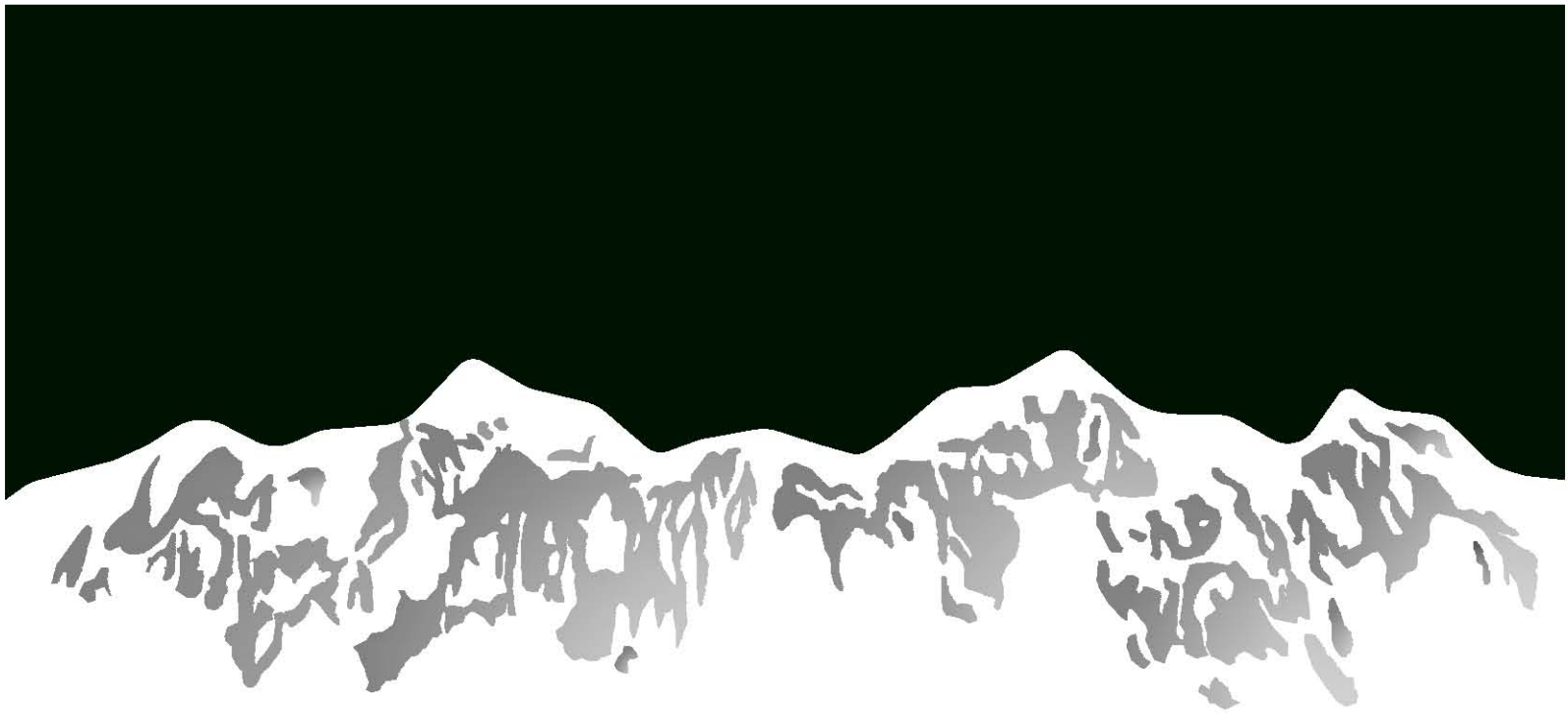


# SUMP BASIN
# MASTER DRAINAGE PLAN

**PREPARED FOR:**

**TOWN OF FIRESTONE**

**MAY 2010**

**COLORADO CIVIL GROUP, INC.**

COLORADO CIVIL GROUP, INC.
*Engineering Consultants*

May 7, 2010

Mr. Wesley LaVanchy, Town Manager
Town of Firestone
151 Grant Avenue
P.O. Box 100
Firestone, CO 80520

**Re: Sump Basin Master Drainage Plan**
**Project No. 0668.0147.00**

Dear Mr. LaVanchy:

We are pleased to submit the Sump Basin Master Drainage Plan for the Town of Firestone. This report includes our hydrologic evaluation of the drainage basin located east of the Tri-Town drainage basin. The information presented in the master drainage plan will assist the Town by providing a guidance document for developers wishing to construct new development within the Sump Basin. The master drainage plan also identifies drainage improvements that are regional in nature and could qualify as Capital Improvement Projects.

We look forward to your review and will gladly answer any questions you may have.

Respectfully,

COLORADO CIVIL GROUP, INC.

COLORADO REGISTERED DAVID B. LINDSAY 32136 PROFESSIONAL ENGINEER 5-7-10

David B. Lindsay, P.E.

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# 1 Introduction

## 1.1 Project Goals

The Town of Firestone has requested Colorado Civil Group, Inc. (CCG) perform a drainage study on a basin located within the Town of Firestone growth limits. The basin is referred to as the "Sump Basin" throughout this report. The primary goal of this study is to analyze and improve the current drainage system and to mitigate the effects of development on the basin which can cause a significant increase in runoff due to the addition of impervious area. This study will also provide an implementation plan and recommendations on financing and installation of future drainage facilities.

## 1.2 Scope of Work

The scope of work for this study included data collection, site inspection, site survey, model generation, model calibration, hydraulic analysis, and the creation this master drainage plan. A brief summary of each task is provided below, and all areas will be discussed at length in later sections of the report.

### 1.2.1 Data Collection

Digital and non-digital data was collected to create the foundation for the hydrologic model and provide support for the master drainage plan. Digital data collected includes Digital Elevation Models (DEM), Digital Raster Graphics (DRG), Digital Line Graphics (DLG), soils data, existing and future land use data, and rainfall data. Non-digital data collected includes approved drainage studies within the basin, plats of developed land within the basin, and flood maps of the Saint Vrain River showing the existing floodplain at the northern end of the Sump Basin.

### 1.2.2 Site Inspection

At the outset of the study, a site inspection was performed to obtain a general awareness and understanding of the Sump Basin and its physical characteristics. Certain features important for the drainage study was observed, such as the general slope of the Sump Basin, soil type, current farming/agricultural practices, existing drainage facilities (culverts, bridges, sumps, detention ponds, etc.), and configuration and condition of existing drainageways. Additional information collected includes culvert sizes, existing detention pond locations, detention pond outlet configurations, existing sump locations, and areas to be surveyed at a future date.

### 1.2.3 Site Survey

A site survey was performed by CivilArts in which roadway profiles were collected for the majority of the Sump Basin. Cross-sections at major drainageway intersections with arterial roadways were collected in addition to spot elevations throughout the Sump Basin. The site survey was performed at the direction of CCG. The roadway profile data collected was used to determine the actual low points in the road where ponding runoff might overtop the road. Spot elevations were needed to better define some of the significant existing sumps and other drainage features throughout the basin.

### 1.2.4 Model Generation

The generation of a hydrologic model for the Sump Basin was the first step in determining peak runoff rates and runoff volumes experienced during a particular rainfall event. Existing and future condition Colorado Unit Hydrograph Procedure (CUHP) models were generated for the 2, 5, 10, and 100 year rainfall events. Existing and future condition Storm Water Management Models (SWMM) were also generated for the 2, 5, 10, and 100 year rainfall events. The digital and non-digital data discussed in Section 1.2.1 was used to build the different hydrologic models.

### 1.2.5 Model Calibration

Model calibration and comparison is a critical aspect of finalizing hydrologic models. Comparisons can be made by evaluating historic rainfall and runoff data observed within the drainage basin. Calibration helps to validate that the data generated from the model is a reasonable representation of historic runoff patterns, runoff rates, and runoff volumes which occur during any rainfall event.

### 1.2.6 Hydraulic Analysis

Peak runoff rates were determined from the hydrologic models, and a hydraulic analysis was performed to size future drainageways and culverts. The hydraulic analysis determines the approximate size and configuration of any future improvements to be installed by either the developer or the Town of Firestone.

### 1.2.7 Drainage Master Plan

A final master drainage plan has been created for the Town of Firestone and can be provided at the request of the Town of Firestone. A digital copy of the report will be provided to the Town of Firestone for further distribution at the discretion of the Town.

## 1.3 Previous Studies

### 1.3.1 Previous Basin Studies

No detailed drainage study has been performed on the entire Sump Basin for the Town of Firestone, Weld County, or other governing entity. On occasion, approximate studies of large portions of the basin have been performed for proposed developments. However, these studies do not contain the detail necessary for a drainage master plan. Currently there are two future developments that have been accepted into the Town's review process. Both play a significant role in the development of the basin since existing features located within each development significantly reduce or eliminate downstream runoff rates.

### 1.3.2 Previous Development Studies

Several subdivisions have been constructed within the Sump Basin, and each subdivision was required to provide a drainage study to the Town for approval. The majority of the drainage studies are for developments located along the western edge of the Sump Basin.

Two proposed developments located east of County Road (CR) 15 are currently within the Town of Firestone review process and portions of their drainage studies are used in the hydrologic models created for the Sump Basin study. These subdivisions are located in the middle of the Sump Basin; one located north of CR 24 and the other south of CR 20. The drainage study for each subdivision has been collected and analyzed to determine the pertinent information to be utilized in the hydrologic models. A list of relevant drainage reports is provided below:

- Ridge Crest Filing 1, April 1999
  Rocky Mountain Consultants, Inc.

- Sagebrush Subdivision, January 2003
  Stantec Consulting, Inc.

- Saint Vrain Ranch Subdivision Filing 2, September 1999
  QCI Development Services Group, Inc.

- Saint Vrain Ranch Filing 3, September 2000
  Northern Engineering Services, Inc.

- Saddleback Heights, December 2003
  Park Engineering Consultants

- Vogl Land – North Parcel, April 2006
  Park Engineering Consultants

- Saddleback Hills, November 2006
  Wright Water Engineers, Inc.

- Saddleback Hills, September 2007
  CVL Consultants of Colorado, Inc.

- Firestone Sports Complex Phase 1, August 2007
  TST, Inc. Consulting Engineers.

- South Weld I-25 Corridor Master Drainage Plan, February 2000
  Anderson Consulting Engineers, Inc.

# 2 Basin Characteristics

## 2.1 Basin Location

The Sump Basin is located within Sections 28, 29, 32, and 33 of Township 3 North, Range 67 West, Weld County Colorado, and Sections 3-10, 16-21, 28, 29, 32, and 33 of Township 2 North, Range 67 West, Weld County Colorado. The Sump Basin is shown in **Exhibit A** overlain on the Fort Lupton, Frederick, Gowanda, and Platteville quadrangle maps indicating the different sections and townships the basin occupies. Exhibit A and each additional exhibit referenced in this master plan is found at the end of the text and in the "Master Plan Exhibits" section. The Town of Firestone growth boundary encompasses the majority of the drainage basin, with only a small section outside the boundary at the south end of the basin. **Exhibit B** shows the Sump Basin in relation to the Town of Firestone growth boundary. The basin is loosely bound by CR 15 to the west, CR 19 to the east, CR16 to the south, and CR 28 and the Dent Line of the Union Pacific Railroad, which is now the Firestone Trail, to the north. A portion of the basin extends past the boundary, but these areas are relatively small in relation to the entire basin. The Saint Vrain River is located to the north of the basin and the South Platte River is located to the east of the basin. The Sump Basin is also located east of the Tri-Town drainage basin, which was defined in the South Weld I-25 Corridor Master Drainage Plan (Anderson Consulting, February 2000).

## 2.2 Basin Description

The description of the Sump Basin can be divided into several categories which better define and quantify the drainage basin. Categories discussed in further detail are the physical characteristics, drainage properties or qualities, and current land use.

### 2.2.1 Physical Characteristics

The Sump Basin measures 7.4 miles long and more than 2 miles wide in some locations, and encompasses nearly 11.4 square miles. There is 300 feet of relief from south to north at an average slope of 0.7%. Calculated slopes vary greatly throughout the basin, ranging from 0.5% to 3.1%. **Exhibit C** shows a scaled view (1" = 3,000') of the Sump Basin with contours.

### 2.2.2 Drainage Properties/Qualities

With an average slope of 0.7% and poorly defined drainageways observed throughout the entire basin, shallow overland flow or sheet flow would best describe the means by which runoff is conveyed through the basin. The soil observed by visual inspection can be described as sandy, light, very dry, and greatly susceptible to wind erosion. More than 83.3% of the soils found throughout the basin are described scientifically as a well drained sandy loam with a hydrologic description of Type B. The remaining soil consists of 4.7% Type A soil, 5.4% Type C soil, and 6.0% Type D soil, with 0.6% classified as water. Type A soil can be described as excessively drained and sandy; Type C soil is described as a well drained silty clay and clay loam; Type D soil is described as poorly drained aquolls, aquents, aquepts, and loamy sand. **Exhibit D** shows the soil composition for the basin. More detailed exhibits of the soil type and drainage information is found in **Appendix A**.

Although the basin is located in close proximity to the Saint Vrain River, no portions of the basin are located within the floodplain or floodway of the river. Based on the Flood Insurance Rate Map (FIRM), found in **Appendix A**, the floodplain boundary appears to extend no further than the abandoned Union Pacific Railroad (Community-Panel Number 080266 0855 C, September 28, 1982).

### 2.2.3 Current Land Use

There are currently a wide range of land uses within the Sump Basin, most of which are agricultural, but rural residential, urban residential, open space, commercial, and industrial uses are found as well. Agricultural land uses cover 90% of the Sump Basin. Rural residential developments cover 7% of the basin while urban residential development, located entirely along the western edge of the basin, covers about 2% of the basin. Small pockets of open space, commercial, and industrial uses are sprinkled throughout the basin with an area totaling no more than 1% of the basin. A detailed description of each land use is provided in the following sections. **Exhibit E** shows the aerial photography used in determining the current land use within the Sump Basin.

#### 2.2.3.1 Agricultural Land Use

Different agricultural land uses totaling 90% of the Sump Basin area include non-irrigated crops, irrigated crops, and pasture land. Non-irrigated crops within the basin are typically dryland or summer wheat. The most common irrigated crops found within the basin are corn and hay. The crops shown in pictures to the left and above are irrigated corn and hay and exhibit both furrowed and non-furrowed ground.







The pictures shown below are of irrigated hay in the different phases of growth and ultimately in its baled condition.



A significant amount of pasture land can also be found throughout the basin and is used primarily for cattle grazing.





Dryland wheat is also a very common agricultural crop and can be seen in the picture to the left.

### 2.2.3.2 Rural Residential Land Use

Existing rural residential developments cover 7% of the Sump Basin, and are concentrated toward the center of the basin. The Casagrande Estates and Enchanted Hills subdivisions are the two rural residential developments located within the basin, both of which are located north of CR 20 and east of CR 15. Enchanted Hills exhibits a higher density at 1 dwelling unit per acre (du/acre), while observed densities for Casagrande Estates are 1 du/5 acres or 0.2 du/acre. The estimations of density were performed based on an aerial image obtained from the Town of Firestone, however, localized densities can vary from the assumed densities within the basin. The assumed densities are intended as an average representation of the entire development.





### 2.2.3.3 Urban Residential Land Use

Existing urban residential developments cover 2% of the Sump Basin and all are located west of CR 15. Subdivisions considered urban residential developments located within the basin are Ridge Crest Filing 1, Sagebrush Subdivision, Saint Vrain Ranch Filing 3, and Saddleback Heights. Based on aerial photography, observed densities for these developments are 4 du/acre. There are two



proposed urban residential developments currently in the review process; Vogl Land – North and South parcel and Saddleback Hills subdivisions. More detailed survey data and hydrologic data





from the proposed developments have been used for the Sump Basin study.

#### 2.2.3.4 Open Space Land Use

Although a large amount of acreage is slated to be open space as the Sump Basin develops, only a few locations featuring public open space currently exist. The first area is part of Firestone Central Park which is located at the southwest corner of



CR 22 and CR 15. This area will eventually serve as a large regional park for the Town of Firestone.

Another area is the Firestone Sports Complex, located at the southwest corner of the intersection of CR 24 and CR 15. The space features three softball fields. **Figure 2.1** presents the fields as currently constructed and is shown below.

**Figure 2.1 Firestone Sports Complex**



### 2.2.3.5 Commercial Land Use

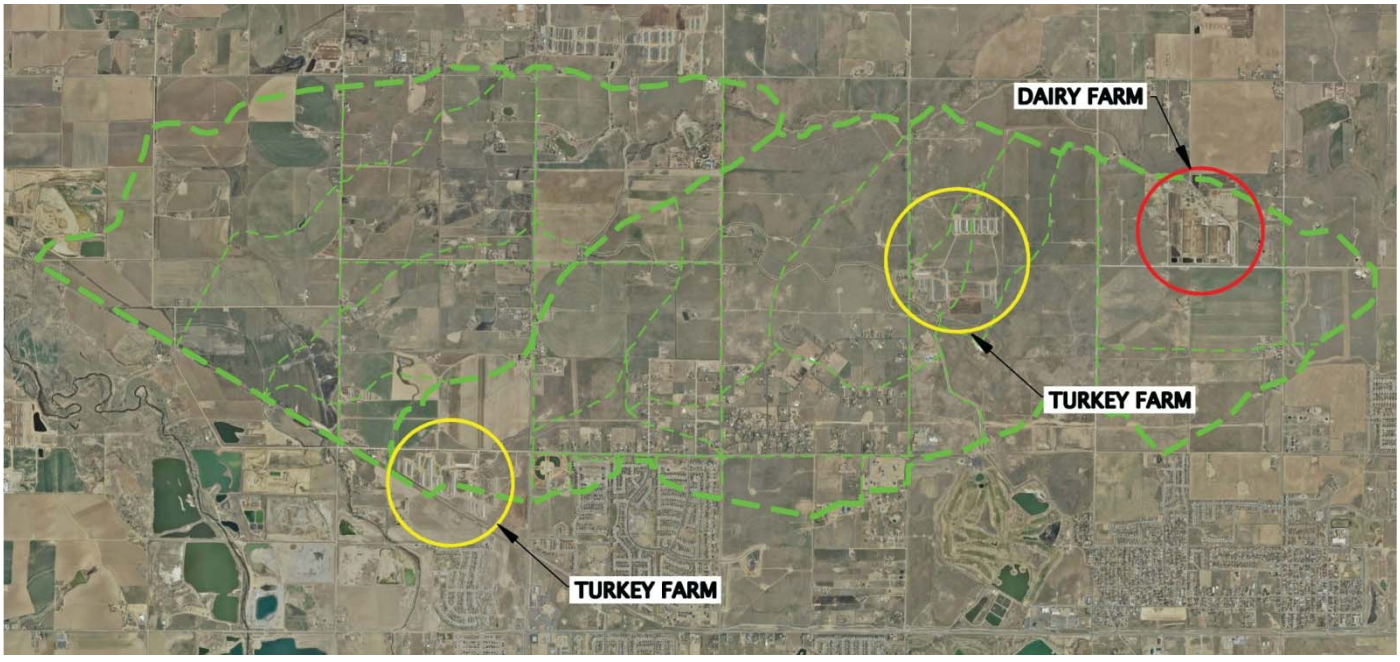
Commercial land uses within the Sump Basin are not widespread and are not the typical commercial uses associated with urbanized areas. The commercial land uses found throughout the basin include turkey and dairy farms. There are two large turkey farms located within the basin, one north of CR 24 along CR 15 and the other south of CR 20 toward the center of the basin. A dairy farm is located at the southern end of the basin along CR 17. These farms can be observed in **Figure 2.2** below as the long and narrow silver/tin looking buildings.








**Figure 2.2 Existing Commercial Land Use**

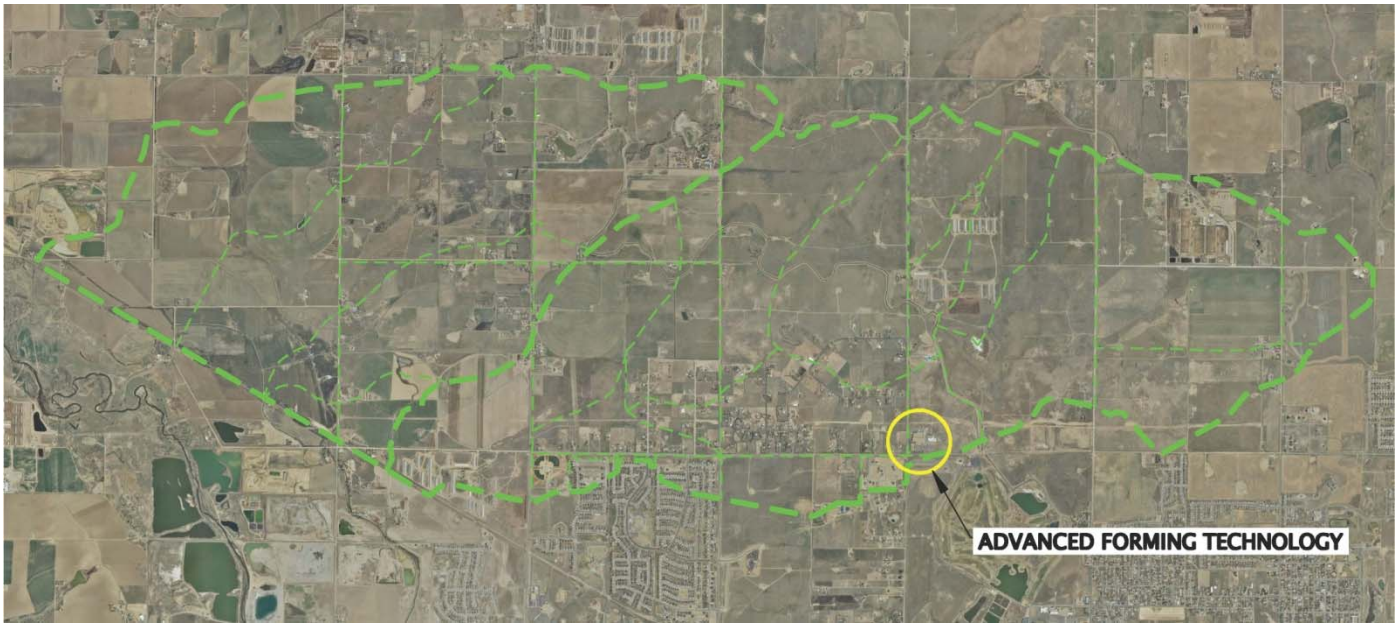


### 2.2.3.6 Industrial Land Use

There is one existing industrial building currently located within the Sump Basin. Advanced Forming Technology (AFT) is located at the southeast corner of CR 20 and CR 15. AFT, which specializes in metal injection molding, is situated at the southeast corner of CR 15 and CR 20. An image of the business is shown below and its location within the Sump Basin is shown in **Figure 2.3** below.



**Figure 2.3 Existing Industrial Land Use**



## 2.3 Natural Drainage Features

Historically runoff has moved from the southern end of the Sump Basin north, ultimately reaching the Saint Vrain River. Natural drainage features that exist within the basin have both conveyed runoff throughout the basin and helped in the reduction of the runoff rate. Defined channels, undefined channels, and existing sumps are typical natural drainage features found throughout the Sump Basin. More detailed explanations of these types of basin characteristics are found in the following sections.

### 2.3.1 Defined Channels

Defined channels are the least common natural drainage feature observed within the basin. The few defined channels are located at the northern end of the basin, and are identified by the incised channel carrying concentrated flow as opposed to sheet flow. Although the defined channels are heavily vegetated, they are much more efficient at conveying runoff than undefined, shallow channels.

### 2.3.2 Undefined/Shallow Channels

The most common natural drainage features found in the Sump Basin are shallow/undefined channels. The undefined channels found throughout the basin effectively reduce the peak runoff rates by impeding flow, which reduces velocities and allows more runoff to infiltrate into the soil. The undefined channels exhibit low flow depths which result in higher roughness values and decreased runoff velocities.

### 2.3.3 Existing Sumps

A handful of existing sumps can be found throughout the Sump Basin. Only the largest sumps were inspected in greater detail for the potential to reduce runoff rates within the basin. There are two very large sumps (501 and 520 in UDSWMM) and three smaller sumps (513, 516, and 537 in UDSWMM) that have been inspected for their retention capacity. Of the two large sumps, one is located north of CR 24 along CR 15 and the other is located south of CR 20 and the Coal Ridge Ditch. Two of the three smaller sumps are located in an area south of CR 22 and east of the Casagrande Estates subdivision, while the last small sump is located south of CR 28 and east of CR 17. **Exhibit F** shows the location of each of the five sumps discussed in this section. **Table 2.1** below shows the approximate storage volume for each of the five sumps observed and modeled.

**Table 2.1 Existing Sump Volumes**

| Sump Designation | Existing Sump Volume (acre-ft) |
|---|---|
| **501** | 82.9 |
| **513** | 20.3 |
| **516** | 18.1 |
| **520** | 230.0 |
| **537** | 14.8 |

#### 2.3.3.1 Large Northern Sump

The northern sump is part of the Vogl Land – North Parcel development. The sump has been surveyed as part of the submittal process for the planned development. After reviewing the survey information, the design engineer estimated the retention capacity of the sump to be 82.9 acre-feet based on the survey data. A large natural weir has been observed at the northern end of the sump which will pass runoff through the sump once the retention capacity is exceeded. Calculations performed by the design engineer to determine the volume of the sump and capacity of the natural weir are provided in **Appendix D**.

#### 2.3.3.2 Large Southern Sump

The southern sump is part of the proposed Saddleback Hills development. This sump has also been surveyed as part of the submittal process. The design engineer estimated the existing retention capacity of the sump to be 230 acre-feet. There are no obvious signs of an existing outfall associated with the sump, leading to the assumption that its capacity is rarely, if ever, exceeded during a 100-year rainfall event. This assumption was verified in an analysis performed by Wright Water Engineers, Inc. Capacity calculations to determine the existing volume within the sump are provided in **Appendix D**.

#### 2.3.3.3 Other Smaller Sumps

The smaller sumps discussed earlier are relatively similar in size, ranging from 14 acre-feet up to 20 acre-feet of retention storage. Survey data was obtained by CCG as part of the Sump Basin study and was used to roughly estimate the volume of each smaller sump. Although these sumps are substantially smaller in size, the affects they have on peak runoff rate reduction can be noticeable and were analyzed with this study. Based on their ability to reduce the peak runoff rate, their affects were included in the drainage analysis. Calculations performed by CCG to determine the existing volume of the three smaller sumps and to verify the volume of the large northern sump are provided in **Appendix B**.

# 3 Inventory of Existing Facilities

The inventory of existing facilities, for the purpose of this study, refers to all existing drainage facilities that are non-natural or man-made structures found within the Sump Basin. Since only a small portion of the basin has been developed, there are only a few man-made facilities installed in the basin. Most of the facilities are located along the western edge of the basin and found west of CR 15, with a few others scattered around the basin. A site survey was performed to observe and collect information on the existing facilities located in the basin.

## 3.1 Site Survey

Site surveys were performed on several occasions to observe and collect information on existing facilities located within the basin that might have some influence on runoff rates, runoff volumes, drainage patterns, areas of inundation or flooding, and could ultimately influence the suggested implementation plan to help mitigate the increase in runoff as a result of development. All existing detention ponds, outlet structures, swales, and culverts were identified and evaluated to determine their influence on runoff. A detailed explanation of each facility is provided in the following sections.

### 3.1.1 Detention Ponds

There are four existing detention ponds that have been fully constructed within the Sump Basin. The four existing detention ponds are located in the Saddleback Heights, Saint Vrain Ranch Filing III, Sagebrush subdivisions, and the Town of Firestone Sports Complex. Each detention pond is effective in reducing the peak runoff rate from their respective developments. Although all detention ponds were sized to detain the 100-year storms in the developed condition, all four were designed with different storage requirements for the minor storm. The storage requirements for the minor storm varied between the 2-year, 5-year, and 10-year storms in the developed condition. Pictures of the four existing detention ponds are provided below. Volume calculations performed by the design engineer for each subdivision and detention pond are provided in **Appendix D**.

**Saddleback Heights Detention Pond**



The Saddleback Heights detention pond was designed by Park Engineering Consultants as described in the Final Drainage Report for Saddleback Heights (December 2003). The design for the detention pond shows a required capacity of 0.50 acre-feet (22,182 cubic-feet) in the 2-year event and 3.81 acre-feet (166,030 cubic-feet) in the 100-year event.

**Saint Vrain Ranch Filing III Detention Pond**



The Saint Vrain Ranch detention pond was designed by Northern Engineering Services, Inc. as described in the Final Drainage Study for Saint Vrain Ranch, Filing III (September 2000). The detention pond was designed to accommodate offsite flows from the south in addition to on-site flows from the subdivision. The required capacity for the 10-year event is 3.82 acre-feet (166,674 cubic-feet) and the required capacity for the 100-year event is 7.09 acre-feet (308,840 cubic-feet).

**Sagebrush Subdivision Detention Pond**



The Sagebrush Subdivision detention pond was designed by Stantec Consulting, Inc. as described in the Final Drainage Report for Sagebrush Subdivision (January 2003). The detention pond was designed with a required capacity of 0.12 acre-feet (5,227 cubic-feet) for the 5-year event and 0.33 acre-feet (14,374 cubic-feet) for the 100-year event.

**Firestone Sports Complex Detention Pond**



The Firestone Sports Complex detention pond was designed by TST, Inc. Consulting Engineers as described in the Final Drainage Report for Firestone Sports Complex – Phase 1 (August 2007). The detention pond was designed with a required capacity of 0.78 acre-feet (33,976 cubic-feet) for the 2-year event and 1.64 acre-feet (71,438 cubic-feet) for the 100-year event.

### 3.1.2 Outlet Structures

Each of the existing detention ponds discussed in Section 3.1.1 also contains an outlet structure designed to restrict and release developed runoff at the desired historic runoff rates. Although different minor storms were used in determining release rates, each structure can release no more than the 100-year historic rate during the 100-year rainfall event. The outlet works also includes the emergency spillways, all of which were designed to safely convey runoff in the 100-year rainfall event. Since the spillway designs were approved by the Town engineer and have no bearing on the hydrologic models, no sizing calculations are provided with this study. If further information about the emergency spillway design is needed, copies of the final drainage reports can be obtained at the Town of Firestone. Pictures and design information about each outlet structure are shown below. Release rate calculations performed by the design engineer for each subdivision and outlet structure are provided in **Appendix E**.

## Saddleback Heights Outlet Structure





The outlet structure for Saddleback Heights was designed to release no more than 1.30 cubic feet per second (cfs) during any storm event (2-year through 100-year).

## Saint Vrain Ranch Filing III Outlet Structure





The outlet structure for Saint Vrain Ranch Filing III was designed to release no more than 1.17 cfs in the 10-year event and no more than 66.8 cfs in the 100-year event.

## Sagebrush Subdivision Outlet Structure





The outlet structure for Sagebrush Subdivision was designed to release no more than 1.2 cfs in the 5-year event and no more than 6.9 cfs in the 100-year event.

**Firestone Sports Complex Outlet Structure**



The outlet structure for Firestone Sports Complex was designed to release no more than 5.4 cfs in the 2-year event and no more than 15.4 cfs in the 100-year event.

### 3.1.3 Existing Swales

There are a few existing swales located along the western edge of the Sump Basin that were designed and installed to safely convey stormwater runoff originating from the residential developments. The remaining swales are roadside ditches and are not sized to carry a substantial amount of runoff. Swale calculations for existing facilities prepared by the design engineer are found in **Appendix F**.

### 3.1.4 Existing Culverts

There are several existing culverts located throughout the Sump Basin. Two culverts located along CR 15 are associated with the residential developments lining the west side of the basin. Two more culverts are located under CR 24 and CR 26, both just east of CR 15. One box culvert crosses CR 15 between CR 22 and CR 24. There are many smaller culverts, roadside ditch culverts, and driveway culverts found throughout the basin, but only the larger culverts conveying significant amounts of stormwater runoff are discussed in this report. Below are pictures and descriptions of each of the major culverts. Exhibit G shows the approximate locations of each of the identified existing culverts within the Sump Basin. Capacity calculations performed by the design engineer for the existing culverts are provided in **Appendix G**.

**Double 24"x38" ERCP**





There are two 24-inch by 38-inch elliptical reinforced concrete pipes (ERCP) crossing CR 22, and located 100 feet west of CR 15. The combined culvert capacity was analyzed in the Final Drainage Study for Saint Vrain Ranch Filing III by Northern Engineering Services, Inc. (September 2000), and was determined to be 73.5 cfs prior to overtopping the road. The anticipated runoff calculated in the Saint Vrain Ranch Filing III drainage report is 47.4 cfs.

**Single 24" RCP**





There is one 24-inch reinforced concrete pipe (RCP) crossing CR 24 on the west side of CR 15. The culvert was analyzed in TST, Inc. Consulting Engineers' Final Drainage Report for Firestone Sports Complex – Phase 1 (August 2007). An HY-8 analysis showed the culvert can convey 20 cfs prior to overtopping the road.

**Single 24" CMP**



There is one 24-inch corrugated metal pipe (CMP) crossing CR 24 and located to the east of CR 15. The culvert is located in the main drainageway for the Sump Basin, and although it was not analyzed for capacity, it is grossly undersized for the significant amount of runoff reaching the culvert in the 100-year event. Additionally, as shown in the pictures above, the culvert is heavily silted in, which would further limit its carrying capacity.

**Single 12" CMP**



There is one 12-inch CMP crossing at CR 26 and located to the east of CR 15. It is also located in the main drainageway for the Sump Basin. It is situated directly downstream from the large northern sump and therefore receives very little flow most of the time. While performing the site survey, flow was observed in the culvert that appeared to be

irrigation tailwater from irrigated crops. The only time it would receive significant flow is when the sump fills completely and spills.

**Single 2'x4' RCB**





There is one reinforced concrete box (RCB) crossing CR 15 and located between CR 22 and CR 24. The box culvert conveys runoff from the west side of CR 15 to the east side and into a grass lined trapezoidal channel. The box culvert was designed by Rocky Mountain Consultants, Inc. in their Final Drainage and Erosion Control Study for Ridge Crest Filing 1 (April 1999), and has a capacity of 53.2 cfs.

# 4 Hydrologic Analysis

The hydrologic analysis portion of the study included data collection through the setup of the different hydrologic models used to evaluate the production, retention, infiltration, and conveyance of runoff in the Sump Basin.

## 4.1 Data Collection

There are many different types and forms of data collected throughout the study process that were utilized in building the different hydrologic models. Basic site data such as horizontal location and topography were collected to begin the process of base mapping. Soil data, current and future land use data, existing drainage facility data, and rainfall data are all forms of data that were collected for use within the hydrologic models. Model parameter data was also collected for use within the model.

### 4.1.1 Site Data

The first type of data collected was Spatial Data Transfer Standard (SDTS) from the GeoCommunity website www.geocomm.com. Once the SDTS file was downloaded, SDTS2DEM conversion software was used to convert the file into the usable United States Geological Survey (USGS) DEM format. According to the GeoCommunity website, "DEM data files are digital representations of cartographic information in raster form." The USGS DEM downloaded is the 7.5-minute DEM (up to 30-meter square grid spacing) cast on Universal Transverse Mercator (UTM) projection. Typical grid spacing is 10-meter square to 30-meter square. Each file downloaded covers the typical 7.5-minute USGS Quadrangle Map. AutoCAD was then used to create a surface and contours with the DEM data. Horizontal location data was then joined with the contours to complete the base mapping. Standard Geographic Information System (GIS) shape files were collected from the Colorado Department of Transportation (CDOT). The shape files collected include city and county boundaries, lakes, streams, routes, roads, highways, and railroads. DRGs were collected for use as a visual reference for the basin. The final piece of data collected for base mapping was an aerial photograph of the area, which was obtained from the Town of Firestone.

### 4.1.2 Soil Data

Soil data was obtained through the Natural Resources Conservation Service (NRCS) Soil Data Mart website. Soil data was collected in GIS shape file format for the southern half of Weld County, Colorado (CO618). Information encoded within the soil data can be accessed to reveal soil properties and qualities, such as chemical properties, erosion factors, physical properties, and water features. Although chemical properties, erosion factors, and water features can be useful in the description of the soil within the basin, the physical properties associated with the soil are most relevant for the drainage study. Properties such as "Hydrologic Soil Group" and "Drainage Class" are important in describing the basin soil characteristics since they relate directly to model parameters that must be input into the hydrologic models. For drainage studies, there are four soil types that define the soil characteristics, Type A, Type B, Type C, and Type D. The soil composition found within the Sump Basin is shown in **Table 4.1** below.

Type A: Type A soils are defined by the NRCS as soils with a high infiltration rate resulting in a low runoff potential, well drained to excessively drained sands to gravelly sands, and a high rate of water transmission.

Type B: Type B soils are defined by the NRCS as soils with a moderate infiltration rate, moderately well drained to well drained, consisting of a mixture of fine textured materials to coarse textured materials, and with a moderate rate of water transmission.

Type C: Type C soils are defined by the NRCS as soils with a slow infiltration rate. The soil generally consists of a layer which impedes the downward movement of water within the soil, consists of soil of moderately fine texture to fine texture, and exhibits a slow rate of water transmission.

Type D: Type D soils are defined by the NRCS as soils having a very slow infiltration rate resulting in high runoff potential. The soil consists mainly of clays that exhibit a high shrink-swell potential. These soils may have a high water table, a claypan or clay layer at or near the surface, or may consist of a shallow layer of soil over nearly impervious material. This soil type exhibits a very slow rate of water transmission.

**Table 4.1 Soil Composition for Each Sub-Basin**

| Sub-Basin | Soil Type (%) | | | | | Sub-Basin | Soil Type (%) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | Water | | A | B | C | D | Water |
| **W1** | 0% | 96% | 0% | 4% | 0% | **W20** | 4% | 69% | 0% | 24% | 3% |
| **W2** | 0% | 100% | 0% | 0% | 0% | **W21** | 3% | 93% | 0% | 4% | 0% |
| **W3** | 0% | 100% | 0% | 0% | 0% | **W22** | 0% | 97% | 0% | 3% | 0% |
| **W4** | 0% | 98% | 0% | 2% | 0% | **W23** | 4% | 91% | 1% | 4% | 0% |
| **W5** | 16% | 82% | 0% | 2% | 0% | **W24** | 0% | 100% | 0% | 0% | 0% |
| **W6** | 0% | 100% | 0% | 0% | 0% | **E25** | 0% | 1% | 30% | 69% | 0% |
| **W7** | 0% | 100% | 0% | 0% | 0% | **E26** | 0% | 99% | 0% | 1% | 0% |
| **W8** | 0% | 100% | 0% | 0% | 0% | **E27** | 0% | 25% | 14% | 61% | 0% |
| **W9** | 0% | 100% | 0% | 0% | 0% | **E28** | 0% | 100% | 0% | 0% | 0% |
| **W10** | 0% | 100% | 0% | 0% | 0% | **E29** | 1% | 99% | 0% | 0% | 0% |
| **W11** | 0% | 100% | 0% | 0% | 0% | **E30** | 49% | 51% | 0% | 0% | 0% |
| **W12** | 0% | 100% | 0% | 0% | 0% | **E31** | 0% | 100% | 0% | 0% | 0% |
| **W13** | 2% | 94% | 0% | 0% | 4% | **E32** | 9% | 54% | 29% | 9% | 0% |
| **W14** | 6% | 94% | 0% | 0% | 0% | **E33** | 0% | 100% | 0% | 0% | 0% |
| **W15** | 0% | 100% | 0% | 0% | 0% | **E34** | 0% | 89% | 0% | 10% | 1% |
| **W16** | 0% | 82% | 18% | 0% | 0% | **E35** | 7% | 82% | 0% | 9% | 3% |
| **W17** | 0% | 100% | 0% | 0% | 0% | **E36** | 0% | 93% | 0% | 7% | 0% |
| **W18** | 4% | 95% | 0% | 1% | 0% | **E37** | 19% | 43% | 29% | 9% | 0% |
| **W19** | 11% | 89% | 0% | 0% | 0% | **E38** | 0% | 84% | 0% | 16% | 0% |

### 4.1.3 Current Land Use Data

Two methods were utilized in the analysis and collection of the current land use; the first method was a site survey of the basin, and the second was an analysis the aerial photograph. A generalized view of the basin was collected during a site visit to determine areas of residential development, commercial and industrial development, and farming and agriculture, and the different types of farming and agriculture. This information was then used when viewing the aerial photograph to determine the general make-up of the basin and how the different land uses might affect infiltration, runoff, drainageways, and existing drainage facilities. As impervious area increases with different land uses, an increase in runoff will be observed. This increase can then affect the drainageways and drainage facilities within the basin. **Table 4.2** and **Table 4.3** below show the imperviousness values used to determine the composite imperviousness of each sub-basin.

**Table 4.2 Land Use Imperviousness**

| Land Use | Description | Imperviousness |
|---|---|---|
| **Single Family** | Urban | 43% |
| **Single Family** | Rural | 15-22% |
| **Commercial Areas** | Residential High | 80% |
| **Industrial Areas** | Heavy | 95% |
| **Open Space** | Parks | 5% |
| **Undeveloped** | Agricultural | 2% |

**Table 4.3 Existing Imperviousness for Each Sub-Basin**

| Sub-Basin | Existing Imperviousness (%) | Sub-Basin | Existing Imperviousness (%) | Sub-Basin | Existing Imperviousness (%) |
|---|---|---|---|---|---|
| **W1** | 2.0% | **W14** | 7.2% | **E27** | 2.0% |
| **W2** | 10.0% | **W15** | 2.0% | **E28** | 4.6% |
| **W3** | 65.0% | **W16** | 2.6% | **E29** | 7.2% |
| **W4** | 10.8% | **W17** | 8.3% | **E30** | 2.0% |
| **W5** | 2.0% | **W18** | 6.3% | **E31** | 2.0% |
| **W6** | 2.0% | **W19** | 2.0% | **E32** | 2.0% |
| **W7** | 30.0% | **W20** | 2.0% | **E33** | 2.0% |
| **W8** | 40.0% | **W21** | 3.4% | **E34** | 2.0% |
| **W9** | 2.0% | **W22** | 2.0% | **E35** | 5.1% |
| **W10** | 30.0% | **W23** | 2.0% | **E36** | 2.0% |
| **W11** | 15.0% | **W24** | 2.0% | **E37** | 2.0% |
| **W12** | 10.9% | **E25** | 2.0% | **E38** | 2.0% |
| **W13** | 3.7% | **E26** | 2.0% | | |

### 4.1.4 Existing Drainage Facility Data

As mentioned in Section 3, existing drainage facility data was collected based on several site visits. The existing drainage facilities are primarily found within the developed areas along the western edge of the basin. An inventory of existing drainage facilities was compiled and then used to review the approved drainage reports for each of the existing developments. Information such as the 2-year through 100-year peak runoff, 2-year through 100-year required detention volumes, and 2-year through 100-year allowable release rates were collected from the drainage reports. This data is essential in building a model that accurately represents the existing conditions observed within the basin.

### 4.1.5 Rainfall Data

Rainfall data was collected from the National Oceanic and Atmospheric Administration (NOAA) Atlas 2, Volume III, Precipitation Frequency Atlas of the Western United States (1973). Volume III includes rainfall data for Colorado and includes the Town of Firestone. Although precipitation contour maps have historically been used for collecting point rainfall data for a specific area, NOAA has developed a website (www.nws.noaa.gov/ohd/hdsc/noaaatlas2.htm) that allows the user to input the latitude and longitude of an area, and the website will return the point rainfall depths for those coordinates based on the standard contour maps. The latitude and longitude coordinates entered for this study correspond to the centroid of the Sump Basin. The centroid was determined with the aid of AutoCAD. The point rainfall data collected from the NOAA website is 1.44 inches for the 2-year 6-hour rainfall event and 3.64 inches for the 100-year 6-hour rainfall event. **Figure 4.1** below shows the point rainfall depths collected from the NOAA website.

**Figure 4.1 NOAA Atlas Precipitation Frequency Data Output**

NOAA Atlas 2

Colorado 40.1427•N 104.9039•W

*Site-specific Estimates*

| Map | Precipitation (inches) | Precipitation Intensity (in/hr) |
|---|---|---|
| 2-year 6-hour | 1.44 | 0.24 |
| 2-year 24-hour | 2.04 | 0.09 |
| 100-year 6-hour | 3.64 | 0.61 |
| 100-year 24-hour | 5.03 | 0.21 |

Hydrometeorological Design Studies Center - NOAA/National Weather Service
1325 East-West Highway - Silver Spring, MD 20910 - (301) 713-1669
Wed Jul 11 17:43:14 2007

The 2-year and 100-year 6-hour point rainfall depths were then manipulated to determine the point rainfall depth for each frequency event (i.e. 2-year, 5-year, 10-year, 25-year, 50-year, 100-year) and each rainfall duration (i.e. 1-hour, 2-hour, 3-hour, 6-hour, 24-hour).

The first step in generating different rainfall amounts for each rainfall scenario was to use the "South Platte, Republican, Arkansas, and Cimarron River" equation from Table 11 (shown below) of the NOAA Atlas 2 report to determine the 1-hour point rainfall depth for the 2-year and 100-year rainfall events. Calculations performed using Equation 1 are found in **Appendix H**. Table 11 of the NOAA Atlas 2 report is also found in **Appendix H**.

**South Platte, Republican, Arkansas, and Cimarron River Equation (From Table 11)**

$$y_2 = 0.218 + 0.709\left({}^{x_1^2}/_{x_2}\right)$$

$$y_{100} = 1.897 + 0.439\left({}^{x_3^2}/_{x_4}\right) - 0.008 \times z$$

$$y_2 = 2yr\ 1hr\ estimated\ value$$

$$y_{100} = 100yr\ 1hr\ estimated\ value$$

$$x_1 = 2yr\ 6hr\ value\ from\ NOAA\ website$$

$$x_2 = 2yr\ 24hr\ value\ from\ NOAA\ website$$

$$x_3 = 100yr\ 6hr\ value\ from\ NOAA\ website$$

$$x_4 = 100yr\ 24hr\ value\ from\ NOAA\ website$$

$$z = Point\ elevation\ in\ hundreds\ of\ feet$$

The next step utilizes **Figure 16a** and **Figure 18a** of the NOAA Atlas 2 report in conjunction with the results from the equation to determine the different point rainfall amounts for each storm frequency and rainfall duration. **Table 4.4** below presents the calculated point rainfall depths based on the equation and Figures 16a and 18a.

**Table 4.4 Calculated Point Rainfall Depths**

| Rainfall Duration | 2-year (in) | 5-year (in) | 10-year (in) | 25-year (in) | 50-year (in) | 100-year (in) |
|---|---|---|---|---|---|---|
| **1-hour** | 0.94 | 1.30 | 1.62 | 1.95 | 2.35 | 2.66 |
| **2-hour** | 1.10 | 1.60 | 1.95 | 2.37 | 2.70 | 3.01 |
| **3-hour** | 1.24 | 1.75 | 2.02 | 2.50 | 2.87 | 3.25 |
| **6-hour** | 1.44 | 1.96 | 2.30 | 2.79 | 3.25 | 3.64 |
| **24-hour** | 2.04 | 2.80 | 3.30 | 3.90 | 4.48 | 5.03 |

Figures 16a and 18a, which were used to compile Table 4.4, and all related calculations are found in **Appendix H**.

Although data was collected for the different events as shown in Table 4.4, only the 3-hour rainfall duration was used for the modeling process based on **Table RA-1** from the UDFCD DCM. In addition, only the 2-year, 5-year, 10-year, and 100-year rainfall event frequencies were used, since the Town of Firestone does not require an analysis for the 25-year and 50-year rainfall events. The selection of the 3-hour rainfall duration was based on Volume I, Chapter 4, Section 3.0 of the UDFCD criteria manual suggesting a 3-hour design storm for basins between 10 and 20 square miles. The Sump Basin is 11.4 square miles; so the 3-hour design storm was used in the modeling process.

Table RA-1—Storm Duration and Area Adjustment for CUHP Modeling

| Watershed Area (square miles) | Suggested Minimum Storm Duration | Area Adjustment Required? |
|---|---|---|
| Less than 10.0 | 2 hours | No |
| 10.0 to 20.0 | 3 hours | Yes |
| 20.0 and larger | 6 hours | Yes |

The rainfall distribution is based on **Table RA-2** (shown below) of Section 3.1 of Chapter 4, Volume I of the UDFCD criteria manual and the 1-hour rainfall depths calculated using the NOAA Atlas 2 process mentioned in Section 4.1.5.

Table RA-2—Design Storm Distributions of 1-Hour NOAA Atlas Depths

| Time | Percent of 1-Hour NOAA Rainfall Atlas Depth | | | | |
|---|---|---|---|---|---|
| Minutes | 2-Year | 5-Year | 10-Year | 25- and 50-Year | 100- and 500-Year |
| 5 | 2.0 | 2.0 | 2.0 | 1.3 | 1.0 |
| 10 | 4.0 | 3.7 | 3.7 | 3.5 | 3.0 |
| 15 | 8.4 | 8.7 | 8.2 | 5.0 | 4.6 |
| 20 | 16.0 | 15.3 | 15.0 | 8.0 | 8.0 |
| 25 | 25.0 | 25.0 | 25.0 | 15.0 | 14.0 |
| 30 | 14.0 | 13.0 | 12.0 | 25.0 | 25.0 |
| 35 | 6.3 | 5.8 | 5.6 | 12.0 | 14.0 |
| 40 | 5.0 | 4.4 | 4.3 | 8.0 | 8.0 |
| 45 | 3.0 | 3.6 | 3.8 | 5.0 | 6.2 |
| 50 | 3.0 | 3.6 | 3.2 | 5.0 | 5.0 |
| 55 | 3.0 | 3.0 | 3.2 | 3.2 | 4.0 |
| 60 | 3.0 | 3.0 | 3.2 | 3.2 | 4.0 |
| 65 | 3.0 | 3.0 | 3.2 | 3.2 | 4.0 |
| 70 | 2.0 | 3.0 | 3.2 | 2.4 | 2.0 |
| 75 | 2.0 | 2.5 | 3.2 | 2.4 | 2.0 |
| 80 | 2.0 | 2.2 | 2.5 | 1.8 | 1.2 |
| 85 | 2.0 | 2.2 | 1.9 | 1.8 | 1.2 |
| 90 | 2.0 | 2.2 | 1.9 | 1.4 | 1.2 |
| 95 | 2.0 | 2.2 | 1.9 | 1.4 | 1.2 |
| 100 | 2.0 | 1.5 | 1.9 | 1.4 | 1.2 |
| 105 | 2.0 | 1.5 | 1.9 | 1.4 | 1.2 |
| 110 | 2.0 | 1.5 | 1.9 | 1.4 | 1.2 |
| 115 | 1.0 | 1.5 | 1.7 | 1.4 | 1.2 |
| 120 | 1.0 | 1.3 | 1.3 | 1.4 | 1.2 |
| Totals | 115.7 | 115.7 | 115.7 | 115.6 | 115.6 |

Table RA-2 is limited to the 2-hour rainfall duration and since the suggested design storm for the Sump Basin is a 3-hour storm, an adjustment was made to the rainfall distribution. This was achieved by applying **Equation RA-2** (shown below) in Section 2.2 of Chapter 4 of the UDFCD DCM to determine the 3-hour rainfall distribution.

**Equation RA-2 (From the UDFCD DCM)**

$$P_3 = P_1 + (P_6 - P_1) \times 0.597$$

$$P_1 = 1 - hour\ Point\ Rainfall\ (inches)$$

$$P_3 = 3 - hour\ Point\ Rainfall\ (inches)$$

$$P_6 = 6 - hour\ Point\ Rainfall\ (inches)$$

This process was performed for the 2-year, 5-year, 10-year, and 100-year rainfall events to determine the 3-hour point rainfall depth so the rainfall was correctly distributed for the 3-hour rainfall event.

The last step in preparing the rainfall data for use within the hydrologic models was to adjust the distribution based on the size of the Sump Basin. This was achieved by applying the area adjustment factors found in Table RA-3 (shown below) of Section 3.2 of Chapter 4 of the UDFCD DCM. Once this step was completed, 3-hour rainfall distributions for the 2-year, 5-year, 10-year, and 100-year rainfall events were applied to the hydrologic models. The results of this adjustment are found in **Appendix H**.

**Table RA-3—Area Adjustment Factors for Design Rainfall Distributions**

| | 2-, 5-, and 10-Year Design Rainfall Area—Square Miles | | | | 25-, 50-, 100-, and 500-Year Design Rainfall Area—Square Miles | | | |
|---|---|---|---|---|---|---|---|---|
| Time Minutes | 10-20 | 20-30 | 30-50 | 50-75 | 10-20 | 20-30 | 30-50 | 50-75 |
| 5 | 1.00 | 1.00 | 1.10 | 1.10 | 1.00 | 1.00 | 1.05 | 1.10 |
| 10 | 1.00 | 1.00 | 1.05 | 1.10 | 1.00 | 1.00 | 1.05 | 1.10 |
| 15 | 1.00 | 1.00 | 1.05 | 1.00 | 1.00 | 1.00 | 1.05 | 1.10 |
| 20 | 0.90 | 0.81 | 0.74 | 0.62 | 1.00 | 1.00 | 1.05 | 1.00 |
| 25 | 0.90 | 0.81 | 0.74 | 0.62 | 0.90 | 0.81 | 0.74 | 0.60 |
| 30 | 0.90 | 0.81 | 0.74 | 0.62 | 0.90 | 0.81 | 0.74 | 0.60 |
| 35 | 1.00 | 1.00 | 1.05 | 1.00 | 0.90 | 0.81 | 0.74 | 0.70 |
| 40 | 1.00 | 1.00 | 1.05 | 1.10 | 1.00 | 1.00 | 1.05 | 1.00 |
| 45 | 1.00 | 1.00 | 1.05 | 1.10 | 1.00 | 1.00 | 1.05 | 1.10 |
| 50 | 1.00 | 1.00 | 1.05 | 1.10 | 1.00 | 1.00 | 1.05 | 1.10 |
| 55 | 1.00 | 1.00 | 1.05 | 1.10 | 1.00 | 1.00 | 1.05 | 1.10 |
| 60 | 1.00 | 1.00 | 1.05 | 1.10 | 1.00 | 1.00 | 1.05 | 1.10 |
| 65 - 120 | 1.00 | 1.00 | 1.05 | 1.10 | 1.00 | 1.00 | 1.05 | 1.10 |
| 125 - 180 | 1.00 | 1.15 | 1.20 | 1.40 | 1.00 | 1.15 | 1.20 | 1.40 |
| 185 - 360 | N/A | 1.15 | 1.20 | 1.20 | N/A | 1.15 | 1.20 | 1.20 |

### 4.1.6 Model Parameters Data

For this study, model parameters refer to the data inputs that do not represent the physical properties of the basin, such as those discussed in previous sections. Model parameters include maximum depression storage on pervious and impervious areas, initial and final infiltration rates, and Horton's Decay Rate. These values are found within **Table RO-6** of Section 3.2.2 and **Table RO-7** of Section 3.2.3 of Chapter 5, Volume I of the UDFCD criteria manual.

#### 4.1.6.1 Maximum Depression Storage

Maximum depression storage on pervious and impervious areas considers the imperfections in both pervious and impervious areas that capture portions of runoff which can only be infiltrated or evaporated. These areas are commonly called sumps, low points, or holes.

Table RO-6—Typical Depression Losses for Various Land Covers

(All Values in Inches. For use with the CUHP Method)

| Land Cover | Range in Depression (Retention) Losses | Recommended |
|---|---|---|
| Impervious: | | |
| Large paved areas | 0.05 - 0.15 | 0.1 |
| Roofs-flat | 0.1 - 0.3 | 0.1 |
| Roofs-sloped | 0.05 - 0.1 | 0.05 |
| Pervious: | | |
| Lawn grass | 0.2 - 0.5 | 0.35 |
| Wooded areas and open fields | 0.2 - 0.6 | 0.4 |

##### 4.1.6.1.1 Pervious Depression Storage

For pervious areas, Table RO-6 (shown above) gives a range for this parameter of 0.2 to 0.6 inches. A value of 0.35 was used in the hydrologic models.

##### 4.1.6.1.2 Impervious Depression Storage

For impervious areas, Table RO-6 also gives a range for this parameter of 0.05 to 0.15 inches. A value of 0.05 was used in the hydrologic models.

### 4.1.7 Infiltration Rates

Initial and final infiltration rates are determined based on the soil type found within the Sump Basin. Initial infiltration rates are high as the soil is easily able to infiltrate rainfall, but as the storm continues the soil becomes more saturated and has less capacity to infiltrate runoff which is accounted for in the final infiltration rates. Table RO-7 (shown below) provides the standard initial and final infiltration rates for the four different hydrologic soil groups. Composite infiltration rates were calculated for an individual sub-basin with more than one hydrologic soil group.

Table RO-7—Recommended Horton's Equation Parameters

| NRCS Hydrologic Soil Group | Infiltration (inches per hour) | | Decay Coefficient—$a$ |
|---|---|---|---|
| | Initial—$f_i$ | Final—$f_o$ | |
| A | 5.0 | 1.0 | 0.0007 |
| B | 4.5 | 0.6 | 0.0018 |
| C | 3.0 | 0.5 | 0.0018 |
| D | 3.0 | 0.5 | 0.0018 |

#### 4.1.7.1 Initial Infiltration Rates

The initial infiltration rates vary throughout the basin and range from 3.0 to 4.7 inches per hour. The majority of the basin is composed of Type B soil which has an infiltration rate of 4.5 inches per hour. **Table 4.5** (presented in Section 4.1.8) provides the initial infiltration rates for each sub-basin.

#### 4.1.7.2 Final Infiltration Rates

The final infiltration rates also vary throughout the basin and range from 0.5 inches/hour to 0.8 inches/hour, with the most common rate at 0.6 inches/hour. The range observed in the final infiltration rates is significantly smaller than found in initial infiltration rates. **Table 4.5** (presented in Section 4.1.9) provides the final infiltration rates for each sub-basin.

### 4.1.8 Horton's Decay Rate

Horton's Decay Rate is another parameter that can be found in Volume I of the UDFCD criteria manual. **Table RO-7** (shown below) in Section 3.2.3 of Chapter 5 provides values for Horton's Decay Rate based on the four different soil types described in Section 4.1.8 of this report. The parameters shown in Table RO-7 were applied to each sub-basin according to its composite soil type. **Table 4.5** provides Horton's Decay Rate for each sub-basin.

Table RO-7—Recommended Horton's Equation Parameters

| NRCS Hydrologic Soil Group | Infiltration (inches per hour) | | Decay Coefficient—$a$ |
|---|---|---|---|
| | Initial—$f_i$ | Final—$f_o$ | |
| A | 5.0 | 1.0 | 0.0007 |
| B | 4.5 | 0.6 | 0.0018 |
| C | 3.0 | 0.5 | 0.0018 |
| D | 3.0 | 0.5 | 0.0018 |

**Table 4.5 Initial and Final Infiltration Rates, Horton's Decay Rate**

| Sub-Basin | Initial Infiltration Rate | Final Infiltration Rate | Horton's Decay Rate | Sub-Basin | Initial Infiltration Rate | Final Infiltration Rate | Horton's Decay Rate |
|---|---|---|---|---|---|---|---|
| **W1** | 4.4 | 0.6 | 0.0018 | **W20** | 4.0 | 0.6 | 0.0017 |
| **W2** | 4.5 | 0.6 | 0.0018 | **W21** | 4.5 | 0.6 | 0.0018 |
| **W3** | 4.5 | 0.6 | 0.0018 | **W22** | 4.5 | 0.6 | 0.0018 |
| **W4** | 4.5 | 0.6 | 0.0018 | **W23** | 4.5 | 0.6 | 0.0018 |
| **W5** | 4.6 | 0.7 | 0.0016 | **W24** | 4.5 | 0.6 | 0.0018 |
| **W6** | 4.5 | 0.6 | 0.0018 | **E25** | 3.0 | 0.5 | 0.0018 |
| **W7** | 4.5 | 0.6 | 0.0018 | **E26** | 4.5 | 0.6 | 0.0018 |
| **W8** | 4.5 | 0.6 | 0.0018 | **E27** | 3.4 | 0.5 | 0.0018 |
| **W9** | 4.5 | 0.6 | 0.0018 | **E28** | 4.5 | 0.6 | 0.0018 |
| **W10** | 4.5 | 0.6 | 0.0018 | **E29** | 4.5 | 0.6 | 0.0018 |
| **W11** | 4.5 | 0.6 | 0.0018 | **E30** | 4.7 | 0.8 | 0.0013 |
| **W12** | 4.5 | 0.6 | 0.0018 | **E31** | 4.5 | 0.6 | 0.0018 |
| **W13** | 4.3 | 0.6 | 0.0017 | **E32** | 4.0 | 0.6 | 0.0017 |
| **W14** | 4.5 | 0.6 | 0.0017 | **E33** | 4.5 | 0.6 | 0.0018 |
| **W15** | 4.5 | 0.6 | 0.0018 | **E34** | 4.3 | 0.6 | 0.0018 |
| **W16** | 4.2 | 0.6 | 0.0018 | **E35** | 4.3 | 0.6 | 0.0017 |
| **W17** | 4.5 | 0.6 | 0.0018 | **E36** | 4.4 | 0.6 | 0.0018 |
| **W18** | 4.5 | 0.6 | 0.0018 | **E37** | 4.0 | 0.6 | 0.0016 |
| **W19** | 4.6 | 0.6 | 0.0017 | **E38** | 4.3 | 0.6 | 0.0018 |

## 4.2 Hydrologic Model Description

The hydrologic model used for this study consists of two models that work together to determine the final results. UDFCD's Colorado Unit Hydrograph Procedure (UDCUHP-2000 Version 1.1) and Stormwater Management Model (UDSWMM-2000 Version 1.4.6) are the two pieces that make up the hydrologic model used to analyze the Sump Basin. UDFCD describes the UDCUHP model as "…a method of hydrologic analysis based upon the unit hydrograph principle" (UDFCD DCM Volume 1, Chapter 5, 2007). UDCUHP calculates the individual sub-basin hydrographs, which provides information on the amount of infiltration, the volume of runoff, the peak runoff, and the time to peak. UDSWMM was developed by the UDFCD from the original Runoff Block of EPA's SWMM. According to UDFCD, "It was intended to simulate both the quantity and quality of runoff from urban drainage catchments and to route flows and contaminants through conveyance elements…" (Urban Drainage Stormwater Management Model User Manual, Revised May 2003). UDSWMM essentially routes flows calculated by UDCUHP through the basin to determine attenuated peak runoff values, runoff volume, and time to peak. In 2005, UDFCD adopted the use of EPA's SWMM 5.0, which is newer software used for the routing portion of the hydrologic models. However, EPA SWMM 5.0 was not chosen for this study since previous basin studies in Firestone utilized UDCUHP and UDSWMM. Consistency in data presentation was an important issue and having different types of models for different basins would not provide that consistency.

There are two hydrologic models outlined in the scope of work for this study; the current condition model and the future condition with improvements model. Each of the two hydrologic models was generated using UDCUHP and UDSWMM and is discussed in detail in the following sections.

### 4.2.1 Current Condition

The current condition model was first set up in UDCUHP. Rainfall data was entered and all of the Sump Basin parameters and physical properties necessary to run the model were added. Four separate current condition UDCUHP models were generated; one each for the 2-year, 5-year, 10-year, and 100-year rainfall events. The current condition UDCUHP model is intended to represent the physical properties found within the basin prior to development and to then model the runoff generated during each design storm analyzed. Peak runoff values are calculated for each of the 38 sub-basins modeled within the Sump Basin.

UDSWMM was then utilized to route the individual sub-basin peak runoff totals through the Sump Basin to determine attenuated peak runoff. UDSWMM links each sub-basin together so that the entire Sump Basin can be analyzed as one drainage basin. UDSWMM was also used to generate four current condition models; one each for the 2-year, 5-year, 10-year, and 100-year rainfall event.

### 4.2.2 Future Condition with Improvements

The future condition model with improvements was created to evaluate where drainage improvements will be needed and to provide information that would be used to design improvements to the drainage system, such as new or improved drainage channels, storage facilities, and culverts.

# 5 Hydrologic Model Calibration

Calibration of the hydrologic models is an important step in preparing a master plan for any drainage basin; however, it can also be a difficult step. Lack of qualified data, project budgets, and project schedules are some of the reasons it can be difficult to perform a good calibration on a hydrologic model, but it is still a necessary process in preparing a model that reasonably represents the hydrologic events occurring within the study area.

For the Sump Basin, virtually no data exists that can be used to calibrate the model. Since there are very few defined channels and only a few culverts that exist within the basin, it is difficult to compare historic rainfall events to simulated events within the hydrologic model. For this reason, this study relied heavily on UDFCD's recommendations on the maximum unit flow release rates.

**Table SO-1** (shown below) in Section 3.2.1 of Chapter 10, Volume II of the UDFCD design manual, provides some guidelines for the maximum unit flow release rates from a site. The table is used as a general rule of thumb for estimating surface runoff from any drainage basin.

Table SO-1—Maximum Unit Flow Release Rates (cfs/acre) from On-Site Detention Facilities

| Design Return Period (Years) | NRCS Hydrologic Soil Group | | |
|---|---|---|---|
| | A | B | C & D |
| 2 | 0.02 | 0.03 | 0.04 |
| 5 | 0.07 | 0.13 | 0.17 |
| 10 | 0.13 | 0.23 | 0.30 |
| 25 | 0.24 | 0.41 | 0.52 |
| 50 | 0.33 | 0.56 | 0.68 |
| 100 | 0.50 | 0.85 | 1.00 |

For the Sump Basin analysis, each sub-basin was reviewed to determine the soil make-up. The composite soil was then used to determine the maximum unit flow release rate from Table SO-1 for that sub-basin. A comparison between the calculated unit release rate and modeled unit release rates was performed. Sub-basins within the Sump Basin that are currently developed and have functioning detention ponds (W2, W3, W8, and W10) were not considered when making these comparisons since the presence of a detention pond and outlet structure has already reduced the release rate to historic levels. **Table 5.1** below shows the calculated and modeled unit release rate for each sub-basin. The calculated unit release rate is based on the composite soil information and the UDFCD Table SO-1 shown above. The modeled unit release rate was determined from the discharges found in the current condition UDCUHP model. It is also important to note that portions of the Sump Basin have experienced development and therefore have a higher imperviousness percentage. The increased imperviousness will result in increased unit release rates which may not closely compare to the calculated unit release rates.

## Table 5.1 Calculated and Modeled Unit Release Rates

| Sub-Basin | Sub-Basin Imperviousness (%) | Sub-Basin Area (acre) | Calculated 2-yr Unit Release Rate (cfs) | Modeled 2-yr Unit Release Rate (cfs) | Calculated 5-yr Unit Release Rate (cfs) | Modeled 5-yr Unit Release Rate (cfs) | Calculated 10-yr Unit Release Rate (cfs) | Modeled 10-yr Unit Release Rate (cfs) | Calculated 100-yr Unit Release Rate (cfs) | Modeled 100-yr Unit Release Rate (cfs) |
|---|---|---|---|---|---|---|---|---|---|---|
| **W1** | 2.0% | 277.0 | 8 | 1 | 36 | 19 | 64 | 68 | 237 | 323 |
| **W4** | 10.8% | 120.3 | 4 | 5 | 16 | 12 | 28 | 27 | 103 | 107 |
| **W5** | 2.0% | 273.9 | 8 | 0 | 33 | 3 | 59 | 32 | 218 | 224 |
| **W6** | 2.0% | 73.0 | 2 | 0 | 9 | 4 | 17 | 15 | 62 | 72 |
| **W7** | 30.0% | 4.5 | 0 | 1 | 1 | 2 | 1 | 4 | 4 | 11 |
| **W9** | 2.0% | 130.6 | 4 | 0 | 17 | 0 | 30 | 29 | 111 | 140 |
| **W11** | 15.0% | 49.9 | 1 | 0 | 6 | 8 | 11 | 12 | 42 | 44 |
| **W12** | 10.9% | 284.2 | 9 | 0 | 37 | 0 | 65 | 65 | 242 | 262 |
| **W13** | 3.7% | 418.6 | 28 | 3 | 67 | 6 | 107 | 76 | 355 | 380 |
| **W14** | 7.2% | 189.4 | 6 | 11 | 24 | 28 | 42 | 46 | 157 | 205 |
| **W15** | 2.0% | 62.1 | 2 | 4 | 8 | 21 | 14 | 12 | 53 | 58 |
| **W16** | 2.6% | 405.1 | 13 | 5 | 56 | 16 | 98 | 68 | 355 | 332 |
| **W17** | 8.3% | 94.7 | 3 | 0 | 12 | 3 | 22 | 37 | 81 | 150 |
| **W18** | 6.3% | 110.7 | 3 | 2 | 14 | 20 | 25 | 27 | 93 | 115 |
| **W19** | 2.0% | 164.7 | 5 | 5 | 20 | 15 | 36 | 26 | 134 | 141 |
| **W20** | 2.0% | 442.4 | 25 | 3 | 71 | 10 | 116 | 78 | 387 | 392 |
| **W21** | 3.4% | 211.3 | 7 | 0 | 28 | 5 | 49 | 39 | 178 | 185 |
| **W22** | 2.0% | 254.7 | 8 | 1 | 33 | 21 | 59 | 42 | 218 | 214 |
| **W23** | 2.0% | 565.8 | 17 | 2 | 73 | 12 | 130 | 103 | 477 | 523 |
| **W24** | 2.0% | 152.3 | 5 | 1 | 20 | 11 | 35 | 37 | 129 | 178 |
| **E25** | 2.0% | 35.2 | 1 | 1 | 6 | 27 | 11 | 10 | 35 | 34 |
| **E26** | 2.0% | 90.9 | 3 | 1 | 12 | 10 | 21 | 19 | 77 | 92 |
| **E27** | 2.0% | 64.0 | 2 | 0 | 10 | 5 | 18 | 16 | 62 | 60 |
| **E28** | 4.6% | 373.8 | 11 | 0 | 49 | 5 | 86 | 79 | 318 | 362 |
| **E29** | 7.2% | 39.0 | 1 | 0 | 5 | 7 | 9 | 10 | 33 | 39 |
| **E30** | 2.0% | 21.8 | 1 | 5 | 2 | 26 | 4 | 2 | 15 | 27 |
| **E31** | 2.0% | 23.0 | 1 | 1 | 3 | 4 | 5 | 6 | 20 | 30 |
| **E32** | 2.0% | 338.6 | 0 | 0 | 47 | 0 | 84 | 66 | 296 | 322 |
| **E33** | 2.0% | 33.4 | 1 | 0 | 4 | 2 | 8 | 8 | 28 | 39 |
| **E34** | 2.0% | 449.9 | 17 | 1 | 63 | 17 | 109 | 77 | 390 | 386 |
| **E35** | 5.1% | 468.5 | 26 | 0 | 71 | 2 | 117 | 96 | 396 | 453 |
| **E36** | 2.0% | 66.6 | 2 | 1 | 9 | 22 | 16 | 17 | 57 | 77 |
| **E37** | 2.0% | 686.1 | 22 | 7 | 92 | 30 | 163 | 110 | 576 | 604 |
| **E38** | 2.0% | 173.4 | 5 | 1 | 24 | 11 | 42 | 38 | 152 | 178 |
| **Basin** | 3.5% | 7149.1 | 250 | 62 | 980 | 384 | 1701 | 1397 | 6089 | 6759 |
| | Unit Release (cfs/acre) | | 0.03 | 0.01 | 0.14 | 0.05 | 0.24 | 0.20 | 0.85 | 0.95 |

As a whole, the Sump Basin is comprised of 4.7% Type A soil, 83.3% Type B soil, 5.4% Type C soil, 6.0% Type D soil, and 0.6% Water. Applying this breakdown to Table SO-1, the 10-year calculated unit release rate is 0.23 cfs/acre and the 100-year calculated unit release rate is 0.85 cfs/acre, assuming an undeveloped (2% imperviousness) basin. The 10-year modeled unit release rate is 18% less than the calculated unit release rate. The 100-year modeled unit release rate is 11% greater than the calculated unit release rate. This comparison and result was analyzed thoroughly to understand the differences in the release rates. Model parameters like the initial and final infiltration rates, the pervious and impervious depression storage, and the decay rate were adjusted systematically to determine the sensitivity of the results. The only changes that were made were to the depression storage parameters. The pervious surface depression storage parameter was lowered from 0.40 to 0.35 and the impervious surface parameter was lowered from 0.10 to 0.05. The initial model results with the default values of 0.40 and 0.10 showed unit release rates far below the rates presented in UDFCD Table SO-1. This was especially noticeable for the 2-year, 5-year, and 10-year events and less noticeable for the 100-year event. As a result, the lesser depression storage parameters were used and provided more reasonable results. With flat slopes and 88% of the Sump Basin being composed of Type A and B soils, unit release rates lower than the rates identified in Table SO-1 are acceptable for the Sump Basin.

Additionally, there was an initial intent to compare the attenuated results between the Sump basin and the Tri-Town basin, which is located immediately west of the Sump Basin and is of similar size and shape. However, because of the two existing large sumps and three existing smaller sumps located within the Sump Basin, and that four out of the five sumps contain the entire 10-year event and one of the larger sumps contains the entire 100-year event, it was determined that the drainage basins were not comparable in how surface runoff is conveyed downstream.

# 6 Hydrologic Model Results

The hydrologic model results and discussion of those results are provided in the following sections. An analysis of the results is presented for the current condition model and the future condition with improvements model. The future condition with improvements model keeps the same sub-basin parameters as the current condition model and incorporates major drainageway improvements throughout the Sump Basin. The major drainageway improvements increase the conveyance efficiency which slightly increases the anticipated design flows in the regional channels. The sub-basin parameters remain the same since as the basin develops, each development will be required to release at historic 10-year and 100-year rates.

## 6.1 UDCUHP Model Results

A separate UDCUHP model was generated for the 2-year, 5-year, 10-year, and 100-year rainfall events in order to evaluate the surface runoff generated for each sub-basin for the current condition model and the future condition model without improvements. Improvements to conveyance elements affect the future condition UDSWMM model results but do not affect the UDCUHP model results. A detailed analysis of the results is presented in the following sections.

### 6.1.1 Current Condition UDCUHP Model Results

Four separate current condition models were generated for the different rainfall events needed for analysis. **Table 6.1** below presents the discharge results from the individual hydrology calculated for each sub-basin.

**Table 6.1 Current Condition UDCUHP Model Results**

| Sub-Basins | Rainfall Events | | | | Sub-Basins | Rainfall Events | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2-year | 5-year | 10-year | 100-year | | 2-year | 5-year | 10-year | 100-year |
| **W1** | 1 | 19 | 68 | 323 | **W22** | 1 | 11 | 42 | 214 |
| **W4** | 5 | 12 | 27 | 107 | **W23** | 1 | 27 | 103 | 523 |
| **W5** | 0 | 3 | 32 | 224 | **W24** | 1 | 10 | 37 | 178 |
| **W6** | 0 | 4 | 15 | 72 | **E25** | 0 | 5 | 10 | 34 |
| **W7** | 1 | 2 | 4 | 11 | **E26** | 0 | 5 | 19 | 92 |
| **W9** | 0 | 8 | 29 | 140 | **E27** | 0 | 7 | 16 | 60 |
| **W11** | 3 | 6 | 12 | 44 | **E28** | 5 | 26 | 79 | 362 |
| **W12** | 11 | 28 | 65 | 262 | **E29** | 1 | 4 | 10 | 39 |
| **W13** | 4 | 21 | 76 | 380 | **E30** | 0 | 0 | 2 | 27 |
| **W14** | 5 | 16 | 46 | 205 | **E31** | 0 | 2 | 6 | 30 |
| **W15** | 0 | 3 | 12 | 58 | **E32** | 1 | 17 | 66 | 322 |
| **W16** | 2 | 20 | 68 | 332 | **E33** | 0 | 2 | 8 | 39 |
| **W17** | 5 | 15 | 37 | 150 | **E34** | 1 | 22 | 77 | 386 |
| **W18** | 3 | 10 | 27 | 115 | **E35** | 7 | 30 | 96 | 453 |
| **W19** | 0 | 5 | 26 | 141 | **E36** | 0 | 5 | 17 | 77 |
| **W20** | 1 | 21 | 78 | 392 | **E37** | 1 | 23 | 110 | 604 |
| **W21** | 2 | 12 | 39 | 185 | **E38** | 1 | 11 | 38 | 178 |

As Table 6.1 shows, individual basin hydrology was performed on each sub-basin producing the different discharge rates for each rainfall event. Notice that sub-basins W2, W3, W8, and W10 are not included in the table because these basins have previously been analyzed in the approved subdivision drainage reports. The hydrology for these four sub-basins is provided in **Appendix C** and is incorporated into the current condition UDCUHP analysis. The current condition UDCUHP results can be found in **Appendix I**.

## 6.2 UDSWMM Model Results

UDSWMM was used to generate results for the 2-year, 5-year, 10-year, and 100-year rainfall events. UDSWMM was used to generate and analyze the affects of attenuation within the Sump Basin and the results are discussed in greater detail in the following sections.

### 6.2.1 Current Condition UDSWMM Results

The current condition was analyzed with UDSWMM to evaluate the attenuation of runoff within the Sump Basin and to evaluate the peak discharge and timing at critical locations within the basin. This is the first step in identifying drainage improvements that will be necessary as development occurs.

The current condition UDSWMM results are presented in **Appendix J**, including design point hydrographs, timing, and additional discharge information for conveyance elements. Map sheets with basin designation, area, and conveyance elements are found at the beginning of Appendix J for reference.

### 6.2.2 Future Condition with Improvements UDSWMM Results

The future condition with improvements UDSWMM results presented in this section must be used by the design engineer for each new development to size conveyance channels and major culverts at arterial roadway crossings. There is a notable increase in discharge presented in **Table 6.2** below when compared with Table 6.1 (above). Table 6.2 is used to size the major drainageways and culverts throughout the Sump Basin because as the major drainageways are improved, they convey runoff more efficiently, which also reduces infiltration and travel time to the next downstream design point. The future condition with improvements UDSWMM model uses the current condition UDCUHP model for individual basin hydrology, and then routes runoff through the improved channels defined by UDSWMM. Since the Sump Basin is mostly undeveloped, the Town can ensure that each new development releases no more than the historic rate for 10-year and 100-year rainfall event. As a result, no regional detention ponds are needed to detain excess runoff from developments. The future condition with improvements model can then use the existing condition UDCUHP model which naturally generates the correct runoff from each sub-basin. Table 6.2 presents the UDSWMM results for the future condition with improvements. The entire UDSWMM results for the future condition with improvements are found in **Appendix M**. Map sheets with basin designation, area, and realigned conveyance elements are found at the beginning of Appendix M for reference.

## Table 6.2 Future Condition with Improvements UDSWMM Results

| Design Point | Rainfall Events | | | | Design Point | Rainfall Events | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2-yr Discharge (cfs) | 5-yr Discharge (cfs) | 10-yr Discharge (cfs) | 100-yr Discharge (cfs) | | 2-yr Discharge (cfs) | 5-yr Discharge (cfs) | 10-yr Discharge (cfs) | 100-yr Discharge (cfs) |
| **101** | 13 | 44 | 162 | 1509 | **129** | 0 | 4 | 13 | 67 |
| **102** | 11 | 11 | 11 | 57 | **130** | 0 | 0 | 2 | 27 |
| **103** | 4 | 4 | 4 | 16 | **131** | 0 | 2 | 6 | 30 |
| **104** | 11 | 37 | 105 | 1218 | **132** | 1 | 22 | 126 | 937 |
| **105** | 0 | 3 | 34 | 265 | **133** | 0 | 2 | 8 | 39 |
| **106** | 0 | 4 | 15 | 72 | **134** | 1 | 25 | 105 | 726 |
| **107** | 1 | 3 | 5 | 41 | **135** | 7 | 30 | 99 | 490 |
| **108** | 45 | 45 | 45 | 99 | **136** | 0 | 5 | 17 | 77 |
| **109** | 0 | 8 | 29 | 140 | **137** | 0 | 24 | 118 | 707 |
| **110** | 11 | 21 | 33 | 77 | **138** | 0 | 11 | 38 | 178 |
| **111** | 8 | 23 | 56 | 260 | **400** | 3 | 49 | 219 | 1746 |
| **112** | 11 | 28 | 65 | 262 | **401** | 11 | 39 | 132 | 1386 |
| **113** | 4 | 28 | 116 | 703 | **402** | 4 | 4 | 4 | 24 |
| **114** | 5 | 16 | 46 | 920 | **404** | 12 | 35 | 92 | 1182 |
| **115** | 0 | 3 | 12 | 58 | **414** | 0 | 2 | 9 | 931 |
| **116** | 2 | 20 | 68 | 332 | **416** | 0 | 0 | 0 | 886 |
| **117** | 5 | 15 | 37 | 150 | **420** | 1 | 39 | 152 | 835 |
| **118** | 4 | 20 | 68 | 367 | **432** | 1 | 27 | 110 | 755 |
| **119** | 0 | 5 | 26 | 141 | **501** | 0 | 0 | 0 | 1082 |
| **120** | 0 | 37 | 184 | 1176 | **513** | 0 | 0 | 0 | 701 |
| **121** | 2 | 12 | 39 | 185 | **516** | 0 | 0 | 0 | 300 |
| **122** | 0 | 11 | 42 | 214 | **520** | 0 | 0 | 5 | 5 |
| **123** | 1 | 28 | 110 | 621 | **537** | 0 | 0 | 17 | 700 |
| **124** | 0 | 10 | 37 | 178 | **602** | 3 | 3 | 3 | 22 |
| **125** | 0 | 5 | 17 | 1087 | **603** | 1 | 1 | 1 | 5 |
| **126** | 0 | 5 | 19 | 1101 | **608** | 1 | 1 | 5 | 34 |
| **127** | 3 | 23 | 81 | 452 | **609** | 0 | 2 | 7 | 36 |
| **128** | 5 | 26 | 82 | 419 | **610** | 0 | 0 | 1 | 1 |

# 7 Drainage Improvements

The purpose of this study is to establish a master drainage plan for the Sump Basin that can be used as a guide for new drainage systems as the basin develops. Consistency should be maintained with regard to the way runoff is detained and conveyed throughout the basin, and may be established by mandating the types and degree of improvements necessary to minimize flooding throughout the basin and is essential to maintaining public safety.

## 7.1 Firestone Drainage Policy

### 7.1.1 Detention Storage and Release Rates

The Town of Firestone has already made the decision to regulate drainage improvements as areas develop within its drainage basins to ensure public safety and to mitigate pre-existing drainage issues or issues created through development. The Town of Firestone, along with many additional governmental agencies, requested Anderson Consulting Engineers, Inc. to perform a drainage study on two of the drainage basins located within the Town of Firestone, which are immediately west of the Sump Basin. The study made suggestions on drainage improvements to be installed and recommended that new developments be required to detain excess runoff generated by the increase in impervious area. The current Town of Firestone drainage policy with respect to drainage detention is commonly referred to as "10-10, 100-100" which means that the detention pond and outlet works must detain the difference in developed runoff and historic runoff for both the 10-year and 100-year rainfall events. This also means that the outlet works must be designed and constructed to release no more than the 10-year historic runoff rate during a 10-year rainfall event and release no more than the 100-year historic runoff rate during a 100-year rainfall event. The allowable 10-year and 100-year release rate must be determined from Table 6.1 above. Additionally, since there are numerous major drainageways located within the Sump Basin, Table 6.2 above must be used to account for adjacent offsite runoff. If an adjacent off-site area is tributary to a new development, the new development must accommodate runoff up to the 100-year historic runoff from upstream and adjacent areas. This off-site runoff, however, does not need to be detained within the proposed detention ponds and the runoff release rate for the 10-year and 100-year rainfall events can be increased by the corresponding runoff rate of the adjacent off-site area. Any proposed swales within a new development that would carry off-site flows must be designed to carry the off-site runoff. This increased runoff is commonly referred to as pass-through flow.

Although the Town of Firestone has no formal policy on the improvement of culverts located under arterial roadways, it has required that improvements be constructed to accommodate nuisance flows. Typically this improvement greatly increases the flow capacity of the crossing thereby improving the drainage system as a whole.

These policies are maintained and reiterated with this study. The "10-10, 100-100" philosophy applies to detention and runoff release rates for this study. Any adjacent areas tributary to any future development may allow runoff to "pass-through," but must safely convey the runoff through their drainage system.

### 7.1.2 Culvert Capacities at Arterial Roadways

Improvements to culverts under arterial roadways will be evaluated on a case-by-case basis as the basin is developed. At a minimum, nuisance flows must be accommodated by improving the crossing, but the details of this improvement will be agreed upon by future developers and the Town of Firestone engineer.

### 7.1.3 Additional Downstream Improvements

Additional improvements required of the developer of any area within the Sump Basin may include improvements to the roadside ditches downstream of the outlet of the future development. If a proposed development occurs when an adjacent area downstream has not been developed, careful consideration must be given to the effects on runoff created by the new development. Although the runoff release rates for any proposed development are not allowed to exceed the 10-year and 100-year historic rates, a significant increase in the volume of runoff generated does occur. As a result of the new development and its increase in impervious area, the downstream property owner may notice runoff flowing through their property more frequently. Even though the runoff rates observed on the property should be no greater than the historic rates, the increase in frequency and volume can become a nuisance. For this reason, the Town of Firestone engineer may require improvements along the downstream roadside ditches to the next arterial crossing. These improvements would most likely include cleaning and re-grading of ditches to improve capacity. The improved capacity of the roadside ditch may divert nuisance flows into the ditch and away from the downstream property owner. This improvement is not meant to convey the 100-year runoff rate, but will convey the 5-year rate. The roadside ditch improvements should be located outside of the ultimate right-of-way, however if this proves difficult, the improvements may be allowed within the existing right-of-way. Each new development will be reviewed on a case-by-case basis, and required improvements may vary within the Sump Basin.

## 7.2 Hydraulic Analysis

One of the tasks required of this drainage study is to evaluate the current drainage system and identify areas that are in need of improvement with regard to the effective conveyance of runoff. Significant improvements needed include arterial roadway crossings, drainage channels for conveyance of surface runoff from the 100-year event, and detention ponds for detaining the increase in surface runoff as a result of new development. A cursory hydraulic analysis has been performed on proposed drainage facilities, some of which are regional in nature while most are considered local.

### 7.2.1 Regional Improvements

Most of the Regional Improvements identified at this time to be funded in-part by the Town of Firestone are the culverts at arterial roadway crossings. However, there is one improvement that is not an arterial roadway crossing will also be classified as a regional improvement. Currently the Casagrande Estates subdivision and the Enchanted Hills subdivision are Weld County subdivisions and have not been annexed into the Town of Firestone. Both developments are considered rural subdivisions with no significant

drainage facilities accommodating offsite runoff. The location of the subdivisions places them directly in the main conveyance channel for the upper (southern) half of the Sump Basin. One of the proposed regional improvements is to redirect tributary runoff around these two subdivisions to reduce the possibility for flooding. A hydraulic analysis was performed on the drainage channel (SWMM Conveyance Elements 313, 314, 317, 318, and 319) that would be required to divert this tributary runoff to the east until it could safely be discharged back into the original drainage channel north of the Enchanted Hills subdivision. **Exhibit H** shows the location of the proposed regional improvement.

The hydrologic model of the Sump Basin shows that a drainage channel must convey between 700 and 950 cfs, depending on the location, to safely redirect runoff around the two subdivisions. The drainage channel is fed through one arterial roadway crossing under CR 20. A hydraulic analysis was performed on this roadway crossing to determine the size of the culvert(s) needed to convey the 100-year runoff rate from the adjacent properties to the south. Some assumptions were made in the hydraulic analysis for both the drainage channel and the roadway crossing:

- The slope used in the hydraulic analysis of the proposed drainage channel matched the existing condition. There were two options considered for the design of the drainage channel; to maintain the existing slope but widen the drainage channel to ensure velocities did not become erosive or to construct a channel with a flatter (less steep) slope by adding drop structures to make up the difference in elevation. After some approximate calculations, it was determined that the cost of construction and value of the land required for the widening would be less than a narrower and steeper drainage channel with drop structures. This is the typical suggestion for any drainage channel improvement performed by either the Town of Firestone or a developer.

- The slope used in the hydraulic analysis for the arterial roadway crossings was assumed to be 0.50%. If it can be shown, through an additional hydraulic analysis, that a slope other than 0.50% can be used to effectively and safely convey the runoff rate under the arterial road, then the hydraulic analysis provided with this study may be superseded by the new analysis.

- The backwater depth at the crossing is no less than one foot below the top of the road.

- The culvert was a minimum of three feet high and preferably four feet high. This applies to either a reinforced concrete pipe or reinforced concrete box. This criteria helps minimize future maintenance of the culverts.

The remaining regional improvements are the arterial roadway crossings capable of conveying the 100-year runoff determined with the hydrologic model of the Sump Basin. Ideally, developers will be responsible for funding the cost of regional improvements. However, since development in the Sump Basin will not likely occur in the downstream to upstream direction, the Town may need to fund regional improvements without the aid of a developer to ensure the safe conveyance of runoff throughout the basin.

### 7.2.2 Developer Improvements

Drainage improvements within the Sump Basin to be implemented by the developer include on-site drainage channel improvements, on-site culverts, on-site detention ponds, and possibly downstream roadside ditches. In addition to these improvements, a portion of any adjacent downstream arterial roadway crossing may be the responsibility of the developer.

#### 7.2.2.1 Hydraulic Analysis of Major Drainageways

Some major drainageways have been identified within the Sump Basin and have been analyzed in their current condition and to determine a more efficient and safer configuration as development occurs in the basin. A Hydraulic analysis has been provided in this report for some specific on-site drainage channel improvements. These improvements must be funded and constructed by the developer. Some assumptions were made in the hydraulic analysis of the major drainageways and are discussed below.

- In a similar fashion as in Section 7.2.1, the channels were analyzed with the existing slope observed on-site and was configured with a wide bottom width to reduce flow velocities. Again, this option for hydraulic analysis was based on some approximate calculations that show constructing a wide bottom channel is more cost effective than constructing a narrow channel with drop structures to control velocities.10
-

**Table 7.1** below presents a list of SWMM conveyance elements representing the major drainageways and indicates each channel's modeled configuration. A detailed hydraulic analysis of each channel is provided in **Appendix L**.

**Table 7.1 Major Drainageway Configuration**

| SWMM Conveyance Element | SWMM Design Point | 2-year Design Discharge (cfs) | 5-year Design Discharge (cfs) | 10-year Design Discharge (cfs) | 100-year Design Discharge (cfs) | Swale Design Slope (%) | Swale Bottom Width (ft) | Flow Depth (ft) | Min. Swale Depth (ft) |
|---|---|---|---|---|---|---|---|---|---|
| **301** | 126 | 0 | 5 | 19 | 1101 | 1.52% | 150 | 1.42 | 2.42 |
| **302** | 402 | 4 | 4 | 4 | 24 | 1.50% | 0 | 1.50 | 2.50 |
| **304** | 401 | 11 | 39 | 132 | 1386 | 1.33% | 175 | 1.55 | 2.55 |
| **306** | 105 | 0 | 3 | 34 | 265 | 1.57% | 25 | 1.65 | 2.65 |
| **311** | 104 | 11 | 37 | 105 | 1218 | 1.23% | 135 | 1.70 | 2.70 |
| **313** | 513 | 0 | 0 | 0 | 701 | 0.54% | 10 | 4.90 | 5.90 |
| **314** | 114 | 5 | 16 | 46 | 920 | 0.80% | 60 | 2.60 | 3.60 |
| **315** | 115 | 0 | 3 | 12 | 58 | 0.97% | 0 | 2.15 | 3.15 |
| **316** | 516 | 0 | 0 | 0 | 300 | 0.53% | 0 | 4.25 | 5.25 |
| **317** | 117 | 5 | 15 | 37 | 150 | 0.11% | 0 | 4.50 | 5.50 |

| SWMM Conveyance Element | SWMM Design Point | 2-year Design Discharge (cfs) | 5-year Design Discharge (cfs) | 10-year Design Discharge (cfs) | 100-year Design Discharge (cfs) | Swale Design Slope (%) | Swale Bottom Width (ft) | Flow Depth (ft) | Min. Swale Depth (ft) |
|---|---|---|---|---|---|---|---|---|---|
| **318** | 113 | 4 | 28 | 116 | 703 | 0.71% | 35 | 3.05 | 4.05 |
| **319** | 119 | 0 | 5 | 26 | 141 | 0.82% | 0 | 3.00 | 4.00 |
| **322** | 120 | 0 | 37 | 184 | 1176 | 0.85% | 100 | 2.25 | 3.25 |
| **324** | 123 | 1 | 28 | 110 | 621 | 1.33% | 80 | 1.50 | 2.50 |
| **326** | 125 | 0 | 5 | 17 | 1087 | 0.18% | 45 | 4.90 | 5.90 |
| **328** | 127 | 3 | 23 | 81 | 452 | 0.26% | 10 | 4.75 | 5.75 |
| **329** | 128 | 2.5 | 13 | 41 | 210 | 1.73% | 25 | 1.50 | 2.50 |
| **330** | 128 | 2.5 | 13 | 41 | 210 | 1.48% | 15 | 1.90 | 2.90 |
| **331** | 129 | 0 | 4 | 13 | 67 | 1.35% | 0 | 2.10 | 3.10 |
| **333** | 132 | 1 | 22 | 126 | 937 | 0.68% | 55 | 2.90 | 3.90 |
| **335** | 134 | 1 | 25 | 105 | 726 | 1.23% | 85 | 1.70 | 2.70 |
| **336** | 135 | 7 | 30 | 99 | 490 | 0.99% | 35 | 2.25 | 3.25 |
| **337** | 537 | 0 | 0 | 17 | 700 | 0.20% | 25 | 4.90 | 5.90 |
| **338** | 137 | 0 | 24 | 118 | 707 | 1.39% | 90 | 1.55 | 2.55 |

#### 7.2.2.1 Hydraulic Analysis of On-site Culverts

The site-survey of the Sump Basin was not intended to locate and document any existing drainage culvert that may be located within the boundaries of a new development. Only culverts that would be within the Town of Firestone right of way were analyzed. Therefore, if any existing culvert is found within the boundary of a future development, the culvert must be analyzed to determine its current capacity to convey runoff and must be improved if its capacity is insufficient to handle the runoff rate flowing to the culvert.

#### 7.2.2.2 Hydraulic Analysis of On-site Storage Facilities

##### On-Site Detention Ponds

There are no detention ponds located within any undeveloped area of the Sump Basin. As with any new development, a detention pond is needed to collect and release at historic rates in accordance with Town of Firestone drainage criteria.

##### On-Site Irrigation Ponds

There were no considerations made within the hydrologic model of the Sump Basin for the existing irrigation ponds. The basic assumption is that during any rainfall event the ponds are full with no additional capacity for detained runoff, and so any runoff conveyed to the irrigation pond simply passes through it and continues in its historic pattern. **Exhibit I** shows the location of each irrigation pond.

### On-Site Large Sumps

As previously discussed, there are two large sumps located within the Sump Basin. At this time, both sumps are part of subdivisions that are in the Town of Firestone development review process. Park Engineering has provided more detailed topographic information for the northern sump, and CVL Consultants of Colorado has provided more detailed topographic information on the southern sump. Additionally, Wright Water Engineers, Inc. performed a hydrologic evaluation on the southern sump and tributary area. Their analysis, based on CVL's topographic data, showed that the southern sump can retain the entire 100-year event. Visual inspection of the area appears to support the same conclusion since no outlet was found and there is no identifiable downstream channel. The policy set by this master drainage plan is to maintain the existing storage capacity with any new development. The existing storage capacity for each large sump is shown in **Table 7.2** below.

**Table 7.2 Existing Large Sump Volume to be Maintained with Development**

| Sump SWMM Designation | Existing Sump Volume (acre-ft) |
|---|---|
| **501** | 82.9 |
| **520** | 230.0 |

### On-Site Small Sumps

There are three notable sumps of smaller size located within the Sump Basin; these three are in addition to the two large sumps discussed in the previous section. Two of the smaller sumps are located just south of CR 22 toward the middle of the Sump Basin and the third is located just south of CR 26 and east of CR 17. The three smaller sumps have been shown based on the hydrologic model to effectively reduce downstream flow rates. Since there is a noticeable decrease in the downstream flow rates, any developer that wishes to develop land that includes any of these three sumps must not lessen the effects of the sumps on the overall drainage system. The retention capacity must be included in the total detention responsibilities for the future development. **Table 7.3** below shows the additional detention storage to be added to any on-site detention storage once development occurs at Sumps 513, 516, and 537. Exhibit F shows each of the sumps mentioned.

**Table 7.3 Existing Small Sump Volume to be Maintained with Development**

| Sump SWMM Designation | Existing Sump Volume (acre-ft) |
|---|---|
| **513** | 20.3 |
| **516** | 18.1 |
| **537** | 14.8 |

#### 7.2.2.3 Hydraulic Analysis of Regional Crossings

A portion of the cost of installation for regional culvert crossings will be the responsibility of the developer, however, this will be evaluated with each new development that occurs within the Sump Basin. As stated in Section 7.1, the developer may only be responsible to install a culvert that can convey the 5-year runoff rate, but this requirement will be evaluated by Town Engineer for each development. Assumptions that were used in the hydraulic analysis of the culverts are shown below.

- Culverts were designed to allow runoff to pond to one foot below the roadway surface. The upstream swale conveying runoff to the culvert will need to be built to account for the ponding height anticipated for each culvert.
- The culvert slope is 0.50% for the hydraulic analysis.

**Table 7.4** below presents a list of the SWMM discharge points representing the Regional Culvert improvements at arterial roadway crossings and indicates each culvert's approximate size and configuration. A detailed hydraulic analysis of each culvert is provided in **Appendix K**. **Exhibit J** shows the approximate location of each major culvert crossing at arterial roadways.

**Table 7.4 Regional Culvert Improvements**

| SWMM Discharge Point | 2-year Design Discharge (cfs) | 5-year Design Discharge (cfs) | 10-year Design Discharge (cfs) | 100-year Design Discharge (cfs) | Culvert Type (RCP or RCB) (ft) | RCP Diameter or RCB Width (ft) | RCB Height (ft) | Number of Barrels |
|---|---|---|---|---|---|---|---|---|
| **106** | 0 | 4 | 15 | 72 | RCP | 3.5 | n/a | 1 |
| **115** | 0 | 3 | 12 | 58 | RCP | 3.0 | n/a | 1 |
| **118** | 4 | 20 | 68 | 367 | RCB | 6.0 | 4.0 | 2 |
| **124** | 0 | 10 | 37 | 178 | RCB | 6.0 | 4.0 | 1 |
| **126** | 0 | 5 | 19 | 1101 | RCB | 10.0 | 4.0 | 5 |
| **128** | 5 | 26 | 82 | 419 | RCB | 6.0 | 4.0 | 3 |
| **129** | 0 | 4 | 13 | 67 | RCP | 3.5 | n/a | 1 |
| **130** | 0 | 0 | 2 | 27 | RCP | 3.0 | n/a | 1 |
| **131** | 0 | 2 | 6 | 30 | RCP | 3.0 | n/a | 1 |
| **135** | 7 | 30 | 99 | 490 | RCB | 6.0 | 4.0 | 3 |
| **136** | 0 | 5 | 17 | 77 | RCP | 3.5 | n/a | 1 |
| **138** | 0 | 11 | 38 | 178 | RCP | 4.0 | n/a | 2 |
| **401** | 11 | 39 | 132 | 1386 | RCB | 9.0 | 4.0 | 5 |
| **416** | 0 | 0 | 0 | 886 | RCB | 10.0 | 4.0 | 3 |
| **420** | 1 | 39 | 152 | 835 | RCB | 10.0 | 4.0 | 3 |
| **432** | 1 | 27 | 110 | 755 | RCB | 9.0 | 4.0 | 3 |
| **537** | 0 | 0 | 17 | 700 | RCB | 8.0 | 4.0 | 4 |

# 8 Improvement Costs and Funding/Financing

This master plan has highlighted the need for drainage improvements as development occurs within the Sump Basin and the parties responsible for the cost of each improvement; however, the methods used to pay for the improvements can vary greatly. The anticipated cost of improvements and several funding options are presented in the following sections.

## 8.1 Cost of Improvements

Improvements that were analyzed to determine their approximate cost were major drainageways and culvert crossings at arterial roadways. The cost analysis includes the material cost of the new drainage facility, the cost of construction, and the cost of developable ground used for the new drainage facility. **Table 8.1** below presents the approximate costs for each regional culvert improvement. A more detailed breakdown of the estimated costs for the installation of each regional culvert is found in **Appendix N**.

**Table 8.1 Estimated Cost of Regional Culvert Installation**

| Culvert | Culvert Type (RCP or RCB) (ft) | RCP Diameter or RCB Width (ft) | RCB Height (ft) | Number of Barrels | Total Installed Price ($) |
|---|---|---|---|---|---|
| **106** | RCP | 3.5 | n/a | 1 | $33,519.83 |
| **115** | RCP | 3.0 | n/a | 1 | $31,660.20 |
| **118** | RCB | 6.0 | 4.0 | 2 | $132,968.93 |
| **124** | RCB | 6.0 | 4.0 | 1 | $73,022.85 |
| **126** | RCB | 10.0 | 4.0 | 5 | $555,366.38 |
| **128** | RCB | 6.0 | 4.0 | 3 | $192,915.00 |
| **129** | RCP | 3.5 | n/a | 1 | $33,519.83 |
| **130** | RCP | 3.0 | n/a | 1 | $31,660.20 |
| **131** | RCP | 3.0 | n/a | 1 | $31,660.20 |
| **135** | RCB | 6.0 | 4.0 | 3 | $192,915.00 |
| **136** | RCP | 3.5 | n/a | 1 | $33,519.83 |
| **138** | RCP | 4.0 | n/a | 2 | $60,628.50 |
| **401** | RCB | 9.0 | 4.0 | 5 | $448,490.25 |
| **416** | RCB | 10.0 | 4.0 | 3 | $337,642.43 |
| **420** | RCB | 10.0 | 4.0 | 3 | $97,072.43 |
| **432** | RCB | 9.0 | 4.0 | 3 | $273,516.75 |
| **537** | RCB | 8.0 | 4.0 | 4 | $359,062.88 |

**Table 8.2** below presents the estimated costs for each major drainageway.

**Table 8.2 Estimated Cost of Major Drainageway Installation**

| Swale | Bottom Width (ft) | Top Width (ft) | Easement Width (ft) | Total Width (ft) | Length (ft) | Area (acres) | Price/acre ($) | Total Price ($) |
|---|---|---|---|---|---|---|---|---|
| **301** | 150 | 169 | 40 | 209 | 1716 | 8.25 | $25,000.00 | $206,187.88 |
| **302** | 0 | 20 | 40 | 60 | 1698 | 2.34 | $25,000.00 | $58,471.07 |
| **304** | 175 | 195 | 40 | 235 | 1761 | 9.52 | $25,000.00 | $237,912.88 |
| **306** | 25 | 46 | 40 | 86 | 5603 | 11.09 | $25,000.00 | $277,191.57 |
| **311** | 135 | 157 | 40 | 197 | 2519 | 11.37 | $25,000.00 | $284,226.01 |
| **313** | 10 | 57 | 40 | 97 | 2381 | 5.31 | $25,000.00 | $132,824.38 |
| **314** | 60 | 89 | 40 | 129 | 3598 | 10.64 | $25,000.00 | $265,967.86 |
| **315** | 0 | 25 | 40 | 65 | 2696 | 4.04 | $25,000.00 | $100,883.38 |
| **316** | 0 | 42 | 40 | 82 | 965 | 1.82 | $25,000.00 | $45,414.37 |
| **317** | 0 | 44 | 40 | 84 | 118 | 0.23 | $25,000.00 | $5,688.71 |
| **318** | 35 | 67 | 40 | 107 | 3069 | 7.57 | $25,000.00 | $189,170.45 |
| **319** | 0 | 32 | 40 | 72 | 2135 | 3.53 | $25,000.00 | $88,223.14 |
| **322** | 100 | 126 | 40 | 166 | 2881 | 10.98 | $25,000.00 | $274,475.44 |
| **324** | 80 | 100 | 40 | 140 | 5657 | 18.18 | $25,000.00 | $454,533.98 |
| **326** | 45 | 92 | 40 | 132 | 2265 | 6.87 | $25,000.00 | $171,850.90 |
| **328** | 10 | 56 | 40 | 96 | 2545 | 5.61 | $25,000.00 | $140,220.39 |
| **329** | 25 | 45 | 40 | 85 | 4136 | 8.07 | $25,000.00 | $201,767.68 |
| **330** | 15 | 38 | 40 | 78 | 6271 | 11.26 | $25,000.00 | $281,446.40 |
| **331** | 0 | 25 | 40 | 65 | 2147 | 3.19 | $25,000.00 | $79,847.11 |
| **333** | 55 | 86 | 40 | 126 | 4716 | 13.66 | $25,000.00 | $341,574.38 |
| **335** | 85 | 107 | 40 | 147 | 7048 | 23.72 | $25,000.00 | $592,996.33 |
| **336** | 35 | 61 | 40 | 101 | 5158 | 11.96 | $25,000.00 | $298,988.75 |
| **337** | 25 | 72 | 40 | 112 | 4489 | 11.56 | $25,000.00 | $289,064.39 |
| **338** | 90 | 110 | 40 | 150 | 5244 | 18.11 | $25,000.00 | $452,650.14 |

## 8.2 Funding and Financing Alternatives

There are several different methods for funding drainage improvements in the Sump Basin that are available to the Town including requiring the developer to fund the entire cost of improvements, however, in 2009 the Town formed a Stormwater Activity Enterprise with Stormwater Utility Service Fees and also updated its development impact fee which includes a Regional Stormwater Drainage Impact Fee. Between these two fees, money is generated to fund ongoing maintenance of the stormwater drainage system and any regional improvement the Town desires.

### 8.2.1 Regional Stormwater Drainage Impact Fee

The Town's Development Impact Fee is assessed to each residential unit constructed within Town limits and totals $9,517.16. The Regional Stormwater Drainage Impact Fee is a portion of the total Development Impact Fee and is $1,011.90 per residential unit. This fee is used to mitigate the effects to the existing stormwater drainage system of new development by funding regional improvements.

### 8.2.2 Stormwater Utility Service Fees

The Stormwater Utility Service Fee was adopted with Ordinance 709 and is applied to all property within the Town's limits, excluding public ground or other taxing entities. All existing residential, commercial, industrial, and open space land is assessed the stormwater fee, and all new annexations and developments will be assessed fees according to their land use makeup. The Stormwater Utility Service Fees generate an estimated $155,000.00 annually for ongoing maintenance needs.

## 9 Implementation Plan

The adoption of this Sump Basin Master Drainage Plan will allow any future development within the Sump Basin to follow a guide in effectively collecting, conveying, detaining, and releasing stormwater runoff. With this master drainage plan, the Regional Stormwater Drainage Impact Fee and the Stormwater Utility Service Fee, all the necessary tools are in place to effectively manage the future growth of the Sump Basin.

# 10 References

Urban Storm Drainage Criteria Manual Volume 1, June 2001, Rev. August 2006, Urban Drainage & Flood Control District (UDFCD), Denver, Colorado

Urban Storm Drainage Criteria Manual Volume 2, June 2001, Rev. January 2007, Urban Drainage & Flood Control District (UDFCD), Denver, Colorado

Town of Firestone Design Criteria & Construction Regulations, July 2002, TST, Inc. Consulting Engineers, Fort Collins, Colorado

Final Drainage and Erosion Control Study, Ridge Crest Filing 1, January 1999, Rev. April 1999, Rocky Mountain Consultants, Inc., Englewood, Colorado

Final Drainage Report, Sagebrush Subdivision, December 2001, Rev. January 2003, Stantec Consulting Inc., Denver, Colorado

Storm Drainage Study, St. Vrain Ranch Subdivision Filing 2, July 1999, Rev. September 1999, QCI Development Services Group, Inc., Denver, Colorado

Final Drainage Study, St. Vrain Ranch Filing 3, September 2000, Northern Engineering Services, Inc., Fort Collins, Colorado

Final Drainage Report, Saddleback Heights, December 2003, Park Engineering Consultants, Longmont, Colorado

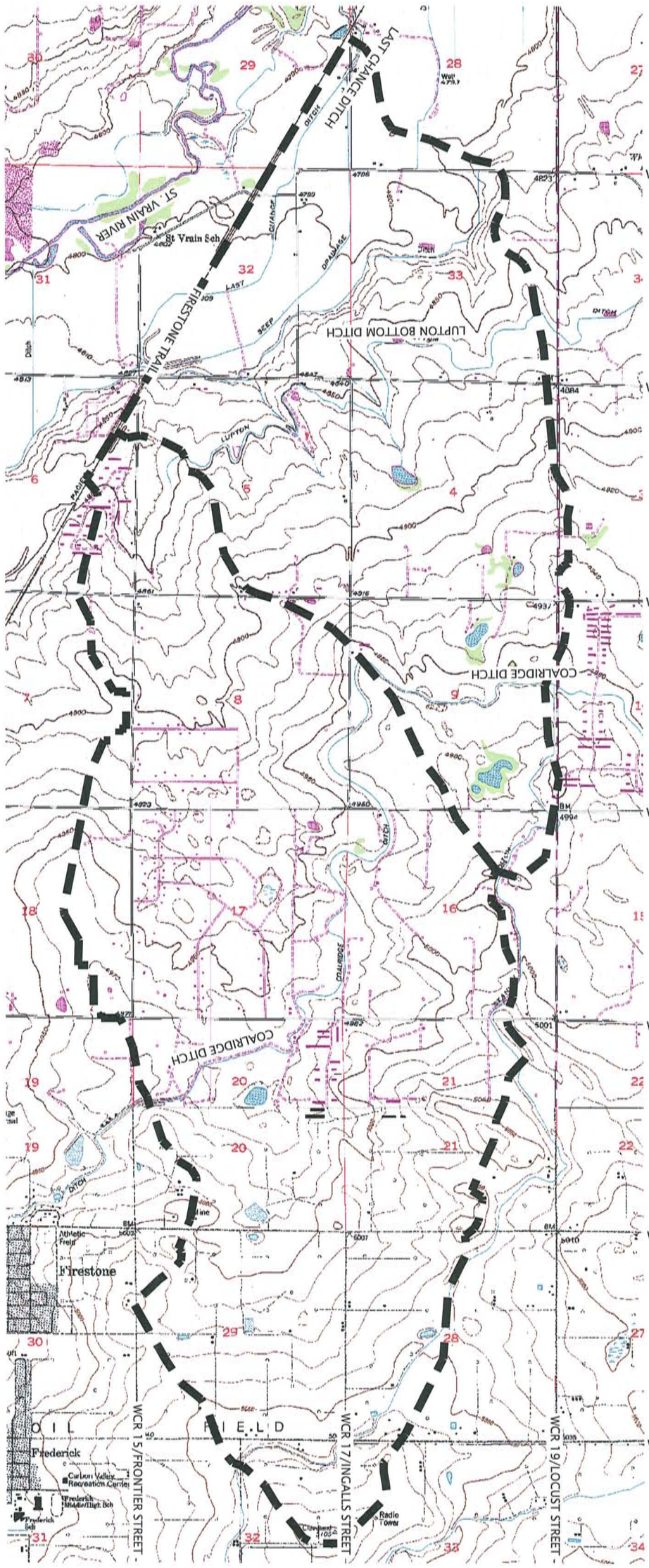
Final Drainage Report, Vogl Land – North Parcel, June 2005, Rev. April 2006, Park Engineering Consultants, Longmont, Colorado

Drainage Report, Saddleback Hills, November 2006, Wright Water Engineers, Inc., Denver, Colorado

Final Drainage Report, Firestone Sports Complex Phase 1, August 2007, TST, Inc. Consulting Engineers, Fort Collins, Colorado

South Weld I-25 Corridor Master Drainage Plan, February 2000, Anderson Consulting Engineers, Inc., Fort Collins, Colorado

# MASTER PLAN EXHIBITS




LEGEND

SUMP BASIN BOUNDARY

N

N.T.S.

# TOWN OF FIRESTONE
# SUMP BASIN MASTER PLAN

## SUMP BASIN LOCATION
## SECTION, TOWNSHIP, RANGE

EXHIBIT A

SHEET NO.:

DATE: MAY 2010

SCALE: N.T.S.

JOB NO.: 0668.0147.00

CHECKED: D.B.L.

DESIGNED: D.H.

FILENAME: 0147_DRAINAGE

CCG COLORADO CIVIL GROUP, INC.
ENGINEERING CONSULTANTS

LEGEND

SUMP BASIN BOUNDARY

N

N.T.S.

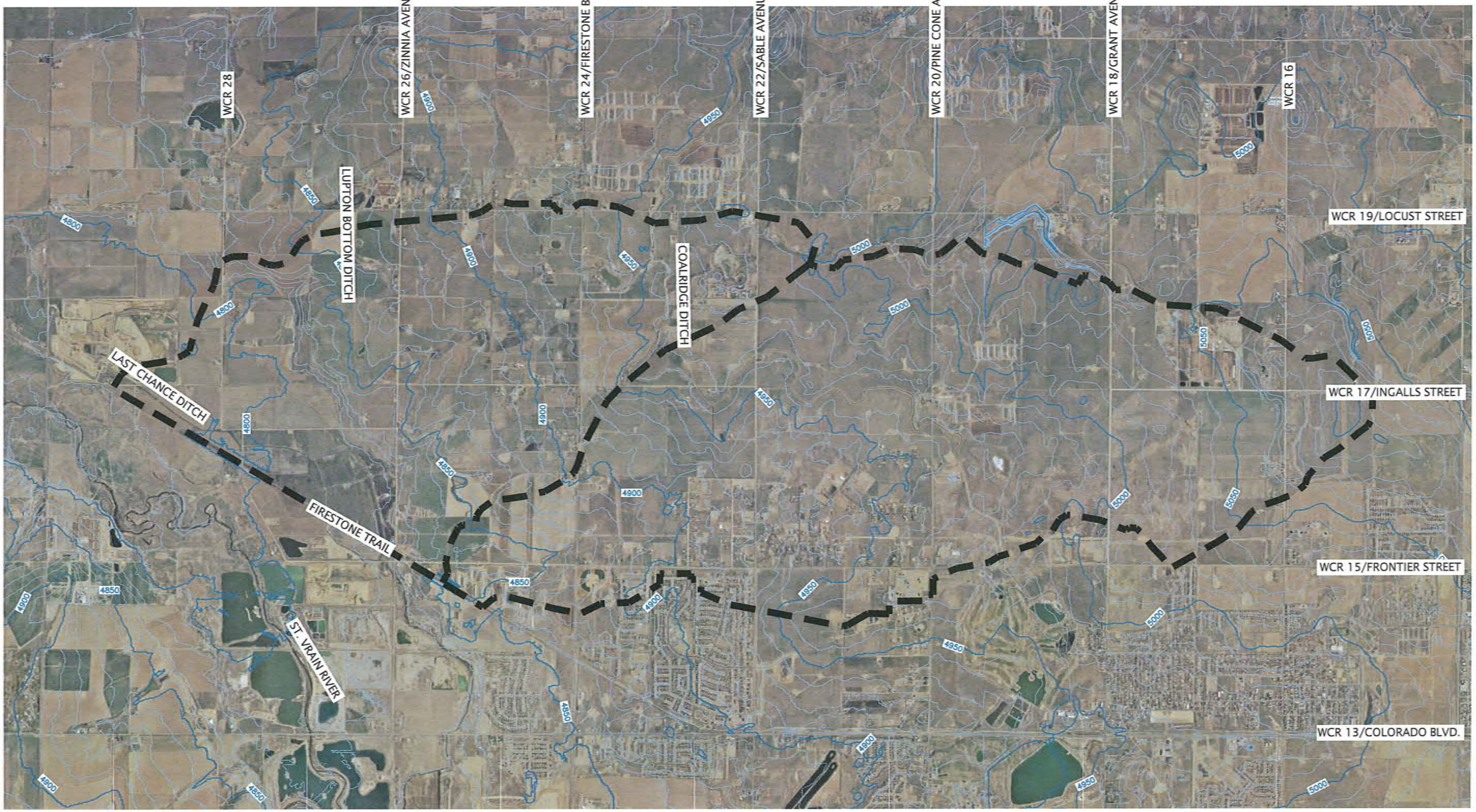
CCG COLORADO CIVIL GROUP, INC. ENGINEERING CONSULTANTS

**TOWN OF FIRESTONE**
**SUMP BASIN MASTER PLAN**

**SUMP BASIN LOCATION**
**TOWN OF FIRESTONE GROWTH BOUNDARY**

FILENAME: 0147_DRAINAGE
DESIGNED: D.H.
CHECKED: D.B.L.
JOB NO.: 0668.0147.00
SCALE: N.T.S.
DATE: MAY 2010

SHEET NO.:
**EXHIBIT B**




LEGEND

EXISTING 10' CONTOUR

EXISTING 50' CONTOUR

SUMP BASIN BOUNDARY

N

0 3000 6000

scale 1" = 3000' feet

CCG COLORADO CIVIL GROUP, INC. ENGINEERING CONSULTANTS

# TOWN OF FIRESTONE
# SUMP BASIN MASTER PLAN

## SUMP BASIN WITH CONTOURS

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DESIGNED: D.H.

CHECKED: D.B.L.

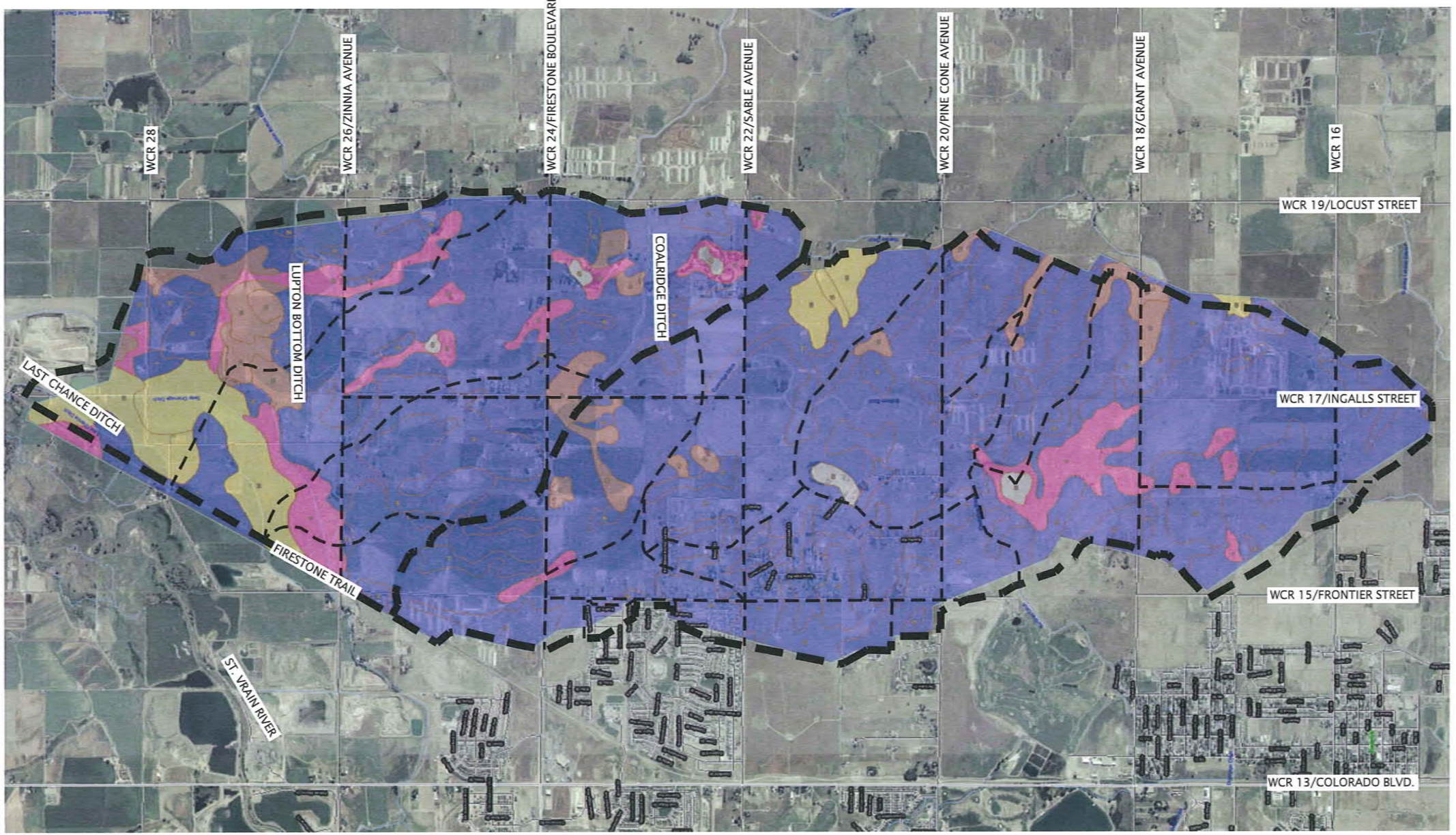
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DATE: MAY 2010

SHEET NO.:

**EXHIBIT C**



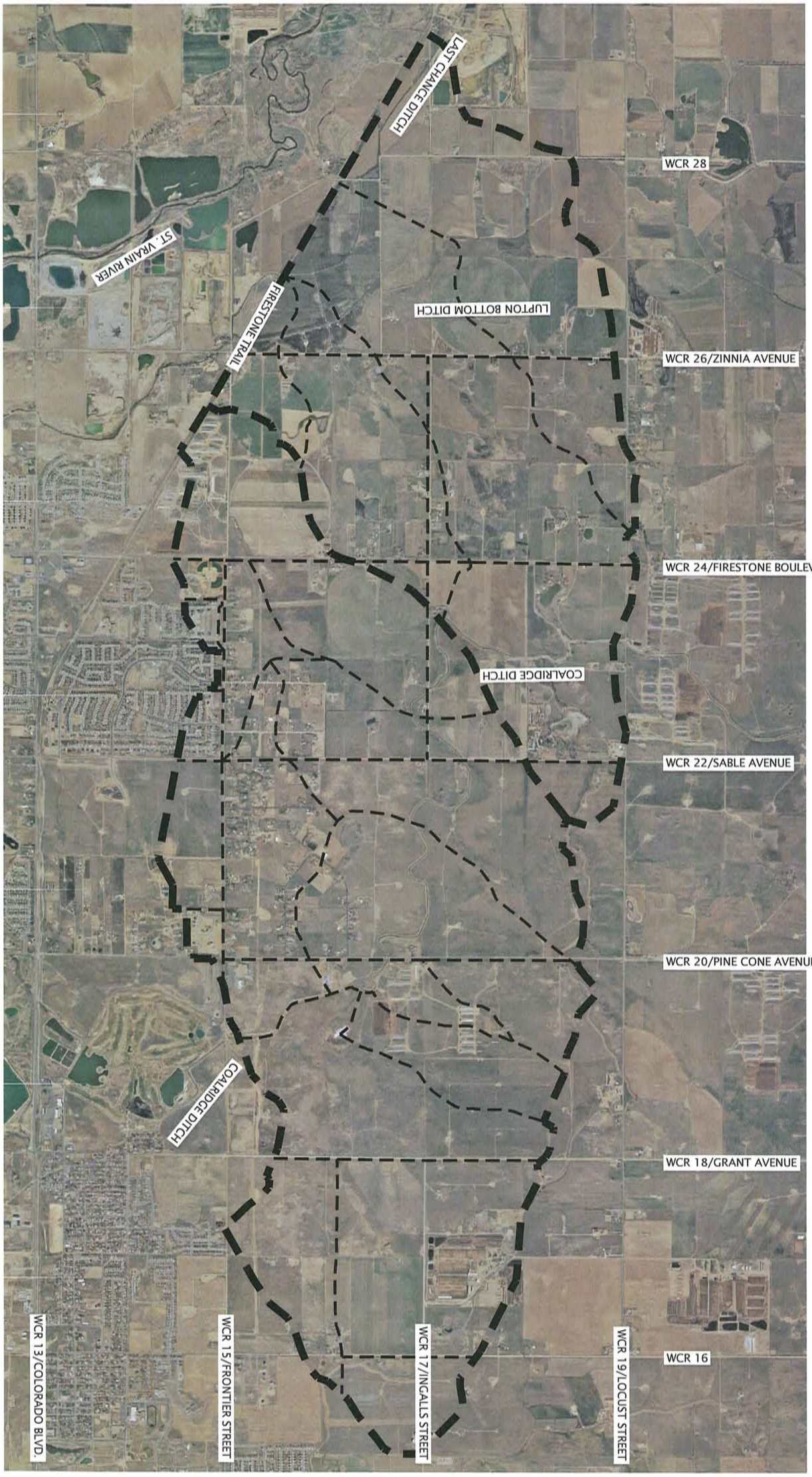

CCG COLORADO CIVIL GROUP, INC. ENGINEERING CONSULTANTS

TOWN OF FIRESTONE
SUMP BASIN MASTER PLAN

SUMP BASIN SOIL COMPOSITION

FILENAME: 0147_DRAINAGE
DESIGNED: D.H.
CHECKED: D.B.L.
JOB NO.: 0668.0147.00
SCALE: N.T.S.
DATE: MAY 2010

SHEET NO.: EXHIBIT D




# TOWN OF FIRESTONE
# SUMP BASIN MASTER PLAN

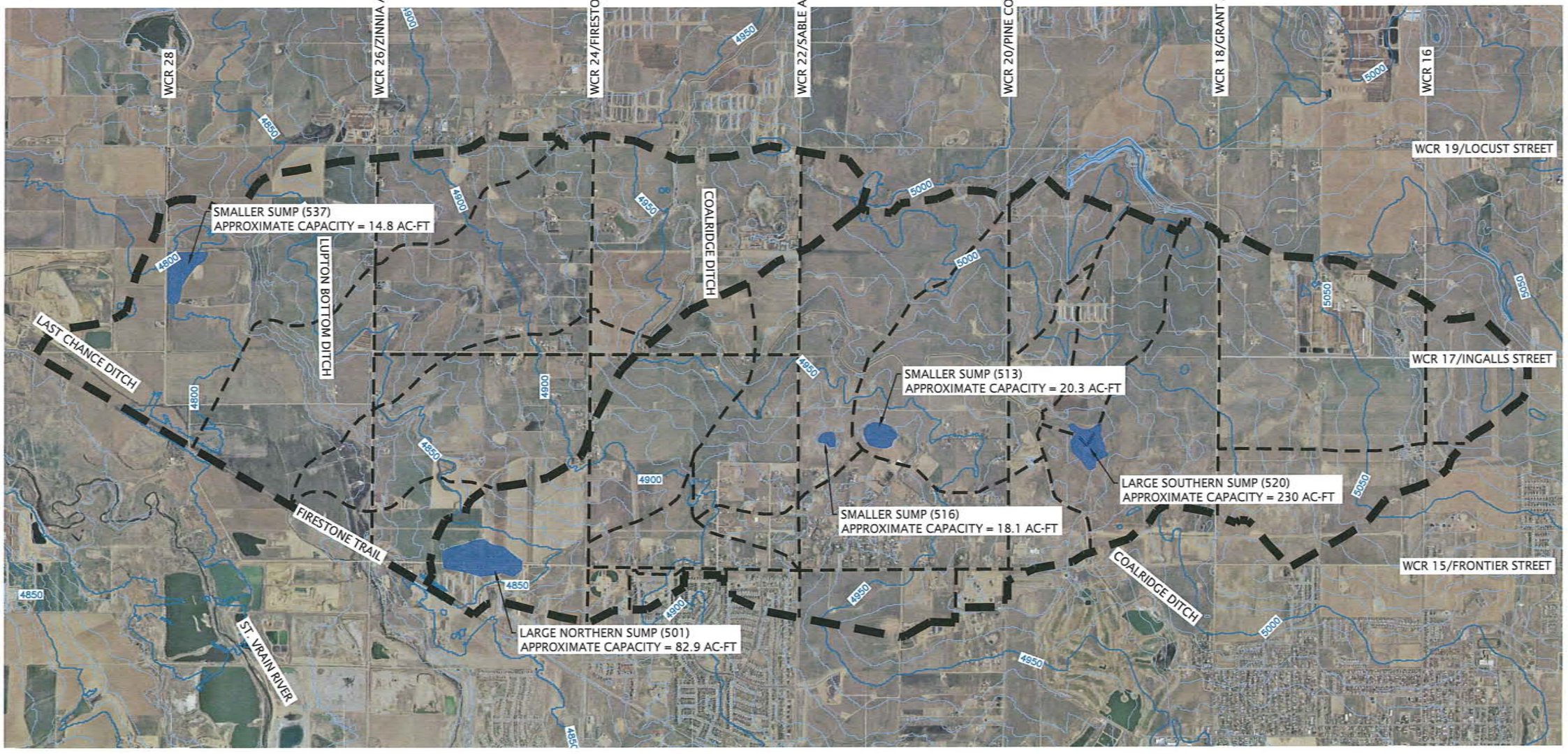
## SUMP BASIN AERIAL FOR LAND USE

EXHIBIT E

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| | |
|---|---|
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| DESIGNED: | D.H. |
| CHECKED: | D.B.L. |
| JOB NO.: | 0668.0147.00 |
| SCALE: | N.T.S. |
| DATE: | MAY 2010 |

CCG COLORADO CIVIL GROUP, INC.
ENGINEERING CONSULTANTS




LEGEND

- EXISTING 10' CONTOUR
- EXISTING 50' CONTOUR
- SUB-BASINS
- SUMP BASIN BOUNDARY
- EXISTING SUMPS

N

N.T.S.

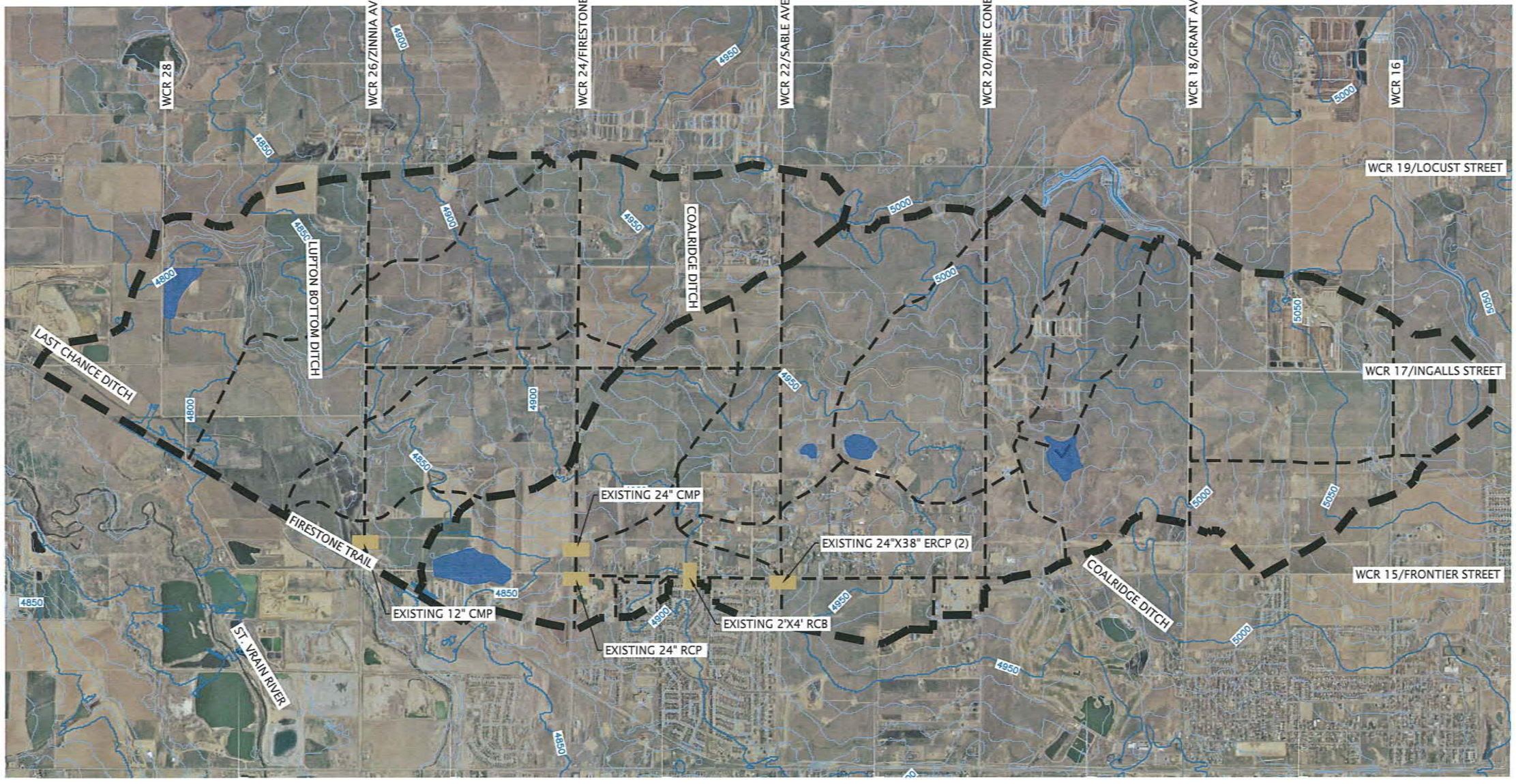
CCG COLORADO CIVIL GROUP, INC. ENGINEERING CONSULTANTS

# TOWN OF FIRESTONE
# SUMP BASIN MASTER PLAN

## SUMP BASIN EXISTING SUMP LOCATIONS

FILENAME: 0147_DRAINAGE
DESIGNED: D.H.
CHECKED: D.B.L.
JOB NO.: 0668.0147.00
SCALE: N.T.S.
DATE: MAY 2010

SHEET NO.:
**EXHIBIT F**




LEGEND

- EXISTING 10' CONTOUR
- EXISTING 50' CONTOUR
- SUB-BASINS
- SUMP BASIN BOUNDARY
- EXISTING CULVERT

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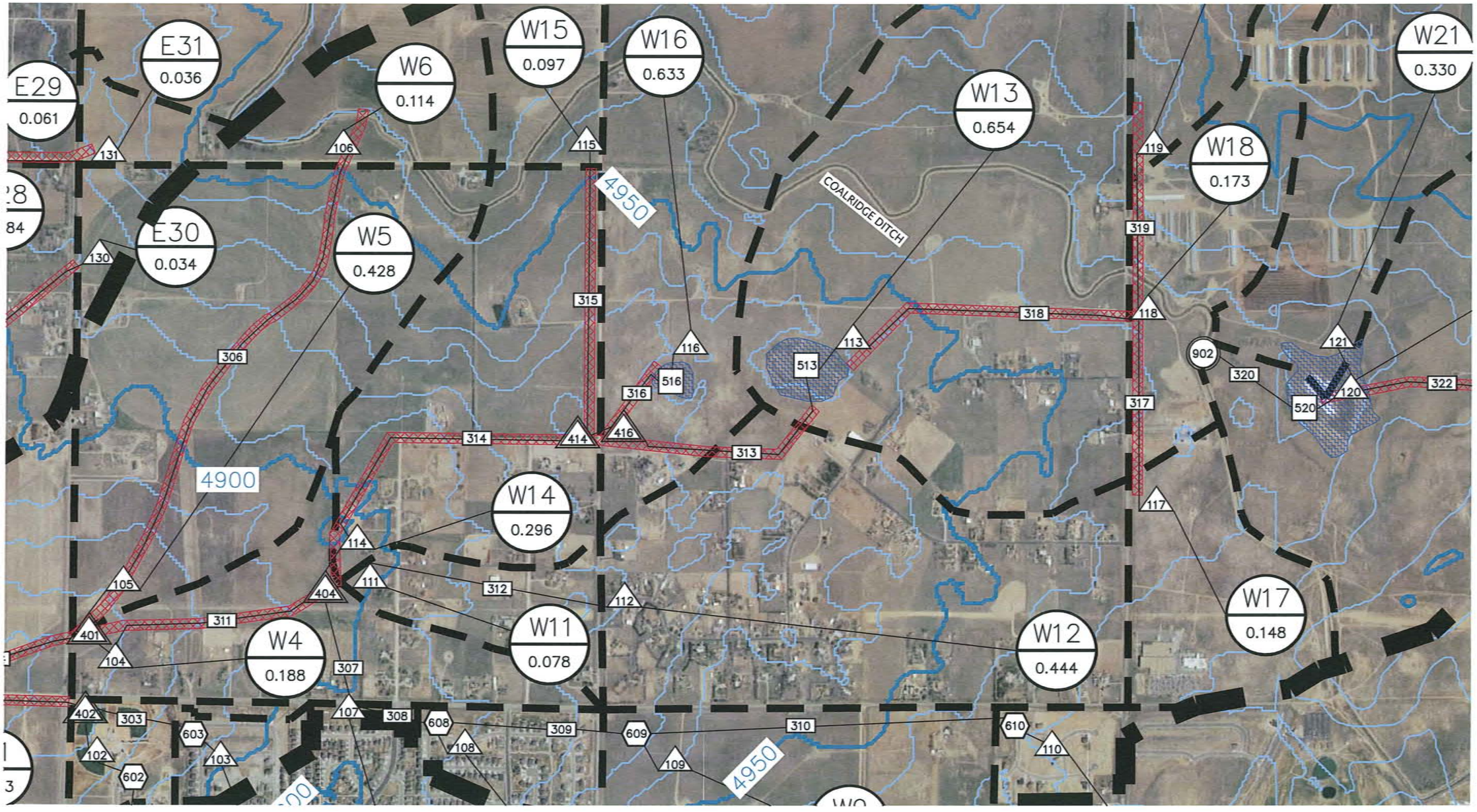
N.T.S.

CCG COLORADO CIVIL GROUP, INC. ENGINEERING CONSULTANTS

# TOWN OF FIRESTONE
# SUMP BASIN MASTER PLAN
# SUMP BASIN EXISTING CULVERT LOCATIONS

FILENAME: 0147_DRAINAGE
DESIGNED: D.H.
CHECKED: D.B.L.
JOB NO.: 0668.0147.00
SCALE: N.T.S.
DATE: MAY 2010

SHEET NO.:
**EXHIBIT G**




LEGEND

A: BASIN DESIGNATION
B: BASIN AREA (SQ. MILES)

SUB-BASIN DESIGN POINT
CONVEYANCE ELEMENT
CRITICAL DESIGN POINT

SUMP
DETENTION POND
BASIN DISCHARGE POINT

EXISTING 10' CONTOUR
EXISTING 50' CONTOUR
SUB-BASINS
SUMP BASIN BOUNDARY
REALIGNED SWALE

N

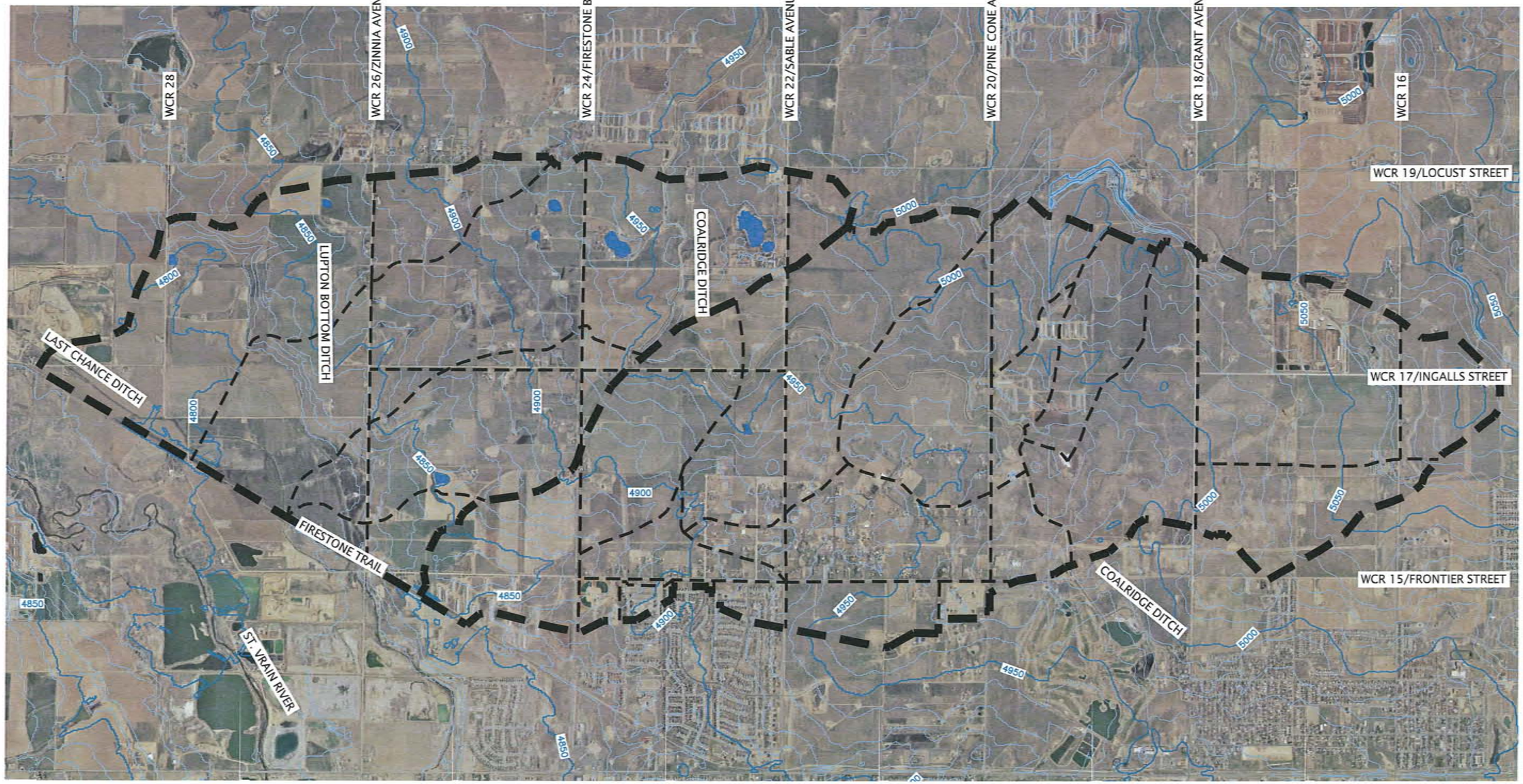
N.T.S.

CCG COLORADO CIVIL GROUP, INC. ENGINEERING CONSULTANTS

TOWN OF FIRESTONE
SUMP BASIN MASTER PLAN
SUMP BASIN REGIONAL IMPROVEMENTS SWMM
CONVEYANCE ELEMENTS 313, 314, 317, 318, 319

FILENAME: 0147_DRAINAGE
DESIGNED: D.H.
CHECKED: D.B.L.
JOB NO.: 0668.0147.00
SCALE: N.T.S.
DATE: MAY 2010

SHEET NO.:
EXHIBIT H




LEGEND

- EXISTING 10' CONTOUR
- EXISTING 50' CONTOUR
- SUB-BASINS
- SUMP BASIN BOUNDARY
- EXISTING IRRIGATION PONDS

N

N.T.S.

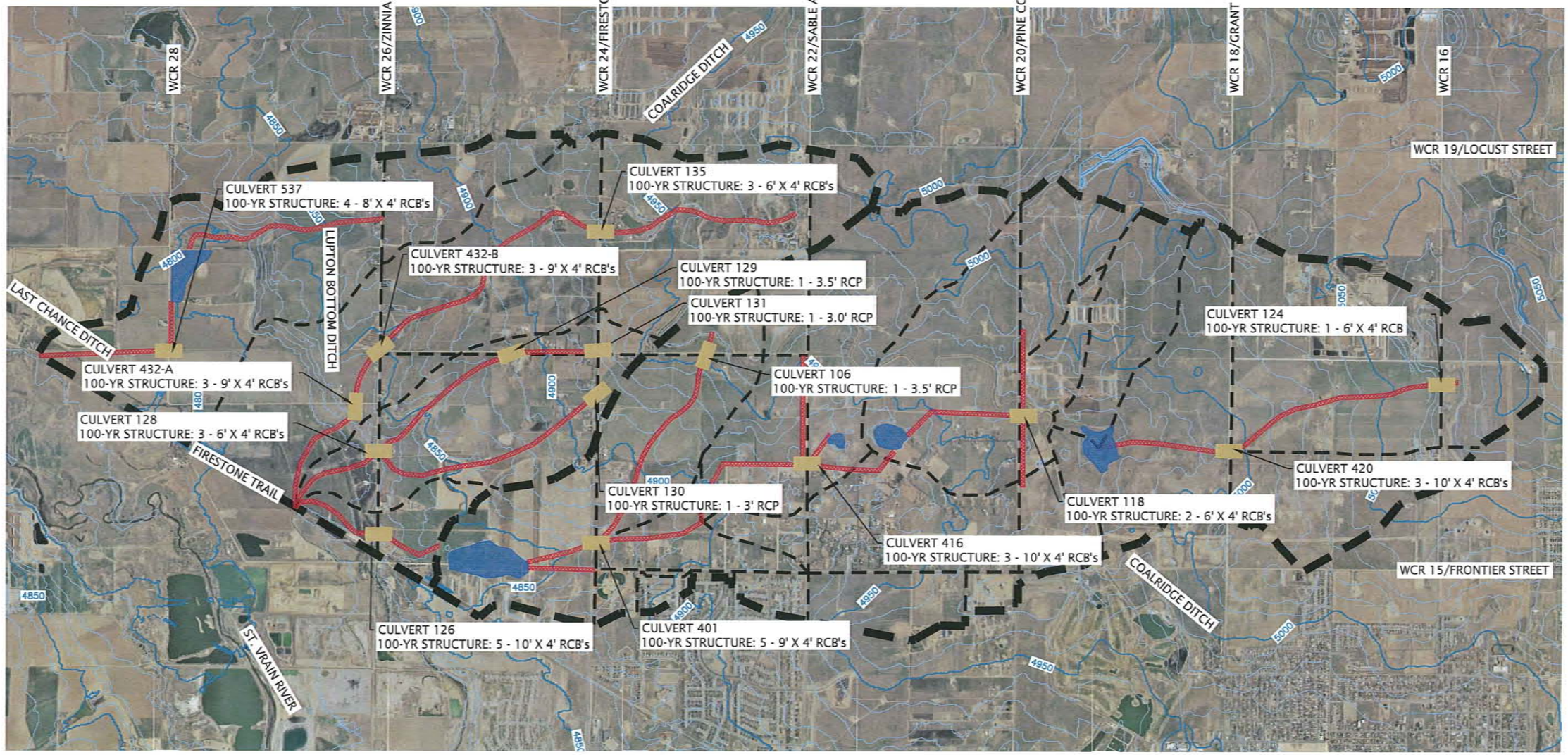
CCG COLORADO CIVIL GROUP, INC. ENGINEERING CONSULTANTS

# TOWN OF FIRESTONE
# SUMP BASIN MASTER PLAN

## SUMP BASIN EXISTING IRRIGATION POND LOCATIONS

FILENAME: 0147_DRAINAGE
DESIGNED: D.H.
CHECKED: D.B.L.
JOB NO.: 0668.0147.00
SCALE: N.T.S.
DATE: MAY 2010

SHEET NO.:
**EXHIBIT I**




LEGEND

- EXISTING 10' CONTOUR
- EXISTING 50' CONTOUR
- SUB-BASINS
- SUMP BASIN BOUNDARY
- REALIGNED SWALE
- PROPOSED CULVERT

N

N.T.S.

CCG COLORADO CIVIL GROUP, INC. ENGINEERING CONSULTANTS

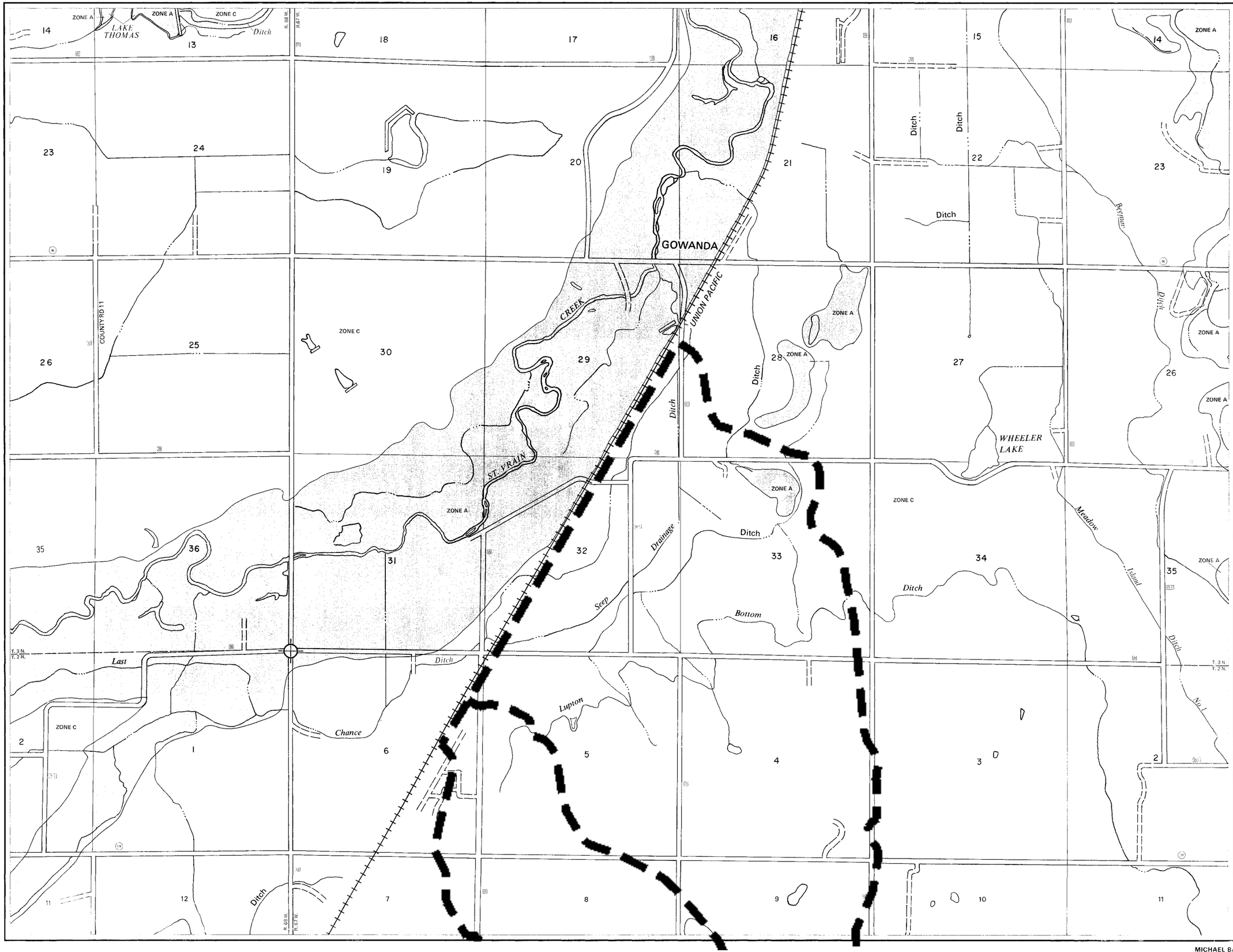
# TOWN OF FIRESTONE
# SUMP BASIN MASTER PLAN

## SUMP BASIN FUTURE CULVERT LOCATIONS

FILENAME: 0147_DRAINAGE
DESIGNED: D.H.
CHECKED: D.B.L.
JOB NO.: 0668.0147.00
SCALE: N.T.S.
DATE: MAY 2010

SHEET NO.:
**EXHIBIT J**

# Appendix A:
# CURRENT BASIN INFORMATION




## KEY TO MAP

500-Year Flood Boundary
100-Year Flood Boundary — ZONE B
Zone Designations* — ZONE A1 / ZONE A5
100-Year Flood Boundary — ZONE B
500-Year Flood Boundary

Base Flood Elevation Line With Elevation In Feet**

Base Flood Elevation In Feet Where Uniform Within Zone** (EL 987)

Elevation Reference Mark RM7$_X$

River Mile •M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

## *EXPLANATION OF ZONE DESIGNATIONS

| ZONE | EXPLANATION |
|---|---|
| A | Areas of 100-year flood; base flood elevations and flood hazard factors not determined. |
| AO | Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined. |
| AH | Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined. |
| A1-A30 | Areas of 100-year flood; base flood elevations and flood hazard factors determined. |
| A99 | Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined. |
| B | Areas between limits of the 100-year flood and 500-year flood, or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading) |
| C | Areas of minimal flooding. (No shading) |
| D | Areas of undetermined, but possible, flood hazards. |
| V | Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined. |
| V1-V30 | Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined. |

## NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION:
MARCH 21, 1978

FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE:
MARCH 18, 1980

FLOOD INSURANCE RATE MAP REVISIONS:
SEPTEMBER 28, 1982 - Panel revised to reflect F.E.M.A. title block.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program at (800) 638-6620.

APPROXIMATE SCALE
1000 0 1000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

# FIRM
FLOOD INSURANCE RATE MAP

# WELD COUNTY, COLORADO
UNINCORPORATED AREA

PANEL 855 OF 1075
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
080266 0855 C

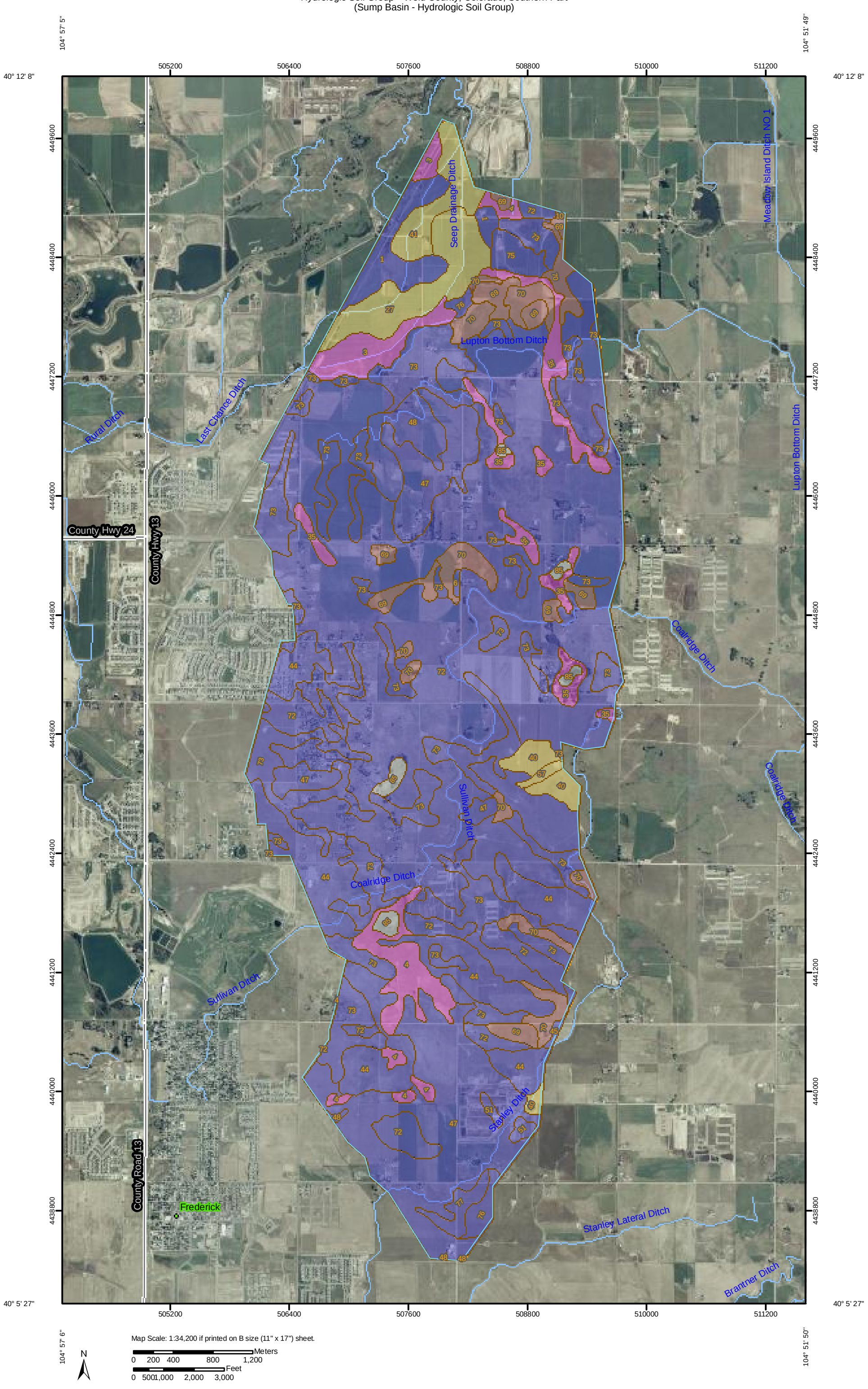
MAP REVISED:
SEPTEMBER 28, 1982

federal emergency management agency
insurance administration

MICHAEL BAKER JR., INC.

"E" FRAME

# Hydrologic Soil Group—Weld County, Colorado, Southern Part
(Sump Basin - Hydrologic Soil Group)



## MAP LEGEND

**Area of Interest (AOI)**

- Area of Interest (AOI)

**Soils**

- Soil Map Units

**Soil Ratings**

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

**Political Features**

- Cities

**Water Features**

- Oceans
- Streams and Canals

**Transportation**

- Rails
- Interstate Highways
- US Routes
- Major Roads

## MAP INFORMATION

Map Scale: 1:34,200 if printed on B size (11" × 17") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 13N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Weld County, Colorado, Southern Part
Survey Area Data: Version 11, Aug 27, 2009

Date(s) aerial images were photographed: 8/6/2005; 7/30/2005; 7/29/2005

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# Hydrologic Soil Group

| Hydrologic Soil Group— Summary by Map Unit — Weld County, Colorado, Southern Part | | | | |
|---|---|---|---|---|
| **Map unit symbol** | **Map unit name** | **Rating** | **Acres in AOI** | **Percent of AOI** |
| 1 | Altvan loam, 0 to 1 percent slopes | B | 131.5 | 1.8% |
| 3 | Aquolls and Aquents, gravelly substratum | D | 114.6 | 1.6% |
| 4 | Aquolls and Aquepts, flooded | D | 157.0 | 2.2% |
| 6 | Ascalon sandy loam, 3 to 5 percent slopes | B | 4.4 | 0.1% |
| 10 | Bankard sandy loam, 0 to 3 percent slopes | A | 1.7 | 0.0% |
| 27 | Heldt silty clay, 1 to 3 percent slopes | C | 191.1 | 2.7% |
| 35 | Loup-Boel loamy sands, 0 to 3 percent slopes | D | 187.1 | 2.6% |
| 40 | Nunn loam, 1 to 3 percent slopes | C | 71.7 | 1.0% |
| 41 | Nunn clay loam, 0 to 1 percent slopes | C | 107.6 | 1.5% |
| 44 | Olney loamy sand, 1 to 3 percent slopes | B | 574.1 | 8.0% |
| 45 | Olney loamy sand, 3 to 5 percent slopes | B | 5.2 | 0.1% |
| 47 | Olney fine sandy loam, 1 to 3 percent slopes | B | 804.4 | 11.2% |
| 48 | Olney fine sandy loam, 3 to 5 percent slopes | B | 116.2 | 1.6% |
| 51 | Otero sandy loam, 1 to 3 percent slopes | B | 19.0 | 0.3% |
| 57 | Renohill clay loam, 3 to 9 percent slopes | C | 11.2 | 0.2% |
| 69 | Valent sand, 0 to 3 percent slopes | A | 127.9 | 1.8% |
| 70 | Valent sand, 3 to 9 percent slopes | A | 220.0 | 3.1% |
| 72 | Vona loamy sand, 0 to 3 percent slopes | B | 3,037.2 | 42.1% |
| 73 | Vona loamy sand, 3 to 5 percent slopes | B | 1,161.1 | 16.1% |
| 75 | Vona sandy loam, 0 to 1 percent slopes | B | 45.0 | 0.6% |
| 76 | Vona sandy loam, 1 to 3 percent slopes | B | 39.9 | 0.6% |
| 77 | Vona sandy loam, 3 to 5 percent slopes | B | 36.5 | 0.5% |
| 85 | Water | | 44.0 | 0.6% |
| **Totals for Area of Interest** | | | **7,208.4** | **100.0%** |

## Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

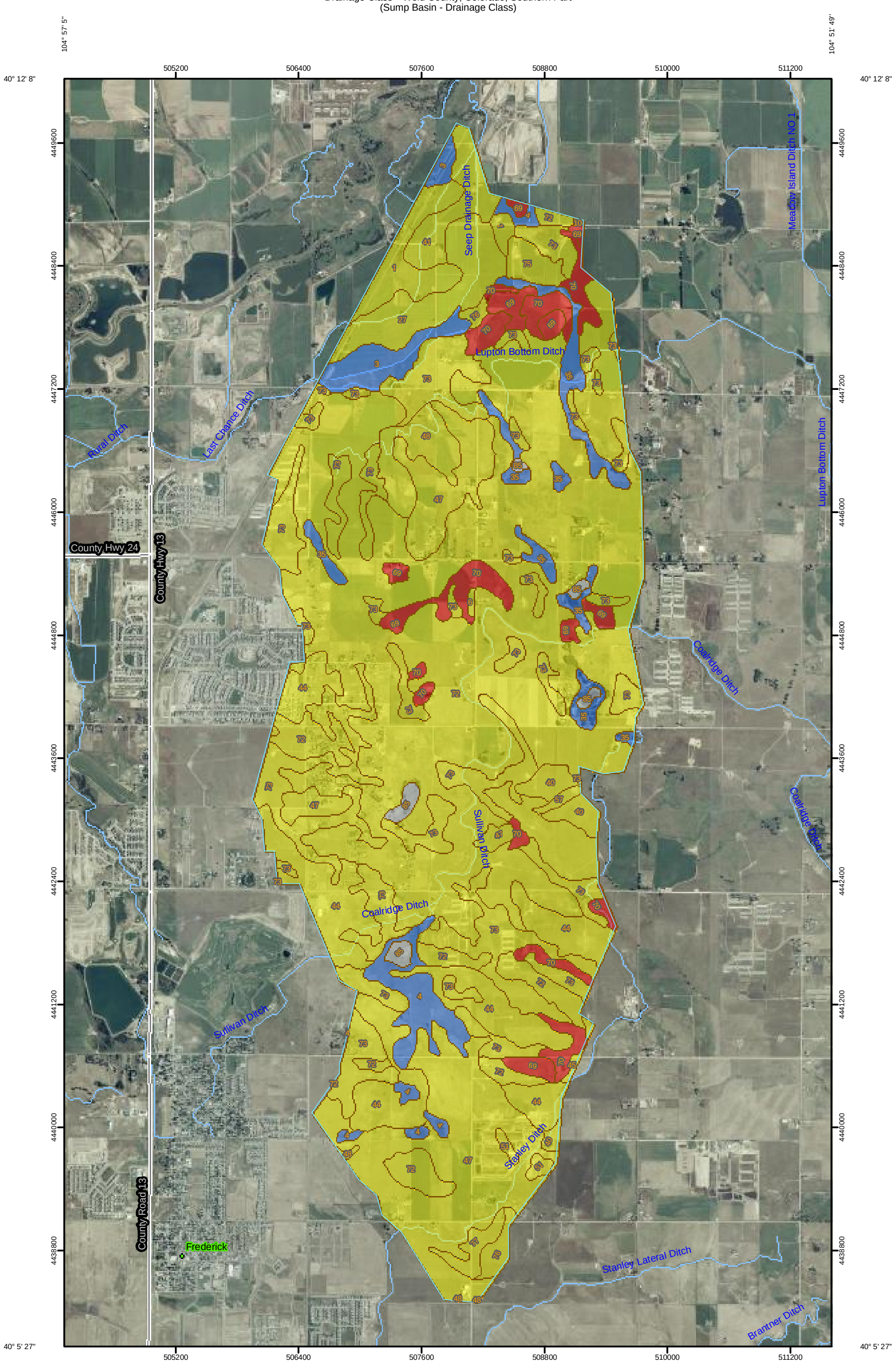
## Rating Options

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff: None Specified*

*Tie-break Rule:* Lower

# Drainage Class—Weld County, Colorado, Southern Part
(Sump Basin - Drainage Class)



## MAP LEGEND

**Area of Interest (AOI)**

- Area of Interest (AOI)

**Soils**

- Soil Map Units

**Soil Ratings**

- Excessively drained
- Somewhat excessively drained
- Well drained
- Moderately well drained
- Somewhat poorly drained
- Poorly drained
- Very poorly drained
- Not rated or not available

**Political Features**

- Cities

**Water Features**

- Oceans
- Streams and Canals

**Transportation**

- Rails
- Interstate Highways
- US Routes
- Major Roads

## MAP INFORMATION

Map Scale: 1:34,200 if printed on B size (11" × 17") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 13N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Weld County, Colorado, Southern Part
Survey Area Data: Version 11, Aug 27, 2009

Date(s) aerial images were photographed: 8/6/2005; 7/30/2005; 7/29/2005

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# Drainage Class

| Drainage Class— Summary by Map Unit — Weld County, Colorado, Southern Part | | | | |
|---|---|---|---|---|
| **Map unit symbol** | **Map unit name** | **Rating** | **Acres in AOI** | **Percent of AOI** |
| 1 | Altvan loam, 0 to 1 percent slopes | Well drained | 131.5 | 1.8% |
| 3 | Aquolls and Aquents, gravelly substratum | Poorly drained | 114.6 | 1.6% |
| 4 | Aquolls and Aquepts, flooded | Poorly drained | 157.0 | 2.2% |
| 6 | Ascalon sandy loam, 3 to 5 percent slopes | Well drained | 4.4 | 0.1% |
| 10 | Bankard sandy loam, 0 to 3 percent slopes | Somewhat excessively drained | 1.7 | 0.0% |
| 27 | Heldt silty clay, 1 to 3 percent slopes | Well drained | 191.1 | 2.7% |
| 35 | Loup-Boel loamy sands, 0 to 3 percent slopes | Poorly drained | 187.1 | 2.6% |
| 40 | Nunn loam, 1 to 3 percent slopes | Well drained | 71.7 | 1.0% |
| 41 | Nunn clay loam, 0 to 1 percent slopes | Well drained | 107.6 | 1.5% |
| 44 | Olney loamy sand, 1 to 3 percent slopes | Well drained | 574.1 | 8.0% |
| 45 | Olney loamy sand, 3 to 5 percent slopes | Well drained | 5.2 | 0.1% |
| 47 | Olney fine sandy loam, 1 to 3 percent slopes | Well drained | 804.4 | 11.2% |
| 48 | Olney fine sandy loam, 3 to 5 percent slopes | Well drained | 116.2 | 1.6% |
| 51 | Otero sandy loam, 1 to 3 percent slopes | Well drained | 19.0 | 0.3% |
| 57 | Renohill clay loam, 3 to 9 percent slopes | Well drained | 11.2 | 0.2% |
| 69 | Valent sand, 0 to 3 percent slopes | Excessively drained | 127.9 | 1.8% |
| 70 | Valent sand, 3 to 9 percent slopes | Excessively drained | 220.0 | 3.1% |
| 72 | Vona loamy sand, 0 to 3 percent slopes | Well drained | 3,037.2 | 42.1% |
| 73 | Vona loamy sand, 3 to 5 percent slopes | Well drained | 1,161.1 | 16.1% |
| 75 | Vona sandy loam, 0 to 1 percent slopes | Well drained | 45.0 | 0.6% |
| 76 | Vona sandy loam, 1 to 3 percent slopes | Well drained | 39.9 | 0.6% |
| 77 | Vona sandy loam, 3 to 5 percent slopes | Well drained | 36.5 | 0.5% |

| Drainage Class— Summary by Map Unit — Weld County, Colorado, Southern Part | | | | |
|---|---|---|---|---|
| **Map unit symbol** | **Map unit name** | **Rating** | **Acres in AOI** | **Percent of AOI** |
| 85 | Water | | 44.0 | 0.6% |
| **Totals for Area of Interest** | | | **7,208.4** | **100.0%** |

## Description

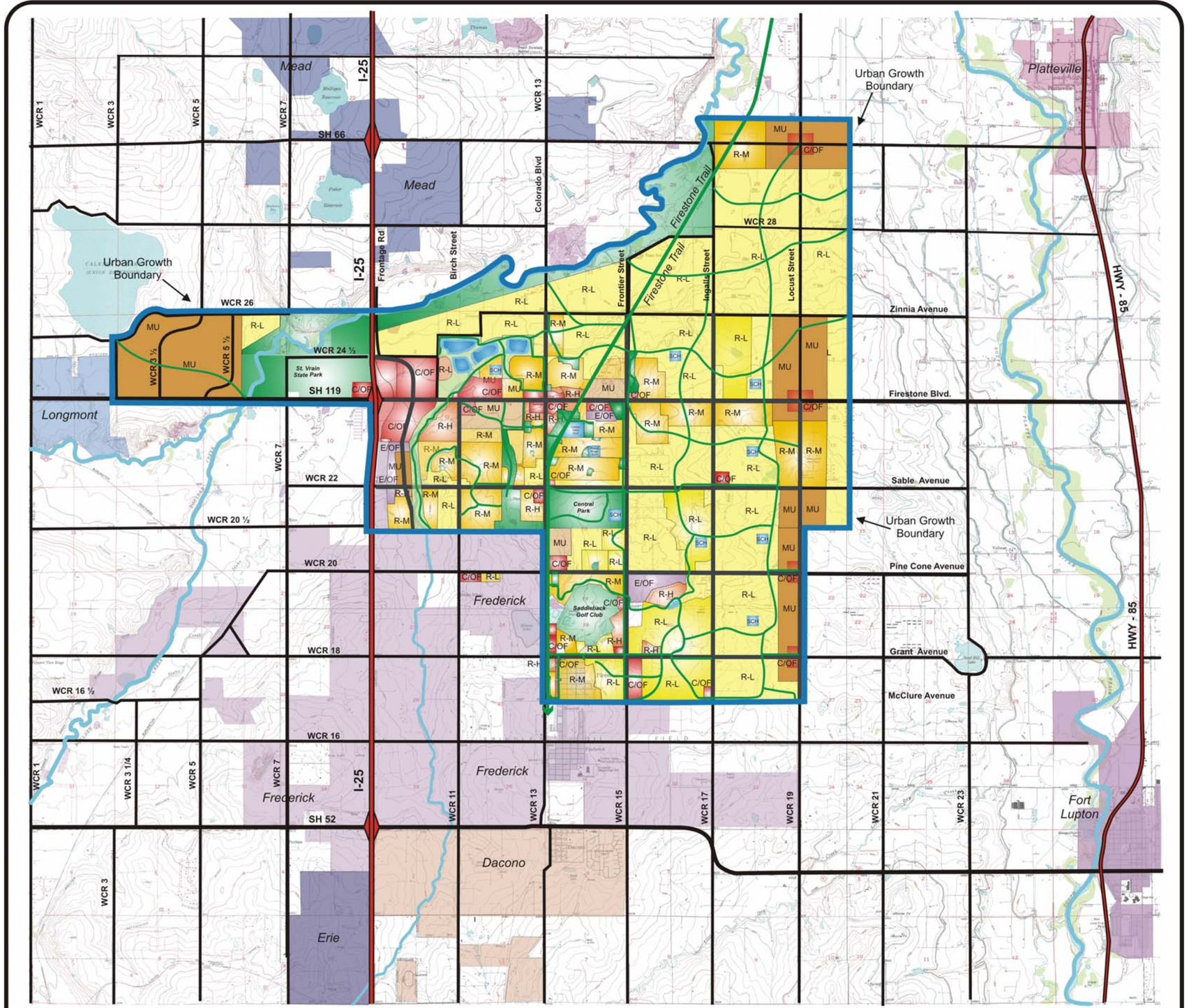
"Drainage class (natural)" refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized-excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the "Soil Survey Manual."

## Rating Options

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff: None Specified*

*Tie-break Rule:* Higher




Legend

- Urban Growth Boundary
- Major Roadway
- Trails
- Parks
- Community Separator
- Drainage Corridor and Open Space
- Commercial/ Office
- Mixed Use
- Employment/ Office
- Residential Low Density
- Residential Medium Density
- Residential High Density
- Municipal or Government
- Existing/Planned General School Location

# Firestone
## Master Plan

February 18, 2008

DRAFT

NORTH

# TOWN OF FREDERICK

## Comprehensive Plan

Adopted by the Planning Commission April 20, 2006

### Land Use

- Rural Residential
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Mixed-Use Residential Neighborhood
- Neighborhood Commercial
- Downtown Commercial
- Mixed-Use Highway 52 Commercial
- Community Commercial
- Employment
- Regional / Corridor Commercial
- Light Industrial
- Public/Quasi-Public Facilities
- Parks and Open Lands
- Community Separator
- Planning Area Boundary

### Transportation

- Collector Road
- 2-Lane Arterial
- 4-Lane Arterial
- 4-Lane Highway Arterial
- Interstate Highway
- Modified Arterial

### Community Facilities

- Existing Elementary School
- Existing High School
- Proposed Elementary School
- Proposed Middle School
- Proposed High School
- Existing Facility
- Park and Ride Station

0 0.125 0.25 0.5 0.75 1 Miles

N

**Disclaimer:**

This map is general representation of the Land Uses within the Town of Frederick. The map is for general representation only and may contain information that is not current.

The Town of Frederick does NOT warrant the precise boundaries and shall assume no liability for any errors, omissions, or inaccuracies in the information provided regardless of cause. The Town of Frederick assumes no liability for any decisions made or actions taken or not taken in reliance upon this map or any information provided on this map.

Records and additional maps are available for review at the Town of Frederick, Planning Department, 401 Locust Street, Frederick, CO 80530 telephone 303.833.2388, fax 303.833.3817, website: www.frederickco.gov

Boulder County
Weld County

Erie
Dacono
Firestone
Colorado Blvd.

CR 1
CR 3 1/4
CR 5
CR 7
CR 11
CR 15
CR 16
CR 17
CR 18
CR 19
CR 20
CR 20 1/2

119
25
52

St. Vrain Creek
Idaho Creek
Goddling Ditch
Boulder Creek
Lower Boulder Ditch
Boulder & Weld County Ditch
Goddling Hollow
Coalridge Ditch
Farmers Reservoir and Irrigation Ditch

Fire Station #2
Bella Rosa Golf Course
Tri-Area Sanitation
Milavec Lake
Fire Station #1
Frederick Town Hall
Weld County Library
Carbon Valley Recreation Center

# Appendix B:
# EXISTING SUMP VOLUMES

| Sump 501 | | | | | |
|---|---|---|---|---|---|
| Contour Elevation | Area (sf) | h (ft) | Volume (cf) | Accumulated Volume (cf) | Accumulated Volume (ac-ft) |
| 4933.48 | 0 | 0 | 0 | 0 | 0.0 |
| 4934 | 17204 | 0.52 | 2979 | 2979 | 0.1 |
| 4935 | 122872 | 1 | 61956 | 64935 | 1.5 |
| 4936 | 275280 | 1 | 193828 | 258763 | 5.9 |
| 4937 | 491227 | 1 | 377701 | 636463 | 14.6 |
| 4938 | 763275 | 1 | 621653 | 1258117 | 28.9 |
| 4939 | 1074386 | 1 | 913495 | 2171612 | 49.9 |
| 4940 | 1422222 | 1 | 1243001 | 3414613 | 78.4 |

| Sump 513 | | | | | |
|---|---|---|---|---|---|
| Contour Elevation | Area (sf) | h (ft) | Volume (cf) | Accumulated Volume (cf) | Accumulated Volume (ac-ft) |
| 4918.86 | 314 | 0 | 0 | 0 | 0.0 |
| 4919 | 2814 | 0.14 | 190 | 190 | 0.0 |
| 4920 | 107908 | 1 | 42673 | 42863 | 1.0 |
| 4921 | 196572 | 1 | 149891 | 192754 | 4.4 |
| 4922 | 336298 | 1 | 263064 | 455818 | 10.5 |
| 4923 | 530911 | 1 | 429488 | 885306 | 20.3 |

| Sump 516 | | | | | |
|---|---|---|---|---|---|
| Contour Elevation | Area (sf) | h (ft) | Volume (cf) | Accumulated Volume (cf) | Accumulated Volume (ac-ft) |
| 4923.68 | 314 | 0 | 0 | 0 | 0.0 |
| 4924 | 1847 | 0.32 | 311 | 311 | 0.0 |
| 4925 | 18440 | 1 | 8699 | 9010 | 0.2 |
| 4926 | 52821 | 1 | 34123 | 43133 | 1.0 |
| 4927 | 104988 | 1 | 77348 | 120481 | 2.8 |
| 4928 | 174943 | 1 | 138347 | 258828 | 5.9 |
| 4929 | 262685 | 1 | 217116 | 475944 | 10.9 |
| 4930 | 368214 | 1 | 313654 | 789598 | 18.1 |

| Sump 537 | | | | | |
|---|---|---|---|---|---|
| Contour Elevation | Area (sf) | h (ft) | Volume (cf) | Accumulated Volume (cf) | Accumulated Volume (ac-ft) |
| 4793.65 | 314 | 0 | 0 | 0 | 0.0 |
| 4794 | 43090 | 0.35 | 5487 | 5487 | 0.1 |
| 4795 | 101276 | 1 | 70072 | 75559 | 1.7 |
| 4796 | 193099 | 1 | 144595 | 220154 | 5.1 |
| 4797 | 322406 | 1 | 254751 | 474905 | 10.9 |
| 4797.5 | 368068 | 0.5 | 172320 | 647225 | 14.9 |

# Appendix C:
# APPROVED DRAINAGE REPORTS
# HYDROLOGY

Sadd. Heights
Final Drainage Rept
Review By: KDS 4/21/04
Comments

PARK ENGINEERING CONSULTANTS

# Final Drainage Report
# Saddleback Heights
# Firestone, Colorado

**Prepared for:**

Saddleback Heights, LLC
3100 S. Federal Blvd. # B203
Denver, Colorado 80236
(303) -884-4114

**Prepared by:**

Park Engineering Consultants
420 21st Avenue, Suite 101
Longmont, Colorado 80501
(303) 651-6626

December, 2003

PEC Job#3381fdr.doc

SADDLEBACK HEIGHTS
JOB # - 3381

| | | | | | | |
|---|---|---|---|---|---|---|
| **HISTORIC RUNOFF** | | | | | | |
| ON-SITE | | | | | | |
| | AREA = | 26.674 | ACRES | | | |
| | S ~ | 1.32 | % | | | |
| | C2 = | 0.05 | C5 = | 0.15 | | |
| | C10 = | 0.25 | C100 = | 0.50 | | |
| | | | | | | |
| | | | Q=CIA | | | |
| | Tc = Ti + Tt | | | | | |
| | | | | | | |
| Ti = (1.8(1.1-C5)SQRT(L))/(S^1/3) | | L = | 500 | S = | 1.2 | % |
| | | | | | | |
| | | Ti = | 35.98 | MIN | | |
| | | | | | | |
| | Tc: | L = | 545 | S = | 1.4 | % |
| | | short grasss => | | V = | 0.8 | FPS |
| Tt = L/(60V) | | | | | | |
| | | | | | | |
| | | Tt = | 11.35 | MIN | | |
| | | | | | | |
| | Tc = Ti + Tt => | 47.34 | MIN | | | |
| | | | | | | |
| | I2 = | 1.20 | IN/HR | | | |
| | I5 = | 1.70 | IN/HR | | | |
| | I10 = | 2.05 | IN/HR | | | |
| | I100 = | 3.25 | IN/HR | | | |
| | | | | | | |
| | | Q=CIA | | | | |
| | | | | | | |
| | Q2 = CIA => | 1.6 | CFS | | | |
| | Q5 = CIA => | 6.8 | CFS | | | |
| | Q10 = CIA => | 13.7 | CFS | | | |
| | Q100 = CIA => | 43.3 | CFS | | | |

**Subdivision:** SADDLEBACK HEIGHTS - DEVELOPED CONDITION

**Calculated By:** JGJ

**Job #:** 338-1
**Date:** 1-Dec-03

| Sub-Basin Data | | | Initial/Overland Flow | | | Travel Time (Tt) | | | | | Urban Check | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Area Design | Area (Ac) | C**** 5 yr. | length (ft) | slope (%) | Ti* (min) | length (ft) | slope (%) | velocity (f/s) | Tt*** (min) | Tc=Ti+Tt (min) | L | Urban Tc (min) | Final Tc (min) | |
| Dev | 26.67 | 0.30 | 94 | 2.0 | 11.1 | 1,842 | 0.5 | 1.5 | 20.5 | 32 | 1,936 | 20.8 | **21** | |

*Ti From Equation 3-3 of Urban Drainage and Flood Control District (UDFCD) Manual
**From Figure 3-2 of UDFCD Manual
***Tt = Travel Length / Travel Velocity
****From Table 3-1 of UDFCD Manual

| DEVELOPED RUNOFF | | | | | |
|---|---|---|---|---|---|
| AREA = | 26.7 | ACRES | | | |
| S ~ | 0.5 | % | | | |
| C2 = | 0.22 | C5 = | 0.30 | | |
| C10 = | 0.38 | C100 = | 0.57 | | |
| Tc = Ti + Tt => | 21.00 | MIN | (SEE DEVELOPED CONDITION TC SPREADSHEET) | | |
| I2 = | 1.95 | IN/HR | | | |
| I5 = | 2.70 | IN/HR | | | |
| I10 = | 3.30 | IN/HR | | | |
| I100 = | 5.20 | IN/HR | | | |
| | Q=CIA | | | | |
| Q2 = CIA => | 11.45 | CFS | | | |
| Q5 = CIA => | 21.63 | CFS | | | |
| Q10 = CIA => | 33.48 | CFS | | | |
| Q100 = CIA => | 79.14 | CFS | | | |

**Subdivision:** SADDLEBACK HEIGHTS - DEVELOPED SUB-BASINS

**Calculated By:** JGJ

**Job #:** 338-1
**Date:** 22-Sep-03

| Sub-Basin Data | | | Initial/Overland Flow | | | Travel Time (Tt) | | | | | Urban Check | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Area Design | Area (Ac) | C**** 5 yr. | length (ft) | slope (%) | Ti* (min) | length (ft) | slope (%) | velocity (f/s) | Tt*** (min) | Tc=Ti+Tt (min) | L | Urban Tc (min) | Final Tc (min) | |
| 100 | 1.92 | 0.30 | 201 | 2.0 | 16.2 | 375 | 0.5 | 1.5 | 4.2 | 20 | 576 | 13.2 | 13 | |
| 101 | 2.16 | 0.30 | 140 | 2.0 | 13.5 | 392 | 0.5 | 1.5 | 4.4 | 18 | 532 | 13.0 | 13 | |
| 200 | 2.24 | 0.30 | 97 | 2.0 | 11.3 | 409 | 0.5 | 1.5 | 4.5 | 16 | 506 | 12.8 | 13 | |
| 300 | 2.71 | 0.30 | 234 | 2.0 | 17.5 | 487 | 0.5 | 1.5 | 5.4 | 23 | 721 | 14.0 | 14 | |
| 400 | 2.55 | 0.30 | 273 | 0.5 | 30.0 | 172 | 0.5 | 1.5 | 1.9 | 32 | 445 | 12.5 | 12 | |
| 500 | 5.29 | 0.30 | 87 | 2.0 | 10.7 | 1,492 | 0.5 | 0.5 | 49.7 | 60 | 1,579 | 18.8 | 19 | |
| 600 | 1.53 | 0.30 | 147 | 2.0 | 13.9 | 147 | 0.5 | 1.5 | 1.6 | 15 | 294 | 11.6 | 12 | |
| 700 | 2.75 | 0.30 | 164 | 2.0 | 14.6 | 363 | 0.5 | 1.5 | 4.0 | 19 | 527 | 12.9 | 13 | |
| 800 | 1.36 | 0.30 | 144 | 2.0 | 13.7 | 425 | 0.5 | 1.5 | 4.7 | 18 | 569 | 13.2 | 13 | |
| 801 | 0.49 | 0.30 | 117 | 2.0 | 12.4 | 249 | 0.5 | 1.5 | 2.8 | 15 | 366 | 12.0 | 12 | |
| 802 | 0.55 | 0.30 | 203 | 2.0 | 16.3 | 123 | 0.5 | 1.5 | 1.4 | 18 | 326 | 11.8 | 12 | |
| 803 | 0.93 | 0.30 | 118 | 2.0 | 12.4 | 174 | 0.5 | 1.5 | 1.9 | 14 | 292 | 11.6 | 12 | |
| 804 | 0.35 | 0.30 | 85 | 2.0 | 10.5 | 177 | 0.5 | 1.5 | 2.0 | 13 | 262 | 11.5 | 11 | |
| 900 | 0.26 | 0.90 | 16 | 2.0 | 1.1 | 197 | 2.0 | 2.9 | 1.1 | 2 | 213 | 11.2 | 2 | |
| 1000 | 0.24 | 0.30 | 93 | 2.0 | 11.0 | - | 2.0 | 2.9 | 0.0 | 11 | 93 | 10.5 | 11 | |
| 1100 | 0.86 | 0.30 | 149 | 2.0 | 14.0 | - | 2.0 | 2.9 | 0.0 | 14 | 149 | 10.8 | 11 | |
| 1200 | 0.14 | 0.30 | 20 | 2.0 | 5.1 | 225 | 1.0 | 2.9 | 1.3 | 6 | 245 | 11.4 | 6 | |
| 0S1 | 0.32 | 0.30 | 94 | 2.0 | 11.1 | - | 2.0 | 2.9 | 0.0 | 11 | 94 | 10.5 | 11 | |
| 0S2 | 2.21 | 0.30 | 162 | 2.0 | 14.5 | 1,000 | 0.5 | 1.2 | 13.9 | 28 | 1,162 | 16.5 | 16 | |
| OS3 | 0.29 | 0.30 | 41 | 2.0 | 7.3 | 215 | 1.0 | 1.5 | 2.4 | 10 | 256 | 11.4 | 10 | |

*Ti From Equation 3-3 of Urban Drainage and Flood Control District (UDFCD) Manual
**From Figure 3-2 of UDFCD Manual
***Tt = Travel Length / Travel Velocity
****From Table 3-1 of UDFCD Manual

PARK ENGINEERING CONSULTANTS

STANDARD FORM SF-9
STORM DRAINAGE SYSTEM DESIGN
(RATIONAL METHOD PROCEDURE)

Subdivision: SADDLEBACK HEIGHTS - 2-YR DEVELOPED
Calculated By: JGJ
Date: 1-Dec-03

| Street | Design Pt. | Design Area | Direct Runoff | | | | | | Total Runoff | | | | Street | | Pipe | | | Travel Time | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Runoff Coeff. | Tc | C x A | I | Q | Tc | C*A | I | Q | S | Str. Flow | Q | S | Pipe Size | L | S | V | time |
| | | | (Ac) | (C) | (min) | (acres) | (in/hr) | (cfs) | (min) | (acres) | (in/hr) | (cfs) | (%) | (cfs) | (cfs) | (%) | (in) | (ft) | (%) | (fps) | (min) |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | 15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) |
| | 1b | 100 | 1.92 | 0.22 | 13 | 0.42 | 2.5 | 1.1 | | | | | | | | | | | | | |
| | | 101 | 2.16 | 0.22 | 13 | 0.48 | 2.5 | 1.2 | | | | | 0.50 | 0.02 | 2.98 | 0.50 | 18 | | | | |
| | | 200 | 1.31 | 0.22 | 13 | 0.29 | 2.5 | 0.7 | | | | | | | | | | | | | |
| | | 300 | 2.71 | 0.22 | 14 | 0.60 | 2.3 | 1.4 | | | | | | | | | | | | | |
| | | 400 | 2.55 | 0.22 | 12 | 0.56 | 2.6 | 1.5 | | | | | | | | | | | | | |
| | | 500 | 5.29 | 0.22 | 19 | 1.16 | 2.1 | 2.5 | | | | | | | | | | | | | |
| | | 600 | 1.53 | 0.22 | 12 | 0.34 | 2.6 | 0.9 | | | | | | | | | | | | | |
| | 7 | 700 | 2.75 | 0.22 | 13 | 0.61 | 2.5 | 1.5 | | | | | | | | | | | | | |
| | 8a | 800 | 1.36 | 0.22 | 13 | 0.30 | 2.5 | 0.7 | | | | | | | | | | | | | |
| | | 801 | 0.49 | 0.22 | 12 | 0.11 | 2.6 | 0.3 | | | | | 0.05 | 0 | 2.1 | 0.50 | 18 | | | | |
| | | 802 | 0.55 | 0.22 | 12 | 0.12 | 2.6 | 0.3 | | | | | | | | | | | | | |
| | | 803 | 0.93 | 0.22 | 12 | 0.20 | 2.6 | 0.5 | | | | | | | | | | | | | |
| | 8e | 804 | 0.35 | 0.22 | 11 | 0.08 | 2.7 | 0.2 | | | | | | | | | | | | | |
| | | 900 | 0.26 | 0.89 | 10 | 0.23 | 2.8 | 0.6 | | | | | | | | | | | | | |
| | | 1000 | 0.24 | 0.22 | 11 | 0.05 | 2.7 | 0.1 | | | | | | | | | | | | | |
| | | 1100 | 0.86 | 0.22 | 11 | 0.19 | 2.7 | 0.5 | | | | | | | | | | | | | |
| | | 1200 | 0.14 | 0.22 | 10 | 0.03 | 2.8 | 0.1 | | | | | | | | | | | | | |
| | | OS1 | 0.32 | 0.22 | 11 | 0.07 | 2.7 | 0.2 | | | | | | | | | | | | | |
| | | OS2 | 2.21 | 0.22 | 16 | 0.49 | 2.3 | 1.1 | | | | | | | | | | | | | |
| | | OS3 | 0.29 | 0.22 | 10 | 0.06 | 2.8 | 0.2 | | | | | | | | | | | | | |
| | 1a | OS1+101 | | | | | | | 17 | 0.55 | 2.2 | 1.2 | 0.50 | 0.11 | 3.39 | 0.50 | 18 | 507 | 0.05 | 1.50 | 6 |
| | | OS1+101+100 | | | | | | | 17 | 0.97 | 2.2 | 2.1 | | | | | | 0 | 0.05 | 1.50 | 0 |
| | 8b | 700+801 | | | | | | | 16 | 0.71 | 2.3 | 1.6 | 0.50 | 0.48 | 4.22 | 0.50 | 18 | 250 | 0.05 | 1.50 | 3 |
| | 2 | 200+300+inlet bypass(IB) | | | | | | | 14 | 0.88 | 2.4 | 2.3 | | | | | | 18 | 0.05 | 1.50 | 0 |
| | 8c | 802+IB | | | | | | | 14 | 0.12 | 2.4 | 0.4 | | | | | | 175 | 0.05 | 1.50 | 2 |
| | 8d | 200+300+802+803+IB | | | | | | | 16 | 1.21 | 2.3 | 3.4 | | | | | | 183 | 0.05 | 1.50 | 2 |
| | 8f | 200+300+802+803+804+IB | | | | | | | 16 | 1.29 | 2.3 | 3.8 | | | | | | 0 | 0.05 | 1.50 | 0 |
| | 5 | OS2+500+900 | | | | | | | 17 | 1.47 | 2.2 | 3.2 | | | | | | 52 | 2 | 1.00 | 1 |
| | 12 | OS3+1200 | | | | | | | 10 | 0.09 | 2.8 | 0.3 | | | | | | 0 | 2 | 1.00 | 0 |

PARK ENGINEERING CONSULTANTS

STANDARD FORM SF-9
STORM DRAINAGE SYSTEM DESIGN
(RATIONAL METHOD PROCEDURE)

Subdivision: SADDLEBACK HEIGHTS -10-YR DEVELOPED
Calculated By: JGJ
Date: 1-Dec-03

| Street | Design Pt. | Design Area | Direct Runoff | | | | | | Total Runoff | | | | Street | | Pipe | | | Travel Time | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Runoff Coeff. | Tc | C x A | I | Q | Tc | C*A | I | Q | S | Str. Flow | Q | S | Pipe Size | L | S | V | time |
| | | | (Ac) | (C) | (min) | (acres) | (in/hr) | (cfs) | (min) | (acres) | (in/hr) | (cfs) | (%) | (cfs) | (cfs) | (%) | (in) | (ft) | (%) | (fps) | (min) |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | 15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) |
| | 1b | 100 | 1.92 | 0.38 | 13 | 0.73 | 4.2 | **3.0** | | | | | 0.50 | 0.02 | 2.98 | 0.50 | 18 | | | | |
| | | 101 | 2.16 | 0.38 | 13 | 0.82 | 4.2 | **3.4** | | | | | | | | | | | | | |
| | | 200 | 1.31 | 0.38 | 13 | 0.50 | 4.2 | **2.1** | | | | | | | | | | | | | |
| | | 300 | 2.71 | 0.38 | 14 | 1.03 | 4.1 | **4.2** | | | | | | | | | | | | | |
| | | 400 | 2.55 | 0.38 | 12 | 0.97 | 4.4 | **4.2** | | | | | | | | | | | | | |
| | | 500 | 5.29 | 0.38 | 19 | 2.01 | 3.5 | **7.0** | | | | | | | | | | | | | |
| | | 600 | 1.53 | 0.38 | 12 | 0.58 | 4.4 | **2.5** | | | | | | | | | | | | | |
| | 7 | 700 | 2.75 | 0.38 | 13 | 1.05 | 4.2 | **4.3** | | | | | | | | | | | | | |
| | 8a | 800 | 1.36 | 0.38 | 13 | 0.52 | 4.2 | **2.1** | | | | | | | | | | | | | |
| | | 801 | 0.49 | 0.38 | 12 | 0.19 | 4.4 | **0.8** | | | | | 0.05 | 0 | 2.1 | 0.50 | 18 | | | | |
| | | 802 | 0.55 | 0.38 | 12 | 0.21 | 4.4 | **0.9** | | | | | | | | | | | | | |
| | | 803 | 0.93 | 0.38 | 12 | 0.35 | 4.4 | **1.5** | | | | | | | | | | | | | |
| | 8e | 804 | 0.35 | 0.38 | 11 | 0.13 | 4.5 | **0.6** | | | | | | | | | | | | | |
| | | 900 | 0.26 | 0.38 | 10 | 0.10 | 4.7 | **0.5** | | | | | | | | | | | | | |
| | | 1000 | 0.24 | 0.38 | 11 | 0.09 | 4.5 | **0.4** | | | | | | | | | | | | | |
| | | 1100 | 0.86 | 0.38 | 11 | 0.33 | 4.5 | **1.5** | | | | | | | | | | | | | |
| | | 1200 | 0.14 | 0.38 | 10 | 0.05 | 4.7 | **0.2** | | | | | | | | | | | | | |
| | | OS1 | 0.32 | 0.38 | 11 | 0.12 | 4.5 | **0.5** | | | | | | | | | | | | | |
| | | OS2 | 2.21 | 0.38 | 16 | 0.84 | 3.8 | **3.2** | | | | | | | | | | | | | |
| | | OS3 | 0.29 | 0.38 | 10 | 0.11 | 4.7 | **0.5** | | | | | | | | | | | | | |
| | 1a | OS1+101 | | | | | | | 17 | 0.94 | 3.7 | **3.5** | 0.50 | 0.11 | 3.39 | 0.50 | 18 | 507 | 0.05 | 1.50 | 6 |
| | | OS1+101+100 | | | | | | | 17 | 1.67 | 3.7 | **6.2** | | | | | | 0 | 0.05 | 1.50 | 0 |
| | 8b | 700+801 | | | | | | | 16 | 1.23 | 3.8 | **4.7** | 0.50 | 0.48 | 4.22 | 0.50 | 18 | 250 | 0.05 | 1.50 | 3 |
| | 2 | 200+300+inlet bypass(IB) | | | | | | | 14 | 1.53 | 4.1 | **6.7** | | | | | | 18 | 0.05 | 1.50 | 0 |
| | 8c | 802+IB | | | | | | | 14 | 0.21 | 4.1 | **1.0** | | | | | | 175 | 0.05 | 1.50 | 2 |
| | 8d | 200+300+802+803+IB | | | | | | | 16 | 2.09 | 3.8 | **8.5** | | | | | | 183 | 0.05 | 1.50 | 2 |
| | 8f | 200+300+802+803+804+IB | | | | | | | 16 | 2.22 | 3.8 | **9.6** | | | | | | 0 | 0.05 | 1.50 | 0 |
| | 5 | 0S2+500+900 | | | | | | | 17 | 2.23 | 3.7 | **8.3** | | | | | | 52 | 2 | 1.00 | 1 |
| | 12 | OS3+1200 | | | | | | | 10 | 0.16 | 4.7 | **0.8** | | | | | | 0 | 2 | 1.00 | 0 |

PARK ENGINEERING CONSULTANTS

STANDARD FORM SF-9
STORM DRAINAGE SYSTEM DESIGN
(RATIONAL METHOD PROCEDURE)

Subdivision: SADDLEBACK HEIGHTS -100-YR DEVELOPED
Calculated By: JGJ
Date: 1-Dec-03

| Street | Design Pt. | Design Area | Direct Runoff | | | | | | Total Runoff | | | | Street | | Pipe | | | Travel Time | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area (Ac) | Runoff Coeff. (C) | Tc (min) | C x A (acres) | I (in/hr) | Q (cfs) | Tc (min) | C*A (acres) | I (in/hr) | Q (cfs) | S (%) | Str. Flow (cfs) | Q (cfs) | S (%) | Pipe Size (in) | L (ft) | S (%) | V (fps) | time (min) |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | 15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) |
| | 1b | 100 | 1.92 | 0.57 | 13 | 1.09 | 6.7 | 7.3 | | | | | | | | | | | | | |
| | | 101 | 2.16 | 0.57 | 13 | 1.23 | 6.7 | 8.2 | | | | | 0.50 | 1.71 | 5.59 | 0.50 | 24 | | | | |
| | | 200 | 1.31 | 0.57 | 13 | 0.75 | 6.7 | 5.0 | | | | | | | | | | | | | |
| | | 300 | 2.71 | 0.57 | 14 | 1.54 | 6.3 | 9.7 | | | | | | | | | | | | | |
| | | 400 | 2.55 | 0.57 | 12 | 1.45 | 6.9 | 10.0 | | | | | | | | | | | | | |
| | | 500 | 5.29 | 0.57 | 19 | 3.02 | 5.5 | 16.4 | | | | | | | | | | | | | |
| | | 600 | 1.53 | 0.57 | 12 | 0.87 | 6.9 | 6.0 | | | | | | | | | | | | | |
| | 7 | 700 | 2.75 | 0.57 | 13 | 1.57 | 6.7 | 10.5 | | | | | | | | | | | | | |
| | 8a | 800 | 1.36 | 0.96 | 2 | 1.31 | 9.4 | 12.3 | | | | | | | | | | | | | |
| | | 801 | 0.49 | 0.96 | 2 | 0.47 | 9.4 | 4.4 | | | | | 0.05 | 4.46 | 7.54 | 0.50 | 18 | | | | |
| | | 802 | 0.55 | 0.57 | 12 | 0.31 | 6.9 | 2.2 | | | | | | | | | | | | | |
| | | 803 | 0.93 | 0.57 | 12 | 0.53 | 6.9 | 3.7 | | | | | | | | | | | | | |
| | 8e | 804 | 0.35 | 0.57 | 11 | 0.20 | 7.2 | 1.4 | | | | | | | | | | | | | |
| | | 900 | 0.26 | 0.96 | 10 | 0.25 | 7.5 | 1.9 | | | | | | | | | | | | | |
| | | 1000 | 0.24 | 0.96 | 11 | 0.23 | 7.2 | 1.7 | | | | | | | | | | | | | |
| | | 1100 | 0.86 | 0.57 | 10 | 0.49 | 7.5 | 3.7 | | | | | | | | | | | | | |
| | | 1200 | 0.14 | 0.57 | 10 | 0.08 | 7.5 | 0.6 | | | | | | | | | | | | | |
| | | OS1 | 0.32 | 0.57 | 11 | 0.18 | 7.2 | 1.3 | | | | | | | | | | | | | |
| | | OS2 | 2.21 | 0.57 | 16 | 1.26 | 5.9 | 7.4 | | | | | | | | | | | | | |
| | | OS3 | 0.29 | 0.57 | 10 | 0.17 | 7.5 | 1.2 | | | | | | | | | | | | | |
| | 1a | OS1+101 | | | | | | | 17 | 1.41 | 5.9 | 8.3 | 0.50 | 2.27 | 6.03 | 0.50 | 18 | 507 | 0.05 | 1.50 | 6 |
| | | OS1+101+100 | | | | | | | 17 | 2.51 | 5.9 | 14.7 | | | | | | 0 | 0.05 | 1.50 | 0 |
| | 8b | 700+801 | | | | | | | 16 | 2.04 | 5.9 | 12.0 | 0.50 | 4.56 | 7.44 | 0.50 | 18 | 250 | 0.05 | 1.50 | 3 |
| | 2 | 200+300+inlet bypass(IB) | | | | | | | 14 | 2.29 | 6.3 | 18.3 | | | | | | 18 | 0.05 | 1.50 | 0 |
| | 8c | 802+IB | | | | | | | 14 | 0.31 | 6.3 | 5.9 | | | | | | 175 | 0.05 | 1.50 | 2 |
| | 8d | 200+300+802+803+IB | | | | | | | 16 | 3.14 | 5.9 | 29.8 | | | | | | 183 | 0.05 | 1.50 | 2 |
| | 8f | 200+300+802+803+804+IB | | | | | | | 16 | 3.33 | 5.9 | 32.4 | | | | | | 0 | 0.05 | 1.50 | 0 |
| | 5 | 0S2+500+900 | | | | | | | 17 | 3.45 | 5.9 | 20.3 | | | | | | 52 | 2 | 1.00 | 1 |
| | 12 | OS3+1200 | | | | | | | 10 | 0.25 | 7.5 | 1.8 | | | | | | 0 | 2 | 1.00 | 0 |

Reviewed By:
EMF 2-21-03
Approved.

# FINAL DRAINAGE REPORT
# FOR
# SAGEBRUSH SUBDIVISION
# FIRESTONE, COLORADO

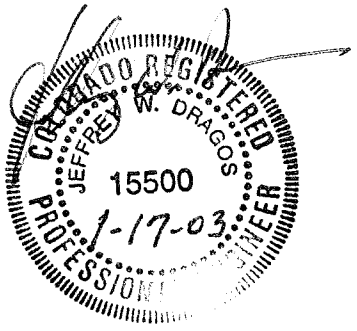
**December 2001**
**Revised January 2003**

**Prepared for:**

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Contact: Craig Jorgenson




Job No. 87002340

# STANDARD FORM SF-2
# STORM DRAINAGE SYSTEM DESIGN
## (RATIONAL METHOD PROCEDURE)

Calculations By: mrl

Location: Sagebrush Subdv. - Firestone, CO

Design Storm: **2 -YEAR (Developed)**

B12

| LOCATION | DESIGN POINT | DIRECT RUNOFF | | | | | | | TOTAL RUNOFF | | | | STREET | | PIPE | | | TRAVEL TIME | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AREA DESIG. | AREA (Acres) | RUNOFF COEFF | Tc (min) | C A (Acres) | I (in/hour) | Q (cfs) | Tc (min) | (C A) (Acres) | I (in/hour) | Q (cfs) | SLOPE (%) | STREET FLOW (cfs) | DESIGN FLOW (cfs) | SLOPE (%) | PIPE SIZE | LENGTH (ft) | VELOCITY (fps) | Tt (min) | |
| | | | | | | | | | | | | | ~ Denotes Overflow | | | | | | | | |
| Frontier St. | 1 | OS-2 | 4.1 | 0.15 | 16.6 | 0.62 | 2.25 | 1.4 | | | | | | | 1.4 | 2.0 | 18 | 60 | 0.8 | 1.3 | |
| Inlet 4B1 | 2 | A1 | 1.0 | 0.40 | 8.7 | 0.39 | 2.75 | 1.1 | | | | | | | | | | | | | |
| Inlet 4B2 | 3 | A2 | 2.9 | 0.40 | 14.0 | 1.14 | 2.35 | 2.7 | | | | | | | | | | | | | |
| | 2 | A1& A2 | 3.8 | 0.40 | | | | | 14.0 | 1.53 | 2.35 | 3.59 | | | 3.6 | 2.0 | 18 | 40 | 2.0 | 0.3 | |
| Inlet 2B16a | 4 | B1 | 3.9 | 0.40 | 13.3 | 1.54 | 2.45 | 3.8 | | | | | | | | | | | | | |
| Inlet 2B4 | 5 | B2 | 2.6 | 0.40 | 13.9 | 1.04 | 2.35 | 2.4 | | | | | | | | | | | | | |
| | 5 | B1 & B2 | 6.5 | 0.40 | 13.9 | | | | 13.9 | 2.58 | 2.35 | 6.06 | | | 6.1 | 2.0 | 18 | 302 | 3.4 | 1.5 | |
| Inlet 2B3 | 6 | B3 | 2.4 | 0.40 | 14.5 | 0.95 | 2.30 | 2.2 | | | | | | | | | | | | | |
| | 6 | B1 - B3 | 8.8 | 0.40 | 14.5 | | | | 14.5 | 3.53 | 2.30 | 8.12 | | | 8.1 | 2.0 | 18 | 262 | 4.6 | 0.9 | |
| Inlet 3D2 | 7 | C1 | 11.3 | 0.40 | 19.1 | 4.54 | 2.05 | 9.3 | | | | | | | | | | | | | |
| Inlet 3D1 | 8 | C2 | 6.3 | 0.40 | 28.5 | 2.50 | 1.65 | 4.1 | | | | | | | | | | | | | |
| | 8 | C1 & C2 | 17.6 | 0.40 | | | | | 28.5 | 7.04 | 1.65 | 11.62 | | | 11.6 | 2.0 | 24 | 40 | 3.7 | 0.18 | |
| | | | | | | | | | | | | | | | | | | | | | |

# STANDARD FORM SF-2
## STORM DRAINAGE SYSTEM DESIGN
### (RATIONAL METHOD PROCEDURE)

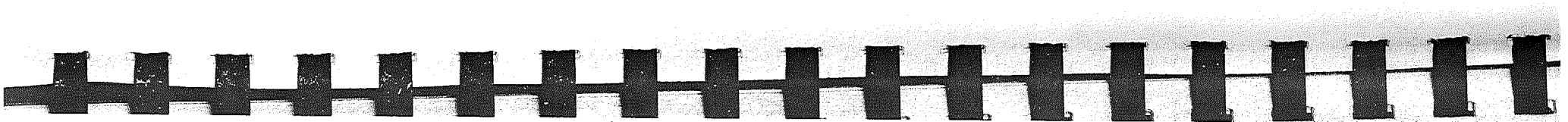
Location: Sagebrush Subdv. - Firestone, CO

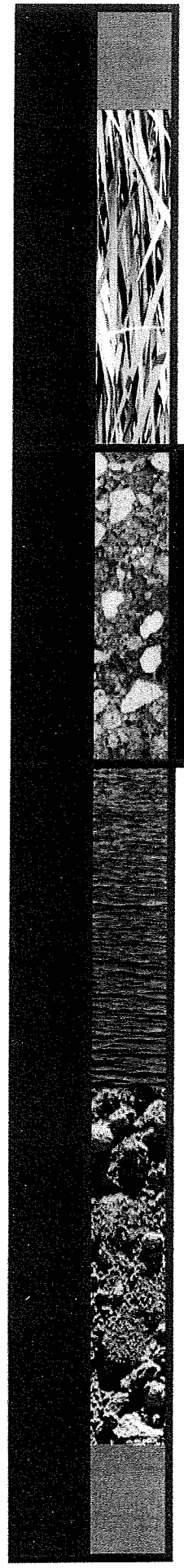
Calculations By: mrl

Design Storm: **100 -YEAR (Developed)**

| LOCATION | DESIGN POINT | DIRECT RUNOFF | | | | | | | TOTAL RUNOFF | | | | STREET | | PIPE | | | TRAVEL TIME | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AREA DESIG. | AREA (Acres) | RUNOFF COEFF | Tc (min) | C A (Acres) | I (in/hour) | Q (cfs) | Tc (min) | (C A) (Acres) | I (in/hour) | Q (cfs) | SLOPE (%) | STREET FLOW (cfs) | DESIGN FLOW (cfs) | SLOPE (%) | PIPE SIZE | LENGTH (ft) | VELOCITY (fps) | Tt (min) | |
| | | | | | | | | | | | | | ~ Denotes Overflow | | | | | | | | |
| Frontier St. | 1 | OS-2 | 4.1 | 0.50 | 16.6 | 2.05 | 3.80 | 7.8 | | | | | | | 7.8 | 2.0 | 18 | 60 | 4.4 | 0.2 | |
| Inlet 4B1 | 2 | A1 | 1.0 | 0.60 | 8.7 | 0.58 | 7.50 | 4.4 | | | | | | | | | | | | | |
| Inlet 4B2 | 3 | A2 | 2.9 | 0.60 | 14.0 | 1.71 | 6.30 | 10.8 | | | | | | | | | | | | | |
| | 2 | A1& A2 | 3.8 | 0.60 | | | | | 14.0 | 2.29 | 6.30 | 14.44 | | | 14.4 | 2.0 | 18 | 40 | 8.2 | 0.1 | |
| Inlet 2B16a | 4 | B1 | 3.9 | 0.60 | 13.3 | 2.31 | 6.40 | 14.8 | | | | | | | | | | | | | |
| Inlet 2B4 | 5 | B2 | 2.6 | 0.60 | 13.9 | 1.56 | 6.30 | 9.8 | | | | | | | | | | | | | |
| | 5 | B1 & B2 | 6.5 | 0.60 | 13.9 | | | | 13.9 | 3.87 | 6.30 | 24.38 | | | 24.4 | 2.0 | 18 | 302 | 13.8 | 0.4 | |
| Inlet 2B3 | 6 | B3 | 2.4 | 0.60 | 14.5 | 1.43 | 6.20 | 8.9 | | | | | | | | | | | | | |
| | 6 | B1 - B3 | 8.8 | 0.60 | 14.5 | | | | 14.5 | 5.30 | 6.20 | 32.85 | | | 32.8 | 2.0 | 18 | 262 | 18.6 | 0.2 | |
| Inlet 3D2 | 7 | C1 | 11.3 | 0.60 | 19.1 | 6.80 | 5.60 | 38.1 | | | | | | | | | | | | | |
| Inlet 3D1 | 8 | C2 | 6.3 | 0.60 | 28.5 | 3.76 | 4.45 | 16.7 | | | | | | | | | | | | | |
| | 8 | C1 & C2 | 17.6 | 0.60 | | | | | 28.5 | 10.56 | 4.45 | 46.99 | | | 47.0 | 2.0 | 24 | 40 | 15.0 | 0.045 | |
| | | | | | | | | | | | | | | | | | | | | | |







# Final Drainage Report
# For
# Firestone Sports Complex – Phase 1

SUBMITTED TO:

Town of Firestone, Colorado

AUGUST 10, 2007

TST, Inc. Consulting Engineers

TST

TST, INC. CONSULTING ENGINEERS

August 10, 2007

Mrs. Cheri Andersen
Town of Firestone Administrator
151 Grant Avenue
P.O. Box 100
Firestone, CO 80520-0100

*Re: Firestone Sports Complex – Phase 1*
*Project No. 0668.0130.01*

Dear Mrs. Andersen:

We are pleased to submit this Final Drainage Report for the Firestone Sports Complex – Phase 1 project. This report was prepared using the current Town of Firestone Design Criteria and Construction Regulations.

We look forward to your review and will gladly answer any questions you may have.

Respectfully,

TST, INC. CONSULTING ENGINEERS

Spencer M. Smith, P.E.

SMS

COLORADO LICENSED
SPENCER M. SMITH
40333
8-13-07
PROFESSIONAL ENGINEER

I hereby certify that this report (plan) for the final drainage analysis and design of Firestone Sports Complex – Phase 1 was prepared by me or under my direct supervision in accordance with the provisions of the Town of Firestone Design Criteria and Construction Regulations for the owners thereof.

Spencer M. Smith
Registered Professional Engineer
State of Colorado No. 40333

748 Whalers Way
Fort Collins, CO 80525
970.226.0557
metro 303.595.9103
fax 970.226.0204

info@tstinc.com
www.tstinc.com

## Developed Basin Imperviousness

| Subbasin No. | Area (ac.) | Area (Acres) | | | | | | | Imperv. % |
|---|---|---|---|---|---|---|---|---|---|
| | | Street (Paved) | Street (Gravel) | Drive/Walk | Grass | Playground | Infield | Commercial | |
| A1 | 2.00 | 0 | 0.10 | 0 | 1.61 | 0 | 0.29 | 0 | 10.9 |
| A2 | 2.42 | 0 | 0.15 | 0 | 2.00 | 0 | 0.27 | 0 | 9.7 |
| A3 | 1.39 | 0.98 | 0 | 0.22 | 0.19 | 0 | 0 | 0 | 85.0 |
| A4 | 1.52 | 1.05 | 0 | 0.23 | 0.24 | 0 | 0 | 0 | 83.0 |
| A5 | 0.98 | 0 | 0.03 | 0.18 | 0.34 | 0 | 0.43 | 0 | 40.4 |
| A6 | 0.98 | 0 | 0 | 0.18 | 0.37 | 0 | 0.43 | 0 | 39.2 |
| A7 | 2.65 | 0 | 0.10 | 0.16 | 2.24 | 0 | 0.15 | 0 | 11.5 |
| A8 | 1.57 | 0 | 0.09 | 0 | 1.34 | 0 | 0.14 | 0 | 8.5 |
| A9 | 0.84 | 0 | 0 | 0.24 | 0.36 | 0.03 | 0.21 | 0 | 39.4 |
| A10 | 1.68 | 0 | 0 | 0.40 | 0.97 | 0.07 | 0.24 | 0 | 30.1 |
| A11 | 0.88 | 0 | 0 | 0 | 0.88 | 0 | 0 | 0 | 2.0 |
| A12 | 1.91 | 1.45 | 0 | 0.10 | 0.36 | 0 | 0 | 0 | 81.0 |
| A13 | 1.19 | 0.99 | 0 | 0.14 | 0.06 | 0 | 0 | 0 | 93.9 |
| OS1 | 4.48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6.0 |
| OS2 | 2.35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OS3 | 0.39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OS4 | 0.36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OS5 | 1.13 | 0 | 0 | 0 | 0 | 0 | 0 | 1.13 | 95.0 |
| OS6 | 2.09 | 0 | 0 | 0 | 0 | 0 | 0 | 2.09 | 95.0 |
| OS7 | 0.69 | 0.69 | 0 | 0 | 0 | 0 | 0 | 0 | 100.0 |

## Developed Runoff

| Subbasin No. | Design Point | Area (ac.) | Imperv. % | Runoff Coefficient $C_2$ | $C_5$ | $C_{10}$ | $C_{100}$ | Overland Flow Length (ft) | Average Overland Slope (%) | Overland Travel Time Ti (min) | Gutter Flow Length (ft) | Average Gutter Slope (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A1 | 1 | 2.00 | 0.11 | 0.06 | 0.14 | 0.22 | 0.41 | 274.0 | 1.00 | 28.6 | 479 | 1.75 |
| A2 | 2 | 2.42 | 0.10 | 0.05 | 0.13 | 0.22 | 0.40 | 279.0 | 1.00 | 29.1 | 464 | 1.50 |
| A3 | 3 | 1.39 | 0.85 | 0.63 | 0.66 | 0.69 | 0.75 | 43.0 | 2.00 | 4.2 | 950 | 1.65 |
| A4 | 4 | 1.52 | 0.83 | 0.61 | 0.63 | 0.66 | 0.73 | 43.0 | 2.00 | 4.4 | 1053 | 1.50 |
| A5 | 5 | 0.98 | 0.40 | 0.24 | 0.30 | 0.36 | 0.50 | 176.0 | 4.50 | 11.7 | 212 | 0.75 |
| A6 | 6 | 0.98 | 0.39 | 0.23 | 0.29 | 0.36 | 0.49 | 176.0 | 4.50 | 11.8 | 212 | 0.75 |
| A7 | 7 | 2.65 | 0.11 | 0.06 | 0.15 | 0.23 | 0.41 | 278.0 | 1.00 | 28.7 | 343 | 0.80 |
| A8 | 8 | 1.57 | 0.08 | 0.05 | 0.13 | 0.21 | 0.40 | 288.0 | 1.00 | 29.8 | 276 | 1.00 |
| A9 | 9 | 0.84 | 0.39 | 0.23 | 0.29 | 0.36 | 0.49 | 148.0 | 1.80 | 14.6 | 220 | 0.77 |
| A10 | 10 | 1.68 | 0.30 | 0.18 | 0.25 | 0.32 | 0.47 | 202.0 | 2.80 | 15.5 | 188 | 0.77 |
| A11 | 11 | 0.88 | 0.02 | 0.03 | 0.08 | 0.17 | 0.36 | 31.0 | 20.00 | 3.8 | 417 | 0.75 |
| A12 | 12 | 1.91 | 0.81 | 0.58 | 0.61 | 0.64 | 0.71 | 234.0 | 2.00 | 10.9 | 148 | 0.72 |
| A13 | 13 | 1.19 | 0.94 | 0.77 | 0.79 | 0.81 | 0.86 | 79.0 | 2.00 | 4.0 | 281 | 1.10 |
| OS1 | 20 | 4.48 | 0.06 | 0.04 | 0.11 | 0.19 | 0.38 | 500.0 | 2.90 | 28.2 | 20 | 2.90 |
| OS2 | 21 | 2.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | |
| OS3 | 22 | 0.39 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | |
| OS4 | 23 | 0.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | |
| OS5 | 24 | 1.13 | 0.95 | 0.79 | 0.81 | 0.83 | 0.88 | 163.0 | 2.00 | 5.4 | | |
| OS6 | 25 | 2.09 | 0.95 | 0.79 | 0.81 | 0.83 | 0.88 | 338.0 | 2.00 | 7.8 | | |
| OS7 | 26 | 0.69 | 1.00 | 0.89 | 0.90 | 0.92 | 0.96 | 26.0 | 2.00 | 1.5 | 599 | 0.80 |

## Developed Runoff (Cont.)

| Design Point | Concentrated Flow Conveyance Description | CV | Gutter Flow Velocity (ft/sec) | Gutter Travel Time Tt (min) | Time of Concentration Tc=Ti+Tt (min) | Intensity (i) 2-Year (in/hr) | Intensity (i) 100-Year (in/hr) | Discharge (Q) 2-Year Q (cfs) | Discharge (Q) 100-Year Q (cfs) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Grassed Waterway | 15 | 1.98 | 4.0 | 32.6 | 1.49 | 4.10 | 0.2 | 3.3 |
| 2 | Grassed Waterway | 15 | 1.84 | 4.2 | 33.3 | 1.47 | 4.05 | 0.2 | 3.9 |
| 3 | Paved areas and shallow paved areas | 20 | 2.57 | 6.2 | 10.3 | 2.60 | 7.14 | 2.3 | 7.5 |
| 4 | Paved areas and shallow paved areas | 20 | 2.45 | 7.2 | 11.6 | 2.49 | 6.84 | 2.3 | 7.6 |
| 5 | Paved areas and shallow paved areas | 20 | 1.73 | 2.0 | 13.7 | 2.33 | 6.40 | 0.5 | 3.1 |
| 6 | Paved areas and shallow paved areas | 20 | 1.73 | 2.0 | 13.8 | 2.32 | 6.38 | 0.5 | 3.1 |
| 7 | Grassed Waterway | 15 | 1.34 | 4.3 | 33.0 | 1.48 | 4.08 | 0.2 | 4.4 |
| 8 | Grassed Waterway | 15 | 1.50 | 3.1 | 32.9 | 1.48 | 4.08 | 0.1 | 2.5 |
| 9 | Paved areas and shallow paved areas | 20 | 1.75 | 2.1 | 16.7 | 2.14 | 5.88 | 0.4 | 2.4 |
| 10 | Paved areas and shallow paved areas | 20 | 1.75 | 1.8 | 17.3 | 2.10 | 5.78 | 0.6 | 4.6 |
| 11 | Grassed Waterway | 15 | 1.30 | 5.4 | 9.2 | 2.72 | 7.46 | 0.1 | 2.4 |
| 12 | Paved areas and shallow paved areas | 20 | 1.70 | 1.5 | 12.3 | 2.44 | 6.68 | 2.7 | 9.1 |
| 13 | Paved areas and shallow paved areas | 20 | 2.10 | 2.2 | 6.2 | 3.10 | 8.49 | 2.8 | 8.7 |
| 20 | Nearly bare ground | 10 | 1.70 | 0.2 | 28.4 | 1.63 | 4.47 | 0.3 | 7.7 |
| 21 | | | | | | | | 0.6 | 7.9 |
| 22 | | | | | | | | 1.5 | 2.3 |
| 23 | | | | | | | | 1.4 | 2.1 |
| 24 | Paved areas and shallow paved areas | 20 | 0.00 | 0.0 | 5.4 | 3.24 | 8.87 | 2.9 | 8.8 |
| 25 | Paved areas and shallow paved areas | 20 | 0.00 | 0.0 | 7.8 | 2.88 | 7.90 | 4.8 | 14.5 |
| 26 | Paved areas and shallow paved areas | 20 | 1.79 | 5.6 | 7.1 | 2.97 | 8.14 | 1.8 | 5.4 |

## Attenuated Runoff

| DESIGN POINT | CONTRIBUTING AREAS | AREA (ac.) | % IMP. | RUNOFF COEFFICIENTS | | | |
|---|---|---|---|---|---|---|---|
| | | | | $C_2$ | $C_5$ | $C_{10}$ | $C_{100}$ |
| 1 | A1 | 2.00 | 0.11 | 0.06 | 0.14 | 0.22 | 0.41 |
| 2 | A2 | 2.42 | 0.10 | 0.05 | 0.13 | 0.22 | 0.40 |
| 3 | A3 | 1.39 | 0.85 | 0.63 | 0.66 | 0.69 | 0.75 |
| 4 | A4 | 1.52 | 0.83 | 0.61 | 0.63 | 0.66 | 0.73 |
| 5 | A5 | 0.98 | 0.40 | 0.24 | 0.30 | 0.36 | 0.50 |
| 6 | A6 | 0.98 | 0.39 | 0.23 | 0.29 | 0.36 | 0.49 |
| 7 | A7 | 2.65 | 0.11 | 0.06 | 0.15 | 0.23 | 0.41 |
| 8 | A8 | 1.57 | 0.08 | 0.05 | 0.13 | 0.21 | 0.40 |
| 9 | A9 | 0.84 | 0.39 | 0.23 | 0.29 | 0.36 | 0.49 |
| 10 | A10 | 1.68 | 0.30 | 0.18 | 0.25 | 0.32 | 0.47 |
| 11 | A11 | 0.88 | 0.02 | 0.03 | 0.08 | 0.17 | 0.36 |
| 12 | A12 | 1.91 | 0.81 | 0.58 | 0.61 | 0.64 | 0.71 |
| 13 | A13 | 1.19 | 0.94 | 0.77 | 0.79 | 0.81 | 0.86 |
| 13 | OS4, A13 | 1.55 | 0.93 | 0.74 | 0.76 | 0.78 | 0.84 |
| 14 | A1-A6, DP27, DP29 | 31.14 | 0.40 | 0.29 | 0.34 | 0.41 | 0.55 |
| 14 | A1-A13 | 20.01 | 0.38 | 0.26 | 0.32 | 0.39 | 0.53 |
| 14 | OS1-OS7, A1-A13 | 31.50 | 0.40 | 0.29 | 0.35 | 0.41 | 0.55 |
| 15 | A7, A9, OS5, DP16 | 7.40 | 0.59 | 0.47 | 0.52 | 0.57 | 0.67 |
| 16 | OS6, OS7 | 2.78 | 0.96 | 0.81 | 0.83 | 0.85 | 0.90 |
| 17 | A8, DP18 | 14.45 | 0.31 | 0.21 | 0.26 | 0.34 | 0.49 |
| 18 | A10, A12, A13, DP28 | 12.88 | 0.33 | 0.23 | 0.28 | 0.36 | 0.50 |
| 19 | A11, OS1-OS3 | 8.10 | 0.14 | 0.08 | 0.14 | 0.23 | 0.41 |
| 20 | OS1 | 4.48 | 0.06 | 0.04 | 0.11 | 0.19 | 0.38 |
| 21 | OS2 | 2.35 | 0.20 | 0.08 | 0.12 | 0.25 | 0.42 |
| 22 | OS3 | 0.39 | 0.90 | 0.63 | 0.66 | 0.69 | 0.75 |
| 23 | OS4 | 0.36 | 0.90 | 0.63 | 0.66 | 0.69 | 0.75 |
| 24 | OS5 | 1.13 | 0.95 | 0.79 | 0.81 | 0.83 | 0.88 |
| 25 | OS6 | 2.09 | 0.95 | 0.79 | 0.81 | 0.83 | 0.88 |
| 26 | OS7 | 0.69 | 1.00 | 0.89 | 0.90 | 0.92 | 0.96 |
| 15 | OS4-OS7 | 4.27 | 0.95 | 0.79 | 0.81 | 0.83 | 0.88 |
| 27 | A7, A9, OS5-OS7 | 7.40 | 0.59 | 0.47 | 0.52 | 0.57 | 0.67 |
| 28 | A11, OS1-OS3 | 8.10 | 0.14 | 0.08 | 0.14 | 0.23 | 0.41 |
| 29 | A2, A4, A6 | 4.92 | 0.38 | 0.26 | 0.32 | 0.38 | 0.52 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 30 | A12, A13 | 3.10 | 0.86 | 0.65 | 0.68 | 0.71 | 0.77 |

## Attenuated Runoff (Cont.)

| DESIGN POINT | Time of Concentration Tc=Ti+Tt (min) | Intensity (i) 2-Year (in/hr) | Intensity (i) 100-Year (in/hr) | Discharge (Q) 2-Year Q (cfs) | Discharge (Q) 100-Year Q (cfs) |
|---|---|---|---|---|---|
| 1 | 32.65 | 1.49 | 4.10 | 0.2 | 3.3 |
| 2 | 33.33 | 1.47 | 4.05 | 0.2 | 3.9 |
| 3 | 10.34 | 2.60 | 7.14 | 2.3 | 7.5 |
| 4 | 11.58 | 2.49 | 6.84 | 2.3 | 7.6 |
| 5 | 13.72 | 2.33 | 6.40 | 0.5 | 3.1 |
| 6 | 13.80 | 2.32 | 6.38 | 0.5 | 3.1 |
| 7 | 32.98 | 1.48 | 4.08 | 0.2 | 4.4 |
| 8 | 32.92 | 1.48 | 4.08 | 0.1 | 2.5 |
| 9 | 16.67 | 2.14 | 5.88 | 0.4 | 2.4 |
| 10 | 17.33 | 2.10 | 5.78 | 0.6 | 4.6 |
| 11 | 9.16 | 2.72 | 7.46 | 0.1 | 2.4 |
| 12 | 12.30 | 2.44 | 6.68 | 2.7 | 9.1 |
| 13 | 6.22 | 3.10 | 8.49 | 2.8 | 8.7 |
| 13 | 6.22 | 3.10 | 8.49 | 3.5 | 11.0 |
| 14 | 33.33 | 1.47 | 4.05 | 13.3 | 68.9 |
| 14 | 33.33 | 1.47 | 4.05 | 7.8 | 42.6 |
| 14 | 33.33 | 1.47 | 4.05 | 13.6 | 70.0 |
| 15 | 32.98 | 1.48 | 4.08 | 5.2 | 20.3 |
| 16 | 7.76 | 2.88 | 7.90 | 6.5 | 19.7 |
| 17 | 32.92 | 1.48 | 4.08 | 4.5 | 29.0 |
| 18 | 33.33 | 1.47 | 4.05 | 4.4 | 26.3 |
| 19 | 28.38 | 1.63 | 4.47 | 1.0 | 14.9 |
| 20 | 28.38 | 1.63 | 4.47 | 0.3 | 7.7 |
| 21 | 6.00 | 3.32 | 7.91 | 0.6 | 7.9 |
| 22 | 7.00 | 3.22 | 7.69 | 1.5 | 2.3 |
| 23 | 6.00 | 3.32 | 7.91 | 1.4 | 2.1 |
| 24 | 5.39 | 3.24 | 8.87 | 2.9 | 8.8 |
| 25 | 7.76 | 2.88 | 7.90 | 4.8 | 14.5 |
| 26 | 7.08 | 2.97 | 8.14 | 1.8 | 5.4 |
| 15 | 7.76 | 2.88 | 7.90 | 9.8 | 29.7 |

| | | | | | |
|---|---|---|---|---|---|
| 27 | 32.98 | 1.48 | 4.08 | 5.2 | 20.3 |
| 28 | 28.38 | 1.63 | 4.47 | 1.0 | 14.9 |
| 29 | 33.33 | 1.47 | 4.05 | 1.9 | 10.4 |
| 30 | 12.30 | 2.44 | 6.68 | 4.9 | 15.9 |

# Final Drainage Study
# for
# St. Vrain Ranch, Filing III
# Firestone, Colorado

September 18, 2000

Prepared For:
St. Vrain Partners, LLC
Boulder, Colorado 80304

Prepared By:

NORTHERN ENGINEERING SERVICES, INC
Northern Engineering Services, Inc
420 S. Howes, Suite 202
Fort Collins, Colorado 80521
Phone: (970)221-4158

Project Number: SVR; 2003.00

NORTHERN
ENGINEERING
SERVICES INC

September 18, 2000

TST, Inc.
Attn.: Mr. David B. Lindsay, P.E.
748 Whalers Way
Building D
Fort Collins, Colorado 80525

**RE:** St. Vrain Ranch, Filing III
Weld County, Colorado

Dear Mr. Lindsay,

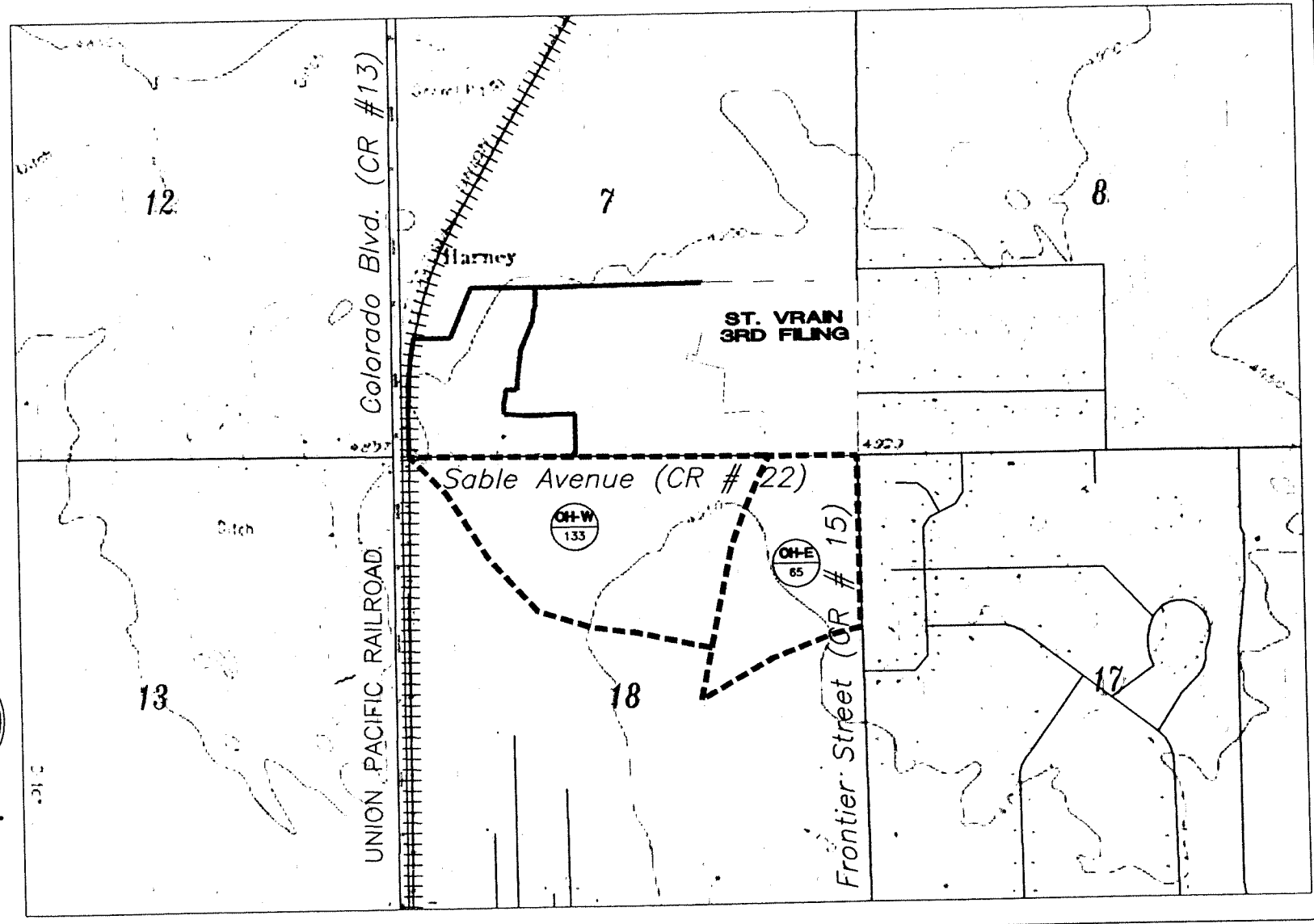
Northern Engineering Services, Inc. is pleased to resubmit this Final Drainage Study for St. Vrain Ranch, Filing 3 for your review. This report was prepared in compliance with technical criteria set forth by the Town of Firestone in the Design Criteria and Construction Standards Manual. We acknowledge that the Town of Firestone's review of this study is only for general conformance with submittal requirements, current design criteria and standard engineering principles and practices.

If you should have any questions or comments as you review this report, please feel free to contact me at your convenience.

Sincerely,
NORTHERN ENGINEERING SERVICES, INC.

Melissa L. Chalona, P.E.
Project Engineer

420 SOUTH HOWES, SUITE 202, FORT COLLINS, COLORADO 80521, (970) 221-4158, FAX (970) 221-4159




OFFSITE BASINS

N.T.S.

| Revisions | By | Date |
|---|---|---|
| | | |

NORTHERN ENGINEERING SERVICES
420 SOUTH HOWES SUITE 202, FT. COLLINS, COLORADO 80521
(970) 221-4158

Project: SVR: 2003.00
Print Date:
SCALE: N.A.
DESIGNER: MLC
CHECKED BY: N.A.
DRAFTSMAN: ACAD
PREPARED: 03/08/00

ST. VRAIN RANCH
OFFSITE BASINS

Sheet 1/1 Sheets

# *Historic Composite Runoff Coefficient Calculations (2 yr. and 100 yr.)*

| Character of Surface | 2yr Runoff Coefficient | 100yr Runoff Coefficient |
|---|---|---|
| ***Streets, Parking Lots, Drives:*** | | |
| Asphalt and Concrete | 0.87 | 0.93 |
| Gravel | 0.40 | 0.60 |
| ***Roofs, Walks and Drives*** | 0.80 | 0.90 |
| ***Lawns,*** | | |
| Sandy Soil | 0.00 | 0.20 |
| ***Lawns,*** | | |
| Heavy Soil | 0.05 | 0.50 |

Project: St. Vrain Ranch, Filing 3
Calculations By: MLC
Date: March 14, 2000

Runoff Coefficients are taken from the Urban Storm Drainage Criteria Manual, Volume I, Urban Drainage and Flood Control District, Denver Colorado (Table 3-1)

| Basin ID | Basin Area (Acres) | Area of Streets, Parking Lots, and Walks (Acres) | Area of Roofs, Walks and Drives (Acres) | Area of Gravel Parking and Drives (Acres) | Area of Lawn and Landscape (Acres) | 10yr Weighted Runoff Coefficient | 100yr Weighted Runoff Coefficient |
|---|---|---|---|---|---|---|---|
| O-HE | 65.0 | 0.0 | 0.0 | 0.0 | 65.0 | 0.00 | 0.20 |
| H-3 | 38.0 | 0.0 | 0.0 | 0.0 | 38.0 | 0.00 | 0.20 |

# *Historic Composite Runoff Coefficient Calculations (10 yr. and 100 yr.)*

| Character of Surface | 10yr Runoff Coefficient | 100yr Runoff Coefficient |
|---|---|---|
| ***Streets, Parking Lots, Drives:*** | | |
| Asphalt and Concrete | 0.90 | 0.93 |
| Gravel | 0.50 | 0.60 |
| ***Roofs, Walks and Drives*** | 0.90 | 0.90 |
| ***Lawns,*** | | |
| Sandy Soil | 0.05 | 0.20 |
| ***Lawns,*** | | |
| Heavy Soil | 0.25 | 0.50 |

Project: St. Vrain Ranch, Filing 3
Calculations By: MLC
Date: March 13, 2000

Runoff Coefficients are taken from the Urban Storm Drainage Criteria Manual, Volume I, Urban Drainage and Flood Control District, Denver Colorado (Table 3-1)

| Basin ID | Basin Area (Acres) | Area of Streets, Parking Lots, and Walks (Acres) | Area of Roofs, Walks and Drives (Acres) | Area of Gravel Parking and Drives (Acres) | Area of Lawn and Landscape (Acres) | 10yr Weighted Runoff Coefficient | 100yr Weighted Runoff Coefficient |
|---|---|---|---|---|---|---|---|
| O-HE | 65.0 | 0.0 | 0.0 | 0.0 | 65.0 | 0.05 | 0.20 |
| H-3 | 38.0 | 0.0 | 0.0 | 0.0 | 38.0 | 0.05 | 0.20 |

# INITIAL STORM (2-YR) HISTORIC RUNOFF COMPUTATIONS

Town of Firestone,
Overland Flow, Time of Concentration:
$T_i = 1.8(1.1-C_5)L^{1/2} / S^{1/3}$
Gutter/Swale Flow, Time of Concentration:
$T_t = L / 60V$
$T_c = T_i + T_t$
Intensity, (i) taken from Intensity Frequency Curve by RBD in the Weld County Tri-area Sanitation District Specifications
Velocity, (V) taken from Figure15.2
Rational Equation: Q= CiA

Calculations By: Jim Jones
Project: St. Vrain Ranch, Filing 3
Date: March 14, 2000

| | | | | Overland Flow | | | | Gutter Flow | | | | Swale Flow | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Design Point | Basins | Area, A (acres) | $C_2$ | $C_5$ | Length, L (ft) | Slope,S (%) | $T_i$ (min) | Length, L (ft) | Slope, S (%) | Velocity, V (fps) | $T_t$ (min) | Length, L (ft) | Slope, S (%) | Velocity ,V (fps) | $T_t$ (min) | $T_c$ (min) | Intensity, i (in/hr) | Flow, Q (cfs) |
| 13 | O-HE | 65.0 | 0.01 | 0.01 | 400.0 | 2.93 | 27.4 | 0.0 | 0.00 | 0.00 | 0.0 | 2672.0 | 2.93 | 2.76 | 16.1 | 43.5 | 1.3 | 0.8 |
| H-3 | H-3 | 38.0 | 0.01 | 0.01 | 400.0 | 1.45 | 34.7 | 0.0 | 0.00 | 0.00 | ?? | 1700.0 | 1.33 | 1.86 | 15.2 | 49.9 | 1.1 | 0.4 |

# MINOR STORM (10-YR) HISTORIC RUNOFF COMPUTATIONS

Town of Firestone,

Overland Flow, Time of Concentration:

$T_i = 1.8(1.1-C_5)L^{1/2} / S^{1/3}$

Gutter/Swale Flow, Time of Concentration:

$T_t = L / 60V$

$T_c = T_i + T_t$

Intensity, (i) taken from Intensity Frequency Curve by RBD in the Weld County Tri-area Sanitation District Specifications

Velocity, (V) taken from Figure15.2

Rational Equation: Q= CiA

Calculations By: Jim Jones

Project: St. Vrain Ranch, Filing 3

Date: March 13, 2000

| Design Point | Basins | Area, A (acres) | $C_{10}$ | Overland Flow | | | | Gutter Flow | | | | Swale Flow | | | | $T_c$ (min) | Intensity, i (in/hr) | Flow, Q (cfs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | $C_5$ | Length, L (ft) | Slope,S (%) | $T_i$ (min) | Length, L (ft) | Slope, S (%) | Velocity, V (fps) | $T_t$ (min) | Length, L (ft) | Slope, S (%) | Velocity ,V (fps) | $T_t$ (min) | | | |
| 13 | O-HE | 65.0 | 0.05 | 0.01 | 400.0 | 2.93 | 27.4 | 0.0 | 0.00 | 0.00 | 0.0 | 2672.0 | 2.93 | 2.76 | 16.1 | 43.5 | 2.2 | 7.0 |
| H-3 | H-3 | 38.0 | 0.05 | 0.01 | 400.0 | 1.45 | 34.7 | 0.0 | 0.00 | 0.00 | ?? | 1700.0 | 1.33 | 1.86 | 15.2 | 49.9 | 2.0 | 3.7 |

# MAJOR STORM (100-YR) HISTORIC RUNOFF COMPUTATIONS

Town of Firestone,

Overland Flow, Time of Concentration:

$T_i = 1.8(1.1-C_5)L^{1/2} / S^{1/3}$

Gutter/Swale Flow, Time of Concentration:

$T_t = L / 60V$

$T_c = T_i + T_t$

Intensity, (i) taken from Intensity Frequency Curve by RBD in the Weld County Tri-area Sanitation District Specifications

Velocity, (V) taken from Figure15.2

Rational Equation: Q= CiA

Calculations By: Jim Jones

Project: St. Vrain Ranch, Filing 3

Date: March 13, 2000

| | | | | Overland Flow | | | | Gutter Flow | | | | Swale Flow | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Design Point | Basins | Area, A (acres) | $C_{100}$ | $C_5$ | Length, L (ft) | Slope,S (%) | $T_i$ (min) | Length, L (ft) | Slope, S (%) | Velocity, V (fps) | $T_t$ (min) | Length, L (ft) | Slope, S (%) | Velocity ,V (fps) | $T_t$ (min) | $T_c$ (min) | Intensity, i (in/hr) | Flow, Q (cfs) |
| 13 | O-HE | 65.0 | 0.20 | 0.01 | 400.0 | 2.93 | 27.4 | 0.0 | 0.00 | 0.00 | 0.0 | 2672.0 | 2.93 | 2.76 | 16.1 | 43.5 | 3.3 | 43.4 |
| H-3 | H-3 | 38.0 | 0.20 | 0.01 | 400.0 | 1.33 | 35.7 | 0.0 | 0.00 | 0.00 | ?? | 1700.0 | 1.33 | 1.86 | 15.2 | 50.9 | 3.0 | 22.9 |

# INITIAL STORM (2-YR) RUNOFF COMPUTATIONS

Town of Firestone,
Overland Flow, Time of Concentration:
$T_i = 1.87(1.1-C_5)L^{1/2} / S^{1/3}$
Gutter/Swale Flow, Time of Concentration:
$T_t = L / 60V$
$T_c = T_i + T_t$
Intensity, (i) taken from Intensity Frequency Curve by RBD in the Weld County Tri-area Sanitation District Specifications
Velocity, (V) taken from Figure15.2
Rational Equation: Q= CiA

Calculations By:
Project: St.Vrain Ranch, Filing 3
Date: August 15, 2000

| Design Point | Basins | Area, A (acres) | $C_2$ | Overland Flow | | | | Gutter Flow | | | | Swale Flow | | | | $T_c$ (min) | Intensity, i (in/hr) | Flow, Q (cfs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | $C_5$ | Length, L (ft) | Slope,S (%) | $T_i$ (min) | Length, L (ft) | Slope, S (%) | Velocity,V (fps) | $T_t$ (min) | Length, L (ft) | Slope, S (%) | Velocity ,V (fps) | $T_t$ (min) | | | |
| 1 | G1A | 5.6 | 0.50 | 0.01 | 140.7 | 2.00 | 18.5 | 561.5 | 0.85 | 1.87 | 5.0 | 0.0 | 0.00 | 0.00 | 0.0 | 23.5 | 1.8 | 5.1 |
| 1 | G1B | 5.0 | 0.24 | 0.01 | 94.4 | 2.00 | 15.1 | 1170.2 | 1.59 | 2.56 | 7.6 | 0.0 | 0.00 | 0.00 | 0.0 | 22.7 | 1.9 | 2.3 |
| 1 | G1A, G1B | 10.6 | 0.33 | 0.01 | 60.1 | 2.00 | 12.1 | 1363.5 | 0.70 | 1.70 | 13.4 | 0.0 | 0.00 | 0.00 | 0.0 | 25.4 | 1.8 | 6.1 |
| 2 | G2A | 7.5 | 0.20 | 0.01 | 216.9 | 2.00 | 22.9 | 1351.3 | 1.45 | 2.45 | 9.2 | 0.0 | 0.00 | 0.00 | 0.0 | 32.1 | 1.5 | 2.3 |
| 3 | G3A | 4.7 | 0.26 | 0.01 | 213.6 | 2.00 | 22.8 | 902.6 | 0.63 | 1.61 | 9.3 | 0.0 | 0.00 | 0.00 | 0.0 | 32.1 | 1.5 | 1.9 |
| 3 | G3B | 1.0 | 0.37 | 0.01 | 88.2 | 2.00 | 14.6 | 273.3 | 0.74 | 1.75 | 2.6 | 0.0 | 0.00 | 0.00 | 0.0 | 17.2 | 2.2 | 0.8 |
| 3 | G3A, G3B | 5.7 | 0.28 | 0.01 | 213.6 | 2.00 | 22.8 | 902.6 | 0.63 | 1.61 | 9.3 | 0.0 | 0.00 | 0.00 | 0.0 | 32.1 | 1.5 | 2.4 |
| 4 | G7A | 4.4 | 0.47 | 0.01 | 73.5 | 2.00 | 13.4 | 1792.0 | 0.70 | 1.70 | 17.6 | 0.0 | 0.00 | 0.00 | 0.0 | 30.9 | 1.6 | 3.2 |
| 5 | G9A | 2.5 | 0.46 | 0.01 | 128.2 | 2.00 | 17.6 | 859.6 | 1.07 | 2.10 | 6.8 | 0.0 | 0.00 | 0.00 | 0.0 | 24.4 | 1.8 | 2.1 |
| 5 | G9B | 2.4 | 0.45 | 0.01 | 128.1 | 2.00 | 17.6 | 641.6 | 1.00 | 2.03 | 5.3 | 0.0 | 0.00 | 0.00 | 0.0 | 22.9 | 1.9 | 2.0 |
| 5 | G9A, G9B | 4.9 | 0.45 | 0.01 | 128.2 | 2.00 | 17.6 | 859.6 | 1.07 | 2.10 | 6.8 | 0.0 | 0.00 | 0.00 | 0.0 | 24.4 | 1.8 | 4.0 |
| 6 | G11A | 2.7 | 0.45 | 0.01 | 109.0 | 2.00 | 16.3 | 927.9 | 0.81 | 1.83 | 8.5 | 0.0 | 0.00 | 0.00 | 0.0 | 24.7 | 1.8 | 2.1 |
| 6 | G11B | 2.5 | 0.46 | 0.01 | 137.8 | 2.00 | 18.3 | 753.4 | 0.93 | 1.96 | 6.4 | 0.0 | 0.00 | 0.00 | 0.0 | 24.7 | 1.8 | 2.1 |

# INITIAL STORM (2-YR) RUNOFF COMPUTATIONS

Town of Firestone,
Overland Flow, Time of Concentration:
$T_i = 1.87(1.1-C_5)L^{1/2} / S^{1/3}$
Gutter/Swale Flow, Time of Concentration:
$T_t = L / 60V$
$T_c = T_i + T_t$
Intensity, (i) taken from Intensity Frequency Curve by RBD in the Weld County Tri-area Sanitation District Specifications
Velocity, (V) taken from Figure15.2
Rational Equation: Q= CiA

Calculations By:
Project: St.Vrain Ranch, Filing 3
Date: August 15, 2000

| Design Point | Basins | Area, A (acres) | $C_2$ | Overland Flow | | | | Gutter Flow | | | | Swale Flow | | | | $T_c$ (min) | Intensity, i (in/hr) | Flow, Q (cfs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | $C_5$ | Length, L (ft) | Slope,S (%) | $T_i$ (min) | Length, L (ft) | Slope, S (%) | Velocity,V (fps) | $T_t$ (min) | Length, L (ft) | Slope, S (%) | Velocity ,V (fps) | $T_t$ (min) | | | |
| 6 | G11A, G11B | 5.2 | 0.45 | 0.01 | 109.0 | 2.00 | 16.3 | 927.9 | 0.81 | 1.83 | 8.5 | 0.0 | 0.00 | 0.00 | 0.0 | 24.7 | 1.8 | 4.2 |
| 7 | G13A | 3.1 | 0.40 | 0.01 | 201.2 | 2.00 | 22.1 | 973.9 | 0.71 | 1.71 | 9.5 | 0.0 | 0.00 | 0.00 | 0.0 | 31.6 | 1.5 | 1.9 |
| 7 | G13B | 2.6 | 0.44 | 0.01 | 126.2 | 2.00 | 17.5 | 672.0 | 0.83 | 1.85 | 6.0 | 0.0 | 0.00 | 0.00 | 0.0 | 23.5 | 1.8 | 2.1 |
| 7 | G13A, G13B | 5.7 | 0.42 | 0.01 | 201.2 | 2.00 | 22.1 | 973.9 | 0.71 | 1.71 | 9.5 | 0.0 | 0.00 | 0.00 | 0.0 | 31.6 | 1.5 | 3.7 |
| 8 | G15A | 2.8 | 0.42 | 0.01 | 160.0 | 2.00 | 19.7 | 920.0 | 0.64 | 1.63 | 9.4 | 0.0 | 0.00 | 0.00 | 0.0 | 29.1 | 1.6 | 1.9 |
| 8 | G15B | 2.8 | 0.42 | 0.01 | 160.0 | 2.00 | 19.7 | 727.0 | 0.64 | 1.63 | 7.5 | 0.0 | 0.00 | 0.00 | 0.0 | 27.1 | 1.7 | 2.0 |
| 8 | G15A, G15B | 5.6 | 0.42 | 0.01 | 160.0 | 2.00 | 19.7 | 920.0 | 0.64 | 1.63 | 9.4 | 0.0 | 0.00 | 0.00 | 0.0 | 29.1 | 1.6 | 3.8 |
| 9 | G17A | 0.9 | 0.56 | 0.01 | 97.3 | 2.00 | 15.4 | 766.4 | 0.60 | 1.57 | 8.1 | 0.0 | 0.00 | 0.00 | 0.0 | 23.5 | 1.8 | 0.9 |
| 10 | G21A, G21B | 2.7 | 0.23 | 0.88 | 19.4 | 2.00 | 1.4 | 0.0 | 0.00 | 0.00 | 0.0 | 1773.7 | 0.53 | 1.17 | 25.2 | 26.6 | 1.7 | 1.1 |
| 10A | G21B | 1.3 | 0.20 | 0.88 | 19.4 | 2.00 | 1.4 | 0.0 | 0.00 | 0.00 | 0.0 | 848.7 | 1.30 | 1.84 | 7.7 | 9.1 | 2.9 | 0.8 |
| 12 | G20 | 2.3 | 0.22 | 0.01 | 160.8 | 2.00 | 19.7 | 0.0 | 0.00 | 0.00 | 0.0 | 711.2 | 1.43 | 1.93 | 6.1 | 25.9 | 1.7 | 0.9 |

# INITIAL STORM (2-YR) RUNOFF COMPUTATIONS

Town of Firestone,
Overland Flow, Time of Concentration:
$T_i = 1.87(1.1-C_5)L^{1/2} / S^{1/3}$
Gutter/Swale Flow, Time of Concentration:
$T_t = L / 60V$
$T_c = T_i + T_t$
Intensity, (i) taken from Intensity Frequency Curve by RBD in the Weld County Tri-area Sanitation District Specifications
Velocity, (V) taken from Figure15.2
Rational Equation: Q= CiA

Calculations By:
Project: St.Vrain Ranch, Filing 3
Date: August 16, 2000

| Design Point | Basins | Area, A (acres) | $C_2$ | Overland Flow | | | | Gutter Flow | | | | Swale Flow | | | | $T_c$ (min) | Intensity, i (in/hr) | Flow, Q (cfs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | $C_5$ | Length, L (ft) | Slope,S (%) | $T_i$ (min) | Length, L (ft) | Slope, S (%) | Velocity,V (fps) | $T_t$ (min) | Length, L (ft) | Slope, S (%) | Velocity ,V (fps) | $T_t$ (min) | | | |
| 14 | G9A, G9B, G11A, G11B, G13A, G13B, G15A, G15B, G17A,19A | 27.0 | 0.38 | 0.01 | 68.0 | 2.00 | 12.8 | 859.6 | 1.07 | 2.10 | 6.8 | 1027.3 | 0.42 | 1.05 | 16.4 | 36.0 | 1.4 | 14.6 |
| 15 | G1A, G1B, G2A, G3A, G3B | 23.8 | 0.33 | 0.01 | 216.9 | 2.00 | 22.9 | 1351.3 | 1.45 | 2.45 | 9.2 | 329.4 | 0.56 | 1.21 | 4.5 | 36.7 | 1.4 | 11.0 |
| G22 | G22 | 1.6 | 0.30 | 0.01 | 60.0 | 2.00 | 12.1 | 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | 12.1 | 2.6 | 1.3 |
| B7 | B7 | 0.3 | 0.50 | 0.01 | 59.9 | 2.00 | 12.1 | 179.7 | 1.42 | 2.42 | 1.2 | 0.0 | 0.00 | 0.00 | 0.0 | 13.3 | 2.5 | 0.4 |
| F1 | F1 | 0.5 | 0.34 | 0.01 | 56.0 | 2.00 | 11.7 | 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | 11.7 | 2.6 | 0.4 |
| F2 | F2 | 0.1 | 0.80 | 0.01 | 44.8 | 2.00 | 10.4 | 161.9 | 1.42 | 2.42 | 1.1 | 0.0 | 0.00 | 0.00 | 0.0 | 11.5 | 2.6 | 0.3 |

# MINOR STORM (10-YR) RUNOFF COMPUTATIONS

Town of Firestone,

Overland Flow, Time of Concentration:

$T_i = 1.87(1.1-C_5)L^{1/2} / S^{1/3}$

Gutter/Swale Flow, Time of Concentration:

$T_t = L / 60V$

$T_c = T_i + T_t$

Intensity, (i) taken from Intensity Frequency Curve by RBD in the Weld County Tri-area Sanitation District Specifications

Velocity, (V) taken from Figure15.2

Rational Equation: Q= CiA

Calculations By:

Project: St.Vrain Ranch, Filing 3

Date: August 16, 2000

| Design Point | Basins | Area, A (acres) | $C_{10}$ | Overland Flow | | | | Gutter Flow | | | | Swale Flow | | | | $T_c$ (min) | Intensity, i (in/hr) | Flow, Q (cfs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | $C_5$ | Length, L (ft) | Slope,S (%) | $T_i$ (min) | Length, L (ft) | Slope, S (%) | Velocity, V (fps) | $T_t$ (min) | Length, L (ft) | Slope, S (%) | Velocity ,V (fps) | $T_t$ (min) | | | |
| 1 | G1A | 5.6 | 0.46 | 0.01 | 140.7 | 2.00 | 18.5 | 561.5 | 0.85 | 1.87 | 5.0 | 0.0 | 0.00 | 0.00 | 0.0 | 23.5 | 3.1 | 8.1 |
| 1 | G1B | 5.0 | 0.29 | 0.01 | 94.4 | 2.00 | 15.1 | 1170.2 | 1.59 | 2.56 | 7.6 | 0.0 | 0.00 | 0.00 | 0.0 | 22.7 | 3.2 | 4.7 |
| 1 | G1A, G1B | 10.6 | 0.38 | 0.01 | 60.1 | 2.00 | 12.1 | 1363.5 | 0.70 | 1.70 | 13.4 | 0.0 | 0.00 | 0.00 | 0.0 | 25.4 | 3.0 | 12.1 |
| 2 | G2A | 7.5 | 0.25 | 0.01 | 216.9 | 2.00 | 22.9 | 1351.3 | 1.45 | 2.45 | 9.2 | 0.0 | 0.00 | 0.00 | 0.0 | 32.1 | 2.6 | 4.9 |
| 3 | G3A | 4.7 | 0.31 | 0.01 | 213.6 | 2.00 | 22.8 | 902.6 | 0.63 | 1.61 | 9.3 | 0.0 | 0.00 | 0.00 | 0.0 | 32.1 | 2.6 | 3.8 |
| 3 | G3B | 1.0 | 0.43 | 0.01 | 88.2 | 2.00 | 14.6 | 273.3 | 0.74 | 1.75 | 2.6 | 0.0 | 0.00 | 0.00 | 0.0 | 17.2 | 3.7 | 1.7 |
| 3 | G3A, G3B | 5.7 | 0.33 | 0.01 | 213.6 | 2.00 | 22.8 | 902.6 | 0.63 | 1.61 | 9.3 | 0.0 | 0.00 | 0.00 | 0.0 | 32.1 | 2.6 | 4.9 |
| 4 | G7A | 4.4 | 0.53 | 0.01 | 73.5 | 2.00 | 13.4 | 1792.0 | 0.70 | 1.70 | 17.6 | 0.0 | 0.00 | 0.00 | 0.0 | 30.9 | 2.7 | 6.2 |
| 5 | G9A | 2.5 | 0.52 | 0.01 | 128.2 | 2.00 | 17.6 | 859.6 | 1.07 | 2.10 | 6.8 | 0.0 | 0.00 | 0.00 | 0.0 | 24.4 | 3.1 | 4.1 |
| 5 | G9B | 2.4 | 0.51 | 0.01 | 128.1 | 2.00 | 17.6 | 641.6 | 1.00 | 2.03 | 5.3 | 0.0 | 0.00 | 0.00 | 0.0 | 22.9 | 3.2 | 3.9 |
| 5 | G9A, G9B | 4.9 | 0.51 | 0.01 | 128.2 | 2.00 | 17.6 | 859.6 | 1.07 | 2.10 | 6.8 | 0.0 | 0.00 | 0.00 | 0.0 | 24.4 | 3.1 | 7.7 |
| 6 | G11A | 2.7 | 0.51 | 0.01 | 109.0 | 2.00 | 16.3 | 927.9 | 0.81 | 1.83 | 8.5 | 0.0 | 0.00 | 0.00 | 0.0 | 24.7 | 3.0 | 4.2 |
| 6 | G11B | 2.5 | 0.52 | 0.01 | 137.8 | 2.00 | 18.3 | 753.4 | 0.93 | 1.96 | 6.4 | 0.0 | 0.00 | 0.00 | 0.0 | 24.7 | 3.1 | 4.0 |

# MINOR STORM (10-YR) RUNOFF COMPUTATIONS

Town of Firestone,
Overland Flow, Time of Concentration:
$T_i = 1.87(1.1-C_5)L^{1/2} / S^{1/3}$
Gutter/Swale Flow, Time of Concentration:
$T_t = L / 60V$
$T_c = T_i + T_t$
Intensity, (i) taken from Intensity Frequency Curve by RBD in the Weld County Tri-area Sanitation District Specifications
Velocity, (V) taken from Figure15.2
Rational Equation: Q= CiA

Calculations By:
Project: St.Vrain Ranch, Filing 3
Date: August 16, 2000

| Design Point | Basins | Area, A (acres) | $C_{10}$ | Overland Flow | | | | Gutter Flow | | | | Swale Flow | | | | $T_c$ (min) | Intensity, i (in/hr) | Flow, Q (cfs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | $C_5$ | Length, L (ft) | Slope,S (%) | $T_i$ (min) | Length, L (ft) | Slope, S (%) | Velocity, V (fps) | $T_t$ (min) | Length, L (ft) | Slope, S (%) | Velocity ,V (fps) | $T_t$ (min) | | | |
| 6 | G11A, G11B | 5.2 | 0.51 | 0.01 | 109.0 | 2.00 | 16.3 | 927.9 | 0.81 | 1.83 | 8.5 | 0.0 | 0.00 | 0.00 | 0.0 | 24.7 | 3.0 | 8.1 |
| 7 | G13A | 3.1 | 0.45 | 0.01 | 201.2 | 2.00 | 22.1 | 973.9 | 0.71 | 1.71 | 9.5 | 0.0 | 0.00 | 0.00 | 0.0 | 31.6 | 2.6 | 3.7 |
| 7 | G13B | 2.6 | 0.50 | 0.01 | 126.2 | 2.00 | 17.5 | 672.0 | 0.83 | 1.85 | 6.0 | 0.0 | 0.00 | 0.00 | 0.0 | 23.5 | 3.1 | 4.1 |
| 7 | G13A, G13B | 5.7 | 0.48 | 0.01 | 201.2 | 2.00 | 22.1 | 973.9 | 0.71 | 1.71 | 9.5 | 0.0 | 0.00 | 0.00 | 0.0 | 31.6 | 2.6 | 7.2 |
| 8 | G15A | 2.8 | 0.48 | 0.01 | 160.0 | 2.00 | 19.7 | 920.0 | 0.64 | 1.63 | 9.4 | 0.0 | 0.00 | 0.00 | 0.0 | 29.1 | 2.8 | 3.7 |
| 8 | G15B | 2.8 | 0.48 | 0.01 | 160.0 | 2.00 | 19.7 | 727.0 | 0.64 | 1.63 | 7.5 | 0.0 | 0.00 | 0.00 | 0.0 | 27.1 | 2.9 | 3.9 |
| 8 | G15A, G15B | 5.6 | 0.48 | 0.01 | 160.0 | 2.00 | 19.7 | 920.0 | 0.64 | 1.63 | 9.4 | 0.0 | 0.00 | 0.00 | 0.0 | 29.1 | 2.8 | 7.4 |
| 9 | G17A | 0.9 | 0.60 | 0.01 | 97.3 | 2.00 | 15.4 | 766.4 | 0.60 | 1.57 | 8.1 | 0.0 | 0.00 | 0.00 | 0.0 | 23.5 | 3.1 | 1.7 |
| 10 | G21A, G21B | 2.7 | 0.33 | 0.88 | 19.4 | 2.00 | 1.4 | 0.0 | 0.00 | 0.00 | 0.0 | 1773.7 | 0.53 | 1.17 | 25.2 | 26.6 | 2.9 | 2.6 |
| 10A | G21B | 1.3 | 0.38 | 0.88 | 19.4 | 2.00 | 1.4 | 0.0 | 0.00 | 0.00 | 0.0 | 848.7 | 1.30 | 1.84 | 7.7 | 9.1 | 4.9 | 2.4 |
| 12 | G20 | 2.3 | 0.26 | 0.01 | 160.8 | 2.00 | 19.7 | 0.0 | 0.00 | 0.00 | 0.0 | 711.2 | 1.43 | 1.93 | 6.1 | 25.9 | 3.0 | 1.8 |

# MINOR STORM (10-YR) RUNOFF COMPUTATIONS

Town of Firestone,

Overland Flow, Time of Concentration:

$T_i = 1.87(1.1-C_5)L^{1/2} / S^{1/3}$

Gutter/Swale Flow, Time of Concentration:

$T_t = L / 60V$

$T_c = T_i + T_t$

Intensity, (i) taken from Intensity Frequency Curve by RBD in the Weld County Tri-area Sanitation District Specifications

Velocity, (V) taken from Figure15.2

Rational Equation: Q= CiA

Calculations By:

Project: St.Vrain Ranch, Filing 3

Date: August 16, 2000

| Design Point | Basins | Area, A (acres) | $C_{10}$ | Overland Flow | | | | Gutter Flow | | | | Swale Flow | | | | $T_c$ (min) | Intensity, i (in/hr) | Flow, Q (cfs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | $C_5$ | Length, L (ft) | Slope,S (%) | $T_i$ (min) | Length, L (ft) | Slope, S (%) | Velocity, V (fps) | $T_t$ (min) | Length, L (ft) | Slope, S (%) | Velocity ,V (fps) | $T_t$ (min) | | | |
| 14 | G9A, G9B, G11A, G11B, G13A, G13B, G15A, G15B, G17A, 19A | 27.0 | 0.44 | 0.01 | 128.2 | 2.00 | 17.6 | 859.6 | 1.07 | 2.10 | 6.8 | 1027.3 | 0.42 | 1.05 | 16.4 | 40.8 | 2.2 | 26.7 |
| 15 | G1A, G1B, G2A, G3A, G3B | 23.8 | 0.33 | 0.01 | 216.9 | 2.00 | 22.9 | 1351.3 | 1.45 | 2.45 | 9.2 | 329.4 | 0.56 | 1.21 | 4.5 | 36.7 | 2.4 | 18.9 |
| G22 | G22 | 1.6 | 0.36 | 0.01 | 60.0 | 2.00 | 12.1 | 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | 12.1 | 4.4 | 2.6 |
| B7 | B7 | 0.3 | 0.55 | 0.01 | 59.9 | 2.00 | 12.1 | 179.7 | 1.42 | 2.42 | 1.2 | 0.0 | 0.00 | 0.00 | 0.0 | 13.3 | 4.2 | 0.7 |
| F1 | F1 | 0.5 | 0.41 | 0.01 | 56.0 | 2.00 | 11.7 | 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | 11.7 | 4.5 | 0.9 |
| F2 | F2 | 0.1 | 0.84 | 0.01 | 44.8 | 2.00 | 10.4 | 161.9 | 1.42 | 2.42 | 1.1 | 0.0 | 0.00 | 0.00 | 0.0 | 11.5 | 4.5 | 0.5 |

# MAJOR STORM (100-YR) RUNOFF COMPUTATIONS

Town of Firestone,

Overland Flow, Time of Concentration:

$T_i = 1.87(1.1-C_5)L^{1/2} / S^{1/3}$

Gutter/Swale Flow, Time of Concentration:

$T_t = L / 60V$

$T_c = T_i + T_t$

Intensity, (i) taken from Intensity Frequency Curve by RBD in the Weld County Tri-area Sanitation District Specifications

Velocity, (V) taken from Figure15.2

Rational Equation: Q= CiA

Calculations By:

Project: St.Vrain Ranch, Filing 3

Date: August 16, 2000

| Design Point | Basins | Area, A (acres) | $C_{100}$ | Overland Flow | | | | Gutter Flow | | | | Swale Flow | | | | $T_c$ (min) | Intensity, i (in/hr) | Flow, Q (cfs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | $C_5$ | Length, L (ft) | Slope,S (%) | $T_i$ (min) | Length, L (ft) | Slope, S (%) | Velocity, V (fps) | $T_t$ (min) | Length, L (ft) | Slope, S (%) | Velocity ,V (fps) | $T_t$ (min) | | | |
| 1 | G1A | 5.6 | 0.55 | 0.01 | 140.7 | 2.00 | 18.5 | 561.5 | 0.85 | 1.87 | 5.0 | 0.0 | 0.00 | 0.00 | 0.0 | 23.5 | 4.9 | 15.0 |
| 1 | G1B | 5.0 | 0.41 | 0.01 | 94.4 | 2.00 | 15.1 | 1170.2 | 1.59 | 2.56 | 7.6 | 0.0 | 0.00 | 0.00 | 0.0 | 22.7 | 4.9 | 10.2 |
| 1A | G5A | 3.9 | 0.59 | 0.01 | 60.1 | 2.00 | 12.1 | 681.7 | 2.17 | 2.99 | 3.8 | 0.0 | 0.00 | 0.00 | 0.0 | 15.9 | 6.0 | 13.8 |
| 1 | G1A, G1B | 10.6 | 0.48 | 0.01 | 60.1 | 2.00 | 12.1 | 1363.5 | 0.70 | 1.70 | 13.4 | 0.0 | 0.00 | 0.00 | 0.0 | 25.4 | 4.6 | 23.6 |
| 2 | G2A | 7.5 | 0.37 | 0.01 | 216.9 | 2.00 | 22.9 | 1351.3 | 1.45 | 2.45 | 9.2 | 0.0 | 0.00 | 0.00 | 0.0 | 32.1 | 4.0 | 11.2 |
| 3 | G3A | 4.7 | 0.42 | 0.01 | 213.6 | 2.00 | 22.8 | 902.6 | 0.63 | 1.61 | 9.3 | 0.0 | 0.00 | 0.00 | 0.0 | 32.1 | 4.0 | 8.0 |
| 3 | G3B | 1.0 | 0.52 | 0.01 | 88.2 | 2.00 | 14.6 | 273.3 | 0.74 | 1.75 | 2.6 | 0.0 | 0.00 | 0.00 | 0.0 | 17.2 | 5.7 | 3.1 |
| 3 | G3A, G3B | 5.7 | 0.44 | 0.01 | 213.6 | 2.00 | 22.8 | 902.6 | 0.63 | 1.61 | 9.3 | 0.0 | 0.00 | 0.00 | 0.0 | 32.1 | 4.0 | 10.1 |
| 4 | G7A | 4.4 | 0.60 | 0.01 | 73.5 | 2.00 | 13.4 | 1792.0 | 0.70 | 1.70 | 17.6 | 0.0 | 0.00 | 0.00 | 0.0 | 30.9 | 4.1 | 10.9 |
| 5 | G9A | 2.5 | 0.59 | 0.01 | 128.2 | 2.00 | 17.6 | 859.6 | 1.07 | 2.10 | 6.8 | 0.0 | 0.00 | 0.00 | 0.0 | 24.4 | 4.8 | 7.1 |
| 5 | G9B | 2.4 | 0.58 | 0.01 | 128.1 | 2.00 | 17.6 | 641.6 | 1.00 | 2.03 | 5.3 | 0.0 | 0.00 | 0.00 | 0.0 | 22.9 | 4.9 | 6.9 |
| 5 | G9A, G9B | 4.9 | 0.59 | 0.01 | 128.2 | 2.00 | 17.6 | 859.6 | 1.07 | 2.10 | 6.8 | 0.0 | 0.00 | 0.00 | 0.0 | 24.4 | 4.8 | 13.7 |

# MAJOR STORM (100-YR) RUNOFF COMPUTATIONS

Town of Firestone,

Overland Flow, Time of Concentration:

$T_i = 1.87(1.1-C_5)L^{1/2} / S^{1/3}$

Gutter/Swale Flow, Time of Concentration:

$T_t = L / 60V$

$T_c = T_i + T_t$

Intensity, (i) taken from Intensity Frequency Curve by RBD in the Weld County Tri-area Sanitation District Specifications

Velocity, (V) taken from Figure15.2

Rational Equation: Q= CiA

Calculations By:

Project: St.Vrain Ranch, Filing 3

Date: August 16, 2000

| Design Point | Basins | Area, A (acres) | $C_{100}$ | Overland Flow | | | | Gutter Flow | | | | Swale Flow | | | | $T_c$ (min) | Intensity, i (in/hr) | Flow, Q (cfs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | $C_5$ | Length, L (ft) | Slope,S (%) | $T_i$ (min) | Length, L (ft) | Slope, S (%) | Velocity, V (fps) | $T_t$ (min) | Length, L (ft) | Slope, S (%) | Velocity ,V (fps) | $T_t$ (min) | | | |
| 6 | G11A | 2.7 | 0.58 | 0.01 | 109.0 | 2.00 | 16.3 | 927.9 | 0.81 | 1.83 | 8.5 | 0.0 | 0.00 | 0.00 | 0.0 | 24.7 | 4.7 | 7.3 |
| 6 | G11B | 2.5 | 0.59 | 0.01 | 137.8 | 2.00 | 18.3 | 753.4 | 0.93 | 1.96 | 6.4 | 0.0 | 0.00 | 0.00 | 0.0 | 24.7 | 4.7 | 7.0 |
| 6 | G11A, G11B | 5.2 | 0.59 | 0.01 | 109.0 | 2.00 | 16.3 | 927.9 | 0.81 | 1.83 | 8.5 | 0.0 | 0.00 | 0.00 | 0.0 | 24.7 | 4.7 | 14.5 |
| 7 | G13A | 3.1 | 0.54 | 0.01 | 201.2 | 2.00 | 22.1 | 973.9 | 0.71 | 1.71 | 9.5 | 0.0 | 0.00 | 0.00 | 0.0 | 31.6 | 4.1 | 6.9 |
| 7 | G13B | 2.6 | 0.58 | 0.01 | 126.2 | 2.00 | 17.5 | 672.0 | 0.83 | 1.85 | 6.0 | 0.0 | 0.00 | 0.00 | 0.0 | 23.5 | 4.9 | 7.4 |
| 7 | G13A, G13B | 5.7 | 0.56 | 0.01 | 201.2 | 2.00 | 22.1 | 973.9 | 0.71 | 1.71 | 9.5 | 0.0 | 0.00 | 0.00 | 0.0 | 31.6 | 4.1 | 13.0 |
| 8 | G15A | 2.8 | 0.56 | 0.01 | 160.0 | 2.00 | 19.7 | 920.0 | 0.64 | 1.63 | 9.4 | 0.0 | 0.00 | 0.00 | 0.0 | 29.1 | 4.3 | 6.7 |
| 8 | G15B | 2.8 | 0.56 | 0.01 | 160.0 | 2.00 | 19.7 | 727.0 | 0.64 | 1.63 | 7.5 | 0.0 | 0.00 | 0.00 | 0.0 | 27.1 | 4.5 | 7.0 |
| 8 | G15A, G15B | 5.6 | 0.56 | 0.01 | 160.0 | 2.00 | 19.7 | 920.0 | 0.64 | 1.63 | 9.4 | 0.0 | 0.00 | 0.00 | 0.0 | 29.1 | 4.3 | 13.4 |
| 9 | G17A | 0.9 | 0.67 | 0.01 | 97.3 | 2.00 | 15.4 | 766.4 | 0.60 | 1.57 | 8.1 | 0.0 | 0.00 | 0.00 | 0.0 | 23.5 | 4.9 | 2.9 |
| 10 | G21A, G21B | 2.7 | 0.44 | 0.88 | 19.4 | 2.00 | 1.4 | 0.0 | 0.00 | 0.00 | 0.0 | 1773.7 | 0.53 | 1.17 | 25.2 | 26.6 | 4.5 | 5.4 |
| 10A | G21B | 1.3 | 0.48 | 0.88 | 19.4 | 2.00 | 1.4 | 0.0 | 0.00 | 0.00 | 0.0 | 848.7 | 1.30 | 1.84 | 7.7 | 9.1 | 7.6 | 4.8 |

# MAJOR STORM (100-YR) RUNOFF COMPUTATIONS

Town of Firestone,
Overland Flow, Time of Concentration:
$T_i = 1.87(1.1-C_5)L^{1/2} / S^{1/3}$
Gutter/Swale Flow, Time of Concentration:
$T_t = L / 60V$
$T_c = T_i + T_t$
Intensity, (i) taken from Intensity Frequency Curve by RBD in the Weld County Tri-area Sanitation District Specifications
Velocity, (V) taken from Figure15.2
Rational Equation: Q= CiA

Calculations By:
Project: St.Vrain Ranch, Filing 3
Date: August 16, 2000

| Design Point | Basins | Area, A (acres) | $C_{100}$ | Overland Flow | | | | Gutter Flow | | | | Swale Flow | | | | $T_c$ (min) | Intensity, i (in/hr) | Flow, Q (cfs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | $C_5$ | Length, L (ft) | Slope,S (%) | $T_i$ (min) | Length, L (ft) | Slope, S (%) | Velocity, V (fps) | $T_t$ (min) | Length, L (ft) | Slope, S (%) | Velocity ,V (fps) | $T_t$ (min) | | | |
| 12 | G20 | 2.3 | 0.38 | 0.01 | 160.8 | 2.00 | 19.7 | 0.0 | 0.00 | 0.00 | 0.0 | 711.2 | 1.43 | 1.93 | 6.1 | 25.9 | 4.6 | 4.0 |
| 14 | G9A, G9B, G11A, G11B, G13A, G13B, G15A, G15B, G17A, G17B, 19A | 27.0 | 0.53 | 0.01 | 68.0 | 2.00 | 12.8 | 859.6 | 1.07 | 2.10 | 6.8 | 1027.3 | 0.42 | 1.05 | 16.4 | 36.0 | 3.8 | 53.9 |
| 15 | G1A, G1B, G2A, G3A, G3B | 23.8 | 0.44 | 0.01 | 216.9 | 2.00 | 22.9 | 1351.3 | 1.45 | 2.45 | 9.2 | 329.4 | 0.56 | 1.21 | 4.5 | 36.7 | 3.7 | 39.0 |
| G22 | G22 | 1.6 | 0.46 | 0.01 | 60.0 | 2.00 | 12.1 | 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | 12.1 | 6.8 | 5.1 |
| B7 | B7 | 0.3 | 0.63 | 0.01 | 59.9 | 2.00 | 12.1 | 179.7 | 1.42 | 2.42 | 1.2 | 0.0 | 0.00 | 0.00 | 0.0 | 13.3 | 6.5 | 1.3 |
| F1 | F1 | 0.5 | 0.49 | 0.01 | 56.0 | 2.00 | 11.7 | 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | 11.7 | 6.9 | 1.7 |
| F2 | F2 | 0.1 | 0.87 | 0.01 | 44.8 | 2.00 | 10.4 | 161.9 | 1.42 | 2.42 | 1.1 | 0.0 | 0.00 | 0.00 | 0.0 | 11.5 | 6.9 | 0.8 |

PARK ENGINEERING
CONSULTANTS

# *Vogl Land – North Parcel*
# *Firestone, CO*
# *Final Drainage Report*

**June 2005**
**Revised November 2005**
**Revised April 2006**

420 21st Ave. Suite 101 • Longmont, CO 80501 • (303) 651-6626 • FAX (303) 651-0331
E-mail don@parkengineering.net

"I hereby certify that this report (plan) for the final drainage design of Vogl Land - North Parcel, was prepared by me (or under my direct supervision) in accordance with the provisions of Town of Firestone Storm Drainage Criteria Manual for the owners thereof."

_____

Registered Professional Engineer
State of Colorado No. 37162

# Offsite Impervious % estimate

Vogl Land - North Parcel

12/14/2005

62

| OVERALL BASIN | % of AREA | % IMPERV |
|---|---|---|
| RESIDENTIAL - LOW DENSITY | 50 | 50 |
| RESIDENTIAL - MED DENSITY | 25 | 60 |
| RESIDENTIAL - HIGH DENSITY | 5 | 70 |
| COMMERCIAL | 5 | 95 |
| OPEN SPACE (SANDY SOIL) | 15 | 0 |

**Basin Impervious**

48%

```
 2   1    1    2
 3   4
WATERSHED    1
VOGL 100-DEV
TGR                                                                    1
      80   0 0   5.0
      10    11

   0   11    12     3      0.1      0.1  0.0125
   0   12    13   7 2   0.0001      0.1
      0.          0.        7.5         0.       26.4         0.       63.3         0.
    82.9          0.       129.       1400.      201.      6510.        0.         0.

  2
 11   12     0     0     0     0     0     0     0     0     0     0     0     0     0     0
  2    1
 11   12     0     0     0     0     0     0     0     0     0     0     0     0     0     0
ENDPROGRAM
```

# Appendix D:
# APPROVED DRAINAGE REPORTS
# DETENTION PONDS

Sadd. Heights
Final Drainage Rept
Review By: KDS 4/21/04
Comments

PARK ENGINEERING CONSULTANTS

# Final Drainage Report
# Saddleback Heights
# Firestone, Colorado

**Prepared for:**

Saddleback Heights, LLC
3100 S. Federal Blvd. # B203
Denver, Colorado 80236
(303) -884-4114

**Prepared by:**

Park Engineering Consultants
420 21st Avenue, Suite 101
Longmont, Colorado 80501
(303) 651-6626

December, 2003

PEC Job#3381fdr.doc

# DETENTION POND VOLUME - STAGE/STORAGE
# 2-YEAR & 100-YEAR EVENTS

**Volume of detention area with 0.5% flat bottom, 4:1 sides**
**SADDLEBACK HEIGHTS**

| | elevation (ft) | elevation increment (ft) | area (sq.ft.) | area (ac.) | incremental volume (ac.) | sum volumes (ac. ft.) |
|---|---|---|---|---|---|---|
| OUTLET INVERT | 4959.50 | | 0 | 0.00 | | 0.00 |
| | | 0.5 | | | 0.02 | |
| | 4960.0 | | 4,630 | 0.11 | | 0.02 |
| | | 0.5 | | | 0.18 | |
| | 4960.5 | | 16,594 | 0.38 | | 0.20 |
| | | 0.5 | | | 0.26 | |
| | 4961.0 | | 29,947 | 0.69 | | 0.46 |
| | | 0.5 | | | 0.42 | |
| | 4961.5 | | 43,685 | 1.00 | | 0.88 |
| | | 0.5 | | | 0.58 | |
| | 4962.0 | | 57,032 | 1.31 | | 1.45 |
| | | 0.5 | | | 0.74 | |
| | 4962.5 | | 72,074 | 1.65 | | 2.19 |
| | | 0.5 | | | 0.86 | |
| | 4963.0 | | 78,323 | 1.80 | | 3.06 |
| | | 0.5 | | | 0.91 | |
| | 4963.5 | | 80,897 | 1.86 | | 3.97 |
| | | 0.5 | | | 0.94 | |
| | 4964.0 | | 83,499 | 1.92 | | 4.91 |
| | | 0.5 | | | 0.97 | |
| | 4964.5 | | 86,121 | 1.98 | | 5.89 |
| | | 0.5 | | | 1.00 | |
| | 4965.0 | | 88,772 | 2.04 | | 6.89 |
| | | 0.5 | | | 1.03 | |
| | 4965.5 | | 91,448 | 2.10 | | 7.93 |

| | | |
|---|---|---|
| 2-YEAR HIGH WATER ELEV. | = | 4960.18 |
| 100-YEAR HIGH WATER ELEV. | = | 4963.97 |

NOTE: Detention volume does not include volume stored in drainage swales

SADDLEBACK HEIGHTS
JOB # - 3381

## ALLOWABLE RELEASE RATE

Qr = 2-YEAR HISTORIC*>

1.30 cfs

*-INCLUDES OFF-SITE BASIN CONTRIBUTION AND FREE RELEASE

1.6 (2-YR ON-SITE) + 0.2 (0S1) + 1.1 (OS2) - 0.9 (600) - .1 (1000) - 0.5 (1100) - 0.1 (1200) = 1.3

## CUMULATIVE RUNOFF VOLUMES FOR 2 YEAR AND 100 YEAR EVENTS:

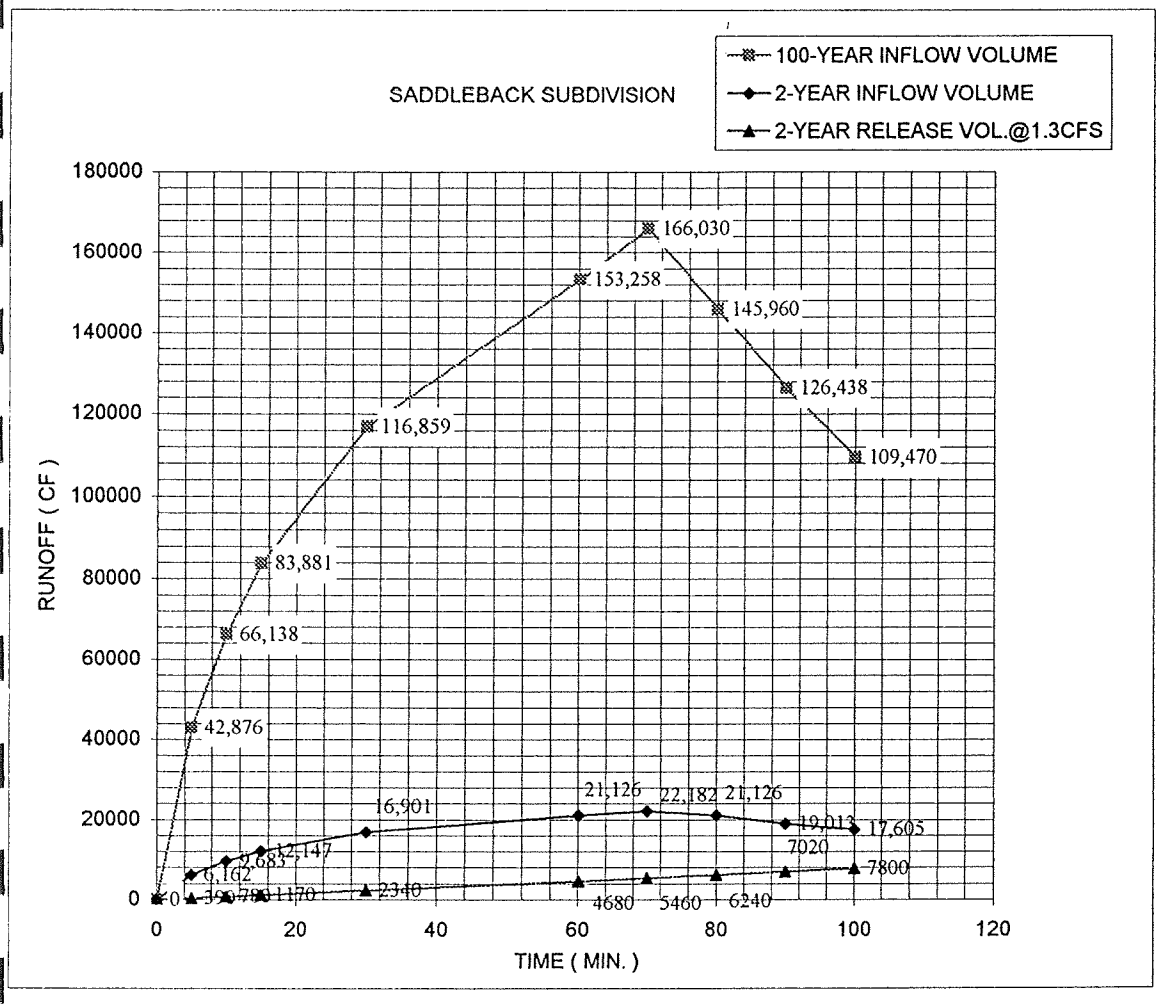
AREA 26.674 ACRES

C2 = 0.22 C2A = 5.86828

C100 = 0.57 C100A = 15.20418

| *TIME* (min.) | *RAINFALL INTENSITY 2-YEAR* (inches/hr) | *INFLOW VOLUME 2-YEAR* (cubic feet) | *RAINFALL INTENSITY 100-YEAR* (inches/hr) | *INFLOW VOLUME 100-YEAR* (cubic feet) | *RELEASE VOLUME COMPARISON @1.30 cfs* (cubic feet) |
|---|---|---|---|---|---|
| | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 3.50 | 6,162 | 9.40 | 42,876 | 390 |
| 10 | 2.75 | 9,683 | 7.25 | 66,138 | 780 |
| 15 | 2.30 | 12,147 | 6.13 | 83,881 | 1170 |
| 30 | 1.60 | 16,901 | 4.27 | 116,859 | 2340 |
| 60 | 1.00 | 21,126 | 2.80 | 153,258 | 4680 |
| 70 | 0.90 | **22,182** | 2.60 | **166,030** | 5460 |
| 80 | 0.75 | 21,126 | 2.00 | 145,960 | 6240 |
| 90 | 0.60 | 19,013 | 1.54 | 126,438 | 7020 |
| 100 | 0.50 | 17,605 | 1.20 | 109,470 | 7800 |

SADDLEBACK HEIGHTS
JOB # - 3381




**Total Storage Volume 2-YEAR STORM:** 16,722 cubic ft 0.38 acre/ft
**Total Storage Volume 100-YEAR STORM:** 160,570 cubic ft 3.69 acre/ft

# STATE OF COLORADO

**OFFICE OF THE STATE ENGINEER**
Division of Water Resources
Department of Natural Resources

1313 Sherman Street, Room 818
Denver, Colorado 80203
Phone (303) 866-3581
FAX (303) 866-3589

www.water.state.co.us

December 1, 2006

Bill Owens
Governor

Russell George
Executive Director

Hal D. Simpson, P.E.
State Engineer

Mr. Gary D. Witt, P.G.
Wright Water Engineers, Inc.
2490 W. 26th Avenue, Suite 100A
Denver, CO 80211

RE: Your memorandum regarding Saddleback Hills – Water Rights Issues and Water Balance Comparison, dated October 18, 2006 and revised November 6, 2006

Dear Gary,

We have reviewed the above-referenced memo that you submitted to the State Engineer's Office. The Saddleback Hills Development in Firestone, Colorado has unique topography that contains a natural depression. This natural depression presents certain difficulties in dealing with storm water runoff and a potential for injury to water rights. The purpose of your memorandum is to propose an approach to managing storm water from the proposed Saddleback Hills subdivision that collects in this natural depression, to prevent injury to water rights.

The proposed Saddleback Hills Development is located in Section 20, T2N, R67W of the 6th P.M., Town of Firestone, County of Weld, State of Colorado. The proposed development will consist of single-family residential homes and recreational open space on approximately 450 acres (see Figure 1, attached). Currently the site consists of undeveloped agricultural land. The natural depression is located on the northern portion of the site adjacent to the Coal Ridge Ditch and collects runoff from the undeveloped tributary watershed (approximately 1,600 acres). You refer to the depression as the "Terminal Pond" because currently there is no outfall for the depression; runoff that collects in the depression either infiltrates to groundwater or is lost to evaporation.

After review of the available site information including soil surveys, existing topography, and water table elevations, you have determined that relying on infiltration and evaporation as the sole means of disposing of storm water from the Terminal Pond was not advisable. We agree with that determination, especially in consideration of the fact that an increased amount of water in the Terminal Pond, due to runoff from impervious surfaces, would result in additional exposure of the storm runoff to the atmosphere. The resulting increase in evaporation would potentially cause injury to senior vested water rights. Therefore, you have developed a conceptual plan for pumping storm water that collects in the Terminal Pond into the adjacent Coal Ridge Ditch. The water will then be released to the South Platte River stream system without being put to beneficial use.

To demonstrate the impact this operation will have on water rights, compared to the historical effect of storm events on the property and the watershed, you performed a comparative analysis of the historical and developed conditions for Saddleback Hills using the Environmental Protection Agency (EPA) Stormwater Management Model (SWMM) Version 5.0. Modeling was conducted using standard design storms in accordance with the Denver Urban Drainage and Flood Control District (UDFCD) Urban Storm Drainage Criteria Manual (USDCM). In addition to the standard design storms, a continuous simulation model run was developed to evaluate storage requirements for synoptic events based on the actual historic precipitation record.

The results of the comparative analysis show that the effects of pumping storm water runoff for the developed subdivision from the Terminal Pond into the Coal Ridge Ditch are:

1. The amount of water lost to the evapotranspiration on the site is reduced,
2. The amount of water lost to evaporation from the surface in the Terminal Pond is reduced and, therefore,
3. The future net loss to the South Platte River system is reduced,

However, we also note that the amount of water that returns to the ground water system through deep percolation at that location is reduced as a result of pumping water to the Coal Ridge Ditch. We acknowledge that you have taken steps to minimize that reduction and in fact, can show a net increase in water to the South Platte River system. We recognize that land development, including the conversion of land from pervious to impervious surfaces, requires adherence to local and regional drainage design standards and that will necessarily change the ground water and surface water flow characteristics. Since your conceptual plan takes steps to minimize that change we do not object to the plan. Our decision is conditioned on the following:

1. The plan shall be documented and approved in an agreement with, at a minimum, the Metro District, the Town of Firestone, the Coal Ridge Ditch Company and either the Lupton Meadows Ditch Company or the Platte Valley Irrigation Company
2. The Metro District shall submit a copy of the agreement to the water commissioner and the Division Engineer
3. All accounting must be approved by the District 2 water commissioner
4. All water pumped into the Coal Ridge Ditch must be conveyed, without any beneficial use and with minimal consumption, through the ditch to Sand Hill Reservoir located in Sections 23, 24, 25, and 26, T2N, R67W. From Sand Hill Reservoir, it will be released as quickly as possible to the South Platte River either through the Platte Valley Supply Canal (a conveyance that travels approximately 1.5 miles directly east) or through the Lupton Bottom Ditch (a conveyance that travels approximately 2.3 miles southwest) and is then delivered from the ditch at an existing augmentation station to Little Dry Creek, which flows to the South Platte. Any other method for returning the water to the stream system will require additional review from the State Engineer's Office.
5. The water pumped from the pond must be pumped at the highest discharge that Coal Ridge Ditch operations will allow in order to evacuate the incremental increase in runoff stored in the pond (developed runoff minus existing runoff) thereby minimizing evaporation and delay in returning the storm water runoff to the stream system.
6. The State Engineer and Division Engineer will retain the right to periodically inspect the site to ensure that it is operating as required in items 3 and 4 above.

Please contact either of us if you have questions.

Sincerely,

Kevin G. Rein, P.E.
Chief of Water Supply

Dick Wolfe, P.E.
Assistant State Engineer

cc: Jim Hall, Division Engineer
Bob Stahl, Water Commissioner, District 2

# SADDLEBACK HILLS
# DRAINAGE REPORT



Prepared by:

**WRIGHT WATER ENGINEERS, INC.**
Denver, Colorado

November 2006
061-062.000

# SADDLEBACK HILLS
# DRAINAGE REPORT

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## 3.0 HYDROLOGIC ANALYSIS

WWE has developed several scenarios for stormwater modeling analysis to compare existing runoff volumes and surface storage with future developed runoff volumes and required retention storage volumes. The effects of low impact development (LID) were also considered in an attempt to reduce the required storage volume in the Terminal Pond by increasing infiltration. The U.S. Environmental Protection Agency (EPA) Stormwater Management Model (SWMM) Version 5.0 was selected for the modeling effort. Modeling was conducted using standard design storms in accordance with the Denver Urban Drainage and Flood Control District (UDFCD) *Urban Storm Drainage Criteria Manual* (USDCM). In addition to the standard design storms, a continuous simulation model run was developed to evaluate storage requirements for synoptic events based on the actual historic precipitation record.

The existing depression area provides storage for approximately 230 acre-feet (AF) of runoff and encompasses an area of approximately 65 acres based on information provided by CVL Consultants. Runoff exceeding this volume would spill over the Coal Ridge Ditch to the north. An area of approximately 1,600 acres drains to the Terminal Pond. Model results for the 100-year design event storm indicate that the predevelopment runoff volume is approximately 108 AF (47 percent of existing pond capacity) under current conditions (2 percent impervious). Of the 1,600 acres draining to the pond, only 350 acres are part of the Saddleback Hills Development, and the remaining area of more than 1,250 acres drains from offsite (i.e., not a part of the Saddleback Hills proposed development).

When modeling the future developed condition, the Town of Firestone Storm Drainage Criteria requires that:

> *In the case of a naturally formed sump the Engineer shall show that the sump can contain the 100-yr event developed runoff from the entire contributing basin with a reasonable amount of excess capacity to account for a partially filled sump prior to the 100-yr event. Water quality and the effect of the sump on surrounding development (current or future) shall also be considered. The design must show that the sump will not create a nuisance caused by increased runoff volumes caused by development. If these conditions can not be met to the satisfaction of the Town, the Town may require that a conveyance be installed to drain the sump.*

Therefore, a model for future build-out conditions was prepared assuming all onsite and offsite basins would be developed to include single- and multi-family residential, commercial, and open space, with an overall weighted watershed imperviousness of 43 percent. This value is slightly conservative with respect to the comprehensive plans for the Towns of Frederick and Firestone, which consist primarily of low density, medium density, and mixed-use residential, as well as a community separator of open space. Based on discussions with Jennifer Hoffman, Planning Director, Town of Frederick, mixed-use residential was assumed to have the same imperviousness as medium density residential.

In an attempt to reduce the required storage volume for the pond, WWE evaluated several alternatives to traditional development that promote infiltration to reduce the runoff volume. LID is an innovative stormwater management approach with the goal of managing rainfall at the source using relatively small controls distributed throughout the site. The intent is to maintain (or at least resemble) a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source.

Several development scenarios were evaluated in a memorandum to Advocate Homes dated July 25, 2006. These scenarios included varying the implementation of LID from moderate (25 percent of all impervious areas drain to pervious areas) to extensive (50 percent of all impervious areas drain to pervious areas), and implementing LID onsite and offsite separately based on the willingness of future developers to implement these measures offsite. The selected level of LID implementation included "moderate" LID practices for onsite basins and traditional development offsite due to the uncertainty of future developers to implement these measures.

The results of the selected model indicate that for the 100-year design storm event, the runoff volume to the Terminal Pond would be approximately 215 AF. The Saddleback Hills Development would contribute only about 45 AF of this total, with the remaining 170 AF of runoff from offsite basins. A brief summary of the model results for required storage volume is presented below in Table 1. Additional information pertaining to historic and proposed SWMM input files and model results can be found in Appendices A and B.

## Table 1
## Summary of Required Storage Volumes

| Event | Required Storage Volume Moderate LID Onsite / No LID Offsite (AF) |
|---|---|
| 6-month | 15 |
| 1-year | 33 |
| 2-year | 54 |
| 5-year | 82 |
| 10-year | 103 |
| 25-year | 146 |
| 100-year | 215 |
| Continuous Simulation* | 267 |

*Required storage volumes from continuous simulation results reflect the maximum pond storage including effects of multiple events and an event greater than the 100-year 4-hour storm. The period of record for the continuous simulation covers 58 years (1948-2006).

In addition to the 100-year design storm, the 25-year, 10-year, 5-year, 2-year, 1-year, and 6-month events were simulated using the model. The continuous simulation model was run using 58 years (1948 to 2006) of 1-hour precipitation data. The Longmont gage was selected for the precipitation input because of the long period of record and similarities between Longmont and Firestone precipitation characteristics over the long-term period of record. The Fort Lupton precipitation gage was also evaluated; however, the Longmont data provided a longer period of record and fewer gaps in data.

The results of the continuous simulation model for fully developed conditions in the tributary watershed indicate a peak storage volume in the Terminal Pond of approximately 270 AF. This volume results from a partially full pond prior to a 1970 rainfall event of 3.5 inches in 4 hours. The National Oceanic and Atmospheric Administration (NOAA) Precipitation-Frequency Atlas provides a 100-year 6-hour rainfall depth of approximately 3.70 inches. Extrapolation of the NOAA value to a 4-hour event results in a rainfall depth of 3.41 inches. Therefore, the rainfall event included in the precipitation record (3.5 inches) is slightly greater than the 100-year event. The precipitation record also contained a 1969 rainfall event of 4.59 inches in 59 hours which produced the second highest peak storage in the Terminal Pond.

## 4.0 DRAINAGE FACILITY DESIGN

Based on the results of the continuous simulation, WWE determined that approximately 280 AF (plus 1 foot of freeboard) would be a reasonable storage capacity for the Terminal Pond if the Saddleback Hills Development and offsite areas are constructed as currently planned using typical development practices. The recommended volume is approximately 1.3 times the storage volume determined based on the 100-year design storm and reflects effects of multiple storm events and a partially filled pond based on a long-term historic precipitation record. In design of the Terminal Pond, events larger than the 100-year event should be considered, and an emergency spillway should be provided to pass these flows safely across the Coal Ridge ditch along the historic overflow path.

The Terminal Pond was sized assuming a pumping rate of 5 cubic feet per second (cfs), or approximately 10 AF per day, to evacuate the pond between events. The pump is assumed to begin operation when the volume of water in the pond exceeds approximately 10 AF (equivalent to a water depth of 6 inches in the Terminal Pond based on the stage-area-volume relationship used in the model). The pump will also be used to discharge base flows from the Terminal pond, which will result from lawn irrigation, car washing, foundation drains, etc. This base flow will likely create a wet-bottomed pond. The primary source of these base flows from the development will be return flows from irrigation of landscaped areas with imported water. Please note that in our water balance assessment for evaluating injury to water rights relative to the natural, pre-development condition, we have not considered this imported water. If anything, infiltration of excess irrigation water that is imported would be a net benefit for the system from a water rights perspective.

To investigate National Pollutant Discharge Elimination System (NPDES) permitting ramifications of pumping from the Terminal Pond to the Coal Ridge Ditch, WWE contacted Nathan Moore of the Colorado Department of Public Health and Environment (CDPHE) Water Quality Control Division (WQCD). WWE explained the proposed drainage system and inquired about the need for an NPDES permit for the pumped stormwater discharge. Mr. Moore informed WWE that a NPDES permit would not be required for stormwater discharges from the Terminal Pond.

2 hr Rainfall Event (same event as WWE Report)
(Not adjusted for basin greater than 10 sq. miles)

\existing - 100yr SWMM 2hr.sot

| | | | | | |
|---|---|---|---|---|---|
| 234 | 415. | (DIRECT FLOW) | | 1 | 5. |
| 233 | 42. | (DIRECT FLOW) | | 0 | 45. |
| 130 | 13. | .4 | 1 | 35. | |
| 129 | 57. | 1.0 | 1 | 25. | |
| 701 | 80. | .9 | 2 | 0. | |
| 123 | 651. | (DIRECT FLOW) | | 1 | 5. |
| 122 | 232. | (DIRECT FLOW) | | 1 | 0. |
| 338 | 83. | (DIRECT FLOW) | | 1 | 50. |
| 237 | 651. | (DIRECT FLOW) | | 1 | 5. |
| 134 | 717. | (DIRECT FLOW) | | 1 | 20. |
| 133 | 42. | (DIRECT FLOW) | | 0 | 45. |
| 330 | 13. | (DIRECT FLOW) | | 1 | 35. |
| 329 | 57. | (DIRECT FLOW) | | 1 | 25. |
| 228 | 393. | (DIRECT FLOW) | | 0 | 55. |
| 301 | 80. | (DIRECT FLOW) | | 2 | 0. |
| 226 | 100. | (DIRECT FLOW) | | 0 | 50. |
| 420 | 737. | 1.7 | 1 | 30. | |
| 221 | 199. | (DIRECT FLOW) | | 0 | 55. |
| 137 | 696. | (DIRECT FLOW) | | 1 | 5. |
| 432 | 615. | 1.5 | 1 | 50. | |
| 128 | 358. | 1.2 | 1 | 30. | |
| 126 | 64. | 1.0 | 1 | 30. | |
| 322 | 737. | (DIRECT FLOW) | | 1 | 30. |
| 220 | 424. | (DIRECT FLOW) | | 1 | 0. |
| 121 | 199. | (DIRECT FLOW) | | 0 | 55. |
| 537 | 693. | .1 | 17.2 | 1 | 10. |
| 333 | 615. | (DIRECT FLOW) | | 1 | 50. |
| 232 | 347. | (DIRECT FLOW) | | 1 | 0. |
| 328 | 358. | (DIRECT FLOW) | | 1 | 30. |
| 227 | 64. | (DIRECT FLOW) | | 0 | 55. |
| 326 | 64. | (DIRECT FLOW) | | 1 | 30. |
| 225 | 37. | (DIRECT FLOW) | | 0 | 50. |
| 120 | 1268. | (DIRECT FLOW) | | 1 | 20. |
| 737 | 693. | (DIRECT FLOW) | | 1 | 10. |
| 132 | 814. | (DIRECT FLOW) | | 1 | 35. |
| 127 | 411. | (DIRECT FLOW) | | 1 | 25. |
| 125 | 94. | (DIRECT FLOW) | | 1 | 20. |
| 520 | 0. | .1 | 117.8 | 2 | 0. |
| 337 | 693. | (DIRECT FLOW) | | 1 | 10. |
| 400 | 1308. | (DIRECT FLOW) | | 1 | 30. |
| 720 | 0. | .0 | 2 | 0. | |
| 901 | 693. | (DIRECT FLOW) | | 1 | 10. |
| 900 | 1308. | (DIRECT FLOW) | | 1 | 30. |
| 320 | 0. | (DIRECT FLOW) | | 2 | 0. |

← 108 ac.-ft. from WWE Report

2hr Rainfall Event (Comparison to WWE Report)
(Adjusted for basin greater than 10 sq. miles)



| | | | | | | |
|---|---|---|---|---|---|---|
| 234 | 372. | (DIRECT FLOW) | | 1 | 5. | |
| 233 | 38. | (DIRECT FLOW) | | 0 | 55. | |
| 130 | 11. | .4 | 1 | 35. | | |
| 129 | 51. | .9 | 1 | 25. | | |
| 701 | 0. | .0 | 2 | 0. | | |
| 123 | 581. | (DIRECT FLOW) | | 1 | 5. | |
| 122 | 206. | (DIRECT FLOW) | | 1 | 5. | |
| 338 | 73. | (DIRECT FLOW) | | 1 | 55. | |
| 237 | 582. | (DIRECT FLOW) | | 1 | 5. | |
| 134 | 641. | (DIRECT FLOW) | | 1 | 20. | |
| 133 | 38. | (DIRECT FLOW) | | 0 | 55. | |
| 330 | 11. | (DIRECT FLOW) | | 1 | 35. | |
| 329 | 51. | (DIRECT FLOW) | | 1 | 25. | |
| 228 | 349. | (DIRECT FLOW) | | 1 | 0. | |
| 301 | 0. | (DIRECT FLOW) | | 2 | 0. | |
| 226 | 89. | (DIRECT FLOW) | | 0 | 50. | |
| 420 | 657. | 1.7 | 1 | 30. | | |
| 221 | 178. | (DIRECT FLOW) | | 1 | 0. | |
| 137 | 620. | (DIRECT FLOW) | | 1 | 5. | |
| 432 | 546. | 1.4 | 1 | 50. | | |
| 128 | 320. | 1.2 | 1 | 30. | | |
| 126 | 57. | 1.0 | 1 | 30. | | |
| 322 | 657. | (DIRECT FLOW) | | 1 | 30. | |
| 220 | 379. | (DIRECT FLOW) | | 1 | 5. | |
| 121 | 178. | (DIRECT FLOW) | | 1 | 0. | |
| 537 | 620. | .1 | 17.0 | 1 | 10. | |
| 333 | 546. | (DIRECT FLOW) | | 1 | 50. | |
| 232 | 310. | (DIRECT FLOW) | | 1 | 0. | |
| 328 | 320. | (DIRECT FLOW) | | 1 | 30. | |
| 227 | 58. | (DIRECT FLOW) | | 0 | 55. | |
| 326 | 57. | (DIRECT FLOW) | | 1 | 30. | |
| 225 | 33. | (DIRECT FLOW) | | 1 | 5. | |
| 120 | 1133. | (DIRECT FLOW) | | 1 | 20. | |
| 737 | 620. | (DIRECT FLOW) | | 1 | 10. | |
| 132 | 722. | (DIRECT FLOW) | | 1 | 40. | |
| 127 | 366. | (DIRECT FLOW) | | 1 | 25. | |
| 125 | 84. | (DIRECT FLOW) | | 1 | 20. | |
| 520 | 0. | .1 | 104.5 | 2 | 0. | |
| 337 | 620. | (DIRECT FLOW) | | 1 | 10. | |
| 400 | 1162. | (DIRECT FLOW) | | 1 | 30. | |
| 720 | 0. | .0 | 2 | 0. | | |
| 901 | 620. | (DIRECT FLOW) | | 1 | 10. | |
| 900 | 1162. | (DIRECT FLOW) | | 1 | 30. | |
| 320 | 0. | (DIRECT FLOW) | | 2 | 0. | |

≈ 108 ac-ft from WWE Report

Reviewed By:
EMF 2-21-03
Approved.

# FINAL DRAINAGE REPORT
# FOR
# SAGEBRUSH SUBDIVISION
# FIRESTONE, COLORADO

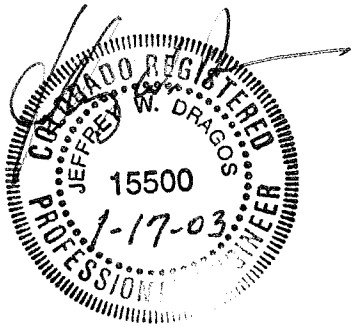
**December 2001**
**Revised January 2003**

**Prepared for:**

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Contact: Craig Jorgenson




Job No. 87002340

# POND D
# VOLUME OF A RESERVOIR

Volume Equation:
Vol (V) = 1/3h(A1+A2+SQRT(A1*A2))

V = Volume in Cubic Feet (CF) or Acre-Feet (Ac-Ft)
h = Contour Interval in Feet (Ft)
A1,A2 = Area Enclosed by Successive Contours
In Square Feet (SF)

| Contour Elev. (Ft) | Area (SF) | A1+A2 (SF) | SQRT(A1*A2) (SF) | (A1+A2)+ SQRT(A1*A2) (SF) | h (Ft) | h/3 (Ft) | Volume V (CF) | Accum. Vol. AV (CF) | Accum. Vol. AV (Ac-ft) |
|---|---|---|---|---|---|---|---|---|---|
| 79.0 | 1469 | | | | | | | 0.00 | 0.00 |
| | | 5552 | 2449.07 | 8001.07 | 1.00 | 0.33 | 2667.02 | | |
| 80.0 | 4083 | | | | | | | 2667.02 | 0.06 |
| | | 10134 | 4970.54 | 15104.54 | 1.00 | 0.33 | 5034.85 | | |
| 81.0 | 6051 | | | | | | | 7701.87 | 0.18 |
| | | 13422 | 6678.47 | 20100.47 | 1.00 | 0.33 | 6700.16 | | |
| 82.0 | 7371 | | | | | | | 14402.02 | 0.33 |
| | | 16117 | 8029.12 | 24146.12 | 1.00 | 0.33 | 8048.71 | | |
| 83.0 | 8746 | | | | | | | 22450.73 | 0.52 |

REQUIRED VOLUME = 0.33 A.F.
100 YR W/S ELEV. = 82.00

Stantec

Project: SAGEBRUSH SUBDIVISION Project Number:

Notes: POND SIZING Scale:

Page of Page(s)

Computed By: Date: Checked By: Date:

POND D (BASIN A, OS-2)

1. AREA = 4.4 + 2.5 (BACK OF LOTS ON SUNBURST AVE.)
2. IMPERVIOUSNESS

$4.4/6.9 \times 40 = 25.5$ $2.5/6.9 \times 5 = 1.8$ $25.5 + 1.8 = 27.3\%$

3. EMPIRICAL FORMULA $V = KA$ A = AREA I = IMPERV. %

$K_{100} = (1.78I - .002I^2 - 3.56)/900$ $K_{100} = 0.048$
$K_5 = (.77I - 2.65)/1000$ $K_5 = 0.018$

4. $V_{100} = 0.048(6.9) = 0.33$ AF
$V_5 = 0.018(6.9) = 0.12$ AF

5. $Q_{100} = 1.0 \times 6.9 = 6.9$ cfs $Q_5 = .17 \times 6.9 = 1.2$ cfs

6. 100YR W.S. = 82.0 5YR W.S. $.06/.12 = X/1$ $X = .5$ W.S. = 80.5

7. 5YR ORIFICE (INV. @ 78.05) $h = 80.5 - 78.05 - .25 = 2.2'$

$A = 1.2/(.65)(2 \times 32.2 \times 2.2)^{1/2} = 0.16$ SF dia $= (4(.16)/\pi)^{1/2}$ ℄ pipe $= 0.45'$
USE 6" ORIFICE (TOLERANCE W/I 15%)

8. DISCHARGE THRU 5YR ORIFICE @ 100YR HEADWATER

$h = 82 - 78.05 - .25 = 3.7'$ ℄ pipe $A = 0.2$ SF $Q = (.65)(.2)(2 \times 32.2 \times 3.7)^{1/2} = 2.0$ cfs

9. $Q_{WEIR} = 7.0$ cfs $- 2 = 5.0$ cfs

10. 100YR ORIFICE $h = 82 - 78 - .5 = 3.5'$ $A = 7/(.65)(2 \times 32.2 \times 3.5)^{1/2} = 0.72$ SF
dia $= (4(.72)/\pi)^{1/2} = 0.96'$ ℄ pipe USE 12" ORIFICE

11. WEIR LENGTH $L = Q_{WEIR}/CH^{3/2}$ $H = 82 - 80.5 = 1.5$

$L = 5/3.4(1.5)^{3/2} = 0.80'$ 50% INCREASE $.8 \times 1.5 = 1.20" = 14"$
STD TYPE D = 13.8" OKAT

12. GRATE CAPACITY - STD TYPE D GRATE = 13.8 SF OF OPEN AREA

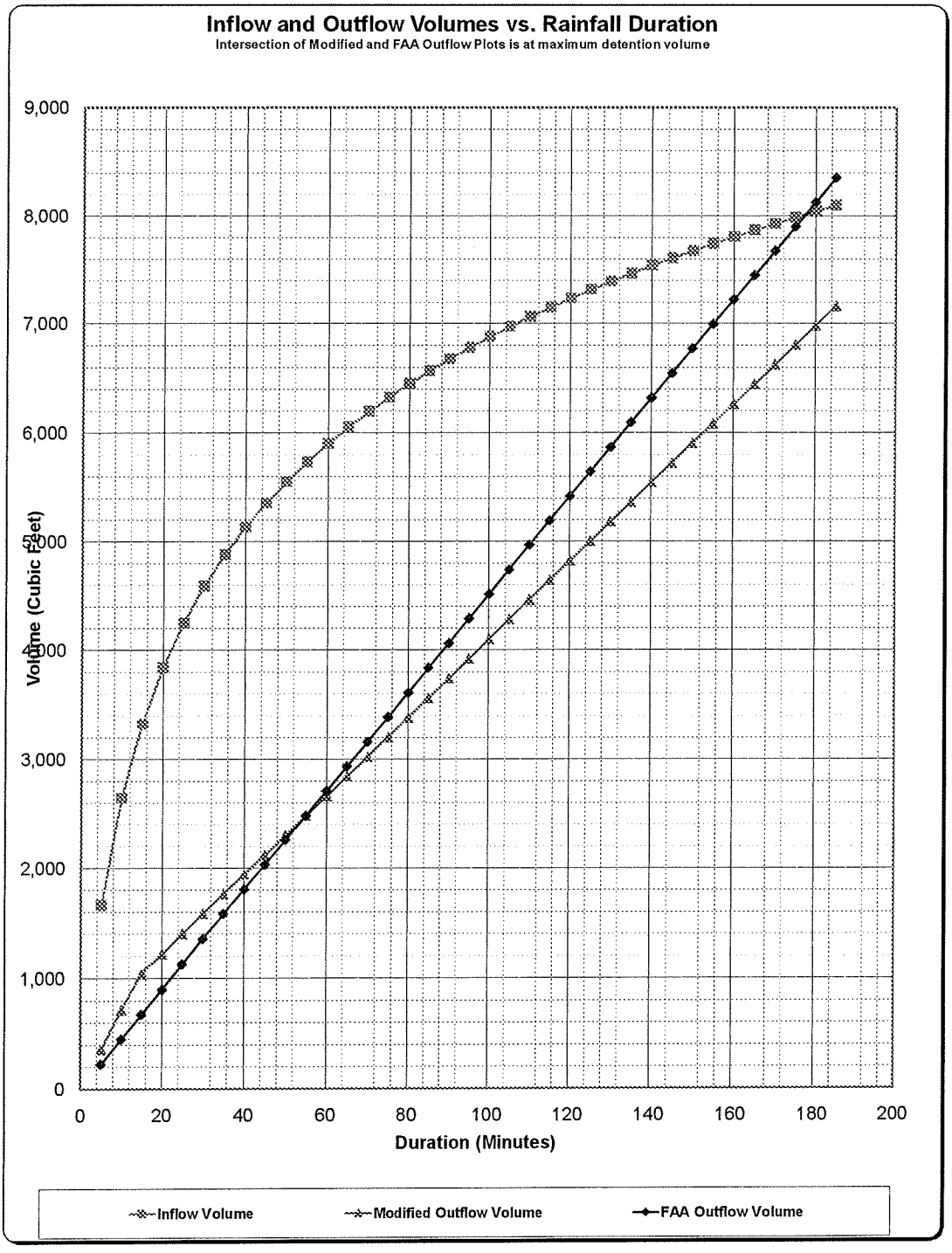
$Q = .65(13.8)(2 \times 32.2 \times 1.5)^{1/2} = 88.2$ cfs
$Q_5 \times 2 = 1.2 \times 2 = 2.4$ cfs GRATE OKAT

## MINOR DETENTION VOLUME BY FAA & MODIFIED FAA METHOD

**(See USDCM Volume I Runoff Chapter for description of method)**

**Project:**
**Basin ID:**

Blue cells are for the user to enter data into
Green cells are calculated values, sometimes they are filled from the VB macro code



# MAJOR DETENTION VOLUME BY FAA & MODIFIED FAA METHOD

**(See USDCM Volume I Runoff Chapter for description of method)**

**Project:** Blue cells are for the user to enter data into

**Basin ID:** Green cells are calculated values, sometimes they are filled from the VB macro code

**(For catchments less than 160 acres only. For larger catchments, use hydrograph routing method)**

**(Note: for catchments larger than 90 acres, CUHP hydrograph and routing are recommended)**

**The user must fill in all of the blue cells for these sheets to function.**

## Design Information (Input):

| | | | |
|---|---|---|---|
| Catchment Drainage Imperviousness | $I_a$ = | 65.00 | percent |
| Catchment Drainage Area | A = | 3.9000 | acres |
| Predevelopment NRCS Soil Group | Type = | B | A, B, C, or D |
| Return Period for Detention Control | T = | 100 | years (2, 5, 10, 25, 50, or 100) |
| Time of Concentration of Watershed | Tc = | 14 | minutes |
| Allowable Unit Release Rate (See Table A) | q = | 1.77 | cfs/acre |
| One-hour Precipitation | $P_1$ = | 2.66 | inches |
| **Design Rainfall IDF Formula I = C1* P1/(C2+Tc)^C3** | | | |
| Coefficient One | $C_1$ = | 28.50 | |
| Coefficient Two | $C_2$ = | 10.00 | |
| Coefficient Three | $C_3$ = | 0.79 | |

## Determination of Average Outflow from the Basin (Calculated):

| | | | |
|---|---|---|---|
| Runoff Coefficient | C = | 0.59 | |
| Inflow Peak Runoff | Qp-in = | 14.17 | cfs |
| Allowable Peak Outflow Rate | Qp-out = | 6.90 | cfs |
| Ratio of Qp-out/Qp-in | Ratio = | 0.49 | |

## Determination of MAJOR Detention Volume Using FAA & Modified FAA Method

5 <- Enter Rainfall Duration Incremental Increase Value Here (e.g. 5 for 5-Minutes)

| Rainfall Duration minutes (input) | Rainfall Intensity inches / hr (output) | Inflow Volume cubic feet (output) | Average Outflow (FAA, cfs) (output) | Outflow Volume (FAA, cf) (output) | Storage Volume (FAA, cf) (output) | Adjustment Factor (Modified) (output) | Average Outflow (Mod, cfs) (output) | Outflow Volume (Mod, cf) (output) | Storage Volume (Mod, cf) (output) |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 8.93 | 6,161 | 4.83 | 1,449 | 4,712 | 1.00 | 6.90 | 2,070 | 4,091 |
| 10 | 7.11 | 9,817 | 4.83 | 2,898 | 6,919 | 1.00 | 6.90 | 4,139 | 5,678 |
| 15 | 5.96 | 12,346 | 4.83 | 4,346 | 7,999 | 0.97 | 6.67 | 6,002 | 6,343 |
| 20 | 5.16 | 14,253 | 4.83 | 5,795 | 8,458 | 0.85 | 5.86 | 7,037 | 7,216 |
| 25 | 4.57 | 15,773 | 4.83 | 7,244 | 8,529 | 0.78 | 5.38 | 8,072 | 7,701 |
| 30 | 4.11 | 17,033 | 4.83 | 8,693 | 8,340 | 0.73 | 5.06 | 9,107 | 7,926 |
| 35 | 3.75 | 18,106 | 4.83 | 10,142 | 7,964 | 0.70 | 4.83 | 10,142 | 7,964 |
| 40 | 3.45 | 19,040 | 4.83 | 11,590 | 7,450 | 0.68 | 4.66 | 11,177 | 7,864 |
| 45 | 3.20 | 19,866 | 4.83 | 13,039 | 6,827 | 0.66 | 4.52 | 12,211 | 7,655 |
| 50 | 2.99 | 20,607 | 4.83 | 14,488 | 6,119 | 0.64 | 4.42 | 13,246 | 7,361 |
| 55 | 2.80 | 21,279 | 4.83 | 15,937 | 5,342 | 0.63 | 4.33 | 14,281 | 6,998 |
| 60 | 2.64 | 21,894 | 4.83 | 17,386 | 4,508 | 0.62 | 4.25 | 15,316 | 6,578 |
| 65 | 2.50 | 22,460 | 4.83 | 18,835 | 3,625 | 0.61 | 4.19 | 16,351 | 6,109 |
| 70 | 2.38 | 22,985 | 4.83 | 20,283 | 2,702 | 0.60 | 4.14 | 17,386 | 5,600 |
| 75 | 2.27 | 23,475 | 4.83 | 21,732 | 1,743 | 0.59 | 4.09 | 18,421 | 5,055 |
| 80 | 2.17 | 23,935 | 4.83 | 23,181 | 754 | 0.59 | 4.05 | 19,455 | 4,480 |
| 85 | 2.08 | 24,368 | 4.83 | 24,630 | -262 | 0.58 | 4.02 | 20,490 | 3,877 |
| 90 | 1.99 | 24,776 | 4.83 | 26,079 | -1,302 | 0.58 | 3.99 | 21,525 | 3,251 |
| 95 | 1.92 | 25,164 | 4.83 | 27,527 | -2,363 | 0.57 | 3.96 | 22,560 | 2,604 |
| 100 | 1.85 | 25,533 | 4.83 | 28,976 | -3,444 | 0.57 | 3.93 | 23,595 | 1,938 |
| 105 | 1.79 | 25,884 | 4.83 | 30,425 | -4,541 | 0.57 | 3.91 | 24,630 | 1,254 |
| 110 | 1.73 | 26,220 | 4.83 | 31,874 | -5,654 | 0.56 | 3.89 | 25,665 | 555 |
| 115 | 1.67 | 26,542 | 4.83 | 33,323 | -6,781 | 0.56 | 3.87 | 26,700 | -158 |
| 120 | 1.62 | 26,851 | 4.83 | 34,771 | -7,920 | 0.56 | 3.85 | 27,734 | -883 |
| 125 | 1.57 | 27,148 | 4.83 | 36,220 | -9,072 | 0.56 | 3.84 | 28,769 | -1,621 |
| 130 | 1.53 | 27,434 | 4.83 | 37,669 | -10,235 | 0.55 | 3.82 | 29,804 | -2,370 |
| 135 | 1.49 | 27,711 | 4.83 | 39,118 | -11,407 | 0.55 | 3.81 | 30,839 | -3,128 |
| 140 | 1.45 | 27,978 | 4.83 | 40,567 | -12,589 | 0.55 | 3.79 | 31,874 | -3,896 |
| 145 | 1.41 | 28,236 | 4.83 | 42,016 | -13,780 | 0.55 | 3.78 | 32,909 | -4,673 |
| 150 | 1.38 | 28,486 | 4.83 | 43,464 | -14,978 | 0.55 | 3.77 | 33,944 | -5,458 |
| 155 | 1.34 | 28,729 | 4.83 | 44,913 | -16,185 | 0.55 | 3.76 | 34,978 | -6,250 |
| 160 | 1.31 | 28,964 | 4.83 | 46,362 | -17,398 | 0.54 | 3.75 | 36,013 | -7,049 |
| 165 | 1.28 | 29,193 | 4.83 | 47,811 | -18,618 | 0.54 | 3.74 | 37,048 | -7,855 |
| 170 | 1.25 | 29,416 | 4.83 | 49,260 | -19,844 | 0.54 | 3.73 | 38,083 | -8,667 |
| 175 | 1.23 | 29,632 | 4.83 | 50,708 | -21,076 | 0.54 | 3.73 | 39,118 | -9,486 |
| 180 | 1.20 | 29,844 | 4.83 | 52,157 | -22,314 | 0.54 | 3.72 | 40,153 | -10,309 |
| 185 | 1.18 | 30,050 | 4.83 | 53,606 | -23,556 | 0.54 | 3.71 | 41,188 | -11,138 |

**FAA Major Storage Volume (cubic ft.) =** 8,529 **Mod. FAA Major Storage Volume (cubic ft.) =** 7,964

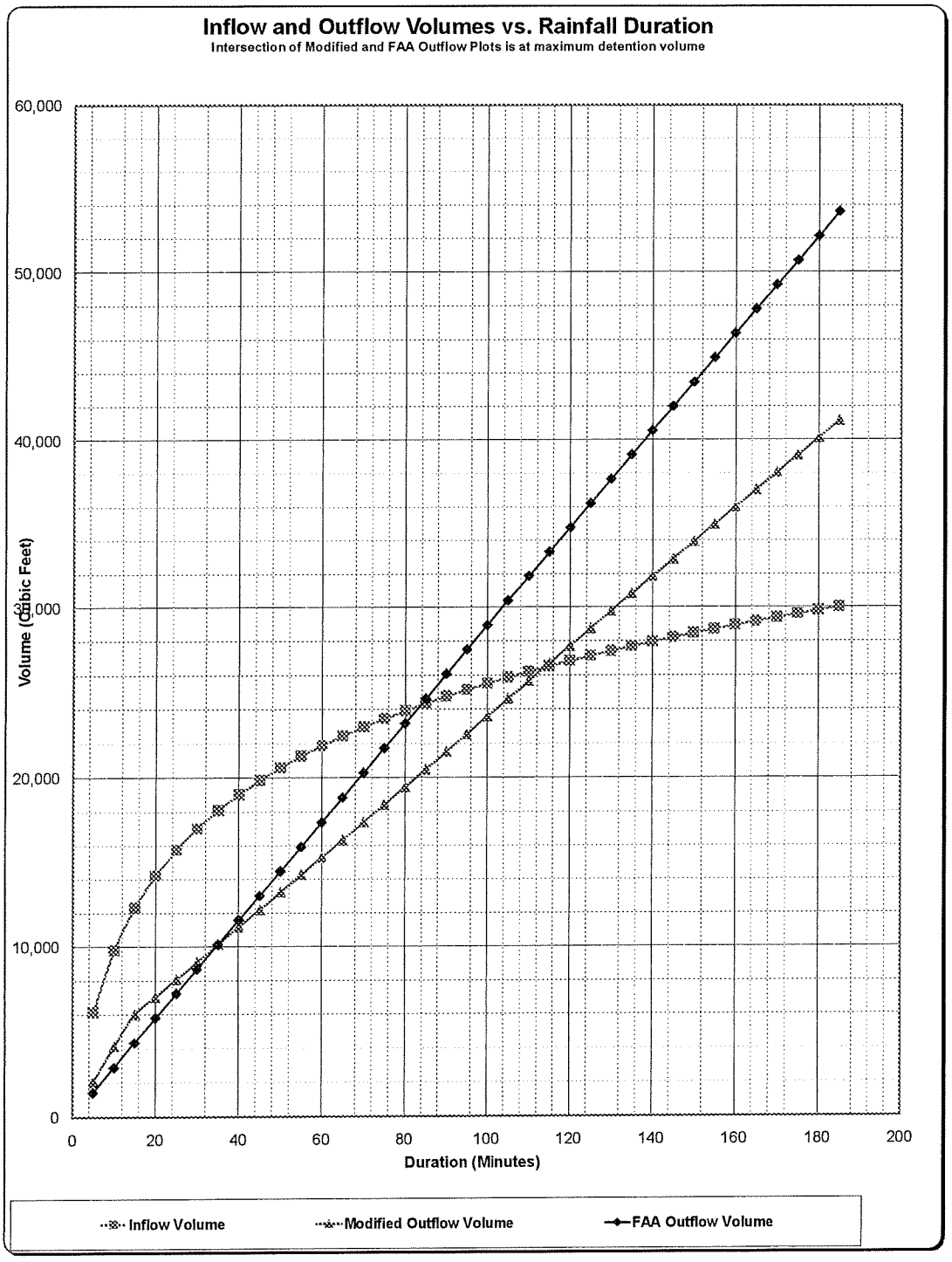
**FAA Major Storage Volume (acre-ft.) =** 0.1958 **Mod. FAA Major Storage Volume (acre-ft.) =** 0.1828

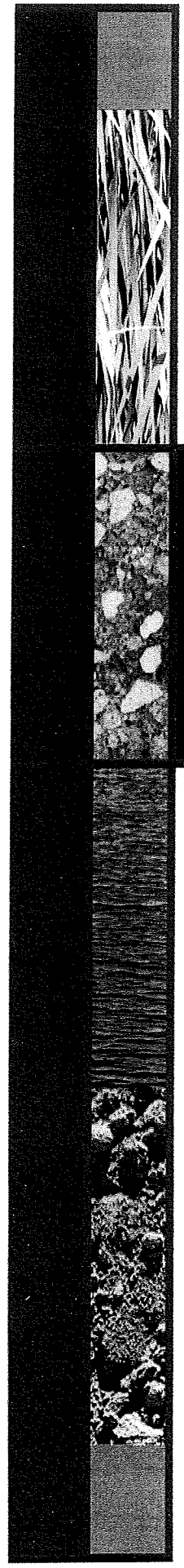
UDFCD DETENTION VOLUME ESTIMATING WORKBOOK Version 2.02, Released January 2007

## MAJOR DETENTION VOLUME BY FAA & MODIFIED FAA METHOD
**(See USDCM Volume I Runoff Chapter for description of method)**

**Project:**
**Basin ID:**

Blue cells are for the user to enter data into
Green cells are calculated values, sometimes they are filled from the VB macro code





# Final Drainage Report
# For
# Firestone Sports Complex – Phase 1

SUBMITTED TO:

Town of Firestone, Colorado

AUGUST 10, 2007

TST, Inc. Consulting Engineers

TST

TST, INC. CONSULTING ENGINEERS

August 10, 2007

Mrs. Cheri Andersen
Town of Firestone Administrator
151 Grant Avenue
P.O. Box 100
Firestone, CO 80520-0100

*Re: Firestone Sports Complex – Phase 1*
*Project No. 0668.0130.01*

Dear Mrs. Andersen:

We are pleased to submit this Final Drainage Report for the Firestone Sports Complex – Phase 1 project. This report was prepared using the current Town of Firestone Design Criteria and Construction Regulations.

We look forward to your review and will gladly answer any questions you may have.

Respectfully,

TST, INC. CONSULTING ENGINEERS

Spencer M. Smith, P.E.

SMS

COLORADO LICENSED
SPENCER M. SMITH
40333
8-13-07
PROFESSIONAL ENGINEER

I hereby certify that this report (plan) for the final drainage analysis and design of Firestone Sports Complex – Phase 1 was prepared by me or under my direct supervision in accordance with the provisions of the Town of Firestone Design Criteria and Construction Regulations for the owners thereof.

Spencer M. Smith
Registered Professional Engineer
State of Colorado No. 40333

748 Whalers Way
Fort Collins, CO 80525
970.226.0557
metro 303.595.9103
fax 970.226.0204

info@tstinc.com
www.tstinc.com

## MAJOR DETENTION VOLUME BY FAA & MODIFIED FAA METHOD

(See USDCM Volume I Runoff Chapter for description of method)

Project: Firestone Sports Complex - Phase 1
Basin ID: Sports Complex Detention Requirement

(For catchments less than 160 acres only. For larger catchments, use hydrograph routing method)
(Note: for catchments larger than 90 acres, CUHP hydrograph and routing are recommended)

The user must fill in all of the blue cells for these sheets to function.

**Design Information (Input):**

| | | | |
|---|---|---|---|
| Catchment Drainage Imperviousness | $I_a$ = | 38.00 | percent |
| Catchment Drainage Area | A = | 20.0100 | acres |
| Predevelopment NRCS Soil Group | Type = | B | A, B, C, or D |
| Return Period for Detention Control | T = | 100 | years (2, 5, 10, 25, 50, or 100) |
| Time of Concentration of Watershed | Tc = | 33 | minutes |
| Allowable Unit Release Rate (See Table A) | q = | 1.00 | cfs/acre |
| One-hour Precipitation | $P_1$ = | 2.70 | inches |
| **Design Rainfall IDF Formula I = C1* P1/(C2+Tc)^C3** | | | |
| Coefficient One | $C_1$ = | 28.50 | |
| Coefficient Two | $C_2$ = | 10.00 | |
| Coefficient Three | $C_3$ = | 0.78 | |

**Determination of Average Outflow from the Basin (Calculated):**

| | | | |
|---|---|---|---|
| Runoff Coefficient | C = | 0.49 | |
| Inflow Peak Runoff | Qp-in = | 38.42 | cfs |
| Allowable Peak Outflow Rate | Qp-out = | 20.01 | cfs |
| Ratio of Qp-out/Qp-in | Ratio = | 0.52 | |

**Determination of MAJOR Detention Volume Using FAA & Modified FAA Method**

5 <- Enter Rainfall Duration Incremental Increase Value Here (e.g. 5 for 5 Minutes)

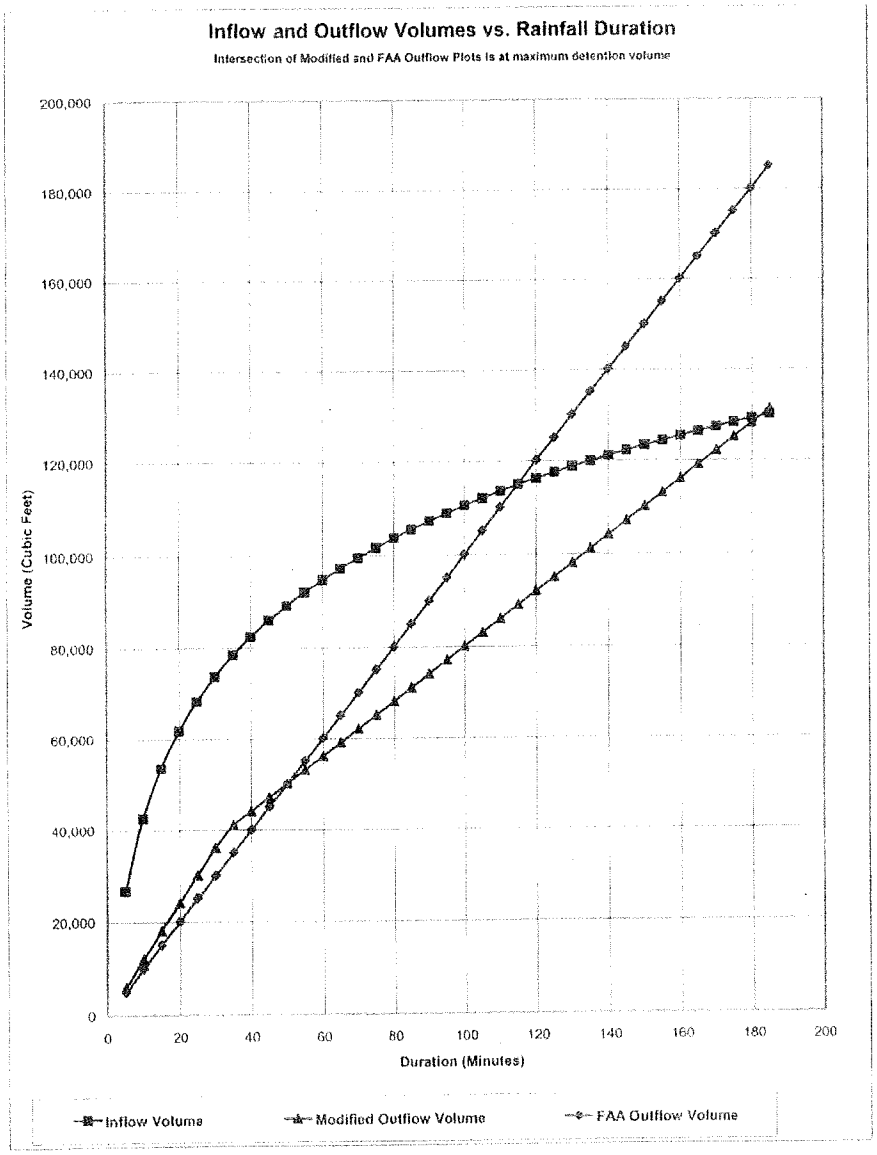
| Rainfall Duration minutes (input) | Rainfall Intensity inches / hr (output) | Inflow Volume cubic feet (output) | Average Outflow (FAA, cfs) (output) | Outflow Volume (FAA, cf) (output) | Storage Volume (FAA, cf) (output) | Adjustment Factor (Modified) (output) | Average Outflow (Mod. cfs) (output) | Outflow Volume (Mod. cf) (output) | Storage Volume (Mod. cf) (output) |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 9.06 | 26,848 | 16.67 | 5,002 | 21,645 | 1.00 | 20.01 | 6,003 | 20,645 |
| 10 | 7.22 | 42,461 | 16.67 | 10,005 | 32,456 | 1.00 | 20.01 | 12,006 | 30,455 |
| 15 | 6.05 | 53,398 | 16.67 | 15,007 | 38,391 | 1.00 | 20.01 | 18,009 | 35,389 |
| 20 | 5.24 | 61,646 | 16.67 | 20,009 | 41,637 | 1.00 | 20.01 | 24,012 | 37,634 |
| 25 | 4.64 | 68,223 | 16.67 | 25,011 | 43,211 | 1.00 | 20.01 | 30,015 | 38,206 |
| 30 | 4.17 | 73,671 | 16.67 | 30,014 | 43,657 | 1.00 | 20.01 | 36,018 | 37,653 |
| 35 | 3.80 | 78,313 | 16.67 | 35,018 | 43,297 | 0.98 | 19.53 | 41,018 | 37,294 |
| 40 | 3.50 | 82,352 | 16.67 | 40,018 | 42,334 | 0.92 | 18.34 | 44,020 | 38,332 |
| 45 | 3.25 | 85,927 | 16.67 | 45,021 | 40,906 | 0.87 | 17.42 | 47,021 | 38,905 |
| 50 | 3.03 | 89,132 | 16.67 | 50,023 | 39,109 | 0.83 | 16.67 | 50,023 | 39,109 |
| 55 | 2.84 | 92,037 | 16.67 | 55,025 | 37,012 | 0.80 | 16.07 | 53,024 | 39,013 |
| 60 | 2.68 | 94,695 | 16.67 | 60,028 | 34,667 | 0.78 | 15.56 | 56,026 | 38,669 |
| 65 | 2.54 | 97,144 | 16.67 | 65,030 | 32,115 | 0.76 | 15.14 | 59,027 | 38,117 |
| 70 | 2.41 | 99,417 | 16.67 | 70,032 | 29,385 | 0.74 | 14.77 | 62,029 | 37,398 |
| 75 | 2.30 | 101,537 | 16.67 | 75,034 | 26,502 | 0.72 | 14.45 | 65,030 | 36,506 |
| 80 | 2.20 | 103,524 | 16.67 | 80,037 | 23,487 | 0.71 | 14.17 | 68,032 | 35,492 |
| 85 | 2.11 | 105,395 | 16.67 | 85,039 | 20,356 | 0.70 | 13.93 | 71,033 | 34,362 |
| 90 | 2.02 | 107,163 | 16.67 | 90,041 | 17,122 | 0.69 | 13.71 | 74,035 | 33,128 |
| 95 | 1.95 | 108,840 | 16.67 | 95,044 | 13,796 | 0.68 | 13.52 | 77,036 | 31,803 |
| 100 | 1.88 | 110,434 | 16.67 | 100,046 | 10,388 | 0.67 | 13.34 | 80,038 | 30,398 |
| 105 | 1.81 | 111,954 | 16.67 | 105,048 | 6,906 | 0.66 | 13.18 | 83,039 | 28,915 |
| 110 | 1.75 | 113,408 | 16.67 | 110,051 | 3,357 | 0.65 | 13.04 | 86,041 | 27,367 |
| 115 | 1.70 | 114,800 | 16.67 | 115,053 | -253 | 0.64 | 12.90 | 89,042 | 25,758 |
| 120 | 1.65 | 116,137 | 16.67 | 120,055 | -3,919 | 0.64 | 12.78 | 92,044 | 24,093 |
| 125 | 1.60 | 117,422 | 16.67 | 125,057 | -7,636 | 0.63 | 12.67 | 95,045 | 22,376 |
| 130 | 1.55 | 118,660 | 16.67 | 130,060 | -11,400 | 0.63 | 12.57 | 98,047 | 20,613 |
| 135 | 1.51 | 119,855 | 16.67 | 135,062 | -15,207 | 0.62 | 12.48 | 101,048 | 18,806 |
| 140 | 1.47 | 121,009 | 16.67 | 140,064 | -19,055 | 0.62 | 12.39 | 104,050 | 16,959 |
| 145 | 1.43 | 122,126 | 16.67 | 145,067 | -22,940 | 0.61 | 12.30 | 107,051 | 15,075 |
| 150 | 1.40 | 123,208 | 16.67 | 150,069 | -26,861 | 0.61 | 12.23 | 110,053 | 13,155 |
| 155 | 1.36 | 124,257 | 16.67 | 155,071 | -30,814 | 0.61 | 12.16 | 113,054 | 11,203 |
| 160 | 1.33 | 125,276 | 16.67 | 160,074 | -34,797 | 0.60 | 12.09 | 116,056 | 9,220 |
| 165 | 1.30 | 126,266 | 16.67 | 165,076 | -38,810 | 0.60 | 12.03 | 119,057 | 7,209 |
| 170 | 1.27 | 127,229 | 16.67 | 170,078 | -42,849 | 0.60 | 11.97 | 122,059 | 5,170 |
| 175 | 1.24 | 128,167 | 16.67 | 175,080 | -46,914 | 0.60 | 11.91 | 125,060 | 3,106 |
| 180 | 1.22 | 129,080 | 16.67 | 180,083 | -51,002 | 0.59 | 11.86 | 128,062 | 1,018 |
| 185 | 1.19 | 129,971 | 16.67 | 185,085 | -55,114 | 0.59 | 11.81 | 131,063 | -1,092 |

| | | | |
|---|---|---|---|
| FAA Major Storage Volume (cubic ft.) = | 43,657 | Mod. FAA Major Storage Volume (cubic ft.) = | 39,109 |
| FAA Major Storage Volume (acre-ft.) = | 1.0022 | Mod. FAA Major Storage Volume (acre-ft.) = | 0.8978 |

UDFCD DETENTION VOLUME ESTIMATING WORKBOOK Version 2.01, Released August 2006

**MAJOR DETENTION VOLUME BY FAA & MODIFIED FAA METHOD**
**(See USDCM Volume I Runoff Chapter for description of method)**

Project: Firestone Sports Complex - Phase 1
Basin ID: Sports Complex Detention Requirement




UDFCD DETENTION VOLUME ESTIMATING WORKBOOK Version 2.01, Released August 2006

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## MINOR DETENTION VOLUME BY FAA & MODIFIED FAA METHOD

**(See USDCM Volume I Runoff Chapter for description of method)**

**Project:** Firestone Sports Complex - Phase 1
**Basin ID:** Sports Complex Detention Requirement

**(For catchments less than 160 acres only. For larger catchments, use hydrograph routing method)**
**(Note: for catchments larger than 90 acres, CUHP hydrograph and routing are recommended)**

**The user must fill in all of the blue cells for these sheets to function.**

**Design Information (Input):**

| | | | |
|---|---|---|---|
| Catchment Drainage Imperviousness | $I_a$ = | 38.00 | percent |
| Catchment Drainage Area | A = | 20.0100 | acres |
| Predevelopment NRCS Soil Group | Type = | B | A, B, C, or D |
| Return Period for Detention Control | T = | 10 | years (2, 5, 10, 25, 50, or 100) |
| Time of Concentration of Watershed | Tc = | 33 | minutes |
| Allowable Unit Release Rate (See Table A) | q = | 0.23 | cfs/acre |
| One-hour Precipitation | $P_1$ = | 1.61 | inches |
| **Design Rainfall IDF Formula I = C1* P1/(C2+Tc)^C3** | | | |
| Coefficient One | $C_1$ = | 28.50 | |
| Coefficient Two | $C_2$ = | 10.00 | |
| Coefficient Three | $C_3$ = | 0.79 | |

**Determination of Average Outflow from the Basin (Calculated):**

| | | | |
|---|---|---|---|
| Runoff Coefficient | C = | 0.35 | |
| Inflow Peak Runoff | Qp-in = | 16.37 | cfs |
| Allowable Peak Outflow Rate | Qp-out = | 4.60 | cfs |
| Ratio of Qp-out/Qp-in | Ratio = | 0.28 | |

**Determination of MINOR Detention Volume Using FAA & Modified FAA Method**

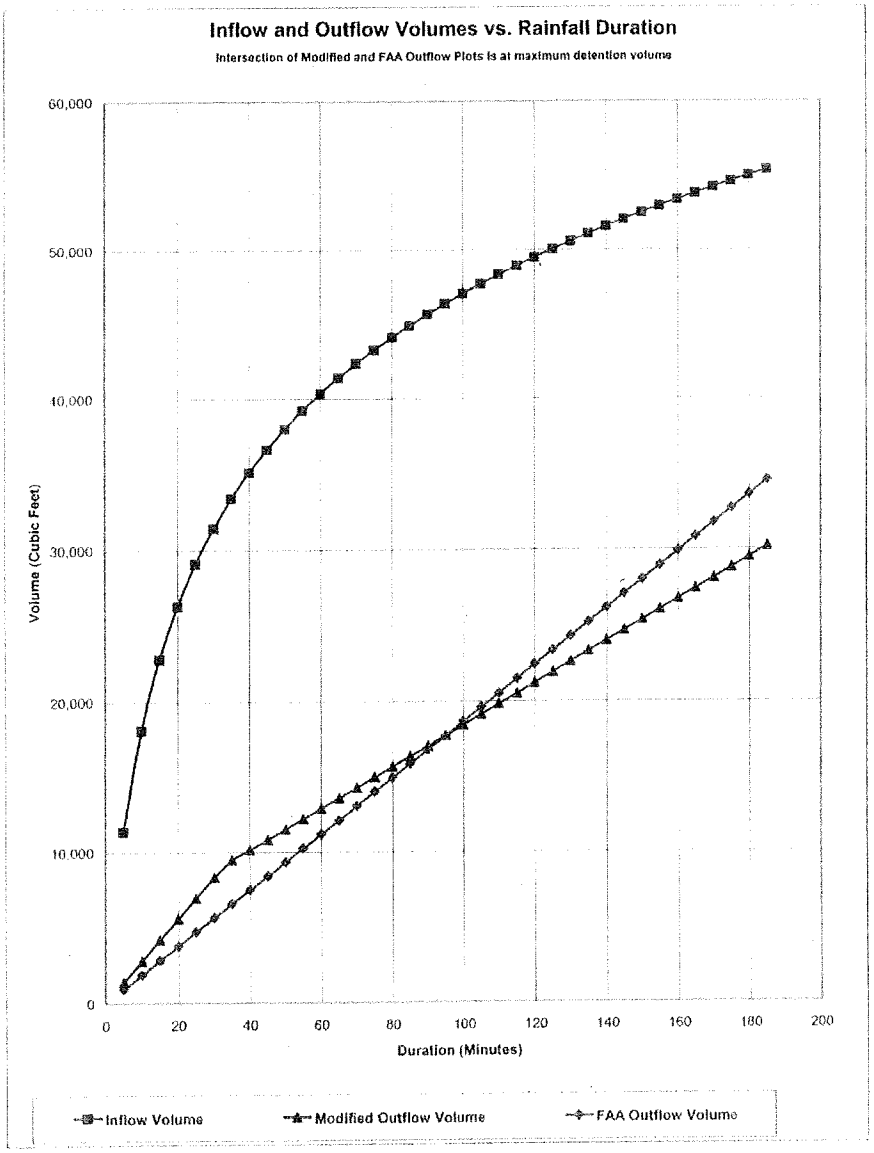
5 <- Enter Rainfall Duration Incremental Increase Value Here (e.g. 5 for 5-Minutes)

| Rainfall Duration minutes (input) | Rainfall Intensity inches / hr (output) | Inflow Volume cubic feet (output) | Average Outflow (FAA, cfs) (output) | Outflow Volume (FAA, cf) (output) | Storage Volume (FAA, cf) (output) | Adjustment Factor (Modified) (output) | Average Outflow (Mod, cfs) (output) | Outflow Volume (Mod, cf) (output) | Storage Volume (Mod, cf) (output) |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 5.40 | 11,350 | 3.11 | 933 | 10,417 | 1.00 | 4.60 | 1,381 | 9,969 |
| 10 | 4.30 | 18,085 | 3.11 | 1,865 | 16,220 | 1.00 | 4.60 | 2,761 | 15,324 |
| 15 | 3.61 | 22,743 | 3.11 | 2,798 | 19,946 | 1.00 | 4.60 | 4,142 | 18,601 |
| 20 | 3.12 | 26,257 | 3.11 | 3,730 | 22,527 | 1.00 | 4.60 | 5,523 | 20,734 |
| 25 | 2.77 | 29,058 | 3.11 | 4,663 | 24,395 | 1.00 | 4.60 | 6,903 | 22,154 |
| 30 | 2.49 | 31,378 | 3.11 | 5,595 | 25,783 | 1.00 | 4.60 | 8,284 | 23,094 |
| 35 | 2.27 | 33,355 | 3.11 | 6,528 | 26,828 | 0.98 | 4.49 | 9,434 | 23,921 |
| 40 | 2.00 | 35,076 | 3.11 | 7,460 | 27,616 | 0.92 | 4.22 | 10,125 | 24,951 |
| 45 | 1.94 | 36,598 | 3.11 | 8,393 | 28,206 | 0.87 | 4.01 | 10,815 | 25,784 |
| 50 | 1.81 | 37,964 | 3.11 | 9,325 | 28,638 | 0.83 | 3.84 | 11,505 | 26,458 |
| 55 | 1.70 | 39,201 | 3.11 | 10,258 | 28,943 | 0.80 | 3.70 | 12,196 | 27,005 |
| 60 | 1.60 | 40,333 | 3.11 | 11,191 | 29,142 | 0.78 | 3.58 | 12,886 | 27,447 |
| 65 | 1.51 | 41,376 | 3.11 | 12,123 | 29,253 | 0.76 | 3.48 | 13,576 | 27,600 |
| 70 | 1.44 | 42,344 | 3.11 | 13,056 | 29,289 | 0.74 | 3.40 | 14,267 | 28,078 |
| 75 | 1.37 | 43,247 | 3.11 | 13,988 | 29,259 | 0.72 | 3.32 | 14,957 | 28,290 |
| 80 | 1.31 | 44,094 | 3.11 | 14,921 | 29,173 | 0.71 | 3.26 | 15,647 | 28,446 |
| 85 | 1.26 | 44,890 | 3.11 | 15,853 | 29,037 | 0.70 | 3.20 | 16,338 | 28,553 |
| 90 | 1.21 | 45,644 | 3.11 | 16,786 | 28,858 | 0.69 | 3.15 | 17,028 | 28,616 |
| 95 | 1.16 | 46,359 | 3.11 | 17,718 | 28,639 | 0.68 | 3.11 | 17,718 | 28,639 |
| 100 | 1.12 | 47,037 | 3.11 | 18,651 | 28,386 | 0.67 | 3.07 | 18,409 | 28,628 |
| 105 | 1.08 | 47,684 | 3.11 | 19,583 | 28,101 | 0.66 | 3.03 | 19,099 | 28,585 |
| 110 | 1.05 | 48,303 | 3.11 | 20,516 | 27,787 | 0.65 | 3.00 | 19,789 | 28,514 |
| 115 | 1.01 | 48,896 | 3.11 | 21,449 | 27,448 | 0.64 | 2.97 | 20,480 | 28,417 |
| 120 | 0.99 | 49,466 | 3.11 | 22,381 | 27,084 | 0.64 | 2.94 | 21,170 | 28,295 |
| 125 | 0.95 | 50,013 | 3.11 | 23,314 | 26,699 | 0.63 | 2.91 | 21,860 | 28,153 |
| 130 | 0.93 | 50,540 | 3.11 | 24,246 | 26,294 | 0.63 | 2.89 | 22,551 | 27,990 |
| 135 | 0.90 | 51,049 | 3.11 | 25,179 | 25,871 | 0.62 | 2.87 | 23,241 | 27,808 |
| 140 | 0.88 | 51,541 | 3.11 | 26,111 | 25,430 | 0.62 | 2.85 | 23,932 | 27,610 |
| 145 | 0.85 | 52,017 | 3.11 | 27,044 | 24,973 | 0.61 | 2.83 | 24,622 | 27,395 |
| 150 | 0.83 | 52,478 | 3.11 | 27,978 | 24,501 | 0.61 | 2.81 | 25,312 | 27,165 |
| 155 | 0.81 | 52,924 | 3.11 | 28,909 | 24,016 | 0.61 | 2.80 | 26,003 | 26,922 |
| 160 | 0.79 | 53,358 | 3.11 | 29,842 | 23,517 | 0.60 | 2.78 | 26,693 | 26,665 |
| 165 | 0.78 | 53,780 | 3.11 | 30,774 | 23,006 | 0.60 | 2.77 | 27,383 | 26,397 |
| 170 | 0.76 | 54,190 | 3.11 | 31,707 | 22,484 | 0.60 | 2.75 | 28,074 | 26,117 |
| 175 | 0.74 | 54,590 | 3.11 | 32,639 | 21,950 | 0.60 | 2.74 | 28,764 | 25,826 |
| 180 | 0.73 | 54,979 | 3.11 | 33,572 | 21,407 | 0.59 | 2.73 | 29,454 | 25,524 |
| 185 | 0.71 | 55,358 | 3.11 | 34,504 | 20,854 | 0.59 | 2.72 | 30,145 | 25,214 |
| | | **FAA Minor Storage Volume (cubic ft.) =** | | **29,289** | | | **Mod. FAA Minor Storage Volume (cubic ft.) =** | | **26,639** |
| | | **FAA Minor Storage Volume (acre-ft.) =** | | **0.6724** | | | **Mod. FAA Minor Storage Volume (acre-ft.) =** | | **0.6575** |

UDFCD DETENTION VOLUME ESTIMATING WORKBOOK Version 2.01, Released August 2006

**MINOR DETENTION VOLUME BY FAA & MODIFIED FAA METHOD**
(See USDCM Volume I Runoff Chapter for description of method)

Project: Firestone Sports Complex - Phase 1
Basin ID: Sports Complex Detention Requirement




UDFCD DETENTION VOLUME ESTIMATING WORKBOOK Version 2.01, Released August 2006

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## MAJOR DETENTION VOLUME BY FAA & MODIFIED FAA METHOD
(See USDCM Volume I Runoff Chapter for description of method)

Project: Firestone Sports Complex - Phase 1
Basin ID: Detention Pond 1

(For catchments less than 160 acres only. For larger catchments, use hydrograph routing method)
(Note: for catchments larger than 90 acres, CUHP hydrograph and routing are recommended)

The user must fill in all of the blue cells for these sheets to function.

**Design Information (Input):**

| | | | |
|---|---|---|---|
| Catchment Drainage Imperviousness | $I_a$ = | 38.00 | percent |
| Catchment Drainage Area | A = | 23.3500 | acres |
| Predevelopment NRCS Soil Group | Type = | B | A, B, C, or D |
| Return Period for Detention Control | T = | 100 | years (2, 5, 10, 25, 50, or 100) |
| Time of Concentration of Watershed | Tc = | 33 | minutes |
| Allowable Unit Release Rate (See Table A) | q = | 0.66 | cfs/acre |
| One-hour Precipitation | $P_1$ = | 2.70 | inches |
| **Design Rainfall IDF Formula I = C1* P1/(C2+Tc)^C3** | | | |
| Coefficient One | $C_1$ = | 28.50 | |
| Coefficient Two | $C_2$ = | 10.00 | |
| Coefficient Three | $C_3$ = | 0.79 | |

**Determination of Average Outflow from the Basin (Calculated):**

| | | | |
|---|---|---|---|
| Runoff Coefficient | C = | 0.49 | |
| Inflow Peak Runoff | Qp-in = | 44.84 | cfs |
| Allowable Peak Outflow Rate | Qp-out = | 15.41 | cfs |
| Ratio of Qp-out/Qp-in | Ratio = | 0.34 | |

**Determination of MAJOR Detention Volume Using FAA & Modified FAA Method**

5 <- Enter Rainfall Duration Incremental Increase Value Here (e.g. 5 for 5-Minutes)

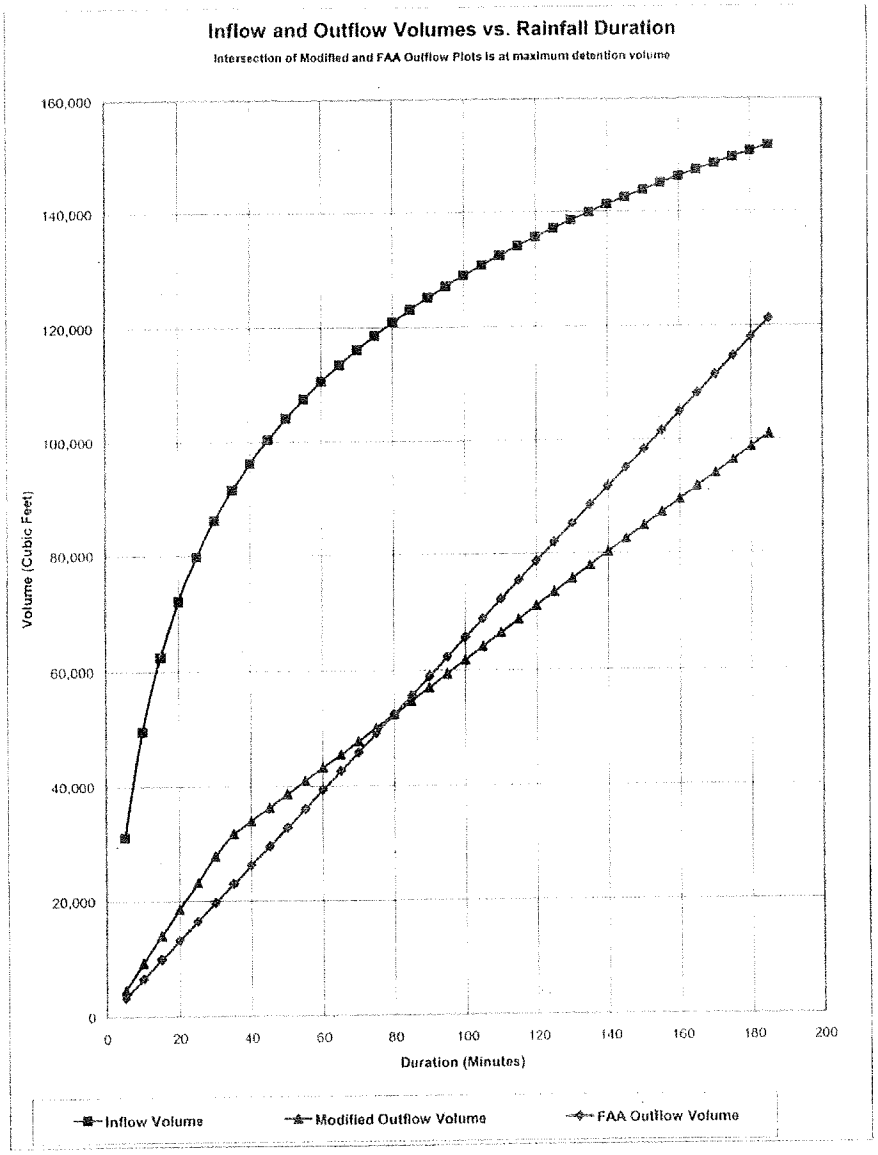
| Rainfall Duration minutes (input) | Rainfall Intensity inches / hr (output) | Inflow Volume cubic feet (output) | Average Outflow (FAA, cfs) (output) | Outflow Volume (FAA, cf) (output) | Storage Volume (FAA, cf) (output) | Adjustment Factor (Modified) (output) | Average Outflow (Mod, cfs) (output) | Outflow Volume (Mod, cf) (output) | Storage Volume (Mod, cf) (output) |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 9.06 | 31,096 | 10.92 | 3,275 | 27,821 | 1.00 | 15.41 | 4,623 | 26,472 |
| 10 | 7.22 | 49,548 | 10.92 | 6,549 | 42,999 | 1.00 | 15.41 | 9,247 | 40,302 |
| 15 | 6.05 | 62,311 | 10.92 | 9,824 | 52,486 | 1.00 | 15.41 | 13,870 | 48,441 |
| 20 | 5.24 | 71,936 | 10.92 | 13,099 | 58,837 | 1.00 | 15.41 | 18,493 | 53,443 |
| 25 | 4.64 | 79,610 | 10.92 | 16,374 | 63,237 | 1.00 | 15.41 | 23,117 | 56,494 |
| 30 | 4.17 | 85,988 | 10.92 | 19,648 | 66,320 | 1.00 | 15.41 | 27,740 | 58,228 |
| 35 | 3.80 | 91,385 | 10.92 | 22,923 | 68,461 | 0.98 | 15.04 | 31,591 | 59,784 |
| 40 | 3.50 | 96,098 | 10.92 | 26,198 | 69,901 | 0.92 | 14.13 | 33,903 | 62,186 |
| 45 | 3.25 | 100,269 | 10.92 | 29,473 | 70,797 | 0.87 | 13.41 | 36,214 | 64,056 |
| 50 | 3.03 | 104,010 | 10.92 | 32,747 | 71,262 | 0.83 | 12.84 | 38,526 | 65,484 |
| 55 | 2.84 | 107,400 | 10.92 | 36,022 | 71,378 | 0.80 | 12.38 | 40,838 | 66,592 |
| 60 | 2.68 | 110,501 | 10.92 | 39,297 | 71,204 | 0.78 | 11.99 | 43,149 | 67,352 |
| 65 | 2.54 | 113,359 | 10.92 | 42,572 | 70,788 | 0.76 | 11.66 | 45,461 | 67,899 |
| 70 | 2.41 | 116,011 | 10.92 | 45,846 | 70,165 | 0.74 | 11.37 | 47,773 | 68,239 |
| 75 | 2.30 | 118,485 | 10.92 | 49,121 | 69,364 | 0.72 | 11.13 | 50,084 | 68,401 |
| 80 | 2.20 | 120,804 | 10.92 | 52,396 | 68,408 | 0.71 | 10.92 | 52,396 | 68,408 |
| 85 | 2.11 | 122,987 | 10.92 | 56,671 | 67,317 | 0.70 | 10.73 | 54,708 | 68,280 |
| 90 | 2.02 | 125,050 | 10.92 | 58,945 | 66,105 | 0.69 | 10.56 | 57,019 | 68,031 |
| 95 | 1.95 | 127,007 | 10.92 | 62,220 | 64,787 | 0.68 | 10.41 | 59,331 | 67,676 |
| 100 | 1.88 | 128,867 | 10.92 | 65,495 | 63,372 | 0.67 | 10.27 | 61,642 | 67,225 |
| 105 | 1.81 | 130,641 | 10.92 | 68,770 | 61,872 | 0.66 | 10.15 | 63,954 | 66,687 |
| 110 | 1.75 | 132,337 | 10.92 | 72,044 | 60,293 | 0.65 | 10.04 | 66,266 | 66,072 |
| 115 | 1.70 | 133,962 | 10.92 | 75,319 | 58,643 | 0.64 | 9.94 | 68,577 | 65,385 |
| 120 | 1.65 | 135,522 | 10.92 | 78,594 | 56,928 | 0.64 | 9.85 | 70,889 | 64,633 |
| 125 | 1.60 | 137,022 | 10.92 | 81,869 | 55,153 | 0.63 | 9.76 | 73,201 | 63,821 |
| 130 | 1.55 | 138,467 | 10.92 | 85,143 | 53,323 | 0.63 | 9.68 | 75,512 | 62,954 |
| 135 | 1.51 | 139,861 | 10.92 | 88,418 | 51,443 | 0.62 | 9.61 | 77,824 | 62,037 |
| 140 | 1.47 | 141,208 | 10.92 | 91,693 | 49,515 | 0.62 | 9.54 | 80,136 | 61,072 |
| 145 | 1.43 | 142,511 | 10.92 | 94,967 | 47,544 | 0.61 | 9.48 | 82,447 | 60,064 |
| 150 | 1.40 | 143,774 | 10.92 | 98,242 | 45,531 | 0.61 | 9.42 | 84,759 | 59,016 |
| 155 | 1.36 | 144,998 | 10.92 | 101,517 | 43,481 | 0.61 | 9.36 | 87,071 | 57,927 |
| 160 | 1.33 | 146,187 | 10.92 | 104,792 | 41,395 | 0.60 | 9.31 | 89,382 | 56,805 |
| 165 | 1.30 | 147,342 | 10.92 | 108,066 | 39,276 | 0.60 | 9.26 | 91,694 | 55,648 |
| 170 | 1.27 | 148,466 | 10.92 | 111,341 | 37,125 | 0.60 | 9.22 | 94,006 | 54,460 |
| 175 | 1.24 | 149,560 | 10.92 | 114,616 | 34,944 | 0.60 | 9.17 | 96,317 | 53,243 |
| 180 | 1.22 | 150,626 | 10.92 | 117,891 | 32,735 | 0.59 | 9.13 | 98,629 | 51,997 |
| 185 | 1.19 | 151,666 | 10.92 | 121,165 | 30,500 | 0.59 | 9.09 | 100,941 | 50,725 |
| | FAA Major Storage Volume (cubic ft.) = | | | 71,378 | | | Mod. FAA Major Storage Volume (cubic ft.) = | | 68,408 |
| | FAA Major Storage Volume (acre-ft.) = | | | 1.6386 | | | Mod. FAA Major Storage Volume (acre-ft.) = | | 1.5704 |

UDFCD DETENTION VOLUME ESTIMATING WORKBOOK Version 2.01, Released August 2006

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**MAJOR DETENTION VOLUME BY FAA & MODIFIED FAA METHOD**
(See USDCM Volume I Runoff Chapter for description of method)

Project: Firestone Sports Complex - Phase 1
Basin ID: Detention Pond 1




UDFCD DETENTION VOLUME ESTIMATING WORKBOOK Version 2.01, Released August 2006

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## MINOR DETENTION VOLUME BY FAA & MODIFIED FAA METHOD

(See USDCM Volume I Runoff Chapter for description of method)

Project: Firestone Sports Complex - Phase 1

Basin ID: Detention Pond 1

(For catchments less than 160 acres only. For larger catchments, use hydrograph routing method)

(Note: for catchments larger than 90 acres, CUHP hydrograph and routing are recommended)

**The user must fill in all of the blue cells for these sheets to function.**

**Design Information (Input):**

| | | | |
|---|---|---|---|
| Catchment Drainage Imperviousness | $I_a$ = | 38.00 | percent |
| Catchment Drainage Area | A = | 23.3500 | acres |
| Predevelopment NRCS Soil Group | Type = | B | A, B, C, or D |
| Return Period for Detention Control | T = | 10 | years (2, 5, 10, 25, 50, or 100) |
| Time of Concentration of Watershed | Tc = | 33 | minutes |
| Allowable Unit Release Rate (See Table A) | q = | 0.23 | cfs/acre |
| One-hour Precipitation | $P_1$ = | 1.61 | inches |
| **Design Rainfall IDF Formula I = C1* P1/(C2+Tc)^C3** | | | |
| Coefficient One | $C_1$ = | 26.50 | |
| Coefficient Two | $C_2$ = | 10.00 | |
| Coefficient Three | $C_3$ = | 0.79 | |

**Determination of Average Outflow from the Basin (Calculated):**

| | | | |
|---|---|---|---|
| Runoff Coefficient | C = | 0.35 | |
| Inflow Peak Runoff | Qp-in = | 19.10 | cfs |
| Allowable Peak Outflow Rate | Qp-out = | 5.37 | cfs |
| Ratio of Qp-out/Qp-in | Ratio = | 0.28 | |

**Determination of MINOR Detention Volume Using FAA & Modified FAA Method**

5 <- Enter Rainfall Duration Incremental Increase Value Here (e.g. 5 for 5-Minutes)

| Rainfall Duration minutes (input) | Rainfall Intensity inches / hr (output) | Inflow Volume cubic feet (output) | Average Outflow (FAA, cfs) (output) | Outflow Volume (FAA, cf) (output) | Storage Volume (FAA, cf) (output) | Adjustment Factor (Modified) (output) | Average Outflow (Mod, cfs) (output) | Outflow Volume (Mod, cf) (output) | Storage Volume (Mod, cf) (output) |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 5.40 | 13,244 | 3.63 | 1,088 | 12,156 | 1.00 | 5.37 | 1,611 | 11,633 |
| 10 | 4.30 | 21,104 | 3.63 | 2,176 | 18,928 | 1.00 | 5.37 | 3,222 | 17,882 |
| 15 | 3.61 | 26,540 | 3.63 | 3,265 | 23,275 | 1.00 | 5.37 | 4,833 | 21,706 |
| 20 | 3.12 | 30,639 | 3.63 | 4,353 | 26,287 | 1.00 | 5.37 | 6,445 | 24,195 |
| 25 | 2.77 | 33,908 | 3.63 | 5,441 | 28,467 | 1.00 | 5.37 | 8,056 | 25,852 |
| 30 | 2.49 | 36,616 | 3.63 | 6,529 | 30,087 | 1.00 | 5.37 | 9,667 | 26,949 |
| 35 | 2.27 | 38,923 | 3.63 | 7,617 | 31,306 | 0.98 | 5.24 | 11,008 | 27,914 |
| 40 | 2.09 | 40,931 | 3.63 | 8,706 | 32,225 | 0.92 | 4.92 | 11,815 | 29,116 |
| 45 | 1.94 | 42,707 | 3.63 | 9,794 | 32,914 | 0.87 | 4.67 | 12,620 | 30,087 |
| 50 | 1.81 | 44,300 | 3.63 | 10,882 | 33,418 | 0.83 | 4.48 | 13,426 | 30,875 |
| 55 | 1.70 | 45,744 | 3.63 | 11,970 | 33,774 | 0.80 | 4.31 | 14,231 | 31,513 |
| 60 | 1.60 | 47,065 | 3.63 | 13,058 | 34,007 | 0.78 | 4.18 | 15,037 | 32,028 |
| 65 | 1.51 | 48,283 | 3.63 | 14,147 | 34,136 | 0.76 | 4.06 | 15,842 | 32,440 |
| 70 | 1.44 | 49,412 | 3.63 | 15,235 | 34,177 | 0.74 | 3.96 | 16,648 | 32,764 |
| 75 | 1.37 | 50,466 | 3.63 | 16,323 | 34,143 | 0.72 | 3.88 | 17,454 | 33,012 |
| 80 | 1.31 | 51,454 | 3.63 | 17,411 | 34,042 | 0.71 | 3.80 | 18,259 | 33,184 |
| 85 | 1.26 | 52,383 | 3.63 | 18,499 | 33,884 | 0.70 | 3.74 | 19,065 | 33,319 |
| 90 | 1.21 | 53,262 | 3.63 | 19,588 | 33,675 | 0.69 | 3.68 | 19,870 | 33,392 |
| 95 | 1.16 | 54,095 | 3.63 | 20,676 | 33,420 | 0.68 | 3.63 | 20,676 | 33,420 |
| 100 | 1.12 | 54,888 | 3.63 | 21,764 | 33,124 | 0.67 | 3.58 | 21,481 | 33,408 |
| 105 | 1.08 | 55,644 | 3.63 | 22,852 | 32,791 | 0.66 | 3.54 | 22,287 | 33,357 |
| 110 | 1.05 | 56,366 | 3.63 | 23,941 | 32,425 | 0.65 | 3.50 | 23,093 | 33,273 |
| 115 | 1.01 | 57,050 | 3.63 | 25,029 | 32,029 | 0.64 | 3.46 | 23,898 | 33,160 |
| 120 | 0.98 | 57,722 | 3.63 | 26,117 | 31,605 | 0.64 | 3.43 | 24,704 | 33,018 |
| 125 | 0.95 | 58,361 | 3.63 | 27,205 | 31,156 | 0.63 | 3.40 | 25,509 | 32,852 |
| 130 | 0.93 | 58,977 | 3.63 | 28,293 | 30,683 | 0.63 | 3.37 | 26,315 | 32,662 |
| 135 | 0.90 | 59,570 | 3.63 | 29,382 | 30,189 | 0.62 | 3.35 | 27,120 | 32,450 |
| 140 | 0.88 | 60,144 | 3.63 | 30,470 | 29,674 | 0.62 | 3.32 | 27,926 | 32,218 |
| 145 | 0.85 | 60,699 | 3.63 | 31,558 | 29,141 | 0.61 | 3.30 | 28,732 | 31,968 |
| 150 | 0.83 | 61,237 | 3.63 | 32,646 | 28,591 | 0.61 | 3.28 | 29,537 | 31,700 |
| 155 | 0.81 | 61,756 | 3.63 | 33,734 | 28,024 | 0.61 | 3.26 | 30,343 | 31,416 |
| 160 | 0.79 | 62,265 | 3.63 | 34,823 | 27,442 | 0.60 | 3.24 | 31,148 | 31,116 |
| 165 | 0.78 | 62,757 | 3.63 | 35,911 | 26,846 | 0.60 | 3.23 | 31,954 | 30,803 |
| 170 | 0.76 | 63,235 | 3.63 | 36,999 | 26,236 | 0.60 | 3.21 | 32,760 | 30,476 |
| 175 | 0.74 | 63,701 | 3.63 | 38,087 | 25,614 | 0.60 | 3.20 | 33,565 | 30,136 |
| 180 | 0.73 | 64,156 | 3.63 | 39,175 | 24,980 | 0.59 | 3.18 | 34,371 | 29,785 |
| 185 | 0.71 | 64,598 | 3.63 | 40,264 | 24,335 | 0.59 | 3.17 | 35,176 | 29,422 |

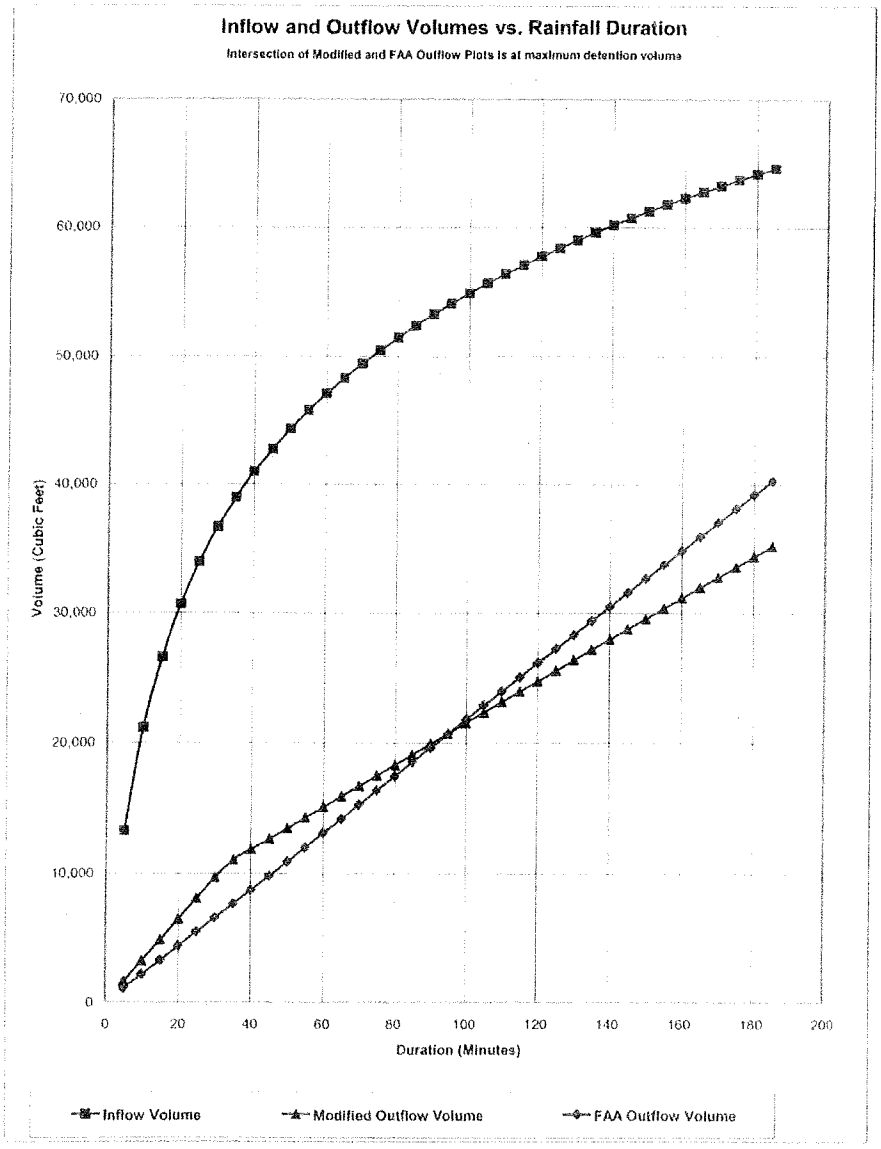
FAA Minor Storage Volume (cubic ft.) = 34,177 | Mod. FAA Minor Storage Volume (cubic ft.) = 33,420

FAA Minor Storage Volume (acre-ft.) = 0.7845 | Mod. FAA Minor Storage Volume (acre-ft.) = 0.7672

UDFCD DETENTION VOLUME ESTIMATING WORKBOOK Version 2.01, Released August 2006

**MINOR DETENTION VOLUME BY FAA & MODIFIED FAA METHOD**
(See USDCM Volume I Runoff Chapter for description of method)

Project: Firestone Sports Complex - Phase 1
Basin ID: Detention Pond 1




UDFCD DETENTION VOLUME ESTIMATING WORKBOOK Version 2.01, Released August 2006

0130.01_Pond 1_v3.xls, Modified FAA 8/16/2007 2:58 PM

# STAGE-STORAGE FOR IRREGULAR GEOMETRY

Project: Firestone Sports Complex
Basin ID: Detention Pond 1

Design Information (Input):
**From the pond site grading plan, enter water surface elevations and measured contour areas in ascending order.**

| Water Surface Elevation ft (input) | Eq-elev. Contour Area square feet (input) | Volume above Datum acre-ft (output) |
|---|---|---|
| 4862.00 | 0 | 0.00 |
| 4863.00 | 3,553 | 0.04 |
| 4864.00 | 14,254 | 0.25 |
| 4865.00 | 17,891 | 0.61 |
| 4866.00 | 22,215 | 1.07 |
| 4867.00 | 26,970 | 1.64 |
| 4868.00 | 32,447 | 2.32 |
| | | |
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| | | |

Pond 1_vol check.xls, Irregular 8/10/2007, 3:59 PM

## MAJOR DETENTION VOLUME BY FAA & MODIFIED FAA METHOD

(See USDCM Volume I Runoff Chapter for description of method)

Project: Firestone Sports Complex - Phase 1
Basin ID: Detention Pond 2

(For catchments less than 160 acres only. For larger catchments, use hydrograph routing method)
(Note: for catchments larger than 90 acres, CUHP hydrograph and routing are recommended)

**The user must fill in all of the blue cells for these sheets to function.**

**Design Information (Input):**

| | | | |
|---|---|---|---|
| Catchment Drainage Imperviousness | $I_a$ = | 59.00 | percent |
| Catchment Drainage Area | A = | 7.4000 | acres |
| Predevelopment NRCS Soil Group | Type = | B | A, B, C, or D |
| Return Period for Detention Control | T = | 100 | years (2, 5, 10, 25, 50, or 100) |
| Time of Concentration of Watershed | Tc = | 8 | minutes |
| Allowable Unit Release Rate (See Table A) | q = | 0.56 | cfs/acre |
| One-hour Precipitation | $P_1$ = | 2.70 | inches |
| **Design Rainfall IDF Formula I = C1* P1/(C2+Tc)^C3** | | | |
| Coefficient One | $C_1$ = | 28.50 | |
| Coefficient Two | $C_2$ = | 10.00 | |
| Coefficient Three | $C_3$ = | 0.70 | |

**Determination of Average Outflow from the Basin (Calculated):**

| | | | |
|---|---|---|---|
| Runoff Coefficient | C = | 0.58 | |
| Inflow Peak Runoff | Qp-in = | 32.85 | cfs |
| Allowable Peak Outflow Rate | Qp-out = | 4.14 | cfs |
| Ratio of Qp-out/Qp-in | Ratio = | 0.13 | |

**Determination of MAJOR Detention Volume Using FAA & Modified FAA Method**

5 <- Enter Rainfall Duration Incremental Increase Value Here (e.g. 5 for 5-Minutes)

| Rainfall Duration minutes (input) | Rainfall Intensity inches / hr (output) | Inflow Volume cubic feet (output) | Average Outflow (FAA, cfs) (output) | Outflow Volume (FAA, cf) (output) | Storage Volume (FAA, cf) (output) | Adjustment Factor (Modified) (output) | Average Outflow (Mod, cfs) (output) | Outflow Volume (Mod, cf) (output) | Storage Volume (Mod, cf) (output) |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 9.06 | 11,263 | 2.23 | 668 | 10,595 | 1.00 | 4.14 | 1,243 | 10,019 |
| 10 | 7.22 | 17,946 | 2.23 | 1,335 | 16,611 | 0.89 | 3.68 | 2,208 | 15,738 |
| 15 | 6.05 | 22,568 | 2.23 | 2,003 | 20,566 | 0.76 | 3.14 | 2,830 | 19,738 |
| 20 | 5.24 | 26,055 | 2.23 | 2,670 | 23,384 | 0.69 | 2.86 | 3,451 | 22,603 |
| 25 | 4.64 | 28,834 | 2.23 | 3,338 | 25,496 | 0.66 | 2.72 | 4,073 | 24,761 |
| 30 | 4.17 | 31,137 | 2.23 | 4,005 | 27,132 | 0.63 | 2.61 | 4,694 | 26,442 |
| 35 | 3.80 | 33,099 | 2.23 | 4,673 | 28,426 | 0.61 | 2.53 | 5,316 | 27,783 |
| 40 | 3.50 | 34,806 | 2.23 | 5,340 | 29,466 | 0.60 | 2.47 | 5,938 | 28,668 |
| 45 | 3.25 | 36,317 | 2.23 | 6,008 | 30,309 | 0.59 | 2.43 | 6,559 | 29,758 |
| 50 | 3.03 | 37,671 | 2.23 | 6,675 | 30,996 | 0.58 | 2.39 | 7,181 | 30,491 |
| 55 | 2.84 | 38,899 | 2.23 | 7,343 | 31,556 | 0.57 | 2.36 | 7,802 | 31,097 |
| 60 | 2.68 | 40,022 | 2.23 | 8,010 | 32,012 | 0.56 | 2.34 | 8,424 | 31,599 |
| 65 | 2.54 | 41,058 | 2.23 | 8,678 | 32,380 | 0.56 | 2.32 | 9,046 | 32,012 |
| 70 | 2.41 | 42,018 | 2.23 | 9,346 | 32,673 | 0.56 | 2.30 | 9,667 | 32,351 |
| 75 | 2.30 | 42,914 | 2.23 | 10,013 | 32,901 | 0.55 | 2.29 | 10,289 | 32,625 |
| 80 | 2.20 | 43,754 | 2.23 | 10,681 | 33,073 | 0.55 | 2.27 | 10,910 | 32,844 |
| 85 | 2.11 | 44,545 | 2.23 | 11,348 | 33,197 | 0.55 | 2.26 | 11,532 | 33,013 |
| 90 | 2.02 | 45,292 | 2.23 | 12,016 | 33,276 | 0.54 | 2.25 | 12,154 | 33,139 |
| 95 | 1.95 | 46,001 | 2.23 | 12,683 | 33,317 | 0.54 | 2.24 | 12,775 | 33,225 |
| 100 | 1.88 | 46,674 | 2.23 | 13,351 | 33,324 | 0.54 | 2.23 | 13,397 | 33,278 |
| 105 | 1.81 | 47,317 | 2.23 | 14,018 | 33,299 | 0.54 | 2.23 | 14,018 | 33,299 |
| 110 | 1.75 | 47,931 | 2.23 | 14,686 | 33,245 | 0.54 | 2.22 | 14,640 | 33,291 |
| 115 | 1.70 | 48,520 | 2.23 | 15,353 | 33,166 | 0.53 | 2.21 | 15,262 | 33,258 |
| 120 | 1.65 | 49,085 | 2.23 | 16,021 | 33,064 | 0.53 | 2.21 | 15,883 | 33,202 |
| 125 | 1.60 | 49,628 | 2.23 | 16,688 | 32,939 | 0.53 | 2.20 | 16,505 | 33,123 |
| 130 | 1.55 | 50,151 | 2.23 | 17,356 | 32,795 | 0.53 | 2.20 | 17,126 | 33,025 |
| 135 | 1.51 | 50,656 | 2.23 | 18,024 | 32,633 | 0.53 | 2.19 | 17,748 | 32,906 |
| 140 | 1.47 | 51,144 | 2.23 | 18,691 | 32,453 | 0.53 | 2.19 | 18,370 | 32,775 |
| 145 | 1.43 | 51,616 | 2.23 | 19,359 | 32,258 | 0.53 | 2.18 | 18,991 | 32,625 |
| 150 | 1.40 | 52,073 | 2.23 | 20,026 | 32,047 | 0.53 | 2.18 | 19,613 | 32,461 |
| 155 | 1.36 | 52,517 | 2.23 | 20,694 | 31,823 | 0.53 | 2.18 | 20,234 | 32,283 |
| 160 | 1.33 | 52,947 | 2.23 | 21,361 | 31,586 | 0.52 | 2.17 | 20,856 | 32,092 |
| 165 | 1.30 | 53,366 | 2.23 | 22,029 | 31,337 | 0.52 | 2.17 | 21,478 | 31,888 |
| 170 | 1.27 | 53,773 | 2.23 | 22,696 | 31,077 | 0.52 | 2.17 | 22,099 | 31,674 |
| 175 | 1.24 | 54,169 | 2.23 | 23,364 | 30,805 | 0.52 | 2.16 | 22,721 | 31,448 |
| 180 | 1.22 | 54,555 | 2.23 | 24,031 | 30,524 | 0.52 | 2.16 | 23,342 | 31,213 |
| 185 | 1.19 | 54,932 | 2.23 | 24,699 | 30,233 | 0.52 | 2.16 | 23,964 | 30,968 |

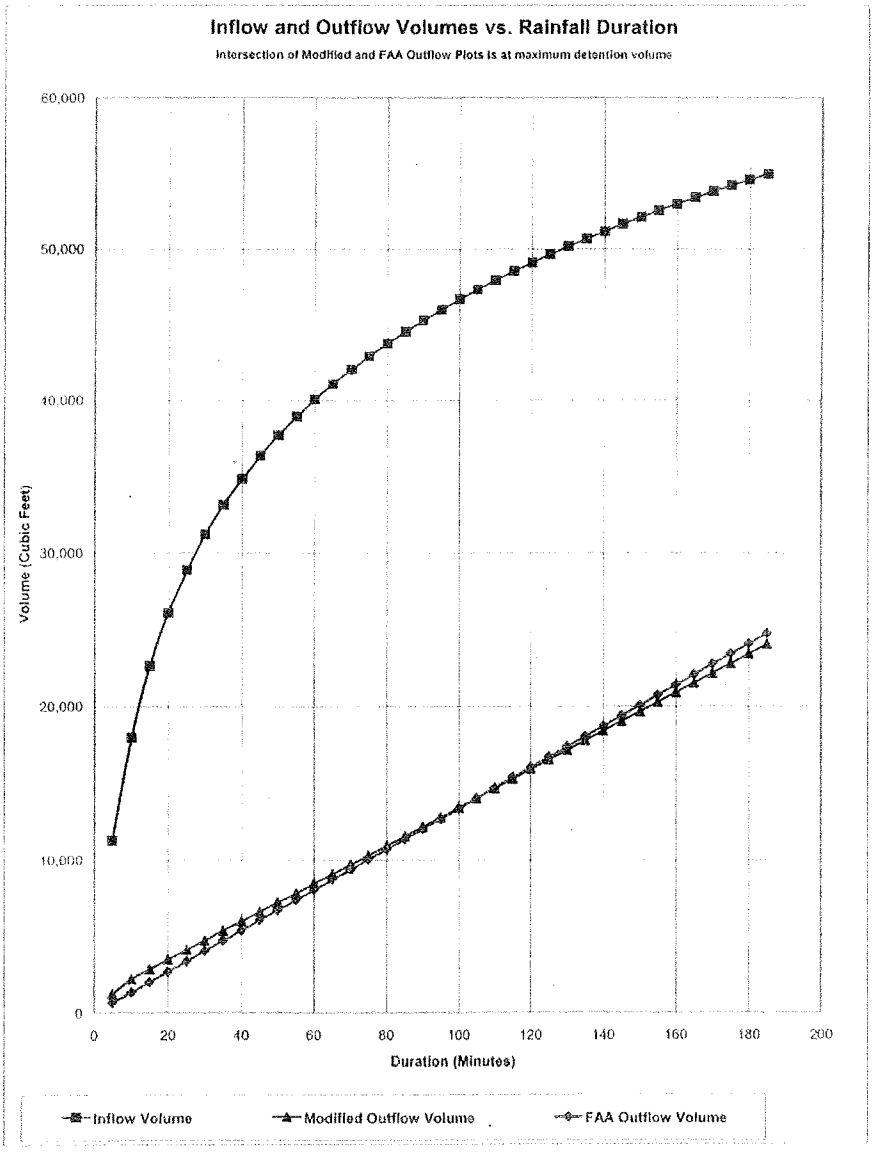
| | | | |
|---|---|---|---|
| FAA Major Storage Volume (cubic ft.) = | 33,324 | Mod. FAA Major Storage Volume (cubic ft.) = | 33,299 |
| FAA Major Storage Volume (acre-ft.) = | 0.7650 | Mod. FAA Major Storage Volume (acre-ft.) = | 0.7644 |

UDFCD DETENTION VOLUME ESTIMATING WORKBOOK Version 2.01, Released August 2006

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**MAJOR DETENTION VOLUME BY FAA & MODIFIED FAA METHOD**
**(See USDCM Volume I Runoff Chapter for description of method)**

Project: Firestone Sports Complex - Phase 1
Basin ID: Detention Pond 2




UDFCD DETENTION VOLUME ESTIMATING WORKBOOK Version 2.01, Released August 2006

0130.01_Pond 2_vol.xls, Modified FAA 9/10/2007, 3:56 PM

## MINOR DETENTION VOLUME BY FAA & MODIFIED FAA METHOD

**(See USDCM Volume I Runoff Chapter for description of method)**

**Project:** Firestone Sports Complex - Phase 1
**Basin ID:** Detention Pond 2

**(For catchments less than 160 acres only. For larger catchments, use hydrograph routing method)**
**(Note: for catchments larger than 90 acres, CUHP hydrograph and routing are recommended)**

**The user must fill in all of the blue cells for these sheets to function.**

**Design Information (Input):**

| | | | |
|---|---|---|---|
| Catchment Drainage Imperviousness | $I_a$ = | 59.00 | percent |
| Catchment Drainage Area | A = | 7.4000 | acres |
| Predevelopment NRCS Soil Group | Type = | B | A, B, C, or D |
| Return Period for Detention Control | T = | 10 | years (2, 5, 10, 25, 50, or 100) |
| Time of Concentration of Watershed | Tc = | 8 | minutes |
| Allowable Unit Release Rate (See Table A) | q = | 0.23 | cfs/acre |
| One-hour Precipitation | $P_1$ = | 1.81 | inches |
| **Design Rainfall IDF Formula I = C1* P1/(C2+Tc)^C3** | | | |
| Coefficient One | $C_1$ = | 28.50 | |
| Coefficient Two | $C_2$ = | 10.00 | |
| Coefficient Three | $C_3$ = | 0.79 | |

**Determination of Average Outflow from the Basin (Calculated):**

| | | | |
|---|---|---|---|
| Runoff Coefficient | C = | 0.45 | |
| Inflow Peak Runoff | Qp-in = | 15.74 | cfs |
| Allowable Peak Outflow Rate | Qp out = | 1.70 | cfs |
| Ratio of Qp-out/Qp-in | Ratio = | 0.11 | |

**Determination of MINOR Detention Volume Using FAA & Modified FAA Method**

5 <- Enter Rainfall Duration Incremental Increase Value Here (e.g. 5 for 5-Minutes)

| Rainfall Duration minutes (input) | Rainfall Intensity inches / hr (output) | Inflow Volume cubic feet (output) | Average Outflow (FAA, cfs) (output) | Outflow Volume (FAA, cf) (output) | Storage Volume (FAA, cf) (output) | Adjustment Factor (Modified) (output) | Average Outflow (Mod, cfs) (output) | Outflow Volume (Mod, cf) (output) | Storage Volume (Mod, cf) (output) |
|---|---|---|---|---|---|---|---|---|---|
| 120 | 0.98 | 23,520 | 0.90 | 6,508 | 17,012 | 0.53 | 0.91 | 6,523 | 16,996 |
| 125 | 0.95 | 23,780 | 0.90 | 6,779 | 17,001 | 0.53 | 0.90 | 6,779 | 17,001 |
| 130 | 0.93 | 24,031 | 0.90 | 7,050 | 16,981 | 0.53 | 0.90 | 7,034 | 16,997 |
| 135 | 0.90 | 24,273 | 0.90 | 7,321 | 16,952 | 0.53 | 0.90 | 7,289 | 16,983 |
| 140 | 0.88 | 24,507 | 0.90 | 7,592 | 16,914 | 0.53 | 0.90 | 7,545 | 16,962 |
| 145 | 0.85 | 24,733 | 0.90 | 7,863 | 16,869 | 0.53 | 0.90 | 7,800 | 16,933 |
| 150 | 0.83 | 24,952 | 0.90 | 8,134 | 16,817 | 0.53 | 0.90 | 8,055 | 16,897 |
| 155 | 0.81 | 25,164 | 0.90 | 8,406 | 16,759 | 0.53 | 0.89 | 8,311 | 16,854 |
| 160 | 0.79 | 25,371 | 0.90 | 8,677 | 16,694 | 0.52 | 0.89 | 8,566 | 16,805 |
| 165 | 0.78 | 25,571 | 0.90 | 8,948 | 16,623 | 0.52 | 0.89 | 8,821 | 16,750 |
| 170 | 0.76 | 25,766 | 0.90 | 9,219 | 16,547 | 0.52 | 0.89 | 9,078 | 16,690 |
| 175 | 0.74 | 25,956 | 0.90 | 9,490 | 16,466 | 0.52 | 0.89 | 9,332 | 16,624 |
| 180 | 0.73 | 26,141 | 0.90 | 9,761 | 16,380 | 0.52 | 0.89 | 9,587 | 16,554 |
| 185 | 0.71 | 26,321 | 0.90 | 10,033 | 16,289 | 0.52 | 0.89 | 9,842 | 16,479 |
| 190 | 0.70 | 26,498 | 0.90 | 10,304 | 16,194 | 0.52 | 0.89 | 10,098 | 16,400 |
| 195 | 0.68 | 26,670 | 0.90 | 10,575 | 16,095 | 0.52 | 0.88 | 10,353 | 16,317 |
| 200 | 0.67 | 26,838 | 0.90 | 10,846 | 15,992 | 0.52 | 0.88 | 10,608 | 16,229 |
| 205 | 0.66 | 27,002 | 0.90 | 11,117 | 15,885 | 0.52 | 0.88 | 10,864 | 16,138 |
| 210 | 0.65 | 27,163 | 0.90 | 11,388 | 15,774 | 0.52 | 0.88 | 11,119 | 16,044 |
| 215 | 0.64 | 27,320 | 0.90 | 11,659 | 15,661 | 0.52 | 0.88 | 11,374 | 15,946 |
| 220 | 0.63 | 27,474 | 0.90 | 11,931 | 15,544 | 0.52 | 0.88 | 11,629 | 15,845 |
| 225 | 0.61 | 27,625 | 0.90 | 12,202 | 15,423 | 0.52 | 0.88 | 11,885 | 15,740 |
| 230 | 0.60 | 27,773 | 0.90 | 12,473 | 15,300 | 0.52 | 0.88 | 12,140 | 15,633 |
| 235 | 0.59 | 27,919 | 0.90 | 12,744 | 15,175 | 0.52 | 0.88 | 12,395 | 15,523 |
| 240 | 0.59 | 28,061 | 0.90 | 13,015 | 15,046 | 0.52 | 0.88 | 12,651 | 15,410 |
| 245 | 0.58 | 28,201 | 0.90 | 13,286 | 14,915 | 0.52 | 0.88 | 12,906 | 15,295 |
| 250 | 0.57 | 28,339 | 0.90 | 13,557 | 14,781 | 0.52 | 0.88 | 13,161 | 15,177 |
| 255 | 0.56 | 28,474 | 0.90 | 13,829 | 14,645 | 0.52 | 0.88 | 13,417 | 15,057 |
| 260 | 0.55 | 28,606 | 0.90 | 14,100 | 14,507 | 0.51 | 0.88 | 13,672 | 14,935 |
| 265 | 0.54 | 28,737 | 0.90 | 14,371 | 14,366 | 0.51 | 0.88 | 13,927 | 14,810 |
| 270 | 0.54 | 28,865 | 0.90 | 14,642 | 14,223 | 0.51 | 0.88 | 14,182 | 14,683 |
| 275 | 0.53 | 28,992 | 0.90 | 14,913 | 14,078 | 0.51 | 0.88 | 14,438 | 14,554 |
| 280 | 0.52 | 29,116 | 0.90 | 15,184 | 13,932 | 0.51 | 0.87 | 14,693 | 14,423 |
| 285 | 0.51 | 29,238 | 0.90 | 15,455 | 13,783 | 0.51 | 0.87 | 14,948 | 14,290 |
| 290 | 0.51 | 29,359 | 0.90 | 15,727 | 13,632 | 0.51 | 0.87 | 15,204 | 14,155 |
| 295 | 0.50 | 29,478 | 0.90 | 15,998 | 13,480 | 0.51 | 0.87 | 15,459 | 14,019 |
| 300 | 0.49 | 29,595 | 0.90 | 16,269 | 13,326 | 0.51 | 0.87 | 15,714 | 13,880 |

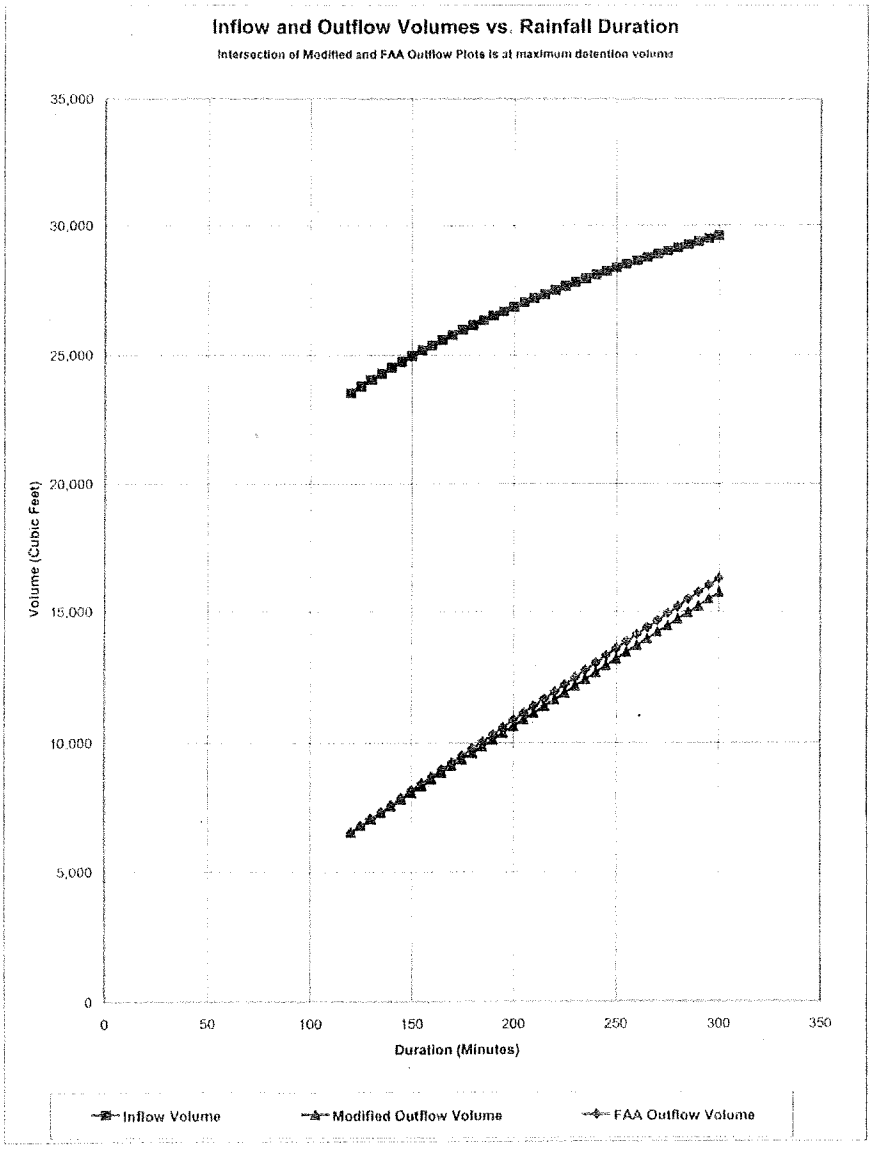
**FAA Minor Storage Volume (cubic ft.) =** 17,012
**FAA Minor Storage Volume (acre-ft.) =** 0.3905

**Mod. FAA Minor Storage Volume (cubic ft.) =** 17,001
**Mod. FAA Minor Storage Volume (acre-ft.) =** 0.3903

UDFCD DETENTION VOLUME ESTIMATING WORKBOOK Version 2.01, Released August 2006

**MINOR DETENTION VOLUME BY FAA & MODIFIED FAA METHOD**
(See USDCM Volume I Runoff Chapter for description of method)

Project: Firestone Sports Complex - Phase 1
Basin ID: Detention Pond 2




UDFCD DETENTION VOLUME ESTIMATING WORKBOOK Version 2.01, Released August 2006

0130-01 Pond 2_v01.xls, Modified FAA 8/10/2007, 3:58 PM

# STAGE-STORAGE FOR IRREGULAR GEOMETRY

Project: Firestone Sports Complex
Basin ID: Detention Pond 2

Design Information (Input):
**From the pond site grading plan, enter water surface elevations and measured contour areas in ascending order.**

| Water Surface Elevation ft (input) | Eq-elev. Contour Area square feet (input) | Volume above Datum acre-ft (output) |
|---|---|---|
| 4871.00 | 15 | 0.00 |
| 4872.00 | 1,652 | 0.02 |
| 4873.00 | 5,336 | 0.10 |
| 4874.00 | 14,449 | 0.33 |
| 4875.00 | 23,784 | 0.77 |
| 4876.00 | 33,047 | 1.42 |
| | | |
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| | | | | | |
|---|---|---|---|---|---|
| 311 | 799. | (DIRECT FLOW) | 2 | 15. | |
| 204 | 103. | (DIRECT FLOW) | 0 | 50. | |
| 602 | 15. | .1 | 1.6 | 1 | 15. |
| 703 | 5. | .4 | 0 | 40. | |
| 105 | 243. | (DIRECT FLOW) | 1 | 10. | |
| 104 | 842. | (DIRECT FLOW) | 2 | 15. | |
| 702 | 15. | (DIRECT FLOW) | 1 | 15. | |
| 303 | 5. | (DIRECT FLOW) | 0 | 40. | |
| 236 | 75. | (DIRECT FLOW) | 0 | 55. | |
| 401 | 926. | 2.7 | 2 | 25. | |
| 402 | 11. | .4 | 1 | 50. | |
| 136 | 37. | .5 | 1 | 40. | |
| 231 | 29. | (DIRECT FLOW) | 0 | 50. | |
| 304 | 926. | (DIRECT FLOW) | 2 | 25. | |
| 302 | 11. | (DIRECT FLOW) | 1 | 50. | |
| 201 | 310. | (DIRECT FLOW) | 0 | 50. | |
| 224 | 171. | (DIRECT FLOW) | 0 | 50. | |
| 336 | 37. | (DIRECT FLOW) | 1 | 40. | |
| 235 | 437. | (DIRECT FLOW) | 1 | 0. | |
| 131 | 25. | 1.7 | 1 | 5. | |
| 101 | 989. | (DIRECT FLOW) | 2 | 20. | |
| 124 | 102. | .8 | 1 | 30. | |
| 238 | 171. | (DIRECT FLOW) | 0 | 55. | |
| 135 | 326. | 1.3 | 1 | 35. | |
| 230 | 26. | (DIRECT FLOW) | 0 | 45. | |
| 331 | 25. | (DIRECT FLOW) | 1 | 5. | |
| 229 | 38. | (DIRECT FLOW) | 1 | 0. | |
| 501 | 829. | .1 | 110.2 | 3 | 0. |
| 324 | 102. | (DIRECT FLOW) | 1 | 30. | |
| 223 | 504. | (DIRECT FLOW) | 1 | 5. | |
| 222 | 206. | (DIRECT FLOW) | 1 | 5. | |
| 138 | 73. | .8 | 1 | 55. | |
| 335 | 326. | (DIRECT FLOW) | 1 | 35. | |
| 234 | 372. | (DIRECT FLOW) | 1 | 5. | |
| 233 | 38. | (DIRECT FLOW) | 0 | 55. | |
| 130 | 11. | .4 | 1 | 35. | |
| 129 | 51. | .9 | 1 | 25. | |
| 701 | 825. | 2.2 | 3 | 0. | |
| 123 | 581. | (DIRECT FLOW) | 1 | 5. | |
| 122 | 206. | (DIRECT FLOW) | 1 | 5. | |
| 338 | 73. | (DIRECT FLOW) | 1 | 55. | |
| 237 | 582. | (DIRECT FLOW) | 1 | 5. | |
| 134 | 641. | (DIRECT FLOW) | 1 | 20. | |
| 133 | 38. | (DIRECT FLOW) | 0 | 55. | |
| 330 | 11. | (DIRECT FLOW) | 1 | 35. | |

# Final Drainage Study
# for
# St. Vrain Ranch, Filing III
# Firestone, Colorado

September 18, 2000

Prepared For:
St. Vrain Partners, LLC
Boulder, Colorado 80304

Prepared By:

NORTHERN ENGINEERING SERVICES, INC
Northern Engineering Services, Inc
420 S. Howes, Suite 202
Fort Collins, Colorado 80521
Phone: (970)221-4158

Project Number: SVR; 2003.00

NORTHERN
ENGINEERING
SERVICES INC

September 18, 2000

TST, Inc.
Attn.: Mr. David B. Lindsay, P.E.
748 Whalers Way
Building D
Fort Collins, Colorado 80525

**RE:** St. Vrain Ranch, Filing III
Weld County, Colorado

Dear Mr. Lindsay,

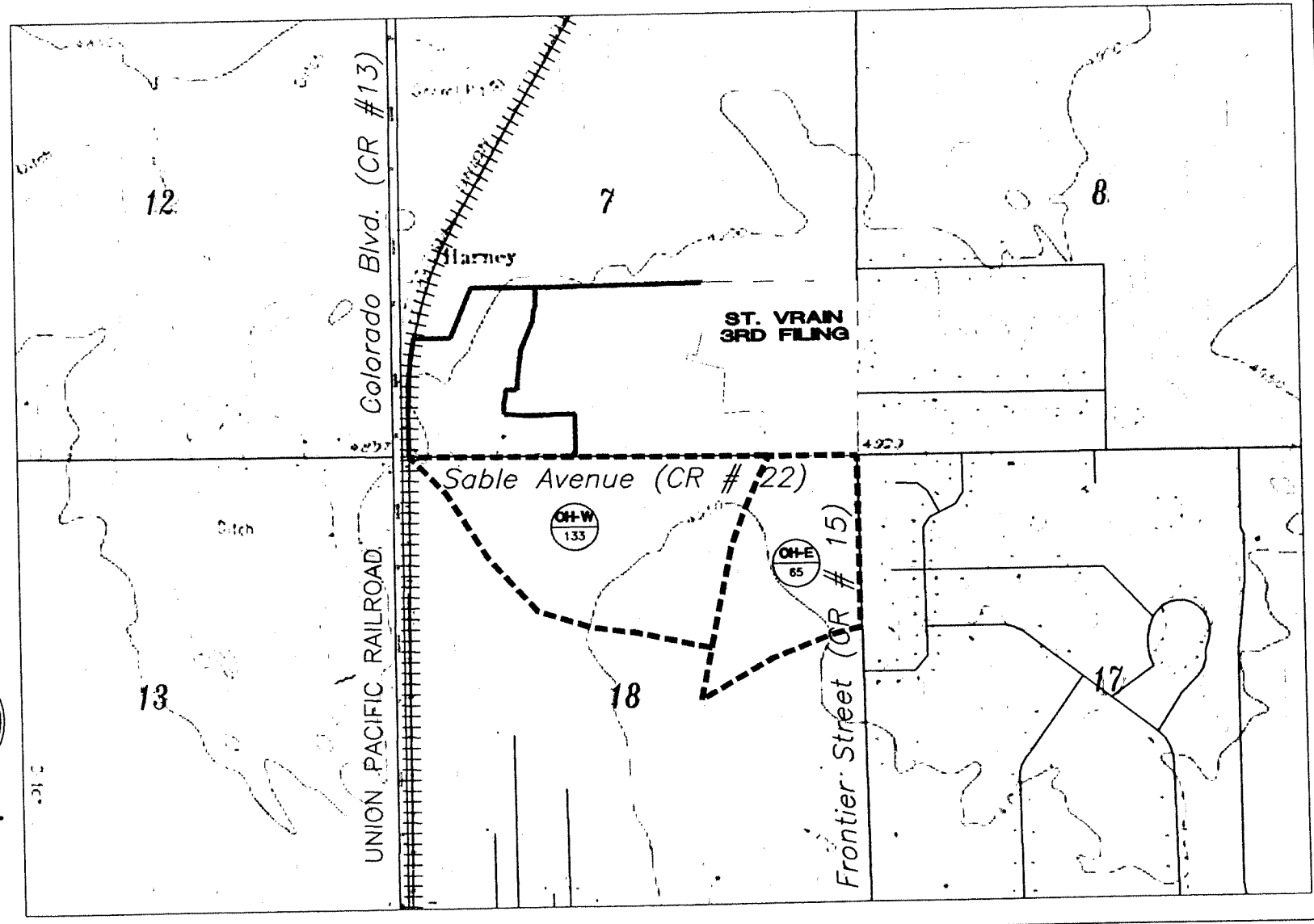
Northern Engineering Services, Inc. is pleased to resubmit this Final Drainage Study for St. Vrain Ranch, Filing 3 for your review. This report was prepared in compliance with technical criteria set forth by the Town of Firestone in the Design Criteria and Construction Standards Manual. We acknowledge that the Town of Firestone's review of this study is only for general conformance with submittal requirements, current design criteria and standard engineering principles and practices.

If you should have any questions or comments as you review this report, please feel free to contact me at your convenience.

Sincerely,
NORTHERN ENGINEERING SERVICES, INC.

Melissa L. Chalona, P.E.
Project Engineer

420 SOUTH HOWES, SUITE 202, FORT COLLINS, COLORADO 80521, (970) 221-4158, FAX (970) 221-4159




OFFSITE BASINS

N.T.S.

| Revisions | By | Date |
|---|---|---|
| | | |

NORTHERN ENGINEERING SERVICES
420 SOUTH HOWES SUITE 202, FT. COLLINS, COLORADO 80521
(970) 221-4158

Project: SVR: 2003.00
Print Date:
SCALE: N.A.
DESIGNER: MLC
CHECKED BY: N.A.
DRAFTSMAN: ACAD
PREPARED: 03/08/00

ST. VRAIN RANCH
OFFSITE BASINS

Sheet 1/1 Sheets

OUTLET STRUCTURE REPORT

RECORD NUMBER : 1
TYPE : CIRCULAR ORIFICE
DESCRIPTION : **Pond 1 - 10 Year Release Orifice (3.60")**

[RATING CURVE LIMIT]

| | | |
|---|---|---|
| Minimum Elevation | = | 4898.58 (ft) |
| Maximum Elevation | = | 4906.00 (ft) |
| Elevation Increment | = | 0.10 (ft) |

[OUTLET STRUCTURE INFORMATION]

| | | |
|---|---|---|
| Radius | = | 0.15 (ft) |
| Coefficient Co | = | 0.60000 |
| Invert Elevation | = | 4898.58 (ft) |
| # of Openings | = | 1 |

[CIRCULAR ORIFICE EQUATION]

Q = Co*A*[2gh]/k]^0.5
A = Wetted area, (sqft)
K = 1

[Culvert Weir Discharge Value vs. Stage]
(the elevation increment is 0.1)

| STAGE | ELEVATION (ft) | FLOW (cfs) |
|---|---|---|
| 0.10 | 4898.68 | 0.02 |
| 0.20 | 4898.78 | 0.08 |
| 0.30 | 4898.88 | 0.13 |
| 0.40 | 4898.98 | 0.17 |
| 0.50 | 4899.08 | 0.20 |
| 0.60 | 4899.18 | 0.23 |
| 0.70 | 4899.28 | 0.25 |
| 0.80 | 4899.38 | 0.27 |
| 0.90 | 4899.48 | 0.29 |
| 1.00 | 4899.58 | 0.31 |
| 1.10 | 4899.68 | 0.33 |
| 1.20 | 4899.78 | 0.35 |
| 1.30 | 4899.88 | 0.36 |
| 1.40 | 4899.98 | 0.38 |
| 1.50 | 4900.08 | 0.40 |
| 1.60 | 4900.18 | 0.41 |
| 1.70 | 4900.28 | 0.42 |
| 1.80 | 4900.38 | 0.44 |
| 1.90 | 4900.48 | 0.45 |
| 2.00 | 4900.58 | 0.46 |

[Culvert Weir Discharge Value vs. Stage]
(the elevation increment is 0.1)

| STAGE | ELEVATION (ft) | FLOW (cfs) |
|---|---|---|
| 2.10 | 4900.68 | 0.47 |
| 2.20 | 4900.78 | 0.49 |
| 2.30 | 4900.88 | 0.50 |
| 2.40 | 4900.98 | 0.51 |
| 2.50 | 4901.08 | 0.52 |
| 2.60 | 4901.18 | 0.53 |
| 2.70 | 4901.28 | 0.54 |
| 2.80 | 4901.38 | 0.55 |
| 2.90 | 4901.48 | 0.56 |
| 3.00 | 4901.58 | 0.57 |
| 3.10 | 4901.68 | 0.58 |
| 3.20 | 4901.78 | 0.59 |
| 3.30 | 4901.88 | 0.60 |
| 3.40 | 4901.98 | 0.61 |
| 3.50 | 4902.08 | 0.62 |
| 3.60 | 4902.18 | 0.63 |
| 3.70 | 4902.28 | 0.64 |
| 3.80 | 4902.38 | 0.65 |
| 3.90 | 4902.48 | 0.66 |
| 4.00 | 4902.58 | 0.67 |
| 4.10 | 4902.68 | 0.68 |
| 4.20 | 4902.78 | 0.68 |
| 4.30 | 4902.88 | 0.69 |
| 4.40 | 4902.98 | 0.70 |
| 4.50 | 4903.08 | 0.71 |
| 4.60 | 4903.18 | 0.72 |
| 4.70 | 4903.28 | 0.73 |
| 4.80 | 4903.38 | 0.73 |
| 4.90 | 4903.48 | 0.74 |
| 5.00 | 4903.58 | 0.75 |
| 5.10 | 4903.68 | 0.76 |
| 5.20 | 4903.78 | 0.76 |
| 5.30 | 4903.88 | 0.77 |
| 5.40 | 4903.98 | 0.78 |
| 5.50 | 4904.08 | 0.79 |
| 5.60 | 4904.18 | 0.79 |
| 5.70 | 4904.28 | 0.80 |
| 5.80 | 4904.38 | 0.81 |
| 5.90 | 4904.48 | 0.82 |
| 6.00 | 4904.58 | 0.82 |
| 6.10 | 4904.68 | 0.83 |
| 6.20 | 4904.78 | 0.84 |
| 6.30 | 4904.88 | 0.84 |
| 6.40 | 4904.98 | 0.85 |
| 6.50 | 4905.08 | 0.86 |

[Culvert Weir Discharge Value vs. Stage]
(the elevation increment is 0.1)

| STAGE | ELEVATION (ft) | FLOW (cfs) |
|---|---|---|
| 6.60 | 4905.18 | 0.86 |
| 6.70 | 4905.28 | 0.87 |
| 6.80 | 4905.38 | 0.88 |
| 6.90 | 4905.48 | 0.88 |
| 7.00 | 4905.58 | 0.89 |
| 7.10 | 4905.68 | 0.90 |
| 7.20 | 4905.78 | 0.90 |
| 7.30 | 4905.88 | 0.91 |
| 7.40 | 4905.98 | 0.92 |
| 7.42 | 4906.00 | 0.92 |

OUTLET STRUCTURE REPORT

RECORD NUMBER : 1
TYPE : TRAPEZOIDAL WEIR
DESCRIPTION : **Pond 1 Weir - 100 yr Release**

[RATING CURVE LIMIT]

| | | |
|---|---|---|
| Minimum Elevation | = | 4902.60 (ft) |
| Maximum Elevation | = | 4906.00 (ft) |
| Elevation Increment | = | 0.10 (ft) |

[OUTLET STRUCTURE INFORMATION]

| | | |
|---|---|---|
| Weir Angle | = | 151.93000 (deg) |
| Crest Elevation | = | 4902.60 (ft) |
| Crest Length | = | 6.00 (ft) |
| Coefficient Cw | = | 3.57000 |
| Exponential | = | 1.50000 |

[TRAP EQUATION]

Q = Cw*tan(ang/2)H^exp
H = Headwater depth above inlet control section invert, (ft)
ang = Weir Angle

[Culvert Weir Discharge Value vs. Stage]
(the elevation increment is 0.1)

| STAGE | ELEVATION (ft) | FLOW (cfs) |
|---|---|---|
| 0.10 | 4902.70 | 0.71 |
| 0.20 | 4902.80 | 2.12 |
| 0.30 | 4902.90 | 4.08 |
| 0.40 | 4903.00 | 6.58 |
| 0.50 | 4903.10 | 9.59 |
| 0.60 | 4903.20 | 13.14 |
| 0.70 | 4903.30 | 17.23 |
| 0.80 | 4903.40 | 21.87 |
| 0.90 | 4903.50 | 27.07 |
| 1.00 | 4903.60 | 32.85 |
| 1.10 | 4903.70 | 39.21 |
| 1.20 | 4903.80 | 46.18 |
| 1.30 | 4903.90 | 53.76 |
| 1.40 | 4904.00 | 61.98 |
| 1.50 | 4904.10 | 70.83 |
| 1.60 | 4904.20 | 80.35 |
| 1.70 | 4904.30 | 90.53 |
| 1.80 | 4904.40 | 101.39 |
| 1.90 | 4904.50 | 112.95 |
| 2.00 | 4904.60 | 125.21 |
| 2.10 | 4904.70 | 138.20 |
| 2.20 | 4904.80 | 151.92 |
| 2.30 | 4904.90 | 166.38 |
| 2.40 | 4905.00 | 181.59 |
| 2.50 | 4905.10 | 197.57 |
| 2.60 | 4905.20 | 214.34 |
| 2.70 | 4905.30 | 231.89 |
| 2.80 | 4905.40 | 250.24 |
| 2.90 | 4905.50 | 269.41 |
| 3.00 | 4905.60 | 289.40 |
| 3.10 | 4905.70 | 310.23 |
| 3.20 | 4905.80 | 331.90 |
| 3.30 | 4905.90 | 354.43 |
| 3.40 | 4906.00 | 377.82 |

HYDROGRAPH REPORT

RECORD NUMBER : 6
TYPE : COMBINE
DESCRIPTION : **Pond 1 Inflow (Onsite and Offsite)**

[HYDROGRAPH INFORMATION]

| | | | |
|---|---|---|---|
| Peak Discharge | = | 51.88 | (cfs) |
| Volume | = | 3.93 | (acft) |
| Time Interval | = | 1.00 | (min) |
| Time to Peak | = | 41.00 | (min) |
| Time of Base | = | 116.00 | (min) |

[COMBINE HYDROGRAPH RECORD #]

HYDROGRAPH # 2 TYPE : MOD. RATIONAL
DESCRIPTION : Design Point 15

| | | | |
|---|---|---|---|
| Peak Discharge | = | 18.72 | (cfs) |
| Time to Peak | = | 36.70 | (min) |
| Time Interval | = | 0.10 | (min) |

HYDROGRAPH # 5 TYPE : MOD. RATIONAL
DESCRIPTION : Offsite Basin O-HE

| | | | |
|---|---|---|---|
| Peak Discharge | = | 7.06 | (cfs) |
| Time to Peak | = | 43.50 | (min) |
| Time Interval | = | 0.10 | (min) |

HYDROGRAPH # 4 TYPE : MOD. RATIONAL
DESCRIPTION : Design Point 12

| | | | |
|---|---|---|---|
| Peak Discharge | = | 1.76 | (cfs) |
| Time to Peak | = | 25.90 | (min) |
| Time Interval | = | 0.10 | (min) |

HYDROGRAPH # 1 TYPE : MOD. RATIONAL
DESCRIPTION : Design Point 14

| | | | |
|---|---|---|---|
| Peak Discharge | = | 26.70 | (cfs) |
| Time to Peak | = | 40.80 | (min) |
| Time Interval | = | 0.10 | (min) |

I14



RESERVOIR REPORT

RECORD NUMBER : 1
STORAGE TYPE : MAN STAGE/STOR
DISCHARGE TYPE : COMP STAGE/DIS
DESCRIPTION : **Pond 1 - 10 year Stage/Storage (Orifice Only)**

[RATING CURVE LIMIT]

| | | |
|---|---|---|
| Minimum Elevation | = | 4898.58 (ft) |
| Maximum Elevation | = | 4906.00 (ft) |
| Elevation Increment | = | 0.10 (ft) |

[STAGE STORAGE INFORMATION]

Input file = NULL
Output file = NULL

[Manual Storage vs. Elevation]

| ELEVATION (ft) | STORAGE (cuft) |
|---|---|
| 4898.60 | 0.01 |
| 4898.70 | 0.50 |
| 4898.80 | 1.92 |
| 4898.90 | 4.56 |
| 4899.00 | 8.69 |
| 4899.10 | 89.22 |
| 4899.20 | 245.79 |
| 4899.30 | 486.05 |
| 4899.40 | 816.08 |
| 4899.50 | 1243.32 |
| 4899.60 | 1774.81 |
| 4899.70 | 2417.59 |
| 4899.80 | 3180.81 |
| 4899.90 | 4067.69 |
| 4900.00 | 5087.03 |
| 4900.10 | 6997.23 |
| 4900.20 | 9131.53 |
| 4900.30 | 11496.74 |
| 4900.40 | 14095.24 |
| 4900.50 | 16933.26 |
| 4900.60 | 20015.95 |
| 4900.70 | 23348.44 |
| 4900.80 | 26940.67 |
| 4900.90 | 30788.84 |
| 4901.00 | 34902.23 |
| 4901.10 | 40429.63 |
| 4901.20 | 46247.30 |

[Manual Storage vs. Elevation]

| ELEVATION (ft) | STORAGE (cuft) |
|---|---|
| 4901.30 | 52359.33 |
| 4901.40 | 58764.08 |
| 4901.50 | 65464.91 |
| 4901.60 | 72463.77 |
| 4901.70 | 79762.59 |
| 4901.80 | 87369.13 |
| 4901.90 | 95274.42 |
| 4902.00 | 103485.48 |
| 4902.10 | 112143.41 |
| 4902.20 | 121008.63 |
| 4902.30 | 130089.20 |
| 4902.40 | 139388.99 |
| 4902.50 | 148915.51 |
| 4902.60 | 158675.21 |
| 4902.70 | 168674.57 |
| 4902.80 | 178924.65 |
| 4902.90 | 189423.38 |
| 4903.00 | 200181.19 |
| 4903.10 | 211167.64 |
| 4903.20 | 222262.20 |
| 4903.30 | 233466.67 |
| 4903.40 | 244780.70 |
| 4903.50 | 256205.82 |
| 4903.60 | 267743.00 |
| 4903.70 | 279393.24 |
| 4903.80 | 291159.71 |
| 4903.90 | 303039.29 |
| 4904.00 | 315034.89 |
| 4904.10 | 327158.68 |
| 4904.20 | 339353.14 |
| 4904.30 | 351618.97 |
| 4904.40 | 363955.49 |
| 4904.50 | 376363.23 |
| 4904.60 | 388842.37 |
| 4904.70 | 401393.08 |
| 4904.80 | 414016.94 |
| 4904.90 | 426711.52 |
| 4905.00 | 439478.22 |
| 4905.10 | 452408.94 |
| 4905.20 | 465419.28 |
| 4905.30 | 478509.93 |
| 4905.40 | 491680.05 |
| 4905.50 | 504930.14 |
| 4905.60 | 518260.32 |
| 4905.70 | 531670.71 |
| 4905.80 | 545163.01 |

[Manual Storage vs. Elevation]

| ELEVATION (ft) | STORAGE (cuft) |
|---|---|
| 4905.90 | 558734.39 |
| 4906.00 | 572386.34 |

[STAGE DISCHARGE INFORMATION]

OUTLET STRUCTURE:

STR # : 1
TYPE : CIRCULAR ORIFICE
DESCRIPTION : Pond 1 - 10 Year Release Orifice (3.50")

[Reservoir Discharge Value vs. Stage]
(the elevation increment is 0.1)

| STAGE (ft) | ELEVATION (ft) | CONTOUR AREA (sqft) | STORAGE (cuft) | DISCHARGE (cfs) |
|---|---|---|---|---|
| 0.00 | 4898.58 | 0.00 | 0.00 | 0.00 |
| 0.10 | 4898.68 | 12.06 | 0.40 | 0.02 |
| 0.20 | 4898.78 | 24.54 | 1.64 | 0.08 |
| 0.30 | 4898.88 | 40.32 | 4.03 | 0.13 |
| 0.40 | 4898.98 | 58.98 | 7.86 | 0.17 |
| 0.50 | 4899.08 | 438.68 | 73.11 | 0.20 |
| 0.60 | 4899.18 | 1072.38 | 214.48 | 0.23 |
| 0.70 | 4899.28 | 1877.13 | 438.00 | 0.25 |
| 0.80 | 4899.38 | 2812.78 | 750.07 | 0.27 |
| 0.90 | 4899.48 | 3859.57 | 1157.87 | 0.29 |
| 1.00 | 4899.58 | 5005.54 | 1668.51 | 0.31 |
| 1.10 | 4899.68 | 6242.82 | 2289.03 | 0.33 |
| 1.20 | 4899.78 | 7570.41 | 3028.17 | 0.35 |
| 1.30 | 4899.88 | 8977.65 | 3890.31 | 0.36 |
| 1.40 | 4899.98 | 10463.92 | 4883.16 | 0.38 |
| 1.50 | 4900.08 | 13230.38 | 6615.19 | 0.40 |
| 1.60 | 4900.18 | 16321.26 | 8704.67 | 0.41 |
| 1.70 | 4900.28 | 19453.58 | 11023.70 | 0.42 |
| 1.80 | 4900.38 | 22625.90 | 13575.54 | 0.44 |
| 1.90 | 4900.48 | 25840.51 | 16365.66 | 0.45 |
| 2.00 | 4900.58 | 29099.12 | 19399.41 | 0.46 |
| 2.10 | 4900.68 | 32402.77 | 22681.94 | 0.47 |
| 2.20 | 4900.78 | 35757.58 | 26222.22 | 0.49 |
| 2.30 | 4900.88 | 39155.49 | 30019.21 | 0.50 |
| 2.40 | 4900.98 | 42599.44 | 34079.55 | 0.51 |
| 2.50 | 4901.08 | 47188.98 | 39324.15 | 0.52 |
| 2.60 | 4901.18 | 52019.73 | 45083.77 | 0.53 |

[Reservoir Discharge Value vs. Stage]
(the elevation increment is 0.1)

| STAGE (ft) | ELEVATION (ft) | CONTOUR AREA (sqft) | STORAGE (cuft) | DISCHARGE (cfs) |
|---|---|---|---|---|
| 2.70 | 4901.28 | 56818.80 | 51136.92 | 0.54 |
| 2.80 | 4901.38 | 61589.07 | 57483.13 | 0.55 |
| 2.90 | 4901.48 | 66335.94 | 64124.74 | 0.56 |
| 3.00 | 4901.58 | 71064.00 | 71064.00 | 0.57 |
| 3.10 | 4901.68 | 75776.93 | 78302.83 | 0.58 |
| 3.20 | 4901.78 | 80482.33 | 85847.82 | 0.59 |
| 3.30 | 4901.88 | 85175.78 | 93693.36 | 0.60 |
| 3.40 | 4901.98 | 89861.71 | 101843.27 | 0.61 |
| 3.50 | 4902.08 | 94638.71 | 110411.82 | 0.62 |
| 3.60 | 4902.18 | 99362.99 | 119235.59 | 0.63 |
| 3.70 | 4902.28 | 104005.20 | 128273.09 | 0.64 |
| 3.80 | 4902.38 | 108575.55 | 137529.03 | 0.65 |
| 3.90 | 4902.48 | 113084.77 | 147010.21 | 0.66 |
| 4.00 | 4902.58 | 117542.45 | 156723.27 | 0.67 |
| 4.10 | 4902.68 | 121957.10 | 166674.70 | 0.68 |
| 4.20 | 4902.78 | 126339.02 | 176874.63 | 0.68 |
| 4.30 | 4902.88 | 130690.91 | 187323.63 | 0.69 |
| 4.40 | 4902.98 | 135020.20 | 198029.63 | 0.70 |
| 4.50 | 4903.08 | 139313.57 | 208970.35 | 0.71 |
| 4.60 | 4903.18 | 143506.49 | 220043.29 | 0.72 |
| 4.70 | 4903.28 | 147590.92 | 231225.78 | 0.73 |
| 4.80 | 4903.38 | 151573.68 | 242517.89 | 0.73 |
| 4.90 | 4903.48 | 155461.71 | 253920.80 | 0.74 |
| 5.00 | 4903.58 | 159261.34 | 265435.56 | 0.75 |
| 5.10 | 4903.68 | 162978.35 | 277063.19 | 0.76 |
| 5.20 | 4903.78 | 166619.09 | 288806.42 | 0.76 |
| 5.30 | 4903.88 | 170186.82 | 300663.37 | 0.77 |
| 5.40 | 4903.98 | 173686.54 | 312635.77 | 0.78 |
| 5.50 | 4904.08 | 177127.59 | 324733.92 | 0.79 |
| 5.60 | 4904.18 | 180489.78 | 336914.25 | 0.79 |
| 5.70 | 4904.28 | 183771.48 | 349165.80 | 0.80 |
| 5.80 | 4904.38 | 186976.65 | 361488.19 | 0.81 |
| 5.90 | 4904.48 | 190109.33 | 373881.68 | 0.82 |
| 6.00 | 4904.58 | 193173.27 | 386346.54 | 0.82 |
| 6.10 | 4904.68 | 196171.94 | 398882.94 | 0.83 |
| 6.20 | 4904.78 | 199109.11 | 411492.17 | 0.84 |
| 6.30 | 4904.88 | 201986.95 | 424172.60 | 0.84 |
| 6.40 | 4904.98 | 204808.54 | 436924.88 | 0.85 |
| 6.50 | 4905.08 | 207610.52 | 449822.80 | 0.86 |
| 6.60 | 4905.18 | 210371.46 | 462817.21 | 0.86 |
| 6.70 | 4905.28 | 213085.88 | 475891.80 | 0.87 |
| 6.80 | 4905.38 | 215755.60 | 489046.03 | 0.88 |
| 6.90 | 4905.48 | 218382.66 | 502280.12 | 0.88 |
| 7.00 | 4905.58 | 220968.98 | 515594.28 | 0.89 |
| 7.10 | 4905.68 | 223516.32 | 528988.63 | 0.90 |

[Reservoir Discharge Value vs. Stage]
(the elevation increment is 0.1)

| STAGE (ft) | ELEVATION (ft) | CONTOUR AREA (sqft) | STORAGE (cuft) | DISCHARGE (cfs) |
|---|---|---|---|---|
| 7.20 | 4905.78 | 226026.90 | 542464.55 | 0.90 |
| 7.30 | 4905.88 | 228501.42 | 556020.11 | 0.91 |
| 7.40 | 4905.98 | 230941.60 | 569655.95 | 0.92 |
| 7.42 | 4906.00 | 231423.05 | 572386.34 | 0.92 |

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HYDROGRAPH REPORT

RECORD NUMBER : 7
TYPE : COMBINE
DESCRIPTION : **Pond 1 - 100 yr Inflow (Onsite and Offsite)**

[HYDROGRAPH INFORMATION]

| | | | |
|---|---|---|---|
| Peak Discharge | = | 131.45 | (cfs) |
| Volume | = | 9.89 | (acft) |
| Time Interval | = | 1.00 | (min) |
| Time to Peak | = | 37.00 | (min) |
| Time of Base | = | 116.00 | (min) |

[COMBINE HYDROGRAPH RECORD #]

HYDROGRAPH # 2 TYPE : MOD. RATIONAL
DESCRIPTION : Design Point 15 - 100 yr

| | | | |
|---|---|---|---|
| Peak Discharge | = | 38.67 | (cfs) |
| Time to Peak | = | 36.70 | (min) |
| Time Interval | = | 0.10 | (min) |

HYDROGRAPH # 6 TYPE : MOD. RATIONAL
DESCRIPTION : Offsite Basin O-HE - 100 yr

| | | | |
|---|---|---|---|
| Peak Discharge | = | 43.25 | (cfs) |
| Time to Peak | = | 43.50 | (min) |
| Time Interval | = | 0.10 | (min) |

HYDROGRAPH # 5 TYPE : MOD. RATIONAL
DESCRIPTION : Design Point 12 - 100 yr

| | | | |
|---|---|---|---|
| Peak Discharge | = | 3.97 | (cfs) |
| Time to Peak | = | 25.90 | (min) |
| Time Interval | = | 0.10 | (min) |

HYDROGRAPH # 1 TYPE : MOD. RATIONAL
DESCRIPTION : Design Point 14 - 100 yr

| | | | |
|---|---|---|---|
| Peak Discharge | = | 53.38 | (cfs) |
| Time to Peak | = | 36.00 | (min) |
| Time Interval | = | 0.10 | (min) |

RESERVOIR REPORT

RECORD NUMBER : 1
STORAGE TYPE : MAN STAGE/STOR
DISCHARGE TYPE : COMP STAGE/DIS
DESCRIPTION : **Pond 1 - 100 yr Stage/Storage**

[RATING CURVE LIMIT]

Minimum Elevation..... = 4898.58 (ft)
Maximum Elevation..... = 4906.00 (ft)
Elevation Increment..... = 0.10 (ft)

[STAGE STORAGE INFORMATION]

Input file = NULL
Output file = NULL

[Manual Storage vs. Elevation]

| ELEVATION (ft) | STORAGE (cuft) |
|---|---|
| 4898.60 | 0.01 |
| 4898.70 | 0.50 |
| 4898.80 | 1.92 |
| 4898.90 | 4.56 |
| 4899.00 | 8.69 |
| 4899.10 | 89.22 |
| 4899.20 | 245.79 |
| 4899.30 | 486.05 |
| 4899.40 | 816.08 |
| 4899.50 | 1243.32 |
| 4899.60 | 1774.81 |
| 4899.70 | 2417.59 |
| 4899.80 | 3180.81 |
| 4899.90 | 4067.69 |
| 4900.00 | 5087.03 |
| 4900.10 | 6997.23 |
| 4900.20 | 9131.53 |
| 4900.30 | 11496.74 |
| 4900.40 | 14095.24 |
| 4900.50 | 16933.26 |
| 4900.60 | 20015.95 |
| 4900.70 | 23348.44 |
| 4900.80 | 26940.67 |
| 4900.90 | 30788.84 |
| 4901.00 | 34902.23 |
| 4901.10 | 40429.63 |
| 4901.20 | 46247.30 |

[Manual Storage vs. Elevation]

| ELEVATION (ft) | STORAGE (cuft) |
|---|---|
| 4901.30 | 52359.33 |
| 4901.40 | 58764.08 |
| 4901.50 | 65464.91 |
| 4901.60 | 72463.77 |
| 4901.70 | 79762.59 |
| 4901.80 | 87369.13 |
| 4901.90 | 95274.42 |
| 4902.00 | 103485.48 |
| 4902.10 | 112143.41 |
| 4902.20 | 121008.63 |
| 4902.30 | 130089.20 |
| 4902.40 | 139388.99 |
| 4902.50 | 148915.51 |
| 4902.60 | 158675.21 |
| 4902.70 | 168674.57 |
| 4902.80 | 178924.65 |
| 4902.90 | 189423.38 |
| 4903.00 | 200181.19 |
| 4903.10 | 211167.64 |
| 4903.20 | 222262.20 |
| 4903.30 | 233466.67 |
| 4903.40 | 244780.70 |
| 4903.50 | 256205.82 |
| 4903.60 | 267743.00 |
| 4903.70 | 279393.24 |
| 4903.80 | 291159.71 |
| 4903.90 | 303039.29 |
| 4904.00 | 315034.89 |
| 4904.10 | 327158.68 |
| 4904.20 | 339353.14 |
| 4904.30 | 351618.97 |
| 4904.40 | 363955.49 |
| 4904.50 | 376363.23 |
| 4904.60 | 388842.37 |
| 4904.70 | 401393.08 |
| 4904.80 | 414016.94 |
| 4904.90 | 426711.52 |
| 4905.00 | 439478.22 |
| 4905.10 | 452408.94 |
| 4905.20 | 465419.28 |
| 4905.30 | 478509.93 |
| 4905.40 | 491680.05 |
| 4905.50 | 504930.14 |
| 4905.60 | 518260.32 |
| 4905.70 | 531670.71 |
| 4905.80 | 545163.01 |

[Manual Storage vs. Elevation]

| ELEVATION (ft) | STORAGE (cuft) |
|---|---|
| 4905.90 | 558734.39 |
| 4906.00 | 572386.34 |

[STAGE DISCHARGE INFORMATION]

OUTLET STRUCTURE:

STR # : 1
TYPE : TRAPEZOIDAL WEIR
DESCRIPTION : Pond 1 Weir - 100 yr Release

STR # : 2
TYPE : CIRCULAR ORIFICE
DESCRIPTION : Pond 1 - 10 Year Release Orifice

[Reservoir Discharge Value vs. Stage]
(the elevation increment is 0.1)

| STAGE (ft) | ELEVATION (ft) | CONTOUR AREA (sqft) | STORAGE (cuft) | DISCHARGE (cfs) |
|---|---|---|---|---|
| 0.00 | 4898.58 | 0.00 | 0.00 | 0.00 |
| 0.10 | 4898.68 | 12.06 | 0.40 | 0.02 |
| 0.20 | 4898.78 | 24.54 | 1.64 | 0.08 |
| 0.30 | 4898.88 | 40.32 | 4.03 | 0.13 |
| 0.40 | 4898.98 | 58.98 | 7.86 | 0.17 |
| 0.50 | 4899.08 | 438.68 | 73.11 | 0.20 |
| 0.60 | 4899.18 | 1072.38 | 214.48 | 0.23 |
| 0.70 | 4899.28 | 1877.13 | 438.00 | 0.25 |
| 0.80 | 4899.38 | 2812.78 | 750.07 | 0.27 |
| 0.90 | 4899.48 | 3859.57 | 1157.87 | 0.29 |
| 1.00 | 4899.58 | 5005.54 | 1668.51 | 0.31 |
| 1.10 | 4899.68 | 6242.82 | 2289.03 | 0.33 |
| 1.20 | 4899.78 | 7570.41 | 3028.17 | 0.35 |
| 1.30 | 4899.88 | 8977.65 | 3890.31 | 0.36 |
| 1.40 | 4899.98 | 10463.92 | 4883.16 | 0.38 |
| 1.50 | 4900.08 | 13230.38 | 6615.19 | 0.40 |
| 1.60 | 4900.18 | 16321.26 | 8704.67 | 0.41 |
| 1.70 | 4900.28 | 19453.58 | 11023.70 | 0.42 |
| 1.80 | 4900.38 | 22625.90 | 13575.54 | 0.44 |
| 1.90 | 4900.48 | 25840.51 | 16365.66 | 0.45 |
| 2.00 | 4900.58 | 29099.12 | 19399.41 | 0.46 |
| 2.10 | 4900.68 | 32402.77 | 22681.94 | 0.47 |
| 2.20 | 4900.78 | 35757.58 | 26222.22 | 0.49 |

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[Reservoir Discharge Value vs. Stage]
(the elevation increment is 0.1)

| STAGE (ft) | ELEVATION (ft) | CONTOUR AREA (sqft) | STORAGE (cuft) | DISCHARGE (cfs) |
|---|---|---|---|---|
| 2.30 | 4900.88 | 39155.49 | 30019.21 | 0.50 |
| 2.40 | 4900.98 | 42599.44 | 34079.55 | 0.51 |
| 2.50 | 4901.08 | 47188.98 | 39324.15 | 0.52 |
| 2.60 | 4901.18 | 52019.73 | 45083.77 | 0.53 |
| 2.70 | 4901.28 | 56818.80 | 51136.92 | 0.54 |
| 2.80 | 4901.38 | 61589.07 | 57483.13 | 0.55 |
| 2.90 | 4901.48 | 66335.94 | 64124.74 | 0.56 |
| 3.00 | 4901.58 | 71064.00 | 71064.00 | 0.57 |
| 3.10 | 4901.68 | 75776.93 | 78302.83 | 0.58 |
| 3.20 | 4901.78 | 80482.33 | 85847.82 | 0.59 |
| 3.30 | 4901.88 | 85175.78 | 93693.36 | 0.60 |
| 3.40 | 4901.98 | 89861.71 | 101843.27 | 0.61 |
| 3.50 | 4902.08 | 94638.71 | 110411.82 | 0.62 |
| 3.60 | 4902.18 | 99362.99 | 119235.59 | 0.63 |
| 3.70 | 4902.28 | 104005.20 | 128273.09 | 0.64 |
| 3.80 | 4902.38 | 108575.55 | 137529.03 | 0.65 |
| 3.90 | 4902.48 | 113084.77 | 147010.21 | 0.66 |
| 4.00 | 4902.58 | 117542.45 | 156723.27 | 0.67 |
| 4.10 | 4902.68 | 121957.10 | 166674.70 | 1.18 |
| 4.20 | 4902.78 | 126339.02 | 176874.63 | 2.48 |
| 4.30 | 4902.88 | 130690.91 | 187323.63 | 4.34 |
| 4.40 | 4902.98 | 135020.20 | 198029.63 | 6.74 |
| 4.50 | 4903.08 | 139313.57 | 208970.35 | 9.66 |
| 4.60 | 4903.18 | 143506.49 | 220043.29 | 13.11 |
| 4.70 | 4903.28 | 147590.92 | 231225.78 | 17.09 |
| 4.80 | 4903.38 | 151573.68 | 242517.89 | 21.63 |
| 4.90 | 4903.48 | 155461.71 | 253920.80 | 26.72 |
| 5.00 | 4903.58 | 159261.34 | 265435.56 | 32.39 |
| 5.10 | 4903.68 | 162978.35 | 277063.19 | 38.65 |
| 5.20 | 4903.78 | 166619.09 | 288806.42 | 45.50 |
| 5.30 | 4903.88 | 170186.82 | 300663.37 | 52.97 |
| 5.40 | 4903.98 | 173686.54 | 312635.77 | 61.06 |
| 5.50 | 4904.08 | 177127.59 | 324733.92 | 69.80 |
| 5.60 | 4904.18 | 180489.78 | 336914.25 | 79.19 |
| 5.70 | 4904.28 | 183771.48 | 349165.80 | 89.24 |
| 5.80 | 4904.38 | 186976.65 | 361488.19 | 99.97 |
| 5.90 | 4904.48 | 190109.33 | 373881.68 | 111.40 |
| 6.00 | 4904.58 | 193173.27 | 386346.54 | 123.53 |
| 6.10 | 4904.68 | 196171.94 | 398882.94 | 136.37 |
| 6.20 | 4904.78 | 199109.11 | 411492.17 | 149.95 |
| 6.30 | 4904.88 | 201986.95 | 424172.60 | 164.27 |
| 6.40 | 4904.98 | 204808.54 | 436924.88 | 179.34 |
| 6.50 | 4905.08 | 207610.52 | 449822.80 | 195.17 |
| 6.60 | 4905.18 | 210371.46 | 462817.21 | 211.78 |
| 6.70 | 4905.28 | 213085.88 | 475891.80 | 229.19 |

[Reservoir Discharge Value vs. Stage]
(the elevation increment is 0.1)

| STAGE (ft) | ELEVATION (ft) | CONTOUR AREA (sqft) | STORAGE (cuft) | DISCHARGE (cfs) |
|---|---|---|---|---|
| 6.80 | 4905.38 | 215755.60 | 489046.03 | 247.38 |
| 6.90 | 4905.48 | 218382.66 | 502280.12 | 266.39 |
| 7.00 | 4905.58 | 220968.98 | 515594.28 | 286.23 |
| 7.10 | 4905.68 | 223516.32 | 528988.63 | 306.89 |
| 7.20 | 4905.78 | 226026.90 | 542464.55 | 328.40 |
| 7.30 | 4905.88 | 228501.42 | 556020.11 | 350.76 |
| 7.40 | 4905.98 | 230941.60 | 569655.95 | 373.99 |
| 7.42 | 4906.00 | 231423.05 | 572386.34 | 378.74 |

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HYDROGRAPH REPORT

RECORD NUMBER : 9
TYPE : RESER MOD. PULS
DESCRIPTION : **Pond 1 - 100 yr Routing (Onsite and Offsite)**

[HYDROGRAPH INFORMATION]

| | | |
|---|---|---|
| Peak Discharge | = | 55.58 (cfs) |
| Volume | = | 7.09 (acft) |
| Time Interval | = | 1.00 (min) |
| Time to Peak | = | 76.00 (min) |
| Time of Base | = | 1440.00 (min) |
| Peak Elevation | = | 4903.91 (ft) |

[RESERVOIR STRUCTURE INFORMATION]

| | | |
|---|---|---|
| Reservoir # | = | 1 |
| Description | = | Pond 1 - 100 yr Stage/Storage |
| Storage type | = | MAN STAGE/STOR |
| Max storage | = | 572386.34 Cuft |
| Discharge type | = | COMP STAGE/DIS |
| Max discharge | = | 378.74 cfs |

[RESERVOIR INFORMATION]

| | | |
|---|---|---|
| Reservoir # | = | 1 |
| Reservoir Description | = | Pond 1 - 100 yr Stage/Storage |

[INFLOW HYDROGRAPH INFORMATION]

| | | |
|---|---|---|
| Hydrograph # | = | 7 |
| Hydrograph Description | = | Pond 1 - 100 yr Inflow Onsite and Offsite) |

PARK ENGINEERING
CONSULTANTS

# *Vogl Land – North Parcel*
# *Firestone, CO*
# *Final Drainage Report*

**June 2005**
**Revised November 2005**
**Revised April 2006**

420 21st Ave. Suite 101 • Longmont, CO 80501 • (303) 651-6626 • FAX (303) 651-0331
E-mail don@parkengineering.net

"I hereby certify that this report (plan) for the final drainage design of Vogl Land - North Parcel, was prepared by me (or under my direct supervision) in accordance with the provisions of Town of Firestone Storm Drainage Criteria Manual for the owners thereof."

_____

Registered Professional Engineer
State of Colorado No. 37162

## Retention Pond Narrative

As shown on the drainage plan, there exists a retention area north of the site (see p F1-a in **Appendix**). Using the CUHP and SWM Models (provided by Urban Drainage) the retention area volume needed for the complete basin (4521 AC) at buildout was calculated. The assumptions of land usage are found on the next page (p G2) and the following pages include additional input needed for the CUHP model (from Urban Drainage). CUHP model data is found in pages G6-G11. Input parameters for and the output of the SWM model (including the retention discharge point/swale) are included in pages G12-G18. The existing capacity of this retention area (shown on G21) was found using the following formula:

$$V=[[(A1=A2)+(A1*A2)^0.5)*DEPTH]/3]$$

The contours to the west of the site, as stated previously, are estimated. The capacity calculations are found on p G21 (82.9 AC-ft). The required volume of the basin is 201 AC-ft (see p G18). This means, with the outflow of 7051 cfs from the retention area, that the depth of flow will be 2.62' (see p G20) and the water surface elevation will be 4839.42. The lowest walk out elevation for the subdivision is 4841.15 which yields a freeboard of 1.73'.

1/31/2006

# Size of Northern Retention Pond

Vogl Land, Firestone, CO

| Elevation | h | $A_{top}$ | $A_{bottom}$ | $V_{pond}$ | | Notes |
|---|---|---|---|---|---|---|
| | ft | sf | sf | cf | Ac-ft | |
| 4830.0 | 0.0 | | **EAST SIDE** | | | |
| 4832.0 | 2.0 | 272,576 | 73,313 | 324,831 | 7.5 | |
| 4834.0 | 2.0 | 432,415 | 272,576 | 698,864 | 16.0 | the LP in the street is 4833.8 (at crown) |
| total ponding | 4.0 | | | 1,023,696 | **23.5** | |
| | | | | | | |
| | | | **WEST SIDE** *(estimated using USGS topo)* | | | |
| 4832.0 | 0.0 | 21,685 | | - | - | |
| 4834.0 | 2.0 | 117,010 | 21,685 | 126,044 | 2.9 | the LP in the street is 4833.8 (at crown) |
| total ponding | 2.0 | | | 126,044 | **2.9** | |
| | | | | | | |
| | | | **FRONTIER STREET** | | | |
| 4834.0 | 0.2 | 18,942 | - | 1,263 | 0.0 | the LP in the street is 4833.8 (at crown) |
| total ponding | 0.2 | | | 1,263 | **0.0** | |
| | | | | | | |
| 4834.0 | 0.0 | | **OVERALL (above 4834.0)** | | | |
| 4836.0 | 2.0 | 1,027,796 | 602,966 | 1,611,976 | 37.0 | |
| 4838.0 | 2.0 | 1,879,482 | 1,027,796 | 2,864,733 | 65.8 | |
| 4839.5 | 1.5 | 2,324,112 | 1,879,482 | 3,146,769 | 72.2 | |

*TOTAL STAGE-STORAGE FOR RETENTION POND*

| ELEV | $V_{ACC}$ | |
|---|---|---|
| 4830.0 | 0 | |
| 4832.0 | 7.5 | |
| 4834.0 | 26.4 | |
| 4836.0 | 63.4 | |
| 4836.8 | 82.9 | elevation of natural outlet |
| 4838.0 | 129.19 | |
| 4839.5 | 201.43 | |

# Appendix E:
# APPROVED DRAINAGE REPORTS
# OUTLET STRUCTURES

Sadd. Heights
Final Drainage Rept
Review By: KDS 4/21/04
Comments

PARK ENGINEERING CONSULTANTS

# Final Drainage Report
# Saddleback Heights
# Firestone, Colorado

**Prepared for:**

Saddleback Heights, LLC
3100 S. Federal Blvd. # B203
Denver, Colorado 80236
(303) -884-4114

**Prepared by:**

Park Engineering Consultants
420 21st Avenue, Suite 101
Longmont, Colorado 80501
(303) 651-6626

December, 2003

PEC Job#3381fdr.doc

# ORIFICE FLOW CALCULATIONS FOR DETENTION POND

SADDLEBACK SUBDIVISION

**Outlet Invert =** **4959.49**

| | | |
|---|---|---|
| **100-Year Event** | | |
| **High Water Elevation =** | **4963.97** | |
| **Invert Headwater =** | **4.48** | **feet** |
| **Max Allowable Q2 =** | **1.3** | **cfs** |

**circular orifice calculations:** Q = CA(SQRT(2gH), C = 0.65, H = HW - 0.5*D

| **pipe diam (in)** | pipe diam (ft) | H (ft) | HW (ft) | A (sq.ft) | **Q (cfs)** |
|---|---|---|---|---|---|
| **5.0** | 0.42 | 4.27 | 4.48 | 0.14 | **1.5** |
| **5.5** | 0.46 | 4.25 | 4.48 | 0.16 | **1.8** |
| **6.0** | 0.50 | 4.23 | 4.48 | 0.20 | **2.1** |

**2-year orifice:** **use 5.0" diameter circular orifice**
(assume small amount of clogging)

Reviewed By:
EMF 2-21-03
Approved.

# FINAL DRAINAGE REPORT
# FOR
# SAGEBRUSH SUBDIVISION
# FIRESTONE, COLORADO

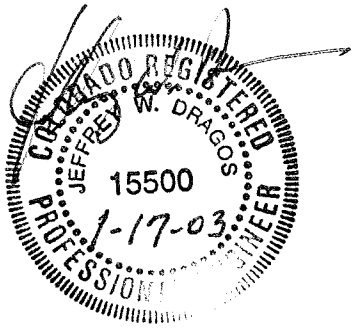
**December 2001**
**Revised January 2003**

**Prepared for:**

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Contact: Craig Jorgenson




Job No. 87002340

Stantec

Project: SAGEBRUSH SUBDIVISION Project Number:

Notes: POND SIZING Scale:

Page of Page(s)

Computed By: Date: Checked By: Date:

POND D (BASIN A, OS-2)

1. AREA = 4.4 + 2.5 (BACK OF LOTS ON SUNBURST AVE.)
2. IMPERVIOUSNESS

$4.4/6.9 \times 40 = 25.5$ $2.5/6.9 \times 5 = 1.8$ $25.5 + 1.8 = 27.3\%$

3. EMPIRICAL FORMULA $V = KA$ A = AREA I = IMPERV. %

$K_{100} = (1.78I - .002I^2 - 3.56)/900$ $K_{100} = 0.048$
$K_5 = (.77I - 2.65)/1000$ $K_5 = 0.018$

4. $V_{100} = 0.048(6.9) = 0.33$ AF
$V_5 = 0.018(6.9) = 0.12$ AF

5. $Q_{100} = 1.0 \times 6.9 = 6.9$ cfs $Q_5 = .17 \times 6.9 = 1.2$ cfs

6. 100YR W.S. = 82.0 5YR W.S. $.06/.12 = X/1$ $X = .5$ W.S. = 80.5

7. 5YR ORIFICE (INV. @ 78.05) $h = 80.5 - 78.05 - .25 = 2.2'$

$A = 1.2/(.65)(2 \times 32.2 \times 2.2)^{1/2} = 0.16$ SF dia $= (4(.16)/\pi)^{1/2}$ ℄ pipe $= 0.45'$
USE 6" ORIFICE (TOLERANCE W/I 15%)

8. DISCHARGE THRU 5YR ORIFICE @ 100YR HEADWATER

$h = 82 - 78.05 - .25 = 3.7'$ ℄ pipe $A = 0.2$ SF $Q = (.65)(.2)(2 \times 32.2 \times 3.7)^{1/2} = 2.0$ cfs

9. $Q_{WEIR} = 7.0$ cfs $- 2 = 5.0$ cfs

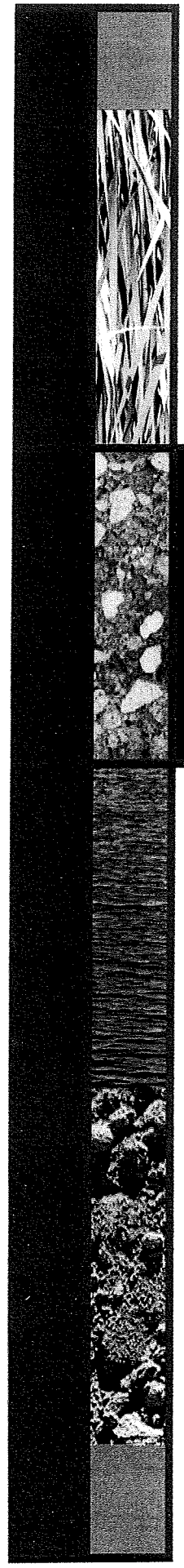
10. 100YR ORIFICE $h = 82 - 78 - .5 = 3.5'$ $A = 7/(.65)(2 \times 32.2 \times 3.5)^{1/2} = 0.72$ SF
dia $= (4(.72)/\pi)^{1/2} = 0.96'$ ℄ pipe USE 12" ORIFICE

11. WEIR LENGTH $L = Q_{WEIR}/CH^{3/2}$ $H = 82 - 80.5 = 1.5$

$L = 5/3.4(1.5)^{3/2} = 0.80'$ 50% INCREASE $.8 \times 1.5 = 1.20" = 14"$
STD TYPE D = 13.8" OKAT

12. GRATE CAPACITY - STD TYPE D GRATE = 13.8 SF OF OPEN AREA

$Q = .65(13.8)(2 \times 32.2 \times 1.5)^{1/2} = 88.2$ cfs
$Q_5 \times 2 = 1.2 \times 2 = 2.4$ cfs GRATE OKAT



# Final Drainage Report
# For
# Firestone Sports Complex – Phase 1

SUBMITTED TO:

Town of Firestone, Colorado

AUGUST 10, 2007

TST, Inc. Consulting Engineers

## 100-yr Orifice Diameter

| POND NAME | DESIGN POINT | DESIGN FLOW 100-YR (cfs) | DIAMETER OUTLET PIPE (in.) | 100-YR W.S. EL. (ft) | 100-YR HGL UDSEWER (ft) | DELTA h (ft) | DIA. ORIFICE PLATE (in.) | COMMENT |
|---|---|---|---|---|---|---|---|---|
| Pond 1 | 14 | 15.4 | 24 | 4867.00 | 4864.83 | 2.17 | 20.0 | NEED ORIFICE |
| Pond 2 | 27 | 4.14 | 12 | 4875.00 | 4871.71 | 3.29 | 9.3 | NEED ORIFICE |

## 10-yr Orifice Diameter

| POND NAME | DESIGN POINT | DESIGN FLOW 10-YR (cfs) | DIAMETER OUTLET PIPE (in.) | 10-YR W.S. EL. (ft) | 10-YR HGL UDSEWER (ft) | DELTA h (ft) | DIA. ORIFICE PLATE (in.) | COMMENT |
|---|---|---|---|---|---|---|---|---|
| Pond 1 | 14 | 5.37 | 24 | 4865.37 | 4862.91 | 2.46 | 11.4 | NEED ORIFICE |
| Pond 2 | 27 | 1.70 | 12 | 4874.14 | 4871.27 | 2.87 | 6.2 | NEED ORIFICE |

TST, INC.
Consulting Engineers

CLIENT Town of Firestone JOB NO. 0668.0130.01

PROJECT Sports Complex-Ph.1 CALCULATIONS FOR Detention Pond Spillways

MADE BY SMS DATE 8-10-07 CHECKED BY ____ DATE ____ SHEET 1 OF 1

## Detention Pond 1

$$Q = C_{BCW} L H^{1.5}$$

$$L = \frac{Q}{C_{BCW} H^{1.5}}$$

$$= \frac{70}{(3)(1^{1.5})}$$

$$= 23.3'$$

where; Q = 100-yr. flow rate over weir/spillway (cfs)

$C_{BCW}$ = Broad Crested Weir Coefficient (3)

L = Length of weir in feet

H = Height of flow on spillway (ft)

## Detention Pond 2

$$L = \frac{Q}{C_{BCW} H^{1.5}}$$

$$= \frac{20.3}{(3)(1^{1.5})}$$

$$= 6.77'$$

# Final Drainage Study
# for
# St. Vrain Ranch, Filing III
# Firestone, Colorado

September 18, 2000

Prepared For:
St. Vrain Partners, LLC
Boulder, Colorado 80304

Prepared By:

NORTHERN ENGINEERING SERVICES, INC
Northern Engineering Services, Inc
420 S. Howes, Suite 202
Fort Collins, Colorado 80521
Phone: (970)221-4158

Project Number: SVR; 2003.00

## Pond 1 10-year Release:

The 10-year release was calculated by taking the 10-year historic runoff from Basin H-3, minus the undetained 10-year developed runoff (Basin G-22).

10 year Allowable Release (Onsite):

3.7 cfs (H-3) - 2.6 cfs (G-22) = 1.1 cfs

10 year WSEL = 4902.43 (Onsite)

The 10 year onsite release will be released at a rate of 0.65 cfs through the orifice.

10 year Allowable Release (Onsite and Offsite):

1.1 cfs (Onsite) + 7.0 cfs (O-HE) = 8.1 cfs

10 year WSEL = 4902.68 (Onsite and Offsite)

The 10 year onsite and offsite release will be released at a rate of 1.17 cfs through the orifice and the weir.

## Pond 1 100-year Release:

The 100-year release was calculated by taking the area from Basin H-3 (38 acres) multiplied by 0.75 cfs/ac, minus the undetained 100-year developed runoff (Basin G-22).

100 year Allowable Release (Onsite):

38 acres * 0.75 cfs / ac (H-3) - 5.1 cfs (G-22) = 23.4 cfs

100 year WSEL = 4903.36 (Onsite)

The 100 year onsite release will be released at a rate of 20.92 cfs though the orifice and the weir.

100 year Allowable Release (Onsite and Offsite):

23.4 cfs (Onsite) + 43.4 cfs (O-HE) = 66.8 cfs

100 year WSEL = 4903.91 (Onsite and Offsite)

The 100 year onsite and offsite release will be released at a rate of 55.58 cfs through the orifice and the weir.

# Discharge vs. WSEL (100yr)
# Rating Table for Irregular Channel (modified more precisely)

G20

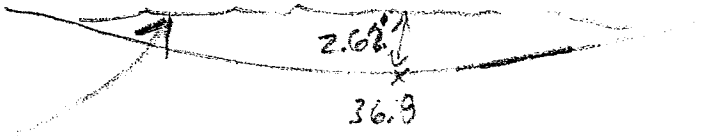
| Project Description | |
|---|---|
| Worksheet | Retention pond outlet-det |
| Flow Element | Irregular Channel |
| Method | Manning's Formula |
| Solve For | Channel Depth |

| Input Data | |
|---|---|
| Channel Slc | 006700 ft/ft |

| Options | |
|---|---|
| Current Roughness Methc | >ved Lotter's Method |
| Open Channel Weighting | >ved Lotter's Method |
| Closed Channel Weighting | Horton's Method |

| Attribute | Minimum | Maximum | Increment |
|---|---|---|---|
| Discharge (cfs) | 1,750.00 | 7,000.00 | 250.00 |

| Discharge (cfs) | Water Surface Elevation (ft) | Velocity (ft/s) | Flow Area (ft²) | Wetted Perimeter (ft) | Top Width (ft) |
|---|---|---|---|---|---|
| 1,750.00 | 38.15 | 3.35 | 523.0 | 553.42 | 553.40 |
| 2,000.00 | 38.23 | 3.50 | 571.8 | 566.29 | 566.28 |
| 2,250.00 | 38.31 | 3.64 | 618.9 | 578.43 | 578.42 |
| 2,500.00 | 38.39 | 3.76 | 664.5 | 589.95 | 589.93 |
| 2,750.00 | 38.47 | 3.88 | 708.8 | 600.93 | 600.91 |
| 3,000.00 | 38.54 | 3.99 | 752.0 | 611.44 | 611.42 |
| 3,250.00 | 38.61 | 4.09 | 794.2 | 621.53 | 621.51 |
| 3,500.00 | 38.67 | 4.19 | 835.5 | 631.25 | 631.23 |
| 3,750.00 | 38.74 | 4.28 | 876.0 | 640.64 | 640.62 |
| 4,000.00 | 38.80 | 4.37 | 915.7 | 649.72 | 649.70 |
| 4,250.00 | 38.86 | 4.45 | 954.7 | 658.53 | 658.51 |
| 4,500.00 | 38.92 | 4.53 | 993.2 | 667.08 | 667.06 |
| 4,750.00 | 38.97 | 4.61 | 1,031.0 | 675.40 | 675.38 |
| 5,000.00 | 39.03 | 4.68 | 1,068.3 | 683.50 | 683.47 |
| 5,250.00 | 39.08 | 4.75 | 1,105.1 | 691.40 | 691.37 |
| 5,500.00 | 39.13 | 4.82 | 1,141.4 | 699.10 | 699.08 |
| 5,750.00 | 39.18 | 4.88 | 1,177.3 | 706.64 | 706.61 |
| 6,000.00 | 39.23 | 4.95 | 1,212.8 | 714.00 | 713.98 |
| 6,250.00 | 39.28 | 5.01 | 1,247.9 | 721.21 | 721.19 |
| 6,500.00 | 39.33 | 5.07 | 1,282.6 | 728.28 | 728.25 |
| 6,750.00 | 39.38 | 5.13 | 1,316.9 | 735.20 | 735.18 |
| 7,000.00 | 39.42 | 5.18 | 1,351.0 | 742.00 | 741.97 |




Lowest house/walkout elev = 41.15

(Lot 36, West of Furlong, Sheet 3 in Final Util. Plan

# Appendix F:
# APPROVED DRAINAGE REPORTS
# SWALES

# FINAL DRAINAGE
# AND
# EROSION CONTROL STUDY
# FOR
# RIDGE CREST FILING NO. 1

Prepared For:

U.S. HOMES
5970 S. Greenwood Village Plaza Blvd.
Suite 310
Englewood, CO 80111

Prepared By:

ROCKY MOUNTAIN CONSULTANTS, INC.
8301 E. Prentice Avenue, Suite 101
Englewood, CO 80111
(303) 741-6000

January 1999
Revised April 1999
RMC Reference No. 0965.019.00

# RC1 EXISTING DOWNSTREAM SWALE CAPACITY D3-D3
## Worksheet for Irregular Channel

| Project Description | |
|---|---|
| Worksheet | Irregular Channel - 1 |
| Flow Element | Irregular Channel |
| Method | Manning's Formula |
| Solve For | Discharge |

| Input Data | |
|---|---|
| Slope | 0.0154 ft/ft |
| Water Surface Elevation | 88.20 ft |

| Options | |
|---|---|
| Current Roughness Method | Improved Lotter's Method |
| Open Channel Weighting Method | Improved Lotter's Method |
| Closed Channel Weighting Method | Horton's Method |

| Results | | |
|---|---|---|
| Mannings Coefficient | 0.030 | |
| Elevation Range | 87.60 to 88.80 | |
| Discharge | 14.90 | cfs |
| Flow Area | 5.5 | ft² |
| Wetted Perimeter | 18.68 | ft |
| Top Width | 18.62 | ft |
| Actual Depth | 0.60 | ft |
| Critical Elevation | 88.17 | ft |
| Critical Slope | 0.0201 | ft/ft |
| Velocity | 2.72 | ft/s |
| Velocity Head | 0.11 | ft |
| Specific Energy | 88.31 | ft |
| Froude Number | 0.88 | |
| Flow Type | Subcritical | |

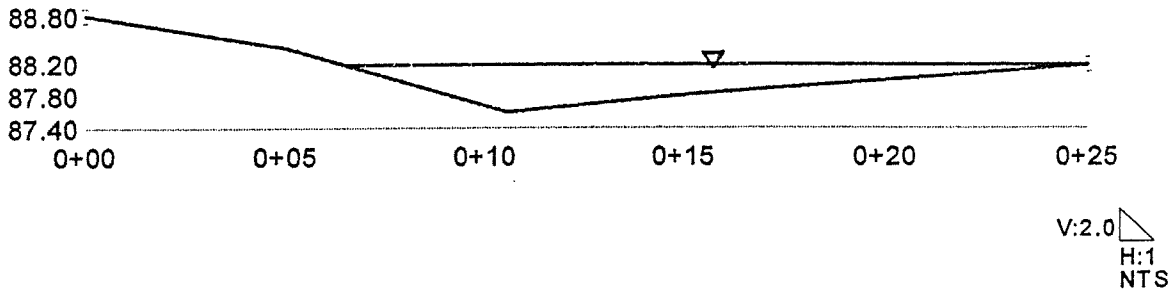
| Roughness Segments | | |
|---|---|---|
| Start Station | End Station | Mannings Coefficient |
| 0+00 | 0+25 | 0.030 |

| Natural Channel Points | |
|---|---|
| Station (ft) | Elevation (ft) |
| 0+00 | 88.80 |
| 0+05 | 88.40 |
| 0+11 | 87.60 |
| 0+15 | 87.80 |
| 0+25 | 88.20 |

# Cross Section
## Cross Section for Irregular Channel

| Project Description | |
|---|---|
| Worksheet | Irregular Channel - 1 |
| Flow Element | Irregular Channel |
| Method | Manning's Formula |
| Solve For | Discharge |

| Section Data | | |
|---|---|---|
| Mannings Coefficient | 0.030 | |
| Slope | 0.0154 | ft/ft |
| Water Surface Elevation | 88.20 | ft |
| Elevation Range | 87.60 to 88.80 | |
| Discharge | 14.90 | cfs |






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Rocky Mountain Consultants, Inc.
37 Brookside Road Waterbury, CT 06708 USA (203) 755-1666

# Final Drainage Study
# for
# St. Vrain Ranch, Filing III
# Firestone, Colorado

September 18, 2000

Prepared For:
St. Vrain Partners, LLC
Boulder, Colorado 80304

Prepared By:

NORTHERN ENGINEERING SERVICES, INC
Northern Engineering Services, Inc
420 S. Howes, Suite 202
Fort Collins, Colorado 80521
Phone: (970)221-4158

Project Number: SVR; 2003.00

NORTHERN
ENGINEERING
SERVICES INC

September 18, 2000

TST, Inc.
Attn.: Mr. David B. Lindsay, P.E.
748 Whalers Way
Building D
Fort Collins, Colorado 80525

**RE:** St. Vrain Ranch, Filing III
Weld County, Colorado

Dear Mr. Lindsay,

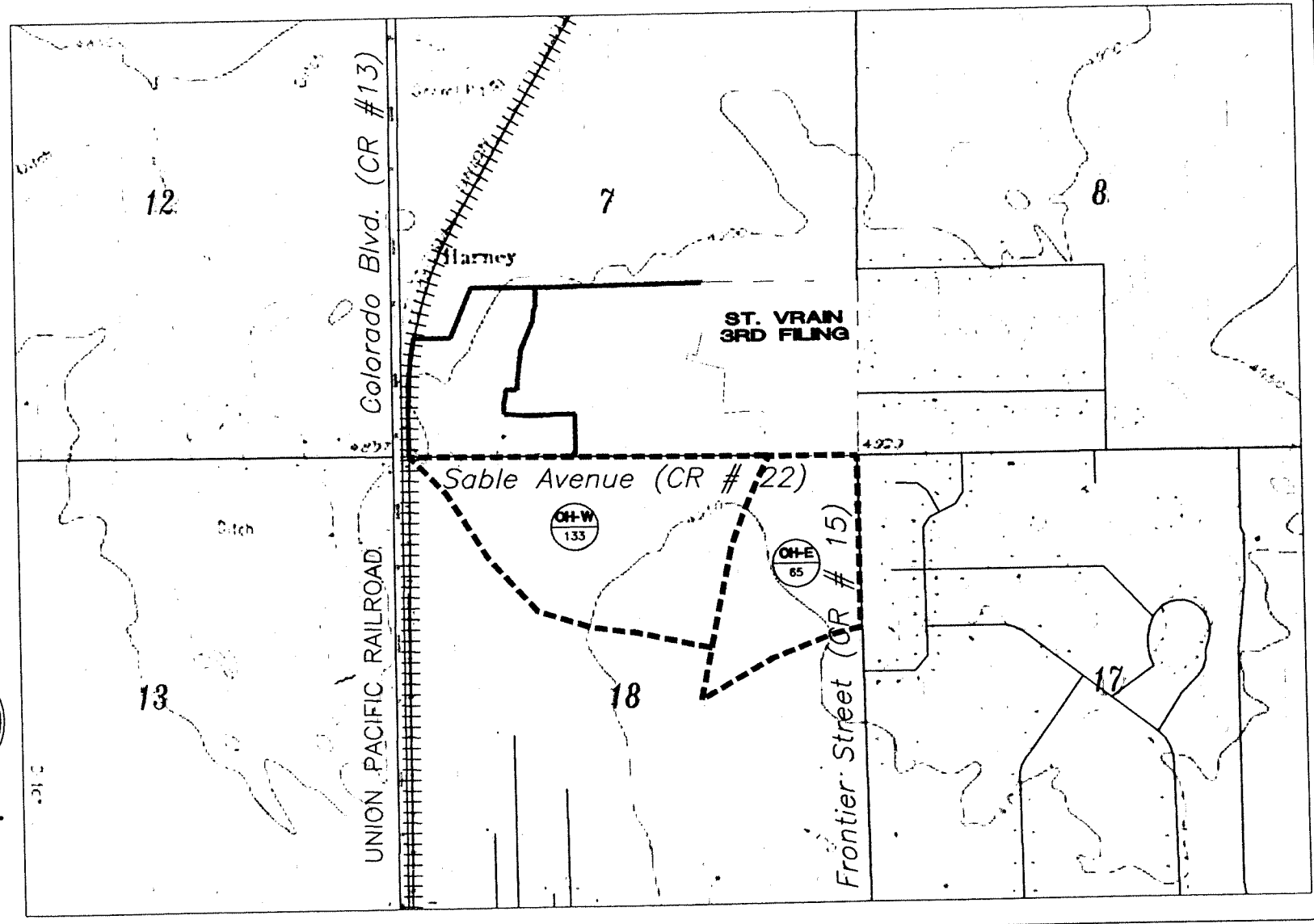
Northern Engineering Services, Inc. is pleased to resubmit this Final Drainage Study for St. Vrain Ranch, Filing 3 for your review. This report was prepared in compliance with technical criteria set forth by the Town of Firestone in the Design Criteria and Construction Standards Manual. We acknowledge that the Town of Firestone's review of this study is only for general conformance with submittal requirements, current design criteria and standard engineering principles and practices.

If you should have any questions or comments as you review this report, please feel free to contact me at your convenience.

Sincerely,
NORTHERN ENGINEERING SERVICES, INC.

Melissa L. Chalona, P.E.
Project Engineer

420 SOUTH HOWES, SUITE 202, FORT COLLINS, COLORADO 80521, (970) 221-4158, FAX (970) 221-4159




OFFSITE BASINS

N.T.S.

| Revisions | By | Date |
|---|---|---|
| | | |

NORTHERN ENGINEERING SERVICES
420 SOUTH HOWES SUITE 202, FT. COLLINS, COLORADO 80521
(970) 221-4158

Project: SVR: 2003.00
Print Date:
SCALE: N.A.
DESIGNER: MLC
CHECKED BY: N.A.
DRAFTSMAN: ACAD
PREPARED: 03/08/00

ST. VRAIN RANCH
OFFSITE BASINS

Sheet 1/1 Sheets

F3



CURRENT DATE: 08-16-2000
CURRENT TIME: 09:43:33

FILE DATE: 08-16-2000
FILE NAME: SVR3CR15

## TAILWATER

******* REGULAR CHANNEL CROSS SECTION ****************

| | |
|---|---|
| SIDE SLOPE H/V (X:1) | 4.0 |
| CHANNEL SLOPE V/H (ft/ft) | 0.005 |
| MANNING'S n (.01-0.1) | 0.035 |
| CHANNEL INVERT ELEVATION | 4905.02 ft |
| CULVERT NO.1 OUTLET INVERT ELEVATION | 4905.02 ft |

******* UNIFORM FLOW RATING CURVE FOR DOWNSTREAM CHANNEL

| FLOW (cfs) | W.S.E. (ft) | FROUDE NUMBER | DEPTH (ft) | VEL. (f/s) | SHEAR (psf) |
|---|---|---|---|---|---|
| 0.00 | 4905.02 | 0.000 | 0.00 | 0.00 | 0.00 |
| 4.74 | 4905.87 | 0.318 | 0.85 | 1.66 | 0.26 |
| 9.48 | 4906.12 | 0.332 | 1.10 | 1.97 | 0.34 |
| 14.22 | 4906.30 | 0.340 | 1.28 | 2.18 | 0.40 |
| 18.96 | 4906.44 | 0.346 | 1.42 | 2.34 | 0.44 |
| 23.70 | 4906.57 | 0.351 | 1.55 | 2.48 | 0.48 |
| 28.44 | 4906.68 | 0.355 | 1.66 | 2.59 | 0.52 |
| 33.18 | 4906.77 | 0.359 | 1.75 | 2.70 | 0.55 |
| 37.92 | 4906.86 | 0.362 | 1.84 | 2.79 | 0.57 |
| 42.66 | 4906.95 | 0.364 | 1.93 | 2.87 | 0.60 |
| 47.40 | 4907.02 | 0.367 | 2.00 | 2.95 | 0.63 |

## ROADWAY OVERTOPPING DATA

| | |
|---|---|
| ROADWAY SURFACE | PAVED |
| EMBANKMENT TOP WIDTH | 60.00 ft |
| CREST LENGTH | 20.00 ft |
| OVERTOPPING CREST ELEVATION | 4909.87 ft |

# Appendix G:
# APPROVED DRAINAGE REPORTS
# CULVERTS

# HY-8 Culvert Analysis Report

**Project Notes**

Project Title:

Designer:

Project Date: Thursday, August 09, 2007

Notes:

**Project Units: U.S. Customary Units**

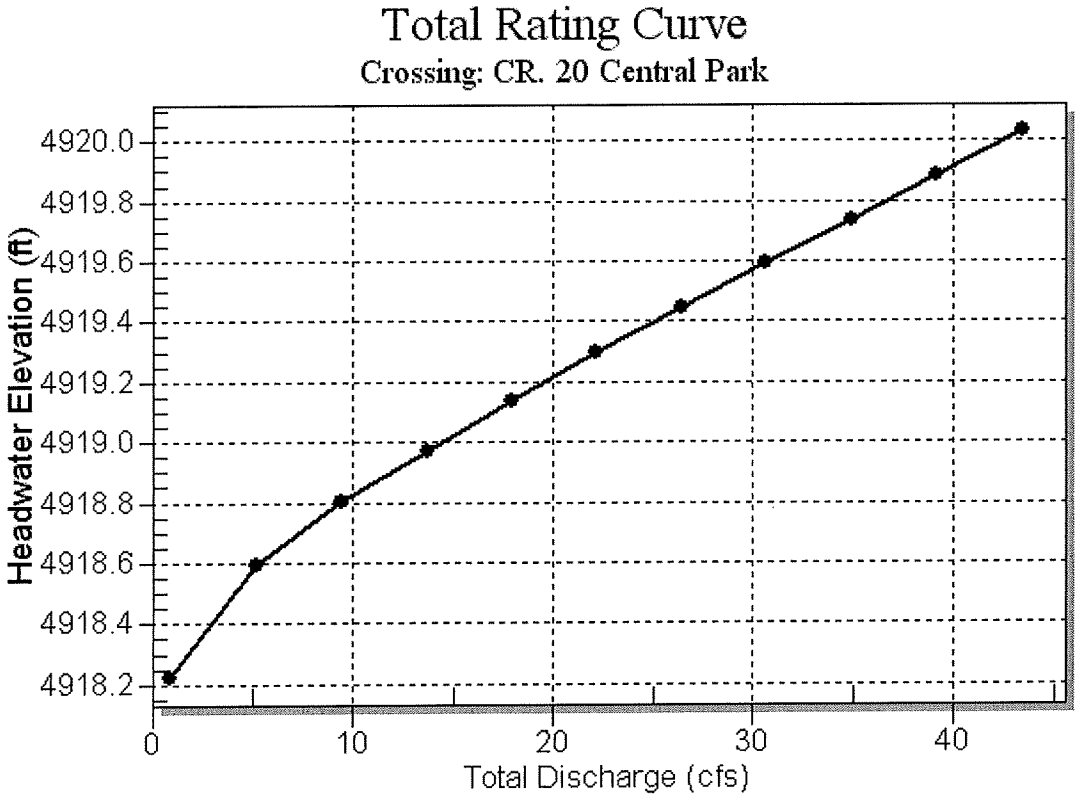
**Outlet Control Option: Profiles**

**Crossing Notes: CR. 20 Central Park**

## Table 1 - Summary of Culvert Flows at Crossing: CR. 20 Central Park

| Headwater Elevation (ft) | Total Discharge (cfs) | Culvert 1 Discharge (cfs) | Roadway Discharge (cfs) | Iterations |
|---|---|---|---|---|
| 4918.22 | 0.90 | 0.90 | 0.00 | 1 |
| 4918.60 | 5.15 | 5.15 | 0.00 | 1 |
| 4918.80 | 9.40 | 9.40 | 0.00 | 1 |
| 4918.97 | 13.65 | 13.65 | 0.00 | 1 |
| 4919.14 | 17.90 | 17.90 | 0.00 | 1 |
| 4919.30 | 22.15 | 22.15 | 0.00 | 1 |
| 4919.45 | 26.40 | 26.40 | 0.00 | 1 |
| 4919.59 | 30.65 | 30.65 | 0.00 | 1 |
| 4919.74 | 34.90 | 34.90 | 0.00 | 1 |
| 4919.88 | 39.15 | 39.15 | 0.00 | 1 |
| 4920.03 | 43.40 | 43.40 | 0.00 | 1 |

**Rating Curve Plot for Crossing: CR. 20 Central Park**




**Culvert Notes: Culvert 1**

## Table 2 - Culvert Summary Table: Culvert 1

| Total Discharge (cfs) | Culvert Discharge (cfs) | Headwater Elevation (ft) | Inlet Control Depth (ft) | Outlet Control Depth (ft) | Flow Type | Normal Depth (ft) | Critical Depth (ft) | Outlet Depth (ft) | Tailwater Depth (ft) | Outlet Velocity (ft/s) | Tailwater Velocity (ft/s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.90 | 0.90 | 4918.22 | 0.224 | 0.224 | 1-S2n | 0.121 | 0.157 | 0.121 | 0.172 | 1.932 | 1.049 |
| 5.15 | 5.15 | 4918.60 | 0.595 | 0.595 | 1-S2n | 0.345 | 0.421 | 0.350 | 0.514 | 3.975 | 2.004 |
| 9.40 | 9.40 | 4918.80 | 0.801 | 0.801 | 1-S2n | 0.465 | 0.573 | 0.472 | 0.760 | 4.718 | 2.472 |
| 13.65 | 13.65 | 4918.97 | 0.968 | 0.968 | 1-S2n | 0.562 | 0.689 | 0.568 | 0.976 | 5.246 | 2.799 |
| 17.90 | 17.90 | 4919.14 | 1.136 | 1.136 | 1-S2n | 0.641 | 0.799 | 0.648 | 1.173 | 5.772 | 3.052 |
| 22.15 | 22.15 | 4919.30 | 1.296 | 1.296 | 1-S2n | 0.708 | 0.885 | 0.714 | 1.360 | 6.097 | 3.257 |
| 26.40 | 26.40 | 4919.45 | 1.447 | 1.447 | 1-S2n | 0.776 | 0.971 | 0.780 | 1.539 | 6.417 | 3.430 |
| 30.65 | 30.65 | 4919.59 | 1.593 | 1.593 | 1-S2n | 0.834 | 1.210 | 0.839 | 1.712 | 6.744 | 3.580 |
| 34.90 | 34.90 | 4919.74 | 1.737 | 1.737 | 1-S2n | 0.886 | 1.270 | 0.889 | 1.880 | 7.008 | 3.713 |
| 39.15 | 39.15 | 4919.88 | 1.883 | 1.883 | 5-S1f | 0.938 | 1.330 | 1.330 | 2.044 | 5.643 | 3.831 |
| 43.40 | 43.40 | 4920.03 | 2.031 | 2.031 | 5-S1f | 0.991 | 1.389 | 1.389 | 2.204 | 5.885 | 3.938 |

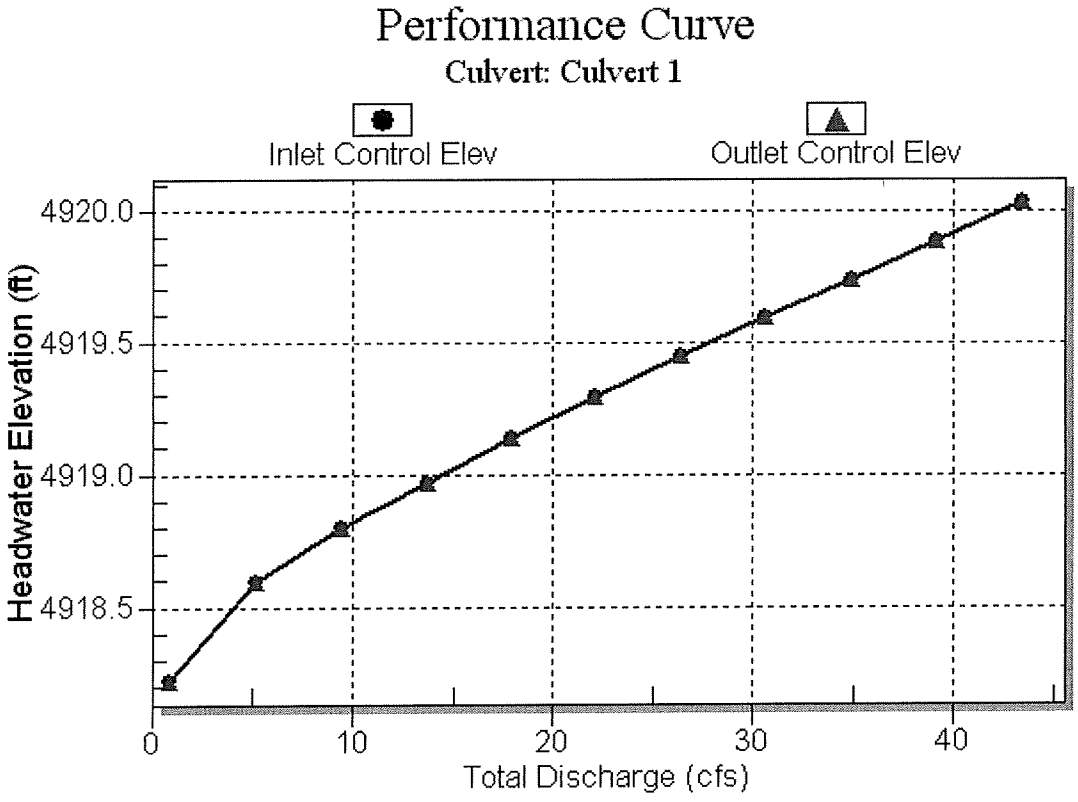
**********

Inlet Elevation (invert): 4918.00 ft, Outlet Elevation (invert): 4917.00 ft

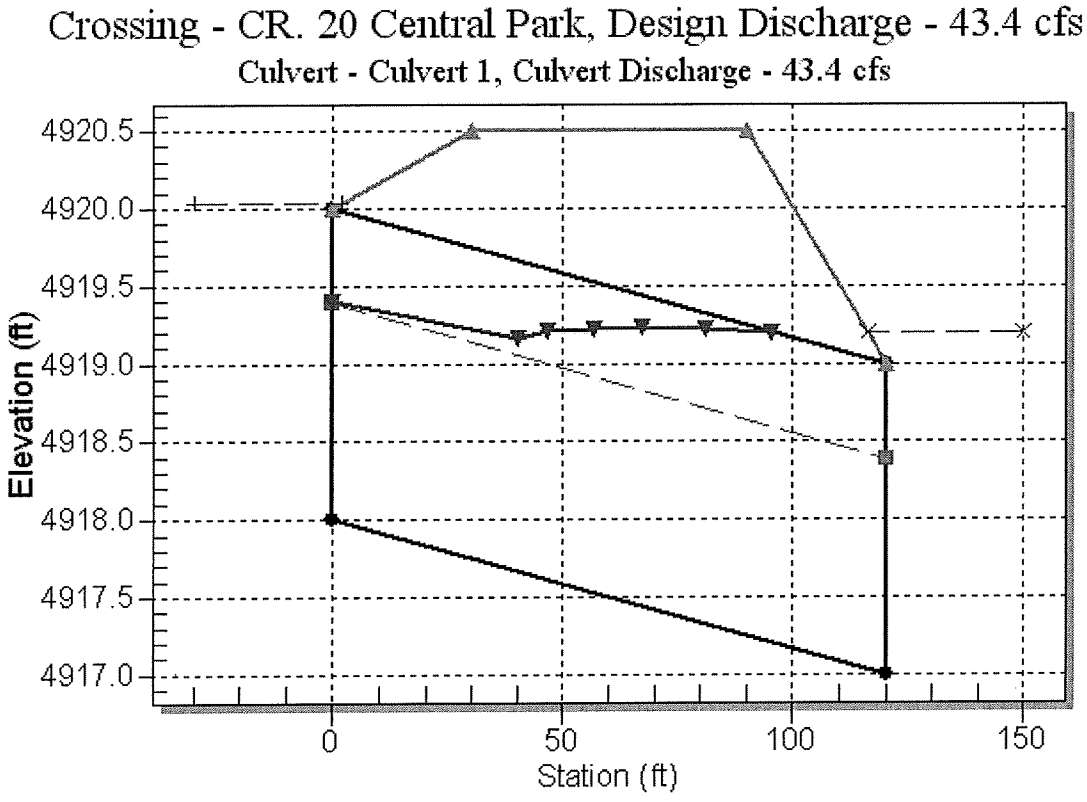
Culvert Length: 120.00 ft, Culvert Slope: 0.0083

**********

**Culvert Performance Curve Plot: Culvert 1**



**Water Surface Profile Plot for Culvert: Culvert 1**




**Site Data - Culvert 1**

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 4918.00 ft

Outlet Station: 120.00 ft

Outlet Elevation: 4917.00 ft

Number of Barrels: 2

**Culvert Data Summary - Culvert 1**

Barrel Shape: Elliptical

Barrel Span: 38.00 in

Barrel Rise: 24.00 in

Barrel Material: Concrete

Barrel Manning's n: 0.0130

Inlet Type: Conventional

Inlet Edge Condition: Square Edge with Headwall

Inlet Depression: None

## Table 3 - Downstream Channel Rating Curve (Crossing: CR. 20 Central Park)

| Flow (cfs) | Water Surface Elev (ft) | Depth (ft) | Velocity (ft/s) | Shear (psf) | Froude Number |
|---|---|---|---|---|---|
| 0.90 | 4917.17 | 0.17 | 1.05 | 0.10 | 0.45 |
| 5.15 | 4917.51 | 0.51 | 2.00 | 0.29 | 0.49 |
| 9.40 | 4917.76 | 0.76 | 2.47 | 0.43 | 0.50 |
| 13.65 | 4917.98 | 0.98 | 2.80 | 0.55 | 0.50 |
| 17.90 | 4918.17 | 1.17 | 3.05 | 0.67 | 0.50 |
| 22.15 | 4918.36 | 1.36 | 3.26 | 0.77 | 0.49 |
| 26.40 | 4918.54 | 1.54 | 3.43 | 0.87 | 0.49 |
| 30.65 | 4918.71 | 1.71 | 3.58 | 0.97 | 0.48 |
| 34.90 | 4918.88 | 1.88 | 3.71 | 1.07 | 0.48 |
| 39.15 | 4919.04 | 2.04 | 3.83 | 1.16 | 0.47 |
| 43.40 | 4919.20 | 2.20 | 3.94 | 1.25 | 0.47 |

### Tailwater Channel Data - CR. 20 Central Park

Tailwater Channel Option: Rectangular Channel

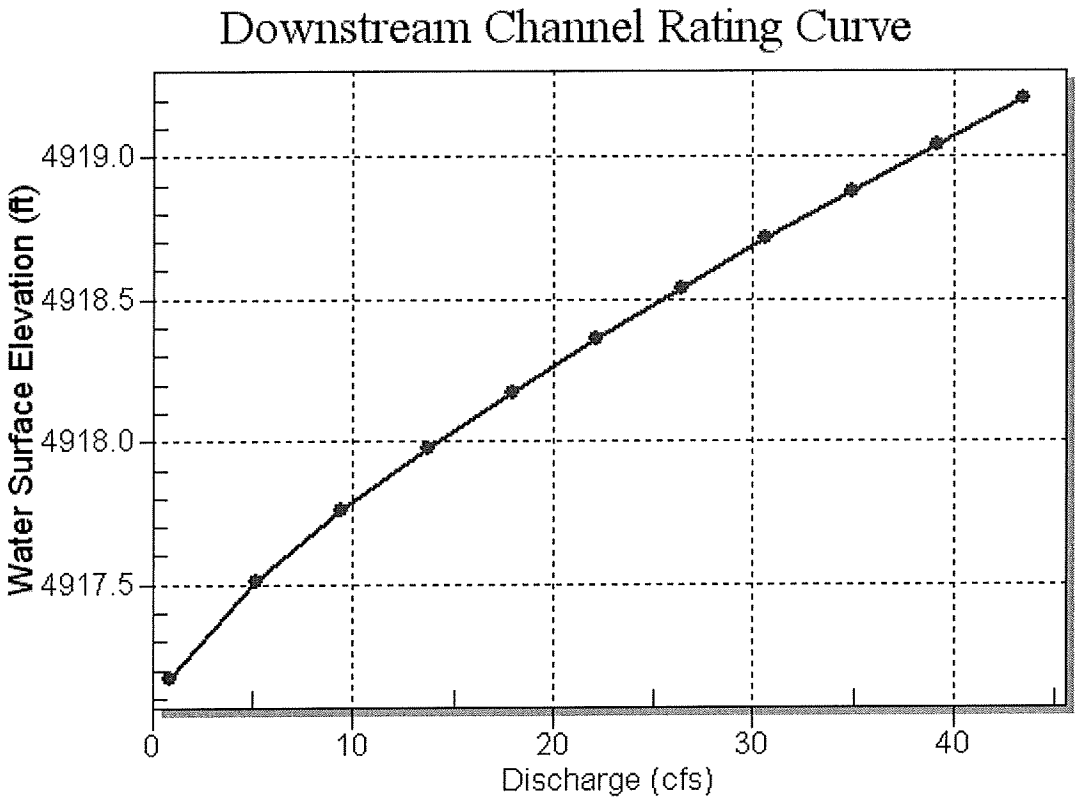
Bottom Width: 5.00 ft

Channel Slope: 0.0091

Channel Manning's n: 0.0400

Channel Invert Elevation: 4917.00 ft

**Tailwater Rating Curve Plot for Crossing: CR. 20 Central Park**




**Roadway Data for Crossing: CR. 20 Central Park**

Roadway Profile Shape: Constant Roadway Elevation

Crest Length: 50.00 ft

Crest Elevation: 4920.50 ft

Roadway Surface: Paved

Roadway Top Width: 60.00 ft

# FINAL DRAINAGE
# AND
# EROSION CONTROL STUDY
# FOR
# RIDGE CREST FILING NO. 1

Prepared For:

U.S. HOMES
5970 S. Greenwood Village Plaza Blvd.
Suite 310
Englewood, CO 80111

Prepared By:

ROCKY MOUNTAIN CONSULTANTS, INC.
8301 E. Prentice Avenue, Suite 101
Englewood, CO 80111
(303) 741-6000

January 1999
Revised April 1999
RMC Reference No. 0965.019.00

CULVERT #2

From BPR

PROJECT: RIDGECREST FILING NO. 1

DESIGNER: MJS

DATE: 4/26/99

**HYDROLOGIC AND CHANNEL INFORMATION**

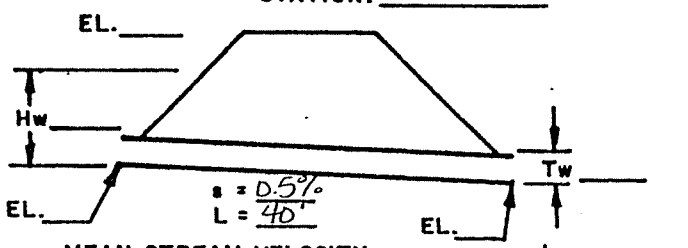
$Q_1$ = _____ TAILWATER ELEVATION = _____

$Q_2$ = _____ TAILWATER ELEVATION = _____

($Q_1$ = DESIGN DISCHARGE, SAY $Q_{25}$
$Q_2$ = CHECK DISCHARGE, SAY $Q_{50}$ OR $Q_{100}$)

**SKETCH**

STATION: _____




MEAN STREAM VELOCITY = _____

MAX. STREAM VELOCITY = _____ $\frac{L}{100s}$ = _____

| CULVERT DESCRIPTION (ENTRANCE TYPE) | Q | SIZE | HEADWATER COMPUTATION | | | | | | | | | | | | CONTROLLING Hw | OUTLET VELOCITY | COST | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | INLET CONT. | | OUTLET CONTROL HW = H + $h_o$ − Ls | | | | | | | | CHART | | | | | |
| | | | $\frac{Hw}{D}$ | Hw | $K_e$ | H | $d_c$ | $\frac{d_c+D}{2}$ | Tw | $h_o$ | Ls | Hw | No. | Hw | | | | |
| 1 BOX CULVERT | 53.2 | 2x4 | 1.47 | 2.94 | 0.2 | 1.05 | 1.76 | 1.88 | 1.73 | 1.88 | 0.2 | 2.73 | | | 2.94 | 7.69 | | INLET CONTROL |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |

SUMMARY & RECOMENDATIONS:

FIGURE 4-4. DESIGN COMPUTATION FORM FOR CULVERTS



Denver Regional Council of Governments



# Final Drainage Report
# For
# Firestone Sports Complex – Phase 1

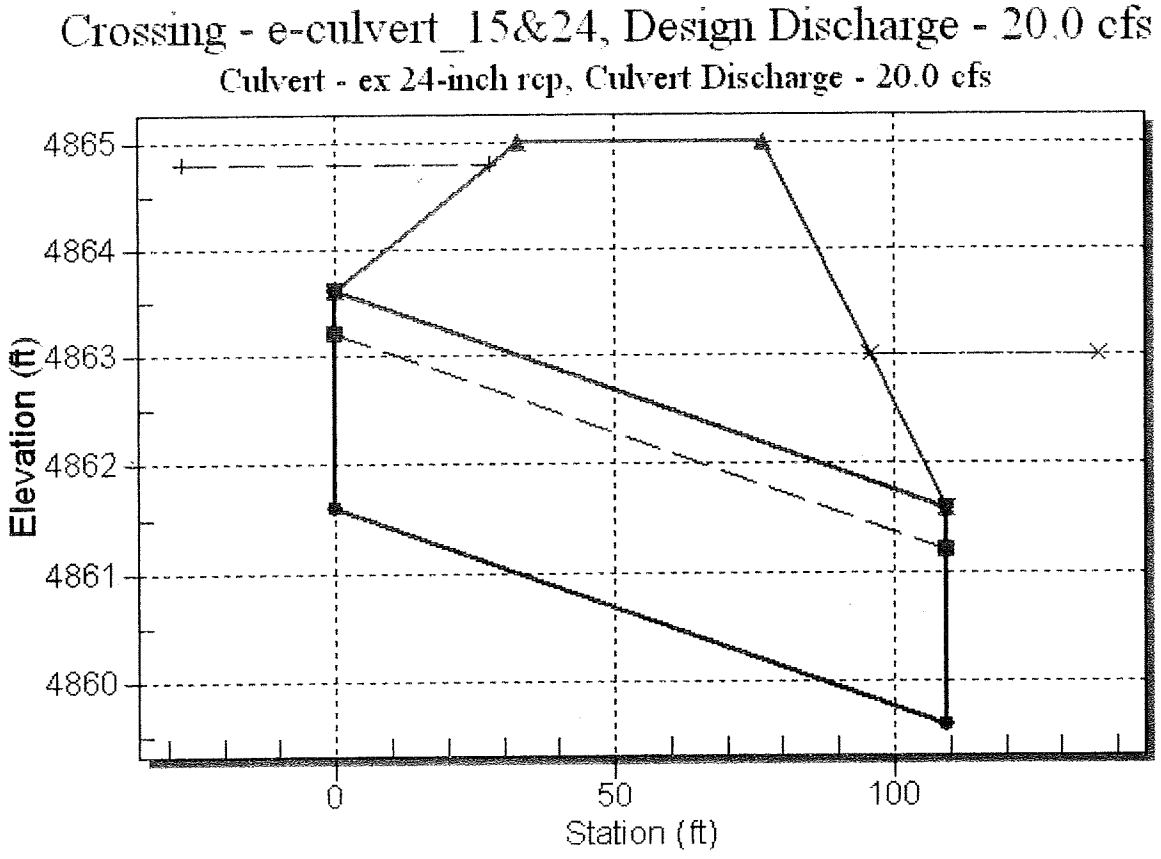
SUBMITTED TO:

Town of Firestone, Colorado

August 10, 2007

TST, Inc. Consulting Engineers

**Water Surface Profile Plot for Culvert: ex 24-inch rcp**




**Site Data - ex 24-inch rcp**

Site Data Option: Culvert Invert Data
Inlet Station: 0.00 ft
Inlet Elevation: 4861.61 ft
Outlet Station: 109.28 ft
Outlet Elevation: 4859.59 ft
Number of Barrels: 1

**Culvert Data Summary - ex 24-inch rcp**

Barrel Shape: Circular
Barrel Diameter: 2.00 ft
Barrel Material:
Barrel Manning's n: 0.0130
Inlet Type:
Inlet Edge Condition:
Inlet Depression: None

## EXISTING 24" CULVERT

# HY-8 Culvert Analysis Report

### Table 1 - Summary of Culvert Flows at Crossing: e-culvert_15&24

| Headwater Elevation (ft) | Total Discharge (cfs) | ex 24-inch rcp Discharge (cfs) | Roadway Discharge (cfs) | Iterations |
|---|---|---|---|---|
| 4863.10 | 5.00 | 5.00 | 0.00 | 1 |
| 4863.28 | 8.50 | 8.50 | 0.00 | 1 |
| 4863.65 | 12.00 | 12.00 | 0.00 | 1 |
| 4864.08 | 15.50 | 15.50 | 0.00 | 1 |
| 4864.62 | 19.00 | 19.00 | 0.00 | 1 |
| 4864.79 | 20.00 | 20.00 | 0.00 | 1 |
| 4865.05 | 26.00 | 21.41 | 4.46 | 10 |
| 4865.08 | 29.50 | 21.54 | 7.86 | 4 |
| 4865.10 | 33.00 | 21.64 | 11.14 | 3 |
| 4865.12 | 36.50 | 21.74 | 14.61 | 3 |
| 4865.14 | 40.00 | 21.84 | 18.08 | 3 |

# Final Drainage Study
# for
# St. Vrain Ranch, Filing III
# Firestone, Colorado

September 18, 2000

Prepared For:
St. Vrain Partners, LLC
Boulder, Colorado 80304

Prepared By:

NORTHERN ENGINEERING SERVICES, INC
Northern Engineering Services, Inc
420 S. Howes, Suite 202
Fort Collins, Colorado 80521
Phone: (970)221-4158

Project Number: SVR; 2003.00

NORTHERN
ENGINEERING
SERVICES INC

September 18, 2000

TST, Inc.
Attn.: Mr. David B. Lindsay, P.E.
748 Whalers Way
Building D
Fort Collins, Colorado 80525

**RE:** St. Vrain Ranch, Filing III
Weld County, Colorado

Dear Mr. Lindsay,

Northern Engineering Services, Inc. is pleased to resubmit this Final Drainage Study for St. Vrain Ranch, Filing 3 for your review. This report was prepared in compliance with technical criteria set forth by the Town of Firestone in the Design Criteria and Construction Standards Manual. We acknowledge that the Town of Firestone's review of this study is only for general conformance with submittal requirements, current design criteria and standard engineering principles and practices.

If you should have any questions or comments as you review this report, please feel free to contact me at your convenience.

Sincerely,
NORTHERN ENGINEERING SERVICES, INC.

Melissa L. Chalona, P.E.
Project Engineer

420 SOUTH HOWES, SUITE 202, FORT COLLINS, COLORADO 80521, (970) 221-4158, FAX (970) 221-4159

F1



# STORM CULVERT 1

**DP12 (4.0 cfs) + DP 13 (43.4 CFS) = 47.4 CFS**

CURRENT DATE: 08-16-2000
CURRENT TIME: 09:43:33

FILE DATE: 08-16-2000
FILE NAME: SVR3CR15

FHWA CULVERT ANALYSIS
HY-8, VERSION 6.1

| CULV NO. | SITE DATA: INLET ELEV. (ft) | SITE DATA: OUTLET ELEV. (ft) | SITE DATA: CULVERT LENGTH (ft) | CULVERT SHAPE, MATERIAL, INLET: BARRELS SHAPE MATERIAL | SPAN (ft) | RISE (ft) | MANNING n | INLET TYPE |
|---|---|---|---|---|---|---|---|---|
| 1 | 4906.02 | 4905.02 | 200.00 | 2 RCP | 2.25 | 2.25 | .013 | IMPR SDT REC |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |

SUMMARY OF CULVERT FLOWS (cfs) FILE: SVR3CR15 DATE: 08-16-2000

| ELEV (ft) | TOTAL | 1 | 2 | 3 | 4 | 5 | 6 | ROADWAY | ITR |
|---|---|---|---|---|---|---|---|---|---|
| 4906.02 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 1 |
| 4906.55 | 4.7 | 4.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 1 |
| 4906.79 | 9.5 | 9.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 1 |
| 4907.01 | 14.2 | 14.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 1 |
| 4907.22 | 19.0 | 19.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 1 |
| 4907.42 | 23.7 | 23.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 1 |
| 4907.98 | 28.4 | 28.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 1 |
| 4908.17 | 33.2 | 33.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 1 |
| 4908.36 | 37.9 | 37.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 1 |
| 4908.60 | 42.7 | 42.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 1 |
| 4908.84 | **47.4** | 47.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 1 |
| 4909.87 | 73.5 | 73.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | OVERTOPPING | |

SUMMARY OF ITERATIVE SOLUTION ERRORS FILE: SVR3CR15 DATE: 08-16-2000

| HEAD ELEV (ft) | HEAD ERROR (ft) | TOTAL FLOW (cfs) | FLOW ERROR (cfs) | % FLOW ERROR |
|---|---|---|---|---|
| 4906.02 | 0.000 | 0.00 | 0.00 | 0.00 |
| 4906.55 | 0.000 | 4.74 | 0.00 | 0.00 |
| 4906.79 | 0.000 | 9.48 | 0.00 | 0.00 |
| 4907.01 | 0.000 | 14.22 | 0.00 | 0.00 |
| 4907.22 | 0.000 | 18.96 | 0.00 | 0.00 |
| 4907.42 | 0.000 | 23.70 | 0.00 | 0.00 |
| 4907.98 | 0.000 | 28.44 | 0.00 | 0.00 |
| 4908.17 | 0.000 | 33.18 | 0.00 | 0.00 |
| 4908.36 | 0.000 | 37.92 | 0.00 | 0.00 |
| 4908.60 | 0.000 | 42.66 | 0.00 | 0.00 |
| 4908.84 | 0.000 | 47.40 | 0.00 | 0.00 |

<1> TOLERANCE (ft) = 0.010 <2> TOLERANCE (%) = 1.000

F2



CURRENT DATE: 08-16-2000 FILE DATE: 08-16-2000
CURRENT TIME: 09:43:33 FILE NAME: SVR3CR15

PERFORMANCE CURVE FOR CULVERT 1 - 2( 2.25 (ft) BY 2.25 (ft)) RCP

| DIS-CHARGE FLOW (cfs) | HEAD-WATER ELEV. (ft) | INLET CONTROL DEPTH (ft) | OUTLET CONTROL DEPTH (ft) | FLOW TYPE <F4> | NORMAL DEPTH (ft) | CRIT. DEPTH (ft) | OUTLET DEPTH (ft) | TW DEPTH (ft) | OUTLET VEL. (fps) | TW VEL. (fps) |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.00 | 4906.02 | 0.00 | 0.00 | 0-NF | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4.74 | 4906.55 | 0.53 | 0.53 | 1-S2n | 0.49 | 0.51 | 0.41 | 0.85 | 4.73 | 1.66 |
| 9.48 | 4906.79 | 0.77 | 0.77 | 1-S2n | 0.71 | 0.73 | 0.63 | 1.10 | 5.14 | 1.97 |
| 14.22 | 4907.01 | 0.99 | 0.99 | 1-S2n | 0.88 | 0.91 | 0.81 | 1.28 | 5.49 | 2.18 |
| 18.96 | 4907.22 | 1.20 | 1.20 | 1-S2n | 1.04 | 1.06 | 0.96 | 1.42 | 5.88 | 2.34 |
| 23.70 | 4907.42 | 1.40 | 1.40 | 1-S2n | 1.18 | 1.19 | 1.09 | 1.55 | 6.22 | 2.48 |
| 28.44 | 4907.98 | 1.58 | 1.96 | 3-M1t | 1.33 | 1.31 | 1.66 | 1.66 | 4.54 | 2.59 |
| 33.18 | 4908.17 | 1.76 | 2.15 | 3-M1t | 1.47 | 1.42 | 1.75 | 1.75 | 5.00 | 2.70 |
| 37.92 | 4908.36 | 1.92 | 2.34 | 3-M1t | 1.63 | 1.52 | 1.84 | 1.84 | 5.42 | 2.79 |
| 42.66 | 4908.60 | 2.08 | 2.58 | 3-M1t | 1.81 | 1.61 | 1.93 | 1.93 | 5.90 | 2.87 |
| 47.40 | 4908.84 | 2.24 | 2.82 | 3-M2t | 2.25 | 1.70 | 2.00 | 2.00 | 6.34 | 2.95 |

El. inlet face invert 4906.02 ft El. outlet invert 4905.02 ft
El. inlet throat invert 4906.00 ft El. inlet crest 0.00 ft

***** SITE DATA ***** CULVERT INVERT **********

| | |
|---|---|
| INLET STATION | 0.00 ft |
| INLET ELEVATION | 4906.02 ft |
| OUTLET STATION | 204.50 ft |
| OUTLET ELEVATION | 4905.02 ft |
| NUMBER OF BARRELS | 2 |
| SLOPE (V/H) | 0.0049 |
| CULVERT LENGTH ALONG SLOPE | 200.00 ft |

***** CULVERT DATA SUMMARY **********

| | |
|---|---|
| BARREL SHAPE | CIRCULAR |
| BARREL DIAMETER | 2.25 ft |
| BARREL MATERIAL | CONCRETE |
| BARREL MANNING'S n | 0.013 |
| INLET TYPE | IMPR SDT RECT |
| INLET EDGE AND WALL | SQUARE EDGE TOP (26-90 DEG WINGWALL) |
| INLET DEPRESSION | NONE |

***** SIDE-TAPERED RECTANGULAR IMPROVED INLET ***

| | |
|---|---|
| FACE WIDTH | 4.50 ft |
| SIDE TAPER (4:1 TO 6:1) (X:1) | 4.00 |

F3



CURRENT DATE: 08-16-2000
CURRENT TIME: 09:43:33

FILE DATE: 08-16-2000
FILE NAME: SVR3CR15

## TAILWATER

******* REGULAR CHANNEL CROSS SECTION ****************

| | |
|---|---|
| SIDE SLOPE H/V (X:1) | 4.0 |
| CHANNEL SLOPE V/H (ft/ft) | 0.005 |
| MANNING'S n (.01-0.1) | 0.035 |
| CHANNEL INVERT ELEVATION | 4905.02 ft |
| CULVERT NO.1 OUTLET INVERT ELEVATION | 4905.02 ft |

******* UNIFORM FLOW RATING CURVE FOR DOWNSTREAM CHANNEL

| FLOW (cfs) | W.S.E. (ft) | FROUDE NUMBER | DEPTH (ft) | VEL. (f/s) | SHEAR (psf) |
|---|---|---|---|---|---|
| 0.00 | 4905.02 | 0.000 | 0.00 | 0.00 | 0.00 |
| 4.74 | 4905.87 | 0.318 | 0.85 | 1.66 | 0.26 |
| 9.48 | 4906.12 | 0.332 | 1.10 | 1.97 | 0.34 |
| 14.22 | 4906.30 | 0.340 | 1.28 | 2.18 | 0.40 |
| 18.96 | 4906.44 | 0.346 | 1.42 | 2.34 | 0.44 |
| 23.70 | 4906.57 | 0.351 | 1.55 | 2.48 | 0.48 |
| 28.44 | 4906.68 | 0.355 | 1.66 | 2.59 | 0.52 |
| 33.18 | 4906.77 | 0.359 | 1.75 | 2.70 | 0.55 |
| 37.92 | 4906.86 | 0.362 | 1.84 | 2.79 | 0.57 |
| 42.66 | 4906.95 | 0.364 | 1.93 | 2.87 | 0.60 |
| 47.40 | 4907.02 | 0.367 | 2.00 | 2.95 | 0.63 |

## ROADWAY OVERTOPPING DATA

| | |
|---|---|
| ROADWAY SURFACE | PAVED |
| EMBANKMENT TOP WIDTH | 60.00 ft |
| CREST LENGTH | 20.00 ft |
| OVERTOPPING CREST ELEVATION | 4909.87 ft |

# Appendix H:
# UDCUHP INPUT PARAMETERS

# Precipitation Frequency Data Output

**NOAA Atlas 2**

**Colorado 40.1427•N 104.9039•W**
***Site-specific Estimates***

---

| Map | Precipitation (inches) | Precipitation Intensity (in/hr) |
|---|---|---|
| 2-year 6-hour | 1.44 | 0.24 |
| 2-year 24-hour | 2.04 | 0.09 |
| 100-year 6-hour | 3.64 | 0.61 |
| 100-year 24-hour | 5.03 | 0.21 |

---

**Hydrometeorological Design Studies Center - NOAA/National Weather Service**
**1325 East-West Highway - Silver Spring, MD 20910 - (301) 713-1669**
**Wed Jul 11 17:43:14 2007**

# Colorado

## Discussion of Maps

Figures 20 through 43 present precipitation-frequency maps for Colorado for 6- and 24-hr durations. Figures 20 through 31 are for annual (or all-season) values for the 2-, 5-, 10-, 25-, 50, and 100-yr return periods. Figures 32 through 43 are for the May through October season and are for probabilities of 0.50, 0.20, 0.10, 0.04, 0.02, and 0.01. The isopluvial maps represent the 360- and 1,440-min durations for the partial-duration series. Data were tabulated for clock and observation-day intervals for the annual series and were adjusted by the empirical factors given in the ANALYSIS section.

**Isoline interval.** The isoline interval selected was designed to provide a reasonably complete description of the isopluvial pattern in various regions of the state. The isoline interval over most of the state on maps for the 24-hr duration is 0.2 in. for precipitation-frequency values below 3.0 in., 0.4 in. between 3.0 in. and 5.0 in., and 0.5 in. at values greater than 5.0 in. However, in southwestern Colorado along the San Juan Mountains, the annual maps use an isoline interval of 0.2 in. below precipitation-frequency values of 2.0 in., and 0.5 in. for values over 2.0 in. On the maps for the 6-hr duration, the interval is 0.1 in. for precipitation-frequency values under 1.2 in. at the 2-yr and 0.50 and 0.20 probability level (on maps for the May through October season). At longer return periods (or lower probabilities), the upper limit of the 0.1-in. isoline interval increases in order to maintain the isopluvial gradient and degree of detail. On all maps for the 6-hr duration, the isoline interval changes from 0.2 in. below 3.0 in. to 0.4 in. over 3.0-in. precipitation-frequency values. Dashed intermediate lines have been placed between widely separated isolines and in regions where a linear interpolation between the normal isopluvial interval would lead to erroneous interpolation. "Lows" that close within the boundaries of a particular map have been hatched on the low-valued side of the isoline.

**Importance of snow in precipitation-frequency values.** The annual maps in this Atlas represent frequency values of precipitation regardless of type. For many hydrologic purposes, precipitation falling as rain must be treated in a different manner from that falling as snow. The contribution of snow amounts to precipitation-frequency values in Colorado and the Rocky Mountain States (roughly Montana, Wyoming, Colorado, New Mexico, and Utah) was investigated. In this area, there were about 50 stations per state having 10 to 15 yrs of observation of snowfall as part of the precipitation observing program. For each such station, two data series were formed as discussed under Interpretation of Results, Importance of Snow in Estimating Frequency Values.

A ratio was formed of the 2-yr 24-hr value for the series containing maximum annual events without regard to the type of precipitation and the 2-yr 24-hr value for the series with snow occurrences eliminated. A plot of this ratio vs. latitude (fig. 15) shows that the ratio tends to be at a maximum in the latitude of Colorado and Utah. Over all of Colorado, the all-precipitation series tends to average about 10 percent higher than the series with snow eliminated. However, examination of the data shows that in the relatively flat areas east of a smoothed 6,000-ft contour the differences between the two series are minor. With data from this area eliminated, the difference between the two series averages about 15 percent, with some individual differences as large as 40 to 50 percent. About half the stations have differences greater than 10 percent. These differences indicate that frequency values computed from an annual series of rainfall amounts only would be different from those composed of all-precipitation values, and two separate sets of precipitation-frequency maps were needed.

Snowfall observations are made at only about 15 percent of the precipitation stations used in this study. For this reason, a rainfall-frequency study could not be made by direct methods. Since most snowfall occurs during the colder half of the year, a series containing only values for the May to October season was compared with the series that was based on rainfall only. The two series were in good agreement, except for a slight bias toward higher values for the May to October season. This bias results from some large amounts in late October and early May occurring as snow and thus excluded from the rainfall-only series. The average difference is only about 4 percent, with no consistent preference toward higher elevations or particular geographic regions.

Two sets of maps were prepared for Colorado. The first set consists of annual maps based on precipitation data from all months of the year without regard to the type of precipitation; rain, rain and snow mixed, all snow, hail, etc. The second series takes precipitation values from the months May to October. No attempt was made in this second series to differentiate between types of precipitation occurring within these months, but the investigations mentioned in the preceding paragraph indicate that these maps will approximate the values that would be obtained by using a data series made up of precipitation events that are exclusively rain. Since data for only part of the year were used, these maps have been labeled with the appropriate probabilities rather than with a return period in years (figs. 32–43).

**Table 11.** *Equations for estimating 1-hr values in Colorado with statistical parameters for each equation*

| Region of applicability* | Equation | Corr. coeff. | No. of stations | Mean of computed stn. values (inches) | Standard error of estimate (inches) |
|---|---|---|---|---|---|
| South Platte, Republican, Arkansas, and Cimarron River Basins (1) | $Y_2 = 0.218 + 0.709[(X_1)(X_1/X_2)]$ | 0.94 | 75 | 1.01 | 0.074 |
| | $Y_{100} = 1.897 + 0.439[(X_3)(X_3/X_4)] - 0.008Z$ | .84 | 75 | 2.68 | .317 |
| San Juan, Upper Rio Grande, Upper Colorado, and Gunnison River Basins and Green River Basin below confluence with the Yampa River (2) | $Y_2 = -0.011 + 0.942[(X_1)(X_1/X_2)]$ | .95 | 86 | 0.72 | .085 |
| | $Y_{100} = 0.494 + 0.755[(X_3)(X_3/X_4)]$ | .90 | 85 | 1.96 | .290 |
| Yampa and Green River Basins above confluence of Green and Yampa Rivers (3) | $Y_2 = 0.019 + 0.711[(X_1)(X_1/X_2)] + 0.001Z$ | .82 | 98 | 0.40 | .031 |
| | $Y_{100} = 0.338 + 0.670[(X_3)(X_3/X_4)] + 0.001Z$ | .80 | 79 | 1.04 | .141 |
| North Platte (4) | $Y_2 = 0.028 + 0.890[(X_1)(X_1/X_2)]$ | .93 | 90 | 0.60 | .062 |
| | $Y_{100} = 0.671 + 0.757[(X_3)(X_3/X_4)] - 0.003Z$ | .91 | 88 | 1.71 | .236 |

* Numbers in parentheses refer to geographic regions shown in figure 19. See text for more complete description.

List of variables
$Y_2$ = 2-yr 1-hr estimated value
$Y_{100}$ = 100-yr 1-hr estimated value
$X_1$ = 2-yr 6-hr value from precipitation-frequency maps
$X_2$ = 2-yr 24-hr value from precipitation-frequency maps
$X_3$ = 100-yr 6-hr value from precipitation-frequency maps
$X_4$ = 100-yr 24-hr value from precipitation-frequency maps
$Z$ = point elevation in hundreds of feet

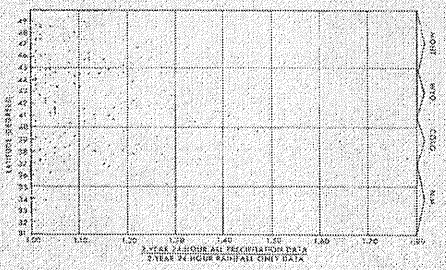



**Figure 15.** *Ratio of 2-yr 24-hr value for all data to 2-yr 24-hr value for rainfall only vs. latitude.*

**Table 12.** *Adjustment factors to obtain n-min estimates from 1-hr values*

| Duration (min) | 5 | 10 | 15 | 30 |
|---|---|---|---|---|
| Ratio to 1-hr | 0.29 | 0.45 | 0.57 | 0.79 |

(Adopted from *U.S. Weather Bureau Technical Paper* No. 40, 1961.)

## Procedures for Estimating Values for Durations Other Than 6 and 24 Hrs

The isopluvial maps in this Atlas are for 6- and 24-hr durations. For many hydrologic purposes, values for other durations are necessary. Such values can be estimated using the 6- and 24-hr maps and the empirical methods outlined in the following sections. The procedures detailed below for obtaining 1-, 2-, and 3-hr estimates were developed specifically for this Atlas. The procedures for obtaining estimates for less than 1-hr duration and for 12-hr duration were adopted from *Weather Bureau Technical Paper* No. 40 (U.S. Weather Bureau 1961) only after investigation demonstrated their applicability to data from the area covered by this Atlas.

**Procedures for estimating 1-hr (60-min) precipitation-frequency values.** Multiple-regression screening techniques were used to develop equations for estimating 1-hr duration values. Factors considered in the screening process were restricted to those that could be determined easily from the maps of this Atlas or from generally available topographic maps.

The 11 western states were separated into several geographic regions. The regions were chosen on the basis of meteorological and climatological homogeneity and are generally combinations of river basins separated by prominent divides. Four of these geographic regions are partially within Colorado. For convenience and use as an overlay on the precipitation-frequency maps, these regions are outlined on figure 19. The first Colorado region is part of the region that lies to the east of the Continental Divide and the crest of the Sangre de Cristo and Sacramento Mountains and is south of the divide separating the drainage basins of the North and South Platte Rivers. It consists of that portion of Colorado drained by the South Platte, Republican, Arkansas, and Cimarron Rivers (Region 1, fig. 19). The second region consists of the area drained by the San Juan, Upper Rio Grande, Upper Colorado, and Gunnison Rivers and by the Green River below its confluence with the Yampa River (Region 2, fig. 19). This is part of a larger region that extends from southwestern Colorado, westward to the Wasatch Mountains of Utah, and southward through Arizona and the western half of New Mexico. The third region is the mountainous portion of the area between the Continental Divide and the crest of the Cascade Range. The portion that lies within Colorado is the northwestern portion of the State that is drained by the Yampa River and the Green River above its confluence with the Yampa (Region 3, fig. 19). A small portion of Colorado drained by the North Platte is Region 4, figure 19. The larger region of which this is a part includes that portion of Wyoming and Montana east of the Continental Divide. Equations to provide estimates for the 1-hr duration for 2- and 100-yr return periods are shown in table 11. Also listed are the statistical parameters associated with each equation. In these equations, the variable $[(X_1)(X_1/X_2)]$ or

$[(X_2)(X_6/X_1)]$ can be regarded as the 6-hr value times the slope of the line connecting the 6- and 24-hr values for the appropriate return period.

As with any separation into regions, the boundary can only be regarded as the sharpest portion of a zone of transition between regions. These equations have been tested for boundary discontinuities by computing values using equations from both sides of the boundary. Differences were found to be mostly under 15 percent. However, it is suggested that when computing estimates along or within a few miles of a regional boundary computations be made using equations applicable to each region and that the average of such computations be adopted.

**Estimates of 1-hr precipitation-frequency values for return periods between 2 and 100 yrs.** The 1-hr values for the 2- and 100-yr return periods can be plotted on the nomogram of figure 6 to obtain values for return periods greater than 2 yrs or less than 100 yrs. Draw a straight line connecting the 2- and 100-yr values and read the desired return-period value from the nomogram.

**Estimates for 2- and 3-hr (120- and 180-min) precipitation-frequency values.** To obtain estimates of precipitation-frequency values for 2 or 3 hrs, plot the 1- and 6-hr values from the Atlas on the appropriate nomogram of figure 16. Draw a straight line connecting the 1- and 6-hr values, and read the 2- and 3-hr values from the nomogram. This nomogram is independent of return period. It was developed using data from the same regions used to develop the 1-hr equations.

The mathematical solution from the data used to develop figure 16 gives the following equations for estimating the 2- and 3-hr values:

| | | |
|---|---|---|
| For Region 1, figure 19 | 2-hr = 0.342 (6-hr) + 0.658 (1-hr) | (3) |
| | 3-hr = 0.597 (6-hr) + 0.403 (1-hr) | (4) |
| For Region 2, figure 19 | 2-hr = 0.341 (6-hr) + 0.659 (1-hr) | (5) |
| | 3-hr = 0.569 (6-hr) + 0.431 (1-hr) | (6) |
| For Regions 3 and 4, figure 19 | 2-hr = 0.250 (6-hr) + 0.750 (1-hr) | (7) |
| | 3-hr = 0.467 (6-hr) + 0.533 (1-hr) | (8) |

**Estimates for 12-hr (720-min) precipitation-frequency values.** To obtain estimates for the 12-hr duration, plot values from the 6- and 24-hr maps on figure 17. Read the 12-hr estimates at the intersection of the line connecting these points with the 12-hr duration line of the nomogram.

**Estimates for less than 1 hr.** To obtain estimates for durations of less than 1 hr, apply the values in table 12 to the 1-hr value for the return period of interest.

| | 1-hr | 2-hr | 3-hr | 6-hr | 24-hr |
|---|---|---|---|---|---|
| 2-yr | *0.71* | *0.83* | *0.91* | 1.05 | 1.58 |
| 5-yr | | | | 1.38 | 1.99 |
| 10-yr | | | | 1.59 | 2.27 |
| 25-yr | | | | 1.90 | 2.65 |
| 50-yr | | | | 2.19 | 2.95 |
| 100-yr | *1.86* | | | 2.39 | 3.35 |

**Table 13.** *Precipitation data for depth-frequency atlas computation point 106°00′ W., 39°00′ N.*

## Illustration of Use of Precipitation-Frequency Maps, Diagrams, and Equations

To illustrate the use of these maps, values were read from figures 20 to 31 for the point at 39°00′ N. and 106°00′ W. These values are shown in boldface type in table 13. The values read from the maps should be plotted on the return-period diagram of figure 6 because (1) not all points are as easy to locate on a series of maps as are latitude-longitude intersections, (2) there may be some slight registration differences in printing, and (3) precise interpolation between isolines is difficult. This has been done for the 24-hr values in table 13 (fig. 18a) and a line of best fit has been drawn subjectively. On this nomogram, the line fits the data rather well. Had any points deviated noticeably from the line, the value would have been reread from the line and the new value substituted in table 13 and adopted in preference to the original readings.

The 2- and 100-yr 1-hr values for the point were computed from the equations applicable to Region 1, figure 19 (table 11), since the point is east of the Continental Divide. The 2-yr 1-hr value is estimated at 0.71 in. (2-yr 6- and 24-hr values from table 13); the estimated 100-yr 1-hr value is 1.86 in. (100-yr 6- and 24-hr values from table 13 and elevation of 9,500 ft). By plotting these 1-hr values on figure 6 and connecting them with a straight line, one can obtain estimates for return periods of 5, 10, 25, and 50 yrs.

The 2- and 3-hr values can be estimated by using the nomogram of figure 16 or equations (3) and (4). The 1- and 6-hr values for the desired return period are obtained as above. Plot these points on the nomogram of figure 16 and connect them with a straight line. Read the estimates for 2 or 3 hrs at the intersections of the connecting line and the 2- and 3-hr vertical lines. An example is shown in figure 18b for the 2-yr return period. The 2-yr 2-hr (0.83 in.) and 2-yr 3-hr (0.91 in.) values are in italics on table 13.

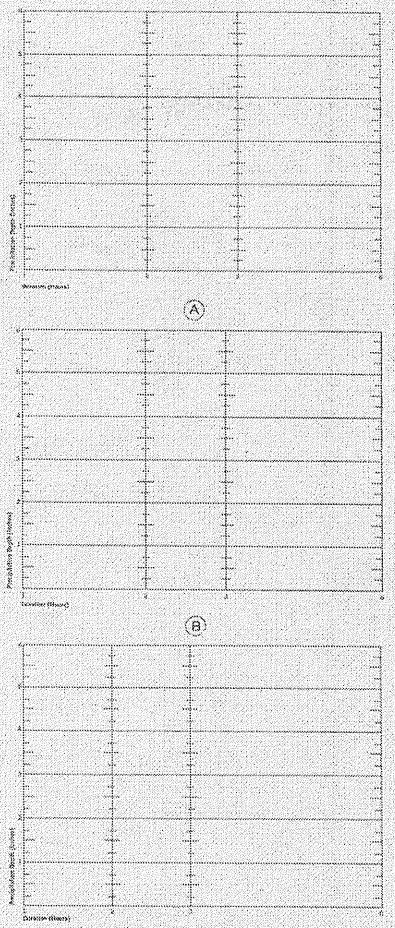



**Figure 16.** *Precipitation depth-duration diagram (1- to 6-hr).*
*a. South Platte, Republican, Arkansas, and Cimarron River Basins (Region 1, fig. 19).*
*b. San Juan, Upper Rio Grande, Upper Colorado, and Gunnison River Basins and Green River Basin below its confluence with the Yampa River (Region 2, fig. 19).*
*c. Yampa and Green River Basins above confluence of Green and Yampa Rivers (Region 3, fig. 19) and North Platte Drainage (Region 4, fig. 19).*

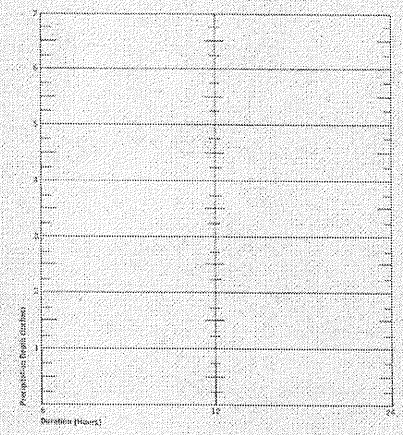
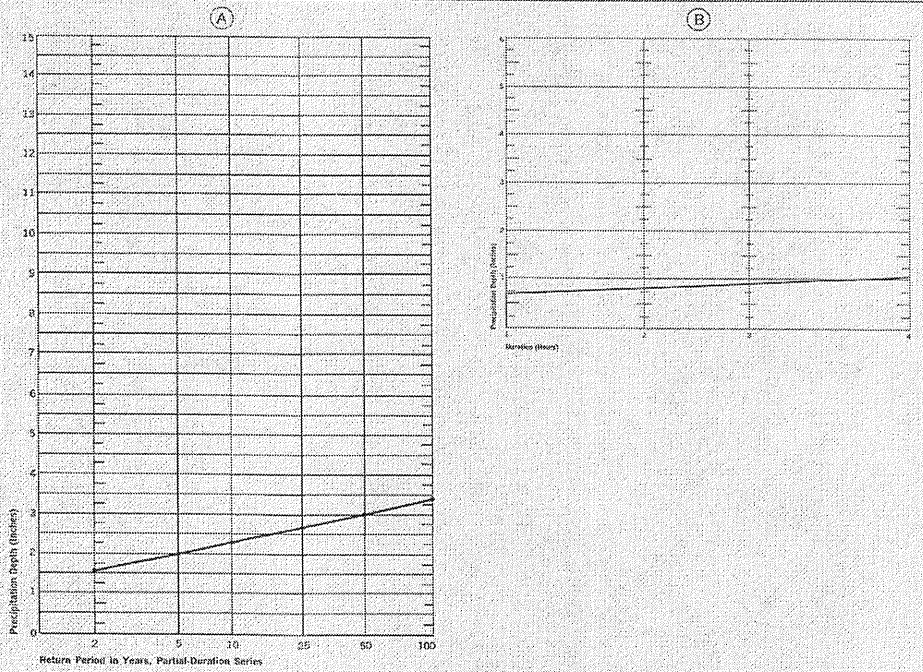


**Figure 17.** *Precipitation depth-duration diagram (6- to 24-hr).*

**Figure 18.** *Illustration of use of precipitation-frequency diagrams using values from precipitation-frequency maps and relations at 106°00′ W., 39°00′ N.*



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*Engineering Consultants*

PROJECT Town of Firestone Sump Basin Analysis JOB NO. 01068.0147.00

CALCULATIONS FOR Rainfall Depths

MADE BY DH DATE 7/11/07 SHEET _____ OF _____

Calculations to determine the 1-hour point rainfall depth for the 2yr & 100yr events.

Calculations based on equations from Table 11 of the Precipitation-Frequency Atlas of the Western United States Volume III - Colorado

Equation (1) - South Platte, Republican, Arkansas, & Cimarron River Basins

$$Y_2 = 0.218 + 0.709\,(X_1^2/X_2)$$

$$Y_{100} = 1.897 + 0.439\,(X_3^2/X_4) - 0.008 \cdot Z$$

Where $Y_2$ = 2yr 1hr estimated value

$Y_{100}$ = 100yr 1hr estimated value

$X_1$ = 2yr 6hr value from precipitation-frequency maps

$X_2$ = 2yr 24hr value from precipitation-frequency maps

$X_3$ = 100yr 6hr " "

$X_4$ = 100yr 24hr " "

$Z$ = Point elevation in hundreds of feet

$X_1 - X_4$ Values were determined by entering the Latitude & Longitude of the sump basin centroid at the NOAA Atlas 2 website www.nws.noaa.gov/ohd/hdsc/noaaatlas2.htm

$X_1$ = 1.44 inches
$X_2$ = 2.04 inches
$X_3$ = 3.64 inches
$X_4$ = 5.03 inches

$\Rightarrow Y_2 = 0.218 + 0.709\,(1.44^2/2.04) \Rightarrow Y_2 = 0.94$ inches

$Y_{100} = 1.897 + 0.439\,(3.64^2/5.03) - 0.008\,(4955/100) \Rightarrow Y_{100} = 2.66$ inches

COLORADO CIVIL GROUP, INC.
*Engineering Consultants*

PROJECT Town of Firestone Sump Basin Analysis JOB NO. 0668.0147.00
CALCULATIONS FOR 3hr Point Precipitation Value (2yr)
MADE BY DH DATE 7/20/07 SHEET ____ OF ____

Using Equation RA-2:

$$P_3 = P_1 + (P_6 - P_1) \cdot 0.597$$

$P_3$ = 3hr Point Rainfall (in)
(2yr) $P_1$ = 1hr Point Rainfall (in) = 0.94 inches
(2yr) $P_6$ = 6hr Point Rainfall (in) = 1.44 inches

$$\Rightarrow P_3 = 0.94 + (1.44 - 0.94) \cdot 0.597 \Rightarrow P_3 = 1.24 \text{ inches (2yr)}$$

Now the distribution needs to be calculated for the 2yr event.

$$\text{Last 1hr} = P_{3(2yr)} = P_{3(2yr)} - (P_{1(2yr)} \cdot 1.157)$$
$$= 1.24 - (0.94 \cdot 1.157)$$
$$= 0.152$$

Divide this into 12-5min steps:

$$\Rightarrow \frac{0.152}{12} = .013 \text{ inches}$$

COLORADO CIVIL GROUP, INC.
*Engineering Consultants*

PROJECT Town of Firestone Sump Basin Analysis JOB NO. 01668.0147.00
CALCULATIONS FOR 3-hr Point Precip Value (100yr)
MADE BY DH DATE 7/20/07 SHEET ____ OF ____

Calculate $P_3$ (3hr Point Rainfall Depth) from Equation RA-2 (100yr)

RA-2: $P_3 = P_1 + (P_6 - P_1) \cdot 0.597$

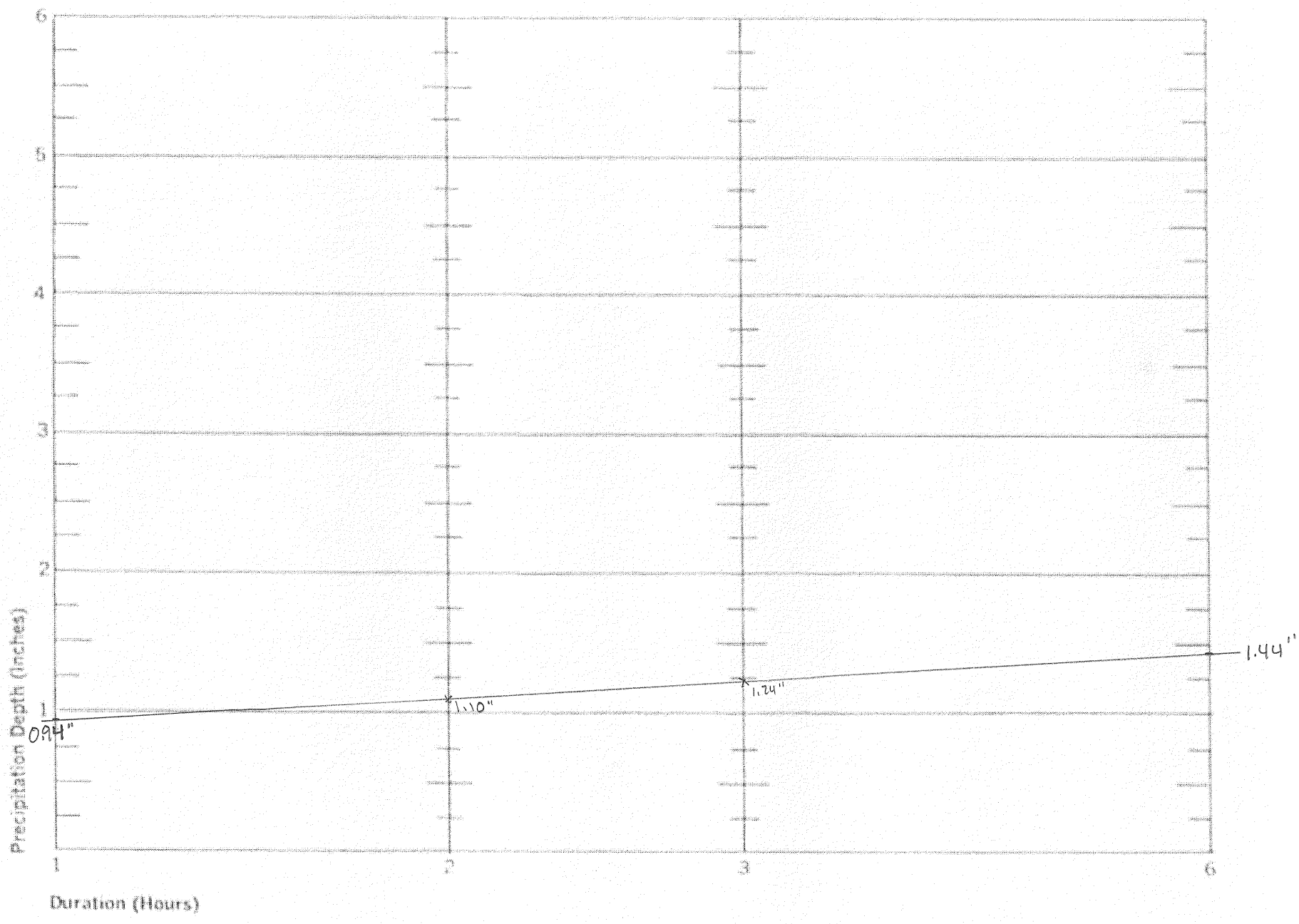
$P_3$ = 3hr Point Rainfall (in)
(100yr) $P_1$ = 1hr Point Rainfall (in) = 2.666 inches
(100yr) $P_6$ = 6hr Point Rainfall (in) = 3.64 inches

$\Rightarrow P_3 = 2.666 + (3.64 - 2.666) \cdot 0.597 \Rightarrow \underline{P_3 = 3.25 \text{ inches}}$ (100yr)

Since basin is larger than 10 square miles, a 3hr design storm is suggested. The rainfall distribution over the last 1hr of the storm is calculated as shown below.

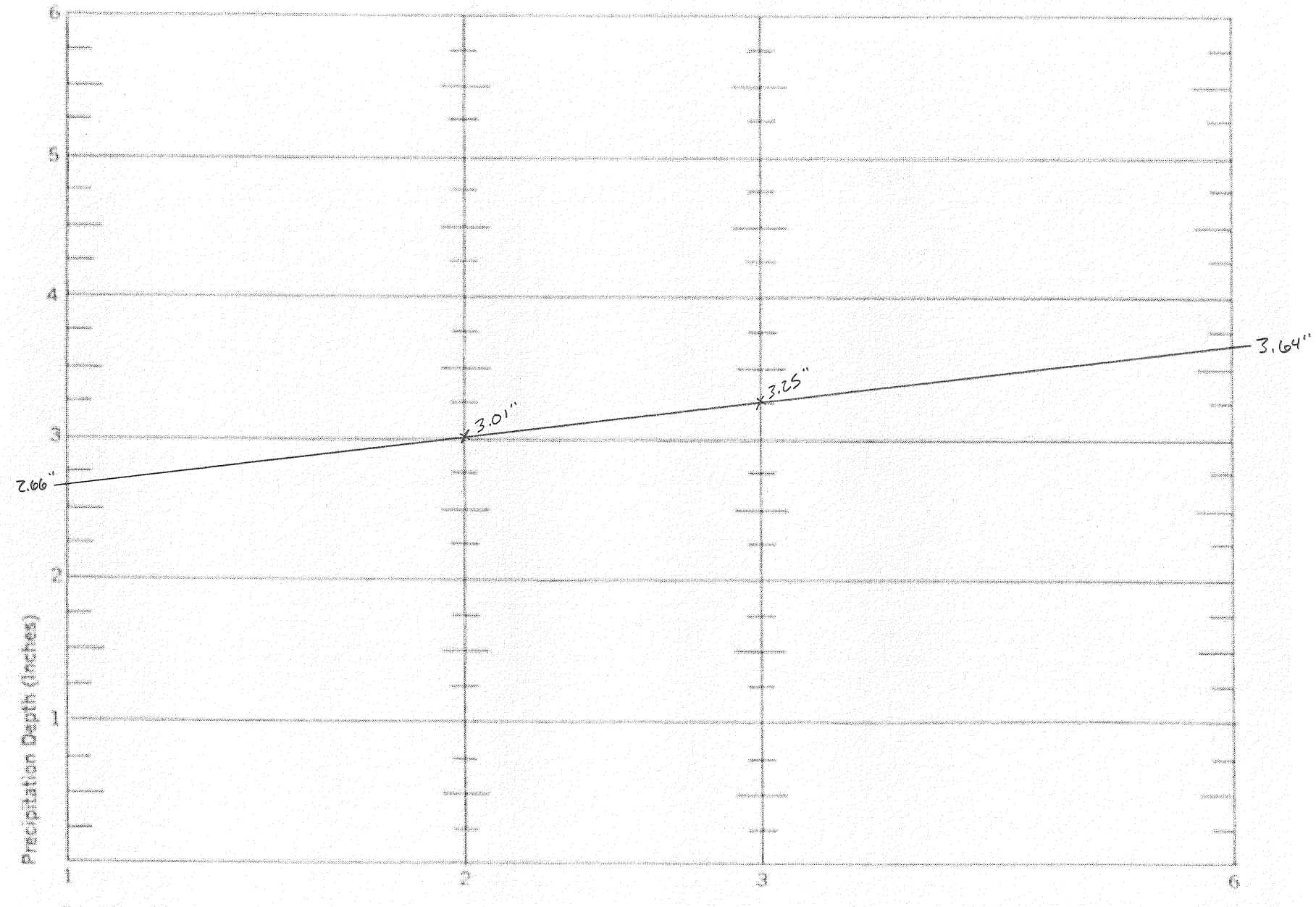
Rainfall to distribute over last 1hr = $P_3 - (P_1 \cdot 1.156)$
$= 3.25 - (2.666 \cdot 1.156)$
$= \underline{0.1750 \text{ inches}}$

From 175min to 180mins there are 12-5min steps $\Rightarrow$ $0.1750/12 = \underline{0.015}$ for each 5min step.




A

2yr Depths
(1hr-6hr)




100yr Depths
(1hr-6hr)

A

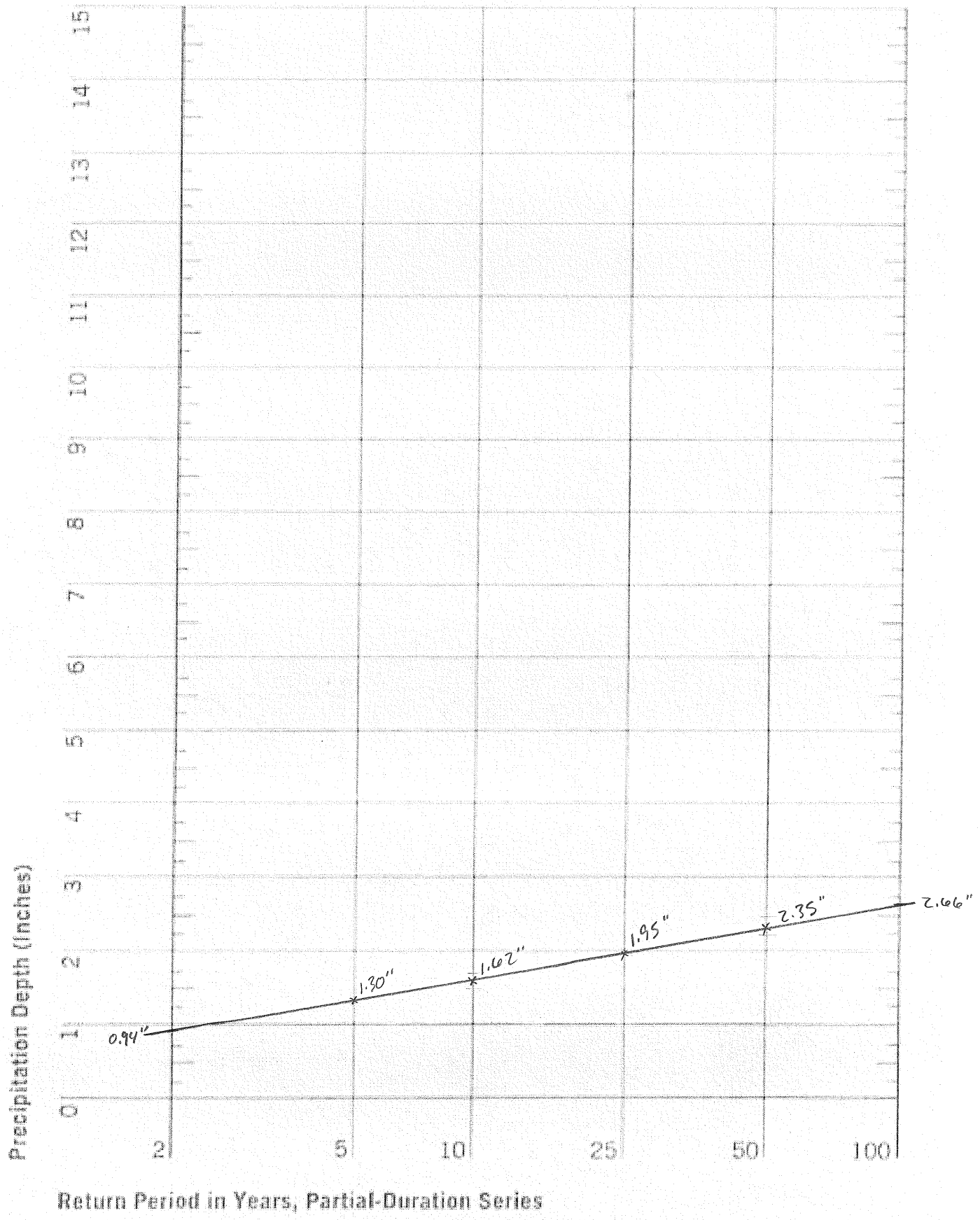
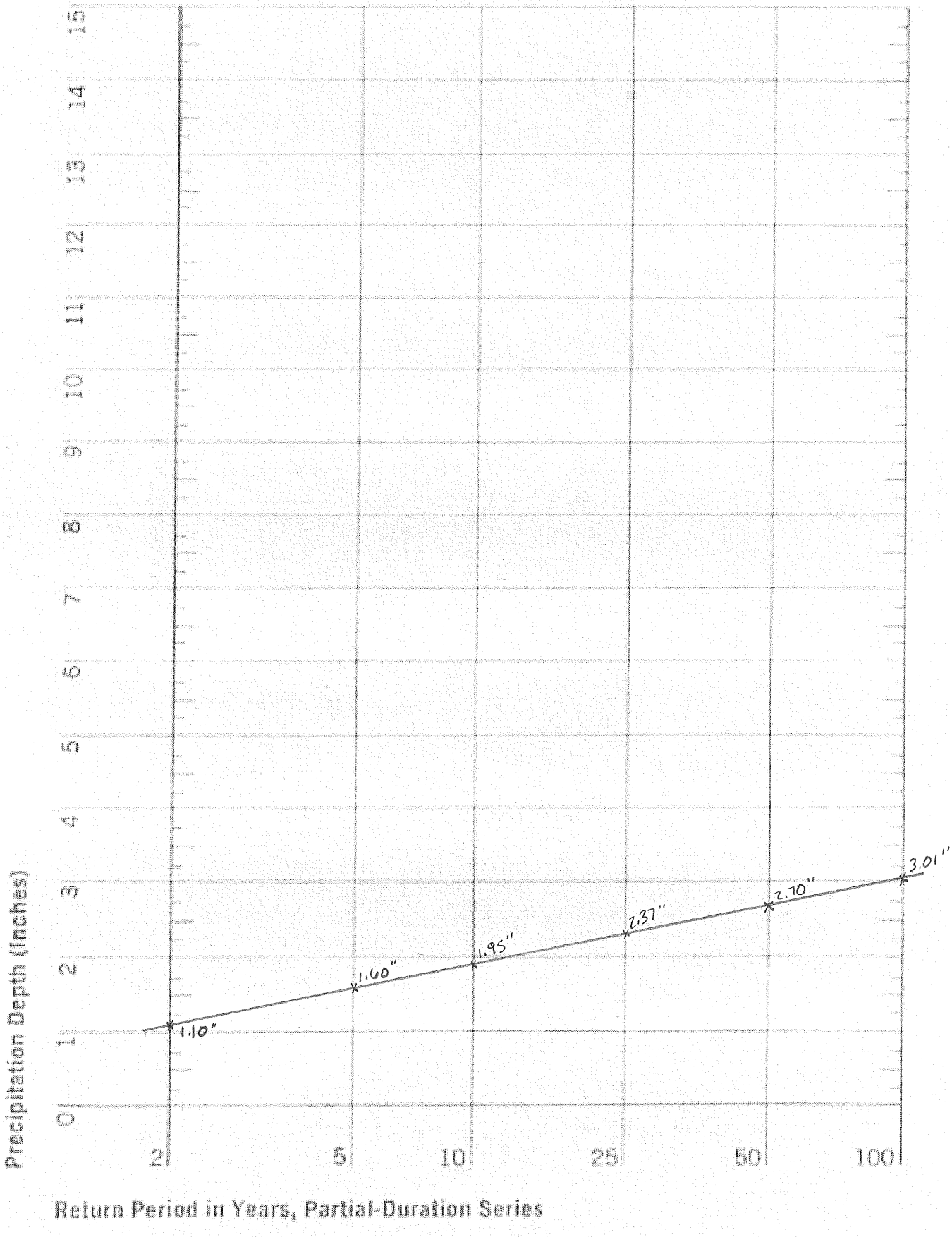
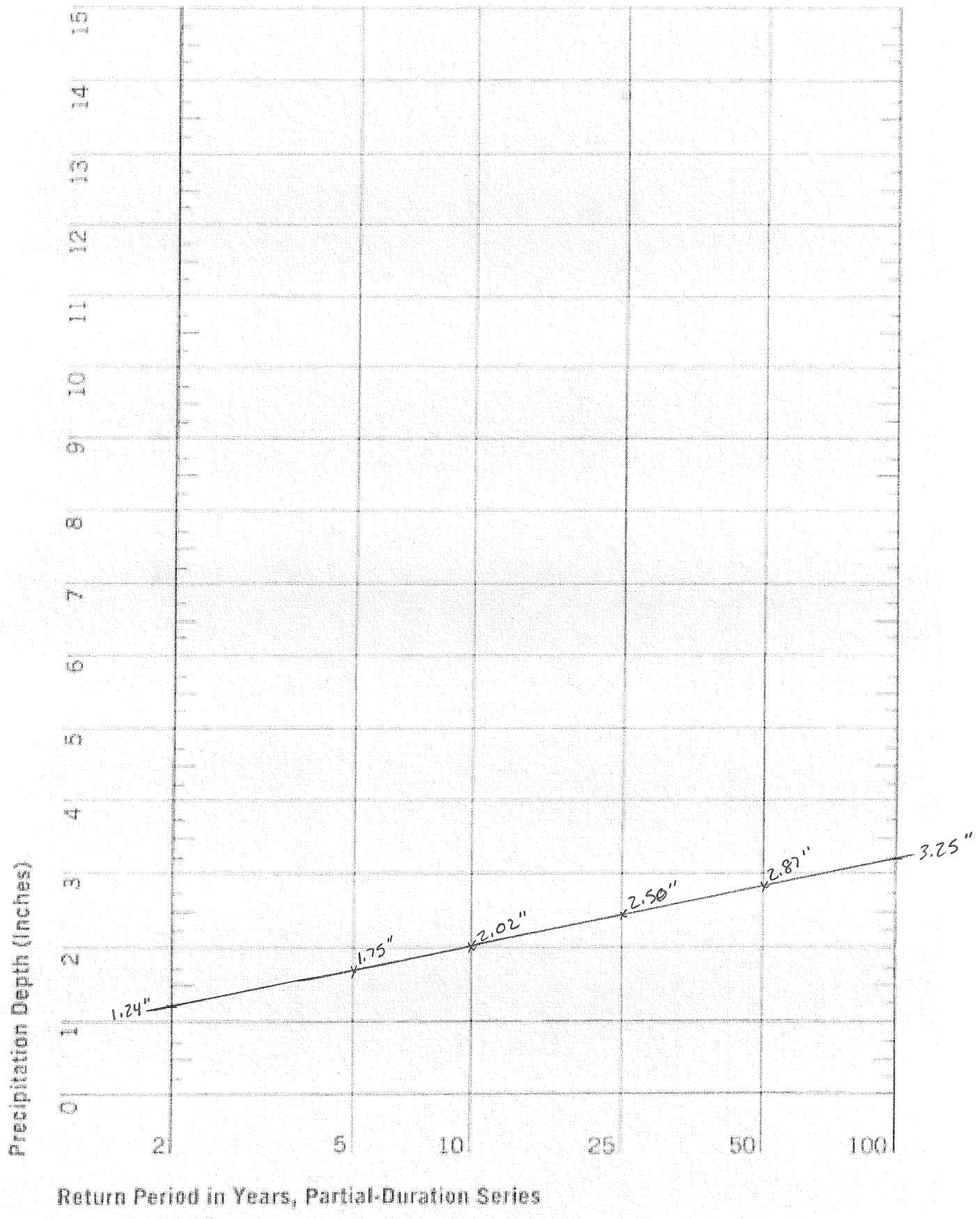



**Figure 6.** *Precipitation depth versus return period for partial-duration series.*



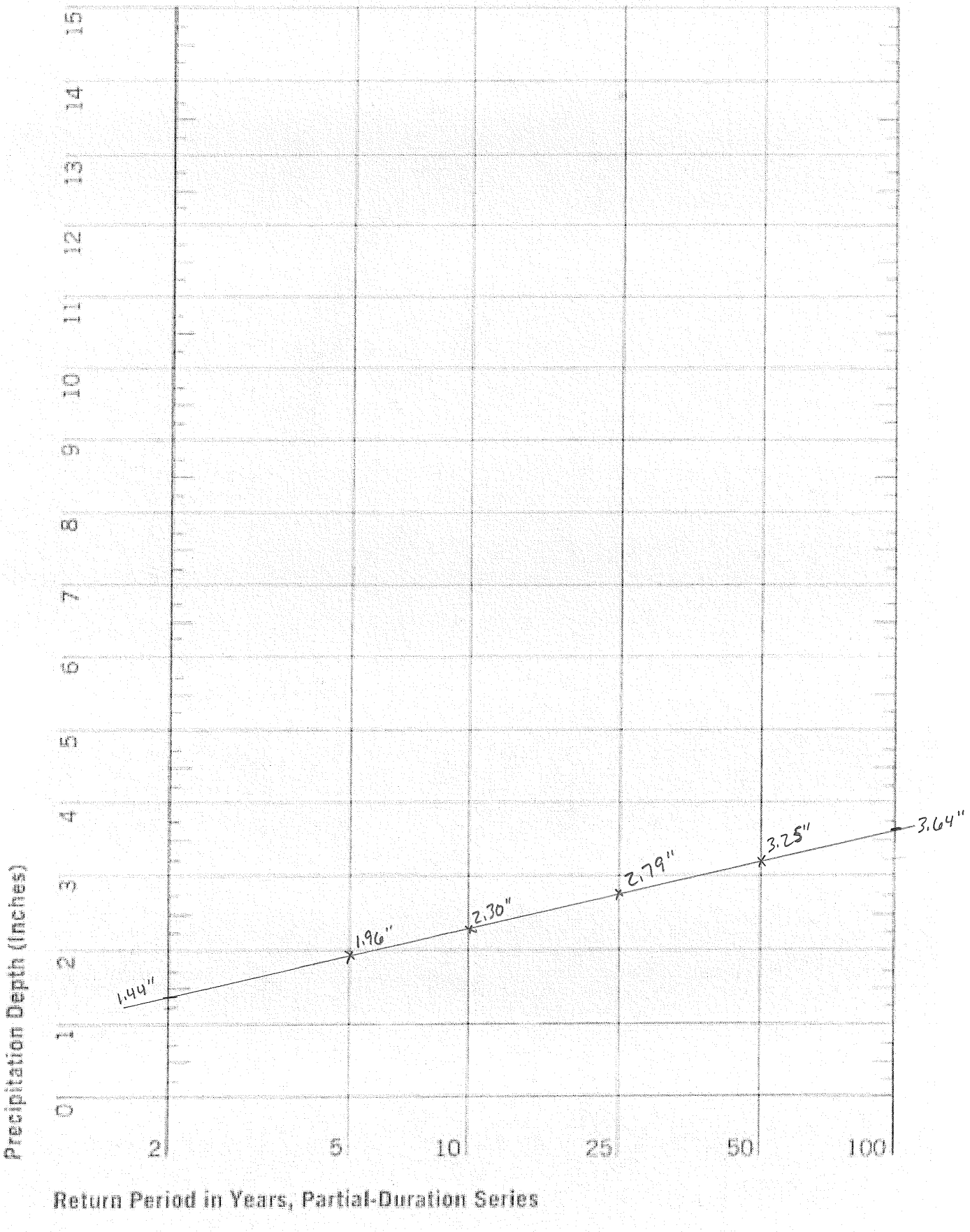

2-hr Depth

**Figure 6.** *Precipitation depth versus return period for partial-duration series.*




3hr Depths

**Figure 6.** *Precipitation depth versus return period for partial-duration series.*




6 hr Depths

**Figure 6.** *Precipitation depth versus return period for partial-duration series.*

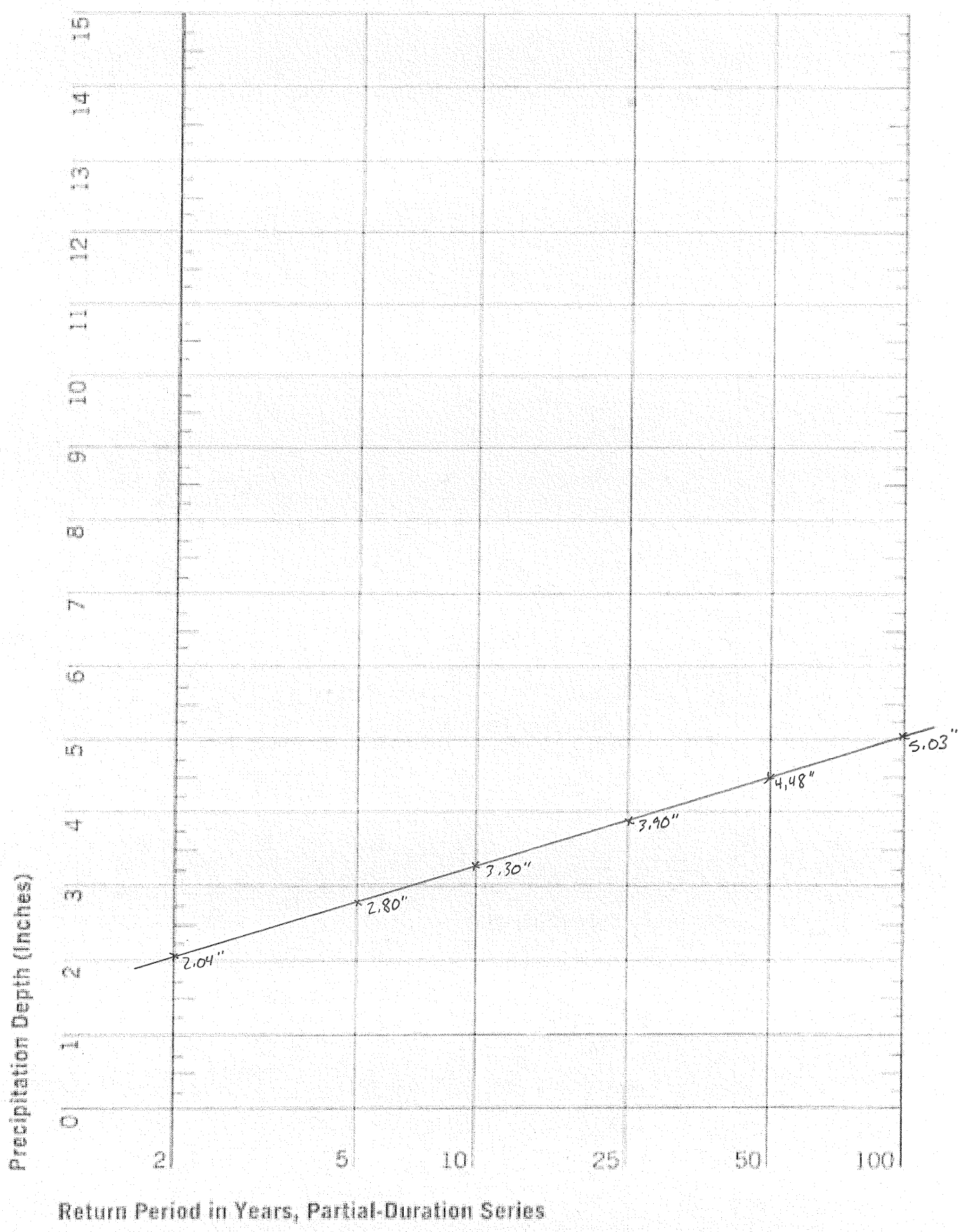



**Figure 6.** *Precipitation depth versus return period for partial-duration series.*

**Unit Hydrograph for Sump Basin in CUHP**

| | 2yr 3hr 1.24 | 5yr 3hr 1.75 | 10yr 3hr 2.02 | 100yr 3hr 3.25 | Adjustment for Basin Size | | | | Final Unit Hydrograph | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time (min) | 2-yr | 5-yr | 10-yr | 100-yr | 2-yr | 5-yr | 10-yr | 100-yr | 2-yr | 5-yr | 10-yr | 100-yr |
| 5 | 0.019 | 0.026 | 0.032 | 0.027 | 1.00 | 1.00 | 1.00 | 1.00 | 0.019 | 0.026 | 0.032 | 0.027 |
| 10 | 0.038 | 0.048 | 0.060 | 0.080 | 1.00 | 1.00 | 1.00 | 1.00 | 0.038 | 0.048 | 0.060 | 0.080 |
| 15 | 0.079 | 0.113 | 0.133 | 0.122 | 1.00 | 1.00 | 1.00 | 1.00 | 0.079 | 0.113 | 0.133 | 0.122 |
| 20 | 0.150 | 0.199 | 0.243 | 0.213 | 0.90 | 0.90 | 0.90 | 1.00 | 0.135 | 0.179 | 0.219 | 0.213 |
| 25 | 0.235 | 0.325 | 0.405 | 0.372 | 0.90 | 0.90 | 0.90 | 0.90 | 0.212 | 0.293 | 0.365 | 0.335 |
| 30 | 0.132 | 0.169 | 0.194 | 0.665 | 0.90 | 0.90 | 0.90 | 0.90 | 0.118 | 0.152 | 0.175 | 0.599 |
| 35 | 0.059 | 0.075 | 0.091 | 0.372 | 1.00 | 1.00 | 1.00 | 0.90 | 0.059 | 0.075 | 0.091 | 0.335 |
| 40 | 0.047 | 0.057 | 0.070 | 0.213 | 1.00 | 1.00 | 1.00 | 1.00 | 0.047 | 0.057 | 0.070 | 0.213 |
| 45 | 0.028 | 0.047 | 0.062 | 0.165 | 1.00 | 1.00 | 1.00 | 1.00 | 0.028 | 0.047 | 0.062 | 0.165 |
| 50 | 0.028 | 0.047 | 0.052 | 0.133 | 1.00 | 1.00 | 1.00 | 1.00 | 0.028 | 0.047 | 0.052 | 0.133 |
| 55 | 0.028 | 0.039 | 0.052 | 0.106 | 1.00 | 1.00 | 1.00 | 1.00 | 0.028 | 0.039 | 0.052 | 0.106 |
| 60 | 0.028 | 0.039 | 0.052 | 0.106 | 1.00 | 1.00 | 1.00 | 1.00 | 0.028 | 0.039 | 0.052 | 0.106 |
| 65 | 0.028 | 0.039 | 0.052 | 0.106 | 1.00 | 1.00 | 1.00 | 1.00 | 0.028 | 0.039 | 0.052 | 0.106 |
| 70 | 0.019 | 0.039 | 0.052 | 0.053 | 1.00 | 1.00 | 1.00 | 1.00 | 0.019 | 0.039 | 0.052 | 0.053 |
| 75 | 0.019 | 0.033 | 0.052 | 0.053 | 1.00 | 1.00 | 1.00 | 1.00 | 0.019 | 0.033 | 0.052 | 0.053 |
| 80 | 0.019 | 0.029 | 0.041 | 0.032 | 1.00 | 1.00 | 1.00 | 1.00 | 0.019 | 0.029 | 0.041 | 0.032 |
| 85 | 0.019 | 0.029 | 0.031 | 0.032 | 1.00 | 1.00 | 1.00 | 1.00 | 0.019 | 0.029 | 0.031 | 0.032 |
| 90 | 0.019 | 0.029 | 0.031 | 0.032 | 1.00 | 1.00 | 1.00 | 1.00 | 0.019 | 0.029 | 0.031 | 0.032 |
| 95 | 0.019 | 0.029 | 0.031 | 0.032 | 1.00 | 1.00 | 1.00 | 1.00 | 0.019 | 0.029 | 0.031 | 0.032 |
| 100 | 0.019 | 0.020 | 0.031 | 0.032 | 1.00 | 1.00 | 1.00 | 1.00 | 0.019 | 0.020 | 0.031 | 0.032 |
| 105 | 0.019 | 0.020 | 0.031 | 0.032 | 1.00 | 1.00 | 1.00 | 1.00 | 0.019 | 0.020 | 0.031 | 0.032 |
| 110 | 0.019 | 0.020 | 0.031 | 0.032 | 1.00 | 1.00 | 1.00 | 1.00 | 0.019 | 0.020 | 0.031 | 0.032 |
| 115 | 0.009 | 0.020 | 0.028 | 0.032 | 1.00 | 1.00 | 1.00 | 1.00 | 0.009 | 0.020 | 0.028 | 0.032 |
| 120 | 0.009 | 0.017 | 0.021 | 0.032 | 1.00 | 1.00 | 1.00 | 1.00 | 0.009 | 0.017 | 0.021 | 0.032 |
| 125 | 0.013 | 0.020 | 0.012 | 0.015 | 1.00 | 1.00 | 1.00 | 1.00 | 0.013 | 0.020 | 0.012 | 0.015 |
| 130 | 0.013 | 0.020 | 0.012 | 0.015 | 1.00 | 1.00 | 1.00 | 1.00 | 0.013 | 0.020 | 0.012 | 0.015 |
| 135 | 0.013 | 0.020 | 0.012 | 0.015 | 1.00 | 1.00 | 1.00 | 1.00 | 0.013 | 0.020 | 0.012 | 0.015 |
| 140 | 0.013 | 0.020 | 0.012 | 0.015 | 1.00 | 1.00 | 1.00 | 1.00 | 0.013 | 0.020 | 0.012 | 0.015 |
| 145 | 0.013 | 0.020 | 0.012 | 0.015 | 1.00 | 1.00 | 1.00 | 1.00 | 0.013 | 0.020 | 0.012 | 0.015 |
| 150 | 0.013 | 0.020 | 0.012 | 0.015 | 1.00 | 1.00 | 1.00 | 1.00 | 0.013 | 0.020 | 0.012 | 0.015 |
| 155 | 0.013 | 0.020 | 0.012 | 0.015 | 1.00 | 1.00 | 1.00 | 1.00 | 0.013 | 0.020 | 0.012 | 0.015 |
| 160 | 0.013 | 0.020 | 0.012 | 0.015 | 1.00 | 1.00 | 1.00 | 1.00 | 0.013 | 0.020 | 0.012 | 0.015 |
| 165 | 0.013 | 0.020 | 0.012 | 0.015 | 1.00 | 1.00 | 1.00 | 1.00 | 0.013 | 0.020 | 0.012 | 0.015 |
| 170 | 0.013 | 0.020 | 0.012 | 0.015 | 1.00 | 1.00 | 1.00 | 1.00 | 0.013 | 0.020 | 0.012 | 0.015 |
| 175 | 0.013 | 0.020 | 0.012 | 0.015 | 1.00 | 1.00 | 1.00 | 1.00 | 0.013 | 0.020 | 0.012 | 0.015 |
| 180 | 0.013 | 0.020 | 0.012 | 0.015 | 1.00 | 1.00 | 1.00 | 1.00 | 0.013 | 0.020 | 0.012 | 0.015 |
| Totals | 1.24 | 1.75 | 2.02 | 3.25 | | | | | 1.19 | 1.68 | 1.94 | 3.11 |

in Figure RO-A6 in Appendix A at the end of this chapter.

### 3.2.2 Depression Losses

Rainwater that is collected and held in small depressions and does not become part of the general surface runoff is called depression loss. Most of this water eventually infiltrates or is evaporated. Depression losses also include water intercepted by trees, bushes, other vegetation, and all other surfaces. The CUHP method requires numerical values of depression loss as inputs to calculate the effective rainfall. Table RO-6 can be used as a guide in estimating the amount of depression (retention) losses to be used with CUHP.

**Table RO-6—Typical Depression Losses for Various Land Covers**

(All Values in Inches. For use with the CUHP Method)

| Land Cover | Range in Depression (Retention) Losses | Recommended |
|---|---|---|
| Impervious: | | |
| Large paved areas | 0.05 - 0.15 | 0.1 |
| Roofs-flat | 0.1 - 0.3 | 0.1 |
| Roofs-sloped | 0.05 - 0.1 | 0.05 |
| Pervious: | | |
| Lawn grass | 0.2 - 0.5 | 0.35 |
| Wooded areas and open fields | 0.2 - 0.6 | 0.4 |

When an area is analyzed for depression losses, the pervious and impervious loss values for all parts of the watershed must be considered and accumulated in proportion to the percent of aerial coverage for each type of surface.

### 3.2.3 Infiltration

The flow of water into the soil surface is called infiltration. In urban hydrology much of the infiltration occurs on areas covered with grass. Urbanization can increase or decrease the total amount of infiltration.

Soil type is the most important factor in determining the infiltration rate. When the soil has a large percentage of well-graded fines, the infiltration rate is low. In some cases of extremely tight soil, there may be, from a practical standpoint, essentially no infiltration. If the soil has several layers or horizons, the least permeable layer near the surface will control the maximum infiltration rate. The soil cover also plays an important role in determining the infiltration rate. Vegetation, lawn grass in particular, tends to increase infiltration by loosening the soil near the surface. Other factors affecting infiltration rates include slope of land, temperature, quality of water, age of lawn and soil compaction.

As rainfall continues, the infiltration rate decreases. When rainfall occurs on an area that has little antecedent moisture and the ground is dry, the infiltration rate is much higher than it is with high

antecedent moisture resulting from previous storms or land irrigation such as lawn watering. Although antecedent precipitation is very important when calculating runoff from smaller storms in non-urbanized areas, the runoff data from urbanized basins indicates that antecedent precipitation has a limited effect on runoff peaks and volumes in the urbanized portions of the District.

There are many infiltration models in use by hydrologists. These models vary significantly in complexity. Because of the climatic condition in the semi-arid region and because runoff from urban watersheds is not very sensitive to infiltration refinements, the infiltration model proposed by Horton was found to provide a good balance between simplicity and reasonable physical description of the infiltration process for use in CUHP. Horton's infiltration model is described by Equation RO-8 and is illustrated graphically in Figure RO-9.

$$f = f_o + (f_i - f_o)\, e^{-at} \qquad \text{(RO-8)}$$

in which:

$f$ = infiltration rate at any given time $t$ from start of rainfall (in/hr)

$f_o$ = final infiltration rate (in/hr)

$f_i$ = initial infiltration rate (in/hr)

$e$ = natural logarithm base

$a$ = decay coefficient (1/second)

$t$ = time (seconds)

In developing Equation RO-8, Horton observed that infiltration is high early in the storm and eventually decays to a steady state constant value as the pores in the soil become saturated. The coefficients and initial and final infiltration values are site specific and depend on the soils and vegetative cover complex. It is possible to develop these values for each site if sufficient rainfall-runoff observations are made. However, such an approach is rarely practical.

Since 1977, the District has analyzed a considerable amount of rainfall-runoff data. On the basis of this analysis, the values in Table RO-7 are recommended for use within the District with CUHP. The NRCS Hydrologic Soil Groups C and D occur most frequently within the District; however, areas of NRCS Group A and B soils are also fairly common. Consult NRCS soil surveys for appropriate soil classifications.

**Table RO-7—Recommended Horton's Equation Parameters**

| NRCS Hydrologic Soil Group | Infiltration (inches per hour) | | Decay Coefficient—$a$ |
|---|---|---|---|
| | Initial—$f_i$ | Final—$f_o$ | |
| A | 5.0 | 1.0 | 0.0007 |
| B | 4.5 | 0.6 | 0.0018 |
| C | 3.0 | 0.5 | 0.0018 |
| D | 3.0 | 0.5 | 0.0018 |

To calculate the maximum infiltration depths that may occur at each time increment, it is necessary to integrate Equation RO-8 and calculate the values for each time increment. Very little accuracy is lost if, instead of integrating Equation RO-8, the infiltration rate is calculated at the center of each time increment. This "central" value can then be multiplied by the unit time increment to estimate the infiltration depth. This was done for the four NRCS hydrologic soil groups, and the results are presented in Table RO-8. Although Tables RO-7 and RO-8 provide recommended values for various Horton equation parameters, these recommendations are being made specifically for the urbanized or urbanizing watersheds in the Denver metropolitan area and may not be valid in different meteorologic and climatic regions.

**Table RO-8—Incremental Infiltration Depths in Inches***

| Time in Minutes** | NRCS Hydrologic Soil Group | | |
|---|---|---|---|
| | A | B | C and D |
| 5 | 0.384 | 0.298 | 0.201 |
| 10 | 0.329 | 0.195 | 0.134 |
| 15 | 0.284 | 0.134 | 0.096 |
| 20 | 0.248 | 0.099 | 0.073 |
| 25 | 0.218 | 0.079 | 0.060 |
| 30 | 0.194 | 0.067 | 0.052 |
| 35 | 0.175 | 0.060 | 0.048 |
| 40 | 0.159 | 0.056 | 0.045 |
| 45 | 0.146 | 0.053 | 0.044 |
| 50 | 0.136 | 0.052 | 0.043 |
| 55 | 0.127 | 0.051 | 0.042 |
| 60 | 0.121 | 0.051 | 0.042 |
| 65 | 0.115 | 0.050 | 0.042 |
| 70 | 0.111 | 0.050 | 0.042 |
| 75 | 0.107 | 0.050 | 0.042 |
| 80 | 0.104 | 0.050 | 0.042 |
| 85 | 0.102 | 0.050 | 0.042 |
| 90 | 0.100 | 0.050 | 0.042 |
| 95 | 0.098 | 0.050 | 0.042 |
| 100 | 0.097 | 0.050 | 0.042 |
| 105 | 0.096 | 0.050 | 0.042 |
| 110 | 0.095 | 0.050 | 0.042 |
| 115 | 0.095 | 0.050 | 0.042 |
| 120 | 0.094 | 0.050 | 0.042 |

* Based on central value of each time increment in Horton's equation.
** Time at end of the time increment.

## 2.4 Time of Concentration

One of the basic assumptions underlying the Rational Method is that runoff is a function of the average rainfall rate during the time required for water to flow from the most remote part of the drainage area under consideration to the design point. However, in practice, the time of concentration can be an empirical value that results in reasonable and acceptable peak flow calculations. The time of concentration relationships recommended in this *Manual* are based in part on the rainfall-runoff data collected in the Denver metropolitan area and are designed to work with the runoff coefficients also recommended in this *Manual*. As a result, these recommendations need to be used with a great deal of caution whenever working in areas that may differ significantly from the climate or topography found in the Denver region.

For urban areas, the time of concentration, $t_c$, consists of an initial time or overland flow time, $t_i$, plus the travel time, $t_t$, in the storm sewer, paved gutter, roadside drainage ditch, or drainage channel. For non-urban areas, the time of concentration consists of an overland flow time, $t_i$, plus the time of travel in a defined form, such as a swale, channel, or drainageway. The travel portion, $t_t$, of the time of concentration can be estimated from the hydraulic properties of the storm sewer, gutter, swale, ditch, or drainageway. Initial time, on the other hand, will vary with surface slope, depression storage, surface cover, antecedent rainfall, and infiltration capacity of the soil, as well as distance of surface flow. The time of concentration is represented by Equation RO-2 for both urban and non-urban areas:

$$t_c = t_i + t_t \qquad \text{(RO-2)}$$

in which:

$t_c$ = time of concentration (minutes)

$t_i$ = initial or overland flow time (minutes)

$t_t$ = travel time in the ditch, channel, gutter, storm sewer, etc. (minutes)

### 2.4.1 Initial Flow Time

The initial or overland flow time, $t_i$, may be calculated using equation RO-3:

$$t_i = \frac{0.395\left(1.1 - C_5\right)\sqrt{L}}{S^{0.33}} \qquad \text{(RO-3)}$$

in which:

$t_i$ = initial or overland flow time (minutes)

$C_5$ = runoff coefficient for 5-year frequency (from Table RO-5)

$L$ = length of overland flow (500 ft maximum for non-urban land uses, 300 ft maximum for urban land uses)

$S$ = average basin slope (ft/ft)

Equation RO-3 is adequate for distances up to 500 feet. Note that, in some urban watersheds, the overland flow time may be very small because flows quickly channelize.

### 2.4.2 Overland Travel Time

For catchments with overland and channelized flow, the time of concentration needs to be considered in combination with the overland travel time, $t_t$, which is calculated using the hydraulic properties of the swale, ditch, or channel. For preliminary work, the overland travel time, $t_t$, can be estimated with the help of Figure RO-1 or the following equation (Guo 1999):

$$V = C_v S_w^{0.5} \qquad \text{(RO-4)}$$

in which:

$V$ = velocity (ft/sec)

$C_v$ = conveyance coefficient (from Table RO-2)

$S_w$ = watercourse slope (ft/ft)

**Table RO-2—Conveyance Coefficient, $C_v$**

| Type of Land Surface | Conveyance Coefficient, $C_v$ |
|---|---|
| Heavy meadow | 2.5 |
| Tillage/field | 5 |
| Short pasture and lawns | 7 |
| Nearly bare ground | 10 |
| Grassed waterway | 15 |
| Paved areas and shallow paved swales | 20 |

The time of concentration, $t_c$, is then the sum of the initial flow time, $t_i$, and the travel time, $t_t$, as per Equation RO-2.

### 2.4.3 First Design Point Time of Concentration in Urban Catchments

Using this procedure, the time of concentration at the first design point (i.e., initial flow time, $t_i$) in an urbanized catchment should not exceed the time of concentration calculated using Equation RO-5.

$$t_c = \frac{L}{180} + 10 \qquad \text{(RO-5)}$$

in which:

$t_c$ = maximum time of concentration at the first design point in an urban watershed (minutes)

**UDCUHP Inputs Summary Table**

| Basin | Catchment Area (mi2) | Catchment Length (mi) | Distance to Centroid (mi) | Catchment Imperviousness (%) | Weighted Catchment Slope (ft/ft) | Time of Concentration (min) | Average Maximum Depression Storage on Pervious Surfaces (in) | Average Maximum Depression Storage on Impervious Surfaces (in) | Initial Infiltration Rate (in/hr) | Horton's Exponential Decay Rate Coefficient (1/sec.) | Final Infiltration Rate (in/hr) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| W1 | 0.433 | 0.849 | 0.427 | 2.0% | 0.015 | N/A | 0.35 | 0.05 | 4.4 | 0.0018 | 0.6 |
| W2 | 0.052 | 0.258 | 0.142 | 10.0% | 0.019 | 38 | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| W3 | 0.035 | 0.265 | 0.139 | 65.0% | 0.014 | 17 | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| W4 | 0.188 | 1.030 | 0.514 | 10.8% | 0.010 | N/A | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| W5 | 0.428 | 1.199 | 0.670 | 2.0% | 0.017 | N/A | 0.35 | 0.05 | 4.6 | 0.0016 | 0.7 |
| W6 | 0.114 | 0.404 | 0.073 | 2.0% | 0.009 | 80 | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| W7 | 0.007 | 0.137 | 0.044 | 30.0% | 0.007 | 22 | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| W8 | 0.063 | 0.445 | 0.161 | 40.0% | 0.011 | 30 | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| W9 | 0.204 | 0.731 | 0.370 | 2.0% | 0.012 | N/A | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| W10 | 0.047 | 0.333 | 0.151 | 30.0% | 0.005 | 31 | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| W11 | 0.078 | 0.509 | 0.224 | 15.0% | 0.009 | 90 | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| W12 | 0.444 | 1.144 | 0.590 | 10.9% | 0.009 | N/A | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| W13 | 0.654 | 1.300 | 0.580 | 3.7% | 0.011 | N/A | 0.35 | 0.05 | 4.3 | 0.0017 | 0.6 |
| W14 | 0.296 | 1.024 | 0.372 | 7.2% | 0.014 | N/A | 0.35 | 0.05 | 4.5 | 0.0017 | 0.6 |
| W15 | 0.097 | 0.438 | 0.285 | 2.0% | 0.009 | 83 | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| W16 | 0.633 | 1.673 | 0.610 | 2.6% | 0.012 | N/A | 0.35 | 0.05 | 4.2 | 0.0018 | 0.6 |
| W17 | 0.148 | 0.396 | 0.223 | 8.3% | 0.009 | N/A | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| W18 | 0.173 | 0.877 | 0.414 | 6.3% | 0.016 | N/A | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| W19 | 0.257 | 0.969 | 0.624 | 2.0% | 0.013 | N/A | 0.35 | 0.05 | 4.6 | 0.0017 | 0.6 |
| W20 | 0.691 | 1.372 | 0.520 | 2.0% | 0.009 | N/A | 0.35 | 0.05 | 4.0 | 0.0017 | 0.6 |
| W21 | 0.330 | 1.142 | 0.604 | 3.4% | 0.014 | N/A | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| W22 | 0.398 | 1.171 | 0.654 | 2.0% | 0.012 | N/A | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| W23 | 0.884 | 1.197 | 0.587 | 2.0% | 0.014 | N/A | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| W24 | 0.238 | 0.609 | 0.447 | 2.0% | 0.012 | N/A | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| E25 | 0.055 | 0.396 | 0.190 | 2.0% | 0.007 | 78 | 0.35 | 0.05 | 3.0 | 0.0018 | 0.5 |
| E26 | 0.142 | 0.570 | 0.347 | 2.0% | 0.017 | 80 | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| E27 | 0.100 | 0.597 | 0.260 | 2.0% | 0.009 | 92 | 0.35 | 0.05 | 3.4 | 0.0018 | 0.5 |
| E28 | 0.584 | 1.185 | 0.597 | 4.6% | 0.016 | N/A | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| E29 | 0.061 | 0.622 | 0.214 | 7.2% | 0.012 | 66 | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| E30 | 0.034 | 0.189 | 0.088 | 2.0% | 0.031 | 36 | 0.35 | 0.05 | 4.7 | 0.0013 | 0.8 |
| E31 | 0.036 | 0.260 | 0.138 | 2.0% | 0.029 | 44 | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| E32 | 0.529 | 1.170 | 0.478 | 2.0% | 0.010 | N/A | 0.35 | 0.05 | 4.0 | 0.0017 | 0.6 |
| E33 | 0.052 | 0.335 | 0.178 | 2.0% | 0.023 | 54 | 0.35 | 0.05 | 4.5 | 0.0018 | 0.6 |
| E34 | 0.703 | 1.375 | 0.680 | 2.0% | 0.012 | N/A | 0.35 | 0.05 | 4.3 | 0.0018 | 0.6 |
| E35 | 0.732 | 1.218 | 0.526 | 5.1% | 0.011 | N/A | 0.35 | 0.05 | 4.3 | 0.0017 | 0.6 |
| E36 | 0.104 | 0.290 | 0.158 | 2.0% | 0.011 | 63 | 0.35 | 0.05 | 4.4 | 0.0018 | 0.6 |
| E37 | 1.072 | 1.799 | 0.490 | 2.0% | 0.010 | N/A | 0.35 | 0.05 | 4.0 | 0.0016 | 0.6 |
| E38 | 0.271 | 0.889 | 0.467 | 2.0% | 0.014 | N/A | 0.35 | 0.05 | 4.3 | 0.0018 | 0.6 |

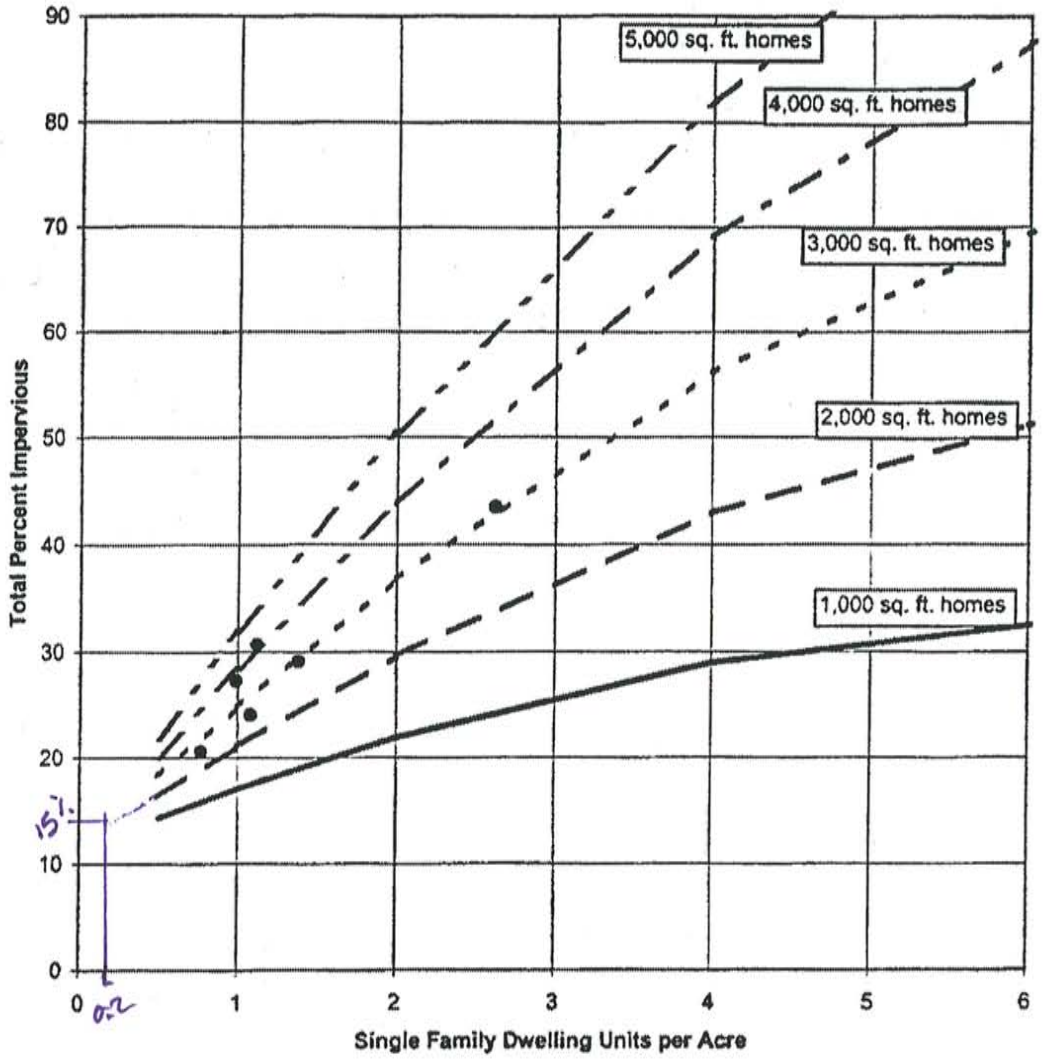



**Figure RO-3— Watershed Imperviousness, Single-Family Residential Ranch Style Houses**

Imperviousness calculations for existing Weld County development located north of CR 20 and east of CR 15. There are two different densities observed in the Weld County development. The density calculated on this sheet is assumed at 1 du/5ac or 0.2 du's/ac. Using the assumption of 2000 sf homes, an imperviousness value of 15% was calculated

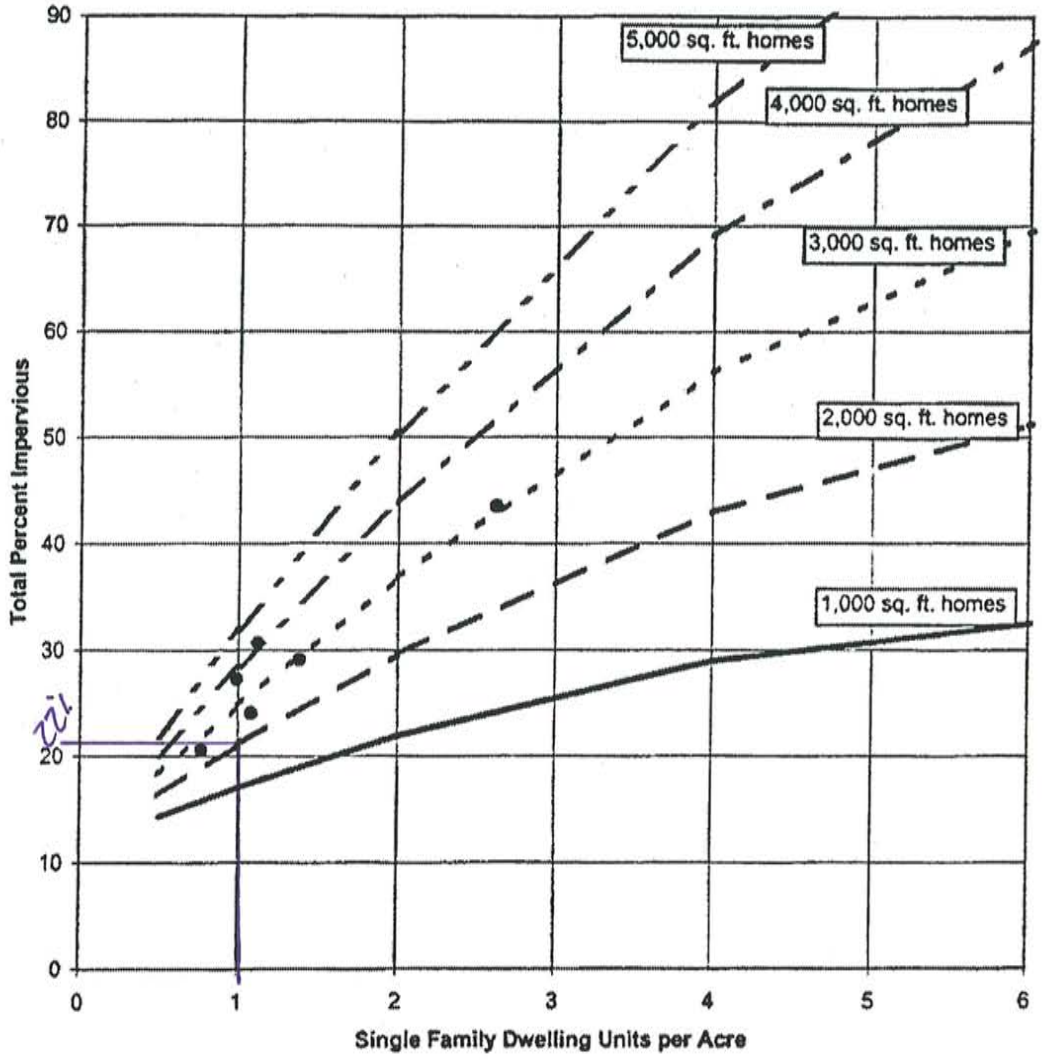



**Figure RO-3— Watershed Imperviousness, Single-Family Residential Ranch Style Houses**

Imperviousness Calculations for existing Weld County development located north of CR 20 and east of CR 15. The density calculated on this sheet is assumed at 1 du/ac (from aerial map). Assuming 2000sf homes, an imperviousness value of 22% was calculated.

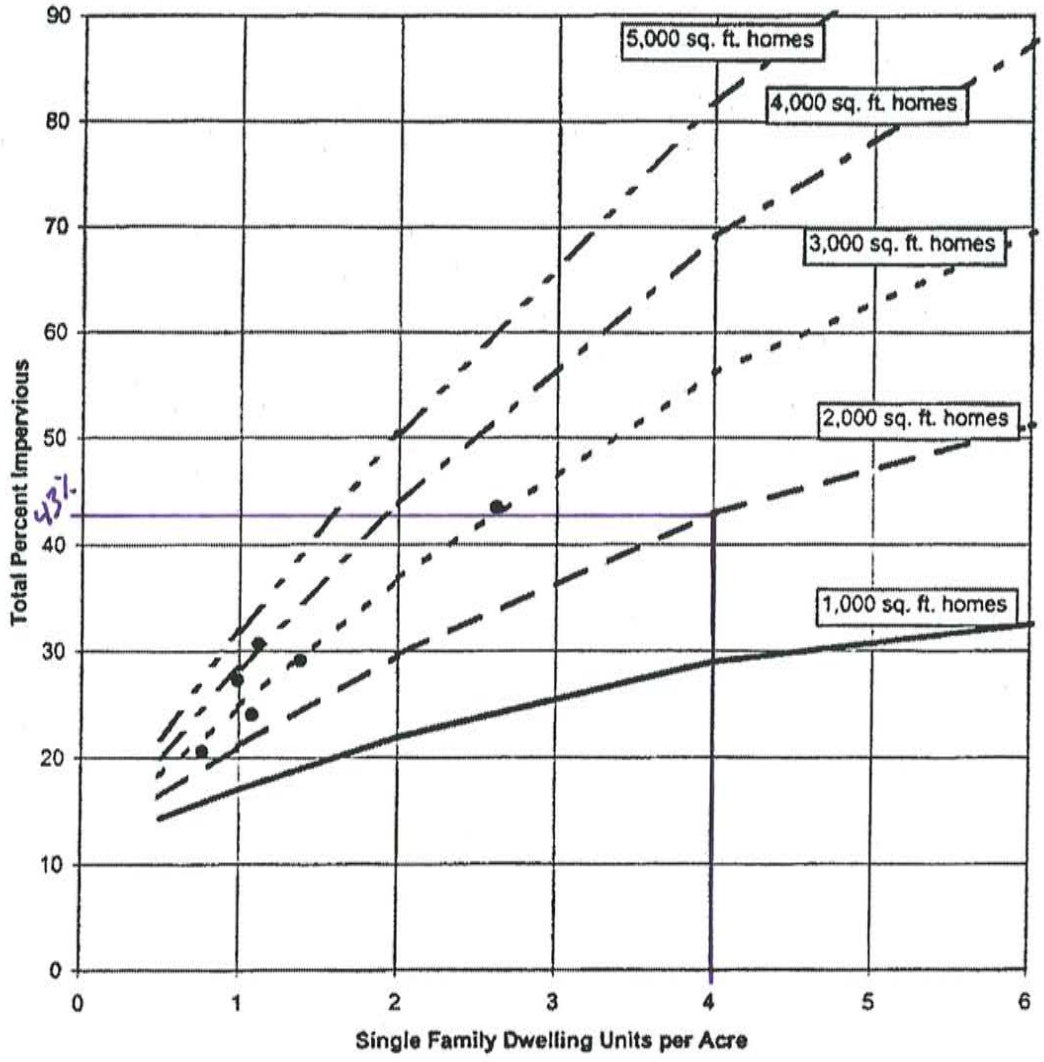



**Figure RO-3— Watershed Imperviousness, Single-Family Residential Ranch Style Houses**

Imperviousness Calculations for existing developments west of CR 15. This area includes Sagebrush, Ridgecrest Filing 1, St. Vrain Ranch Filing 3, & Saddleback Heights developments. Based on aerial photography an assumption of 4 du's/ac was made and a conservative 2000 sf ranch style home was chosen. The resulting imperviousness is 43%.

**Current Condition Rational Method Time of Concentration**

| Basin | Area (ac) | Imperviousness (%) | Soil Type | C-Value (5yr) | Overland Flow Length (ft) | Slope (ft/ft) | Overland Flow Time (min) | Channelized Flow Length (ft) | Slope (ft/ft) | Conveyance Coefficient Cv | Channelized Flow Velocity (ft/sec) | Channelized Flow Time (min) | Total Travel Time (min) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W2 | 33.3 | 10.0% | B | 0.14 | 500 | 0.022 | 30 | 860 | 0.017 | 15 | 1.96 | 7 | 38 |
| W3 | 22.4 | 65.0% | B | 0.45 | 109 | 0.03 | 9 | 1290 | 0.0147 | 20 | 2.42 | 9 | 17 |
| W6 | 73.0 | 2.0% | B | 0.08 | 500 | 0.0075 | 46 | 1630 | 0.0131 | 7 | 0.80 | 34 | 80 |
| W7 | 4.5 | 30.0% | B | 0.25 | 220 | 0.03 | 16 | 503 | 0.010 | 15 | 1.50 | 6 | 22 |
| W8 | 40.3 | 40.0% | B | 0.30 | 140 | 0.03 | 12 | 2211 | 0.0104 | 20 | 2.04 | 18 | 30 |
| W10 | 30.1 | 30.0% | B | 0.25 | 106 | 0.03 | 11 | 1652 | 0.005 | 20 | 1.41 | 19 | 31 |
| W11 | 49.9 | 15.0% | B | 0.17 | 500 | 0.01 | 38 | 2187 | 0.010 | 7 | 0.70 | 52 | 90 |
| W15 | 62.1 | 2.0% | B | 0.08 | 500 | 0.0075 | 46 | 1810 | 0.0134 | 7 | 0.81 | 37 | 83 |
| E25 | 35.2 | 2.0% | C/D | 0.16 | 500 | 0.0238 | 29 | 1590 | 0.006 | 7 | 0.54 | 49 | 78 |
| E26 | 90.9 | 2.0% | B | 0.08 | 500 | 0.028 | 30 | 2510 | 0.0143 | 7 | 0.84 | 50 | 80 |
| E27 | 64.0 | 2.0% | C/D | 0.16 | 500 | 0.024 | 29 | 2650 | 0.010 | 7 | 0.69 | 64 | 92 |
| E29 | 39.0 | 7.2% | B | 0.11 | 500 | 0.012 | 38 | 2780 | 0.0119 | 15 | 1.64 | 28 | 66 |
| E30 | 21.8 | 2.0% | A/B | 0.04 | 500 | 0.036 | 28 | 500 | 0.026 | 7 | 1.13 | 7 | 36 |
| E31 | 23.0 | 2.0% | B | 0.08 | 500 | 0.022 | 32 | 870 | 0.031 | 7 | 1.23 | 12 | 44 |
| E33 | 33.4 | 2.0% | B | 0.08 | 500 | 0.018 | 34 | 1265 | 0.0245 | 7 | 1.10 | 19 | 54 |
| E36 | 66.6 | 2.0% | B | 0.08 | 500 | 0.016 | 36 | 1030 | 0.0078 | 7 | 0.62 | 28 | 63 |

# Appendix I:
# CURRENT CONDITION UDCUHP

```
1    2yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin
1 2yr      .019.038.079.135.212.118.059.047.028.028.028.028.028.019.019.019.019
1 2yr      .019.019.019.019.019.013.013.013.013.013.013.013.013.013.013.013.013
1 2yr      .013.013

70 1 1 5.    W1  1Western portion of Sump Basin
.433 .849 .427   2. .015       .35  .05  4.4.0018   .6
70 1 1 5.    W4  4Western portion of Sump Basin
.188 1.03 .514 10.8 .010       .35  .05  4.5.0018   .6
70 1 1 5.    W5  5Western portion of Sump Basin
.428 1.20 .670   2. .017       .35  .05  4.6.0016   .7
71 1 1 5.    W6  6Western portion of Sump Basin
.114 .404 .073   2. .009  80.  .35  .05  4.5.0018   .6
71 1 1 5.    W7  7Western portion of Sump Basin
.007 .137 .044  30. .007  22.  .35  .05  4.5.0018   .6
70 1 1 5.    W9  9Western portion of Sump Basin
.204 .801 .370   2. .012       .35  .05  4.5.0018   .6
71 1 1 5.   W11 11Western portion of Sump Basin
.078 .509 .224  15. .009  90.  .35  .05  4.5.0018   .6
70 1 1 5.   W12 12Western portion of Sump Basin
.444 1.14 .590 10.9 .009       .35  .05  4.5.0018   .6
70 1 1 5.   W13 13Western portion of Sump Basin
.654 1.30 .580  3.7 .012       .35  .05  4.3.0017   .6
70 1 1 5.   W14 14Western portion of Sump Basin
.296 1.02 .372  7.2 .014       .35  .05  4.5.0017   .6
71 1 1 5.   W15 15Western portion of Sump Basin
.097 .438 .285   2. .009  83.  .35  .05  4.5.0018   .6
70 1 1 5.   W16 16Western portion of Sump Basin
.633 1.67 .610  2.6 .012       .35  .05  4.2.0018   .6
70 1 1 5.   W17 17Western portion of Sump Basin
.148 .396 .223  8.3 .009       .35  .05  4.5.0018   .6
70 1 1 5.   W18 18Western portion of Sump Basin
.173 .877 .414  6.3 .016       .35  .05  4.5.0018   .6
70 1 1 5.   W19 19Western portion of Sump Basin
.257 .969 .624   2. .013       .35  .05  4.6.0017   .6
70 1 1 5.   W20 20Western portion of Sump Basin
.691 1.37 .520   2. .009       .35  .05  4.0.0017   .6
70 1 1 5.   W21 21Western portion of Sump Basin
.330 1.14 .604  3.4 .014       .35  .05  4.5.0018   .6
70 1 1 5.   W22 22Western portion of Sump Basin
.398 1.17 .654   2. .012       .35  .05  4.5.0018   .6
70 1 1 5.   W23 23Western portion of Sump Basin
.884 1.20 .731   2. .014       .35  .05  4.5.0018   .6
70 1 1 5.   W24 24Western portion of Sump Basin
.238 .609 .447   2. .014       .35  .05  4.5.0018   .6
71 1 1 5.   E25 25Eastern portion of Sump Basin
.055 .396 .190   2. .007  78.  .35  .05  3.0.0018   .5
71 1 1 5.   E26 26Eastern portion of Sump Basin
.142 .570 .347   2. .017  80.  .35  .05  4.5.0018   .6
71 1 1 5.   E27 27Eastern portion of Sump Basin
.100 .597 .260   2. .009  92.  .35  .05  3.4.0018   .5
70 1 1 5.   E28 28Eastern portion of Sump Basin
.584 1.19 .597  4.6 .016       .35  .05  4.5.0018   .6
71 1 1 5.   E29 29Eastern portion of Sump Basin
.061 .622 .214  7.2 .012  66.  .35  .05  4.5.0018   .6
71 1 1 5.   E30 30Eastern portion of Sump Basin
.034 .189 .088   2. .031  36.  .35  .05  4.7.0013   .8
71 1 1 5.   E31 31Eastern portion of Sump Basin
.036 .260 .138   2. .029  44.  .35  .05  4.5.0018   .6
70 1 1 5.   E32 32Eastern portion of Sump Basin
.529 1.17 .478   2. .010       .35  .05  4.0.0017   .6
71 1 1 5.   E33 33Eastern portion of Sump Basin
.052 .335 .178   2. .023  54.  .35  .05  4.5.0018   .6
70 1 1 5.   E34 34Eastern portion of Sump Basin
.703 1.37 .680   2. .012       .35  .05  4.3.0018   .6
70 1 1 5.   E35 35Eastern portion of Sump Basin
.732 1.22 .526  5.1 .011       .35  .05  4.3.0017   .6
71 1 1 5.   E36 36Eastern portion of Sump Basin
.104 .290 .158   2. .011  63.  .35  .05  4.4.0018   .6
70 1 1 5.   E37 37Eastern portion of Sump Basin
1.07 1.80 .490   2. .010       .35  .05  4.0.0016   .6
70 1 1 5.   E38 38Eastern portion of Sump Basin
.271 .889 .467   2. .014       .35  .05  4.3.0018   .6
E
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1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W1 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.43 | 0.85 | 0.43 | 2.00 | 0.0150 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.294 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 18.22 | 719.49 | 311.54 | 23.09 |

WIDTH AT 50 = 42. MIN. WIDTH AT 75 = 22. MIN. K50 =0.26 K75 =0.36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.40 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 65. | 107. | 130. | 23. |
| 5. | 91. | 70. | 95. | 135. | 21. |
| 10. | 224. | 75. | 85. | 140. | 19. |
| 15. | 300. | 80. | 75. | 145. | 16. |
| 20. | 309. | 85. | 67. | 150. | 15. |
| 25. | 279. | 90. | 60. | 155. | 13. |
| 30. | 243. | 95. | 53. | 160. | 12. |
| 35. | 221. | 100. | 47. | 165. | 10. |
| 40. | 197. | 105. | 42. | 170. | 9. |
| 45. | 174. | 110. | 37. | 175. | 8. |
| 50. | 152. | 115. | 33. | 180. | 0. |
| 55. | 135. | 120. | 30. | 0. | 0. |
| 60. | 120. | 125. | 26. | 0. | 0. |

1 BASIN ID: W1 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.004 INCHES
VOLUME OF EXCESS PRECIP = 0.09 ACRE-FEET
PEAK Q = 1. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.40 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W4 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.19 | 1.03 | 0.51 | 10.80 | 0.0100 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.124 | 0.224 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.09 | D= 0.22 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 19.12 | 518.38 | 97.46 | 10.03 |

WIDTH AT 50 = 58. MIN. WIDTH AT 75 = 30. MIN. K50 =0.20 K75 =0.27

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 70. | 46. | 140. | 17. |
| 5. | 26. | 75. | 43. | 145. | 16. |
| 10. | 67. | 80. | 40. | 150. | 15. |
| 15. | 92. | 85. | 37. | 155. | 14. |
| 20. | 97. | 90. | 35. | 160. | 13. |
| 25. | 90. | 95. | 32. | 165. | 12. |
| 30. | 78. | 100. | 30. | 170. | 11. |
| 35. | 68. | 105. | 28. | 175. | 11. |
| 40. | 70. | 110. | 26. | 180. | 10. |
| 45. | 69. | 115. | 24. | 185. | 9. |
| 50. | 64. | 120. | 23. | 190. | 9. |
| 55. | 59. | 125. | 21. | 195. | 8. |
| 60. | 54. | 130. | 20. | 200. | 7. |
| 65. | 49. | 135. | 18. | 205. | 0. |

1 BASIN ID: W4 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME | INCREMENT RAINFALL | TOTAL* EXCESS | STORM** HYDROGRAPH | TIME | INCREMENT RAINFALL | TOTAL* EXCESS | STORM** HYDROGRAPH |
|---|---|---|---|---|---|---|---|

| (MIN.) | (IN) | PRECIP | (CFS) | (MIN.) | (IN) | PRECIP | (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 80. | 0.02 | 0.000 | 3. |
| 5. | 0.02 | 0.000 | 0. | 85. | 0.02 | 0.000 | 3. |
| 10. | 0.04 | 0.000 | 0. | 90. | 0.02 | 0.000 | 3. |
| 15. | 0.08 | 0.002 | 0. | 95. | 0.02 | 0.000 | 3. |
| 20. | 0.14 | 0.003 | 0. | 100. | 0.02 | 0.000 | 3. |
| 25. | 0.21 | 0.020 | 1. | 105. | 0.02 | 0.000 | 3. |
| 30. | 0.12 | 0.016 | 2. | 110. | 0.02 | 0.000 | 2. |
| 35. | 0.06 | 0.006 | 4. | 115. | 0.01 | 0.000 | 2. |
| 40. | 0.05 | 0.004 | 4. | 120. | 0.01 | 0.000 | 2. |
| 45. | 0.03 | 0.001 | 5. | 125. | 0.01 | 0.000 | 2. |
| 50. | 0.03 | 0.001 | 4. | 130. | 0.01 | 0.000 | 2. |
| 55. | 0.03 | 0.001 | 4. | 135. | 0.01 | 0.000 | 2. |
| 60. | 0.03 | 0.001 | 4. | 140. | 0.01 | 0.000 | 2. |
| 65. | 0.03 | 0.001 | 4. | 145. | 0.01 | 0.000 | 2. |
| 70. | 0.02 | 0.000 | 4. | 150. | 0.01 | 0.000 | 2. |
| 75. | 0.02 | 0.000 | 4. | 155. | 0.01 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.065 INCHES
VOLUME OF EXCESS PRECIP = 0.65 ACRE-FEET
PEAK Q = 5. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W5 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.43 | 1.20 | 0.67 | 2.00 | 0.0170 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.294 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 24.85 | 504.98 | 216.13 | 22.83 |

WIDTH AT 50 = 59. MIN. WIDTH AT 75 = 31. MIN. K50 =0.25 K75 =0.34

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.60 IN./HR. DECAY = 0.00160/SECOND FNINFL = 0.70 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0. | 0. | 85. | 84. | 170. | 22. | | |
| 5. | 39. | 90. | 78. | 175. | 20. | | |
| 10. | 109. | 95. | 72. | 180. | 19. | | |
| 15. | 170. | 100. | 66. | 185. | 17. | | |
| 20. | 206. | 105. | 61. | 190. | 16. | | |
| 25. | 216. | 110. | 57. | 195. | 15. | | |
| 30. | 208. | 115. | 52. | 200. | 14. | | |
| 35. | 191. | 120. | 48. | 205. | 13. | | |
| 40. | 172. | 125. | 45. | 210. | 12. | | |
| 45. | 162. | 130. | 41. | 215. | 11. | | |
| 50. | 151. | 135. | 38. | 220. | 10. | | |
| 55. | 140. | 140. | 35. | 225. | 9. | | |
| 60. | 129. | 145. | 32. | 230. | 8. | | |
| 65. | 118. | 150. | 30. | 235. | 8. | | |
| 70. | 107. | 155. | 28. | 240. | 0. | | |
| 75. | 99. | 160. | 26. | 0. | 0. | | |
| 80. | 91. | 165. | 24. | 0. | 0. | | |

1 BASIN ID: W5 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.001 INCHES
VOLUME OF EXCESS PRECIP = 0.02 ACRE-FEET
PEAK Q = 0. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.60 IN/HR DECAY =0.00160 FNINF = 0.70 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W6 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.11 | 0.40 | 0.07 | 2.00 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.241 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 17.58 | 80.00 | 613.95 | 69.99 | 6.08 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 7.83)

WIDTH AT 50 = 49. MIN. WIDTH AT 75 = 25. MIN. K50 =0.22 K75 =0.29

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 55. | 36. | 110. | 15. |
| 5. | 21. | 60. | 33. | 115. | 14. |
| 10. | 52. | 65. | 30. | 120. | 13. |
| 15. | 68. | 70. | 28. | 125. | 12. |
| 20. | 69. | 75. | 26. | 130. | 11. |
| 25. | 61. | 80. | 24. | 135. | 10. |
| 30. | 53. | 85. | 22. | 140. | 9. |
| 35. | 52. | 90. | 21. | 145. | 9. |
| 40. | 49. | 95. | 19. | 150. | 8. |
| 45. | 44. | 100. | 18. | 155. | 7. |
| 50. | 40. | 105. | 16. | 160. | 0. |

1 BASIN ID: W6 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.004 INCHES
VOLUME OF EXCESS PRECIP = 0.02 ACRE-FEET
PEAK Q = 0. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W7 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.01 | 0.14 | 0.04 | 30.00 | 0.0070 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.099 | 0.189 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM |
|---|---|

( DEFAULT ) R= 0.16 ( DEFAULT ) D= 0.60

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 7.50 | 22.00 | 1453.96 | 10.18 | 0.37 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 4.19)

WIDTH AT 50 = 21. MIN. WIDTH AT 75 = 11. MIN. K50 =0.22 K75 =0.30

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 25. | 5. | 50. | 6. |
| 5. | 9. | 30. | 5. | 55. | 7. |
| 10. | 9. | 35. | 6. | 60. | 7. |
| 15. | 8. | 40. | 6. | 65. | 7. |
| 20. | 6. | 45. | 6. | 70. | 0. |

1 BASIN ID: W7 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.253 INCHES
VOLUME OF EXCESS PRECIP = 0.09 ACRE-FEET
PEAK Q = 1. CFS TIME OF PEAK = 75. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W9 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.20 | 0.80 | 0.37 | 2.00 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.263 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.06 | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.04 |
|---|---|

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 17.55 | 671.02 | 136.89 | 10.88 |

WIDTH AT 50 = 45. MIN. WIDTH AT 75 = 23. MIN. K50 =0.24 K75 =0.32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 60. | 58. | 120. | 18. |
| 5. | 42. | 65. | 53. | 125. | 16. |
| 10. | 102. | 70. | 48. | 130. | 14. |
| 15. | 134. | 75. | 43. | 135. | 13. |
| 20. | 134. | 80. | 39. | 140. | 12. |
| 25. | 120. | 85. | 35. | 145. | 11. |
| 30. | 105. | 90. | 32. | 150. | 10. |
| 35. | 100. | 95. | 29. | 155. | 9. |
| 40. | 90. | 100. | 26. | 160. | 8. |
| 45. | 81. | 105. | 24. | 165. | 0. |
| 50. | 72. | 110. | 22. | 0. | 0. |
| 55. | 64. | 115. | 19. | 0. | 0. |

1 BASIN ID: W9 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.004 INCHES
VOLUME OF EXCESS PRECIP = 0.04 ACRE-FEET
PEAK Q = 0. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W11 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.08 | 0.51 | 0.22 | 15.00 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.118 | 0.203 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.10 | D= 0.30 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 17.53 | 90.00 | 518.54 | 40.45 | 4.16 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 10.21)

WIDTH AT 50 = 58. MIN. WIDTH AT 75 = 30. MIN. K50 =0.18 K75 =0.25

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 65. | 20. | 130. | 12. |
| 5. | 12. | 70. | 19. | 135. | 11. |
| 10. | 30. | 75. | 19. | 140. | 11. |
| 15. | 39. | 80. | 18. | 145. | 11. |
| 20. | 40. | 85. | 17. | 150. | 10. |
| 25. | 35. | 90. | 17. | 155. | 10. |
| 30. | 29. | 95. | 16. | 160. | 9. |
| 35. | 26. | 100. | 15. | 165. | 9. |
| 40. | 30. | 105. | 15. | 170. | 9. |
| 45. | 28. | 110. | 14. | 175. | 8. |
| 50. | 26. | 115. | 13. | 180. | 8. |
| 55. | 24. | 120. | 13. | 185. | 8. |
| 60. | 22. | 125. | 12. | 190. | 0. |

1 BASIN ID: W11 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 75. | 0.02 | 0.001 | 2. |
| 5. | 0.02 | 0.000 | 0. | 80. | 0.02 | 0.001 | 2. |
| 10. | 0.04 | 0.000 | 0. | 85. | 0.02 | 0.001 | 2. |
| 15. | 0.08 | 0.003 | 0. | 90. | 0.02 | 0.001 | 2. |
| 20. | 0.14 | 0.006 | 0. | 95. | 0.02 | 0.001 | 2. |
| 25. | 0.21 | 0.031 | 1. | 100. | 0.02 | 0.001 | 2. |
| 30. | 0.12 | 0.021 | 2. | 105. | 0.02 | 0.001 | 2. |
| 35. | 0.06 | 0.008 | 2. | 110. | 0.02 | 0.001 | 2. |
| 40. | 0.05 | 0.006 | 3. | 115. | 0.01 | 0.001 | 2. |
| 45. | 0.03 | 0.002 | 3. | 120. | 0.01 | 0.001 | 2. |
| 50. | 0.03 | 0.002 | 3. | 125. | 0.01 | 0.001 | 2. |
| 55. | 0.03 | 0.002 | 2. | 130. | 0.01 | 0.001 | 2. |
| 60. | 0.03 | 0.002 | 2. | 135. | 0.01 | 0.001 | 1. |
| 65. | 0.03 | 0.002 | 2. | 140. | 0.01 | 0.001 | 1. |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 70. | 0.02 | 0.001 | 2. | \| | 145. | 0.01 | 0.001 | 1. | \| |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.101 INCHES
VOLUME OF EXCESS PRECIP = 0.42 ACRE-FEET
PEAK Q = 3. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W12 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.44 | 1.14 | 0.59 | 10.90 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.124 | 0.255 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.09 | D= 0.22 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 21.60 | 513.48 | 227.99 | 23.68 |

WIDTH AT 50 = 58. MIN. WIDTH AT 75 = 30. MIN. K50 =0.22 K75 =0.30

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 85. | 86. | 170. | 22. |
| 5. | 51. | 90. | 79. | 175. | 21. |
| 10. | 137. | 95. | 73. | 180. | 19. |
| 15. | 200. | 100. | 68. | 185. | 18. |
| 20. | 227. | 105. | 63. | 190. | 16. |
| 25. | 223. | 110. | 58. | 195. | 15. |
| 30. | 203. | 115. | 53. | 200. | 14. |
| 35. | 180. | 120. | 49. | 205. | 13. |
| 40. | 168. | 125. | 46. | 210. | 12. |
| 45. | 166. | 130. | 42. | 215. | 11. |
| 50. | 154. | 135. | 39. | 220. | 10. |
| 55. | 142. | 140. | 36. | 225. | 9. |
| 60. | 131. | 145. | 33. | 230. | 9. |
| 65. | 119. | 150. | 31. | 235. | 8. |
| 70. | 109. | 155. | 28. | 240. | 7. |
| 75. | 101. | 160. | 26. | 245. | 0. |
| 80. | 93. | 165. | 24. | 0. | 0. |

1 BASIN ID: W12 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 110. | 0.02 | 0.000 | 6. |
| 5. | 0.02 | 0.000 | 0. | 115. | 0.01 | 0.000 | 5. |
| 10. | 0.04 | 0.000 | 0. | 120. | 0.01 | 0.000 | 5. |
| 15. | 0.08 | 0.002 | 0. | 125. | 0.01 | 0.000 | 5. |
| 20. | 0.14 | 0.003 | 0. | 130. | 0.01 | 0.000 | 5. |
| 25. | 0.21 | 0.021 | 2. | 135. | 0.01 | 0.000 | 4. |
| 30. | 0.12 | 0.016 | 5. | 140. | 0.01 | 0.000 | 4. |
| 35. | 0.06 | 0.006 | 8. | 145. | 0.01 | 0.000 | 4. |
| 40. | 0.05 | 0.004 | 10. | 150. | 0.01 | 0.000 | 4. |
| 45. | 0.03 | 0.001 | 11. | 155. | 0.01 | 0.000 | 3. |
| 50. | 0.03 | 0.001 | 11. | 160. | 0.01 | 0.000 | 3. |
| 55. | 0.03 | 0.001 | 11. | 165. | 0.01 | 0.000 | 3. |
| 60. | 0.03 | 0.001 | 10. | 170. | 0.01 | 0.000 | 3. |
| 65. | 0.03 | 0.001 | 10. | 175. | 0.01 | 0.000 | 3. |
| 70. | 0.02 | 0.000 | 9. | 180. | 0.01 | 0.000 | 3. |
| 75. | 0.02 | 0.000 | 9. | 185. | 0.00 | 0.000 | 2. |
| 80. | 0.02 | 0.000 | 8. | 190. | 0.00 | 0.000 | 2. |
| 85. | 0.02 | 0.000 | 8. | 195. | 0.00 | 0.000 | 2. |
| 90. | 0.02 | 0.000 | 7. | 200. | 0.00 | 0.000 | 2. |
| 95. | 0.02 | 0.000 | 7. | 205. | 0.00 | 0.000 | 2. |
| 100. | 0.02 | 0.000 | 6. | 210. | 0.00 | 0.000 | 2. |
| 105. | 0.02 | 0.000 | 6. | 215. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.065 INCHES
VOLUME OF EXCESS PRECIP = 1.55 ACRE-FEET
PEAK Q = 11. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W13 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.65 | 1.30 | 0.58 | 3.70 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.149 | 0.301 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.07 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|

25.11 511.27 334.37 34.88

WIDTH AT 50 = 59. MIN. WIDTH AT 75 = 31. MIN. K50 =0.26 K75 =0.35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.30 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 90. | 117. | 180. | 26. |
| 5. | 59. | 95. | 108. | 185. | 24. |
| 10. | 166. | 100. | 99. | 190. | 22. |
| 15. | 260. | 105. | 92. | 195. | 21. |
| 20. | 318. | 110. | 84. | 200. | 19. |
| 25. | 334. | 115. | 78. | 205. | 17. |
| 30. | 323. | 120. | 71. | 210. | 16. |
| 35. | 297. | 125. | 66. | 215. | 15. |
| 40. | 268. | 130. | 60. | 220. | 14. |
| 45. | 251. | 135. | 56. | 225. | 12. |
| 50. | 233. | 140. | 51. | 230. | 11. |
| 55. | 215. | 145. | 47. | 235. | 11. |
| 60. | 198. | 150. | 43. | 240. | 10. |
| 65. | 180. | 155. | 40. | 245. | 9. |
| 70. | 164. | 160. | 37. | 250. | 8. |
| 75. | 151. | 165. | 34. | 255. | 8. |
| 80. | 139. | 170. | 31. | 260. | 0. |
| 85. | 128. | 175. | 29. | 0. | 0. |

1 BASIN ID: W13 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 60. | 0.03 | 0.000 | 3. |
| 5. | 0.02 | 0.000 | 0. | 65. | 0.03 | 0.000 | 3. |
| 10. | 0.04 | 0.000 | 0. | 70. | 0.02 | 0.000 | 3. |
| 15. | 0.08 | 0.000 | 0. | 75. | 0.02 | 0.000 | 3. |
| 20. | 0.14 | 0.000 | 0. | 80. | 0.02 | 0.000 | 3. |
| 25. | 0.21 | 0.001 | 0. | 85. | 0.02 | 0.000 | 2. |
| 30. | 0.12 | 0.007 | 1. | 90. | 0.02 | 0.000 | 2. |
| 35. | 0.06 | 0.002 | 2. | 95. | 0.02 | 0.000 | 2. |
| 40. | 0.05 | 0.001 | 3. | 100. | 0.02 | 0.000 | 2. |
| 45. | 0.03 | 0.000 | 3. | 105. | 0.02 | 0.000 | 2. |
| 50. | 0.03 | 0.000 | 4. | 110. | 0.02 | 0.000 | 2. |
| 55. | 0.03 | 0.000 | 4. | 115. | 0.01 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.013 INCHES
VOLUME OF EXCESS PRECIP = 0.44 ACRE-FEET
PEAK Q = 4. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.30 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W14 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.30 | 1.02 | 0.37 | 7.20 | 0.0140 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.136 | 0.250 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.08 | D= 0.14 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 16.81 | 670.65 | 198.51 | 15.79 |

WIDTH AT 50 = 45. MIN. WIDTH AT 75 = 23. MIN. K50 =0.23 K75 =0.31

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 65. | 75. | 130. | 20. |
| 5. | 65. | 70. | 68. | 135. | 18. |
| 10. | 154. | 75. | 61. | 140. | 16. |
| 15. | 196. | 80. | 55. | 145. | 15. |
| 20. | 192. | 85. | 50. | 150. | 13. |
| 25. | 168. | 90. | 45. | 155. | 12. |
| 30. | 148. | 95. | 41. | 160. | 11. |
| 35. | 143. | 100. | 37. | 165. | 10. |
| 40. | 130. | 105. | 33. | 170. | 9. |
| 45. | 117. | 110. | 30. | 175. | 8. |
| 50. | 103. | 115. | 27. | 180. | 0. |
| 55. | 92. | 120. | 24. | 0. | 0. |
| 60. | 83. | 125. | 22. | 0. | 0. |

1 BASIN ID: W14 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 65. | 0.03 | 0.000 | 4. |
| 5. | 0.02 | 0.000 | 0. | 70. | 0.02 | 0.000 | 4. |
| 10. | 0.04 | 0.000 | 0. | 75. | 0.02 | 0.000 | 3. |
| 15. | 0.08 | 0.001 | 0. | 80. | 0.02 | 0.000 | 3. |
| 20. | 0.14 | 0.001 | 0. | 85. | 0.02 | 0.000 | 3. |
| 25. | 0.21 | 0.009 | 1. | 90. | 0.02 | 0.000 | 3. |
| 30. | 0.12 | 0.011 | 3. | 95. | 0.02 | 0.000 | 2. |
| 35. | 0.06 | 0.004 | 4. | 100. | 0.02 | 0.000 | 2. |
| 40. | 0.05 | 0.003 | 5. | 105. | 0.02 | 0.000 | 2. |
| 45. | 0.03 | 0.000 | 5. | 110. | 0.02 | 0.000 | 2. |
| 50. | 0.03 | 0.000 | 5. | 115. | 0.01 | 0.000 | 2. |
| 55. | 0.03 | 0.000 | 5. | 120. | 0.01 | 0.000 | 2. |
| 60. | 0.03 | 0.000 | 4. | 125. | 0.01 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.034 INCHES
VOLUME OF EXCESS PRECIP = 0.54 ACRE-FEET
PEAK Q = 5. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W15 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.10 | 0.44 | 0.28 | 2.00 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.235 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 18.14 | 83.00 | 577.57 | 56.02 | 5.17 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 13.15)

WIDTH AT 50 = 52. MIN. WIDTH AT 75 = 27. MIN. K50 =0.21 K75 =0.28

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 60. | 28. | 120. | 13. |
| 5. | 16. | 65. | 26. | 125. | 12. |
| 10. | 40. | 70. | 24. | 130. | 12. |
| 15. | 54. | 75. | 23. | 135. | 11. |
| 20. | 55. | 80. | 22. | 140. | 10. |
| 25. | 50. | 85. | 20. | 145. | 10. |
| 30. | 43. | 90. | 19. | 150. | 9. |
| 35. | 40. | 95. | 18. | 155. | 8. |
| 40. | 40. | 100. | 17. | 160. | 8. |
| 45. | 37. | 105. | 16. | 165. | 7. |
| 50. | 34. | 110. | 15. | 170. | 0. |
| 55. | 31. | 115. | 14. | 0. | 0. |

1 BASIN ID: W15 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.004 INCHES
VOLUME OF EXCESS PRECIP = 0.02 ACRE-FEET
PEAK Q = 0. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W16 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.63 | 1.67 | 0.61 | 2.60 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.153 | 0.307 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.05 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 29.34 | 439.57 | 278.25 | 33.76 |

WIDTH AT 50 = 68. MIN. WIDTH AT 75 = 35. MIN. K50 =0.26 K75 =0.35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.20 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 100. | 105. | 200. | 25. |
| 5. | 38. | 105. | 98. | 205. | 24. |
| 10. | 112. | 110. | 91. | 210. | 22. |
| 15. | 187. | 115. | 85. | 215. | 21. |
| 20. | 241. | 120. | 79. | 220. | 19. |
| 25. | 271. | 125. | 74. | 225. | 18. |
| 30. | 278. | 130. | 69. | 230. | 17. |
| 35. | 269. | 135. | 64. | 235. | 16. |
| 40. | 251. | 140. | 60. | 240. | 14. |
| 45. | 230. | 145. | 55. | 245. | 13. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 50. | 213. | 150. | 52. | 250. | 13. | | |
| 55. | 202. | 155. | 48. | 255. | 12. | | |
| 60. | 189. | 160. | 45. | 260. | 11. | | |
| 65. | 177. | 165. | 42. | 265. | 10. | | |
| 70. | 164. | 170. | 39. | 270. | 9. | | |
| 75. | 152. | 175. | 36. | 275. | 9. | | |
| 80. | 139. | 180. | 34. | 280. | 8. | | |
| 85. | 130. | 185. | 31. | 285. | 8. | | |
| 90. | 121. | 190. | 29. | 290. | 0. | | |
| 95. | 112. | 195. | 27. | 0. | 0. | | |

1 BASIN ID: W16 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 40. | 0.05 | 0.001 | 1. |
| 5. | 0.02 | 0.000 | 0. | 45. | 0.03 | 0.000 | 1. |
| 10. | 0.04 | 0.000 | 0. | 50. | 0.03 | 0.000 | 2. |
| 15. | 0.08 | 0.000 | 0. | 55. | 0.03 | 0.000 | 2. |
| 20. | 0.14 | 0.000 | 0. | 60. | 0.03 | 0.000 | 2. |
| 25. | 0.21 | 0.000 | 0. | 65. | 0.03 | 0.000 | 2. |
| 30. | 0.12 | 0.004 | 0. | 70. | 0.02 | 0.000 | 2. |
| 35. | 0.06 | 0.001 | 1. | 75. | 0.02 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.007 INCHES
VOLUME OF EXCESS PRECIP = 0.25 ACRE-FEET
PEAK Q = 2. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.20 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W17 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.15 | 0.40 | 0.22 | 8.30 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.132 | 0.221 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.08 | D= 0.17 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 10.16 | 1108.67 | 164.08 | 7.89 |

WIDTH AT 50 = 27. MIN. WIDTH AT 75 = 14. MIN. K50 =0.23 K75 =0.31

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 40. | 61. | 80. | 16. |
| 5. | 106. | 45. | 52. | 85. | 14. |
| 10. | 164. | 50. | 44. | 90. | 12. |
| 15. | 139. | 55. | 37. | 95. | 10. |
| 20. | 123. | 60. | 31. | 100. | 8. |
| 25. | 104. | 65. | 27. | 105. | 0. |
| 30. | 86. | 70. | 23. | 0. | 0. |
| 35. | 72. | 75. | 19. | 0. | 0. |

1 BASIN ID: W17 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 45. | 0.03 | 0.000 | 4. |
| 5. | 0.02 | 0.000 | 0. | 50. | 0.03 | 0.000 | 4. |
| 10. | 0.04 | 0.000 | 0. | 55. | 0.03 | 0.001 | 3. |
| 15. | 0.08 | 0.001 | 0. | 60. | 0.03 | 0.001 | 3. |
| 20. | 0.14 | 0.002 | 0. | 65. | 0.03 | 0.001 | 3. |
| 25. | 0.21 | 0.014 | 2. | 70. | 0.02 | 0.000 | 2. |
| 30. | 0.12 | 0.013 | 4. | 75. | 0.02 | 0.000 | 2. |
| 35. | 0.06 | 0.005 | 5. | 80. | 0.02 | 0.000 | 2. |
| 40. | 0.05 | 0.003 | 5. | 85. | 0.02 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.044 INCHES
VOLUME OF EXCESS PRECIP = 0.35 ACRE-FEET
PEAK Q = 5. CFS TIME OF PEAK = 35. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W18 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.17 | 0.88 | 0.41 | 6.30 | 0.0160 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.140 | 0.234 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|

R= 0.07 D= 0.13

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 16.40 | 646.93 | 111.92 | 9.23 |

WIDTH AT 50 = 46. MIN. WIDTH AT 75 = 24. MIN. K50 =0.21 K75 =0.29

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 60. | 49. | 120. | 16. |
| 5. | 38. | 65. | 45. | 125. | 15. |
| 10. | 89. | 70. | 41. | 130. | 14. |
| 15. | 111. | 75. | 37. | 135. | 13. |
| 20. | 107. | 80. | 34. | 140. | 11. |
| 25. | 92. | 85. | 31. | 145. | 10. |
| 30. | 81. | 90. | 28. | 150. | 10. |
| 35. | 82. | 95. | 26. | 155. | 9. |
| 40. | 75. | 100. | 24. | 160. | 8. |
| 45. | 67. | 105. | 22. | 165. | 0. |
| 50. | 60. | 110. | 20. | 0. | 0. |
| 55. | 54. | 115. | 18. | 0. | 0. |

1 BASIN ID: W18 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 40. | 0.05 | 0.002 | 3. |
| 5. | 0.02 | 0.000 | 0. | 45. | 0.03 | 0.000 | 3. |
| 10. | 0.04 | 0.000 | 0. | 50. | 0.03 | 0.000 | 2. |
| 15. | 0.08 | 0.001 | 0. | 55. | 0.03 | 0.000 | 2. |
| 20. | 0.14 | 0.001 | 0. | 60. | 0.03 | 0.000 | 2. |
| 25. | 0.21 | 0.008 | 0. | 65. | 0.03 | 0.000 | 2. |
| 30. | 0.12 | 0.011 | 1. | 70. | 0.02 | 0.000 | 2. |
| 35. | 0.06 | 0.003 | 2. | 75. | 0.02 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.030 INCHES
VOLUME OF EXCESS PRECIP = 0.27 ACRE-FEET
PEAK Q = 3. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W19 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| 0.26 | 0.97 | 0.62 | 2.00 | 0.0130 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.272 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 23.29 | 502.90 | 129.25 | 13.71 |

WIDTH AT 50 = 60. MIN. WIDTH AT 75 = 31. MIN. K50 =0.23 K75 =0.32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.60 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 75. | 59. | 150. | 19. |
| 5. | 26. | 80. | 55. | 155. | 18. |
| 10. | 71. | 85. | 51. | 160. | 17. |
| 15. | 107. | 90. | 47. | 165. | 16. |
| 20. | 126. | 95. | 44. | 170. | 14. |
| 25. | 129. | 100. | 41. | 175. | 13. |
| 30. | 121. | 105. | 38. | 180. | 12. |
| 35. | 109. | 110. | 35. | 185. | 12. |
| 40. | 99. | 115. | 33. | 190. | 11. |
| 45. | 96. | 120. | 30. | 195. | 10. |
| 50. | 90. | 125. | 28. | 200. | 9. |
| 55. | 83. | 130. | 26. | 205. | 9. |
| 60. | 76. | 135. | 24. | 210. | 8. |
| 65. | 70. | 140. | 23. | 215. | 7. |
| 70. | 64. | 145. | 21. | 220. | 0. |

1 BASIN ID: W19 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.002 INCHES
VOLUME OF EXCESS PRECIP = 0.03 ACRE-FEET
PEAK Q = 0. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.60 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W20 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.69 | 1.37 | 0.52 | 2.00 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.316 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 27.07 | 493.63 | 341.10 | 36.85 |

WIDTH AT 50 = 61. MIN. WIDTH AT 75 = 32. MIN. K50 =0.27 K75 =0.36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.00 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 95. | 117. | 190. | 25. |
| 5. | 53. | 100. | 108. | 195. | 23. |
| 10. | 153. | 105. | 99. | 200. | 21. |
| 15. | 247. | 110. | 92. | 205. | 20. |
| 20. | 312. | 115. | 85. | 210. | 18. |
| 25. | 339. | 120. | 78. | 215. | 17. |
| 30. | 337. | 125. | 72. | 220. | 15. |
| 35. | 317. | 130. | 66. | 225. | 14. |
| 40. | 289. | 135. | 61. | 230. | 13. |
| 45. | 264. | 140. | 56. | 235. | 12. |
| 50. | 246. | 145. | 52. | 240. | 11. |
| 55. | 229. | 150. | 48. | 245. | 10. |
| 60. | 211. | 155. | 44. | 250. | 10. |
| 65. | 194. | 160. | 41. | 255. | 9. |
| 70. | 176. | 165. | 38. | 260. | 8. |
| 75. | 161. | 170. | 35. | 265. | 7. |
| 80. | 149. | 175. | 32. | 270. | 0. |
| 85. | 137. | 180. | 30. | 0. | 0. |
| 90. | 127. | 185. | 27. | 0. | 0. |

1 BASIN ID: W20 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.004 INCHES
VOLUME OF EXCESS PRECIP = 0.13 ACRE-FEET
PEAK Q = 1. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.00 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W21 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.33 | 1.14 | 0.60 | 3.40 | 0.0140 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.150 | 0.273 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.07 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 23.51 | 499.75 | 164.92 | 17.60 |

WIDTH AT 50 = 60. MIN. WIDTH AT 75 = 31. MIN. K50 =0.24 K75 =0.32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 80. | 70. | 160. | 21. |
| 5. | 32. | 85. | 65. | 165. | 19. |
| 10. | 89. | 90. | 60. | 170. | 18. |
| 15. | 136. | 95. | 56. | 175. | 17. |
| 20. | 161. | 100. | 52. | 180. | 15. |
| 25. | 164. | 105. | 48. | 185. | 14. |
| 30. | 155. | 110. | 45. | 190. | 13. |
| 35. | 140. | 115. | 41. | 195. | 12. |
| 40. | 127. | 120. | 38. | 200. | 11. |
| 45. | 123. | 125. | 35. | 205. | 11. |
| 50. | 115. | 130. | 33. | 210. | 10. |
| 55. | 107. | 135. | 30. | 215. | 9. |
| 60. | 98. | 140. | 28. | 220. | 8. |
| 65. | 90. | 145. | 26. | 225. | 8. |
| 70. | 82. | 150. | 24. | 230. | 0. |
| 75. | 76. | 155. | 22. | 0. | 0. |

1 BASIN ID: W21 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 30. | 0.12 | 0.007 | 0. |
| 5. | 0.02 | 0.000 | 0. | 35. | 0.06 | 0.002 | 1. |
| 10. | 0.04 | 0.000 | 0. | 40. | 0.05 | 0.001 | 1. |
| 15. | 0.08 | 0.000 | 0. | 45. | 0.03 | 0.000 | 2. |
| 20. | 0.14 | 0.000 | 0. | 50. | 0.03 | 0.000 | 2. |
| 25. | 0.21 | 0.000 | 0. | 55. | 0.03 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.011 INCHES
VOLUME OF EXCESS PRECIP = 0.20 ACRE-FEET
PEAK Q = 2. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W22 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.40 | 1.17 | 0.65 | 2.00 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.291 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 26.23 | 470.49 | 187.25 | 21.23 |

WIDTH AT 50 = 64. MIN. WIDTH AT 75 = 33. MIN. K50 =0.25 K75 =0.34

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 85. | 80. | 170. | 23. |
| 5. | 31. | 90. | 74. | 175. | 21. |
| 10. | 88. | 95. | 69. | 180. | 20. |
| 15. | 140. | 100. | 64. | 185. | 19. |
| 20. | 174. | 105. | 60. | 190. | 17. |
| 25. | 187. | 110. | 56. | 195. | 16. |
| 30. | 184. | 115. | 52. | 200. | 15. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 35. | 171. | | 120. | 48. | | 205. | 14. |
| 40. | 156. | | 125. | 45. | | 210. | 13. |
| 45. | 144. | | 130. | 41. | | 215. | 12. |
| 50. | 137. | | 135. | 39. | | 220. | 11. |
| 55. | 128. | | 140. | 36. | | 225. | 10. |
| 60. | 119. | | 145. | 33. | | 230. | 10. |
| 65. | 110. | | 150. | 31. | | 235. | 9. |
| 70. | 101. | | 155. | 29. | | 240. | 8. |
| 75. | 93. | | 160. | 27. | | 245. | 8. |
| 80. | 86. | | 165. | 25. | | 250. | 0. |

1 BASIN ID: W22 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.004 INCHES
VOLUME OF EXCESS PRECIP = 0.08 ACRE-FEET
PEAK Q = 1. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W23 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.88 | 1.20 | 0.73 | 2.00 | 0.0140 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.328 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 26.92 | 515.37 | 455.59 | 47.15 |

WIDTH AT 50 = 58. MIN. WIDTH AT 75 = 30. MIN. K50 =0.28 K75 =0.38

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 95. | 146. | 190. | 28. |
| 5. | 72. | 100. | 134. | 195. | 26. |
| 10. | 206. | 105. | 123. | 200. | 24. |
| 15. | 332. | 110. | 112. | 205. | 22. |
| 20. | 418. | 115. | 103. | 210. | 20. |
| 25. | 453. | 120. | 95. | 215. | 18. |
| 30. | 450. | 125. | 87. | 220. | 17. |
| 35. | 422. | 130. | 80. | 225. | 16. |
| 40. | 383. | 135. | 73. | 230. | 14. |
| 45. | 346. | 140. | 67. | 235. | 13. |
| 50. | 321. | 145. | 62. | 240. | 12. |
| 55. | 296. | 150. | 57. | 245. | 11. |
| 60. | 272. | 155. | 52. | 250. | 10. |
| 65. | 247. | 160. | 48. | 255. | 9. |
| 70. | 224. | 165. | 44. | 260. | 9. |
| 75. | 205. | 170. | 40. | 265. | 8. |
| 80. | 188. | 175. | 37. | 270. | 0. |
| 85. | 173. | 180. | 34. | 0. | 0. |
| 90. | 159. | 185. | 31. | 0. | 0. |

1 BASIN ID: W23 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 30. | 0.12 | 0.001 | 0. |
| 5. | 0.02 | 0.000 | 0. | 35. | 0.06 | 0.001 | 0. |
| 10. | 0.04 | 0.000 | 0. | 40. | 0.05 | 0.000 | 1. |
| 15. | 0.08 | 0.000 | 0. | 45. | 0.03 | 0.000 | 1. |
| 20. | 0.14 | 0.000 | 0. | 50. | 0.03 | 0.000 | 1. |
| 25. | 0.21 | 0.000 | 0. | 55. | 0.03 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.004 INCHES
VOLUME OF EXCESS PRECIP = 0.17 ACRE-FEET
PEAK Q = 1. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W24 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.24 | 0.61 | 0.45 | 2.00 | 0.0140 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.269 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM |
|---|---|

( DEFAULT )
R= 0.06

( DEFAULT )
D= 0.04

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 16.43 | 742.27 | 176.66 | 12.69 |

WIDTH AT 50 = 40. MIN. WIDTH AT 75 = 21. MIN. K50 =0.24 K75 =0.33

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 55. | 74. | 110. | 21. |
| 5. | 60. | 60. | 66. | 115. | 19. |
| 10. | 140. | 65. | 59. | 120. | 17. |
| 15. | 175. | 70. | 52. | 125. | 15. |
| 20. | 169. | 75. | 47. | 130. | 13. |
| 25. | 147. | 80. | 42. | 135. | 12. |
| 30. | 133. | 85. | 37. | 140. | 11. |
| 35. | 120. | 90. | 33. | 145. | 9. |
| 40. | 107. | 95. | 30. | 150. | 8. |
| 45. | 94. | 100. | 26. | 155. | 8. |
| 50. | 82. | 105. | 24. | 160. | 0. |

1 BASIN ID: W24 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.004 INCHES
VOLUME OF EXCESS PRECIP = 0.04 ACRE-FEET
PEAK Q = 1. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E25 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.05 | 0.40 | 0.19 | 2.00 | 0.0070 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.216 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.06 | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.04 |
|---|---|

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 17.20 | 78.00 | 564.50 | 31.05 | 2.93 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 11.37)

WIDTH AT 50 = 53. MIN. WIDTH AT 75 = 28. MIN. K50 =0.19 K75 =0.26

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 3.00 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.50 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 60. | 16. | 120. | 10. |
| 5. | 10. | 65. | 15. | 125. | 10. |
| 10. | 24. | 70. | 15. | 130. | 10. |
| 15. | 30. | 75. | 14. | 135. | 9. |
| 20. | 30. | 80. | 14. | 140. | 9. |
| 25. | 26. | 85. | 13. | 145. | 9. |
| 30. | 22. | 90. | 13. | 150. | 9. |
| 35. | 21. | 95. | 12. | 155. | 8. |
| 40. | 22. | 100. | 12. | 160. | 8. |
| 45. | 21. | 105. | 12. | 165. | 8. |
| 50. | 19. | 110. | 11. | 170. | 7. |
| 55. | 17. | 115. | 11. | 175. | 0. |

1 BASIN ID: E25 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.009 INCHES
VOLUME OF EXCESS PRECIP = 0.03 ACRE-FEET
PEAK Q = 0. CFS TIME OF PEAK = 45. MIN.
INFILT.= 3.00 IN/HR DECAY =0.00180 FNINF = 0.50 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E26 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.14 | 0.57 | 0.35 | 2.00 | 0.0170 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.249 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 17.58 | 80.00 | 634.51 | 90.10 | 7.57 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 13.90)

WIDTH AT 50 = 47. MIN. WIDTH AT 75 = 25. MIN. K50 =0.22 K75 =0.30

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 55. | 45. | 110. | 17. |
| 5. | 28. | 60. | 41. | 115. | 16. |
| 10. | 67. | 65. | 37. | 120. | 14. |
| 15. | 88. | 70. | 34. | 125. | 13. |
| 20. | 88. | 75. | 31. | 130. | 12. |
| 25. | 79. | 80. | 29. | 135. | 11. |
| 30. | 69. | 85. | 26. | 140. | 10. |
| 35. | 67. | 90. | 24. | 145. | 9. |
| 40. | 61. | 95. | 22. | 150. | 8. |
| 45. | 56. | 100. | 20. | 155. | 8. |
| 50. | 50. | 105. | 19. | 160. | 0. |

1 BASIN ID: E26 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.004 INCHES
VOLUME OF EXCESS PRECIP = 0.03 ACRE-FEET
PEAK Q = 0. CFS TIME OF PEAK = 45. MIN.

INFILT.= 4.50 IN/HR  DECAY =0.00180  FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN.  MAX.IMP.RET.=0.05 IN.

*** WARNING : THE ABOVE PEAK IS COMPUTED BASED ON THE TIME TO PEAK MODIFIED BY THE RATIONAL FORMULA.
BUT THE AREA IS TOO LARGE (GREATER THAN 90 ACRES) TO APPLIY THE MODIFICATION, AND
THE ABOVE ESTIMATED PEAK MAY NOT BE RIGHT.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E27 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.10 | 0.60 | 0.26 | 2.00 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.236 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 19.84 | 92.00 | 523.38 | 52.34 | 5.33 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 14.32)

WIDTH AT 50 = 57. MIN. WIDTH AT 75 = 30. MIN. K50 =0.21 K75 =0.28

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN.  MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 3.40 IN./HR.  DECAY = 0.00180/SECOND  FNINFL = 0.50 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 65. | 26. | 130. | 13. |
| 5. | 13. | 70. | 25. | 135. | 12. |
| 10. | 35. | 75. | 24. | 140. | 12. |
| 15. | 48. | 80. | 22. | 145. | 11. |
| 20. | 52. | 85. | 21. | 150. | 11. |
| 25. | 49. | 90. | 20. | 155. | 10. |
| 30. | 43. | 95. | 19. | 160. | 9. |
| 35. | 38. | 100. | 18. | 165. | 9. |
| 40. | 38. | 105. | 17. | 170. | 9. |
| 45. | 37. | 110. | 16. | 175. | 8. |
| 50. | 34. | 115. | 15. | 180. | 8. |
| 55. | 32. | 120. | 15. | 185. | 0. |
| 60. | 29. | 125. | 14. | 0. | 0. |

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.007 INCHES
VOLUME OF EXCESS PRECIP = 0.04 ACRE-FEET
PEAK Q = 0. CFS TIME OF PEAK = 50. MIN.
INFILT.= 3.40 IN/HR DECAY =0.00180 FNINF = 0.50 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E28 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.58 | 1.19 | 0.60 | 4.60 | 0.0160 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.146 | 0.290 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.07 | D= 0.09 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 22.55 | 556.13 | 324.78 | 31.15 |

WIDTH AT 50 = 54. MIN. WIDTH AT 75 = 28. MIN. K50 =0.25 K75 =0.34

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 85. | 109. | 170. | 24. |
| 5. | 68. | 90. | 100. | 175. | 22. |
| 10. | 185. | 95. | 91. | 180. | 20. |
| 15. | 277. | 100. | 84. | 185. | 18. |
| 20. | 320. | 105. | 76. | 190. | 17. |
| 25. | 321. | 110. | 70. | 195. | 15. |
| 30. | 297. | 115. | 64. | 200. | 14. |
| 35. | 266. | 120. | 58. | 205. | 13. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 40. | 245. | | 125. | 53. | | 210. | 12. |
| 45. | 229. | | 130. | 49. | | 215. | 11. |
| 50. | 210. | | 135. | 45. | | 220. | 10. |
| 55. | 192. | | 140. | 41. | | 225. | 9. |
| 60. | 173. | | 145. | 37. | | 230. | 8. |
| 65. | 157. | | 150. | 34. | | 235. | 7. |
| 70. | 143. | | 155. | 31. | | 240. | 0. |
| 75. | 131. | | 160. | 28. | | 0. | 0. |
| 80. | 120. | | 165. | 26. | | 0. | 0. |

1 BASIN ID: E28 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 70. | 0.02 | 0.000 | 4. |
| 5. | 0.02 | 0.000 | 0. | 75. | 0.02 | 0.000 | 4. |
| 10. | 0.04 | 0.000 | 0. | 80. | 0.02 | 0.000 | 3. |
| 15. | 0.08 | 0.000 | 0. | 85. | 0.02 | 0.000 | 3. |
| 20. | 0.14 | 0.001 | 0. | 90. | 0.02 | 0.000 | 3. |
| 25. | 0.21 | 0.003 | 0. | 95. | 0.02 | 0.000 | 3. |
| 30. | 0.12 | 0.008 | 1. | 100. | 0.02 | 0.000 | 2. |
| 35. | 0.06 | 0.003 | 3. | 105. | 0.02 | 0.000 | 2. |
| 40. | 0.05 | 0.002 | 4. | 110. | 0.02 | 0.000 | 2. |
| 45. | 0.03 | 0.000 | 5. | 115. | 0.01 | 0.000 | 2. |
| 50. | 0.03 | 0.000 | 5. | 120. | 0.01 | 0.000 | 2. |
| 55. | 0.03 | 0.000 | 5. | 125. | 0.01 | 0.000 | 2. |
| 60. | 0.03 | 0.000 | 5. | 130. | 0.01 | 0.000 | 2. |
| 65. | 0.03 | 0.000 | 4. | 135. | 0.01 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.019 INCHES
VOLUME OF EXCESS PRECIP = 0.58 ACRE-FEET
PEAK Q = 5. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E29 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.06 | 0.62 | 0.21 | 7.20 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.136 | 0.197 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.08 | D= 0.14 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK | TIME OF CONCENTRATION | PEAK RATE OF RUNOFF | UNIT HYDROGRAPH PEAK | VOLUME OF RUNOFF |
|---|---|---|---|---|

| (MIN) | (MIN) | (CFS/SQMI) | (CFS) | (AF) |
|---|---|---|---|---|
| 13.96 | 66.00 | 660.48 | 40.29 | 3.25 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 11.48)

WIDTH AT 50 = 45. MIN. WIDTH AT 75 = 24. MIN. K50 =0.18 K75 =0.25

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 55. | 19. | 110. | 11. |
| 5. | 17. | 60. | 18. | 115. | 10. |
| 10. | 36. | 65. | 17. | 120. | 10. |
| 15. | 40. | 70. | 17. | 125. | 9. |
| 20. | 35. | 75. | 16. | 130. | 9. |
| 25. | 28. | 80. | 15. | 135. | 8. |
| 30. | 27. | 85. | 14. | 140. | 8. |
| 35. | 28. | 90. | 13. | 145. | 8. |
| 40. | 26. | 95. | 13. | 150. | 0. |
| 45. | 23. | 100. | 12. | 0. | 0. |
| 50. | 21. | 105. | 12. | 0. | 0. |

1 BASIN ID: E29 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.036 INCHES
VOLUME OF EXCESS PRECIP = 0.12 ACRE-FEET
PEAK Q = 1. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E30 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.03 | 0.19 | 0.09 | 2.00 | 0.0310 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.201 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.06 | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.04 |
|---|---|

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 9.27 | 36.00 | 1140.00 | 38.76 | 1.81 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 5.51)

WIDTH AT 50 = 26. MIN. WIDTH AT 75 = 14. MIN. K50 =0.21 K75 =0.29

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.70 IN./HR. DECAY = 0.00130/SECOND FNINFL = 0.80 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 30. | 19. | 60. | 11. |
| 5. | 27. | 35. | 18. | 65. | 10. |
| 10. | 39. | 40. | 16. | 70. | 9. |
| 15. | 30. | 45. | 15. | 75. | 9. |
| 20. | 28. | 50. | 14. | 80. | 8. |
| 25. | 24. | 55. | 12. | 85. | 0. |

1 BASIN ID: E30 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.001 INCHES
VOLUME OF EXCESS PRECIP = 0.00 ACRE-FEET
PEAK Q = 0. CFS TIME OF PEAK = 35. MIN.
INFILT.= 4.70 IN/HR DECAY =0.00130 FNINF = 0.80 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E31 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.04 | 0.26 | 0.14 | 2.00 | 0.0290 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.203 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 10.78 | 44.00 | 940.19 | 33.85 | 1.92 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 6.92)

WIDTH AT 50 = 32. MIN. WIDTH AT 75 = 17. MIN. K50 =0.20 K75 =0.28

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 40. | 16. | 80. | 10. |
| 5. | 20. | 45. | 15. | 85. | 9. |
| 10. | 34. | 50. | 14. | 90. | 9. |
| 15. | 30. | 55. | 13. | 95. | 8. |
| 20. | 24. | 60. | 13. | 100. | 8. |
| 25. | 24. | 65. | 12. | 105. | 0. |
| 30. | 21. | 70. | 11. | 0. | 0. |
| 35. | 18. | 75. | 10. | 0. | 0. |

1 BASIN ID: E31 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.004 INCHES
VOLUME OF EXCESS PRECIP = 0.01 ACRE-FEET
PEAK Q = 0. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E32 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.53 | 1.17 | 0.48 | 2.00 | 0.0100 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.303 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 23.83 | 546.30 | 288.99 | 28.21 |

WIDTH AT 50 = 55. MIN. WIDTH AT 75 = 29. MIN. K50 =0.26 K75 =0.35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.00 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 80. | 110. | 160. | 27. |
| 5. | 55. | 85. | 100. | 165. | 24. |
| 10. | 154. | 90. | 92. | 170. | 22. |
| 15. | 236. | 95. | 84. | 175. | 20. |
| 20. | 280. | 100. | 77. | 180. | 19. |
| 25. | 288. | 105. | 71. | 185. | 17. |
| 30. | 273. | 110. | 65. | 190. | 16. |
| 35. | 247. | 115. | 59. | 195. | 14. |
| 40. | 223. | 120. | 54. | 200. | 13. |
| 45. | 208. | 125. | 50. | 205. | 12. |
| 50. | 192. | 130. | 45. | 210. | 11. |
| 55. | 175. | 135. | 42. | 215. | 10. |
| 60. | 159. | 140. | 38. | 220. | 9. |
| 65. | 143. | 145. | 35. | 225. | 8. |
| 70. | 131. | 150. | 32. | 230. | 8. |
| 75. | 120. | 155. | 29. | 235. | 0. |

1 BASIN ID: E32 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.004 INCHES
VOLUME OF EXCESS PRECIP = 0.10 ACRE-FEET

PEAK Q = 1. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.00 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E33 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.05 | 0.34 | 0.18 | 2.00 | 0.0230 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.214 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 12.67 | 54.00 | 809.11 | 42.07 | 2.77 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 8.46)

WIDTH AT 50 = 37. MIN. WIDTH AT 75 = 19. MIN. K50 =0.21 K75 =0.28

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 45. | 20. | 90. | 11. |
| 5. | 21. | 50. | 19. | 95. | 10. |
| 10. | 40. | 55. | 18. | 100. | 10. |
| 15. | 41. | 60. | 16. | 105. | 9. |
| 20. | 33. | 65. | 15. | 110. | 8. |
| 25. | 30. | 70. | 14. | 115. | 8. |
| 30. | 29. | 75. | 13. | 120. | 0. |
| 35. | 26. | 80. | 13. | 0. | 0. |
| 40. | 22. | 85. | 12. | 0. | 0. |

1 BASIN ID: E33 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | \| | 5. | 0.02 | 0.000 | 0. | \| |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.004 INCHES
VOLUME OF EXCESS PRECIP = 0.01 ACRE-FEET
PEAK Q = 0. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E34 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.70 | 1.37 | 0.68 | 2.00 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.317 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 28.58 | 466.21 | 327.75 | 37.49 |

WIDTH AT 50 = 64. MIN. WIDTH AT 75 = 33. MIN. K50 =0.27 K75 =0.36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.30 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 95. | 122. | 190. | 29. |
| 5. | 47. | 100. | 113. | 195. | 27. |
| 10. | 136. | 105. | 105. | 200. | 25. |
| 15. | 226. | 110. | 97. | 205. | 23. |
| 20. | 290. | 115. | 90. | 210. | 21. |
| 25. | 322. | 120. | 83. | 215. | 20. |
| 30. | 327. | 125. | 77. | 220. | 18. |
| 35. | 313. | 130. | 72. | 225. | 17. |
| 40. | 290. | 135. | 66. | 230. | 16. |
| 45. | 264. | 140. | 61. | 235. | 14. |
| 50. | 246. | 145. | 57. | 240. | 13. |
| 55. | 230. | 150. | 53. | 245. | 12. |
| 60. | 214. | 155. | 49. | 250. | 11. |
| 65. | 198. | 160. | 45. | 255. | 11. |
| 70. | 182. | 165. | 42. | 260. | 10. |
| 75. | 166. | 170. | 39. | 265. | 9. |
| 80. | 154. | 175. | 36. | 270. | 8. |
| 85. | 142. | 180. | 33. | 275. | 8. |

| | | | | | |
|---|---|---|---|---|---|
| 90. | 132. | 185. | 31. | 280. | 0. |

1 BASIN ID: E34 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.004 INCHES
VOLUME OF EXCESS PRECIP = 0.14 ACRE-FEET
PEAK Q = 1. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.30 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E35 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.73 | 1.22 | 0.53 | 5.10 | 0.0110 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.144 | 0.297 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.07 | D= 0.10 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 23.12 | 553.64 | 405.26 | 39.04 |

WIDTH AT 50 = 54. MIN. WIDTH AT 75 = 28. MIN. K50 =0.26 K75 =0.35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.30 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 85. | 137. | 170. | 29. |
| 5. | 81. | 90. | 125. | 175. | 27. |
| 10. | 224. | 95. | 115. | 180. | 25. |
| 15. | 339. | 100. | 105. | 185. | 22. |
| 20. | 397. | 105. | 96. | 190. | 21. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 25. | 403. | 110. | 87. | 195. | 19. | | |
| 30. | 377. | 115. | 80. | 200. | 17. | | |
| 35. | 338. | 120. | 73. | 205. | 16. | | |
| 40. | 308. | 125. | 67. | 210. | 14. | | |
| 45. | 288. | 130. | 61. | 215. | 13. | | |
| 50. | 265. | 135. | 56. | 220. | 12. | | |
| 55. | 242. | 140. | 51. | 225. | 11. | | |
| 60. | 218. | 145. | 46. | 230. | 10. | | |
| 65. | 197. | 150. | 42. | 235. | 9. | | |
| 70. | 180. | 155. | 39. | 240. | 8. | | |
| 75. | 164. | 160. | 35. | 245. | 8. | | |
| 80. | 150. | 165. | 32. | 250. | 0. | | |

1 BASIN ID: E35 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 80. | 0.02 | 0.000 | 5. |
| 5. | 0.02 | 0.000 | 0. | 85. | 0.02 | 0.000 | 4. |
| 10. | 0.04 | 0.000 | 0. | 90. | 0.02 | 0.000 | 4. |
| 15. | 0.08 | 0.000 | 0. | 95. | 0.02 | 0.000 | 4. |
| 20. | 0.14 | 0.001 | 0. | 100. | 0.02 | 0.000 | 3. |
| 25. | 0.21 | 0.004 | 1. | 105. | 0.02 | 0.000 | 3. |
| 30. | 0.12 | 0.009 | 2. | 110. | 0.02 | 0.000 | 3. |
| 35. | 0.06 | 0.003 | 4. | 115. | 0.01 | 0.000 | 3. |
| 40. | 0.05 | 0.002 | 6. | 120. | 0.01 | 0.000 | 3. |
| 45. | 0.03 | 0.000 | 7. | 125. | 0.01 | 0.000 | 2. |
| 50. | 0.03 | 0.000 | 7. | 130. | 0.01 | 0.000 | 2. |
| 55. | 0.03 | 0.000 | 7. | 135. | 0.01 | 0.000 | 2. |
| 60. | 0.03 | 0.000 | 6. | 140. | 0.01 | 0.000 | 2. |
| 65. | 0.03 | 0.000 | 6. | 145. | 0.01 | 0.000 | 2. |
| 70. | 0.02 | 0.000 | 6. | 150. | 0.01 | 0.000 | 2. |
| 75. | 0.02 | 0.000 | 5. | 155. | 0.01 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.021 INCHES
VOLUME OF EXCESS PRECIP = 0.82 ACRE-FEET
PEAK Q = 7. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.30 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E36 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.10 | 0.29 | 0.16 | 2.00 | 0.0110 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.238 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|

R= 0.06 D= 0.04

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 14.37 | 63.00 | 769.27 | 80.00 | 5.55 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 8.77)

WIDTH AT 50 = 39. MIN. WIDTH AT 75 = 20. MIN. K50 =0.22 K75 =0.30

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.40 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 45. | 40. | 90. | 16. |
| 5. | 33. | 50. | 36. | 95. | 14. |
| 10. | 70. | 55. | 32. | 100. | 13. |
| 15. | 80. | 60. | 29. | 105. | 12. |
| 20. | 71. | 65. | 26. | 110. | 10. |
| 25. | 60. | 70. | 24. | 115. | 9. |
| 30. | 58. | 75. | 21. | 120. | 8. |
| 35. | 52. | 80. | 19. | 125. | 8. |
| 40. | 46. | 85. | 17. | 130. | 0. |

1 BASIN ID: E36 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.004 INCHES
VOLUME OF EXCESS PRECIP = 0.02 ACRE-FEET
PEAK Q = 0. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.40 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E37 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 1.07 | 1.80 | 0.49 | 2.00 | 0.0100 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|

0.156 0.337

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 29.04 | 487.92 | 522.08 | 57.07 |

WIDTH AT 50 = 61. MIN. WIDTH AT 75 = 32. MIN. K50 =0.28 K75 =0.39

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.00 IN./HR. DECAY = 0.00160/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 100. | 168. | 200. | 33. |
| 5. | 73. | 105. | 155. | 205. | 30. |
| 10. | 213. | 110. | 142. | 210. | 28. |
| 15. | 354. | 115. | 131. | 215. | 25. |
| 20. | 456. | 120. | 121. | 220. | 23. |
| 25. | 510. | 125. | 111. | 225. | 22. |
| 30. | 521. | 130. | 103. | 230. | 20. |
| 35. | 502. | 135. | 95. | 235. | 18. |
| 40. | 464. | 140. | 87. | 240. | 17. |
| 45. | 421. | 145. | 80. | 245. | 16. |
| 50. | 385. | 150. | 74. | 250. | 14. |
| 55. | 358. | 155. | 68. | 255. | 13. |
| 60. | 331. | 160. | 63. | 260. | 12. |
| 65. | 304. | 165. | 58. | 265. | 11. |
| 70. | 278. | 170. | 53. | 270. | 10. |
| 75. | 253. | 175. | 49. | 275. | 9. |
| 80. | 233. | 180. | 45. | 280. | 9. |
| 85. | 215. | 185. | 42. | 285. | 8. |
| 90. | 198. | 190. | 38. | 290. | 7. |
| 95. | 182. | 195. | 35. | 295. | 0. |

1 BASIN ID: E37 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.003 INCHES
VOLUME OF EXCESS PRECIP = 0.15 ACRE-FEET
PEAK Q = 1. CFS TIME OF PEAK = 60. MIN.
INFILT.= 4.00 IN/HR DECAY =0.00160 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E38 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.27 | 0.89 | 0.47 | 2.00 | 0.0140 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.274 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 19.55 | 618.07 | 167.50 | 14.45 |

WIDTH AT 50 = 49. MIN. WIDTH AT 75 = 25. MIN. K50 =0.24 K75 =0.33

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.30 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 65. | 71. | 130. | 21. |
| 5. | 44. | 70. | 65. | 135. | 19. |
| 10. | 112. | 75. | 59. | 140. | 17. |
| 15. | 156. | 80. | 54. | 145. | 16. |
| 20. | 167. | 85. | 49. | 150. | 14. |
| 25. | 157. | 90. | 44. | 155. | 13. |
| 30. | 139. | 95. | 40. | 160. | 12. |
| 35. | 126. | 100. | 37. | 165. | 11. |
| 40. | 118. | 105. | 33. | 170. | 10. |
| 45. | 108. | 110. | 30. | 175. | 9. |
| 50. | 97. | 115. | 28. | 180. | 8. |
| 55. | 87. | 120. | 25. | 185. | 0. |
| 60. | 78. | 125. | 23. | 0. | 0. |

1 BASIN ID: E38 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 2yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.02 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.20 EXCESS PRECIP. = 0.004 INCHES
VOLUME OF EXCESS PRECIP = 0.06 ACRE-FEET

PEAK Q =    1. CFS      TIME OF PEAK =  50. MIN.
INFILT.= 4.30 IN/HR    DECAY =0.00180    FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN.     MAX.IMP.RET.=0.05 IN.

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1    5yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin
1 5yr      .026.048.113.179.293.152.075.057.047.039.039.039.039.029.029.029.029
1 5yr       .02 .02 .02 .02 .02 .02 .02 .02 .02 .02 .02 .02 .02 .02 .02 .02 .02
1 5yr       .02 .02

70 1 1 5.    W1  1Western portion of Sump Basin
.433 .849 .427   2. .015       .35  .05  4.4.0018   .6
70 1 1 5.    W4  4Western portion of Sump Basin
.188 1.03 .514 10.8 .010       .35  .05  4.5.0018   .6
70 1 1 5.    W5  5Western portion of Sump Basin
.428 1.20 .670   2. .017       .35  .05  4.6.0016   .7
71 1 1 5.    W6  6Western portion of Sump Basin
.114 .404 .073   2. .009  80.  .35  .05  4.5.0018   .6
71 1 1 5.    W7  7Western portion of Sump Basin
.007 .137 .044  30. .007  22.  .35  .05  4.5.0018   .6
70 1 1 5.    W9  9Western portion of Sump Basin
.204 .801 .370   2. .012       .35  .05  4.5.0018   .6
71 1 1 5.   W11 11Western portion of Sump Basin
.078 .509 .224  15. .009  90.  .35  .05  4.5.0018   .6
70 1 1 5.   W12 12Western portion of Sump Basin
.444 1.14 .590 10.9 .009       .35  .05  4.5.0018   .6
70 1 1 5.   W13 13Western portion of Sump Basin
.654 1.30 .580  3.7 .012       .35  .05  4.3.0017   .6
70 1 1 5.   W14 14Western portion of Sump Basin
.296 1.02 .372  7.2 .014       .35  .05  4.5.0017   .6
71 1 1 5.   W15 15Western portion of Sump Basin
.097 .438 .285   2. .009  83.  .35  .05  4.5.0018   .6
70 1 1 5.   W16 16Western portion of Sump Basin
.633 1.67 .610  2.6 .012       .35  .05  4.2.0018   .6
70 1 1 5.   W17 17Western portion of Sump Basin
.148 .396 .223  8.3 .009       .35  .05  4.5.0018   .6
70 1 1 5.   W18 18Western portion of Sump Basin
.173 .877 .414  6.3 .016       .35  .05  4.5.0018   .6
70 1 1 5.   W19 19Western portion of Sump Basin
.257 .969 .624   2. .013       .35  .05  4.6.0017   .6
70 1 1 5.   W20 20Western portion of Sump Basin
.691 1.37 .520   2. .009       .35  .05  4.0.0017   .6
70 1 1 5.   W21 21Western portion of Sump Basin
.330 1.14 .604  3.4 .014       .35  .05  4.5.0018   .6
70 1 1 5.   W22 22Western portion of Sump Basin
.398 1.17 .654   2. .012       .35  .05  4.5.0018   .6
70 1 1 5.   W23 23Western portion of Sump Basin
.884 1.20 .731   2. .014       .35  .05  4.5.0018   .6
70 1 1 5.   W24 24Western portion of Sump Basin
.238 .609 .447   2. .014       .35  .05  4.5.0018   .6
71 1 1 5.   E25 25Eastern portion of Sump Basin
.055 .396 .190   2. .007  78.  .35  .05  3.0.0018   .5
71 1 1 5.   E26 26Eastern portion of Sump Basin
.142 .570 .347   2. .017  80.  .35  .05  4.5.0018   .6
71 1 1 5.   E27 27Eastern portion of Sump Basin
.100 .597 .260   2. .009  92.  .35  .05  3.4.0018   .5
70 1 1 5.   E28 28Eastern portion of Sump Basin
.584 1.19 .597  4.6 .016       .35  .05  4.5.0018   .6
71 1 1 5.   E29 29Eastern portion of Sump Basin
.061 .622 .214  7.2 .012  66.  .35  .05  4.5.0018   .6
71 1 1 5.   E30 30Eastern portion of Sump Basin
.034 .189 .088   2. .031  36.  .35  .05  4.7.0013   .8
71 1 1 5.   E31 31Eastern portion of Sump Basin
.036 .260 .138   2. .029  44.  .35  .05  4.5.0018   .6
70 1 1 5.   E32 32Eastern portion of Sump Basin
.529 1.17 .478   2. .010       .35  .05  4.0.0017   .6
71 1 1 5.   E33 33Eastern portion of Sump Basin
.052 .335 .178   2. .023  54.  .35  .05  4.5.0018   .6
70 1 1 5.   E34 34Eastern portion of Sump Basin
.703 1.37 .680   2. .012       .35  .05  4.3.0018   .6
70 1 1 5.   E35 35Eastern portion of Sump Basin
.732 1.22 .526  5.1 .011       .35  .05  4.3.0017   .6
71 1 1 5.   E36 36Eastern portion of Sump Basin
.104 .290 .158   2. .011  63.  .35  .05  4.4.0018   .6
70 1 1 5.   E37 37Eastern portion of Sump Basin
1.07 1.80 .490   2. .010       .35  .05  4.0.0016   .6
70 1 1 5.   E38 38Eastern portion of Sump Basin
.271 .889 .467   2. .014       .35  .05  4.3.0018   .6
E
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1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W1 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.43 | 0.85 | 0.43 | 2.00 | 0.0150 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.294 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 18.22 | 719.49 | 311.54 | 23.09 |

WIDTH AT 50 = 42. MIN. WIDTH AT 75 = 22. MIN. K50 =0.26 K75 =0.36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.40 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 65. | 107. | 130. | 23. |
| 5. | 91. | 70. | 95. | 135. | 21. |
| 10. | 224. | 75. | 85. | 140. | 19. |
| 15. | 300. | 80. | 75. | 145. | 16. |
| 20. | 309. | 85. | 67. | 150. | 15. |
| 25. | 279. | 90. | 60. | 155. | 13. |
| 30. | 243. | 95. | 53. | 160. | 12. |
| 35. | 221. | 100. | 47. | 165. | 10. |
| 40. | 197. | 105. | 42. | 170. | 9. |
| 45. | 174. | 110. | 37. | 175. | 8. |
| 50. | 152. | 115. | 33. | 180. | 0. |
| 55. | 135. | 120. | 30. | 0. | 0. |
| 60. | 120. | 125. | 26. | 0. | 0. |

1 BASIN ID: W1 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 80. | 0.03 | 0.000 | 9. |
| 5. | 0.03 | 0.000 | 0. | 85. | 0.03 | 0.000 | 8. |
| 10. | 0.05 | 0.000 | 0. | 90. | 0.02 | 0.000 | 7. |
| 15. | 0.11 | 0.000 | 0. | 95. | 0.02 | 0.000 | 6. |
| 20. | 0.18 | 0.000 | 0. | 100. | 0.02 | 0.000 | 6. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 25. | 0.29 | 0.007 | 1. | 105. | 0.02 | 0.000 | 5. |
| 30. | 0.15 | 0.037 | 5. | 110. | 0.02 | 0.000 | 5. |
| 35. | 0.08 | 0.017 | 12. | 115. | 0.02 | 0.000 | 4. |
| 40. | 0.06 | 0.003 | 17. | 120. | 0.02 | 0.000 | 4. |
| 45. | 0.05 | 0.001 | 19. | 125. | 0.02 | 0.000 | 3. |
| 50. | 0.04 | 0.000 | 18. | 130. | 0.02 | 0.000 | 3. |
| 55. | 0.04 | 0.000 | 16. | 135. | 0.02 | 0.000 | 3. |
| 60. | 0.04 | 0.000 | 15. | 140. | 0.02 | 0.000 | 2. |
| 65. | 0.04 | 0.000 | 13. | 145. | 0.02 | 0.000 | 2. |
| 70. | 0.03 | 0.000 | 12. | 150. | 0.02 | 0.000 | 2. |
| 75. | 0.03 | 0.000 | 10. | 155. | 0.02 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.065 INCHES
VOLUME OF EXCESS PRECIP = 1.50 ACRE-FEET
PEAK Q = 19. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.40 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W4 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.19 | 1.03 | 0.51 | 10.80 | 0.0100 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.124 | 0.224 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.09 | D= 0.22 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 19.12 | 518.38 | 97.46 | 10.03 |

WIDTH AT 50 = 58. MIN. WIDTH AT 75 = 30. MIN. K50 =0.20 K75 =0.27

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 70. | 46. | 140. | 17. |
| 5. | 26. | 75. | 43. | 145. | 16. |
| 10. | 67. | 80. | 40. | 150. | 15. |
| 15. | 92. | 85. | 37. | 155. | 14. |
| 20. | 97. | 90. | 35. | 160. | 13. |
| 25. | 90. | 95. | 32. | 165. | 12. |
| 30. | 78. | 100. | 30. | 170. | 11. |
| 35. | 68. | 105. | 28. | 175. | 11. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 40. | 70. | 110. | 26. | 180. | 10. | | |
| 45. | 69. | 115. | 24. | 185. | 9. | | |
| 50. | 64. | 120. | 23. | 190. | 9. | | |
| 55. | 59. | 125. | 21. | 195. | 8. | | |
| 60. | 54. | 130. | 20. | 200. | 7. | | |
| 65. | 49. | 135. | 18. | 205. | 0. | | |

1 BASIN ID: W4 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 110. | 0.02 | 0.000 | 6. |
| 5. | 0.03 | 0.000 | 0. | 115. | 0.02 | 0.000 | 6. |
| 10. | 0.05 | 0.001 | 0. | 120. | 0.02 | 0.000 | 5. |
| 15. | 0.11 | 0.003 | 0. | 125. | 0.02 | 0.000 | 5. |
| 20. | 0.18 | 0.005 | 0. | 130. | 0.02 | 0.000 | 5. |
| 25. | 0.29 | 0.047 | 2. | 135. | 0.02 | 0.000 | 5. |
| 30. | 0.15 | 0.046 | 5. | 140. | 0.02 | 0.000 | 4. |
| 35. | 0.08 | 0.021 | 9. | 145. | 0.02 | 0.000 | 4. |
| 40. | 0.06 | 0.007 | 11. | 150. | 0.02 | 0.000 | 4. |
| 45. | 0.05 | 0.004 | 12. | 155. | 0.02 | 0.000 | 4. |
| 50. | 0.04 | 0.003 | 11. | 160. | 0.02 | 0.000 | 3. |
| 55. | 0.04 | 0.003 | 11. | 165. | 0.02 | 0.000 | 3. |
| 60. | 0.04 | 0.003 | 10. | 170. | 0.02 | 0.000 | 3. |
| 65. | 0.04 | 0.003 | 10. | 175. | 0.02 | 0.000 | 3. |
| 70. | 0.03 | 0.001 | 10. | 180. | 0.02 | 0.000 | 3. |
| 75. | 0.03 | 0.001 | 10. | 185. | 0.00 | 0.000 | 3. |
| 80. | 0.03 | 0.001 | 9. | 190. | 0.00 | 0.000 | 2. |
| 85. | 0.03 | 0.001 | 8. | 195. | 0.00 | 0.000 | 2. |
| 90. | 0.02 | 0.000 | 8. | 200. | 0.00 | 0.000 | 2. |
| 95. | 0.02 | 0.000 | 7. | 205. | 0.00 | 0.000 | 2. |
| 100. | 0.02 | 0.000 | 7. | 210. | 0.00 | 0.000 | 2. |
| 105. | 0.02 | 0.000 | 7. | 215. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.160 INCHES
VOLUME OF EXCESS PRECIP = 1.60 ACRE-FEET
PEAK Q = 12. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W5 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.43 | 1.20 | 0.67 | 2.00 | 0.0170 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.294 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|

R= 0.06 D= 0.04

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 24.85 | 504.98 | 216.13 | 22.83 |

WIDTH AT 50 = 59. MIN. WIDTH AT 75 = 31. MIN. K50 =0.25 K75 =0.34

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.60 IN./HR. DECAY = 0.00160/SECOND FNINFL = 0.70 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 85. | 84. | 170. | 22. |
| 5. | 39. | 90. | 78. | 175. | 20. |
| 10. | 109. | 95. | 72. | 180. | 19. |
| 15. | 170. | 100. | 66. | 185. | 17. |
| 20. | 206. | 105. | 61. | 190. | 16. |
| 25. | 216. | 110. | 57. | 195. | 15. |
| 30. | 208. | 115. | 52. | 200. | 14. |
| 35. | 191. | 120. | 48. | 205. | 13. |
| 40. | 172. | 125. | 45. | 210. | 12. |
| 45. | 162. | 130. | 41. | 215. | 11. |
| 50. | 151. | 135. | 38. | 220. | 10. |
| 55. | 140. | 140. | 35. | 225. | 9. |
| 60. | 129. | 145. | 32. | 230. | 8. |
| 65. | 118. | 150. | 30. | 235. | 8. |
| 70. | 107. | 155. | 28. | 240. | 0. |
| 75. | 99. | 160. | 26. | 0. | 0. |
| 80. | 91. | 165. | 24. | 0. | 0. |

1 BASIN ID: W5 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 50. | 0.04 | 0.000 | 3. |
| 5. | 0.03 | 0.000 | 0. | 55. | 0.04 | 0.000 | 3. |
| 10. | 0.05 | 0.000 | 0. | 60. | 0.04 | 0.000 | 2. |
| 15. | 0.11 | 0.000 | 0. | 65. | 0.04 | 0.000 | 2. |
| 20. | 0.18 | 0.000 | 0. | 70. | 0.03 | 0.000 | 2. |
| 25. | 0.29 | 0.004 | 0. | 75. | 0.03 | 0.000 | 2. |
| 30. | 0.15 | 0.007 | 1. | 80. | 0.03 | 0.000 | 2. |
| 35. | 0.08 | 0.002 | 1. | 85. | 0.03 | 0.000 | 2. |
| 40. | 0.06 | 0.001 | 2. | 90. | 0.02 | 0.000 | 2. |
| 45. | 0.05 | 0.000 | 3. | 95. | 0.02 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.013 INCHES
VOLUME OF EXCESS PRECIP = 0.30 ACRE-FEET
PEAK Q = 3. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.60 IN/HR DECAY =0.00160 FNINF = 0.70 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W6 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.11 | 0.40 | 0.07 | 2.00 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.241 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 17.58 | 80.00 | 613.95 | 69.99 | 6.08 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 7.83)

WIDTH AT 50 = 49. MIN. WIDTH AT 75 = 25. MIN. K50 =0.22 K75 =0.29

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 55. | 36. | 110. | 15. |
| 5. | 21. | 60. | 33. | 115. | 14. |
| 10. | 52. | 65. | 30. | 120. | 13. |
| 15. | 68. | 70. | 28. | 125. | 12. |
| 20. | 69. | 75. | 26. | 130. | 11. |
| 25. | 61. | 80. | 24. | 135. | 10. |
| 30. | 53. | 85. | 22. | 140. | 9. |
| 35. | 52. | 90. | 21. | 145. | 9. |
| 40. | 49. | 95. | 19. | 150. | 8. |
| 45. | 44. | 100. | 18. | 155. | 7. |
| 50. | 40. | 105. | 16. | 160. | 0. |

1 BASIN ID: W6 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 55. | 0.04 | 0.000 | 3. |
| 5. | 0.03 | 0.000 | 0. | 60. | 0.04 | 0.000 | 3. |
| 10. | 0.05 | 0.000 | 0. | 65. | 0.04 | 0.000 | 3. |
| 15. | 0.11 | 0.000 | 0. | 70. | 0.03 | 0.000 | 3. |
| 20. | 0.18 | 0.000 | 0. | 75. | 0.03 | 0.000 | 3. |
| 25. | 0.29 | 0.007 | 0. | 80. | 0.03 | 0.000 | 2. |
| 30. | 0.15 | 0.035 | 1. | 85. | 0.03 | 0.000 | 2. |
| 35. | 0.08 | 0.016 | 3. | 90. | 0.02 | 0.000 | 2. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 40. | 0.06 | 0.002 | 4. | 95. | 0.02 | 0.000 | 2. |
| 45. | 0.05 | 0.001 | 4. | 100. | 0.02 | 0.000 | 2. |
| 50. | 0.04 | 0.000 | 4. | 105. | 0.02 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.062 INCHES
VOLUME OF EXCESS PRECIP = 0.38 ACRE-FEET
PEAK Q = 4. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W7 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.01 | 0.14 | 0.04 | 30.00 | 0.0070 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.099 | 0.189 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.16 | D= 0.60 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 7.50 | 22.00 | 1453.96 | 10.18 | 0.37 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 4.19)

WIDTH AT 50 = 21. MIN. WIDTH AT 75 = 11. MIN. K50 =0.22 K75 =0.30

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 25. | 5. | 50. | 6. |
| 5. | 9. | 30. | 5. | 55. | 7. |
| 10. | 9. | 35. | 6. | 60. | 7. |
| 15. | 8. | 40. | 6. | 65. | 7. |
| 20. | 6. | 45. | 6. | 70. | 0. |

1 BASIN ID: W7 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 45. | 0.05 | 0.013 | 2. |
| 5. | 0.03 | 0.000 | 0. | 50. | 0.04 | 0.010 | 2. |
| 10. | 0.05 | 0.004 | 0. | 55. | 0.04 | 0.010 | 2. |
| 15. | 0.11 | 0.019 | 0. | 60. | 0.04 | 0.010 | 2. |
| 20. | 0.18 | 0.032 | 0. | 65. | 0.04 | 0.010 | 2. |
| 25. | 0.29 | 0.107 | 1. | 70. | 0.03 | 0.006 | 2. |
| 30. | 0.15 | 0.070 | 2. | 75. | 0.03 | 0.006 | 2. |
| 35. | 0.08 | 0.032 | 2. | 80. | 0.03 | 0.006 | 2. |
| 40. | 0.06 | 0.017 | 2. | 85. | 0.03 | 0.006 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.423 INCHES
VOLUME OF EXCESS PRECIP = 0.16 ACRE-FEET
PEAK Q = 2. CFS TIME OF PEAK = 75. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W9 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.20 | 0.80 | 0.37 | 2.00 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.263 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 17.55 | 671.02 | 136.89 | 10.88 |

WIDTH AT 50 = 45. MIN. WIDTH AT 75 = 23. MIN. K50 =0.24 K75 =0.32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 60. | 58. | 120. | 18. |
| 5. | 42. | 65. | 53. | 125. | 16. |
| 10. | 102. | 70. | 48. | 130. | 14. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 15. | 134. | 75. | 43. | 135. | 13. | | |
| 20. | 134. | 80. | 39. | 140. | 12. | | |
| 25. | 120. | 85. | 35. | 145. | 11. | | |
| 30. | 105. | 90. | 32. | 150. | 10. | | |
| 35. | 100. | 95. | 29. | 155. | 9. | | |
| 40. | 90. | 100. | 26. | 160. | 8. | | |
| 45. | 81. | 105. | 24. | 165. | 0. | | |
| 50. | 72. | 110. | 22. | 0. | 0. | | |
| 55. | 64. | 115. | 19. | 0. | 0. | | |

1 BASIN ID: W9 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 65. | 0.04 | 0.000 | 6. |
| 5. | 0.03 | 0.000 | 0. | 70. | 0.03 | 0.000 | 5. |
| 10. | 0.05 | 0.000 | 0. | 75. | 0.03 | 0.000 | 5. |
| 15. | 0.11 | 0.000 | 0. | 80. | 0.03 | 0.000 | 4. |
| 20. | 0.18 | 0.000 | 0. | 85. | 0.03 | 0.000 | 4. |
| 25. | 0.29 | 0.007 | 0. | 90. | 0.02 | 0.000 | 3. |
| 30. | 0.15 | 0.035 | 2. | 95. | 0.02 | 0.000 | 3. |
| 35. | 0.08 | 0.016 | 5. | 100. | 0.02 | 0.000 | 3. |
| 40. | 0.06 | 0.002 | 7. | 105. | 0.02 | 0.000 | 2. |
| 45. | 0.05 | 0.001 | 8. | 110. | 0.02 | 0.000 | 2. |
| 50. | 0.04 | 0.000 | 7. | 115. | 0.02 | 0.000 | 2. |
| 55. | 0.04 | 0.000 | 7. | 120. | 0.02 | 0.000 | 2. |
| 60. | 0.04 | 0.000 | 6. | 125. | 0.02 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.062 INCHES
VOLUME OF EXCESS PRECIP = 0.67 ACRE-FEET
PEAK Q = 8. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W11 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.08 | 0.51 | 0.22 | 15.00 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.118 | 0.203 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.10 | D= 0.30 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| 17.53 | 90.00 | 518.54 | 40.45 | 4.16 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 10.21)

WIDTH AT 50 = 58. MIN. WIDTH AT 75 = 30. MIN. K50 =0.18 K75 =0.25

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 65. | 20. | 130. | 12. |
| 5. | 12. | 70. | 19. | 135. | 11. |
| 10. | 30. | 75. | 19. | 140. | 11. |
| 15. | 39. | 80. | 18. | 145. | 11. |
| 20. | 40. | 85. | 17. | 150. | 10. |
| 25. | 35. | 90. | 17. | 155. | 10. |
| 30. | 29. | 95. | 16. | 160. | 9. |
| 35. | 26. | 100. | 15. | 165. | 9. |
| 40. | 30. | 105. | 15. | 170. | 9. |
| 45. | 28. | 110. | 14. | 175. | 8. |
| 50. | 26. | 115. | 13. | 180. | 8. |
| 55. | 24. | 120. | 13. | 185. | 8. |
| 60. | 22. | 125. | 12. | 190. | 0. |

1 BASIN ID: W11 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 105. | 0.02 | 0.001 | 4. |
| 5. | 0.03 | 0.000 | 0. | 110. | 0.02 | 0.001 | 4. |
| 10. | 0.05 | 0.001 | 0. | 115. | 0.02 | 0.001 | 4. |
| 15. | 0.11 | 0.005 | 0. | 120. | 0.02 | 0.001 | 3. |
| 20. | 0.18 | 0.011 | 0. | 125. | 0.02 | 0.001 | 3. |
| 25. | 0.29 | 0.060 | 1. | 130. | 0.02 | 0.001 | 3. |
| 30. | 0.15 | 0.052 | 3. | 135. | 0.02 | 0.001 | 3. |
| 35. | 0.08 | 0.024 | 5. | 140. | 0.02 | 0.001 | 3. |
| 40. | 0.06 | 0.009 | 6. | 145. | 0.02 | 0.001 | 3. |
| 45. | 0.05 | 0.006 | 6. | 150. | 0.02 | 0.001 | 3. |
| 50. | 0.04 | 0.004 | 6. | 155. | 0.02 | 0.001 | 3. |
| 55. | 0.04 | 0.005 | 5. | 160. | 0.02 | 0.001 | 3. |
| 60. | 0.04 | 0.005 | 5. | 165. | 0.02 | 0.001 | 3. |
| 65. | 0.04 | 0.005 | 5. | 170. | 0.02 | 0.001 | 3. |
| 70. | 0.03 | 0.002 | 5. | 175. | 0.02 | 0.001 | 2. |
| 75. | 0.03 | 0.002 | 5. | 180. | 0.02 | 0.001 | 2. |
| 80. | 0.03 | 0.002 | 5. | 185. | 0.00 | 0.000 | 2. |
| 85. | 0.03 | 0.002 | 5. | 190. | 0.00 | 0.000 | 2. |
| 90. | 0.02 | 0.001 | 4. | 195. | 0.00 | 0.000 | 2. |
| 95. | 0.02 | 0.001 | 4. | 200. | 0.00 | 0.000 | 2. |
| 100. | 0.02 | 0.001 | 4. | 205. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.212 INCHES
VOLUME OF EXCESS PRECIP = 0.88 ACRE-FEET
PEAK Q = 6. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W12 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.44 | 1.14 | 0.59 | 10.90 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.124 | 0.255 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.09 | D= 0.22 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 21.60 | 513.48 | 227.99 | 23.68 |

WIDTH AT 50 = 58. MIN. WIDTH AT 75 = 30. MIN. K50 =0.22 K75 =0.30

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 85. | 86. | 170. | 22. |
| 5. | 51. | 90. | 79. | 175. | 21. |
| 10. | 137. | 95. | 73. | 180. | 19. |
| 15. | 200. | 100. | 68. | 185. | 18. |
| 20. | 227. | 105. | 63. | 190. | 16. |
| 25. | 223. | 110. | 58. | 195. | 15. |
| 30. | 203. | 115. | 53. | 200. | 14. |
| 35. | 180. | 120. | 49. | 205. | 13. |
| 40. | 168. | 125. | 46. | 210. | 12. |
| 45. | 166. | 130. | 42. | 215. | 11. |
| 50. | 154. | 135. | 39. | 220. | 10. |
| 55. | 142. | 140. | 36. | 225. | 9. |
| 60. | 131. | 145. | 33. | 230. | 9. |
| 65. | 119. | 150. | 31. | 235. | 8. |
| 70. | 109. | 155. | 28. | 240. | 7. |
| 75. | 101. | 160. | 26. | 245. | 0. |
| 80. | 93. | 165. | 24. | 0. | 0. |

1 BASIN ID: W12 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 130. | 0.02 | 0.000 | 11. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5. | 0.03 | 0.000 | 0. | 135. | 0.02 | 0.000 | 10. |
| 10. | 0.05 | 0.001 | 0. | 140. | 0.02 | 0.000 | 10. |
| 15. | 0.11 | 0.003 | 0. | 145. | 0.02 | 0.000 | 9. |
| 20. | 0.18 | 0.005 | 1. | 150. | 0.02 | 0.000 | 8. |
| 25. | 0.29 | 0.047 | 4. | 155. | 0.02 | 0.000 | 8. |
| 30. | 0.15 | 0.047 | 10. | 160. | 0.02 | 0.000 | 7. |
| 35. | 0.08 | 0.021 | 19. | 165. | 0.02 | 0.000 | 7. |
| 40. | 0.06 | 0.007 | 25. | 170. | 0.02 | 0.000 | 7. |
| 45. | 0.05 | 0.004 | 28. | 175. | 0.02 | 0.000 | 6. |
| 50. | 0.04 | 0.003 | 28. | 180. | 0.02 | 0.000 | 6. |
| 55. | 0.04 | 0.003 | 27. | 185. | 0.00 | 0.000 | 6. |
| 60. | 0.04 | 0.003 | 26. | 190. | 0.00 | 0.000 | 5. |
| 65. | 0.04 | 0.003 | 25. | 195. | 0.00 | 0.000 | 5. |
| 70. | 0.03 | 0.001 | 24. | 200. | 0.00 | 0.000 | 4. |
| 75. | 0.03 | 0.001 | 23. | 205. | 0.00 | 0.000 | 4. |
| 80. | 0.03 | 0.001 | 22. | 210. | 0.00 | 0.000 | 4. |
| 85. | 0.03 | 0.001 | 21. | 215. | 0.00 | 0.000 | 3. |
| 90. | 0.02 | 0.000 | 19. | 220. | 0.00 | 0.000 | 3. |
| 95. | 0.02 | 0.000 | 18. | 225. | 0.00 | 0.000 | 3. |
| 100. | 0.02 | 0.000 | 17. | 230. | 0.00 | 0.000 | 3. |
| 105. | 0.02 | 0.000 | 16. | 235. | 0.00 | 0.000 | 3. |
| 110. | 0.02 | 0.000 | 15. | 240. | 0.00 | 0.000 | 2. |
| 115. | 0.02 | 0.000 | 14. | 245. | 0.00 | 0.000 | 2. |
| 120. | 0.02 | 0.000 | 13. | 250. | 0.00 | 0.000 | 2. |
| 125. | 0.02 | 0.000 | 12. | 255. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.161 INCHES
VOLUME OF EXCESS PRECIP = 3.81 ACRE-FEET
PEAK Q = 28. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W13 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.65 | 1.30 | 0.58 | 3.70 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.149 | 0.301 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.07 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 25.11 | 511.27 | 334.37 | 34.88 |

WIDTH AT 50 = 59. MIN. WIDTH AT 75 = 31. MIN. K50 =0.26 K75 =0.35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.30 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 90. | 117. | 180. | 26. |
| 5. | 59. | 95. | 108. | 185. | 24. |
| 10. | 166. | 100. | 99. | 190. | 22. |
| 15. | 260. | 105. | 92. | 195. | 21. |
| 20. | 318. | 110. | 84. | 200. | 19. |
| 25. | 334. | 115. | 78. | 205. | 17. |
| 30. | 323. | 120. | 71. | 210. | 16. |
| 35. | 297. | 125. | 66. | 215. | 15. |
| 40. | 268. | 130. | 60. | 220. | 14. |
| 45. | 251. | 135. | 56. | 225. | 12. |
| 50. | 233. | 140. | 51. | 230. | 11. |
| 55. | 215. | 145. | 47. | 235. | 11. |
| 60. | 198. | 150. | 43. | 240. | 10. |
| 65. | 180. | 155. | 40. | 245. | 9. |
| 70. | 164. | 160. | 37. | 250. | 8. |
| 75. | 151. | 165. | 34. | 255. | 8. |
| 80. | 139. | 170. | 31. | 260. | 0. |
| 85. | 128. | 175. | 29. | 0. | 0. |

1 BASIN ID: W13 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 115. | 0.02 | 0.000 | 8. |
| 5. | 0.03 | 0.000 | 0. | 120. | 0.02 | 0.000 | 8. |
| 10. | 0.05 | 0.000 | 0. | 125. | 0.02 | 0.000 | 7. |
| 15. | 0.11 | 0.000 | 0. | 130. | 0.02 | 0.000 | 7. |
| 20. | 0.18 | 0.000 | 0. | 135. | 0.02 | 0.000 | 6. |
| 25. | 0.29 | 0.015 | 1. | 140. | 0.02 | 0.000 | 6. |
| 30. | 0.15 | 0.031 | 4. | 145. | 0.02 | 0.000 | 5. |
| 35. | 0.08 | 0.016 | 10. | 150. | 0.02 | 0.000 | 5. |
| 40. | 0.06 | 0.002 | 16. | 155. | 0.02 | 0.000 | 4. |
| 45. | 0.05 | 0.001 | 20. | 160. | 0.02 | 0.000 | 4. |
| 50. | 0.04 | 0.001 | 21. | 165. | 0.02 | 0.000 | 4. |
| 55. | 0.04 | 0.001 | 21. | 170. | 0.02 | 0.000 | 4. |
| 60. | 0.04 | 0.001 | 20. | 175. | 0.02 | 0.000 | 3. |
| 65. | 0.04 | 0.001 | 18. | 180. | 0.02 | 0.000 | 3. |
| 70. | 0.03 | 0.000 | 17. | 185. | 0.00 | 0.000 | 3. |
| 75. | 0.03 | 0.000 | 16. | 190. | 0.00 | 0.000 | 3. |
| 80. | 0.03 | 0.000 | 15. | 195. | 0.00 | 0.000 | 2. |
| 85. | 0.03 | 0.000 | 14. | 200. | 0.00 | 0.000 | 2. |
| 90. | 0.02 | 0.000 | 13. | 205. | 0.00 | 0.000 | 2. |
| 95. | 0.02 | 0.000 | 12. | 210. | 0.00 | 0.000 | 2. |
| 100. | 0.02 | 0.000 | 11. | 215. | 0.00 | 0.000 | 2. |
| 105. | 0.02 | 0.000 | 10. | 220. | 0.00 | 0.000 | 2. |
| 110. | 0.02 | 0.000 | 9. | 225. | 0.00 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.069 INCHES
VOLUME OF EXCESS PRECIP = 2.42 ACRE-FEET
PEAK Q = 21. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.30 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W14 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.30 | 1.02 | 0.37 | 7.20 | 0.0140 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.136 | 0.250 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.08 | D= 0.14 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 16.81 | 670.65 | 198.51 | 15.79 |

WIDTH AT 50 = 45. MIN. WIDTH AT 75 = 23. MIN. K50 =0.23 K75 =0.31

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 65. | 75. | 130. | 20. |
| 5. | 65. | 70. | 68. | 135. | 18. |
| 10. | 154. | 75. | 61. | 140. | 16. |
| 15. | 196. | 80. | 55. | 145. | 15. |
| 20. | 192. | 85. | 50. | 150. | 13. |
| 25. | 168. | 90. | 45. | 155. | 12. |
| 30. | 148. | 95. | 41. | 160. | 11. |
| 35. | 143. | 100. | 37. | 165. | 10. |
| 40. | 130. | 105. | 33. | 170. | 9. |
| 45. | 117. | 110. | 30. | 175. | 8. |
| 50. | 103. | 115. | 27. | 180. | 0. |
| 55. | 92. | 120. | 24. | 0. | 0. |
| 60. | 83. | 125. | 22. | 0. | 0. |

1 BASIN ID: W14 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 95. | 0.02 | 0.000 | 7. |
| 5. | 0.03 | 0.000 | 0. | 100. | 0.02 | 0.000 | 7. |
| 10. | 0.05 | 0.000 | 0. | 105. | 0.02 | 0.000 | 6. |
| 15. | 0.11 | 0.001 | 0. | 110. | 0.02 | 0.000 | 5. |
| 20. | 0.18 | 0.002 | 0. | 115. | 0.02 | 0.000 | 5. |
| 25. | 0.29 | 0.031 | 3. | 120. | 0.02 | 0.000 | 5. |
| 30. | 0.15 | 0.031 | 7. | 125. | 0.02 | 0.000 | 4. |
| 35. | 0.08 | 0.017 | 12. | 130. | 0.02 | 0.000 | 4. |
| 40. | 0.06 | 0.004 | 15. | 135. | 0.02 | 0.000 | 3. |
| 45. | 0.05 | 0.003 | 16. | 140. | 0.02 | 0.000 | 3. |
| 50. | 0.04 | 0.002 | 15. | 145. | 0.02 | 0.000 | 3. |
| 55. | 0.04 | 0.002 | 14. | 150. | 0.02 | 0.000 | 3. |
| 60. | 0.04 | 0.002 | 13. | 155. | 0.02 | 0.000 | 2. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 65. | 0.04 | 0.002 | 12. | 160. | 0.02 | 0.000 | 2. |
| 70. | 0.03 | 0.000 | 12. | 165. | 0.02 | 0.000 | 2. |
| 75. | 0.03 | 0.001 | 11. | 170. | 0.02 | 0.000 | 2. |
| 80. | 0.03 | 0.001 | 10. | 175. | 0.02 | 0.000 | 2. |
| 85. | 0.03 | 0.001 | 9. | 180. | 0.02 | 0.000 | 2. |
| 90. | 0.02 | 0.000 | 8. | 185. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.101 INCHES
VOLUME OF EXCESS PRECIP = 1.60 ACRE-FEET
PEAK Q = 16. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W15 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.10 | 0.44 | 0.28 | 2.00 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.235 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 18.14 | 83.00 | 577.57 | 56.02 | 5.17 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 13.15)

WIDTH AT 50 = 52. MIN. WIDTH AT 75 = 27. MIN. K50 =0.21 K75 =0.28

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 60. | 28. | 120. | 13. |
| 5. | 16. | 65. | 26. | 125. | 12. |
| 10. | 40. | 70. | 24. | 130. | 12. |
| 15. | 54. | 75. | 23. | 135. | 11. |
| 20. | 55. | 80. | 22. | 140. | 10. |
| 25. | 50. | 85. | 20. | 145. | 10. |
| 30. | 43. | 90. | 19. | 150. | 9. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 35. | 40. | 95. | 18. | 155. | 8. |
| 40. | 40. | 100. | 17. | 160. | 8. |
| 45. | 37. | 105. | 16. | 165. | 7. |
| 50. | 34. | 110. | 15. | 170. | 0. |
| 55. | 31. | 115. | 14. | 0. | 0. |

1 BASIN ID: W15 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 50. | 0.04 | 0.000 | 3. |
| 5. | 0.03 | 0.000 | 0. | 55. | 0.04 | 0.000 | 3. |
| 10. | 0.05 | 0.000 | 0. | 60. | 0.04 | 0.000 | 3. |
| 15. | 0.11 | 0.000 | 0. | 65. | 0.04 | 0.000 | 2. |
| 20. | 0.18 | 0.000 | 0. | 70. | 0.03 | 0.000 | 2. |
| 25. | 0.29 | 0.007 | 0. | 75. | 0.03 | 0.000 | 2. |
| 30. | 0.15 | 0.035 | 1. | 80. | 0.03 | 0.000 | 2. |
| 35. | 0.08 | 0.016 | 2. | 85. | 0.03 | 0.000 | 2. |
| 40. | 0.06 | 0.002 | 3. | 90. | 0.02 | 0.000 | 2. |
| 45. | 0.05 | 0.001 | 3. | 95. | 0.02 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.062 INCHES
VOLUME OF EXCESS PRECIP = 0.32 ACRE-FEET
PEAK Q = 3. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W16 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.63 | 1.67 | 0.61 | 2.60 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.153 | 0.307 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.05 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 29.34 | 439.57 | 278.25 | 33.76 |

WIDTH AT 50 = 68. MIN. WIDTH AT 75 = 35. MIN. K50 =0.26 K75 =0.35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN.  MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.20 IN./HR.  DECAY = 0.00180/SECOND  FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 100. | 105. | 200. | 25. |
| 5. | 38. | 105. | 98. | 205. | 24. |
| 10. | 112. | 110. | 91. | 210. | 22. |
| 15. | 187. | 115. | 85. | 215. | 21. |
| 20. | 241. | 120. | 79. | 220. | 19. |
| 25. | 271. | 125. | 74. | 225. | 18. |
| 30. | 278. | 130. | 69. | 230. | 17. |
| 35. | 269. | 135. | 64. | 235. | 16. |
| 40. | 251. | 140. | 60. | 240. | 14. |
| 45. | 230. | 145. | 55. | 245. | 13. |
| 50. | 213. | 150. | 52. | 250. | 13. |
| 55. | 202. | 155. | 48. | 255. | 12. |
| 60. | 189. | 160. | 45. | 260. | 11. |
| 65. | 177. | 165. | 42. | 265. | 10. |
| 70. | 164. | 170. | 39. | 270. | 9. |
| 75. | 152. | 175. | 36. | 275. | 9. |
| 80. | 139. | 180. | 34. | 280. | 8. |
| 85. | 130. | 185. | 31. | 285. | 8. |
| 90. | 121. | 190. | 29. | 290. | 0. |
| 95. | 112. | 195. | 27. | 0. | 0. |

1 BASIN ID: W16 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 125. | 0.02 | 0.000 | 8. |
| 5. | 0.03 | 0.000 | 0. | 130. | 0.02 | 0.000 | 8. |
| 10. | 0.05 | 0.000 | 0. | 135. | 0.02 | 0.000 | 7. |
| 15. | 0.11 | 0.000 | 0. | 140. | 0.02 | 0.000 | 7. |
| 20. | 0.18 | 0.000 | 0. | 145. | 0.02 | 0.000 | 6. |
| 25. | 0.29 | 0.010 | 0. | 150. | 0.02 | 0.000 | 6. |
| 30. | 0.15 | 0.043 | 3. | 155. | 0.02 | 0.000 | 5. |
| 35. | 0.08 | 0.017 | 7. | 160. | 0.02 | 0.000 | 5. |
| 40. | 0.06 | 0.003 | 13. | 165. | 0.02 | 0.000 | 5. |
| 45. | 0.05 | 0.001 | 17. | 170. | 0.02 | 0.000 | 4. |
| 50. | 0.04 | 0.000 | 19. | 175. | 0.02 | 0.000 | 4. |
| 55. | 0.04 | 0.000 | 20. | 180. | 0.02 | 0.000 | 4. |
| 60. | 0.04 | 0.000 | 20. | 185. | 0.00 | 0.000 | 4. |
| 65. | 0.04 | 0.000 | 19. | 190. | 0.00 | 0.000 | 3. |
| 70. | 0.03 | 0.000 | 18. | 195. | 0.00 | 0.000 | 3. |
| 75. | 0.03 | 0.000 | 17. | 200. | 0.00 | 0.000 | 3. |
| 80. | 0.03 | 0.000 | 16. | 205. | 0.00 | 0.000 | 3. |
| 85. | 0.03 | 0.000 | 15. | 210. | 0.00 | 0.000 | 3. |
| 90. | 0.02 | 0.000 | 14. | 215. | 0.00 | 0.000 | 2. |
| 95. | 0.02 | 0.000 | 13. | 220. | 0.00 | 0.000 | 2. |
| 100. | 0.02 | 0.000 | 12. | 225. | 0.00 | 0.000 | 2. |
| 105. | 0.02 | 0.000 | 11. | 230. | 0.00 | 0.000 | 2. |
| 110. | 0.02 | 0.000 | 10. | 235. | 0.00 | 0.000 | 2. |
| 115. | 0.02 | 0.000 | 9. | 240. | 0.00 | 0.000 | 2. |
| 120. | 0.02 | 0.000 | 9. | 245. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64  EXCESS PRECIP. = 0.076 INCHES
VOLUME OF EXCESS PRECIP = 2.58 ACRE-FEET
PEAK Q = 20. CFS  TIME OF PEAK = 55. MIN.
INFILT.= 4.20 IN/HR  DECAY =0.00180  FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN.  MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS  EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W17 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.15 | 0.40 | 0.22 | 8.30 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.132 | 0.221 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.08 | D= 0.17 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 10.16 | 1108.67 | 164.08 | 7.89 |

WIDTH AT 50 = 27. MIN. WIDTH AT 75 = 14. MIN. K50 =0.23 K75 =0.31

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 40. | 61. | 80. | 16. |
| 5. | 106. | 45. | 52. | 85. | 14. |
| 10. | 164. | 50. | 44. | 90. | 12. |
| 15. | 139. | 55. | 37. | 95. | 10. |
| 20. | 123. | 60. | 31. | 100. | 8. |
| 25. | 104. | 65. | 27. | 105. | 0. |
| 30. | 86. | 70. | 23. | 0. | 0. |
| 35. | 72. | 75. | 19. | 0. | 0. |

1 BASIN ID: W17 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 60. | 0.04 | 0.002 | 9. |
| 5. | 0.03 | 0.000 | 0. | 65. | 0.04 | 0.002 | 8. |
| 10. | 0.05 | 0.000 | 0. | 70. | 0.03 | 0.001 | 7. |
| 15. | 0.11 | 0.001 | 0. | 75. | 0.03 | 0.001 | 6. |
| 20. | 0.18 | 0.002 | 1. | 80. | 0.03 | 0.001 | 5. |
| 25. | 0.29 | 0.037 | 5. | 85. | 0.03 | 0.001 | 5. |
| 30. | 0.15 | 0.043 | 11. | 90. | 0.02 | 0.000 | 4. |
| 35. | 0.08 | 0.020 | 15. | 95. | 0.02 | 0.000 | 3. |
| 40. | 0.06 | 0.006 | 15. | 100. | 0.02 | 0.000 | 3. |
| 45. | 0.05 | 0.003 | 14. | 105. | 0.02 | 0.000 | 3. |
| 50. | 0.04 | 0.002 | 12. | 110. | 0.02 | 0.000 | 2. |
| 55. | 0.04 | 0.002 | 10. | 115. | 0.02 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.130 INCHES
VOLUME OF EXCESS PRECIP = 1.02 ACRE-FEET
PEAK Q = 15. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W18 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.17 | 0.88 | 0.41 | 6.30 | 0.0160 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.140 | 0.234 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.07 | D= 0.13 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 16.40 | 646.93 | 111.92 | 9.23 |

WIDTH AT 50 = 46. MIN. WIDTH AT 75 = 24. MIN. K50 =0.21 K75 =0.29

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 60. | 49. | 120. | 16. |
| 5. | 38. | 65. | 45. | 125. | 15. |
| 10. | 89. | 70. | 41. | 130. | 14. |
| 15. | 111. | 75. | 37. | 135. | 13. |
| 20. | 107. | 80. | 34. | 140. | 11. |
| 25. | 92. | 85. | 31. | 145. | 10. |
| 30. | 81. | 90. | 28. | 150. | 10. |
| 35. | 82. | 95. | 26. | 155. | 9. |
| 40. | 75. | 100. | 24. | 160. | 8. |
| 45. | 67. | 105. | 22. | 165. | 0. |
| 50. | 60. | 110. | 20. | 0. | 0. |
| 55. | 54. | 115. | 18. | 0. | 0. |

1 BASIN ID: W18 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 85. | 0.03 | 0.000 | 5. |
| 5. | 0.03 | 0.000 | 0. | 90. | 0.02 | 0.000 | 5. |
| 10. | 0.05 | 0.000 | 0. | 95. | 0.02 | 0.000 | 5. |
| 15. | 0.11 | 0.001 | 0. | 100. | 0.02 | 0.000 | 4. |
| 20. | 0.18 | 0.001 | 0. | 105. | 0.02 | 0.000 | 4. |
| 25. | 0.29 | 0.028 | 1. | 110. | 0.02 | 0.000 | 4. |
| 30. | 0.15 | 0.041 | 4. | 115. | 0.02 | 0.000 | 3. |
| 35. | 0.08 | 0.019 | 8. | 120. | 0.02 | 0.000 | 3. |
| 40. | 0.06 | 0.005 | 10. | 125. | 0.02 | 0.000 | 3. |
| 45. | 0.05 | 0.002 | 10. | 130. | 0.02 | 0.000 | 2. |
| 50. | 0.04 | 0.001 | 9. | 135. | 0.02 | 0.000 | 2. |
| 55. | 0.04 | 0.002 | 8. | 140. | 0.02 | 0.000 | 2. |
| 60. | 0.04 | 0.002 | 8. | 145. | 0.02 | 0.000 | 2. |
| 65. | 0.04 | 0.002 | 8. | 150. | 0.02 | 0.000 | 2. |
| 70. | 0.03 | 0.000 | 7. | 155. | 0.02 | 0.000 | 2. |
| 75. | 0.03 | 0.000 | 6. | 160. | 0.02 | 0.000 | 2. |
| 80. | 0.03 | 0.000 | 6. | 165. | 0.02 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.107 INCHES
VOLUME OF EXCESS PRECIP = 0.98 ACRE-FEET
PEAK Q = 10. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W19 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.26 | 0.97 | 0.62 | 2.00 | 0.0130 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.272 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 23.29 | 502.90 | 129.25 | 13.71 |

WIDTH AT 50 = 60. MIN. WIDTH AT 75 = 31. MIN. K50 =0.23 K75 =0.32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.60 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT | TIME | UNIT | TIME | UNIT |
|---|---|---|---|---|---|

| | HYDROGRAPH | | HYDROGRAPH | | HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 75. | 59. | 150. | 19. |
| 5. | 26. | 80. | 55. | 155. | 18. |
| 10. | 71. | 85. | 51. | 160. | 17. |
| 15. | 107. | 90. | 47. | 165. | 16. |
| 20. | 126. | 95. | 44. | 170. | 14. |
| 25. | 129. | 100. | 41. | 175. | 13. |
| 30. | 121. | 105. | 38. | 180. | 12. |
| 35. | 109. | 110. | 35. | 185. | 12. |
| 40. | 99. | 115. | 33. | 190. | 11. |
| 45. | 96. | 120. | 30. | 195. | 10. |
| 50. | 90. | 125. | 28. | 200. | 9. |
| 55. | 83. | 130. | 26. | 205. | 9. |
| 60. | 76. | 135. | 24. | 210. | 8. |
| 65. | 70. | 140. | 23. | 215. | 7. |
| 70. | 64. | 145. | 21. | 220. | 0. |

1 BASIN ID: W19 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 70. | 0.03 | 0.000 | 4. |
| 5. | 0.03 | 0.000 | 0. | 75. | 0.03 | 0.000 | 4. |
| 10. | 0.05 | 0.000 | 0. | 80. | 0.03 | 0.000 | 4. |
| 15. | 0.11 | 0.000 | 0. | 85. | 0.03 | 0.000 | 3. |
| 20. | 0.18 | 0.000 | 0. | 90. | 0.02 | 0.000 | 3. |
| 25. | 0.29 | 0.005 | 0. | 95. | 0.02 | 0.000 | 3. |
| 30. | 0.15 | 0.021 | 1. | 100. | 0.02 | 0.000 | 3. |
| 35. | 0.08 | 0.014 | 2. | 105. | 0.02 | 0.000 | 2. |
| 40. | 0.06 | 0.001 | 4. | 110. | 0.02 | 0.000 | 2. |
| 45. | 0.05 | 0.000 | 5. | 115. | 0.02 | 0.000 | 2. |
| 50. | 0.04 | 0.000 | 5. | 120. | 0.02 | 0.000 | 2. |
| 55. | 0.04 | 0.000 | 5. | 125. | 0.02 | 0.000 | 2. |
| 60. | 0.04 | 0.000 | 5. | 130. | 0.02 | 0.000 | 2. |
| 65. | 0.04 | 0.000 | 4. | 135. | 0.02 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.043 INCHES
VOLUME OF EXCESS PRECIP = 0.58 ACRE-FEET
PEAK Q = 5. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.60 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W20 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.69 | 1.37 | 0.52 | 2.00 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.316 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.06

FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.04

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 27.07 | 493.63 | 341.10 | 36.85 |

WIDTH AT 50 = 61. MIN. WIDTH AT 75 = 32. MIN. K50 =0.27 K75 =0.36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.00 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 95. | 117. | 190. | 25. |
| 5. | 53. | 100. | 108. | 195. | 23. |
| 10. | 153. | 105. | 99. | 200. | 21. |
| 15. | 247. | 110. | 92. | 205. | 20. |
| 20. | 312. | 115. | 85. | 210. | 18. |
| 25. | 339. | 120. | 78. | 215. | 17. |
| 30. | 337. | 125. | 72. | 220. | 15. |
| 35. | 317. | 130. | 66. | 225. | 14. |
| 40. | 289. | 135. | 61. | 230. | 13. |
| 45. | 264. | 140. | 56. | 235. | 12. |
| 50. | 246. | 145. | 52. | 240. | 11. |
| 55. | 229. | 150. | 48. | 245. | 10. |
| 60. | 211. | 155. | 44. | 250. | 10. |
| 65. | 194. | 160. | 41. | 255. | 9. |
| 70. | 176. | 165. | 38. | 260. | 8. |
| 75. | 161. | 170. | 35. | 265. | 7. |
| 80. | 149. | 175. | 32. | 270. | 0. |
| 85. | 137. | 180. | 30. | 0. | 0. |
| 90. | 127. | 185. | 27. | 0. | 0. |

1 BASIN ID: W20 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 110. | 0.02 | 0.000 | 9. |
| 5. | 0.03 | 0.000 | 0. | 115. | 0.02 | 0.000 | 8. |
| 10. | 0.05 | 0.000 | 0. | 120. | 0.02 | 0.000 | 7. |
| 15. | 0.11 | 0.000 | 0. | 125. | 0.02 | 0.000 | 7. |
| 20. | 0.18 | 0.000 | 0. | 130. | 0.02 | 0.000 | 6. |
| 25. | 0.29 | 0.007 | 0. | 135. | 0.02 | 0.000 | 6. |
| 30. | 0.15 | 0.036 | 3. | 140. | 0.02 | 0.000 | 5. |
| 35. | 0.08 | 0.016 | 8. | 145. | 0.02 | 0.000 | 5. |
| 40. | 0.06 | 0.002 | 14. | 150. | 0.02 | 0.000 | 5. |
| 45. | 0.05 | 0.001 | 18. | 155. | 0.02 | 0.000 | 4. |
| 50. | 0.04 | 0.000 | 20. | 160. | 0.02 | 0.000 | 4. |
| 55. | 0.04 | 0.000 | 21. | 165. | 0.02 | 0.000 | 4. |
| 60. | 0.04 | 0.000 | 20. | 170. | 0.02 | 0.000 | 3. |
| 65. | 0.04 | 0.000 | 18. | 175. | 0.02 | 0.000 | 3. |
| 70. | 0.03 | 0.000 | 17. | 180. | 0.02 | 0.000 | 3. |
| 75. | 0.03 | 0.000 | 15. | 185. | 0.00 | 0.000 | 3. |
| 80. | 0.03 | 0.000 | 14. | 190. | 0.00 | 0.000 | 2. |
| 85. | 0.03 | 0.000 | 13. | 195. | 0.00 | 0.000 | 2. |
| 90. | 0.02 | 0.000 | 12. | 200. | 0.00 | 0.000 | 2. |
| 95. | 0.02 | 0.000 | 11. | 205. | 0.00 | 0.000 | 2. |
| 100. | 0.02 | 0.000 | 10. | 210. | 0.00 | 0.000 | 2. |
| 105. | 0.02 | 0.000 | 9. | 215. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.062 INCHES
VOLUME OF EXCESS PRECIP = 2.29 ACRE-FEET
PEAK Q = 21. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.00 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W21 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.33 | 1.14 | 0.60 | 3.40 | 0.0140 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.150 | 0.273 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.07 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 23.51 | 499.75 | 164.92 | 17.60 |

WIDTH AT 50 = 60. MIN. WIDTH AT 75 = 31. MIN. K50 =0.24 K75 =0.32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 80. | 70. | 160. | 21. |
| 5. | 32. | 85. | 65. | 165. | 19. |
| 10. | 89. | 90. | 60. | 170. | 18. |
| 15. | 136. | 95. | 56. | 175. | 17. |
| 20. | 161. | 100. | 52. | 180. | 15. |
| 25. | 164. | 105. | 48. | 185. | 14. |
| 30. | 155. | 110. | 45. | 190. | 13. |
| 35. | 140. | 115. | 41. | 195. | 12. |
| 40. | 127. | 120. | 38. | 200. | 11. |
| 45. | 123. | 125. | 35. | 205. | 11. |
| 50. | 115. | 130. | 33. | 210. | 10. |
| 55. | 107. | 135. | 30. | 215. | 9. |
| 60. | 98. | 140. | 28. | 220. | 8. |
| 65. | 90. | 145. | 26. | 225. | 8. |
| 70. | 82. | 150. | 24. | 230. | 0. |
| 75. | 76. | 155. | 22. | 0. | 0. |

1 BASIN ID: W21 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 100. | 0.02 | 0.000 | 6. |
| 5. | 0.03 | 0.000 | 0. | 105. | 0.02 | 0.000 | 5. |
| 10. | 0.05 | 0.000 | 0. | 110. | 0.02 | 0.000 | 5. |
| 15. | 0.11 | 0.000 | 0. | 115. | 0.02 | 0.000 | 5. |
| 20. | 0.18 | 0.000 | 0. | 120. | 0.02 | 0.000 | 4. |
| 25. | 0.29 | 0.014 | 1. | 125. | 0.02 | 0.000 | 4. |
| 30. | 0.15 | 0.037 | 3. | 130. | 0.02 | 0.000 | 4. |
| 35. | 0.08 | 0.017 | 6. | 135. | 0.02 | 0.000 | 4. |
| 40. | 0.06 | 0.003 | 9. | 140. | 0.02 | 0.000 | 3. |
| 45. | 0.05 | 0.001 | 11. | 145. | 0.02 | 0.000 | 3. |
| 50. | 0.04 | 0.000 | 12. | 150. | 0.02 | 0.000 | 3. |
| 55. | 0.04 | 0.001 | 11. | 155. | 0.02 | 0.000 | 3. |
| 60. | 0.04 | 0.001 | 10. | 160. | 0.02 | 0.000 | 2. |
| 65. | 0.04 | 0.001 | 10. | 165. | 0.02 | 0.000 | 2. |
| 70. | 0.03 | 0.000 | 9. | 170. | 0.02 | 0.000 | 2. |
| 75. | 0.03 | 0.000 | 9. | 175. | 0.02 | 0.000 | 2. |
| 80. | 0.03 | 0.000 | 8. | 180. | 0.02 | 0.000 | 2. |
| 85. | 0.03 | 0.000 | 8. | 185. | 0.00 | 0.000 | 2. |
| 90. | 0.02 | 0.000 | 7. | 190. | 0.00 | 0.000 | 2. |
| 95. | 0.02 | 0.000 | 6. | 195. | 0.00 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.076 INCHES
VOLUME OF EXCESS PRECIP = 1.34 ACRE-FEET
PEAK Q = 12. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W22 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.40 | 1.17 | 0.65 | 2.00 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.291 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.06

FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.04

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 26.23 | 470.49 | 187.25 | 21.23 |

WIDTH AT 50 = 64. MIN. WIDTH AT 75 = 33. MIN. K50 =0.25 K75 =0.34

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 85. | 80. | 170. | 23. |
| 5. | 31. | 90. | 74. | 175. | 21. |
| 10. | 88. | 95. | 69. | 180. | 20. |
| 15. | 140. | 100. | 64. | 185. | 19. |
| 20. | 174. | 105. | 60. | 190. | 17. |
| 25. | 187. | 110. | 56. | 195. | 16. |
| 30. | 184. | 115. | 52. | 200. | 15. |
| 35. | 171. | 120. | 48. | 205. | 14. |
| 40. | 156. | 125. | 45. | 210. | 13. |
| 45. | 144. | 130. | 41. | 215. | 12. |
| 50. | 137. | 135. | 39. | 220. | 11. |
| 55. | 128. | 140. | 36. | 225. | 10. |
| 60. | 119. | 145. | 33. | 230. | 10. |
| 65. | 110. | 150. | 31. | 235. | 9. |
| 70. | 101. | 155. | 29. | 240. | 8. |
| 75. | 93. | 160. | 27. | 245. | 8. |
| 80. | 86. | 165. | 25. | 250. | 0. |

1 BASIN ID: W22 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 100. | 0.02 | 0.000 | 6. |
| 5. | 0.03 | 0.000 | 0. | 105. | 0.02 | 0.000 | 5. |
| 10. | 0.05 | 0.000 | 0. | 110. | 0.02 | 0.000 | 5. |
| 15. | 0.11 | 0.000 | 0. | 115. | 0.02 | 0.000 | 5. |
| 20. | 0.18 | 0.000 | 0. | 120. | 0.02 | 0.000 | 4. |
| 25. | 0.29 | 0.007 | 0. | 125. | 0.02 | 0.000 | 4. |
| 30. | 0.15 | 0.035 | 2. | 130. | 0.02 | 0.000 | 4. |
| 35. | 0.08 | 0.016 | 5. | 135. | 0.02 | 0.000 | 4. |
| 40. | 0.06 | 0.002 | 8. | 140. | 0.02 | 0.000 | 3. |
| 45. | 0.05 | 0.001 | 10. | 145. | 0.02 | 0.000 | 3. |
| 50. | 0.04 | 0.000 | 11. | 150. | 0.02 | 0.000 | 3. |
| 55. | 0.04 | 0.000 | 11. | 155. | 0.02 | 0.000 | 3. |
| 60. | 0.04 | 0.000 | 11. | 160. | 0.02 | 0.000 | 2. |
| 65. | 0.04 | 0.000 | 10. | 165. | 0.02 | 0.000 | 2. |
| 70. | 0.03 | 0.000 | 9. | 170. | 0.02 | 0.000 | 2. |
| 75. | 0.03 | 0.000 | 9. | 175. | 0.02 | 0.000 | 2. |
| 80. | 0.03 | 0.000 | 8. | 180. | 0.02 | 0.000 | 2. |
| 85. | 0.03 | 0.000 | 8. | 185. | 0.00 | 0.000 | 2. |
| 90. | 0.02 | 0.000 | 7. | 190. | 0.00 | 0.000 | 2. |
| 95. | 0.02 | 0.000 | 6. | 195. | 0.00 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.062 INCHES
VOLUME OF EXCESS PRECIP = 1.31 ACRE-FEET
PEAK Q = 11. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W23 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.88 | 1.20 | 0.73 | 2.00 | 0.0140 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.328 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 26.92 | 515.37 | 455.59 | 47.15 |

WIDTH AT 50 = 58. MIN. WIDTH AT 75 = 30. MIN. K50 =0.28 K75 =0.38

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 95. | 146. | 190. | 28. |
| 5. | 72. | 100. | 134. | 195. | 26. |
| 10. | 206. | 105. | 123. | 200. | 24. |
| 15. | 332. | 110. | 112. | 205. | 22. |
| 20. | 418. | 115. | 103. | 210. | 20. |
| 25. | 453. | 120. | 95. | 215. | 18. |
| 30. | 450. | 125. | 87. | 220. | 17. |
| 35. | 422. | 130. | 80. | 225. | 16. |
| 40. | 383. | 135. | 73. | 230. | 14. |
| 45. | 346. | 140. | 67. | 235. | 13. |
| 50. | 321. | 145. | 62. | 240. | 12. |
| 55. | 296. | 150. | 57. | 245. | 11. |
| 60. | 272. | 155. | 52. | 250. | 10. |
| 65. | 247. | 160. | 48. | 255. | 9. |
| 70. | 224. | 165. | 44. | 260. | 9. |
| 75. | 205. | 170. | 40. | 265. | 8. |
| 80. | 188. | 175. | 37. | 270. | 0. |
| 85. | 173. | 180. | 34. | 0. | 0. |
| 90. | 159. | 185. | 31. | 0. | 0. |

1 BASIN ID: W23 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 115. | 0.02 | 0.000 | 10. |
| 5. | 0.03 | 0.000 | 0. | 120. | 0.02 | 0.000 | 9. |
| 10. | 0.05 | 0.000 | 0. | 125. | 0.02 | 0.000 | 9. |
| 15. | 0.11 | 0.000 | 0. | 130. | 0.02 | 0.000 | 8. |
| 20. | 0.18 | 0.000 | 0. | 135. | 0.02 | 0.000 | 7. |
| 25. | 0.29 | 0.007 | 1. | 140. | 0.02 | 0.000 | 7. |
| 30. | 0.15 | 0.035 | 4. | 145. | 0.02 | 0.000 | 6. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 35. | 0.08 | 0.016 | 11. | | 150. | 0.02 | 0.000 | 6. |
| 40. | 0.06 | 0.002 | 18. | | 155. | 0.02 | 0.000 | 5. |
| 45. | 0.05 | 0.001 | 24. | | 160. | 0.02 | 0.000 | 5. |
| 50. | 0.04 | 0.000 | 27. | | 165. | 0.02 | 0.000 | 4. |
| 55. | 0.04 | 0.000 | 27. | | 170. | 0.02 | 0.000 | 4. |
| 60. | 0.04 | 0.000 | 26. | | 175. | 0.02 | 0.000 | 4. |
| 65. | 0.04 | 0.000 | 24. | | 180. | 0.02 | 0.000 | 3. |
| 70. | 0.03 | 0.000 | 22. | | 185. | 0.00 | 0.000 | 3. |
| 75. | 0.03 | 0.000 | 20. | | 190. | 0.00 | 0.000 | 3. |
| 80. | 0.03 | 0.000 | 19. | | 195. | 0.00 | 0.000 | 3. |
| 85. | 0.03 | 0.000 | 17. | | 200. | 0.00 | 0.000 | 2. |
| 90. | 0.02 | 0.000 | 16. | | 205. | 0.00 | 0.000 | 2. |
| 95. | 0.02 | 0.000 | 14. | | 210. | 0.00 | 0.000 | 2. |
| 100. | 0.02 | 0.000 | 13. | | 215. | 0.00 | 0.000 | 2. |
| 105. | 0.02 | 0.000 | 12. | | 220. | 0.00 | 0.000 | 2. |
| 110. | 0.02 | 0.000 | 11. | | 225. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.062 INCHES
VOLUME OF EXCESS PRECIP = 2.92 ACRE-FEET
PEAK Q = 27. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W24 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.24 | 0.61 | 0.45 | 2.00 | 0.0140 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.269 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 16.43 | 742.27 | 176.66 | 12.69 |

WIDTH AT 50 = 40. MIN. WIDTH AT 75 = 21. MIN. K50 =0.24 K75 =0.33

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | | TIME | UNIT HYDROGRAPH | | TIME | UNIT HYDROGRAPH | |
|---|---|---|---|---|---|---|---|---|
| 0. | 0. | | 55. | 74. | | 110. | 21. | |
| 5. | 60. | | 60. | 66. | | 115. | 19. | |
| 10. | 140. | | 65. | 59. | | 120. | 17. | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 15. | 175. | 70. | 52. | 125. | 15. | | |
| 20. | 169. | 75. | 47. | 130. | 13. | | |
| 25. | 147. | 80. | 42. | 135. | 12. | | |
| 30. | 133. | 85. | 37. | 140. | 11. | | |
| 35. | 120. | 90. | 33. | 145. | 9. | | |
| 40. | 107. | 95. | 30. | 150. | 8. | | |
| 45. | 94. | 100. | 26. | 155. | 8. | | |
| 50. | 82. | 105. | 24. | 160. | 0. | | |

1 BASIN ID: W24 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 65. | 0.04 | 0.000 | 7. |
| 5. | 0.03 | 0.000 | 0. | 70. | 0.03 | 0.000 | 6. |
| 10. | 0.05 | 0.000 | 0. | 75. | 0.03 | 0.000 | 5. |
| 15. | 0.11 | 0.000 | 0. | 80. | 0.03 | 0.000 | 5. |
| 20. | 0.18 | 0.000 | 0. | 85. | 0.03 | 0.000 | 4. |
| 25. | 0.29 | 0.007 | 0. | 90. | 0.02 | 0.000 | 4. |
| 30. | 0.15 | 0.035 | 3. | 95. | 0.02 | 0.000 | 3. |
| 35. | 0.08 | 0.016 | 7. | 100. | 0.02 | 0.000 | 3. |
| 40. | 0.06 | 0.002 | 10. | 105. | 0.02 | 0.000 | 3. |
| 45. | 0.05 | 0.001 | 10. | 110. | 0.02 | 0.000 | 2. |
| 50. | 0.04 | 0.000 | 9. | 115. | 0.02 | 0.000 | 2. |
| 55. | 0.04 | 0.000 | 8. | 120. | 0.02 | 0.000 | 2. |
| 60. | 0.04 | 0.000 | 8. | 125. | 0.02 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.062 INCHES
VOLUME OF EXCESS PRECIP = 0.79 ACRE-FEET
PEAK Q = 10. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E25 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.05 | 0.40 | 0.19 | 2.00 | 0.0070 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.216 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| 17.20 | 78.00 | 564.50 | 31.05 | 2.93 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 11.37)

WIDTH AT 50 = 53. MIN. WIDTH AT 75 = 28. MIN. K50 =0.19 K75 =0.26

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 3.00 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.50 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 60. | 16. | 120. | 10. |
| 5. | 10. | 65. | 15. | 125. | 10. |
| 10. | 24. | 70. | 15. | 130. | 10. |
| 15. | 30. | 75. | 14. | 135. | 9. |
| 20. | 30. | 80. | 14. | 140. | 9. |
| 25. | 26. | 85. | 13. | 145. | 9. |
| 30. | 22. | 90. | 13. | 150. | 9. |
| 35. | 21. | 95. | 12. | 155. | 8. |
| 40. | 22. | 100. | 12. | 160. | 8. |
| 45. | 21. | 105. | 12. | 165. | 8. |
| 50. | 19. | 110. | 11. | 170. | 7. |
| 55. | 17. | 115. | 11. | 175. | 0. |

1 BASIN ID: E25 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 90. | 0.02 | 0.000 | 3. |
| 5. | 0.03 | 0.000 | 0. | 95. | 0.02 | 0.000 | 2. |
| 10. | 0.05 | 0.000 | 0. | 100. | 0.02 | 0.000 | 2. |
| 15. | 0.11 | 0.000 | 0. | 105. | 0.02 | 0.000 | 2. |
| 20. | 0.18 | 0.000 | 0. | 110. | 0.02 | 0.000 | 2. |
| 25. | 0.29 | 0.017 | 0. | 115. | 0.02 | 0.000 | 2. |
| 30. | 0.15 | 0.101 | 1. | 120. | 0.02 | 0.000 | 2. |
| 35. | 0.08 | 0.028 | 3. | 125. | 0.02 | 0.000 | 2. |
| 40. | 0.06 | 0.013 | 4. | 130. | 0.02 | 0.000 | 2. |
| 45. | 0.05 | 0.004 | 5. | 135. | 0.02 | 0.000 | 2. |
| 50. | 0.04 | 0.001 | 4. | 140. | 0.02 | 0.000 | 2. |
| 55. | 0.04 | 0.001 | 4. | 145. | 0.02 | 0.000 | 2. |
| 60. | 0.04 | 0.001 | 4. | 150. | 0.02 | 0.000 | 2. |
| 65. | 0.04 | 0.001 | 4. | 155. | 0.02 | 0.000 | 2. |
| 70. | 0.03 | 0.000 | 3. | 160. | 0.02 | 0.000 | 2. |
| 75. | 0.03 | 0.000 | 3. | 165. | 0.02 | 0.000 | 2. |
| 80. | 0.03 | 0.000 | 3. | 170. | 0.02 | 0.000 | 1. |
| 85. | 0.03 | 0.000 | 3. | 175. | 0.02 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.165 INCHES
VOLUME OF EXCESS PRECIP = 0.48 ACRE-FEET
PEAK Q = 5. CFS TIME OF PEAK = 45. MIN.
INFILT.= 3.00 IN/HR DECAY =0.00180 FNINF = 0.50 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E26 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.14 | 0.57 | 0.35 | 2.00 | 0.0170 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.249 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 17.58 | 80.00 | 634.51 | 90.10 | 7.57 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 13.90)

WIDTH AT 50 = 47. MIN. WIDTH AT 75 = 25. MIN. K50 =0.22 K75 =0.30

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 55. | 45. | 110. | 17. |
| 5. | 28. | 60. | 41. | 115. | 16. |
| 10. | 67. | 65. | 37. | 120. | 14. |
| 15. | 88. | 70. | 34. | 125. | 13. |
| 20. | 88. | 75. | 31. | 130. | 12. |
| 25. | 79. | 80. | 29. | 135. | 11. |
| 30. | 69. | 85. | 26. | 140. | 10. |
| 35. | 67. | 90. | 24. | 145. | 9. |
| 40. | 61. | 95. | 22. | 150. | 8. |
| 45. | 56. | 100. | 20. | 155. | 8. |
| 50. | 50. | 105. | 19. | 160. | 0. |

1 BASIN ID: E26 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 60. | 0.04 | 0.000 | 4. |
| 5. | 0.03 | 0.000 | 0. | 65. | 0.04 | 0.000 | 4. |
| 10. | 0.05 | 0.000 | 0. | 70. | 0.03 | 0.000 | 4. |
| 15. | 0.11 | 0.000 | 0. | 75. | 0.03 | 0.000 | 3. |
| 20. | 0.18 | 0.000 | 0. | 80. | 0.03 | 0.000 | 3. |
| 25. | 0.29 | 0.007 | 0. | 85. | 0.03 | 0.000 | 3. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 30. | 0.15 | 0.035 | 1. | 90. | 0.02 | 0.000 | 2. |
| 35. | 0.08 | 0.016 | 3. | 95. | 0.02 | 0.000 | 2. |
| 40. | 0.06 | 0.002 | 5. | 100. | 0.02 | 0.000 | 2. |
| 45. | 0.05 | 0.001 | 5. | 105. | 0.02 | 0.000 | 2. |
| 50. | 0.04 | 0.000 | 5. | 110. | 0.02 | 0.000 | 2. |
| 55. | 0.04 | 0.000 | 4. | 115. | 0.02 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.062 INCHES
VOLUME OF EXCESS PRECIP = 0.47 ACRE-FEET
PEAK Q = 5. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

*** WARNING : THE ABOVE PEAK IS COMPUTED BASED ON THE TIME TO PEAK MODIFIED BY THE RATIONAL FORMULA.
BUT THE AREA IS TOO LARGE (GREATER THAN 90 ACRES) TO APPLIY THE MODIFICATION, AND
THE ABOVE ESTIMATED PEAK MAY NOT BE RIGHT.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E27 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.10 | 0.60 | 0.26 | 2.00 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.236 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 19.84 | 92.00 | 523.38 | 52.34 | 5.33 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 14.32)

WIDTH AT 50 = 57. MIN. WIDTH AT 75 = 30. MIN. K50 =0.21 K75 =0.28

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 3.40 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.50 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| 0. | 0. | 65. | 26. | 130. | 13. |
| 5. | 13. | 70. | 25. | 135. | 12. |
| 10. | 35. | 75. | 24. | 140. | 12. |
| 15. | 48. | 80. | 22. | 145. | 11. |
| 20. | 52. | 85. | 21. | 150. | 11. |
| 25. | 49. | 90. | 20. | 155. | 10. |
| 30. | 43. | 95. | 19. | 160. | 9. |
| 35. | 38. | 100. | 18. | 165. | 9. |
| 40. | 38. | 105. | 17. | 170. | 9. |
| 45. | 37. | 110. | 16. | 175. | 8. |
| 50. | 34. | 115. | 15. | 180. | 8. |
| 55. | 32. | 120. | 15. | 185. | 0. |
| 60. | 29. | 125. | 14. | 0. | 0. |

1 BASIN ID: E27 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 95. | 0.02 | 0.000 | 4. |
| 5. | 0.03 | 0.000 | 0. | 100. | 0.02 | 0.000 | 4. |
| 10. | 0.05 | 0.000 | 0. | 105. | 0.02 | 0.000 | 3. |
| 15. | 0.11 | 0.000 | 0. | 110. | 0.02 | 0.000 | 3. |
| 20. | 0.18 | 0.000 | 0. | 115. | 0.02 | 0.000 | 3. |
| 25. | 0.29 | 0.010 | 0. | 120. | 0.02 | 0.000 | 3. |
| 30. | 0.15 | 0.089 | 2. | 125. | 0.02 | 0.000 | 3. |
| 35. | 0.08 | 0.027 | 4. | 130. | 0.02 | 0.000 | 3. |
| 40. | 0.06 | 0.012 | 6. | 135. | 0.02 | 0.000 | 2. |
| 45. | 0.05 | 0.004 | 7. | 140. | 0.02 | 0.000 | 2. |
| 50. | 0.04 | 0.001 | 7. | 145. | 0.02 | 0.000 | 2. |
| 55. | 0.04 | 0.001 | 6. | 150. | 0.02 | 0.000 | 2. |
| 60. | 0.04 | 0.001 | 6. | 155. | 0.02 | 0.000 | 2. |
| 65. | 0.04 | 0.001 | 6. | 160. | 0.02 | 0.000 | 2. |
| 70. | 0.03 | 0.000 | 5. | 165. | 0.02 | 0.000 | 2. |
| 75. | 0.03 | 0.000 | 5. | 170. | 0.02 | 0.000 | 2. |
| 80. | 0.03 | 0.000 | 5. | 175. | 0.02 | 0.000 | 2. |
| 85. | 0.03 | 0.000 | 4. | 180. | 0.02 | 0.000 | 1. |
| 90. | 0.02 | 0.000 | 4. | 185. | 0.00 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.145 INCHES
VOLUME OF EXCESS PRECIP = 0.77 ACRE-FEET
PEAK Q = 7. CFS TIME OF PEAK = 50. MIN.
INFILT.= 3.40 IN/HR DECAY =0.00180 FNINF = 0.50 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E28 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.58 | 1.19 | 0.60 | 4.60 | 0.0160 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.146 | 0.290 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.07

FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.09

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 22.55 | 556.13 | 324.78 | 31.15 |

WIDTH AT 50 = 54. MIN. WIDTH AT 75 = 28. MIN. K50 =0.25 K75 =0.34

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 85. | 109. | 170. | 24. |
| 5. | 68. | 90. | 100. | 175. | 22. |
| 10. | 185. | 95. | 91. | 180. | 20. |
| 15. | 277. | 100. | 84. | 185. | 18. |
| 20. | 320. | 105. | 76. | 190. | 17. |
| 25. | 321. | 110. | 70. | 195. | 15. |
| 30. | 297. | 115. | 64. | 200. | 14. |
| 35. | 266. | 120. | 58. | 205. | 13. |
| 40. | 245. | 125. | 53. | 210. | 12. |
| 45. | 229. | 130. | 49. | 215. | 11. |
| 50. | 210. | 135. | 45. | 220. | 10. |
| 55. | 192. | 140. | 41. | 225. | 9. |
| 60. | 173. | 145. | 37. | 230. | 8. |
| 65. | 157. | 150. | 34. | 235. | 7. |
| 70. | 143. | 155. | 31. | 240. | 0. |
| 75. | 131. | 160. | 28. | 0. | 0. |
| 80. | 120. | 165. | 26. | 0. | 0. |

1 BASIN ID: E28 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 115. | 0.02 | 0.000 | 9. |
| 5. | 0.03 | 0.000 | 0. | 120. | 0.02 | 0.000 | 8. |
| 10. | 0.05 | 0.000 | 0. | 125. | 0.02 | 0.000 | 8. |
| 15. | 0.11 | 0.000 | 0. | 130. | 0.02 | 0.000 | 7. |
| 20. | 0.18 | 0.001 | 0. | 135. | 0.02 | 0.000 | 7. |
| 25. | 0.29 | 0.020 | 2. | 140. | 0.02 | 0.000 | 6. |
| 30. | 0.15 | 0.038 | 7. | 145. | 0.02 | 0.000 | 6. |
| 35. | 0.08 | 0.018 | 14. | 150. | 0.02 | 0.000 | 5. |
| 40. | 0.06 | 0.004 | 21. | 155. | 0.02 | 0.000 | 5. |
| 45. | 0.05 | 0.002 | 25. | 160. | 0.02 | 0.000 | 4. |
| 50. | 0.04 | 0.001 | 26. | 165. | 0.02 | 0.000 | 4. |
| 55. | 0.04 | 0.001 | 25. | 170. | 0.02 | 0.000 | 4. |
| 60. | 0.04 | 0.001 | 23. | 175. | 0.02 | 0.000 | 3. |
| 65. | 0.04 | 0.001 | 21. | 180. | 0.02 | 0.000 | 3. |
| 70. | 0.03 | 0.000 | 20. | 185. | 0.00 | 0.000 | 3. |
| 75. | 0.03 | 0.000 | 19. | 190. | 0.00 | 0.000 | 3. |
| 80. | 0.03 | 0.000 | 17. | 195. | 0.00 | 0.000 | 2. |
| 85. | 0.03 | 0.000 | 16. | 200. | 0.00 | 0.000 | 2. |
| 90. | 0.02 | 0.000 | 14. | 205. | 0.00 | 0.000 | 2. |
| 95. | 0.02 | 0.000 | 13. | 210. | 0.00 | 0.000 | 2. |
| 100. | 0.02 | 0.000 | 12. | 215. | 0.00 | 0.000 | 2. |
| 105. | 0.02 | 0.000 | 11. | 220. | 0.00 | 0.000 | 2. |
| 110. | 0.02 | 0.000 | 10. | 225. | 0.00 | 0.000 | 1. |

 * LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.088 INCHES
VOLUME OF EXCESS PRECIP = 2.75 ACRE-FEET
PEAK Q = 26. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E29 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.06 | 0.62 | 0.21 | 7.20 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.136 | 0.197 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.08 | D= 0.14 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 13.96 | 66.00 | 660.48 | 40.29 | 3.25 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 11.48)

WIDTH AT 50 = 45. MIN. WIDTH AT 75 = 24. MIN. K50 =0.18 K75 =0.25

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 55. | 19. | 110. | 11. |
| 5. | 17. | 60. | 18. | 115. | 10. |
| 10. | 36. | 65. | 17. | 120. | 10. |
| 15. | 40. | 70. | 17. | 125. | 9. |
| 20. | 35. | 75. | 16. | 130. | 9. |
| 25. | 28. | 80. | 15. | 135. | 8. |
| 30. | 27. | 85. | 14. | 140. | 8. |
| 35. | 28. | 90. | 13. | 145. | 8. |
| 40. | 26. | 95. | 13. | 150. | 0. |
| 45. | 23. | 100. | 12. | 0. | 0. |
| 50. | 21. | 105. | 12. | 0. | 0. |

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 65. | 0.04 | 0.002 | 3. |
| 5. | 0.03 | 0.000 | 0. | 70. | 0.03 | 0.001 | 3. |
| 10. | 0.05 | 0.000 | 0. | 75. | 0.03 | 0.001 | 2. |
| 15. | 0.11 | 0.001 | 0. | 80. | 0.03 | 0.001 | 2. |
| 20. | 0.18 | 0.002 | 0. | 85. | 0.03 | 0.001 | 2. |
| 25. | 0.29 | 0.032 | 1. | 90. | 0.02 | 0.000 | 2. |
| 30. | 0.15 | 0.042 | 2. | 95. | 0.02 | 0.000 | 2. |
| 35. | 0.08 | 0.019 | 3. | 100. | 0.02 | 0.000 | 2. |
| 40. | 0.06 | 0.005 | 4. | 105. | 0.02 | 0.000 | 2. |
| 45. | 0.05 | 0.003 | 3. | 110. | 0.02 | 0.000 | 2. |
| 50. | 0.04 | 0.002 | 3. | 115. | 0.02 | 0.000 | 2. |
| 55. | 0.04 | 0.002 | 3. | 120. | 0.02 | 0.000 | 2. |
| 60. | 0.04 | 0.002 | 3. | 125. | 0.02 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.117 INCHES
VOLUME OF EXCESS PRECIP = 0.38 ACRE-FEET
PEAK Q = 4. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E30 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.03 | 0.19 | 0.09 | 2.00 | 0.0310 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.201 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 9.27 | 36.00 | 1140.00 | 38.76 | 1.81 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 5.51)

WIDTH AT 50 = 26. MIN. WIDTH AT 75 = 14. MIN. K50 =0.21 K75 =0.29

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN.  MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.70 IN./HR.  DECAY = 0.00130/SECOND  FNINFL = 0.80 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 30. | 19. | 60. | 11. |
| 5. | 27. | 35. | 18. | 65. | 10. |
| 10. | 39. | 40. | 16. | 70. | 9. |
| 15. | 30. | 45. | 15. | 75. | 9. |
| 20. | 28. | 50. | 14. | 80. | 8. |
| 25. | 24. | 55. | 12. | 85. | 0. |

1 BASIN ID: E30 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 5. | 0.03 | 0.000 | 0. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.007 INCHES
VOLUME OF EXCESS PRECIP = 0.01 ACRE-FEET
PEAK Q = 0. CFS TIME OF PEAK = 35. MIN.
INFILT.= 4.70 IN/HR DECAY =0.00130 FNINF = 0.80 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.
1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E31 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.04 | 0.26 | 0.14 | 2.00 | 0.0290 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.203 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 10.78 | 44.00 | 940.19 | 33.85 | 1.92 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,

REPLACING THE ONE COMPUTED BY CUHPF (TP= 6.92)

WIDTH AT 50 = 32. MIN. WIDTH AT 75 = 17. MIN. K50 =0.20 K75 =0.28

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 40. | 16. | 80. | 10. |
| 5. | 20. | 45. | 15. | 85. | 9. |
| 10. | 34. | 50. | 14. | 90. | 9. |
| 15. | 30. | 55. | 13. | 95. | 8. |
| 20. | 24. | 60. | 13. | 100. | 8. |
| 25. | 24. | 65. | 12. | 105. | 0. |
| 30. | 21. | 70. | 11. | 0. | 0. |
| 35. | 18. | 75. | 10. | 0. | 0. |

1 BASIN ID: E31 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 25. | 0.29 | 0.007 | 0. |
| 5. | 0.03 | 0.000 | 0. | 30. | 0.15 | 0.035 | 1. |
| 10. | 0.05 | 0.000 | 0. | 35. | 0.08 | 0.016 | 2. |
| 15. | 0.11 | 0.000 | 0. | 40. | 0.06 | 0.002 | 2. |
| 20. | 0.18 | 0.000 | 0. | 45. | 0.05 | 0.001 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.062 INCHES
VOLUME OF EXCESS PRECIP = 0.12 ACRE-FEET
PEAK Q = 2. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E32 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.53 | 1.17 | 0.48 | 2.00 | 0.0100 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.303 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|

R= 0.06 D= 0.04

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 23.83 | 546.30 | 288.99 | 28.21 |

WIDTH AT 50 = 55. MIN. WIDTH AT 75 = 29. MIN. K50 =0.26 K75 =0.35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.00 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 80. | 110. | 160. | 27. |
| 5. | 55. | 85. | 100. | 165. | 24. |
| 10. | 154. | 90. | 92. | 170. | 22. |
| 15. | 236. | 95. | 84. | 175. | 20. |
| 20. | 280. | 100. | 77. | 180. | 19. |
| 25. | 288. | 105. | 71. | 185. | 17. |
| 30. | 273. | 110. | 65. | 190. | 16. |
| 35. | 247. | 115. | 59. | 195. | 14. |
| 40. | 223. | 120. | 54. | 200. | 13. |
| 45. | 208. | 125. | 50. | 205. | 12. |
| 50. | 192. | 130. | 45. | 210. | 11. |
| 55. | 175. | 135. | 42. | 215. | 10. |
| 60. | 159. | 140. | 38. | 220. | 9. |
| 65. | 143. | 145. | 35. | 225. | 8. |
| 70. | 131. | 150. | 32. | 230. | 8. |
| 75. | 120. | 155. | 29. | 235. | 0. |

1 BASIN ID: E32 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 100. | 0.02 | 0.000 | 8. |
| 5. | 0.03 | 0.000 | 0. | 105. | 0.02 | 0.000 | 7. |
| 10. | 0.05 | 0.000 | 0. | 110. | 0.02 | 0.000 | 6. |
| 15. | 0.11 | 0.000 | 0. | 115. | 0.02 | 0.000 | 6. |
| 20. | 0.18 | 0.000 | 0. | 120. | 0.02 | 0.000 | 5. |
| 25. | 0.29 | 0.007 | 0. | 125. | 0.02 | 0.000 | 5. |
| 30. | 0.15 | 0.036 | 3. | 130. | 0.02 | 0.000 | 5. |
| 35. | 0.08 | 0.016 | 8. | 135. | 0.02 | 0.000 | 4. |
| 40. | 0.06 | 0.002 | 13. | 140. | 0.02 | 0.000 | 4. |
| 45. | 0.05 | 0.001 | 16. | 145. | 0.02 | 0.000 | 3. |
| 50. | 0.04 | 0.000 | 17. | 150. | 0.02 | 0.000 | 3. |
| 55. | 0.04 | 0.000 | 17. | 155. | 0.02 | 0.000 | 3. |
| 60. | 0.04 | 0.000 | 16. | 160. | 0.02 | 0.000 | 3. |
| 65. | 0.04 | 0.000 | 14. | 165. | 0.02 | 0.000 | 2. |
| 70. | 0.03 | 0.000 | 13. | 170. | 0.02 | 0.000 | 2. |
| 75. | 0.03 | 0.000 | 12. | 175. | 0.02 | 0.000 | 2. |
| 80. | 0.03 | 0.000 | 11. | 180. | 0.02 | 0.000 | 2. |
| 85. | 0.03 | 0.000 | 10. | 185. | 0.00 | 0.000 | 2. |
| 90. | 0.02 | 0.000 | 9. | 190. | 0.00 | 0.000 | 2. |
| 95. | 0.02 | 0.000 | 8. | 195. | 0.00 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.062 INCHES
VOLUME OF EXCESS PRECIP = 1.75 ACRE-FEET
PEAK Q = 17. CFS TIME OF PEAK = 50. MIN.

INFILT.= 4.00 IN/HR  DECAY =0.00170  FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN.  MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS  EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E33 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.05 | 0.34 | 0.18 | 2.00 | 0.0230 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.214 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 12.67 | 54.00 | 809.11 | 42.07 | 2.77 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 8.46)

WIDTH AT 50 = 37. MIN.  WIDTH AT 75 = 19. MIN.  K50 =0.21  K75 =0.28

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN.  MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR.  DECAY = 0.00180/SECOND  FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 45. | 20. | 90. | 11. |
| 5. | 21. | 50. | 19. | 95. | 10. |
| 10. | 40. | 55. | 18. | 100. | 10. |
| 15. | 41. | 60. | 16. | 105. | 9. |
| 20. | 33. | 65. | 15. | 110. | 8. |
| 25. | 30. | 70. | 14. | 115. | 8. |
| 30. | 29. | 75. | 13. | 120. | 0. |
| 35. | 26. | 80. | 13. | 0. | 0. |
| 40. | 22. | 85. | 12. | 0. | 0. |

1 BASIN ID: E33 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 35. | 0.08 | 0.016 | 2. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 5. | 0.03 | 0.000 | 0. | | 40. | 0.06 | 0.002 | 2. |
| 10. | 0.05 | 0.000 | 0. | | 45. | 0.05 | 0.001 | 2. |
| 15. | 0.11 | 0.000 | 0. | | 50. | 0.04 | 0.000 | 2. |
| 20. | 0.18 | 0.000 | 0. | | 55. | 0.04 | 0.000 | 2. |
| 25. | 0.29 | 0.007 | 0. | | 60. | 0.04 | 0.000 | 2. |
| 30. | 0.15 | 0.035 | 1. | | 65. | 0.04 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.062 INCHES
VOLUME OF EXCESS PRECIP = 0.17 ACRE-FEET
PEAK Q = 2. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E34 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.70 | 1.37 | 0.68 | 2.00 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.317 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 28.58 | 466.21 | 327.75 | 37.49 |

WIDTH AT 50 = 64. MIN. WIDTH AT 75 = 33. MIN. K50 =0.27 K75 =0.36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.30 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 95. | 122. | 190. | 29. |
| 5. | 47. | 100. | 113. | 195. | 27. |
| 10. | 136. | 105. | 105. | 200. | 25. |
| 15. | 226. | 110. | 97. | 205. | 23. |
| 20. | 290. | 115. | 90. | 210. | 21. |
| 25. | 322. | 120. | 83. | 215. | 20. |
| 30. | 327. | 125. | 77. | 220. | 18. |
| 35. | 313. | 130. | 72. | 225. | 17. |
| 40. | 290. | 135. | 66. | 230. | 16. |
| 45. | 264. | 140. | 61. | 235. | 14. |
| 50. | 246. | 145. | 57. | 240. | 13. |
| 55. | 230. | 150. | 53. | 245. | 12. |
| 60. | 214. | 155. | 49. | 250. | 11. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 65. | 198. | 160. | 45. | 255. | 11. | | |
| 70. | 182. | 165. | 42. | 260. | 10. | | |
| 75. | 166. | 170. | 39. | 265. | 9. | | |
| 80. | 154. | 175. | 36. | 270. | 8. | | |
| 85. | 142. | 180. | 33. | 275. | 8. | | |
| 90. | 132. | 185. | 31. | 280. | 0. | | |

1 BASIN ID: E34 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 120. | 0.02 | 0.000 | 8. |
| 5. | 0.03 | 0.000 | 0. | 125. | 0.02 | 0.000 | 8. |
| 10. | 0.05 | 0.000 | 0. | 130. | 0.02 | 0.000 | 7. |
| 15. | 0.11 | 0.000 | 0. | 135. | 0.02 | 0.000 | 7. |
| 20. | 0.18 | 0.000 | 0. | 140. | 0.02 | 0.000 | 6. |
| 25. | 0.29 | 0.007 | 0. | 145. | 0.02 | 0.000 | 6. |
| 30. | 0.15 | 0.040 | 3. | 150. | 0.02 | 0.000 | 5. |
| 35. | 0.08 | 0.017 | 8. | 155. | 0.02 | 0.000 | 5. |
| 40. | 0.06 | 0.003 | 13. | 160. | 0.02 | 0.000 | 5. |
| 45. | 0.05 | 0.001 | 18. | 165. | 0.02 | 0.000 | 4. |
| 50. | 0.04 | 0.000 | 21. | 170. | 0.02 | 0.000 | 4. |
| 55. | 0.04 | 0.000 | 22. | 175. | 0.02 | 0.000 | 4. |
| 60. | 0.04 | 0.000 | 21. | 180. | 0.02 | 0.000 | 3. |
| 65. | 0.04 | 0.000 | 20. | 185. | 0.00 | 0.000 | 3. |
| 70. | 0.03 | 0.000 | 18. | 190. | 0.00 | 0.000 | 3. |
| 75. | 0.03 | 0.000 | 17. | 195. | 0.00 | 0.000 | 3. |
| 80. | 0.03 | 0.000 | 16. | 200. | 0.00 | 0.000 | 3. |
| 85. | 0.03 | 0.000 | 15. | 205. | 0.00 | 0.000 | 2. |
| 90. | 0.02 | 0.000 | 14. | 210. | 0.00 | 0.000 | 2. |
| 95. | 0.02 | 0.000 | 13. | 215. | 0.00 | 0.000 | 2. |
| 100. | 0.02 | 0.000 | 12. | 220. | 0.00 | 0.000 | 2. |
| 105. | 0.02 | 0.000 | 11. | 225. | 0.00 | 0.000 | 2. |
| 110. | 0.02 | 0.000 | 10. | 230. | 0.00 | 0.000 | 2. |
| 115. | 0.02 | 0.000 | 9. | 235. | 0.00 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.068 INCHES
VOLUME OF EXCESS PRECIP = 2.54 ACRE-FEET
PEAK Q = 22. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.30 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E35 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.73 | 1.22 | 0.53 | 5.10 | 0.0110 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.144 | 0.297 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED |
|---|---|

IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.07

TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.10

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 23.12 | 553.64 | 405.26 | 39.04 |

WIDTH AT 50 = 54. MIN. WIDTH AT 75 = 28. MIN. K50 =0.26 K75 =0.35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.30 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 85. | 137. | 170. | 29. |
| 5. | 81. | 90. | 125. | 175. | 27. |
| 10. | 224. | 95. | 115. | 180. | 25. |
| 15. | 339. | 100. | 105. | 185. | 22. |
| 20. | 397. | 105. | 96. | 190. | 21. |
| 25. | 403. | 110. | 87. | 195. | 19. |
| 30. | 377. | 115. | 80. | 200. | 17. |
| 35. | 338. | 120. | 73. | 205. | 16. |
| 40. | 308. | 125. | 67. | 210. | 14. |
| 45. | 288. | 130. | 61. | 215. | 13. |
| 50. | 265. | 135. | 56. | 220. | 12. |
| 55. | 242. | 140. | 51. | 225. | 11. |
| 60. | 218. | 145. | 46. | 230. | 10. |
| 65. | 197. | 150. | 42. | 235. | 9. |
| 70. | 180. | 155. | 39. | 240. | 8. |
| 75. | 164. | 160. | 35. | 245. | 8. |
| 80. | 150. | 165. | 32. | 250. | 0. |

1 BASIN ID: E35 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 120. | 0.02 | 0.000 | 10. |
| 5. | 0.03 | 0.000 | 0. | 125. | 0.02 | 0.000 | 9. |
| 10. | 0.05 | 0.000 | 0. | 130. | 0.02 | 0.000 | 9. |
| 15. | 0.11 | 0.001 | 0. | 135. | 0.02 | 0.000 | 8. |
| 20. | 0.18 | 0.001 | 0. | 140. | 0.02 | 0.000 | 7. |
| 25. | 0.29 | 0.021 | 2. | 145. | 0.02 | 0.000 | 7. |
| 30. | 0.15 | 0.033 | 8. | 150. | 0.02 | 0.000 | 6. |
| 35. | 0.08 | 0.017 | 17. | 155. | 0.02 | 0.000 | 6. |
| 40. | 0.06 | 0.003 | 24. | 160. | 0.02 | 0.000 | 5. |
| 45. | 0.05 | 0.002 | 29. | 165. | 0.02 | 0.000 | 5. |
| 50. | 0.04 | 0.001 | 30. | 170. | 0.02 | 0.000 | 4. |
| 55. | 0.04 | 0.001 | 29. | 175. | 0.02 | 0.000 | 4. |
| 60. | 0.04 | 0.001 | 27. | 180. | 0.02 | 0.000 | 4. |
| 65. | 0.04 | 0.001 | 25. | 185. | 0.00 | 0.000 | 4. |
| 70. | 0.03 | 0.000 | 24. | 190. | 0.00 | 0.000 | 3. |
| 75. | 0.03 | 0.000 | 22. | 195. | 0.00 | 0.000 | 3. |
| 80. | 0.03 | 0.000 | 20. | 200. | 0.00 | 0.000 | 3. |
| 85. | 0.03 | 0.000 | 19. | 205. | 0.00 | 0.000 | 2. |
| 90. | 0.02 | 0.000 | 17. | 210. | 0.00 | 0.000 | 2. |
| 95. | 0.02 | 0.000 | 16. | 215. | 0.00 | 0.000 | 2. |
| 100. | 0.02 | 0.000 | 14. | 220. | 0.00 | 0.000 | 2. |
| 105. | 0.02 | 0.000 | 13. | 225. | 0.00 | 0.000 | 2. |
| 110. | 0.02 | 0.000 | 12. | 230. | 0.00 | 0.000 | 2. |
| 115. | 0.02 | 0.000 | 11. | 235. | 0.00 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME

** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.084 INCHES
VOLUME OF EXCESS PRECIP = 3.28 ACRE-FEET
PEAK Q = 30. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.30 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E36 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.10 | 0.29 | 0.16 | 2.00 | 0.0110 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.238 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 14.37 | 63.00 | 769.27 | 80.00 | 5.55 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 8.77)

WIDTH AT 50 = 39. MIN. WIDTH AT 75 = 20. MIN. K50 =0.22 K75 =0.30

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.40 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 45. | 40. | 90. | 16. |
| 5. | 33. | 50. | 36. | 95. | 14. |
| 10. | 70. | 55. | 32. | 100. | 13. |
| 15. | 80. | 60. | 29. | 105. | 12. |
| 20. | 71. | 65. | 26. | 110. | 10. |
| 25. | 60. | 70. | 24. | 115. | 9. |
| 30. | 58. | 75. | 21. | 120. | 8. |
| 35. | 52. | 80. | 19. | 125. | 8. |
| 40. | 46. | 85. | 17. | 130. | 0. |

1 BASIN ID: E36 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 50. | 0.04 | 0.000 | 4. |
| 5. | 0.03 | 0.000 | 0. | 55. | 0.04 | 0.000 | 4. |
| 10. | 0.05 | 0.000 | 0. | 60. | 0.04 | 0.000 | 3. |
| 15. | 0.11 | 0.000 | 0. | 65. | 0.04 | 0.000 | 3. |
| 20. | 0.18 | 0.000 | 0. | 70. | 0.03 | 0.000 | 3. |
| 25. | 0.29 | 0.007 | 0. | 75. | 0.03 | 0.000 | 2. |
| 30. | 0.15 | 0.037 | 2. | 80. | 0.03 | 0.000 | 2. |
| 35. | 0.08 | 0.017 | 4. | 85. | 0.03 | 0.000 | 2. |
| 40. | 0.06 | 0.003 | 5. | 90. | 0.02 | 0.000 | 2. |
| 45. | 0.05 | 0.001 | 5. | 95. | 0.02 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.065 INCHES
VOLUME OF EXCESS PRECIP = 0.36 ACRE-FEET
PEAK Q = 5. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.40 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E37 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 1.07 | 1.80 | 0.49 | 2.00 | 0.0100 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.337 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 29.04 | 487.92 | 522.08 | 57.07 |

WIDTH AT 50 = 61. MIN. WIDTH AT 75 = 32. MIN. K50 =0.28 K75 =0.39

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.00 IN./HR. DECAY = 0.00160/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 100. | 168. | 200. | 33. |
| 5. | 73. | 105. | 155. | 205. | 30. |
| 10. | 213. | 110. | 142. | 210. | 28. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 15. | 354. | | 115. | 131. | | 215. | 25. | |
| 20. | 456. | | 120. | 121. | | 220. | 23. | |
| 25. | 510. | | 125. | 111. | | 225. | 22. | |
| 30. | 521. | | 130. | 103. | | 230. | 20. | |
| 35. | 502. | | 135. | 95. | | 235. | 18. | |
| 40. | 464. | | 140. | 87. | | 240. | 17. | |
| 45. | 421. | | 145. | 80. | | 245. | 16. | |
| 50. | 385. | | 150. | 74. | | 250. | 14. | |
| 55. | 358. | | 155. | 68. | | 255. | 13. | |
| 60. | 331. | | 160. | 63. | | 260. | 12. | |
| 65. | 304. | | 165. | 58. | | 265. | 11. | |
| 70. | 278. | | 170. | 53. | | 270. | 10. | |
| 75. | 253. | | 175. | 49. | | 275. | 9. | |
| 80. | 233. | | 180. | 45. | | 280. | 9. | |
| 85. | 215. | | 185. | 42. | | 285. | 8. | |
| 90. | 198. | | 190. | 38. | | 290. | 7. | |
| 95. | 182. | | 195. | 35. | | 295. | 0. | |

1 BASIN ID: E37 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 115. | 0.02 | 0.000 | 9. |
| 5. | 0.03 | 0.000 | 0. | 120. | 0.02 | 0.000 | 9. |
| 10. | 0.05 | 0.000 | 0. | 125. | 0.02 | 0.000 | 8. |
| 15. | 0.11 | 0.000 | 0. | 130. | 0.02 | 0.000 | 7. |
| 20. | 0.18 | 0.000 | 0. | 135. | 0.02 | 0.000 | 7. |
| 25. | 0.29 | 0.006 | 1. | 140. | 0.02 | 0.000 | 6. |
| 30. | 0.15 | 0.024 | 3. | 145. | 0.02 | 0.000 | 6. |
| 35. | 0.08 | 0.014 | 8. | 150. | 0.02 | 0.000 | 5. |
| 40. | 0.06 | 0.001 | 15. | 155. | 0.02 | 0.000 | 5. |
| 45. | 0.05 | 0.000 | 19. | 160. | 0.02 | 0.000 | 5. |
| 50. | 0.04 | 0.000 | 22. | 165. | 0.02 | 0.000 | 4. |
| 55. | 0.04 | 0.000 | 23. | 170. | 0.02 | 0.000 | 4. |
| 60. | 0.04 | 0.000 | 23. | 175. | 0.02 | 0.000 | 4. |
| 65. | 0.04 | 0.000 | 22. | 180. | 0.02 | 0.000 | 3. |
| 70. | 0.03 | 0.000 | 20. | 185. | 0.00 | 0.000 | 3. |
| 75. | 0.03 | 0.000 | 18. | 190. | 0.00 | 0.000 | 3. |
| 80. | 0.03 | 0.000 | 17. | 195. | 0.00 | 0.000 | 3. |
| 85. | 0.03 | 0.000 | 16. | 200. | 0.00 | 0.000 | 2. |
| 90. | 0.02 | 0.000 | 14. | 205. | 0.00 | 0.000 | 2. |
| 95. | 0.02 | 0.000 | 13. | 210. | 0.00 | 0.000 | 2. |
| 100. | 0.02 | 0.000 | 12. | 215. | 0.00 | 0.000 | 2. |
| 105. | 0.02 | 0.000 | 11. | 220. | 0.00 | 0.000 | 2. |
| 110. | 0.02 | 0.000 | 10. | 225. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.64 EXCESS PRECIP. = 0.046 INCHES
VOLUME OF EXCESS PRECIP = 2.65 ACRE-FEET
PEAK Q = 23. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.00 IN/HR DECAY =0.00160 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

r Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E38 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.27 | 0.89 | 0.47 | 2.00 | 0.0140 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.274 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 19.55 | 618.07 | 167.50 | 14.45 |

WIDTH AT 50 = 49. MIN. WIDTH AT 75 = 25. MIN. K50 =0.24 K75 =0.33

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.30 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 65. | 71. | 130. | 21. |
| 5. | 44. | 70. | 65. | 135. | 19. |
| 10. | 112. | 75. | 59. | 140. | 17. |
| 15. | 156. | 80. | 54. | 145. | 16. |
| 20. | 167. | 85. | 49. | 150. | 14. |
| 25. | 157. | 90. | 44. | 155. | 13. |
| 30. | 139. | 95. | 40. | 160. | 12. |
| 35. | 126. | 100. | 37. | 165. | 11. |
| 40. | 118. | 105. | 33. | 170. | 10. |
| 45. | 108. | 110. | 30. | 175. | 9. |
| 50. | 97. | 115. | 28. | 180. | 8. |
| 55. | 87. | 120. | 25. | 185. | 0. |
| 60. | 78. | 125. | 23. | 0. | 0. |

1 BASIN ID: E38 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 5yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 80. | 0.03 | 0.000 | 6. |
| 5. | 0.03 | 0.000 | 0. | 85. | 0.03 | 0.000 | 5. |
| 10. | 0.05 | 0.000 | 0. | 90. | 0.02 | 0.000 | 5. |
| 15. | 0.11 | 0.000 | 0. | 95. | 0.02 | 0.000 | 4. |
| 20. | 0.18 | 0.000 | 0. | 100. | 0.02 | 0.000 | 4. |
| 25. | 0.29 | 0.007 | 0. | 105. | 0.02 | 0.000 | 4. |
| 30. | 0.15 | 0.040 | 3. | 110. | 0.02 | 0.000 | 3. |
| 35. | 0.08 | 0.017 | 6. | 115. | 0.02 | 0.000 | 3. |
| 40. | 0.06 | 0.003 | 9. | 120. | 0.02 | 0.000 | 3. |
| 45. | 0.05 | 0.001 | 11. | 125. | 0.02 | 0.000 | 3. |
| 50. | 0.04 | 0.000 | 11. | 130. | 0.02 | 0.000 | 2. |
| 55. | 0.04 | 0.000 | 10. | 135. | 0.02 | 0.000 | 2. |
| 60. | 0.04 | 0.000 | 9. | 140. | 0.02 | 0.000 | 2. |
| 65. | 0.04 | 0.000 | 8. | 145. | 0.02 | 0.000 | 2. |
| 70. | 0.03 | 0.000 | 7. | 150. | 0.02 | 0.000 | 2. |
| 75. | 0.03 | 0.000 | 7. | 155. | 0.02 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. =  1.64     EXCESS PRECIP. = 0.068  INCHES
VOLUME OF EXCESS PRECIP =   0.98  ACRE-FEET
PEAK Q =   11. CFS      TIME OF PEAK =  45. MIN.
INFILT.= 4.30 IN/HR    DECAY =0.00180    FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN.     MAX.IMP.RET.=0.05 IN.

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1    10yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin
1 10yr     .032 .06.133.219.365.175.091 .07.062.052.052.052.052.052.052.041.031
1 10yr     .031.031.031.031.031.028.021.012.012.012.012.012.012.012.012.012.012
1 10yr     .012.012

70 1 1 5.    W1  1Western portion of Sump Basin
.433 .849 .427   2. .015       .35  .05  4.4.0018   .6
70 1 1 5.    W4  4Western portion of Sump Basin
.188 1.03 .514 10.8 .010       .35  .05  4.5.0018   .6
70 1 1 5.    W5  5Western portion of Sump Basin
.428 1.20 .670   2. .017       .35  .05  4.6.0016   .7
71 1 1 5.    W6  6Western portion of Sump Basin
.114 .404 .073   2. .009  80.  .35  .05  4.5.0018   .6
71 1 1 5.    W7  7Western portion of Sump Basin
.007 .137 .044  30. .007  22.  .35  .05  4.5.0018   .6
70 1 1 5.    W9  9Western portion of Sump Basin
.204 .801 .370   2. .012       .35  .05  4.5.0018   .6
71 1 1 5.   W11 11Western portion of Sump Basin
.078 .509 .224  15. .009  90.  .35  .05  4.5.0018   .6
70 1 1 5.   W12 12Western portion of Sump Basin
.444 1.14 .590 10.9 .009       .35  .05  4.5.0018   .6
70 1 1 5.   W13 13Western portion of Sump Basin
.654 1.30 .580  3.7 .012       .35  .05  4.3.0017   .6
70 1 1 5.   W14 14Western portion of Sump Basin
.296 1.02 .372  7.2 .014       .35  .05  4.5.0017   .6
71 1 1 5.   W15 15Western portion of Sump Basin
.097 .438 .285   2. .009  83.  .35  .05  4.5.0018   .6
70 1 1 5.   W16 16Western portion of Sump Basin
.633 1.67 .610  2.6 .012       .35  .05  4.2.0018   .6
70 1 1 5.   W17 17Western portion of Sump Basin
.148 .396 .223  8.3 .009       .35  .05  4.5.0018   .6
70 1 1 5.   W18 18Western portion of Sump Basin
.173 .877 .414  6.3 .016       .35  .05  4.5.0018   .6
70 1 1 5.   W19 19Western portion of Sump Basin
.257 .969 .624   2. .013       .35  .05  4.6.0017   .6
70 1 1 5.   W20 20Western portion of Sump Basin
.691 1.37 .520   2. .009       .35  .05  4.0.0017   .6
70 1 1 5.   W21 21Western portion of Sump Basin
.330 1.14 .604  3.4 .014       .35  .05  4.5.0018   .6
70 1 1 5.   W22 22Western portion of Sump Basin
.398 1.17 .654   2. .012       .35  .05  4.5.0018   .6
70 1 1 5.   W23 23Western portion of Sump Basin
.884 1.20 .731   2. .014       .35  .05  4.5.0018   .6
70 1 1 5.   W24 24Western portion of Sump Basin
.238 .609 .447   2. .014       .35  .05  4.5.0018   .6
71 1 1 5.   E25 25Eastern portion of Sump Basin
.055 .396 .190   2. .007  78.  .35  .05  3.0.0018   .5
71 1 1 5.   E26 26Eastern portion of Sump Basin
.142 .570 .347   2. .017  80.  .35  .05  4.5.0018   .6
71 1 1 5.   E27 27Eastern portion of Sump Basin
.100 .597 .260   2. .009  92.  .35  .05  3.4.0018   .5
70 1 1 5.   E28 28Eastern portion of Sump Basin
.584 1.19 .597  4.6 .016       .35  .05  4.5.0018   .6
71 1 1 5.   E29 29Eastern portion of Sump Basin
.061 .622 .214  7.2 .012  66.  .35  .05  4.5.0018   .6
71 1 1 5.   E30 30Eastern portion of Sump Basin
.034 .189 .088   2. .031  36.  .35  .05  4.7.0013   .8
71 1 1 5.   E31 31Eastern portion of Sump Basin
.036 .260 .138   2. .029  44.  .35  .05  4.5.0018   .6
70 1 1 5.   E32 32Eastern portion of Sump Basin
.529 1.17 .478   2. .010       .35  .05  4.0.0017   .6
71 1 1 5.   E33 33Eastern portion of Sump Basin
.052 .335 .178   2. .023  54.  .35  .05  4.5.0018   .6
70 1 1 5.   E34 34Eastern portion of Sump Basin
.703 1.37 .680   2. .012       .35  .05  4.3.0018   .6
70 1 1 5.   E35 35Eastern portion of Sump Basin
.732 1.22 .526  5.1 .011       .35  .05  4.3.0017   .6
71 1 1 5.   E36 36Eastern portion of Sump Basin
.104 .290 .158   2. .011  63.  .35  .05  4.4.0018   .6
70 1 1 5.   E37 37Eastern portion of Sump Basin
1.07 1.80 .490   2. .010       .35  .05  4.0.0016   .6
70 1 1 5.   E38 38Eastern portion of Sump Basin
.271 .889 .467   2. .014       .35  .05  4.3.0018   .6
E
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1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W1 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.43 | 0.85 | 0.43 | 2.00 | 0.0150 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.294 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 18.22 | 719.49 | 311.54 | 23.09 |

WIDTH AT 50 = 42. MIN. WIDTH AT 75 = 22. MIN. K50 =0.26 K75 =0.36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.40 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 65. | 107. | 130. | 23. |
| 5. | 91. | 70. | 95. | 135. | 21. |
| 10. | 224. | 75. | 85. | 140. | 19. |
| 15. | 300. | 80. | 75. | 145. | 16. |
| 20. | 309. | 85. | 67. | 150. | 15. |
| 25. | 279. | 90. | 60. | 155. | 13. |
| 30. | 243. | 95. | 53. | 160. | 12. |
| 35. | 221. | 100. | 47. | 165. | 10. |
| 40. | 197. | 105. | 42. | 170. | 9. |
| 45. | 174. | 110. | 37. | 175. | 8. |
| 50. | 152. | 115. | 33. | 180. | 0. |
| 55. | 135. | 120. | 30. | 0. | 0. |
| 60. | 120. | 125. | 26. | 0. | 0. |

1 BASIN ID: W1 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 100. | 0.03 | 0.000 | 23. |
| 5. | 0.03 | 0.000 | 0. | 105. | 0.03 | 0.000 | 21. |
| 10. | 0.06 | 0.000 | 0. | 110. | 0.03 | 0.000 | 19. |
| 15. | 0.13 | 0.000 | 0. | 115. | 0.03 | 0.000 | 16. |
| 20. | 0.22 | 0.000 | 0. | 120. | 0.02 | 0.000 | 15. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 25. | 0.37 | 0.071 | 7. | 125. | 0.01 | 0.000 | 13. |
| 30. | 0.17 | 0.110 | 26. | 130. | 0.01 | 0.000 | 12. |
| 35. | 0.09 | 0.033 | 49. | 135. | 0.01 | 0.000 | 10. |
| 40. | 0.07 | 0.016 | 64. | 140. | 0.01 | 0.000 | 9. |
| 45. | 0.06 | 0.010 | 68. | 145. | 0.01 | 0.000 | 8. |
| 50. | 0.05 | 0.001 | 65. | 150. | 0.01 | 0.000 | 7. |
| 55. | 0.05 | 0.002 | 60. | 155. | 0.01 | 0.000 | 6. |
| 60. | 0.05 | 0.002 | 55. | 160. | 0.01 | 0.000 | 6. |
| 65. | 0.05 | 0.003 | 50. | 165. | 0.01 | 0.000 | 5. |
| 70. | 0.05 | 0.003 | 45. | 170. | 0.01 | 0.000 | 5. |
| 75. | 0.05 | 0.003 | 40. | 175. | 0.01 | 0.000 | 4. |
| 80. | 0.04 | 0.000 | 37. | 180. | 0.01 | 0.000 | 4. |
| 85. | 0.03 | 0.000 | 33. | 185. | 0.00 | 0.000 | 3. |
| 90. | 0.03 | 0.000 | 30. | 190. | 0.00 | 0.000 | 3. |
| 95. | 0.03 | 0.000 | 26. | 195. | 0.00 | 0.000 | 3. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.254 INCHES
VOLUME OF EXCESS PRECIP = 5.85 ACRE-FEET
PEAK Q = 68. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.40 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W4 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.19 | 1.03 | 0.51 | 10.80 | 0.0100 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.124 | 0.224 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.09 | D= 0.22 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 19.12 | 518.38 | 97.46 | 10.03 |

WIDTH AT 50 = 58. MIN. WIDTH AT 75 = 30. MIN. K50 =0.20 K75 =0.27

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 70. | 46. | 140. | 17. |
| 5. | 26. | 75. | 43. | 145. | 16. |
| 10. | 67. | 80. | 40. | 150. | 15. |
| 15. | 92. | 85. | 37. | 155. | 14. |

| | | | | | |
|---|---|---|---|---|---|
| 20. | 97. | 90. | 35. | 160. | 13. |
| 25. | 90. | 95. | 32. | 165. | 12. |
| 30. | 78. | 100. | 30. | 170. | 11. |
| 35. | 68. | 105. | 28. | 175. | 11. |
| 40. | 70. | 110. | 26. | 180. | 10. |
| 45. | 69. | 115. | 24. | 185. | 9. |
| 50. | 64. | 120. | 23. | 190. | 9. |
| 55. | 59. | 125. | 21. | 195. | 8. |
| 60. | 54. | 130. | 20. | 200. | 7. |
| 65. | 49. | 135. | 18. | 205. | 0. |

1 BASIN ID: W4 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 115. | 0.03 | 0.001 | 14. |
| 5. | 0.03 | 0.000 | 0. | 120. | 0.02 | 0.000 | 13. |
| 10. | 0.06 | 0.001 | 0. | 125. | 0.01 | 0.000 | 12. |
| 15. | 0.13 | 0.003 | 0. | 130. | 0.01 | 0.000 | 12. |
| 20. | 0.22 | 0.015 | 1. | 135. | 0.01 | 0.000 | 11. |
| 25. | 0.37 | 0.106 | 4. | 140. | 0.01 | 0.000 | 10. |
| 30. | 0.17 | 0.115 | 12. | 145. | 0.01 | 0.000 | 9. |
| 35. | 0.09 | 0.037 | 20. | 150. | 0.01 | 0.000 | 9. |
| 40. | 0.07 | 0.020 | 25. | 155. | 0.01 | 0.000 | 8. |
| 45. | 0.06 | 0.014 | 27. | 160. | 0.01 | 0.000 | 8. |
| 50. | 0.05 | 0.005 | 26. | 165. | 0.01 | 0.000 | 7. |
| 55. | 0.05 | 0.006 | 25. | 170. | 0.01 | 0.000 | 7. |
| 60. | 0.05 | 0.007 | 24. | 175. | 0.01 | 0.000 | 6. |
| 65. | 0.05 | 0.007 | 24. | 180. | 0.01 | 0.000 | 6. |
| 70. | 0.05 | 0.007 | 23. | 185. | 0.00 | 0.000 | 6. |
| 75. | 0.05 | 0.007 | 22. | 190. | 0.00 | 0.000 | 5. |
| 80. | 0.04 | 0.003 | 21. | 195. | 0.00 | 0.000 | 5. |
| 85. | 0.03 | 0.002 | 20. | 200. | 0.00 | 0.000 | 5. |
| 90. | 0.03 | 0.002 | 19. | 205. | 0.00 | 0.000 | 4. |
| 95. | 0.03 | 0.002 | 18. | 210. | 0.00 | 0.000 | 4. |
| 100. | 0.03 | 0.002 | 17. | 215. | 0.00 | 0.000 | 4. |
| 105. | 0.03 | 0.002 | 16. | 220. | 0.00 | 0.000 | 3. |
| 110. | 0.03 | 0.002 | 15. | 225. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.368 INCHES
VOLUME OF EXCESS PRECIP = 3.69 ACRE-FEET
PEAK Q = 27. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W5 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.43 | 1.20 | 0.67 | 2.00 | 0.0170 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.294 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.06 | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.04 |
|---|---|

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 24.85 | 504.98 | 216.13 | 22.83 |

WIDTH AT 50 = 59. MIN. WIDTH AT 75 = 31. MIN. K50 =0.25 K75 =0.34

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.60 IN./HR. DECAY = 0.00160/SECOND FNINFL = 0.70 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 85. | 84. | 170. | 22. |
| 5. | 39. | 90. | 78. | 175. | 20. |
| 10. | 109. | 95. | 72. | 180. | 19. |
| 15. | 170. | 100. | 66. | 185. | 17. |
| 20. | 206. | 105. | 61. | 190. | 16. |
| 25. | 216. | 110. | 57. | 195. | 15. |
| 30. | 208. | 115. | 52. | 200. | 14. |
| 35. | 191. | 120. | 48. | 205. | 13. |
| 40. | 172. | 125. | 45. | 210. | 12. |
| 45. | 162. | 130. | 41. | 215. | 11. |
| 50. | 151. | 135. | 38. | 220. | 10. |
| 55. | 140. | 140. | 35. | 225. | 9. |
| 60. | 129. | 145. | 32. | 230. | 8. |
| 65. | 118. | 150. | 30. | 235. | 8. |
| 70. | 107. | 155. | 28. | 240. | 0. |
| 75. | 99. | 160. | 26. | 0. | 0. |
| 80. | 91. | 165. | 24. | 0. | 0. |

1 BASIN ID: W5 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 125. | 0.01 | 0.000 | 10. |
| 5. | 0.03 | 0.000 | 0. | 130. | 0.01 | 0.000 | 10. |
| 10. | 0.06 | 0.000 | 0. | 135. | 0.01 | 0.000 | 9. |
| 15. | 0.13 | 0.000 | 0. | 140. | 0.01 | 0.000 | 8. |
| 20. | 0.22 | 0.000 | 0. | 145. | 0.01 | 0.000 | 8. |
| 25. | 0.37 | 0.031 | 1. | 150. | 0.01 | 0.000 | 7. |
| 30. | 0.17 | 0.095 | 7. | 155. | 0.01 | 0.000 | 7. |
| 35. | 0.09 | 0.020 | 16. | 160. | 0.01 | 0.000 | 6. |
| 40. | 0.07 | 0.004 | 25. | 165. | 0.01 | 0.000 | 6. |
| 45. | 0.06 | 0.001 | 30. | 170. | 0.01 | 0.000 | 5. |
| 50. | 0.05 | 0.000 | 32. | 175. | 0.01 | 0.000 | 5. |
| 55. | 0.05 | 0.001 | 31. | 180. | 0.01 | 0.000 | 4. |
| 60. | 0.05 | 0.001 | 29. | 185. | 0.00 | 0.000 | 4. |
| 65. | 0.05 | 0.001 | 27. | 190. | 0.00 | 0.000 | 4. |
| 70. | 0.05 | 0.001 | 25. | 195. | 0.00 | 0.000 | 3. |
| 75. | 0.05 | 0.001 | 23. | 200. | 0.00 | 0.000 | 3. |
| 80. | 0.04 | 0.000 | 22. | 205. | 0.00 | 0.000 | 3. |
| 85. | 0.03 | 0.000 | 20. | 210. | 0.00 | 0.000 | 3. |
| 90. | 0.03 | 0.000 | 18. | 215. | 0.00 | 0.000 | 3. |
| 95. | 0.03 | 0.000 | 17. | 220. | 0.00 | 0.000 | 2. |
| 100. | 0.03 | 0.000 | 16. | 225. | 0.00 | 0.000 | 2. |
| 105. | 0.03 | 0.000 | 14. | 230. | 0.00 | 0.000 | 2. |
| 110. | 0.03 | 0.000 | 13. | 235. | 0.00 | 0.000 | 2. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 115. | 0.03 | 0.000 | 12. | | 240. | 0.00 | 0.000 | 2. |
| 120. | 0.02 | 0.000 | 11. | | 245. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.155 INCHES
VOLUME OF EXCESS PRECIP = 3.53 ACRE-FEET
PEAK Q = 32. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.60 IN/HR DECAY =0.00160 FNINF = 0.70 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W6 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.11 | 0.40 | 0.07 | 2.00 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.241 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 17.58 | 80.00 | 613.95 | 69.99 | 6.08 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 7.83)

WIDTH AT 50 = 49. MIN. WIDTH AT 75 = 25. MIN. K50 =0.22 K75 =0.29

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 55. | 36. | 110. | 15. |
| 5. | 21. | 60. | 33. | 115. | 14. |
| 10. | 52. | 65. | 30. | 120. | 13. |
| 15. | 68. | 70. | 28. | 125. | 12. |
| 20. | 69. | 75. | 26. | 130. | 11. |
| 25. | 61. | 80. | 24. | 135. | 10. |
| 30. | 53. | 85. | 22. | 140. | 9. |
| 35. | 52. | 90. | 21. | 145. | 9. |
| 40. | 49. | 95. | 19. | 150. | 8. |
| 45. | 44. | 100. | 18. | 155. | 7. |
| 50. | 40. | 105. | 16. | 160. | 0. |

1 BASIN ID: W6 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 90. | 0.03 | 0.000 | 8. |
| 5. | 0.03 | 0.000 | 0. | 95. | 0.03 | 0.000 | 7. |
| 10. | 0.06 | 0.000 | 0. | 100. | 0.03 | 0.000 | 7. |
| 15. | 0.13 | 0.000 | 0. | 105. | 0.03 | 0.000 | 6. |
| 20. | 0.22 | 0.000 | 0. | 110. | 0.03 | 0.000 | 6. |
| 25. | 0.37 | 0.068 | 1. | 115. | 0.03 | 0.000 | 5. |
| 30. | 0.17 | 0.109 | 6. | 120. | 0.02 | 0.000 | 5. |
| 35. | 0.09 | 0.032 | 11. | 125. | 0.01 | 0.000 | 5. |
| 40. | 0.07 | 0.015 | 14. | 130. | 0.01 | 0.000 | 4. |
| 45. | 0.06 | 0.010 | 15. | 135. | 0.01 | 0.000 | 4. |
| 50. | 0.05 | 0.001 | 14. | 140. | 0.01 | 0.000 | 4. |
| 55. | 0.05 | 0.002 | 13. | 145. | 0.01 | 0.000 | 3. |
| 60. | 0.05 | 0.002 | 13. | 150. | 0.01 | 0.000 | 3. |
| 65. | 0.05 | 0.003 | 12. | 155. | 0.01 | 0.000 | 3. |
| 70. | 0.05 | 0.003 | 11. | 160. | 0.01 | 0.000 | 3. |
| 75. | 0.05 | 0.003 | 10. | 165. | 0.01 | 0.000 | 2. |
| 80. | 0.04 | 0.000 | 9. | 170. | 0.01 | 0.000 | 2. |
| 85. | 0.03 | 0.000 | 9. | 175. | 0.01 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.250 INCHES
VOLUME OF EXCESS PRECIP = 1.52 ACRE-FEET
PEAK Q = 15. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W7 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.01 | 0.14 | 0.04 | 30.00 | 0.0070 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.099 | 0.189 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.16 | D= 0.60 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 7.50 | 22.00 | 1453.96 | 10.18 | 0.37 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 4.19)

WIDTH AT 50 = 21. MIN. WIDTH AT 75 = 11. MIN. K50 =0.22 K75 =0.30

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 25. | 5. | 50. | 6. |
| 5. | 9. | 30. | 5. | 55. | 7. |
| 10. | 9. | 35. | 6. | 60. | 7. |
| 15. | 8. | 40. | 6. | 65. | 7. |
| 20. | 6. | 45. | 6. | 70. | 0. |

1 BASIN ID: W7 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 50. | 0.05 | 0.015 | 3. |
| 5. | 0.03 | 0.000 | 0. | 55. | 0.05 | 0.015 | 3. |
| 10. | 0.06 | 0.007 | 0. | 60. | 0.05 | 0.016 | 3. |
| 15. | 0.13 | 0.023 | 0. | 65. | 0.05 | 0.016 | 3. |
| 20. | 0.22 | 0.052 | 1. | 70. | 0.05 | 0.016 | 4. |
| 25. | 0.37 | 0.168 | 2. | 75. | 0.05 | 0.016 | 4. |
| 30. | 0.17 | 0.126 | 3. | 80. | 0.04 | 0.011 | 4. |
| 35. | 0.09 | 0.048 | 3. | 85. | 0.03 | 0.007 | 4. |
| 40. | 0.07 | 0.030 | 3. | 90. | 0.03 | 0.007 | 2. |
| 45. | 0.06 | 0.024 | 3. | 95. | 0.03 | 0.007 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.657 INCHES
VOLUME OF EXCESS PRECIP = 0.25 ACRE-FEET
PEAK Q = 4. CFS TIME OF PEAK = 80. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.
1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W9 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.20 | 0.80 | 0.37 | 2.00 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.263 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.06

FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.04

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 17.55 | 671.02 | 136.89 | 10.88 |

WIDTH AT 50 = 45. MIN. WIDTH AT 75 = 23. MIN. K50 =0.24 K75 =0.32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 60. | 58. | 120. | 18. |
| 5. | 42. | 65. | 53. | 125. | 16. |
| 10. | 102. | 70. | 48. | 130. | 14. |
| 15. | 134. | 75. | 43. | 135. | 13. |
| 20. | 134. | 80. | 39. | 140. | 12. |
| 25. | 120. | 85. | 35. | 145. | 11. |
| 30. | 105. | 90. | 32. | 150. | 10. |
| 35. | 100. | 95. | 29. | 155. | 9. |
| 40. | 90. | 100. | 26. | 160. | 8. |
| 45. | 81. | 105. | 24. | 165. | 0. |
| 50. | 72. | 110. | 22. | 0. | 0. |
| 55. | 64. | 115. | 19. | 0. | 0. |

1 BASIN ID: W9 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 95. | 0.03 | 0.000 | 13. |
| 5. | 0.03 | 0.000 | 0. | 100. | 0.03 | 0.000 | 12. |
| 10. | 0.06 | 0.000 | 0. | 105. | 0.03 | 0.000 | 10. |
| 15. | 0.13 | 0.000 | 0. | 110. | 0.03 | 0.000 | 9. |
| 20. | 0.22 | 0.000 | 0. | 115. | 0.03 | 0.000 | 9. |
| 25. | 0.37 | 0.068 | 3. | 120. | 0.02 | 0.000 | 8. |
| 30. | 0.17 | 0.109 | 12. | 125. | 0.01 | 0.000 | 7. |
| 35. | 0.09 | 0.032 | 22. | 130. | 0.01 | 0.000 | 6. |
| 40. | 0.07 | 0.015 | 28. | 135. | 0.01 | 0.000 | 6. |
| 45. | 0.06 | 0.010 | 29. | 140. | 0.01 | 0.000 | 5. |
| 50. | 0.05 | 0.001 | 28. | 145. | 0.01 | 0.000 | 5. |
| 55. | 0.05 | 0.002 | 26. | 150. | 0.01 | 0.000 | 4. |
| 60. | 0.05 | 0.002 | 24. | 155. | 0.01 | 0.000 | 4. |
| 65. | 0.05 | 0.003 | 22. | 160. | 0.01 | 0.000 | 4. |
| 70. | 0.05 | 0.003 | 20. | 165. | 0.01 | 0.000 | 3. |
| 75. | 0.05 | 0.003 | 19. | 170. | 0.01 | 0.000 | 3. |
| 80. | 0.04 | 0.000 | 17. | 175. | 0.01 | 0.000 | 3. |
| 85. | 0.03 | 0.000 | 16. | 180. | 0.01 | 0.000 | 2. |
| 90. | 0.03 | 0.000 | 14. | 185. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.250 INCHES
VOLUME OF EXCESS PRECIP = 2.72 ACRE-FEET
PEAK Q = 29. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR

MAX.PERV.RET.=0.35 IN.  MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W11 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.08 | 0.51 | 0.22 | 15.00 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.118 | 0.203 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.10 | D= 0.30 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 17.53 | 90.00 | 518.54 | 40.45 | 4.16 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 10.21)

WIDTH AT 50 = 58. MIN. WIDTH AT 75 = 30. MIN. K50 =0.18 K75 =0.25

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 65. | 20. | 130. | 12. |
| 5. | 12. | 70. | 19. | 135. | 11. |
| 10. | 30. | 75. | 19. | 140. | 11. |
| 15. | 39. | 80. | 18. | 145. | 11. |
| 20. | 40. | 85. | 17. | 150. | 10. |
| 25. | 35. | 90. | 17. | 155. | 10. |
| 30. | 29. | 95. | 16. | 160. | 9. |
| 35. | 26. | 100. | 15. | 165. | 9. |
| 40. | 30. | 105. | 15. | 170. | 9. |
| 45. | 28. | 110. | 14. | 175. | 8. |
| 50. | 26. | 115. | 13. | 180. | 8. |
| 55. | 24. | 120. | 13. | 185. | 8. |
| 60. | 22. | 125. | 12. | 190. | 0. |

1 BASIN ID: W11 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| 0. | 0.00 | 0.000 | 0. | | 110. | 0.03 | 0.003 | 8. |
| 5. | 0.03 | 0.000 | 0. | | 115. | 0.03 | 0.002 | 8. |
| 10. | 0.06 | 0.002 | 0. | | 120. | 0.02 | 0.001 | 7. |
| 15. | 0.13 | 0.006 | 0. | | 125. | 0.01 | 0.001 | 7. |
| 20. | 0.22 | 0.024 | 1. | | 130. | 0.01 | 0.001 | 7. |
| 25. | 0.37 | 0.120 | 3. | | 135. | 0.01 | 0.001 | 6. |
| 30. | 0.17 | 0.117 | 6. | | 140. | 0.01 | 0.001 | 6. |
| 35. | 0.09 | 0.040 | 10. | | 145. | 0.01 | 0.001 | 6. |
| 40. | 0.07 | 0.022 | 12. | | 150. | 0.01 | 0.001 | 6. |
| 45. | 0.06 | 0.016 | 12. | | 155. | 0.01 | 0.001 | 6. |
| 50. | 0.05 | 0.007 | 11. | | 160. | 0.01 | 0.001 | 5. |
| 55. | 0.05 | 0.008 | 11. | | 165. | 0.01 | 0.001 | 5. |
| 60. | 0.05 | 0.009 | 11. | | 170. | 0.01 | 0.001 | 5. |
| 65. | 0.05 | 0.009 | 11. | | 175. | 0.01 | 0.001 | 5. |
| 70. | 0.05 | 0.009 | 11. | | 180. | 0.01 | 0.001 | 5. |
| 75. | 0.05 | 0.009 | 10. | | 185. | 0.00 | 0.000 | 4. |
| 80. | 0.04 | 0.005 | 10. | | 190. | 0.00 | 0.000 | 4. |
| 85. | 0.03 | 0.003 | 10. | | 195. | 0.00 | 0.000 | 4. |
| 90. | 0.03 | 0.003 | 9. | | 200. | 0.00 | 0.000 | 4. |
| 95. | 0.03 | 0.003 | 9. | | 205. | 0.00 | 0.000 | 4. |
| 100. | 0.03 | 0.003 | 8. | | 210. | 0.00 | 0.000 | 3. |
| 105. | 0.03 | 0.003 | 8. | | 215. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.428 INCHES
VOLUME OF EXCESS PRECIP = 1.78 ACRE-FEET
PEAK Q = 12. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W12 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.44 | 1.14 | 0.59 | 10.90 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.124 | 0.255 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.09 | D= 0.22 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 21.60 | 513.48 | 227.99 | 23.68 |

WIDTH AT 50 = 58. MIN. WIDTH AT 75 = 30. MIN. K50 =0.22 K75 =0.30

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 85. | 86. | 170. | 22. |
| 5. | 51. | 90. | 79. | 175. | 21. |
| 10. | 137. | 95. | 73. | 180. | 19. |
| 15. | 200. | 100. | 68. | 185. | 18. |
| 20. | 227. | 105. | 63. | 190. | 16. |
| 25. | 223. | 110. | 58. | 195. | 15. |
| 30. | 203. | 115. | 53. | 200. | 14. |
| 35. | 180. | 120. | 49. | 205. | 13. |
| 40. | 168. | 125. | 46. | 210. | 12. |
| 45. | 166. | 130. | 42. | 215. | 11. |
| 50. | 154. | 135. | 39. | 220. | 10. |
| 55. | 142. | 140. | 36. | 225. | 9. |
| 60. | 131. | 145. | 33. | 230. | 9. |
| 65. | 119. | 150. | 31. | 235. | 8. |
| 70. | 109. | 155. | 28. | 240. | 7. |
| 75. | 101. | 160. | 26. | 245. | 0. |
| 80. | 93. | 165. | 24. | 0. | 0. |

1 BASIN ID: W12 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 135. | 0.01 | 0.000 | 24. |
| 5. | 0.03 | 0.000 | 0. | 140. | 0.01 | 0.000 | 23. |
| 10. | 0.06 | 0.001 | 0. | 145. | 0.01 | 0.000 | 21. |
| 15. | 0.13 | 0.003 | 0. | 150. | 0.01 | 0.000 | 20. |
| 20. | 0.22 | 0.015 | 1. | 155. | 0.01 | 0.000 | 18. |
| 25. | 0.37 | 0.106 | 8. | 160. | 0.01 | 0.000 | 17. |
| 30. | 0.17 | 0.115 | 24. | 165. | 0.01 | 0.000 | 16. |
| 35. | 0.09 | 0.037 | 43. | 170. | 0.01 | 0.000 | 15. |
| 40. | 0.07 | 0.020 | 57. | 175. | 0.01 | 0.000 | 13. |
| 45. | 0.06 | 0.014 | 64. | 180. | 0.01 | 0.000 | 13. |
| 50. | 0.05 | 0.005 | 65. | 185. | 0.00 | 0.000 | 12. |
| 55. | 0.05 | 0.006 | 62. | 190. | 0.00 | 0.000 | 11. |
| 60. | 0.05 | 0.007 | 59. | 195. | 0.00 | 0.000 | 10. |
| 65. | 0.05 | 0.007 | 57. | 200. | 0.00 | 0.000 | 9. |
| 70. | 0.05 | 0.007 | 56. | 205. | 0.00 | 0.000 | 9. |
| 75. | 0.05 | 0.007 | 54. | 210. | 0.00 | 0.000 | 8. |
| 80. | 0.04 | 0.004 | 52. | 215. | 0.00 | 0.000 | 7. |
| 85. | 0.03 | 0.002 | 49. | 220. | 0.00 | 0.000 | 7. |
| 90. | 0.03 | 0.002 | 46. | 225. | 0.00 | 0.000 | 6. |
| 95. | 0.03 | 0.002 | 43. | 230. | 0.00 | 0.000 | 6. |
| 100. | 0.03 | 0.002 | 40. | 235. | 0.00 | 0.000 | 5. |
| 105. | 0.03 | 0.002 | 37. | 240. | 0.00 | 0.000 | 5. |
| 110. | 0.03 | 0.002 | 35. | 245. | 0.00 | 0.000 | 5. |
| 115. | 0.03 | 0.001 | 33. | 250. | 0.00 | 0.000 | 4. |
| 120. | 0.02 | 0.000 | 31. | 255. | 0.00 | 0.000 | 4. |
| 125. | 0.01 | 0.000 | 28. | 260. | 0.00 | 0.000 | 3. |
| 130. | 0.01 | 0.000 | 26. | 265. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.369 INCHES
VOLUME OF EXCESS PRECIP = 8.74 ACRE-FEET
PEAK Q = 65. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W13 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.65 | 1.30 | 0.58 | 3.70 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.149 | 0.301 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.07 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 25.11 | 511.27 | 334.37 | 34.88 |

WIDTH AT 50 = 59. MIN. WIDTH AT 75 = 31. MIN. K50 =0.26 K75 =0.35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.30 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 90. | 117. | 180. | 26. |
| 5. | 59. | 95. | 108. | 185. | 24. |
| 10. | 166. | 100. | 99. | 190. | 22. |
| 15. | 260. | 105. | 92. | 195. | 21. |
| 20. | 318. | 110. | 84. | 200. | 19. |
| 25. | 334. | 115. | 78. | 205. | 17. |
| 30. | 323. | 120. | 71. | 210. | 16. |
| 35. | 297. | 125. | 66. | 215. | 15. |
| 40. | 268. | 130. | 60. | 220. | 14. |
| 45. | 251. | 135. | 56. | 225. | 12. |
| 50. | 233. | 140. | 51. | 230. | 11. |
| 55. | 215. | 145. | 47. | 235. | 11. |
| 60. | 198. | 150. | 43. | 240. | 10. |
| 65. | 180. | 155. | 40. | 245. | 9. |
| 70. | 164. | 160. | 37. | 250. | 8. |
| 75. | 151. | 165. | 34. | 255. | 8. |
| 80. | 139. | 170. | 31. | 260. | 0. |
| 85. | 128. | 175. | 29. | 0. | 0. |

1 BASIN ID: W13 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 140. | 0.01 | 0.000 | 22. |
| 5. | 0.03 | 0.000 | 0. | 145. | 0.01 | 0.000 | 20. |
| 10. | 0.06 | 0.000 | 0. | 150. | 0.01 | 0.000 | 18. |
| 15. | 0.13 | 0.000 | 0. | 155. | 0.01 | 0.000 | 17. |
| 20. | 0.22 | 0.001 | 0. | 160. | 0.01 | 0.000 | 15. |
| 25. | 0.37 | 0.073 | 5. | 165. | 0.01 | 0.000 | 14. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 30. | 0.17 | 0.109 | 19. | 170. | 0.01 | 0.000 | 13. |
| 35. | 0.09 | 0.032 | 39. | 175. | 0.01 | 0.000 | 12. |
| 40. | 0.07 | 0.015 | 58. | 180. | 0.01 | 0.000 | 11. |
| 45. | 0.06 | 0.010 | 71. | 185. | 0.00 | 0.000 | 10. |
| 50. | 0.05 | 0.002 | 76. | 190. | 0.00 | 0.000 | 9. |
| 55. | 0.05 | 0.002 | 76. | 195. | 0.00 | 0.000 | 9. |
| 60. | 0.05 | 0.003 | 72. | 200. | 0.00 | 0.000 | 8. |
| 65. | 0.05 | 0.003 | 67. | 205. | 0.00 | 0.000 | 7. |
| 70. | 0.05 | 0.003 | 64. | 210. | 0.00 | 0.000 | 7. |
| 75. | 0.05 | 0.004 | 60. | 215. | 0.00 | 0.000 | 6. |
| 80. | 0.04 | 0.001 | 57. | 220. | 0.00 | 0.000 | 6. |
| 85. | 0.03 | 0.000 | 53. | 225. | 0.00 | 0.000 | 5. |
| 90. | 0.03 | 0.000 | 49. | 230. | 0.00 | 0.000 | 5. |
| 95. | 0.03 | 0.000 | 45. | 235. | 0.00 | 0.000 | 4. |
| 100. | 0.03 | 0.000 | 42. | 240. | 0.00 | 0.000 | 4. |
| 105. | 0.03 | 0.000 | 38. | 245. | 0.00 | 0.000 | 4. |
| 110. | 0.03 | 0.000 | 35. | 250. | 0.00 | 0.000 | 3. |
| 115. | 0.03 | 0.000 | 33. | 255. | 0.00 | 0.000 | 3. |
| 120. | 0.02 | 0.000 | 30. | 260. | 0.00 | 0.000 | 3. |
| 125. | 0.01 | 0.000 | 28. | 265. | 0.00 | 0.000 | 3. |
| 130. | 0.01 | 0.000 | 25. | 270. | 0.00 | 0.000 | 3. |
| 135. | 0.01 | 0.000 | 23. | 275. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.259 INCHES
VOLUME OF EXCESS PRECIP = 9.04 ACRE-FEET
PEAK Q = 76. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.30 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W14 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.30 | 1.02 | 0.37 | 7.20 | 0.0140 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.136 | 0.250 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.08

FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.14

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 16.81 | 670.65 | 198.51 | 15.79 |

WIDTH AT 50 = 45. MIN. WIDTH AT 75 = 23. MIN. K50 =0.23 K75 =0.31

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT | TIME | UNIT | TIME | UNIT |
|---|---|---|---|---|---|

| HYDROGRAPH | | HYDROGRAPH | | HYDROGRAPH | |
|---|---|---|---|---|---|
| 0. | 0. | 65. | 75. | 130. | 20. |
| 5. | 65. | 70. | 68. | 135. | 18. |
| 10. | 154. | 75. | 61. | 140. | 16. |
| 15. | 196. | 80. | 55. | 145. | 15. |
| 20. | 192. | 85. | 50. | 150. | 13. |
| 25. | 168. | 90. | 45. | 155. | 12. |
| 30. | 148. | 95. | 41. | 160. | 11. |
| 35. | 143. | 100. | 37. | 165. | 10. |
| 40. | 130. | 105. | 33. | 170. | 9. |
| 45. | 117. | 110. | 30. | 175. | 8. |
| 50. | 103. | 115. | 27. | 180. | 0. |
| 55. | 92. | 120. | 24. | 0. | 0. |
| 60. | 83. | 125. | 22. | 0. | 0. |

1 BASIN ID: W14 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 100. | 0.03 | 0.001 | 21. |
| 5. | 0.03 | 0.000 | 0. | 105. | 0.03 | 0.001 | 19. |
| 10. | 0.06 | 0.000 | 0. | 110. | 0.03 | 0.001 | 17. |
| 15. | 0.13 | 0.001 | 0. | 115. | 0.03 | 0.000 | 16. |
| 20. | 0.22 | 0.006 | 1. | 120. | 0.02 | 0.000 | 14. |
| 25. | 0.37 | 0.085 | 7. | 125. | 0.01 | 0.000 | 13. |
| 30. | 0.17 | 0.110 | 22. | 130. | 0.01 | 0.000 | 12. |
| 35. | 0.09 | 0.033 | 37. | 135. | 0.01 | 0.000 | 11. |
| 40. | 0.07 | 0.017 | 45. | 140. | 0.01 | 0.000 | 10. |
| 45. | 0.06 | 0.011 | 46. | 145. | 0.01 | 0.000 | 9. |
| 50. | 0.05 | 0.004 | 44. | 150. | 0.01 | 0.000 | 8. |
| 55. | 0.05 | 0.004 | 41. | 155. | 0.01 | 0.000 | 7. |
| 60. | 0.05 | 0.005 | 39. | 160. | 0.01 | 0.000 | 6. |
| 65. | 0.05 | 0.005 | 37. | 165. | 0.01 | 0.000 | 6. |
| 70. | 0.05 | 0.005 | 34. | 170. | 0.01 | 0.000 | 5. |
| 75. | 0.05 | 0.005 | 32. | 175. | 0.01 | 0.000 | 5. |
| 80. | 0.04 | 0.002 | 29. | 180. | 0.01 | 0.000 | 4. |
| 85. | 0.03 | 0.001 | 27. | 185. | 0.00 | 0.000 | 4. |
| 90. | 0.03 | 0.001 | 25. | 190. | 0.00 | 0.000 | 4. |
| 95. | 0.03 | 0.001 | 23. | 195. | 0.00 | 0.000 | 3. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.300 INCHES
VOLUME OF EXCESS PRECIP = 4.73 ACRE-FEET
PEAK Q = 46. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W15 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.10 | 0.44 | 0.28 | 2.00 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|

0.156 0.235

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 18.14 | 83.00 | 577.57 | 56.02 | 5.17 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 13.15)

WIDTH AT 50 = 52. MIN. WIDTH AT 75 = 27. MIN. K50 =0.21 K75 =0.28

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 60. | 28. | 120. | 13. |
| 5. | 16. | 65. | 26. | 125. | 12. |
| 10. | 40. | 70. | 24. | 130. | 12. |
| 15. | 54. | 75. | 23. | 135. | 11. |
| 20. | 55. | 80. | 22. | 140. | 10. |
| 25. | 50. | 85. | 20. | 145. | 10. |
| 30. | 43. | 90. | 19. | 150. | 9. |
| 35. | 40. | 95. | 18. | 155. | 8. |
| 40. | 40. | 100. | 17. | 160. | 8. |
| 45. | 37. | 105. | 16. | 165. | 7. |
| 50. | 34. | 110. | 15. | 170. | 0. |
| 55. | 31. | 115. | 14. | 0. | 0. |

1 BASIN ID: W15 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 95. | 0.03 | 0.000 | 6. |
| 5. | 0.03 | 0.000 | 0. | 100. | 0.03 | 0.000 | 6. |
| 10. | 0.06 | 0.000 | 0. | 105. | 0.03 | 0.000 | 6. |
| 15. | 0.13 | 0.000 | 0. | 110. | 0.03 | 0.000 | 5. |
| 20. | 0.22 | 0.000 | 0. | 115. | 0.03 | 0.000 | 5. |
| 25. | 0.37 | 0.068 | 1. | 120. | 0.02 | 0.000 | 5. |
| 30. | 0.17 | 0.109 | 5. | 125. | 0.01 | 0.000 | 4. |
| 35. | 0.09 | 0.032 | 9. | 130. | 0.01 | 0.000 | 4. |
| 40. | 0.07 | 0.015 | 11. | 135. | 0.01 | 0.000 | 4. |
| 45. | 0.06 | 0.010 | 12. | 140. | 0.01 | 0.000 | 4. |
| 50. | 0.05 | 0.001 | 11. | 145. | 0.01 | 0.000 | 3. |
| 55. | 0.05 | 0.002 | 11. | 150. | 0.01 | 0.000 | 3. |
| 60. | 0.05 | 0.002 | 10. | 155. | 0.01 | 0.000 | 3. |
| 65. | 0.05 | 0.003 | 10. | 160. | 0.01 | 0.000 | 3. |
| 70. | 0.05 | 0.003 | 9. | 165. | 0.01 | 0.000 | 3. |
| 75. | 0.05 | 0.003 | 9. | 170. | 0.01 | 0.000 | 2. |
| 80. | 0.04 | 0.000 | 8. | 175. | 0.01 | 0.000 | 2. |
| 85. | 0.03 | 0.000 | 7. | 180. | 0.01 | 0.000 | 2. |
| 90. | 0.03 | 0.000 | 7. | 185. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.250 INCHES
VOLUME OF EXCESS PRECIP = 1.29 ACRE-FEET
PEAK Q = 12. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W16 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.63 | 1.67 | 0.61 | 2.60 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.153 | 0.307 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.05 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 29.34 | 439.57 | 278.25 | 33.76 |

WIDTH AT 50 = 68. MIN. WIDTH AT 75 = 35. MIN. K50 =0.26 K75 =0.35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.20 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 100. | 105. | 200. | 25. |
| 5. | 38. | 105. | 98. | 205. | 24. |
| 10. | 112. | 110. | 91. | 210. | 22. |
| 15. | 187. | 115. | 85. | 215. | 21. |
| 20. | 241. | 120. | 79. | 220. | 19. |
| 25. | 271. | 125. | 74. | 225. | 18. |
| 30. | 278. | 130. | 69. | 230. | 17. |
| 35. | 269. | 135. | 64. | 235. | 16. |
| 40. | 251. | 140. | 60. | 240. | 14. |
| 45. | 230. | 145. | 55. | 245. | 13. |
| 50. | 213. | 150. | 52. | 250. | 13. |
| 55. | 202. | 155. | 48. | 255. | 12. |
| 60. | 189. | 160. | 45. | 260. | 11. |
| 65. | 177. | 165. | 42. | 265. | 10. |
| 70. | 164. | 170. | 39. | 270. | 9. |
| 75. | 152. | 175. | 36. | 275. | 9. |
| 80. | 139. | 180. | 34. | 280. | 8. |
| 85. | 130. | 185. | 31. | 285. | 8. |
| 90. | 121. | 190. | 29. | 290. | 0. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 95. | 112. | 195. | 27. | 0. | 0. | | |

1 BASIN ID: W16 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 155. | 0.01 | 0.000 | 19. |
| 5. | 0.03 | 0.000 | 0. | 160. | 0.01 | 0.000 | 18. |
| 10. | 0.06 | 0.000 | 0. | 165. | 0.01 | 0.000 | 17. |
| 15. | 0.13 | 0.000 | 0. | 170. | 0.01 | 0.000 | 16. |
| 20. | 0.22 | 0.000 | 0. | 175. | 0.01 | 0.000 | 15. |
| 25. | 0.37 | 0.083 | 3. | 180. | 0.01 | 0.000 | 14. |
| 30. | 0.17 | 0.111 | 14. | 185. | 0.00 | 0.000 | 13. |
| 35. | 0.09 | 0.033 | 29. | 190. | 0.00 | 0.000 | 12. |
| 40. | 0.07 | 0.016 | 45. | 195. | 0.00 | 0.000 | 11. |
| 45. | 0.06 | 0.010 | 58. | 200. | 0.00 | 0.000 | 10. |
| 50. | 0.05 | 0.002 | 66. | 205. | 0.00 | 0.000 | 10. |
| 55. | 0.05 | 0.002 | 68. | 210. | 0.00 | 0.000 | 9. |
| 60. | 0.05 | 0.003 | 68. | 215. | 0.00 | 0.000 | 8. |
| 65. | 0.05 | 0.003 | 64. | 220. | 0.00 | 0.000 | 8. |
| 70. | 0.05 | 0.003 | 61. | 225. | 0.00 | 0.000 | 7. |
| 75. | 0.05 | 0.003 | 58. | 230. | 0.00 | 0.000 | 7. |
| 80. | 0.04 | 0.000 | 55. | 235. | 0.00 | 0.000 | 6. |
| 85. | 0.03 | 0.000 | 52. | 240. | 0.00 | 0.000 | 6. |
| 90. | 0.03 | 0.000 | 49. | 245. | 0.00 | 0.000 | 5. |
| 95. | 0.03 | 0.000 | 46. | 250. | 0.00 | 0.000 | 5. |
| 100. | 0.03 | 0.000 | 43. | 255. | 0.00 | 0.000 | 5. |
| 105. | 0.03 | 0.000 | 40. | 260. | 0.00 | 0.000 | 4. |
| 110. | 0.03 | 0.000 | 37. | 265. | 0.00 | 0.000 | 4. |
| 115. | 0.03 | 0.000 | 34. | 270. | 0.00 | 0.000 | 4. |
| 120. | 0.02 | 0.000 | 32. | 275. | 0.00 | 0.000 | 4. |
| 125. | 0.01 | 0.000 | 30. | 280. | 0.00 | 0.000 | 3. |
| 130. | 0.01 | 0.000 | 28. | 285. | 0.00 | 0.000 | 3. |
| 135. | 0.01 | 0.000 | 26. | 290. | 0.00 | 0.000 | 3. |
| 140. | 0.01 | 0.000 | 24. | 295. | 0.00 | 0.000 | 3. |
| 145. | 0.01 | 0.000 | 22. | 300. | 0.00 | 0.000 | 3. |
| 150. | 0.01 | 0.000 | 21. | 305. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.271 INCHES
VOLUME OF EXCESS PRECIP = 9.14 ACRE-FEET
PEAK Q = 68. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.20 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W17 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.15 | 0.40 | 0.22 | 8.30 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.132 | 0.221 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.08

FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.17

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 10.16 | 1108.67 | 164.08 | 7.89 |

WIDTH AT 50 = 27. MIN. WIDTH AT 75 = 14. MIN. K50 =0.23 K75 =0.31

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 40. | 61. | 80. | 16. |
| 5. | 106. | 45. | 52. | 85. | 14. |
| 10. | 164. | 50. | 44. | 90. | 12. |
| 15. | 139. | 55. | 37. | 95. | 10. |
| 20. | 123. | 60. | 31. | 100. | 8. |
| 25. | 104. | 65. | 27. | 105. | 0. |
| 30. | 86. | 70. | 23. | 0. | 0. |
| 35. | 72. | 75. | 19. | 0. | 0. |

1 BASIN ID: W17 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 70. | 0.05 | 0.006 | 18. |
| 5. | 0.03 | 0.000 | 0. | 75. | 0.05 | 0.006 | 17. |
| 10. | 0.06 | 0.001 | 0. | 80. | 0.04 | 0.003 | 15. |
| 15. | 0.13 | 0.002 | 0. | 85. | 0.03 | 0.001 | 13. |
| 20. | 0.22 | 0.009 | 1. | 90. | 0.03 | 0.001 | 11. |
| 25. | 0.37 | 0.097 | 12. | 95. | 0.03 | 0.001 | 10. |
| 30. | 0.17 | 0.113 | 29. | 100. | 0.03 | 0.001 | 8. |
| 35. | 0.09 | 0.036 | 37. | 105. | 0.03 | 0.001 | 7. |
| 40. | 0.07 | 0.019 | 37. | 110. | 0.03 | 0.001 | 6. |
| 45. | 0.06 | 0.013 | 34. | 115. | 0.03 | 0.001 | 6. |
| 50. | 0.05 | 0.004 | 31. | 120. | 0.02 | 0.000 | 5. |
| 55. | 0.05 | 0.005 | 26. | 125. | 0.01 | 0.000 | 3. |
| 60. | 0.05 | 0.005 | 23. | 130. | 0.01 | 0.000 | 2. |
| 65. | 0.05 | 0.006 | 21. | 135. | 0.01 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.332 INCHES
VOLUME OF EXCESS PRECIP = 2.62 ACRE-FEET
PEAK Q = 37. CFS TIME OF PEAK = 35. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W18 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.17 | 0.88 | 0.41 | 6.30 | 0.0160 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.140 | 0.234 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.07 | D= 0.13 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 16.40 | 646.93 | 111.92 | 9.23 |

WIDTH AT 50 = 46. MIN. WIDTH AT 75 = 24. MIN. K50 =0.21 K75 =0.29

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 60. | 49. | 120. | 16. |
| 5. | 38. | 65. | 45. | 125. | 15. |
| 10. | 89. | 70. | 41. | 130. | 14. |
| 15. | 111. | 75. | 37. | 135. | 13. |
| 20. | 107. | 80. | 34. | 140. | 11. |
| 25. | 92. | 85. | 31. | 145. | 10. |
| 30. | 81. | 90. | 28. | 150. | 10. |
| 35. | 82. | 95. | 26. | 155. | 9. |
| 40. | 75. | 100. | 24. | 160. | 8. |
| 45. | 67. | 105. | 22. | 165. | 0. |
| 50. | 60. | 110. | 20. | 0. | 0. |
| 55. | 54. | 115. | 18. | 0. | 0. |

1 BASIN ID: W18 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 95. | 0.03 | 0.001 | 14. |
| 5. | 0.03 | 0.000 | 0. | 100. | 0.03 | 0.001 | 12. |
| 10. | 0.06 | 0.000 | 0. | 105. | 0.03 | 0.001 | 11. |
| 15. | 0.13 | 0.001 | 0. | 110. | 0.03 | 0.001 | 11. |
| 20. | 0.22 | 0.004 | 0. | 115. | 0.03 | 0.000 | 10. |
| 25. | 0.37 | 0.090 | 4. | 120. | 0.02 | 0.000 | 9. |
| 30. | 0.17 | 0.112 | 13. | 125. | 0.01 | 0.000 | 8. |
| 35. | 0.09 | 0.035 | 22. | 130. | 0.01 | 0.000 | 7. |
| 40. | 0.07 | 0.018 | 26. | 135. | 0.01 | 0.000 | 7. |
| 45. | 0.06 | 0.012 | 27. | 140. | 0.01 | 0.000 | 6. |
| 50. | 0.05 | 0.003 | 25. | 145. | 0.01 | 0.000 | 6. |
| 55. | 0.05 | 0.004 | 24. | 150. | 0.01 | 0.000 | 5. |
| 60. | 0.05 | 0.004 | 23. | 155. | 0.01 | 0.000 | 5. |
| 65. | 0.05 | 0.005 | 21. | 160. | 0.01 | 0.000 | 4. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 70. | 0.05 | 0.005 | 20. | 165. | 0.01 | 0.000 | 4. |
| 75. | 0.05 | 0.005 | 19. | 170. | 0.01 | 0.000 | 4. |
| 80. | 0.04 | 0.002 | 17. | 175. | 0.01 | 0.000 | 3. |
| 85. | 0.03 | 0.001 | 16. | 180. | 0.01 | 0.000 | 3. |
| 90. | 0.03 | 0.001 | 15. | 185. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.305 INCHES
VOLUME OF EXCESS PRECIP = 2.81 ACRE-FEET
PEAK Q = 27. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W19 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.26 | 0.97 | 0.62 | 2.00 | 0.0130 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.272 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 23.29 | 502.90 | 129.25 | 13.71 |

WIDTH AT 50 = 60. MIN. WIDTH AT 75 = 31. MIN. K50 =0.23 K75 =0.32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.60 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 75. | 59. | 150. | 19. |
| 5. | 26. | 80. | 55. | 155. | 18. |
| 10. | 71. | 85. | 51. | 160. | 17. |
| 15. | 107. | 90. | 47. | 165. | 16. |
| 20. | 126. | 95. | 44. | 170. | 14. |
| 25. | 129. | 100. | 41. | 175. | 13. |
| 30. | 121. | 105. | 38. | 180. | 12. |
| 35. | 109. | 110. | 35. | 185. | 12. |
| 40. | 99. | 115. | 33. | 190. | 11. |
| 45. | 96. | 120. | 30. | 195. | 10. |
| 50. | 90. | 125. | 28. | 200. | 9. |
| 55. | 83. | 130. | 26. | 205. | 9. |
| 60. | 76. | 135. | 24. | 210. | 8. |
| 65. | 70. | 140. | 23. | 215. | 7. |

70. 64. | 145. 21. | 220. 0. |

1 BASIN ID: W19 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 120. | 0.02 | 0.000 | 11. |
| 5. | 0.03 | 0.000 | 0. | 125. | 0.01 | 0.000 | 10. |
| 10. | 0.06 | 0.000 | 0. | 130. | 0.01 | 0.000 | 9. |
| 15. | 0.13 | 0.000 | 0. | 135. | 0.01 | 0.000 | 8. |
| 20. | 0.22 | 0.000 | 0. | 140. | 0.01 | 0.000 | 8. |
| 25. | 0.37 | 0.056 | 1. | 145. | 0.01 | 0.000 | 7. |
| 30. | 0.17 | 0.106 | 7. | 150. | 0.01 | 0.000 | 7. |
| 35. | 0.09 | 0.030 | 14. | 155. | 0.01 | 0.000 | 6. |
| 40. | 0.07 | 0.014 | 21. | 160. | 0.01 | 0.000 | 6. |
| 45. | 0.06 | 0.009 | 25. | 165. | 0.01 | 0.000 | 5. |
| 50. | 0.05 | 0.001 | 26. | 170. | 0.01 | 0.000 | 5. |
| 55. | 0.05 | 0.001 | 26. | 175. | 0.01 | 0.000 | 5. |
| 60. | 0.05 | 0.002 | 24. | 180. | 0.01 | 0.000 | 4. |
| 65. | 0.05 | 0.002 | 22. | 185. | 0.00 | 0.000 | 4. |
| 70. | 0.05 | 0.003 | 22. | 190. | 0.00 | 0.000 | 4. |
| 75. | 0.05 | 0.003 | 20. | 195. | 0.00 | 0.000 | 3. |
| 80. | 0.04 | 0.000 | 19. | 200. | 0.00 | 0.000 | 3. |
| 85. | 0.03 | 0.000 | 18. | 205. | 0.00 | 0.000 | 3. |
| 90. | 0.03 | 0.000 | 17. | 210. | 0.00 | 0.000 | 3. |
| 95. | 0.03 | 0.000 | 15. | 215. | 0.00 | 0.000 | 3. |
| 100. | 0.03 | 0.000 | 14. | 220. | 0.00 | 0.000 | 2. |
| 105. | 0.03 | 0.000 | 13. | 225. | 0.00 | 0.000 | 2. |
| 110. | 0.03 | 0.000 | 12. | 230. | 0.00 | 0.000 | 2. |
| 115. | 0.03 | 0.000 | 11. | 235. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.228 INCHES
VOLUME OF EXCESS PRECIP = 3.12 ACRE-FEET
PEAK Q = 26. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.60 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W20 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.69 | 1.37 | 0.52 | 2.00 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.316 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 27.07 | 493.63 | 341.10 | 36.85 |

WIDTH AT 50 = 61. MIN. WIDTH AT 75 = 32. MIN. K50 =0.27 K75 =0.36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.00 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 95. | 117. | 190. | 25. |
| 5. | 53. | 100. | 108. | 195. | 23. |
| 10. | 153. | 105. | 99. | 200. | 21. |
| 15. | 247. | 110. | 92. | 205. | 20. |
| 20. | 312. | 115. | 85. | 210. | 18. |
| 25. | 339. | 120. | 78. | 215. | 17. |
| 30. | 337. | 125. | 72. | 220. | 15. |
| 35. | 317. | 130. | 66. | 225. | 14. |
| 40. | 289. | 135. | 61. | 230. | 13. |
| 45. | 264. | 140. | 56. | 235. | 12. |
| 50. | 246. | 145. | 52. | 240. | 11. |
| 55. | 229. | 150. | 48. | 245. | 10. |
| 60. | 211. | 155. | 44. | 250. | 10. |
| 65. | 194. | 160. | 41. | 255. | 9. |
| 70. | 176. | 165. | 38. | 260. | 8. |
| 75. | 161. | 170. | 35. | 265. | 7. |
| 80. | 149. | 175. | 32. | 270. | 0. |
| 85. | 137. | 180. | 30. | 0. | 0. |
| 90. | 127. | 185. | 27. | 0. | 0. |

1 BASIN ID: W20 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 145. | 0.01 | 0.000 | 21. |
| 5. | 0.03 | 0.000 | 0. | 150. | 0.01 | 0.000 | 19. |
| 10. | 0.06 | 0.000 | 0. | 155. | 0.01 | 0.000 | 18. |
| 15. | 0.13 | 0.000 | 0. | 160. | 0.01 | 0.000 | 16. |
| 20. | 0.22 | 0.000 | 0. | 165. | 0.01 | 0.000 | 15. |
| 25. | 0.37 | 0.074 | 4. | 170. | 0.01 | 0.000 | 14. |
| 30. | 0.17 | 0.109 | 17. | 175. | 0.01 | 0.000 | 13. |
| 35. | 0.09 | 0.032 | 37. | 180. | 0.01 | 0.000 | 12. |
| 40. | 0.07 | 0.015 | 56. | 185. | 0.00 | 0.000 | 11. |
| 45. | 0.06 | 0.009 | 70. | 190. | 0.00 | 0.000 | 10. |
| 50. | 0.05 | 0.001 | 77. | 195. | 0.00 | 0.000 | 9. |
| 55. | 0.05 | 0.002 | 78. | 200. | 0.00 | 0.000 | 9. |
| 60. | 0.05 | 0.002 | 75. | 205. | 0.00 | 0.000 | 8. |
| 65. | 0.05 | 0.002 | 71. | 210. | 0.00 | 0.000 | 7. |
| 70. | 0.05 | 0.003 | 66. | 215. | 0.00 | 0.000 | 7. |
| 75. | 0.05 | 0.003 | 62. | 220. | 0.00 | 0.000 | 6. |
| 80. | 0.04 | 0.000 | 58. | 225. | 0.00 | 0.000 | 6. |
| 85. | 0.03 | 0.000 | 55. | 230. | 0.00 | 0.000 | 5. |
| 90. | 0.03 | 0.000 | 51. | 235. | 0.00 | 0.000 | 5. |
| 95. | 0.03 | 0.000 | 47. | 240. | 0.00 | 0.000 | 4. |
| 100. | 0.03 | 0.000 | 43. | 245. | 0.00 | 0.000 | 4. |
| 105. | 0.03 | 0.000 | 39. | 250. | 0.00 | 0.000 | 4. |
| 110. | 0.03 | 0.000 | 36. | 255. | 0.00 | 0.000 | 3. |
| 115. | 0.03 | 0.000 | 34. | 260. | 0.00 | 0.000 | 3. |
| 120. | 0.02 | 0.000 | 31. | 265. | 0.00 | 0.000 | 3. |
| 125. | 0.01 | 0.000 | 29. | 270. | 0.00 | 0.000 | 3. |
| 130. | 0.01 | 0.000 | 26. | 275. | 0.00 | 0.000 | 3. |
| 135. | 0.01 | 0.000 | 24. | 280. | 0.00 | 0.000 | 2. |
| 140. | 0.01 | 0.000 | 22. | 285. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.252 INCHES
VOLUME OF EXCESS PRECIP = 9.30 ACRE-FEET
PEAK Q = 78. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.00 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W21 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.33 | 1.14 | 0.60 | 3.40 | 0.0140 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.150 | 0.273 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.07 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 23.51 | 499.75 | 164.92 | 17.60 |

WIDTH AT 50 = 60. MIN. WIDTH AT 75 = 31. MIN. K50 =0.24 K75 =0.32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 80. | 70. | 160. | 21. |
| 5. | 32. | 85. | 65. | 165. | 19. |
| 10. | 89. | 90. | 60. | 170. | 18. |
| 15. | 136. | 95. | 56. | 175. | 17. |
| 20. | 161. | 100. | 52. | 180. | 15. |
| 25. | 164. | 105. | 48. | 185. | 14. |
| 30. | 155. | 110. | 45. | 190. | 13. |
| 35. | 140. | 115. | 41. | 195. | 12. |
| 40. | 127. | 120. | 38. | 200. | 11. |
| 45. | 123. | 125. | 35. | 205. | 11. |
| 50. | 115. | 130. | 33. | 210. | 10. |
| 55. | 107. | 135. | 30. | 215. | 9. |
| 60. | 98. | 140. | 28. | 220. | 8. |
| 65. | 90. | 145. | 26. | 225. | 8. |
| 70. | 82. | 150. | 24. | 230. | 0. |
| 75. | 76. | 155. | 22. | 0. | 0. |

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 125. | 0.01 | 0.000 | 15. |
| 5. | 0.03 | 0.000 | 0. | 130. | 0.01 | 0.000 | 14. |
| 10. | 0.06 | 0.000 | 0. | 135. | 0.01 | 0.000 | 13. |
| 15. | 0.13 | 0.000 | 0. | 140. | 0.01 | 0.000 | 12. |
| 20. | 0.22 | 0.000 | 0. | 145. | 0.01 | 0.000 | 11. |
| 25. | 0.37 | 0.077 | 3. | 150. | 0.01 | 0.000 | 10. |
| 30. | 0.17 | 0.110 | 11. | 155. | 0.01 | 0.000 | 9. |
| 35. | 0.09 | 0.033 | 21. | 160. | 0.01 | 0.000 | 9. |
| 40. | 0.07 | 0.016 | 31. | 165. | 0.01 | 0.000 | 8. |
| 45. | 0.06 | 0.010 | 37. | 170. | 0.01 | 0.000 | 7. |
| 50. | 0.05 | 0.002 | 39. | 175. | 0.01 | 0.000 | 7. |
| 55. | 0.05 | 0.003 | 38. | 180. | 0.01 | 0.000 | 6. |
| 60. | 0.05 | 0.003 | 35. | 185. | 0.00 | 0.000 | 6. |
| 65. | 0.05 | 0.003 | 33. | 190. | 0.00 | 0.000 | 5. |
| 70. | 0.05 | 0.003 | 32. | 195. | 0.00 | 0.000 | 5. |
| 75. | 0.05 | 0.003 | 31. | 200. | 0.00 | 0.000 | 5. |
| 80. | 0.04 | 0.001 | 29. | 205. | 0.00 | 0.000 | 4. |
| 85. | 0.03 | 0.000 | 27. | 210. | 0.00 | 0.000 | 4. |
| 90. | 0.03 | 0.000 | 25. | 215. | 0.00 | 0.000 | 4. |
| 95. | 0.03 | 0.000 | 23. | 220. | 0.00 | 0.000 | 3. |
| 100. | 0.03 | 0.000 | 21. | 225. | 0.00 | 0.000 | 3. |
| 105. | 0.03 | 0.000 | 20. | 230. | 0.00 | 0.000 | 3. |
| 110. | 0.03 | 0.000 | 18. | 235. | 0.00 | 0.000 | 3. |
| 115. | 0.03 | 0.000 | 17. | 240. | 0.00 | 0.000 | 3. |
| 120. | 0.02 | 0.000 | 16. | 245. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.267 INCHES
VOLUME OF EXCESS PRECIP = 4.69 ACRE-FEET
PEAK Q = 39. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W22 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.40 | 1.17 | 0.65 | 2.00 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.291 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|

26.23 470.49 187.25 21.23

WIDTH AT 50 = 64. MIN. WIDTH AT 75 = 33. MIN. K50 =0.25 K75 =0.34

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 85. | 80. | 170. | 23. |
| 5. | 31. | 90. | 74. | 175. | 21. |
| 10. | 88. | 95. | 69. | 180. | 20. |
| 15. | 140. | 100. | 64. | 185. | 19. |
| 20. | 174. | 105. | 60. | 190. | 17. |
| 25. | 187. | 110. | 56. | 195. | 16. |
| 30. | 184. | 115. | 52. | 200. | 15. |
| 35. | 171. | 120. | 48. | 205. | 14. |
| 40. | 156. | 125. | 45. | 210. | 13. |
| 45. | 144. | 130. | 41. | 215. | 12. |
| 50. | 137. | 135. | 39. | 220. | 11. |
| 55. | 128. | 140. | 36. | 225. | 10. |
| 60. | 119. | 145. | 33. | 230. | 10. |
| 65. | 110. | 150. | 31. | 235. | 9. |
| 70. | 101. | 155. | 29. | 240. | 8. |
| 75. | 93. | 160. | 27. | 245. | 8. |
| 80. | 86. | 165. | 25. | 250. | 0. |

1 BASIN ID: W22 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 135. | 0.01 | 0.000 | 15. |
| 5. | 0.03 | 0.000 | 0. | 140. | 0.01 | 0.000 | 14. |
| 10. | 0.06 | 0.000 | 0. | 145. | 0.01 | 0.000 | 13. |
| 15. | 0.13 | 0.000 | 0. | 150. | 0.01 | 0.000 | 12. |
| 20. | 0.22 | 0.000 | 0. | 155. | 0.01 | 0.000 | 11. |
| 25. | 0.37 | 0.068 | 2. | 160. | 0.01 | 0.000 | 10. |
| 30. | 0.17 | 0.109 | 9. | 165. | 0.01 | 0.000 | 9. |
| 35. | 0.09 | 0.032 | 20. | 170. | 0.01 | 0.000 | 9. |
| 40. | 0.07 | 0.015 | 31. | 175. | 0.01 | 0.000 | 8. |
| 45. | 0.06 | 0.010 | 38. | 180. | 0.01 | 0.000 | 8. |
| 50. | 0.05 | 0.001 | 42. | 185. | 0.00 | 0.000 | 7. |
| 55. | 0.05 | 0.002 | 42. | 190. | 0.00 | 0.000 | 7. |
| 60. | 0.05 | 0.002 | 40. | 195. | 0.00 | 0.000 | 6. |
| 65. | 0.05 | 0.003 | 38. | 200. | 0.00 | 0.000 | 6. |
| 70. | 0.05 | 0.003 | 36. | 205. | 0.00 | 0.000 | 5. |
| 75. | 0.05 | 0.003 | 34. | 210. | 0.00 | 0.000 | 5. |
| 80. | 0.04 | 0.000 | 32. | 215. | 0.00 | 0.000 | 5. |
| 85. | 0.03 | 0.000 | 31. | 220. | 0.00 | 0.000 | 4. |
| 90. | 0.03 | 0.000 | 29. | 225. | 0.00 | 0.000 | 4. |
| 95. | 0.03 | 0.000 | 26. | 230. | 0.00 | 0.000 | 4. |
| 100. | 0.03 | 0.000 | 24. | 235. | 0.00 | 0.000 | 3. |
| 105. | 0.03 | 0.000 | 23. | 240. | 0.00 | 0.000 | 3. |
| 110. | 0.03 | 0.000 | 21. | 245. | 0.00 | 0.000 | 3. |
| 115. | 0.03 | 0.000 | 19. | 250. | 0.00 | 0.000 | 3. |
| 120. | 0.02 | 0.000 | 18. | 255. | 0.00 | 0.000 | 3. |
| 125. | 0.01 | 0.000 | 17. | 260. | 0.00 | 0.000 | 2. |
| 130. | 0.01 | 0.000 | 16. | 265. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.250 INCHES

VOLUME OF EXCESS PRECIP = 5.30 ACRE-FEET
PEAK Q = 42. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W23 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.88 | 1.20 | 0.73 | 2.00 | 0.0140 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.328 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 26.92 | 515.37 | 455.59 | 47.15 |

WIDTH AT 50 = 58. MIN. WIDTH AT 75 = 30. MIN. K50 =0.28 K75 =0.38

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 95. | 146. | 190. | 28. |
| 5. | 72. | 100. | 134. | 195. | 26. |
| 10. | 206. | 105. | 123. | 200. | 24. |
| 15. | 332. | 110. | 112. | 205. | 22. |
| 20. | 418. | 115. | 103. | 210. | 20. |
| 25. | 453. | 120. | 95. | 215. | 18. |
| 30. | 450. | 125. | 87. | 220. | 17. |
| 35. | 422. | 130. | 80. | 225. | 16. |
| 40. | 383. | 135. | 73. | 230. | 14. |
| 45. | 346. | 140. | 67. | 235. | 13. |
| 50. | 321. | 145. | 62. | 240. | 12. |
| 55. | 296. | 150. | 57. | 245. | 11. |
| 60. | 272. | 155. | 52. | 250. | 10. |
| 65. | 247. | 160. | 48. | 255. | 9. |
| 70. | 224. | 165. | 44. | 260. | 9. |
| 75. | 205. | 170. | 40. | 265. | 8. |
| 80. | 188. | 175. | 37. | 270. | 0. |
| 85. | 173. | 180. | 34. | 0. | 0. |
| 90. | 159. | 185. | 31. | 0. | 0. |

1 BASIN ID: W23 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 145. | 0.01 | 0.000 | 25. |
| 5. | 0.03 | 0.000 | 0. | 150. | 0.01 | 0.000 | 23. |
| 10. | 0.06 | 0.000 | 0. | 155. | 0.01 | 0.000 | 21. |
| 15. | 0.13 | 0.000 | 0. | 160. | 0.01 | 0.000 | 19. |
| 20. | 0.22 | 0.000 | 0. | 165. | 0.01 | 0.000 | 18. |
| 25. | 0.37 | 0.068 | 5. | 170. | 0.01 | 0.000 | 16. |
| 30. | 0.17 | 0.109 | 22. | 175. | 0.01 | 0.000 | 15. |
| 35. | 0.09 | 0.032 | 48. | 180. | 0.01 | 0.000 | 14. |
| 40. | 0.07 | 0.015 | 73. | 185. | 0.00 | 0.000 | 13. |
| 45. | 0.06 | 0.010 | 91. | 190. | 0.00 | 0.000 | 12. |
| 50. | 0.05 | 0.001 | 101. | 195. | 0.00 | 0.000 | 11. |
| 55. | 0.05 | 0.002 | 103. | 200. | 0.00 | 0.000 | 10. |
| 60. | 0.05 | 0.002 | 99. | 205. | 0.00 | 0.000 | 9. |
| 65. | 0.05 | 0.003 | 92. | 210. | 0.00 | 0.000 | 8. |
| 70. | 0.05 | 0.003 | 86. | 215. | 0.00 | 0.000 | 8. |
| 75. | 0.05 | 0.003 | 81. | 220. | 0.00 | 0.000 | 7. |
| 80. | 0.04 | 0.000 | 75. | 225. | 0.00 | 0.000 | 6. |
| 85. | 0.03 | 0.000 | 70. | 230. | 0.00 | 0.000 | 6. |
| 90. | 0.03 | 0.000 | 65. | 235. | 0.00 | 0.000 | 5. |
| 95. | 0.03 | 0.000 | 59. | 240. | 0.00 | 0.000 | 5. |
| 100. | 0.03 | 0.000 | 54. | 245. | 0.00 | 0.000 | 4. |
| 105. | 0.03 | 0.000 | 50. | 250. | 0.00 | 0.000 | 4. |
| 110. | 0.03 | 0.000 | 46. | 255. | 0.00 | 0.000 | 4. |
| 115. | 0.03 | 0.000 | 42. | 260. | 0.00 | 0.000 | 3. |
| 120. | 0.02 | 0.000 | 39. | 265. | 0.00 | 0.000 | 3. |
| 125. | 0.01 | 0.000 | 35. | 270. | 0.00 | 0.000 | 3. |
| 130. | 0.01 | 0.000 | 32. | 275. | 0.00 | 0.000 | 3. |
| 135. | 0.01 | 0.000 | 30. | 280. | 0.00 | 0.000 | 2. |
| 140. | 0.01 | 0.000 | 27. | 285. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.250 INCHES
VOLUME OF EXCESS PRECIP = 11.77 ACRE-FEET
PEAK Q = 103. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W24 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.24 | 0.61 | 0.45 | 2.00 | 0.0140 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.269 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|

16.43 742.27 176.66 12.69

WIDTH AT 50 = 40. MIN. WIDTH AT 75 = 21. MIN. K50 =0.24 K75 =0.33

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 55. | 74. | 110. | 21. |
| 5. | 60. | 60. | 66. | 115. | 19. |
| 10. | 140. | 65. | 59. | 120. | 17. |
| 15. | 175. | 70. | 52. | 125. | 15. |
| 20. | 169. | 75. | 47. | 130. | 13. |
| 25. | 147. | 80. | 42. | 135. | 12. |
| 30. | 133. | 85. | 37. | 140. | 11. |
| 35. | 120. | 90. | 33. | 145. | 9. |
| 40. | 107. | 95. | 30. | 150. | 8. |
| 45. | 94. | 100. | 26. | 155. | 8. |
| 50. | 82. | 105. | 24. | 160. | 0. |

1 BASIN ID: W24 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 90. | 0.03 | 0.000 | 16. |
| 5. | 0.03 | 0.000 | 0. | 95. | 0.03 | 0.000 | 14. |
| 10. | 0.06 | 0.000 | 0. | 100. | 0.03 | 0.000 | 13. |
| 15. | 0.13 | 0.000 | 0. | 105. | 0.03 | 0.000 | 11. |
| 20. | 0.22 | 0.000 | 0. | 110. | 0.03 | 0.000 | 10. |
| 25. | 0.37 | 0.068 | 4. | 115. | 0.03 | 0.000 | 9. |
| 30. | 0.17 | 0.109 | 16. | 120. | 0.02 | 0.000 | 8. |
| 35. | 0.09 | 0.032 | 29. | 125. | 0.01 | 0.000 | 7. |
| 40. | 0.07 | 0.015 | 36. | 130. | 0.01 | 0.000 | 6. |
| 45. | 0.06 | 0.010 | 37. | 135. | 0.01 | 0.000 | 6. |
| 50. | 0.05 | 0.001 | 35. | 140. | 0.01 | 0.000 | 5. |
| 55. | 0.05 | 0.002 | 32. | 145. | 0.01 | 0.000 | 5. |
| 60. | 0.05 | 0.002 | 29. | 150. | 0.01 | 0.000 | 4. |
| 65. | 0.05 | 0.003 | 26. | 155. | 0.01 | 0.000 | 4. |
| 70. | 0.05 | 0.003 | 24. | 160. | 0.01 | 0.000 | 3. |
| 75. | 0.05 | 0.003 | 22. | 165. | 0.01 | 0.000 | 3. |
| 80. | 0.04 | 0.000 | 20. | 170. | 0.01 | 0.000 | 3. |
| 85. | 0.03 | 0.000 | 18. | 175. | 0.01 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.250 INCHES
VOLUME OF EXCESS PRECIP = 3.17 ACRE-FEET
PEAK Q = 37. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E25 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.05 | 0.40 | 0.19 | 2.00 | 0.0070 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.216 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 17.20 | 78.00 | 564.50 | 31.05 | 2.93 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 11.37)

WIDTH AT 50 = 53. MIN. WIDTH AT 75 = 28. MIN. K50 =0.19 K75 =0.26

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 3.00 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.50 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 60. | 16. | 120. | 10. |
| 5. | 10. | 65. | 15. | 125. | 10. |
| 10. | 24. | 70. | 15. | 130. | 10. |
| 15. | 30. | 75. | 14. | 135. | 9. |
| 20. | 30. | 80. | 14. | 140. | 9. |
| 25. | 26. | 85. | 13. | 145. | 9. |
| 30. | 22. | 90. | 13. | 150. | 9. |
| 35. | 21. | 95. | 12. | 155. | 8. |
| 40. | 22. | 100. | 12. | 160. | 8. |
| 45. | 21. | 105. | 12. | 165. | 8. |
| 50. | 19. | 110. | 11. | 170. | 7. |
| 55. | 17. | 115. | 11. | 175. | 0. |

1 BASIN ID: E25 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 100. | 0.03 | 0.000 | 6. |
| 5. | 0.03 | 0.000 | 0. | 105. | 0.03 | 0.000 | 6. |
| 10. | 0.06 | 0.000 | 0. | 110. | 0.03 | 0.000 | 6. |
| 15. | 0.13 | 0.000 | 0. | 115. | 0.03 | 0.000 | 6. |
| 20. | 0.22 | 0.000 | 0. | 120. | 0.02 | 0.000 | 5. |
| 25. | 0.37 | 0.149 | 1. | 125. | 0.01 | 0.000 | 5. |
| 30. | 0.17 | 0.124 | 5. | 130. | 0.01 | 0.000 | 5. |
| 35. | 0.09 | 0.044 | 8. | 135. | 0.01 | 0.000 | 5. |
| 40. | 0.07 | 0.026 | 10. | 140. | 0.01 | 0.000 | 5. |
| 45. | 0.06 | 0.019 | 10. | 145. | 0.01 | 0.000 | 5. |
| 50. | 0.05 | 0.010 | 9. | 150. | 0.01 | 0.000 | 4. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 55. | 0.05 | 0.010 | 9. | | 155. | 0.01 | 0.000 | 4. |
| 60. | 0.05 | 0.011 | 9. | | 160. | 0.01 | 0.000 | 4. |
| 65. | 0.05 | 0.011 | 9. | | 165. | 0.01 | 0.000 | 4. |
| 70. | 0.05 | 0.011 | 9. | | 170. | 0.01 | 0.000 | 4. |
| 75. | 0.05 | 0.011 | 8. | | 175. | 0.01 | 0.000 | 4. |
| 80. | 0.04 | 0.001 | 8. | | 180. | 0.01 | 0.000 | 4. |
| 85. | 0.03 | 0.000 | 7. | | 185. | 0.00 | 0.000 | 4. |
| 90. | 0.03 | 0.000 | 7. | | 190. | 0.00 | 0.000 | 3. |
| 95. | 0.03 | 0.000 | 7. | | 195. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.426 INCHES
VOLUME OF EXCESS PRECIP = 1.25 ACRE-FEET
PEAK Q = 10. CFS TIME OF PEAK = 45. MIN.
INFILT.= 3.00 IN/HR DECAY =0.00180 FNINF = 0.50 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E26 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.14 | 0.57 | 0.35 | 2.00 | 0.0170 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.249 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 17.58 | 80.00 | 634.51 | 90.10 | 7.57 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 13.90)

WIDTH AT 50 = 47. MIN. WIDTH AT 75 = 25. MIN. K50 =0.22 K75 =0.30

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | | TIME | UNIT HYDROGRAPH | | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|---|---|
| 0. | 0. | | 55. | 45. | | 110. | 17. |
| 5. | 28. | | 60. | 41. | | 115. | 16. |
| 10. | 67. | | 65. | 37. | | 120. | 14. |
| 15. | 88. | | 70. | 34. | | 125. | 13. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 20. | 88. | 75. | 31. | 130. | 12. | | |
| 25. | 79. | 80. | 29. | 135. | 11. | | |
| 30. | 69. | 85. | 26. | 140. | 10. | | |
| 35. | 67. | 90. | 24. | 145. | 9. | | |
| 40. | 61. | 95. | 22. | 150. | 8. | | |
| 45. | 56. | 100. | 20. | 155. | 8. | | |
| 50. | 50. | 105. | 19. | 160. | 0. | | |

1 BASIN ID: E26 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 90. | 0.03 | 0.000 | 10. |
| 5. | 0.03 | 0.000 | 0. | 95. | 0.03 | 0.000 | 9. |
| 10. | 0.06 | 0.000 | 0. | 100. | 0.03 | 0.000 | 8. |
| 15. | 0.13 | 0.000 | 0. | 105. | 0.03 | 0.000 | 8. |
| 20. | 0.22 | 0.000 | 0. | 110. | 0.03 | 0.000 | 7. |
| 25. | 0.37 | 0.068 | 2. | 115. | 0.03 | 0.000 | 6. |
| 30. | 0.17 | 0.109 | 8. | 120. | 0.02 | 0.000 | 6. |
| 35. | 0.09 | 0.032 | 14. | 125. | 0.01 | 0.000 | 5. |
| 40. | 0.07 | 0.015 | 18. | 130. | 0.01 | 0.000 | 5. |
| 45. | 0.06 | 0.010 | 19. | 135. | 0.01 | 0.000 | 5. |
| 50. | 0.05 | 0.001 | 18. | 140. | 0.01 | 0.000 | 4. |
| 55. | 0.05 | 0.002 | 17. | 145. | 0.01 | 0.000 | 4. |
| 60. | 0.05 | 0.002 | 16. | 150. | 0.01 | 0.000 | 3. |
| 65. | 0.05 | 0.003 | 15. | 155. | 0.01 | 0.000 | 3. |
| 70. | 0.05 | 0.003 | 14. | 160. | 0.01 | 0.000 | 3. |
| 75. | 0.05 | 0.003 | 13. | 165. | 0.01 | 0.000 | 3. |
| 80. | 0.04 | 0.000 | 12. | 170. | 0.01 | 0.000 | 2. |
| 85. | 0.03 | 0.000 | 11. | 175. | 0.01 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.250 INCHES
VOLUME OF EXCESS PRECIP = 1.89 ACRE-FEET
PEAK Q = 19. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

*** WARNING : THE ABOVE PEAK IS COMPUTED BASED ON THE TIME TO PEAK MODIFIED BY THE RATIONAL FORMULA.
BUT THE AREA IS TOO LARGE (GREATER THAN 90 ACRES) TO APPLIY THE MODIFICATION, AND
THE ABOVE ESTIMATED PEAK MAY NOT BE RIGHT.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E27 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.10 | 0.60 | 0.26 | 2.00 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.236 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.06 | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.04 |
|---|---|

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 19.84 | 92.00 | 523.38 | 52.34 | 5.33 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 14.32)

WIDTH AT 50 = 57. MIN. WIDTH AT 75 = 30. MIN. K50 =0.21 K75 =0.28

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 3.40 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.50 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 65. | 26. | 130. | 13. |
| 5. | 13. | 70. | 25. | 135. | 12. |
| 10. | 35. | 75. | 24. | 140. | 12. |
| 15. | 48. | 80. | 22. | 145. | 11. |
| 20. | 52. | 85. | 21. | 150. | 11. |
| 25. | 49. | 90. | 20. | 155. | 10. |
| 30. | 43. | 95. | 19. | 160. | 9. |
| 35. | 38. | 100. | 18. | 165. | 9. |
| 40. | 38. | 105. | 17. | 170. | 9. |
| 45. | 37. | 110. | 16. | 175. | 8. |
| 50. | 34. | 115. | 15. | 180. | 8. |
| 55. | 32. | 120. | 15. | 185. | 0. |
| 60. | 29. | 125. | 14. | 0. | 0. |

1 BASIN ID: E27 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 105. | 0.03 | 0.000 | 10. |
| 5. | 0.03 | 0.000 | 0. | 110. | 0.03 | 0.000 | 9. |
| 10. | 0.06 | 0.000 | 0. | 115. | 0.03 | 0.000 | 9. |
| 15. | 0.13 | 0.000 | 0. | 120. | 0.02 | 0.000 | 8. |
| 20. | 0.22 | 0.000 | 0. | 125. | 0.01 | 0.000 | 8. |
| 25. | 0.37 | 0.132 | 2. | 130. | 0.01 | 0.000 | 7. |
| 30. | 0.17 | 0.122 | 6. | 135. | 0.01 | 0.000 | 7. |
| 35. | 0.09 | 0.043 | 11. | 140. | 0.01 | 0.000 | 7. |
| 40. | 0.07 | 0.025 | 15. | 145. | 0.01 | 0.000 | 6. |
| 45. | 0.06 | 0.019 | 16. | 150. | 0.01 | 0.000 | 6. |
| 50. | 0.05 | 0.010 | 16. | 155. | 0.01 | 0.000 | 6. |
| 55. | 0.05 | 0.010 | 15. | 160. | 0.01 | 0.000 | 5. |
| 60. | 0.05 | 0.011 | 15. | 165. | 0.01 | 0.000 | 5. |
| 65. | 0.05 | 0.011 | 15. | 170. | 0.01 | 0.000 | 5. |
| 70. | 0.05 | 0.011 | 15. | 175. | 0.01 | 0.000 | 5. |
| 75. | 0.05 | 0.011 | 14. | 180. | 0.01 | 0.000 | 4. |
| 80. | 0.04 | 0.001 | 14. | 185. | 0.00 | 0.000 | 4. |
| 85. | 0.03 | 0.000 | 13. | 190. | 0.00 | 0.000 | 4. |
| 90. | 0.03 | 0.000 | 12. | 195. | 0.00 | 0.000 | 4. |
| 95. | 0.03 | 0.000 | 11. | 200. | 0.00 | 0.000 | 4. |
| 100. | 0.03 | 0.000 | 11. | 205. | 0.00 | 0.000 | 2. |

 * LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.406 INCHES
VOLUME OF EXCESS PRECIP = 2.16 ACRE-FEET
PEAK Q = 16. CFS TIME OF PEAK = 45. MIN.
INFILT.= 3.40 IN/HR DECAY =0.00180 FNINF = 0.50 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E28 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.58 | 1.19 | 0.60 | 4.60 | 0.0160 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.146 | 0.290 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.07 | D= 0.09 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 22.55 | 556.13 | 324.78 | 31.15 |

WIDTH AT 50 = 54. MIN. WIDTH AT 75 = 28. MIN. K50 =0.25 K75 =0.34

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 85. | 109. | 170. | 24. |
| 5. | 68. | 90. | 100. | 175. | 22. |
| 10. | 185. | 95. | 91. | 180. | 20. |
| 15. | 277. | 100. | 84. | 185. | 18. |
| 20. | 320. | 105. | 76. | 190. | 17. |
| 25. | 321. | 110. | 70. | 195. | 15. |
| 30. | 297. | 115. | 64. | 200. | 14. |
| 35. | 266. | 120. | 58. | 205. | 13. |
| 40. | 245. | 125. | 53. | 210. | 12. |
| 45. | 229. | 130. | 49. | 215. | 11. |
| 50. | 210. | 135. | 45. | 220. | 10. |
| 55. | 192. | 140. | 41. | 225. | 9. |
| 60. | 173. | 145. | 37. | 230. | 8. |
| 65. | 157. | 150. | 34. | 235. | 7. |
| 70. | 143. | 155. | 31. | 240. | 0. |
| 75. | 131. | 160. | 28. | 0. | 0. |
| 80. | 120. | 165. | 26. | 0. | 0. |

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 130. | 0.01 | 0.000 | 23. |
| 5. | 0.03 | 0.000 | 0. | 135. | 0.01 | 0.000 | 21. |
| 10. | 0.06 | 0.000 | 0. | 140. | 0.01 | 0.000 | 20. |
| 15. | 0.13 | 0.001 | 0. | 145. | 0.01 | 0.000 | 18. |
| 20. | 0.22 | 0.001 | 0. | 150. | 0.01 | 0.000 | 16. |
| 25. | 0.37 | 0.084 | 6. | 155. | 0.01 | 0.000 | 15. |
| 30. | 0.17 | 0.111 | 23. | 160. | 0.01 | 0.000 | 14. |
| 35. | 0.09 | 0.034 | 46. | 165. | 0.01 | 0.000 | 13. |
| 40. | 0.07 | 0.017 | 65. | 170. | 0.01 | 0.000 | 12. |
| 45. | 0.06 | 0.011 | 76. | 175. | 0.01 | 0.000 | 11. |
| 50. | 0.05 | 0.002 | 79. | 180. | 0.01 | 0.000 | 10. |
| 55. | 0.05 | 0.003 | 76. | 185. | 0.00 | 0.000 | 9. |
| 60. | 0.05 | 0.004 | 71. | 190. | 0.00 | 0.000 | 8. |
| 65. | 0.05 | 0.004 | 67. | 195. | 0.00 | 0.000 | 7. |
| 70. | 0.05 | 0.004 | 63. | 200. | 0.00 | 0.000 | 7. |
| 75. | 0.05 | 0.004 | 59. | 205. | 0.00 | 0.000 | 6. |
| 80. | 0.04 | 0.001 | 56. | 210. | 0.00 | 0.000 | 6. |
| 85. | 0.03 | 0.000 | 51. | 215. | 0.00 | 0.000 | 5. |
| 90. | 0.03 | 0.000 | 47. | 220. | 0.00 | 0.000 | 5. |
| 95. | 0.03 | 0.000 | 43. | 225. | 0.00 | 0.000 | 4. |
| 100. | 0.03 | 0.000 | 40. | 230. | 0.00 | 0.000 | 4. |
| 105. | 0.03 | 0.000 | 36. | 235. | 0.00 | 0.000 | 4. |
| 110. | 0.03 | 0.000 | 33. | 240. | 0.00 | 0.000 | 3. |
| 115. | 0.03 | 0.000 | 30. | 245. | 0.00 | 0.000 | 3. |
| 120. | 0.02 | 0.000 | 28. | 250. | 0.00 | 0.000 | 3. |
| 125. | 0.01 | 0.000 | 26. | 255. | 0.00 | 0.000 | 3. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.281 INCHES
VOLUME OF EXCESS PRECIP = 8.77 ACRE-FEET
PEAK Q = 79. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E29 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.06 | 0.62 | 0.21 | 7.20 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.136 | 0.197 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.08 | D= 0.14 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK | TIME OF CONCENTRATION | PEAK RATE OF RUNOFF | UNIT HYDROGRAPH PEAK | VOLUME OF RUNOFF |
|---|---|---|---|---|

| (MIN) | (MIN) | (CFS/SQMI) | (CFS) | (AF) |
|---|---|---|---|---|
| 13.96 | 66.00 | 660.48 | 40.29 | 3.25 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 11.48)

WIDTH AT 50 = 45. MIN. WIDTH AT 75 = 24. MIN. K50 =0.18 K75 =0.25

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 55. | 19. | 110. | 11. |
| 5. | 17. | 60. | 18. | 115. | 10. |
| 10. | 36. | 65. | 17. | 120. | 10. |
| 15. | 40. | 70. | 17. | 125. | 9. |
| 20. | 35. | 75. | 16. | 130. | 9. |
| 25. | 28. | 80. | 15. | 135. | 8. |
| 30. | 27. | 85. | 14. | 140. | 8. |
| 35. | 28. | 90. | 13. | 145. | 8. |
| 40. | 26. | 95. | 13. | 150. | 0. |
| 45. | 23. | 100. | 12. | 0. | 0. |
| 50. | 21. | 105. | 12. | 0. | 0. |

1 BASIN ID: E29 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 85. | 0.03 | 0.001 | 6. |
| 5. | 0.03 | 0.000 | 0. | 90. | 0.03 | 0.001 | 6. |
| 10. | 0.06 | 0.000 | 0. | 95. | 0.03 | 0.001 | 6. |
| 15. | 0.13 | 0.001 | 0. | 100. | 0.03 | 0.001 | 5. |
| 20. | 0.22 | 0.007 | 0. | 105. | 0.03 | 0.001 | 5. |
| 25. | 0.37 | 0.093 | 2. | 110. | 0.03 | 0.001 | 5. |
| 30. | 0.17 | 0.112 | 6. | 115. | 0.03 | 0.000 | 5. |
| 35. | 0.09 | 0.035 | 9. | 120. | 0.02 | 0.000 | 4. |
| 40. | 0.07 | 0.018 | 10. | 125. | 0.01 | 0.000 | 4. |
| 45. | 0.06 | 0.012 | 9. | 130. | 0.01 | 0.000 | 4. |
| 50. | 0.05 | 0.004 | 8. | 135. | 0.01 | 0.000 | 4. |
| 55. | 0.05 | 0.004 | 8. | 140. | 0.01 | 0.000 | 4. |
| 60. | 0.05 | 0.005 | 8. | 145. | 0.01 | 0.000 | 3. |
| 65. | 0.05 | 0.005 | 8. | 150. | 0.01 | 0.000 | 3. |
| 70. | 0.05 | 0.005 | 7. | 155. | 0.01 | 0.000 | 3. |
| 75. | 0.05 | 0.005 | 7. | 160. | 0.01 | 0.000 | 3. |
| 80. | 0.04 | 0.002 | 6. | 165. | 0.01 | 0.000 | 3. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.317 INCHES
VOLUME OF EXCESS PRECIP = 1.03 ACRE-FEET
PEAK Q = 10. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E30 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.03 | 0.19 | 0.09 | 2.00 | 0.0310 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.201 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 9.27 | 36.00 | 1140.00 | 38.76 | 1.81 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 5.51)

WIDTH AT 50 = 26. MIN. WIDTH AT 75 = 14. MIN. K50 =0.21 K75 =0.29

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.70 IN./HR. DECAY = 0.00130/SECOND FNINFL = 0.80 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 30. | 19. | 60. | 11. |
| 5. | 27. | 35. | 18. | 65. | 10. |
| 10. | 39. | 40. | 16. | 70. | 9. |
| 15. | 30. | 45. | 15. | 75. | 9. |
| 20. | 28. | 50. | 14. | 80. | 8. |
| 25. | 24. | 55. | 12. | 85. | 0. |

1 BASIN ID: E30 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 20. | 0.22 | 0.000 | 0. |
| 5. | 0.03 | 0.000 | 0. | 25. | 0.37 | 0.009 | 0. |
| 10. | 0.06 | 0.000 | 0. | 30. | 0.17 | 0.037 | 1. |
| 15. | 0.13 | 0.000 | 0. | 35. | 0.09 | 0.002 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.049 INCHES

VOLUME OF EXCESS PRECIP = 0.09 ACRE-FEET
PEAK Q = 2. CFS TIME OF PEAK = 35. MIN.
INFILT.= 4.70 IN/HR DECAY =0.00130 FNINF = 0.80 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E31 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.04 | 0.26 | 0.14 | 2.00 | 0.0290 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.203 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 10.78 | 44.00 | 940.19 | 33.85 | 1.92 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 6.92)

WIDTH AT 50 = 32. MIN. WIDTH AT 75 = 17. MIN. K50 =0.20 K75 =0.28

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 40. | 16. | 80. | 10. |
| 5. | 20. | 45. | 15. | 85. | 9. |
| 10. | 34. | 50. | 14. | 90. | 9. |
| 15. | 30. | 55. | 13. | 95. | 8. |
| 20. | 24. | 60. | 13. | 100. | 8. |
| 25. | 24. | 65. | 12. | 105. | 0. |
| 30. | 21. | 70. | 11. | 0. | 0. |
| 35. | 18. | 75. | 10. | 0. | 0. |

1 BASIN ID: E31 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 65. | 0.05 | 0.003 | 4. |
| 5. | 0.03 | 0.000 | 0. | 70. | 0.05 | 0.003 | 4. |
| 10. | 0.06 | 0.000 | 0. | 75. | 0.05 | 0.003 | 4. |
| 15. | 0.13 | 0.000 | 0. | 80. | 0.04 | 0.000 | 4. |
| 20. | 0.22 | 0.000 | 0. | 85. | 0.03 | 0.000 | 3. |
| 25. | 0.37 | 0.068 | 1. | 90. | 0.03 | 0.000 | 3. |
| 30. | 0.17 | 0.109 | 5. | 95. | 0.03 | 0.000 | 3. |
| 35. | 0.09 | 0.032 | 6. | 100. | 0.03 | 0.000 | 3. |
| 40. | 0.07 | 0.015 | 6. | 105. | 0.03 | 0.000 | 3. |
| 45. | 0.06 | 0.010 | 6. | 110. | 0.03 | 0.000 | 2. |
| 50. | 0.05 | 0.001 | 6. | 115. | 0.03 | 0.000 | 2. |
| 55. | 0.05 | 0.002 | 5. | 120. | 0.02 | 0.000 | 2. |
| 60. | 0.05 | 0.002 | 4. | 125. | 0.01 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.250 INCHES
VOLUME OF EXCESS PRECIP = 0.48 ACRE-FEET
PEAK Q = 6. CFS TIME OF PEAK = 35. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E32 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.53 | 1.17 | 0.48 | 2.00 | 0.0100 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.303 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 23.83 | 546.30 | 288.99 | 28.21 |

WIDTH AT 50 = 55. MIN. WIDTH AT 75 = 29. MIN. K50 =0.26 K75 =0.35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.00 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 80. | 110. | 160. | 27. |
| 5. | 55. | 85. | 100. | 165. | 24. |
| 10. | 154. | 90. | 92. | 170. | 22. |
| 15. | 236. | 95. | 84. | 175. | 20. |
| 20. | 280. | 100. | 77. | 180. | 19. |
| 25. | 288. | 105. | 71. | 185. | 17. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 30. | 273. | 110. | 65. | 190. | 16. | | |
| 35. | 247. | 115. | 59. | 195. | 14. | | |
| 40. | 223. | 120. | 54. | 200. | 13. | | |
| 45. | 208. | 125. | 50. | 205. | 12. | | |
| 50. | 192. | 130. | 45. | 210. | 11. | | |
| 55. | 175. | 135. | 42. | 215. | 10. | | |
| 60. | 159. | 140. | 38. | 220. | 9. | | |
| 65. | 143. | 145. | 35. | 225. | 8. | | |
| 70. | 131. | 150. | 32. | 230. | 8. | | |
| 75. | 120. | 155. | 29. | 235. | 0. | | |

1 BASIN ID: E32 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 130. | 0.01 | 0.000 | 19. |
| 5. | 0.03 | 0.000 | 0. | 135. | 0.01 | 0.000 | 17. |
| 10. | 0.06 | 0.000 | 0. | 140. | 0.01 | 0.000 | 16. |
| 15. | 0.13 | 0.000 | 0. | 145. | 0.01 | 0.000 | 14. |
| 20. | 0.22 | 0.000 | 0. | 150. | 0.01 | 0.000 | 13. |
| 25. | 0.37 | 0.074 | 4. | 155. | 0.01 | 0.000 | 12. |
| 30. | 0.17 | 0.109 | 17. | 160. | 0.01 | 0.000 | 11. |
| 35. | 0.09 | 0.032 | 36. | 165. | 0.01 | 0.000 | 10. |
| 40. | 0.07 | 0.015 | 52. | 170. | 0.01 | 0.000 | 9. |
| 45. | 0.06 | 0.009 | 62. | 175. | 0.01 | 0.000 | 9. |
| 50. | 0.05 | 0.001 | 66. | 180. | 0.01 | 0.000 | 8. |
| 55. | 0.05 | 0.002 | 64. | 185. | 0.00 | 0.000 | 7. |
| 60. | 0.05 | 0.002 | 60. | 190. | 0.00 | 0.000 | 7. |
| 65. | 0.05 | 0.002 | 55. | 195. | 0.00 | 0.000 | 6. |
| 70. | 0.05 | 0.003 | 52. | 200. | 0.00 | 0.000 | 5. |
| 75. | 0.05 | 0.003 | 49. | 205. | 0.00 | 0.000 | 5. |
| 80. | 0.04 | 0.000 | 45. | 210. | 0.00 | 0.000 | 5. |
| 85. | 0.03 | 0.000 | 42. | 215. | 0.00 | 0.000 | 4. |
| 90. | 0.03 | 0.000 | 38. | 220. | 0.00 | 0.000 | 4. |
| 95. | 0.03 | 0.000 | 35. | 225. | 0.00 | 0.000 | 4. |
| 100. | 0.03 | 0.000 | 32. | 230. | 0.00 | 0.000 | 3. |
| 105. | 0.03 | 0.000 | 29. | 235. | 0.00 | 0.000 | 3. |
| 110. | 0.03 | 0.000 | 27. | 240. | 0.00 | 0.000 | 3. |
| 115. | 0.03 | 0.000 | 25. | 245. | 0.00 | 0.000 | 2. |
| 120. | 0.02 | 0.000 | 22. | 250. | 0.00 | 0.000 | 2. |
| 125. | 0.01 | 0.000 | 21. | 255. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.252 INCHES
VOLUME OF EXCESS PRECIP = 7.12 ACRE-FEET
PEAK Q = 66. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.00 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E33 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.05 | 0.34 | 0.18 | 2.00 | 0.0230 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|

0.156 0.214

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 12.67 | 54.00 | 809.11 | 42.07 | 2.77 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 8.46)

WIDTH AT 50 = 37. MIN. WIDTH AT 75 = 19. MIN. K50 =0.21 K75 =0.28

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 45. | 20. | 90. | 11. |
| 5. | 21. | 50. | 19. | 95. | 10. |
| 10. | 40. | 55. | 18. | 100. | 10. |
| 15. | 41. | 60. | 16. | 105. | 9. |
| 20. | 33. | 65. | 15. | 110. | 8. |
| 25. | 30. | 70. | 14. | 115. | 8. |
| 30. | 29. | 75. | 13. | 120. | 0. |
| 35. | 26. | 80. | 13. | 0. | 0. |
| 40. | 22. | 85. | 12. | 0. | 0. |

1 BASIN ID: E33 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 70. | 0.05 | 0.003 | 5. |
| 5. | 0.03 | 0.000 | 0. | 75. | 0.05 | 0.003 | 5. |
| 10. | 0.06 | 0.000 | 0. | 80. | 0.04 | 0.000 | 5. |
| 15. | 0.13 | 0.000 | 0. | 85. | 0.03 | 0.000 | 4. |
| 20. | 0.22 | 0.000 | 0. | 90. | 0.03 | 0.000 | 4. |
| 25. | 0.37 | 0.068 | 1. | 95. | 0.03 | 0.000 | 4. |
| 30. | 0.17 | 0.109 | 5. | 100. | 0.03 | 0.000 | 4. |
| 35. | 0.09 | 0.032 | 8. | 105. | 0.03 | 0.000 | 3. |
| 40. | 0.07 | 0.015 | 8. | 110. | 0.03 | 0.000 | 3. |
| 45. | 0.06 | 0.010 | 8. | 115. | 0.03 | 0.000 | 3. |
| 50. | 0.05 | 0.001 | 7. | 120. | 0.02 | 0.000 | 3. |
| 55. | 0.05 | 0.002 | 7. | 125. | 0.01 | 0.000 | 2. |
| 60. | 0.05 | 0.002 | 6. | 130. | 0.01 | 0.000 | 2. |
| 65. | 0.05 | 0.003 | 6. | 135. | 0.01 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.250 INCHES
VOLUME OF EXCESS PRECIP = 0.69 ACRE-FEET

PEAK Q = 8. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E34 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.70 | 1.37 | 0.68 | 2.00 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.317 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 28.58 | 466.21 | 327.75 | 37.49 |

WIDTH AT 50 = 64. MIN. WIDTH AT 75 = 33. MIN. K50 =0.27 K75 =0.36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.30 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 95. | 122. | 190. | 29. |
| 5. | 47. | 100. | 113. | 195. | 27. |
| 10. | 136. | 105. | 105. | 200. | 25. |
| 15. | 226. | 110. | 97. | 205. | 23. |
| 20. | 290. | 115. | 90. | 210. | 21. |
| 25. | 322. | 120. | 83. | 215. | 20. |
| 30. | 327. | 125. | 77. | 220. | 18. |
| 35. | 313. | 130. | 72. | 225. | 17. |
| 40. | 290. | 135. | 66. | 230. | 16. |
| 45. | 264. | 140. | 61. | 235. | 14. |
| 50. | 246. | 145. | 57. | 240. | 13. |
| 55. | 230. | 150. | 53. | 245. | 12. |
| 60. | 214. | 155. | 49. | 250. | 11. |
| 65. | 198. | 160. | 45. | 255. | 11. |
| 70. | 182. | 165. | 42. | 260. | 10. |
| 75. | 166. | 170. | 39. | 265. | 9. |
| 80. | 154. | 175. | 36. | 270. | 8. |
| 85. | 142. | 180. | 33. | 275. | 8. |
| 90. | 132. | 185. | 31. | 280. | 0. |

1 BASIN ID: E34 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| INCREMENT | TOTAL* | STORM** | INCREMENT | TOTAL* | STORM** |
|---|---|---|---|---|---|

| TIME (MIN.) | RAINFALL (IN) | EXCESS PRECIP | HYDROGRAPH (CFS) | TIME (MIN.) | RAINFALL (IN) | EXCESS PRECIP | HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 150. | 0.01 | 0.000 | 21. |
| 5. | 0.03 | 0.000 | 0. | 155. | 0.01 | 0.000 | 19. |
| 10. | 0.06 | 0.000 | 0. | 160. | 0.01 | 0.000 | 18. |
| 15. | 0.13 | 0.000 | 0. | 165. | 0.01 | 0.000 | 17. |
| 20. | 0.22 | 0.000 | 0. | 170. | 0.01 | 0.000 | 15. |
| 25. | 0.37 | 0.075 | 4. | 175. | 0.01 | 0.000 | 14. |
| 30. | 0.17 | 0.110 | 16. | 180. | 0.01 | 0.000 | 13. |
| 35. | 0.09 | 0.033 | 34. | 185. | 0.00 | 0.000 | 12. |
| 40. | 0.07 | 0.016 | 52. | 190. | 0.00 | 0.000 | 11. |
| 45. | 0.06 | 0.010 | 66. | 195. | 0.00 | 0.000 | 11. |
| 50. | 0.05 | 0.001 | 75. | 200. | 0.00 | 0.000 | 10. |
| 55. | 0.05 | 0.002 | 77. | 205. | 0.00 | 0.000 | 9. |
| 60. | 0.05 | 0.002 | 76. | 210. | 0.00 | 0.000 | 8. |
| 65. | 0.05 | 0.003 | 72. | 215. | 0.00 | 0.000 | 8. |
| 70. | 0.05 | 0.003 | 67. | 220. | 0.00 | 0.000 | 7. |
| 75. | 0.05 | 0.003 | 64. | 225. | 0.00 | 0.000 | 7. |
| 80. | 0.04 | 0.000 | 60. | 230. | 0.00 | 0.000 | 6. |
| 85. | 0.03 | 0.000 | 57. | 235. | 0.00 | 0.000 | 6. |
| 90. | 0.03 | 0.000 | 53. | 240. | 0.00 | 0.000 | 5. |
| 95. | 0.03 | 0.000 | 49. | 245. | 0.00 | 0.000 | 5. |
| 100. | 0.03 | 0.000 | 45. | 250. | 0.00 | 0.000 | 5. |
| 105. | 0.03 | 0.000 | 42. | 255. | 0.00 | 0.000 | 4. |
| 110. | 0.03 | 0.000 | 39. | 260. | 0.00 | 0.000 | 4. |
| 115. | 0.03 | 0.000 | 36. | 265. | 0.00 | 0.000 | 4. |
| 120. | 0.02 | 0.000 | 33. | 270. | 0.00 | 0.000 | 3. |
| 125. | 0.01 | 0.000 | 31. | 275. | 0.00 | 0.000 | 3. |
| 130. | 0.01 | 0.000 | 28. | 280. | 0.00 | 0.000 | 3. |
| 135. | 0.01 | 0.000 | 26. | 285. | 0.00 | 0.000 | 3. |
| 140. | 0.01 | 0.000 | 24. | 290. | 0.00 | 0.000 | 2. |
| 145. | 0.01 | 0.000 | 23. | 295. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.259 INCHES
VOLUME OF EXCESS PRECIP = 9.70 ACRE-FEET
PEAK Q = 77. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.30 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E35 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.73 | 1.22 | 0.53 | 5.10 | 0.0110 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.144 | 0.297 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.07 | D= 0.10 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|

23.12 553.64 405.26 39.04

WIDTH AT 50 = 54. MIN. WIDTH AT 75 = 28. MIN. K50 =0.26 K75 =0.35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.30 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 85. | 137. | 170. | 29. |
| 5. | 81. | 90. | 125. | 175. | 27. |
| 10. | 224. | 95. | 115. | 180. | 25. |
| 15. | 339. | 100. | 105. | 185. | 22. |
| 20. | 397. | 105. | 96. | 190. | 21. |
| 25. | 403. | 110. | 87. | 195. | 19. |
| 30. | 377. | 115. | 80. | 200. | 17. |
| 35. | 338. | 120. | 73. | 205. | 16. |
| 40. | 308. | 125. | 67. | 210. | 14. |
| 45. | 288. | 130. | 61. | 215. | 13. |
| 50. | 265. | 135. | 56. | 220. | 12. |
| 55. | 242. | 140. | 51. | 225. | 11. |
| 60. | 218. | 145. | 46. | 230. | 10. |
| 65. | 197. | 150. | 42. | 235. | 9. |
| 70. | 180. | 155. | 39. | 240. | 8. |
| 75. | 164. | 160. | 35. | 245. | 8. |
| 80. | 150. | 165. | 32. | 250. | 0. |

1 BASIN ID: E35 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 135. | 0.01 | 0.000 | 27. |
| 5. | 0.03 | 0.000 | 0. | 140. | 0.01 | 0.000 | 24. |
| 10. | 0.06 | 0.000 | 0. | 145. | 0.01 | 0.000 | 22. |
| 15. | 0.13 | 0.001 | 0. | 150. | 0.01 | 0.000 | 20. |
| 20. | 0.22 | 0.001 | 0. | 155. | 0.01 | 0.000 | 19. |
| 25. | 0.37 | 0.081 | 7. | 160. | 0.01 | 0.000 | 17. |
| 30. | 0.17 | 0.109 | 28. | 165. | 0.01 | 0.000 | 16. |
| 35. | 0.09 | 0.033 | 56. | 170. | 0.01 | 0.000 | 14. |
| 40. | 0.07 | 0.016 | 79. | 175. | 0.01 | 0.000 | 13. |
| 45. | 0.06 | 0.011 | 92. | 180. | 0.01 | 0.000 | 12. |
| 50. | 0.05 | 0.002 | 96. | 185. | 0.00 | 0.000 | 11. |
| 55. | 0.05 | 0.003 | 93. | 190. | 0.00 | 0.000 | 10. |
| 60. | 0.05 | 0.004 | 87. | 195. | 0.00 | 0.000 | 9. |
| 65. | 0.05 | 0.004 | 82. | 200. | 0.00 | 0.000 | 8. |
| 70. | 0.05 | 0.004 | 78. | 205. | 0.00 | 0.000 | 8. |
| 75. | 0.05 | 0.004 | 73. | 210. | 0.00 | 0.000 | 7. |
| 80. | 0.04 | 0.001 | 69. | 215. | 0.00 | 0.000 | 6. |
| 85. | 0.03 | 0.000 | 64. | 220. | 0.00 | 0.000 | 6. |
| 90. | 0.03 | 0.000 | 59. | 225. | 0.00 | 0.000 | 5. |
| 95. | 0.03 | 0.000 | 54. | 230. | 0.00 | 0.000 | 5. |
| 100. | 0.03 | 0.000 | 49. | 235. | 0.00 | 0.000 | 4. |
| 105. | 0.03 | 0.000 | 45. | 240. | 0.00 | 0.000 | 4. |
| 110. | 0.03 | 0.000 | 41. | 245. | 0.00 | 0.000 | 4. |
| 115. | 0.03 | 0.000 | 38. | 250. | 0.00 | 0.000 | 3. |
| 120. | 0.02 | 0.000 | 35. | 255. | 0.00 | 0.000 | 3. |
| 125. | 0.01 | 0.000 | 32. | 260. | 0.00 | 0.000 | 3. |
| 130. | 0.01 | 0.000 | 29. | 265. | 0.00 | 0.000 | 3. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.277 INCHES

VOLUME OF EXCESS PRECIP = 10.83 ACRE-FEET
PEAK Q = 96. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.30 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E36 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.10 | 0.29 | 0.16 | 2.00 | 0.0110 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.238 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 14.37 | 63.00 | 769.27 | 80.00 | 5.55 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 8.77)

WIDTH AT 50 = 39. MIN. WIDTH AT 75 = 20. MIN. K50 =0.22 K75 =0.30

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.40 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 45. | 40. | 90. | 16. |
| 5. | 33. | 50. | 36. | 95. | 14. |
| 10. | 70. | 55. | 32. | 100. | 13. |
| 15. | 80. | 60. | 29. | 105. | 12. |
| 20. | 71. | 65. | 26. | 110. | 10. |
| 25. | 60. | 70. | 24. | 115. | 9. |
| 30. | 58. | 75. | 21. | 120. | 8. |
| 35. | 52. | 80. | 19. | 125. | 8. |
| 40. | 46. | 85. | 17. | 130. | 0. |

1 BASIN ID: E36 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 75. | 0.05 | 0.003 | 10. |
| 5. | 0.03 | 0.000 | 0. | 80. | 0.04 | 0.000 | 9. |
| 10. | 0.06 | 0.000 | 0. | 85. | 0.03 | 0.000 | 8. |
| 15. | 0.13 | 0.000 | 0. | 90. | 0.03 | 0.000 | 7. |
| 20. | 0.22 | 0.000 | 0. | 95. | 0.03 | 0.000 | 6. |
| 25. | 0.37 | 0.071 | 2. | 100. | 0.03 | 0.000 | 6. |
| 30. | 0.17 | 0.110 | 9. | 105. | 0.03 | 0.000 | 5. |
| 35. | 0.09 | 0.033 | 15. | 110. | 0.03 | 0.000 | 5. |
| 40. | 0.07 | 0.016 | 17. | 115. | 0.03 | 0.000 | 4. |
| 45. | 0.06 | 0.010 | 16. | 120. | 0.02 | 0.000 | 4. |
| 50. | 0.05 | 0.001 | 15. | 125. | 0.01 | 0.000 | 3. |
| 55. | 0.05 | 0.002 | 14. | 130. | 0.01 | 0.000 | 3. |
| 60. | 0.05 | 0.002 | 13. | 135. | 0.01 | 0.000 | 3. |
| 65. | 0.05 | 0.003 | 12. | 140. | 0.01 | 0.000 | 3. |
| 70. | 0.05 | 0.003 | 10. | 145. | 0.01 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.254 INCHES
VOLUME OF EXCESS PRECIP = 1.41 ACRE-FEET
PEAK Q = 17. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.40 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E37 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 1.07 | 1.80 | 0.49 | 2.00 | 0.0100 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.337 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 29.04 | 487.92 | 522.08 | 57.07 |

WIDTH AT 50 = 61. MIN. WIDTH AT 75 = 32. MIN. K50 =0.28 K75 =0.39

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.00 IN./HR. DECAY = 0.00160/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 100. | 168. | 200. | 33. |
| 5. | 73. | 105. | 155. | 205. | 30. |
| 10. | 213. | 110. | 142. | 210. | 28. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 15. | 354. | | 115. | 131. | | 215. | 25. | |
| 20. | 456. | | 120. | 121. | | 220. | 23. | |
| 25. | 510. | | 125. | 111. | | 225. | 22. | |
| 30. | 521. | | 130. | 103. | | 230. | 20. | |
| 35. | 502. | | 135. | 95. | | 235. | 18. | |
| 40. | 464. | | 140. | 87. | | 240. | 17. | |
| 45. | 421. | | 145. | 80. | | 245. | 16. | |
| 50. | 385. | | 150. | 74. | | 250. | 14. | |
| 55. | 358. | | 155. | 68. | | 255. | 13. | |
| 60. | 331. | | 160. | 63. | | 260. | 12. | |
| 65. | 304. | | 165. | 58. | | 265. | 11. | |
| 70. | 278. | | 170. | 53. | | 270. | 10. | |
| 75. | 253. | | 175. | 49. | | 275. | 9. | |
| 80. | 233. | | 180. | 45. | | 280. | 9. | |
| 85. | 215. | | 185. | 42. | | 285. | 8. | |
| 90. | 198. | | 190. | 38. | | 290. | 7. | |
| 95. | 182. | | 195. | 35. | | 295. | 0. | |

1 BASIN ID: E37 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 155. | 0.01 | 0.000 | 25. |
| 5. | 0.03 | 0.000 | 0. | 160. | 0.01 | 0.000 | 23. |
| 10. | 0.06 | 0.000 | 0. | 165. | 0.01 | 0.000 | 21. |
| 15. | 0.13 | 0.000 | 0. | 170. | 0.01 | 0.000 | 19. |
| 20. | 0.22 | 0.000 | 0. | 175. | 0.01 | 0.000 | 18. |
| 25. | 0.37 | 0.061 | 5. | 180. | 0.01 | 0.000 | 17. |
| 30. | 0.17 | 0.106 | 21. | 185. | 0.00 | 0.000 | 15. |
| 35. | 0.09 | 0.030 | 46. | 190. | 0.00 | 0.000 | 14. |
| 40. | 0.07 | 0.013 | 73. | 195. | 0.00 | 0.000 | 13. |
| 45. | 0.06 | 0.008 | 93. | 200. | 0.00 | 0.000 | 12. |
| 50. | 0.05 | 0.001 | 106. | 205. | 0.00 | 0.000 | 11. |
| 55. | 0.05 | 0.001 | 110. | 210. | 0.00 | 0.000 | 10. |
| 60. | 0.05 | 0.002 | 108. | 215. | 0.00 | 0.000 | 9. |
| 65. | 0.05 | 0.002 | 102. | 220. | 0.00 | 0.000 | 9. |
| 70. | 0.05 | 0.003 | 95. | 225. | 0.00 | 0.000 | 8. |
| 75. | 0.05 | 0.003 | 89. | 230. | 0.00 | 0.000 | 7. |
| 80. | 0.04 | 0.000 | 84. | 235. | 0.00 | 0.000 | 7. |
| 85. | 0.03 | 0.000 | 78. | 240. | 0.00 | 0.000 | 6. |
| 90. | 0.03 | 0.000 | 73. | 245. | 0.00 | 0.000 | 6. |
| 95. | 0.03 | 0.000 | 67. | 250. | 0.00 | 0.000 | 5. |
| 100. | 0.03 | 0.000 | 62. | 255. | 0.00 | 0.000 | 5. |
| 105. | 0.03 | 0.000 | 57. | 260. | 0.00 | 0.000 | 4. |
| 110. | 0.03 | 0.000 | 52. | 265. | 0.00 | 0.000 | 4. |
| 115. | 0.03 | 0.000 | 48. | 270. | 0.00 | 0.000 | 4. |
| 120. | 0.02 | 0.000 | 44. | 275. | 0.00 | 0.000 | 3. |
| 125. | 0.01 | 0.000 | 41. | 280. | 0.00 | 0.000 | 3. |
| 130. | 0.01 | 0.000 | 38. | 285. | 0.00 | 0.000 | 3. |
| 135. | 0.01 | 0.000 | 35. | 290. | 0.00 | 0.000 | 3. |
| 140. | 0.01 | 0.000 | 32. | 295. | 0.00 | 0.000 | 3. |
| 145. | 0.01 | 0.000 | 29. | 300. | 0.00 | 0.000 | 2. |
| 150. | 0.01 | 0.000 | 27. | 305. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.230 INCHES
VOLUME OF EXCESS PRECIP = 13.14 ACRE-FEET
PEAK Q = 110. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.00 IN/HR DECAY =0.00160 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E38 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.27 | 0.89 | 0.47 | 2.00 | 0.0140 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.274 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 19.55 | 618.07 | 167.50 | 14.45 |

WIDTH AT 50 = 49. MIN. WIDTH AT 75 = 25. MIN. K50 =0.24 K75 =0.33

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.30 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 65. | 71. | 130. | 21. |
| 5. | 44. | 70. | 65. | 135. | 19. |
| 10. | 112. | 75. | 59. | 140. | 17. |
| 15. | 156. | 80. | 54. | 145. | 16. |
| 20. | 167. | 85. | 49. | 150. | 14. |
| 25. | 157. | 90. | 44. | 155. | 13. |
| 30. | 139. | 95. | 40. | 160. | 12. |
| 35. | 126. | 100. | 37. | 165. | 11. |
| 40. | 118. | 105. | 33. | 170. | 10. |
| 45. | 108. | 110. | 30. | 175. | 9. |
| 50. | 97. | 115. | 28. | 180. | 8. |
| 55. | 87. | 120. | 25. | 185. | 0. |
| 60. | 78. | 125. | 23. | 0. | 0. |

1 BASIN ID: E38 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 105. | 0.03 | 0.000 | 15. |
| 5. | 0.03 | 0.000 | 0. | 110. | 0.03 | 0.000 | 13. |
| 10. | 0.06 | 0.000 | 0. | 115. | 0.03 | 0.000 | 12. |
| 15. | 0.13 | 0.000 | 0. | 120. | 0.02 | 0.000 | 11. |
| 20. | 0.22 | 0.000 | 0. | 125. | 0.01 | 0.000 | 10. |
| 25. | 0.37 | 0.075 | 3. | 130. | 0.01 | 0.000 | 9. |
| 30. | 0.17 | 0.110 | 13. | 135. | 0.01 | 0.000 | 8. |
| 35. | 0.09 | 0.033 | 26. | 140. | 0.01 | 0.000 | 8. |
| 40. | 0.07 | 0.016 | 34. | 145. | 0.01 | 0.000 | 7. |
| 45. | 0.06 | 0.010 | 38. | 150. | 0.01 | 0.000 | 6. |
| 50. | 0.05 | 0.001 | 37. | 155. | 0.01 | 0.000 | 6. |
| 55. | 0.05 | 0.002 | 34. | 160. | 0.01 | 0.000 | 5. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 60. | 0.05 | 0.002 | 32. | 165. | 0.01 | 0.000 | 5. |
| 65. | 0.05 | 0.003 | 30. | 170. | 0.01 | 0.000 | 4. |
| 70. | 0.05 | 0.003 | 28. | 175. | 0.01 | 0.000 | 4. |
| 75. | 0.05 | 0.003 | 26. | 180. | 0.01 | 0.000 | 4. |
| 80. | 0.04 | 0.000 | 23. | 185. | 0.00 | 0.000 | 3. |
| 85. | 0.03 | 0.000 | 21. | 190. | 0.00 | 0.000 | 3. |
| 90. | 0.03 | 0.000 | 20. | 195. | 0.00 | 0.000 | 3. |
| 95. | 0.03 | 0.000 | 18. | 200. | 0.00 | 0.000 | 2. |
| 100. | 0.03 | 0.000 | 16. | 205. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 1.94 EXCESS PRECIP. = 0.259 INCHES
VOLUME OF EXCESS PRECIP = 3.74 ACRE-FEET
PEAK Q = 38. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.30 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

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1    100yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin
1 100yr    .027 .08.122.213.335.599.335.213.165.133.106.106.106.053.053.032.032
1 100yr    .032.032.032.032.032.032.032.015.015.015.015.015.015.015.015.015.015
1 100yr    .015.015

70 1 1 5.    W1  1Western portion of Sump Basin
.433 .849 .427   2. .015       .35  .05  4.4.0018   .6
70 1 1 5.    W4  4Western portion of Sump Basin
.188 1.03 .514 10.8 .010       .35  .05  4.5.0018   .6
70 1 1 5.    W5  5Western portion of Sump Basin
.428 1.20 .670   2. .017       .35  .05  4.6.0016   .7
71 1 1 5.    W6  6Western portion of Sump Basin
.114 .404 .073   2. .009  80.  .35  .05  4.5.0018   .6
71 1 1 5.    W7  7Western portion of Sump Basin
.007 .137 .044  30. .007  22.  .35  .05  4.5.0018   .6
70 1 1 5.    W9  9Western portion of Sump Basin
.204 .801 .370   2. .012       .35  .05  4.5.0018   .6
71 1 1 5.   W11 11Western portion of Sump Basin
.078 .509 .224  15. .009  90.  .35  .05  4.5.0018   .6
70 1 1 5.   W12 12Western portion of Sump Basin
.444 1.14 .590 10.9 .009       .35  .05  4.5.0018   .6
70 1 1 5.   W13 13Western portion of Sump Basin
.654 1.30 .580  3.7 .012       .35  .05  4.3.0017   .6
70 1 1 5.   W14 14Western portion of Sump Basin
.296 1.02 .372  7.2 .014       .35  .05  4.5.0017   .6
71 1 1 5.   W15 15Western portion of Sump Basin
.097 .438 .285   2. .009  83.  .35  .05  4.5.0018   .6
70 1 1 5.   W16 16Western portion of Sump Basin
.633 1.67 .610  2.6 .012       .35  .05  4.2.0018   .6
70 1 1 5.   W17 17Western portion of Sump Basin
.148 .396 .223  8.3 .009       .35  .05  4.5.0018   .6
70 1 1 5.   W18 18Western portion of Sump Basin
.173 .877 .414  6.3 .016       .35  .05  4.5.0018   .6
70 1 1 5.   W19 19Western portion of Sump Basin
.257 .969 .624   2. .013       .35  .05  4.6.0017   .6
70 1 1 5.   W20 20Western portion of Sump Basin
.691 1.37 .520   2. .009       .35  .05  4.0.0017   .6
70 1 1 5.   W21 21Western portion of Sump Basin
.330 1.14 .604  3.4 .014       .35  .05  4.5.0018   .6
70 1 1 5.   W22 22Western portion of Sump Basin
.398 1.17 .654   2. .012       .35  .05  4.5.0018   .6
70 1 1 5.   W23 23Western portion of Sump Basin
.884 1.20 .731   2. .014       .35  .05  4.5.0018   .6
70 1 1 5.   W24 24Western portion of Sump Basin
.238 .609 .447   2. .014       .35  .05  4.5.0018   .6
71 1 1 5.   E25 25Eastern portion of Sump Basin
.055 .396 .190   2. .007  78.  .35  .05  3.0.0018   .5
71 1 1 5.   E26 26Eastern portion of Sump Basin
.142 .570 .347   2. .017  80.  .35  .05  4.5.0018   .6
71 1 1 5.   E27 27Eastern portion of Sump Basin
.100 .597 .260   2. .009  92.  .35  .05  3.4.0018   .5
70 1 1 5.   E28 28Eastern portion of Sump Basin
.584 1.19 .597  4.6 .016       .35  .05  4.5.0018   .6
71 1 1 5.   E29 29Eastern portion of Sump Basin
.061 .622 .214  7.2 .012  66.  .35  .05  4.5.0018   .6
71 1 1 5.   E30 30Eastern portion of Sump Basin
.034 .189 .088   2. .031  36.  .35  .05  4.7.0013   .8
71 1 1 5.   E31 31Eastern portion of Sump Basin
.036 .260 .138   2. .029  44.  .35  .05  4.5.0018   .6
70 1 1 5.   E32 32Eastern portion of Sump Basin
.529 1.17 .478   2. .010       .35  .05  4.0.0017   .6
71 1 1 5.   E33 33Eastern portion of Sump Basin
.052 .335 .178   2. .023  54.  .35  .05  4.5.0018   .6
70 1 1 5.   E34 34Eastern portion of Sump Basin
.703 1.37 .680   2. .012       .35  .05  4.3.0018   .6
70 1 1 5.   E35 35Eastern portion of Sump Basin
.732 1.22 .526  5.1 .011       .35  .05  4.3.0017   .6
71 1 1 5.   E36 36Eastern portion of Sump Basin
.104 .290 .158   2. .011  63.  .35  .05  4.4.0018   .6
70 1 1 5.   E37 37Eastern portion of Sump Basin
1.07 1.80 .490   2. .010       .35  .05  4.0.0016   .6
70 1 1 5.   E38 38Eastern portion of Sump Basin
.271 .889 .467   2. .014       .35  .05  4.3.0018   .6
E
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1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W1 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.43 | 0.85 | 0.43 | 2.00 | 0.0150 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.294 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 18.22 | 719.49 | 311.54 | 23.09 |

WIDTH AT 50 = 42. MIN. WIDTH AT 75 = 22. MIN. K50 =0.26 K75 =0.36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.40 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 65. | 107. | 130. | 23. |
| 5. | 91. | 70. | 95. | 135. | 21. |
| 10. | 224. | 75. | 85. | 140. | 19. |
| 15. | 300. | 80. | 75. | 145. | 16. |
| 20. | 309. | 85. | 67. | 150. | 15. |
| 25. | 279. | 90. | 60. | 155. | 13. |
| 30. | 243. | 95. | 53. | 160. | 12. |
| 35. | 221. | 100. | 47. | 165. | 10. |
| 40. | 197. | 105. | 42. | 170. | 9. |
| 45. | 174. | 110. | 37. | 175. | 8. |
| 50. | 152. | 115. | 33. | 180. | 0. |
| 55. | 135. | 120. | 30. | 0. | 0. |
| 60. | 120. | 125. | 26. | 0. | 0. |

1 BASIN ID: W1 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 115. | 0.03 | 0.000 | 103. |
| 5. | 0.03 | 0.000 | 0. | 120. | 0.03 | 0.000 | 92. |
| 10. | 0.08 | 0.000 | 0. | 125. | 0.01 | 0.000 | 82. |
| 15. | 0.12 | 0.000 | 0. | 130. | 0.01 | 0.000 | 73. |
| 20. | 0.21 | 0.000 | 0. | 135. | 0.01 | 0.000 | 65. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 25. | 0.34 | 0.034 | 3. | | 140. | 0.01 | 0.000 | 57. |
| 30. | 0.60 | 0.533 | 56. | | 145. | 0.01 | 0.000 | 51. |
| 35. | 0.34 | 0.276 | 155. | | 150. | 0.01 | 0.000 | 45. |
| 40. | 0.21 | 0.158 | 247. | | 155. | 0.01 | 0.000 | 40. |
| 45. | 0.17 | 0.113 | 303. | | 160. | 0.01 | 0.000 | 36. |
| 50. | 0.13 | 0.082 | 323. | | 165. | 0.01 | 0.000 | 32. |
| 55. | 0.11 | 0.056 | 321. | | 170. | 0.01 | 0.000 | 29. |
| 60. | 0.11 | 0.056 | 313. | | 175. | 0.01 | 0.000 | 25. |
| 65. | 0.11 | 0.057 | 302. | | 180. | 0.01 | 0.000 | 23. |
| 70. | 0.05 | 0.004 | 285. | | 185. | 0.00 | 0.000 | 20. |
| 75. | 0.05 | 0.004 | 261. | | 190. | 0.00 | 0.000 | 18. |
| 80. | 0.03 | 0.000 | 235. | | 195. | 0.00 | 0.000 | 16. |
| 85. | 0.03 | 0.000 | 209. | | 200. | 0.00 | 0.000 | 14. |
| 90. | 0.03 | 0.000 | 186. | | 205. | 0.00 | 0.000 | 8. |
| 95. | 0.03 | 0.000 | 165. | | 210. | 0.00 | 0.000 | 6. |
| 100. | 0.03 | 0.000 | 147. | | 215. | 0.00 | 0.000 | 4. |
| 105. | 0.03 | 0.000 | 131. | | 220. | 0.00 | 0.000 | 3. |
| 110. | 0.03 | 0.000 | 116. | | 225. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.374 INCHES
VOLUME OF EXCESS PRECIP = 31.72 ACRE-FEET
PEAK Q = 323. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.40 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W4 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.19 | 1.03 | 0.51 | 10.80 | 0.0100 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.124 | 0.224 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.09 | D= 0.22 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 19.12 | 518.38 | 97.46 | 10.03 |

WIDTH AT 50 = 58. MIN. WIDTH AT 75 = 30. MIN. K50 =0.20 K75 =0.27

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | | TIME | UNIT HYDROGRAPH | | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|---|---|
| 0. | 0. | | 70. | 46. | | 140. | 17. |

| | | | | | |
|---|---|---|---|---|---|
| 5. | 26. | 75. | 43. | 145. | 16. |
| 10. | 67. | 80. | 40. | 150. | 15. |
| 15. | 92. | 85. | 37. | 155. | 14. |
| 20. | 97. | 90. | 35. | 160. | 13. |
| 25. | 90. | 95. | 32. | 165. | 12. |
| 30. | 78. | 100. | 30. | 170. | 11. |
| 35. | 68. | 105. | 28. | 175. | 11. |
| 40. | 70. | 110. | 26. | 180. | 10. |
| 45. | 69. | 115. | 24. | 185. | 9. |
| 50. | 64. | 120. | 23. | 190. | 9. |
| 55. | 59. | 125. | 21. | 195. | 8. |
| 60. | 54. | 130. | 20. | 200. | 7. |
| 65. | 49. | 135. | 18. | 205. | 0. |

1 BASIN ID: W4 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 130. | 0.01 | 0.000 | 48. |
| 5. | 0.03 | 0.000 | 0. | 135. | 0.01 | 0.000 | 45. |
| 10. | 0.08 | 0.001 | 0. | 140. | 0.01 | 0.000 | 42. |
| 15. | 0.12 | 0.003 | 0. | 145. | 0.01 | 0.000 | 39. |
| 20. | 0.21 | 0.012 | 1. | 150. | 0.01 | 0.000 | 36. |
| 25. | 0.34 | 0.071 | 3. | 155. | 0.01 | 0.000 | 34. |
| 30. | 0.60 | 0.536 | 20. | 160. | 0.01 | 0.000 | 32. |
| 35. | 0.34 | 0.280 | 51. | 165. | 0.01 | 0.000 | 30. |
| 40. | 0.21 | 0.162 | 81. | 170. | 0.01 | 0.000 | 28. |
| 45. | 0.17 | 0.117 | 99. | 175. | 0.01 | 0.000 | 26. |
| 50. | 0.13 | 0.086 | 107. | 180. | 0.01 | 0.000 | 24. |
| 55. | 0.11 | 0.060 | 106. | 185. | 0.00 | 0.000 | 23. |
| 60. | 0.11 | 0.060 | 104. | 190. | 0.00 | 0.000 | 21. |
| 65. | 0.11 | 0.060 | 105. | 195. | 0.00 | 0.000 | 20. |
| 70. | 0.05 | 0.008 | 106. | 200. | 0.00 | 0.000 | 18. |
| 75. | 0.05 | 0.008 | 102. | 205. | 0.00 | 0.000 | 17. |
| 80. | 0.03 | 0.002 | 97. | 210. | 0.00 | 0.000 | 16. |
| 85. | 0.03 | 0.002 | 90. | 215. | 0.00 | 0.000 | 15. |
| 90. | 0.03 | 0.002 | 83. | 220. | 0.00 | 0.000 | 14. |
| 95. | 0.03 | 0.002 | 78. | 225. | 0.00 | 0.000 | 12. |
| 100. | 0.03 | 0.002 | 73. | 230. | 0.00 | 0.000 | 8. |
| 105. | 0.03 | 0.002 | 68. | 235. | 0.00 | 0.000 | 5. |
| 110. | 0.03 | 0.002 | 63. | 240. | 0.00 | 0.000 | 4. |
| 115. | 0.03 | 0.002 | 59. | 245. | 0.00 | 0.000 | 3. |
| 120. | 0.03 | 0.002 | 55. | 250. | 0.00 | 0.000 | 2. |
| 125. | 0.01 | 0.000 | 51. | 255. | 0.00 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.485 INCHES
VOLUME OF EXCESS PRECIP = 14.89 ACRE-FEET
PEAK Q = 107. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W5 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.43 | 1.20 | 0.67 | 2.00 | 0.0170 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.294 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 24.85 | 504.98 | 216.13 | 22.83 |

WIDTH AT 50 = 59. MIN. WIDTH AT 75 = 31. MIN. K50 =0.25 K75 =0.34

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.60 IN./HR. DECAY = 0.00160/SECOND FNINFL = 0.70 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 85. | 84. | 170. | 22. |
| 5. | 39. | 90. | 78. | 175. | 20. |
| 10. | 109. | 95. | 72. | 180. | 19. |
| 15. | 170. | 100. | 66. | 185. | 17. |
| 20. | 206. | 105. | 61. | 190. | 16. |
| 25. | 216. | 110. | 57. | 195. | 15. |
| 30. | 208. | 115. | 52. | 200. | 14. |
| 35. | 191. | 120. | 48. | 205. | 13. |
| 40. | 172. | 125. | 45. | 210. | 12. |
| 45. | 162. | 130. | 41. | 215. | 11. |
| 50. | 151. | 135. | 38. | 220. | 10. |
| 55. | 140. | 140. | 35. | 225. | 9. |
| 60. | 129. | 145. | 32. | 230. | 8. |
| 65. | 118. | 150. | 30. | 235. | 8. |
| 70. | 107. | 155. | 28. | 240. | 0. |
| 75. | 99. | 160. | 26. | 0. | 0. |
| 80. | 91. | 165. | 24. | 0. | 0. |

1 BASIN ID: W5 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 140. | 0.01 | 0.000 | 75. |
| 5. | 0.03 | 0.000 | 0. | 145. | 0.01 | 0.000 | 69. |
| 10. | 0.08 | 0.000 | 0. | 150. | 0.01 | 0.000 | 64. |
| 15. | 0.12 | 0.000 | 0. | 155. | 0.01 | 0.000 | 59. |
| 20. | 0.21 | 0.000 | 0. | 160. | 0.01 | 0.000 | 55. |
| 25. | 0.34 | 0.010 | 0. | 165. | 0.01 | 0.000 | 50. |
| 30. | 0.60 | 0.503 | 21. | 170. | 0.01 | 0.000 | 47. |
| 35. | 0.34 | 0.263 | 67. | 175. | 0.01 | 0.000 | 43. |
| 40. | 0.21 | 0.147 | 122. | 180. | 0.01 | 0.000 | 40. |
| 45. | 0.17 | 0.102 | 171. | 185. | 0.00 | 0.000 | 37. |
| 50. | 0.13 | 0.072 | 204. | 190. | 0.00 | 0.000 | 34. |
| 55. | 0.11 | 0.047 | 221. | 195. | 0.00 | 0.000 | 31. |
| 60. | 0.11 | 0.047 | 224. | 200. | 0.00 | 0.000 | 29. |
| 65. | 0.11 | 0.048 | 221. | 205. | 0.00 | 0.000 | 27. |
| 70. | 0.05 | 0.001 | 216. | 210. | 0.00 | 0.000 | 25. |
| 75. | 0.05 | 0.001 | 208. | 215. | 0.00 | 0.000 | 23. |
| 80. | 0.03 | 0.000 | 197. | 220. | 0.00 | 0.000 | 21. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 85. | 0.03 | 0.000 | 184. | 225. | 0.00 | 0.000 | 19. |
| 90. | 0.03 | 0.000 | 169. | 230. | 0.00 | 0.000 | 18. |
| 95. | 0.03 | 0.000 | 155. | 235. | 0.00 | 0.000 | 17. |
| 100. | 0.03 | 0.000 | 143. | 240. | 0.00 | 0.000 | 15. |
| 105. | 0.03 | 0.000 | 132. | 245. | 0.00 | 0.000 | 14. |
| 110. | 0.03 | 0.000 | 121. | 250. | 0.00 | 0.000 | 13. |
| 115. | 0.03 | 0.000 | 112. | 255. | 0.00 | 0.000 | 12. |
| 120. | 0.03 | 0.000 | 103. | 260. | 0.00 | 0.000 | 11. |
| 125. | 0.01 | 0.000 | 95. | 265. | 0.00 | 0.000 | 7. |
| 130. | 0.01 | 0.000 | 88. | 270. | 0.00 | 0.000 | 4. |
| 135. | 0.01 | 0.000 | 81. | 275. | 0.00 | 0.000 | 3. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.242 INCHES
VOLUME OF EXCESS PRECIP = 28.35 ACRE-FEET
PEAK Q = 224. CFS TIME OF PEAK = 60. MIN.
INFILT.= 4.60 IN/HR DECAY =0.00160 FNINF = 0.70 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W6 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.11 | 0.40 | 0.07 | 2.00 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.241 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 17.58 | 80.00 | 613.95 | 69.99 | 6.08 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 7.83)

WIDTH AT 50 = 49. MIN. WIDTH AT 75 = 25. MIN. K50 =0.22 K75 =0.29

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 55. | 36. | 110. | 15. |
| 5. | 21. | 60. | 33. | 115. | 14. |

| | | | | | |
|---|---|---|---|---|---|
| 10. | 52. | 65. | 30. | 120. | 13. |
| 15. | 68. | 70. | 28. | 125. | 12. |
| 20. | 69. | 75. | 26. | 130. | 11. |
| 25. | 61. | 80. | 24. | 135. | 10. |
| 30. | 53. | 85. | 22. | 140. | 9. |
| 35. | 52. | 90. | 21. | 145. | 9. |
| 40. | 49. | 95. | 19. | 150. | 8. |
| 45. | 44. | 100. | 18. | 155. | 7. |
| 50. | 40. | 105. | 16. | 160. | 0. |

1 BASIN ID: W6 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 105. | 0.03 | 0.000 | 38. |
| 5. | 0.03 | 0.000 | 0. | 110. | 0.03 | 0.000 | 35. |
| 10. | 0.08 | 0.000 | 0. | 115. | 0.03 | 0.000 | 33. |
| 15. | 0.12 | 0.000 | 0. | 120. | 0.03 | 0.000 | 30. |
| 20. | 0.21 | 0.000 | 0. | 125. | 0.01 | 0.000 | 28. |
| 25. | 0.34 | 0.032 | 1. | 130. | 0.01 | 0.000 | 26. |
| 30. | 0.60 | 0.533 | 13. | 135. | 0.01 | 0.000 | 24. |
| 35. | 0.34 | 0.276 | 36. | 140. | 0.01 | 0.000 | 22. |
| 40. | 0.21 | 0.158 | 56. | 145. | 0.01 | 0.000 | 20. |
| 45. | 0.17 | 0.113 | 68. | 150. | 0.01 | 0.000 | 19. |
| 50. | 0.13 | 0.082 | 72. | 155. | 0.01 | 0.000 | 17. |
| 55. | 0.11 | 0.056 | 71. | 160. | 0.01 | 0.000 | 16. |
| 60. | 0.11 | 0.056 | 71. | 165. | 0.01 | 0.000 | 15. |
| 65. | 0.11 | 0.057 | 70. | 170. | 0.01 | 0.000 | 14. |
| 70. | 0.05 | 0.004 | 68. | 175. | 0.01 | 0.000 | 13. |
| 75. | 0.05 | 0.004 | 64. | 180. | 0.01 | 0.000 | 12. |
| 80. | 0.03 | 0.000 | 59. | 185. | 0.00 | 0.000 | 7. |
| 85. | 0.03 | 0.000 | 53. | 190. | 0.00 | 0.000 | 5. |
| 90. | 0.03 | 0.000 | 49. | 195. | 0.00 | 0.000 | 3. |
| 95. | 0.03 | 0.000 | 45. | 200. | 0.00 | 0.000 | 2. |
| 100. | 0.03 | 0.000 | 42. | 205. | 0.00 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.370 INCHES
VOLUME OF EXCESS PRECIP = 8.33 ACRE-FEET
PEAK Q = 72. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W7 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.01 | 0.14 | 0.04 | 30.00 | 0.0070 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.099 | 0.189 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED |
|---|---|

IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.16

TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.60

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 7.50 | 22.00 | 1453.96 | 10.18 | 0.37 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 4.19)

WIDTH AT 50 = 21. MIN. WIDTH AT 75 = 11. MIN. K50 =0.22 K75 =0.30

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 25. | 5. | 50. | 6. |
| 5. | 9. | 30. | 5. | 55. | 7. |
| 10. | 9. | 35. | 6. | 60. | 7. |
| 15. | 8. | 40. | 6. | 65. | 7. |
| 20. | 6. | 45. | 6. | 70. | 0. |

1 BASIN ID: W7 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 60. | 0.11 | 0.069 | 10. |
| 5. | 0.03 | 0.000 | 0. | 65. | 0.11 | 0.069 | 10. |
| 10. | 0.08 | 0.010 | 0. | 70. | 0.05 | 0.017 | 10. |
| 15. | 0.12 | 0.021 | 0. | 75. | 0.05 | 0.017 | 10. |
| 20. | 0.21 | 0.048 | 1. | 80. | 0.03 | 0.007 | 11. |
| 25. | 0.34 | 0.135 | 2. | 85. | 0.03 | 0.007 | 11. |
| 30. | 0.60 | 0.543 | 7. | 90. | 0.03 | 0.007 | 10. |
| 35. | 0.34 | 0.288 | 9. | 95. | 0.03 | 0.007 | 6. |
| 40. | 0.21 | 0.171 | 10. | 100. | 0.03 | 0.007 | 4. |
| 45. | 0.17 | 0.125 | 9. | 105. | 0.03 | 0.007 | 3. |
| 50. | 0.13 | 0.095 | 9. | 110. | 0.03 | 0.007 | 3. |
| 55. | 0.11 | 0.069 | 9. | 115. | 0.03 | 0.007 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.772 INCHES
VOLUME OF EXCESS PRECIP = 0.66 ACRE-FEET
PEAK Q = 11. CFS TIME OF PEAK = 85. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W9 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.20 | 0.80 | 0.37 | 2.00 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.263 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 17.55 | 671.02 | 136.89 | 10.88 |

WIDTH AT 50 = 45. MIN. WIDTH AT 75 = 23. MIN. K50 =0.24 K75 =0.32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 60. | 58. | 120. | 18. |
| 5. | 42. | 65. | 53. | 125. | 16. |
| 10. | 102. | 70. | 48. | 130. | 14. |
| 15. | 134. | 75. | 43. | 135. | 13. |
| 20. | 134. | 80. | 39. | 140. | 12. |
| 25. | 120. | 85. | 35. | 145. | 11. |
| 30. | 105. | 90. | 32. | 150. | 10. |
| 35. | 100. | 95. | 29. | 155. | 9. |
| 40. | 90. | 100. | 26. | 160. | 8. |
| 45. | 81. | 105. | 24. | 165. | 0. |
| 50. | 72. | 110. | 22. | 0. | 0. |
| 55. | 64. | 115. | 19. | 0. | 0. |

1 BASIN ID: W9 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 105. | 0.03 | 0.000 | 65. |
| 5. | 0.03 | 0.000 | 0. | 110. | 0.03 | 0.000 | 59. |
| 10. | 0.08 | 0.000 | 0. | 115. | 0.03 | 0.000 | 53. |
| 15. | 0.12 | 0.000 | 0. | 120. | 0.03 | 0.000 | 48. |
| 20. | 0.21 | 0.000 | 0. | 125. | 0.01 | 0.000 | 44. |
| 25. | 0.34 | 0.032 | 1. | 130. | 0.01 | 0.000 | 39. |
| 30. | 0.60 | 0.533 | 26. | 135. | 0.01 | 0.000 | 36. |
| 35. | 0.34 | 0.276 | 70. | 140. | 0.01 | 0.000 | 32. |
| 40. | 0.21 | 0.158 | 110. | 145. | 0.01 | 0.000 | 29. |
| 45. | 0.17 | 0.113 | 133. | 150. | 0.01 | 0.000 | 27. |
| 50. | 0.13 | 0.082 | 140. | 155. | 0.01 | 0.000 | 24. |
| 55. | 0.11 | 0.056 | 139. | 160. | 0.01 | 0.000 | 22. |
| 60. | 0.11 | 0.056 | 138. | 165. | 0.01 | 0.000 | 20. |
| 65. | 0.11 | 0.057 | 135. | 170. | 0.01 | 0.000 | 18. |
| 70. | 0.05 | 0.004 | 129. | 175. | 0.01 | 0.000 | 16. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 75. | 0.05 | 0.004 | 119. | | 180. | 0.01 | 0.000 | 15. |
| 80. | 0.03 | 0.000 | 108. | | 185. | 0.00 | 0.000 | 13. |
| 85. | 0.03 | 0.000 | 97. | | 190. | 0.00 | 0.000 | 8. |
| 90. | 0.03 | 0.000 | 88. | | 195. | 0.00 | 0.000 | 5. |
| 95. | 0.03 | 0.000 | 80. | | 200. | 0.00 | 0.000 | 4. |
| 100. | 0.03 | 0.000 | 72. | | 205. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.370 INCHES
VOLUME OF EXCESS PRECIP = 14.91 ACRE-FEET
PEAK Q = 140. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W11 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.08 | 0.51 | 0.22 | 15.00 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.118 | 0.203 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.10 | D= 0.30 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 17.53 | 90.00 | 518.54 | 40.45 | 4.16 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 10.21)

WIDTH AT 50 = 58. MIN. WIDTH AT 75 = 30. MIN. K50 =0.18 K75 =0.25

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | | TIME | UNIT HYDROGRAPH | | TIME | UNIT HYDROGRAPH | |
|---|---|---|---|---|---|---|---|---|
| 0. | 0. | | 65. | 20. | | 130. | 12. | |
| 5. | 12. | | 70. | 19. | | 135. | 11. | |
| 10. | 30. | | 75. | 19. | | 140. | 11. | |
| 15. | 39. | | 80. | 18. | | 145. | 11. | |
| 20. | 40. | | 85. | 17. | | 150. | 10. | |
| 25. | 35. | | 90. | 17. | | 155. | 10. | |
| 30. | 29. | | 95. | 16. | | 160. | 9. | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 35. | 26. | 100. | 15. | 165. | 9. | | |
| 40. | 30. | 105. | 15. | 170. | 9. | | |
| 45. | 28. | 110. | 14. | 175. | 8. | | |
| 50. | 26. | 115. | 13. | 180. | 8. | | |
| 55. | 24. | 120. | 13. | 185. | 8. | | |
| 60. | 22. | 125. | 12. | 190. | 0. | | |

1 BASIN ID: W11 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 120. | 0.03 | 0.003 | 27. |
| 5. | 0.03 | 0.000 | 0. | 125. | 0.01 | 0.001 | 26. |
| 10. | 0.08 | 0.002 | 0. | 130. | 0.01 | 0.001 | 25. |
| 15. | 0.12 | 0.005 | 0. | 135. | 0.01 | 0.001 | 24. |
| 20. | 0.21 | 0.021 | 1. | 140. | 0.01 | 0.001 | 23. |
| 25. | 0.34 | 0.086 | 2. | 145. | 0.01 | 0.001 | 22. |
| 30. | 0.60 | 0.538 | 10. | 150. | 0.01 | 0.001 | 21. |
| 35. | 0.34 | 0.282 | 24. | 155. | 0.01 | 0.001 | 20. |
| 40. | 0.21 | 0.164 | 36. | 160. | 0.01 | 0.001 | 19. |
| 45. | 0.17 | 0.118 | 43. | 165. | 0.01 | 0.001 | 19. |
| 50. | 0.13 | 0.088 | 44. | 170. | 0.01 | 0.001 | 18. |
| 55. | 0.11 | 0.062 | 43. | 175. | 0.01 | 0.001 | 17. |
| 60. | 0.11 | 0.062 | 42. | 180. | 0.01 | 0.001 | 17. |
| 65. | 0.11 | 0.062 | 44. | 185. | 0.00 | 0.000 | 16. |
| 70. | 0.05 | 0.010 | 44. | 190. | 0.00 | 0.000 | 15. |
| 75. | 0.05 | 0.010 | 43. | 195. | 0.00 | 0.000 | 15. |
| 80. | 0.03 | 0.003 | 41. | 200. | 0.00 | 0.000 | 14. |
| 85. | 0.03 | 0.003 | 38. | 205. | 0.00 | 0.000 | 13. |
| 90. | 0.03 | 0.003 | 35. | 210. | 0.00 | 0.000 | 12. |
| 95. | 0.03 | 0.003 | 33. | 215. | 0.00 | 0.000 | 8. |
| 100. | 0.03 | 0.003 | 32. | 220. | 0.00 | 0.000 | 5. |
| 105. | 0.03 | 0.003 | 30. | 225. | 0.00 | 0.000 | 4. |
| 110. | 0.03 | 0.003 | 29. | 230. | 0.00 | 0.000 | 3. |
| 115. | 0.03 | 0.003 | 28. | 235. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.545 INCHES
VOLUME OF EXCESS PRECIP = 6.43 ACRE-FEET
PEAK Q = 44. CFS TIME OF PEAK = 70. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W12 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.44 | 1.14 | 0.59 | 10.90 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.124 | 0.255 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED |
|---|---|

IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.09

TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.22

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 21.60 | 513.48 | 227.99 | 23.68 |

WIDTH AT 50 = 58. MIN. WIDTH AT 75 = 30. MIN. K50 =0.22 K75 =0.30

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 85. | 86. | 170. | 22. |
| 5. | 51. | 90. | 79. | 175. | 21. |
| 10. | 137. | 95. | 73. | 180. | 19. |
| 15. | 200. | 100. | 68. | 185. | 18. |
| 20. | 227. | 105. | 63. | 190. | 16. |
| 25. | 223. | 110. | 58. | 195. | 15. |
| 30. | 203. | 115. | 53. | 200. | 14. |
| 35. | 180. | 120. | 49. | 205. | 13. |
| 40. | 168. | 125. | 46. | 210. | 12. |
| 45. | 166. | 130. | 42. | 215. | 11. |
| 50. | 154. | 135. | 39. | 220. | 10. |
| 55. | 142. | 140. | 36. | 225. | 9. |
| 60. | 131. | 145. | 33. | 230. | 9. |
| 65. | 119. | 150. | 31. | 235. | 8. |
| 70. | 109. | 155. | 28. | 240. | 7. |
| 75. | 101. | 160. | 26. | 245. | 0. |
| 80. | 93. | 165. | 24. | 0. | 0. |

1 BASIN ID: W12 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 150. | 0.01 | 0.000 | 80. |
| 5. | 0.03 | 0.000 | 0. | 155. | 0.01 | 0.000 | 74. |
| 10. | 0.08 | 0.001 | 0. | 160. | 0.01 | 0.000 | 69. |
| 15. | 0.12 | 0.003 | 0. | 165. | 0.01 | 0.000 | 64. |
| 20. | 0.21 | 0.012 | 1. | 170. | 0.01 | 0.000 | 59. |
| 25. | 0.34 | 0.071 | 6. | 175. | 0.01 | 0.000 | 54. |
| 30. | 0.60 | 0.536 | 40. | 180. | 0.01 | 0.000 | 50. |
| 35. | 0.34 | 0.280 | 106. | 185. | 0.00 | 0.000 | 47. |
| 40. | 0.21 | 0.162 | 174. | 190. | 0.00 | 0.000 | 43. |
| 45. | 0.17 | 0.117 | 225. | 195. | 0.00 | 0.000 | 40. |
| 50. | 0.13 | 0.086 | 253. | 200. | 0.00 | 0.000 | 37. |
| 55. | 0.11 | 0.060 | 262. | 205. | 0.00 | 0.000 | 34. |
| 60. | 0.11 | 0.060 | 259. | 210. | 0.00 | 0.000 | 31. |
| 65. | 0.11 | 0.061 | 256. | 215. | 0.00 | 0.000 | 29. |
| 70. | 0.05 | 0.008 | 255. | 220. | 0.00 | 0.000 | 27. |
| 75. | 0.05 | 0.008 | 248. | 225. | 0.00 | 0.000 | 25. |
| 80. | 0.03 | 0.002 | 235. | 230. | 0.00 | 0.000 | 23. |
| 85. | 0.03 | 0.002 | 219. | 235. | 0.00 | 0.000 | 21. |
| 90. | 0.03 | 0.002 | 202. | 240. | 0.00 | 0.000 | 20. |
| 95. | 0.03 | 0.002 | 187. | 245. | 0.00 | 0.000 | 18. |
| 100. | 0.03 | 0.002 | 173. | 250. | 0.00 | 0.000 | 17. |
| 105. | 0.03 | 0.002 | 161. | 255. | 0.00 | 0.000 | 15. |
| 110. | 0.03 | 0.002 | 149. | 260. | 0.00 | 0.000 | 14. |
| 115. | 0.03 | 0.002 | 138. | 265. | 0.00 | 0.000 | 13. |
| 120. | 0.03 | 0.002 | 128. | 270. | 0.00 | 0.000 | 8. |
| 125. | 0.01 | 0.000 | 118. | 275. | 0.00 | 0.000 | 5. |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 130. | 0.01 | 0.000 | 110. | | 280. | 0.00 | 0.000 | 4. | |
| 135. | 0.01 | 0.000 | 101. | | 285. | 0.00 | 0.000 | 3. | |
| 140. | 0.01 | 0.000 | 94. | | 290. | 0.00 | 0.000 | 2. | |
| 145. | 0.01 | 0.000 | 87. | | 295. | 0.00 | 0.000 | 1. | |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.487 INCHES
VOLUME OF EXCESS PRECIP = 35.21 ACRE-FEET
PEAK Q = 262. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W13 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.65 | 1.30 | 0.58 | 3.70 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.149 | 0.301 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.07 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 25.11 | 511.27 | 334.37 | 34.88 |

WIDTH AT 50 = 59. MIN. WIDTH AT 75 = 31. MIN. K50 =0.26 K75 =0.35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.30 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | | TIME | UNIT HYDROGRAPH | | TIME | UNIT HYDROGRAPH | |
|---|---|---|---|---|---|---|---|---|
| 0. | 0. | | 90. | 117. | | 180. | 26. | |
| 5. | 59. | | 95. | 108. | | 185. | 24. | |
| 10. | 166. | | 100. | 99. | | 190. | 22. | |
| 15. | 260. | | 105. | 92. | | 195. | 21. | |
| 20. | 318. | | 110. | 84. | | 200. | 19. | |
| 25. | 334. | | 115. | 78. | | 205. | 17. | |
| 30. | 323. | | 120. | 71. | | 210. | 16. | |
| 35. | 297. | | 125. | 66. | | 215. | 15. | |
| 40. | 268. | | 130. | 60. | | 220. | 14. | |
| 45. | 251. | | 135. | 56. | | 225. | 12. | |
| 50. | 233. | | 140. | 51. | | 230. | 11. | |
| 55. | 215. | | 145. | 47. | | 235. | 11. | |
| 60. | 198. | | 150. | 43. | | 240. | 10. | |
| 65. | 180. | | 155. | 40. | | 245. | 9. | |
| 70. | 164. | | 160. | 37. | | 250. | 8. | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 75. | 151. | 165. | 34. | 255. | 8. | | |
| 80. | 139. | 170. | 31. | 260. | 0. | | |
| 85. | 128. | 175. | 29. | 0. | 0. | | |

1 BASIN ID: W13 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 155. | 0.01 | 0.000 | 98. |
| 5. | 0.03 | 0.000 | 0. | 160. | 0.01 | 0.000 | 90. |
| 10. | 0.08 | 0.000 | 0. | 165. | 0.01 | 0.000 | 83. |
| 15. | 0.12 | 0.000 | 0. | 170. | 0.01 | 0.000 | 76. |
| 20. | 0.21 | 0.001 | 0. | 175. | 0.01 | 0.000 | 70. |
| 25. | 0.34 | 0.036 | 2. | 180. | 0.01 | 0.000 | 64. |
| 30. | 0.60 | 0.532 | 38. | 185. | 0.00 | 0.000 | 59. |
| 35. | 0.34 | 0.275 | 114. | 190. | 0.00 | 0.000 | 55. |
| 40. | 0.21 | 0.158 | 205. | 195. | 0.00 | 0.000 | 50. |
| 45. | 0.17 | 0.113 | 286. | 200. | 0.00 | 0.000 | 46. |
| 50. | 0.13 | 0.082 | 342. | 205. | 0.00 | 0.000 | 43. |
| 55. | 0.11 | 0.056 | 371. | 210. | 0.00 | 0.000 | 39. |
| 60. | 0.11 | 0.057 | 380. | 215. | 0.00 | 0.000 | 36. |
| 65. | 0.11 | 0.057 | 376. | 220. | 0.00 | 0.000 | 33. |
| 70. | 0.05 | 0.004 | 369. | 225. | 0.00 | 0.000 | 31. |
| 75. | 0.05 | 0.005 | 356. | 230. | 0.00 | 0.000 | 28. |
| 80. | 0.03 | 0.000 | 338. | 235. | 0.00 | 0.000 | 26. |
| 85. | 0.03 | 0.000 | 315. | 240. | 0.00 | 0.000 | 24. |
| 90. | 0.03 | 0.000 | 291. | 245. | 0.00 | 0.000 | 22. |
| 95. | 0.03 | 0.000 | 266. | 250. | 0.00 | 0.000 | 20. |
| 100. | 0.03 | 0.000 | 244. | 255. | 0.00 | 0.000 | 19. |
| 105. | 0.03 | 0.000 | 225. | 260. | 0.00 | 0.000 | 17. |
| 110. | 0.03 | 0.000 | 207. | 265. | 0.00 | 0.000 | 16. |
| 115. | 0.03 | 0.000 | 190. | 270. | 0.00 | 0.000 | 14. |
| 120. | 0.03 | 0.000 | 175. | 275. | 0.00 | 0.000 | 13. |
| 125. | 0.01 | 0.000 | 161. | 280. | 0.00 | 0.000 | 12. |
| 130. | 0.01 | 0.000 | 148. | 285. | 0.00 | 0.000 | 7. |
| 135. | 0.01 | 0.000 | 136. | 290. | 0.00 | 0.000 | 5. |
| 140. | 0.01 | 0.000 | 125. | 295. | 0.00 | 0.000 | 3. |
| 145. | 0.01 | 0.000 | 115. | 300. | 0.00 | 0.000 | 2. |
| 150. | 0.01 | 0.000 | 106. | 305. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.378 INCHES
VOLUME OF EXCESS PRECIP = 48.07 ACRE-FEET
PEAK Q = 380. CFS TIME OF PEAK = 60. MIN.
INFILT.= 4.30 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W14 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.30 | 1.02 | 0.37 | 7.20 | 0.0140 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.136 | 0.250 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.08 | D= 0.14 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 16.81 | 670.65 | 198.51 | 15.79 |

WIDTH AT 50 = 45. MIN. WIDTH AT 75 = 23. MIN. K50 =0.23 K75 =0.31

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 65. | 75. | 130. | 20. |
| 5. | 65. | 70. | 68. | 135. | 18. |
| 10. | 154. | 75. | 61. | 140. | 16. |
| 15. | 196. | 80. | 55. | 145. | 15. |
| 20. | 192. | 85. | 50. | 150. | 13. |
| 25. | 168. | 90. | 45. | 155. | 12. |
| 30. | 148. | 95. | 41. | 160. | 11. |
| 35. | 143. | 100. | 37. | 165. | 10. |
| 40. | 130. | 105. | 33. | 170. | 9. |
| 45. | 117. | 110. | 30. | 175. | 8. |
| 50. | 103. | 115. | 27. | 180. | 0. |
| 55. | 92. | 120. | 24. | 0. | 0. |
| 60. | 83. | 125. | 22. | 0. | 0. |

1 BASIN ID: W14 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 115. | 0.03 | 0.001 | 79. |
| 5. | 0.03 | 0.000 | 0. | 120. | 0.03 | 0.001 | 71. |
| 10. | 0.08 | 0.001 | 0. | 125. | 0.01 | 0.000 | 64. |
| 15. | 0.12 | 0.001 | 0. | 130. | 0.01 | 0.000 | 58. |
| 20. | 0.21 | 0.004 | 1. | 135. | 0.01 | 0.000 | 53. |
| 25. | 0.34 | 0.050 | 4. | 140. | 0.01 | 0.000 | 48. |
| 30. | 0.60 | 0.532 | 43. | 145. | 0.01 | 0.000 | 43. |
| 35. | 0.34 | 0.276 | 111. | 150. | 0.01 | 0.000 | 39. |
| 40. | 0.21 | 0.159 | 168. | 155. | 0.01 | 0.000 | 35. |
| 45. | 0.17 | 0.114 | 197. | 160. | 0.01 | 0.000 | 32. |
| 50. | 0.13 | 0.084 | 205. | 165. | 0.01 | 0.000 | 29. |
| 55. | 0.11 | 0.058 | 202. | 170. | 0.01 | 0.000 | 26. |
| 60. | 0.11 | 0.058 | 202. | 175. | 0.01 | 0.000 | 23. |
| 65. | 0.11 | 0.059 | 198. | 180. | 0.01 | 0.000 | 21. |
| 70. | 0.05 | 0.006 | 189. | 185. | 0.00 | 0.000 | 19. |
| 75. | 0.05 | 0.006 | 175. | 190. | 0.00 | 0.000 | 17. |
| 80. | 0.03 | 0.001 | 159. | 195. | 0.00 | 0.000 | 16. |
| 85. | 0.03 | 0.001 | 144. | 200. | 0.00 | 0.000 | 14. |
| 90. | 0.03 | 0.001 | 130. | 205. | 0.00 | 0.000 | 9. |
| 95. | 0.03 | 0.001 | 118. | 210. | 0.00 | 0.000 | 6. |
| 100. | 0.03 | 0.001 | 107. | 215. | 0.00 | 0.000 | 4. |
| 105. | 0.03 | 0.001 | 96. | 220. | 0.00 | 0.000 | 3. |
| 110. | 0.03 | 0.001 | 87. | 225. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.418 INCHES
VOLUME OF EXCESS PRECIP = 22.39 ACRE-FEET
PEAK Q = 205. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W15 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.10 | 0.44 | 0.28 | 2.00 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.235 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.06 | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.04 |
|---|---|

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 18.14 | 83.00 | 577.57 | 56.02 | 5.17 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 13.15)

WIDTH AT 50 = 52. MIN. WIDTH AT 75 = 27. MIN. K50 =0.21 K75 =0.28

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 60. | 28. | 120. | 13. |
| 5. | 16. | 65. | 26. | 125. | 12. |
| 10. | 40. | 70. | 24. | 130. | 12. |
| 15. | 54. | 75. | 23. | 135. | 11. |
| 20. | 55. | 80. | 22. | 140. | 10. |
| 25. | 50. | 85. | 20. | 145. | 10. |
| 30. | 43. | 90. | 19. | 150. | 9. |
| 35. | 40. | 95. | 18. | 155. | 8. |
| 40. | 40. | 100. | 17. | 160. | 8. |
| 45. | 37. | 105. | 16. | 165. | 7. |
| 50. | 34. | 110. | 15. | 170. | 0. |
| 55. | 31. | 115. | 14. | 0. | 0. |

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 110. | 0.03 | 0.000 | 31. |
| 5. | 0.03 | 0.000 | 0. | 115. | 0.03 | 0.000 | 29. |
| 10. | 0.08 | 0.000 | 0. | 120. | 0.03 | 0.000 | 28. |
| 15. | 0.12 | 0.000 | 0. | 125. | 0.01 | 0.000 | 26. |
| 20. | 0.21 | 0.000 | 0. | 130. | 0.01 | 0.000 | 24. |
| 25. | 0.34 | 0.032 | 1. | 135. | 0.01 | 0.000 | 23. |
| 30. | 0.60 | 0.533 | 10. | 140. | 0.01 | 0.000 | 21. |
| 35. | 0.34 | 0.276 | 28. | 145. | 0.01 | 0.000 | 20. |
| 40. | 0.21 | 0.158 | 44. | 150. | 0.01 | 0.000 | 19. |
| 45. | 0.17 | 0.113 | 54. | 155. | 0.01 | 0.000 | 18. |
| 50. | 0.13 | 0.082 | 58. | 160. | 0.01 | 0.000 | 17. |
| 55. | 0.11 | 0.056 | 57. | 165. | 0.01 | 0.000 | 16. |
| 60. | 0.11 | 0.056 | 56. | 170. | 0.01 | 0.000 | 15. |
| 65. | 0.11 | 0.057 | 57. | 175. | 0.01 | 0.000 | 14. |
| 70. | 0.05 | 0.004 | 56. | 180. | 0.01 | 0.000 | 13. |
| 75. | 0.05 | 0.004 | 53. | 185. | 0.00 | 0.000 | 12. |
| 80. | 0.03 | 0.000 | 49. | 190. | 0.00 | 0.000 | 11. |
| 85. | 0.03 | 0.000 | 45. | 195. | 0.00 | 0.000 | 7. |
| 90. | 0.03 | 0.000 | 41. | 200. | 0.00 | 0.000 | 4. |
| 95. | 0.03 | 0.000 | 39. | 205. | 0.00 | 0.000 | 3. |
| 100. | 0.03 | 0.000 | 36. | 210. | 0.00 | 0.000 | 2. |
| 105. | 0.03 | 0.000 | 34. | 215. | 0.00 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.370 INCHES
VOLUME OF EXCESS PRECIP = 7.09 ACRE-FEET
PEAK Q = 58. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W16 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.63 | 1.67 | 0.61 | 2.60 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.153 | 0.307 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.05 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 29.34 | 439.57 | 278.25 | 33.76 |

WIDTH AT 50 = 68. MIN. WIDTH AT 75 = 35. MIN. K50 =0.26 K75 =0.35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.20 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 100. | 105. | 200. | 25. |
| 5. | 38. | 105. | 98. | 205. | 24. |
| 10. | 112. | 110. | 91. | 210. | 22. |
| 15. | 187. | 115. | 85. | 215. | 21. |
| 20. | 241. | 120. | 79. | 220. | 19. |
| 25. | 271. | 125. | 74. | 225. | 18. |
| 30. | 278. | 130. | 69. | 230. | 17. |
| 35. | 269. | 135. | 64. | 235. | 16. |
| 40. | 251. | 140. | 60. | 240. | 14. |
| 45. | 230. | 145. | 55. | 245. | 13. |
| 50. | 213. | 150. | 52. | 250. | 13. |
| 55. | 202. | 155. | 48. | 255. | 12. |
| 60. | 189. | 160. | 45. | 260. | 11. |
| 65. | 177. | 165. | 42. | 265. | 10. |
| 70. | 164. | 170. | 39. | 270. | 9. |
| 75. | 152. | 175. | 36. | 275. | 9. |
| 80. | 139. | 180. | 34. | 280. | 8. |
| 85. | 130. | 185. | 31. | 285. | 8. |
| 90. | 121. | 190. | 29. | 290. | 0. |
| 95. | 112. | 195. | 27. | 0. | 0. |

1 BASIN ID: W16 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 170. | 0.01 | 0.000 | 88. |
| 5. | 0.03 | 0.000 | 0. | 175. | 0.01 | 0.000 | 82. |
| 10. | 0.08 | 0.000 | 0. | 180. | 0.01 | 0.000 | 76. |
| 15. | 0.12 | 0.000 | 0. | 185. | 0.00 | 0.000 | 71. |
| 20. | 0.21 | 0.000 | 0. | 190. | 0.00 | 0.000 | 66. |
| 25. | 0.34 | 0.041 | 2. | 195. | 0.00 | 0.000 | 62. |
| 30. | 0.60 | 0.535 | 25. | 200. | 0.00 | 0.000 | 57. |
| 35. | 0.34 | 0.277 | 78. | 205. | 0.00 | 0.000 | 53. |
| 40. | 0.21 | 0.159 | 147. | 210. | 0.00 | 0.000 | 50. |
| 45. | 0.17 | 0.113 | 214. | 215. | 0.00 | 0.000 | 46. |
| 50. | 0.13 | 0.082 | 269. | 220. | 0.00 | 0.000 | 43. |
| 55. | 0.11 | 0.056 | 306. | 225. | 0.00 | 0.000 | 40. |
| 60. | 0.11 | 0.057 | 326. | 230. | 0.00 | 0.000 | 37. |
| 65. | 0.11 | 0.057 | 332. | 235. | 0.00 | 0.000 | 35. |
| 70. | 0.05 | 0.004 | 328. | 240. | 0.00 | 0.000 | 33. |
| 75. | 0.05 | 0.004 | 319. | 245. | 0.00 | 0.000 | 30. |
| 80. | 0.03 | 0.000 | 308. | 250. | 0.00 | 0.000 | 28. |
| 85. | 0.03 | 0.000 | 293. | 255. | 0.00 | 0.000 | 26. |
| 90. | 0.03 | 0.000 | 276. | 260. | 0.00 | 0.000 | 25. |
| 95. | 0.03 | 0.000 | 258. | 265. | 0.00 | 0.000 | 23. |
| 100. | 0.03 | 0.000 | 240. | 270. | 0.00 | 0.000 | 21. |
| 105. | 0.03 | 0.000 | 222. | 275. | 0.00 | 0.000 | 20. |
| 110. | 0.03 | 0.000 | 206. | 280. | 0.00 | 0.000 | 18. |
| 115. | 0.03 | 0.000 | 192. | 285. | 0.00 | 0.000 | 17. |
| 120. | 0.03 | 0.000 | 179. | 290. | 0.00 | 0.000 | 16. |
| 125. | 0.01 | 0.000 | 166. | 295. | 0.00 | 0.000 | 15. |
| 130. | 0.01 | 0.000 | 155. | 300. | 0.00 | 0.000 | 14. |
| 135. | 0.01 | 0.000 | 144. | 305. | 0.00 | 0.000 | 13. |
| 140. | 0.01 | 0.000 | 134. | 310. | 0.00 | 0.000 | 12. |
| 145. | 0.01 | 0.000 | 125. | 315. | 0.00 | 0.000 | 7. |
| 150. | 0.01 | 0.000 | 116. | 320. | 0.00 | 0.000 | 5. |
| 155. | 0.01 | 0.000 | 108. | 325. | 0.00 | 0.000 | 3. |
| 160. | 0.01 | 0.000 | 101. | 330. | 0.00 | 0.000 | 2. |
| 165. | 0.01 | 0.000 | 94. | 335. | 0.00 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.386 INCHES
VOLUME OF EXCESS PRECIP = 46.80 ACRE-FEET
PEAK Q = 332. CFS TIME OF PEAK = 65. MIN.
INFILT.= 4.20 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W17 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.15 | 0.40 | 0.22 | 8.30 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.132 | 0.221 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.08 | D= 0.17 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 10.16 | 1108.67 | 164.08 | 7.89 |

WIDTH AT 50 = 27. MIN. WIDTH AT 75 = 14. MIN. K50 =0.23 K75 =0.31

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 40. | 61. | 80. | 16. |
| 5. | 106. | 45. | 52. | 85. | 14. |
| 10. | 164. | 50. | 44. | 90. | 12. |
| 15. | 139. | 55. | 37. | 95. | 10. |
| 20. | 123. | 60. | 31. | 100. | 8. |
| 25. | 104. | 65. | 27. | 105. | 0. |
| 30. | 86. | 70. | 23. | 0. | 0. |
| 35. | 72. | 75. | 19. | 0. | 0. |

1 BASIN ID: W17 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 80. | 0.03 | 0.001 | 77. |
| 5. | 0.03 | 0.000 | 0. | 85. | 0.03 | 0.001 | 65. |
| 10. | 0.08 | 0.001 | 0. | 90. | 0.03 | 0.001 | 55. |
| 15. | 0.12 | 0.002 | 0. | 95. | 0.03 | 0.001 | 47. |
| 20. | 0.21 | 0.007 | 1. | 100. | 0.03 | 0.001 | 40. |
| 25. | 0.34 | 0.062 | 8. | 105. | 0.03 | 0.001 | 34. |
| 30. | 0.60 | 0.535 | 68. | 110. | 0.03 | 0.001 | 29. |
| 35. | 0.34 | 0.279 | 127. | 115. | 0.03 | 0.001 | 25. |
| 40. | 0.21 | 0.161 | 146. | 120. | 0.03 | 0.001 | 21. |
| 45. | 0.17 | 0.115 | 150. | 125. | 0.01 | 0.000 | 18. |
| 50. | 0.13 | 0.085 | 147. | 130. | 0.01 | 0.000 | 11. |
| 55. | 0.11 | 0.059 | 136. | 135. | 0.01 | 0.000 | 8. |
| 60. | 0.11 | 0.059 | 126. | 140. | 0.01 | 0.000 | 5. |
| 65. | 0.11 | 0.059 | 117. | 145. | 0.01 | 0.000 | 4. |
| 70. | 0.05 | 0.007 | 104. | 150. | 0.01 | 0.000 | 3. |
| 75. | 0.05 | 0.007 | 89. | 155. | 0.01 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.451 INCHES
VOLUME OF EXCESS PRECIP = 11.45 ACRE-FEET
PEAK Q = 150. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W18 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.17 | 0.88 | 0.41 | 6.30 | 0.0160 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.140 | 0.234 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.07 | D= 0.13 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 16.40 | 646.93 | 111.92 | 9.23 |

WIDTH AT 50 = 46. MIN. WIDTH AT 75 = 24. MIN. K50 =0.21 K75 =0.29

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 60. | 49. | 120. | 16. |
| 5. | 38. | 65. | 45. | 125. | 15. |
| 10. | 89. | 70. | 41. | 130. | 14. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 15. | 111. | 75. | 37. | 135. | 13. | | |
| 20. | 107. | 80. | 34. | 140. | 11. | | |
| 25. | 92. | 85. | 31. | 145. | 10. | | |
| 30. | 81. | 90. | 28. | 150. | 10. | | |
| 35. | 82. | 95. | 26. | 155. | 9. | | |
| 40. | 75. | 100. | 24. | 160. | 8. | | |
| 45. | 67. | 105. | 22. | 165. | 0. | | |
| 50. | 60. | 110. | 20. | 0. | 0. | | |
| 55. | 54. | 115. | 18. | 0. | 0. | | |

1 BASIN ID: W18 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 105. | 0.03 | 0.001 | 58. |
| 5. | 0.03 | 0.000 | 0. | 110. | 0.03 | 0.001 | 53. |
| 10. | 0.08 | 0.000 | 0. | 115. | 0.03 | 0.001 | 48. |
| 15. | 0.12 | 0.001 | 0. | 120. | 0.03 | 0.001 | 44. |
| 20. | 0.21 | 0.002 | 0. | 125. | 0.01 | 0.000 | 40. |
| 25. | 0.34 | 0.055 | 2. | 130. | 0.01 | 0.000 | 37. |
| 30. | 0.60 | 0.535 | 26. | 135. | 0.01 | 0.000 | 34. |
| 35. | 0.34 | 0.278 | 64. | 140. | 0.01 | 0.000 | 31. |
| 40. | 0.21 | 0.160 | 96. | 145. | 0.01 | 0.000 | 28. |
| 45. | 0.17 | 0.115 | 112. | 150. | 0.01 | 0.000 | 26. |
| 50. | 0.13 | 0.084 | 115. | 155. | 0.01 | 0.000 | 23. |
| 55. | 0.11 | 0.058 | 113. | 160. | 0.01 | 0.000 | 21. |
| 60. | 0.11 | 0.058 | 114. | 165. | 0.01 | 0.000 | 20. |
| 65. | 0.11 | 0.058 | 113. | 170. | 0.01 | 0.000 | 18. |
| 70. | 0.05 | 0.006 | 108. | 175. | 0.01 | 0.000 | 16. |
| 75. | 0.05 | 0.006 | 101. | 180. | 0.01 | 0.000 | 15. |
| 80. | 0.03 | 0.001 | 92. | 185. | 0.00 | 0.000 | 13. |
| 85. | 0.03 | 0.001 | 84. | 190. | 0.00 | 0.000 | 8. |
| 90. | 0.03 | 0.001 | 76. | 195. | 0.00 | 0.000 | 5. |
| 95. | 0.03 | 0.001 | 70. | 200. | 0.00 | 0.000 | 4. |
| 100. | 0.03 | 0.001 | 64. | 205. | 0.00 | 0.000 | 3. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.424 INCHES
VOLUME OF EXCESS PRECIP = 13.14 ACRE-FEET
PEAK Q = 115. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W19 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.26 | 0.97 | 0.62 | 2.00 | 0.0130 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.272 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED |
|---|---|

IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.06

TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.04

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 23.29 | 502.90 | 129.25 | 13.71 |

WIDTH AT 50 = 60. MIN. WIDTH AT 75 = 31. MIN. K50 =0.23 K75 =0.32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.60 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 75. | 59. | 150. | 19. |
| 5. | 26. | 80. | 55. | 155. | 18. |
| 10. | 71. | 85. | 51. | 160. | 17. |
| 15. | 107. | 90. | 47. | 165. | 16. |
| 20. | 126. | 95. | 44. | 170. | 14. |
| 25. | 129. | 100. | 41. | 175. | 13. |
| 30. | 121. | 105. | 38. | 180. | 12. |
| 35. | 109. | 110. | 35. | 185. | 12. |
| 40. | 99. | 115. | 33. | 190. | 11. |
| 45. | 96. | 120. | 30. | 195. | 10. |
| 50. | 90. | 125. | 28. | 200. | 9. |
| 55. | 83. | 130. | 26. | 205. | 9. |
| 60. | 76. | 135. | 24. | 210. | 8. |
| 65. | 70. | 140. | 23. | 215. | 7. |
| 70. | 64. | 145. | 21. | 220. | 0. |

1 BASIN ID: W19 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 135. | 0.01 | 0.000 | 54. |
| 5. | 0.03 | 0.000 | 0. | 140. | 0.01 | 0.000 | 51. |
| 10. | 0.08 | 0.000 | 0. | 145. | 0.01 | 0.000 | 47. |
| 15. | 0.12 | 0.000 | 0. | 150. | 0.01 | 0.000 | 44. |
| 20. | 0.21 | 0.000 | 0. | 155. | 0.01 | 0.000 | 41. |
| 25. | 0.34 | 0.020 | 1. | 160. | 0.01 | 0.000 | 38. |
| 30. | 0.60 | 0.530 | 15. | 165. | 0.01 | 0.000 | 35. |
| 35. | 0.34 | 0.274 | 47. | 170. | 0.01 | 0.000 | 32. |
| 40. | 0.21 | 0.157 | 83. | 175. | 0.01 | 0.000 | 30. |
| 45. | 0.17 | 0.112 | 113. | 180. | 0.01 | 0.000 | 28. |
| 50. | 0.13 | 0.081 | 132. | 185. | 0.00 | 0.000 | 26. |
| 55. | 0.11 | 0.055 | 140. | 190. | 0.00 | 0.000 | 24. |
| 60. | 0.11 | 0.056 | 141. | 195. | 0.00 | 0.000 | 22. |
| 65. | 0.11 | 0.056 | 139. | 200. | 0.00 | 0.000 | 21. |
| 70. | 0.05 | 0.004 | 138. | 205. | 0.00 | 0.000 | 19. |
| 75. | 0.05 | 0.004 | 133. | 210. | 0.00 | 0.000 | 18. |
| 80. | 0.03 | 0.000 | 127. | 215. | 0.00 | 0.000 | 17. |
| 85. | 0.03 | 0.000 | 118. | 220. | 0.00 | 0.000 | 15. |
| 90. | 0.03 | 0.000 | 109. | 225. | 0.00 | 0.000 | 14. |
| 95. | 0.03 | 0.000 | 100. | 230. | 0.00 | 0.000 | 13. |
| 100. | 0.03 | 0.000 | 93. | 235. | 0.00 | 0.000 | 12. |
| 105. | 0.03 | 0.000 | 86. | 240. | 0.00 | 0.000 | 11. |
| 110. | 0.03 | 0.000 | 80. | 245. | 0.00 | 0.000 | 7. |
| 115. | 0.03 | 0.000 | 74. | 250. | 0.00 | 0.000 | 5. |
| 120. | 0.03 | 0.000 | 68. | 255. | 0.00 | 0.000 | 3. |
| 125. | 0.01 | 0.000 | 63. | 260. | 0.00 | 0.000 | 2. |
| 130. | 0.01 | 0.000 | 59. | 265. | 0.00 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.348 INCHES
VOLUME OF EXCESS PRECIP = 18.48 ACRE-FEET
PEAK Q = 141. CFS TIME OF PEAK = 60. MIN.
INFILT.= 4.60 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W20 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.69 | 1.37 | 0.52 | 2.00 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.316 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 27.07 | 493.63 | 341.10 | 36.85 |

WIDTH AT 50 = 61. MIN. WIDTH AT 75 = 32. MIN. K50 =0.27 K75 =0.36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.00 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 95. | 117. | 190. | 25. |
| 5. | 53. | 100. | 108. | 195. | 23. |
| 10. | 153. | 105. | 99. | 200. | 21. |
| 15. | 247. | 110. | 92. | 205. | 20. |
| 20. | 312. | 115. | 85. | 210. | 18. |
| 25. | 339. | 120. | 78. | 215. | 17. |
| 30. | 337. | 125. | 72. | 220. | 15. |
| 35. | 317. | 130. | 66. | 225. | 14. |
| 40. | 289. | 135. | 61. | 230. | 13. |
| 45. | 264. | 140. | 56. | 235. | 12. |
| 50. | 246. | 145. | 52. | 240. | 11. |
| 55. | 229. | 150. | 48. | 245. | 10. |
| 60. | 211. | 155. | 44. | 250. | 10. |
| 65. | 194. | 160. | 41. | 255. | 9. |
| 70. | 176. | 165. | 38. | 260. | 8. |
| 75. | 161. | 170. | 35. | 265. | 7. |
| 80. | 149. | 175. | 32. | 270. | 0. |
| 85. | 137. | 180. | 30. | 0. | 0. |
| 90. | 127. | 185. | 27. | 0. | 0. |

1 BASIN ID: W20 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 160. | 0.01 | 0.000 | 97. |
| 5. | 0.03 | 0.000 | 0. | 165. | 0.01 | 0.000 | 90. |
| 10. | 0.08 | 0.000 | 0. | 170. | 0.01 | 0.000 | 83. |
| 15. | 0.12 | 0.000 | 0. | 175. | 0.01 | 0.000 | 76. |
| 20. | 0.21 | 0.000 | 0. | 180. | 0.01 | 0.000 | 71. |
| 25. | 0.34 | 0.034 | 2. | 185. | 0.00 | 0.000 | 65. |
| 30. | 0.60 | 0.533 | 34. | 190. | 0.00 | 0.000 | 60. |
| 35. | 0.34 | 0.276 | 105. | 195. | 0.00 | 0.000 | 55. |
| 40. | 0.21 | 0.158 | 193. | 200. | 0.00 | 0.000 | 51. |
| 45. | 0.17 | 0.112 | 276. | 205. | 0.00 | 0.000 | 47. |
| 50. | 0.13 | 0.082 | 338. | 210. | 0.00 | 0.000 | 43. |
| 55. | 0.11 | 0.056 | 376. | 215. | 0.00 | 0.000 | 40. |
| 60. | 0.11 | 0.056 | 392. | 220. | 0.00 | 0.000 | 37. |
| 65. | 0.11 | 0.056 | 392. | 225. | 0.00 | 0.000 | 34. |
| 70. | 0.05 | 0.004 | 384. | 230. | 0.00 | 0.000 | 31. |
| 75. | 0.05 | 0.004 | 371. | 235. | 0.00 | 0.000 | 29. |
| 80. | 0.03 | 0.000 | 353. | 240. | 0.00 | 0.000 | 27. |
| 85. | 0.03 | 0.000 | 332. | 245. | 0.00 | 0.000 | 25. |
| 90. | 0.03 | 0.000 | 308. | 250. | 0.00 | 0.000 | 23. |
| 95. | 0.03 | 0.000 | 283. | 255. | 0.00 | 0.000 | 21. |
| 100. | 0.03 | 0.000 | 260. | 260. | 0.00 | 0.000 | 19. |
| 105. | 0.03 | 0.000 | 239. | 265. | 0.00 | 0.000 | 18. |
| 110. | 0.03 | 0.000 | 220. | 270. | 0.00 | 0.000 | 16. |
| 115. | 0.03 | 0.000 | 203. | 275. | 0.00 | 0.000 | 15. |
| 120. | 0.03 | 0.000 | 187. | 280. | 0.00 | 0.000 | 14. |
| 125. | 0.01 | 0.000 | 172. | 285. | 0.00 | 0.000 | 13. |
| 130. | 0.01 | 0.000 | 158. | 290. | 0.00 | 0.000 | 12. |
| 135. | 0.01 | 0.000 | 146. | 295. | 0.00 | 0.000 | 7. |
| 140. | 0.01 | 0.000 | 135. | 300. | 0.00 | 0.000 | 5. |
| 145. | 0.01 | 0.000 | 124. | 305. | 0.00 | 0.000 | 3. |
| 150. | 0.01 | 0.000 | 115. | 310. | 0.00 | 0.000 | 2. |
| 155. | 0.01 | 0.000 | 106. | 315. | 0.00 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.370 INCHES
VOLUME OF EXCESS PRECIP = 50.47 ACRE-FEET
PEAK Q = 392. CFS TIME OF PEAK = 65. MIN.
INFILT.= 4.00 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W21 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.33 | 1.14 | 0.60 | 3.40 | 0.0140 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.150 | 0.273 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

FRACTION OF PERVIOUS FRACTION OF IMPERVIOUS

| AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.06 | AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.07 |
|---|---|

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 23.51 | 499.75 | 164.92 | 17.60 |

WIDTH AT 50 = 60. MIN. WIDTH AT 75 = 31. MIN. K50 =0.24 K75 =0.32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 80. | 70. | 160. | 21. |
| 5. | 32. | 85. | 65. | 165. | 19. |
| 10. | 89. | 90. | 60. | 170. | 18. |
| 15. | 136. | 95. | 56. | 175. | 17. |
| 20. | 161. | 100. | 52. | 180. | 15. |
| 25. | 164. | 105. | 48. | 185. | 14. |
| 30. | 155. | 110. | 45. | 190. | 13. |
| 35. | 140. | 115. | 41. | 195. | 12. |
| 40. | 127. | 120. | 38. | 200. | 11. |
| 45. | 123. | 125. | 35. | 205. | 11. |
| 50. | 115. | 130. | 33. | 210. | 10. |
| 55. | 107. | 135. | 30. | 215. | 9. |
| 60. | 98. | 140. | 28. | 220. | 8. |
| 65. | 90. | 145. | 26. | 225. | 8. |
| 70. | 82. | 150. | 24. | 230. | 0. |
| 75. | 76. | 155. | 22. | 0. | 0. |

1 BASIN ID: W21 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 140. | 0.01 | 0.000 | 66. |
| 5. | 0.03 | 0.000 | 0. | 145. | 0.01 | 0.000 | 61. |
| 10. | 0.08 | 0.000 | 0. | 150. | 0.01 | 0.000 | 57. |
| 15. | 0.12 | 0.000 | 0. | 155. | 0.01 | 0.000 | 53. |
| 20. | 0.21 | 0.000 | 0. | 160. | 0.01 | 0.000 | 49. |
| 25. | 0.34 | 0.040 | 1. | 165. | 0.01 | 0.000 | 45. |
| 30. | 0.60 | 0.534 | 21. | 170. | 0.01 | 0.000 | 42. |
| 35. | 0.34 | 0.277 | 62. | 175. | 0.01 | 0.000 | 39. |
| 40. | 0.21 | 0.159 | 109. | 180. | 0.01 | 0.000 | 36. |
| 45. | 0.17 | 0.113 | 148. | 185. | 0.00 | 0.000 | 33. |
| 50. | 0.13 | 0.083 | 173. | 190. | 0.00 | 0.000 | 31. |
| 55. | 0.11 | 0.056 | 184. | 195. | 0.00 | 0.000 | 29. |
| 60. | 0.11 | 0.057 | 185. | 200. | 0.00 | 0.000 | 27. |
| 65. | 0.11 | 0.057 | 182. | 205. | 0.00 | 0.000 | 25. |
| 70. | 0.05 | 0.004 | 181. | 210. | 0.00 | 0.000 | 23. |
| 75. | 0.05 | 0.004 | 175. | 215. | 0.00 | 0.000 | 21. |
| 80. | 0.03 | 0.000 | 166. | 220. | 0.00 | 0.000 | 20. |
| 85. | 0.03 | 0.000 | 156. | 225. | 0.00 | 0.000 | 18. |
| 90. | 0.03 | 0.000 | 144. | 230. | 0.00 | 0.000 | 17. |
| 95. | 0.03 | 0.000 | 132. | 235. | 0.00 | 0.000 | 16. |
| 100. | 0.03 | 0.000 | 122. | 240. | 0.00 | 0.000 | 14. |
| 105. | 0.03 | 0.000 | 113. | 245. | 0.00 | 0.000 | 13. |
| 110. | 0.03 | 0.000 | 105. | 250. | 0.00 | 0.000 | 12. |
| 115. | 0.03 | 0.000 | 97. | 255. | 0.00 | 0.000 | 7. |
| 120. | 0.03 | 0.000 | 90. | 260. | 0.00 | 0.000 | 5. |
| 125. | 0.01 | 0.000 | 83. | 265. | 0.00 | 0.000 | 3. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 130. | 0.01 | 0.000 | 77. | | 270. | 0.00 | 0.000 | 2. |
| 135. | 0.01 | 0.000 | 71. | | 275. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.386 INCHES
VOLUME OF EXCESS PRECIP = 24.39 ACRE-FEET
PEAK Q = 185. CFS TIME OF PEAK = 60. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W22 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.40 | 1.17 | 0.65 | 2.00 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.291 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 26.23 | 470.49 | 187.25 | 21.23 |

WIDTH AT 50 = 64. MIN. WIDTH AT 75 = 33. MIN. K50 =0.25 K75 =0.34

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 85. | 80. | 170. | 23. |
| 5. | 31. | 90. | 74. | 175. | 21. |
| 10. | 88. | 95. | 69. | 180. | 20. |
| 15. | 140. | 100. | 64. | 185. | 19. |
| 20. | 174. | 105. | 60. | 190. | 17. |
| 25. | 187. | 110. | 56. | 195. | 16. |
| 30. | 184. | 115. | 52. | 200. | 15. |
| 35. | 171. | 120. | 48. | 205. | 14. |
| 40. | 156. | 125. | 45. | 210. | 13. |
| 45. | 144. | 130. | 41. | 215. | 12. |
| 50. | 137. | 135. | 39. | 220. | 11. |
| 55. | 128. | 140. | 36. | 225. | 10. |
| 60. | 119. | 145. | 33. | 230. | 10. |
| 65. | 110. | 150. | 31. | 235. | 9. |
| 70. | 101. | 155. | 29. | 240. | 8. |
| 75. | 93. | 160. | 27. | 245. | 8. |
| 80. | 86. | 165. | 25. | 250. | 0. |

1 BASIN ID: W22 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 150. | 0.01 | 0.000 | 70. |
| 5. | 0.03 | 0.000 | 0. | 155. | 0.01 | 0.000 | 65. |
| 10. | 0.08 | 0.000 | 0. | 160. | 0.01 | 0.000 | 61. |
| 15. | 0.12 | 0.000 | 0. | 165. | 0.01 | 0.000 | 56. |
| 20. | 0.21 | 0.000 | 0. | 170. | 0.01 | 0.000 | 52. |
| 25. | 0.34 | 0.032 | 1. | 175. | 0.01 | 0.000 | 49. |
| 30. | 0.60 | 0.533 | 19. | 180. | 0.01 | 0.000 | 45. |
| 35. | 0.34 | 0.276 | 60. | 185. | 0.00 | 0.000 | 42. |
| 40. | 0.21 | 0.158 | 109. | 190. | 0.00 | 0.000 | 39. |
| 45. | 0.17 | 0.113 | 155. | 195. | 0.00 | 0.000 | 36. |
| 50. | 0.13 | 0.082 | 188. | 200. | 0.00 | 0.000 | 34. |
| 55. | 0.11 | 0.056 | 207. | 205. | 0.00 | 0.000 | 31. |
| 60. | 0.11 | 0.056 | 214. | 210. | 0.00 | 0.000 | 29. |
| 65. | 0.11 | 0.057 | 214. | 215. | 0.00 | 0.000 | 27. |
| 70. | 0.05 | 0.004 | 210. | 220. | 0.00 | 0.000 | 25. |
| 75. | 0.05 | 0.004 | 204. | 225. | 0.00 | 0.000 | 23. |
| 80. | 0.03 | 0.000 | 196. | 230. | 0.00 | 0.000 | 22. |
| 85. | 0.03 | 0.000 | 185. | 235. | 0.00 | 0.000 | 20. |
| 90. | 0.03 | 0.000 | 173. | 240. | 0.00 | 0.000 | 19. |
| 95. | 0.03 | 0.000 | 160. | 245. | 0.00 | 0.000 | 17. |
| 100. | 0.03 | 0.000 | 147. | 250. | 0.00 | 0.000 | 16. |
| 105. | 0.03 | 0.000 | 137. | 255. | 0.00 | 0.000 | 15. |
| 110. | 0.03 | 0.000 | 127. | 260. | 0.00 | 0.000 | 14. |
| 115. | 0.03 | 0.000 | 118. | 265. | 0.00 | 0.000 | 13. |
| 120. | 0.03 | 0.000 | 109. | 270. | 0.00 | 0.000 | 12. |
| 125. | 0.01 | 0.000 | 101. | 275. | 0.00 | 0.000 | 7. |
| 130. | 0.01 | 0.000 | 94. | 280. | 0.00 | 0.000 | 5. |
| 135. | 0.01 | 0.000 | 87. | 285. | 0.00 | 0.000 | 3. |
| 140. | 0.01 | 0.000 | 81. | 290. | 0.00 | 0.000 | 2. |
| 145. | 0.01 | 0.000 | 75. | 295. | 0.00 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.370 INCHES
VOLUME OF EXCESS PRECIP = 29.09 ACRE-FEET
PEAK Q = 214. CFS TIME OF PEAK = 60. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W23 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.88 | 1.20 | 0.73 | 2.00 | 0.0140 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.328 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED |
|---|---|

IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.06

TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.04

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 26.92 | 515.37 | 455.59 | 47.15 |

WIDTH AT 50 = 58. MIN. WIDTH AT 75 = 30. MIN. K50 =0.28 K75 =0.38

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 95. | 146. | 190. | 28. |
| 5. | 72. | 100. | 134. | 195. | 26. |
| 10. | 206. | 105. | 123. | 200. | 24. |
| 15. | 332. | 110. | 112. | 205. | 22. |
| 20. | 418. | 115. | 103. | 210. | 20. |
| 25. | 453. | 120. | 95. | 215. | 18. |
| 30. | 450. | 125. | 87. | 220. | 17. |
| 35. | 422. | 130. | 80. | 225. | 16. |
| 40. | 383. | 135. | 73. | 230. | 14. |
| 45. | 346. | 140. | 67. | 235. | 13. |
| 50. | 321. | 145. | 62. | 240. | 12. |
| 55. | 296. | 150. | 57. | 245. | 11. |
| 60. | 272. | 155. | 52. | 250. | 10. |
| 65. | 247. | 160. | 48. | 255. | 9. |
| 70. | 224. | 165. | 44. | 260. | 9. |
| 75. | 205. | 170. | 40. | 265. | 8. |
| 80. | 188. | 175. | 37. | 270. | 0. |
| 85. | 173. | 180. | 34. | 0. | 0. |
| 90. | 159. | 185. | 31. | 0. | 0. |

1 BASIN ID: W23 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 160. | 0.01 | 0.000 | 118. |
| 5. | 0.03 | 0.000 | 0. | 165. | 0.01 | 0.000 | 108. |
| 10. | 0.08 | 0.000 | 0. | 170. | 0.01 | 0.000 | 99. |
| 15. | 0.12 | 0.000 | 0. | 175. | 0.01 | 0.000 | 91. |
| 20. | 0.21 | 0.000 | 0. | 180. | 0.01 | 0.000 | 84. |
| 25. | 0.34 | 0.032 | 2. | 185. | 0.00 | 0.000 | 77. |
| 30. | 0.60 | 0.533 | 45. | 190. | 0.00 | 0.000 | 70. |
| 35. | 0.34 | 0.276 | 140. | 195. | 0.00 | 0.000 | 65. |
| 40. | 0.21 | 0.158 | 259. | 200. | 0.00 | 0.000 | 59. |
| 45. | 0.17 | 0.113 | 370. | 205. | 0.00 | 0.000 | 54. |
| 50. | 0.13 | 0.082 | 453. | 210. | 0.00 | 0.000 | 50. |
| 55. | 0.11 | 0.056 | 503. | 215. | 0.00 | 0.000 | 46. |
| 60. | 0.11 | 0.056 | 523. | 220. | 0.00 | 0.000 | 42. |
| 65. | 0.11 | 0.057 | 522. | 225. | 0.00 | 0.000 | 39. |
| 70. | 0.05 | 0.004 | 509. | 230. | 0.00 | 0.000 | 35. |
| 75. | 0.05 | 0.004 | 490. | 235. | 0.00 | 0.000 | 32. |
| 80. | 0.03 | 0.000 | 464. | 240. | 0.00 | 0.000 | 30. |
| 85. | 0.03 | 0.000 | 433. | 245. | 0.00 | 0.000 | 27. |
| 90. | 0.03 | 0.000 | 399. | 250. | 0.00 | 0.000 | 25. |
| 95. | 0.03 | 0.000 | 365. | 255. | 0.00 | 0.000 | 23. |
| 100. | 0.03 | 0.000 | 334. | 260. | 0.00 | 0.000 | 21. |
| 105. | 0.03 | 0.000 | 305. | 265. | 0.00 | 0.000 | 19. |
| 110. | 0.03 | 0.000 | 280. | 270. | 0.00 | 0.000 | 18. |
| 115. | 0.03 | 0.000 | 257. | 275. | 0.00 | 0.000 | 16. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 120. | 0.03 | 0.000 | 235. | 280. | 0.00 | 0.000 | 15. |
| 125. | 0.01 | 0.000 | 216. | 285. | 0.00 | 0.000 | 14. |
| 130. | 0.01 | 0.000 | 198. | 290. | 0.00 | 0.000 | 12. |
| 135. | 0.01 | 0.000 | 181. | 295. | 0.00 | 0.000 | 8. |
| 140. | 0.01 | 0.000 | 166. | 300. | 0.00 | 0.000 | 5. |
| 145. | 0.01 | 0.000 | 153. | 305. | 0.00 | 0.000 | 3. |
| 150. | 0.01 | 0.000 | 140. | 310. | 0.00 | 0.000 | 2. |
| 155. | 0.01 | 0.000 | 129. | 315. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.370 INCHES
VOLUME OF EXCESS PRECIP = 64.61 ACRE-FEET
PEAK Q = 523. CFS TIME OF PEAK = 60. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: W24 -- BASIN COMMENT: Western portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.24 | 0.61 | 0.45 | 2.00 | 0.0140 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.269 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 16.43 | 742.27 | 176.66 | 12.69 |

WIDTH AT 50 = 40. MIN. WIDTH AT 75 = 21. MIN. K50 =0.24 K75 =0.33

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 55. | 74. | 110. | 21. |
| 5. | 60. | 60. | 66. | 115. | 19. |
| 10. | 140. | 65. | 59. | 120. | 17. |
| 15. | 175. | 70. | 52. | 125. | 15. |
| 20. | 169. | 75. | 47. | 130. | 13. |
| 25. | 147. | 80. | 42. | 135. | 12. |
| 30. | 133. | 85. | 37. | 140. | 11. |
| 35. | 120. | 90. | 33. | 145. | 9. |
| 40. | 107. | 95. | 30. | 150. | 8. |
| 45. | 94. | 100. | 26. | 155. | 8. |
| 50. | 82. | 105. | 24. | 160. | 0. |

1 BASIN ID: W24 -- BASIN COMMENT: Western portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 105. | 0.03 | 0.000 | 71. |
| 5. | 0.03 | 0.000 | 0. | 110. | 0.03 | 0.000 | 64. |
| 10. | 0.08 | 0.000 | 0. | 115. | 0.03 | 0.000 | 57. |
| 15. | 0.12 | 0.000 | 0. | 120. | 0.03 | 0.000 | 51. |
| 20. | 0.21 | 0.000 | 0. | 125. | 0.01 | 0.000 | 45. |
| 25. | 0.34 | 0.032 | 2. | 130. | 0.01 | 0.000 | 40. |
| 30. | 0.60 | 0.533 | 36. | 135. | 0.01 | 0.000 | 36. |
| 35. | 0.34 | 0.276 | 97. | 140. | 0.01 | 0.000 | 32. |
| 40. | 0.21 | 0.158 | 147. | 145. | 0.01 | 0.000 | 29. |
| 45. | 0.17 | 0.113 | 172. | 150. | 0.01 | 0.000 | 26. |
| 50. | 0.13 | 0.082 | 178. | 155. | 0.01 | 0.000 | 23. |
| 55. | 0.11 | 0.056 | 176. | 160. | 0.01 | 0.000 | 20. |
| 60. | 0.11 | 0.056 | 172. | 165. | 0.01 | 0.000 | 18. |
| 65. | 0.11 | 0.057 | 166. | 170. | 0.01 | 0.000 | 16. |
| 70. | 0.05 | 0.004 | 156. | 175. | 0.01 | 0.000 | 15. |
| 75. | 0.05 | 0.004 | 142. | 180. | 0.01 | 0.000 | 13. |
| 80. | 0.03 | 0.000 | 127. | 185. | 0.00 | 0.000 | 8. |
| 85. | 0.03 | 0.000 | 113. | 190. | 0.00 | 0.000 | 5. |
| 90. | 0.03 | 0.000 | 101. | 195. | 0.00 | 0.000 | 3. |
| 95. | 0.03 | 0.000 | 90. | 200. | 0.00 | 0.000 | 2. |
| 100. | 0.03 | 0.000 | 80. | 205. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.370 INCHES
VOLUME OF EXCESS PRECIP = 17.40 ACRE-FEET
PEAK Q = 178. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E25 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.05 | 0.40 | 0.19 | 2.00 | 0.0070 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.216 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| 17.20 | 78.00 | 564.50 | 31.05 | 2.93 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 11.37)

WIDTH AT 50 = 53. MIN. WIDTH AT 75 = 28. MIN. K50 =0.19 K75 =0.26

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 3.00 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.50 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 60. | 16. | 120. | 10. |
| 5. | 10. | 65. | 15. | 125. | 10. |
| 10. | 24. | 70. | 15. | 130. | 10. |
| 15. | 30. | 75. | 14. | 135. | 9. |
| 20. | 30. | 80. | 14. | 140. | 9. |
| 25. | 26. | 85. | 13. | 145. | 9. |
| 30. | 22. | 90. | 13. | 150. | 9. |
| 35. | 21. | 95. | 12. | 155. | 8. |
| 40. | 22. | 100. | 12. | 160. | 8. |
| 45. | 21. | 105. | 12. | 165. | 8. |
| 50. | 19. | 110. | 11. | 170. | 7. |
| 55. | 17. | 115. | 11. | 175. | 0. |

1 BASIN ID: E25 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 110. | 0.03 | 0.000 | 22. |
| 5. | 0.03 | 0.000 | 0. | 115. | 0.03 | 0.000 | 21. |
| 10. | 0.08 | 0.000 | 0. | 120. | 0.03 | 0.000 | 20. |
| 15. | 0.12 | 0.000 | 0. | 125. | 0.01 | 0.000 | 19. |
| 20. | 0.21 | 0.000 | 0. | 130. | 0.01 | 0.000 | 19. |
| 25. | 0.34 | 0.102 | 1. | 135. | 0.01 | 0.000 | 18. |
| 30. | 0.60 | 0.547 | 8. | 140. | 0.01 | 0.000 | 18. |
| 35. | 0.34 | 0.288 | 19. | 145. | 0.01 | 0.000 | 17. |
| 40. | 0.21 | 0.168 | 28. | 150. | 0.01 | 0.000 | 16. |
| 45. | 0.17 | 0.122 | 33. | 155. | 0.01 | 0.000 | 16. |
| 50. | 0.13 | 0.091 | 34. | 160. | 0.01 | 0.000 | 15. |
| 55. | 0.11 | 0.064 | 34. | 165. | 0.01 | 0.000 | 15. |
| 60. | 0.11 | 0.065 | 33. | 170. | 0.01 | 0.000 | 14. |
| 65. | 0.11 | 0.065 | 34. | 175. | 0.01 | 0.000 | 14. |
| 70. | 0.05 | 0.012 | 34. | 180. | 0.01 | 0.000 | 13. |
| 75. | 0.05 | 0.012 | 33. | 185. | 0.00 | 0.000 | 13. |
| 80. | 0.03 | 0.000 | 30. | 190. | 0.00 | 0.000 | 13. |
| 85. | 0.03 | 0.000 | 28. | 195. | 0.00 | 0.000 | 11. |
| 90. | 0.03 | 0.000 | 26. | 200. | 0.00 | 0.000 | 7. |
| 95. | 0.03 | 0.000 | 25. | 205. | 0.00 | 0.000 | 5. |
| 100. | 0.03 | 0.000 | 24. | 210. | 0.00 | 0.000 | 3. |
| 105. | 0.03 | 0.000 | 23. | 215. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.537 INCHES
VOLUME OF EXCESS PRECIP = 4.51 ACRE-FEET
PEAK Q = 34. CFS TIME OF PEAK = 65. MIN.
INFILT.= 3.00 IN/HR DECAY =0.00180 FNINF = 0.50 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E26 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.14 | 0.57 | 0.35 | 2.00 | 0.0170 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.249 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 17.58 | 80.00 | 634.51 | 90.10 | 7.57 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 13.90)

WIDTH AT 50 = 47. MIN. WIDTH AT 75 = 25. MIN. K50 =0.22 K75 =0.30

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 55. | 45. | 110. | 17. |
| 5. | 28. | 60. | 41. | 115. | 16. |
| 10. | 67. | 65. | 37. | 120. | 14. |
| 15. | 88. | 70. | 34. | 125. | 13. |
| 20. | 88. | 75. | 31. | 130. | 12. |
| 25. | 79. | 80. | 29. | 135. | 11. |
| 30. | 69. | 85. | 26. | 140. | 10. |
| 35. | 67. | 90. | 24. | 145. | 9. |
| 40. | 61. | 95. | 22. | 150. | 8. |
| 45. | 56. | 100. | 20. | 155. | 8. |
| 50. | 50. | 105. | 19. | 160. | 0. |

1 BASIN ID: E26 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 105. | 0.03 | 0.000 | 47. |
| 5. | 0.03 | 0.000 | 0. | 110. | 0.03 | 0.000 | 43. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10. | 0.08 | 0.000 | 0. | | 115. | 0.03 | 0.000 | 39. |
| 15. | 0.12 | 0.000 | 0. | | 120. | 0.03 | 0.000 | 36. |
| 20. | 0.21 | 0.000 | 0. | | 125. | 0.01 | 0.000 | 33. |
| 25. | 0.34 | 0.032 | 1. | | 130. | 0.01 | 0.000 | 30. |
| 30. | 0.60 | 0.533 | 17. | | 135. | 0.01 | 0.000 | 28. |
| 35. | 0.34 | 0.276 | 46. | | 140. | 0.01 | 0.000 | 25. |
| 40. | 0.21 | 0.158 | 72. | | 145. | 0.01 | 0.000 | 23. |
| 45. | 0.17 | 0.113 | 88. | | 150. | 0.01 | 0.000 | 21. |
| 50. | 0.13 | 0.082 | 92. | | 155. | 0.01 | 0.000 | 19. |
| 55. | 0.11 | 0.056 | 91. | | 160. | 0.01 | 0.000 | 18. |
| 60. | 0.11 | 0.056 | 92. | | 165. | 0.01 | 0.000 | 16. |
| 65. | 0.11 | 0.057 | 90. | | 170. | 0.01 | 0.000 | 15. |
| 70. | 0.05 | 0.004 | 87. | | 175. | 0.01 | 0.000 | 14. |
| 75. | 0.05 | 0.004 | 81. | | 180. | 0.01 | 0.000 | 12. |
| 80. | 0.03 | 0.000 | 74. | | 185. | 0.00 | 0.000 | 8. |
| 85. | 0.03 | 0.000 | 67. | | 190. | 0.00 | 0.000 | 5. |
| 90. | 0.03 | 0.000 | 61. | | 195. | 0.00 | 0.000 | 3. |
| 95. | 0.03 | 0.000 | 56. | | 200. | 0.00 | 0.000 | 2. |
| 100. | 0.03 | 0.000 | 51. | | 205. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.370 INCHES
VOLUME OF EXCESS PRECIP = 10.38 ACRE-FEET
PEAK Q = 92. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

*** WARNING : THE ABOVE PEAK IS COMPUTED BASED ON THE TIME TO PEAK MODIFIED BY THE RATIONAL FORMULA.
BUT THE AREA IS TOO LARGE (GREATER THAN 90 ACRES) TO APPLIY THE MODIFICATION, AND
THE ABOVE ESTIMATED PEAK MAY NOT BE RIGHT.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E27 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.10 | 0.60 | 0.26 | 2.00 | 0.0090 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.236 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 19.84 | 92.00 | 523.38 | 52.34 | 5.33 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 14.32)

WIDTH AT 50 = 57. MIN. WIDTH AT 75 = 30. MIN. K50 =0.21 K75 =0.28

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 3.40 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.50 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 65. | 26. | 130. | 13. |
| 5. | 13. | 70. | 25. | 135. | 12. |
| 10. | 35. | 75. | 24. | 140. | 12. |
| 15. | 48. | 80. | 22. | 145. | 11. |
| 20. | 52. | 85. | 21. | 150. | 11. |
| 25. | 49. | 90. | 20. | 155. | 10. |
| 30. | 43. | 95. | 19. | 160. | 9. |
| 35. | 38. | 100. | 18. | 165. | 9. |
| 40. | 38. | 105. | 17. | 170. | 9. |
| 45. | 37. | 110. | 16. | 175. | 8. |
| 50. | 34. | 115. | 15. | 180. | 8. |
| 55. | 32. | 120. | 15. | 185. | 0. |
| 60. | 29. | 125. | 14. | 0. | 0. |

1 BASIN ID: E27 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 115. | 0.03 | 0.000 | 34. |
| 5. | 0.03 | 0.000 | 0. | 120. | 0.03 | 0.000 | 32. |
| 10. | 0.08 | 0.000 | 0. | 125. | 0.01 | 0.000 | 30. |
| 15. | 0.12 | 0.000 | 0. | 130. | 0.01 | 0.000 | 29. |
| 20. | 0.21 | 0.000 | 0. | 135. | 0.01 | 0.000 | 27. |
| 25. | 0.34 | 0.086 | 1. | 140. | 0.01 | 0.000 | 26. |
| 30. | 0.60 | 0.545 | 10. | 145. | 0.01 | 0.000 | 24. |
| 35. | 0.34 | 0.287 | 27. | 150. | 0.01 | 0.000 | 23. |
| 40. | 0.21 | 0.168 | 43. | 155. | 0.01 | 0.000 | 22. |
| 45. | 0.17 | 0.122 | 54. | 160. | 0.01 | 0.000 | 21. |
| 50. | 0.13 | 0.091 | 59. | 165. | 0.01 | 0.000 | 20. |
| 55. | 0.11 | 0.064 | 60. | 170. | 0.01 | 0.000 | 19. |
| 60. | 0.11 | 0.065 | 59. | 175. | 0.01 | 0.000 | 18. |
| 65. | 0.11 | 0.065 | 59. | 180. | 0.01 | 0.000 | 17. |
| 70. | 0.05 | 0.012 | 59. | 185. | 0.00 | 0.000 | 16. |
| 75. | 0.05 | 0.012 | 57. | 190. | 0.00 | 0.000 | 15. |
| 80. | 0.03 | 0.000 | 54. | 195. | 0.00 | 0.000 | 14. |
| 85. | 0.03 | 0.000 | 51. | 200. | 0.00 | 0.000 | 14. |
| 90. | 0.03 | 0.000 | 47. | 205. | 0.00 | 0.000 | 12. |
| 95. | 0.03 | 0.000 | 43. | 210. | 0.00 | 0.000 | 8. |
| 100. | 0.03 | 0.000 | 41. | 215. | 0.00 | 0.000 | 5. |
| 105. | 0.03 | 0.000 | 38. | 220. | 0.00 | 0.000 | 4. |
| 110. | 0.03 | 0.000 | 36. | 225. | 0.00 | 0.000 | 3. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.516 INCHES
VOLUME OF EXCESS PRECIP = 8.09 ACRE-FEET
PEAK Q = 60. CFS TIME OF PEAK = 55. MIN.
INFILT.= 3.40 IN/HR DECAY =0.00180 FNINF = 0.50 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E28 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.58 | 1.19 | 0.60 | 4.60 | 0.0160 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.146 | 0.290 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.07 | D= 0.09 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 22.55 | 556.13 | 324.78 | 31.15 |

WIDTH AT 50 = 54. MIN. WIDTH AT 75 = 28. MIN. K50 =0.25 K75 =0.34

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 85. | 109. | 170. | 24. |
| 5. | 68. | 90. | 100. | 175. | 22. |
| 10. | 185. | 95. | 91. | 180. | 20. |
| 15. | 277. | 100. | 84. | 185. | 18. |
| 20. | 320. | 105. | 76. | 190. | 17. |
| 25. | 321. | 110. | 70. | 195. | 15. |
| 30. | 297. | 115. | 64. | 200. | 14. |
| 35. | 266. | 120. | 58. | 205. | 13. |
| 40. | 245. | 125. | 53. | 210. | 12. |
| 45. | 229. | 130. | 49. | 215. | 11. |
| 50. | 210. | 135. | 45. | 220. | 10. |
| 55. | 192. | 140. | 41. | 225. | 9. |
| 60. | 173. | 145. | 37. | 230. | 8. |
| 65. | 157. | 150. | 34. | 235. | 7. |
| 70. | 143. | 155. | 31. | 240. | 0. |
| 75. | 131. | 160. | 28. | 0. | 0. |
| 80. | 120. | 165. | 26. | 0. | 0. |

1 BASIN ID: E28 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 145. | 0.01 | 0.000 | 97. |
| 5. | 0.03 | 0.000 | 0. | 150. | 0.01 | 0.000 | 89. |
| 10. | 0.08 | 0.000 | 0. | 155. | 0.01 | 0.000 | 81. |
| 15. | 0.12 | 0.000 | 0. | 160. | 0.01 | 0.000 | 74. |
| 20. | 0.21 | 0.001 | 0. | 165. | 0.01 | 0.000 | 68. |
| 25. | 0.34 | 0.047 | 4. | 170. | 0.01 | 0.000 | 62. |
| 30. | 0.60 | 0.534 | 45. | 175. | 0.01 | 0.000 | 57. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 35. | 0.34 | 0.277 | 131. | 180. | 0.01 | 0.000 | 52. |
| 40. | 0.21 | 0.159 | 225. | 185. | 0.00 | 0.000 | 48. |
| 45. | 0.17 | 0.114 | 300. | 190. | 0.00 | 0.000 | 43. |
| 50. | 0.13 | 0.083 | 345. | 195. | 0.00 | 0.000 | 40. |
| 55. | 0.11 | 0.057 | 362. | 200. | 0.00 | 0.000 | 36. |
| 60. | 0.11 | 0.057 | 361. | 205. | 0.00 | 0.000 | 33. |
| 65. | 0.11 | 0.058 | 357. | 210. | 0.00 | 0.000 | 30. |
| 70. | 0.05 | 0.005 | 348. | 215. | 0.00 | 0.000 | 28. |
| 75. | 0.05 | 0.005 | 333. | 220. | 0.00 | 0.000 | 25. |
| 80. | 0.03 | 0.000 | 312. | 225. | 0.00 | 0.000 | 23. |
| 85. | 0.03 | 0.000 | 287. | 230. | 0.00 | 0.000 | 21. |
| 90. | 0.03 | 0.000 | 262. | 235. | 0.00 | 0.000 | 19. |
| 95. | 0.03 | 0.000 | 239. | 240. | 0.00 | 0.000 | 18. |
| 100. | 0.03 | 0.000 | 218. | 245. | 0.00 | 0.000 | 16. |
| 105. | 0.03 | 0.000 | 200. | 250. | 0.00 | 0.000 | 15. |
| 110. | 0.03 | 0.000 | 182. | 255. | 0.00 | 0.000 | 14. |
| 115. | 0.03 | 0.000 | 167. | 260. | 0.00 | 0.000 | 12. |
| 120. | 0.03 | 0.000 | 152. | 265. | 0.00 | 0.000 | 7. |
| 125. | 0.01 | 0.000 | 139. | 270. | 0.00 | 0.000 | 5. |
| 130. | 0.01 | 0.000 | 127. | 275. | 0.00 | 0.000 | 3. |
| 135. | 0.01 | 0.000 | 116. | 280. | 0.00 | 0.000 | 2. |
| 140. | 0.01 | 0.000 | 106. | 285. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.401 INCHES
VOLUME OF EXCESS PRECIP = 43.63 ACRE-FEET
PEAK Q = 362. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E29 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.06 | 0.62 | 0.21 | 7.20 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.136 | 0.197 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.08 | D= 0.14 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 13.96 | 66.00 | 660.48 | 40.29 | 3.25 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 11.48)

WIDTH AT 50 = 45. MIN. WIDTH AT 75 = 24. MIN. K50 =0.18 K75 =0.25

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN.  MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR.  DECAY = 0.00180/SECOND  FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 55. | 19. | 110. | 11. |
| 5. | 17. | 60. | 18. | 115. | 10. |
| 10. | 36. | 65. | 17. | 120. | 10. |
| 15. | 40. | 70. | 17. | 125. | 9. |
| 20. | 35. | 75. | 16. | 130. | 9. |
| 25. | 28. | 80. | 15. | 135. | 8. |
| 30. | 27. | 85. | 14. | 140. | 8. |
| 35. | 28. | 90. | 13. | 145. | 8. |
| 40. | 26. | 95. | 13. | 150. | 0. |
| 45. | 23. | 100. | 12. | 0. | 0. |
| 50. | 21. | 105. | 12. | 0. | 0. |

1 BASIN ID: E29 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 100. | 0.03 | 0.001 | 25. |
| 5. | 0.03 | 0.000 | 0. | 105. | 0.03 | 0.001 | 24. |
| 10. | 0.08 | 0.001 | 0. | 110. | 0.03 | 0.001 | 22. |
| 15. | 0.12 | 0.001 | 0. | 115. | 0.03 | 0.001 | 21. |
| 20. | 0.21 | 0.004 | 0. | 120. | 0.03 | 0.001 | 20. |
| 25. | 0.34 | 0.058 | 1. | 125. | 0.01 | 0.000 | 19. |
| 30. | 0.60 | 0.535 | 12. | 130. | 0.01 | 0.000 | 18. |
| 35. | 0.34 | 0.278 | 27. | 135. | 0.01 | 0.000 | 17. |
| 40. | 0.21 | 0.161 | 36. | 140. | 0.01 | 0.000 | 17. |
| 45. | 0.17 | 0.115 | 39. | 145. | 0.01 | 0.000 | 16. |
| 50. | 0.13 | 0.084 | 38. | 150. | 0.01 | 0.000 | 15. |
| 55. | 0.11 | 0.058 | 38. | 155. | 0.01 | 0.000 | 14. |
| 60. | 0.11 | 0.059 | 39. | 160. | 0.01 | 0.000 | 13. |
| 65. | 0.11 | 0.059 | 39. | 165. | 0.01 | 0.000 | 13. |
| 70. | 0.05 | 0.006 | 38. | 170. | 0.01 | 0.000 | 12. |
| 75. | 0.05 | 0.006 | 35. | 175. | 0.01 | 0.000 | 7. |
| 80. | 0.03 | 0.001 | 32. | 180. | 0.01 | 0.000 | 5. |
| 85. | 0.03 | 0.001 | 30. | 185. | 0.00 | 0.000 | 3. |
| 90. | 0.03 | 0.001 | 28. | 190. | 0.00 | 0.000 | 2. |
| 95. | 0.03 | 0.001 | 27. | 195. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11  EXCESS PRECIP. = 1.436 INCHES
VOLUME OF EXCESS PRECIP = 4.67 ACRE-FEET
PEAK Q = 39. CFS  TIME OF PEAK = 60. MIN.
INFILT.= 4.50 IN/HR  DECAY =0.00180  FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN.  MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS  EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E30 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.03 | 0.19 | 0.09 | 2.00 | 0.0310 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.201 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 9.27 | 36.00 | 1140.00 | 38.76 | 1.81 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 5.51)

WIDTH AT 50 = 26. MIN. WIDTH AT 75 = 14. MIN. K50 =0.21 K75 =0.29

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.70 IN./HR. DECAY = 0.00130/SECOND FNINFL = 0.80 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 30. | 19. | 60. | 11. |
| 5. | 27. | 35. | 18. | 65. | 10. |
| 10. | 39. | 40. | 16. | 70. | 9. |
| 15. | 30. | 45. | 15. | 75. | 9. |
| 20. | 28. | 50. | 14. | 80. | 8. |
| 25. | 24. | 55. | 12. | 85. | 0. |

1 BASIN ID: E30 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 65. | 0.11 | 0.038 | 21. |
| 5. | 0.03 | 0.000 | 0. | 70. | 0.05 | 0.000 | 19. |
| 10. | 0.08 | 0.000 | 0. | 75. | 0.05 | 0.000 | 17. |
| 15. | 0.12 | 0.000 | 0. | 80. | 0.03 | 0.000 | 16. |
| 20. | 0.21 | 0.000 | 0. | 85. | 0.03 | 0.000 | 14. |
| 25. | 0.34 | 0.006 | 0. | 90. | 0.03 | 0.000 | 13. |
| 30. | 0.60 | 0.427 | 12. | 95. | 0.03 | 0.000 | 12. |
| 35. | 0.34 | 0.244 | 23. | 100. | 0.03 | 0.000 | 11. |
| 40. | 0.21 | 0.130 | 26. | 105. | 0.03 | 0.000 | 10. |
| 45. | 0.17 | 0.088 | 27. | 110. | 0.03 | 0.000 | 6. |
| 50. | 0.13 | 0.060 | 26. | 115. | 0.03 | 0.000 | 4. |
| 55. | 0.11 | 0.035 | 24. | 120. | 0.03 | 0.000 | 2. |
| 60. | 0.11 | 0.037 | 22. | 125. | 0.01 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.066 INCHES
VOLUME OF EXCESS PRECIP = 1.93 ACRE-FEET

PEAK Q = 27. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.70 IN/HR DECAY =0.00130 FNINF = 0.80 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E31 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.04 | 0.26 | 0.14 | 2.00 | 0.0290 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.203 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 10.78 | 44.00 | 940.19 | 33.85 | 1.92 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,
REPLACING THE ONE COMPUTED BY CUHPF (TP= 6.92)

WIDTH AT 50 = 32. MIN. WIDTH AT 75 = 17. MIN. K50 =0.20 K75 =0.28

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 40. | 16. | 80. | 10. |
| 5. | 20. | 45. | 15. | 85. | 9. |
| 10. | 34. | 50. | 14. | 90. | 9. |
| 15. | 30. | 55. | 13. | 95. | 8. |
| 20. | 24. | 60. | 13. | 100. | 8. |
| 25. | 24. | 65. | 12. | 105. | 0. |
| 30. | 21. | 70. | 11. | 0. | 0. |
| 35. | 18. | 75. | 10. | 0. | 0. |

1 BASIN ID: E31 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 75. | 0.05 | 0.004 | 23. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 5. | 0.03 | 0.000 | 0. | 80. | 0.03 | 0.000 | 21. |
| 10. | 0.08 | 0.000 | 0. | 85. | 0.03 | 0.000 | 20. |
| 15. | 0.12 | 0.000 | 0. | 90. | 0.03 | 0.000 | 18. |
| 20. | 0.21 | 0.000 | 0. | 95. | 0.03 | 0.000 | 17. |
| 25. | 0.34 | 0.032 | 1. | 100. | 0.03 | 0.000 | 16. |
| 30. | 0.60 | 0.533 | 12. | 105. | 0.03 | 0.000 | 15. |
| 35. | 0.34 | 0.276 | 25. | 110. | 0.03 | 0.000 | 14. |
| 40. | 0.21 | 0.158 | 29. | 115. | 0.03 | 0.000 | 13. |
| 45. | 0.17 | 0.113 | 29. | 120. | 0.03 | 0.000 | 12. |
| 50. | 0.13 | 0.082 | 30. | 125. | 0.01 | 0.000 | 11. |
| 55. | 0.11 | 0.056 | 29. | 130. | 0.01 | 0.000 | 7. |
| 60. | 0.11 | 0.056 | 28. | 135. | 0.01 | 0.000 | 5. |
| 65. | 0.11 | 0.057 | 27. | 140. | 0.01 | 0.000 | 3. |
| 70. | 0.05 | 0.004 | 25. | 145. | 0.01 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.370 INCHES
VOLUME OF EXCESS PRECIP = 2.63 ACRE-FEET
PEAK Q = 30. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E32 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.53 | 1.17 | 0.48 | 2.00 | 0.0100 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.303 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 23.83 | 546.30 | 288.99 | 28.21 |

WIDTH AT 50 = 55. MIN. WIDTH AT 75 = 29. MIN. K50 =0.26 K75 =0.35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.00 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 80. | 110. | 160. | 27. |
| 5. | 55. | 85. | 100. | 165. | 24. |
| 10. | 154. | 90. | 92. | 170. | 22. |
| 15. | 236. | 95. | 84. | 175. | 20. |
| 20. | 280. | 100. | 77. | 180. | 19. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 25. | 288. | 105. | 71. | 185. | 17. | | |
| 30. | 273. | 110. | 65. | 190. | 16. | | |
| 35. | 247. | 115. | 59. | 195. | 14. | | |
| 40. | 223. | 120. | 54. | 200. | 13. | | |
| 45. | 208. | 125. | 50. | 205. | 12. | | |
| 50. | 192. | 130. | 45. | 210. | 11. | | |
| 55. | 175. | 135. | 42. | 215. | 10. | | |
| 60. | 159. | 140. | 38. | 220. | 9. | | |
| 65. | 143. | 145. | 35. | 225. | 8. | | |
| 70. | 131. | 150. | 32. | 230. | 8. | | |
| 75. | 120. | 155. | 29. | 235. | 0. | | |

1 BASIN ID: E32 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 140. | 0.01 | 0.000 | 96. |
| 5. | 0.03 | 0.000 | 0. | 145. | 0.01 | 0.000 | 88. |
| 10. | 0.08 | 0.000 | 0. | 150. | 0.01 | 0.000 | 80. |
| 15. | 0.12 | 0.000 | 0. | 155. | 0.01 | 0.000 | 73. |
| 20. | 0.21 | 0.000 | 0. | 160. | 0.01 | 0.000 | 67. |
| 25. | 0.34 | 0.034 | 2. | 165. | 0.01 | 0.000 | 62. |
| 30. | 0.60 | 0.533 | 35. | 170. | 0.01 | 0.000 | 56. |
| 35. | 0.34 | 0.276 | 105. | 175. | 0.01 | 0.000 | 52. |
| 40. | 0.21 | 0.158 | 186. | 180. | 0.01 | 0.000 | 47. |
| 45. | 0.17 | 0.112 | 254. | 185. | 0.00 | 0.000 | 43. |
| 50. | 0.13 | 0.082 | 299. | 190. | 0.00 | 0.000 | 40. |
| 55. | 0.11 | 0.056 | 319. | 195. | 0.00 | 0.000 | 36. |
| 60. | 0.11 | 0.056 | 322. | 200. | 0.00 | 0.000 | 33. |
| 65. | 0.11 | 0.056 | 317. | 205. | 0.00 | 0.000 | 30. |
| 70. | 0.05 | 0.004 | 309. | 210. | 0.00 | 0.000 | 28. |
| 75. | 0.05 | 0.004 | 296. | 215. | 0.00 | 0.000 | 25. |
| 80. | 0.03 | 0.000 | 278. | 220. | 0.00 | 0.000 | 23. |
| 85. | 0.03 | 0.000 | 257. | 225. | 0.00 | 0.000 | 21. |
| 90. | 0.03 | 0.000 | 234. | 230. | 0.00 | 0.000 | 20. |
| 95. | 0.03 | 0.000 | 214. | 235. | 0.00 | 0.000 | 18. |
| 100. | 0.03 | 0.000 | 195. | 240. | 0.00 | 0.000 | 16. |
| 105. | 0.03 | 0.000 | 179. | 245. | 0.00 | 0.000 | 15. |
| 110. | 0.03 | 0.000 | 163. | 250. | 0.00 | 0.000 | 14. |
| 115. | 0.03 | 0.000 | 149. | 255. | 0.00 | 0.000 | 12. |
| 120. | 0.03 | 0.000 | 136. | 260. | 0.00 | 0.000 | 7. |
| 125. | 0.01 | 0.000 | 125. | 265. | 0.00 | 0.000 | 5. |
| 130. | 0.01 | 0.000 | 114. | 270. | 0.00 | 0.000 | 3. |
| 135. | 0.01 | 0.000 | 105. | 275. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.370 INCHES
VOLUME OF EXCESS PRECIP = 38.64 ACRE-FEET
PEAK Q = 322. CFS TIME OF PEAK = 60. MIN.
INFILT.= 4.00 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E33 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.05 | 0.34 | 0.18 | 2.00 | 0.0230 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.214 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.06 | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.04 |
|---|---|

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 12.67 | 54.00 | 809.11 | 42.07 | 2.77 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 8.46)

WIDTH AT 50 = 37. MIN. WIDTH AT 75 = 19. MIN. K50 =0.21 K75 =0.28

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.50 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 45. | 20. | 90. | 11. |
| 5. | 21. | 50. | 19. | 95. | 10. |
| 10. | 40. | 55. | 18. | 100. | 10. |
| 15. | 41. | 60. | 16. | 105. | 9. |
| 20. | 33. | 65. | 15. | 110. | 8. |
| 25. | 30. | 70. | 14. | 115. | 8. |
| 30. | 29. | 75. | 13. | 120. | 0. |
| 35. | 26. | 80. | 13. | 0. | 0. |
| 40. | 22. | 85. | 12. | 0. | 0. |

1 BASIN ID: E33 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 85. | 0.03 | 0.000 | 26. |
| 5. | 0.03 | 0.000 | 0. | 90. | 0.03 | 0.000 | 24. |
| 10. | 0.08 | 0.000 | 0. | 95. | 0.03 | 0.000 | 23. |
| 15. | 0.12 | 0.000 | 0. | 100. | 0.03 | 0.000 | 21. |
| 20. | 0.21 | 0.000 | 0. | 105. | 0.03 | 0.000 | 20. |
| 25. | 0.34 | 0.032 | 1. | 110. | 0.03 | 0.000 | 18. |
| 30. | 0.60 | 0.533 | 12. | 115. | 0.03 | 0.000 | 17. |
| 35. | 0.34 | 0.276 | 28. | 120. | 0.03 | 0.000 | 16. |
| 40. | 0.21 | 0.158 | 37. | 125. | 0.01 | 0.000 | 15. |
| 45. | 0.17 | 0.113 | 39. | 130. | 0.01 | 0.000 | 14. |
| 50. | 0.13 | 0.082 | 39. | 135. | 0.01 | 0.000 | 13. |
| 55. | 0.11 | 0.056 | 39. | 140. | 0.01 | 0.000 | 12. |
| 60. | 0.11 | 0.056 | 38. | 145. | 0.01 | 0.000 | 7. |
| 65. | 0.11 | 0.057 | 36. | 150. | 0.01 | 0.000 | 5. |
| 70. | 0.05 | 0.004 | 34. | 155. | 0.01 | 0.000 | 3. |
| 75. | 0.05 | 0.004 | 31. | 160. | 0.01 | 0.000 | 2. |
| 80. | 0.03 | 0.000 | 29. | 165. | 0.01 | 0.000 | 1. |

* LESS ANY WATER QUALITY CAPTURE VOLUME

** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.370 INCHES
VOLUME OF EXCESS PRECIP = 3.80 ACRE-FEET
PEAK Q = 39. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.50 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E34 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.70 | 1.37 | 0.68 | 2.00 | 0.0120 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.317 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 28.58 | 466.21 | 327.75 | 37.49 |

WIDTH AT 50 = 64. MIN. WIDTH AT 75 = 33. MIN. K50 =0.27 K75 =0.36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.30 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 95. | 122. | 190. | 29. |
| 5. | 47. | 100. | 113. | 195. | 27. |
| 10. | 136. | 105. | 105. | 200. | 25. |
| 15. | 226. | 110. | 97. | 205. | 23. |
| 20. | 290. | 115. | 90. | 210. | 21. |
| 25. | 322. | 120. | 83. | 215. | 20. |
| 30. | 327. | 125. | 77. | 220. | 18. |
| 35. | 313. | 130. | 72. | 225. | 17. |
| 40. | 290. | 135. | 66. | 230. | 16. |
| 45. | 264. | 140. | 61. | 235. | 14. |
| 50. | 246. | 145. | 57. | 240. | 13. |
| 55. | 230. | 150. | 53. | 245. | 12. |
| 60. | 214. | 155. | 49. | 250. | 11. |
| 65. | 198. | 160. | 45. | 255. | 11. |
| 70. | 182. | 165. | 42. | 260. | 10. |
| 75. | 166. | 170. | 39. | 265. | 9. |
| 80. | 154. | 175. | 36. | 270. | 8. |
| 85. | 142. | 180. | 33. | 275. | 8. |
| 90. | 132. | 185. | 31. | 280. | 0. |

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 165. | 0.01 | 0.000 | 98. |
| 5. | 0.03 | 0.000 | 0. | 170. | 0.01 | 0.000 | 90. |
| 10. | 0.08 | 0.000 | 0. | 175. | 0.01 | 0.000 | 84. |
| 15. | 0.12 | 0.000 | 0. | 180. | 0.01 | 0.000 | 78. |
| 20. | 0.21 | 0.000 | 0. | 185. | 0.00 | 0.000 | 72. |
| 25. | 0.34 | 0.036 | 2. | 190. | 0.00 | 0.000 | 67. |
| 30. | 0.60 | 0.534 | 30. | 195. | 0.00 | 0.000 | 62. |
| 35. | 0.34 | 0.277 | 94. | 200. | 0.00 | 0.000 | 57. |
| 40. | 0.21 | 0.159 | 176. | 205. | 0.00 | 0.000 | 53. |
| 45. | 0.17 | 0.113 | 256. | 210. | 0.00 | 0.000 | 49. |
| 50. | 0.13 | 0.082 | 319. | 215. | 0.00 | 0.000 | 45. |
| 55. | 0.11 | 0.056 | 360. | 220. | 0.00 | 0.000 | 42. |
| 60. | 0.11 | 0.056 | 381. | 225. | 0.00 | 0.000 | 39. |
| 65. | 0.11 | 0.057 | 386. | 230. | 0.00 | 0.000 | 36. |
| 70. | 0.05 | 0.004 | 380. | 235. | 0.00 | 0.000 | 34. |
| 75. | 0.05 | 0.004 | 368. | 240. | 0.00 | 0.000 | 31. |
| 80. | 0.03 | 0.000 | 353. | 245. | 0.00 | 0.000 | 29. |
| 85. | 0.03 | 0.000 | 333. | 250. | 0.00 | 0.000 | 27. |
| 90. | 0.03 | 0.000 | 312. | 255. | 0.00 | 0.000 | 25. |
| 95. | 0.03 | 0.000 | 289. | 260. | 0.00 | 0.000 | 23. |
| 100. | 0.03 | 0.000 | 267. | 265. | 0.00 | 0.000 | 21. |
| 105. | 0.03 | 0.000 | 246. | 270. | 0.00 | 0.000 | 20. |
| 110. | 0.03 | 0.000 | 227. | 275. | 0.00 | 0.000 | 18. |
| 115. | 0.03 | 0.000 | 210. | 280. | 0.00 | 0.000 | 17. |
| 120. | 0.03 | 0.000 | 195. | 285. | 0.00 | 0.000 | 16. |
| 125. | 0.01 | 0.000 | 180. | 290. | 0.00 | 0.000 | 14. |
| 130. | 0.01 | 0.000 | 167. | 295. | 0.00 | 0.000 | 13. |
| 135. | 0.01 | 0.000 | 154. | 300. | 0.00 | 0.000 | 12. |
| 140. | 0.01 | 0.000 | 143. | 305. | 0.00 | 0.000 | 7. |
| 145. | 0.01 | 0.000 | 132. | 310. | 0.00 | 0.000 | 5. |
| 150. | 0.01 | 0.000 | 123. | 315. | 0.00 | 0.000 | 3. |
| 155. | 0.01 | 0.000 | 114. | 320. | 0.00 | 0.000 | 2. |
| 160. | 0.01 | 0.000 | 105. | 325. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.377 INCHES
VOLUME OF EXCESS PRECIP = 51.61 ACRE-FEET
PEAK Q = 386. CFS TIME OF PEAK = 65. MIN.
INFILT.= 4.30 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E35 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.73 | 1.22 | 0.53 | 5.10 | 0.0110 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.144 | 0.297 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS | FRACTION OF IMPERVIOUS |
|---|---|

| AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.07 | AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.10 |
|---|---|

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 23.12 | 553.64 | 405.26 | 39.04 |

WIDTH AT 50 = 54. MIN. WIDTH AT 75 = 28. MIN. K50 =0.26 K75 =0.35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.30 IN./HR. DECAY = 0.00170/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 85. | 137. | 170. | 29. |
| 5. | 81. | 90. | 125. | 175. | 27. |
| 10. | 224. | 95. | 115. | 180. | 25. |
| 15. | 339. | 100. | 105. | 185. | 22. |
| 20. | 397. | 105. | 96. | 190. | 21. |
| 25. | 403. | 110. | 87. | 195. | 19. |
| 30. | 377. | 115. | 80. | 200. | 17. |
| 35. | 338. | 120. | 73. | 205. | 16. |
| 40. | 308. | 125. | 67. | 210. | 14. |
| 45. | 288. | 130. | 61. | 215. | 13. |
| 50. | 265. | 135. | 56. | 220. | 12. |
| 55. | 242. | 140. | 51. | 225. | 11. |
| 60. | 218. | 145. | 46. | 230. | 10. |
| 65. | 197. | 150. | 42. | 235. | 9. |
| 70. | 180. | 155. | 39. | 240. | 8. |
| 75. | 164. | 160. | 35. | 245. | 8. |
| 80. | 150. | 165. | 32. | 250. | 0. |

1 BASIN ID: E35 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 150. | 0.01 | 0.000 | 111. |
| 5. | 0.03 | 0.000 | 0. | 155. | 0.01 | 0.000 | 101. |
| 10. | 0.08 | 0.000 | 0. | 160. | 0.01 | 0.000 | 93. |
| 15. | 0.12 | 0.001 | 0. | 165. | 0.01 | 0.000 | 85. |
| 20. | 0.21 | 0.001 | 0. | 170. | 0.01 | 0.000 | 77. |
| 25. | 0.34 | 0.044 | 4. | 175. | 0.01 | 0.000 | 71. |
| 30. | 0.60 | 0.532 | 54. | 180. | 0.01 | 0.000 | 65. |
| 35. | 0.34 | 0.276 | 158. | 185. | 0.00 | 0.000 | 59. |
| 40. | 0.21 | 0.159 | 273. | 190. | 0.00 | 0.000 | 54. |
| 45. | 0.17 | 0.113 | 368. | 195. | 0.00 | 0.000 | 49. |
| 50. | 0.13 | 0.083 | 427. | 200. | 0.00 | 0.000 | 45. |
| 55. | 0.11 | 0.057 | 452. | 205. | 0.00 | 0.000 | 41. |
| 60. | 0.11 | 0.057 | 453. | 210. | 0.00 | 0.000 | 38. |
| 65. | 0.11 | 0.058 | 446. | 215. | 0.00 | 0.000 | 34. |
| 70. | 0.05 | 0.005 | 436. | 220. | 0.00 | 0.000 | 31. |
| 75. | 0.05 | 0.005 | 417. | 225. | 0.00 | 0.000 | 29. |
| 80. | 0.03 | 0.000 | 391. | 230. | 0.00 | 0.000 | 26. |
| 85. | 0.03 | 0.000 | 360. | 235. | 0.00 | 0.000 | 24. |
| 90. | 0.03 | 0.000 | 329. | 240. | 0.00 | 0.000 | 22. |
| 95. | 0.03 | 0.000 | 300. | 245. | 0.00 | 0.000 | 20. |
| 100. | 0.03 | 0.000 | 274. | 250. | 0.00 | 0.000 | 18. |
| 105. | 0.03 | 0.000 | 250. | 255. | 0.00 | 0.000 | 17. |
| 110. | 0.03 | 0.000 | 229. | 260. | 0.00 | 0.000 | 15. |
| 115. | 0.03 | 0.000 | 209. | 265. | 0.00 | 0.000 | 14. |
| 120. | 0.03 | 0.000 | 191. | 270. | 0.00 | 0.000 | 12. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 125. | 0.01 | 0.000 | 174. | \| | 275. | 0.00 | 0.000 | 8. \| |
| 130. | 0.01 | 0.000 | 159. | \| | 280. | 0.00 | 0.000 | 5. \| |
| 135. | 0.01 | 0.000 | 146. | \| | 285. | 0.00 | 0.000 | 4. \| |
| 140. | 0.01 | 0.000 | 133. | \| | 290. | 0.00 | 0.000 | 2. \| |
| 145. | 0.01 | 0.000 | 122. | \| | 295. | 0.00 | 0.000 | 2. \| |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.396 INCHES
VOLUME OF EXCESS PRECIP = 54.51 ACRE-FEET
PEAK Q = 453. CFS TIME OF PEAK = 60. MIN.
INFILT.= 4.30 IN/HR DECAY =0.00170 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E36 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.10 | 0.29 | 0.16 | 2.00 | 0.0110 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.238 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | TIME OF CONCENTRATION (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|---|
| 14.37 | 63.00 | 769.27 | 80.00 | 5.55 |

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPF (TP= 8.77)

WIDTH AT 50 = 39. MIN. WIDTH AT 75 = 20. MIN. K50 =0.22 K75 =0.30

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.40 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 45. | 40. | 90. | 16. |
| 5. | 33. | 50. | 36. | 95. | 14. |
| 10. | 70. | 55. | 32. | 100. | 13. |
| 15. | 80. | 60. | 29. | 105. | 12. |
| 20. | 71. | 65. | 26. | 110. | 10. |
| 25. | 60. | 70. | 24. | 115. | 9. |
| 30. | 58. | 75. | 21. | 120. | 8. |
| 35. | 52. | 80. | 19. | 125. | 8. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 40. | 46. | 85. | 17. | 130. | 0. | | |

1 BASIN ID: E36 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 90. | 0.03 | 0.000 | 45. |
| 5. | 0.03 | 0.000 | 0. | 95. | 0.03 | 0.000 | 40. |
| 10. | 0.08 | 0.000 | 0. | 100. | 0.03 | 0.000 | 36. |
| 15. | 0.12 | 0.000 | 0. | 105. | 0.03 | 0.000 | 32. |
| 20. | 0.21 | 0.000 | 0. | 110. | 0.03 | 0.000 | 29. |
| 25. | 0.34 | 0.034 | 1. | 115. | 0.03 | 0.000 | 26. |
| 30. | 0.60 | 0.533 | 20. | 120. | 0.03 | 0.000 | 24. |
| 35. | 0.34 | 0.276 | 49. | 125. | 0.01 | 0.000 | 21. |
| 40. | 0.21 | 0.158 | 70. | 130. | 0.01 | 0.000 | 19. |
| 45. | 0.17 | 0.113 | 77. | 135. | 0.01 | 0.000 | 17. |
| 50. | 0.13 | 0.082 | 77. | 140. | 0.01 | 0.000 | 16. |
| 55. | 0.11 | 0.056 | 77. | 145. | 0.01 | 0.000 | 14. |
| 60. | 0.11 | 0.056 | 75. | 150. | 0.01 | 0.000 | 13. |
| 65. | 0.11 | 0.057 | 72. | 155. | 0.01 | 0.000 | 8. |
| 70. | 0.05 | 0.004 | 67. | 160. | 0.01 | 0.000 | 5. |
| 75. | 0.05 | 0.004 | 61. | 165. | 0.01 | 0.000 | 3. |
| 80. | 0.03 | 0.000 | 55. | 170. | 0.01 | 0.000 | 2. |
| 85. | 0.03 | 0.000 | 50. | 175. | 0.01 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.374 INCHES
VOLUME OF EXCESS PRECIP = 7.62 ACRE-FEET
PEAK Q = 77. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.40 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E37 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 1.07 | 1.80 | 0.49 | 2.00 | 0.0100 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.337 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) R= 0.06

FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) D= 0.04

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 29.04 | 487.92 | 522.08 | 57.07 |

WIDTH AT 50 = 61. MIN. WIDTH AT 75 = 32. MIN. K50 =0.28 K75 =0.39

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.00 IN./HR. DECAY = 0.00160/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 100. | 168. | 200. | 33. |
| 5. | 73. | 105. | 155. | 205. | 30. |
| 10. | 213. | 110. | 142. | 210. | 28. |
| 15. | 354. | 115. | 131. | 215. | 25. |
| 20. | 456. | 120. | 121. | 220. | 23. |
| 25. | 510. | 125. | 111. | 225. | 22. |
| 30. | 521. | 130. | 103. | 230. | 20. |
| 35. | 502. | 135. | 95. | 235. | 18. |
| 40. | 464. | 140. | 87. | 240. | 17. |
| 45. | 421. | 145. | 80. | 245. | 16. |
| 50. | 385. | 150. | 74. | 250. | 14. |
| 55. | 358. | 155. | 68. | 255. | 13. |
| 60. | 331. | 160. | 63. | 260. | 12. |
| 65. | 304. | 165. | 58. | 265. | 11. |
| 70. | 278. | 170. | 53. | 270. | 10. |
| 75. | 253. | 175. | 49. | 275. | 9. |
| 80. | 233. | 180. | 45. | 280. | 9. |
| 85. | 215. | 185. | 42. | 285. | 8. |
| 90. | 198. | 190. | 38. | 290. | 7. |
| 95. | 182. | 195. | 35. | 295. | 0. |

1 BASIN ID: E37 -- BASIN COMMENT: Eastern portion of Sump Basin

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 170. | 0.01 | 0.000 | 126. |
| 5. | 0.03 | 0.000 | 0. | 175. | 0.01 | 0.000 | 117. |
| 10. | 0.08 | 0.000 | 0. | 180. | 0.01 | 0.000 | 107. |
| 15. | 0.12 | 0.000 | 0. | 185. | 0.00 | 0.000 | 99. |
| 20. | 0.21 | 0.000 | 0. | 190. | 0.00 | 0.000 | 91. |
| 25. | 0.34 | 0.024 | 2. | 195. | 0.00 | 0.000 | 84. |
| 30. | 0.60 | 0.530 | 44. | 200. | 0.00 | 0.000 | 77. |
| 35. | 0.34 | 0.273 | 141. | 205. | 0.00 | 0.000 | 71. |
| 40. | 0.21 | 0.156 | 268. | 210. | 0.00 | 0.000 | 66. |
| 45. | 0.17 | 0.111 | 392. | 215. | 0.00 | 0.000 | 60. |
| 50. | 0.13 | 0.081 | 492. | 220. | 0.00 | 0.000 | 56. |
| 55. | 0.11 | 0.055 | 560. | 225. | 0.00 | 0.000 | 51. |
| 60. | 0.11 | 0.056 | 595. | 230. | 0.00 | 0.000 | 47. |
| 65. | 0.11 | 0.056 | 604. | 235. | 0.00 | 0.000 | 44. |
| 70. | 0.05 | 0.004 | 594. | 240. | 0.00 | 0.000 | 40. |
| 75. | 0.05 | 0.004 | 572. | 245. | 0.00 | 0.000 | 37. |
| 80. | 0.03 | 0.000 | 546. | 250. | 0.00 | 0.000 | 34. |
| 85. | 0.03 | 0.000 | 513. | 255. | 0.00 | 0.000 | 31. |
| 90. | 0.03 | 0.000 | 478. | 260. | 0.00 | 0.000 | 29. |
| 95. | 0.03 | 0.000 | 440. | 265. | 0.00 | 0.000 | 27. |
| 100. | 0.03 | 0.000 | 403. | 270. | 0.00 | 0.000 | 25. |
| 105. | 0.03 | 0.000 | 370. | 275. | 0.00 | 0.000 | 23. |
| 110. | 0.03 | 0.000 | 340. | 280. | 0.00 | 0.000 | 21. |
| 115. | 0.03 | 0.000 | 313. | 285. | 0.00 | 0.000 | 19. |
| 120. | 0.03 | 0.000 | 288. | 290. | 0.00 | 0.000 | 18. |
| 125. | 0.01 | 0.000 | 265. | 295. | 0.00 | 0.000 | 16. |
| 130. | 0.01 | 0.000 | 244. | 300. | 0.00 | 0.000 | 15. |
| 135. | 0.01 | 0.000 | 225. | 305. | 0.00 | 0.000 | 14. |
| 140. | 0.01 | 0.000 | 207. | 310. | 0.00 | 0.000 | 13. |
| 145. | 0.01 | 0.000 | 191. | 315. | 0.00 | 0.000 | 12. |
| 150. | 0.01 | 0.000 | 176. | 320. | 0.00 | 0.000 | 7. |
| 155. | 0.01 | 0.000 | 162. | 325. | 0.00 | 0.000 | 5. |
| 160. | 0.01 | 0.000 | 149. | 330. | 0.00 | 0.000 | 3. |
| 165. | 0.01 | 0.000 | 137. | 335. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.350 INCHES
VOLUME OF EXCESS PRECIP = 77.05 ACRE-FEET
PEAK Q = 604. CFS TIME OF PEAK = 65. MIN.
INFILT.= 4.00 IN/HR DECAY =0.00160 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE 5/ 5/2010 AT TIME 9:14

CUHPF/PC RELEASE 2A (32-BIT VER) SEPTEMBER 10, 1998

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

0yr Current Condition (NOAA 3hr rainfall) Town of Firestone Sump Basin

BASIN ID: E38 -- BASIN COMMENT: Eastern portion of Sump Basin

| AREA (SQMI) | LENGTH OF BASIN (MI) | DIST TO CENTROID (MI) | IMPERV. AREA (PCT) | SLOPE (FT/FT) | UNIT DURATION (MIN) |
|---|---|---|---|---|---|
| 0.27 | 0.89 | 0.47 | 2.00 | 0.0140 | 5.00 |

| COEFFICIENT (REFLECTING TIME TO PEAK) | COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF) |
|---|---|
| 0.156 | 0.274 |

THIS BASIN USES TRADITIONAL DRAINAGE PRACTICES

| FRACTION OF PERVIOUS AREA RECEIVING IMPERVIOUS DRAINAGE ( DEFAULT ) | FRACTION OF IMPERVIOUS AREA DIRECTLY CONNECTED TO DRAINAGE SYSTEM ( DEFAULT ) |
|---|---|
| R= 0.06 | D= 0.04 |

CALCULATED UNIT HYDROGRAPH

| TIME TO PEAK (MIN) | PEAK RATE OF RUNOFF (CFS/SQMI) | UNIT HYDROGRAPH PEAK (CFS) | VOLUME OF RUNOFF (AF) |
|---|---|---|---|
| 19.55 | 618.07 | 167.50 | 14.45 |

WIDTH AT 50 = 49. MIN. WIDTH AT 75 = 25. MIN. K50 =0.24 K75 =0.33

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. =0.35 IN. MAX. IMPERVIOUS RET. =0.05 IN.
INFILTRATION = 4.30 IN./HR. DECAY = 0.00180/SECOND FNINFL = 0.60 IN./HR.

| TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH | TIME | UNIT HYDROGRAPH |
|---|---|---|---|---|---|
| 0. | 0. | 65. | 71. | 130. | 21. |
| 5. | 44. | 70. | 65. | 135. | 19. |
| 10. | 112. | 75. | 59. | 140. | 17. |
| 15. | 156. | 80. | 54. | 145. | 16. |
| 20. | 167. | 85. | 49. | 150. | 14. |
| 25. | 157. | 90. | 44. | 155. | 13. |
| 30. | 139. | 95. | 40. | 160. | 12. |
| 35. | 126. | 100. | 37. | 165. | 11. |
| 40. | 118. | 105. | 33. | 170. | 10. |
| 45. | 108. | 110. | 30. | 175. | 9. |
| 50. | 97. | 115. | 28. | 180. | 8. |
| 55. | 87. | 120. | 25. | 185. | 0. |
| 60. | 78. | 125. | 23. | 0. | 0. |

1 BASIN ID: E38 -- BASIN COMMENT: Eastern portion of Sump Basin

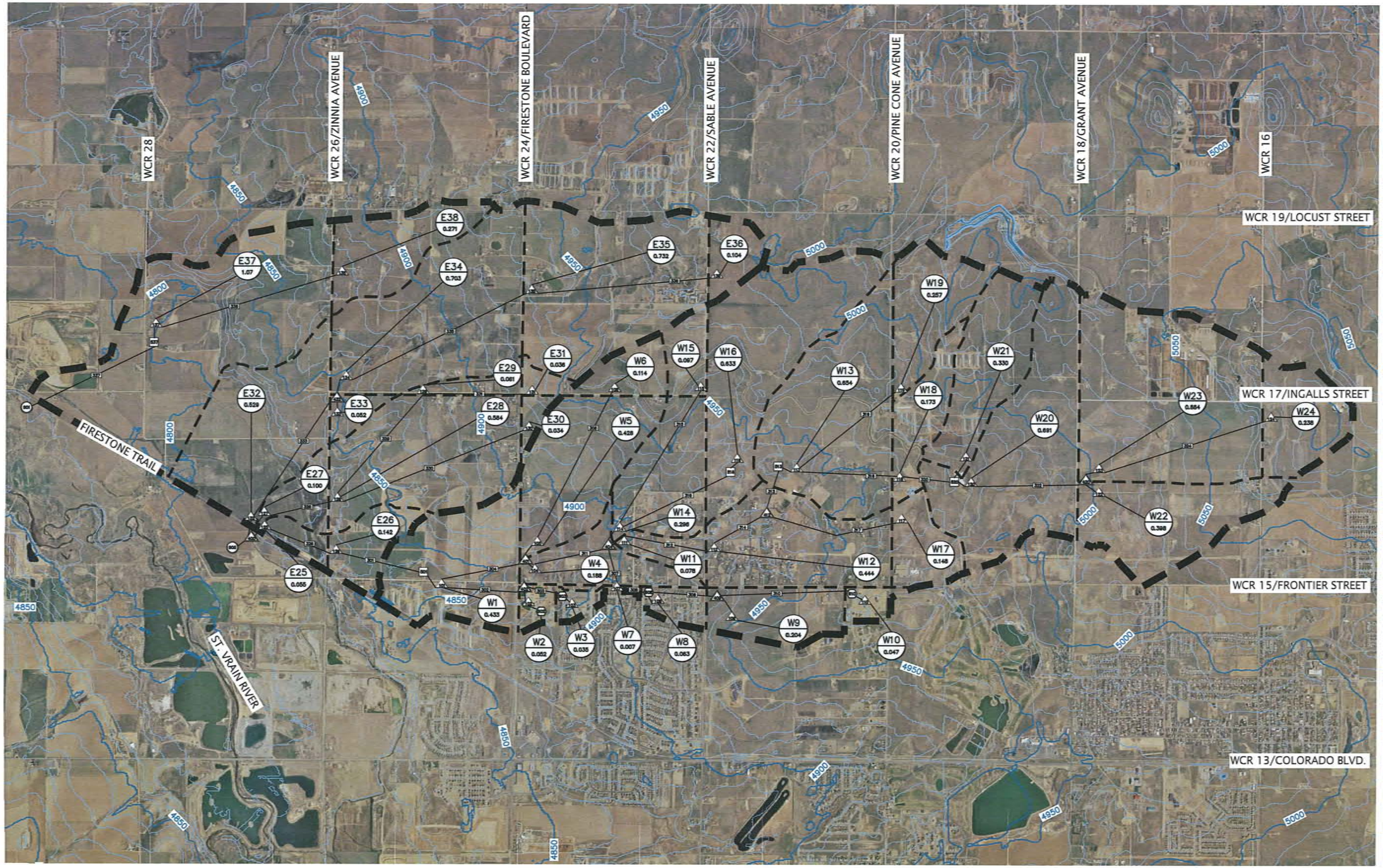
**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100yr

| TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) | TIME (MIN.) | INCREMENT RAINFALL (IN) | TOTAL* EXCESS PRECIP | STORM** HYDROGRAPH (CFS) |
|---|---|---|---|---|---|---|---|
| 0. | 0.00 | 0.000 | 0. | 115. | 0.03 | 0.000 | 73. |
| 5. | 0.03 | 0.000 | 0. | 120. | 0.03 | 0.000 | 66. |
| 10. | 0.08 | 0.000 | 0. | 125. | 0.01 | 0.000 | 60. |
| 15. | 0.12 | 0.000 | 0. | 130. | 0.01 | 0.000 | 55. |
| 20. | 0.21 | 0.000 | 0. | 135. | 0.01 | 0.000 | 50. |
| 25. | 0.34 | 0.036 | 2. | 140. | 0.01 | 0.000 | 45. |
| 30. | 0.60 | 0.534 | 27. | 145. | 0.01 | 0.000 | 41. |
| 35. | 0.34 | 0.277 | 78. | 150. | 0.01 | 0.000 | 38. |
| 40. | 0.21 | 0.159 | 128. | 155. | 0.01 | 0.000 | 34. |
| 45. | 0.17 | 0.113 | 161. | 160. | 0.01 | 0.000 | 31. |
| 50. | 0.13 | 0.082 | 176. | 165. | 0.01 | 0.000 | 28. |
| 55. | 0.11 | 0.056 | 178. | 170. | 0.01 | 0.000 | 26. |
| 60. | 0.11 | 0.056 | 175. | 175. | 0.01 | 0.000 | 23. |
| 65. | 0.11 | 0.057 | 173. | 180. | 0.01 | 0.000 | 21. |
| 70. | 0.05 | 0.004 | 167. | 185. | 0.00 | 0.000 | 19. |
| 75. | 0.05 | 0.004 | 157. | 190. | 0.00 | 0.000 | 18. |
| 80. | 0.03 | 0.000 | 144. | 195. | 0.00 | 0.000 | 16. |
| 85. | 0.03 | 0.000 | 130. | 200. | 0.00 | 0.000 | 15. |
| 90. | 0.03 | 0.000 | 118. | 205. | 0.00 | 0.000 | 13. |
| 95. | 0.03 | 0.000 | 107. | 210. | 0.00 | 0.000 | 8. |
| 100. | 0.03 | 0.000 | 98. | 215. | 0.00 | 0.000 | 5. |
| 105. | 0.03 | 0.000 | 89. | 220. | 0.00 | 0.000 | 4. |
| 110. | 0.03 | 0.000 | 80. | 225. | 0.00 | 0.000 | 2. |

* LESS ANY WATER QUALITY CAPTURE VOLUME
** INCLUDES ANY WATER QUALITY CAPTURE VOLUME RELEASE FLOW

TOTAL PRECIP. = 3.11 EXCESS PRECIP. = 1.377 INCHES
VOLUME OF EXCESS PRECIP = 19.90 ACRE-FEET
PEAK Q = 178. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.30 IN/HR DECAY =0.00180 FNINF = 0.60 IN/HR
MAX.PERV.RET.=0.35 IN. MAX.IMP.RET.=0.05 IN.

# Appendix J:
# CURRENT CONDITION UDSWMM




LEGEND

| | |
|---|---|
| A / B | A: BASIN DESIGNATION<br>B: BASIN AREA (SQ. MILES) |
| 125 | SUB-BASIN DESIGN POINT |
| 302 | CONVEYANCE ELEMENT |
| 400 | CRITICAL DESIGN POINT |
| 501 | EXISTING SUMP |
| 603 | EXISTING DETENTION POND |
| 900 | BASIN DISCHARGE POINT |
| | EXISTING 10' CONTOUR |
| | EXISTING 50' CONTOUR |
| | SUB-BASINS |
| | SUMP BASIN BOUNDARY |

N

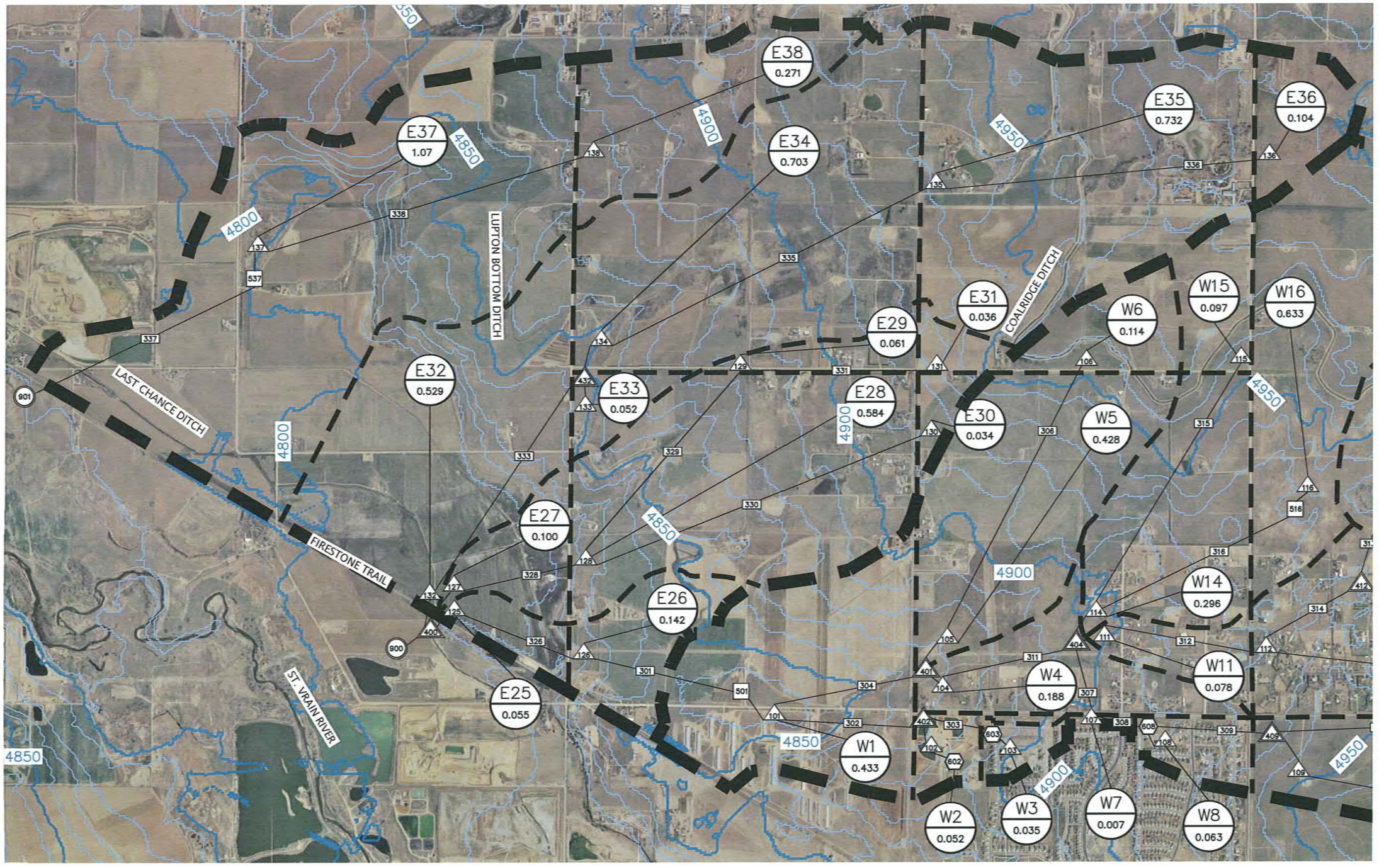
N.T.S.

CCG COLORADO CIVIL GROUP, INC. ENGINEERING CONSULTANTS

# TOWN OF FIRESTONE
## SUMP BASIN MASTER PLAN
## CURRENT CONDITION UDSWMM SCHEMATIC
## OVERALL

FILENAME: 0147_DRAINAGE
DESIGNED: D.H.
CHECKED: D.B.L.
JOB NO.: 0668.0147.00
SCALE: N.T.S.
DATE: MAY 2010

SHEET NO.: 1 OF 3




LEGEND

- A: BASIN DESIGNATION
- B: BASIN AREA (SQ. MILES)
- SUB-BASIN DESIGN POINT
- CONVEYANCE ELEMENT
- CRITICAL DESIGN POINT
- EXISTING SUMP
- EXISTING DETENTION POND
- BASIN DISCHARGE POINT
- EXISTING 10' CONTOUR
- EXISTING 50' CONTOUR
- SUB-BASINS
- SUMP BASIN BOUNDARY

N

N.T.S.

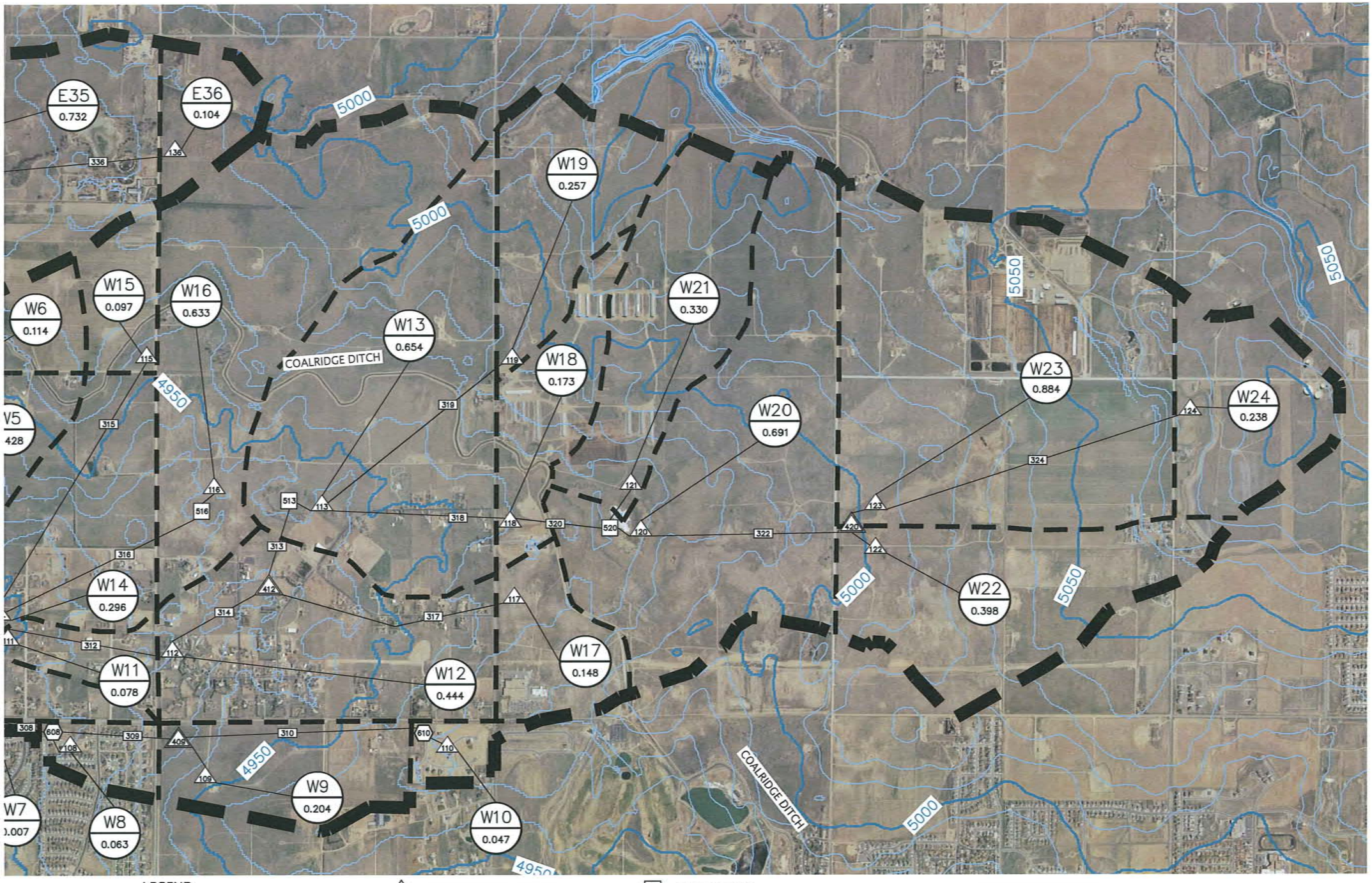
COLORADO CIVIL GROUP, INC.
ENGINEERING CONSULTANTS

TOWN OF FIRESTONE
SUMP BASIN MASTER PLAN

CURRENT CONDITION UDSWMM SCHEMATIC

FILENAME: 0147_DRAINAGE
DESIGNED: D.H.
CHECKED: D.B.L.
JOB NO.: 0668.0147.00
SCALE: N.T.S.
DATE: MAY 2010

SHEET NO.: 2 OF 3




COLORADO CIVIL GROUP, INC.
ENGINEERING CONSULTANTS

# TOWN OF FIRESTONE
# SUMP BASIN MASTER PLAN
# CURRENT CONDITION UDSWMM SCHEMATIC

FILENAME: 0147_DRAINAGE
DESIGNED: D.H.
CHECKED: D.B.L.
JOB NO.: 0668.0147.00
SCALE: N.T.S.
DATE: MAY 2010

SHEET NO.: 3 OF 3

```
   2   1   1   2
   3   4
WATERSHED   1
2yr 3hr Current Condition SWMM Sump Basin
Blank
        84       5.0                                                          1
         1  201
         4  204
         5  205
         6  206
         7  207
         9  209
        11  211
        12  212
        13  213
        14  214
        15  215
        16  216
        17  217
        18  218
        19  219
        20  220
        21  221
        22  222
        23  223
        24  224
        25  225
        26  226
        27  227
        28  228
        29  229
        30  230
        31  231
        32  232
        33  233
        34  234
        35  235
        36  236
        37  237
        38  238

    0  201  101    3              1.
   -1  202  102  3 3              1.
         0.        0.      0.55      10.1      1.65        0.        0.        0.
   -1  203  103  3 3              1.
         0.        0.      0.23      3.59      0.69        0.        0.        0.
    0  204  104    3              1.
    0  205  105    3              1.
    0  206  106    3              1.
    0  207  107    3              1.
   -1  208  108  3 3              1.
         0.        0.      0.67     45.23      1.80        0.        0.        0.
    0  209  109    3              1.
   -1  210  110  3 3              1.
         0.        0.      0.35     11.45      1.05        0.        0.        0.
    0  211  111    3              1.
    0  212  112    3              1.
    0  213  113    3              1.
    0  214  114    3              1.
    0  215  115    3              1.
    0  216  116    3              1.
    0  217  117    3              1.
    0  218  118    3              1.
    0  219  119    3              1.
    0  220  120    3              1.
    0  121  120    3              1.
    0  221  121    3              1.
    0  222  122    3              1.
    0  223  123    3              1.
    0  224  124    3              1.
    0  225  125    3              1.
    0  226  126    3              1.
    0  227  127    3              1.
    0  228  128    3              1.
    0  229  129    3              1.
    0  230  130    3              1.
    0  231  131    3              1.
    0  232  132    3              1.
```

```
0  233  133    3             1.
0  234  134    3             1.
0  235  135    3             1.
0  236  136    3             1.
0  237  137    3             1.
0  238  138    3             1.
0  402  302    3             1.
0  401  304    3             1.
0  106  306    3             1.
0  107  307    3             1.
0  409  309    3             1.
0  404  311    3             1.
0  112  312    3             1.
0  412  314    3             1.
0  115  315    3             1.
0  117  317    3             1.
0  118  318    3             1.
0  119  319    3             1.
0  420  322    3             1.
0  124  324    3             1.
0  126  326    3             1.
0  128  328    3             1.
0  129  329    3             1.
0  130  330    3             1.
0  131  331    3             1.
0  432  333    3             1.
0  135  335    3             1.
0  136  336    3             1.
0  138  338    3             1.
0  125  400    3             1.
0  127  400    3             1.
0  132  400    3             1.
0  104  401    3             1.
0  105  401    3             1.
0  111  404    3             1.
0  114  404    3             1.
0  109  409    3             1.
0  122  420    3             1.
0  123  420    3             1.
0  133  432    3             1.
0  134  432    3             1.
0  101  501    3             1.
0  113  513    3             1.
0  116  516    3             1.
0  120  520    3             1.
0  137  537    3             1.
0  102  602    3             1.
0  103  603    3             1.
0  108  608    3             1.
0  110  610    3             1.
0  400  900    3             1.
0  337  901    3             1.
0  501  301  7 2     0.1       1.                                      0.1
    0.        0.       7.5        0.      26.4        0.      63.3        0.
  82.9        0.      129.     1400.      201.     6510.
0  513  313  3 2     0.1       1.                                      0.1
    0.        0.      20.3        0.      22.1      495.
0  516  316  3 2     0.1       1.                                      0.1
    0.        0.     18.12        0.      18.9      320.        0.        0.
0  520  320  4 2     0.1       1.                                      0.1
    0.        0.       9.9        0.       10.        0.      230.        0.
0  537  337  3 2     0.1       1.                                      0.1
    0.        0.     14.85        0.      17.9      623.        0.        0.
0  602  402  3 2     0.1       1.                                      0.1
    0.        0.      0.78       5.4      1.64      15.4
0  603  303  3 2     0.1       1.                                      0.1
    0.        0.      0.12       1.2      0.33       6.9        0.        0.
0  608  308 10 2     0.1       1.                                      0.1
    0.        0.      .038      0.31      0.45      0.46      1.63      0.57
  3.59      0.67      6.09     32.39      7.09     55.58      8.87    123.53
 11.53    266.39     13.14    378.74
0  610  310  2 2     0.1       1.                                      0.1
    0.        0.      3.81       1.3        0.        0.        0.        0.
0  302  101    1          3681.  0.0077     60.     60.    .045     10.
0  304  101    1          3729.  0.0074     40.     40.    .045     10.
0  311  104    1          2920.  0.0108     70.     70.    .045     10.
0  306  105    1          5319.  0.0161     50.     50.    .045     10.
0  308  107    1      4.    625.   0.008    0.01    0.01   0.016      2.
```

```
    0  312  111    1           2682.  0.0082    110.    110.    .045     10.
    0  314  112    1           1834.  0.0049    175.    175.    .045     10.
    0  318  113    1           3243.  0.0052    100.    100.    .045     10.
    0  319  113    1           4029.  0.0107     95.     95.    .045     10.
    0  315  114    1           5050.  0.0109     80.     80.    .045     10.
    0  316  114    1           2964.  0.0101     50.     50.    .045     10.
    0  320  118    1            811.  0.0123     80.     80.    .045     10.
    0  322  120    1           3463.  0.0081    100.    100.    .045     10.
    0  324  123    1           5484.  0.0133     75.     75.    .045     10.
    0  326  125    1           2139.  0.0019     80.     80.    .045     10.
    0  301  126    1           1590.   0.017     40.     40.    .045     10.
    0  328  127    1           3272.  0.0089    115.    115.    .045     10.
    0  329  128    1           3696.  0.0176     25.     25.    .045     10.
    0  330  128    1           5614.  0.0157     50.     50.    .045     10.
    0  331  129    1           2742.  0.0091      3.      3.   0.035      3.
    0  333  132    1           4251.  0.0078    125.    125.    .045     10.
    0  335  134    1           6142.  0.0138     70.     70.    .045     10.
    0  336  135    1           5277.    0.01    100.    100.    .045     10.
    0  338  137    1           8677.  0.0086     75.     75.    .045     10.
    0  303  402    1      5.   1011.  0.0151      5.      5.   0.035      3.
    0  307  404    1      5.   1308.  0.0031      5.      5.   0.035      3.
    0  310  409    1      5.   3896.    0.01      5.      5.   0.035      3.
    0  313  412    1            820.  0.0073    100.    100.    .045     10.
    0  317  412    1           3628.  0.0105    100.    100.    .045     10.
    0  309  608    1      5.   1757.  0.0091      5.      5.   0.035      3.

    0
   85
  101  102  103  104  105  106  107  108  109  110  111  112  113  114  115  116
  117  118  119  120  121  122  123  124  125  126  127  128  129  130  131  132
  133  134  135  136  137  138  301  302  303  304  306  307  308  309  310  311
  312  313  314  315  316  317  318  319  320  322  324  326  328  329  330  331
  333  335  336  338  400  401  402  404  412  420  432  501  513  516  520  537
  602  603  608  609  610
ENDPROGRAM
```

URBAN DRAINAGE STORM WATER MANAGEMENT MODEL - 32 BIT VERSION 1998
REVISED BY UNIVERSITY OF COLORADO AT DENVER

*** ENTRY MADE TO RUNOFF MODEL ***

2yr 3hr Current Condition SWMM Sump Basin
Blank

0NUMBER OF TIME STEPS 84
0INTEGRATION TIME INTERVAL (MINUTES), 5.00

25.0 PERCENT OF IMPERVIOUS AREA HAS ZERO DETENTION DEPTH
1

2yr 3hr Current Condition SWMM Sump Basin
Blank

HYDROGRAPHS FROM CUHPF MODEL ARE LISTED FOR THE FOLLOWING 34 SUBCATCHMENTS

| TIME(HR/MIN) | 1 | 4 | 5 | 6 | 7 | 9 | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|---|---|
| | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 |
| | 35 | 36 | 37 | 38 | | | | | | |
| 0 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 5. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 10. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 15. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 20. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 25. | 0. | 1. | 0. | 0. | 0. | 0. | 1. | 2. | 0. | 1. |
| | 0. | 0. | 2. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 1. | 0. | 0. | 0. | | | | | | |
| 0 30. | 0. | 2. | 0. | 0. | 0. | 0. | 2. | 5. | 1. | 3. |
| | 0. | 0. | 4. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 2. | 0. | 0. | 0. | | | | | | |
| 0 35. | 0. | 4. | 0. | 0. | 0. | 0. | 2. | 8. | 2. | 4. |
| | 0. | 1. | 5. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 3. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 4. | 0. | 0. | 0. | | | | | | |
| 0 40. | 0. | 4. | 0. | 0. | 0. | 0. | 3. | 10. | 3. | 5. |
| | 0. | 1. | 5. | 3. | 0. | 0. | 1. | 0. | 1. | 0. |
| | 0. | 0. | 0. | 4. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 6. | 0. | 0. | 0. | | | | | | |
| 0 45. | 0. | 5. | 0. | 0. | 0. | 0. | 3. | 11. | 3. | 5. |
| | 0. | 1. | 4. | 3. | 0. | 0. | 2. | 0. | 1. | 0. |

```
                0.      0.      0.      5.      0.      0.      0.      0.      0.      0.
                7.      0.      0.      0.

0   50.         0.      4.      0.      0.      0.      0.      3.     11.      4.      5.
                0.      2.      4.      2.      0.      0.      2.      0.      1.      0.
                0.      0.      0.      5.      0.      0.      0.      0.      0.      0.
                7.      0.      0.      0.

0   55.         0.      4.      0.      0.      0.      0.      2.     11.      4.      5.
                0.      2.      3.      2.      0.      0.      2.      0.      1.      0.
                0.      0.      0.      5.      0.      0.      0.      0.      0.      0.
                7.      0.      0.      0.

1    0.         0.      4.      0.      0.      0.      0.      2.     10.      3.      4.
                0.      2.      3.      2.      0.      0.      2.      0.      0.      0.
                0.      0.      0.      5.      0.      0.      0.      0.      0.      0.
                6.      0.      0.      0.

1    5.         0.      4.      0.      0.      0.      0.      2.     10.      3.      4.
                0.      2.      3.      2.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      4.      0.      0.      0.      0.      0.      0.
                6.      0.      0.      0.

1   10.         0.      4.      0.      0.      0.      0.      2.      9.      3.      4.
                0.      2.      2.      2.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      4.      0.      0.      0.      0.      0.      0.
                6.      0.      0.      0.

1   15.         0.      4.      0.      0.      0.      0.      2.      9.      3.      3.
                0.      2.      2.      2.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      4.      0.      0.      0.      0.      0.      0.
                5.      0.      0.      0.

1   20.         0.      3.      0.      0.      0.      0.      2.      8.      3.      3.
                0.      1.      2.      2.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      3.      0.      0.      0.      0.      0.      0.
                5.      0.      0.      0.

1   25.         0.      3.      0.      0.      0.      0.      2.      8.      2.      3.
                0.      0.      1.      0.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      3.      0.      0.      0.      0.      0.      0.
                4.      0.      0.      0.

1   30.         0.      3.      0.      0.      0.      0.      2.      7.      2.      3.
                0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      3.      0.      0.      0.      0.      0.      0.
                4.      0.      0.      0.

1   35.         0.      3.      0.      0.      0.      0.      2.      7.      2.      2.
                0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      3.      0.      0.      0.      0.      0.      0.
                4.      0.      0.      0.

1   40.         0.      3.      0.      0.      0.      0.      2.      6.      2.      2.
                0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      2.      0.      0.      0.      0.      0.      0.
                3.      0.      0.      0.

1   45.         0.      3.      0.      0.      0.      0.      2.      6.      2.      2.
                0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      2.      0.      0.      0.      0.      0.      0.
                3.      0.      0.      0.

1   50.         0.      2.      0.      0.      0.      0.      2.      6.      2.      2.
                0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      2.      0.      0.      0.      0.      0.      0.
                3.      0.      0.      0.

1   55.         0.      2.      0.      0.      0.      0.      2.      5.      2.      2.
                0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      2.      0.      0.      0.      0.      0.      0.
                3.      0.      0.      0.

2    0.         0.      2.      0.      0.      0.      0.      2.      5.      1.      2.
                0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      2.      0.      0.      0.      0.      0.      0.
                3.      0.      0.      0.
```

```
2    5.      0.      2.      0.      0.      0.      0.      2.      5.      0.      1.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      2.      0.      0.      0.      0.      0.      0.
             2.      0.      0.      0.

2   10.      0.      2.      0.      0.      0.      0.      2.      5.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      2.      0.      0.      0.      0.      0.      0.
             2.      0.      0.      0.

2   15.      0.      2.      0.      0.      0.      0.      1.      4.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      1.      0.      0.      0.      0.      0.      0.
             2.      0.      0.      0.

2   20.      0.      2.      0.      0.      0.      0.      1.      4.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             2.      0.      0.      0.

2   25.      0.      2.      0.      0.      0.      0.      1.      4.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             2.      0.      0.      0.

2   30.      0.      2.      0.      0.      0.      0.      0.      4.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             2.      0.      0.      0.

2   35.      0.      2.      0.      0.      0.      0.      0.      3.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             2.      0.      0.      0.

2   40.      0.      1.      0.      0.      0.      0.      0.      3.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             1.      0.      0.      0.

2   45.      0.      0.      0.      0.      0.      0.      0.      3.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.

2   50.      0.      0.      0.      0.      0.      0.      0.      3.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.

2   55.      0.      0.      0.      0.      0.      0.      0.      3.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.

3    0.      0.      0.      0.      0.      0.      0.      0.      3.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.

3    5.      0.      0.      0.      0.      0.      0.      0.      2.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.

3   10.      0.      0.      0.      0.      0.      0.      0.      2.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.

3   15.      0.      0.      0.      0.      0.      0.      0.      2.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.

3   20.      0.      0.      0.      0.      0.      0.      0.      2.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

```
                0.        0.        0.        0.
   3   25.      0.        0.        0.        0.        0.        0.        0.        2.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.
   3   30.      0.        0.        0.        0.        0.        0.        0.        2.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.
   3   35.      0.        0.        0.        0.        0.        0.        0.        2.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.
   3   40.      0.        0.        0.        0.        0.        0.        0.        1.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.
1

 2yr 3hr Current Condition SWMM Sump Basin
 Blank


                                                                  WIDTH              INVERT     SIDE SLOPES           OVERBA
NK/SURCHARGE
 GUTTER      GUTTER       NDP        NP                          OR DIAM    LENGTH    SLOPE    HORIZ TO VERT   MANNING
 DEPTH       JK
 NUMBER    CONNECTION                                              (FT)      (FT)    (FT/FT)      L     R         N
  (FT)

  201         101          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  202         102          3          3                            .0        1.     .0010       .0    .0       .001
 10.00       -1
                      TIME IN HRS VS INFLOW IN CFS
                            .0      .0        .6    10.1        1.6      .0
  203         103          3          3                            .0        1.     .0010       .0    .0       .001
 10.00       -1
                      TIME IN HRS VS INFLOW IN CFS
                            .0      .0        .2     3.6         .7      .0
  204         104          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  205         105          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  206         106          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  207         107          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  208         108          3          3                            .0        1.     .0010       .0    .0       .001
 10.00       -1
                      TIME IN HRS VS INFLOW IN CFS
                            .0      .0        .7    45.2        1.8      .0
  209         109          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  210         110          3          3                            .0        1.     .0010       .0    .0       .001
 10.00       -1
                      TIME IN HRS VS INFLOW IN CFS
                            .0      .0        .3    11.4        1.0      .0
  211         111          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  212         112          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  213         113          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  214         114          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  215         115          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  216         116          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  217         117          0          3                            .0        1.     .0010       .0    .0       .001
```

```
10.00       0
 218        118         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 219        119         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 220        120         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 121        120         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 221        121         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 222        122         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 223        123         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 224        124         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 225        125         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 226        126         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 227        127         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 228        128         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 229        129         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 230        130         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 231        131         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 232        132         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 233        133         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 234        134         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 235        135         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 236        136         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 237        137         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 238        138         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 402        302         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 401        304         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 106        306         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 107        307         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 409        309         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 404        311         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 112        312         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 412        314         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 115        315         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 117        317         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 118        318         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 119        319         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 420        322         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 124        324         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 126        326         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 128        328         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 129        329         0         3                  .0       1.     .0010       .0    .0       .001
```

```
10.00        0
 130         330         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 131         331         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 432         333         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 135         335         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 136         336         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 138         338         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 125         400         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 127         400         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 132         400         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 104         401         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 105         401         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 111         404         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 114         404         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 109         409         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 122         420         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 123         420         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 133         432         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 134         432         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 101         501         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 113         513         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 116         516         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 120         520         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 137         537         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 102         602         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 103         603         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 108         608         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 110         610         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 400         900         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 337         901         0          3                      .0        1.     .0010       .0    .0       .001
10.00        0
 501         301         7          2      PIPE            .1        1.     .0010       .0    .0       .001
  .10        0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                          .0      .0       7.5      .0      26.4      .0      63.3      .0      82.9      .0     12
9.0  1400.0
                             201.0  6510.0
 513         313         3          2      PIPE            .1        1.     .0010       .0    .0       .001
  .10        0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                          .0      .0      20.3      .0      22.1   495.0
 516         316         3          2      PIPE            .1        1.     .0010       .0    .0       .001
  .10        0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                          .0      .0      18.1      .0      18.9   320.0
 520         320         4          2      PIPE            .1        1.     .0010       .0    .0       .001
  .10        0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                          .0      .0       9.9      .0      10.0      .0     230.0      .0
 537         337         3          2      PIPE            .1        1.     .0010       .0    .0       .001
```

```
   .10        0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                          .0      .0      14.9      .0      17.9   623.0
   602         402          3          2      PIPE             .1        1.     .0010       .0    .0       .001
   .10         0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                          .0      .0        .8     5.4       1.6    15.4
   603         303          3          2      PIPE             .1        1.     .0010       .0    .0       .001
   .10         0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                          .0      .0        .1     1.2        .3     6.9
   608         308         10          2      PIPE             .1        1.     .0010       .0    .0       .001
   .10         0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                          .0      .0        .0      .3        .4      .5       1.6      .6       3.6      .7
6.1    32.4
                         7.1    55.6       8.9   123.5      11.5   266.4      13.1   378.7
   610         310          2          2      PIPE             .1        1.     .0010       .0    .0       .001
   .10         0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                          .0      .0       3.8     1.3
   302         101          0          1      CHANNEL          .0     3681.     .0077     60.0  60.0       .045
  10.00        0
   304         101          0          1      CHANNEL          .0     3729.     .0074     40.0  40.0       .045
  10.00        0
   311         104          0          1      CHANNEL          .0     2920.     .0108     70.0  70.0       .045
  10.00        0
   306         105          0          1      CHANNEL          .0     5319.     .0161     50.0  50.0       .045
  10.00        0
   308         107          0          1      CHANNEL         4.0      625.     .0080       .0    .0       .016
   2.00        0
   312         111          0          1      CHANNEL          .0     2682.     .0082    110.0 110.0       .045
  10.00        0
   314         112          0          1      CHANNEL          .0     1834.     .0049    175.0 175.0       .045
  10.00        0
   318         113          0          1      CHANNEL          .0     3243.     .0052    100.0 100.0       .045
  10.00        0
   319         113          0          1      CHANNEL          .0     4029.     .0107     95.0  95.0       .045
  10.00        0
   315         114          0          1      CHANNEL          .0     5050.     .0109     80.0  80.0       .045
  10.00        0
   316         114          0          1      CHANNEL          .0     2964.     .0101     50.0  50.0       .045
  10.00        0
   320         118          0          1      CHANNEL          .0      811.     .0123     80.0  80.0       .045
  10.00        0
   322         120          0          1      CHANNEL          .0     3463.     .0081    100.0 100.0       .045
  10.00        0
   324         123          0          1      CHANNEL          .0     5484.     .0133     75.0  75.0       .045
  10.00        0
   326         125          0          1      CHANNEL          .0     2139.     .0019     80.0  80.0       .045
  10.00        0
   301         126          0          1      CHANNEL          .0     1590.     .0170     40.0  40.0       .045
  10.00        0
   328         127          0          1      CHANNEL          .0     3272.     .0089    115.0 115.0       .045
  10.00        0
   329         128          0          1      CHANNEL          .0     3696.     .0176     25.0  25.0       .045
  10.00        0
   330         128          0          1      CHANNEL          .0     5614.     .0157     50.0  50.0       .045
  10.00        0
   331         129          0          1      CHANNEL          .0     2742.     .0091      3.0   3.0       .035
   3.00        0
   333         132          0          1      CHANNEL          .0     4251.     .0078    125.0 125.0       .045
  10.00        0
   335         134          0          1      CHANNEL          .0     6142.     .0138     70.0  70.0       .045
  10.00        0
   336         135          0          1      CHANNEL          .0     5277.     .0100    100.0 100.0       .045
  10.00        0
   338         137          0          1      CHANNEL          .0     8677.     .0086     75.0  75.0       .045
  10.00        0
   303         402          0          1      CHANNEL         5.0     1011.     .0151      5.0   5.0       .035
   3.00        0
   307         404          0          1      CHANNEL         5.0     1308.     .0031      5.0   5.0       .035
   3.00        0
   310         409          0          1      CHANNEL         5.0     3896.     .0100      5.0   5.0       .035
   3.00        0
   313         412          0          1      CHANNEL          .0      820.     .0073    100.0 100.0       .045
  10.00        0
   317         412          0          1      CHANNEL          .0     3628.     .0105    100.0 100.0       .045
```

```
 10.00        0
  309         608          0          1      CHANNEL         5.0     1757.     .0091      5.0   5.0       .035
  3.00        0
0TOTAL NUMBER OF GUTTERS/PIPES, 124
1


 2yr 3hr Current Condition SWMM Sump Basin
 Blank


 ARRANGEMENT OF SUBCATCHMENTS AND GUTTERS/PIPES

       GUTTER     TRIBUTARY GUTTER/PIPE                                          TRIBUTARY SUBAREA
         D.A.(AC)

       101        201  302  304    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0  4284.8

       102        202    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0       .0

       103        203    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0       .0

       104        204  311    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0  3660.8

       105        205  306    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0   346.9

       106        206    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0    73.0

       107        207  308    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0   135.0

       108        208    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0       .0

       109        209    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0   130.6

       110        210    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0       .0

       111        211  312    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0  2748.8

       112        212  314    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0  2698.9

       113        213  318  319    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0  2320.0

       114        214  315  316    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0   656.6

       115        215    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0    62.1

       116        216    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0   405.1

       117        217    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0    94.7

       118        218  320    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0  1737.0

       119        219    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0   164.5

       120        220  121  322    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0  1626.2

       121        221    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
```

0 0 211.2

122 222 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 254.7

123 223 324 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 718.1

124 224 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 152.3

125 225 326 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 4410.9

126 226 301 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 4375.7

127 227 328 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 521.6

128 228 329 330 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 457.6

129 229 331 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 62.1

130 230 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 21.8

131 231 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 23.0

132 232 333 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 1356.8

133 233 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 33.3

134 234 335 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 985.0

135 235 336 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 535.0

136 236 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 66.6

137 237 338 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 858.2

138 238 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 173.4

201 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0
0 0 277.1

202 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

203 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

204 0 0 0 0 0 0 0 0 0 0 4 0 0 0 0 0 0 0
0 0 120.3

205 0 0 0 0 0 0 0 0 0 0 5 0 0 0 0 0 0 0
0 0 273.9

206 0 0 0 0 0 0 0 0 0 0 6 0 0 0 0 0 0 0
0 0 73.0

207 0 0 0 0 0 0 0 0 0 0 7 0 0 0 0 0 0 0
0 0 4.5

208 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

209 0 0 0 0 0 0 0 0 0 0 9 0 0 0 0 0 0 0

0 0 130.6

210 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 .0

211 0 0 0 0 0 0 0 0 0 0 11 0 0 0 0 0 0 0 0 0 49.9

212 0 0 0 0 0 0 0 0 0 0 12 0 0 0 0 0 0 0 0 0 284.2

213 0 0 0 0 0 0 0 0 0 0 13 0 0 0 0 0 0 0 0 0 418.6

214 0 0 0 0 0 0 0 0 0 0 14 0 0 0 0 0 0 0 0 0 189.4

215 0 0 0 0 0 0 0 0 0 0 15 0 0 0 0 0 0 0 0 0 62.1

216 0 0 0 0 0 0 0 0 0 0 16 0 0 0 0 0 0 0 0 0 405.1

217 0 0 0 0 0 0 0 0 0 0 17 0 0 0 0 0 0 0 0 0 94.7

218 0 0 0 0 0 0 0 0 0 0 18 0 0 0 0 0 0 0 0 0 110.7

219 0 0 0 0 0 0 0 0 0 0 19 0 0 0 0 0 0 0 0 0 164.5

220 0 0 0 0 0 0 0 0 0 0 20 0 0 0 0 0 0 0 0 0 442.2

221 0 0 0 0 0 0 0 0 0 0 21 0 0 0 0 0 0 0 0 0 211.2

222 0 0 0 0 0 0 0 0 0 0 22 0 0 0 0 0 0 0 0 0 254.7

223 0 0 0 0 0 0 0 0 0 0 23 0 0 0 0 0 0 0 0 0 565.8

224 0 0 0 0 0 0 0 0 0 0 24 0 0 0 0 0 0 0 0 0 152.3

225 0 0 0 0 0 0 0 0 0 0 25 0 0 0 0 0 0 0 0 0 35.2

226 0 0 0 0 0 0 0 0 0 0 26 0 0 0 0 0 0 0 0 0 90.9

227 0 0 0 0 0 0 0 0 0 0 27 0 0 0 0 0 0 0 0 0 64.0

228 0 0 0 0 0 0 0 0 0 0 28 0 0 0 0 0 0 0 0 0 373.8

229 0 0 0 0 0 0 0 0 0 0 29 0 0 0 0 0 0 0 0 0 39.0

230 0 0 0 0 0 0 0 0 0 0 30 0 0 0 0 0 0 0 0 0 21.8

231 0 0 0 0 0 0 0 0 0 0 31 0 0 0 0 0 0 0 0 0 23.0

232 0 0 0 0 0 0 0 0 0 0 32 0 0 0 0 0 0 0 0 0 338.6

233 0 0 0 0 0 0 0 0 0 0 33 0 0 0 0 0 0 0 0 0 33.3

234 0 0 0 0 0 0 0 0 0 0 34 0 0 0 0 0 0 0 0 0 449.9

235 0 0 0 0 0 0 0 0 0 0 35 0 0 0 0 0 0 0 0

0 0 468.5

236 0 0 0 0 0 0 0 0 0 0 36 0 0 0 0 0 0 0
0 0 66.6

237 0 0 0 0 0 0 0 0 0 0 37 0 0 0 0 0 0 0
0 0 684.8

238 0 0 0 0 0 0 0 0 0 0 38 0 0 0 0 0 0 0
0 0 173.4

301 501 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 4284.8

302 402 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

303 603 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

304 401 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 4007.7

306 106 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 73.0

307 107 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 135.0

308 608 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 130.6

309 409 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 130.6

310 610 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

311 404 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 3540.5

312 112 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 2698.9

313 513 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 2320.0

314 412 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 2414.7

315 115 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 62.1

316 516 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 405.1

317 117 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 94.7

318 118 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 1737.0

319 119 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 164.5

320 520 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 1626.2

322 420 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 972.8

324 124 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 152.3

326 126 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 4375.7

328 128 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

```
    0    0   457.6

     329       129    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0    62.1

     330       130    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0    21.8

     331       131    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0    23.0

     333       432    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0  1018.2

     335       135    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0   535.0

     336       136    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0    66.6

     337       537    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0   858.2

     338       138    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0   173.4

     400       125  127  132    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0  6289.3

     401       104  105    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0  4007.7

     402       602  303    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0      .0

     404       111  114  307    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0  3540.5

     409       109  310    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0   130.6

     412       313  317    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0  2414.7

     420       122  123    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0   972.8

     432       133  134    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0  1018.2

     501       101    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0  4284.8

     513       113    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0  2320.0

     516       116    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0   405.1

     520       120    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0  1626.2

     537       137    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0   858.2

     602       102    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0      .0

     603       103    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0      .0

     608       108  309    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0   130.6

     610       110    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
    0    0      .0
1
```

2yr 3hr Current Condition SWMM Sump Basin
Blank

HYDROGRAPHS ARE LISTED FOR THE FOLLOWING 85 CONVEYANCE ELEMENTS

THE UPPER NUMBER IS DISCHARGE IN CFS
THE LOWER NUMBER IS ONE OF THE FOLLOWING CASES:
( ) DENOTES DEPTH ABOVE INVERT IN FEET
(S) DENOTES STORAGE IN AC-FT FOR DETENTION DAM. DISCHARGE INCLUDES SPILLWAY OUTFLOW.
(I) DENOTES GUTTER INFLOW IN CFS FROM SPECIFIED INFLOW HYDROGRAPH
(D) DENOTES DISCHARGE IN CFS DIVERTED FROM THIS GUTTER
(O) DENOTES STORAGE IN AC-FT FOR SURCHARGED GUTTER

| TIME(HR/MIN) | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 |
|---|---|---|---|---|---|---|---|---|---|---|
| | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |
| | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 |
| | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 301 | 302 |
| | 303 | 304 | 306 | 307 | 308 | 309 | 310 | 311 | 312 | 313 |
| | 314 | 315 | 316 | 317 | 318 | 319 | 320 | 322 | 324 | 326 |
| | 328 | 329 | 330 | 331 | 333 | 335 | 336 | 338 | 400 | 401 |
| | 402 | 404 | 412 | 420 | 432 | 501 | 513 | 516 | 520 | 537 |
| | 602 | 603 | 608 | 609 | 610 | | | | | |
| 0 5. | 0. | 2. | 1. | 0. | 0. | 0. | 0. | 6. | 0. | 3. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0(S) | .0(S) | .0(S) | .0(S) | .0(S) |
| | 0. | 0. | 0. | 0. | 0. | | | | | |
| | .0(S) | .0(S) | .0(S) | .0( ) | .0(S) | | | | | |
| 0 10. | 0. | 3. | 3. | 0. | 0. | 0. | 0. | 11. | 0. | 5. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0(S) | .0(S) | .0(S) | .0(S) | .0(S) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0(S) | 0. .0(S) | 0. .1(S) | 0. .0( ) | 0. .0(S) | | | | | |
| 0 | 15. | 0. .0( ) | 5. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 17. .0( ) | 0. .0( ) | 8. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .2(S) | 0. .0( ) | 0. .1(S) | | | | | |
| 0 | 20. | 0. .0( ) | 6. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 23. .0( ) | 0. .0( ) | 11. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 1. .1(S) | 1. .1(S) | 0. .3(S) | 0. .0( ) | 0. .1(S) | | | | | |
| 0 | 25. | 0. .0( ) | 8. .0( ) | 3. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 28. .0( ) | 0. .0( ) | 11. .0( ) |
| | | 1. .0( ) | 2. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1.0( ) | 2.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0(S) | 0.0(S) | 0.0(S) | 0.0(S) | 0.0(S) |
| | | 1.1(S) | 1.1(S) | 0.5(S) | 0.0( ) | 0.2(S) | | | | | |
| 0 | 30. | 0.0( ) | 9.0( ) | 1.0( ) | 2.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 34.0( ) | 0.0( ) | 8.0( ) |
| | | 2.0( ) | 5.0( ) | 1.0( ) | 3.0( ) | 0.0( ) | 0.0( ) | 4.0( ) | 1.0( ) | 0.0( ) | 0.0( ) |
| | | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 1.0( ) | 0.0( ) | 0.0( ) |
| | | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 2.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.1( ) |
| | | 0.1( ) | 0.1( ) | 0.0( ) | 0.1( ) | 0.1( ) | 0.0( ) | 0.0( ) | 0.1( ) | 0.1( ) | 0.0( ) |
| | | 0.0( ) | 0.0( ) | 0.0( ) | 0.1( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) |
| | | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 2.0( ) |
| | | 2.0( ) | 4.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0(S) | 0.0(S) | 0.0(S) | 0.0(S) | 0.0(S) |
| | | 1.2(S) | 1.1(S) | 1.7(S) | 0.0( ) | 0.3(S) | | | | | |
| 0 | 35. | 0.0( ) | 11.0( ) | 1.0( ) | 4.0( ) | 0.0( ) | 0.0( ) | 1.0( ) | 39.0( ) | 0.0( ) | 8.0( ) |
| | | 3.0( ) | 8.0( ) | 2.0( ) | 4.0( ) | 0.0( ) | 1.0( ) | 5.0( ) | 2.0( ) | 0.0( ) | 1.0( ) |
| | | 1.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 3.0( ) | 0.0( ) | 0.0( ) |
| | | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 4.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.1( ) |
| | | 1.1( ) | 0.1( ) | 0.0( ) | 0.1( ) | 0.1( ) | 0.0( ) | 0.0( ) | 0.1( ) | 0.1( ) | 0.0( ) |
| | | 0.0( ) | 0.0( ) | 0.0( ) | 0.1( ) | 0.1( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) |
| | | 0.1( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.1( ) | 0.0( ) | 0.0( ) | 0.0( ) | 4.0( ) |
| | | 2.0( ) | 7.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0(S) | 0.0(S) | 0.0(S) | 0.0(S) | 0.0(S) |
| | | 2.2(S) | 1.1(S) | 1.9(S) | 0.0( ) | 0.3(S) | | | | | |
| 0 | 40. | 1.0( ) | 8.0( ) | 0.0( ) | 6.0( ) | 0.0( ) | 0.0( ) | 1.0( ) | 45.0( ) | 0.0( ) | 5.0( ) |
| | | 4.0( ) | 10.0( ) | 3.0( ) | 5.0( ) | 0.0( ) | 1.0( ) | 5.0( ) | 3.0( ) | 0.0( ) | 1.0( ) |
| | | 1.0( ) | 0.0( ) | 1.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 4.0( ) | 0.0( ) | 0.0( ) |
| | | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 6.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.1( ) |
| | | 1.1( ) | 0.1( ) | 0.0( ) | 0.1( ) | 0.1( ) | 0.0( ) | 0.0( ) | 1.2( ) | 1.1( ) | 0.0( ) |
| | | 0.0( ) | 0.0( ) | 0.0( ) | 1.1( ) | 0.1( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 6. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 9. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0(S) | .0(S) | .0(S) | .0(S) | .0(S) |
| | | 2. | 1. | 1. | 0. | 0. | | | | | |
| | | .3(S) | .1(S) | 1.2(S) | .0( ) | .4(S) | | | | | |
| 0 | 45. | 1. | 9. | 0. | 6. | 0. | 0. | 1. | 42. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 11. | 4. | 5. | 0. | 1. | 4. | 3. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 0. | 1. | 0. | 0. | 0. | 0. | 5. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 7. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 1. | 1. | 0. | 0. | 1. | 0. | 0. | 2. | 2. | 0. |
| | | .1( ) | .2( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .2( ) | .2( ) | .0( ) |
| | | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 6. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 10. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0(S) | .0(S) | .0(S) | .0(S) | .0(S) |
| | | 2. | 1. | 1. | 0. | 0. | | | | | |
| | | .3(S) | .1(S) | 1.5(S) | .0( ) | .4(S) | | | | | |
| 0 | 50. | 2. | 7. | 0. | 7. | 0. | 0. | 1. | 38. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 11. | 4. | 5. | 0. | 2. | 4. | 2. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 0. | 1. | 0. | 0. | 0. | 1. | 5. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 1. | 7. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 1. | 1. | 0. | 0. | 1. | 0. | 0. | 3. | 3. | 0. |
| | | .1( ) | .2( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .2( ) | .2( ) | .0( ) |
| | | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 1. | 7. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 10. | 1. | 1. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0(S) | .1(S) | .0(S) | .0(S) | .0(S) |
| | | 3. | 1. | 1. | 0. | 0. | | | | | |
| | | .4(S) | .1(S) | 1.8(S) | .0( ) | .5(S) | | | | | |
| 0 | 55. | 2. | 8. | 0. | 8. | 0. | 0. | 1. | 36. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 6. | 11. | 4. | 5. | 0. | 2. | 3. | 2. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 0. | 1. | 0. | 0. | 0. | 1. | 5. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 1. | 7. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 1. | 2. | 0. | 0. | 1. | 0. | 0. | 4. | 3. | 0. |
| | | .1( ) | .2( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .2( ) | .2( ) | .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 1. | 8. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 11. | 1. | 1. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0(S) | .1(S) | .0(S) | .0(S) | .0(S) |
| | | 3. | 1. | 1. | 0. | 0. | | | | | |
| | | .4(S) | .1(S) | 2.0(S) | .0( ) | .5(S) | | | | | |
| 1 | 0. | 3. | 5. | 0. | 8. | 0. | 0. | 1. | 32. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 6. | 10. | 4. | 4. | 0. | 2. | 3. | 2. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 0. | 0. | 1. | 5. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 1. | 6. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 1. | 2. | 0. | 0. | 1. | 0. | 0. | 4. | 4. | 0. |
| | | .1( ) | .3( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .3( ) | .2( ) | .0( ) |
| | | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 1. | 8. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 11. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0(S) | .1(S) | .1(S) | .1(S) | .0(S) |
| | | 3. | 1. | 1. | 0. | 0. | | | | | |
| | | .4(S) | .1(S) | 2.3(S) | .0( ) | .5(S) | | | | | |
| 1 | 5. | 3. | 6. | 0. | 9. | 0. | 0. | 1. | 29. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 7. | 10. | 4. | 4. | 0. | 2. | 3. | 2. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 4. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 1. | 6. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 1. | 3. | 0. | 0. | 1. | 0. | 0. | 5. | 5. | 0. |
| | | .1( ) | .3( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .3( ) | .2( ) | .0( ) |
| | | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 1. | 9. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 12. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1(S) | .2(S) | .1(S) | .1(S) | .0(S) |
| | | 3. | 1. | 1. | 0. | 0. | | | | | |
| | | .4(S) | .1(S) | 2.5(S) | .0( ) | .5(S) | | | | | |
| 1 | 10. | 4. | 4. | 0. | 10. | 0. | 0. | 1. | 25. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 8. | 10. | 4. | 4. | 0. | 2. | 2. | 2. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 2. | 4. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 2. | 6. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. .1( ) | 3. .3( ) | 0. .0( ) | 0. .1( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 6. .3( ) | 5. .3( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 2. .2( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 10. .0( ) |
| | | 4. .0( ) | 12. .0( ) | 1. .0( ) | 0. .0( ) | 2. .0( ) | 0. .1(S) | 0. .2(S) | 0. .1(S) | 0. .1(S) | 0. .0(S) |
| | | 3. .4(S) | 1. .0(S) | 1. 2.7(S) | 0. .0( ) | 0. .5(S) | | | | | |
| 1 | 15. | 5. .0( ) | 5. .0( ) | 0. .0( ) | 10. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 22. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 8. .0( ) | 9. .0( ) | 3. .0( ) | 3. .0( ) | 0. .0( ) | 2. .0( ) | 2. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .2( ) |
| | | 1. .1( ) | 4. .3( ) | 0. .0( ) | 1. .1( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 7. .3( ) | 6. .3( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 2. .2( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 10. .0( ) |
| | | 4. .0( ) | 12. .0( ) | 1. .0( ) | 0. .0( ) | 2. .0( ) | 0. .1(S) | 0. .2(S) | 0. .1(S) | 0. .1(S) | 0. .0(S) |
| | | 3. .5(S) | 0. .0(S) | 1. 2.8(S) | 0. .0( ) | 0. .5(S) | | | | | |
| 1 | 20. | 6. .0( ) | 2. .0( ) | 0. .0( ) | 11. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 18. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 8. .0( ) | 9. .0( ) | 3. .0( ) | 3. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .2( ) |
| | | 1. .1( ) | 4. .3( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 7. .3( ) | 6. .3( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 2. .2( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 11. .0( ) |
| | | 4. .0( ) | 12. .0( ) | 1. .0( ) | 0. .0( ) | 2. .0( ) | 0. .2(S) | 0. .2(S) | 0. .1(S) | 0. .1(S) | 0. .0(S) |
| | | 3. .5(S) | 0. .0(S) | 1. 2.9(S) | 0. .0( ) | 0. .5(S) | | | | | |
| 1 | 25. | 6. .0( ) | 3. .0( ) | 0. .0( ) | 11. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 16. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 8. .0( ) | 8. .0( ) | 3. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 0. | 0. | 2. | 4. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 5. | 0. | 1. | 1. | 0. | 0. | 8. | 6. | 0. |
| | | .1( ) | .4( ) | .0( ) | .2( ) | .1( ) | .0( ) | .0( ) | .3( ) | .3( ) | .0( ) |
| | | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .2( ) | .1( ) | .0( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 0. | 2. | 0. | 0. | 2. | 11. |
| | | .2( ) | .0( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 12. | 1. | 0. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2(S) | .2(S) | .1(S) | .1(S) | .0(S) |
| | | 3. | 0. | 1. | 0. | 0. | | | | | |
| | | .5(S) | .0(S) | 3.1(S) | .0( ) | .5(S) | | | | | |
| 1 | 30. | 7. | 0. | 0. | 11. | 0. | 0. | 1. | 12. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 8. | 8. | 3. | 3. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 2. | 3. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 2. | 4. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 6. | 0. | 1. | 1. | 0. | 0. | 8. | 7. | 0. |
| | | .1( ) | .4( ) | .0( ) | .2( ) | .1( ) | .0( ) | .0( ) | .3( ) | .3( ) | .0( ) |
| | | 1. | 0. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .2( ) | .1( ) | .0( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 0. | 2. | 0. | 0. | 2. | 11. |
| | | .2( ) | .0( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 12. | 1. | 0. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3(S) | .3(S) | .1(S) | .1(S) | .0(S) |
| | | 3. | 0. | 1. | 0. | 0. | | | | | |
| | | .4(S) | .0(S) | 3.1(S) | .0( ) | .5(S) | | | | | |
| 1 | 35. | 8. | 2. | 0. | 12. | 0. | 0. | 1. | 9. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 9. | 7. | 3. | 2. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 2. | 3. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 2. | 4. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 6. | 0. | 1. | 1. | 0. | 0. | 9. | 7. | 0. |
| | | .1( ) | .4( ) | .0( ) | .2( ) | .1( ) | .0( ) | .0( ) | .3( ) | .3( ) | .0( ) |
| | | 1. | 0. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 0. | 2. | 0. | 0. | 2. | 12. |
| | | .2( ) | .0( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 11. | 1. | 0. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3(S) | .3(S) | .1(S) | .1(S) | .0(S) |
| | | 3. | 0. | 1. | 0. | 0. | | | | | |
| | | .4(S) | .0(S) | 3.2(S) | .0( ) | .5(S) | | | | | |
| 1 | 40. | 9. | 0. | 0. | 12. | 0. | 0. | 1. | 5. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 9. | 7. | 3. | 2. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .2( ) |
| | | 0. .1( ) | 7. .4( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 9. .3( ) | 7. .3( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 2. .2( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 12. .0( ) |
| | | 3. .0( ) | 11. .0( ) | 1. .0( ) | 0. .0( ) | 2. .0( ) | 0. .4(S) | 0. .3(S) | 0. .1(S) | 0. .1(S) | 0. .0(S) |
| | | 3. .4(S) | 0. .0(S) | 1. 3.3(S) | 0. .0( ) | 0. .5(S) | | | | | |
| 1 | 45. | 9. .0( ) | 0. .0( ) | 0. .0( ) | 12. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 9. .0( ) | 7. .0( ) | 2. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 2. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .2( ) |
| | | 0. .1( ) | 7. .4( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 9. .4( ) | 7. .3( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 2. .2( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 12. .0( ) |
| | | 3. .0( ) | 11. .0( ) | 1. .0( ) | 0. .0( ) | 2. .0( ) | 0. .4(S) | 0. .3(S) | 0. .1(S) | 0. .1(S) | 0. .0(S) |
| | | 3. .4(S) | 0. .0(S) | 1. 3.3(S) | 0. .0( ) | 0. .5(S) | | | | | |
| 1 | 50. | 10. .0( ) | 0. .0( ) | 0. .0( ) | 12. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 8. .0( ) | 6. .0( ) | 2. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 2. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .2( ) |
| | | 0. .1( ) | 8. .4( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 10. .4( ) | 7. .3( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 2. .2( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 12. .0( ) |
| | | 3. .0( ) | 11. .0( ) | 1. .0( ) | 0. .0( ) | 2. .0( ) | 0. .5(S) | 0. .3(S) | 0. .1(S) | 0. .1(S) | 0. .0(S) |
| | | 3. .4(S) | 0. .0(S) | 1. 3.3(S) | 0. .0( ) | 0. .5(S) | | | | | |
| 1 | 55. | 10. .0( ) | 0. .0( ) | 0. .0( ) | 12. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 8.<br>.0( ) | 6.<br>.0( ) | 2.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.2( ) |
| | | 0.<br>.1( ) | 8.<br>.4( ) | 0.<br>.0( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 10.<br>.4( ) | 7.<br>.3( ) | 0.<br>.0( ) |
| | | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 2.<br>.2( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) | 2.<br>.2( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 12.<br>.0( ) |
| | | 3.<br>.0( ) | 11.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.6(S) | 0.<br>.3(S) | 0.<br>.1(S) | 0.<br>.1(S) | 0.<br>.0(S) |
| | | 2.<br>.4(S) | 0.<br>.0(S) | 1.<br>3.3(S) | 0.<br>.0( ) | 0.<br>.5(S) | | | | | |
| 2 | 0. | 11.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 12.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 8.<br>.0( ) | 6.<br>.0( ) | 2.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.2( ) |
| | | 0.<br>.1( ) | 9.<br>.5( ) | 0.<br>.0( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 10.<br>.4( ) | 7.<br>.3( ) | 0.<br>.0( ) |
| | | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 2.<br>.2( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) | 2.<br>.2( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 12.<br>.0( ) |
| | | 3.<br>.0( ) | 10.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.6(S) | 0.<br>.4(S) | 0.<br>.1(S) | 0.<br>.1(S) | 0.<br>.0(S) |
| | | 2.<br>.3(S) | 0.<br>.0(S) | 1.<br>3.3(S) | 0.<br>.0( ) | 0.<br>.5(S) | | | | | |
| 2 | 5. | 11.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 12.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 8.<br>.0( ) | 6.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.2( ) |
| | | 0.<br>.1( ) | 9.<br>.5( ) | 0.<br>.0( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 10.<br>.4( ) | 6.<br>.3( ) | 0.<br>.0( ) |
| | | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 2.<br>.2( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) | 2.<br>.2( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 12.<br>.0( ) |
| | | 3.<br>.0( ) | 10.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.7(S) | 0.<br>.4(S) | 0.<br>.1(S) | 0.<br>.1(S) | 0.<br>.0(S) |
| | | 2.<br>.3(S) | 0.<br>.0(S) | 1.<br>3.3(S) | 0.<br>.0( ) | 0.<br>.5(S) | | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 10. | 12.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 12.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 8.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.2( ) |
| | | 0.<br>.1( ) | 9.<br>.5( ) | 0.<br>.0( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 10.<br>.4( ) | 6.<br>.3( ) | 0.<br>.0( ) |
| | | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 2.<br>.2( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) | 2.<br>.2( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 12.<br>.0( ) |
| | | 2.<br>.0( ) | 9.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.8(S) | 0.<br>.4(S) | 0.<br>.1(S) | 0.<br>.1(S) | 0.<br>.0(S) |
| | | 2.<br>.3(S) | 0.<br>.0(S) | 1.<br>3.3(S) | 0.<br>.0( ) | 0.<br>.5(S) | | | | | |
| 2 | 15. | 12.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 12.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 8.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.2( ) |
| | | 0.<br>.1( ) | 10.<br>.5( ) | 0.<br>.0( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 10.<br>.4( ) | 6.<br>.3( ) | 0.<br>.0( ) |
| | | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 2.<br>.2( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) | 2.<br>.2( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 12.<br>.0( ) |
| | | 2.<br>.0( ) | 8.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.9(S) | 0.<br>.4(S) | 0.<br>.1(S) | 0.<br>.1(S) | 0.<br>.0(S) |
| | | 2.<br>.3(S) | 0.<br>.0(S) | 1.<br>3.3(S) | 0.<br>.0( ) | 0.<br>.5(S) | | | | | |
| 2 | 20. | 12.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 11.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 8.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.2( ) |
| | | 0.<br>.1( ) | 10.<br>.5( ) | 0.<br>.0( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 10.<br>.4( ) | 6.<br>.3( ) | 0.<br>.0( ) |
| | | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 2.<br>.2( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) | 2.<br>.2( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 11.<br>.0( ) |
| | | 2.<br>.0( ) | 8.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.9(S) | 0.<br>.4(S) | 0.<br>.1(S) | 0.<br>.1(S) | 0.<br>.0(S) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2. | 0. | 1. | 0. | 0. | | | | | |
| | | .3(S) | .0(S) | 3.3(S) | .0( ) | .5(S) | | | | | |
| 2 | 25. | 12. | 0. | 0. | 11. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 7. | 5. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 2. | 2. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 10. | 0. | 1. | 1. | 0. | 0. | 9. | 6. | 0. |
| | | .1( ) | .5( ) | .0( ) | .2( ) | .1( ) | .0( ) | .0( ) | .4( ) | .3( ) | .0( ) |
| | | 1. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 1. | 2. | 0. | 0. | 3. | 11. |
| | | .2( ) | .0( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 8. | 1. | 0. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.0(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 2. | 0. | 1. | 0. | 0. | | | | | |
| | | .3(S) | .0(S) | 3.2(S) | .0( ) | .5(S) | | | | | |
| 2 | 30. | 12. | 0. | 0. | 11. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 6. | 4. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 2. | 2. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 10. | 0. | 1. | 1. | 0. | 0. | 9. | 6. | 0. |
| | | .1( ) | .5( ) | .0( ) | .2( ) | .1( ) | .0( ) | .0( ) | .3( ) | .3( ) | .0( ) |
| | | 1. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 1. | 2. | 0. | 0. | 3. | 11. |
| | | .2( ) | .0( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 6. | 1. | 0. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.1(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 2. | 0. | 1. | 0. | 0. | | | | | |
| | | .3(S) | .0(S) | 3.2(S) | .0( ) | .5(S) | | | | | |
| 2 | 35. | 12. | 0. | 0. | 10. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 6. | 4. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 2. | 2. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 10. | 0. | 1. | 1. | 0. | 0. | 9. | 6. | 0. |
| | | .1( ) | .5( ) | .0( ) | .2( ) | .1( ) | .0( ) | .0( ) | .3( ) | .3( ) | .0( ) |
| | | 1. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 1. | 2. | 0. | 0. | 3. | 10. |
| | | .2( ) | .0( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2. | 6. | 1. | 0. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.2(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 2. | 0. | 1. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 3.2(S) | .0( ) | .5(S) | | | | | |
| 2 | 40. | 12. | 0. | 0. | 10. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 4. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 2. | 1. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 10. | 0. | 1. | 1. | 0. | 0. | 8. | 5. | 0. |
| | | .1( ) | .5( ) | .0( ) | .2( ) | .1( ) | .0( ) | .0( ) | .3( ) | .3( ) | .0( ) |
| | | 1. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 2. | 0. | 0. | 3. | 10. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 6. | 1. | 0. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.3(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 2. | 0. | 1. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 3.2(S) | .0( ) | .5(S) | | | | | |
| 2 | 45. | 12. | 0. | 0. | 8. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 4. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 2. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 10. | 0. | 1. | 1. | 0. | 0. | 8. | 5. | 0. |
| | | .0( ) | .5( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .3( ) | .0( ) |
| | | 1. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 2. | 0. | 0. | 3. | 8. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 6. | 1. | 0. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.4(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 2. | 0. | 1. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 3.2(S) | .0( ) | .5(S) | | | | | |
| 2 | 50. | 12. | 0. | 0. | 8. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 4. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 2. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 10. | 0. | 1. | 1. | 0. | 0. | 8. | 5. | 0. |
| | | .0( ) | .5( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .1( ) | .0( ) | .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. | 0. | 0. | 0. | 1. | 2. | 0. | 0. | 3. | 8. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 6. | 1. | 0. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.4(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 3.2(S) | .0( ) | .5(S) | | | | | |
| 2 | 55. | 12. | 0. | 0. | 7. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 3. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 2. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 9. | 0. | 1. | 1. | 0. | 0. | 7. | 5. | 0. |
| | | .0( ) | .5( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 2. | 0. | 0. | 3. | 7. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 6. | 1. | 0. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.5(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 3.2(S) | .0( ) | .5(S) | | | | | |
| 3 | 0. | 11. | 0. | 0. | 7. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 3. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 2. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 9. | 0. | 1. | 1. | 0. | 0. | 7. | 5. | 0. |
| | | .0( ) | .5( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 2. | 0. | 0. | 2. | 7. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 5. | 1. | 0. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.6(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 3.2(S) | .0( ) | .5(S) | | | | | |
| 3 | 5. | 11. | 0. | 0. | 7. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 3. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 2. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 9. | 0. | 1. | 1. | 0. | 0. | 7. | 5. | 0. |
| | | .0( ) | .5( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .2( ) | .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 2. | 0. | 0. | 2. | 7. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 5. | 0. | 0. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.7(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 3.2(S) | .0( ) | .5(S) | | | | | |
| 3 | 10. | 11. | 0. | 0. | 7. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 3. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 2. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 9. | 0. | 1. | 1. | 0. | 0. | 7. | 4. | 0. |
| | | .0( ) | .5( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 2. | 0. | 0. | 2. | 7. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 5. | 0. | 0. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.8(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 3.2(S) | .0( ) | .5(S) | | | | | |
| 3 | 15. | 10. | 0. | 0. | 7. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 3. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 2. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 9. | 0. | 1. | 1. | 0. | 0. | 7. | 4. | 0. |
| | | .0( ) | .5( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 2. | 0. | 0. | 2. | 7. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 5. | 0. | 0. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.8(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 3.2(S) | .0( ) | .5(S) | | | | | |
| 3 | 20. | 10. | 0. | 0. | 6. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 3. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 2. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0( ) | 8. .4( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 6. .3( ) | 4. .2( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 2. .2( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 6. .0( ) |
| | | 1. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. 1.9(S) | 0. .4(S) | 0. .1(S) | 0. .1(S) | 0. .0(S) |
| | | 1. .2(S) | 0. .0(S) | 1. 3.2(S) | 0. .0( ) | 0. .4(S) | | | | | |
| 3 | 25. | 10. .0( ) | 0. .0( ) | 0. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 4. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .2( ) |
| | | 0. .0( ) | 8. .4( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 6. .3( ) | 4. .2( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 1. .2( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 6. .0( ) |
| | | 1. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.0(S) | 0. .4(S) | 0. .1(S) | 0. .1(S) | 0. .0(S) |
| | | 1. .1(S) | 0. .0(S) | 1. 3.2(S) | 0. .0( ) | 0. .4(S) | | | | | |
| 3 | 30. | 10. .0( ) | 0. .0( ) | 0. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 4. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .2( ) |
| | | 0. .0( ) | 8. .4( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 6. .3( ) | 4. .2( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 1. .2( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 6. .0( ) |
| | | 1. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.0(S) | 0. .4(S) | 0. .1(S) | 0. .1(S) | 0. .0(S) |
| | | 1. .1(S) | 0. .0(S) | 1. 3.2(S) | 0. .0( ) | 0. .4(S) | | | | | |
| 3 | 35. | 9. .0( ) | 0. .0( ) | 0. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 4. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 8. | 0. | 1. | 1. | 0. | 0. | 6. | 4. | 0. |
| | | .0( ) | .4( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 2. | 6. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 4. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.1(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.2(S) | .0( ) | .4(S) | | | | | |
| 3 | 40. | 9. | 0. | 0. | 6. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 2. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 7. | 0. | 1. | 1. | 0. | 0. | 6. | 4. | 0. |
| | | .0( ) | .4( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 2. | 6. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 4. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.2(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.2(S) | .0( ) | .4(S) | | | | | |
| 3 | 45. | 9. | 0. | 0. | 5. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 7. | 0. | 1. | 1. | 0. | 0. | 5. | 3. | 0. |
| | | .0( ) | .4( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 2. | 5. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 4. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.2(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.2(S) | .0( ) | .4(S) | | | | | |
| 3 | 50. | 9. | 0. | 0. | 5. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 7. | 0. | 1. | 1. | 0. | 0. | 5. | 3. | 0. |
| | | .0( ) | .4( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 2. | 5. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 4. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.3(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.2(S) | .0( ) | .4(S) | | | | | |
| 3 | 55. | 8. | 0. | 0. | 5. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 7. | 0. | 1. | 1. | 0. | 0. | 5. | 3. | 0. |
| | | .0( ) | .4( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 2. | 5. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 3. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.3(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.2(S) | .0( ) | .4(S) | | | | | |
| 4 | 0. | 8. | 0. | 0. | 5. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 7. | 0. | 1. | 1. | 0. | 0. | 5. | 3. | 0. |
| | | .0( ) | .4( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 2. | 5. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 3. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.4(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.2(S) | .0( ) | .4(S) | | | | | |
| 4 | 5. | 8. | 0. | 0. | 5. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .2( ) |
| | | 0. .0( ) | 6. .4( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 5. .3( ) | 2. .2( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 5. .0( ) |
| | | 1. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.5(S) | 0. .4(S) | 0. .1(S) | 0. .1(S) | 0. .0(S) |
| | | 1. .1(S) | 0. .0(S) | 1. 3.2(S) | 0. .0( ) | 0. .4(S) | | | | | |
| 4 | 10. | 8. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .2( ) |
| | | 0. .0( ) | 6. .4( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 4. .3( ) | 2. .2( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 4. .0( ) |
| | | 1. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.5(S) | 0. .4(S) | 0. .1(S) | 0. .1(S) | 0. .0(S) |
| | | 1. .1(S) | 0. .0(S) | 1. 3.2(S) | 0. .0( ) | 0. .4(S) | | | | | |
| 4 | 15. | 7. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .2( ) |
| | | 0. .0( ) | 6. .4( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 4. .3( ) | 2. .2( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 4. .0( ) |
| | | 1. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.6(S) | 0. .4(S) | 0. .1(S) | 0. .1(S) | 0. .0(S) |
| | | 1. .1(S) | 0. .0(S) | 1. 3.2(S) | 0. .0( ) | 0. .4(S) | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 20. | 7. | 0. | 0. | 4. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 6. | 0. | 1. | 1. | 0. | 0. | 4. | 2. | 0. |
| | | .0( ) | .4( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 2. | 4. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 3. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.6(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.2(S) | .0( ) | .4(S) | | | | | |
| 4 | 25. | 7. | 0. | 0. | 4. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 6. | 0. | 1. | 1. | 0. | 0. | 4. | 2. | 0. |
| | | .0( ) | .4( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 2. | 4. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 3. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.7(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.2(S) | .0( ) | .4(S) | | | | | |
| 4 | 30. | 7. | 0. | 0. | 4. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 6. | 0. | 1. | 1. | 0. | 0. | 4. | 2. | 0. |
| | | .0( ) | .4( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 2. | 4. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 2. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.7(S) | .4(S) | .1(S) | .1(S) | .0(S) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. .1(S) | 0. .0(S) | 1. 3.2(S) | 0. .0( ) | 0. .4(S) | | | | |
| 4 | 35. | 7. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .2( ) |
| | | 0. .0( ) | 5. .4( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 4. .2( ) | 2. .2( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 4. .0( ) |
| | | 1. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.8(S) | 0. .4(S) | 0. .1(S) | 0. .1(S) | 0. .0(S) |
| | | 1. .1(S) | 0. .0(S) | 1. 3.1(S) | 0. .0( ) | 0. .4(S) | | | | | |
| 4 | 40. | 6. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .2( ) |
| | | 0. .0( ) | 5. .4( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 3. .2( ) | 2. .2( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 3. .0( ) |
| | | 1. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.8(S) | 0. .4(S) | 0. .1(S) | 0. .1(S) | 0. .0(S) |
| | | 1. .1(S) | 0. .0(S) | 1. 3.1(S) | 0. .0( ) | 0. .4(S) | | | | | |
| 4 | 45. | 6. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .2( ) |
| | | 0. .0( ) | 5. .4( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 3. .2( ) | 1. .2( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 3. .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. | 2. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.8(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.1(S) | .0( ) | .4(S) | | | | | |
| 4 | 50. | 6. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 5. | 0. | 1. | 1. | 0. | 0. | 3. | 1. | 0. |
| | | .0( ) | .4( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .2( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 2. | 3. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.9(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.1(S) | .0( ) | .4(S) | | | | | |
| 4 | 55. | 6. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 5. | 0. | 1. | 1. | 0. | 0. | 3. | 1. | 0. |
| | | .0( ) | .4( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 1. | 3. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.9(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.1(S) | .0( ) | .4(S) | | | | | |
| 5 | 0. | 6. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 5. | 0. | 1. | 1. | 0. | 0. | 3. | 1. | 0. |
| | | .0( ) | .4( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 1. | 3. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.0(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.1(S) | .0( ) | .4(S) | | | | | |
| 5 | 5. | 5. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 4. | 0. | 1. | 1. | 0. | 0. | 3. | 1. | 0. |
| | | .0( ) | .4( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 1. | 3. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.0(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.1(S) | .0( ) | .4(S) | | | | | |
| 5 | 10. | 5. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 4. | 0. | 1. | 1. | 0. | 0. | 3. | 1. | 0. |
| | | .0( ) | .3( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 1. | 3. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.0(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.1(S) | .0( ) | .4(S) | | | | | |
| 5 | 15. | 5. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 4. | 0. | 1. | 1. | 0. | 0. | 3. | 1. | 0. |
| | | .0( ) | .3( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .1( ) | .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 3.<br>.0( ) |
| | | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>3.1(S) | 0.<br>.4(S) | 0.<br>.1(S) | 0.<br>.1(S) | 0.<br>.0(S) |
| | | 0.<br>.0(S) | 0.<br>.0(S) | 1.<br>3.1(S) | 0.<br>.0( ) | 0.<br>.4(S) | | | | | |
| 5 | 20. | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 1.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.2( ) |
| | | 0.<br>.0( ) | 4.<br>.3( ) | 0.<br>.0( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 3.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) |
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 3.<br>.0( ) |
| | | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>3.1(S) | 0.<br>.4(S) | 0.<br>.1(S) | 0.<br>.1(S) | 0.<br>.0(S) |
| | | 0.<br>.0(S) | 0.<br>.0(S) | 1.<br>3.1(S) | 0.<br>.0( ) | 0.<br>.4(S) | | | | | |
| 5 | 25. | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.2( ) |
| | | 0.<br>.0( ) | 4.<br>.3( ) | 0.<br>.0( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 2.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) |
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 2.<br>.0( ) |
| | | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>3.1(S) | 0.<br>.4(S) | 0.<br>.1(S) | 0.<br>.1(S) | 0.<br>.0(S) |
| | | 0.<br>.0(S) | 0.<br>.0(S) | 1.<br>3.1(S) | 0.<br>.0( ) | 0.<br>.4(S) | | | | | |
| 5 | 30. | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 1.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.2( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 4. | 0. | 1. | 1. | 0. | 0. | 2. | 1. | 0. |
| | | .0( ) | .3( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 1. | 2. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.2(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.1(S) | .0( ) | .4(S) | | | | | |
| 5 | 35. | 4. | 0. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 4. | 0. | 1. | 1. | 0. | 0. | 2. | 1. | 0. |
| | | .0( ) | .3( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 2. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.2(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.1(S) | .0( ) | .4(S) | | | | | |
| 5 | 40. | 4. | 0. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 3. | 0. | 1. | 1. | 0. | 0. | 2. | 1. | 0. |
| | | .0( ) | .3( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 2. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.2(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.1(S) | .0( ) | .4(S) | | | | | |
| 5 | 45. | 4. | 0. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 3. | 0. | 1. | 1. | 0. | 0. | 2. | 1. | 0. |
| | | .0( ) | .3( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 2. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.3(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.1(S) | .0( ) | .4(S) | | | | | |
| 5 | 50. | 4. | 0. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 3. | 0. | 1. | 1. | 0. | 0. | 2. | 1. | 0. |
| | | .0( ) | .3( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 2. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.3(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.1(S) | .0( ) | .4(S) | | | | | |
| 5 | 55. | 4. | 0. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 0. | 3. | 0. | 1. | 1. | 0. | 0. | 2. | 1. | 0. |
| | | .0( ) | .3( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 2. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.3(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.1(S) | .0( ) | .4(S) | | | | | |
| 6 | 0. | 4. | 0. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 0. | 3. | 0. | 1. | 1. | 0. | 0. | 2. | 1. | 0. |
| | | .0( ) | .3( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 2. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.3(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.1(S) | .0( ) | .4(S) | | | | | |
| 6 | 5. | 4. | 0. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 0. | 3. | 0. | 1. | 1. | 0. | 0. | 2. | 1. | 0. |
| | | .0( ) | .3( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 2. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.4(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.1(S) | .0( ) | .4(S) | | | | | |
| 6 | 10. | 3. | 0. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 0. | 3. | 0. | 1. | 1. | 0. | 0. | 2. | 1. | 0. |
| | | .0( ) | .3( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 2. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.4(S) | .4(S) | .1(S) | .1(S) | .0(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.1(S) | .0( ) | .4(S) | | | | | |
| 6 | 15. | 3. | 0. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) |
| | | 0. .0( ) | 3. .3( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 2. .2( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. 3.4(S) | 0. .4(S) | 0. .1(S) | 0. .1(S) | 0. .0(S) |
| | | 0. .0(S) | 0. .0(S) | 1. 3.1(S) | 0. .0( ) | 0. .4(S) | | | | | |
| 6 | 20. | 3. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) |
| | | 0. .0( ) | 3. .3( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 2. .2( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. 3.4(S) | 0. .4(S) | 0. .1(S) | 0. .1(S) | 0. .0(S) |
| | | 0. .0(S) | 0. .0(S) | 1. 3.1(S) | 0. .0( ) | 0. .4(S) | | | | | |
| 6 | 25. | 3. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) |
| | | 0. .0( ) | 3. .3( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 2. .2( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. 3.5(S) | 0. .4(S) | 0. .1(S) | 0. .1(S) | 0. .0(S) |
| | | 0. .0(S) | 0. .0(S) | 1. 3.1(S) | 0. .0( ) | 0. .4(S) | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 30. | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) |
| | | 0.<br>.0( ) | 3.<br>.3( ) | 0.<br>.0( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 2.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) |
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 2.<br>.0( ) |
| | | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>3.5(S) | 0.<br>.4(S) | 0.<br>.1(S) | 0.<br>.1(S) | 0.<br>.0(S) |
| | | 0.<br>.0(S) | 0.<br>.0(S) | 1.<br>3.1(S) | 0.<br>.0( ) | 0.<br>.4(S) | | | | | |
| 6 | 35. | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) |
| | | 0.<br>.0( ) | 2.<br>.3( ) | 0.<br>.0( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 2.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) |
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 2.<br>.0( ) |
| | | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>3.5(S) | 0.<br>.4(S) | 0.<br>.1(S) | 0.<br>.1(S) | 0.<br>.0(S) |
| | | 0.<br>.0(S) | 0.<br>.0(S) | 1.<br>3.1(S) | 0.<br>.0( ) | 0.<br>.4(S) | | | | | |
| 6 | 40. | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) |
| | | 0.<br>.0( ) | 2.<br>.3( ) | 0.<br>.0( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 2.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) |
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 2.<br>.0( ) |
| | | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>3.5(S) | 0.<br>.4(S) | 0.<br>.1(S) | 0.<br>.1(S) | 0.<br>.0(S) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0(S) | 0. .0(S) | 1. 3.1(S) | 0. .0( ) | 0. .4(S) | | | | |
| 6 | 45. | 3. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) |
| | | 0. .0( ) | 2. .3( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 2. .2( ) | 0. .1( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. 3.5(S) | 0. .4(S) | 0. .1(S) | 0. .1(S) | 0. .0(S) |
| | | 0. .0(S) | 0. .0(S) | 1. 3.1(S) | 0. .0( ) | 0. .4(S) | | | | | |
| 6 | 50. | 3. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) |
| | | 0. .0( ) | 2. .3( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 2. .2( ) | 0. .1( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. 3.6(S) | 0. .4(S) | 0. .1(S) | 0. .1(S) | 0. .0(S) |
| | | 0. .0(S) | 0. .0(S) | 1. 3.1(S) | 0. .0( ) | 0. .4(S) | | | | | |
| 6 | 55. | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) |
| | | 0. .0( ) | 2. .3( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 1. .2( ) | 0. .1( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) |

```
                0.       1.       0.       0.       0.       0.       0.       0.       0.       0.
                 .0( )    .0( )    .0( )    .0( )    .0( )   3.6(S)    .4(S)    .1(S)    .1(S)    .0(S)

                0.       0.       1.       0.       0.
                 .0(S)    .0(S)   3.1(S)    .0( )    .4(S)

  7    0.       3.       0.       0.       1.       0.       0.       1.       0.       0.       0.
                 .0( )    .0( )    .0( )    .0( )    .0( )    .0( )    .0( )    .0( )    .0( )    .0( )

                0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
                 .0( )    .0( )    .0( )    .0( )    .0( )    .0( )    .0( )    .0( )    .0( )    .0( )

                0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
                 .0( )    .0( )    .0( )    .0( )    .0( )    .0( )    .0( )    .0( )    .0( )    .0( )

                0.       1.       0.       0.       0.       0.       0.       0.       0.       0.
                 .0( )    .0( )    .0( )    .0( )    .0( )    .0( )    .0( )    .0( )    .0( )    .1( )

                0.       2.       0.       1.       1.       0.       0.       1.       0.       0.
                 .0( )    .3( )    .0( )    .2( )    .1( )    .1( )    .1( )    .2( )    .1( )    .0( )

                0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
                 .1( )    .0( )    .0( )    .0( )    .1( )    .0( )    .0( )    .0( )    .0( )    .0( )

                0.       0.       0.       0.       1.       0.       0.       0.       1.       1.
                 .1( )    .0( )    .0( )    .0( )    .1( )    .1( )    .0( )    .0( )    .0( )    .0( )

                0.       1.       0.       0.       0.       0.       0.       0.       0.       0.
                 .0( )    .0( )    .0( )    .0( )    .0( )   3.6(S)    .4(S)    .1(S)    .1(S)    .0(S)

                0.       0.       1.       0.       0.
                 .0(S)    .0(S)   3.0(S)    .0( )    .4(S)

1

 2yr 3hr Current Condition SWMM Sump Basin
 Blank


 *** PEAK FLOWS, STAGES AND STORAGES OF GUTTERS AND DETENTION DAMS ***

   CONVEYANCE   PEAK      STAGE      STORAGE     TIME
     ELEMENT    (CFS)      (FT)      (AC-FT)   (HR/MIN)

      224         0.       (DIRECT FLOW)        0   0.
      124         0.       (DIRECT FLOW)        0   0.
      324         0.        .0                  0   0.
      223         1.       (DIRECT FLOW)        0  55.
      222         0.       (DIRECT FLOW)        0   0.
      123         1.       (DIRECT FLOW)        0  55.
      122         0.       (DIRECT FLOW)        0   0.
      420         1.       (DIRECT FLOW)        0  55.
      221         2.       (DIRECT FLOW)        0  50.
      322         0.        .1                  1   0.
      121         2.       (DIRECT FLOW)        0  50.
      220         0.       (DIRECT FLOW)        0   0.
      120         2.       (DIRECT FLOW)        0  55.
      520         0.        .1          .1      4  55.
      219         0.       (DIRECT FLOW)        0   0.
      320         0.        .0                  7   0.
      218         3.       (DIRECT FLOW)        0  45.
      210        11.       (DIRECT FLOW)        0  25.
      119         0.       (DIRECT FLOW)        0   0.
      118         3.       (DIRECT FLOW)        0  45.
      110        11.       (DIRECT FLOW)        0  25.
      319         0.        .0                  0   0.
      318         1.        .1                  1  25.
      213         4.       (DIRECT FLOW)        0  50.
      610         0.        .1          .5      1   0.
      209         0.       (DIRECT FLOW)        0   0.
      217         5.       (DIRECT FLOW)        0  35.
      113         4.       (DIRECT FLOW)        0  55.
      310         0.        .1                  5  10.
      109         0.       (DIRECT FLOW)        0   0.
      117         5.       (DIRECT FLOW)        0  35.
      513         0.        .1          .4      7   0.
```

| | | | | | |
|---|---|---|---|---|---|
| 409 | 0. | (DIRECT FLOW) | | 5 | 10. |
| 208 | 45. | (DIRECT FLOW) | | 0 | 40. |
| 317 | 1. | .2 | | 1 | 25. |
| 313 | 0. | .0 | | 7 | 0. |
| 309 | 0. | .1 | | 5 | 55. |
| 108 | 45. | (DIRECT FLOW) | | 0 | 40. |
| 216 | 2. | (DIRECT FLOW) | | 0 | 55. |
| 412 | 1. | (DIRECT FLOW) | | 1 | 25. |
| 608 | 1. | .1 | 3.3 | 1 | 45. |
| 116 | 2. | (DIRECT FLOW) | | 0 | 55. |
| 215 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 314 | 1. | .1 | | 2 | 20. |
| 212 | 11. | (DIRECT FLOW) | | 0 | 45. |
| 308 | 1. | .1 | | 1 | 55. |
| 207 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 516 | 0. | .1 | .1 | 1 | 25. |
| 115 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 112 | 11. | (DIRECT FLOW) | | 0 | 50. |
| 107 | 1. | (DIRECT FLOW) | | 1 | 55. |
| 316 | 0. | .0 | | 7 | 0. |
| 315 | 0. | .0 | | 0 | 0. |
| 214 | 5. | (DIRECT FLOW) | | 0 | 45. |
| 312 | 7. | .3 | | 1 | 45. |
| 211 | 3. | (DIRECT FLOW) | | 0 | 45. |
| 206 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 307 | 1. | .2 | | 3 | 15. |
| 114 | 5. | (DIRECT FLOW) | | 0 | 45. |
| 111 | 9. | (DIRECT FLOW) | | 1 | 40. |
| 203 | 4. | (DIRECT FLOW) | | 0 | 15. |
| 106 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 404 | 12. | (DIRECT FLOW) | | 1 | 15. |
| 103 | 4. | (DIRECT FLOW) | | 0 | 15. |
| 202 | 11. | (DIRECT FLOW) | | 0 | 35. |
| 306 | 0. | .0 | | 0 | 0. |
| 205 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 311 | 10. | .4 | | 2 | 5. |
| 204 | 5. | (DIRECT FLOW) | | 0 | 45. |
| 603 | 1. | .1 | .1 | 0 | 35. |
| 102 | 11. | (DIRECT FLOW) | | 0 | 35. |
| 236 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 105 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 104 | 12. | (DIRECT FLOW) | | 1 | 55. |
| 303 | 1. | .1 | | 0 | 50. |
| 602 | 3. | .1 | .5 | 1 | 20. |
| 136 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 231 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 401 | 12. | (DIRECT FLOW) | | 1 | 55. |
| 402 | 4. | (DIRECT FLOW) | | 1 | 15. |
| 336 | 0. | .0 | | 0 | 0. |
| 235 | 7. | (DIRECT FLOW) | | 0 | 50. |
| 131 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 304 | 10. | .5 | | 2 | 35. |
| 302 | 2. | .2 | | 2 | 15. |
| 201 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 135 | 7. | (DIRECT FLOW) | | 0 | 50. |
| 230 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 331 | 0. | .0 | | 0 | 0. |
| 229 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 101 | 12. | (DIRECT FLOW) | | 2 | 35. |
| 238 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 335 | 2. | .2 | | 2 | 0. |
| 234 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 233 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 130 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 129 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 501 | 0. | .1 | 3.6 | 7 | 0. |
| 138 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 134 | 2. | (DIRECT FLOW) | | 2 | 0. |
| 133 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 330 | 0. | .0 | | 0 | 0. |
| 329 | 0. | .0 | | 0 | 0. |
| 228 | 5. | (DIRECT FLOW) | | 0 | 50. |
| 301 | 0. | .0 | | 7 | 0. |
| 226 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 338 | 0. | .0 | | 0 | 0. |
| 237 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 432 | 2. | (DIRECT FLOW) | | 2 | 0. |
| 128 | 5. | (DIRECT FLOW) | | 0 | 50. |

| | | | | |
|---|---|---|---|---|
| 126 | 0. | (DIRECT FLOW) | 7 | 0. |
| 137 | 0. | (DIRECT FLOW) | 0 | 0. |
| 333 | 1. | .1 | 3 | 25. |
| 232 | 0. | (DIRECT FLOW) | 0 | 0. |
| 328 | 2. | .2 | 1 | 50. |
| 227 | 0. | (DIRECT FLOW) | 0 | 0. |
| 326 | 0. | .0 | 7 | 0. |
| 225 | 0. | (DIRECT FLOW) | 0 | 0. |
| 537 | 0. | .0 | 0 | 0. |
| 132 | 1. | (DIRECT FLOW) | 3 | 25. |
| 127 | 2. | (DIRECT FLOW) | 1 | 50. |
| 125 | 0. | (DIRECT FLOW) | 7 | 0. |
| 337 | 0. | (DIRECT FLOW) | 0 | 0. |
| 400 | 3. | (DIRECT FLOW) | 2 | 15. |
| 901 | 0. | (DIRECT FLOW) | 0 | 0. |
| 900 | 3. | (DIRECT FLOW) | 2 | 15. |

```
   2   1   1   2
   3   4
WATERSHED   1
5yr 3hr Current Condition SWMM Sump Basin
Blank
        84       5.0                                                          1
         1  201
         4  204
         5  205
         6  206
         7  207
         9  209
        11  211
        12  212
        13  213
        14  214
        15  215
        16  216
        17  217
        18  218
        19  219
        20  220
        21  221
        22  222
        23  223
        24  224
        25  225
        26  226
        27  227
        28  228
        29  229
        30  230
        31  231
        32  232
        33  233
        34  234
        35  235
        36  236
        37  237
        38  238

    0  201  101    3              1.
   -1  202  102  3 3              1.
         0.        0.      0.55      10.1      1.65        0.        0.        0.
   -1  203  103  3 3              1.
         0.        0.      0.23      3.59      0.69        0.        0.        0.
    0  204  104    3              1.
    0  205  105    3              1.
    0  206  106    3              1.
    0  207  107    3              1.
   -1  208  108  3 3              1.
         0.        0.      0.67     45.23      1.80        0.        0.        0.
    0  209  109    3              1.
   -1  210  110  3 3              1.
         0.        0.      0.35     21.63      1.05        0.        0.        0.
    0  211  111    3              1.
    0  212  112    3              1.
    0  213  113    3              1.
    0  214  114    3              1.
    0  215  115    3              1.
    0  216  116    3              1.
    0  217  117    3              1.
    0  218  118    3              1.
    0  219  119    3              1.
    0  220  120    3              1.
    0  121  120    3              1.
    0  221  121    3              1.
    0  222  122    3              1.
    0  223  123    3              1.
    0  224  124    3              1.
    0  225  125    3              1.
    0  226  126    3              1.
    0  227  127    3              1.
    0  228  128    3              1.
    0  229  129    3              1.
    0  230  130    3              1.
    0  231  131    3              1.
    0  232  132    3              1.
```

```
0  233  133    3             1.
0  234  134    3             1.
0  235  135    3             1.
0  236  136    3             1.
0  237  137    3             1.
0  238  138    3             1.
0  402  302    3             1.
0  401  304    3             1.
0  106  306    3             1.
0  107  307    3             1.
0  409  309    3             1.
0  404  311    3             1.
0  112  312    3             1.
0  412  314    3             1.
0  115  315    3             1.
0  117  317    3             1.
0  118  318    3             1.
0  119  319    3             1.
0  420  322    3             1.
0  124  324    3             1.
0  126  326    3             1.
0  128  328    3             1.
0  129  329    3             1.
0  130  330    3             1.
0  131  331    3             1.
0  432  333    3             1.
0  135  335    3             1.
0  136  336    3             1.
0  138  338    3             1.
0  125  400    3             1.
0  127  400    3             1.
0  132  400    3             1.
0  104  401    3             1.
0  105  401    3             1.
0  111  404    3             1.
0  114  404    3             1.
0  109  409    3             1.
0  122  420    3             1.
0  123  420    3             1.
0  133  432    3             1.
0  134  432    3             1.
0  101  501    3             1.
0  113  513    3             1.
0  116  516    3             1.
0  120  520    3             1.
0  137  537    3             1.
0  102  602    3             1.
0  103  603    3             1.
0  108  608    3             1.
0  110  610    3             1.
0  400  900    3             1.
0  337  901    3             1.
0  501  301  7 2     0.1       1.                                      0.1
    0.        0.       7.5        0.      26.4        0.      63.3        0.
  82.9        0.      129.     1400.      201.     6510.
0  513  313  3 2     0.1       1.                                      0.1
    0.        0.      20.3        0.      22.1      495.
0  516  316  3 2     0.1       1.                                      0.1
    0.        0.     18.12        0.      18.9      320.        0.        0.
0  520  320  4 2     0.1       1.                                      0.1
    0.        0.       9.9        0.       10.        0.      230.        0.
0  537  337  3 2     0.1       1.                                      0.1
    0.        0.     14.85        0.      17.9      623.        0.        0.
0  602  402  3 2     0.1       1.                                      0.1
    0.        0.      0.78       5.4      1.64      15.4
0  603  303  3 2     0.1       1.                                      0.1
    0.        0.      0.12       1.2      0.33       6.9        0.        0.
0  608  308 10 2     0.1       1.                                      0.1
    0.        0.      .038      0.31      0.45      0.46      1.63      0.57
  3.59      0.67      6.09     32.39      7.09     55.58      8.87    123.53
 11.53    266.39     13.14    378.74
0  610  310  2 2     0.1       1.                                      0.1
    0.        0.      3.81       1.3        0.        0.        0.        0.
0  302  101    1          3681.  0.0077     60.     60.    .045     10.
0  304  101    1          3729.  0.0074     40.     40.    .045     10.
0  311  104    1          2920.  0.0108     70.     70.    .045     10.
0  306  105    1          5319.  0.0161     50.     50.    .045     10.
0  308  107    1      4.    625.   0.008    0.01    0.01   0.016      2.
```

```
    0  312  111    1           2682.  0.0082    110.    110.    .045     10.
    0  314  112    1           1834.  0.0049    175.    175.    .045     10.
    0  318  113    1           3243.  0.0052    100.    100.    .045     10.
    0  319  113    1           4029.  0.0107     95.     95.    .045     10.
    0  315  114    1           5050.  0.0109     80.     80.    .045     10.
    0  316  114    1           2964.  0.0101     50.     50.    .045     10.
    0  320  118    1            811.  0.0123     80.     80.    .045     10.
    0  322  120    1           3463.  0.0081    100.    100.    .045     10.
    0  324  123    1           5484.  0.0133     75.     75.    .045     10.
    0  326  125    1           2139.  0.0019     80.     80.    .045     10.
    0  301  126    1           1590.   0.017     40.     40.    .045     10.
    0  328  127    1           3272.  0.0089    115.    115.    .045     10.
    0  329  128    1           3696.  0.0176     25.     25.    .045     10.
    0  330  128    1           5614.  0.0157     50.     50.    .045     10.
    0  331  129    1           2742.  0.0091      3.      3.   0.035      3.
    0  333  132    1           4251.  0.0078    125.    125.    .045     10.
    0  335  134    1           6142.  0.0138     70.     70.    .045     10.
    0  336  135    1           5277.    0.01    100.    100.    .045     10.
    0  338  137    1           8677.  0.0086     75.     75.    .045     10.
    0  303  402    1      5.   1011.  0.0151      5.      5.   0.035      3.
    0  307  404    1      5.   1308.  0.0031      5.      5.   0.035      3.
    0  310  409    1      5.   3896.    0.01      5.      5.   0.035      3.
    0  313  412    1            820.  0.0073    100.    100.    .045     10.
    0  317  412    1           3628.  0.0105    100.    100.    .045     10.
    0  309  608    1      5.   1757.  0.0091      5.      5.   0.035      3.

    0
   85
  101  102  103  104  105  106  107  108  109  110  111  112  113  114  115  116
  117  118  119  120  121  122  123  124  125  126  127  128  129  130  131  132
  133  134  135  136  137  138  301  302  303  304  306  307  308  309  310  311
  312  313  314  315  316  317  318  319  320  322  324  326  328  329  330  331
  333  335  336  338  400  401  402  404  412  420  432  501  513  516  520  537
  602  603  608  609  610
ENDPROGRAM
```

URBAN DRAINAGE STORM WATER MANAGEMENT MODEL - 32 BIT VERSION 1998
REVISED BY UNIVERSITY OF COLORADO AT DENVER

*** ENTRY MADE TO RUNOFF MODEL ***

5yr 3hr Current Condition SWMM Sump Basin
Blank

0NUMBER OF TIME STEPS 84
0INTEGRATION TIME INTERVAL (MINUTES), 5.00

25.0 PERCENT OF IMPERVIOUS AREA HAS ZERO DETENTION DEPTH
1

5yr 3hr Current Condition SWMM Sump Basin
Blank

HYDROGRAPHS FROM CUHPF MODEL ARE LISTED FOR THE FOLLOWING 34 SUBCATCHMENTS

| TIME(HR/MIN) | 1 | 4 | 5 | 6 | 7 | 9 | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|---|---|
| | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 |
| | 35 | 36 | 37 | 38 | | | | | | |
| 0 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 5. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 10. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 15. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 20. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. |
| | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 25. | 1. | 2. | 0. | 0. | 1. | 0. | 1. | 4. | 1. | 3. |
| | 0. | 0. | 5. | 1. | 0. | 0. | 1. | 0. | 1. | 0. |
| | 0. | 0. | 0. | 2. | 1. | 0. | 0. | 0. | 0. | 0. |
| | 2. | 0. | 1. | 0. | | | | | | |
| 0 30. | 5. | 5. | 1. | 1. | 2. | 2. | 3. | 10. | 4. | 7. |
| | 1. | 3. | 11. | 4. | 1. | 3. | 3. | 2. | 4. | 3. |
| | 1. | 1. | 2. | 7. | 2. | 0. | 1. | 3. | 1. | 3. |
| | 8. | 2. | 3. | 3. | | | | | | |
| 0 35. | 12. | 9. | 1. | 3. | 2. | 5. | 5. | 19. | 10. | 12. |
| | 2. | 7. | 15. | 8. | 2. | 8. | 6. | 5. | 11. | 7. |
| | 3. | 3. | 4. | 14. | 3. | 0. | 2. | 8. | 2. | 8. |
| | 17. | 4. | 8. | 6. | | | | | | |
| 0 40. | 17. | 11. | 2. | 4. | 2. | 7. | 6. | 25. | 16. | 15. |
| | 3. | 13. | 15. | 10. | 4. | 14. | 9. | 8. | 18. | 10. |
| | 4. | 5. | 6. | 21. | 4. | 0. | 2. | 13. | 2. | 13. |
| | 24. | 5. | 15. | 9. | | | | | | |
| 0 45. | 19. | 12. | 3. | 4. | 2. | 8. | 6. | 28. | 20. | 16. |
| | 3. | 17. | 14. | 10. | 5. | 18. | 11. | 10. | 24. | 10. |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5. | 5. | 7. | 25. | 3. | 0. | 2. | 16. | 2. | 18. |
| | | 29. | 5. | 19. | 11. | | | | | | |
| 0 | 50. | 18. | 11. | 3. | 4. | 2. | 7. | 6. | 28. | 21. | 15. |
| | | 3. | 19. | 12. | 9. | 5. | 20. | 12. | 11. | 27. | 9. |
| | | 4. | 5. | 7. | 26. | 3. | 0. | 1. | 17. | 2. | 21. |
| | | 30. | 4. | 22. | 11. | | | | | | |
| 0 | 55. | 16. | 11. | 3. | 3. | 2. | 7. | 5. | 27. | 21. | 14. |
| | | 3. | 20. | 10. | 8. | 5. | 21. | 11. | 11. | 27. | 8. |
| | | 4. | 4. | 6. | 25. | 3. | 0. | 0. | 17. | 2. | 22. |
| | | 29. | 4. | 23. | 10. | | | | | | |
| 1 | 0. | 15. | 10. | 2. | 3. | 2. | 6. | 5. | 26. | 20. | 13. |
| | | 3. | 20. | 9. | 8. | 5. | 20. | 10. | 11. | 26. | 8. |
| | | 4. | 4. | 6. | 23. | 3. | 0. | 0. | 16. | 2. | 21. |
| | | 27. | 3. | 23. | 9. | | | | | | |
| 1 | 5. | 13. | 10. | 2. | 3. | 2. | 6. | 5. | 25. | 18. | 12. |
| | | 2. | 19. | 8. | 8. | 4. | 18. | 10. | 10. | 24. | 7. |
| | | 4. | 4. | 6. | 21. | 3. | 0. | 0. | 14. | 1. | 20. |
| | | 25. | 3. | 22. | 8. | | | | | | |
| 1 | 10. | 12. | 10. | 2. | 3. | 2. | 5. | 5. | 24. | 17. | 12. |
| | | 2. | 18. | 7. | 7. | 4. | 17. | 9. | 9. | 22. | 6. |
| | | 3. | 4. | 5. | 20. | 3. | 0. | 0. | 13. | 0. | 18. |
| | | 24. | 3. | 20. | 7. | | | | | | |
| 1 | 15. | 10. | 10. | 2. | 3. | 2. | 5. | 5. | 23. | 16. | 11. |
| | | 2. | 17. | 6. | 6. | 4. | 15. | 9. | 9. | 20. | 5. |
| | | 3. | 3. | 5. | 19. | 2. | 0. | 0. | 12. | 0. | 17. |
| | | 22. | 2. | 18. | 7. | | | | | | |
| 1 | 20. | 9. | 9. | 2. | 2. | 2. | 4. | 5. | 22. | 15. | 10. |
| | | 2. | 16. | 5. | 6. | 4. | 14. | 8. | 8. | 19. | 5. |
| | | 3. | 3. | 5. | 17. | 2. | 0. | 0. | 11. | 0. | 16. |
| | | 21. | 2. | 17. | 6. | | | | | | |
| 1 | 25. | 8. | 8. | 2. | 2. | 2. | 4. | 5. | 21. | 14. | 9. |
| | | 2. | 15. | 5. | 5. | 3. | 13. | 8. | 8. | 17. | 4. |
| | | 3. | 3. | 4. | 16. | 2. | 0. | 0. | 10. | 0. | 15. |
| | | 19. | 2. | 16. | 5. | | | | | | |
| 1 | 30. | 7. | 8. | 2. | 2. | 0. | 3. | 4. | 19. | 13. | 8. |
| | | 2. | 14. | 4. | 5. | 3. | 12. | 7. | 7. | 16. | 4. |
| | | 3. | 2. | 4. | 14. | 2. | 0. | 0. | 9. | 0. | 14. |
| | | 17. | 2. | 14. | 5. | | | | | | |
| 1 | 35. | 6. | 7. | 1. | 2. | 0. | 3. | 4. | 18. | 12. | 7. |
| | | 2. | 13. | 3. | 5. | 3. | 11. | 6. | 6. | 14. | 3. |
| | | 2. | 2. | 4. | 13. | 2. | 0. | 0. | 8. | 0. | 13. |
| | | 16. | 2. | 13. | 4. | | | | | | |
| 1 | 40. | 6. | 7. | 0. | 2. | 0. | 3. | 4. | 17. | 11. | 7. |
| | | 1. | 12. | 3. | 4. | 3. | 10. | 6. | 6. | 13. | 3. |
| | | 2. | 2. | 4. | 12. | 2. | 0. | 0. | 8. | 0. | 12. |
| | | 14. | 1. | 12. | 4. | | | | | | |
| 1 | 45. | 5. | 7. | 0. | 2. | 0. | 2. | 4. | 16. | 10. | 6. |
| | | 0. | 11. | 3. | 4. | 2. | 9. | 5. | 5. | 12. | 3. |
| | | 2. | 2. | 3. | 11. | 2. | 0. | 0. | 7. | 0. | 11. |
| | | 13. | 0. | 11. | 4. | | | | | | |
| 1 | 50. | 5. | 6. | 0. | 1. | 0. | 2. | 4. | 15. | 9. | 5. |
| | | 0. | 10. | 2. | 4. | 2. | 9. | 5. | 5. | 11. | 2. |
| | | 2. | 2. | 3. | 10. | 2. | 0. | 0. | 6. | 0. | 10. |
| | | 12. | 0. | 10. | 3. | | | | | | |
| 1 | 55. | 4. | 6. | 0. | 0. | 0. | 2. | 4. | 14. | 8. | 5. |
| | | 0. | 9. | 2. | 3. | 2. | 8. | 5. | 5. | 10. | 2. |
| | | 2. | 2. | 3. | 9. | 2. | 0. | 0. | 6. | 0. | 9. |
| | | 11. | 0. | 9. | 3. | | | | | | |
| 2 | 0. | 4. | 5. | 0. | 0. | 0. | 2. | 3. | 13. | 8. | 5. |
| | | 0. | 9. | 2. | 3. | 2. | 7. | 4. | 4. | 9. | 2. |
| | | 2. | 1. | 3. | 8. | 2. | 0. | 0. | 5. | 0. | 8. |
| | | 10. | 0. | 9. | 3. | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 5. | 3. | 5. | 0. | 0. | 0. | 2. | 3. | 12. | 7. | 4. |
| | | 0. | 8. | 0. | 3. | 2. | 7. | 4. | 4. | 9. | 2. |
| | | 2. | 0. | 3. | 8. | 1. | 0. | 0. | 5. | 0. | 8. |
| | | 9. | 0. | 8. | 3. | | | | | | |
| 2 | 10. | 3. | 5. | 0. | 0. | 0. | 2. | 3. | 11. | 7. | 4. |
| | | 0. | 8. | 0. | 3. | 2. | 6. | 4. | 4. | 8. | 2. |
| | | 2. | 0. | 3. | 7. | 1. | 0. | 0. | 5. | 0. | 7. |
| | | 9. | 0. | 7. | 2. | | | | | | |
| 2 | 15. | 3. | 5. | 0. | 0. | 0. | 0. | 3. | 10. | 6. | 3. |
| | | 0. | 7. | 0. | 2. | 2. | 6. | 4. | 4. | 7. | 0. |
| | | 2. | 0. | 2. | 7. | 0. | 0. | 0. | 4. | 0. | 7. |
| | | 8. | 0. | 7. | 2. | | | | | | |
| 2 | 20. | 2. | 4. | 0. | 0. | 0. | 0. | 3. | 10. | 6. | 3. |
| | | 0. | 7. | 0. | 2. | 1. | 5. | 3. | 3. | 7. | 0. |
| | | 2. | 0. | 2. | 6. | 0. | 0. | 0. | 4. | 0. | 6. |
| | | 7. | 0. | 6. | 2. | | | | | | |
| 2 | 25. | 2. | 4. | 0. | 0. | 0. | 0. | 3. | 9. | 5. | 3. |
| | | 0. | 6. | 0. | 2. | 0. | 5. | 3. | 3. | 6. | 0. |
| | | 2. | 0. | 2. | 6. | 0. | 0. | 0. | 3. | 0. | 6. |
| | | 7. | 0. | 6. | 2. | | | | | | |
| 2 | 30. | 2. | 4. | 0. | 0. | 0. | 0. | 3. | 8. | 5. | 3. |
| | | 0. | 6. | 0. | 2. | 0. | 5. | 3. | 3. | 6. | 0. |
| | | 2. | 0. | 2. | 5. | 0. | 0. | 0. | 3. | 0. | 5. |
| | | 6. | 0. | 5. | 2. | | | | | | |
| 2 | 35. | 2. | 4. | 0. | 0. | 0. | 0. | 3. | 8. | 4. | 2. |
| | | 0. | 5. | 0. | 2. | 0. | 4. | 3. | 3. | 5. | 0. |
| | | 2. | 0. | 2. | 5. | 0. | 0. | 0. | 3. | 0. | 5. |
| | | 6. | 0. | 5. | 1. | | | | | | |
| 2 | 40. | 1. | 3. | 0. | 0. | 0. | 0. | 3. | 7. | 4. | 2. |
| | | 0. | 5. | 0. | 2. | 0. | 4. | 2. | 2. | 5. | 0. |
| | | 2. | 0. | 2. | 4. | 0. | 0. | 0. | 3. | 0. | 5. |
| | | 5. | 0. | 5. | 0. | | | | | | |
| 2 | 45. | 0. | 3. | 0. | 0. | 0. | 0. | 3. | 7. | 4. | 2. |
| | | 0. | 5. | 0. | 1. | 0. | 4. | 2. | 2. | 4. | 0. |
| | | 2. | 0. | 2. | 4. | 0. | 0. | 0. | 2. | 0. | 4. |
| | | 5. | 0. | 4. | 0. | | | | | | |
| 2 | 50. | 0. | 3. | 0. | 0. | 0. | 0. | 3. | 7. | 4. | 2. |
| | | 0. | 4. | 0. | 0. | 0. | 3. | 2. | 2. | 4. | 0. |
| | | 1. | 0. | 2. | 4. | 0. | 0. | 0. | 2. | 0. | 4. |
| | | 4. | 0. | 4. | 0. | | | | | | |
| 2 | 55. | 0. | 3. | 0. | 0. | 0. | 0. | 2. | 6. | 3. | 2. |
| | | 0. | 4. | 0. | 0. | 0. | 3. | 2. | 2. | 4. | 0. |
| | | 1. | 0. | 2. | 3. | 0. | 0. | 0. | 2. | 0. | 4. |
| | | 4. | 0. | 4. | 0. | | | | | | |
| 3 | 0. | 0. | 3. | 0. | 0. | 0. | 0. | 2. | 6. | 3. | 2. |
| | | 0. | 4. | 0. | 0. | 0. | 3. | 2. | 2. | 3. | 0. |
| | | 0. | 0. | 2. | 3. | 0. | 0. | 0. | 2. | 0. | 3. |
| | | 4. | 0. | 3. | 0. | | | | | | |
| 3 | 5. | 0. | 3. | 0. | 0. | 0. | 0. | 2. | 6. | 3. | 2. |
| | | 0. | 4. | 0. | 0. | 0. | 3. | 2. | 2. | 3. | 0. |
| | | 0. | 0. | 1. | 3. | 0. | 0. | 0. | 2. | 0. | 3. |
| | | 4. | 0. | 3. | 0. | | | | | | |
| 3 | 10. | 0. | 2. | 0. | 0. | 0. | 0. | 2. | 5. | 3. | 0. |
| | | 0. | 3. | 0. | 0. | 0. | 2. | 2. | 2. | 3. | 0. |
| | | 0. | 0. | 0. | 3. | 0. | 0. | 0. | 2. | 0. | 3. |
| | | 3. | 0. | 3. | 0. | | | | | | |
| 3 | 15. | 0. | 2. | 0. | 0. | 0. | 0. | 2. | 5. | 2. | 0. |
| | | 0. | 3. | 0. | 0. | 0. | 2. | 1. | 1. | 3. | 0. |
| | | 0. | 0. | 0. | 2. | 0. | 0. | 0. | 1. | 0. | 3. |
| | | 3. | 0. | 3. | 0. | | | | | | |
| 3 | 20. | 0. | 2. | 0. | 0. | 0. | 0. | 2. | 4. | 2. | 0. |
| | | 0. | 3. | 0. | 0. | 0. | 2. | 0. | 0. | 2. | 0. |
| | | 0. | 0. | 0. | 2. | 0. | 0. | 0. | 0. | 0. | 3. |

```
                3.        0.        2.        0.

   3   25.      0.        2.        0.        0.        0.        0.        2.        4.        2.        0.
                0.        3.        0.        0.        0.        2.        0.        0.        2.        0.
                0.        0.        0.        2.        0.        0.        0.        0.        0.        2.
                2.        0.        2.        0.

   3   30.      0.        2.        0.        0.        0.        0.        0.        4.        2.        0.
                0.        3.        0.        0.        0.        2.        0.        0.        2.        0.
                0.        0.        0.        2.        0.        0.        0.        0.        0.        2.
                2.        0.        2.        0.

   3   35.      0.        2.        0.        0.        0.        0.        0.        4.        2.        0.
                0.        2.        0.        0.        0.        2.        0.        0.        2.        0.
                0.        0.        0.        2.        0.        0.        0.        0.        0.        2.
                2.        0.        2.        0.

   3   40.      0.        2.        0.        0.        0.        0.        0.        3.        2.        0.
                0.        2.        0.        0.        0.        2.        0.        0.        2.        0.
                0.        0.        0.        2.        0.        0.        0.        0.        0.        2.
                2.        0.        2.        0.

   3   45.      0.        0.        0.        0.        0.        0.        0.        3.        1.        0.
                0.        2.        0.        0.        0.        0.        0.        0.        2.        0.
                0.        0.        0.        1.        0.        0.        0.        0.        0.        2.
                2.        0.        2.        0.

   3   50.      0.        0.        0.        0.        0.        0.        0.        3.        0.        0.
                0.        2.        0.        0.        0.        0.        0.        0.        1.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        2.
                2.        0.        1.        0.

   3   55.      0.        0.        0.        0.        0.        0.        0.        3.        0.        0.
                0.        2.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        1.
                1.        0.        0.        0.

   4    0.      0.        0.        0.        0.        0.        0.        0.        2.        0.        0.
                0.        2.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.

   4    5.      0.        0.        0.        0.        0.        0.        0.        2.        0.        0.
                0.        2.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.

   4   10.      0.        0.        0.        0.        0.        0.        0.        2.        0.        0.
                0.        1.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.

   4   15.      0.        0.        0.        0.        0.        0.        0.        2.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.

   4   20.      0.        0.        0.        0.        0.        0.        0.        2.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.

1

 5yr 3hr Current Condition SWMM Sump Basin
 Blank

                                                          WIDTH              INVERT     SIDE SLOPES           OVERBA
NK/SURCHARGE
 GUTTER      GUTTER       NDP        NP                  OR DIAM    LENGTH    SLOPE    HORIZ TO VERT   MANNING
 DEPTH       JK
 NUMBER    CONNECTION                                      (FT)      (FT)    (FT/FT)      L     R         N
  (FT)

  201         101          0          3                     .0        1.     .0010       .0    .0       .001
```

```
10.00        0
 202         102          3          3                        .0        1.     .0010       .0    .0       .001
10.00       -1
                    TIME IN HRS VS INFLOW IN CFS
                          .0      .0        .6    10.1       1.6      .0
 203         103          3          3                        .0        1.     .0010       .0    .0       .001
10.00       -1
                    TIME IN HRS VS INFLOW IN CFS
                          .0      .0        .2     3.6        .7      .0
 204         104          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 205         105          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 206         106          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 207         107          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 208         108          3          3                        .0        1.     .0010       .0    .0       .001
10.00       -1
                    TIME IN HRS VS INFLOW IN CFS
                          .0      .0        .7    45.2       1.8      .0
 209         109          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 210         110          3          3                        .0        1.     .0010       .0    .0       .001
10.00       -1
                    TIME IN HRS VS INFLOW IN CFS
                          .0      .0        .3    21.6       1.0      .0
 211         111          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 212         112          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 213         113          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 214         114          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 215         115          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 216         116          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 217         117          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 218         118          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 219         119          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 220         120          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 121         120          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 221         121          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 222         122          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 223         123          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 224         124          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 225         125          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 226         126          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 227         127          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 228         128          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 229         129          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 230         130          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 231         131          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 232         132          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 233         133          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 234         134          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 235         135          0          3                        .0        1.     .0010       .0    .0       .001
```

```
10.00       0
 236        136         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 237        137         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 238        138         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 402        302         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 401        304         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 106        306         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 107        307         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 409        309         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 404        311         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 112        312         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 412        314         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 115        315         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 117        317         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 118        318         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 119        319         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 420        322         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 124        324         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 126        326         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 128        328         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 129        329         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 130        330         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 131        331         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 432        333         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 135        335         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 136        336         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 138        338         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 125        400         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 127        400         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 132        400         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 104        401         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 105        401         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 111        404         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 114        404         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 109        409         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 122        420         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 123        420         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 133        432         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 134        432         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 101        501         0         3                  .0       1.     .0010       .0    .0       .001
```

```
 10.00        0
  113         513          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  116         516          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  120         520          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  137         537          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  102         602          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  103         603          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  108         608          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  110         610          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  400         900          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  337         901          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  501         301          7          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                        RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                              .0      .0       7.5      .0      26.4      .0      63.3      .0      82.9      .0     12
9.0  1400.0
                            201.0  6510.0
  513         313          3          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                        RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                              .0      .0      20.3      .0      22.1   495.0
  516         316          3          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                        RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                              .0      .0      18.1      .0      18.9   320.0
  520         320          4          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                        RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                              .0      .0       9.9      .0      10.0      .0     230.0      .0
  537         337          3          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                        RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                              .0      .0      14.9      .0      17.9   623.0
  602         402          3          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                        RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                              .0      .0        .8     5.4       1.6    15.4
  603         303          3          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                        RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                              .0      .0        .1     1.2        .3     6.9
  608         308         10          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                        RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                              .0      .0        .0      .3        .4      .5       1.6      .6       3.6      .7
6.1    32.4
                             7.1    55.6       8.9   123.5      11.5   266.4      13.1   378.7
  610         310          2          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                        RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                              .0      .0       3.8     1.3
  302         101          0          1      CHANNEL         .0     3681.     .0077     60.0  60.0       .045
 10.00        0
  304         101          0          1      CHANNEL         .0     3729.     .0074     40.0  40.0       .045
 10.00        0
  311         104          0          1      CHANNEL         .0     2920.     .0108     70.0  70.0       .045
 10.00        0
  306         105          0          1      CHANNEL         .0     5319.     .0161     50.0  50.0       .045
 10.00        0
  308         107          0          1      CHANNEL        4.0      625.     .0080      .0    .0       .016
  2.00        0
  312         111          0          1      CHANNEL         .0     2682.     .0082    110.0 110.0       .045
 10.00        0
  314         112          0          1      CHANNEL         .0     1834.     .0049    175.0 175.0       .045
 10.00        0
  318         113          0          1      CHANNEL         .0     3243.     .0052    100.0 100.0       .045
 10.00        0
  319         113          0          1      CHANNEL         .0     4029.     .0107     95.0  95.0       .045
```

```
 10.00        0
  315         114          0          1      CHANNEL          .0     5050.     .0109     80.0  80.0       .045
 10.00        0
  316         114          0          1      CHANNEL          .0     2964.     .0101     50.0  50.0       .045
 10.00        0
  320         118          0          1      CHANNEL          .0      811.     .0123     80.0  80.0       .045
 10.00        0
  322         120          0          1      CHANNEL          .0     3463.     .0081    100.0 100.0       .045
 10.00        0
  324         123          0          1      CHANNEL          .0     5484.     .0133     75.0  75.0       .045
 10.00        0
  326         125          0          1      CHANNEL          .0     2139.     .0019     80.0  80.0       .045
 10.00        0
  301         126          0          1      CHANNEL          .0     1590.     .0170     40.0  40.0       .045
 10.00        0
  328         127          0          1      CHANNEL          .0     3272.     .0089    115.0 115.0       .045
 10.00        0
  329         128          0          1      CHANNEL          .0     3696.     .0176     25.0  25.0       .045
 10.00        0
  330         128          0          1      CHANNEL          .0     5614.     .0157     50.0  50.0       .045
 10.00        0
  331         129          0          1      CHANNEL          .0     2742.     .0091      3.0   3.0       .035
  3.00        0
  333         132          0          1      CHANNEL          .0     4251.     .0078    125.0 125.0       .045
 10.00        0
  335         134          0          1      CHANNEL          .0     6142.     .0138     70.0  70.0       .045
 10.00        0
  336         135          0          1      CHANNEL          .0     5277.     .0100    100.0 100.0       .045
 10.00        0
  338         137          0          1      CHANNEL          .0     8677.     .0086     75.0  75.0       .045
 10.00        0
  303         402          0          1      CHANNEL         5.0     1011.     .0151      5.0   5.0       .035
  3.00        0
  307         404          0          1      CHANNEL         5.0     1308.     .0031      5.0   5.0       .035
  3.00        0
  310         409          0          1      CHANNEL         5.0     3896.     .0100      5.0   5.0       .035
  3.00        0
  313         412          0          1      CHANNEL          .0      820.     .0073    100.0 100.0       .045
 10.00        0
  317         412          0          1      CHANNEL          .0     3628.     .0105    100.0 100.0       .045
 10.00        0
  309         608          0          1      CHANNEL         5.0     1757.     .0091      5.0   5.0       .035
  3.00        0
0TOTAL NUMBER OF GUTTERS/PIPES, 124
1

 5yr 3hr Current Condition SWMM Sump Basin
 Blank


 ARRANGEMENT OF SUBCATCHMENTS AND GUTTERS/PIPES

       GUTTER     TRIBUTARY GUTTER/PIPE                                          TRIBUTARY SUBAREA
         D.A.(AC)

       101       201  302  304    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
   0    0  4284.8

       102       202    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
   0    0      .0

       103       203    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
   0    0      .0

       104       204  311    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
   0    0  3660.8

       105       205  306    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
   0    0   346.9

       106       206    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
   0    0    73.0

       107       207  308    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
   0    0   135.0
```

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 108 | 208 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 109 | 209 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130.6 |
| 110 | 210 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 111 | 211 | 312 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2748.8 |
| 112 | 212 | 314 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2698.9 |
| 113 | 213 | 318 | 319 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2320.0 |
| 114 | 214 | 315 | 316 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 656.6 |
| 115 | 215 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62.1 |
| 116 | 216 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 405.1 |
| 117 | 217 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94.7 |
| 118 | 218 | 320 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1737.0 |
| 119 | 219 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 164.5 |
| 120 | 220 | 121 | 322 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1626.2 |
| 121 | 221 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 211.2 |
| 122 | 222 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 254.7 |
| 123 | 223 | 324 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 718.1 |
| 124 | 224 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 152.3 |
| 125 | 225 | 326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4410.9 |
| 126 | 226 | 301 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4375.7 |
| 127 | 227 | 328 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 521.6 |
| 128 | 228 | 329 | 330 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 457.6 |
| 129 | 229 | 331 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62.1 |
| 130 | 230 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21.8 |
| 131 | 231 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.0 |
| 132 | 232 | 333 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1356.8 |
| 133 | 233 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33.3 |

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 134 | 234 | 335 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 985.0 | | | | | | | | | | | | | | | | | | | | | | |
| 135 | 235 | 336 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 535.0 | | | | | | | | | | | | | | | | | | | | | | |
| 136 | 236 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 66.6 | | | | | | | | | | | | | | | | | | | | | | |
| 137 | 237 | 338 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 858.2 | | | | | | | | | | | | | | | | | | | | | | |
| 138 | 238 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 173.4 | | | | | | | | | | | | | | | | | | | | | | |
| 201 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 277.1 | | | | | | | | | | | | | | | | | | | | | | |
| 202 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| .0 | | | | | | | | | | | | | | | | | | | | | | |
| 203 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| .0 | | | | | | | | | | | | | | | | | | | | | | |
| 204 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 120.3 | | | | | | | | | | | | | | | | | | | | | | |
| 205 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 273.9 | | | | | | | | | | | | | | | | | | | | | | |
| 206 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 73.0 | | | | | | | | | | | | | | | | | | | | | | |
| 207 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4.5 | | | | | | | | | | | | | | | | | | | | | | |
| 208 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| .0 | | | | | | | | | | | | | | | | | | | | | | |
| 209 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 130.6 | | | | | | | | | | | | | | | | | | | | | | |
| 210 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| .0 | | | | | | | | | | | | | | | | | | | | | | |
| 211 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 49.9 | | | | | | | | | | | | | | | | | | | | | | |
| 212 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 284.2 | | | | | | | | | | | | | | | | | | | | | | |
| 213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 418.6 | | | | | | | | | | | | | | | | | | | | | | |
| 214 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 189.4 | | | | | | | | | | | | | | | | | | | | | | |
| 215 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 62.1 | | | | | | | | | | | | | | | | | | | | | | |
| 216 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 405.1 | | | | | | | | | | | | | | | | | | | | | | |
| 217 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 94.7 | | | | | | | | | | | | | | | | | | | | | | |
| 218 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 110.7 | | | | | | | | | | | | | | | | | | | | | | |
| 219 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 164.5 | | | | | | | | | | | | | | | | | | | | | | |
| 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 442.2 | | | | | | | | | | | | | | | | | | | | | | |
| 221 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 211.2 | | | | | | | | | | | | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 222 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 254.7 |
| 223 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 565.8 |
| 224 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 152.3 |
| 225 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35.2 |
| 226 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90.9 |
| 227 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64.0 |
| 228 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 373.8 |
| 229 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39.0 |
| 230 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21.8 |
| 231 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.0 |
| 232 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 338.6 |
| 233 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33.3 |
| 234 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 449.9 |
| 235 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 468.5 |
| 236 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66.6 |
| 237 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 684.8 |
| 238 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 173.4 |
| 301 | 501 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4284.8 |
| 302 | 402 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 303 | 603 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 304 | 401 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4007.7 |
| 306 | 106 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73.0 |
| 307 | 107 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 135.0 |
| 308 | 608 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130.6 |
| 309 | 409 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130.6 |
| 310 | 610 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |

```
    311       404    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  3540.5

    312       112    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  2698.9

    313       513    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  2320.0

    314       412    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  2414.7

    315       115    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0    62.1

    316       516    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0   405.1

    317       117    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0    94.7

    318       118    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  1737.0

    319       119    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0   164.5

    320       520    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  1626.2

    322       420    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0   972.8

    324       124    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0   152.3

    326       126    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  4375.7

    328       128    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0   457.6

    329       129    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0    62.1

    330       130    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0    21.8

    331       131    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0    23.0

    333       432    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  1018.2

    335       135    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0   535.0

    336       136    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0    66.6

    337       537    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0   858.2

    338       138    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0   173.4

    400       125  127  132    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  6289.3

    401       104  105    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  4007.7

    402       602  303    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0      .0

    404       111  114  307    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  3540.5
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```
      409       109  310    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   130.6

      412       313  317    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  2414.7

      420       122  123    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   972.8

      432       133  134    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  1018.2

      501       101    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  4284.8

      513       113    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  2320.0

      516       116    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   405.1

      520       120    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  1626.2

      537       137    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   858.2

      602       102    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0

      603       103    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0

      608       108  309    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   130.6

      610       110    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0
1


 5yr 3hr Current Condition SWMM Sump Basin
 Blank


 HYDROGRAPHS ARE LISTED FOR THE FOLLOWING  85 CONVEYANCE ELEMENTS


          THE UPPER NUMBER IS DISCHARGE IN CFS
          THE LOWER NUMBER IS ONE OF THE FOLLOWING CASES:
                    ( ) DENOTES DEPTH ABOVE INVERT IN FEET
                    (S) DENOTES STORAGE IN AC-FT FOR DETENTION DAM.  DISCHARGE INCLUDES SPILLWAY OUTFLOW.
                    (I) DENOTES GUTTER INFLOW IN CFS FROM SPECIFIED INFLOW HYDROGRAPH
                    (D) DENOTES DISCHARGE IN CFS DIVERTED FROM THIS GUTTER
                    (O) DENOTES STORAGE IN AC-FT FOR SURCHARGED GUTTER

 TIME(HR/MIN)   101       102       103       104       105       106       107       108       109       110
                111       112       113       114       115       116       117       118       119       120
                121       122       123       124       125       126       127       128       129       130
                131       132       133       134       135       136       137       138       301       302
                303       304       306       307       308       309       310       311       312       313
                314       315       316       317       318       319       320       322       324       326
                328       329       330       331       333       335       336       338       400       401
                402       404       412       420       432       501       513       516       520       537
                602       603       608       609       610

   0    5.       0.        2.        1.        0.        0.        0.        0.        6.        0.        5.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )
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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0( ) | 0. .0(S) | | | | | |
| 0 | 10. | 0. .0( ) | 3. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 11. .0( ) | 0. .0( ) | 10. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .1(S) | 0. .0( ) | 0. .1(S) | | | | | |
| 0 | 15. | 0. .0( ) | 5. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 17. .0( ) | 0. .0( ) | 15. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .2(S) | 0. .0( ) | 0. .2(S) | | | | | |
| 0 | 20. | 0. .0( ) | 6. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 23. .0( ) | 0. .0( ) | 21. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | 1. .1(S) | 1. .1(S) | 0. .3(S) | 0. .0( ) | 0. .3(S) | | | | | |
| 0 25. | 1. .0( ) | 8. .0( ) | 3. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 28. .0( ) | 0. .0( ) | 21. .0( ) |
| | 1. .0( ) | 4. .0( ) | 1. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 5. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) |
| | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 1. .0( ) | 0. .0( ) |
| | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) |
| | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) |
| | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) |
| | 1. .0( ) | 4. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | 1. .1(S) | 1. .1(S) | 0. .5(S) | 0. .0( ) | 0. .4(S) | | | | | |
| 0 30. | 5. .0( ) | 9. .0( ) | 1. .0( ) | 6. .0( ) | 1. .0( ) | 1. .0( ) | 2. .0( ) | 34. .0( ) | 2. .0( ) | 15. .0( ) |
| | 4. .0( ) | 10. .0( ) | 5. .0( ) | 7. .0( ) | 1. .0( ) | 3. .0( ) | 11. .0( ) | 4. .0( ) | 1. .0( ) | 6. .0( ) |
| | 3. .0( ) | 2. .0( ) | 4. .0( ) | 3. .0( ) | 1. .0( ) | 1. .0( ) | 2. .0( ) | 7. .0( ) | 2. .0( ) | 0. .0( ) |
| | 1. .0( ) | 3. .0( ) | 1. .0( ) | 3. .0( ) | 8. .0( ) | 2. .0( ) | 3. .0( ) | 3. .0( ) | 0. .0( ) | 0. .1( ) |
| | 0. .1( ) | 0. .1( ) | 0. .0( ) | 1. .2( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) |
| | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) |
| | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 6. .0( ) | 6. .0( ) |
| | 2. .0( ) | 11. .0( ) | 0. .0( ) | 6. .0( ) | 4. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | 1. .2(S) | 1. .1(S) | 1. .7(S) | 0. .0( ) | 0. .5(S) | | | | | |
| 0 35. | 13. .0( ) | 11. .0( ) | 1. .0( ) | 11. .0( ) | 2. .0( ) | 3. .0( ) | 3. .0( ) | 39. .0( ) | 5. .0( ) | 16. .0( ) |
| | 6. .0( ) | 19. .0( ) | 10. .0( ) | 12. .0( ) | 2. .0( ) | 7. .0( ) | 15. .0( ) | 8. .0( ) | 2. .0( ) | 14. .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 6. .0( ) | 5. .0( ) | 11. .0( ) | 7. .0( ) | 3. .0( ) | 3. .0( ) | 5. .0( ) | 14. .0( ) | 3. .0( ) | 0. .0( ) |
| | | 2. .0( ) | 8. .0( ) | 2. .0( ) | 8. .0( ) | 17. .0( ) | 4. .0( ) | 9. .0( ) | 6. .0( ) | 0. .0( ) | 0. .1( ) |
| | | 1. .1( ) | 1. .2( ) | 0. .1( ) | 1. .2( ) | 1. .1( ) | 1. .1( ) | 0. .0( ) | 2. .2( ) | 1. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) |
| | | 1. .1( ) | 0. .1( ) | 0. .0( ) | 0. .3( ) | 0. .1( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 16. .0( ) | 12. .0( ) |
| | | 2. .0( ) | 20. .0( ) | 1. .0( ) | 15. .0( ) | 10. .0( ) | 0. .1(S) | 0. .1(S) | 0. .0(S) | 0. .1(S) | 0. .1(S) |
| | | 2. .2(S) | 1. .1(S) | 1. .9(S) | 0. .0( ) | 0. .7(S) | | | | | |
| 0 | 40. | 19. .0( ) | 8. .0( ) | 0. .0( ) | 15. .0( ) | 2. .0( ) | 4. .0( ) | 2. .0( ) | 45. .0( ) | 7. .0( ) | 10. .0( ) |
| | | 9. .0( ) | 25. .0( ) | 16. .0( ) | 15. .0( ) | 3. .0( ) | 13. .0( ) | 15. .0( ) | 10. .0( ) | 4. .0( ) | 24. .0( ) |
| | | 9. .0( ) | 8. .0( ) | 18. .0( ) | 10. .0( ) | 5. .0( ) | 5. .0( ) | 8. .0( ) | 21. .0( ) | 4. .0( ) | 0. .0( ) |
| | | 2. .0( ) | 14. .0( ) | 2. .0( ) | 15. .0( ) | 24. .0( ) | 5. .0( ) | 15. .0( ) | 9. .0( ) | 0. .0( ) | 0. .1( ) |
| | | 1. .1( ) | 2. .2( ) | 0. .1( ) | 1. .3( ) | 1. .1( ) | 2. .3( ) | 0. .0( ) | 4. .3( ) | 3. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .0( ) | 2. .2( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 2. .2( ) | 0. .1( ) | 0. .1( ) |
| | | 2. .2( ) | 1. .2( ) | 0. .0( ) | 0. .3( ) | 1. .1( ) | 1. .2( ) | 0. .1( ) | 0. .1( ) | 26. .0( ) | 17. .0( ) |
| | | 3. .0( ) | 26. .0( ) | 2. .0( ) | 26. .0( ) | 17. .0( ) | 0. .2(S) | 0. .2(S) | 0. .1(S) | 0. .2(S) | 0. .1(S) |
| | | 2. .3(S) | 1. .1(S) | 1. 1.2(S) | 0. .0( ) | 0. .7(S) | | | | | |
| 0 | 45. | 22. .0( ) | 9. .0( ) | 0. .0( ) | 19. .0( ) | 3. .0( ) | 4. .0( ) | 2. .0( ) | 42. .0( ) | 8. .0( ) | 11. .0( ) |
| | | 11. .0( ) | 28. .0( ) | 21. .0( ) | 16. .0( ) | 3. .0( ) | 17. .0( ) | 14. .0( ) | 10. .0( ) | 5. .0( ) | 33. .0( ) |
| | | 11. .0( ) | 10. .0( ) | 25. .0( ) | 10. .0( ) | 5. .0( ) | 5. .0( ) | 10. .0( ) | 26. .0( ) | 4. .0( ) | 0. .0( ) |
| | | 2. .0( ) | 18. .0( ) | 2. .0( ) | 21. .0( ) | 29. .0( ) | 5. .0( ) | 20. .0( ) | 11. .0( ) | 0. .0( ) | 0. .1( ) |
| | | 1. .1( ) | 3. .3( ) | 0. .1( ) | 2. .3( ) | 1. .1( ) | 4. .4( ) | 0. .0( ) | 7. .3( ) | 6. .3( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .1( ) | 0. .0( ) | 3. .2( ) | 1. .2( ) | 0. .1( ) | 0. .0( ) | 4. .2( ) | 1. .1( ) | 0. .1( ) |
| | | 3. .2( ) | 1. .2( ) | 0. .0( ) | 1. .4( ) | 2. .2( ) | 3. .2( ) | 0. .1( ) | 0. .1( ) | 33. .0( ) | 22. .0( ) |
| | | 3. .0( ) | 29. .0( ) | 3. .0( ) | 34. .0( ) | 23. .0( ) | 0. .3(S) | 0. .3(S) | 0. .2(S) | 0. .4(S) | 0. .3(S) |
| | | 2. .3(S) | 1. .1(S) | 1. 1.6(S) | 0. .0( ) | 0. .8(S) | | | | | |
| 0 | 50. | 23. .0( ) | 7. .0( ) | 0. .0( ) | 21. .0( ) | 3. .0( ) | 4. .0( ) | 2. .0( ) | 38. .0( ) | 7. .0( ) | 5. .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 14. .0( ) | 29. .0( ) | 23. .0( ) | 15. .0( ) | 3. .0( ) | 19. .0( ) | 12. .0( ) | 9. .0( ) | 5. .0( ) | 38. .0( ) |
| | | 12. .0( ) | 11. .0( ) | 28. .0( ) | 9. .0( ) | 5. .0( ) | 5. .0( ) | 12. .0( ) | 27. .0( ) | 4. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 20. .0( ) | 2. .0( ) | 25. .0( ) | 30. .0( ) | 4. .0( ) | 23. .0( ) | 11. .0( ) | 0. .0( ) | 0. .1( ) |
| | | 1. .1( ) | 5. .4( ) | 0. .1( ) | 2. .3( ) | 1. .1( ) | 5. .4( ) | 0. .0( ) | 10. .4( ) | 8. .3( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .1( ) | 0. .0( ) | 4. .2( ) | 2. .2( ) | 1. .1( ) | 0. .0( ) | 6. .3( ) | 1. .2( ) | 1. .2( ) |
| | | 5. .2( ) | 1. .2( ) | 0. .0( ) | 1. .4( ) | 3. .2( ) | 4. .2( ) | 0. .1( ) | 1. .1( ) | 37. .0( ) | 24. .0( ) |
| | | 3. .0( ) | 31. .0( ) | 4. .0( ) | 39. .0( ) | 27. .0( ) | 0. .5(S) | 0. .4(S) | 0. .3(S) | 0. .7(S) | 0. .4(S) |
| | | 3. .4(S) | 1. .1(S) | 1. 1.9(S) | 0. .0( ) | 0. .9(S) | | | | | |
| 0 | 55. | 24. .0( ) | 8. .0( ) | 0. .0( ) | 24. .0( ) | 3. .0( ) | 3. .0( ) | 2. .0( ) | 36. .0( ) | 7. .0( ) | 6. .0( ) |
| | | 16. .0( ) | 28. .0( ) | 24. .0( ) | 14. .0( ) | 3. .0( ) | 20. .0( ) | 10. .0( ) | 8. .0( ) | 5. .0( ) | 41. .0( ) |
| | | 11. .0( ) | 11. .0( ) | 29. .0( ) | 8. .0( ) | 5. .0( ) | 4. .0( ) | 14. .0( ) | 26. .0( ) | 4. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 21. .0( ) | 2. .0( ) | 27. .0( ) | 29. .0( ) | 4. .0( ) | 24. .0( ) | 10. .0( ) | 0. .0( ) | 1. .1( ) |
| | | 1. .1( ) | 7. .4( ) | 1. .1( ) | 2. .3( ) | 1. .1( ) | 6. .4( ) | 0. .0( ) | 13. .4( ) | 11. .3( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .1( ) | 0. .0( ) | 4. .2( ) | 2. .2( ) | 1. .1( ) | 0. .0( ) | 10. .3( ) | 2. .2( ) | 1. .2( ) |
| | | 7. .3( ) | 1. .2( ) | 0. .0( ) | 1. .4( ) | 4. .2( ) | 6. .3( ) | 1. .1( ) | 1. .1( ) | 39. .0( ) | 27. .0( ) |
| | | 3. .0( ) | 32. .0( ) | 4. .0( ) | 40. .0( ) | 29. .0( ) | 0. .7(S) | 0. .6(S) | 0. .5(S) | 0. .9(S) | 0. .6(S) |
| | | 3. .4(S) | 1. .1(S) | 1. 2.1(S) | 0. .0( ) | 0. .9(S) | | | | | |
| 1 | 0. | 24. .0( ) | 5. .0( ) | 0. .0( ) | 26. .0( ) | 3. .0( ) | 3. .0( ) | 3. .0( ) | 32. .0( ) | 6. .0( ) | 0. .0( ) |
| | | 18. .0( ) | 26. .0( ) | 23. .0( ) | 14. .0( ) | 3. .0( ) | 20. .0( ) | 9. .0( ) | 8. .0( ) | 5. .0( ) | 43. .0( ) |
| | | 10. .0( ) | 11. .0( ) | 28. .0( ) | 8. .0( ) | 5. .0( ) | 4. .0( ) | 15. .0( ) | 25. .0( ) | 4. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 21. .0( ) | 2. .0( ) | 28. .0( ) | 28. .0( ) | 3. .0( ) | 24. .0( ) | 9. .0( ) | 0. .0( ) | 1. .2( ) |
| | | 1. .1( ) | 9. .5( ) | 1. .1( ) | 2. .3( ) | 1. .1( ) | 6. .4( ) | 0. .0( ) | 16. .4( ) | 13. .4( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .1( ) | 0. .0( ) | 5. .2( ) | 2. .2( ) | 1. .1( ) | 0. .0( ) | 13. .4( ) | 2. .2( ) | 1. .2( ) |
| | | 9. .3( ) | 2. .2( ) | 0. .0( ) | 1. .4( ) | 6. .3( ) | 7. .3( ) | 1. .1( ) | 1. .2( ) | 41. .0( ) | 29. .0( ) |
| | | 4. .0( ) | 34. .0( ) | 5. .0( ) | 39. .0( ) | 30. .0( ) | 0. .8(S) | 0. .8(S) | 0. .6(S) | 0. 1.2(S) | 0. .7(S) |
| | | 3. .4(S) | 1. .1(S) | 1. 2.4(S) | 0. .0( ) | 0. .9(S) | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5. | 25. | 6. | 0. | 29. | 3. | 3. | 3. | 29. | 6. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 20. | 26. | 22. | 13. | 2. | 19. | 8. | 8. | 4. | 43. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 10. | 10. | 26. | 7. | 5. | 4. | 16. | 23. | 3. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 22. | 1. | 29. | 26. | 3. | 23. | 8. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 1. | 11. | 1. | 2. | 1. | 6. | 0. | 19. | 14. | 0. |
| | | .1( ) | .5( ) | .2( ) | .3( ) | .1( ) | .4( ) | .0( ) | .5( ) | .4( ) | .0( ) |
| | | 1. | 1. | 0. | 5. | 3. | 1. | 0. | 15. | 2. | 1. |
| | | .1( ) | .1( ) | .0( ) | .2( ) | .2( ) | .1( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 11. | 2. | 0. | 1. | 8. | 9. | 1. | 1. | 43. | 32. |
| | | .3( ) | .3( ) | .0( ) | .4( ) | .3( ) | .3( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 4. | 35. | 5. | 36. | 30. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.0(S) | .9(S) | .8(S) | 1.5(S) | .9(S) |
| | | 3. | 1. | 1. | 0. | 0. | | | | | |
| | | .4(S) | .1(S) | 2.7(S) | .0( ) | .9(S) | | | | | |
| 1 | 10. | 27. | 4. | 0. | 32. | 3. | 3. | 3. | 25. | 5. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 21. | 26. | 22. | 12. | 2. | 18. | 7. | 7. | 4. | 43. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 9. | 9. | 24. | 6. | 5. | 4. | 17. | 22. | 3. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 22. | 0. | 28. | 25. | 3. | 21. | 7. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 1. | 14. | 1. | 2. | 1. | 6. | 0. | 22. | 16. | 0. |
| | | .1( ) | .5( ) | .2( ) | .4( ) | .1( ) | .4( ) | .0( ) | .5( ) | .4( ) | .0( ) |
| | | 2. | 1. | 0. | 5. | 3. | 1. | 0. | 17. | 3. | 1. |
| | | .1( ) | .1( ) | .0( ) | .3( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 12. | 2. | 0. | 0. | 9. | 10. | 1. | 1. | 44. | 35. |
| | | .3( ) | .3( ) | .0( ) | .3( ) | .3( ) | .3( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 4. | 36. | 5. | 34. | 28. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.2(S) | 1.1(S) | .9(S) | 1.8(S) | 1.0(S) |
| | | 3. | 1. | 1. | 0. | 0. | | | | | |
| | | .4(S) | .0(S) | 2.9(S) | .0( ) | .9(S) | | | | | |
| 1 | 15. | 28. | 5. | 0. | 34. | 3. | 3. | 3. | 22. | 5. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 22. | 25. | 21. | 11. | 2. | 17. | 6. | 7. | 4. | 43. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 9. | 9. | 23. | 5. | 5. | 3. | 18. | 21. | 3. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 23. | 0. | 28. | 23. | 2. | 20. | 7. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 1. | 17. | 1. | 3. | 1. | 6. | 0. | 24. | 17. | 0. |
| | | .1( ) | .6( ) | .2( ) | .4( ) | .1( ) | .4( ) | .0( ) | .5( ) | .4( ) | .0( ) |
| | | 2. | 1. | 0. | 5. | 3. | 1. | 0. | 19. | 3. | 1. |
| | | .2( ) | .1( ) | .0( ) | .3( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 13. | 2. | 0. | 0. | 11. | 11. | 1. | 2. | 45. | 37. |
| | | .3( ) | .3( ) | .0( ) | .3( ) | .3( ) | .4( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 4. | 36. | 5. | 31. | 28. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.4(S) | 1.2(S) | 1.0(S) | 2.1(S) | 1.2(S) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 3. .5(S) | 0. .0(S) | 1. 3.1(S) | 0. .0( ) | 0. .9(S) | | | | | |
| 1 | 20. | 30. .0( ) | 2. .0( ) | 0. .0( ) | 35. .0( ) | 3. .0( ) | 2. .0( ) | 3. .0( ) | 18. .0( ) | 4. .0( ) | 0. .0( ) |
| | | 23. .0( ) | 24. .0( ) | 20. .0( ) | 10. .0( ) | 2. .0( ) | 16. .0( ) | 5. .0( ) | 6. .0( ) | 4. .0( ) | 43. .0( ) |
| | | 8. .0( ) | 8. .0( ) | 22. .0( ) | 5. .0( ) | 5. .0( ) | 3. .0( ) | 18. .0( ) | 19. .0( ) | 3. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 23. .0( ) | 0. .0( ) | 28. .0( ) | 21. .0( ) | 2. .0( ) | 18. .0( ) | 6. .0( ) | 0. .0( ) | 1. .2( ) |
| | | 1. .1( ) | 19. .6( ) | 1. .2( ) | 3. .4( ) | 1. .1( ) | 5. .4( ) | 0. .0( ) | 26. .5( ) | 18. .4( ) | 0. .0( ) |
| | | 2. .2( ) | 1. .1( ) | 0. .0( ) | 5. .3( ) | 3. .2( ) | 2. .2( ) | 0. .0( ) | 20. .4( ) | 3. .2( ) | 2. .2( ) |
| | | 14. .3( ) | 2. .3( ) | 0. .0( ) | 0. .3( ) | 12. .3( ) | 12. .4( ) | 1. .1( ) | 2. .2( ) | 46. .0( ) | 38. .0( ) |
| | | 4. .0( ) | 36. .0( ) | 5. .0( ) | 30. .0( ) | 28. .0( ) | 0. 1.6(S) | 0. 1.4(S) | 0. 1.1(S) | 0. 2.4(S) | 0. 1.3(S) |
| | | 3. .5(S) | 0. .0(S) | 1. 3.3(S) | 0. .0( ) | 0. .9(S) | | | | | |
| 1 | 25. | 32. .0( ) | 3. .0( ) | 0. .0( ) | 36. .0( ) | 3. .0( ) | 2. .0( ) | 3. .0( ) | 16. .0( ) | 4. .0( ) | 0. .0( ) |
| | | 24. .0( ) | 23. .0( ) | 19. .0( ) | 10. .0( ) | 2. .0( ) | 15. .0( ) | 5. .0( ) | 5. .0( ) | 3. .0( ) | 42. .0( ) |
| | | 8. .0( ) | 8. .0( ) | 20. .0( ) | 4. .0( ) | 4. .0( ) | 3. .0( ) | 19. .0( ) | 18. .0( ) | 2. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 23. .0( ) | 0. .0( ) | 27. .0( ) | 20. .0( ) | 2. .0( ) | 17. .0( ) | 5. .0( ) | 0. .0( ) | 2. .2( ) |
| | | 0. .1( ) | 22. .6( ) | 1. .2( ) | 3. .4( ) | 1. .1( ) | 5. .4( ) | 0. .0( ) | 28. .5( ) | 19. .4( ) | 0. .0( ) |
| | | 2. .2( ) | 1. .1( ) | 0. .0( ) | 5. .3( ) | 4. .2( ) | 2. .2( ) | 0. .0( ) | 21. .4( ) | 3. .2( ) | 2. .2( ) |
| | | 14. .4( ) | 2. .3( ) | 0. .0( ) | 0. .3( ) | 13. .3( ) | 13. .4( ) | 1. .1( ) | 2. .2( ) | 46. .0( ) | 39. .0( ) |
| | | 4. .0( ) | 36. .0( ) | 5. .0( ) | 28. .0( ) | 27. .0( ) | 0. 1.8(S) | 0. 1.5(S) | 0. 1.2(S) | 0. 2.7(S) | 0. 1.4(S) |
| | | 3. .5(S) | 0. .0(S) | 1. 3.4(S) | 0. .0( ) | 0. .9(S) | | | | | |
| 1 | 30. | 33. .0( ) | 0. .0( ) | 0. .0( ) | 37. .0( ) | 3. .0( ) | 2. .0( ) | 1. .0( ) | 12. .0( ) | 3. .0( ) | 0. .0( ) |
| | | 24. .0( ) | 22. .0( ) | 18. .0( ) | 9. .0( ) | 2. .0( ) | 14. .0( ) | 4. .0( ) | 5. .0( ) | 3. .0( ) | 41. .0( ) |
| | | 7. .0( ) | 7. .0( ) | 19. .0( ) | 4. .0( ) | 4. .0( ) | 2. .0( ) | 19. .0( ) | 17. .0( ) | 2. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 23. .0( ) | 0. .0( ) | 27. .0( ) | 18. .0( ) | 2. .0( ) | 16. .0( ) | 5. .0( ) | 0. .0( ) | 2. .2( ) |
| | | 0. .1( ) | 24. .7( ) | 1. .2( ) | 2. .4( ) | 1. .1( ) | 4. .4( ) | 0. .1( ) | 29. .5( ) | 20. .4( ) | 0. .0( ) |
| | | 3. .2( ) | 1. .1( ) | 0. .0( ) | 5. .3( ) | 4. .3( ) | 2. .2( ) | 0. .0( ) | 22. .4( ) | 3. .2( ) | 2. .2( ) |
| | | 15. .4( ) | 2. .3( ) | 0. .0( ) | 0. .3( ) | 14. .4( ) | 13. .4( ) | 1. .1( ) | 2. .2( ) | 46. .0( ) | 40. .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4.<br>.0( ) | 35.<br>.0( ) | 5.<br>.0( ) | 26.<br>.0( ) | 27.<br>.0( ) | 0.<br>2.0(S) | 0.<br>1.6(S) | 0.<br>1.3(S) | 0.<br>3.0(S) | 0.<br>1.6(S) |
| | | 3.<br>.4(S) | 0.<br>.0(S) | 1.<br>3.5(S) | 0.<br>.0( ) | 0.<br>.9(S) | | | | | |
| 1 | 35. | 35.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 38.<br>.0( ) | 3.<br>.0( ) | 2.<br>.0( ) | 1.<br>.0( ) | 9.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) |
| | | 24.<br>.0( ) | 21.<br>.0( ) | 17.<br>.0( ) | 8.<br>.0( ) | 2.<br>.0( ) | 13.<br>.0( ) | 3.<br>.0( ) | 5.<br>.0( ) | 3.<br>.0( ) | 40.<br>.0( ) |
| | | 6.<br>.0( ) | 6.<br>.0( ) | 17.<br>.0( ) | 3.<br>.0( ) | 4.<br>.0( ) | 2.<br>.0( ) | 18.<br>.0( ) | 15.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 24.<br>.0( ) | 0.<br>.0( ) | 26.<br>.0( ) | 17.<br>.0( ) | 2.<br>.0( ) | 15.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 2.<br>.2( ) |
| | | 0.<br>.1( ) | 26.<br>.7( ) | 1.<br>.2( ) | 2.<br>.3( ) | 1.<br>.1( ) | 4.<br>.3( ) | 0.<br>.1( ) | 30.<br>.5( ) | 20.<br>.4( ) | 0.<br>.0( ) |
| | | 3.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) | 5.<br>.2( ) | 4.<br>.3( ) | 2.<br>.2( ) | 0.<br>.0( ) | 22.<br>.5( ) | 3.<br>.2( ) | 2.<br>.2( ) |
| | | 15.<br>.4( ) | 2.<br>.3( ) | 0.<br>.0( ) | 0.<br>.3( ) | 15.<br>.4( ) | 13.<br>.4( ) | 1.<br>.1( ) | 2.<br>.2( ) | 46.<br>.0( ) | 40.<br>.0( ) |
| | | 3.<br>.0( ) | 34.<br>.0( ) | 5.<br>.0( ) | 24.<br>.0( ) | 26.<br>.0( ) | 0.<br>2.2(S) | 0.<br>1.8(S) | 0.<br>1.4(S) | 0.<br>3.3(S) | 0.<br>1.7(S) |
| | | 3.<br>.4(S) | 0.<br>.0(S) | 1.<br>3.6(S) | 0.<br>.0( ) | 0.<br>.9(S) | | | | | |
| 1 | 40. | 36.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 38.<br>.0( ) | 1.<br>.0( ) | 2.<br>.0( ) | 1.<br>.0( ) | 5.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) |
| | | 24.<br>.0( ) | 20.<br>.0( ) | 17.<br>.0( ) | 8.<br>.0( ) | 1.<br>.0( ) | 12.<br>.0( ) | 3.<br>.0( ) | 4.<br>.0( ) | 3.<br>.0( ) | 39.<br>.0( ) |
| | | 6.<br>.0( ) | 6.<br>.0( ) | 16.<br>.0( ) | 3.<br>.0( ) | 4.<br>.0( ) | 2.<br>.0( ) | 18.<br>.0( ) | 14.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 24.<br>.0( ) | 0.<br>.0( ) | 25.<br>.0( ) | 15.<br>.0( ) | 1.<br>.0( ) | 14.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 2.<br>.2( ) |
| | | 0.<br>.1( ) | 28.<br>.7( ) | 1.<br>.2( ) | 2.<br>.3( ) | 1.<br>.2( ) | 4.<br>.3( ) | 0.<br>.1( ) | 31.<br>.6( ) | 20.<br>.4( ) | 0.<br>.0( ) |
| | | 3.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) | 5.<br>.2( ) | 4.<br>.3( ) | 2.<br>.2( ) | 0.<br>.0( ) | 22.<br>.5( ) | 3.<br>.2( ) | 2.<br>.2( ) |
| | | 15.<br>.4( ) | 2.<br>.3( ) | 0.<br>.0( ) | 0.<br>.2( ) | 16.<br>.4( ) | 14.<br>.4( ) | 1.<br>.1( ) | 2.<br>.2( ) | 46.<br>.0( ) | 39.<br>.0( ) |
| | | 3.<br>.0( ) | 33.<br>.0( ) | 5.<br>.0( ) | 22.<br>.0( ) | 25.<br>.0( ) | 0.<br>2.5(S) | 0.<br>1.9(S) | 0.<br>1.5(S) | 0.<br>3.5(S) | 0.<br>1.8(S) |
| | | 3.<br>.4(S) | 0.<br>.0(S) | 2.<br>3.7(S) | 0.<br>.0( ) | 0.<br>.9(S) | | | | | |
| 1 | 45. | 37.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 38.<br>.0( ) | 1.<br>.0( ) | 2.<br>.0( ) | 2.<br>.0( ) | 2.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) |
| | | 24.<br>.0( ) | 19.<br>.0( ) | 16.<br>.0( ) | 7.<br>.0( ) | 0.<br>.0( ) | 11.<br>.0( ) | 3.<br>.0( ) | 4.<br>.0( ) | 2.<br>.0( ) | 37.<br>.0( ) |
| | | 5.<br>.0( ) | 5.<br>.0( ) | 15.<br>.0( ) | 3.<br>.0( ) | 4.<br>.0( ) | 2.<br>.0( ) | 18.<br>.0( ) | 13.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 24.<br>.0( ) | 0.<br>.0( ) | 24.<br>.0( ) | 14.<br>.0( ) | 0.<br>.0( ) | 13.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 2.<br>.2( ) |
| | | 0.<br>.1( ) | 30.<br>.7( ) | 1.<br>.2( ) | 2.<br>.3( ) | 2.<br>.2( ) | 3.<br>.3( ) | 0.<br>.1( ) | 31.<br>.6( ) | 20.<br>.4( ) | 0.<br>.0( ) |
| | | 3.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) | 5.<br>.2( ) | 4.<br>.3( ) | 2.<br>.2( ) | 0.<br>.0( ) | 22.<br>.4( ) | 3.<br>.2( ) | 2.<br>.2( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 15. .4( ) | 2. .3( ) | 0. .0( ) | 0. .2( ) | 17. .4( ) | 14. .4( ) | 1. .1( ) | 2. .2( ) | 46. .0( ) | 39. .0( ) |
| | | 3. .0( ) | 32. .0( ) | 5. .0( ) | 20. .0( ) | 24. .0( ) | 0. 2.7(S) | 0. 2.0(S) | 0. 1.6(S) | 0. 3.8(S) | 0. 1.9(S) |
| | | 3. .4(S) | 0. .0(S) | 2. 3.7(S) | 0. .0( ) | 0. .9(S) | | | | | |
| 1 | 50. | 38. .0( ) | 0. .0( ) | 0. .0( ) | 38. .0( ) | 1. .0( ) | 1. .0( ) | 2. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) |
| | | 23. .0( ) | 18. .0( ) | 15. .0( ) | 6. .0( ) | 0. .0( ) | 10. .0( ) | 2. .0( ) | 4. .0( ) | 2. .0( ) | 36. .0( ) |
| | | 5. .0( ) | 5. .0( ) | 14. .0( ) | 2. .0( ) | 4. .0( ) | 2. .0( ) | 18. .0( ) | 12. .0( ) | 2. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 24. .0( ) | 0. .0( ) | 24. .0( ) | 13. .0( ) | 0. .0( ) | 12. .0( ) | 3. .0( ) | 0. .0( ) | 2. .2( ) |
| | | 0. .1( ) | 31. .7( ) | 1. .2( ) | 2. .3( ) | 2. .2( ) | 3. .3( ) | 0. .1( ) | 31. .6( ) | 20. .4( ) | 0. .0( ) |
| | | 4. .2( ) | 1. .1( ) | 0. .0( ) | 5. .2( ) | 4. .3( ) | 2. .2( ) | 0. .0( ) | 22. .4( ) | 3. .2( ) | 2. .2( ) |
| | | 14. .4( ) | 2. .3( ) | 0. .0( ) | 0. .2( ) | 18. .4( ) | 14. .4( ) | 1. .1( ) | 2. .2( ) | 45. .0( ) | 39. .0( ) |
| | | 3. .0( ) | 32. .0( ) | 5. .0( ) | 19. .0( ) | 24. .0( ) | 0. 3.0(S) | 0. 2.1(S) | 0. 1.6(S) | 0. 4.1(S) | 0. 1.9(S) |
| | | 3. .4(S) | 0. .0(S) | 2. 3.7(S) | 0. .0( ) | 0. .9(S) | | | | | |
| 1 | 55. | 38. .0( ) | 0. .0( ) | 0. .0( ) | 37. .0( ) | 1. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) |
| | | 23. .0( ) | 17. .0( ) | 14. .0( ) | 6. .0( ) | 0. .0( ) | 9. .0( ) | 2. .0( ) | 3. .0( ) | 2. .0( ) | 34. .0( ) |
| | | 5. .0( ) | 5. .0( ) | 13. .0( ) | 2. .0( ) | 4. .0( ) | 2. .0( ) | 17. .0( ) | 11. .0( ) | 2. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 24. .0( ) | 0. .0( ) | 23. .0( ) | 12. .0( ) | 0. .0( ) | 12. .0( ) | 3. .0( ) | 0. .0( ) | 2. .2( ) |
| | | 0. .1( ) | 32. .7( ) | 1. .2( ) | 2. .3( ) | 2. .2( ) | 3. .3( ) | 0. .1( ) | 31. .6( ) | 19. .4( ) | 0. .0( ) |
| | | 4. .2( ) | 1. .1( ) | 0. .0( ) | 4. .2( ) | 4. .3( ) | 2. .2( ) | 0. .0( ) | 22. .4( ) | 3. .2( ) | 2. .2( ) |
| | | 14. .4( ) | 2. .3( ) | 0. .0( ) | 0. .2( ) | 18. .4( ) | 14. .4( ) | 1. .1( ) | 2. .2( ) | 45. .0( ) | 38. .0( ) |
| | | 3. .0( ) | 31. .0( ) | 4. .0( ) | 18. .0( ) | 23. .0( ) | 0. 3.2(S) | 0. 2.2(S) | 0. 1.7(S) | 0. 4.3(S) | 0. 2.0(S) |
| | | 2. .4(S) | 0. .0(S) | 2. 3.7(S) | 0. .0( ) | 0. .9(S) | | | | | |
| 2 | 0. | 39. .0( ) | 0. .0( ) | 0. .0( ) | 37. .0( ) | 1. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) |
| | | 22. .0( ) | 16. .0( ) | 14. .0( ) | 5. .0( ) | 0. .0( ) | 9. .0( ) | 2. .0( ) | 3. .0( ) | 2. .0( ) | 33. .0( ) |
| | | 4. .0( ) | 4. .0( ) | 12. .0( ) | 2. .0( ) | 4. .0( ) | 1. .0( ) | 17. .0( ) | 11. .0( ) | 2. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 24. .0( ) | 0. .0( ) | 22. .0( ) | 11. .0( ) | 0. .0( ) | 11. .0( ) | 3. .0( ) | 0. .0( ) | 2. .2( ) |
| | | 0. .1( ) | 33. .7( ) | 1. .2( ) | 2. .3( ) | 2. .2( ) | 3. .3( ) | 0. .1( ) | 31. .6( ) | 19. .4( ) | 0. .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4. | 1. | 0. | 4. | 4. | 2. | 0. | 21. | 3. | 2. |
| | | .2( ) | .1( ) | .0( ) | .2( ) | .3( ) | .2( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 14. | 2. | 0. | 0. | 18. | 13. | 1. | 2. | 44. | 38. |
| | | .4( ) | .3( ) | .0( ) | .2( ) | .4( ) | .4( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 3. | 30. | 4. | 17. | 22. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.5(S) | 2.3(S) | 1.8(S) | 4.5(S) | 2.1(S) |
| | | 2. | 0. | 3. | 0. | 0. | | | | | |
| | | .3(S) | .0(S) | 3.7(S) | .0( ) | .9(S) | | | | | |
| 2 | 5. | 39. | 0. | 0. | 36. | 1. | 0. | 3. | 0. | 2. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 22. | 16. | 13. | 5. | 0. | 8. | 0. | 3. | 2. | 31. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 4. | 11. | 2. | 4. | 0. | 16. | 10. | 2. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 24. | 0. | 21. | 10. | 0. | 10. | 3. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 34. | 1. | 2. | 3. | 2. | 0. | 31. | 19. | 0. |
| | | .1( ) | .8( ) | .2( ) | .3( ) | .2( ) | .3( ) | .1( ) | .6( ) | .4( ) | .0( ) |
| | | 4. | 1. | 0. | 4. | 4. | 2. | 0. | 20. | 3. | 2. |
| | | .2( ) | .1( ) | .0( ) | .2( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 13. | 2. | 0. | 0. | 19. | 13. | 1. | 2. | 43. | 37. |
| | | .3( ) | .3( ) | .0( ) | .2( ) | .4( ) | .4( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 3. | 29. | 4. | 15. | 21. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.8(S) | 2.4(S) | 1.8(S) | 4.8(S) | 2.2(S) |
| | | 2. | 0. | 3. | 0. | 0. | | | | | |
| | | .3(S) | .0(S) | 3.7(S) | .0( ) | .9(S) | | | | | |
| 2 | 10. | 39. | 0. | 0. | 35. | 1. | 0. | 3. | 0. | 2. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 21. | 15. | 12. | 5. | 0. | 8. | 0. | 3. | 2. | 30. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 4. | 11. | 2. | 4. | 0. | 15. | 9. | 1. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 23. | 0. | 20. | 9. | 0. | 10. | 2. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 34. | 1. | 2. | 3. | 2. | 0. | 30. | 18. | 0. |
| | | .1( ) | .8( ) | .2( ) | .3( ) | .2( ) | .3( ) | .1( ) | .5( ) | .4( ) | .0( ) |
| | | 4. | 1. | 0. | 4. | 4. | 2. | 0. | 20. | 3. | 2. |
| | | .2( ) | .1( ) | .0( ) | .2( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 13. | 2. | 0. | 0. | 19. | 13. | 1. | 2. | 42. | 36. |
| | | .3( ) | .3( ) | .0( ) | .2( ) | .4( ) | .4( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 2. | 28. | 4. | 14. | 20. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 4.0(S) | 2.5(S) | 1.9(S) | 5.0(S) | 2.2(S) |
| | | 2. | 0. | 2. | 0. | 0. | | | | | |
| | | .3(S) | .0(S) | 3.7(S) | .0( ) | .9(S) | | | | | |
| 2 | 15. | 39. | 0. | 0. | 34. | 1. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 21. | 14. | 12. | 4. | 0. | 7. | 0. | 2. | 2. | 28. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 4. | 10. | 0. | 3. | 0. | 15. | 8. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 23. | 0. | 19. | 9. | 0. | 9. | 2. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 34. | 1. | 2. | 2. | 2. | 0. | 30. | 18. | 0. |
| | | .1( ) | .8( ) | .2( ) | .4( ) | .2( ) | .2( ) | .1( ) | .5( ) | .4( ) | .0( ) |
| | | 4. | 1. | 0. | 3. | 4. | 2. | 0. | 19. | 3. | 1. |
| | | .2( ) | .1( ) | .0( ) | .2( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 12. | 2. | 0. | 0. | 19. | 13. | 1. | 2. | 41. | 36. |
| | | .3( ) | .3( ) | .0( ) | .2( ) | .4( ) | .4( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 2. | 27. | 3. | 13. | 19. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 4.3(S) | 2.5(S) | 1.9(S) | 5.2(S) | 2.3(S) |
| | | 2. | 0. | 2. | 0. | 0. | | | | | |
| | | .3(S) | .0(S) | 3.7(S) | .0( ) | .9(S) | | | | | |
| 2 | 20. | 39. | 0. | 0. | 34. | 1. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 20. | 13. | 11. | 4. | 0. | 7. | 0. | 2. | 1. | 27. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 3. | 9. | 0. | 3. | 0. | 14. | 8. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 23. | 0. | 19. | 8. | 0. | 8. | 2. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 35. | 1. | 2. | 2. | 1. | 0. | 29. | 17. | 0. |
| | | .1( ) | .8( ) | .2( ) | .4( ) | .2( ) | .2( ) | .1( ) | .5( ) | .4( ) | .0( ) |
| | | 4. | 1. | 0. | 3. | 3. | 2. | 0. | 18. | 2. | 1. |
| | | .2( ) | .1( ) | .0( ) | .2( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 12. | 2. | 0. | 0. | 19. | 12. | 1. | 2. | 40. | 35. |
| | | .3( ) | .2( ) | .0( ) | .2( ) | .4( ) | .4( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 2. | 26. | 3. | 12. | 19. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 4.6(S) | 2.6(S) | 2.0(S) | 5.4(S) | 2.4(S) |
| | | 2. | 0. | 2. | 0. | 0. | | | | | |
| | | .3(S) | .0(S) | 3.7(S) | .0( ) | .9(S) | | | | | |
| 2 | 25. | 39. | 0. | 0. | 33. | 1. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 19. | 13. | 10. | 4. | 0. | 6. | 0. | 2. | 0. | 26. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 3. | 8. | 0. | 3. | 0. | 14. | 7. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 22. | 0. | 18. | 7. | 0. | 8. | 2. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 35. | 1. | 2. | 2. | 1. | 0. | 29. | 16. | 0. |
| | | .1( ) | .8( ) | .2( ) | .4( ) | .2( ) | .2( ) | .1( ) | .5( ) | .4( ) | .0( ) |
| | | 4. | 1. | 0. | 3. | 3. | 2. | 0. | 18. | 2. | 1. |
| | | .2( ) | .1( ) | .0( ) | .2( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 11. | 1. | 0. | 0. | 19. | 12. | 1. | 2. | 39. | 34. |
| | | .3( ) | .2( ) | .0( ) | .2( ) | .4( ) | .4( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 2. | 25. | 3. | 11. | 18. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 4.9(S) | 2.7(S) | 2.0(S) | 5.5(S) | 2.4(S) |
| | | 2. | 0. | 2. | 0. | 0. | | | | | |
| | | .3(S) | .0(S) | 3.7(S) | .0( ) | .9(S) | | | | | |
| 2 | 30. | 38. | 0. | 0. | 32. | 1. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 19. | 12. | 10. | 3. | 0. | 6. | 0. | 2. | 0. | 24. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 3. | 8. | 0. | 3. | 0. | 13. | 6. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 22. | 0. | 17. | 7. | 0. | 8. | 2. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 34. | 1. | 2. | 2. | 1. | 0. | 28. | 16. | 0. |
| | | .1( ) | .8( ) | .2( ) | .4( ) | .2( ) | .2( ) | .1( ) | .5( ) | .4( ) | .0( ) |
| | | 4. | 1. | 0. | 3. | 3. | 2. | 0. | 17. | 2. | 1. |
| | | .2( ) | .1( ) | .0( ) | .2( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 11. | 1. | 0. | 0. | 19. | 12. | 1. | 2. | 38. | 33. |
| | | .3( ) | .2( ) | .0( ) | .2( ) | .4( ) | .4( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 2. | 24. | 3. | 11. | 17. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 5.1(S) | 2.8(S) | 2.1(S) | 5.7(S) | 2.5(S) |
| | | 2. | 0. | 2. | 0. | 0. | | | | | |
| | | .3(S) | .0(S) | 3.7(S) | .0( ) | .9(S) | | | | | |
| 2 | 35. | 38. | 0. | 0. | 31. | 1. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 18. | 11. | 9. | 3. | 0. | 5. | 0. | 2. | 0. | 23. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 3. | 7. | 0. | 3. | 0. | 12. | 6. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 21. | 0. | 16. | 6. | 0. | 7. | 1. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 34. | 1. | 2. | 2. | 1. | 0. | 27. | 15. | 0. |
| | | .1( ) | .8( ) | .1( ) | .3( ) | .2( ) | .1( ) | .1( ) | .5( ) | .4( ) | .0( ) |
| | | 3. | 1. | 0. | 2. | 3. | 2. | 0. | 16. | 2. | 1. |
| | | .2( ) | .1( ) | .0( ) | .2( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 10. | 1. | 0. | 0. | 19. | 11. | 1. | 2. | 37. | 32. |
| | | .3( ) | .2( ) | .0( ) | .1( ) | .4( ) | .4( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 2. | 23. | 2. | 10. | 16. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 5.4(S) | 2.8(S) | 2.1(S) | 5.9(S) | 2.5(S) |
| | | 2. | 0. | 2. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 3.7(S) | .0( ) | .9(S) | | | | | |
| 2 | 40. | 37. | 0. | 0. | 30. | 1. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 17. | 11. | 9. | 3. | 0. | 5. | 0. | 2. | 0. | 22. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 2. | 7. | 0. | 3. | 0. | 12. | 5. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 21. | 0. | 15. | 6. | 0. | 7. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 34. | 1. | 2. | 2. | 1. | 0. | 27. | 15. | 0. |
| | | .1( ) | .8( ) | .1( ) | .3( ) | .2( ) | .1( ) | .1( ) | .5( ) | .4( ) | .0( ) |
| | | 3. | 1. | 0. | 2. | 3. | 2. | 0. | 15. | 2. | 1. |
| | | .2( ) | .1( ) | .0( ) | .2( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 10. | 1. | 0. | 0. | 18. | 11. | 1. | 2. | 35. | 31. |
| | | .3( ) | .2( ) | .0( ) | .1( ) | .4( ) | .4( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 2. | 22. | 2. | 9. | 15. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 5.6(S) | 2.9(S) | 2.1(S) | 6.0(S) | 2.6(S) |
| | | 2. | 0. | 2. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 3.7(S) | .0( ) | .9(S) | | | | | |
| 2 | 45. | 35. | 0. | 0. | 29. | 1. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 17. | 10. | 8. | 3. | 0. | 5. | 0. | 1. | 0. | 21. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2. .0( ) | 2. .0( ) | 6. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 11. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 20. .0( ) | 0. .0( ) | 15. .0( ) | 5. .0( ) | 0. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) | 2. .2( ) |
| | | 0. .0( ) | 33. .7( ) | 1. .1( ) | 2. .3( ) | 2. .2( ) | 1. .1( ) | 0. .1( ) | 26. .5( ) | 14. .4( ) | 0. .0( ) |
| | | 3. .2( ) | 1. .1( ) | 0. .0( ) | 2. .2( ) | 3. .2( ) | 1. .2( ) | 0. .0( ) | 15. .4( ) | 2. .2( ) | 1. .2( ) |
| | | 9. .3( ) | 1. .2( ) | 0. .0( ) | 0. .1( ) | 18. .4( ) | 10. .3( ) | 1. .1( ) | 2. .2( ) | 34. .0( ) | 30. .0( ) |
| | | 2. .0( ) | 22. .0( ) | 2. .0( ) | 8. .0( ) | 15. .0( ) | 0. 5.9(S) | 0. 2.9(S) | 0. 2.2(S) | 0. 6.2(S) | 0. 2.6(S) |
| | | 2. .2(S) | 0. .0(S) | 2. 3.7(S) | 0. .0( ) | 0. .9(S) | | | | | |
| 2 | 50. | 35. .0( ) | 0. .0( ) | 0. .0( ) | 28. .0( ) | 1. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 16. .0( ) | 10. .0( ) | 8. .0( ) | 2. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 19. .0( ) |
| | | 2. .0( ) | 2. .0( ) | 6. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 11. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 20. .0( ) | 0. .0( ) | 14. .0( ) | 5. .0( ) | 0. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) | 2. .2( ) |
| | | 0. .0( ) | 33. .7( ) | 1. .1( ) | 2. .3( ) | 2. .2( ) | 1. .1( ) | 0. .1( ) | 25. .5( ) | 14. .4( ) | 0. .0( ) |
| | | 3. .2( ) | 0. .1( ) | 0. .0( ) | 2. .2( ) | 3. .2( ) | 1. .2( ) | 0. .0( ) | 14. .4( ) | 2. .2( ) | 1. .2( ) |
| | | 9. .3( ) | 1. .2( ) | 0. .0( ) | 0. .1( ) | 18. .4( ) | 10. .3( ) | 1. .1( ) | 2. .2( ) | 33. .0( ) | 29. .0( ) |
| | | 2. .0( ) | 21. .0( ) | 2. .0( ) | 8. .0( ) | 14. .0( ) | 0. 6.1(S) | 0. 3.0(S) | 0. 2.2(S) | 0. 6.3(S) | 0. 2.7(S) |
| | | 1. .2(S) | 0. .0(S) | 2. 3.7(S) | 0. .0( ) | 0. .9(S) | | | | | |
| 2 | 55. | 34. .0( ) | 0. .0( ) | 0. .0( ) | 27. .0( ) | 1. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 15. .0( ) | 9. .0( ) | 7. .0( ) | 2. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 18. .0( ) |
| | | 2. .0( ) | 2. .0( ) | 5. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 10. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 19. .0( ) | 0. .0( ) | 13. .0( ) | 5. .0( ) | 0. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) | 2. .2( ) |
| | | 0. .0( ) | 32. .7( ) | 1. .1( ) | 2. .3( ) | 2. .2( ) | 0. .1( ) | 0. .1( ) | 24. .5( ) | 13. .4( ) | 0. .0( ) |
| | | 3. .2( ) | 0. .1( ) | 0. .0( ) | 2. .2( ) | 3. .2( ) | 1. .1( ) | 0. .0( ) | 13. .4( ) | 2. .2( ) | 1. .2( ) |
| | | 8. .3( ) | 1. .2( ) | 0. .0( ) | 0. .1( ) | 17. .4( ) | 10. .3( ) | 1. .1( ) | 2. .2( ) | 32. .0( ) | 28. .0( ) |
| | | 2. .0( ) | 20. .0( ) | 2. .0( ) | 7. .0( ) | 13. .0( ) | 0. 6.4(S) | 0. 3.1(S) | 0. 2.2(S) | 0. 6.4(S) | 0. 2.7(S) |
| | | 1. .2(S) | 0. .0(S) | 2. 3.7(S) | 0. .0( ) | 0. .9(S) | | | | | |
| 3 | 0. | 33. .0( ) | 0. .0( ) | 0. .0( ) | 26. .0( ) | 1. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 15.<br>.0( ) | 9.<br>.0( ) | 7.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 17.<br>.0( ) |
| | | 2.<br>.0( ) | 2.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 10.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 19.<br>.0( ) | 0.<br>.0( ) | 13.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.2( ) |
| | | 0.<br>.0( ) | 31.<br>.7( ) | 1.<br>.1( ) | 2.<br>.3( ) | 2.<br>.2( ) | 0.<br>.1( ) | 0.<br>.1( ) | 23.<br>.5( ) | 12.<br>.3( ) | 0.<br>.0( ) |
| | | 3.<br>.2( ) | 0.<br>.1( ) | 0.<br>.0( ) | 2.<br>.2( ) | 2.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) | 13.<br>.4( ) | 2.<br>.2( ) | 1.<br>.2( ) |
| | | 8.<br>.3( ) | 1.<br>.2( ) | 0.<br>.0( ) | 0.<br>.1( ) | 17.<br>.4( ) | 9.<br>.3( ) | 1.<br>.1( ) | 2.<br>.2( ) | 29.<br>.0( ) | 27.<br>.0( ) |
| | | 1.<br>.0( ) | 19.<br>.0( ) | 2.<br>.0( ) | 7.<br>.0( ) | 13.<br>.0( ) | 0.<br>6.6(S) | 0.<br>3.1(S) | 0.<br>2.3(S) | 0.<br>6.6(S) | 0.<br>2.7(S) |
| | | 1.<br>.2(S) | 0.<br>.0(S) | 2.<br>3.7(S) | 0.<br>.0( ) | 0.<br>.9(S) | | | | | |
| 3 | 5. | 33.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 25.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 14.<br>.0( ) | 8.<br>.0( ) | 6.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 16.<br>.0( ) |
| | | 2.<br>.0( ) | 2.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 9.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 18.<br>.0( ) | 0.<br>.0( ) | 12.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.2( ) |
| | | 0.<br>.0( ) | 30.<br>.7( ) | 1.<br>.1( ) | 2.<br>.3( ) | 1.<br>.2( ) | 0.<br>.1( ) | 0.<br>.1( ) | 23.<br>.5( ) | 12.<br>.3( ) | 0.<br>.0( ) |
| | | 3.<br>.2( ) | 0.<br>.1( ) | 0.<br>.0( ) | 2.<br>.2( ) | 2.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) | 12.<br>.4( ) | 1.<br>.2( ) | 1.<br>.2( ) |
| | | 8.<br>.3( ) | 1.<br>.2( ) | 0.<br>.0( ) | 0.<br>.1( ) | 17.<br>.4( ) | 9.<br>.3( ) | 1.<br>.1( ) | 2.<br>.2( ) | 28.<br>.0( ) | 26.<br>.0( ) |
| | | 1.<br>.0( ) | 18.<br>.0( ) | 2.<br>.0( ) | 6.<br>.0( ) | 12.<br>.0( ) | 0.<br>6.8(S) | 0.<br>3.1(S) | 0.<br>2.3(S) | 0.<br>6.7(S) | 0.<br>2.8(S) |
| | | 1.<br>.2(S) | 0.<br>.0(S) | 1.<br>3.6(S) | 0.<br>.0( ) | 0.<br>.9(S) | | | | | |
| 3 | 10. | 32.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 24.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 14.<br>.0( ) | 8.<br>.0( ) | 6.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 15.<br>.0( ) |
| | | 2.<br>.0( ) | 2.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 7.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 18.<br>.0( ) | 0.<br>.0( ) | 11.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.2( ) |
| | | 0.<br>.0( ) | 30.<br>.7( ) | 1.<br>.1( ) | 2.<br>.3( ) | 1.<br>.2( ) | 0.<br>.1( ) | 0.<br>.1( ) | 22.<br>.5( ) | 11.<br>.3( ) | 0.<br>.0( ) |
| | | 3.<br>.2( ) | 0.<br>.1( ) | 0.<br>.0( ) | 1.<br>.2( ) | 2.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) | 11.<br>.4( ) | 1.<br>.2( ) | 1.<br>.2( ) |
| | | 7.<br>.3( ) | 1.<br>.2( ) | 0.<br>.0( ) | 0.<br>.1( ) | 16.<br>.4( ) | 9.<br>.3( ) | 1.<br>.1( ) | 2.<br>.2( ) | 26.<br>.0( ) | 25.<br>.0( ) |
| | | 1.<br>.0( ) | 16.<br>.0( ) | 1.<br>.0( ) | 6.<br>.0( ) | 11.<br>.0( ) | 0.<br>7.0(S) | 0.<br>3.2(S) | 0.<br>2.3(S) | 0.<br>6.8(S) | 0.<br>2.8(S) |
| | | 1.<br>.2(S) | 0.<br>.0(S) | 1.<br>3.6(S) | 0.<br>.0( ) | 0.<br>.9(S) | | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 15. | 31.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 23.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 13.<br>.0( ) | 7.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 15.<br>.0( ) |
| | | 1.<br>.0( ) | 1.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 7.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 17.<br>.0( ) | 0.<br>.0( ) | 11.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.2( ) |
| | | 0.<br>.0( ) | 29.<br>.7( ) | 1.<br>.1( ) | 2.<br>.3( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 21.<br>.5( ) | 11.<br>.3( ) | 0.<br>.0( ) |
| | | 2.<br>.2( ) | 0.<br>.1( ) | 0.<br>.0( ) | 1.<br>.2( ) | 2.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) | 11.<br>.3( ) | 1.<br>.2( ) | 1.<br>.2( ) |
| | | 7.<br>.3( ) | 1.<br>.2( ) | 0.<br>.0( ) | 0.<br>.1( ) | 16.<br>.4( ) | 8.<br>.3( ) | 1.<br>.1( ) | 2.<br>.2( ) | 25.<br>.0( ) | 23.<br>.0( ) |
| | | 1.<br>.0( ) | 15.<br>.0( ) | 1.<br>.0( ) | 5.<br>.0( ) | 11.<br>.0( ) | 0.<br>7.3(S) | 0.<br>3.2(S) | 0.<br>2.3(S) | 0.<br>6.9(S) | 0.<br>2.8(S) |
| | | 1.<br>.2(S) | 0.<br>.0(S) | 1.<br>3.6(S) | 0.<br>.0( ) | 0.<br>.9(S) | | | | | |
| 3 | 20. | 30.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 22.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 12.<br>.0( ) | 7.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 12.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 6.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 15.<br>.0( ) | 0.<br>.0( ) | 10.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.2( ) |
| | | 0.<br>.0( ) | 28.<br>.7( ) | 1.<br>.1( ) | 2.<br>.3( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 20.<br>.5( ) | 10.<br>.3( ) | 0.<br>.0( ) |
| | | 2.<br>.2( ) | 0.<br>.1( ) | 0.<br>.0( ) | 1.<br>.1( ) | 2.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) | 10.<br>.3( ) | 1.<br>.2( ) | 1.<br>.2( ) |
| | | 6.<br>.3( ) | 1.<br>.2( ) | 0.<br>.0( ) | 0.<br>.1( ) | 15.<br>.4( ) | 8.<br>.3( ) | 1.<br>.1( ) | 2.<br>.2( ) | 22.<br>.0( ) | 22.<br>.0( ) |
| | | 1.<br>.0( ) | 14.<br>.0( ) | 1.<br>.0( ) | 4.<br>.0( ) | 10.<br>.0( ) | 0.<br>7.5(S) | 0.<br>3.3(S) | 0.<br>2.3(S) | 0.<br>7.0(S) | 0.<br>2.9(S) |
| | | 1.<br>.2(S) | 0.<br>.0(S) | 1.<br>3.6(S) | 0.<br>.0( ) | 0.<br>.9(S) | | | | | |
| 3 | 25. | 29.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 21.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 12.<br>.0( ) | 6.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 11.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 6.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 15.<br>.0( ) | 0.<br>.0( ) | 10.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.2( ) |
| | | 0.<br>.0( ) | 27.<br>.7( ) | 0.<br>.1( ) | 1.<br>.3( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 19.<br>.5( ) | 10.<br>.3( ) | 0.<br>.0( ) |
| | | 2.<br>.2( ) | 0.<br>.1( ) | 0.<br>.0( ) | 1.<br>.1( ) | 2.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) | 10.<br>.3( ) | 1.<br>.2( ) | 1.<br>.2( ) |
| | | 6.<br>.3( ) | 0.<br>.2( ) | 0.<br>.0( ) | 0.<br>.1( ) | 15.<br>.4( ) | 7.<br>.3( ) | 0.<br>.1( ) | 2.<br>.2( ) | 22.<br>.0( ) | 21.<br>.0( ) |
| | | 1.<br>.0( ) | 14.<br>.0( ) | 1.<br>.0( ) | 3.<br>.0( ) | 10.<br>.0( ) | 0.<br>7.7(S) | 0.<br>3.3(S) | 0.<br>2.4(S) | 0.<br>7.1(S) | 0.<br>2.9(S) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.6(S) | .0( ) | .9(S) | | | | | |
| 3 | 30. | 28. | 0. | 0. | 20. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 10. | 6. | 4. | 0. | 0. | 3. | 0. | 0. | 0. | 11. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 3. | 0. | 1. | 0. | 6. | 2. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 14. | 0. | 9. | 3. | 0. | 4. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 26. | 0. | 1. | 1. | 0. | 0. | 18. | 10. | 0. |
| | | .0( ) | .7( ) | .1( ) | .3( ) | .1( ) | .1( ) | .1( ) | .4( ) | .3( ) | .0( ) |
| | | 2. | 0. | 0. | 1. | 2. | 1. | 0. | 9. | 1. | 1. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .3( ) | .2( ) | .2( ) |
| | | 6. | 0. | 0. | 0. | 14. | 7. | 0. | 2. | 21. | 20. |
| | | .3( ) | .1( ) | .0( ) | .1( ) | .4( ) | .3( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 1. | 11. | 1. | 3. | 9. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 7.9(S) | 3.3(S) | 2.4(S) | 7.1(S) | 2.9(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.6(S) | .0( ) | .9(S) | | | | | |
| 3 | 35. | 27. | 0. | 0. | 18. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 9. | 6. | 4. | 0. | 0. | 2. | 0. | 0. | 0. | 10. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 3. | 0. | 1. | 0. | 5. | 2. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 14. | 0. | 9. | 3. | 0. | 3. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 25. | 0. | 1. | 1. | 0. | 0. | 17. | 9. | 0. |
| | | .0( ) | .7( ) | .1( ) | .3( ) | .1( ) | .1( ) | .1( ) | .4( ) | .3( ) | .0( ) |
| | | 2. | 0. | 0. | 1. | 2. | 1. | 0. | 8. | 1. | 1. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .3( ) | .1( ) | .2( ) |
| | | 5. | 0. | 0. | 0. | 14. | 7. | 0. | 2. | 20. | 19. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .4( ) | .3( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 1. | 11. | 1. | 3. | 9. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 8.1(S) | 3.4(S) | 2.4(S) | 7.2(S) | 2.9(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.6(S) | .0( ) | .8(S) | | | | | |
| 3 | 40. | 26. | 0. | 0. | 17. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 9. | 5. | 4. | 0. | 0. | 2. | 0. | 0. | 0. | 9. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 3. | 0. | 1. | 0. | 5. | 2. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 14. | 0. | 8. | 2. | 0. | 3. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 24. | 0. | 1. | 1. | 0. | 0. | 16. | 9. | 0. |
| | | .0( ) | .7( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .4( ) | .3( ) | .0( ) |
| | | 2. | 0. | 0. | 1. | 2. | 1. | 0. | 8. | 1. | 1. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .3( ) | .1( ) | .2( ) |
| | | 5. | 0. | 0. | 0. | 14. | 7. | 0. | 1. | 19. | 18. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .3( ) | .1( ) | .2( ) | .0( ) | .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. .0( ) | 10. .0( ) | 1. .0( ) | 3. .0( ) | 8. .0( ) | 0. 8.2(S) | 0. 3.4(S) | 0. 2.4(S) | 0. 7.3(S) | 0. 3.0(S) | |
| 1. .1(S) | 0. .0(S) | 1. 3.6(S) | 0. .0( ) | 0. .8(S) | | | | | | |
| 3 45. | 25. .0( ) | 0. .0( ) | 0. .0( ) | 15. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| 8. .0( ) | 5. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 7. .0( ) | |
| 0. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 5. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | |
| 0. .0( ) | 13. .0( ) | 0. .0( ) | 8. .0( ) | 2. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 2. .2( ) | |
| 0. .0( ) | 23. .7( ) | 0. .1( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 15. .4( ) | 8. .3( ) | 0. .0( ) | |
| 2. .2( ) | 0. .1( ) | 0. .0( ) | 1. .1( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 7. .3( ) | 1. .1( ) | 1. .2( ) | |
| 5. .2( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 13. .3( ) | 6. .3( ) | 0. .1( ) | 1. .2( ) | 19. .0( ) | 15. .0( ) | |
| 1. .0( ) | 10. .0( ) | 1. .0( ) | 3. .0( ) | 8. .0( ) | 0. 8.4(S) | 0. 3.4(S) | 0. 2.4(S) | 0. 7.3(S) | 0. 3.0(S) | |
| 1. .1(S) | 0. .0(S) | 1. 3.6(S) | 0. .0( ) | 0. .8(S) | | | | | | |
| 3 50. | 24. .0( ) | 0. .0( ) | 0. .0( ) | 14. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| 8. .0( ) | 5. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 7. .0( ) | |
| 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | |
| 0. .0( ) | 13. .0( ) | 0. .0( ) | 8. .0( ) | 2. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 2. .2( ) | |
| 0. .0( ) | 22. .6( ) | 0. .1( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 14. .4( ) | 8. .3( ) | 0. .0( ) | |
| 2. .2( ) | 0. .1( ) | 0. .0( ) | 1. .1( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 7. .3( ) | 1. .1( ) | 1. .2( ) | |
| 4. .2( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 13. .3( ) | 6. .3( ) | 0. .1( ) | 1. .2( ) | 18. .0( ) | 14. .0( ) | |
| 1. .0( ) | 9. .0( ) | 1. .0( ) | 2. .0( ) | 8. .0( ) | 0. 8.6(S) | 0. 3.4(S) | 0. 2.4(S) | 0. 7.4(S) | 0. 3.0(S) | |
| 1. .1(S) | 0. .0(S) | 1. 3.6(S) | 0. .0( ) | 0. .8(S) | | | | | | |
| 3 55. | 23. .0( ) | 0. .0( ) | 0. .0( ) | 13. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| 7. .0( ) | 4. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 6. .0( ) | |
| 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | |
| 0. .0( ) | 12. .0( ) | 0. .0( ) | 7. .0( ) | 2. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 2. .2( ) | |
| 0. .0( ) | 21. .6( ) | 0. .1( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 13. .4( ) | 7. .3( ) | 0. .0( ) | |
| 2. .2( ) | 0. .1( ) | 0. .0( ) | 1. .1( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 6. .3( ) | 1. .1( ) | 1. .2( ) | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4. | 0. | 0. | 0. | 12. | 6. | 0. | 1. | 17. | 14. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .3( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 1. | 9. | 1. | 1. | 7. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 8.7(S) | 3.4(S) | 2.5(S) | 7.4(S) | 3.0(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.6(S) | .0( ) | .8(S) | | | | | |
| 4 | 0. | 22. | 0. | 0. | 13. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 7. | 4. | 2. | 0. | 0. | 2. | 0. | 0. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 12. | 0. | 5. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 20. | 0. | 1. | 1. | 0. | 0. | 13. | 7. | 0. |
| | | .0( ) | .6( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .4( ) | .3( ) | .0( ) |
| | | 2. | 0. | 0. | 1. | 1. | 1. | 0. | 6. | 1. | 0. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .3( ) | .1( ) | .2( ) |
| | | 4. | 0. | 0. | 0. | 12. | 5. | 0. | 1. | 16. | 13. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .3( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 1. | 8. | 1. | 1. | 5. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 8.9(S) | 3.5(S) | 2.5(S) | 7.5(S) | 3.0(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.6(S) | .0( ) | .8(S) | | | | | |
| 4 | 5. | 20. | 0. | 0. | 12. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 7. | 4. | 2. | 0. | 0. | 2. | 0. | 0. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 11. | 0. | 5. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 19. | 0. | 1. | 1. | 0. | 0. | 12. | 7. | 0. |
| | | .0( ) | .6( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .4( ) | .3( ) | .0( ) |
| | | 2. | 0. | 0. | 1. | 1. | 1. | 0. | 6. | 1. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .3( ) | .1( ) | .2( ) |
| | | 4. | 0. | 0. | 0. | 11. | 5. | 0. | 1. | 15. | 12. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .3( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 1. | 8. | 1. | 1. | 5. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 9.0(S) | 3.5(S) | 2.5(S) | 7.5(S) | 3.0(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.6(S) | .0( ) | .8(S) | | | | | |
| 4 | 10. | 20. | 0. | 0. | 11. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 6. | 4. | 2. | 0. | 0. | 1. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 11. | 0. | 5. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 18. | 0. | 1. | 1. | 0. | 0. | 11. | 6. | 0. |
| | | .0( ) | .6( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .4( ) | .3( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2. | 0. | 0. | 1. | 1. | 1. | 0. | 5. | 1. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .3( ) | .1( ) | .1( ) |
| | | 3. | 0. | 0. | 0. | 11. | 5. | 0. | 1. | 14. | 12. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .3( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 1. | 8. | 1. | 1. | 5. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 9.2(S) | 3.5(S) | 2.5(S) | 7.5(S) | 3.0(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.6(S) | .0( ) | .8(S) | | | | | |
| 4 | 15. | 19. | 0. | 0. | 11. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 6. | 3. | 2. | 0. | 0. | 0. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 10. | 0. | 5. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 17. | 0. | 1. | 1. | 0. | 0. | 11. | 6. | 0. |
| | | .0( ) | .6( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .4( ) | .3( ) | .0( ) |
| | | 1. | 0. | 0. | 1. | 1. | 1. | 0. | 5. | 1. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .3( ) | .1( ) | .1( ) |
| | | 3. | 0. | 0. | 0. | 10. | 5. | 0. | 1. | 14. | 11. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .3( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 1. | 7. | 1. | 1. | 5. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 9.3(S) | 3.5(S) | 2.5(S) | 7.6(S) | 3.0(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.6(S) | .0( ) | .8(S) | | | | | |
| 4 | 20. | 18. | 0. | 0. | 10. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 6. | 3. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 10. | 0. | 4. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 16. | 0. | 1. | 1. | 0. | 0. | 10. | 6. | 0. |
| | | .0( ) | .6( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .4( ) | .3( ) | .0( ) |
| | | 1. | 0. | 0. | 1. | 1. | 1. | 0. | 4. | 1. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 3. | 0. | 0. | 0. | 10. | 4. | 0. | 1. | 13. | 10. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .3( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 1. | 7. | 1. | 1. | 4. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 9.4(S) | 3.5(S) | 2.5(S) | 7.6(S) | 3.1(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.6(S) | .0( ) | .8(S) | | | | | |
| 4 | 25. | 17. | 0. | 0. | 10. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 9. | 0. | 4. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 16. | 0. | 1. | 1. | 0. | 0. | 10. | 5. | 0. |
| | | .0( ) | .6( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .4( ) | .3( ) | .0( ) |
| | | 1. | 0. | 0. | 1. | 1. | 0. | 0. | 4. | 1. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 3. | 0. | 0. | 0. | 9. | 4. | 0. | 1. | 12. | 10. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .2( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 1. | 6. | 1. | 1. | 4. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 9.5(S) | 3.5(S) | 2.5(S) | 7.6(S) | 3.1(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.6(S) | .0( ) | .8(S) | | | | | |
| 4 | 30. | 16. | 0. | 0. | 9. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 3. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 9. | 0. | 4. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 15. | 0. | 1. | 1. | 0. | 0. | 9. | 5. | 0. |
| | | .0( ) | .6( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 1. | 1. | 0. | 0. | 4. | 1. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 2. | 0. | 0. | 0. | 9. | 4. | 0. | 1. | 12. | 9. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .2( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 1. | 6. | 1. | 1. | 4. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 9.7(S) | 3.5(S) | 2.5(S) | 7.7(S) | 3.1(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.6(S) | .0( ) | .8(S) | | | | | |
| 4 | 35. | 15. | 0. | 0. | 9. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 9. | 0. | 4. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 14. | 0. | 1. | 1. | 0. | 0. | 9. | 4. | 0. |
| | | .0( ) | .5( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 1. | 1. | 0. | 0. | 4. | 1. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 2. | 0. | 0. | 0. | 9. | 4. | 0. | 1. | 11. | 9. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .2( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 1. | 5. | 1. | 1. | 4. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 9.8(S) | 3.5(S) | 2.5(S) | 7.7(S) | 3.1(S) |
| | | 1. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.6(S) | .0( ) | .8(S) | | | | | |
| 4 | 40. | 15. | 0. | 0. | 8. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 2. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0( ) | 8. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .2( ) |
| | | 0. .0( ) | 14. .5( ) | 0. .1( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 8. .3( ) | 4. .2( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .1( ) | 0. .0( ) | 1. .1( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 3. .2( ) | 1. .1( ) | 0. .1( ) |
| | | 2. .2( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 8. .3( ) | 3. .2( ) | 0. .1( ) | 1. .2( ) | 11. .0( ) | 9. .0( ) |
| | | 1. .0( ) | 5. .0( ) | 1. .0( ) | 1. .0( ) | 3. .0( ) | 0. 9.9(S) | 0. 3.5(S) | 0. 2.5(S) | 0. 7.7(S) | 0. 3.1(S) |
| | | 1. .1(S) | 0. .0(S) | 1. 3.6(S) | 0. .0( ) | 0. .8(S) | | | | | |
| 4 | 45. | 14. .0( ) | 0. .0( ) | 0. .0( ) | 8. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 4. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 8. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .2( ) |
| | | 0. .0( ) | 13. .5( ) | 0. .1( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 8. .3( ) | 4. .2( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 3. .2( ) | 1. .1( ) | 0. .1( ) |
| | | 2. .2( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 8. .3( ) | 3. .2( ) | 0. .1( ) | 1. .2( ) | 10. .0( ) | 8. .0( ) |
| | | 1. .0( ) | 5. .0( ) | 1. .0( ) | 1. .0( ) | 3. .0( ) | 0. 10.0(S) | 0. 3.5(S) | 0. 2.5(S) | 0. 7.7(S) | 0. 3.1(S) |
| | | 0. .1(S) | 0. .0(S) | 1. 3.6(S) | 0. .0( ) | 0. .8(S) | | | | | |
| 4 | 50. | 13. .0( ) | 0. .0( ) | 0. .0( ) | 7. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 4. .0( ) | 2. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 8. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .2( ) |
| | | 0. .0( ) | 12. .5( ) | 0. .1( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 7. .3( ) | 4. .2( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 3. .2( ) | 1. .1( ) | 0. .1( ) |
| | | 2. .2( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 8. .3( ) | 3. .2( ) | 0. .1( ) | 1. .2( ) | 10. .0( ) | 8. .0( ) |
| | | 0. .0( ) | 5. .0( ) | 0. .0( ) | 1. .0( ) | 3. .0( ) | 0. 10.1(S) | 0. 3.5(S) | 0. 2.5(S) | 0. 7.8(S) | 0. 3.1(S) |
| | | 0. .1(S) | 0. .0(S) | 1. 3.6(S) | 0. .0( ) | 0. .8(S) | | | | | |
| 4 | 55. | 13. .0( ) | 0. .0( ) | 0. .0( ) | 7. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 3. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 7. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .2( ) |
| | | 0. .0( ) | 12. .5( ) | 0. .1( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 7. .3( ) | 3. .2( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 3. .2( ) | 1. .1( ) | 0. .1( ) |
| | | 2. .2( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 7. .3( ) | 3. .2( ) | 0. .1( ) | 1. .2( ) | 9. .0( ) | 7. .0( ) |
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 1. .0( ) | 3. .0( ) | 0. 10.2(S) | 0. 3.6(S) | 0. 2.5(S) | 0. 7.8(S) | 0. 3.1(S) |
| | | 0. .1(S) | 0. .0(S) | 1. 3.6(S) | 0. .0( ) | 0. .8(S) | | | | | |
| 5 | 0. | 12. .0( ) | 0. .0( ) | 0. .0( ) | 7. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 3. .0( ) | 2. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 7. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .2( ) |
| | | 0. .0( ) | 11. .5( ) | 0. .1( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 7. .3( ) | 3. .2( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 3. .2( ) | 1. .1( ) | 0. .1( ) |
| | | 2. .2( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 7. .3( ) | 3. .2( ) | 0. .1( ) | 1. .2( ) | 9. .0( ) | 7. .0( ) |
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 1. .0( ) | 3. .0( ) | 0. 10.2(S) | 0. 3.6(S) | 0. 2.5(S) | 0. 7.8(S) | 0. 3.1(S) |
| | | 0. .1(S) | 0. .0(S) | 1. 3.6(S) | 0. .0( ) | 0. .8(S) | | | | | |
| 5 | 5. | 12. .0( ) | 0. .0( ) | 0. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 3. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 7. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .2( ) |
| | | 0. .0( ) | 11. .5( ) | 0. .1( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 6. .3( ) | 3. .2( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 2. .2( ) | 0. .1( ) | 0. .1( ) |
| | | 2. .2( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 7. .3( ) | 3. .2( ) | 0. .1( ) | 1. .2( ) | 8. .0( ) | 7. .0( ) |
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 0. 10.3(S) | 0. 3.6(S) | 0. 2.5(S) | 0. 7.8(S) | 0. 3.1(S) |
| | | 0. .1(S) | 0. .0(S) | 1. 3.6(S) | 0. .0( ) | 0. .8(S) | | | | | |
| 5 | 10. | 11. .0( ) | 0. .0( ) | 0. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 3.<br>.0( ) | 2.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 6.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.2( ) |
| | | 0.<br>.0( ) | 10.<br>.5( ) | 0.<br>.1( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 6.<br>.3( ) | 3.<br>.2( ) | 0.<br>.0( ) |
| | | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 2.<br>.2( ) | 0.<br>.1( ) | 0.<br>.1( ) |
| | | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 6.<br>.3( ) | 2.<br>.2( ) | 0.<br>.1( ) | 1.<br>.1( ) | 8.<br>.0( ) | 6.<br>.0( ) |
| | | 0.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>10.4(S) | 0.<br>3.6(S) | 0.<br>2.5(S) | 0.<br>7.8(S) | 0.<br>3.1(S) |
| | | 0.<br>.1(S) | 0.<br>.0(S) | 1.<br>3.6(S) | 0.<br>.0( ) | 0.<br>.8(S) | | | | | |
| 5 | 15. | 11.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 6.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 3.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 6.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.2( ) |
| | | 0.<br>.0( ) | 10.<br>.5( ) | 0.<br>.1( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 6.<br>.3( ) | 3.<br>.2( ) | 0.<br>.0( ) |
| | | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 2.<br>.2( ) | 0.<br>.1( ) | 0.<br>.1( ) |
| | | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 6.<br>.3( ) | 2.<br>.2( ) | 0.<br>.1( ) | 1.<br>.1( ) | 8.<br>.0( ) | 6.<br>.0( ) |
| | | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>10.5(S) | 0.<br>3.6(S) | 0.<br>2.5(S) | 0.<br>7.9(S) | 0.<br>3.1(S) |
| | | 0.<br>.0(S) | 0.<br>.0(S) | 1.<br>3.6(S) | 0.<br>.0( ) | 0.<br>.8(S) | | | | | |
| 5 | 20. | 10.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 2.<br>.0( ) | 2.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 6.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.2( ) |
| | | 0.<br>.0( ) | 9.<br>.5( ) | 0.<br>.1( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 5.<br>.3( ) | 2.<br>.2( ) | 0.<br>.0( ) |
| | | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 2.<br>.2( ) | 0.<br>.1( ) | 0.<br>.1( ) |
| | | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 6.<br>.3( ) | 2.<br>.2( ) | 0.<br>.1( ) | 1.<br>.1( ) | 7.<br>.0( ) | 6.<br>.0( ) |
| | | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>10.6(S) | 0.<br>3.6(S) | 0.<br>2.5(S) | 0.<br>7.9(S) | 0.<br>3.1(S) |
| | | 0.<br>.0(S) | 0.<br>.0(S) | 1.<br>3.6(S) | 0.<br>.0( ) | 0.<br>.8(S) | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 25. | 10. | 0. | 0. | 5. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 6. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 9. | 0. | 1. | 1. | 0. | 0. | 5. | 2. | 0. |
| | | .0( ) | .5( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 2. | 0. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 6. | 2. | 0. | 1. | 7. | 5. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .2( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 0. | 3. | 0. | 0. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 10.6(S) | 3.6(S) | 2.5(S) | 7.9(S) | 3.1(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.5(S) | .0( ) | .8(S) | | | | | |
| 5 | 30. | 9. | 0. | 0. | 5. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 2. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 5. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 9. | 0. | 1. | 1. | 0. | 0. | 5. | 2. | 0. |
| | | .0( ) | .5( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 2. | 0. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 5. | 2. | 0. | 1. | 7. | 5. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .2( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 0. | 3. | 0. | 0. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 10.7(S) | 3.6(S) | 2.5(S) | 7.9(S) | 3.1(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.5(S) | .0( ) | .8(S) | | | | | |
| 5 | 35. | 9. | 0. | 0. | 5. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 5. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 8. | 0. | 1. | 1. | 0. | 0. | 5. | 2. | 0. |
| | | .0( ) | .4( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 2. | 0. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 5. | 2. | 0. | 1. | 6. | 5. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .2( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 0. | 3. | 0. | 0. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 10.8(S) | 3.6(S) | 2.5(S) | 7.9(S) | 3.2(S) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.<br>.0(S) | 0.<br>.0(S) | 1.<br>3.5(S) | 0.<br>.0( ) | 0.<br>.8(S) | | | | | |
| 5 | 40. | 9.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 2.<br>.0( ) | 1.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.2( ) |
| | | 0.<br>.0( ) | 8.<br>.4( ) | 0.<br>.1( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 4.<br>.3( ) | 2.<br>.2( ) | 0.<br>.0( ) |
| | | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 2.<br>.2( ) | 0.<br>.1( ) | 0.<br>.1( ) |
| | | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 5.<br>.2( ) | 2.<br>.2( ) | 0.<br>.1( ) | 1.<br>.1( ) | 6.<br>.0( ) | 5.<br>.0( ) |
| | | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>10.8(S) | 0.<br>3.6(S) | 0.<br>2.5(S) | 0.<br>7.9(S) | 0.<br>3.2(S) |
| | | 0.<br>.0(S) | 0.<br>.0(S) | 1.<br>3.5(S) | 0.<br>.0( ) | 0.<br>.8(S) | | | | | |
| 5 | 45. | 8.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 2.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.2( ) |
| | | 0.<br>.0( ) | 7.<br>.4( ) | 0.<br>.1( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 4.<br>.3( ) | 2.<br>.2( ) | 0.<br>.0( ) |
| | | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 2.<br>.2( ) | 0.<br>.1( ) | 0.<br>.1( ) |
| | | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 5.<br>.2( ) | 2.<br>.2( ) | 0.<br>.1( ) | 1.<br>.1( ) | 6.<br>.0( ) | 4.<br>.0( ) |
| | | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>10.9(S) | 0.<br>3.6(S) | 0.<br>2.5(S) | 0.<br>7.9(S) | 0.<br>3.2(S) |
| | | 0.<br>.0(S) | 0.<br>.0(S) | 1.<br>3.5(S) | 0.<br>.0( ) | 0.<br>.8(S) | | | | | |
| 5 | 50. | 8.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 2.<br>.0( ) | 1.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.2( ) |
| | | 0.<br>.0( ) | 7.<br>.4( ) | 0.<br>.1( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 4.<br>.3( ) | 2.<br>.2( ) | 0.<br>.0( ) |
| | | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 2.<br>.2( ) | 0.<br>.1( ) | 0.<br>.1( ) |
| | | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 5.<br>.2( ) | 2.<br>.2( ) | 0.<br>.1( ) | 1.<br>.1( ) | 6.<br>.0( ) | 4.<br>.0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. 10.9(S) | 0. 3.6(S) | 0. 2.5(S) | 0. 7.9(S) | 0. 3.2(S) |
| | | 0. .0(S) | 0. .0(S) | 1. 3.5(S) | 0. .0( ) | 0. .8(S) | | | | | |
| 5 | 55. | 8. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) |
| | | 0. .0( ) | 7. .4( ) | 0. .1( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 4. .3( ) | 2. .2( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 1. .2( ) | 0. .1( ) | 0. .1( ) |
| | | 1. .1( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 4. .2( ) | 2. .2( ) | 0. .1( ) | 1. .1( ) | 5. .0( ) | 4. .0( ) |
| | | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. 11.0(S) | 0. 3.6(S) | 0. 2.5(S) | 0. 7.9(S) | 0. 3.2(S) |
| | | 0. .0(S) | 0. .0(S) | 1. 3.5(S) | 0. .0( ) | 0. .8(S) | | | | | |
| 6 | 0. | 7. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) |
| | | 0. .0( ) | 7. .4( ) | 0. .1( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 4. .2( ) | 2. .2( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 1. .2( ) | 0. .1( ) | 0. .1( ) |
| | | 1. .1( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 4. .2( ) | 2. .2( ) | 0. .1( ) | 1. .1( ) | 5. .0( ) | 4. .0( ) |
| | | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. 11.0(S) | 0. 3.6(S) | 0. 2.5(S) | 0. 8.0(S) | 0. 3.2(S) |
| | | 0. .0(S) | 0. .0(S) | 1. 3.5(S) | 0. .0( ) | 0. .8(S) | | | | | |
| 6 | 5. | 7. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) |
| | | 0. .0( ) | 6. .4( ) | 0. .1( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 4. .2( ) | 1. .2( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 1. .2( ) | 0. .1( ) | 0. .1( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. | 0. | 0. | 0. | 4. | 1. | 0. | 1. | 5. | 4. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .2( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 11.1(S) | 3.6(S) | 2.5(S) | 8.0(S) | 3.2(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.5(S) | .0( ) | .8(S) | | | | | |
| 6 | 10. | 7. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 4. | 0. | 1. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 0. | 6. | 0. | 1. | 1. | 0. | 0. | 3. | 1. | 0. |
| | | .0( ) | .4( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 4. | 1. | 0. | 1. | 5. | 4. |
| | | .1( ) | .1( ) | .0( ) | .0( ) | .2( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 11.1(S) | 3.6(S) | 2.5(S) | 8.0(S) | 3.2(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.5(S) | .0( ) | .8(S) | | | | | |
| 6 | 15. | 6. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 4. | 0. | 1. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 0. | 6. | 0. | 1. | 1. | 0. | 0. | 3. | 1. | 0. |
| | | .0( ) | .4( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 4. | 1. | 0. | 1. | 5. | 3. |
| | | .1( ) | .1( ) | .0( ) | .0( ) | .2( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 11.2(S) | 3.6(S) | 2.5(S) | 8.0(S) | 3.2(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.5(S) | .0( ) | .8(S) | | | | | |
| 6 | 20. | 6. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 4. | 0. | 1. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 0. | 6. | 0. | 1. | 1. | 0. | 0. | 3. | 1. | 0. |
| | | .0( ) | .4( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .1( ) | .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 4. | 1. | 0. | 1. | 4. | 3. |
| | | .1( ) | .1( ) | .0( ) | .0( ) | .2( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 11.2(S) | 3.6(S) | 2.5(S) | 8.0(S) | 3.2(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.5(S) | .0( ) | .8(S) | | | | | |
| 6 | 25. | 6. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 3. | 0. | 1. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 0. | 5. | 0. | 1. | 1. | 0. | 0. | 3. | 1. | 0. |
| | | .0( ) | .4( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 3. | 1. | 0. | 1. | 4. | 3. |
| | | .1( ) | .1( ) | .0( ) | .0( ) | .2( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 11.2(S) | 3.6(S) | 2.5(S) | 8.0(S) | 3.2(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.5(S) | .0( ) | .8(S) | | | | | |
| 6 | 30. | 6. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 3. | 0. | 1. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 0. | 5. | 0. | 1. | 1. | 0. | 0. | 3. | 1. | 0. |
| | | .0( ) | .4( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 3. | 1. | 0. | 1. | 4. | 3. |
| | | .1( ) | .1( ) | .0( ) | .0( ) | .2( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 11.3(S) | 3.6(S) | 2.5(S) | 8.0(S) | 3.2(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.5(S) | .0( ) | .8(S) | | | | | |
| 6 | 35. | 5. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 3. | 0. | 1. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 5. | 0. | 1. | 1. | 0. | 0. | 3. | 1. | 0. |
| | | .0( ) | .4( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 3. | 1. | 0. | 1. | 4. | 3. |
| | | .1( ) | .1( ) | .0( ) | .0( ) | .2( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 11.3(S) | 3.7(S) | 2.5(S) | 8.0(S) | 3.2(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.5(S) | .0( ) | .8(S) | | | | | |
| 6 | 40. | 5. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 3. | 0. | 1. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 0. | 5. | 0. | 1. | 1. | 0. | 0. | 3. | 1. | 0. |
| | | .0( ) | .4( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 3. | 1. | 0. | 1. | 4. | 3. |
| | | .1( ) | .1( ) | .0( ) | .0( ) | .2( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 11.4(S) | 3.7(S) | 2.5(S) | 8.0(S) | 3.2(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.5(S) | .0( ) | .8(S) | | | | | |
| 6 | 45. | 5. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 3. | 0. | 1. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 0. | 5. | 0. | 1. | 1. | 0. | 0. | 3. | 1. | 0. |
| | | .0( ) | .4( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .2( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 3. | 1. | 0. | 1. | 4. | 3. |
| | | .1( ) | .1( ) | .0( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 11.4(S) | 3.7(S) | 2.5(S) | 8.0(S) | 3.2(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.5(S) | .0( ) | .8(S) | | | | | |
| 6 | 50. | 5. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) |
| | | 0. .0( ) | 4. .4( ) | 0. .1( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 3. .2( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) |
| | | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 3. .2( ) | 1. .1( ) | 0. .1( ) | 1. .1( ) | 3. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 11.4(S) | 0. 3.7(S) | 0. 2.5(S) | 0. 8.0(S) | 0. 3.2(S) |
| | | 0. .0(S) | 0. .0(S) | 1. 3.5(S) | 0. .0( ) | 0. .8(S) | | | | | |
| 6 | 55. | 5. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) |
| | | 0. .0( ) | 4. .3( ) | 0. .1( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 3. .2( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .1( ) |
| | | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 3. .2( ) | 1. .1( ) | 0. .1( ) | 1. .1( ) | 3. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 11.5(S) | 0. 3.7(S) | 0. 2.5(S) | 0. 8.0(S) | 0. 3.2(S) |
| | | 0. .0(S) | 0. .0(S) | 1. 3.5(S) | 0. .0( ) | 0. .8(S) | | | | | |
| 7 | 0. | 5. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) |
| | | 0. .0( ) | 4. .3( ) | 0. .1( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 2. .2( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) |
| | | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 3. .2( ) | 1. .1( ) | 0. .1( ) | 1. .1( ) | 3. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 11.5(S) | 0. 3.7(S) | 0. 2.5(S) | 0. 8.0(S) | 0. 3.2(S) |
| | | 0. .0(S) | 0. .0(S) | 1. 3.5(S) | 0. .0( ) | 0. .8(S) | | | | | |

1

5yr 3hr Current Condition SWMM Sump Basin
Blank

*** PEAK FLOWS, STAGES AND STORAGES OF GUTTERS AND DETENTION DAMS ***

| CONVEYANCE ELEMENT | PEAK (CFS) | STAGE (FT) | STORAGE (AC-FT) | TIME (HR/MIN) |
|---|---|---|---|---|
| 224 | 10. | (DIRECT FLOW) | | 0 45. |
| 124 | 10. | (DIRECT FLOW) | | 0 45. |
| 324 | 3. | .2 | | 1 40. |
| 223 | 27. | (DIRECT FLOW) | | 0 55. |
| 222 | 11. | (DIRECT FLOW) | | 0 55. |
| 123 | 29. | (DIRECT FLOW) | | 0 55. |
| 122 | 11. | (DIRECT FLOW) | | 0 55. |
| 420 | 40. | (DIRECT FLOW) | | 0 55. |
| 221 | 12. | (DIRECT FLOW) | | 0 50. |
| 322 | 22. | .5 | | 1 40. |
| 121 | 12. | (DIRECT FLOW) | | 0 50. |
| 220 | 21. | (DIRECT FLOW) | | 0 55. |
| 120 | 43. | (DIRECT FLOW) | | 1 15. |
| 520 | 0. | .1 | 8.0 | 7 0. |
| 219 | 5. | (DIRECT FLOW) | | 0 50. |
| 320 | 0. | .0 | | 7 0. |
| 218 | 10. | (DIRECT FLOW) | | 0 45. |
| 210 | 21. | (DIRECT FLOW) | | 0 25. |
| 119 | 5. | (DIRECT FLOW) | | 0 50. |
| 118 | 10. | (DIRECT FLOW) | | 0 45. |
| 110 | 21. | (DIRECT FLOW) | | 0 25. |
| 319 | 2. | .2 | | 1 55. |
| 318 | 4. | .3 | | 1 45. |
| 213 | 21. | (DIRECT FLOW) | | 0 50. |
| 610 | 0. | .1 | .9 | 1 0. |
| 209 | 8. | (DIRECT FLOW) | | 0 45. |
| 217 | 15. | (DIRECT FLOW) | | 0 40. |
| 113 | 24. | (DIRECT FLOW) | | 0 55. |
| 310 | 0. | .1 | | 4 30. |
| 109 | 8. | (DIRECT FLOW) | | 0 45. |
| 117 | 15. | (DIRECT FLOW) | | 0 40. |
| 513 | 0. | .1 | 3.7 | 7 0. |
| 409 | 8. | (DIRECT FLOW) | | 0 45. |
| 208 | 45. | (DIRECT FLOW) | | 0 40. |
| 317 | 5. | .3 | | 1 20. |
| 313 | 0. | .0 | | 7 0. |
| 309 | 6. | .4 | | 1 0. |
| 108 | 45. | (DIRECT FLOW) | | 0 40. |
| 216 | 20. | (DIRECT FLOW) | | 0 55. |
| 412 | 5. | (DIRECT FLOW) | | 1 20. |
| 608 | 3. | .1 | 3.7 | 2 5. |
| 116 | 20. | (DIRECT FLOW) | | 0 55. |
| 215 | 3. | (DIRECT FLOW) | | 0 45. |
| 314 | 4. | .2 | | 2 10. |
| 212 | 28. | (DIRECT FLOW) | | 0 50. |
| 308 | 3. | .2 | | 2 5. |
| 207 | 2. | (DIRECT FLOW) | | 1 15. |
| 516 | 0. | .1 | 2.5 | 4 15. |
| 115 | 3. | (DIRECT FLOW) | | 0 45. |
| 112 | 29. | (DIRECT FLOW) | | 0 50. |
| 107 | 3. | (DIRECT FLOW) | | 1 15. |
| 316 | 0. | .0 | | 7 0. |
| 315 | 1. | .1 | | 1 40. |
| 214 | 16. | (DIRECT FLOW) | | 0 45. |
| 312 | 20. | .4 | | 1 40. |
| 211 | 6. | (DIRECT FLOW) | | 0 45. |
| 206 | 4. | (DIRECT FLOW) | | 0 45. |
| 307 | 3. | .4 | | 1 25. |
| 114 | 16. | (DIRECT FLOW) | | 0 45. |
| 111 | 24. | (DIRECT FLOW) | | 1 35. |
| 203 | 4. | (DIRECT FLOW) | | 0 15. |
| 106 | 4. | (DIRECT FLOW) | | 0 45. |
| 404 | 36. | (DIRECT FLOW) | | 1 15. |
| 103 | 4. | (DIRECT FLOW) | | 0 15. |
| 202 | 11. | (DIRECT FLOW) | | 0 35. |
| 306 | 1. | .2 | | 1 50. |
| 205 | 3. | (DIRECT FLOW) | | 0 50. |
| 311 | 31. | .6 | | 1 50. |
| 204 | 12. | (DIRECT FLOW) | | 0 45. |
| 603 | 1. | .1 | .1 | 0 35. |

| | | | | | |
|---|---|---|---|---|---|
| 102 | 11. | (DIRECT FLOW) | | 0 | 35. |
| 236 | 5. | (DIRECT FLOW) | | 0 | 40. |
| 105 | 3. | (DIRECT FLOW) | | 0 | 55. |
| 104 | 38. | (DIRECT FLOW) | | 1 | 40. |
| 303 | 1. | .1 | | 0 | 50. |
| 602 | 3. | .1 | .5 | 1 | 20. |
| 136 | 5. | (DIRECT FLOW) | | 0 | 40. |
| 231 | 2. | (DIRECT FLOW) | | 0 | 40. |
| 401 | 40. | (DIRECT FLOW) | | 1 | 35. |
| 402 | 4. | (DIRECT FLOW) | | 1 | 15. |
| 336 | 1. | .1 | | 1 | 40. |
| 235 | 30. | (DIRECT FLOW) | | 0 | 50. |
| 131 | 2. | (DIRECT FLOW) | | 0 | 40. |
| 304 | 35. | .8 | | 2 | 20. |
| 302 | 2. | .2 | | 2 | 15. |
| 201 | 19. | (DIRECT FLOW) | | 0 | 45. |
| 135 | 30. | (DIRECT FLOW) | | 0 | 50. |
| 230 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 331 | 1. | .4 | | 0 | 50. |
| 229 | 4. | (DIRECT FLOW) | | 0 | 40. |
| 101 | 39. | (DIRECT FLOW) | | 2 | 10. |
| 238 | 11. | (DIRECT FLOW) | | 0 | 45. |
| 335 | 14. | .4 | | 1 | 45. |
| 234 | 22. | (DIRECT FLOW) | | 0 | 55. |
| 233 | 2. | (DIRECT FLOW) | | 0 | 40. |
| 130 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 129 | 4. | (DIRECT FLOW) | | 0 | 40. |
| 501 | 0. | .1 | 11.5 | 7 | 0. |
| 138 | 11. | (DIRECT FLOW) | | 0 | 45. |
| 134 | 29. | (DIRECT FLOW) | | 1 | 5. |
| 133 | 2. | (DIRECT FLOW) | | 0 | 40. |
| 330 | 0. | .0 | | 0 | 0. |
| 329 | 2. | .3 | | 1 | 30. |
| 228 | 26. | (DIRECT FLOW) | | 0 | 50. |
| 301 | 0. | .0 | | 7 | 0. |
| 226 | 5. | (DIRECT FLOW) | | 0 | 45. |
| 338 | 2. | .2 | | 2 | 15. |
| 237 | 23. | (DIRECT FLOW) | | 0 | 55. |
| 432 | 30. | (DIRECT FLOW) | | 1 | 0. |
| 128 | 27. | (DIRECT FLOW) | | 0 | 50. |
| 126 | 5. | (DIRECT FLOW) | | 0 | 45. |
| 137 | 24. | (DIRECT FLOW) | | 0 | 55. |
| 333 | 19. | .4 | | 2 | 20. |
| 232 | 17. | (DIRECT FLOW) | | 0 | 50. |
| 328 | 15. | .4 | | 1 | 35. |
| 227 | 7. | (DIRECT FLOW) | | 0 | 50. |
| 326 | 2. | .2 | | 1 | 45. |
| 225 | 5. | (DIRECT FLOW) | | 0 | 45. |
| 537 | 0. | .1 | 3.2 | 7 | 0. |
| 132 | 24. | (DIRECT FLOW) | | 1 | 50. |
| 127 | 19. | (DIRECT FLOW) | | 1 | 25. |
| 125 | 5. | (DIRECT FLOW) | | 0 | 45. |
| 337 | 0. | (DIRECT FLOW) | | 0 | 25. |
| 400 | 46. | (DIRECT FLOW) | | 1 | 35. |
| 901 | 0. | (DIRECT FLOW) | | 0 | 25. |
| 900 | 46. | (DIRECT FLOW) | | 1 | 35. |

```
   2   1   1   2
   3   4
WATERSHED   1
10yr 3hr Current Condition SWMM Sump Basin
Blank
        84       5.0                                                          1
         1  201
         4  204
         5  205
         6  206
         7  207
         9  209
        11  211
        12  212
        13  213
        14  214
        15  215
        16  216
        17  217
        18  218
        19  219
        20  220
        21  221
        22  222
        23  223
        24  224
        25  225
        26  226
        27  227
        28  228
        29  229
        30  230
        31  231
        32  232
        33  233
        34  234
        35  235
        36  236
        37  237
        38  238

    0  201  101    3              1.
   -1  202  102  3 3              1.
        0.        0.      0.55      10.1      1.65        0.        0.        0.

   -1  203  103  3 3              1.
        0.        0.      0.23      3.59      0.69        0.        0.        0.
    0  204  104    3              1.
    0  205  105    3              1.
    0  206  106    3              1.
    0  207  107    3              1.
   -1  208  108  3 3              1.
        0.        0.      0.67     45.23      1.80        0.        0.        0.
    0  209  109    3              1.
   -1  210  110  3 3              1.
        0.        0.      0.35     33.48      1.05        0.        0.        0.
    0  211  111    3              1.
    0  212  112    3              1.
    0  213  113    3              1.
    0  214  114    3              1.
    0  215  115    3              1.
    0  216  116    3              1.
    0  217  117    3              1.
    0  218  118    3              1.
    0  219  119    3              1.
    0  220  120    3              1.
    0  121  120    3              1.
    0  221  121    3              1.
    0  222  122    3              1.
    0  223  123    3              1.
    0  224  124    3              1.
    0  225  125    3              1.
    0  226  126    3              1.
    0  227  127    3              1.
    0  228  128    3              1.
    0  229  129    3              1.
    0  230  130    3              1.
    0  231  131    3              1.
```

```
0  232  132    3              1.
0  233  133    3              1.
0  234  134    3              1.
0  235  135    3              1.
0  236  136    3              1.
0  237  137    3              1.
0  238  138    3              1.
0  402  302    3              1.
0  401  304    3              1.
0  106  306    3              1.
0  107  307    3              1.
0  409  309    3              1.
0  404  311    3              1.
0  112  312    3              1.
0  412  314    3              1.
0  115  315    3              1.
0  117  317    3              1.
0  118  318    3              1.
0  119  319    3              1.
0  420  322    3              1.
0  124  324    3              1.
0  126  326    3              1.
0  128  328    3              1.
0  129  329    3              1.
0  130  330    3              1.
0  131  331    3              1.
0  432  333    3              1.
0  135  335    3              1.
0  136  336    3              1.
0  138  338    3              1.
0  125  400    3              1.
0  127  400    3              1.
0  132  400    3              1.
0  104  401    3              1.
0  105  401    3              1.
0  111  404    3              1.
0  114  404    3              1.
0  109  409    3              1.
0  122  420    3              1.
0  123  420    3              1.
0  133  432    3              1.
0  134  432    3              1.
0  101  501    3              1.
0  113  513    3              1.
0  116  516    3              1.
0  120  520    3              1.
0  137  537    3              1.
0  102  602    3              1.
0  103  603    3              1.
0  108  608    3              1.
0  110  610    3              1.
0  400  900    3              1.
0  337  901    3              1.
0  501  301  7 2     0.1       1.                                        0.1
    0.        0.       7.5        0.       26.4        0.       63.3        0.
  82.9        0.      129.     1400.       201.     6510.
0  513  313  3 2     0.1       1.                                        0.1
    0.        0.      20.3        0.       22.1      495.
0  516  316  3 2     0.1       1.                                        0.1
    0.        0.     18.12        0.       18.9      320.        0.        0.
0  520  320  4 2     0.1       1.                                        0.1
    0.        0.       9.9        0.        10.        0.      230.        0.
0  537  337  3 2     0.1       1.                                        0.1
    0.        0.     14.85        0.       17.9      623.        0.        0.
0  602  402  3 2     0.1       1.                                        0.1
    0.        0.      0.78       5.4       1.64      15.4
0  603  303  3 2     0.1       1.                                        0.1
    0.        0.      0.12       1.2       0.33       6.9        0.        0.
0  608  308 10 2     0.1       1.                                        0.1
    0.        0.      .038      0.31       0.45      0.46      1.63      0.57
  3.59      0.67      6.09     32.39       7.09     55.58      8.87    123.53
 11.53    266.39     13.14    378.74
0  610  310  2 2     0.1       1.                                        0.1
    0.        0.      3.81        1.3        0.        0.        0.        0.
0  302  101    1          3681.  0.0077     60.     60.    .045     10.
0  304  101    1          3729.  0.0074     40.     40.    .045     10.
0  311  104    1          2920.  0.0108     70.     70.    .045     10.
0  306  105    1          5319.  0.0161     50.     50.    .045     10.
```

```
    0  308  107    1      4.    625.   0.008    0.01    0.01   0.016      2.
    0  312  111    1           2682.  0.0082    110.    110.    .045     10.
    0  314  112    1           1834.  0.0049    175.    175.    .045     10.
    0  318  113    1           3243.  0.0052    100.    100.    .045     10.
    0  319  113    1           4029.  0.0107     95.     95.    .045     10.
    0  315  114    1           5050.  0.0109     80.     80.    .045     10.
    0  316  114    1           2964.  0.0101     50.     50.    .045     10.
    0  320  118    1            811.  0.0123     80.     80.    .045     10.
    0  322  120    1           3463.  0.0081    100.    100.    .045     10.
    0  324  123    1           5484.  0.0133     75.     75.    .045     10.
    0  326  125    1           2139.  0.0019     80.     80.    .045     10.
    0  301  126    1           1590.   0.017     40.     40.    .045     10.
    0  328  127    1           3272.  0.0089    115.    115.    .045     10.
    0  329  128    1           3696.  0.0176     25.     25.    .045     10.
    0  330  128    1           5614.  0.0157     50.     50.    .045     10.
    0  331  129    1           2742.  0.0091      3.      3.   0.035      3.
    0  333  132    1           4251.  0.0078    125.    125.    .045     10.
    0  335  134    1           6142.  0.0138     70.     70.    .045     10.
    0  336  135    1           5277.    0.01    100.    100.    .045     10.
    0  338  137    1           8677.  0.0086     75.     75.    .045     10.
    0  303  402    1      5.   1011.  0.0151      5.      5.   0.035      3.
    0  307  404    1      5.   1308.  0.0031      5.      5.   0.035      3.
    0  310  409    1      5.   3896.    0.01      5.      5.   0.035      3.
    0  313  412    1            820.  0.0073    100.    100.    .045     10.
    0  317  412    1           3628.  0.0105    100.    100.    .045     10.
    0  309  608    1      5.   1757.  0.0091      5.      5.   0.035      3.

    0
   85
  101  102  103  104  105  106  107  108  109  110  111  112  113  114  115  116
  117  118  119  120  121  122  123  124  125  126  127  128  129  130  131  132
  133  134  135  136  137  138  301  302  303  304  306  307  308  309  310  311
  312  313  314  315  316  317  318  319  320  322  324  326  328  329  330  331
  333  335  336  338  400  401  402  404  412  420  432  501  513  516  520  537
  602  603  608  609  610
ENDPROGRAM
```

URBAN DRAINAGE STORM WATER MANAGEMENT MODEL - 32 BIT VERSION 1998
REVISED BY UNIVERSITY OF COLORADO AT DENVER

*** ENTRY MADE TO RUNOFF MODEL ***

10yr 3hr Current Condition SWMM Sump Basin
Blank

0NUMBER OF TIME STEPS 84
0INTEGRATION TIME INTERVAL (MINUTES), 5.00

25.0 PERCENT OF IMPERVIOUS AREA HAS ZERO DETENTION DEPTH
1

10yr 3hr Current Condition SWMM Sump Basin
Blank

HYDROGRAPHS FROM CUHPF MODEL ARE LISTED FOR THE FOLLOWING 34 SUBCATCHMENTS

| TIME(HR/MIN) | 1 | 4 | 5 | 6 | 7 | 9 | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|---|---|
| | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 |
| | 35 | 36 | 37 | 38 | | | | | | |
| 0 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 5. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 10. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 15. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 20. | 0. | 1. | 0. | 0. | 1. | 0. | 1. | 1. | 0. | 1. |
| | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 25. | 7. | 4. | 1. | 1. | 2. | 3. | 3. | 8. | 5. | 7. |
| | 1. | 3. | 12. | 4. | 1. | 4. | 3. | 2. | 5. | 4. |
| | 1. | 2. | 2. | 6. | 2. | 0. | 1. | 4. | 1. | 4. |
| | 7. | 2. | 5. | 3. | | | | | | |
| 0 30. | 26. | 12. | 7. | 6. | 3. | 12. | 6. | 24. | 19. | 22. |
| | 5. | 14. | 29. | 13. | 7. | 17. | 11. | 9. | 22. | 16. |
| | 5. | 8. | 6. | 23. | 6. | 1. | 5. | 17. | 5. | 16. |
| | 28. | 9. | 21. | 13. | | | | | | |
| 0 35. | 49. | 20. | 16. | 11. | 3. | 22. | 10. | 43. | 39. | 37. |
| | 9. | 29. | 37. | 22. | 14. | 37. | 21. | 20. | 48. | 29. |
| | 8. | 14. | 11. | 46. | 9. | 2. | 6. | 36. | 8. | 34. |
| | 56. | 15. | 46. | 26. | | | | | | |
| 0 40. | 64. | 25. | 25. | 14. | 3. | 28. | 12. | 57. | 58. | 45. |
| | 11. | 45. | 37. | 26. | 21. | 56. | 31. | 31. | 73. | 36. |
| | 10. | 18. | 15. | 65. | 10. | 1. | 6. | 52. | 8. | 52. |
| | 79. | 17. | 73. | 34. | | | | | | |
| 0 45. | 68. | 27. | 30. | 15. | 3. | 29. | 12. | 64. | 71. | 46. |
| | 12. | 58. | 34. | 27. | 25. | 70. | 37. | 38. | 92. | 37. |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 10. | 19. | 16. | 76. | 9. | 0. | 6. | 62. | 8. | 66. |
| | | 92. | 16. | 93. | 38. | | | | | | |
| 0 | 50. | 65. | 26. | 32. | 14. | 3. | 28. | 11. | 65. | 76. | 44. |
| | | 11. | 66. | 31. | 25. | 26. | 77. | 39. | 42. | 101. | 35. |
| | | 9. | 18. | 16. | 79. | 8. | 0. | 6. | 66. | 7. | 75. |
| | | 96. | 15. | 106. | 37. | | | | | | |
| 0 | 55. | 60. | 25. | 31. | 13. | 3. | 26. | 11. | 62. | 76. | 41. |
| | | 11. | 68. | 26. | 24. | 26. | 78. | 38. | 42. | 103. | 32. |
| | | 9. | 17. | 15. | 76. | 8. | 0. | 5. | 64. | 7. | 77. |
| | | 93. | 14. | 110. | 34. | | | | | | |
| 1 | 0. | 55. | 24. | 29. | 13. | 3. | 24. | 11. | 59. | 72. | 39. |
| | | 10. | 68. | 23. | 23. | 24. | 75. | 35. | 40. | 99. | 29. |
| | | 9. | 16. | 15. | 71. | 8. | 0. | 4. | 60. | 6. | 76. |
| | | 87. | 13. | 108. | 32. | | | | | | |
| 1 | 5. | 50. | 24. | 27. | 12. | 3. | 22. | 11. | 57. | 67. | 37. |
| | | 10. | 64. | 21. | 21. | 22. | 71. | 33. | 38. | 92. | 27. |
| | | 9. | 15. | 15. | 67. | 8. | 0. | 4. | 55. | 6. | 72. |
| | | 82. | 12. | 102. | 30. | | | | | | |
| 1 | 10. | 45. | 23. | 25. | 11. | 4. | 20. | 11. | 56. | 64. | 34. |
| | | 9. | 61. | 18. | 20. | 22. | 66. | 32. | 36. | 86. | 24. |
| | | 9. | 14. | 15. | 63. | 7. | 0. | 4. | 52. | 5. | 67. |
| | | 78. | 10. | 95. | 28. | | | | | | |
| 1 | 15. | 40. | 22. | 23. | 10. | 4. | 19. | 10. | 54. | 60. | 32. |
| | | 9. | 58. | 17. | 19. | 20. | 62. | 31. | 34. | 81. | 22. |
| | | 8. | 13. | 14. | 59. | 7. | 0. | 4. | 49. | 5. | 64. |
| | | 73. | 10. | 89. | 26. | | | | | | |
| 1 | 20. | 37. | 21. | 22. | 9. | 4. | 17. | 10. | 52. | 57. | 29. |
| | | 8. | 55. | 15. | 17. | 19. | 58. | 29. | 32. | 75. | 20. |
| | | 8. | 12. | 14. | 56. | 6. | 0. | 4. | 45. | 5. | 60. |
| | | 69. | 9. | 84. | 23. | | | | | | |
| 1 | 25. | 33. | 20. | 20. | 9. | 4. | 16. | 10. | 49. | 53. | 27. |
| | | 7. | 52. | 13. | 16. | 18. | 55. | 27. | 31. | 70. | 18. |
| | | 7. | 11. | 13. | 51. | 6. | 0. | 3. | 42. | 4. | 57. |
| | | 64. | 8. | 78. | 21. | | | | | | |
| 1 | 30. | 30. | 19. | 18. | 8. | 2. | 14. | 9. | 46. | 49. | 25. |
| | | 7. | 49. | 11. | 15. | 17. | 51. | 25. | 29. | 65. | 16. |
| | | 7. | 10. | 12. | 47. | 6. | 0. | 3. | 38. | 4. | 53. |
| | | 59. | 7. | 73. | 20. | | | | | | |
| 1 | 35. | 26. | 18. | 17. | 7. | 2. | 13. | 9. | 43. | 45. | 23. |
| | | 6. | 46. | 10. | 14. | 15. | 47. | 23. | 26. | 59. | 14. |
| | | 7. | 9. | 11. | 43. | 6. | 0. | 3. | 35. | 4. | 49. |
| | | 54. | 6. | 67. | 18. | | | | | | |
| 1 | 40. | 23. | 17. | 16. | 7. | 0. | 12. | 8. | 40. | 42. | 21. |
| | | 6. | 43. | 8. | 12. | 14. | 43. | 21. | 24. | 54. | 13. |
| | | 6. | 8. | 11. | 40. | 5. | 0. | 3. | 32. | 4. | 45. |
| | | 49. | 6. | 62. | 16. | | | | | | |
| 1 | 45. | 21. | 16. | 14. | 6. | 0. | 10. | 8. | 37. | 38. | 19. |
| | | 6. | 40. | 7. | 11. | 13. | 40. | 20. | 23. | 50. | 11. |
| | | 6. | 8. | 10. | 36. | 5. | 0. | 3. | 29. | 3. | 42. |
| | | 45. | 5. | 57. | 15. | | | | | | |
| 1 | 50. | 19. | 15. | 13. | 6. | 0. | 9. | 8. | 35. | 35. | 17. |
| | | 5. | 37. | 6. | 11. | 12. | 36. | 18. | 21. | 46. | 10. |
| | | 6. | 7. | 9. | 33. | 5. | 0. | 2. | 27. | 3. | 39. |
| | | 41. | 5. | 52. | 13. | | | | | | |
| 1 | 55. | 16. | 14. | 12. | 5. | 0. | 9. | 8. | 33. | 33. | 16. |
| | | 5. | 34. | 6. | 10. | 11. | 34. | 17. | 19. | 42. | 9. |
| | | 6. | 6. | 9. | 30. | 5. | 0. | 2. | 25. | 3. | 36. |
| | | 38. | 4. | 48. | 12. | | | | | | |
| 2 | 0. | 15. | 13. | 11. | 5. | 0. | 8. | 7. | 31. | 30. | 14. |
| | | 5. | 32. | 5. | 9. | 11. | 31. | 16. | 18. | 39. | 8. |
| | | 5. | 6. | 8. | 28. | 4. | 0. | 2. | 22. | 3. | 33. |
| | | 35. | 4. | 44. | 11. | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 5. | 13. | 12. | 10. | 5. | 0. | 7. | 7. | 28. | 28. | 13. |
| | | 4. | 30. | 3. | 8. | 10. | 29. | 15. | 17. | 35. | 7. |
| | | 5. | 5. | 8. | 26. | 4. | 0. | 1. | 21. | 2. | 31. |
| | | 32. | 3. | 41. | 10. | | | | | | |
| 2 | 10. | 12. | 12. | 10. | 4. | 0. | 6. | 7. | 26. | 25. | 12. |
| | | 4. | 28. | 2. | 7. | 9. | 26. | 14. | 16. | 32. | 6. |
| | | 5. | 5. | 7. | 23. | 4. | 0. | 0. | 19. | 2. | 28. |
| | | 29. | 3. | 38. | 9. | | | | | | |
| 2 | 15. | 10. | 11. | 9. | 4. | 0. | 6. | 6. | 25. | 23. | 11. |
| | | 4. | 26. | 1. | 7. | 8. | 24. | 13. | 15. | 30. | 6. |
| | | 5. | 5. | 7. | 21. | 4. | 0. | 0. | 17. | 2. | 26. |
| | | 27. | 3. | 35. | 8. | | | | | | |
| 2 | 20. | 9. | 10. | 8. | 4. | 0. | 5. | 6. | 23. | 22. | 10. |
| | | 4. | 24. | 0. | 6. | 8. | 22. | 12. | 14. | 27. | 5. |
| | | 5. | 4. | 7. | 20. | 4. | 0. | 0. | 16. | 2. | 24. |
| | | 24. | 3. | 32. | 8. | | | | | | |
| 2 | 25. | 8. | 9. | 8. | 3. | 0. | 5. | 6. | 21. | 20. | 9. |
| | | 3. | 22. | 0. | 6. | 7. | 21. | 11. | 13. | 25. | 5. |
| | | 5. | 4. | 6. | 18. | 3. | 0. | 0. | 14. | 0. | 23. |
| | | 22. | 2. | 29. | 7. | | | | | | |
| 2 | 30. | 7. | 9. | 7. | 3. | 0. | 4. | 6. | 20. | 18. | 8. |
| | | 3. | 21. | 0. | 5. | 7. | 19. | 10. | 12. | 23. | 4. |
| | | 4. | 3. | 6. | 16. | 3. | 0. | 0. | 13. | 0. | 21. |
| | | 20. | 2. | 27. | 6. | | | | | | |
| 2 | 35. | 6. | 8. | 7. | 3. | 0. | 4. | 6. | 18. | 17. | 7. |
| | | 3. | 19. | 0. | 5. | 6. | 18. | 9. | 11. | 21. | 4. |
| | | 4. | 3. | 6. | 15. | 3. | 0. | 0. | 12. | 0. | 19. |
| | | 19. | 0. | 25. | 6. | | | | | | |
| 2 | 40. | 6. | 8. | 6. | 3. | 0. | 4. | 5. | 17. | 15. | 6. |
| | | 3. | 18. | 0. | 4. | 6. | 16. | 9. | 10. | 19. | 3. |
| | | 4. | 3. | 5. | 14. | 3. | 0. | 0. | 11. | 0. | 18. |
| | | 17. | 0. | 23. | 5. | | | | | | |
| 2 | 45. | 5. | 7. | 6. | 2. | 0. | 3. | 5. | 16. | 14. | 6. |
| | | 3. | 17. | 0. | 4. | 5. | 15. | 8. | 9. | 18. | 3. |
| | | 4. | 3. | 5. | 13. | 3. | 0. | 0. | 10. | 0. | 17. |
| | | 16. | 0. | 21. | 5. | | | | | | |
| 2 | 50. | 5. | 7. | 5. | 2. | 0. | 3. | 5. | 15. | 13. | 5. |
| | | 2. | 16. | 0. | 4. | 5. | 14. | 7. | 9. | 16. | 3. |
| | | 4. | 2. | 5. | 12. | 2. | 0. | 0. | 9. | 0. | 15. |
| | | 14. | 0. | 19. | 4. | | | | | | |
| 2 | 55. | 4. | 6. | 5. | 2. | 0. | 3. | 5. | 13. | 12. | 5. |
| | | 2. | 15. | 0. | 3. | 5. | 13. | 7. | 8. | 15. | 2. |
| | | 4. | 2. | 5. | 11. | 0. | 0. | 0. | 9. | 0. | 14. |
| | | 13. | 0. | 18. | 4. | | | | | | |
| 3 | 0. | 4. | 6. | 4. | 1. | 0. | 2. | 5. | 13. | 11. | 4. |
| | | 2. | 14. | 0. | 3. | 4. | 12. | 6. | 8. | 14. | 2. |
| | | 4. | 2. | 4. | 10. | 0. | 0. | 0. | 8. | 0. | 13. |
| | | 12. | 0. | 17. | 4. | | | | | | |
| 3 | 5. | 3. | 6. | 4. | 0. | 0. | 2. | 4. | 12. | 10. | 4. |
| | | 2. | 13. | 0. | 2. | 4. | 11. | 6. | 7. | 13. | 0. |
| | | 4. | 0. | 4. | 9. | 0. | 0. | 0. | 7. | 0. | 12. |
| | | 11. | 0. | 15. | 3. | | | | | | |
| 3 | 10. | 3. | 5. | 4. | 0. | 0. | 0. | 4. | 11. | 9. | 4. |
| | | 1. | 12. | 0. | 0. | 4. | 10. | 5. | 7. | 12. | 0. |
| | | 3. | 0. | 4. | 8. | 0. | 0. | 0. | 7. | 0. | 11. |
| | | 10. | 0. | 14. | 3. | | | | | | |
| 3 | 15. | 3. | 5. | 3. | 0. | 0. | 0. | 4. | 10. | 9. | 3. |
| | | 0. | 11. | 0. | 0. | 3. | 9. | 5. | 6. | 11. | 0. |
| | | 2. | 0. | 4. | 7. | 0. | 0. | 0. | 6. | 0. | 11. |
| | | 9. | 0. | 13. | 3. | | | | | | |
| 3 | 20. | 2. | 5. | 3. | 0. | 0. | 0. | 4. | 9. | 8. | 2. |
| | | 0. | 10. | 0. | 0. | 3. | 9. | 5. | 6. | 10. | 0. |
| | | 0. | 0. | 4. | 7. | 0. | 0. | 0. | 5. | 0. | 10. |

```
              8.       0.      12.       2.
3   25.       0.       4.       3.       0.       0.       0.       4.       9.       7.       0.
              0.      10.       0.       0.       3.       8.       4.       5.       9.       0.
              0.       0.       2.       6.       0.       0.       0.       5.       0.       9.
              8.       0.      11.       2.
3   30.       0.       4.       3.       0.       0.       0.       3.       8.       7.       0.
              0.       9.       0.       0.       3.       7.       4.       5.       8.       0.
              0.       0.       0.       6.       0.       0.       0.       5.       0.       8.
              7.       0.      10.       0.
3   35.       0.       4.       3.       0.       0.       0.       2.       7.       6.       0.
              0.       8.       0.       0.       3.       7.       4.       5.       8.       0.
              0.       0.       0.       5.       0.       0.       0.       4.       0.       8.
              6.       0.       9.       0.
3   40.       0.       3.       2.       0.       0.       0.       0.       7.       6.       0.
              0.       8.       0.       0.       2.       6.       3.       4.       7.       0.
              0.       0.       0.       5.       0.       0.       0.       4.       0.       7.
              6.       0.       9.       0.
3   45.       0.       2.       2.       0.       0.       0.       0.       6.       5.       0.
              0.       7.       0.       0.       2.       6.       3.       4.       6.       0.
              0.       0.       0.       4.       0.       0.       0.       4.       0.       7.
              5.       0.       8.       0.
3   50.       0.       0.       2.       0.       0.       0.       0.       6.       5.       0.
              0.       7.       0.       0.       2.       5.       3.       4.       6.       0.
              0.       0.       0.       4.       0.       0.       0.       3.       0.       6.
              5.       0.       7.       0.
3   55.       0.       0.       2.       0.       0.       0.       0.       5.       4.       0.
              0.       6.       0.       0.       2.       5.       3.       3.       5.       0.
              0.       0.       0.       4.       0.       0.       0.       3.       0.       6.
              4.       0.       7.       0.
4    0.       0.       0.       2.       0.       0.       0.       0.       5.       4.       0.
              0.       6.       0.       0.       0.       4.       3.       3.       5.       0.
              0.       0.       0.       3.       0.       0.       0.       3.       0.       5.
              4.       0.       6.       0.
4    5.       0.       0.       2.       0.       0.       0.       0.       5.       4.       0.
              0.       5.       0.       0.       0.       4.       2.       3.       5.       0.
              0.       0.       0.       3.       0.       0.       0.       2.       0.       5.
              4.       0.       6.       0.
4   10.       0.       0.       1.       0.       0.       0.       0.       4.       4.       0.
              0.       5.       0.       0.       0.       4.       2.       3.       4.       0.
              0.       0.       0.       3.       0.       0.       0.       2.       0.       5.
              3.       0.       5.       0.
4   15.       0.       0.       0.       0.       0.       0.       0.       4.       3.       0.
              0.       5.       0.       0.       0.       3.       0.       3.       4.       0.
              0.       0.       0.       3.       0.       0.       0.       2.       0.       4.
              3.       0.       5.       0.
4   20.       0.       0.       0.       0.       0.       0.       0.       3.       3.       0.
              0.       4.       0.       0.       0.       3.       0.       2.       3.       0.
              0.       0.       0.       2.       0.       0.       0.       0.       0.       4.
              3.       0.       4.       0.
4   25.       0.       0.       0.       0.       0.       0.       0.       2.       3.       0.
              0.       4.       0.       0.       0.       3.       0.       2.       3.       0.
              0.       0.       0.       0.       0.       0.       0.       0.       0.       4.
              3.       0.       4.       0.
4   30.       0.       0.       0.       0.       0.       0.       0.       1.       3.       0.
              0.       4.       0.       0.       0.       3.       0.       2.       3.       0.
              0.       0.       0.       0.       0.       0.       0.       0.       0.       3.
              2.       0.       4.       0.
4   35.       0.       0.       0.       0.       0.       0.       0.       0.       2.       0.
              0.       4.       0.       0.       0.       3.       0.       0.       3.       0.
              0.       0.       0.       0.       0.       0.       0.       0.       0.       3.
              0.       0.       3.       0.
4   40.       0.       0.       0.       0.       0.       0.       0.       0.       2.       0.
```

```
                0.        3.        0.        0.        0.        2.        0.        0.        2.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        3.
                0.        0.        3.        0.

    4   45.     0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        3.        0.        0.        0.        2.        0.        0.        2.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        3.
                0.        0.        3.        0.

    4   50.     0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        3.        0.        0.        0.        1.        0.        0.        2.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        2.
                0.        0.        3.        0.

    4   55.     0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        3.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        2.
                0.        0.        3.        0.

    5    0.     0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        3.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        2.
                0.        0.        2.        0.

    5    5.     0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        2.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        2.        0.

    5   10.     0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        2.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        2.        0.

1

 10yr 3hr Current Condition SWMM Sump Basin
 Blank


                                                                  WIDTH              INVERT     SIDE SLOPES           OVERBA
NK/SURCHARGE
 GUTTER      GUTTER       NDP        NP                          OR DIAM    LENGTH    SLOPE    HORIZ TO VERT   MANNING
 DEPTH       JK
 NUMBER    CONNECTION                                              (FT)      (FT)    (FT/FT)      L     R         N
  (FT)

  201         101          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  202         102          3          3                            .0        1.     .0010       .0    .0       .001
 10.00       -1
                      TIME IN HRS VS INFLOW IN CFS
                            .0      .0        .6    10.1        1.6      .0
  203         103          3          3                            .0        1.     .0010       .0    .0       .001
 10.00       -1
                      TIME IN HRS VS INFLOW IN CFS
                            .0      .0        .2     3.6         .7      .0
  204         104          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  205         105          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  206         106          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  207         107          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  208         108          3          3                            .0        1.     .0010       .0    .0       .001
 10.00       -1
                      TIME IN HRS VS INFLOW IN CFS
                            .0      .0        .7    45.2        1.8      .0
  209         109          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  210         110          3          3                            .0        1.     .0010       .0    .0       .001
 10.00       -1
                      TIME IN HRS VS INFLOW IN CFS
                            .0      .0        .3    33.5        1.0      .0
  211         111          0          3                            .0        1.     .0010       .0    .0       .001
```

```
10.00       0
 212        112         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 213        113         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 214        114         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 215        115         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 216        116         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 217        117         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 218        118         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 219        119         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 220        120         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 121        120         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 221        121         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 222        122         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 223        123         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 224        124         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 225        125         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 226        126         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 227        127         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 228        128         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 229        129         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 230        130         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 231        131         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 232        132         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 233        133         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 234        134         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 235        135         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 236        136         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 237        137         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 238        138         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 402        302         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 401        304         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 106        306         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 107        307         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 409        309         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 404        311         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 112        312         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 412        314         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 115        315         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 117        317         0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 118        318         0          3                    .0        1.     .0010       .0    .0       .001
```

```
 10.00        0
  119         319          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  420         322          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  124         324          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  126         326          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  128         328          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  129         329          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  130         330          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  131         331          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  432         333          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  135         335          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  136         336          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  138         338          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  125         400          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  127         400          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  132         400          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  104         401          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  105         401          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  111         404          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  114         404          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  109         409          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  122         420          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  123         420          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  133         432          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  134         432          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  101         501          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  113         513          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  116         516          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  120         520          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  137         537          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  102         602          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  103         603          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  108         608          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  110         610          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  400         900          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  337         901          0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  501         301          7          2      PIPE          .1        1.     .0010       .0    .0       .001
   .10        0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                          .0       .0       7.5       .0       26.4       .0       63.3       .0       82.9       .0     12
9.0  1400.0
                        201.0  6510.0
  513         313          3          2      PIPE          .1        1.     .0010       .0    .0       .001
```

```
  .10        0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                          .0      .0      20.3      .0      22.1   495.0
  516         316         3          2      PIPE             .1        1.     .0010       .0    .0       .001
  .10         0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                          .0      .0      18.1      .0      18.9   320.0
  520         320         4          2      PIPE             .1        1.     .0010       .0    .0       .001
  .10         0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                          .0      .0       9.9      .0      10.0      .0     230.0      .0
  537         337         3          2      PIPE             .1        1.     .0010       .0    .0       .001
  .10         0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                          .0      .0      14.9      .0      17.9   623.0
  602         402         3          2      PIPE             .1        1.     .0010       .0    .0       .001
  .10         0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                          .0      .0        .8     5.4       1.6    15.4
  603         303         3          2      PIPE             .1        1.     .0010       .0    .0       .001
  .10         0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                          .0      .0        .1     1.2        .3     6.9
  608         308        10          2      PIPE             .1        1.     .0010       .0    .0       .001
  .10         0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                          .0      .0        .0      .3        .4      .5       1.6      .6       3.6      .7
6.1    32.4
                         7.1    55.6       8.9   123.5      11.5   266.4      13.1   378.7
  610         310         2          2      PIPE             .1        1.     .0010       .0    .0       .001
  .10         0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                          .0      .0       3.8     1.3
  302         101         0          1      CHANNEL          .0     3681.     .0077     60.0  60.0       .045
 10.00        0
  304         101         0          1      CHANNEL          .0     3729.     .0074     40.0  40.0       .045
 10.00        0
  311         104         0          1      CHANNEL          .0     2920.     .0108     70.0  70.0       .045
 10.00        0
  306         105         0          1      CHANNEL          .0     5319.     .0161     50.0  50.0       .045
 10.00        0
  308         107         0          1      CHANNEL         4.0      625.     .0080      .0    .0        .016
  2.00        0
  312         111         0          1      CHANNEL          .0     2682.     .0082    110.0 110.0       .045
 10.00        0
  314         112         0          1      CHANNEL          .0     1834.     .0049    175.0 175.0       .045
 10.00        0
  318         113         0          1      CHANNEL          .0     3243.     .0052    100.0 100.0       .045
 10.00        0
  319         113         0          1      CHANNEL          .0     4029.     .0107     95.0  95.0       .045
 10.00        0
  315         114         0          1      CHANNEL          .0     5050.     .0109     80.0  80.0       .045
 10.00        0
  316         114         0          1      CHANNEL          .0     2964.     .0101     50.0  50.0       .045
 10.00        0
  320         118         0          1      CHANNEL          .0      811.     .0123     80.0  80.0       .045
 10.00        0
  322         120         0          1      CHANNEL          .0     3463.     .0081    100.0 100.0       .045
 10.00        0
  324         123         0          1      CHANNEL          .0     5484.     .0133     75.0  75.0       .045
 10.00        0
  326         125         0          1      CHANNEL          .0     2139.     .0019     80.0  80.0       .045
 10.00        0
  301         126         0          1      CHANNEL          .0     1590.     .0170     40.0  40.0       .045
 10.00        0
  328         127         0          1      CHANNEL          .0     3272.     .0089    115.0 115.0       .045
 10.00        0
  329         128         0          1      CHANNEL          .0     3696.     .0176     25.0  25.0       .045
 10.00        0
  330         128         0          1      CHANNEL          .0     5614.     .0157     50.0  50.0       .045
 10.00        0
  331         129         0          1      CHANNEL          .0     2742.     .0091      3.0   3.0       .035
  3.00        0
  333         132         0          1      CHANNEL          .0     4251.     .0078    125.0 125.0       .045
 10.00        0
  335         134         0          1      CHANNEL          .0     6142.     .0138     70.0  70.0       .045
 10.00        0
  336         135         0          1      CHANNEL          .0     5277.     .0100    100.0 100.0       .045
```

```
 10.00        0
  338         137          0          1      CHANNEL          .0     8677.     .0086     75.0  75.0       .045
 10.00        0
  303         402          0          1      CHANNEL         5.0     1011.     .0151      5.0   5.0       .035
  3.00        0
  307         404          0          1      CHANNEL         5.0     1308.     .0031      5.0   5.0       .035
  3.00        0
  310         409          0          1      CHANNEL         5.0     3896.     .0100      5.0   5.0       .035
  3.00        0
  313         412          0          1      CHANNEL          .0      820.     .0073    100.0 100.0       .045
 10.00        0
  317         412          0          1      CHANNEL          .0     3628.     .0105    100.0 100.0       .045
 10.00        0
  309         608          0          1      CHANNEL         5.0     1757.     .0091      5.0   5.0       .035
  3.00        0
0TOTAL NUMBER OF GUTTERS/PIPES, 124
1


 10yr 3hr Current Condition SWMM Sump Basin
 Blank


 ARRANGEMENT OF SUBCATCHMENTS AND GUTTERS/PIPES

       GUTTER     TRIBUTARY GUTTER/PIPE                                          TRIBUTARY SUBAREA
         D.A.(AC)

       101        201  302  304    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0  4284.8

       102        202    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0      .0

       103        203    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0      .0

       104        204  311    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0  3660.8

       105        205  306    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0   346.9

       106        206    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0    73.0

       107        207  308    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0   135.0

       108        208    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0      .0

       109        209    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0   130.6

       110        210    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0      .0

       111        211  312    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0  2748.8

       112        212  314    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0  2698.9

       113        213  318  319    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0  2320.0

       114        214  315  316    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0   656.6

       115        215    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0    62.1

       116        216    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
   0    0   405.1

       117        217    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
```

```
0    0    94.7

    118       218  320    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0  1737.0

    119       219    0    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0   164.5

    120       220  121  322    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0  1626.2

    121       221    0    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0   211.2

    122       222    0    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0   254.7

    123       223  324    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0   718.1

    124       224    0    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0   152.3

    125       225  326    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0  4410.9

    126       226  301    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0  4375.7

    127       227  328    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0   521.6

    128       228  329  330    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0   457.6

    129       229  331    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0    62.1

    130       230    0    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0    21.8

    131       231    0    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0    23.0

    132       232  333    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0  1356.8

    133       233    0    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0    33.3

    134       234  335    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0   985.0

    135       235  336    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0   535.0

    136       236    0    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0    66.6

    137       237  338    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0   858.2

    138       238    0    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0   173.4

    201         0    0    0    0    0    0    0    0    0    0              1    0    0    0    0    0    0    0
0    0   277.1

    202         0    0    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0      .0

    203         0    0    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
0    0      .0

    204         0    0    0    0    0    0    0    0    0    0              4    0    0    0    0    0    0    0
0    0   120.3

    205         0    0    0    0    0    0    0    0    0    0              5    0    0    0    0    0    0    0
```

0 0 273.9

206 0 0 0 0 0 0 0 0 0 0 6 0 0 0 0 0 0 0
0 0 73.0

207 0 0 0 0 0 0 0 0 0 0 7 0 0 0 0 0 0 0
0 0 4.5

208 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

209 0 0 0 0 0 0 0 0 0 0 9 0 0 0 0 0 0 0
0 0 130.6

210 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

211 0 0 0 0 0 0 0 0 0 0 11 0 0 0 0 0 0 0
0 0 49.9

212 0 0 0 0 0 0 0 0 0 0 12 0 0 0 0 0 0 0
0 0 284.2

213 0 0 0 0 0 0 0 0 0 0 13 0 0 0 0 0 0 0
0 0 418.6

214 0 0 0 0 0 0 0 0 0 0 14 0 0 0 0 0 0 0
0 0 189.4

215 0 0 0 0 0 0 0 0 0 0 15 0 0 0 0 0 0 0
0 0 62.1

216 0 0 0 0 0 0 0 0 0 0 16 0 0 0 0 0 0 0
0 0 405.1

217 0 0 0 0 0 0 0 0 0 0 17 0 0 0 0 0 0 0
0 0 94.7

218 0 0 0 0 0 0 0 0 0 0 18 0 0 0 0 0 0 0
0 0 110.7

219 0 0 0 0 0 0 0 0 0 0 19 0 0 0 0 0 0 0
0 0 164.5

220 0 0 0 0 0 0 0 0 0 0 20 0 0 0 0 0 0 0
0 0 442.2

221 0 0 0 0 0 0 0 0 0 0 21 0 0 0 0 0 0 0
0 0 211.2

222 0 0 0 0 0 0 0 0 0 0 22 0 0 0 0 0 0 0
0 0 254.7

223 0 0 0 0 0 0 0 0 0 0 23 0 0 0 0 0 0 0
0 0 565.8

224 0 0 0 0 0 0 0 0 0 0 24 0 0 0 0 0 0 0
0 0 152.3

225 0 0 0 0 0 0 0 0 0 0 25 0 0 0 0 0 0 0
0 0 35.2

226 0 0 0 0 0 0 0 0 0 0 26 0 0 0 0 0 0 0
0 0 90.9

227 0 0 0 0 0 0 0 0 0 0 27 0 0 0 0 0 0 0
0 0 64.0

228 0 0 0 0 0 0 0 0 0 0 28 0 0 0 0 0 0 0
0 0 373.8

229 0 0 0 0 0 0 0 0 0 0 29 0 0 0 0 0 0 0
0 0 39.0

230 0 0 0 0 0 0 0 0 0 0 30 0 0 0 0 0 0 0
0 0 21.8

231 0 0 0 0 0 0 0 0 0 0 31 0 0 0 0 0 0 0

0 0 23.0

232 0 0 0 0 0 0 0 0 0 0 32 0 0 0 0 0 0 0
0 0 338.6

233 0 0 0 0 0 0 0 0 0 0 33 0 0 0 0 0 0 0
0 0 33.3

234 0 0 0 0 0 0 0 0 0 0 34 0 0 0 0 0 0 0
0 0 449.9

235 0 0 0 0 0 0 0 0 0 0 35 0 0 0 0 0 0 0
0 0 468.5

236 0 0 0 0 0 0 0 0 0 0 36 0 0 0 0 0 0 0
0 0 66.6

237 0 0 0 0 0 0 0 0 0 0 37 0 0 0 0 0 0 0
0 0 684.8

238 0 0 0 0 0 0 0 0 0 0 38 0 0 0 0 0 0 0
0 0 173.4

301 501 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 4284.8

302 402 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

303 603 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

304 401 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 4007.7

306 106 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 73.0

307 107 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 135.0

308 608 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 130.6

309 409 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 130.6

310 610 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

311 404 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 3540.5

312 112 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 2698.9

313 513 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 2320.0

314 412 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 2414.7

315 115 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 62.1

316 516 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 405.1

317 117 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 94.7

318 118 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 1737.0

319 119 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 164.5

320 520 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

0 0 1626.2

322 420 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 972.8

324 124 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 152.3

326 126 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 4375.7

328 128 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 457.6

329 129 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 62.1

330 130 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 21.8

331 131 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 23.0

333 432 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 1018.2

335 135 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 535.0

336 136 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 66.6

337 537 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 858.2

338 138 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 173.4

400 125 127 132 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 6289.3

401 104 105 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 4007.7

402 602 303 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

404 111 114 307 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 3540.5

409 109 310 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 130.6

412 313 317 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 2414.7

420 122 123 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 972.8

432 133 134 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 1018.2

501 101 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 4284.8

513 113 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 2320.0

516 116 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 405.1

520 120 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 1626.2

537 137 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 858.2

602 102 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

```
  0    0      .0

      603       103    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0

      608       108  309    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   130.6

      610       110    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0
1


 10yr 3hr Current Condition SWMM Sump Basin
 Blank


 HYDROGRAPHS ARE LISTED FOR THE FOLLOWING  85 CONVEYANCE ELEMENTS


          THE UPPER NUMBER IS DISCHARGE IN CFS
          THE LOWER NUMBER IS ONE OF THE FOLLOWING CASES:
                    ( ) DENOTES DEPTH ABOVE INVERT IN FEET
                    (S) DENOTES STORAGE IN AC-FT FOR DETENTION DAM.  DISCHARGE INCLUDES SPILLWAY OUTFLOW.
                    (I) DENOTES GUTTER INFLOW IN CFS FROM SPECIFIED INFLOW HYDROGRAPH
                    (D) DENOTES DISCHARGE IN CFS DIVERTED FROM THIS GUTTER
                    (O) DENOTES STORAGE IN AC-FT FOR SURCHARGED GUTTER

 TIME(HR/MIN)   101       102       103       104       105       106       107       108       109       110
                111       112       113       114       115       116       117       118       119       120
                121       122       123       124       125       126       127       128       129       130
                131       132       133       134       135       136       137       138       301       302
                303       304       306       307       308       309       310       311       312       313
                314       315       316       317       318       319       320       322       324       326
                328       329       330       331       333       335       336       338       400       401
                402       404       412       420       432       501       513       516       520       537
                602       603       608       609       610

   0    5.       0.        2.        1.        0.        0.        0.        0.        6.        0.        8.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                  0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                  0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                  0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                  0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                  0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                  0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                  0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0(S)     .0(S)     .0(S)     .0(S)     .0(S)

                  0.        0.        0.        0.        0.
                  .0(S)     .0(S)     .0(S)     .0( )     .0(S)

   0   10.       0.        3.        3.        0.        0.        0.        0.       11.        0.       16.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                  0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                  0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                  0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )
```

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .1(S) | 0. .0( ) | 0. .1(S) | | | | | |
| 0 | 15. | 0. .0( ) | 5. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 17. .0( ) | 0. .0( ) | 24. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .2(S) | 0. .0( ) | 0. .2(S) | | | | | |
| 0 | 20. | 0. .0( ) | 6. .0( ) | 2. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 23. .0( ) | 0. .0( ) | 32. .0( ) |
| | | 1. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |
| | | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 1. .1(S) | 1. .1(S) | 0. .3(S) | 0. .0( ) | 0. .4(S) | | | | | |
| 0 | 25. | 7. .0( ) | 8. .0( ) | 3. .0( ) | 4. .0( ) | 1. .0( ) | 1. .0( ) | 3. .0( ) | 28. .0( ) | 3. .0( ) | 33. .0( ) |
| | | 3. .0( ) | 8. .0( ) | 5. .0( ) | 7. .0( ) | 1. .0( ) | 3. .0( ) | 12. .0( ) | 4. .0( ) | 1. .0( ) | 7. .0( ) |
| | | 3. .0( ) | 2. .0( ) | 5. .0( ) | 4. .0( ) | 1. .0( ) | 2. .0( ) | 2. .0( ) | 6. .0( ) | 2. .0( ) | 0. .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1.0( ) | 4.0( ) | 1.0( ) | 4.0( ) | 7.0( ) | 2.0( ) | 5.0( ) | 3.0( ) | 0.0( ) | 0.1( ) |
| | 0.1( ) | 0.1( ) | 0.0( ) | 0.1( ) | 0.1( ) | 0.0( ) | 0.0( ) | 0.1( ) | 0.1( ) | 0.0( ) |
| | 0.0( ) | 0.0( ) | 0.0( ) | 0.1( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.1( ) | 0.0( ) | 0.0( ) |
| | 0.1( ) | 0.1( ) | 0.0( ) | 0.2( ) | 0.0( ) | 0.1( ) | 0.0( ) | 0.0( ) | 0.0( ) | 0.0( ) |
| | 1.0( ) | 10.0( ) | 0.0( ) | 7.0( ) | 5.0( ) | 0.0(S) | 0.0(S) | 0.0(S) | 0.0(S) | 0.0(S) |
| | 1.1(S) | 1.1(S) | 0.5(S) | 0.0( ) | 0.7(S) | | | | | |
| 0 30. | 27.0( ) | 9.0( ) | 1.0( ) | 14.0( ) | 7.0( ) | 6.0( ) | 4.0( ) | 34.0( ) | 12.0( ) | 24.0( ) |
| | 8.0( ) | 24.0( ) | 19.0( ) | 22.0( ) | 5.0( ) | 14.0( ) | 29.0( ) | 13.0( ) | 7.0( ) | 29.0( ) |
| | 11.0( ) | 9.0( ) | 22.0( ) | 16.0( ) | 5.0( ) | 8.0( ) | 7.0( ) | 24.0( ) | 6.0( ) | 1.0( ) |
| | 5.0( ) | 18.0( ) | 5.0( ) | 16.0( ) | 28.0( ) | 9.0( ) | 21.0( ) | 13.0( ) | 0.0( ) | 0.1( ) |
| | 0.1( ) | 1.2( ) | 0.1( ) | 1.2( ) | 0.1( ) | 2.2( ) | 0.0( ) | 2.2( ) | 1.1( ) | 0.0( ) |
| | 0.0( ) | 0.1( ) | 0.0( ) | 1.2( ) | 0.1( ) | 0.1( ) | 0.0( ) | 1.1( ) | 0.1( ) | 0.1( ) |
| | 1.1( ) | 0.1( ) | 0.0( ) | 0.4( ) | 0.1( ) | 1.1( ) | 0.1( ) | 0.1( ) | 30.0( ) | 21.0( ) |
| | 2.0( ) | 30.0( ) | 1.0( ) | 32.0( ) | 21.0( ) | 0.1(S) | 0.1(S) | 0.1(S) | 0.1(S) | 0.1(S) |
| | 1.2(S) | 1.1(S) | 1.7(S) | 0.0( ) | 0.9(S) | | | | | |
| 0 35. | 52.0( ) | 11.0( ) | 1.0( ) | 26.0( ) | 17.0( ) | 11.0( ) | 4.0( ) | 39.0( ) | 22.0( ) | 25.0( ) |
| | 14.0( ) | 43.0( ) | 41.0( ) | 37.0( ) | 9.0( ) | 29.0( ) | 37.0( ) | 22.0( ) | 14.0( ) | 63.0( ) |
| | 21.0( ) | 20.0( ) | 49.0( ) | 29.0( ) | 8.0( ) | 14.0( ) | 14.0( ) | 48.0( ) | 10.0( ) | 2.0( ) |
| | 6.0( ) | 38.0( ) | 8.0( ) | 36.0( ) | 56.0( ) | 15.0( ) | 47.0( ) | 26.0( ) | 0.0( ) | 0.1( ) |
| | 1.1( ) | 3.3( ) | 0.1( ) | 2.3( ) | 1.1( ) | 7.5( ) | 0.0( ) | 6.3( ) | 4.2( ) | 0.0( ) |
| | 0.1( ) | 0.1( ) | 0.0( ) | 4.2( ) | 1.2( ) | 1.1( ) | 0.0( ) | 5.2( ) | 1.2( ) | 1.2( ) |
| | 3.2( ) | 1.2( ) | 0.1( ) | 1.5( ) | 2.2( ) | 3.2( ) | 0.1( ) | 0.1( ) | 61.0( ) | 43.0( ) |
| | 2.0( ) | 53.0( ) | 4.0( ) | 69.0( ) | 44.0( ) | 0.4(S) | 0.3(S) | 0.2(S) | 0.5(S) | 0.3(S) |
| | 2.2(S) | 1.1(S) | 1.1.0(S) | 0.0( ) | 0.1.0(S) | | | | | |
| 0 40. | 72.0( ) | 8.0( ) | 0.0( ) | 39.0( ) | 26.0( ) | 14.0( ) | 4.0( ) | 45.0( ) | 28.0( ) | 16.0( ) |
| | 21.0( ) | 58.0( ) | 62.0( ) | 46.0( ) | 11.0( ) | 45.0( ) | 37.0( ) | 26.0( ) | 21.0( ) | 99.0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 31.<br>.0( ) | 31.<br>.0( ) | 76.<br>.0( ) | 36.<br>.0( ) | 11.<br>.0( ) | 18.<br>.0( ) | 23.<br>.0( ) | 67.<br>.0( ) | 12.<br>.0( ) | 1.<br>.0( ) |
| | | 6.<br>.0( ) | 57.<br>.0( ) | 8.<br>.0( ) | 59.<br>.0( ) | 80.<br>.0( ) | 17.<br>.0( ) | 74.<br>.0( ) | 34.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) |
| | | 1.<br>.1( ) | 8.<br>.4( ) | 1.<br>.2( ) | 2.<br>.3( ) | 1.<br>.1( ) | 15.<br>.7( ) | 0.<br>.0( ) | 14.<br>.4( ) | 9.<br>.3( ) | 0.<br>.0( ) |
| | | 0.<br>.1( ) | 1.<br>.1( ) | 0.<br>.0( ) | 7.<br>.3( ) | 2.<br>.2( ) | 1.<br>.2( ) | 0.<br>.0( ) | 12.<br>.4( ) | 3.<br>.2( ) | 2.<br>.2( ) |
| | | 8.<br>.3( ) | 2.<br>.3( ) | 0.<br>.1( ) | 3.<br>.7( ) | 5.<br>.2( ) | 7.<br>.3( ) | 1.<br>.1( ) | 1.<br>.2( ) | 91.<br>.0( ) | 65.<br>.0( ) |
| | | 3.<br>.0( ) | 69.<br>.0( ) | 7.<br>.0( ) | 107.<br>.0( ) | 67.<br>.0( ) | 0.<br>.8(S) | 0.<br>.7(S) | 0.<br>.5(S) | 0.<br>1.0(S) | 0.<br>.8(S) |
| | | 2.<br>.3(S) | 1.<br>.1(S) | 1.<br>1.3(S) | 0.<br>.0( ) | 0.<br>1.2(S) | | | | | |
| 0 | 45. | 84.<br>.0( ) | 9.<br>.0( ) | 0.<br>.0( ) | 51.<br>.0( ) | 32.<br>.0( ) | 15.<br>.0( ) | 4.<br>.0( ) | 42.<br>.0( ) | 29.<br>.0( ) | 17.<br>.0( ) |
| | | 28.<br>.0( ) | 65.<br>.0( ) | 78.<br>.0( ) | 47.<br>.0( ) | 12.<br>.0( ) | 58.<br>.0( ) | 34.<br>.0( ) | 27.<br>.0( ) | 25.<br>.0( ) | 131.<br>.0( ) |
| | | 37.<br>.0( ) | 38.<br>.0( ) | 97.<br>.0( ) | 37.<br>.0( ) | 12.<br>.0( ) | 19.<br>.0( ) | 31.<br>.0( ) | 79.<br>.0( ) | 12.<br>.0( ) | 0.<br>.0( ) |
| | | 6.<br>.0( ) | 72.<br>.0( ) | 8.<br>.0( ) | 79.<br>.0( ) | 94.<br>.0( ) | 16.<br>.0( ) | 96.<br>.0( ) | 38.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) |
| | | 1.<br>.1( ) | 16.<br>.6( ) | 2.<br>.2( ) | 3.<br>.4( ) | 1.<br>.1( ) | 21.<br>.8( ) | 0.<br>.0( ) | 24.<br>.5( ) | 16.<br>.4( ) | 0.<br>.0( ) |
| | | 1.<br>.1( ) | 1.<br>.1( ) | 0.<br>.0( ) | 10.<br>.3( ) | 4.<br>.3( ) | 3.<br>.2( ) | 0.<br>.0( ) | 25.<br>.5( ) | 5.<br>.3( ) | 3.<br>.3( ) |
| | | 15.<br>.4( ) | 3.<br>.3( ) | 0.<br>.1( ) | 3.<br>.8( ) | 10.<br>.3( ) | 13.<br>.4( ) | 2.<br>.2( ) | 2.<br>.2( ) | 116.<br>.0( ) | 83.<br>.0( ) |
| | | 3.<br>.0( ) | 78.<br>.0( ) | 10.<br>.0( ) | 135.<br>.0( ) | 87.<br>.0( ) | 0.<br>1.4(S) | 0.<br>1.1(S) | 0.<br>.8(S) | 0.<br>1.8(S) | 0.<br>1.3(S) |
| | | 2.<br>.3(S) | 1.<br>.1(S) | 1.<br>1.7(S) | 0.<br>.0( ) | 0.<br>1.3(S) | | | | | |
| 0 | 50. | 91.<br>.0( ) | 7.<br>.0( ) | 0.<br>.0( ) | 60.<br>.0( ) | 35.<br>.0( ) | 14.<br>.0( ) | 4.<br>.0( ) | 38.<br>.0( ) | 28.<br>.0( ) | 8.<br>.0( ) |
| | | 35.<br>.0( ) | 67.<br>.0( ) | 87.<br>.0( ) | 45.<br>.0( ) | 11.<br>.0( ) | 66.<br>.0( ) | 31.<br>.0( ) | 25.<br>.0( ) | 26.<br>.0( ) | 156.<br>.0( ) |
| | | 39.<br>.0( ) | 42.<br>.0( ) | 109.<br>.0( ) | 35.<br>.0( ) | 13.<br>.0( ) | 18.<br>.0( ) | 39.<br>.0( ) | 83.<br>.0( ) | 12.<br>.0( ) | 0.<br>.0( ) |
| | | 6.<br>.0( ) | 82.<br>.0( ) | 7.<br>.0( ) | 94.<br>.0( ) | 99.<br>.0( ) | 15.<br>.0( ) | 109.<br>.0( ) | 37.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) |
| | | 1.<br>.1( ) | 25.<br>.7( ) | 3.<br>.2( ) | 3.<br>.4( ) | 1.<br>.1( ) | 25.<br>.9( ) | 0.<br>.0( ) | 34.<br>.6( ) | 23.<br>.4( ) | 0.<br>.0( ) |
| | | 2.<br>.2( ) | 2.<br>.2( ) | 0.<br>.0( ) | 12.<br>.3( ) | 6.<br>.3( ) | 5.<br>.2( ) | 0.<br>.0( ) | 40.<br>.6( ) | 8.<br>.3( ) | 4.<br>.3( ) |
| | | 23.<br>.4( ) | 5.<br>.4( ) | 0.<br>.1( ) | 4.<br>.8( ) | 17.<br>.4( ) | 20.<br>.4( ) | 2.<br>.2( ) | 3.<br>.2( ) | 135.<br>.0( ) | 95.<br>.0( ) |
| | | 3.<br>.0( ) | 83.<br>.0( ) | 12.<br>.0( ) | 150.<br>.0( ) | 102.<br>.0( ) | 0.<br>2.0(S) | 0.<br>1.7(S) | 0.<br>1.3(S) | 0.<br>2.8(S) | 0.<br>2.0(S) |
| | | 3.<br>.4(S) | 1.<br>.1(S) | 1.<br>2.2(S) | 0.<br>.0( ) | 0.<br>1.3(S) | | | | | |
| 0 | 55. | 96.<br>.0( ) | 8.<br>.0( ) | 0.<br>.0( ) | 68.<br>.0( ) | 35.<br>.0( ) | 13.<br>.0( ) | 4.<br>.0( ) | 36.<br>.0( ) | 26.<br>.0( ) | 9.<br>.0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 41. | 65. | 89. | 43. | 11. | 68. | 26. | 24. | 26. | 172. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 38. | 42. | 112. | 32. | 14. | 17. | 46. | 81. | 13. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 89. | 7. | 104. | 96. | 14. | 115. | 34. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 1. | 36. | 4. | 3. | 1. | 26. | 0. | 43. | 30. | 0. |
| | | .1( ) | .8( ) | .3( ) | .4( ) | .1( ) | .9( ) | .0( ) | .6( ) | .5( ) | .0( ) |
| | | 3. | 2. | 0. | 14. | 7. | 6. | 0. | 56. | 10. | 5. |
| | | .2( ) | .2( ) | .0( ) | .4( ) | .3( ) | .3( ) | .0( ) | .6( ) | .3( ) | .4( ) |
| | | 31. | 6. | 0. | 4. | 25. | 27. | 3. | 4. | 149. | 103. |
| | | .5( ) | .4( ) | .1( ) | .8( ) | .4( ) | .5( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 3. | 87. | 14. | 155. | 111. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.6(S) | 2.3(S) | 1.7(S) | 3.9(S) | 2.8(S) |
| | | 3. | 1. | 1. | 0. | 1. | | | | | |
| | | .4(S) | .1(S) | 2.6(S) | .0( ) | 1.4(S) | | | | | |
| 1 | 0. | 102. | 5. | 0. | 76. | 33. | 13. | 4. | 32. | 24. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 46. | 63. | 88. | 42. | 10. | 68. | 23. | 23. | 24. | 181. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 35. | 40. | 110. | 29. | 15. | 16. | 52. | 78. | 13. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 93. | 6. | 109. | 91. | 13. | 114. | 32. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 1. | 46. | 4. | 3. | 1. | 25. | 0. | 53. | 35. | 0. |
| | | .1( ) | .9( ) | .3( ) | .4( ) | .1( ) | .9( ) | .0( ) | .7( ) | .5( ) | .0( ) |
| | | 4. | 3. | 0. | 15. | 9. | 8. | 0. | 71. | 11. | 6. |
| | | .2( ) | .2( ) | .0( ) | .4( ) | .3( ) | .3( ) | .0( ) | .7( ) | .4( ) | .4( ) |
| | | 38. | 7. | 0. | 4. | 34. | 33. | 4. | 6. | 161. | 109. |
| | | .5( ) | .4( ) | .1( ) | .8( ) | .5( ) | .5( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 4. | 91. | 15. | 151. | 115. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.3(S) | 2.9(S) | 2.2(S) | 5.1(S) | 3.6(S) |
| | | 3. | 1. | 1. | 0. | 1. | | | | | |
| | | .4(S) | .1(S) | 3.0(S) | .0( ) | 1.4(S) | | | | | |
| 1 | 5. | 108. | 6. | 0. | 84. | 32. | 12. | 4. | 29. | 22. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 51. | 63. | 87. | 40. | 10. | 64. | 21. | 22. | 22. | 187. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 33. | 38. | 105. | 27. | 16. | 15. | 58. | 74. | 12. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 98. | 6. | 111. | 86. | 12. | 109. | 30. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 1. | 57. | 5. | 3. | 1. | 24. | 0. | 61. | 40. | 0. |
| | | .1( ) | .9( ) | .3( ) | .4( ) | .1( ) | .9( ) | .1( ) | .7( ) | .5( ) | .0( ) |
| | | 5. | 3. | 0. | 16. | 10. | 9. | 0. | 83. | 13. | 7. |
| | | .2( ) | .2( ) | .0( ) | .4( ) | .4( ) | .3( ) | .0( ) | .7( ) | .4( ) | .4( ) |
| | | 43. | 8. | 0. | 4. | 42. | 39. | 4. | 7. | 171. | 116. |
| | | .5( ) | .4( ) | .1( ) | .8( ) | .5( ) | .6( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 4. | 94. | 16. | 143. | 116. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 4.0(S) | 3.5(S) | 2.6(S) | 6.4(S) | 4.4(S) |
| | | 3. | 1. | 1. | 0. | 1. | | | | | |
| | | .4(S) | .1(S) | 3.4(S) | .0( ) | 1.4(S) | | | | | |

1 10. 114. 4. 0. 91. 30. 11. 5. 25. 20. 0.
.0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( )

55. 62. 85. 37. 9. 61. 18. 20. 22. 190.
.0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( )

32. 36. 100. 24. 16. 14. 62. 71. 12. 0.
.0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( )

4. 102. 5. 111. 82. 10. 103. 28. 0. 1.
.0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .2( )

1. 68. 6. 4. 1. 23. 0. 68. 44. 0.
.1( ) 1.0( ) .3( ) .5( ) .2( ) .9( ) .1( ) .7( ) .6( ) .0( )

6. 3. 0. 16. 11. 11. 0. 92. 14. 8.
.3( ) .2( ) .0( ) .4( ) .4( ) .3( ) .0( ) .8( ) .4( ) .4( )

48. 8. 0. 4. 50. 44. 4. 7. 181. 122.
.6( ) .5( ) .1( ) .8( ) .6( ) .6( ) .2( ) .3( ) .0( ) .0( )

4. 96. 16. 136. 116. 0. 0. 0. 0. 0.
.0( ) .0( ) .0( ) .0( ) .0( ) 4.8(S) 4.1(S) 3.1(S) 7.7(S) 5.1(S)

3. 1. 2. 0. 1.
.4(S) .0(S) 3.7(S) .0( ) 1.4(S)

1 15. 119. 5. 0. 97. 29. 10. 8. 22. 19. 0.
.0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( )

58. 62. 83. 35. 9. 58. 17. 19. 20. 191.
.0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( )

31. 34. 95. 22. 16. 13. 65. 68. 11. 0.
.0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( )

4. 106. 5. 111. 78. 10. 97. 26. 0. 1.
.0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .2( )

1. 78. 6. 5. 4. 21. 0. 74. 47. 0.
.1( ) 1.0( ) .3( ) .5( ) .3( ) .8( ) .1( ) .8( ) .6( ) .0( )

8. 4. 0. 16. 12. 12. 0. 99. 15. 8.
.3( ) .2( ) .0( ) .4( ) .4( ) .3( ) .0( ) .8( ) .4( ) .4( )

51. 9. 0. 4. 58. 48. 5. 8. 188. 126.
.6( ) .5( ) .1( ) .8( ) .6( ) .6( ) .2( ) .3( ) .0( ) .0( )

4. 98. 16. 129. 116. 0. 0. 0. 0. 0.
.0( ) .0( ) .0( ) .0( ) .0( ) 5.6(S) 4.7(S) 3.5(S) 9.0(S) 5.8(S)

3. 0. 6. 0. 1.
.5(S) .0(S) 4.0(S) .0( ) 1.4(S)

1 20. 125. 2. 0. 101. 28. 9. 12. 18. 17. 0.
.0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( )

60. 60. 82. 33. 8. 55. 15. 17. 19. 191.
.0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( )

29. 32. 91. 20. 16. 12. 67. 65. 11. 0.
.0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( )

4. 110. 5. 111. 74. 9. 92. 23. 0. 1.
.0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .0( ) .2( )

1. 87. 6. 7. 8. 20. 0. 80. 50. 0.
.1( ) 1.1( ) .3( ) .6( ) .5( ) .8( ) .1( ) .8( ) .6( ) .0( )

9. 4. 0. 16. 12. 12. 0. 103. 15. 8.
.3( ) .2( ) .0( ) .4( ) .4( ) .4( ) .0( ) .8( ) .4( ) .4( )

53. 9. 0. 4. 65. 51. 5. 9. 193. 129.
.6( ) .5( ) .1( ) .8( ) .6( ) .6( ) .2( ) .4( ) .0( ) .0( )

4. 100. 16. 123. 116. 0. 0. 0. 0. 0.
.0( ) .0( ) .0( ) .0( ) .0( ) 6.4(S) 5.3(S) 3.9(S) 10.3(S) 6.4(S)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 3. | 0. | 9. | 0. | 1. | | | | | |
| | | .5(S) | .0(S) | 4.2(S) | .0( ) | 1.4(S) | | | | | |
| 1 | 25. | 129. | 3. | 0. | 105. | 27. | 9. | 14. | 16. | 16. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 61. | 59. | 79. | 31. | 7. | 52. | 13. | 16. | 18. | 188. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 27. | 31. | 86. | 18. | 16. | 11. | 68. | 61. | 10. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 112. | 4. | 110. | 69. | 8. | 88. | 21. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 95. | 7. | 9. | 11. | 18. | 0. | 84. | 51. | 0. |
| | | .1( ) | 1.1( ) | .3( ) | .7( ) | .6( ) | .8( ) | .1( ) | .8( ) | .6( ) | .0( ) |
| | | 10. | 4. | 0. | 16. | 13. | 13. | 0. | 106. | 15. | 9. |
| | | .3( ) | .2( ) | .0( ) | .4( ) | .4( ) | .4( ) | .0( ) | .8( ) | .4( ) | .5( ) |
| | | 55. | 9. | 0. | 4. | 71. | 53. | 5. | 10. | 196. | 131. |
| | | .6( ) | .5( ) | .1( ) | .8( ) | .6( ) | .6( ) | .3( ) | .4( ) | .0( ) | .0( ) |
| | | 4. | 101. | 16. | 116. | 114. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 7.3(S) | 5.8(S) | 4.2(S) | 11.6(S) | 7.1(S) |
| | | 3. | 0. | 11. | 0. | 1. | | | | | |
| | | .5(S) | .0(S) | 4.4(S) | .0( ) | 1.4(S) | | | | | |
| 1 | 30. | 133. | 0. | 0. | 107. | 25. | 8. | 15. | 12. | 14. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 61. | 56. | 76. | 29. | 7. | 49. | 11. | 15. | 17. | 183. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 25. | 29. | 80. | 16. | 16. | 10. | 67. | 57. | 10. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 114. | 4. | 107. | 64. | 7. | 83. | 20. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 102. | 7. | 11. | 12. | 17. | 0. | 88. | 52. | 0. |
| | | .1( ) | 1.1( ) | .3( ) | .8( ) | .6( ) | .7( ) | .1( ) | .8( ) | .6( ) | .0( ) |
| | | 11. | 4. | 0. | 16. | 13. | 14. | 0. | 107. | 16. | 9. |
| | | .3( ) | .3( ) | .0( ) | .4( ) | .4( ) | .4( ) | .0( ) | .8( ) | .4( ) | .5( ) |
| | | 55. | 9. | 0. | 4. | 76. | 55. | 5. | 10. | 197. | 132. |
| | | .6( ) | .5( ) | .1( ) | .8( ) | .7( ) | .7( ) | .3( ) | .4( ) | .0( ) | .0( ) |
| | | 4. | 102. | 16. | 109. | 111. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 8.2(S) | 6.3(S) | 4.6(S) | 12.9(S) | 7.6(S) |
| | | 3. | 0. | 13. | 0. | 1. | | | | | |
| | | .4(S) | .0(S) | 4.5(S) | .0( ) | 1.4(S) | | | | | |
| 1 | 35. | 136. | 2. | 0. | 109. | 24. | 7. | 15. | 9. | 13. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 62. | 54. | 72. | 27. | 6. | 46. | 10. | 14. | 15. | 177. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 23. | 26. | 75. | 14. | 16. | 9. | 67. | 53. | 9. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 115. | 4. | 104. | 59. | 6. | 77. | 18. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 108. | 7. | 13. | 14. | 15. | 0. | 91. | 53. | 0. |
| | | .1( ) | 1.2( ) | .3( ) | .8( ) | .7( ) | .7( ) | .1( ) | .8( ) | .6( ) | .0( ) |
| | | 11. | 5. | 0. | 15. | 13. | 14. | 0. | 107. | 16. | 9. |
| | | .3( ) | .3( ) | .0( ) | .4( ) | .4( ) | .4( ) | .0( ) | .8( ) | .4( ) | .5( ) |
| | | 55. | 9. | 0. | 4. | 80. | 55. | 5. | 10. | 197. | 133. |
| | | .6( ) | .5( ) | .1( ) | .8( ) | .7( ) | .7( ) | .3( ) | .4( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 3. | 101. | 15. | 101. | 108. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 9.1(S) | 6.9(S) | 4.9(S) | 14.2(S) | 8.2(S) |
| | | 3. | 0. | 14. | 0. | 1. | | | | | |
| | | .4(S) | .0(S) | 4.6(S) | .0( ) | 1.4(S) | | | | | |
| 1 | 40. | 138. | 0. | 0. | 110. | 22. | 7. | 15. | 5. | 12. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 61. | 51. | 69. | 25. | 6. | 43. | 8. | 12. | 14. | 170. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 21. | 24. | 70. | 13. | 15. | 8. | 65. | 49. | 9. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 115. | 4. | 101. | 55. | 6. | 72. | 16. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 112. | 7. | 14. | 15. | 14. | 0. | 94. | 53. | 0. |
| | | .1( ) | 1.2( ) | .3( ) | .9( ) | .7( ) | .7( ) | .1( ) | .8( ) | .6( ) | .0( ) |
| | | 12. | 5. | 0. | 14. | 13. | 14. | 0. | 105. | 15. | 9. |
| | | .3( ) | .3( ) | .0( ) | .4( ) | .4( ) | .4( ) | .0( ) | .8( ) | .4( ) | .5( ) |
| | | 55. | 9. | 0. | 3. | 83. | 56. | 6. | 11. | 196. | 133. |
| | | .6( ) | .5( ) | .1( ) | .7( ) | .7( ) | .7( ) | .3( ) | .4( ) | .0( ) | .0( ) |
| | | 3. | 100. | 14. | 94. | 104. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 10.1(S) | 7.3(S) | 5.2(S) | 15.3(S) | 8.7(S) |
| | | 3. | 0. | 15. | 0. | 1. | | | | | |
| | | .4(S) | .0(S) | 4.7(S) | .0( ) | 1.4(S) | | | | | |
| 1 | 45. | 139. | 0. | 0. | 111. | 21. | 6. | 15. | 2. | 10. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 60. | 49. | 65. | 24. | 6. | 40. | 7. | 11. | 13. | 162. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 20. | 23. | 65. | 11. | 15. | 8. | 63. | 46. | 8. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 115. | 3. | 97. | 51. | 5. | 68. | 15. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 116. | 7. | 14. | 15. | 13. | 0. | 95. | 52. | 0. |
| | | .1( ) | 1.2( ) | .3( ) | .9( ) | .7( ) | .6( ) | .1( ) | .8( ) | .6( ) | .0( ) |
| | | 12. | 5. | 0. | 14. | 13. | 14. | 0. | 103. | 15. | 9. |
| | | .3( ) | .3( ) | .0( ) | .4( ) | .4( ) | .4( ) | .0( ) | .8( ) | .4( ) | .5( ) |
| | | 54. | 9. | 0. | 3. | 86. | 55. | 6. | 11. | 193. | 132. |
| | | .6( ) | .5( ) | .1( ) | .7( ) | .7( ) | .7( ) | .3( ) | .4( ) | .0( ) | .0( ) |
| | | 3. | 98. | 14. | 88. | 100. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 11.0(S) | 7.8(S) | 5.5(S) | 16.5(S) | 9.2(S) |
| | | 3. | 0. | 15. | 0. | 1. | | | | | |
| | | .4(S) | .0(S) | 4.7(S) | .0( ) | 1.4(S) | | | | | |
| 1 | 50. | 140. | 0. | 0. | 110. | 20. | 6. | 15. | 0. | 9. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 59. | 47. | 62. | 22. | 5. | 37. | 6. | 11. | 12. | 155. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 18. | 21. | 60. | 10. | 15. | 7. | 61. | 42. | 8. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 114. | 3. | 93. | 47. | 5. | 63. | 13. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 119. | 7. | 14. | 15. | 12. | 0. | 95. | 52. | 0. |
| | | .1( ) | 1.2( ) | .3( ) | .9( ) | .7( ) | .6( ) | .1( ) | .8( ) | .6( ) | .0( ) |
| | | 12. | 5. | 0. | 13. | 13. | 14. | 0. | 100. | 15. | 9. |
| | | .3( ) | .3( ) | .0( ) | .3( ) | .4( ) | .4( ) | .0( ) | .8( ) | .4( ) | .5( ) |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 52. | 9. | 0. | 3. | 87. | 54. | 6. | 11. | 190. | 130. | |
| | | .6( ) | .5( ) | .1( ) | .7( ) | .7( ) | .7( ) | .3( ) | .4( ) | .0( ) | .0( ) | |
| | | 3. | 96. | 13. | 81. | 96. | 0. | 0. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 12.0(S) | 8.2(S) | 5.8(S) | 17.6(S) | 9.6(S) | |
| | | 3. | 0. | 15. | 0. | 1. | | | | | | |
| | | .4(S) | .0(S) | 4.7(S) | .0( ) | 1.4(S) | | | | | | |
| 1 | 55. | 140. | 0. | 0. | 109. | 19. | 5. | 14. | 0. | 9. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 58. | 45. | 59. | 20. | 5. | 34. | 6. | 10. | 11. | 147. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 17. | 19. | 56. | 9. | 14. | 6. | 59. | 39. | 7. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 2. | 113. | 3. | 89. | 43. | 4. | 59. | 12. | 0. | 2. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) | |
| | | 0. | 121. | 7. | 14. | 14. | 11. | 0. | 95. | 51. | 0. | |
| | | .1( ) | 1.2( ) | .3( ) | .9( ) | .7( ) | .6( ) | .1( ) | .8( ) | .6( ) | .0( ) | |
| | | 12. | 5. | 0. | 12. | 13. | 14. | 0. | 96. | 14. | 9. | |
| | | .3( ) | .3( ) | .0( ) | .3( ) | .4( ) | .4( ) | .0( ) | .8( ) | .4( ) | .4( ) | |
| | | 50. | 9. | 0. | 3. | 88. | 53. | 5. | 11. | 186. | 128. | |
| | | .6( ) | .5( ) | .1( ) | .7( ) | .7( ) | .6( ) | .3( ) | .4( ) | .0( ) | .0( ) | |
| | | 3. | 93. | 12. | 76. | 92. | 0. | 0. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 13.0(S) | 8.7(S) | 6.0(S) | 18.6(S) | 10.1(S) | |
| | | 2. | 0. | 14. | 0. | 1. | | | | | | |
| | | .4(S) | .0(S) | 4.7(S) | .0( ) | 1.4(S) | | | | | | |
| 2 | 0. | 139. | 0. | 0. | 108. | 18. | 5. | 14. | 0. | 8. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 57. | 43. | 55. | 19. | 5. | 32. | 5. | 9. | 11. | 139. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 16. | 18. | 52. | 8. | 14. | 6. | 57. | 36. | 7. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 2. | 111. | 3. | 85. | 40. | 4. | 55. | 11. | 0. | 2. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) | |
| | | 0. | 122. | 7. | 14. | 14. | 10. | 0. | 94. | 49. | 0. | |
| | | .1( ) | 1.2( ) | .3( ) | .9( ) | .7( ) | .6( ) | .1( ) | .8( ) | .6( ) | .0( ) | |
| | | 12. | 5. | 0. | 11. | 12. | 13. | 0. | 92. | 14. | 8. | |
| | | .3( ) | .3( ) | .0( ) | .3( ) | .4( ) | .4( ) | .0( ) | .8( ) | .4( ) | .4( ) | |
| | | 48. | 8. | 0. | 3. | 88. | 52. | 5. | 11. | 181. | 125. | |
| | | .6( ) | .5( ) | .1( ) | .7( ) | .7( ) | .6( ) | .3( ) | .4( ) | .0( ) | .0( ) | |
| | | 3. | 90. | 11. | 70. | 88. | 0. | 0. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 13.9(S) | 9.0(S) | 6.2(S) | 19.6(S) | 10.5(S) | |
| | | 2. | 0. | 14. | 0. | 1. | | | | | | |
| | | .3(S) | .0(S) | 4.6(S) | .0( ) | 1.4(S) | | | | | | |
| 2 | 5. | 138. | 0. | 0. | 105. | 17. | 5. | 14. | 0. | 7. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 55. | 40. | 52. | 18. | 4. | 30. | 3. | 8. | 10. | 131. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 15. | 17. | 49. | 7. | 13. | 5. | 54. | 34. | 7. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 1. | 109. | 2. | 81. | 37. | 3. | 52. | 10. | 0. | 2. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) | |
| | | 0. | 123. | 6. | 14. | 14. | 9. | 0. | 93. | 48. | 0. | |
| | | .1( ) | 1.2( ) | .3( ) | .9( ) | .7( ) | .5( ) | .1( ) | .8( ) | .6( ) | .0( ) | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 12. | 5. | 0. | 11. | 12. | 13. | 0. | 88. | 13. | 8. |
| | | .3( ) | .3( ) | .0( ) | .3( ) | .4( ) | .4( ) | .0( ) | .8( ) | .4( ) | .4( ) |
| | | 46. | 8. | 0. | 2. | 88. | 51. | 5. | 11. | 176. | 122. |
| | | .6( ) | .4( ) | .1( ) | .7( ) | .7( ) | .6( ) | .3( ) | .4( ) | .0( ) | .0( ) |
| | | 3. | 87. | 11. | 65. | 84. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 14.9(S) | 9.4(S) | 6.4(S) | 20.5(S) | 10.8(S) |
| | | 2. | 0. | 14. | 0. | 1. | | | | | |
| | | .3(S) | .0(S) | 4.6(S) | .0( ) | 1.4(S) | | | | | |
| 2 | 10. | 136. | 0. | 0. | 103. | 16. | 4. | 13. | 0. | 6. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 53. | 38. | 49. | 16. | 4. | 28. | 2. | 7. | 9. | 124. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 14. | 16. | 45. | 6. | 13. | 5. | 52. | 31. | 6. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 106. | 2. | 77. | 34. | 3. | 49. | 9. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 122. | 6. | 14. | 13. | 8. | 0. | 91. | 46. | 0. |
| | | .1( ) | 1.2( ) | .3( ) | .9( ) | .6( ) | .5( ) | .1( ) | .8( ) | .6( ) | .0( ) |
| | | 12. | 5. | 0. | 10. | 11. | 13. | 0. | 84. | 13. | 8. |
| | | .3( ) | .3( ) | .0( ) | .3( ) | .4( ) | .4( ) | .0( ) | .7( ) | .4( ) | .4( ) |
| | | 44. | 8. | 0. | 2. | 87. | 49. | 5. | 11. | 171. | 119. |
| | | .5( ) | .4( ) | .1( ) | .6( ) | .7( ) | .6( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 2. | 84. | 10. | 61. | 80. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 15.8(S) | 9.8(S) | 6.6(S) | 21.4(S) | 11.2(S) |
| | | 2. | 0. | 13. | 0. | 1. | | | | | |
| | | .3(S) | .0(S) | 4.6(S) | .0( ) | 1.4(S) | | | | | |
| 2 | 15. | 134. | 0. | 0. | 100. | 15. | 4. | 13. | 0. | 6. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 51. | 36. | 47. | 15. | 4. | 26. | 1. | 7. | 8. | 117. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 13. | 15. | 42. | 6. | 12. | 5. | 49. | 29. | 5. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 103. | 2. | 74. | 32. | 3. | 46. | 8. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 121. | 6. | 14. | 13. | 7. | 0. | 89. | 45. | 0. |
| | | .1( ) | 1.2( ) | .3( ) | .9( ) | .6( ) | .5( ) | .1( ) | .8( ) | .6( ) | .0( ) |
| | | 11. | 5. | 0. | 9. | 11. | 12. | 0. | 80. | 12. | 8. |
| | | .3( ) | .3( ) | .0( ) | .3( ) | .4( ) | .3( ) | .0( ) | .7( ) | .4( ) | .4( ) |
| | | 42. | 8. | 0. | 2. | 86. | 47. | 5. | 11. | 165. | 115. |
| | | .5( ) | .4( ) | .1( ) | .6( ) | .7( ) | .6( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 2. | 80. | 9. | 56. | 76. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 16.7(S) | 10.1(S) | 6.8(S) | 22.2(S) | 11.5(S) |
| | | 2. | 0. | 13. | 0. | 1. | | | | | |
| | | .3(S) | .0(S) | 4.5(S) | .0( ) | 1.4(S) | | | | | |
| 2 | 20. | 131. | 0. | 0. | 97. | 14. | 4. | 12. | 0. | 5. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 49. | 34. | 44. | 14. | 4. | 24. | 0. | 6. | 8. | 110. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 12. | 14. | 39. | 5. | 12. | 4. | 47. | 27. | 5. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 100. | 2. | 70. | 29. | 3. | 43. | 8. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 119. | 6. | 13. | 12. | 7. | 0. | 87. | 43. | 0. |
| | | .1( ) | 1.2( ) | .3( ) | .9( ) | .6( ) | .5( ) | .1( ) | .8( ) | .6( ) | .0( ) |
| | | 11. | 5. | 0. | 8. | 11. | 12. | 0. | 76. | 11. | 7. |
| | | .3( ) | .3( ) | .0( ) | .3( ) | .4( ) | .3( ) | .0( ) | .7( ) | .4( ) | .4( ) |
| | | 40. | 7. | 0. | 1. | 84. | 45. | 5. | 11. | 159. | 111. |
| | | .5( ) | .4( ) | .1( ) | .5( ) | .7( ) | .6( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 2. | 77. | 8. | 52. | 71. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 17.6(S) | 10.4(S) | 7.0(S) | 23.0(S) | 11.8(S) |
| | | 2. | 0. | 12. | 0. | 1. | | | | | |
| | | .3(S) | .0(S) | 4.5(S) | .0( ) | 1.4(S) | | | | | |
| 2 | 25. | 128. | 0. | 0. | 93. | 13. | 3. | 12. | 0. | 5. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 47. | 32. | 41. | 13. | 3. | 22. | 0. | 6. | 7. | 103. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 11. | 13. | 36. | 5. | 12. | 4. | 44. | 25. | 4. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 97. | 0. | 66. | 27. | 2. | 40. | 7. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 117. | 6. | 13. | 12. | 6. | 0. | 84. | 41. | 0. |
| | | .1( ) | 1.2( ) | .3( ) | .8( ) | .6( ) | .4( ) | .1( ) | .8( ) | .5( ) | .0( ) |
| | | 11. | 5. | 0. | 7. | 10. | 11. | 0. | 72. | 11. | 7. |
| | | .3( ) | .3( ) | .0( ) | .3( ) | .4( ) | .3( ) | .0( ) | .7( ) | .3( ) | .4( ) |
| | | 38. | 7. | 0. | 1. | 82. | 44. | 5. | 11. | 153. | 107. |
| | | .5( ) | .4( ) | .1( ) | .5( ) | .7( ) | .6( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 2. | 73. | 7. | 49. | 66. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 18.5(S) | 10.7(S) | 7.2(S) | 23.8(S) | 12.1(S) |
| | | 2. | 0. | 12. | 0. | 1. | | | | | |
| | | .3(S) | .0(S) | 4.5(S) | .0( ) | 1.4(S) | | | | | |
| 2 | 30. | 124. | 0. | 0. | 90. | 12. | 3. | 11. | 0. | 4. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 45. | 30. | 39. | 12. | 3. | 21. | 0. | 5. | 7. | 97. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 10. | 12. | 33. | 4. | 11. | 4. | 42. | 23. | 4. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 93. | 0. | 63. | 25. | 2. | 38. | 6. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 115. | 5. | 12. | 11. | 6. | 0. | 81. | 39. | 0. |
| | | .1( ) | 1.2( ) | .3( ) | .8( ) | .6( ) | .4( ) | .1( ) | .8( ) | .5( ) | .0( ) |
| | | 10. | 5. | 0. | 7. | 10. | 11. | 0. | 68. | 10. | 7. |
| | | .3( ) | .3( ) | .0( ) | .3( ) | .4( ) | .3( ) | .0( ) | .7( ) | .3( ) | .4( ) |
| | | 36. | 6. | 0. | 1. | 80. | 42. | 5. | 10. | 147. | 102. |
| | | .5( ) | .4( ) | .1( ) | .4( ) | .7( ) | .6( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 2. | 70. | 7. | 45. | 63. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 19.4(S) | 11.0(S) | 7.3(S) | 24.4(S) | 12.3(S) |
| | | 2. | 0. | 11. | 0. | 0. | | | | | |
| | | .3(S) | .0(S) | 4.4(S) | .0( ) | 1.4(S) | | | | | |
| 2 | 35. | 121. | 0. | 0. | 87. | 12. | 3. | 11. | 0. | 4. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 43. | 28. | 37. | 12. | 3. | 19. | 0. | 5. | 6. | 91. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 9. | 11. | 31. | 4. | 11. | 3. | 40. | 21. | 4. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 90. | 0. | 59. | 23. | 0. | 35. | 6. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 112. | 5. | 12. | 11. | 5. | 0. | 78. | 38. | 0. |
| | | .1( ) | 1.2( ) | .3( ) | .8( ) | .6( ) | .4( ) | .1( ) | .8( ) | .5( ) | .0( ) |
| | | 10. | 4. | 0. | 6. | 9. | 11. | 0. | 64. | 10. | 6. |
| | | .3( ) | .3( ) | .0( ) | .3( ) | .4( ) | .3( ) | .0( ) | .7( ) | .3( ) | .4( ) |
| | | 34. | 6. | 0. | 1. | 78. | 40. | 4. | 10. | 140. | 98. |
| | | .5( ) | .4( ) | .1( ) | .4( ) | .7( ) | .6( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 2. | 67. | 6. | 42. | 59. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 20.2(S) | 11.2(S) | 7.4(S) | 25.1(S) | 12.6(S) |
| | | 2. | 0. | 11. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 4.4(S) | .0( ) | 1.4(S) | | | | | |
| 2 | 40. | 117. | 0. | 0. | 83. | 11. | 3. | 10. | 0. | 4. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 41. | 26. | 35. | 11. | 3. | 18. | 0. | 4. | 6. | 85. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 9. | 10. | 29. | 3. | 10. | 3. | 38. | 19. | 3. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 86. | 0. | 56. | 21. | 0. | 33. | 5. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 109. | 5. | 11. | 10. | 5. | 0. | 75. | 36. | 0. |
| | | .1( ) | 1.2( ) | .3( ) | .8( ) | .6( ) | .4( ) | .1( ) | .8( ) | .5( ) | .0( ) |
| | | 9. | 4. | 0. | 5. | 9. | 10. | 0. | 61. | 9. | 6. |
| | | .3( ) | .3( ) | .0( ) | .3( ) | .3( ) | .3( ) | .0( ) | .7( ) | .3( ) | .4( ) |
| | | 32. | 6. | 0. | 1. | 75. | 38. | 4. | 10. | 134. | 94. |
| | | .5( ) | .4( ) | .1( ) | .4( ) | .7( ) | .6( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 2. | 63. | 5. | 39. | 56. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 21.1(S) | 11.5(S) | 7.6(S) | 25.7(S) | 12.8(S) |
| | | 2. | 0. | 10. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 4.4(S) | .0( ) | 1.4(S) | | | | | |
| 2 | 45. | 113. | 0. | 0. | 80. | 10. | 2. | 10. | 0. | 3. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 39. | 24. | 32. | 10. | 3. | 17. | 0. | 4. | 5. | 80. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 8. | 9. | 27. | 3. | 10. | 3. | 35. | 18. | 3. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 83. | 0. | 53. | 19. | 0. | 31. | 5. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 106. | 5. | 11. | 10. | 4. | 0. | 72. | 34. | 0. |
| | | .0( ) | 1.2( ) | .3( ) | .8( ) | .5( ) | .4( ) | .1( ) | .8( ) | .5( ) | .0( ) |
| | | 9. | 4. | 0. | 5. | 9. | 10. | 0. | 57. | 9. | 6. |
| | | .3( ) | .2( ) | .0( ) | .2( ) | .3( ) | .3( ) | .0( ) | .6( ) | .3( ) | .4( ) |
| | | 30. | 5. | 0. | 0. | 73. | 36. | 4. | 10. | 128. | 90. |
| | | .5( ) | .4( ) | .1( ) | .4( ) | .6( ) | .6( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 2. | 60. | 5. | 36. | 53. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 21.9(S) | 11.7(S) | 7.7(S) | 26.3(S) | 13.0(S) |
| | | 2. | 0. | 10. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 4.3(S) | .0( ) | 1.4(S) | | | | | |
| 2 | 50. | 109. | 0. | 0. | 76. | 10. | 2. | 10. | 0. | 3. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 37. | 23. | 31. | 9. | 2. | 16. | 0. | 4. | 5. | 75. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 7. | 9. | 25. | 3. | 9. | 2. | 33. | 16. | 2. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 79. | 0. | 50. | 18. | 0. | 29. | 4. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 102. | 5. | 10. | 10. | 4. | 0. | 69. | 32. | 0. |
| | | .0( ) | 1.1( ) | .3( ) | .8( ) | .5( ) | .4( ) | .1( ) | .7( ) | .5( ) | .0( ) |
| | | 8. | 4. | 0. | 5. | 8. | 9. | 0. | 54. | 8. | 6. |
| | | .3( ) | .2( ) | .0( ) | .2( ) | .3( ) | .3( ) | .0( ) | .6( ) | .3( ) | .4( ) |
| | | 29. | 5. | 0. | 0. | 70. | 34. | 4. | 10. | 122. | 86. |
| | | .5( ) | .4( ) | .1( ) | .3( ) | .6( ) | .5( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 2. | 57. | 5. | 33. | 50. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 22.6(S) | 11.9(S) | 7.8(S) | 26.8(S) | 13.3(S) |
| | | 1. | 0. | 9. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 4.3(S) | .0( ) | 1.4(S) | | | | | |
| 2 | 55. | 105. | 0. | 0. | 73. | 9. | 2. | 9. | 0. | 3. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 35. | 21. | 29. | 9. | 2. | 15. | 0. | 3. | 5. | 70. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 7. | 8. | 23. | 2. | 9. | 2. | 31. | 15. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 76. | 0. | 47. | 17. | 0. | 27. | 4. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 99. | 4. | 10. | 9. | 4. | 0. | 66. | 31. | 0. |
| | | .0( ) | 1.1( ) | .3( ) | .8( ) | .5( ) | .3( ) | .1( ) | .7( ) | .5( ) | .0( ) |
| | | 8. | 4. | 0. | 4. | 8. | 9. | 0. | 51. | 8. | 5. |
| | | .3( ) | .2( ) | .0( ) | .2( ) | .3( ) | .3( ) | .0( ) | .6( ) | .3( ) | .4( ) |
| | | 27. | 4. | 0. | 0. | 68. | 33. | 3. | 9. | 117. | 82. |
| | | .4( ) | .4( ) | .1( ) | .3( ) | .6( ) | .5( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 2. | 54. | 4. | 31. | 47. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 23.4(S) | 12.1(S) | 7.9(S) | 27.3(S) | 13.4(S) |
| | | 1. | 0. | 9. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 4.2(S) | .0( ) | 1.3(S) | | | | | |
| 3 | 0. | 101. | 0. | 0. | 69. | 9. | 1. | 9. | 0. | 2. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 34. | 20. | 27. | 8. | 2. | 14. | 0. | 3. | 4. | 66. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 6. | 8. | 21. | 2. | 9. | 2. | 30. | 14. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 73. | 0. | 44. | 15. | 0. | 26. | 4. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 95. | 4. | 10. | 9. | 4. | 0. | 64. | 29. | 0. |
| | | .0( ) | 1.1( ) | .3( ) | .7( ) | .5( ) | .3( ) | .1( ) | .7( ) | .5( ) | .0( ) |
| | | 7. | 4. | 0. | 4. | 7. | 8. | 0. | 48. | 7. | 5. |
| | | .3( ) | .2( ) | .0( ) | .2( ) | .3( ) | .3( ) | .0( ) | .6( ) | .3( ) | .4( ) |
| | | 25. | 4. | 0. | 0. | 65. | 31. | 3. | 9. | 111. | 78. |
| | | .4( ) | .3( ) | .1( ) | .3( ) | .6( ) | .5( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 1. | 51. | 4. | 29. | 44. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 24.1(S) | 12.3(S) | 8.0(S) | 27.8(S) | 13.6(S) |
| | | 1. | 0. | 9. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 4.2(S) | .0( ) | 1.3(S) | | | | | |
| 3 | 5. | 97. | 0. | 0. | 66. | 8. | 0. | 8. | 0. | 2. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 32. | 18. | 25. | 8. | 2. | 13. | 0. | 2. | 4. | 62. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 6. | 7. | 20. | 0. | 8. | 0. | 28. | 12. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 69. | 0. | 42. | 14. | 0. | 24. | 3. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 92. | 4. | 9. | 8. | 3. | 0. | 61. | 27. | 0. |
| | | .0( ) | 1.1( ) | .3( ) | .7( ) | .5( ) | .3( ) | .1( ) | .7( ) | .5( ) | .0( ) |
| | | 7. | 4. | 0. | 3. | 7. | 8. | 0. | 45. | 7. | 5. |
| | | .3( ) | .2( ) | .0( ) | .2( ) | .3( ) | .3( ) | .0( ) | .6( ) | .3( ) | .4( ) |
| | | 24. | 3. | 0. | 0. | 62. | 29. | 3. | 9. | 105. | 74. |
| | | .4( ) | .3( ) | .1( ) | .3( ) | .6( ) | .5( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 1. | 49. | 4. | 27. | 42. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 24.7(S) | 12.5(S) | 8.1(S) | 28.2(S) | 13.8(S) |
| | | 1. | 0. | 8. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 4.2(S) | .0( ) | 1.3(S) | | | | | |
| 3 | 10. | 93. | 0. | 0. | 63. | 7. | 0. | 8. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 30. | 17. | 24. | 7. | 1. | 12. | 0. | 0. | 4. | 58. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 7. | 18. | 0. | 8. | 0. | 26. | 11. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 66. | 0. | 39. | 13. | 0. | 23. | 3. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 88. | 4. | 9. | 8. | 3. | 0. | 58. | 26. | 0. |
| | | .0( ) | 1.1( ) | .3( ) | .7( ) | .5( ) | .3( ) | .1( ) | .7( ) | .5( ) | .0( ) |
| | | 6. | 4. | 0. | 3. | 6. | 8. | 0. | 42. | 6. | 4. |
| | | .3( ) | .2( ) | .0( ) | .2( ) | .3( ) | .3( ) | .0( ) | .6( ) | .3( ) | .3( ) |
| | | 22. | 3. | 0. | 0. | 60. | 28. | 3. | 9. | 100. | 70. |
| | | .4( ) | .3( ) | .1( ) | .3( ) | .6( ) | .5( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 46. | 3. | 25. | 39. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 25.4(S) | 12.7(S) | 8.2(S) | 28.6(S) | 14.0(S) |
| | | 1. | 0. | 8. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 4.1(S) | .0( ) | 1.3(S) | | | | | |
| 3 | 15. | 89. | 0. | 0. | 60. | 7. | 0. | 7. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 29. | 16. | 22. | 7. | 0. | 11. | 0. | 0. | 3. | 54. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 6. | 17. | 0. | 6. | 0. | 24. | 10. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 63. | 0. | 37. | 12. | 0. | 21. | 3. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 85. | 3. | 8. | 7. | 2. | 0. | 55. | 25. | 0. |
| | | .0( ) | 1.1( ) | .3( ) | .7( ) | .4( ) | .2( ) | .1( ) | .7( ) | .4( ) | .0( ) |
| | | 6. | 3. | 0. | 3. | 6. | 7. | 0. | 40. | 6. | 4. |
| | | .2( ) | .2( ) | .0( ) | .2( ) | .3( ) | .3( ) | .0( ) | .6( ) | .3( ) | .3( ) |
| | | 21. | 3. | 0. | 0. | 57. | 26. | 3. | 8. | 94. | 67. |
| | | .4( ) | .3( ) | .1( ) | .2( ) | .6( ) | .5( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 44. | 3. | 23. | 37. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 26.0(S) | 12.8(S) | 8.3(S) | 29.0(S) | 14.1(S) |
| | | 1. | 0. | 7. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 4.1(S) | .0( ) | 1.3(S) | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 20. | 85. | 0. | 0. | 57. | 6. | 0. | 7. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 27. | 15. | 20. | 6. | 0. | 10. | 0. | 0. | 3. | 50. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 6. | 15. | 0. | 4. | 0. | 23. | 9. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 60. | 0. | 35. | 11. | 0. | 20. | 2. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 81. | 3. | 8. | 7. | 2. | 0. | 52. | 23. | 0. |
| | | .0( ) | 1.0( ) | .2( ) | .7( ) | .4( ) | .2( ) | .1( ) | .7( ) | .4( ) | .0( ) |
| | | 6. | 3. | 0. | 3. | 5. | 7. | 0. | 37. | 6. | 4. |
| | | .2( ) | .2( ) | .0( ) | .2( ) | .3( ) | .3( ) | .0( ) | .5( ) | .3( ) | .3( ) |
| | | 19. | 2. | 0. | 0. | 55. | 25. | 3. | 8. | 87. | 63. |
| | | .4( ) | .3( ) | .1( ) | .2( ) | .6( ) | .5( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 40. | 3. | 21. | 35. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 26.6(S) | 13.0(S) | 8.3(S) | 29.4(S) | 14.3(S) |
| | | 1. | 0. | 7. | 0. | 0. | | | | | |
| | | .2(S) | .0(S) | 4.1(S) | .0( ) | 1.3(S) | | | | | |
| 3 | 25. | 79. | 0. | 0. | 54. | 6. | 0. | 6. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 25. | 14. | 19. | 3. | 0. | 10. | 0. | 0. | 3. | 47. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 5. | 14. | 0. | 3. | 0. | 20. | 8. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 57. | 0. | 33. | 10. | 0. | 19. | 2. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 78. | 3. | 7. | 6. | 1. | 0. | 50. | 22. | 0. |
| | | .0( ) | 1.0( ) | .2( ) | .6( ) | .4( ) | .2( ) | .1( ) | .7( ) | .4( ) | .0( ) |
| | | 5. | 3. | 0. | 3. | 5. | 7. | 0. | 35. | 5. | 3. |
| | | .2( ) | .2( ) | .0( ) | .2( ) | .3( ) | .3( ) | .0( ) | .5( ) | .3( ) | .3( ) |
| | | 18. | 2. | 0. | 0. | 52. | 24. | 2. | 8. | 81. | 60. |
| | | .4( ) | .3( ) | .0( ) | .2( ) | .6( ) | .5( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 36. | 3. | 19. | 33. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 27.2(S) | 13.1(S) | 8.4(S) | 29.7(S) | 14.4(S) |
| | | 1. | 0. | 6. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 4.0(S) | .0( ) | 1.3(S) | | | | | |
| 3 | 30. | 76. | 0. | 0. | 50. | 5. | 0. | 6. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 23. | 13. | 18. | 3. | 0. | 9. | 0. | 0. | 3. | 44. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 5. | 13. | 0. | 3. | 0. | 17. | 8. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 55. | 0. | 31. | 9. | 0. | 18. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 74. | 3. | 7. | 6. | 1. | 0. | 47. | 21. | 0. |
| | | .0( ) | 1.0( ) | .2( ) | .6( ) | .4( ) | .2( ) | .1( ) | .6( ) | .4( ) | .0( ) |
| | | 5. | 3. | 0. | 2. | 5. | 6. | 0. | 33. | 5. | 3. |
| | | .2( ) | .2( ) | .0( ) | .2( ) | .3( ) | .3( ) | .0( ) | .5( ) | .3( ) | .3( ) |
| | | 17. | 2. | 0. | 0. | 50. | 22. | 2. | 8. | 75. | 56. |
| | | .4( ) | .3( ) | .0( ) | .2( ) | .6( ) | .5( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 33. | 2. | 18. | 31. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 27.7(S) | 13.2(S) | 8.5(S) | 30.0(S) | 14.5(S) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. .1(S) | 0. .0(S) | 6. 4.0(S) | 0. .0( ) | 0. 1.3(S) | | | | |
| 3 | 35. | 72. .0( ) | 0. .0( ) | 0. .0( ) | 47. .0( ) | 5. .0( ) | 0. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 21. .0( ) | 12. .0( ) | 17. .0( ) | 3. .0( ) | 0. .0( ) | 8. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 41. .0( ) |
| | | 4. .0( ) | 5. .0( ) | 12. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 16. .0( ) | 7. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 52. .0( ) | 0. .0( ) | 29. .0( ) | 9. .0( ) | 0. .0( ) | 17. .0( ) | 0. .0( ) | 0. .0( ) | 2. .2( ) |
| | | 0. .0( ) | 71. 1.0( ) | 2. .2( ) | 7. .6( ) | 6. .4( ) | 1. .1( ) | 0. .1( ) | 44. .6( ) | 19. .4( ) | 0. .0( ) |
| | | 5. .2( ) | 3. .2( ) | 0. .0( ) | 2. .2( ) | 4. .3( ) | 6. .3( ) | 0. .0( ) | 31. .5( ) | 4. .3( ) | 3. .3( ) |
| | | 16. .4( ) | 2. .2( ) | 0. .0( ) | 0. .2( ) | 48. .6( ) | 21. .5( ) | 2. .2( ) | 7. .3( ) | 71. .0( ) | 52. .0( ) |
| | | 1. .0( ) | 30. .0( ) | 2. .0( ) | 17. .0( ) | 29. .0( ) | 0. 28.2(S) | 0. 13.4(S) | 0. 8.5(S) | 0. 30.3(S) | 0. 14.6(S) |
| | | 1. .1(S) | 0. .0(S) | 5. 4.0(S) | 0. .0( ) | 0. 1.3(S) | | | | | |
| 3 | 40. | 69. .0( ) | 0. .0( ) | 0. .0( ) | 44. .0( ) | 5. .0( ) | 0. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 18. .0( ) | 11. .0( ) | 15. .0( ) | 3. .0( ) | 0. .0( ) | 8. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 38. .0( ) |
| | | 3. .0( ) | 4. .0( ) | 11. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 15. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 50. .0( ) | 0. .0( ) | 27. .0( ) | 8. .0( ) | 0. .0( ) | 16. .0( ) | 0. .0( ) | 0. .0( ) | 2. .2( ) |
| | | 0. .0( ) | 67. 1.0( ) | 2. .2( ) | 6. .6( ) | 5. .4( ) | 1. .1( ) | 0. .1( ) | 41. .6( ) | 18. .4( ) | 0. .0( ) |
| | | 4. .2( ) | 3. .2( ) | 0. .0( ) | 2. .2( ) | 4. .3( ) | 6. .3( ) | 0. .0( ) | 29. .5( ) | 4. .2( ) | 3. .3( ) |
| | | 15. .4( ) | 1. .2( ) | 0. .0( ) | 0. .2( ) | 46. .5( ) | 20. .4( ) | 2. .2( ) | 7. .3( ) | 67. .0( ) | 49. .0( ) |
| | | 1. .0( ) | 27. .0( ) | 2. .0( ) | 15. .0( ) | 27. .0( ) | 0. 28.7(S) | 0. 13.5(S) | 0. 8.6(S) | 0. 30.6(S) | 0. 14.7(S) |
| | | 1. .1(S) | 0. .0(S) | 5. 3.9(S) | 0. .0( ) | 0. 1.3(S) | | | | | |
| 3 | 45. | 65. .0( ) | 0. .0( ) | 0. .0( ) | 40. .0( ) | 4. .0( ) | 0. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 17. .0( ) | 10. .0( ) | 14. .0( ) | 2. .0( ) | 0. .0( ) | 7. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 36. .0( ) |
| | | 3. .0( ) | 4. .0( ) | 10. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 14. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 47. .0( ) | 0. .0( ) | 26. .0( ) | 7. .0( ) | 0. .0( ) | 15. .0( ) | 0. .0( ) | 0. .0( ) | 2. .2( ) |
| | | 0. .0( ) | 64. 1.0( ) | 2. .2( ) | 6. .6( ) | 5. .3( ) | 1. .1( ) | 0. .1( ) | 38. .6( ) | 17. .4( ) | 0. .0( ) |
| | | 4. .2( ) | 2. .2( ) | 0. .0( ) | 2. .2( ) | 4. .3( ) | 5. .3( ) | 0. .0( ) | 27. .5( ) | 4. .2( ) | 2. .3( ) |
| | | 14. .3( ) | 1. .2( ) | 0. .0( ) | 0. .2( ) | 44. .5( ) | 19. .4( ) | 2. .2( ) | 7. .3( ) | 63. .0( ) | 45. .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. | 25. | 2. | 14. | 26. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 29.2(S) | 13.6(S) | 8.6(S) | 30.8(S) | 14.8(S) |
| | | 1. | 0. | 5. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.9(S) | .0( ) | 1.3(S) | | | | | |
| 3 | 50. | 61. | 0. | 0. | 35. | 4. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 16. | 10. | 13. | 2. | 0. | 7. | 0. | 0. | 2. | 34. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 4. | 9. | 0. | 2. | 0. | 13. | 5. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 45. | 0. | 24. | 7. | 0. | 14. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 60. | 2. | 5. | 4. | 1. | 0. | 35. | 16. | 0. |
| | | .0( ) | .9( ) | .2( ) | .5( ) | .3( ) | .1( ) | .1( ) | .6( ) | .4( ) | .0( ) |
| | | 4. | 2. | 0. | 2. | 3. | 5. | 0. | 25. | 4. | 2. |
| | | .2( ) | .2( ) | .0( ) | .2( ) | .2( ) | .3( ) | .0( ) | .5( ) | .2( ) | .3( ) |
| | | 13. | 1. | 0. | 0. | 42. | 18. | 2. | 6. | 60. | 39. |
| | | .3( ) | .2( ) | .0( ) | .2( ) | .5( ) | .4( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 24. | 2. | 13. | 24. | 0. | 0. | 0. | 0. | 11. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 29.6(S) | 13.7(S) | 8.7(S) | 31.1(S) | 14.9(S) |
| | | 1. | 0. | 4. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.9(S) | .0( ) | 1.3(S) | | | | | |
| 3 | 55. | 58. | 0. | 0. | 33. | 4. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 15. | 9. | 13. | 2. | 0. | 6. | 0. | 0. | 2. | 31. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 3. | 9. | 0. | 2. | 0. | 12. | 5. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 43. | 0. | 23. | 6. | 0. | 13. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 56. | 2. | 5. | 4. | 1. | 0. | 33. | 15. | 0. |
| | | .0( ) | .9( ) | .2( ) | .5( ) | .3( ) | .1( ) | .1( ) | .6( ) | .4( ) | .0( ) |
| | | 4. | 2. | 0. | 2. | 3. | 5. | 0. | 24. | 3. | 2. |
| | | .2( ) | .2( ) | .0( ) | .2( ) | .2( ) | .2( ) | .0( ) | .5( ) | .2( ) | .3( ) |
| | | 12. | 1. | 0. | 0. | 40. | 17. | 2. | 6. | 57. | 37. |
| | | .3( ) | .2( ) | .0( ) | .2( ) | .5( ) | .4( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 22. | 2. | 12. | 23. | 0. | 0. | 0. | 0. | 13. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 30.0(S) | 13.8(S) | 8.7(S) | 31.3(S) | 14.9(S) |
| | | 1. | 0. | 4. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.9(S) | .0( ) | 1.3(S) | | | | | |
| 4 | 0. | 54. | 0. | 0. | 31. | 3. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 14. | 8. | 12. | 2. | 0. | 6. | 0. | 0. | 0. | 29. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 3. | 8. | 0. | 2. | 0. | 11. | 4. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 40. | 0. | 21. | 6. | 0. | 12. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 53. | 2. | 5. | 4. | 1. | 0. | 31. | 14. | 0. |
| | | .0( ) | .9( ) | .2( ) | .5( ) | .3( ) | .1( ) | .1( ) | .6( ) | .4( ) | .0( ) |
| | | 3. | 2. | 0. | 2. | 3. | 5. | 0. | 22. | 3. | 2. |
| | | .2( ) | .2( ) | .0( ) | .2( ) | .2( ) | .2( ) | .0( ) | .5( ) | .2( ) | .3( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 11. | 1. | 0. | 0. | 38. | 16. | 2. | 6. | 54. | 34. |
| | | .3( ) | .2( ) | .0( ) | .2( ) | .5( ) | .4( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 21. | 2. | 11. | 21. | 0. | 0. | 0. | 0. | 13. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 30.4(S) | 13.8(S) | 8.8(S) | 31.5(S) | 14.9(S) |
| | | 1. | 0. | 4. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.8(S) | .0( ) | 1.3(S) | | | | | |
| 4 | 5. | 51. | 0. | 0. | 29. | 3. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 14. | 8. | 11. | 2. | 0. | 5. | 0. | 0. | 0. | 27. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 3. | 8. | 0. | 2. | 0. | 10. | 4. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 38. | 0. | 20. | 5. | 0. | 11. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 50. | 2. | 4. | 4. | 1. | 0. | 29. | 14. | 0. |
| | | .0( ) | .9( ) | .2( ) | .5( ) | .3( ) | .1( ) | .1( ) | .5( ) | .4( ) | .0( ) |
| | | 3. | 2. | 0. | 1. | 3. | 4. | 0. | 21. | 3. | 2. |
| | | .2( ) | .2( ) | .0( ) | .2( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .3( ) |
| | | 10. | 1. | 0. | 0. | 36. | 15. | 2. | 6. | 51. | 32. |
| | | .3( ) | .2( ) | .0( ) | .2( ) | .5( ) | .4( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 20. | 1. | 10. | 20. | 0. | 0. | 0. | 0. | 12. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 30.8(S) | 13.9(S) | 8.8(S) | 31.7(S) | 14.9(S) |
| | | 1. | 0. | 4. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.8(S) | .0( ) | 1.3(S) | | | | | |
| 4 | 10. | 48. | 0. | 0. | 27. | 3. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 13. | 7. | 10. | 2. | 0. | 5. | 0. | 0. | 0. | 25. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 3. | 7. | 0. | 2. | 0. | 10. | 4. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 37. | 0. | 19. | 5. | 0. | 11. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 47. | 2. | 4. | 3. | 1. | 0. | 27. | 13. | 0. |
| | | .0( ) | .9( ) | .2( ) | .5( ) | .3( ) | .1( ) | .1( ) | .5( ) | .4( ) | .0( ) |
| | | 3. | 2. | 0. | 1. | 3. | 4. | 0. | 20. | 3. | 2. |
| | | .2( ) | .2( ) | .0( ) | .1( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 10. | 1. | 0. | 0. | 34. | 14. | 2. | 5. | 48. | 30. |
| | | .3( ) | .2( ) | .0( ) | .1( ) | .5( ) | .4( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 19. | 1. | 10. | 19. | 0. | 0. | 0. | 0. | 11. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 31.1(S) | 14.0(S) | 8.8(S) | 31.9(S) | 14.9(S) |
| | | 1. | 0. | 3. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.8(S) | .0( ) | 1.3(S) | | | | | |
| 4 | 15. | 45. | 0. | 0. | 26. | 1. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 12. | 7. | 9. | 2. | 0. | 5. | 0. | 0. | 0. | 22. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 3. | 6. | 0. | 2. | 0. | 9. | 3. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 34. | 0. | 18. | 5. | 0. | 10. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 44. | 1. | 4. | 3. | 1. | 0. | 26. | 12. | 0. |
| | | .0( ) | .8( ) | .2( ) | .5( ) | .3( ) | .1( ) | .1( ) | .5( ) | .3( ) | .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 3. | 2. | 0. | 1. | 2. | 4. | 0. | 19. | 3. | 2. |
| | | .2( ) | .2( ) | .0( ) | .1( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 9. | 1. | 0. | 0. | 33. | 14. | 2. | 5. | 45. | 27. |
| | | .3( ) | .2( ) | .0( ) | .1( ) | .5( ) | .4( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 18. | 1. | 9. | 18. | 0. | 0. | 0. | 0. | 11. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 31.4(S) | 14.1(S) | 8.9(S) | 32.0(S) | 14.9(S) |
| | | 1. | 0. | 3. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.8(S) | .0( ) | 1.3(S) | | | | | |
| 4 | 20. | 43. | 0. | 0. | 24. | 1. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 11. | 6. | 9. | 2. | 0. | 4. | 0. | 0. | 0. | 21. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 2. | 6. | 0. | 2. | 0. | 8. | 2. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 31. | 0. | 17. | 4. | 0. | 10. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 41. | 1. | 4. | 3. | 1. | 0. | 24. | 11. | 0. |
| | | .0( ) | .8( ) | .2( ) | .4( ) | .2( ) | .1( ) | .1( ) | .5( ) | .3( ) | .0( ) |
| | | 3. | 2. | 0. | 1. | 2. | 3. | 0. | 17. | 3. | 2. |
| | | .2( ) | .2( ) | .0( ) | .1( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 8. | 1. | 0. | 0. | 31. | 13. | 1. | 5. | 41. | 26. |
| | | .3( ) | .2( ) | .0( ) | .1( ) | .5( ) | .4( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 16. | 1. | 8. | 17. | 0. | 0. | 0. | 0. | 10. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 31.7(S) | 14.1(S) | 8.9(S) | 32.2(S) | 14.9(S) |
| | | 1. | 0. | 3. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.8(S) | .0( ) | 1.3(S) | | | | | |
| 4 | 25. | 40. | 0. | 0. | 23. | 1. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 11. | 5. | 8. | 2. | 0. | 4. | 0. | 0. | 0. | 19. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 2. | 6. | 0. | 1. | 0. | 8. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 30. | 0. | 16. | 4. | 0. | 9. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 39. | 1. | 3. | 3. | 1. | 0. | 23. | 11. | 0. |
| | | .0( ) | .8( ) | .2( ) | .4( ) | .2( ) | .1( ) | .1( ) | .5( ) | .3( ) | .0( ) |
| | | 3. | 2. | 0. | 1. | 2. | 3. | 0. | 16. | 2. | 1. |
| | | .2( ) | .2( ) | .0( ) | .1( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 8. | 1. | 0. | 0. | 30. | 12. | 1. | 5. | 39. | 24. |
| | | .3( ) | .2( ) | .0( ) | .1( ) | .5( ) | .4( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 15. | 1. | 8. | 16. | 0. | 0. | 0. | 0. | 9. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 32.0(S) | 14.2(S) | 8.9(S) | 32.3(S) | 14.9(S) |
| | | 1. | 0. | 3. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 1.3(S) | | | | | |
| 4 | 30. | 38. | 0. | 0. | 22. | 1. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 10. | 4. | 7. | 1. | 0. | 4. | 0. | 0. | 0. | 18. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 2. | 5. | 0. | 1. | 0. | 7. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 28. | 0. | 15. | 3. | 0. | 8. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 36. | 1. | 3. | 3. | 1. | 0. | 22. | 10. | 0. |
| | | .0( ) | .8( ) | .2( ) | .4( ) | .2( ) | .1( ) | .1( ) | .5( ) | .3( ) | .0( ) |
| | | 2. | 1. | 0. | 1. | 2. | 3. | 0. | 15. | 2. | 1. |
| | | .2( ) | .2( ) | .0( ) | .1( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 7. | 1. | 0. | 0. | 28. | 11. | 1. | 5. | 37. | 23. |
| | | .3( ) | .2( ) | .0( ) | .1( ) | .5( ) | .4( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 14. | 1. | 7. | 15. | 0. | 0. | 0. | 0. | 9. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 32.3(S) | 14.2(S) | 9.0(S) | 32.5(S) | 14.9(S) |
| | | 1. | 0. | 2. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 1.3(S) | | | | | |
| 4 | 35. | 35. | 0. | 0. | 20. | 1. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 9. | 2. | 7. | 1. | 0. | 4. | 0. | 0. | 0. | 17. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 5. | 0. | 1. | 0. | 6. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 27. | 0. | 14. | 1. | 0. | 8. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 34. | 1. | 3. | 2. | 0. | 0. | 20. | 9. | 0. |
| | | .0( ) | .8( ) | .2( ) | .4( ) | .2( ) | .1( ) | .1( ) | .5( ) | .3( ) | .0( ) |
| | | 2. | 1. | 0. | 1. | 2. | 3. | 0. | 14. | 2. | 1. |
| | | .2( ) | .2( ) | .0( ) | .1( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 6. | 1. | 0. | 0. | 27. | 11. | 1. | 5. | 35. | 21. |
| | | .3( ) | .2( ) | .0( ) | .1( ) | .4( ) | .4( ) | .1( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 13. | 1. | 5. | 14. | 0. | 0. | 0. | 0. | 8. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 32.5(S) | 14.3(S) | 9.0(S) | 32.6(S) | 14.9(S) |
| | | 1. | 0. | 2. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 1.3(S) | | | | | |
| 4 | 40. | 33. | 0. | 0. | 19. | 1. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 8. | 2. | 6. | 1. | 0. | 3. | 0. | 0. | 0. | 16. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 4. | 0. | 1. | 0. | 6. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 26. | 0. | 13. | 1. | 0. | 8. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 32. | 1. | 3. | 2. | 0. | 0. | 19. | 8. | 0. |
| | | .0( ) | .7( ) | .2( ) | .4( ) | .2( ) | .1( ) | .1( ) | .5( ) | .3( ) | .0( ) |
| | | 2. | 1. | 0. | 1. | 2. | 2. | 0. | 13. | 2. | 1. |
| | | .2( ) | .2( ) | .0( ) | .1( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 6. | 0. | 0. | 0. | 26. | 10. | 1. | 4. | 33. | 20. |
| | | .3( ) | .2( ) | .0( ) | .1( ) | .4( ) | .3( ) | .1( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 12. | 1. | 4. | 13. | 0. | 0. | 0. | 0. | 8. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 32.8(S) | 14.3(S) | 9.0(S) | 32.7(S) | 14.9(S) |
| | | 1. | 0. | 2. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 1.3(S) | | | | | |
| 4 | 45. | 32. | 0. | 0. | 18. | 1. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 7. | 2. | 4. | 1. | 0. | 3. | 0. | 0. | 0. | 14. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 4. | 0. | 1. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 24. | 0. | 12. | 1. | 0. | 7. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 30. | 1. | 3. | 2. | 0. | 0. | 18. | 7. | 0. |
| | | .0( ) | .7( ) | .2( ) | .4( ) | .2( ) | .1( ) | .1( ) | .4( ) | .3( ) | .0( ) |
| | | 2. | 1. | 0. | 1. | 2. | 2. | 0. | 12. | 2. | 1. |
| | | .2( ) | .2( ) | .0( ) | .1( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 5. | 0. | 0. | 0. | 24. | 9. | 1. | 4. | 31. | 19. |
| | | .2( ) | .2( ) | .0( ) | .1( ) | .4( ) | .3( ) | .1( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 11. | 1. | 4. | 12. | 0. | 0. | 0. | 0. | 7. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 33.0(S) | 14.4(S) | 9.0(S) | 32.8(S) | 14.9(S) |
| | | 0. | 0. | 2. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 1.3(S) | | | | | |
| 4 | 50. | 30. | 0. | 0. | 17. | 1. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 7. | 2. | 4. | 1. | 0. | 3. | 0. | 0. | 0. | 13. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 3. | 0. | 1. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 23. | 0. | 11. | 1. | 0. | 7. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 29. | 1. | 2. | 2. | 0. | 0. | 17. | 7. | 0. |
| | | .0( ) | .7( ) | .2( ) | .4( ) | .2( ) | .1( ) | .1( ) | .4( ) | .3( ) | .0( ) |
| | | 2. | 1. | 0. | 1. | 2. | 2. | 0. | 11. | 2. | 1. |
| | | .2( ) | .2( ) | .0( ) | .1( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .2( ) |
| | | 5. | 0. | 0. | 0. | 23. | 9. | 1. | 4. | 29. | 18. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .4( ) | .3( ) | .1( ) | .3( ) | .0( ) | .0( ) |
| | | 0. | 10. | 1. | 3. | 11. | 0. | 0. | 0. | 0. | 7. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 33.2(S) | 14.4(S) | 9.1(S) | 32.9(S) | 14.9(S) |
| | | 0. | 0. | 2. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 1.3(S) | | | | | |
| 4 | 55. | 28. | 0. | 0. | 16. | 1. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 6. | 2. | 4. | 1. | 0. | 3. | 0. | 0. | 0. | 11. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 1. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 22. | 0. | 10. | 1. | 0. | 6. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 27. | 1. | 2. | 2. | 0. | 0. | 16. | 6. | 0. |
| | | .0( ) | .7( ) | .2( ) | .3( ) | .2( ) | .1( ) | .1( ) | .4( ) | .3( ) | .0( ) |
| | | 2. | 1. | 0. | 1. | 2. | 2. | 0. | 11. | 2. | 1. |
| | | .2( ) | .2( ) | .0( ) | .1( ) | .2( ) | .2( ) | .0( ) | .3( ) | .2( ) | .2( ) |
| | | 5. | 0. | 0. | 0. | 22. | 8. | 1. | 4. | 28. | 17. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .4( ) | .3( ) | .1( ) | .3( ) | .0( ) | .0( ) |
| | | 0. | 10. | 1. | 2. | 10. | 0. | 0. | 0. | 0. | 7. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 33.4(S) | 14.4(S) | 9.1(S) | 33.0(S) | 14.9(S) |
| | | 0. | 0. | 2. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 1.3(S) | | | | | |
| 5 | 0. | 27. | 0. | 0. | 15. | 1. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 6. | 2. | 3. | 1. | 0. | 2. | 0. | 0. | 0. | 10. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 0. | 2. | 0. | 1. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 21. | 0. | 9. | 1. | 0. | 6. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 26. | 1. | 2. | 2. | 0. | 0. | 15. | 6. | 0. |
| | | .0( ) | .7( ) | .1( ) | .3( ) | .2( ) | .1( ) | .1( ) | .4( ) | .3( ) | .0( ) |
| | | 2. | 1. | 0. | 1. | 1. | 2. | 0. | 10. | 2. | 1. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .2( ) | .2( ) | .0( ) | .3( ) | .2( ) | .2( ) |
| | | 4. | 0. | 0. | 0. | 21. | 8. | 1. | 4. | 26. | 16. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .4( ) | .3( ) | .1( ) | .3( ) | .0( ) | .0( ) |
| | | 0. | 9. | 1. | 2. | 9. | 0. | 0. | 0. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 33.6(S) | 14.4(S) | 9.1(S) | 33.0(S) | 14.9(S) |
| | | 0. | 0. | 2. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 1.3(S) | | | | | |
| 5 | 5. | 25. | 0. | 0. | 14. | 1. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 2. | 3. | 1. | 0. | 2. | 0. | 0. | 0. | 9. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 1. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 20. | 0. | 7. | 1. | 0. | 6. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 24. | 1. | 2. | 2. | 0. | 0. | 14. | 5. | 0. |
| | | .0( ) | .7( ) | .1( ) | .3( ) | .2( ) | .1( ) | .1( ) | .4( ) | .3( ) | .0( ) |
| | | 2. | 1. | 0. | 1. | 1. | 2. | 0. | 9. | 2. | 1. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .2( ) | .2( ) | .0( ) | .3( ) | .2( ) | .2( ) |
| | | 4. | 0. | 0. | 0. | 20. | 7. | 1. | 4. | 25. | 15. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .4( ) | .3( ) | .1( ) | .3( ) | .0( ) | .0( ) |
| | | 0. | 8. | 1. | 2. | 7. | 0. | 0. | 0. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 33.8(S) | 14.4(S) | 9.1(S) | 33.1(S) | 14.9(S) |
| | | 0. | 0. | 2. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 1.3(S) | | | | | |
| 5 | 10. | 24. | 0. | 0. | 13. | 1. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 2. | 3. | 1. | 0. | 2. | 0. | 0. | 0. | 8. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 1. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 19. | 0. | 7. | 1. | 0. | 5. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 23. | 1. | 2. | 2. | 0. | 0. | 13. | 5. | 0. |
| | | .0( ) | .7( ) | .1( ) | .3( ) | .2( ) | .1( ) | .1( ) | .4( ) | .2( ) | .0( ) |
| | | 2. | 1. | 0. | 1. | 1. | 2. | 0. | 8. | 1. | 1. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .2( ) | .2( ) | .0( ) | .3( ) | .2( ) | .2( ) |
| | | 4. | 0. | 0. | 0. | 19. | 7. | 1. | 4. | 23. | 14. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .4( ) | .3( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 0. | 8. | 1. | 1. | 7. | 0. | 0. | 0. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 33.9(S) | 14.5(S) | 9.1(S) | 33.2(S) | 14.9(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .1(S) | .0(S) | 3.6(S) | .0( ) | 1.3(S) | | | | | |
| 5 | 15. | 22. | 0. | 0. | 12. | 1. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 5. | 2. | 3. | 1. | 0. | 0. | 0. | 0. | 0. | 8. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 1. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 18. | 0. | 6. | 1. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 21. | 1. | 2. | 1. | 0. | 0. | 12. | 5. | 0. |
| | | .0( ) | .6( ) | .1( ) | .3( ) | .2( ) | .1( ) | .1( ) | .4( ) | .2( ) | .0( ) |
| | | 2. | 1. | 0. | 1. | 1. | 2. | 0. | 8. | 1. | 1. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .2( ) | .2( ) | .0( ) | .3( ) | .2( ) | .2( ) |
| | | 3. | 0. | 0. | 0. | 18. | 6. | 1. | 3. | 22. | 13. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .4( ) | .3( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 0. | 7. | 1. | 1. | 6. | 0. | 0. | 0. | 0. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 34.1(S) | 14.5(S) | 9.1(S) | 33.2(S) | 14.9(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.6(S) | .0( ) | 1.3(S) | | | | | |
| 5 | 20. | 21. | 0. | 0. | 11. | 1. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 1. | 3. | 1. | 0. | 0. | 0. | 0. | 0. | 7. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 1. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 17. | 0. | 6. | 1. | 0. | 5. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 20. | 1. | 2. | 1. | 0. | 0. | 11. | 4. | 0. |
| | | .0( ) | .6( ) | .1( ) | .3( ) | .2( ) | .1( ) | .1( ) | .4( ) | .2( ) | .0( ) |
| | | 1. | 1. | 0. | 1. | 1. | 1. | 0. | 7. | 1. | 1. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .2( ) | .2( ) | .0( ) | .3( ) | .2( ) | .2( ) |
| | | 3. | 0. | 0. | 0. | 17. | 6. | 1. | 3. | 20. | 12. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .4( ) | .3( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 0. | 7. | 1. | 1. | 6. | 0. | 0. | 0. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 34.3(S) | 14.5(S) | 9.1(S) | 33.3(S) | 14.9(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.6(S) | .0( ) | 1.3(S) | | | | | |
| 5 | 25. | 20. | 0. | 0. | 11. | 1. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 1. | 2. | 1. | 0. | 0. | 0. | 0. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 1. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 16. | 0. | 6. | 1. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 19. | 1. | 2. | 1. | 0. | 0. | 11. | 4. | 0. |
| | | .0( ) | .6( ) | .1( ) | .3( ) | .1( ) | .1( ) | .1( ) | .4( ) | .2( ) | .0( ) |
| | | 1. | 1. | 0. | 1. | 1. | 1. | 0. | 6. | 1. | 1. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .2( ) | .2( ) | .0( ) | .3( ) | .2( ) | .2( ) |
| | | 3. | 0. | 0. | 0. | 16. | 6. | 1. | 3. | 19. | 11. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .4( ) | .3( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 0. | 6. | 1. | 1. | 6. | 0. | 0. | 0. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 34.4(S) | 14.5(S) | 9.1(S) | 33.3(S) | 14.9(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.6(S) | .0( ) | 1.2(S) | | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 30. | 19.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 10.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 4.<br>.0( ) | 1.<br>.0( ) | 2.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 6.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 15.<br>.0( ) | 0.<br>.0( ) | 5.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.2( ) |
| | | 0.<br>.0( ) | 18.<br>.6( ) | 1.<br>.1( ) | 1.<br>.3( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 10.<br>.4( ) | 4.<br>.2( ) | 0.<br>.0( ) |
| | | 1.<br>.1( ) | 1.<br>.1( ) | 0.<br>.0( ) | 1.<br>.1( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) | 6.<br>.3( ) | 1.<br>.2( ) | 1.<br>.2( ) |
| | | 3.<br>.2( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 15.<br>.4( ) | 5.<br>.3( ) | 1.<br>.1( ) | 3.<br>.2( ) | 18.<br>.0( ) | 11.<br>.0( ) |
| | | 0.<br>.0( ) | 6.<br>.0( ) | 1.<br>.0( ) | 1.<br>.0( ) | 5.<br>.0( ) | 0.<br>34.5(S) | 0.<br>14.5(S) | 0.<br>9.1(S) | 0.<br>33.4(S) | 3.<br>14.9(S) |
| | | 0.<br>.0(S) | 0.<br>.0(S) | 1.<br>3.6(S) | 0.<br>.0( ) | 0.<br>1.2(S) | | | | | |
| 5 | 35. | 18.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 10.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 4.<br>.0( ) | 1.<br>.0( ) | 2.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 6.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 14.<br>.0( ) | 0.<br>.0( ) | 5.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.2( ) |
| | | 0.<br>.0( ) | 17.<br>.6( ) | 1.<br>.1( ) | 1.<br>.3( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 10.<br>.4( ) | 4.<br>.2( ) | 0.<br>.0( ) |
| | | 1.<br>.1( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) | 6.<br>.3( ) | 1.<br>.1( ) | 1.<br>.2( ) |
| | | 2.<br>.2( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 14.<br>.4( ) | 5.<br>.3( ) | 1.<br>.1( ) | 3.<br>.2( ) | 17.<br>.0( ) | 10.<br>.0( ) |
| | | 0.<br>.0( ) | 6.<br>.0( ) | 1.<br>.0( ) | 1.<br>.0( ) | 5.<br>.0( ) | 0.<br>34.7(S) | 0.<br>14.6(S) | 0.<br>9.1(S) | 0.<br>33.4(S) | 3.<br>14.9(S) |
| | | 0.<br>.0(S) | 0.<br>.0(S) | 1.<br>3.6(S) | 0.<br>.0( ) | 0.<br>1.2(S) | | | | | |
| 5 | 40. | 17.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 9.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 3.<br>.0( ) | 1.<br>.0( ) | 2.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 5.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 13.<br>.0( ) | 0.<br>.0( ) | 5.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.2( ) |
| | | 0.<br>.0( ) | 16.<br>.6( ) | 1.<br>.1( ) | 1.<br>.3( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 9.<br>.3( ) | 3.<br>.2( ) | 0.<br>.0( ) |
| | | 1.<br>.1( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 1.<br>.1( ) | 1.<br>.1( ) | 0.<br>.0( ) | 5.<br>.3( ) | 1.<br>.1( ) | 1.<br>.2( ) |
| | | 2.<br>.2( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 13.<br>.3( ) | 5.<br>.3( ) | 1.<br>.1( ) | 3.<br>.2( ) | 16.<br>.0( ) | 10.<br>.0( ) |
| | | 0.<br>.0( ) | 5.<br>.0( ) | 1.<br>.0( ) | 1.<br>.0( ) | 5.<br>.0( ) | 0.<br>34.8(S) | 0.<br>14.6(S) | 0.<br>9.1(S) | 0.<br>33.4(S) | 3.<br>14.9(S) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0(S) | 0. .0(S) | 1. 3.6(S) | 0. .0( ) | 0. 1.2(S) | | | | | |
| 5 | 45. | 16. .0( ) | 0. .0( ) | 0. .0( ) | 8. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 3. .0( ) | 1. .0( ) | 2. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 5. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 13. .0( ) | 0. .0( ) | 5. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .2( ) |
| | | 0. .0( ) | 15. .6( ) | 1. .1( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 8. .3( ) | 3. .2( ) | 0. .0( ) |
| | | 1. .1( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 1. .1( ) | 1. .1( ) | 0. .0( ) | 5. .3( ) | 1. .1( ) | 1. .2( ) |
| | | 2. .2( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 13. .3( ) | 5. .3( ) | 1. .1( ) | 3. .2( ) | 15. .0( ) | 9. .0( ) |
| | | 0. .0( ) | 5. .0( ) | 0. .0( ) | 1. .0( ) | 5. .0( ) | 0. 34.9(S) | 0. 14.6(S) | 0. 9.1(S) | 0. 33.5(S) | 3. 14.9(S) |
| | | 0. .0(S) | 0. .0(S) | 1. 3.6(S) | 0. .0( ) | 0. 1.2(S) | | | | | |
| 5 | 50. | 15. .0( ) | 0. .0( ) | 0. .0( ) | 8. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 3. .0( ) | 1. .0( ) | 2. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 5. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 12. .0( ) | 0. .0( ) | 4. .0( ) | 1. .0( ) | 0. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 1. .2( ) |
| | | 0. .0( ) | 15. .6( ) | 0. .1( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 8. .3( ) | 3. .2( ) | 0. .0( ) |
| | | 1. .1( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 1. .1( ) | 1. .1( ) | 0. .0( ) | 5. .2( ) | 1. .1( ) | 1. .2( ) |
| | | 2. .2( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 12. .3( ) | 4. .3( ) | 1. .1( ) | 3. .2( ) | 15. .0( ) | 9. .0( ) |
| | | 0. .0( ) | 5. .0( ) | 0. .0( ) | 1. .0( ) | 4. .0( ) | 0. 35.0(S) | 0. 14.6(S) | 0. 9.1(S) | 0. 33.5(S) | 3. 14.9(S) |
| | | 0. .0(S) | 0. .0(S) | 1. 3.6(S) | 0. .0( ) | 0. 1.2(S) | | | | | |
| 5 | 55. | 15. .0( ) | 0. .0( ) | 0. .0( ) | 8. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 3. .0( ) | 1. .0( ) | 2. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 11. .0( ) | 0. .0( ) | 4. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) |
| | | 0. .0( ) | 14. .5( ) | 0. .1( ) | 1. .2( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 8. .3( ) | 3. .2( ) | 0. .0( ) |
| | | 1. .1( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 1. .1( ) | 1. .1( ) | 0. .0( ) | 4. .2( ) | 1. .1( ) | 1. .2( ) |
| | | 2. .2( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 11. .3( ) | 4. .2( ) | 1. .1( ) | 3. .2( ) | 14. .0( ) | 8. .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 5. | 0. | 1. | 4. | 0. | 0. | 0. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 35.1(S) | 14.6(S) | 9.1(S) | 33.5(S) | 14.9(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.6(S) | .0( ) | 1.2(S) | | | | | |
| 6 | 0. | 14. | 0. | 0. | 7. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 1. | 2. | 1. | 0. | 0. | 0. | 0. | 0. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 1. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 11. | 0. | 4. | 1. | 0. | 4. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 0. | 13. | 0. | 1. | 1. | 0. | 0. | 7. | 3. | 0. |
| | | .0( ) | .5( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 1. | 0. | 0. | 1. | 1. | 0. | 4. | 1. | 1. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) |
| | | 2. | 0. | 0. | 0. | 11. | 4. | 1. | 3. | 13. | 8. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .2( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 0. | 4. | 0. | 1. | 4. | 0. | 0. | 0. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 35.2(S) | 14.6(S) | 9.1(S) | 33.6(S) | 14.9(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.6(S) | .0( ) | 1.2(S) | | | | | |
| 6 | 5. | 13. | 0. | 0. | 7. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 1. | 2. | 1. | 0. | 0. | 0. | 0. | 0. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 10. | 0. | 4. | 1. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 0. | 12. | 0. | 1. | 1. | 0. | 0. | 7. | 2. | 0. |
| | | .0( ) | .5( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 1. | 0. | 0. | 1. | 1. | 0. | 4. | 1. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) |
| | | 2. | 0. | 0. | 0. | 10. | 4. | 1. | 2. | 12. | 7. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .2( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 0. | 4. | 0. | 1. | 4. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 35.3(S) | 14.6(S) | 9.1(S) | 33.6(S) | 14.9(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.6(S) | .0( ) | 1.2(S) | | | | | |
| 6 | 10. | 12. | 0. | 0. | 6. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 1. | 2. | 1. | 0. | 0. | 0. | 0. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 10. | 0. | 3. | 1. | 0. | 4. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 0. | 12. | 0. | 1. | 1. | 0. | 0. | 6. | 2. | 0. |
| | | .0( ) | .5( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 1. | 0. | 0. | 1. | 1. | 0. | 3. | 1. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2. | 0. | 0. | 0. | 10. | 3. | 1. | 2. | 12. | 7. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .2( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 0. | 4. | 0. | 1. | 3. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 35.4(S) | 14.6(S) | 9.1(S) | 33.6(S) | 14.9(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.6(S) | .0( ) | 1.2(S) | | | | | |
| 6 | 15. | 12. | 0. | 0. | 6. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 1. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 9. | 0. | 3. | 1. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 0. | 11. | 0. | 1. | 1. | 0. | 0. | 6. | 2. | 0. |
| | | .0( ) | .5( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 1. | 0. | 0. | 1. | 1. | 0. | 3. | 1. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 9. | 3. | 1. | 2. | 11. | 6. |
| | | .2( ) | .1( ) | .0( ) | .1( ) | .3( ) | .2( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 0. | 4. | 0. | 1. | 3. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 35.5(S) | 14.7(S) | 9.1(S) | 33.6(S) | 14.9(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.6(S) | .0( ) | 1.2(S) | | | | | |
| 6 | 20. | 11. | 0. | 0. | 6. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 1. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 9. | 0. | 3. | 1. | 0. | 4. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 0. | 11. | 0. | 1. | 1. | 0. | 0. | 6. | 2. | 0. |
| | | .0( ) | .5( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 1. | 0. | 0. | 1. | 1. | 0. | 3. | 1. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 9. | 3. | 1. | 2. | 11. | 6. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .3( ) | .2( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 0. | 4. | 0. | 1. | 3. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 35.5(S) | 14.7(S) | 9.1(S) | 33.6(S) | 14.9(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.6(S) | .0( ) | 1.2(S) | | | | | |
| 6 | 25. | 11. | 0. | 0. | 6. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 1. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 8. | 0. | 3. | 1. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 0. | 10. | 0. | 1. | 1. | 0. | 0. | 6. | 2. | 0. |
| | | .0( ) | .5( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1.<br>.1( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 1.<br>.1( ) | 1.<br>.1( ) | 0.<br>.0( ) | 3.<br>.2( ) | 1.<br>.1( ) | 0.<br>.1( ) |
| | | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 8.<br>.3( ) | 3.<br>.2( ) | 1.<br>.1( ) | 2.<br>.2( ) | 10.<br>.0( ) | 6.<br>.0( ) |
| | | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 3.<br>.0( ) | 0.<br>35.6(S) | 0.<br>14.7(S) | 0.<br>9.1(S) | 0.<br>33.7(S) | 2.<br>14.9(S) |
| | | 0.<br>.0(S) | 0.<br>.0(S) | 1.<br>3.6(S) | 0.<br>.0( ) | 0.<br>1.2(S) | | | | | |
| 6 | 30. | 10.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 2.<br>.0( ) | 1.<br>.0( ) | 1.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 8.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) |
| | | 0.<br>.0( ) | 10.<br>.5( ) | 0.<br>.1( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 5.<br>.3( ) | 2.<br>.2( ) | 0.<br>.0( ) |
| | | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 1.<br>.1( ) | 1.<br>.1( ) | 0.<br>.0( ) | 3.<br>.2( ) | 1.<br>.1( ) | 0.<br>.1( ) |
| | | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 8.<br>.3( ) | 3.<br>.2( ) | 1.<br>.1( ) | 2.<br>.2( ) | 10.<br>.0( ) | 6.<br>.0( ) |
| | | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 3.<br>.0( ) | 0.<br>35.7(S) | 0.<br>14.7(S) | 0.<br>9.1(S) | 0.<br>33.7(S) | 2.<br>14.9(S) |
| | | 0.<br>.0(S) | 0.<br>.0(S) | 1.<br>3.6(S) | 0.<br>.0( ) | 0.<br>1.2(S) | | | | | |
| 6 | 35. | 10.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 2.<br>.0( ) | 1.<br>.0( ) | 1.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 8.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) |
| | | 0.<br>.0( ) | 9.<br>.5( ) | 0.<br>.1( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.1( ) | 5.<br>.3( ) | 2.<br>.2( ) | 0.<br>.0( ) |
| | | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 1.<br>.1( ) | 1.<br>.1( ) | 0.<br>.0( ) | 3.<br>.2( ) | 1.<br>.1( ) | 0.<br>.1( ) |
| | | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.1( ) | 8.<br>.3( ) | 3.<br>.2( ) | 0.<br>.1( ) | 2.<br>.2( ) | 9.<br>.0( ) | 5.<br>.0( ) |
| | | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 3.<br>.0( ) | 0.<br>35.8(S) | 0.<br>14.7(S) | 0.<br>9.1(S) | 0.<br>33.7(S) | 2.<br>14.9(S) |
| | | 0.<br>.0(S) | 0.<br>.0(S) | 1.<br>3.6(S) | 0.<br>.0( ) | 0.<br>1.2(S) | | | | | |
| 6 | 40. | 9.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 2.<br>.0( ) | 1.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 7.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.1( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 9. | 0. | 1. | 1. | 0. | 0. | 5. | 2. | 0. |
| | | .0( ) | .5( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 1. | 0. | 2. | 1. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 7. | 3. | 0. | 2. | 9. | 5. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .3( ) | .2( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 0. | 3. | 0. | 1. | 3. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 35.8(S) | 14.7(S) | 9.1(S) | 33.7(S) | 14.9(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.6(S) | .0( ) | 1.2(S) | | | | | |
| 6 | 45. | 9. | 0. | 0. | 5. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 7. | 0. | 3. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 0. | 8. | 0. | 1. | 1. | 0. | 0. | 5. | 2. | 0. |
| | | .0( ) | .4( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 1. | 0. | 2. | 1. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 7. | 3. | 0. | 2. | 8. | 5. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .3( ) | .2( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 0. | 3. | 0. | 1. | 3. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 35.9(S) | 14.7(S) | 9.1(S) | 33.7(S) | 14.9(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.6(S) | .0( ) | 1.2(S) | | | | | |
| 6 | 50. | 8. | 0. | 0. | 4. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 7. | 0. | 2. | 0. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 0. | 8. | 0. | 1. | 1. | 0. | 0. | 4. | 2. | 0. |
| | | .0( ) | .4( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 1. | 0. | 2. | 1. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 7. | 2. | 0. | 2. | 8. | 5. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .3( ) | .2( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 0. | 3. | 0. | 1. | 2. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 35.9(S) | 14.7(S) | 9.1(S) | 33.8(S) | 14.9(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.6(S) | .0( ) | 1.2(S) | | | | | |
| 6 | 55. | 8. | 0. | 0. | 4. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0. | 6. | 0. | 2. | 0. | 0. | 0. | 0. | 0. | 0. |
| .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| 0. | 8. | 0. | 1. | 1. | 0. | 0. | 4. | 1. | 0. |
| .0( ) | .4( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| 1. | 0. | 0. | 0. | 0. | 1. | 0. | 2. | 1. | 0. |
| .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| 1. | 0. | 0. | 0. | 6. | 2. | 0. | 2. | 8. | 4. |
| .1( ) | .1( ) | .0( ) | .1( ) | .3( ) | .2( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| 0. | 3. | 0. | 1. | 2. | 0. | 0. | 0. | 0. | 2. |
| .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 36.0(S) | 14.7(S) | 9.1(S) | 33.8(S) | 14.9(S) |
| 0. | 0. | 1. | 0. | 0. | | | | | |
| .0(S) | .0(S) | 3.6(S) | .0( ) | 1.2(S) | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0. | 8. | 0. | 0. | 4. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 6. | 0. | 2. | 0. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) |
| | | 0. | 7. | 0. | 1. | 1. | 0. | 0. | 4. | 1. | 0. |
| | | .0( ) | .4( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .3( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 2. | 1. | 0. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 6. | 2. | 0. | 2. | 7. | 4. |
| | | .1( ) | .1( ) | .0( ) | .1( ) | .3( ) | .2( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 0. | 3. | 0. | 1. | 2. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 36.1(S) | 14.7(S) | 9.1(S) | 33.8(S) | 14.9(S) |
| | | 0. | 0. | 1. | 0. | 0. | | | | | |
| | | .0(S) | .0(S) | 3.6(S) | .0( ) | 1.2(S) | | | | | |

1

10yr 3hr Current Condition SWMM Sump Basin
Blank

*** PEAK FLOWS, STAGES AND STORAGES OF GUTTERS AND DETENTION DAMS ***

| CONVEYANCE ELEMENT | PEAK (CFS) | STAGE (FT) | STORAGE (AC-FT) | TIME (HR/MIN) |
|---|---|---|---|---|
| 224 | 37. | (DIRECT FLOW) | | 0 45. |
| 124 | 37. | (DIRECT FLOW) | | 0 45. |
| 324 | 16. | .4 | | 1 30. |
| 223 | 103. | (DIRECT FLOW) | | 0 55. |
| 222 | 42. | (DIRECT FLOW) | | 0 55. |
| 123 | 112. | (DIRECT FLOW) | | 0 55. |
| 122 | 42. | (DIRECT FLOW) | | 0 55. |
| 420 | 155. | (DIRECT FLOW) | | 0 55. |
| 221 | 39. | (DIRECT FLOW) | | 0 50. |
| 322 | 107. | .8 | | 1 30. |
| 121 | 39. | (DIRECT FLOW) | | 0 50. |
| 220 | 78. | (DIRECT FLOW) | | 0 55. |
| 120 | 191. | (DIRECT FLOW) | | 1 15. |
| 520 | 0. | .1 | 33.8 | 7 0. |
| 219 | 26. | (DIRECT FLOW) | | 0 50. |
| 320 | 0. | .0 | | 7 0. |
| 218 | 27. | (DIRECT FLOW) | | 0 45. |
| 210 | 33. | (DIRECT FLOW) | | 0 25. |
| 119 | 26. | (DIRECT FLOW) | | 0 50. |
| 118 | 27. | (DIRECT FLOW) | | 0 45. |

| | | | | | |
|---|---|---|---|---|---|
| 110 | 33. | (DIRECT FLOW) | | 0 | 25. |
| 319 | 14. | .4 | | 1 | 40. |
| 318 | 13. | .4 | | 1 | 35. |
| 213 | 76. | (DIRECT FLOW) | | 0 | 50. |
| 610 | 1. | .1 | 1.4 | 1 | 0. |
| 209 | 29. | (DIRECT FLOW) | | 0 | 45. |
| 217 | 37. | (DIRECT FLOW) | | 0 | 35. |
| 113 | 89. | (DIRECT FLOW) | | 0 | 55. |
| 310 | 0. | .1 | | 4 | 5. |
| 109 | 29. | (DIRECT FLOW) | | 0 | 45. |
| 117 | 37. | (DIRECT FLOW) | | 0 | 35. |
| 513 | 0. | .1 | 14.7 | 7 | 0. |
| 409 | 29. | (DIRECT FLOW) | | 0 | 45. |
| 208 | 45. | (DIRECT FLOW) | | 0 | 40. |
| 317 | 16. | .4 | | 1 | 15. |
| 313 | 0. | .0 | | 7 | 0. |
| 309 | 26. | .9 | | 0 | 55. |
| 108 | 45. | (DIRECT FLOW) | | 0 | 40. |
| 216 | 68. | (DIRECT FLOW) | | 0 | 55. |
| 412 | 16. | (DIRECT FLOW) | | 1 | 15. |
| 608 | 15. | .1 | 4.7 | 1 | 45. |
| 116 | 68. | (DIRECT FLOW) | | 0 | 55. |
| 215 | 12. | (DIRECT FLOW) | | 0 | 45. |
| 314 | 12. | .3 | | 1 | 55. |
| 212 | 65. | (DIRECT FLOW) | | 0 | 50. |
| 308 | 15. | .7 | | 1 | 45. |
| 207 | 4. | (DIRECT FLOW) | | 1 | 20. |
| 516 | 0. | .1 | 9.1 | 5 | 10. |
| 115 | 12. | (DIRECT FLOW) | | 0 | 45. |
| 112 | 67. | (DIRECT FLOW) | | 0 | 50. |
| 107 | 15. | (DIRECT FLOW) | | 1 | 35. |
| 316 | 0. | .0 | | 7 | 0. |
| 315 | 5. | .3 | | 1 | 55. |
| 214 | 46. | (DIRECT FLOW) | | 0 | 45. |
| 312 | 53. | .6 | | 1 | 35. |
| 211 | 12. | (DIRECT FLOW) | | 0 | 45. |
| 206 | 15. | (DIRECT FLOW) | | 0 | 45. |
| 307 | 14. | .9 | | 1 | 55. |
| 114 | 47. | (DIRECT FLOW) | | 0 | 45. |
| 111 | 62. | (DIRECT FLOW) | | 1 | 35. |
| 203 | 4. | (DIRECT FLOW) | | 0 | 15. |
| 106 | 15. | (DIRECT FLOW) | | 0 | 45. |
| 404 | 102. | (DIRECT FLOW) | | 1 | 30. |
| 103 | 4. | (DIRECT FLOW) | | 0 | 15. |
| 202 | 11. | (DIRECT FLOW) | | 0 | 35. |
| 306 | 7. | .3 | | 1 | 40. |
| 205 | 32. | (DIRECT FLOW) | | 0 | 50. |
| 311 | 95. | .8 | | 1 | 50. |
| 204 | 27. | (DIRECT FLOW) | | 0 | 45. |
| 603 | 1. | .1 | .1 | 0 | 35. |
| 102 | 11. | (DIRECT FLOW) | | 0 | 35. |
| 236 | 17. | (DIRECT FLOW) | | 0 | 40. |
| 105 | 35. | (DIRECT FLOW) | | 0 | 50. |
| 104 | 111. | (DIRECT FLOW) | | 1 | 45. |
| 303 | 1. | .1 | | 0 | 50. |
| 602 | 3. | .1 | .5 | 1 | 20. |
| 136 | 17. | (DIRECT FLOW) | | 0 | 40. |
| 231 | 6. | (DIRECT FLOW) | | 0 | 35. |
| 401 | 133. | (DIRECT FLOW) | | 1 | 35. |
| 402 | 4. | (DIRECT FLOW) | | 1 | 15. |
| 336 | 6. | .3 | | 1 | 45. |
| 235 | 96. | (DIRECT FLOW) | | 0 | 50. |
| 131 | 6. | (DIRECT FLOW) | | 0 | 35. |
| 304 | 123. | 1.2 | | 2 | 5. |
| 302 | 2. | .2 | | 2 | 15. |
| 201 | 68. | (DIRECT FLOW) | | 0 | 45. |
| 135 | 99. | (DIRECT FLOW) | | 0 | 50. |
| 230 | 2. | (DIRECT FLOW) | | 0 | 35. |
| 331 | 4. | .8 | | 1 | 0. |
| 229 | 10. | (DIRECT FLOW) | | 0 | 40. |
| 101 | 140. | (DIRECT FLOW) | | 1 | 50. |
| 238 | 38. | (DIRECT FLOW) | | 0 | 45. |
| 335 | 56. | .7 | | 1 | 40. |
| 234 | 77. | (DIRECT FLOW) | | 0 | 55. |
| 233 | 8. | (DIRECT FLOW) | | 0 | 40. |
| 130 | 2. | (DIRECT FLOW) | | 0 | 35. |
| 129 | 13. | (DIRECT FLOW) | | 0 | 55. |
| 501 | 0. | .1 | 36.1 | 7 | 0. |

| | | | | | |
|---|---|---|---|---|---|
| 138 | 38. | (DIRECT FLOW) | | 0 | 45. |
| 134 | 111. | (DIRECT FLOW) | | 1 | 15. |
| 133 | 8. | (DIRECT FLOW) | | 0 | 40. |
| 330 | 0. | .1 | | 0 | 45. |
| 329 | 9. | .5 | | 1 | 30. |
| 228 | 79. | (DIRECT FLOW) | | 0 | 50. |
| 301 | 0. | .0 | | 7 | 0. |
| 226 | 19. | (DIRECT FLOW) | | 0 | 45. |
| 338 | 11. | .4 | | 2 | 0. |
| 237 | 110. | (DIRECT FLOW) | | 0 | 55. |
| 432 | 116. | (DIRECT FLOW) | | 1 | 5. |
| 128 | 83. | (DIRECT FLOW) | | 0 | 50. |
| 126 | 19. | (DIRECT FLOW) | | 0 | 45. |
| 137 | 115. | (DIRECT FLOW) | | 0 | 55. |
| 333 | 88. | .7 | | 2 | 0. |
| 232 | 66. | (DIRECT FLOW) | | 0 | 50. |
| 328 | 55. | .6 | | 1 | 30. |
| 227 | 16. | (DIRECT FLOW) | | 0 | 45. |
| 326 | 9. | .5 | | 1 | 35. |
| 225 | 10. | (DIRECT FLOW) | | 0 | 45. |
| 537 | 13. | .1 | 14.9 | 3 | 55. |
| 132 | 115. | (DIRECT FLOW) | | 1 | 40. |
| 127 | 68. | (DIRECT FLOW) | | 1 | 25. |
| 125 | 16. | (DIRECT FLOW) | | 1 | 15. |
| 337 | 13. | (DIRECT FLOW) | | 3 | 55. |
| 400 | 197. | (DIRECT FLOW) | | 1 | 30. |
| 901 | 13. | (DIRECT FLOW) | | 3 | 55. |
| 900 | 197. | (DIRECT FLOW) | | 1 | 30. |

```
   2   1   1   2
   3   4
WATERSHED   1
100yr 3hr Current Condition SWMM Sump Basin
Blank
        84       5.0                                                          1
         1  201
         4  204
         5  205
         6  206
         7  207
         9  209
        11  211
        12  212
        13  213
        14  214
        15  215
        16  216
        17  217
        18  218
        19  219
        20  220
        21  221
        22  222
        23  223
        24  224
        25  225
        26  226
        27  227
        28  228
        29  229
        30  230
        31  231
        32  232
        33  233
        34  234
        35  235
        36  236
        37  237
        38  238

    0  201  101    3              1.
   -1  202  102  3 3              1.
        0.        0.      0.55      53.8      1.65        0.        0.        0.

   -1  203  103  3 3              1.
        0.        0.      0.23      14.4      0.69        0.        0.        0.
    0  204  104    3              1.
    0  205  105    3              1.
    0  206  106    3              1.
    0  207  107    3              1.
   -1  208  108  3 3              1.
        0.        0.      0.62     94.67      1.63        0.        0.        0.
    0  209  109    3              1.
   -1  210  110  3 3              1.
        0.        0.      0.35     79.14      1.05        0.        0.        0.
    0  211  111    3              1.
    0  212  112    3              1.
    0  213  113    3              1.
    0  214  114    3              1.
    0  215  115    3              1.
    0  216  116    3              1.
    0  217  117    3              1.
    0  218  118    3              1.
    0  219  119    3              1.
    0  220  120    3              1.
    0  121  120    3              1.
    0  221  121    3              1.
    0  222  122    3              1.
    0  223  123    3              1.
    0  224  124    3              1.
    0  225  125    3              1.
    0  226  126    3              1.
    0  227  127    3              1.
    0  228  128    3              1.
    0  229  129    3              1.
    0  230  130    3              1.
    0  231  131    3              1.
```

```
0  232  132    3              1.
0  233  133    3              1.
0  234  134    3              1.
0  235  135    3              1.
0  236  136    3              1.
0  237  137    3              1.
0  238  138    3              1.
0  402  302    3              1.
0  401  304    3              1.
0  106  306    3              1.
0  107  307    3              1.
0  409  309    3              1.
0  404  311    3              1.
0  112  312    3              1.
0  412  314    3              1.
0  115  315    3              1.
0  117  317    3              1.
0  118  318    3              1.
0  119  319    3              1.
0  420  322    3              1.
0  124  324    3              1.
0  126  326    3              1.
0  128  328    3              1.
0  129  329    3              1.
0  130  330    3              1.
0  131  331    3              1.
0  432  333    3              1.
0  135  335    3              1.
0  136  336    3              1.
0  138  338    3              1.
0  125  400    3              1.
0  127  400    3              1.
0  132  400    3              1.
0  104  401    3              1.
0  105  401    3              1.
0  111  404    3              1.
0  114  404    3              1.
0  109  409    3              1.
0  122  420    3              1.
0  123  420    3              1.
0  133  432    3              1.
0  134  432    3              1.
0  101  501    3              1.
0  113  513    3              1.
0  116  516    3              1.
0  120  520    3              1.
0  137  537    3              1.
0  102  602    3              1.
0  103  603    3              1.
0  108  608    3              1.
0  110  610    3              1.
0  400  900    3              1.
0  337  901    3              1.
0  501  301  7 2     0.1       1.                                        0.1
    0.        0.       7.5        0.       26.4        0.       63.3        0.
  82.9        0.      129.     1400.       201.     6510.
0  513  313  3 2     0.1       1.                                        0.1
    0.        0.      20.3        0.       22.1      495.
0  516  316  3 2     0.1       1.                                        0.1
    0.        0.     18.12        0.       18.9      320.        0.        0.
0  520  320  4 2     0.1       1.                                        0.1
    0.        0.       9.9        0.        10.        0.      230.        0.
0  537  337  3 2     0.1       1.                                        0.1
    0.        0.     14.85        0.       17.9      623.        0.        0.
0  602  402  3 2     0.1       1.                                        0.1
    0.        0.      0.78       5.4       1.64      15.4
0  603  303  3 2     0.1       1.                                        0.1
    0.        0.      0.12       1.2       0.33       6.9        0.        0.
0  608  308 10 2     0.1       1.                                        0.1
    0.        0.      .038      0.31       0.45      0.46      1.63      0.57
  3.59      0.67      6.09     32.39       7.09     55.58      8.87    123.53
 11.53    266.39     13.14    378.74
0  610  310  2 2     0.1       1.                                        0.1
    0.        0.      3.81        1.3        0.        0.        0.        0.
0  302  101    1          3681.  0.0077     60.     60.    .045     10.
0  304  101    1          3729.  0.0074     40.     40.    .045     10.
0  311  104    1          2920.  0.0108     70.     70.    .045     10.
0  306  105    1          5319.  0.0161     50.     50.    .045     10.
```

```
    0  308  107    1      4.    625.   0.008    0.01    0.01   0.016      2.
    0  312  111    1           2682.  0.0082    110.    110.    .045     10.
    0  314  112    1           1834.  0.0049    175.    175.    .045     10.
    0  318  113    1           3243.  0.0052    100.    100.    .045     10.
    0  319  113    1           4029.  0.0107     95.     95.    .045     10.
    0  315  114    1           5050.  0.0109     80.     80.    .045     10.
    0  316  114    1           2964.  0.0101     50.     50.    .045     10.
    0  320  118    1            811.  0.0123     80.     80.    .045     10.
    0  322  120    1           3463.  0.0081    100.    100.    .045     10.
    0  324  123    1           5484.  0.0133     75.     75.    .045     10.
    0  326  125    1           2139.  0.0019     80.     80.    .045     10.
    0  301  126    1           1590.   0.017     40.     40.    .045     10.
    0  328  127    1           3272.  0.0089    115.    115.    .045     10.
    0  329  128    1           3696.  0.0176     25.     25.    .045     10.
    0  330  128    1           5614.  0.0157     50.     50.    .045     10.
    0  331  129    1           2742.  0.0091      3.      3.   0.035      3.
    0  333  132    1           4251.  0.0078    125.    125.    .045     10.
    0  335  134    1           6142.  0.0138     70.     70.    .045     10.
    0  336  135    1           5277.    0.01    100.    100.    .045     10.
    0  338  137    1           8677.  0.0086     75.     75.    .045     10.
    0  303  402    1      5.   1011.  0.0151      5.      5.   0.035      3.
    0  307  404    1      5.   1308.  0.0031      5.      5.   0.035      3.
    0  310  409    1      5.   3896.    0.01      5.      5.   0.035      3.
    0  313  412    1            820.  0.0073    100.    100.    .045     10.
    0  317  412    1           3628.  0.0105    100.    100.    .045     10.
    0  309  608    1      5.   1757.  0.0091      5.      5.   0.035      3.

    0
   85
  101  102  103  104  105  106  107  108  109  110  111  112  113  114  115  116
  117  118  119  120  121  122  123  124  125  126  127  128  129  130  131  132
  133  134  135  136  137  138  301  302  303  304  306  307  308  309  310  311
  312  313  314  315  316  317  318  319  320  322  324  326  328  329  330  331
  333  335  336  338  400  401  402  404  412  420  432  501  513  516  520  537
  602  603  608  609  610
ENDPROGRAM
```

URBAN DRAINAGE STORM WATER MANAGEMENT MODEL - 32 BIT VERSION 1998
REVISED BY UNIVERSITY OF COLORADO AT DENVER

*** ENTRY MADE TO RUNOFF MODEL ***

100yr 3hr Current Condition SWMM Sump Basin
Blank

0NUMBER OF TIME STEPS 84
0INTEGRATION TIME INTERVAL (MINUTES), 5.00

25.0 PERCENT OF IMPERVIOUS AREA HAS ZERO DETENTION DEPTH
1

100yr 3hr Current Condition SWMM Sump Basin
Blank

HYDROGRAPHS FROM CUHPF MODEL ARE LISTED FOR THE FOLLOWING 34 SUBCATCHMENTS

| TIME(HR/MIN) | 1 | 4 | 5 | 6 | 7 | 9 | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|---|---|
| | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 |
| | 35 | 36 | 37 | 38 | | | | | | |
| 0 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 5. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 10. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 15. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 20. | 0. | 1. | 0. | 0. | 1. | 0. | 1. | 1. | 0. | 1. |
| | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 25. | 3. | 3. | 0. | 1. | 2. | 1. | 2. | 6. | 2. | 4. |
| | 1. | 2. | 8. | 2. | 1. | 2. | 1. | 1. | 2. | 2. |
| | 1. | 1. | 1. | 4. | 1. | 0. | 1. | 2. | 1. | 2. |
| | 4. | 1. | 2. | 2. | | | | | | |
| 0 30. | 56. | 20. | 21. | 13. | 7. | 26. | 10. | 40. | 38. | 43. |
| | 10. | 25. | 68. | 26. | 15. | 34. | 21. | 19. | 45. | 36. |
| | 8. | 17. | 10. | 45. | 12. | 12. | 12. | 35. | 12. | 30. |
| | 54. | 20. | 44. | 27. | | | | | | |
| 0 35. | 155. | 51. | 67. | 36. | 9. | 70. | 24. | 106. | 114. | 111. |
| | 28. | 78. | 127. | 64. | 47. | 105. | 62. | 60. | 140. | 97. |
| | 19. | 46. | 27. | 131. | 27. | 23. | 25. | 105. | 28. | 94. |
| | 158. | 49. | 141. | 78. | | | | | | |
| 0 40. | 247. | 81. | 122. | 56. | 10. | 110. | 36. | 174. | 205. | 168. |
| | 44. | 147. | 146. | 96. | 83. | 193. | 109. | 109. | 259. | 147. |
| | 28. | 72. | 43. | 225. | 36. | 26. | 29. | 186. | 37. | 176. |
| | 273. | 70. | 268. | 128. | | | | | | |
| 0 45. | 303. | 99. | 171. | 68. | 9. | 133. | 43. | 225. | 286. | 197. |
| | 54. | 214. | 150. | 112. | 113. | 276. | 148. | 155. | 370. | 172. |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 33. | 88. | 54. | 300. | 39. | 27. | 29. | 254. | 39. | 256. |
| | | 368. | 77. | 392. | 161. | | | | | | |
| 0 | 50. | 323. | 107. | 204. | 72. | 9. | 140. | 44. | 253. | 342. | 205. |
| | | 58. | 269. | 147. | 115. | 132. | 338. | 173. | 188. | 453. | 178. |
| | | 34. | 92. | 59. | 345. | 38. | 26. | 30. | 299. | 39. | 319. |
| | | 427. | 77. | 492. | 176. | | | | | | |
| 0 | 55. | 321. | 106. | 221. | 71. | 9. | 139. | 43. | 262. | 371. | 202. |
| | | 57. | 306. | 136. | 113. | 140. | 376. | 184. | 207. | 503. | 176. |
| | | 34. | 91. | 60. | 362. | 38. | 24. | 29. | 319. | 39. | 360. |
| | | 452. | 77. | 560. | 178. | | | | | | |
| 1 | 0. | 313. | 104. | 224. | 71. | 10. | 138. | 42. | 259. | 380. | 202. |
| | | 56. | 326. | 126. | 114. | 141. | 392. | 185. | 214. | 523. | 172. |
| | | 33. | 92. | 59. | 361. | 39. | 22. | 28. | 322. | 38. | 381. |
| | | 453. | 75. | 595. | 175. | | | | | | |
| 1 | 5. | 302. | 105. | 221. | 70. | 10. | 135. | 44. | 256. | 376. | 198. |
| | | 57. | 332. | 117. | 113. | 139. | 392. | 182. | 214. | 522. | 166. |
| | | 34. | 90. | 59. | 357. | 39. | 21. | 27. | 317. | 36. | 386. |
| | | 446. | 72. | 604. | 173. | | | | | | |
| 1 | 10. | 285. | 106. | 216. | 68. | 10. | 129. | 44. | 255. | 369. | 189. |
| | | 56. | 328. | 104. | 108. | 138. | 384. | 181. | 210. | 509. | 156. |
| | | 34. | 87. | 59. | 348. | 38. | 19. | 25. | 309. | 34. | 380. |
| | | 436. | 67. | 594. | 167. | | | | | | |
| 1 | 15. | 261. | 102. | 208. | 64. | 11. | 119. | 43. | 248. | 356. | 175. |
| | | 53. | 319. | 89. | 101. | 133. | 371. | 175. | 204. | 490. | 142. |
| | | 33. | 81. | 57. | 333. | 35. | 17. | 23. | 296. | 31. | 368. |
| | | 417. | 61. | 572. | 157. | | | | | | |
| 1 | 20. | 235. | 97. | 197. | 59. | 11. | 108. | 41. | 235. | 338. | 159. |
| | | 49. | 308. | 77. | 92. | 127. | 353. | 166. | 196. | 464. | 127. |
| | | 30. | 74. | 54. | 312. | 32. | 16. | 21. | 278. | 29. | 353. |
| | | 391. | 55. | 546. | 144. | | | | | | |
| 1 | 25. | 209. | 90. | 184. | 54. | 11. | 97. | 38. | 219. | 315. | 144. |
| | | 45. | 293. | 65. | 84. | 118. | 332. | 156. | 185. | 433. | 113. |
| | | 28. | 67. | 51. | 287. | 30. | 14. | 20. | 257. | 26. | 333. |
| | | 360. | 50. | 513. | 130. | | | | | | |
| 1 | 30. | 186. | 83. | 169. | 49. | 10. | 88. | 35. | 202. | 291. | 130. |
| | | 41. | 276. | 55. | 76. | 109. | 308. | 144. | 173. | 399. | 101. |
| | | 26. | 61. | 47. | 262. | 28. | 13. | 18. | 234. | 24. | 312. |
| | | 329. | 45. | 478. | 118. | | | | | | |
| 1 | 35. | 165. | 78. | 155. | 45. | 6. | 80. | 33. | 187. | 266. | 118. |
| | | 39. | 258. | 47. | 70. | 100. | 283. | 132. | 160. | 365. | 90. |
| | | 25. | 56. | 43. | 239. | 27. | 12. | 17. | 214. | 23. | 289. |
| | | 300. | 40. | 440. | 107. | | | | | | |
| 1 | 40. | 147. | 73. | 143. | 42. | 5. | 72. | 32. | 173. | 244. | 107. |
| | | 36. | 240. | 40. | 64. | 93. | 260. | 122. | 147. | 334. | 80. |
| | | 24. | 51. | 41. | 218. | 25. | 11. | 16. | 195. | 21. | 267. |
| | | 274. | 36. | 403. | 98. | | | | | | |
| 1 | 45. | 131. | 68. | 132. | 38. | 3. | 65. | 30. | 161. | 225. | 96. |
| | | 34. | 222. | 34. | 58. | 86. | 239. | 113. | 137. | 305. | 71. |
| | | 23. | 47. | 38. | 200. | 24. | 10. | 15. | 179. | 20. | 246. |
| | | 250. | 32. | 370. | 89. | | | | | | |
| 1 | 50. | 116. | 63. | 121. | 35. | 3. | 59. | 29. | 149. | 207. | 87. |
| | | 31. | 206. | 29. | 53. | 80. | 220. | 105. | 127. | 280. | 64. |
| | | 22. | 43. | 36. | 182. | 22. | 6. | 14. | 163. | 18. | 227. |
| | | 229. | 29. | 340. | 80. | | | | | | |
| 1 | 55. | 103. | 59. | 112. | 33. | 2. | 53. | 28. | 138. | 190. | 79. |
| | | 29. | 192. | 25. | 48. | 74. | 203. | 97. | 118. | 257. | 57. |
| | | 21. | 39. | 34. | 167. | 21. | 4. | 13. | 149. | 17. | 210. |
| | | 209. | 26. | 313. | 73. | | | | | | |
| 2 | 0. | 92. | 55. | 103. | 30. | 2. | 48. | 27. | 128. | 175. | 71. |
| | | 28. | 179. | 21. | 44. | 68. | 187. | 90. | 109. | 235. | 51. |
| | | 20. | 36. | 32. | 152. | 20. | 2. | 12. | 136. | 16. | 195. |
| | | 191. | 24. | 288. | 66. | | | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 5. | 82. | 51. | 95. | 28. | 0. | 44. | 26. | 118. | 161. | 64. |
| | | 26. | 166. | 18. | 40. | 63. | 172. | 83. | 101. | 216. | 45. |
| | | 19. | 33. | 30. | 139. | 19. | 2. | 11. | 125. | 15. | 180. |
| | | 174. | 21. | 265. | 60. | | | | | | |
| 2 | 10. | 73. | 48. | 88. | 26. | 0. | 39. | 25. | 110. | 148. | 58. |
| | | 24. | 155. | 11. | 37. | 59. | 158. | 77. | 94. | 198. | 40. |
| | | 19. | 30. | 29. | 127. | 18. | 0. | 7. | 114. | 14. | 167. |
| | | 159. | 19. | 244. | 55. | | | | | | |
| 2 | 15. | 65. | 45. | 81. | 24. | 0. | 36. | 24. | 101. | 136. | 53. |
| | | 23. | 144. | 8. | 34. | 55. | 146. | 71. | 87. | 181. | 36. |
| | | 18. | 28. | 27. | 116. | 17. | 0. | 5. | 105. | 13. | 154. |
| | | 146. | 17. | 225. | 50. | | | | | | |
| 2 | 20. | 57. | 42. | 75. | 22. | 0. | 32. | 23. | 94. | 125. | 48. |
| | | 21. | 134. | 5. | 31. | 51. | 135. | 66. | 81. | 166. | 32. |
| | | 18. | 25. | 26. | 106. | 17. | 0. | 3. | 96. | 12. | 143. |
| | | 133. | 16. | 207. | 45. | | | | | | |
| 2 | 25. | 51. | 39. | 69. | 20. | 0. | 29. | 22. | 87. | 115. | 43. |
| | | 20. | 125. | 4. | 28. | 47. | 124. | 61. | 75. | 153. | 29. |
| | | 17. | 23. | 24. | 97. | 16. | 0. | 2. | 88. | 7. | 132. |
| | | 122. | 14. | 191. | 41. | | | | | | |
| 2 | 30. | 46. | 36. | 64. | 19. | 0. | 27. | 21. | 80. | 106. | 39. |
| | | 19. | 116. | 3. | 26. | 44. | 115. | 57. | 70. | 140. | 26. |
| | | 16. | 21. | 23. | 89. | 15. | 0. | 1. | 80. | 5. | 123. |
| | | 111. | 13. | 176. | 38. | | | | | | |
| 2 | 35. | 40. | 34. | 59. | 17. | 0. | 24. | 20. | 74. | 98. | 35. |
| | | 18. | 108. | 2. | 24. | 41. | 106. | 53. | 65. | 129. | 23. |
| | | 16. | 19. | 22. | 81. | 14. | 0. | 0. | 73. | 3. | 114. |
| | | 101. | 8. | 162. | 34. | | | | | | |
| 2 | 40. | 36. | 32. | 55. | 16. | 0. | 22. | 19. | 69. | 90. | 32. |
| | | 17. | 101. | 0. | 21. | 38. | 97. | 49. | 61. | 118. | 20. |
| | | 15. | 18. | 21. | 74. | 13. | 0. | 0. | 67. | 2. | 105. |
| | | 93. | 5. | 149. | 31. | | | | | | |
| 2 | 45. | 32. | 30. | 50. | 15. | 0. | 20. | 19. | 64. | 83. | 29. |
| | | 16. | 94. | 0. | 20. | 35. | 90. | 45. | 56. | 108. | 18. |
| | | 15. | 16. | 20. | 68. | 13. | 0. | 0. | 62. | 1. | 98. |
| | | 85. | 3. | 137. | 28. | | | | | | |
| 2 | 50. | 29. | 28. | 47. | 14. | 0. | 18. | 18. | 59. | 76. | 26. |
| | | 15. | 88. | 0. | 18. | 32. | 83. | 42. | 52. | 99. | 16. |
| | | 14. | 15. | 19. | 62. | 12. | 0. | 0. | 56. | 0. | 90. |
| | | 77. | 2. | 126. | 26. | | | | | | |
| 2 | 55. | 25. | 26. | 43. | 13. | 0. | 16. | 17. | 54. | 70. | 23. |
| | | 14. | 82. | 0. | 16. | 30. | 76. | 39. | 49. | 91. | 15. |
| | | 14. | 14. | 18. | 57. | 7. | 0. | 0. | 52. | 0. | 84. |
| | | 71. | 2. | 117. | 23. | | | | | | |
| 3 | 0. | 23. | 24. | 40. | 12. | 0. | 15. | 17. | 50. | 64. | 21. |
| | | 13. | 76. | 0. | 15. | 28. | 71. | 36. | 45. | 84. | 13. |
| | | 13. | 12. | 17. | 52. | 5. | 0. | 0. | 47. | 0. | 78. |
| | | 65. | 0. | 107. | 21. | | | | | | |
| 3 | 5. | 20. | 23. | 37. | 7. | 0. | 13. | 16. | 47. | 59. | 19. |
| | | 12. | 71. | 0. | 13. | 26. | 65. | 33. | 42. | 77. | 8. |
| | | 13. | 8. | 16. | 48. | 3. | 0. | 0. | 43. | 0. | 72. |
| | | 59. | 0. | 99. | 19. | | | | | | |
| 3 | 10. | 18. | 21. | 34. | 5. | 0. | 8. | 15. | 43. | 55. | 17. |
| | | 11. | 66. | 0. | 8. | 24. | 60. | 31. | 39. | 70. | 5. |
| | | 13. | 5. | 15. | 43. | 2. | 0. | 0. | 40. | 0. | 67. |
| | | 54. | 0. | 91. | 18. | | | | | | |
| 3 | 15. | 16. | 20. | 31. | 3. | 0. | 5. | 15. | 40. | 50. | 16. |
| | | 7. | 62. | 0. | 5. | 22. | 55. | 29. | 36. | 65. | 3. |
| | | 11. | 3. | 14. | 40. | 2. | 0. | 0. | 36. | 0. | 62. |
| | | 49. | 0. | 84. | 16. | | | | | | |
| 3 | 20. | 14. | 18. | 29. | 2. | 0. | 4. | 14. | 37. | 46. | 14. |
| | | 4. | 57. | 0. | 4. | 21. | 51. | 27. | 34. | 59. | 2. |
| | | 7. | 2. | 14. | 36. | 0. | 0. | 0. | 33. | 0. | 57. |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 45. | 0. | 77. | 15. | | | | | | |
| 3 | 25. | 8. | 17. | 27. | 1. | 0. | 2. | 13. | 34. | 43. | 9. |
| | | 3. | 53. | 0. | 3. | 19. | 47. | 25. | 31. | 54. | 2. |
| | | 5. | 2. | 12. | 33. | 0. | 0. | 0. | 30. | 0. | 53. |
| | | 41. | 0. | 71. | 13. | | | | | | |
| 3 | 30. | 6. | 16. | 25. | 0. | 0. | 2. | 12. | 31. | 39. | 6. |
| | | 2. | 50. | 0. | 2. | 18. | 43. | 23. | 29. | 50. | 0. |
| | | 3. | 0. | 8. | 30. | 0. | 0. | 0. | 28. | 0. | 49. |
| | | 38. | 0. | 66. | 8. | | | | | | |
| 3 | 35. | 4. | 15. | 23. | 0. | 0. | 0. | 8. | 29. | 36. | 4. |
| | | 1. | 46. | 0. | 0. | 17. | 40. | 21. | 27. | 46. | 0. |
| | | 2. | 0. | 5. | 28. | 0. | 0. | 0. | 25. | 0. | 45. |
| | | 34. | 0. | 60. | 5. | | | | | | |
| 3 | 40. | 3. | 14. | 21. | 0. | 0. | 0. | 5. | 27. | 33. | 3. |
| | | 0. | 43. | 0. | 0. | 15. | 37. | 20. | 25. | 42. | 0. |
| | | 2. | 0. | 4. | 25. | 0. | 0. | 0. | 23. | 0. | 42. |
| | | 31. | 0. | 56. | 4. | | | | | | |
| 3 | 45. | 2. | 12. | 19. | 0. | 0. | 0. | 4. | 25. | 31. | 2. |
| | | 0. | 40. | 0. | 0. | 14. | 34. | 18. | 23. | 39. | 0. |
| | | 0. | 0. | 3. | 23. | 0. | 0. | 0. | 21. | 0. | 39. |
| | | 29. | 0. | 51. | 2. | | | | | | |
| 3 | 50. | 0. | 8. | 18. | 0. | 0. | 0. | 3. | 23. | 28. | 0. |
| | | 0. | 37. | 0. | 0. | 13. | 31. | 17. | 22. | 35. | 0. |
| | | 0. | 0. | 2. | 21. | 0. | 0. | 0. | 20. | 0. | 36. |
| | | 26. | 0. | 47. | 2. | | | | | | |
| 3 | 55. | 0. | 5. | 17. | 0. | 0. | 0. | 2. | 21. | 26. | 0. |
| | | 0. | 35. | 0. | 0. | 12. | 29. | 16. | 20. | 32. | 0. |
| | | 0. | 0. | 0. | 19. | 0. | 0. | 0. | 18. | 0. | 34. |
| | | 24. | 0. | 44. | 0. | | | | | | |
| 4 | 0. | 0. | 4. | 15. | 0. | 0. | 0. | 2. | 20. | 24. | 0. |
| | | 0. | 33. | 0. | 0. | 11. | 27. | 14. | 19. | 30. | 0. |
| | | 0. | 0. | 0. | 18. | 0. | 0. | 0. | 16. | 0. | 31. |
| | | 22. | 0. | 40. | 0. | | | | | | |
| 4 | 5. | 0. | 3. | 14. | 0. | 0. | 0. | 0. | 18. | 22. | 0. |
| | | 0. | 30. | 0. | 0. | 7. | 25. | 13. | 17. | 27. | 0. |
| | | 0. | 0. | 0. | 16. | 0. | 0. | 0. | 15. | 0. | 29. |
| | | 20. | 0. | 37. | 0. | | | | | | |
| 4 | 10. | 0. | 2. | 13. | 0. | 0. | 0. | 0. | 17. | 20. | 0. |
| | | 0. | 28. | 0. | 0. | 5. | 23. | 12. | 16. | 25. | 0. |
| | | 0. | 0. | 0. | 15. | 0. | 0. | 0. | 14. | 0. | 27. |
| | | 18. | 0. | 34. | 0. | | | | | | |
| 4 | 15. | 0. | 1. | 12. | 0. | 0. | 0. | 0. | 15. | 19. | 0. |
| | | 0. | 26. | 0. | 0. | 3. | 21. | 7. | 15. | 23. | 0. |
| | | 0. | 0. | 0. | 14. | 0. | 0. | 0. | 12. | 0. | 25. |
| | | 17. | 0. | 31. | 0. | | | | | | |
| 4 | 20. | 0. | 0. | 11. | 0. | 0. | 0. | 0. | 14. | 17. | 0. |
| | | 0. | 25. | 0. | 0. | 2. | 19. | 5. | 14. | 21. | 0. |
| | | 0. | 0. | 0. | 12. | 0. | 0. | 0. | 7. | 0. | 23. |
| | | 15. | 0. | 29. | 0. | | | | | | |
| 4 | 25. | 0. | 0. | 7. | 0. | 0. | 0. | 0. | 13. | 16. | 0. |
| | | 0. | 23. | 0. | 0. | 1. | 18. | 3. | 13. | 19. | 0. |
| | | 0. | 0. | 0. | 7. | 0. | 0. | 0. | 5. | 0. | 21. |
| | | 14. | 0. | 27. | 0. | | | | | | |
| 4 | 30. | 0. | 0. | 4. | 0. | 0. | 0. | 0. | 8. | 14. | 0. |
| | | 0. | 21. | 0. | 0. | 0. | 16. | 2. | 12. | 18. | 0. |
| | | 0. | 0. | 0. | 5. | 0. | 0. | 0. | 3. | 0. | 20. |
| | | 12. | 0. | 25. | 0. | | | | | | |
| 4 | 35. | 0. | 0. | 3. | 0. | 0. | 0. | 0. | 5. | 13. | 0. |
| | | 0. | 20. | 0. | 0. | 0. | 15. | 2. | 7. | 16. | 0. |
| | | 0. | 0. | 0. | 3. | 0. | 0. | 0. | 2. | 0. | 18. |
| | | 8. | 0. | 23. | 0. | | | | | | |
| 4 | 40. | 0. | 0. | 2. | 0. | 0. | 0. | 0. | 4. | 12. | 0. |

```
                0.       18.        0.        0.        0.       14.        0.        5.       15.        0.
                0.        0.        0.        2.        0.        0.        0.        2.        0.       17.
                5.        0.       21.        0.

   4   45.      0.        0.        0.        0.        0.        0.        0.        3.        7.        0.
                0.       17.        0.        0.        0.       13.        0.        3.       14.        0.
                0.        0.        0.        2.        0.        0.        0.        0.        0.       16.
                4.        0.       19.        0.

   4   50.      0.        0.        0.        0.        0.        0.        0.        2.        5.        0.
                0.       16.        0.        0.        0.       12.        0.        2.       12.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.       14.
                2.        0.       18.        0.

   4   55.      0.        0.        0.        0.        0.        0.        0.        1.        3.        0.
                0.       15.        0.        0.        0.        7.        0.        1.        8.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.       13.
                2.        0.       16.        0.

   5    0.      0.        0.        0.        0.        0.        0.        0.        0.        2.        0.
                0.       14.        0.        0.        0.        5.        0.        0.        5.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.       12.
                0.        0.       15.        0.

   5    5.      0.        0.        0.        0.        0.        0.        0.        0.        2.        0.
                0.       13.        0.        0.        0.        3.        0.        0.        3.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        7.
                0.        0.       14.        0.

   5   10.      0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.       12.        0.        0.        0.        2.        0.        0.        2.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        5.
                0.        0.       13.        0.

   5   15.      0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        7.        0.        0.        0.        1.        0.        0.        2.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        3.
                0.        0.       12.        0.

   5   20.      0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        5.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        2.
                0.        0.        7.        0.

   5   25.      0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        3.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        2.
                0.        0.        5.        0.

   5   30.      0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        2.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        3.        0.

   5   35.      0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        1.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        2.        0.

   5   40.      0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        1.        0.

1


 100yr 3hr Current Condition SWMM Sump Basin
 Blank


                                                                WIDTH              INVERT     SIDE SLOPES           OVERBA
NK/SURCHARGE
 GUTTER      GUTTER       NDP        NP                       OR DIAM    LENGTH    SLOPE    HORIZ TO VERT   MANNING
 DEPTH       JK
 NUMBER    CONNECTION                                           (FT)      (FT)    (FT/FT)      L     R         N
  (FT)
```

```
 201        101          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 202        102          3          3                    .0        1.     .0010       .0    .0       .001
10.00      -1
                    TIME IN HRS VS INFLOW IN CFS
                          .0      .0        .6    53.8       1.6      .0
 203        103          3          3                    .0        1.     .0010       .0    .0       .001
10.00      -1
                    TIME IN HRS VS INFLOW IN CFS
                          .0      .0        .2    14.4        .7      .0
 204        104          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 205        105          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 206        106          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 207        107          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 208        108          3          3                    .0        1.     .0010       .0    .0       .001
10.00      -1
                    TIME IN HRS VS INFLOW IN CFS
                          .0      .0        .6    94.7       1.6      .0
 209        109          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 210        110          3          3                    .0        1.     .0010       .0    .0       .001
10.00      -1
                    TIME IN HRS VS INFLOW IN CFS
                          .0      .0        .3    79.1       1.0      .0
 211        111          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 212        112          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 213        113          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 214        114          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 215        115          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 216        116          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 217        117          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 218        118          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 219        119          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 220        120          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 121        120          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 221        121          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 222        122          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 223        123          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 224        124          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 225        125          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 226        126          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 227        127          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 228        128          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 229        129          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 230        130          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 231        131          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 232        132          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 233        133          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 234        134          0          3                    .0        1.     .0010       .0    .0       .001
```

```
10.00       0
 235        135         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 236        136         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 237        137         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 238        138         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 402        302         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 401        304         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 106        306         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 107        307         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 409        309         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 404        311         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 112        312         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 412        314         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 115        315         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 117        317         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 118        318         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 119        319         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 420        322         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 124        324         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 126        326         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 128        328         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 129        329         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 130        330         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 131        331         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 432        333         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 135        335         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 136        336         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 138        338         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 125        400         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 127        400         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 132        400         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 104        401         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 105        401         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 111        404         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 114        404         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 109        409         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 122        420         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 123        420         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 133        432         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 134        432         0         3                  .0       1.     .0010       .0    .0       .001
```

```
 10.00        0
  101         501          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  113         513          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  116         516          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  120         520          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  137         537          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  102         602          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  103         603          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  108         608          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  110         610          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  400         900          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  337         901          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  501         301          7          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                     RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                           .0      .0       7.5      .0      26.4      .0      63.3      .0      82.9      .0     12
9.0  1400.0
                         201.0  6510.0
  513         313          3          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                     RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                           .0      .0      20.3      .0      22.1   495.0
  516         316          3          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                     RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                           .0      .0      18.1      .0      18.9   320.0
  520         320          4          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                     RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                           .0      .0       9.9      .0      10.0      .0    230.0      .0
  537         337          3          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                     RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                           .0      .0      14.9      .0      17.9   623.0
  602         402          3          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                     RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                           .0      .0       .8     5.4       1.6    15.4
  603         303          3          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                     RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                           .0      .0       .1     1.2        .3     6.9
  608         308         10          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                     RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                           .0      .0       .0      .3       .4      .5       1.6      .6       3.6      .7
6.1    32.4
                          7.1    55.6       8.9   123.5      11.5   266.4      13.1   378.7
  610         310          2          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                     RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                           .0      .0       3.8     1.3
  302         101          0          1      CHANNEL         .0     3681.     .0077     60.0  60.0       .045
 10.00        0
  304         101          0          1      CHANNEL         .0     3729.     .0074     40.0  40.0       .045
 10.00        0
  311         104          0          1      CHANNEL         .0     2920.     .0108     70.0  70.0       .045
 10.00        0
  306         105          0          1      CHANNEL         .0     5319.     .0161     50.0  50.0       .045
 10.00        0
  308         107          0          1      CHANNEL        4.0      625.     .0080       .0    .0       .016
  2.00        0
  312         111          0          1      CHANNEL         .0     2682.     .0082    110.0 110.0       .045
 10.00        0
  314         112          0          1      CHANNEL         .0     1834.     .0049    175.0 175.0       .045
 10.00        0
  318         113          0          1      CHANNEL         .0     3243.     .0052    100.0 100.0       .045
```

```
 10.00        0
  319         113          0          1      CHANNEL          .0     4029.     .0107     95.0  95.0       .045
 10.00        0
  315         114          0          1      CHANNEL          .0     5050.     .0109     80.0  80.0       .045
 10.00        0
  316         114          0          1      CHANNEL          .0     2964.     .0101     50.0  50.0       .045
 10.00        0
  320         118          0          1      CHANNEL          .0      811.     .0123     80.0  80.0       .045
 10.00        0
  322         120          0          1      CHANNEL          .0     3463.     .0081    100.0 100.0       .045
 10.00        0
  324         123          0          1      CHANNEL          .0     5484.     .0133     75.0  75.0       .045
 10.00        0
  326         125          0          1      CHANNEL          .0     2139.     .0019     80.0  80.0       .045
 10.00        0
  301         126          0          1      CHANNEL          .0     1590.     .0170     40.0  40.0       .045
 10.00        0
  328         127          0          1      CHANNEL          .0     3272.     .0089    115.0 115.0       .045
 10.00        0
  329         128          0          1      CHANNEL          .0     3696.     .0176     25.0  25.0       .045
 10.00        0
  330         128          0          1      CHANNEL          .0     5614.     .0157     50.0  50.0       .045
 10.00        0
  331         129          0          1      CHANNEL          .0     2742.     .0091      3.0   3.0       .035
  3.00        0
  333         132          0          1      CHANNEL          .0     4251.     .0078    125.0 125.0       .045
 10.00        0
  335         134          0          1      CHANNEL          .0     6142.     .0138     70.0  70.0       .045
 10.00        0
  336         135          0          1      CHANNEL          .0     5277.     .0100    100.0 100.0       .045
 10.00        0
  338         137          0          1      CHANNEL          .0     8677.     .0086     75.0  75.0       .045
 10.00        0
  303         402          0          1      CHANNEL         5.0     1011.     .0151      5.0   5.0       .035
  3.00        0
  307         404          0          1      CHANNEL         5.0     1308.     .0031      5.0   5.0       .035
  3.00        0
  310         409          0          1      CHANNEL         5.0     3896.     .0100      5.0   5.0       .035
  3.00        0
  313         412          0          1      CHANNEL          .0      820.     .0073    100.0 100.0       .045
 10.00        0
  317         412          0          1      CHANNEL          .0     3628.     .0105    100.0 100.0       .045
 10.00        0
  309         608          0          1      CHANNEL         5.0     1757.     .0091      5.0   5.0       .035
  3.00        0
0TOTAL NUMBER OF GUTTERS/PIPES, 124
1


 100yr 3hr Current Condition SWMM Sump Basin
 Blank


 ARRANGEMENT OF SUBCATCHMENTS AND GUTTERS/PIPES

       GUTTER     TRIBUTARY GUTTER/PIPE                                          TRIBUTARY SUBAREA
         D.A.(AC)

       101       201  302  304    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  4284.8

       102       202    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0

       103       203    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0

       104       204  311    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  3660.8

       105       205  306    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   346.9

       106       206    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0    73.0

       107       207  308    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
```

0 0 135.0

108 208 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

109 209 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 130.6

110 210 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

111 211 312 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 2748.8

112 212 314 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 2698.9

113 213 318 319 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 2320.0

114 214 315 316 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 656.6

115 215 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 62.1

116 216 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 405.1

117 217 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 94.7

118 218 320 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 1737.0

119 219 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 164.5

120 220 121 322 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 1626.2

121 221 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 211.2

122 222 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 254.7

123 223 324 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 718.1

124 224 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 152.3

125 225 326 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 4410.9

126 226 301 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 4375.7

127 227 328 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 521.6

128 228 329 330 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 457.6

129 229 331 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 62.1

130 230 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 21.8

131 231 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 23.0

132 232 333 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 1356.8

133 233 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

0 0 33.3

134 234 335 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 985.0

135 235 336 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 535.0

136 236 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 66.6

137 237 338 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 858.2

138 238 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 173.4

201 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0
0 0 277.1

202 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

203 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

204 0 0 0 0 0 0 0 0 0 0 4 0 0 0 0 0 0 0
0 0 120.3

205 0 0 0 0 0 0 0 0 0 0 5 0 0 0 0 0 0 0
0 0 273.9

206 0 0 0 0 0 0 0 0 0 0 6 0 0 0 0 0 0 0
0 0 73.0

207 0 0 0 0 0 0 0 0 0 0 7 0 0 0 0 0 0 0
0 0 4.5

208 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

209 0 0 0 0 0 0 0 0 0 0 9 0 0 0 0 0 0 0
0 0 130.6

210 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

211 0 0 0 0 0 0 0 0 0 0 11 0 0 0 0 0 0 0
0 0 49.9

212 0 0 0 0 0 0 0 0 0 0 12 0 0 0 0 0 0 0
0 0 284.2

213 0 0 0 0 0 0 0 0 0 0 13 0 0 0 0 0 0 0
0 0 418.6

214 0 0 0 0 0 0 0 0 0 0 14 0 0 0 0 0 0 0
0 0 189.4

215 0 0 0 0 0 0 0 0 0 0 15 0 0 0 0 0 0 0
0 0 62.1

216 0 0 0 0 0 0 0 0 0 0 16 0 0 0 0 0 0 0
0 0 405.1

217 0 0 0 0 0 0 0 0 0 0 17 0 0 0 0 0 0 0
0 0 94.7

218 0 0 0 0 0 0 0 0 0 0 18 0 0 0 0 0 0 0
0 0 110.7

219 0 0 0 0 0 0 0 0 0 0 19 0 0 0 0 0 0 0
0 0 164.5

220 0 0 0 0 0 0 0 0 0 0 20 0 0 0 0 0 0 0
0 0 442.2

221 0 0 0 0 0 0 0 0 0 0 21 0 0 0 0 0 0 0

0 0 211.2

222 0 0 0 0 0 0 0 0 0 0 22 0 0 0 0 0 0 0
0 0 254.7

223 0 0 0 0 0 0 0 0 0 0 23 0 0 0 0 0 0 0
0 0 565.8

224 0 0 0 0 0 0 0 0 0 0 24 0 0 0 0 0 0 0
0 0 152.3

225 0 0 0 0 0 0 0 0 0 0 25 0 0 0 0 0 0 0
0 0 35.2

226 0 0 0 0 0 0 0 0 0 0 26 0 0 0 0 0 0 0
0 0 90.9

227 0 0 0 0 0 0 0 0 0 0 27 0 0 0 0 0 0 0
0 0 64.0

228 0 0 0 0 0 0 0 0 0 0 28 0 0 0 0 0 0 0
0 0 373.8

229 0 0 0 0 0 0 0 0 0 0 29 0 0 0 0 0 0 0
0 0 39.0

230 0 0 0 0 0 0 0 0 0 0 30 0 0 0 0 0 0 0
0 0 21.8

231 0 0 0 0 0 0 0 0 0 0 31 0 0 0 0 0 0 0
0 0 23.0

232 0 0 0 0 0 0 0 0 0 0 32 0 0 0 0 0 0 0
0 0 338.6

233 0 0 0 0 0 0 0 0 0 0 33 0 0 0 0 0 0 0
0 0 33.3

234 0 0 0 0 0 0 0 0 0 0 34 0 0 0 0 0 0 0
0 0 449.9

235 0 0 0 0 0 0 0 0 0 0 35 0 0 0 0 0 0 0
0 0 468.5

236 0 0 0 0 0 0 0 0 0 0 36 0 0 0 0 0 0 0
0 0 66.6

237 0 0 0 0 0 0 0 0 0 0 37 0 0 0 0 0 0 0
0 0 684.8

238 0 0 0 0 0 0 0 0 0 0 38 0 0 0 0 0 0 0
0 0 173.4

301 501 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 4284.8

302 402 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

303 603 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

304 401 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 4007.7

306 106 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 73.0

307 107 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 135.0

308 608 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 130.6

309 409 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 130.6

310 610 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

0 0 .0

311 404 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 3540.5

312 112 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 2698.9

313 513 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 2320.0

314 412 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 2414.7

315 115 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 62.1

316 516 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 405.1

317 117 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 94.7

318 118 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 1737.0

319 119 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 164.5

320 520 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 1626.2

322 420 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 972.8

324 124 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 152.3

326 126 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 4375.7

328 128 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 457.6

329 129 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 62.1

330 130 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 21.8

331 131 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 23.0

333 432 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 1018.2

335 135 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 535.0

336 136 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 66.6

337 537 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 858.2

338 138 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 173.4

400 125 127 132 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 6289.3

401 104 105 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 4007.7

402 602 303 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 .0

404 111 114 307 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

```
  0    0  3540.5

      409       109  310    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   130.6

      412       313  317    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  2414.7

      420       122  123    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   972.8

      432       133  134    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  1018.2

      501       101    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  4284.8

      513       113    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  2320.0

      516       116    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   405.1

      520       120    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  1626.2

      537       137    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   858.2

      602       102    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0

      603       103    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0

      608       108  309    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   130.6

      610       110    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0
1


 100yr 3hr Current Condition SWMM Sump Basin
 Blank


 HYDROGRAPHS ARE LISTED FOR THE FOLLOWING  85 CONVEYANCE ELEMENTS


          THE UPPER NUMBER IS DISCHARGE IN CFS
          THE LOWER NUMBER IS ONE OF THE FOLLOWING CASES:
                   ( ) DENOTES DEPTH ABOVE INVERT IN FEET
                   (S) DENOTES STORAGE IN AC-FT FOR DETENTION DAM.  DISCHARGE INCLUDES SPILLWAY OUTFLOW.
                   (I) DENOTES GUTTER INFLOW IN CFS FROM SPECIFIED INFLOW HYDROGRAPH
                   (D) DENOTES DISCHARGE IN CFS DIVERTED FROM THIS GUTTER
                   (O) DENOTES STORAGE IN AC-FT FOR SURCHARGED GUTTER

 TIME(HR/MIN)   101       102       103       104       105       106       107       108       109       110
                111       112       113       114       115       116       117       118       119       120
                121       122       123       124       125       126       127       128       129       130
                131       132       133       134       135       136       137       138       301       302
                303       304       306       307       308       309       310       311       312       313
                314       315       316       317       318       319       320       322       324       326
                328       329       330       331       333       335       336       338       400       401
                402       404       412       420       432       501       513       516       520       537
                602       603       608       609       610

   0    5.       0.        8.        5.        0.        0.        0.        0.       13.        0.       19.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )
```

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) |
| | | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0( ) | 0.<br>.1(S) | | | | | |
| 0 | 10. | 0.<br>.0( ) | 16.<br>.0( ) | 10.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 25.<br>.0( ) | 0.<br>.0( ) | 38.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) |
| | | 1.<br>.1(S) | 1.<br>.1(S) | 0.<br>.2(S) | 0.<br>.0( ) | 0.<br>.3(S) | | | | | |
| 0 | 15. | 0.<br>.0( ) | 24.<br>.0( ) | 16.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 38.<br>.0( ) | 0.<br>.0( ) | 57.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) |
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) |
| | | 2.<br>.2(S) | 2.<br>.1(S) | 0.<br>.4(S) | 0.<br>.0( ) | 0.<br>.6(S) | | | | | |
| 0 | 20. | 0.<br>.0( ) | 33.<br>.0( ) | 9.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 51.<br>.0( ) | 0.<br>.0( ) | 75.<br>.0( ) |
| | | 1.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) |
| | | 2. .2( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |
| | | 4. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 3. .4(S) | 4. .2(S) | 1. .7(S) | 0. .0( ) | 0. 1.0(S) | | | | | |
| 0 | 25. | 4. .0( ) | 41. .0( ) | 10. .0( ) | 3. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) | 64. .0( ) | 1. .0( ) | 77. .0( ) |
| | | 2. .0( ) | 6. .0( ) | 2. .0( ) | 4. .0( ) | 1. .0( ) | 2. .0( ) | 8. .0( ) | 2. .0( ) | 1. .0( ) | 3. .0( ) |
| | | 1. .0( ) | 1. .0( ) | 2. .0( ) | 2. .0( ) | 1. .0( ) | 1. .0( ) | 1. .0( ) | 4. .0( ) | 1. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 2. .0( ) | 1. .0( ) | 2. .0( ) | 4. .0( ) | 1. .0( ) | 2. .0( ) | 2. .0( ) | 0. .0( ) | 0. .1( ) |
| | | 3. .3( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 4. .0( ) |
| | | 8. .0( ) | 7. .0( ) | 0. .0( ) | 3. .0( ) | 2. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 5. .6(S) | 5. .3(S) | 1. 1.1(S) | 0. .0( ) | 1. 1.6(S) | | | | | |
| 0 | 30. | 58. .0( ) | 49. .0( ) | 4. .0( ) | 23. .0( ) | 21. .0( ) | 13. .0( ) | 7. .0( ) | 76. .0( ) | 26. .0( ) | 57. .0( ) |
| | | 12. .0( ) | 40. .0( ) | 38. .0( ) | 43. .0( ) | 10. .0( ) | 25. .0( ) | 68. .0( ) | 26. .0( ) | 15. .0( ) | 56. .0( ) |
| | | 21. .0( ) | 19. .0( ) | 46. .0( ) | 36. .0( ) | 8. .0( ) | 17. .0( ) | 12. .0( ) | 46. .0( ) | 13. .0( ) | 12. .0( ) |
| | | 12. .0( ) | 35. .0( ) | 12. .0( ) | 31. .0( ) | 54. .0( ) | 20. .0( ) | 44. .0( ) | 27. .0( ) | 0. .0( ) | 1. .2( ) |
| | | 4. .3( ) | 1. .2( ) | 0. .1( ) | 1. .3( ) | 1. .1( ) | 4. .3( ) | 0. .0( ) | 3. .2( ) | 2. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .0( ) | 2. .2( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 2. .2( ) | 1. .1( ) | 0. .1( ) |
| | | 1. .1( ) | 0. .2( ) | 0. .1( ) | 1. .5( ) | 1. .1( ) | 1. .1( ) | 0. .1( ) | 0. .1( ) | 55. .0( ) | 44. .0( ) |
| | | 11. .0( ) | 57. .0( ) | 2. .0( ) | 65. .0( ) | 43. .0( ) | 0. .2(S) | 0. .1(S) | 0. .1(S) | 0. .2(S) | 0. .2(S) |
| | | 7. .9(S) | 5. .3(S) | 1. 1.6(S) | 0. .0( ) | 1. 2.0(S) | | | | | |
| 0 | 35. | 166. .0( ) | 57. .0( ) | 5. .0( ) | 68. .0( ) | 68. .0( ) | 36. .0( ) | 10. .0( ) | 89. .0( ) | 70. .0( ) | 58. .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 33. | 106. | 119. | 111. | 28. | 78. | 127. | 64. | 47. | 180. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 62. | 60. | 145. | 97. | 21. | 46. | 36. | 135. | 32. | 23. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 25. | 111. | 28. | 101. | 159. | 49. | 143. | 78. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 5. | 10. | 1. | 3. | 1. | 23. | 0. | 16. | 9. | 0. |
| | | .3( ) | .5( ) | .2( ) | .4( ) | .1( ) | .9( ) | .0( ) | .4( ) | .3( ) | .0( ) |
| | | 0. | 1. | 0. | 11. | 3. | 2. | 0. | 14. | 4. | 2. |
| | | .1( ) | .1( ) | .0( ) | .3( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | .3( ) |
| | | 9. | 3. | 1. | 5. | 5. | 7. | 2. | 1. | 167. | 136. |
| | | .3( ) | .3( ) | .2( ) | .9( ) | .2( ) | .3( ) | .2( ) | .2( ) | .0( ) | .0( ) |
| | | 15. | 148. | 11. | 205. | 129. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.0(S) | .7(S) | .5(S) | 1.0(S) | .8(S) |
| | | 11. | 5. | 1. | 0. | 1. | | | | | |
| | | 1.2(S) | .3(S) | 2.2(S) | .0( ) | 2.4(S) | | | | | |
| 0 | 40. | 283. | 43. | 0. | 129. | 127. | 56. | 10. | 99. | 110. | 38. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 64. | 176. | 221. | 170. | 44. | 147. | 146. | 96. | 83. | 351. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 109. | 109. | 272. | 147. | 35. | 72. | 73. | 236. | 48. | 26. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 29. | 206. | 37. | 201. | 278. | 70. | 273. | 127. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 5. | 34. | 5. | 5. | 1. | 60. | 0. | 48. | 28. | 0. |
| | | .3( ) | .8( ) | .3( ) | .5( ) | .1( ) | 1.4( ) | .0( ) | .7( ) | .5( ) | .0( ) |
| | | 2. | 3. | 0. | 26. | 9. | 7. | 0. | 49. | 14. | 7. |
| | | .2( ) | .2( ) | .0( ) | .5( ) | .4( ) | .3( ) | .0( ) | .6( ) | .4( ) | .4( ) |
| | | 30. | 8. | 2. | 12. | 19. | 25. | 5. | 5. | 314. | 255. |
| | | .5( ) | .5( ) | .2( ) | 1.2( ) | .4( ) | .5( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 18. | 239. | 26. | 381. | 238. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.5(S) | 1.9(S) | 1.2(S) | 2.9(S) | 2.2(S) |
| | | 14. | 5. | 1. | 0. | 1. | | | | | |
| | | 1.5(S) | .2(S) | 3.2(S) | .0( ) | 2.7(S) | | | | | |
| 0 | 45. | 387. | 49. | 0. | 197. | 181. | 68. | 14. | 73. | 133. | 40. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 100. | 230. | 320. | 203. | 54. | 214. | 150. | 112. | 113. | 540. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 148. | 155. | 397. | 172. | 47. | 88. | 121. | 320. | 57. | 27. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 29. | 301. | 39. | 312. | 377. | 77. | 403. | 161. | 0. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 4. | 81. | 10. | 8. | 5. | 99. | 0. | 98. | 58. | 0. |
| | | .3( ) | 1.0( ) | .4( ) | .7( ) | .3( ) | 1.7( ) | .1( ) | .8( ) | .6( ) | .0( ) |
| | | 5. | 6. | 0. | 43. | 18. | 16. | 0. | 116. | 28. | 14. |
| | | .2( ) | .3( ) | .0( ) | .5( ) | .5( ) | .4( ) | .0( ) | .8( ) | .5( ) | .5( ) |
| | | 67. | 16. | 4. | 18. | 47. | 56. | 9. | 10. | 470. | 378. |
| | | .6( ) | .6( ) | .3( ) | 1.4( ) | .6( ) | .7( ) | .3( ) | .4( ) | .0( ) | .0( ) |
| | | 21. | 311. | 43. | 552. | 351. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 4.9(S) | 3.7(S) | 2.5(S) | 5.9(S) | 4.6(S) |
| | | 16. | 4. | 9. | 0. | 1. | | | | | |
| | | 1.7(S) | .2(S) | 4.3(S) | .0( ) | 3.0(S) | | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 50. | 477. | 35. | 0. | 265. | 220. | 72. | 29. | 84. | 140. | 19. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 139. | 264. | 399. | 214. | 58. | 269. | 147. | 115. | 132. | 722. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 173. | 188. | 497. | 178. | 57. | 92. | 175. | 376. | 61. | 26. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 30. | 389. | 39. | 418. | 441. | 77. | 511. | 176. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 4. | 149. | 16. | 13. | 20. | 124. | 0. | 158. | 95. | 0. |
| | | .3( ) | 1.3( ) | .5( ) | .9( ) | .9( ) | 1.9( ) | .1( ) | 1.0( ) | .7( ) | .0( ) |
| | | 11. | 9. | 0. | 59. | 29. | 28. | 0. | 211. | 44. | 22. |
| | | .3( ) | .3( ) | .0( ) | .6( ) | .5( ) | .5( ) | .0( ) | 1.0( ) | .6( ) | .6( ) |
| | | 116. | 25. | 6. | 23. | 90. | 99. | 14. | 18. | 621. | 485. |
| | | .8( ) | .7( ) | .3( ) | 1.5( ) | .7( ) | .8( ) | .4( ) | .5( ) | .0( ) | .0( ) |
| | | 22. | 367. | 59. | 685. | 457. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 7.8(S) | 6.2(S) | 4.1(S) | 10.3(S) | 7.7(S) |
| | | 18. | 3. | 24. | 0. | 1. | | | | | |
| | | 1.9(S) | .2(S) | 5.5(S) | .0( ) | 3.2(S) | | | | | |
| 0 | 55. | 559. | 41. | 0. | 327. | 243. | 71. | 49. | 58. | 139. | 21. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 176. | 280. | 452. | 216. | 57. | 306. | 136. | 113. | 140. | 880. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 184. | 207. | 563. | 176. | 65. | 91. | 229. | 402. | 64. | 24. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 29. | 465. | 39. | 508. | 471. | 77. | 586. | 178. | 0. | 7. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 3. | 231. | 23. | 25. | 40. | 135. | 0. | 221. | 133. | 0. |
| | | .3( ) | 1.6( ) | .5( ) | 1.2( ) | 1.4( ) | 2.0( ) | .1( ) | 1.2( ) | .8( ) | .0( ) |
| | | 19. | 13. | 0. | 72. | 39. | 42. | 0. | 320. | 60. | 31. |
| | | .4( ) | .4( ) | .0( ) | .7( ) | .6( ) | .6( ) | .0( ) | 1.2( ) | .7( ) | .7( ) |
| | | 169. | 33. | 7. | 25. | 146. | 148. | 19. | 27. | 758. | 571. |
| | | .9( ) | .8( ) | .3( ) | 1.6( ) | .8( ) | .9( ) | .4( ) | .5( ) | .0( ) | .0( ) |
| | | 23. | 417. | 72. | 770. | 547. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 11.4(S) | 9.1(S) | 6.1(S) | 15.8(S) | 11.5(S) |
| | | 20. | 3. | 44. | 0. | 1. | | | | | |
| | | 2.0(S) | .2(S) | 6.6(S) | .0( ) | 3.3(S) | | | | | |
| 1 | 0. | 642. | 27. | 0. | 390. | 253. | 71. | 104. | 68. | 138. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 210. | 287. | 483. | 219. | 56. | 326. | 126. | 114. | 141. | 1003. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 185. | 214. | 597. | 172. | 72. | 92. | 277. | 410. | 66. | 22. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 28. | 533. | 38. | 577. | 477. | 75. | 630. | 175. | 0. | 9. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 3. | 320. | 29. | 51. | 67. | 138. | 0. | 286. | 168. | 0. |
| | | .2( ) | 1.8( ) | .6( ) | 1.6( ) | .0(O) | 2.0( ) | .1( ) | 1.3( ) | .9( ) | .0( ) |
| | | 28. | 17. | 0. | 82. | 49. | 55. | 0. | 427. | 74. | 39. |
| | | .4( ) | .4( ) | .0( ) | .7( ) | .7( ) | .6( ) | .0( ) | 1.4( ) | .7( ) | .8( ) |
| | | 218. | 40. | 9. | 27. | 211. | 196. | 24. | 36. | 882. | 643. |
| | | 1.0( ) | .8( ) | .4( ) | 1.6( ) | 1.0( ) | 1.1( ) | .4( ) | .6( ) | .0( ) | .0( ) |
| | | 23. | 480. | 82. | 811. | 615. | 0. | 0. | 0. | 0. | 99. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 15.5(S) | 12.3(S) | 8.3(S) | 22.3(S) | 15.3(S) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 21. | 2. | 74. | 0. | 1. | | | | | |
| | | 2.1(S) | .2(S) | 7.6(S) | .0( ) | 3.4(S) | | | | | |
| 1 | 5. | 723. | 33. | 0. | 457. | 255. | 70. | 50. | 42. | 135. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 241. | 294. | 501. | 219. | 57. | 332. | 117. | 113. | 139. | 1095. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 182. | 214. | 609. | 166. | 81. | 90. | 319. | 413. | 66. | 21. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 27. | 597. | 36. | 625. | 474. | 72. | 648. | 173. | 0. | 10. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 2. | 410. | 34. | 65. | 67. | 137. | 0. | 352. | 197. | 0. |
| | | .2( ) | 1.9( ) | .6( ) | 1.8( ) | .2(O) | 2.0( ) | .1( ) | 1.4( ) | 1.0( ) | .0( ) |
| | | 38. | 21. | 0. | 89. | 57. | 68. | 0. | 520. | 87. | 46. |
| | | .5( ) | .5( ) | .0( ) | .7( ) | .7( ) | .7( ) | .0( ) | 1.5( ) | .8( ) | .8( ) |
| | | 260. | 46. | 10. | 27. | 280. | 240. | 28. | 44. | 997. | 712. |
| | | 1.1( ) | .9( ) | .4( ) | 1.6( ) | 1.1( ) | 1.1( ) | .5( ) | .6( ) | .0( ) | .0( ) |
| | | 24. | 525. | 89. | 823. | 662. | 0. | 0. | 0. | 0. | 545. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 20.2(S) | 15.7(S) | 10.6(S) | 29.5(S) | 17.5(S) |
| | | 21. | 2. | 101. | 0. | 1. | | | | | |
| | | 2.2(S) | .1(S) | 8.3(S) | .0( ) | 3.4(S) | | | | | |
| 1 | 10. | 795. | 19. | 0. | 516. | 255. | 68. | 104. | 52. | 129. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 266. | 303. | 512. | 214. | 56. | 328. | 104. | 109. | 138. | 1160. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 181. | 210. | 606. | 156. | 86. | 87. | 353. | 410. | 64. | 19. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 25. | 657. | 34. | 657. | 468. | 67. | 646. | 167. | 0. | 12. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 2. | 498. | 39. | 72. | 67. | 134. | 1. | 411. | 222. | 0. |
| | | .2( ) | 2.1( ) | .6( ) | 1.9( ) | .5(O) | 2.0( ) | .1( ) | 1.5( ) | 1.0( ) | .0( ) |
| | | 48. | 25. | 0. | 93. | 65. | 78. | 0. | 595. | 97. | 52. |
| | | .5( ) | .5( ) | .0( ) | .7( ) | .7( ) | .7( ) | .0( ) | 1.5( ) | .8( ) | .9( ) |
| | | 294. | 51. | 11. | 26. | 348. | 277. | 32. | 52. | 1096. | 771. |
| | | 1.1( ) | .9( ) | .4( ) | 1.6( ) | 1.2( ) | 1.2( ) | .5( ) | .7( ) | .0( ) | .0( ) |
| | | 24. | 552. | 93. | 816. | 691. | 0. | 0. | 0. | 0. | 629. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 25.5(S) | 19.2(S) | 12.8(S) | 37.3(S) | 17.9(S) |
| | | 22. | 1. | 120. | 0. | 1. | | | | | |
| | | 2.2(S) | .1(S) | 8.8(S) | .0( ) | 3.4(S) | | | | | |
| 1 | 15. | 852. | 24. | 0. | 561. | 251. | 64. | 50. | 27. | 119. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 287. | 311. | 514. | 203. | 53. | 319. | 89. | 101. | 133. | 1195. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 175. | 204. | 594. | 142. | 89. | 81. | 377. | 398. | 60. | 17. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 23. | 707. | 31. | 676. | 452. | 61. | 632. | 157. | 0. | 13. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 2. | 578. | 43. | 75. | 67. | 127. | 1. | 458. | 244. | 72. |
| | | .2( ) | 2.2( ) | .7( ) | 2.0( ) | .9(O) | 1.9( ) | .1( ) | 1.5( ) | 1.1( ) | .7( ) |
| | | 64. | 28. | 0. | 93. | 70. | 87. | 0. | 649. | 104. | 57. |
| | | .6( ) | .5( ) | .0( ) | .7( ) | .8( ) | .7( ) | .0( ) | 1.6( ) | .8( ) | .9( ) |
| | | 319. | 53. | 12. | 26. | 410. | 308. | 35. | 60. | 1173. | 812. |
| | | 1.1( ) | .9( ) | .4( ) | 1.6( ) | 1.2( ) | 1.2( ) | .5( ) | .7( ) | .0( ) | .0( ) |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 23. | 564. | 165. | 799. | 707. | 0. | 348. | 0. | 0. | 638. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 31.1(S) | 21.6(S) | 15.1(S) | 45.4(S) | 18.0(S) | |
| | | 22. | 1. | 135. | 0. | 1. | | | | | | |
| | | 2.2(S) | .1(S) | 9.1(S) | .0( ) | 3.4(S) | | | | | | |
| 1 | 20. | 896. | 11. | 0. | 591. | 242. | 59. | 105. | 37. | 108. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 306. | 343. | 506. | 189. | 49. | 308. | 77. | 92. | 127. | 1204. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 166. | 196. | 573. | 127. | 90. | 74. | 390. | 379. | 56. | 16. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 21. | 744. | 29. | 683. | 428. | 55. | 612. | 144. | 0. | 14. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) | |
| | | 1. | 647. | 45. | 76. | 67. | 119. | 1. | 494. | 265. | 283. | |
| | | .2( ) | 2.3( ) | .7( ) | 2.0( ) | 1.4(O) | 1.9( ) | .1( ) | 1.6( ) | 1.1( ) | 1.2( ) | |
| | | 108. | 30. | 0. | 92. | 74. | 94. | 0. | 684. | 109. | 60. | |
| | | .7( ) | .5( ) | .0( ) | .7( ) | .8( ) | .7( ) | .0( ) | 1.6( ) | .8( ) | .9( ) | |
| | | 335. | 55. | 12. | 24. | 465. | 330. | 38. | 66. | 1224. | 834. | |
| | | 1.2( ) | .9( ) | .4( ) | 1.6( ) | 1.3( ) | 1.3( ) | .5( ) | .7( ) | .0( ) | .0( ) | |
| | | 23. | 572. | 375. | 769. | 711. | 0. | 505. | 0. | 0. | 625. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 37.2(S) | 22.1(S) | 17.2(S) | 53.6(S) | 17.9(S) | |
| | | 21. | 1. | 141. | 0. | 1. | | | | | | |
| | | 2.2(S) | .1(S) | 9.2(S) | .0( ) | 3.3(S) | | | | | | |
| 1 | 25. | 927. | 16. | 0. | 615. | 230. | 54. | 50. | 11. | 97. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 332. | 410. | 490. | 187. | 45. | 293. | 65. | 84. | 118. | 1188. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 156. | 185. | 544. | 113. | 90. | 67. | 393. | 354. | 53. | 14. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 20. | 768. | 26. | 678. | 399. | 50. | 585. | 130. | 0. | 15. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) | |
| | | 1. | 703. | 47. | 77. | 67. | 109. | 1. | 524. | 294. | 432. | |
| | | .2( ) | 2.4( ) | .7( ) | 2.0( ) | 1.9(O) | 1.8( ) | .1( ) | 1.6( ) | 1.1( ) | 1.4( ) | |
| | | 190. | 32. | 11. | 88. | 76. | 99. | 0. | 701. | 110. | 62. | |
| | | .9( ) | .5( ) | .4( ) | .7( ) | .8( ) | .8( ) | .0( ) | 1.6( ) | .8( ) | .9( ) | |
| | | 343. | 55. | 12. | 23. | 511. | 345. | 39. | 71. | 1251. | 845. | |
| | | 1.2( ) | .9( ) | .4( ) | 1.5( ) | 1.4( ) | 1.3( ) | .5( ) | .8( ) | .0( ) | .0( ) | |
| | | 22. | 596. | 520. | 728. | 704. | 0. | 498. | 198. | 0. | 603. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 43.4(S) | 22.1(S) | 18.6(S) | 61.9(S) | 17.8(S) | |
| | | 21. | 1. | 140. | 0. | 1. | | | | | | |
| | | 2.1(S) | .1(S) | 9.2(S) | .0( ) | 3.3(S) | | | | | | |
| 1 | 30. | 948. | 2. | 0. | 644. | 217. | 49. | 104. | 21. | 88. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 371. | 486. | 469. | 219. | 41. | 276. | 55. | 76. | 109. | 1154. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 144. | 173. | 509. | 101. | 88. | 61. | 389. | 328. | 50. | 13. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 18. | 781. | 24. | 663. | 369. | 45. | 553. | 118. | 0. | 16. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) | |
| | | 1. | 747. | 47. | 77. | 67. | 99. | 1. | 561. | 336. | 472. | |
| | | .1( ) | 2.4( ) | .7( ) | 2.0( ) | 2.4(O) | 1.7( ) | .1( ) | 1.6( ) | 1.2( ) | 1.4( ) | |
| | | 284. | 33. | 56. | 83. | 77. | 101. | 0. | 702. | 110. | 62. | |
| | | 1.0( ) | .5( ) | .8( ) | .7( ) | .8( ) | .8( ) | .0( ) | 1.6( ) | .8( ) | .9( ) | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 342. | 54. | 13. | 21. | 547. | 351. | 40. | 75. | 1258. | 861. | |
| | | 1.2( ) | .9( ) | .4( ) | 1.5( ) | 1.4( ) | 1.3( ) | .5( ) | .8( ) | .0( ) | .0( ) | |
| | | 21. | 667. | 555. | 682. | 688. | 0. | 480. | 300. | 0. | 575. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 49.9(S) | 22.0(S) | 18.9(S) | 69.9(S) | 17.7(S) | |
| | | 20. | 1. | 134. | 0. | 1. | | | | | | |
| | | 2.0(S) | .1(S) | 9.1(S) | .0( ) | 3.3(S) | | | | | | |
| 1 | 35. | 967. | 8. | 0. | 690. | 203. | 45. | 46. | 0. | 80. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 419. | 548. | 444. | 260. | 39. | 258. | 47. | 70. | 100. | 1105. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 132. | 160. | 473. | 90. | 86. | 56. | 379. | 304. | 47. | 12. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 17. | 786. | 23. | 641. | 340. | 40. | 518. | 107. | 0. | 16. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) | |
| | | 1. | 785. | 47. | 76. | 67. | 90. | 1. | 613. | 386. | 470. | |
| | | .1( ) | 2.5( ) | .7( ) | 2.0( ) | 2.8(O) | 1.7( ) | .1( ) | 1.7( ) | 1.3( ) | 1.4( ) | |
| | | 361. | 34. | 108. | 78. | 76. | 102. | 0. | 690. | 108. | 61. | |
| | | 1.1( ) | .5( ) | 1.0( ) | .7( ) | .8( ) | .8( ) | .0( ) | 1.6( ) | .8( ) | .9( ) | |
| | | 336. | 52. | 13. | 20. | 572. | 352. | 40. | 78. | 1252. | 893. | |
| | | 1.2( ) | .9( ) | .4( ) | 1.5( ) | 1.4( ) | 1.3( ) | .5( ) | .8( ) | .0( ) | .0( ) | |
| | | 20. | 756. | 547. | 633. | 664. | 0. | 457. | 262. | 0. | 542. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 56.5(S) | 22.0(S) | 18.8(S) | 77.7(S) | 17.5(S) | |
| | | 19. | 1. | 124. | 0. | 1. | | | | | | |
| | | 1.9(S) | .1(S) | 8.9(S) | .0( ) | 3.3(S) | | | | | | |
| 1 | 40. | 988. | 0. | 0. | 749. | 190. | 42. | 99. | 1. | 72. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 470. | 587. | 420. | 287. | 36. | 240. | 40. | 64. | 93. | 1051. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 122. | 147. | 438. | 80. | 84. | 51. | 367. | 281. | 44. | 11. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 16. | 782. | 21. | 614. | 314. | 36. | 483. | 98. | 0. | 17. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) | |
| | | 1. | 824. | 47. | 74. | 67. | 81. | 1. | 676. | 438. | 452. | |
| | | .1( ) | 2.5( ) | .7( ) | 1.9( ) | 3.2(O) | 1.6( ) | .1( ) | 1.8( ) | 1.3( ) | 1.4( ) | |
| | | 413. | 34. | 146. | 72. | 75. | 101. | 0. | 669. | 105. | 60. | |
| | | 1.2( ) | .5( ) | 1.1( ) | .7( ) | .8( ) | .8( ) | .0( ) | 1.6( ) | .8( ) | .9( ) | |
| | | 326. | 51. | 12. | 19. | 587. | 348. | 40. | 80. | 1233. | 938. | |
| | | 1.1( ) | .9( ) | .4( ) | 1.4( ) | 1.4( ) | 1.3( ) | .5( ) | .8( ) | .0( ) | .0( ) | |
| | | 18. | 831. | 524. | 586. | 635. | 0. | 433. | 247. | 0. | 508. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 63.2(S) | 21.9(S) | 18.7(S) | 85.1(S) | 17.3(S) | |
| | | 17. | 1. | 115. | 0. | 1. | | | | | | |
| | | 1.8(S) | .1(S) | 8.6(S) | .0( ) | 3.3(S) | | | | | | |
| 1 | 45. | 1013. | 0. | 0. | 809. | 177. | 38. | 43. | 0. | 65. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 514. | 604. | 397. | 301. | 34. | 222. | 34. | 58. | 86. | 994. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 113. | 136. | 406. | 71. | 81. | 47. | 352. | 260. | 41. | 10. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 15. | 772. | 20. | 585. | 290. | 32. | 451. | 89. | 0. | 17. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) | |
| | | 1. | 866. | 46. | 72. | 67. | 74. | 1. | 742. | 484. | 430. | |
| | | .1( ) | 2.5( ) | .7( ) | 1.9( ) | 3.5(O) | 1.5( ) | .1( ) | 1.8( ) | 1.4( ) | 1.4( ) | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 443. | 34. | 171. | 66. | 73. | 99. | 0. | 642. | 101. | 59. | |
| | | 1.2( ) | .5( ) | 1.2( ) | .6( ) | .8( ) | .8( ) | .0( ) | 1.6( ) | .8( ) | .9( ) | |
| | | 313. | 49. | 12. | 18. | 594. | 340. | 39. | 81. | 1205. | 987. | |
| | | 1.1( ) | .9( ) | .4( ) | 1.4( ) | 1.4( ) | 1.3( ) | .5( ) | .8( ) | .0( ) | .0( ) | |
| | | 17. | 888. | 497. | 543. | 605. | 0. | 409. | 228. | 0. | 474. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 70.1(S) | 21.8(S) | 18.7(S) | 92.2(S) | 17.2(S) | |
| | | 16. | 1. | 106. | 0. | 1. | | | | | | |
| | | 1.7(S) | .1(S) | 8.4(S) | .0( ) | 3.3(S) | | | | | | |
| 1 | 50. | 1042. | 0. | 0. | 865. | 166. | 35. | 97. | 0. | 59. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 549. | 604. | 373. | 306. | 31. | 206. | 29. | 53. | 80. | 936. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 105. | 127. | 376. | 64. | 78. | 43. | 335. | 241. | 39. | 6. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 14. | 756. | 18. | 556. | 267. | 29. | 421. | 80. | 0. | 17. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) | |
| | | 1. | 909. | 45. | 71. | 67. | 67. | 1. | 802. | 520. | 407. | |
| | | .1( ) | 2.6( ) | .7( ) | 1.9( ) | 3.7(O) | 1.5( ) | .1( ) | 1.9( ) | 1.4( ) | 1.4( ) | |
| | | 455. | 34. | 185. | 61. | 70. | 96. | 0. | 612. | 96. | 57. | |
| | | 1.2( ) | .5( ) | 1.2( ) | .6( ) | .8( ) | .8( ) | .0( ) | 1.6( ) | .8( ) | .9( ) | |
| | | 299. | 47. | 12. | 16. | 593. | 329. | 39. | 81. | 1170. | 1031. | |
| | | 1.1( ) | .9( ) | .4( ) | 1.4( ) | 1.4( ) | 1.3( ) | .5( ) | .8( ) | .0( ) | .0( ) | |
| | | 16. | 925. | 468. | 503. | 575. | 0. | 386. | 212. | 0. | 443. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 77.2(S) | 21.7(S) | 18.6(S) | 98.8(S) | 17.0(S) | |
| | | 15. | 1. | 98. | 0. | 1. | | | | | | |
| | | 1.6(S) | .1(S) | 8.2(S) | .0( ) | 3.3(S) | | | | | | |
| 1 | 55. | 1072. | 0. | 0. | 910. | 155. | 33. | 42. | 0. | 53. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 571. | 593. | 351. | 302. | 29. | 192. | 25. | 48. | 74. | 879. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 97. | 118. | 348. | 57. | 75. | 44. | 318. | 222. | 37. | 4. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 13. | 736. | 17. | 527. | 246. | 26. | 394. | 73. | 5. | 17. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) | .5( ) | |
| | | 1. | 952. | 43. | 70. | 67. | 61. | 1. | 851. | 543. | 384. | |
| | | .1( ) | 2.6( ) | .7( ) | 1.9( ) | 3.9(O) | 1.4( ) | .2( ) | 1.9( ) | 1.4( ) | 1.3( ) | |
| | | 455. | 34. | 190. | 55. | 68. | 93. | 0. | 579. | 91. | 55. | |
| | | 1.2( ) | .5( ) | 1.3( ) | .6( ) | .7( ) | .7( ) | .0( ) | 1.5( ) | .8( ) | .9( ) | |
| | | 284. | 45. | 11. | 15. | 586. | 317. | 37. | 81. | 1129. | 1065. | |
| | | 1.1( ) | .8( ) | .4( ) | 1.3( ) | 1.4( ) | 1.3( ) | .5( ) | .8( ) | .0( ) | .0( ) | |
| | | 15. | 944. | 440. | 465. | 544. | 43. | 363. | 197. | 0. | 414. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 84.3(S) | 21.6(S) | 18.6(S) | 105.1(S) | 16.9(S) | |
| | | 14. | 1. | 90. | 0. | 1. | | | | | | |
| | | 1.5(S) | .1(S) | 8.0(S) | .0( ) | 3.3(S) | | | | | | |
| 2 | 0. | 1098. | 0. | 0. | 941. | 145. | 30. | 96. | 0. | 48. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 582. | 574. | 329. | 294. | 28. | 179. | 21. | 44. | 68. | 823. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 90. | 109. | 321. | 51. | 77. | 93. | 300. | 205. | 35. | 2. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 12. | 711. | 16. | 498. | 227. | 24. | 368. | 66. | 57. | 16. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .8( ) | .5( ) | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. | 990. | 41. | 69. | 67. | 55. | 1. | 886. | 556. | 362. | |
| | | .1( ) | 2.7( ) | .6( ) | 1.9( ) | 4.0(O) | 1.3( ) | .2( ) | 1.9( ) | 1.4( ) | 1.3( ) | |
| | | 446. | 33. | 190. | 50. | 65. | 90. | 0. | 547. | 86. | 57. | |
| | | 1.2( ) | .5( ) | 1.3( ) | .6( ) | .7( ) | .7( ) | .0( ) | 1.5( ) | .8( ) | .9( ) | |
| | | 268. | 42. | 10. | 15. | 575. | 303. | 36. | 80. | 1088. | 1086. | |
| | | 1.1( ) | .8( ) | .4( ) | 1.3( ) | 1.4( ) | 1.2( ) | .5( ) | .8( ) | .0( ) | .0( ) | |
| | | 13. | 946. | 412. | 430. | 514. | 240. | 340. | 183. | 0. | 387. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 90.8(S) | 21.5(S) | 18.6(S) | 110.9(S) | 16.7(S) | |
| | | 13. | 1. | 83. | 0. | 1. | | | | | | |
| | | 1.4(S) | .1(S) | 7.8(S) | .0( ) | 3.3(S) | | | | | | |
| 2 | 5. | 1119. | 0. | 0. | 958. | 135. | 28. | 40. | 0. | 44. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 583. | 550. | 308. | 283. | 26. | 166. | 18. | 41. | 63. | 769. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 83. | 101. | 296. | 45. | 92. | 227. | 283. | 189. | 33. | 2. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 11. | 685. | 15. | 469. | 209. | 21. | 344. | 60. | 194. | 16. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.2( ) | .5( ) | |
| | | 1. | 1021. | 40. | 69. | 67. | 50. | 1. | 906. | 557. | 340. | |
| | | .1( ) | 2.7( ) | .6( ) | 1.9( ) | 4.1(O) | 1.3( ) | .2( ) | 2.0( ) | 1.4( ) | 1.3( ) | |
| | | 432. | 32. | 186. | 46. | 62. | 86. | 0. | 514. | 81. | 72. | |
| | | 1.2( ) | .5( ) | 1.2( ) | .6( ) | .7( ) | .7( ) | .0( ) | 1.5( ) | .7( ) | 1.0( ) | |
| | | 252. | 40. | 10. | 14. | 560. | 289. | 35. | 79. | 1059. | 1093. | |
| | | 1.0( ) | .8( ) | .4( ) | 1.3( ) | 1.4( ) | 1.2( ) | .5( ) | .8( ) | .0( ) | .0( ) | |
| | | 12. | 935. | 386. | 398. | 484. | 405. | 319. | 170. | 0. | 361. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 96.2(S) | 21.5(S) | 18.5(S) | 116.4(S) | 16.6(S) | |
| | | 12. | 1. | 76. | 0. | 1. | | | | | | |
| | | 1.3(S) | .1(S) | 7.6(S) | .0( ) | 3.3(S) | | | | | | |
| 2 | 10. | 1131. | 0. | 0. | 961. | 126. | 26. | 94. | 0. | 39. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 576. | 523. | 288. | 270. | 24. | 155. | 11. | 37. | 59. | 717. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 77. | 94. | 273. | 40. | 130. | 391. | 266. | 174. | 30. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 7. | 657. | 14. | 441. | 193. | 19. | 321. | 55. | 361. | 15. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.6( ) | .5( ) | |
| | | 1. | 1043. | 38. | 68. | 67. | 46. | 1. | 913. | 551. | 319. | |
| | | .1( ) | 2.7( ) | .6( ) | 1.9( ) | 4.1(O) | 1.2( ) | .2( ) | 2.0( ) | 1.4( ) | 1.2( ) | |
| | | 414. | 32. | 180. | 41. | 58. | 82. | 0. | 482. | 76. | 111. | |
| | | 1.2( ) | .5( ) | 1.2( ) | .5( ) | .7( ) | .7( ) | .0( ) | 1.4( ) | .7( ) | 1.2( ) | |
| | | 237. | 38. | 9. | 12. | 542. | 274. | 34. | 77. | 1052. | 1087. | |
| | | 1.0( ) | .8( ) | .4( ) | 1.2( ) | 1.4( ) | 1.2( ) | .5( ) | .8( ) | .0( ) | .0( ) | |
| | | 11. | 914. | 360. | 367. | 455. | 541. | 299. | 159. | 0. | 337. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 100.7(S) | 21.4(S) | 18.5(S) | 121.5(S) | 16.5(S) | |
| | | 11. | 1. | 69. | 0. | 1. | | | | | | |
| | | 1.2(S) | .1(S) | 7.4(S) | .0( ) | 3.3(S) | | | | | | |
| 2 | 15. | 1134. | 0. | 0. | 953. | 117. | 24. | 40. | 0. | 36. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 562. | 495. | 269. | 256. | 23. | 144. | 8. | 34. | 55. | 668. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 71. | 87. | 252. | 36. | 194. | 542. | 249. | 161. | 27. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5. | 627. | 13. | 414. | 178. | 17. | 300. | 50. | 515. | 15. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.8( ) | .5( ) | | |
| | | 1. | 1054. | 36. | 67. | 67. | 42. | 1. | 908. | 538. | 299. | | |
| | | .1( ) | 2.7( ) | .6( ) | 1.9( ) | 4.1(O) | 1.2( ) | .2( ) | 2.0( ) | 1.4( ) | 1.2( ) | | |
| | | 394. | 31. | 173. | 37. | 55. | 78. | 0. | 451. | 71. | 176. | | |
| | | 1.2( ) | .5( ) | 1.2( ) | .5( ) | .7( ) | .7( ) | .0( ) | 1.4( ) | .7( ) | 1.4( ) | | |
| | | 222. | 36. | 8. | 10. | 523. | 260. | 32. | 75. | 1071. | 1070. | | |
| | | 1.0( ) | .8( ) | .4( ) | 1.1( ) | 1.4( ) | 1.2( ) | .5( ) | .8( ) | .0( ) | .0( ) | | |
| | | 11. | 885. | 336. | 339. | 427. | 653. | 279. | 148. | 0. | 315. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 104.4(S) | 21.3(S) | 18.5(S) | 126.3(S) | 16.4(S) | | |
| | | 10. | 1. | 63. | 0. | 1. | | | | | | | |
| | | 1.2(S) | .1(S) | 7.3(S) | .0( ) | 3.3(S) | | | | | | | |
| 2 | 20. | 1127. | 0. | 0. | 935. | 109. | 22. | 94. | 0. | 32. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 544. | 467. | 251. | 242. | 21. | 134. | 5. | 31. | 51. | 622. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 66. | 81. | 233. | 32. | 279. | 665. | 233. | 148. | 25. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 3. | 598. | 12. | 388. | 164. | 16. | 280. | 45. | 640. | 14. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.9( ) | .5( ) | | |
| | | 1. | 1055. | 34. | 67. | 67. | 38. | 1. | 893. | 521. | 280. | | |
| | | .1( ) | 2.7( ) | .6( ) | 1.9( ) | 4.1(O) | 1.1( ) | .2( ) | 1.9( ) | 1.4( ) | 1.2( ) | | |
| | | 373. | 30. | 164. | 32. | 52. | 74. | 0. | 422. | 66. | 262. | | |
| | | 1.2( ) | .5( ) | 1.2( ) | .5( ) | .7( ) | .7( ) | .0( ) | 1.4( ) | .7( ) | 1.6( ) | | |
| | | 208. | 34. | 7. | 8. | 502. | 245. | 31. | 73. | 1111. | 1045. | | |
| | | 1.0( ) | .8( ) | .3( ) | 1.0( ) | 1.3( ) | 1.1( ) | .5( ) | .8( ) | .0( ) | .0( ) | | |
| | | 10. | 853. | 312. | 314. | 400. | 743. | 261. | 137. | 0. | 294. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 107.4(S) | 21.2(S) | 18.5(S) | 130.7(S) | 16.3(S) | | |
| | | 9. | 1. | 58. | 0. | 1. | | | | | | | |
| | | 1.1(S) | .0(S) | 7.2(S) | .0( ) | 3.3(S) | | | | | | | |
| 2 | 25. | 1112. | 0. | 0. | 911. | 102. | 20. | 40. | 0. | 29. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 522. | 439. | 235. | 228. | 20. | 125. | 4. | 28. | 47. | 579. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 61. | 75. | 214. | 29. | 377. | 761. | 218. | 136. | 22. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 2. | 568. | 7. | 364. | 151. | 14. | 262. | 41. | 738. | 14. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.1( ) | .5( ) | | |
| | | 1. | 1047. | 33. | 67. | 67. | 35. | 1. | 871. | 501. | 262. | | |
| | | .1( ) | 2.7( ) | .6( ) | 1.9( ) | 4.0(O) | 1.1( ) | .2( ) | 1.9( ) | 1.4( ) | 1.2( ) | | |
| | | 352. | 29. | 156. | 29. | 49. | 70. | 0. | 394. | 62. | 360. | | |
| | | 1.1( ) | .5( ) | 1.2( ) | .5( ) | .7( ) | .7( ) | .0( ) | 1.3( ) | .7( ) | 1.8( ) | | |
| | | 194. | 32. | 7. | 6. | 480. | 231. | 29. | 71. | 1163. | 1012. | | |
| | | .9( ) | .7( ) | .3( ) | .9( ) | 1.3( ) | 1.1( ) | .5( ) | .8( ) | .0( ) | .0( ) | | |
| | | 9. | 817. | 291. | 290. | 371. | 815. | 243. | 128. | 0. | 275. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 109.7(S) | 21.2(S) | 18.4(S) | 134.9(S) | 16.2(S) | | |
| | | 8. | 0. | 54. | 0. | 1. | | | | | | | |
| | | 1.0(S) | .0(S) | 7.0(S) | .0( ) | 3.2(S) | | | | | | | |
| 2 | 30. | 1089. | 0. | 0. | 881. | 95. | 19. | 94. | 0. | 27. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 499. | 411. | 219. | 214. | 19. | 116. | 3. | 26. | 44. | 539. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 57. | 70. | 197. | 26. | 477. | 833. | 204. | 124. | 20. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 1. | 537. | 5. | 340. | 139. | 13. | 244. | 38. | 812. | 13. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.1( ) | .5( ) | |
| | | 1. | 1030. | 31. | 67. | 67. | 32. | 1. | 844. | 478. | 245. | |
| | | .1( ) | 2.7( ) | .6( ) | 1.9( ) | 3.9(O) | 1.0( ) | .2( ) | 1.9( ) | 1.4( ) | 1.1( ) | |
| | | 331. | 28. | 147. | 25. | 46. | 66. | 0. | 368. | 57. | 461. | |
| | | 1.1( ) | .5( ) | 1.1( ) | .4( ) | .6( ) | .7( ) | .0( ) | 1.3( ) | .7( ) | 2.0( ) | |
| | | 181. | 29. | 6. | 5. | 457. | 218. | 28. | 69. | 1219. | 976. | |
| | | .9( ) | .7( ) | .3( ) | .9( ) | 1.3( ) | 1.1( ) | .5( ) | .8( ) | .0( ) | .0( ) | |
| | | 8. | 780. | 270. | 268. | 345. | 869. | 227. | 119. | 0. | 257. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 111.5(S) | 21.1(S) | 18.4(S) | 138.7(S) | 16.1(S) | |
| | | 8. | 0. | 51. | 0. | 1. | | | | | | |
| | | 1.0(S) | .0(S) | 6.9(S) | .0( ) | 3.2(S) | | | | | | |
| 2 | 35. | 1060. | 0. | 0. | 848. | 88. | 17. | 40. | 0. | 24. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 475. | 385. | 204. | 201. | 18. | 108. | 2. | 24. | 41. | 501. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 53. | 65. | 182. | 23. | 574. | 887. | 190. | 114. | 18. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 508. | 3. | 318. | 128. | 8. | 228. | 34. | 867. | 13. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.2( ) | .4( ) | |
| | | 0. | 1007. | 29. | 67. | 67. | 29. | 1. | 814. | 455. | 229. | |
| | | .1( ) | 2.7( ) | .6( ) | 1.9( ) | 3.8(O) | 1.0( ) | .2( ) | 1.9( ) | 1.3( ) | 1.1( ) | |
| | | 311. | 27. | 139. | 22. | 44. | 63. | 0. | 343. | 53. | 558. | |
| | | 1.1( ) | .5( ) | 1.1( ) | .4( ) | .6( ) | .6( ) | .0( ) | 1.3( ) | .6( ) | 2.1( ) | |
| | | 168. | 27. | 6. | 4. | 434. | 205. | 26. | 67. | 1271. | 936. | |
| | | .9( ) | .7( ) | .3( ) | .8( ) | 1.3( ) | 1.1( ) | .5( ) | .7( ) | .0( ) | .0( ) | |
| | | 8. | 743. | 251. | 247. | 322. | 908. | 212. | 111. | 0. | 240. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 112.8(S) | 21.1(S) | 18.4(S) | 142.3(S) | 16.0(S) | |
| | | 7. | 0. | 48. | 0. | 1. | | | | | | |
| | | .9(S) | .0(S) | 6.8(S) | .0( ) | 3.2(S) | | | | | | |
| 2 | 40. | 1026. | 0. | 0. | 813. | 82. | 16. | 94. | 0. | 22. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 450. | 360. | 190. | 188. | 17. | 101. | 0. | 21. | 38. | 466. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 49. | 61. | 167. | 20. | 660. | 924. | 177. | 105. | 16. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 479. | 2. | 297. | 117. | 5. | 213. | 31. | 906. | 12. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.2( ) | .4( ) | |
| | | 0. | 978. | 28. | 67. | 67. | 26. | 1. | 781. | 431. | 214. | |
| | | .1( ) | 2.7( ) | .6( ) | 1.9( ) | 3.7(O) | .9( ) | .2( ) | 1.9( ) | 1.3( ) | 1.1( ) | |
| | | 291. | 26. | 130. | 20. | 41. | 59. | 0. | 319. | 50. | 645. | |
| | | 1.1( ) | .5( ) | 1.1( ) | .4( ) | .6( ) | .6( ) | .0( ) | 1.2( ) | .6( ) | 2.3( ) | |
| | | 157. | 25. | 5. | 3. | 412. | 192. | 24. | 64. | 1317. | 895. | |
| | | .9( ) | .7( ) | .3( ) | .7( ) | 1.2( ) | 1.0( ) | .4( ) | .7( ) | .0( ) | .0( ) | |
| | | 7. | 705. | 233. | 228. | 300. | 933. | 197. | 103. | 0. | 224. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 113.6(S) | 21.0(S) | 18.4(S) | 145.6(S) | 15.9(S) | |
| | | 7. | 0. | 45. | 0. | 1. | | | | | | |
| | | .9(S) | .0(S) | 6.6(S) | .0( ) | 3.2(S) | | | | | | |
| 2 | 45. | 989. | 0. | 0. | 776. | 77. | 15. | 40. | 0. | 20. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 426. | 336. | 177. | 176. | 16. | 94. | 0. | 20. | 35. | 433. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 45. | 56. | 154. | 18. | 735. | 948. | 165. | 96. | 15. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 451. | 1. | 278. | 107. | 3. | 199. | 28. | 931. | 12. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.2( ) | .4( ) | |
| | | 0. | 946. | 26. | 67. | 67. | 24. | 1. | 747. | 407. | 199. | |
| | | .1( ) | 2.6( ) | .5( ) | 1.9( ) | 3.5(O) | .9( ) | .2( ) | 1.8( ) | 1.3( ) | 1.0( ) | |
| | | 273. | 25. | 123. | 17. | 38. | 56. | 0. | 298. | 46. | 720. | |
| | | 1.0( ) | .5( ) | 1.1( ) | .4( ) | .6( ) | .6( ) | .0( ) | 1.2( ) | .6( ) | 2.4( ) | |
| | | 145. | 23. | 5. | 2. | 390. | 180. | 23. | 62. | 1351. | 853. | |
| | | .8( ) | .7( ) | .3( ) | .6( ) | 1.2( ) | 1.0( ) | .4( ) | .7( ) | .0( ) | .0( ) | |
| | | 7. | 669. | 217. | 210. | 279. | 947. | 184. | 96. | 0. | 209. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 114.1(S) | 21.0(S) | 18.4(S) | 148.7(S) | 15.9(S) | |
| | | 6. | 0. | 42. | 0. | 1. | | | | | | |
| | | .8(S) | .0(S) | 6.5(S) | .0( ) | 3.2(S) | | | | | | |
| 2 | 50. | 950. | 0. | 0. | 740. | 71. | 14. | 94. | 0. | 18. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 402. | 314. | 165. | 165. | 15. | 88. | 0. | 18. | 32. | 402. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 42. | 52. | 142. | 16. | 796. | 960. | 154. | 88. | 13. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 424. | 0. | 259. | 98. | 2. | 186. | 26. | 945. | 11. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.3( ) | .4( ) | |
| | | 0. | 911. | 25. | 67. | 67. | 22. | 1. | 712. | 384. | 186. | |
| | | .1( ) | 2.6( ) | .5( ) | 1.9( ) | 3.3(O) | .8( ) | .2( ) | 1.8( ) | 1.3( ) | 1.0( ) | |
| | | 255. | 24. | 115. | 15. | 36. | 53. | 0. | 277. | 43. | 782. | |
| | | 1.0( ) | .5( ) | 1.0( ) | .4( ) | .6( ) | .6( ) | .0( ) | 1.2( ) | .6( ) | 2.4( ) | |
| | | 135. | 21. | 4. | 2. | 368. | 169. | 21. | 59. | 1375. | 811. | |
| | | .8( ) | .6( ) | .3( ) | .6( ) | 1.2( ) | 1.0( ) | .4( ) | .7( ) | .0( ) | .0( ) | |
| | | 6. | 634. | 201. | 194. | 259. | 952. | 171. | 90. | 0. | 195. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 114.2(S) | 20.9(S) | 18.3(S) | 151.6(S) | 15.8(S) | |
| | | 6. | 0. | 39. | 0. | 1. | | | | | | |
| | | .8(S) | .0(S) | 6.4(S) | .0( ) | 3.2(S) | | | | | | |
| 2 | 55. | 910. | 0. | 0. | 704. | 66. | 13. | 40. | 0. | 16. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 379. | 293. | 154. | 155. | 14. | 82. | 0. | 16. | 30. | 373. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 39. | 49. | 131. | 15. | 844. | 962. | 143. | 80. | 9. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 399. | 0. | 242. | 90. | 2. | 174. | 23. | 948. | 10. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.3( ) | .4( ) | |
| | | 0. | 874. | 23. | 67. | 67. | 20. | 1. | 678. | 361. | 174. | |
| | | .1( ) | 2.6( ) | .5( ) | 1.9( ) | 3.1(O) | .8( ) | .2( ) | 1.8( ) | 1.2( ) | 1.0( ) | |
| | | 239. | 23. | 108. | 14. | 34. | 50. | 0. | 258. | 40. | 830. | |
| | | 1.0( ) | .5( ) | 1.0( ) | .4( ) | .6( ) | .6( ) | .0( ) | 1.1( ) | .6( ) | 2.5( ) | |
| | | 125. | 19. | 4. | 1. | 347. | 158. | 19. | 57. | 1386. | 771. | |
| | | .8( ) | .6( ) | .3( ) | .5( ) | 1.2( ) | 1.0( ) | .4( ) | .7( ) | .0( ) | .0( ) | |
| | | 6. | 600. | 187. | 179. | 242. | 948. | 160. | 84. | 0. | 182. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 114.1(S) | 20.9(S) | 18.3(S) | 154.3(S) | 15.7(S) | |
| | | 5. | 0. | 36. | 0. | 1. | | | | | | |
| | | .8(S) | .0(S) | 6.3(S) | .0( ) | 3.2(S) | | | | | | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 0. | 869. | 0. | 0. | 669. | 62. | 12. | 94. | 0. | 15. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 356. | 273. | 143. | 145. | 13. | 76. | 0. | 15. | 28. | 347. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 36. | 45. | 120. | 13. | 878. | 956. | 133. | 73. | 6. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 0. | 375. | 0. | 225. | 83. | 0. | 162. | 21. | 944. | 10. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.3( ) | .4( ) | | |
| | | 0. | 837. | 22. | 67. | 67. | 18. | 1. | 645. | 340. | 162. | | |
| | | .1( ) | 2.5( ) | .5( ) | 1.9( ) | 2.9(O) | .8( ) | .2( ) | 1.7( ) | 1.2( ) | 1.0( ) | | |
| | | 223. | 22. | 101. | 12. | 32. | 47. | 0. | 240. | 37. | 865. | | |
| | | 1.0( ) | .5( ) | 1.0( ) | .3( ) | .6( ) | .6( ) | .0( ) | 1.1( ) | .6( ) | 2.5( ) | | |
| | | 116. | 17. | 4. | 1. | 328. | 148. | 18. | 55. | 1386. | 731. | | |
| | | .8( ) | .6( ) | .3( ) | .5( ) | 1.1( ) | .9( ) | .4( ) | .7( ) | .0( ) | .0( ) | | |
| | | 5. | 568. | 174. | 165. | 225. | 937. | 149. | 78. | 0. | 170. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 113.7(S) | 20.8(S) | 18.3(S) | 156.8(S) | 15.7(S) | | |
| | | 5. | 0. | 34. | 0. | 1. | | | | | | | |
| | | .7(S) | .0(S) | 6.2(S) | .0( ) | 3.2(S) | | | | | | | |
| 3 | 5. | 829. | 0. | 0. | 635. | 57. | 7. | 40. | 0. | 13. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 335. | 255. | 133. | 135. | 12. | 71. | 0. | 13. | 26. | 322. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 33. | 42. | 110. | 8. | 901. | 940. | 124. | 66. | 4. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 0. | 352. | 0. | 210. | 76. | 0. | 151. | 19. | 932. | 9. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.2( ) | .4( ) | | |
| | | 0. | 799. | 21. | 67. | 67. | 17. | 1. | 613. | 319. | 151. | | |
| | | .1( ) | 2.5( ) | .5( ) | 1.9( ) | 2.7(O) | .7( ) | .2( ) | 1.7( ) | 1.2( ) | .9( ) | | |
| | | 208. | 21. | 95. | 11. | 30. | 44. | 0. | 224. | 34. | 888. | | |
| | | .9( ) | .5( ) | 1.0( ) | .3( ) | .5( ) | .6( ) | .0( ) | 1.1( ) | .5( ) | 2.6( ) | | |
| | | 108. | 15. | 3. | 1. | 309. | 138. | 16. | 52. | 1376. | 693. | | |
| | | .8( ) | .6( ) | .3( ) | .4( ) | 1.1( ) | .9( ) | .4( ) | .7( ) | .0( ) | .0( ) | | |
| | | 5. | 537. | 162. | 152. | 210. | 920. | 138. | 73. | 0. | 159. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 113.2(S) | 20.8(S) | 18.3(S) | 159.1(S) | 15.6(S) | | |
| | | 5. | 0. | 32. | 0. | 1. | | | | | | | |
| | | .7(S) | .0(S) | 6.0(S) | .0( ) | 3.2(S) | | | | | | | |
| 3 | 10. | 789. | 0. | 0. | 603. | 53. | 5. | 94. | 0. | 8. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 315. | 238. | 124. | 127. | 11. | 66. | 0. | 8. | 24. | 299. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 31. | 39. | 101. | 5. | 912. | 920. | 115. | 59. | 3. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 0. | 330. | 0. | 195. | 69. | 0. | 141. | 18. | 916. | 9. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.2( ) | .4( ) | | |
| | | 0. | 762. | 19. | 67. | 67. | 14. | 1. | 582. | 300. | 141. | | |
| | | .1( ) | 2.4( ) | .5( ) | 1.9( ) | 2.4(O) | .7( ) | .2( ) | 1.7( ) | 1.1( ) | .9( ) | | |
| | | 195. | 20. | 89. | 10. | 27. | 42. | 0. | 208. | 31. | 899. | | |
| | | .9( ) | .4( ) | .9( ) | .3( ) | .5( ) | .6( ) | .0( ) | 1.0( ) | .5( ) | 2.6( ) | | |
| | | 100. | 13. | 3. | 1. | 291. | 129. | 15. | 50. | 1357. | 656. | | |
| | | .7( ) | .5( ) | .2( ) | .4( ) | 1.1( ) | .9( ) | .4( ) | .7( ) | .0( ) | .0( ) | | |
| | | 5. | 509. | 150. | 140. | 195. | 899. | 129. | 68. | 0. | 148. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 112.5(S) | 20.8(S) | 18.3(S) | 161.2(S) | 15.6(S) | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5. | 0. | 31. | 0. | 1. | | | | | | |
| | | .7(S) | .0(S) | 5.9(S) | .0( ) | 3.2(S) | | | | | | |
| 3 | 15. | 750. | 0. | 0. | 572. | 48. | 3. | 40. | 0. | 5. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 296. | 222. | 115. | 118. | 7. | 62. | 0. | 6. | 22. | 277. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 29. | 36. | 93. | 3. | 913. | 898. | 106. | 54. | 2. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 310. | 0. | 182. | 63. | 0. | 132. | 16. | 894. | 9. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.2( ) | .4( ) | |
| | | 0. | 726. | 17. | 67. | 67. | 11. | 1. | 552. | 281. | 131. | |
| | | .1( ) | 2.4( ) | .5( ) | 1.9( ) | 2.1(O) | .6( ) | .2( ) | 1.6( ) | 1.1( ) | .9( ) | |
| | | 182. | 19. | 83. | 9. | 25. | 39. | 0. | 193. | 28. | 902. | |
| | | .9( ) | .4( ) | .9( ) | .3( ) | .5( ) | .5( ) | .0( ) | 1.0( ) | .5( ) | 2.6( ) | |
| | | 92. | 11. | 3. | 1. | 274. | 120. | 14. | 48. | 1330. | 620. | |
| | | .7( ) | .5( ) | .2( ) | .4( ) | 1.1( ) | .9( ) | .4( ) | .7( ) | .0( ) | .0( ) | |
| | | 5. | 481. | 140. | 129. | 182. | 875. | 119. | 63. | 0. | 139. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 111.7(S) | 20.7(S) | 18.3(S) | 163.2(S) | 15.5(S) | |
| | | 4. | 0. | 29. | 0. | 1. | | | | | | |
| | | .6(S) | .0(S) | 5.8(S) | .0( ) | 3.2(S) | | | | | | |
| 3 | 20. | 712. | 0. | 0. | 542. | 44. | 2. | 94. | 0. | 4. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 278. | 207. | 106. | 110. | 4. | 57. | 0. | 4. | 21. | 257. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 27. | 34. | 85. | 2. | 904. | 872. | 98. | 48. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 291. | 0. | 169. | 58. | 0. | 123. | 15. | 870. | 8. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.2( ) | .4( ) | |
| | | 0. | 690. | 16. | 67. | 67. | 9. | 1. | 524. | 264. | 122. | |
| | | .1( ) | 2.3( ) | .4( ) | 1.9( ) | 1.9(O) | .5( ) | .2( ) | 1.6( ) | 1.1( ) | .9( ) | |
| | | 170. | 18. | 78. | 8. | 23. | 37. | 0. | 180. | 25. | 897. | |
| | | .9( ) | .4( ) | .9( ) | .3( ) | .5( ) | .5( ) | .0( ) | 1.0( ) | .5( ) | 2.6( ) | |
| | | 85. | 9. | 3. | 0. | 258. | 112. | 13. | 46. | 1294. | 586. | |
| | | .7( ) | .5( ) | .2( ) | .4( ) | 1.0( ) | .9( ) | .4( ) | .6( ) | .0( ) | .0( ) | |
| | | 4. | 455. | 130. | 118. | 169. | 847. | 110. | 59. | 0. | 129. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 110.8(S) | 20.7(S) | 18.3(S) | 165.0(S) | 15.5(S) | |
| | | 4. | 0. | 27. | 0. | 1. | | | | | | |
| | | .6(S) | .0(S) | 5.7(S) | .0( ) | 3.2(S) | | | | | | |
| 3 | 25. | 672. | 0. | 0. | 513. | 41. | 1. | 40. | 0. | 2. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 261. | 193. | 98. | 98. | 3. | 53. | 0. | 3. | 19. | 239. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 25. | 31. | 77. | 2. | 891. | 844. | 91. | 44. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 273. | 0. | 158. | 53. | 0. | 115. | 13. | 843. | 8. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.2( ) | .4( ) | |
| | | 0. | 655. | 14. | 67. | 67. | 7. | 1. | 496. | 247. | 113. | |
| | | .1( ) | 2.3( ) | .4( ) | 1.9( ) | 1.6(O) | .5( ) | .2( ) | 1.6( ) | 1.1( ) | .8( ) | |
| | | 159. | 17. | 73. | 7. | 21. | 35. | 0. | 167. | 23. | 887. | |
| | | .8( ) | .4( ) | .9( ) | .3( ) | .5( ) | .5( ) | .0( ) | 1.0( ) | .5( ) | 2.6( ) | |
| | | 78. | 8. | 3. | 0. | 242. | 105. | 12. | 44. | 1255. | 554. | |
| | | .7( ) | .4( ) | .2( ) | .3( ) | 1.0( ) | .8( ) | .3( ) | .6( ) | .0( ) | .0( ) | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4. | 426. | 120. | 109. | 158. | 818. | 102. | 55. | 0. | 121. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 109.8(S) | 20.7(S) | 18.3(S) | 166.7(S) | 15.4(S) | |
| | | 4. | 0. | 26. | 0. | 1. | | | | | | |
| | | .6(S) | .0(S) | 5.6(S) | .0( ) | 3.1(S) | | | | | | |
| 3 | 30. | 635. | 0. | 0. | 484. | 37. | 0. | 94. | 0. | 2. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 244. | 180. | 91. | 90. | 2. | 50. | 0. | 2. | 18. | 222. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 23. | 29. | 71. | 0. | 874. | 814. | 80. | 39. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 256. | 0. | 147. | 49. | 0. | 107. | 8. | 814. | 7. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.1( ) | .4( ) | |
| | | 0. | 622. | 13. | 67. | 67. | 5. | 1. | 469. | 232. | 105. | |
| | | .1( ) | 2.2( ) | .4( ) | 1.9( ) | 1.3(O) | .4( ) | .2( ) | 1.5( ) | 1.0( ) | .8( ) | |
| | | 148. | 15. | 69. | 6. | 19. | 33. | 0. | 155. | 21. | 871. | |
| | | .8( ) | .4( ) | .9( ) | .3( ) | .5( ) | .5( ) | .0( ) | .9( ) | .4( ) | 2.5( ) | |
| | | 72. | 7. | 2. | 0. | 228. | 98. | 11. | 42. | 1210. | 522. | |
| | | .7( ) | .4( ) | .2( ) | .3( ) | 1.0( ) | .8( ) | .3( ) | .6( ) | .0( ) | .0( ) | |
| | | 4. | 401. | 111. | 100. | 147. | 787. | 95. | 51. | 0. | 113. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 108.8(S) | 20.6(S) | 18.2(S) | 168.3(S) | 15.4(S) | |
| | | 4. | 0. | 24. | 0. | 1. | | | | | | |
| | | .5(S) | .0(S) | 5.4(S) | .0( ) | 3.1(S) | | | | | | |
| 3 | 35. | 600. | 0. | 0. | 457. | 34. | 0. | 40. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 225. | 167. | 84. | 83. | 1. | 46. | 0. | 0. | 17. | 205. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 21. | 27. | 65. | 0. | 854. | 783. | 72. | 36. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 240. | 0. | 137. | 45. | 0. | 100. | 5. | 783. | 7. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.1( ) | .4( ) | |
| | | 0. | 589. | 11. | 67. | 67. | 4. | 1. | 442. | 217. | 97. | |
| | | .1( ) | 2.2( ) | .4( ) | 1.9( ) | 1.0(O) | .4( ) | .2( ) | 1.5( ) | 1.0( ) | .8( ) | |
| | | 138. | 14. | 64. | 6. | 17. | 31. | 0. | 144. | 19. | 851. | |
| | | .8( ) | .4( ) | .8( ) | .3( ) | .4( ) | .5( ) | .0( ) | .9( ) | .4( ) | 2.5( ) | |
| | | 67. | 6. | 2. | 0. | 214. | 91. | 10. | 39. | 1165. | 491. | |
| | | .6( ) | .4( ) | .2( ) | .3( ) | 1.0( ) | .8( ) | .3( ) | .6( ) | .0( ) | .0( ) | |
| | | 4. | 374. | 103. | 92. | 137. | 755. | 87. | 48. | 0. | 105. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 107.8(S) | 20.6(S) | 18.2(S) | 169.8(S) | 15.4(S) | |
| | | 4. | 0. | 23. | 0. | 1. | | | | | | |
| | | .5(S) | .0(S) | 5.3(S) | .0( ) | 3.1(S) | | | | | | |
| 3 | 40. | 567. | 0. | 0. | 430. | 31. | 0. | 94. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 209. | 156. | 77. | 76. | 0. | 43. | 0. | 0. | 15. | 191. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 20. | 25. | 59. | 0. | 830. | 751. | 65. | 32. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 225. | 0. | 127. | 41. | 0. | 93. | 4. | 751. | 7. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.1( ) | .4( ) | |
| | | 0. | 558. | 10. | 67. | 67. | 3. | 1. | 417. | 203. | 90. | |
| | | .1( ) | 2.2( ) | .4( ) | 1.9( ) | .7(O) | .3( ) | .2( ) | 1.5( ) | 1.0( ) | .8( ) | |
| | | 129. | 13. | 60. | 5. | 15. | 29. | 0. | 134. | 17. | 828. | |
| | | .8( ) | .4( ) | .8( ) | .3( ) | .4( ) | .5( ) | .0( ) | .9( ) | .4( ) | 2.5( ) | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 61. | 5. | 2. | 0. | 201. | 85. | 9. | 37. | 1120. | 462. | |
| | | .6( ) | .4( ) | .2( ) | .3( ) | 1.0( ) | .8( ) | .3( ) | .6( ) | .0( ) | .0( ) | |
| | | 4. | 352. | 95. | 84. | 127. | 722. | 81. | 44. | 0. | 98. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 106.7(S) | 20.6(S) | 18.2(S) | 171.1(S) | 15.3(S) | |
| | | 3. | 0. | 21. | 0. | 1. | | | | | | |
| | | .5(S) | .0(S) | 5.2(S) | .0( ) | 3.1(S) | | | | | | |
| 3 | 45. | 536. | 0. | 0. | 405. | 29. | 0. | 40. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 194. | 145. | 71. | 70. | 0. | 40. | 0. | 0. | 14. | 177. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 18. | 23. | 54. | 0. | 803. | 719. | 59. | 29. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 211. | 0. | 118. | 38. | 0. | 86. | 2. | 719. | 6. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.0( ) | .3( ) | |
| | | 0. | 528. | 9. | 67. | 67. | 2. | 1. | 393. | 191. | 83. | |
| | | .1( ) | 2.1( ) | .4( ) | 1.9( ) | .4(O) | .3( ) | .2( ) | 1.4( ) | 1.0( ) | .8( ) | |
| | | 120. | 12. | 56. | 5. | 14. | 27. | 0. | 124. | 16. | 803. | |
| | | .8( ) | .4( ) | .8( ) | .2( ) | .4( ) | .5( ) | .0( ) | .9( ) | .4( ) | 2.5( ) | |
| | | 56. | 4. | 2. | 0. | 189. | 79. | 9. | 35. | 1073. | 434. | |
| | | .6( ) | .4( ) | .2( ) | .3( ) | .9( ) | .7( ) | .3( ) | .6( ) | .0( ) | .0( ) | |
| | | 3. | 332. | 88. | 78. | 118. | 690. | 75. | 41. | 0. | 91. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 105.6(S) | 20.6(S) | 18.2(S) | 172.4(S) | 15.3(S) | |
| | | 3. | 0. | 19. | 0. | 1. | | | | | | |
| | | .5(S) | .0(S) | 5.1(S) | .0( ) | 3.1(S) | | | | | | |
| 3 | 50. | 504. | 0. | 0. | 378. | 26. | 0. | 94. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 181. | 135. | 66. | 64. | 0. | 37. | 0. | 0. | 13. | 164. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 17. | 22. | 50. | 0. | 777. | 687. | 54. | 27. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 198. | 0. | 110. | 34. | 0. | 80. | 2. | 687. | 6. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.0( ) | .3( ) | |
| | | 0. | 498. | 8. | 67. | 67. | 2. | 1. | 371. | 178. | 77. | |
| | | .1( ) | 2.1( ) | .4( ) | 1.9( ) | .0(O) | .2( ) | .2( ) | 1.4( ) | .9( ) | .7( ) | |
| | | 112. | 11. | 53. | 4. | 12. | 26. | 0. | 116. | 14. | 777. | |
| | | .7( ) | .4( ) | .8( ) | .2( ) | .4( ) | .5( ) | .0( ) | .8( ) | .4( ) | 2.4( ) | |
| | | 52. | 4. | 2. | 0. | 178. | 74. | 8. | 33. | 1028. | 405. | |
| | | .6( ) | .3( ) | .2( ) | .2( ) | .9( ) | .7( ) | .3( ) | .6( ) | .0( ) | .0( ) | |
| | | 3. | 312. | 82. | 71. | 110. | 658. | 69. | 38. | 0. | 85. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 104.6(S) | 20.6(S) | 18.2(S) | 173.6(S) | 15.3(S) | |
| | | 3. | 0. | 18. | 0. | 1. | | | | | | |
| | | .4(S) | .0(S) | 5.0(S) | .0( ) | 3.1(S) | | | | | | |
| 3 | 55. | 475. | 0. | 0. | 354. | 24. | 0. | 4. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 169. | 126. | 61. | 60. | 0. | 35. | 0. | 0. | 12. | 152. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 16. | 20. | 45. | 0. | 749. | 656. | 48. | 24. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 185. | 0. | 103. | 32. | 0. | 75. | 0. | 656. | 6. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.0( ) | .3( ) | |
| | | 0. | 470. | 8. | 57. | 31. | 2. | 1. | 348. | 167. | 72. | |
| | | .0( ) | 2.0( ) | .3( ) | 1.7( ) | 1.2( ) | .2( ) | .2( ) | 1.4( ) | .9( ) | .7( ) | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 105. | 10. | 50. | 4. | 11. | 24. | 0. | 107. | 13. | 749. |
| | | .7( ) | .3( ) | .8( ) | .2( ) | .4( ) | .4( ) | .0( ) | .8( ) | .4( ) | 2.4( ) |
| | | 48. | 3. | 2. | 0. | 167. | 69. | 8. | 31. | 982. | 378. |
| | | .6( ) | .3( ) | .2( ) | .2( ) | .9( ) | .7( ) | .3( ) | .6( ) | .0( ) | .0( ) |
| | | 3. | 286. | 76. | 66. | 103. | 626. | 64. | 36. | 0. | 79. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 103.5(S) | 20.5(S) | 18.2(S) | 174.7(S) | 15.2(S) |
| | | 3. | 0. | 17. | 0. | 1. | | | | | |
| | | .4(S) | .0(S) | 4.8(S) | .0( ) | 3.1(S) | | | | | |
| 4 | 0. | 447. | 0. | 0. | 328. | 22. | 0. | 38. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 158. | 117. | 57. | 56. | 0. | 33. | 0. | 0. | 11. | 141. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 14. | 19. | 42. | 0. | 720. | 624. | 44. | 22. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 174. | 0. | 96. | 29. | 0. | 70. | 0. | 624. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.9( ) | .3( ) |
| | | 0. | 442. | 7. | 38. | 11. | 2. | 1. | 324. | 156. | 66. |
| | | .0( ) | 2.0( ) | .3( ) | 1.4( ) | .6( ) | .2( ) | .2( ) | 1.3( ) | .9( ) | .7( ) |
| | | 97. | 9. | 46. | 4. | 10. | 23. | 0. | 100. | 12. | 720. |
| | | .7( ) | .3( ) | .7( ) | .2( ) | .4( ) | .4( ) | .0( ) | .8( ) | .4( ) | 2.4( ) |
| | | 44. | 3. | 2. | 0. | 157. | 65. | 7. | 29. | 938. | 350. |
| | | .5( ) | .3( ) | .2( ) | .2( ) | .9( ) | .7( ) | .3( ) | .6( ) | .0( ) | .0( ) |
| | | 3. | 252. | 70. | 60. | 96. | 595. | 59. | 33. | 0. | 73. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 102.5(S) | 20.5(S) | 18.2(S) | 175.7(S) | 15.2(S) |
| | | 3. | 0. | 15. | 0. | 1. | | | | | |
| | | .4(S) | .0(S) | 4.7(S) | .0( ) | 3.1(S) | | | | | |
| 4 | 5. | 419. | 0. | 0. | 301. | 20. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 146. | 109. | 52. | 52. | 0. | 30. | 0. | 0. | 7. | 131. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 13. | 17. | 38. | 0. | 691. | 594. | 41. | 20. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 163. | 0. | 89. | 27. | 0. | 65. | 0. | 594. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.9( ) | .3( ) |
| | | 0. | 414. | 6. | 26. | 16. | 1. | 1. | 298. | 146. | 62. |
| | | .0( ) | 1.9( ) | .3( ) | 1.2( ) | .7( ) | .2( ) | .2( ) | 1.3( ) | .9( ) | .7( ) |
| | | 91. | 8. | 44. | 3. | 9. | 21. | 0. | 93. | 11. | 691. |
| | | .7( ) | .3( ) | .7( ) | .2( ) | .4( ) | .4( ) | .0( ) | .8( ) | .3( ) | 2.3( ) |
| | | 41. | 3. | 2. | 0. | 148. | 60. | 7. | 28. | 895. | 321. |
| | | .5( ) | .3( ) | .2( ) | .2( ) | .8( ) | .7( ) | .3( ) | .5( ) | .0( ) | .0( ) |
| | | 3. | 225. | 65. | 56. | 89. | 564. | 55. | 31. | 0. | 68. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 101.5(S) | 20.5(S) | 18.2(S) | 176.6(S) | 15.2(S) |
| | | 3. | 0. | 14. | 0. | 1. | | | | | |
| | | .4(S) | .0(S) | 4.7(S) | .0( ) | 3.1(S) | | | | | |
| 4 | 10. | 392. | 0. | 0. | 276. | 19. | 0. | 29. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 137. | 101. | 48. | 49. | 0. | 28. | 0. | 0. | 5. | 121. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 12. | 16. | 35. | 0. | 662. | 563. | 38. | 18. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 153. | 0. | 83. | 25. | 0. | 60. | 0. | 563. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.9( ) | .3( ) |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 387. | 6. | 21. | 13. | 1. | 1. | 274. | 137. | 57. | |
| | | .0( ) | 1.9( ) | .3( ) | 1.1( ) | .6( ) | .2( ) | .2( ) | 1.2( ) | .9( ) | .7( ) | |
| | | 85. | 8. | 41. | 3. | 9. | 19. | 0. | 86. | 10. | 662. | |
| | | .7( ) | .3( ) | .7( ) | .2( ) | .3( ) | .4( ) | .0( ) | .7( ) | .3( ) | 2.3( ) | |
| | | 38. | 2. | 1. | 0. | 139. | 56. | 6. | 26. | 853. | 294. | |
| | | .5( ) | .3( ) | .2( ) | .2( ) | .8( ) | .7( ) | .3( ) | .5( ) | .0( ) | .0( ) | |
| | | 3. | 206. | 60. | 51. | 83. | 534. | 50. | 29. | 0. | 63. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 100.5(S) | 20.5(S) | 18.2(S) | 177.5(S) | 15.2(S) | |
| | | 3. | 0. | 13. | 0. | 1. | | | | | | |
| | | .4(S) | .0(S) | 4.6(S) | .0( ) | 3.1(S) | | | | | | |
| 4 | 15. | 365. | 0. | 0. | 253. | 17. | 0. | 0. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 128. | 94. | 44. | 45. | 0. | 26. | 0. | 0. | 3. | 109. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 7. | 15. | 32. | 0. | 633. | 534. | 35. | 17. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 143. | 0. | 77. | 23. | 0. | 56. | 0. | 534. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.8( ) | .3( ) | |
| | | 0. | 360. | 5. | 17. | 13. | 1. | 1. | 252. | 128. | 53. | |
| | | .0( ) | 1.8( ) | .3( ) | 1.0( ) | .6( ) | .2( ) | .2( ) | 1.2( ) | .8( ) | .6( ) | |
| | | 79. | 7. | 38. | 3. | 8. | 18. | 0. | 80. | 9. | 633. | |
| | | .6( ) | .3( ) | .7( ) | .2( ) | .3( ) | .4( ) | .0( ) | .7( ) | .3( ) | 2.3( ) | |
| | | 35. | 2. | 1. | 0. | 131. | 53. | 6. | 25. | 811. | 271. | |
| | | .5( ) | .3( ) | .2( ) | .2( ) | .8( ) | .6( ) | .3( ) | .5( ) | .0( ) | .0( ) | |
| | | 3. | 191. | 56. | 47. | 77. | 505. | 46. | 27. | 0. | 59. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 99.5(S) | 20.5(S) | 18.2(S) | 178.3(S) | 15.1(S) | |
| | | 2. | 0. | 12. | 0. | 1. | | | | | | |
| | | .4(S) | .0(S) | 4.5(S) | .0( ) | 3.1(S) | | | | | | |
| 4 | 20. | 340. | 0. | 0. | 233. | 16. | 0. | 24. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 120. | 88. | 40. | 43. | 0. | 25. | 0. | 0. | 2. | 99. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 5. | 14. | 30. | 0. | 604. | 505. | 32. | 15. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 130. | 0. | 72. | 21. | 0. | 52. | 0. | 505. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.8( ) | .3( ) | |
| | | 0. | 335. | 5. | 15. | 11. | 1. | 1. | 233. | 120. | 49. | |
| | | .0( ) | 1.8( ) | .3( ) | .9( ) | .6( ) | .2( ) | .2( ) | 1.2( ) | .8( ) | .6( ) | |
| | | 74. | 7. | 36. | 3. | 7. | 16. | 0. | 75. | 8. | 604. | |
| | | .6( ) | .3( ) | .7( ) | .2( ) | .3( ) | .4( ) | .0( ) | .7( ) | .3( ) | 2.2( ) | |
| | | 32. | 2. | 1. | 0. | 123. | 49. | 6. | 23. | 767. | 248. | |
| | | .5( ) | .3( ) | .2( ) | .2( ) | .8( ) | .6( ) | .3( ) | .5( ) | .0( ) | .0( ) | |
| | | 2. | 178. | 51. | 44. | 72. | 476. | 42. | 25. | 0. | 55. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 98.6(S) | 20.5(S) | 18.2(S) | 179.0(S) | 15.1(S) | |
| | | 2. | 0. | 11. | 0. | 1. | | | | | | |
| | | .3(S) | .0(S) | 4.4(S) | .0( ) | 3.1(S) | | | | | | |
| 4 | 25. | 316. | 0. | 0. | 216. | 11. | 0. | 0. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 112. | 81. | 37. | 40. | 0. | 23. | 0. | 0. | 1. | 91. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 3. | 13. | 27. | 0. | 576. | 476. | 30. | 10. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 121. | 0. | 67. | 19. | 0. | 49. | 0. | 476. | 5. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.7( ) | .3( ) | | |
| | | 0. | 311. | 4. | 13. | 11. | 1. | 1. | 216. | 112. | 45. | | |
| | | .0( ) | 1.7( ) | .3( ) | .9( ) | .6( ) | .2( ) | .2( ) | 1.1( ) | .8( ) | .6( ) | | |
| | | 69. | 6. | 34. | 2. | 7. | 14. | 0. | 70. | 8. | 576. | | |
| | | .6( ) | .3( ) | .7( ) | .2( ) | .3( ) | .4( ) | .0( ) | .7( ) | .3( ) | 2.2( ) | | |
| | | 30. | 2. | 1. | 0. | 116. | 46. | 5. | 22. | 726. | 227. | | |
| | | .5( ) | .2( ) | .2( ) | .2( ) | .8( ) | .6( ) | .3( ) | .5( ) | .0( ) | .0( ) | | |
| | | 2. | 166. | 47. | 40. | 67. | 448. | 39. | 23. | 0. | 51. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 97.6(S) | 20.4(S) | 18.2(S) | 179.6(S) | 15.1(S) | | |
| | | 2. | 0. | 10. | 0. | 1. | | | | | | | |
| | | .3(S) | .0(S) | 4.4(S) | .0( ) | 3.1(S) | | | | | | | |
| 4 | 30. | 293. | 0. | 0. | 200. | 8. | 0. | 21. | 0. | 0. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 105. | 72. | 34. | 37. | 0. | 21. | 0. | 0. | 0. | 84. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 2. | 12. | 25. | 0. | 548. | 449. | 27. | 7. | 0. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 0. | 112. | 0. | 63. | 17. | 0. | 45. | 0. | 449. | 4. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.7( ) | .3( ) | | |
| | | 0. | 289. | 4. | 12. | 10. | 1. | 1. | 200. | 105. | 41. | | |
| | | .0( ) | 1.7( ) | .3( ) | .8( ) | .5( ) | .2( ) | .2( ) | 1.1( ) | .8( ) | .6( ) | | |
| | | 64. | 6. | 32. | 2. | 6. | 13. | 0. | 65. | 7. | 548. | | |
| | | .6( ) | .3( ) | .6( ) | .2( ) | .3( ) | .4( ) | .0( ) | .7( ) | .3( ) | 2.1( ) | | |
| | | 27. | 1. | 1. | 0. | 109. | 43. | 5. | 21. | 687. | 208. | | |
| | | .5( ) | .2( ) | .2( ) | .2( ) | .8( ) | .6( ) | .2( ) | .5( ) | .0( ) | .0( ) | | |
| | | 2. | 154. | 43. | 37. | 63. | 421. | 35. | 22. | 0. | 48. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 96.8(S) | 20.4(S) | 18.2(S) | 180.2(S) | 15.1(S) | | |
| | | 2. | 0. | 10. | 0. | 1. | | | | | | | |
| | | .3(S) | .0(S) | 4.3(S) | .0( ) | 3.1(S) | | | | | | | |
| 4 | 35. | 272. | 0. | 0. | 186. | 7. | 0. | 0. | 0. | 0. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 97. | 65. | 31. | 35. | 0. | 20. | 0. | 0. | 0. | 77. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 2. | 7. | 23. | 0. | 520. | 422. | 24. | 6. | 0. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 0. | 105. | 0. | 58. | 12. | 0. | 42. | 0. | 422. | 4. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.7( ) | .3( ) | | |
| | | 0. | 268. | 4. | 11. | 9. | 1. | 1. | 186. | 97. | 38. | | |
| | | .0( ) | 1.6( ) | .3( ) | .8( ) | .5( ) | .2( ) | .2( ) | 1.1( ) | .8( ) | .6( ) | | |
| | | 59. | 5. | 30. | 2. | 6. | 12. | 0. | 60. | 7. | 520. | | |
| | | .6( ) | .3( ) | .6( ) | .2( ) | .3( ) | .3( ) | .0( ) | .7( ) | .3( ) | 2.1( ) | | |
| | | 24. | 1. | 1. | 0. | 102. | 40. | 5. | 20. | 649. | 193. | | |
| | | .4( ) | .2( ) | .2( ) | .2( ) | .7( ) | .6( ) | .2( ) | .5( ) | .0( ) | .0( ) | | |
| | | 2. | 143. | 40. | 30. | 58. | 395. | 32. | 20. | 0. | 45. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 95.9(S) | 20.4(S) | 18.2(S) | 180.8(S) | 15.1(S) | | |
| | | 2. | 0. | 9. | 0. | 1. | | | | | | | |
| | | .3(S) | .0(S) | 4.2(S) | .0( ) | 3.0(S) | | | | | | | |
| 4 | 40. | 253. | 0. | 0. | 173. | 5. | 0. | 18. | 0. | 0. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 90. | 59. | 28. | 33. | 0. | 18. | 0. | 0. | 0. | 69. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 5. | 21. | 0. | 493. | 396. | 22. | 4. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 98. | 0. | 54. | 9. | 0. | 40. | 0. | 396. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.6( ) | .3( ) |
| | | 0. | 248. | 3. | 10. | 8. | 1. | 1. | 173. | 90. | 35. |
| | | .0( ) | 1.6( ) | .3( ) | .8( ) | .5( ) | .2( ) | .2( ) | 1.1( ) | .7( ) | .5( ) |
| | | 55. | 5. | 28. | 2. | 5. | 11. | 0. | 55. | 6. | 493. |
| | | .6( ) | .3( ) | .6( ) | .2( ) | .3( ) | .3( ) | .0( ) | .6( ) | .3( ) | 2.1( ) |
| | | 22. | 1. | 1. | 0. | 96. | 37. | 4. | 19. | 613. | 179. |
| | | .4( ) | .2( ) | .2( ) | .2( ) | .7( ) | .6( ) | .2( ) | .5( ) | .0( ) | .0( ) |
| | | 2. | 133. | 37. | 26. | 54. | 369. | 29. | 19. | 0. | 42. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 95.1(S) | 20.4(S) | 18.2(S) | 181.3(S) | 15.1(S) |
| | | 2. | 0. | 8. | 0. | 1. | | | | | |
| | | .3(S) | .0(S) | 4.2(S) | .0( ) | 3.0(S) | | | | | |
| 4 | 45. | 235. | 0. | 0. | 161. | 3. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 83. | 54. | 22. | 31. | 0. | 17. | 0. | 0. | 0. | 64. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 3. | 19. | 0. | 467. | 372. | 20. | 4. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 91. | 0. | 50. | 8. | 0. | 37. | 0. | 372. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.6( ) | .3( ) |
| | | 0. | 231. | 3. | 9. | 8. | 1. | 1. | 161. | 83. | 31. |
| | | .0( ) | 1.6( ) | .2( ) | .7( ) | .5( ) | .2( ) | .2( ) | 1.0( ) | .7( ) | .5( ) |
| | | 51. | 5. | 26. | 2. | 5. | 10. | 0. | 51. | 6. | 467. |
| | | .5( ) | .3( ) | .6( ) | .2( ) | .3( ) | .3( ) | .0( ) | .6( ) | .3( ) | 2.0( ) |
| | | 20. | 1. | 1. | 0. | 91. | 34. | 4. | 18. | 577. | 164. |
| | | .4( ) | .2( ) | .2( ) | .2( ) | .7( ) | .5( ) | .2( ) | .5( ) | .0( ) | .0( ) |
| | | 2. | 123. | 33. | 23. | 50. | 346. | 25. | 18. | 0. | 39. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 94.3(S) | 20.4(S) | 18.2(S) | 181.8(S) | 15.0(S) |
| | | 2. | 0. | 8. | 0. | 1. | | | | | |
| | | .3(S) | .0(S) | 4.1(S) | .0( ) | 3.0(S) | | | | | |
| 4 | 50. | 218. | 0. | 0. | 150. | 3. | 0. | 15. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 77. | 49. | 18. | 29. | 0. | 16. | 0. | 0. | 0. | 58. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 2. | 18. | 0. | 442. | 348. | 18. | 2. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 85. | 0. | 46. | 6. | 0. | 35. | 0. | 348. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.5( ) | .3( ) |
| | | 0. | 215. | 3. | 9. | 7. | 1. | 1. | 150. | 77. | 27. |
| | | .0( ) | 1.5( ) | .2( ) | .7( ) | .4( ) | .2( ) | .2( ) | 1.0( ) | .7( ) | .5( ) |
| | | 47. | 4. | 24. | 2. | 4. | 9. | 0. | 47. | 5. | 442. |
| | | .5( ) | .3( ) | .6( ) | .2( ) | .3( ) | .3( ) | .0( ) | .6( ) | .3( ) | 2.0( ) |
| | | 18. | 1. | 1. | 0. | 85. | 31. | 4. | 17. | 544. | 153. |
| | | .4( ) | .2( ) | .2( ) | .1( ) | .7( ) | .5( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 2. | 114. | 29. | 20. | 46. | 323. | 20. | 16. | 0. | 36. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 93.5(S) | 20.4(S) | 18.2(S) | 182.2(S) | 15.0(S) |
| | | 2. | 0. | 7. | 0. | 1. | | | | | |
| | | .3(S) | .0(S) | 4.1(S) | .0( ) | 3.0(S) | | | | | |
| 4 | 55. | 203. | 0. | 0. | 140. | 3. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 71. | 45. | 15. | 27. | 0. | 15. | 0. | 0. | 0. | 49. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 12. | 0. | 417. | 326. | 16. | 2. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 80. | 0. | 42. | 5. | 0. | 32. | 0. | 326. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.5( ) | .3( ) |
| | | 0. | 200. | 3. | 8. | 7. | 1. | 1. | 140. | 71. | 24. |
| | | .0( ) | 1.5( ) | .2( ) | .7( ) | .4( ) | .2( ) | .2( ) | 1.0( ) | .7( ) | .5( ) |
| | | 44. | 4. | 23. | 2. | 4. | 8. | 0. | 42. | 5. | 417. |
| | | .5( ) | .2( ) | .6( ) | .2( ) | .3( ) | .3( ) | .0( ) | .6( ) | .3( ) | 1.9( ) |
| | | 16. | 1. | 1. | 0. | 80. | 29. | 4. | 16. | 513. | 143. |
| | | .4( ) | .2( ) | .2( ) | .1( ) | .7( ) | .5( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 2. | 106. | 25. | 14. | 42. | 302. | 17. | 15. | 0. | 34. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 92.8(S) | 20.4(S) | 18.2(S) | 182.5(S) | 15.0(S) |
| | | 2. | 0. | 7. | 0. | 1. | | | | | |
| | | .2(S) | .0(S) | 4.1(S) | .0( ) | 3.0(S) | | | | | |
| 5 | 0. | 190. | 0. | 0. | 131. | 3. | 0. | 13. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 66. | 40. | 13. | 25. | 0. | 14. | 0. | 0. | 0. | 43. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 10. | 0. | 394. | 305. | 14. | 2. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 75. | 0. | 39. | 3. | 0. | 30. | 0. | 305. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.5( ) | .3( ) |
| | | 0. | 186. | 3. | 8. | 6. | 1. | 1. | 131. | 66. | 20. |
| | | .0( ) | 1.4( ) | .2( ) | .6( ) | .4( ) | .2( ) | .2( ) | .9( ) | .6( ) | .4( ) |
| | | 40. | 4. | 21. | 1. | 4. | 7. | 0. | 38. | 5. | 394. |
| | | .5( ) | .2( ) | .6( ) | .2( ) | .3( ) | .3( ) | .0( ) | .6( ) | .3( ) | 1.9( ) |
| | | 14. | 1. | 1. | 0. | 75. | 26. | 3. | 15. | 483. | 133. |
| | | .4( ) | .2( ) | .1( ) | .1( ) | .7( ) | .5( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 2. | 98. | 22. | 10. | 39. | 282. | 14. | 14. | 0. | 32. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 92.2(S) | 20.4(S) | 18.2(S) | 182.9(S) | 15.0(S) |
| | | 2. | 0. | 6. | 0. | 1. | | | | | |
| | | .2(S) | .0(S) | 4.0(S) | .0( ) | 3.0(S) | | | | | |
| 5 | 5. | 177. | 0. | 0. | 122. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 60. | 36. | 12. | 24. | 0. | 13. | 0. | 0. | 0. | 37. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 8. | 0. | 371. | 285. | 13. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 70. | 0. | 32. | 3. | 0. | 28. | 0. | 285. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.4( ) | .3( ) |
| | | 0. | 174. | 2. | 7. | 6. | 1. | 1. | 122. | 60. | 18. |
| | | .0( ) | 1.4( ) | .2( ) | .6( ) | .4( ) | .2( ) | .2( ) | .9( ) | .6( ) | .4( ) |
| | | 36. | 4. | 20. | 1. | 4. | 7. | 0. | 34. | 4. | 371. |
| | | .5( ) | .2( ) | .5( ) | .2( ) | .2( ) | .3( ) | .0( ) | .5( ) | .2( ) | 1.8( ) |
| | | 13. | 1. | 1. | 0. | 70. | 24. | 3. | 14. | 454. | 124. |
| | | .3( ) | .2( ) | .1( ) | .1( ) | .6( ) | .5( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 2. | 91. | 19. | 8. | 32. | 263. | 12. | 13. | 0. | 30. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 91.6(S) | 20.3(S) | 18.2(S) | 183.1(S) | 15.0(S) |
| | | 2. | 0. | 6. | 0. | 1. | | | | | |
| | | .2(S) | .0(S) | 4.0(S) | .0( ) | 3.0(S) | | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 10. | 165. | 0. | 0. | 113. | 2. | 0. | 11. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 56. | 33. | 9. | 22. | 0. | 12. | 0. | 0. | 0. | 33. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 6. | 0. | 350. | 267. | 11. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 65. | 0. | 27. | 3. | 0. | 26. | 0. | 267. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.4( ) | .3( ) |
| | | 0. | 162. | 2. | 7. | 5. | 1. | 1. | 113. | 56. | 15. |
| | | .0( ) | 1.4( ) | .2( ) | .6( ) | .4( ) | .2( ) | .2( ) | .9( ) | .6( ) | .4( ) |
| | | 33. | 3. | 19. | 1. | 3. | 6. | 0. | 31. | 4. | 350. |
| | | .5( ) | .2( ) | .5( ) | .1( ) | .2( ) | .3( ) | .0( ) | .5( ) | .2( ) | 1.8( ) |
| | | 11. | 1. | 1. | 0. | 65. | 22. | 3. | 14. | 427. | 116. |
| | | .3( ) | .2( ) | .1( ) | .1( ) | .6( ) | .5( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 2. | 84. | 17. | 6. | 27. | 246. | 11. | 12. | 0. | 28. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 91.0(S) | 20.3(S) | 18.1(S) | 183.4(S) | 15.0(S) |
| | | 1. | 0. | 5. | 0. | 1. | | | | | |
| | | .2(S) | .0(S) | 4.0(S) | .0( ) | 3.0(S) | | | | | |
| 5 | 15. | 155. | 0. | 0. | 106. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 51. | 30. | 9. | 21. | 0. | 7. | 0. | 0. | 0. | 29. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 5. | 0. | 329. | 249. | 10. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 61. | 0. | 24. | 3. | 0. | 25. | 0. | 249. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.4( ) | .3( ) |
| | | 0. | 152. | 2. | 6. | 5. | 1. | 1. | 106. | 51. | 13. |
| | | .0( ) | 1.3( ) | .2( ) | .6( ) | .3( ) | .2( ) | .2( ) | .9( ) | .6( ) | .4( ) |
| | | 30. | 3. | 18. | 1. | 3. | 5. | 0. | 28. | 4. | 329. |
| | | .4( ) | .2( ) | .5( ) | .1( ) | .2( ) | .3( ) | .0( ) | .5( ) | .2( ) | 1.8( ) |
| | | 10. | 1. | 1. | 0. | 61. | 21. | 3. | 13. | 401. | 108. |
| | | .3( ) | .2( ) | .1( ) | .1( ) | .6( ) | .5( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 1. | 78. | 14. | 5. | 24. | 230. | 9. | 9. | 0. | 26. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 90.5(S) | 20.3(S) | 18.1(S) | 183.6(S) | 15.0(S) |
| | | 1. | 0. | 5. | 0. | 1. | | | | | |
| | | .2(S) | .0(S) | 3.9(S) | .0( ) | 3.0(S) | | | | | |
| 5 | 20. | 145. | 0. | 0. | 98. | 2. | 0. | 10. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 47. | 27. | 8. | 19. | 0. | 5. | 0. | 0. | 0. | 25. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 4. | 0. | 310. | 233. | 9. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 56. | 0. | 21. | 3. | 0. | 20. | 0. | 233. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.3( ) | .3( ) |
| | | 0. | 142. | 2. | 6. | 5. | 1. | 1. | 98. | 47. | 12. |
| | | .0( ) | 1.3( ) | .2( ) | .6( ) | .3( ) | .2( ) | .2( ) | .9( ) | .6( ) | .4( ) |
| | | 27. | 3. | 16. | 1. | 3. | 5. | 0. | 25. | 4. | 310. |
| | | .4( ) | .2( ) | .5( ) | .1( ) | .2( ) | .2( ) | .0( ) | .5( ) | .2( ) | 1.7( ) |
| | | 9. | 1. | 1. | 0. | 56. | 19. | 3. | 12. | 376. | 100. |
| | | .3( ) | .2( ) | .1( ) | .1( ) | .6( ) | .4( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 1. | 72. | 13. | 4. | 21. | 214. | 8. | 5. | 0. | 23. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 90.0(S) | 20.3(S) | 18.1(S) | 183.8(S) | 15.0(S) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. | 0. | 5. | 0. | 1. | | | | | |
| | | .2(S) | .0(S) | 3.9(S) | .0( ) | 3.0(S) | | | | | |
| 5 | 25. | 135. | 0. | 0. | 91. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 44. | 25. | 7. | 17. | 0. | 3. | 0. | 0. | 0. | 22. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 3. | 0. | 292. | 218. | 9. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 52. | 0. | 19. | 3. | 0. | 16. | 0. | 218. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.3( ) | .3( ) |
| | | 0. | 133. | 2. | 5. | 4. | 1. | 1. | 91. | 44. | 10. |
| | | .0( ) | 1.3( ) | .2( ) | .5( ) | .3( ) | .2( ) | .2( ) | .8( ) | .6( ) | .3( ) |
| | | 25. | 3. | 14. | 1. | 3. | 5. | 0. | 22. | 3. | 292. |
| | | .4( ) | .2( ) | .5( ) | .1( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | 1.7( ) |
| | | 9. | 0. | 1. | 0. | 52. | 18. | 3. | 12. | 353. | 93. |
| | | .3( ) | .2( ) | .1( ) | .1( ) | .6( ) | .4( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 1. | 66. | 11. | 3. | 19. | 200. | 8. | 4. | 0. | 19. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 89.5(S) | 20.3(S) | 18.1(S) | 183.9(S) | 14.9(S) |
| | | 1. | 0. | 4. | 0. | 1. | | | | | |
| | | .2(S) | .0(S) | 3.9(S) | .0( ) | 3.0(S) | | | | | |
| 5 | 30. | 127. | 0. | 0. | 85. | 2. | 0. | 9. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 40. | 23. | 7. | 15. | 0. | 2. | 0. | 0. | 0. | 20. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 3. | 0. | 275. | 204. | 8. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 48. | 0. | 16. | 2. | 0. | 15. | 0. | 204. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.3( ) | .2( ) |
| | | 0. | 124. | 2. | 5. | 4. | 1. | 1. | 85. | 40. | 9. |
| | | .0( ) | 1.2( ) | .2( ) | .5( ) | .3( ) | .2( ) | .2( ) | .8( ) | .5( ) | .3( ) |
| | | 23. | 3. | 12. | 1. | 2. | 4. | 0. | 20. | 3. | 275. |
| | | .4( ) | .2( ) | .4( ) | .1( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | 1.6( ) |
| | | 8. | 0. | 1. | 0. | 48. | 16. | 2. | 11. | 331. | 87. |
| | | .3( ) | .2( ) | .1( ) | .1( ) | .6( ) | .4( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 1. | 60. | 10. | 3. | 16. | 187. | 7. | 3. | 0. | 16. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 89.1(S) | 20.3(S) | 18.1(S) | 184.1(S) | 14.9(S) |
| | | 1. | 0. | 4. | 0. | 1. | | | | | |
| | | .2(S) | .0(S) | 3.9(S) | .0( ) | 3.0(S) | | | | | |
| 5 | 35. | 119. | 0. | 0. | 79. | 2. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 37. | 21. | 6. | 13. | 0. | 1. | 0. | 0. | 0. | 18. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 3. | 0. | 259. | 191. | 7. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 45. | 0. | 15. | 2. | 0. | 13. | 0. | 191. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.2( ) | .2( ) |
| | | 0. | 116. | 2. | 5. | 4. | 1. | 1. | 79. | 37. | 8. |
| | | .0( ) | 1.2( ) | .2( ) | .5( ) | .3( ) | .2( ) | .2( ) | .8( ) | .5( ) | .3( ) |
| | | 21. | 2. | 11. | 1. | 2. | 4. | 0. | 18. | 3. | 259. |
| | | .4( ) | .2( ) | .4( ) | .1( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | 1.6( ) |
| | | 7. | 0. | 1. | 0. | 45. | 15. | 2. | 11. | 310. | 80. |
| | | .3( ) | .1( ) | .1( ) | .1( ) | .5( ) | .4( ) | .2( ) | .4( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. | 55. | 9. | 3. | 15. | 175. | 7. | 2. | 0. | 14. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 88.7(S) | 20.3(S) | 18.1(S) | 184.2(S) | 14.9(S) |
| | | 1. | 0. | 4. | 0. | 1. | | | | | |
| | | .2(S) | .0(S) | 3.8(S) | .0( ) | 3.0(S) | | | | | |
| 5 | 40. | 111. | 0. | 0. | 73. | 1. | 0. | 8. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 34. | 19. | 6. | 12. | 0. | 0. | 0. | 0. | 0. | 16. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 3. | 0. | 243. | 179. | 7. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 41. | 0. | 14. | 2. | 0. | 12. | 0. | 179. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.2( ) | .2( ) |
| | | 0. | 109. | 1. | 4. | 4. | 1. | 1. | 73. | 34. | 8. |
| | | .0( ) | 1.2( ) | .2( ) | .5( ) | .3( ) | .2( ) | .2( ) | .8( ) | .5( ) | .3( ) |
| | | 19. | 2. | 9. | 1. | 2. | 4. | 0. | 16. | 3. | 243. |
| | | .4( ) | .2( ) | .4( ) | .1( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | 1.6( ) |
| | | 7. | 0. | 1. | 0. | 41. | 14. | 2. | 10. | 291. | 74. |
| | | .3( ) | .1( ) | .1( ) | .1( ) | .5( ) | .4( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 1. | 50. | 9. | 3. | 14. | 164. | 6. | 1. | 0. | 13. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 88.3(S) | 20.3(S) | 18.1(S) | 184.3(S) | 14.9(S) |
| | | 1. | 0. | 4. | 0. | 1. | | | | | |
| | | .2(S) | .0(S) | 3.8(S) | .0( ) | 2.9(S) | | | | | |
| 5 | 45. | 104. | 0. | 0. | 68. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 31. | 17. | 5. | 10. | 0. | 0. | 0. | 0. | 0. | 15. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 3. | 0. | 229. | 167. | 6. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 39. | 0. | 13. | 2. | 0. | 8. | 0. | 167. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.2( ) | .2( ) |
| | | 0. | 102. | 1. | 4. | 3. | 1. | 1. | 68. | 31. | 7. |
| | | .0( ) | 1.1( ) | .2( ) | .5( ) | .3( ) | .2( ) | .2( ) | .7( ) | .5( ) | .3( ) |
| | | 17. | 2. | 8. | 1. | 2. | 3. | 0. | 15. | 3. | 229. |
| | | .4( ) | .2( ) | .4( ) | .1( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | 1.5( ) |
| | | 6. | 0. | 1. | 0. | 39. | 13. | 2. | 10. | 274. | 69. |
| | | .3( ) | .1( ) | .1( ) | .1( ) | .5( ) | .4( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 1. | 46. | 8. | 3. | 13. | 153. | 6. | 0. | 0. | 11. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 87.9(S) | 20.3(S) | 18.1(S) | 184.4(S) | 14.9(S) |
| | | 1. | 0. | 3. | 0. | 1. | | | | | |
| | | .1(S) | .0(S) | 3.8(S) | .0( ) | 2.9(S) | | | | | |
| 5 | 50. | 97. | 0. | 0. | 62. | 1. | 0. | 7. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 29. | 16. | 5. | 9. | 0. | 0. | 0. | 0. | 0. | 13. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 215. | 157. | 6. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 36. | 0. | 12. | 2. | 0. | 11. | 0. | 157. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.1( ) | .2( ) |
| | | 0. | 95. | 1. | 4. | 3. | 1. | 1. | 62. | 29. | 7. |
| | | .0( ) | 1.1( ) | .2( ) | .5( ) | .3( ) | .2( ) | .2( ) | .7( ) | .5( ) | .3( ) |
| | | 16. | 2. | 7. | 1. | 2. | 3. | 0. | 13. | 2. | 215. |
| | | .4( ) | .2( ) | .4( ) | .1( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | 1.5( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 6. | 0. | 1. | 0. | 36. | 12. | 2. | 9. | 257. | 64. |
| | | .2( ) | .1( ) | .1( ) | .1( ) | .5( ) | .4( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 1. | 42. | 7. | 2. | 12. | 143. | 5. | 0. | 0. | 10. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 87.6(S) | 20.3(S) | 18.1(S) | 184.5(S) | 14.9(S) |
| | | 1. | 0. | 3. | 0. | 1. | | | | | |
| | | .1(S) | .0(S) | 3.8(S) | .0( ) | 2.9(S) | | | | | |
| 5 | 55. | 91. | 0. | 0. | 58. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 27. | 14. | 5. | 8. | 0. | 0. | 0. | 0. | 0. | 12. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 203. | 147. | 5. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 33. | 0. | 11. | 2. | 0. | 8. | 0. | 147. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.1( ) | .2( ) |
| | | 0. | 89. | 1. | 4. | 3. | 1. | 1. | 58. | 27. | 6. |
| | | .0( ) | 1.1( ) | .2( ) | .4( ) | .3( ) | .2( ) | .2( ) | .7( ) | .5( ) | .3( ) |
| | | 14. | 2. | 6. | 1. | 2. | 3. | 0. | 12. | 2. | 203. |
| | | .3( ) | .2( ) | .3( ) | .1( ) | .2( ) | .2( ) | .0( ) | .4( ) | .2( ) | 1.5( ) |
| | | 5. | 0. | 0. | 0. | 33. | 11. | 2. | 9. | 241. | 59. |
| | | .2( ) | .1( ) | .1( ) | .1( ) | .5( ) | .4( ) | .2( ) | .4( ) | .0( ) | .0( ) |
| | | 1. | 39. | 7. | 2. | 11. | 134. | 5. | 0. | 0. | 9. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 87.3(S) | 20.3(S) | 18.1(S) | 184.6(S) | 14.9(S) |
| | | 1. | 0. | 3. | 0. | 1. | | | | | |
| | | .1(S) | .0(S) | 3.8(S) | .0( ) | 2.9(S) | | | | | |
| 6 | 0. | 85. | 0. | 0. | 54. | 1. | 0. | 6. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 25. | 13. | 4. | 7. | 0. | 0. | 0. | 0. | 0. | 11. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 191. | 138. | 5. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 31. | 0. | 11. | 2. | 0. | 10. | 0. | 138. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.1( ) | .2( ) |
| | | 0. | 83. | 1. | 3. | 3. | 1. | 1. | 54. | 25. | 6. |
| | | .0( ) | 1.1( ) | .2( ) | .4( ) | .2( ) | .2( ) | .2( ) | .7( ) | .5( ) | .3( ) |
| | | 13. | 2. | 5. | 1. | 2. | 3. | 0. | 11. | 2. | 191. |
| | | .3( ) | .2( ) | .3( ) | .1( ) | .2( ) | .2( ) | .0( ) | .3( ) | .2( ) | 1.4( ) |
| | | 5. | 0. | 0. | 0. | 31. | 11. | 2. | 9. | 227. | 55. |
| | | .2( ) | .1( ) | .1( ) | .1( ) | .5( ) | .4( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 36. | 6. | 2. | 11. | 125. | 5. | 0. | 0. | 9. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 87.0(S) | 20.3(S) | 18.1(S) | 184.7(S) | 14.9(S) |
| | | 1. | 0. | 3. | 0. | 1. | | | | | |
| | | .1(S) | .0(S) | 3.8(S) | .0( ) | 2.9(S) | | | | | |
| 6 | 5. | 79. | 0. | 0. | 50. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 23. | 12. | 4. | 6. | 0. | 0. | 0. | 0. | 0. | 10. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 180. | 129. | 4. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 29. | 0. | 10. | 2. | 0. | 7. | 0. | 129. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.1( ) | .2( ) |
| | | 0. | 77. | 1. | 3. | 3. | 1. | 1. | 50. | 23. | 5. |
| | | .0( ) | 1.0( ) | .2( ) | .4( ) | .2( ) | .2( ) | .2( ) | .7( ) | .4( ) | .3( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 12. | 2. | 5. | 1. | 2. | 3. | 0. | 10. | 2. | 180. |
| | | .3( ) | .2( ) | .3( ) | .1( ) | .2( ) | .2( ) | .0( ) | .3( ) | .2( ) | 1.4( ) |
| | | 4. | 0. | 0. | 0. | 29. | 10. | 2. | 8. | 213. | 51. |
| | | .2( ) | .1( ) | .1( ) | .1( ) | .5( ) | .3( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 33. | 6. | 2. | 10. | 117. | 4. | 0. | 0. | 9. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 86.8(S) | 20.3(S) | 18.1(S) | 184.8(S) | 14.9(S) |
| | | 1. | 0. | 3. | 0. | 1. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 2.9(S) | | | | | |
| 6 | 10. | 74. | 0. | 0. | 46. | 1. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 21. | 11. | 4. | 6. | 0. | 0. | 0. | 0. | 0. | 9. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 169. | 121. | 4. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 27. | 0. | 9. | 2. | 0. | 9. | 0. | 121. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.0( ) | .2( ) |
| | | 0. | 72. | 1. | 3. | 3. | 1. | 1. | 46. | 21. | 5. |
| | | .0( ) | 1.0( ) | .2( ) | .4( ) | .2( ) | .2( ) | .2( ) | .6( ) | .4( ) | .3( ) |
| | | 11. | 2. | 4. | 1. | 2. | 2. | 0. | 9. | 2. | 169. |
| | | .3( ) | .2( ) | .3( ) | .1( ) | .2( ) | .2( ) | .0( ) | .3( ) | .2( ) | 1.4( ) |
| | | 4. | 0. | 0. | 0. | 27. | 9. | 2. | 8. | 201. | 47. |
| | | .2( ) | .1( ) | .1( ) | .1( ) | .4( ) | .3( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 30. | 6. | 2. | 9. | 109. | 4. | 0. | 0. | 8. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 86.5(S) | 20.3(S) | 18.1(S) | 184.8(S) | 14.9(S) |
| | | 1. | 0. | 3. | 0. | 1. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 2.9(S) | | | | | |
| 6 | 15. | 69. | 0. | 0. | 43. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 20. | 11. | 4. | 5. | 0. | 0. | 0. | 0. | 0. | 9. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 159. | 113. | 4. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 25. | 0. | 9. | 2. | 0. | 6. | 0. | 113. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.0( ) | .2( ) |
| | | 0. | 68. | 1. | 3. | 2. | 1. | 1. | 43. | 20. | 5. |
| | | .0( ) | 1.0( ) | .2( ) | .4( ) | .2( ) | .2( ) | .2( ) | .6( ) | .4( ) | .3( ) |
| | | 11. | 2. | 4. | 1. | 1. | 2. | 0. | 9. | 2. | 159. |
| | | .3( ) | .2( ) | .3( ) | .1( ) | .2( ) | .2( ) | .0( ) | .3( ) | .2( ) | 1.3( ) |
| | | 4. | 0. | 0. | 0. | 25. | 9. | 2. | 8. | 189. | 44. |
| | | .2( ) | .1( ) | .1( ) | .1( ) | .4( ) | .3( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 28. | 5. | 2. | 9. | 102. | 4. | 0. | 0. | 8. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 86.3(S) | 20.3(S) | 18.1(S) | 184.9(S) | 14.9(S) |
| | | 1. | 0. | 2. | 0. | 1. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 2.9(S) | | | | | |
| 6 | 20. | 65. | 0. | 0. | 40. | 1. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 18. | 10. | 3. | 5. | 0. | 0. | 0. | 0. | 0. | 8. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 150. | 106. | 4. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 24. | 0. | 8. | 2. | 0. | 9. | 0. | 106. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.0( ) | .2( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 63. | 1. | 3. | 2. | 1. | 1. | 40. | 18. | 4. |
| | | .0( ) | 1.0( ) | .2( ) | .4( ) | .2( ) | .2( ) | .2( ) | .6( ) | .4( ) | .2( ) |
| | | 10. | 1. | 3. | 1. | 1. | 2. | 0. | 8. | 2. | 150. |
| | | .3( ) | .2( ) | .3( ) | .1( ) | .2( ) | .2( ) | .0( ) | .3( ) | .2( ) | 1.3( ) |
| | | 4. | 0. | 0. | 0. | 24. | 8. | 2. | 7. | 178. | 41. |
| | | .2( ) | .1( ) | .1( ) | .1( ) | .4( ) | .3( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 26. | 5. | 2. | 8. | 96. | 4. | 0. | 0. | 8. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 86.0(S) | 20.3(S) | 18.1(S) | 185.0(S) | 14.9(S) |
| | | 1. | 0. | 2. | 0. | 1. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 2.9(S) | | | | | |
| 6 | 25. | 61. | 0. | 0. | 37. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 17. | 9. | 3. | 4. | 0. | 0. | 0. | 0. | 0. | 7. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 141. | 99. | 3. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 22. | 0. | 8. | 1. | 0. | 6. | 0. | 99. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.0( ) | .2( ) |
| | | 0. | 59. | 1. | 3. | 2. | 1. | 1. | 37. | 17. | 4. |
| | | .0( ) | .9( ) | .2( ) | .4( ) | .2( ) | .2( ) | .2( ) | .6( ) | .4( ) | .2( ) |
| | | 9. | 1. | 3. | 1. | 1. | 2. | 0. | 7. | 2. | 141. |
| | | .3( ) | .2( ) | .3( ) | .1( ) | .2( ) | .2( ) | .0( ) | .3( ) | .2( ) | 1.3( ) |
| | | 3. | 0. | 0. | 0. | 22. | 8. | 1. | 7. | 167. | 38. |
| | | .2( ) | .1( ) | .1( ) | .1( ) | .4( ) | .3( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 24. | 5. | 2. | 8. | 89. | 3. | 0. | 0. | 7. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 85.8(S) | 20.3(S) | 18.1(S) | 185.0(S) | 14.9(S) |
| | | 1. | 0. | 2. | 0. | 1. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 2.9(S) | | | | | |
| 6 | 30. | 57. | 0. | 0. | 34. | 1. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 16. | 9. | 3. | 4. | 0. | 0. | 0. | 0. | 0. | 7. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 133. | 93. | 3. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 21. | 0. | 7. | 1. | 0. | 8. | 0. | 93. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .9( ) | .2( ) |
| | | 0. | 55. | 1. | 3. | 2. | 1. | 1. | 34. | 16. | 4. |
| | | .0( ) | .9( ) | .1( ) | .4( ) | .2( ) | .2( ) | .2( ) | .6( ) | .4( ) | .2( ) |
| | | 9. | 1. | 3. | 1. | 1. | 2. | 0. | 7. | 2. | 133. |
| | | .3( ) | .2( ) | .2( ) | .1( ) | .2( ) | .2( ) | .0( ) | .3( ) | .2( ) | 1.3( ) |
| | | 3. | 0. | 0. | 0. | 21. | 7. | 1. | 7. | 157. | 35. |
| | | .2( ) | .1( ) | .1( ) | .1( ) | .4( ) | .3( ) | .2( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 23. | 4. | 2. | 7. | 84. | 3. | 0. | 0. | 7. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 85.7(S) | 20.3(S) | 18.1(S) | 185.1(S) | 14.9(S) |
| | | 1. | 0. | 2. | 0. | 1. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 2.9(S) | | | | | |
| 6 | 35. | 53. | 0. | 0. | 32. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 15. | 8. | 3. | 4. | 0. | 0. | 0. | 0. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 125. | 87. | 3. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 20. | 0. | 7. | 1. | 0. | 5. | 0. | 87. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .9( ) | .2( ) |
| | | 0. | 52. | 1. | 2. | 2. | 1. | 1. | 32. | 15. | 4. |
| | | .0( ) | .9( ) | .1( ) | .4( ) | .2( ) | .2( ) | .2( ) | .6( ) | .4( ) | .2( ) |
| | | 8. | 1. | 2. | 0. | 1. | 2. | 0. | 6. | 1. | 125. |
| | | .3( ) | .2( ) | .2( ) | .1( ) | .2( ) | .2( ) | .0( ) | .3( ) | .2( ) | 1.2( ) |
| | | 3. | 0. | 0. | 0. | 20. | 7. | 1. | 6. | 148. | 33. |
| | | .2( ) | .1( ) | .1( ) | .1( ) | .4( ) | .3( ) | .1( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 21. | 4. | 1. | 7. | 78. | 3. | 0. | 0. | 7. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 85.5(S) | 20.3(S) | 18.1(S) | 185.1(S) | 14.9(S) |
| | | 1. | 0. | 2. | 0. | 1. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 2.9(S) | | | | | |
| 6 | 40. | 50. | 0. | 0. | 30. | 1. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 14. | 8. | 3. | 3. | 0. | 0. | 0. | 0. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 118. | 82. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 19. | 0. | 7. | 1. | 0. | 8. | 0. | 82. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .9( ) | .2( ) |
| | | 0. | 49. | 1. | 2. | 2. | 1. | 1. | 30. | 14. | 3. |
| | | .0( ) | .9( ) | .1( ) | .3( ) | .2( ) | .2( ) | .2( ) | .5( ) | .4( ) | .2( ) |
| | | 8. | 1. | 2. | 0. | 1. | 2. | 0. | 6. | 1. | 118. |
| | | .3( ) | .2( ) | .2( ) | .1( ) | .2( ) | .2( ) | .0( ) | .3( ) | .2( ) | 1.2( ) |
| | | 3. | 0. | 0. | 0. | 19. | 7. | 1. | 6. | 140. | 31. |
| | | .2( ) | .1( ) | .1( ) | .1( ) | .4( ) | .3( ) | .1( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 20. | 4. | 1. | 7. | 73. | 3. | 0. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 85.3(S) | 20.3(S) | 18.1(S) | 185.2(S) | 14.9(S) |
| | | 1. | 0. | 2. | 0. | 1. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 2.9(S) | | | | | |
| 6 | 45. | 47. | 0. | 0. | 28. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 13. | 7. | 3. | 3. | 0. | 0. | 0. | 0. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 111. | 76. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 18. | 0. | 6. | 1. | 0. | 4. | 0. | 76. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .9( ) | .2( ) |
| | | 0. | 46. | 1. | 2. | 2. | 1. | 1. | 28. | 13. | 3. |
| | | .0( ) | .8( ) | .1( ) | .3( ) | .2( ) | .2( ) | .2( ) | .5( ) | .4( ) | .2( ) |
| | | 7. | 1. | 2. | 0. | 1. | 1. | 0. | 6. | 1. | 111. |
| | | .3( ) | .2( ) | .2( ) | .1( ) | .2( ) | .2( ) | .0( ) | .3( ) | .2( ) | 1.2( ) |
| | | 3. | 0. | 0. | 0. | 18. | 6. | 1. | 6. | 132. | 29. |
| | | .2( ) | .1( ) | .1( ) | .1( ) | .4( ) | .3( ) | .1( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 18. | 4. | 1. | 6. | 69. | 3. | 0. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 85.2(S) | 20.3(S) | 18.1(S) | 185.2(S) | 14.9(S) |
| | | 1. | 0. | 2. | 0. | 1. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 2.9(S) | | | | | |
| 6 | 50. | 44. | 0. | 0. | 26. | 1. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 12. | 7. | 2. | 3. | 0. | 0. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 0. | 1. | 0. | 105. | 72. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 17. | 0. | 6. | 1. | 0. | 7. | 0. | 72. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .9( ) | .2( ) |
| | | 0. | 43. | 1. | 2. | 2. | 1. | 1. | 26. | 12. | 3. |
| | | .0( ) | .8( ) | .1( ) | .3( ) | .2( ) | .2( ) | .2( ) | .5( ) | .3( ) | .2( ) |
| | | 7. | 1. | 2. | 0. | 1. | 1. | 0. | 5. | 1. | 105. |
| | | .3( ) | .1( ) | .2( ) | .1( ) | .2( ) | .2( ) | .0( ) | .3( ) | .2( ) | 1.1( ) |
| | | 2. | 0. | 0. | 0. | 17. | 6. | 1. | 6. | 124. | 27. |
| | | .2( ) | .1( ) | .1( ) | .1( ) | .4( ) | .3( ) | .1( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 17. | 3. | 1. | 6. | 64. | 2. | 0. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 85.0(S) | 20.3(S) | 18.1(S) | 185.2(S) | 14.9(S) |
| | | 1. | 0. | 2. | 0. | 1. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 2.9(S) | | | | | |
| 6 | 55. | 42. | 0. | 0. | 25. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 12. | 6. | 2. | 3. | 0. | 0. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 99. | 67. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 16. | 0. | 6. | 1. | 0. | 4. | 0. | 67. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .8( ) | .2( ) |
| | | 0. | 40. | 1. | 2. | 2. | 1. | 1. | 25. | 12. | 3. |
| | | .0( ) | .8( ) | .1( ) | .3( ) | .2( ) | .2( ) | .2( ) | .5( ) | .3( ) | .2( ) |
| | | 6. | 1. | 2. | 0. | 1. | 1. | 0. | 5. | 1. | 99. |
| | | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .2( ) | .0( ) | .3( ) | .2( ) | 1.1( ) |
| | | 2. | 0. | 0. | 0. | 16. | 6. | 1. | 5. | 117. | 25. |
| | | .2( ) | .1( ) | .1( ) | .1( ) | .4( ) | .3( ) | .1( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 16. | 3. | 1. | 6. | 60. | 2. | 0. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 84.9(S) | 20.3(S) | 18.1(S) | 185.3(S) | 14.9(S) |
| | | 1. | 0. | 2. | 0. | 1. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 2.8(S) | | | | | |
| 7 | 0. | 39. | 0. | 0. | 23. | 1. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 11. | 6. | 2. | 2. | 0. | 0. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 93. | 63. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 15. | 0. | 5. | 1. | 0. | 7. | 0. | 63. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .8( ) | .2( ) |
| | | 0. | 38. | 1. | 2. | 2. | 1. | 1. | 23. | 11. | 3. |
| | | .0( ) | .8( ) | .1( ) | .3( ) | .2( ) | .2( ) | .2( ) | .5( ) | .3( ) | .2( ) |
| | | 6. | 1. | 1. | 0. | 1. | 1. | 0. | 5. | 1. | 93. |
| | | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | 1.1( ) |
| | | 2. | 0. | 0. | 0. | 15. | 5. | 1. | 5. | 110. | 24. |
| | | .2( ) | .1( ) | .1( ) | .1( ) | .4( ) | .3( ) | .1( ) | .3( ) | .0( ) | .0( ) |
| | | 1. | 15. | 3. | 1. | 5. | 56. | 2. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 84.8(S) | 20.3(S) | 18.1(S) | 185.3(S) | 14.9(S) |
| | | 1. | 0. | 2. | 0. | 1. | | | | | |
| | | .1(S) | .0(S) | 3.7(S) | .0( ) | 2.8(S) | | | | | |

100yr 3hr Current Condition SWMM Sump Basin
Blank

*** PEAK FLOWS, STAGES AND STORAGES OF GUTTERS AND DETENTION DAMS ***

| CONVEYANCE ELEMENT | PEAK (CFS) | STAGE (FT) | STORAGE (AC-FT) | TIME (HR/MIN) |
|---|---|---|---|---|
| 224 | 178. | (DIRECT FLOW) | | 0 50. |
| 124 | 178. | (DIRECT FLOW) | | 0 50. |
| 324 | 110. | .8 | | 1 25. |
| 223 | 523. | (DIRECT FLOW) | | 1 0. |
| 222 | 214. | (DIRECT FLOW) | | 1 0. |
| 123 | 609. | (DIRECT FLOW) | | 1 5. |
| 122 | 214. | (DIRECT FLOW) | | 1 0. |
| 420 | 823. | (DIRECT FLOW) | | 1 5. |
| 221 | 185. | (DIRECT FLOW) | | 1 0. |
| 322 | 702. | 1.6 | | 1 30. |
| 121 | 185. | (DIRECT FLOW) | | 1 0. |
| 220 | 392. | (DIRECT FLOW) | | 1 5. |
| 120 | 1204. | (DIRECT FLOW) | | 1 20. |
| 520 | 0. | .1 | 185.3 | 7 0. |
| 219 | 141. | (DIRECT FLOW) | | 1 0. |
| 320 | 0. | .0 | | 7 0. |
| 218 | 115. | (DIRECT FLOW) | | 0 50. |
| 210 | 77. | (DIRECT FLOW) | | 0 25. |
| 119 | 141. | (DIRECT FLOW) | | 1 0. |
| 118 | 115. | (DIRECT FLOW) | | 0 50. |
| 110 | 77. | (DIRECT FLOW) | | 0 25. |
| 319 | 102. | .8 | | 1 35. |
| 318 | 77. | .8 | | 1 30. |
| 213 | 380. | (DIRECT FLOW) | | 1 0. |
| 610 | 1. | .1 | 3.4 | 1 0. |
| 209 | 140. | (DIRECT FLOW) | | 0 50. |
| 217 | 150. | (DIRECT FLOW) | | 0 45. |
| 113 | 514. | (DIRECT FLOW) | | 1 15. |
| 310 | 1. | .2 | | 3 25. |
| 109 | 140. | (DIRECT FLOW) | | 0 50. |
| 117 | 150. | (DIRECT FLOW) | | 0 45. |
| 513 | 505. | .1 | 22.1 | 1 20. |
| 409 | 141. | (DIRECT FLOW) | | 0 50. |
| 208 | 99. | (DIRECT FLOW) | | 0 40. |
| 317 | 93. | .7 | | 1 15. |
| 313 | 472. | 1.4 | | 1 30. |
| 309 | 138. | 2.0 | | 1 0. |
| 108 | 99. | (DIRECT FLOW) | | 0 40. |
| 216 | 332. | (DIRECT FLOW) | | 1 5. |
| 412 | 555. | (DIRECT FLOW) | | 1 30. |
| 608 | 141. | .1 | 9.2 | 1 20. |
| 116 | 332. | (DIRECT FLOW) | | 1 5. |
| 215 | 58. | (DIRECT FLOW) | | 0 50. |
| 314 | 455. | 1.2 | | 1 50. |
| 212 | 262. | (DIRECT FLOW) | | 0 55. |
| 308 | 67. | 2.0 | 4.1 | 2 10. |
| 207 | 11. | (DIRECT FLOW) | | 1 25. |
| 516 | 300. | .1 | 18.9 | 1 30. |
| 115 | 58. | (DIRECT FLOW) | | 0 50. |
| 112 | 604. | (DIRECT FLOW) | | 1 50. |
| 107 | 105. | (DIRECT FLOW) | | 1 20. |
| 316 | 190. | 1.3 | | 2 0. |
| 315 | 34. | .5 | | 1 45. |
| 214 | 205. | (DIRECT FLOW) | | 0 50. |
| 312 | 557. | 1.4 | | 2 5. |
| 211 | 44. | (DIRECT FLOW) | | 1 10. |
| 206 | 72. | (DIRECT FLOW) | | 0 50. |
| 307 | 77. | 2.0 | | 1 30. |
| 114 | 306. | (DIRECT FLOW) | | 1 50. |
| 111 | 583. | (DIRECT FLOW) | | 2 5. |
| 203 | 16. | (DIRECT FLOW) | | 0 15. |
| 106 | 72. | (DIRECT FLOW) | | 0 50. |
| 404 | 946. | (DIRECT FLOW) | | 2 0. |
| 103 | 16. | (DIRECT FLOW) | | 0 15. |
| 202 | 57. | (DIRECT FLOW) | | 0 35. |
| 306 | 47. | .7 | | 1 30. |
| 205 | 224. | (DIRECT FLOW) | | 1 0. |
| 311 | 913. | 2.0 | | 2 10. |

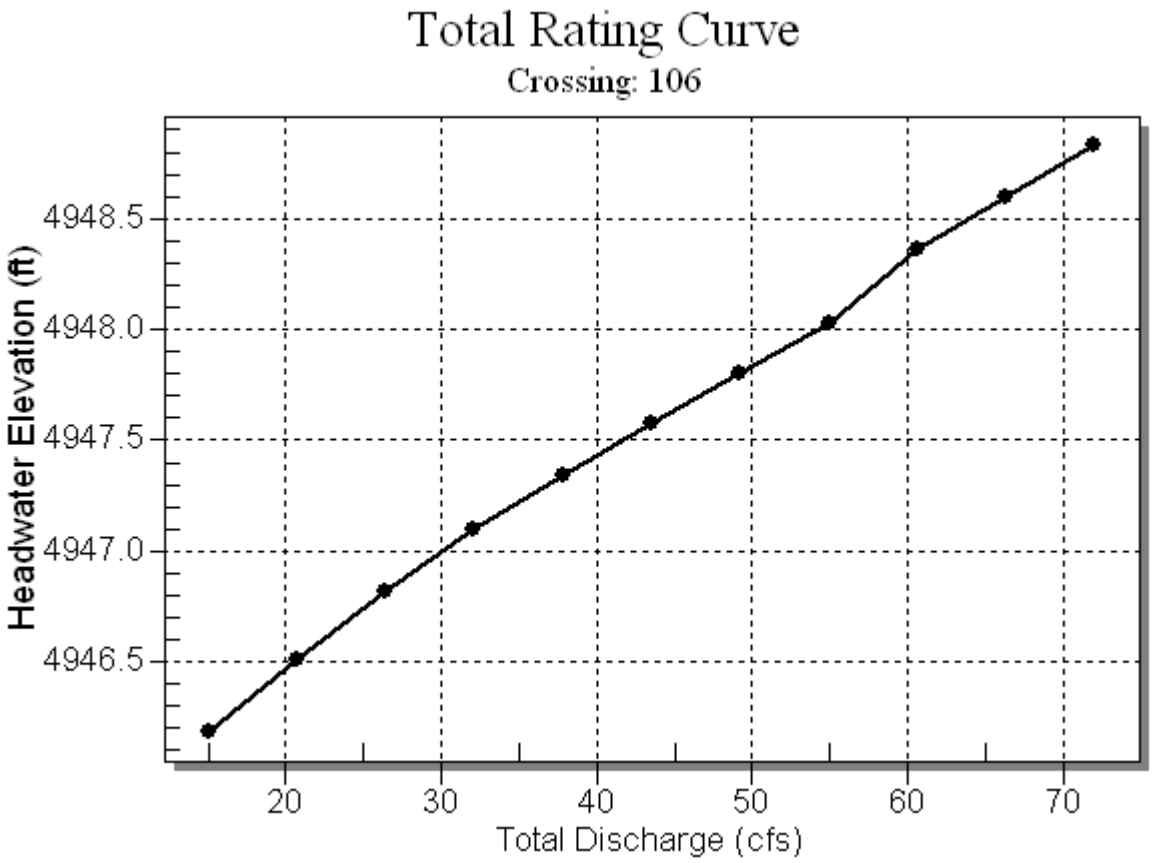
| | | | | |
|---|---|---|---|---|
| 204 | 107. | (DIRECT FLOW) | 0 | 50. |
| 603 | 5. | .1 .3 | 0 | 30. |
| 102 | 57. | (DIRECT FLOW) | 0 | 35. |
| 236 | 77. | (DIRECT FLOW) | 0 | 55. |
| 105 | 255. | (DIRECT FLOW) | 1 | 10. |
| 104 | 961. | (DIRECT FLOW) | 2 | 10. |
| 303 | 5. | .3 | 0 | 40. |
| 602 | 22. | .1 2.2 | 1 | 10. |
| 136 | 77. | (DIRECT FLOW) | 0 | 55. |
| 231 | 30. | (DIRECT FLOW) | 0 | 50. |
| 401 | 1093. | (DIRECT FLOW) | 2 | 5. |
| 402 | 24. | (DIRECT FLOW) | 1 | 5. |
| 336 | 40. | .5 | 1 | 35. |
| 235 | 453. | (DIRECT FLOW) | 1 | 0. |
| 131 | 30. | (DIRECT FLOW) | 0 | 50. |
| 304 | 1055. | 2.7 | 2 | 20. |
| 302 | 17. | .5 | 1 | 45. |
| 201 | 323. | (DIRECT FLOW) | 0 | 50. |
| 135 | 477. | (DIRECT FLOW) | 1 | 0. |
| 230 | 27. | (DIRECT FLOW) | 0 | 45. |
| 331 | 27. | 1.6 | 1 | 5. |
| 229 | 39. | (DIRECT FLOW) | 1 | 0. |
| 101 | 1134. | (DIRECT FLOW) | 2 | 15. |
| 238 | 178. | (DIRECT FLOW) | 0 | 55. |
| 335 | 352. | 1.3 | 1 | 35. |
| 234 | 386. | (DIRECT FLOW) | 1 | 5. |
| 233 | 39. | (DIRECT FLOW) | 0 | 55. |
| 130 | 27. | (DIRECT FLOW) | 0 | 45. |
| 129 | 66. | (DIRECT FLOW) | 1 | 5. |
| 501 | 952. | .1 114.2 | 2 | 50. |
| 138 | 178. | (DIRECT FLOW) | 0 | 55. |
| 134 | 683. | (DIRECT FLOW) | 1 | 20. |
| 133 | 39. | (DIRECT FLOW) | 0 | 55. |
| 330 | 13. | .4 | 1 | 30. |
| 329 | 55. | .9 | 1 | 20. |
| 228 | 362. | (DIRECT FLOW) | 0 | 55. |
| 301 | 948. | 2.3 | 2 | 55. |
| 226 | 92. | (DIRECT FLOW) | 0 | 50. |
| 338 | 81. | .8 | 1 | 50. |
| 237 | 604. | (DIRECT FLOW) | 1 | 5. |
| 432 | 711. | (DIRECT FLOW) | 1 | 20. |
| 128 | 413. | (DIRECT FLOW) | 1 | 5. |
| 126 | 962. | (DIRECT FLOW) | 2 | 55. |
| 137 | 648. | (DIRECT FLOW) | 1 | 5. |
| 333 | 594. | 1.4 | 1 | 45. |
| 232 | 322. | (DIRECT FLOW) | 1 | 0. |
| 328 | 343. | 1.2 | 1 | 25. |
| 227 | 60. | (DIRECT FLOW) | 0 | 55. |
| 326 | 902. | 2.6 | 3 | 15. |
| 225 | 34. | (DIRECT FLOW) | 1 | 5. |
| 537 | 638. | .1 18.0 | 1 | 15. |
| 132 | 786. | (DIRECT FLOW) | 1 | 35. |
| 127 | 393. | (DIRECT FLOW) | 1 | 25. |
| 125 | 913. | (DIRECT FLOW) | 3 | 15. |
| 337 | 638. | (DIRECT FLOW) | 1 | 15. |
| 400 | 1386. | (DIRECT FLOW) | 3 | 0. |
| 901 | 638. | (DIRECT FLOW) | 1 | 15. |
| 900 | 1386. | (DIRECT FLOW) | 3 | 0. |

# Appendix K:
# MAJOR CULVERT CROSSINGS

## Table 1 - Summary of Culvert Flows at Crossing: 106

| Headwater Elevation (ft) | Total Discharge (cfs) | 106 Discharge (cfs) | Roadway Discharge (cfs) | Iterations |
|---|---|---|---|---|
| 4946.19 | 15.00 | 15.00 | 0.00 | 1 |
| 4946.51 | 20.70 | 20.70 | 0.00 | 1 |
| 4946.82 | 26.40 | 26.40 | 0.00 | 1 |
| 4947.09 | 32.10 | 32.10 | 0.00 | 1 |
| 4947.34 | 37.80 | 37.80 | 0.00 | 1 |
| 4947.58 | 43.50 | 43.50 | 0.00 | 1 |
| 4947.80 | 49.20 | 49.20 | 0.00 | 1 |
| 4948.03 | 54.90 | 54.90 | 0.00 | 1 |
| 4948.37 | 60.60 | 60.60 | 0.00 | 1 |
| 4948.60 | 66.30 | 66.30 | 0.00 | 1 |
| 4948.83 | 72.00 | 72.00 | 0.00 | 1 |
| 4951.00 | 106.89 | 106.89 | 0.00 | Overtopping |

**Rating Curve Plot for Crossing: 106**



## Table 2 - Culvert Summary Table: 106

| Total Discharge (cfs) | Culvert Discharge (cfs) | Headwater Elevation (ft) | Inlet Control Depth (ft) | Outlet Control Depth (ft) | Flow Type | Normal Depth (ft) | Critical Depth (ft) | Outlet Depth (ft) | Tailwater Depth (ft) | Outlet Velocity (ft/s) | Tailwater Velocity (ft/s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.00 | 15.00 | 4946.19 | 1.587 | 0.000 | 1-S2n | 1.086 | 1.169 | 1.088 | 0.310 | 5.902 | 1.841 |
| 20.70 | 20.70 | 4946.51 | 1.913 | 0.000 | 1-S2n | 1.284 | 1.393 | 1.292 | 0.376 | 6.400 | 2.076 |
| 26.40 | 26.40 | 4946.82 | 2.221 | 0.000 | 1-S2n | 1.472 | 1.574 | 1.473 | 0.434 | 6.863 | 2.273 |
| 32.10 | 32.10 | 4947.09 | 2.494 | 0.000 | 1-S2n | 1.643 | 1.753 | 1.652 | 0.488 | 7.184 | 2.443 |
| 37.80 | 37.80 | 4947.34 | 2.743 | 0.000 | 1-S2n | 1.812 | 1.902 | 1.815 | 0.537 | 7.505 | 2.594 |
| 43.50 | 43.50 | 4947.58 | 2.977 | 0.000 | 1-S2n | 1.974 | 2.052 | 1.981 | 0.584 | 7.751 | 2.727 |
| 49.20 | 49.20 | 4947.80 | 3.203 | 0.028 | 1-S2n | 2.139 | 2.186 | 2.139 | 0.628 | 7.984 | 2.848 |
| 54.90 | 54.90 | 4948.03 | 3.427 | 0.069 | 1-S2n | 2.308 | 2.312 | 2.311 | 0.669 | 8.157 | 2.963 |
| 60.60 | 60.60 | 4948.37 | 3.656 | 3.766 | 2-M2c | 2.482 | 2.438 | 2.438 | 0.709 | 8.470 | 3.069 |
| 66.30 | 66.30 | 4948.60 | 3.893 | 3.996 | 2-M2c | 2.682 | 2.544 | 2.544 | 0.747 | 8.866 | 3.173 |
| 72.00 | 72.00 | 4948.83 | 4.141 | 4.231 | 2-M2c | 2.929 | 2.648 | 2.648 | 0.784 | 9.241 | 3.266 |

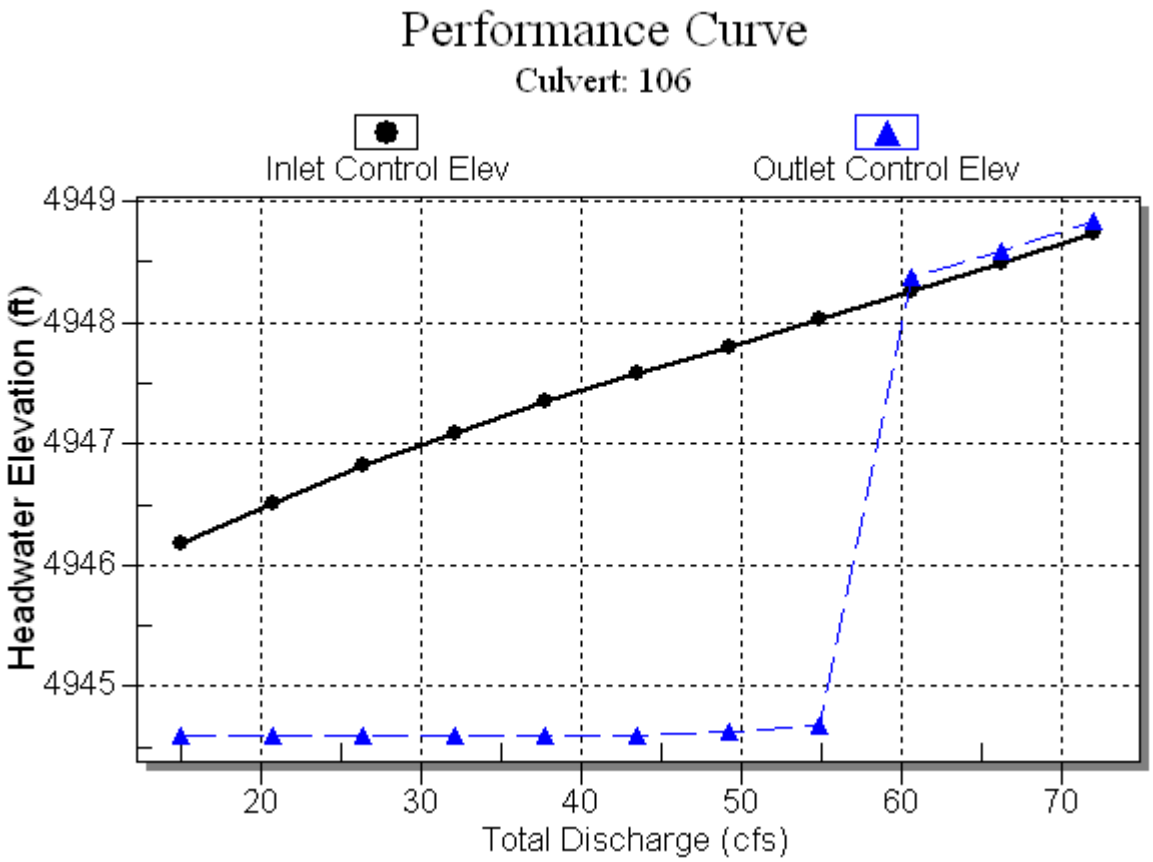
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Inlet Elevation (invert): 4944.60 ft,  Outlet Elevation (invert): 4944.00 ft

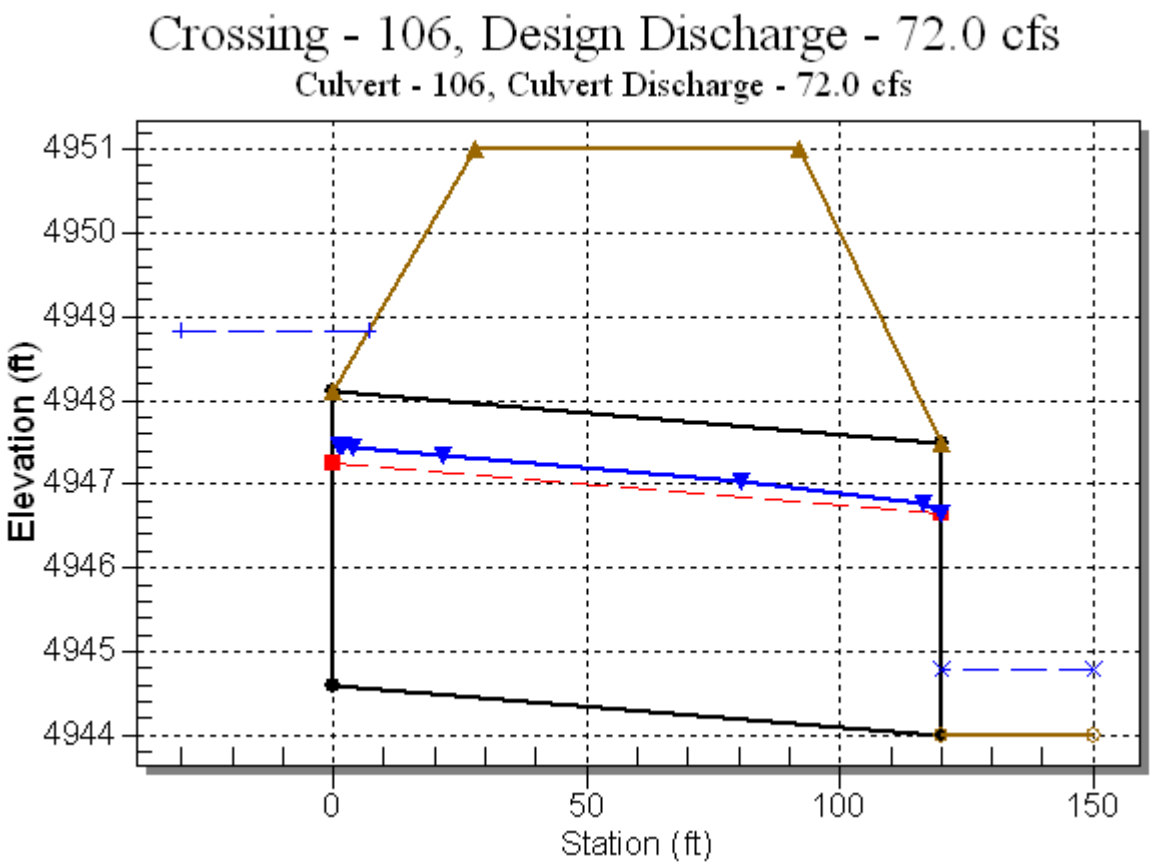
Culvert Length: 120.00 ft,  Culvert Slope: 0.0050

**********

**Culvert Performance Curve Plot: 106**



**Water Surface Profile Plot for Culvert: 106**




**Site Data - 106**

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 4944.60 ft

Outlet Station: 120.00 ft

Outlet Elevation: 4944.00 ft

Number of Barrels: 1

**Culvert Data Summary - 106**

Barrel Shape: Circular

Barrel Diameter: 3.50 ft

Barrel Material: Concrete

Barrel Manning's n: 0.0130

Inlet Type: Conventional

Inlet Edge Condition: Beveled Edge (1.5:1)

Inlet Depression: None

**Table 3 - Downstream Channel Rating Curve (Crossing: 106)**

| Flow (cfs) | Water Surface Elev (ft) | Depth (ft) | Velocity (ft/s) | Shear (psf) | Froude Number |
|---|---|---|---|---|---|
| 15.00 | 4944.31 | 0.31 | 1.84 | 0.30 | 0.60 |
| 20.70 | 4944.38 | 0.38 | 2.08 | 0.37 | 0.61 |
| 26.40 | 4944.43 | 0.43 | 2.27 | 0.43 | 0.63 |
| 32.10 | 4944.49 | 0.49 | 2.44 | 0.48 | 0.64 |
| 37.80 | 4944.54 | 0.54 | 2.59 | 0.53 | 0.65 |
| 43.50 | 4944.58 | 0.58 | 2.73 | 0.57 | 0.66 |
| 49.20 | 4944.63 | 0.63 | 2.85 | 0.62 | 0.66 |
| 54.90 | 4944.67 | 0.67 | 2.96 | 0.66 | 0.67 |
| 60.60 | 4944.71 | 0.71 | 3.07 | 0.69 | 0.67 |
| 66.30 | 4944.75 | 0.75 | 3.17 | 0.73 | 0.68 |
| 72.00 | 4944.78 | 0.78 | 3.27 | 0.77 | 0.69 |

## Tailwater Channel Data - 106

Tailwater Channel Option:  Trapezoidal Channel

Bottom Width:  25.00 ft

Side Slope (H:V):  4.00 (_:1)

Channel Slope:  0.0157

Channel Manning's n:  0.0450

Channel Invert Elevation:  4944.00 ft

## Roadway Data for Crossing: 106

Roadway Profile Shape:  Constant Roadway Elevation

Crest Length:  100.00 ft

Crest Elevation:  4951.00 ft

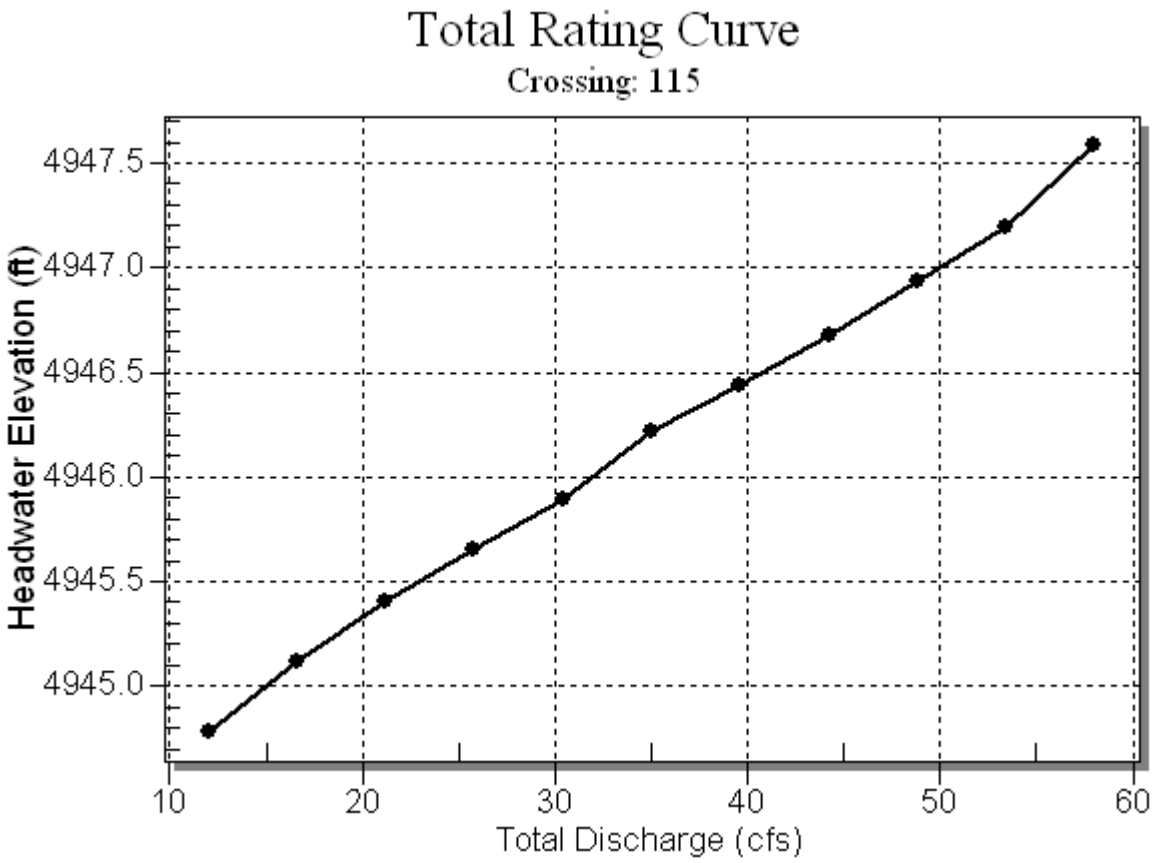
Roadway Surface:  Paved

Roadway Top Width:  64.00 ft

## Table 4 - Summary of Culvert Flows at Crossing: 115

| Headwater Elevation (ft) | Total Discharge (cfs) | 115 Discharge (cfs) | Roadway Discharge (cfs) | Iterations |
|---|---|---|---|---|
| 4944.78 | 12.00 | 12.00 | 0.00 | 1 |
| 4945.12 | 16.60 | 16.60 | 0.00 | 1 |
| 4945.40 | 21.20 | 21.20 | 0.00 | 1 |
| 4945.66 | 25.80 | 25.80 | 0.00 | 1 |
| 4945.89 | 30.40 | 30.40 | 0.00 | 1 |
| 4946.22 | 35.00 | 35.00 | 0.00 | 1 |
| 4946.44 | 39.60 | 39.60 | 0.00 | 1 |
| 4946.68 | 44.20 | 44.20 | 0.00 | 1 |
| 4946.93 | 48.80 | 48.80 | 0.00 | 1 |
| 4947.20 | 53.40 | 53.40 | 0.00 | 1 |
| 4947.58 | 58.00 | 58.00 | 0.00 | 1 |
| 4948.70 | 69.97 | 69.97 | 0.00 | Overtopping |

**Rating Curve Plot for Crossing: 115**



## Table 5 - Culvert Summary Table: 115

| Total Discharge (cfs) | Culvert Discharge (cfs) | Headwater Elevation (ft) | Inlet Control Depth (ft) | Outlet Control Depth (ft) | Flow Type | Normal Depth (ft) | Critical Depth (ft) | Outlet Depth (ft) | Tailwater Depth (ft) | Outlet Velocity (ft/s) | Tailwater Velocity (ft/s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.00 | 12.00 | 4944.78 | 1.484 | 1.484 | 1-S2n | 1.023 | 1.091 | 1.030 | 1.163 | 5.570 | 2.220 |
| 16.60 | 16.60 | 4945.12 | 1.815 | 1.815 | 1-S2n | 1.226 | 1.295 | 1.227 | 1.313 | 6.108 | 2.407 |
| 21.20 | 21.20 | 4945.40 | 2.101 | 2.101 | 1-S2n | 1.405 | 1.477 | 1.406 | 1.439 | 6.512 | 2.559 |
| 25.80 | 25.80 | 4945.66 | 2.356 | 0.949 | 1-S2n | 1.580 | 1.633 | 1.582 | 1.549 | 6.826 | 2.688 |
| 30.40 | 30.40 | 4945.89 | 2.592 | 1.047 | 1-S2n | 1.750 | 1.785 | 1.754 | 1.647 | 7.082 | 2.801 |
| 35.00 | 35.00 | 4946.22 | 2.821 | 2.921 | 2-M2c | 1.925 | 1.916 | 1.916 | 1.737 | 7.353 | 2.901 |
| 39.60 | 39.60 | 4946.44 | 3.051 | 3.142 | 2-M2c | 2.102 | 2.045 | 2.045 | 1.819 | 7.724 | 2.992 |
| 44.20 | 44.20 | 4946.68 | 3.289 | 3.381 | 2-M2c | 2.310 | 2.160 | 2.160 | 1.896 | 8.124 | 3.075 |
| 48.80 | 48.80 | 4946.93 | 3.540 | 3.632 | 2-M2c | 2.587 | 2.265 | 2.265 | 1.967 | 8.541 | 3.152 |
| 53.40 | 53.40 | 4947.20 | 3.806 | 3.897 | 2-M2c | 3.000 | 2.371 | 2.371 | 2.035 | 8.920 | 3.224 |
| 58.00 | 58.00 | 4947.58 | 4.091 | 4.285 | 7-M2c | 3.000 | 2.453 | 2.453 | 2.099 | 9.391 | 3.291 |

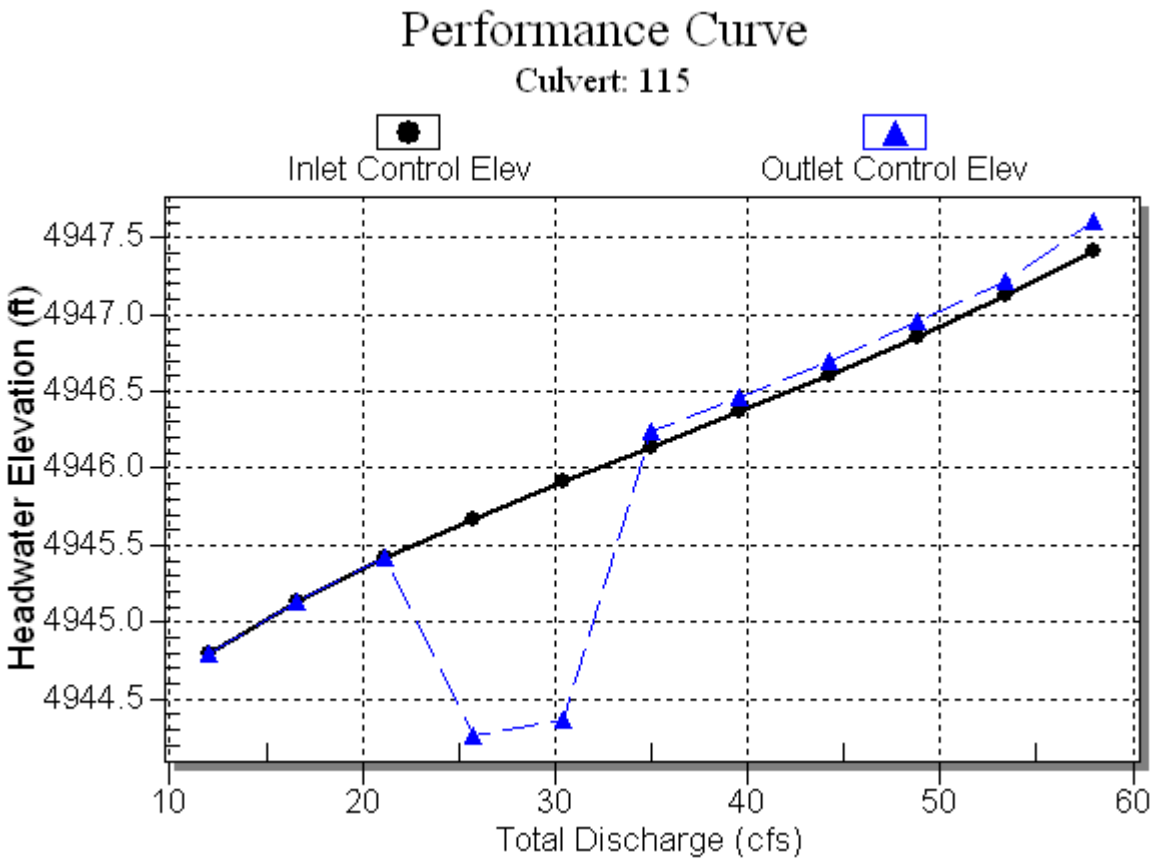
**********

Inlet Elevation (invert): 4943.30 ft,  Outlet Elevation (invert): 4942.70 ft

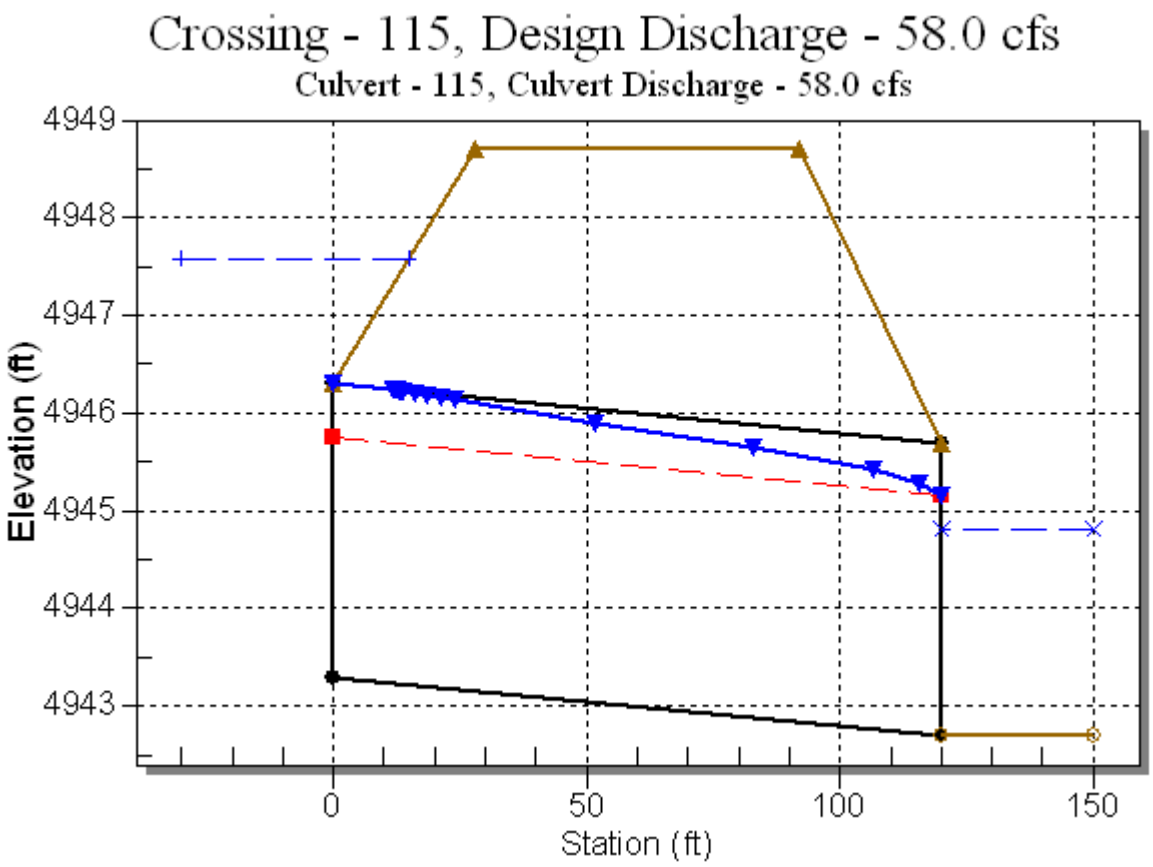
Culvert Length: 120.00 ft,  Culvert Slope: 0.0050

**********

**Culvert Performance Curve Plot: 115**



**Water Surface Profile Plot for Culvert: 115**




**Site Data - 115**

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 4943.30 ft

Outlet Station: 120.00 ft

Outlet Elevation: 4942.70 ft

Number of Barrels: 1

**Culvert Data Summary - 115**

Barrel Shape: Circular

Barrel Diameter: 3.00 ft

Barrel Material: Concrete

Barrel Manning's n: 0.0130

Inlet Type: Conventional

Inlet Edge Condition: Beveled Edge (1.5:1)

Inlet Depression: None

**Table 6 - Downstream Channel Rating Curve (Crossing: 115)**

| Flow (cfs) | Water Surface Elev (ft) | Depth (ft) | Velocity (ft/s) | Shear (psf) | Froude Number |
|---|---|---|---|---|---|
| 12.00 | 4943.86 | 1.16 | 2.22 | 0.70 | 0.51 |
| 16.60 | 4944.01 | 1.31 | 2.41 | 0.79 | 0.52 |
| 21.20 | 4944.14 | 1.44 | 2.56 | 0.87 | 0.53 |
| 25.80 | 4944.25 | 1.55 | 2.69 | 0.94 | 0.54 |
| 30.40 | 4944.35 | 1.65 | 2.80 | 1.00 | 0.54 |
| 35.00 | 4944.44 | 1.74 | 2.90 | 1.05 | 0.55 |
| 39.60 | 4944.52 | 1.82 | 2.99 | 1.10 | 0.55 |
| 44.20 | 4944.60 | 1.90 | 3.08 | 1.15 | 0.56 |
| 48.80 | 4944.67 | 1.97 | 3.15 | 1.19 | 0.56 |
| 53.40 | 4944.73 | 2.03 | 3.22 | 1.23 | 0.56 |
| 58.00 | 4944.80 | 2.10 | 3.29 | 1.27 | 0.57 |

## Tailwater Channel Data - 115

Tailwater Channel Option:  Triangular Channel

Side Slope (H:V):  4.00 (_:1)

Channel Slope:  0.0097

Channel Manning's n:  0.0450

Channel Invert Elevation:  4942.70 ft

## Roadway Data for Crossing: 115

Roadway Profile Shape:  Constant Roadway Elevation

Crest Length:  100.00 ft

Crest Elevation:  4948.70 ft

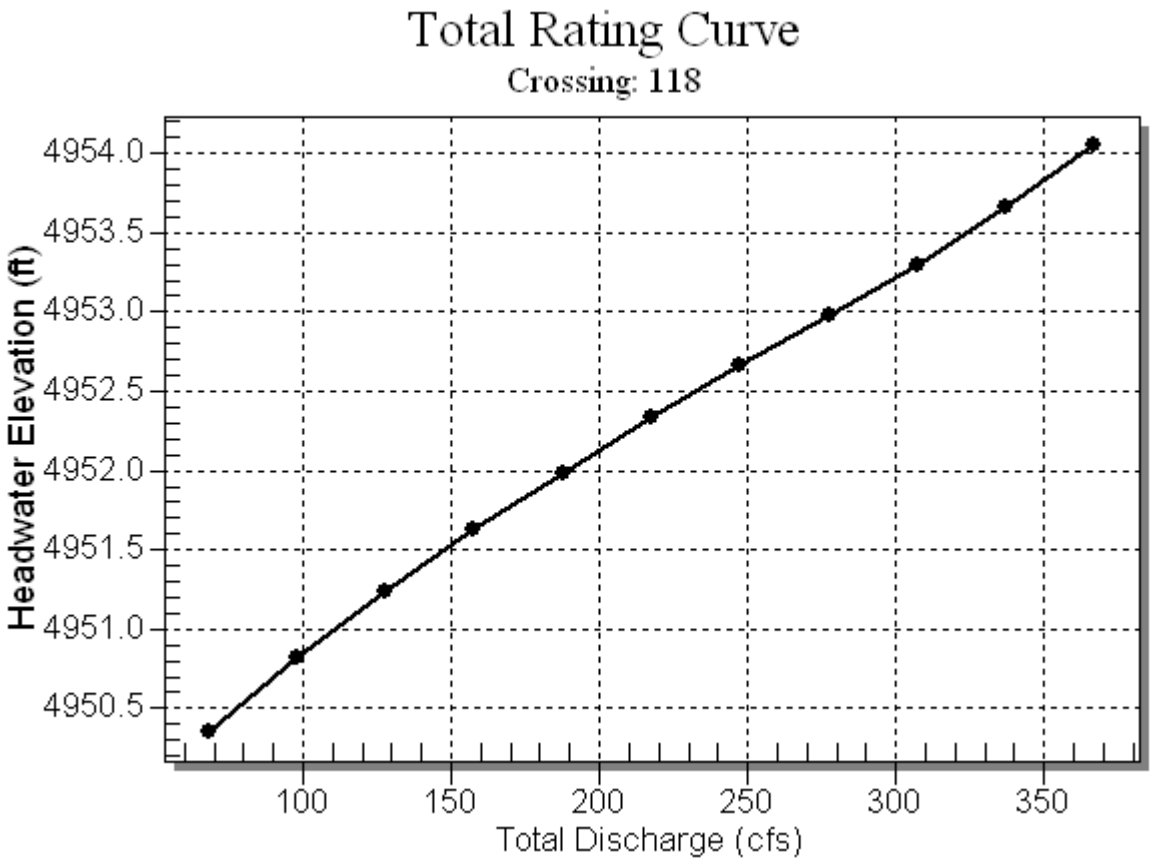
Roadway Surface:  Paved

Roadway Top Width:  64.00 ft

## Table 7 - Summary of Culvert Flows at Crossing: 118

| Headwater Elevation (ft) | Total Discharge (cfs) | 118 Discharge (cfs) | Roadway Discharge (cfs) | Iterations |
|---|---|---|---|---|
| 4950.36 | 68.00 | 68.00 | 0.00 | 1 |
| 4950.82 | 97.90 | 97.90 | 0.00 | 1 |
| 4951.24 | 127.80 | 127.80 | 0.00 | 1 |
| 4951.63 | 157.70 | 157.70 | 0.00 | 1 |
| 4951.99 | 187.60 | 187.60 | 0.00 | 1 |
| 4952.33 | 217.50 | 217.50 | 0.00 | 1 |
| 4952.66 | 247.40 | 247.40 | 0.00 | 1 |
| 4952.99 | 277.30 | 277.30 | 0.00 | 1 |
| 4953.30 | 307.20 | 307.20 | 0.00 | 1 |
| 4953.67 | 337.10 | 337.10 | 0.00 | 1 |
| 4954.05 | 367.00 | 367.00 | 0.00 | 1 |
| 4955.10 | 440.40 | 440.40 | 0.00 | Overtopping |

**Rating Curve Plot for Crossing: 118**



## Table 8 - Culvert Summary Table: 118

| Total Discharge (cfs) | Culvert Discharge (cfs) | Headwater Elevation (ft) | Inlet Control Depth (ft) | Outlet Control Depth (ft) | Flow Type | Normal Depth (ft) | Critical Depth (ft) | Outlet Depth (ft) | Tailwater Depth (ft) | Outlet Velocity (ft/s) | Tailwater Velocity (ft/s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 68.00 | 68.00 | 4950.36 | 1.714 | 1.755 | 1-S1t | 0.944 | 1.001 | 1.833 | 1.833 | 3.092 | 3.009 |
| 97.90 | 97.90 | 4950.82 | 2.173 | 2.220 | 1-S1t | 1.215 | 1.277 | 2.167 | 2.167 | 3.765 | 3.305 |
| 127.80 | 127.80 | 4951.24 | 2.582 | 2.640 | 1-S1t | 1.454 | 1.525 | 2.443 | 2.443 | 4.359 | 3.541 |
| 157.70 | 157.70 | 4951.63 | 2.960 | 3.032 | 1-S1t | 1.686 | 1.754 | 2.683 | 2.683 | 4.899 | 3.737 |
| 187.60 | 187.60 | 4951.99 | 3.317 | 3.388 | 1-S1t | 1.906 | 1.969 | 2.897 | 2.897 | 5.397 | 3.905 |
| 217.50 | 217.50 | 4952.33 | 3.662 | 3.732 | 1-S1t | 2.119 | 2.174 | 3.090 | 3.090 | 5.865 | 4.054 |
| 247.40 | 247.40 | 4952.66 | 4.004 | 4.062 | 5-S1t | 2.327 | 2.368 | 3.267 | 3.267 | 6.310 | 4.190 |
| 277.30 | 277.30 | 4952.99 | 4.347 | 4.385 | 5-S1t | 2.529 | 2.556 | 3.432 | 3.432 | 6.733 | 4.314 |
| 307.20 | 307.20 | 4953.30 | 4.700 | 4.689 | 5-S1t | 2.728 | 2.736 | 3.587 | 3.587 | 7.136 | 4.426 |
| 337.10 | 337.10 | 4953.67 | 5.066 | 4.988 | 7-M1t | 2.923 | 2.911 | 3.732 | 3.732 | 7.528 | 4.533 |
| 367.00 | 367.00 | 4954.05 | 5.451 | 5.280 | 7-M1t | 3.116 | 3.081 | 3.871 | 3.871 | 7.902 | 4.629 |

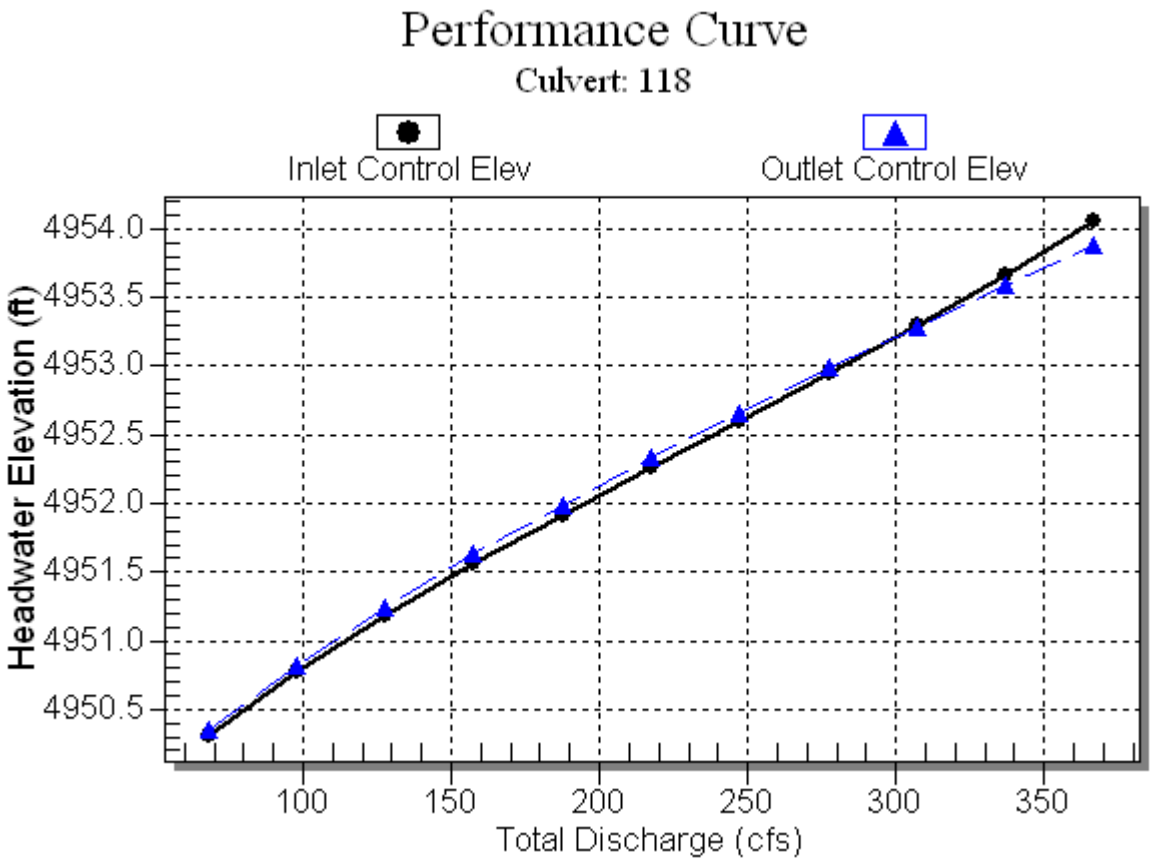
**********

Inlet Elevation (invert): 4948.60 ft,  Outlet Elevation (invert): 4948.10 ft

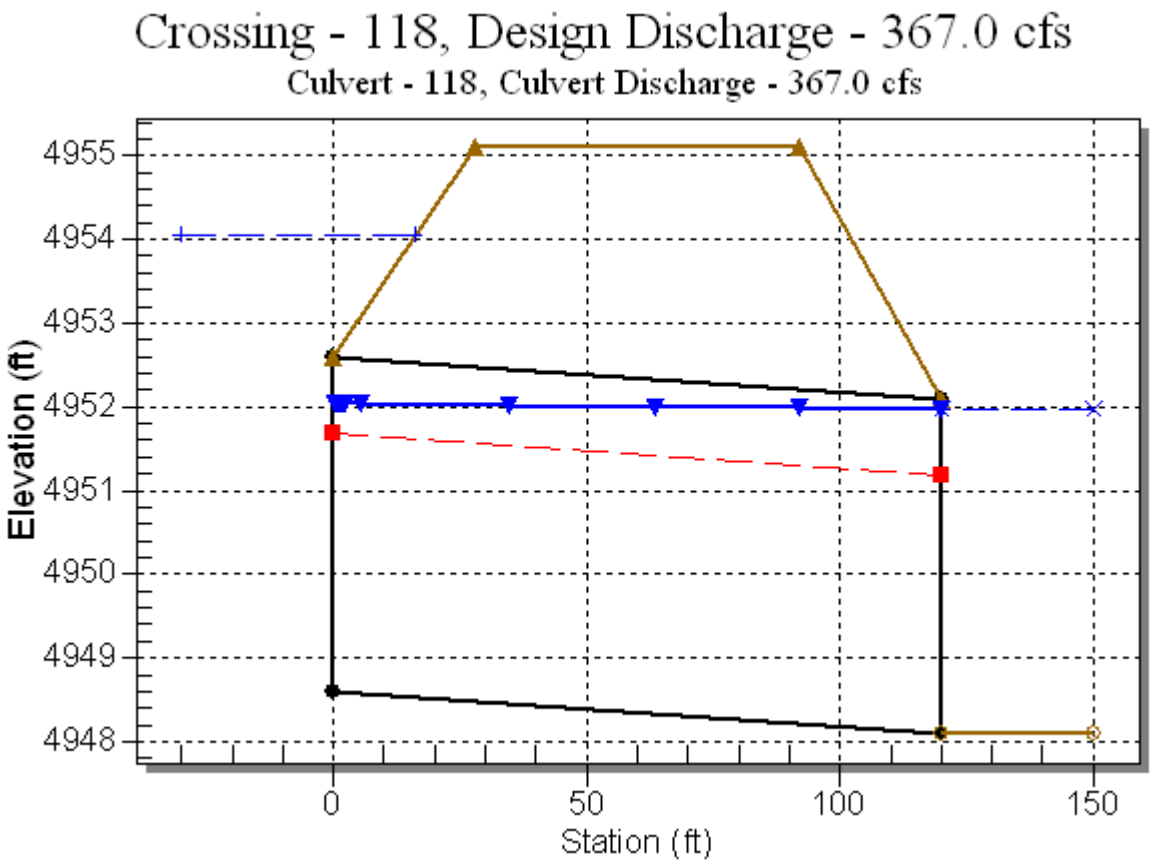
Culvert Length: 120.00 ft,  Culvert Slope: 0.0042

**********

**Culvert Performance Curve Plot: 118**



**Water Surface Profile Plot for Culvert: 118**




**Site Data - 118**

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 4948.60 ft

Outlet Station: 120.00 ft

Outlet Elevation: 4948.10 ft

Number of Barrels: 2

**Culvert Data Summary - 118**

Barrel Shape: Concrete Box

Barrel Span: 6.00 ft

Barrel Rise: 4.00 ft

Barrel Material: Concrete

Barrel Manning's n: 0.0130

Inlet Type: Conventional

Inlet Edge Condition: Square Edge (90º) Headwall

Inlet Depression: None

**Table 9 - Downstream Channel Rating Curve (Crossing: 118)**

| Flow (cfs) | Water Surface Elev (ft) | Depth (ft) | Velocity (ft/s) | Shear (psf) | Froude Number |
|---|---|---|---|---|---|
| 68.00 | 4949.93 | 1.83 | 3.01 | 0.81 | 0.49 |
| 97.90 | 4950.27 | 2.17 | 3.31 | 0.96 | 0.51 |
| 127.80 | 4950.54 | 2.44 | 3.54 | 1.08 | 0.51 |
| 157.70 | 4950.78 | 2.68 | 3.74 | 1.19 | 0.52 |
| 187.60 | 4951.00 | 2.90 | 3.90 | 1.28 | 0.53 |
| 217.50 | 4951.19 | 3.09 | 4.05 | 1.37 | 0.53 |
| 247.40 | 4951.37 | 3.27 | 4.19 | 1.45 | 0.54 |
| 277.30 | 4951.53 | 3.43 | 4.31 | 1.52 | 0.54 |
| 307.20 | 4951.69 | 3.59 | 4.43 | 1.59 | 0.54 |
| 337.10 | 4951.83 | 3.73 | 4.53 | 1.65 | 0.55 |
| 367.00 | 4951.97 | 3.87 | 4.63 | 1.71 | 0.55 |

## Tailwater Channel Data - 118

Tailwater Channel Option:  Trapezoidal Channel

Bottom Width:  5.00 ft

Side Slope (H:V):  4.00 (_:1)

Channel Slope:  0.0071

Channel Manning's n:  0.0450

Channel Invert Elevation:  4948.10 ft

## Roadway Data for Crossing: 118

Roadway Profile Shape:  Constant Roadway Elevation

Crest Length:  100.00 ft

Crest Elevation:  4955.10 ft

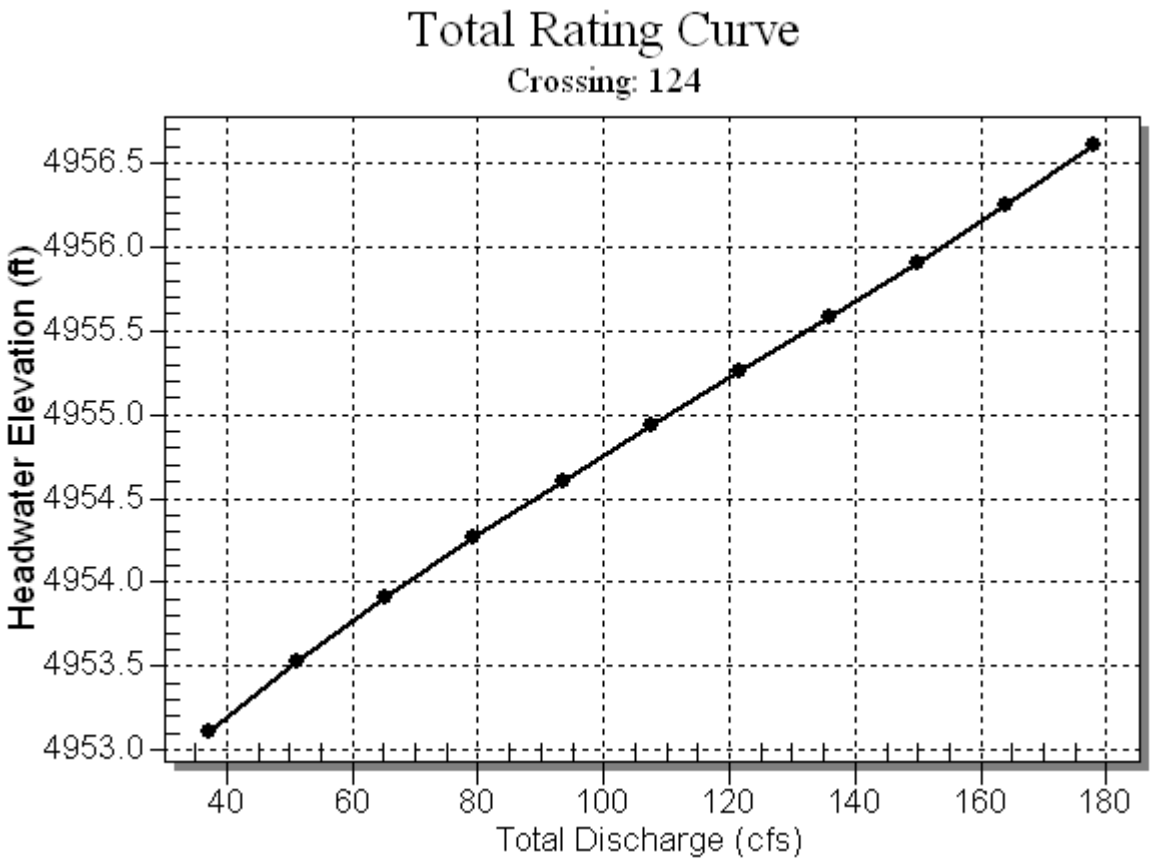
Roadway Surface:  Paved

Roadway Top Width:  64.00 ft

## Table 10 - Summary of Culvert Flows at Crossing: 124

| Headwater Elevation (ft) | Total Discharge (cfs) | 124 Discharge (cfs) | Roadway Discharge (cfs) | Iterations |
|---|---|---|---|---|
| 4953.11 | 37.00 | 37.00 | 0.00 | 1 |
| 4953.53 | 51.10 | 51.10 | 0.00 | 1 |
| 4953.91 | 65.20 | 65.20 | 0.00 | 1 |
| 4954.27 | 79.30 | 79.30 | 0.00 | 1 |
| 4954.61 | 93.40 | 93.40 | 0.00 | 1 |
| 4954.93 | 107.50 | 107.50 | 0.00 | 1 |
| 4955.25 | 121.60 | 121.60 | 0.00 | 1 |
| 4955.58 | 135.70 | 135.70 | 0.00 | 1 |
| 4955.91 | 149.80 | 149.80 | 0.00 | 1 |
| 4956.25 | 163.90 | 163.90 | 0.00 | 1 |
| 4956.61 | 178.00 | 178.00 | 0.00 | 1 |
| 4957.80 | 220.26 | 220.26 | 0.00 | Overtopping |

**Rating Curve Plot for Crossing: 124**



## Table 11 - Culvert Summary Table: 124

| Total Discharge (cfs) | Culvert Discharge (cfs) | Headwater Elevation (ft) | Inlet Control Depth (ft) | Outlet Control Depth (ft) | Flow Type | Normal Depth (ft) | Critical Depth (ft) | Outlet Depth (ft) | Tailwater Depth (ft) | Outlet Velocity (ft/s) | Tailwater Velocity (ft/s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 37.00 | 37.00 | 4953.11 | 1.811 | 0.000 | 1-S2n | 0.940 | 1.059 | 0.949 | 0.282 | 6.496 | 1.618 |
| 51.10 | 51.10 | 4953.53 | 2.232 | 0.000 | 1-S2n | 1.175 | 1.314 | 1.177 | 0.341 | 7.238 | 1.840 |
| 65.20 | 65.20 | 4953.91 | 2.614 | 0.000 | 1-S2n | 1.384 | 1.545 | 1.385 | 0.395 | 7.844 | 2.022 |
| 79.30 | 79.30 | 4954.27 | 2.969 | 0.000 | 1-S2n | 1.590 | 1.761 | 1.591 | 0.444 | 8.308 | 2.185 |
| 93.40 | 93.40 | 4954.61 | 3.306 | 0.000 | 1-S2n | 1.780 | 1.964 | 1.783 | 0.490 | 8.731 | 2.326 |
| 107.50 | 107.50 | 4954.93 | 3.632 | 0.000 | 1-S2n | 1.970 | 2.157 | 1.976 | 0.533 | 9.068 | 2.456 |
| 121.60 | 121.60 | 4955.25 | 3.954 | 0.000 | 1-S2n | 2.150 | 2.342 | 2.156 | 0.573 | 9.402 | 2.578 |
| 135.70 | 135.70 | 4955.58 | 4.277 | 0.012 | 5-S2n | 2.329 | 2.519 | 2.334 | 0.612 | 9.691 | 2.689 |
| 149.80 | 149.80 | 4955.91 | 4.607 | 0.050 | 5-S2n | 2.504 | 2.691 | 2.510 | 0.650 | 9.948 | 2.792 |
| 163.90 | 163.90 | 4956.25 | 4.949 | 0.084 | 5-S2n | 2.675 | 2.857 | 2.679 | 0.684 | 10.196 | 2.894 |
| 178.00 | 178.00 | 4956.61 | 5.306 | 0.119 | 5-S2n | 2.845 | 3.019 | 2.848 | 0.719 | 10.418 | 2.986 |

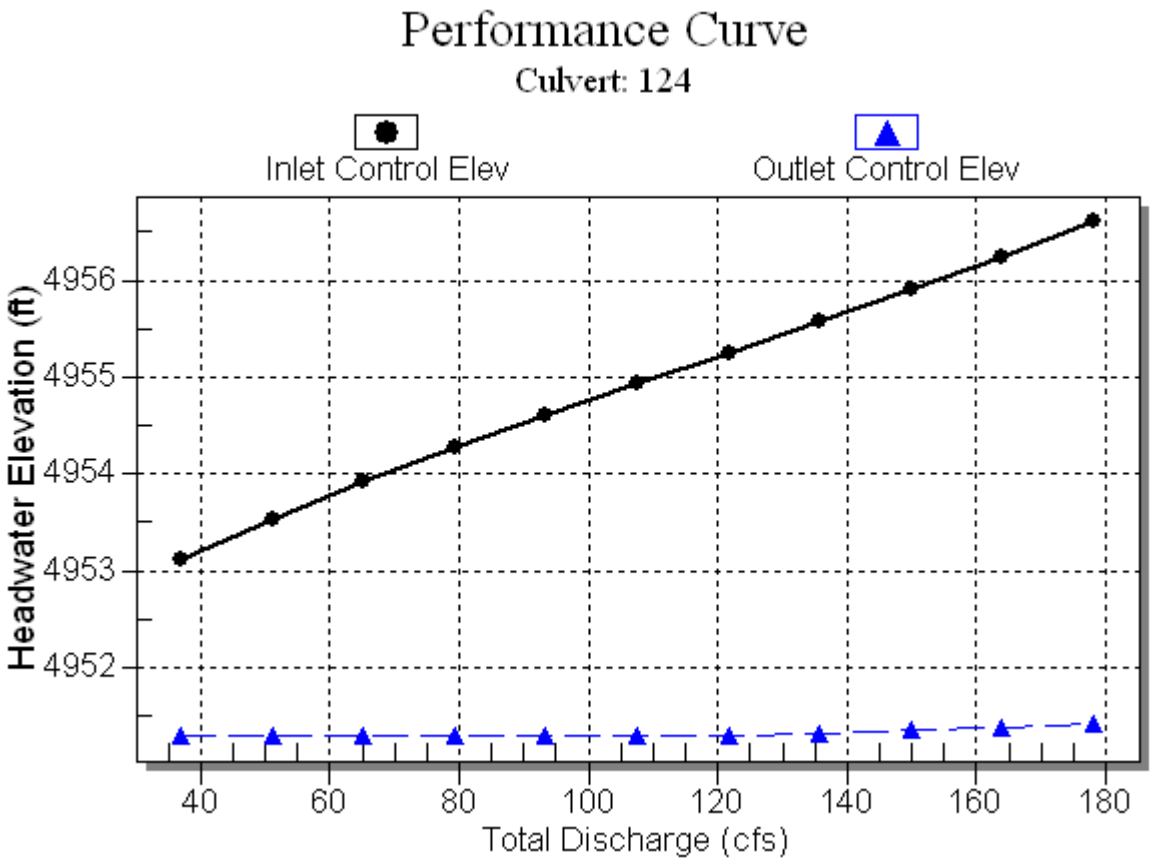
**********

Inlet Elevation (invert): 4951.30 ft,  Outlet Elevation (invert): 4950.70 ft

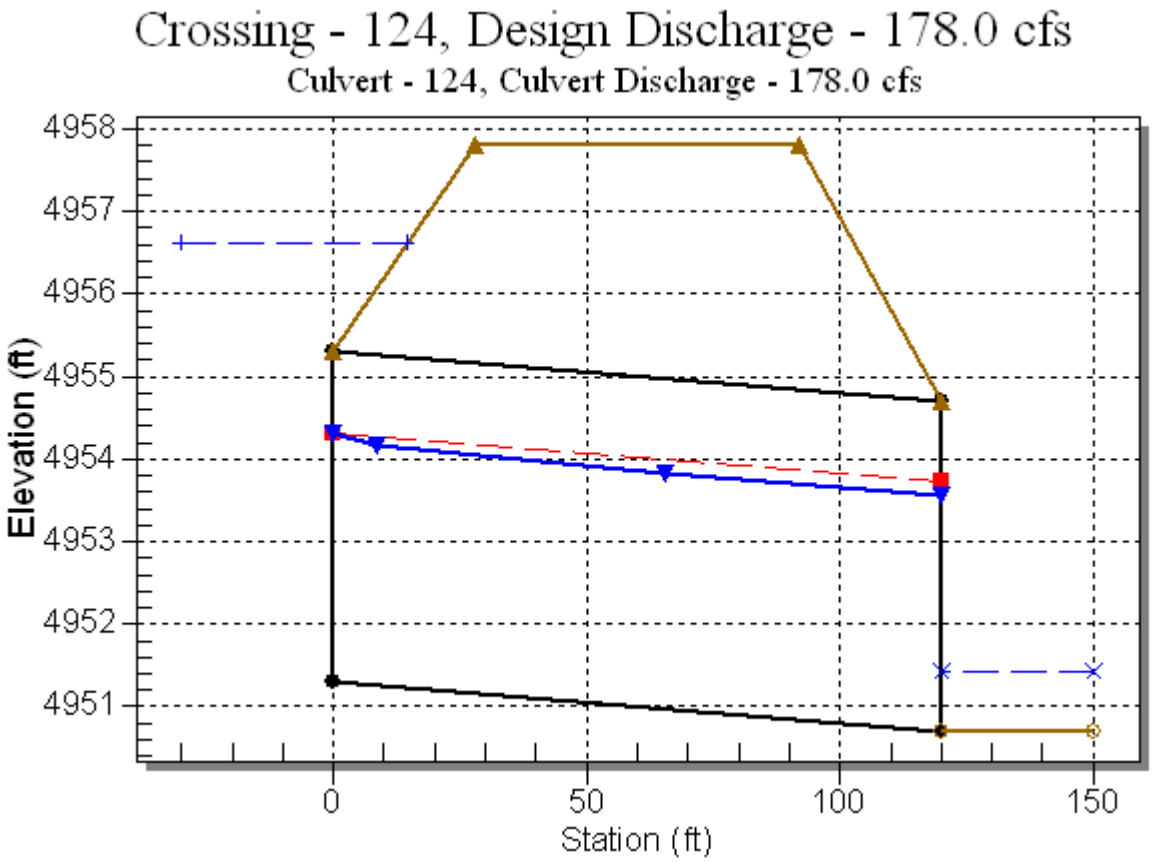
Culvert Length: 120.00 ft,  Culvert Slope: 0.0050

**********

**Culvert Performance Curve Plot: 124**



**Water Surface Profile Plot for Culvert: 124**




**Site Data - 124**

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 4951.30 ft

Outlet Station: 120.00 ft

Outlet Elevation: 4950.70 ft

Number of Barrels: 1

**Culvert Data Summary - 124**

Barrel Shape: Concrete Box

Barrel Span: 6.00 ft

Barrel Rise: 4.00 ft

Barrel Material: Concrete

Barrel Manning's n: 0.0130

Inlet Type: Conventional

Inlet Edge Condition: Square Edge (90º) Headwall

Inlet Depression: None

**Table 12 - Downstream Channel Rating Curve (Crossing: 124)**

| Flow (cfs) | Water Surface Elev (ft) | Depth (ft) | Velocity (ft/s) | Shear (psf) | Froude Number |
|---|---|---|---|---|---|
| 37.00 | 4950.98 | 0.28 | 1.62 | 0.23 | 0.54 |
| 51.10 | 4951.04 | 0.34 | 1.84 | 0.28 | 0.56 |
| 65.20 | 4951.10 | 0.40 | 2.02 | 0.33 | 0.57 |
| 79.30 | 4951.14 | 0.44 | 2.19 | 0.37 | 0.58 |
| 93.40 | 4951.19 | 0.49 | 2.33 | 0.41 | 0.59 |
| 107.50 | 4951.23 | 0.53 | 2.46 | 0.44 | 0.60 |
| 121.60 | 4951.27 | 0.57 | 2.58 | 0.48 | 0.61 |
| 135.70 | 4951.31 | 0.61 | 2.69 | 0.51 | 0.61 |
| 149.80 | 4951.35 | 0.65 | 2.79 | 0.54 | 0.62 |
| 163.90 | 4951.38 | 0.68 | 2.89 | 0.57 | 0.63 |
| 178.00 | 4951.42 | 0.72 | 2.99 | 0.60 | 0.63 |

## Tailwater Channel Data - 124

Tailwater Channel Option:  Trapezoidal Channel

Bottom Width:  80.00 ft

Side Slope (H:V):  4.00 (_:1)

Channel Slope:  0.0133

Channel Manning's n:  0.0450

Channel Invert Elevation:  4950.70 ft

## Roadway Data for Crossing: 124

Roadway Profile Shape:  Constant Roadway Elevation

Crest Length:  100.00 ft

Crest Elevation:  4957.80 ft

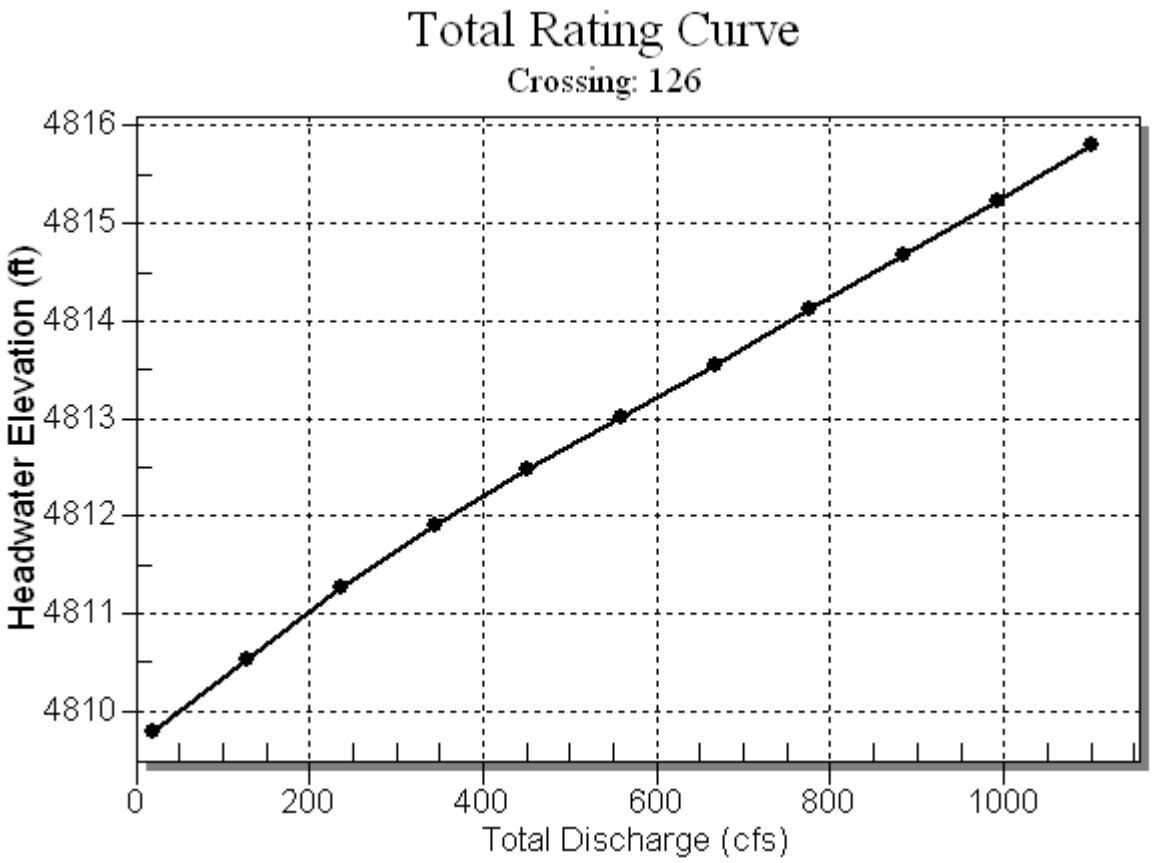
Roadway Surface:  Paved

Roadway Top Width:  64.00 ft

## Table 13 - Summary of Culvert Flows at Crossing: 126

| Headwater Elevation (ft) | Total Discharge (cfs) | 126 Discharge (cfs) | Roadway Discharge (cfs) | Iterations |
|---|---|---|---|---|
| 4809.79 | 19.00 | 19.00 | 0.00 | 1 |
| 4810.52 | 127.20 | 127.20 | 0.00 | 1 |
| 4811.26 | 235.40 | 235.40 | 0.00 | 1 |
| 4811.91 | 343.60 | 343.60 | 0.00 | 1 |
| 4812.47 | 451.80 | 451.80 | 0.00 | 1 |
| 4813.00 | 560.00 | 560.00 | 0.00 | 1 |
| 4813.55 | 668.20 | 668.20 | 0.00 | 1 |
| 4814.12 | 776.40 | 776.40 | 0.00 | 1 |
| 4814.68 | 884.60 | 884.60 | 0.00 | 1 |
| 4815.24 | 992.80 | 992.80 | 0.00 | 1 |
| 4815.80 | 1101.00 | 1100.80 | 0.03 | 5 |
| 4815.80 | 1101.00 | 1101.00 | 0.00 | Overtopping |

**Rating Curve Plot for Crossing: 126**



## Table 14 - Culvert Summary Table: 126

| Total Discharge (cfs) | Culvert Discharge (cfs) | Headwater Elevation (ft) | Inlet Control Depth (ft) | Outlet Control Depth (ft) | Flow Type | Normal Depth (ft) | Critical Depth (ft) | Outlet Depth (ft) | Tailwater Depth (ft) | Outlet Velocity (ft/s) | Tailwater Velocity (ft/s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.00 | 19.00 | 4809.79 | 0.390 | 0.390 | 1-S2n | 0.091 | 0.165 | 0.155 | 0.491 | 2.448 | 0.860 |
| 127.20 | 127.20 | 4810.52 | 1.010 | 1.119 | 1-S1t | 0.503 | 0.587 | 1.566 | 1.566 | 1.625 | 1.805 |
| 235.40 | 235.40 | 4811.26 | 1.512 | 1.857 | 1-S1t | 0.759 | 0.885 | 2.291 | 2.291 | 2.055 | 2.283 |
| 343.60 | 343.60 | 4811.91 | 1.945 | 2.507 | 1-S1t | 0.963 | 1.139 | 2.903 | 2.903 | 2.367 | 2.630 |
| 451.80 | 451.80 | 4812.47 | 2.319 | 3.073 | 1-S1t | 1.158 | 1.367 | 3.452 | 3.452 | 2.618 | 2.909 |
| 560.00 | 560.00 | 4813.00 | 2.666 | 3.604 | 1-S1t | 1.330 | 1.577 | 3.956 | 3.956 | 2.831 | 3.146 |
| 668.20 | 668.20 | 4813.55 | 2.991 | 4.153 | 4-FFf | 1.495 | 1.774 | 4.000 | 4.430 | 3.341 | 3.352 |
| 776.40 | 776.40 | 4814.12 | 3.301 | 4.716 | 4-FFf | 1.655 | 1.961 | 4.000 | 4.880 | 3.882 | 3.536 |
| 884.60 | 884.60 | 4814.68 | 3.601 | 5.277 | 4-FFf | 1.804 | 2.139 | 4.000 | 5.310 | 4.423 | 3.702 |
| 992.80 | 992.80 | 4815.24 | 3.898 | 5.838 | 4-FFf | 1.953 | 2.310 | 4.000 | 5.724 | 4.964 | 3.854 |
| 1101.00 | 1100.80 | 4815.80 | 4.194 | 6.402 | 4-FFf | 2.094 | 2.474 | 4.000 | 6.125 | 5.504 | 3.995 |

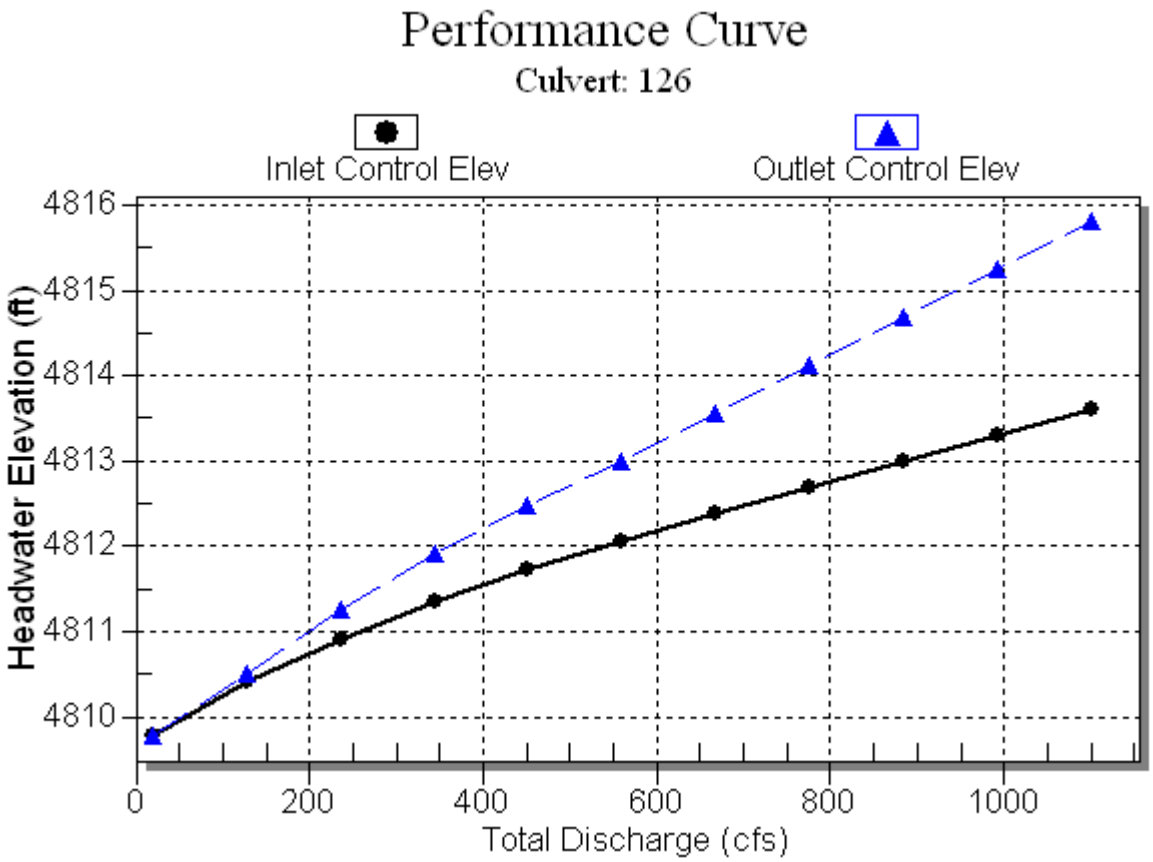
**********

Inlet Elevation (invert): 4809.40 ft,  Outlet Elevation (invert): 4808.80 ft

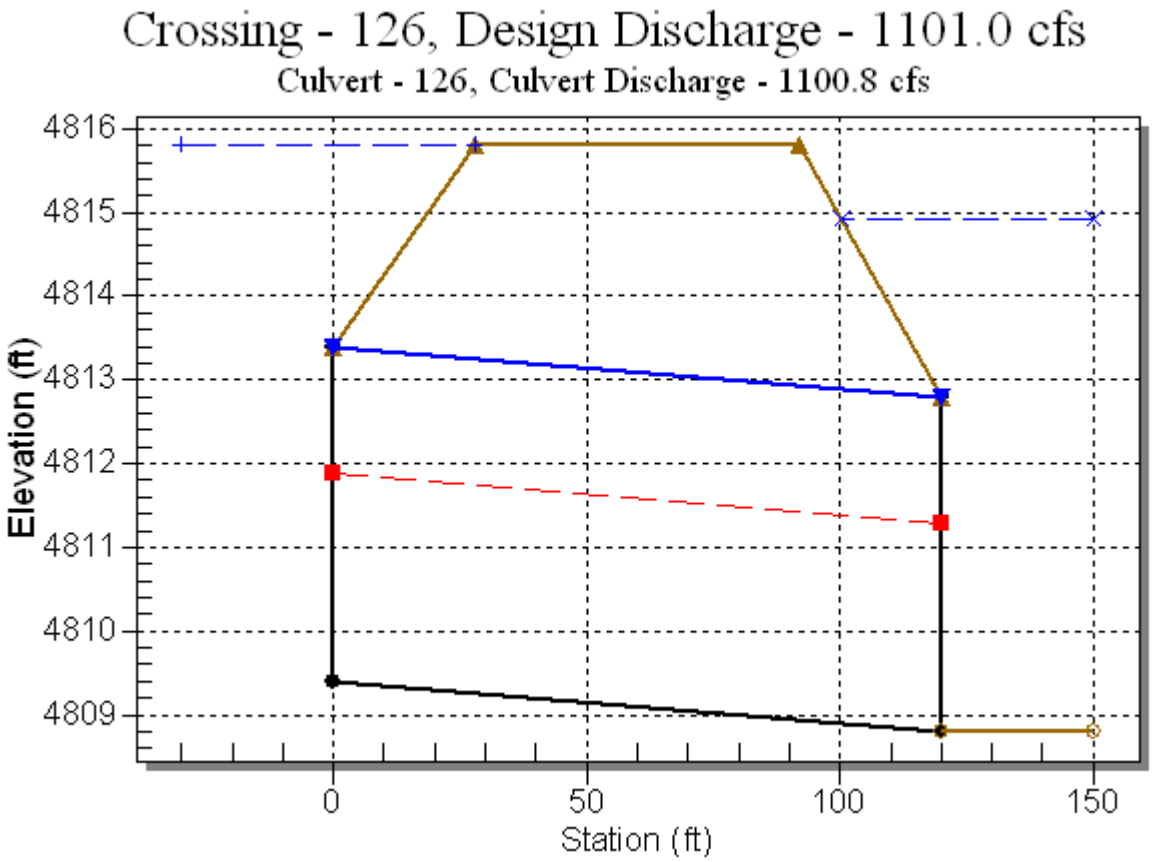
Culvert Length: 120.00 ft,  Culvert Slope: 0.0050

**********

**Culvert Performance Curve Plot: 126**



**Water Surface Profile Plot for Culvert: 126**




**Site Data - 126**

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 4809.40 ft

Outlet Station: 120.00 ft

Outlet Elevation: 4808.80 ft

Number of Barrels: 5

**Culvert Data Summary - 126**

Barrel Shape: Concrete Box

Barrel Span: 10.00 ft

Barrel Rise: 4.00 ft

Barrel Material: Concrete

Barrel Manning's n: 0.0130

Inlet Type: Conventional

Inlet Edge Condition: Square Edge (90º) Headwall

Inlet Depression: None

**Table 15 - Downstream Channel Rating Curve (Crossing: 126)**

| Flow (cfs) | Water Surface Elev (ft) | Depth (ft) | Velocity (ft/s) | Shear (psf) | Froude Number |
|---|---|---|---|---|---|
| 19.00 | 4809.29 | 0.49 | 0.86 | 0.06 | 0.22 |
| 127.20 | 4810.37 | 1.57 | 1.81 | 0.18 | 0.25 |
| 235.40 | 4811.09 | 2.29 | 2.28 | 0.26 | 0.27 |
| 343.60 | 4811.70 | 2.90 | 2.63 | 0.33 | 0.27 |
| 451.80 | 4812.25 | 3.45 | 2.91 | 0.39 | 0.28 |
| 560.00 | 4812.76 | 3.96 | 3.15 | 0.44 | 0.28 |
| 668.20 | 4813.23 | 4.43 | 3.35 | 0.50 | 0.28 |
| 776.40 | 4813.68 | 4.88 | 3.54 | 0.55 | 0.28 |
| 884.60 | 4814.11 | 5.31 | 3.70 | 0.60 | 0.28 |
| 992.80 | 4814.52 | 5.72 | 3.85 | 0.64 | 0.28 |
| 1101.00 | 4814.92 | 6.12 | 3.99 | 0.69 | 0.28 |

## Tailwater Channel Data - 126

Tailwater Channel Option:  Rectangular Channel

Bottom Width:  45.00 ft

Channel Slope:  0.0018

Channel Manning's n:  0.0450

Channel Invert Elevation:  4808.80 ft

## Roadway Data for Crossing: 126

Roadway Profile Shape:  Constant Roadway Elevation

Crest Length:  100.00 ft

Crest Elevation:  4815.80 ft

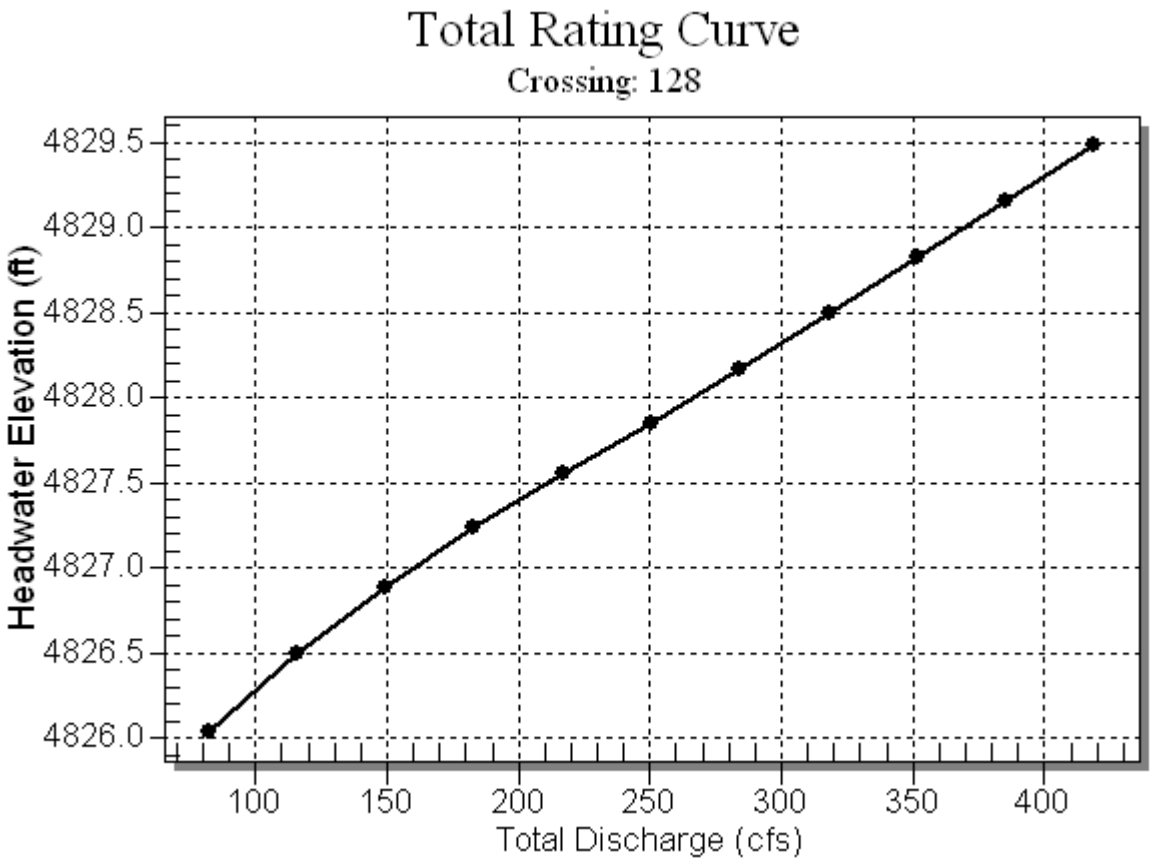
Roadway Surface:  Paved

Roadway Top Width:  64.00 ft

## Table 16 - Summary of Culvert Flows at Crossing: 128

| Headwater Elevation (ft) | Total Discharge (cfs) | 128 Discharge (cfs) | Roadway Discharge (cfs) | Iterations |
|---|---|---|---|---|
| 4826.04 | 82.00 | 82.00 | 0.00 | 1 |
| 4826.50 | 115.70 | 115.70 | 0.00 | 1 |
| 4826.89 | 149.40 | 149.40 | 0.00 | 1 |
| 4827.24 | 183.10 | 183.10 | 0.00 | 1 |
| 4827.55 | 216.80 | 216.80 | 0.00 | 1 |
| 4827.85 | 250.50 | 250.50 | 0.00 | 1 |
| 4828.17 | 284.20 | 284.20 | 0.00 | 1 |
| 4828.50 | 317.90 | 317.90 | 0.00 | 1 |
| 4828.82 | 351.60 | 351.60 | 0.00 | 1 |
| 4829.15 | 385.30 | 385.30 | 0.00 | 1 |
| 4829.48 | 419.00 | 419.00 | 0.00 | 1 |
| 4830.40 | 502.60 | 502.60 | 0.00 | Overtopping |

**Rating Curve Plot for Crossing: 128**



## Table 17 - Culvert Summary Table: 128

| Total Discharge (cfs) | Culvert Discharge (cfs) | Headwater Elevation (ft) | Inlet Control Depth (ft) | Outlet Control Depth (ft) | Flow Type | Normal Depth (ft) | Critical Depth (ft) | Outlet Depth (ft) | Tailwater Depth (ft) | Outlet Velocity (ft/s) | Tailwater Velocity (ft/s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 82.00 | 82.00 | 4826.04 | 1.479 | 2.037 | 1-S1t | 0.773 | 0.866 | 2.508 | 2.508 | 1.816 | 2.175 |
| 115.70 | 115.70 | 4826.50 | 1.861 | 2.495 | 1-S1t | 0.966 | 1.089 | 2.920 | 2.920 | 2.201 | 2.375 |
| 149.40 | 149.40 | 4826.89 | 2.195 | 2.887 | 1-S1t | 1.153 | 1.291 | 3.264 | 3.264 | 2.543 | 2.535 |
| 183.10 | 183.10 | 4827.24 | 2.504 | 3.235 | 1-S1t | 1.323 | 1.479 | 3.564 | 3.564 | 2.855 | 2.669 |
| 216.80 | 216.80 | 4827.55 | 2.795 | 3.552 | 1-S1t | 1.487 | 1.655 | 3.830 | 3.830 | 3.145 | 2.785 |
| 250.50 | 250.50 | 4827.85 | 3.071 | 3.849 | 1-S1f | 1.647 | 1.822 | 4.000 | 4.073 | 3.479 | 2.888 |
| 284.20 | 284.20 | 4828.17 | 3.337 | 4.171 | 4-FFf | 1.798 | 1.982 | 4.000 | 4.296 | 3.947 | 2.982 |
| 317.90 | 317.90 | 4828.50 | 3.597 | 4.496 | 4-FFf | 1.949 | 2.136 | 4.000 | 4.503 | 4.415 | 3.068 |
| 351.60 | 351.60 | 4828.82 | 3.854 | 4.823 | 4-FFf | 2.095 | 2.285 | 4.000 | 4.697 | 4.883 | 3.147 |
| 385.30 | 385.30 | 4829.15 | 4.110 | 5.152 | 4-FFf | 2.237 | 2.428 | 4.000 | 4.879 | 5.351 | 3.221 |
| 419.00 | 419.00 | 4829.48 | 4.369 | 5.485 | 4-FFf | 2.379 | 2.568 | 4.000 | 5.053 | 5.819 | 3.289 |

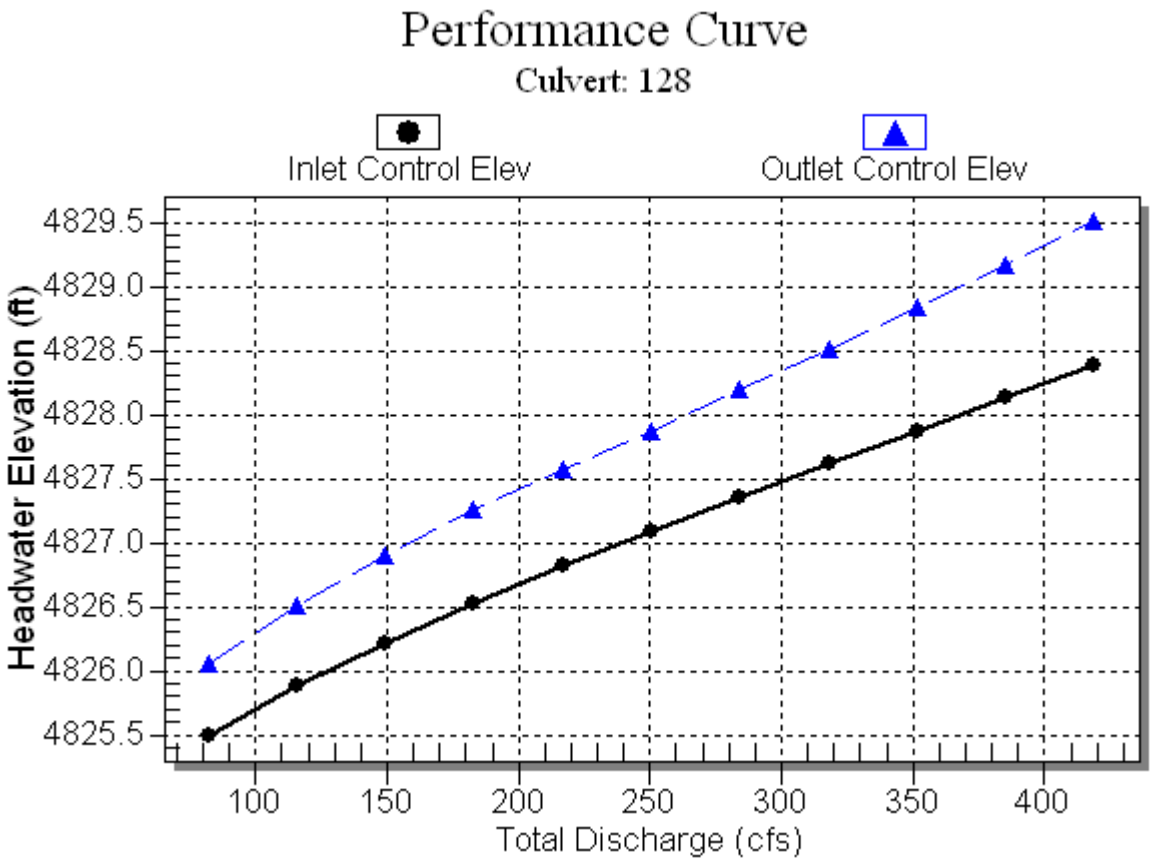
**********

Inlet Elevation (invert): 4824.00 ft,  Outlet Elevation (invert): 4823.40 ft

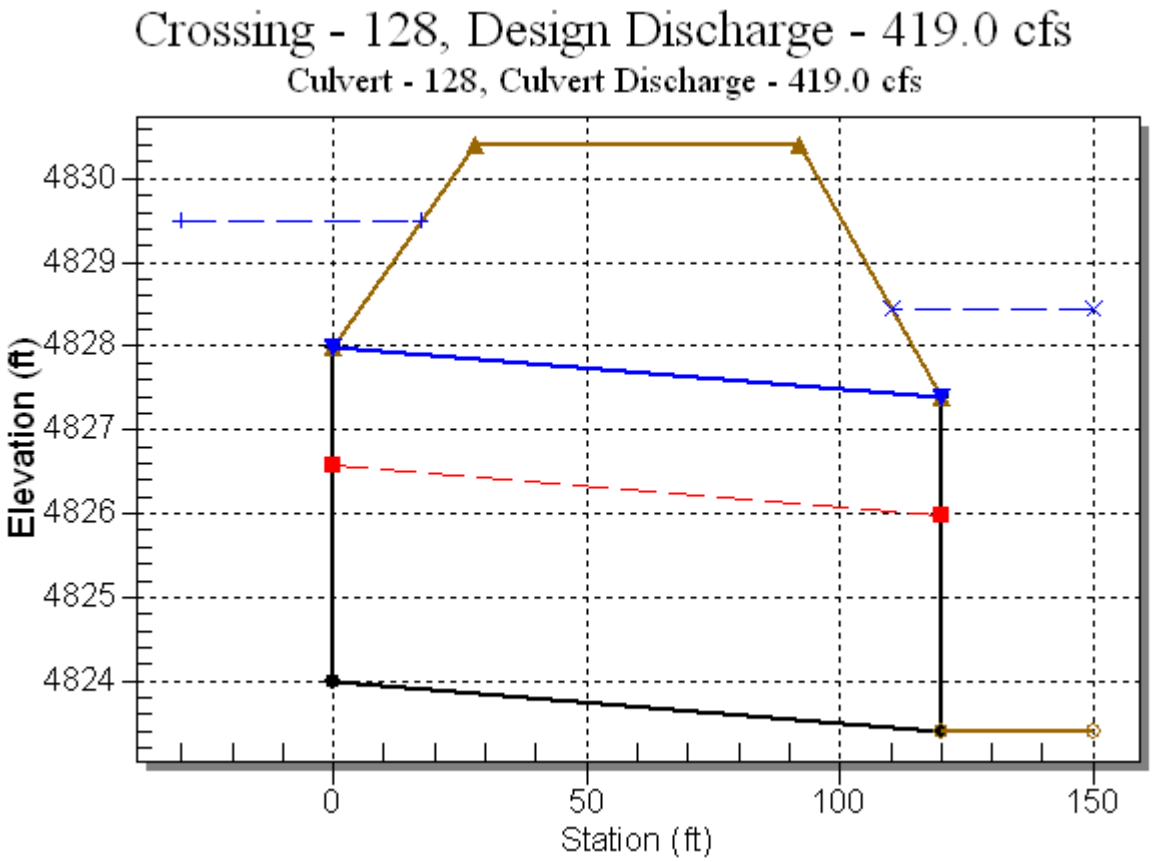
Culvert Length: 120.00 ft,  Culvert Slope: 0.0050

**********

**Culvert Performance Curve Plot: 128**



**Water Surface Profile Plot for Culvert: 128**




**Site Data - 128**

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 4824.00 ft

Outlet Station: 120.00 ft

Outlet Elevation: 4823.40 ft

Number of Barrels: 3

**Culvert Data Summary - 128**

Barrel Shape: Concrete Box

Barrel Span: 6.00 ft

Barrel Rise: 4.00 ft

Barrel Material: Concrete

Barrel Manning's n: 0.0130

Inlet Type: Conventional

Inlet Edge Condition: Square Edge (90º) Headwall

Inlet Depression: None

**Table 18 - Downstream Channel Rating Curve (Crossing: 128)**

| Flow (cfs) | Water Surface Elev (ft) | Depth (ft) | Velocity (ft/s) | Shear (psf) | Froude Number |
|---|---|---|---|---|---|
| 82.00 | 4825.91 | 2.51 | 2.17 | 0.41 | 0.31 |
| 115.70 | 4826.32 | 2.92 | 2.38 | 0.47 | 0.32 |
| 149.40 | 4826.66 | 3.26 | 2.54 | 0.53 | 0.32 |
| 183.10 | 4826.96 | 3.56 | 2.67 | 0.58 | 0.33 |
| 216.80 | 4827.23 | 3.83 | 2.79 | 0.62 | 0.33 |
| 250.50 | 4827.47 | 4.07 | 2.89 | 0.66 | 0.34 |
| 284.20 | 4827.70 | 4.30 | 2.98 | 0.70 | 0.34 |
| 317.90 | 4827.90 | 4.50 | 3.07 | 0.73 | 0.34 |
| 351.60 | 4828.10 | 4.70 | 3.15 | 0.76 | 0.34 |
| 385.30 | 4828.28 | 4.88 | 3.22 | 0.79 | 0.34 |
| 419.00 | 4828.45 | 5.05 | 3.29 | 0.82 | 0.35 |

## Tailwater Channel Data - 128

Tailwater Channel Option:  Trapezoidal Channel

Bottom Width:  5.00 ft

Side Slope (H:V):  4.00 (_:1)

Channel Slope:  0.0026

Channel Manning's n:  0.0450

Channel Invert Elevation:  4823.40 ft

## Roadway Data for Crossing: 128

Roadway Profile Shape:  Constant Roadway Elevation

Crest Length:  100.00 ft

Crest Elevation:  4830.40 ft

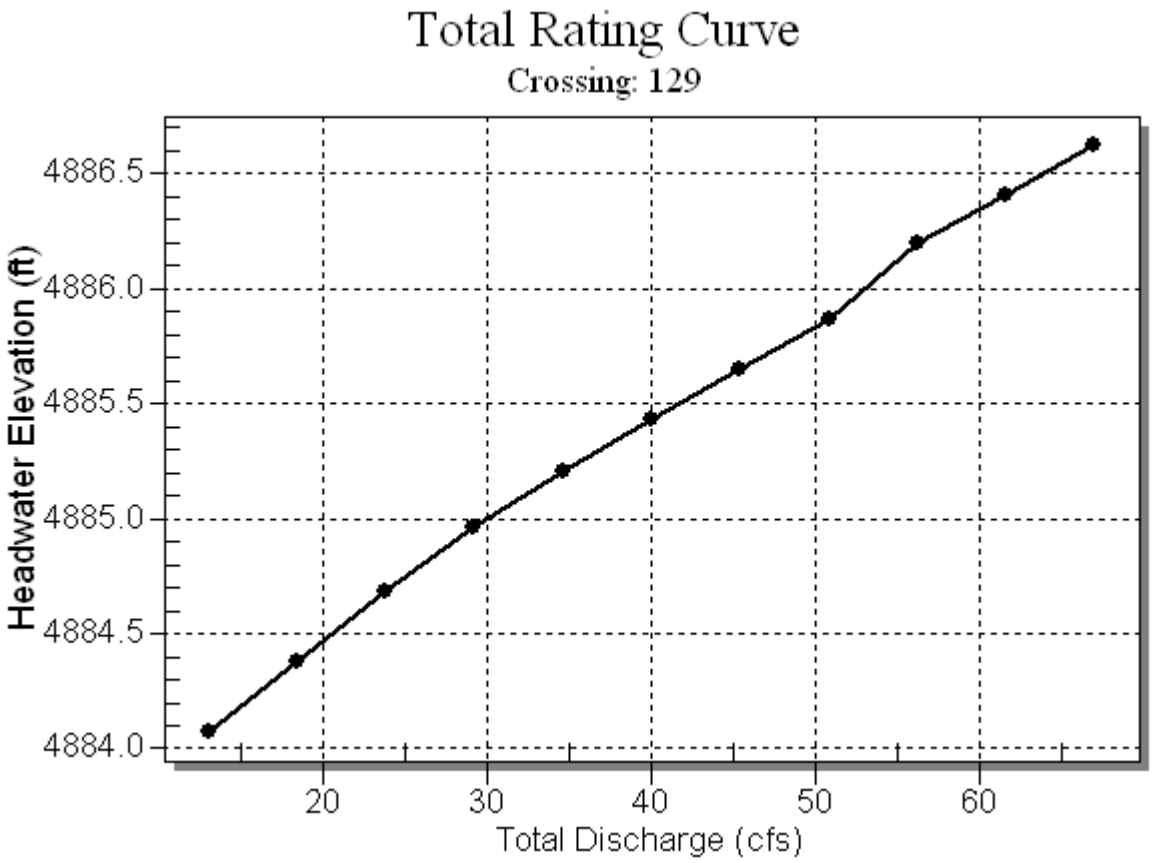
Roadway Surface:  Paved

Roadway Top Width:  64.00 ft

## Table 19 - Summary of Culvert Flows at Crossing: 129

| Headwater Elevation (ft) | Total Discharge (cfs) | 129 Discharge (cfs) | Roadway Discharge (cfs) | Iterations |
|---|---|---|---|---|
| 4884.08 | 13.00 | 13.00 | 0.00 | 1 |
| 4884.38 | 18.40 | 18.40 | 0.00 | 1 |
| 4884.69 | 23.80 | 23.80 | 0.00 | 1 |
| 4884.96 | 29.20 | 29.20 | 0.00 | 1 |
| 4885.21 | 34.60 | 34.60 | 0.00 | 1 |
| 4885.43 | 40.00 | 40.00 | 0.00 | 1 |
| 4885.65 | 45.40 | 45.40 | 0.00 | 1 |
| 4885.87 | 50.80 | 50.80 | 0.00 | 1 |
| 4886.20 | 56.20 | 56.20 | 0.00 | 1 |
| 4886.41 | 61.60 | 61.60 | 0.00 | 1 |
| 4886.62 | 67.00 | 67.00 | 0.00 | 1 |
| 4888.00 | 92.58 | 92.58 | 0.00 | Overtopping |

**Rating Curve Plot for Crossing: 129**



## Table 20 - Culvert Summary Table: 129

| Total Discharge (cfs) | Culvert Discharge (cfs) | Headwater Elevation (ft) | Inlet Control Depth (ft) | Outlet Control Depth (ft) | Flow Type | Normal Depth (ft) | Critical Depth (ft) | Outlet Depth (ft) | Tailwater Depth (ft) | Outlet Velocity (ft/s) | Tailwater Velocity (ft/s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.00 | 13.00 | 4884.08 | 1.475 | 0.000 | 1-S2n | 1.006 | 1.090 | 1.009 | 0.278 | 5.643 | 1.794 |
| 18.40 | 18.40 | 4884.38 | 1.775 | 0.000 | 1-S2n | 1.204 | 1.303 | 1.212 | 0.341 | 6.204 | 2.048 |
| 23.80 | 23.80 | 4884.69 | 2.085 | 0.000 | 1-S2n | 1.392 | 1.492 | 1.393 | 0.398 | 6.666 | 2.251 |
| 29.20 | 29.20 | 4884.96 | 2.359 | 0.000 | 1-S2n | 1.556 | 1.662 | 1.561 | 0.448 | 7.031 | 2.431 |
| 34.60 | 34.60 | 4885.21 | 2.606 | 0.000 | 1-S2n | 1.719 | 1.818 | 1.721 | 0.495 | 7.346 | 2.590 |
| 40.00 | 40.00 | 4885.43 | 2.834 | 0.000 | 1-S2n | 1.874 | 1.960 | 1.879 | 0.539 | 7.607 | 2.731 |
| 45.40 | 45.40 | 4885.65 | 3.052 | 0.000 | 1-S2n | 2.029 | 2.101 | 2.030 | 0.582 | 7.848 | 2.853 |
| 50.80 | 50.80 | 4885.87 | 3.266 | 0.021 | 1-S2n | 2.186 | 2.221 | 2.190 | 0.621 | 8.029 | 2.977 |
| 56.20 | 56.20 | 4886.20 | 3.479 | 3.600 | 2-M2c | 2.347 | 2.341 | 2.341 | 0.659 | 8.229 | 3.084 |
| 61.60 | 61.60 | 4886.41 | 3.697 | 3.810 | 2-M2c | 2.517 | 2.459 | 2.459 | 0.695 | 8.529 | 3.190 |
| 67.00 | 67.00 | 4886.62 | 3.923 | 4.024 | 2-M2c | 2.706 | 2.557 | 2.557 | 0.731 | 8.914 | 3.283 |

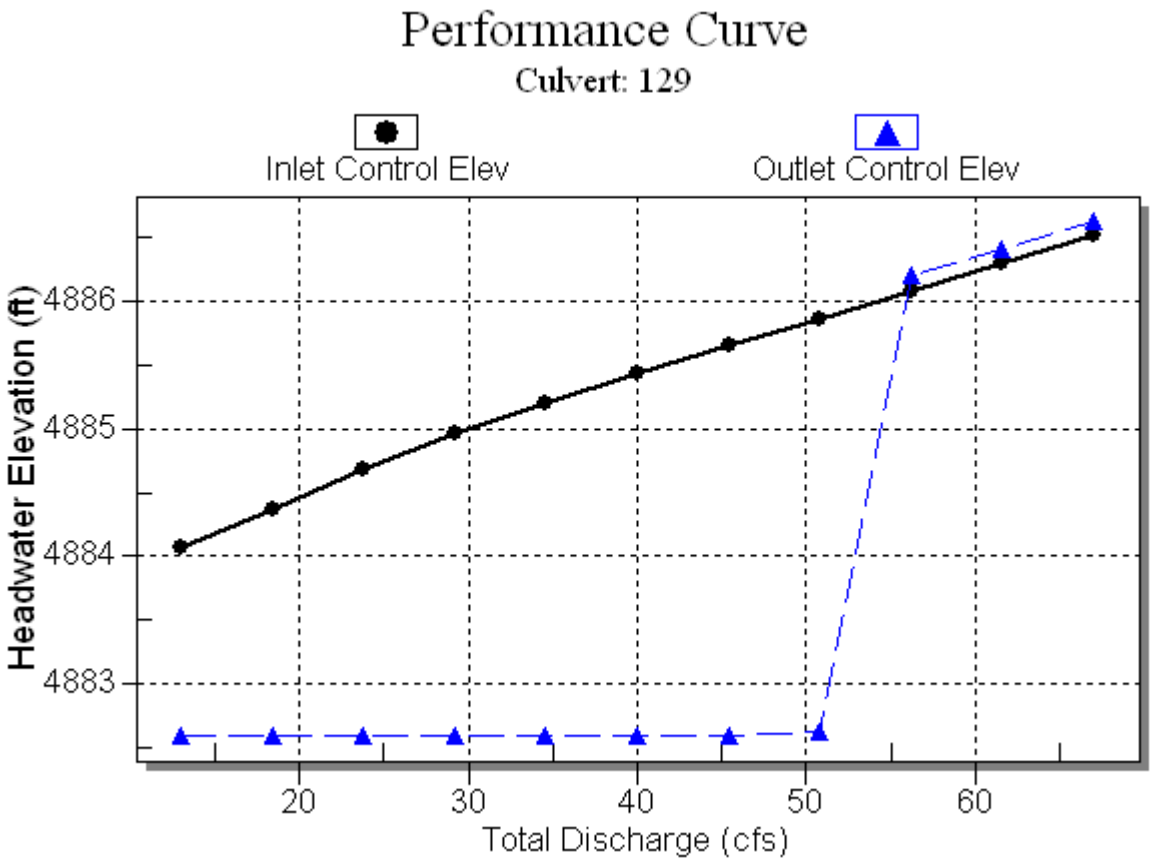
**********

Inlet Elevation (invert): 4882.60 ft,  Outlet Elevation (invert): 4882.00 ft

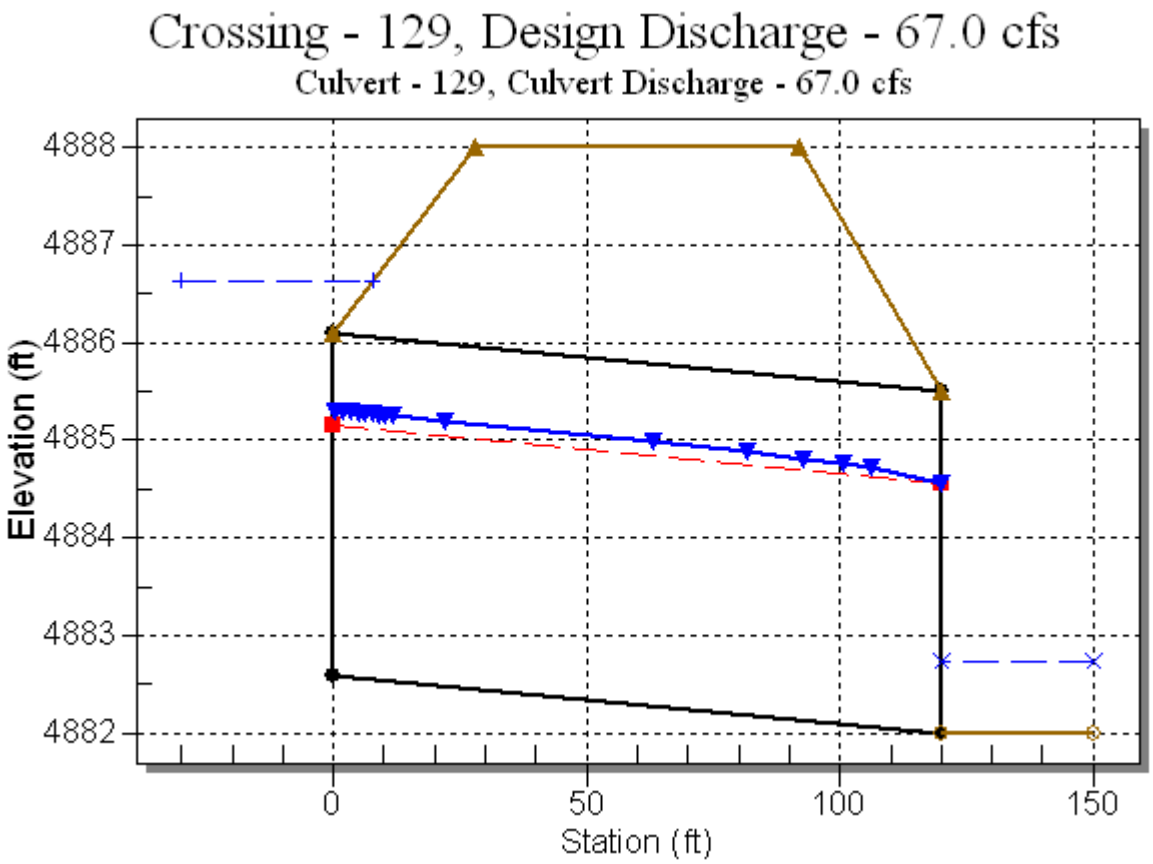
Culvert Length: 120.00 ft,  Culvert Slope: 0.0050

**********

**Culvert Performance Curve Plot: 129**



**Water Surface Profile Plot for Culvert: 129**




**Site Data - 129**

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 4882.60 ft

Outlet Station: 120.00 ft

Outlet Elevation: 4882.00 ft

Number of Barrels: 1

**Culvert Data Summary - 129**

Barrel Shape: Circular

Barrel Diameter: 3.50 ft

Barrel Material: Concrete

Barrel Manning's n: 0.0130

Inlet Type: Conventional

Inlet Edge Condition: Beveled Edge (1.5:1)

Inlet Depression: None

**Table 21 - Downstream Channel Rating Curve (Crossing: 129)**

| Flow (cfs) | Water Surface Elev (ft) | Depth (ft) | Velocity (ft/s) | Shear (psf) | Froude Number |
|---|---|---|---|---|---|
| 13.00 | 4882.28 | 0.28 | 1.79 | 0.30 | 0.61 |
| 18.40 | 4882.34 | 0.34 | 2.05 | 0.37 | 0.63 |
| 23.80 | 4882.40 | 0.40 | 2.25 | 0.43 | 0.65 |
| 29.20 | 4882.45 | 0.45 | 2.43 | 0.48 | 0.66 |
| 34.60 | 4882.50 | 0.50 | 2.59 | 0.53 | 0.67 |
| 40.00 | 4882.54 | 0.54 | 2.73 | 0.58 | 0.68 |
| 45.40 | 4882.58 | 0.58 | 2.85 | 0.63 | 0.69 |
| 50.80 | 4882.62 | 0.62 | 2.98 | 0.67 | 0.70 |
| 56.20 | 4882.66 | 0.66 | 3.08 | 0.71 | 0.70 |
| 61.60 | 4882.70 | 0.70 | 3.19 | 0.75 | 0.71 |
| 67.00 | 4882.73 | 0.73 | 3.28 | 0.79 | 0.71 |

## Tailwater Channel Data - 129

Tailwater Channel Option:  Trapezoidal Channel

Bottom Width:  25.00 ft

Side Slope (H:V):  4.00 (_:1)

Channel Slope:  0.0173

Channel Manning's n:  0.0450

Channel Invert Elevation:  4882.00 ft

## Roadway Data for Crossing: 129

Roadway Profile Shape:  Constant Roadway Elevation

Crest Length:  100.00 ft

Crest Elevation:  4888.00 ft

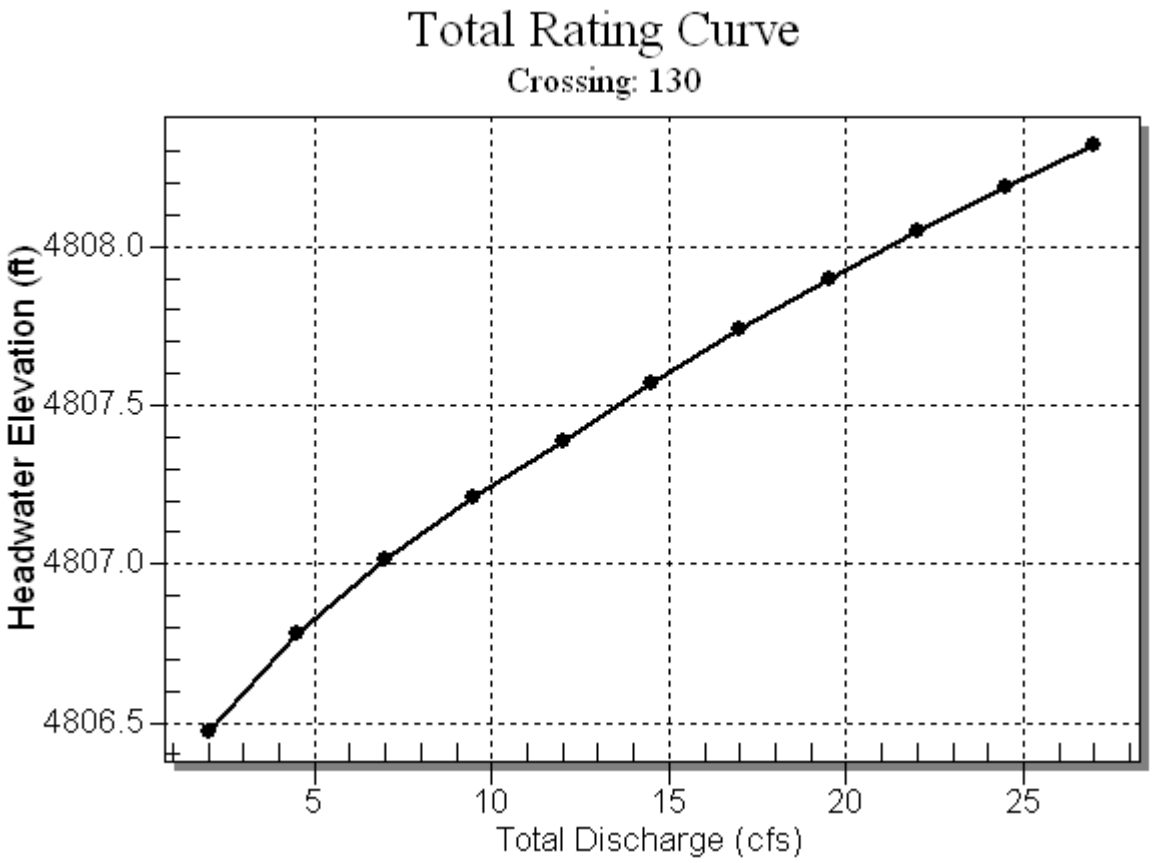
Roadway Surface:  Paved

Roadway Top Width:  64.00 ft

## Table 22 - Summary of Culvert Flows at Crossing: 130

| Headwater Elevation (ft) | Total Discharge (cfs) | 130 Discharge (cfs) | Roadway Discharge (cfs) | Iterations |
|---|---|---|---|---|
| 4806.47 | 2.00 | 2.00 | 0.00 | 1 |
| 4806.78 | 4.50 | 4.50 | 0.00 | 1 |
| 4807.01 | 7.00 | 7.00 | 0.00 | 1 |
| 4807.21 | 9.50 | 9.50 | 0.00 | 1 |
| 4807.38 | 12.00 | 12.00 | 0.00 | 1 |
| 4807.57 | 14.50 | 14.50 | 0.00 | 1 |
| 4807.74 | 17.00 | 17.00 | 0.00 | 1 |
| 4807.90 | 19.50 | 19.50 | 0.00 | 1 |
| 4808.05 | 22.00 | 22.00 | 0.00 | 1 |
| 4808.19 | 24.50 | 24.50 | 0.00 | 1 |
| 4808.32 | 27.00 | 27.00 | 0.00 | 1 |
| 4810.30 | 59.26 | 59.26 | 0.00 | Overtopping |

**Rating Curve Plot for Crossing: 130**



## Table 23 - Culvert Summary Table: 130

| Total Discharge (cfs) | Culvert Discharge (cfs) | Headwater Elevation (ft) | Inlet Control Depth (ft) | Outlet Control Depth (ft) | Flow Type | Normal Depth (ft) | Critical Depth (ft) | Outlet Depth (ft) | Tailwater Depth (ft) | Outlet Velocity (ft/s) | Tailwater Velocity (ft/s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.00 | 2.00 | 4806.47 | 0.573 | 0.000 | 1-S2n | 0.396 | 0.415 | 0.405 | 0.128 | 3.381 | 1.004 |
| 4.50 | 4.50 | 4806.78 | 0.882 | 0.000 | 1-S2n | 0.621 | 0.654 | 0.623 | 0.208 | 4.264 | 1.366 |
| 7.00 | 7.00 | 4807.01 | 1.112 | 0.000 | 1-S2n | 0.768 | 0.822 | 0.772 | 0.270 | 4.817 | 1.611 |
| 9.50 | 9.50 | 4807.21 | 1.309 | 0.000 | 1-S2n | 0.911 | 0.967 | 0.912 | 0.324 | 5.236 | 1.799 |
| 12.00 | 12.00 | 4807.38 | 1.484 | 0.000 | 1-S2n | 1.023 | 1.091 | 1.030 | 0.372 | 5.570 | 1.959 |
| 14.50 | 14.50 | 4807.57 | 1.670 | 0.000 | 1-S2n | 1.136 | 1.212 | 1.141 | 0.416 | 5.867 | 2.094 |
| 17.00 | 17.00 | 4807.74 | 1.842 | 0.000 | 1-S2n | 1.242 | 1.311 | 1.244 | 0.456 | 6.146 | 2.217 |
| 19.50 | 19.50 | 4807.90 | 2.000 | 0.000 | 1-S2n | 1.339 | 1.410 | 1.340 | 0.494 | 6.377 | 2.324 |
| 22.00 | 22.00 | 4808.05 | 2.147 | 0.000 | 1-S2n | 1.437 | 1.508 | 1.437 | 0.531 | 6.576 | 2.420 |
| 24.50 | 24.50 | 4808.19 | 2.286 | 0.000 | 1-S2n | 1.532 | 1.590 | 1.532 | 0.564 | 6.748 | 2.518 |
| 27.00 | 27.00 | 4808.32 | 2.419 | 0.000 | 1-S2n | 1.625 | 1.673 | 1.632 | 0.597 | 6.875 | 2.602 |

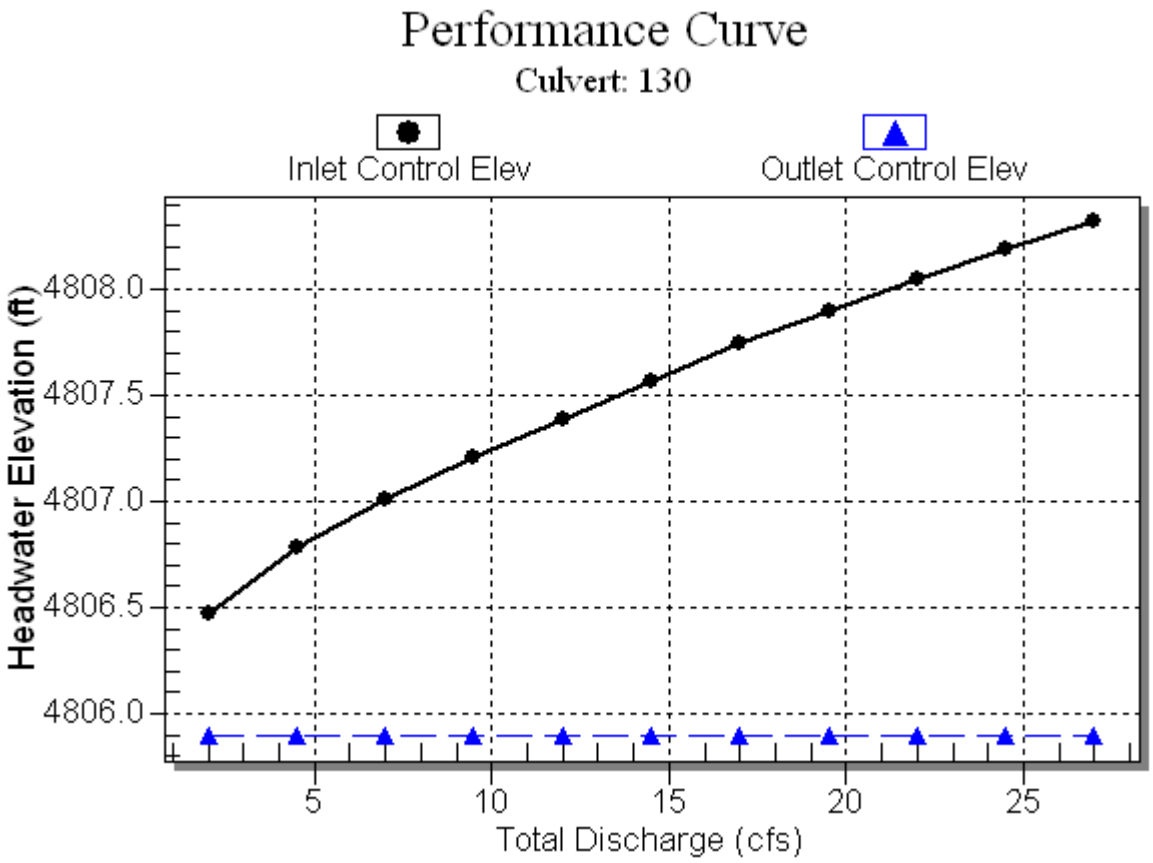
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Inlet Elevation (invert): 4805.90 ft,  Outlet Elevation (invert): 4805.30 ft

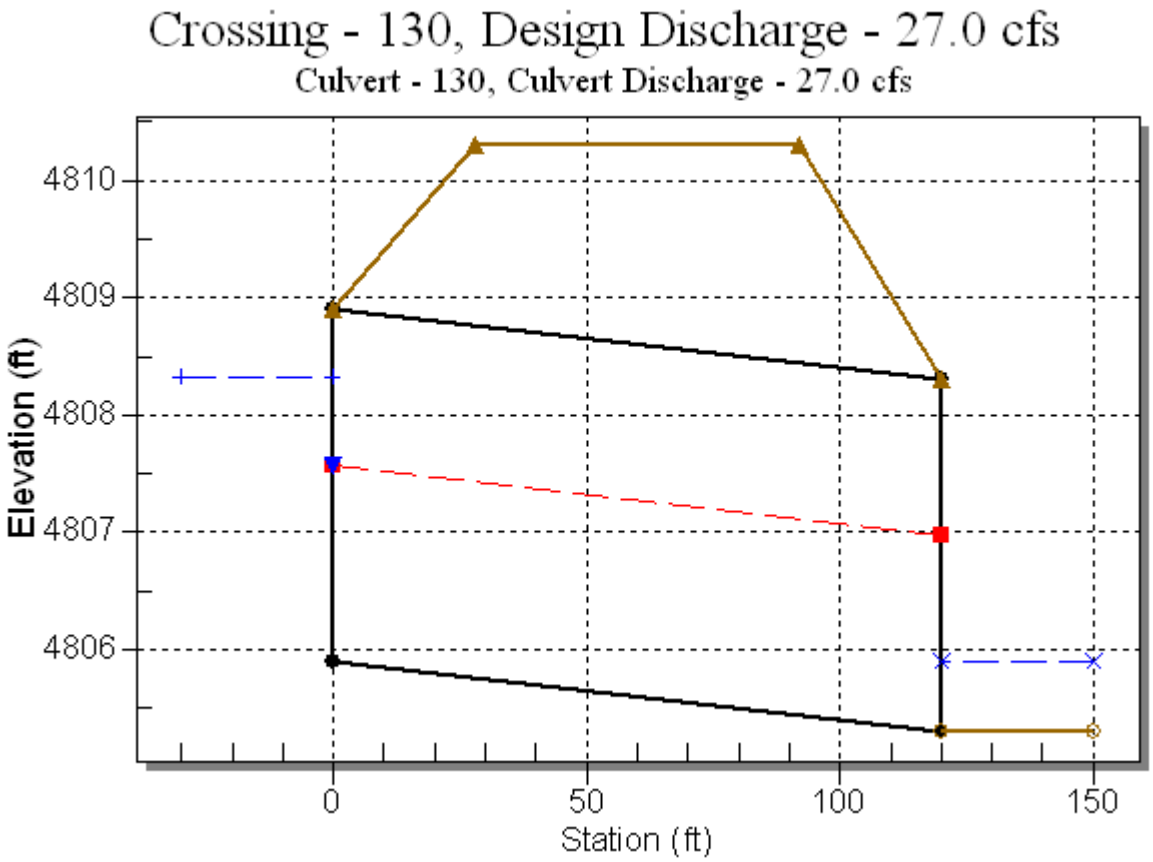
Culvert Length: 120.00 ft,  Culvert Slope: 0.0050

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**Culvert Performance Curve Plot: 130**



**Water Surface Profile Plot for Culvert: 130**




**Site Data - 130**

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 4805.90 ft

Outlet Station: 120.00 ft

Outlet Elevation: 4805.30 ft

Number of Barrels: 1

**Culvert Data Summary - 130**

Barrel Shape: Circular

Barrel Diameter: 3.00 ft

Barrel Material: Concrete

Barrel Manning's n: 0.0130

Inlet Type: Conventional

Inlet Edge Condition: Beveled Edge (1.5:1)

Inlet Depression: None

**Table 24 - Downstream Channel Rating Curve (Crossing: 130)**

| Flow (cfs) | Water Surface Elev (ft) | Depth (ft) | Velocity (ft/s) | Shear (psf) | Froude Number |
|---|---|---|---|---|---|
| 2.00 | 4805.43 | 0.13 | 1.00 | 0.12 | 0.50 |
| 4.50 | 4805.51 | 0.21 | 1.37 | 0.19 | 0.54 |
| 7.00 | 4805.57 | 0.27 | 1.61 | 0.25 | 0.56 |
| 9.50 | 4805.62 | 0.32 | 1.80 | 0.30 | 0.58 |
| 12.00 | 4805.67 | 0.37 | 1.96 | 0.34 | 0.59 |
| 14.50 | 4805.72 | 0.42 | 2.09 | 0.38 | 0.60 |
| 17.00 | 4805.76 | 0.46 | 2.22 | 0.42 | 0.61 |
| 19.50 | 4805.79 | 0.49 | 2.32 | 0.46 | 0.62 |
| 22.00 | 4805.83 | 0.53 | 2.42 | 0.49 | 0.62 |
| 24.50 | 4805.86 | 0.56 | 2.52 | 0.52 | 0.63 |
| 27.00 | 4805.90 | 0.60 | 2.60 | 0.55 | 0.63 |

## Tailwater Channel Data - 130

Tailwater Channel Option:  Trapezoidal Channel

Bottom Width:  15.00 ft

Side Slope (H:V):  4.00 (_:1)

Channel Slope:  0.0148

Channel Manning's n:  0.0450

Channel Invert Elevation:  4805.30 ft

## Roadway Data for Crossing: 130

Roadway Profile Shape:  Constant Roadway Elevation

Crest Length:  100.00 ft

Crest Elevation:  4810.30 ft

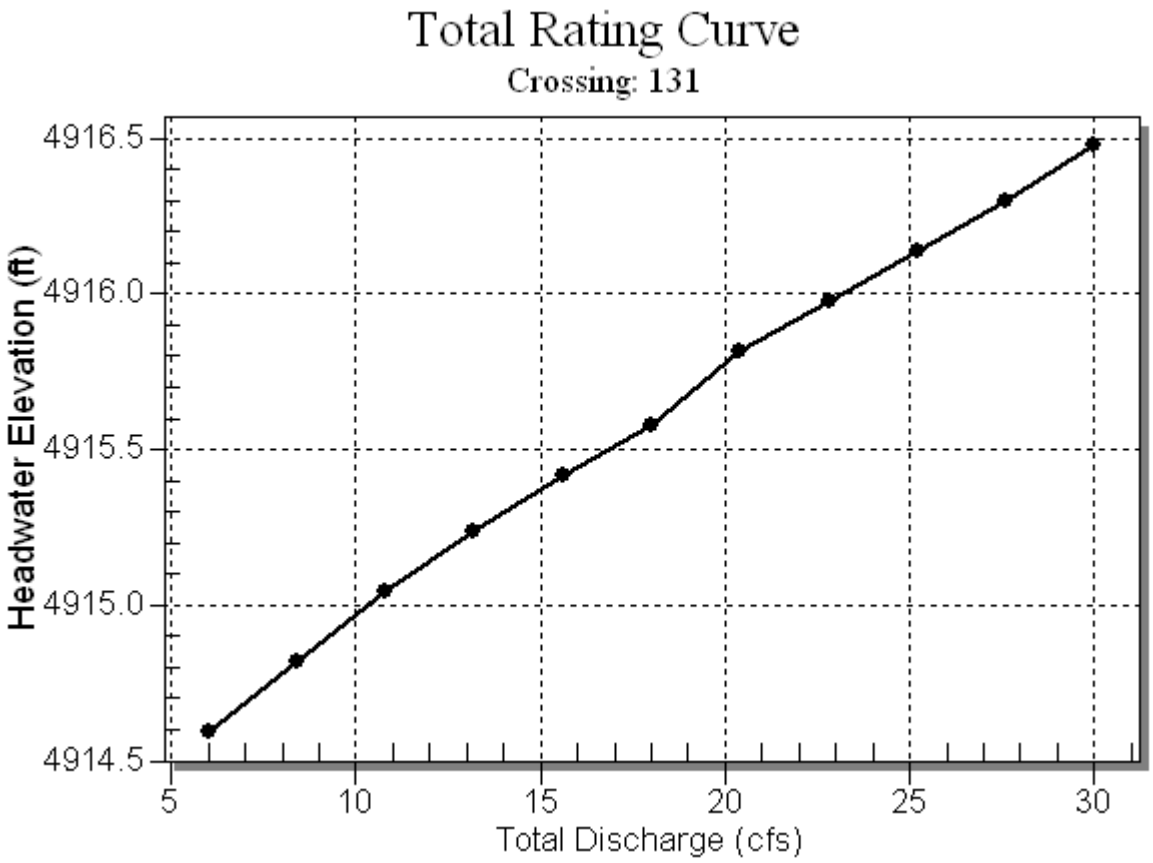
Roadway Surface:  Paved

Roadway Top Width:  64.00 ft

## Table 25 - Summary of Culvert Flows at Crossing: 131

| Headwater Elevation (ft) | Total Discharge (cfs) | 131 Discharge (cfs) | Roadway Discharge (cfs) | Iterations |
|---|---|---|---|---|
| 4914.59 | 6.00 | 6.00 | 0.00 | 1 |
| 4914.81 | 8.40 | 8.40 | 0.00 | 1 |
| 4915.04 | 10.80 | 10.80 | 0.00 | 1 |
| 4915.23 | 13.20 | 13.20 | 0.00 | 1 |
| 4915.41 | 15.60 | 15.60 | 0.00 | 1 |
| 4915.58 | 18.00 | 18.00 | 0.00 | 1 |
| 4915.81 | 20.40 | 20.40 | 0.00 | 1 |
| 4915.97 | 22.80 | 22.80 | 0.00 | 1 |
| 4916.13 | 25.20 | 25.20 | 0.00 | 1 |
| 4916.29 | 27.60 | 27.60 | 0.00 | 1 |
| 4916.47 | 30.00 | 30.00 | 0.00 | 1 |
| 4918.90 | 49.05 | 49.05 | 0.00 | Overtopping |

**Rating Curve Plot for Crossing: 131**



## Table 26 - Culvert Summary Table: 131

| Total Discharge (cfs) | Culvert Discharge (cfs) | Headwater Elevation (ft) | Inlet Control Depth (ft) | Outlet Control Depth (ft) | Flow Type | Normal Depth (ft) | Critical Depth (ft) | Outlet Depth (ft) | Tailwater Depth (ft) | Outlet Velocity (ft/s) | Tailwater Velocity (ft/s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.00 | 6.00 | 4914.59 | 1.089 | 1.089 | 1-S2n | 0.769 | 0.804 | 0.773 | 0.843 | 4.655 | 2.113 |
| 8.40 | 8.40 | 4914.81 | 1.315 | 1.315 | 1-S2n | 0.915 | 0.961 | 0.920 | 0.956 | 5.114 | 2.298 |
| 10.80 | 10.80 | 4915.04 | 1.537 | 0.450 | 1-S2n | 1.053 | 1.094 | 1.054 | 1.050 | 5.492 | 2.448 |
| 13.20 | 13.20 | 4915.23 | 1.733 | 0.532 | 1-S2n | 1.180 | 1.219 | 1.188 | 1.132 | 5.740 | 2.573 |
| 15.60 | 15.60 | 4915.41 | 1.910 | 0.606 | 1-S2n | 1.304 | 1.328 | 1.307 | 1.206 | 6.008 | 2.683 |
| 18.00 | 18.00 | 4915.58 | 2.076 | 0.672 | 1-S2n | 1.424 | 1.433 | 1.432 | 1.272 | 6.196 | 2.781 |
| 20.40 | 20.40 | 4915.81 | 2.234 | 2.309 | 2-M2c | 1.546 | 1.531 | 1.531 | 1.333 | 6.471 | 2.869 |
| 22.80 | 22.80 | 4915.97 | 2.391 | 2.470 | 2-M2c | 1.670 | 1.619 | 1.619 | 1.390 | 6.788 | 2.950 |
| 25.20 | 25.20 | 4916.13 | 2.549 | 2.629 | 2-M2c | 1.803 | 1.707 | 1.707 | 1.443 | 7.061 | 3.025 |
| 27.60 | 27.60 | 4916.29 | 2.712 | 2.793 | 2-M2c | 1.950 | 1.787 | 1.787 | 1.493 | 7.342 | 3.095 |
| 30.00 | 30.00 | 4916.47 | 2.882 | 2.972 | 2-M2c | 2.155 | 1.860 | 1.860 | 1.541 | 7.679 | 3.160 |

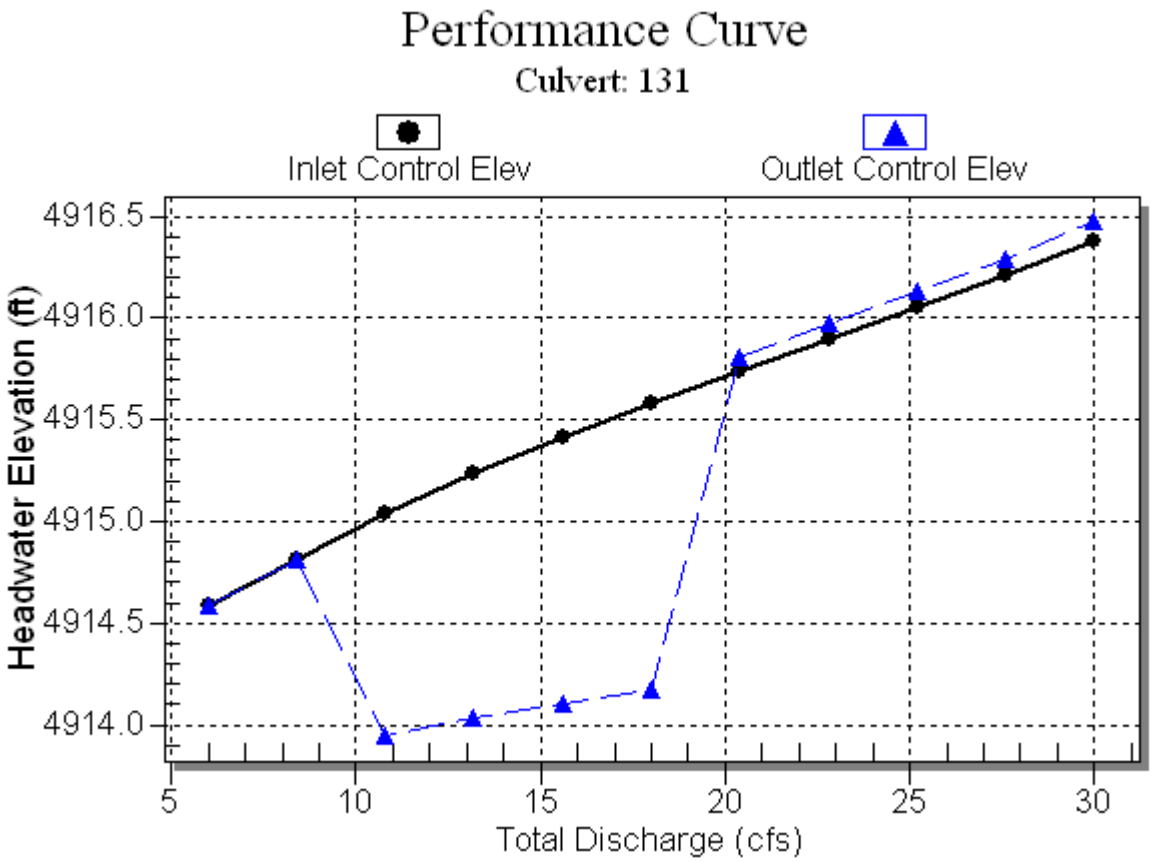
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Inlet Elevation (invert): 4913.50 ft,  Outlet Elevation (invert): 4912.90 ft

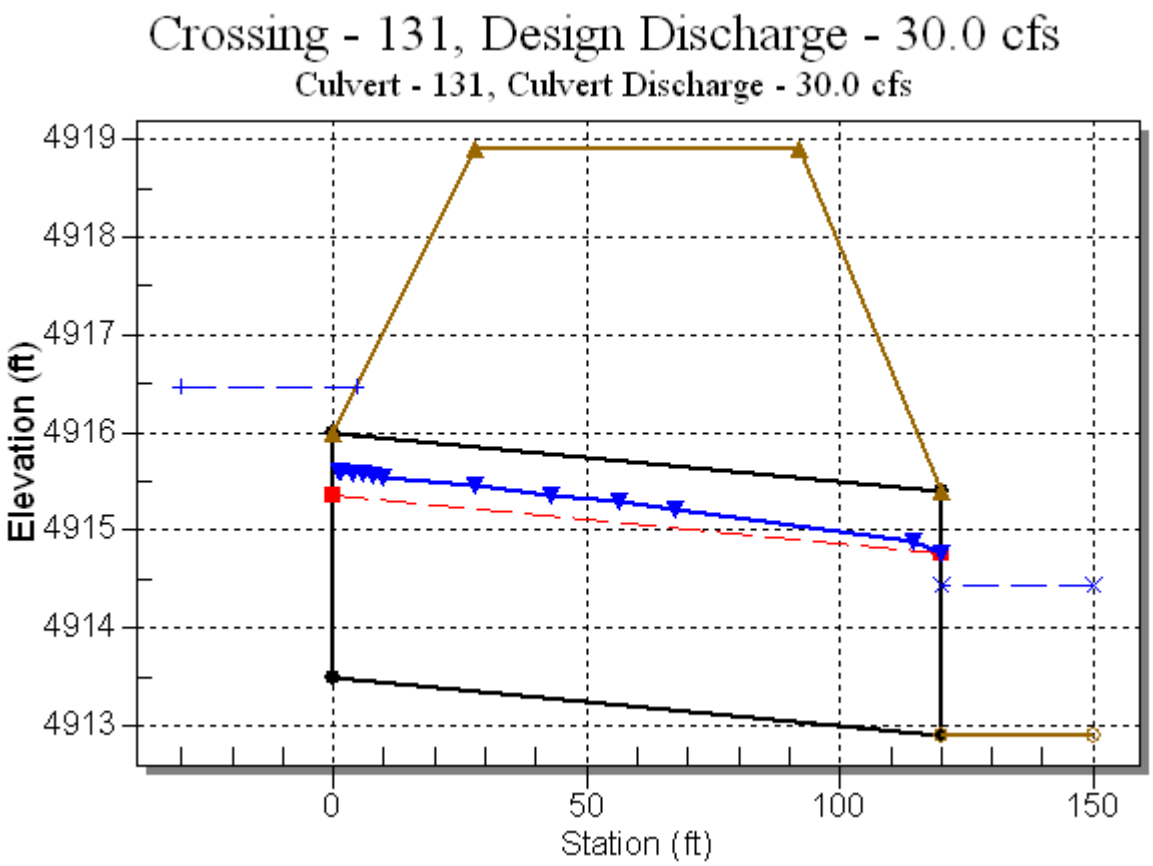
Culvert Length: 120.00 ft,  Culvert Slope: 0.0050

**********

**Culvert Performance Curve Plot: 131**



**Water Surface Profile Plot for Culvert: 131**




**Site Data - 131**

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 4913.50 ft

Outlet Station: 120.00 ft

Outlet Elevation: 4912.90 ft

Number of Barrels: 1

**Culvert Data Summary - 131**

Barrel Shape: Circular

Barrel Diameter: 2.50 ft

Barrel Material: Concrete

Barrel Manning's n: 0.0130

Inlet Type: Conventional

Inlet Edge Condition: Beveled Edge (1.5:1)

Inlet Depression: None

**Table 27 - Downstream Channel Rating Curve (Crossing: 131)**

| Flow (cfs) | Water Surface Elev (ft) | Depth (ft) | Velocity (ft/s) | Shear (psf) | Froude Number |
|---|---|---|---|---|---|
| 6.00 | 4913.74 | 0.84 | 2.11 | 0.71 | 0.57 |
| 8.40 | 4913.86 | 0.96 | 2.30 | 0.81 | 0.59 |
| 10.80 | 4913.95 | 1.05 | 2.45 | 0.88 | 0.60 |
| 13.20 | 4914.03 | 1.13 | 2.57 | 0.95 | 0.60 |
| 15.60 | 4914.11 | 1.21 | 2.68 | 1.02 | 0.61 |
| 18.00 | 4914.17 | 1.27 | 2.78 | 1.07 | 0.61 |
| 20.40 | 4914.23 | 1.33 | 2.87 | 1.12 | 0.62 |
| 22.80 | 4914.29 | 1.39 | 2.95 | 1.17 | 0.62 |
| 25.20 | 4914.34 | 1.44 | 3.02 | 1.22 | 0.63 |
| 27.60 | 4914.39 | 1.49 | 3.09 | 1.26 | 0.63 |
| 30.00 | 4914.44 | 1.54 | 3.16 | 1.30 | 0.63 |

## Tailwater Channel Data - 131

Tailwater Channel Option:  Triangular Channel

Side Slope (H:V):  4.00 (_:1)

Channel Slope:  0.0135

Channel Manning's n:  0.0450

Channel Invert Elevation:  4912.90 ft

## Roadway Data for Crossing: 131

Roadway Profile Shape:  Constant Roadway Elevation

Crest Length:  100.00 ft

Crest Elevation:  4918.90 ft

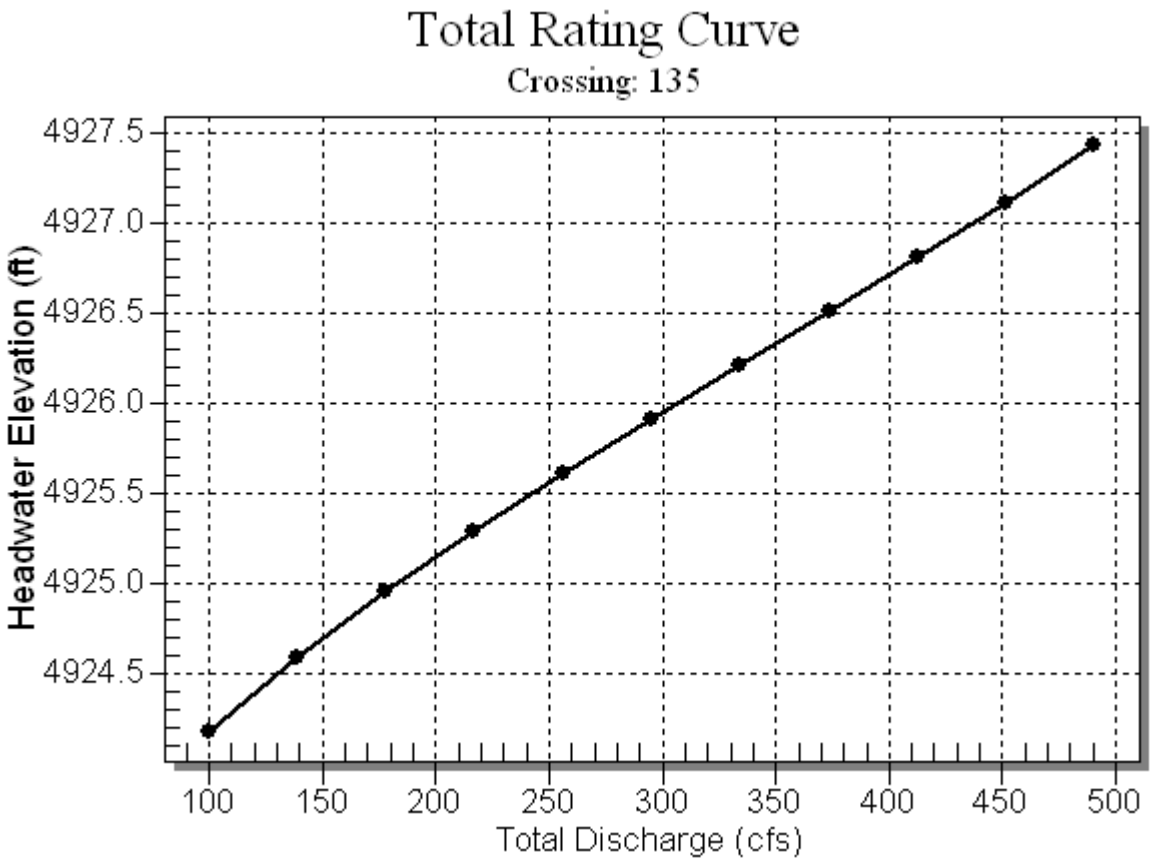
Roadway Surface:  Paved

Roadway Top Width:  64.00 ft

## Table 28 - Summary of Culvert Flows at Crossing: 135

| Headwater Elevation (ft) | Total Discharge (cfs) | 135 Discharge (cfs) | Roadway Discharge (cfs) | Iterations |
|---|---|---|---|---|
| 4924.18 | 99.00 | 99.00 | 0.00 | 1 |
| 4924.59 | 138.10 | 138.10 | 0.00 | 1 |
| 4924.95 | 177.20 | 177.20 | 0.00 | 1 |
| 4925.29 | 216.30 | 216.30 | 0.00 | 1 |
| 4925.61 | 255.40 | 255.40 | 0.00 | 1 |
| 4925.92 | 294.50 | 294.50 | 0.00 | 1 |
| 4926.22 | 333.60 | 333.60 | 0.00 | 1 |
| 4926.51 | 372.70 | 372.70 | 0.00 | 1 |
| 4926.81 | 411.80 | 411.80 | 0.00 | 1 |
| 4927.12 | 450.90 | 450.90 | 0.00 | 1 |
| 4927.43 | 490.00 | 490.00 | 0.00 | 1 |
| 4928.90 | 651.00 | 651.00 | 0.00 | Overtopping |

**Rating Curve Plot for Crossing: 135**



## Table 29 - Culvert Summary Table: 135

| Total Discharge (cfs) | Culvert Discharge (cfs) | Headwater Elevation (ft) | Inlet Control Depth (ft) | Outlet Control Depth (ft) | Flow Type | Normal Depth (ft) | Critical Depth (ft) | Outlet Depth (ft) | Tailwater Depth (ft) | Outlet Velocity (ft/s) | Tailwater Velocity (ft/s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 99.00 | 99.00 | 4924.18 | 1.679 | 0.000 | 1-S2n | 0.873 | 0.981 | 0.880 | 0.501 | 6.247 | 2.270 |
| 138.10 | 138.10 | 4924.59 | 2.087 | 0.011 | 1-S2n | 1.090 | 1.225 | 1.094 | 0.611 | 7.011 | 2.586 |
| 177.20 | 177.20 | 4924.95 | 2.452 | 0.109 | 1-S2n | 1.294 | 1.447 | 1.296 | 0.709 | 7.597 | 2.846 |
| 216.30 | 216.30 | 4925.29 | 2.790 | 0.198 | 1-S2n | 1.485 | 1.653 | 1.492 | 0.798 | 8.056 | 3.074 |
| 255.40 | 255.40 | 4925.61 | 3.110 | 0.281 | 1-S2n | 1.669 | 1.846 | 1.675 | 0.881 | 8.470 | 3.276 |
| 294.50 | 294.50 | 4925.92 | 3.417 | 0.360 | 1-S2n | 1.844 | 2.030 | 1.849 | 0.960 | 8.848 | 3.455 |
| 333.60 | 333.60 | 4926.22 | 3.717 | 0.433 | 1-S2n | 2.018 | 2.206 | 2.020 | 1.033 | 9.175 | 3.622 |
| 372.70 | 372.70 | 4926.51 | 4.014 | 0.503 | 5-S2n | 2.184 | 2.375 | 2.189 | 1.103 | 9.458 | 3.780 |
| 411.80 | 411.80 | 4926.81 | 4.313 | 0.570 | 5-S2n | 2.349 | 2.539 | 2.352 | 1.170 | 9.729 | 3.923 |
| 450.90 | 450.90 | 4927.12 | 4.619 | 0.635 | 5-S2n | 2.510 | 2.697 | 2.516 | 1.235 | 9.957 | 4.060 |
| 490.00 | 490.00 | 4927.43 | 4.935 | 0.698 | 5-S2n | 2.668 | 2.851 | 2.673 | 1.298 | 10.183 | 4.186 |

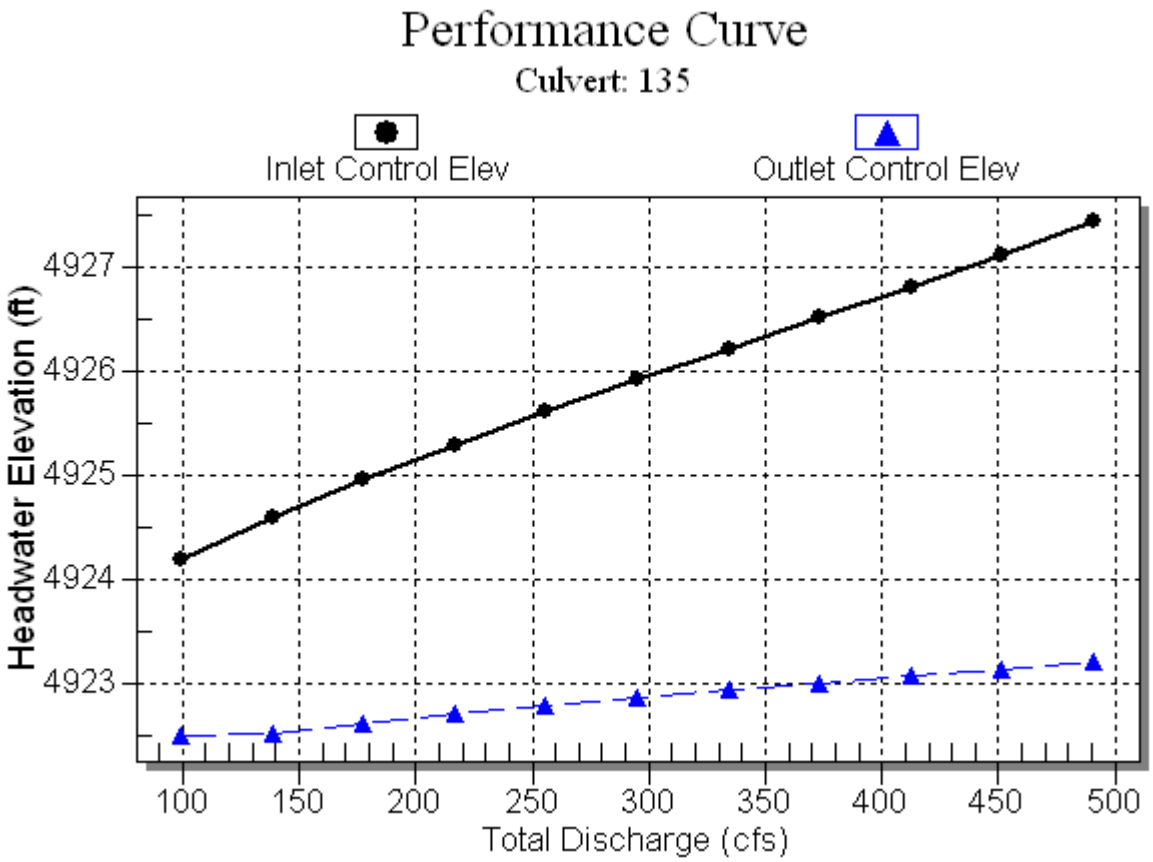
**********

Inlet Elevation (invert): 4922.50 ft,  Outlet Elevation (invert): 4921.90 ft

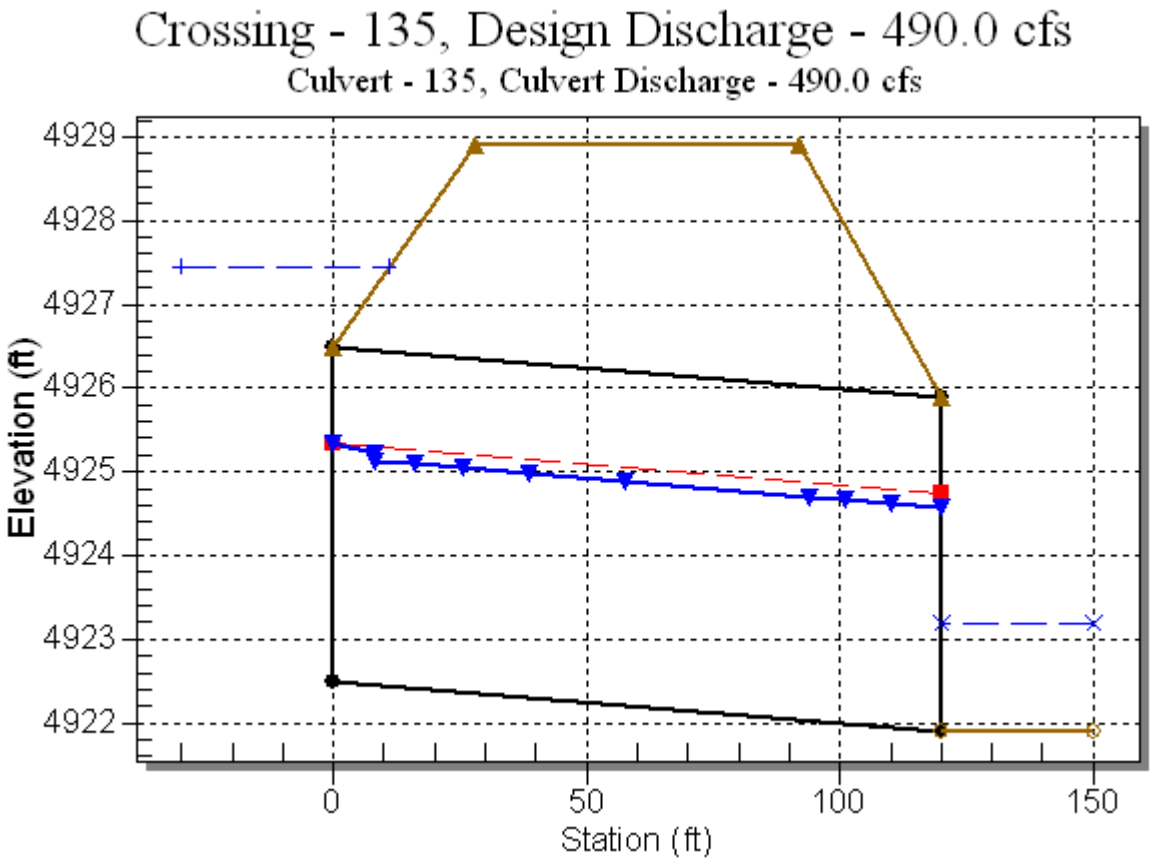
Culvert Length: 120.00 ft,  Culvert Slope: 0.0050

**********

**Culvert Performance Curve Plot: 135**



**Water Surface Profile Plot for Culvert: 135**




**Site Data - 135**

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 4922.50 ft

Outlet Station: 120.00 ft

Outlet Elevation: 4921.90 ft

Number of Barrels: 3

**Culvert Data Summary - 135**

Barrel Shape: Concrete Box

Barrel Span: 6.00 ft

Barrel Rise: 4.00 ft

Barrel Material: Concrete

Barrel Manning's n: 0.0130

Inlet Type: Conventional

Inlet Edge Condition: Square Edge (90º) Headwall

Inlet Depression: None

**Table 30 - Downstream Channel Rating Curve (Crossing: 135)**

| Flow (cfs) | Water Surface Elev (ft) | Depth (ft) | Velocity (ft/s) | Shear (psf) | Froude Number |
|---|---|---|---|---|---|
| 99.00 | 4922.40 | 0.50 | 2.27 | 0.38 | 0.57 |
| 138.10 | 4922.51 | 0.61 | 2.59 | 0.47 | 0.59 |
| 177.20 | 4922.61 | 0.71 | 2.85 | 0.54 | 0.61 |
| 216.30 | 4922.70 | 0.80 | 3.07 | 0.61 | 0.62 |
| 255.40 | 4922.78 | 0.88 | 3.28 | 0.68 | 0.63 |
| 294.50 | 4922.86 | 0.96 | 3.45 | 0.74 | 0.63 |
| 333.60 | 4922.93 | 1.03 | 3.62 | 0.79 | 0.64 |
| 372.70 | 4923.00 | 1.10 | 3.78 | 0.85 | 0.65 |
| 411.80 | 4923.07 | 1.17 | 3.92 | 0.90 | 0.66 |
| 450.90 | 4923.13 | 1.23 | 4.06 | 0.95 | 0.66 |
| 490.00 | 4923.20 | 1.30 | 4.19 | 1.00 | 0.67 |

## Tailwater Channel Data - 135

Tailwater Channel Option:  Trapezoidal Channel

Bottom Width:  85.00 ft

Side Slope (H:V):  4.00 (_:1)

Channel Slope:  0.0123

Channel Manning's n:  0.0450

Channel Invert Elevation:  4921.90 ft

## Roadway Data for Crossing: 135

Roadway Profile Shape:  Constant Roadway Elevation

Crest Length:  100.00 ft

Crest Elevation:  4928.90 ft

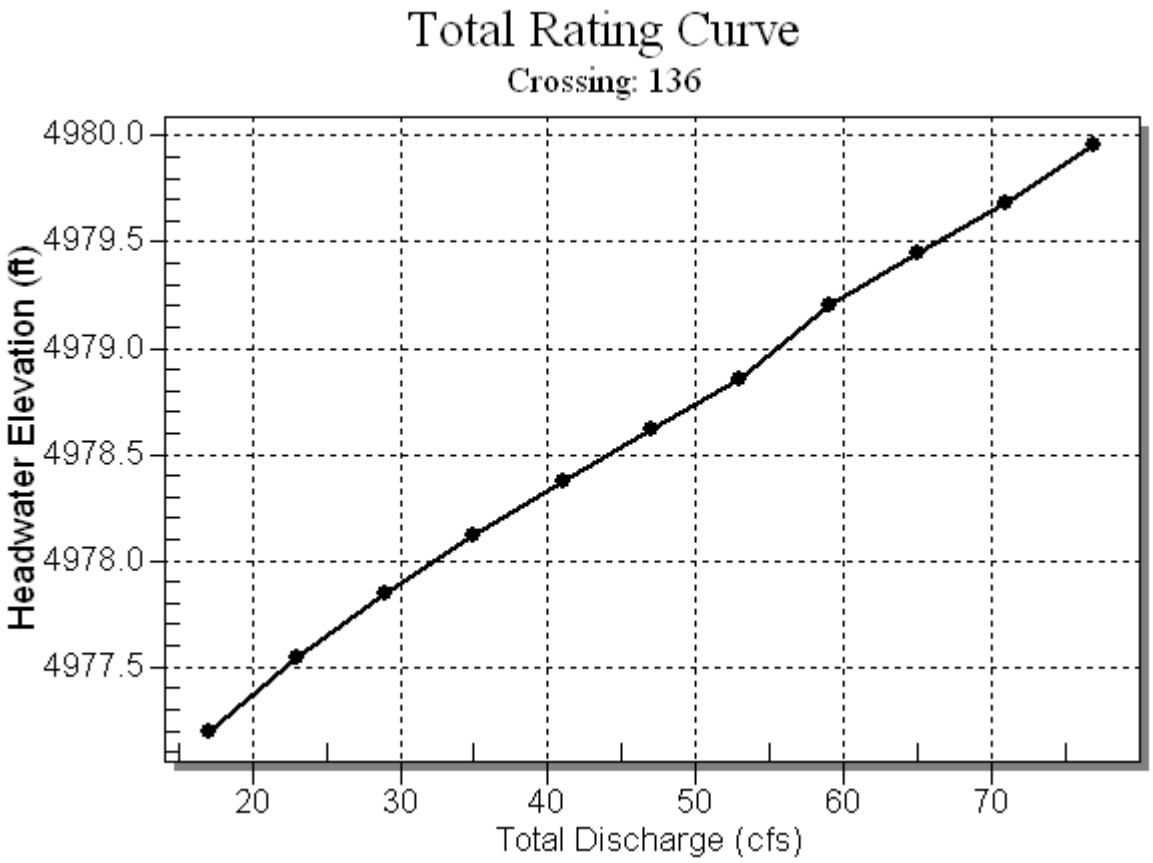
Roadway Surface:  Paved

Roadway Top Width:  64.00 ft

## Table 31 - Summary of Culvert Flows at Crossing: 136

| Headwater Elevation (ft) | Total Discharge (cfs) | 136 Discharge (cfs) | Roadway Discharge (cfs) | Iterations |
|---|---|---|---|---|
| 4977.20 | 17.00 | 17.00 | 0.00 | 1 |
| 4977.54 | 23.00 | 23.00 | 0.00 | 1 |
| 4977.85 | 29.00 | 29.00 | 0.00 | 1 |
| 4978.12 | 35.00 | 35.00 | 0.00 | 1 |
| 4978.38 | 41.00 | 41.00 | 0.00 | 1 |
| 4978.62 | 47.00 | 47.00 | 0.00 | 1 |
| 4978.85 | 53.00 | 53.00 | 0.00 | 1 |
| 4979.21 | 59.00 | 59.00 | 0.00 | 1 |
| 4979.44 | 65.00 | 65.00 | 0.00 | 1 |
| 4979.68 | 71.00 | 71.00 | 0.00 | 1 |
| 4979.96 | 77.00 | 77.00 | 0.00 | 1 |
| 4981.90 | 106.88 | 106.88 | 0.00 | Overtopping |

**Rating Curve Plot for Crossing: 136**



## Table 32 - Culvert Summary Table: 136

| Total Discharge (cfs) | Culvert Discharge (cfs) | Headwater Elevation (ft) | Inlet Control Depth (ft) | Outlet Control Depth (ft) | Flow Type | Normal Depth (ft) | Critical Depth (ft) | Outlet Depth (ft) | Tailwater Depth (ft) | Outlet Velocity (ft/s) | Tailwater Velocity (ft/s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.00 | 17.00 | 4977.20 | 1.697 | 0.000 | 1-S2n | 1.156 | 1.247 | 1.157 | 0.315 | 6.103 | 1.489 |
| 23.00 | 23.00 | 4977.54 | 2.042 | 0.000 | 1-S2n | 1.364 | 1.467 | 1.366 | 0.378 | 6.610 | 1.669 |
| 29.00 | 29.00 | 4977.85 | 2.349 | 0.000 | 1-S2n | 1.550 | 1.656 | 1.555 | 0.433 | 7.020 | 1.823 |
| 35.00 | 35.00 | 4978.12 | 2.623 | 0.000 | 1-S2n | 1.731 | 1.829 | 1.733 | 0.485 | 7.368 | 1.954 |
| 41.00 | 41.00 | 4978.38 | 2.875 | 0.000 | 1-S2n | 1.903 | 1.986 | 1.905 | 0.532 | 7.664 | 2.075 |
| 47.00 | 47.00 | 4978.62 | 3.116 | 0.000 | 1-S2n | 2.075 | 2.137 | 2.076 | 0.577 | 7.909 | 2.183 |
| 53.00 | 53.00 | 4978.85 | 3.352 | 0.020 | 1-S2n | 2.252 | 2.270 | 2.260 | 0.620 | 8.080 | 2.281 |
| 59.00 | 59.00 | 4979.21 | 3.591 | 3.706 | 2-M2c | 2.430 | 2.403 | 2.403 | 0.660 | 8.385 | 2.374 |
| 65.00 | 65.00 | 4979.44 | 3.838 | 3.945 | 2-M2c | 2.636 | 2.520 | 2.520 | 0.699 | 8.776 | 2.462 |
| 71.00 | 71.00 | 4979.68 | 4.097 | 4.180 | 2-M2c | 2.873 | 2.630 | 2.630 | 0.736 | 9.178 | 2.543 |
| 77.00 | 77.00 | 4979.96 | 4.370 | 4.455 | 2-M2c | 3.500 | 2.739 | 2.739 | 0.772 | 9.547 | 2.620 |

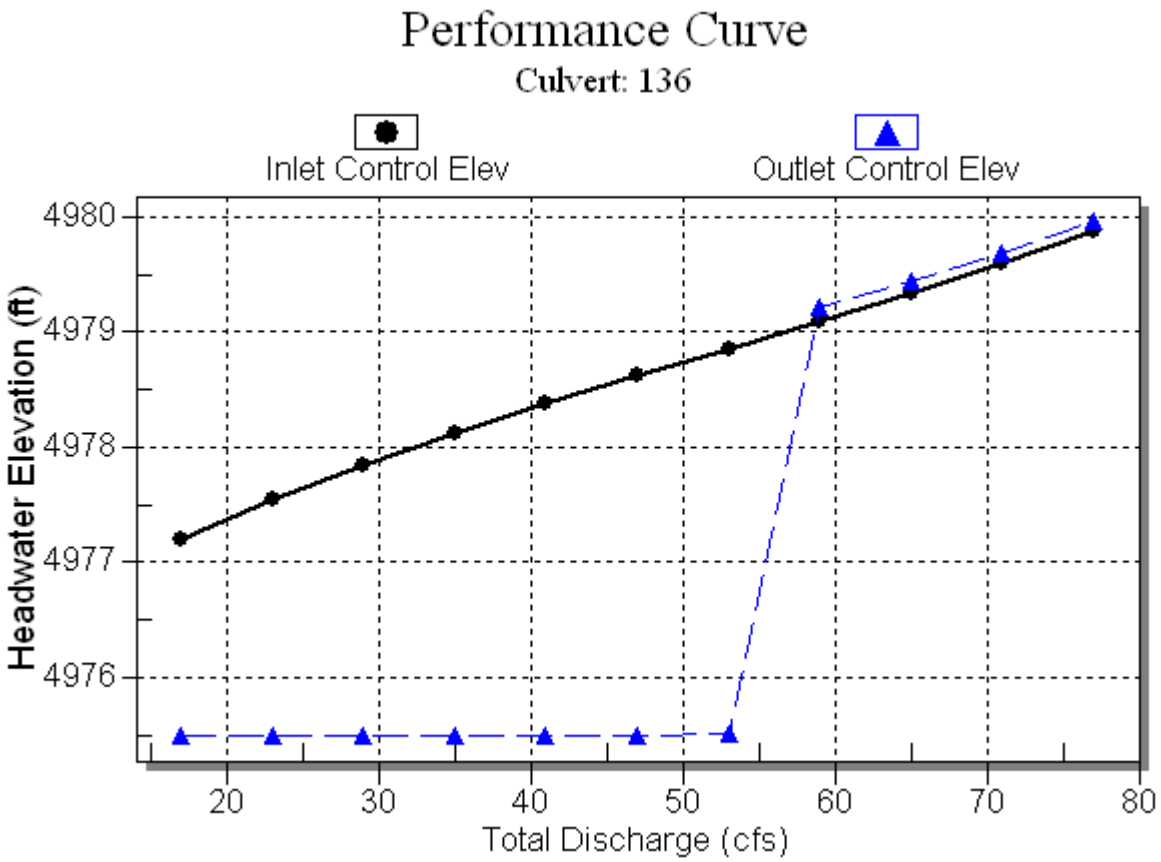
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Inlet Elevation (invert): 4975.50 ft,  Outlet Elevation (invert): 4974.90 ft

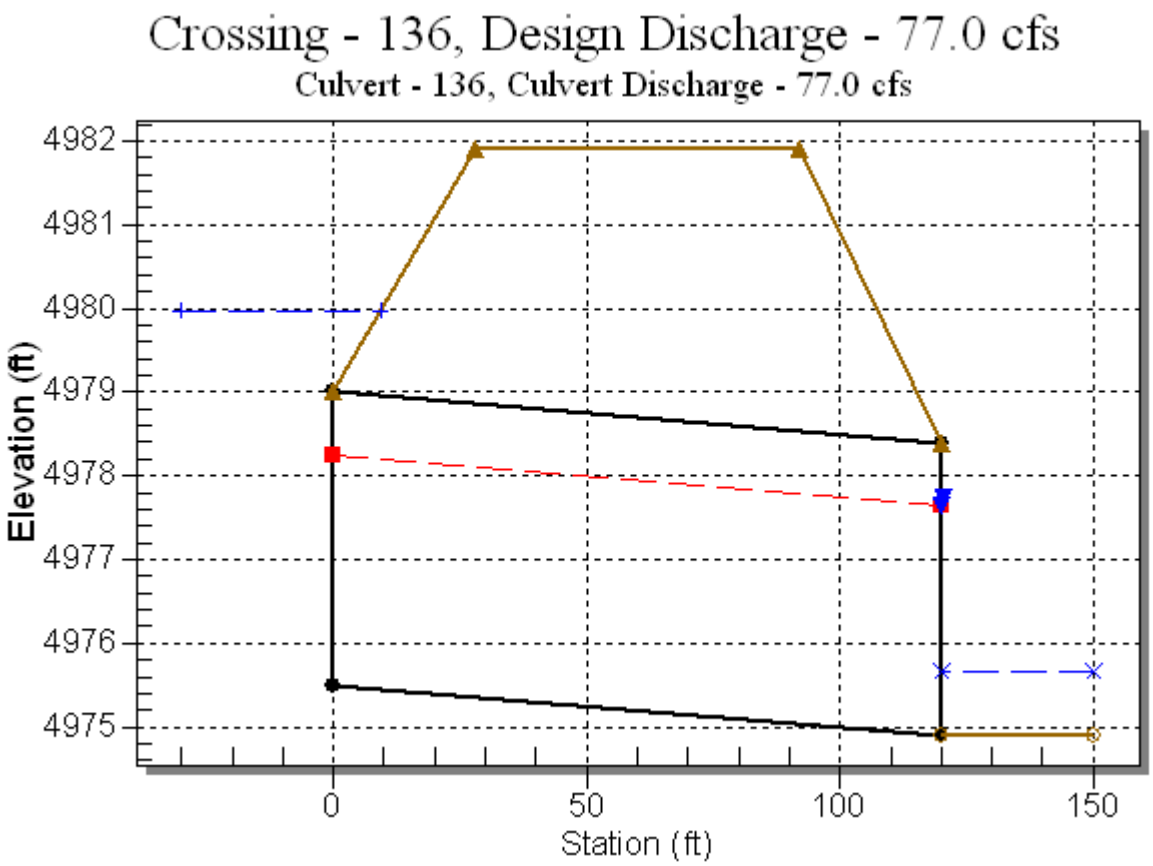
Culvert Length: 120.00 ft,  Culvert Slope: 0.0050

**********

**Culvert Performance Curve Plot: 136**



**Water Surface Profile Plot for Culvert: 136**




**Site Data - 136**

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 4975.50 ft

Outlet Station: 120.00 ft

Outlet Elevation: 4974.90 ft

Number of Barrels: 1

**Culvert Data Summary - 136**

Barrel Shape: Circular

Barrel Diameter: 3.50 ft

Barrel Material: Concrete

Barrel Manning's n: 0.0130

Inlet Type: Conventional

Inlet Edge Condition: Beveled Edge (1.5:1)

Inlet Depression: None

**Table 33 - Downstream Channel Rating Curve (Crossing: 136)**

| Flow (cfs) | Water Surface Elev (ft) | Depth (ft) | Velocity (ft/s) | Shear (psf) | Froude Number |
|---|---|---|---|---|---|
| 17.00 | 4975.21 | 0.31 | 1.49 | 0.19 | 0.48 |
| 23.00 | 4975.28 | 0.38 | 1.67 | 0.23 | 0.49 |
| 29.00 | 4975.33 | 0.43 | 1.82 | 0.27 | 0.50 |
| 35.00 | 4975.38 | 0.48 | 1.95 | 0.30 | 0.51 |
| 41.00 | 4975.43 | 0.53 | 2.08 | 0.33 | 0.52 |
| 47.00 | 4975.48 | 0.58 | 2.18 | 0.36 | 0.52 |
| 53.00 | 4975.52 | 0.62 | 2.28 | 0.38 | 0.53 |
| 59.00 | 4975.56 | 0.66 | 2.37 | 0.41 | 0.53 |
| 65.00 | 4975.60 | 0.70 | 2.46 | 0.43 | 0.54 |
| 71.00 | 4975.64 | 0.74 | 2.54 | 0.45 | 0.54 |
| 77.00 | 4975.67 | 0.77 | 2.62 | 0.48 | 0.55 |

## Tailwater Channel Data - 136

Tailwater Channel Option:  Trapezoidal Channel

Bottom Width:  35.00 ft

Side Slope (H:V):  4.00 (_:1)

Channel Slope:  0.0099

Channel Manning's n:  0.0450

Channel Invert Elevation:  4974.90 ft

## Roadway Data for Crossing: 136

Roadway Profile Shape:  Constant Roadway Elevation

Crest Length:  100.00 ft

Crest Elevation:  4981.90 ft

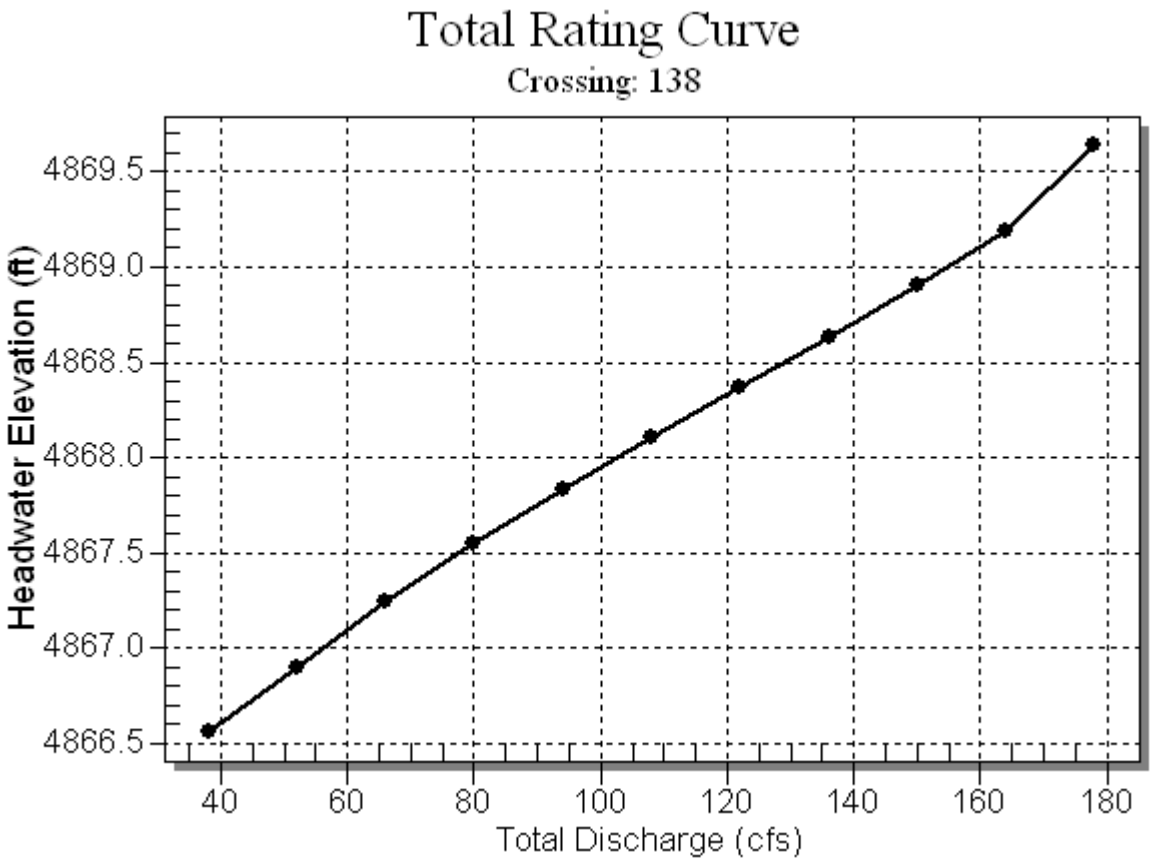
Roadway Surface:  Paved

Roadway Top Width:  64.00 ft

## Table 34 - Summary of Culvert Flows at Crossing: 138

| Headwater Elevation (ft) | Total Discharge (cfs) | 138 Discharge (cfs) | Roadway Discharge (cfs) | Iterations |
|---|---|---|---|---|
| 4866.56 | 38.00 | 38.00 | 0.00 | 1 |
| 4866.90 | 52.00 | 52.00 | 0.00 | 1 |
| 4867.24 | 66.00 | 66.00 | 0.00 | 1 |
| 4867.55 | 80.00 | 80.00 | 0.00 | 1 |
| 4867.83 | 94.00 | 94.00 | 0.00 | 1 |
| 4868.11 | 108.00 | 108.00 | 0.00 | 1 |
| 4868.37 | 122.00 | 122.00 | 0.00 | 1 |
| 4868.63 | 136.00 | 136.00 | 0.00 | 1 |
| 4868.91 | 150.00 | 150.00 | 0.00 | 1 |
| 4869.19 | 164.00 | 164.00 | 0.00 | 1 |
| 4869.64 | 178.00 | 178.00 | 0.00 | 1 |
| 4871.20 | 244.34 | 244.34 | 0.00 | Overtopping |

**Rating Curve Plot for Crossing: 138**



## Table 35 - Culvert Summary Table: 138

| Total Discharge (cfs) | Culvert Discharge (cfs) | Headwater Elevation (ft) | Inlet Control Depth (ft) | Outlet Control Depth (ft) | Flow Type | Normal Depth (ft) | Critical Depth (ft) | Outlet Depth (ft) | Tailwater Depth (ft) | Outlet Velocity (ft/s) | Tailwater Velocity (ft/s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 38.00 | 38.00 | 4866.56 | 1.761 | 0.000 | 1-S2n | 1.166 | 1.273 | 1.172 | 0.264 | 6.181 | 1.582 |
| 52.00 | 52.00 | 4866.90 | 2.099 | 0.000 | 1-S2n | 1.369 | 1.499 | 1.389 | 0.317 | 6.686 | 1.796 |
| 66.00 | 66.00 | 4867.24 | 2.441 | 0.000 | 1-S2n | 1.564 | 1.699 | 1.568 | 0.367 | 7.217 | 1.968 |
| 80.00 | 80.00 | 4867.55 | 2.749 | 0.000 | 1-S2n | 1.737 | 1.879 | 1.739 | 0.410 | 7.623 | 2.129 |
| 94.00 | 94.00 | 4867.83 | 3.034 | 0.000 | 1-S2n | 1.906 | 2.050 | 1.909 | 0.453 | 7.939 | 2.263 |
| 108.00 | 108.00 | 4868.11 | 3.305 | 0.000 | 1-S2n | 2.071 | 2.200 | 2.079 | 0.491 | 8.185 | 2.391 |
| 122.00 | 122.00 | 4868.37 | 3.570 | 0.000 | 1-S2n | 2.231 | 2.350 | 2.240 | 0.529 | 8.428 | 2.505 |
| 136.00 | 136.00 | 4868.63 | 3.835 | 0.000 | 1-S2n | 2.391 | 2.485 | 2.394 | 0.564 | 8.664 | 2.614 |
| 150.00 | 150.00 | 4868.91 | 4.106 | 0.000 | 5-S2n | 2.557 | 2.612 | 2.561 | 0.598 | 8.838 | 2.716 |
| 164.00 | 164.00 | 4869.19 | 4.388 | 0.030 | 5-S2n | 2.724 | 2.739 | 2.729 | 0.630 | 8.985 | 2.812 |
| 178.00 | 178.00 | 4869.64 | 4.686 | 4.840 | 2-M2c | 2.906 | 2.854 | 2.854 | 0.662 | 9.287 | 2.903 |

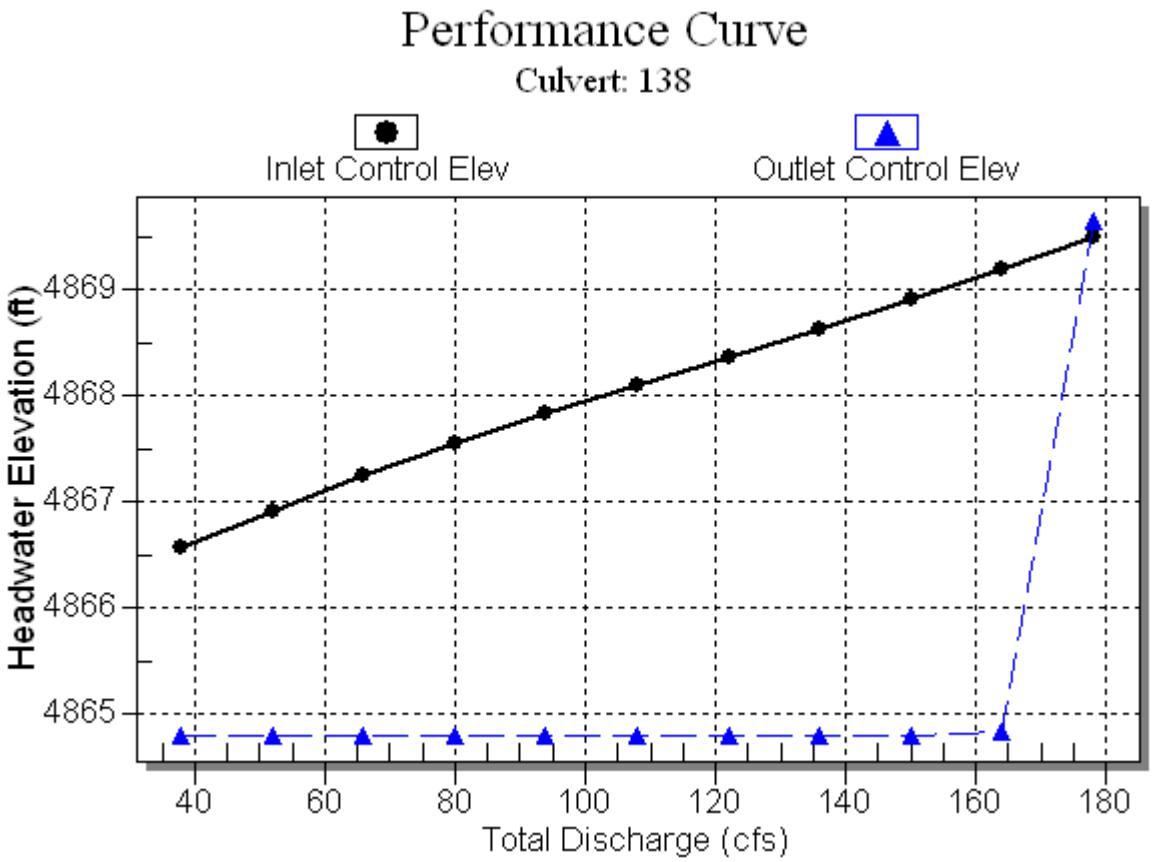
**********

Inlet Elevation (invert): 4864.80 ft,  Outlet Elevation (invert): 4864.20 ft

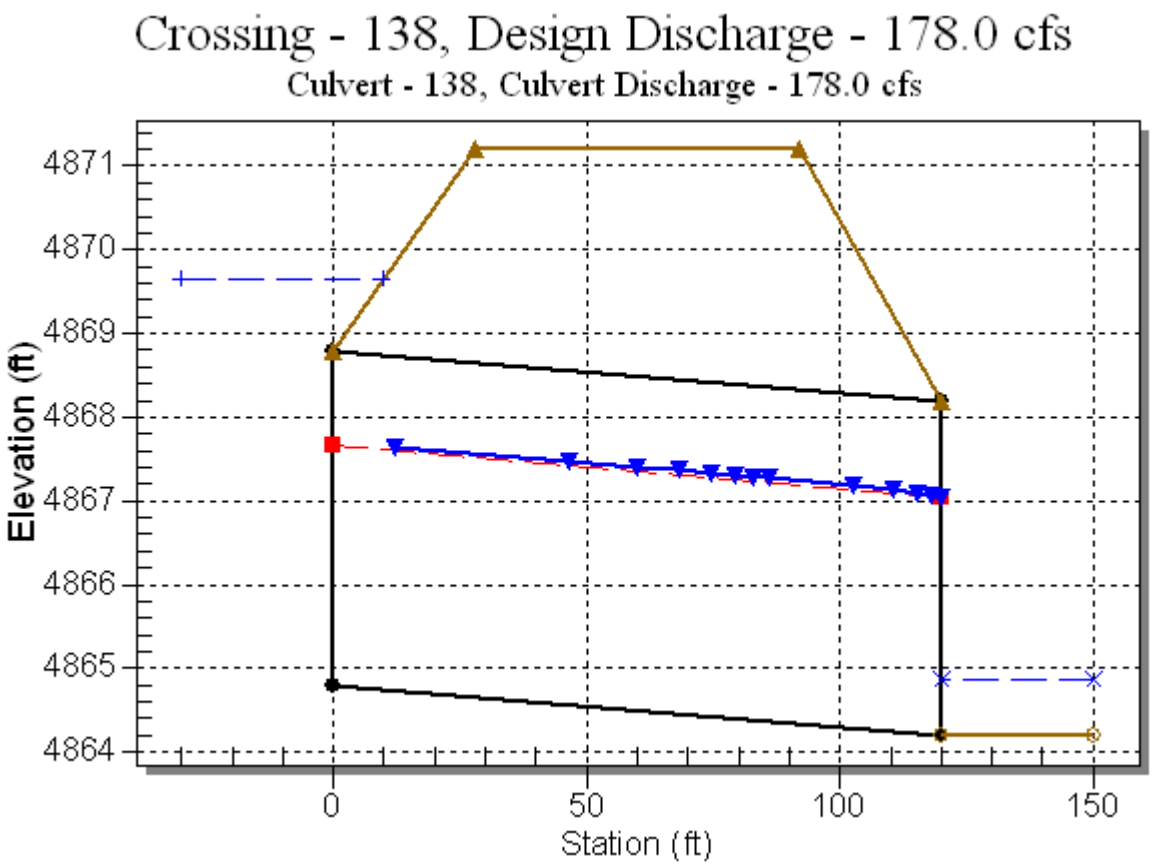
Culvert Length: 120.00 ft,  Culvert Slope: 0.0050

**********

**Culvert Performance Curve Plot: 138**



**Water Surface Profile Plot for Culvert: 138**




**Site Data - 138**

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 4864.80 ft

Outlet Station: 120.00 ft

Outlet Elevation: 4864.20 ft

Number of Barrels: 2

**Culvert Data Summary - 138**

Barrel Shape: Circular

Barrel Diameter: 4.00 ft

Barrel Material: Concrete

Barrel Manning's n: 0.0130

Inlet Type: Conventional

Inlet Edge Condition: Square Edge with Headwall

Inlet Depression: None

**Table 36 - Downstream Channel Rating Curve (Crossing: 138)**

| Flow (cfs) | Water Surface Elev (ft) | Depth (ft) | Velocity (ft/s) | Shear (psf) | Froude Number |
|---|---|---|---|---|---|
| 38.00 | 4864.46 | 0.26 | 1.58 | 0.23 | 0.55 |
| 52.00 | 4864.52 | 0.32 | 1.80 | 0.28 | 0.57 |
| 66.00 | 4864.57 | 0.37 | 1.97 | 0.32 | 0.58 |
| 80.00 | 4864.61 | 0.41 | 2.13 | 0.36 | 0.59 |
| 94.00 | 4864.65 | 0.45 | 2.26 | 0.39 | 0.60 |
| 108.00 | 4864.69 | 0.49 | 2.39 | 0.43 | 0.61 |
| 122.00 | 4864.73 | 0.53 | 2.50 | 0.46 | 0.61 |
| 136.00 | 4864.76 | 0.56 | 2.61 | 0.49 | 0.62 |
| 150.00 | 4864.80 | 0.60 | 2.72 | 0.52 | 0.63 |
| 164.00 | 4864.83 | 0.63 | 2.81 | 0.55 | 0.63 |
| 178.00 | 4864.86 | 0.66 | 2.90 | 0.57 | 0.64 |

## Tailwater Channel Data - 138

Tailwater Channel Option:  Trapezoidal Channel

Bottom Width:  90.00 ft

Side Slope (H:V):  4.00 (_:1)

Channel Slope:  0.0139

Channel Manning's n:  0.0450

Channel Invert Elevation:  4864.20 ft

## Roadway Data for Crossing: 138

Roadway Profile Shape:  Constant Roadway Elevation

Crest Length:  100.00 ft

Crest Elevation:  4871.20 ft

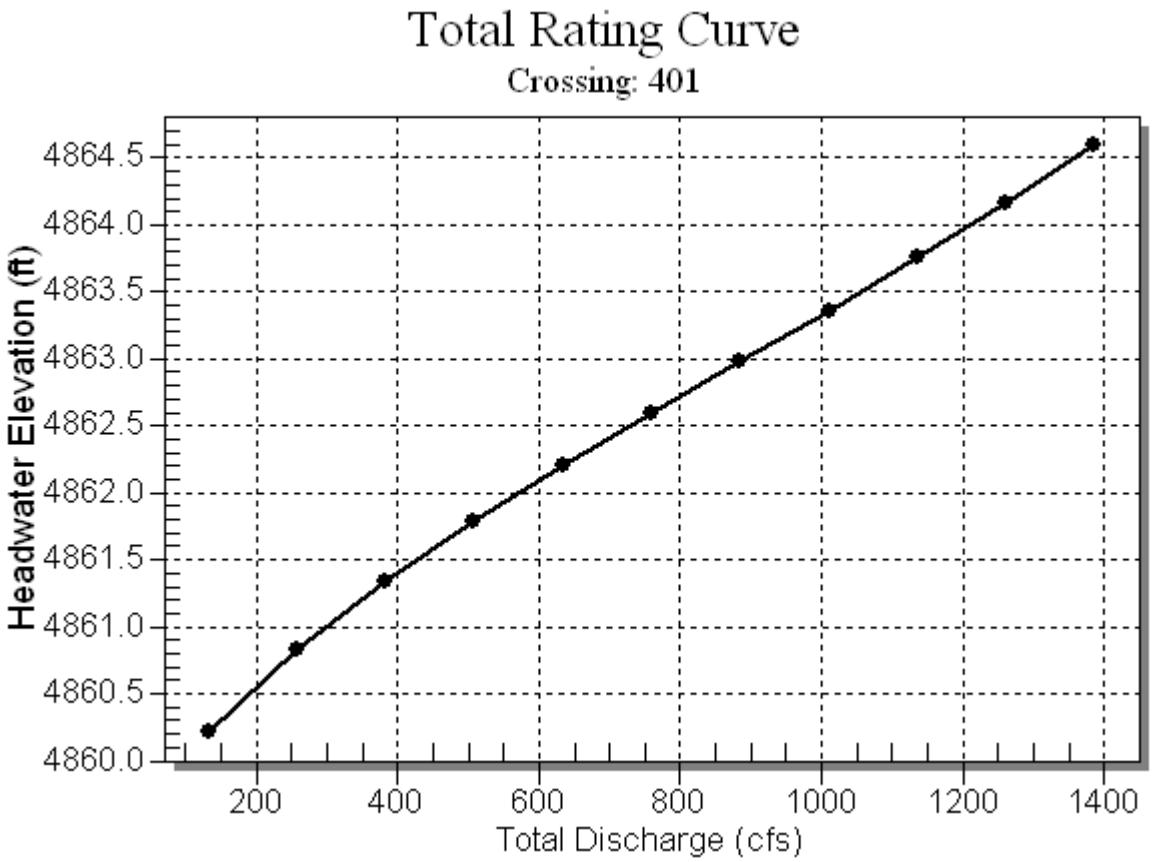
Roadway Surface:  Paved

Roadway Top Width:  64.00 ft

## Table 37 - Summary of Culvert Flows at Crossing: 401

| Headwater Elevation (ft) | Total Discharge (cfs) | 401 Discharge (cfs) | Roadway Discharge (cfs) | Iterations |
|---|---|---|---|---|
| 4860.21 | 132.00 | 132.00 | 0.00 | 1 |
| 4860.82 | 257.40 | 257.40 | 0.00 | 1 |
| 4861.33 | 382.80 | 382.80 | 0.00 | 1 |
| 4861.78 | 508.20 | 508.20 | 0.00 | 1 |
| 4862.19 | 633.60 | 633.60 | 0.00 | 1 |
| 4862.59 | 759.00 | 759.00 | 0.00 | 1 |
| 4862.97 | 884.40 | 884.40 | 0.00 | 1 |
| 4863.35 | 1009.80 | 1009.80 | 0.00 | 1 |
| 4863.74 | 1135.20 | 1135.20 | 0.00 | 1 |
| 4864.15 | 1260.60 | 1260.60 | 0.00 | 1 |
| 4864.58 | 1386.00 | 1386.00 | 0.00 | 1 |
| 4865.80 | 1699.98 | 1699.98 | 0.00 | Overtopping |

**Rating Curve Plot for Crossing: 401**



## Table 38 - Culvert Summary Table: 401

| Total Discharge (cfs) | Culvert Discharge (cfs) | Headwater Elevation (ft) | Inlet Control Depth (ft) | Outlet Control Depth (ft) | Flow Type | Normal Depth (ft) | Critical Depth (ft) | Outlet Depth (ft) | Tailwater Depth (ft) | Outlet Velocity (ft/s) | Tailwater Velocity (ft/s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 132.00 | 132.00 | 4860.21 | 1.109 | 0.000 | 1-S2n | 0.552 | 0.645 | 0.565 | 0.377 | 5.187 | 1.982 |
| 257.40 | 257.40 | 4860.82 | 1.723 | 0.000 | 1-S2n | 0.865 | 1.007 | 0.871 | 0.563 | 6.563 | 2.578 |
| 382.80 | 382.80 | 4861.33 | 2.230 | 0.114 | 1-S2n | 1.121 | 1.313 | 1.127 | 0.714 | 7.550 | 3.013 |
| 508.20 | 508.20 | 4861.78 | 2.680 | 0.248 | 1-S2n | 1.351 | 1.586 | 1.355 | 0.848 | 8.337 | 3.361 |
| 633.60 | 633.60 | 4862.19 | 3.095 | 0.366 | 1-S2n | 1.569 | 1.837 | 1.576 | 0.966 | 8.936 | 3.665 |
| 759.00 | 759.00 | 4862.59 | 3.487 | 0.477 | 1-S2n | 1.769 | 2.072 | 1.795 | 1.077 | 9.394 | 3.930 |
| 884.40 | 884.40 | 4862.97 | 3.870 | 0.579 | 1-S2n | 1.967 | 2.294 | 1.973 | 1.179 | 9.961 | 4.172 |
| 1009.80 | 1009.80 | 4863.35 | 4.253 | 0.675 | 5-S2n | 2.152 | 2.506 | 2.159 | 1.275 | 10.396 | 4.396 |
| 1135.20 | 1135.20 | 4863.74 | 4.644 | 0.768 | 5-S2n | 2.336 | 2.709 | 2.342 | 1.368 | 10.772 | 4.598 |
| 1260.60 | 1260.60 | 4864.15 | 5.053 | 0.856 | 5-S2n | 2.513 | 2.905 | 2.520 | 1.456 | 11.116 | 4.786 |
| 1386.00 | 1386.00 | 4864.58 | 5.484 | 0.941 | 5-S2n | 2.686 | 3.095 | 2.737 | 1.541 | 11.253 | 4.965 |

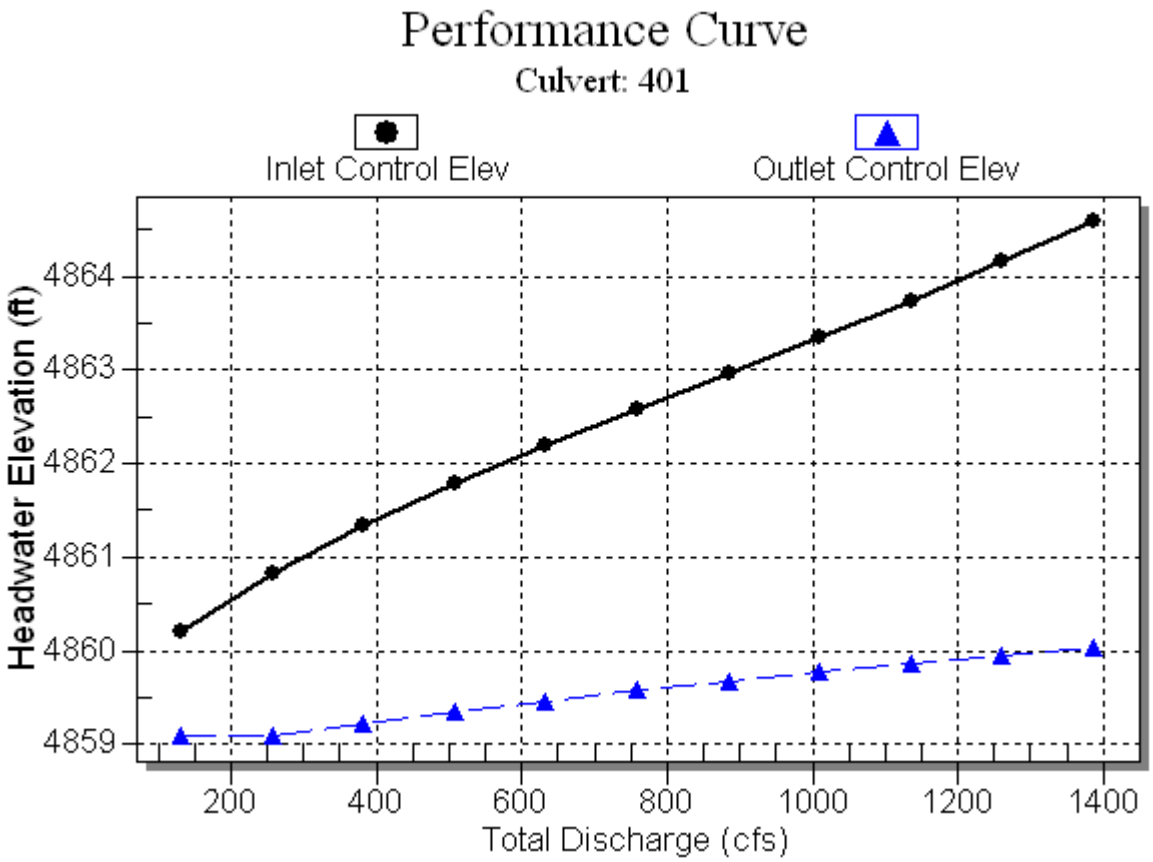
**********

Inlet Elevation (invert): 4859.10 ft,  Outlet Elevation (invert): 4858.50 ft

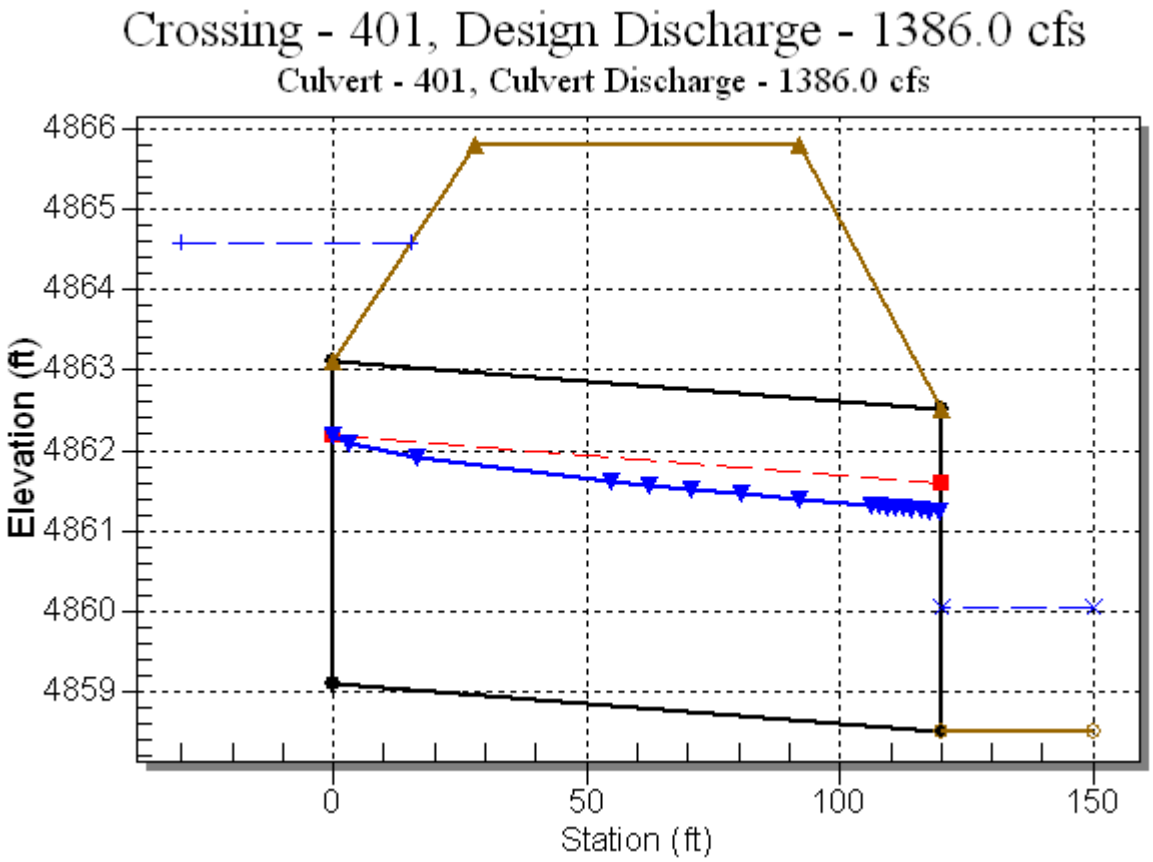
Culvert Length: 120.00 ft,  Culvert Slope: 0.0050

**********

**Culvert Performance Curve Plot: 401**



**Water Surface Profile Plot for Culvert: 401**




**Site Data - 401**

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 4859.10 ft

Outlet Station: 120.00 ft

Outlet Elevation: 4858.50 ft

Number of Barrels: 5

**Culvert Data Summary - 401**

Barrel Shape: Concrete Box

Barrel Span: 9.00 ft

Barrel Rise: 4.00 ft

Barrel Material: Concrete

Barrel Manning's n: 0.0130

Inlet Type: Conventional

Inlet Edge Condition: Square Edge (90º) Headwall

Inlet Depression: None

**Table 39 - Downstream Channel Rating Curve (Crossing: 401)**

| Flow (cfs) | Water Surface Elev (ft) | Depth (ft) | Velocity (ft/s) | Shear (psf) | Froude Number |
|---|---|---|---|---|---|
| 132.00 | 4858.88 | 0.38 | 1.98 | 0.31 | 0.57 |
| 257.40 | 4859.06 | 0.56 | 2.58 | 0.47 | 0.61 |
| 382.80 | 4859.21 | 0.71 | 3.01 | 0.59 | 0.63 |
| 508.20 | 4859.35 | 0.85 | 3.36 | 0.70 | 0.65 |
| 633.60 | 4859.47 | 0.97 | 3.67 | 0.80 | 0.66 |
| 759.00 | 4859.58 | 1.08 | 3.93 | 0.89 | 0.68 |
| 884.40 | 4859.68 | 1.18 | 4.17 | 0.98 | 0.69 |
| 1009.80 | 4859.78 | 1.28 | 4.40 | 1.06 | 0.70 |
| 1135.20 | 4859.87 | 1.37 | 4.60 | 1.14 | 0.70 |
| 1260.60 | 4859.96 | 1.46 | 4.79 | 1.21 | 0.71 |
| 1386.00 | 4860.04 | 1.54 | 4.96 | 1.28 | 0.72 |

## Tailwater Channel Data - 401

Tailwater Channel Option:  Trapezoidal Channel

Bottom Width:  175.00 ft

Side Slope (H:V):  4.00 (_:1)

Channel Slope:  0.0133

Channel Manning's n:  0.0450

Channel Invert Elevation:  4858.50 ft

## Roadway Data for Crossing: 401

Roadway Profile Shape:  Constant Roadway Elevation

Crest Length:  100.00 ft

Crest Elevation:  4865.80 ft

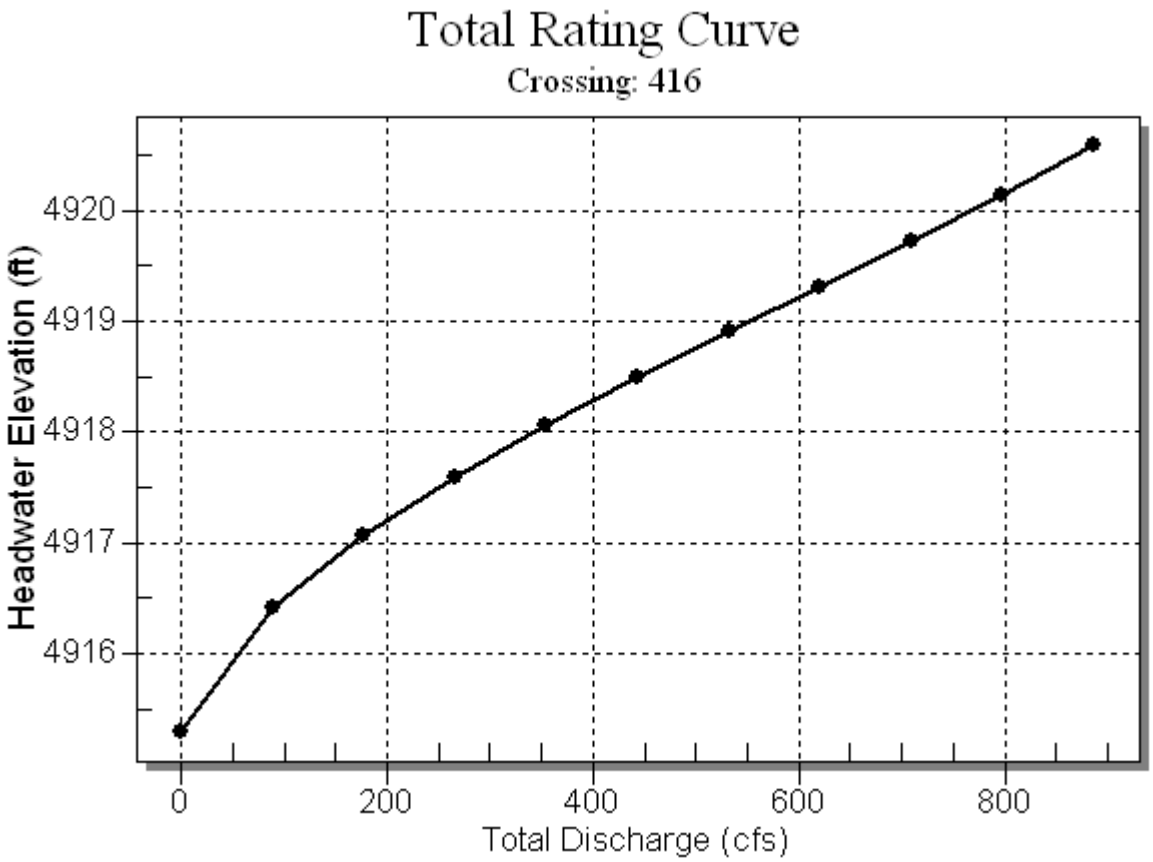
Roadway Surface:  Paved

Roadway Top Width:  64.00 ft

## Table 40 - Summary of Culvert Flows at Crossing: 416

| Headwater Elevation (ft) | Total Discharge (cfs) | 416 Discharge (cfs) | Roadway Discharge (cfs) | Iterations |
|---|---|---|---|---|
| 4915.30 | 0.00 | 0.00 | 0.00 | 1 |
| 4916.41 | 88.60 | 88.60 | 0.00 | 1 |
| 4917.06 | 177.20 | 177.20 | 0.00 | 1 |
| 4917.59 | 265.80 | 265.80 | 0.00 | 1 |
| 4918.06 | 354.40 | 354.40 | 0.00 | 1 |
| 4918.49 | 443.00 | 443.00 | 0.00 | 1 |
| 4918.91 | 531.60 | 531.60 | 0.00 | 1 |
| 4919.31 | 620.20 | 620.20 | 0.00 | 1 |
| 4919.72 | 708.80 | 708.80 | 0.00 | 1 |
| 4920.14 | 797.40 | 797.40 | 0.00 | 1 |
| 4920.58 | 886.00 | 886.00 | 0.00 | 1 |
| 4921.70 | 1084.96 | 1084.96 | 0.00 | Overtopping |

**Rating Curve Plot for Crossing: 416**



## Table 41 - Culvert Summary Table: 416

| Total Discharge (cfs) | Culvert Discharge (cfs) | Headwater Elevation (ft) | Inlet Control Depth (ft) | Outlet Control Depth (ft) | Flow Type | Normal Depth (ft) | Critical Depth (ft) | Outlet Depth (ft) | Tailwater Depth (ft) | Outlet Velocity (ft/s) | Tailwater Velocity (ft/s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.00 | 0.00 | 4915.30 | 0.000 | 0.000 | 0-NF | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 88.60 | 88.60 | 4916.41 | 1.114 | 1.114 | 1-S2n | 0.551 | 0.648 | 0.558 | 0.655 | 5.289 | 2.161 |
| 177.20 | 177.20 | 4917.06 | 1.760 | 1.760 | 1-S2n | 0.876 | 1.029 | 0.883 | 0.987 | 6.687 | 2.807 |
| 265.80 | 265.80 | 4917.59 | 2.290 | 2.290 | 1-S2n | 1.142 | 1.349 | 1.148 | 1.255 | 7.719 | 3.258 |
| 354.40 | 354.40 | 4918.06 | 2.760 | 2.760 | 1-S2n | 1.376 | 1.634 | 1.383 | 1.485 | 8.542 | 3.619 |
| 443.00 | 443.00 | 4918.49 | 3.193 | 3.193 | 1-S2n | 1.602 | 1.896 | 1.605 | 1.692 | 9.201 | 3.921 |
| 531.60 | 531.60 | 4918.91 | 3.605 | 3.605 | 1-S2n | 1.806 | 2.141 | 1.810 | 1.883 | 9.790 | 4.182 |
| 620.20 | 620.20 | 4919.31 | 4.010 | 4.010 | 5-S2n | 2.008 | 2.373 | 2.012 | 2.060 | 10.276 | 4.413 |
| 708.80 | 708.80 | 4919.72 | 4.418 | 4.418 | 5-S2n | 2.196 | 2.594 | 2.205 | 2.225 | 10.717 | 4.623 |
| 797.40 | 797.40 | 4920.14 | 4.840 | 1.783 | 5-S2n | 2.384 | 2.806 | 2.438 | 2.383 | 10.901 | 4.812 |
| 886.00 | 886.00 | 4920.58 | 5.285 | 1.931 | 5-S2n | 2.562 | 3.010 | 2.627 | 2.531 | 11.244 | 4.991 |

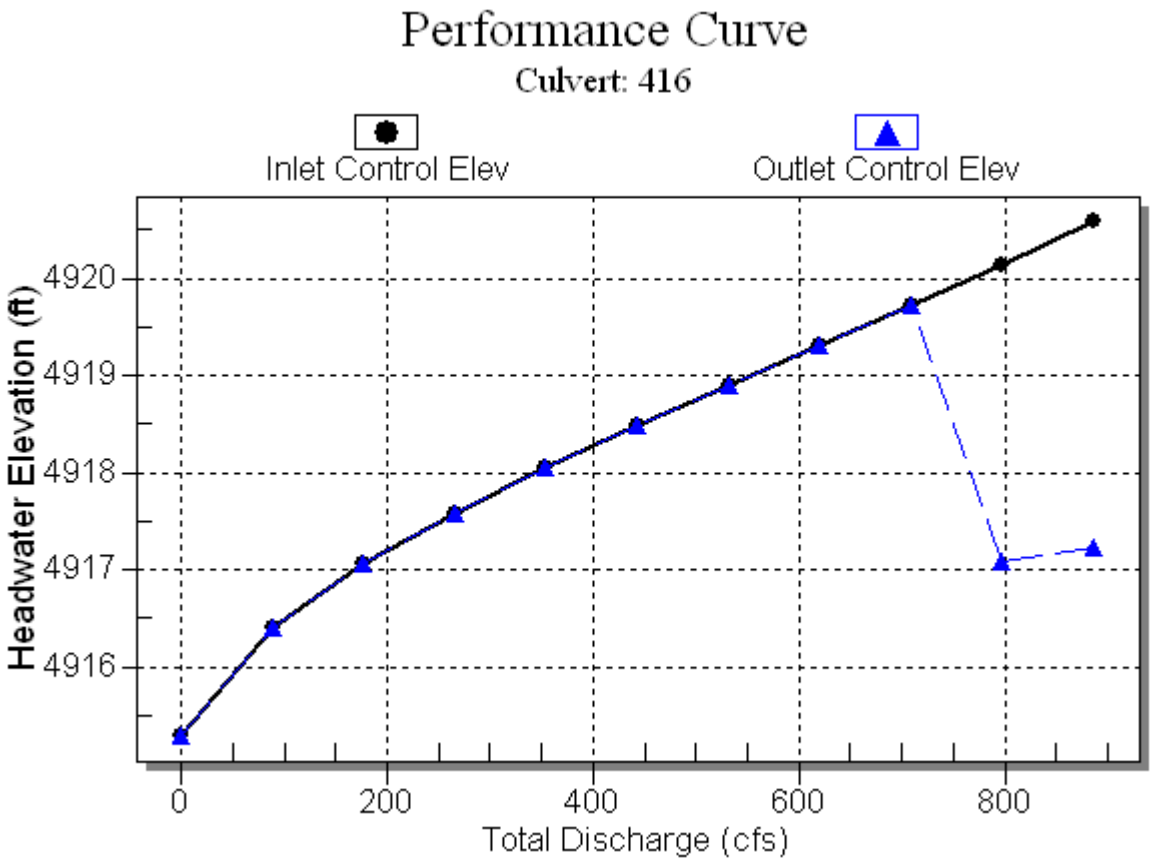
**********

Inlet Elevation (invert): 4915.30 ft,  Outlet Elevation (invert): 4914.70 ft

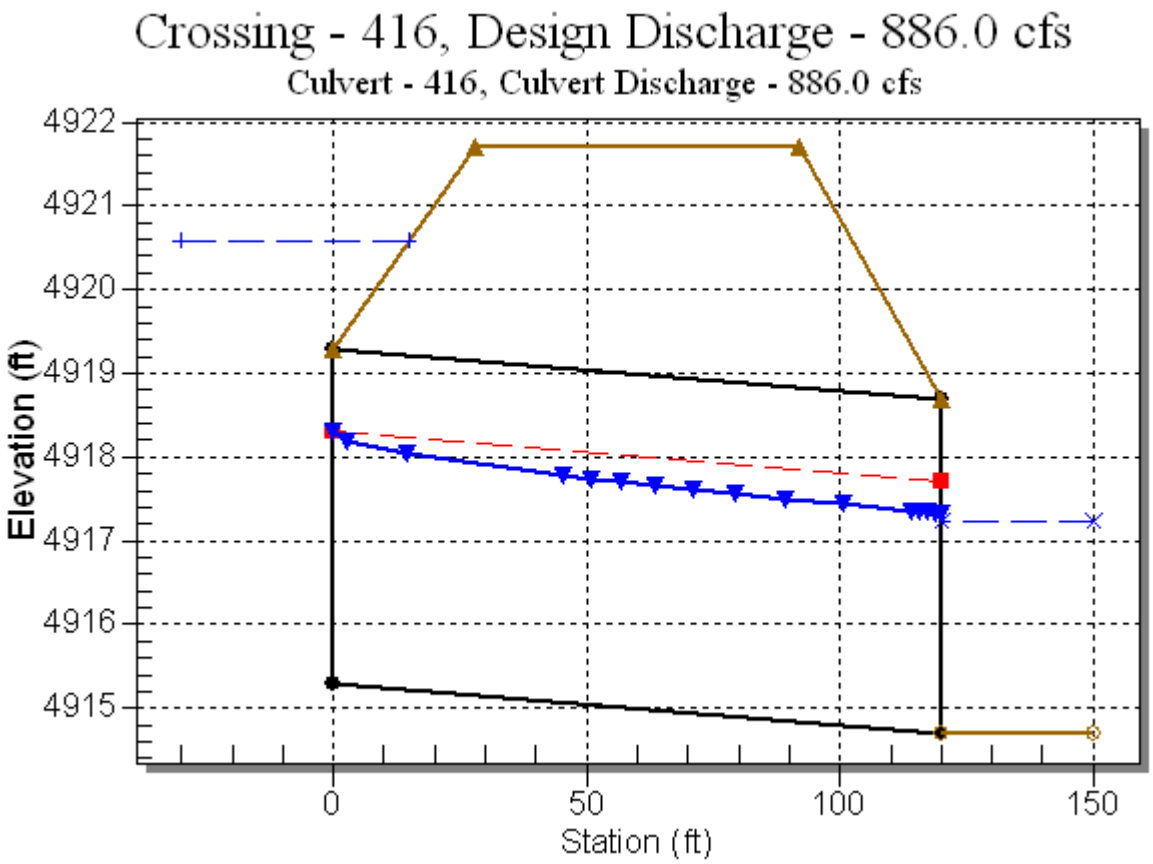
Culvert Length: 120.00 ft,  Culvert Slope: 0.0050

**********

**Culvert Performance Curve Plot: 416**



**Water Surface Profile Plot for Culvert: 416**




**Site Data - 416**

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 4915.30 ft

Outlet Station: 120.00 ft

Outlet Elevation: 4914.70 ft

Number of Barrels: 3

**Culvert Data Summary - 416**

Barrel Shape: Concrete Box

Barrel Span: 10.00 ft

Barrel Rise: 4.00 ft

Barrel Material: Concrete

Barrel Manning's n: 0.0130

Inlet Type: Conventional

Inlet Edge Condition: Square Edge (90º) Headwall

Inlet Depression: None

**Table 42 - Downstream Channel Rating Curve (Crossing: 416)**

| Flow (cfs) | Water Surface Elev (ft) | Depth (ft) | Velocity (ft/s) | Shear (psf) | Froude Number |
|---|---|---|---|---|---|
| 0.00 | 4914.70 | 0.00 | 0.00 | 0.00 | 0.00 |
| 88.60 | 4915.35 | 0.65 | 2.16 | 0.33 | 0.48 |
| 177.20 | 4915.69 | 0.99 | 2.81 | 0.49 | 0.51 |
| 265.80 | 4915.95 | 1.25 | 3.26 | 0.63 | 0.53 |
| 354.40 | 4916.19 | 1.49 | 3.62 | 0.74 | 0.55 |
| 443.00 | 4916.39 | 1.69 | 3.92 | 0.84 | 0.56 |
| 531.60 | 4916.58 | 1.88 | 4.18 | 0.94 | 0.57 |
| 620.20 | 4916.76 | 2.06 | 4.41 | 1.03 | 0.57 |
| 708.80 | 4916.93 | 2.23 | 4.62 | 1.11 | 0.58 |
| 797.40 | 4917.08 | 2.38 | 4.81 | 1.19 | 0.59 |
| 886.00 | 4917.23 | 2.53 | 4.99 | 1.26 | 0.59 |

## Tailwater Channel Data - 416

Tailwater Channel Option:  Trapezoidal Channel

Bottom Width:  60.00 ft

Side Slope (H:V):  4.00 (_:1)

Channel Slope:  0.0080

Channel Manning's n:  0.0450

Channel Invert Elevation:  4914.70 ft

## Roadway Data for Crossing: 416

Roadway Profile Shape:  Constant Roadway Elevation

Crest Length:  100.00 ft

Crest Elevation:  4921.70 ft

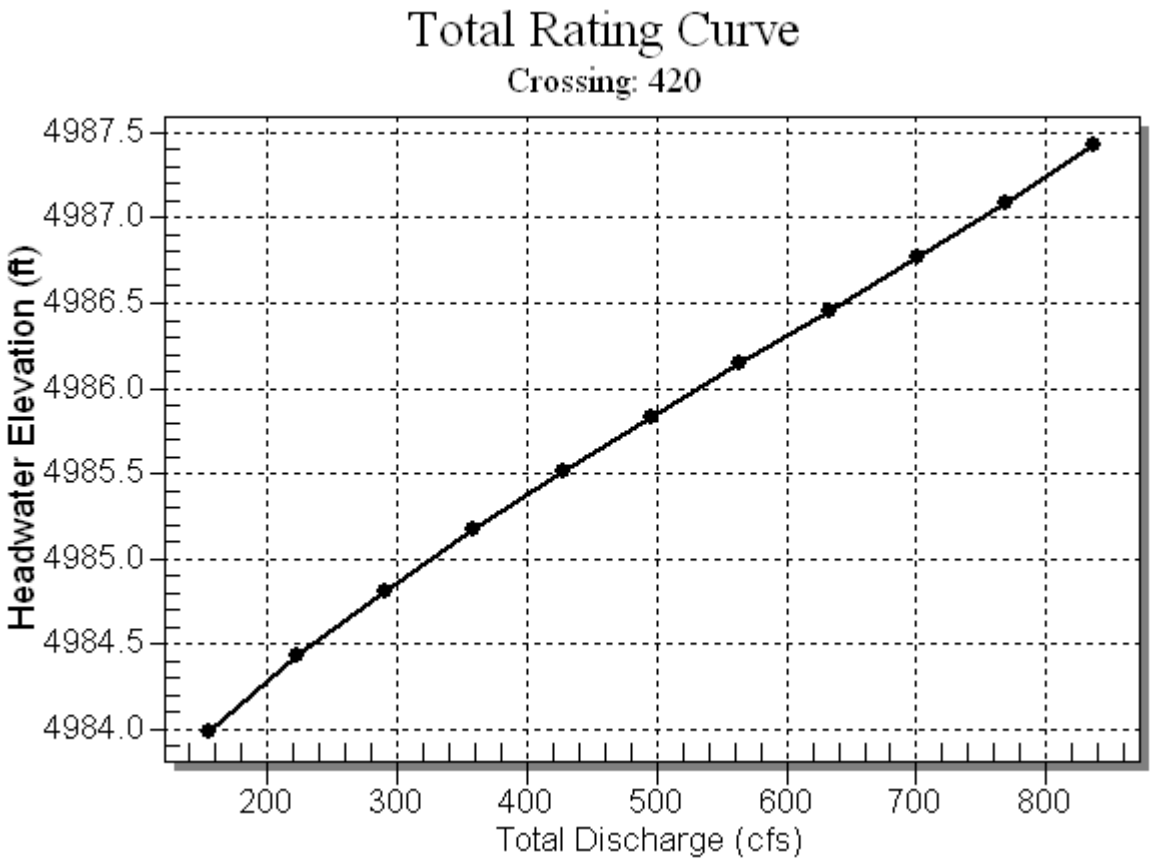
Roadway Surface:  Paved

Roadway Top Width:  64.00 ft

## Table 43 - Summary of Culvert Flows at Crossing: 420

| Headwater Elevation (ft) | Total Discharge (cfs) | 420 Discharge (cfs) | Roadway Discharge (cfs) | Iterations |
|---|---|---|---|---|
| 4983.99 | 152.00 | 152.00 | 0.00 | 1 |
| 4984.43 | 220.30 | 220.30 | 0.00 | 1 |
| 4984.82 | 288.60 | 288.60 | 0.00 | 1 |
| 4985.17 | 356.90 | 356.90 | 0.00 | 1 |
| 4985.51 | 425.20 | 425.20 | 0.00 | 1 |
| 4985.83 | 493.50 | 493.50 | 0.00 | 1 |
| 4986.14 | 561.80 | 561.80 | 0.00 | 1 |
| 4986.45 | 630.10 | 630.10 | 0.00 | 1 |
| 4986.77 | 698.40 | 698.40 | 0.00 | 1 |
| 4987.09 | 766.70 | 766.70 | 0.00 | 1 |
| 4987.43 | 835.00 | 835.00 | 0.00 | 1 |
| 4988.90 | 1101.28 | 1101.28 | 0.00 | Overtopping |

**Rating Curve Plot for Crossing: 420**



## Table 44 - Culvert Summary Table: 420

| Total Discharge (cfs) | Culvert Discharge (cfs) | Headwater Elevation (ft) | Inlet Control Depth (ft) | Outlet Control Depth (ft) | Flow Type | Normal Depth (ft) | Critical Depth (ft) | Outlet Depth (ft) | Tailwater Depth (ft) | Outlet Velocity (ft/s) | Tailwater Velocity (ft/s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 152.00 | 152.00 | 4983.99 | 1.589 | 0.056 | 1-S2n | 0.801 | 0.929 | 0.802 | 0.656 | 6.320 | 2.258 |
| 220.30 | 220.30 | 4984.43 | 2.029 | 0.219 | 1-S2n | 1.005 | 1.190 | 1.010 | 0.819 | 7.270 | 2.604 |
| 288.60 | 288.60 | 4984.82 | 2.415 | 0.361 | 1-S2n | 1.209 | 1.425 | 1.210 | 0.961 | 7.952 | 2.891 |
| 356.90 | 356.90 | 4985.17 | 2.772 | 0.491 | 1-S2n | 1.383 | 1.642 | 1.391 | 1.091 | 8.555 | 3.135 |
| 425.20 | 425.20 | 4985.51 | 3.108 | 0.611 | 1-S2n | 1.557 | 1.845 | 1.564 | 1.211 | 9.063 | 3.349 |
| 493.50 | 493.50 | 4985.83 | 3.430 | 0.723 | 1-S2n | 1.718 | 2.037 | 1.727 | 1.323 | 9.523 | 3.542 |
| 561.80 | 561.80 | 4986.14 | 3.743 | 0.829 | 1-S2n | 1.875 | 2.221 | 1.880 | 1.429 | 9.959 | 3.720 |
| 630.10 | 630.10 | 4986.45 | 4.055 | 0.929 | 5-S2n | 2.029 | 2.398 | 2.031 | 1.529 | 10.342 | 3.883 |
| 698.40 | 698.40 | 4986.77 | 4.369 | 1.025 | 5-S2n | 2.174 | 2.568 | 2.182 | 1.625 | 10.668 | 4.034 |
| 766.70 | 766.70 | 4987.09 | 4.692 | 1.117 | 5-S2n | 2.319 | 2.733 | 2.372 | 1.717 | 10.775 | 4.180 |
| 835.00 | 835.00 | 4987.43 | 5.026 | 1.206 | 5-S2n | 2.460 | 2.893 | 2.519 | 1.806 | 11.050 | 4.311 |

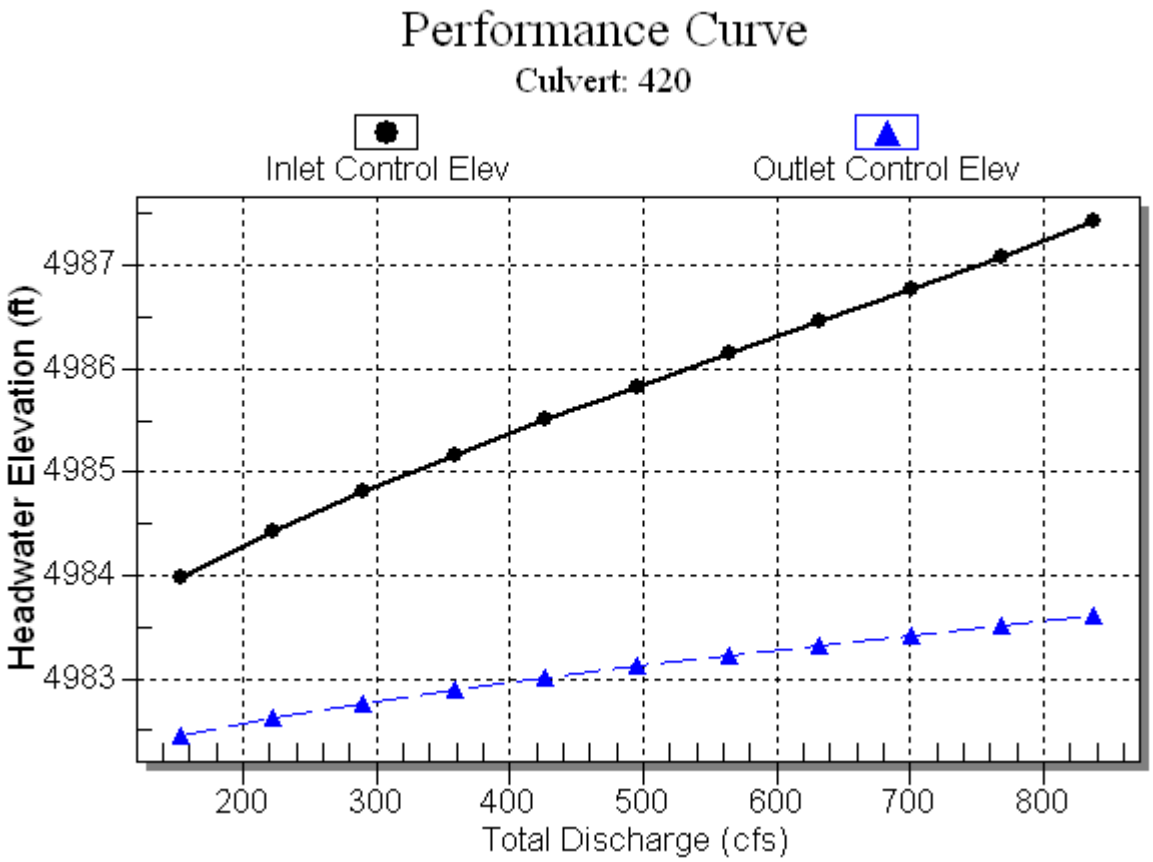
**********

Inlet Elevation (invert): 4982.40 ft,  Outlet Elevation (invert): 4981.80 ft

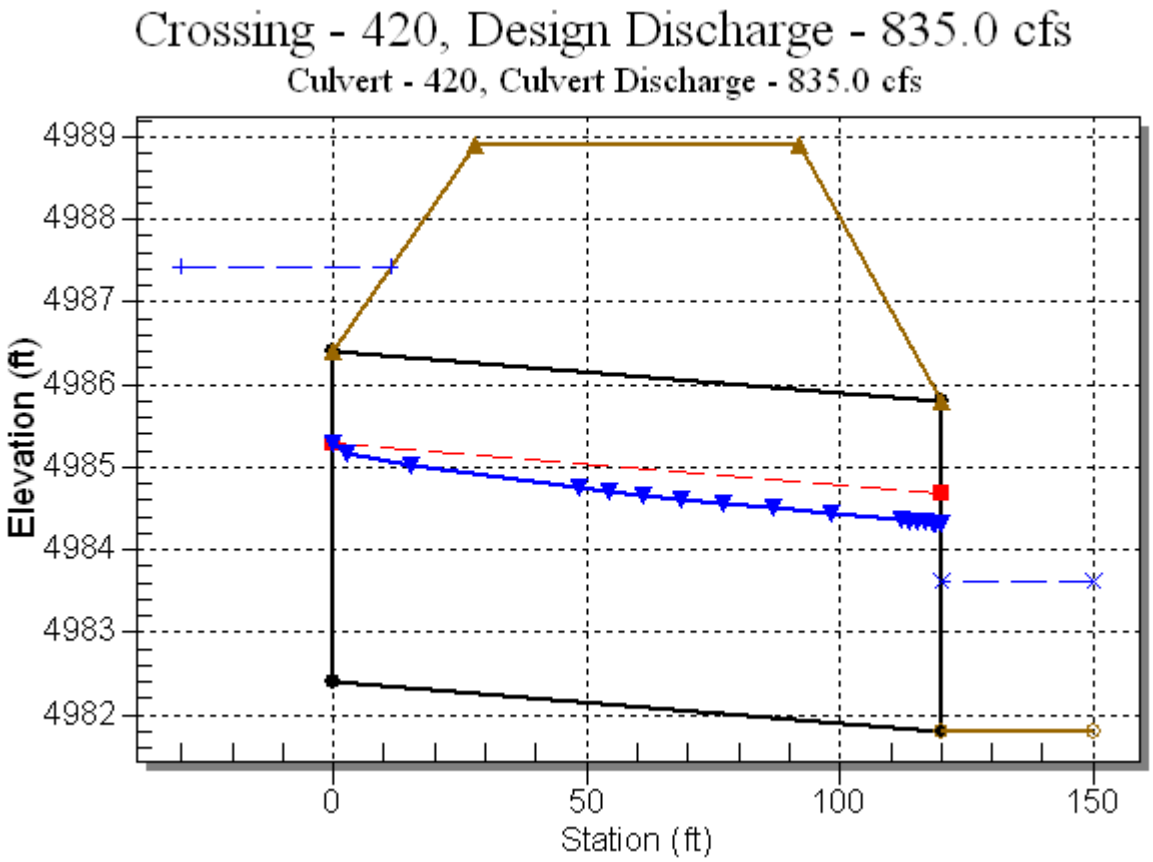
Culvert Length: 120.00 ft,  Culvert Slope: 0.0050

**********

**Culvert Performance Curve Plot: 420**



**Water Surface Profile Plot for Culvert: 420**




**Site Data - 420**

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 4982.40 ft

Outlet Station: 120.00 ft

Outlet Elevation: 4981.80 ft

Number of Barrels: 3

**Culvert Data Summary - 420**

Barrel Shape: Concrete Box

Barrel Span: 10.00 ft

Barrel Rise: 4.00 ft

Barrel Material: Concrete

Barrel Manning's n: 0.0130

Inlet Type: Conventional

Inlet Edge Condition: Square Edge (90º) Headwall

Inlet Depression: None

**Table 45 - Downstream Channel Rating Curve (Crossing: 420)**

| Flow (cfs) | Water Surface Elev (ft) | Depth (ft) | Velocity (ft/s) | Shear (psf) | Froude Number |
|---|---|---|---|---|---|
| 152.00 | 4982.46 | 0.66 | 2.26 | 0.35 | 0.50 |
| 220.30 | 4982.62 | 0.82 | 2.60 | 0.43 | 0.52 |
| 288.60 | 4982.76 | 0.96 | 2.89 | 0.51 | 0.53 |
| 356.90 | 4982.89 | 1.09 | 3.14 | 0.58 | 0.54 |
| 425.20 | 4983.01 | 1.21 | 3.35 | 0.64 | 0.55 |
| 493.50 | 4983.12 | 1.32 | 3.54 | 0.70 | 0.56 |
| 561.80 | 4983.23 | 1.43 | 3.72 | 0.76 | 0.56 |
| 630.10 | 4983.33 | 1.53 | 3.88 | 0.81 | 0.57 |
| 698.40 | 4983.43 | 1.63 | 4.03 | 0.86 | 0.57 |
| 766.70 | 4983.52 | 1.72 | 4.18 | 0.91 | 0.58 |
| 835.00 | 4983.61 | 1.81 | 4.31 | 0.96 | 0.58 |

## Tailwater Channel Data - 420

Tailwater Channel Option:  Trapezoidal Channel

Bottom Width:  100.00 ft

Side Slope (H:V):  4.00 (_:1)

Channel Slope:  0.0085

Channel Manning's n:  0.0450

Channel Invert Elevation:  4981.80 ft

## Roadway Data for Crossing: 420

Roadway Profile Shape:  Constant Roadway Elevation

Crest Length:  100.00 ft

Crest Elevation:  4988.90 ft

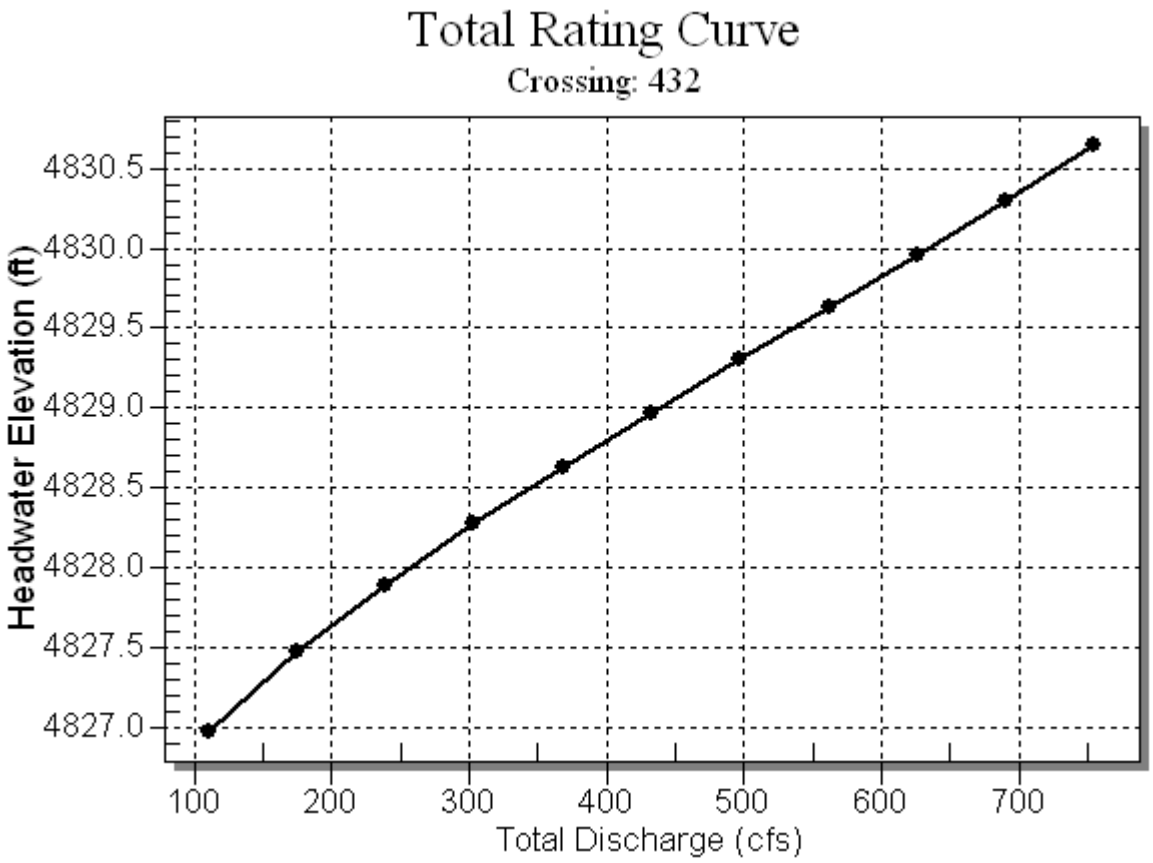
Roadway Surface:  Paved

Roadway Top Width:  64.00 ft

## Table 46 - Summary of Culvert Flows at Crossing: 432

| Headwater Elevation (ft) | Total Discharge (cfs) | 432 Discharge (cfs) | Roadway Discharge (cfs) | Iterations |
|---|---|---|---|---|
| 4826.97 | 110.00 | 110.00 | 0.00 | 1 |
| 4827.47 | 174.50 | 174.50 | 0.00 | 1 |
| 4827.89 | 239.00 | 239.00 | 0.00 | 1 |
| 4828.27 | 303.50 | 303.50 | 0.00 | 1 |
| 4828.63 | 368.00 | 368.00 | 0.00 | 1 |
| 4828.97 | 432.50 | 432.50 | 0.00 | 1 |
| 4829.30 | 497.00 | 497.00 | 0.00 | 1 |
| 4829.63 | 561.50 | 561.50 | 0.00 | 1 |
| 4829.96 | 626.00 | 626.00 | 0.00 | 1 |
| 4830.29 | 690.50 | 690.50 | 0.00 | 1 |
| 4830.65 | 755.00 | 755.00 | 0.00 | 1 |
| 4832.00 | 976.44 | 976.44 | 0.00 | Overtopping |

**Rating Curve Plot for Crossing: 432**



## Table 47 - Culvert Summary Table: 432

| Total Discharge (cfs) | Culvert Discharge (cfs) | Headwater Elevation (ft) | Inlet Control Depth (ft) | Outlet Control Depth (ft) | Flow Type | Normal Depth (ft) | Critical Depth (ft) | Outlet Depth (ft) | Tailwater Depth (ft) | Outlet Velocity (ft/s) | Tailwater Velocity (ft/s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 110.00 | 110.00 | 4826.97 | 1.371 | 1.371 | 1-S2n | 0.688 | 0.804 | 0.694 | 0.821 | 5.874 | 2.299 |
| 174.50 | 174.50 | 4827.47 | 1.868 | 1.868 | 1-S2n | 0.933 | 1.093 | 0.942 | 1.078 | 6.861 | 2.728 |
| 239.00 | 239.00 | 4827.89 | 2.288 | 2.288 | 1-S2n | 1.152 | 1.348 | 1.157 | 1.299 | 7.651 | 3.056 |
| 303.50 | 303.50 | 4828.27 | 2.672 | 2.672 | 1-S2n | 1.346 | 1.581 | 1.350 | 1.495 | 8.329 | 3.330 |
| 368.00 | 368.00 | 4828.63 | 3.029 | 3.029 | 1-S2n | 1.534 | 1.797 | 1.539 | 1.672 | 8.855 | 3.567 |
| 432.50 | 432.50 | 4828.97 | 3.369 | 3.369 | 1-S2n | 1.709 | 2.002 | 1.716 | 1.837 | 9.334 | 3.776 |
| 497.00 | 497.00 | 4829.30 | 3.700 | 3.700 | 1-S2n | 1.879 | 2.196 | 1.886 | 1.991 | 9.760 | 3.964 |
| 561.50 | 561.50 | 4829.63 | 4.026 | 4.026 | 5-S2n | 2.044 | 2.382 | 2.051 | 2.138 | 10.139 | 4.134 |
| 626.00 | 626.00 | 4829.96 | 4.356 | 4.356 | 5-S2n | 2.201 | 2.561 | 2.210 | 2.276 | 10.490 | 4.291 |
| 690.50 | 690.50 | 4830.29 | 4.694 | 4.694 | 5-S2n | 2.359 | 2.734 | 2.363 | 2.409 | 10.821 | 4.435 |
| 755.00 | 755.00 | 4830.65 | 5.045 | 5.045 | 5-S2n | 2.509 | 2.902 | 2.517 | 2.535 | 11.110 | 4.573 |

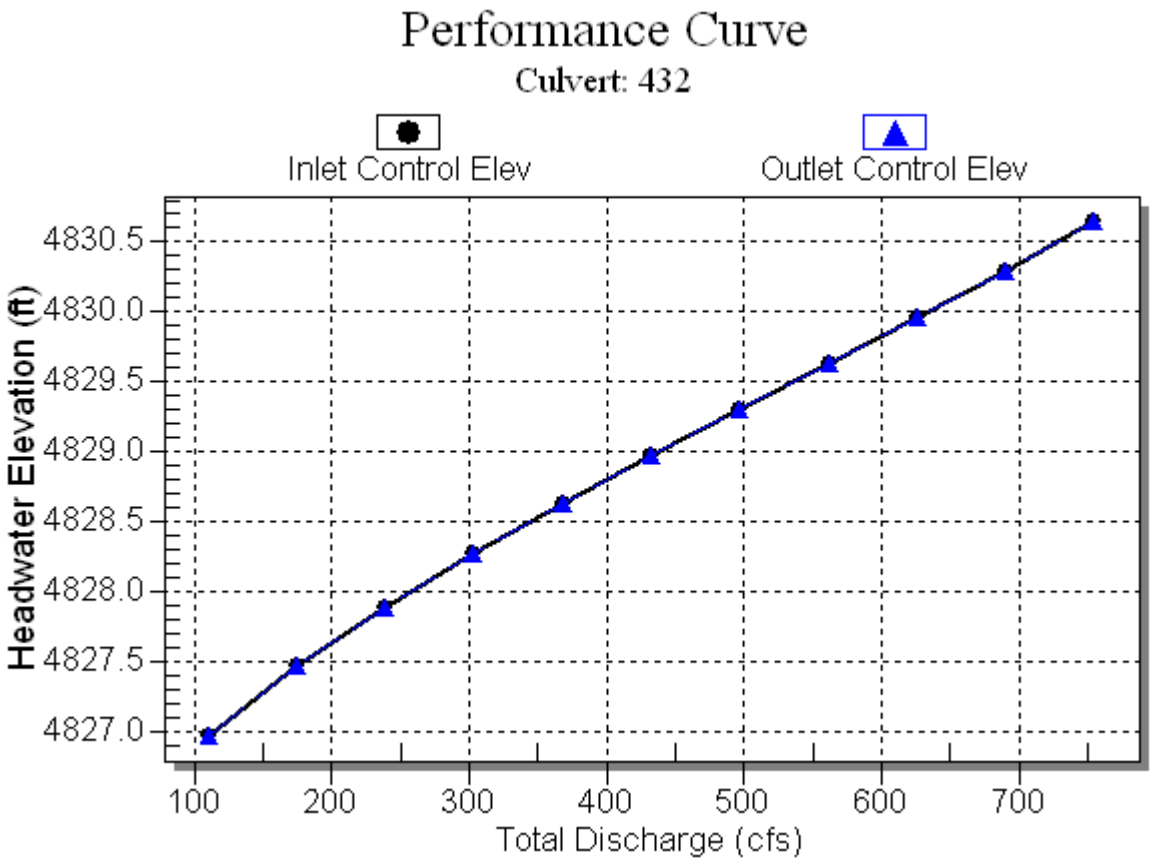
**********

Inlet Elevation (invert): 4825.60 ft,  Outlet Elevation (invert): 4825.00 ft

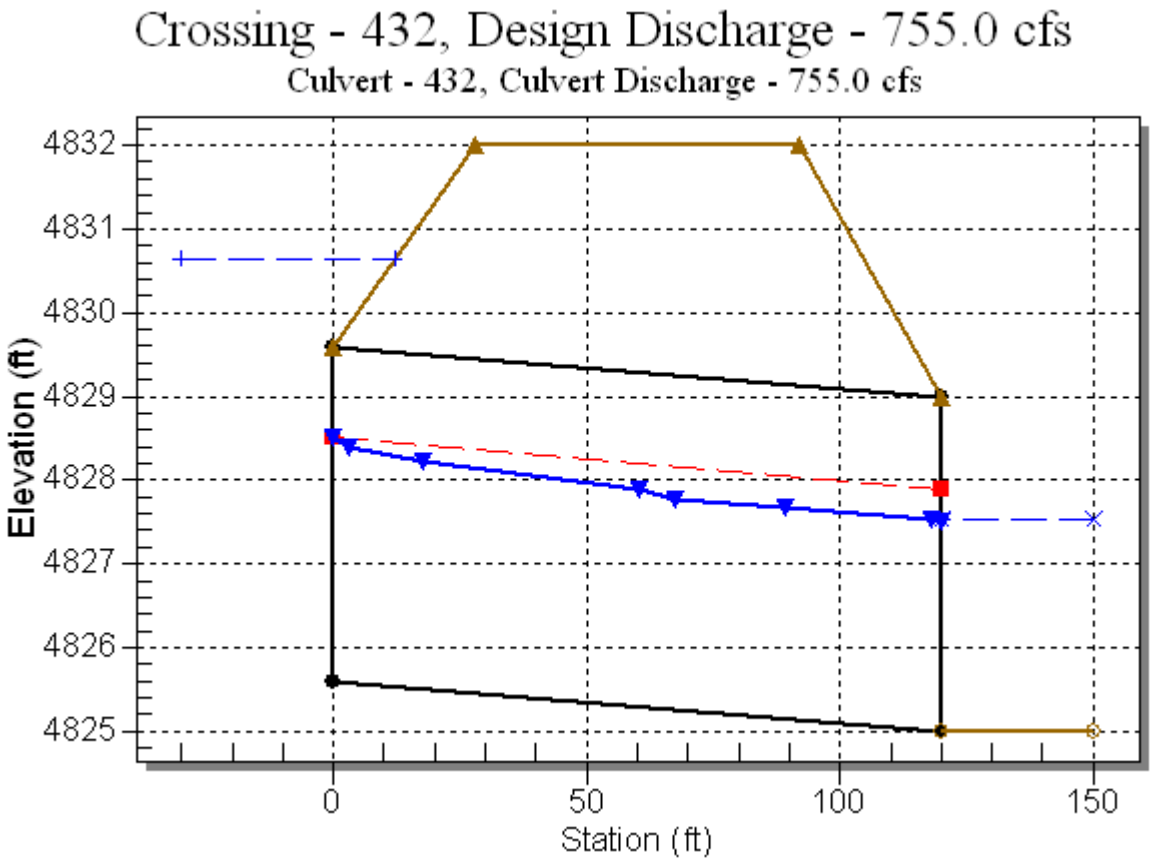
Culvert Length: 120.00 ft,  Culvert Slope: 0.0050

**********

**Culvert Performance Curve Plot: 432**



**Water Surface Profile Plot for Culvert: 432**




**Site Data - 432**

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 4825.60 ft

Outlet Station: 120.00 ft

Outlet Elevation: 4825.00 ft

Number of Barrels: 3

**Culvert Data Summary - 432**

Barrel Shape: Concrete Box

Barrel Span: 9.00 ft

Barrel Rise: 4.00 ft

Barrel Material: Concrete

Barrel Manning's n: 0.0130

Inlet Type: Conventional

Inlet Edge Condition: Square Edge (90º) Headwall

Inlet Depression: None

**Table 48 - Downstream Channel Rating Curve (Crossing: 432)**

| Flow (cfs) | Water Surface Elev (ft) | Depth (ft) | Velocity (ft/s) | Shear (psf) | Froude Number |
|---|---|---|---|---|---|
| 110.00 | 4825.82 | 0.82 | 2.30 | 0.35 | 0.46 |
| 174.50 | 4826.08 | 1.08 | 2.73 | 0.46 | 0.48 |
| 239.00 | 4826.30 | 1.30 | 3.06 | 0.55 | 0.49 |
| 303.50 | 4826.49 | 1.49 | 3.33 | 0.63 | 0.50 |
| 368.00 | 4826.67 | 1.67 | 3.57 | 0.71 | 0.51 |
| 432.50 | 4826.84 | 1.84 | 3.78 | 0.78 | 0.52 |
| 497.00 | 4826.99 | 1.99 | 3.96 | 0.84 | 0.53 |
| 561.50 | 4827.14 | 2.14 | 4.13 | 0.91 | 0.53 |
| 626.00 | 4827.28 | 2.28 | 4.29 | 0.97 | 0.54 |
| 690.50 | 4827.41 | 2.41 | 4.44 | 1.02 | 0.54 |
| 755.00 | 4827.53 | 2.53 | 4.57 | 1.08 | 0.54 |

## Tailwater Channel Data - 432

Tailwater Channel Option:  Trapezoidal Channel

Bottom Width:  55.00 ft

Side Slope (H:V):  4.00 (_:1)

Channel Slope:  0.0068

Channel Manning's n:  0.0450

Channel Invert Elevation:  4825.00 ft

## Roadway Data for Crossing: 432

Roadway Profile Shape:  Constant Roadway Elevation

Crest Length:  100.00 ft

Crest Elevation:  4832.00 ft

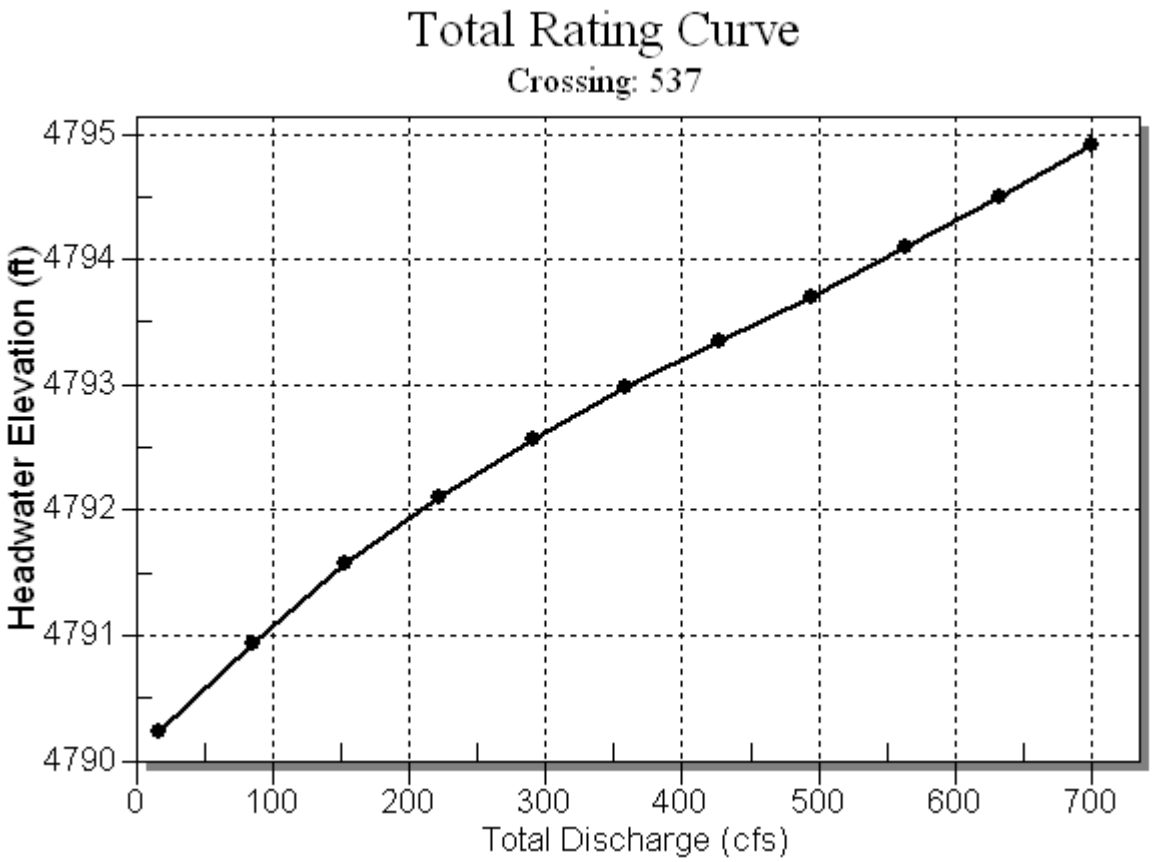
Roadway Surface:  Paved

Roadway Top Width:  64.00 ft

## Table 49 - Summary of Culvert Flows at Crossing: 537

| Headwater Elevation (ft) | Total Discharge (cfs) | 537 Discharge (cfs) | Roadway Discharge (cfs) | Iterations |
|---|---|---|---|---|
| 4790.23 | 17.00 | 17.00 | 0.00 | 1 |
| 4790.93 | 85.30 | 85.30 | 0.00 | 1 |
| 4791.57 | 153.60 | 153.60 | 0.00 | 1 |
| 4792.10 | 221.90 | 221.90 | 0.00 | 1 |
| 4792.56 | 290.20 | 290.20 | 0.00 | 1 |
| 4792.97 | 358.50 | 358.50 | 0.00 | 1 |
| 4793.35 | 426.80 | 426.80 | 0.00 | 1 |
| 4793.70 | 495.10 | 495.10 | 0.00 | 1 |
| 4794.10 | 563.40 | 563.40 | 0.00 | 1 |
| 4794.50 | 631.70 | 631.70 | 0.00 | 1 |
| 4794.91 | 700.00 | 700.00 | 0.00 | 1 |
| 4796.20 | 878.78 | 878.78 | 0.00 | Overtopping |

**Rating Curve Plot for Crossing: 537**



## Table 50 - Culvert Summary Table: 537

| Total Discharge (cfs) | Culvert Discharge (cfs) | Headwater Elevation (ft) | Inlet Control Depth (ft) | Outlet Control Depth (ft) | Flow Type | Normal Depth (ft) | Critical Depth (ft) | Outlet Depth (ft) | Tailwater Depth (ft) | Outlet Velocity (ft/s) | Tailwater Velocity (ft/s) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.00 | 17.00 | 4790.23 | 0.432 | 0.432 | 1-S2n | 0.129 | 0.207 | 0.197 | 0.615 | 2.702 | 1.006 |
| 85.30 | 85.30 | 4790.93 | 1.041 | 1.133 | 1-S1t | 0.523 | 0.606 | 1.561 | 1.561 | 1.707 | 1.748 |
| 153.60 | 153.60 | 4791.57 | 1.532 | 1.769 | 1-S1t | 0.782 | 0.896 | 2.167 | 2.167 | 2.215 | 2.106 |
| 221.90 | 221.90 | 4792.10 | 1.956 | 2.299 | 1-S1t | 0.986 | 1.145 | 2.648 | 2.648 | 2.619 | 2.354 |
| 290.20 | 290.20 | 4792.56 | 2.325 | 2.759 | 1-S1t | 1.186 | 1.370 | 3.058 | 3.058 | 2.966 | 2.549 |
| 358.50 | 358.50 | 4792.97 | 2.666 | 3.172 | 1-S1t | 1.361 | 1.577 | 3.420 | 3.420 | 3.276 | 2.710 |
| 426.80 | 426.80 | 4793.35 | 2.987 | 3.550 | 1-S1t | 1.533 | 1.772 | 3.746 | 3.746 | 3.561 | 2.850 |
| 495.10 | 495.10 | 4793.70 | 3.293 | 3.904 | 1-S1f | 1.696 | 1.956 | 4.000 | 4.045 | 3.868 | 2.972 |
| 563.40 | 563.40 | 4794.10 | 3.590 | 4.295 | 4-FFf | 1.852 | 2.132 | 4.000 | 4.323 | 4.402 | 3.081 |
| 631.70 | 631.70 | 4794.50 | 3.882 | 4.702 | 4-FFf | 2.008 | 2.301 | 4.000 | 4.583 | 4.935 | 3.181 |
| 700.00 | 700.00 | 4794.91 | 4.175 | 5.109 | 4-FFf | 2.154 | 2.464 | 4.000 | 4.826 | 5.469 | 3.274 |

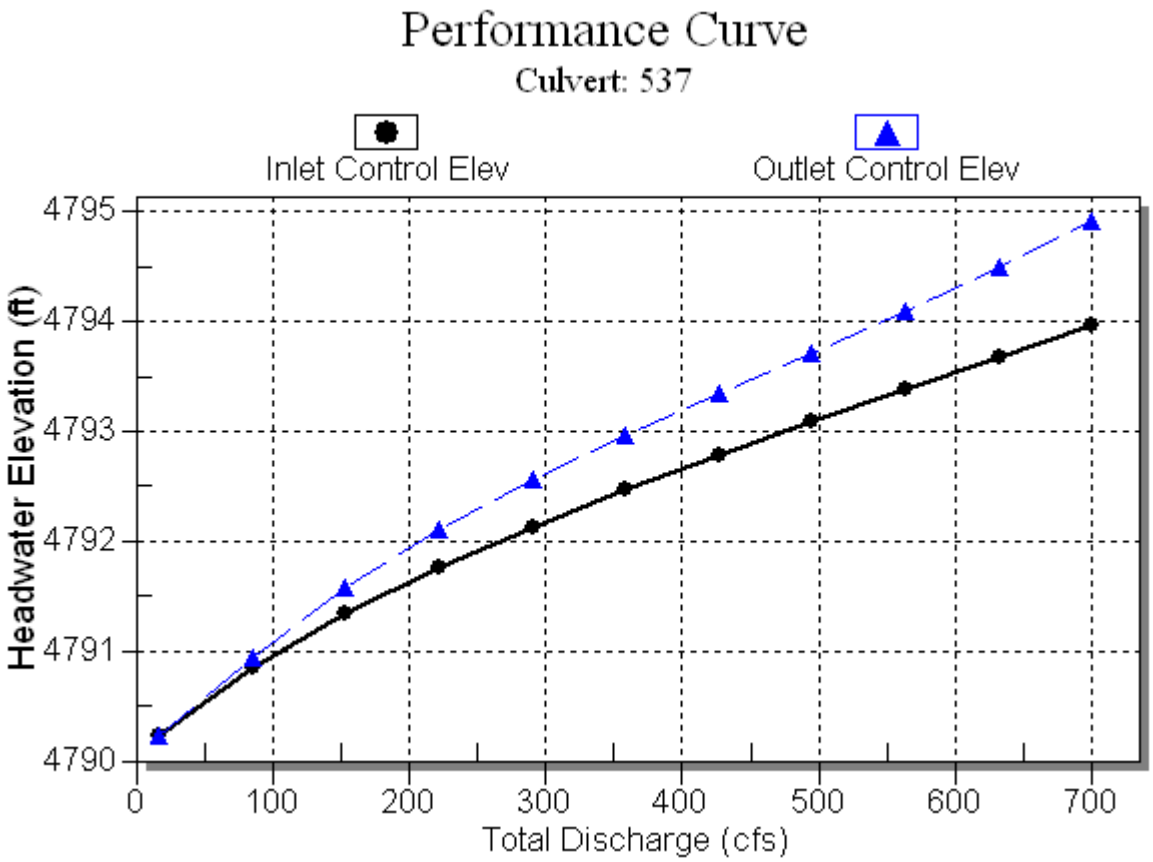
**********

Inlet Elevation (invert): 4789.80 ft,  Outlet Elevation (invert): 4789.20 ft

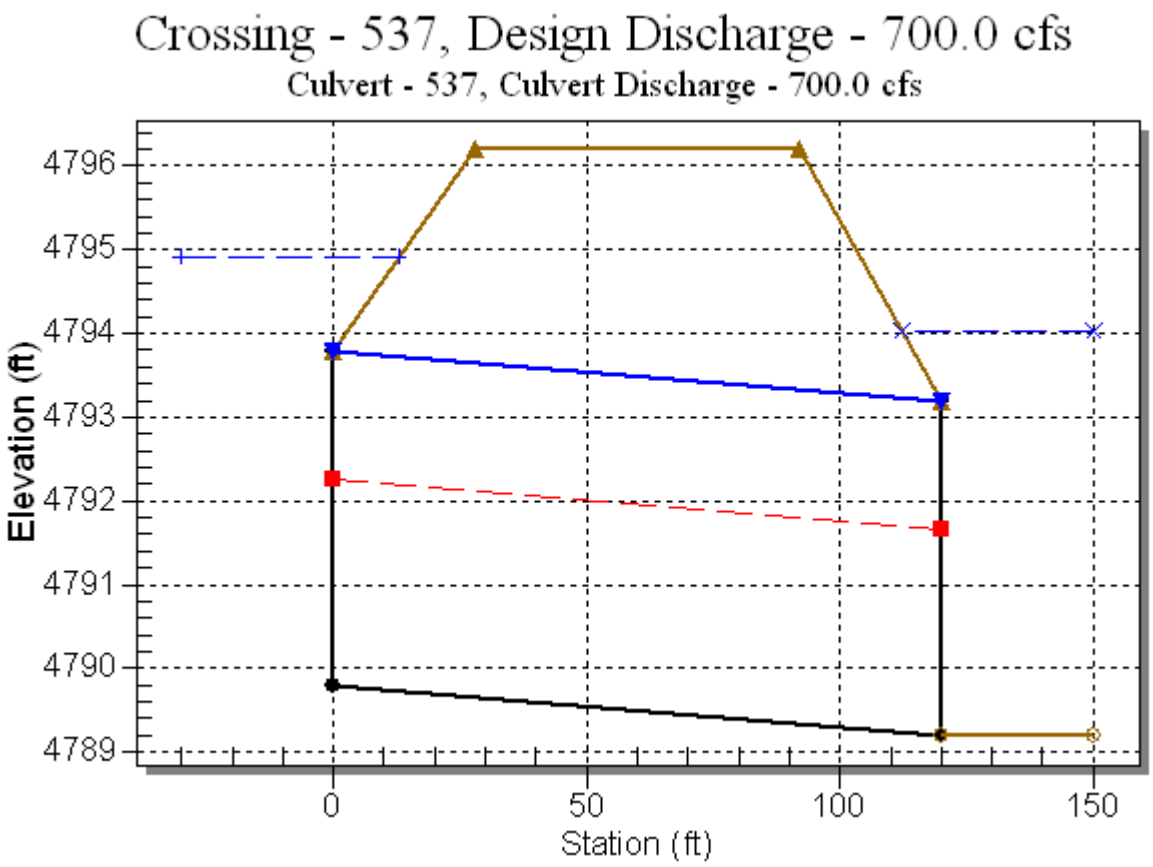
Culvert Length: 120.00 ft,  Culvert Slope: 0.0050

**********

**Culvert Performance Curve Plot: 537**



**Water Surface Profile Plot for Culvert: 537**




**Site Data - 537**

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 4789.80 ft

Outlet Station: 120.00 ft

Outlet Elevation: 4789.20 ft

Number of Barrels: 4

**Culvert Data Summary - 537**

Barrel Shape: Concrete Box

Barrel Span: 8.00 ft

Barrel Rise: 4.00 ft

Barrel Material: Concrete

Barrel Manning's n: 0.0130

Inlet Type: Conventional

Inlet Edge Condition: Square Edge (90º) Headwall

Inlet Depression: None

**Table 51 - Downstream Channel Rating Curve (Crossing: 537)**

| Flow (cfs) | Water Surface Elev (ft) | Depth (ft) | Velocity (ft/s) | Shear (psf) | Froude Number |
|---|---|---|---|---|---|
| 17.00 | 4789.82 | 0.62 | 1.01 | 0.08 | 0.24 |
| 85.30 | 4790.76 | 1.56 | 1.75 | 0.19 | 0.27 |
| 153.60 | 4791.37 | 2.17 | 2.11 | 0.27 | 0.28 |
| 221.90 | 4791.85 | 2.65 | 2.35 | 0.33 | 0.29 |
| 290.20 | 4792.26 | 3.06 | 2.55 | 0.38 | 0.30 |
| 358.50 | 4792.62 | 3.42 | 2.71 | 0.43 | 0.30 |
| 426.80 | 4792.95 | 3.75 | 2.85 | 0.47 | 0.30 |
| 495.10 | 4793.25 | 4.05 | 2.97 | 0.50 | 0.31 |
| 563.40 | 4793.52 | 4.32 | 3.08 | 0.54 | 0.31 |
| 631.70 | 4793.78 | 4.58 | 3.18 | 0.57 | 0.31 |
| 700.00 | 4794.03 | 4.83 | 3.27 | 0.60 | 0.31 |

## Tailwater Channel Data - 537

Tailwater Channel Option:  Trapezoidal Channel

Bottom Width:  25.00 ft

Side Slope (H:V):  4.00 (_:1)

Channel Slope:  0.0020

Channel Manning's n:  0.0450

Channel Invert Elevation:  4789.20 ft

## Roadway Data for Crossing: 537

Roadway Profile Shape:  Constant Roadway Elevation

Crest Length:  100.00 ft

Crest Elevation:  4796.20 ft

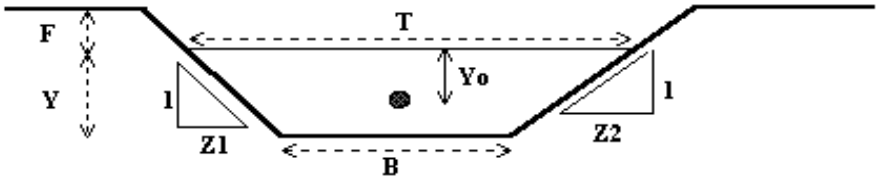
Roadway Surface:  Paved

Roadway Top Width:  64.00 ft

# Appendix L:
# MAJOR DRAINAGEWAYS

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 301

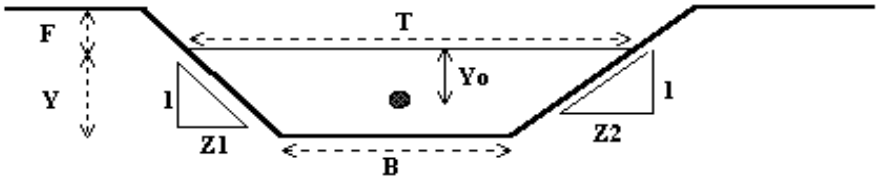



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0152 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 150.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **1.42** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **1,111.58** | cfs |
| **Froude Number** | **Fr =** | **0.76** | |
| **Flow Velocity** | **V =** | **5.03** | fps |
| Flow Area | A = | 221.07 | sq ft |
| Top Width | T = | 161.36 | ft |
| Wetted Perimeter | P = | 161.71 | ft |
| Hydraulic Radius | R = | 1.37 | ft |
| Hydraulic Depth | D = | 1.37 | ft |
| Specific Energy | Es = | 1.81 | ft |
| Centroid of Flow Area | Yo = | 0.70 | ft |
| Specific Force | Fs = | 20.52 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 302

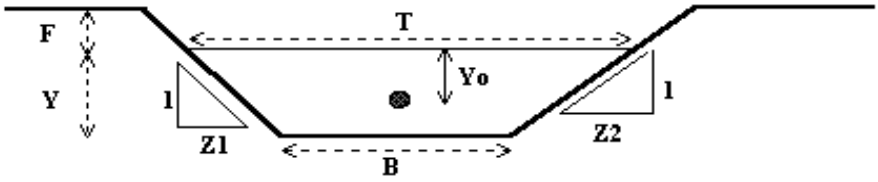



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0150 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 0.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **1.50** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **29.53** | cfs |
| **Froude Number** | **Fr =** | **0.67** | |
| **Flow Velocity** | **V =** | **3.28** | fps |
| Flow Area | A = | 9.00 | sq ft |
| Top Width | T = | 12.00 | ft |
| Wetted Perimeter | P = | 12.37 | ft |
| Hydraulic Radius | R = | 0.73 | ft |
| Hydraulic Depth | D = | 0.75 | ft |
| Specific Energy | Es = | 1.67 | ft |
| Centroid of Flow Area | Yo = | 0.50 | ft |
| Specific Force | Fs = | 0.47 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 304

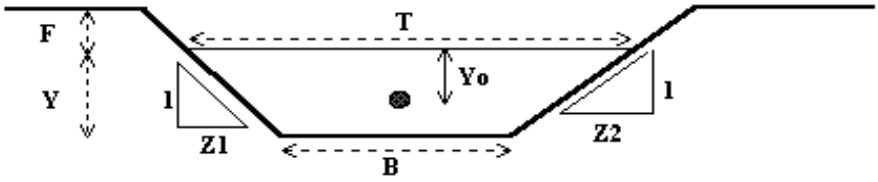



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0133 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 175.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **1.55** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **1,402.64** | cfs |
| **Froude Number** | **Fr =** | **0.72** | |
| **Flow Velocity** | **V =** | **4.99** | fps |
| Flow Area | A = | 280.86 | sq ft |
| Top Width | T = | 187.40 | ft |
| Wetted Perimeter | P = | 187.78 | ft |
| Hydraulic Radius | R = | 1.50 | ft |
| Hydraulic Depth | D = | 1.50 | ft |
| Specific Energy | Es = | 1.94 | ft |
| Centroid of Flow Area | Yo = | 0.77 | ft |
| Specific Force | Fs = | 27.01 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 306

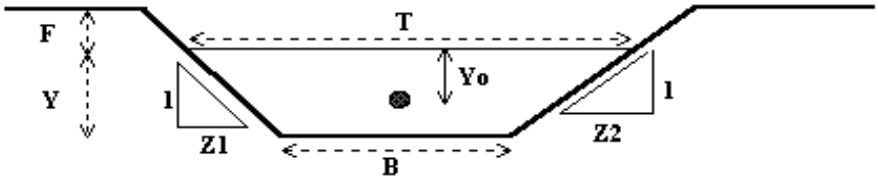



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0157 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 25.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **1.65** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **264.30** | cfs |
| **Froude Number** | **Fr =** | **0.76** | |
| **Flow Velocity** | **V =** | **5.07** | fps |
| Flow Area | A = | 52.14 | sq ft |
| Top Width | T = | 38.20 | ft |
| Wetted Perimeter | P = | 38.61 | ft |
| Hydraulic Radius | R = | 1.35 | ft |
| Hydraulic Depth | D = | 1.36 | ft |
| Specific Energy | Es = | 2.05 | ft |
| Centroid of Flow Area | Yo = | 0.77 | ft |
| Specific Force | Fs = | 5.09 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 311

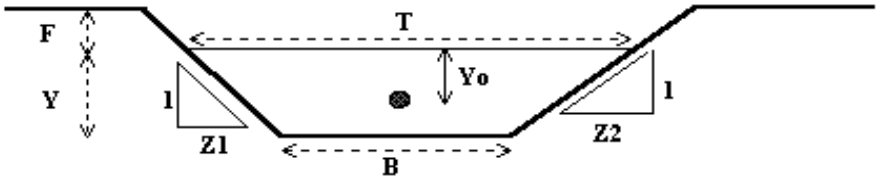



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0123 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 135.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **1.70** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **1,219.85** | cfs |
| **Froude Number** | **Fr =** | **0.70** | |
| **Flow Velocity** | **V =** | **5.06** | fps |
| Flow Area | A = | 241.06 | sq ft |
| Top Width | T = | 148.60 | ft |
| Wetted Perimeter | P = | 149.02 | ft |
| Hydraulic Radius | R = | 1.62 | ft |
| Hydraulic Depth | D = | 1.62 | ft |
| Specific Energy | Es = | 2.10 | ft |
| Centroid of Flow Area | Yo = | 0.84 | ft |
| Specific Force | Fs = | 24.55 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 313

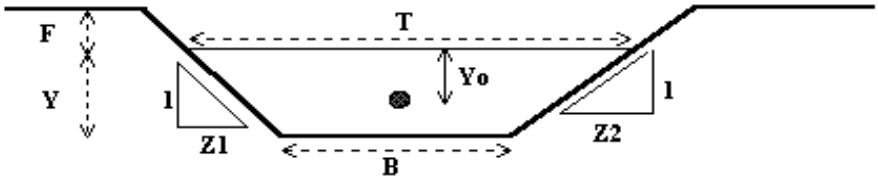



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0054 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 10.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **4.90** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **713.94** | cfs |
| **Froude Number** | **Fr =** | **0.51** | |
| **Flow Velocity** | **V =** | **4.92** | fps |
| Flow Area | A = | 145.04 | sq ft |
| Top Width | T = | 49.20 | ft |
| Wetted Perimeter | P = | 50.41 | ft |
| Hydraulic Radius | R = | 2.88 | ft |
| Hydraulic Depth | D = | 2.95 | ft |
| Specific Energy | Es = | 5.28 | ft |
| Centroid of Flow Area | Yo = | 1.90 | ft |
| Specific Force | Fs = | 24.00 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 314

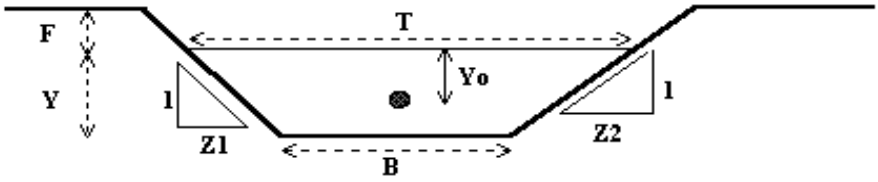



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0080 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 60.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **2.60** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **930.11** | cfs |
| **Froude Number** | **Fr =** | **0.59** | |
| **Flow Velocity** | **V =** | **5.08** | fps |
| Flow Area | A = | 183.04 | sq ft |
| Top Width | T = | 80.80 | ft |
| Wetted Perimeter | P = | 81.44 | ft |
| Hydraulic Radius | R = | 2.25 | ft |
| Hydraulic Depth | D = | 2.27 | ft |
| Specific Energy | Es = | 3.00 | ft |
| Centroid of Flow Area | Yo = | 1.23 | ft |
| Specific Force | Fs = | 23.27 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 315

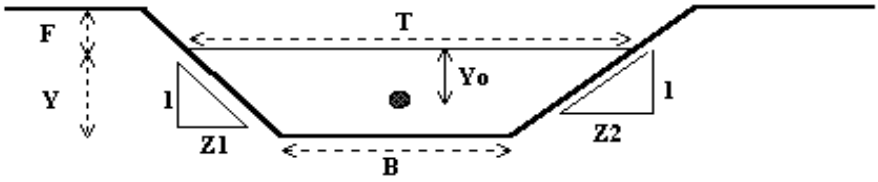



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0097 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 0.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **2.15** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **62.01** | cfs |
| **Froude Number** | **Fr =** | **0.57** | |
| **Flow Velocity** | **V =** | **3.35** | fps |
| Flow Area | A = | 18.49 | sq ft |
| Top Width | T = | 17.20 | ft |
| Wetted Perimeter | P = | 17.73 | ft |
| Hydraulic Radius | R = | 1.04 | ft |
| Hydraulic Depth | D = | 1.08 | ft |
| Specific Energy | Es = | 2.32 | ft |
| Centroid of Flow Area | Yo = | 0.71 | ft |
| Specific Force | Fs = | 1.22 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 316

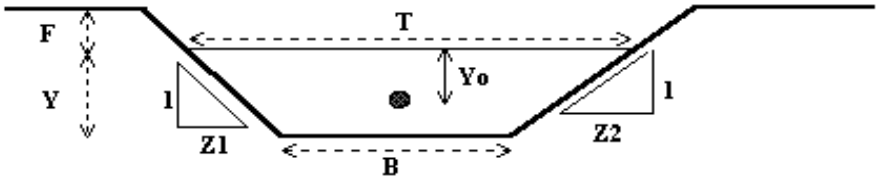



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0053 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 0.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **4.25** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **282.11** | cfs |
| **Froude Number** | **Fr =** | **0.47** | |
| **Flow Velocity** | **V =** | **3.90** | fps |
| Flow Area | A = | 72.25 | sq ft |
| Top Width | T = | 34.00 | ft |
| Wetted Perimeter | P = | 35.05 | ft |
| Hydraulic Radius | R = | 2.06 | ft |
| Hydraulic Depth | D = | 2.13 | ft |
| Specific Energy | Es = | 4.49 | ft |
| Centroid of Flow Area | Yo = | 1.40 | ft |
| Specific Force | Fs = | 8.46 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 317

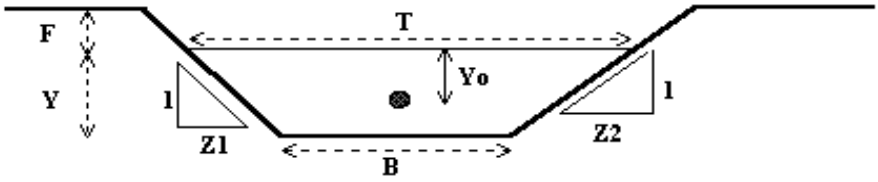



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0011 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 0.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **4.50** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **149.68** | cfs |
| **Froude Number** | **Fr =** | **0.22** | |
| **Flow Velocity** | **V =** | **1.85** | fps |
| Flow Area | A = | 81.00 | sq ft |
| Top Width | T = | 36.00 | ft |
| Wetted Perimeter | P = | 37.11 | ft |
| Hydraulic Radius | R = | 2.18 | ft |
| Hydraulic Depth | D = | 2.25 | ft |
| Specific Energy | Es = | 4.55 | ft |
| Centroid of Flow Area | Yo = | 1.49 | ft |
| Specific Force | Fs = | 8.04 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 318

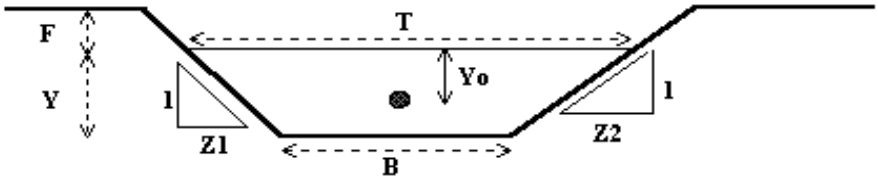



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0071 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 35.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **3.05** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **718.64** | cfs |
| **Froude Number** | **Fr =** | **0.57** | |
| **Flow Velocity** | **V =** | **4.99** | fps |
| Flow Area | A = | 143.96 | sq ft |
| Top Width | T = | 59.40 | ft |
| Wetted Perimeter | P = | 60.15 | ft |
| Hydraulic Radius | R = | 2.39 | ft |
| Hydraulic Depth | D = | 2.42 | ft |
| Specific Energy | Es = | 3.44 | ft |
| Centroid of Flow Area | Yo = | 1.39 | ft |
| Specific Force | Fs = | 19.45 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 319

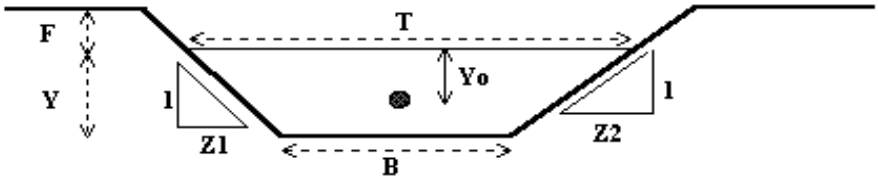



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0082 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 0.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **3.00** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **138.61** | cfs |
| **Froude Number** | **Fr =** | **0.55** | |
| **Flow Velocity** | **V =** | **3.85** | fps |
| Flow Area | A = | 36.00 | sq ft |
| Top Width | T = | 24.00 | ft |
| Wetted Perimeter | P = | 24.74 | ft |
| Hydraulic Radius | R = | 1.46 | ft |
| Hydraulic Depth | D = | 1.50 | ft |
| Specific Energy | Es = | 3.23 | ft |
| Centroid of Flow Area | Yo = | 0.99 | ft |
| Specific Force | Fs = | 3.26 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 322

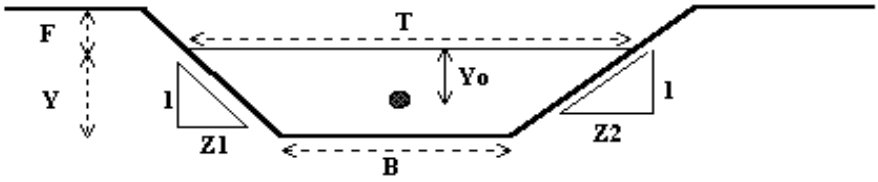



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0085 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 100.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **2.25** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **1,215.50** | cfs |
| **Froude Number** | **Fr =** | **0.61** | |
| **Flow Velocity** | **V =** | **4.96** | fps |
| Flow Area | A = | 245.25 | sq ft |
| Top Width | T = | 118.00 | ft |
| Wetted Perimeter | P = | 118.55 | ft |
| Hydraulic Radius | R = | 2.07 | ft |
| Hydraulic Depth | D = | 2.08 | ft |
| Specific Energy | Es = | 2.63 | ft |
| Centroid of Flow Area | Yo = | 1.09 | ft |
| Specific Force | Fs = | 28.42 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 324

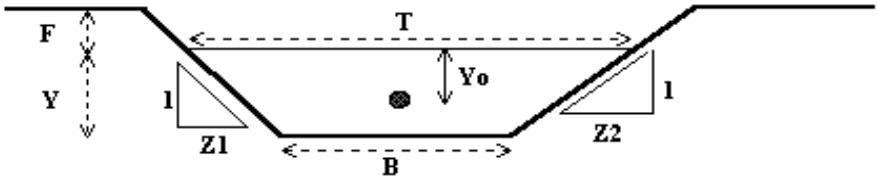



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0133 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 80.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **1.50** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **615.46** | cfs |
| **Froude Number** | **Fr =** | **0.71** | |
| **Flow Velocity** | **V =** | **4.77** | fps |
| Flow Area | A = | 129.00 | sq ft |
| Top Width | T = | 92.00 | ft |
| Wetted Perimeter | P = | 92.37 | ft |
| Hydraulic Radius | R = | 1.40 | ft |
| Hydraulic Depth | D = | 1.40 | ft |
| Specific Energy | Es = | 1.85 | ft |
| Centroid of Flow Area | Yo = | 0.73 | ft |
| Specific Force | Fs = | 11.59 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 326

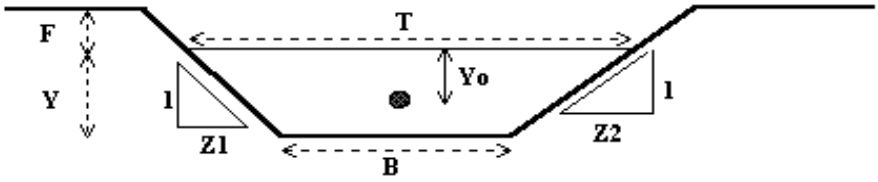



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0018 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 45.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **5.00** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **1,105.71** | cfs |
| **Froude Number** | **Fr =** | **0.31** | |
| **Flow Velocity** | **V =** | **3.40** | fps |
| Flow Area | A = | 325.00 | sq ft |
| Top Width | T = | 85.00 | ft |
| Wetted Perimeter | P = | 86.23 | ft |
| Hydraulic Radius | R = | 3.77 | ft |
| Hydraulic Depth | D = | 3.82 | ft |
| Specific Energy | Es = | 5.18 | ft |
| Centroid of Flow Area | Yo = | 2.24 | ft |
| Specific Force | Fs = | 52.69 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 328

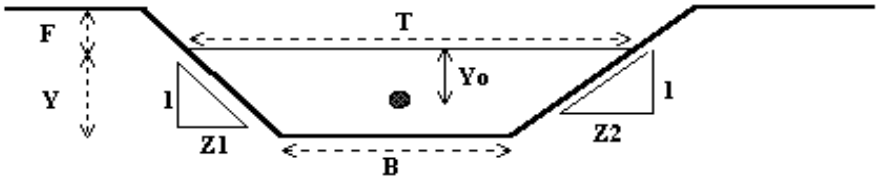



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0026 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 10.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **4.75** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **462.19** | cfs |
| **Froude Number** | **Fr =** | **0.35** | |
| **Flow Velocity** | **V =** | **3.36** | fps |
| Flow Area | A = | 137.75 | sq ft |
| Top Width | T = | 48.00 | ft |
| Wetted Perimeter | P = | 49.17 | ft |
| Hydraulic Radius | R = | 2.80 | ft |
| Hydraulic Depth | D = | 2.87 | ft |
| Specific Energy | Es = | 4.92 | ft |
| Centroid of Flow Area | Yo = | 1.85 | ft |
| Specific Force | Fs = | 18.88 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 329

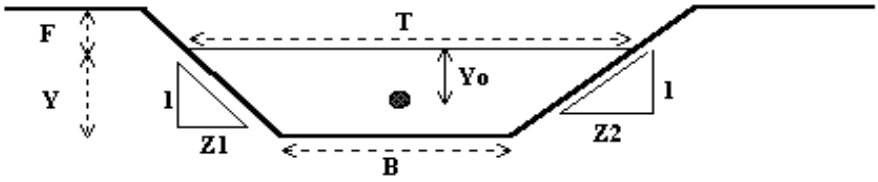



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0173 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 25.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **1.50** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **234.28** | cfs |
| **Froude Number** | **Fr =** | **0.79** | |
| **Flow Velocity** | **V =** | **5.04** | fps |
| Flow Area | A = | 46.50 | sq ft |
| Top Width | T = | 37.00 | ft |
| Wetted Perimeter | P = | 37.37 | ft |
| Hydraulic Radius | R = | 1.24 | ft |
| Hydraulic Depth | D = | 1.26 | ft |
| Specific Energy | Es = | 1.89 | ft |
| Centroid of Flow Area | Yo = | 0.70 | ft |
| Specific Force | Fs = | 4.32 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 330

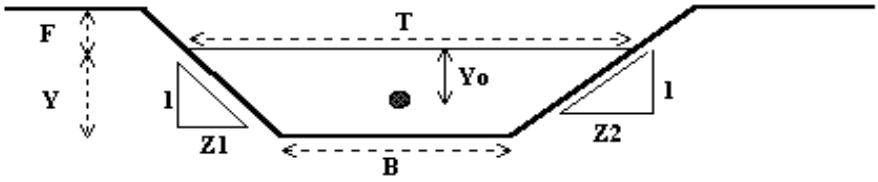



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0148 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 15.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **1.90** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **216.48** | cfs |
| **Froude Number** | **Fr =** | **0.75** | |
| **Flow Velocity** | **V =** | **5.04** | fps |
| Flow Area | A = | 42.94 | sq ft |
| Top Width | T = | 30.20 | ft |
| Wetted Perimeter | P = | 30.67 | ft |
| Hydraulic Radius | R = | 1.40 | ft |
| Hydraulic Depth | D = | 1.42 | ft |
| Specific Energy | Es = | 2.29 | ft |
| Centroid of Flow Area | Yo = | 0.84 | ft |
| Specific Force | Fs = | 4.37 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 331

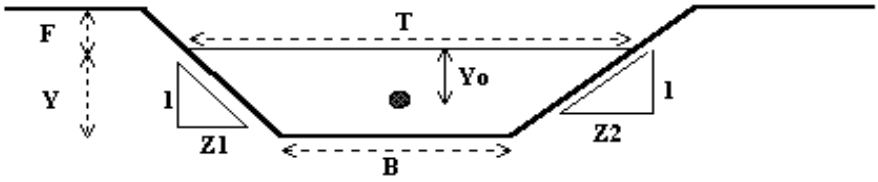



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0135 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 0.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **2.10** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **68.71** | cfs |
| **Froude Number** | **Fr =** | **0.67** | |
| **Flow Velocity** | **V =** | **3.89** | fps |
| Flow Area | A = | 17.64 | sq ft |
| Top Width | T = | 16.80 | ft |
| Wetted Perimeter | P = | 17.32 | ft |
| Hydraulic Radius | R = | 1.02 | ft |
| Hydraulic Depth | D = | 1.05 | ft |
| Specific Energy | Es = | 2.34 | ft |
| Centroid of Flow Area | Yo = | 0.69 | ft |
| Specific Force | Fs = | 1.28 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 333

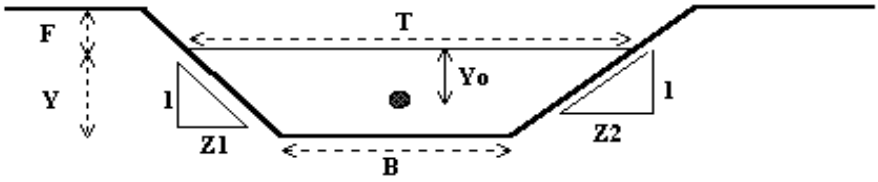



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0068 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 55.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **2.90** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **957.74** | cfs |
| **Froude Number** | **Fr =** | **0.56** | |
| **Flow Velocity** | **V =** | **4.96** | fps |
| Flow Area | A = | 193.14 | sq ft |
| Top Width | T = | 78.20 | ft |
| Wetted Perimeter | P = | 78.91 | ft |
| Hydraulic Radius | R = | 2.45 | ft |
| Hydraulic Depth | D = | 2.47 | ft |
| Specific Energy | Es = | 3.28 | ft |
| Centroid of Flow Area | Yo = | 1.36 | ft |
| Specific Force | Fs = | 25.65 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 335

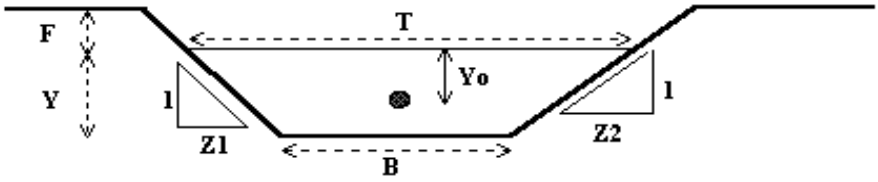



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0123 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 85.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **1.70** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **776.13** | cfs |
| **Froude Number** | **Fr =** | **0.70** | |
| **Flow Velocity** | **V =** | **4.97** | fps |
| Flow Area | A = | 156.06 | sq ft |
| Top Width | T = | 98.60 | ft |
| Wetted Perimeter | P = | 99.02 | ft |
| Hydraulic Radius | R = | 1.58 | ft |
| Hydraulic Depth | D = | 1.58 | ft |
| Specific Energy | Es = | 2.08 | ft |
| Centroid of Flow Area | Yo = | 0.83 | ft |
| Specific Force | Fs = | 15.56 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 336

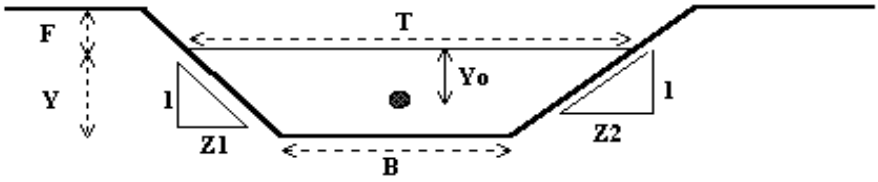



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0099 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 35.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **2.25** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **491.27** | cfs |
| **Froude Number** | **Fr =** | **0.64** | |
| **Flow Velocity** | **V =** | **4.96** | fps |
| Flow Area | A = | 99.00 | sq ft |
| Top Width | T = | 53.00 | ft |
| Wetted Perimeter | P = | 53.55 | ft |
| Hydraulic Radius | R = | 1.85 | ft |
| Hydraulic Depth | D = | 1.87 | ft |
| Specific Energy | Es = | 2.63 | ft |
| Centroid of Flow Area | Yo = | 1.05 | ft |
| Specific Force | Fs = | 11.20 | kip |

# Normal Flow Analysis - Trapezoidal Channel

**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 337

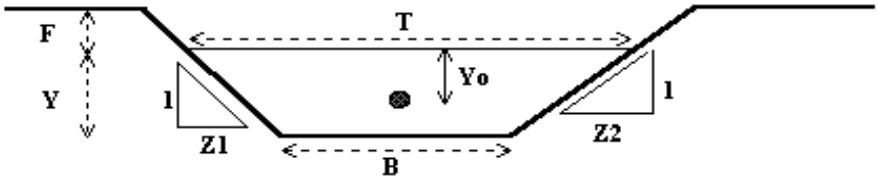



| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0020 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 25.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **4.90** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **723.26** | cfs |
| **Froude Number** | **Fr =** | **0.32** | |
| **Flow Velocity** | **V =** | **3.31** | fps |
| Flow Area | A = | 218.54 | sq ft |
| Top Width | T = | 64.20 | ft |
| Wetted Perimeter | P = | 65.41 | ft |
| Hydraulic Radius | R = | 3.34 | ft |
| Hydraulic Depth | D = | 3.40 | ft |
| Specific Energy | Es = | 5.07 | ft |
| Centroid of Flow Area | Yo = | 2.08 | ft |
| Specific Force | Fs = | 33.06 | kip |

# Normal Flow Analysis - Trapezoidal Channel

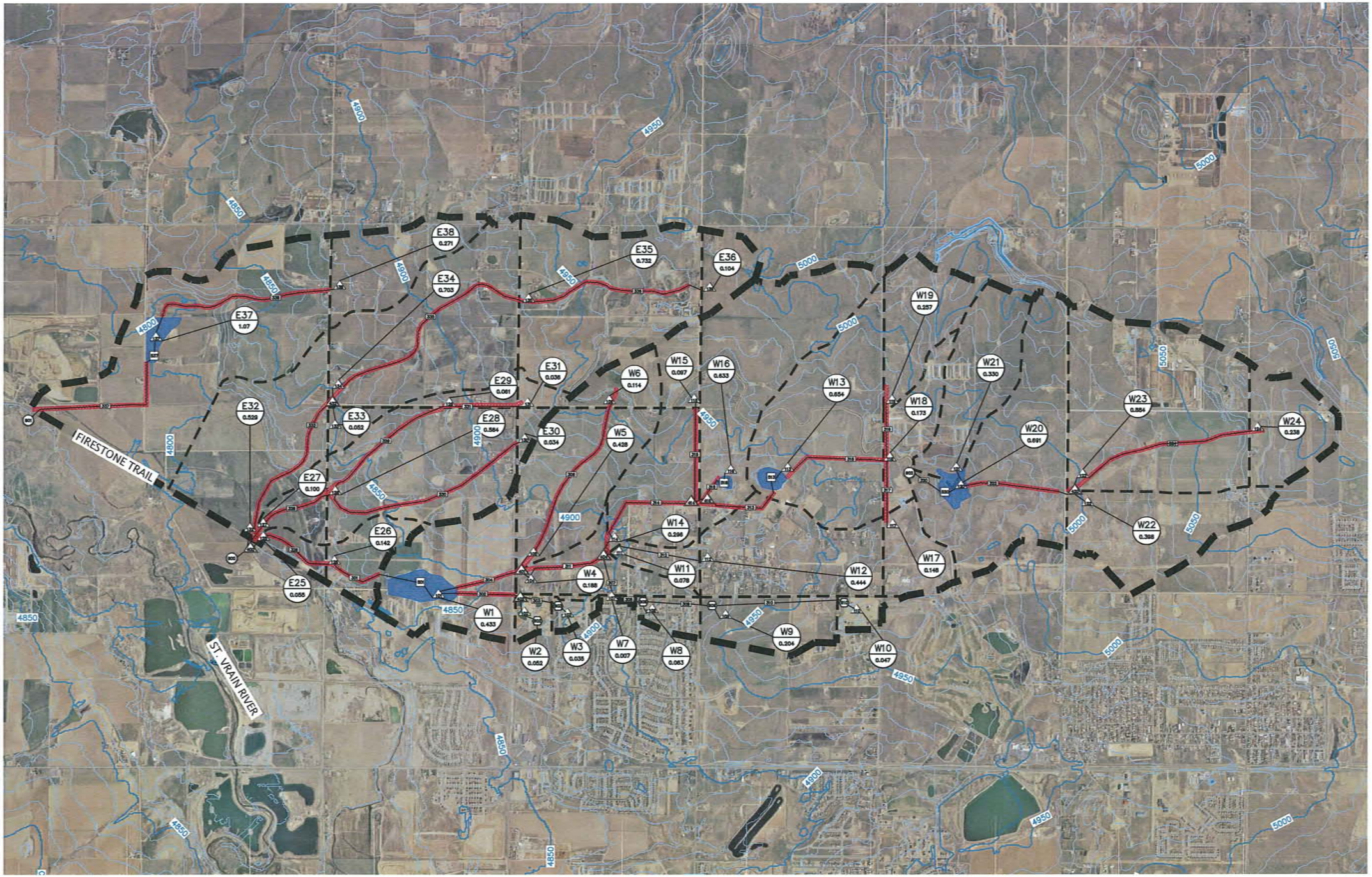
**Project:** Town of Firestone - Sump Basin Master Plan
**Channel ID:** Realigned Channel 338




| **Design Information (Input)** | | | |
|---|---|---|---|
| Channel Invert Slope | So = | 0.0139 | ft/ft |
| Manning's n | n = | 0.045 | |
| Bottom Width | B = | 90.00 | ft |
| Left Side Slope | Z1 = | 4.00 | ft/ft |
| Right Side Slope | Z2 = | 4.00 | ft/ft |
| Freeboard Height | F = | 1.00 | ft |
| Design Water Depth | Y = | **1.55** | ft |

| **Normal Flow Condtion (Calculated)** | | | |
|---|---|---|---|
| **Discharge** | **Q =** | **745.96** | cfs |
| **Froude Number** | **Fr =** | **0.73** | |
| **Flow Velocity** | **V =** | **5.00** | fps |
| Flow Area | A = | 149.11 | sq ft |
| Top Width | T = | 102.40 | ft |
| Wetted Perimeter | P = | 102.78 | ft |
| Hydraulic Radius | R = | 1.45 | ft |
| Hydraulic Depth | D = | 1.46 | ft |
| Specific Energy | Es = | 1.94 | ft |
| Centroid of Flow Area | Yo = | 0.76 | ft |
| Specific Force | Fs = | 14.29 | kip |

# Appendix M:
# FUTURE CONDITION WITH IMPROVEMENTS UDSWMM




LEGEND

- A: BASIN DESIGNATION
- B: BASIN AREA (SQ. MILES)
- 125 SUB-BASIN DESIGN POINT
- 302 CONVEYANCE ELEMENT
- 400 CRITICAL DESIGN POINT
- 501 SUMP
- 603 DETENTION POND
- 900 BASIN DISCHARGE POINT
- EXISTING 10' CONTOUR
- EXISTING 50' CONTOUR
- SUB-BASINS
- SUMP BASIN BOUNDARY

N

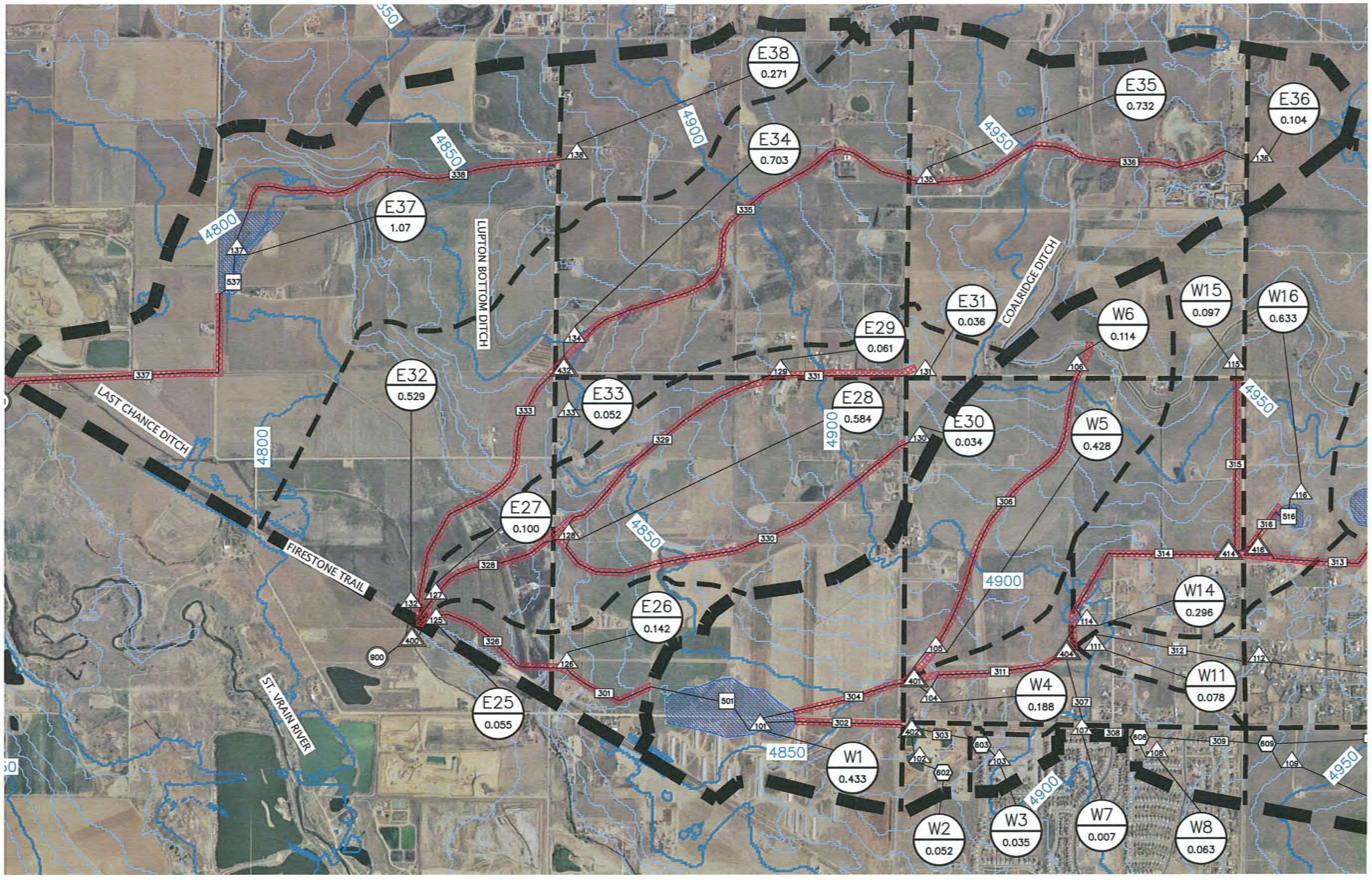
N.T.S.

COLORADO CIVIL GROUP, INC.
ENGINEERING CONSULTANTS

# TOWN OF FIRESTONE
## SUMP BASIN MASTER PLAN
## FUTURE CONDITION WITH IMPROVEMENTS SWMM SCHEMATIC OVERALL

FILENAME: 0147_DRAINAGE
DESIGNED: D.H.
CHECKED: D.B.L.
JOB NO.: 0668.0147.00
SCALE: N.T.S.
DATE: MAY 2010

SHEET NO.: 1 OF 3




LEGEND

- A / B — A: BASIN DESIGNATION; B: BASIN AREA (SQ. MILES)
- 125 — SUB-BASIN DESIGN POINT
- 302 — CONVEYANCE ELEMENT
- 400 — CRITICAL DESIGN POINT
- 501 — SUMP
- 603 — DETENTION POND
- 900 — BASIN DISCHARGE POINT
- EXISTING 10' CONTOUR
- EXISTING 50' CONTOUR
- SUB-BASINS
- SUMP BASIN BOUNDARY

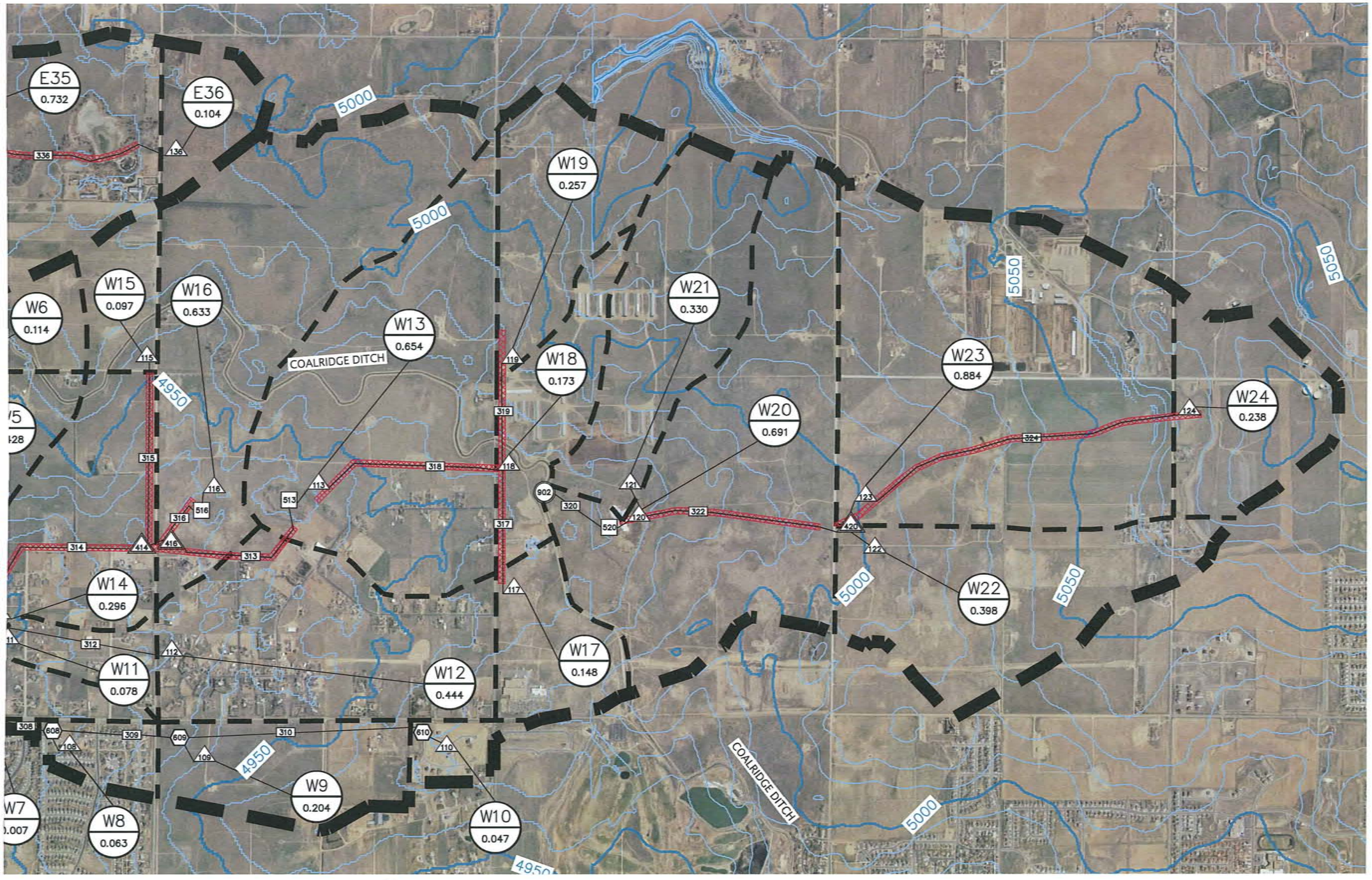
N.T.S.

COLORADO CIVIL GROUP, INC. ENGINEERING CONSULTANTS

# TOWN OF FIRESTONE
# SUMP BASIN MASTER PLAN
## FUTURE CONDITION WITH IMPROVEMENTS SWMM SCHEMATIC

FILENAME: 0147_DRAINAGE
DESIGNED: D.H.
CHECKED: D.B.L.
JOB NO.: 0668.0147.00
SCALE: N.T.S.
DATE: MAY 2010

SHEET NO.: 2 OF 3




LEGEND

| | |
|---|---|
| A / B | A: BASIN DESIGNATION<br>B: BASIN AREA (SQ. MILES) |
| 125 | SUB-BASIN DESIGN POINT |
| 302 | CONVEYANCE ELEMENT |
| 400 | CRITICAL DESIGN POINT |
| 501 | SUMP |
| 603 | DETENTION POND |
| 900 | BASIN DISCHARGE POINT |
| | EXISTING 10' CONTOUR |
| | EXISTING 50' CONTOUR |
| | SUB-BASINS |
| | SUMP BASIN BOUNDARY |

N

N.T.S.

CCG COLORADO CIVIL GROUP, INC. ENGINEERING CONSULTANTS

TOWN OF FIRESTONE
SUMP BASIN MASTER PLAN
FUTURE CONDITION WITH IMPROVEMENTS
SWMM SCHEMATIC

FILENAME: 0147_DRAINAGE
DESIGNED: D.H.
CHECKED: D.B.L.
JOB NO.: 0668.0147.00
SCALE: N.T.S.
DATE: MAY 2010

SHEET NO.: 3 OF 3

```
   2   1   1   2
   3   4
WATERSHED   1
2yr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
Blank
        84       5.0                                                                1
         1  201
         4  204
         5  205
         6  206
         7  207
         9  209
        11  211
        12  212
        13  213
        14  214
        15  215
        16  216
        17  217
        18  218
        19  219
        20  220
        21  221
        22  222
        23  223
        24  224
        25  225
        26  226
        27  227
        28  228
        29  229
        30  230
        31  231
        32  232
        33  233
        34  234
        35  235
        36  236
        37  237
        38  238

    0  201  101    3              1.
   -1  202  102  3 3              1.
         0.         0.      0.55       10.1      1.65        0.        0.        0.
   -1  203  103  3 3              1.
         0.         0.      0.23       3.59      0.69        0.        0.        0.
    0  204  104    3              1.
    0  205  105    3              1.
    0  206  106    3              1.
    0  207  107    3              1.
   -1  208  108  3 3              1.
         0.         0.      0.67      45.23      1.80        0.        0.        0.
    0  209  109    3              1.
   -1  210  110  3 3              1.
         0.         0.      0.35      11.45      1.05        0.        0.        0.
    0  211  111    3              1.
    0  212  112    3              1.
    0  213  113    3              1.
    0  214  114    3              1.
    0  215  115    3              1.
    0  216  116    3              1.
    0  217  117    3              1.
    0  218  118    3              1.
    0  219  119    3              1.
    0  220  120    3              1.
    0  221  121    3              1.
    0  222  122    3              1.
    0  223  123    3              1.
    0  224  124    3              1.
    0  225  125    3              1.
    0  226  126    3              1.
    0  227  127    3              1.
    0  228  128    3              1.
    0  229  129    3              1.
    0  230  130    3              1.
    0  231  131    3              1.
    0  232  132    3              1.
    0  233  133    3              1.
```

```
0  234  134    3             1.
0  235  135    3             1.
0  236  136    3             1.
0  237  137    3             1.
0  238  138    3             1.
0  402  302    3             1.
0  401  304    3             1.
0  106  306    3             1.
0  107  307    3             1.
0  404  311    3             1.
0  112  312    3             1.
0  414  314    3             1.
0  115  315    3             1.
0  117  317    3             1.
0  118  318    3             1.
0  119  319    3             1.
0  420  322    3             1.
0  124  324    3             1.
0  126  326    3             1.
0  128  328    3             1.
0  129  329    3             1.
0  130  330    3             1.
0  131  331    3             1.
0  432  333    3             1.
0  135  335    3             1.
0  136  336    3             1.
0  138  338    3             1.
0  125  400    3             1.
0  127  400    3             1.
0  132  400    3             1.
0  104  401    3             1.
0  105  401    3             1.
0  111  404    3             1.
0  114  404    3             1.
0  416  414    3             1.
0  122  420    3             1.
0  123  420    3             1.
0  133  432    3             1.
0  134  432    3             1.
0  101  501    3             1.
0  113  513    3             1.
0  116  516    3             1.
0  120  520    3             1.
0  121  520    3             1.
0  137  537    3             1.
0  102  602    3             1.
0  103  603    3             1.
0  108  608    3             1.
0  109  609    3             1.
0  110  610    3             1.
0  400  900    3             1.
0  337  901    3             1.
0  320  902    3             1.
0  501  301  7 2     0.1       1.                                      0.1
    0.        0.       7.5        0.      26.4        0.      63.3        0.
  82.9        0.      129.     1400.      201.     6510.
0  513  313  3 2     0.1       1.                                      0.1
    0.        0.      20.3        0.      22.6      665.
0  516  316  3 2     0.1       1.                                      0.1
    0.        0.     18.12        0.      18.9      320.        0.        0.
0  520  320  4 2     0.1       1.                                      0.1
    0.        0.       9.9        0.       10.        5.      280.        5.
0  537  337  3 2     0.1       1.                                      0.1
    0.        0.     14.85        0.      17.7      649.        0.        0.
0  602  402  3 2     0.1       1.                                      0.1
    0.        0.      0.78       5.4      1.64      15.4
0  603  303  3 2     0.1       1.                                      0.1
    0.        0.      0.12       1.2      0.33       6.9        0.        0.
0  608  308 10 2     0.1       1.                                      0.1
    0.        0.      .038      0.31      0.45      0.46      1.63      0.57
  3.59      0.67      6.09     32.39      7.09     55.58      8.87    123.53
 11.53    266.39     13.14    378.74
0  609  309  2 2     0.1       1.                                      0.1
    0.        0.       12.      43.4
0  610  310  2 2     0.1       1.                                      0.1
    0.        0.      3.81       1.3        0.        0.        0.        0.
0  302  101    1      0.   1698.  0.0150      4.      4.    .045      5.
0  304  101    1    175.   1761.  0.0133      4.      4.    .045      5.
```

```
    0  311  104    1    135.   2519.  0.0123      4.      4.    .045      5.
    0  306  105    1     25.   5603.  0.0157      4.      4.    .045      5.
    0  308  107    1      4.    625.   0.008    0.01    0.01   0.016      2.
    0  312  111    1      0.   2682.  0.0082    110.    110.    .045     10.
    0  318  113    1     35.   3069.  0.0071      4.      4.    .045      5.
    0  314  114    1     60.   3598.  0.0080      4.      4.    .045      5.
    0  317  118    1      0.   1788.  0.0011      4.      4.    .045      5.
    0  319  118    1      0.   2135.  0.0082      4.      4.    .045      5.
    0  322  120    1    100.   2881.  0.0085      4.      4.    .045      5.
    0  324  123    1     80.   5657.  0.0133      4.      4.    .045      5.
    0  326  125    1     45.   2265.  0.0018      4.      4.    .045      5.
    0  301  126    1    150.   1716.  0.0152      4.      4.    .045      5.
    0  328  127    1     10.   2545.  0.0026      4.      4.    .045      5.
    0  329  128    1     25.   4136.  0.0173      4.      4.    .045      5.
    0  330  128    1     15.   6271.  0.0148      4.      4.    .045      5.
    0  331  129    1      0.   2147.  0.0135      4.      4.    .045      5.
    0  333  132    1     55.   4716.  0.0068      4.      4.    .045      5.
    0  335  134    1     85.   7048.  0.0123      4.      4.    .045      5.
    0  336  135    1     35.   5158.  0.0099      4.      4.    .045      5.
    0  338  137    1     90.   5244.  0.0139      4.      4.    .045      5.
    0  303  402    1      5.   1011.  0.0151      5.      5.   0.035      3.
    0  307  404    1      5.   1308.  0.0031      5.      5.   0.035      3.
    0  315  414    1      0.   2696.  0.0097      4.      4.    .045      5.
    0  313  416    1     10.   2381.  0.0054      4.      4.    .045      5.
    0  316  416    1      0.    965.  0.0053      4.      4.    .045      5.
    0  309  608    1      5.   1757.  0.0091      5.      5.   0.035      3.
    0  310  609    1      5.   3896.    0.01      5.      5.   0.035      3.

    0
   86
  101  102  103  104  105  106  107  108  109  110  111  112  113  114  115  116
  117  118  119  120  121  122  123  124  125  126  127  128  129  130  131  132
  133  134  135  136  137  138  301  302  303  304  306  307  308  309  310  311
  312  313  314  315  316  317  318  319  320  322  324  326  328  329  330  331
  333  335  336  338  400  401  402  404  414  416  420  432  501  513  516  520
  537  602  603  608  609  610
ENDPROGRAM
```

URBAN DRAINAGE STORM WATER MANAGEMENT MODEL - 32 BIT VERSION 1998
REVISED BY UNIVERSITY OF COLORADO AT DENVER

*** ENTRY MADE TO RUNOFF MODEL ***

2yr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
Blank

0NUMBER OF TIME STEPS 84
0INTEGRATION TIME INTERVAL (MINUTES), 5.00

25.0 PERCENT OF IMPERVIOUS AREA HAS ZERO DETENTION DEPTH
1

2yr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
Blank

HYDROGRAPHS FROM CUHPF MODEL ARE LISTED FOR THE FOLLOWING 34 SUBCATCHMENTS

| TIME(HR/MIN) | 1 | 4 | 5 | 6 | 7 | 9 | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|---|---|
| | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 |
| | 35 | 36 | 37 | 38 | | | | | | |
| 0 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 5. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 10. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 15. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 20. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 25. | 0. | 1. | 0. | 0. | 0. | 0. | 1. | 2. | 0. | 1. |
| | 0. | 0. | 2. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 1. | 0. | 0. | 0. | | | | | | |
| 0 30. | 0. | 2. | 0. | 0. | 0. | 0. | 2. | 5. | 1. | 3. |
| | 0. | 0. | 4. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 2. | 0. | 0. | 0. | | | | | | |
| 0 35. | 0. | 4. | 0. | 0. | 0. | 0. | 2. | 8. | 2. | 4. |
| | 0. | 1. | 5. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 3. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 4. | 0. | 0. | 0. | | | | | | |
| 0 40. | 0. | 4. | 0. | 0. | 0. | 0. | 3. | 10. | 3. | 5. |
| | 0. | 1. | 5. | 3. | 0. | 0. | 1. | 0. | 1. | 0. |
| | 0. | 0. | 0. | 4. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 6. | 0. | 0. | 0. | | | | | | |
| 0 45. | 0. | 5. | 0. | 0. | 0. | 0. | 3. | 11. | 3. | 5. |
| | 0. | 1. | 4. | 3. | 0. | 0. | 2. | 0. | 1. | 0. |

```
                0.      0.      0.      5.      0.      0.      0.      0.      0.      0.
                7.      0.      0.      0.

0   50.         0.      4.      0.      0.      0.      0.      3.     11.      4.      5.
                0.      2.      4.      2.      0.      0.      2.      0.      1.      0.
                0.      0.      0.      5.      0.      0.      0.      0.      0.      0.
                7.      0.      0.      0.

0   55.         0.      4.      0.      0.      0.      0.      2.     11.      4.      5.
                0.      2.      3.      2.      0.      0.      2.      0.      1.      0.
                0.      0.      0.      5.      0.      0.      0.      0.      0.      0.
                7.      0.      0.      0.

1    0.         0.      4.      0.      0.      0.      0.      2.     10.      3.      4.
                0.      2.      3.      2.      0.      0.      2.      0.      0.      0.
                0.      0.      0.      5.      0.      0.      0.      0.      0.      0.
                6.      0.      0.      0.

1    5.         0.      4.      0.      0.      0.      0.      2.     10.      3.      4.
                0.      2.      3.      2.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      4.      0.      0.      0.      0.      0.      0.
                6.      0.      0.      0.

1   10.         0.      4.      0.      0.      0.      0.      2.      9.      3.      4.
                0.      2.      2.      2.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      4.      0.      0.      0.      0.      0.      0.
                6.      0.      0.      0.

1   15.         0.      4.      0.      0.      0.      0.      2.      9.      3.      3.
                0.      2.      2.      2.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      4.      0.      0.      0.      0.      0.      0.
                5.      0.      0.      0.

1   20.         0.      3.      0.      0.      0.      0.      2.      8.      3.      3.
                0.      1.      2.      2.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      3.      0.      0.      0.      0.      0.      0.
                5.      0.      0.      0.

1   25.         0.      3.      0.      0.      0.      0.      2.      8.      2.      3.
                0.      0.      1.      0.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      3.      0.      0.      0.      0.      0.      0.
                4.      0.      0.      0.

1   30.         0.      3.      0.      0.      0.      0.      2.      7.      2.      3.
                0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      3.      0.      0.      0.      0.      0.      0.
                4.      0.      0.      0.

1   35.         0.      3.      0.      0.      0.      0.      2.      7.      2.      2.
                0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      3.      0.      0.      0.      0.      0.      0.
                4.      0.      0.      0.

1   40.         0.      3.      0.      0.      0.      0.      2.      6.      2.      2.
                0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      2.      0.      0.      0.      0.      0.      0.
                3.      0.      0.      0.

1   45.         0.      3.      0.      0.      0.      0.      2.      6.      2.      2.
                0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      2.      0.      0.      0.      0.      0.      0.
                3.      0.      0.      0.

1   50.         0.      2.      0.      0.      0.      0.      2.      6.      2.      2.
                0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      2.      0.      0.      0.      0.      0.      0.
                3.      0.      0.      0.

1   55.         0.      2.      0.      0.      0.      0.      2.      5.      2.      2.
                0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      2.      0.      0.      0.      0.      0.      0.
                3.      0.      0.      0.

2    0.         0.      2.      0.      0.      0.      0.      2.      5.      1.      2.
                0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
                0.      0.      0.      2.      0.      0.      0.      0.      0.      0.
                3.      0.      0.      0.
```

```
2    5.      0.      2.      0.      0.      0.      0.      2.      5.      0.      1.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      2.      0.      0.      0.      0.      0.      0.
             2.      0.      0.      0.

2   10.      0.      2.      0.      0.      0.      0.      2.      5.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      2.      0.      0.      0.      0.      0.      0.
             2.      0.      0.      0.

2   15.      0.      2.      0.      0.      0.      0.      1.      4.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      1.      0.      0.      0.      0.      0.      0.
             2.      0.      0.      0.

2   20.      0.      2.      0.      0.      0.      0.      1.      4.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             2.      0.      0.      0.

2   25.      0.      2.      0.      0.      0.      0.      1.      4.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             2.      0.      0.      0.

2   30.      0.      2.      0.      0.      0.      0.      0.      4.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             2.      0.      0.      0.

2   35.      0.      2.      0.      0.      0.      0.      0.      3.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             2.      0.      0.      0.

2   40.      0.      1.      0.      0.      0.      0.      0.      3.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             1.      0.      0.      0.

2   45.      0.      0.      0.      0.      0.      0.      0.      3.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.

2   50.      0.      0.      0.      0.      0.      0.      0.      3.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.

2   55.      0.      0.      0.      0.      0.      0.      0.      3.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.

3    0.      0.      0.      0.      0.      0.      0.      0.      3.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.

3    5.      0.      0.      0.      0.      0.      0.      0.      2.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.

3   10.      0.      0.      0.      0.      0.      0.      0.      2.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.

3   15.      0.      0.      0.      0.      0.      0.      0.      2.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.

3   20.      0.      0.      0.      0.      0.      0.      0.      2.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

```
                0.        0.        0.        0.

   3   25.      0.        0.        0.        0.        0.        0.        0.        2.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.

   3   30.      0.        0.        0.        0.        0.        0.        0.        2.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.

   3   35.      0.        0.        0.        0.        0.        0.        0.        2.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.

   3   40.      0.        0.        0.        0.        0.        0.        0.        1.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.

1

 2yr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
 Blank


                                                          WIDTH              INVERT     SIDE SLOPES           OVERBA
NK/SURCHARGE
 GUTTER      GUTTER       NDP        NP                   OR DIAM    LENGTH    SLOPE    HORIZ TO VERT   MANNING
 DEPTH       JK
 NUMBER    CONNECTION                                      (FT)      (FT)    (FT/FT)      L     R         N
  (FT)

  201         101          0          3                     .0        1.     .0010       .0    .0       .001
 10.00        0
  202         102          3          3                     .0        1.     .0010       .0    .0       .001
 10.00       -1
                      TIME IN HRS VS INFLOW IN CFS
                            .0      .0        .6    10.1       1.6      .0
  203         103          3          3                     .0        1.     .0010       .0    .0       .001
 10.00       -1
                      TIME IN HRS VS INFLOW IN CFS
                            .0      .0        .2     3.6        .7      .0
  204         104          0          3                     .0        1.     .0010       .0    .0       .001
 10.00        0
  205         105          0          3                     .0        1.     .0010       .0    .0       .001
 10.00        0
  206         106          0          3                     .0        1.     .0010       .0    .0       .001
 10.00        0
  207         107          0          3                     .0        1.     .0010       .0    .0       .001
 10.00        0
  208         108          3          3                     .0        1.     .0010       .0    .0       .001
 10.00       -1
                      TIME IN HRS VS INFLOW IN CFS
                            .0      .0        .7    45.2       1.8      .0
  209         109          0          3                     .0        1.     .0010       .0    .0       .001
 10.00        0
  210         110          3          3                     .0        1.     .0010       .0    .0       .001
 10.00       -1
                      TIME IN HRS VS INFLOW IN CFS
                            .0      .0        .3    11.4       1.0      .0
  211         111          0          3                     .0        1.     .0010       .0    .0       .001
 10.00        0
  212         112          0          3                     .0        1.     .0010       .0    .0       .001
 10.00        0
  213         113          0          3                     .0        1.     .0010       .0    .0       .001
 10.00        0
  214         114          0          3                     .0        1.     .0010       .0    .0       .001
 10.00        0
  215         115          0          3                     .0        1.     .0010       .0    .0       .001
 10.00        0
  216         116          0          3                     .0        1.     .0010       .0    .0       .001
 10.00        0
  217         117          0          3                     .0        1.     .0010       .0    .0       .001
```

```
10.00       0
 218        118         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 219        119         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 220        120         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 221        121         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 222        122         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 223        123         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 224        124         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 225        125         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 226        126         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 227        127         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 228        128         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 229        129         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 230        130         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 231        131         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 232        132         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 233        133         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 234        134         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 235        135         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 236        136         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 237        137         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 238        138         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 402        302         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 401        304         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 106        306         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 107        307         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 404        311         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 112        312         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 414        314         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 115        315         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 117        317         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 118        318         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 119        319         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 420        322         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 124        324         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 126        326         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 128        328         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 129        329         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 130        330         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 131        331         0         3                  .0       1.     .0010       .0    .0       .001
```

```
 10.00        0
  432         333         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  135         335         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  136         336         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  138         338         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  125         400         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  127         400         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  132         400         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  104         401         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  105         401         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  111         404         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  114         404         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  416         414         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  122         420         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  123         420         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  133         432         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  134         432         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  101         501         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  113         513         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  116         516         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  120         520         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  121         520         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  137         537         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  102         602         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  103         603         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  108         608         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  109         609         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  110         610         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  400         900         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  337         901         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  320         902         0          3                    .0        1.     .0010       .0    .0       .001
 10.00        0
  501         301         7          2      PIPE          .1        1.     .0010       .0    .0       .001
   .10        0
                        RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                              .0      .0       7.5      .0      26.4      .0      63.3      .0      82.9      .0     12
9.0  1400.0
                           201.0  6510.0
  513         313         3          2      PIPE          .1        1.     .0010       .0    .0       .001
   .10        0
                        RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                              .0      .0      20.3      .0      22.6   665.0
  516         316         3          2      PIPE          .1        1.     .0010       .0    .0       .001
   .10        0
                        RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                              .0      .0      18.1      .0      18.9   320.0
  520         320         4          2      PIPE          .1        1.     .0010       .0    .0       .001
   .10        0
                        RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
```

```
                        .0      .0       9.9      .0      10.0     5.0     280.0     5.0
  537         337         3          2      PIPE             .1        1.     .0010       .0    .0       .001
   .10        0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                        .0      .0      14.9      .0      17.7   649.0
  602         402         3          2      PIPE             .1        1.     .0010       .0    .0       .001
   .10        0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                        .0      .0        .8     5.4       1.6    15.4
  603         303         3          2      PIPE             .1        1.     .0010       .0    .0       .001
   .10        0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                        .0      .0        .1     1.2        .3     6.9
  608         308        10          2      PIPE             .1        1.     .0010       .0    .0       .001
   .10        0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                        .0      .0        .0      .3        .4      .5       1.6      .6       3.6      .7
6.1    32.4
                       7.1    55.6       8.9   123.5      11.5   266.4      13.1   378.7
  609         309         2          2      PIPE             .1        1.     .0010       .0    .0       .001
   .10        0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                        .0      .0      12.0    43.4
  610         310         2          2      PIPE             .1        1.     .0010       .0    .0       .001
   .10        0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                        .0      .0       3.8     1.3
  302         101         0          1      CHANNEL          .0     1698.     .0150      4.0   4.0       .045
  5.00        0
  304         101         0          1      CHANNEL       175.0     1761.     .0133      4.0   4.0       .045
  5.00        0
  311         104         0          1      CHANNEL       135.0     2519.     .0123      4.0   4.0       .045
  5.00        0
  306         105         0          1      CHANNEL        25.0     5603.     .0157      4.0   4.0       .045
  5.00        0
  308         107         0          1      CHANNEL         4.0      625.     .0080       .0    .0       .016
  2.00        0
  312         111         0          1      CHANNEL          .0     2682.     .0082    110.0 110.0       .045
 10.00        0
  318         113         0          1      CHANNEL        35.0     3069.     .0071      4.0   4.0       .045
  5.00        0
  314         114         0          1      CHANNEL        60.0     3598.     .0080      4.0   4.0       .045
  5.00        0
  317         118         0          1      CHANNEL          .0     1788.     .0011      4.0   4.0       .045
  5.00        0
  319         118         0          1      CHANNEL          .0     2135.     .0082      4.0   4.0       .045
  5.00        0
  322         120         0          1      CHANNEL       100.0     2881.     .0085      4.0   4.0       .045
  5.00        0
  324         123         0          1      CHANNEL        80.0     5657.     .0133      4.0   4.0       .045
  5.00        0
  326         125         0          1      CHANNEL        45.0     2265.     .0018      4.0   4.0       .045
  5.00        0
  301         126         0          1      CHANNEL       150.0     1716.     .0152      4.0   4.0       .045
  5.00        0
  328         127         0          1      CHANNEL        10.0     2545.     .0026      4.0   4.0       .045
  5.00        0
  329         128         0          1      CHANNEL        25.0     4136.     .0173      4.0   4.0       .045
  5.00        0
  330         128         0          1      CHANNEL        15.0     6271.     .0148      4.0   4.0       .045
  5.00        0
  331         129         0          1      CHANNEL          .0     2147.     .0135      4.0   4.0       .045
  5.00        0
  333         132         0          1      CHANNEL        55.0     4716.     .0068      4.0   4.0       .045
  5.00        0
  335         134         0          1      CHANNEL        85.0     7048.     .0123      4.0   4.0       .045
  5.00        0
  336         135         0          1      CHANNEL        35.0     5158.     .0099      4.0   4.0       .045
  5.00        0
  338         137         0          1      CHANNEL        90.0     5244.     .0139      4.0   4.0       .045
  5.00        0
  303         402         0          1      CHANNEL         5.0     1011.     .0151      5.0   5.0       .035
  3.00        0
  307         404         0          1      CHANNEL         5.0     1308.     .0031      5.0   5.0       .035
  3.00        0
  315         414         0          1      CHANNEL          .0     2696.     .0097      4.0   4.0       .045
  5.00        0
  313         416         0          1      CHANNEL        10.0     2381.     .0054      4.0   4.0       .045
```

```
  5.00        0
  316         416          0          1      CHANNEL          .0      965.     .0053      4.0   4.0       .045
  5.00        0
  309         608          0          1      CHANNEL         5.0     1757.     .0091      5.0   5.0       .035
  3.00        0
  310         609          0          1      CHANNEL         5.0     3896.     .0100      5.0   5.0       .035
  3.00        0
0TOTAL NUMBER OF GUTTERS/PIPES, 125
1


 2yr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
 Blank


 ARRANGEMENT OF SUBCATCHMENTS AND GUTTERS/PIPES

       GUTTER     TRIBUTARY GUTTER/PIPE                                          TRIBUTARY SUBAREA
         D.A.(AC)

       101       201  302  304    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  2658.6

       102       202    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0

       103       203    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0

       104       204  311    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  2034.6

       105       205  306    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   346.9

       106       206    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0    73.0

       107       207  308    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   135.0

       108       208    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0

       109       209    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   130.6

       110       210    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0

       111       211  312    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   334.1

       112       212    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   284.2

       113       213  318    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   788.5

       114       214  314    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  1445.1

       115       215    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0    62.1

       116       216    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   405.1

       117       217    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0    94.7

       118       218  317  319    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   369.9

       119       219    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   164.5
```

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 120 | 220 | 322 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 1415.0 | | | | | | | | | | | | | | | | | | | | | |
| 121 | 221 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 211.2 | | | | | | | | | | | | | | | | | | | | | |
| 122 | 222 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 254.7 | | | | | | | | | | | | | | | | | | | | | |
| 123 | 223 | 324 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 718.1 | | | | | | | | | | | | | | | | | | | | | |
| 124 | 224 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 152.3 | | | | | | | | | | | | | | | | | | | | | |
| 125 | 225 | 326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 2784.6 | | | | | | | | | | | | | | | | | | | | | |
| 126 | 226 | 301 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 2749.4 | | | | | | | | | | | | | | | | | | | | | |
| 127 | 227 | 328 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 521.6 | | | | | | | | | | | | | | | | | | | | | |
| 128 | 228 | 329 | 330 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 457.6 | | | | | | | | | | | | | | | | | | | | | |
| 129 | 229 | 331 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 62.1 | | | | | | | | | | | | | | | | | | | | | |
| 130 | 230 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 21.8 | | | | | | | | | | | | | | | | | | | | | |
| 131 | 231 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 23.0 | | | | | | | | | | | | | | | | | | | | | |
| 132 | 232 | 333 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 1356.8 | | | | | | | | | | | | | | | | | | | | | |
| 133 | 233 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 33.3 | | | | | | | | | | | | | | | | | | | | | |
| 134 | 234 | 335 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 985.0 | | | | | | | | | | | | | | | | | | | | | |
| 135 | 235 | 336 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 535.0 | | | | | | | | | | | | | | | | | | | | | |
| 136 | 236 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 66.6 | | | | | | | | | | | | | | | | | | | | | |
| 137 | 237 | 338 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 858.2 | | | | | | | | | | | | | | | | | | | | | |
| 138 | 238 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 173.4 | | | | | | | | | | | | | | | | | | | | | |
| 201 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 277.1 | | | | | | | | | | | | | | | | | | | | | |
| 202 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | .0 | | | | | | | | | | | | | | | | | | | | | |
| 203 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | .0 | | | | | | | | | | | | | | | | | | | | | |
| 204 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 120.3 | | | | | | | | | | | | | | | | | | | | | |
| 205 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 273.9 | | | | | | | | | | | | | | | | | | | | | |
| 206 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 73.0 | | | | | | | | | | | | | | | | | | | | | |
| 207 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 4.5 | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 208 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 209 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130.6 |
| 210 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 211 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49.9 |
| 212 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 284.2 |
| 213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 418.6 |
| 214 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 189.4 |
| 215 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62.1 |
| 216 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 405.1 |
| 217 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94.7 |
| 218 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 110.7 |
| 219 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 164.5 |
| 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 442.2 |
| 221 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 211.2 |
| 222 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 254.7 |
| 223 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 565.8 |
| 224 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 152.3 |
| 225 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35.2 |
| 226 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90.9 |
| 227 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64.0 |
| 228 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 373.8 |
| 229 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39.0 |
| 230 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21.8 |
| 231 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.0 |
| 232 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 338.6 |
| 233 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33.3 |

```
    234         0    0    0    0    0    0    0    0    0    0            34    0    0    0    0    0    0    0
0    0   449.9

    235         0    0    0    0    0    0    0    0    0    0            35    0    0    0    0    0    0    0
0    0   468.5

    236         0    0    0    0    0    0    0    0    0    0            36    0    0    0    0    0    0    0
0    0    66.6

    237         0    0    0    0    0    0    0    0    0    0            37    0    0    0    0    0    0    0
0    0   684.8

    238         0    0    0    0    0    0    0    0    0    0            38    0    0    0    0    0    0    0
0    0   173.4

    301       501    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0  2658.6

    302       402    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0      .0

    303       603    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0      .0

    304       401    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0  2381.4

    306       106    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0    73.0

    307       107    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0   135.0

    308       608    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0   130.6

    309       609    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0   130.6

    310       610    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0      .0

    311       404    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0  1914.2

    312       112    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0   284.2

    313       513    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0   788.5

    314       414    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0  1255.7

    315       115    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0    62.1

    316       516    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0   405.1

    317       117    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0    94.7

    318       118    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0   369.9

    319       119    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0   164.5

    320       520    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0  1626.2

    322       420    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0   972.8

    324       124    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
0    0   152.3
```

```
    326       126    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  2749.4

    328       128    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0   457.6

    329       129    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0    62.1

    330       130    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0    21.8

    331       131    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0    23.0

    333       432    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  1018.2

    335       135    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0   535.0

    336       136    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0    66.6

    337       537    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0   858.2

    338       138    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0   173.4

    400       125  127  132    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  4663.0

    401       104  105    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  2381.4

    402       602  303    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0      .0

    404       111  114  307    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  1914.2

    414       416  315    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  1255.7

    416       313  316    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  1193.6

    420       122  123    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0   972.8

    432       133  134    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  1018.2

    501       101    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  2658.6

    513       113    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0   788.5

    516       116    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0   405.1

    520       120  121    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0  1626.2

    537       137    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0   858.2

    602       102    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0      .0

    603       103    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0      .0

    608       108  309    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
0    0   130.6
```

```
      609       109  310    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
  0    0   130.6

      610       110    0    0    0    0    0    0    0    0    0             0    0    0    0    0    0    0    0
  0    0      .0
1


 2yr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
 Blank


 HYDROGRAPHS ARE LISTED FOR THE FOLLOWING  86 CONVEYANCE ELEMENTS


         THE UPPER NUMBER IS DISCHARGE IN CFS
         THE LOWER NUMBER IS ONE OF THE FOLLOWING CASES:
                  ( ) DENOTES DEPTH ABOVE INVERT IN FEET
                  (S) DENOTES STORAGE IN AC-FT FOR DETENTION DAM.  DISCHARGE INCLUDES SPILLWAY OUTFLOW.
                  (I) DENOTES GUTTER INFLOW IN CFS FROM SPECIFIED INFLOW HYDROGRAPH
                  (D) DENOTES DISCHARGE IN CFS DIVERTED FROM THIS GUTTER
                  (O) DENOTES STORAGE IN AC-FT FOR SURCHARGED GUTTER

 TIME(HR/MIN)   101       102       103       104       105       106       107       108       109       110
                111       112       113       114       115       116       117       118       119       120
                121       122       123       124       125       126       127       128       129       130
                131       132       133       134       135       136       137       138       301       302
                303       304       306       307       308       309       310       311       312       313
                314       315       316       317       318       319       320       322       324       326
                328       329       330       331       333       335       336       338       400       401
                402       404       414       416       420       432       501       513       516       520
                537       602       603       608       609       610

   0    5.       0.        2.        1.        0.        0.        0.        0.        6.        0.        3.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0(S)     .0(S)     .0(S)     .0(S)

                 0.        0.        0.        0.        0.        0.
                  .0(S)     .0(S)     .0(S)     .0(S)     .0(S)     .0(S)

   0   10.       0.        3.        3.        0.        0.        0.        0.       11.        0.        5.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .1( )

                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )
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|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .1(S) | 0. .0(S) | 0. .0(S) | | | | |
| 0 | 15. | 0. .0( ) | 5. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 17. .0( ) | 0. .0( ) | 8. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .2(S) | 0. .0(S) | 0. .1(S) | | | | |
| 0 | 20. | 0. .0( ) | 6. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 23. .0( ) | 0. .0( ) | 11. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .2( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 0. .0(S) | 1. .1(S) | 1. .1(S) | 0. .3(S) | 0. .0(S) | 0. .1(S) | | | | |
| 0 | 25. | 0. .0( ) | 8. .0( ) | 3. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 28. .0( ) | 0. .0( ) | 11. .0( ) |
| | | 1. .0( ) | 2. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .3( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |
| | | 1. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 0. .0(S) | 1. .1(S) | 1. .1(S) | 0. .5(S) | 0. .0(S) | 0. .2(S) | | | | |
| 0 | 30. | 1. .0( ) | 9. .0( ) | 1. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 34. .0( ) | 0. .0( ) | 8. .0( ) |
| | | 2. .0( ) | 5. .0( ) | 1. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .3( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .4( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) |
| | | 2. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 0. .0(S) | 1. .2(S) | 1. .1(S) | 1. .7(S) | 0. .0(S) | 0. .3(S) | | | | |
| 0 | 35. | 1. .0( ) | 11. .0( ) | 1. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 39. .0( ) | 0. .0( ) | 8. .0( ) |
| | | 3. .0( ) | 8. .0( ) | 2. .0( ) | 4. .0( ) | 0. .0( ) | 1. .0( ) | 5. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .4( ) |
| | | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 1. .6( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) |
| | | 2. .0( ) | 7. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 0. .0(S) | 2. .2(S) | 1. .1(S) | 1. .9(S) | 0. .0(S) | 0. .3(S) | | | | |
| 0 | 40. | 2. .0( ) | 8. .0( ) | 0. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 45. .0( ) | 0. .0( ) | 5. .0( ) |
| | | 4. .0( ) | 10. .0( ) | 3. .0( ) | 5. .0( ) | 0. .0( ) | 1. .0( ) | 5. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .5( ) |

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|---|---|---|---|---|---|---|---|---|---|---|
| | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .1( ) | 0. .0( ) |
| | 0. .0( ) | 0. .0( ) | 0. .1( ) | 1. .7( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 5. .0( ) |
| | 3. .0( ) | 9. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | 0. .0(S) | 2. .3(S) | 1. .1(S) | 1. 1.2(S) | 0. .0(S) | 0. .4(S) | | | | |
| 0 45. | 2. .0( ) | 9. .0( ) | 0. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 42. .0( ) | 0. .0( ) | 6. .0( ) |
| | 5. .0( ) | 11. .0( ) | 4. .0( ) | 5. .0( ) | 0. .0( ) | 1. .0( ) | 4. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) |
| | 2. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) |
| | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 7. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .5( ) |
| | 1. .1( ) | 1. .0( ) | 0. .0( ) | 0. .1( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .2( ) | 0. .0( ) |
| | 0. .0( ) | 0. .0( ) | 0. .1( ) | 2. .8( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 6. .0( ) |
| | 3. .0( ) | 10. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | 0. .0(S) | 2. .3(S) | 1. .1(S) | 1. 1.5(S) | 0. .0(S) | 0. .4(S) | | | | |
| 0 50. | 3. .0( ) | 7. .0( ) | 0. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 38. .0( ) | 0. .0( ) | 3. .0( ) |
| | 5. .0( ) | 11. .0( ) | 4. .0( ) | 5. .0( ) | 0. .0( ) | 2. .0( ) | 4. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) |
| | 2. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) |
| | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 7. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .6( ) |
| | 1. .1( ) | 1. .0( ) | 0. .0( ) | 0. .1( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 3. .2( ) | 0. .0( ) |
| | 0. .0( ) | 0. .0( ) | 0. .1( ) | 2. .9( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | 1. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 6. .0( ) |
| | 3. .0( ) | 10. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .1(S) | 0. .1(S) | 0. .0(S) | 0. .0(S) |
| | 0. .0(S) | 3. .4(S) | 1. .1(S) | 1. 1.8(S) | 0. .0(S) | 0. .5(S) | | | | |
| 0 55. | 4. .0( ) | 8. .0( ) | 0. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 36. .0( ) | 0. .0( ) | 3. .0( ) |
| | 6. .0( ) | 11. .0( ) | 4. .0( ) | 5. .0( ) | 0. .0( ) | 2. .0( ) | 3. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) |
| | 2. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) |

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|---|---|---|---|---|---|---|---|---|---|---|
| 0. | 0. | 0. | 0. | 7. | 0. | 0. | 0. | 0. | 3. |
| .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| 1. | 1. | 0. | 0. | 1. | 0. | 0. | 2. | 3. | 0. |
| .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .2( ) | .0( ) |
| 0. | 0. | 0. | 2. | 1. | 0. | 0. | 0. | 0. | 0. |
| .0( ) | .0( ) | .1( ) | .9( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 6. |
| .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| 3. | 11. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1(S) | .1(S) | .0(S) | .0(S) |
| 0. | 3. | 1. | 1. | 0. | 0. | | | | |
| .0(S) | .4(S) | .1(S) | 2.0(S) | .0(S) | .5(S) | | | | |
| 1 0. | 5. | 5. | 0. | 7. | 0. | 0. | 1. | 32. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 6. | 10. | 4. | 4. | 0. | 2. | 3. | 4. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 2. | 0. | 0. | 0. | 0. | 0. | 2. | 5. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 6. | 0. | 0. | 0. | 0. | 3. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| | 1. | 2. | 0. | 0. | 1. | 0. | 0. | 3. | 4. | 0. |
| | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .2( ) | .0( ) |
| | 0. | 0. | 0. | 2. | 1. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .1( ) | .9( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 2. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 2. | 7. |
| | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 4. | 11. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1(S) | .1(S) | .1(S) | .1(S) |
| | 0. | 3. | 1. | 1. | 0. | 0. | | | | |
| | .0(S) | .4(S) | .1(S) | 2.3(S) | .0(S) | .5(S) | | | | |
| 1 5. | 6. | 6. | 0. | 8. | 0. | 0. | 1. | 29. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 7. | 10. | 4. | 4. | 0. | 2. | 3. | 4. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 2. | 4. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 6. | 0. | 0. | 0. | 0. | 3. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .7( ) |
| | 1. | 2. | 0. | 0. | 1. | 0. | 0. | 4. | 5. | 0. |
| | .1( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) |
| | 0. | 0. | 0. | 2. | 1. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .1( ) | .9( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 2. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 2. | 8. |
| | .3( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 4. | 11. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1(S) | .2(S) | .1(S) | .1(S) |
| | 0. | 3. | 1. | 1. | 0. | 0. | | | | |
| | .0(S) | .4(S) | .1(S) | 2.5(S) | .0(S) | .5(S) | | | | |
| 1 10. | 6. | 4. | 0. | 8. | 0. | 0. | 1. | 25. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 8. | 9. | 4. | 4. | 0. | 2. | 2. | 4. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .7( ) |
| | | 1. .1( ) | 3. .0( ) | 0. .0( ) | 0. .1( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 5. .1( ) | 5. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 2. .9( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .3( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 8. .0( ) |
| | | 4. .0( ) | 12. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .2(S) | 0. .2(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 3. .4(S) | 1. .0(S) | 1. 2.7(S) | 0. .0(S) | 0. .5(S) | | | | |
| 1 | 15. | 7. .0( ) | 5. .0( ) | 0. .0( ) | 9. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 22. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 8. .0( ) | 9. .0( ) | 4. .0( ) | 3. .0( ) | 0. .0( ) | 2. .0( ) | 2. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 4. .7( ) |
| | | 1. .1( ) | 4. .0( ) | 0. .0( ) | 1. .1( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 5. .1( ) | 6. .3( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 2. .9( ) | 2. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .3( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 9. .0( ) |
| | | 4. .0( ) | 12. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .2(S) | 0. .2(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 3. .5(S) | 0. .0(S) | 1. 2.8(S) | 0. .0(S) | 0. .5(S) | | | | |
| 1 | 20. | 8. .0( ) | 2. .0( ) | 0. .0( ) | 10. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 18. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 8. .0( ) | 8. .0( ) | 4. .0( ) | 3. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 4. .7( ) |
| | | 1. .1( ) | 4. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 6. .1( ) | 6. .3( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 2. .9( ) | 2. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 3. .3( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 10. .0( ) |
| | | 4. .0( ) | 12. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .3(S) | 0. .3(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 3. .5(S) | 0. .0(S) | 1. 2.9(S) | 0. .0(S) | 0. .5(S) | | | | |
| 1 | 25. | 9. .0( ) | 3. .0( ) | 0. .0( ) | 10. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 16. .0( ) | 0. .0( ) | 0. .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 8.<br>.0( ) | 8.<br>.0( ) | 4.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 4.<br>.7( ) |
| | | 0.<br>.1( ) | 5.<br>.1( ) | 0.<br>.0( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 7.<br>.1( ) | 6.<br>.3( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 2.<br>.9( ) | 2.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 3.<br>.3( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 10.<br>.0( ) |
| | | 4.<br>.0( ) | 11.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.3(S) | 0.<br>.3(S) | 0.<br>.1(S) | 0.<br>.1(S) |
| | | 0.<br>.0(S) | 3.<br>.5(S) | 0.<br>.0(S) | 1.<br>3.1(S) | 0.<br>.0(S) | 0.<br>.5(S) | | | | |
| 1 | 30. | 10.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 10.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 12.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 8.<br>.0( ) | 7.<br>.0( ) | 4.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 4.<br>.7( ) |
| | | 0.<br>.1( ) | 6.<br>.1( ) | 0.<br>.0( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 7.<br>.1( ) | 6.<br>.3( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 2.<br>.9( ) | 2.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 3.<br>.3( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 10.<br>.0( ) |
| | | 4.<br>.0( ) | 11.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.4(S) | 0.<br>.3(S) | 0.<br>.1(S) | 0.<br>.1(S) |
| | | 0.<br>.0(S) | 3.<br>.4(S) | 0.<br>.0(S) | 1.<br>3.1(S) | 0.<br>.0(S) | 0.<br>.5(S) | | | | |
| 1 | 35. | 10.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 11.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 9.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 8.<br>.0( ) | 7.<br>.0( ) | 4.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 4.<br>.7( ) |
| | | 0.<br>.1( ) | 7.<br>.1( ) | 0.<br>.0( ) | 1.<br>.2( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 8.<br>.1( ) | 6.<br>.3( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 2.<br>.8( ) | 2.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 3.<br>.3( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 11.<br>.0( ) |
| | | 3.<br>.0( ) | 11.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.5(S) | 0.<br>.3(S) | 0.<br>.1(S) | 0.<br>.1(S) |
| | | 0.<br>.0(S) | 3.<br>.4(S) | 0.<br>.0(S) | 1.<br>3.2(S) | 0.<br>.0(S) | 0.<br>.5(S) | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 40. | 11. .0( ) | 0. .0( ) | 0. .0( ) | 11. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 8. .0( ) | 6. .0( ) | 4. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .7( ) |
| | | 0. .1( ) | 7. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 8. .1( ) | 6. .3( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 1. .8( ) | 2. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 3. .3( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 11. .0( ) |
| | | 3. .0( ) | 11. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .5(S) | 0. .4(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 3. .4(S) | 0. .0(S) | 1. 3.3(S) | 0. .0(S) | 0. .5(S) | | | | |
| 1 | 45. | 11. .0( ) | 0. .0( ) | 0. .0( ) | 11. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 8. .0( ) | 6. .0( ) | 4. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .7( ) |
| | | 0. .1( ) | 8. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 9. .1( ) | 6. .3( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 1. .8( ) | 2. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 3. .3( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 11. .0( ) |
| | | 3. .0( ) | 11. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .6(S) | 0. .4(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 3. .4(S) | 0. .0(S) | 1. 3.3(S) | 0. .0(S) | 0. .5(S) | | | | |
| 1 | 50. | 12. .0( ) | 0. .0( ) | 0. .0( ) | 11. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 8. .0( ) | 6. .0( ) | 3. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .7( ) |
| | | 0. .1( ) | 8. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 9. .1( ) | 6. .3( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 1. .7( ) | 2. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 3. .3( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 11. .0( ) |
| | | 3. .0( ) | 11. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .7(S) | 0. .4(S) | 0. .1(S) | 0. .1(S) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0(S) | 3. .4(S) | 0. .0(S) | 1. 3.3(S) | 0. .0(S) | 0. .5(S) | | | | |
| 1 | 55. | 12. .0( ) | 0. .0( ) | 0. .0( ) | 11. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 8. .0( ) | 5. .0( ) | 3. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .6( ) |
| | | 0. .1( ) | 9. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 9. .1( ) | 6. .3( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 1. .7( ) | 2. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .3( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 11. .0( ) |
| | | 3. .0( ) | 10. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .8(S) | 0. .4(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 2. .4(S) | 0. .0(S) | 1. 3.3(S) | 0. .0(S) | 0. .5(S) | | | | |
| 2 | 0. | 12. .0( ) | 0. .0( ) | 0. .0( ) | 11. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 8. .0( ) | 5. .0( ) | 3. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .6( ) |
| | | 0. .1( ) | 9. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 9. .1( ) | 6. .3( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 1. .7( ) | 2. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .3( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 11. .0( ) |
| | | 3. .0( ) | 10. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .9(S) | 0. .5(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 2. .3(S) | 0. .0(S) | 1. 3.3(S) | 0. .0(S) | 0. .5(S) | | | | |
| 2 | 5. | 13. .0( ) | 0. .0( ) | 0. .0( ) | 11. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 8. .0( ) | 5. .0( ) | 2. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .6( ) |
| | | 0. .1( ) | 10. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 9. .1( ) | 6. .3( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 1. .6( ) | 2. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .3( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 11. .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 3. .0( ) | 10. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .9(S) | 0. .5(S) | 0. .1(S) | 0. .1(S) |
| 0. .0(S) | 2. .3(S) | 0. .0(S) | 1. 3.3(S) | 0. .0(S) | 0. .5(S) | | | | |
| 2 10. | 13. .0( ) | 0. .0( ) | 0. .0( ) | 11. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| 7. .0( ) | 5. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | |
| 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | |
| 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .6( ) | |
| 0. .1( ) | 10. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 9. .1( ) | 6. .3( ) | 0. .0( ) | |
| 0. .0( ) | 0. .0( ) | 0. .1( ) | 1. .6( ) | 2. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | |
| 2. .3( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 11. .0( ) | |
| 2. .0( ) | 8. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 1.0(S) | 0. .5(S) | 0. .1(S) | 0. .1(S) | |
| 0. .0(S) | 2. .3(S) | 0. .0(S) | 1. 3.3(S) | 0. .0(S) | 0. .5(S) | | | | |
| 2 15. | 13. .0( ) | 0. .0( ) | 0. .0( ) | 11. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| 7. .0( ) | 4. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | |
| 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | |
| 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .6( ) | |
| 0. .1( ) | 10. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 9. .1( ) | 6. .3( ) | 0. .0( ) | |
| 0. .0( ) | 0. .0( ) | 0. .1( ) | 1. .6( ) | 2. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | |
| 2. .3( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 11. .0( ) | |
| 2. .0( ) | 8. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 1.1(S) | 0. .5(S) | 0. .1(S) | 0. .1(S) | |
| 0. .0(S) | 2. .3(S) | 0. .0(S) | 1. 3.3(S) | 0. .0(S) | 0. .5(S) | | | | |
| 2 20. | 13. .0( ) | 0. .0( ) | 0. .0( ) | 11. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| 7. .0( ) | 4. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | |
| 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | |
| 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .6( ) | |
| 0. .1( ) | 10. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 9. .1( ) | 6. .3( ) | 0. .0( ) | |
| 0. .0( ) | 0. .0( ) | 0. .1( ) | 1. .6( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 2. | 11. |
| | | .3( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 8. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.2(S) | .5(S) | .1(S) | .1(S) |
| | | 0. | 2. | 0. | 1. | 0. | 0. | | | | |
| | | .0(S) | .3(S) | .0(S) | 3.3(S) | .0(S) | .5(S) | | | | |
| 2 | 25. | 13. | 0. | 0. | 10. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 7. | 4. | 1. | 0. | 0. | 0. | 0. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 1. | 2. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| | | 0. | 10. | 0. | 1. | 1. | 0. | 0. | 9. | 5. | 0. |
| | | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .0( ) | .0( ) | .1( ) | .3( ) | .0( ) |
| | | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .1( ) | .5( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 2. | 10. |
| | | .3( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 7. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.3(S) | .5(S) | .1(S) | .1(S) |
| | | 0. | 2. | 0. | 1. | 0. | 0. | | | | |
| | | .0(S) | .3(S) | .0(S) | 3.2(S) | .0(S) | .5(S) | | | | |
| 2 | 30. | 13. | 0. | 0. | 10. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 4. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 1. | 2. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| | | 0. | 10. | 0. | 1. | 1. | 0. | 0. | 8. | 5. | 0. |
| | | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .0( ) | .0( ) | .1( ) | .3( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .1( ) | .5( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 2. | 10. |
| | | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 6. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.4(S) | .5(S) | .1(S) | .1(S) |
| | | 0. | 2. | 0. | 1. | 0. | 0. | | | | |
| | | .0(S) | .3(S) | .0(S) | 3.2(S) | .0(S) | .5(S) | | | | |
| 2 | 35. | 12. | 0. | 0. | 10. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 3. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 1. | 2. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| | | 0. | 10. | 0. | 1. | 1. | 0. | 0. | 8. | 5. | 0. |
| | | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .1( ) | .5( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 2. | 10. |
| | | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 6. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.5(S) | .5(S) | .1(S) | .1(S) |
| | | 0. | 2. | 0. | 1. | 0. | 0. | | | | |
| | | .0(S) | .2(S) | .0(S) | 3.2(S) | .0(S) | .5(S) | | | | |
| 2 | 40. | 12. | 0. | 0. | 9. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 3. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| | | 0. | 10. | 0. | 1. | 1. | 0. | 0. | 8. | 5. | 0. |
| | | .1( ) | .1( ) | .0( ) | .2( ) | .1( ) | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .1( ) | .5( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 2. | 9. |
| | | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 6. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.6(S) | .5(S) | .1(S) | .1(S) |
| | | 0. | 2. | 0. | 1. | 0. | 0. | | | | |
| | | .0(S) | .2(S) | .0(S) | 3.2(S) | .0(S) | .5(S) | | | | |
| 2 | 45. | 12. | 0. | 0. | 7. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 3. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) |
| | | 0. | 10. | 0. | 1. | 1. | 0. | 0. | 7. | 5. | 0. |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .1( ) | .5( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 1. | 7. |
| | | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 5. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.6(S) | .5(S) | .1(S) | .1(S) |
| | | 0. | 2. | 0. | 1. | 0. | 0. | | | | |
| | | .0(S) | .2(S) | .0(S) | 3.2(S) | .0(S) | .5(S) | | | | |
| 2 | 50. | 11. | 0. | 0. | 7. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 3. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 9. | 0. | 1. | 1. | 0. | 0. | 7. | 4. | 0. |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .1( ) | .5( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 1. | 7. |
| | | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 5. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.7(S) | .5(S) | .1(S) | .1(S) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | | | | |
| | | .0(S) | .2(S) | .0(S) | 3.2(S) | .0(S) | .5(S) | | | | |
| 2 | 55. | 11. | 0. | 0. | 7. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 3. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) |
| | | 0. | 9. | 0. | 1. | 1. | 0. | 0. | 7. | 4. | 0. |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .1( ) | .4( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 1. | 7. |
| | | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 5. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.8(S) | .6(S) | .1(S) | .1(S) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | | | | |
| | | .0(S) | .2(S) | .0(S) | 3.2(S) | .0(S) | .5(S) | | | | |
| 3 | 0. | 10. | 0. | 0. | 7. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 3. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) |
| | | 0. | 9. | 0. | 1. | 1. | 0. | 0. | 7. | 4. | 0. |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .1( ) | .4( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 1. | 7. |
| | | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 5. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.9(S) | .6(S) | .1(S) | .1(S) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | | | | |
| | | .0(S) | .2(S) | .0(S) | 3.2(S) | .0(S) | .5(S) | | | | |
| 3 | 5. | 10. | 0. | 0. | 6. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 2. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .5( ) |
| | | 0. .0( ) | 8. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 6. .1( ) | 4. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .4( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 6. .0( ) |
| | | 1. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 1.9(S) | 0. .6(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 1. .2(S) | 0. .0(S) | 1. 3.2(S) | 0. .0(S) | 0. .5(S) | | | | |
| 3 | 10. | 9. .0( ) | 0. .0( ) | 0. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 4. .0( ) | 2. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .5( ) |
| | | 0. .0( ) | 8. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 6. .1( ) | 4. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .4( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 6. .0( ) |
| | | 1. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.0(S) | 0. .6(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 1. .2(S) | 0. .0(S) | 1. 3.2(S) | 0. .0(S) | 0. .5(S) | | | | |
| 3 | 15. | 9. .0( ) | 0. .0( ) | 0. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 4. .0( ) | 2. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .5( ) |
| | | 0. .0( ) | 8. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 6. .1( ) | 4. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .4( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 6. .0( ) |
| | | 1. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.1(S) | 0. .6(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 1. .2(S) | 0. .0(S) | 1. 3.2(S) | 0. .0(S) | 0. .5(S) | | | | |
| 3 | 20. | 9. .0( ) | 0. .0( ) | 0. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 4. .0( ) | 2. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .5( ) |
| | | 0. .0( ) | 7. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 6. .1( ) | 4. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .4( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 6. .0( ) |
| | | 1. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.1(S) | 0. .6(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 1. .2(S) | 0. .0(S) | 1. 3.2(S) | 0. .0(S) | 0. .4(S) | | | | |
| 3 | 25. | 8. .0( ) | 0. .0( ) | 0. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 3. .0( ) | 2. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .5( ) |
| | | 0. .0( ) | 7. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 6. .1( ) | 3. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .4( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 6. .0( ) |
| | | 1. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.2(S) | 0. .6(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 1. .1(S) | 0. .0(S) | 1. 3.2(S) | 0. .0(S) | 0. .4(S) | | | | |
| 3 | 30. | 8. .0( ) | 0. .0( ) | 0. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 3. .0( ) | 2. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .5( ) |
| | | 0. .0( ) | 7. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 5. .1( ) | 3. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .4( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 5. .0( ) |
| | | 1. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.2(S) | 0. .6(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 1. .1(S) | 0. .0(S) | 1. 3.2(S) | 0. .0(S) | 0. .4(S) | | | | |
| 3 | 35. | 8. .0( ) | 0. .0( ) | 0. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 3. .0( ) | 2. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .5( ) |
| | | 0. .0( ) | 7. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 5. .1( ) | 3. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .3( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 5. .0( ) |
| | | 1. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.3(S) | 0. .6(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 1. .1(S) | 0. .0(S) | 1. 3.2(S) | 0. .0(S) | 0. .4(S) | | | | |
| 3 | 40. | 8. .0( ) | 0. .0( ) | 0. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 3. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .4( ) |
| | | 0. .0( ) | 6. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 5. .1( ) | 3. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .3( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 5. .0( ) |
| | | 1. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.3(S) | 0. .6(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 1. .1(S) | 0. .0(S) | 1. 3.2(S) | 0. .0(S) | 0. .4(S) | | | | |
| 3 | 45. | 7. .0( ) | 0. .0( ) | 0. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 3. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .4( ) |
| | | 0. .0( ) | 6. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 5. .1( ) | 3. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .3( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 5. .0( ) |
| | | 1. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.4(S) | 0. .6(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 1. .1(S) | 0. .0(S) | 1. 3.2(S) | 0. .0(S) | 0. .4(S) | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 50. | 7. .0( ) | 0. .0( ) | 0. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .4( ) |
| | | 0. .0( ) | 6. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 5. .1( ) | 2. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .3( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 5. .0( ) |
| | | 1. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.4(S) | 0. .6(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 1. .1(S) | 0. .0(S) | 1. 3.2(S) | 0. .0(S) | 0. .4(S) | | | | |
| 3 | 55. | 7. .0( ) | 0. .0( ) | 0. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .4( ) |
| | | 0. .0( ) | 6. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 5. .1( ) | 2. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .3( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 5. .0( ) |
| | | 1. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.5(S) | 0. .6(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 1. .1(S) | 0. .0(S) | 1. 3.2(S) | 0. .0(S) | 0. .4(S) | | | | |
| 4 | 0. | 7. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .4( ) |
| | | 0. .0( ) | 6. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 4. .1( ) | 2. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .3( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 4. .0( ) |
| | | 1. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.5(S) | 0. .6(S) | 0. .1(S) | 0. .1(S) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0(S) | 1. .1(S) | 0. .0(S) | 1. 3.2(S) | 0. .0(S) | 0. .4(S) | | | | |
| 4 | 5. | 6. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .4( ) |
| | | 0. .0( ) | 5. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 4. .1( ) | 2. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .3( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 4. .0( ) |
| | | 1. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.6(S) | 0. .6(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 1. .1(S) | 0. .0(S) | 1. 3.2(S) | 0. .0(S) | 0. .4(S) | | | | |
| 4 | 10. | 6. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .4( ) |
| | | 0. .0( ) | 5. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 4. .1( ) | 2. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .3( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 4. .0( ) |
| | | 1. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.6(S) | 0. .6(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 1. .1(S) | 0. .0(S) | 1. 3.2(S) | 0. .0(S) | 0. .4(S) | | | | |
| 4 | 15. | 6. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .4( ) |
| | | 0. .0( ) | 5. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 4. .1( ) | 2. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .3( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 4. .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.7(S) | 0. .6(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 1. .1(S) | 0. .0(S) | 1. 3.2(S) | 0. .0(S) | 0. .4(S) | | | | |
| 4 | 20. | 6. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .4( ) |
| | | 0. .0( ) | 5. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 4. .1( ) | 1. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .3( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 4. .0( ) |
| | | 1. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.7(S) | 0. .6(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 1. .1(S) | 0. .0(S) | 1. 3.1(S) | 0. .0(S) | 0. .4(S) | | | | |
| 4 | 25. | 5. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .4( ) |
| | | 0. .0( ) | 5. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 4. .1( ) | 1. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .3( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 4. .0( ) |
| | | 1. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 2.7(S) | 0. .6(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 1. .1(S) | 0. .0(S) | 1. 3.1(S) | 0. .0(S) | 0. .4(S) | | | | |
| 4 | 30. | 5. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .4( ) |
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 3. .1( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .3( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 1. | 3. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 2. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.8(S) | .6(S) | .1(S) | .1(S) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | | | | |
| | | .0(S) | .1(S) | .0(S) | 3.1(S) | .0(S) | .4(S) | | | | |
| 4 | 35. | 5. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 4. | 0. | 1. | 1. | 0. | 0. | 3. | 1. | 0. |
| | | .0( ) | .0( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .0( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .1( ) | .3( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 1. | 3. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 2. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.8(S) | .6(S) | .1(S) | .1(S) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | | | | |
| | | .0(S) | .1(S) | .0(S) | 3.1(S) | .0(S) | .4(S) | | | | |
| 4 | 40. | 5. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 4. | 0. | 1. | 1. | 0. | 0. | 3. | 1. | 0. |
| | | .0( ) | .0( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .0( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 1. | 3. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 2. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.8(S) | .6(S) | .1(S) | .1(S) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | | | | |
| | | .0(S) | .1(S) | .0(S) | 3.1(S) | .0(S) | .4(S) | | | | |
| 4 | 45. | 5. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 4. | 0. | 1. | 1. | 0. | 0. | 3. | 1. | 0. |
| | | .0( ) | .0( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .0( ) | .1( ) | .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 1. | 3. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 2. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.9(S) | .6(S) | .1(S) | .1(S) |
| | | 0. | 0. | 0. | 1. | 0. | 0. | | | | |
| | | .0(S) | .1(S) | .0(S) | 3.1(S) | .0(S) | .4(S) | | | | |
| 4 | 50. | 4. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 4. | 0. | 1. | 1. | 0. | 0. | 3. | 1. | 0. |
| | | .0( ) | .0( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .0( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 1. | 3. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.9(S) | .6(S) | .1(S) | .1(S) |
| | | 0. | 0. | 0. | 1. | 0. | 0. | | | | |
| | | .0(S) | .1(S) | .0(S) | 3.1(S) | .0(S) | .4(S) | | | | |
| 4 | 55. | 4. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 4. | 0. | 1. | 1. | 0. | 0. | 3. | 1. | 0. |
| | | .0( ) | .0( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .0( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 1. | 3. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.9(S) | .6(S) | .1(S) | .1(S) |
| | | 0. | 0. | 0. | 1. | 0. | 0. | | | | |
| | | .0(S) | .1(S) | .0(S) | 3.1(S) | .0(S) | .4(S) | | | | |
| 5 | 0. | 4. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 3. .0( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 3.0(S) | 0. .6(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 0. .1(S) | 0. .0(S) | 1. 3.1(S) | 0. .0(S) | 0. .4(S) | | | | |
| 5 | 5. | 4. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .3( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 3. .0( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 3.0(S) | 0. .7(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 0. .1(S) | 0. .0(S) | 1. 3.1(S) | 0. .0(S) | 0. .4(S) | | | | |
| 5 | 10. | 4. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .3( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 2. .0( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 3.0(S) | 0. .7(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 0. .1(S) | 0. .0(S) | 1. 3.1(S) | 0. .0(S) | 0. .4(S) | | | | |
| 5 | 15. | 4. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .3( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 2. .0( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 3.0(S) | 0. .7(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .0(S) | 1. 3.1(S) | 0. .0(S) | 0. .4(S) | | | | |
| 5 | 20. | 4. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .3( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 2. .0( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 3.1(S) | 0. .7(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .0(S) | 1. 3.1(S) | 0. .0(S) | 0. .4(S) | | | | |
| 5 | 25. | 3. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .3( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 2. .0( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 3.1(S) | 0. .7(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .0(S) | 1. 3.1(S) | 0. .0(S) | 0. .4(S) | | | | |
| 5 | 30. | 3. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .3( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 2. .0( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 3.1(S) | 0. .7(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .0(S) | 1. 3.1(S) | 0. .0(S) | 0. .4(S) | | | | |
| 5 | 35. | 3. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .3( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 2. .0( ) | 0. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 3.1(S) | 0. .7(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .0(S) | 1. 3.1(S) | 0. .0(S) | 0. .4(S) | | | | |
| 5 | 40. | 3. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .3( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 2. .0( ) | 0. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 3.2(S) | 0. .7(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .0(S) | 1. 3.1(S) | 0. .0(S) | 0. .4(S) | | | | |
| 5 | 45. | 3. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | 0. | 3. | 0. | 1. | 1. | 0. | 0. | 2. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .0( ) | .1( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 1. | 2. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.2(S) | .7(S) | .1(S) | .1(S) |
| | 0. | 0. | 0. | 1. | 0. | 0. | | | | |
| | .0(S) | .0(S) | .0(S) | 3.1(S) | .0(S) | .4(S) | | | | |
| 5 50. | 3. | 0. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | 0. | 3. | 0. | 1. | 1. | 0. | 0. | 2. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .0( ) | .1( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 1. | 2. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.2(S) | .7(S) | .1(S) | .1(S) |
| | 0. | 0. | 0. | 1. | 0. | 0. | | | | |
| | .0(S) | .0(S) | .0(S) | 3.1(S) | .0(S) | .4(S) | | | | |
| 5 55. | 3. | 0. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | 0. | 2. | 0. | 1. | 1. | 0. | 0. | 2. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .0( ) | .1( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 1. | 2. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.2(S) | .7(S) | .1(S) | .1(S) |
| | 0. | 0. | 0. | 1. | 0. | 0. | | | | |
| | .0(S) | .0(S) | .0(S) | 3.1(S) | .0(S) | .4(S) | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 0. | 3. | 0. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 2. | 0. | 1. | 1. | 0. | 0. | 2. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .0( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 1. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.2(S) | .7(S) | .1(S) | .1(S) |
| | | 0. | 0. | 0. | 1. | 0. | 0. | | | | |
| | | .0(S) | .0(S) | .0(S) | 3.1(S) | .0(S) | .4(S) | | | | |
| 6 | 5. | 3. | 0. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 2. | 0. | 1. | 1. | 0. | 0. | 2. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .0( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 1. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.3(S) | .7(S) | .1(S) | .1(S) |
| | | 0. | 0. | 0. | 1. | 0. | 0. | | | | |
| | | .0(S) | .0(S) | .0(S) | 3.1(S) | .0(S) | .4(S) | | | | |
| 6 | 10. | 3. | 0. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 2. | 0. | 1. | 1. | 0. | 0. | 2. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .0( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 1. | 0. | 0. | 1. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.3(S) | .7(S) | .1(S) | .1(S) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0(S) | 0. .0(S) | 0. .0(S) | 1. 3.1(S) | 0. .0(S) | 0. .4(S) | | | | |
| 6 | 15. | 2. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .3( ) |
| | | 0. .0( ) | 2. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 2. .0( ) | 0. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 3.3(S) | 0. .7(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .0(S) | 1. 3.1(S) | 0. .0(S) | 0. .4(S) | | | | |
| 6 | 20. | 2. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .3( ) |
| | | 0. .0( ) | 2. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 2. .0( ) | 0. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. 3.3(S) | 0. .7(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .0(S) | 1. 3.1(S) | 0. .0(S) | 0. .4(S) | | | | |
| 6 | 25. | 2. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .2( ) |
| | | 0. .0( ) | 2. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 2. .0( ) | 0. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 2. .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.3(S) | .7(S) | .1(S) | .1(S) |
| | | 0. | 0. | 0. | 1. | 0. | 0. | | | | |
| | | .0(S) | .0(S) | .0(S) | 3.0(S) | .0(S) | .4(S) | | | | |
| 6 | 30. | 2. | 0. | 0. | 1. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 2. | 0. | 1. | 1. | 0. | 0. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .0( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.3(S) | .7(S) | .1(S) | .1(S) |
| | | 0. | 0. | 0. | 1. | 0. | 0. | | | | |
| | | .0(S) | .0(S) | .0(S) | 3.0(S) | .0(S) | .4(S) | | | | |
| 6 | 35. | 2. | 0. | 0. | 1. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 2. | 0. | 1. | 1. | 0. | 0. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .0( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.4(S) | .7(S) | .1(S) | .1(S) |
| | | 0. | 0. | 0. | 1. | 0. | 0. | | | | |
| | | .0(S) | .0(S) | .0(S) | 3.0(S) | .0(S) | .4(S) | | | | |
| 6 | 40. | 2. | 0. | 0. | 1. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 2. | 0. | 1. | 1. | 0. | 0. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .0( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .1( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. 3.4(S) | 0. .7(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .0(S) | 1. 3.0(S) | 0. .0(S) | 0. .4(S) | | | | |
| 6 | 45. | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .2( ) |
| | | 0. .0( ) | 2. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 1. .0( ) | 0. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. 3.4(S) | 0. .7(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .0(S) | 1. 3.0(S) | 0. .0(S) | 0. .4(S) | | | | |
| 6 | 50. | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .2( ) |
| | | 0. .0( ) | 2. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 1. .0( ) | 0. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 1. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. 3.4(S) | 0. .7(S) | 0. .1(S) | 0. .1(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .0(S) | 1. 3.0(S) | 0. .0(S) | 0. .4(S) | | | | |
| 6 | 55. | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .2( ) |
| | | 0. .0( ) | 2. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 1. .0( ) | 0. .1( ) | 0. .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 1. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.4(S) | .7(S) | .1(S) | .1(S) |
| | 0. | 0. | 0. | 1. | 0. | 0. | | | | |
| | .0(S) | .0(S) | .0(S) | 3.0(S) | .0(S) | .4(S) | | | | |
| 7 0. | 2. | 0. | 0. | 1. | 0. | 0. | 1. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | 0. | 2. | 0. | 1. | 1. | 0. | 0. | 1. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .2( ) | .1( ) | .0( ) | .1( ) | .0( ) | .1( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 1. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.4(S) | .7(S) | .1(S) | .1(S) |
| | 0. | 0. | 0. | 1. | 0. | 0. | | | | |
| | .0(S) | .0(S) | .0(S) | 3.0(S) | .0(S) | .4(S) | | | | |

1

2yr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
Blank

*** PEAK FLOWS, STAGES AND STORAGES OF GUTTERS AND DETENTION DAMS ***

| CONVEYANCE ELEMENT | PEAK (CFS) | STAGE (FT) | STORAGE (AC-FT) | TIME (HR/MIN) |
|---|---|---|---|---|
| 219 | 0. | (DIRECT FLOW) | | 0 0. |
| 217 | 5. | (DIRECT FLOW) | | 0 35. |
| 119 | 0. | (DIRECT FLOW) | | 0 0. |
| 117 | 5. | (DIRECT FLOW) | | 0 35. |
| 210 | 11. | (DIRECT FLOW) | | 0 25. |
| 319 | 0. | .0 | | 0 0. |
| 317 | 2. | .9 | | 1 10. |
| 218 | 3. | (DIRECT FLOW) | | 0 45. |
| 110 | 11. | (DIRECT FLOW) | | 0 25. |
| 118 | 4. | (DIRECT FLOW) | | 1 0. |
| 610 | 0. | .1 | .5 | 1 0. |
| 209 | 0. | (DIRECT FLOW) | | 0 0. |
| 216 | 2. | (DIRECT FLOW) | | 0 55. |
| 318 | 2. | .1 | | 1 30. |
| 213 | 4. | (DIRECT FLOW) | | 0 50. |
| 310 | 0. | .1 | | 5 10. |
| 109 | 0. | (DIRECT FLOW) | | 0 0. |
| 116 | 2. | (DIRECT FLOW) | | 0 55. |
| 113 | 4. | (DIRECT FLOW) | | 1 20. |
| 609 | 0. | .1 | .0 | 7 0. |
| 208 | 45. | (DIRECT FLOW) | | 0 40. |
| 215 | 0. | (DIRECT FLOW) | | 0 0. |
| 516 | 0. | .1 | .1 | 1 25. |
| 513 | 0. | .1 | .7 | 7 0. |
| 309 | 0. | .0 | | 7 0. |

| | | | | | |
|---|---|---|---|---|---|
| 108 | 45. | (DIRECT FLOW) | | 0 | 40. |
| 115 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 316 | 0. | .1 | | 7 | 0. |
| 313 | 0. | .0 | | 7 | 0. |
| 608 | 1. | .1 | 3.3 | 1 | 45. |
| 315 | 0. | .0 | | 0 | 0. |
| 416 | 0. | (DIRECT FLOW) | | 7 | 0. |
| 212 | 11. | (DIRECT FLOW) | | 0 | 45. |
| 308 | 1. | .1 | | 1 | 55. |
| 207 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 414 | 0. | (DIRECT FLOW) | | 7 | 0. |
| 112 | 11. | (DIRECT FLOW) | | 0 | 45. |
| 107 | 1. | (DIRECT FLOW) | | 1 | 55. |
| 314 | 0. | .0 | | 7 | 0. |
| 214 | 5. | (DIRECT FLOW) | | 0 | 45. |
| 312 | 6. | .3 | | 1 | 40. |
| 211 | 3. | (DIRECT FLOW) | | 0 | 45. |
| 206 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 307 | 1. | .2 | | 3 | 10. |
| 114 | 5. | (DIRECT FLOW) | | 0 | 45. |
| 111 | 8. | (DIRECT FLOW) | | 1 | 35. |
| 203 | 4. | (DIRECT FLOW) | | 0 | 15. |
| 106 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 404 | 12. | (DIRECT FLOW) | | 1 | 15. |
| 103 | 4. | (DIRECT FLOW) | | 0 | 15. |
| 202 | 11. | (DIRECT FLOW) | | 0 | 35. |
| 306 | 0. | .0 | | 0 | 0. |
| 205 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 311 | 9. | .1 | | 2 | 5. |
| 204 | 5. | (DIRECT FLOW) | | 0 | 45. |
| 603 | 1. | .1 | .1 | 0 | 35. |
| 102 | 11. | (DIRECT FLOW) | | 0 | 35. |
| 236 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 105 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 104 | 11. | (DIRECT FLOW) | | 2 | 0. |
| 303 | 1. | .1 | | 0 | 50. |
| 602 | 3. | .1 | .5 | 1 | 20. |
| 224 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 136 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 231 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 401 | 11. | (DIRECT FLOW) | | 2 | 0. |
| 402 | 4. | (DIRECT FLOW) | | 1 | 15. |
| 124 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 336 | 0. | .0 | | 0 | 0. |
| 235 | 7. | (DIRECT FLOW) | | 0 | 50. |
| 131 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 304 | 10. | .1 | | 2 | 25. |
| 302 | 4. | .7 | | 1 | 25. |
| 201 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 324 | 0. | .0 | | 0 | 0. |
| 223 | 1. | (DIRECT FLOW) | | 0 | 55. |
| 222 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 135 | 7. | (DIRECT FLOW) | | 0 | 50. |
| 230 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 331 | 0. | .0 | | 0 | 0. |
| 229 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 101 | 13. | (DIRECT FLOW) | | 2 | 15. |
| 123 | 1. | (DIRECT FLOW) | | 0 | 55. |
| 122 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 238 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 335 | 1. | .0 | | 2 | 40. |
| 234 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 233 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 130 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 129 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 501 | 0. | .1 | 3.4 | 7 | 0. |
| 420 | 1. | (DIRECT FLOW) | | 0 | 55. |
| 138 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 134 | 1. | (DIRECT FLOW) | | 2 | 40. |
| 133 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 330 | 0. | .0 | | 0 | 0. |
| 329 | 0. | .0 | | 0 | 0. |
| 228 | 5. | (DIRECT FLOW) | | 0 | 50. |
| 301 | 0. | .0 | | 7 | 0. |
| 226 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 221 | 2. | (DIRECT FLOW) | | 0 | 50. |
| 322 | 0. | .0 | | 1 | 0. |
| 220 | 0. | (DIRECT FLOW) | | 0 | 0. |

| | | | | |
|---|---|---|---|---|
| 338 | 0. | .0 | 0 | 0. |
| 237 | 0. | (DIRECT FLOW) | 0 | 0. |
| 432 | 1. | (DIRECT FLOW) | 2 | 40. |
| 128 | 5. | (DIRECT FLOW) | 0 | 50. |
| 126 | 0. | (DIRECT FLOW) | 7 | 0. |
| 121 | 2. | (DIRECT FLOW) | 0 | 50. |
| 120 | 0. | (DIRECT FLOW) | 1 | 0. |
| 137 | 0. | (DIRECT FLOW) | 0 | 0. |
| 333 | 1. | .0 | 5 | 10. |
| 232 | 0. | (DIRECT FLOW) | 0 | 0. |
| 328 | 3. | .3 | 1 | 35. |
| 227 | 0. | (DIRECT FLOW) | 0 | 0. |
| 326 | 0. | .0 | 7 | 0. |
| 225 | 0. | (DIRECT FLOW) | 0 | 0. |
| 520 | 0. | .1 .1 | 3 | 30. |
| 537 | 0. | .0 | 0 | 0. |
| 132 | 1. | (DIRECT FLOW) | 5 | 10. |
| 127 | 3. | (DIRECT FLOW) | 1 | 35. |
| 125 | 0. | (DIRECT FLOW) | 7 | 0. |
| 320 | 0. | (DIRECT FLOW) | 0 | 25. |
| 337 | 0. | (DIRECT FLOW) | 0 | 0. |
| 400 | 3. | (DIRECT FLOW) | 1 | 35. |
| 902 | 0. | (DIRECT FLOW) | 0 | 25. |
| 901 | 0. | (DIRECT FLOW) | 0 | 0. |
| 900 | 3. | (DIRECT FLOW) | 1 | 35. |

```
   2   1   1   2
   3   4
WATERSHED   1
5yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
Blank
        84       5.0                                                          1
         1  201
         4  204
         5  205
         6  206
         7  207
         9  209
        11  211
        12  212
        13  213
        14  214
        15  215
        16  216
        17  217
        18  218
        19  219
        20  220
        21  221
        22  222
        23  223
        24  224
        25  225
        26  226
        27  227
        28  228
        29  229
        30  230
        31  231
        32  232
        33  233
        34  234
        35  235
        36  236
        37  237
        38  238

    0  201  101    3              1.
   -1  202  102  3 3              1.
         0.        0.      0.55      10.1      1.65        0.        0.        0.
   -1  203  103  3 3              1.
         0.        0.      0.23      3.59      0.69        0.        0.        0.
    0  204  104    3              1.
    0  205  105    3              1.
    0  206  106    3              1.
    0  207  107    3              1.
   -1  208  108  3 3              1.
         0.        0.      0.67     45.23      1.80        0.        0.        0.
    0  209  109    3              1.
   -1  210  110  3 3              1.
         0.        0.      0.35     21.63      1.05        0.        0.        0.
    0  211  111    3              1.
    0  212  112    3              1.
    0  213  113    3              1.
    0  214  114    3              1.
    0  215  115    3              1.
    0  216  116    3              1.
    0  217  117    3              1.
    0  218  118    3              1.
    0  219  119    3              1.
    0  220  120    3              1.
    0  221  121    3              1.
    0  222  122    3              1.
    0  223  123    3              1.
    0  224  124    3              1.
    0  225  125    3              1.
    0  226  126    3              1.
    0  227  127    3              1.
    0  228  128    3              1.
    0  229  129    3              1.
    0  230  130    3              1.
    0  231  131    3              1.
    0  232  132    3              1.
    0  233  133    3              1.
```

```
0  234  134    3             1.
0  235  135    3             1.
0  236  136    3             1.
0  237  137    3             1.
0  238  138    3             1.
0  402  302    3             1.
0  401  304    3             1.
0  106  306    3             1.
0  107  307    3             1.
0  404  311    3             1.
0  112  312    3             1.
0  414  314    3             1.
0  115  315    3             1.
0  117  317    3             1.
0  118  318    3             1.
0  119  319    3             1.
0  420  322    3             1.
0  124  324    3             1.
0  126  326    3             1.
0  128  328    3             1.
0  129  329    3             1.
0  130  330    3             1.
0  131  331    3             1.
0  432  333    3             1.
0  135  335    3             1.
0  136  336    3             1.
0  138  338    3             1.
0  125  400    3             1.
0  127  400    3             1.
0  132  400    3             1.
0  104  401    3             1.
0  105  401    3             1.
0  111  404    3             1.
0  114  404    3             1.
0  416  414    3             1.
0  122  420    3             1.
0  123  420    3             1.
0  133  432    3             1.
0  134  432    3             1.
0  101  501    3             1.
0  113  513    3             1.
0  116  516    3             1.
0  120  520    3             1.
0  121  520    3             1.
0  137  537    3             1.
0  102  602    3             1.
0  103  603    3             1.
0  108  608    3             1.
0  109  609    3             1.
0  110  610    3             1.
0  400  900    3             1.
0  337  901    3             1.
0  320  902    3             1.
0  501  301  7 2     0.1       1.                                      0.1
    0.        0.       7.5        0.      26.4        0.      63.3        0.
  82.9        0.      129.     1400.      201.     6510.
0  513  313  3 2     0.1       1.                                      0.1
    0.        0.      20.3        0.      22.6      665.
0  516  316  3 2     0.1       1.                                      0.1
    0.        0.     18.12        0.      18.9      320.        0.        0.
0  520  320  4 2     0.1       1.                                      0.1
    0.        0.       9.9        0.       10.        5.      280.        5.
0  537  337  3 2     0.1       1.                                      0.1
    0.        0.     14.85        0.      17.7      649.        0.        0.
0  602  402  3 2     0.1       1.                                      0.1
    0.        0.      0.78       5.4      1.64      15.4
0  603  303  3 2     0.1       1.                                      0.1
    0.        0.      0.12       1.2      0.33       6.9        0.        0.
0  608  308 10 2     0.1       1.                                      0.1
    0.        0.      .038      0.31      0.45      0.46      1.63      0.57
  3.59      0.67      6.09     32.39      7.09     55.58      8.87    123.53
 11.53    266.39     13.14    378.74
0  609  309  2 2     0.1       1.                                      0.1
    0.        0.       12.      43.4
0  610  310  2 2     0.1       1.                                      0.1
    0.        0.      3.81       1.3        0.        0.        0.        0.
0  302  101    1      0.   1698.  0.0150      4.      4.    .045      5.
0  304  101    1    175.   1761.  0.0133      4.      4.    .045      5.
```

```
    0  311  104    1    135.   2519.  0.0123      4.      4.    .045      5.
    0  306  105    1     25.   5603.  0.0157      4.      4.    .045      5.
    0  308  107    1      4.    625.   0.008    0.01    0.01   0.016      2.
    0  312  111    1      0.   2682.  0.0082    110.    110.    .045     10.
    0  318  113    1     35.   3069.  0.0071      4.      4.    .045      5.
    0  314  114    1     60.   3598.  0.0080      4.      4.    .045      5.
    0  317  118    1      0.   1788.  0.0011      4.      4.    .045      5.
    0  319  118    1      0.   2135.  0.0082      4.      4.    .045      5.
    0  322  120    1    100.   2881.  0.0085      4.      4.    .045      5.
    0  324  123    1     80.   5657.  0.0133      4.      4.    .045      5.
    0  326  125    1     45.   2265.  0.0018      4.      4.    .045      5.
    0  301  126    1    150.   1716.  0.0152      4.      4.    .045      5.
    0  328  127    1     10.   2545.  0.0026      4.      4.    .045      5.
    0  329  128    1     25.   4136.  0.0173      4.      4.    .045      5.
    0  330  128    1     15.   6271.  0.0148      4.      4.    .045      5.
    0  331  129    1      0.   2147.  0.0135      4.      4.    .045      5.
    0  333  132    1     55.   4716.  0.0068      4.      4.    .045      5.
    0  335  134    1     85.   7048.  0.0123      4.      4.    .045      5.
    0  336  135    1     35.   5158.  0.0099      4.      4.    .045      5.
    0  338  137    1     90.   5244.  0.0139      4.      4.    .045      5.
    0  303  402    1      5.   1011.  0.0151      5.      5.   0.035      3.
    0  307  404    1      5.   1308.  0.0031      5.      5.   0.035      3.
    0  315  414    1      0.   2696.  0.0097      4.      4.    .045      5.
    0  313  416    1     10.   2381.  0.0054      4.      4.    .045      5.
    0  316  416    1      0.    965.  0.0053      4.      4.    .045      5.
    0  309  608    1      5.   1757.  0.0091      5.      5.   0.035      3.
    0  310  609    1      5.   3896.    0.01      5.      5.   0.035      3.

    0
   86
  101  102  103  104  105  106  107  108  109  110  111  112  113  114  115  116
  117  118  119  120  121  122  123  124  125  126  127  128  129  130  131  132
  133  134  135  136  137  138  301  302  303  304  306  307  308  309  310  311
  312  313  314  315  316  317  318  319  320  322  324  326  328  329  330  331
  333  335  336  338  400  401  402  404  414  416  420  432  501  513  516  520
  537  602  603  608  609  610
ENDPROGRAM
```

URBAN DRAINAGE STORM WATER MANAGEMENT MODEL - 32 BIT VERSION 1998
REVISED BY UNIVERSITY OF COLORADO AT DENVER

*** ENTRY MADE TO RUNOFF MODEL ***

5yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
Blank

0NUMBER OF TIME STEPS 84
0INTEGRATION TIME INTERVAL (MINUTES), 5.00

25.0 PERCENT OF IMPERVIOUS AREA HAS ZERO DETENTION DEPTH
1

5yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
Blank

HYDROGRAPHS FROM CUHPF MODEL ARE LISTED FOR THE FOLLOWING 34 SUBCATCHMENTS

| TIME(HR/MIN) | 1 | 4 | 5 | 6 | 7 | 9 | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|---|---|
| | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 |
| | 35 | 36 | 37 | 38 | | | | | | |
| 0 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 5. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 10. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 15. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 20. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. |
| | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 25. | 1. | 2. | 0. | 0. | 1. | 0. | 1. | 4. | 1. | 3. |
| | 0. | 0. | 5. | 1. | 0. | 0. | 1. | 0. | 1. | 0. |
| | 0. | 0. | 0. | 2. | 1. | 0. | 0. | 0. | 0. | 0. |
| | 2. | 0. | 1. | 0. | | | | | | |
| 0 30. | 5. | 5. | 1. | 1. | 2. | 2. | 3. | 10. | 4. | 7. |
| | 1. | 3. | 11. | 4. | 1. | 3. | 3. | 2. | 4. | 3. |
| | 1. | 1. | 2. | 7. | 2. | 0. | 1. | 3. | 1. | 3. |
| | 8. | 2. | 3. | 3. | | | | | | |
| 0 35. | 12. | 9. | 1. | 3. | 2. | 5. | 5. | 19. | 10. | 12. |
| | 2. | 7. | 15. | 8. | 2. | 8. | 6. | 5. | 11. | 7. |
| | 3. | 3. | 4. | 14. | 3. | 0. | 2. | 8. | 2. | 8. |
| | 17. | 4. | 8. | 6. | | | | | | |
| 0 40. | 17. | 11. | 2. | 4. | 2. | 7. | 6. | 25. | 16. | 15. |
| | 3. | 13. | 15. | 10. | 4. | 14. | 9. | 8. | 18. | 10. |
| | 4. | 5. | 6. | 21. | 4. | 0. | 2. | 13. | 2. | 13. |
| | 24. | 5. | 15. | 9. | | | | | | |
| 0 45. | 19. | 12. | 3. | 4. | 2. | 8. | 6. | 28. | 20. | 16. |
| | 3. | 17. | 14. | 10. | 5. | 18. | 11. | 10. | 24. | 10. |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5. | 5. | 7. | 25. | 3. | 0. | 2. | 16. | 2. | 18. |
| | | 29. | 5. | 19. | 11. | | | | | | |
| 0 | 50. | 18. | 11. | 3. | 4. | 2. | 7. | 6. | 28. | 21. | 15. |
| | | 3. | 19. | 12. | 9. | 5. | 20. | 12. | 11. | 27. | 9. |
| | | 4. | 5. | 7. | 26. | 3. | 0. | 1. | 17. | 2. | 21. |
| | | 30. | 4. | 22. | 11. | | | | | | |
| 0 | 55. | 16. | 11. | 3. | 3. | 2. | 7. | 5. | 27. | 21. | 14. |
| | | 3. | 20. | 10. | 8. | 5. | 21. | 11. | 11. | 27. | 8. |
| | | 4. | 4. | 6. | 25. | 3. | 0. | 0. | 17. | 2. | 22. |
| | | 29. | 4. | 23. | 10. | | | | | | |
| 1 | 0. | 15. | 10. | 2. | 3. | 2. | 6. | 5. | 26. | 20. | 13. |
| | | 3. | 20. | 9. | 8. | 5. | 20. | 10. | 11. | 26. | 8. |
| | | 4. | 4. | 6. | 23. | 3. | 0. | 0. | 16. | 2. | 21. |
| | | 27. | 3. | 23. | 9. | | | | | | |
| 1 | 5. | 13. | 10. | 2. | 3. | 2. | 6. | 5. | 25. | 18. | 12. |
| | | 2. | 19. | 8. | 8. | 4. | 18. | 10. | 10. | 24. | 7. |
| | | 4. | 4. | 6. | 21. | 3. | 0. | 0. | 14. | 1. | 20. |
| | | 25. | 3. | 22. | 8. | | | | | | |
| 1 | 10. | 12. | 10. | 2. | 3. | 2. | 5. | 5. | 24. | 17. | 12. |
| | | 2. | 18. | 7. | 7. | 4. | 17. | 9. | 9. | 22. | 6. |
| | | 3. | 4. | 5. | 20. | 3. | 0. | 0. | 13. | 0. | 18. |
| | | 24. | 3. | 20. | 7. | | | | | | |
| 1 | 15. | 10. | 10. | 2. | 3. | 2. | 5. | 5. | 23. | 16. | 11. |
| | | 2. | 17. | 6. | 6. | 4. | 15. | 9. | 9. | 20. | 5. |
| | | 3. | 3. | 5. | 19. | 2. | 0. | 0. | 12. | 0. | 17. |
| | | 22. | 2. | 18. | 7. | | | | | | |
| 1 | 20. | 9. | 9. | 2. | 2. | 2. | 4. | 5. | 22. | 15. | 10. |
| | | 2. | 16. | 5. | 6. | 4. | 14. | 8. | 8. | 19. | 5. |
| | | 3. | 3. | 5. | 17. | 2. | 0. | 0. | 11. | 0. | 16. |
| | | 21. | 2. | 17. | 6. | | | | | | |
| 1 | 25. | 8. | 8. | 2. | 2. | 2. | 4. | 5. | 21. | 14. | 9. |
| | | 2. | 15. | 5. | 5. | 3. | 13. | 8. | 8. | 17. | 4. |
| | | 3. | 3. | 4. | 16. | 2. | 0. | 0. | 10. | 0. | 15. |
| | | 19. | 2. | 16. | 5. | | | | | | |
| 1 | 30. | 7. | 8. | 2. | 2. | 0. | 3. | 4. | 19. | 13. | 8. |
| | | 2. | 14. | 4. | 5. | 3. | 12. | 7. | 7. | 16. | 4. |
| | | 3. | 2. | 4. | 14. | 2. | 0. | 0. | 9. | 0. | 14. |
| | | 17. | 2. | 14. | 5. | | | | | | |
| 1 | 35. | 6. | 7. | 1. | 2. | 0. | 3. | 4. | 18. | 12. | 7. |
| | | 2. | 13. | 3. | 5. | 3. | 11. | 6. | 6. | 14. | 3. |
| | | 2. | 2. | 4. | 13. | 2. | 0. | 0. | 8. | 0. | 13. |
| | | 16. | 2. | 13. | 4. | | | | | | |
| 1 | 40. | 6. | 7. | 0. | 2. | 0. | 3. | 4. | 17. | 11. | 7. |
| | | 1. | 12. | 3. | 4. | 3. | 10. | 6. | 6. | 13. | 3. |
| | | 2. | 2. | 4. | 12. | 2. | 0. | 0. | 8. | 0. | 12. |
| | | 14. | 1. | 12. | 4. | | | | | | |
| 1 | 45. | 5. | 7. | 0. | 2. | 0. | 2. | 4. | 16. | 10. | 6. |
| | | 0. | 11. | 3. | 4. | 2. | 9. | 5. | 5. | 12. | 3. |
| | | 2. | 2. | 3. | 11. | 2. | 0. | 0. | 7. | 0. | 11. |
| | | 13. | 0. | 11. | 4. | | | | | | |
| 1 | 50. | 5. | 6. | 0. | 1. | 0. | 2. | 4. | 15. | 9. | 5. |
| | | 0. | 10. | 2. | 4. | 2. | 9. | 5. | 5. | 11. | 2. |
| | | 2. | 2. | 3. | 10. | 2. | 0. | 0. | 6. | 0. | 10. |
| | | 12. | 0. | 10. | 3. | | | | | | |
| 1 | 55. | 4. | 6. | 0. | 0. | 0. | 2. | 4. | 14. | 8. | 5. |
| | | 0. | 9. | 2. | 3. | 2. | 8. | 5. | 5. | 10. | 2. |
| | | 2. | 2. | 3. | 9. | 2. | 0. | 0. | 6. | 0. | 9. |
| | | 11. | 0. | 9. | 3. | | | | | | |
| 2 | 0. | 4. | 5. | 0. | 0. | 0. | 2. | 3. | 13. | 8. | 5. |
| | | 0. | 9. | 2. | 3. | 2. | 7. | 4. | 4. | 9. | 2. |
| | | 2. | 1. | 3. | 8. | 2. | 0. | 0. | 5. | 0. | 8. |
| | | 10. | 0. | 9. | 3. | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 5. | 3. | 5. | 0. | 0. | 0. | 2. | 3. | 12. | 7. | 4. |
| | | 0. | 8. | 0. | 3. | 2. | 7. | 4. | 4. | 9. | 2. |
| | | 2. | 0. | 3. | 8. | 1. | 0. | 0. | 5. | 0. | 8. |
| | | 9. | 0. | 8. | 3. | | | | | | |
| 2 | 10. | 3. | 5. | 0. | 0. | 0. | 2. | 3. | 11. | 7. | 4. |
| | | 0. | 8. | 0. | 3. | 2. | 6. | 4. | 4. | 8. | 2. |
| | | 2. | 0. | 3. | 7. | 1. | 0. | 0. | 5. | 0. | 7. |
| | | 9. | 0. | 7. | 2. | | | | | | |
| 2 | 15. | 3. | 5. | 0. | 0. | 0. | 0. | 3. | 10. | 6. | 3. |
| | | 0. | 7. | 0. | 2. | 2. | 6. | 4. | 4. | 7. | 0. |
| | | 2. | 0. | 2. | 7. | 0. | 0. | 0. | 4. | 0. | 7. |
| | | 8. | 0. | 7. | 2. | | | | | | |
| 2 | 20. | 2. | 4. | 0. | 0. | 0. | 0. | 3. | 10. | 6. | 3. |
| | | 0. | 7. | 0. | 2. | 1. | 5. | 3. | 3. | 7. | 0. |
| | | 2. | 0. | 2. | 6. | 0. | 0. | 0. | 4. | 0. | 6. |
| | | 7. | 0. | 6. | 2. | | | | | | |
| 2 | 25. | 2. | 4. | 0. | 0. | 0. | 0. | 3. | 9. | 5. | 3. |
| | | 0. | 6. | 0. | 2. | 0. | 5. | 3. | 3. | 6. | 0. |
| | | 2. | 0. | 2. | 6. | 0. | 0. | 0. | 3. | 0. | 6. |
| | | 7. | 0. | 6. | 2. | | | | | | |
| 2 | 30. | 2. | 4. | 0. | 0. | 0. | 0. | 3. | 8. | 5. | 3. |
| | | 0. | 6. | 0. | 2. | 0. | 5. | 3. | 3. | 6. | 0. |
| | | 2. | 0. | 2. | 5. | 0. | 0. | 0. | 3. | 0. | 5. |
| | | 6. | 0. | 5. | 2. | | | | | | |
| 2 | 35. | 2. | 4. | 0. | 0. | 0. | 0. | 3. | 8. | 4. | 2. |
| | | 0. | 5. | 0. | 2. | 0. | 4. | 3. | 3. | 5. | 0. |
| | | 2. | 0. | 2. | 5. | 0. | 0. | 0. | 3. | 0. | 5. |
| | | 6. | 0. | 5. | 1. | | | | | | |
| 2 | 40. | 1. | 3. | 0. | 0. | 0. | 0. | 3. | 7. | 4. | 2. |
| | | 0. | 5. | 0. | 2. | 0. | 4. | 2. | 2. | 5. | 0. |
| | | 2. | 0. | 2. | 4. | 0. | 0. | 0. | 3. | 0. | 5. |
| | | 5. | 0. | 5. | 0. | | | | | | |
| 2 | 45. | 0. | 3. | 0. | 0. | 0. | 0. | 3. | 7. | 4. | 2. |
| | | 0. | 5. | 0. | 1. | 0. | 4. | 2. | 2. | 4. | 0. |
| | | 2. | 0. | 2. | 4. | 0. | 0. | 0. | 2. | 0. | 4. |
| | | 5. | 0. | 4. | 0. | | | | | | |
| 2 | 50. | 0. | 3. | 0. | 0. | 0. | 0. | 3. | 7. | 4. | 2. |
| | | 0. | 4. | 0. | 0. | 0. | 3. | 2. | 2. | 4. | 0. |
| | | 1. | 0. | 2. | 4. | 0. | 0. | 0. | 2. | 0. | 4. |
| | | 4. | 0. | 4. | 0. | | | | | | |
| 2 | 55. | 0. | 3. | 0. | 0. | 0. | 0. | 2. | 6. | 3. | 2. |
| | | 0. | 4. | 0. | 0. | 0. | 3. | 2. | 2. | 4. | 0. |
| | | 1. | 0. | 2. | 3. | 0. | 0. | 0. | 2. | 0. | 4. |
| | | 4. | 0. | 4. | 0. | | | | | | |
| 3 | 0. | 0. | 3. | 0. | 0. | 0. | 0. | 2. | 6. | 3. | 2. |
| | | 0. | 4. | 0. | 0. | 0. | 3. | 2. | 2. | 3. | 0. |
| | | 0. | 0. | 2. | 3. | 0. | 0. | 0. | 2. | 0. | 3. |
| | | 4. | 0. | 3. | 0. | | | | | | |
| 3 | 5. | 0. | 3. | 0. | 0. | 0. | 0. | 2. | 6. | 3. | 2. |
| | | 0. | 4. | 0. | 0. | 0. | 3. | 2. | 2. | 3. | 0. |
| | | 0. | 0. | 1. | 3. | 0. | 0. | 0. | 2. | 0. | 3. |
| | | 4. | 0. | 3. | 0. | | | | | | |
| 3 | 10. | 0. | 2. | 0. | 0. | 0. | 0. | 2. | 5. | 3. | 0. |
| | | 0. | 3. | 0. | 0. | 0. | 2. | 2. | 2. | 3. | 0. |
| | | 0. | 0. | 0. | 3. | 0. | 0. | 0. | 2. | 0. | 3. |
| | | 3. | 0. | 3. | 0. | | | | | | |
| 3 | 15. | 0. | 2. | 0. | 0. | 0. | 0. | 2. | 5. | 2. | 0. |
| | | 0. | 3. | 0. | 0. | 0. | 2. | 1. | 1. | 3. | 0. |
| | | 0. | 0. | 0. | 2. | 0. | 0. | 0. | 1. | 0. | 3. |
| | | 3. | 0. | 3. | 0. | | | | | | |
| 3 | 20. | 0. | 2. | 0. | 0. | 0. | 0. | 2. | 4. | 2. | 0. |
| | | 0. | 3. | 0. | 0. | 0. | 2. | 0. | 0. | 2. | 0. |
| | | 0. | 0. | 0. | 2. | 0. | 0. | 0. | 0. | 0. | 3. |

```
                3.        0.        2.        0.

   3   25.      0.        2.        0.        0.        0.        0.        2.        4.        2.        0.
                0.        3.        0.        0.        0.        2.        0.        0.        2.        0.
                0.        0.        0.        2.        0.        0.        0.        0.        0.        2.
                2.        0.        2.        0.

   3   30.      0.        2.        0.        0.        0.        0.        0.        4.        2.        0.
                0.        3.        0.        0.        0.        2.        0.        0.        2.        0.
                0.        0.        0.        2.        0.        0.        0.        0.        0.        2.
                2.        0.        2.        0.

   3   35.      0.        2.        0.        0.        0.        0.        0.        4.        2.        0.
                0.        2.        0.        0.        0.        2.        0.        0.        2.        0.
                0.        0.        0.        2.        0.        0.        0.        0.        0.        2.
                2.        0.        2.        0.

   3   40.      0.        2.        0.        0.        0.        0.        0.        3.        2.        0.
                0.        2.        0.        0.        0.        2.        0.        0.        2.        0.
                0.        0.        0.        2.        0.        0.        0.        0.        0.        2.
                2.        0.        2.        0.

   3   45.      0.        0.        0.        0.        0.        0.        0.        3.        1.        0.
                0.        2.        0.        0.        0.        0.        0.        0.        2.        0.
                0.        0.        0.        1.        0.        0.        0.        0.        0.        2.
                2.        0.        2.        0.

   3   50.      0.        0.        0.        0.        0.        0.        0.        3.        0.        0.
                0.        2.        0.        0.        0.        0.        0.        0.        1.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        2.
                2.        0.        1.        0.

   3   55.      0.        0.        0.        0.        0.        0.        0.        3.        0.        0.
                0.        2.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        1.
                1.        0.        0.        0.

   4    0.      0.        0.        0.        0.        0.        0.        0.        2.        0.        0.
                0.        2.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.

   4    5.      0.        0.        0.        0.        0.        0.        0.        2.        0.        0.
                0.        2.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.

   4   10.      0.        0.        0.        0.        0.        0.        0.        2.        0.        0.
                0.        1.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.

   4   15.      0.        0.        0.        0.        0.        0.        0.        2.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.

   4   20.      0.        0.        0.        0.        0.        0.        0.        2.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.

1

 5yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
 Blank

                                                    WIDTH              INVERT     SIDE SLOPES           OVERBA
NK/SURCHARGE
 GUTTER      GUTTER       NDP        NP             OR DIAM    LENGTH    SLOPE    HORIZ TO VERT   MANNING
 DEPTH       JK
 NUMBER    CONNECTION                                 (FT)      (FT)    (FT/FT)      L     R         N
  (FT)

  201         101          0          3                .0        1.     .0010       .0    .0       .001
```

```
10.00        0
 202         102          3          3                        .0        1.     .0010       .0    .0       .001
10.00       -1
                    TIME IN HRS VS INFLOW IN CFS
                          .0      .0        .6    10.1       1.6      .0
 203         103          3          3                        .0        1.     .0010       .0    .0       .001
10.00       -1
                    TIME IN HRS VS INFLOW IN CFS
                          .0      .0        .2     3.6        .7      .0
 204         104          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 205         105          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 206         106          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 207         107          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 208         108          3          3                        .0        1.     .0010       .0    .0       .001
10.00       -1
                    TIME IN HRS VS INFLOW IN CFS
                          .0      .0        .7    45.2       1.8      .0
 209         109          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 210         110          3          3                        .0        1.     .0010       .0    .0       .001
10.00       -1
                    TIME IN HRS VS INFLOW IN CFS
                          .0      .0        .3    21.6       1.0      .0
 211         111          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 212         112          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 213         113          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 214         114          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 215         115          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 216         116          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 217         117          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 218         118          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 219         119          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 220         120          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 221         121          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 222         122          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 223         123          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 224         124          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 225         125          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 226         126          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 227         127          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 228         128          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 229         129          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 230         130          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 231         131          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 232         132          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 233         133          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 234         134          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 235         135          0          3                        .0        1.     .0010       .0    .0       .001
10.00        0
 236         136          0          3                        .0        1.     .0010       .0    .0       .001
```

```
10.00       0
 237        137         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 238        138         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 402        302         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 401        304         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 106        306         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 107        307         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 404        311         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 112        312         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 414        314         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 115        315         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 117        317         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 118        318         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 119        319         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 420        322         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 124        324         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 126        326         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 128        328         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 129        329         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 130        330         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 131        331         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 432        333         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 135        335         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 136        336         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 138        338         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 125        400         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 127        400         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 132        400         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 104        401         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 105        401         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 111        404         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 114        404         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 416        414         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 122        420         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 123        420         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 133        432         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 134        432         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 101        501         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 113        513         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 116        516         0         3                  .0       1.     .0010       .0    .0       .001
```

```
 10.00        0
  120         520          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  121         520          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  137         537          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  102         602          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  103         603          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  108         608          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  109         609          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  110         610          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  400         900          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  337         901          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  320         902          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  501         301          7          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                      RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                            .0      .0       7.5      .0      26.4      .0      63.3      .0      82.9      .0     12
9.0  1400.0
                          201.0  6510.0
  513         313          3          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                      RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                            .0      .0      20.3      .0      22.6   665.0
  516         316          3          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                      RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                            .0      .0      18.1      .0      18.9   320.0
  520         320          4          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                      RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                            .0      .0       9.9      .0      10.0     5.0     280.0     5.0
  537         337          3          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                      RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                            .0      .0      14.9      .0      17.7   649.0
  602         402          3          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                      RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                            .0      .0       .8     5.4       1.6    15.4
  603         303          3          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                      RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                            .0      .0       .1     1.2        .3     6.9
  608         308         10          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                      RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                            .0      .0       .0      .3        .4      .5       1.6      .6       3.6      .7
6.1    32.4
                          7.1    55.6       8.9   123.5      11.5   266.4      13.1   378.7
  609         309          2          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                      RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                            .0      .0      12.0    43.4
  610         310          2          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                      RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                            .0      .0       3.8     1.3
  302         101          0          1      CHANNEL          .0     1698.     .0150      4.0   4.0       .045
  5.00        0
  304         101          0          1      CHANNEL       175.0     1761.     .0133      4.0   4.0       .045
  5.00        0
  311         104          0          1      CHANNEL       135.0     2519.     .0123      4.0   4.0       .045
  5.00        0
  306         105          0          1      CHANNEL        25.0     5603.     .0157      4.0   4.0       .045
  5.00        0
  308         107          0          1      CHANNEL         4.0      625.     .0080       .0    .0       .016
  2.00        0
  312         111          0          1      CHANNEL          .0     2682.     .0082    110.0 110.0       .045
```

```
 10.00        0
  318         113          0          1      CHANNEL        35.0     3069.     .0071      4.0   4.0       .045
  5.00        0
  314         114          0          1      CHANNEL        60.0     3598.     .0080      4.0   4.0       .045
  5.00        0
  317         118          0          1      CHANNEL          .0     1788.     .0011      4.0   4.0       .045
  5.00        0
  319         118          0          1      CHANNEL          .0     2135.     .0082      4.0   4.0       .045
  5.00        0
  322         120          0          1      CHANNEL       100.0     2881.     .0085      4.0   4.0       .045
  5.00        0
  324         123          0          1      CHANNEL        80.0     5657.     .0133      4.0   4.0       .045
  5.00        0
  326         125          0          1      CHANNEL        45.0     2265.     .0018      4.0   4.0       .045
  5.00        0
  301         126          0          1      CHANNEL       150.0     1716.     .0152      4.0   4.0       .045
  5.00        0
  328         127          0          1      CHANNEL        10.0     2545.     .0026      4.0   4.0       .045
  5.00        0
  329         128          0          1      CHANNEL        25.0     4136.     .0173      4.0   4.0       .045
  5.00        0
  330         128          0          1      CHANNEL        15.0     6271.     .0148      4.0   4.0       .045
  5.00        0
  331         129          0          1      CHANNEL          .0     2147.     .0135      4.0   4.0       .045
  5.00        0
  333         132          0          1      CHANNEL        55.0     4716.     .0068      4.0   4.0       .045
  5.00        0
  335         134          0          1      CHANNEL        85.0     7048.     .0123      4.0   4.0       .045
  5.00        0
  336         135          0          1      CHANNEL        35.0     5158.     .0099      4.0   4.0       .045
  5.00        0
  338         137          0          1      CHANNEL        90.0     5244.     .0139      4.0   4.0       .045
  5.00        0
  303         402          0          1      CHANNEL         5.0     1011.     .0151      5.0   5.0       .035
  3.00        0
  307         404          0          1      CHANNEL         5.0     1308.     .0031      5.0   5.0       .035
  3.00        0
  315         414          0          1      CHANNEL          .0     2696.     .0097      4.0   4.0       .045
  5.00        0
  313         416          0          1      CHANNEL        10.0     2381.     .0054      4.0   4.0       .045
  5.00        0
  316         416          0          1      CHANNEL          .0      965.     .0053      4.0   4.0       .045
  5.00        0
  309         608          0          1      CHANNEL         5.0     1757.     .0091      5.0   5.0       .035
  3.00        0
  310         609          0          1      CHANNEL         5.0     3896.     .0100      5.0   5.0       .035
  3.00        0
0TOTAL NUMBER OF GUTTERS/PIPES, 125
1


 5yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
 Blank


 ARRANGEMENT OF SUBCATCHMENTS AND GUTTERS/PIPES

       GUTTER     TRIBUTARY GUTTER/PIPE                                    TRIBUTARY SUBAREA
         D.A.(AC)

       101        201  302  304    0    0    0    0    0    0    0          0    0    0    0    0    0    0    0
  0    0  2658.6

       102        202    0    0    0    0    0    0    0    0    0          0    0    0    0    0    0    0    0
  0    0      .0

       103        203    0    0    0    0    0    0    0    0    0          0    0    0    0    0    0    0    0
  0    0      .0

       104        204  311    0    0    0    0    0    0    0    0          0    0    0    0    0    0    0    0
  0    0  2034.6

       105        205  306    0    0    0    0    0    0    0    0          0    0    0    0    0    0    0    0
  0    0   346.9

       106        206    0    0    0    0    0    0    0    0    0          0    0    0    0    0    0    0    0
  0    0    73.0
```

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 107 | 207 | 308 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 135.0 |
| 108 | 208 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 109 | 209 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130.6 |
| 110 | 210 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 111 | 211 | 312 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 334.1 |
| 112 | 212 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 284.2 |
| 113 | 213 | 318 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 788.5 |
| 114 | 214 | 314 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1445.1 |
| 115 | 215 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62.1 |
| 116 | 216 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 405.1 |
| 117 | 217 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94.7 |
| 118 | 218 | 317 | 319 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 369.9 |
| 119 | 219 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 164.5 |
| 120 | 220 | 322 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1415.0 |
| 121 | 221 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 211.2 |
| 122 | 222 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 254.7 |
| 123 | 223 | 324 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 718.1 |
| 124 | 224 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 152.3 |
| 125 | 225 | 326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2784.6 |
| 126 | 226 | 301 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2749.4 |
| 127 | 227 | 328 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 521.6 |
| 128 | 228 | 329 | 330 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 457.6 |
| 129 | 229 | 331 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62.1 |
| 130 | 230 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21.8 |
| 131 | 231 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.0 |
| 132 | 232 | 333 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1356.8 |

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 133 | 233 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33.3 |
| 134 | 234 | 335 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 985.0 |
| 135 | 235 | 336 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 535.0 |
| 136 | 236 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66.6 |
| 137 | 237 | 338 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 858.2 |
| 138 | 238 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 173.4 |
| 201 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 277.1 |
| 202 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 203 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 204 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 120.3 |
| 205 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 273.9 |
| 206 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73.0 |
| 207 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.5 |
| 208 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 209 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130.6 |
| 210 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 211 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49.9 |
| 212 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 284.2 |
| 213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 418.6 |
| 214 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 189.4 |
| 215 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62.1 |
| 216 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 405.1 |
| 217 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94.7 |
| 218 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 110.7 |
| 219 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 164.5 |
| 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 442.2 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 221 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 211.2 | | | | | | | | | | | | | | | | | | | |
| 222 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 254.7 | | | | | | | | | | | | | | | | | | | |
| 223 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 565.8 | | | | | | | | | | | | | | | | | | | |
| 224 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 152.3 | | | | | | | | | | | | | | | | | | | |
| 225 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 35.2 | | | | | | | | | | | | | | | | | | | |
| 226 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 90.9 | | | | | | | | | | | | | | | | | | | |
| 227 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 64.0 | | | | | | | | | | | | | | | | | | | |
| 228 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 373.8 | | | | | | | | | | | | | | | | | | | |
| 229 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 39.0 | | | | | | | | | | | | | | | | | | | |
| 230 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 21.8 | | | | | | | | | | | | | | | | | | | |
| 231 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 23.0 | | | | | | | | | | | | | | | | | | | |
| 232 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 338.6 | | | | | | | | | | | | | | | | | | | |
| 233 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 33.3 | | | | | | | | | | | | | | | | | | | |
| 234 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 449.9 | | | | | | | | | | | | | | | | | | | |
| 235 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 468.5 | | | | | | | | | | | | | | | | | | | |
| 236 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 66.6 | | | | | | | | | | | | | | | | | | | |
| 237 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 684.8 | | | | | | | | | | | | | | | | | | | |
| 238 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 173.4 | | | | | | | | | | | | | | | | | | | |
| 301 | | 501 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 2658.6 | | | | | | | | | | | | | | | | | | | |
| 302 | | 402 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | .0 | | | | | | | | | | | | | | | | | | | |
| 303 | | 603 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | .0 | | | | | | | | | | | | | | | | | | | |
| 304 | | 401 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 2381.4 | | | | | | | | | | | | | | | | | | | |
| 306 | | 106 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 73.0 | | | | | | | | | | | | | | | | | | | |
| 307 | | 107 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 135.0 | | | | | | | | | | | | | | | | | | | |
| 308 | | 608 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 130.6 | | | | | | | | | | | | | | | | | | | |
| 309 | | 609 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 130.6 | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 310 | 610 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 311 | 404 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1914.2 |
| 312 | 112 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 284.2 |
| 313 | 513 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 788.5 |
| 314 | 414 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1255.7 |
| 315 | 115 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62.1 |
| 316 | 516 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 405.1 |
| 317 | 117 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94.7 |
| 318 | 118 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 369.9 |
| 319 | 119 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 164.5 |
| 320 | 520 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1626.2 |
| 322 | 420 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 972.8 |
| 324 | 124 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 152.3 |
| 326 | 126 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2749.4 |
| 328 | 128 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 457.6 |
| 329 | 129 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62.1 |
| 330 | 130 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21.8 |
| 331 | 131 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.0 |
| 333 | 432 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1018.2 |
| 335 | 135 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 535.0 |
| 336 | 136 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66.6 |
| 337 | 537 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 858.2 |
| 338 | 138 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 173.4 |
| 400 | 125 | 127 | 132 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4663.0 |
| 401 | 104 | 105 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2381.4 |
| 402 | 602 | 303 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |

```
     404       111  114  307    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  1914.2

     414       416  315    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  1255.7

     416       313  316    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  1193.6

     420       122  123    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   972.8

     432       133  134    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  1018.2

     501       101    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  2658.6

     513       113    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   788.5

     516       116    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   405.1

     520       120  121    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  1626.2

     537       137    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   858.2

     602       102    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0

     603       103    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0

     608       108  309    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   130.6

     609       109  310    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   130.6

     610       110    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0
1

 5yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
 Blank


 HYDROGRAPHS ARE LISTED FOR THE FOLLOWING  86 CONVEYANCE ELEMENTS

          THE UPPER NUMBER IS DISCHARGE IN CFS
          THE LOWER NUMBER IS ONE OF THE FOLLOWING CASES:
                   ( ) DENOTES DEPTH ABOVE INVERT IN FEET
                   (S) DENOTES STORAGE IN AC-FT FOR DETENTION DAM.  DISCHARGE INCLUDES SPILLWAY OUTFLOW.
                   (I) DENOTES GUTTER INFLOW IN CFS FROM SPECIFIED INFLOW HYDROGRAPH
                   (D) DENOTES DISCHARGE IN CFS DIVERTED FROM THIS GUTTER
                   (O) DENOTES STORAGE IN AC-FT FOR SURCHARGED GUTTER

 TIME(HR/MIN)   101       102       103       104       105       106       107       108       109       110
                111       112       113       114       115       116       117       118       119       120
                121       122       123       124       125       126       127       128       129       130
                131       132       133       134       135       136       137       138       301       302
                303       304       306       307       308       309       310       311       312       313
                314       315       316       317       318       319       320       322       324       326
                328       329       330       331       333       335       336       338       400       401
                402       404       414       416       420       432       501       513       516       520
                537       602       603       608       609       610

   0    5.       0.        2.        1.        0.        0.        0.        0.        6.        0.        5.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )

                 0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
```

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) | | | | |
| 0 | 10. | 0. .0( ) | 3. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 11. .0( ) | 0. .0( ) | 10. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .1(S) | 0. .0(S) | 0. .1(S) | | | | |
| 0 | 15. | 0. .0( ) | 5. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 17. .0( ) | 0. .0( ) | 15. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .2(S) | 0. .0(S) | 0. .2(S) | | | | |
| 0 | 20. | 0. | 6. | 2. | 0. | 0. | 0. | 1. | 23. | 0. | 21. |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.2( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 1.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) |
| | | 0.<br>.0(S) | 1.<br>.1(S) | 1.<br>.1(S) | 0.<br>.3(S) | 0.<br>.0(S) | 0.<br>.3(S) | | | | |
| 0 | 25. | 1.<br>.0( ) | 8.<br>.0( ) | 3.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 28.<br>.0( ) | 0.<br>.0( ) | 21.<br>.0( ) |
| | | 1.<br>.0( ) | 4.<br>.0( ) | 1.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 5.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.3( ) |
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.4( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 2.<br>.0( ) |
| | | 1.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) |
| | | 0.<br>.0(S) | 1.<br>.1(S) | 1.<br>.1(S) | 0.<br>.5(S) | 0.<br>.0(S) | 0.<br>.4(S) | | | | |
| 0 | 30. | 6.<br>.0( ) | 9.<br>.0( ) | 1.<br>.0( ) | 5.<br>.0( ) | 1.<br>.0( ) | 1.<br>.0( ) | 2.<br>.0( ) | 34.<br>.0( ) | 2.<br>.0( ) | 15.<br>.0( ) |
| | | 4.<br>.0( ) | 10.<br>.0( ) | 5.<br>.0( ) | 7.<br>.0( ) | 1.<br>.0( ) | 3.<br>.0( ) | 11.<br>.0( ) | 5.<br>.0( ) | 1.<br>.0( ) | 3.<br>.0( ) |
| | | 3.<br>.0( ) | 2.<br>.0( ) | 4.<br>.0( ) | 3.<br>.0( ) | 1.<br>.0( ) | 1.<br>.0( ) | 2.<br>.0( ) | 7.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) |
| | | 1.<br>.0( ) | 3.<br>.0( ) | 1.<br>.0( ) | 3.<br>.0( ) | 8.<br>.0( ) | 2.<br>.0( ) | 3.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 1.<br>.3( ) |
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.2( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.1( ) | 1.<br>.7( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 6.<br>.0( ) | 6.<br>.0( ) |
| | | 2.<br>.0( ) | 11.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 6.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) |
| | | 0.<br>.0(S) | 1.<br>.1(S) | 1.<br>.1(S) | 1.<br>.3(S) | 0.<br>.0(S) | 0.<br>.3(S) | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | .0(S) | .2(S) | .1(S) | .7(S) | .0(S) | .5(S) | | | | |
| 0 | 35. | 13. | 11. | 1. | 10. | 1. | 3. | 3. | 39. | 5. | 16. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 6. | 19. | 10. | 12. | 2. | 7. | 15. | 10. | 2. | 8. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 6. | 5. | 11. | 7. | 3. | 3. | 5. | 14. | 3. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 8. | 2. | 8. | 17. | 4. | 8. | 6. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 1. | 0. | 0. | 1. | 1. | 0. | 0. | 1. | 1. | 0. |
| | | .1( ) | .0( ) | .0( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .2( ) | .0( ) |
| | | 0. | 0. | 0. | 2. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .2( ) | .1( ) | 1.0( ) | .0( ) | .3( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 16. | 11. |
| | | .2( ) | .0( ) | .0( ) | .2( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 20. | 0. | 0. | 15. | 10. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1(S) | .1(S) | .0(S) | .1(S) |
| | | 0. | 2. | 1. | 1. | 0. | 0. | | | | |
| | | .1(S) | .2(S) | .1(S) | .9(S) | .0(S) | .7(S) | | | | |
| 0 | 40. | 20. | 8. | 0. | 14. | 2. | 4. | 2. | 45. | 7. | 10. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 9. | 25. | 17. | 15. | 3. | 13. | 15. | 14. | 4. | 15. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 9. | 8. | 18. | 10. | 4. | 5. | 9. | 21. | 4. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 13. | 2. | 14. | 24. | 5. | 15. | 9. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) |
| | | 1. | 1. | 0. | 1. | 1. | 0. | 0. | 2. | 3. | 0. |
| | | .1( ) | .0( ) | .0( ) | .3( ) | .1( ) | .0( ) | .0( ) | .0( ) | .2( ) | .0( ) |
| | | 0. | 0. | 0. | 4. | 1. | 1. | 0. | 1. | 0. | 0. |
| | | .0( ) | .3( ) | .1( ) | 1.2( ) | .1( ) | .4( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 26. | 16. |
| | | .3( ) | .0( ) | .0( ) | .3( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 26. | 0. | 0. | 26. | 16. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2(S) | .2(S) | .1(S) | .2(S) |
| | | 0. | 2. | 1. | 1. | 0. | 0. | | | | |
| | | .1(S) | .3(S) | .1(S) | 1.2(S) | .1(S) | .7(S) | | | | |
| 0 | 45. | 24. | 9. | 0. | 17. | 3. | 4. | 2. | 42. | 8. | 11. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 11. | 28. | 22. | 16. | 3. | 17. | 14. | 17. | 5. | 21. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 11. | 10. | 24. | 10. | 5. | 5. | 12. | 25. | 4. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 17. | 2. | 19. | 29. | 5. | 20. | 11. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) |
| | | 1. | 3. | 0. | 2. | 1. | 0. | 0. | 5. | 6. | 0. |
| | | .1( ) | .0( ) | .0( ) | .3( ) | .1( ) | .0( ) | .0( ) | .1( ) | .3( ) | .0( ) |
| | | 0. | 1. | 0. | 6. | 2. | 1. | 0. | 3. | 0. | 0. |
| | | .0( ) | .4( ) | .1( ) | 1.3( ) | .1( ) | .5( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 6. | 0. | 0. | 1. | 1. | 1. | 0. | 0. | 35. | 19. |
| | | .5( ) | .0( ) | .0( ) | .4( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 29. | 1. | 0. | 34. | 21. | 0. | 0. | 0. | 0. |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4(S) | .3(S) | .2(S) | .4(S) | |
| | 0. .3(S) | 2. .3(S) | 1. .1(S) | 1. 1.5(S) | 0. .1(S) | 0. .8(S) | | | | | |
| 0 50. | 26. .0( ) | 7. .0( ) | 0. .0( ) | 19. .0( ) | 3. .0( ) | 4. .0( ) | 2. .0( ) | 38. .0( ) | 7. .0( ) | 5. .0( ) | |
| | 14. .0( ) | 28. .0( ) | 25. .0( ) | 15. .0( ) | 3. .0( ) | 19. .0( ) | 12. .0( ) | 18. .0( ) | 5. .0( ) | 26. .0( ) | |
| | 12. .0( ) | 11. .0( ) | 27. .0( ) | 9. .0( ) | 5. .0( ) | 5. .0( ) | 16. .0( ) | 26. .0( ) | 4. .0( ) | 0. .0( ) | |
| | 1. .0( ) | 19. .0( ) | 2. .0( ) | 23. .0( ) | 30. .0( ) | 4. .0( ) | 23. .0( ) | 11. .0( ) | 0. .0( ) | 2. .6( ) | |
| | 1. .1( ) | 5. .1( ) | 0. .0( ) | 2. .3( ) | 1. .1( ) | 0. .0( ) | 0. .0( ) | 8. .1( ) | 8. .3( ) | 0. .0( ) | |
| | 0. .0( ) | 1. .5( ) | 0. .1( ) | 7. 1.4( ) | 4. .1( ) | 2. .6( ) | 0. .0( ) | 6. .1( ) | 1. .0( ) | 0. .0( ) | |
| | 9. .6( ) | 1. .0( ) | 0. .0( ) | 1. .4( ) | 2. .1( ) | 2. .0( ) | 0. .0( ) | 1. .0( ) | 40. .0( ) | 22. .0( ) | |
| | 3. .0( ) | 30. .0( ) | 1. .0( ) | 0. .0( ) | 38. .0( ) | 24. .0( ) | 0. .5(S) | 0. .5(S) | 0. .3(S) | 0. .7(S) | |
| | 0. .4(S) | 3. .4(S) | 1. .1(S) | 1. 1.8(S) | 1. .2(S) | 0. .9(S) | | | | | |
| 0 55. | 27. .0( ) | 8. .0( ) | 0. .0( ) | 22. .0( ) | 3. .0( ) | 3. .0( ) | 2. .0( ) | 36. .0( ) | 7. .0( ) | 6. .0( ) | |
| | 16. .0( ) | 27. .0( ) | 27. .0( ) | 14. .0( ) | 3. .0( ) | 20. .0( ) | 10. .0( ) | 19. .0( ) | 5. .0( ) | 30. .0( ) | |
| | 11. .0( ) | 11. .0( ) | 28. .0( ) | 8. .0( ) | 4. .0( ) | 4. .0( ) | 18. .0( ) | 25. .0( ) | 4. .0( ) | 0. .0( ) | |
| | 0. .0( ) | 20. .0( ) | 2. .0( ) | 24. .0( ) | 29. .0( ) | 4. .0( ) | 24. .0( ) | 10. .0( ) | 0. .0( ) | 3. .6( ) | |
| | 1. .1( ) | 8. .1( ) | 0. .0( ) | 2. .3( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 11. .1( ) | 10. .3( ) | 0. .0( ) | |
| | 0. .0( ) | 2. .5( ) | 0. .1( ) | 8. 1.5( ) | 6. .2( ) | 3. .7( ) | 0. .0( ) | 10. .1( ) | 1. .0( ) | 1. .1( ) | |
| | 12. .8( ) | 1. .1( ) | 0. .0( ) | 1. .4( ) | 3. .1( ) | 3. .1( ) | 0. .0( ) | 1. .0( ) | 43. .0( ) | 25. .0( ) | |
| | 3. .0( ) | 32. .0( ) | 2. .0( ) | 0. .0( ) | 39. .0( ) | 26. .0( ) | 0. .7(S) | 0. .6(S) | 0. .5(S) | 0. .9(S) | |
| | 0. .6(S) | 3. .4(S) | 1. .1(S) | 1. 2.0(S) | 1. .2(S) | 0. .9(S) | | | | | |
| 1 0. | 29. .0( ) | 5. .0( ) | 0. .0( ) | 24. .0( ) | 3. .0( ) | 3. .0( ) | 3. .0( ) | 32. .0( ) | 6. .0( ) | 0. .0( ) | |
| | 18. .0( ) | 26. .0( ) | 27. .0( ) | 13. .0( ) | 3. .0( ) | 20. .0( ) | 9. .0( ) | 20. .0( ) | 5. .0( ) | 33. .0( ) | |
| | 10. .0( ) | 11. .0( ) | 27. .0( ) | 8. .0( ) | 4. .0( ) | 4. .0( ) | 20. .0( ) | 24. .0( ) | 4. .0( ) | 0. .0( ) | |
| | 0. .0( ) | 20. .0( ) | 2. .0( ) | 25. .0( ) | 28. .0( ) | 3. .0( ) | 24. .0( ) | 9. .0( ) | 0. .0( ) | 3. .6( ) | |
| | 1. .1( ) | 12. .1( ) | 1. .0( ) | 2. .3( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 14. .1( ) | 12. .3( ) | 0. .0( ) | |
| | 0. .0( ) | 2. .6( ) | 0. .1( ) | 8. 1.5( ) | 8. .2( ) | 3. .7( ) | 0. .0( ) | 14. .2( ) | 1. .0( ) | 1. .1( ) | |
| | 14. | 1. | 0. | 1. | 5. | 4. | 1. | 1. | 45. | 27. | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | .8( ) | .1( ) | .0( ) | .4( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4.<br>.0( ) | 33.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 38.<br>.0( ) | 27.<br>.0( ) | 0.<br>.9(S) | 0.<br>.8(S) | 0.<br>.6(S) | 0.<br>1.2(S) |
| | | 0.<br>.7(S) | 3.<br>.4(S) | 1.<br>.1(S) | 1.<br>2.3(S) | 1.<br>.3(S) | 0.<br>.9(S) | | | | |
| 1 | 5. | 31.<br>.0( ) | 6.<br>.0( ) | 0.<br>.0( ) | 28.<br>.0( ) | 3.<br>.0( ) | 3.<br>.0( ) | 3.<br>.0( ) | 29.<br>.0( ) | 6.<br>.0( ) | 1.<br>.0( ) |
| | | 20.<br>.0( ) | 25.<br>.0( ) | 28.<br>.0( ) | 13.<br>.0( ) | 2.<br>.0( ) | 19.<br>.0( ) | 8.<br>.0( ) | 20.<br>.0( ) | 4.<br>.0( ) | 35.<br>.0( ) |
| | | 10.<br>.0( ) | 10.<br>.0( ) | 25.<br>.0( ) | 7.<br>.0( ) | 5.<br>.0( ) | 4.<br>.0( ) | 22.<br>.0( ) | 23.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 20.<br>.0( ) | 1.<br>.0( ) | 25.<br>.0( ) | 26.<br>.0( ) | 3.<br>.0( ) | 23.<br>.0( ) | 8.<br>.0( ) | 0.<br>.0( ) | 3.<br>.7( ) |
| | | 1.<br>.1( ) | 15.<br>.1( ) | 1.<br>.0( ) | 2.<br>.3( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 17.<br>.1( ) | 14.<br>.4( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 2.<br>.6( ) | 0.<br>.1( ) | 8.<br>1.5( ) | 9.<br>.2( ) | 4.<br>.8( ) | 0.<br>.0( ) | 17.<br>.2( ) | 1.<br>.0( ) | 1.<br>.1( ) |
| | | 16.<br>.9( ) | 1.<br>.1( ) | 0.<br>.0( ) | 1.<br>.3( ) | 6.<br>.1( ) | 5.<br>.1( ) | 1.<br>.0( ) | 1.<br>.0( ) | 47.<br>.0( ) | 31.<br>.0( ) |
| | | 4.<br>.0( ) | 34.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 35.<br>.0( ) | 26.<br>.0( ) | 0.<br>1.1(S) | 0.<br>1.0(S) | 0.<br>.8(S) | 0.<br>1.5(S) |
| | | 0.<br>.9(S) | 3.<br>.4(S) | 1.<br>.1(S) | 1.<br>2.5(S) | 1.<br>.3(S) | 0.<br>.9(S) | | | | |
| 1 | 10. | 34.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 31.<br>.0( ) | 3.<br>.0( ) | 3.<br>.0( ) | 3.<br>.0( ) | 25.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) |
| | | 21.<br>.0( ) | 24.<br>.0( ) | 28.<br>.0( ) | 12.<br>.0( ) | 2.<br>.0( ) | 18.<br>.0( ) | 7.<br>.0( ) | 19.<br>.0( ) | 4.<br>.0( ) | 36.<br>.0( ) |
| | | 9.<br>.0( ) | 9.<br>.0( ) | 23.<br>.0( ) | 6.<br>.0( ) | 5.<br>.0( ) | 4.<br>.0( ) | 23.<br>.0( ) | 21.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 21.<br>.0( ) | 0.<br>.0( ) | 24.<br>.0( ) | 25.<br>.0( ) | 3.<br>.0( ) | 22.<br>.0( ) | 7.<br>.0( ) | 0.<br>.0( ) | 3.<br>.7( ) |
| | | 1.<br>.1( ) | 19.<br>.1( ) | 1.<br>.1( ) | 2.<br>.4( ) | 1.<br>.1( ) | 1.<br>.1( ) | 0.<br>.0( ) | 21.<br>.1( ) | 16.<br>.4( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 2.<br>.6( ) | 0.<br>.1( ) | 8.<br>1.5( ) | 11.<br>.3( ) | 4.<br>.8( ) | 0.<br>.0( ) | 20.<br>.2( ) | 1.<br>.0( ) | 1.<br>.1( ) |
| | | 17.<br>.9( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.3( ) | 8.<br>.2( ) | 6.<br>.1( ) | 1.<br>.0( ) | 2.<br>.0( ) | 48.<br>.0( ) | 33.<br>.0( ) |
| | | 4.<br>.0( ) | 35.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 32.<br>.0( ) | 24.<br>.0( ) | 0.<br>1.3(S) | 0.<br>1.2(S) | 0.<br>.9(S) | 0.<br>1.8(S) |
| | | 0.<br>1.0(S) | 3.<br>.4(S) | 1.<br>.0(S) | 1.<br>2.7(S) | 1.<br>.3(S) | 0.<br>.9(S) | | | | |
| 1 | 15. | 36.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 33.<br>.0( ) | 3.<br>.0( ) | 3.<br>.0( ) | 3.<br>.0( ) | 22.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) |
| | | 22.<br>.0( ) | 23.<br>.0( ) | 28.<br>.0( ) | 11.<br>.0( ) | 2.<br>.0( ) | 17.<br>.0( ) | 6.<br>.0( ) | 18.<br>.0( ) | 4.<br>.0( ) | 37.<br>.0( ) |
| | | 9.<br>.0( ) | 9.<br>.0( ) | 22.<br>.0( ) | 5.<br>.0( ) | 4.<br>.0( ) | 3.<br>.0( ) | 23.<br>.0( ) | 20.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 21.<br>.0( ) | 0.<br>.0( ) | 24.<br>.0( ) | 23.<br>.0( ) | 2.<br>.0( ) | 20.<br>.0( ) | 7.<br>.0( ) | 0.<br>.0( ) | 4.<br>.7( ) |
| | | 1.<br>.1( ) | 22.<br>.1( ) | 1.<br>.1( ) | 3.<br>.4( ) | 1.<br>.1( ) | 1.<br>.1( ) | 0.<br>.0( ) | 23.<br>.2( ) | 17.<br>.4( ) | 0.<br>.0( ) |
| | | 0. | 2. | 0. | 8. | 12. | 4. | 0. | 22. | 2. | 1. |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | .0( ) | .6( ) | .1( ) | 1.5( ) | .3( ) | .8( ) | .0( ) | .2( ) | .0( ) | .1( ) |
| | | 18.<br>1.0( ) | 2.<br>.1( ) | 0.<br>.0( ) | 0.<br>.3( ) | 9.<br>.2( ) | 7.<br>.1( ) | 1.<br>.0( ) | 2.<br>.0( ) | 49.<br>.0( ) | 36.<br>.0( ) |
| | | 4.<br>.0( ) | 35.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 30.<br>.0( ) | 24.<br>.0( ) | 0.<br>1.6(S) | 0.<br>1.4(S) | 0.<br>1.0(S) | 0.<br>2.2(S) |
| | | 0.<br>1.2(S) | 3.<br>.5(S) | 0.<br>.0(S) | 1.<br>2.8(S) | 1.<br>.3(S) | 0.<br>.9(S) | | | | |
| 1 | 20. | 39.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 35.<br>.0( ) | 3.<br>.0( ) | 2.<br>.0( ) | 3.<br>.0( ) | 18.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) |
| | | 22.<br>.0( ) | 22.<br>.0( ) | 28.<br>.0( ) | 10.<br>.0( ) | 2.<br>.0( ) | 16.<br>.0( ) | 5.<br>.0( ) | 17.<br>.0( ) | 4.<br>.0( ) | 37.<br>.0( ) |
| | | 8.<br>.0( ) | 8.<br>.0( ) | 20.<br>.0( ) | 5.<br>.0( ) | 4.<br>.0( ) | 3.<br>.0( ) | 23.<br>.0( ) | 19.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 21.<br>.0( ) | 0.<br>.0( ) | 24.<br>.0( ) | 21.<br>.0( ) | 2.<br>.0( ) | 19.<br>.0( ) | 6.<br>.0( ) | 0.<br>.0( ) | 4.<br>.7( ) |
| | | 1.<br>.1( ) | 26.<br>.1( ) | 1.<br>.1( ) | 3.<br>.4( ) | 1.<br>.1( ) | 1.<br>.1( ) | 0.<br>.0( ) | 26.<br>.2( ) | 18.<br>.4( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 2.<br>.6( ) | 0.<br>.1( ) | 7.<br>1.5( ) | 13.<br>.3( ) | 4.<br>.8( ) | 0.<br>.0( ) | 23.<br>.2( ) | 2.<br>.0( ) | 1.<br>.1( ) |
| | | 18.<br>1.0( ) | 2.<br>.1( ) | 0.<br>.0( ) | 0.<br>.3( ) | 10.<br>.2( ) | 8.<br>.1( ) | 1.<br>.1( ) | 2.<br>.0( ) | 49.<br>.0( ) | 37.<br>.0( ) |
| | | 4.<br>.0( ) | 35.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 28.<br>.0( ) | 24.<br>.0( ) | 0.<br>1.8(S) | 0.<br>1.6(S) | 0.<br>1.1(S) | 0.<br>2.5(S) |
| | | 0.<br>1.3(S) | 3.<br>.5(S) | 0.<br>.0(S) | 1.<br>3.0(S) | 1.<br>.4(S) | 0.<br>.9(S) | | | | |
| 1 | 25. | 41.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 36.<br>.0( ) | 3.<br>.0( ) | 2.<br>.0( ) | 3.<br>.0( ) | 16.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) |
| | | 23.<br>.0( ) | 21.<br>.0( ) | 28.<br>.0( ) | 9.<br>.0( ) | 2.<br>.0( ) | 15.<br>.0( ) | 5.<br>.0( ) | 16.<br>.0( ) | 3.<br>.0( ) | 37.<br>.0( ) |
| | | 8.<br>.0( ) | 8.<br>.0( ) | 19.<br>.0( ) | 4.<br>.0( ) | 4.<br>.0( ) | 3.<br>.0( ) | 23.<br>.0( ) | 17.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 22.<br>.0( ) | 0.<br>.0( ) | 23.<br>.0( ) | 20.<br>.0( ) | 2.<br>.0( ) | 18.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 4.<br>.7( ) |
| | | 0.<br>.1( ) | 29.<br>.2( ) | 1.<br>.1( ) | 3.<br>.4( ) | 1.<br>.1( ) | 1.<br>.2( ) | 0.<br>.0( ) | 27.<br>.2( ) | 18.<br>.4( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 2.<br>.6( ) | 0.<br>.1( ) | 7.<br>1.4( ) | 14.<br>.3( ) | 4.<br>.8( ) | 0.<br>.0( ) | 24.<br>.2( ) | 2.<br>.0( ) | 1.<br>.1( ) |
| | | 18.<br>1.0( ) | 2.<br>.1( ) | 0.<br>.0( ) | 0.<br>.3( ) | 12.<br>.2( ) | 9.<br>.1( ) | 1.<br>.1( ) | 2.<br>.0( ) | 49.<br>.0( ) | 38.<br>.0( ) |
| | | 4.<br>.0( ) | 34.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 27.<br>.0( ) | 23.<br>.0( ) | 0.<br>2.1(S) | 0.<br>1.8(S) | 0.<br>1.2(S) | 0.<br>2.8(S) |
| | | 0.<br>1.4(S) | 3.<br>.5(S) | 0.<br>.0(S) | 1.<br>3.1(S) | 1.<br>.4(S) | 0.<br>.9(S) | | | | |
| 1 | 30. | 43.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 37.<br>.0( ) | 3.<br>.0( ) | 2.<br>.0( ) | 1.<br>.0( ) | 12.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) |
| | | 23.<br>.0( ) | 19.<br>.0( ) | 27.<br>.0( ) | 8.<br>.0( ) | 2.<br>.0( ) | 14.<br>.0( ) | 4.<br>.0( ) | 15.<br>.0( ) | 3.<br>.0( ) | 36.<br>.0( ) |
| | | 7.<br>.0( ) | 7.<br>.0( ) | 18.<br>.0( ) | 4.<br>.0( ) | 4.<br>.0( ) | 2.<br>.0( ) | 22.<br>.0( ) | 16.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 22.<br>.0( ) | 0.<br>.0( ) | 23.<br>.0( ) | 18.<br>.0( ) | 2.<br>.0( ) | 17.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 4.<br>.7( ) |
| | | 0. | 32. | 1. | 2. | 1. | 1. | 0. | 29. | 18. | 0. |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | .1( ) | .2( ) | .1( ) | .4( ) | .1( ) | .2( ) | .1( ) | .2( ) | .4( ) | .0( ) |
| | | 0. .0( ) | 2. .6( ) | 0. .1( ) | 7. 1.4( ) | 14. .3( ) | 4. .8( ) | 0. .0( ) | 24. .2( ) | 2. .0( ) | 2. .1( ) |
| | | 18. 1.0( ) | 2. .1( ) | 0. .0( ) | 0. .2( ) | 13. .2( ) | 9. .1( ) | 1. .1( ) | 2. .1( ) | 48. .0( ) | 39. .0( ) |
| | | 4. .0( ) | 33. .0( ) | 2. .0( ) | 0. .0( ) | 25. .0( ) | 23. .0( ) | 0. 2.4(S) | 0. 2.0(S) | 0. 1.3(S) | 0. 3.1(S) |
| | | 0. 1.6(S) | 3. .4(S) | 0. .0(S) | 1. 3.2(S) | 1. .4(S) | 0. .9(S) | | | | |
| 1 | 35. | 44. .0( ) | 2. .0( ) | 0. .0( ) | 37. .0( ) | 2. .0( ) | 2. .0( ) | 1. .0( ) | 9. .0( ) | 3. .0( ) | 0. .0( ) |
| | | 22. .0( ) | 18. .0( ) | 26. .0( ) | 8. .0( ) | 2. .0( ) | 13. .0( ) | 3. .0( ) | 14. .0( ) | 3. .0( ) | 35. .0( ) |
| | | 6. .0( ) | 6. .0( ) | 16. .0( ) | 3. .0( ) | 4. .0( ) | 2. .0( ) | 21. .0( ) | 15. .0( ) | 2. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 22. .0( ) | 0. .0( ) | 22. .0( ) | 17. .0( ) | 2. .0( ) | 16. .0( ) | 4. .0( ) | 0. .0( ) | 4. .7( ) |
| | | 0. .1( ) | 34. .2( ) | 1. .1( ) | 2. .3( ) | 1. .1( ) | 1. .2( ) | 0. .1( ) | 30. .2( ) | 18. .4( ) | 0. .0( ) |
| | | 0. .0( ) | 2. .6( ) | 0. .1( ) | 6. 1.4( ) | 14. .3( ) | 3. .7( ) | 0. .0( ) | 24. .2( ) | 2. .0( ) | 2. .1( ) |
| | | 17. .9( ) | 2. .1( ) | 0. .0( ) | 0. .2( ) | 14. .2( ) | 10. .1( ) | 1. .1( ) | 3. .1( ) | 47. .0( ) | 39. .0( ) |
| | | 3. .0( ) | 32. .0( ) | 2. .0( ) | 0. .0( ) | 23. .0( ) | 22. .0( ) | 0. 2.7(S) | 0. 2.2(S) | 0. 1.4(S) | 0. 3.4(S) |
| | | 0. 1.7(S) | 3. .4(S) | 0. .0(S) | 1. 3.3(S) | 2. .4(S) | 0. .9(S) | | | | |
| 1 | 40. | 44. .0( ) | 0. .0( ) | 0. .0( ) | 37. .0( ) | 1. .0( ) | 2. .0( ) | 1. .0( ) | 5. .0( ) | 3. .0( ) | 0. .0( ) |
| | | 22. .0( ) | 17. .0( ) | 25. .0( ) | 7. .0( ) | 1. .0( ) | 12. .0( ) | 3. .0( ) | 13. .0( ) | 3. .0( ) | 34. .0( ) |
| | | 6. .0( ) | 6. .0( ) | 15. .0( ) | 3. .0( ) | 4. .0( ) | 2. .0( ) | 20. .0( ) | 14. .0( ) | 2. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 22. .0( ) | 0. .0( ) | 22. .0( ) | 15. .0( ) | 1. .0( ) | 15. .0( ) | 4. .0( ) | 0. .0( ) | 3. .7( ) |
| | | 0. .1( ) | 35. .2( ) | 1. .1( ) | 2. .3( ) | 1. .1( ) | 1. .2( ) | 0. .1( ) | 30. .2( ) | 18. .4( ) | 0. .0( ) |
| | | 0. .0( ) | 2. .6( ) | 0. .1( ) | 6. 1.3( ) | 14. .3( ) | 3. .7( ) | 0. .0( ) | 24. .2( ) | 2. .1( ) | 2. .1( ) |
| | | 17. .9( ) | 2. .1( ) | 0. .0( ) | 0. .2( ) | 15. .2( ) | 10. .1( ) | 1. .1( ) | 3. .1( ) | 46. .0( ) | 38. .0( ) |
| | | 3. .0( ) | 31. .0( ) | 2. .0( ) | 0. .0( ) | 21. .0( ) | 22. .0( ) | 0. 3.0(S) | 0. 2.3(S) | 0. 1.5(S) | 0. 3.7(S) |
| | | 0. 1.8(S) | 3. .4(S) | 0. .0(S) | 1. 3.3(S) | 2. .4(S) | 0. .9(S) | | | | |
| 1 | 45. | 44. .0( ) | 0. .0( ) | 0. .0( ) | 37. .0( ) | 1. .0( ) | 2. .0( ) | 1. .0( ) | 2. .0( ) | 2. .0( ) | 0. .0( ) |
| | | 22. .0( ) | 16. .0( ) | 24. .0( ) | 7. .0( ) | 0. .0( ) | 11. .0( ) | 3. .0( ) | 12. .0( ) | 2. .0( ) | 32. .0( ) |
| | | 5. .0( ) | 5. .0( ) | 14. .0( ) | 3. .0( ) | 4. .0( ) | 2. .0( ) | 19. .0( ) | 13. .0( ) | 2. .0( ) | 0. .0( ) |
| | | 0. | 22. | 0. | 21. | 14. | 0. | 14. | 4. | 0. | 3. |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .7( ) |
| | | 0.<br>.1( ) | 36.<br>.2( ) | 1.<br>.1( ) | 1.<br>.3( ) | 1.<br>.1( ) | 1.<br>.2( ) | 0.<br>.1( ) | 30.<br>.2( ) | 18.<br>.4( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 2.<br>.5( ) | 0.<br>.1( ) | 5.<br>1.3( ) | 14.<br>.3( ) | 3.<br>.7( ) | 0.<br>.0( ) | 23.<br>.2( ) | 2.<br>.1( ) | 2.<br>.1( ) |
| | | 16.<br>.9( ) | 2.<br>.1( ) | 0.<br>.0( ) | 0.<br>.2( ) | 15.<br>.3( ) | 10.<br>.1( ) | 1.<br>.1( ) | 3.<br>.1( ) | 46.<br>.0( ) | 38.<br>.0( ) |
| | | 3.<br>.0( ) | 30.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 20.<br>.0( ) | 21.<br>.0( ) | 0.<br>3.3(S) | 0.<br>2.5(S) | 0.<br>1.6(S) | 0.<br>3.9(S) |
| | | 0.<br>1.9(S) | 3.<br>.4(S) | 0.<br>.0(S) | 1.<br>3.3(S) | 2.<br>.4(S) | 0.<br>.9(S) | | | | |
| 1 | 50. | 44.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 36.<br>.0( ) | 1.<br>.0( ) | 1.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) |
| | | 21.<br>.0( ) | 15.<br>.0( ) | 23.<br>.0( ) | 6.<br>.0( ) | 0.<br>.0( ) | 10.<br>.0( ) | 2.<br>.0( ) | 11.<br>.0( ) | 2.<br>.0( ) | 31.<br>.0( ) |
| | | 5.<br>.0( ) | 5.<br>.0( ) | 13.<br>.0( ) | 2.<br>.0( ) | 4.<br>.0( ) | 2.<br>.0( ) | 19.<br>.0( ) | 12.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 22.<br>.0( ) | 0.<br>.0( ) | 20.<br>.0( ) | 13.<br>.0( ) | 0.<br>.0( ) | 13.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 3.<br>.7( ) |
| | | 0.<br>.1( ) | 36.<br>.2( ) | 1.<br>.1( ) | 1.<br>.2( ) | 1.<br>.1( ) | 1.<br>.2( ) | 0.<br>.1( ) | 30.<br>.2( ) | 18.<br>.4( ) | 0.<br>.0( ) |
| | | 1.<br>.0( ) | 1.<br>.5( ) | 0.<br>.1( ) | 5.<br>1.2( ) | 13.<br>.3( ) | 3.<br>.7( ) | 0.<br>.0( ) | 22.<br>.2( ) | 2.<br>.1( ) | 2.<br>.1( ) |
| | | 15.<br>.9( ) | 2.<br>.1( ) | 0.<br>.0( ) | 0.<br>.2( ) | 16.<br>.3( ) | 11.<br>.1( ) | 1.<br>.1( ) | 3.<br>.1( ) | 45.<br>.0( ) | 37.<br>.0( ) |
| | | 3.<br>.0( ) | 28.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 18.<br>.0( ) | 20.<br>.0( ) | 0.<br>3.6(S) | 0.<br>2.7(S) | 0.<br>1.6(S) | 0.<br>4.2(S) |
| | | 0.<br>2.0(S) | 3.<br>.4(S) | 0.<br>.0(S) | 1.<br>3.3(S) | 2.<br>.4(S) | 0.<br>.9(S) | | | | |
| 1 | 55. | 44.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 35.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) |
| | | 21.<br>.0( ) | 14.<br>.0( ) | 21.<br>.0( ) | 6.<br>.0( ) | 0.<br>.0( ) | 9.<br>.0( ) | 2.<br>.0( ) | 10.<br>.0( ) | 2.<br>.0( ) | 30.<br>.0( ) |
| | | 5.<br>.0( ) | 5.<br>.0( ) | 12.<br>.0( ) | 2.<br>.0( ) | 4.<br>.0( ) | 2.<br>.0( ) | 18.<br>.0( ) | 11.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 22.<br>.0( ) | 0.<br>.0( ) | 20.<br>.0( ) | 12.<br>.0( ) | 0.<br>.0( ) | 12.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 3.<br>.6( ) |
| | | 0.<br>.1( ) | 36.<br>.2( ) | 1.<br>.1( ) | 1.<br>.2( ) | 1.<br>.1( ) | 2.<br>.2( ) | 0.<br>.1( ) | 29.<br>.2( ) | 17.<br>.4( ) | 0.<br>.0( ) |
| | | 1.<br>.0( ) | 1.<br>.5( ) | 0.<br>.1( ) | 4.<br>1.2( ) | 13.<br>.3( ) | 3.<br>.7( ) | 0.<br>.0( ) | 22.<br>.2( ) | 2.<br>.1( ) | 2.<br>.1( ) |
| | | 15.<br>.8( ) | 2.<br>.1( ) | 0.<br>.0( ) | 0.<br>.2( ) | 16.<br>.3( ) | 11.<br>.1( ) | 1.<br>.1( ) | 3.<br>.1( ) | 44.<br>.0( ) | 36.<br>.0( ) |
| | | 3.<br>.0( ) | 27.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 17.<br>.0( ) | 20.<br>.0( ) | 0.<br>3.9(S) | 0.<br>2.8(S) | 0.<br>1.7(S) | 0.<br>4.4(S) |
| | | 0.<br>2.1(S) | 2.<br>.4(S) | 0.<br>.0(S) | 1.<br>3.4(S) | 2.<br>.4(S) | 0.<br>.9(S) | | | | |
| 2 | 0. | 43.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 34.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) |
| | | 20.<br>.0( ) | 13.<br>.0( ) | 20.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 9.<br>.0( ) | 2.<br>.0( ) | 9.<br>.0( ) | 2.<br>.0( ) | 28.<br>.0( ) |
| | | 4. | 4. | 11. | 2. | 4. | 1. | 17. | 10. | 2. | 0. |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 22. | 0. | 19. | 11. | 0. | 11. | 3. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| | | 0. | 36. | 1. | 1. | 1. | 2. | 0. | 29. | 16. | 0. |
| | | .1( ) | .2( ) | .1( ) | .2( ) | .1( ) | .2( ) | .1( ) | .2( ) | .4( ) | .0( ) |
| | | 1. | 1. | 0. | 4. | 12. | 3. | 0. | 21. | 2. | 2. |
| | | .0( ) | .4( ) | .1( ) | 1.1( ) | .3( ) | .7( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 14. | 2. | 0. | 0. | 17. | 11. | 1. | 3. | 42. | 35. |
| | | .8( ) | .1( ) | .0( ) | .2( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 3. | 26. | 1. | 0. | 16. | 19. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 4.2(S) | 3.0(S) | 1.8(S) | 4.6(S) |
| | | 0. | 2. | 0. | 1. | 2. | 0. | | | | |
| | | 2.1(S) | .3(S) | .0(S) | 3.4(S) | .4(S) | .9(S) | | | | |
| 2 | 5. | 42. | 0. | 0. | 33. | 1. | 0. | 1. | 0. | 2. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 19. | 12. | 19. | 5. | 0. | 8. | 0. | 9. | 2. | 27. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 4. | 11. | 2. | 4. | 0. | 16. | 10. | 2. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 22. | 0. | 19. | 10. | 0. | 11. | 3. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| | | 0. | 36. | 1. | 1. | 1. | 2. | 0. | 28. | 16. | 0. |
| | | .1( ) | .2( ) | .1( ) | .2( ) | .1( ) | .2( ) | .1( ) | .2( ) | .4( ) | .0( ) |
| | | 1. | 1. | 0. | 3. | 12. | 2. | 0. | 20. | 2. | 2. |
| | | .0( ) | .4( ) | .1( ) | 1.1( ) | .3( ) | .7( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 13. | 2. | 0. | 0. | 17. | 11. | 1. | 3. | 41. | 34. |
| | | .8( ) | .1( ) | .0( ) | .2( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 3. | 25. | 1. | 0. | 15. | 19. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 4.5(S) | 3.1(S) | 1.8(S) | 4.9(S) |
| | | 0. | 2. | 0. | 1. | 2. | 0. | | | | |
| | | 2.2(S) | .3(S) | .0(S) | 3.4(S) | .5(S) | .9(S) | | | | |
| 2 | 10. | 41. | 0. | 0. | 32. | 1. | 0. | 1. | 0. | 2. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 18. | 11. | 18. | 4. | 0. | 8. | 0. | 8. | 2. | 25. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 4. | 10. | 2. | 3. | 0. | 15. | 9. | 1. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 22. | 0. | 18. | 9. | 0. | 10. | 2. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| | | 0. | 35. | 1. | 1. | 1. | 2. | 0. | 27. | 15. | 0. |
| | | .1( ) | .2( ) | .1( ) | .2( ) | .1( ) | .2( ) | .1( ) | .2( ) | .4( ) | .0( ) |
| | | 1. | 1. | 0. | 3. | 11. | 2. | 0. | 19. | 2. | 1. |
| | | .0( ) | .4( ) | .1( ) | 1.0( ) | .3( ) | .6( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 12. | 2. | 0. | 0. | 17. | 11. | 1. | 3. | 40. | 33. |
| | | .8( ) | .1( ) | .0( ) | .2( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 2. | 24. | 1. | 0. | 14. | 18. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 4.8(S) | 3.2(S) | 1.9(S) | 5.1(S) |
| | | 0. | 2. | 0. | 1. | 2. | 0. | | | | |
| | | 2.3(S) | .3(S) | .0(S) | 3.4(S) | .5(S) | .9(S) | | | | |
| 2 | 15. | 40. | 0. | 0. | 31. | 1. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 18. | 10. | 17. | 4. | 0. | 7. | 0. | 7. | 2. | 24. |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 4. | 9. | 0. | 3. | 0. | 14. | 8. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 21. | 0. | 17. | 9. | 0. | 10. | 2. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| | | 0. | 34. | 1. | 1. | 1. | 2. | 0. | 26. | 15. | 0. |
| | | .1( ) | .2( ) | .1( ) | .2( ) | .1( ) | .2( ) | .1( ) | .2( ) | .4( ) | .0( ) |
| | | 1. | 1. | 0. | 3. | 11. | 2. | 0. | 18. | 2. | 1. |
| | | .0( ) | .4( ) | .1( ) | 1.0( ) | .3( ) | .6( ) | .0( ) | .2( ) | .0( ) | .1( ) |
| | | 12. | 2. | 0. | 0. | 17. | 11. | 1. | 3. | 38. | 32. |
| | | .7( ) | .1( ) | .0( ) | .1( ) | .3( ) | .1( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 2. | 23. | 1. | 0. | 13. | 17. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 5.1(S) | 3.3(S) | 1.9(S) | 5.3(S) |
| | | 0. | 2. | 0. | 1. | 2. | 0. | | | | |
| | | 2.4(S) | .3(S) | .0(S) | 3.4(S) | .4(S) | .9(S) | | | | |
| 2 | 20. | 38. | 0. | 0. | 30. | 1. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 17. | 10. | 16. | 4. | 0. | 7. | 0. | 6. | 1. | 23. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 3. | 9. | 0. | 3. | 0. | 13. | 8. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 21. | 0. | 17. | 8. | 0. | 9. | 2. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| | | 0. | 34. | 1. | 1. | 1. | 2. | 0. | 26. | 14. | 0. |
| | | .1( ) | .2( ) | .1( ) | .2( ) | .1( ) | .2( ) | .1( ) | .2( ) | .4( ) | .0( ) |
| | | 1. | 0. | 0. | 2. | 10. | 2. | 0. | 17. | 2. | 1. |
| | | .0( ) | .3( ) | .1( ) | .9( ) | .3( ) | .6( ) | .0( ) | .2( ) | .0( ) | .1( ) |
| | | 11. | 2. | 0. | 0. | 17. | 10. | 1. | 3. | 37. | 31. |
| | | .7( ) | .1( ) | .0( ) | .1( ) | .3( ) | .1( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 2. | 22. | 1. | 0. | 12. | 17. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 5.3(S) | 3.4(S) | 2.0(S) | 5.4(S) |
| | | 0. | 2. | 0. | 1. | 2. | 0. | | | | |
| | | 2.4(S) | .3(S) | .0(S) | 3.4(S) | .4(S) | .9(S) | | | | |
| 2 | 25. | 37. | 0. | 0. | 29. | 1. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 16. | 9. | 14. | 3. | 0. | 6. | 0. | 6. | 0. | 21. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 3. | 8. | 0. | 3. | 0. | 12. | 7. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 20. | 0. | 16. | 7. | 0. | 8. | 2. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| | | 0. | 33. | 1. | 1. | 1. | 2. | 0. | 25. | 13. | 0. |
| | | .1( ) | .2( ) | .1( ) | .2( ) | .1( ) | .2( ) | .1( ) | .2( ) | .4( ) | .0( ) |
| | | 1. | 0. | 0. | 2. | 9. | 2. | 0. | 16. | 2. | 1. |
| | | .0( ) | .3( ) | .1( ) | .9( ) | .2( ) | .6( ) | .0( ) | .2( ) | .0( ) | .1( ) |
| | | 10. | 1. | 0. | 0. | 17. | 10. | 1. | 3. | 36. | 30. |
| | | .7( ) | .1( ) | .0( ) | .1( ) | .3( ) | .1( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 2. | 21. | 0. | 0. | 11. | 16. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 5.6(S) | 3.5(S) | 2.0(S) | 5.6(S) |
| | | 0. | 2. | 0. | 1. | 2. | 0. | | | | |
| | | 2.5(S) | .3(S) | .0(S) | 3.4(S) | .4(S) | .9(S) | | | | |
| 2 | 30. | 36. | 0. | 0. | 28. | 1. | 0. | 1. | 0. | 0. | 0. |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 16. .0( ) | 8. .0( ) | 13. .0( ) | 3. .0( ) | 0. .0( ) | 6. .0( ) | 0. .0( ) | 5. .0( ) | 0. .0( ) | 20. .0( ) |
| | | 3. .0( ) | 3. .0( ) | 7. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 12. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 20. .0( ) | 0. .0( ) | 15. .0( ) | 7. .0( ) | 0. .0( ) | 8. .0( ) | 2. .0( ) | 0. .0( ) | 2. .6( ) |
| | | 0. .1( ) | 32. .2( ) | 1. .1( ) | 1. .2( ) | 1. .1( ) | 2. .2( ) | 0. .1( ) | 24. .2( ) | 13. .4( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .3( ) | 0. .1( ) | 2. .8( ) | 9. .2( ) | 1. .5( ) | 0. .0( ) | 15. .2( ) | 2. .0( ) | 1. .1( ) |
| | | 10. .7( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 17. .3( ) | 10. .1( ) | 1. .0( ) | 3. .1( ) | 35. .0( ) | 28. .0( ) |
| | | 2. .0( ) | 20. .0( ) | 0. .0( ) | 0. .0( ) | 10. .0( ) | 15. .0( ) | 0. 5.8(S) | 0. 3.6(S) | 0. 2.1(S) | 0. 5.8(S) |
| | | 0. 2.5(S) | 2. .3(S) | 0. .0(S) | 1. 3.4(S) | 2. .4(S) | 0. .9(S) | | | | |
| 2 | 35. | 34. .0( ) | 0. .0( ) | 0. .0( ) | 27. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 15. .0( ) | 8. .0( ) | 12. .0( ) | 3. .0( ) | 0. .0( ) | 5. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 19. .0( ) |
| | | 3. .0( ) | 3. .0( ) | 7. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 11. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 20. .0( ) | 0. .0( ) | 15. .0( ) | 6. .0( ) | 0. .0( ) | 8. .0( ) | 1. .0( ) | 0. .0( ) | 2. .6( ) |
| | | 0. .1( ) | 31. .2( ) | 1. .1( ) | 1. .2( ) | 1. .1( ) | 2. .2( ) | 0. .1( ) | 23. .2( ) | 12. .3( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .3( ) | 0. .1( ) | 1. .8( ) | 8. .2( ) | 1. .5( ) | 0. .0( ) | 15. .2( ) | 2. .0( ) | 1. .1( ) |
| | | 9. .6( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 17. .3( ) | 10. .1( ) | 1. .0( ) | 3. .1( ) | 33. .0( ) | 27. .0( ) |
| | | 2. .0( ) | 19. .0( ) | 0. .0( ) | 0. .0( ) | 9. .0( ) | 15. .0( ) | 0. 6.1(S) | 0. 3.7(S) | 0. 2.1(S) | 0. 5.9(S) |
| | | 0. 2.6(S) | 2. .2(S) | 0. .0(S) | 1. 3.4(S) | 2. .4(S) | 0. .9(S) | | | | |
| 2 | 40. | 33. .0( ) | 0. .0( ) | 0. .0( ) | 25. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 14. .0( ) | 7. .0( ) | 12. .0( ) | 3. .0( ) | 0. .0( ) | 5. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 18. .0( ) |
| | | 2. .0( ) | 2. .0( ) | 6. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 10. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 19. .0( ) | 0. .0( ) | 14. .0( ) | 6. .0( ) | 0. .0( ) | 7. .0( ) | 0. .0( ) | 0. .0( ) | 2. .6( ) |
| | | 0. .1( ) | 30. .2( ) | 1. .0( ) | 1. .2( ) | 1. .1( ) | 2. .2( ) | 0. .1( ) | 22. .2( ) | 12. .3( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .3( ) | 0. .1( ) | 1. .8( ) | 7. .2( ) | 1. .4( ) | 0. .0( ) | 14. .2( ) | 2. .0( ) | 1. .1( ) |
| | | 8. .6( ) | 1. .1( ) | 0. .0( ) | 0. .1( ) | 16. .3( ) | 10. .1( ) | 1. .0( ) | 2. .1( ) | 32. .0( ) | 26. .0( ) |
| | | 2. .0( ) | 18. .0( ) | 0. .0( ) | 0. .0( ) | 9. .0( ) | 14. .0( ) | 0. 6.3(S) | 0. 3.8(S) | 0. 2.1(S) | 0. 6.1(S) |
| | | 0. | 2. | 0. | 1. | 1. | 0. | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 2.6(S) | .2(S) | .0(S) | 3.4(S) | .4(S) | .9(S) | | | |
| 2 | 45. | 30. | 0. | 0. | 24. | 1. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 14. | 7. | 11. | 3. | 0. | 5. | 0. | 3. | 0. | 17. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 2. | 6. | 0. | 2. | 0. | 10. | 5. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 19. | 0. | 14. | 5. | 0. | 7. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) |
| | | 0. | 29. | 1. | 1. | 1. | 2. | 0. | 21. | 11. | 0. |
| | | .0( ) | .2( ) | .0( ) | .2( ) | .1( ) | .2( ) | .1( ) | .2( ) | .3( ) | .0( ) |
| | | 1. | 0. | 0. | 1. | 7. | 1. | 0. | 13. | 2. | 1. |
| | | .0( ) | .3( ) | .1( ) | .7( ) | .2( ) | .4( ) | .0( ) | .2( ) | .0( ) | .1( ) |
| | | 8. | 1. | 0. | 0. | 16. | 9. | 1. | 2. | 31. | 25. |
| | | .6( ) | .1( ) | .0( ) | .1( ) | .3( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 17. | 0. | 0. | 8. | 14. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 6.5(S) | 3.9(S) | 2.2(S) | 6.2(S) |
| | | 0. | 2. | 0. | 1. | 1. | 0. | | | | |
| | | 2.7(S) | .2(S) | .0(S) | 3.4(S) | .4(S) | .9(S) | | | | |
| 2 | 50. | 29. | 0. | 0. | 23. | 1. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 13. | 7. | 10. | 2. | 0. | 4. | 0. | 2. | 0. | 16. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 2. | 5. | 0. | 2. | 0. | 9. | 5. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 18. | 0. | 13. | 5. | 0. | 6. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) |
| | | 0. | 27. | 1. | 1. | 1. | 2. | 0. | 20. | 11. | 0. |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .3( ) | .0( ) |
| | | 1. | 0. | 0. | 1. | 6. | 1. | 0. | 12. | 2. | 1. |
| | | .0( ) | .3( ) | .1( ) | .7( ) | .2( ) | .4( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 7. | 1. | 0. | 0. | 16. | 9. | 1. | 2. | 29. | 24. |
| | | .6( ) | .1( ) | .0( ) | .1( ) | .3( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 16. | 0. | 0. | 8. | 13. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 6.7(S) | 4.0(S) | 2.2(S) | 6.3(S) |
| | | 0. | 1. | 0. | 1. | 1. | 0. | | | | |
| | | 2.7(S) | .2(S) | .0(S) | 3.4(S) | .4(S) | .9(S) | | | | |
| 2 | 55. | 28. | 0. | 0. | 22. | 1. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 12. | 6. | 9. | 2. | 0. | 4. | 0. | 1. | 0. | 15. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 2. | 5. | 0. | 2. | 0. | 8. | 4. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 18. | 0. | 13. | 5. | 0. | 6. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) |
| | | 0. | 26. | 1. | 1. | 1. | 1. | 0. | 20. | 10. | 0. |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .3( ) | .0( ) |
| | | 1. | 0. | 0. | 1. | 6. | 0. | 0. | 12. | 1. | 1. |
| | | .0( ) | .2( ) | .1( ) | .7( ) | .2( ) | .4( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 7. | 1. | 0. | 0. | 16. | 9. | 1. | 2. | 28. | 23. |
| | | .6( ) | .1( ) | .0( ) | .1( ) | .3( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 15. | 0. | 0. | 7. | 13. | 0. | 0. | 0. | 0. |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 6.9(S) | 4.0(S) | 2.2(S) | 6.5(S) | |
| | | 0. | 1. | 0. | 1. | 1. | 0. | | | | | |
| | | 2.8(S) | .2(S) | .0(S) | 3.4(S) | .4(S) | .9(S) | | | | | |
| 3 | 0. | 27. | 0. | 0. | 21. | 1. | 0. | 1. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 12. | 6. | 8. | 2. | 0. | 4. | 0. | 1. | 0. | 14. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 2. | 2. | 5. | 0. | 1. | 0. | 8. | 4. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 17. | 0. | 12. | 4. | 0. | 5. | 0. | 0. | 2. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) | |
| | | 0. | 25. | 1. | 1. | 1. | 1. | 0. | 19. | 10. | 0. | |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .3( ) | .0( ) | |
| | | 1. | 0. | 0. | 1. | 5. | 0. | 0. | 11. | 1. | 1. | |
| | | .0( ) | .2( ) | .1( ) | .6( ) | .2( ) | .3( ) | .0( ) | .1( ) | .0( ) | .1( ) | |
| | | 6. | 1. | 0. | 0. | 15. | 9. | 1. | 2. | 26. | 22. | |
| | | .5( ) | .1( ) | .0( ) | .1( ) | .3( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 1. | 15. | 0. | 0. | 7. | 12. | 0. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 7.1(S) | 4.1(S) | 2.3(S) | 6.6(S) | |
| | | 0. | 1. | 0. | 1. | 1. | 0. | | | | | |
| | | 2.8(S) | .2(S) | .0(S) | 3.4(S) | .4(S) | .9(S) | | | | | |
| 3 | 5. | 26. | 0. | 0. | 21. | 1. | 0. | 1. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 11. | 6. | 7. | 2. | 0. | 4. | 0. | 1. | 0. | 13. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 2. | 2. | 4. | 0. | 1. | 0. | 7. | 4. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 17. | 0. | 11. | 4. | 0. | 5. | 0. | 0. | 2. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) | |
| | | 0. | 24. | 1. | 1. | 1. | 1. | 0. | 18. | 9. | 0. | |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .3( ) | .0( ) | |
| | | 0. | 0. | 0. | 1. | 5. | 0. | 0. | 10. | 1. | 1. | |
| | | .0( ) | .2( ) | .1( ) | .6( ) | .2( ) | .3( ) | .0( ) | .1( ) | .0( ) | .1( ) | |
| | | 6. | 1. | 0. | 0. | 15. | 8. | 1. | 2. | 25. | 21. | |
| | | .5( ) | .1( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 1. | 14. | 0. | 0. | 6. | 11. | 0. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 7.3(S) | 4.1(S) | 2.3(S) | 6.7(S) | |
| | | 0. | 1. | 0. | 1. | 1. | 0. | | | | | |
| | | 2.8(S) | .2(S) | .0(S) | 3.4(S) | .4(S) | .9(S) | | | | | |
| 3 | 10. | 25. | 0. | 0. | 20. | 1. | 0. | 1. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 11. | 5. | 7. | 0. | 0. | 3. | 0. | 1. | 0. | 12. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 2. | 2. | 4. | 0. | 1. | 0. | 6. | 3. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 16. | 0. | 11. | 4. | 0. | 5. | 0. | 0. | 2. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) | |
| | | 0. | 24. | 1. | 1. | 1. | 1. | 0. | 17. | 9. | 0. | |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .3( ) | .0( ) | |
| | | 0. | 0. | 0. | 1. | 4. | 0. | 0. | 10. | 1. | 1. | |
| | | .0( ) | .2( ) | .1( ) | .6( ) | .1( ) | .3( ) | .0( ) | .1( ) | .0( ) | .1( ) | |
| | | 6. | 1. | 0. | 0. | 14. | 8. | 0. | 2. | 22. | 20. | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | .5( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 12. | 0. | 0. | 6. | 11. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 7.5(S) | 4.2(S) | 2.3(S) | 6.8(S) |
| | | 0. | 1. | 0. | 1. | 1. | 0. | | | | |
| | | 2.9(S) | .2(S) | .0(S) | 3.4(S) | .4(S) | .9(S) | | | | |
| 3 | 15. | 24. | 0. | 0. | 18. | 1. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 10. | 5. | 6. | 0. | 0. | 3. | 0. | 1. | 0. | 12. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 1. | 4. | 0. | 1. | 0. | 5. | 3. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 16. | 0. | 11. | 3. | 0. | 4. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) |
| | | 0. | 23. | 1. | 1. | 1. | 1. | 0. | 16. | 8. | 0. |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .3( ) | .0( ) |
| | | 0. | 0. | 0. | 1. | 4. | 0. | 0. | 9. | 1. | 1. |
| | | .0( ) | .2( ) | .1( ) | .6( ) | .1( ) | .3( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 5. | 1. | 0. | 0. | 14. | 8. | 0. | 2. | 21. | 19. |
| | | .5( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 11. | 0. | 0. | 5. | 11. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 7.7(S) | 4.2(S) | 2.3(S) | 6.9(S) |
| | | 0. | 1. | 0. | 1. | 1. | 0. | | | | |
| | | 2.9(S) | .2(S) | .0(S) | 3.4(S) | .4(S) | .9(S) | | | | |
| 3 | 20. | 23. | 0. | 0. | 17. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 10. | 4. | 6. | 0. | 0. | 3. | 0. | 1. | 0. | 11. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 4. | 0. | 1. | 0. | 5. | 3. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 14. | 0. | 10. | 3. | 0. | 4. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) |
| | | 0. | 22. | 0. | 1. | 1. | 1. | 0. | 15. | 8. | 0. |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .3( ) | .0( ) |
| | | 0. | 0. | 0. | 1. | 3. | 0. | 0. | 9. | 1. | 1. |
| | | .0( ) | .2( ) | .1( ) | .5( ) | .1( ) | .3( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 5. | 1. | 0. | 0. | 14. | 8. | 0. | 2. | 19. | 18. |
| | | .5( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 11. | 0. | 0. | 4. | 10. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 7.8(S) | 4.3(S) | 2.3(S) | 6.9(S) |
| | | 0. | 1. | 0. | 1. | 1. | 0. | | | | |
| | | 2.9(S) | .2(S) | .0(S) | 3.5(S) | .3(S) | .9(S) | | | | |
| 3 | 25. | 22. | 0. | 0. | 17. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 9. | 4. | 5. | 0. | 0. | 3. | 0. | 1. | 0. | 10. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 3. | 0. | 1. | 0. | 5. | 3. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 13. | 0. | 10. | 3. | 0. | 4. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) |
| | | 0. | 21. | 0. | 1. | 1. | 1. | 0. | 15. | 7. | 0. |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .3( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 3. | 0. | 0. | 8. | 1. | 1. |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | .0( ) | .2( ) | .1( ) | .5( ) | .1( ) | .3( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | 5.<br>.4( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 13.<br>.2( ) | 7.<br>.1( ) | 0.<br>.0( ) | 2.<br>.0( ) | 18.<br>.0( ) | 17.<br>.0( ) |
| | 1.<br>.0( ) | 10.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 10.<br>.0( ) | 0.<br>8.0(S) | 0.<br>4.3(S) | 0.<br>2.4(S) | 0.<br>7.0(S) |
| | 0.<br>3.0(S) | 1.<br>.1(S) | 0.<br>.0(S) | 1.<br>3.5(S) | 1.<br>.3(S) | 0.<br>.9(S) | | | | |
| 3 30. | 21.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 16.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | 7.<br>.0( ) | 4.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 9.<br>.0( ) |
| | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | 0.<br>.0( ) | 13.<br>.0( ) | 0.<br>.0( ) | 9.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.5( ) |
| | 0.<br>.0( ) | 20.<br>.1( ) | 0.<br>.0( ) | 1.<br>.2( ) | 1.<br>.1( ) | 1.<br>.2( ) | 0.<br>.1( ) | 14.<br>.1( ) | 7.<br>.3( ) | 0.<br>.0( ) |
| | 0.<br>.0( ) | 0.<br>.2( ) | 0.<br>.1( ) | 0.<br>.5( ) | 3.<br>.1( ) | 0.<br>.2( ) | 0.<br>.0( ) | 8.<br>.1( ) | 1.<br>.0( ) | 1.<br>.1( ) |
| | 4.<br>.4( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 13.<br>.2( ) | 7.<br>.1( ) | 0.<br>.0( ) | 2.<br>.0( ) | 18.<br>.0( ) | 16.<br>.0( ) |
| | 1.<br>.0( ) | 8.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 9.<br>.0( ) | 0.<br>8.1(S) | 0.<br>4.3(S) | 0.<br>2.4(S) | 0.<br>7.1(S) |
| | 0.<br>3.0(S) | 1.<br>.1(S) | 0.<br>.0(S) | 1.<br>3.5(S) | 1.<br>.3(S) | 0.<br>.9(S) | | | | |
| 3 35. | 20.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 15.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | 7.<br>.0( ) | 4.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 9.<br>.0( ) |
| | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | 0.<br>.0( ) | 12.<br>.0( ) | 0.<br>.0( ) | 9.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.5( ) |
| | 0.<br>.0( ) | 19.<br>.1( ) | 0.<br>.0( ) | 1.<br>.2( ) | 1.<br>.1( ) | 1.<br>.2( ) | 0.<br>.1( ) | 13.<br>.1( ) | 7.<br>.3( ) | 0.<br>.0( ) |
| | 0.<br>.0( ) | 0.<br>.2( ) | 0.<br>.1( ) | 0.<br>.5( ) | 3.<br>.1( ) | 0.<br>.2( ) | 0.<br>.0( ) | 7.<br>.1( ) | 1.<br>.0( ) | 1.<br>.1( ) |
| | 4.<br>.4( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 12.<br>.2( ) | 7.<br>.1( ) | 0.<br>.0( ) | 1.<br>.0( ) | 17.<br>.0( ) | 15.<br>.0( ) |
| | 1.<br>.0( ) | 8.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 9.<br>.0( ) | 0.<br>8.3(S) | 0.<br>4.4(S) | 0.<br>2.4(S) | 0.<br>7.1(S) |
| | 0.<br>3.0(S) | 1.<br>.1(S) | 0.<br>.0(S) | 1.<br>3.5(S) | 1.<br>.3(S) | 0.<br>.8(S) | | | | |
| 3 40. | 19.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 14.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | 6.<br>.0( ) | 3.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 8.<br>.0( ) |
| | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | 0.<br>.0( ) | 12.<br>.0( ) | 0.<br>.0( ) | 8.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.4( ) |
| | 0. | 18. | 0. | 1. | 1. | 1. | 0. | 12. | 6. | 0. |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .3( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 2. | 0. | 0. | 7. | 1. | 1. |
| | | .0( ) | .2( ) | .1( ) | .5( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 4. | 0. | 0. | 0. | 12. | 7. | 0. | 1. | 16. | 14. |
| | | .4( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 7. | 0. | 0. | 3. | 8. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 8.4(S) | 4.4(S) | 2.4(S) | 7.2(S) |
| | | 0. | 1. | 0. | 1. | 1. | 0. | | | | |
| | | 3.0(S) | .1(S) | .0(S) | 3.5(S) | .3(S) | .8(S) | | | | |
| 3 | 45. | 18. | 0. | 0. | 11. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 6. | 3. | 4. | 0. | 0. | 2. | 0. | 0. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 3. | 0. | 1. | 0. | 3. | 2. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 12. | 0. | 8. | 2. | 0. | 3. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 17. | 0. | 1. | 1. | 1. | 0. | 11. | 6. | 0. |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .3( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 2. | 0. | 0. | 6. | 1. | 1. |
| | | .0( ) | .2( ) | .1( ) | .5( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 3. | 0. | 0. | 0. | 12. | 6. | 0. | 1. | 16. | 12. |
| | | .4( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 7. | 0. | 0. | 3. | 8. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 8.5(S) | 4.4(S) | 2.4(S) | 7.3(S) |
| | | 0. | 1. | 0. | 1. | 1. | 0. | | | | |
| | | 3.1(S) | .1(S) | .0(S) | 3.5(S) | .3(S) | .8(S) | | | | |
| 3 | 50. | 17. | 0. | 0. | 11. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 6. | 3. | 2. | 0. | 0. | 2. | 0. | 0. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 0. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 11. | 0. | 8. | 2. | 0. | 3. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 15. | 0. | 1. | 1. | 1. | 0. | 11. | 6. | 0. |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .3( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 2. | 0. | 0. | 6. | 1. | 0. |
| | | .0( ) | .2( ) | .1( ) | .4( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 3. | 0. | 0. | 0. | 11. | 6. | 0. | 1. | 15. | 11. |
| | | .4( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 7. | 0. | 0. | 2. | 8. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 8.6(S) | 4.4(S) | 2.4(S) | 7.3(S) |
| | | 0. | 1. | 0. | 1. | 1. | 0. | | | | |
| | | 3.1(S) | .1(S) | .0(S) | 3.5(S) | .3(S) | .8(S) | | | | |
| 3 | 55. | 15. | 0. | 0. | 10. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 3. | 2. | 0. | 0. | 2. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 11. | 0. | 7. | 2. | 0. | 1. | 0. | 0. | 1. |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 14. | 0. | 1. | 1. | 1. | 0. | 10. | 5. | 0. |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .3( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 2. | 0. | 0. | 5. | 1. | 0. |
| | | .0( ) | .2( ) | .1( ) | .4( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 3. | 0. | 0. | 0. | 11. | 6. | 0. | 1. | 14. | 10. |
| | | .3( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 6. | 0. | 0. | 1. | 7. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 8.7(S) | 4.5(S) | 2.5(S) | 7.3(S) |
| | | 0. | 1. | 0. | 1. | 1. | 0. | | | | |
| | | 3.1(S) | .1(S) | .0(S) | 3.5(S) | .3(S) | .8(S) | | | | |
| 4 | 0. | 15. | 0. | 0. | 10. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 2. | 2. | 0. | 0. | 2. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 11. | 0. | 6. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 14. | 0. | 1. | 1. | 1. | 0. | 10. | 5. | 0. |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 2. | 0. | 0. | 5. | 1. | 0. |
| | | .0( ) | .2( ) | .1( ) | .4( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 3. | 0. | 0. | 0. | 11. | 6. | 0. | 1. | 14. | 10. |
| | | .3( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 6. | 0. | 0. | 1. | 6. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 8.8(S) | 4.5(S) | 2.5(S) | 7.4(S) |
| | | 0. | 1. | 0. | 1. | 1. | 0. | | | | |
| | | 3.1(S) | .1(S) | .0(S) | 3.5(S) | .3(S) | .8(S) | | | | |
| 4 | 5. | 14. | 0. | 0. | 9. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 2. | 2. | 0. | 0. | 2. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 10. | 0. | 5. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 13. | 0. | 1. | 1. | 1. | 0. | 9. | 5. | 0. |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 2. | 0. | 0. | 5. | 1. | 0. |
| | | .0( ) | .1( ) | .1( ) | .4( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 2. | 0. | 0. | 0. | 10. | 5. | 0. | 1. | 13. | 9. |
| | | .3( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 6. | 0. | 0. | 1. | 5. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 8.9(S) | 4.5(S) | 2.5(S) | 7.4(S) |
| | | 0. | 1. | 0. | 1. | 1. | 0. | | | | |
| | | 3.1(S) | .1(S) | .0(S) | 3.5(S) | .3(S) | .8(S) | | | | |
| 4 | 10. | 13. | 0. | 0. | 9. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 2. | 2. | 0. | 0. | 1. | 0. | 0. | 0. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 2. | 0. | 0. | 0. |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 10. | 0. | 5. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 12. | 0. | 1. | 1. | 1. | 0. | 9. | 4. | 0. |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 2. | 0. | 0. | 4. | 1. | 0. |
| | | .0( ) | .1( ) | .1( ) | .4( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 10. | 5. | 0. | 1. | 12. | 9. |
| | | .3( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 5. | 0. | 0. | 1. | 5. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 9.0(S) | 4.5(S) | 2.5(S) | 7.4(S) |
| | | 0. | 1. | 0. | 1. | 1. | 0. | | | | |
| | | 3.1(S) | .1(S) | .0(S) | 3.5(S) | .3(S) | .8(S) | | | | |
| 4 | 15. | 12. | 0. | 0. | 8. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 2. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 9. | 0. | 5. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 11. | 0. | 1. | 1. | 1. | 0. | 8. | 4. | 0. |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 4. | 1. | 0. |
| | | .0( ) | .1( ) | .1( ) | .4( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 9. | 5. | 0. | 1. | 12. | 8. |
| | | .3( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 5. | 0. | 0. | 1. | 5. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 9.1(S) | 4.5(S) | 2.5(S) | 7.5(S) |
| | | 0. | 1. | 0. | 1. | 1. | 0. | | | | |
| | | 3.1(S) | .1(S) | .0(S) | 3.5(S) | .3(S) | .8(S) | | | | |
| 4 | 20. | 12. | 0. | 0. | 8. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 2. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 9. | 0. | 5. | 0. | 0. | 1. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 11. | 0. | 1. | 1. | 1. | 0. | 8. | 4. | 0. |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 4. | 1. | 0. |
| | | .0( ) | .1( ) | .1( ) | .4( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 9. | 5. | 0. | 1. | 11. | 8. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 5. | 0. | 0. | 1. | 5. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 9.2(S) | 4.5(S) | 2.5(S) | 7.5(S) |
| | | 0. | 1. | 0. | 1. | 1. | 0. | | | | |
| | | 3.1(S) | .1(S) | .0(S) | 3.5(S) | .3(S) | .8(S) | | | | |
| 4 | 25. | 11. | 0. | 0. | 7. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 3. |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 8. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .4( ) |
| | | 0. .0( ) | 10. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .2( ) | 0. .1( ) | 7. .1( ) | 4. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .4( ) | 1. .1( ) | 0. .2( ) | 0. .0( ) | 3. .1( ) | 1. .0( ) | 0. .0( ) |
| | | 2. .2( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 8. .2( ) | 4. .1( ) | 0. .0( ) | 1. .0( ) | 10. .0( ) | 8. .0( ) |
| | | 1. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 4. .0( ) | 0. 9.3(S) | 0. 4.5(S) | 0. 2.5(S) | 0. 7.5(S) |
| | | 0. 3.1(S) | 1. .1(S) | 0. .0(S) | 1. 3.5(S) | 1. .3(S) | 0. .8(S) | | | | |
| 4 | 30. | 10. .0( ) | 0. .0( ) | 0. .0( ) | 7. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 3. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 8. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .4( ) |
| | | 0. .0( ) | 10. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .2( ) | 0. .1( ) | 7. .1( ) | 3. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .3( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 3. .1( ) | 1. .0( ) | 0. .0( ) |
| | | 1. .2( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 8. .2( ) | 4. .1( ) | 0. .0( ) | 1. .0( ) | 10. .0( ) | 7. .0( ) |
| | | 1. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 4. .0( ) | 0. 9.4(S) | 0. 4.5(S) | 0. 2.5(S) | 0. 7.5(S) |
| | | 0. 3.1(S) | 1. .1(S) | 0. .0(S) | 1. 3.5(S) | 1. .3(S) | 0. .8(S) | | | | |
| 4 | 35. | 10. .0( ) | 0. .0( ) | 0. .0( ) | 7. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 3. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 8. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .4( ) |
| | | 0. .0( ) | 9. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .2( ) | 0. .1( ) | 7. .1( ) | 3. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .3( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 3. .1( ) | 1. .0( ) | 0. .0( ) |
| | | 1. .2( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 8. .2( ) | 4. .1( ) | 0. .0( ) | 1. .0( ) | 9. .0( ) | 7. .0( ) |
| | | 1. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 4. .0( ) | 0. 9.4(S) | 0. 4.5(S) | 0. 2.5(S) | 0. 7.6(S) |
| | | 0. 3.2(S) | 1. .1(S) | 0. .0(S) | 1. 3.5(S) | 1. .3(S) | 0. .8(S) | | | | |
| 4 | 40. | 9. | 0. | 0. | 6. | 0. | 0. | 1. | 0. | 0. | 0. |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 7. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .4( ) |
| | | 0. .0( ) | 9. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .2( ) | 0. .1( ) | 6. .1( ) | 3. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .3( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 3. .1( ) | 1. .0( ) | 0. .0( ) |
| | | 1. .2( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 7. .2( ) | 4. .1( ) | 0. .0( ) | 1. .0( ) | 9. .0( ) | 7. .0( ) |
| | | 1. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 4. .0( ) | 0. 9.5(S) | 0. 4.5(S) | 0. 2.5(S) | 0. 7.6(S) |
| | | 0. 3.2(S) | 1. .1(S) | 0. .0(S) | 1. 3.5(S) | 1. .3(S) | 0. .8(S) | | | | |
| 4 | 45. | 9. .0( ) | 0. .0( ) | 0. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 7. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .4( ) |
| | | 0. .0( ) | 8. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .2( ) | 0. .1( ) | 6. .1( ) | 2. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .3( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 3. .1( ) | 1. .0( ) | 0. .0( ) |
| | | 1. .2( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 7. .2( ) | 4. .1( ) | 0. .0( ) | 1. .0( ) | 9. .0( ) | 6. .0( ) |
| | | 1. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 4. .0( ) | 0. 9.6(S) | 0. 4.6(S) | 0. 2.5(S) | 0. 7.6(S) |
| | | 0. 3.2(S) | 0. .1(S) | 0. .0(S) | 1. 3.5(S) | 1. .3(S) | 0. .8(S) | | | | |
| 4 | 50. | 9. .0( ) | 0. .0( ) | 0. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 7. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .3( ) |
| | | 0. .0( ) | 8. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .2( ) | 0. .1( ) | 6. .1( ) | 2. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .3( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 3. .1( ) | 1. .0( ) | 0. .0( ) |
| | | 1. .2( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 7. .2( ) | 4. .1( ) | 0. .0( ) | 1. .0( ) | 8. .0( ) | 6. .0( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 4. .0( ) | 0. 9.6(S) | 0. 4.6(S) | 0. 2.5(S) | 0. 7.6(S) |
| | | 0. | 0. | 0. | 1. | 1. | 0. | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 3.2(S) | .1(S) | .0(S) | 3.5(S) | .2(S) | .8(S) | | | | |
| 4 | 55. | 8. .0( ) | 0. .0( ) | 0. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 7. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .3( ) |
| | | 0. .0( ) | 8. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .2( ) | 0. .1( ) | 5. .1( ) | 2. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .3( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 2. .1( ) | 1. .0( ) | 0. .0( ) |
| | | 1. .2( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 7. .2( ) | 3. .1( ) | 0. .0( ) | 1. .0( ) | 8. .0( ) | 6. .0( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 3. .0( ) | 0. 9.7(S) | 0. 4.6(S) | 0. 2.5(S) | 0. 7.6(S) |
| | | 0. 3.2(S) | 0. .1(S) | 0. .0(S) | 1. 3.5(S) | 1. .2(S) | 0. .8(S) | | | | |
| 5 | 0. | 8. .0( ) | 0. .0( ) | 0. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 6. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .3( ) |
| | | 0. .0( ) | 7. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .2( ) | 0. .1( ) | 5. .1( ) | 2. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .3( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 2. .1( ) | 1. .0( ) | 0. .0( ) |
| | | 1. .2( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 6. .2( ) | 3. .1( ) | 0. .0( ) | 1. .0( ) | 8. .0( ) | 5. .0( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 3. .0( ) | 0. 9.7(S) | 0. 4.6(S) | 0. 2.5(S) | 0. 7.6(S) |
| | | 0. 3.2(S) | 0. .1(S) | 0. .0(S) | 1. 3.5(S) | 1. .2(S) | 0. .8(S) | | | | |
| 5 | 5. | 7. .0( ) | 0. .0( ) | 0. .0( ) | 5. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 2. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 6. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .3( ) |
| | | 0. .0( ) | 7. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .2( ) | 0. .1( ) | 5. .1( ) | 2. .2( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .3( ) | 1. .1( ) | 0. .1( ) | 0. .0( ) | 2. .1( ) | 1. .0( ) | 0. .0( ) |
| | | 1. .2( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 6. .1( ) | 3. .1( ) | 0. .0( ) | 1. .0( ) | 7. .0( ) | 5. .0( ) |
| | | 0. | 3. | 0. | 0. | 1. | 3. | 0. | 0. | 0. | 0. |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 9.8(S) | 4.6(S) | 2.5(S) | 7.7(S) |
| | 0. | 0. | 0. | 1. | 1. | 0. | | | | |
| | 3.2(S) | .1(S) | .0(S) | 3.5(S) | .2(S) | .8(S) | | | | |
| 5 10. | 7. | 0. | 0. | 5. | 0. | 0. | 1. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 2. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 2. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 6. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | 0. | 7. | 0. | 1. | 1. | 1. | 0. | 5. | 2. | 0. |
| | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 2. | 1. | 0. |
| | .0( ) | .1( ) | .1( ) | .3( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 1. | 0. | 0. | 0. | 6. | 3. | 0. | 1. | 7. | 5. |
| | .2( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 3. | 0. | 0. | 1. | 3. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 9.8(S) | 4.6(S) | 2.5(S) | 7.7(S) |
| | 0. | 0. | 0. | 1. | 1. | 0. | | | | |
| | 3.2(S) | .1(S) | .0(S) | 3.5(S) | .2(S) | .8(S) | | | | |
| 5 15. | 7. | 0. | 0. | 4. | 0. | 0. | 1. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 2. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 6. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | 0. | 6. | 0. | 1. | 1. | 1. | 0. | 4. | 1. | 0. |
| | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .2( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 2. | 1. | 0. |
| | .0( ) | .1( ) | .1( ) | .3( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 1. | 0. | 0. | 0. | 6. | 3. | 0. | 1. | 7. | 5. |
| | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 2. | 0. | 0. | 1. | 3. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 9.9(S) | 4.6(S) | 2.5(S) | 7.7(S) |
| | 0. | 0. | 0. | 1. | 1. | 0. | | | | |
| | 3.2(S) | .0(S) | .0(S) | 3.5(S) | .2(S) | .8(S) | | | | |
| 5 20. | 6. | 0. | 0. | 4. | 0. | 0. | 1. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 2. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 6. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | 0. | 6. | 0. | 1. | 1. | 1. | 0. | 4. | 1. | 0. |
| | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 2. | 1. | 0. |
| | .0( ) | .1( ) | .1( ) | .3( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 1. | 0. | 0. | 0. | 6. | 3. | 0. | 1. | 6. | 4. |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 3. .0( ) | 0. 9.9(S) | 0. 4.6(S) | 0. 2.5(S) | 0. 7.7(S) |
| | | 0. 3.2(S) | 0. .0(S) | 0. .0(S) | 1. 3.5(S) | 1. .2(S) | 0. .8(S) | | | | |
| 5 | 25. | 6. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 5. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .3( ) |
| | | 0. .0( ) | 6. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .1( ) | 0. .1( ) | 4. .1( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .3( ) | 1. .0( ) | 0. .1( ) | 0. .0( ) | 2. .0( ) | 1. .0( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 5. .1( ) | 3. .1( ) | 0. .0( ) | 1. .0( ) | 6. .0( ) | 4. .0( ) |
| | | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 3. .0( ) | 0. 10.0(S) | 0. 4.6(S) | 0. 2.5(S) | 0. 7.7(S) |
| | | 0. 3.2(S) | 0. .0(S) | 0. .0(S) | 1. 3.5(S) | 1. .2(S) | 0. .8(S) | | | | |
| 5 | 30. | 6. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 5. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .3( ) |
| | | 0. .0( ) | 6. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .1( ) | 0. .1( ) | 4. .1( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .3( ) | 1. .0( ) | 0. .1( ) | 0. .0( ) | 2. .0( ) | 1. .0( ) | 0. .0( ) |
| | | 1. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 5. .1( ) | 3. .1( ) | 0. .0( ) | 1. .0( ) | 6. .0( ) | 4. .0( ) |
| | | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 3. .0( ) | 0. 10.0(S) | 0. 4.6(S) | 0. 2.5(S) | 0. 7.7(S) |
| | | 0. 3.2(S) | 0. .0(S) | 0. .0(S) | 1. 3.5(S) | 1. .2(S) | 0. .8(S) | | | | |
| 5 | 35. | 6. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 5. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .3( ) |
| | | 0. .0( ) | 5. .1( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .1( ) | 0. .1( ) | 4. .1( ) | 1. .1( ) | 0. .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 2. | 1. | 0. |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | .0( ) | .1( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 5. | 3. | 0. | 1. | 6. | 4. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 1. | 3. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 10.0(S) | 4.6(S) | 2.5(S) | 7.7(S) |
| | | 0. | 0. | 0. | 1. | 1. | 0. | | | | |
| | | 3.2(S) | .0(S) | .0(S) | 3.5(S) | .2(S) | .8(S) | | | | |
| 5 | 40. | 5. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 5. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 5. | 0. | 1. | 1. | 1. | 0. | 3. | 1. | 0. |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .1( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 2. | 1. | 0. |
| | | .0( ) | .1( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 5. | 2. | 0. | 1. | 6. | 4. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 1. | 2. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 10.1(S) | 4.6(S) | 2.5(S) | 7.7(S) |
| | | 0. | 0. | 0. | 1. | 1. | 0. | | | | |
| | | 3.2(S) | .0(S) | .0(S) | 3.5(S) | .2(S) | .8(S) | | | | |
| 5 | 45. | 5. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 5. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 5. | 0. | 1. | 1. | 1. | 0. | 3. | 1. | 0. |
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .0( ) | .1( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 1. | 0. | 0. | 1. | 0. | 0. |
| | | .0( ) | .1( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 5. | 2. | 0. | 1. | 5. | 3. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 2. | 0. | 0. | 0. | 2. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 10.1(S) | 4.6(S) | 2.5(S) | 7.8(S) |
| | | 0. | 0. | 0. | 1. | 1. | 0. | | | | |
| | | 3.2(S) | .0(S) | .0(S) | 3.5(S) | .2(S) | .8(S) | | | | |
| 5 | 50. | 5. | 0. | 0. | 3. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 4. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 5. | 0. | 1. | 1. | 1. | 0. | 3. | 1. | 0. |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | .0( ) | .1( ) | .0( ) | .2( ) | .1( ) | .1( ) | .1( ) | .0( ) | .1( ) | .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 4. .1( ) | 2. .1( ) | 0. .0( ) | 1. .0( ) | 5. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. 10.2(S) | 0. 4.6(S) | 0. 2.5(S) | 0. 7.8(S) |
| | | 0. 3.2(S) | 0. .0(S) | 0. .0(S) | 1. 3.5(S) | 1. .2(S) | 0. .8(S) | | | | |
| 5 | 55. | 5. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .3( ) |
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .1( ) | 0. .1( ) | 3. .0( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 4. .1( ) | 2. .1( ) | 0. .0( ) | 1. .0( ) | 5. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. 10.2(S) | 0. 4.6(S) | 0. 2.5(S) | 0. 7.8(S) |
| | | 0. 3.2(S) | 0. .0(S) | 0. .0(S) | 1. 3.5(S) | 1. .2(S) | 0. .8(S) | | | | |
| 6 | 0. | 5. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .3( ) |
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .1( ) | 0. .1( ) | 3. .0( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 4. .1( ) | 2. .1( ) | 0. .0( ) | 1. .0( ) | 5. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. 10.2(S) | 0. 4.6(S) | 0. 2.5(S) | 0. 7.8(S) |
| | | 0. 3.2(S) | 0. .0(S) | 0. .0(S) | 1. 3.5(S) | 1. .2(S) | 0. .8(S) | | | | |
| 6 | 5. | 4. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. | 4. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .1( ) | 0. .1( ) | 3. .0( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 4. .1( ) | 2. .0( ) | 0. .0( ) | 1. .0( ) | 5. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. 10.3(S) | 0. 4.6(S) | 0. 2.5(S) | 0. 7.8(S) |
| | | 0. 3.2(S) | 0. .0(S) | 0. .0(S) | 1. 3.5(S) | 1. .2(S) | 0. .8(S) | | | | |
| 6 | 10. | 4. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .3( ) |
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .1( ) | 0. .1( ) | 3. .0( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 4. .1( ) | 2. .0( ) | 0. .0( ) | 1. .0( ) | 5. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. 10.3(S) | 0. 4.6(S) | 0. 2.5(S) | 0. 7.8(S) |
| | | 0. 3.2(S) | 0. .0(S) | 0. .0(S) | 1. 3.5(S) | 1. .2(S) | 0. .8(S) | | | | |
| 6 | 15. | 4. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .3( ) |
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .1( ) | 0. .1( ) | 3. .0( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 4. .1( ) | 2. .0( ) | 0. .0( ) | 1. .0( ) | 4. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. 10.3(S) | 0. 4.6(S) | 0. 2.5(S) | 0. 7.8(S) |
| | | 0. 3.2(S) | 0. .0(S) | 0. .0(S) | 1. 3.5(S) | 1. .2(S) | 0. .8(S) | | | | |
| 6 | 20. | 4. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .3( ) |
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .1( ) | 0. .1( ) | 3. .0( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 4. .1( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. 10.3(S) | 0. 4.6(S) | 0. 2.5(S) | 0. 7.8(S) |
| | | 0. 3.2(S) | 0. .0(S) | 0. .0(S) | 1. 3.5(S) | 1. .2(S) | 0. .8(S) | | | | |
| 6 | 25. | 4. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .2( ) |
| | | 0. .0( ) | 4. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .1( ) | 0. .1( ) | 2. .0( ) | 1. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 4. .1( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 3. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. 10.4(S) | 0. 4.6(S) | 0. 2.5(S) | 0. 7.8(S) |
| | | 0. 3.2(S) | 0. .0(S) | 0. .0(S) | 1. 3.5(S) | 1. .2(S) | 0. .8(S) | | | | |
| 6 | 30. | 4. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .2( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .1( ) | 0. .1( ) | 2. .0( ) | 0. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .1( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. 10.4(S) | 0. 4.6(S) | 0. 2.5(S) | 0. 7.8(S) |
| | | 0. 3.3(S) | 0. .0(S) | 0. .0(S) | 1. 3.5(S) | 1. .2(S) | 0. .8(S) | | | | |
| 6 | 35. | 4. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.2( ) |
| | | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 1.<br>.2( ) | 1.<br>.1( ) | 1.<br>.1( ) | 0.<br>.1( ) | 2.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.1( ) | 0.<br>.2( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.1( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 2.<br>.0( ) |
| | | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>10.4(S) | 0.<br>4.6(S) | 0.<br>2.5(S) | 0.<br>7.8(S) |
| | | 0.<br>3.3(S) | 0.<br>.0(S) | 0.<br>.0(S) | 1.<br>3.5(S) | 1.<br>.2(S) | 0.<br>.8(S) | | | | |
| 6 | 40. | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.2( ) |
| | | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 1.<br>.2( ) | 1.<br>.1( ) | 1.<br>.1( ) | 0.<br>.1( ) | 2.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.1( ) | 0.<br>.2( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.1( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 2.<br>.0( ) |
| | | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>10.4(S) | 0.<br>4.6(S) | 0.<br>2.5(S) | 0.<br>7.8(S) |
| | | 0.<br>3.3(S) | 0.<br>.0(S) | 0.<br>.0(S) | 1.<br>3.5(S) | 1.<br>.2(S) | 0.<br>.8(S) | | | | |
| 6 | 45. | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.2( ) |
| | | 0.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 1.<br>.2( ) | 1.<br>.1( ) | 1.<br>.1( ) | 0.<br>.1( ) | 2.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.1( ) | 0.<br>.2( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.1( ) | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 2.<br>.0( ) |
| | | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>10.5(S) | 0.<br>4.6(S) | 0.<br>2.5(S) | 0.<br>7.8(S) |
| | | 0.<br>3.3(S) | 0.<br>.0(S) | 0.<br>.0(S) | 1.<br>3.5(S) | 1.<br>.2(S) | 0.<br>.8(S) | | | | |
| 6 | 50. | 3. | 0. | 0. | 2. | 0. | 0. | 1. | 0. | 0. | 0. |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .2( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .1( ) | 0. .1( ) | 2. .0( ) | 0. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .1( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 4. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. 10.5(S) | 0. 4.6(S) | 0. 2.5(S) | 0. 7.9(S) |
| | | 0. 3.3(S) | 0. .0(S) | 0. .0(S) | 1. 3.5(S) | 1. .2(S) | 0. .8(S) | | | | |
| 6 | 55. | 3. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .2( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .1( ) | 0. .1( ) | 2. .0( ) | 0. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .1( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. 10.5(S) | 0. 4.6(S) | 0. 2.5(S) | 0. 7.9(S) |
| | | 0. 3.3(S) | 0. .0(S) | 0. .0(S) | 1. 3.5(S) | 1. .2(S) | 0. .8(S) | | | | |
| 7 | 0. | 3. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .2( ) |
| | | 0. .0( ) | 3. .0( ) | 0. .0( ) | 1. .2( ) | 1. .1( ) | 1. .1( ) | 0. .1( ) | 2. .0( ) | 0. .1( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .2( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 3. .1( ) | 2. .0( ) | 0. .0( ) | 0. .0( ) | 3. .0( ) | 2. .0( ) |
| | | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 2. .0( ) | 0. 10.5(S) | 0. 4.6(S) | 0. 2.5(S) | 0. 7.9(S) |
| | | 0. | 0. | 0. | 1. | 1. | 0. | | | | |

3.3(S) .0(S) .0(S) 3.5(S) .2(S) .8(S)

1

5yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
Blank

*** PEAK FLOWS, STAGES AND STORAGES OF GUTTERS AND DETENTION DAMS ***

| CONVEYANCE ELEMENT | PEAK (CFS) | STAGE (FT) | STORAGE (AC-FT) | TIME (HR/MIN) |
|---|---|---|---|---|
| 219 | 5. | (DIRECT FLOW) | | 0 50. |
| 217 | 15. | (DIRECT FLOW) | | 0 40. |
| 119 | 5. | (DIRECT FLOW) | | 0 50. |
| 117 | 15. | (DIRECT FLOW) | | 0 40. |
| 210 | 21. | (DIRECT FLOW) | | 0 25. |
| 319 | 4. | .8 | | 1 15. |
| 317 | 8. | 1.5 | | 1 5. |
| 218 | 10. | (DIRECT FLOW) | | 0 45. |
| 110 | 21. | (DIRECT FLOW) | | 0 25. |
| 118 | 20. | (DIRECT FLOW) | | 1 0. |
| 610 | 0. | .1 | .9 | 1 0. |
| 209 | 8. | (DIRECT FLOW) | | 0 45. |
| 216 | 20. | (DIRECT FLOW) | | 0 55. |
| 318 | 14. | .3 | | 1 35. |
| 213 | 21. | (DIRECT FLOW) | | 0 50. |
| 310 | 0. | .1 | | 4 30. |
| 109 | 8. | (DIRECT FLOW) | | 0 45. |
| 116 | 20. | (DIRECT FLOW) | | 0 55. |
| 113 | 28. | (DIRECT FLOW) | | 1 15. |
| 609 | 2. | .1 | .5 | 2 10. |
| 208 | 45. | (DIRECT FLOW) | | 0 40. |
| 215 | 3. | (DIRECT FLOW) | | 0 45. |
| 516 | 0. | .1 | 2.5 | 4 15. |
| 513 | 0. | .1 | 4.6 | 7 0. |
| 309 | 2. | .2 | | 2 20. |
| 108 | 45. | (DIRECT FLOW) | | 0 40. |
| 115 | 3. | (DIRECT FLOW) | | 0 45. |
| 316 | 0. | .1 | | 7 0. |
| 313 | 0. | .0 | | 7 0. |
| 608 | 1. | .1 | 3.5 | 6 45. |
| 315 | 2. | .6 | | 1 20. |
| 416 | 0. | (DIRECT FLOW) | | 7 0. |
| 212 | 28. | (DIRECT FLOW) | | 0 50. |
| 308 | 1. | .1 | | 6 35. |
| 207 | 2. | (DIRECT FLOW) | | 1 15. |
| 414 | 2. | (DIRECT FLOW) | | 1 20. |
| 112 | 28. | (DIRECT FLOW) | | 0 50. |
| 107 | 3. | (DIRECT FLOW) | | 1 15. |
| 314 | 1. | .0 | | 2 15. |
| 214 | 16. | (DIRECT FLOW) | | 0 45. |
| 312 | 18. | .4 | | 1 35. |
| 211 | 6. | (DIRECT FLOW) | | 0 45. |
| 206 | 4. | (DIRECT FLOW) | | 0 45. |
| 307 | 3. | .4 | | 1 25. |
| 114 | 16. | (DIRECT FLOW) | | 0 45. |
| 111 | 23. | (DIRECT FLOW) | | 1 30. |
| 203 | 4. | (DIRECT FLOW) | | 0 15. |
| 106 | 4. | (DIRECT FLOW) | | 0 45. |
| 404 | 35. | (DIRECT FLOW) | | 1 15. |
| 103 | 4. | (DIRECT FLOW) | | 0 15. |
| 202 | 11. | (DIRECT FLOW) | | 0 35. |
| 306 | 1. | .1 | | 1 50. |
| 205 | 3. | (DIRECT FLOW) | | 0 50. |
| 311 | 30. | .2 | | 1 45. |
| 204 | 12. | (DIRECT FLOW) | | 0 45. |
| 603 | 1. | .1 | .1 | 0 35. |
| 102 | 11. | (DIRECT FLOW) | | 0 35. |
| 236 | 5. | (DIRECT FLOW) | | 0 40. |
| 105 | 3. | (DIRECT FLOW) | | 0 55. |
| 104 | 37. | (DIRECT FLOW) | | 1 35. |
| 303 | 1. | .1 | | 0 50. |
| 602 | 3. | .1 | .5 | 1 20. |
| 224 | 10. | (DIRECT FLOW) | | 0 45. |

| | | | | | |
|---|---|---|---|---|---|
| 136 | 5. | (DIRECT FLOW) | | 0 | 40. |
| 231 | 2. | (DIRECT FLOW) | | 0 | 40. |
| 401 | 39. | (DIRECT FLOW) | | 1 | 35. |
| 402 | 4. | (DIRECT FLOW) | | 1 | 15. |
| 124 | 10. | (DIRECT FLOW) | | 0 | 45. |
| 336 | 1. | .1 | | 1 | 40. |
| 235 | 30. | (DIRECT FLOW) | | 0 | 50. |
| 131 | 2. | (DIRECT FLOW) | | 0 | 40. |
| 304 | 36. | .2 | | 1 | 55. |
| 302 | 4. | .7 | | 1 | 25. |
| 201 | 19. | (DIRECT FLOW) | | 0 | 45. |
| 324 | 2. | .1 | | 1 | 55. |
| 223 | 27. | (DIRECT FLOW) | | 0 | 55. |
| 222 | 11. | (DIRECT FLOW) | | 0 | 55. |
| 135 | 30. | (DIRECT FLOW) | | 0 | 50. |
| 230 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 331 | 1. | .4 | | 0 | 50. |
| 229 | 4. | (DIRECT FLOW) | | 0 | 40. |
| 101 | 44. | (DIRECT FLOW) | | 1 | 45. |
| 123 | 28. | (DIRECT FLOW) | | 0 | 55. |
| 122 | 11. | (DIRECT FLOW) | | 0 | 55. |
| 238 | 11. | (DIRECT FLOW) | | 0 | 45. |
| 335 | 11. | .1 | | 2 | 0. |
| 234 | 22. | (DIRECT FLOW) | | 0 | 55. |
| 233 | 2. | (DIRECT FLOW) | | 0 | 40. |
| 130 | 0. | (DIRECT FLOW) | | 0 | 0. |
| 129 | 4. | (DIRECT FLOW) | | 0 | 45. |
| 501 | 0. | .1 | 10.5 | 7 | 0. |
| 420 | 39. | (DIRECT FLOW) | | 0 | 55. |
| 138 | 11. | (DIRECT FLOW) | | 0 | 45. |
| 134 | 25. | (DIRECT FLOW) | | 1 | 0. |
| 133 | 2. | (DIRECT FLOW) | | 0 | 40. |
| 330 | 0. | .0 | | 0 | 0. |
| 329 | 2. | .1 | | 1 | 45. |
| 228 | 26. | (DIRECT FLOW) | | 0 | 50. |
| 301 | 0. | .0 | | 7 | 0. |
| 226 | 5. | (DIRECT FLOW) | | 0 | 45. |
| 221 | 12. | (DIRECT FLOW) | | 0 | 50. |
| 322 | 24. | .2 | | 1 | 30. |
| 220 | 21. | (DIRECT FLOW) | | 0 | 55. |
| 338 | 3. | .1 | | 2 | 0. |
| 237 | 23. | (DIRECT FLOW) | | 0 | 55. |
| 432 | 27. | (DIRECT FLOW) | | 1 | 0. |
| 128 | 26. | (DIRECT FLOW) | | 0 | 50. |
| 126 | 5. | (DIRECT FLOW) | | 0 | 45. |
| 121 | 12. | (DIRECT FLOW) | | 0 | 50. |
| 120 | 37. | (DIRECT FLOW) | | 1 | 20. |
| 137 | 24. | (DIRECT FLOW) | | 0 | 55. |
| 333 | 17. | .3 | | 2 | 15. |
| 232 | 17. | (DIRECT FLOW) | | 0 | 50. |
| 328 | 18. | 1.0 | | 1 | 20. |
| 227 | 7. | (DIRECT FLOW) | | 0 | 50. |
| 326 | 2. | .1 | | 1 | 50. |
| 225 | 5. | (DIRECT FLOW) | | 0 | 45. |
| 520 | 0. | .1 | 7.9 | 7 | 0. |
| 537 | 0. | .1 | 3.3 | 7 | 0. |
| 132 | 22. | (DIRECT FLOW) | | 1 | 45. |
| 127 | 23. | (DIRECT FLOW) | | 1 | 15. |
| 125 | 5. | (DIRECT FLOW) | | 0 | 45. |
| 320 | 0. | (DIRECT FLOW) | | 0 | 20. |
| 337 | 0. | (DIRECT FLOW) | | 0 | 30. |
| 400 | 49. | (DIRECT FLOW) | | 1 | 20. |
| 902 | 0. | (DIRECT FLOW) | | 0 | 20. |
| 901 | 0. | (DIRECT FLOW) | | 0 | 30. |
| 900 | 49. | (DIRECT FLOW) | | 1 | 20. |

```
   2   1   1   2
   3   4
WATERSHED   1
10yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
Blank
        84       5.0                                                                1
         1  201
         4  204
         5  205
         6  206
         7  207
         9  209
        11  211
        12  212
        13  213
        14  214
        15  215
        16  216
        17  217
        18  218
        19  219
        20  220
        21  221
        22  222
        23  223
        24  224
        25  225
        26  226
        27  227
        28  228
        29  229
        30  230
        31  231
        32  232
        33  233
        34  234
        35  235
        36  236
        37  237
        38  238

    0  201  101    3              1.
   -1  202  102  3 3              1.
        0.        0.      0.55      10.1      1.65        0.        0.        0.

   -1  203  103  3 3              1.
        0.        0.      0.23      3.59      0.69        0.        0.        0.
    0  204  104    3              1.
    0  205  105    3              1.
    0  206  106    3              1.
    0  207  107    3              1.
   -1  208  108  3 3              1.
        0.        0.      0.67     45.23      1.80        0.        0.        0.
    0  209  109    3              1.
   -1  210  110  3 3              1.
        0.        0.      0.35     33.48      1.05        0.        0.        0.
    0  211  111    3              1.
    0  212  112    3              1.
    0  213  113    3              1.
    0  214  114    3              1.
    0  215  115    3              1.
    0  216  116    3              1.
    0  217  117    3              1.
    0  218  118    3              1.
    0  219  119    3              1.
    0  220  120    3              1.
    0  221  121    3              1.
    0  222  122    3              1.
    0  223  123    3              1.
    0  224  124    3              1.
    0  225  125    3              1.
    0  226  126    3              1.
    0  227  127    3              1.
    0  228  128    3              1.
    0  229  129    3              1.
    0  230  130    3              1.
    0  231  131    3              1.
    0  232  132    3              1.
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0  233  133    3              1.
0  234  134    3              1.
0  235  135    3              1.
0  236  136    3              1.
0  237  137    3              1.
0  238  138    3              1.
0  402  302    3              1.
0  401  304    3              1.
0  106  306    3              1.
0  107  307    3              1.
0  404  311    3              1.
0  112  312    3              1.
0  414  314    3              1.
0  115  315    3              1.
0  117  317    3              1.
0  118  318    3              1.
0  119  319    3              1.
0  420  322    3              1.
0  124  324    3              1.
0  126  326    3              1.
0  128  328    3              1.
0  129  329    3              1.
0  130  330    3              1.
0  131  331    3              1.
0  432  333    3              1.
0  135  335    3              1.
0  136  336    3              1.
0  138  338    3              1.
0  125  400    3              1.
0  127  400    3              1.
0  132  400    3              1.
0  104  401    3              1.
0  105  401    3              1.
0  111  404    3              1.
0  114  404    3              1.
0  416  414    3              1.
0  122  420    3              1.
0  123  420    3              1.
0  133  432    3              1.
0  134  432    3              1.
0  101  501    3              1.
0  113  513    3              1.
0  116  516    3              1.
0  120  520    3              1.
0  121  520    3              1.
0  137  537    3              1.
0  102  602    3              1.
0  103  603    3              1.
0  108  608    3              1.
0  109  609    3              1.
0  110  610    3              1.
0  400  900    3              1.
0  337  901    3              1.
0  320  902    3              1.
0  501  301  7 2     0.1        1.                                        0.1
    0.        0.       7.5        0.      26.4        0.      63.3        0.
  82.9        0.      129.     1400.      201.     6510.
0  513  313  3 2     0.1        1.                                        0.1
    0.        0.      20.3        0.      22.6      665.
0  516  316  3 2     0.1        1.                                        0.1
    0.        0.     18.12        0.      18.9      320.        0.        0.
0  520  320  4 2     0.1        1.                                        0.1
    0.        0.       9.9        0.       10.        5.      280.        5.
0  537  337  3 2     0.1        1.                                        0.1
    0.        0.     14.85        0.      17.7      649.        0.        0.
0  602  402  3 2     0.1        1.                                        0.1
    0.        0.      0.78       5.4      1.64      15.4
0  603  303  3 2     0.1        1.                                        0.1
    0.        0.      0.12       1.2      0.33       6.9        0.        0.
0  608  308 10 2     0.1        1.                                        0.1
    0.        0.      .038      0.31      0.45      0.46      1.63      0.57
  3.59      0.67      6.09     32.39      7.09     55.58      8.87    123.53
 11.53    266.39     13.14    378.74
0  609  309  2 2     0.1        1.                                        0.1
    0.        0.       12.      43.4
0  610  310  2 2     0.1        1.                                        0.1
    0.        0.      3.81       1.3        0.        0.        0.        0.
0  302  101    1      0.   1698.  0.0150      4.      4.    .045      5.
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    0  304  101    1    175.   1761.  0.0133      4.      4.    .045      5.
    0  311  104    1    135.   2519.  0.0123      4.      4.    .045      5.
    0  306  105    1     25.   5603.  0.0157      4.      4.    .045      5.
    0  308  107    1      4.    625.   0.008    0.01    0.01   0.016      2.
    0  312  111    1      0.   2682.  0.0082    110.    110.    .045     10.
    0  318  113    1     35.   3069.  0.0071      4.      4.    .045      5.
    0  314  114    1     60.   3598.  0.0080      4.      4.    .045      5.
    0  317  118    1      0.   1788.  0.0011      4.      4.    .045      5.
    0  319  118    1      0.   2135.  0.0082      4.      4.    .045      5.
    0  322  120    1    100.   2881.  0.0085      4.      4.    .045      5.
    0  324  123    1     80.   5657.  0.0133      4.      4.    .045      5.
    0  326  125    1     45.   2265.  0.0018      4.      4.    .045      5.
    0  301  126    1    150.   1716.  0.0152      4.      4.    .045      5.
    0  328  127    1     10.   2545.  0.0026      4.      4.    .045      5.
    0  329  128    1     25.   4136.  0.0173      4.      4.    .045      5.
    0  330  128    1     15.   6271.  0.0148      4.      4.    .045      5.
    0  331  129    1      0.   2147.  0.0135      4.      4.    .045      5.
    0  333  132    1     55.   4716.  0.0068      4.      4.    .045      5.
    0  335  134    1     85.   7048.  0.0123      4.      4.    .045      5.
    0  336  135    1     35.   5158.  0.0099      4.      4.    .045      5.
    0  338  137    1     90.   5244.  0.0139      4.      4.    .045      5.
    0  303  402    1      5.   1011.  0.0151      5.      5.   0.035      3.
    0  307  404    1      5.   1308.  0.0031      5.      5.   0.035      3.
    0  315  414    1      0.   2696.  0.0097      4.      4.    .045      5.
    0  313  416    1     10.   2381.  0.0054      4.      4.    .045      5.
    0  316  416    1      0.    965.  0.0053      4.      4.    .045      5.
    0  309  608    1      5.   1757.  0.0091      5.      5.   0.035      3.
    0  310  609    1      5.   3896.    0.01      5.      5.   0.035      3.

    0
   86
  101  102  103  104  105  106  107  108  109  110  111  112  113  114  115  116
  117  118  119  120  121  122  123  124  125  126  127  128  129  130  131  132
  133  134  135  136  137  138  301  302  303  304  306  307  308  309  310  311
  312  313  314  315  316  317  318  319  320  322  324  326  328  329  330  331
  333  335  336  338  400  401  402  404  414  416  420  432  501  513  516  520
  537  602  603  608  609  610
ENDPROGRAM
```

URBAN DRAINAGE STORM WATER MANAGEMENT MODEL - 32 BIT VERSION 1998
REVISED BY UNIVERSITY OF COLORADO AT DENVER

*** ENTRY MADE TO RUNOFF MODEL ***

10yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
Blank

0NUMBER OF TIME STEPS 84
0INTEGRATION TIME INTERVAL (MINUTES), 5.00

25.0 PERCENT OF IMPERVIOUS AREA HAS ZERO DETENTION DEPTH
1

10yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
Blank

HYDROGRAPHS FROM CUHPF MODEL ARE LISTED FOR THE FOLLOWING 34 SUBCATCHMENTS

| TIME(HR/MIN) | 1 | 4 | 5 | 6 | 7 | 9 | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|---|---|
| | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 |
| | 35 | 36 | 37 | 38 | | | | | | |
| 0 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 5. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 10. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 15. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 20. | 0. | 1. | 0. | 0. | 1. | 0. | 1. | 1. | 0. | 1. |
| | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 25. | 7. | 4. | 1. | 1. | 2. | 3. | 3. | 8. | 5. | 7. |
| | 1. | 3. | 12. | 4. | 1. | 4. | 3. | 2. | 5. | 4. |
| | 1. | 2. | 2. | 6. | 2. | 0. | 1. | 4. | 1. | 4. |
| | 7. | 2. | 5. | 3. | | | | | | |
| 0 30. | 26. | 12. | 7. | 6. | 3. | 12. | 6. | 24. | 19. | 22. |
| | 5. | 14. | 29. | 13. | 7. | 17. | 11. | 9. | 22. | 16. |
| | 5. | 8. | 6. | 23. | 6. | 1. | 5. | 17. | 5. | 16. |
| | 28. | 9. | 21. | 13. | | | | | | |
| 0 35. | 49. | 20. | 16. | 11. | 3. | 22. | 10. | 43. | 39. | 37. |
| | 9. | 29. | 37. | 22. | 14. | 37. | 21. | 20. | 48. | 29. |
| | 8. | 14. | 11. | 46. | 9. | 2. | 6. | 36. | 8. | 34. |
| | 56. | 15. | 46. | 26. | | | | | | |
| 0 40. | 64. | 25. | 25. | 14. | 3. | 28. | 12. | 57. | 58. | 45. |
| | 11. | 45. | 37. | 26. | 21. | 56. | 31. | 31. | 73. | 36. |
| | 10. | 18. | 15. | 65. | 10. | 1. | 6. | 52. | 8. | 52. |
| | 79. | 17. | 73. | 34. | | | | | | |
| 0 45. | 68. | 27. | 30. | 15. | 3. | 29. | 12. | 64. | 71. | 46. |
| | 12. | 58. | 34. | 27. | 25. | 70. | 37. | 38. | 92. | 37. |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 10. | 19. | 16. | 76. | 9. | 0. | 6. | 62. | 8. | 66. |
| | | 92. | 16. | 93. | 38. | | | | | | |
| 0 | 50. | 65. | 26. | 32. | 14. | 3. | 28. | 11. | 65. | 76. | 44. |
| | | 11. | 66. | 31. | 25. | 26. | 77. | 39. | 42. | 101. | 35. |
| | | 9. | 18. | 16. | 79. | 8. | 0. | 6. | 66. | 7. | 75. |
| | | 96. | 15. | 106. | 37. | | | | | | |
| 0 | 55. | 60. | 25. | 31. | 13. | 3. | 26. | 11. | 62. | 76. | 41. |
| | | 11. | 68. | 26. | 24. | 26. | 78. | 38. | 42. | 103. | 32. |
| | | 9. | 17. | 15. | 76. | 8. | 0. | 5. | 64. | 7. | 77. |
| | | 93. | 14. | 110. | 34. | | | | | | |
| 1 | 0. | 55. | 24. | 29. | 13. | 3. | 24. | 11. | 59. | 72. | 39. |
| | | 10. | 68. | 23. | 23. | 24. | 75. | 35. | 40. | 99. | 29. |
| | | 9. | 16. | 15. | 71. | 8. | 0. | 4. | 60. | 6. | 76. |
| | | 87. | 13. | 108. | 32. | | | | | | |
| 1 | 5. | 50. | 24. | 27. | 12. | 3. | 22. | 11. | 57. | 67. | 37. |
| | | 10. | 64. | 21. | 21. | 22. | 71. | 33. | 38. | 92. | 27. |
| | | 9. | 15. | 15. | 67. | 8. | 0. | 4. | 55. | 6. | 72. |
| | | 82. | 12. | 102. | 30. | | | | | | |
| 1 | 10. | 45. | 23. | 25. | 11. | 4. | 20. | 11. | 56. | 64. | 34. |
| | | 9. | 61. | 18. | 20. | 22. | 66. | 32. | 36. | 86. | 24. |
| | | 9. | 14. | 15. | 63. | 7. | 0. | 4. | 52. | 5. | 67. |
| | | 78. | 10. | 95. | 28. | | | | | | |
| 1 | 15. | 40. | 22. | 23. | 10. | 4. | 19. | 10. | 54. | 60. | 32. |
| | | 9. | 58. | 17. | 19. | 20. | 62. | 31. | 34. | 81. | 22. |
| | | 8. | 13. | 14. | 59. | 7. | 0. | 4. | 49. | 5. | 64. |
| | | 73. | 10. | 89. | 26. | | | | | | |
| 1 | 20. | 37. | 21. | 22. | 9. | 4. | 17. | 10. | 52. | 57. | 29. |
| | | 8. | 55. | 15. | 17. | 19. | 58. | 29. | 32. | 75. | 20. |
| | | 8. | 12. | 14. | 56. | 6. | 0. | 4. | 45. | 5. | 60. |
| | | 69. | 9. | 84. | 23. | | | | | | |
| 1 | 25. | 33. | 20. | 20. | 9. | 4. | 16. | 10. | 49. | 53. | 27. |
| | | 7. | 52. | 13. | 16. | 18. | 55. | 27. | 31. | 70. | 18. |
| | | 7. | 11. | 13. | 51. | 6. | 0. | 3. | 42. | 4. | 57. |
| | | 64. | 8. | 78. | 21. | | | | | | |
| 1 | 30. | 30. | 19. | 18. | 8. | 2. | 14. | 9. | 46. | 49. | 25. |
| | | 7. | 49. | 11. | 15. | 17. | 51. | 25. | 29. | 65. | 16. |
| | | 7. | 10. | 12. | 47. | 6. | 0. | 3. | 38. | 4. | 53. |
| | | 59. | 7. | 73. | 20. | | | | | | |
| 1 | 35. | 26. | 18. | 17. | 7. | 2. | 13. | 9. | 43. | 45. | 23. |
| | | 6. | 46. | 10. | 14. | 15. | 47. | 23. | 26. | 59. | 14. |
| | | 7. | 9. | 11. | 43. | 6. | 0. | 3. | 35. | 4. | 49. |
| | | 54. | 6. | 67. | 18. | | | | | | |
| 1 | 40. | 23. | 17. | 16. | 7. | 0. | 12. | 8. | 40. | 42. | 21. |
| | | 6. | 43. | 8. | 12. | 14. | 43. | 21. | 24. | 54. | 13. |
| | | 6. | 8. | 11. | 40. | 5. | 0. | 3. | 32. | 4. | 45. |
| | | 49. | 6. | 62. | 16. | | | | | | |
| 1 | 45. | 21. | 16. | 14. | 6. | 0. | 10. | 8. | 37. | 38. | 19. |
| | | 6. | 40. | 7. | 11. | 13. | 40. | 20. | 23. | 50. | 11. |
| | | 6. | 8. | 10. | 36. | 5. | 0. | 3. | 29. | 3. | 42. |
| | | 45. | 5. | 57. | 15. | | | | | | |
| 1 | 50. | 19. | 15. | 13. | 6. | 0. | 9. | 8. | 35. | 35. | 17. |
| | | 5. | 37. | 6. | 11. | 12. | 36. | 18. | 21. | 46. | 10. |
| | | 6. | 7. | 9. | 33. | 5. | 0. | 2. | 27. | 3. | 39. |
| | | 41. | 5. | 52. | 13. | | | | | | |
| 1 | 55. | 16. | 14. | 12. | 5. | 0. | 9. | 8. | 33. | 33. | 16. |
| | | 5. | 34. | 6. | 10. | 11. | 34. | 17. | 19. | 42. | 9. |
| | | 6. | 6. | 9. | 30. | 5. | 0. | 2. | 25. | 3. | 36. |
| | | 38. | 4. | 48. | 12. | | | | | | |
| 2 | 0. | 15. | 13. | 11. | 5. | 0. | 8. | 7. | 31. | 30. | 14. |
| | | 5. | 32. | 5. | 9. | 11. | 31. | 16. | 18. | 39. | 8. |
| | | 5. | 6. | 8. | 28. | 4. | 0. | 2. | 22. | 3. | 33. |
| | | 35. | 4. | 44. | 11. | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 5. | 13. | 12. | 10. | 5. | 0. | 7. | 7. | 28. | 28. | 13. |
| | | 4. | 30. | 3. | 8. | 10. | 29. | 15. | 17. | 35. | 7. |
| | | 5. | 5. | 8. | 26. | 4. | 0. | 1. | 21. | 2. | 31. |
| | | 32. | 3. | 41. | 10. | | | | | | |
| 2 | 10. | 12. | 12. | 10. | 4. | 0. | 6. | 7. | 26. | 25. | 12. |
| | | 4. | 28. | 2. | 7. | 9. | 26. | 14. | 16. | 32. | 6. |
| | | 5. | 5. | 7. | 23. | 4. | 0. | 0. | 19. | 2. | 28. |
| | | 29. | 3. | 38. | 9. | | | | | | |
| 2 | 15. | 10. | 11. | 9. | 4. | 0. | 6. | 6. | 25. | 23. | 11. |
| | | 4. | 26. | 1. | 7. | 8. | 24. | 13. | 15. | 30. | 6. |
| | | 5. | 5. | 7. | 21. | 4. | 0. | 0. | 17. | 2. | 26. |
| | | 27. | 3. | 35. | 8. | | | | | | |
| 2 | 20. | 9. | 10. | 8. | 4. | 0. | 5. | 6. | 23. | 22. | 10. |
| | | 4. | 24. | 0. | 6. | 8. | 22. | 12. | 14. | 27. | 5. |
| | | 5. | 4. | 7. | 20. | 4. | 0. | 0. | 16. | 2. | 24. |
| | | 24. | 3. | 32. | 8. | | | | | | |
| 2 | 25. | 8. | 9. | 8. | 3. | 0. | 5. | 6. | 21. | 20. | 9. |
| | | 3. | 22. | 0. | 6. | 7. | 21. | 11. | 13. | 25. | 5. |
| | | 5. | 4. | 6. | 18. | 3. | 0. | 0. | 14. | 0. | 23. |
| | | 22. | 2. | 29. | 7. | | | | | | |
| 2 | 30. | 7. | 9. | 7. | 3. | 0. | 4. | 6. | 20. | 18. | 8. |
| | | 3. | 21. | 0. | 5. | 7. | 19. | 10. | 12. | 23. | 4. |
| | | 4. | 3. | 6. | 16. | 3. | 0. | 0. | 13. | 0. | 21. |
| | | 20. | 2. | 27. | 6. | | | | | | |
| 2 | 35. | 6. | 8. | 7. | 3. | 0. | 4. | 6. | 18. | 17. | 7. |
| | | 3. | 19. | 0. | 5. | 6. | 18. | 9. | 11. | 21. | 4. |
| | | 4. | 3. | 6. | 15. | 3. | 0. | 0. | 12. | 0. | 19. |
| | | 19. | 0. | 25. | 6. | | | | | | |
| 2 | 40. | 6. | 8. | 6. | 3. | 0. | 4. | 5. | 17. | 15. | 6. |
| | | 3. | 18. | 0. | 4. | 6. | 16. | 9. | 10. | 19. | 3. |
| | | 4. | 3. | 5. | 14. | 3. | 0. | 0. | 11. | 0. | 18. |
| | | 17. | 0. | 23. | 5. | | | | | | |
| 2 | 45. | 5. | 7. | 6. | 2. | 0. | 3. | 5. | 16. | 14. | 6. |
| | | 3. | 17. | 0. | 4. | 5. | 15. | 8. | 9. | 18. | 3. |
| | | 4. | 3. | 5. | 13. | 3. | 0. | 0. | 10. | 0. | 17. |
| | | 16. | 0. | 21. | 5. | | | | | | |
| 2 | 50. | 5. | 7. | 5. | 2. | 0. | 3. | 5. | 15. | 13. | 5. |
| | | 2. | 16. | 0. | 4. | 5. | 14. | 7. | 9. | 16. | 3. |
| | | 4. | 2. | 5. | 12. | 2. | 0. | 0. | 9. | 0. | 15. |
| | | 14. | 0. | 19. | 4. | | | | | | |
| 2 | 55. | 4. | 6. | 5. | 2. | 0. | 3. | 5. | 13. | 12. | 5. |
| | | 2. | 15. | 0. | 3. | 5. | 13. | 7. | 8. | 15. | 2. |
| | | 4. | 2. | 5. | 11. | 0. | 0. | 0. | 9. | 0. | 14. |
| | | 13. | 0. | 18. | 4. | | | | | | |
| 3 | 0. | 4. | 6. | 4. | 1. | 0. | 2. | 5. | 13. | 11. | 4. |
| | | 2. | 14. | 0. | 3. | 4. | 12. | 6. | 8. | 14. | 2. |
| | | 4. | 2. | 4. | 10. | 0. | 0. | 0. | 8. | 0. | 13. |
| | | 12. | 0. | 17. | 4. | | | | | | |
| 3 | 5. | 3. | 6. | 4. | 0. | 0. | 2. | 4. | 12. | 10. | 4. |
| | | 2. | 13. | 0. | 2. | 4. | 11. | 6. | 7. | 13. | 0. |
| | | 4. | 0. | 4. | 9. | 0. | 0. | 0. | 7. | 0. | 12. |
| | | 11. | 0. | 15. | 3. | | | | | | |
| 3 | 10. | 3. | 5. | 4. | 0. | 0. | 0. | 4. | 11. | 9. | 4. |
| | | 1. | 12. | 0. | 0. | 4. | 10. | 5. | 7. | 12. | 0. |
| | | 3. | 0. | 4. | 8. | 0. | 0. | 0. | 7. | 0. | 11. |
| | | 10. | 0. | 14. | 3. | | | | | | |
| 3 | 15. | 3. | 5. | 3. | 0. | 0. | 0. | 4. | 10. | 9. | 3. |
| | | 0. | 11. | 0. | 0. | 3. | 9. | 5. | 6. | 11. | 0. |
| | | 2. | 0. | 4. | 7. | 0. | 0. | 0. | 6. | 0. | 11. |
| | | 9. | 0. | 13. | 3. | | | | | | |
| 3 | 20. | 2. | 5. | 3. | 0. | 0. | 0. | 4. | 9. | 8. | 2. |
| | | 0. | 10. | 0. | 0. | 3. | 9. | 5. | 6. | 10. | 0. |
| | | 0. | 0. | 4. | 7. | 0. | 0. | 0. | 5. | 0. | 10. |

```
              8.       0.      12.       2.
3   25.       0.       4.       3.       0.       0.       0.       4.       9.       7.       0.
              0.      10.       0.       0.       3.       8.       4.       5.       9.       0.
              0.       0.       2.       6.       0.       0.       0.       5.       0.       9.
              8.       0.      11.       2.
3   30.       0.       4.       3.       0.       0.       0.       3.       8.       7.       0.
              0.       9.       0.       0.       3.       7.       4.       5.       8.       0.
              0.       0.       0.       6.       0.       0.       0.       5.       0.       8.
              7.       0.      10.       0.
3   35.       0.       4.       3.       0.       0.       0.       2.       7.       6.       0.
              0.       8.       0.       0.       3.       7.       4.       5.       8.       0.
              0.       0.       0.       5.       0.       0.       0.       4.       0.       8.
              6.       0.       9.       0.
3   40.       0.       3.       2.       0.       0.       0.       0.       7.       6.       0.
              0.       8.       0.       0.       2.       6.       3.       4.       7.       0.
              0.       0.       0.       5.       0.       0.       0.       4.       0.       7.
              6.       0.       9.       0.
3   45.       0.       2.       2.       0.       0.       0.       0.       6.       5.       0.
              0.       7.       0.       0.       2.       6.       3.       4.       6.       0.
              0.       0.       0.       4.       0.       0.       0.       4.       0.       7.
              5.       0.       8.       0.
3   50.       0.       0.       2.       0.       0.       0.       0.       6.       5.       0.
              0.       7.       0.       0.       2.       5.       3.       4.       6.       0.
              0.       0.       0.       4.       0.       0.       0.       3.       0.       6.
              5.       0.       7.       0.
3   55.       0.       0.       2.       0.       0.       0.       0.       5.       4.       0.
              0.       6.       0.       0.       2.       5.       3.       3.       5.       0.
              0.       0.       0.       4.       0.       0.       0.       3.       0.       6.
              4.       0.       7.       0.
4    0.       0.       0.       2.       0.       0.       0.       0.       5.       4.       0.
              0.       6.       0.       0.       0.       4.       3.       3.       5.       0.
              0.       0.       0.       3.       0.       0.       0.       3.       0.       5.
              4.       0.       6.       0.
4    5.       0.       0.       2.       0.       0.       0.       0.       5.       4.       0.
              0.       5.       0.       0.       0.       4.       2.       3.       5.       0.
              0.       0.       0.       3.       0.       0.       0.       2.       0.       5.
              4.       0.       6.       0.
4   10.       0.       0.       1.       0.       0.       0.       0.       4.       4.       0.
              0.       5.       0.       0.       0.       4.       2.       3.       4.       0.
              0.       0.       0.       3.       0.       0.       0.       2.       0.       5.
              3.       0.       5.       0.
4   15.       0.       0.       0.       0.       0.       0.       0.       4.       3.       0.
              0.       5.       0.       0.       0.       3.       0.       3.       4.       0.
              0.       0.       0.       3.       0.       0.       0.       2.       0.       4.
              3.       0.       5.       0.
4   20.       0.       0.       0.       0.       0.       0.       0.       3.       3.       0.
              0.       4.       0.       0.       0.       3.       0.       2.       3.       0.
              0.       0.       0.       2.       0.       0.       0.       0.       0.       4.
              3.       0.       4.       0.
4   25.       0.       0.       0.       0.       0.       0.       0.       2.       3.       0.
              0.       4.       0.       0.       0.       3.       0.       2.       3.       0.
              0.       0.       0.       0.       0.       0.       0.       0.       0.       4.
              3.       0.       4.       0.
4   30.       0.       0.       0.       0.       0.       0.       0.       1.       3.       0.
              0.       4.       0.       0.       0.       3.       0.       2.       3.       0.
              0.       0.       0.       0.       0.       0.       0.       0.       0.       3.
              2.       0.       4.       0.
4   35.       0.       0.       0.       0.       0.       0.       0.       0.       2.       0.
              0.       4.       0.       0.       0.       3.       0.       0.       3.       0.
              0.       0.       0.       0.       0.       0.       0.       0.       0.       3.
              0.       0.       3.       0.
4   40.       0.       0.       0.       0.       0.       0.       0.       0.       2.       0.
```

```
                0.        3.        0.        0.        0.        2.        0.        0.        2.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        3.
                0.        0.        3.        0.

    4   45.     0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        3.        0.        0.        0.        2.        0.        0.        2.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        3.
                0.        0.        3.        0.

    4   50.     0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        3.        0.        0.        0.        1.        0.        0.        2.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        2.
                0.        0.        3.        0.

    4   55.     0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        3.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        2.
                0.        0.        3.        0.

    5    0.     0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        3.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        2.
                0.        0.        2.        0.

    5    5.     0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        2.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        2.        0.

    5   10.     0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        2.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                0.        0.        2.        0.

1

 10yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
 Blank


                                                                  WIDTH              INVERT     SIDE SLOPES           OVERBA
NK/SURCHARGE
 GUTTER      GUTTER       NDP        NP                          OR DIAM    LENGTH    SLOPE    HORIZ TO VERT   MANNING
 DEPTH       JK
 NUMBER    CONNECTION                                             (FT)      (FT)    (FT/FT)      L     R         N
  (FT)

  201         101          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  202         102          3          3                            .0        1.     .0010       .0    .0       .001
 10.00       -1
                      TIME IN HRS VS INFLOW IN CFS
                            .0      .0        .6    10.1        1.6      .0
  203         103          3          3                            .0        1.     .0010       .0    .0       .001
 10.00       -1
                      TIME IN HRS VS INFLOW IN CFS
                            .0      .0        .2     3.6         .7      .0
  204         104          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  205         105          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  206         106          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  207         107          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  208         108          3          3                            .0        1.     .0010       .0    .0       .001
 10.00       -1
                      TIME IN HRS VS INFLOW IN CFS
                            .0      .0        .7    45.2        1.8      .0
  209         109          0          3                            .0        1.     .0010       .0    .0       .001
 10.00        0
  210         110          3          3                            .0        1.     .0010       .0    .0       .001
 10.00       -1
                      TIME IN HRS VS INFLOW IN CFS
                            .0      .0        .3    33.5        1.0      .0
  211         111          0          3                            .0        1.     .0010       .0    .0       .001
```

```
10.00       0
 212        112         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 213        113         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 214        114         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 215        115         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 216        116         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 217        117         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 218        118         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 219        119         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 220        120         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 221        121         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 222        122         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 223        123         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 224        124         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 225        125         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 226        126         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 227        127         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 228        128         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 229        129         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 230        130         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 231        131         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 232        132         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 233        133         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 234        134         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 235        135         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 236        136         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 237        137         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 238        138         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 402        302         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 401        304         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 106        306         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 107        307         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 404        311         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 112        312         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 414        314         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 115        315         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 117        317         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 118        318         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 119        319         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 420        322         0         3                  .0       1.     .0010       .0    .0       .001
```

```
10.00       0
 124        324         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 126        326         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 128        328         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 129        329         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 130        330         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 131        331         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 432        333         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 135        335         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 136        336         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 138        338         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 125        400         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 127        400         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 132        400         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 104        401         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 105        401         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 111        404         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 114        404         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 416        414         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 122        420         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 123        420         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 133        432         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 134        432         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 101        501         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 113        513         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 116        516         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 120        520         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 121        520         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 137        537         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 102        602         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 103        603         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 108        608         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 109        609         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 110        610         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 400        900         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 337        901         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 320        902         0         3                    .0       1.     .0010       .0    .0       .001
10.00       0
 501        301         7         2      PIPE          .1       1.     .0010       .0    .0       .001
  .10       0
                    RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                          .0      .0       7.5      .0      26.4      .0      63.3      .0      82.9      .0     12
9.0  1400.0
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```
                    201.0  6510.0
 513        313         3          2      PIPE             .1        1.     .0010       .0    .0       .001
  .10       0
                   RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                         .0      .0      20.3      .0      22.6   665.0
 516        316         3          2      PIPE             .1        1.     .0010       .0    .0       .001
  .10       0
                   RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                         .0      .0      18.1      .0      18.9   320.0
 520        320         4          2      PIPE             .1        1.     .0010       .0    .0       .001
  .10       0
                   RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                         .0      .0       9.9      .0      10.0     5.0     280.0     5.0
 537        337         3          2      PIPE             .1        1.     .0010       .0    .0       .001
  .10       0
                   RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                         .0      .0      14.9      .0      17.7   649.0
 602        402         3          2      PIPE             .1        1.     .0010       .0    .0       .001
  .10       0
                   RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                         .0      .0        .8     5.4       1.6    15.4
 603        303         3          2      PIPE             .1        1.     .0010       .0    .0       .001
  .10       0
                   RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                         .0      .0        .1     1.2        .3     6.9
 608        308        10          2      PIPE             .1        1.     .0010       .0    .0       .001
  .10       0
                   RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                         .0      .0        .0      .3        .4      .5       1.6      .6       3.6      .7
6.1    32.4
                        7.1    55.6       8.9   123.5      11.5   266.4      13.1   378.7
 609        309         2          2      PIPE             .1        1.     .0010       .0    .0       .001
  .10       0
                   RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                         .0      .0      12.0    43.4
 610        310         2          2      PIPE             .1        1.     .0010       .0    .0       .001
  .10       0
                   RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                         .0      .0       3.8     1.3
 302        101         0          1      CHANNEL          .0     1698.     .0150      4.0   4.0       .045
 5.00       0
 304        101         0          1      CHANNEL       175.0     1761.     .0133      4.0   4.0       .045
 5.00       0
 311        104         0          1      CHANNEL       135.0     2519.     .0123      4.0   4.0       .045
 5.00       0
 306        105         0          1      CHANNEL        25.0     5603.     .0157      4.0   4.0       .045
 5.00       0
 308        107         0          1      CHANNEL         4.0      625.     .0080       .0    .0       .016
 2.00       0
 312        111         0          1      CHANNEL          .0     2682.     .0082    110.0 110.0       .045
10.00       0
 318        113         0          1      CHANNEL        35.0     3069.     .0071      4.0   4.0       .045
 5.00       0
 314        114         0          1      CHANNEL        60.0     3598.     .0080      4.0   4.0       .045
 5.00       0
 317        118         0          1      CHANNEL          .0     1788.     .0011      4.0   4.0       .045
 5.00       0
 319        118         0          1      CHANNEL          .0     2135.     .0082      4.0   4.0       .045
 5.00       0
 322        120         0          1      CHANNEL       100.0     2881.     .0085      4.0   4.0       .045
 5.00       0
 324        123         0          1      CHANNEL        80.0     5657.     .0133      4.0   4.0       .045
 5.00       0
 326        125         0          1      CHANNEL        45.0     2265.     .0018      4.0   4.0       .045
 5.00       0
 301        126         0          1      CHANNEL       150.0     1716.     .0152      4.0   4.0       .045
 5.00       0
 328        127         0          1      CHANNEL        10.0     2545.     .0026      4.0   4.0       .045
 5.00       0
 329        128         0          1      CHANNEL        25.0     4136.     .0173      4.0   4.0       .045
 5.00       0
 330        128         0          1      CHANNEL        15.0     6271.     .0148      4.0   4.0       .045
 5.00       0
 331        129         0          1      CHANNEL          .0     2147.     .0135      4.0   4.0       .045
 5.00       0
 333        132         0          1      CHANNEL        55.0     4716.     .0068      4.0   4.0       .045
 5.00       0
 335        134         0          1      CHANNEL        85.0     7048.     .0123      4.0   4.0       .045
```

```
 5.00        0
 336         135          0          1      CHANNEL        35.0     5158.     .0099      4.0   4.0       .045
 5.00        0
 338         137          0          1      CHANNEL        90.0     5244.     .0139      4.0   4.0       .045
 5.00        0
 303         402          0          1      CHANNEL         5.0     1011.     .0151      5.0   5.0       .035
 3.00        0
 307         404          0          1      CHANNEL         5.0     1308.     .0031      5.0   5.0       .035
 3.00        0
 315         414          0          1      CHANNEL          .0     2696.     .0097      4.0   4.0       .045
 5.00        0
 313         416          0          1      CHANNEL        10.0     2381.     .0054      4.0   4.0       .045
 5.00        0
 316         416          0          1      CHANNEL          .0      965.     .0053      4.0   4.0       .045
 5.00        0
 309         608          0          1      CHANNEL         5.0     1757.     .0091      5.0   5.0       .035
 3.00        0
 310         609          0          1      CHANNEL         5.0     3896.     .0100      5.0   5.0       .035
 3.00        0
0TOTAL NUMBER OF GUTTERS/PIPES, 125
1


 10yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
 Blank


 ARRANGEMENT OF SUBCATCHMENTS AND GUTTERS/PIPES

       GUTTER     TRIBUTARY GUTTER/PIPE                                          TRIBUTARY SUBAREA
         D.A.(AC)

       101       201  302  304    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
  0    0  2658.6

       102       202    0    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
  0    0      .0

       103       203    0    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
  0    0      .0

       104       204  311    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
  0    0  2034.6

       105       205  306    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
  0    0   346.9

       106       206    0    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
  0    0    73.0

       107       207  308    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
  0    0   135.0

       108       208    0    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
  0    0      .0

       109       209    0    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
  0    0   130.6

       110       210    0    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
  0    0      .0

       111       211  312    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
  0    0   334.1

       112       212    0    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
  0    0   284.2

       113       213  318    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
  0    0   788.5

       114       214  314    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
  0    0  1445.1

       115       215    0    0    0    0    0    0    0    0    0              0    0    0    0    0    0    0    0
  0    0    62.1
```

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 116 | 216 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 405.1 |
| 117 | 217 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94.7 |
| 118 | 218 | 317 | 319 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 369.9 |
| 119 | 219 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 164.5 |
| 120 | 220 | 322 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1415.0 |
| 121 | 221 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 211.2 |
| 122 | 222 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 254.7 |
| 123 | 223 | 324 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 718.1 |
| 124 | 224 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 152.3 |
| 125 | 225 | 326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2784.6 |
| 126 | 226 | 301 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2749.4 |
| 127 | 227 | 328 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 521.6 |
| 128 | 228 | 329 | 330 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 457.6 |
| 129 | 229 | 331 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62.1 |
| 130 | 230 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21.8 |
| 131 | 231 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.0 |
| 132 | 232 | 333 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1356.8 |
| 133 | 233 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33.3 |
| 134 | 234 | 335 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 985.0 |
| 135 | 235 | 336 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 535.0 |
| 136 | 236 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66.6 |
| 137 | 237 | 338 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 858.2 |
| 138 | 238 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 173.4 |
| 201 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 277.1 |
| 202 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 203 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 204 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 120.3 |
| 205 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 273.9 |
| 206 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73.0 |
| 207 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.5 |
| 208 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 209 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130.6 |
| 210 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 211 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49.9 |
| 212 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 284.2 |
| 213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 418.6 |
| 214 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 189.4 |
| 215 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62.1 |
| 216 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 405.1 |
| 217 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94.7 |
| 218 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 110.7 |
| 219 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 164.5 |
| 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 442.2 |
| 221 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 211.2 |
| 222 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 254.7 |
| 223 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 565.8 |
| 224 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 152.3 |
| 225 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35.2 |
| 226 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90.9 |
| 227 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64.0 |
| 228 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 373.8 |
| 229 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39.0 |

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 230 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21.8 |
| 231 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.0 |
| 232 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 338.6 |
| 233 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33.3 |
| 234 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 449.9 |
| 235 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 468.5 |
| 236 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66.6 |
| 237 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 684.8 |
| 238 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 173.4 |
| 301 | 501 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2658.6 |
| 302 | 402 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 303 | 603 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 304 | 401 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2381.4 |
| 306 | 106 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73.0 |
| 307 | 107 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 135.0 |
| 308 | 608 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130.6 |
| 309 | 609 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130.6 |
| 310 | 610 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 311 | 404 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1914.2 |
| 312 | 112 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 284.2 |
| 313 | 513 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 788.5 |
| 314 | 414 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1255.7 |
| 315 | 115 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62.1 |
| 316 | 516 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 405.1 |
| 317 | 117 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94.7 |
| 318 | 118 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 369.9 |

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 319 | 119 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 164.5 | | | | | | | | | | | | | | | | | | | | | |
| 320 | 520 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 1626.2 | | | | | | | | | | | | | | | | | | | | | |
| 322 | 420 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 972.8 | | | | | | | | | | | | | | | | | | | | | |
| 324 | 124 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 152.3 | | | | | | | | | | | | | | | | | | | | | |
| 326 | 126 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 2749.4 | | | | | | | | | | | | | | | | | | | | | |
| 328 | 128 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 457.6 | | | | | | | | | | | | | | | | | | | | | |
| 329 | 129 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 62.1 | | | | | | | | | | | | | | | | | | | | | |
| 330 | 130 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 21.8 | | | | | | | | | | | | | | | | | | | | | |
| 331 | 131 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 23.0 | | | | | | | | | | | | | | | | | | | | | |
| 333 | 432 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 1018.2 | | | | | | | | | | | | | | | | | | | | | |
| 335 | 135 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 535.0 | | | | | | | | | | | | | | | | | | | | | |
| 336 | 136 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 66.6 | | | | | | | | | | | | | | | | | | | | | |
| 337 | 537 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 858.2 | | | | | | | | | | | | | | | | | | | | | |
| 338 | 138 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 173.4 | | | | | | | | | | | | | | | | | | | | | |
| 400 | 125 | 127 | 132 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 4663.0 | | | | | | | | | | | | | | | | | | | | | |
| 401 | 104 | 105 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 2381.4 | | | | | | | | | | | | | | | | | | | | | |
| 402 | 602 | 303 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | .0 | | | | | | | | | | | | | | | | | | | | | |
| 404 | 111 | 114 | 307 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 1914.2 | | | | | | | | | | | | | | | | | | | | | |
| 414 | 416 | 315 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 1255.7 | | | | | | | | | | | | | | | | | | | | | |
| 416 | 313 | 316 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 1193.6 | | | | | | | | | | | | | | | | | | | | | |
| 420 | 122 | 123 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 972.8 | | | | | | | | | | | | | | | | | | | | | |
| 432 | 133 | 134 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 1018.2 | | | | | | | | | | | | | | | | | | | | | |
| 501 | 101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 2658.6 | | | | | | | | | | | | | | | | | | | | | |
| 513 | 113 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 788.5 | | | | | | | | | | | | | | | | | | | | | |
| 516 | 116 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 405.1 | | | | | | | | | | | | | | | | | | | | | |
| 520 | 120 | 121 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 1626.2 | | | | | | | | | | | | | | | | | | | | | |

```
      537       137    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   858.2

      602       102    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0

      603       103    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0

      608       108  309    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   130.6

      609       109  310    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   130.6

      610       110    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0
1
```

10yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
Blank

HYDROGRAPHS ARE LISTED FOR THE FOLLOWING 86 CONVEYANCE ELEMENTS

THE UPPER NUMBER IS DISCHARGE IN CFS
THE LOWER NUMBER IS ONE OF THE FOLLOWING CASES:
( ) DENOTES DEPTH ABOVE INVERT IN FEET
(S) DENOTES STORAGE IN AC-FT FOR DETENTION DAM. DISCHARGE INCLUDES SPILLWAY OUTFLOW.
(I) DENOTES GUTTER INFLOW IN CFS FROM SPECIFIED INFLOW HYDROGRAPH
(D) DENOTES DISCHARGE IN CFS DIVERTED FROM THIS GUTTER
(O) DENOTES STORAGE IN AC-FT FOR SURCHARGED GUTTER

| TIME(HR/MIN) | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 |
|---|---|---|---|---|---|---|---|---|---|---|
| | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |
| | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 |
| | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 301 | 302 |
| | 303 | 304 | 306 | 307 | 308 | 309 | 310 | 311 | 312 | 313 |
| | 314 | 315 | 316 | 317 | 318 | 319 | 320 | 322 | 324 | 326 |
| | 328 | 329 | 330 | 331 | 333 | 335 | 336 | 338 | 400 | 401 |
| | 402 | 404 | 414 | 416 | 420 | 432 | 501 | 513 | 516 | 520 |
| | 537 | 602 | 603 | 608 | 609 | 610 | | | | |
| 0 5. | 0. | 2. | 1. | 0. | 0. | 0. | 0. | 6. | 0. | 8. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0(S) | .0(S) | .0(S) | .0(S) |
| | 0. | 0. | 0. | 0. | 0. | 0. | | | | |
| | .0(S) | .0(S) | .0(S) | .0(S) | .0(S) | .0(S) | | | | |
| 0 10. | 0. | 3. | 3. | 0. | 0. | 0. | 0. | 11. | 0. | 16. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .1(S) | 0. .0(S) | 0. .1(S) | | | | |
| 0 | 15. | 0. .0( ) | 5. .0( ) | 4. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 17. .0( ) | 0. .0( ) | 24. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .2(S) | 0. .0(S) | 0. .2(S) | | | | |
| 0 | 20. | 0. .0( ) | 6. .0( ) | 2. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 23. .0( ) | 0. .0( ) | 32. .0( ) |
| | | 1. .0( ) | 1. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .2( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .1( ) | 0. .1( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .2( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 1. .0( ) |
| | | 1. .0( ) | 1. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0(S) | 0. .0(S) | 0. .0(S) | 0. .0(S) |
| | | 0. .0(S) | 1. .1(S) | 1. .1(S) | 0. .3(S) | 0. .0(S) | 0. .4(S) | | | | |
| 0 | 25. | 7. .0( ) | 8. .0( ) | 3. .0( ) | 4. .0( ) | 1. .0( ) | 1. .0( ) | 3. .0( ) | 28. .0( ) | 3. .0( ) | 33. .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 3.<br>.0( ) | 8.<br>.0( ) | 5.<br>.0( ) | 7.<br>.0( ) | 1.<br>.0( ) | 3.<br>.0( ) | 12.<br>.0( ) | 5.<br>.0( ) | 1.<br>.0( ) | 4.<br>.0( ) |
| | | 3.<br>.0( ) | 2.<br>.0( ) | 5.<br>.0( ) | 4.<br>.0( ) | 1.<br>.0( ) | 2.<br>.0( ) | 2.<br>.0( ) | 6.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) |
| | | 1.<br>.0( ) | 4.<br>.0( ) | 1.<br>.0( ) | 4.<br>.0( ) | 7.<br>.0( ) | 2.<br>.0( ) | 5.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 0.<br>.3( ) |
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.1( ) | 1.<br>.6( ) | 0.<br>.0( ) | 0.<br>.2( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.2( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 7.<br>.0( ) | 5.<br>.0( ) |
| | | 1.<br>.0( ) | 10.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 7.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) |
| | | 0.<br>.0(S) | 1.<br>.1(S) | 1.<br>.1(S) | 0.<br>.5(S) | 0.<br>.0(S) | 0.<br>.7(S) | | | | |
| 0 | 30. | 27.<br>.0( ) | 9.<br>.0( ) | 1.<br>.0( ) | 13.<br>.0( ) | 7.<br>.0( ) | 6.<br>.0( ) | 4.<br>.0( ) | 34.<br>.0( ) | 12.<br>.0( ) | 24.<br>.0( ) |
| | | 8.<br>.0( ) | 24.<br>.0( ) | 19.<br>.0( ) | 22.<br>.0( ) | 5.<br>.0( ) | 14.<br>.0( ) | 29.<br>.0( ) | 17.<br>.0( ) | 7.<br>.0( ) | 18.<br>.0( ) |
| | | 11.<br>.0( ) | 9.<br>.0( ) | 22.<br>.0( ) | 16.<br>.0( ) | 5.<br>.0( ) | 8.<br>.0( ) | 7.<br>.0( ) | 24.<br>.0( ) | 6.<br>.0( ) | 1.<br>.0( ) |
| | | 5.<br>.0( ) | 18.<br>.0( ) | 5.<br>.0( ) | 16.<br>.0( ) | 28.<br>.0( ) | 9.<br>.0( ) | 21.<br>.0( ) | 13.<br>.0( ) | 0.<br>.0( ) | 1.<br>.3( ) |
| | | 0.<br>.1( ) | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.2( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 1.<br>.1( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.3( ) | 0.<br>.1( ) | 3.<br>1.1( ) | 0.<br>.0( ) | 1.<br>.4( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 1.<br>.2( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.3( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 30.<br>.0( ) | 20.<br>.0( ) |
| | | 2.<br>.0( ) | 30.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 32.<br>.0( ) | 21.<br>.0( ) | 0.<br>.1(S) | 0.<br>.1(S) | 0.<br>.1(S) | 0.<br>.1(S) |
| | | 0.<br>.1(S) | 1.<br>.2(S) | 1.<br>.1(S) | 1.<br>.7(S) | 0.<br>.1(S) | 0.<br>.9(S) | | | | |
| 0 | 35. | 54.<br>.0( ) | 11.<br>.0( ) | 1.<br>.0( ) | 24.<br>.0( ) | 17.<br>.0( ) | 11.<br>.0( ) | 4.<br>.0( ) | 39.<br>.0( ) | 22.<br>.0( ) | 25.<br>.0( ) |
| | | 14.<br>.0( ) | 43.<br>.0( ) | 41.<br>.0( ) | 37.<br>.0( ) | 9.<br>.0( ) | 29.<br>.0( ) | 37.<br>.0( ) | 33.<br>.0( ) | 14.<br>.0( ) | 41.<br>.0( ) |
| | | 21.<br>.0( ) | 20.<br>.0( ) | 48.<br>.0( ) | 29.<br>.0( ) | 8.<br>.0( ) | 14.<br>.0( ) | 17.<br>.0( ) | 47.<br>.0( ) | 10.<br>.0( ) | 2.<br>.0( ) |
| | | 6.<br>.0( ) | 37.<br>.0( ) | 8.<br>.0( ) | 35.<br>.0( ) | 56.<br>.0( ) | 15.<br>.0( ) | 47.<br>.0( ) | 26.<br>.0( ) | 0.<br>.0( ) | 1.<br>.4( ) |
| | | 1.<br>.1( ) | 4.<br>.0( ) | 0.<br>.0( ) | 2.<br>.3( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 4.<br>.1( ) | 4.<br>.2( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 1.<br>.5( ) | 0.<br>.1( ) | 8.<br>1.5( ) | 2.<br>.1( ) | 3.<br>.7( ) | 0.<br>.0( ) | 4.<br>.1( ) | 1.<br>.0( ) | 0.<br>.0( ) |
| | | 5.<br>.5( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.5( ) | 1.<br>.1( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 62.<br>.0( ) | 41.<br>.0( ) |
| | | 2.<br>.0( ) | 53.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 69.<br>.0( ) | 43.<br>.0( ) | 0.<br>.4(S) | 0.<br>.3(S) | 0.<br>.2(S) | 0.<br>.5(S) |
| | | 0.<br>.3(S) | 2.<br>.2(S) | 1.<br>.1(S) | 1.<br>.9(S) | 1.<br>.2(S) | 0.<br>1.0(S) | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 40. | 76.<br>.0( ) | 8.<br>.0( ) | 0.<br>.0( ) | 37.<br>.0( ) | 26.<br>.0( ) | 14.<br>.0( ) | 4.<br>.0( ) | 45.<br>.0( ) | 28.<br>.0( ) | 16.<br>.0( ) |
| | | 21.<br>.0( ) | 57.<br>.0( ) | 65.<br>.0( ) | 45.<br>.0( ) | 11.<br>.0( ) | 45.<br>.0( ) | 37.<br>.0( ) | 47.<br>.0( ) | 21.<br>.0( ) | 69.<br>.0( ) |
| | | 31.<br>.0( ) | 31.<br>.0( ) | 75.<br>.0( ) | 36.<br>.0( ) | 11.<br>.0( ) | 18.<br>.0( ) | 29.<br>.0( ) | 67.<br>.0( ) | 12.<br>.0( ) | 1.<br>.0( ) |
| | | 6.<br>.0( ) | 56.<br>.0( ) | 8.<br>.0( ) | 55.<br>.0( ) | 80.<br>.0( ) | 17.<br>.0( ) | 74.<br>.0( ) | 34.<br>.0( ) | 0.<br>.0( ) | 1.<br>.5( ) |
| | | 1.<br>.1( ) | 11.<br>.1( ) | 1.<br>.1( ) | 2.<br>.3( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 11.<br>.1( ) | 9.<br>.3( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 3.<br>.7( ) | 0.<br>.1( ) | 14.<br>1.8( ) | 6.<br>.2( ) | 7.<br>1.0( ) | 0.<br>.0( ) | 13.<br>.2( ) | 2.<br>.0( ) | 1.<br>.1( ) |
| | | 15.<br>.8( ) | 1.<br>.1( ) | 0.<br>.0( ) | 3.<br>.6( ) | 4.<br>.1( ) | 3.<br>.1( ) | 1.<br>.1( ) | 1.<br>.0( ) | 96.<br>.0( ) | 62.<br>.0( ) |
| | | 3.<br>.0( ) | 69.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 105.<br>.0( ) | 64.<br>.0( ) | 0.<br>.9(S) | 0.<br>.7(S) | 0.<br>.5(S) | 0.<br>1.0(S) |
| | | 0.<br>.8(S) | 2.<br>.3(S) | 1.<br>.1(S) | 1.<br>1.2(S) | 1.<br>.3(S) | 0.<br>1.2(S) | | | | |
| 0 | 45. | 94.<br>.0( ) | 9.<br>.0( ) | 0.<br>.0( ) | 49.<br>.0( ) | 32.<br>.0( ) | 15.<br>.0( ) | 4.<br>.0( ) | 42.<br>.0( ) | 29.<br>.0( ) | 17.<br>.0( ) |
| | | 28.<br>.0( ) | 64.<br>.0( ) | 84.<br>.0( ) | 46.<br>.0( ) | 12.<br>.0( ) | 58.<br>.0( ) | 34.<br>.0( ) | 57.<br>.0( ) | 25.<br>.0( ) | 101.<br>.0( ) |
| | | 37.<br>.0( ) | 38.<br>.0( ) | 95.<br>.0( ) | 37.<br>.0( ) | 12.<br>.0( ) | 19.<br>.0( ) | 43.<br>.0( ) | 78.<br>.0( ) | 13.<br>.0( ) | 0.<br>.0( ) |
| | | 6.<br>.0( ) | 71.<br>.0( ) | 8.<br>.0( ) | 74.<br>.0( ) | 94.<br>.0( ) | 16.<br>.0( ) | 97.<br>.0( ) | 38.<br>.0( ) | 0.<br>.0( ) | 2.<br>.5( ) |
| | | 1.<br>.1( ) | 25.<br>.1( ) | 2.<br>.1( ) | 3.<br>.4( ) | 1.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 22.<br>.2( ) | 16.<br>.4( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 5.<br>.8( ) | 0.<br>.1( ) | 18.<br>2.0( ) | 14.<br>.3( ) | 12.<br>1.2( ) | 0.<br>.0( ) | 31.<br>.3( ) | 3.<br>.1( ) | 2.<br>.1( ) |
| | | 27.<br>1.2( ) | 2.<br>.1( ) | 0.<br>.0( ) | 4.<br>.7( ) | 9.<br>.2( ) | 7.<br>.1( ) | 2.<br>.1( ) | 3.<br>.1( ) | 127.<br>.0( ) | 81.<br>.0( ) |
| | | 3.<br>.0( ) | 77.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 133.<br>.0( ) | 81.<br>.0( ) | 0.<br>1.5(S) | 0.<br>1.2(S) | 0.<br>.8(S) | 0.<br>1.8(S) |
| | | 0.<br>1.3(S) | 2.<br>.3(S) | 1.<br>.1(S) | 1.<br>1.5(S) | 2.<br>.5(S) | 0.<br>1.3(S) | | | | |
| 0 | 50. | 109.<br>.0( ) | 7.<br>.0( ) | 0.<br>.0( ) | 60.<br>.0( ) | 34.<br>.0( ) | 14.<br>.0( ) | 3.<br>.0( ) | 38.<br>.0( ) | 28.<br>.0( ) | 8.<br>.0( ) |
| | | 34.<br>.0( ) | 65.<br>.0( ) | 99.<br>.0( ) | 44.<br>.0( ) | 11.<br>.0( ) | 66.<br>.0( ) | 31.<br>.0( ) | 63.<br>.0( ) | 26.<br>.0( ) | 131.<br>.0( ) |
| | | 39.<br>.0( ) | 42.<br>.0( ) | 106.<br>.0( ) | 35.<br>.0( ) | 13.<br>.0( ) | 18.<br>.0( ) | 56.<br>.0( ) | 82.<br>.0( ) | 13.<br>.0( ) | 0.<br>.0( ) |
| | | 6.<br>.0( ) | 83.<br>.0( ) | 7.<br>.0( ) | 88.<br>.0( ) | 99.<br>.0( ) | 15.<br>.0( ) | 111.<br>.0( ) | 37.<br>.0( ) | 0.<br>.0( ) | 2.<br>.6( ) |
| | | 1.<br>.1( ) | 42.<br>.2( ) | 3.<br>.1( ) | 3.<br>.4( ) | 1.<br>.1( ) | 1.<br>.1( ) | 0.<br>.0( ) | 33.<br>.2( ) | 23.<br>.4( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 7.<br>.9( ) | 0.<br>.1( ) | 21.<br>2.2( ) | 23.<br>.4( ) | 16.<br>1.4( ) | 0.<br>.0( ) | 54.<br>.4( ) | 5.<br>.1( ) | 4.<br>.2( ) |
| | | 40.<br>1.5( ) | 3.<br>.1( ) | 0.<br>.0( ) | 4.<br>.8( ) | 17.<br>.3( ) | 13.<br>.1( ) | 3.<br>.1( ) | 5.<br>.1( ) | 151.<br>.0( ) | 94.<br>.0( ) |
| | | 3.<br>.0( ) | 81.<br>.0( ) | 7.<br>.0( ) | 0.<br>.0( ) | 148.<br>.0( ) | 95.<br>.0( ) | 0.<br>2.2(S) | 0.<br>1.8(S) | 0.<br>1.3(S) | 0.<br>2.9(S) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 3. | 1. | 1. | 3. | 0. | | | | |
| | | 2.1(S) | .4(S) | .1(S) | 1.8(S) | .7(S) | 1.3(S) | | | | |
| 0 | 55. | 123. | 8. | 0. | 69. | 34. | 13. | 4. | 36. | 26. | 9. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 40. | 62. | 108. | 42. | 11. | 68. | 26. | 67. | 26. | 156. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 38. | 42. | 110. | 32. | 14. | 17. | 66. | 80. | 13. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 91. | 7. | 97. | 97. | 14. | 118. | 34. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| | | 1. | 60. | 3. | 3. | 1. | 1. | 0. | 45. | 29. | 0. |
| | | .1( ) | .2( ) | .1( ) | .4( ) | .1( ) | .2( ) | .0( ) | .2( ) | .5( ) | .0( ) |
| | | 0. | 8. | 0. | 23. | 32. | 20. | 0. | 77. | 7. | 5. |
| | | .0( ) | 1.0( ) | .1( ) | 2.2( ) | .5( ) | 1.4( ) | .0( ) | .4( ) | .1( ) | .2( ) |
| | | 50. | 5. | 0. | 5. | 27. | 19. | 3. | 7. | 170. | 104. |
| | | 1.6( ) | .2( ) | .0( ) | .8( ) | .4( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 3. | 85. | 8. | 0. | 152. | 104. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.0(S) | 2.5(S) | 1.7(S) | 4.1(S) |
| | | 0. | 3. | 1. | 1. | 3. | 1. | | | | |
| | | 2.8(S) | .4(S) | .1(S) | 2.1(S) | .9(S) | 1.4(S) | | | | |
| 1 | 0. | 135. | 5. | 0. | 79. | 33. | 13. | 4. | 32. | 24. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 45. | 59. | 112. | 40. | 10. | 68. | 23. | 68. | 24. | 172. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 35. | 40. | 108. | 29. | 15. | 16. | 73. | 77. | 13. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 97. | 6. | 101. | 92. | 13. | 118. | 32. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| | | 1. | 77. | 4. | 3. | 1. | 2. | 0. | 55. | 34. | 0. |
| | | .1( ) | .3( ) | .1( ) | .4( ) | .1( ) | .2( ) | .0( ) | .3( ) | .5( ) | .0( ) |
| | | 1. | 8. | 0. | 23. | 41. | 22. | 0. | 97. | 9. | 6. |
| | | .0( ) | 1.0( ) | .1( ) | 2.2( ) | .6( ) | 1.5( ) | .0( ) | .5( ) | .1( ) | .3( ) |
| | | 58. | 6. | 0. | 5. | 38. | 26. | 4. | 9. | 186. | 112. |
| | | 1.8( ) | .2( ) | .0( ) | .8( ) | .4( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 4. | 88. | 8. | 0. | 148. | 108. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 3.8(S) | 3.3(S) | 2.2(S) | 5.5(S) |
| | | 0. | 3. | 1. | 1. | 4. | 1. | | | | |
| | | 3.7(S) | .4(S) | .1(S) | 2.3(S) | 1.0(S) | 1.4(S) | | | | |
| 1 | 5. | 144. | 6. | 0. | 88. | 32. | 12. | 4. | 29. | 22. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 49. | 57. | 115. | 38. | 10. | 64. | 21. | 67. | 22. | 181. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 33. | 38. | 103. | 27. | 16. | 15. | 77. | 74. | 12. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 104. | 6. | 103. | 87. | 12. | 114. | 30. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .7( ) |
| | | 1. | 92. | 5. | 3. | 1. | 3. | 0. | 64. | 38. | 0. |
| | | .1( ) | .3( ) | .2( ) | .4( ) | .1( ) | .3( ) | .1( ) | .3( ) | .5( ) | .0( ) |
| | | 1. | 9. | 0. | 23. | 48. | 22. | 0. | 110. | 10. | 8. |
| | | .0( ) | 1.0( ) | .1( ) | 2.2( ) | .6( ) | 1.5( ) | .0( ) | .5( ) | .1( ) | .3( ) |
| | | 63. | 7. | 0. | 5. | 49. | 32. | 5. | 11. | 198. | 119. |
| | | 1.8( ) | .2( ) | .0( ) | .8( ) | .5( ) | .3( ) | .1( ) | .1( ) | .0( ) | .0( ) |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4. .0( ) | 90. .0( ) | 9. .0( ) | 0. .0( ) | 141. .0( ) | 109. .0( ) | 0. 4.8(S) | 0. 4.1(S) | 0. 2.6(S) | 0. 7.0(S) | |
| | | 0. 4.4(S) | 3. .4(S) | 1. .1(S) | 1. 2.5(S) | 4. 1.1(S) | 1. 1.4(S) | | | | | |
| 1 | 10. | 152. .0( ) | 4. .0( ) | 0. .0( ) | 95. .0( ) | 31. .0( ) | 11. .0( ) | 4. .0( ) | 25. .0( ) | 20. .0( ) | 0. .0( ) | |
| | | 52. .0( ) | 56. .0( ) | 116. .0( ) | 36. .0( ) | 9. .0( ) | 61. .0( ) | 18. .0( ) | 64. .0( ) | 22. .0( ) | 184. .0( ) | |
| | | 32. .0( ) | 36. .0( ) | 98. .0( ) | 24. .0( ) | 17. .0( ) | 14. .0( ) | 80. .0( ) | 71. .0( ) | 12. .0( ) | 0. .0( ) | |
| | | 4. .0( ) | 111. .0( ) | 5. .0( ) | 104. .0( ) | 83. .0( ) | 10. .0( ) | 108. .0( ) | 28. .0( ) | 0. .0( ) | 3. .7( ) | |
| | | 1. .1( ) | 104. .3( ) | 6. .2( ) | 4. .4( ) | 1. .1( ) | 3. .3( ) | 0. .1( ) | 72. .3( ) | 41. .5( ) | 0. .0( ) | |
| | | 2. .1( ) | 9. 1.0( ) | 0. .1( ) | 22. 2.2( ) | 52. .7( ) | 22. 1.5( ) | 0. .0( ) | 118. .6( ) | 12. .1( ) | 8. .3( ) | |
| | | 65. 1.9( ) | 8. .2( ) | 0. .0( ) | 4. .8( ) | 59. .6( ) | 37. .3( ) | 5. .2( ) | 13. .1( ) | 208. .0( ) | 126. .0( ) | |
| | | 4. .0( ) | 91. .0( ) | 9. .0( ) | 0. .0( ) | 133. .0( ) | 109. .0( ) | 0. 5.8(S) | 0. 4.9(S) | 0. 3.1(S) | 0. 8.5(S) | |
| | | 0. 5.2(S) | 3. .4(S) | 1. .0(S) | 1. 2.7(S) | 5. 1.3(S) | 1. 1.4(S) | | | | | |
| 1 | 15. | 158. .0( ) | 5. .0( ) | 0. .0( ) | 100. .0( ) | 30. .0( ) | 10. .0( ) | 4. .0( ) | 22. .0( ) | 19. .0( ) | 0. .0( ) | |
| | | 54. .0( ) | 54. .0( ) | 116. .0( ) | 34. .0( ) | 9. .0( ) | 58. .0( ) | 17. .0( ) | 62. .0( ) | 20. .0( ) | 184. .0( ) | |
| | | 31. .0( ) | 34. .0( ) | 93. .0( ) | 22. .0( ) | 17. .0( ) | 13. .0( ) | 81. .0( ) | 68. .0( ) | 11. .0( ) | 0. .0( ) | |
| | | 4. .0( ) | 116. .0( ) | 5. .0( ) | 105. .0( ) | 79. .0( ) | 10. .0( ) | 103. .0( ) | 26. .0( ) | 0. .0( ) | 4. .7( ) | |
| | | 1. .1( ) | 114. .3( ) | 6. .2( ) | 4. .5( ) | 1. .1( ) | 4. .3( ) | 0. .1( ) | 77. .3( ) | 44. .6( ) | 0. .0( ) | |
| | | 2. .1( ) | 9. 1.0( ) | 0. .1( ) | 21. 2.2( ) | 55. .7( ) | 22. 1.5( ) | 1. .0( ) | 122. .6( ) | 13. .1( ) | 9. .3( ) | |
| | | 66. 1.9( ) | 8. .2( ) | 0. .0( ) | 4. .7( ) | 68. .6( ) | 41. .3( ) | 6. .2( ) | 14. .1( ) | 214. .0( ) | 129. .0( ) | |
| | | 4. .0( ) | 92. .0( ) | 9. .0( ) | 0. .0( ) | 127. .0( ) | 110. .0( ) | 0. 6.9(S) | 0. 5.7(S) | 0. 3.5(S) | 1. 9.9(S) | |
| | | 0. 5.9(S) | 3. .5(S) | 0. .0(S) | 1. 2.9(S) | 5. 1.4(S) | 1. 1.4(S) | | | | | |
| 1 | 20. | 161. .0( ) | 2. .0( ) | 0. .0( ) | 103. .0( ) | 28. .0( ) | 9. .0( ) | 4. .0( ) | 18. .0( ) | 17. .0( ) | 0. .0( ) | |
| | | 55. .0( ) | 52. .0( ) | 113. .0( ) | 32. .0( ) | 8. .0( ) | 55. .0( ) | 15. .0( ) | 58. .0( ) | 19. .0( ) | 181. .0( ) | |
| | | 29. .0( ) | 32. .0( ) | 89. .0( ) | 20. .0( ) | 17. .0( ) | 12. .0( ) | 80. .0( ) | 64. .0( ) | 11. .0( ) | 0. .0( ) | |
| | | 4. .0( ) | 121. .0( ) | 5. .0( ) | 105. .0( ) | 75. .0( ) | 9. .0( ) | 99. .0( ) | 23. .0( ) | 0. .0( ) | 4. .7( ) | |
| | | 1. .1( ) | 121. .4( ) | 7. .2( ) | 4. .5( ) | 1. .1( ) | 4. .4( ) | 0. .1( ) | 82. .3( ) | 45. .6( ) | 0. .0( ) | |
| | | 2. .1( ) | 9. 1.0( ) | 0. .1( ) | 20. 2.1( ) | 57. .7( ) | 21. 1.5( ) | 5. .0( ) | 123. .6( ) | 13. .2( ) | 9. .3( ) | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 66. | 9. | 0. | 4. | 75. | 45. | 6. | 15. | 218. | 131. | |
| | | 1.9( ) | .2( ) | .0( ) | .7( ) | .7( ) | .3( ) | .2( ) | .2( ) | .0( ) | .0( ) | |
| | | 4. | 91. | 9. | 0. | 121. | 110. | 0. | 0. | 0. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 8.0(S) | 6.4(S) | 3.9(S) | 11.4(S) | |
| | | 0. | 3. | 0. | 1. | 5. | 1. | | | | | |
| | | 6.6(S) | .5(S) | .0(S) | 3.1(S) | 1.5(S) | 1.4(S) | | | | | |
| 1 | 25. | 162. | 3. | 0. | 104. | 27. | 9. | 4. | 16. | 16. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 56. | 49. | 110. | 30. | 7. | 52. | 13. | 55. | 18. | 176. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 27. | 31. | 84. | 18. | 17. | 11. | 78. | 60. | 10. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 3. | 123. | 4. | 105. | 70. | 8. | 94. | 21. | 0. | 4. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .7( ) | |
| | | 0. | 125. | 7. | 4. | 1. | 5. | 0. | 84. | 46. | 0. | |
| | | .1( ) | .4( ) | .2( ) | .5( ) | .1( ) | .4( ) | .1( ) | .3( ) | .6( ) | .0( ) | |
| | | 3. | 8. | 0. | 19. | 57. | 20. | 5. | 121. | 14. | 10. | |
| | | .1( ) | 1.0( ) | .1( ) | 2.1( ) | .7( ) | 1.5( ) | .0( ) | .6( ) | .2( ) | .3( ) | |
| | | 65. | 9. | 0. | 4. | 82. | 48. | 6. | 16. | 219. | 132. | |
| | | 1.9( ) | .2( ) | .0( ) | .7( ) | .7( ) | .3( ) | .2( ) | .2( ) | .0( ) | .0( ) | |
| | | 4. | 90. | 8. | 0. | 115. | 109. | 0. | 0. | 0. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 9.1(S) | 7.2(S) | 4.2(S) | 12.8(S) | |
| | | 0. | 3. | 0. | 1. | 6. | 1. | | | | | |
| | | 7.3(S) | .5(S) | .0(S) | 3.2(S) | 1.5(S) | 1.4(S) | | | | | |
| 1 | 30. | 161. | 0. | 0. | 105. | 26. | 8. | 3. | 12. | 14. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 55. | 46. | 105. | 28. | 7. | 49. | 11. | 51. | 17. | 169. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 25. | 29. | 79. | 16. | 17. | 10. | 75. | 56. | 9. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 3. | 125. | 4. | 103. | 65. | 7. | 89. | 20. | 0. | 4. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .7( ) | |
| | | 0. | 128. | 7. | 4. | 1. | 5. | 0. | 86. | 46. | 0. | |
| | | .1( ) | .4( ) | .2( ) | .5( ) | .1( ) | .4( ) | .1( ) | .3( ) | .6( ) | .0( ) | |
| | | 3. | 8. | 0. | 17. | 56. | 19. | 5. | 118. | 14. | 10. | |
| | | .1( ) | 1.0( ) | .1( ) | 2.0( ) | .7( ) | 1.4( ) | .0( ) | .6( ) | .2( ) | .3( ) | |
| | | 63. | 9. | 0. | 4. | 87. | 51. | 6. | 16. | 217. | 130. | |
| | | 1.8( ) | .2( ) | .0( ) | .7( ) | .7( ) | .3( ) | .2( ) | .2( ) | .0( ) | .0( ) | |
| | | 4. | 87. | 8. | 0. | 107. | 107. | 0. | 0. | 0. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 10.2(S) | 8.0(S) | 4.6(S) | 14.1(S) | |
| | | 0. | 3. | 0. | 1. | 6. | 1. | | | | | |
| | | 7.9(S) | .4(S) | .0(S) | 3.3(S) | 1.6(S) | 1.4(S) | | | | | |
| 1 | 35. | 158. | 2. | 0. | 103. | 24. | 7. | 2. | 9. | 13. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 55. | 43. | 99. | 26. | 6. | 46. | 10. | 47. | 15. | 161. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 23. | 26. | 74. | 14. | 16. | 9. | 72. | 52. | 9. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 3. | 126. | 4. | 101. | 60. | 6. | 84. | 18. | 0. | 4. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .7( ) | |
| | | 0. | 128. | 7. | 4. | 1. | 5. | 0. | 86. | 46. | 0. | |
| | | .1( ) | .4( ) | .2( ) | .4( ) | .1( ) | .4( ) | .1( ) | .3( ) | .6( ) | .0( ) | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4. | 8. | 0. | 16. | 54. | 18. | 5. | 114. | 14. | 10. |
| | | .1( ) | 1.0( ) | .1( ) | 1.9( ) | .7( ) | 1.4( ) | .0( ) | .6( ) | .2( ) | .3( ) |
| | | 61. | 9. | 0. | 3. | 91. | 52. | 6. | 17. | 214. | 127. |
| | | 1.8( ) | .2( ) | .0( ) | .7( ) | .7( ) | .3( ) | .2( ) | .2( ) | .0( ) | .0( ) |
| | | 3. | 84. | 8. | 0. | 100. | 105. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 11.3(S) | 8.7(S) | 4.9(S) | 15.4(S) |
| | | 0. | 3. | 0. | 1. | 6. | 1. | | | | |
| | | 8.5(S) | .4(S) | .0(S) | 3.4(S) | 1.7(S) | 1.4(S) | | | | |
| 1 | 40. | 154. | 0. | 0. | 101. | 23. | 7. | 1. | 5. | 12. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 54. | 40. | 93. | 25. | 6. | 43. | 8. | 44. | 14. | 152. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 21. | 24. | 69. | 13. | 16. | 8. | 69. | 49. | 9. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 125. | 4. | 98. | 56. | 6. | 78. | 16. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .7( ) |
| | | 0. | 127. | 7. | 3. | 1. | 6. | 0. | 85. | 45. | 0. |
| | | .1( ) | .4( ) | .2( ) | .4( ) | .1( ) | .4( ) | .1( ) | .3( ) | .6( ) | .0( ) |
| | | 4. | 7. | 0. | 14. | 52. | 17. | 5. | 109. | 14. | 10. |
| | | .1( ) | 1.0( ) | .1( ) | 1.9( ) | .7( ) | 1.4( ) | .0( ) | .5( ) | .2( ) | .3( ) |
| | | 58. | 9. | 0. | 3. | 93. | 53. | 6. | 17. | 210. | 124. |
| | | 1.8( ) | .2( ) | .0( ) | .7( ) | .7( ) | .3( ) | .2( ) | .2( ) | .0( ) | .0( ) |
| | | 3. | 81. | 7. | 0. | 93. | 101. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 12.4(S) | 9.3(S) | 5.2(S) | 16.5(S) |
| | | 0. | 3. | 0. | 1. | 6. | 1. | | | | |
| | | 9.1(S) | .4(S) | .0(S) | 3.5(S) | 1.7(S) | 1.4(S) | | | | |
| 1 | 45. | 149. | 0. | 0. | 99. | 21. | 6. | 1. | 2. | 10. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 52. | 37. | 87. | 23. | 6. | 40. | 7. | 40. | 13. | 143. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 20. | 23. | 64. | 11. | 16. | 8. | 65. | 45. | 8. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 124. | 3. | 94. | 51. | 5. | 73. | 15. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .7( ) |
| | | 0. | 125. | 7. | 2. | 1. | 6. | 0. | 83. | 44. | 0. |
| | | .1( ) | .4( ) | .2( ) | .3( ) | .1( ) | .4( ) | .1( ) | .3( ) | .6( ) | .0( ) |
| | | 4. | 7. | 0. | 13. | 49. | 16. | 5. | 103. | 14. | 9. |
| | | .1( ) | .9( ) | .1( ) | 1.8( ) | .7( ) | 1.3( ) | .0( ) | .5( ) | .2( ) | .3( ) |
| | | 55. | 9. | 0. | 3. | 94. | 53. | 6. | 17. | 204. | 120. |
| | | 1.7( ) | .2( ) | .0( ) | .7( ) | .8( ) | .3( ) | .2( ) | .2( ) | .0( ) | .0( ) |
| | | 3. | 77. | 7. | 0. | 86. | 98. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 13.4(S) | 9.9(S) | 5.5(S) | 17.7(S) |
| | | 0. | 3. | 0. | 1. | 6. | 1. | | | | |
| | | 9.6(S) | .4(S) | .0(S) | 3.6(S) | 1.7(S) | 1.4(S) | | | | |
| 1 | 50. | 144. | 0. | 0. | 96. | 20. | 6. | 1. | 0. | 9. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 50. | 35. | 82. | 22. | 5. | 37. | 6. | 37. | 12. | 134. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 18. | 21. | 59. | 10. | 15. | 7. | 61. | 42. | 8. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 121. | 3. | 91. | 48. | 5. | 68. | 13. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .7( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 122. | 7. | 2. | 1. | 6. | 0. | 81. | 43. | 0. |
| | | .1( ) | .4( ) | .2( ) | .3( ) | .1( ) | .4( ) | .1( ) | .3( ) | .6( ) | .0( ) |
| | | 5. | 7. | 0. | 12. | 46. | 15. | 5. | 98. | 14. | 9. |
| | | .1( ) | .9( ) | .1( ) | 1.7( ) | .6( ) | 1.3( ) | .0( ) | .5( ) | .2( ) | .3( ) |
| | | 52. | 9. | 0. | 3. | 95. | 52. | 6. | 16. | 198. | 116. |
| | | 1.7( ) | .2( ) | .0( ) | .6( ) | .8( ) | .3( ) | .2( ) | .2( ) | .0( ) | .0( ) |
| | | 3. | 74. | 7. | 0. | 80. | 94. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 14.4(S) | 10.5(S) | 5.8(S) | 18.7(S) |
| | | 0. | 3. | 0. | 1. | 6. | 1. | | | | |
| | | 10.1(S) | .4(S) | .0(S) | 3.6(S) | 1.8(S) | 1.4(S) | | | | |
| 1 | 55. | 138. | 0. | 0. | 92. | 19. | 5. | 1. | 0. | 9. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 49. | 33. | 76. | 20. | 5. | 34. | 6. | 34. | 11. | 126. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 17. | 19. | 55. | 9. | 15. | 6. | 58. | 39. | 7. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 119. | 3. | 87. | 44. | 4. | 64. | 12. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| | | 0. | 119. | 7. | 2. | 1. | 6. | 0. | 78. | 41. | 0. |
| | | .1( ) | .4( ) | .2( ) | .3( ) | .1( ) | .4( ) | .1( ) | .3( ) | .5( ) | .0( ) |
| | | 5. | 6. | 0. | 11. | 43. | 14. | 5. | 92. | 13. | 9. |
| | | .1( ) | .9( ) | .1( ) | 1.7( ) | .6( ) | 1.3( ) | .0( ) | .5( ) | .2( ) | .3( ) |
| | | 49. | 9. | 0. | 3. | 94. | 52. | 6. | 16. | 191. | 112. |
| | | 1.6( ) | .2( ) | .0( ) | .6( ) | .7( ) | .3( ) | .2( ) | .2( ) | .0( ) | .0( ) |
| | | 3. | 71. | 6. | 0. | 75. | 90. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 15.4(S) | 11.1(S) | 6.0(S) | 19.7(S) |
| | | 0. | 2. | 0. | 1. | 6. | 1. | | | | |
| | | 10.5(S) | .4(S) | .0(S) | 3.6(S) | 1.8(S) | 1.4(S) | | | | |
| 2 | 0. | 132. | 0. | 0. | 89. | 18. | 5. | 1. | 0. | 8. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 47. | 31. | 71. | 19. | 5. | 32. | 5. | 31. | 11. | 118. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 16. | 18. | 51. | 8. | 14. | 6. | 54. | 36. | 7. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 115. | 3. | 84. | 41. | 4. | 60. | 11. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| | | 0. | 115. | 7. | 2. | 1. | 6. | 0. | 76. | 39. | 0. |
| | | .1( ) | .3( ) | .2( ) | .3( ) | .2( ) | .4( ) | .1( ) | .3( ) | .5( ) | .0( ) |
| | | 5. | 6. | 0. | 10. | 41. | 13. | 5. | 87. | 13. | 8. |
| | | .1( ) | .9( ) | .1( ) | 1.6( ) | .6( ) | 1.2( ) | .0( ) | .5( ) | .1( ) | .3( ) |
| | | 46. | 8. | 0. | 3. | 93. | 51. | 6. | 15. | 184. | 107. |
| | | 1.6( ) | .2( ) | .0( ) | .6( ) | .7( ) | .3( ) | .2( ) | .2( ) | .0( ) | .0( ) |
| | | 3. | 67. | 6. | 0. | 69. | 86. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 16.3(S) | 11.6(S) | 6.2(S) | 20.6(S) |
| | | 0. | 2. | 0. | 2. | 7. | 1. | | | | |
| | | 11.0(S) | .3(S) | .0(S) | 3.7(S) | 1.8(S) | 1.4(S) | | | | |
| 2 | 5. | 126. | 0. | 0. | 85. | 17. | 5. | 2. | 0. | 7. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 45. | 28. | 66. | 18. | 4. | 30. | 3. | 29. | 10. | 110. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 15. | 17. | 48. | 7. | 13. | 5. | 51. | 34. | 6. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. | 112. | 2. | 80. | 38. | 3. | 56. | 10. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| | | 0. | 110. | 6. | 2. | 2. | 6. | 0. | 73. | 38. | 0. |
| | | .1( ) | .3( ) | .2( ) | .3( ) | .2( ) | .4( ) | .1( ) | .3( ) | .5( ) | .0( ) |
| | | 5. | 6. | 0. | 9. | 38. | 12. | 5. | 81. | 12. | 8. |
| | | .1( ) | .9( ) | .1( ) | 1.5( ) | .6( ) | 1.2( ) | .0( ) | .5( ) | .1( ) | .3( ) |
| | | 43. | 8. | 0. | 2. | 91. | 49. | 6. | 15. | 176. | 102. |
| | | 1.5( ) | .2( ) | .0( ) | .6( ) | .7( ) | .3( ) | .2( ) | .2( ) | .0( ) | .0( ) |
| | | 3. | 64. | 6. | 0. | 65. | 82. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 17.2(S) | 12.0(S) | 6.4(S) | 21.5(S) |
| | | 0. | 2. | 0. | 2. | 7. | 1. | | | | |
| | | 11.4(S) | .3(S) | .0(S) | 3.7(S) | 1.8(S) | 1.4(S) | | | | |
| 2 | 10. | 120. | 0. | 0. | 82. | 16. | 4. | 2. | 0. | 6. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 43. | 26. | 61. | 17. | 4. | 28. | 2. | 26. | 9. | 103. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 14. | 16. | 44. | 6. | 13. | 5. | 48. | 31. | 6. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 108. | 2. | 76. | 35. | 3. | 52. | 9. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| | | 0. | 106. | 6. | 2. | 2. | 6. | 0. | 70. | 36. | 0. |
| | | .1( ) | .3( ) | .2( ) | .3( ) | .2( ) | .5( ) | .1( ) | .3( ) | .5( ) | .0( ) |
| | | 5. | 5. | 0. | 7. | 35. | 11. | 5. | 76. | 12. | 8. |
| | | .1( ) | .9( ) | .1( ) | 1.5( ) | .5( ) | 1.2( ) | .0( ) | .4( ) | .1( ) | .3( ) |
| | | 40. | 8. | 0. | 2. | 89. | 48. | 5. | 14. | 169. | 97. |
| | | 1.5( ) | .2( ) | .0( ) | .6( ) | .7( ) | .3( ) | .2( ) | .1( ) | .0( ) | .0( ) |
| | | 2. | 61. | 5. | 0. | 60. | 78. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 18.1(S) | 12.5(S) | 6.6(S) | 22.3(S) |
| | | 0. | 2. | 0. | 2. | 7. | 1. | | | | |
| | | 11.7(S) | .3(S) | .0(S) | 3.7(S) | 1.8(S) | 1.4(S) | | | | |
| 2 | 15. | 115. | 0. | 0. | 78. | 15. | 4. | 3. | 0. | 6. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 41. | 25. | 56. | 16. | 4. | 26. | 1. | 24. | 8. | 96. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 13. | 15. | 41. | 6. | 12. | 5. | 45. | 29. | 5. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 104. | 2. | 72. | 32. | 3. | 48. | 8. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| | | 0. | 102. | 6. | 2. | 3. | 6. | 0. | 67. | 34. | 0. |
| | | .1( ) | .3( ) | .2( ) | .3( ) | .2( ) | .5( ) | .1( ) | .3( ) | .5( ) | .0( ) |
| | | 5. | 5. | 0. | 6. | 33. | 10. | 5. | 72. | 11. | 7. |
| | | .1( ) | .8( ) | .1( ) | 1.4( ) | .5( ) | 1.1( ) | .0( ) | .4( ) | .1( ) | .3( ) |
| | | 38. | 7. | 0. | 1. | 87. | 46. | 5. | 14. | 161. | 93. |
| | | 1.4( ) | .2( ) | .0( ) | .5( ) | .7( ) | .3( ) | .2( ) | .1( ) | .0( ) | .0( ) |
| | | 2. | 58. | 5. | 0. | 56. | 75. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 18.9(S) | 12.9(S) | 6.8(S) | 23.0(S) |
| | | 0. | 2. | 0. | 3. | 7. | 1. | | | | |
| | | 12.1(S) | .3(S) | .0(S) | 3.8(S) | 1.8(S) | 1.4(S) | | | | |
| 2 | 20. | 109. | 0. | 0. | 74. | 14. | 4. | 3. | 0. | 5. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 39. | 23. | 52. | 15. | 4. | 24. | 0. | 21. | 8. | 90. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 12. .0( ) | 14. .0( ) | 38. .0( ) | 5. .0( ) | 12. .0( ) | 4. .0( ) | 42. .0( ) | 27. .0( ) | 5. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 100. .0( ) | 2. .0( ) | 69. .0( ) | 29. .0( ) | 3. .0( ) | 45. .0( ) | 8. .0( ) | 0. .0( ) | 2. .6( ) |
| | | 0. .1( ) | 97. .3( ) | 6. .2( ) | 2. .3( ) | 3. .2( ) | 7. .5( ) | 0. .1( ) | 64. .3( ) | 33. .5( ) | 0. .0( ) |
| | | 5. .1( ) | 5. .8( ) | 0. .1( ) | 6. 1.3( ) | 30. .5( ) | 10. 1.1( ) | 5. .0( ) | 67. .4( ) | 11. .1( ) | 7. .3( ) |
| | | 35. 1.4( ) | 7. .2( ) | 0. .0( ) | 1. .4( ) | 84. .7( ) | 44. .3( ) | 5. .2( ) | 13. .1( ) | 154. .0( ) | 88. .0( ) |
| | | 2. .0( ) | 55. .0( ) | 5. .0( ) | 0. .0( ) | 52. .0( ) | 70. .0( ) | 0. 19.7(S) | 0. 13.2(S) | 0. 7.0(S) | 5. 23.7(S) |
| | | 0. 12.4(S) | 2. .3(S) | 0. .0(S) | 3. 3.8(S) | 7. 1.8(S) | 1. 1.4(S) | | | | |
| 2 | 25. | 103. .0( ) | 0. .0( ) | 0. .0( ) | 71. .0( ) | 13. .0( ) | 3. .0( ) | 3. .0( ) | 0. .0( ) | 5. .0( ) | 0. .0( ) |
| | | 37. .0( ) | 21. .0( ) | 48. .0( ) | 14. .0( ) | 3. .0( ) | 22. .0( ) | 0. .0( ) | 19. .0( ) | 7. .0( ) | 84. .0( ) |
| | | 11. .0( ) | 13. .0( ) | 35. .0( ) | 5. .0( ) | 11. .0( ) | 4. .0( ) | 39. .0( ) | 25. .0( ) | 4. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 95. .0( ) | 0. .0( ) | 65. .0( ) | 27. .0( ) | 2. .0( ) | 42. .0( ) | 7. .0( ) | 0. .0( ) | 2. .6( ) |
| | | 0. .1( ) | 93. .3( ) | 6. .2( ) | 2. .4( ) | 3. .3( ) | 7. .5( ) | 0. .1( ) | 62. .3( ) | 31. .5( ) | 0. .0( ) |
| | | 5. .1( ) | 4. .8( ) | 0. .1( ) | 5. 1.2( ) | 28. .5( ) | 9. 1.1( ) | 5. .0( ) | 63. .4( ) | 10. .1( ) | 7. .3( ) |
| | | 33. 1.3( ) | 7. .2( ) | 0. .0( ) | 1. .4( ) | 81. .7( ) | 43. .3( ) | 5. .1( ) | 13. .1( ) | 146. .0( ) | 84. .0( ) |
| | | 2. .0( ) | 53. .0( ) | 4. .0( ) | 0. .0( ) | 48. .0( ) | 65. .0( ) | 0. 20.4(S) | 0. 13.6(S) | 0. 7.2(S) | 5. 24.3(S) |
| | | 0. 12.7(S) | 2. .3(S) | 0. .0(S) | 3. 3.8(S) | 7. 1.8(S) | 1. 1.4(S) | | | | |
| 2 | 30. | 98. .0( ) | 0. .0( ) | 0. .0( ) | 68. .0( ) | 12. .0( ) | 3. .0( ) | 4. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) |
| | | 35. .0( ) | 20. .0( ) | 44. .0( ) | 13. .0( ) | 3. .0( ) | 21. .0( ) | 0. .0( ) | 17. .0( ) | 7. .0( ) | 78. .0( ) |
| | | 10. .0( ) | 12. .0( ) | 33. .0( ) | 4. .0( ) | 11. .0( ) | 3. .0( ) | 37. .0( ) | 23. .0( ) | 4. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 91. .0( ) | 0. .0( ) | 62. .0( ) | 25. .0( ) | 2. .0( ) | 39. .0( ) | 6. .0( ) | 0. .0( ) | 2. .6( ) |
| | | 0. .1( ) | 89. .3( ) | 5. .2( ) | 3. .4( ) | 4. .3( ) | 7. .5( ) | 0. .1( ) | 59. .3( ) | 29. .5( ) | 0. .0( ) |
| | | 5. .1( ) | 4. .8( ) | 0. .1( ) | 4. 1.1( ) | 26. .4( ) | 8. 1.0( ) | 5. .0( ) | 59. .4( ) | 10. .1( ) | 6. .3( ) |
| | | 31. 1.3( ) | 6. .2( ) | 0. .0( ) | 1. .4( ) | 78. .7( ) | 41. .3( ) | 5. .1( ) | 12. .1( ) | 138. .0( ) | 80. .0( ) |
| | | 2. .0( ) | 50. .0( ) | 4. .0( ) | 0. .0( ) | 45. .0( ) | 62. .0( ) | 0. 21.1(S) | 0. 13.9(S) | 0. 7.3(S) | 5. 24.9(S) |
| | | 0. 13.0(S) | 2. .3(S) | 0. .0(S) | 4. 3.8(S) | 6. 1.8(S) | 0. 1.4(S) | | | | |
| 2 | 35. | 93. .0( ) | 0. .0( ) | 0. .0( ) | 65. .0( ) | 12. .0( ) | 3. .0( ) | 4. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 33. | 18. | 41. | 12. | 3. | 19. | 0. | 16. | 6. | 73. |
| .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| 9. | 11. | 31. | 4. | 10. | 3. | 34. | 21. | 4. | 0. |
| .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| 0. | 86. | 0. | 58. | 23. | 0. | 37. | 6. | 0. | 2. |
| .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| 0. | 85. | 5. | 3. | 4. | 6. | 0. | 56. | 28. | 0. |
| .1( ) | .3( ) | .2( ) | .4( ) | .3( ) | .5( ) | .1( ) | .3( ) | .5( ) | .0( ) |
| 5. | 4. | 0. | 3. | 24. | 8. | 5. | 55. | 9. | 6. |
| .1( ) | .8( ) | .1( ) | 1.1( ) | .4( ) | 1.0( ) | .0( ) | .4( ) | .1( ) | .2( ) |
| 29. | 6. | 0. | 1. | 74. | 39. | 4. | 12. | 131. | 76. |
| 1.2( ) | .2( ) | .0( ) | .3( ) | .7( ) | .3( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| 2. | 48. | 4. | 0. | 41. | 58. | 0. | 0. | 0. | 5. |
| .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 21.7(S) | 14.2(S) | 7.4(S) | 25.5(S) |
| 0. | 2. | 0. | 4. | 6. | 0. | | | | |
| 13.2(S) | .2(S) | .0(S) | 3.8(S) | 1.8(S) | 1.4(S) | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 40. | 89. | 0. | 0. | 62. | 11. | 3. | 4. | 0. | 4. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 31. | 17. | 38. | 11. | 3. | 18. | 0. | 14. | 6. | 68. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 9. | 10. | 28. | 3. | 10. | 3. | 32. | 19. | 3. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 82. | 0. | 55. | 21. | 0. | 34. | 5. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .6( ) |
| | | 0. | 81. | 5. | 3. | 4. | 6. | 0. | 54. | 26. | 0. |
| | | .1( ) | .3( ) | .2( ) | .4( ) | .3( ) | .5( ) | .1( ) | .3( ) | .5( ) | .0( ) |
| | | 5. | 4. | 0. | 3. | 22. | 7. | 5. | 52. | 9. | 6. |
| | | .1( ) | .7( ) | .1( ) | 1.0( ) | .4( ) | 1.0( ) | .0( ) | .3( ) | .1( ) | .2( ) |
| | | 27. | 6. | 0. | 0. | 71. | 37. | 4. | 11. | 124. | 72. |
| | | 1.2( ) | .2( ) | .0( ) | .3( ) | .6( ) | .3( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 2. | 46. | 4. | 0. | 38. | 55. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 22.4(S) | 14.5(S) | 7.6(S) | 26.0(S) |
| | | 0. | 2. | 0. | 4. | 6. | 0. | | | | |
| | | 13.5(S) | .2(S) | .0(S) | 3.9(S) | 1.8(S) | 1.4(S) | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 45. | 84. | 0. | 0. | 59. | 10. | 2. | 4. | 0. | 3. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 30. | 16. | 35. | 10. | 3. | 17. | 0. | 13. | 5. | 63. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 8. | 9. | 26. | 3. | 9. | 3. | 30. | 18. | 3. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 78. | 0. | 52. | 19. | 0. | 32. | 5. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) |
| | | 0. | 77. | 5. | 4. | 4. | 6. | 0. | 52. | 24. | 0. |
| | | .0( ) | .3( ) | .2( ) | .4( ) | .3( ) | .4( ) | .1( ) | .3( ) | .4( ) | .0( ) |
| | | 5. | 3. | 0. | 2. | 20. | 7. | 5. | 48. | 8. | 5. |
| | | .1( ) | .7( ) | .1( ) | 1.0( ) | .4( ) | 1.0( ) | .0( ) | .3( ) | .1( ) | .2( ) |
| | | 25. | 5. | 0. | 0. | 68. | 36. | 4. | 11. | 118. | 69. |
| | | 1.1( ) | .2( ) | .0( ) | .3( ) | .6( ) | .3( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 2. | 44. | 4. | 0. | 36. | 52. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 23.0(S) | 14.7(S) | 7.7(S) | 26.5(S) |
| | | 0. | 2. | 0. | 4. | 6. | 0. | | | | |
| | | 13.7(S) | .2(S) | .0(S) | 3.9(S) | 1.7(S) | 1.4(S) | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 50. | 80. | 0. | 0. | 56. | 10. | 2. | 4. | 0. | 3. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 28. | 14. | 32. | 10. | 2. | 16. | 0. | 12. | 5. | 59. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 7. | 9. | 24. | 3. | 9. | 2. | 28. | 16. | 2. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 74. | 0. | 49. | 18. | 0. | 30. | 4. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) |
| | | 0. | 73. | 4. | 4. | 4. | 6. | 0. | 49. | 23. | 0. |
| | | .0( ) | .3( ) | .1( ) | .5( ) | .3( ) | .4( ) | .1( ) | .3( ) | .4( ) | .0( ) |
| | | 5. | 3. | 0. | 2. | 19. | 6. | 5. | 45. | 8. | 5. |
| | | .1( ) | .7( ) | .1( ) | .9( ) | .4( ) | .9( ) | .0( ) | .3( ) | .1( ) | .2( ) |
| | | 23. | 5. | 0. | 0. | 65. | 34. | 3. | 10. | 111. | 66. |
| | | 1.1( ) | .2( ) | .0( ) | .3( ) | .6( ) | .3( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 2. | 42. | 3. | 0. | 33. | 49. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 23.5(S) | 14.9(S) | 7.8(S) | 26.9(S) |
| | | 0. | 1. | 0. | 4. | 6. | 0. | | | | |
| | | 13.9(S) | .2(S) | .0(S) | 3.9(S) | 1.7(S) | 1.4(S) | | | | |
| 2 | 55. | 76. | 0. | 0. | 53. | 9. | 2. | 5. | 0. | 3. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 26. | 13. | 29. | 9. | 2. | 15. | 0. | 11. | 5. | 55. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 7. | 8. | 23. | 2. | 9. | 2. | 26. | 15. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 70. | 0. | 46. | 16. | 0. | 27. | 4. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) |
| | | 0. | 70. | 4. | 4. | 5. | 6. | 0. | 47. | 22. | 0. |
| | | .0( ) | .3( ) | .1( ) | .5( ) | .3( ) | .4( ) | .1( ) | .2( ) | .4( ) | .0( ) |
| | | 4. | 3. | 0. | 2. | 17. | 6. | 5. | 43. | 8. | 5. |
| | | .1( ) | .7( ) | .1( ) | .9( ) | .4( ) | .9( ) | .0( ) | .3( ) | .1( ) | .2( ) |
| | | 21. | 4. | 0. | 0. | 62. | 32. | 3. | 10. | 105. | 62. |
| | | 1.0( ) | .1( ) | .0( ) | .3( ) | .6( ) | .3( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 2. | 40. | 3. | 0. | 31. | 46. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 24.1(S) | 15.2(S) | 7.9(S) | 27.3(S) |
| | | 0. | 1. | 0. | 5. | 6. | 0. | | | | |
| | | 14.1(S) | .2(S) | .0(S) | 3.9(S) | 1.7(S) | 1.3(S) | | | | |
| 3 | 0. | 72. | 0. | 0. | 51. | 8. | 1. | 5. | 0. | 2. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 25. | 13. | 27. | 9. | 2. | 14. | 0. | 10. | 4. | 52. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 6. | 8. | 21. | 2. | 8. | 2. | 24. | 13. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 67. | 0. | 44. | 15. | 0. | 26. | 4. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) |
| | | 0. | 67. | 4. | 4. | 5. | 6. | 0. | 45. | 20. | 0. |
| | | .0( ) | .3( ) | .1( ) | .5( ) | .3( ) | .4( ) | .1( ) | .2( ) | .4( ) | .0( ) |
| | | 4. | 3. | 0. | 2. | 16. | 6. | 5. | 40. | 7. | 5. |
| | | .1( ) | .7( ) | .1( ) | .8( ) | .3( ) | .9( ) | .0( ) | .3( ) | .1( ) | .2( ) |
| | | 20. | 4. | 0. | 0. | 59. | 31. | 3. | 9. | 99. | 59. |
| | | 1.0( ) | .1( ) | .0( ) | .2( ) | .6( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 38. | 3. | 0. | 29. | 44. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 24.6(S) | 15.4(S) | 8.0(S) | 27.7(S) |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 1. | 0. | 5. | 6. | 0. | | | | | |
| | | 14.3(S) | .2(S) | .0(S) | 3.9(S) | 1.7(S) | 1.3(S) | | | | | |
| 3 | 5. | 69. | 0. | 0. | 49. | 8. | 0. | 5. | 0. | 2. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 24. | 12. | 25. | 8. | 2. | 13. | 0. | 9. | 4. | 48. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 6. | 7. | 19. | 0. | 8. | 0. | 23. | 12. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 63. | 0. | 41. | 14. | 0. | 24. | 3. | 0. | 2. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) | |
| | | 0. | 64. | 4. | 4. | 5. | 6. | 0. | 43. | 19. | 0. | |
| | | .0( ) | .2( ) | .1( ) | .5( ) | .3( ) | .4( ) | .1( ) | .2( ) | .4( ) | .0( ) | |
| | | 4. | 3. | 0. | 1. | 15. | 5. | 5. | 37. | 7. | 4. | |
| | | .1( ) | .7( ) | .1( ) | .8( ) | .3( ) | .9( ) | .0( ) | .3( ) | .1( ) | .2( ) | |
| | | 18. | 3. | 0. | 0. | 56. | 29. | 3. | 9. | 94. | 56. | |
| | | 1.0( ) | .1( ) | .0( ) | .2( ) | .6( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) | |
| | | 1. | 36. | 3. | 0. | 26. | 41. | 0. | 0. | 0. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 25.1(S) | 15.5(S) | 8.1(S) | 28.0(S) | |
| | | 0. | 1. | 0. | 5. | 6. | 0. | | | | | |
| | | 14.5(S) | .2(S) | .0(S) | 3.9(S) | 1.6(S) | 1.3(S) | | | | | |
| 3 | 10. | 65. | 0. | 0. | 47. | 7. | 0. | 5. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 22. | 11. | 23. | 8. | 1. | 12. | 0. | 6. | 4. | 45. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 5. | 7. | 18. | 0. | 7. | 0. | 21. | 11. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 60. | 0. | 39. | 13. | 0. | 22. | 3. | 0. | 2. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) | |
| | | 0. | 61. | 3. | 5. | 5. | 6. | 0. | 41. | 18. | 0. | |
| | | .0( ) | .2( ) | .1( ) | .5( ) | .3( ) | .4( ) | .1( ) | .2( ) | .4( ) | .0( ) | |
| | | 4. | 3. | 0. | 1. | 13. | 5. | 5. | 35. | 6. | 4. | |
| | | .1( ) | .7( ) | .1( ) | .7( ) | .3( ) | .9( ) | .0( ) | .3( ) | .1( ) | .2( ) | |
| | | 17. | 3. | 0. | 0. | 54. | 28. | 3. | 8. | 88. | 54. | |
| | | .9( ) | .1( ) | .0( ) | .2( ) | .5( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) | |
| | | 1. | 35. | 3. | 0. | 24. | 39. | 0. | 0. | 0. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 25.5(S) | 15.7(S) | 8.2(S) | 28.4(S) | |
| | | 0. | 1. | 0. | 5. | 6. | 0. | | | | | |
| | | 14.6(S) | .2(S) | .0(S) | 3.9(S) | 1.6(S) | 1.3(S) | | | | | |
| 3 | 15. | 62. | 0. | 0. | 44. | 7. | 0. | 5. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 21. | 10. | 21. | 7. | 0. | 11. | 0. | 6. | 3. | 42. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 5. | 6. | 16. | 0. | 6. | 0. | 19. | 10. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 57. | 0. | 37. | 12. | 0. | 21. | 3. | 0. | 1. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) | |
| | | 0. | 58. | 3. | 5. | 5. | 6. | 0. | 40. | 17. | 0. | |
| | | .0( ) | .2( ) | .1( ) | .5( ) | .3( ) | .4( ) | .1( ) | .2( ) | .4( ) | .0( ) | |
| | | 4. | 2. | 0. | 1. | 12. | 4. | 5. | 33. | 6. | 3. | |
| | | .1( ) | .6( ) | .1( ) | .7( ) | .3( ) | .8( ) | .0( ) | .3( ) | .1( ) | .2( ) | |
| | | 16. | 3. | 0. | 0. | 51. | 26. | 2. | 8. | 82. | 51. | |
| | | .9( ) | .1( ) | .0( ) | .2( ) | .5( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. | 33. | 2. | 0. | 23. | 37. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 26.0(S) | 15.8(S) | 8.3(S) | 28.7(S) |
| | | 0. | 1. | 0. | 5. | 6. | 0. | | | | |
| | | 14.8(S) | .2(S) | .0(S) | 3.9(S) | 1.6(S) | 1.3(S) | | | | |
| 3 | 20. | 58. | 0. | 0. | 42. | 6. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 20. | 9. | 19. | 6. | 0. | 10. | 0. | 5. | 3. | 39. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 6. | 15. | 0. | 3. | 0. | 18. | 9. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 54. | 0. | 35. | 11. | 0. | 19. | 2. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) |
| | | 0. | 55. | 3. | 5. | 5. | 6. | 0. | 38. | 16. | 0. |
| | | .0( ) | .2( ) | .1( ) | .5( ) | .3( ) | .4( ) | .1( ) | .2( ) | .4( ) | .0( ) |
| | | 4. | 2. | 0. | 1. | 11. | 4. | 5. | 31. | 5. | 3. |
| | | .1( ) | .6( ) | .1( ) | .7( ) | .3( ) | .8( ) | .0( ) | .3( ) | .1( ) | .2( ) |
| | | 15. | 2. | 0. | 0. | 48. | 25. | 2. | 7. | 75. | 48. |
| | | .8( ) | .1( ) | .0( ) | .2( ) | .5( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 31. | 2. | 0. | 21. | 35. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 26.4(S) | 16.0(S) | 8.3(S) | 29.0(S) |
| | | 8. | 1. | 0. | 5. | 6. | 0. | | | | |
| | | 14.9(S) | .2(S) | .0(S) | 3.9(S) | 1.5(S) | 1.3(S) | | | | |
| 3 | 25. | 54. | 0. | 0. | 40. | 6. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 19. | 9. | 17. | 4. | 0. | 10. | 0. | 5. | 3. | 37. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 5. | 14. | 0. | 3. | 0. | 16. | 8. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 51. | 0. | 33. | 10. | 0. | 18. | 2. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) |
| | | 0. | 52. | 3. | 5. | 5. | 6. | 0. | 36. | 15. | 0. |
| | | .0( ) | .2( ) | .1( ) | .5( ) | .3( ) | .4( ) | .1( ) | .2( ) | .4( ) | .0( ) |
| | | 4. | 1. | 0. | 1. | 10. | 4. | 5. | 29. | 5. | 3. |
| | | .1( ) | .5( ) | .1( ) | .7( ) | .3( ) | .8( ) | .0( ) | .2( ) | .1( ) | .2( ) |
| | | 13. | 2. | 0. | 0. | 46. | 23. | 2. | 7. | 70. | 46. |
| | | .8( ) | .1( ) | .0( ) | .2( ) | .5( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 27. | 2. | 0. | 19. | 33. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 26.7(S) | 16.1(S) | 8.4(S) | 29.2(S) |
| | | 17. | 1. | 0. | 5. | 5. | 0. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 3.9(S) | 1.5(S) | 1.3(S) | | | | |
| 3 | 30. | 51. | 0. | 0. | 38. | 5. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 17. | 8. | 16. | 3. | 0. | 9. | 0. | 4. | 3. | 34. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 5. | 13. | 0. | 3. | 0. | 12. | 8. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 48. | 0. | 31. | 9. | 0. | 17. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) |
| | | 0. | 50. | 2. | 5. | 5. | 6. | 0. | 34. | 14. | 0. |
| | | .0( ) | .2( ) | .1( ) | .5( ) | .4( ) | .4( ) | .1( ) | .2( ) | .4( ) | .0( ) |
| | | 3. | 1. | 0. | 1. | 9. | 4. | 5. | 27. | 5. | 3. |
| | | .1( ) | .5( ) | .1( ) | .6( ) | .2( ) | .8( ) | .0( ) | .2( ) | .1( ) | .1( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 12.<br>.8( ) | 2.<br>.1( ) | 0.<br>.0( ) | 0.<br>.2( ) | 44.<br>.5( ) | 22.<br>.2( ) | 2.<br>.1( ) | 7.<br>.1( ) | 63.<br>.0( ) | 43.<br>.0( ) |
| | | 1.<br>.0( ) | 25.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 18.<br>.0( ) | 31.<br>.0( ) | 0.<br>27.1(S) | 0.<br>16.2(S) | 0.<br>8.5(S) | 5.<br>29.4(S) |
| | | 17.<br>14.9(S) | 1.<br>.1(S) | 0.<br>.0(S) | 5.<br>3.9(S) | 5.<br>1.5(S) | 0.<br>1.3(S) | | | | |
| 3 | 35. | 48.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 35.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 15.<br>.0( ) | 7.<br>.0( ) | 15.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 8.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 3.<br>.0( ) | 32.<br>.0( ) |
| | | 4.<br>.0( ) | 5.<br>.0( ) | 12.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 11.<br>.0( ) | 7.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 46.<br>.0( ) | 0.<br>.0( ) | 29.<br>.0( ) | 8.<br>.0( ) | 0.<br>.0( ) | 15.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.5( ) |
| | | 0.<br>.0( ) | 47.<br>.2( ) | 2.<br>.1( ) | 5.<br>.5( ) | 5.<br>.4( ) | 6.<br>.4( ) | 0.<br>.1( ) | 32.<br>.2( ) | 13.<br>.4( ) | 0.<br>.0( ) |
| | | 3.<br>.1( ) | 1.<br>.5( ) | 0.<br>.1( ) | 1.<br>.6( ) | 8.<br>.2( ) | 3.<br>.7( ) | 5.<br>.0( ) | 25.<br>.2( ) | 5.<br>.1( ) | 2.<br>.1( ) |
| | | 11.<br>.7( ) | 2.<br>.1( ) | 0.<br>.0( ) | 0.<br>.2( ) | 42.<br>.5( ) | 21.<br>.2( ) | 2.<br>.1( ) | 6.<br>.1( ) | 60.<br>.0( ) | 40.<br>.0( ) |
| | | 1.<br>.0( ) | 23.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 17.<br>.0( ) | 29.<br>.0( ) | 0.<br>27.5(S) | 0.<br>16.3(S) | 0.<br>8.5(S) | 5.<br>29.7(S) |
| | | 16.<br>14.9(S) | 1.<br>.1(S) | 0.<br>.0(S) | 5.<br>4.0(S) | 5.<br>1.4(S) | 0.<br>1.3(S) | | | | |
| 3 | 40. | 46.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 33.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 12.<br>.0( ) | 7.<br>.0( ) | 14.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 8.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 2.<br>.0( ) | 30.<br>.0( ) |
| | | 3.<br>.0( ) | 4.<br>.0( ) | 11.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 11.<br>.0( ) | 6.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 43.<br>.0( ) | 0.<br>.0( ) | 27.<br>.0( ) | 8.<br>.0( ) | 0.<br>.0( ) | 14.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.4( ) |
| | | 0.<br>.0( ) | 44.<br>.2( ) | 2.<br>.1( ) | 5.<br>.5( ) | 5.<br>.4( ) | 5.<br>.4( ) | 0.<br>.1( ) | 29.<br>.2( ) | 12.<br>.3( ) | 0.<br>.0( ) |
| | | 3.<br>.1( ) | 1.<br>.4( ) | 0.<br>.1( ) | 1.<br>.6( ) | 8.<br>.2( ) | 3.<br>.7( ) | 5.<br>.0( ) | 24.<br>.2( ) | 4.<br>.1( ) | 2.<br>.1( ) |
| | | 11.<br>.7( ) | 2.<br>.1( ) | 0.<br>.0( ) | 0.<br>.2( ) | 40.<br>.4( ) | 20.<br>.2( ) | 2.<br>.1( ) | 6.<br>.1( ) | 56.<br>.0( ) | 37.<br>.0( ) |
| | | 1.<br>.0( ) | 21.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 15.<br>.0( ) | 27.<br>.0( ) | 0.<br>27.8(S) | 0.<br>16.4(S) | 0.<br>8.6(S) | 5.<br>29.9(S) |
| | | 15.<br>14.9(S) | 1.<br>.1(S) | 0.<br>.0(S) | 5.<br>4.0(S) | 5.<br>1.4(S) | 0.<br>1.3(S) | | | | |
| 3 | 45. | 43.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 30.<br>.0( ) | 4.<br>.0( ) | 0.<br>.0( ) | 5.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 12.<br>.0( ) | 6.<br>.0( ) | 12.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 7.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 2.<br>.0( ) | 28.<br>.0( ) |
| | | 3.<br>.0( ) | 4.<br>.0( ) | 10.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 10.<br>.0( ) | 6.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 41.<br>.0( ) | 0.<br>.0( ) | 26.<br>.0( ) | 7.<br>.0( ) | 0.<br>.0( ) | 13.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.4( ) |
| | | 0.<br>.0( ) | 42.<br>.2( ) | 2.<br>.1( ) | 5.<br>.5( ) | 5.<br>.4( ) | 5.<br>.4( ) | 0.<br>.1( ) | 28.<br>.2( ) | 12.<br>.3( ) | 0.<br>.0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 3. | 1. | 0. | 1. | 7. | 3. | 5. | 22. | 4. | 2. |
| | | .1( ) | .4( ) | .1( ) | .6( ) | .2( ) | .7( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 10. | 1. | 0. | 0. | 38. | 19. | 2. | 5. | 53. | 34. |
| | | .7( ) | .1( ) | .0( ) | .1( ) | .4( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 20. | 1. | 0. | 14. | 26. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 28.1(S) | 16.5(S) | 8.6(S) | 30.1(S) |
| | | 14. | 1. | 0. | 5. | 5. | 0. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 4.0(S) | 1.4(S) | 1.3(S) | | | | |
| 3 | 50. | 40. | 0. | 0. | 26. | 4. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 11. | 6. | 11. | 3. | 0. | 7. | 0. | 3. | 2. | 26. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 4. | 10. | 0. | 2. | 0. | 9. | 5. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 39. | 0. | 24. | 6. | 0. | 12. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 39. | 2. | 5. | 5. | 5. | 0. | 26. | 11. | 0. |
| | | .0( ) | .2( ) | .1( ) | .5( ) | .4( ) | .4( ) | .1( ) | .2( ) | .3( ) | .0( ) |
| | | 3. | 1. | 0. | 1. | 7. | 3. | 5. | 21. | 4. | 2. |
| | | .1( ) | .4( ) | .1( ) | .5( ) | .2( ) | .7( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 9. | 1. | 0. | 0. | 36. | 18. | 2. | 5. | 50. | 30. |
| | | .6( ) | .1( ) | .0( ) | .1( ) | .4( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 19. | 1. | 0. | 13. | 24. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 28.4(S) | 16.6(S) | 8.7(S) | 30.2(S) |
| | | 13. | 1. | 0. | 5. | 5. | 0. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 4.0(S) | 1.3(S) | 1.3(S) | | | | |
| 3 | 55. | 37. | 0. | 0. | 24. | 3. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 10. | 5. | 11. | 3. | 0. | 6. | 0. | 3. | 2. | 24. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 3. | 9. | 0. | 2. | 0. | 8. | 5. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 37. | 0. | 23. | 6. | 0. | 11. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 36. | 2. | 5. | 5. | 5. | 0. | 24. | 10. | 0. |
| | | .0( ) | .2( ) | .1( ) | .5( ) | .4( ) | .4( ) | .1( ) | .2( ) | .3( ) | .0( ) |
| | | 3. | 1. | 0. | 0. | 6. | 3. | 5. | 19. | 4. | 2. |
| | | .1( ) | .4( ) | .1( ) | .5( ) | .2( ) | .7( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 8. | 1. | 0. | 0. | 34. | 17. | 1. | 5. | 47. | 28. |
| | | .6( ) | .1( ) | .0( ) | .1( ) | .4( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 18. | 1. | 0. | 12. | 23. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 28.6(S) | 16.7(S) | 8.7(S) | 30.4(S) |
| | | 12. | 1. | 0. | 5. | 5. | 0. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 3.9(S) | 1.3(S) | 1.3(S) | | | | |
| 4 | 0. | 34. | 0. | 0. | 23. | 3. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 10. | 5. | 10. | 2. | 0. | 6. | 0. | 3. | 0. | 23. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 3. | 8. | 0. | 2. | 0. | 8. | 4. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 35. | 0. | 22. | 5. | 0. | 10. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 33. | 2. | 5. | 5. | 5. | 0. | 23. | 10. | 0. |
| | | .0( ) | .2( ) | .1( ) | .5( ) | .4( ) | .4( ) | .1( ) | .2( ) | .3( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 6. | 2. | 5. | 18. | 3. | 2. |
| | | .1( ) | .3( ) | .1( ) | .5( ) | .2( ) | .6( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 8. | 1. | 0. | 0. | 32. | 16. | 1. | 4. | 44. | 26. |
| | | .6( ) | .1( ) | .0( ) | .1( ) | .4( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 17. | 1. | 0. | 11. | 22. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 28.9(S) | 16.7(S) | 8.8(S) | 30.5(S) |
| | | 11. | 1. | 0. | 5. | 5. | 0. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 3.9(S) | 1.3(S) | 1.3(S) | | | | |
| 4 | 5. | 32. | 0. | 0. | 22. | 3. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 9. | 5. | 9. | 2. | 0. | 5. | 0. | 2. | 0. | 21. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 3. | 8. | 0. | 2. | 0. | 7. | 4. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 33. | 0. | 20. | 5. | 0. | 10. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 31. | 1. | 5. | 5. | 5. | 0. | 22. | 9. | 0. |
| | | .0( ) | .2( ) | .1( ) | .5( ) | .4( ) | .4( ) | .1( ) | .2( ) | .3( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 5. | 2. | 5. | 17. | 3. | 2. |
| | | .1( ) | .3( ) | .1( ) | .5( ) | .2( ) | .6( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 7. | 1. | 0. | 0. | 31. | 15. | 1. | 4. | 42. | 25. |
| | | .6( ) | .1( ) | .0( ) | .1( ) | .4( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 17. | 0. | 0. | 11. | 20. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 29.1(S) | 16.8(S) | 8.8(S) | 30.7(S) |
| | | 10. | 1. | 0. | 5. | 5. | 0. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 3.9(S) | 1.3(S) | 1.3(S) | | | | |
| 4 | 10. | 30. | 0. | 0. | 21. | 3. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 8. | 4. | 8. | 2. | 0. | 5. | 0. | 2. | 0. | 20. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 3. | 7. | 0. | 1. | 0. | 7. | 4. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 32. | 0. | 19. | 5. | 0. | 9. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 29. | 1. | 5. | 5. | 5. | 0. | 21. | 8. | 0. |
| | | .0( ) | .2( ) | .1( ) | .5( ) | .3( ) | .4( ) | .1( ) | .1( ) | .3( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 5. | 1. | 5. | 16. | 3. | 1. |
| | | .1( ) | .3( ) | .1( ) | .5( ) | .2( ) | .5( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 7. | 1. | 0. | 0. | 29. | 15. | 1. | 4. | 40. | 24. |
| | | .5( ) | .1( ) | .0( ) | .1( ) | .4( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 16. | 0. | 0. | 10. | 19. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 29.3(S) | 16.9(S) | 8.8(S) | 30.8(S) |
| | | 9. | 1. | 0. | 5. | 4. | 0. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 3.9(S) | 1.2(S) | 1.3(S) | | | | |
| 4 | 15. | 28. | 0. | 0. | 20. | 1. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 8. | 4. | 8. | 2. | 0. | 5. | 0. | 1. | 0. | 19. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 3. | 7. | 0. | 1. | 0. | 6. | 3. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 29. | 0. | 18. | 4. | 0. | 8. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 28. | 1. | 5. | 5. | 5. | 0. | 20. | 8. | 0. |
| | | .0( ) | .1( ) | .1( ) | .5( ) | .3( ) | .4( ) | .1( ) | .1( ) | .3( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 4. | 1. | 5. | 15. | 3. | 1. |
| | | .1( ) | .3( ) | .1( ) | .4( ) | .2( ) | .5( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 6. | 1. | 0. | 0. | 28. | 14. | 1. | 4. | 37. | 21. |
| | | .5( ) | .1( ) | .0( ) | .1( ) | .4( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 15. | 0. | 0. | 9. | 18. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 29.5(S) | 16.9(S) | 8.9(S) | 30.9(S) |
| | | 9. | 1. | 0. | 5. | 4. | 0. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 3.9(S) | 1.2(S) | 1.3(S) | | | | |
| 4 | 20. | 27. | 0. | 0. | 19. | 1. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 7. | 3. | 7. | 2. | 0. | 4. | 0. | 1. | 0. | 17. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 2. | 6. | 0. | 1. | 0. | 6. | 3. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 27. | 0. | 17. | 4. | 0. | 8. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 26. | 1. | 5. | 5. | 5. | 0. | 19. | 7. | 0. |
| | | .0( ) | .1( ) | .1( ) | .5( ) | .3( ) | .4( ) | .1( ) | .1( ) | .3( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 4. | 1. | 5. | 14. | 3. | 1. |
| | | .1( ) | .3( ) | .1( ) | .4( ) | .1( ) | .5( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 6. | 1. | 0. | 0. | 27. | 13. | 1. | 3. | 33. | 20. |
| | | .5( ) | .1( ) | .0( ) | .1( ) | .4( ) | .1( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 15. | 0. | 0. | 9. | 17. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 29.7(S) | 17.0(S) | 8.9(S) | 31.0(S) |
| | | 8. | 1. | 0. | 5. | 4. | 0. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 3.9(S) | 1.2(S) | 1.3(S) | | | | |
| 4 | 25. | 25. | 0. | 0. | 18. | 1. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 7. | 2. | 6. | 2. | 0. | 4. | 0. | 1. | 0. | 16. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 2. | 6. | 0. | 1. | 0. | 5. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 25. | 0. | 16. | 4. | 0. | 7. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 24. | 1. | 5. | 5. | 4. | 0. | 18. | 7. | 0. |
| | | .0( ) | .1( ) | .1( ) | .5( ) | .3( ) | .4( ) | .1( ) | .1( ) | .3( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 4. | 1. | 5. | 13. | 3. | 1. |
| | | .1( ) | .3( ) | .1( ) | .4( ) | .1( ) | .4( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 5. | 1. | 0. | 0. | 25. | 13. | 1. | 3. | 32. | 19. |
| | | .5( ) | .1( ) | .0( ) | .1( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 14. | 0. | 0. | 8. | 16. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 29.9(S) | 17.0(S) | 8.9(S) | 31.1(S) |
| | | 8. | 1. | 0. | 5. | 4. | 0. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 3.9(S) | 1.2(S) | 1.3(S) | | | | |
| 4 | 30. | 24. | 0. | 0. | 17. | 1. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 6. | 1. | 6. | 2. | 0. | 4. | 0. | 1. | 0. | 15. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 2. | 5. | 0. | 1. | 0. | 4. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 24. | 0. | 15. | 3. | 0. | 7. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 23. | 1. | 5. | 5. | 4. | 0. | 17. | 6. | 0. |
| | | .0( ) | .1( ) | .1( ) | .5( ) | .3( ) | .4( ) | .1( ) | .1( ) | .3( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 3. | 1. | 5. | 13. | 2. | 1. |
| | | .1( ) | .3( ) | .1( ) | .4( ) | .1( ) | .4( ) | .0( ) | .1( ) | .1( ) | .1( ) |
| | | 4. | 1. | 0. | 0. | 24. | 12. | 1. | 3. | 30. | 18. |
| | | .4( ) | .0( ) | .0( ) | .1( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 13. | 0. | 0. | 7. | 15. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 30.1(S) | 17.1(S) | 9.0(S) | 31.1(S) |
| | | 7. | 1. | 0. | 5. | 4. | 0. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 3.9(S) | 1.1(S) | 1.3(S) | | | | |
| 4 | 35. | 22. | 0. | 0. | 17. | 1. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 6. | 0. | 5. | 2. | 0. | 4. | 0. | 1. | 0. | 14. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 5. | 0. | 1. | 0. | 4. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 23. | 0. | 14. | 1. | 0. | 6. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 22. | 1. | 5. | 5. | 4. | 0. | 17. | 6. | 0. |
| | | .0( ) | .1( ) | .1( ) | .5( ) | .3( ) | .4( ) | .1( ) | .1( ) | .3( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 3. | 0. | 5. | 12. | 2. | 1. |
| | | .1( ) | .2( ) | .1( ) | .4( ) | .1( ) | .4( ) | .0( ) | .1( ) | .1( ) | .1( ) |
| | | 4. | 1. | 0. | 0. | 23. | 11. | 1. | 3. | 28. | 18. |
| | | .4( ) | .0( ) | .0( ) | .1( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 12. | 0. | 0. | 5. | 14. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 30.2(S) | 17.1(S) | 9.0(S) | 31.2(S) |
| | | 7. | 1. | 0. | 5. | 4. | 0. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 3.9(S) | 1.1(S) | 1.3(S) | | | | |
| 4 | 40. | 21. | 0. | 0. | 16. | 1. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 0. | 4. | 2. | 0. | 3. | 0. | 1. | 0. | 13. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 5. | 0. | 1. | 0. | 3. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 22. | 0. | 13. | 1. | 0. | 6. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 21. | 1. | 5. | 5. | 4. | 0. | 16. | 5. | 0. |
| | | .0( ) | .1( ) | .1( ) | .5( ) | .3( ) | .4( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 2. | 0. | 0. | 0. | 3. | 0. | 5. | 11. | 2. | 1. |
| | | .1( ) | .2( ) | .1( ) | .4( ) | .1( ) | .3( ) | .0( ) | .1( ) | .1( ) | .1( ) |
| | | 3. | 1. | 0. | 0. | 22. | 11. | 1. | 3. | 26. | 17. |
| | | .4( ) | .0( ) | .0( ) | .1( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 12. | 0. | 0. | 5. | 13. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 30.4(S) | 17.1(S) | 9.0(S) | 31.3(S) |
| | | 6. | 1. | 0. | 5. | 4. | 0. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 3.9(S) | 1.1(S) | 1.3(S) | | | | |
| 4 | 45. | 20. | 0. | 0. | 15. | 1. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5. | 0. | 3. | 1. | 0. | 3. | 0. | 1. | 0. | 12. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 4. | 0. | 1. | 0. | 3. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 21. | 0. | 13. | 1. | 0. | 6. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) |
| | | 0. | 20. | 1. | 5. | 5. | 4. | 0. | 15. | 5. | 0. |
| | | .0( ) | .1( ) | .1( ) | .5( ) | .3( ) | .3( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 3. | 0. | 5. | 10. | 2. | 1. |
| | | .1( ) | .2( ) | .1( ) | .4( ) | .1( ) | .3( ) | .0( ) | .1( ) | .1( ) | .1( ) |
| | | 3. | 1. | 0. | 0. | 21. | 10. | 1. | 3. | 25. | 16. |
| | | .4( ) | .0( ) | .0( ) | .1( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 11. | 0. | 0. | 4. | 13. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 30.5(S) | 17.2(S) | 9.0(S) | 31.3(S) |
| | | 6. | 0. | 0. | 5. | 4. | 0. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 3.9(S) | 1.1(S) | 1.3(S) | | | | |
| 4 | 50. | 19. | 0. | 0. | 14. | 1. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 0. | 2. | 1. | 0. | 3. | 0. | 0. | 0. | 11. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 4. | 0. | 1. | 0. | 3. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 20. | 0. | 12. | 1. | 0. | 5. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 19. | 1. | 5. | 5. | 4. | 0. | 14. | 4. | 0. |
| | | .0( ) | .1( ) | .1( ) | .5( ) | .3( ) | .3( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 2. | 0. | 5. | 9. | 2. | 1. |
| | | .1( ) | .2( ) | .1( ) | .4( ) | .1( ) | .3( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 3. | 1. | 0. | 0. | 20. | 9. | 1. | 2. | 23. | 15. |
| | | .3( ) | .0( ) | .0( ) | .1( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 0. | 10. | 0. | 0. | 4. | 12. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 30.6(S) | 17.2(S) | 9.1(S) | 31.4(S) |
| | | 5. | 0. | 0. | 5. | 4. | 0. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 3.9(S) | 1.0(S) | 1.3(S) | | | | |
| 4 | 55. | 18. | 0. | 0. | 14. | 1. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 4. | 0. | 2. | 1. | 0. | 3. | 0. | 0. | 0. | 8. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 1. | 0. | 2. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 19. | 0. | 11. | 1. | 0. | 5. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 18. | 1. | 5. | 5. | 4. | 0. | 14. | 4. | 0. |
| | | .0( ) | .1( ) | .1( ) | .5( ) | .3( ) | .3( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 2. | 0. | 5. | 8. | 2. | 1. |
| | | .1( ) | .2( ) | .1( ) | .4( ) | .1( ) | .3( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 2. | 1. | 0. | 0. | 19. | 9. | 1. | 2. | 22. | 14. |
| | | .3( ) | .0( ) | .0( ) | .1( ) | .3( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 10. | 0. | 0. | 2. | 11. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 30.8(S) | 17.2(S) | 9.1(S) | 31.4(S) |
| | | 5. | 0. | 0. | 5. | 4. | 0. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 3.9(S) | 1.0(S) | 1.3(S) | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 0. | 18. | 0. | 0. | 13. | 1. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 0. | 2. | 1. | 0. | 2. | 0. | 0. | 0. | 8. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 1. | 0. | 2. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 18. | 0. | 10. | 1. | 0. | 5. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 17. | 1. | 5. | 5. | 4. | 0. | 13. | 3. | 0. |
| | | .0( ) | .1( ) | .1( ) | .5( ) | .3( ) | .3( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 2. | 0. | 5. | 8. | 2. | 1. |
| | | .1( ) | .2( ) | .1( ) | .3( ) | .1( ) | .3( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 2. | 1. | 0. | 0. | 18. | 8. | 1. | 2. | 21. | 14. |
| | | .3( ) | .0( ) | .0( ) | .1( ) | .3( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 9. | 0. | 0. | 2. | 10. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 30.9(S) | 17.2(S) | 9.1(S) | 31.4(S) |
| | | 5. | 0. | 0. | 5. | 4. | 0. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 3.9(S) | 1.0(S) | 1.3(S) | | | | |
| 5 | 5. | 17. | 0. | 0. | 12. | 1. | 0. | 5. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 0. | 2. | 1. | 0. | 2. | 0. | 0. | 0. | 7. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 1. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 17. | 0. | 8. | 1. | 0. | 4. | 0. | 0. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 16. | 1. | 5. | 5. | 4. | 0. | 12. | 3. | 0. |
| | | .0( ) | .1( ) | .1( ) | .5( ) | .3( ) | .3( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 2. | 0. | 5. | 7. | 2. | 1. |
| | | .1( ) | .2( ) | .1( ) | .3( ) | .1( ) | .3( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 2. | 0. | 0. | 0. | 17. | 8. | 1. | 2. | 20. | 13. |
| | | .3( ) | .0( ) | .0( ) | .1( ) | .3( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 9. | 0. | 0. | 2. | 8. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 31.0(S) | 17.2(S) | 9.1(S) | 31.4(S) |
| | | 4. | 0. | 0. | 5. | 4. | 0. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 3.9(S) | 1.0(S) | 1.3(S) | | | | |
| 5 | 10. | 16. | 0. | 0. | 12. | 1. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 0. | 2. | 1. | 0. | 2. | 0. | 0. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 1. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 16. | 0. | 8. | 1. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 16. | 1. | 5. | 4. | 4. | 0. | 12. | 3. | 0. |
| | | .0( ) | .1( ) | .0( ) | .5( ) | .3( ) | .3( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 2. | 0. | 5. | 6. | 2. | 1. |
| | | .0( ) | .2( ) | .1( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 2. | 0. | 0. | 0. | 16. | 8. | 1. | 2. | 18. | 13. |
| | | .3( ) | .0( ) | .0( ) | .1( ) | .3( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 9. | 0. | 0. | 2. | 8. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 31.1(S) | 17.2(S) | 9.1(S) | 31.4(S) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4. | 0. | 0. | 4. | 3. | 0. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 3.9(S) | .9(S) | 1.3(S) | | | | |
| 5 | 15. | 15. | 0. | 0. | 11. | 1. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 0. | 2. | 1. | 0. | 0. | 0. | 0. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 1. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 15. | 0. | 7. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 15. | 1. | 5. | 4. | 4. | 0. | 11. | 3. | 0. |
| | | .0( ) | .1( ) | .0( ) | .5( ) | .3( ) | .3( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 2. | 0. | 5. | 6. | 2. | 1. |
| | | .0( ) | .2( ) | .1( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 2. | 0. | 0. | 0. | 15. | 7. | 1. | 2. | 17. | 12. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .3( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 8. | 0. | 0. | 2. | 7. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 31.2(S) | 17.2(S) | 9.1(S) | 31.4(S) |
| | | 2. | 0. | 0. | 4. | 3. | 0. | | | | |
| | | 14.9(S) | .0(S) | .0(S) | 3.9(S) | .9(S) | 1.3(S) | | | | |
| 5 | 20. | 15. | 0. | 0. | 11. | 1. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 0. | 2. | 1. | 0. | 0. | 0. | 0. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 1. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 14. | 0. | 7. | 1. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 14. | 1. | 5. | 4. | 3. | 0. | 11. | 2. | 0. |
| | | .0( ) | .1( ) | .0( ) | .5( ) | .3( ) | .3( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 2. | 0. | 5. | 6. | 2. | 1. |
| | | .0( ) | .2( ) | .1( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 2. | 0. | 0. | 0. | 14. | 7. | 1. | 2. | 16. | 12. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 8. | 0. | 0. | 2. | 7. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 31.3(S) | 17.3(S) | 9.1(S) | 31.4(S) |
| | | 2. | 0. | 0. | 4. | 3. | 0. | | | | |
| | | 14.9(S) | .0(S) | .0(S) | 3.9(S) | .9(S) | 1.3(S) | | | | |
| 5 | 25. | 14. | 0. | 0. | 10. | 1. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 1. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 13. | 0. | 6. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 14. | 1. | 4. | 4. | 3. | 0. | 10. | 2. | 0. |
| | | .0( ) | .1( ) | .0( ) | .5( ) | .3( ) | .3( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 0. | 5. | 5. | 2. | 1. |
| | | .0( ) | .2( ) | .1( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 13. | 6. | 1. | 2. | 15. | 11. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 8. | 0. | 0. | 2. | 6. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 31.4(S) | 17.3(S) | 9.1(S) | 31.4(S) |
| | | 2. | 0. | 0. | 4. | 3. | 0. | | | | |
| | | 14.9(S) | .0(S) | .0(S) | 3.9(S) | .9(S) | 1.2(S) | | | | |
| 5 | 30. | 13. | 0. | 0. | 10. | 1. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 1. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 13. | 0. | 6. | 1. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 13. | 1. | 4. | 4. | 3. | 0. | 10. | 2. | 0. |
| | | .0( ) | .1( ) | .0( ) | .5( ) | .3( ) | .3( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 0. | 5. | 5. | 1. | 1. |
| | | .0( ) | .2( ) | .1( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 13. | 6. | 1. | 2. | 15. | 11. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 7. | 0. | 0. | 1. | 6. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 31.5(S) | 17.3(S) | 9.1(S) | 31.4(S) |
| | | 2. | 0. | 0. | 4. | 3. | 0. | | | | |
| | | 14.9(S) | .0(S) | .0(S) | 3.9(S) | .9(S) | 1.2(S) | | | | |
| 5 | 35. | 13. | 0. | 0. | 10. | 1. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 1. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 12. | 0. | 6. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 12. | 1. | 4. | 4. | 3. | 0. | 10. | 2. | 0. |
| | | .0( ) | .1( ) | .0( ) | .5( ) | .3( ) | .3( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 0. | 5. | 4. | 1. | 1. |
| | | .0( ) | .2( ) | .1( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 12. | 6. | 1. | 2. | 14. | 10. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 7. | 0. | 0. | 1. | 6. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 31.6(S) | 17.3(S) | 9.1(S) | 31.4(S) |
| | | 2. | 0. | 0. | 4. | 3. | 0. | | | | |
| | | 14.9(S) | .0(S) | .0(S) | 3.9(S) | .8(S) | 1.2(S) | | | | |
| 5 | 40. | 12. | 0. | 0. | 9. | 1. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 1. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 11. | 0. | 6. | 1. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 12. | 1. | 4. | 4. | 3. | 0. | 9. | 2. | 0. |
| | | .0( ) | .1( ) | .0( ) | .5( ) | .3( ) | .3( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 0. | 5. | 4. | 1. | 1. |
| | | .0( ) | .1( ) | .1( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. | 0. | 0. | 0. | 11. | 6. | 1. | 2. | 13. | 10. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 7. | 0. | 0. | 1. | 6. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 31.7(S) | 17.3(S) | 9.1(S) | 31.4(S) |
| | | 2. | 0. | 0. | 4. | 3. | 0. | | | | |
| | | 14.9(S) | .0(S) | .0(S) | 3.9(S) | .8(S) | 1.2(S) | | | | |
| 5 | 45. | 12. | 0. | 0. | 9. | 0. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 1. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 11. | 0. | 5. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 12. | 0. | 4. | 4. | 3. | 0. | 9. | 1. | 0. |
| | | .0( ) | .1( ) | .0( ) | .5( ) | .3( ) | .3( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 0. | 5. | 4. | 1. | 1. |
| | | .0( ) | .1( ) | .1( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 11. | 5. | 1. | 1. | 12. | 9. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 6. | 0. | 0. | 1. | 5. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 31.8(S) | 17.3(S) | 9.1(S) | 31.4(S) |
| | | 2. | 0. | 0. | 4. | 3. | 0. | | | | |
| | | 14.9(S) | .0(S) | .0(S) | 3.8(S) | .8(S) | 1.2(S) | | | | |
| 5 | 50. | 11. | 0. | 0. | 9. | 0. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 10. | 0. | 5. | 1. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 11. | 0. | 4. | 4. | 3. | 0. | 9. | 1. | 0. |
| | | .0( ) | .1( ) | .0( ) | .5( ) | .3( ) | .3( ) | .1( ) | .1( ) | .2( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 0. | 5. | 4. | 1. | 0. |
| | | .0( ) | .1( ) | .1( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 10. | 5. | 1. | 1. | 12. | 9. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 6. | 0. | 0. | 1. | 5. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 31.9(S) | 17.3(S) | 9.1(S) | 31.4(S) |
| | | 1. | 0. | 0. | 4. | 3. | 0. | | | | |
| | | 14.9(S) | .0(S) | .0(S) | 3.8(S) | .8(S) | 1.2(S) | | | | |
| 5 | 55. | 11. | 0. | 0. | 8. | 0. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 10. | 0. | 5. | 1. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 11. | 0. | 4. | 4. | 3. | 0. | 8. | 1. | 0. |
| | | .0( ) | .1( ) | .0( ) | .5( ) | .3( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. | 0. | 0. | 0. | 1. | 0. | 5. | 3. | 1. | 0. |
| | | .0( ) | .1( ) | .1( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 10. | 5. | 1. | 1. | 11. | 9. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 6. | 0. | 0. | 1. | 5. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 31.9(S) | 17.3(S) | 9.1(S) | 31.4(S) |
| | | 1. | 0. | 0. | 4. | 3. | 0. | | | | |
| | | 14.9(S) | .0(S) | .0(S) | 3.8(S) | .8(S) | 1.2(S) | | | | |
| 6 | 0. | 11. | 0. | 0. | 8. | 0. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 9. | 0. | 5. | 0. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 10. | 0. | 4. | 4. | 3. | 0. | 8. | 1. | 0. |
| | | .0( ) | .1( ) | .0( ) | .5( ) | .3( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 0. | 5. | 3. | 1. | 0. |
| | | .0( ) | .1( ) | .1( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 9. | 5. | 0. | 1. | 11. | 8. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 6. | 0. | 0. | 1. | 5. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 32.0(S) | 17.3(S) | 9.1(S) | 31.4(S) |
| | | 1. | 0. | 0. | 4. | 3. | 0. | | | | |
| | | 14.9(S) | .0(S) | .0(S) | 3.8(S) | .8(S) | 1.2(S) | | | | |
| 6 | 5. | 10. | 0. | 0. | 8. | 0. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 9. | 0. | 4. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 10. | 0. | 4. | 4. | 3. | 0. | 8. | 1. | 0. |
| | | .0( ) | .1( ) | .0( ) | .5( ) | .3( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 0. | 5. | 3. | 1. | 0. |
| | | .0( ) | .1( ) | .1( ) | .2( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) |
| | | 1. | 0. | 0. | 0. | 9. | 4. | 0. | 1. | 10. | 8. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 6. | 0. | 0. | 1. | 4. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 32.1(S) | 17.3(S) | 9.1(S) | 31.4(S) |
| | | 1. | 0. | 0. | 4. | 3. | 0. | | | | |
| | | 14.9(S) | .0(S) | .0(S) | 3.8(S) | .7(S) | 1.2(S) | | | | |
| 6 | 10. | 10. | 0. | 0. | 7. | 0. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 9. | 0. | 4. | 0. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 10. | 0. | 4. | 4. | 3. | 0. | 7. | 1. | 0. |
| | | .0( ) | .1( ) | .0( ) | .5( ) | .3( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 0. | 5. | 3. | 1. | 0. |
| | | .0( ) | .1( ) | .1( ) | .2( ) | .1( ) | .1( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 9. | 4. | 0. | 1. | 10. | 8. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 6. | 0. | 0. | 1. | 4. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 32.2(S) | 17.3(S) | 9.1(S) | 31.4(S) |
| | | 1. | 0. | 0. | 4. | 3. | 0. | | | | |
| | | 14.9(S) | .0(S) | .0(S) | 3.8(S) | .7(S) | 1.2(S) | | | | |
| 6 | 15. | 9. | 0. | 0. | 7. | 0. | 0. | 4. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 8. | 0. | 4. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 9. | 0. | 4. | 4. | 3. | 0. | 7. | 1. | 0. |
| | | .0( ) | .1( ) | .0( ) | .4( ) | .3( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 0. | 5. | 3. | 1. | 0. |
| | | .0( ) | .1( ) | .1( ) | .2( ) | .1( ) | .1( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 8. | 4. | 0. | 1. | 9. | 8. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 5. | 0. | 0. | 1. | 4. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 32.2(S) | 17.3(S) | 9.1(S) | 31.4(S) |
| | | 1. | 0. | 0. | 4. | 3. | 0. | | | | |
| | | 14.9(S) | .0(S) | .0(S) | 3.8(S) | .7(S) | 1.2(S) | | | | |
| 6 | 20. | 9. | 0. | 0. | 7. | 0. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 8. | 0. | 4. | 0. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) |
| | | 0. | 9. | 0. | 4. | 3. | 3. | 0. | 7. | 1. | 0. |
| | | .0( ) | .1( ) | .0( ) | .4( ) | .3( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 0. | 5. | 3. | 1. | 0. |
| | | .0( ) | .1( ) | .1( ) | .2( ) | .1( ) | .1( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 8. | 4. | 0. | 1. | 9. | 7. |
| | | .1( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 5. | 0. | 0. | 1. | 4. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 32.3(S) | 17.3(S) | 9.1(S) | 31.3(S) |
| | | 1. | 0. | 0. | 3. | 3. | 0. | | | | |
| | | 14.9(S) | .0(S) | .0(S) | 3.8(S) | .7(S) | 1.2(S) | | | | |
| 6 | 25. | 9. | 0. | 0. | 7. | 0. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 0. | 8. | 0. | 4. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | 0. | 9. | 0. | 4. | 3. | 3. | 0. | 7. | 1. | 0. |
| | .0( ) | .1( ) | .0( ) | .4( ) | .3( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) |
| | 1. | 0. | 0. | 0. | 1. | 0. | 5. | 3. | 1. | 0. |
| | .0( ) | .1( ) | .1( ) | .2( ) | .1( ) | .1( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | 1. | 0. | 0. | 0. | 8. | 4. | 0. | 1. | 9. | 7. |
| | .1( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 5. | 0. | 0. | 1. | 4. | 0. | 0. | 0. | 5. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 32.3(S) | 17.3(S) | 9.1(S) | 31.3(S) |
| | 1. | 0. | 0. | 3. | 3. | 0. | | | | |
| | 14.9(S) | .0(S) | .0(S) | 3.8(S) | .7(S) | 1.2(S) | | | | |
| 6 30. | 9. | 0. | 0. | 6. | 0. | 0. | 3. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 1. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 2. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 7. | 0. | 4. | 0. | 0. | 2. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | 0. | 8. | 0. | 4. | 3. | 3. | 0. | 6. | 1. | 0. |
| | .0( ) | .1( ) | .0( ) | .4( ) | .3( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) |
| | 1. | 0. | 0. | 0. | 1. | 0. | 5. | 2. | 1. | 0. |
| | .0( ) | .1( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | 1. | 0. | 0. | 0. | 7. | 4. | 0. | 1. | 8. | 7. |
| | .1( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 5. | 0. | 0. | 1. | 4. | 0. | 0. | 0. | 5. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 32.4(S) | 17.4(S) | 9.1(S) | 31.3(S) |
| | 1. | 0. | 0. | 3. | 2. | 0. | | | | |
| | 14.9(S) | .0(S) | .0(S) | 3.8(S) | .7(S) | 1.2(S) | | | | |
| 6 35. | 8. | 0. | 0. | 6. | 0. | 0. | 3. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 1. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 2. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 7. | 0. | 4. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | 0. | 8. | 0. | 3. | 3. | 3. | 0. | 6. | 1. | 0. |
| | .0( ) | .1( ) | .0( ) | .4( ) | .3( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) |
| | 1. | 0. | 0. | 0. | 1. | 0. | 5. | 2. | 1. | 0. |
| | .0( ) | .1( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | 1. | 0. | 0. | 0. | 7. | 4. | 0. | 1. | 8. | 7. |
| | .1( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 5. | 0. | 0. | 1. | 4. | 0. | 0. | 0. | 5. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 32.5(S) | 17.4(S) | 9.1(S) | 31.3(S) |
| | 1. | 0. | 0. | 3. | 2. | 0. | | | | |
| | 14.9(S) | .0(S) | .0(S) | 3.8(S) | .7(S) | 1.2(S) | | | | |
| 6 40. | 8. | 0. | 0. | 6. | 0. | 0. | 3. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 1. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 2. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 7. | 0. | 3. | 0. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 8. | 0. | 3. | 3. | 3. | 0. | 6. | 1. | 0. |
| | | .0( ) | .1( ) | .0( ) | .4( ) | .3( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 0. | 5. | 2. | 1. | 0. |
| | | .0( ) | .1( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 7. | 3. | 0. | 1. | 8. | 6. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 5. | 0. | 0. | 1. | 3. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 32.5(S) | 17.4(S) | 9.1(S) | 31.3(S) |
| | | 1. | 0. | 0. | 3. | 2. | 0. | | | | |
| | | 14.9(S) | .0(S) | .0(S) | 3.8(S) | .6(S) | 1.2(S) | | | | |
| 6 | 45. | 8. | 0. | 0. | 6. | 0. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 6. | 0. | 3. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 8. | 0. | 3. | 3. | 2. | 0. | 6. | 1. | 0. |
| | | .0( ) | .1( ) | .0( ) | .4( ) | .3( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 0. | 5. | 2. | 1. | 0. |
| | | .0( ) | .1( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 6. | 3. | 0. | 1. | 7. | 6. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 5. | 0. | 0. | 1. | 3. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 32.6(S) | 17.4(S) | 9.1(S) | 31.3(S) |
| | | 1. | 0. | 0. | 3. | 2. | 0. | | | | |
| | | 14.9(S) | .0(S) | .0(S) | 3.8(S) | .6(S) | 1.2(S) | | | | |
| 6 | 50. | 7. | 0. | 0. | 6. | 0. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 1. | 1. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 0. | 0. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 6. | 0. | 3. | 0. | 0. | 2. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | | 0. | 7. | 0. | 3. | 3. | 2. | 0. | 6. | 1. | 0. |
| | | .0( ) | .1( ) | .0( ) | .4( ) | .3( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 1. | 0. | 5. | 2. | 1. | 0. |
| | | .0( ) | .1( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 0. | 0. | 6. | 3. | 0. | 1. | 7. | 6. |
| | | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 4. | 0. | 0. | 1. | 3. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 32.6(S) | 17.4(S) | 9.1(S) | 31.2(S) |
| | | 1. | 0. | 0. | 3. | 2. | 0. | | | | |
| | | 14.9(S) | .0(S) | .0(S) | 3.8(S) | .6(S) | 1.2(S) | | | | |
| 6 | 55. | 7. | 0. | 0. | 6. | 0. | 0. | 3. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 2. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 6. | 0. | 3. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | 0. | 7. | 0. | 3. | 3. | 2. | 0. | 6. | 1. | 0. |
| | .0( ) | .1( ) | .0( ) | .4( ) | .3( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 1. | 0. | 5. | 2. | 1. | 0. |
| | .0( ) | .1( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 6. | 3. | 0. | 1. | 7. | 6. |
| | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 4. | 0. | 0. | 1. | 3. | 0. | 0. | 0. | 5. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 32.7(S) | 17.4(S) | 9.1(S) | 31.2(S) |
| | 1. | 0. | 0. | 3. | 2. | 0. | | | | |
| | 14.9(S) | .0(S) | .0(S) | 3.8(S) | .6(S) | 1.2(S) | | | | |
| 7 0. | 7. | 0. | 0. | 5. | 0. | 0. | 3. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 2. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 6. | 0. | 3. | 0. | 0. | 2. | 0. | 0. | 0. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) |
| | 0. | 7. | 0. | 3. | 3. | 2. | 0. | 5. | 1. | 0. |
| | .0( ) | .1( ) | .0( ) | .4( ) | .2( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 0. | 0. | 5. | 2. | 1. | 0. |
| | .0( ) | .1( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 0. | 0. | 0. | 6. | 3. | 0. | 1. | 6. | 6. |
| | .1( ) | .0( ) | .0( ) | .0( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | 0. | 4. | 0. | 0. | 1. | 3. | 0. | 0. | 0. | 5. |
| | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 32.7(S) | 17.4(S) | 9.1(S) | 31.2(S) |
| | 1. | 0. | 0. | 3. | 2. | 0. | | | | |
| | 14.9(S) | .0(S) | .0(S) | 3.8(S) | .6(S) | 1.2(S) | | | | |

1

10yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
Blank

*** PEAK FLOWS, STAGES AND STORAGES OF GUTTERS AND DETENTION DAMS ***

| CONVEYANCE ELEMENT | PEAK (CFS) | STAGE (FT) | STORAGE (AC-FT) | TIME (HR/MIN) |
|---|---|---|---|---|
| 219 | 26. | (DIRECT FLOW) | | 0 50. |
| 217 | 37. | (DIRECT FLOW) | | 0 35. |
| 119 | 26. | (DIRECT FLOW) | | 0 50. |
| 117 | 37. | (DIRECT FLOW) | | 0 35. |
| 210 | 33. | (DIRECT FLOW) | | 0 25. |
| 319 | 22. | 1.5 | | 1 5. |
| 317 | 23. | 2.2 | | 1 0. |
| 218 | 27. | (DIRECT FLOW) | | 0 45. |
| 110 | 33. | (DIRECT FLOW) | | 0 25. |
| 118 | 68. | (DIRECT FLOW) | | 1 0. |
| 610 | 1. | .1 | 1.4 | 1 0. |
| 209 | 29. | (DIRECT FLOW) | | 0 45. |
| 216 | 68. | (DIRECT FLOW) | | 0 55. |

| | | | | | |
|---|---|---|---|---|---|
| 318 | 57. | .7 | | 1 | 25. |
| 213 | 76. | (DIRECT FLOW) | | 0 | 50. |
| 310 | 0. | .1 | | 4 | 5. |
| 109 | 29. | (DIRECT FLOW) | | 0 | 45. |
| 116 | 68. | (DIRECT FLOW) | | 0 | 55. |
| 113 | 116. | (DIRECT FLOW) | | 1 | 10. |
| 609 | 7. | .1 | 1.8 | 2 | 10. |
| 208 | 45. | (DIRECT FLOW) | | 0 | 40. |
| 215 | 12. | (DIRECT FLOW) | | 0 | 45. |
| 516 | 0. | .1 | 9.1 | 5 | 10. |
| 513 | 0. | .1 | 17.4 | 7 | 0. |
| 309 | 7. | .5 | | 2 | 25. |
| 108 | 45. | (DIRECT FLOW) | | 0 | 40. |
| 115 | 12. | (DIRECT FLOW) | | 0 | 45. |
| 316 | 0. | .1 | | 7 | 0. |
| 313 | 0. | .0 | | 7 | 0. |
| 608 | 5. | .1 | 4.0 | 3 | 45. |
| 315 | 9. | 1.0 | | 1 | 10. |
| 416 | 0. | (DIRECT FLOW) | | 7 | 0. |
| 212 | 65. | (DIRECT FLOW) | | 0 | 50. |
| 308 | 5. | .4 | | 3 | 45. |
| 207 | 4. | (DIRECT FLOW) | | 1 | 20. |
| 414 | 9. | (DIRECT FLOW) | | 1 | 10. |
| 112 | 65. | (DIRECT FLOW) | | 0 | 50. |
| 107 | 5. | (DIRECT FLOW) | | 3 | 45. |
| 314 | 5. | .1 | | 2 | 15. |
| 214 | 46. | (DIRECT FLOW) | | 0 | 45. |
| 312 | 46. | .6 | | 1 | 30. |
| 211 | 12. | (DIRECT FLOW) | | 0 | 45. |
| 206 | 15. | (DIRECT FLOW) | | 0 | 45. |
| 307 | 5. | .5 | | 4 | 0. |
| 114 | 46. | (DIRECT FLOW) | | 0 | 45. |
| 111 | 56. | (DIRECT FLOW) | | 1 | 25. |
| 203 | 4. | (DIRECT FLOW) | | 0 | 15. |
| 106 | 15. | (DIRECT FLOW) | | 0 | 45. |
| 404 | 92. | (DIRECT FLOW) | | 1 | 15. |
| 103 | 4. | (DIRECT FLOW) | | 0 | 15. |
| 202 | 11. | (DIRECT FLOW) | | 0 | 35. |
| 306 | 7. | .2 | | 1 | 35. |
| 205 | 32. | (DIRECT FLOW) | | 0 | 50. |
| 311 | 86. | .3 | | 1 | 35. |
| 204 | 27. | (DIRECT FLOW) | | 0 | 45. |
| 603 | 1. | .1 | .1 | 0 | 35. |
| 102 | 11. | (DIRECT FLOW) | | 0 | 35. |
| 236 | 17. | (DIRECT FLOW) | | 0 | 40. |
| 105 | 34. | (DIRECT FLOW) | | 0 | 55. |
| 104 | 105. | (DIRECT FLOW) | | 1 | 30. |
| 303 | 1. | .1 | | 0 | 50. |
| 602 | 3. | .1 | .5 | 1 | 20. |
| 224 | 37. | (DIRECT FLOW) | | 0 | 45. |
| 136 | 17. | (DIRECT FLOW) | | 0 | 40. |
| 231 | 6. | (DIRECT FLOW) | | 0 | 35. |
| 401 | 132. | (DIRECT FLOW) | | 1 | 25. |
| 402 | 4. | (DIRECT FLOW) | | 1 | 15. |
| 124 | 37. | (DIRECT FLOW) | | 0 | 45. |
| 336 | 6. | .2 | | 1 | 35. |
| 235 | 96. | (DIRECT FLOW) | | 0 | 50. |
| 131 | 6. | (DIRECT FLOW) | | 0 | 35. |
| 304 | 128. | .4 | | 1 | 35. |
| 302 | 4. | .7 | | 1 | 25. |
| 201 | 68. | (DIRECT FLOW) | | 0 | 45. |
| 324 | 14. | .2 | | 1 | 35. |
| 223 | 103. | (DIRECT FLOW) | | 0 | 55. |
| 222 | 42. | (DIRECT FLOW) | | 0 | 55. |
| 135 | 99. | (DIRECT FLOW) | | 0 | 50. |
| 230 | 2. | (DIRECT FLOW) | | 0 | 35. |
| 331 | 5. | .8 | | 1 | 0. |
| 229 | 10. | (DIRECT FLOW) | | 0 | 40. |
| 101 | 162. | (DIRECT FLOW) | | 1 | 25. |
| 123 | 110. | (DIRECT FLOW) | | 0 | 55. |
| 122 | 42. | (DIRECT FLOW) | | 0 | 55. |
| 238 | 38. | (DIRECT FLOW) | | 0 | 45. |
| 335 | 53. | .3 | | 1 | 45. |
| 234 | 77. | (DIRECT FLOW) | | 0 | 55. |
| 233 | 8. | (DIRECT FLOW) | | 0 | 40. |
| 130 | 2. | (DIRECT FLOW) | | 0 | 35. |
| 129 | 13. | (DIRECT FLOW) | | 0 | 55. |
| 501 | 0. | .1 | 32.7 | 7 | 0. |

| | | | | | |
|---|---|---|---|---|---|
| 420 | 152. | (DIRECT FLOW) | | 0 | 55. |
| 138 | 38. | (DIRECT FLOW) | | 0 | 45. |
| 134 | 105. | (DIRECT FLOW) | | 1 | 20. |
| 133 | 8. | (DIRECT FLOW) | | 0 | 40. |
| 330 | 0. | .0 | | 0 | 45. |
| 329 | 9. | .2 | | 1 | 35. |
| 228 | 79. | (DIRECT FLOW) | | 0 | 50. |
| 301 | 0. | .0 | | 7 | 0. |
| 226 | 19. | (DIRECT FLOW) | | 0 | 45. |
| 221 | 39. | (DIRECT FLOW) | | 0 | 50. |
| 322 | 123. | .6 | | 1 | 20. |
| 220 | 78. | (DIRECT FLOW) | | 0 | 55. |
| 338 | 17. | .2 | | 1 | 40. |
| 237 | 110. | (DIRECT FLOW) | | 0 | 55. |
| 432 | 110. | (DIRECT FLOW) | | 1 | 20. |
| 128 | 82. | (DIRECT FLOW) | | 0 | 50. |
| 126 | 19. | (DIRECT FLOW) | | 0 | 45. |
| 121 | 39. | (DIRECT FLOW) | | 0 | 50. |
| 120 | 184. | (DIRECT FLOW) | | 1 | 10. |
| 137 | 118. | (DIRECT FLOW) | | 1 | 0. |
| 333 | 95. | .8 | | 1 | 50. |
| 232 | 66. | (DIRECT FLOW) | | 0 | 50. |
| 328 | 66. | 1.9 | | 1 | 15. |
| 227 | 16. | (DIRECT FLOW) | | 0 | 45. |
| 326 | 10. | .3 | | 1 | 30. |
| 225 | 10. | (DIRECT FLOW) | | 0 | 45. |
| 520 | 5. | .1 | 31.4 | 5 | 25. |
| 537 | 17. | .1 | 14.9 | 3 | 30. |
| 132 | 126. | (DIRECT FLOW) | | 1 | 35. |
| 127 | 81. | (DIRECT FLOW) | | 1 | 15. |
| 125 | 17. | (DIRECT FLOW) | | 1 | 15. |
| 320 | 5. | (DIRECT FLOW) | | 1 | 25. |
| 337 | 17. | (DIRECT FLOW) | | 3 | 30. |
| 400 | 219. | (DIRECT FLOW) | | 1 | 25. |
| 902 | 5. | (DIRECT FLOW) | | 1 | 25. |
| 901 | 17. | (DIRECT FLOW) | | 3 | 30. |
| 900 | 219. | (DIRECT FLOW) | | 1 | 25. |

```
   2   1   1   2
   3   4
WATERSHED   1
100yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
Blank
        84       5.0                                                                1
         1  201
         4  204
         5  205
         6  206
         7  207
         9  209
        11  211
        12  212
        13  213
        14  214
        15  215
        16  216
        17  217
        18  218
        19  219
        20  220
        21  221
        22  222
        23  223
        24  224
        25  225
        26  226
        27  227
        28  228
        29  229
        30  230
        31  231
        32  232
        33  233
        34  234
        35  235
        36  236
        37  237
        38  238

    0  201  101    3              1.
   -1  202  102  3 3              1.
         0.        0.      0.55      53.8      1.65        0.        0.        0.

   -1  203  103  3 3              1.
         0.        0.      0.23      14.4      0.69        0.        0.        0.
    0  204  104    3              1.
    0  205  105    3              1.
    0  206  106    3              1.
    0  207  107    3              1.
   -1  208  108  3 3              1.
         0.        0.      0.62     94.67      1.63        0.        0.        0.
    0  209  109    3              1.
   -1  210  110  3 3              1.
         0.        0.      0.35     79.14      1.05        0.        0.        0.
    0  211  111    3              1.
    0  212  112    3              1.
    0  213  113    3              1.
    0  214  114    3              1.
    0  215  115    3              1.
    0  216  116    3              1.
    0  217  117    3              1.
    0  218  118    3              1.
    0  219  119    3              1.
    0  220  120    3              1.
    0  221  121    3              1.
    0  222  122    3              1.
    0  223  123    3              1.
    0  224  124    3              1.
    0  225  125    3              1.
    0  226  126    3              1.
    0  227  127    3              1.
    0  228  128    3              1.
    0  229  129    3              1.
    0  230  130    3              1.
    0  231  131    3              1.
    0  232  132    3              1.
```

```
0  233  133    3              1.
0  234  134    3              1.
0  235  135    3              1.
0  236  136    3              1.
0  237  137    3              1.
0  238  138    3              1.
0  402  302    3              1.
0  401  304    3              1.
0  106  306    3              1.
0  107  307    3              1.
0  404  311    3              1.
0  112  312    3              1.
0  414  314    3              1.
0  115  315    3              1.
0  117  317    3              1.
0  118  318    3              1.
0  119  319    3              1.
0  420  322    3              1.
0  124  324    3              1.
0  126  326    3              1.
0  128  328    3              1.
0  129  329    3              1.
0  130  330    3              1.
0  131  331    3              1.
0  432  333    3              1.
0  135  335    3              1.
0  136  336    3              1.
0  138  338    3              1.
0  125  400    3              1.
0  127  400    3              1.
0  132  400    3              1.
0  104  401    3              1.
0  105  401    3              1.
0  111  404    3              1.
0  114  404    3              1.
0  416  414    3              1.
0  122  420    3              1.
0  123  420    3              1.
0  133  432    3              1.
0  134  432    3              1.
0  101  501    3              1.
0  113  513    3              1.
0  116  516    3              1.
0  120  520    3              1.
0  121  520    3              1.
0  137  537    3              1.
0  102  602    3              1.
0  103  603    3              1.
0  108  608    3              1.
0  109  609    3              1.
0  110  610    3              1.
0  400  900    3              1.
0  337  901    3              1.
0  320  902    3              1.
0  501  301  7 2     0.1        1.                                        0.1
    0.        0.       7.5        0.      26.4        0.      63.3        0.
  82.9        0.      129.     1400.      201.     6510.
0  513  313  3 2     0.1        1.                                        0.1
    0.        0.      20.3        0.      22.6      665.
0  516  316  3 2     0.1        1.                                        0.1
    0.        0.     18.12        0.      18.9      320.        0.        0.
0  520  320  4 2     0.1        1.                                        0.1
    0.        0.       9.9        0.       10.        5.      280.        5.
0  537  337  3 2     0.1        1.                                        0.1
    0.        0.     14.85        0.      17.7      649.        0.        0.
0  602  402  3 2     0.1        1.                                        0.1
    0.        0.      0.78       5.4      1.64      15.4
0  603  303  3 2     0.1        1.                                        0.1
    0.        0.      0.12       1.2      0.33       6.9        0.        0.
0  608  308 10 2     0.1        1.                                        0.1
    0.        0.      .038      0.31      0.45      0.46      1.63      0.57
  3.59      0.67      6.09     32.39      7.09     55.58      8.87    123.53
 11.53    266.39     13.14    378.74
0  609  309  2 2     0.1        1.                                        0.1
    0.        0.       12.      43.4
0  610  310  2 2     0.1        1.                                        0.1
    0.        0.      3.81       1.3        0.        0.        0.        0.
0  302  101    1      0.   1698.  0.0150      4.      4.    .045      5.
```

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    0  304  101    1    175.   1761.  0.0133      4.      4.    .045      5.
    0  311  104    1    135.   2519.  0.0123      4.      4.    .045      5.
    0  306  105    1     25.   5603.  0.0157      4.      4.    .045      5.
    0  308  107    1      4.    625.   0.008    0.01    0.01   0.016      2.
    0  312  111    1      0.   2682.  0.0082    110.    110.    .045     10.
    0  318  113    1     35.   3069.  0.0071      4.      4.    .045      5.
    0  314  114    1     60.   3598.  0.0080      4.      4.    .045      5.
    0  317  118    1      0.   1788.  0.0011      4.      4.    .045      5.
    0  319  118    1      0.   2135.  0.0082      4.      4.    .045      5.
    0  322  120    1    100.   2881.  0.0085      4.      4.    .045      5.
    0  324  123    1     80.   5657.  0.0133      4.      4.    .045      5.
    0  326  125    1     45.   2265.  0.0018      4.      4.    .045      5.
    0  301  126    1    150.   1716.  0.0152      4.      4.    .045      5.
    0  328  127    1     10.   2545.  0.0026      4.      4.    .045      5.
    0  329  128    1     25.   4136.  0.0173      4.      4.    .045      5.
    0  330  128    1     15.   6271.  0.0148      4.      4.    .045      5.
    0  331  129    1      0.   2147.  0.0135      4.      4.    .045      5.
    0  333  132    1     55.   4716.  0.0068      4.      4.    .045      5.
    0  335  134    1     85.   7048.  0.0123      4.      4.    .045      5.
    0  336  135    1     35.   5158.  0.0099      4.      4.    .045      5.
    0  338  137    1     90.   5244.  0.0139      4.      4.    .045      5.
    0  303  402    1      5.   1011.  0.0151      5.      5.   0.035      3.
    0  307  404    1      5.   1308.  0.0031      5.      5.   0.035      3.
    0  315  414    1      0.   2696.  0.0097      4.      4.    .045      5.
    0  313  416    1     10.   2381.  0.0054      4.      4.    .045      5.
    0  316  416    1      0.    965.  0.0053      4.      4.    .045      5.
    0  309  608    1      5.   1757.  0.0091      5.      5.   0.035      3.
    0  310  609    1      5.   3896.    0.01      5.      5.   0.035      3.

    0
   86
  101  102  103  104  105  106  107  108  109  110  111  112  113  114  115  116
  117  118  119  120  121  122  123  124  125  126  127  128  129  130  131  132
  133  134  135  136  137  138  301  302  303  304  306  307  308  309  310  311
  312  313  314  315  316  317  318  319  320  322  324  326  328  329  330  331
  333  335  336  338  400  401  402  404  414  416  420  432  501  513  516  520
  537  602  603  608  609  610
ENDPROGRAM
```

URBAN DRAINAGE STORM WATER MANAGEMENT MODEL - 32 BIT VERSION 1998
REVISED BY UNIVERSITY OF COLORADO AT DENVER

*** ENTRY MADE TO RUNOFF MODEL ***

100yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
Blank

0NUMBER OF TIME STEPS 84
0INTEGRATION TIME INTERVAL (MINUTES), 5.00

25.0 PERCENT OF IMPERVIOUS AREA HAS ZERO DETENTION DEPTH
1

100yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
Blank

HYDROGRAPHS FROM CUHPF MODEL ARE LISTED FOR THE FOLLOWING 34 SUBCATCHMENTS

| TIME(HR/MIN) | 1 | 4 | 5 | 6 | 7 | 9 | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|---|---|
| | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 |
| | 35 | 36 | 37 | 38 | | | | | | |
| 0 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 5. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 10. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 15. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 20. | 0. | 1. | 0. | 0. | 1. | 0. | 1. | 1. | 0. | 1. |
| | 0. | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | 0. | 0. | 0. | 0. | | | | | | |
| 0 25. | 3. | 3. | 0. | 1. | 2. | 1. | 2. | 6. | 2. | 4. |
| | 1. | 2. | 8. | 2. | 1. | 2. | 1. | 1. | 2. | 2. |
| | 1. | 1. | 1. | 4. | 1. | 0. | 1. | 2. | 1. | 2. |
| | 4. | 1. | 2. | 2. | | | | | | |
| 0 30. | 56. | 20. | 21. | 13. | 7. | 26. | 10. | 40. | 38. | 43. |
| | 10. | 25. | 68. | 26. | 15. | 34. | 21. | 19. | 45. | 36. |
| | 8. | 17. | 10. | 45. | 12. | 12. | 12. | 35. | 12. | 30. |
| | 54. | 20. | 44. | 27. | | | | | | |
| 0 35. | 155. | 51. | 67. | 36. | 9. | 70. | 24. | 106. | 114. | 111. |
| | 28. | 78. | 127. | 64. | 47. | 105. | 62. | 60. | 140. | 97. |
| | 19. | 46. | 27. | 131. | 27. | 23. | 25. | 105. | 28. | 94. |
| | 158. | 49. | 141. | 78. | | | | | | |
| 0 40. | 247. | 81. | 122. | 56. | 10. | 110. | 36. | 174. | 205. | 168. |
| | 44. | 147. | 146. | 96. | 83. | 193. | 109. | 109. | 259. | 147. |
| | 28. | 72. | 43. | 225. | 36. | 26. | 29. | 186. | 37. | 176. |
| | 273. | 70. | 268. | 128. | | | | | | |
| 0 45. | 303. | 99. | 171. | 68. | 9. | 133. | 43. | 225. | 286. | 197. |
| | 54. | 214. | 150. | 112. | 113. | 276. | 148. | 155. | 370. | 172. |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 33. | 88. | 54. | 300. | 39. | 27. | 29. | 254. | 39. | 256. |
| | | 368. | 77. | 392. | 161. | | | | | | |
| 0 | 50. | 323. | 107. | 204. | 72. | 9. | 140. | 44. | 253. | 342. | 205. |
| | | 58. | 269. | 147. | 115. | 132. | 338. | 173. | 188. | 453. | 178. |
| | | 34. | 92. | 59. | 345. | 38. | 26. | 30. | 299. | 39. | 319. |
| | | 427. | 77. | 492. | 176. | | | | | | |
| 0 | 55. | 321. | 106. | 221. | 71. | 9. | 139. | 43. | 262. | 371. | 202. |
| | | 57. | 306. | 136. | 113. | 140. | 376. | 184. | 207. | 503. | 176. |
| | | 34. | 91. | 60. | 362. | 38. | 24. | 29. | 319. | 39. | 360. |
| | | 452. | 77. | 560. | 178. | | | | | | |
| 1 | 0. | 313. | 104. | 224. | 71. | 10. | 138. | 42. | 259. | 380. | 202. |
| | | 56. | 326. | 126. | 114. | 141. | 392. | 185. | 214. | 523. | 172. |
| | | 33. | 92. | 59. | 361. | 39. | 22. | 28. | 322. | 38. | 381. |
| | | 453. | 75. | 595. | 175. | | | | | | |
| 1 | 5. | 302. | 105. | 221. | 70. | 10. | 135. | 44. | 256. | 376. | 198. |
| | | 57. | 332. | 117. | 113. | 139. | 392. | 182. | 214. | 522. | 166. |
| | | 34. | 90. | 59. | 357. | 39. | 21. | 27. | 317. | 36. | 386. |
| | | 446. | 72. | 604. | 173. | | | | | | |
| 1 | 10. | 285. | 106. | 216. | 68. | 10. | 129. | 44. | 255. | 369. | 189. |
| | | 56. | 328. | 104. | 108. | 138. | 384. | 181. | 210. | 509. | 156. |
| | | 34. | 87. | 59. | 348. | 38. | 19. | 25. | 309. | 34. | 380. |
| | | 436. | 67. | 594. | 167. | | | | | | |
| 1 | 15. | 261. | 102. | 208. | 64. | 11. | 119. | 43. | 248. | 356. | 175. |
| | | 53. | 319. | 89. | 101. | 133. | 371. | 175. | 204. | 490. | 142. |
| | | 33. | 81. | 57. | 333. | 35. | 17. | 23. | 296. | 31. | 368. |
| | | 417. | 61. | 572. | 157. | | | | | | |
| 1 | 20. | 235. | 97. | 197. | 59. | 11. | 108. | 41. | 235. | 338. | 159. |
| | | 49. | 308. | 77. | 92. | 127. | 353. | 166. | 196. | 464. | 127. |
| | | 30. | 74. | 54. | 312. | 32. | 16. | 21. | 278. | 29. | 353. |
| | | 391. | 55. | 546. | 144. | | | | | | |
| 1 | 25. | 209. | 90. | 184. | 54. | 11. | 97. | 38. | 219. | 315. | 144. |
| | | 45. | 293. | 65. | 84. | 118. | 332. | 156. | 185. | 433. | 113. |
| | | 28. | 67. | 51. | 287. | 30. | 14. | 20. | 257. | 26. | 333. |
| | | 360. | 50. | 513. | 130. | | | | | | |
| 1 | 30. | 186. | 83. | 169. | 49. | 10. | 88. | 35. | 202. | 291. | 130. |
| | | 41. | 276. | 55. | 76. | 109. | 308. | 144. | 173. | 399. | 101. |
| | | 26. | 61. | 47. | 262. | 28. | 13. | 18. | 234. | 24. | 312. |
| | | 329. | 45. | 478. | 118. | | | | | | |
| 1 | 35. | 165. | 78. | 155. | 45. | 6. | 80. | 33. | 187. | 266. | 118. |
| | | 39. | 258. | 47. | 70. | 100. | 283. | 132. | 160. | 365. | 90. |
| | | 25. | 56. | 43. | 239. | 27. | 12. | 17. | 214. | 23. | 289. |
| | | 300. | 40. | 440. | 107. | | | | | | |
| 1 | 40. | 147. | 73. | 143. | 42. | 5. | 72. | 32. | 173. | 244. | 107. |
| | | 36. | 240. | 40. | 64. | 93. | 260. | 122. | 147. | 334. | 80. |
| | | 24. | 51. | 41. | 218. | 25. | 11. | 16. | 195. | 21. | 267. |
| | | 274. | 36. | 403. | 98. | | | | | | |
| 1 | 45. | 131. | 68. | 132. | 38. | 3. | 65. | 30. | 161. | 225. | 96. |
| | | 34. | 222. | 34. | 58. | 86. | 239. | 113. | 137. | 305. | 71. |
| | | 23. | 47. | 38. | 200. | 24. | 10. | 15. | 179. | 20. | 246. |
| | | 250. | 32. | 370. | 89. | | | | | | |
| 1 | 50. | 116. | 63. | 121. | 35. | 3. | 59. | 29. | 149. | 207. | 87. |
| | | 31. | 206. | 29. | 53. | 80. | 220. | 105. | 127. | 280. | 64. |
| | | 22. | 43. | 36. | 182. | 22. | 6. | 14. | 163. | 18. | 227. |
| | | 229. | 29. | 340. | 80. | | | | | | |
| 1 | 55. | 103. | 59. | 112. | 33. | 2. | 53. | 28. | 138. | 190. | 79. |
| | | 29. | 192. | 25. | 48. | 74. | 203. | 97. | 118. | 257. | 57. |
| | | 21. | 39. | 34. | 167. | 21. | 4. | 13. | 149. | 17. | 210. |
| | | 209. | 26. | 313. | 73. | | | | | | |
| 2 | 0. | 92. | 55. | 103. | 30. | 2. | 48. | 27. | 128. | 175. | 71. |
| | | 28. | 179. | 21. | 44. | 68. | 187. | 90. | 109. | 235. | 51. |
| | | 20. | 36. | 32. | 152. | 20. | 2. | 12. | 136. | 16. | 195. |
| | | 191. | 24. | 288. | 66. | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 5. | 82. | 51. | 95. | 28. | 0. | 44. | 26. | 118. | 161. | 64. |
| | | 26. | 166. | 18. | 40. | 63. | 172. | 83. | 101. | 216. | 45. |
| | | 19. | 33. | 30. | 139. | 19. | 2. | 11. | 125. | 15. | 180. |
| | | 174. | 21. | 265. | 60. | | | | | | |
| 2 | 10. | 73. | 48. | 88. | 26. | 0. | 39. | 25. | 110. | 148. | 58. |
| | | 24. | 155. | 11. | 37. | 59. | 158. | 77. | 94. | 198. | 40. |
| | | 19. | 30. | 29. | 127. | 18. | 0. | 7. | 114. | 14. | 167. |
| | | 159. | 19. | 244. | 55. | | | | | | |
| 2 | 15. | 65. | 45. | 81. | 24. | 0. | 36. | 24. | 101. | 136. | 53. |
| | | 23. | 144. | 8. | 34. | 55. | 146. | 71. | 87. | 181. | 36. |
| | | 18. | 28. | 27. | 116. | 17. | 0. | 5. | 105. | 13. | 154. |
| | | 146. | 17. | 225. | 50. | | | | | | |
| 2 | 20. | 57. | 42. | 75. | 22. | 0. | 32. | 23. | 94. | 125. | 48. |
| | | 21. | 134. | 5. | 31. | 51. | 135. | 66. | 81. | 166. | 32. |
| | | 18. | 25. | 26. | 106. | 17. | 0. | 3. | 96. | 12. | 143. |
| | | 133. | 16. | 207. | 45. | | | | | | |
| 2 | 25. | 51. | 39. | 69. | 20. | 0. | 29. | 22. | 87. | 115. | 43. |
| | | 20. | 125. | 4. | 28. | 47. | 124. | 61. | 75. | 153. | 29. |
| | | 17. | 23. | 24. | 97. | 16. | 0. | 2. | 88. | 7. | 132. |
| | | 122. | 14. | 191. | 41. | | | | | | |
| 2 | 30. | 46. | 36. | 64. | 19. | 0. | 27. | 21. | 80. | 106. | 39. |
| | | 19. | 116. | 3. | 26. | 44. | 115. | 57. | 70. | 140. | 26. |
| | | 16. | 21. | 23. | 89. | 15. | 0. | 1. | 80. | 5. | 123. |
| | | 111. | 13. | 176. | 38. | | | | | | |
| 2 | 35. | 40. | 34. | 59. | 17. | 0. | 24. | 20. | 74. | 98. | 35. |
| | | 18. | 108. | 2. | 24. | 41. | 106. | 53. | 65. | 129. | 23. |
| | | 16. | 19. | 22. | 81. | 14. | 0. | 0. | 73. | 3. | 114. |
| | | 101. | 8. | 162. | 34. | | | | | | |
| 2 | 40. | 36. | 32. | 55. | 16. | 0. | 22. | 19. | 69. | 90. | 32. |
| | | 17. | 101. | 0. | 21. | 38. | 97. | 49. | 61. | 118. | 20. |
| | | 15. | 18. | 21. | 74. | 13. | 0. | 0. | 67. | 2. | 105. |
| | | 93. | 5. | 149. | 31. | | | | | | |
| 2 | 45. | 32. | 30. | 50. | 15. | 0. | 20. | 19. | 64. | 83. | 29. |
| | | 16. | 94. | 0. | 20. | 35. | 90. | 45. | 56. | 108. | 18. |
| | | 15. | 16. | 20. | 68. | 13. | 0. | 0. | 62. | 1. | 98. |
| | | 85. | 3. | 137. | 28. | | | | | | |
| 2 | 50. | 29. | 28. | 47. | 14. | 0. | 18. | 18. | 59. | 76. | 26. |
| | | 15. | 88. | 0. | 18. | 32. | 83. | 42. | 52. | 99. | 16. |
| | | 14. | 15. | 19. | 62. | 12. | 0. | 0. | 56. | 0. | 90. |
| | | 77. | 2. | 126. | 26. | | | | | | |
| 2 | 55. | 25. | 26. | 43. | 13. | 0. | 16. | 17. | 54. | 70. | 23. |
| | | 14. | 82. | 0. | 16. | 30. | 76. | 39. | 49. | 91. | 15. |
| | | 14. | 14. | 18. | 57. | 7. | 0. | 0. | 52. | 0. | 84. |
| | | 71. | 2. | 117. | 23. | | | | | | |
| 3 | 0. | 23. | 24. | 40. | 12. | 0. | 15. | 17. | 50. | 64. | 21. |
| | | 13. | 76. | 0. | 15. | 28. | 71. | 36. | 45. | 84. | 13. |
| | | 13. | 12. | 17. | 52. | 5. | 0. | 0. | 47. | 0. | 78. |
| | | 65. | 0. | 107. | 21. | | | | | | |
| 3 | 5. | 20. | 23. | 37. | 7. | 0. | 13. | 16. | 47. | 59. | 19. |
| | | 12. | 71. | 0. | 13. | 26. | 65. | 33. | 42. | 77. | 8. |
| | | 13. | 8. | 16. | 48. | 3. | 0. | 0. | 43. | 0. | 72. |
| | | 59. | 0. | 99. | 19. | | | | | | |
| 3 | 10. | 18. | 21. | 34. | 5. | 0. | 8. | 15. | 43. | 55. | 17. |
| | | 11. | 66. | 0. | 8. | 24. | 60. | 31. | 39. | 70. | 5. |
| | | 13. | 5. | 15. | 43. | 2. | 0. | 0. | 40. | 0. | 67. |
| | | 54. | 0. | 91. | 18. | | | | | | |
| 3 | 15. | 16. | 20. | 31. | 3. | 0. | 5. | 15. | 40. | 50. | 16. |
| | | 7. | 62. | 0. | 5. | 22. | 55. | 29. | 36. | 65. | 3. |
| | | 11. | 3. | 14. | 40. | 2. | 0. | 0. | 36. | 0. | 62. |
| | | 49. | 0. | 84. | 16. | | | | | | |
| 3 | 20. | 14. | 18. | 29. | 2. | 0. | 4. | 14. | 37. | 46. | 14. |
| | | 4. | 57. | 0. | 4. | 21. | 51. | 27. | 34. | 59. | 2. |
| | | 7. | 2. | 14. | 36. | 0. | 0. | 0. | 33. | 0. | 57. |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 45. | 0. | 77. | 15. | | | | | | |
| 3 | 25. | 8. | 17. | 27. | 1. | 0. | 2. | 13. | 34. | 43. | 9. |
| | | 3. | 53. | 0. | 3. | 19. | 47. | 25. | 31. | 54. | 2. |
| | | 5. | 2. | 12. | 33. | 0. | 0. | 0. | 30. | 0. | 53. |
| | | 41. | 0. | 71. | 13. | | | | | | |
| 3 | 30. | 6. | 16. | 25. | 0. | 0. | 2. | 12. | 31. | 39. | 6. |
| | | 2. | 50. | 0. | 2. | 18. | 43. | 23. | 29. | 50. | 0. |
| | | 3. | 0. | 8. | 30. | 0. | 0. | 0. | 28. | 0. | 49. |
| | | 38. | 0. | 66. | 8. | | | | | | |
| 3 | 35. | 4. | 15. | 23. | 0. | 0. | 0. | 8. | 29. | 36. | 4. |
| | | 1. | 46. | 0. | 0. | 17. | 40. | 21. | 27. | 46. | 0. |
| | | 2. | 0. | 5. | 28. | 0. | 0. | 0. | 25. | 0. | 45. |
| | | 34. | 0. | 60. | 5. | | | | | | |
| 3 | 40. | 3. | 14. | 21. | 0. | 0. | 0. | 5. | 27. | 33. | 3. |
| | | 0. | 43. | 0. | 0. | 15. | 37. | 20. | 25. | 42. | 0. |
| | | 2. | 0. | 4. | 25. | 0. | 0. | 0. | 23. | 0. | 42. |
| | | 31. | 0. | 56. | 4. | | | | | | |
| 3 | 45. | 2. | 12. | 19. | 0. | 0. | 0. | 4. | 25. | 31. | 2. |
| | | 0. | 40. | 0. | 0. | 14. | 34. | 18. | 23. | 39. | 0. |
| | | 0. | 0. | 3. | 23. | 0. | 0. | 0. | 21. | 0. | 39. |
| | | 29. | 0. | 51. | 2. | | | | | | |
| 3 | 50. | 0. | 8. | 18. | 0. | 0. | 0. | 3. | 23. | 28. | 0. |
| | | 0. | 37. | 0. | 0. | 13. | 31. | 17. | 22. | 35. | 0. |
| | | 0. | 0. | 2. | 21. | 0. | 0. | 0. | 20. | 0. | 36. |
| | | 26. | 0. | 47. | 2. | | | | | | |
| 3 | 55. | 0. | 5. | 17. | 0. | 0. | 0. | 2. | 21. | 26. | 0. |
| | | 0. | 35. | 0. | 0. | 12. | 29. | 16. | 20. | 32. | 0. |
| | | 0. | 0. | 0. | 19. | 0. | 0. | 0. | 18. | 0. | 34. |
| | | 24. | 0. | 44. | 0. | | | | | | |
| 4 | 0. | 0. | 4. | 15. | 0. | 0. | 0. | 2. | 20. | 24. | 0. |
| | | 0. | 33. | 0. | 0. | 11. | 27. | 14. | 19. | 30. | 0. |
| | | 0. | 0. | 0. | 18. | 0. | 0. | 0. | 16. | 0. | 31. |
| | | 22. | 0. | 40. | 0. | | | | | | |
| 4 | 5. | 0. | 3. | 14. | 0. | 0. | 0. | 0. | 18. | 22. | 0. |
| | | 0. | 30. | 0. | 0. | 7. | 25. | 13. | 17. | 27. | 0. |
| | | 0. | 0. | 0. | 16. | 0. | 0. | 0. | 15. | 0. | 29. |
| | | 20. | 0. | 37. | 0. | | | | | | |
| 4 | 10. | 0. | 2. | 13. | 0. | 0. | 0. | 0. | 17. | 20. | 0. |
| | | 0. | 28. | 0. | 0. | 5. | 23. | 12. | 16. | 25. | 0. |
| | | 0. | 0. | 0. | 15. | 0. | 0. | 0. | 14. | 0. | 27. |
| | | 18. | 0. | 34. | 0. | | | | | | |
| 4 | 15. | 0. | 1. | 12. | 0. | 0. | 0. | 0. | 15. | 19. | 0. |
| | | 0. | 26. | 0. | 0. | 3. | 21. | 7. | 15. | 23. | 0. |
| | | 0. | 0. | 0. | 14. | 0. | 0. | 0. | 12. | 0. | 25. |
| | | 17. | 0. | 31. | 0. | | | | | | |
| 4 | 20. | 0. | 0. | 11. | 0. | 0. | 0. | 0. | 14. | 17. | 0. |
| | | 0. | 25. | 0. | 0. | 2. | 19. | 5. | 14. | 21. | 0. |
| | | 0. | 0. | 0. | 12. | 0. | 0. | 0. | 7. | 0. | 23. |
| | | 15. | 0. | 29. | 0. | | | | | | |
| 4 | 25. | 0. | 0. | 7. | 0. | 0. | 0. | 0. | 13. | 16. | 0. |
| | | 0. | 23. | 0. | 0. | 1. | 18. | 3. | 13. | 19. | 0. |
| | | 0. | 0. | 0. | 7. | 0. | 0. | 0. | 5. | 0. | 21. |
| | | 14. | 0. | 27. | 0. | | | | | | |
| 4 | 30. | 0. | 0. | 4. | 0. | 0. | 0. | 0. | 8. | 14. | 0. |
| | | 0. | 21. | 0. | 0. | 0. | 16. | 2. | 12. | 18. | 0. |
| | | 0. | 0. | 0. | 5. | 0. | 0. | 0. | 3. | 0. | 20. |
| | | 12. | 0. | 25. | 0. | | | | | | |
| 4 | 35. | 0. | 0. | 3. | 0. | 0. | 0. | 0. | 5. | 13. | 0. |
| | | 0. | 20. | 0. | 0. | 0. | 15. | 2. | 7. | 16. | 0. |
| | | 0. | 0. | 0. | 3. | 0. | 0. | 0. | 2. | 0. | 18. |
| | | 8. | 0. | 23. | 0. | | | | | | |
| 4 | 40. | 0. | 0. | 2. | 0. | 0. | 0. | 0. | 4. | 12. | 0. |

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|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 18. | 0. | 0. | 0. | 14. | 0. | 5. | 15. | 0. |
| | | 0. | 0. | 0. | 2. | 0. | 0. | 0. | 2. | 0. | 17. |
| | | 5. | 0. | 21. | 0. | | | | | | |
| 4 | 45. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 3. | 7. | 0. |
| | | 0. | 17. | 0. | 0. | 0. | 13. | 0. | 3. | 14. | 0. |
| | | 0. | 0. | 0. | 2. | 0. | 0. | 0. | 0. | 0. | 16. |
| | | 4. | 0. | 19. | 0. | | | | | | |
| 4 | 50. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 2. | 5. | 0. |
| | | 0. | 16. | 0. | 0. | 0. | 12. | 0. | 2. | 12. | 0. |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 14. |
| | | 2. | 0. | 18. | 0. | | | | | | |
| 4 | 55. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 1. | 3. | 0. |
| | | 0. | 15. | 0. | 0. | 0. | 7. | 0. | 1. | 8. | 0. |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 13. |
| | | 2. | 0. | 16. | 0. | | | | | | |
| 5 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 2. | 0. |
| | | 0. | 14. | 0. | 0. | 0. | 5. | 0. | 0. | 5. | 0. |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 12. |
| | | 0. | 0. | 15. | 0. | | | | | | |
| 5 | 5. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 2. | 0. |
| | | 0. | 13. | 0. | 0. | 0. | 3. | 0. | 0. | 3. | 0. |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 7. |
| | | 0. | 0. | 14. | 0. | | | | | | |
| 5 | 10. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | 0. | 12. | 0. | 0. | 0. | 2. | 0. | 0. | 2. | 0. |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 5. |
| | | 0. | 0. | 13. | 0. | | | | | | |
| 5 | 15. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | 0. | 7. | 0. | 0. | 0. | 1. | 0. | 0. | 2. | 0. |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 3. |
| | | 0. | 0. | 12. | 0. | | | | | | |
| 5 | 20. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | 0. | 5. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | 0. | 0. | 7. | 0. | | | | | | |
| 5 | 25. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | 0. | 3. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 2. |
| | | 0. | 0. | 5. | 0. | | | | | | |
| 5 | 30. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | 0. | 2. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | 0. | 0. | 3. | 0. | | | | | | |
| 5 | 35. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | 0. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | 0. | 0. | 2. | 0. | | | | | | |
| 5 | 40. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| | | 0. | 0. | 1. | 0. | | | | | | |

1

100yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
Blank

| NK/SURCHARGE GUTTER DEPTH NUMBER (FT) | GUTTER JK CONNECTION | NDP | NP | WIDTH OR DIAM (FT) | LENGTH (FT) | INVERT SLOPE (FT/FT) | SIDE SLOPES HORIZ TO VERT L | R | MANNING N | OVERBA |
|---|---|---|---|---|---|---|---|---|---|---|

```
 201        101          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 202        102          3          3                    .0        1.     .0010       .0    .0       .001
10.00      -1
                    TIME IN HRS VS INFLOW IN CFS
                          .0      .0        .6    53.8       1.6      .0
 203        103          3          3                    .0        1.     .0010       .0    .0       .001
10.00      -1
                    TIME IN HRS VS INFLOW IN CFS
                          .0      .0        .2    14.4        .7      .0
 204        104          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 205        105          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 206        106          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 207        107          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 208        108          3          3                    .0        1.     .0010       .0    .0       .001
10.00      -1
                    TIME IN HRS VS INFLOW IN CFS
                          .0      .0        .6    94.7       1.6      .0
 209        109          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 210        110          3          3                    .0        1.     .0010       .0    .0       .001
10.00      -1
                    TIME IN HRS VS INFLOW IN CFS
                          .0      .0        .3    79.1       1.0      .0
 211        111          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 212        112          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 213        113          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 214        114          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 215        115          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 216        116          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 217        117          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 218        118          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 219        119          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 220        120          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 221        121          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 222        122          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 223        123          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 224        124          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 225        125          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 226        126          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 227        127          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 228        128          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 229        129          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 230        130          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 231        131          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 232        132          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 233        133          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 234        134          0          3                    .0        1.     .0010       .0    .0       .001
10.00       0
 235        135          0          3                    .0        1.     .0010       .0    .0       .001
```

```
10.00       0
 236        136         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 237        137         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 238        138         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 402        302         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 401        304         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 106        306         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 107        307         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 404        311         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 112        312         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 414        314         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 115        315         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 117        317         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 118        318         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 119        319         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 420        322         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 124        324         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 126        326         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 128        328         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 129        329         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 130        330         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 131        331         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 432        333         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 135        335         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 136        336         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 138        338         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 125        400         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 127        400         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 132        400         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 104        401         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 105        401         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 111        404         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 114        404         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 416        414         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 122        420         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 123        420         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 133        432         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 134        432         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 101        501         0         3                  .0       1.     .0010       .0    .0       .001
10.00       0
 113        513         0         3                  .0       1.     .0010       .0    .0       .001
```

```
 10.00        0
  116         516          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  120         520          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  121         520          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  137         537          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  102         602          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  103         603          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  108         608          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  109         609          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  110         610          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  400         900          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  337         901          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  320         902          0          3                      .0        1.     .0010       .0    .0       .001
 10.00        0
  501         301          7          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                       RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                             .0      .0       7.5      .0      26.4      .0      63.3      .0      82.9      .0     12
9.0  1400.0
                          201.0  6510.0
  513         313            3          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                       RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                             .0      .0      20.3      .0      22.6   665.0
  516         316            3          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                       RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                             .0      .0      18.1      .0      18.9   320.0
  520         320            4          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                       RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                             .0      .0       9.9      .0      10.0     5.0     280.0     5.0
  537         337            3          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                       RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                             .0      .0      14.9      .0      17.7   649.0
  602         402            3          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                       RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                             .0      .0        .8     5.4       1.6    15.4
  603         303            3          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                       RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                             .0      .0        .1     1.2        .3     6.9
  608         308           10          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                       RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                             .0      .0        .0      .3        .4      .5       1.6      .6       3.6      .7
6.1    32.4
                           7.1    55.6       8.9   123.5      11.5   266.4      13.1   378.7
  609         309            2          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                       RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                             .0      .0      12.0    43.4
  610         310            2          2      PIPE            .1        1.     .0010       .0    .0       .001
   .10        0
                       RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                             .0      .0       3.8     1.3
  302         101            0          1      CHANNEL          .0     1698.     .0150      4.0   4.0       .045
  5.00        0
  304         101            0          1      CHANNEL       175.0     1761.     .0133      4.0   4.0       .045
  5.00        0
  311         104            0          1      CHANNEL       135.0     2519.     .0123      4.0   4.0       .045
  5.00        0
  306         105            0          1      CHANNEL        25.0     5603.     .0157      4.0   4.0       .045
  5.00        0
  308         107            0          1      CHANNEL         4.0      625.     .0080       .0    .0       .016
```

```
 2.00        0
 312         111          0          1      CHANNEL          .0     2682.     .0082    110.0 110.0       .045
10.00        0
 318         113          0          1      CHANNEL         35.0     3069.     .0071      4.0   4.0       .045
 5.00        0
 314         114          0          1      CHANNEL         60.0     3598.     .0080      4.0   4.0       .045
 5.00        0
 317         118          0          1      CHANNEL          .0     1788.     .0011      4.0   4.0       .045
 5.00        0
 319         118          0          1      CHANNEL          .0     2135.     .0082      4.0   4.0       .045
 5.00        0
 322         120          0          1      CHANNEL        100.0     2881.     .0085      4.0   4.0       .045
 5.00        0
 324         123          0          1      CHANNEL         80.0     5657.     .0133      4.0   4.0       .045
 5.00        0
 326         125          0          1      CHANNEL         45.0     2265.     .0018      4.0   4.0       .045
 5.00        0
 301         126          0          1      CHANNEL        150.0     1716.     .0152      4.0   4.0       .045
 5.00        0
 328         127          0          1      CHANNEL         10.0     2545.     .0026      4.0   4.0       .045
 5.00        0
 329         128          0          1      CHANNEL         25.0     4136.     .0173      4.0   4.0       .045
 5.00        0
 330         128          0          1      CHANNEL         15.0     6271.     .0148      4.0   4.0       .045
 5.00        0
 331         129          0          1      CHANNEL          .0     2147.     .0135      4.0   4.0       .045
 5.00        0
 333         132          0          1      CHANNEL         55.0     4716.     .0068      4.0   4.0       .045
 5.00        0
 335         134          0          1      CHANNEL         85.0     7048.     .0123      4.0   4.0       .045
 5.00        0
 336         135          0          1      CHANNEL         35.0     5158.     .0099      4.0   4.0       .045
 5.00        0
 338         137          0          1      CHANNEL         90.0     5244.     .0139      4.0   4.0       .045
 5.00        0
 303         402          0          1      CHANNEL          5.0     1011.     .0151      5.0   5.0       .035
 3.00        0
 307         404          0          1      CHANNEL          5.0     1308.     .0031      5.0   5.0       .035
 3.00        0
 315         414          0          1      CHANNEL          .0     2696.     .0097      4.0   4.0       .045
 5.00        0
 313         416          0          1      CHANNEL         10.0     2381.     .0054      4.0   4.0       .045
 5.00        0
 316         416          0          1      CHANNEL          .0      965.     .0053      4.0   4.0       .045
 5.00        0
 309         608          0          1      CHANNEL          5.0     1757.     .0091      5.0   5.0       .035
 3.00        0
 310         609          0          1      CHANNEL          5.0     3896.     .0100      5.0   5.0       .035
 3.00        0
0TOTAL NUMBER OF GUTTERS/PIPES, 125
1


 100yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
 Blank


 ARRANGEMENT OF SUBCATCHMENTS AND GUTTERS/PIPES

       GUTTER     TRIBUTARY GUTTER/PIPE                                    TRIBUTARY SUBAREA
         D.A.(AC)

       101       201  302  304    0    0    0    0    0    0    0          0    0    0    0    0    0    0    0
  0    0  2658.6

       102       202    0    0    0    0    0    0    0    0    0          0    0    0    0    0    0    0    0
  0    0      .0

       103       203    0    0    0    0    0    0    0    0    0          0    0    0    0    0    0    0    0
  0    0      .0

       104       204  311    0    0    0    0    0    0    0    0          0    0    0    0    0    0    0    0
  0    0  2034.6

       105       205  306    0    0    0    0    0    0    0    0          0    0    0    0    0    0    0    0
  0    0   346.9
```

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 106 | 206 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 73.0 | | | | | | | | | | | | | | | | | | | | |
| 107 | 207 | 308 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 135.0 | | | | | | | | | | | | | | | | | | | | |
| 108 | 208 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | .0 | | | | | | | | | | | | | | | | | | | | |
| 109 | 209 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 130.6 | | | | | | | | | | | | | | | | | | | | |
| 110 | 210 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | .0 | | | | | | | | | | | | | | | | | | | | |
| 111 | 211 | 312 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 334.1 | | | | | | | | | | | | | | | | | | | | |
| 112 | 212 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 284.2 | | | | | | | | | | | | | | | | | | | | |
| 113 | 213 | 318 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 788.5 | | | | | | | | | | | | | | | | | | | | |
| 114 | 214 | 314 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 1445.1 | | | | | | | | | | | | | | | | | | | | |
| 115 | 215 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 62.1 | | | | | | | | | | | | | | | | | | | | |
| 116 | 216 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 405.1 | | | | | | | | | | | | | | | | | | | | |
| 117 | 217 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 94.7 | | | | | | | | | | | | | | | | | | | | |
| 118 | 218 | 317 | 319 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 369.9 | | | | | | | | | | | | | | | | | | | | |
| 119 | 219 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 164.5 | | | | | | | | | | | | | | | | | | | | |
| 120 | 220 | 322 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 1415.0 | | | | | | | | | | | | | | | | | | | | |
| 121 | 221 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 211.2 | | | | | | | | | | | | | | | | | | | | |
| 122 | 222 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 254.7 | | | | | | | | | | | | | | | | | | | | |
| 123 | 223 | 324 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 718.1 | | | | | | | | | | | | | | | | | | | | |
| 124 | 224 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 152.3 | | | | | | | | | | | | | | | | | | | | |
| 125 | 225 | 326 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 2784.6 | | | | | | | | | | | | | | | | | | | | |
| 126 | 226 | 301 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 2749.4 | | | | | | | | | | | | | | | | | | | | |
| 127 | 227 | 328 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 521.6 | | | | | | | | | | | | | | | | | | | | |
| 128 | 228 | 329 | 330 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 457.6 | | | | | | | | | | | | | | | | | | | | |
| 129 | 229 | 331 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 62.1 | | | | | | | | | | | | | | | | | | | | |
| 130 | 230 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 21.8 | | | | | | | | | | | | | | | | | | | | |
| 131 | 231 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 23.0 | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 132 | 232 | 333 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1356.8 |
| 133 | 233 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33.3 |
| 134 | 234 | 335 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 985.0 |
| 135 | 235 | 336 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 535.0 |
| 136 | 236 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66.6 |
| 137 | 237 | 338 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 858.2 |
| 138 | 238 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 173.4 |
| 201 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 277.1 |
| 202 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 203 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 204 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 120.3 |
| 205 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 273.9 |
| 206 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73.0 |
| 207 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.5 |
| 208 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 209 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130.6 |
| 210 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 211 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49.9 |
| 212 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 284.2 |
| 213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 418.6 |
| 214 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 189.4 |
| 215 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62.1 |
| 216 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 405.1 |
| 217 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94.7 |
| 218 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 110.7 |
| 219 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 164.5 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 442.2 |
| 221 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 211.2 |
| 222 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 254.7 |
| 223 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 565.8 |
| 224 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 152.3 |
| 225 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35.2 |
| 226 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90.9 |
| 227 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64.0 |
| 228 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 373.8 |
| 229 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39.0 |
| 230 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21.8 |
| 231 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.0 |
| 232 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 338.6 |
| 233 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33.3 |
| 234 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 449.9 |
| 235 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 468.5 |
| 236 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66.6 |
| 237 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 684.8 |
| 238 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 173.4 |
| 301 | 501 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2658.6 |
| 302 | 402 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 303 | 603 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 |
| 304 | 401 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2381.4 |
| 306 | 106 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73.0 |
| 307 | 107 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 135.0 |
| 308 | 608 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130.6 |

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 309 | 609 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 130.6 | | | | | | | | | | | | | | | | | | | | | |
| 310 | 610 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | .0 | | | | | | | | | | | | | | | | | | | | | |
| 311 | 404 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 1914.2 | | | | | | | | | | | | | | | | | | | | | |
| 312 | 112 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 284.2 | | | | | | | | | | | | | | | | | | | | | |
| 313 | 513 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 788.5 | | | | | | | | | | | | | | | | | | | | | |
| 314 | 414 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 1255.7 | | | | | | | | | | | | | | | | | | | | | |
| 315 | 115 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 62.1 | | | | | | | | | | | | | | | | | | | | | |
| 316 | 516 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 405.1 | | | | | | | | | | | | | | | | | | | | | |
| 317 | 117 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 94.7 | | | | | | | | | | | | | | | | | | | | | |
| 318 | 118 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 369.9 | | | | | | | | | | | | | | | | | | | | | |
| 319 | 119 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 164.5 | | | | | | | | | | | | | | | | | | | | | |
| 320 | 520 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 1626.2 | | | | | | | | | | | | | | | | | | | | | |
| 322 | 420 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 972.8 | | | | | | | | | | | | | | | | | | | | | |
| 324 | 124 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 152.3 | | | | | | | | | | | | | | | | | | | | | |
| 326 | 126 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 2749.4 | | | | | | | | | | | | | | | | | | | | | |
| 328 | 128 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 457.6 | | | | | | | | | | | | | | | | | | | | | |
| 329 | 129 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 62.1 | | | | | | | | | | | | | | | | | | | | | |
| 330 | 130 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 21.8 | | | | | | | | | | | | | | | | | | | | | |
| 331 | 131 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 23.0 | | | | | | | | | | | | | | | | | | | | | |
| 333 | 432 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 1018.2 | | | | | | | | | | | | | | | | | | | | | |
| 335 | 135 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 535.0 | | | | | | | | | | | | | | | | | | | | | |
| 336 | 136 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 66.6 | | | | | | | | | | | | | | | | | | | | | |
| 337 | 537 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 858.2 | | | | | | | | | | | | | | | | | | | | | |
| 338 | 138 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 173.4 | | | | | | | | | | | | | | | | | | | | | |
| 400 | 125 | 127 | 132 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 4663.0 | | | | | | | | | | | | | | | | | | | | | |
| 401 | 104 | 105 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 2381.4 | | | | | | | | | | | | | | | | | | | | | |

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      402       602  303    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0

      404       111  114  307    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  1914.2

      414       416  315    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  1255.7

      416       313  316    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  1193.6

      420       122  123    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   972.8

      432       133  134    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  1018.2

      501       101    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  2658.6

      513       113    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   788.5

      516       116    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   405.1

      520       120  121    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0  1626.2

      537       137    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   858.2

      602       102    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0

      603       103    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0

      608       108  309    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   130.6

      609       109  310    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0   130.6

      610       110    0    0    0    0    0    0    0    0    0            0    0    0    0    0    0    0    0
  0    0      .0
1


 100yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
 Blank


 HYDROGRAPHS ARE LISTED FOR THE FOLLOWING  86 CONVEYANCE ELEMENTS


          THE UPPER NUMBER IS DISCHARGE IN CFS
          THE LOWER NUMBER IS ONE OF THE FOLLOWING CASES:
                    ( ) DENOTES DEPTH ABOVE INVERT IN FEET
                    (S) DENOTES STORAGE IN AC-FT FOR DETENTION DAM.  DISCHARGE INCLUDES SPILLWAY OUTFLOW.
                    (I) DENOTES GUTTER INFLOW IN CFS FROM SPECIFIED INFLOW HYDROGRAPH
                    (D) DENOTES DISCHARGE IN CFS DIVERTED FROM THIS GUTTER
                    (O) DENOTES STORAGE IN AC-FT FOR SURCHARGED GUTTER

 TIME(HR/MIN)   101       102       103       104       105       106       107       108       109       110
                111       112       113       114       115       116       117       118       119       120
                121       122       123       124       125       126       127       128       129       130
                131       132       133       134       135       136       137       138       301       302
                303       304       306       307       308       309       310       311       312       313
                314       315       316       317       318       319       320       322       324       326
                328       329       330       331       333       335       336       338       400       401
                402       404       414       416       420       432       501       513       516       520
                537       602       603       608       609       610

   0    5.       0.        8.        5.        0.        0.        0.        0.       13.        0.       19.
                  .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )     .0( )
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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) |
| | | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.1(S) | | | | |
| 0 | 10. | 0.<br>.0( ) | 16.<br>.0( ) | 10.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 25.<br>.0( ) | 0.<br>.0( ) | 38.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.2( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) |
| | | 0.<br>.0(S) | 1.<br>.1(S) | 1.<br>.1(S) | 0.<br>.2(S) | 0.<br>.0(S) | 0.<br>.3(S) | | | | |
| 0 | 15. | 0.<br>.0( ) | 24.<br>.0( ) | 16.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 38.<br>.0( ) | 0.<br>.0( ) | 57.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.3( ) |
| | | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 2.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) |
| | | 0.<br>.0(S) | 2.<br>.2(S) | 2.<br>.1(S) | 0.<br>.4(S) | 0.<br>.0(S) | 0.<br>.6(S) | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20. | 1.<br>.0( ) | 33.<br>.0( ) | 9.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 51.<br>.0( ) | 0.<br>.0( ) | 75.<br>.0( ) |
| | | 1.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.4( ) |
| | | 2.<br>.2( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.2( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) |
| | | 4.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) |
| | | 0.<br>.0(S) | 3.<br>.4(S) | 4.<br>.2(S) | 1.<br>.7(S) | 0.<br>.0(S) | 0.<br>1.0(S) | | | | |
| 0 | 25. | 6.<br>.0( ) | 41.<br>.0( ) | 10.<br>.0( ) | 3.<br>.0( ) | 0.<br>.0( ) | 1.<br>.0( ) | 2.<br>.0( ) | 64.<br>.0( ) | 1.<br>.0( ) | 77.<br>.0( ) |
| | | 2.<br>.0( ) | 6.<br>.0( ) | 2.<br>.0( ) | 4.<br>.0( ) | 1.<br>.0( ) | 2.<br>.0( ) | 8.<br>.0( ) | 3.<br>.0( ) | 1.<br>.0( ) | 2.<br>.0( ) |
| | | 1.<br>.0( ) | 1.<br>.0( ) | 2.<br>.0( ) | 2.<br>.0( ) | 1.<br>.0( ) | 1.<br>.0( ) | 1.<br>.0( ) | 4.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) |
| | | 1.<br>.0( ) | 2.<br>.0( ) | 1.<br>.0( ) | 2.<br>.0( ) | 4.<br>.0( ) | 1.<br>.0( ) | 2.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0( ) | 3.<br>.6( ) |
| | | 3.<br>.3( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.1( ) | 0.<br>.5( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 4.<br>.0( ) | 4.<br>.0( ) |
| | | 8.<br>.0( ) | 7.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 3.<br>.0( ) | 2.<br>.0( ) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) | 0.<br>.0(S) |
| | | 0.<br>.0(S) | 5.<br>.6(S) | 5.<br>.3(S) | 1.<br>1.1(S) | 0.<br>.0(S) | 1.<br>1.6(S) | | | | |
| 0 | 30. | 63.<br>.0( ) | 49.<br>.0( ) | 4.<br>.0( ) | 22.<br>.0( ) | 21.<br>.0( ) | 13.<br>.0( ) | 7.<br>.0( ) | 76.<br>.0( ) | 26.<br>.0( ) | 57.<br>.0( ) |
| | | 12.<br>.0( ) | 40.<br>.0( ) | 38.<br>.0( ) | 43.<br>.0( ) | 10.<br>.0( ) | 25.<br>.0( ) | 68.<br>.0( ) | 32.<br>.0( ) | 15.<br>.0( ) | 35.<br>.0( ) |
| | | 21.<br>.0( ) | 19.<br>.0( ) | 45.<br>.0( ) | 36.<br>.0( ) | 8.<br>.0( ) | 17.<br>.0( ) | 12.<br>.0( ) | 46.<br>.0( ) | 13.<br>.0( ) | 12.<br>.0( ) |
| | | 12.<br>.0( ) | 35.<br>.0( ) | 12.<br>.0( ) | 30.<br>.0( ) | 54.<br>.0( ) | 20.<br>.0( ) | 44.<br>.0( ) | 27.<br>.0( ) | 0.<br>.0( ) | 5.<br>.8( ) |
| | | 4.<br>.3( ) | 1.<br>.0( ) | 0.<br>.0( ) | 1.<br>.3( ) | 1.<br>.1( ) | 0.<br>.0( ) | 0.<br>.0( ) | 2.<br>.0( ) | 2.<br>.2( ) | 0.<br>.0( ) |
| | | 0.<br>.0( ) | 1.<br>.4( ) | 0.<br>.1( ) | 5.<br>1.3( ) | 1.<br>.1( ) | 1.<br>.5( ) | 0.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) |
| | | 2.<br>.3( ) | 0.<br>.0( ) | 0.<br>.0( ) | 1.<br>.5( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 0.<br>.0( ) | 55.<br>.0( ) | 42.<br>.0( ) |
| | | 11.<br>.0( ) | 57.<br>.0( ) | 1.<br>.0( ) | 0.<br>.0( ) | 65.<br>.0( ) | 43.<br>.0( ) | 0.<br>.3(S) | 0.<br>.1(S) | 0.<br>.1(S) | 0.<br>.2(S) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 7. | 5. | 1. | 0. | 1. | | | | |
| | | .2(S) | .9(S) | .3(S) | 1.6(S) | .1(S) | 2.0(S) | | | | |
| 0 | 35. | 178. | 57. | 5. | 65. | 68. | 36. | 10. | 89. | 70. | 58. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 33. | 106. | 122. | 111. | 28. | 78. | 127. | 98. | 47. | 120. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 62. | 60. | 143. | 97. | 21. | 46. | 44. | 134. | 33. | 23. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 25. | 110. | 28. | 98. | 159. | 49. | 143. | 78. | 0. | 9. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .9( ) |
| | | 5. | 15. | 1. | 3. | 1. | 0. | 0. | 13. | 9. | 0. |
| | | .3( ) | .1( ) | .1( ) | .4( ) | .1( ) | .0( ) | .0( ) | .1( ) | .3( ) | .0( ) |
| | | 0. | 4. | 0. | 24. | 8. | 9. | 0. | 15. | 3. | 2. |
| | | .0( ) | .8( ) | .1( ) | 2.3( ) | .2( ) | 1.1( ) | .0( ) | .2( ) | .1( ) | .1( ) |
| | | 17. | 2. | 1. | 6. | 4. | 4. | 2. | 2. | 174. | 132. |
| | | .9( ) | .1( ) | .1( ) | .8( ) | .1( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) |
| | | 15. | 147. | 4. | 0. | 203. | 126. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.1(S) | .7(S) | .5(S) | 1.0(S) |
| | | 0. | 11. | 5. | 1. | 2. | 1. | | | | |
| | | .8(S) | 1.2(S) | .3(S) | 2.1(S) | .4(S) | 2.4(S) | | | | |
| 0 | 40. | 326. | 43. | 0. | 131. | 126. | 56. | 10. | 99. | 110. | 38. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 64. | 174. | 239. | 168. | 44. | 147. | 146. | 178. | 83. | 264. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 109. | 109. | 269. | 147. | 35. | 72. | 100. | 235. | 50. | 26. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 29. | 207. | 37. | 193. | 279. | 70. | 276. | 127. | 0. | 12. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.1( ) |
| | | 5. | 66. | 5. | 5. | 1. | 1. | 0. | 50. | 27. | 0. |
| | | .3( ) | .3( ) | .2( ) | .5( ) | .1( ) | .1( ) | .0( ) | .3( ) | .5( ) | .0( ) |
| | | 0. | 12. | 0. | 53. | 33. | 29. | 0. | 71. | 10. | 7. |
| | | .0( ) | 1.2( ) | .1( ) | 3.0( ) | .5( ) | 1.7( ) | .0( ) | .4( ) | .1( ) | .3( ) |
| | | 57. | 7. | 2. | 14. | 21. | 17. | 6. | 8. | 343. | 257. |
| | | 1.8( ) | .2( ) | .1( ) | 1.1( ) | .3( ) | .2( ) | .2( ) | .1( ) | .0( ) | .0( ) |
| | | 18. | 237. | 12. | 0. | 378. | 230. | 0. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 2.8(S) | 1.9(S) | 1.2(S) | 2.9(S) |
| | | 0. | 14. | 5. | 1. | 4. | 1. | | | | |
| | | 2.3(S) | 1.5(S) | .2(S) | 2.8(S) | 1.0(S) | 2.7(S) | | | | |
| 0 | 45. | 494. | 49. | 0. | 215. | 182. | 68. | 10. | 73. | 133. | 40. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 100. | 225. | 369. | 198. | 54. | 214. | 150. | 250. | 113. | 466. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 148. | 155. | 395. | 172. | 51. | 88. | 177. | 320. | 59. | 27. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 29. | 314. | 39. | 302. | 381. | 77. | 413. | 161. | 0. | 16. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.2( ) |
| | | 4. | 175. | 11. | 7. | 1. | 2. | 0. | 115. | 57. | 0. |
| | | .3( ) | .4( ) | .3( ) | .6( ) | .1( ) | .2( ) | .1( ) | .4( ) | .6( ) | .0( ) |
| | | 1. | 24. | 0. | 80. | 84. | 58. | 0. | 190. | 25. | 17. |
| | | .0( ) | 1.5( ) | .1( ) | 3.6( ) | .9( ) | 2.2( ) | .0( ) | .7( ) | .2( ) | .5( ) |
| | | 123. | 15. | 5. | 20. | 60. | 46. | 13. | 21. | 542. | 397. |
| | | 2.6( ) | .3( ) | .2( ) | 1.3( ) | .6( ) | .3( ) | .3( ) | .2( ) | .0( ) | .0( ) |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 21. | 305. | 24. | 0. | 550. | 341. | 0. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 5.7(S) | 4.0(S) | 2.5(S) | 6.3(S) | |
| | | 0. | 16. | 4. | 1. | 7. | 1. | | | | | |
| | | 4.6(S) | 1.7(S) | .2(S) | 3.4(S) | 1.8(S) | 3.0(S) | | | | | |
| 0 | 50. | 666. | 35. | 0. | 300. | 224. | 72. | 12. | 84. | 140. | 19. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 137. | 253. | 491. | 207. | 58. | 269. | 147. | 304. | 132. | 692. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 173. | 188. | 497. | 178. | 65. | 92. | 258. | 377. | 62. | 26. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 30. | 425. | 39. | 412. | 448. | 77. | 532. | 176. | 0. | 19. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.3( ) | |
| | | 4. | 324. | 20. | 8. | 3. | 4. | 0. | 193. | 93. | 0. | |
| | | .3( ) | .6( ) | .4( ) | .7( ) | .2( ) | .3( ) | .1( ) | .6( ) | .7( ) | .0( ) | |
| | | 2. | 35. | 0. | 101. | 149. | 88. | 5. | 353. | 45. | 30. | |
| | | .1( ) | 1.7( ) | .1( ) | 3.9( ) | 1.3( ) | 2.5( ) | .0( ) | 1.1( ) | .3( ) | .6( ) | |
| | | 199. | 25. | 7. | 24. | 126. | 93. | 21. | 40. | 748. | 524. | |
| | | 3.2( ) | .4( ) | .3( ) | 1.4( ) | .9( ) | .5( ) | .4( ) | .3( ) | .0( ) | .0( ) | |
| | | 22. | 352. | 35. | 0. | 686. | 451. | 0. | 0. | 0. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 9.6(S) | 7.0(S) | 4.1(S) | 11.4(S) | |
| | | 0. | 18. | 3. | 5. | 10. | 1. | | | | | |
| | | 7.9(S) | 1.9(S) | .2(S) | 3.9(S) | 2.7(S) | 3.2(S) | | | | | |
| 0 | 55. | 814. | 41. | 0. | 372. | 250. | 71. | 18. | 58. | 139. | 21. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 171. | 262. | 587. | 208. | 57. | 306. | 136. | 339. | 140. | 895. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 184. | 207. | 567. | 176. | 76. | 91. | 329. | 406. | 65. | 24. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 29. | 534. | 39. | 512. | 481. | 77. | 621. | 178. | 0. | 21. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.3( ) | |
| | | 3. | 473. | 29. | 11. | 9. | 7. | 0. | 266. | 128. | 0. | |
| | | .3( ) | .8( ) | .5( ) | .8( ) | .5( ) | .5( ) | .1( ) | .7( ) | .8( ) | .0( ) | |
| | | 6. | 43. | 0. | 114. | 215. | 112. | 5. | 519. | 65. | 43. | |
| | | .1( ) | 1.9( ) | .1( ) | 4.1( ) | 1.5( ) | 2.8( ) | .0( ) | 1.4( ) | .4( ) | .8( ) | |
| | | 270. | 35. | 9. | 27. | 215. | 152. | 30. | 61. | 940. | 622. | |
| | | 3.7( ) | .5( ) | .3( ) | 1.5( ) | 1.2( ) | .6( ) | .4( ) | .3( ) | .0( ) | .0( ) | |
| | | 23. | 390. | 43. | 0. | 775. | 551. | 0. | 0. | 0. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 14.7(S) | 10.7(S) | 6.1(S) | 18.1(S) | |
| | | 0. | 20. | 3. | 11. | 13. | 1. | | | | | |
| | | 11.9(S) | 2.0(S) | .2(S) | 4.4(S) | 3.6(S) | 3.3(S) | | | | | |
| 1 | 0. | 928. | 27. | 0. | 433. | 261. | 71. | 24. | 68. | 138. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 200. | 259. | 650. | 212. | 56. | 326. | 126. | 360. | 141. | 1044. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 185. | 214. | 606. | 172. | 87. | 92. | 382. | 415. | 67. | 22. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 28. | 639. | 38. | 593. | 490. | 75. | 676. | 175. | 0. | 22. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.3( ) | |
| | | 3. | 593. | 37. | 15. | 15. | 10. | 0. | 329. | 158. | 0. | |
| | | .2( ) | .9( ) | .5( ) | .9( ) | .7( ) | .6( ) | .1( ) | .8( ) | .9( ) | .0( ) | |
| | | 10. | 48. | 0. | 120. | 271. | 127. | 5. | 652. | 83. | 54. | |
| | | .2( ) | 2.0( ) | .1( ) | 4.1( ) | 1.8( ) | 2.9( ) | .0( ) | 1.6( ) | .5( ) | .9( ) | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 324. | 43. | 11. | 27. | 317. | 212. | 37. | 81. | 1109. | 694. | |
| | | 4.0( ) | .6( ) | .4( ) | 1.5( ) | 1.5( ) | .8( ) | .5( ) | .4( ) | .0( ) | .0( ) | |
| | | 23. | 427. | 48. | 0. | 820. | 631. | 0. | 0. | 0. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 20.7(S) | 15.0(S) | 8.3(S) | 26.0(S) | |
| | | 187. | 21. | 2. | 16. | 16. | 1. | | | | | |
| | | 15.7(S) | 2.1(S) | .2(S) | 4.8(S) | 4.5(S) | 3.4(S) | | | | | |
| 1 | 5. | 1006. | 33. | 0. | 488. | 265. | 70. | 29. | 42. | 135. | 2. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 225. | 256. | 686. | 213. | 57. | 332. | 117. | 367. | 139. | 1132. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 182. | 214. | 621. | 166. | 97. | 90. | 420. | 419. | 67. | 21. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 27. | 736. | 36. | 653. | 489. | 72. | 703. | 173. | 0. | 23. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.4( ) | |
| | | 2. | 681. | 43. | 20. | 19. | 13. | 0. | 382. | 181. | 0. | |
| | | .2( ) | 1.0( ) | .6( ) | 1.1( ) | .8( ) | .7( ) | .1( ) | .9( ) | 1.0( ) | .0( ) | |
| | | 15. | 51. | 0. | 120. | 310. | 133. | 5. | 740. | 99. | 62. | |
| | | .2( ) | 2.0( ) | .1( ) | 4.1( ) | 1.9( ) | 3.0( ) | .0( ) | 1.7( ) | .5( ) | 1.0( ) | |
| | | 361. | 50. | 12. | 27. | 419. | 267. | 44. | 99. | 1253. | 752. | |
| | | 4.3( ) | .6( ) | .4( ) | 1.5( ) | 1.8( ) | .9( ) | .6( ) | .5( ) | .0( ) | .0( ) | |
| | | 24. | 458. | 51. | 0. | 835. | 689. | 0. | 0. | 0. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 27.4(S) | 19.6(S) | 10.6(S) | 34.7(S) | |
| | | 629. | 21. | 2. | 20. | 19. | 1. | | | | | |
| | | 17.6(S) | 2.2(S) | .1(S) | 5.1(S) | 5.3(S) | 3.4(S) | | | | | |
| 1 | 10. | 1055. | 19. | 0. | 532. | 265. | 68. | 33. | 52. | 129. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 244. | 255. | 703. | 217. | 56. | 328. | 104. | 361. | 138. | 1171. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 181. | 210. | 619. | 156. | 103. | 87. | 443. | 416. | 64. | 19. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 25. | 821. | 34. | 693. | 484. | 67. | 707. | 167. | 0. | 23. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.4( ) | |
| | | 2. | 746. | 49. | 25. | 23. | 17. | 1. | 426. | 199. | 89. | |
| | | .2( ) | 1.1( ) | .6( ) | 1.2( ) | .9( ) | .7( ) | .1( ) | .9( ) | 1.0( ) | 1.8( ) | |
| | | 28. | 53. | 0. | 117. | 334. | 136. | 5. | 787. | 111. | 69. | |
| | | .3( ) | 2.0( ) | .1( ) | 4.1( ) | 2.0( ) | 3.0( ) | .0( ) | 1.7( ) | .5( ) | 1.0( ) | |
| | | 383. | 54. | 13. | 27. | 511. | 313. | 48. | 113. | 1366. | 797. | |
| | | 4.4( ) | .6( ) | .4( ) | 1.5( ) | 2.0( ) | 1.0( ) | .6( ) | .5( ) | .0( ) | .0( ) | |
| | | 24. | 486. | 142. | 89. | 829. | 727. | 0. | 588. | 0. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 34.5(S) | 22.3(S) | 12.8(S) | 43.9(S) | |
| | | 696. | 22. | 1. | 24. | 22. | 1. | | | | | |
| | | 17.9(S) | 2.2(S) | .1(S) | 5.4(S) | 6.0(S) | 3.4(S) | | | | | |
| 1 | 15. | 1080. | 24. | 0. | 572. | 261. | 64. | 36. | 27. | 119. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 255. | 248. | 699. | 255. | 53. | 319. | 89. | 347. | 133. | 1176. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 175. | 204. | 608. | 142. | 105. | 81. | 452. | 404. | 60. | 17. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 23. | 883. | 31. | 718. | 468. | 61. | 695. | 157. | 0. | 23. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.4( ) | |
| | | 2. | 795. | 53. | 30. | 26. | 20. | 1. | 469. | 212. | 347. | |
| | | .2( ) | 1.1( ) | .7( ) | 1.3( ) | 1.0( ) | .8( ) | .1( ) | 1.0( ) | 1.0( ) | 3.5( ) | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 79. | 54. | 0. | 110. | 343. | 136. | 5. | 804. | 118. | 72. |
| | | .6( ) | 2.0( ) | .1( ) | 4.0( ) | 2.0( ) | 3.0( ) | .0( ) | 1.8( ) | .6( ) | 1.1( ) |
| | | 394. | 57. | 14. | 26. | 586. | 349. | 51. | 123. | 1439. | 833. |
| | | 4.4( ) | .7( ) | .4( ) | 1.5( ) | 2.2( ) | 1.1( ) | .6( ) | .5( ) | .0( ) | .0( ) |
| | | 23. | 539. | 401. | 347. | 812. | 749. | 0. | 701. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 41.8(S) | 22.7(S) | 15.1(S) | 53.1(S) |
| | | 700. | 22. | 1. | 26. | 24. | 1. | | | | |
| | | 17.9(S) | 2.2(S) | .1(S) | 5.6(S) | 6.7(S) | 3.4(S) | | | | |
| 1 | 20. | 1099. | 11. | 0. | 632. | 251. | 59. | 39. | 37. | 108. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 260. | 235. | 678. | 358. | 49. | 308. | 77. | 327. | 127. | 1154. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 166. | 196. | 585. | 127. | 104. | 74. | 448. | 383. | 56. | 16. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 21. | 921. | 29. | 726. | 443. | 55. | 674. | 144. | 0. | 23. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.4( ) |
| | | 1. | 840. | 55. | 34. | 28. | 23. | 1. | 535. | 219. | 534. |
| | | .2( ) | 1.1( ) | .7( ) | 1.4( ) | 1.1( ) | .9( ) | .1( ) | 1.0( ) | 1.0( ) | 4.3( ) |
| | | 199. | 53. | 0. | 102. | 340. | 133. | 5. | 800. | 121. | 74. |
| | | 1.1( ) | 2.0( ) | .1( ) | 3.9( ) | 2.0( ) | 3.0( ) | .0( ) | 1.8( ) | .6( ) | 1.1( ) |
| | | 394. | 57. | 14. | 24. | 643. | 373. | 53. | 129. | 1473. | 883. |
| | | 4.4( ) | .7( ) | .4( ) | 1.4( ) | 2.3( ) | 1.1( ) | .6( ) | .5( ) | .0( ) | .0( ) |
| | | 23. | 652. | 587. | 534. | 781. | 755. | 0. | 689. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 49.3(S) | 22.7(S) | 17.2(S) | 62.3(S) |
| | | 687. | 21. | 1. | 29. | 27. | 1. | | | | |
| | | 17.9(S) | 2.2(S) | .1(S) | 5.8(S) | 7.4(S) | 3.3(S) | | | | |
| 1 | 25. | 1134. | 16. | 0. | 728. | 239. | 54. | 41. | 11. | 97. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 259. | 219. | 644. | 505. | 45. | 293. | 65. | 303. | 118. | 1111. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 156. | 185. | 554. | 113. | 101. | 67. | 435. | 358. | 52. | 14. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 20. | 937. | 26. | 719. | 413. | 50. | 644. | 130. | 0. | 23. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.4( ) |
| | | 1. | 902. | 55. | 37. | 30. | 25. | 1. | 638. | 221. | 614. |
| | | .2( ) | 1.2( ) | .7( ) | 1.4( ) | 1.1( ) | .9( ) | .1( ) | 1.2( ) | 1.0( ) | 4.6( ) |
| | | 361. | 50. | 58. | 92. | 329. | 127. | 5. | 780. | 121. | 73. |
| | | 1.5( ) | 2.0( ) | 2.3( ) | 3.8( ) | 2.0( ) | 2.9( ) | .0( ) | 1.7( ) | .6( ) | 1.1( ) |
| | | 385. | 56. | 15. | 23. | 680. | 386. | 53. | 131. | 1473. | 967. |
| | | 4.4( ) | .7( ) | .4( ) | 1.4( ) | 2.4( ) | 1.1( ) | .6( ) | .6( ) | .0( ) | .0( ) |
| | | 22. | 801. | 722. | 671. | 739. | 746. | 0. | 661. | 198. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 57.0(S) | 22.6(S) | 18.6(S) | 71.2(S) |
| | | 663. | 21. | 1. | 30. | 29. | 1. | | | | |
| | | 17.8(S) | 2.1(S) | .1(S) | 5.9(S) | 7.9(S) | 3.3(S) | | | | |
| 1 | 30. | 1202. | 2. | 0. | 860. | 224. | 49. | 41. | 21. | 88. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 254. | 202. | 603. | 671. | 41. | 276. | 55. | 279. | 109. | 1054. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 144. | 173. | 518. | 101. | 97. | 61. | 415. | 331. | 49. | 13. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 18. | 934. | 24. | 700. | 380. | 45. | 607. | 118. | 0. | 22. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.3( ) |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. | 994. | 54. | 39. | 31. | 27. | 1. | 777. | 219. | 630. | |
| | | .1( ) | 1.3( ) | .7( ) | 1.4( ) | 1.1( ) | .9( ) | .1( ) | 1.3( ) | 1.0( ) | 4.6( ) | |
| | | 541. | 48. | 209. | 82. | 312. | 120. | 5. | 746. | 118. | 71. | |
| | | 1.9( ) | 2.0( ) | 3.8( ) | 3.6( ) | 1.9( ) | 2.8( ) | .0( ) | 1.7( ) | .6( ) | 1.1( ) | |
| | | 368. | 55. | 14. | 21. | 700. | 388. | 52. | 129. | 1446. | 1083. | |
| | | 4.3( ) | .6( ) | .4( ) | 1.3( ) | 2.4( ) | 1.1( ) | .6( ) | .5( ) | .0( ) | .0( ) | |
| | | 21. | 964. | 887. | 840. | 690. | 725. | 0. | 624. | 300. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 65.1(S) | 22.5(S) | 18.9(S) | 79.6(S) | |
| | | 630. | 20. | 1. | 31. | 30. | 1. | | | | | |
| | | 17.6(S) | 2.0(S) | .1(S) | 6.0(S) | 8.3(S) | 3.3(S) | | | | | |
| 1 | 35. | 1300. | 8. | 0. | 1008. | 208. | 45. | 38. | 0. | 80. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 246. | 187. | 559. | 821. | 39. | 258. | 47. | 255. | 100. | 988. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 132. | 160. | 479. | 90. | 93. | 56. | 392. | 306. | 46. | 12. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 17. | 917. | 23. | 672. | 350. | 40. | 566. | 107. | 0. | 21. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.3( ) | |
| | | 1. | 1113. | 53. | 39. | 32. | 29. | 1. | 930. | 213. | 614. | |
| | | .1( ) | 1.4( ) | .7( ) | 1.5( ) | 1.2( ) | 1.0( ) | .1( ) | 1.4( ) | 1.0( ) | 4.6( ) | |
| | | 703. | 45. | 272. | 73. | 293. | 112. | 5. | 705. | 114. | 68. | |
| | | 2.2( ) | 1.9( ) | 4.2( ) | 3.4( ) | 1.8( ) | 2.8( ) | .0( ) | 1.6( ) | .6( ) | 1.0( ) | |
| | | 348. | 53. | 14. | 20. | 703. | 383. | 50. | 126. | 1401. | 1216. | |
| | | 4.2( ) | .6( ) | .4( ) | 1.3( ) | 2.4( ) | 1.1( ) | .6( ) | .5( ) | .0( ) | .0( ) | |
| | | 20. | 1106. | 931. | 886. | 639. | 695. | 0. | 581. | 262. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 73.7(S) | 22.3(S) | 18.8(S) | 87.6(S) | |
| | | 592. | 19. | 1. | 32. | 31. | 1. | | | | | |
| | | 17.4(S) | 1.9(S) | .1(S) | 6.0(S) | 8.7(S) | 3.3(S) | | | | | |
| 1 | 40. | 1405. | 0. | 0. | 1134. | 193. | 42. | 36. | 1. | 72. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 236. | 173. | 516. | 903. | 36. | 240. | 40. | 233. | 93. | 919. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 122. | 147. | 442. | 80. | 88. | 51. | 368. | 282. | 43. | 11. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 16. | 889. | 21. | 639. | 321. | 36. | 524. | 98. | 0. | 20. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.3( ) | |
| | | 1. | 1238. | 51. | 38. | 32. | 31. | 1. | 1062. | 205. | 583. | |
| | | .1( ) | 1.4( ) | .6( ) | 1.4( ) | 1.2( ) | 1.0( ) | .1( ) | 1.6( ) | 1.0( ) | 4.5( ) | |
| | | 797. | 42. | 256. | 64. | 272. | 104. | 5. | 660. | 108. | 64. | |
| | | 2.4( ) | 1.9( ) | 4.1( ) | 3.3( ) | 1.8( ) | 2.7( ) | .0( ) | 1.6( ) | .5( ) | 1.0( ) | |
| | | 327. | 50. | 14. | 18. | 694. | 372. | 48. | 121. | 1345. | 1328. | |
| | | 4.1( ) | .6( ) | .4( ) | 1.3( ) | 2.4( ) | 1.1( ) | .6( ) | .5( ) | .0( ) | .0( ) | |
| | | 18. | 1178. | 882. | 840. | 589. | 660. | 3. | 538. | 247. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 83.0(S) | 22.2(S) | 18.7(S) | 95.0(S) | |
| | | 551. | 17. | 1. | 32. | 33. | 1. | | | | | |
| | | 17.3(S) | 1.8(S) | .1(S) | 6.0(S) | 9.0(S) | 3.3(S) | | | | | |
| 1 | 45. | 1482. | 0. | 0. | 1205. | 180. | 38. | 35. | 0. | 65. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 226. | 161. | 476. | 920. | 34. | 222. | 34. | 212. | 86. | 853. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 113. | 136. | 408. | 71. | 86. | 72. | 344. | 261. | 41. | 10. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 15. | 854. | 20. | 604. | 295. | 32. | 485. | 89. | 26. | 19. | | | | | | | | | | | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .1( ) | 1.3( ) | | | | | | | | | | | | |
| | | 1. | 1332. | 48. | 37. | 32. | 32. | 1. | 1137. | 195. | 546. | | | | | | | | | | | | |
| | | .1( ) | 1.5( ) | .6( ) | 1.4( ) | 1.2( ) | 1.0( ) | .1( ) | 1.6( ) | 1.0( ) | 4.3( ) | | | | | | | | | | | | |
| | | 823. | 39. | 240. | 57. | 251. | 97. | 5. | 614. | 102. | 64. | | | | | | | | | | | | |
| | | 2.4( ) | 1.8( ) | 4.0( ) | 3.1( ) | 1.7( ) | 2.6( ) | .0( ) | 1.5( ) | .5( ) | 1.0( ) | | | | | | | | | | | | |
| | | 305. | 48. | 13. | 17. | 676. | 358. | 45. | 115. | 1284. | 1385. | | | | | | | | | | | | |
| | | 3.9( ) | .6( ) | .4( ) | 1.3( ) | 2.4( ) | 1.1( ) | .6( ) | .5( ) | .0( ) | .0( ) | | | | | | | | | | | | |
| | | 17. | 1182. | 825. | 786. | 544. | 623. | 276. | 496. | 228. | 5. | | | | | | | | | | | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 92.0(S) | 22.0(S) | 18.7(S) | 101.9(S) | | | | | | | | | | | | |
| | | 510. | 16. | 1. | 32. | 33. | 1. | | | | | | | | | | | | | | | | |
| | | 17.1(S) | 1.7(S) | .1(S) | 6.0(S) | 9.2(S) | 3.3(S) | | | | | | | | | | | | | | | | |
| 1 | 50. | 1509. | 0. | 0. | 1218. | 167. | 35. | 34. | 0. | 59. | 0. | | | | | | | | | | | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | | | | | | | | | | | |
| | | 215. | 149. | 438. | 898. | 31. | 206. | 29. | 193. | 80. | 791. | | | | | | | | | | | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | | | | | | | | | | | |
| | | 105. | 127. | 376. | 64. | 107. | 223. | 321. | 241. | 39. | 6. | | | | | | | | | | | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | | | | | | | | | | | |
| | | 14. | 814. | 18. | 568. | 271. | 29. | 449. | 80. | 180. | 18. | | | | | | | | | | | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) | 1.2( ) | | | | | | | | | | | | |
| | | 1. | 1375. | 46. | 36. | 32. | 33. | 1. | 1155. | 186. | 507. | | | | | | | | | | | | |
| | | .1( ) | 1.5( ) | .6( ) | 1.4( ) | 1.2( ) | 1.0( ) | .1( ) | 1.6( ) | 1.0( ) | 4.2( ) | | | | | | | | | | | | |
| | | 811. | 37. | 223. | 50. | 231. | 90. | 5. | 571. | 96. | 85. | | | | | | | | | | | | |
| | | 2.4( ) | 1.8( ) | 3.9( ) | 3.0( ) | 1.6( ) | 2.6( ) | .0( ) | 1.4( ) | .5( ) | 1.2( ) | | | | | | | | | | | | |
| | | 284. | 46. | 13. | 16. | 651. | 341. | 43. | 109. | 1241. | 1386. | | | | | | | | | | | | |
| | | 3.8( ) | .6( ) | .4( ) | 1.2( ) | 2.3( ) | 1.0( ) | .5( ) | .5( ) | .0( ) | .0( ) | | | | | | | | | | | | |
| | | 16. | 1148. | 767. | 730. | 502. | 587. | 507. | 457. | 212. | 5. | | | | | | | | | | | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 99.6(S) | 21.9(S) | 18.6(S) | 108.2(S) | | | | | | | | | | | | |
| | | 472. | 15. | 1. | 32. | 34. | 1. | | | | | | | | | | | | | | | | |
| | | 16.9(S) | 1.6(S) | .1(S) | 6.0(S) | 9.4(S) | 3.3(S) | | | | | | | | | | | | | | | | |
| 1 | 55. | 1488. | 0. | 0. | 1192. | 155. | 33. | 34. | 0. | 53. | 0. | | | | | | | | | | | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | | | | | | | | | | | |
| | | 203. | 138. | 402. | 856. | 29. | 192. | 25. | 176. | 74. | 732. | | | | | | | | | | | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | | | | | | | | | | | |
| | | 97. | 118. | 346. | 57. | 182. | 472. | 298. | 221. | 36. | 4. | | | | | | | | | | | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | | | | | | | | | | | |
| | | 13. | 772. | 17. | 533. | 249. | 26. | 416. | 73. | 433. | 16. | | | | | | | | | | | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .8( ) | 1.2( ) | | | | | | | | | | | | |
| | | 1. | 1368. | 43. | 35. | 32. | 34. | 1. | 1133. | 176. | 470. | | | | | | | | | | | | |
| | | .1( ) | 1.5( ) | .6( ) | 1.4( ) | 1.2( ) | 1.0( ) | .2( ) | 1.6( ) | .9( ) | 4.1( ) | | | | | | | | | | | | |
| | | 777. | 35. | 207. | 44. | 212. | 84. | 5. | 529. | 89. | 161. | | | | | | | | | | | | |
| | | 2.3( ) | 1.7( ) | 3.8( ) | 2.8( ) | 1.5( ) | 2.5( ) | .0( ) | 1.4( ) | .5( ) | 1.7( ) | | | | | | | | | | | | |
| | | 264. | 43. | 11. | 15. | 623. | 323. | 40. | 102. | 1252. | 1348. | | | | | | | | | | | | |
| | | 3.7( ) | .6( ) | .4( ) | 1.2( ) | 2.3( ) | 1.0( ) | .5( ) | .5( ) | .0( ) | .0( ) | | | | | | | | | | | | |
| | | 15. | 1094. | 711. | 676. | 463. | 551. | 694. | 420. | 197. | 5. | | | | | | | | | | | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 105.8(S) | 21.8(S) | 18.6(S) | 114.1(S) | | | | | | | | | | | | |
| | | 437. | 14. | 1. | 32. | 35. | 1. | | | | | | | | | | | | | | | | |
| | | 16.8(S) | 1.5(S) | .1(S) | 6.0(S) | 9.6(S) | 3.3(S) | | | | | | | | | | | | | | | | |
| 2 | 0. | 1434. | 0. | 0. | 1144. | 144. | 30. | 34. | 0. | 48. | 0. | | | | | | | | | | | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | | | | | | | | | | | |
| | | 192. | 128. | 369. | 806. | 28. | 179. | 21. | 160. | 68. | 677. | | | | | | | | | | | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | | | | | | | | | | | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 90. | 109. | 318. | 51. | 327. | 705. | 277. | 204. | 35. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 12. | 728. | 16. | 499. | 228. | 24. | 384. | 66. | 669. | 15. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.1( ) | 1.2( ) |
| | | 1. | 1327. | 41. | 34. | 32. | 34. | 1. | 1088. | 165. | 433. |
| | | .1( ) | 1.5( ) | .6( ) | 1.4( ) | 1.2( ) | 1.1( ) | .2( ) | 1.6( ) | .9( ) | 3.9( ) |
| | | 734. | 32. | 193. | 38. | 195. | 78. | 5. | 491. | 83. | 307. |
| | | 2.3( ) | 1.7( ) | 3.7( ) | 2.7( ) | 1.5( ) | 2.4( ) | .0( ) | 1.3( ) | .5( ) | 2.5( ) |
| | | 245. | 41. | 10. | 14. | 592. | 305. | 37. | 96. | 1332. | 1288. |
| | | 3.6( ) | .5( ) | .3( ) | 1.2( ) | 2.2( ) | 1.0( ) | .5( ) | .5( ) | .0( ) | .0( ) |
| | | 13. | 1032. | 659. | 626. | 427. | 515. | 840. | 386. | 183. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 110.5(S) | 21.6(S) | 18.6(S) | 119.6(S) |
| | | 405. | 13. | 1. | 32. | 35. | 1. | | | | |
| | | 16.6(S) | 1.4(S) | .1(S) | 6.1(S) | 9.7(S) | 3.3(S) | | | | |
| 2 | 5. | 1363. | 0. | 0. | 1084. | 134. | 28. | 32. | 0. | 44. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 181. | 118. | 339. | 753. | 26. | 166. | 18. | 146. | 63. | 626. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 83. | 101. | 292. | 45. | 513. | 872. | 257. | 188. | 33. | 2. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 11. | 685. | 15. | 467. | 209. | 21. | 355. | 60. | 839. | 14. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.2( ) | 1.1( ) |
| | | 1. | 1268. | 39. | 34. | 32. | 35. | 1. | 1033. | 156. | 400. |
| | | .1( ) | 1.5( ) | .5( ) | 1.4( ) | 1.2( ) | 1.1( ) | .2( ) | 1.5( ) | .9( ) | 3.8( ) |
| | | 689. | 30. | 179. | 33. | 179. | 72. | 5. | 454. | 77. | 494. |
| | | 2.2( ) | 1.6( ) | 3.6( ) | 2.6( ) | 1.4( ) | 2.3( ) | .0( ) | 1.3( ) | .4( ) | 3.2( ) |
| | | 227. | 39. | 9. | 13. | 561. | 287. | 35. | 90. | 1456. | 1218. |
| | | 3.4( ) | .5( ) | .3( ) | 1.1( ) | 2.1( ) | .9( ) | .5( ) | .4( ) | .0( ) | .0( ) |
| | | 12. | 968. | 609. | 579. | 394. | 481. | 945. | 354. | 170. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 114.0(S) | 21.5(S) | 18.5(S) | 124.6(S) |
| | | 374. | 12. | 1. | 32. | 35. | 1. | | | | |
| | | 16.5(S) | 1.3(S) | .1(S) | 6.1(S) | 9.8(S) | 3.3(S) | | | | |
| 2 | 10. | 1285. | 0. | 0. | 1021. | 124. | 26. | 32. | 0. | 39. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 171. | 110. | 311. | 701. | 24. | 155. | 11. | 133. | 59. | 579. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 77. | 94. | 269. | 40. | 696. | 982. | 239. | 172. | 30. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 7. | 643. | 14. | 435. | 192. | 19. | 328. | 55. | 952. | 13. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.3( ) | 1.1( ) |
| | | 1. | 1199. | 36. | 33. | 32. | 35. | 1. | 973. | 146. | 368. |
| | | .1( ) | 1.4( ) | .5( ) | 1.3( ) | 1.2( ) | 1.1( ) | .2( ) | 1.5( ) | .9( ) | 3.6( ) |
| | | 643. | 29. | 167. | 29. | 164. | 67. | 5. | 421. | 71. | 678. |
| | | 2.1( ) | 1.6( ) | 3.5( ) | 2.4( ) | 1.3( ) | 2.3( ) | .0( ) | 1.2( ) | .4( ) | 3.8( ) |
| | | 210. | 37. | 8. | 12. | 529. | 269. | 33. | 84. | 1578. | 1145. |
| | | 3.3( ) | .5( ) | .3( ) | 1.1( ) | 2.1( ) | .9( ) | .5( ) | .4( ) | .0( ) | .0( ) |
| | | 11. | 905. | 564. | 535. | 363. | 449. | 1017. | 325. | 159. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 116.4(S) | 21.4(S) | 18.5(S) | 129.3(S) |
| | | 345. | 11. | 1. | 32. | 36. | 1. | | | | |
| | | 16.4(S) | 1.2(S) | .1(S) | 6.1(S) | 9.8(S) | 3.3(S) | | | | |
| 2 | 15. | 1205. | 0. | 0. | 958. | 115. | 24. | 33. | 0. | 36. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 160. | 101. | 286. | 652. | 23. | 144. | 8. | 120. | 55. | 535. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 71. | 87. | 247. | 36. | 847. | 1050. | 221. | 158. | 27. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 5. | 602. | 13. | 406. | 176. | 17. | 303. | 50. | 1022. | 12. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.4( ) | 1.1( ) | |
| | | 1. | 1129. | 34. | 33. | 33. | 35. | 1. | 913. | 137. | 339. | |
| | | .1( ) | 1.4( ) | .5( ) | 1.3( ) | 1.2( ) | 1.1( ) | .2( ) | 1.4( ) | .9( ) | 3.5( ) | |
| | | 599. | 27. | 156. | 24. | 150. | 62. | 5. | 389. | 66. | 829. | |
| | | 2.0( ) | 1.6( ) | 3.4( ) | 2.3( ) | 1.3( ) | 2.2( ) | .0( ) | 1.1( ) | .4( ) | 4.3( ) | |
| | | 194. | 35. | 7. | 10. | 498. | 251. | 30. | 78. | 1671. | 1073. | |
| | | 3.2( ) | .5( ) | .3( ) | 1.0( ) | 2.0( ) | .9( ) | .4( ) | .4( ) | .0( ) | .0( ) | |
| | | 11. | 845. | 522. | 495. | 334. | 419. | 1060. | 299. | 148. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 117.8(S) | 21.3(S) | 18.5(S) | 133.6(S) | |
| | | 319. | 10. | 1. | 33. | 36. | 1. | | | | | |
| | | 16.3(S) | 1.2(S) | .1(S) | 6.1(S) | 9.9(S) | 3.3(S) | | | | | |
| 2 | 20. | 1128. | 0. | 0. | 897. | 107. | 22. | 33. | 0. | 32. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 151. | 94. | 262. | 605. | 21. | 134. | 5. | 109. | 51. | 495. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 66. | 81. | 227. | 32. | 958. | 1087. | 205. | 145. | 24. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 3. | 563. | 12. | 378. | 161. | 16. | 280. | 45. | 1062. | 11. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.4( ) | 1.0( ) | |
| | | 1. | 1059. | 32. | 33. | 33. | 36. | 1. | 855. | 128. | 312. | |
| | | .1( ) | 1.3( ) | .5( ) | 1.3( ) | 1.2( ) | 1.1( ) | .2( ) | 1.4( ) | .8( ) | 3.4( ) | |
| | | 557. | 25. | 145. | 20. | 137. | 58. | 5. | 361. | 61. | 940. | |
| | | 1.9( ) | 1.5( ) | 3.3( ) | 2.1( ) | 1.2( ) | 2.2( ) | .0( ) | 1.1( ) | .4( ) | 4.6( ) | |
| | | 179. | 32. | 6. | 8. | 468. | 235. | 28. | 73. | 1726. | 1004. | |
| | | 3.1( ) | .5( ) | .3( ) | .9( ) | 1.9( ) | .8( ) | .4( ) | .4( ) | .0( ) | .0( ) | |
| | | 10. | 788. | 482. | 457. | 308. | 390. | 1080. | 274. | 137. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 118.5(S) | 21.2(S) | 18.5(S) | 137.6(S) | |
| | | 295. | 9. | 1. | 33. | 36. | 1. | | | | | |
| | | 16.1(S) | 1.1(S) | .0(S) | 6.1(S) | 9.9(S) | 3.3(S) | | | | | |
| 2 | 25. | 1053. | 0. | 0. | 839. | 99. | 20. | 34. | 0. | 29. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 142. | 87. | 241. | 561. | 20. | 125. | 4. | 99. | 47. | 458. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 61. | 75. | 209. | 29. | 1030. | 1101. | 190. | 133. | 22. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 2. | 526. | 7. | 352. | 148. | 14. | 258. | 41. | 1078. | 10. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.4( ) | 1.0( ) | |
| | | 1. | 992. | 30. | 33. | 34. | 36. | 1. | 800. | 120. | 287. | |
| | | .1( ) | 1.3( ) | .5( ) | 1.3( ) | 1.2( ) | 1.1( ) | .2( ) | 1.3( ) | .8( ) | 3.2( ) | |
| | | 518. | 24. | 135. | 17. | 125. | 54. | 5. | 334. | 56. | 1013. | |
| | | 1.9( ) | 1.5( ) | 3.2( ) | 2.0( ) | 1.1( ) | 2.1( ) | .0( ) | 1.0( ) | .4( ) | 4.8( ) | |
| | | 166. | 30. | 6. | 6. | 438. | 219. | 26. | 68. | 1746. | 938. | |
| | | 3.0( ) | .5( ) | .2( ) | .8( ) | 1.9( ) | .8( ) | .4( ) | .4( ) | .0( ) | .0( ) | |
| | | 9. | 735. | 446. | 422. | 284. | 359. | 1082. | 251. | 128. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 118.5(S) | 21.2(S) | 18.4(S) | 141.3(S) | |
| | | 272. | 8. | 0. | 34. | 36. | 1. | | | | | |
| | | 16.0(S) | 1.0(S) | .0(S) | 6.1(S) | 9.8(S) | 3.2(S) | | | | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 30. | 984. | 0. | 0. | 784. | 92. | 19. | 34. | 0. | 27. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 133. | 80. | 221. | 520. | 19. | 116. | 3. | 90. | 44. | 424. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 57. | 70. | 192. | 26. | 1071. | 1098. | 176. | 122. | 20. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 1. | 490. | 5. | 327. | 135. | 13. | 238. | 38. | 1077. | 10. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.4( ) | 1.0( ) | |
| | | 1. | 928. | 28. | 33. | 34. | 36. | 1. | 748. | 112. | 265. | |
| | | .1( ) | 1.2( ) | .5( ) | 1.3( ) | 1.2( ) | 1.1( ) | .2( ) | 1.3( ) | .8( ) | 3.1( ) | |
| | | 481. | 22. | 126. | 14. | 115. | 50. | 5. | 309. | 52. | 1054. | |
| | | 1.8( ) | 1.5( ) | 3.1( ) | 1.8( ) | 1.1( ) | 2.0( ) | .0( ) | 1.0( ) | .3( ) | 4.9( ) | |
| | | 153. | 28. | 5. | 5. | 409. | 204. | 24. | 63. | 1736. | 876. | |
| | | 2.8( ) | .4( ) | .2( ) | .8( ) | 1.8( ) | .8( ) | .4( ) | .4( ) | .0( ) | .0( ) | |
| | | 8. | 686. | 413. | 390. | 262. | 332. | 1070. | 231. | 119. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 118.1(S) | 21.1(S) | 18.4(S) | 144.7(S) | |
| | | 251. | 8. | 0. | 34. | 35. | 1. | | | | | |
| | | 16.0(S) | 1.0(S) | .0(S) | 6.2(S) | 9.8(S) | 3.2(S) | | | | | |
| 2 | 35. | 918. | 0. | 0. | 734. | 85. | 17. | 34. | 0. | 24. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 125. | 74. | 202. | 482. | 18. | 108. | 2. | 82. | 41. | 392. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 53. | 65. | 176. | 23. | 1087. | 1081. | 163. | 111. | 18. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 455. | 3. | 304. | 124. | 8. | 220. | 34. | 1062. | 9. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.4( ) | 1.0( ) | |
| | | 0. | 869. | 26. | 34. | 34. | 35. | 1. | 699. | 104. | 243. | |
| | | .1( ) | 1.2( ) | .4( ) | 1.4( ) | 1.2( ) | 1.1( ) | .2( ) | 1.2( ) | .8( ) | 3.0( ) | |
| | | 447. | 21. | 117. | 12. | 105. | 47. | 5. | 286. | 48. | 1071. | |
| | | 1.7( ) | 1.4( ) | 3.1( ) | 1.7( ) | 1.0( ) | 2.0( ) | .0( ) | 1.0( ) | .3( ) | 4.9( ) | |
| | | 141. | 26. | 5. | 3. | 382. | 190. | 22. | 58. | 1705. | 819. | |
| | | 2.7( ) | .4( ) | .2( ) | .7( ) | 1.7( ) | .7( ) | .4( ) | .3( ) | .0( ) | .0( ) | |
| | | 8. | 640. | 382. | 361. | 241. | 307. | 1048. | 212. | 111. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 117.4(S) | 21.0(S) | 18.4(S) | 147.9(S) | |
| | | 232. | 7. | 0. | 34. | 35. | 1. | | | | | |
| | | 15.9(S) | .9(S) | .0(S) | 6.2(S) | 9.7(S) | 3.2(S) | | | | | |
| 2 | 40. | 857. | 0. | 0. | 686. | 79. | 16. | 34. | 0. | 22. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 117. | 69. | 186. | 447. | 17. | 101. | 0. | 74. | 38. | 363. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 49. | 61. | 162. | 20. | 1085. | 1056. | 150. | 102. | 16. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 424. | 2. | 283. | 113. | 5. | 203. | 31. | 1038. | 8. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.4( ) | .9( ) | |
| | | 0. | 813. | 25. | 34. | 34. | 35. | 1. | 654. | 98. | 224. | |
| | | .1( ) | 1.1( ) | .4( ) | 1.4( ) | 1.2( ) | 1.1( ) | .2( ) | 1.2( ) | .8( ) | 2.9( ) | |
| | | 415. | 20. | 109. | 10. | 96. | 43. | 5. | 265. | 44. | 1070. | |
| | | 1.6( ) | 1.4( ) | 3.0( ) | 1.6( ) | 1.0( ) | 1.9( ) | .0( ) | .9( ) | .3( ) | 4.9( ) | |
| | | 130. | 23. | 4. | 2. | 356. | 177. | 20. | 54. | 1659. | 765. | |
| | | 2.6( ) | .4( ) | .2( ) | .6( ) | 1.6( ) | .7( ) | .3( ) | .3( ) | .0( ) | .0( ) | |
| | | 7. | 598. | 353. | 333. | 222. | 285. | 1017. | 194. | 103. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 116.4(S) | 21.0(S) | 18.4(S) | 150.8(S) | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 214. | 7. | 0. | 34. | 35. | 1. | | | | | |
| | | 15.8(S) | .9(S) | .0(S) | 6.2(S) | 9.7(S) | 3.2(S) | | | | | |
| 2 | 45. | 801. | 0. | 0. | 642. | 73. | 15. | 34. | 0. | 20. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 110. | 64. | 171. | 414. | 16. | 94. | 0. | 68. | 35. | 336. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 45. | 56. | 149. | 18. | 1070. | 1023. | 139. | 93. | 15. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 394. | 1. | 263. | 103. | 3. | 188. | 28. | 1007. | 8. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.3( ) | .9( ) | |
| | | 0. | 761. | 23. | 34. | 34. | 35. | 1. | 612. | 91. | 206. | |
| | | .1( ) | 1.1( ) | .4( ) | 1.4( ) | 1.2( ) | 1.1( ) | .2( ) | 1.1( ) | .7( ) | 2.8( ) | |
| | | 385. | 19. | 102. | 8. | 88. | 40. | 5. | 246. | 40. | 1055. | |
| | | 1.6( ) | 1.4( ) | 2.9( ) | 1.5( ) | .9( ) | 1.9( ) | .0( ) | .9( ) | .3( ) | 4.9( ) | |
| | | 119. | 22. | 4. | 2. | 332. | 165. | 18. | 50. | 1603. | 715. | |
| | | 2.5( ) | .4( ) | .2( ) | .5( ) | 1.6( ) | .7( ) | .3( ) | .3( ) | .0( ) | .0( ) | |
| | | 7. | 558. | 327. | 308. | 205. | 264. | 982. | 178. | 96. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 115.2(S) | 20.9(S) | 18.4(S) | 153.5(S) | |
| | | 198. | 6. | 0. | 34. | 35. | 1. | | | | | |
| | | 15.7(S) | .8(S) | .0(S) | 6.2(S) | 9.6(S) | 3.2(S) | | | | | |
| 2 | 50. | 748. | 0. | 0. | 601. | 68. | 14. | 34. | 0. | 18. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 103. | 59. | 157. | 384. | 15. | 88. | 0. | 62. | 32. | 311. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 42. | 52. | 137. | 16. | 1045. | 986. | 129. | 85. | 13. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 366. | 0. | 244. | 93. | 2. | 173. | 26. | 971. | 7. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.3( ) | .9( ) | |
| | | 0. | 713. | 22. | 34. | 34. | 35. | 1. | 573. | 85. | 190. | |
| | | .1( ) | 1.0( ) | .4( ) | 1.4( ) | 1.2( ) | 1.1( ) | .2( ) | 1.1( ) | .7( ) | 2.7( ) | |
| | | 358. | 18. | 95. | 6. | 81. | 38. | 5. | 228. | 37. | 1031. | |
| | | 1.5( ) | 1.3( ) | 2.8( ) | 1.4( ) | .9( ) | 1.8( ) | .0( ) | .8( ) | .3( ) | 4.8( ) | |
| | | 110. | 20. | 3. | 1. | 310. | 153. | 16. | 47. | 1540. | 669. | |
| | | 2.4( ) | .4( ) | .2( ) | .5( ) | 1.5( ) | .7( ) | .3( ) | .3( ) | .0( ) | .0( ) | |
| | | 6. | 521. | 303. | 285. | 189. | 244. | 942. | 164. | 90. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 113.9(S) | 20.9(S) | 18.3(S) | 155.9(S) | |
| | | 183. | 6. | 0. | 34. | 34. | 1. | | | | | |
| | | 15.7(S) | .8(S) | .0(S) | 6.2(S) | 9.5(S) | 3.2(S) | | | | | |
| 2 | 55. | 699. | 0. | 0. | 562. | 63. | 13. | 35. | 0. | 16. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 96. | 54. | 144. | 356. | 14. | 82. | 0. | 57. | 30. | 288. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 39. | 49. | 126. | 15. | 1014. | 945. | 119. | 78. | 8. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 340. | 0. | 226. | 85. | 2. | 160. | 23. | 931. | 7. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.3( ) | .9( ) | |
| | | 0. | 667. | 20. | 34. | 34. | 34. | 1. | 536. | 79. | 175. | |
| | | .1( ) | 1.0( ) | .4( ) | 1.4( ) | 1.2( ) | 1.1( ) | .2( ) | 1.0( ) | .7( ) | 2.5( ) | |
| | | 333. | 17. | 89. | 5. | 74. | 35. | 5. | 211. | 34. | 1000. | |
| | | 1.4( ) | 1.3( ) | 2.8( ) | 1.3( ) | .8( ) | 1.8( ) | .0( ) | .8( ) | .3( ) | 4.7( ) | |
| | | 101. | 18. | 3. | 1. | 289. | 143. | 14. | 44. | 1473. | 626. | |
| | | 2.3( ) | .3( ) | .2( ) | .4( ) | 1.5( ) | .6( ) | .3( ) | .3( ) | .0( ) | .0( ) | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 6. | 487. | 280. | 264. | 174. | 226. | 901. | 151. | 84. | 5. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 112.6(S) | 20.8(S) | 18.3(S) | 158.3(S) | | |
| | | 169. | 5. | 0. | 34. | 34. | 1. | | | | | | |
| | | 15.6(S) | .8(S) | .0(S) | 6.2(S) | 9.4(S) | 3.2(S) | | | | | | |
| 3 | 0. | 654. | 0. | 0. | 527. | 59. | 12. | 34. | 0. | 15. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 91. | 50. | 133. | 331. | 13. | 76. | 0. | 52. | 28. | 266. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 36. | 45. | 115. | 13. | 977. | 903. | 110. | 70. | 6. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 0. | 316. | 0. | 210. | 77. | 0. | 148. | 21. | 890. | 6. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.2( ) | .8( ) | | |
| | | 0. | 625. | 19. | 34. | 34. | 34. | 1. | 503. | 74. | 161. | | |
| | | .1( ) | 1.0( ) | .4( ) | 1.4( ) | 1.2( ) | 1.1( ) | .2( ) | 1.0( ) | .7( ) | 2.4( ) | | |
| | | 310. | 16. | 83. | 4. | 68. | 33. | 5. | 196. | 32. | 964. | | |
| | | 1.4( ) | 1.3( ) | 2.7( ) | 1.2( ) | .8( ) | 1.7( ) | .0( ) | .8( ) | .3( ) | 4.6( ) | | |
| | | 93. | 16. | 3. | 1. | 269. | 132. | 13. | 41. | 1403. | 585. | | |
| | | 2.2( ) | .3( ) | .2( ) | .4( ) | 1.4( ) | .6( ) | .3( ) | .3( ) | .0( ) | .0( ) | | |
| | | 5. | 456. | 260. | 244. | 161. | 210. | 859. | 139. | 78. | 5. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 111.2(S) | 20.8(S) | 18.3(S) | 160.4(S) | | |
| | | 156. | 5. | 0. | 34. | 33. | 1. | | | | | | |
| | | 15.5(S) | .7(S) | .0(S) | 6.2(S) | 9.2(S) | 3.2(S) | | | | | | |
| 3 | 5. | 612. | 0. | 0. | 494. | 54. | 7. | 34. | 0. | 13. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 85. | 47. | 122. | 307. | 12. | 71. | 0. | 47. | 26. | 246. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 33. | 42. | 106. | 8. | 937. | 856. | 101. | 64. | 4. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 0. | 294. | 0. | 195. | 70. | 0. | 137. | 19. | 848. | 6. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.2( ) | .8( ) | | |
| | | 0. | 586. | 17. | 34. | 34. | 34. | 1. | 471. | 69. | 149. | | |
| | | .1( ) | .9( ) | .3( ) | 1.4( ) | 1.2( ) | 1.0( ) | .2( ) | 1.0( ) | .7( ) | 2.4( ) | | |
| | | 288. | 15. | 77. | 4. | 63. | 30. | 5. | 181. | 29. | 924. | | |
| | | 1.3( ) | 1.3( ) | 2.6( ) | 1.1( ) | .8( ) | 1.7( ) | .0( ) | .7( ) | .2( ) | 4.5( ) | | |
| | | 85. | 14. | 3. | 1. | 251. | 123. | 11. | 38. | 1333. | 548. | | |
| | | 2.1( ) | .3( ) | .2( ) | .4( ) | 1.3( ) | .6( ) | .2( ) | .3( ) | .0( ) | .0( ) | | |
| | | 5. | 427. | 241. | 226. | 148. | 195. | 816. | 128. | 73. | 5. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 109.8(S) | 20.7(S) | 18.3(S) | 162.4(S) | | |
| | | 144. | 5. | 0. | 34. | 33. | 1. | | | | | | |
| | | 15.5(S) | .7(S) | .0(S) | 6.2(S) | 9.1(S) | 3.2(S) | | | | | | |
| 3 | 10. | 573. | 0. | 0. | 463. | 50. | 5. | 34. | 0. | 8. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 80. | 43. | 112. | 285. | 11. | 66. | 0. | 40. | 24. | 228. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 31. | 39. | 97. | 5. | 895. | 811. | 93. | 57. | 3. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 0. | 274. | 0. | 181. | 64. | 0. | 126. | 18. | 807. | 5. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.2( ) | .8( ) | | |
| | | 0. | 549. | 16. | 34. | 34. | 33. | 1. | 442. | 64. | 137. | | |
| | | .1( ) | .9( ) | .3( ) | 1.4( ) | 1.2( ) | 1.0( ) | .2( ) | .9( ) | .6( ) | 2.3( ) | | |
| | | 268. | 14. | 72. | 3. | 57. | 28. | 5. | 168. | 26. | 882. | | |
| | | 1.3( ) | 1.2( ) | 2.6( ) | 1.1( ) | .7( ) | 1.7( ) | .0( ) | .7( ) | .2( ) | 4.4( ) | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 78. | 12. | 2. | 1. | 234. | 114. | 10. | 35. | 1262. | 512. | |
| | | 2.0( ) | .3( ) | .1( ) | .3( ) | 1.3( ) | .5( ) | .2( ) | .3( ) | .0( ) | .0( ) | |
| | | 5. | 399. | 223. | 209. | 136. | 181. | 773. | 117. | 68. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 108.4(S) | 20.7(S) | 18.3(S) | 164.2(S) | |
| | | 133. | 5. | 0. | 34. | 32. | 1. | | | | | |
| | | 15.4(S) | .7(S) | .0(S) | 6.2(S) | 9.0(S) | 3.2(S) | | | | | |
| 3 | 15. | 536. | 0. | 0. | 434. | 45. | 3. | 34. | 0. | 5. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 75. | 40. | 102. | 265. | 7. | 62. | 0. | 35. | 22. | 211. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 29. | 36. | 89. | 3. | 851. | 769. | 86. | 52. | 2. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 255. | 0. | 168. | 58. | 0. | 117. | 16. | 765. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.1( ) | .8( ) | |
| | | 0. | 515. | 14. | 34. | 34. | 33. | 1. | 415. | 60. | 126. | |
| | | .1( ) | .9( ) | .3( ) | 1.4( ) | 1.2( ) | 1.0( ) | .2( ) | .9( ) | .6( ) | 2.2( ) | |
| | | 249. | 12. | 67. | 3. | 52. | 26. | 5. | 156. | 24. | 840. | |
| | | 1.2( ) | 1.2( ) | 2.5( ) | 1.0( ) | .7( ) | 1.6( ) | .0( ) | .7( ) | .2( ) | 4.3( ) | |
| | | 71. | 10. | 2. | 0. | 219. | 106. | 9. | 33. | 1192. | 479. | |
| | | 2.0( ) | .2( ) | .1( ) | .3( ) | 1.2( ) | .5( ) | .2( ) | .2( ) | .0( ) | .0( ) | |
| | | 5. | 374. | 206. | 194. | 125. | 168. | 732. | 107. | 63. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 107.0(S) | 20.7(S) | 18.3(S) | 165.9(S) | |
| | | 123. | 4. | 0. | 34. | 32. | 1. | | | | | |
| | | 15.4(S) | .6(S) | .0(S) | 6.2(S) | 8.8(S) | 3.2(S) | | | | | |
| 3 | 20. | 501. | 0. | 0. | 407. | 41. | 2. | 34. | 0. | 4. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 70. | 37. | 93. | 245. | 4. | 57. | 0. | 31. | 21. | 195. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 27. | 34. | 81. | 2. | 805. | 727. | 79. | 47. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 237. | 0. | 156. | 53. | 0. | 108. | 15. | 725. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.1( ) | .8( ) | |
| | | 0. | 482. | 12. | 34. | 34. | 32. | 1. | 389. | 56. | 116. | |
| | | .1( ) | .8( ) | .3( ) | 1.4( ) | 1.2( ) | 1.0( ) | .2( ) | .9( ) | .6( ) | 2.1( ) | |
| | | 232. | 11. | 63. | 2. | 47. | 25. | 5. | 144. | 22. | 798. | |
| | | 1.2( ) | 1.1( ) | 2.4( ) | 1.0( ) | .6( ) | 1.6( ) | .0( ) | .6( ) | .2( ) | 4.2( ) | |
| | | 65. | 9. | 2. | 0. | 204. | 99. | 8. | 30. | 1121. | 449. | |
| | | 1.9( ) | .2( ) | .1( ) | .3( ) | 1.2( ) | .5( ) | .2( ) | .2( ) | .0( ) | .0( ) | |
| | | 4. | 350. | 190. | 179. | 115. | 156. | 692. | 98. | 59. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 105.7(S) | 20.6(S) | 18.3(S) | 167.4(S) | |
| | | 113. | 4. | 0. | 34. | 31. | 1. | | | | | |
| | | 15.3(S) | .6(S) | .0(S) | 6.1(S) | 8.6(S) | 3.2(S) | | | | | |
| 3 | 25. | 465. | 0. | 0. | 381. | 38. | 1. | 34. | 0. | 2. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 66. | 34. | 85. | 224. | 3. | 53. | 0. | 28. | 19. | 181. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 25. | 31. | 74. | 2. | 761. | 687. | 72. | 42. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 221. | 0. | 145. | 48. | 0. | 100. | 13. | 685. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.1( ) | .8( ) | |
| | | 0. | 452. | 11. | 34. | 34. | 31. | 1. | 364. | 52. | 107. | |
| | | .1( ) | .8( ) | .3( ) | 1.4( ) | 1.2( ) | 1.0( ) | .2( ) | .8( ) | .6( ) | 2.0( ) | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 215. | 9. | 59. | 2. | 42. | 23. | 5. | 133. | 19. | 757. | | |
| | | 1.1( ) | 1.0( ) | 2.4( ) | .9( ) | .6( ) | 1.5( ) | .0( ) | .6( ) | .2( ) | 4.1( ) | | |
| | | 59. | 7. | 2. | 0. | 191. | 92. | 7. | 28. | 1054. | 419. | | |
| | | 1.8( ) | .2( ) | .1( ) | .3( ) | 1.1( ) | .5( ) | .2( ) | .2( ) | .0( ) | .0( ) | | |
| | | 4. | 323. | 174. | 165. | 105. | 145. | 652. | 89. | 55. | 5. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 104.4(S) | 20.6(S) | 18.3(S) | 168.8(S) | | |
| | | 105. | 4. | 0. | 33. | 31. | 1. | | | | | | |
| | | 15.3(S) | .6(S) | .0(S) | 6.1(S) | 8.4(S) | 3.1(S) | | | | | | |
| 3 | 30. | 432. | 0. | 0. | 355. | 34. | 0. | 33. | 0. | 2. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 61. | 31. | 77. | 205. | 2. | 50. | 0. | 25. | 18. | 167. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 23. | 29. | 68. | 0. | 720. | 646. | 62. | 38. | 0. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 0. | 206. | 0. | 134. | 44. | 0. | 92. | 8. | 646. | 4. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.0( ) | .7( ) | | |
| | | 0. | 422. | 10. | 34. | 33. | 31. | 1. | 339. | 49. | 98. | | |
| | | .1( ) | .8( ) | .2( ) | 1.4( ) | 1.2( ) | 1.0( ) | .2( ) | .8( ) | .6( ) | 1.9( ) | | |
| | | 199. | 7. | 55. | 2. | 38. | 21. | 5. | 124. | 18. | 716. | | |
| | | 1.1( ) | 1.0( ) | 2.3( ) | .9( ) | .6( ) | 1.5( ) | .0( ) | .6( ) | .2( ) | 4.0( ) | | |
| | | 54. | 6. | 2. | 0. | 178. | 85. | 6. | 26. | 988. | 389. | | |
| | | 1.7( ) | .2( ) | .1( ) | .3( ) | 1.1( ) | .5( ) | .2( ) | .2( ) | .0( ) | .0( ) | | |
| | | 4. | 299. | 160. | 152. | 97. | 134. | 614. | 81. | 51. | 5. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 103.1(S) | 20.6(S) | 18.2(S) | 170.2(S) | | |
| | | 97. | 4. | 0. | 33. | 30. | 1. | | | | | | |
| | | 15.3(S) | .5(S) | .0(S) | 6.1(S) | 8.2(S) | 3.1(S) | | | | | | |
| 3 | 35. | 402. | 0. | 0. | 330. | 31. | 0. | 33. | 0. | 0. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 53. | 29. | 71. | 188. | 1. | 46. | 0. | 21. | 17. | 154. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 21. | 27. | 62. | 0. | 680. | 609. | 55. | 35. | 0. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 0. | 192. | 0. | 125. | 40. | 0. | 84. | 5. | 609. | 4. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.0( ) | .7( ) | | |
| | | 0. | 394. | 8. | 33. | 33. | 30. | 1. | 315. | 46. | 90. | | |
| | | .1( ) | .7( ) | .2( ) | 1.3( ) | 1.2( ) | 1.0( ) | .2( ) | .8( ) | .6( ) | 1.8( ) | | |
| | | 184. | 6. | 51. | 2. | 34. | 20. | 5. | 114. | 16. | 677. | | |
| | | 1.0( ) | .9( ) | 2.2( ) | .8( ) | .5( ) | 1.4( ) | .0( ) | .6( ) | .2( ) | 3.8( ) | | |
| | | 50. | 5. | 2. | 0. | 167. | 79. | 6. | 24. | 926. | 361. | | |
| | | 1.6( ) | .2( ) | .1( ) | .2( ) | 1.0( ) | .4( ) | .2( ) | .2( ) | .0( ) | .0( ) | | |
| | | 4. | 275. | 146. | 141. | 89. | 125. | 576. | 74. | 48. | 5. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 101.9(S) | 20.6(S) | 18.2(S) | 171.4(S) | | |
| | | 89. | 4. | 0. | 33. | 29. | 1. | | | | | | |
| | | 15.2(S) | .5(S) | .0(S) | 6.1(S) | 8.1(S) | 3.1(S) | | | | | | |
| 3 | 40. | 373. | 0. | 0. | 306. | 28. | 0. | 32. | 0. | 0. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 48. | 27. | 64. | 173. | 0. | 43. | 0. | 20. | 15. | 143. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 20. | 25. | 56. | 0. | 641. | 573. | 49. | 31. | 0. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 0. | 179. | 0. | 116. | 37. | 0. | 77. | 4. | 573. | 4. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 1.0( ) | .7( ) | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 367. | 7. | 33. | 32. | 29. | 1. | 293. | 42. | 82. | |
| | | .1( ) | .7( ) | .2( ) | 1.3( ) | 1.2( ) | 1.0( ) | .2( ) | .7( ) | .6( ) | 1.7( ) | |
| | | 171. | 5. | 47. | 1. | 31. | 18. | 5. | 106. | 14. | 640. | |
| | | 1.0( ) | .8( ) | 2.2( ) | .8( ) | .5( ) | 1.4( ) | .0( ) | .5( ) | .2( ) | 3.7( ) | |
| | | 45. | 5. | 2. | 0. | 156. | 74. | 5. | 22. | 869. | 335. | |
| | | 1.6( ) | .1( ) | .1( ) | .2( ) | 1.0( ) | .4( ) | .2( ) | .2( ) | .0( ) | .0( ) | |
| | | 4. | 254. | 134. | 130. | 82. | 116. | 541. | 67. | 44. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 100.7(S) | 20.5(S) | 18.2(S) | 172.5(S) | |
| | | 82. | 3. | 0. | 32. | 28. | 1. | | | | | |
| | | 15.2(S) | .5(S) | .0(S) | 6.1(S) | 7.9(S) | 3.1(S) | | | | | |
| 3 | 45. | 347. | 0. | 0. | 284. | 26. | 0. | 32. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 44. | 25. | 59. | 160. | 0. | 40. | 0. | 18. | 14. | 132. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 18. | 23. | 52. | 0. | 603. | 538. | 44. | 29. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 167. | 0. | 108. | 34. | 0. | 71. | 2. | 538. | 4. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .9( ) | .7( ) | |
| | | 0. | 341. | 7. | 33. | 32. | 29. | 1. | 272. | 40. | 75. | |
| | | .1( ) | .7( ) | .2( ) | 1.3( ) | 1.2( ) | 1.0( ) | .2( ) | .7( ) | .5( ) | 1.7( ) | |
| | | 158. | 4. | 44. | 1. | 28. | 17. | 5. | 98. | 13. | 603. | |
| | | .9( ) | .7( ) | 2.1( ) | .7( ) | .5( ) | 1.4( ) | .0( ) | .5( ) | .2( ) | 3.6( ) | |
| | | 41. | 4. | 1. | 0. | 146. | 69. | 5. | 19. | 814. | 310. | |
| | | 1.5( ) | .1( ) | .1( ) | .2( ) | 1.0( ) | .4( ) | .1( ) | .2( ) | .0( ) | .0( ) | |
| | | 3. | 236. | 123. | 120. | 75. | 108. | 506. | 62. | 41. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 99.6(S) | 20.5(S) | 18.2(S) | 173.6(S) | |
| | | 75. | 3. | 0. | 32. | 28. | 1. | | | | | |
| | | 15.2(S) | .5(S) | .0(S) | 6.1(S) | 7.7(S) | 3.1(S) | | | | | |
| 3 | 50. | 320. | 0. | 0. | 260. | 24. | 0. | 32. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 40. | 23. | 54. | 146. | 0. | 37. | 0. | 17. | 13. | 122. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 17. | 22. | 47. | 0. | 568. | 505. | 40. | 26. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 156. | 0. | 100. | 31. | 0. | 65. | 2. | 505. | 4. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .9( ) | .7( ) | |
| | | 0. | 316. | 6. | 32. | 32. | 28. | 1. | 252. | 37. | 69. | |
| | | .1( ) | .6( ) | .2( ) | 1.3( ) | 1.2( ) | 1.0( ) | .2( ) | .7( ) | .5( ) | 1.6( ) | |
| | | 146. | 3. | 41. | 1. | 26. | 16. | 5. | 91. | 12. | 568. | |
| | | .9( ) | .7( ) | 2.1( ) | .7( ) | .4( ) | 1.3( ) | .0( ) | .5( ) | .1( ) | 3.5( ) | |
| | | 38. | 4. | 1. | 0. | 136. | 64. | 4. | 18. | 764. | 284. | |
| | | 1.4( ) | .1( ) | .1( ) | .2( ) | .9( ) | .4( ) | .1( ) | .2( ) | .0( ) | .0( ) | |
| | | 3. | 218. | 113. | 111. | 69. | 100. | 474. | 57. | 38. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 98.5(S) | 20.5(S) | 18.2(S) | 174.5(S) | |
| | | 69. | 3. | 0. | 32. | 27. | 1. | | | | | |
| | | 15.2(S) | .4(S) | .0(S) | 6.0(S) | 7.5(S) | 3.1(S) | | | | | |
| 3 | 55. | 296. | 0. | 0. | 240. | 22. | 0. | 31. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 37. | 21. | 50. | 135. | 0. | 35. | 0. | 16. | 12. | 113. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 16. | 20. | 43. | 0. | 535. | 473. | 35. | 24. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 145. | 0. | 93. | 28. | 0. | 59. | 0. | 473. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .9( ) | .7( ) |
| | | 0. | 292. | 5. | 32. | 31. | 27. | 1. | 235. | 35. | 64. |
| | | .0( ) | .6( ) | .2( ) | 1.3( ) | 1.2( ) | .9( ) | .2( ) | .6( ) | .5( ) | 1.5( ) |
| | | 135. | 2. | 39. | 1. | 24. | 15. | 5. | 84. | 11. | 535. |
| | | .8( ) | .6( ) | 2.0( ) | .7( ) | .4( ) | 1.3( ) | .0( ) | .5( ) | .1( ) | 3.4( ) |
| | | 35. | 3. | 1. | 0. | 128. | 60. | 4. | 16. | 715. | 262. |
| | | 1.4( ) | .1( ) | .1( ) | .2( ) | .9( ) | .4( ) | .1( ) | .2( ) | .0( ) | .0( ) |
| | | 3. | 204. | 104. | 102. | 64. | 93. | 442. | 52. | 36. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 97.5(S) | 20.5(S) | 18.2(S) | 175.4(S) |
| | | 63. | 3. | 0. | 31. | 26. | 1. | | | | |
| | | 15.1(S) | .4(S) | .0(S) | 6.0(S) | 7.3(S) | 3.1(S) | | | | |
| 4 | 0. | 274. | 0. | 0. | 223. | 20. | 0. | 31. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 34. | 20. | 46. | 125. | 0. | 33. | 0. | 15. | 11. | 105. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 14. | 19. | 40. | 0. | 503. | 442. | 32. | 22. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 136. | 0. | 87. | 26. | 0. | 54. | 0. | 442. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .8( ) | .7( ) |
| | | 0. | 271. | 5. | 32. | 31. | 27. | 1. | 219. | 32. | 59. |
| | | .0( ) | .6( ) | .2( ) | 1.3( ) | 1.2( ) | .9( ) | .2( ) | .6( ) | .5( ) | 1.5( ) |
| | | 125. | 2. | 36. | 1. | 22. | 14. | 5. | 78. | 10. | 503. |
| | | .8( ) | .6( ) | 2.0( ) | .6( ) | .4( ) | 1.3( ) | .0( ) | .4( ) | .1( ) | 3.3( ) |
| | | 32. | 3. | 1. | 0. | 119. | 56. | 4. | 14. | 670. | 243. |
| | | 1.3( ) | .1( ) | .1( ) | .2( ) | .9( ) | .4( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 3. | 191. | 96. | 95. | 59. | 87. | 412. | 48. | 33. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 96.5(S) | 20.5(S) | 18.2(S) | 176.2(S) |
| | | 58. | 3. | 0. | 31. | 26. | 1. | | | | |
| | | 15.1(S) | .4(S) | .0(S) | 6.0(S) | 7.1(S) | 3.1(S) | | | | |
| 4 | 5. | 255. | 0. | 0. | 208. | 18. | 0. | 31. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 30. | 18. | 42. | 116. | 0. | 30. | 0. | 13. | 7. | 97. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 13. | 17. | 37. | 0. | 472. | 413. | 29. | 20. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 127. | 0. | 81. | 24. | 0. | 50. | 0. | 413. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .8( ) | .7( ) |
| | | 0. | 252. | 4. | 31. | 31. | 26. | 1. | 205. | 30. | 54. |
| | | .0( ) | .6( ) | .1( ) | 1.3( ) | 1.1( ) | .9( ) | .2( ) | .6( ) | .5( ) | 1.4( ) |
| | | 116. | 1. | 34. | 1. | 20. | 12. | 5. | 73. | 9. | 472. |
| | | .8( ) | .5( ) | 1.9( ) | .6( ) | .4( ) | 1.2( ) | .0( ) | .4( ) | .1( ) | 3.1( ) |
| | | 29. | 2. | 1. | 0. | 112. | 52. | 4. | 13. | 628. | 226. |
| | | 1.2( ) | .1( ) | .1( ) | .2( ) | .8( ) | .3( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 3. | 177. | 89. | 88. | 54. | 81. | 384. | 44. | 31. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 95.6(S) | 20.5(S) | 18.2(S) | 177.0(S) |
| | | 53. | 3. | 0. | 31. | 25. | 1. | | | | |
| | | 15.1(S) | .4(S) | .0(S) | 6.0(S) | 7.0(S) | 3.1(S) | | | | |
| 4 | 10. | 237. | 0. | 0. | 194. | 17. | 0. | 30. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 28. | 17. | 39. | 108. | 0. | 28. | 0. | 11. | 5. | 90. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 12. | 16. | 34. | 0. | 443. | 386. | 27. | 18. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 119. | 0. | 75. | 22. | 0. | 46. | 0. | 386. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .8( ) | .6( ) |
| | | 0. | 234. | 4. | 31. | 30. | 26. | 1. | 192. | 28. | 50. |
| | | .0( ) | .5( ) | .1( ) | 1.3( ) | 1.1( ) | .9( ) | .2( ) | .6( ) | .5( ) | 1.4( ) |
| | | 108. | 1. | 31. | 1. | 19. | 10. | 5. | 67. | 8. | 443. |
| | | .7( ) | .5( ) | 1.9( ) | .6( ) | .4( ) | 1.1( ) | .0( ) | .4( ) | .1( ) | 3.0( ) |
| | | 27. | 2. | 1. | 0. | 105. | 49. | 3. | 12. | 588. | 211. |
| | | 1.2( ) | .1( ) | .1( ) | .2( ) | .8( ) | .3( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 3. | 167. | 82. | 81. | 50. | 75. | 358. | 41. | 29. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 94.7(S) | 20.4(S) | 18.2(S) | 177.7(S) |
| | | 48. | 3. | 0. | 30. | 25. | 1. | | | | |
| | | 15.1(S) | .4(S) | .0(S) | 5.9(S) | 6.8(S) | 3.1(S) | | | | |
| 4 | 15. | 222. | 0. | 0. | 182. | 16. | 0. | 30. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 26. | 15. | 36. | 100. | 0. | 26. | 0. | 9. | 3. | 84. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 7. | 15. | 31. | 0. | 415. | 360. | 25. | 17. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 111. | 0. | 70. | 20. | 0. | 42. | 0. | 360. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .7( ) | .6( ) |
| | | 0. | 219. | 4. | 31. | 30. | 25. | 1. | 180. | 26. | 46. |
| | | .0( ) | .5( ) | .1( ) | 1.3( ) | 1.1( ) | .9( ) | .2( ) | .5( ) | .5( ) | 1.3( ) |
| | | 100. | 1. | 29. | 1. | 17. | 8. | 5. | 63. | 8. | 415. |
| | | .7( ) | .5( ) | 1.8( ) | .6( ) | .3( ) | 1.0( ) | .0( ) | .4( ) | .1( ) | 2.9( ) |
| | | 25. | 2. | 1. | 0. | 98. | 46. | 3. | 11. | 551. | 197. |
| | | 1.1( ) | .1( ) | .1( ) | .2( ) | .8( ) | .3( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 3. | 157. | 76. | 75. | 46. | 70. | 334. | 37. | 27. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 93.9(S) | 20.4(S) | 18.2(S) | 178.3(S) |
| | | 44. | 2. | 0. | 30. | 24. | 1. | | | | |
| | | 15.0(S) | .4(S) | .0(S) | 5.9(S) | 6.7(S) | 3.1(S) | | | | |
| 4 | 20. | 208. | 0. | 0. | 170. | 14. | 0. | 30. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 24. | 14. | 32. | 93. | 0. | 25. | 0. | 7. | 2. | 78. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 5. | 14. | 28. | 0. | 389. | 337. | 23. | 15. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 100. | 0. | 66. | 18. | 0. | 39. | 0. | 337. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .7( ) | .6( ) |
| | | 0. | 205. | 3. | 30. | 30. | 24. | 1. | 170. | 24. | 43. |
| | | .0( ) | .5( ) | .1( ) | 1.3( ) | 1.1( ) | .9( ) | .2( ) | .5( ) | .4( ) | 1.2( ) |
| | | 93. | 1. | 27. | 1. | 15. | 7. | 5. | 58. | 7. | 389. |
| | | .7( ) | .4( ) | 1.8( ) | .6( ) | .3( ) | 1.0( ) | .0( ) | .4( ) | .1( ) | 2.8( ) |
| | | 23. | 2. | 1. | 0. | 92. | 43. | 3. | 10. | 512. | 184. |
| | | 1.1( ) | .1( ) | .1( ) | .1( ) | .7( ) | .3( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 2. | 148. | 71. | 70. | 42. | 66. | 311. | 34. | 25. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 93.1(S) | 20.4(S) | 18.2(S) | 178.9(S) |
| | | 41. | 2. | 0. | 29. | 24. | 1. | | | | |
| | | 15.0(S) | .3(S) | .0(S) | 5.9(S) | 6.5(S) | 3.1(S) | | | | |
| 4 | 25. | 194. | 0. | 0. | 160. | 10. | 0. | 29. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 23. .0( ) | 13. .0( ) | 29. .0( ) | 87. .0( ) | 0. .0( ) | 23. .0( ) | 0. .0( ) | 6. .0( ) | 1. .0( ) | 72. .0( ) |
| | | 3. .0( ) | 13. .0( ) | 26. .0( ) | 0. .0( ) | 365. .0( ) | 314. .0( ) | 20. .0( ) | 10. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 92. .0( ) | 0. .0( ) | 61. .0( ) | 17. .0( ) | 0. .0( ) | 36. .0( ) | 0. .0( ) | 314. .7( ) | 3. .6( ) |
| | | 0. .0( ) | 191. .5( ) | 3. .1( ) | 30. 1.3( ) | 29. 1.1( ) | 24. .9( ) | 1. .2( ) | 160. .5( ) | 23. .4( ) | 39. 1.2( ) |
| | | 87. .6( ) | 1. .4( ) | 25. 1.7( ) | 0. .5( ) | 14. .3( ) | 5. .9( ) | 5. .0( ) | 54. .4( ) | 7. .1( ) | 365. 2.7( ) |
| | | 20. 1.0( ) | 2. .1( ) | 1. .1( ) | 0. .1( ) | 87. .7( ) | 40. .3( ) | 3. .1( ) | 9. .1( ) | 477. .0( ) | 170. .0( ) |
| | | 2. .0( ) | 139. .0( ) | 65. .0( ) | 65. .0( ) | 39. .0( ) | 61. .0( ) | 290. 92.5(S) | 31. 20.4(S) | 23. 18.2(S) | 5. 179.4(S) |
| | | 38. 15.0(S) | 2. .3(S) | 0. .0(S) | 29. 5.8(S) | 23. 6.3(S) | 1. 3.1(S) | | | | |
| 4 | 30. | 180. .0( ) | 0. .0( ) | 0. .0( ) | 151. .0( ) | 7. .0( ) | 0. .0( ) | 29. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 21. .0( ) | 8. .0( ) | 27. .0( ) | 81. .0( ) | 0. .0( ) | 21. .0( ) | 0. .0( ) | 4. .0( ) | 0. .0( ) | 67. .0( ) |
| | | 2. .0( ) | 12. .0( ) | 24. .0( ) | 0. .0( ) | 342. .0( ) | 294. .0( ) | 18. .0( ) | 7. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 85. .0( ) | 0. .0( ) | 57. .0( ) | 15. .0( ) | 0. .0( ) | 33. .0( ) | 0. .0( ) | 294. .6( ) | 3. .6( ) |
| | | 0. .0( ) | 178. .5( ) | 3. .1( ) | 29. 1.3( ) | 29. 1.1( ) | 23. .9( ) | 1. .2( ) | 151. .5( ) | 21. .4( ) | 36. 1.1( ) |
| | | 81. .6( ) | 1. .4( ) | 24. 1.7( ) | 0. .5( ) | 12. .3( ) | 4. .8( ) | 5. .0( ) | 50. .3( ) | 6. .1( ) | 342. 2.6( ) |
| | | 18. .9( ) | 2. .1( ) | 1. .1( ) | 0. .1( ) | 81. .7( ) | 37. .3( ) | 2. .1( ) | 8. .1( ) | 444. .0( ) | 158. .0( ) |
| | | 2. .0( ) | 131. .0( ) | 60. .0( ) | 60. .0( ) | 36. .0( ) | 57. .0( ) | 271. 91.8(S) | 28. 20.4(S) | 22. 18.2(S) | 5. 179.9(S) |
| | | 35. 15.0(S) | 2. .3(S) | 0. .0(S) | 29. 5.8(S) | 22. 6.2(S) | 1. 3.1(S) | | | | |
| 4 | 35. | 168. .0( ) | 0. .0( ) | 0. .0( ) | 142. .0( ) | 5. .0( ) | 0. .0( ) | 28. .0( ) | 0. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 19. .0( ) | 5. .0( ) | 24. .0( ) | 75. .0( ) | 0. .0( ) | 20. .0( ) | 0. .0( ) | 3. .0( ) | 0. .0( ) | 62. .0( ) |
| | | 2. .0( ) | 7. .0( ) | 22. .0( ) | 0. .0( ) | 320. .0( ) | 275. .0( ) | 16. .0( ) | 6. .0( ) | 0. .0( ) | 0. .0( ) |
| | | 0. .0( ) | 79. .0( ) | 0. .0( ) | 53. .0( ) | 10. .0( ) | 0. .0( ) | 30. .0( ) | 0. .0( ) | 275. .6( ) | 2. .6( ) |
| | | 0. .0( ) | 166. .4( ) | 3. .1( ) | 29. 1.3( ) | 28. 1.1( ) | 23. .9( ) | 1. .2( ) | 142. .5( ) | 19. .4( ) | 33. 1.1( ) |
| | | 75. .6( ) | 1. .4( ) | 22. 1.6( ) | 0. .5( ) | 11. .3( ) | 3. .7( ) | 5. .0( ) | 47. .3( ) | 6. .1( ) | 320. 2.5( ) |
| | | 16. .9( ) | 1. .1( ) | 1. .1( ) | 0. .1( ) | 76. .7( ) | 35. .3( ) | 2. .1( ) | 8. .1( ) | 415. .0( ) | 148. .0( ) |
| | | 2. .0( ) | 123. .0( ) | 56. .0( ) | 55. .0( ) | 29. .0( ) | 53. .0( ) | 253. 91.2(S) | 25. 20.4(S) | 20. 18.2(S) | 5. 180.3(S) |
| | | 32. 15.0(S) | 2. .3(S) | 0. .0(S) | 28. 5.7(S) | 22. 6.0(S) | 1. 3.0(S) | | | | |

| | | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 25. | 2. | 0. | 27. | 20. | 1. | | | | | | |
| | | 15.0(S) | .3(S) | .0(S) | 5.6(S) | 5.6(S) | 3.0(S) | | | | | | |
| 4 | 55. | 130. | 0. | 0. | 112. | 2. | 0. | 26. | 0. | 0. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 12. | 1. | 10. | 56. | 0. | 15. | 0. | 1. | 0. | 38. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 0. | 1. | 12. | 0. | 248. | 210. | 9. | 2. | 0. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 0. | 59. | 0. | 39. | 3. | 0. | 22. | 0. | 210. | 2. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) | .5( ) | | |
| | | 0. | 128. | 2. | 27. | 26. | 21. | 1. | 112. | 12. | 21. | | |
| | | .0( ) | .4( ) | .1( ) | 1.2( ) | 1.0( ) | .8( ) | .2( ) | .4( ) | .3( ) | .8( ) | | |
| | | 56. | 0. | 17. | 0. | 7. | 1. | 5. | 31. | 4. | 248. | | |
| | | .5( ) | .3( ) | 1.5( ) | .4( ) | .2( ) | .5( ) | .0( ) | .3( ) | .1( ) | 2.2( ) | | |
| | | 9. | 1. | 1. | 0. | 59. | 25. | 2. | 6. | 315. | 114. | | |
| | | .6( ) | .1( ) | .1( ) | .1( ) | .6( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) | | |
| | | 2. | 95. | 38. | 37. | 14. | 39. | 192. | 11. | 15. | 5. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 89.2(S) | 20.3(S) | 18.2(S) | 181.6(S) | | |
| | | 23. | 2. | 0. | 26. | 20. | 1. | | | | | | |
| | | 15.0(S) | .2(S) | .0(S) | 5.6(S) | 5.5(S) | 3.0(S) | | | | | | |
| 5 | 0. | 122. | 0. | 0. | 105. | 2. | 0. | 26. | 0. | 0. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 10. | 0. | 8. | 52. | 0. | 14. | 0. | 1. | 0. | 32. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 0. | 0. | 9. | 0. | 232. | 197. | 7. | 2. | 0. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 0. | 55. | 0. | 35. | 2. | 0. | 20. | 0. | 197. | 2. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) | .5( ) | | |
| | | 0. | 121. | 2. | 27. | 26. | 20. | 1. | 105. | 10. | 18. | | |
| | | .0( ) | .4( ) | .1( ) | 1.2( ) | 1.0( ) | .8( ) | .2( ) | .4( ) | .3( ) | .8( ) | | |
| | | 52. | 0. | 16. | 0. | 6. | 1. | 5. | 28. | 4. | 232. | | |
| | | .5( ) | .3( ) | 1.4( ) | .4( ) | .2( ) | .5( ) | .0( ) | .2( ) | .1( ) | 2.1( ) | | |
| | | 7. | 1. | 1. | 0. | 55. | 23. | 2. | 5. | 295. | 107. | | |
| | | .6( ) | .1( ) | .1( ) | .1( ) | .5( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) | | |
| | | 2. | 89. | 34. | 33. | 9. | 35. | 179. | 9. | 14. | 5. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 88.8(S) | 20.3(S) | 18.2(S) | 181.8(S) | | |
| | | 21. | 2. | 0. | 26. | 19. | 1. | | | | | | |
| | | 14.9(S) | .2(S) | .0(S) | 5.6(S) | 5.4(S) | 3.0(S) | | | | | | |
| 5 | 5. | 115. | 0. | 0. | 99. | 2. | 0. | 25. | 0. | 0. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 9. | 0. | 7. | 47. | 0. | 13. | 0. | 1. | 0. | 27. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 0. | 0. | 7. | 0. | 218. | 184. | 6. | 1. | 0. | 0. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | | |
| | | 0. | 52. | 0. | 29. | 2. | 0. | 19. | 0. | 184. | 2. | | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) | .5( ) | | |
| | | 0. | 114. | 2. | 26. | 25. | 20. | 1. | 99. | 9. | 15. | | |
| | | .0( ) | .3( ) | .1( ) | 1.2( ) | 1.0( ) | .8( ) | .2( ) | .4( ) | .3( ) | .7( ) | | |
| | | 47. | 0. | 15. | 0. | 5. | 1. | 5. | 24. | 4. | 218. | | |
| | | .5( ) | .3( ) | 1.4( ) | .4( ) | .2( ) | .4( ) | .0( ) | .2( ) | .1( ) | 2.0( ) | | |
| | | 6. | 1. | 1. | 0. | 52. | 21. | 2. | 5. | 276. | 101. | | |
| | | .5( ) | .1( ) | .1( ) | .1( ) | .5( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2. | 83. | 30. | 30. | 7. | 29. | 168. | 8. | 13. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 88.4(S) | 20.3(S) | 18.2(S) | 181.9(S) | |
| | | 20. | 2. | 0. | 25. | 19. | 1. | | | | | |
| | | 14.9(S) | .2(S) | .0(S) | 5.5(S) | 5.2(S) | 3.0(S) | | | | | |
| 5 | 10. | 109. | 0. | 0. | 93. | 1. | 0. | 25. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 8. | 0. | 5. | 43. | 0. | 12. | 0. | 1. | 0. | 23. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 0. | 6. | 0. | 205. | 173. | 6. | 1. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 48. | 0. | 25. | 2. | 0. | 17. | 0. | 173. | 2. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) | .5( ) | |
| | | 0. | 107. | 1. | 26. | 25. | 19. | 1. | 93. | 8. | 13. | |
| | | .0( ) | .3( ) | .1( ) | 1.2( ) | 1.0( ) | .8( ) | .2( ) | .4( ) | .3( ) | .6( ) | |
| | | 43. | 0. | 14. | 0. | 5. | 1. | 5. | 21. | 4. | 205. | |
| | | .4( ) | .3( ) | 1.4( ) | .4( ) | .2( ) | .4( ) | .0( ) | .2( ) | .1( ) | 2.0( ) | |
| | | 6. | 1. | 1. | 0. | 48. | 20. | 2. | 5. | 258. | 95. | |
| | | .5( ) | .1( ) | .1( ) | .1( ) | .5( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) | |
| | | 2. | 77. | 27. | 26. | 6. | 25. | 157. | 6. | 12. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 88.1(S) | 20.3(S) | 18.1(S) | 182.1(S) | |
| | | 18. | 1. | 0. | 25. | 19. | 1. | | | | | |
| | | 14.9(S) | .2(S) | .0(S) | 5.5(S) | 5.1(S) | 3.0(S) | | | | | |
| 5 | 15. | 102. | 0. | 0. | 87. | 1. | 0. | 24. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 7. | 0. | 4. | 40. | 0. | 7. | 0. | 1. | 0. | 20. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 0. | 5. | 0. | 193. | 162. | 5. | 1. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 44. | 0. | 22. | 1. | 0. | 16. | 0. | 162. | 2. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .5( ) | .5( ) | |
| | | 0. | 101. | 1. | 25. | 24. | 19. | 1. | 87. | 7. | 11. | |
| | | .0( ) | .3( ) | .1( ) | 1.2( ) | 1.0( ) | .8( ) | .2( ) | .4( ) | .3( ) | .6( ) | |
| | | 40. | 0. | 12. | 0. | 4. | 1. | 5. | 19. | 4. | 193. | |
| | | .4( ) | .2( ) | 1.3( ) | .4( ) | .2( ) | .4( ) | .0( ) | .2( ) | .1( ) | 1.9( ) | |
| | | 5. | 1. | 1. | 0. | 44. | 18. | 1. | 4. | 241. | 89. | |
| | | .5( ) | .1( ) | .1( ) | .1( ) | .5( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) | |
| | | 1. | 72. | 23. | 23. | 5. | 22. | 148. | 4. | 9. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 87.8(S) | 20.3(S) | 18.1(S) | 182.2(S) | |
| | | 17. | 1. | 0. | 24. | 18. | 1. | | | | | |
| | | 14.9(S) | .2(S) | .0(S) | 5.4(S) | 5.0(S) | 3.0(S) | | | | | |
| 5 | 20. | 97. | 0. | 0. | 82. | 1. | 0. | 24. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 6. | 0. | 4. | 36. | 0. | 5. | 0. | 1. | 0. | 17. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 0. | 3. | 0. | 181. | 153. | 4. | 1. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 40. | 0. | 19. | 1. | 0. | 11. | 0. | 153. | 2. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) | .5( ) | |
| | | 0. | 95. | 1. | 25. | 24. | 18. | 1. | 82. | 6. | 9. | |
| | | .0( ) | .3( ) | .1( ) | 1.2( ) | 1.0( ) | .8( ) | .2( ) | .3( ) | .3( ) | .5( ) | |
| | | 36. | 0. | 9. | 0. | 4. | 0. | 5. | 17. | 3. | 181. | |
| | | .4( ) | .2( ) | 1.2( ) | .4( ) | .1( ) | .3( ) | .0( ) | .2( ) | .1( ) | 1.8( ) | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4. | 1. | 0. | 0. | 40. | 17. | 1. | 4. | 226. | 83. | |
| | | .4( ) | .0( ) | .1( ) | .1( ) | .5( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) | |
| | | 1. | 67. | 19. | 19. | 3. | 19. | 138. | 4. | 5. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 87.5(S) | 20.3(S) | 18.1(S) | 182.3(S) | |
| | | 14. | 1. | 0. | 24. | 18. | 1. | | | | | |
| | | 14.9(S) | .2(S) | .0(S) | 5.4(S) | 4.9(S) | 3.0(S) | | | | | |
| 5 | 25. | 91. | 0. | 0. | 77. | 1. | 0. | 23. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 6. | 0. | 3. | 33. | 0. | 3. | 0. | 1. | 0. | 15. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 0. | 3. | 0. | 171. | 144. | 4. | 1. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 37. | 0. | 17. | 1. | 0. | 8. | 0. | 144. | 2. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) | .5( ) | |
| | | 0. | 89. | 1. | 24. | 23. | 18. | 1. | 77. | 6. | 8. | |
| | | .0( ) | .3( ) | .1( ) | 1.2( ) | .9( ) | .8( ) | .2( ) | .3( ) | .3( ) | .5( ) | |
| | | 33. | 0. | 7. | 0. | 3. | 0. | 5. | 15. | 3. | 171. | |
| | | .4( ) | .2( ) | 1.1( ) | .4( ) | .1( ) | .3( ) | .0( ) | .2( ) | .1( ) | 1.8( ) | |
| | | 4. | 1. | 0. | 0. | 37. | 16. | 1. | 4. | 212. | 78. | |
| | | .4( ) | .0( ) | .1( ) | .1( ) | .4( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) | |
| | | 1. | 62. | 15. | 15. | 3. | 17. | 130. | 4. | 4. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 87.2(S) | 20.3(S) | 18.1(S) | 182.4(S) | |
| | | 10. | 1. | 0. | 23. | 17. | 1. | | | | | |
| | | 14.9(S) | .2(S) | .0(S) | 5.4(S) | 4.8(S) | 3.0(S) | | | | | |
| 5 | 30. | 86. | 0. | 0. | 72. | 1. | 0. | 23. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 5. | 0. | 3. | 29. | 0. | 2. | 0. | 0. | 0. | 13. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 0. | 3. | 0. | 161. | 135. | 4. | 1. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 34. | 0. | 15. | 1. | 0. | 7. | 0. | 135. | 1. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) | .5( ) | |
| | | 0. | 84. | 1. | 24. | 23. | 18. | 1. | 72. | 5. | 7. | |
| | | .0( ) | .3( ) | .1( ) | 1.1( ) | .9( ) | .8( ) | .2( ) | .3( ) | .2( ) | .5( ) | |
| | | 29. | 0. | 5. | 0. | 3. | 0. | 5. | 13. | 3. | 161. | |
| | | .3( ) | .2( ) | 1.0( ) | .3( ) | .1( ) | .3( ) | .0( ) | .2( ) | .1( ) | 1.7( ) | |
| | | 4. | 1. | 0. | 0. | 34. | 15. | 1. | 4. | 198. | 73. | |
| | | .4( ) | .0( ) | .1( ) | .1( ) | .4( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) | |
| | | 1. | 58. | 12. | 12. | 3. | 15. | 122. | 3. | 3. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 86.9(S) | 20.3(S) | 18.1(S) | 182.4(S) | |
| | | 8. | 1. | 0. | 23. | 17. | 1. | | | | | |
| | | 14.9(S) | .2(S) | .0(S) | 5.3(S) | 4.7(S) | 3.0(S) | | | | | |
| 5 | 35. | 81. | 0. | 0. | 68. | 1. | 0. | 22. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 5. | 0. | 3. | 26. | 0. | 1. | 0. | 0. | 0. | 12. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 0. | 3. | 0. | 152. | 127. | 3. | 1. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 31. | 0. | 14. | 1. | 0. | 6. | 0. | 127. | 1. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) | .5( ) | |
| | | 0. | 79. | 1. | 23. | 22. | 17. | 1. | 68. | 5. | 6. | |
| | | .0( ) | .3( ) | .1( ) | 1.1( ) | .9( ) | .8( ) | .2( ) | .3( ) | .2( ) | .4( ) | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 26. | 0. | 4. | 0. | 3. | 0. | 5. | 12. | 3. | 152. | |
| | | .3( ) | .2( ) | .8( ) | .3( ) | .1( ) | .3( ) | .0( ) | .1( ) | .1( ) | 1.6( ) | |
| | | 3. | 1. | 0. | 0. | 31. | 14. | 1. | 3. | 186. | 69. | |
| | | .4( ) | .0( ) | .1( ) | .1( ) | .4( ) | .2( ) | .1( ) | .1( ) | .0( ) | .0( ) | |
| | | 1. | 54. | 10. | 10. | 3. | 14. | 115. | 3. | 2. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 86.7(S) | 20.3(S) | 18.1(S) | 182.5(S) | |
| | | 6. | 1. | 0. | 22. | 17. | 1. | | | | | |
| | | 14.9(S) | .2(S) | .0(S) | 5.3(S) | 4.6(S) | 3.0(S) | | | | | |
| 5 | 40. | 76. | 0. | 0. | 63. | 1. | 0. | 22. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 4. | 0. | 3. | 23. | 0. | 0. | 0. | 0. | 0. | 10. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 0. | 3. | 0. | 143. | 120. | 3. | 1. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 29. | 0. | 13. | 1. | 0. | 5. | 0. | 120. | 1. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) | .5( ) | |
| | | 0. | 75. | 1. | 23. | 22. | 17. | 1. | 63. | 4. | 5. | |
| | | .0( ) | .3( ) | .1( ) | 1.1( ) | .9( ) | .7( ) | .2( ) | .3( ) | .2( ) | .4( ) | |
| | | 23. | 0. | 3. | 0. | 3. | 0. | 5. | 10. | 3. | 143. | |
| | | .3( ) | .2( ) | .7( ) | .3( ) | .1( ) | .3( ) | .0( ) | .1( ) | .1( ) | 1.6( ) | |
| | | 3. | 1. | 0. | 0. | 29. | 13. | 1. | 3. | 175. | 64. | |
| | | .3( ) | .0( ) | .1( ) | .1( ) | .4( ) | .1( ) | .1( ) | .1( ) | .0( ) | .0( ) | |
| | | 1. | 50. | 8. | 8. | 3. | 13. | 108. | 3. | 1. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 86.4(S) | 20.3(S) | 18.1(S) | 182.5(S) | |
| | | 5. | 1. | 0. | 22. | 16. | 1. | | | | | |
| | | 14.9(S) | .2(S) | .0(S) | 5.3(S) | 4.5(S) | 2.9(S) | | | | | |
| 5 | 45. | 71. | 0. | 0. | 59. | 1. | 0. | 22. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 4. | 0. | 2. | 21. | 0. | 0. | 0. | 0. | 0. | 9. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 0. | 3. | 0. | 135. | 113. | 3. | 1. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 27. | 0. | 12. | 1. | 0. | 2. | 0. | 113. | 1. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .4( ) | .5( ) | |
| | | 0. | 70. | 1. | 22. | 22. | 16. | 1. | 59. | 4. | 5. | |
| | | .0( ) | .3( ) | .1( ) | 1.1( ) | .9( ) | .7( ) | .2( ) | .3( ) | .2( ) | .4( ) | |
| | | 21. | 0. | 2. | 0. | 2. | 0. | 5. | 9. | 3. | 135. | |
| | | .3( ) | .2( ) | .6( ) | .3( ) | .1( ) | .3( ) | .0( ) | .1( ) | .1( ) | 1.5( ) | |
| | | 3. | 1. | 0. | 0. | 27. | 12. | 1. | 3. | 164. | 60. | |
| | | .3( ) | .0( ) | .0( ) | .1( ) | .4( ) | .1( ) | .1( ) | .1( ) | .0( ) | .0( ) | |
| | | 1. | 47. | 7. | 7. | 3. | 12. | 101. | 3. | 0. | 5. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 86.2(S) | 20.3(S) | 18.1(S) | 182.5(S) | |
| | | 3. | 1. | 0. | 21. | 16. | 1. | | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 5.2(S) | 4.4(S) | 2.9(S) | | | | | |
| 5 | 50. | 67. | 0. | 0. | 56. | 1. | 0. | 21. | 0. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 3. | 0. | 2. | 19. | 0. | 0. | 0. | 0. | 0. | 9. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 0. | 2. | 0. | 127. | 106. | 2. | 1. | 0. | 0. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | |
| | | 0. | 25. | 0. | 11. | 1. | 0. | 4. | 0. | 106. | 1. | |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) | .5( ) | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 66. | 1. | 22. | 21. | 16. | 1. | 56. | 3. | 4. |
| | | .0( ) | .2( ) | .1( ) | 1.1( ) | .9( ) | .7( ) | .2( ) | .3( ) | .2( ) | .3( ) |
| | | 19. | 0. | 1. | 0. | 2. | 0. | 5. | 9. | 2. | 127. |
| | | .3( ) | .2( ) | .5( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .1( ) | 1.5( ) |
| | | 2. | 0. | 0. | 0. | 25. | 11. | 1. | 3. | 155. | 57. |
| | | .3( ) | .0( ) | .0( ) | .1( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 44. | 6. | 6. | 2. | 11. | 95. | 2. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 86.0(S) | 20.3(S) | 18.1(S) | 182.6(S) |
| | | 3. | 1. | 0. | 21. | 15. | 1. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 5.2(S) | 4.3(S) | 2.9(S) | | | | |
| 5 | 55. | 63. | 0. | 0. | 52. | 1. | 0. | 21. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 0. | 2. | 17. | 0. | 0. | 0. | 0. | 0. | 8. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 120. | 100. | 2. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 23. | 0. | 11. | 1. | 0. | 1. | 0. | 100. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) | .4( ) |
| | | 0. | 62. | 1. | 21. | 21. | 16. | 1. | 52. | 3. | 4. |
| | | .0( ) | .2( ) | .1( ) | 1.1( ) | .9( ) | .7( ) | .2( ) | .3( ) | .2( ) | .3( ) |
| | | 17. | 0. | 1. | 0. | 2. | 0. | 5. | 8. | 2. | 120. |
| | | .2( ) | .2( ) | .5( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .1( ) | 1.4( ) |
| | | 2. | 0. | 0. | 0. | 23. | 11. | 1. | 3. | 146. | 53. |
| | | .3( ) | .0( ) | .0( ) | .1( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 41. | 5. | 5. | 2. | 11. | 90. | 2. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 85.8(S) | 20.3(S) | 18.1(S) | 182.6(S) |
| | | 3. | 1. | 0. | 21. | 15. | 1. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 5.2(S) | 4.2(S) | 2.9(S) | | | | |
| 6 | 0. | 60. | 0. | 0. | 49. | 1. | 0. | 20. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 3. | 0. | 2. | 15. | 0. | 0. | 0. | 0. | 0. | 7. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 114. | 94. | 2. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 21. | 0. | 10. | 1. | 0. | 4. | 0. | 94. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) | .4( ) |
| | | 0. | 59. | 1. | 21. | 20. | 15. | 1. | 49. | 3. | 4. |
| | | .0( ) | .2( ) | .1( ) | 1.1( ) | .9( ) | .7( ) | .2( ) | .2( ) | .2( ) | .3( ) |
| | | 15. | 0. | 1. | 0. | 2. | 0. | 5. | 7. | 2. | 114. |
| | | .2( ) | .2( ) | .4( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .1( ) | 1.4( ) |
| | | 2. | 0. | 0. | 0. | 21. | 10. | 1. | 3. | 137. | 50. |
| | | .3( ) | .0( ) | .0( ) | .1( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 39. | 4. | 4. | 2. | 10. | 84. | 2. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 85.7(S) | 20.3(S) | 18.1(S) | 182.6(S) |
| | | 3. | 1. | 0. | 20. | 15. | 1. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 5.1(S) | 4.1(S) | 2.9(S) | | | | |
| 6 | 5. | 56. | 0. | 0. | 46. | 1. | 0. | 20. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 0. | 2. | 13. | 0. | 0. | 0. | 0. | 0. | 7. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 107. | 89. | 2. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 20. | 0. | 9. | 1. | 0. | 1. | 0. | 89. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) | .4( ) |
| | | 0. | 55. | 1. | 21. | 20. | 15. | 1. | 46. | 2. | 3. |
| | | .0( ) | .2( ) | .1( ) | 1.1( ) | .8( ) | .7( ) | .2( ) | .2( ) | .2( ) | .3( ) |
| | | 13. | 0. | 0. | 0. | 2. | 0. | 5. | 7. | 2. | 107. |
| | | .2( ) | .2( ) | .4( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .1( ) | 1.3( ) |
| | | 2. | 0. | 0. | 0. | 20. | 9. | 1. | 2. | 129. | 47. |
| | | .3( ) | .0( ) | .0( ) | .1( ) | .3( ) | .1( ) | .1( ) | .1( ) | .0( ) | .0( ) |
| | | 1. | 37. | 4. | 4. | 2. | 9. | 79. | 2. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 85.5(S) | 20.3(S) | 18.1(S) | 182.6(S) |
| | | 3. | 1. | 0. | 20. | 14. | 1. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 5.1(S) | 4.0(S) | 2.9(S) | | | | |
| 6 | 10. | 53. | 0. | 0. | 44. | 1. | 0. | 19. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 0. | 2. | 12. | 0. | 0. | 0. | 0. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 102. | 84. | 2. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 19. | 0. | 9. | 1. | 0. | 4. | 0. | 84. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) | .4( ) |
| | | 0. | 52. | 1. | 20. | 19. | 15. | 1. | 44. | 2. | 3. |
| | | .0( ) | .2( ) | .1( ) | 1.1( ) | .8( ) | .7( ) | .2( ) | .2( ) | .2( ) | .3( ) |
| | | 12. | 0. | 0. | 0. | 2. | 0. | 5. | 6. | 2. | 102. |
| | | .2( ) | .2( ) | .3( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | 1.3( ) |
| | | 2. | 0. | 0. | 0. | 19. | 9. | 1. | 2. | 122. | 44. |
| | | .3( ) | .0( ) | .0( ) | .1( ) | .3( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 35. | 3. | 3. | 2. | 9. | 75. | 2. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 85.4(S) | 20.3(S) | 18.1(S) | 182.6(S) |
| | | 2. | 1. | 0. | 19. | 14. | 1. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 5.1(S) | 3.9(S) | 2.9(S) | | | | |
| 6 | 15. | 50. | 0. | 0. | 41. | 1. | 0. | 19. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 0. | 1. | 11. | 0. | 0. | 0. | 0. | 0. | 6. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 96. | 79. | 2. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 18. | 0. | 8. | 1. | 0. | 1. | 0. | 79. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) | .4( ) |
| | | 0. | 49. | 1. | 20. | 19. | 14. | 1. | 41. | 2. | 3. |
| | | .0( ) | .2( ) | .1( ) | 1.0( ) | .8( ) | .7( ) | .2( ) | .2( ) | .2( ) | .3( ) |
| | | 11. | 0. | 0. | 0. | 1. | 0. | 5. | 6. | 2. | 96. |
| | | .2( ) | .2( ) | .3( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | 1.3( ) |
| | | 2. | 0. | 0. | 0. | 18. | 8. | 1. | 2. | 115. | 42. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .3( ) | .1( ) | .1( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 33. | 3. | 3. | 2. | 8. | 70. | 2. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 85.2(S) | 20.3(S) | 18.1(S) | 182.6(S) |
| | | 2. | 1. | 0. | 19. | 14. | 1. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 5.0(S) | 3.8(S) | 2.9(S) | | | | |
| 6 | 20. | 48. | 0. | 0. | 39. | 1. | 0. | 19. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 0. | 1. | 10. | 0. | 0. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0. | 0. | 2. | 0. | 91. | 75. | 2. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 17. | 0. | 8. | 1. | 0. | 4. | 0. | 75. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) | .4( ) |
| | | 0. | 47. | 1. | 19. | 19. | 14. | 1. | 39. | 2. | 3. |
| | | .0( ) | .2( ) | .0( ) | 1.0( ) | .8( ) | .7( ) | .2( ) | .2( ) | .2( ) | .3( ) |
| | | 10. | 0. | 0. | 0. | 1. | 0. | 5. | 5. | 2. | 91. |
| | | .2( ) | .2( ) | .3( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | 1.2( ) |
| | | 2. | 0. | 0. | 0. | 17. | 8. | 1. | 2. | 109. | 40. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .3( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 31. | 3. | 3. | 2. | 8. | 66. | 1. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 85.1(S) | 20.3(S) | 18.1(S) | 182.6(S) |
| | | 2. | 1. | 0. | 19. | 13. | 1. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 5.0(S) | 3.7(S) | 2.9(S) | | | | |
| 6 | 25. | 45. | 0. | 0. | 37. | 1. | 0. | 18. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 0. | 1. | 9. | 0. | 0. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 86. | 71. | 1. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 16. | 0. | 8. | 1. | 0. | 1. | 0. | 71. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) | .4( ) |
| | | 0. | 44. | 1. | 19. | 18. | 14. | 1. | 37. | 2. | 2. |
| | | .0( ) | .2( ) | .0( ) | 1.0( ) | .8( ) | .7( ) | .2( ) | .2( ) | .2( ) | .2( ) |
| | | 9. | 0. | 0. | 0. | 1. | 0. | 5. | 5. | 2. | 86. |
| | | .2( ) | .1( ) | .3( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | 1.2( ) |
| | | 1. | 0. | 0. | 0. | 16. | 8. | 1. | 2. | 103. | 38. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .3( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 30. | 3. | 3. | 2. | 8. | 62. | 1. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 85.0(S) | 20.3(S) | 18.1(S) | 182.6(S) |
| | | 2. | 1. | 0. | 18. | 13. | 1. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 5.0(S) | 3.6(S) | 2.9(S) | | | | |
| 6 | 30. | 43. | 0. | 0. | 35. | 1. | 0. | 18. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 2. | 0. | 1. | 8. | 0. | 0. | 0. | 0. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 82. | 67. | 1. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 15. | 0. | 7. | 1. | 0. | 3. | 0. | 67. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) | .4( ) |
| | | 0. | 42. | 1. | 19. | 18. | 13. | 1. | 35. | 2. | 2. |
| | | .0( ) | .2( ) | .0( ) | 1.0( ) | .8( ) | .7( ) | .2( ) | .2( ) | .2( ) | .2( ) |
| | | 8. | 0. | 0. | 0. | 1. | 0. | 5. | 5. | 2. | 82. |
| | | .2( ) | .1( ) | .2( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | 1.1( ) |
| | | 1. | 0. | 0. | 0. | 15. | 7. | 1. | 2. | 98. | 36. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 29. | 2. | 2. | 2. | 7. | 59. | 1. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 84.8(S) | 20.3(S) | 18.1(S) | 182.6(S) |
| | | 2. | 1. | 0. | 18. | 13. | 1. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 4.9(S) | 3.5(S) | 2.9(S) | | | | |
| 6 | 35. | 41. | 0. | 0. | 34. | 1. | 0. | 17. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1. | 0. | 1. | 8. | 0. | 0. | 0. | 0. | 0. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 77. | 63. | 1. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 14. | 0. | 7. | 1. | 0. | 0. | 0. | 63. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .3( ) | .4( ) |
| | | 0. | 40. | 1. | 18. | 17. | 13. | 1. | 34. | 1. | 2. |
| | | .0( ) | .2( ) | .0( ) | 1.0( ) | .8( ) | .7( ) | .2( ) | .2( ) | .2( ) | .2( ) |
| | | 8. | 0. | 0. | 0. | 1. | 0. | 5. | 4. | 2. | 77. |
| | | .2( ) | .1( ) | .2( ) | .3( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | 1.1( ) |
| | | 1. | 0. | 0. | 0. | 14. | 7. | 1. | 2. | 93. | 34. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 27. | 2. | 2. | 2. | 7. | 56. | 1. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 84.7(S) | 20.3(S) | 18.1(S) | 182.6(S) |
| | | 2. | 1. | 0. | 17. | 13. | 1. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 4.9(S) | 3.5(S) | 2.9(S) | | | | |
| 6 | 40. | 39. | 0. | 0. | 32. | 1. | 0. | 17. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 1. | 7. | 0. | 0. | 0. | 0. | 0. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 73. | 60. | 1. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 13. | 0. | 7. | 1. | 0. | 3. | 0. | 60. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) | .4( ) |
| | | 0. | 38. | 1. | 18. | 17. | 13. | 1. | 32. | 1. | 2. |
| | | .0( ) | .2( ) | .0( ) | 1.0( ) | .8( ) | .6( ) | .2( ) | .2( ) | .2( ) | .2( ) |
| | | 7. | 0. | 0. | 0. | 1. | 0. | 5. | 4. | 2. | 73. |
| | | .1( ) | .1( ) | .2( ) | .2( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | 1.1( ) |
| | | 1. | 0. | 0. | 0. | 13. | 7. | 1. | 2. | 88. | 33. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 26. | 2. | 2. | 2. | 7. | 53. | 1. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 84.6(S) | 20.3(S) | 18.1(S) | 182.6(S) |
| | | 2. | 1. | 0. | 17. | 12. | 1. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 4.9(S) | 3.4(S) | 2.9(S) | | | | |
| 6 | 45. | 37. | 0. | 0. | 31. | 1. | 0. | 17. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 1. | 7. | 0. | 0. | 0. | 0. | 0. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 2. | 0. | 69. | 57. | 1. | 1. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 13. | 0. | 6. | 1. | 0. | 0. | 0. | 57. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) | .4( ) |
| | | 0. | 36. | 1. | 17. | 17. | 12. | 1. | 31. | 1. | 2. |
| | | .0( ) | .2( ) | .0( ) | 1.0( ) | .8( ) | .6( ) | .2( ) | .2( ) | .1( ) | .2( ) |
| | | 7. | 0. | 0. | 0. | 1. | 0. | 5. | 4. | 2. | 69. |
| | | .1( ) | .1( ) | .2( ) | .2( ) | .1( ) | .2( ) | .0( ) | .1( ) | .0( ) | 1.0( ) |
| | | 1. | 0. | 0. | 0. | 13. | 6. | 1. | 2. | 83. | 31. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 25. | 2. | 2. | 2. | 6. | 50. | 1. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 84.5(S) | 20.3(S) | 18.1(S) | 182.6(S) |
| | | 2. | 1. | 0. | 17. | 12. | 1. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 4.8(S) | 3.3(S) | 2.9(S) | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 50. | 35. | 0. | 0. | 30. | 1. | 0. | 16. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 1. | 6. | 0. | 0. | 0. | 0. | 0. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 66. | 54. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 12. | 0. | 6. | 1. | 0. | 3. | 0. | 54. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) | .4( ) |
| | | 0. | 35. | 1. | 17. | 16. | 12. | 1. | 30. | 1. | 2. |
| | | .0( ) | .2( ) | .0( ) | 1.0( ) | .7( ) | .6( ) | .2( ) | .2( ) | .1( ) | .2( ) |
| | | 6. | 0. | 0. | 0. | 1. | 0. | 5. | 4. | 1. | 66. |
| | | .1( ) | .1( ) | .2( ) | .2( ) | .1( ) | .1( ) | .0( ) | .1( ) | .0( ) | 1.0( ) |
| | | 1. | 0. | 0. | 0. | 12. | 6. | 1. | 2. | 79. | 30. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 24. | 2. | 2. | 1. | 6. | 47. | 1. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 84.5(S) | 20.3(S) | 18.1(S) | 182.6(S) |
| | | 2. | 1. | 0. | 16. | 12. | 1. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 4.8(S) | 3.2(S) | 2.9(S) | | | | |
| 6 | 55. | 34. | 0. | 0. | 28. | 0. | 0. | 16. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 1. | 6. | 0. | 0. | 0. | 0. | 0. | 4. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 63. | 51. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 11. | 0. | 6. | 1. | 0. | 0. | 0. | 51. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) | .4( ) |
| | | 0. | 33. | 0. | 17. | 16. | 12. | 1. | 28. | 1. | 2. |
| | | .0( ) | .2( ) | .0( ) | 1.0( ) | .7( ) | .6( ) | .2( ) | .2( ) | .1( ) | .2( ) |
| | | 6. | 0. | 0. | 0. | 1. | 0. | 5. | 4. | 1. | 63. |
| | | .1( ) | .1( ) | .2( ) | .2( ) | .1( ) | .1( ) | .0( ) | .1( ) | .0( ) | 1.0( ) |
| | | 1. | 0. | 0. | 0. | 11. | 6. | 1. | 2. | 75. | 29. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 23. | 2. | 2. | 1. | 6. | 45. | 1. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 84.4(S) | 20.3(S) | 18.1(S) | 182.6(S) |
| | | 2. | 1. | 0. | 16. | 11. | 1. | | | | |
| | | 14.9(S) | .1(S) | .0(S) | 4.8(S) | 3.2(S) | 2.8(S) | | | | |
| 7 | 0. | 33. | 0. | 0. | 27. | 0. | 0. | 16. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 0. | 1. | 5. | 0. | 0. | 0. | 0. | 0. | 3. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 0. | 1. | 0. | 60. | 48. | 1. | 0. | 0. | 0. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 0. | 11. | 0. | 5. | 1. | 0. | 3. | 0. | 48. | 1. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .2( ) | .4( ) |
| | | 0. | 32. | 0. | 16. | 16. | 12. | 1. | 27. | 1. | 1. |
| | | .0( ) | .2( ) | .0( ) | 1.0( ) | .7( ) | .6( ) | .2( ) | .2( ) | .1( ) | .2( ) |
| | | 5. | 0. | 0. | 0. | 1. | 0. | 5. | 3. | 1. | 60. |
| | | .1( ) | .1( ) | .2( ) | .2( ) | .1( ) | .1( ) | .0( ) | .1( ) | .0( ) | 1.0( ) |
| | | 1. | 0. | 0. | 0. | 11. | 5. | 1. | 1. | 71. | 28. |
| | | .2( ) | .0( ) | .0( ) | .1( ) | .2( ) | .1( ) | .0( ) | .0( ) | .0( ) | .0( ) |
| | | 1. | 23. | 2. | 2. | 1. | 5. | 43. | 1. | 0. | 5. |
| | | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | .0( ) | 84.3(S) | 20.3(S) | 18.1(S) | 182.6(S) |

| | | | | | |
|---|---|---|---|---|---|
| 2. | 1. | 0. | 16. | 11. | 1. |
| 14.9(S) | .1(S) | .0(S) | 4.8(S) | 3.1(S) | 2.8(S) |

1

100yr 3hr 3hr Future Condition w/Imp. & Realigned Channels Sump Basin
Blank

*** PEAK FLOWS, STAGES AND STORAGES OF GUTTERS AND DETENTION DAMS ***

| CONVEYANCE ELEMENT | PEAK (CFS) | STAGE (FT) | STORAGE (AC-FT) | TIME (HR/MIN) |
|---|---|---|---|---|
| 219 | 141. | (DIRECT FLOW) | | 1 0. |
| 217 | 150. | (DIRECT FLOW) | | 0 45. |
| 119 | 141. | (DIRECT FLOW) | | 1 0. |
| 117 | 150. | (DIRECT FLOW) | | 0 45. |
| 210 | 77. | (DIRECT FLOW) | | 0 25. |
| 319 | 136. | 3.0 | | 1 10. |
| 317 | 120. | 4.1 | | 1 5. |
| 218 | 115. | (DIRECT FLOW) | | 0 50. |
| 110 | 77. | (DIRECT FLOW) | | 0 25. |
| 118 | 367. | (DIRECT FLOW) | | 1 5. |
| 610 | 1. | .1 | 3.4 | 1 0. |
| 209 | 140. | (DIRECT FLOW) | | 0 50. |
| 216 | 332. | (DIRECT FLOW) | | 1 5. |
| 318 | 343. | 2.0 | | 1 15. |
| 213 | 380. | (DIRECT FLOW) | | 1 0. |
| 310 | 1. | .2 | | 3 25. |
| 109 | 140. | (DIRECT FLOW) | | 0 50. |
| 116 | 332. | (DIRECT FLOW) | | 1 5. |
| 113 | 703. | (DIRECT FLOW) | | 1 10. |
| 609 | 36. | .1 | 9.9 | 2 15. |
| 208 | 99. | (DIRECT FLOW) | | 0 40. |
| 215 | 58. | (DIRECT FLOW) | | 0 50. |
| 516 | 300. | .1 | 18.9 | 1 30. |
| 513 | 701. | .1 | 22.7 | 1 15. |
| 309 | 36. | 1.1 | | 2 25. |
| 108 | 99. | (DIRECT FLOW) | | 0 40. |
| 115 | 58. | (DIRECT FLOW) | | 0 50. |
| 316 | 272. | 4.2 | | 1 35. |
| 313 | 630. | 4.6 | | 1 30. |
| 608 | 34. | .1 | 6.2 | 2 55. |
| 315 | 54. | 2.0 | | 1 15. |
| 416 | 886. | (DIRECT FLOW) | | 1 35. |
| 212 | 262. | (DIRECT FLOW) | | 0 55. |
| 308 | 34. | 1.2 | | 2 55. |
| 207 | 11. | (DIRECT FLOW) | | 1 25. |
| 414 | 931. | (DIRECT FLOW) | | 1 35. |
| 112 | 262. | (DIRECT FLOW) | | 0 55. |
| 107 | 41. | (DIRECT FLOW) | | 1 30. |
| 314 | 823. | 2.4 | | 1 45. |
| 214 | 205. | (DIRECT FLOW) | | 0 50. |
| 312 | 221. | 1.0 | | 1 25. |
| 211 | 44. | (DIRECT FLOW) | | 1 10. |
| 206 | 72. | (DIRECT FLOW) | | 0 50. |
| 307 | 39. | 1.5 | | 1 35. |
| 114 | 920. | (DIRECT FLOW) | | 1 45. |
| 111 | 260. | (DIRECT FLOW) | | 1 20. |
| 203 | 16. | (DIRECT FLOW) | | 0 15. |
| 106 | 72. | (DIRECT FLOW) | | 0 50. |
| 404 | 1182. | (DIRECT FLOW) | | 1 45. |
| 103 | 16. | (DIRECT FLOW) | | 0 15. |
| 202 | 57. | (DIRECT FLOW) | | 0 35. |
| 306 | 55. | .7 | | 1 25. |
| 205 | 224. | (DIRECT FLOW) | | 1 0. |
| 311 | 1155. | 1.6 | | 1 50. |
| 204 | 107. | (DIRECT FLOW) | | 0 50. |
| 603 | 5. | .1 | .3 | 0 30. |
| 102 | 57. | (DIRECT FLOW) | | 0 35. |
| 236 | 77. | (DIRECT FLOW) | | 0 55. |
| 105 | 265. | (DIRECT FLOW) | | 1 10. |
| 104 | 1218. | (DIRECT FLOW) | | 1 50. |
| 303 | 5. | .3 | | 0 40. |

| | | | | | |
|---|---|---|---|---|---|
| 602 | 22. | .1 | 2.2 | 1 | 10. |
| 224 | 178. | (DIRECT FLOW) | | 0 | 50. |
| 136 | 77. | (DIRECT FLOW) | | 0 | 55. |
| 231 | 30. | (DIRECT FLOW) | | 0 | 50. |
| 401 | 1386. | (DIRECT FLOW) | | 1 | 50. |
| 402 | 24. | (DIRECT FLOW) | | 1 | 5. |
| 124 | 178. | (DIRECT FLOW) | | 0 | 50. |
| 336 | 53. | .6 | | 1 | 20. |
| 235 | 453. | (DIRECT FLOW) | | 1 | 0. |
| 131 | 30. | (DIRECT FLOW) | | 0 | 50. |
| 304 | 1375. | 1.5 | | 1 | 50. |
| 302 | 23. | 1.4 | | 1 | 15. |
| 201 | 323. | (DIRECT FLOW) | | 0 | 50. |
| 324 | 121. | .6 | | 1 | 20. |
| 223 | 523. | (DIRECT FLOW) | | 1 | 0. |
| 222 | 214. | (DIRECT FLOW) | | 1 | 0. |
| 135 | 490. | (DIRECT FLOW) | | 1 | 0. |
| 230 | 27. | (DIRECT FLOW) | | 0 | 45. |
| 331 | 27. | 1.5 | | 1 | 0. |
| 229 | 39. | (DIRECT FLOW) | | 1 | 0. |
| 101 | 1509. | (DIRECT FLOW) | | 1 | 50. |
| 123 | 621. | (DIRECT FLOW) | | 1 | 5. |
| 122 | 214. | (DIRECT FLOW) | | 1 | 0. |
| 238 | 178. | (DIRECT FLOW) | | 0 | 55. |
| 335 | 388. | 1.1 | | 1 | 30. |
| 234 | 386. | (DIRECT FLOW) | | 1 | 5. |
| 233 | 39. | (DIRECT FLOW) | | 0 | 55. |
| 130 | 27. | (DIRECT FLOW) | | 0 | 45. |
| 129 | 67. | (DIRECT FLOW) | | 1 | 0. |
| 501 | 1082. | .1 | 118.5 | 2 | 25. |
| 420 | 835. | (DIRECT FLOW) | | 1 | 5. |
| 138 | 178. | (DIRECT FLOW) | | 0 | 55. |
| 134 | 726. | (DIRECT FLOW) | | 1 | 20. |
| 133 | 39. | (DIRECT FLOW) | | 0 | 55. |
| 330 | 15. | .4 | | 1 | 25. |
| 329 | 57. | .7 | | 1 | 20. |
| 228 | 362. | (DIRECT FLOW) | | 0 | 55. |
| 301 | 1078. | 1.4 | | 2 | 25. |
| 226 | 92. | (DIRECT FLOW) | | 0 | 50. |
| 221 | 185. | (DIRECT FLOW) | | 1 | 0. |
| 322 | 804. | 1.8 | | 1 | 15. |
| 220 | 392. | (DIRECT FLOW) | | 1 | 5. |
| 338 | 131. | .6 | | 1 | 25. |
| 237 | 604. | (DIRECT FLOW) | | 1 | 5. |
| 432 | 755. | (DIRECT FLOW) | | 1 | 20. |
| 128 | 419. | (DIRECT FLOW) | | 1 | 5. |
| 126 | 1101. | (DIRECT FLOW) | | 2 | 25. |
| 121 | 185. | (DIRECT FLOW) | | 1 | 0. |
| 120 | 1176. | (DIRECT FLOW) | | 1 | 15. |
| 137 | 707. | (DIRECT FLOW) | | 1 | 10. |
| 333 | 703. | 2.4 | | 1 | 35. |
| 232 | 322. | (DIRECT FLOW) | | 1 | 0. |
| 328 | 394. | 4.4 | | 1 | 15. |
| 227 | 60. | (DIRECT FLOW) | | 0 | 55. |
| 326 | 1071. | 4.9 | | 2 | 35. |
| 225 | 34. | (DIRECT FLOW) | | 1 | 5. |
| 520 | 5. | .1 | 182.6 | 6 | 25. |
| 537 | 700. | .1 | 17.9 | 1 | 15. |
| 132 | 937. | (DIRECT FLOW) | | 1 | 25. |
| 127 | 452. | (DIRECT FLOW) | | 1 | 15. |
| 125 | 1087. | (DIRECT FLOW) | | 2 | 35. |
| 320 | 5. | (DIRECT FLOW) | | 0 | 50. |
| 337 | 700. | (DIRECT FLOW) | | 1 | 15. |
| 400 | 1746. | (DIRECT FLOW) | | 2 | 25. |
| 902 | 5. | (DIRECT FLOW) | | 0 | 50. |
| 901 | 700. | (DIRECT FLOW) | | 1 | 15. |
| 900 | 1746. | (DIRECT FLOW) | | 2 | 25. |

# Appendix N:
# IMPROVEMENTS OPINION OF COST

**Culvert Construction Cost Estimate Summary**

| Culvert | Culvert Type (RCP or RCB) (ft) | RCP Diameter or RCB Width (ft) | RCB Height (ft) | Number of Barrels | Total Installed Price ($) |
|---|---|---|---|---|---|
| 106 | RCP | 3.5 | n/a | 1 | $33,519.83 |
| 115 | RCP | 3.0 | n/a | 1 | $31,660.20 |
| 118 | RCB | 6.0 | 4.0 | 2 | $132,968.93 |
| 124 | RCB | 6.0 | 4.0 | 1 | $73,022.85 |
| 126 | RCB | 10.0 | 4.0 | 5 | $555,366.38 |
| 128 | RCB | 6.0 | 4.0 | 3 | $192,915.00 |
| 129 | RCP | 3.5 | n/a | 1 | $33,519.83 |
| 130 | RCP | 3.0 | n/a | 1 | $31,660.20 |
| 131 | RCP | 3.0 | n/a | 1 | $31,660.20 |
| 135 | RCB | 6.0 | 4.0 | 3 | $192,915.00 |
| 136 | RCP | 3.5 | n/a | 1 | $33,519.83 |
| 138 | RCP | 4.0 | n/a | 2 | $60,628.50 |
| 401 | RCB | 9.0 | 4.0 | 5 | $448,490.25 |
| 416 | RCB | 10.0 | 4.0 | 3 | $337,642.43 |
| 420 | RCB | 10.0 | 4.0 | 3 | $97,072.43 |
| 432 | RCB | 9.0 | 4.0 | 3 | $273,516.75 |
| 537 | RCB | 8.0 | 4.0 | 4 | $359,062.88 |

**Swale Construction Cost Estimate Summary**

| Swale | Bottom Width (ft) | Top Width (ft) | Easement Width (ft) | Total Width (ft) | Length (ft) | Area (acres) | Price/acre ($) | Total Price ($) |
|---|---|---|---|---|---|---|---|---|
| 301 | 150 | 169 | 40 | 209 | 1716 | 8.25 | $25,000.00 | $206,187.88 |
| 302 | 0 | 20 | 40 | 60 | 1698 | 2.34 | $25,000.00 | $58,471.07 |
| 304 | 175 | 195 | 40 | 235 | 1761 | 9.52 | $25,000.00 | $237,912.88 |
| 306 | 25 | 46 | 40 | 86 | 5603 | 11.09 | $25,000.00 | $277,191.57 |
| 311 | 135 | 157 | 40 | 197 | 2519 | 11.37 | $25,000.00 | $284,226.01 |
| 313 | 10 | 57 | 40 | 97 | 2381 | 5.31 | $25,000.00 | $132,824.38 |
| 314 | 60 | 89 | 40 | 129 | 3598 | 10.64 | $25,000.00 | $265,967.86 |
| 315 | 0 | 25 | 40 | 65 | 2696 | 4.04 | $25,000.00 | $100,883.38 |
| 316 | 0 | 42 | 40 | 82 | 965 | 1.82 | $25,000.00 | $45,414.37 |
| 317 | 0 | 44 | 40 | 84 | 118 | 0.23 | $25,000.00 | $5,688.71 |
| 318 | 35 | 67 | 40 | 107 | 3069 | 7.57 | $25,000.00 | $189,170.45 |
| 319 | 0 | 32 | 40 | 72 | 2135 | 3.53 | $25,000.00 | $88,223.14 |
| 322 | 100 | 126 | 40 | 166 | 2881 | 10.98 | $25,000.00 | $274,475.44 |
| 324 | 80 | 100 | 40 | 140 | 5657 | 18.18 | $25,000.00 | $454,533.98 |
| 326 | 45 | 92 | 40 | 132 | 2265 | 6.87 | $25,000.00 | $171,850.90 |
| 328 | 10 | 56 | 40 | 96 | 2545 | 5.61 | $25,000.00 | $140,220.39 |
| 329 | 25 | 45 | 40 | 85 | 4136 | 8.07 | $25,000.00 | $201,767.68 |
| 330 | 15 | 38 | 40 | 78 | 6271 | 11.26 | $25,000.00 | $281,446.40 |
| 331 | 0 | 25 | 40 | 65 | 2147 | 3.19 | $25,000.00 | $79,847.11 |
| 333 | 55 | 86 | 40 | 126 | 4716 | 13.66 | $25,000.00 | $341,574.38 |
| 335 | 85 | 107 | 40 | 147 | 7048 | 23.72 | $25,000.00 | $592,996.33 |
| 336 | 35 | 61 | 40 | 101 | 5158 | 11.96 | $25,000.00 | $298,988.75 |
| 337 | 25 | 72 | 40 | 112 | 4489 | 11.56 | $25,000.00 | $289,064.39 |
| 338 | 90 | 110 | 40 | 150 | 5244 | 18.11 | $25,000.00 | $452,650.14 |

**Construction Cost Estimate for Culverts 106, 115, and 118**

| **Culvert 106** | Quantity | Units | Unit Cost | Total |
|---|---|---|---|---|
| Remove Asphalt | 192 | SY | $7.50 | $1,440.00 |
| Grading | 637 | CY | $3.50 | $2,229.50 |
| Culvert (3.5' RCP 1 Barrel) | 120 | LF | $130.00 | $15,600.00 |
| Paving (2-Lane) | 48 | LF | $95.00 | $4,560.00 |
| Traffic Control | 5 | DAY | $200.00 | $1,000.00 |
| | | | Sub-Total | $24,829.50 |
| | | | | |
| Mobilization (5%) | | | | $1,241.48 |
| Contingency (20%) | | | | $4,965.90 |
| Construction Engineering (10%) | | | | $2,482.95 |
| | | | **Total** | **$33,519.83** |

| **Culvert 115** | Quantity | Units | Unit Cost | Total |
|---|---|---|---|---|
| Remove Asphalt | 188 | SY | $7.50 | $1,410.00 |
| Grading | 622 | CY | $3.50 | $2,177.00 |
| Culvert (3.0' RCP 1 Barrel) | 120 | LF | $120.00 | $14,400.00 |
| Paving (2-Lane) | 47 | LF | $95.00 | $4,465.00 |
| Traffic Control | 5 | DAY | $200.00 | $1,000.00 |
| | | | Sub-Total | $23,452.00 |
| | | | | |
| Mobilization (5%) | | | | $1,172.60 |
| Contingency (20%) | | | | $4,690.40 |
| Construction Engineering (10%) | | | | $2,345.20 |
| | | | **Total** | **$31,660.20** |

| **Culvert 118** | Quantity | Units | Unit Cost | Total |
|---|---|---|---|---|
| Remove Asphalt | 264 | SY | $7.50 | $1,980.00 |
| Grading | 1213 | CY | $3.50 | $4,245.50 |
| Culvert (6'x4' RCB 2 Boxes) | 240 | LF | $350.00 | $84,000.00 |
| Paving (2-Lane) | 66 | LF | $95.00 | $6,270.00 |
| Traffic Control | 10 | DAY | $200.00 | $2,000.00 |
| | | | Sub-Total | $98,495.50 |
| | | | | |
| Mobilization (5%) | | | | $4,924.78 |
| Contingency (20%) | | | | $19,699.10 |
| Construction Engineering (10%) | | | | $9,849.55 |
| | | | **Total** | **$132,968.93** |

**Construction Cost Estimate for Culverts 124, 126, and 128**

| **Culvert 124** | Quantity | Units | Unit Cost | Total |
|---|---|---|---|---|
| Remove Asphalt | 240 | SY | $7.50 | $1,800.00 |
| Grading | 1026 | CY | $3.50 | $3,591.00 |
| Culvert (6'x4' RCB 1 Box) | 120 | LF | $350.00 | $42,000.00 |
| Paving (2-Lane) | 60 | LF | $95.00 | $5,700.00 |
| Traffic Control | 5 | DAY | $200.00 | $1,000.00 |
| | | | Sub-Total | $54,091.00 |
| | | | | |
| Mobilization (5%) | | | | $2,704.55 |
| Contingency (20%) | | | | $10,818.20 |
| Construction Engineering (10%) | | | | $5,409.10 |
| | | | **Total** | **$73,022.85** |

| **Culvert 126** | Quantity | Units | Unit Cost | Total | |
|---|---|---|---|---|---|
| Remove Asphalt | 416 | SY | $7.50 | $3,120.00 | |
| Grading | 2395 | CY | $3.50 | $8,382.50 | |
| Culvert (10'x4' RCB 5 Boxes) | 600 | LF | $640.00 | $384,000.00 | $8000/box for crane |
| Paving (2-Lane) | 104 | LF | $95.00 | $9,880.00 | |
| Traffic Control | 30 | DAY | $200.00 | $6,000.00 | |
| | | | Sub-Total | $411,382.50 | |
| | | | | | |
| Mobilization (5%) | | | | $20,569.13 | |
| Contingency (20%) | | | | $82,276.50 | |
| Construction Engineering (10%) | | | | $41,138.25 | |
| | | | **Total** | **$555,366.38** | |

| **Culvert 128** | Quantity | Units | Unit Cost | Total |
|---|---|---|---|---|
| Remove Asphalt | 288 | SY | $7.50 | $2,160.00 |
| Grading | 1400 | CY | $3.50 | $4,900.00 |
| Culvert (6'x4' RCB 3 Boxes) | 360 | LF | $350.00 | $126,000.00 |
| Paving (2-Lane) | 72 | LF | $95.00 | $6,840.00 |
| Traffic Control | 15 | DAY | $200.00 | $3,000.00 |
| | | | Sub-Total | $142,900.00 |
| | | | | |
| Mobilization (5%) | | | | $7,145.00 |
| Contingency (20%) | | | | $28,580.00 |
| Construction Engineering (10%) | | | | $14,290.00 |
| | | | **Total** | **$192,915.00** |

**Construction Cost Estimate for Culverts 129, 130, and 131**

| **Culvert 129** | Quantity | Units | Unit Cost | Total |
|---|---|---|---|---|
| Remove Asphalt | 192 | SY | $7.50 | $1,440.00 |
| Grading | 637 | CY | $3.50 | $2,229.50 |
| Culvert (3.5' RCP 1 Barrel) | 120 | LF | $130.00 | $15,600.00 |
| Paving (2-Lane) | 48 | LF | $95.00 | $4,560.00 |
| Traffic Control | 5 | DAY | $200.00 | $1,000.00 |
| | | | Sub-Total | $24,829.50 |
| | | | | |
| Mobilization (5%) | | | | $1,241.48 |
| Contingency (20%) | | | | $4,965.90 |
| Construction Engineering (10%) | | | | $2,482.95 |
| | | | **Total** | **$33,519.83** |

| **Culvert 130** | Quantity | Units | Unit Cost | Total |
|---|---|---|---|---|
| Remove Asphalt | 188 | SY | $7.50 | $1,410.00 |
| Grading | 622 | CY | $3.50 | $2,177.00 |
| Culvert (3.0' RCP 1 Barrel) | 120 | LF | $120.00 | $14,400.00 |
| Paving (2-Lane) | 47 | LF | $95.00 | $4,465.00 |
| Traffic Control | 5 | DAY | $200.00 | $1,000.00 |
| | | | Sub-Total | $23,452.00 |
| | | | | |
| Mobilization (5%) | | | | $1,172.60 |
| Contingency (20%) | | | | $4,690.40 |
| Construction Engineering (10%) | | | | $2,345.20 |
| | | | **Total** | **$31,660.20** |

| **Culvert 131** | Quantity | Units | Unit Cost | Total |
|---|---|---|---|---|
| Remove Asphalt | 188 | SY | $7.50 | $1,410.00 |
| Grading | 622 | CY | $3.50 | $2,177.00 |
| Culvert (3.0' RCP 1 Barrel) | 120 | LF | $120.00 | $14,400.00 |
| Paving (2-Lane) | 47 | LF | $95.00 | $4,465.00 |
| Traffic Control | 5 | DAY | $200.00 | $1,000.00 |
| | | | Sub-Total | $23,452.00 |
| | | | | |
| Mobilization (5%) | | | | $1,172.60 |
| Contingency (20%) | | | | $4,690.40 |
| Construction Engineering (10%) | | | | $2,345.20 |
| | | | **Total** | **$31,660.20** |

**Construction Cost Estimate for Culverts 135, 136, and 138**

| **Culvert 135** | Quantity | Units | Unit Cost | Total |
|---|---|---|---|---|
| Remove Asphalt | 288 | SY | $7.50 | $2,160.00 |
| Grading | 1400 | CY | $3.50 | $4,900.00 |
| Culvert (6'x4' RCB 3 Boxes) | 360 | LF | $350.00 | $126,000.00 |
| Paving (2-Lane) | 72 | LF | $95.00 | $6,840.00 |
| Traffic Control | 15 | DAY | $200.00 | $3,000.00 |
| | | | Sub-Total | $142,900.00 |
| | | | | |
| Mobilization (5%) | | | | $7,145.00 |
| Contingency (20%) | | | | $28,580.00 |
| Construction Engineering (10%) | | | | $14,290.00 |
| | | | **Total** | **$192,915.00** |

| **Culvert 136** | Quantity | Units | Unit Cost | Total |
|---|---|---|---|---|
| Remove Asphalt | 192 | SY | $7.50 | $1,440.00 |
| Grading | 637 | CY | $3.50 | $2,229.50 |
| Culvert (3.5' RCP 1 Barrel) | 120 | LF | $130.00 | $15,600.00 |
| Paving (2-Lane) | 48 | LF | $95.00 | $4,560.00 |
| Traffic Control | 5 | DAY | $200.00 | $1,000.00 |
| | | | Sub-Total | $24,829.50 |
| | | | | |
| Mobilization (5%) | | | | $1,241.48 |
| Contingency (20%) | | | | $4,965.90 |
| Construction Engineering (10%) | | | | $2,482.95 |
| | | | **Total** | **$33,519.83** |

| **Culvert 138** | Quantity | Units | Unit Cost | Total |
|---|---|---|---|---|
| Remove Asphalt | 192 | SY | $7.50 | $1,440.00 |
| Grading | 780 | CY | $3.50 | $2,730.00 |
| Culvert (4.0' RCP 2 Barrel) | 240 | LF | $145.00 | $34,800.00 |
| Paving (2-Lane) | 52 | LF | $95.00 | $4,940.00 |
| Traffic Control | 5 | DAY | $200.00 | $1,000.00 |
| | | | Sub-Total | $44,910.00 |
| | | | | |
| Mobilization (5%) | | | | $2,245.50 |
| Contingency (20%) | | | | $8,982.00 |
| Construction Engineering (10%) | | | | $4,491.00 |
| | | | **Total** | **$60,628.50** |

**Construction Cost Estimate for Culverts 401, 416, and 420**

| **Culvert 401** | Quantity | Units | Unit Cost | Total |
|---|---|---|---|---|
| Remove Asphalt | 396 | SY | $7.50 | $2,970.00 |
| Grading | 2240 | CY | $3.50 | $7,840.00 |
| Culvert (9'x4' RCB 5 Boxes) | 600 | LF | $510.00 | $306,000.00 |
| Paving (2-Lane) | 99 | LF | $95.00 | $9,405.00 |
| Traffic Control | 30 | DAY | $200.00 | $6,000.00 |
| | | | Sub-Total | $332,215.00 |
| | | | | |
| Mobilization (5%) | | | | $16,610.75 |
| Contingency (20%) | | | | $66,443.00 |
| Construction Engineering (10%) | | | | $33,221.50 |
| | | | **Total** | **$448,490.25** |

| **Culvert 416** | Quantity | Units | Unit Cost | Total | |
|---|---|---|---|---|---|
| Remove Asphalt | 336 | SY | $7.50 | $2,520.00 | |
| Grading | 1773 | CY | $3.50 | $6,205.50 | |
| Culvert (10'x4' RCB 3 Boxes) | 360 | LF | $640.00 | $230,400.00 | $8000/box for crane |
| Paving (2-Lane) | 84 | LF | $95.00 | $7,980.00 | |
| Traffic Control | 15 | DAY | $200.00 | $3,000.00 | |
| | | | Sub-Total | $250,105.50 | |
| | | | | | |
| Mobilization (5%) | | | | $12,505.28 | |
| Contingency (20%) | | | | $50,021.10 | |
| Construction Engineering (10%) | | | | $25,010.55 | |
| | | | **Total** | **$337,642.43** | |

| **Culvert 420** | Quantity | Units | Unit Cost | Total | |
|---|---|---|---|---|---|
| Remove Asphalt | 336 | SY | $7.50 | $2,520.00 | |
| Grading | 1773 | CY | $3.50 | $6,205.50 | |
| Culvert (10'x4' RCB 3 Boxes) | 360 | LF | $145.00 | $52,200.00 | $8000/box for crane |
| Paving (2-Lane) | 84 | LF | $95.00 | $7,980.00 | |
| Traffic Control | 15 | DAY | $200.00 | $3,000.00 | |
| | | | Sub-Total | $71,905.50 | |
| | | | | | |
| Mobilization (5%) | | | | $3,595.28 | |
| Contingency (20%) | | | | $14,381.10 | |
| Construction Engineering (10%) | | | | $7,190.55 | |
| | | | **Total** | **$97,072.43** | |

**Construction Cost Estimate for Culverts 432 and 537**

| **Culvert 432** | Quantity | Units | Unit Cost | Total |
|---|---|---|---|---|
| Remove Asphalt | 324 | SY | $7.50 | $2,430.00 |
| Grading | 1680 | CY | $3.50 | $5,880.00 |
| Culvert (9'x4' RCB 3 Boxes) | 360 | LF | $510.00 | $183,600.00 |
| Paving (2-Lane) | 81 | LF | $95.00 | $7,695.00 |
| Traffic Control | 15 | DAY | $200.00 | $3,000.00 |
| | | | Sub-Total | $202,605.00 |
| | | | | |
| Mobilization (5%) | | | | $10,130.25 |
| Contingency (20%) | | | | $40,521.00 |
| Construction Engineering (10%) | | | | $20,260.50 |
| | | | **Total** | **$273,516.75** |

| **Culvert 537** | Quantity | Units | Unit Cost | Total |
|---|---|---|---|---|
| Remove Asphalt | 344 | SY | $7.50 | $2,580.00 |
| Grading | 1835 | CY | $3.50 | $6,422.50 |
| Culvert (8'x4' RCB 4 Boxes) | 480 | LF | $510.00 | $244,800.00 |
| Paving (2-Lane) | 86 | LF | $95.00 | $8,170.00 |
| Traffic Control | 20 | DAY | $200.00 | $4,000.00 |
| | | | Sub-Total | $265,972.50 |
| | | | | |
| Mobilization (5%) | | | | $13,298.63 |
| Contingency (20%) | | | | $53,194.50 |
| Construction Engineering (10%) | | | | $26,597.25 |
| | | | **Total** | **$359,062.88** |



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