Paisley Park Subdivision

A major subdivision in Missoula, Montana

Drainage Design Report

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Prepared for:

OO Land Holding, LLC
16309 East Marietta Avenue
Spokane Valley, WA 99216

405 Third Street NW, Suite 206
Great Falls, MT 59404
(406) 761-1955

WOITH ENGINEERING, INC.
ENGINEERS & SURVEYORS

3860 O'Leary Street, Suite A
Missoula, MT 59808
(406) 203-0869

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This design report provides the criteria used as a basis of design for the stormwater collection system to be constructed to serve Paisley Park Subdivision located in Missoula, Montana. This report is submitted in conjunction with the Preliminary Plat and preliminary construction plans. It is organized following the outline recommended in the City of Missoula Public Works Standards and Specifications Manual, Appendix 6C. This report will be periodically updated at various design milestones, such as submission of public infrastructure plans for construction of each phase of the subdivision. Content which will be added at a later date is noted and explained in the report.

1. INTRODUCTION

1.A. LOCATION

The proposed subdivision is in the Sx^{w}tpqyen area of Missoula, southeast of Missoula Montana Airport, north of Mullan Road, and west of George Elmer Drive. Paisley Park is bisected by England Boulevard, which is classified as a neighborhood collector. The proposed lots within the subdivision will be accessed via the network of urban local streets, neighborhood streets, and alleys shown on the preliminary plat.

Grant Creek, which lies in an artificial channel in this area, is approximately 677 feet northwest of Paisley Park. Grant Creek confluences with the Clark Fork approximately 1.5 miles southwest of Paisley Park. The parcels adjacent to the proposed subdivision include agricultural, residential, and airport land uses. Missoula Montana Airport is immediately to the northwest, and the existing Remington Flats and Mcnett Flats subdivisions share boundaries or corners with Paisley Park.

1.B. DESCRIPTION OF PROPERTY

The existing 40.07-acre property consists primarily of brush, weed, and grass ground cover in fair condition. The existing land use is vacant land, with historic agricultural usage for grazing and hay production. The land slopes on the property are minimal, generally ranging from 0.2% - 0.5%, entirely devoid of any notable geographic features. Stormwater runoff from the parcel primarily discharges to groundwater, with Grant Creek being the ultimate receiving channel for overland discharges. All of the land is outside the 1% annual chance flood (100-year floodplain), shown on FEMA Flood Insurance Rate Map panel 30063C1190E. An existing irrigation ditch is on an adjacent parcel to the northeast, just outside the boundaries of the proposed subdivision. This ditch is owned by the City of Missoula and is no longer used for irrigation. There are no major geologic or topographic limitations on the property which may limit the capability for building or excavating storm drainage facilities using ordinary and reasonable construction techniques.

1.C. PREVIOUS DRAINAGE STUDIES

Paisley Park is within the area studied by a Drainage and Infrastructure Recommendation Memo prepared by IMEG, Inc. in support of the Sx^{w}tpqyen Master Plan project, published in July 2020. The purpose of this study was to provide recommendations for stormwater runoff mitigation within the Sx^{w}tpqyen Area, to be used as a reference during development of the area [1]. Paisley Park is also within an area studied by a Cumulative Effects Groundwater Model prepared by Newfields, Inc., published in November 2023. This technical memorandum describes updates made to numerical groundwater models of the Grant Creek Area [2], which are used in this report to determine separation from infiltrative facilities to the seasonal groundwater table.

1.D. GENERAL PROJECT DESCRIPTION

The proposed subdivision will create 100 lots, in addition to a network of streets and common areas throughout the project. The net acreages of lots, streets and roads, and common areas are depicted on the preliminary plat. The development will include up to 671 residential dwelling units. Paisley Park will be accessed via the network of urban local streets, neighborhood streets, and alleys depicted on the preliminary plat. The proposed storm drainage system will include lot grading, street and gutter flow, underground piping, and underground infiltration systems.

Due to the presence of high seasonal groundwater across the property, the proposed storm drainage system consists of a combination of surface retention and infiltration, shallow drainage piping, and shallow underground infiltration systems.

1.E. STATE OR FEDERAL REGULATIONS

The project is regulated under The Missoula City Public Works Standards and Specifications Manual, Chapter 6 – Storm Water System, and the Montana Department of Environmental Quality, Circular 8, Montana Standards for Subdivision Storm Drainage.

1.F. GEOTECHNICAL REPORT

A geotechnical investigation of the property, has been completed by Allwest, Inc. It is dated June 7, 2024, and included in the Subdivision Application submittal for the project as Attachment 22. Paisley Park is also within an area studied by a Cumulative Effects Groundwater Model prepared by Newfields, Inc., published in November 2023 [2].

2. EXISTING SITE CONDITIONS

2.A. MAJOR BASIN DESCRIPTION

The subdivision property is depicted on FEMA Flood Insurance Rate Map 30063C1190E, which covers the lower reach of the Grant Creek drainage basin. The major basin is comprised of multiple drainage ways which convey stormwater to the west and into Grant Creek. In the past, before any development within the area, all stormwater flowed from northeast to southwest. In addition, multiple natural drainage paths exist across the basin to convey stormwater to Grant Creek, however, none of these existing drainage paths cross the subject property. The existing and recently proposed developments within the focus area have individual drainage plans to mitigate the increase in stormwater due to additional impervious areas.

The partially constructed Remington Flats Subdivision is located to the south of the proposed subdivision. The stormwater design incorporates drywell sumps to infiltrate stormwater runoff into the groundwater. The difference between the pre- and post-development 100-year storm will be retained and infiltrated entirely onsite without overtopping. Drywell sumps have been a common method for treating and mitigating stormwater in large storm events in the major basin, however, due to high groundwater elevations in areas closer to Grant Creek, drywell sumps cannot be used for stormwater mitigation within Paisley Park.

2.B. SUB-BASIN DESCRIPTION

The subdivision property forms approximately 16 existing sub-basins, all of which drain runoff to various shallow depressions across the site. These shallow depressions hold and infiltrate stormwater. The site does not have any well-defined existing drainage channels or offsite discharge points. If the shallow sub-basins scattered across the site were to fill with stormwater, and overtop, they would eventually discharge to one of seven low points along the northern and western boundaries of the property. The existing sub-basin conditions, major offsite discharge points, and major infiltrative depressions are shown on Attachment 8.14 of the subdivision application.

The existing sub-basins discharge very little water onto the neighboring properties, because the shallow depressions scattered across the site must fill with water and overtop before discharging to neighboring properties. With the relatively rapid infiltration rates on the site, offsite discharge of overland flow is relatively rare in the existing condition. Similarly, the existing property to the east does not have any well-defined drainage channels that would discharge upgradient flows onto the

subject property. Runoff on the parcel to the east largely remains in shallow depressions on the property to the east, except in very large rainfall events. The design of Paisley Park Subdivision will direct these flows to designated emergency overflow points, should they ever be large enough to overtop the depressions on the parcel to the east.

The existing drainage sub-basins were modeled in PCSWMM software to determine the pre-developed runoff flow rates for the property. The PCSWMM modeling method and input parameters are discussed in detail in Section 3 of this report. Table 2-1 shows the calculated pre-developed runoff flow rates from each existing sub-basin.

Table 2-1. Pre-developed runoff flow rates.

Pre-Developed Sub-basin	Area (acres)	Peak Runoff Flow Rate (cfs)		
		2-year	10-year	100-year
E1	0.08	0.00	0.02	0.08
E2	1.76	0.00	0.05	0.28
E3	0.70	0.00	0.04	0.18
E4	0.65	0.00	0.03	0.16
E5	0.25	0.00	0.02	0.08
E6	0.24	0.00	0.02	0.12
E7	0.15	0.00	0.03	0.11
E8	0.17	0.00	0.02	0.07
E9	3.83	0.00	0.06	0.35
E10	7.70	0.00	0.09	0.47
E11	1.81	0.00	0.05	0.28
E12	2.72	0.00	0.07	0.39
E13	11.17	0.00	0.12	0.64
E14	0.90	0.00	0.04	0.21
E15	2.25	0.00	0.08	0.44
E16	5.69	0.00	0.14	0.74
Total	**40.07**	**0.00**	**0.88**	**4.60**

2.C. GROUNDWATER

The proposed subdivision is in an area where the water table in the local shallow aquifer has been modeled conceptually and numerically in multiple studies completed and updated periodically between 2004 and 2023. The most recent update to the groundwater modeling was published in a Technical Memorandum dated November 1, 2023. This effort updated the numerical modeling based on new boring logs, groundwater elevation data, and creek flow data, incorporated the location of the proposed Grant Creek realignment channel, and updated the predictive models to evaluate the cumulative effects of realigning Grant Creek and using sumps to manage stormwater

for existing and future development after removing the Flynn-Lowney Ditch system, both during average and high Grant Creek flows.

The predictive simulations completed by Newfields included (1) 2-year high-flow creek event in Grant Creek, stormwater discharge for a 100-year storm event, and the estimated full build-out sump configuration, (2) 100-year high-flow creek event in Grant Creek, stormwater discharge for a 2-year storm event, and the current sump configuration, and (3) 100-year high-flow creek event in Grant Creek, stormwater discharge for a 2-year storm event, and the estimated full build-out sump configuration. Generally, the study found that under all scenarios, the predicted depth to the high-water table is less than 10 feet below ground surface within 1,000 to 2,000 feet of Grant Creek and 10 feet to 20 feet below ground surface west of George Elmer Drive along the Flynn-Lowney Ditch.

Figure 16 of the Newfields Technical Memorandum shows the simulated groundwater elevation during a 2-year creek flow event with a 2-year storm drainage discharge from full development in the study area flowing to sumps. These groundwater elevation contours are compared to the existing and proposed finished ground elevations within Paisley Park Subdivision on Attachment 8.14 and Attachment 8.15 of the subdivision application, respectively. Full-depth (8') infiltrative drywells require 14 feet of separation between finished ground and the high groundwater table to meet the City's requirement to provide four feet of separation between the bottom of infiltrative facilities and the water table. Attachment 8.15 shows that full-depth sumps are not feasible in Paisley Park due to insufficient depth to the high groundwater table. The considerations to address this in the design of the subdivision and drainage system are discussed in Section 3 of this report.

2.D. Waterways and Wetlands

The subdivision property does not contain any surface waterways or wetlands, and there are no surface waterways or wetlands immediately adjacent to the site. The National Wetlands Inventory (NWI) map is included with the subdivision application as Attachment 8.12. Impacts to waterways and wetlands within the larger vicinity of the project, such as Grant Creek, will be mitigated through the use of onsite retention and infiltration as the primary method of stormwater management.

3. Stormwater Design Criteria

3.A. Design Concepts

Increases in stormwater runoff quantities caused by the urbanization and construction of new impervious surfaces in Paisley Park Subdivision will be mitigated by construction of a stormwater

management system consisting of surface gutters, surface retention basins, underground stormwater piping, and a perforated corrugated metal pipe (CMP) underground detention and infiltration system. Stormwater quality will be controlled through the use of surface retention swales, swirl technology (hydrodynamic separation), and isolation rows. The system will be designed such that each lot within the subdivision can discharge into the right-of-way without needing to provide retention or detention storage onsite. All stormwater quantity and quality controls will be implemented for the entire subdivision, not on a lot-by-lot basis. Each element of the proposed stormwater mitigation system is discussed in detail in Section 4 of this report.

3.B. DRAINAGE CRITERIA

3.B.i. Application Standards or Exceptions

The application standard for the proposed subdivision is the Missoula City Public Works Standards and Specifications Manual (Public Works Manual). The project must also comply with the Montana Department of Environmental Quality Circular 8, Montana Standards for Subdivision Storm Drainage (DEQ-8). In addition to these regulatory standards, the Sx^{w}tpqyen form-based code includes the following stormwater management standards:

1. Manage rainfall as close to where it falls as possible, approximating the natural pre-development hydrology (water quality and water quantity) by using natural, decentralized stormwater management practices that do not impede or negatively alter the historic flow of stormwater runoff.

2. Recognize stormwater as an integral part of the built environment.

3. Establish watershed sensitive planning and design criteria at the neighborhood scale of development to support shared flood control solutions.

4. Encourage incorporation of Light Imprint Best Management Practices (BMPs) at the Block, street, and site scales of development, appropriate to land use context and site conditions.

The proposed design requires two exceptions from the standards contained in the Public Works Manual. In order to provide adequate slopes and cover depths in the piped conveyance system, a reduction in required separation from the bottom of the proposed infiltrative facilities to the high seasonal water table to three feet is proposed. With this exception, the proposed design will still meet the DEQ-8 minimum separation requirement, which is three feet. To mitigate the impacts of

this reduction, the design includes additional pretreatment of stormwater prior to infiltration. These pretreatment methods are discussed in detail in Section 4.F of this report.

The other exception required is a reduction in minimum flow velocity in the storm drainage pipes during the minor rainfall event from three feet per second to two feet per second in upstream storm drain lateral pipes with low flows. Due to the shallow bury depths required due to topography, it is preferrable to use larger pipes in these scenarios to mitigate freezing concerns, rather than using a smaller pipe to meet the three feet per second minimum flow velocity.

3.B.ii. Minor and Major Storm Frequencies

This report will include analysis of the 2-year, 10-year, and 100-year rainfall events. The 2-year and 10-year events are considered minor storms, with the 100-year event considered a major storm. The Minor Drainage System consists of curbs, gutters, ditches, stormwater piping, and infiltration facilities, and is designed to carry runoff from the peak flow rate from the 10-year storm event without overtopping roadways or surcharging stormwater piping.

The Major Drainage System consists of pathways that are provided for runoff to safely flow to natural or engineered channels. The Major Drainage System is designed to safely carry runoff from events larger than the 100-year storm, without inundating structures, overtopping roadways, or interrupting traffic and emergency services. Flows from the 100-year storm event will be carried in the piping system and pond in the street system, within acceptable depth criteria.

3.B.iii. Hydrologic Methods

The design storm depths, shown in Table 3-1, are based on the 24-hour storm duration at the Missoula International Airport as published in MDT Hydraulics Manual Chapter 7, Appendix B, as published in the Public Works Manual.

Table 3-1. Rainfall depths per design storm return period.

	2-YEAR, 24-HOUR STORM	10-YEAR, 24-HOUR STORM	100-YEAR, 24-HOUR STORM
Depth (inches)	1.17	1.66	2.28

(a) Design Storms

Design storms were created using SCS synthetic hydrographs. The Type II distribution is a typical time distribution from rainfall records in Montana, however, Type I and Type IA distributions can be appropriate for certain parts of Montana. The appropriate distribution was determined by

comparing the 6-hour rainfall total to the 24-hour rainfall total, shown in Equation 1. The 6-hour rainfall was determined from the MDT Hydraulics Manual.

Equation 1. $$D_1 = \frac{P_6}{P_{24}} = \frac{1.53}{2.28} = 0.67$$

Where D_1 *= Distribution selection factor*
P_6 *= 100-year, 6-hour rainfall depth (inches)*
P_{24} *= 100-year, 24-hour rainfall depth (inches)*

If the distribution selection factor ranges between 0.518 and 0.639, the Type I distribution should be selected. The Type II distribution should be selected for all values between 0.640 and 0.767. Therefore, the SCS Type II 24-hour storm was selected as the design storm for this project. The design storm hyetograph for each of the 2-year, 10-year, and 100-year design storms were prepared using the SCS dimensionless rainfall distribution and the rainfall depths shown above within PCSWMM, a stormwater modeling software which runs on the United States Environmental Protection Agency's SWMM5 engine. All stormwater modeling and calculations for this project were prepared using PCSWMM. Table 3-2 shows the input parameters that were used in the PCSWMM model for sub-basins.

Table 3-2. PCSWMM input parameters for sub-basins.

CONSTANT	VALUE
Manning's roughness for impervious areas	0.012
Manning's roughness for pervious areas	0.20
Depth of surface storage in impervious areas (inches)	0.033
Depth of surface storage in pervious areas (inches)	0.1
Percent of impervious area with zero surface storage	25%
Subarea routing method	Pervious to impervious
Maximum sod area infiltration rate (inches per hour)	1.0
Minimum sod area infiltration rate (inches per hour)	0.15
Horton infiltration rate decay constant	0.00115

(b) Stormwater Quality Storm & Treatment Methods

Historical rainfall data supports the characterization that, on average, 90 percent of the rainfall events occurring across Montana's MS4 areas are 0.5 inches or less. Therefore, the Montana Department of Environmental Quality MS4 General Permit requires that all regulated projects implement post-construction stormwater best management practices that are designed to infiltrate, evapotranspire, and/or capture for reuse the post-construction runoff generated from the first 0.5 inches of rainfall from a 24-hour storm preceded by 48 hours of no measurable

precipitation. Any portion of this runoff not infiltrated, evapotranspired, or captured for reuse must be treated by best management practices (BMPs) expected to remove 80 percent total suspended solids (TSS). The stormwater quality controls implemented by this project are discussed in detail in Section 4.F of this report.

(c) Detention & Infiltration Calculation Methods

The proposed underground detention and infiltration systems were modelled in PCSWMM using storage nodes with seepage. The storage nodes utilize depth-area storage curves for the specific systems, provided by manufacturer data.

The infiltration rate (conductivity) applied to the storage nodes in PCSWMM has been estimated using available field data. During a geotechnical investigation which was conducted on the project site, the infiltration rate in two test pits was measured at a depth of approximately 10 feet below ground surface. The infiltration rates in these deep soils, which were classified as poorly graded gravel (GP-GM) with silt and sand, were extremely rapid.

However, due to the shallow groundwater discussed in Section 2.C of this report, the proposed infiltration facilities must infiltrate runoff into the soil layer approximately four feet below ground surface, which is generally silty sand (SM) across the test pits. A site-specific infiltration test was not conducted in this soil layer during the original geotechnical investigation. For the purposes of this report, Missoula Public Health Regulation 1, which provides estimated percolation rates for septic systems installed in undisturbed soil layers at approximately four feet below ground surface, is used to estimated the infiltration rate in the silty sand layer as a proof of concept.

Regulation 1 lists the estimated percolation rate for medium sand and sandy loam soils as six to ten inches per hour. Due to the lack of surface runoff expression on the site and the extremely rapid infiltration rates in the deep soil layer, the infiltration rate in the silty sand layer is expected to be approximately ten inches per hour. Thus, an infiltration rate of ten inches per hour is applied to the infiltration facilities modeled in PCSWMM. Safety factors are applied to the modelled infiltration rate in accordance with the City Public Works Manual, and as discussed in Section 4.K of this report.

This infiltration rate will need to be thoroughly confirmed through field testing of at least five test pits across the footprint of each infiltration facility at the time of final design. The measured infiltration rates will be averaged to produce an accurate design infiltration rate representative of a facility with a large infiltrative footprint. If the field-measured infiltration rate is found to be

significantly less than anticipated in this design, the system will need to be revised to discharge stormwater offsite through pumping, rather than through infiltration.

(d) Detention Storage Release Rate Calculation Method

The proposed underground detention systems will be constructed with perforated corrugated metal pipes; thus, they will only be discharged into groundwater, and will not release flows onto the surface, into overland channels, or into any other piping systems.

3.B.iv. Hydraulic Methods

(a) Design Standards

The proposed stormwater conveyance system includes overland flow, channelized surface flow in streets and gutters, and flow through underground stormwater piping. The conveyance system is designed in accordance with the requirements of the Public Works Manual. Specifically, this report will show that:

- Streets can convey the 10-year storm within the parameters outlined in Table 6-3 of the Public Works Manual.
- Gutters can convey the 10-year storm without overtopping the curb.
- Storm drainage piping will operate in non-pressurized flow conditions during the 10-year storm event.
- Streets can convey the 100-year storm event within the parameters outlined in Table 6-4 of the Public Works Manual.

(b) Hydraulic Models

A hydraulic model of the proposed piping system was prepared using PCSWMM. The hydraulic model uses a dynamic wave routing method to account for backflow and ponding within pipes, due to the shallow pipe grades required to meet the depth to groundwater constraint.

(c) Methods used to determine channel and storm sewer capacities

Storm drainage piping capacities were calculated using PCSWMM and are presented in Section 4.C of this report. Conveyance capacities for gutters and streets were calculated as presented in Section 4.D of this report. Table 3-3 shows the PCSWMM input constants for pipes.

Table 3-3. PCSWMM input parameters for pipes.

CONSTANT	VALUE
Manning's roughness for PVC pipe	0.01
Entry loss coefficient; inlet	0.20
Entry loss coefficient; 0°-5° deflection	0.20
Entry loss coefficient; 5°-22.5° deflection	0.26
Entry loss coefficient; 22.5°-45° deflection	0.42
Entry loss coefficient; 45°-90° deflection	0.72
Exit loss coefficient	0.20

(d) Methods used for design of hydraulic structures, outlet protection, and erosion control

Specific methods used to design any special hydraulic structures, outlet protection, and erosion control, which is applicable at the entrances to surface retention swales from gutters, will be completed and added to this report at the time of permitting each phase of the project.

(e) Methods used for designing stormwater pond outlet structures

All of the proposed detention storage facilities in the proposed subdivision discharge to groundwater through infiltration. Therefore, the facilities do not have surface outlet structures. Their outflow rates to groundwater are calculated and discussed in detail in Section 4.K of this report.

3.C. DOWN-GRADIENT ANALYSIS

A down-gradient analysis has been conducted to identify and evaluate potential adverse impacts to downstream properties due to increased runoff from the proposed subdivision. The scope of the down-gradient analysis is limited to emergency overflows from Paisley Park, since all runoff from the 2-, 10-, and 100-year design storms will be retained and infiltrated onsite.

Two adjacent properties could be impacted by emergency overflows, both of which are owned by the Missoula County Airport Authority. Emergency overflows could occur if the piping and infiltration system fail completely, or if a rainfall event exceeds the 100-year design depth or intensity. The existing site topography has approximately seven locations where overflows from the subdivision property will flow onto these adjacent parcels. These locations are shown on Attachment 8.14 of the subdivision application. These locations connect to shallow depressions running from southeast to northwest across the adjacent properties, which convey any existing

overflows to Grant Creek. These shallow depressions are visible in aerial imagery and highlighted on Attachment 8.14 of the subdivision application.

The proposed subdivision is designed such that any overflows from emergency situations will discharge at seven locations along the subdivision boundary, which are deliberately located in approximately the same locations as the existing overflow points to ensure emergency overflows can continue to Grant Creek. These overflow locations are shown on Attachment 8.18 of the subdivision application. There are no known existing or potential off-site drainage problems which may be exacerbated by the project. These overland conveyance routes are in good condition, with no constrictions or low-capacity zones. They intersect with the Grant Creek floodplain and eventually, the creek channel itself. The floodplain boundary is shown on Attachment 8.14 of the subdivision application.

4. PROPOSED DESIGN

4.A. GENERAL CONVEYANCE CONCEPTS

In general, during the minor rainfall events, stormwater runoff will flow from lots within the subdivision, onto streets, into the underground storm drainage piping system, to the detention basins, where it will ultimately infiltrate into the ground. During major rainfall events, the underground piping system will convey the 10-year runoff flows as normal, but the 100-year runoff flows will be stored and conveyed within the streets, which function as additional system capacity for these large and infrequent events.

4.B. PROPOSED DRAINAGE PATTERNS

The proposed grading of the 40-acre subdivision divides the property into 76 sub-basins, each of which collects runoff at an inlet to the underground piping system. This section provides an overview of the input assumptions and sub-basin hydrology results from PCSWMM, which utilizes the EPA's SWMM 5 engine. The SWMM 5 engine requires input of the area, equivalent width, average slope, and percentage of impervious cover to calculate the runoff from each sub-basin. The area of the sub-basins was calculated from the proposed grading plan. The equivalent width is determined by dividing the area of the sub-basin by the length of the longest possible flow path. The average slope of each sub-basin, which must be estimated since specific grading plans for each lot do not exist, is assumed to be 2%.

Each sub-basin will contain a combination of the various land uses permitted by the Sx^{w}tpqyen area form-based code, which specifies maximum impervious coverage for each land use designation. These maximum impervious coverages are shown in Table 4-1. The impervious coverage for rights-of-way is an average calculated from the site plan and boulevard widths shown on the typical sections of the rights-of-way. The proposed sub-basins are shown as a map on Attachment 8.17 of the subdivision application.

Table 4-1. Maximum impervious surface coverage by land use designation.

LAND USE	MAXIMUM IMPERVIOUS COVERAGE
OS Open Space Transect	5%
T3 Neighborhood Edge Transect	60%
T4 Neighborhood General Transect	70%
T5 Mixed-Use Center Transect	90%
Right-of-way – Alley	95%
Right-of-way – Street with Boulevards	75%

The PCSWMM input parameters for each sub-basin are detailed in the PCSWMM status output files in the appendices, in the section titled “Subcatchment Summary” in each output file. The impervious percentage is a weighted average calculated from the area of each land use within each sub-basin and the maximum impervious coverage for each land use. Overall, the proposed subdivision has an area of 40 acres and an estimated impervious coverage of 67%.

Using the input parameters for each sub-basin, PCSWMM calculates the proportion of rainfall infiltrated for each sub-basin to determine the total runoff volume and peak runoff flow rate for each sub-basin. This process is repeated for each design rainfall event. The total runoff volume and peak runoff flow rates are detailed in the PCSWMM status output files in the appendices, in the section titled “Subcatchment Runoff Summary” in each output file.

4.C. STORM SEWER DESIGN

The proposed storm sewer pipes are designed to convey the runoff produced by the minor rainfall events from the sub-basin outlets to the proposed underground detention and infiltration basins without pressurizing (surcharging). The storm sewer pipes are modelled as circular conduits in PCSWMM, which require slope, Manning’s roughness coefficient, and length as input parameters. The lengths and slopes were designed based on the proposed grading plan. The farthest downstream invert elevation of each pipe run matches the invert elevation of the proposed infiltration basins, which was established to ensure three feet of separation from the bottom of the infiltration basins’ drain rock to the seasonal high groundwater table. The names, slopes, sizes,

and lengths of each storm sewer pipe are shown on the storm drain plan and profile sheets in the preliminary construction plans. Pipes C1, C2, C3, C4, C5, and C6 are used only within the PCSWMM model to represent the inlets and headers of the proposed underground detention systems, and thus do not show on the plan and profile sheets.

The storm sewer pipes were sized iteratively to ensure that they do not surcharge during the minor rainfall events, and that the minimum and maximum flow velocities are met during the 10-year storm. During the ten-year storm, all pipes have flow velocities between two and ten feet per second, except for pipes SP10, SP39, and SP51, SP82, SP83, and SP85. These pipes are inlet laterals at the far upstream end of the system, which would need to be downsized to eight inches to achieve the minimum velocity. The PCSWMM output statistics for each pipe are detailed in the PCSWMM status output files in the appendices, in the section titled "Link Flow Summary" in each output file. The section titled "Conduit Surcharge Summary" in each output file shows that the pipes do not surcharge during the 2-year and 10-year rainfall events.

During the 100-year rainfall event, most of the storm sewer pipes in the system surcharge and operate in a pressurized state. These pipes are detailed in the PCSWMM status output file for the 100-year event in the appendices, in the section titled "Conduit Surcharge Summary". To provide storage for the 100-year storm event, a shallow surface basin six inches deep will be provided in each common area across the footprint of each underground detention and infiltration basin. During the 100-year event, runoff will pond in the streets around the inlets, in the piping system, and primarily, in these shallow surface basins until it infiltrates through the infiltration basin. Table 4-2 shows the volume of water ponded in each location that sees surface ponding during the 100-year event.

Table 4-2. Ponding locations and depths during 100-year rainfall events.

PONDING LOCATION	PONDING VOLUME (CUBIC FEET)	PONDING DEPTH (INCHES)
CB82	29.88	0.3
CB88	25.43	0.25
CMP South	13,088	6.00
CMP North	13,627	6.00

Both detention basins will infiltrate all stored stormwater with 48 hours of collection. When accounting for continued inflows after the peak intensity of the storm events, both basins will fully infiltrate their stored water and return to an empty state approximately 24 hours after reaching their full storage volume. This is shown in the PCSWMM status output file for the 100-year event in the

appendices, on the graph titled "Depth of Storage" for each of the detention and infiltration basins. In all design storm events, both major and minor, all runoff will be captured and infiltrated onsite, which ensures that post-development runoff rates onto adjacent properties do not exceed the pre-development runoff rates.

4.D. STREET CAPACITIES

The subdivision is designed such that streets and common areas function as an emergency overflow pathway, should a storm sewer pipe within the system become clogged or a rainfall event exceeds the 100-year depth or intensity. The layout of the overflow pathways, as well as the offsite emergency overflow discharge points, is depicted by Attachment 8.18 of the subdivision application. Equation 2 shows the depth of water that will flow in the gutter, should a street need to convey the full 100-year runoff flow rate for all basins including England Boulevard and south, which is 35.84 cubic feet per second, or 17.92 cubic feet per second on each side of the street.

Equation 2. $$y = 1.24\left(\frac{QnS_X}{s^{0.5}}\right)^{\frac{3}{8}} = 1.24\left(\frac{(17.92)(0.013)(0.02)}{0.005^{0.5}}\right)^{\frac{3}{8}} = 0.44\,ft$$

Where y = *Depth of water in gutter cross-section (feet)*
Q = *Gutter flow rate (cfs)*
n = *Manning's roughness coefficient (0.013 for smooth asphalt or concrete)*
s = *Longitudinal slope of gutter (feet per foot)*
S_x = *Pavement cross-slope (feet per foot)*

The calculation shows that the local streets can convey the full 100-year runoff flow rates in a situation where the underground piping has failed completely, without overtopping the curbs. Both lanes and the crown would be inundated in this scenario. England Boulevard, which is a neighborhood collector, does not serve as an overflow pathway. Therefore, at least one full lane will always be free from water on England Boulevard.

4.E. OUTFALL LOCATION AND DESIGN

The proposed storm drainage system does not include any engineered outfalls, since all runoff will be collected onsite at infiltration basins and discharged to groundwater. The emergency overflow pathways include seven points where floodwaters will discharge to adjacent properties to the north and west in emergency situations. These points are deliberately located in approximately the same locations as the existing offsite overflow points shown on Attachment 8.14 of the subdivision application, so that emergency overflows will flow across the adjacent properties to Grant Creek in the same manner they do at present.

4.F. STORMWATER QUALITY CONTROL

The proposed storm drainage system includes two elements of stormwater quality control – pretreatment and regulatory compliance. As discussed in Section 3.B.i of this report, in order to provide adequate slopes and cover depths in the piped conveyance system, a reduction in required separation from the bottom of the proposed infiltrative facilities to the high seasonal water table to three feet is proposed. To mitigate the impacts of this reduction and help ensure the long-term viability of the infiltration basins, three stages of pretreatment are proposed to ensure as much sediment as possible is removed from the water prior to entering the infiltration basins.

The first stage of pretreatment will occur at each inlet into the storm sewer system. Each inlet structure will have a two-foot deep sediment trap below the invert elevation of all pipes. In addition to the sediment traps, many inlets will have a shallow retention swale on the surface surrounding the inlet. A typical cross-section of a shallow retention swale is shown in Figure 4-1.

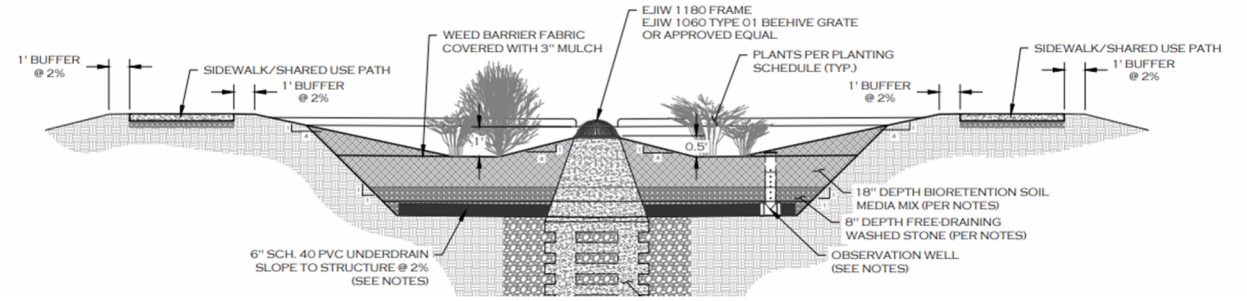

Figure 4-1. Typical shallow retention swale.

The second stage of pretreatment is the use of hydrodynamic separators at each inlet to the underground infiltration basins. The proposed hydrodynamic separators, shown on the storm drain plan and profiles, will use continuous deflective separation – a combination of swirl concentration and indirect screening to screen, separate and trap debris, sediment, and hydrocarbons from stormwater runoff. The hydrodynamic separators will retain all captured pollutants, even at high flow rates, and provide easy access for maintenance.

The final stage of pretreatment is the provision of an isolator row inside each of the underground infiltration basins. An isolator row is a row of pipe within the underground basin which is solid-walled, instead of perforated, and has its invert elevation set one to two feet lower than the perforated pipes comprising the remainder of the infiltration basin. The isolator row fills prior to the remainder of the system in water quality events, allowing remaining sediment to settle out of water

without clogging the perforated sections of the system. The isolator row will have a riser on both ends to allow access with a hydro jet and vacuum truck to remove accumulated sediment.

To ensure regulatory compliance in the storm water quality controls, the runoff reduction volume (RRV), or the volume of storm water runoff generated from the first 0.5 inches of rainfall, was calculated using the procedure outlined in Chapter 3 of the Montana Post-Construction Storm Water BMP Design Guidance Manual, shown in Equation 3.

Equation 3. $$RRV = \frac{PR_V A}{12} = \frac{0.5*0.653*40.07}{12} = 1.09\ acre - feet$$

Where *RRV = Runoff reduction volume (acre-feet)*
P = Water quality storm rainfall depth (inches)
R_V = Dimensionless runoff coefficient, Rv = 0.05 + 0.9(I)
I = Percent impervious cover draining to the facility (67%)
A = Area draining to the facility (acres)

Regulatory compliance in the storm water quality controls is accomplished since 100% of the runoff reduction volume is captured onsite and infiltrated at the underground infiltration basins.

4.G. POST-OUTFALL CONVEYANCE

The manner, location, and direction of post-outfall conveyance will not be changed by the proposed subdivision. All stormwater runoff from the minor and major design storms will be detained and infiltrated onsite. Emergency overflows will flow overland in approximately the same locations as the existing overflows, where they will continue overland to Grant Creek in the same manner they do at present.

4.H. OPEN CHANNEL DESIGN

The emergency overflow pathways introduced in Section 4.D include two reaches which flow across the common areas oriented east to west across the subdivision. These common areas will be graded in a shallow V-shape, with a minimum width of 48 feet and minimum depth of 18 inches, which will have the conveyance capacity calculated in Equation 4.

Equation 4. $$Q = \frac{1.486AR^{2/3}s^{1/2}}{n} = \frac{1.486*36*0.75^{\frac{2}{3}}*0.005^{\frac{1}{2}}}{0.07} = 44.69\ cfs$$

Where *Q = Overland flow rate (cfs)*
A = Cross-sectional area of flow channel (ft^2) = 36 ft^2
R = Hydraulic radius (feet) = 0.75 ft

s = Longitudinal slope of flow channel (feet per foot)
n = Manning's roughness for sluggish reaches

The calculation shows that the east-west common areas can convey the full 100-year runoff flow rates in a situation where the underground piping has failed completely, without inundating adjacent alleys or buildings.

4.I. EASEMENTS, MAINTENANCE, AND ACCESS

Maintenance will be required for the stormwater infrastructure proposed within the rights-of-way and within the common areas. Maintenance of the infiltration basins and hydrodynamic separators in the common areas will be the responsibility of the property owner's association, with a maintenance agreement and covenant filed which will allow the City to conduct emergency maintenance, should the property owner's association not complete required items. Maintenance of the infrastructure within the right-of-way should be completed by the City. The City will be granted easements across all common areas containing stormwater infrastructure for maintenance access. Structures within the common areas which require access, such as the isolator rows and hydrodynamic separators, will be located adjacent to a trail, which will allow maintenance crews to access the structures by vehicle without driving across grass. The following is a list of maintenance tasks which should be completed for the proposed infrastructure:

- Concrete gutter pans or flowlines in the concrete should be swept or cleaned of debris and sediment on a quarterly or as needed basis.
- Building gutters and downspouts should be cleaned seasonally to prevent debris from entering the storm sewer pipes that carry drainage from downspouts to the infiltration area.
- Storm sewer pipes should be flushed or jetted on as needed basis when clogging becomes apparent.
- Isolator rows should be inspected annually and flushed or jetted on as needed basis when sediment buildup becomes apparent.
- Hydrodynamic separators should be inspected and vacuumed at least once annually.
- Sediment traps in catch basins and manholes should be vacuumed on an as needed basis.
- Infiltration and retention swales should be inspected for vegetation cover and bare areas on a quarterly basis.
- Infiltration and retention swales should be inspected for sediment buildup on an annual basis.

4.J. FLOODING HAZARDS

In general, building floors will be elevated at least three to six inches above the sidewalk elevation to ensure positive drainage in front yards. The sidewalk elevation is generally four inches above the top of curb, meaning that buildings will have at least seven to ten inches of freeboard between the high-water elevation in the street and their floor elevation during emergency overflow scenarios with the streets flowing full. Specific minimum finished floor elevations will be analyzed during the design of each phase. The emergency overflow pathways designed in the subdivision will ensure that no buildings are inundated should the piping system become completely clogged or rainfall intensities or depths exceed the 100-year event.

4.K. INFILTRATION FACILITIES

The proposed storm drainage system includes three detention and infiltration facilities. Two of the infiltration facilities are underground storage piping systems, consisting of perforated corrugated metal pipe (CMP) surrounded by drain rock. One facility, denoted as "CMP South" drains the area including and south of England Boulevard, and the other, denoted as "CMP North", drains the area north of England Boulevard. The depth-area curves shown in Figure 4-2 were used in PCSWMM to model the storage function of the CMP pipe infiltration facilities.

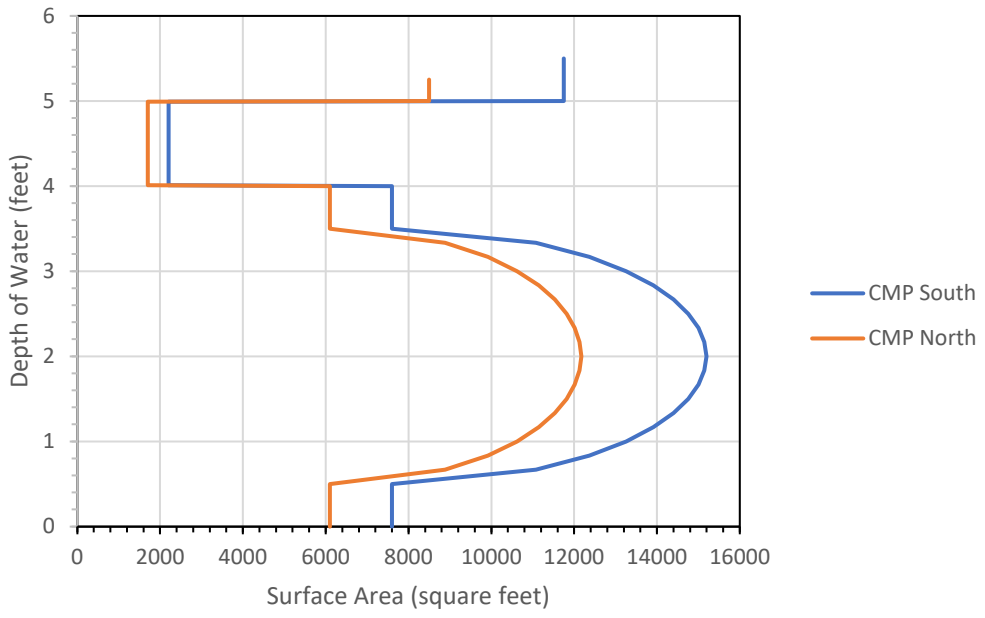

Figure 4-2. Depth-area storage curves for CMP infiltration facilities.

The third infiltration facility is the proposed trail street along the northwestern boundary of the subdivision. The trail street is a right-of-way section which includes an asphalt trail and shallow retention swales, which will collect and infiltrate runoff from sub-basins 23 and 25. The infiltration rate was estimated as discussed in Section3.B.iii(c) of this report, at 10 inches per hour. Using the estimated infiltration rate, the infiltrative outflow rates, in cubic feet per second, for CMP North, CMP South, and the trail street are calculated in Equations 4, 5, and 6, respectively. The CMP infiltration facilities use a safety factor of 2.0, since they have significant pretreatment facilities, while the trail street uses a safety factor of 3.0 since it does not have a pretreatment facility.

Equation 5. $$Q_i = 0.5\frac{iA}{43{,}200} = 0.5 * \frac{10*19{,}000}{43{,}200} = 2.20\ cfs$$

Where Q_i *= Infiltration flow rate (cfs)*
i *= Estimated infiltration rate (inches per hour)*
A *= Infiltrative footprint of facility (square feet)*

Equation 6. $$Q_i = 0.5\frac{iA}{43{,}200} = 0.5 * \frac{10*14{,}000}{43{,}200} = 1.62\ cfs$$

Where Q_i *= Infiltration flow rate (cfs)*
i *= Estimated infiltration rate (inches per hour)*
A *= Infiltrative footprint of facility (square feet)*

Equation 7. $$Q_i = 0.33\frac{iA}{43{,}200} = 0.33 * \frac{10*5{,}100}{43{,}200} = 0.39\ cfs$$

Where Q_i *= Infiltration flow rate (cfs)*
i *= Estimated infiltration rate (inches per hour)*
A *= Infiltrative footprint of facility (square feet)*

The hydrographs for each infiltration facility, within PCSWMM's storage calculator module, were used to calculate the storage volume required to detain the 10-year and 100-year rainfall volume until it can be infiltrated at the infiltrative outflow rate. Table 4-3 compares the peak inflow rate, infiltrative outflow rate, and required storage volume calculated from the hydrographs.

Table 4-3. Infiltration facility statistics for 10-year rainfall events.

FACILITY	PEAK INFLOW (CFS)	INFILTRATION OUTFLOW (CFS)	VOLUME REQUIRED (FT^3)	SYSTEM VOLUME AVAILABLE (FT^3)
CMP South	27.50	2.20	41,632	48,289
CMP North	21.19	1.62	34,159	35,497
Trail Street	3.51	0.39	4,597	8,550

The proposed infiltration facilities have sufficient storage capacity to detain the 10-year rainfall event without accounting for extra storage capacity provided by the piping system and surface storage. Table 4-4 shows the same statistics for the infiltration facilities during the 100-year event.

Table 4-4. Infiltration facility statistics for 100-year rainfall events.

FACILITY	PEAK INFLOW (CFS)	INFILTRATION OUTFLOW (CFS)	VOLUME REQUIRED (FT^3)	SYSTEM VOLUME AVAILABLE (FT^3)
CMP South	37.80	2.20	61,377	48,289
CMP North	34.52	1.62	52,331	35,497
Trail Street	5.07	0.39	7,389	8,550

During the 100-year rainfall event, the storage volume provided at the underground infiltration facilities is insufficient to detain the 100-year runoff volume without accounting for the additional surface ponding discussed in Section 4.C. Table 4-5 shows how the surface ponding storage volumes augment the underground infiltration facility storage volume to detain the 100-year event. The volume required shown in Table 4-2 is calculated within PCSWMM in its storage calculator module by using the inflow and outflow hydrographs for each storage to determine the storage volume required to release the inflows at the outflow rate determined from the infiltration rate. This value neglects the additional storage that, in practice, exists in the pipe system, to show that the facilities are large enough to detain the required volume without needing to account for storage in the conveyance pipes.

Table 4-5. Summary of 100-year detention storage volumes.

FACILITY	VOLUME REQUIRED (FT^3)	VOLUME PROVIDED AT FACILITY (FT^3)	SURFACE PONDING VOLUME (FT^3)	TOTAL STORAGE VOLUME (FT^3)
CMP South	61,377	48,289	13,088	61,377
CMP North	52,331	38,704	13,627	52,331

The calculations show that the proposed infiltration facilities are an effective method of detaining and disposing of stormwater runoff from the proposed subdivision.

5. SUMMARY

5.A. SUMMARY OF PROPOSED IMPROVEMENTS

This drainage report shows that the pre-development flow rates discharging to adjacent properties will not be exceeded in the post-development conditions. It is possible to mitigate the additional runoff produced by the 10-year and 100-year rainfall events onsite using detention storage and shallow infiltration. The design of the storm drainage system ensures that the roads are not inundated during the 2-year event, no curbs are overtopped during the 10-year event, and no buildings are inundated during the 100-year event. The proposed drainage system includes lot drainage, curbs and gutters, retention swales, infiltration swales, storm sewer piping, hydrodynamic separators, and underground CMP infiltration galleries. The street system in the subdivision is also designed to ensure that an emergency overflow pathway is provided, to ensure that no buildings are inundated should the piping system fail, or a rainfall event exceeds the 100-year design storm.

5.B. FLOODPLAIN IMPACTS

The proposed subdivision and storm drainage system do not impact the floodplain.

5.C. COMPLIANCE WITH REGULATIONS

This report, and the proposed storm drainage system, have been prepared in accordance with Chapter 6 of the Missoula City Public Works Standards and Specifications Manual. The design also meets the requirements of the Montana Department of Environmental Quality's Circular 8. This report is intended to summarize the proposed system for the purposes of a subdivision preliminary plat application and approval and will be updated with additional information when each phase of the subdivision is proposed for construction approval. All construction will be in accordance with the Montana Public Works Standard Specifications and City of Missoula Modifications. The proposed stormwater management system also meets the stated standards of the form-based code as follows:

1. Manage rainfall as close to where it falls as possible, approximating the natural pre-development hydrology (water quality and water quantity) by using natural, decentralized stormwater management practices that do not impede or negatively alter the historic flow of stormwater runoff.

The design approximates the natural pre-development hydrology to the greatest extent possible by using infiltration as the primary method of stormwater discharge. The existing topography indicates that infiltration is the primary driver of natural hydrology. The use of retention swales at inlets and multiple infiltration basins promotes the goal of a decentralized system.

2. Recognize stormwater as an integral part of the built environment.

   The design recognizes stormwater as an integral part of the built environment through the use of landscaped retention swales at intersections. These landscaped swales contribute to the overall aesthetics of the subdivision. The proposed underground detention and infiltration systems contribute to the recognition of stormwater as an integral part of the built environment by ensuring that usable common space is not lost to surface stormwater detention basins.

3. Establish watershed sensitive planning and design criteria at the neighborhood scale of development to support shared flood control solutions.

   The proposed system establishes a neighborhood-scale shared flood control solution through the provision and deliberate design of emergency overflow pathways through the street and common area networks.

4. Encourage incorporation of Light Imprint Best Management Practices (BMPs) at the Block, street, and site scales of development, appropriate to land use context and site conditions.

   The proposed stormwater management system incorporates light imprint best management practices through the retention swales, sediment sumps, and hydrodynamic separation spread throughout the development, on a block and street level, to achieve the required water quality goals.

6. REFERENCES

[1] Territorial Landworks, Inc. now IMEG, "Drainage and Infrastructure Recommendation Memo for Mullan Area Master Plan," Missoula, 2020.

[2] Newfields, Inc., "Cumulative Effects Groundwater Model Update," Missoula, 2023.

[3] Montana Department of Environmental Quality, "Circular DEQ-8 Montana Standards for Subdivision Storm Water Drainage," Montana Department of Environmental Quality, Helena, 2017.

[4] United States Department of Agriculture, "Urban Hydrology for Small Watersheds; TR-55," Natural Resources Conservation Service, Washington, DC, 1986.

WOITH ENGINEERING, INC.
ENGINEERS & SURVEYORS

APPENDIX A

2-year, 24-hour Event PCSWMM Output Report

```
  EPA STORM WATER MANAGEMENT MODEL - VERSION 5.2 (Build 5.2.4)
  ------------------------------------------------------------


  *************
  Element Count
  *************
  Number of rain gages ...... 3
  Number of subcatchments ... 76
  Number of nodes ........... 93
  Number of links ........... 90
  Number of pollutants ...... 0
  Number of land uses ....... 0


  ****************
  Raingage Summary
  ****************
                                                    Data       Recording
  Name                 Data Source                  Type       Interval
  ---------------------------------------------------------------------
  100yr24hr            100yr24hr                    INTENSITY    6 min.
  10yr24hr             SCS_Type_II_1.66in           INTENSITY    6 min.
  2yr24hr              2yr24hr                      INTENSITY    6 min.


  ********************
  Subcatchment Summary
  ********************
  Name                        Area     Width   %Imperv    %Slope Rain Gage
Outlet
  ------------------------------------------------------------------------------
--------------------------
  1                           0.76     95.36     80.00    2.0000 2yr24hr
CB9
  10                          0.19     46.66     72.00    2.0000 2yr24hr
CB33
  11                          1.57    196.00     65.00    2.0000 2yr24hr
CB5
  12                          0.92    160.00      9.00    2.0000 2yr24hr
CB1
  13                          1.29    190.50     67.00    2.0000 2yr24hr
CB1
  14                          0.17     50.30     75.00    2.0000 2yr24hr
CB14
  15                          0.18     53.40     75.00    2.0000 2yr24hr
CB15
  16                          0.06     38.30     75.00    2.0000 2yr24hr
CB13
  17                          0.06     38.30     75.00    2.0000 2yr24hr
CB16
  18                          0.22     60.00     75.00    2.0000 2yr24hr
CB11
  19                          0.22     60.00     75.00    2.0000 2yr24hr
CB12
  2                           0.97    127.73     71.00    2.0000 2yr24hr
CB4
```

20	0.09	36.60	75.00	2.0000	2yr24hr
CB26					
21	0.09	36.60	75.00	2.0000	2yr24hr
CB27					
22	0.41	65.30	73.00	2.0000	2yr24hr
CB18					
23	0.73	183.60	63.00	2.0000	2yr24hr
OFTrail					
24	1.22	183.00	66.00	2.0000	2yr24hr
CB84					
25	1.65	192.00	69.00	2.0000	2yr24hr
OFTrail					
26	2.77	228.00	59.00	2.0000	2yr24hr
CB999					
27	0.53	77.00	66.00	2.0000	2yr24hr
CB56					
28	0.61	103.00	73.00	2.0000	2yr24hr
CB36					
29	0.31	54.00	72.00	2.0000	2yr24hr
CB35					
3	0.35	124.00	52.00	2.0000	2yr24hr
CB2					
30	0.22	56.00	72.00	2.0000	2yr24hr
CB31					
31	0.67	114.00	43.00	2.0000	2yr24hr
CB19					
32	0.54	103.00	72.00	2.0000	2yr24hr
CB40					
33	0.19	67.00	59.00	2.0000	2yr24hr
CB39					
34	0.18	54.00	61.00	2.0000	2yr24hr
CB38					
35	0.21	57.30	64.00	2.0000	2yr24hr
CB41					
36	0.07	33.00	73.00	2.0000	2yr24hr
CB42					
37	0.33	87.00	73.00	2.0000	2yr24hr
CB46					
38	0.12	37.00	73.00	2.0000	2yr24hr
CB44					
39	0.69	101.00	85.00	2.0000	2yr24hr
CB47					
4	0.25	100.75	72.00	2.0000	2yr24hr
CB3					
40	0.19	53.00	80.00	2.0000	2yr24hr
CB45					
41	0.98	120.00	67.00	2.0000	2yr24hr
CB31					
42	1.81	168.00	49.00	2.0000	2yr24hr
CB19					
43	0.75	142.50	57.00	2.0000	2yr24hr
CB22					
44	0.70	135.00	63.00	2.0000	2yr24hr
CB21					
45	1.27	245.00	76.00	2.0000	2yr24hr
CB23					
46	0.55	100.00	84.00	2.0000	2yr24hr
CB24					
47	0.31	42.00	75.00	2.0000	2yr24hr
CB28					

48	0.31	42.00	75.00	2.0000	2yr24hr
CB29					
49	0.18	60.40	75.00	2.0000	2yr24hr
CB50					
5	0.20	60.22	61.00	2.0000	2yr24hr
CB8					
50	0.18	60.40	75.00	2.0000	2yr24hr
CB49					
51	0.09	39.30	75.00	2.0000	2yr24hr
CB51					
52	0.09	39.30	75.00	2.0000	2yr24hr
CB54					
53	0.26	60.80	79.00	2.0000	2yr24hr
CB52					
54	0.19	46.00	75.00	2.0000	2yr24hr
CB53					
55	0.17	35.30	75.00	2.0000	2yr24hr
CB57					
56	0.10	33.50	75.00	2.0000	2yr24hr
CB62					
57	1.54	151.00	66.00	2.0000	2yr24hr
CB67					
58	2.24	224.00	44.00	2.0000	2yr24hr
CB68					
59	0.34	50.50	73.00	2.0000	2yr24hr
CB65					
6	0.25	65.00	57.00	2.0000	2yr24hr
CB7					
60	0.59	130.00	72.00	2.0000	2yr24hr
CB66					
61	0.39	99.00	68.00	2.0000	2yr24hr
CB69					
62	0.13	50.20	74.00	2.0000	2yr24hr
CB73					
63	0.20	48.00	81.00	2.0000	2yr24hr
CB70					
64	0.16	54.70	72.00	2.0000	2yr24hr
CB75					
65	0.09	63.80	53.00	2.0000	2yr24hr
CB74					
66	0.10	70.30	51.00	2.0000	2yr24hr
CB60					
67	0.17	54.90	83.00	2.0000	2yr24hr
CB76					
68	0.07	32.00	78.00	2.0000	2yr24hr
CB77					
69	1.20	174.00	82.00	2.0000	2yr24hr
CB61					
7	0.36	65.00	67.00	2.0000	2yr24hr
CB10					
70	0.10	36.90	80.00	2.0000	2yr24hr
CB80					
71	0.22	65.10	81.00	2.0000	2yr24hr
CB79					
72	0.54	57.40	88.00	2.0000	2yr24hr
CB82					
73	0.18	94.40	75.00	2.0000	2yr24hr
CB82					
74	1.78	240.00	84.00	2.0000	2yr24hr
CB72					

75	0.64	150.00	75.00	2.0000	2yr24hr
CB86					
76	0.93	500.00	80.00	2.0000	2yr24hr
CB88					
8	0.43	78.38	62.00	2.0000	2yr24hr
CB6					
9	0.32	79.00	73.00	2.0000	2yr24hr
CB34					

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
CB1	JUNCTION	3146.59	5.13	50.0	
CB10	JUNCTION	3149.24	3.66	50.0	
CB11	JUNCTION	3147.29	5.92	50.0	
CB12	JUNCTION	3148.24	4.99	50.0	
CB13	JUNCTION	3147.90	5.36	50.0	
CB14	JUNCTION	3148.81	3.73	50.0	
CB15	JUNCTION	3149.25	3.30	50.0	
CB16	JUNCTION	3148.85	4.43	50.0	
CB17	JUNCTION	3146.54	4.96	50.0	
CB18	JUNCTION	3146.61	4.97	50.0	
CB19	JUNCTION	3146.64	5.55	50.0	
CB2	JUNCTION	3147.51	3.97	50.0	
CB20	JUNCTION	3147.72	6.64	50.0	
CB21	JUNCTION	3148.28	4.77	50.0	
CB22	JUNCTION	3148.45	4.63	50.0	
CB23	JUNCTION	3148.86	3.93	50.0	
CB24	JUNCTION	3150.97	3.97	50.0	
CB25	JUNCTION	3148.05	4.65	50.0	
CB26	JUNCTION	3148.83	4.37	50.0	
CB27	JUNCTION	3149.79	3.41	50.0	
CB28	JUNCTION	3148.21	5.05	50.0	
CB29	JUNCTION	3149.16	4.10	50.0	
CB3	JUNCTION	3148.41	3.19	50.0	
CB30	JUNCTION	3147.24	4.32	50.0	
CB31	JUNCTION	3147.69	5.11	50.0	
CB32	JUNCTION	3148.63	4.49	50.0	
CB33	JUNCTION	3149.17	4.39	50.0	
CB34	JUNCTION	3149.68	4.02	50.0	
CB35	JUNCTION	3149.01	4.79	50.0	
CB36	JUNCTION	3149.50	4.47	50.0	
CB37	JUNCTION	3149.50	5.39	50.0	
CB38	JUNCTION	3149.80	5.20	50.0	
CB39	JUNCTION	3150.48	4.68	50.0	
CB4	JUNCTION	3148.28	3.22	50.0	
CB40	JUNCTION	3151.68	2.25	50.0	
CB41	JUNCTION	3151.67	3.36	50.0	
CB42	JUNCTION	3149.63	5.33	50.0	
CB43	JUNCTION	3150.51	3.77	50.0	
CB44	JUNCTION	3150.86	3.91	50.0	
CB45	JUNCTION	3151.25	3.58	50.0	
CB46	JUNCTION	3151.13	3.74	50.0	

CB47	JUNCTION	3151.52	3.53	50.0
CB48	JUNCTION	3148.74	6.03	50.0
CB49	JUNCTION	3149.89	4.81	50.0
CB5	JUNCTION	3147.08	4.16	50.0
CB50	JUNCTION	3148.84	5.89	50.0
CB51	JUNCTION	3149.42	4.24	50.0
CB52	JUNCTION	3149.83	3.83	50.0
CB53	JUNCTION	3150.76	2.91	50.0
CB54	JUNCTION	3150.13	3.49	50.0
CB55	JUNCTION	3147.44	5.15	50.0
CB56	JUNCTION	3147.47	4.78	50.0
CB57	JUNCTION	3147.51	4.82	50.0
CB58	JUNCTION	3147.68	4.88	50.0
CB59	JUNCTION	3147.92	5.62	50.0
CB6	JUNCTION	3147.78	4.92	50.0
CB60	JUNCTION	3148.71	4.04	50.0
CB61	JUNCTION	3149.22	4.09	50.0
CB62	JUNCTION	3148.45	4.41	0.0
CB63	JUNCTION	3148.55	3.47	0.0
CB64	JUNCTION	3148.82	3.46	0.0
CB65	JUNCTION	3148.92	4.08	0.0
CB66	JUNCTION	3149.03	4.00	0.0
CB67	JUNCTION	3148.80	3.43	50.0
CB68	JUNCTION	3148.67	3.59	50.0
CB69	JUNCTION	3148.68	5.36	50.0
CB7	JUNCTION	3147.90	4.86	50.0
CB70	JUNCTION	3149.05	5.11	50.0
CB71	JUNCTION	3149.18	4.99	50.0
CB72	JUNCTION	3149.74	4.13	50.0
CB73	JUNCTION	3150.01	4.28	50.0
CB74	JUNCTION	3149.77	3.18	50.0
CB75	JUNCTION	3149.96	3.11	50.0
CB76	JUNCTION	3149.06	3.94	50.0
CB77	JUNCTION	3149.32	4.27	0.0
CB78	JUNCTION	3150.01	4.40	50.0
CB79	JUNCTION	3150.70	3.80	50.0
CB8	JUNCTION	3148.36	4.58	50.0
CB80	JUNCTION	3149.49	3.81	0.0
CB81	JUNCTION	3149.55	4.48	0.0
CB82	JUNCTION	3149.86	2.95	0.0
CB83	JUNCTION	3149.09	3.62	50.0
CB84	JUNCTION	3149.80	3.06	50.0
CB85	JUNCTION	3149.12	3.13	0.0
CB86	JUNCTION	3149.20	2.88	0.0
CB88	JUNCTION	3150.10	3.00	0.0
CB9	JUNCTION	3148.90	3.65	50.0
CB999	JUNCTION	3147.44	6.00	50.0
OF_North	OUTFALL	3150.50	0.25	0.0
OF_South	OUTFALL	3150.50	0.50	0.0
OFTrail	OUTFALL	0.00	0.00	0.0
CMPNorth	STORAGE	3146.85	5.25	0.0
CMPSouth	STORAGE	3146.00	5.50	0.0

****
Link Summary
****

Name	From Node	To Node	Type	Length	% Slope	Roughness
C1	CB1	CMPSouth	CONDUIT	20.0	0.4700	0.0100
C2	CB999	CMPNorth	CONDUIT	10.0	0.9100	0.0100
C3	CB17	CMPSouth	CONDUIT	20.0	0.2000	0.0100
C4	CMPSouth	OF_South	CONDUIT	30.2	1.6574	0.0100
C5	CB55	CMPNorth	CONDUIT	20.7	0.4406	0.0100
C6	CMPNorth	OF_North	CONDUIT	18.8	7.1875	0.0100
SP1	CB2	CB1	CONDUIT	279.5	0.1499	0.0100
SP10	CB11	CB1	CONDUIT	202.0	0.2198	0.0100
SP11	CB12	CB11	CONDUIT	45.6	1.5489	0.0100
SP12	CB13	CB11	CONDUIT	120.4	0.2999	0.0100
SP13	CB14	CB13	CONDUIT	132.4	0.5001	0.0100
SP14	CB15	CB14	CONDUIT	44.3	1.0001	0.0100
SP15	CB16	CB13	CONDUIT	45.3	1.5524	0.0100
SP16	CB18	CB17	CONDUIT	20.0	0.3750	0.0100
SP17	CB19	CB18	CONDUIT	21.3	0.1078	0.0100
SP18	CB20	CB19	CONDUIT	359.5	0.2999	0.0100
SP19	CB21	CB20	CONDUIT	171.9	0.1798	0.0100
SP2	CB3	CB2	CONDUIT	124.6	0.5218	0.0100
SP20	CB22	CB21	CONDUIT	34.0	0.4993	0.0100
SP21	CB23	CB22	CONDUIT	16.2	1.0007	0.0100
SP22	CB24	CB23	CONDUIT	186.6	0.9992	0.0100
SP23	CB25	CB18	CONDUIT	199.5	0.2201	0.0100
SP24	CB26	CB25	CONDUIT	27.2	0.9992	0.0100
SP25	CB27	CB26	CONDUIT	48.4	1.9989	0.0100
SP26	CB28	CB25	CONDUIT	15.2	0.9989	0.0100
SP27	CB29	CB28	CONDUIT	47.8	1.9989	0.0100
SP28	CB30	CB19	CONDUIT	26.6	0.4015	0.0100
SP29	CB31	CB30	CONDUIT	110.6	0.3996	0.0100

SP3	CB4	CB2	CONDUIT	135.6	
0.3835	0.0100				
SP30	CB32	CB31	CONDUIT	139.3	
0.4990	0.0100				
SP31	CB33	CB32	CONDUIT	29.1	
1.0003	0.0100				
SP32	CB34	CB33	CONDUIT	50.6	
0.9990	0.0100				
SP33	CB35	CB32	CONDUIT	12.8	
1.0027	0.0100				
SP34	CB36	CB35	CONDUIT	49.1	
0.9998	0.0100				
SP35	CB37	CB20	CONDUIT	257.6	
0.4997	0.0100				
SP36	CB38	CB37	CONDUIT	30.3	
0.9982	0.0100				
SP37	CB39	CB38	CONDUIT	42.5	
0.9995	0.0100				
SP38	CB40	CB39	CONDUIT	120.5	
0.9992	0.0100				
SP39	CB41	CB39	CONDUIT	29.9	
4.0008	0.0100				
SP4	CB5	CB1	CONDUIT	108.3	
0.2198	0.0100				
SP40	CB42	CB37	CONDUIT	21.5	
0.5986	0.0100				
SP41	CB43	CB42	CONDUIT	146.1	
0.5997	0.0100				
SP42	CB44	CB43	CONDUIT	9.8	
0.9957	0.0100				
SP43	CB45	CB44	CONDUIT	39.5	
0.9985	0.0100				
SP44	CB46	CB43	CONDUIT	37.1	
0.9994	0.0100				
SP45	CB47	CB46	CONDUIT	39.5	
1.0006	0.0100				
SP46	CB48	CB20	CONDUIT	211.7	
0.2499	0.0100				
SP47	CB49	CB48	CONDUIT	45.1	
1.9979	0.0100				
SP48	CB50	CB48	CONDUIT	24.2	
0.4008	0.0100				
SP49	CB51	CB50	CONDUIT	144.0	
0.3999	0.0100				
SP5	CB6	CB5	CONDUIT	174.0	
0.3999	0.0100				
SP50	CB52	CB51	CONDUIT	40.3	
0.3998	0.0100				
SP51	CB53	CB52	CONDUIT	46.6	
1.9990	0.0100				
SP52	CB54	CB51	CONDUIT	46.4	
0.9991	0.0100				
SP53	CB56	CB55	CONDUIT	24.0	
0.1165	0.0100				
SP54	CB57	CB56	CONDUIT	34.8	
0.1094	0.0100				
SP55	CB58	CB57	CONDUIT	157.6	
0.1098	0.0100				
SP56	CB59	CB58	CONDUIT	214.7	
0.1099	0.0100				

SP57	CB60	CB59	CONDUIT	194.5	
0.1502	0.0100				
SP58	CB61	CB60	CONDUIT	26.0	
0.9996	0.0100				
SP59	CB62	CB57	CONDUIT	35.7	
0.3021	0.0100				
SP6	CB7	CB6	CONDUIT	30.1	
0.3988	0.0100				
SP60	CB63	CB62	CONDUIT	30.8	
0.2987	0.0100				
SP61	CB64	CB63	CONDUIT	67.8	
0.3994	0.0100				
SP62	CB65	CB64	CONDUIT	47.0	
0.2192	0.0100				
SP63	CB66	CB65	CONDUIT	51.0	
0.2197	0.0100				
SP64	CB67	CB58	CONDUIT	60.7	
0.4990	0.0100				
SP65	CB68	CB58	CONDUIT	33.4	
0.5003	0.0100				
SP66	CB69	CB59	CONDUIT	173.6	
0.1498	0.0100				
SP67	CB70	CB69	CONDUIT	41.4	
0.2992	0.0100				
SP68	CB71	CB70	CONDUIT	42.2	
0.2988	0.0100				
SP69	CB72	CB71	CONDUIT	187.5	
0.2997	0.0100				
SP7	CB8	CB7	CONDUIT	41.9	
0.5007	0.0100				
SP70	CB73	CB71	CONDUIT	22.6	
1.4973	0.0100				
SP71	CB74	CB60	CONDUIT	63.3	
0.4993	0.0100				
SP72	CB75	CB74	CONDUIT	37.4	
0.5001	0.0100				
SP73	CB76	CB60	CONDUIT	44.7	
0.2191	0.0100				
SP74	CB77	CB76	CONDUIT	119.5	
0.2175	0.0100				
SP75	CB78	CB77	CONDUIT	11.1	
1.7438	0.0100				
SP76	CB79	CB78	CONDUIT	45.7	
1.4999	0.0100				
SP77	CB80	CB77	CONDUIT	33.3	
0.5161	0.0100				
SP78	CB81	CB80	CONDUIT	26.6	
0.2181	0.0100				
SP79	CB82	CB81	CONDUIT	147.0	
0.2163	0.0100				
SP8	CB9	CB8	CONDUIT	108.4	
0.5001	0.0100				
SP80	CB83	CB55	CONDUIT	23.5	
0.6506	0.0100				
SP81	CB84	CB83	CONDUIT	109.4	
0.6500	0.0100				
SP82	CB85	CB66	CONDUIT	38.9	
0.2208	0.0100				
SP83	CB86	CB85	CONDUIT	35.8	
0.2205	0.0100				

SP85	CB88	CB82	CONDUIT	108.5	
0.2194	0.0100				
SP9	CB10	CB8	CONDUIT	38.3	
0.9989	0.0100				

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Cross Section Summary
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Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C1	CIRCULAR	2.50	4.91	0.62	2.50	1	36.56
C2	CIRCULAR	2.50	4.91	0.62	2.50	1	50.87
C3	CIRCULAR	2.50	4.91	0.62	2.50	1	23.85
C4	RECT_OPEN	0.50	25.00	0.49	50.00	1	297.34
C5	CIRCULAR	2.50	4.91	0.62	2.50	1	35.39
C6	RECT_OPEN	0.25	12.50	0.25	50.00	1	196.32
SP1	CIRCULAR	2.00	3.14	0.50	2.00	1	11.39
SP10	CIRCULAR	2.00	3.14	0.50	2.00	1	13.79
SP11	CIRCULAR	1.50	1.77	0.38	1.50	1	17.00
SP12	CIRCULAR	1.50	1.77	0.38	1.50	1	7.48
SP13	CIRCULAR	1.00	0.79	0.25	1.00	1	3.28
SP14	CIRCULAR	1.00	0.79	0.25	1.00	1	4.63
SP15	CIRCULAR	1.00	0.79	0.25	1.00	1	5.77
SP16	CIRCULAR	2.50	4.91	0.62	2.50	1	32.65
SP17	CIRCULAR	2.50	4.91	0.62	2.50	1	17.51
SP18	CIRCULAR	2.50	4.91	0.62	2.50	1	29.20
SP19	CIRCULAR	2.00	3.14	0.50	2.00	1	12.47
SP2	CIRCULAR	1.50	1.77	0.38	1.50	1	9.86
SP20	CIRCULAR	2.00	3.14	0.50	2.00	1	20.78
SP21	CIRCULAR	1.50	1.77	0.38	1.50	1	13.66
SP22	CIRCULAR	1.00	0.79	0.25	1.00	1	4.63
SP23	CIRCULAR	1.50	1.77	0.38	1.50	1	6.41
SP24	CIRCULAR	1.00	0.79	0.25	1.00	1	

SP25	CIRCULAR	1.00	0.79	0.25	1.00	1
6.55						
SP26	CIRCULAR	1.50	1.77	0.38	1.50	1
13.65						
SP27	CIRCULAR	1.50	1.77	0.38	1.50	1
19.31						
SP28	CIRCULAR	2.00	3.14	0.50	2.00	1
18.64						
SP29	CIRCULAR	2.00	3.14	0.50	2.00	1
18.59						
SP3	CIRCULAR	1.50	1.77	0.38	1.50	1
8.46						
SP30	CIRCULAR	1.50	1.77	0.38	1.50	1
9.65						
SP31	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP32	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP33	CIRCULAR	1.00	0.79	0.25	1.00	1
4.64						
SP34	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP35	CIRCULAR	1.50	1.77	0.38	1.50	1
9.65						
SP36	CIRCULAR	1.50	1.77	0.38	1.50	1
13.64						
SP37	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP38	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP39	CIRCULAR	1.00	0.79	0.25	1.00	1
9.26						
SP4	CIRCULAR	2.00	3.14	0.50	2.00	1
13.79						
SP40	CIRCULAR	1.50	1.77	0.38	1.50	1
10.57						
SP41	CIRCULAR	1.50	1.77	0.38	1.50	1
10.58						
SP42	CIRCULAR	1.00	0.79	0.25	1.00	1
4.62						
SP43	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP44	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP45	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP46	CIRCULAR	1.50	1.77	0.38	1.50	1
6.83						
SP47	CIRCULAR	1.00	0.79	0.25	1.00	1
6.55						
SP48	CIRCULAR	1.50	1.77	0.38	1.50	1
8.65						
SP49	CIRCULAR	1.50	1.77	0.38	1.50	1
8.64						
SP5	CIRCULAR	2.00	3.14	0.50	2.00	1
18.60						
SP50	CIRCULAR	1.00	0.79	0.25	1.00	1
2.93						
SP51	CIRCULAR	1.00	0.79	0.25	1.00	1
6.55						

SP52	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP53	CIRCULAR	2.50	4.91	0.62	2.50	1
18.20						
SP54	CIRCULAR	2.50	4.91	0.62	2.50	1
17.63						
SP55	CIRCULAR	2.50	4.91	0.62	2.50	1
17.67						
SP56	CIRCULAR	2.50	4.91	0.62	2.50	1
17.68						
SP57	CIRCULAR	2.00	3.14	0.50	2.00	1
11.40						
SP58	CIRCULAR	1.50	1.77	0.38	1.50	1
13.65						
SP59	CIRCULAR	1.50	1.77	0.38	1.50	1
7.51						
SP6	CIRCULAR	2.00	3.14	0.50	2.00	1
18.57						
SP60	CIRCULAR	1.50	1.77	0.38	1.50	1
7.46						
SP61	CIRCULAR	1.50	1.77	0.38	1.50	1
8.63						
SP62	CIRCULAR	1.50	1.77	0.38	1.50	1
6.39						
SP63	CIRCULAR	1.50	1.77	0.38	1.50	1
6.40						
SP64	CIRCULAR	1.50	1.77	0.38	1.50	1
9.65						
SP65	CIRCULAR	1.50	1.77	0.38	1.50	1
9.66						
SP66	CIRCULAR	2.00	3.14	0.50	2.00	1
11.38						
SP67	CIRCULAR	1.50	1.77	0.38	1.50	1
7.47						
SP68	CIRCULAR	1.50	1.77	0.38	1.50	1
7.46						
SP69	CIRCULAR	1.50	1.77	0.38	1.50	1
7.48						
SP7	CIRCULAR	1.50	1.77	0.38	1.50	1
9.66						
SP70	CIRCULAR	1.00	0.79	0.25	1.00	1
5.67						
SP71	CIRCULAR	1.00	0.79	0.25	1.00	1
3.27						
SP72	CIRCULAR	1.00	0.79	0.25	1.00	1
3.28						
SP73	CIRCULAR	1.50	1.77	0.38	1.50	1
6.39						
SP74	CIRCULAR	1.50	1.77	0.38	1.50	1
6.37						
SP75	CIRCULAR	1.00	0.79	0.25	1.00	1
6.12						
SP76	CIRCULAR	1.00	0.79	0.25	1.00	1
5.67						
SP77	CIRCULAR	1.50	1.77	0.38	1.50	1
9.81						
SP78	CIRCULAR	1.50	1.77	0.38	1.50	1
6.38						
SP79	CIRCULAR	1.50	1.77	0.38	1.50	1
6.35						

SP8	CIRCULAR	1.50	1.77	0.38	1.50	1
9.66						
SP80	CIRCULAR	1.00	0.79	0.25	1.00	1
3.74						
SP81	CIRCULAR	1.00	0.79	0.25	1.00	1
3.73						
SP82	CIRCULAR	1.50	1.77	0.38	1.50	1
6.42						
SP83	CIRCULAR	1.50	1.77	0.38	1.50	1
6.41						
SP85	CIRCULAR	1.50	1.77	0.38	1.50	1
6.40						
SP9	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						

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  ****************
  Analysis Options
  ****************
  Flow Units ............... CFS
  Process Models:
    Rainfall/Runoff ........ YES
    RDII ................... NO
    Snowmelt ............... NO
    Groundwater ............ NO
    Flow Routing ........... YES
    Ponding Allowed ........ YES
    Water Quality .......... NO
  Infiltration Method ...... HORTON
  Flow Routing Method ...... DYNWAVE
  Surcharge Method ......... EXTRAN
  Starting Date ............ 01/27/2025 00:00:00
  Ending Date .............. 01/30/2025 00:00:00
  Antecedent Dry Days ...... 0.0
  Report Time Step ......... 00:00:02
  Wet Time Step ............ 00:00:30
  Dry Time Step ............ 00:05:00
  Routing Time Step ........ 2.00 sec
  Variable Time Step ....... NO
  Maximum Trials ........... 16
  Number of Threads ........ 8
  Head Tolerance ........... 0.000500 ft
```

Runoff Quantity Continuity	Volume acre-feet	Depth inches
Total Precipitation	3.908	1.170
Evaporation Loss	0.000	0.000
Infiltration Loss	1.310	0.392
Surface Runoff	2.543	0.762
Final Storage	0.055	0.016
Continuity Error (%)	-0.003	

Flow Routing Continuity	Volume acre-feet	Volume 10^6 gal

```
  Dry Weather Inflow .......         0.000         0.000
  Wet Weather Inflow .......         2.543         0.829
  Groundwater Inflow .......         0.000         0.000
  RDII Inflow ..............         0.000         0.000
  External Inflow ..........         0.000         0.000
  External Outflow .........         0.152         0.050
  Flooding Loss ............         0.000         0.000
  Evaporation Loss .........         0.000         0.000
  Exfiltration Loss ........         2.390         0.779
  Initial Stored Volume ....         0.000         0.000
  Final Stored Volume ......         0.000         0.000
  Continuity Error (%) .....         0.037


  *************************
  Highest Continuity Errors
  *************************
  Node CB2 (1.14%)


  *******************************
  Highest Flow Instability Indexes
  *******************************
  All links are stable.


  *******************************
  Most Frequent Nonconverging Nodes
  *******************************
  Convergence obtained at all time steps.


  *************************
  Routing Time Step Summary
  *************************
  Minimum Time Step           :     2.00 sec
  Average Time Step           :     2.00 sec
  Maximum Time Step           :     2.00 sec
  % of Time in Steady State   :     0.00
  Average Iterations per Step :     2.00
  % of Steps Not Converging   :     0.00


  ****************************
  Subcatchment Runoff Summary
  ****************************

  ---------------------------------------------------------------------------------------
---------------------------------------------
                           Total      Total      Total      Total     Imperv
Perv      Total       Total     Peak  Runoff
                         Precip      Runon       Evap      Infil     Runoff
Runoff     Runoff      Runoff   Runoff   Coeff
  Subcatchment                in         in         in         in         in
in         in    10^6 gal      CFS
  ---------------------------------------------------------------------------------------
---------------------------------------------
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1			1.17	0.00	0.00	0.23	0.92
0.00	0.92	0.02	0.89	0.783			
10			1.17	0.00	0.00	0.33	0.82
0.00	0.82	0.00	0.21	0.705			
11			1.17	0.00	0.00	0.41	0.74
0.00	0.74	0.03	1.53	0.636			
12			1.17	0.00	0.00	1.06	0.10
0.00	0.10	0.00	0.13	0.088			
13			1.17	0.00	0.00	0.39	0.77
0.00	0.77	0.03	1.32	0.656			
14			1.17	0.00	0.00	0.29	0.86
0.00	0.86	0.00	0.21	0.734			
15			1.17	0.00	0.00	0.29	0.86
0.00	0.86	0.00	0.22	0.734			
16			1.17	0.00	0.00	0.29	0.86
0.00	0.86	0.00	0.07	0.734			
17			1.17	0.00	0.00	0.29	0.86
0.00	0.86	0.00	0.07	0.734			
18			1.17	0.00	0.00	0.29	0.86
0.00	0.86	0.01	0.26	0.734			
19			1.17	0.00	0.00	0.29	0.86
0.00	0.86	0.01	0.26	0.734			
2			1.17	0.00	0.00	0.34	0.81
0.00	0.81	0.02	1.03	0.695			
20			1.17	0.00	0.00	0.29	0.86
0.00	0.86	0.00	0.10	0.734			
21			1.17	0.00	0.00	0.29	0.86
0.00	0.86	0.00	0.10	0.734			
22			1.17	0.00	0.00	0.32	0.84
0.00	0.84	0.01	0.46	0.715			
23			1.17	0.00	0.00	0.43	0.72
0.00	0.72	0.01	0.72	0.617			
24			1.17	0.00	0.00	0.40	0.76
0.00	0.76	0.03	1.23	0.646			
25			1.17	0.00	0.00	0.36	0.79
0.00	0.79	0.04	1.69	0.675			
26			1.17	0.00	0.00	0.48	0.68
0.00	0.68	0.05	2.36	0.578			
27			1.17	0.00	0.00	0.40	0.76
0.00	0.76	0.01	0.54	0.646			
28			1.17	0.00	0.00	0.32	0.84
0.00	0.84	0.01	0.68	0.715			
29			1.17	0.00	0.00	0.33	0.82
0.00	0.82	0.01	0.34	0.705			
3			1.17	0.00	0.00	0.56	0.60
0.00	0.60	0.01	0.29	0.509			
30			1.17	0.00	0.00	0.33	0.82
0.00	0.82	0.00	0.25	0.705			
31			1.17	0.00	0.00	0.67	0.49
0.00	0.49	0.01	0.45	0.421			
32			1.17	0.00	0.00	0.33	0.82
0.00	0.82	0.01	0.61	0.705			
33			1.17	0.00	0.00	0.48	0.68
0.00	0.68	0.00	0.18	0.578			
34			1.17	0.00	0.00	0.46	0.70
0.00	0.70	0.00	0.17	0.597			
35			1.17	0.00	0.00	0.42	0.73
0.00	0.73	0.00	0.21	0.626			
36			1.17	0.00	0.00	0.32	0.84
0.00	0.84	0.00	0.09	0.715			

37			1.17	0.00	0.00	0.32	0.84
0.00	0.84	0.01	0.38	0.715			
38			1.17	0.00	0.00	0.32	0.84
0.00	0.84	0.00	0.14	0.715			
39			1.17	0.00	0.00	0.18	0.97
0.00	0.97	0.02	0.87	0.832			
4			1.17	0.00	0.00	0.33	0.82
0.00	0.82	0.01	0.29	0.705			
40			1.17	0.00	0.00	0.23	0.92
0.00	0.92	0.00	0.24	0.783			
41			1.17	0.00	0.00	0.39	0.77
0.00	0.77	0.02	0.98	0.656			
42			1.17	0.00	0.00	0.60	0.56
0.00	0.56	0.03	1.33	0.480			
43			1.17	0.00	0.00	0.50	0.65
0.00	0.65	0.01	0.67	0.558			
44			1.17	0.00	0.00	0.43	0.72
0.00	0.72	0.01	0.69	0.617			
45			1.17	0.00	0.00	0.28	0.87
0.00	0.87	0.03	1.48	0.744			
46			1.17	0.00	0.00	0.19	0.96
0.00	0.96	0.01	0.70	0.822			
47			1.17	0.00	0.00	0.29	0.86
0.00	0.86	0.01	0.35	0.734			
48			1.17	0.00	0.00	0.29	0.86
0.00	0.86	0.01	0.35	0.734			
49			1.17	0.00	0.00	0.29	0.86
0.00	0.86	0.00	0.21	0.734			
5			1.17	0.00	0.00	0.46	0.70
0.00	0.70	0.00	0.19	0.597			
50			1.17	0.00	0.00	0.29	0.86
0.00	0.86	0.00	0.21	0.734			
51			1.17	0.00	0.00	0.29	0.86
0.00	0.86	0.00	0.11	0.734			
52			1.17	0.00	0.00	0.29	0.86
0.00	0.86	0.00	0.11	0.734			
53			1.17	0.00	0.00	0.25	0.90
0.00	0.90	0.01	0.32	0.773			
54			1.17	0.00	0.00	0.29	0.86
0.00	0.86	0.00	0.22	0.734			
55			1.17	0.00	0.00	0.29	0.86
0.00	0.86	0.00	0.20	0.734			
56			1.17	0.00	0.00	0.29	0.86
0.00	0.86	0.00	0.12	0.734			
57			1.17	0.00	0.00	0.40	0.76
0.00	0.76	0.03	1.47	0.646			
58			1.17	0.00	0.00	0.66	0.50
0.00	0.50	0.03	1.51	0.431			
59			1.17	0.00	0.00	0.32	0.84
0.00	0.84	0.01	0.37	0.715			
6			1.17	0.00	0.00	0.50	0.65
0.00	0.65	0.00	0.23	0.558			
60			1.17	0.00	0.00	0.33	0.82
0.00	0.82	0.01	0.67	0.705			
61			1.17	0.00	0.00	0.37	0.78
0.00	0.78	0.01	0.42	0.666			
62			1.17	0.00	0.00	0.30	0.85
0.00	0.85	0.00	0.15	0.724			
63			1.17	0.00	0.00	0.22	0.93
0.00	0.93	0.00	0.25	0.793			

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  64                        1.17       0.00       0.00       0.33       0.82
0.00       0.82       0.00     0.18   0.705
  65                        1.17       0.00       0.00       0.55       0.61
0.00       0.61       0.00     0.08   0.519
  66                        1.17       0.00       0.00       0.57       0.58
0.00       0.58       0.00     0.09   0.499
  67                        1.17       0.00       0.00       0.20       0.95
0.00       0.95       0.00     0.22   0.812
  68                        1.17       0.00       0.00       0.26       0.89
0.00       0.89       0.00     0.08   0.764
  69                        1.17       0.00       0.00       0.21       0.94
0.00       0.94       0.03     1.46   0.803
  7                         1.17       0.00       0.00       0.39       0.77
0.00       0.77       0.01     0.38   0.656
  70                        1.17       0.00       0.00       0.23       0.92
0.00       0.92       0.00     0.13   0.783
  71                        1.17       0.00       0.00       0.22       0.93
0.00       0.93       0.01     0.28   0.793
  72                        1.17       0.00       0.00       0.14       1.01
0.00       1.01       0.01     0.67   0.861
  73                        1.17       0.00       0.00       0.29       0.86
0.00       0.86       0.00     0.22   0.734
  74                        1.17       0.00       0.00       0.19       0.96
0.00       0.96       0.05     2.20   0.822
  75                        1.17       0.00       0.00       0.29       0.86
0.00       0.86       0.01     0.75   0.734
  76                        1.17       0.00       0.00       0.23       0.92
0.00       0.92       0.02     1.20   0.783
  8                         1.17       0.00       0.00       0.44       0.71
0.00       0.71       0.01     0.41   0.607
  9                         1.17       0.00       0.00       0.32       0.84
0.00       0.84       0.01     0.36   0.715
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Node Depth Summary
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Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
CB1	JUNCTION	0.09	1.22	3147.82	0 12:33	1.22
CB10	JUNCTION	0.01	0.20	3149.44	0 11:54	0.20
CB11	JUNCTION	0.03	0.53	3147.82	0 12:33	0.53
CB12	JUNCTION	0.01	0.13	3148.37	0 11:52	0.13
CB13	JUNCTION	0.02	0.29	3148.19	0 11:54	0.29
CB14	JUNCTION	0.01	0.25	3149.06	0 11:54	0.25
CB15	JUNCTION	0.01	0.15	3149.40	0 11:54	0.15
CB16	JUNCTION	0.01	0.08	3148.93	0 11:54	0.08
CB17	JUNCTION	0.11	1.52	3148.06	0 11:55	1.52
CB18	JUNCTION	0.10	1.60	3148.22	0 11:55	1.60
CB19	JUNCTION	0.11	1.74	3148.38	0 11:55	1.74
CB2	JUNCTION	0.03	0.53	3148.04	0 11:54	0.53
CB20	JUNCTION	0.04	1.00	3148.71	0 11:55	1.00
CB21	JUNCTION	0.04	0.79	3149.07	0 11:54	0.79
CB22	JUNCTION	0.03	0.75	3149.20	0 11:54	0.75

CB23	JUNCTION	0.02	0.51	3149.37	0	11:54	0.51
CB24	JUNCTION	0.01	0.27	3151.24	0	11:54	0.27
CB25	JUNCTION	0.02	0.39	3148.44	0	11:53	0.39
CB26	JUNCTION	0.01	0.16	3148.99	0	11:54	0.16
CB27	JUNCTION	0.00	0.09	3149.88	0	11:54	0.09
CB28	JUNCTION	0.01	0.34	3148.54	0	11:54	0.34
CB29	JUNCTION	0.01	0.14	3149.30	0	11:54	0.14
CB3	JUNCTION	0.01	0.18	3148.59	0	11:54	0.18
CB30	JUNCTION	0.04	1.15	3148.40	0	11:55	1.15
CB31	JUNCTION	0.03	0.77	3148.46	0	11:55	0.77
CB32	JUNCTION	0.02	0.45	3149.08	0	11:54	0.45
CB33	JUNCTION	0.01	0.28	3149.45	0	11:54	0.28
CB34	JUNCTION	0.01	0.19	3149.87	0	11:54	0.19
CB35	JUNCTION	0.02	0.42	3149.43	0	11:54	0.42
CB36	JUNCTION	0.01	0.28	3149.78	0	11:54	0.28
CB37	JUNCTION	0.03	0.59	3150.10	0	11:54	0.59
CB38	JUNCTION	0.02	0.42	3150.22	0	11:54	0.42
CB39	JUNCTION	0.02	0.37	3150.85	0	11:54	0.37
CB4	JUNCTION	0.02	0.36	3148.65	0	11:54	0.36
CB40	JUNCTION	0.01	0.24	3151.93	0	11:54	0.24
CB41	JUNCTION	0.01	0.10	3151.78	0	11:54	0.10
CB42	JUNCTION	0.02	0.55	3150.18	0	11:54	0.55
CB43	JUNCTION	0.02	0.42	3150.93	0	11:54	0.42
CB44	JUNCTION	0.01	0.24	3151.10	0	11:54	0.24
CB45	JUNCTION	0.01	0.16	3151.41	0	11:54	0.16
CB46	JUNCTION	0.02	0.43	3151.55	0	11:54	0.43
CB47	JUNCTION	0.02	0.33	3151.85	0	11:54	0.33
CB48	JUNCTION	0.02	0.44	3149.19	0	11:54	0.44
CB49	JUNCTION	0.01	0.12	3150.02	0	11:54	0.12
CB5	JUNCTION	0.06	0.77	3147.85	0	11:54	0.77
CB50	JUNCTION	0.02	0.42	3149.26	0	11:54	0.42
CB51	JUNCTION	0.02	0.30	3149.72	0	11:54	0.30
CB52	JUNCTION	0.02	0.33	3150.16	0	11:54	0.33
CB53	JUNCTION	0.01	0.13	3150.89	0	11:54	0.13
CB54	JUNCTION	0.01	0.11	3150.24	0	11:54	0.11
CB55	JUNCTION	0.12	1.40	3148.84	0	11:56	1.40
CB56	JUNCTION	0.12	1.50	3148.97	0	11:56	1.50
CB57	JUNCTION	0.12	1.66	3149.17	0	11:56	1.66
CB58	JUNCTION	0.11	1.68	3149.36	0	11:56	1.68
CB59	JUNCTION	0.08	1.57	3149.48	0	11:56	1.57
CB6	JUNCTION	0.02	0.46	3148.24	0	11:54	0.46
CB60	JUNCTION	0.05	1.01	3149.72	0	11:55	1.01
CB61	JUNCTION	0.02	0.54	3149.75	0	11:55	0.54
CB62	JUNCTION	0.03	0.75	3149.20	0	11:56	0.75
CB63	JUNCTION	0.03	0.72	3149.27	0	11:55	0.72
CB64	JUNCTION	0.02	0.57	3149.39	0	11:54	0.57
CB65	JUNCTION	0.03	0.59	3149.51	0	11:54	0.59
CB66	JUNCTION	0.03	0.56	3149.60	0	11:54	0.56
CB67	JUNCTION	0.02	0.59	3149.40	0	11:56	0.59
CB68	JUNCTION	0.02	0.71	3149.38	0	11:56	0.71
CB69	JUNCTION	0.04	0.89	3149.56	0	11:55	0.89
CB7	JUNCTION	0.02	0.50	3148.40	0	11:54	0.50
CB70	JUNCTION	0.03	0.72	3149.77	0	11:55	0.72
CB71	JUNCTION	0.03	0.74	3149.92	0	11:54	0.74
CB72	JUNCTION	0.03	0.58	3150.32	0	11:54	0.58
CB73	JUNCTION	0.01	0.11	3150.13	0	11:54	0.11
CB74	JUNCTION	0.01	0.20	3149.97	0	11:53	0.20

CB75	JUNCTION	0.01	0.17	3150.13	0	11:54	0.17
CB76	JUNCTION	0.04	0.78	3149.83	0	11:55	0.78
CB77	JUNCTION	0.03	0.74	3150.06	0	11:54	0.74
CB78	JUNCTION	0.01	0.18	3150.19	0	11:54	0.18
CB79	JUNCTION	0.01	0.15	3150.85	0	11:54	0.15
CB8	JUNCTION	0.02	0.46	3148.82	0	11:54	0.46
CB80	JUNCTION	0.03	0.68	3150.17	0	11:54	0.68
CB81	JUNCTION	0.03	0.70	3150.25	0	11:54	0.70
CB82	JUNCTION	0.03	0.67	3150.54	0	11:54	0.67
CB83	JUNCTION	0.02	0.48	3149.58	0	11:54	0.48
CB84	JUNCTION	0.02	0.41	3150.22	0	11:54	0.41
CB85	JUNCTION	0.02	0.50	3149.62	0	11:54	0.50
CB86	JUNCTION	0.02	0.46	3149.66	0	11:54	0.46
CB88	JUNCTION	0.02	0.55	3150.65	0	11:54	0.55
CB9	JUNCTION	0.02	0.31	3149.21	0	11:54	0.31
CB999	JUNCTION	0.09	1.39	3148.83	0	12:37	1.39
OF_North	OUTFALL	0.00	0.00	3150.50	0	00:00	0.00
OF_South	OUTFALL	0.00	0.00	3150.50	0	00:00	0.00
OFTrail	OUTFALL	0.00	0.00	0.00	0	00:00	0.00
CMPNorth	STORAGE	0.14	1.98	3148.83	0	12:37	1.98
CMPSouth	STORAGE	0.12	1.82	3147.82	0	12:33	1.82

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Node Inflow Summary
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Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
CB1	JUNCTION	1.45	7.54	0 11:54	0.0294	0.157	-0.320
CB10	JUNCTION	0.38	0.38	0 11:54	0.0076	0.0076	0.002
CB11	JUNCTION	0.26	1.07	0 11:54	0.00508	0.0211	-0.103
CB12	JUNCTION	0.26	0.26	0 11:54	0.00508	0.00508	0.202
CB13	JUNCTION	0.07	0.56	0 11:54	0.00131	0.011	0.278
CB14	JUNCTION	0.21	0.43	0 11:54	0.00407	0.00836	-0.001
CB15	JUNCTION	0.22	0.22	0 11:54	0.00429	0.00429	-0.002
CB16	JUNCTION	0.07	0.07	0 11:54	0.00131	0.00131	0.011
CB17	JUNCTION	0.00	12.52	0 11:55	0	0.274	0.067
CB18	JUNCTION	0.46	12.53	0 11:55	0.0094	0.274	-0.052

CB19		JUNCTION	1.78	11.38	0	11:55	0.0364
0.246	0.034						
CB2		JUNCTION	0.29	1.59	0	11:54	0.00569
0.0326	1.158						
CB20		JUNCTION	0.00	7.45	0	11:54	0
0.152	-0.185						
CB21		JUNCTION	0.69	3.53	0	11:54	0.0137
0.0713	0.365						
CB22		JUNCTION	0.67	2.85	0	11:54	0.0133
0.0576	-0.000						
CB23		JUNCTION	1.48	2.18	0	11:54	0.0299
0.0443	0.002						
CB24		JUNCTION	0.70	0.70	0	11:54	0.0144
0.0144	-0.000						
CB25		JUNCTION	0.00	0.90	0	11:54	0
0.0186	0.931						
CB26		JUNCTION	0.10	0.21	0	11:54	0.002
0.004	0.004						
CB27		JUNCTION	0.10	0.10	0	11:54	0.002
0.002	-0.000						
CB28		JUNCTION	0.35	0.70	0	11:54	0.00729
0.0146	-0.000						
CB29		JUNCTION	0.35	0.35	0	11:54	0.00729
0.00729	0.002						
CB3		JUNCTION	0.29	0.29	0	11:54	0.00554
0.00554	0.293						
CB30		JUNCTION	0.00	2.66	0	11:54	0
0.0572	0.079						
CB31		JUNCTION	1.22	2.80	0	11:54	0.0252
0.0571	-0.125						
CB32		JUNCTION	0.00	1.59	0	11:54	0
0.032	0.230						
CB33		JUNCTION	0.21	0.58	0	11:54	0.0042
0.0114	0.000						
CB34		JUNCTION	0.36	0.36	0	11:54	0.00718
0.00718	0.002						
CB35		JUNCTION	0.34	1.02	0	11:54	0.00684
0.0206	0.000						
CB36		JUNCTION	0.68	0.68	0	11:54	0.0138
0.0138	0.001						
CB37		JUNCTION	0.00	2.85	0	11:54	0
0.0581	-0.001						
CB38		JUNCTION	0.17	1.17	0	11:54	0.00336
0.0233	-0.003						
CB39		JUNCTION	0.18	1.00	0	11:54	0.00356
0.0199	0.001						
CB4		JUNCTION	1.03	1.03	0	11:54	0.0214
0.0214	-0.002						
CB40		JUNCTION	0.61	0.61	0	11:54	0.0122
0.0122	0.000						
CB41		JUNCTION	0.21	0.21	0	11:54	0.00416
0.00416	0.000						
CB42		JUNCTION	0.09	1.70	0	11:54	0.00166
0.0349	0.005						
CB43		JUNCTION	0.00	1.62	0	11:54	0
0.0332	-0.006						
CB44		JUNCTION	0.14	0.38	0	11:54	0.00273
0.00749	0.001						
CB45		JUNCTION	0.24	0.24	0	11:54	0.00476
0.00476	0.002						

CB46	JUNCTION	0.38	1.25	0	11:54	0.00744	0.0257	0.000
CB47	JUNCTION	0.87	0.87	0	11:54	0.0183	0.0183	0.000
CB48	JUNCTION	0.00	1.17	0	11:54	0	0.0234	0.149
CB49	JUNCTION	0.21	0.21	0	11:54	0.00414	0.00414	0.112
CB5	JUNCTION	1.53	3.58	0	11:54	0.0317	0.0745	0.319
CB50	JUNCTION	0.21	0.97	0	11:54	0.00414	0.0193	-0.000
CB51	JUNCTION	0.11	0.76	0	11:54	0.00214	0.0151	-0.000
CB52	JUNCTION	0.32	0.54	0	11:54	0.00641	0.0108	0.001
CB53	JUNCTION	0.22	0.22	0	11:54	0.00443	0.00443	-0.000
CB54	JUNCTION	0.11	0.11	0	11:54	0.00214	0.00214	0.007
CB55	JUNCTION	0.00	12.81	0	11:56	0	0.296	0.065
CB56	JUNCTION	0.54	11.77	0	11:56	0.011	0.271	0.000
CB57	JUNCTION	0.20	11.32	0	11:56	0.00397	0.26	-0.012
CB58	JUNCTION	0.00	9.54	0	11:55	0	0.218	-0.033
CB59	JUNCTION	0.00	7.10	0	11:54	0	0.155	-0.534
CB6	JUNCTION	0.41	2.07	0	11:54	0.00822	0.0429	-0.065
CB60	JUNCTION	0.09	4.42	0	11:54	0.00164	0.0933	0.587
CB61	JUNCTION	1.46	1.46	0	11:54	0.0305	0.0305	0.002
CB62	JUNCTION	0.12	1.80	0	11:54	0.00233	0.0381	0.147
CB63	JUNCTION	0.00	1.73	0	11:54	0	0.0358	0.005
CB64	JUNCTION	0.00	1.75	0	11:54	0	0.0358	-0.009
CB65	JUNCTION	0.37	1.76	0	11:54	0.00764	0.0358	-0.000
CB66	JUNCTION	0.67	1.40	0	11:54	0.0132	0.0281	-0.001
CB67	JUNCTION	1.47	1.47	0	11:54	0.0315	0.0315	0.141
CB68	JUNCTION	1.51	1.51	0	11:54	0.0307	0.0307	0.090
CB69	JUNCTION	0.42	2.91	0	11:54	0.00817	0.0626	0.406
CB7	JUNCTION	0.23	1.67	0	11:54	0.0045	0.0346	0.000
CB70	JUNCTION	0.25	2.53	0	11:54	0.00499	0.0544	0.036
CB71	JUNCTION	0.00	2.33	0	11:54	0	0.0494	-0.005
CB72	JUNCTION	2.20	2.20	0	11:54	0.0464	0.0464	0.000

CB73	JUNCTION	0.15	0.15	0	11:54	0.003	0.003
0.015							
CB74	JUNCTION	0.08	0.26	0	11:54	0.00154	0.00515
0.114							
CB75	JUNCTION	0.18	0.18	0	11:54	0.0036	0.0036
0.003							
CB76	JUNCTION	0.22	2.69	0	11:54	0.00436	0.0561
0.021							
CB77	JUNCTION	0.08	2.50	0	11:54	0.00162	0.0517
-0.004							
CB78	JUNCTION	0.00	0.28	0	11:54	0	0.00546
0.025							
CB79	JUNCTION	0.28	0.28	0	11:54	0.00546	0.00546
0.000							
CB8	JUNCTION	0.19	1.45	0	11:54	0.00375	0.0301
-0.001							
CB80	JUNCTION	0.13	2.16	0	11:54	0.00246	0.0447
0.000							
CB81	JUNCTION	0.00	2.06	0	11:54	0	0.0422
0.007							
CB82	JUNCTION	0.89	2.08	0	11:54	0.019	0.0422
0.002							
CB83	JUNCTION	0.00	1.23	0	11:54	0	0.025
-0.003							
CB84	JUNCTION	1.23	1.23	0	11:54	0.025	0.025
0.002							
CB85	JUNCTION	0.00	0.75	0	11:54	0	0.0149
0.001							
CB86	JUNCTION	0.75	0.75	0	11:54	0.0149	0.0149
-0.001							
CB88	JUNCTION	1.20	1.20	0	11:54	0.0231	0.0231
-0.016							
CB9	JUNCTION	0.89	0.89	0	11:54	0.0188	0.0188
0.001							
CB999	JUNCTION	2.36	2.36	0	11:54	0.0508	0.0508
0.009							
OF_North	OUTFALL	0.00	0.00	0	00:00	0	0
0.000 gal							
OF_South	OUTFALL	0.00	0.00	0	00:00	0	0
0.000 gal							
OFTrail	OUTFALL	2.41	2.41	0	11:54	0.0497	0.0497
0.000							
CMPNorth	STORAGE	0.00	14.89	0	11:56	0	0.347
-0.045							
CMPSouth	STORAGE	0.00	19.90	0	11:55	0	0.432
-0.053							

****
Node Surcharge Summary
****

No nodes were surcharged.

****
Node Flooding Summary
****

No nodes were flooded.

****
Storage Volume Summary
****

Storage Unit	Average Volume 1000 ft³	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 ft³	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS
CMPNorth	1.105	2.8	0.0	100.0	17.471	44.6	0 12:37	1.29
CMPSouth	1.218	2.2	0.0	100.1	21.236	37.8	0 12:33	1.75

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
OF_North	0.00	0.00	0.00	0.000
OF_South	0.00	0.00	0.00	0.000
OFTrail	35.55	0.07	2.41	0.050
System	11.85	0.07	2.41	0.050

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C1	CONDUIT	7.46	0 11:55	4.72	0.20	0.51
C2	CONDUIT	2.35	0 11:54	4.41	0.05	0.58
C3	CONDUIT	12.52	0 11:55	4.62	0.52	0.54
C4	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
C5	CONDUIT	12.81	0 11:56	5.38	0.36	0.58
C6	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
SP1	CONDUIT	1.58	0 11:54	2.42	0.14	0.26
SP10	CONDUIT	1.04	0 11:54	1.58	0.08	0.38
SP11	CONDUIT	0.26	0 11:54	3.38	0.02	0.11
SP12	CONDUIT	0.55	0 11:54	2.39	0.07	0.19

SP13	CONDUIT	0.42	0	11:54	2.78	0.13	0.25
SP14	CONDUIT	0.22	0	11:54	1.94	0.05	0.20
SP15	CONDUIT	0.07	0	11:54	2.45	0.01	0.08
SP16	CONDUIT	12.52	0	11:55	3.89	0.38	0.62
SP17	CONDUIT	11.29	0	11:55	3.24	0.64	0.67
SP18	CONDUIT	7.25	0	11:55	2.64	0.25	0.55
SP19	CONDUIT	3.48	0	11:54	3.35	0.28	0.38
SP2	CONDUIT	0.28	0	11:54	2.22	0.03	0.15
SP20	CONDUIT	2.84	0	11:54	2.58	0.14	0.39
SP21	CONDUIT	2.18	0	11:54	4.55	0.16	0.34
SP22	CONDUIT	0.70	0	11:54	4.19	0.15	0.26
SP23	CONDUIT	0.91	0	11:54	2.35	0.14	0.32
SP24	CONDUIT	0.21	0	11:54	2.75	0.04	0.15
SP25	CONDUIT	0.10	0	11:54	1.85	0.02	0.12
SP26	CONDUIT	0.70	0	11:54	2.13	0.05	0.24
SP27	CONDUIT	0.35	0	11:54	1.94	0.02	0.16
SP28	CONDUIT	2.58	0	11:55	2.67	0.14	0.60
SP29	CONDUIT	2.66	0	11:54	2.64	0.14	0.48
SP3	CONDUIT	1.02	0	11:54	3.17	0.12	0.24
SP30	CONDUIT	1.59	0	11:54	3.71	0.16	0.32
SP31	CONDUIT	0.57	0	11:54	3.58	0.12	0.26
SP32	CONDUIT	0.36	0	11:54	2.59	0.08	0.23
SP33	CONDUIT	1.01	0	11:54	3.89	0.22	0.37
SP34	CONDUIT	0.68	0	11:54	2.83	0.15	0.35
SP35	CONDUIT	2.82	0	11:54	4.54	0.29	0.38
SP36	CONDUIT	1.16	0	11:54	2.33	0.09	0.34
SP37	CONDUIT	0.99	0	11:54	4.21	0.21	0.34
SP38	CONDUIT	0.60	0	11:54	2.97	0.13	0.31
SP39	CONDUIT	0.21	0	11:54	1.52	0.02	0.24
SP4	CONDUIT	3.55	0	11:54	3.21	0.26	0.43
SP40	CONDUIT	1.69	0	11:54	2.74	0.16	0.38
SP41	CONDUIT	1.62	0	11:54	3.27	0.15	0.32
SP42	CONDUIT	0.38	0	11:54	2.99	0.08	0.22
SP43	CONDUIT	0.24	0	11:54	2.15	0.05	0.20
SP44	CONDUIT	1.24	0	11:54	4.39	0.27	0.39
SP45	CONDUIT	0.87	0	11:54	3.22	0.19	0.38
SP46	CONDUIT	1.18	0	11:54	2.72	0.17	0.31
SP47	CONDUIT	0.21	0	11:54	3.58	0.03	0.16
SP48	CONDUIT	0.97	0	11:54	2.32	0.11	0.29
SP49	CONDUIT	0.76	0	11:54	2.32	0.09	0.24
SP5	CONDUIT	2.07	0	11:54	2.53	0.11	0.31
SP50	CONDUIT	0.54	0	11:54	2.62	0.19	0.31
SP51	CONDUIT	0.22	0	11:54	1.66	0.03	0.23
SP52	CONDUIT	0.11	0	11:54	2.42	0.02	0.11
SP53	CONDUIT	11.77	0	11:56	3.98	0.65	0.58
SP54	CONDUIT	11.32	0	11:56	3.47	0.64	0.63
SP55	CONDUIT	9.54	0	11:56	2.75	0.54	0.67
SP56	CONDUIT	6.94	0	11:56	2.06	0.39	0.65
SP57	CONDUIT	4.30	0	11:54	3.08	0.38	0.52
SP58	CONDUIT	1.45	0	11:54	3.21	0.11	0.43
SP59	CONDUIT	1.78	0	11:55	2.98	0.24	0.52
SP6	CONDUIT	1.67	0	11:54	2.85	0.09	0.24
SP60	CONDUIT	1.69	0	11:54	2.52	0.23	0.49
SP61	CONDUIT	1.73	0	11:54	2.68	0.20	0.43
SP62	CONDUIT	1.75	0	11:54	2.87	0.27	0.39
SP63	CONDUIT	1.40	0	11:54	2.25	0.22	0.38
SP64	CONDUIT	1.44	0	11:54	3.15	0.15	0.48

SP65	CONDUIT	1.48	0	11:54	3.22	0.15	0.52
SP66	CONDUIT	2.81	0	11:54	2.56	0.25	0.49
SP67	CONDUIT	2.52	0	11:54	3.40	0.34	0.45
SP68	CONDUIT	2.30	0	11:54	2.71	0.31	0.49
SP69	CONDUIT	2.18	0	11:54	2.92	0.29	0.44
SP7	CONDUIT	1.44	0	11:54	3.51	0.15	0.28
SP70	CONDUIT	0.15	0	11:54	2.92	0.03	0.18
SP71	CONDUIT	0.27	0	11:54	2.43	0.08	0.22
SP72	CONDUIT	0.18	0	11:54	1.87	0.06	0.18
SP73	CONDUIT	2.68	0	11:55	3.10	0.42	0.51
SP74	CONDUIT	2.49	0	11:54	2.81	0.39	0.51
SP75	CONDUIT	0.28	0	11:54	3.41	0.05	0.21
SP76	CONDUIT	0.28	0	11:54	3.32	0.05	0.17
SP77	CONDUIT	2.16	0	11:54	2.62	0.22	0.47
SP78	CONDUIT	2.05	0	11:54	2.58	0.32	0.46
SP79	CONDUIT	2.06	0	11:54	2.62	0.32	0.46
SP8	CONDUIT	0.88	0	11:54	2.49	0.09	0.25
SP80	CONDUIT	1.22	0	11:54	3.69	0.33	0.44
SP81	CONDUIT	1.23	0	11:54	3.61	0.33	0.45
SP82	CONDUIT	0.75	0	11:54	1.33	0.12	0.36
SP83	CONDUIT	0.75	0	11:54	1.55	0.12	0.32
SP85	CONDUIT	1.19	0	11:54	1.85	0.19	0.41
SP9	CONDUIT	0.38	0	11:54	3.43	0.08	0.20

Flow Classification Summary

Inlet Conduit	Adjusted /Actual Length	Fraction of Time in Flow Class: Dry	Up Dry	Down Dry	Sub Crit	Sup Crit	Up Crit	Down Crit	Norm Ltd	Ctrl
C1	1.00	0.00	0.00	0.00	0.08	0.00	0.00	0.92	0.00	0.00
C2	1.00	0.00	0.00	0.00	0.09	0.00	0.00	0.91	0.00	0.00
C3	1.00	0.00	0.00	0.00	0.07	0.00	0.00	0.92	0.00	0.00
C4	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C5	1.00	0.00	0.00	0.00	0.09	0.00	0.00	0.91	0.00	0.00
C6	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SP1	1.00	0.00	0.00	0.00	0.05	0.00	0.00	0.94	0.03	0.00
SP10	1.00	0.00	0.00	0.00	0.07	0.00	0.00	0.93	0.02	0.00
SP11	1.00	0.00	0.00	0.00	0.03	0.00	0.00	0.97	0.03	0.00
SP12	1.00	0.00	0.00	0.00	0.03	0.00	0.00	0.97	0.03	0.00

SP13	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP14	1.00	0.00	0.06	0.00	0.94	0.00	0.00	0.00	1.00
0.00									
SP15	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP16	1.00	0.00	0.08	0.00	0.92	0.00	0.00	0.00	0.67
0.00									
SP17	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
0.00									
SP18	1.00	0.00	0.07	0.00	0.93	0.00	0.00	0.00	1.00
0.00									
SP19	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP2	1.00	0.00	0.00	0.00	0.01	0.00	0.00	0.99	0.01
0.00									
SP20	1.00	0.00	0.19	0.00	0.81	0.00	0.00	0.00	0.95
0.00									
SP21	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP22	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP23	1.00	0.00	0.00	0.00	0.02	0.00	0.00	0.97	0.02
0.00									
SP24	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP25	1.00	0.00	0.00	0.00	0.95	0.05	0.00	0.00	1.00
0.00									
SP26	1.00	0.00	0.12	0.00	0.88	0.00	0.00	0.00	0.97
0.00									
SP27	1.00	0.00	0.00	0.00	0.78	0.22	0.00	0.00	0.43
0.00									
SP28	1.00	0.00	0.00	0.00	0.05	0.00	0.00	0.95	0.00
0.00									
SP29	1.00	0.00	0.04	0.00	0.95	0.01	0.00	0.00	0.85
0.00									
SP3	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP30	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP31	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP32	1.00	0.00	0.00	0.00	0.80	0.20	0.00	0.00	1.00
0.00									
SP33	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP34	1.00	0.00	0.00	0.00	0.70	0.29	0.00	0.00	0.99
0.00									
SP35	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP36	1.00	0.00	0.16	0.00	0.84	0.00	0.00	0.00	0.99
0.00									
SP37	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP38	1.00	0.00	0.00	0.00	0.71	0.29	0.00	0.00	1.00
0.00									
SP39	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
0.00									
SP4	1.00	0.00	0.00	0.00	0.07	0.00	0.00	0.93	0.01
0.00									

SP40	1.00	0.00	0.10	0.00	0.90	0.00	0.00	0.00	0.94
0.00									
SP41	1.00	0.00	0.00	0.00	0.70	0.30	0.00	0.00	0.13
0.00									
SP42	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP43	1.00	0.00	0.00	0.00	0.92	0.08	0.00	0.00	1.00
0.00									
SP44	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP45	1.00	0.00	0.00	0.00	0.70	0.30	0.00	0.00	0.99
0.00									
SP46	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP47	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP48	1.00	0.00	0.07	0.00	0.93	0.00	0.00	0.00	0.96
0.00									
SP49	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.40
0.00									
SP5	1.00	0.00	0.28	0.00	0.72	0.00	0.00	0.00	1.00
0.00									
SP50	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP51	1.00	0.00	0.15	0.00	0.85	0.00	0.00	0.00	1.00
0.00									
SP52	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP53	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.56
0.00									
SP54	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.20
0.00									
SP55	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.85
0.00									
SP56	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.61
0.00									
SP57	1.00	0.00	0.00	0.00	0.04	0.00	0.00	0.96	0.03
0.00									
SP58	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.99	0.00
0.00									
SP59	1.00	0.00	0.00	0.00	0.04	0.00	0.00	0.96	0.00
0.00									
SP6	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.17
0.00									
SP60	1.00	0.00	0.13	0.00	0.87	0.00	0.00	0.00	0.70
0.00									
SP61	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.43
0.00									
SP62	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.55
0.00									
SP63	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.42
0.00									
SP64	1.00	0.00	0.00	0.00	0.03	0.00	0.00	0.96	0.03
0.00									
SP65	1.00	0.00	0.00	0.00	0.03	0.00	0.00	0.96	0.01
0.00									
SP66	1.00	0.00	0.00	0.00	0.04	0.00	0.00	0.96	0.02
0.00									
SP67	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									

SP68	1.00	0.00	0.07	0.00	0.93	0.00	0.00	0.00	0.71
0.00									
SP69	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.50
0.00									
SP7	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP70	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP71	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP72	1.00	0.00	0.02	0.00	0.98	0.00	0.00	0.00	0.99
0.00									
SP73	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP74	1.00	0.00	0.13	0.00	0.87	0.00	0.00	0.00	0.95
0.00									
SP75	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP76	1.00	0.00	0.00	0.00	0.66	0.34	0.00	0.00	0.84
0.00									
SP77	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.45
0.00									
SP78	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.51
0.00									
SP79	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.32
0.00									
SP8	1.00	0.00	0.02	0.00	0.98	0.00	0.00	0.00	1.00
0.00									
SP80	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP81	1.00	0.00	0.00	0.00	0.70	0.30	0.00	0.00	0.99
0.00									
SP82	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.97
0.00									
SP83	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.10
0.00									
SP85	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.99
0.00									
SP9	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									

****
Conduit Surcharge Summary
****

No conduits were surcharged.

Analysis begun on: Wed May 28 10:42:28 2025
Analysis ended on: Wed May 28 10:42:47 2025
Total elapsed time: 00:00:19

WOITH ENGINEERING, INC.
ENGINEERS & SURVEYORS

APPENDIX B

10-year, 24-hour Event PCSWMM Output Report

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  EPA STORM WATER MANAGEMENT MODEL - VERSION 5.2 (Build 5.2.4)
  ------------------------------------------------------------


  *************
  Element Count
  *************
  Number of rain gages ...... 3
  Number of subcatchments ... 76
  Number of nodes ........... 93
  Number of links ........... 90
  Number of pollutants ...... 0
  Number of land uses ....... 0


  ****************
  Raingage Summary
  ****************
                                                    Data       Recording
  Name                 Data Source                  Type       Interval
  ----------------------------------------------------------------------
  100yr24hr            100yr24hr                    INTENSITY    6 min.
  10yr24hr             SCS_Type_II_1.66in           INTENSITY    6 min.
  2yr24hr              2yr24hr                      INTENSITY    6 min.


  ********************
  Subcatchment Summary
  ********************
  Name                        Area     Width   %Imperv    %Slope Rain Gage
Outlet
  ------------------------------------------------------------------------------
--------------------------
  1                           0.76     95.36     80.00    2.0000 10yr24hr
CB9
  10                          0.19     46.66     72.00    2.0000 10yr24hr
CB33
  11                          1.57    196.00     65.00    2.0000 10yr24hr
CB5
  12                          0.92    160.00      9.00    2.0000 10yr24hr
CB1
  13                          1.29    190.50     67.00    2.0000 10yr24hr
CB1
  14                          0.17     50.30     75.00    2.0000 10yr24hr
CB14
  15                          0.18     53.40     75.00    2.0000 10yr24hr
CB15
  16                          0.06     38.30     75.00    2.0000 10yr24hr
CB13
  17                          0.06     38.30     75.00    2.0000 10yr24hr
CB16
  18                          0.22     60.00     75.00    2.0000 10yr24hr
CB11
  19                          0.22     60.00     75.00    2.0000 10yr24hr
CB12
  2                           0.97    127.73     71.00    2.0000 10yr24hr
CB4
```

20	0.09	36.60	75.00	2.0000	10yr24hr
CB26					
21	0.09	36.60	75.00	2.0000	10yr24hr
CB27					
22	0.41	65.30	73.00	2.0000	10yr24hr
CB18					
23	0.73	183.60	63.00	2.0000	10yr24hr
OFTrail					
24	1.22	183.00	66.00	2.0000	10yr24hr
CB84					
25	1.65	192.00	69.00	2.0000	10yr24hr
OFTrail					
26	2.77	228.00	59.00	2.0000	10yr24hr
CB999					
27	0.53	77.00	66.00	2.0000	10yr24hr
CB56					
28	0.61	103.00	73.00	2.0000	10yr24hr
CB36					
29	0.31	54.00	72.00	2.0000	10yr24hr
CB35					
3	0.35	124.00	52.00	2.0000	10yr24hr
CB2					
30	0.22	56.00	72.00	2.0000	10yr24hr
CB31					
31	0.67	114.00	43.00	2.0000	10yr24hr
CB19					
32	0.54	103.00	72.00	2.0000	10yr24hr
CB40					
33	0.19	67.00	59.00	2.0000	10yr24hr
CB39					
34	0.18	54.00	61.00	2.0000	10yr24hr
CB38					
35	0.21	57.30	64.00	2.0000	10yr24hr
CB41					
36	0.07	33.00	73.00	2.0000	10yr24hr
CB42					
37	0.33	87.00	73.00	2.0000	10yr24hr
CB46					
38	0.12	37.00	73.00	2.0000	10yr24hr
CB44					
39	0.69	101.00	85.00	2.0000	10yr24hr
CB47					
4	0.25	100.75	72.00	2.0000	10yr24hr
CB3					
40	0.19	53.00	80.00	2.0000	10yr24hr
CB45					
41	0.98	120.00	67.00	2.0000	10yr24hr
CB31					
42	1.81	168.00	49.00	2.0000	10yr24hr
CB19					
43	0.75	142.50	57.00	2.0000	10yr24hr
CB22					
44	0.70	135.00	63.00	2.0000	10yr24hr
CB21					
45	1.27	245.00	76.00	2.0000	10yr24hr
CB23					
46	0.55	100.00	84.00	2.0000	10yr24hr
CB24					
47	0.31	42.00	75.00	2.0000	10yr24hr
CB28					

48	0.31	42.00	75.00	2.0000	10yr24hr
CB29					
49	0.18	60.40	75.00	2.0000	10yr24hr
CB50					
5	0.20	60.22	61.00	2.0000	10yr24hr
CB8					
50	0.18	60.40	75.00	2.0000	10yr24hr
CB49					
51	0.09	39.30	75.00	2.0000	10yr24hr
CB51					
52	0.09	39.30	75.00	2.0000	10yr24hr
CB54					
53	0.26	60.80	79.00	2.0000	10yr24hr
CB52					
54	0.19	46.00	75.00	2.0000	10yr24hr
CB53					
55	0.17	35.30	75.00	2.0000	10yr24hr
CB57					
56	0.10	33.50	75.00	2.0000	10yr24hr
CB62					
57	1.54	151.00	66.00	2.0000	10yr24hr
CB67					
58	2.24	224.00	44.00	2.0000	10yr24hr
CB68					
59	0.34	50.50	73.00	2.0000	10yr24hr
CB65					
6	0.25	65.00	57.00	2.0000	10yr24hr
CB7					
60	0.59	130.00	72.00	2.0000	10yr24hr
CB66					
61	0.39	99.00	68.00	2.0000	10yr24hr
CB69					
62	0.13	50.20	74.00	2.0000	10yr24hr
CB73					
63	0.20	48.00	81.00	2.0000	10yr24hr
CB70					
64	0.16	54.70	72.00	2.0000	10yr24hr
CB75					
65	0.09	63.80	53.00	2.0000	10yr24hr
CB74					
66	0.10	70.30	51.00	2.0000	10yr24hr
CB60					
67	0.17	54.90	83.00	2.0000	10yr24hr
CB76					
68	0.07	32.00	78.00	2.0000	10yr24hr
CB77					
69	1.20	174.00	82.00	2.0000	10yr24hr
CB61					
7	0.36	65.00	67.00	2.0000	10yr24hr
CB10					
70	0.10	36.90	80.00	2.0000	10yr24hr
CB80					
71	0.22	65.10	81.00	2.0000	10yr24hr
CB79					
72	0.54	57.40	88.00	2.0000	10yr24hr
CB82					
73	0.18	94.40	75.00	2.0000	10yr24hr
CB82					
74	1.78	240.00	84.00	2.0000	10yr24hr
CB72					

75	0.64	150.00	75.00	2.0000	10yr24hr
CB86					
76	0.93	500.00	80.00	2.0000	10yr24hr
CB88					
8	0.43	78.38	62.00	2.0000	10yr24hr
CB6					
9	0.32	79.00	73.00	2.0000	10yr24hr
CB34					

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
CB1	JUNCTION	3146.59	5.13	50.0	
CB10	JUNCTION	3149.24	3.66	50.0	
CB11	JUNCTION	3147.29	5.92	50.0	
CB12	JUNCTION	3148.24	4.99	50.0	
CB13	JUNCTION	3147.90	5.36	50.0	
CB14	JUNCTION	3148.81	3.73	50.0	
CB15	JUNCTION	3149.25	3.30	50.0	
CB16	JUNCTION	3148.85	4.43	50.0	
CB17	JUNCTION	3146.54	4.96	50.0	
CB18	JUNCTION	3146.61	4.97	50.0	
CB19	JUNCTION	3146.64	5.55	50.0	
CB2	JUNCTION	3147.51	3.97	50.0	
CB20	JUNCTION	3147.72	6.64	50.0	
CB21	JUNCTION	3148.28	4.77	50.0	
CB22	JUNCTION	3148.45	4.63	50.0	
CB23	JUNCTION	3148.86	3.93	50.0	
CB24	JUNCTION	3150.97	3.97	50.0	
CB25	JUNCTION	3148.05	4.65	50.0	
CB26	JUNCTION	3148.83	4.37	50.0	
CB27	JUNCTION	3149.79	3.41	50.0	
CB28	JUNCTION	3148.21	5.05	50.0	
CB29	JUNCTION	3149.16	4.10	50.0	
CB3	JUNCTION	3148.41	3.19	50.0	
CB30	JUNCTION	3147.24	4.32	50.0	
CB31	JUNCTION	3147.69	5.11	50.0	
CB32	JUNCTION	3148.63	4.49	50.0	
CB33	JUNCTION	3149.17	4.39	50.0	
CB34	JUNCTION	3149.68	4.02	50.0	
CB35	JUNCTION	3149.01	4.79	50.0	
CB36	JUNCTION	3149.50	4.47	50.0	
CB37	JUNCTION	3149.50	5.39	50.0	
CB38	JUNCTION	3149.80	5.20	50.0	
CB39	JUNCTION	3150.48	4.68	50.0	
CB4	JUNCTION	3148.28	3.22	50.0	
CB40	JUNCTION	3151.68	2.25	50.0	
CB41	JUNCTION	3151.67	3.36	50.0	
CB42	JUNCTION	3149.63	5.33	50.0	
CB43	JUNCTION	3150.51	3.77	50.0	
CB44	JUNCTION	3150.86	3.91	50.0	
CB45	JUNCTION	3151.25	3.58	50.0	
CB46	JUNCTION	3151.13	3.74	50.0	

CB47	JUNCTION	3151.52	3.53	50.0
CB48	JUNCTION	3148.74	6.03	50.0
CB49	JUNCTION	3149.89	4.81	50.0
CB5	JUNCTION	3147.08	4.16	50.0
CB50	JUNCTION	3148.84	5.89	50.0
CB51	JUNCTION	3149.42	4.24	50.0
CB52	JUNCTION	3149.83	3.83	50.0
CB53	JUNCTION	3150.76	2.91	50.0
CB54	JUNCTION	3150.13	3.49	50.0
CB55	JUNCTION	3147.44	5.15	50.0
CB56	JUNCTION	3147.47	4.78	50.0
CB57	JUNCTION	3147.51	4.82	50.0
CB58	JUNCTION	3147.68	4.88	50.0
CB59	JUNCTION	3147.92	5.62	50.0
CB6	JUNCTION	3147.78	4.92	50.0
CB60	JUNCTION	3148.71	4.04	50.0
CB61	JUNCTION	3149.22	4.09	50.0
CB62	JUNCTION	3148.45	4.41	0.0
CB63	JUNCTION	3148.55	3.47	0.0
CB64	JUNCTION	3148.82	3.46	0.0
CB65	JUNCTION	3148.92	4.08	0.0
CB66	JUNCTION	3149.03	4.00	0.0
CB67	JUNCTION	3148.80	3.43	50.0
CB68	JUNCTION	3148.67	3.59	50.0
CB69	JUNCTION	3148.68	5.36	50.0
CB7	JUNCTION	3147.90	4.86	50.0
CB70	JUNCTION	3149.05	5.11	50.0
CB71	JUNCTION	3149.18	4.99	50.0
CB72	JUNCTION	3149.74	4.13	50.0
CB73	JUNCTION	3150.01	4.28	50.0
CB74	JUNCTION	3149.77	3.18	50.0
CB75	JUNCTION	3149.96	3.11	50.0
CB76	JUNCTION	3149.06	3.94	50.0
CB77	JUNCTION	3149.32	4.27	0.0
CB78	JUNCTION	3150.01	4.40	50.0
CB79	JUNCTION	3150.70	3.80	50.0
CB8	JUNCTION	3148.36	4.58	50.0
CB80	JUNCTION	3149.49	3.81	0.0
CB81	JUNCTION	3149.55	4.48	0.0
CB82	JUNCTION	3149.86	2.95	0.0
CB83	JUNCTION	3149.09	3.62	50.0
CB84	JUNCTION	3149.80	3.06	50.0
CB85	JUNCTION	3149.12	3.13	0.0
CB86	JUNCTION	3149.20	2.88	0.0
CB88	JUNCTION	3150.10	3.00	0.0
CB9	JUNCTION	3148.90	3.65	50.0
CB999	JUNCTION	3147.44	6.00	50.0
OF_North	OUTFALL	3150.50	0.25	0.0
OF_South	OUTFALL	3150.50	0.50	0.0
OFTrail	OUTFALL	0.00	0.00	0.0
CMPNorth	STORAGE	3146.85	5.25	0.0
CMPSouth	STORAGE	3146.00	5.50	0.0

****
Link Summary
****

Name	From Node	To Node	Type	Length	% Slope	Roughness
C1	CB1	CMPSouth	CONDUIT	20.0	0.4700	0.0100
C2	CB999	CMPNorth	CONDUIT	10.0	0.9100	0.0100
C3	CB17	CMPSouth	CONDUIT	20.0	0.2000	0.0100
C4	CMPSouth	OF_South	CONDUIT	30.2	1.6574	0.0100
C5	CB55	CMPNorth	CONDUIT	20.7	0.4406	0.0100
C6	CMPNorth	OF_North	CONDUIT	18.8	7.1875	0.0100
SP1	CB2	CB1	CONDUIT	279.5	0.1499	0.0100
SP10	CB11	CB1	CONDUIT	202.0	0.2198	0.0100
SP11	CB12	CB11	CONDUIT	45.6	1.5489	0.0100
SP12	CB13	CB11	CONDUIT	120.4	0.2999	0.0100
SP13	CB14	CB13	CONDUIT	132.4	0.5001	0.0100
SP14	CB15	CB14	CONDUIT	44.3	1.0001	0.0100
SP15	CB16	CB13	CONDUIT	45.3	1.5524	0.0100
SP16	CB18	CB17	CONDUIT	20.0	0.3750	0.0100
SP17	CB19	CB18	CONDUIT	21.3	0.1078	0.0100
SP18	CB20	CB19	CONDUIT	359.5	0.2999	0.0100
SP19	CB21	CB20	CONDUIT	171.9	0.1798	0.0100
SP2	CB3	CB2	CONDUIT	124.6	0.5218	0.0100
SP20	CB22	CB21	CONDUIT	34.0	0.4993	0.0100
SP21	CB23	CB22	CONDUIT	16.2	1.0007	0.0100
SP22	CB24	CB23	CONDUIT	186.6	0.9992	0.0100
SP23	CB25	CB18	CONDUIT	199.5	0.2201	0.0100
SP24	CB26	CB25	CONDUIT	27.2	0.9992	0.0100
SP25	CB27	CB26	CONDUIT	48.4	1.9989	0.0100
SP26	CB28	CB25	CONDUIT	15.2	0.9989	0.0100
SP27	CB29	CB28	CONDUIT	47.8	1.9989	0.0100
SP28	CB30	CB19	CONDUIT	26.6	0.4015	0.0100
SP29	CB31	CB30	CONDUIT	110.6	0.3996	0.0100

SP3		CB4	CB2	CONDUIT	135.6
0.3835	0.0100				
SP30		CB32	CB31	CONDUIT	139.3
0.4990	0.0100				
SP31		CB33	CB32	CONDUIT	29.1
1.0003	0.0100				
SP32		CB34	CB33	CONDUIT	50.6
0.9990	0.0100				
SP33		CB35	CB32	CONDUIT	12.8
1.0027	0.0100				
SP34		CB36	CB35	CONDUIT	49.1
0.9998	0.0100				
SP35		CB37	CB20	CONDUIT	257.6
0.4997	0.0100				
SP36		CB38	CB37	CONDUIT	30.3
0.9982	0.0100				
SP37		CB39	CB38	CONDUIT	42.5
0.9995	0.0100				
SP38		CB40	CB39	CONDUIT	120.5
0.9992	0.0100				
SP39		CB41	CB39	CONDUIT	29.9
4.0008	0.0100				
SP4		CB5	CB1	CONDUIT	108.3
0.2198	0.0100				
SP40		CB42	CB37	CONDUIT	21.5
0.5986	0.0100				
SP41		CB43	CB42	CONDUIT	146.1
0.5997	0.0100				
SP42		CB44	CB43	CONDUIT	9.8
0.9957	0.0100				
SP43		CB45	CB44	CONDUIT	39.5
0.9985	0.0100				
SP44		CB46	CB43	CONDUIT	37.1
0.9994	0.0100				
SP45		CB47	CB46	CONDUIT	39.5
1.0006	0.0100				
SP46		CB48	CB20	CONDUIT	211.7
0.2499	0.0100				
SP47		CB49	CB48	CONDUIT	45.1
1.9979	0.0100				
SP48		CB50	CB48	CONDUIT	24.2
0.4008	0.0100				
SP49		CB51	CB50	CONDUIT	144.0
0.3999	0.0100				
SP5		CB6	CB5	CONDUIT	174.0
0.3999	0.0100				
SP50		CB52	CB51	CONDUIT	40.3
0.3998	0.0100				
SP51		CB53	CB52	CONDUIT	46.6
1.9990	0.0100				
SP52		CB54	CB51	CONDUIT	46.4
0.9991	0.0100				
SP53		CB56	CB55	CONDUIT	24.0
0.1165	0.0100				
SP54		CB57	CB56	CONDUIT	34.8
0.1094	0.0100				
SP55		CB58	CB57	CONDUIT	157.6
0.1098	0.0100				
SP56		CB59	CB58	CONDUIT	214.7
0.1099	0.0100				

SP57	CB60	CB59	CONDUIT	194.5	
0.1502	0.0100				
SP58	CB61	CB60	CONDUIT	26.0	
0.9996	0.0100				
SP59	CB62	CB57	CONDUIT	35.7	
0.3021	0.0100				
SP6	CB7	CB6	CONDUIT	30.1	
0.3988	0.0100				
SP60	CB63	CB62	CONDUIT	30.8	
0.2987	0.0100				
SP61	CB64	CB63	CONDUIT	67.8	
0.3994	0.0100				
SP62	CB65	CB64	CONDUIT	47.0	
0.2192	0.0100				
SP63	CB66	CB65	CONDUIT	51.0	
0.2197	0.0100				
SP64	CB67	CB58	CONDUIT	60.7	
0.4990	0.0100				
SP65	CB68	CB58	CONDUIT	33.4	
0.5003	0.0100				
SP66	CB69	CB59	CONDUIT	173.6	
0.1498	0.0100				
SP67	CB70	CB69	CONDUIT	41.4	
0.2992	0.0100				
SP68	CB71	CB70	CONDUIT	42.2	
0.2988	0.0100				
SP69	CB72	CB71	CONDUIT	187.5	
0.2997	0.0100				
SP7	CB8	CB7	CONDUIT	41.9	
0.5007	0.0100				
SP70	CB73	CB71	CONDUIT	22.6	
1.4973	0.0100				
SP71	CB74	CB60	CONDUIT	63.3	
0.4993	0.0100				
SP72	CB75	CB74	CONDUIT	37.4	
0.5001	0.0100				
SP73	CB76	CB60	CONDUIT	44.7	
0.2191	0.0100				
SP74	CB77	CB76	CONDUIT	119.5	
0.2175	0.0100				
SP75	CB78	CB77	CONDUIT	11.1	
1.7438	0.0100				
SP76	CB79	CB78	CONDUIT	45.7	
1.4999	0.0100				
SP77	CB80	CB77	CONDUIT	33.3	
0.5161	0.0100				
SP78	CB81	CB80	CONDUIT	26.6	
0.2181	0.0100				
SP79	CB82	CB81	CONDUIT	147.0	
0.2163	0.0100				
SP8	CB9	CB8	CONDUIT	108.4	
0.5001	0.0100				
SP80	CB83	CB55	CONDUIT	23.5	
0.6506	0.0100				
SP81	CB84	CB83	CONDUIT	109.4	
0.6500	0.0100				
SP82	CB85	CB66	CONDUIT	38.9	
0.2208	0.0100				
SP83	CB86	CB85	CONDUIT	35.8	
0.2205	0.0100				

SP85	CB88	CB82	CONDUIT	108.5	
0.2194	0.0100				
SP9	CB10	CB8	CONDUIT	38.3	
0.9989	0.0100				

****
Cross Section Summary
****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C1	CIRCULAR	2.50	4.91	0.62	2.50	1	36.56
C2	CIRCULAR	2.50	4.91	0.62	2.50	1	50.87
C3	CIRCULAR	2.50	4.91	0.62	2.50	1	23.85
C4	RECT_OPEN	0.50	25.00	0.49	50.00	1	297.34
C5	CIRCULAR	2.50	4.91	0.62	2.50	1	35.39
C6	RECT_OPEN	0.25	12.50	0.25	50.00	1	196.32
SP1	CIRCULAR	2.00	3.14	0.50	2.00	1	11.39
SP10	CIRCULAR	2.00	3.14	0.50	2.00	1	13.79
SP11	CIRCULAR	1.50	1.77	0.38	1.50	1	17.00
SP12	CIRCULAR	1.50	1.77	0.38	1.50	1	7.48
SP13	CIRCULAR	1.00	0.79	0.25	1.00	1	3.28
SP14	CIRCULAR	1.00	0.79	0.25	1.00	1	4.63
SP15	CIRCULAR	1.00	0.79	0.25	1.00	1	5.77
SP16	CIRCULAR	2.50	4.91	0.62	2.50	1	32.65
SP17	CIRCULAR	2.50	4.91	0.62	2.50	1	17.51
SP18	CIRCULAR	2.50	4.91	0.62	2.50	1	29.20
SP19	CIRCULAR	2.00	3.14	0.50	2.00	1	12.47
SP2	CIRCULAR	1.50	1.77	0.38	1.50	1	9.86
SP20	CIRCULAR	2.00	3.14	0.50	2.00	1	20.78
SP21	CIRCULAR	1.50	1.77	0.38	1.50	1	13.66
SP22	CIRCULAR	1.00	0.79	0.25	1.00	1	4.63
SP23	CIRCULAR	1.50	1.77	0.38	1.50	1	6.41
SP24	CIRCULAR	1.00	0.79	0.25	1.00	1	

SP25	CIRCULAR	1.00	0.79	0.25	1.00	1
6.55						
SP26	CIRCULAR	1.50	1.77	0.38	1.50	1
13.65						
SP27	CIRCULAR	1.50	1.77	0.38	1.50	1
19.31						
SP28	CIRCULAR	2.00	3.14	0.50	2.00	1
18.64						
SP29	CIRCULAR	2.00	3.14	0.50	2.00	1
18.59						
SP3	CIRCULAR	1.50	1.77	0.38	1.50	1
8.46						
SP30	CIRCULAR	1.50	1.77	0.38	1.50	1
9.65						
SP31	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP32	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP33	CIRCULAR	1.00	0.79	0.25	1.00	1
4.64						
SP34	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP35	CIRCULAR	1.50	1.77	0.38	1.50	1
9.65						
SP36	CIRCULAR	1.50	1.77	0.38	1.50	1
13.64						
SP37	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP38	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP39	CIRCULAR	1.00	0.79	0.25	1.00	1
9.26						
SP4	CIRCULAR	2.00	3.14	0.50	2.00	1
13.79						
SP40	CIRCULAR	1.50	1.77	0.38	1.50	1
10.57						
SP41	CIRCULAR	1.50	1.77	0.38	1.50	1
10.58						
SP42	CIRCULAR	1.00	0.79	0.25	1.00	1
4.62						
SP43	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP44	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP45	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP46	CIRCULAR	1.50	1.77	0.38	1.50	1
6.83						
SP47	CIRCULAR	1.00	0.79	0.25	1.00	1
6.55						
SP48	CIRCULAR	1.50	1.77	0.38	1.50	1
8.65						
SP49	CIRCULAR	1.50	1.77	0.38	1.50	1
8.64						
SP5	CIRCULAR	2.00	3.14	0.50	2.00	1
18.60						
SP50	CIRCULAR	1.00	0.79	0.25	1.00	1
2.93						
SP51	CIRCULAR	1.00	0.79	0.25	1.00	1
6.55						

SP52	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP53	CIRCULAR	2.50	4.91	0.62	2.50	1
18.20						
SP54	CIRCULAR	2.50	4.91	0.62	2.50	1
17.63						
SP55	CIRCULAR	2.50	4.91	0.62	2.50	1
17.67						
SP56	CIRCULAR	2.50	4.91	0.62	2.50	1
17.68						
SP57	CIRCULAR	2.00	3.14	0.50	2.00	1
11.40						
SP58	CIRCULAR	1.50	1.77	0.38	1.50	1
13.65						
SP59	CIRCULAR	1.50	1.77	0.38	1.50	1
7.51						
SP6	CIRCULAR	2.00	3.14	0.50	2.00	1
18.57						
SP60	CIRCULAR	1.50	1.77	0.38	1.50	1
7.46						
SP61	CIRCULAR	1.50	1.77	0.38	1.50	1
8.63						
SP62	CIRCULAR	1.50	1.77	0.38	1.50	1
6.39						
SP63	CIRCULAR	1.50	1.77	0.38	1.50	1
6.40						
SP64	CIRCULAR	1.50	1.77	0.38	1.50	1
9.65						
SP65	CIRCULAR	1.50	1.77	0.38	1.50	1
9.66						
SP66	CIRCULAR	2.00	3.14	0.50	2.00	1
11.38						
SP67	CIRCULAR	1.50	1.77	0.38	1.50	1
7.47						
SP68	CIRCULAR	1.50	1.77	0.38	1.50	1
7.46						
SP69	CIRCULAR	1.50	1.77	0.38	1.50	1
7.48						
SP7	CIRCULAR	1.50	1.77	0.38	1.50	1
9.66						
SP70	CIRCULAR	1.00	0.79	0.25	1.00	1
5.67						
SP71	CIRCULAR	1.00	0.79	0.25	1.00	1
3.27						
SP72	CIRCULAR	1.00	0.79	0.25	1.00	1
3.28						
SP73	CIRCULAR	1.50	1.77	0.38	1.50	1
6.39						
SP74	CIRCULAR	1.50	1.77	0.38	1.50	1
6.37						
SP75	CIRCULAR	1.00	0.79	0.25	1.00	1
6.12						
SP76	CIRCULAR	1.00	0.79	0.25	1.00	1
5.67						
SP77	CIRCULAR	1.50	1.77	0.38	1.50	1
9.81						
SP78	CIRCULAR	1.50	1.77	0.38	1.50	1
6.38						
SP79	CIRCULAR	1.50	1.77	0.38	1.50	1
6.35						

```
  SP8              CIRCULAR            1.50     1.77     0.38     1.50        1
9.66
  SP80             CIRCULAR            1.00     0.79     0.25     1.00        1
3.74
  SP81             CIRCULAR            1.00     0.79     0.25     1.00        1
3.73
  SP82             CIRCULAR            1.50     1.77     0.38     1.50        1
6.42
  SP83             CIRCULAR            1.50     1.77     0.38     1.50        1
6.41
  SP85             CIRCULAR            1.50     1.77     0.38     1.50        1
6.40
  SP9              CIRCULAR            1.00     0.79     0.25     1.00        1
4.63


  ****************
  Analysis Options
  ****************
  Flow Units ............... CFS
  Process Models:
    Rainfall/Runoff ........ YES
    RDII ................... NO
    Snowmelt ............... NO
    Groundwater ............ NO
    Flow Routing ........... YES
    Ponding Allowed ........ YES
    Water Quality .......... NO
  Infiltration Method ...... HORTON
  Flow Routing Method ...... DYNWAVE
  Surcharge Method ......... EXTRAN
  Starting Date ............ 01/27/2025 00:00:00
  Ending Date .............. 01/30/2025 00:00:00
  Antecedent Dry Days ...... 0.0
  Report Time Step ......... 00:00:02
  Wet Time Step ............ 00:00:30
  Dry Time Step ............ 00:05:00
  Routing Time Step ........ 2.00 sec
  Variable Time Step ....... NO
  Maximum Trials ........... 16
  Number of Threads ........ 8
  Head Tolerance ........... 0.000500 ft


  **************************        Volume         Depth
  Runoff Quantity Continuity     acre-feet        inches
  **************************     ---------       -------
  Total Precipitation ......         5.544         1.660
  Evaporation Loss .........         0.000         0.000
  Infiltration Loss ........         1.835         0.549
  Surface Runoff ...........         3.655         1.094
  Final Storage ............         0.055         0.016
  Continuity Error (%) .....        -0.004


  **************************        Volume        Volume
  Flow Routing Continuity        acre-feet      10^6 gal
  **************************     ---------     ---------
```

Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	3.655	1.191
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	0.000	0.000
External Outflow	0.219	0.071
Flooding Loss	0.000	0.000
Evaporation Loss	0.000	0.000
Exfiltration Loss	3.435	1.119
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.000	0.000
Continuity Error (%)	0.031	

****
Highest Flow Instability Indexes
****
Link C2 (9)

****
Most Frequent Nonconverging Nodes
****
Convergence obtained at all time steps.

****
Routing Time Step Summary
****

Minimum Time Step	:	2.00 sec
Average Time Step	:	2.00 sec
Maximum Time Step	:	2.00 sec
% of Time in Steady State	:	0.00
Average Iterations per Step	:	2.05
% of Steps Not Converging	:	0.00

****
Subcatchment Runoff Summary
****

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
1	1.66	0.00	0.00	0.33	1.31	0.01	1.31	0.03	1.30	0.791
10	1.66	0.00	0.00	0.46	1.19	0.01	1.19	0.01	0.31	0.715
11	1.66	0.00	0.00	0.58	1.07	0.01	1.07	0.05	2.23	0.644
12	1.66	0.00	0.00	1.50	0.15					

13			1.66	0.00	0.00	0.54	1.10
0.01	1.10	0.04	1.91	0.664			
14			1.66	0.00	0.00	0.41	1.24
0.01	1.24	0.01	0.30	0.745			
15			1.66	0.00	0.00	0.41	1.24
0.01	1.24	0.01	0.31	0.745			
16			1.66	0.00	0.00	0.40	1.24
0.01	1.24	0.00	0.10	0.748			
17			1.66	0.00	0.00	0.40	1.24
0.01	1.24	0.00	0.10	0.748			
18			1.66	0.00	0.00	0.41	1.24
0.01	1.24	0.01	0.37	0.744			
19			1.66	0.00	0.00	0.41	1.24
0.01	1.24	0.01	0.37	0.744			
2			1.66	0.00	0.00	0.48	1.17
0.01	1.17	0.03	1.50	0.703			
20			1.66	0.00	0.00	0.40	1.24
0.01	1.24	0.00	0.15	0.746			
21			1.66	0.00	0.00	0.40	1.24
0.01	1.24	0.00	0.15	0.746			
22			1.66	0.00	0.00	0.44	1.19
0.01	1.20	0.01	0.67	0.723			
23			1.66	0.00	0.00	0.60	1.04
0.01	1.04	0.02	1.04	0.627			
24			1.66	0.00	0.00	0.56	1.09
0.01	1.09	0.04	1.78	0.654			
25			1.66	0.00	0.00	0.51	1.13
0.01	1.13	0.05	2.46	0.683			
26			1.66	0.00	0.00	0.68	0.97
0.00	0.97	0.07	3.46	0.584			
27			1.66	0.00	0.00	0.56	1.09
0.01	1.09	0.02	0.78	0.654			
28			1.66	0.00	0.00	0.44	1.20
0.01	1.20	0.02	0.98	0.723			
29			1.66	0.00	0.00	0.46	1.18
0.01	1.18	0.01	0.50	0.714			
3			1.66	0.00	0.00	0.78	0.86
0.01	0.86	0.01	0.43	0.520			
30			1.66	0.00	0.00	0.46	1.19
0.01	1.19	0.01	0.36	0.715			
31			1.66	0.00	0.00	0.94	0.71
0.01	0.71	0.01	0.65	0.428			
32			1.66	0.00	0.00	0.46	1.18
0.01	1.18	0.02	0.88	0.714			
33			1.66	0.00	0.00	0.67	0.98
0.01	0.98	0.01	0.26	0.589			
34			1.66	0.00	0.00	0.64	1.01
0.01	1.01	0.00	0.25	0.608			
35			1.66	0.00	0.00	0.59	1.06
0.01	1.06	0.01	0.31	0.637			
36			1.66	0.00	0.00	0.44	1.21
0.01	1.21	0.00	0.12	0.727			
37			1.66	0.00	0.00	0.44	1.20
0.01	1.20	0.01	0.54	0.725			
38			1.66	0.00	0.00	0.44	1.20
0.01	1.20	0.00	0.20	0.725			
39			1.66	0.00	0.00	0.24	1.40
0.01	1.40	0.03	1.27	0.840			
4			1.66	0.00	0.00	0.45	1.19
0.01	1.19	0.01	0.41	0.717			

40			1.66	0.00	0.00	0.32	1.32
0.01	1.32	0.01	0.35	0.793			
41			1.66	0.00	0.00	0.54	1.10
0.01	1.10	0.03	1.42	0.663			
42			1.66	0.00	0.00	0.84	0.81
0.00	0.81	0.04	1.93	0.486			
43			1.66	0.00	0.00	0.71	0.94
0.01	0.94	0.02	0.97	0.567			
44			1.66	0.00	0.00	0.61	1.04
0.01	1.04	0.02	1.00	0.626			
45			1.66	0.00	0.00	0.39	1.25
0.01	1.25	0.04	2.15	0.753			
46			1.66	0.00	0.00	0.26	1.38
0.01	1.38	0.02	1.02	0.831			
47			1.66	0.00	0.00	0.41	1.23
0.01	1.23	0.01	0.51	0.742			
48			1.66	0.00	0.00	0.41	1.23
0.01	1.23	0.01	0.51	0.742			
49			1.66	0.00	0.00	0.40	1.24
0.01	1.24	0.01	0.31	0.745			
5			1.66	0.00	0.00	0.64	1.01
0.01	1.01	0.01	0.28	0.608			
50			1.66	0.00	0.00	0.40	1.24
0.01	1.24	0.01	0.31	0.745			
51			1.66	0.00	0.00	0.40	1.24
0.01	1.24	0.00	0.16	0.746			
52			1.66	0.00	0.00	0.40	1.24
0.01	1.24	0.00	0.16	0.746			
53			1.66	0.00	0.00	0.34	1.30
0.01	1.30	0.01	0.46	0.783			
54			1.66	0.00	0.00	0.41	1.24
0.01	1.24	0.01	0.32	0.744			
55			1.66	0.00	0.00	0.41	1.23
0.01	1.23	0.01	0.29	0.743			
56			1.66	0.00	0.00	0.40	1.24
0.01	1.24	0.00	0.17	0.745			
57			1.66	0.00	0.00	0.56	1.08
0.00	1.08	0.05	2.16	0.653			
58			1.66	0.00	0.00	0.92	0.72
0.01	0.72	0.04	2.19	0.436			
59			1.66	0.00	0.00	0.44	1.20
0.01	1.20	0.01	0.54	0.723			
6			1.66	0.00	0.00	0.70	0.94
0.01	0.94	0.01	0.33	0.568			
60			1.66	0.00	0.00	0.46	1.19
0.01	1.19	0.02	0.96	0.714			
61			1.66	0.00	0.00	0.52	1.12
0.01	1.12	0.01	0.60	0.676			
62			1.66	0.00	0.00	0.42	1.22
0.01	1.22	0.00	0.22	0.736			
63			1.66	0.00	0.00	0.31	1.33
0.01	1.33	0.01	0.36	0.803			
64			1.66	0.00	0.00	0.45	1.19
0.01	1.19	0.01	0.27	0.716			
65			1.66	0.00	0.00	0.76	0.89
0.02	0.89	0.00	0.12	0.534			
66			1.66	0.00	0.00	0.79	0.85
0.02	0.85	0.00	0.13	0.515			
67			1.66	0.00	0.00	0.27	1.37
0.01	1.37	0.01	0.32	0.823			

68			1.66	0.00	0.00	0.35	1.29
0.01	1.29	0.00	0.12	0.776			
69			1.66	0.00	0.00	0.29	1.35
0.01	1.35	0.04	2.13	0.811			
7			1.66	0.00	0.00	0.54	1.10
0.01	1.10	0.01	0.55	0.665			
70			1.66	0.00	0.00	0.32	1.32
0.01	1.32	0.00	0.18	0.794			
71			1.66	0.00	0.00	0.31	1.33
0.01	1.33	0.01	0.40	0.803			
72			1.66	0.00	0.00	0.20	1.44
0.00	1.44	0.02	0.98	0.869			
73			1.66	0.00	0.00	0.40	1.24
0.01	1.24	0.01	0.32	0.747			
74			1.66	0.00	0.00	0.26	1.38
0.00	1.38	0.07	3.21	0.831			
75			1.66	0.00	0.00	0.41	1.23
0.01	1.23	0.02	1.08	0.744			
76			1.66	0.00	0.00	0.32	1.32
0.01	1.32	0.03	1.73	0.795			
8			1.66	0.00	0.00	0.62	1.02
0.01	1.02	0.01	0.60	0.616			
9			1.66	0.00	0.00	0.44	1.20
0.01	1.20	0.01	0.52	0.725			

****
Node Depth Summary
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Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
CB1	JUNCTION	0.19	1.98	3148.57	0 12:53	1.98
CB10	JUNCTION	0.01	0.25	3149.49	0 11:54	0.25
CB11	JUNCTION	0.10	1.28	3148.57	0 12:55	1.28
CB12	JUNCTION	0.02	0.33	3148.57	0 12:51	0.33
CB13	JUNCTION	0.04	0.67	3148.57	0 12:55	0.67
CB14	JUNCTION	0.02	0.31	3149.12	0 11:54	0.31
CB15	JUNCTION	0.01	0.18	3149.43	0 11:54	0.18
CB16	JUNCTION	0.01	0.09	3148.94	0 11:51	0.09
CB17	JUNCTION	0.22	2.03	3148.57	0 12:53	2.03
CB18	JUNCTION	0.20	1.98	3148.59	0 11:55	1.98
CB19	JUNCTION	0.21	2.16	3148.80	0 11:55	2.16
CB2	JUNCTION	0.08	1.06	3148.57	0 12:55	1.06
CB20	JUNCTION	0.08	1.40	3149.12	0 11:55	1.40
CB21	JUNCTION	0.05	1.07	3149.34	0 11:54	1.07
CB22	JUNCTION	0.03	1.01	3149.45	0 11:54	1.01
CB23	JUNCTION	0.03	0.72	3149.57	0 11:54	0.72
CB24	JUNCTION	0.02	0.32	3151.29	0 11:54	0.32
CB25	JUNCTION	0.04	0.61	3148.66	0 11:55	0.61
CB26	JUNCTION	0.01	0.19	3149.02	0 11:54	0.19
CB27	JUNCTION	0.01	0.10	3149.90	0 11:54	0.10
CB28	JUNCTION	0.02	0.50	3148.71	0 11:55	0.50
CB29	JUNCTION	0.01	0.17	3149.33	0 11:54	0.17
CB3	JUNCTION	0.01	0.21	3148.62	0 11:54	0.21

CB30	JUNCTION	0.11	1.58	3148.82	0	11:55	1.58
CB31	JUNCTION	0.07	1.18	3148.86	0	11:56	1.18
CB32	JUNCTION	0.03	0.55	3149.19	0	11:54	0.55
CB33	JUNCTION	0.02	0.34	3149.52	0	11:54	0.34
CB34	JUNCTION	0.01	0.24	3149.91	0	11:54	0.24
CB35	JUNCTION	0.02	0.52	3149.53	0	11:54	0.52
CB36	JUNCTION	0.02	0.34	3149.84	0	11:54	0.34
CB37	JUNCTION	0.03	0.74	3150.25	0	11:54	0.74
CB38	JUNCTION	0.02	0.56	3150.36	0	11:54	0.56
CB39	JUNCTION	0.02	0.46	3150.94	0	11:54	0.46
CB4	JUNCTION	0.03	0.44	3148.73	0	11:54	0.44
CB40	JUNCTION	0.02	0.29	3151.98	0	11:54	0.29
CB41	JUNCTION	0.01	0.12	3151.80	0	11:54	0.12
CB42	JUNCTION	0.03	0.70	3150.33	0	11:54	0.70
CB43	JUNCTION	0.03	0.53	3151.03	0	11:54	0.53
CB44	JUNCTION	0.01	0.31	3151.17	0	11:54	0.31
CB45	JUNCTION	0.01	0.19	3151.44	0	11:54	0.19
CB46	JUNCTION	0.02	0.54	3151.67	0	11:54	0.54
CB47	JUNCTION	0.02	0.42	3151.94	0	11:54	0.42
CB48	JUNCTION	0.03	0.55	3149.30	0	11:55	0.55
CB49	JUNCTION	0.01	0.15	3150.04	0	11:54	0.15
CB5	JUNCTION	0.13	1.49	3148.57	0	12:52	1.49
CB50	JUNCTION	0.02	0.52	3149.37	0	11:54	0.52
CB51	JUNCTION	0.02	0.37	3149.79	0	11:54	0.37
CB52	JUNCTION	0.02	0.40	3150.23	0	11:54	0.40
CB53	JUNCTION	0.01	0.15	3150.91	0	11:54	0.15
CB54	JUNCTION	0.01	0.13	3150.26	0	11:54	0.13
CB55	JUNCTION	0.25	2.27	3149.71	0	13:07	2.27
CB56	JUNCTION	0.25	2.24	3149.71	0	13:06	2.24
CB57	JUNCTION	0.25	2.21	3149.71	0	13:06	2.21
CB58	JUNCTION	0.22	2.12	3149.80	0	11:56	2.12
CB59	JUNCTION	0.19	2.03	3149.95	0	11:56	2.03
CB6	JUNCTION	0.06	0.79	3148.57	0	12:52	0.79
CB60	JUNCTION	0.10	1.42	3150.13	0	11:55	1.42
CB61	JUNCTION	0.04	0.93	3150.15	0	11:55	0.93
CB62	JUNCTION	0.11	1.26	3149.71	0	13:06	1.26
CB63	JUNCTION	0.10	1.17	3149.71	0	13:06	1.17
CB64	JUNCTION	0.07	0.89	3149.71	0	13:06	0.89
CB65	JUNCTION	0.07	0.83	3149.75	0	11:54	0.83
CB66	JUNCTION	0.05	0.77	3149.81	0	11:54	0.77
CB67	JUNCTION	0.07	1.02	3149.83	0	11:56	1.02
CB68	JUNCTION	0.08	1.15	3149.82	0	11:56	1.15
CB69	JUNCTION	0.10	1.33	3150.00	0	11:55	1.33
CB7	JUNCTION	0.05	0.67	3148.57	0	12:52	0.67
CB70	JUNCTION	0.06	1.08	3150.13	0	11:55	1.08
CB71	JUNCTION	0.05	1.06	3150.24	0	11:55	1.06
CB72	JUNCTION	0.03	0.76	3150.50	0	11:54	0.76
CB73	JUNCTION	0.01	0.23	3150.24	0	11:55	0.23
CB74	JUNCTION	0.01	0.37	3150.14	0	11:56	0.37
CB75	JUNCTION	0.01	0.21	3150.18	0	11:56	0.21
CB76	JUNCTION	0.06	1.14	3150.20	0	11:55	1.14
CB77	JUNCTION	0.05	1.04	3150.36	0	11:55	1.04
CB78	JUNCTION	0.01	0.36	3150.37	0	11:55	0.36
CB79	JUNCTION	0.01	0.18	3150.88	0	11:54	0.18
CB8	JUNCTION	0.03	0.57	3148.92	0	11:54	0.57
CB80	JUNCTION	0.03	0.95	3150.44	0	11:55	0.95
CB81	JUNCTION	0.04	0.95	3150.50	0	11:54	0.95

CB82	JUNCTION	0.04	0.88	3150.74	0	11:54	0.88
CB83	JUNCTION	0.05	0.62	3149.71	0	13:07	0.62
CB84	JUNCTION	0.02	0.52	3150.32	0	11:54	0.52
CB85	JUNCTION	0.04	0.70	3149.82	0	11:54	0.70
CB86	JUNCTION	0.04	0.64	3149.84	0	11:54	0.64
CB88	JUNCTION	0.03	0.74	3150.84	0	11:54	0.74
CB9	JUNCTION	0.02	0.38	3149.28	0	11:54	0.38
CB999	JUNCTION	0.23	2.27	3149.71	0	13:07	2.27
OF_North	OUTFALL	0.00	0.00	3150.50	0	00:00	0.00
OF_South	OUTFALL	0.00	0.00	3150.50	0	00:00	0.00
OFTrail	OUTFALL	0.00	0.00	0.00	0	00:00	0.00
CMPNorth	STORAGE	0.31	2.86	3149.71	0	13:07	2.86
CMPSouth	STORAGE	0.25	2.57	3148.57	0	12:53	2.57

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Node Inflow Summary
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Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days	hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
CB1	JUNCTION	2.12	10.81	0	11:54	0.0425	0.226	-0.193
CB10	JUNCTION	0.55	0.55	0	11:54	0.0109	0.0109	0.001
CB11	JUNCTION	0.37	1.54	0	11:54	0.00731	0.0303	-0.321
CB12	JUNCTION	0.37	0.37	0	11:54	0.00731	0.00731	0.091
CB13	JUNCTION	0.10	0.80	0	11:54	0.00189	0.0158	0.484
CB14	JUNCTION	0.30	0.61	0	11:54	0.00585	0.012	0.241
CB15	JUNCTION	0.31	0.31	0	11:54	0.00617	0.00617	-0.002
CB16	JUNCTION	0.10	0.10	0	11:54	0.00189	0.00189	0.207
CB17	JUNCTION	0.00	17.72	0	11:55	0	0.394	0.068
CB18	JUNCTION	0.67	17.73	0	11:55	0.0135	0.394	-0.036
CB19	JUNCTION	2.59	16.09	0	11:55	0.0524	0.354	0.034
CB2	JUNCTION	0.43	2.31	0	11:54	0.00826	0.0467	0.418
CB20	JUNCTION	0.00	10.72	0	11:54	0	0.218	-0.646
CB21	JUNCTION	1.00	5.06	0	11:54	0.0197	0.102	0.655

CB22	JUNCTION	0.97	4.09	0	11:54	0.0191	0.0827	-0.006
CB23	JUNCTION	2.15	3.16	0	11:54	0.0429	0.0636	-0.007
CB24	JUNCTION	1.02	1.02	0	11:54	0.0206	0.0206	0.019
CB25	JUNCTION	0.00	1.28	0	11:54	0	0.0267	0.585
CB26	JUNCTION	0.15	0.30	0	11:54	0.00288	0.00577	0.003
CB27	JUNCTION	0.15	0.15	0	11:54	0.00288	0.00288	-0.001
CB28	JUNCTION	0.51	1.02	0	11:54	0.0105	0.0209	0.005
CB29	JUNCTION	0.51	0.51	0	11:54	0.0105	0.0105	-0.019
CB3	JUNCTION	0.41	0.41	0	11:54	0.00799	0.00799	0.244
CB30	JUNCTION	0.00	3.85	0	11:54	0	0.0822	0.064
CB31	JUNCTION	1.78	4.06	0	11:54	0.0362	0.082	-0.240
CB32	JUNCTION	0.00	2.30	0	11:54	0	0.046	0.338
CB33	JUNCTION	0.31	0.83	0	11:54	0.00604	0.0164	0.007
CB34	JUNCTION	0.52	0.52	0	11:54	0.0103	0.0103	0.001
CB35	JUNCTION	0.50	1.48	0	11:54	0.00983	0.0296	0.001
CB36	JUNCTION	0.98	0.98	0	11:54	0.0198	0.0198	-0.000
CB37	JUNCTION	0.00	4.13	0	11:54	0	0.0836	0.598
CB38	JUNCTION	0.25	1.68	0	11:54	0.00485	0.0335	-0.002
CB39	JUNCTION	0.26	1.45	0	11:54	0.00515	0.0287	0.001
CB4	JUNCTION	1.50	1.50	0	11:54	0.0307	0.0307	0.503
CB40	JUNCTION	0.88	0.88	0	11:54	0.0175	0.0175	-0.001
CB41	JUNCTION	0.31	0.31	0	11:54	0.006	0.006	-0.000
CB42	JUNCTION	0.12	2.47	0	11:54	0.0024	0.0501	0.004
CB43	JUNCTION	0.00	2.36	0	11:54	0	0.0477	-0.005
CB44	JUNCTION	0.20	0.55	0	11:54	0.00393	0.0108	0.012
CB45	JUNCTION	0.35	0.35	0	11:54	0.00684	0.00684	0.000
CB46	JUNCTION	0.54	1.81	0	11:54	0.0107	0.0369	0.000
CB47	JUNCTION	1.27	1.27	0	11:54	0.0262	0.0262	-0.000
CB48	JUNCTION	0.00	1.68	0	11:54	0	0.0337	0.785
CB49	JUNCTION	0.31	0.31	0	11:54	0.00596	0.00596	0.046

CB5		JUNCTION	2.23	5.20	0	11:54	0.0454
0.107	0.248						
CB50		JUNCTION	0.31	1.40	0	11:54	0.00596
0.0277	0.001						
CB51		JUNCTION	0.16	1.10	0	11:54	0.00309
0.0218	-0.001						
CB52		JUNCTION	0.46	0.79	0	11:54	0.00921
0.0156	0.001						
CB53		JUNCTION	0.32	0.32	0	11:54	0.00636
0.00636	-0.001						
CB54		JUNCTION	0.16	0.16	0	11:54	0.00309
0.00309	0.004						
CB55		JUNCTION	0.00	18.17	0	11:56	0
0.425	0.057						
CB56		JUNCTION	0.78	16.65	0	11:56	0.0157
0.389	-0.000						
CB57		JUNCTION	0.29	16.00	0	11:56	0.0057
0.374	-0.012						
CB58		JUNCTION	0.00	13.49	0	11:55	0
0.313	-0.022						
CB59		JUNCTION	0.00	9.83	0	11:55	0
0.223	-0.361						
CB6		JUNCTION	0.60	3.01	0	11:54	0.0118
0.0616	-0.084						
CB60		JUNCTION	0.13	6.18	0	11:54	0.0024
0.134	0.335						
CB61		JUNCTION	2.13	2.13	0	11:54	0.0437
0.0437	0.013						
CB62		JUNCTION	0.17	2.46	0	11:54	0.00336
0.0548	0.105						
CB63		JUNCTION	0.00	2.35	0	11:54	0
0.0514	0.013						
CB64		JUNCTION	0.00	2.43	0	11:54	0
0.0514	-0.009						
CB65		JUNCTION	0.54	2.49	0	11:54	0.011
0.0514	-0.002						
CB66		JUNCTION	0.96	1.99	0	11:54	0.019
0.0405	-0.005						
CB67		JUNCTION	2.16	2.16	0	11:54	0.0452
0.0452	0.112						
CB68		JUNCTION	2.19	2.19	0	11:54	0.0441
0.0441	0.075						
CB69		JUNCTION	0.60	4.08	0	11:54	0.0118
0.0897	0.178						
CB7		JUNCTION	0.33	2.42	0	11:54	0.0065
0.0497	-0.052						
CB70		JUNCTION	0.36	3.58	0	11:54	0.00716
0.078	0.162						
CB71		JUNCTION	0.00	3.37	0	11:54	0
0.0709	0.016						
CB72		JUNCTION	3.21	3.21	0	11:54	0.0665
0.0665	-0.026						
CB73		JUNCTION	0.22	0.22	0	11:54	0.00432
0.00432	0.006						
CB74		JUNCTION	0.12	0.38	0	11:54	0.00226
0.00745	0.312						
CB75		JUNCTION	0.27	0.27	0	11:54	0.00519
0.00519	-0.006						
CB76		JUNCTION	0.32	3.74	0	11:54	0.00626
0.0807	0.128						

CB77	JUNCTION	0.12	3.51	0	11:54	0.00233	0.0744	-0.017
CB78	JUNCTION	0.00	0.40	0	11:54	0	0.00785	0.015
CB79	JUNCTION	0.40	0.40	0	11:54	0.00785	0.00785	-0.002
CB8	JUNCTION	0.28	2.11	0	11:54	0.00542	0.0433	0.061
CB80	JUNCTION	0.18	3.06	0	11:54	0.00354	0.0642	-0.001
CB81	JUNCTION	0.00	2.95	0	11:54	0	0.0607	0.007
CB82	JUNCTION	1.30	3.01	0	11:54	0.0273	0.0607	-0.000
CB83	JUNCTION	0.00	1.78	0	11:54	0	0.0359	0.109
CB84	JUNCTION	1.78	1.78	0	11:54	0.0359	0.0359	-0.022
CB85	JUNCTION	0.00	1.07	0	11:54	0	0.0214	0.003
CB86	JUNCTION	1.08	1.08	0	11:54	0.0214	0.0214	-0.006
CB88	JUNCTION	1.73	1.73	0	11:54	0.0333	0.0333	-0.013
CB9	JUNCTION	1.30	1.30	0	11:54	0.0269	0.0269	-0.004
CB999	JUNCTION	3.46	3.46	0	11:54	0.0729	0.0729	0.002
OF_North	OUTFALL	0.00	0.00	0	00:00	0	0	0.000 gal
OF_South	OUTFALL	0.00	0.00	0	00:00	0	0	0.000 gal
OFTrail	OUTFALL	3.51	3.51	0	11:54	0.0714	0.0714	0.000
CMPNorth	STORAGE	0.00	21.19	0	11:55	0	0.498	-0.043
CMPSouth	STORAGE	0.00	27.50	0	11:55	0	0.621	-0.053

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Node Surcharge Summary
****

No nodes were surcharged.

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Node Flooding Summary
****

No nodes were flooded.

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Storage Volume Summary
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	Average Volume	Avg Pcnt	Evap Pcnt	Exfil Pcnt	Maximum Volume	Max Pcnt	Time of Max Occurrence	Maximum Outflow
Storage Unit	1000 ft³	Full	Loss	Loss	1000 ft³	Full	days hr:min	CFS
CMPNorth	2.748	7.0	0.0	100.0	26.972	68.8	0 13:07	1.29
CMPSouth	2.907	5.2	0.0	100.1	32.560	58.0	0 12:53	1.76

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Outfall Loading Summary
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Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
OF_North	0.00	0.00	0.00	0.000
OF_South	0.00	0.00	0.00	0.000
OFTrail	35.79	0.10	3.51	0.071
System	11.93	0.10	3.51	0.071

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Link Flow Summary
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Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C1	CONDUIT	10.28	0 11:53	5.15	0.28	0.81
C2	CONDUIT	3.44	0 11:54	3.96	0.07	0.93
C3	CONDUIT	17.72	0 11:55	5.20	0.74	0.82
C4	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
C5	CONDUIT	18.17	0 11:56	5.90	0.51	0.93
C6	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
SP1	CONDUIT	2.26	0 11:54	2.45	0.20	0.63
SP10	CONDUIT	1.38	0 11:53	1.58	0.10	0.75
SP11	CONDUIT	0.37	0 11:54	3.51	0.02	0.45
SP12	CONDUIT	0.80	0 11:54	2.58	0.11	0.57
SP13	CONDUIT	0.61	0 11:54	3.07	0.19	0.30
SP14	CONDUIT	0.31	0 11:54	2.14	0.07	0.24
SP15	CONDUIT	0.10	0 11:54	2.71	0.02	0.22
SP16	CONDUIT	17.72	0 11:55	4.39	0.54	0.80
SP17	CONDUIT	15.99	0 11:55	3.68	0.91	0.83
SP18	CONDUIT	10.23	0 11:55	2.74	0.35	0.71
SP19	CONDUIT	4.96	0 11:54	3.45	0.40	0.55
SP2	CONDUIT	0.41	0 11:54	2.16	0.04	0.32

SP20	CONDUIT	4.07	0	11:54	2.74	0.20	0.52
SP21	CONDUIT	3.13	0	11:54	4.53	0.23	0.49
SP22	CONDUIT	1.02	0	11:54	4.14	0.22	0.39
SP23	CONDUIT	1.17	0	11:55	2.33	0.18	0.53
SP24	CONDUIT	0.30	0	11:54	3.03	0.06	0.18
SP25	CONDUIT	0.15	0	11:54	2.03	0.02	0.15
SP26	CONDUIT	0.99	0	11:54	2.17	0.07	0.37
SP27	CONDUIT	0.51	0	11:54	2.01	0.03	0.22
SP28	CONDUIT	3.76	0	11:54	2.66	0.20	0.81
SP29	CONDUIT	3.85	0	11:54	2.72	0.21	0.69
SP3	CONDUIT	1.49	0	11:54	3.51	0.18	0.37
SP30	CONDUIT	2.29	0	11:54	3.63	0.24	0.49
SP31	CONDUIT	0.83	0	11:54	3.84	0.18	0.32
SP32	CONDUIT	0.52	0	11:54	2.78	0.11	0.29
SP33	CONDUIT	1.48	0	11:54	4.27	0.32	0.45
SP34	CONDUIT	0.98	0	11:54	3.05	0.21	0.43
SP35	CONDUIT	4.14	0	11:54	4.68	0.43	0.54
SP36	CONDUIT	1.68	0	11:54	2.45	0.12	0.43
SP37	CONDUIT	1.44	0	11:54	4.59	0.31	0.42
SP38	CONDUIT	0.87	0	11:54	3.23	0.19	0.38
SP39	CONDUIT	0.31	0	11:54	1.64	0.03	0.29
SP4	CONDUIT	5.07	0	11:54	3.33	0.37	0.80
SP40	CONDUIT	2.47	0	11:54	2.93	0.23	0.48
SP41	CONDUIT	2.35	0	11:54	3.46	0.22	0.41
SP42	CONDUIT	0.55	0	11:54	3.12	0.12	0.29
SP43	CONDUIT	0.35	0	11:54	2.26	0.08	0.25
SP44	CONDUIT	1.81	0	11:54	4.79	0.39	0.49
SP45	CONDUIT	1.27	0	11:54	3.44	0.27	0.48
SP46	CONDUIT	1.64	0	11:54	2.70	0.24	0.49
SP47	CONDUIT	0.31	0	11:54	3.43	0.05	0.22
SP48	CONDUIT	1.38	0	11:54	2.47	0.16	0.36
SP49	CONDUIT	1.10	0	11:54	2.47	0.13	0.30
SP5	CONDUIT	3.00	0	11:54	2.60	0.16	0.57
SP50	CONDUIT	0.78	0	11:54	2.88	0.27	0.38
SP51	CONDUIT	0.32	0	11:54	1.81	0.05	0.28
SP52	CONDUIT	0.16	0	11:54	2.70	0.03	0.13
SP53	CONDUIT	16.66	0	11:56	4.41	0.92	0.90
SP54	CONDUIT	16.01	0	11:56	3.88	0.91	0.89
SP55	CONDUIT	13.50	0	11:56	3.08	0.76	0.85
SP56	CONDUIT	9.78	0	11:56	2.25	0.55	0.83
SP57	CONDUIT	5.92	0	11:54	3.07	0.52	0.74
SP58	CONDUIT	2.11	0	11:54	3.27	0.15	0.70
SP59	CONDUIT	2.43	0	11:55	3.00	0.32	0.87
SP6	CONDUIT	2.42	0	11:54	2.90	0.13	0.37
SP60	CONDUIT	2.30	0	11:54	2.51	0.31	0.81
SP61	CONDUIT	2.35	0	11:54	2.63	0.27	0.69
SP62	CONDUIT	2.43	0	11:54	2.90	0.38	0.57
SP63	CONDUIT	1.95	0	11:54	2.32	0.30	0.53
SP64	CONDUIT	2.10	0	11:54	3.29	0.22	0.78
SP65	CONDUIT	2.15	0	11:54	3.32	0.22	0.82
SP66	CONDUIT	3.93	0	11:55	2.56	0.35	0.71
SP67	CONDUIT	3.54	0	11:54	3.47	0.47	0.72
SP68	CONDUIT	3.24	0	11:54	2.78	0.43	0.71
SP69	CONDUIT	3.16	0	11:54	3.04	0.42	0.60
SP7	CONDUIT	2.10	0	11:54	3.86	0.22	0.35
SP70	CONDUIT	0.22	0	11:52	2.82	0.04	0.39
SP71	CONDUIT	0.37	0	11:51	2.55	0.11	0.52

SP72	CONDUIT	0.26	0	11:53	2.08	0.08	0.29
SP73	CONDUIT	3.70	0	11:55	3.21	0.58	0.77
SP74	CONDUIT	3.47	0	11:55	2.81	0.54	0.73
SP75	CONDUIT	0.38	0	11:54	3.37	0.06	0.45
SP76	CONDUIT	0.40	0	11:54	3.48	0.07	0.26
SP77	CONDUIT	3.05	0	11:54	2.65	0.31	0.66
SP78	CONDUIT	2.90	0	11:54	2.60	0.45	0.63
SP79	CONDUIT	2.95	0	11:54	2.74	0.46	0.61
SP8	CONDUIT	1.29	0	11:54	2.72	0.13	0.31
SP80	CONDUIT	1.77	0	11:54	4.04	0.47	0.69
SP81	CONDUIT	1.78	0	11:54	3.91	0.48	0.56
SP82	CONDUIT	1.04	0	11:54	1.34	0.16	0.49
SP83	CONDUIT	1.07	0	11:54	1.59	0.17	0.45
SP85	CONDUIT	1.70	0	11:54	1.93	0.27	0.54
SP9	CONDUIT	0.55	0	11:54	3.79	0.12	0.24

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Flow Classification Summary
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Conduit	Adjusted /Actual Length	Fraction of Time in Flow Class: Dry	Up Dry	Down Dry	Sub Crit	Sup Crit	Up Crit	Down Crit	Norm Ltd	Inlet Ctrl
C1	1.00	0.00	0.00	0.00	0.13	0.00	0.00	0.87	0.00	0.00
C2	1.00	0.00	0.00	0.00	0.15	0.00	0.00	0.85	0.00	0.00
C3	1.00	0.00	0.00	0.00	0.13	0.00	0.00	0.87	0.00	0.00
C4	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C5	1.00	0.00	0.00	0.00	0.15	0.00	0.00	0.85	0.00	0.00
C6	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SP1	1.00	0.00	0.00	0.00	0.11	0.00	0.00	0.89	0.02	0.00
SP10	1.00	0.00	0.00	0.00	0.12	0.00	0.00	0.88	0.02	0.00
SP11	1.00	0.00	0.00	0.00	0.09	0.00	0.00	0.91	0.04	0.00
SP12	1.00	0.00	0.00	0.00	0.09	0.00	0.00	0.91	0.02	0.00
SP13	1.00	0.00	0.00	0.00	0.05	0.00	0.00	0.95	0.05	0.00
SP14	1.00	0.00	0.06	0.00	0.94	0.00	0.00	0.00	1.00	0.00
SP15	1.00	0.00	0.00	0.00	0.05	0.00	0.00	0.95	0.05	0.00
SP16	1.00	0.00	0.08	0.00	0.92	0.00	0.00	0.00	0.66	0.00

SP17	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
0.00									
SP18	1.00	0.00	0.07	0.00	0.93	0.00	0.00	0.00	0.93
0.00									
SP19	1.00	0.00	0.00	0.00	0.06	0.00	0.00	0.94	0.02
0.00									
SP2	1.00	0.00	0.00	0.00	0.08	0.00	0.00	0.92	0.05
0.00									
SP20	1.00	0.00	0.19	0.00	0.81	0.00	0.00	0.00	0.92
0.00									
SP21	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP22	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP23	1.00	0.00	0.00	0.00	0.08	0.00	0.00	0.92	0.02
0.00									
SP24	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP25	1.00	0.00	0.00	0.00	0.92	0.08	0.00	0.00	1.00
0.00									
SP26	1.00	0.00	0.12	0.00	0.88	0.00	0.00	0.00	0.94
0.00									
SP27	1.00	0.00	0.00	0.00	0.74	0.26	0.00	0.00	0.43
0.00									
SP28	1.00	0.00	0.00	0.00	0.11	0.00	0.00	0.89	0.00
0.00									
SP29	1.00	0.00	0.04	0.00	0.95	0.01	0.00	0.00	0.74
0.00									
SP3	1.00	0.00	0.00	0.00	0.07	0.00	0.00	0.93	0.04
0.00									
SP30	1.00	0.00	0.00	0.00	0.06	0.00	0.00	0.94	0.06
0.00									
SP31	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP32	1.00	0.00	0.00	0.00	0.70	0.30	0.00	0.00	0.99
0.00									
SP33	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP34	1.00	0.00	0.00	0.00	0.69	0.31	0.00	0.00	0.99
0.00									
SP35	1.00	0.00	0.00	0.00	0.04	0.00	0.00	0.96	0.04
0.00									
SP36	1.00	0.00	0.15	0.00	0.85	0.00	0.00	0.00	0.99
0.00									
SP37	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP38	1.00	0.00	0.00	0.00	0.70	0.30	0.00	0.00	1.00
0.00									
SP39	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
0.00									
SP4	1.00	0.00	0.00	0.00	0.12	0.00	0.00	0.88	0.01
0.00									
SP40	1.00	0.00	0.10	0.00	0.90	0.00	0.00	0.00	0.90
0.00									
SP41	1.00	0.00	0.00	0.00	0.69	0.31	0.00	0.00	0.12
0.00									
SP42	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP43	1.00	0.00	0.00	0.00	0.88	0.12	0.00	0.00	1.00
0.00									

SP44	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP45	1.00	0.00	0.00	0.00	0.68	0.32	0.00	0.00	0.99
0.00									
SP46	1.00	0.00	0.00	0.00	0.05	0.00	0.00	0.95	0.04
0.00									
SP47	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP48	1.00	0.00	0.07	0.00	0.93	0.00	0.00	0.00	0.94
0.00									
SP49	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.40
0.00									
SP5	1.00	0.00	0.28	0.00	0.72	0.00	0.00	0.00	0.93
0.00									
SP50	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP51	1.00	0.00	0.15	0.00	0.85	0.00	0.00	0.00	1.00
0.00									
SP52	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									
SP53	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.57
0.00									
SP54	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.19
0.00									
SP55	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.75
0.00									
SP56	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.54
0.00									
SP57	1.00	0.00	0.00	0.00	0.10	0.00	0.00	0.90	0.01
0.00									
SP58	1.00	0.00	0.00	0.00	0.08	0.00	0.00	0.92	0.02
0.00									
SP59	1.00	0.00	0.00	0.00	0.11	0.00	0.00	0.89	0.00
0.00									
SP6	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.16
0.00									
SP60	1.00	0.00	0.12	0.00	0.88	0.00	0.00	0.00	0.69
0.00									
SP61	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.34
0.00									
SP62	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.55
0.00									
SP63	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.36
0.00									
SP64	1.00	0.00	0.00	0.00	0.10	0.00	0.00	0.90	0.02
0.00									
SP65	1.00	0.00	0.00	0.00	0.10	0.00	0.00	0.90	0.01
0.00									
SP66	1.00	0.00	0.00	0.00	0.10	0.00	0.00	0.89	0.01
0.00									
SP67	1.00	0.00	0.00	0.00	0.08	0.00	0.00	0.92	0.00
0.00									
SP68	1.00	0.00	0.07	0.00	0.93	0.00	0.00	0.00	0.70
0.00									
SP69	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.50
0.00									
SP7	1.00	0.00	0.00	0.00	0.05	0.00	0.00	0.95	0.01
0.00									
SP70	1.00	0.00	0.00	0.00	0.00	0.01	0.00	0.99	0.01
0.00									

SP71	1.00	0.00	0.00	0.00	0.04	0.00	0.00	0.96	0.04
0.00									
SP72	1.00	0.00	0.02	0.00	0.98	0.00	0.00	0.00	0.99
0.00									
SP73	1.00	0.00	0.00	0.00	0.08	0.00	0.00	0.92	0.00
0.00									
SP74	1.00	0.00	0.13	0.00	0.87	0.00	0.00	0.00	0.90
0.00									
SP75	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.99	0.00
0.00									
SP76	1.00	0.00	0.00	0.00	0.66	0.34	0.00	0.00	0.77
0.00									
SP77	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.43
0.00									
SP78	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.51
0.00									
SP79	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.24
0.00									
SP8	1.00	0.00	0.02	0.00	0.98	0.00	0.00	0.00	1.00
0.00									
SP80	1.00	0.00	0.00	0.00	0.07	0.00	0.00	0.92	0.01
0.00									
SP81	1.00	0.00	0.00	0.00	0.75	0.25	0.00	0.00	0.98
0.00									
SP82	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.91
0.00									
SP83	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.10
0.00									
SP85	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.99
0.00									
SP9	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
0.00									

****
Conduit Surcharge Summary
****

No conduits were surcharged.

Analysis begun on: Wed May 28 10:39:53 2025
Analysis ended on: Wed May 28 10:40:12 2025
Total elapsed time: 00:00:19

WOITH ENGINEERING, INC.
ENGINEERS & SURVEYORS

APPENDIX C

100-year, 24-hour Event PCSWMM Output Report

```
  EPA STORM WATER MANAGEMENT MODEL - VERSION 5.2 (Build 5.2.4)
  ------------------------------------------------------------


  *************
  Element Count
  *************
  Number of rain gages ...... 3
  Number of subcatchments ... 76
  Number of nodes ........... 93
  Number of links ........... 90
  Number of pollutants ...... 0
  Number of land uses ....... 0


  ****************
  Raingage Summary
  ****************
                                                    Data       Recording
  Name                 Data Source                  Type       Interval
  ----------------------------------------------------------------------
  100yr24hr            100yr24hr                    INTENSITY    6 min.
  10yr24hr             SCS_Type_II_1.66in           INTENSITY    6 min.
  2yr24hr              2yr24hr                      INTENSITY    6 min.


  ********************
  Subcatchment Summary
  ********************
  Name                        Area     Width   %Imperv    %Slope Rain Gage
Outlet
  ------------------------------------------------------------------------------
--------------------------
  1                           0.76     95.36     80.00    2.0000 100yr24hr
CB9
  10                          0.19     46.66     72.00    2.0000 100yr24hr
CB33
  11                          1.57    196.00     65.00    2.0000 100yr24hr
CB5
  12                          0.92    160.00      9.00    2.0000 100yr24hr
CB1
  13                          1.29    190.50     67.00    2.0000 100yr24hr
CB1
  14                          0.17     50.30     75.00    2.0000 100yr24hr
CB14
  15                          0.18     53.40     75.00    2.0000 100yr24hr
CB15
  16                          0.06     38.30     75.00    2.0000 100yr24hr
CB13
  17                          0.06     38.30     75.00    2.0000 100yr24hr
CB16
  18                          0.22     60.00     75.00    2.0000 100yr24hr
CB11
  19                          0.22     60.00     75.00    2.0000 100yr24hr
CB12
  2                           0.97    127.73     71.00    2.0000 100yr24hr
CB4
```

20	0.09	36.60	75.00	2.0000	100yr24hr
CB26					
21	0.09	36.60	75.00	2.0000	100yr24hr
CB27					
22	0.41	65.30	73.00	2.0000	100yr24hr
CB18					
23	0.73	183.60	63.00	2.0000	100yr24hr
OFTrail					
24	1.22	183.00	66.00	2.0000	100yr24hr
CB84					
25	1.65	192.00	69.00	2.0000	100yr24hr
OFTrail					
26	2.77	228.00	59.00	2.0000	100yr24hr
CB999					
27	0.53	77.00	66.00	2.0000	100yr24hr
CB56					
28	0.61	103.00	73.00	2.0000	100yr24hr
CB36					
29	0.31	54.00	72.00	2.0000	100yr24hr
CB35					
3	0.35	124.00	52.00	2.0000	100yr24hr
CB2					
30	0.22	56.00	72.00	2.0000	100yr24hr
CB31					
31	0.67	114.00	43.00	2.0000	100yr24hr
CB19					
32	0.54	103.00	72.00	2.0000	100yr24hr
CB40					
33	0.19	67.00	59.00	2.0000	100yr24hr
CB39					
34	0.18	54.00	61.00	2.0000	100yr24hr
CB38					
35	0.21	57.30	64.00	2.0000	100yr24hr
CB41					
36	0.07	33.00	73.00	2.0000	100yr24hr
CB42					
37	0.33	87.00	73.00	2.0000	100yr24hr
CB46					
38	0.12	37.00	73.00	2.0000	100yr24hr
CB44					
39	0.69	101.00	85.00	2.0000	100yr24hr
CB47					
4	0.25	100.75	72.00	2.0000	100yr24hr
CB3					
40	0.19	53.00	80.00	2.0000	100yr24hr
CB45					
41	0.98	120.00	67.00	2.0000	100yr24hr
CB31					
42	1.81	168.00	49.00	2.0000	100yr24hr
CB19					
43	0.75	142.50	57.00	2.0000	100yr24hr
CB22					
44	0.70	135.00	63.00	2.0000	100yr24hr
CB21					
45	1.27	245.00	76.00	2.0000	100yr24hr
CB23					
46	0.55	100.00	84.00	2.0000	100yr24hr
CB24					
47	0.31	42.00	75.00	2.0000	100yr24hr
CB28					

48	0.31	42.00	75.00	2.0000	100yr24hr
CB29					
49	0.18	60.40	75.00	2.0000	100yr24hr
CB50					
5	0.20	60.22	61.00	2.0000	100yr24hr
CB8					
50	0.18	60.40	75.00	2.0000	100yr24hr
CB49					
51	0.09	39.30	75.00	2.0000	100yr24hr
CB51					
52	0.09	39.30	75.00	2.0000	100yr24hr
CB54					
53	0.26	60.80	79.00	2.0000	100yr24hr
CB52					
54	0.19	46.00	75.00	2.0000	100yr24hr
CB53					
55	0.17	35.30	75.00	2.0000	100yr24hr
CB57					
56	0.10	33.50	75.00	2.0000	100yr24hr
CB62					
57	1.54	151.00	66.00	2.0000	100yr24hr
CB67					
58	2.24	224.00	44.00	2.0000	100yr24hr
CB68					
59	0.34	50.50	73.00	2.0000	100yr24hr
CB65					
6	0.25	65.00	57.00	2.0000	100yr24hr
CB7					
60	0.59	130.00	72.00	2.0000	100yr24hr
CB66					
61	0.39	99.00	68.00	2.0000	100yr24hr
CB69					
62	0.13	50.20	74.00	2.0000	100yr24hr
CB73					
63	0.20	48.00	81.00	2.0000	100yr24hr
CB70					
64	0.16	54.70	72.00	2.0000	100yr24hr
CB75					
65	0.09	63.80	53.00	2.0000	100yr24hr
CB74					
66	0.10	70.30	51.00	2.0000	100yr24hr
CB60					
67	0.17	54.90	83.00	2.0000	100yr24hr
CB76					
68	0.07	32.00	78.00	2.0000	100yr24hr
CB77					
69	1.20	174.00	82.00	2.0000	100yr24hr
CB61					
7	0.36	65.00	67.00	2.0000	100yr24hr
CB10					
70	0.10	36.90	80.00	2.0000	100yr24hr
CB80					
71	0.22	65.10	81.00	2.0000	100yr24hr
CB79					
72	0.54	57.40	88.00	2.0000	100yr24hr
CB82					
73	0.18	94.40	75.00	2.0000	100yr24hr
CB82					
74	1.78	240.00	84.00	2.0000	100yr24hr
CB72					

75	0.64	150.00	75.00	2.0000	100yr24hr
CB86					
76	0.93	500.00	80.00	2.0000	100yr24hr
CB88					
8	0.43	78.38	62.00	2.0000	100yr24hr
CB6					
9	0.32	79.00	73.00	2.0000	100yr24hr
CB34					

****
Node Summary
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Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
CB1	JUNCTION	3146.59	5.13	50.0	
CB10	JUNCTION	3149.24	3.66	50.0	
CB11	JUNCTION	3147.29	5.92	50.0	
CB12	JUNCTION	3148.24	4.99	50.0	
CB13	JUNCTION	3147.90	5.36	50.0	
CB14	JUNCTION	3148.81	3.73	50.0	
CB15	JUNCTION	3149.25	3.30	50.0	
CB16	JUNCTION	3148.85	4.43	50.0	
CB17	JUNCTION	3146.54	4.96	50.0	
CB18	JUNCTION	3146.61	4.97	50.0	
CB19	JUNCTION	3146.64	5.55	50.0	
CB2	JUNCTION	3147.51	3.97	50.0	
CB20	JUNCTION	3147.72	6.64	50.0	
CB21	JUNCTION	3148.28	4.77	50.0	
CB22	JUNCTION	3148.45	4.63	50.0	
CB23	JUNCTION	3148.86	3.93	50.0	
CB24	JUNCTION	3150.97	3.97	50.0	
CB25	JUNCTION	3148.05	4.65	50.0	
CB26	JUNCTION	3148.83	4.37	50.0	
CB27	JUNCTION	3149.79	3.41	50.0	
CB28	JUNCTION	3148.21	5.05	50.0	
CB29	JUNCTION	3149.16	4.10	50.0	
CB3	JUNCTION	3148.41	3.19	50.0	
CB30	JUNCTION	3147.24	4.32	50.0	
CB31	JUNCTION	3147.69	5.11	50.0	
CB32	JUNCTION	3148.63	4.49	50.0	
CB33	JUNCTION	3149.17	4.39	50.0	
CB34	JUNCTION	3149.68	4.02	50.0	
CB35	JUNCTION	3149.01	4.79	50.0	
CB36	JUNCTION	3149.50	4.47	50.0	
CB37	JUNCTION	3149.50	5.39	50.0	
CB38	JUNCTION	3149.80	5.20	50.0	
CB39	JUNCTION	3150.48	4.68	50.0	
CB4	JUNCTION	3148.28	3.22	50.0	
CB40	JUNCTION	3151.68	2.25	50.0	
CB41	JUNCTION	3151.67	3.36	50.0	
CB42	JUNCTION	3149.63	5.33	50.0	
CB43	JUNCTION	3150.51	3.77	50.0	
CB44	JUNCTION	3150.86	3.91	50.0	
CB45	JUNCTION	3151.25	3.58	50.0	
CB46	JUNCTION	3151.13	3.74	50.0	

CB47	JUNCTION	3151.52	3.53	50.0
CB48	JUNCTION	3148.74	6.03	50.0
CB49	JUNCTION	3149.89	4.81	50.0
CB5	JUNCTION	3147.08	4.16	50.0
CB50	JUNCTION	3148.84	5.89	50.0
CB51	JUNCTION	3149.42	4.24	50.0
CB52	JUNCTION	3149.83	3.83	50.0
CB53	JUNCTION	3150.76	2.91	50.0
CB54	JUNCTION	3150.13	3.49	50.0
CB55	JUNCTION	3147.44	5.15	50.0
CB56	JUNCTION	3147.47	4.78	50.0
CB57	JUNCTION	3147.51	4.82	50.0
CB58	JUNCTION	3147.68	4.88	50.0
CB59	JUNCTION	3147.92	5.62	50.0
CB6	JUNCTION	3147.78	4.92	50.0
CB60	JUNCTION	3148.71	4.04	50.0
CB61	JUNCTION	3149.22	4.09	50.0
CB62	JUNCTION	3148.45	4.41	0.0
CB63	JUNCTION	3148.55	3.47	0.0
CB64	JUNCTION	3148.82	3.46	0.0
CB65	JUNCTION	3148.92	4.08	0.0
CB66	JUNCTION	3149.03	4.00	0.0
CB67	JUNCTION	3148.80	3.43	50.0
CB68	JUNCTION	3148.67	3.59	50.0
CB69	JUNCTION	3148.68	5.36	50.0
CB7	JUNCTION	3147.90	4.86	50.0
CB70	JUNCTION	3149.05	5.11	50.0
CB71	JUNCTION	3149.18	4.99	50.0
CB72	JUNCTION	3149.74	4.13	50.0
CB73	JUNCTION	3150.01	4.28	50.0
CB74	JUNCTION	3149.77	3.18	50.0
CB75	JUNCTION	3149.96	3.11	50.0
CB76	JUNCTION	3149.06	3.94	50.0
CB77	JUNCTION	3149.32	4.27	0.0
CB78	JUNCTION	3150.01	4.40	50.0
CB79	JUNCTION	3150.70	3.80	50.0
CB8	JUNCTION	3148.36	4.58	50.0
CB80	JUNCTION	3149.49	3.81	0.0
CB81	JUNCTION	3149.55	4.48	0.0
CB82	JUNCTION	3149.86	2.95	0.0
CB83	JUNCTION	3149.09	3.62	50.0
CB84	JUNCTION	3149.80	3.06	50.0
CB85	JUNCTION	3149.12	3.13	0.0
CB86	JUNCTION	3149.20	2.88	0.0
CB88	JUNCTION	3150.10	3.00	0.0
CB9	JUNCTION	3148.90	3.65	50.0
CB999	JUNCTION	3147.44	6.00	50.0
OF_North	OUTFALL	3150.50	0.25	0.0
OF_South	OUTFALL	3150.50	0.50	0.0
OFTrail	OUTFALL	0.00	0.00	0.0
CMPNorth	STORAGE	3146.85	5.25	0.0
CMPSouth	STORAGE	3146.00	5.50	0.0

****
Link Summary
****

Name	From Node	To Node	Type	Length	% Slope	Roughness
C1	CB1	CMPSouth	CONDUIT	20.0	0.4700	0.0100
C2	CB999	CMPNorth	CONDUIT	10.0	0.9100	0.0100
C3	CB17	CMPSouth	CONDUIT	20.0	0.2000	0.0100
C4	CMPSouth	OF_South	CONDUIT	30.2	1.6574	0.0100
C5	CB55	CMPNorth	CONDUIT	20.7	0.4406	0.0100
C6	CMPNorth	OF_North	CONDUIT	18.8	7.1875	0.0100
SP1	CB2	CB1	CONDUIT	279.5	0.1499	0.0100
SP10	CB11	CB1	CONDUIT	202.0	0.2198	0.0100
SP11	CB12	CB11	CONDUIT	45.6	1.5489	0.0100
SP12	CB13	CB11	CONDUIT	120.4	0.2999	0.0100
SP13	CB14	CB13	CONDUIT	132.4	0.5001	0.0100
SP14	CB15	CB14	CONDUIT	44.3	1.0001	0.0100
SP15	CB16	CB13	CONDUIT	45.3	1.5524	0.0100
SP16	CB18	CB17	CONDUIT	20.0	0.3750	0.0100
SP17	CB19	CB18	CONDUIT	21.3	0.1078	0.0100
SP18	CB20	CB19	CONDUIT	359.5	0.2999	0.0100
SP19	CB21	CB20	CONDUIT	171.9	0.1798	0.0100
SP2	CB3	CB2	CONDUIT	124.6	0.5218	0.0100
SP20	CB22	CB21	CONDUIT	34.0	0.4993	0.0100
SP21	CB23	CB22	CONDUIT	16.2	1.0007	0.0100
SP22	CB24	CB23	CONDUIT	186.6	0.9992	0.0100
SP23	CB25	CB18	CONDUIT	199.5	0.2201	0.0100
SP24	CB26	CB25	CONDUIT	27.2	0.9992	0.0100
SP25	CB27	CB26	CONDUIT	48.4	1.9989	0.0100
SP26	CB28	CB25	CONDUIT	15.2	0.9989	0.0100
SP27	CB29	CB28	CONDUIT	47.8	1.9989	0.0100
SP28	CB30	CB19	CONDUIT	26.6	0.4015	0.0100
SP29	CB31	CB30	CONDUIT	110.6	0.3996	0.0100

SP3		CB4	CB2	CONDUIT	135.6
0.3835	0.0100				
SP30		CB32	CB31	CONDUIT	139.3
0.4990	0.0100				
SP31		CB33	CB32	CONDUIT	29.1
1.0003	0.0100				
SP32		CB34	CB33	CONDUIT	50.6
0.9990	0.0100				
SP33		CB35	CB32	CONDUIT	12.8
1.0027	0.0100				
SP34		CB36	CB35	CONDUIT	49.1
0.9998	0.0100				
SP35		CB37	CB20	CONDUIT	257.6
0.4997	0.0100				
SP36		CB38	CB37	CONDUIT	30.3
0.9982	0.0100				
SP37		CB39	CB38	CONDUIT	42.5
0.9995	0.0100				
SP38		CB40	CB39	CONDUIT	120.5
0.9992	0.0100				
SP39		CB41	CB39	CONDUIT	29.9
4.0008	0.0100				
SP4		CB5	CB1	CONDUIT	108.3
0.2198	0.0100				
SP40		CB42	CB37	CONDUIT	21.5
0.5986	0.0100				
SP41		CB43	CB42	CONDUIT	146.1
0.5997	0.0100				
SP42		CB44	CB43	CONDUIT	9.8
0.9957	0.0100				
SP43		CB45	CB44	CONDUIT	39.5
0.9985	0.0100				
SP44		CB46	CB43	CONDUIT	37.1
0.9994	0.0100				
SP45		CB47	CB46	CONDUIT	39.5
1.0006	0.0100				
SP46		CB48	CB20	CONDUIT	211.7
0.2499	0.0100				
SP47		CB49	CB48	CONDUIT	45.1
1.9979	0.0100				
SP48		CB50	CB48	CONDUIT	24.2
0.4008	0.0100				
SP49		CB51	CB50	CONDUIT	144.0
0.3999	0.0100				
SP5		CB6	CB5	CONDUIT	174.0
0.3999	0.0100				
SP50		CB52	CB51	CONDUIT	40.3
0.3998	0.0100				
SP51		CB53	CB52	CONDUIT	46.6
1.9990	0.0100				
SP52		CB54	CB51	CONDUIT	46.4
0.9991	0.0100				
SP53		CB56	CB55	CONDUIT	24.0
0.1165	0.0100				
SP54		CB57	CB56	CONDUIT	34.8
0.1094	0.0100				
SP55		CB58	CB57	CONDUIT	157.6
0.1098	0.0100				
SP56		CB59	CB58	CONDUIT	214.7
0.1099	0.0100				

SP57	CB60	CB59	CONDUIT	194.5	
0.1502	0.0100				
SP58	CB61	CB60	CONDUIT	26.0	
0.9996	0.0100				
SP59	CB62	CB57	CONDUIT	35.7	
0.3021	0.0100				
SP6	CB7	CB6	CONDUIT	30.1	
0.3988	0.0100				
SP60	CB63	CB62	CONDUIT	30.8	
0.2987	0.0100				
SP61	CB64	CB63	CONDUIT	67.8	
0.3994	0.0100				
SP62	CB65	CB64	CONDUIT	47.0	
0.2192	0.0100				
SP63	CB66	CB65	CONDUIT	51.0	
0.2197	0.0100				
SP64	CB67	CB58	CONDUIT	60.7	
0.4990	0.0100				
SP65	CB68	CB58	CONDUIT	33.4	
0.5003	0.0100				
SP66	CB69	CB59	CONDUIT	173.6	
0.1498	0.0100				
SP67	CB70	CB69	CONDUIT	41.4	
0.2992	0.0100				
SP68	CB71	CB70	CONDUIT	42.2	
0.2988	0.0100				
SP69	CB72	CB71	CONDUIT	187.5	
0.2997	0.0100				
SP7	CB8	CB7	CONDUIT	41.9	
0.5007	0.0100				
SP70	CB73	CB71	CONDUIT	22.6	
1.4973	0.0100				
SP71	CB74	CB60	CONDUIT	63.3	
0.4993	0.0100				
SP72	CB75	CB74	CONDUIT	37.4	
0.5001	0.0100				
SP73	CB76	CB60	CONDUIT	44.7	
0.2191	0.0100				
SP74	CB77	CB76	CONDUIT	119.5	
0.2175	0.0100				
SP75	CB78	CB77	CONDUIT	11.1	
1.7438	0.0100				
SP76	CB79	CB78	CONDUIT	45.7	
1.4999	0.0100				
SP77	CB80	CB77	CONDUIT	33.3	
0.5161	0.0100				
SP78	CB81	CB80	CONDUIT	26.6	
0.2181	0.0100				
SP79	CB82	CB81	CONDUIT	147.0	
0.2163	0.0100				
SP8	CB9	CB8	CONDUIT	108.4	
0.5001	0.0100				
SP80	CB83	CB55	CONDUIT	23.5	
0.6506	0.0100				
SP81	CB84	CB83	CONDUIT	109.4	
0.6500	0.0100				
SP82	CB85	CB66	CONDUIT	38.9	
0.2208	0.0100				
SP83	CB86	CB85	CONDUIT	35.8	
0.2205	0.0100				

SP85	CB88	CB82	CONDUIT	108.5	
0.2194	0.0100				
SP9	CB10	CB8	CONDUIT	38.3	
0.9989	0.0100				

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Cross Section Summary
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Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C1	CIRCULAR	2.50	4.91	0.62	2.50	1	36.56
C2	CIRCULAR	2.50	4.91	0.62	2.50	1	50.87
C3	CIRCULAR	2.50	4.91	0.62	2.50	1	23.85
C4	RECT_OPEN	0.50	25.00	0.49	50.00	1	297.34
C5	CIRCULAR	2.50	4.91	0.62	2.50	1	35.39
C6	RECT_OPEN	0.25	12.50	0.25	50.00	1	196.32
SP1	CIRCULAR	2.00	3.14	0.50	2.00	1	11.39
SP10	CIRCULAR	2.00	3.14	0.50	2.00	1	13.79
SP11	CIRCULAR	1.50	1.77	0.38	1.50	1	17.00
SP12	CIRCULAR	1.50	1.77	0.38	1.50	1	7.48
SP13	CIRCULAR	1.00	0.79	0.25	1.00	1	3.28
SP14	CIRCULAR	1.00	0.79	0.25	1.00	1	4.63
SP15	CIRCULAR	1.00	0.79	0.25	1.00	1	5.77
SP16	CIRCULAR	2.50	4.91	0.62	2.50	1	32.65
SP17	CIRCULAR	2.50	4.91	0.62	2.50	1	17.51
SP18	CIRCULAR	2.50	4.91	0.62	2.50	1	29.20
SP19	CIRCULAR	2.00	3.14	0.50	2.00	1	12.47
SP2	CIRCULAR	1.50	1.77	0.38	1.50	1	9.86
SP20	CIRCULAR	2.00	3.14	0.50	2.00	1	20.78
SP21	CIRCULAR	1.50	1.77	0.38	1.50	1	13.66
SP22	CIRCULAR	1.00	0.79	0.25	1.00	1	4.63
SP23	CIRCULAR	1.50	1.77	0.38	1.50	1	6.41
SP24	CIRCULAR	1.00	0.79	0.25	1.00	1	

SP25	CIRCULAR	1.00	0.79	0.25	1.00	1
6.55						
SP26	CIRCULAR	1.50	1.77	0.38	1.50	1
13.65						
SP27	CIRCULAR	1.50	1.77	0.38	1.50	1
19.31						
SP28	CIRCULAR	2.00	3.14	0.50	2.00	1
18.64						
SP29	CIRCULAR	2.00	3.14	0.50	2.00	1
18.59						
SP3	CIRCULAR	1.50	1.77	0.38	1.50	1
8.46						
SP30	CIRCULAR	1.50	1.77	0.38	1.50	1
9.65						
SP31	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP32	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP33	CIRCULAR	1.00	0.79	0.25	1.00	1
4.64						
SP34	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP35	CIRCULAR	1.50	1.77	0.38	1.50	1
9.65						
SP36	CIRCULAR	1.50	1.77	0.38	1.50	1
13.64						
SP37	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP38	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP39	CIRCULAR	1.00	0.79	0.25	1.00	1
9.26						
SP4	CIRCULAR	2.00	3.14	0.50	2.00	1
13.79						
SP40	CIRCULAR	1.50	1.77	0.38	1.50	1
10.57						
SP41	CIRCULAR	1.50	1.77	0.38	1.50	1
10.58						
SP42	CIRCULAR	1.00	0.79	0.25	1.00	1
4.62						
SP43	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP44	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP45	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP46	CIRCULAR	1.50	1.77	0.38	1.50	1
6.83						
SP47	CIRCULAR	1.00	0.79	0.25	1.00	1
6.55						
SP48	CIRCULAR	1.50	1.77	0.38	1.50	1
8.65						
SP49	CIRCULAR	1.50	1.77	0.38	1.50	1
8.64						
SP5	CIRCULAR	2.00	3.14	0.50	2.00	1
18.60						
SP50	CIRCULAR	1.00	0.79	0.25	1.00	1
2.93						
SP51	CIRCULAR	1.00	0.79	0.25	1.00	1
6.55						

SP52	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						
SP53	CIRCULAR	2.50	4.91	0.62	2.50	1
18.20						
SP54	CIRCULAR	2.50	4.91	0.62	2.50	1
17.63						
SP55	CIRCULAR	2.50	4.91	0.62	2.50	1
17.67						
SP56	CIRCULAR	2.50	4.91	0.62	2.50	1
17.68						
SP57	CIRCULAR	2.00	3.14	0.50	2.00	1
11.40						
SP58	CIRCULAR	1.50	1.77	0.38	1.50	1
13.65						
SP59	CIRCULAR	1.50	1.77	0.38	1.50	1
7.51						
SP6	CIRCULAR	2.00	3.14	0.50	2.00	1
18.57						
SP60	CIRCULAR	1.50	1.77	0.38	1.50	1
7.46						
SP61	CIRCULAR	1.50	1.77	0.38	1.50	1
8.63						
SP62	CIRCULAR	1.50	1.77	0.38	1.50	1
6.39						
SP63	CIRCULAR	1.50	1.77	0.38	1.50	1
6.40						
SP64	CIRCULAR	1.50	1.77	0.38	1.50	1
9.65						
SP65	CIRCULAR	1.50	1.77	0.38	1.50	1
9.66						
SP66	CIRCULAR	2.00	3.14	0.50	2.00	1
11.38						
SP67	CIRCULAR	1.50	1.77	0.38	1.50	1
7.47						
SP68	CIRCULAR	1.50	1.77	0.38	1.50	1
7.46						
SP69	CIRCULAR	1.50	1.77	0.38	1.50	1
7.48						
SP7	CIRCULAR	1.50	1.77	0.38	1.50	1
9.66						
SP70	CIRCULAR	1.00	0.79	0.25	1.00	1
5.67						
SP71	CIRCULAR	1.00	0.79	0.25	1.00	1
3.27						
SP72	CIRCULAR	1.00	0.79	0.25	1.00	1
3.28						
SP73	CIRCULAR	1.50	1.77	0.38	1.50	1
6.39						
SP74	CIRCULAR	1.50	1.77	0.38	1.50	1
6.37						
SP75	CIRCULAR	1.00	0.79	0.25	1.00	1
6.12						
SP76	CIRCULAR	1.00	0.79	0.25	1.00	1
5.67						
SP77	CIRCULAR	1.50	1.77	0.38	1.50	1
9.81						
SP78	CIRCULAR	1.50	1.77	0.38	1.50	1
6.38						
SP79	CIRCULAR	1.50	1.77	0.38	1.50	1
6.35						

SP8	CIRCULAR	1.50	1.77	0.38	1.50	1
9.66						
SP80	CIRCULAR	1.00	0.79	0.25	1.00	1
3.74						
SP81	CIRCULAR	1.00	0.79	0.25	1.00	1
3.73						
SP82	CIRCULAR	1.50	1.77	0.38	1.50	1
6.42						
SP83	CIRCULAR	1.50	1.77	0.38	1.50	1
6.41						
SP85	CIRCULAR	1.50	1.77	0.38	1.50	1
6.40						
SP9	CIRCULAR	1.00	0.79	0.25	1.00	1
4.63						

****
Analysis Options
****
Flow Units ..... CFS
Process Models:
  Rainfall/Runoff ..... YES
  RDII ..... NO
  Snowmelt ..... NO
  Groundwater ..... NO
  Flow Routing ..... YES
  Ponding Allowed ..... YES
  Water Quality ..... NO
Infiltration Method ..... HORTON
Flow Routing Method ..... DYNWAVE
Surcharge Method ..... EXTRAN
Starting Date 01/27/2025 00:00:00
Ending Date 01/30/2025 00:00:00
Antecedent Dry Days 0.0
Report Time Step 00:00:02
Wet Time Step 00:00:30
Dry Time Step 00:05:00
Routing Time Step ..... 2.00 sec
Variable Time Step ..... NO
Maximum Trials 16
Number of Threads 8
Head Tolerance ..... 0.000500 ft

**********	Volume	Depth
Runoff Quantity Continuity	acre-feet	inches
**********	---------	-------
Total Precipitation	7.615	2.280
Evaporation Loss	0.000	0.000
Infiltration Loss	2.404	0.720
Surface Runoff	5.157	1.544
Final Storage	0.055	0.016
Continuity Error (%)	-0.005	

**********	Volume	Volume
Flow Routing Continuity	acre-feet	10^6 gal
**********	---------	---------

```
  Dry Weather Inflow .......         0.000         0.000
  Wet Weather Inflow .......         5.157         1.680
  Groundwater Inflow .......         0.000         0.000
  RDII Inflow ..............         0.000         0.000
  External Inflow ..........         0.000         0.000
  External Outflow .........         0.492         0.160
  Flooding Loss ............         0.001         0.000
  Evaporation Loss .........         0.000         0.000
  Exfiltration Loss ........         4.685         1.527
  Initial Stored Volume ....         0.000         0.000
  Final Stored Volume ......         0.000         0.000
  Continuity Error (%) .....        -0.388

  ********************************
  Highest Flow Instability Indexes
  ********************************
  Link C2 (6)
  Link SP53 (1)
  Link C1 (1)
  Link C5 (1)
  Link SP54 (1)

  *********************************
  Most Frequent Nonconverging Nodes
  *********************************
  Node OF_North (0.31%)
  Node OF_South (0.31%)
  Node OFTrail (0.31%)
  Node CB76 (0.15%)
  Node CB74 (0.15%)

  *************************
  Routing Time Step Summary
  *************************
  Minimum Time Step           :     2.00 sec
  Average Time Step           :     2.00 sec
  Maximum Time Step           :     2.00 sec
  % of Time in Steady State   :     0.00
  Average Iterations per Step :     2.15
  % of Steps Not Converging   :     0.31

  ***************************
  Subcatchment Runoff Summary
  ***************************

  ---------------------------------------------------------------------------------------
-----------------------------------------
                             Total      Total      Total      Total     Imperv
Perv      Total       Total      Peak  Runoff
                           Precip      Runon       Evap      Infil     Runoff
Runoff     Runoff      Runoff   Runoff   Coeff
  Subcatchment                in         in         in         in         in
in         in    10^6 gal      CFS
```

1			2.28	0.00	0.00	0.42	1.84
0.03	1.84	0.04	1.86	0.805			
10			2.28	0.00	0.00	0.59	1.67
0.05	1.67	0.01	0.45	0.734			
11			2.28	0.00	0.00	0.76	1.51
0.04	1.51	0.06	3.20	0.662			
12			2.28	0.00	0.00	2.00	0.20
0.08	0.28	0.01	0.50	0.122			
13			2.28	0.00	0.00	0.71	1.56
0.04	1.56	0.05	2.75	0.682			
14			2.28	0.00	0.00	0.52	1.74
0.05	1.74	0.01	0.44	0.763			
15			2.28	0.00	0.00	0.52	1.74
0.05	1.74	0.01	0.46	0.764			
16			2.28	0.00	0.00	0.51	1.75
0.06	1.75	0.00	0.15	0.768			
17			2.28	0.00	0.00	0.51	1.75
0.06	1.75	0.00	0.15	0.768			
18			2.28	0.00	0.00	0.52	1.74
0.05	1.74	0.01	0.54	0.763			
19			2.28	0.00	0.00	0.52	1.74
0.05	1.74	0.01	0.54	0.763			
2			2.28	0.00	0.00	0.62	1.64
0.04	1.64	0.04	2.15	0.720			
20			2.28	0.00	0.00	0.52	1.75
0.05	1.75	0.00	0.22	0.766			
21			2.28	0.00	0.00	0.52	1.75
0.05	1.75	0.00	0.22	0.766			
22			2.28	0.00	0.00	0.57	1.65
0.04	1.69	0.02	0.99	0.740			
23			2.28	0.00	0.00	0.78	1.48
0.06	1.48	0.03	1.54	0.650			
24			2.28	0.00	0.00	0.73	1.53
0.05	1.53	0.05	2.57	0.673			
25			2.28	0.00	0.00	0.67	1.59
0.04	1.59	0.07	3.53	0.699			
26			2.28	0.00	0.00	0.90	1.37
0.04	1.37	0.10	4.96	0.599			
27			2.28	0.00	0.00	0.73	1.53
0.04	1.53	0.02	1.12	0.673			
28			2.28	0.00	0.00	0.57	1.69
0.04	1.69	0.03	1.42	0.741			
29			2.28	0.00	0.00	0.59	1.62
0.04	1.67	0.01	0.73	0.732			
3			2.28	0.00	0.00	1.01	1.25
0.08	1.25	0.01	0.65	0.550			
30			2.28	0.00	0.00	0.59	1.68
0.05	1.68	0.01	0.52	0.735			
31			2.28	0.00	0.00	1.24	1.03
0.06	1.03	0.02	0.97	0.453			
32			2.28	0.00	0.00	0.59	1.67
0.05	1.67	0.02	1.27	0.732			
33			2.28	0.00	0.00	0.86	1.40
0.07	1.40	0.01	0.40	0.615			
34			2.28	0.00	0.00	0.82	1.44
0.07	1.44	0.01	0.37	0.633			
35			2.28	0.00	0.00	0.76	1.50
0.06	1.50	0.01	0.45	0.660			

36			2.28	0.00	0.00	0.56	1.71
0.06	1.71	0.00	0.19	0.748			
37			2.28	0.00	0.00	0.57	1.70
0.05	1.70	0.02	0.79	0.744			
38			2.28	0.00	0.00	0.56	1.70
0.05	1.70	0.01	0.29	0.745			
39			2.28	0.00	0.00	0.31	1.94
0.03	1.94	0.04	1.82	0.853			
4			2.28	0.00	0.00	0.58	1.68
0.06	1.68	0.01	0.61	0.738			
40			2.28	0.00	0.00	0.41	1.85
0.04	1.85	0.01	0.50	0.810			
41			2.28	0.00	0.00	0.71	1.55
0.04	1.55	0.04	2.04	0.681			
42			2.28	0.00	0.00	1.12	1.15
0.04	1.15	0.06	2.78	0.503			
43			2.28	0.00	0.00	0.92	1.34
0.06	1.34	0.03	1.41	0.589			
44			2.28	0.00	0.00	0.79	1.47
0.05	1.47	0.03	1.45	0.647			
45			2.28	0.00	0.00	0.51	1.76
0.04	1.76	0.06	3.09	0.770			
46			2.28	0.00	0.00	0.33	1.93
0.03	1.93	0.03	1.46	0.845			
47			2.28	0.00	0.00	0.53	1.73
0.04	1.73	0.01	0.73	0.758			
48			2.28	0.00	0.00	0.53	1.73
0.04	1.73	0.01	0.73	0.758			
49			2.28	0.00	0.00	0.52	1.74
0.05	1.74	0.01	0.45	0.765			
5			2.28	0.00	0.00	0.82	1.44
0.07	1.44	0.01	0.41	0.633			
50			2.28	0.00	0.00	0.52	1.74
0.05	1.74	0.01	0.45	0.765			
51			2.28	0.00	0.00	0.52	1.75
0.05	1.75	0.00	0.24	0.766			
52			2.28	0.00	0.00	0.52	1.75
0.05	1.75	0.00	0.24	0.766			
53			2.28	0.00	0.00	0.44	1.82
0.04	1.82	0.01	0.67	0.799			
54			2.28	0.00	0.00	0.52	1.74
0.05	1.74	0.01	0.47	0.762			
55			2.28	0.00	0.00	0.53	1.74
0.04	1.74	0.01	0.41	0.761			
56			2.28	0.00	0.00	0.52	1.74
0.05	1.74	0.00	0.25	0.764			
57			2.28	0.00	0.00	0.74	1.53
0.04	1.53	0.06	3.10	0.669			
58			2.28	0.00	0.00	1.23	1.04
0.04	1.04	0.06	3.15	0.455			
59			2.28	0.00	0.00	0.58	1.69
0.04	1.69	0.02	0.78	0.740			
6			2.28	0.00	0.00	0.91	1.35
0.07	1.35	0.01	0.49	0.593			
60			2.28	0.00	0.00	0.59	1.67
0.05	1.67	0.03	1.39	0.733			
61			2.28	0.00	0.00	0.67	1.59
0.06	1.59	0.02	0.88	0.697			
62			2.28	0.00	0.00	0.54	1.72
0.05	1.72	0.01	0.33	0.756			

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  63                        2.28       0.00       0.00       0.39       1.87
0.04       1.87       0.01     0.52   0.818
  64                        2.28       0.00       0.00       0.58       1.68
0.06       1.68       0.01     0.39   0.737
  65                        2.28       0.00       0.00       0.97       1.29
0.10       1.29       0.00     0.19   0.568
  66                        2.28       0.00       0.00       1.02       1.25
0.10       1.25       0.00     0.21   0.549
  67                        2.28       0.00       0.00       0.35       1.91
0.04       1.91       0.01     0.46   0.838
  68                        2.28       0.00       0.00       0.45       1.81
0.05       1.81       0.00     0.18   0.794
  69                        2.28       0.00       0.00       0.38       1.88
0.03       1.88       0.06     3.05   0.825
  7                         2.28       0.00       0.00       0.70       1.56
0.05       1.56       0.02     0.79   0.684
  70                        2.28       0.00       0.00       0.41       1.85
0.04       1.85       0.00     0.27   0.811
  71                        2.28       0.00       0.00       0.39       1.87
0.04       1.87       0.01     0.58   0.819
  72                        2.28       0.00       0.00       0.25       2.01
0.02       2.01       0.03     1.41   0.880
  73                        2.28       0.00       0.00       0.51       1.75
0.06       1.75       0.01     0.48   0.767
  74                        2.28       0.00       0.00       0.34       1.92
0.03       1.92       0.09     4.59   0.843
  75                        2.28       0.00       0.00       0.52       1.74
0.05       1.74       0.03     1.57   0.762
  76                        2.28       0.00       0.00       0.41       1.85
0.05       1.85       0.05     2.56   0.812
  8                         2.28       0.00       0.00       0.81       1.45
0.05       1.45       0.02     0.87   0.637
  9                         2.28       0.00       0.00       0.57       1.70
0.05       1.70       0.01     0.76   0.744
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Node Depth Summary

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
CB1	JUNCTION	0.79	4.42	3151.02	0 13:03	4.42
CB10	JUNCTION	0.18	1.78	3151.02	0 13:03	1.78
CB11	JUNCTION	0.59	3.73	3151.02	0 13:00	3.73
CB12	JUNCTION	0.36	2.77	3151.02	0 13:01	2.77
CB13	JUNCTION	0.44	3.12	3151.02	0 13:01	3.12
CB14	JUNCTION	0.26	2.21	3151.02	0 13:02	2.21
CB15	JUNCTION	0.18	1.76	3151.02	0 13:05	1.76
CB16	JUNCTION	0.24	2.17	3151.02	0 12:56	2.17
CB17	JUNCTION	0.82	4.48	3151.02	0 13:00	4.48
CB18	JUNCTION	0.80	4.41	3151.02	0 13:03	4.41
CB19	JUNCTION	0.80	4.38	3151.02	0 13:04	4.38
CB2	JUNCTION	0.54	3.51	3151.02	0 13:00	3.51
CB20	JUNCTION	0.51	3.31	3151.03	0 13:04	3.31
CB21	JUNCTION	0.38	2.75	3151.03	0 12:58	2.75

CB22	JUNCTION	0.34	2.58	3151.03	0	12:57	2.58
CB23	JUNCTION	0.26	2.17	3151.03	0	12:59	2.17
CB24	JUNCTION	0.02	0.39	3151.36	0	11:54	0.39
CB25	JUNCTION	0.42	2.97	3151.02	0	12:59	2.97
CB26	JUNCTION	0.25	2.19	3151.02	0	12:57	2.19
CB27	JUNCTION	0.10	1.23	3151.02	0	13:03	1.23
CB28	JUNCTION	0.38	2.82	3151.02	0	12:58	2.82
CB29	JUNCTION	0.19	1.86	3151.02	0	13:00	1.86
CB3	JUNCTION	0.33	2.61	3151.02	0	13:00	2.61
CB30	JUNCTION	0.61	3.78	3151.02	0	12:59	3.78
CB31	JUNCTION	0.50	3.33	3151.02	0	12:58	3.33
CB32	JUNCTION	0.30	2.39	3151.02	0	13:00	2.39
CB33	JUNCTION	0.20	1.85	3151.02	0	13:00	1.85
CB34	JUNCTION	0.12	1.34	3151.02	0	12:59	1.34
CB35	JUNCTION	0.23	2.02	3151.03	0	12:59	2.02
CB36	JUNCTION	0.14	1.52	3151.02	0	12:59	1.52
CB37	JUNCTION	0.16	1.54	3151.04	0	12:52	1.54
CB38	JUNCTION	0.11	1.23	3151.04	0	12:58	1.23
CB39	JUNCTION	0.05	0.59	3151.07	0	11:54	0.59
CB4	JUNCTION	0.36	2.74	3151.02	0	13:00	2.74
CB40	JUNCTION	0.02	0.36	3152.04	0	11:54	0.36
CB41	JUNCTION	0.01	0.15	3151.82	0	11:54	0.15
CB42	JUNCTION	0.14	1.41	3151.04	0	12:52	1.41
CB43	JUNCTION	0.05	0.66	3151.17	0	11:54	0.66
CB44	JUNCTION	0.02	0.43	3151.28	0	11:54	0.43
CB45	JUNCTION	0.01	0.23	3151.48	0	11:54	0.23
CB46	JUNCTION	0.03	0.68	3151.81	0	11:54	0.68
CB47	JUNCTION	0.02	0.54	3152.06	0	11:54	0.54
CB48	JUNCTION	0.28	2.29	3151.03	0	12:53	2.29
CB49	JUNCTION	0.09	1.14	3151.03	0	12:53	1.14
CB5	JUNCTION	0.65	3.94	3151.02	0	13:04	3.94
CB50	JUNCTION	0.26	2.19	3151.03	0	12:53	2.19
CB51	JUNCTION	0.16	1.62	3151.04	0	12:53	1.62
CB52	JUNCTION	0.11	1.21	3151.04	0	12:53	1.21
CB53	JUNCTION	0.02	0.28	3151.04	0	12:53	0.28
CB54	JUNCTION	0.07	0.91	3151.04	0	12:53	0.91
CB55	JUNCTION	0.82	4.45	3151.89	0	12:12	4.45
CB56	JUNCTION	0.82	4.43	3151.90	0	12:14	4.43
CB57	JUNCTION	0.81	4.40	3151.91	0	12:13	4.40
CB58	JUNCTION	0.76	4.26	3151.94	0	12:11	4.26
CB59	JUNCTION	0.70	4.07	3151.98	0	12:11	4.07
CB6	JUNCTION	0.48	3.24	3151.02	0	13:01	3.24
CB60	JUNCTION	0.50	3.34	3152.05	0	12:10	3.34
CB61	JUNCTION	0.37	2.83	3152.05	0	12:10	2.83
CB62	JUNCTION	0.54	3.46	3151.91	0	12:11	3.46
CB63	JUNCTION	0.52	3.37	3151.91	0	12:11	3.37
CB64	JUNCTION	0.46	3.10	3151.92	0	12:11	3.10
CB65	JUNCTION	0.44	3.00	3151.92	0	12:11	3.00
CB66	JUNCTION	0.41	2.90	3151.93	0	12:11	2.90
CB67	JUNCTION	0.46	3.14	3151.95	0	12:11	3.14
CB68	JUNCTION	0.49	3.28	3151.94	0	12:11	3.28
CB69	JUNCTION	0.50	3.32	3152.00	0	12:11	3.32
CB7	JUNCTION	0.45	3.12	3151.02	0	12:56	3.12
CB70	JUNCTION	0.41	3.18	3152.23	0	11:53	3.18
CB71	JUNCTION	0.39	3.33	3152.50	0	11:53	3.33
CB72	JUNCTION	0.27	4.13	3153.86	0	11:53	4.13
CB73	JUNCTION	0.21	2.54	3152.56	0	11:53	2.54

CB74	JUNCTION	0.26	2.28	3152.06	0	12:10	2.28
CB75	JUNCTION	0.22	2.57	3152.53	0	11:53	2.57
CB76	JUNCTION	0.41	3.04	3152.10	0	11:53	3.04
CB77	JUNCTION	0.36	3.18	3152.50	0	11:53	3.18
CB78	JUNCTION	0.21	2.51	3152.52	0	11:53	2.51
CB79	JUNCTION	0.11	2.17	3152.87	0	12:09	2.17
CB8	JUNCTION	0.35	2.66	3151.02	0	13:00	2.66
CB80	JUNCTION	0.32	3.11	3152.60	0	11:53	3.11
CB81	JUNCTION	0.31	3.10	3152.65	0	11:53	3.10
CB82	JUNCTION	0.25	2.95	3152.82	0	11:53	2.95
CB83	JUNCTION	0.39	2.81	3151.90	0	12:13	2.81
CB84	JUNCTION	0.25	2.10	3151.91	0	12:13	2.10
CB85	JUNCTION	0.39	2.89	3152.01	0	11:54	2.89
CB86	JUNCTION	0.37	2.86	3152.06	0	11:54	2.86
CB88	JUNCTION	0.21	3.00	3153.10	0	11:53	3.00
CB9	JUNCTION	0.24	2.12	3151.02	0	13:03	2.12
CB999	JUNCTION	0.79	4.44	3151.88	0	12:16	4.44
OF_North	OUTFALL	0.00	0.02	3150.52	0	12:13	0.02
OF_South	OUTFALL	0.00	0.01	3150.51	0	13:00	0.01
OFTrail	OUTFALL	0.00	0.00	0.00	0	00:00	0.00
CMPNorth	STORAGE	0.96	5.02	3151.87	0	12:13	5.02
CMPSouth	STORAGE	0.94	5.01	3151.01	0	13:00	5.01

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Node Inflow Summary
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Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
CB1	JUNCTION	3.18	14.48	0 11:54	0.0614	0.322	-0.272
CB10	JUNCTION	0.79	0.79	0 11:54	0.0154	0.0154	0.046
CB11	JUNCTION	0.54	2.14	0 11:54	0.0103	0.043	-0.401
CB12	JUNCTION	0.54	0.54	0 11:54	0.0103	0.0103	-0.287
CB13	JUNCTION	0.15	1.18	0 11:54	0.00267	0.0223	-0.275
CB14	JUNCTION	0.44	0.89	0 11:54	0.00824	0.017	0.502
CB15	JUNCTION	0.46	0.46	0 11:54	0.00869	0.0087	-0.157
CB16	JUNCTION	0.15	0.15	0 11:54	0.00267	0.00271	-0.467
CB17	JUNCTION	0.00	24.60	0 11:55	0	0.558	-0.015

CB18	JUNCTION	0.99	24.66	0	11:55	0.019	0.558	-0.086
CB19	JUNCTION	3.75	22.13	0	11:55	0.0749	0.501	-0.042
CB2	JUNCTION	0.65	3.40	0	11:54	0.012	0.0663	0.081
CB20	JUNCTION	0.00	14.34	0	11:54	0	0.309	-0.611
CB21	JUNCTION	1.45	7.16	0	11:54	0.028	0.145	0.403
CB22	JUNCTION	1.41	5.79	0	11:54	0.0273	0.117	-0.059
CB23	JUNCTION	3.09	4.55	0	11:54	0.0603	0.089	-0.192
CB24	JUNCTION	1.46	1.46	0	11:54	0.0288	0.0288	0.306
CB25	JUNCTION	0.00	1.77	0	11:54	0	0.0376	0.136
CB26	JUNCTION	0.22	0.44	0	11:54	0.00407	0.00817	-0.111
CB27	JUNCTION	0.22	0.22	0	11:54	0.00407	0.0041	-0.190
CB28	JUNCTION	0.73	1.46	0	11:54	0.0147	0.0294	-0.234
CB29	JUNCTION	0.73	0.73	0	11:54	0.0147	0.0147	-0.141
CB3	JUNCTION	0.61	0.61	0	11:54	0.0113	0.0114	-0.198
CB30	JUNCTION	0.00	5.41	0	11:54	0	0.116	-0.057
CB31	JUNCTION	2.56	5.57	0	11:54	0.051	0.116	-0.236
CB32	JUNCTION	0.00	3.25	0	11:54	0	0.0648	0.134
CB33	JUNCTION	0.45	1.21	0	11:54	0.00852	0.0231	0.036
CB34	JUNCTION	0.76	0.76	0	11:54	0.0146	0.0146	-0.078
CB35	JUNCTION	0.73	2.13	0	11:54	0.0138	0.0417	-0.015
CB36	JUNCTION	1.42	1.42	0	11:54	0.0279	0.0279	-0.047
CB37	JUNCTION	0.00	5.96	0	11:54	0	0.118	0.523
CB38	JUNCTION	0.37	2.46	0	11:54	0.00694	0.0475	-0.022
CB39	JUNCTION	0.40	2.11	0	11:54	0.00739	0.0406	0.046
CB4	JUNCTION	2.15	2.15	0	11:54	0.0431	0.0431	0.387
CB40	JUNCTION	1.27	1.27	0	11:54	0.0247	0.0247	-0.023
CB41	JUNCTION	0.45	0.45	0	11:54	0.00855	0.00855	-0.009
CB42	JUNCTION	0.19	3.56	0	11:54	0.00339	0.0701	0.030
CB43	JUNCTION	0.00	3.40	0	11:54	0	0.0667	-0.040
CB44	JUNCTION	0.29	0.80	0	11:54	0.00554	0.0151	0.011

CB45	JUNCTION	0.50	0.50	0	11:54	0.00959	0.00959
-0.004							
CB46	JUNCTION	0.79	2.61	0	11:54	0.0151	0.0516
0.009							
CB47	JUNCTION	1.82	1.82	0	11:54	0.0365	0.0365
-0.001							
CB48	JUNCTION	0.00	2.18	0	11:53	0	0.0482
0.385							
CB49	JUNCTION	0.45	0.45	0	11:54	0.0084	0.00844
-0.013							
CB5	JUNCTION	3.20	7.30	0	11:54	0.0641	0.151
0.145							
CB50	JUNCTION	0.45	1.99	0	11:53	0.0084	0.0396
-0.013							
CB51	JUNCTION	0.24	1.60	0	11:54	0.00436	0.0309
-0.202							
CB52	JUNCTION	0.67	1.14	0	11:54	0.0129	0.0219
0.017							
CB53	JUNCTION	0.47	0.47	0	11:54	0.00895	0.00896
-0.016							
CB54	JUNCTION	0.24	0.24	0	11:54	0.00436	0.0044
0.140							
CB55	JUNCTION	0.00	29.73	0	11:54	0	0.6
-0.033							
CB56	JUNCTION	1.12	27.59	0	11:54	0.0222	0.549
-0.046							
CB57	JUNCTION	0.41	26.46	0	11:54	0.00801	0.527
-0.052							
CB58	JUNCTION	0.00	21.69	0	11:54	0	0.441
-0.058							
CB59	JUNCTION	0.00	15.60	0	11:54	0	0.313
-0.345							
CB6	JUNCTION	0.87	4.32	0	11:54	0.0168	0.0871
-0.169							
CB60	JUNCTION	0.21	9.46	0	11:54	0.00351	0.188
0.214							
CB61	JUNCTION	3.05	3.05	0	11:54	0.0611	0.0611
-0.084							
CB62	JUNCTION	0.25	4.40	0	11:54	0.00474	0.0775
-0.039							
CB63	JUNCTION	0.00	4.12	0	11:54	0	0.0727
-0.086							
CB64	JUNCTION	0.00	4.07	0	11:54	0	0.0726
-0.079							
CB65	JUNCTION	0.78	4.00	0	11:54	0.0154	0.0726
-0.073							
CB66	JUNCTION	1.39	3.14	0	11:54	0.0268	0.0571
-0.091							
CB67	JUNCTION	3.10	3.10	0	11:54	0.0636	0.0636
0.011							
CB68	JUNCTION	3.15	3.15	0	11:54	0.0631	0.0631
-0.054							
CB69	JUNCTION	0.88	6.47	0	11:53	0.0167	0.126
0.113							
CB7	JUNCTION	0.49	3.48	0	11:54	0.00932	0.0701
-0.226							
CB70	JUNCTION	0.52	5.54	0	11:53	0.01	0.109
0.071							
CB71	JUNCTION	0.00	4.94	0	11:53	0	0.099
-0.042							

CB72	JUNCTION	4.59	4.59	0	11:54	0.0928	0.0928
-0.085							
CB73	JUNCTION	0.33	0.50	0	11:53	0.0061	0.0061
-0.337							
CB74	JUNCTION	0.19	0.63	0	11:53	0.00329	0.0107
-0.012							
CB75	JUNCTION	0.39	0.71	0	11:53	0.00734	0.00734
-0.316							
CB76	JUNCTION	0.46	5.74	0	11:54	0.00876	0.113
0.054							
CB77	JUNCTION	0.18	5.27	0	11:54	0.00327	0.104
-0.081							
CB78	JUNCTION	0.00	0.75	0	12:00	0	0.0112
-0.213							
CB79	JUNCTION	0.58	0.79	0	11:53	0.011	0.0111
-0.189							
CB8	JUNCTION	0.41	3.05	0	11:54	0.00775	0.0609
0.111							
CB80	JUNCTION	0.27	4.50	0	11:54	0.00497	0.0901
-0.049							
CB81	JUNCTION	0.00	4.24	0	11:54	0	0.0851
-0.041							
CB82	JUNCTION	1.89	4.45	0	11:54	0.0381	0.0851
-0.056							
CB83	JUNCTION	0.00	2.53	0	11:54	0	0.0508
0.059							
CB84	JUNCTION	2.57	2.57	0	11:54	0.0508	0.0508
-0.048							
CB85	JUNCTION	0.00	1.66	0	11:54	0	0.0302
-0.195							
CB86	JUNCTION	1.57	1.57	0	11:54	0.0302	0.0302
-0.137							
CB88	JUNCTION	2.56	2.56	0	11:54	0.0468	0.0469
-0.137							
CB9	JUNCTION	1.86	1.86	0	11:54	0.0377	0.0377
-0.131							
CB999	JUNCTION	4.96	4.96	0	11:54	0.103	0.103
-0.724							
OF_North	OUTFALL	0.00	4.14	0	12:13	0	0.049
0.000							
OF_South	OUTFALL	0.00	0.80	0	13:00	0	0.0104
0.000							
OFTrail	OUTFALL	5.07	5.07	0	11:54	0.101	0.101
0.000							
CMPNorth	STORAGE	0.00	34.52	0	11:54	0	0.704
-0.040							
CMPSouth	STORAGE	0.00	37.80	0	11:54	0	0.881
-0.045							

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Node Surcharge Summary
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Surcharging occurs when water rises above the top of the highest conduit.

Node	Type	Hours Surcharged	Max. Height Above Crown Feet	Min. Depth Below Rim Feet

CB1	JUNCTION	12.24	1.924	0.710
CB10	JUNCTION	6.20	0.780	1.882
CB11	JUNCTION	11.42	1.732	2.189
CB12	JUNCTION	8.77	1.274	2.220
CB13	JUNCTION	10.88	1.620	2.238
CB14	JUNCTION	8.33	1.209	1.524
CB15	JUNCTION	6.15	0.764	1.534
CB16	JUNCTION	8.07	1.165	2.268
CB17	JUNCTION	12.49	1.980	0.480
CB18	JUNCTION	12.28	1.906	0.565
CB19	JUNCTION	12.24	1.883	1.172
CB2	JUNCTION	10.24	1.506	0.464
CB20	JUNCTION	6.29	0.809	3.327
CB21	JUNCTION	6.08	0.752	2.017
CB22	JUNCTION	5.53	0.582	2.049
CB23	JUNCTION	5.81	0.671	1.756
CB25	JUNCTION	9.98	1.467	1.683
CB26	JUNCTION	8.24	1.195	2.175
CB27	JUNCTION	4.15	0.226	2.181
CB28	JUNCTION	9.02	1.317	2.233
CB29	JUNCTION	4.72	0.359	2.241
CB3	JUNCTION	7.65	1.106	0.586
CB30	JUNCTION	11.79	1.776	0.543
CB31	JUNCTION	9.16	1.334	1.780
CB32	JUNCTION	6.57	0.889	2.096
CB33	JUNCTION	6.44	0.849	2.538
CB34	JUNCTION	4.66	0.344	2.674
CB35	JUNCTION	6.99	1.015	2.771
CB36	JUNCTION	5.33	0.522	2.947
CB37	JUNCTION	1.06	0.036	3.858
CB4	JUNCTION	8.51	1.236	0.481
CB48	JUNCTION	6.20	0.786	3.742
CB49	JUNCTION	3.63	0.135	3.676
CB5	JUNCTION	12.29	1.936	0.227
CB50	JUNCTION	5.86	0.693	3.698
CB51	JUNCTION	3.50	0.118	2.622
CB52	JUNCTION	3.98	0.208	2.625
CB55	JUNCTION	12.59	1.953	0.696
CB56	JUNCTION	12.54	1.931	0.350
CB57	JUNCTION	12.42	1.902	0.416
CB58	JUNCTION	11.71	1.763	0.621
CB59	JUNCTION	10.43	1.566	1.551
CB6	JUNCTION	8.55	1.243	1.676
CB60	JUNCTION	8.68	1.341	0.704
CB61	JUNCTION	8.62	1.335	1.260
CB62	JUNCTION	12.60	1.956	0.955
CB63	JUNCTION	12.28	1.866	0.103
CB64	JUNCTION	11.01	1.602	0.355
CB65	JUNCTION	10.38	1.502	1.077
CB66	JUNCTION	9.70	1.395	1.104
CB67	JUNCTION	11.11	1.642	0.292
CB68	JUNCTION	11.78	1.778	0.311
CB69	JUNCTION	8.87	1.320	2.040
CB7	JUNCTION	7.75	1.122	1.742
CB70	JUNCTION	9.62	1.679	1.933
CB71	JUNCTION	8.87	1.825	1.664

CB72	JUNCTION	6.64	2.627	0.000
CB73	JUNCTION	7.28	1.540	1.738
CB74	JUNCTION	8.28	1.284	0.893
CB75	JUNCTION	7.42	1.570	0.544
CB76	JUNCTION	9.59	1.540	0.896
CB77	JUNCTION	8.02	1.682	1.091
CB78	JUNCTION	7.30	1.514	1.889
CB79	JUNCTION	4.96	1.171	1.627
CB8	JUNCTION	8.02	1.161	1.921
CB80	JUNCTION	7.36	1.609	0.703
CB81	JUNCTION	7.20	1.605	1.375
CB82	JUNCTION	6.27	1.453	0.000
CB83	JUNCTION	12.05	1.809	0.806
CB84	JUNCTION	7.91	1.102	0.956
CB85	JUNCTION	9.19	1.391	0.244
CB86	JUNCTION	8.72	1.363	0.014
CB88	JUNCTION	5.42	1.498	0.000
CB9	JUNCTION	5.67	0.621	1.530
CB999	JUNCTION	12.54	1.938	1.562

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Node Flooding Summary
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Flooding refers to all water that overflows a node, whether it ponds or not.

Node	Hours Flooded	Maximum Rate CFS	Time of Max Occurrence days hr:min	Total Flood Volume 10^6 gal	Maximum Ponded Depth Feet
CB82	0.01	0.95	0 11:53	0.000	0.000
CB88	0.01	1.64	0 11:53	0.000	0.000

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Storage Volume Summary
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Storage Unit	Average Volume 1000 ft³	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 ft³	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS
CMPNorth	7.911	20.2	0.0	93.1	37.273	95.1	0 12:13	5.13
CMPSouth	10.582	18.8	0.0	98.9	50.474	89.8	0 13:00	2.16

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Outfall Loading Summary

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Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
OF_North	2.76	0.92	4.14	0.049
OF_South	1.54	0.35	0.80	0.010
OFTrail	35.96	0.14	5.07	0.101
System	13.42	1.41	5.07	0.160

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Link Flow Summary
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Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C1	CONDUIT	13.49	0 11:54	4.68	0.37	1.00
C2	CONDUIT	4.92	0 11:54	2.65	0.10	1.00
C3	CONDUIT	24.57	0 11:55	5.90	1.03	1.00
C4	CONDUIT	0.80	0 13:00	1.12	0.00	0.03
C5	CONDUIT	29.69	0 11:54	6.70	0.84	1.00
C6	CONDUIT	4.14	0 12:13	3.35	0.02	0.10
SP1	CONDUIT	2.81	0 11:54	2.40	0.25	1.00
SP10	CONDUIT	1.63	0 11:53	1.57	0.12	1.00
SP11	CONDUIT	0.54	0 11:54	3.42	0.03	1.00
SP12	CONDUIT	1.06	0 11:53	2.45	0.14	1.00
SP13	CONDUIT	0.88	0 11:54	3.38	0.27	1.00
SP14	CONDUIT	0.46	0 11:54	2.35	0.10	1.00
SP15	CONDUIT	0.15	0 11:54	2.85	0.03	1.00
SP16	CONDUIT	24.60	0 11:55	5.11	0.75	1.00
SP17	CONDUIT	22.13	0 11:55	4.51	1.26	1.00
SP18	CONDUIT	13.71	0 11:55	2.91	0.47	1.00
SP19	CONDUIT	6.78	0 11:54	3.37	0.54	1.00
SP2	CONDUIT	0.61	0 11:54	2.13	0.06	1.00
SP20	CONDUIT	5.72	0 11:54	2.72	0.28	1.00
SP21	CONDUIT	4.39	0 11:54	4.51	0.32	1.00
SP22	CONDUIT	1.45	0 11:54	4.17	0.31	0.65
SP23	CONDUIT	1.67	0 11:55	2.30	0.26	1.00
SP24	CONDUIT	0.42	0 11:52	3.26	0.09	1.00
SP25	CONDUIT	0.22	0 11:54	2.20	0.03	1.00
SP26	CONDUIT	1.38	0 11:54	2.26	0.10	1.00
SP27	CONDUIT	0.73	0 11:54	2.08	0.04	1.00
SP28	CONDUIT	5.41	0 11:54	2.66	0.29	1.00
SP29	CONDUIT	5.41	0 11:54	2.68	0.29	1.00
SP3	CONDUIT	2.14	0 11:54	3.58	0.25	1.00
SP30	CONDUIT	3.13	0 11:54	3.72	0.32	1.00
SP31	CONDUIT	1.16	0 11:54	3.85	0.25	1.00
SP32	CONDUIT	0.77	0 11:54	2.84	0.17	1.00
SP33	CONDUIT	2.09	0 11:54	4.59	0.45	1.00
SP34	CONDUIT	1.40	0 11:54	3.20	0.30	1.00

SP35	CONDUIT	5.87	0	11:54	4.62	0.61	1.00
SP36	CONDUIT	2.45	0	11:54	2.47	0.18	0.91
SP37	CONDUIT	2.10	0	11:54	4.88	0.45	0.77
SP38	CONDUIT	1.26	0	11:54	3.45	0.27	0.47
SP39	CONDUIT	0.45	0	11:54	1.74	0.05	0.37
SP4	CONDUIT	6.95	0	11:54	3.21	0.50	1.00
SP40	CONDUIT	3.53	0	11:54	3.04	0.33	0.97
SP41	CONDUIT	3.39	0	11:54	3.59	0.32	0.65
SP42	CONDUIT	0.79	0	11:54	3.15	0.17	0.42
SP43	CONDUIT	0.50	0	11:54	2.29	0.11	0.33
SP44	CONDUIT	2.60	0	11:54	5.19	0.56	0.61
SP45	CONDUIT	1.82	0	11:54	3.62	0.39	0.61
SP46	CONDUIT	2.12	0	11:57	2.70	0.31	1.00
SP47	CONDUIT	0.45	0	11:54	3.56	0.07	1.00
SP48	CONDUIT	1.75	0	11:52	2.56	0.20	1.00
SP49	CONDUIT	1.55	0	11:53	2.59	0.18	1.00
SP5	CONDUIT	4.16	0	11:54	2.53	0.22	1.00
SP50	CONDUIT	1.13	0	11:54	3.15	0.39	1.00
SP51	CONDUIT	0.47	0	11:54	1.97	0.07	0.64
SP52	CONDUIT	0.24	0	11:54	2.75	0.05	0.95
SP53	CONDUIT	27.60	0	11:54	5.63	1.52	1.00
SP54	CONDUIT	26.48	0	11:54	5.40	1.50	1.00
SP55	CONDUIT	21.70	0	11:54	4.42	1.23	1.00
SP56	CONDUIT	15.60	0	11:54	3.18	0.88	1.00
SP57	CONDUIT	9.48	0	11:54	3.08	0.83	1.00
SP58	CONDUIT	3.06	0	11:53	3.23	0.22	1.00
SP59	CONDUIT	4.43	0	11:54	2.94	0.59	1.00
SP6	CONDUIT	3.46	0	11:54	2.94	0.19	1.00
SP60	CONDUIT	4.15	0	11:54	2.44	0.56	1.00
SP61	CONDUIT	4.12	0	11:54	2.64	0.48	1.00
SP62	CONDUIT	4.07	0	11:54	2.88	0.64	1.00
SP63	CONDUIT	3.23	0	11:54	2.27	0.51	1.00
SP64	CONDUIT	3.09	0	11:54	3.25	0.32	1.00
SP65	CONDUIT	3.15	0	11:54	3.27	0.33	1.00
SP66	CONDUIT	6.51	0	11:53	2.58	0.57	1.00
SP67	CONDUIT	5.60	0	11:53	3.43	0.75	1.00
SP68	CONDUIT	5.02	0	11:53	2.84	0.67	1.00
SP69	CONDUIT	4.59	0	11:54	3.07	0.61	1.00
SP7	CONDUIT	3.01	0	11:54	4.13	0.31	1.00
SP70	CONDUIT	0.39	0	11:53	2.92	0.07	1.00
SP71	CONDUIT	0.63	0	11:53	2.47	0.19	1.00
SP72	CONDUIT	0.44	0	11:53	2.09	0.14	1.00
SP73	CONDUIT	5.75	0	11:54	3.25	0.90	1.00
SP74	CONDUIT	5.30	0	11:54	3.00	0.83	1.00
SP75	CONDUIT	0.76	0	12:00	3.45	0.12	1.00
SP76	CONDUIT	0.75	0	12:00	3.37	0.13	1.00
SP77	CONDUIT	4.52	0	11:54	2.63	0.46	1.00
SP78	CONDUIT	4.25	0	11:54	2.58	0.67	1.00
SP79	CONDUIT	4.24	0	11:54	2.80	0.67	1.00
SP8	CONDUIT	1.85	0	11:54	2.84	0.19	1.00
SP80	CONDUIT	2.51	0	11:54	4.37	0.67	1.00
SP81	CONDUIT	2.53	0	11:54	4.19	0.68	1.00
SP82	CONDUIT	1.77	0	11:54	1.33	0.28	1.00
SP83	CONDUIT	1.66	0	11:54	1.57	0.26	1.00
SP85	CONDUIT	2.56	0	11:54	1.98	0.40	1.00
SP9	CONDUIT	0.79	0	11:54	4.18	0.17	1.00

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Flow Classification Summary
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Conduit	Adjusted /Actual Length	Fraction of Time in Flow Class: Dry	Up Dry	Down Dry	Sub Crit	Sup Crit	Up Crit	Down Crit	Norm Ltd	Inlet Ctrl
C1	1.00	0.00	0.00	0.00	0.28	0.00	0.00	0.72	0.00	0.00
C2	1.00	0.00	0.00	0.00	0.28	0.00	0.00	0.72	0.00	0.00
C3	1.00	0.00	0.00	0.00	0.27	0.00	0.00	0.73	0.00	0.00
C4	1.00	0.98	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
C5	1.00	0.00	0.00	0.00	0.28	0.00	0.00	0.72	0.00	0.00
C6	1.00	0.97	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
SP1	1.00	0.00	0.00	0.00	0.26	0.00	0.00	0.74	0.02	0.00
SP10	1.00	0.00	0.00	0.00	0.27	0.00	0.00	0.73	0.02	0.00
SP11	1.00	0.00	0.00	0.00	0.24	0.00	0.00	0.76	0.04	0.00
SP12	1.00	0.00	0.00	0.00	0.24	0.00	0.00	0.76	0.02	0.00
SP13	1.00	0.00	0.00	0.00	0.21	0.00	0.00	0.79	0.03	0.00
SP14	1.00	0.00	0.06	0.00	0.94	0.00	0.00	0.00	0.84	0.00
SP15	1.00	0.00	0.01	0.00	0.21	0.00	0.00	0.78	0.65	0.00
SP16	1.00	0.00	0.09	0.00	0.91	0.00	0.00	0.00	0.57	0.00
SP17	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
SP18	1.00	0.00	0.07	0.00	0.93	0.00	0.00	0.00	0.77	0.00
SP19	1.00	0.00	0.00	0.00	0.22	0.00	0.00	0.78	0.01	0.00
SP2	1.00	0.00	0.00	0.00	0.23	0.00	0.00	0.77	0.04	0.00
SP20	1.00	0.00	0.19	0.00	0.81	0.00	0.00	0.00	0.75	0.00
SP21	1.00	0.00	0.00	0.00	0.19	0.00	0.00	0.81	0.01	0.00
SP22	1.00	0.00	0.00	0.00	0.17	0.00	0.00	0.83	0.17	0.00
SP23	1.00	0.00	0.00	0.00	0.24	0.00	0.00	0.76	0.02	0.00
SP24	1.00	0.00	0.00	0.00	0.20	0.00	0.00	0.80	0.01	0.

SP25	1.00	0.00	0.00	0.00	0.95	0.05	0.00	0.00	0.88
0.00									
SP26	1.00	0.00	0.12	0.00	0.88	0.00	0.00	0.00	0.76
0.00									
SP27	1.00	0.00	0.00	0.00	0.85	0.15	0.00	0.00	0.27
0.00									
SP28	1.00	0.00	0.00	0.00	0.26	0.00	0.00	0.74	0.00
0.00									
SP29	1.00	0.00	0.04	0.00	0.94	0.02	0.00	0.00	0.62
0.00									
SP3	1.00	0.00	0.00	0.00	0.23	0.00	0.00	0.77	0.02
0.00									
SP30	1.00	0.00	0.00	0.00	0.22	0.00	0.00	0.77	0.03
0.00									
SP31	1.00	0.00	0.00	0.00	0.18	0.00	0.00	0.82	0.02
0.00									
SP32	1.00	0.00	0.00	0.00	0.85	0.15	0.00	0.00	0.87
0.00									
SP33	1.00	0.00	0.00	0.00	0.18	0.00	0.00	0.82	0.01
0.00									
SP34	1.00	0.00	0.00	0.00	0.86	0.14	0.00	0.00	0.85
0.00									
SP35	1.00	0.00	0.00	0.00	0.21	0.00	0.00	0.79	0.07
0.00									
SP36	1.00	0.00	0.16	0.00	0.84	0.00	0.00	0.00	0.87
0.00									
SP37	1.00	0.00	0.00	0.00	0.09	0.00	0.00	0.91	0.02
0.00									
SP38	1.00	0.00	0.00	0.00	0.76	0.24	0.00	0.00	1.00
0.00									
SP39	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
0.00									
SP4	1.00	0.00	0.00	0.00	0.27	0.00	0.00	0.73	0.01
0.00									
SP40	1.00	0.00	0.12	0.00	0.88	0.00	0.00	0.00	0.80
0.00									
SP41	1.00	0.00	0.00	0.00	0.80	0.20	0.00	0.00	0.17
0.00									
SP42	1.00	0.00	0.00	0.00	0.06	0.00	0.00	0.94	0.00
0.00									
SP43	1.00	0.00	0.00	0.00	0.86	0.14	0.00	0.00	0.99
0.00									
SP44	1.00	0.00	0.00	0.00	0.05	0.00	0.00	0.94	0.05
0.00									
SP45	1.00	0.00	0.00	0.00	0.67	0.33	0.00	0.00	0.98
0.00									
SP46	1.00	0.00	0.00	0.00	0.21	0.00	0.00	0.79	0.02
0.00									
SP47	1.00	0.00	0.00	0.00	0.18	0.00	0.00	0.82	0.07
0.00									
SP48	1.00	0.00	0.07	0.00	0.93	0.00	0.00	0.00	0.77
0.00									
SP49	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.26
0.00									
SP5	1.00	0.00	0.28	0.00	0.72	0.00	0.00	0.00	0.77
0.00									
SP50	1.00	0.00	0.00	0.00	0.12	0.00	0.00	0.88	0.01
0.00									
SP51	1.00	0.00	0.15	0.00	0.85	0.00	0.00	0.00	0.94
0.00									

SP52	1.00	0.00	0.00	0.00	0.13	0.00	0.00	0.87	0.04
0.00									
SP53	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.55
0.00									
SP54	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.14
0.00									
SP55	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.59
0.00									
SP56	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.41
0.00									
SP57	1.00	0.00	0.00	0.00	0.24	0.00	0.00	0.76	0.01
0.00									
SP58	1.00	0.00	0.00	0.00	0.22	0.00	0.00	0.78	0.01
0.00									
SP59	1.00	0.00	0.00	0.00	0.24	0.00	0.00	0.76	0.00
0.00									
SP6	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.10
0.00									
SP60	1.00	0.00	0.14	0.00	0.86	0.00	0.00	0.00	0.62
0.00									
SP61	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.20
0.00									
SP62	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.55
0.00									
SP63	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.21
0.00									
SP64	1.00	0.00	0.00	0.00	0.24	0.00	0.00	0.76	0.01
0.00									
SP65	1.00	0.00	0.00	0.00	0.24	0.00	0.00	0.76	0.01
0.00									
SP66	1.00	0.00	0.00	0.00	0.24	0.00	0.00	0.76	0.01
0.00									
SP67	1.00	0.00	0.00	0.00	0.22	0.00	0.00	0.78	0.01
0.00									
SP68	1.00	0.00	0.07	0.00	0.93	0.00	0.00	0.00	0.65
0.00									
SP69	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.32
0.00									
SP7	1.00	0.00	0.00	0.00	0.21	0.00	0.00	0.79	0.01
0.00									
SP70	1.00	0.00	0.00	0.00	0.19	0.00	0.00	0.81	0.02
0.00									
SP71	1.00	0.00	0.00	0.00	0.20	0.00	0.00	0.80	0.01
0.00									
SP72	1.00	0.00	0.02	0.00	0.98	0.00	0.00	0.00	0.82
0.00									
SP73	1.00	0.00	0.00	0.00	0.22	0.00	0.00	0.78	0.00
0.00									
SP74	1.00	0.00	0.13	0.00	0.87	0.00	0.00	0.00	0.74
0.00									
SP75	1.00	0.00	0.00	0.00	0.18	0.00	0.00	0.82	0.01
0.00									
SP76	1.00	0.00	0.00	0.00	0.83	0.17	0.00	0.00	0.73
0.00									
SP77	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.25
0.00									
SP78	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.51
0.00									
SP79	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.17
0.00									

SP8	1.00	0.00	0.02	0.00	0.98	0.00	0.00	0.00	0.82
0.00									
SP80	1.00	0.00	0.00	0.00	0.22	0.00	0.00	0.78	0.01
0.00									
SP81	1.00	0.00	0.00	0.00	0.84	0.15	0.00	0.00	0.80
0.00									
SP82	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.75
0.00									
SP83	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.06
0.00									
SP85	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.82
0.00									
SP9	1.00	0.00	0.00	0.00	0.18	0.00	0.00	0.82	0.02
0.00									

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Conduit Surcharge Summary
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Conduit	Hours Full: Both Ends	Hours Full: Upstream	Hours Full: Dnstream	Hours Above Full Normal Flow	Hours Capacity Limited
C1	12.24	12.24	12.57	0.01	0.01
C2	12.54	12.54	12.84	0.01	0.01
C3	12.44	12.49	12.57	0.03	0.08
C5	12.54	12.59	12.84	0.01	0.08
SP1	10.24	10.24	12.24	0.01	0.01
SP10	11.42	11.42	13.12	0.01	0.01
SP11	8.77	8.77	12.44	0.01	0.01
SP12	10.88	10.88	12.44	0.01	0.01
SP13	8.33	8.33	12.03	0.01	0.01
SP14	6.15	6.15	8.33	0.01	0.01
SP15	8.07	8.07	12.03	0.01	0.01
SP16	12.23	12.28	12.49	0.01	0.09
SP17	12.19	12.24	12.28	0.16	0.18
SP18	6.29	6.29	12.24	0.01	0.01
SP19	6.08	6.08	7.29	0.01	0.01
SP2	7.65	7.65	11.53	0.01	0.01
SP20	5.53	5.53	6.08	0.01	0.01
SP21	5.81	5.81	6.36	0.01	0.01
SP22	0.01	0.01	6.66	0.01	0.01
SP23	9.98	9.98	12.28	0.01	0.01
SP24	8.24	8.24	9.98	0.01	0.01
SP25	4.15	4.15	8.24	0.01	0.01
SP26	9.02	9.02	9.98	0.01	0.01
SP27	4.72	4.72	9.02	0.01	0.01
SP28	11.79	11.79	12.24	0.01	0.01
SP29	9.16	9.16	11.79	0.01	0.01
SP3	8.51	8.51	11.53	0.01	0.01
SP30	6.57	6.57	10.90	0.01	0.01
SP31	6.44	6.44	7.87	0.01	0.01
SP32	4.66	4.66	6.44	0.01	0.01
SP33	6.99	6.99	7.87	0.01	0.01
SP34	5.33	5.33	6.99	0.01	0.01
SP35	1.05	1.05	9.09	0.01	0.01

SP36	0.01	0.01	1.05	0.01	0.01
SP4	12.29	12.29	13.12	0.01	0.01
SP40	0.01	0.01	1.05	0.01	0.01
SP46	6.20	6.20	9.09	0.01	0.01
SP47	3.63	3.63	7.10	0.01	0.01
SP48	5.86	5.86	6.20	0.01	0.01
SP49	3.50	3.50	5.86	0.01	0.01
SP5	8.55	8.55	12.29	0.01	0.01
SP50	3.98	3.98	4.70	0.01	0.01
SP51	0.01	0.01	3.98	0.01	0.01
SP52	0.01	0.01	4.70	0.01	0.01
SP53	12.50	12.54	12.59	0.14	0.13
SP54	12.41	12.42	12.54	0.14	0.18
SP55	11.71	11.71	12.42	0.09	0.13
SP56	10.42	10.42	11.71	0.01	0.04
SP57	8.68	8.68	10.42	0.01	0.02
SP58	8.62	8.62	10.18	0.01	0.01
SP59	12.60	12.60	12.96	0.01	0.01
SP6	7.75	7.75	8.55	0.01	0.01
SP60	12.28	12.28	12.60	0.01	0.01
SP61	11.01	11.01	12.28	0.01	0.01
SP62	10.38	10.38	11.01	0.01	0.01
SP63	9.70	9.70	10.38	0.01	0.01
SP64	11.11	11.11	12.46	0.01	0.01
SP65	11.78	11.78	12.46	0.01	0.01
SP66	8.86	8.86	10.42	0.01	0.01
SP67	9.62	9.62	10.37	0.01	0.10
SP68	8.87	8.87	9.62	0.01	0.04
SP69	6.64	6.64	8.87	0.01	0.01
SP7	8.02	8.02	9.38	0.01	0.01
SP70	7.28	7.28	8.87	0.01	0.01
SP71	8.28	8.28	10.18	0.01	0.01
SP72	7.42	7.42	8.28	0.01	0.01
SP73	9.59	9.59	10.18	0.01	0.04
SP74	8.02	8.02	9.59	0.01	0.01
SP75	7.30	7.30	8.02	0.01	0.01
SP76	4.96	4.96	7.30	0.01	0.01
SP77	7.36	7.36	8.02	0.01	0.01
SP78	7.20	7.20	7.36	0.01	0.01
SP79	6.27	6.27	7.20	0.01	0.01
SP8	5.67	5.67	8.02	0.01	0.01
SP80	12.04	12.05	12.59	0.01	0.01
SP81	7.91	7.91	12.05	0.01	0.01
SP82	9.19	9.19	9.70	0.01	0.01
SP83	8.71	8.71	9.19	0.01	0.01
SP85	5.42	5.42	6.27	0.01	0.01
SP9	6.20	6.20	8.02	0.01	0.01

Analysis begun on: Wed May 28 10:41:15 2025
Analysis ended on: Wed May 28 10:41:34 2025
Total elapsed time: 00:00:19