MASTER DEVELOPMENT DRAINAGE PLAN AMENDMENT

For

SHILOH MESA AT WOODMEN HEIGHTS

And

FINAL DRAINAGE REPORT

For

SHILOH MESA COMMERCIAL FILING NO. 1

Prepared for:
City of Colorado Springs
Engineering Development Review Division Team
30 South Nevada Avenue, Suite 401
Colorado Springs, CO 80903

On Behalf of:

Jet Stream Development II, LLC
614 Woodmoor Acres Drive
Monument CO 80132

COLA, LLC
7910 Gateway Blvd, Suite 102
El Paso, TX 79915

Center for Strategic Ministry
290 E Woodmen Road
Colorado Springs, CO 80919

Prepared by:

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July 2019

Project No. 18.469.006

Engineer's Statement:

This report and plan for the drainage design of Shiloh Mesa at Woodmen Heights and Shiloh Mesa Commercial Filing No. 1 was prepared by me (or under my direct supervision) and is correct to the best of my knowledge and belief. Said report and plan has been prepared in accordance with the City of Colorado Springs Drainage Criteria Manual and is in conformity with the master plan of the drainage basin. I understand that the City of Colorado Springs does not and will not assume liability for drainage facilities designed by others. I accept responsibility for any liability caused by any negligent acts, errors or omissions on my part in preparing this report.

7/29/2019

Jesse Sullivan — Date

Registered Professional Engineer
State of Colorado
No. 55600

SEAL

Developer's Statement:

Jet Stream Development, LLC hereby certifies that the drainage facilities for Shiloh Mesa at Woodmen Heights and Shiloh Mesa Commercial Filing No. 1 shall be constructed according to the design presented in this report. I understand that the City of Colorado Springs does not and will not assume liability for the drainage facilities designed and/or certified by my engineer and that are submitted to the City of Colorado Springs pursuant to section 7.7.906 of the City Code; and cannot, on behalf of Shiloh Mesa Woodmen Heights and Shiloh Mesa Commercial Filing No. 1, guarantee that final drainage design review will absolve Jet Stream Development, LLC and/or their successors and/or assigns of future liability for improper design. I further understand that approval of the final plat does not imply approval of my engineer's drainage design.

Jet Stream Development, LLC
Business Name

By: _____
Kyle Geditz

Title: _____

Address: 614 Woodmoor Acres Drive
Monument, CO 80132

Developer's Statement:

Center for Strategic Ministry hereby certifies that the drainage facilities for Shiloh Mesa at Woodmen Heights and Shiloh Mesa Commercial Filing No. 1 shall be constructed according to the design presented in this report. I understand that the City of Colorado Springs does not and will not assume liability for the drainage facilities designed and/or certified by my engineer and that are submitted to the City of Colorado Springs pursuant to section 7.7.906 of the City Code; and cannot, on behalf of Shiloh Mesa at Woodmen Heights and Shiloh Mesa Commercial Filing No. 1 guarantee that final drainage design review will absolve Center for Strategic Ministry and/or their successors and/or assigns of future liability for improper design. I further understand that approval of the final plat does not imply approval of my engineer's drainage design.

Business Name: Center for Strategic Ministry

By: _____

Title: Development Mgr

Address: 290 E. Woodman Rd. Colo Spgs 80919

Developer's Statement:

COLA, LLC. hereby certifies that the drainage facilities for Shiloh Mesa at Woodmen Heights and Shiloh Mesa Commercial Filing No. 1 shall be constructed according to the design presented in this report. I understand that the City of Colorado Springs does not and will not assume liability for the drainage facilities designed and/or certified by my engineer and that are submitted to the City of Colorado Springs pursuant to section 7.7.906 of the City Code; and cannot, on behalf of Shiloh Mesa at Woodmen Heights and Shiloh Mesa Commercial Filing No. 1 guarantee that final drainage design review will absolve COLA, LLC. and/or their successors and/or assigns of future liability for improper design. I further understand that approval of the final plat does not imply approval of my engineer's drainage design.

Business Name: COLA, LLC.

By: _____

Title: President

Address: 7910 Gateway Blvd, Suite 102
El Paso, TX 79915

City of Colorado Springs:

Filed in accordance with Section 7.7.906 of the Code of the City of Colorado Springs, 2001, as amended.

Anne Bergmark — 07/31/2019

For the City Engineer — Date

Conditions:

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I. Introduction

Shiloh Mesa at Woodmen Heights is comprised of 112.88 acres of mixed-use development which includes uses of residential, commercial, public assembly, open space, and public right-of-way. The site was annexed into the City of Colorado Springs in August of 2004, as part of the Woodmen Heights Metropolitan District in northeastern Colorado Springs, Colorado. The entirety of the site was originally platted as Woodmen Heights No. 3 but has since undergone development of Shiloh Mesa Filing No. 1 which encompasses the entire northern half of Shiloh Mesa at Woodmen Heights, including the Marksheffel Road corridor, for a total of approximately 63 acres. Shiloh Mesa Filing No. 1 is a single-family residential development separated into four phases. Also developed is the existing Woodmen Valley Chapel, that runs along the east side of the site, bordering Mustang Road. The church plans to expand their current building footprint as well as parking accommodations. The church expansion parcel as well as the remaining area of Shiloh Mesa at Woodmen Heights (Shiloh Mesa Filing No. 5 and Shiloh Mesa Commercial Filing No. 1) total approximately 46 acres and will contain single-family and multi-family residential, and commercial developments.

A. PURPOSE AND SCOPE OF STUDY

The purpose of this Master Development Drainage Plan Amendment is to identify and evaluate the offsite and onsite drainage patterns associated with the remaining undeveloped land in Shiloh Mesa at Woodmen Heights and to provide updated hydrologic and hydraulic analyses of this area to ensure compliance with the City of Colorado Springs Drainage Criteria Manual (DCM) as well as provide effective, safe routing to the downstream outfall. In addition to the MDDP, this report will also serve as a Final Drainage Report for Shiloh Mesa Commercial Filing No. 1 to support the Shiloh Mesa Commercial Filing No. 1 Final Plat. All individual lots will also be required to complete their own Final Drainage Report.

Additionally, this MDDP contains updates to accommodate the proposed, Enclaves at Shiloh Mesa, multi-family development and account for the associated reconfiguration of the detention and water quality ponds for the site.

There have been multiple approved studies completed on the area including:

"The Master Development Drainage Plan for Woodmen Heights", completed by Classic Engineers and Surveyors, dated June 2004 *(MDDP-Classic)*

"The Master Development Drainage Plan Update for Woodmen Heights and Final Drainage Report for Forest Meadows Filing No. 1 and No. 4", by Engineering and Surveying Inc, dated February 2006 *(MDDP-ESI)*

"Master Development Drainage Plan for Shiloh Mesa at Woodmen Heights", prepared by Matrix Design Group, Inc. dated November 2009 *(MDDP-Matrix).*

"Master Development Drainage Plan and Final Drainage Report for Shiloh Mesa & Shiloh Mesa Filing No. 1", prepared by M&S Civil Consultants, Inc., dated December 2015 *(MDDP-F1).*

MDDP-F1 has completed calculations for the entire northern half of the Shiloh Mesa at Woodmen Heights parcel. As such, this report will use the approved *MDDP-F1* calculations for any design point runoff that will discharge directly onto Shiloh Mesa Filing No. 5 and Shiloh Mesa Commercial Filing No. 1. In this report, updated analysis has been completed only for Shiloh Mesa Filing No. 5, Shiloh Mesa Commercial Filing No. 1, Woodmen Valley Chapel, and the Shiloh Mesa Multi-Family development.

"Master Development Drainage Plan for Shiloh Mesa at Woodmen Heights and Final Drainage Report for Shiloh Mesa Commercial Filing No. 1", prepared by Matrix Design Group, Inc. dated January 2018 *(MDDP/FDR-Matrix 2018).*

Reference has also been made to:

"Final Hydrology and Hydraulics Report for Woodmen Road Powers to US 24" dated October 4, 2007 prepared by DMJM Harris – AECOM (H&H Woodmen).

B. DBPS-RELATED INVESTIGATIONS

The site lies in the upper western sub-basin of the Sand Creek Drainage Basin. This drainage basin was studied in ***"Preliminary Design of Selected Alternative, Sand Creek Drainage Basin Planning Study"***, by Kiowa Engineering, dated March 1996 (DBPS-1996). This study will adhere to the parameters set forth in this DBPS.

C. STAKEHOLDER PROCESS

As no amendment to the most recent Drainage Basin Planning Study (DBPS-1996) is being proposed, there is no required stakeholder process.

D. AGENCY JURISDICTIONS

This project is located within the City of Colorado Springs and is subject to the design criteria set forth in the ***City of Colorado Springs Drainage & El Paso County Criteria Manual, Volumes I and II, dated May 2014 (DCM).***

E. GENERAL PROJECT DESCRIPTION

Shiloh Mesa Filing No. 5 and Shiloh Mesa Commercial Filing No. 1 are located at the northeastern intersection of Woodmen Road and Marksheffel Road. In this study, the portion that is to be amended from the original MDDP includes the Shiloh Mesa at Woodmen Heights development south of Kenosha Drive. More specifically, the site is located as follows:

1. General Location: Southwest ¼ of Section 4, Township 13 South, Range 65 West of the 6th P.M. in the City of Colorado Springs, County of El Paso, State of Colorado.

2. Surrounding Streets: Marksheffel Road and Woodmen Road make up the western and southern boundaries of the site, respectively. The site is bound on the east side by Mustang Road and Kenosha Drive separates Shiloh Mesa Filing No. 1 from the Shiloh Mesa Commercial Filing No. 1.

3. Drainageway: As previously mentioned, the site is in the Sand Creek Drainage Basin. All runoff from the site flows from northeast to southwest and is carried to Sand Creek by

two separate storm sewer systems. Approximately 70% of the site drains towards the intersection of Woodmen Road and Marksheffel Road, where it is conveyed (through a combination of culvert systems and open channels) to the west, under Marksheffel Road, and then to the south, under Woodmen Road, and ultimately into the Sand Creek Channel. The remaining 30% is captured by existing area inlets located just east of the Woodmen and Marksheffel intersection. This existing storm sewer system conveys the stormwater south across Woodmen Road and then west into Sand Creek.

4. Surrounding Developments: The site is bound by the aforementioned streets on the south, west, and east, and partially on the north. The remainder of the north portion of the site (Shiloh Mesa Filing No. 5) is bounded on the north by Shiloh Mesa Filing No. 1. Bar J-B Acres is an existing single-family development located on the east side of Mustang Road.

Refer to Appendix D for the Vicinity Map.

F. DATA SOURCES

Topographical information for the site was found using a combination of ***United States Geological Survey*** (USGS) mapping as well as field surveying. The ***Web Soil Survey*** created by the ***Natural Resources Conservation Service*** was utilized to investigate the existing general soil types within the site.

G. APPLICABLE CRITERIA AND STANDARDS

This report has been prepared in accordance to the criteria set forth in the City of Colorado Springs DCM. In addition to the DCM, the ***Urban Storm Drainage Criteria Manuals, Volumes 1 through 3***, dated 2016 have been used to supplement the City Criteria Manual.

II. Project Characteristics

A. BASIN LOCATION AND FLOWS

Shiloh Mesa Filing No. 5, Shiloh Mesa Multi-Family, Shiloh Mesa Commercial Filing No. 1, and Woodmen Valley Chapel are all located within the Sand Creek Drainage Basin, specifically the Upper Basin of Sand Creek as specified in the most recent DBPS study (DBPS-1996) completed in 1996. This study states that any development of properties within Shiloh Mesa which results in the release of undetained stormwater flows directly into Sand Creek will require improvements to the Sand Creek Channel and design and construction of regional detention facility "Pond #3".

B. COMPLIANCE WITH DBPS

Due to budget constraints, the construction of Sand Creek Pond 3 has been broken down into multiple phases. As it is unknown when funds will be available for the next expansion phase for Sand Creek Pond 3, the proposed developments studied in this report will maintain compliance with the latest DBPS study (DBPS-1996) for the Sand Creek basin by treating runoff from the proposed development areas for both water quality and detention before discharging from the studied area and into Sand Creek.

C. GEOLOGY

Most of the site is currently undeveloped and ground cover consists of sparse natural vegetative land cover.

Soils can be classified in four different hydrologic groups, A, B, C, or D to help predict stormwater runoff rates. Hydrologic group "A" is characterized by deep, well-drained coarse-grained soils with a rapid infiltration rate when thoroughly wet and having a low runoff potential. Group "D" typically has a clay layer at or near to the surface, or a very shallow depth to impervious bedrock and has a very slow infiltration rate and a high runoff potential. See Soils Map; Appendix D. The following soil types are present in the development area:

Table 1.1 – NRCS Soil Survey for El Paso County

SOIL ID NUMBER	*SOIL*	*HYDROLOGIC CLASSIFICATION*	*PERMEABILITY*	*PERCENT ON SITE*
8	Blakeland loamy sand (1% - 9% slopes)	A	Rapid	16.3%
19	Columbine gravelly sandy loam (0% - 3% slopes)	A	Rapid	53.1%
71	Pring coarse sandy loam (3% - 8% slopes)	B	Moderately Rapid	30.6%

D. MAJOR DRAINAGEWAYS

As previously mentioned, the entirety of the studied area is located within the Sand Creek Drainage Basin. The site is divided into three major drainageways, two of which (EX1 & L) flow in a northeastern to southwestern direction to a final onsite culmination point. The remaining drainage way (EX2) also flows in a general northeast to southwest pattern before flowing offsite to the south.

The first existing natural drainage way (Sub-basin EX1) begins at the northeast corner of the site, collecting sheet flows, and directing them to the southwest, at slopes ranging from 0.9% to 7.7%, until reaching the intersection between Marksheffel Road and the existing access road that leads to Woodmen Valley Chapel. Once flows reach this intersection, they are directed south by an existing culvert that runs north to the south beneath the existing church access road and, also, by the existing curb and gutter infrastructure in the Marksheffel Road corridor to an existing D-10-R sump inlet located at the northeast quadrant of the intersection of Marksheffel and Woodmen Roads.

This inlet is also the receiving point for the waters that are captured in the second drainageway on the site. This drainageway (Sub-basin L) starts near existing Shiloh Mesa Filing No. 1 and runs south covering the east half of the Marksheffel Road corridor. Development of this sub-basin was undertaken in previous developments. The Corresponding sub-basins from earlier reports also divide Sub-basin L into the two smaller Sub-basins OS2 and OS4. See Appendix C for reference drawings and flows.

From this inlet, flows are routed west underneath Marksheffel Road via existing storm infrastructure before releasing the flows into three existing 48" culverts that route the runoff to the south underneath Woodmen Road and, eventually, to Sand Creek.

The remaining portion of the site (see Sub-Basin EX2) on the Existing Conditions Drainage Map) flows from the northeast to the southwest at slopes ranging from one to five percent. Under current conditions, this runoff appears to sheet flow to the south and exit the site before being collected in area inlets located along the north side of Woodmen Road. Flows are then conveyed to the south and west via existing storm infrastructure before being released into Sand Creek.

E. LAND USES

Presently, a plat has been approved, but not yet recorded for Shiloh Mesa Commercial Filing No. 1 and the site consists mostly of undeveloped land, except for the existing Woodmen Valley Chapel (located along the eastern boundary of the site) and its associated paved entrance drives. Woodmen Valley Chapel plans to expand the church footprint and associated parking lots within a parcel of approximately 9.5-acres. Roughly one acre between the Woodmen Valley Chapel parking, Shiloh Mesa Drive, and Mulberry Wood Drive will remain unplatted. For the purposes of this study, and sizing of downstream detention, this area will be considered as fully developed. The existing access drives either have been or will be removed and access will be provided to the church by Shiloh Mesa Drive and the proposed Mulberry Wood Drive.

Shiloh Mesa Filing No. 5 is a 43-lot single family residential development that consists of approximately 9.9 acres of land included in the Shiloh Mesa at Woodmen Heights development. Development of utilities and roadways are included in this parcel.

The Enclaves at Shiloh Mesa multi-family development will take up the 7.1-acre sub-basin (6.93-acre lot size) north of Shiloh Mesa Drive and between Marksheffel Road (two lanes constructed) and Mulberry Wood Drive. (This is shown as Sub-basin A on drawing DR-02 in Appendix D.) In the previously approved report, ***MDDP/FDR-Matrix 2018,*** this piece was to be a combination of neighborhood commercial and open space development. Shiloh Mesa Commercial Filing No. 1 accounts for the remaining 18.6-acres of undeveloped land on the site. The commercial filing has been broken down into 10 commercial lot boundaries as well as multiple road corridors with associated utilities and curb and gutter improvements and a tract containing proposed Detention Pond 14.

III. Hydrologic Analysis

A. MAJOR BASINS AND SUBBASINS

Drainage generated by Shiloh Mesa Filing No. 5, Shiloh Mesa Commercial Filing No. 1, Shiloh Mesa Multi-Family, and Woodmen Valley Chapel presently flows from the northeast to the southwest where it is captured in existing storm infrastructure and routed to Sand Creek for release. In series detention ponds are utilized to maintain compliance with previously approved drainage studies.

Under proposed conditions, the area of study will be divided into two major basins. One basin will drain to the site's **West Outfall**. This basin will include the proposed multi-family development, "Enclaves at Shiloh Mesa," as well as Lots 7 through 10 of Shiloh Mesa Commercial Filing No. 1. The other basin will discharge to the **South Outfall** and will include Shiloh Mesa Filing No. 5, Woodmen Valley Chapel, and Lots 1 through 6 and Tract "A" of Commercial Filing No. 1.

West Outfall

Proposed flows from Enclaves at Shiloh Mesa (Sub-basin A) will be captured and routed to Pond A, which has been designed to accommodate the Water Quality Capture Volume (WQCV) for the sub-basin containing Enclaves at Shiloh Mesa (Sub-basin A), and the two sub-basins that represent the adjacent portion of Shiloh Mesa Drive (Sub-basins D1 and D2). Pond A will also provide adequate detention to prevent the post-development flows from these three basins from exceeding predevelopment flows. Discharge from Pond A will be conveyed via 18-inch storm sewer to Design Point OS4 where the offsite non-project related flows from Marksheffel will be captured and routed to the existing inlet at the west outfall from the site by 24-inch storm sewer. This 24-inch storm sewer will also have stubs to allow detention outlet connections from future full spectrum detention ponds for Lots 7, 8, 9, and 10 of Commercial Filing No. 1. Construction of Geraldine Point in Commercial Filing No. 1 will require a water quality pond in Lot 9 to provide water quality treatment for runoff from the proposed Geraldine Point. Development of these lots will require individual Final Drainage Reports to demonstrate that detention and water quality treatment are being provided in accordance with City of Colorado Springs criteria.

South Outfall

This basin will require in-series detention pond for treating and detaining flows. Flows from Shiloh Mesa Filing No. 5 (Sub-basin B), Woodmen Valley Chapel (Sub-basins C1 and H2), and portions of Mulberry Wood Drive (Sub-basins B and C2) will be captured and routed to Pond CH in the southwest corner of the Woodmen Valley Chapel lot. Flows from Pond CH will be combined with flows from the east portion of Shiloh Mesa Commercial Filing No. 1 and directed into Pond 14 in the southcentral portion of Shiloh Mesa Commercial Filing No. 1, which will have adequate volume to accommodate the WQCV for the entire tributary area. The in-series combination of Ponds CH and 14 will also provide adequate volume to prevent post development discharge for the tributary areas from exceeding predevelopment conditions.

B. METHODOLOGY

Due to the multiple onsite detention facilities, the hydrology for this project uses the U.S. Environmental Protection Agency Stormwater Management Model (EPA SWMM) as recommended by the Drainage Criteria Manual for the minor and major storms. The EPA SWMM Method is used for drainage basins less than 650-acres in size.

The EPA SWMM Method uses a variation of the Manning's which is as follows:

$$Q = \frac{1.49}{n} W S^{\frac{1}{2}} (d - d_s)^{\frac{5}{3}}$$

Where:

Q	=	Runoff flow rate in cubic feet per second (cfs)
n	=	Runoff coefficient
W	=	Average subcatchment width (ft)
$d-d_s$	=	Height (ft)
S	=	Average slope of subcatchment (ft)

Percentages of imperviousness were used based on the anticipated use of each subcatchment in the runoff calculations.

The hypothetical rainfall depths for the 1-hour storm duration were derived using Table 6-2 of the Colorado Springs DCM (shown on the following page). See Appendix B.

Table 2.1 - Colorado Springs 1-Hour Rainfall Depth

Storm Recurrence Interval	Rainfall Depth (inches)
5-year	1.50
100-year	2.52

As mentioned in the previous section, the WQCV has been addressed by utilizing an Extended Detention Basin at the bottom of each pond series, which is sized to discharge the "initial flush" of stormwater over an extended (40-hour) period. For situations with multiple detention ponds "in series," sizing to accommodate the WQCV, the EURV, the major (100-year), and the minor (5-year) storms has been completed using EPA SWMM, in accordance with City Criteria. Tables comparing SWMM values for storage volume discharge times and percentage of storm volume are included in Appendix A to demonstrate compliance with City criteria.

Where it is possible to treat and detain runoff with a single, full spectrum, extended detention basin, sizing and discharge design has been completed using the UDFCD UD-Detention spreadsheet.

C. BASIN HYDROLOGY

a. The ***existing conditions*** for the site have been analyzed and are presented by design points and are described as follows:

Under existing conditions, the north portion of the site (Sub-basin EX1) flows in a general northeast to southwest pattern into the existing curb and gutter in Marksheffel Road at the southwest corner of the site until reaching **Design Point 1** (Q_5 = 8.1 cfs, Q_{100} = 45.3 cfs), an existing 14' D-10R sump inlet.

Design Point 1 also receives runoff from Design Point OSD2, which is an at grade inlet located at the southeastern corner of Kenosha Drive and Mulberry Wood Drive, and from Sub-basin OSD6. The flow-by runoff generated at OSD2 (Q_5 = 4.8 cfs, Q_{100} = 7.2 cfs) continues south onto the site and joins with the runoff from Sub-basin EX1. Runoff from offsite Sub-basin OSD6 (1.65 acres; Q_5 = 3.0 cfs, Q_{100} = 6.3 cfs) sheet flows to the south before joining with the runoff from Sub-basin EX1. These offsite flows have been included in the design model of the onsite detention ponds. Refer to the table below for the area and storm event runoff generated by each sub-basin that contributes to Design Point 1.

Due to the existing Woodmen Valley Chapel and associated parking lots, an imperviousness of 12% has been calculated for Sub-basin EX1. However, per the DCM, an imperviousness of 2% has been used for all undeveloped calculations. Refer to the Existing Conditions Drainage Map for impervious acreage.

Sub-Basin	Area (AC)	% Impervious	Runoff (CFS)	
			Q5	Q100
OSD6	1.65	N/A	3.0	**6.3**
EX1	34.02	2	6.9	**53.1**
EX2	14.42	2	3.6	**27.5**
L (OS2 & OS4)	2.35	100	9.6	**18.1**

Design Point 2 is located just to the west of DP1 at a 10' D-10R sump inlet. This inlet will collect the subsurface flows from DP1 as well as the paved surface runoff from offsite Sub-basin L (2.35 acres; Q_5 = 7.9 cfs, Q_{100} = 15.7 cfs). This Sub-basin has been included to ensure that the existing storm infrastructure can accommodate the developed flows but has not been included in any detention calculations as it does not flow onto the site. From this point, flows are directed west and then south via the existing storm network until being released into Sand Creek. The total undeveloped site runoff is calculated to be 16.4 cfs and 64.5 cfs in the 5-year and 100-year storm events, respectively. Ex_Outfall_1 in the SWMM outfall loading summary results shown later in this section correspond with the Design Point 2, overall undeveloped site discharge values.

Design Point 3 (Q_5 = 6.6 cfs, Q_{100} = 31.5 cfs) is located at the south end of the site where existing Sub-basin EX2 currently flows offsite and is captured by existing storm infrastructure that conveys is to the south and west until releasing into Sand Creek.

Sub-basin EX2 is comprised of 14.42 acres that also flow from northeast to southwest. Approximately 27% of the site is impervious area from existing Woodmen Valley Chapel, as well as associated parking lots and access roads. As previously stated, an imperviousness of 2% was used for the undeveloped sub-basins which results in 4.2 cfs and 27.1 cfs in the minor and major storm events, respectively. Ex_Outfall_2 in the following SWMM outfall loading summary results corresponds with Design Point 3. SWMM Outfall Loadings for the Q5 and Q100 storms are shown on the following page:

Summary Results

Topic: Outfall Loading — Click a column header to sort the column.

Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
EX_Outfall_1	99.00	0.66	16.38	0.211
EX_Outfall_2	26.31	0.63	4.24	0.054

Q5 Outfall Loading

Summary Results

Topic: Outfall Loading — Click a column header to sort the column.

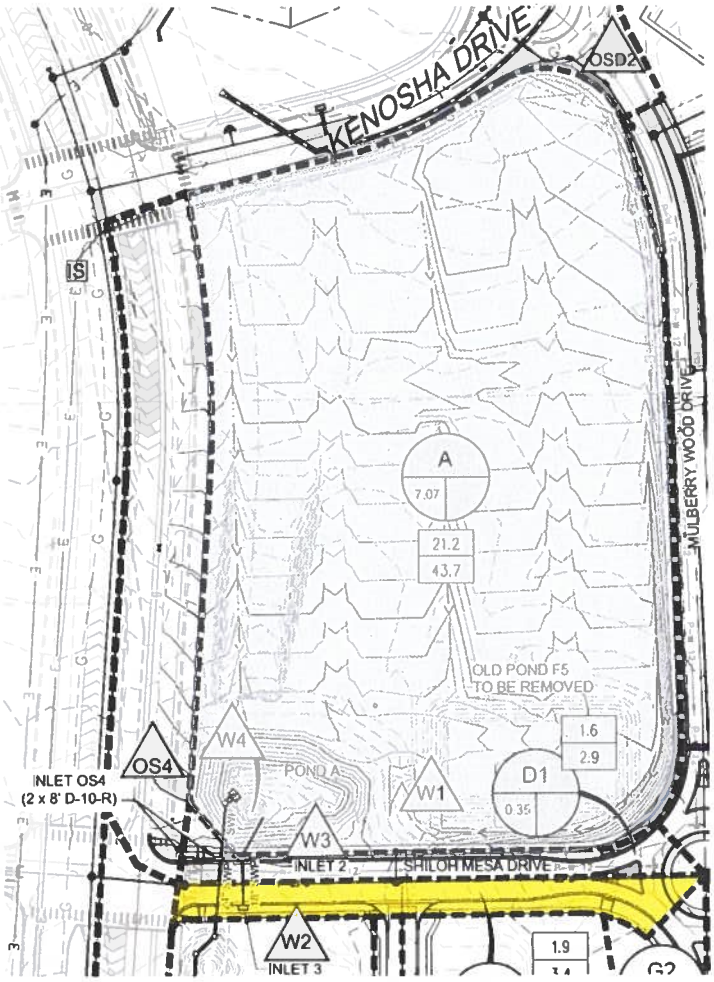
Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
EX_Outfall_1	99.15	4.52	64.45	1.230
EX_Outfall_2	30.49	5.94	27.07	0.487

Q100 Outfall Loading

Note: EX_Outfall_1 is correlated with the proposed West Outfall and EX_Outfall_2 with the proposed South Outfall for the SWMM Model reflecting proposed conditions.

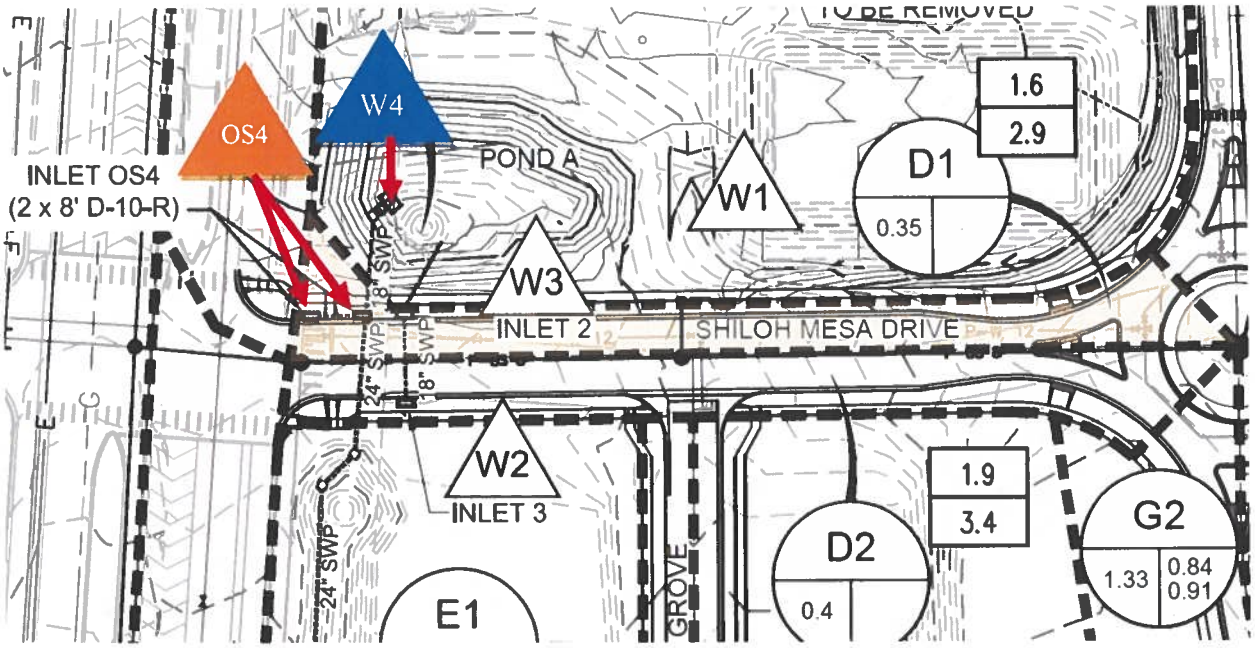
b. The ***fully developed conditions*** for the site are as follows:

Design Point W1, below, (Q_5 = 17.1 cfs, Q_{100} = 43.7 cfs) is at the three proposed D-10 R inlets located at the branch of the proposed multi-family drives in Sub-basin A (7.07 acres). Two 8-foot inlets are proposed for the north and southeast sides of the intersection and a 6-foot inlet is proposed for the southwest side. These inlets will convey runoff from Sub-basin A into Pond A. Further design of these inlets will be undertaken in the FDR for the Enclaves at Shiloh Mesa multi-family development.



Design Point W2, yellow shading above, (0.4 acres; Q_5 = 1.9 cfs, Q_{100} = 3.4 cfs) is located at Inlet 3, an existing 6-foot D-10-R sump inlet on the south side of Shiloh Mesa Drive near its intersection with Marksheffel Road. This inlet captures all flows in Sub-basin D2. Under previous conditions, this inlet drained to the south and discharged into a ditch along Marksheffel Road. However, to comply with City drainage criteria and provide water quality treatment for Shiloh Mesa Drive and optimize detention in the area, this inlet will be re-routed to drain north via 18-inch RCP into Inlet 2 at Design Point W3 and ultimately into proposed Pond A on the Enclaves at Shiloh Mesa site. In the event of Inlet 3 clogging, storm water will either overflow the crown of the road and enter Inlet 2 or, if both inlets are clogged, continue west to Marksheffel Road and then south via the Marksheffel curb and gutter.

Design Point W3, tan shading below (Q_5 = 3.5 cfs, Q_{100} = 6.3 cfs), is an existing 6-foot D-10R inlet (Inlet 2) in a sump condition located on the north side of Shiloh Mesa Drive, near its intersection with the Marksheffel Road corridor. This inlet captures runoff from Sub-basin D1 (0.35 acres; Q_5 = 1.6 cfs, Q_{100} = 2.9 cfs), which consists entirely of paved surfaces. These flows are combined with flows from Design Point W2 to convey flows from the tributary portions of Shiloh Mesa Drive into Pond A. According to DCM Figure 8-12 (see Appendix A), a 4-foot D-10R inlet is required to capture this flow. A 6-foot D-10-R inlet will be used in an effort to be conservative. In the event of clogging, storm water will surcharge the crown of the road and enter Inlet 3. If both inlets are clogged water will eventually follow the curb and gutter west to Marksheffel Road and continue south.



Design Point W4, blue triangle above (Q_5 = 0.2 cfs, Q_{100} = 4.8 cfs), is the discharge from Pond A. Flows from Design Point W3 (Sub-basins D1 & D2) combine with surface sheet flow and storm sewer flows from Sub-basin A for a total of 7.82 acres of tributary area and inflows of: Q_5 = 23.1 cfs, Q_{100} = 47.1 cfs. Outflows from the detention pond to the 18-inch RCP storm pipe running south are: Q_5 = 0.2 cfs, Q_{100} = 4.8 cfs.

Design Point OS4, orange triangle above (Q_5 = 4.2 cfs, Q_{100} = 12.4 cfs), includes two 8-foot at grade D-10-R inlets designed to capture all of the, non-project related, offsite flows from the portion of Marksheffel Road included in Sub-basin OS4 (1.14 acres; Q_5 = 4.0 cfs, Q_{100} = 7.6 cfs). These flows are combined with the discharge from Pond A and conveyed to the south via 24-inch RCP storm pipe.

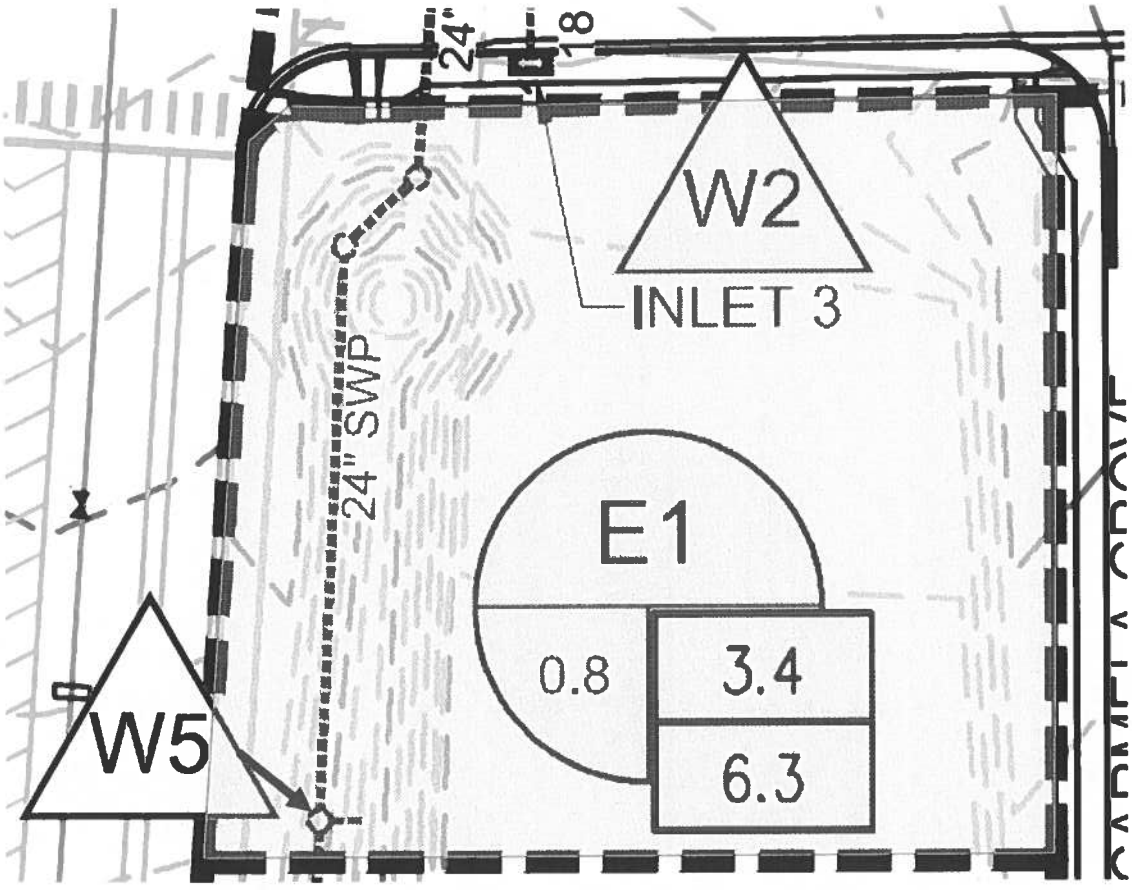
In the previously approved ***MDDP-Matrix***, runoff collected at this point was to be conveyed west via a 54-inch storm drain until being released into Detention Pond #3. Detention Pond #3 is an inline facility located in a portion of Sand Creek near the northwest intersection of Marksheffel Road and Woodmen Road. Per multiple previously approved drainage reports, including ***MDDP-Classic*** and ***MDDP-ESI***, Detention Pond #3 was designed to accommodate the detention and

water quality required for the runoff generated from the Shiloh Mesa at Woodmen Heights Development and an eastern portion of the Woodmen Heights Metropolitan District.

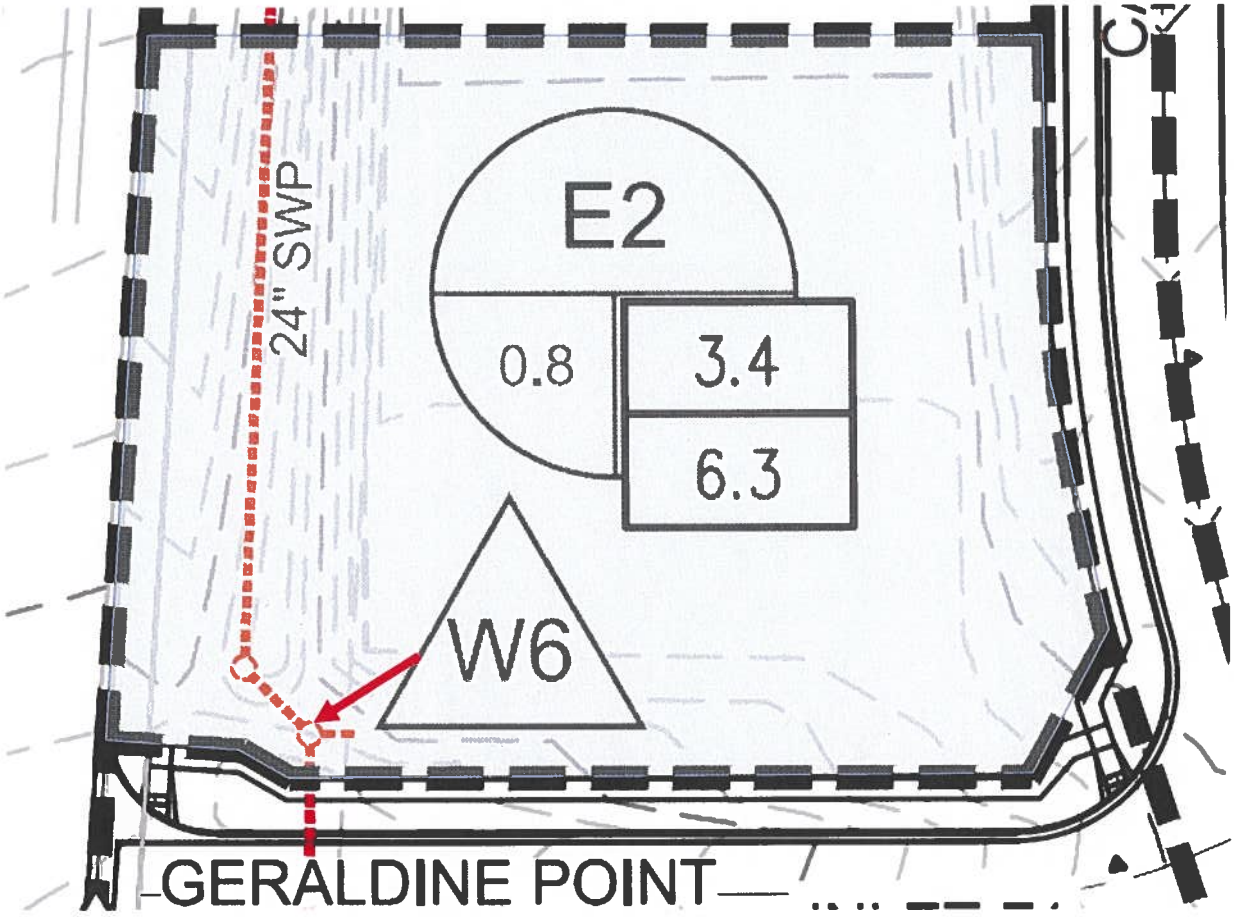
However, due to budget constraints, the construction of Sand Creek Pond 3 has been broken down into multiple phases. The first phase, which was completed in 2016, provides full spectrum detention for specific drainage basins west of Sand Creek (including water quality for approximately 128 acres and 100-year storage volume for 278 acres). The next phase, which was to provide full spectrum detention for specific drainage basins east of Sand Creek, including the Shiloh Mesa at Woodmen Heights Development, is scheduled to be constructed in the future.

With the development of Shiloh Mesa Filing No. 1, an onsite pond was utilized to meet the water quality and detention requirements for the filing. Similarly, the proposed ponds in each lot draining to the West Outfall (Including Ponds A for Enclaves at Shiloh Mesa, E1 in Lot 7, E2 in Lot8, F1 in Lot 9 & including Geraldine Point, and F2 in Lot 10) will meet the water quality and detention requirements for this portion of Shiloh Mesa.

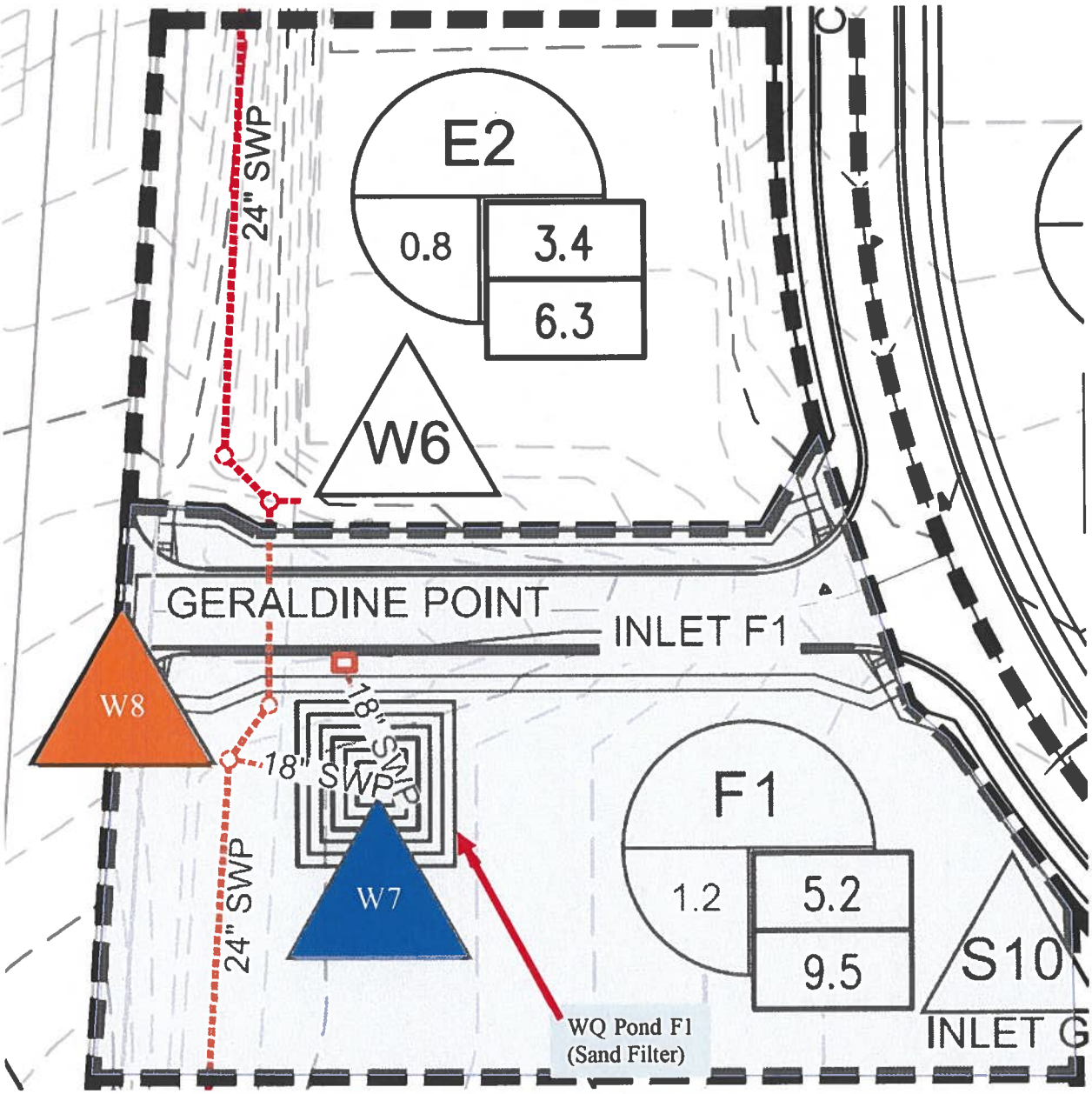
Design Point W5, below, (Q_5 = 4.6 cfs, Q_{100} = 18.4 cfs) is a manhole with an 18-inch stub-out to the east to tie in a future Full Spectrum Detention Pond for Lot 7 (Sub-basin E1: 0.82 acres; Q_5 = 3.4 cfs, Q_{100} = 6.3 cfs). A UD-Detention spreadsheet demonstrating approximate sizing for a Sand Filter option for this lot is included in Appendix A.



Design Point W6, below (Q_5 = 4.8 cfs, Q_{100} = 19.6 cfs), is a manhole with an 18-inch stub out to the east to tie in a future Full Spectrum Detention Pond for Lot 8 (Sub-basin E2: 0.82 acres; Q_5 = 3.4 cfs, Q_{100} = 6.3 cfs). A UD-Detention spreadsheet showing approximate sizing for a Sand Filter option for this lot is included in Appendix A.



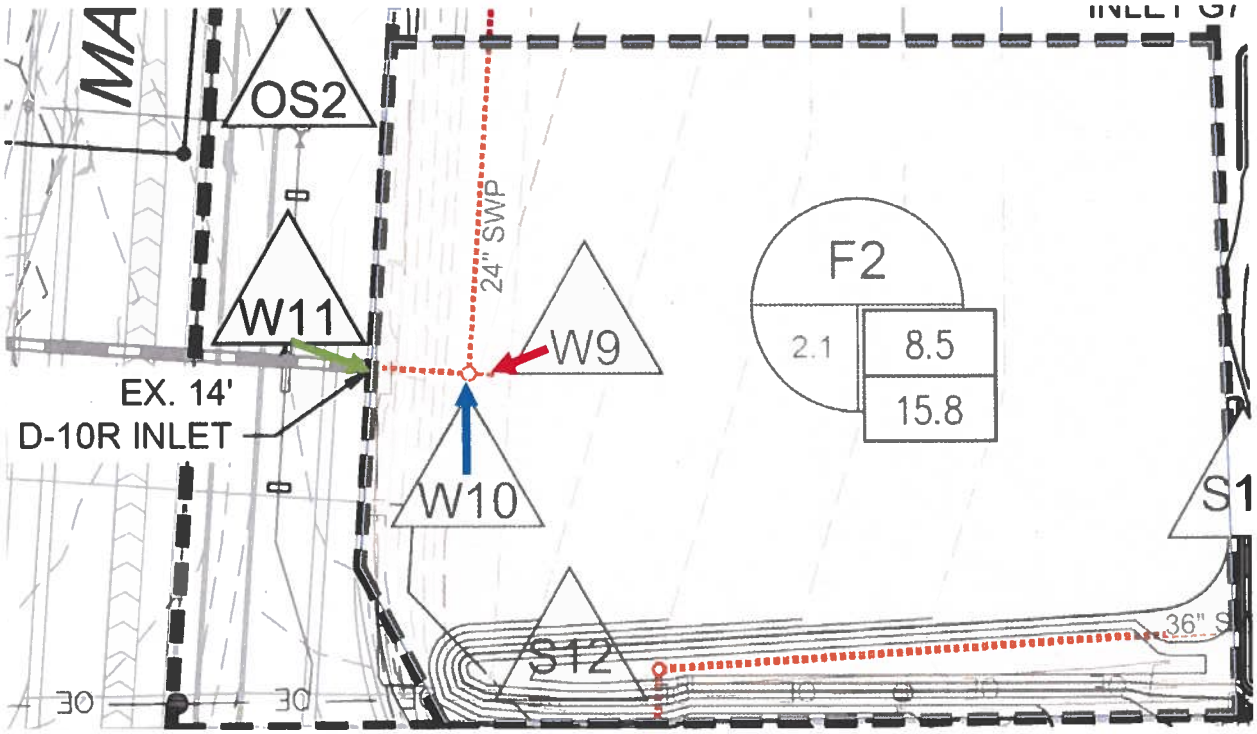
Design Point W7, blue triangle below, (Q_5 = 0.2 cfs, Q_{100} = 1.7 cfs) is the discharge from proposed WQ Pond F1 in Lot 9 (Sub-basin F1: 1.2 acres; Q_5 = 5.2 cfs, Q_{100} = 9.5 cfs). The pond shown below is the approximate size required to treat water quality runoff from Geraldine Point as required by the City DCM. Runoff from Geraldine Point will be captured in a single 6-foot D-10-R Inlet. (Overflow in the event of clogging will continue west along the curb and gutter to Marksheffel Road). Future development of Lot 9 will require expansion of the Water Quality Pond to accommodate detention both detention and water quality treatment for the new development. UD-Detention spreadsheets describing both conditions are included in Appendix A.



Design point W8, orange triangle above, (Q_5 = 5.0 cfs, Q_{100} = 21.3 cfs) is a proposed manhole which will combine flows from Design Point W6 with the discharge from the proposed Water

Quality Pond described by Design Point W7 with the flows carried from Design Point W6 via 24-inch RCP storm sewer.

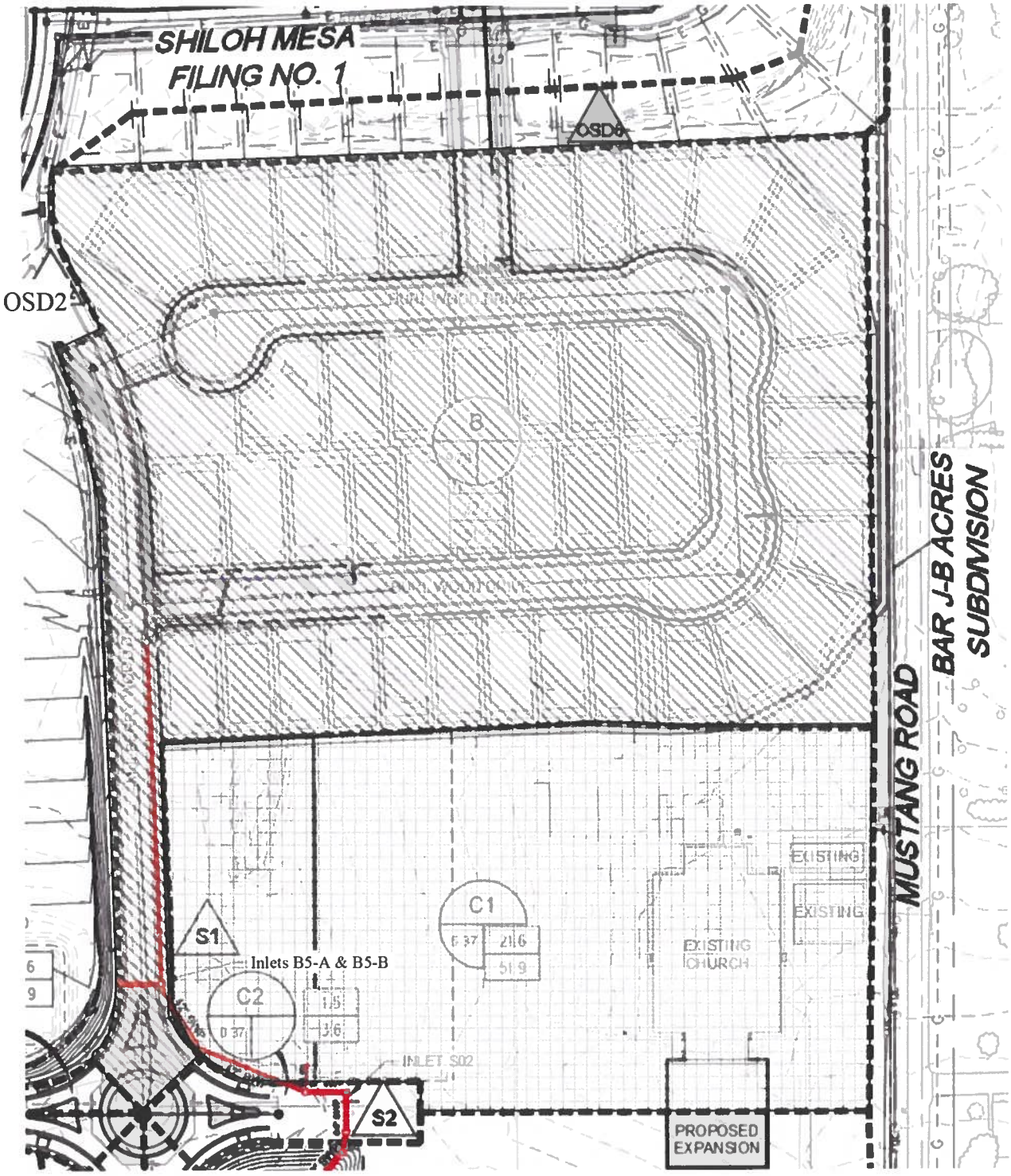
Design Point W9 (Q_5 = 0.1 cfs, Q_{100} = 2.6 cfs), see red arrow below, is an 18-inch RCP storm pipe stub to tie in future full spectrum detention in Lot 10 (Sub-basin F2: 2.1 acres; Q_5 = 8.5 cfs, Q_{100} = 15.8 cfs). A UD-Detention spreadsheet showing approximate sizing for a Sand Filter option in this lot is included in Appendix A.



Design Point W10, see blue arrow above, (Q_5 = 5.1 cfs, Q_{100} = 23.9 cfs), is a proposed manhole combining flows from the proposed Full Spectrum Detention Pond in Lot 10 into the flows from Design Point W8 conveyed via 24-inch RCP storm sewer. Flows are then directed into **Design Point W11** (Q_5 = 10.7 cfs, Q_{100} = 34.4 cfs), see green arrow above, where storm sewer flows from the site are combined with curb and gutter flows from Sub-basin OS2 in an existing 14-foot D-10-R curb inlet.

From Design Point W11, flows are conveyed west by an existing 38-inch x 60-inch elliptical and subsequent 60-inch storm drain until reaching the triple 48-inch culverts that carry the flows south across Woodmen Road and eventually release into Sand Creek.

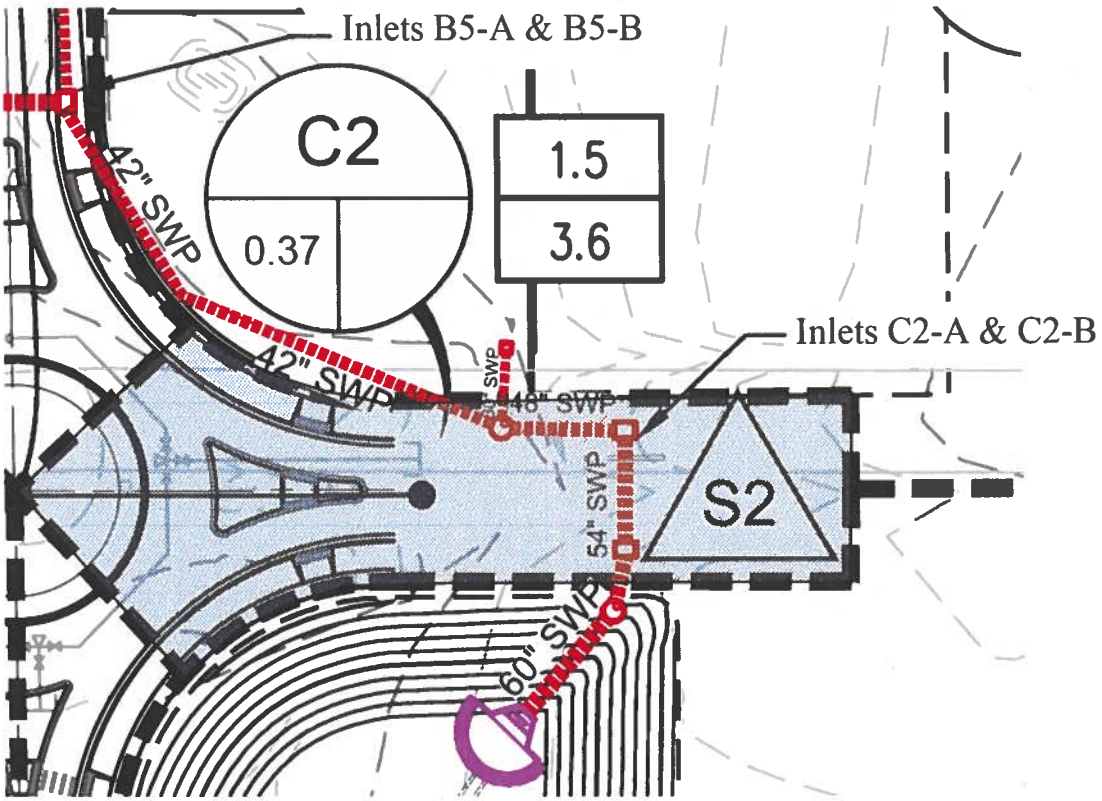
Note: Lot 7(Design Point W5), Lot 8 (Design Point W6), Lot 9 (Design Point W7) and Lot 10 (Design Point W9) will all require Final Drainage Reports and additional detention and storm sewer design prior to development.



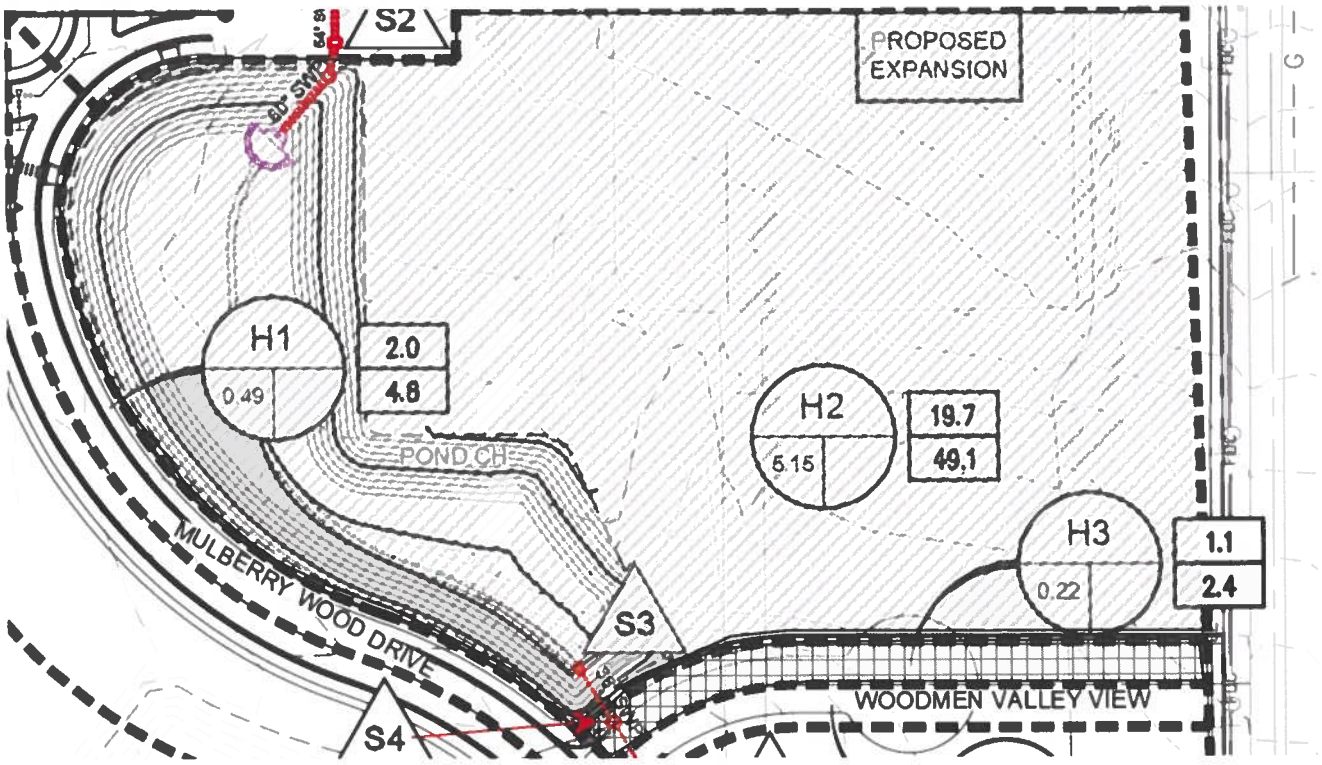
Design Point S1, above, (Q_5 = 22.5 cfs, Q_{100} = 51.2 cfs), is at Inlets B5-B and B5-A which capture runoff from Mulberry Wood Drive and flow by from OSD2 to the north. This inlet combines the captured flow on from Mulberry Wood Drive with flow carried from Sub-basin B (Shiloh Mesa Filing No. 5, angled hatch above). Flow is then carried in 42-inch storm pipe behind the curb of the roundabout to a manhole which serves as a junction to combine these flows with runoff from Sub-basin C1 (square hatch, previous page). From this point flow is conveyed to the inlet on Shiloh Mesa

Drive (Design Point S2) via 48-inch storm pipe. Overflow for the west inlet, in the event of clogging, will continue along the curb and gutter into Sub-basin D1 and be captured by Inlet 2 in that sub-basin or surcharge the crown of the road to be captured by the east inlet. Overflow for the east inlet will surcharge the crown of the road to be captured by the west inlet.

Design Point S2, below, (Q_5 = 43.7 cfs, Q_{100} = 106.6 cfs), is in Sub-basin C2 (0.37 acres; Q_5 = 1.5 cfs, Q_{100} = 3.6 cfs). At this design point 6-foot D-10-R inlets on either side of Shiloh Mesa Drive capture runoff from the sub-basin, combine it with storm water from design point S1 and discharge into Pond CH. Overflow from these inlets will continue west along the curb and gutter to either Inlet B5B or Inlet H1.



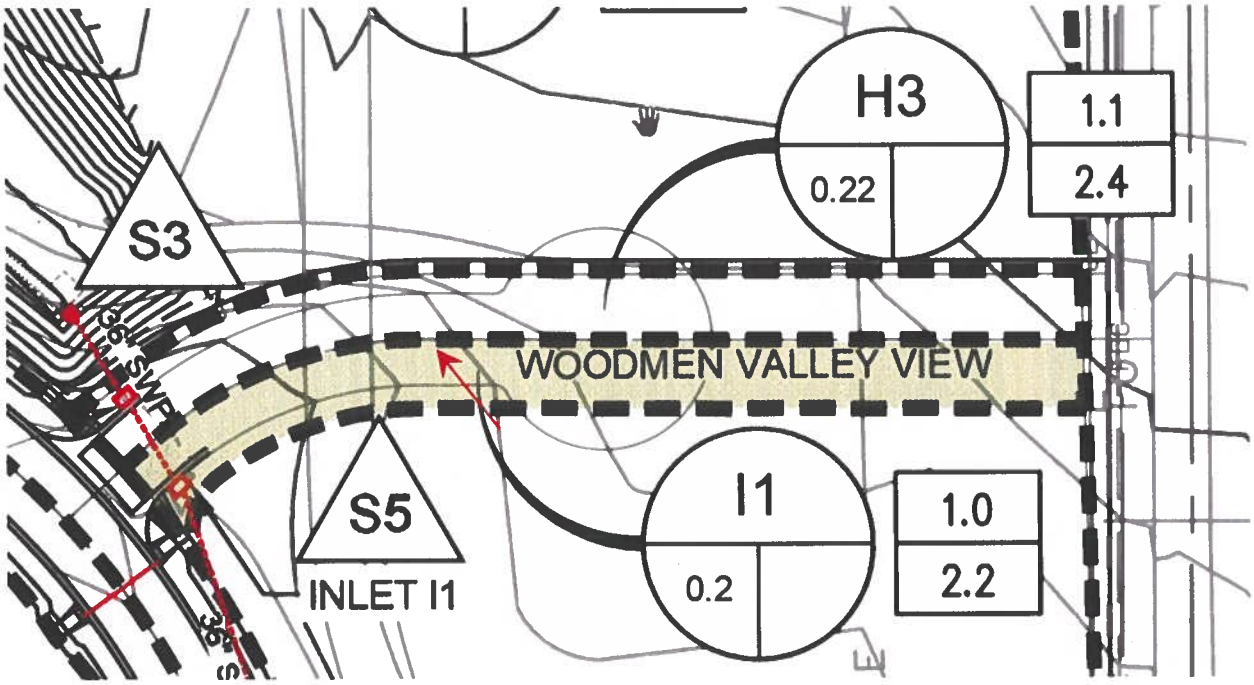
Design Point S3, below, (Q_5 = 2.1 cfs, Q_{100} = 4.5 cfs), is at the discharge structure of Pond CH. Pond CH receives runoff from Sub-basin H2 (angled hatch below) via an onsite storm sewer system. Storm water from Sub-basins B, C1, and C2 are conveyed into Pond CH via proposed storm sewer. Pond CH, in series with Pond 14, provides full spectrum detention for all runoff draining to the South Outfall of the Shiloh Mesa Development.



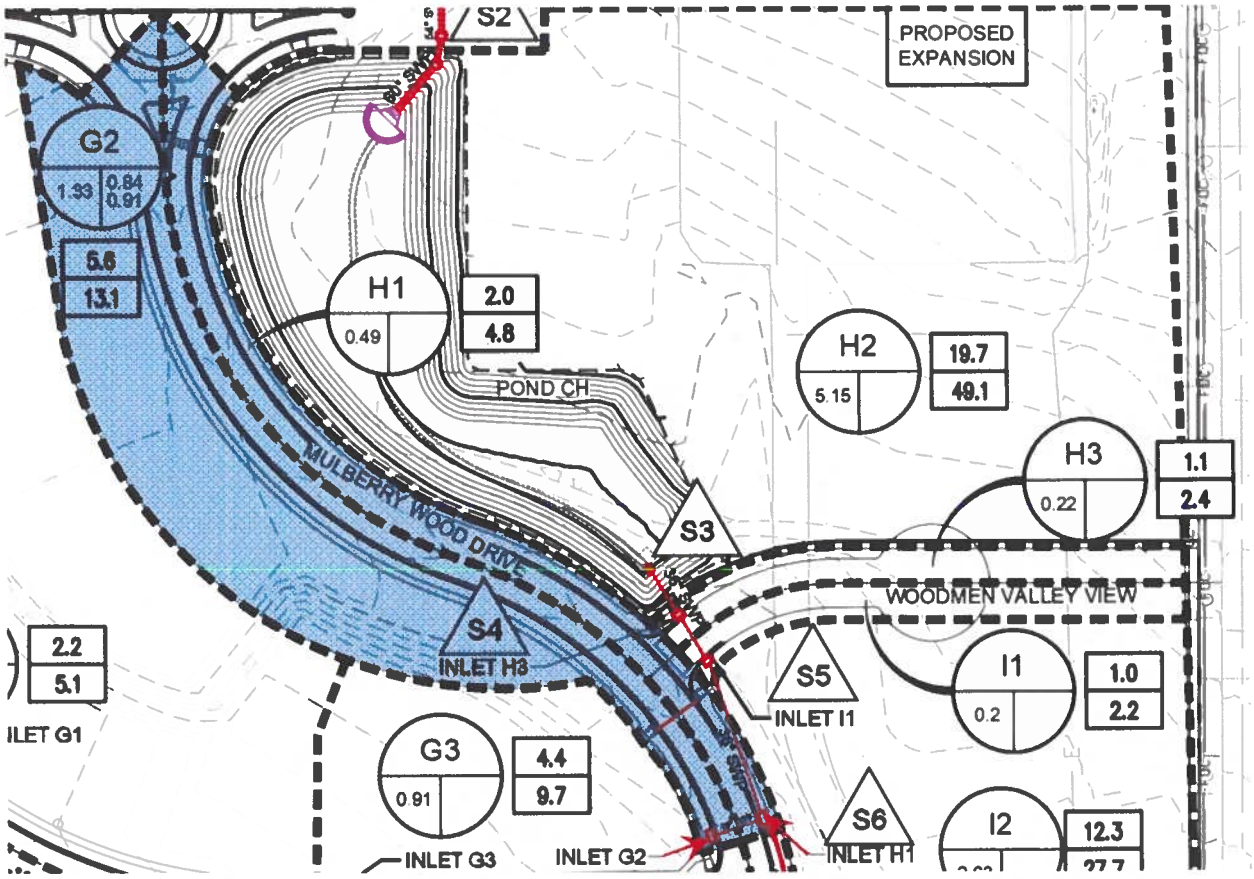
Design Point S4, above, (Q_5 = 2.1 cfs, Q_{100} = 4.5 cfs) is the combination of street surface runoff from the paved surface of Woodmen Valley View from the crown of the road to the northern flowline in Sub-basin H3 (square hatching above), (0.22 acres; Q_5 = 1.1 cfs, Q_{100} = 2.4 cfs, Flow Bypass: Q100 = 0.4 cfs) that is collected in a 6-foot D-10R at-grade inlet, as well as the storm water discharge from Pond CH (Q_5 = 2.1 cfs, Q_{100} = 4.5 cfs). These flows are then conveyed to the south via 36-inch storm sewer.

Design Point S5, below, (Q_5 = 2.3 cfs, Q_{100} = 6.6 cfs) is located at the southeast intersection of Mulberry Wood Drive and Woodmen Valley View at Inlet I1. In addition to the flows from Design Point S4, this 6-foot D-10R inlet, in an at-grade condition, captures the pavement surface runoff from Sub-basin I1 (0.2 acres; Q_5 = 1.0 cfs, Q_{100} = 2.2 cfs).

36-inch storm drain will direct the combined runoff to the west and then south to Design Point S6.



Design Point S6, below, (Q_5 = 9.8 cfs, Q_{100} = 24.1 cfs) shows the convergence of runoff from Design Point S5, Sub-basin G2, Sub-basin H1, and flow-bypass from Inlets H3 and I1. Flows generated in the commercially developed Sub-basin G2 (1.33 acres; Q_5 = 5.6 cfs, Q_{100} = 13.1 cfs) will sheet flow from west to east until reaching the proposed curb and gutter in Mulberry Wood Drive. This infrastructure will route the flows to the south until reaching Inlet G2, an 8-foot D-10R at-grade inlet. According to UD-Inlet approximately 0.4 cfs for the Q_5 storm and 4.5 cfs for the Q_{100} storm will bypass the inlet

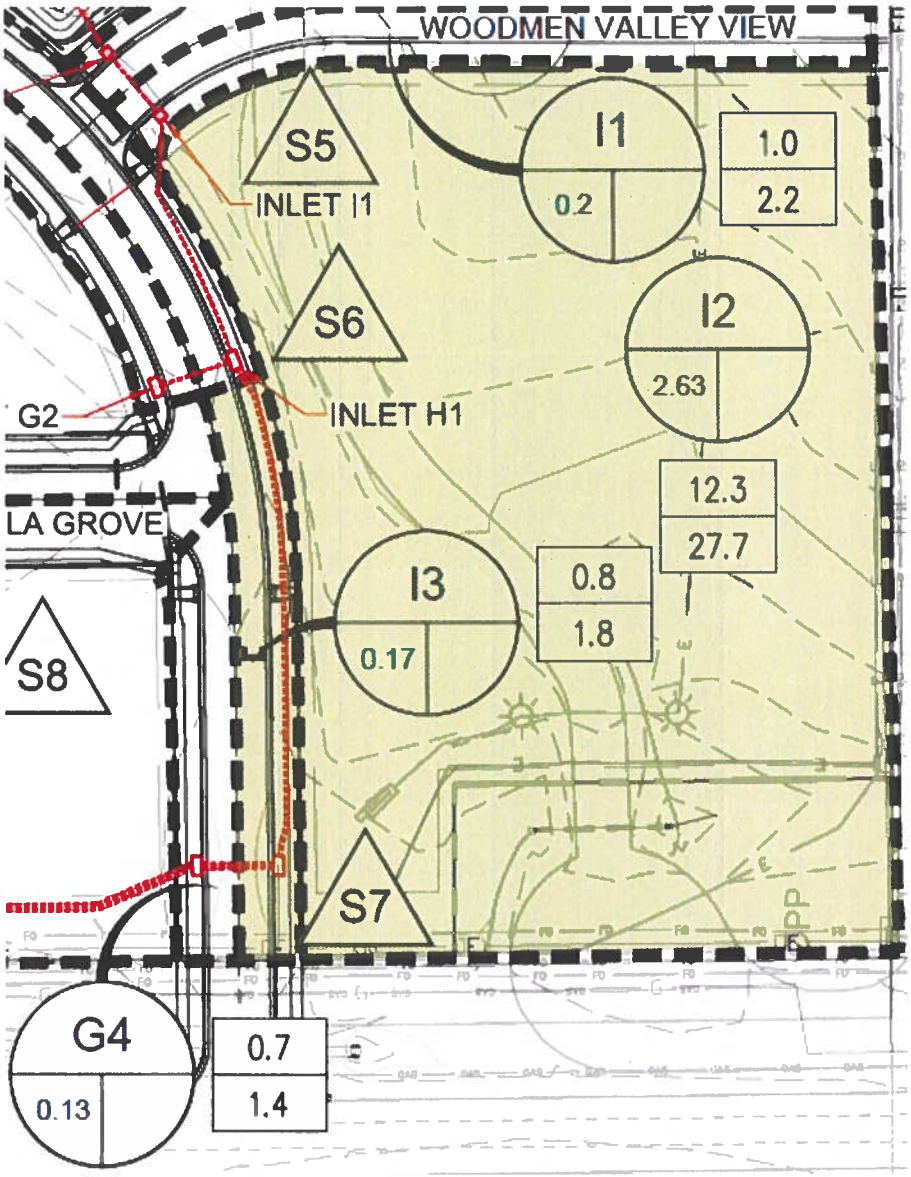


18-inch storm sewer (Pipe Run 3) conveys the flow east from Inlet G2, across Mulberry Wood Drive, and into Inlet H1 (8-foot D-10R, at-grade). Inlet H1 also captures runoff from Sub-basin H1 (0.49 acres; Q_5 = 2.0 cfs, Q_{100} = 4.8 cfs). Sub-basin H1 is the eastern half of the Mulberry Wood Drive road corridor south of Shiloh Mesa Drive and upstream of the inlet. The flows combined in Design Point S6 are then routed to the south via 42-inch storm drain (Pipe Runs 4 A and B) to Inlet I3 (Design Point S7). According to the UD-Inlet spreadsheet, Inlet H1 has a total of 1.6 cfs flow bypass for the 100-year storm. This includes 0.4 cfs of flow bypass each from inlets H3 and I1 and 0.8 cfs from Sub-basin H1.

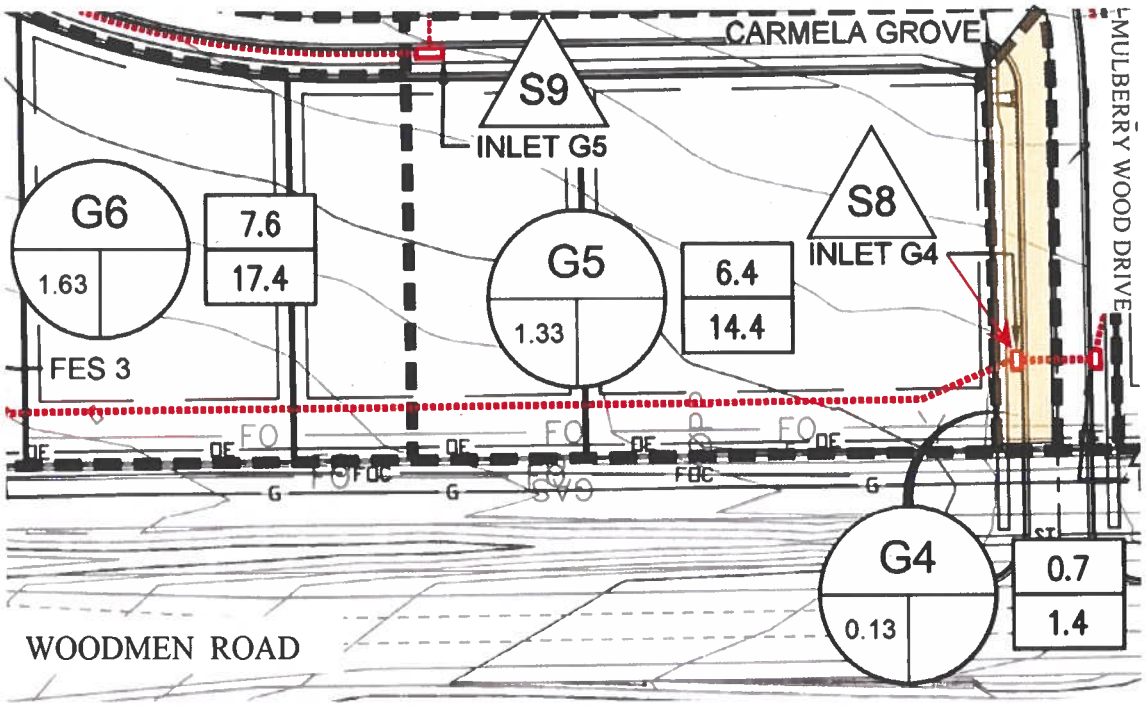
Design Point S7, below, (Q_5 = 22.1 cfs, Q_{100} = 52.5 cfs) is found on the east side of Mulberry Wood Drive approximately 100 feet north of Woodmen Road at Inlet I3. Inlet I3 is a sump inlet which collects paved street surface runoff from Sub-basin I3 (0.17 acres; Q_5 = 0.8 cfs, Q_{100} = 1.8 cfs) as well as 1.6 cfs of flow bypass from the upstream Inlet H1 and has been conservatively sized with an 8-foot length.

In the future, additional subsurface flows from Sub-Basin I2 (2.63 acres; Q_5 = 12.3 cfs, Q_{100} = 27.7 cfs) will be routed to this inlet via onsite storm sewer. According to DCM Figure 8-12 (see Appendix A), this amount of surface flow requires a 4' D-10R inlet. However, to be conservative, Inlet I3 has been designed with an 8-foot length.

The total flows captured in this inlet are routed to the west, across Mulberry Wood Drive, via 42-inch storm drain (Pipe Run 5) until reaching Design Point S8. Overflow, in the event of clogging, will overtop the crown of Mulberry Wood Drive and enter Inlet G4.

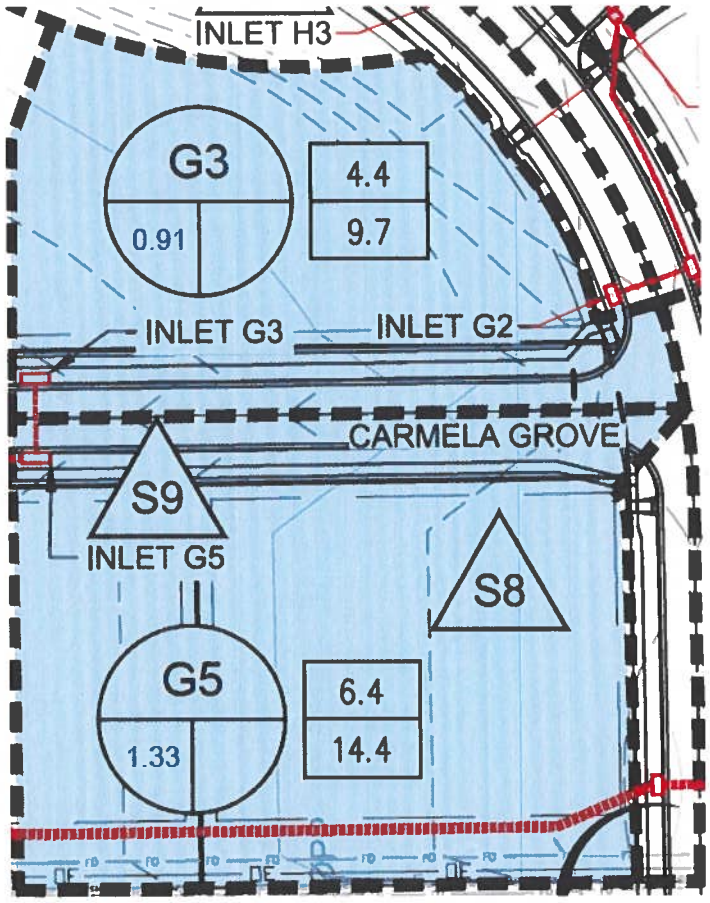


Design Point S8, below, (Q_5 = 22.6 cfs, Q_{100} = 53.8 cfs) is at Inlet G4, an inlet in sump condition which captures the paved roadway surface flow from Sub-basin G4 (0.13 acres; Q_5 = 0.7 cfs, Q_{100} = 1.4 cfs). This requires a 6-foot D-10-R inlet, per the DCM sump inlet nomograph. Surface runoff from Sub-basin G4 combines with the flows from Design Point S7 and is directed to the west via 48-inch storm sewer (Pipe Run 6) until discharging from a 48-inch flared-end section into Pond 14. Pond 14, in series with Pond CH, provides full spectrum detention for Sub-basins B, C1, C2, H1, H2, H3, I1, I2, I3 and G1 through G7. If Inlet G4 clogs overflow will either flow to Woodmen Road or to the existing ditch running along the north side of Woodmen Road.



Design Point S9, on the next page, (Q_5 = 10.8 cfs, Q_{100} = 24.1 cfs), is at Inlet G5, which is a 12' D-10R at-grade inlet on Carmela Grove. Runoff from Sub-basin G5 (1.34 acres; Q_5 = 6.4 cfs, Q_{100} = 14.4 cfs) will sheet flow from south to north until reaching the proposed Carmela Grove curb and gutter which will convey the flows to Inlet G5. Discharge from Sub-basin G3 (0.91 acres; Q_5 = 4.4 cfs, Q_{100} = 9.7 cfs) will sheet flow from the north to south until reaching the curb and gutter proposed adjacent to the sub-basin, and will be routed to Inlet G3, an 8-foot D-10R inlet in an at-grade condition. Flow-by created at Inlet G3 (Q_5 = 0.2 cfs, Q_{100} = 5.3 cfs) will continue to be routed via curb and gutter to the west until being collected by sump Inlet G1. Flows captured by Inlet G3 are conveyed to Inlet G5 via 18-inch storm sewer.

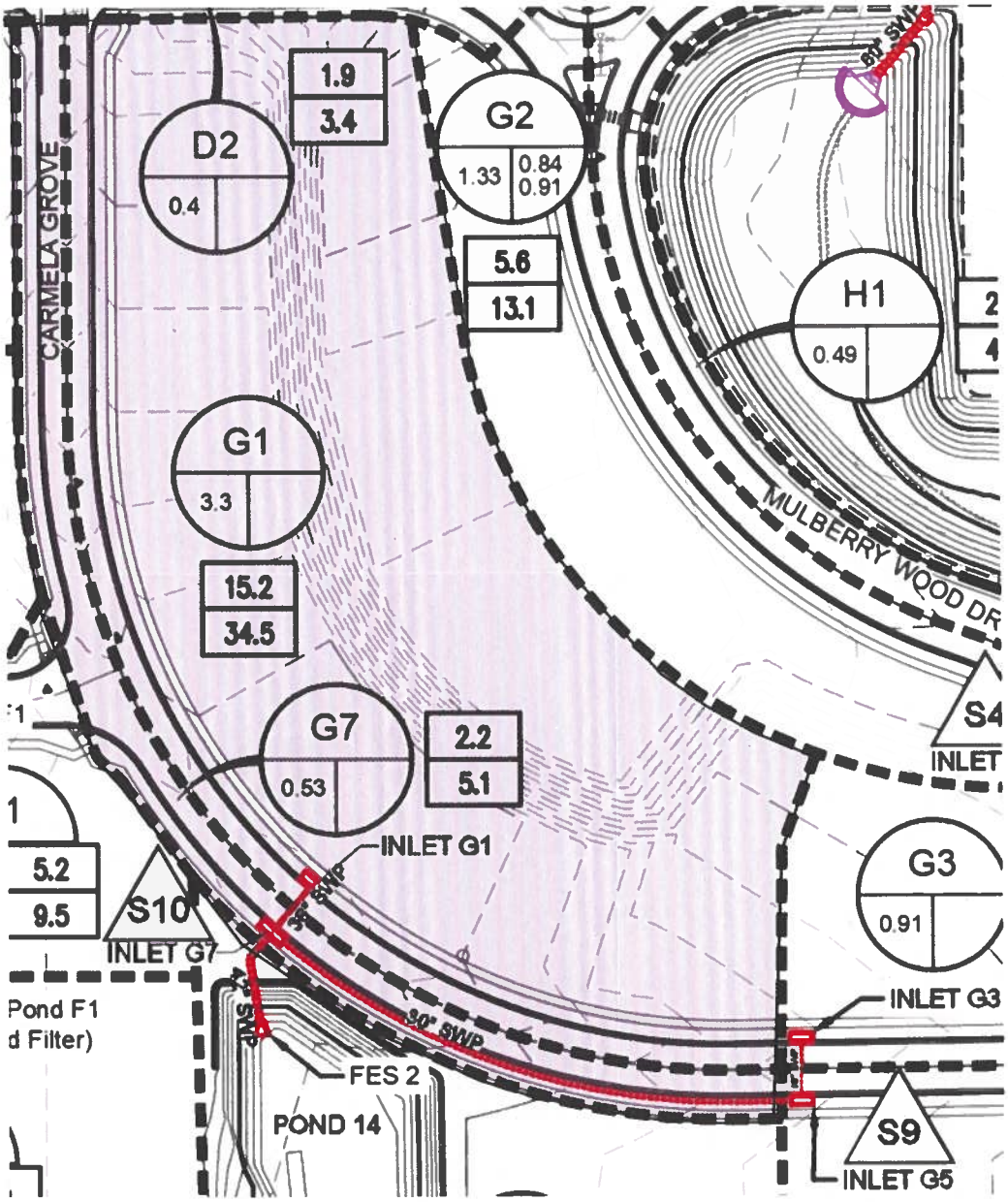
Runoff that is collected in Inlet G3 will be routed to the south via 18-inch storm drain (Pipe Run 7) to Inlet G5 (12-foot D-10R, at-grade). Flow bypass around Inlet G5, (Q_5 = 0.7 cfs, Q_{100} = 5.3 cfs) will be directed via curb and gutter to the west until reaching Inlet G7. Surface flows captured by Inlet G5 will be combined with storm sewer flow from Inlet G3 and carried west via 30-inch storm drain (Pipe Runs 8A and 8B) to Inlet G7. Both Sub-basins G3 and G5 are proposed commercial developments.



Design Point S10, on the next page, (Q_5 = 35.7 cfs, Q_{100} = 80.9 cfs) collects flows from Sub-basin G1 (3.31 acres; Q_5 = 15.2 cfs, Q_{100} = 34.5 cfs) which consists of commercial development as well as surface runoff from the east half of Carmela Grove, and Sub-basin G7 (0.54 acres; (Q_5 = 2.2 cfs, Q_{100} = 5.2 cfs) which is the west half of Carmela Grove. Runoff produced by commercially developed Sub-basin G1 will sheet flow from the east to the west until it is collected in the proposed curb and gutter of Carmela Grove. From this point the runoff drains southeast until being collected in Inlet G1.

In addition to the surface flow from Sub-basin G1, Inlet G1 (sump condition) captures the flow-by generated at Inlet G3. According to the DCM Sump Inlet Capacity nomograph (Figure 8-12: Inlet G1 in Appendix A), a 16-foot D-10-R inlet will be required to capture all the surface flows converging at this inlet (Q_5 = 15.5 cfs, Q_{100} = 39.9 cfs).

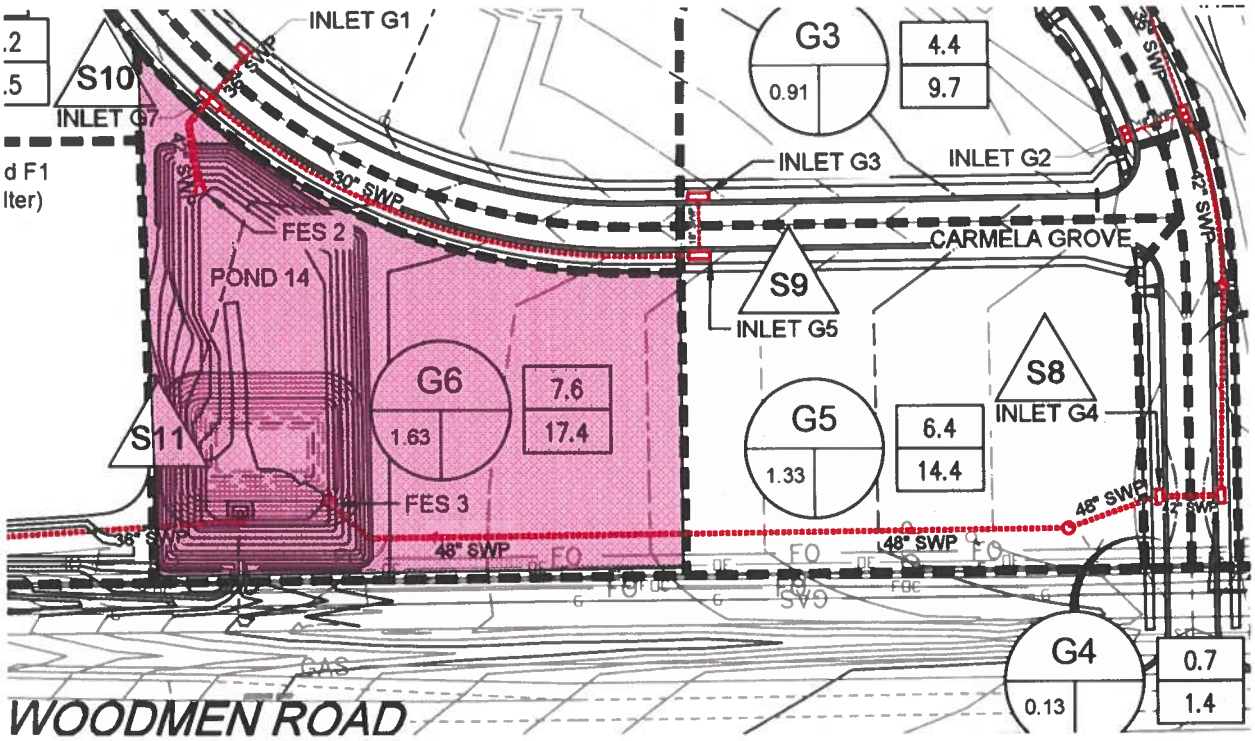
Flows from Inlet G1 are routed via 36-inch storm sewer (Pipe Run 9) southwest into Inlet G7 (Design Point S10). This inlet collects the surface flows from Sub-basin G7 (Carmela Grove, from the crown to the west flowline) as well as flow-by from Inlet G5, for a total of 2.9 cfs and 10.8 cfs from the minor and major storms, respectively. To be conservative, Inlet G7 has been designed as an 8-foot D-10-R. The surface runoff from Sub-basin G7, flow-by from Inlet G5, and the subsurface flow routed from Inlet G1 combine at Inlet G7 and are then conveyed south via a 48-inch storm drain (Pipe Run 10) until being released by FES 2 (48-inch FES) and into Pond 14.



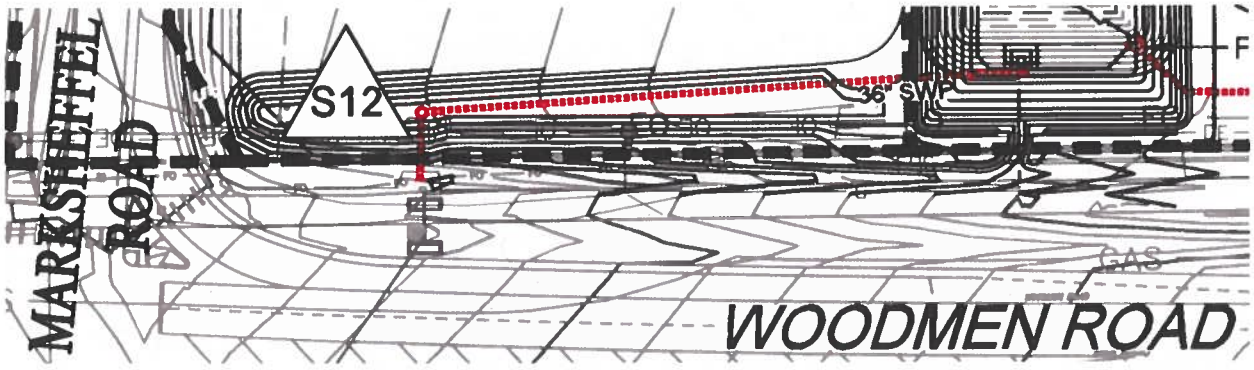
All runoff that is collected in Design Points S10 and S8 will be treated for detention and water quality upon reaching Pond 14, which is also the location of **Design Point S11**, (following page). In addition to these flows, runoff generated by Sub-basin G6 (1.64 acres; Q_5 = 7.7 cfs, Q_{100} = 14.4 cfs), consisting of commercial development, will sheet flow to the west until entering Pond 14 to be treated for water quality and detention, as well. Overflow from Inlets G1 and G7, in the event of clogging, will surcharge the curb and gutter and flow into Pond 14.

Pond 14, in series with Pond CH, provides full spectrum detention for Sub-basins B, C1, C2, H1, H2, H3, I1, I2, I3 and G1 through G7. The total area of the basins that will be treated by the combination of Pond CH and Pond 14 is equal to 33.57 acres, which is comprised of commercial area and paved roadway, considered to have an imperviousness of 95%, and of residential development (Sub-basin B) considered to have an imperviousness of 50%.

Under predevelopment conditions, this south outfall for Shiloh Mesa receives 27.1 cfs for the 100-year storm and 4.2 cfs for the 5-year storm. Under developed conditions, Pond 14 (**Design Point 11**) will release 4.0 cfs for a 5-year storm event, and 20.3 cfs for the 100-year storm event. These flows are at or below undeveloped conditions and are well within the capacity of the downstream infrastructure.



Design Point S12, (Q_5 = 4.0 cfs, Q_{100} = 20.3 cfs), below, shows the location where the treated stormwater released from Pond 14 will discharge into the existing storm sewer. The discharge structure at design point S11 will discharge into 36-inch storm sewer (Pipe Run 13A) and be directed west and then south into an existing 36-inch RCP stub out of an existing grated storm inlet located on the north side of Woodmen Road.



Under predevelopment conditions this existing inlet, the South Outfall from the site, collected flows from 17.6 undeveloped acres of the Shiloh Mesa Commercial development (Q_5 = 4.2 cfs, Q_{100} = 27.1 cfs) and then directed it to the south, underneath Woodmen Road, and then east, under Marksheffel Road and into Sand Creek. There are additional inlets located within Woodmen Road

that collect flows from the paved roadway, totaling 2.7 cfs in the minor storm event and 5.7 cfs in the major storm event, according to the approved ***H&H Woodmen*** report. The existing 36-inch RCP pipe, which will receive the treated runoff from Shiloh Mesa Commercial, has a minimum slope of 0.5%. This slope allows for a full flow storm pipe capacity of 49.91 cfs which exceeds anticipated flows.

Summaries of Sub-basins and Design Points can be found below:

TABLE-3.1
SUB-BASIN SUMMARY
SHILOH MESA MDDP AMENDMENT

AREA ID	AREA (ACRES)	Q5 (CFS)	Q100 (CFS)	AREA ID	AREA (ACRES)	Q5 (CFS)	Q100 (CFS)
OS4	1.14	4.0	7.6	G2	1.33	5.6	13.1
OS2	1.42	5.6	10.5	G3	0.91	4.4	9.7
A	7.07	21.2	43.7	G4	0.13	0.7	1.4
B	9.79	22.7	51.2	G5	1.33	6.4	14.4
C1	5.37	21.6	51.9	G6	1.63	7.6	17.4
C2	0.37	1.5	3.6	G7	0.53	2.2	5.1
D1	0.35	1.6	2.9	H1	0.49	2.0	4.8
D2	0.40	1.9	3.4	H2	5.15	19.7	49.1
E1	0.82	3.4	6.3	H3	0.22	4.4	9.7
E2	0.82	3.4	6.3	I1	0.20	1.0	2.2
F1	1.21	5.2	9.5	I2	2.63	12.3	27.7
F2	2.05	8.5	15.8	I3	0.17	0.8	1.8
G1	3.30	15.2	34.5				

TABLE-3.2
DESIGN POINT SUMMARY
WEST OUTFALL

	Upstream			
Design Points	Area (Ac.)	Q5 (cfs)	Q100 (cfs)	Sub-basins Included
W1	7.07	21.2	43.7	A
W2	0.40	1.9	3.4	D2
W3	0.75	3.5	6.3	D1
W4 Pond A Discharge	7.82	0.2	4.8	A, D1, D2
OS4	1.14	4.2	12.4	OS4 (Marksheffel Non Project Flows added to Pond A Discharge)
W5	9.79	4.6	18.4	A, D1, D2, E1, OS4 (Stub for Lot 7)
W6	10.61	4.8	19.6	A, D1, D2, E1, E2 (Stub for Lot 8)
W7	1.21	0.2	1.7	F1 WQ Pond (Geraldine & Lot 9)
W8	11.82	5.0	21.3	A, D1, D2, E1, E2, & F1 (F1 WQ Pond Discharge)
W9	2.05	0.1	2.6	F2 (Stub for Lot 10)
W10	13.87	5.1	23.9	A, D1, D2, OS4, E1, E2, F1, & F2
W11 (West Outfall)	15.29	10.7	34.4	A, D1, D2, OS4, E1, E2, F1, F2, & OS2 Outfall to Existing Storm Sewer

SOUTH OUTFALL				
	Upstream			
Design Points	Area (Ac.)	Q5 (cfs)	Q100 (cfs)	Sub-basins Included
S1	15.17	22.5	51.2	B
S2	15.53	43.7	106.6	B, C1 & C2
S3 Pond CH Discharge	20.69	2.1	4.5	B, C1, C2 & H2
S4	20.90	2.1	4.5	B, C1, C2, H2 & H3
S5	21.11	2.3	6.6	B, C1, C2, H2, H3 & I1
S6	22.93	9.8	24.1	B, C1, C2, H2, H3, I1, H1 & G2
S7	25.73	22.1	52.5	B, C1, C2, H2, H3, I1, H1, G2, I2, & I3
S8	25.86	22.6	53.8	B, C1, C2, H2, H3, I1, H1, G2, I2, I3 & G4
S9	2.24	10.8	24.1	G3 & G5
S10	6.08	35.7	80.9	G3, G5, G1, & G7
S11 Pond 14 Discharge	33.57	4.0	20.3	B, C1, C2, H1, H2, H3, I1, I2, I3 G1, G2, G3, G4, G5, G6, & G7
S12 South Outfall	33.57	4.0	20.3	B, C1, C2, H1, H2, H3, I1, I2, I3 G1, G2, G3, G4, G5, G6, & G7

SWMM outfall loadings for the Q5 and the Q100 storms are shown below:

Topic: Outfall Loading — Click a column header to sort the column.

Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
SouthOutfall	71.11	0.51	4.01	1.180

Q5 Outfall Loading

Topic: Outfall Loading — Click a column header to sort the column.

Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
SouthOutfall	77.67	1.04	20.28	2.603

Q100 Outfall Loading

Note: West Outfall corresponds with EX_Outfall_1 and South Outfall corresponds with EX_Outfall_2 in the pre-development model.

c. Detention

A summation of the proposed detention and water quality ponds is found below. These numbers are preliminary and will be finalized in the individual Final Drainage Reports for each lot, as will actual pond locations and volumes. Supporting UD-Detention spreadsheets for each lot/sub-basin can be found in Appendix A.

Table 3.3
Pond Summary Table

Pond ID	Contributing Basins	EX 5-YR (CFS)	PR 5-YR (CFS)	EX 100-YR (CFS)	PR 100-YR (CFS)
Pond A (Enclaves) **UD-Detention**	A, D1, D2	0.1	0.2	5.1	4.8
Pond E1 (Lot 7) **UD-Detention**	E1	0	0.1	1.3	1.2
Pond E2 (Lot 8) **UD-Detention**	E2	0	0.1	1.3	1.2
Pond F1 (Lot 9) **UD-Detention**	F1	0	0.2	1.8	1.6
Pond F2 (Lot 10) **UD-Detention**	F2	0.1	0.3	2.9	2.7
Total to WEST OUTFALL		16.4	10.70	64.5	34.40
Pond CH SWMM	B, C1, C2 & H2		2.1		4.5
Pond 14 SWMM	B, C1, C2, H1, H2, H3, I1, I2, I3 G1, G2, G3, G4, G5, G6, & G7		4.0		20.3
Total to SOUTH OUTFALL		4.2	4.0	27.1	20.3

Emergency Overflows

West Outfall

Emergency overflow from Pond A will flow to Shiloh Mesa Drive and be recaptured by Pond A. Ponds E1, E2, and F2 have not been designed yet, but will likely overflow to Marksheffel Road during emergency overflow events. Pond F1 has, at this point, only been designed for the Geraldine Point water quality flows. This pond's emergency overflows will flow to Marksheffel Road and eventually be recaptured by the Existing Inlet at Design Point W11.

South Outfall

Emergency overflow from Pond CH will flow over the emergency spillway on the south side of the pond and onto Woodmen Valley View to be recaptured by the curb inlet at Design Point S4. Flows that exceed the capacity of this inlet will continue down Mulberry Wood Drive and be recaptured by the various inlets south of Woodmen Valley View. Eventually the overflow will be redirected to Pond 14. Emergency Overflow from Pond 14 will be via the spillway on the south side of the detention pond. These flows will be directed by a grassed swale to the Existing grated inlet at Design Point S12.

IV. Hydraulic Analysis

A. MAJOR DRAINAGEWAYS

The entire site is located within the Sand Creek Drainage Basin and all drainage that leaves the site will ultimately release into Sand Creek. Under developed conditions, Design Point W11 (West Outfall) and Design Point S12 (South Outfall) represent the two major offsite exit points for the drainage from Shiloh Mesa Filing No. 5, Woodmen Valley Chapel, Enclaves at Shiloh Mesa, and Shiloh Mesa Commercial Filing No. 1.

The discharge from Design Point S12 will be routed to the south via an existing 36-inch RCP storm drain, which runs at a minimum slope of 0.5% to the south across Woodmen Road and then west until reaching Sand Creek.

The discharge from Design Point W11 is routed west through an existing storm drain system which includes a 38-inch x 60-inch horizontal-elliptical pipe across Marksheffel Road. After crossing to the west side of Marksheffel Road, the storm pipe transitions to 60" RCP, running south and then west until discharging approximately 600' west of the intersection of Woodmen and Marksheffel Roads. The discharge is in very close proximity to 3 – 48-inch storm drains which collect the flows and convey them southward under Woodmen Road. At this point a drainage swale conveys the flow to Sand Creek.

Hydraulic analysis has been completed on the existing and proposed storm sewer, both onsite and offsite. Proposed storm drains and inlets have been sized according to the DCM. Please refer to the pipe capacity (Manning's channel flow calculations) and inlet sizing spreadsheets in Appendix A. Hydraulic grade line profiles will be provided with subsequent construction drawings.

B. METHODOLOGY

A hydraulic analysis has been completed as part of this study to determine the required storm pipe sizing for the site. Hydraulic grade lines were calculated in StormCAD using the Standard Method per DCM requirements.

Initial sizing of the, in-series, on-site detention ponds (Ponds CH & 14) was completed using EPA SWMM. UD-Detention was used for the ponds discharging to the West Outfall, as they are not in series with other ponds. Each of the ponds has been evaluated to determine the peak release rates from the proposed detention pond and the storage required for the 100-year storm event. Most of the pipes have been upsized to accommodate larger flows as a conservative design.

C. STRUCTURE IMPROVEMENTS

The existing storm infrastructure located at the intersection of Marksheffel Road and Woodmen Road has been analyzed and proved capable of conveying the developed flows from the site. As all flows from the proposed project that reach this point have been treated for water quality and detention onsite, no structure improvements are required for this portion of the site.

Because all flows from Shiloh Mesa Filing No. 5 and Shiloh Mesa Commercial Filing No. 1 are to be treated for water quality and detention on site, additional construction in Regional Detention Pond 3 is not required.

D. FLOODPLAINS

Per the ***Flood Insurance Rate Map (FIRM) 08041CO535 G***, effective date December 7, 2018, published by the Federal Emergency Management Agency (FEMA), no portion of Shiloh Mesa lies within any designated 100-year floodplain. This map can be found in Appendix D.

V. Environmental Evaluations

A. WETLAND IMPACTS

There are no designated wetland or riparian areas on site, and no anticipated impacts.

B. STORMWATER QUALITY

All on-site detention facilities shall be designed to accommodate water quality requirements. As the development of each parcel progresses, the detention guidelines outlined in this report are to be upheld.

Per the DCM Chapter 1, Section 4, the City of Colorado Springs requires the UDFCD Four Step Process for receiving water protection that focuses on reducing runoff volumes, treating the water quality capture volume (WQCV), stabilizing drainageways, and implementing long-term source controls.

Step 1: Reduce runoff by disconnecting impervious area, eliminating "unnecessary" impervious area and encouraging infiltration into soils that are suitable.

- Site specific landscaping will be done on each lot to decrease the connectivity of impervious areas. Grass lined swales will be used where possible to allow ground infiltration. An IRF spreadsheet has been completed for the entirety of the site based on the residential use of Shiloh Mesa Filing No. 5 as well as the general commercial use of Shiloh Mesa Commercial Filing No. 1. However, each lot will be responsible for completing a separate spreadsheet once site layouts are complete.

Step 2: Treat and slowly release the WQCV.

- Each pond, or series of ponds, meets the DCM standards for the release rates of Full Spectrum Detention Ponds for Water Quality Capture Volumes.

Step 3: Stabilize stream channels.

- The site is in the Sand Creek Drainage Basin. Channel improvements are planned for Sand Creek and will be completed by the developer of Aspen Meadows, a proposed development adjacent to the creek. Drainage fees, to be paid by the relevant Shiloh Mesa developers at the time of platting, will help fund the channel improvements.

Step 4: Implement source controls.

- During construction, the contractor will have designated concrete washout areas and will implement sediment control logs and inlet protection in order to control pollutants at their source.

C. PERMITTING REQUIREMENTS

No additional permitting requirements are expected at this time.

VI. Alternatives Evaluation

Analysis of the site in both the existing and developed conditions is in accordance with the most recent Drainage Basin Planning Study ***(DBPS-1996)*** as well as the drainage revisions outlined in the successive Master Development Drainage Plans ***(MDDP-Classic, MDDP-ESI, MDDP-MATRIX, MDDP-F1).*** As such, no alternatives have been evaluated.

VII. Selected Plan (Implementation of DBPS)

A. PLAN HYDROLOGY

The hydrology for the site has been provided above and complies with the latest study, DPBS-1996.

B. SYSTEM IMPROVEMENTS

No improvements to the existing system are anticipated.

C. SYSTEM PRIORITIES/PHASING

No phasing of the development has been provided at this time. Once development of any portion of the site begins, the owner will be responsible for providing detention and water quality in accordance with this MDDP, before releasing downstream.

D. GOVERNMENTAL AGENCY REQUIREMENTS

There are no governmental agency requirements for this development.

E. MAINTENANCE REQUIREMENTS

Maintenance requirements for all stormwater quality and erosion control procedures will be outlined in each filing's individual Erosion Control and Storm Water Management Plans. The detention and water quality treatment ponds proposed in this report will be privately owned and maintained by the Woodmen Heights Metro District or, for lot specific detention and water quality ponds, by the owners of the lots on which they are constructed.

F. RECOMMENDATION FOR IMPLEMENTATION

It is recommended that any development of the site initiates the implementation of the detention and water quality procedures that have been detailed in this report. In doing so, the developed conditions will produce runoff comparable to that of predevelopment conditions, which will allow the site to continue to adhere to the DPBS and protect downstream owners and facilities.

VIII. Fee Development

A. UNDEVELOPED PLATTABLE LAND

Shiloh Mesa Commercial Filing No. 1, Woodmen Valley Chapel and Enclaves at Shiloh Mesa have not been previously platted but are currently zoned as PUD and undergoing the platting process. The site is to remain PUD and will incorporate multiple uses. The site was annexed into the City of Colorado Springs in August of 2004 as part of the Woodmen Heights Metropolitan District. The Plat for Shiloh Mesa Filing No. 5 has already been approved and filed.

B. REIMBURSABLE COSTS AND FEES

The site is located entirely within the Sand Creek Drainage Fee Basin. The fees are based upon the platted acreage and have been calculated as follows.

Shiloh Mesa Commercial Filing No. 1
MDDP Amendment & Final Drainage Report
2019 Drainage and Bridge Fees

	Area (ac.)	Fee/Acre	Fee Due	Reimbursable Const. Costs	Fee Due at Platting	Drainage Fee Credit
Drainage Fee	36.22	$12,645.00	$458,001.90	$0.00	$458,001.90	$0.00
Bridge Fee	36.22	$761.00	$27,563.42	$0.00	$27,563.42	$0.00
Pond Fee	36.22	$1,070.00	$38,755.40	$0.00	$38,755.40	$0.00
Pond Facility	36.22	$3,676.00	$133,144.72	$0.00	$133,144.72	$0.00
Surcharge	36.22	$1,333.00	$0.00	$0.00	$0.00	$0.00
			Totals	***$0.00***	***$657,465.44***	***$0.00***

Note: Surcharge not required unless tributary to Pond #2

C. Construction Cost Opinion

An engineer's estimate of probable construction costs has been provided for the proposed improvements of Shiloh Mesa Filing No. 5 and Shiloh Mesa Commercial Filing No. 1 (both estimates can be found on the following page). According to the approved MDDP for Shiloh Mesa at Woodmen Heights (MDDP-Matrix), the only reimbursable improvements are located north of Kenosha Drive, therefore all the improvements in this report are non-reimbursable.

CONSTRUCTION COST OPINION				
SHILOH MESA FILING NO. 5 - Public Non-Reimbursable Expenses				
Storm MH	EA	2	$3,800.00	$7,600.00
24" RCP	LF	334	$58.00	$19,372.00
30" RCP	LF	73	$70.00	$5,110.00
36" RCP	LF	408	$80.00	$32,640.00
42" RCP	LF	25	$100.00	$2,500.00
34"X53" RCP	LF	96	$160.00	$15,360.00
38"X60" RCP	LF	99	$205.00	$20,295.00
6' D-10 R Inlet	EA	1	$5,750.00	$5,750.00
8' D-10R Inlet	EA	1	$7,600.00	$7,600.00
12' D-10R Inlet	EA	1	$9,000.00	$9,000.00
38"X60" FES	EA	1	$5,000.00	$5,000.00
34"X53" FES	EA	1	$5,000.00	$5,000.00
42" Headwall	EA	1	$5,000.00	$5,000.00
18" Dia. Riprap	CY	0.5	$125.00	$62.50
			Sub Total	$140,289.50
			10% Contingency	$14,028.95
			TOTAL:	**$154,318.45**
(All storm infrastructure in Filing No. 5 is PUBLIC)				
SHILOH MESA COMMERCIAL FILING NO. 1 - Public Non-Reimbursable Expenses				
Storm MH	EA	15	$3,800.00	$57,000.00
18" RCP	LF	282.3	$45.00	$12,703.50
24" RCP	LF		$58.00	$0.00
30" RCP	LF	24	$70.00	$1,680.00
36" RCP	LF	480.1	$80.00	$38,408.00
42" RCP	LF	431.6	$100.00	$43,160.00
48" RCP	LF	535.8	$120.00	$64,296.00
54" RCP	LF	48.4	$160.00	$7,744.00
60" RCP	LF	38.8	$200.00	$7,760.00
6' D-10R Inlet	EA	7	$5,750.00	$40,250.00
8' D-10R Inlet	EA	3	$7,600.00	$22,800.00
Type C Inlet	EA	1	$5,000.00	$5,000.00
18" FES	EA	3	$3,000.00	$9,000.00
30" FES	EA	1	$4,000.00	$4,000.00
			Sub Total	$328,551.50
			10% Contingency	$32,855.15
			TOTAL:	**$361,406.65**
			GRAND TOTAL:	**$515,725.10**

CONSTRUCTION COST OPINION - PRIVATE				
SHILOH MESA COMMERCIAL FILING NO. 1 - Private Non-Reimbursable Expenses				
Storm MH	EA	1	$3,800.00	$3,800.00
18" RCP	LF	65	$45.00	$2,925.00
30" RCP	LF	303	$70.00	$21,210.00
36" RCP	LF	31.3	$80.00	$2,504.00
42" RCP	LF	55	$100.00	$5,500.00
6' D-10 R Inlet	EA	1	$5,750.00	$5,750.00
8' D-10R Inlet	EA	1	$7,600.00	$7,600.00
12' D-10R Inlet	EA	2	$9,000.00	$18,000.00
16' D-10R Inlet	EA	1	$12,500.00	$12,500.00
42" FES	EA	1	$5,000.00	$5,000.00
48" FES	EA	1	$5,000.00	$5,000.00
18" Dia. Riprap	CY	20	$125.00	$2,500.00
Detention/WQ Pond	EA	6	$30,000.00	$180,000.00
			Sub Total	$272,289.00
			10% Contingency	$27,228.90
			TOTAL:	**$299,517.90**

IX. References

1. ***City of Colorado Springs Drainage Criteria Manual***, City of Colorado Springs, May 2014
2. ***Web Soil Survey of El Paso County Area, Colorado. Unites States Department of Agriculture Soil Conservation Service***, November 2015.
3. ***Flood Insurance Rate Maps for El Paso County, Colorado and Incorporated Areas, Panel 760 of 1300, Federal Emergency Management Agency***, Effective Date March 17, 1997.
4. ***Urban Storm Drainage Criteria Manual, Vol. 1-3*** by Urban Drainage and Flood Control District (UDFCD), January 2016
5. ***Preliminary Design of Selected Alternative, Sand Creek Drainage Basin Planning Study*** by Kiowa Engineering, revised March 1996
6. ***Master Development Drainage Plan for Woodmen Heights Master Plan,*** by Classic Consulting Engineers and Surveyors, June 2004
7. ***Master Development Drainage Plan for Woodmen Heights Master Plan Update for Woodmen Heights and Final Drainage Report for Forrest Meadows Filing No.1 and No. 4,*** by Engineer and Surveying, Inc., February 2006
8. ***Master Development Drainage Plan for Shiloh Mesa at Woodmen Heights,*** by Matrix Design Group Inc., November 2009
9. ***Master Development Drainage Plan and Final Drainage Report for Shiloh Mesa and Shiloh Mesa Filing No. 1,*** by M&S Civil Consultants, Inc., December 2015
10. ***Preliminary/Final Drainage Report for Shiloh Mesa Filing No. 5***, by Matrix Design Group Inc., November 2016

X. Appendices

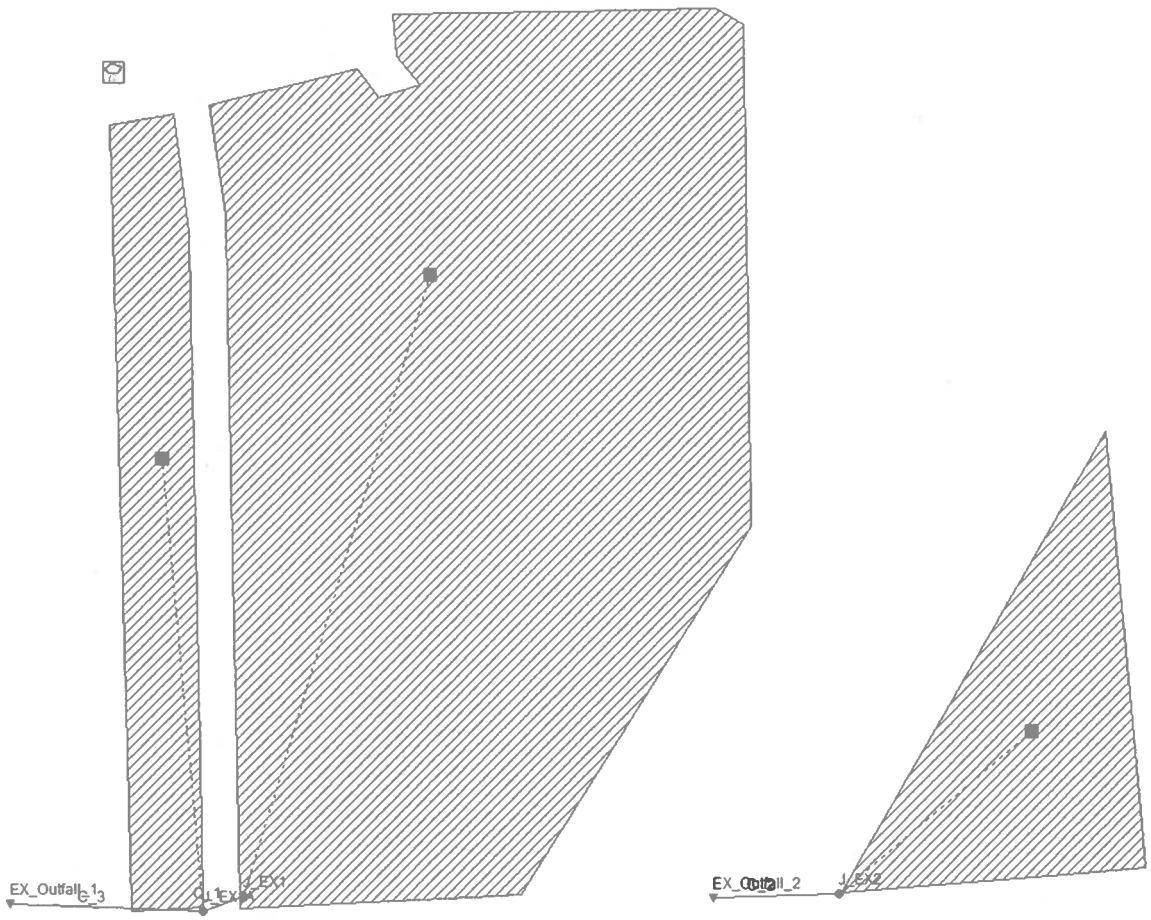
APPENDIX A

HYDROLOGIC AND HYDRAULIC CALCULATIONS

SWMM MODEL 2-HOUR STORM INPUT

		2-YR	5-YR	10-YR	25-YR	50-YR	100-YR	500
		1.15	1.5	1.78	2.27	2.69	2.52	3.52
0	0	0	0	0	0	0	0	0
0:05	0.014	0.0161	0.021	0.02492	0.03178	0.03766	0.03528	0.04928
0:10	0.046	0.0529	0.069	0.08188	0.10442	0.12374	0.11592	0.16192
0:15	0.079	0.09085	0.1185	0.14062	0.17933	0.21251	0.19908	0.27808
0:20	0.12	0.138	0.18	0.2136	0.2724	0.3228	0.3024	0.4224
0:25	0.179	0.20585	0.2685	0.31862	0.40633	0.48151	0.45108	0.63008
0:30	0.258	0.2967	0.387	0.45924	0.58566	0.69402	0.65016	0.90816
0:35	0.421	0.48415	0.6315	0.74938	0.95567	1.13249	1.06092	1.48192
0:40	0.712	0.8188	1.068	1.26736	1.61624	1.91528	1.79424	2.50624
0:45	0.824	0.9476	1.236	1.46672	1.87048	2.21656	2.07648	2.90048
0:50	0.892	1.0258	1.338	1.58776	2.02484	2.39948	2.24784	3.13984
0:55	0.935	1.07525	1.4025	1.6643	2.12245	2.51515	2.3562	3.2912
1:00	0.972	1.1178	1.458	1.73016	2.20644	2.61468	2.44944	3.42144
1:05	1.004	1.1546	1.506	1.78712	2.27908	2.70076	2.53008	3.53408
1:10	1.018	1.1707	1.527	1.81204	2.31086	2.73842	2.56536	3.58336
1:15	1.03	1.1845	1.545	1.8334	2.3381	2.7707	2.5956	3.6256
1:20	1.041	1.19715	1.5615	1.85298	2.36307	2.80029	2.62332	3.66432
1:25	1.052	1.2098	1.578	1.87256	2.38804	2.82988	2.65104	3.70304
1:30	1.063	1.22245	1.5945	1.89214	2.41301	2.85947	2.67876	3.74176
1:35	1.072	1.2328	1.608	1.90816	2.43344	2.88368	2.70144	3.77344
1:40	1.082	1.2443	1.623	1.92596	2.45614	2.91058	2.72664	3.80864
1:45	1.091	1.25465	1.6365	1.94198	2.47657	2.93479	2.74932	3.84032
1:50	1.1	1.265	1.65	1.958	2.497	2.959	2.772	3.872
1:55	1.109	1.27535	1.6635	1.97402	2.51743	2.98321	2.79468	3.90368
2:00	1.119	1.28685	1.6785	1.99182	2.54013	3.01011	2.81988	3.93888

EPA SWMM 5.1
EXISTING MODEL



Subcatchment EX1

Property	Value
Name	EX1
X-Coordinate	4783.036
Y-Coordinate	7819.464
Description	
Tag	
Rain Gage	RG_SM
Outlet	J_EX1
Area	34.02
Width	950
% Slope	1
% Imperv	2
N-Imperv	0.01
N-Perv	0.1
Dstore-Imperv	0.05
Dstore-Perv	0.05
%Zero-Imperv	0
Subarea Routing	OUTLET
Percent Routed	100
Infiltration	MODIFIED_GREEN_AMPT
Groundwater	NO
Snow Pack	
LID Controls	0
Land Uses	0
Initial Buildup	NONE
Curb Length	0

User-assigned name of subcatchment

Subcatchment EX2

Property	Value
Name	EX2
X-Coordinate	8023.649
Y-Coordinate	5315.315
Description	
Tag	
Rain Gage	RG_SM
Outlet	J_EX2
Area	34.02
Width	633
% Slope	1
% Imperv	2
N-Imperv	0.01
N-Perv	0.1
Dstore-Imperv	0.05
Dstore-Perv	0.05
%Zero-Imperv	0
Subarea Routing	OUTLET
Percent Routed	100
Infiltration	MODIFIED_GREEN_AMPT
Groundwater	NO
Snow Pack	
LID Controls	0
Land Uses	0
Initial Buildup	NONE
Curb Length	0

User-assigned name of subcatchment

Subcatchment MS_East

Property	Value
Name	MS_East
X-Coordinate	2652.027
Y-Coordinate	7004.505
Description	
Tag	
Rain Gage	RG_SM
Outlet	J_EX1A
Area	2.35
Width	75
% Slope	1
% Imperv	100
N-Imperv	0.01
N-Perv	0.1
Dstore-Imperv	0.05
Dstore-Perv	0.05
%Zero-Imperv	25
Subarea Routing	OUTLET
Percent Routed	100
Infiltration	MODIFIED_GREEN_AMPT
Groundwater	NO
Snow Pack	
LID Controls	0
Land Uses	0
Initial Buildup	NONE
Curb Length	0

Percent of runoff routed between sub-areas

Junction J_EX1A

Property	Value
Name	J_EX1A
X-Coordinate	2899.775
Y-Coordinate	4211.712
Description	
Tag	
Inflows	NO
Treatment	NO
Invert El.	6891.05
Max. Depth	0
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

Junction J_EX2

Property	Value
Name	J_EX2
X-Coordinate	6829.955
Y-Coordinate	4313.063
Description	
Tag	
Inflows	NO
Treatment	NO
Invert El.	0
Max. Depth	0
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

Conduit C_1

Property	Value
Name	C_1
Inlet Node	J_EX1
Outlet Node	J_EX1A
Description	
Tag	
Shape	CIRCULAR
Max. Depth	4
Length	16
Roughness	.013
Inlet Offset	0
Outlet Offset	0
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff.	0
Exit Loss Coeff.	0
Avg. Loss Coeff.	0
Seepage Loss Rate	0
Flap Gate	NO
Culvert Code	

Conduit C_2

Property	Value
Name	C_2
Inlet Node	J_EX2
Outlet Node	EX_Outfall_2
Description	
Tag	
Shape	CIRCULAR
Max. Depth	3
Length	400
Roughness	0.01
Inlet Offset	0
Outlet Offset	0
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff.	0
Exit Loss Coeff.	0
Avg. Loss Coeff.	0
Seepage Loss Rate	0
Flap Gate	NO
Culvert Code	

Conduit C_3

Property	Value
Name	C_3
Inlet Node	J_EX1A
Outlet Node	EX_Outfall_1
Description	
Tag	
Shape	HORIZ_ELLIPSE
Max. Depth	3.167
Length	159
Roughness	0.01
Inlet Offset	0
Outlet Offset	0
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff.	0
Exit Loss Coeff.	0
Avg. Loss Coeff.	0
Seepage Loss Rate	0
Flap Gate	NO
Culvert Code	

Rain Gage RG_SM

Property	Value
Name	RG_SM
X-Coordinate	2375.847
Y-Coordinate	9367.946
Description	
Tag	
Rain Format	CUMULATIVE
Time Interval	0:05
Snow Catch Factor	1.0
Data Source	TIMESERIES

2 YR STORM

Subcatchment Runoff Summary

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
EX2	1.29	0.00	0.00	1.25	0.04	0.03	3.88	0.028
MS_East	1.29	0.00	0.00	0.00	1.25	0.08	5.67	0.969
EX1	1.29	0.00	0.00	1.24	0.04	0.04	4.44	0.032

Node Inflow Summary

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Day of Maximum Inflow	Hour of Maximum Inflow	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
J_EX1	JUNCTION	4.44	4.44	0	00:45	0.0384	0.0384	-0.004
J_EX2	JUNCTION	3.88	3.88	0	00:45	0.0336	0.0336	-0.023
J_EX1A	JUNCTION	5.67	10.09	0	00:45	0.0796	0.118	-0.002
EX_Outfall_1	OUTFALL	0.00	10.10	0	00:45	0	0.118	0.000
EX_Outfall_2	OUTFALL	0.00	3.69	0	00:45	0	0.0336	0.000

Node Depth Summary

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Day of Maximum Depth	Hour of Maximum Depth	Maximum Reported Depth Feet
J_EX1	JUNCTION	0.03	0.58	6891.79	0	00:45	0.58
J_EX2	JUNCTION	0.09	0.96	0.96	0	00:45	0.96
J_EX1A	JUNCTION	0.06	0.69	6891.74	0	00:45	0.68
EX_Outfall_1	OUTFALL	0.05	0.65	6891.06	0	00:45	0.64
EX_Outfall_2	OUTFALL	0.03	0.50	0.50	0	00:45	0.49

Link Flow Summary

Link	Type	Maximum |Flow| CFS	Day of Maximum Flow	Hour of Maximum Flow	Maximum |Velocity| ft/sec	Max / Full Flow	Max / Full Depth
C_1	CONDUIT	4.43	0	00:45	3.49	0.03	0.16
C_2	CONDUIT	3.69	0	00:45	2.82	0.06	0.24
C_3	CONDUIT	10.10	0	00:45	5.71	0.08	0.21

Outfall Loading Summary

Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
EX_Outfall_1	92.27	0.40	10.10	0.118
EX_Outfall_2	29.31	0.35	3.69	0.034

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Subcatchment Runoff Summary

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
EX2	1.66	0.00	0.00	1.57	0.09	0.08	6.57	0.051
MS_East	1.66	0.00	0.00	0.00	1.62	0.10	7.88	0.976
EX1	1.66	0.00	0.00	1.55	0.11	0.10	8.05	0.064

Node Inflow Summary

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Day of Maximum Inflow	Hour of Maximum Inflow	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
J_EX1	JUNCTION	8.05	8.05	0	00:45	0.0985	0.0985	-0.002
J_EX2	JUNCTION	6.57	6.57	0	00:45	0.0788	0.0788	-0.016
J_EX1A	JUNCTION	7.88	15.92	0	00:45	0.103	0.202	-0.002
EX_Outfall_1	OUTFALL	0.00	15.97	0	00:45	0	0.202	0.000
EX_Outfall_2	OUTFALL	0.00	6.34	0	00:45	0	0.0788	0.000

Node Depth Summary

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Day of Maximum Depth	Hour of Maximum Depth	Maximum Reported Depth Feet
J_EX1	JUNCTION	0.05	0.77	6891.98	0	00:45	0.77
J_EX2	JUNCTION	0.11	1.18	1.18	0	00:45	1.18
J_EX1A	JUNCTION	0.08	0.86	6891.91	0	00:45	0.85
EX_Outfall_1	OUTFALL	0.06	0.81	6891.22	0	00:45	0.80
EX_Outfall_2	OUTFALL	0.04	0.65	0.65	0	00:45	0.65

Link Flow Summary

Link	Type	Maximum |Flow| CFS	Day of Maximum Flow	Hour of Maximum Flow	Maximum |Velocity| ft/sec	Max / Full Flow	Max / Full Depth
C_1	CONDUIT	8.05	0	00:45	4.48	0.06	0.20
C_2	CONDUIT	6.34	0	00:45	3.57	0.10	0.30
C_3	CONDUIT	15.97	0	00:45	6.72	0.12	0.26

Outfall Loading Summary

Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
EX_Outfall_1	92.95	0.67	15.97	0.202
EX_Outfall_2	29.68	0.82	6.34	0.079

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Subcatchment Runoff Summary

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
EX2	1.99	0.00	0.00	1.83	0.16	0.15	9.58	0.082
MS_East	1.99	0.00	0.00	0.00	1.95	0.12	9.97	0.980
EX1	1.99	0.00	0.00	1.79	0.21	0.19	12.16	0.103

Node Inflow Summary

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Day of Maximum Inflow	Hour of Maximum Inflow	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
J_EX1	JUNCTION	12.16	12.16	0	00:45	0.19	0.19	-0.001
J_EX2	JUNCTION	9.58	9.58	0	00:45	0.15	0.15	-0.012
J_EX1A	JUNCTION	9.97	22.13	0	00:45	0.125	0.315	-0.002
EX_Outfall_1	OUTFALL	0.00	22.24	0	00:45	0	0.315	0.000
EX_Outfall_2	OUTFALL	0.00	9.38	0	00:45	0	0.15	0.000

Node Depth Summary

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Day of Maximum Depth	Hour of Maximum Depth	Maximum Reported Depth Feet
J_EX1	JUNCTION	0.06	0.93	6892.14	0	00:45	0.93
J_EX2	JUNCTION	0.14	1.38	1.38	0	00:45	1.37
J_EX1A	JUNCTION	0.09	1.00	6892.05	0	00:45	1.00
EX_Outfall_1	OUTFALL	0.08	0.95	6891.36	0	00:45	0.94
EX_Outfall_2	OUTFALL	0.06	0.79	0.79	0	00:45	0.79

Link Flow Summary

Link	Type	Maximum |Flow| CFS	Day of Maximum Flow	Hour of Maximum Flow	Maximum |Velocity| ft/sec	Max / Full Flow	Max / Full Depth
C_1	CONDUIT	12.18	0	00:45	5.78	0.08	0.24
C_2	CONDUIT	9.38	0	00:45	4.21	0.15	0.36
C_3	CONDUIT	22.24	0	00:45	7.46	0.17	0.31

Outfall Loading Summary

Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
EX_Outfall_1	93.41	1.04	22.24	0.315
EX_Outfall_2	29.92	1.55	9.38	0.150

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Subcatchment Runoff Summary

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
EX2	2.54	0.00	0.00	2.17	0.37	0.34	16.06	0.144
MS_East	2.54	0.00	0.00	0.00	2.50	0.16	13.49	0.984
EX1	2.54	0.00	0.00	2.09	0.45	0.42	21.56	0.179

Node Inflow Summary

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Day of Maximum Inflow	Hour of Maximum Inflow	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
J_EX1	JUNCTION	21.56	21.56	0	00:50	0.419	0.419	-0.000
J_EX2	JUNCTION	16.06	16.06	0	00:45	0.339	0.339	-0.007
J_EX1A	JUNCTION	13.49	34.63	0	00:45	0.16	0.579	-0.002
EX_Outfall_1	OUTFALL	0.00	34.91	0	00:45	0	0.579	0.000
EX_Outfall_2	OUTFALL	0.00	15.95	0	00:45	0	0.339	0.000

Node Depth Summary

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Day of Maximum Depth	Hour of Maximum Depth	Maximum Reported Depth Feet
J_EX1	JUNCTION	0.10	1.17	6892.38	0	00:45	1.17
J_EX2	JUNCTION	0.20	1.73	1.73	0	00:45	1.71
J_EX1A	JUNCTION	0.12	1.23	6892.28	0	00:45	1.23
EX_Outfall_1	OUTFALL	0.11	1.17	6891.58	0	00:45	1.15
EX_Outfall_2	OUTFALL	0.10	1.04	1.04	0	00:45	1.04

Link Flow Summary

Link	Type	Maximum |Flow| CFS	Day of Maximum Flow	Hour of Maximum Flow	Maximum |Velocity| ft/sec	Max / Full Flow	Max / Full Depth
C_1	CONDUIT	21.57	0	00:50	7.68	0.15	0.30
C_2	CONDUIT	15.95	0	00:45	5.21	0.26	0.46
C_3	CONDUIT	34.91	0	00:45	8.56	0.26	0.38

Outfall Loading Summary

Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
EX_Outfall_1	94.01	1.93	34.91	0.579
EX_Outfall_2	31.04	3.42	15.95	0.339

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Subcatchment Runoff Summary

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
EX2	3.01	0.00	0.00	2.41	0.60	0.56	23.24	0.201
MS_East	3.01	0.00	0.00	0.00	2.97	0.19	16.59	0.987
EX1	3.01	0.00	0.00	2.28	0.73	0.67	32.19	0.243

Node Inflow Summary

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Day of Maximum Inflow	Hour of Maximum Inflow	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
J_EX1	JUNCTION	32.19	32.19	0	00:50	0.675	0.675	0.003
J_EX2	JUNCTION	23.24	23.24	0	00:55	0.558	0.558	-0.005
J_EX1A	JUNCTION	16.59	47.35	0	00:45	0.19	0.864	-0.004
EX_Outfall_1	OUTFALL	0.00	47.77	0	00:45	0	0.864	0.000
EX_Outfall_2	OUTFALL	0.00	23.38	0	00:50	0	0.558	0.000

Node Depth Summary

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Day of Maximum Depth	Hour of Maximum Depth	Maximum Reported Depth Feet
J_EX1	JUNCTION	0.13	1.38	6892.59	0	00:45	1.37
J_EX2	JUNCTION	0.26	2.06	2.06	0	00:45	2.04
J_EX1A	JUNCTION	0.16	1.42	6892.47	0	00:45	1.41
EX_Outfall_1	OUTFALL	0.14	1.34	6891.75	0	00:45	1.33
EX_Outfall_2	OUTFALL	0.14	1.28	1.28	0	00:50	1.28

Link Flow Summary

Link	Type	Maximum |Flow| CFS	Day of Maximum Flow	Hour of Maximum Flow	Maximum |Velocity| ft/sec	Max / Full Flow	Max / Full Depth
C_1	CONDUIT	32.21	0	00:50	9.14	0.22	0.35
C_2	CONDUIT	23.38	0	00:50	5.92	0.38	0.55
C_3	CONDUIT	47.77	0	00:45	9.33	0.36	0.44

Outfall Loading Summary

Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
EX_Outfall_1	94.43	3.10	47.77	0.864
EX_Outfall_2	33.16	5.66	23.38	0.558

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Subcatchment Runoff Summary

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
EX2	3.51	0.00	0.00	2.61	0.91	0.84	32.97	0.258
MS_East	3.51	0.00	0.00	0.00	3.47	0.22	19.97	0.989
EX1	3.51	0.00	0.00	2.44	1.07	0.99	45.30	0.305

Node Inflow Summary

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Day of Maximum Inflow	Hour of Maximum Inflow	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
J_EX1	JUNCTION	45.30	45.30	0	00:50	0.988	0.988	0.003
J_EX2	JUNCTION	32.97	32.97	0	00:55	0.837	0.837	-0.002
J_EX1A	JUNCTION	19.97	62.70	0	00:45	0.222	1.21	-0.004
EX_Outfall_1	OUTFALL	0.00	63.22	0	00:45	0	1.21	0.000
EX_Outfall_2	OUTFALL	0.00	32.92	0	00:55	0	0.837	0.000

Node Depth Summary

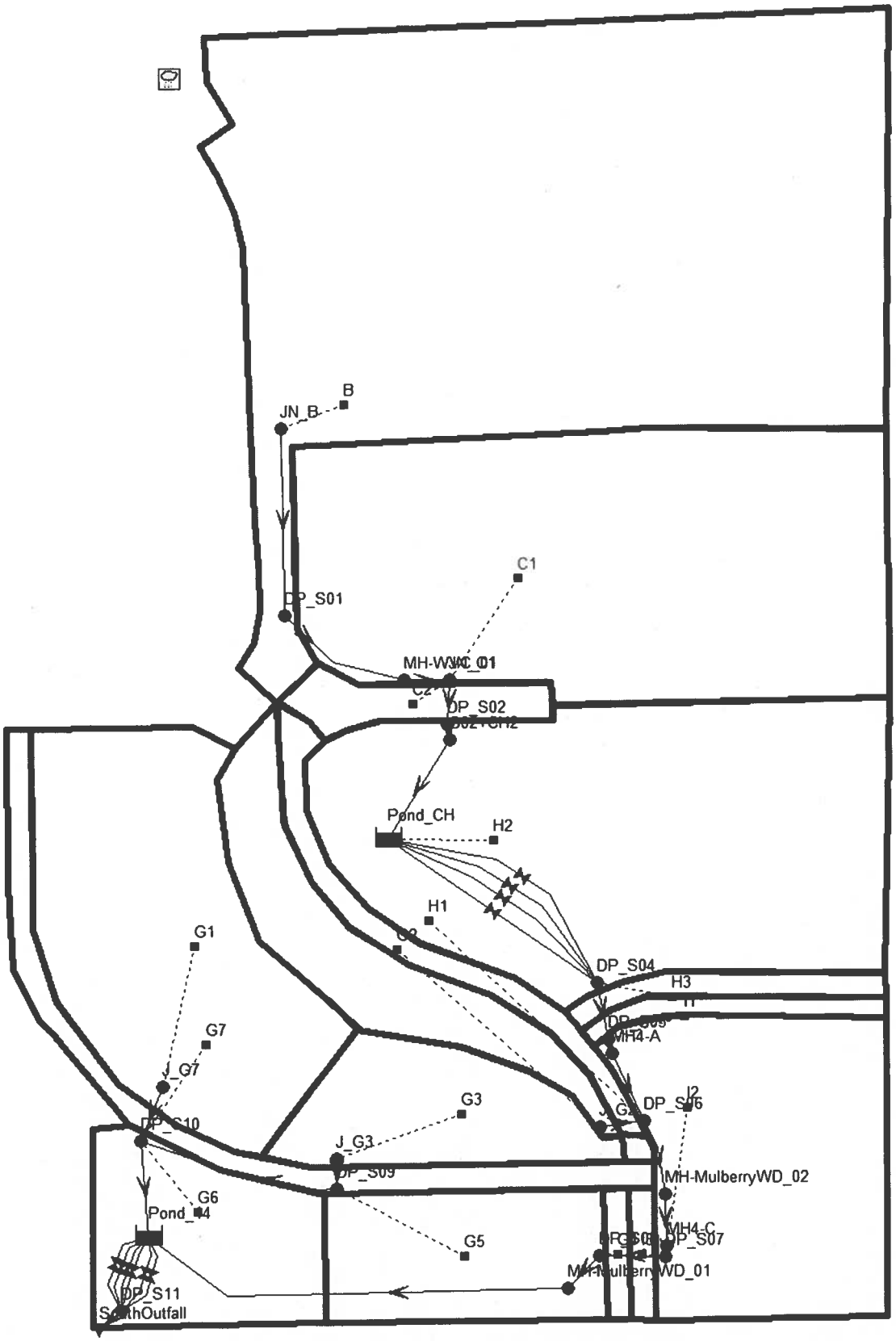
Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Day of Maximum Depth	Hour of Maximum Depth	Maximum Reported Depth Feet
J_EX1	JUNCTION	0.18	1.60	6892.81	0	00:45	1.60
J_EX2	JUNCTION	0.34	2.50	2.50	0	00:50	2.49
J_EX1A	JUNCTION	0.19	1.63	6892.68	0	00:45	1.63
EX_Outfall_1	OUTFALL	0.17	1.53	6891.94	0	00:45	1.51
EX_Outfall_2	OUTFALL	0.19	1.57	1.57	0	00:55	1.56

Link Flow Summary

Link	Type	Maximum |Flow| CFS	Day of Maximum Flow	Hour of Maximum Flow	Maximum |Velocity| ft/sec	Max / Full Flow	Max / Full Depth
C_1	CONDUIT	45.32	0	00:50	10.37	0.32	0.40
C_2	CONDUIT	32.92	0	00:55	6.50	0.54	0.68
C_3	CONDUIT	63.22	0	00:45	9.99	0.48	0.50

Outfall Loading Summary

Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
EX_Outfall_1	94.81	4.66	63.22	1.210
EX_Outfall_2	35.40	8.51	32.92	0.837



EPA SWMM 5.1 DEVELOPED MODEL

Subcatchment B

Property	Value
Name	B
X-Coordinate	5063.070
Y-Coordinate	5086.969
Description	
Tag	
Rain Gage	RG_SM
Outlet	JN_B
Area	9.79
Width	358
% Slope	2
% Imperv	50
N-Imperv	0.01
N-Perv	0.1
Dstore-Imperv	0.05
Dstore-Perv	0.05
%Zero-Imperv	25
Subarea Routing	OUTLET
Percent Routed	100
Infiltration Data	MODIFIED_GREEN_AMPT
Groundwater	NO
Snow Pack	
LID Controls	0
Land Uses	0
Initial Buildup	NONE
Curb Length	0
N-Perv Pattern	
Dstore Pattern	
Infil. Pattern	

Subcatchment C1

Property	Value
Name	C1
X-Coordinate	5736.980
Y-Coordinate	4391.791
Description	
Tag	
Rain Gage	RG_SM
Outlet	JN_C1
Area	5.37
Width	292
% Slope	1
% Imperv	95
N-Imperv	0.01
N-Perv	0.1
Dstore-Imperv	0.05
Dstore-Perv	0.05
%Zero-Imperv	25
Subarea Routing	OUTLET
Percent Routed	100
Infiltration Data	MODIFIED_GREEN_AMPT
Groundwater	NO
Snow Pack	
LID Controls	0
Land Uses	0
Initial Buildup	NONE
Curb Length	0
N-Perv Pattern	
Dstore Pattern	
Infil. Pattern	

Subcatchment C2

Property	Value
Name	C2
X-Coordinate	5296.736
Y-Coordinate	3895.618
Description	
Tag	
Rain Gage	RG_SM
Outlet	DP_S01
Area	.37
Width	30
% Slope	0.5
% Imperv	100
N-Imperv	0.01
N-Perv	0.1
Dstore-Imperv	0.05
Dstore-Perv	0.05
%Zero-Imperv	25
Subarea Routing	OUTLET
Percent Routed	100
Infiltration Data	MODIFIED_GREEN_AMPT
Groundwater	NO
Snow Pack	
LID Controls	0
Land Uses	0
Initial Buildup	NONE
Curb Length	0
N-Perv Pattern	
Dstore Pattern	
Infil. Pattern	

Subcatchment G1

Property	Value
Name	G1
X-Coordinate	4467.473
Y-Coordinate	2921.497
Description	
Tag	
Rain Gage	RG_SM
Outlet	J_G7
Area	3.3
Width	335
% Slope	1
% Imperv	97
N-Imperv	0.01
N-Perv	0.1
Dstore-Imperv	0.05
Dstore-Perv	0.05
%Zero-Imperv	25
Subarea Routing	OUTLET
Percent Routed	100
Infiltration Data	MODIFIED_GREEN_AMPT
Groundwater	NO
Snow Pack	
LID Controls	0
Land Uses	0
Initial Buildup	NONE
Curb Length	0
N-Perv Pattern	
Dstore Pattern	
Infil. Pattern	

Subcatchment G2

Property	Value
Name	G2
X-Coordinate	5260.891
Y-Coordinate	2907.057
Description	
Tag	
Rain Gage	RG_SM
Outlet	J_G2
Area	1.33
Width	82
% Slope	1
% Imperv	97
N-Imperv	0.01
N-Perv	0.1
Dstore-Imperv	0.05
Dstore-Perv	0.05
%Zero-Imperv	25
Subarea Routing	OUTLET
Percent Routed	100
Infiltration Data	MODIFIED_GREEN_AMPT
Groundwater	NO
Snow Pack	
LID Controls	0
Land Uses	0
Initial Buildup	NONE
Curb Length	0
N-Perv Pattern	
Dstore Pattern	
Infil. Pattern	

Subcatchment G3

Property	Value
Name	G3
X-Coordinate	5509.783
Y-Coordinate	2253.018
Description	
Tag	
Rain Gage	RG_SM
Outlet	J_G3
Area	0.91
Width	129
% Slope	1
% Imperv	95
N-Imperv	0.01
N-Perv	0.1
Dstore-Imperv	0.05
Dstore-Perv	0.05
%Zero-Imperv	25
Subarea Routing	OUTLET
Percent Routed	100
Infiltration Data	MODIFIED_GREEN_AMPT
Groundwater	NO
Snow Pack	
LID Controls	0
Land Uses	0
Initial Buildup	NONE
Curb Length	0
N-Perv Pattern	
Dstore Pattern	
Infil. Pattern	

Subcatchment G4

Property	Value
Name	G4
X-Coordinate	6115.427
Y-Coordinate	1693.360
Description	
Tag	
Rain Gage	RG_SM
Outlet	DP_S08
Area	.13
Width	30
% Slope	2
% Imperv	100
N-Imperv	0.01
N-Perv	0.1
Dstore-Imperv	0.05
Dstore-Perv	0.05
%Zero-Imperv	25
Subarea Routing	OUTLET
Percent Routed	100
Infiltration Data	MODIFIED_GREEN_AMPT
Groundwater	NO
Snow Pack	
LID Controls	0
Land Uses	0
Initial Buildup	NONE
Curb Length	0
N-Perv Pattern	
Dstore Pattern	
Infil. Pattern	

Subcatchment G5

Property	Value
Name	G5
X-Coordinate	5519.858
Y-Coordinate	1687.133
Description	
Tag	
Rain Gage	RG_SM
Outlet	DP_S09
Area	1.34
Width	135
% Slope	2
% Imperv	95
N-Imperv	0.01
N-Perv	0.1
Dstore-Imperv	0.05
Dstore-Perv	0.05
%Zero-Imperv	25
Subarea Routing	OUTLET
Percent Routed	100
Infiltration Data	MODIFIED_GREEN_AMPT
Groundwater	NO
Snow Pack	
LID Controls	0
Land Uses	0
Initial Buildup	NONE
Curb Length	0
N-Perv Pattern	
Dstore Pattern	
Infil. Pattern	

Subcatchment G6

Property	Value
Name	G6
X-Coordinate	4477.783
Y-Coordinate	1865.857
Description	
Tag	
Rain Gage	RG_SM
Outlet	DP_S10
Area	1.63
Width	286
% Slope	1
% Imperv	85
N-Imperv	0.01
N-Perv	0.1
Dstore-Imperv	0.05
Dstore-Perv	0.05
%Zero-Imperv	25
Subarea Routing	OUTLET
Percent Routed	100
Infiltration Data	MODIFIED_GREEN_AMPT
Groundwater	NO
Snow Pack	
LID Controls	0
Land Uses	0
Initial Buildup	NONE
Curb Length	0
N-Perv Pattern	
Dstore Pattern	
Infil. Pattern	

Subcatchment G7

Property	Value
Name	G7
X-Coordinate	4511.246
Y-Coordinate	2531.042
Description	
Tag	
Rain Gage	RG_SM
Outlet	DP_S10
Area	.53
Width	30
% Slope	1
% Imperv	100
N-Imperv	0.01
N-Perv	0.1
Dstore-Imperv	0.05
Dstore-Perv	0.05
%Zero-Imperv	25
Subarea Routing	OUTLET
Percent Routed	100
Infiltration Data	MODIFIED_GREEN_AMPT
Groundwater	NO
Snow Pack	
LID Controls	0
Land Uses	0
Initial Buildup	NONE
Curb Length	0
N-Perv Pattern	
Dstore Pattern	
Infil. Pattern	

Subcatchment H1

Property	Value
Name	H1
X-Coordinate	5385.602
Y-Coordinate	3023.986
Description	
Tag	
Rain Gage	RG_SM
Outlet	DP_S06
Area	.49
Width	30
% Slope	1
% Imperv	100
N-Imperv	0.01
N-Perv	0.1
Dstore-Imperv	0.05
Dstore-Perv	0.05
%Zero-Imperv	25
Subarea Routing	OUTLET
Percent Routed	100
Infiltration Data	MODIFIED_GREEN_AMPT
Groundwater	NO
Snow Pack	
LID Controls	0
Land Uses	0
Initial Buildup	NONE
Curb Length	0
N-Perv Pattern	
Dstore Pattern	
Infil. Pattern	

Subcatchment H2

Property	Value
Name	H2
X-Coordinate	5603.766
Y-Coordinate	3364.408
Description	
Tag	
Rain Gage	RG_SM
Outlet	Pond_CH
Area	5.15
Width	428
% Slope	1
% Imperv	75
N-Imperv	0.01
N-Perv	0.1
Dstore-Imperv	0.05
Dstore-Perv	0.05
%Zero-Imperv	25
Subarea Routing	OUTLET
Percent Routed	100
Infiltration Data	MODIFIED_GREEN_AMPT
Groundwater	NO
Snow Pack	
LID Controls	0
Land Uses	0
Initial Buildup	NONE
Curb Length	0
N-Perv Pattern	
Dstore Pattern	
Infil. Pattern	

Subcatchment H3

Property	Value
Name	H3
X-Coordinate	6329.716
Y-Coordinate	2716.600
Description	
Tag	
Rain Gage	RG_SM
Outlet	DP_S04
Area	0.22
Width	30
% Slope	1
% Imperv	100
N-Imperv	0.01
N-Perv	0.1
Dstore-Imperv	0.05
Dstore-Perv	0.05
%Zero-Imperv	25
Subarea Routing	OUTLET
Percent Routed	100
Infiltration Data	MODIFIED_GREEN_AMPT
Groundwater	NO
Snow Pack	
LID Controls	0
Land Uses	0
Initial Buildup	NONE
Curb Length	0
N-Perv Pattern	
Dstore Pattern	
Infil. Pattern	

Subcatchment I1

Property	Value
Name	I1
X-Coordinate	6378.594
Y-Coordinate	2641.456
Description	
Tag	
Rain Gage	RG_SM
Outlet	DP_S05
Area	0.2
Width	30
% Slope	1
% Imperv	100
N-Imperv	0.01
N-Perv	0.1
Dstore-Imperv	0.05
Dstore-Perv	0.05
%Zero-Imperv	25
Subarea Routing	OUTLET
Percent Routed	100
Infiltration Data	MODIFIED_GREEN_AMPT
Groundwater	NO
Snow Pack	
LID Controls	0
Land Uses	0
Initial Buildup	NONE
Curb Length	0
N-Perv Pattern	
Dstore Pattern	
Infil. Pattern	

Subcatchment I2

Property	Value
Name	I2
X-Coordinate	6390.641
Y-Coordinate	2273.126
Description	
Tag	
Rain Gage	RG_SM
Outlet	DP_S07
Area	2.63
Width	297
% Slope	1
% Imperv	95
N-Imperv	0.01
N-Perv	0.1
Dstore-Imperv	0.05
Dstore-Perv	0.05
%Zero-Imperv	25
Subarea Routing	OUTLET
Percent Routed	100
Infiltration Data	MODIFIED_GREEN_AMPT
Groundwater	NO
Snow Pack	
LID Controls	0
Land Uses	0
Initial Buildup	NONE
Curb Length	0
N-Perv Pattern	
Dstore Pattern	
Infil. Pattern	

Subcatchment I3

Property	Value
Name	I3
X-Coordinate	6212.862
Y-Coordinate	1692.858
Description	
Tag	
Rain Gage	RG_SM
Outlet	DP_S07
Area	.17
Width	30
% Slope	1
% Imperv	100
N-Imperv	0.01
N-Perv	0.1
Dstore-Imperv	0.05
Dstore-Perv	0.05
%Zero-Imperv	25
Subarea Routing	OUTLET
Percent Routed	100
Infiltration Data	MODIFIED_GREEN_AMPT
Groundwater	NO
Snow Pack	
LID Controls	0
Land Uses	0
Initial Buildup	NONE
Curb Length	0
N-Perv Pattern	
Dstore Pattern	
Infil. Pattern	

Conduit 26

Property	Value
Name	26
Inlet Node	JN_B
Outlet Node	DP_S01
Description	
Tag	
Shape	CIRCULAR
Max. Depth	3
Length	335
Roughness	.013
Inlet Offset	0
Outlet Offset	0
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff.	.2
Exit Loss Coeff.	1
Avg. Loss Coeff.	0
Seepage Loss Rate	0
Flap Gate	NO
Culvert Code	0

Junction DP_S01

Property	Value
Name	DP_S01
X-Coordinate	4827.290
Y-Coordinate	4241.565
Description	
Tag	
Inflows	NO
Treatment	NO
Invert El.	6918.19
Max. Depth	7
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

X coordinate of junction on study area map

Conduit DP_S01toMH-WVC_01

Property	Value
Name	DP_S01toMH-WVC_01
Inlet Node	DP_S01
Outlet Node	MH-WVC_01
Description	42" RCP with single bend.
Tag	
Shape	CIRCULAR
Max. Depth	3.5
Length	178
Roughness	.013
Inlet Offset	0
Outlet Offset	.5
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff	.2
Exit Loss Coeff.	1
Avg. Loss Coeff.	0
Seepage Loss Ra	0
Flap Gate	NO
Culvert Code	48

Junction MH-WVC_01

Property	Value
Name	MH-WVC_01
X-Coordinate	5293.837
Y-Coordinate	3986.231
Description	
Tag	
Inflows	NO
Treatment	NO
Invert El.	6917.16
Max. Depth	7.2
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

X coordinate of junction on study area map

Conduit 35

Property	Value
Name	35
Inlet Node	MH-WVC_01
Outlet Node	JN_C1
Description	...
Tag	
Shape	CIRCULAR
Max. Depth	4
Length	35.8
Roughness	.013
Inlet Offset	0
Outlet Offset	.5
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff	.2
Exit Loss Coeff.	1
Avg. Loss Coeff.	0
Seepage Loss Ra	0
Flap Gate	NO
Culvert Code	48

Junction JN_C1

Property	Value
Name	JN_C1
X-Coordinate	5468.876
Y-Coordinate	3983.397
Description	S2
Tag	
Inflows	NO
Treatment	NO
Invert El.	6916.55
Max. Depth	7.2
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

X coordinate of junction on study area map

Conduit 10

Property	Value
Name	10
Inlet Node	JN_C1
Outlet Node	DP_S02
Description	...
Tag	
Shape	CIRCULAR
Max. Depth	4.5
Length	35
Roughness	.013
Inlet Offset	0
Outlet Offset	.1
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff	.2
Exit Loss Coeff.	1
Avg. Loss Coeff.	0
Seepage Loss Ra	0
Flap Gate	NO
Culvert Code	48

Junction DP_S02

Property	Value
Name	DP_S02
X-Coordinate	5462.481
Y-Coordinate	3806.466
Description	
Tag	
Inflows	NO
Treatment	NO
Invert El.	6916.35
Max. Depth	7.2
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

X coordinate of junction on study area map

Conduit 28

Property	Value
Name	28
Inlet Node	DP_S02
Outlet Node	S02+CH2
Description	...
Tag	
Shape	CIRCULAR
Max. Depth	4.5
Length	15
Roughness	0.013
Inlet Offset	0
Outlet Offset	.5
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff	.2
Exit Loss Coeff.	1
Avg. Loss Coeff.	0
Seepage Loss Ra	0
Flap Gate	NO
Culvert Code	48

Junction S02+CH2

Property	Value
Name	S02+CH2
X-Coordinate	5468.166
Y-Coordinate	3743.226
Description	
Tag	
Inflows	NO
Treatment	NO
Invert El.	6915.80
Max. Depth	8.2
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

X coordinate of junction on study area map

Conduit 31

Property	Value
Name	31
Inlet Node	S02+CH2
Outlet Node	Pond_CH
Description	
Tag	
Shape	CIRCULAR
Max. Depth	5
Length	38.8
Roughness	0.013
Inlet Offset	0
Outlet Offset	1.96
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff	.2
Exit Loss Coeff.	1
Avg. Loss Coeff.	0
Seepage Loss Ra	0
Flap Gate	NO
Culvert Code	48

Storage Unit Pond_CH

Property	Value
Name	Pond_CH
X-Coordinate	5226.277
Y-Coordinate	3347.932
Description	S3
Tag	
Inflows	NO
Treatment	NO
Invert El.	6913.74
Max. Depth	7
Initial Depth	0
Surcharge Depth	0
Evap. Factor	0
Seepage Loss	NO
Storage Curve	TABULAR
Functional Curve	
Coefficient	1000
Exponent	0
Constant	0
Tabular Curve	
Curve Name	PondCH_Storage

X coordinate of storage unit on study area map

Storage Curve Editor

Curve Name

PondCH_Storage

Description

	Depth (ft)	Area (ft2)
1	0	293
2	1	4546
3	2	26372
4	3	34470
5	4	38680
6	5	43000
7	6	47836
8	7	51912
9		
10		
11		

View...

Load...

Save...

OK

Cancel

Help

Orifice ch_0

Property	Value
Name	ch_0
Inlet Node	Pond_CH
Outlet Node	DP_S04
Description	
Tag	
Type	SIDE
Shape	CIRCULAR
Height	.1958
Width	0
Inlet Offset	0
Discharge Coeff	0.65
Flap Gate	NO
Time to Open/C	0

Orifice 8

Property	Value
Name	8
Inlet Node	Pond_CH
Outlet Node	DP_S04
Description	
Tag	
Type	SIDE
Shape	RECT_CLOSED
Height	1.33
Width	.333
Inlet Offset	2.42
Discharge Coeff	0.65
Flap Gate	NO
Time to Open/C	0

Orifice CH_Weir

Property	Value
Name	CH_Weir
Inlet Node	Pond_CH
Outlet Node	DP_S04
Description	
Tag	
Type	BOTTOM
Shape	RECT_CLOSED
Height	4
Width	4
Inlet Offset	6
Discharge Coeff.	0.65
Flap Gate	NO
Time to Open/Close	0

Weir 3

Property	Value
Name	3
Inlet Node	Pond_CH
Outlet Node	DP_S04
Description	
Tag	
Type	TRANSVERSE
Height	1
Length	60
Side Slope	20
Inlet Offset	6.5
Discharge Coeff.	3.33
Flap Gate	NO
End Contractions	0
End Coeff.	0
Can Surcharge	YES
Coeff. Curve	
Roadway Weir	
Road Width	0
Road Surface	PAVED

Junction DP_S04

Property	Value
Name	DP_S04
X-Coordinate	6039.628
Y-Coordinate	2774.102
Description	S4
Tag	
Inflows	NO
Treatment	NO
Invert El.	6913.55
Max. Depth	5.99
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

X coordinate of junction on study area map

Conduit PR_01

Property	Value
Name	PR_01
Inlet Node	DP_S04
Outlet Node	DP_S05
Description	
Tag	
Shape	CIRCULAR
Max. Depth	3
Length	32
Roughness	.013
Inlet Offset	0
Outlet Offset	.3
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff	.2
Exit Loss Coeff.	1
Avg. Loss Coeff.	0
Seepage Loss Ra	0
Flap Gate	NO
Culvert Code	48

Junction DP_S05

Property	Value
Name	DP_S05
X-Coordinate	6084.140
Y-Coordinate	2548.465
Description	S5
Tag	
Inflows	NO
Treatment	NO
Invert El.	6912.96
Max. Depth	6.56
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

X coordinate of junction on study area map

Conduit PR_02

Property	Value
Name	PR_02
Inlet Node	DP_S05
Outlet Node	MH4-A
Description	
Tag	
Shape	CIRCULAR
Max. Depth	3
Length	23
Roughness	.013
Inlet Offset	0
Outlet Offset	.3
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff	.2
Exit Loss Coeff.	1
Avg. Loss Coeff.	0
Seepage Loss Ra	0
Flap Gate	NO
Culvert Code	48

Junction MH4-A

Property	Value
Name	MH4-A
X-Coordinate	6095.842
Y-Coordinate	2488.715
Description	
Tag	
Inflows	NO
Treatment	NO
Invert El.	6912.43
Max. Depth	6.21
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

X coordinate of junction on study area map

Conduit 33

Property	Value
Name	33
Inlet Node	MH4-A
Outlet Node	DP_S06
Description	
Tag	
Shape	CIRCULAR
Max. Depth	3
Length	101
Roughness	.013
Inlet Offset	0
Outlet Offset	.5
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff	.2
Exit Loss Coeff.	1
Avg. Loss Coeff.	0
Seepage Loss Ra	0
Flap Gate	NO
Culvert Code	48

Junction J_G2

Property	Value
Name	J_G2
X-Coordinate	6049.752
Y-Coordinate	2200.546
Description	
Tag	
Inflows	NO
Treatment	NO
Invert El.	6914.470
Max. Depth	0
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

X coordinate of junction on study area map

Conduit PR_03

Property	Value
Name	PR_03
Inlet Node	J_G2
Outlet Node	DP_S06
Description	
Tag	
Shape	CIRCULAR
Max. Depth	1.5
Length	40
Roughness	.013
Inlet Offset	0
Outlet Offset	2
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff.	0
Exit Loss Coeff.	0
Avg. Loss Coeff.	0
Seepage Loss Rate	0
Flap Gate	NO
Culvert Code	0

Name of node on the inlet end of conduit

Junction DP_S06

Property	Value
Name	DP_S06
X-Coordinate	6221.999
Y-Coordinate	2224.304
Description	S6
Tag	
Inflows	NO
Treatment	NO
Invert El.	6911.41
Max. Depth	6.16
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

X coordinate of junction on study area map

Conduit PR_04

Property	Value
Name	PR_04
Inlet Node	DP_S06
Outlet Node	MH-MulberryWD_02
Description	
Tag	
Shape	CIRCULAR
Max. Depth	3.5
Length	75
Roughness	.013
Inlet Offset	0
Outlet Offset	.2
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff	.2
Exit Loss Coeff.	1
Avg. Loss Coeff.	0
Seepage Loss Ra	0
Flap Gate	NO
Culvert Code	48

Junction MH-MulberryWD_02

Property	Value
Name	MH-MulberryWD_02
X-Coordinate	6302.230
Y-Coordinate	1930.615
Description	
Tag	
Inflows	NO
Treatment	NO
Invert El.	6910.21
Max. Depth	6.72
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

X coordinate of junction on study area map

Conduit PR_04A

Property	Value
Name	PR_04A
Inlet Node	MH-MulberryWD_02
Outlet Node	MH4-C
Description	
Tag	
Shape	CIRCULAR
Max. Depth	3.5
Length	113
Roughness	.013
Inlet Offset	0
Outlet Offset	.3
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff.	.2
Exit Loss Coeff.	1
Avg. Loss Coeff.	0
Seepage Loss Rate	0
Flap Gate	NO
Culvert Code	48

Name of node on the inlet end of conduit

Junction MH4-C

Property	Value
Name	MH4-C
X-Coordinate	6308.023
Y-Coordinate	1723.186
Description	
Tag	
Inflows	NO
Treatment	NO
Invert El.	6908.96
Max. Depth	7.39
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

X coordinate of junction on study area map

Conduit 34

Property	Value
Name	34
Inlet Node	MH4-C
Outlet Node	DP_S07
Description	
Tag	
Shape	CIRCULAR
Max. Depth	3.5
Length	26
Roughness	.013
Inlet Offset	0
Outlet Offset	.3
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff	.2
Exit Loss Coeff.	1
Avg. Loss Coeff.	0
Seepage Loss Ra	0
Flap Gate	NO
Culvert Code	48

Junction DP_S07

Property	Value
Name	DP_S07
X-Coordinate	6305.152
Y-Coordinate	1683.806
Description	S7
Tag	
Inflows	NO
Treatment	NO
Invert El.	6908.44
Max. Depth	7.25
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

X coordinate of junction on study area map

Conduit PR_05

Property	Value
Name	PR_05
Inlet Node	DP_S07
Outlet Node	DP_S08
Description	
Tag	
Shape	CIRCULAR
Max. Depth	4
Length	32
Roughness	.013
Inlet Offset	0
Outlet Offset	.5
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff.	.2
Exit Loss Coeff.	1
Avg. Loss Coeff.	0
Seepage Loss Rate	0
Flap Gate	NO
Culvert Code	48

Name of node on the inlet end of conduit

Junction DP_S08

Property	Value
Name	DP_S08
X-Coordinate	6043.796
Y-Coordinate	1686.942
Description	S8
Tag	
Inflows	NO
Treatment	NO
Invert El.	6907.3
Max. Depth	8.21
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

X coordinate of junction on study area map

Conduit PR_05a

Property	Value
Name	PR_05a
Inlet Node	DP_S08
Outlet Node	MH-MulberryWD_01
Description	
Tag	
Shape	CIRCULAR
Max. Depth	48
Length	51
Roughness	.013
Inlet Offset	0
Outlet Offset	.3
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff.	0
Exit Loss Coeff.	0
Avg. Loss Coeff.	0
Seepage Loss Rate	0
Flap Gate	NO
Culvert Code	

Name of node on the inlet end of conduit

Junction MH-MulberryWD_01

Property	Value
Name	MH-MulberryWD_01
X-Coordinate	5918.875
Y-Coordinate	1555.504
Description	
Tag	
Inflows	NO
Treatment	NO
Invert El.	6906.42
Max. Depth	11.05
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

X coordinate of junction on study area map

Conduit PR_06

Property	Value
Name	PR_06
Inlet Node	MH-MulberryWD_01
Outlet Node	Pond_14
Description	
Tag	
Shape	CIRCULAR
Max. Depth	4
Length	447
Roughness	0.01
Inlet Offset	0
Outlet Offset	3.08
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff.	.2
Exit Loss Coeff.	1
Avg. Loss Coeff.	0
Seepage Loss Rate	0
Flap Gate	NO
Culvert Code	48

Name of node on the inlet end of conduit

Junction MH-MulberryWD_01

Property	Value
Name	MH-MulberryWD_01
X-Coordinate	5918.875
Y-Coordinate	1555.504
Description	
Tag	
Inflows	NO
Treatment	NO
Invert El.	6906.42
Max. Depth	11.05
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

X coordinate of junction on study area map

Conduit PR_06

Property	Value
Name	PR_06
Inlet Node	MH-MulberryWD_01
Outlet Node	Pond_14
Description	
Tag	
Shape	CIRCULAR
Max. Depth	4
Length	447
Roughness	0.01
Inlet Offset	0
Outlet Offset	3.08
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff.	.2
Exit Loss Coeff.	1
Avg. Loss Coeff.	0
Seepage Loss Rate	0
Flap Gate	NO
Culvert Code	48

Name of node on the inlet end of conduit

Junction J_G3

Property	Value
Name	J_G3
X-Coordinate	5022.212
Y-Coordinate	2072.846
Description	
Tag	
Inflows	NO
Treatment	NO
Invert El.	6908.18
Max. Depth	4.61
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

X coordinate of junction on study area map

Junction J_G7

Property	Value
Name	J_G7
X-Coordinate	4343.924
Y-Coordinate	2362.548
Description	
Tag	
Inflows	NO
Treatment	NO
Invert El.	6902.76
Max. Depth	6
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

User-assigned name of junction

Conduit PR_09

Property	Value
Name	PR_09
Inlet Node	J_G7
Outlet Node	DP_S10
Description	
Tag	
Shape	CIRCULAR
Max. Depth	3
Length	30
Roughness	.013
Inlet Offset	0
Outlet Offset	.38
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff.	.2
Exit Loss Coeff.	1
Avg. Loss Coeff.	0
Seepage Loss Rate	0
Flap Gate	NO
Culvert Code	48

User-assigned name of Conduit

Junction DP_S10

Property	Value
Name	DP_S10
X-Coordinate	4259.530
Y-Coordinate	2147.607
Description	S10
Tag	
Inflows	NO
Treatment	NO
Invert El.	6902.08
Max. Depth	6.72
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

User-assigned name of junction

Conduit PR_10

Property	Value
Name	PR_10
Inlet Node	DP_S10
Outlet Node	Pond_14
Description	
Tag	
Shape	CIRCULAR
Max. Depth	3.5
Length	56
Roughness	.013
Inlet Offset	0
Outlet Offset	3.28
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff.	0
Exit Loss Coeff.	0
Avg. Loss Coeff.	0
Seepage Loss Rate	0
Flap Gate	NO
Culvert Code	0

User-assigned name of Conduit

Storage Unit Pond_14

Property	Value
Name	Pond_14
X-Coordinate	4289.393
Y-Coordinate	1763.627
Description	S11
Tag	
Inflows	NO
Treatment	NO
Invert El.	6898
Max. Depth	11.5
Initial Depth	0
Surcharge Depth	0
Evap. Factor	0
Seepage Loss	NO
Storage Curve	TABULAR
Functional Curve	
Coefficient	1000
Exponent	0
Constant	0
Tabular Curve	
Curve Name	Pond14_Full_Tract

User-assigned name of storage unit

Orifice Out_14-1

Property	Value
Name	Out_14-1
Inlet Node	Pond_14
Outlet Node	DP_S11
Description	WQCV DRAIN
Tag	
Type	SIDE
Shape	CIRCULAR
Height	.1666
Width	0
Inlet Offset	2.5
Discharge Coeff.	0.65
Flap Gate	NO
Time to Open/Clos	0

User-assigned name of orifice

Orifice Out_14-2

Property	Value
Name	Out_14-2
Inlet Node	Pond_14
Outlet Node	DP_S11
Description	WQCV DRAIN
Tag	
Type	SIDE
Shape	CIRCULAR
Height	.1958
Width	0
Inlet Offset	3.25
Discharge Coeff.	0.65
Flap Gate	NO
Time to Open/Clos	0

User-assigned name of orifice

Orifice Out_14-3

Property	Value
Name	Out_14-3
Inlet Node	Pond_14
Outlet Node	DP_S11
Description	WQCV DRAIN
Tag	
Type	SIDE
Shape	CIRCULAR
Height	.1958
Width	0
Inlet Offset	4
Discharge Coeff.	0.65
Flap Gate	NO
Time to Open/Clos	0

User-assigned name of orifice

Orifice Out_14-4

Property	Value
Name	Out_14-4
Inlet Node	Pond_14
Outlet Node	DP_S11
Description	
Tag	
Type	SIDE
Shape	RECT_CLOSED
Height	.3
Width	1.333
Inlet Offset	4.26
Discharge Coeff.	0.65
Flap Gate	NO
Time to Open/Clos	0

User-assigned name of orifice

Orifice 16

Property	Value
Name	16
Inlet Node	Pond_14
Outlet Node	DP_S11
Description	
Tag	
Type	SIDE
Shape	CIRCULAR
Height	.08333
Width	0
Inlet Offset	5.75
Discharge Coeff.	0.65
Flap Gate	NO
Time to Open/Clos	0

User-assigned name of orifice

Orifice Weir_14-1

Property	Value
Name	Weir_14-1
Inlet Node	Pond_14
Outlet Node	DP_S11
Description	OVERFLOW WEIR 3'x3
Tag	
Type	BOTTOM
Shape	RECT_CLOSED
Height	1.77
Width	1.77
Inlet Offset	8.37
Discharge Coeff.	0.65
Flap Gate	NO
Time to Open/Clos	0

User-assigned name of orifice

Weir Weir_14-2

Property	Value
Name	Weir_14-2
Inlet Node	Pond_14
Outlet Node	DP_S11
Description	EMERGENCY OVERFLOW
Tag	
Type	TRANSVERSE
Height	2
Length	20
Side Slope	3
Inlet Offset	10.5
Discharge Coeff.	3.33
Flap Gate	NO
End Contractions	0
End Coeff.	0
Can Surcharge	YES
Coeff. Curve	
Roadway Weir	
Road Width	0
Road Surface	PAVED

User-assigned name of weir

Junction DP_S11

Property	Value
Name	DP_S11
X-Coordinate	4181.671
Y-Coordinate	1472.830
Description	
Tag	
Inflows	NO
Treatment	NO
Invert El.	6897.5
Max. Depth	0
Initial Depth	0
Surcharge Depth	0
Ponded Area	0

User-assigned name of junction

Conduit PR_13

Property	Value
Name	PR_13
Inlet Node	DP_S11
Outlet Node	SouthOutfall
Description	
Tag	
Shape	CIRCULAR
Max. Depth	3
Length	43
Roughness	0.01
Inlet Offset	0
Outlet Offset	0
Initial Flow	0
Maximum Flow	0
Entry Loss Coeff.	.2
Exit Loss Coeff.	1
Avg. Loss Coeff.	0
Seepage Loss Rate	0
Flap Gate	NO
Culvert Code	48

User-assigned name of Conduit

Outfall SouthOutfall

Property	Value
Name	SouthOutfall
X-Coordinate	4097.324
Y-Coordinate	1394.972
Description	
Tag	
Inflows	NO
Treatment	NO
Invert El.	6895.53
Tide Gate	NO
Route To	
Type	FREE
Fixed Outfall	
Fixed Stage	0
Tidal Outfall	
Curve Name	*
Time Series Outfall	
Series Name	*

User-assigned name of outfall

Storage Curve Editor

Curve Name: Pond14_Full_Tract

Description: Pond stage storage per 01-18-2019 submitted adde

	Depth (ft)	Area (ft2)
2	1	53
3	2	135
4	3	2950
5	4	13133
6	5	15605
7	6	18060
8	7	20598
9	8	23184
10	9	24970
11	10	26826
12	11	28875

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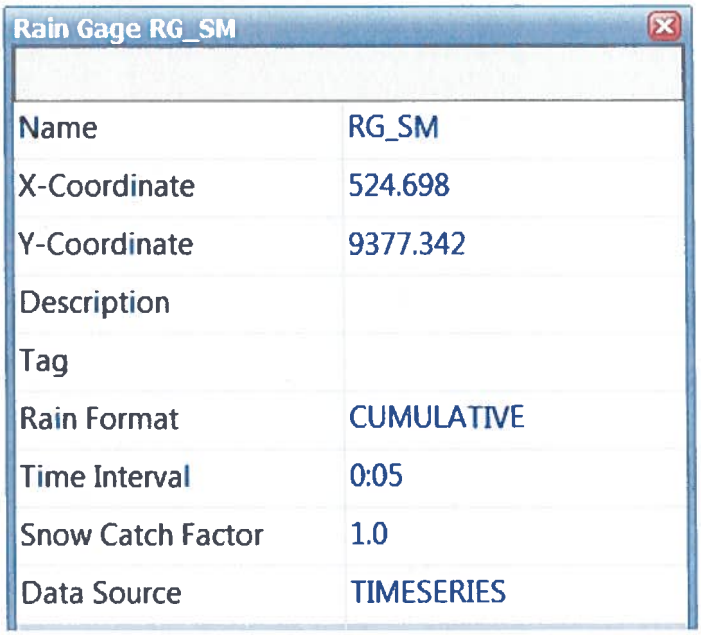
Rain Gage RG_SM
Name
RG_SM
X-Coordinate
524.698
Y-Coordinate
9377.342
Description
Tag
Rain Format
CUMULATIVE
Time Interval
0:05
Snow Catch Factor
1.0
Data Source
TIMESERIES

WQCV Storm

Topic: Subcatchment Runoff Click a column header to sort the column.

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
B	1.04	0.00	0.00	0.52	0.50	0.00	0.50	0.13	21.06	0.483
C1	1.04	0.00	0.00	0.04	0.96	0.01	0.96	0.14	18.06	0.924
C2	1.04	0.00	0.00	0.00	1.01	0.00	1.01	0.01	1.27	0.965
G1	1.04	0.00	0.00	0.02	0.98	0.01	0.98	0.09	14.19	0.943
G2	1.04	0.00	0.00	0.03	0.98	0.01	0.98	0.04	4.75	0.942
G3	1.04	0.00	0.00	0.04	0.96	0.01	0.97	0.02	4.28	0.928
G4	1.04	0.00	0.00	0.00	1.01	0.00	1.01	0.00	0.70	0.967
G5	1.04	0.00	0.00	0.04	0.96	0.01	0.97	0.04	6.31	0.928
G6	1.04	0.00	0.00	0.13	0.86	0.02	0.88	0.04	7.61	0.845
G7	1.04	0.00	0.00	0.00	1.01	0.00	1.01	0.01	1.80	0.965
H1	1.04	0.00	0.00	0.00	1.01	0.00	1.01	0.01	1.73	0.965
H2	1.04	0.00	0.00	0.24	0.75	0.02	0.78	0.11	18.18	0.745
H3	1.04	0.00	0.00	0.00	1.01	0.00	1.01	0.01	1.03	0.966
I1	1.04	0.00	0.00	0.00	1.01	0.00	1.01	0.01	0.95	0.966
I2	1.04	0.00	0.00	0.04	0.96	0.01	0.97	0.07	11.65	0.927
I3	1.04	0.00	0.00	0.00	1.01	0.00	1.01	0.00	0.84	0.966

Topic: Node Inflow

Click a column header to sort the column.

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Day of Maximum Inflow	Hour of Maximum Inflow	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
DP_S01	JUNCTION	0.00	20.79	0	01:35	0	0.132	-0.887
DP_S02	JUNCTION	0.00	37.12	0	01:35	0	0.284	0.012
DP_S04	JUNCTION	1.03	1.25	0	01:35	0.00601	0.399	0.001
DP_S05	JUNCTION	0.95	2.19	0	01:35	0.00547	0.404	-0.000
DP_S06	JUNCTION	1.73	8.55	0	01:35	0.0134	0.453	0.045
DP_S07	JUNCTION	12.49	19.51	0	01:35	0.0737	0.527	0.007
DP_S08	JUNCTION	0.70	19.92	0	01:35	0.00356	0.53	-0.010
DP_S09	JUNCTION	6.31	10.56	0	01:35	0.0352	0.0591	0.721
DP_S10	JUNCTION	9.42	33.90	0	01:35	0.0535	0.282	-0.175
DP_S11	JUNCTION	0.00	3.03	0	01:55	0	0.726	0.000
J_G2	JUNCTION	4.75	4.75	0	01:35	0.0355	0.0355	-0.006
J_G3	JUNCTION	4.28	4.28	0	01:35	0.0239	0.0239	-0.003
J_G7	JUNCTION	14.19	14.19	0	01:35	0.0881	0.0915	0.430
JN_B	JUNCTION	21.06	21.06	0	01:35	0.134	0.134	1.004
JN_C1	JUNCTION	19.33	37.20	0	01:35	0.151	0.284	0.035
MH4-A	JUNCTION	0.00	2.17	0	01:35	0	0.404	0.001
MH4-C	JUNCTION	0.00	8.11	0	01:35	0	0.453	0.004
MH-MulberryWD_01	JUNCTION	0.00	19.68	0	01:35	0	0.53	0.246
MH-MulberryWD_02	JUNCTION	0.00	8.33	0	01:35	0	0.453	-0.046
MH-WVC_01	JUNCTION	0.00	20.07	0	01:35	0	0.134	-0.140
Pond_14	STORAGE	0.00	49.34	0	01:35	0	0.808	-0.142
Pond_CH	STORAGE	18.18	52.67	0	01:35	0.109	0.392	-0.076
S02+CH2	JUNCTION	0.00	37.10	0	01:35	0	0.284	0.153
SouthOutfall	OUTFALL	0.00	3.03	0	01:55	0	0.726	0.000

Topic: Node Depth

Click a column header to sort the column.

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Day of Maximum Depth	Hour of Maximum Depth	Maximum Reported Depth Feet
DP_S01	JUNCTION	0.01	1.99	6920.18	0	01:35	1.96
DP_S02	JUNCTION	0.03	2.53	6918.88	0	01:35	2.51
DP_S04	JUNCTION	0.09	0.45	6914.00	0	01:35	0.45
DP_S05	JUNCTION	0.09	0.61	6913.57	0	01:35	0.61
DP_S06	JUNCTION	0.09	1.22	6912.63	0	01:35	1.20
DP_S07	JUNCTION	0.09	1.84	6910.28	0	01:35	1.83
DP_S08	JUNCTION	0.01	0.83	6908.13	0	01:36	0.78
DP_S09	JUNCTION	0.00	0.69	6907.57	0	01:35	0.69
DP_S10	JUNCTION	0.06	1.96	6904.04	0	01:47	1.90
DP_S11	JUNCTION	0.12	0.74	6898.24	0	01:55	0.74
J_G2	JUNCTION	0.01	0.54	6915.01	0	01:35	0.54
J_G3	JUNCTION	0.00	0.63	6908.81	0	01:35	0.63
J_G7	JUNCTION	0.02	1.74	6904.50	0	01:35	1.73
JN_B	JUNCTION	0.01	1.27	6923.17	0	01:35	1.27
JN_C1	JUNCTION	0.02	2.73	6919.28	0	01:35	2.71
MH4-A	JUNCTION	0.09	0.61	6913.04	0	01:35	0.60
MH4-C	JUNCTION	0.09	1.40	6910.36	0	01:35	1.37
MH-MulberryWD_01	JUNCTION	0.09	1.73	6908.15	0	01:36	1.73
MH-MulberryWD_02	JUNCTION	0.09	1.20	6911.41	0	01:35	1.19
MH-WVC_01	JUNCTION	0.01	2.30	6919.46	0	01:35	2.28
Pond_14	STORAGE	3.31	5.72	6903.72	0	01:55	5.72
Pond_CH	STORAGE	0.92	3.00	6916.74	0	02:20	3.00
S02+CH2	JUNCTION	0.10	2.43	6918.23	0	01:35	2.42
SouthOutfall	OUTFALL	0.05	0.27	6895.80	0	01:55	0.27

Topic: Link Flow Click a column header to sort the column.

Link	Type	Maximum |Flow| CFS	Day of Maximum Flow	Hour of Maximum Flow	Maximum |Velocity| ft/sec	Max / Full Flow	Max / Full Depth
10	CONDUIT	37.12	0	01:35	3.93	0.27	0.57
16	ORIFICE	0.00	0	00:00	0.00		
26	CONDUIT	20.79	0	01:35	6.93	0.32	0.46
28	CONDUIT	37.10	0	01:35	4.73	0.27	0.50
3	WEIR	0.00	0	00:00	0.00		
31	CONDUIT	37.03	0	01:35	5.13	0.20	0.39
33	CONDUIT	2.13	0	01:35	2.20	0.04	0.22
34	CONDUIT	8.57	0	01:35	2.71	0.09	0.42
35	CONDUIT	20.32	0	01:35	2.82	0.20	0.57
8	ORIFICE	0.54	0	02:20	0.43		
ch_0	ORIFICE	0.26	0	02:22	1.00		
CH_Weir	ORIFICE	0.00	0	00:00			
DP_S01toMH-WVC_01	CONDUIT	20.07	0	01:35	3.84	0.28	0.54
Out_14-1	ORIFICE	0.20	0	01:55	1.00		
Out_14-2	ORIFICE	0.24	0	01:55	1.00		
Out_14-3	ORIFICE	0.20	0	01:55	1.00		
Out_14-4	ORIFICE	2.38	0	01:55	1.00		
PR_01	CONDUIT	1.24	0	01:35	2.42	0.02	0.13
PR_02	CONDUIT	2.17	0	01:35	2.87	0.03	0.16
PR_03	CONDUIT	4.74	0	01:35	8.31	0.28	0.36
PR_04	CONDUIT	8.33	0	01:35	3.34	0.07	0.32
PR_04A	CONDUIT	8.11	0	01:35	3.17	0.09	0.33
PR_05	CONDUIT	19.26	0	01:35	5.23	0.09	0.33
PR_05a	CONDUIT	19.68	0	01:35	4.96	0.00	0.02
PR_06	CONDUIT	17.20	0	01:36	3.43	0.08	0.49
PR_07	CONDUIT	4.27	0	01:35	6.23	0.36	0.42
PR_08	CONDUIT	10.41	0	01:35	8.03	0.17	0.33
PR_09	CONDUIT	14.13	0	01:35	4.47	0.21	0.48
PR_10	CONDUIT	33.66	0	01:35	8.27	0.28	0.62
PR_13	CONDUIT	3.03	0	01:55	3.89	0.02	0.17
Weir_14-1	ORIFICE	0.00	0	00:00			
Weir_14-2	WEIR	0.00	0	00:00	0.00		

Topic: Storage Volume Click a column header to sort the column.

Storage Unit	Average Volume 1000 ft3	Average Percent Full	Evap Percent Loss	Exfil Percent Loss	Maximum Volume 1000 ft3	Maximum Percent Full	Day of Maximum Volume	Hour of Maximum Volume	Maximum Outflow CFS
Pond_14	5.634	3	0	0	35.895	21	0	01:55	19.01
Pond_CH	9.178	4	0	0	48.151	22	0	02:20	0.80

Topic: Outfall Loading Click a column header to sort the column.

Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
SouthOutfall	66.73	0.34	3.03	0.726

EURV Storm

Topic: Subcatchment Runoff Click a column header to sort the column.

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
B	1.20	0.00	0.00	0.60	0.58	0.00	0.58	0.15	15.80	0.485
C1	1.20	0.00	0.00	0.05	1.10	0.01	1.11	0.16	14.39	0.925
C2	1.20	0.00	0.00	0.00	1.16	0.00	1.16	0.01	1.03	0.969
G1	1.20	0.00	0.00	0.03	1.13	0.00	1.13	0.10	10.54	0.944
G2	1.20	0.00	0.00	0.03	1.13	0.00	1.13	0.04	3.75	0.943
G3	1.20	0.00	0.00	0.05	1.10	0.01	1.11	0.03	3.04	0.927
G4	1.20	0.00	0.00	0.00	1.16	0.00	1.16	0.00	0.48	0.969
G5	1.20	0.00	0.00	0.05	1.10	0.01	1.11	0.04	4.49	0.927
G6	1.20	0.00	0.00	0.16	0.99	0.02	1.00	0.04	5.19	0.839
G7	1.20	0.00	0.00	0.00	1.16	0.00	1.16	0.02	1.46	0.969
H1	1.20	0.00	0.00	0.00	1.16	0.00	1.16	0.02	1.39	0.969
H2	1.20	0.00	0.00	0.28	0.87	0.02	0.89	0.12	13.11	0.741
H3	1.20	0.00	0.00	0.00	1.16	0.00	1.16	0.01	0.75	0.969
I1	1.20	0.00	0.00	0.00	1.16	0.00	1.16	0.01	0.69	0.969
I2	1.20	0.00	0.00	0.05	1.10	0.01	1.11	0.08	8.48	0.927
I3	1.20	0.00	0.00	0.00	1.16	0.00	1.16	0.01	0.60	0.969

Topic: Node Inflow

Click a column header to sort the column.

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Day of Maximum Inflow	Hour of Maximum Inflow	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
DP_S01	JUNCTION	0.00	15.69	0	00:45	0	0.153	0.105
DP_S02	JUNCTION	0.00	29.92	0	00:45	0	0.327	0.010
DP_S04	JUNCTION	0.75	1.06	0	02:05	0.00693	0.457	0.000
DP_S05	JUNCTION	0.69	1.63	0	00:45	0.0063	0.464	-0.000
DP_S06	JUNCTION	1.39	6.72	0	00:45	0.0154	0.52	0.006
DP_S07	JUNCTION	9.07	15.13	0	00:45	0.0846	0.604	0.004
DP_S08	JUNCTION	0.48	15.48	0	00:45	0.0041	0.608	-0.000
DP_S09	JUNCTION	4.49	7.52	0	00:45	0.0404	0.0678	0.924
DP_S10	JUNCTION	6.65	24.52	0	00:45	0.0611	0.362	0.014
DP_S11	JUNCTION	0.00	3.12	0	01:31	0	0.834	0.000
J_G2	JUNCTION	3.75	3.75	0	00:45	0.0408	0.0408	-0.005
J_G3	JUNCTION	3.04	3.04	0	00:45	0.0274	0.0274	-0.000
J_G7	JUNCTION	10.54	10.54	0	00:45	0.101	0.105	0.334
JN_B	JUNCTION	15.80	15.80	0	00:45	0.154	0.154	0.444
JN_C1	JUNCTION	15.42	29.95	0	00:45	0.173	0.327	0.019
MH4-A	JUNCTION	0.00	1.63	0	00:45	0	0.464	0.003
MH4-C	JUNCTION	0.00	6.54	0	00:45	0	0.52	-0.001
MH-MulberryWD_01	JUNCTION	0.00	16.59	0	00:49	0	0.608	0.122
MH-MulberryWD_02	JUNCTION	0.00	6.63	0	00:45	0	0.52	-0.005
MH-WVC_01	JUNCTION	0.00	15.46	0	00:45	0	0.153	-0.053
Pond_14	STORAGE	0.00	37.93	0	00:45	0	0.966	-0.157
Pond_CH	STORAGE	13.11	41.91	0	00:45	0.124	0.45	-0.062
S02+CH2	JUNCTION	0.00	29.91	0	00:45	0	0.326	0.122
SouthOutfall	OUTFALL	0.00	3.12	0	01:31	0	0.834	0.000

Topic: Node Depth

Click a column header to sort the column.

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Day of Maximum Depth	Hour of Maximum Depth	Maximum Reported Depth Feet
DP_S01	JUNCTION	0.01	1.72	6919.91	0	00:45	1.69
DP_S02	JUNCTION	0.03	2.25	6918.60	0	00:45	2.24
DP_S04	JUNCTION	0.10	0.41	6913.96	0	02:05	0.41
DP_S05	JUNCTION	0.10	0.52	6913.48	0	00:45	0.52
DP_S06	JUNCTION	0.09	1.07	6912.48	0	00:45	1.07
DP_S07	JUNCTION	0.09	1.61	6910.05	0	00:45	1.60
DP_S08	JUNCTION	0.01	0.65	6907.95	0	00:48	0.64
DP_S09	JUNCTION	0.00	0.59	6907.47	0	00:45	0.59
DP_S10	JUNCTION	0.08	2.04	6904.12	0	01:13	2.00
DP_S11	JUNCTION	0.13	0.75	6898.25	0	01:31	0.75
J_G2	JUNCTION	0.01	0.48	6914.95	0	00:45	0.48
J_G3	JUNCTION	0.00	0.52	6908.70	0	00:45	0.52
J_G7	JUNCTION	0.03	1.47	6904.23	0	01:14	1.47
JN_B	JUNCTION	0.01	1.08	6922.98	0	00:45	1.07
JN_C1	JUNCTION	0.02	2.41	6918.96	0	00:45	2.40
MH4-A	JUNCTION	0.10	0.52	6912.95	0	00:45	0.52
MH4-C	JUNCTION	0.09	1.16	6910.12	0	00:45	1.15
MH-MulberryWD_01	JUNCTION	0.09	1.57	6907.99	0	00:46	1.56
MH-MulberryWD_02	JUNCTION	0.09	1.07	6911.28	0	00:45	1.06
MH-WVC_01	JUNCTION	0.01	1.95	6919.11	0	00:45	1.94
Pond_14	STORAGE	3.35	5.81	6903.81	0	01:31	5.80
Pond_CH	STORAGE	0.97	3.15	6916.89	0	02:15	3.15
S02+CH2	JUNCTION	0.12	2.16	6917.96	0	00:45	2.16
SouthOutfall	OUTFALL	0.06	0.27	6895.80	0	01:31	0.27

Topic: Link Flow Click a column header to sort the column.

Link	Type	Maximum |Flow| CFS	Day of Maximum Flow	Hour of Maximum Flow	Maximum |Velocity| ft/sec	Max / Full Flow	Max / Full Depth
10	CONDUIT	29.92	0	00:45	3.70	0.22	0.51
16	ORIFICE	0.00	0	01:31	0.66		
26	CONDUIT	15.69	0	00:45	6.58	0.24	0.38
28	CONDUIT	29.91	0	00:45	4.53	0.22	0.43
3	WEIR	0.00	0	00:00	0.00		
31	CONDUIT	29.88	0	00:45	4.84	0.16	0.35
33	CONDUIT	1.61	0	00:45	2.22	0.03	0.18
34	CONDUIT	6.71	0	00:46	2.68	0.07	0.35
35	CONDUIT	15.46	0	00:45	2.83	0.15	0.48
8	ORIFICE	0.77	0	02:15	0.55		
ch_0	ORIFICE	0.27	0	02:17	1.00		
CH_Weir	ORIFICE	0.00	0	00:00			
DP_S01toMH-WVC_01	CONDUIT	15.46	0	00:45	3.73	0.22	0.45
Out_14-1	ORIFICE	0.20	0	01:31	1.00		
Out_14-2	ORIFICE	0.25	0	01:31	1.00		
Out_14-3	ORIFICE	0.21	0	01:31	1.00		
Out_14-4	ORIFICE	2.46	0	01:31	1.00		
PR_01	CONDUIT	1.06	0	02:05	2.39	0.02	0.11
PR_02	CONDUIT	1.63	0	00:45	2.68	0.02	0.14
PR_03	CONDUIT	3.75	0	00:45	7.77	0.22	0.32
PR_04	CONDUIT	6.63	0	00:45	3.07	0.06	0.28
PR_04A	CONDUIT	6.54	0	00:45	3.20	0.07	0.28
PR_05	CONDUIT	15.02	0	00:45	4.90	0.07	0.29
PR_05a	CONDUIT	16.59	0	00:49	4.92	0.00	0.02
PR_06	CONDUIT	14.41	0	00:46	3.29	0.07	0.42
PR_07	CONDUIT	3.04	0	00:45	5.64	0.26	0.35
PR_08	CONDUIT	7.50	0	00:45	8.46	0.12	0.35
PR_09	CONDUIT	10.48	0	00:45	4.27	0.16	0.51
PR_10	CONDUIT	24.27	0	00:45	9.53	0.20	0.64
PR_13	CONDUIT	3.12	0	01:31	3.92	0.02	0.17
Weir_14-1	ORIFICE	0.00	0	00:00			
Weir_14-2	WEIR	0.00	0	00:00	0.00		

Topic: Storage Volume Click a column header to sort the column.

Storage Unit	Average Volume 1000 ft3	Average Percent Full	Evap Percent Loss	Exfil Percent Loss	Maximum Volume 1000 ft3	Maximum Percent Full	Day of Maximum Volume	Hour of Maximum Volume	Maximum Outflow CFS
Pond_14	6.044	3	0	0	37.437	21	0	01:31	19.69
Pond_CH	10.102	5	0	0	53.619	24	0	02:15	1.04

Topic: Outfall Loading Click a column header to sort the column.

Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
SouthOutfall	68.14	0.38	3.12	0.834

2-Year Storm

Topic: Subcatchment Runoff Click a column header to sort the column.

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
B	1.29	0.00	0.00	0.64	0.62	0.00	0.62	0.17	17.12	0.486
C1	1.29	0.00	0.00	0.06	1.19	0.01	1.20	0.17	15.76	0.929
C2	1.29	0.00	0.00	0.00	1.25	0.00	1.25	0.01	1.12	0.971
G1	1.29	0.00	0.00	0.03	1.21	0.01	1.22	0.11	11.44	0.947
G2	1.29	0.00	0.00	0.03	1.21	0.01	1.22	0.04	4.10	0.947
G3	1.29	0.00	0.00	0.05	1.19	0.01	1.20	0.03	3.30	0.931
G4	1.29	0.00	0.00	0.00	1.25	0.00	1.25	0.00	0.51	0.972
G5	1.29	0.00	0.00	0.05	1.19	0.01	1.20	0.04	4.86	0.931
G6	1.29	0.00	0.00	0.17	1.06	0.03	1.09	0.05	5.66	0.846
G7	1.29	0.00	0.00	0.00	1.25	0.00	1.25	0.02	1.60	0.971
H1	1.29	0.00	0.00	0.00	1.25	0.00	1.25	0.02	1.51	0.971
H2	1.29	0.00	0.00	0.30	0.94	0.03	0.96	0.13	14.35	0.749
H3	1.29	0.00	0.00	0.00	1.25	0.00	1.25	0.01	0.81	0.971
I1	1.29	0.00	0.00	0.00	1.25	0.00	1.25	0.01	0.74	0.971
I2	1.29	0.00	0.00	0.05	1.19	0.01	1.20	0.09	9.21	0.930
I3	1.29	0.00	0.00	0.00	1.25	0.00	1.25	0.01	0.64	0.971

Topic: Node Inflow Click a column header to sort the column.

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Day of Maximum Inflow	Hour of Maximum Inflow	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
DP_S01	JUNCTION	0.00	16.99	0	00:45	0	0.165	-0.150
DP_S02	JUNCTION	0.00	32.72	0	00:45	0	0.353	0.018
DP_S04	JUNCTION	0.81	1.25	0	02:05	0.00747	0.495	0.000
DP_S05	JUNCTION	0.74	1.75	0	00:45	0.00679	0.502	-0.000
DP_S06	JUNCTION	1.51	7.31	0	00:45	0.0166	0.562	0.003
DP_S07	JUNCTION	9.85	16.47	0	00:45	0.0913	0.653	0.004
DP_S08	JUNCTION	0.51	16.85	0	00:45	0.00441	0.658	0.002
DP_S09	JUNCTION	4.86	8.15	0	00:45	0.0436	0.0732	0.993
DP_S10	JUNCTION	7.25	26.69	0	00:45	0.0661	0.392	-0.058
DP_S11	JUNCTION	0.00	3.31	0	01:34	0	0.902	0.000
J_G2	JUNCTION	4.10	4.10	0	00:45	0.044	0.044	-0.004
J_G3	JUNCTION	3.30	3.30	0	00:45	0.0296	0.0296	-0.000
J_G7	JUNCTION	11.44	11.44	0	00:45	0.109	0.113	0.349
JN_B	JUNCTION	17.12	17.12	0	00:45	0.166	0.166	0.388
JN_C1	JUNCTION	16.88	32.75	0	00:45	0.187	0.353	0.017
MH4-A	JUNCTION	0.00	1.74	0	00:45	0	0.502	0.000
MH4-C	JUNCTION	0.00	7.11	0	00:45	0	0.562	-0.001
MH-MulberryWD_01	JUNCTION	0.00	19.55	0	00:48	0	0.658	0.110
MH-MulberryWD_02	JUNCTION	0.00	7.21	0	00:45	0	0.562	-0.003
MH-WVC_01	JUNCTION	0.00	16.81	0	00:45	0	0.166	-0.059
Pond_14	STORAGE	0.00	41.38	0	00:45	0	1.04	-0.141
Pond_CH	STORAGE	14.35	45.98	0	00:45	0.135	0.487	-0.065
S02+CH2	JUNCTION	0.00	32.71	0	00:45	0	0.353	0.129
SouthOutfall	OUTFALL	0.00	3.31	0	01:36	0	0.902	0.000

Topic: Node Depth

Click a column header to sort the column.

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Day of Maximum Depth	Hour of Maximum Depth	Maximum Reported Depth Feet
DP_S01	JUNCTION	0.01	1.80	6919.99	0	00:45	1.78
DP_S02	JUNCTION	0.04	2.36	6918.71	0	00:45	2.35
DP_S04	JUNCTION	0.10	0.45	6914.00	0	02:05	0.45
DP_S05	JUNCTION	0.10	0.54	6913.50	0	00:45	0.54
DP_S06	JUNCTION	0.10	1.12	6912.53	0	00:45	1.12
DP_S07	JUNCTION	0.10	1.68	6910.12	0	00:45	1.68
DP_S08	JUNCTION	0.01	0.77	6908.07	0	00:48	0.76
DP_S09	JUNCTION	0.00	0.61	6907.49	0	00:45	0.61
DP_S10	JUNCTION	0.09	2.23	6904.31	0	01:12	2.21
DP_S11	JUNCTION	0.14	0.78	6898.28	0	01:36	0.78
J_G2	JUNCTION	0.01	0.50	6914.97	0	00:45	0.50
J_G3	JUNCTION	0.00	0.54	6908.72	0	00:45	0.54
J_G7	JUNCTION	0.04	1.71	6904.47	0	01:12	1.57
JN_B	JUNCTION	0.01	1.12	6923.02	0	00:45	1.12
JN_C1	JUNCTION	0.03	2.54	6919.09	0	00:45	2.53
MH4-A	JUNCTION	0.10	0.54	6912.97	0	00:45	0.54
MH4-C	JUNCTION	0.10	1.24	6910.20	0	00:45	1.22
MH-MulberryWD_01	JUNCTION	0.10	1.65	6908.07	0	00:46	1.64
MH-MulberryWD_02	JUNCTION	0.10	1.12	6911.33	0	00:45	1.11
MH-WVC_01	JUNCTION	0.01	2.08	6919.24	0	00:45	2.07
Pond_14	STORAGE	3.37	5.99	6903.99	0	01:34	5.99
Pond_CH	STORAGE	1.00	3.26	6917.00	0	02:13	3.26
S02+CH2	JUNCTION	0.13	2.27	6918.07	0	00:45	2.26
SouthOutfall	OUTFALL	0.06	0.28	6895.81	0	01:36	0.28

Topic: Link Flow — Click a column header to sort the column.

Link	Type	Maximum |Flow| CFS	Day of Maximum Flow	Hour of Maximum Flow	Maximum |Velocity| ft/sec	Max / Full Flow	Max / Full Depth
10	CONDUIT	32.72	0	00:45	3.79	0.24	0.53
16	ORIFICE	0.01	0	01:34	1.00		
26	CONDUIT	16.99	0	00:45	6.63	0.26	0.40
28	CONDUIT	32.71	0	00:45	4.60	0.24	0.46
3	WEIR	0.00	0	00:00	0.00		
31	CONDUIT	32.67	0	00:45	4.96	0.18	0.37
33	CONDUIT	1.73	0	00:45	2.30	0.04	0.19
34	CONDUIT	7.31	0	00:46	2.73	0.08	0.37
35	CONDUIT	16.85	0	00:45	2.82	0.17	0.51
8	ORIFICE	0.95	0	02:13	0.63		
ch_0	ORIFICE	0.27	0	02:15	1.00		
CH_Weir	ORIFICE	0.00	0	00:00			
DP_S01toMH-WVC_01	CONDUIT	16.81	0	00:45	3.72	0.24	0.48
Out_14-1	ORIFICE	0.21	0	01:34	1.00		
Out_14-2	ORIFICE	0.26	0	01:34	1.00		
Out_14-3	ORIFICE	0.22	0	01:34	1.00		
Out_14-4	ORIFICE	2.62	0	01:34	1.00		
PR_01	CONDUIT	1.25	0	02:05	2.49	0.02	0.12
PR_02	CONDUIT	1.74	0	00:45	2.72	0.03	0.15
PR_03	CONDUIT	4.09	0	00:45	7.96	0.24	0.33
PR_04	CONDUIT	7.21	0	00:45	3.11	0.06	0.29
PR_04A	CONDUIT	7.11	0	00:45	3.21	0.08	0.29
PR_05	CONDUIT	16.35	0	00:45	5.01	0.08	0.31
PR_05a	CONDUIT	19.55	0	00:48	4.95	0.00	0.02
PR_06	CONDUIT	15.74	0	00:46	3.28	0.08	0.45
PR_07	CONDUIT	3.30	0	00:45	5.77	0.28	0.36
PR_08	CONDUIT	8.09	0	00:45	8.47	0.13	0.39
PR_09	CONDUIT	11.38	0	00:45	4.37	0.17	0.59
PR_10	CONDUIT	26.52	0	00:58	9.64	0.22	0.69
PR_13	CONDUIT	3.31	0	01:36	3.98	0.02	0.18
Weir_14-1	ORIFICE	0.00	0	00:00			
Weir_14-2	WEIR	0.00	0	00:00	0.00		

Topic: Storage Volume Click a column header to sort the column.

Storage Unit	Average Volume 1000 ft3	Average Percent Full	Evap Percent Loss	Exfil Percent Loss	Maximum Volume 1000 ft3	Maximum Percent Full	Day of Maximum Volume	Hour of Maximum Volume	Maximum Outflow CFS
Pond_14	6.315	4	0	0	40.713	23	0	01:34	21.60
Pond_CH	10.593	5	0	0	57.566	26	0	02:13	1.23

Topic: Outfall Loading Click a column header to sort the column.

Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
SouthOutfall	68.91	0.41	3.31	0.902

5-Year Storm

Topic: Subcatchment Runoff Click a column header to sort the column.

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
B	1.66	0.00	0.00	0.83	0.81	0.00	0.81	0.22	22.69	0.489
C1	1.66	0.00	0.00	0.06	1.54	0.02	1.56	0.23	21.58	0.941
C2	1.66	0.00	0.00	0.00	1.62	0.00	1.62	0.02	1.51	0.978
G1	1.66	0.00	0.00	0.04	1.57	0.01	1.58	0.14	15.23	0.956
G2	1.66	0.00	0.00	0.04	1.57	0.01	1.58	0.06	5.55	0.956
G3	1.66	0.00	0.00	0.06	1.54	0.02	1.56	0.04	4.37	0.942
G4	1.66	0.00	0.00	0.00	1.62	0.00	1.62	0.01	0.67	0.978
G5	1.66	0.00	0.00	0.06	1.54	0.02	1.56	0.06	6.44	0.942
G6	1.66	0.00	0.00	0.19	1.38	0.06	1.44	0.06	7.62	0.867
G7	1.66	0.00	0.00	0.00	1.62	0.00	1.62	0.02	2.16	0.978
H1	1.66	0.00	0.00	0.00	1.62	0.00	1.62	0.02	2.04	0.978
H2	1.66	0.00	0.00	0.34	1.21	0.08	1.29	0.18	19.72	0.779
H3	1.66	0.00	0.00	0.00	1.62	0.00	1.62	0.01	1.06	0.978
I1	1.66	0.00	0.00	0.00	1.62	0.00	1.62	0.01	0.97	0.978
I2	1.66	0.00	0.00	0.06	1.54	0.02	1.56	0.11	12.28	0.942
I3	1.66	0.00	0.00	0.00	1.62	0.00	1.62	0.01	0.84	0.978

Topic: Node Inflow Click a column header to sort the column.

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Day of Maximum Inflow	Hour of Maximum Inflow	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
DP_S01	JUNCTION	0.00	22.52	0	00:45	0	0.215	-0.173
DP_S02	JUNCTION	0.00	43.73	0	00:45	0	0.459	0.048
DP_S04	JUNCTION	1.06	2.10	0	02:05	0.00967	0.648	-0.000
DP_S05	JUNCTION	0.97	2.26	0	00:45	0.00879	0.657	0.000
DP_S06	JUNCTION	2.04	9.79	0	00:45	0.0215	0.736	0.012
DP_S07	JUNCTION	13.12	22.13	0	00:45	0.119	0.855	0.005
DP_S08	JUNCTION	0.67	22.64	0	00:45	0.00572	0.86	0.003
DP_S09	JUNCTION	6.44	10.80	0	00:45	0.0568	0.0953	0.678
DP_S10	JUNCTION	9.78	35.68	0	00:45	0.0869	0.467	-0.081
DP_S11	JUNCTION	0.00	4.01	0	02:06	0	1.18	0.000
J_G2	JUNCTION	5.55	5.55	0	00:45	0.0572	0.0572	-0.003
J_G3	JUNCTION	4.37	4.37	0	00:45	0.0386	0.0386	-0.000
J_G7	JUNCTION	15.23	15.23	0	00:45	0.142	0.145	0.393
JN_B	JUNCTION	22.69	22.69	0	00:45	0.215	0.215	0.259
JN_C1	JUNCTION	23.09	43.78	0	00:45	0.243	0.458	-0.012
MH4-A	JUNCTION	0.00	2.24	0	00:45	0	0.657	-0.016
MH4-C	JUNCTION	0.00	9.55	0	00:45	0	0.736	-0.001
MH-MulberryWD_01	JUNCTION	0.00	24.02	0	00:45	0	0.86	0.092
MH-MulberryWD_02	JUNCTION	0.00	9.67	0	00:45	0	0.736	0.002
MH-WVC_01	JUNCTION	0.00	21.95	0	00:45	0	0.215	-0.002
Pond_14	STORAGE	0.00	55.15	0	00:45	0	1.32	-0.101
Pond_CH	STORAGE	19.72	62.41	0	00:45	0.181	0.638	-0.074
S02+CH2	JUNCTION	0.00	43.70	0	00:45	0	0.458	0.144
SouthOutfall	OUTFALL	0.00	4.01	0	02:06	0	1.18	0.000

Topic: Node Depth Click a column header to sort the column.

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Day of Maximum Depth	Hour of Maximum Depth	Maximum Reported Depth Feet
DP_S01	JUNCTION	0.02	2.09	6920.28	0	00:45	2.07
DP_S02	JUNCTION	0.06	2.79	6919.14	0	00:45	2.78
DP_S04	JUNCTION	0.11	0.60	6914.15	0	02:05	0.60
DP_S05	JUNCTION	0.11	0.62	6913.58	0	00:45	0.62
DP_S06	JUNCTION	0.11	1.32	6912.73	0	00:45	1.32
DP_S07	JUNCTION	0.11	1.98	6910.42	0	00:45	1.98
DP_S08	JUNCTION	0.02	1.05	6908.35	0	00:46	1.02
DP_S09	JUNCTION	0.01	0.70	6907.58	0	00:45	0.70
DP_S10	JUNCTION	0.15	2.93	6905.01	0	01:05	2.91
DP_S11	JUNCTION	0.16	0.86	6898.36	0	02:06	0.86
J_G2	JUNCTION	0.01	0.59	6915.06	0	00:45	0.59
J_G3	JUNCTION	0.01	0.63	6908.81	0	00:45	0.63
J_G7	JUNCTION	0.08	2.43	6905.19	0	01:00	2.27
JN_B	JUNCTION	0.01	1.33	6923.23	0	00:45	1.33
JN_C1	JUNCTION	0.05	3.02	6919.57	0	00:45	3.00
MH4-A	JUNCTION	0.11	0.62	6913.05	0	00:45	0.62
MH4-C	JUNCTION	0.11	1.55	6910.51	0	00:45	1.53
MH-MulberryWD_01	JUNCTION	0.11	1.94	6908.36	0	00:46	1.92
MH-MulberryWD_02	JUNCTION	0.11	1.31	6911.52	0	00:45	1.30
MH-WVC_01	JUNCTION	0.02	2.56	6919.72	0	00:45	2.55
Pond_14	STORAGE	3.46	6.77	6904.77	0	02:06	6.76
Pond_CH	STORAGE	1.08	3.70	6917.44	0	02:08	3.70
S02+CH2	JUNCTION	0.17	2.66	6918.46	0	00:45	2.65
SouthOutfall	OUTFALL	0.06	0.30	6895.83	0	02:06	0.30

Topic: Link Flow

Click a column header to sort the column.

Link	Type	Maximum |Flow| CFS	Day of Maximum Flow	Hour of Maximum Flow	Maximum |Velocity| ft/sec	Max / Full Flow	Max / Full Depth
10	CONDUIT	43.73	0	00:45	4.11	0.31	0.64
16	ORIFICE	0.03	0	02:06	1.00		
26	CONDUIT	22.52	0	00:45	6.66	0.34	0.48
28	CONDUIT	43.70	0	00:45	4.88	0.31	0.55
3	WEIR	0.00	0	00:00	0.00		
31	CONDUIT	43.67	0	00:45	5.38	0.24	0.43
33	CONDUIT	2.22	0	00:45	2.61	0.05	0.24
34	CONDUIT	9.84	0	00:45	2.92	0.11	0.46
35	CONDUIT	22.19	0	00:45	2.83	0.22	0.64
8	ORIFICE	1.78	0	02:08	0.96		
ch_0	ORIFICE	0.28	0	02:10	1.00		
CH_Weir	ORIFICE	0.00	0	00:00			
DP_S01toMH-WVC_01	CONDUIT	21.95	0	00:45	3.74	0.31	0.59
Out_14-1	ORIFICE	0.23	0	02:06	1.00		
Out_14-2	ORIFICE	0.29	0	02:06	1.00		
Out_14-3	ORIFICE	0.26	0	02:06	1.00		
Out_14-4	ORIFICE	3.20	0	02:06	1.00		
PR_01	CONDUIT	2.10	0	02:05	2.81	0.03	0.16
PR_02	CONDUIT	2.24	0	00:45	2.89	0.03	0.17
PR_03	CONDUIT	5.55	0	00:45	8.66	0.32	0.39
PR_04	CONDUIT	9.67	0	00:45	3.26	0.08	0.35
PR_04A	CONDUIT	9.55	0	00:45	3.23	0.10	0.37
PR_05	CONDUIT	21.99	0	00:45	5.42	0.11	0.36
PR_05a	CONDUIT	24.02	0	00:45	5.01	0.00	0.03
PR_06	CONDUIT	21.13	0	00:46	3.35	0.10	0.55
PR_07	CONDUIT	4.37	0	00:45	6.23	0.37	0.42
PR_08	CONDUIT	10.73	0	00:45	8.43	0.17	0.54
PR_09	CONDUIT	15.20	0	00:45	4.64	0.23	0.82
PR_10	CONDUIT	39.40	0	00:56	9.50	0.33	0.89
PR_13	CONDUIT	4.01	0	02:06	4.16	0.02	0.19
Weir_14-1	ORIFICE	0.00	0	00:00			
Weir_14-2	WEIR	0.00	0	00:00	0.00		

Topic: Storage Volume Click a column header to sort the column.

Storage Unit	Average Volume 1000 ft3	Average Percent Full	Evap Percent Loss	Exfil Percent Loss	Maximum Volume 1000 ft3	Maximum Percent Full	Day of Maximum Volume	Hour of Maximum Volume	Maximum Outflow CFS
Pond_14	7.490	4	0	0	55.514	32	0	02:06	28.52
Pond_CH	12.259	6	0	0	73.424	33	0	02:08	2.06

Topic: Outfall Loading Click a column header to sort the column.

Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
SouthOutfall	71.11	0.51	4.01	1.180

10-Year Storm

Topic: Subcatchment Runoff Click a column header to sort the column.

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
B	1.99	0.00	0.00	1.00	0.98	0.00	0.98	0.26	27.80	0.491
C1	1.99	0.00	0.00	0.07	1.86	0.03	1.89	0.28	26.95	0.948
C2	1.99	0.00	0.00	0.00	1.95	0.00	1.95	0.02	1.88	0.981
G1	1.99	0.00	0.00	0.04	1.90	0.02	1.92	0.17	18.69	0.962
G2	1.99	0.00	0.00	0.04	1.90	0.02	1.92	0.07	6.90	0.962
G3	1.99	0.00	0.00	0.07	1.86	0.03	1.89	0.05	5.34	0.949
G4	1.99	0.00	0.00	0.00	1.96	0.00	1.96	0.01	0.81	0.982
G5	1.99	0.00	0.00	0.07	1.86	0.03	1.89	0.07	7.87	0.949
G6	1.99	0.00	0.00	0.21	1.66	0.09	1.76	0.08	9.40	0.882
G7	1.99	0.00	0.00	0.00	1.95	0.00	1.95	0.03	2.68	0.981
H1	1.99	0.00	0.00	0.00	1.95	0.00	1.95	0.03	2.53	0.982
H2	1.99	0.00	0.00	0.37	1.47	0.13	1.60	0.22	24.79	0.801
H3	1.99	0.00	0.00	0.00	1.96	0.00	1.96	0.01	1.29	0.982
I1	1.99	0.00	0.00	0.00	1.96	0.00	1.96	0.01	1.19	0.982
I2	1.99	0.00	0.00	0.07	1.86	0.03	1.89	0.13	15.07	0.949
I3	1.99	0.00	0.00	0.00	1.96	0.00	1.96	0.01	1.02	0.982

Topic: Node Inflow Click a column header to sort the column.

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Day of Maximum Inflow	Hour of Maximum Inflow	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
DP_S01	JUNCTION	0.00	27.59	0	00:45	0	0.259	-0.261
DP_S02	JUNCTION	0.00	53.83	0	00:45	0	0.555	0.041
DP_S04	JUNCTION	1.29	2.66	0	02:05	0.0117	0.789	-0.003
DP_S05	JUNCTION	1.19	2.81	0	00:45	0.0106	0.8	0.001
DP_S06	JUNCTION	2.53	12.12	0	00:45	0.026	0.895	0.018
DP_S07	JUNCTION	16.09	27.33	0	00:45	0.144	1.04	0.005
DP_S08	JUNCTION	0.81	27.98	0	00:45	0.0069	1.05	0.002
DP_S09	JUNCTION	7.87	13.20	0	00:45	0.0688	0.115	0.533
DP_S10	JUNCTION	12.08	43.84	0	00:45	0.106	0.403	-0.342
DP_S11	JUNCTION	0.00	4.54	0	02:09	0	1.44	0.000
J_G2	JUNCTION	6.90	6.90	0	00:45	0.0692	0.0692	-0.003
J_G3	JUNCTION	5.34	5.34	0	00:45	0.0467	0.0467	-0.000
J_G7	JUNCTION	18.69	18.69	0	00:45	0.172	0.172	0.241
JN_B	JUNCTION	27.80	27.80	0	00:45	0.26	0.26	0.230
JN_C1	JUNCTION	28.83	53.95	0	00:45	0.295	0.555	-0.009
MH4-A	JUNCTION	0.00	2.78	0	00:45	0	0.8	-0.027
MH4-C	JUNCTION	0.00	11.84	0	00:45	0	0.895	-0.003
MH-MulberryWD_01	JUNCTION	0.00	28.76	0	00:45	0	1.05	0.098
MH-MulberryWD_02	JUNCTION	0.00	11.98	0	00:45	0	0.895	-0.001
MH-WVC_01	JUNCTION	0.00	26.62	0	00:45	0	0.26	-0.019
Pond_14	STORAGE	0.00	68.36	0	00:45	0	1.45	-0.093
Pond_CH	STORAGE	24.79	77.85	0	00:45	0.223	0.777	-0.079
S02+CH2	JUNCTION	0.00	53.81	0	00:45	0	0.555	0.161
SouthOutfall	OUTFALL	0.00	4.54	0	02:09	0	1.44	0.000

Topic: Node Depth Click a column header to sort the column.

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Day of Maximum Depth	Hour of Maximum Depth	Maximum Reported Depth Feet
DP_S01	JUNCTION	0.02	2.38	6920.57	0	00:45	2.36
DP_S02	JUNCTION	0.09	3.18	6919.53	0	00:45	3.16
DP_S04	JUNCTION	0.12	0.69	6914.24	0	02:05	0.69
DP_S05	JUNCTION	0.12	0.70	6913.66	0	00:45	0.70
DP_S06	JUNCTION	0.12	1.49	6912.90	0	00:45	1.48
DP_S07	JUNCTION	0.12	2.23	6910.67	0	00:45	2.23
DP_S08	JUNCTION	0.02	1.28	6908.58	0	00:45	1.28
DP_S09	JUNCTION	0.01	0.78	6907.66	0	00:45	0.78
DP_S10	JUNCTION	0.21	3.40	6905.48	0	02:08	3.40
DP_S11	JUNCTION	0.17	0.92	6898.42	0	02:09	0.92
J_G2	JUNCTION	0.01	0.66	6915.13	0	00:45	0.66
J_G3	JUNCTION	0.01	0.71	6908.89	0	00:45	0.71
J_G7	JUNCTION	0.13	2.72	6905.48	0	02:08	2.72
JN_B	JUNCTION	0.01	1.52	6923.42	0	00:45	1.52
JN_C1	JUNCTION	0.07	3.45	6920.00	0	00:45	3.44
MH4-A	JUNCTION	0.12	0.70	6913.13	0	00:45	0.69
MH4-C	JUNCTION	0.12	1.80	6910.76	0	00:45	1.79
MH-MulberryWD_01	JUNCTION	0.12	2.18	6908.60	0	00:46	2.17
MH-MulberryWD_02	JUNCTION	0.12	1.48	6911.69	0	00:45	1.47
MH-WVC_01	JUNCTION	0.03	2.99	6920.15	0	00:45	2.97
Pond_14	STORAGE	3.55	7.47	6905.47	0	02:09	7.47
Pond_CH	STORAGE	1.14	4.09	6917.83	0	02:07	4.09
S02+CH2	JUNCTION	0.20	2.99	6918.79	0	00:45	2.97
SouthOutfall	OUTFALL	0.07	0.32	6895.85	0	02:09	0.32

Topic: Link Flow — Click a column header to sort the column.

Link	Type	Maximum |Flow| CFS	Day of Maximum Flow	Hour of Maximum Flow	Maximum |Velocity| ft/sec	Max / Full Flow	Max / Full Depth
10	CONDUIT	53.83	0	00:45	4.36	0.39	0.73
16	ORIFICE	0.04	0	02:09	1.00		
26	CONDUIT	27.59	0	00:45	6.81	0.42	0.56
28	CONDUIT	53.81	0	00:45	5.11	0.39	0.63
3	WEIR	0.00	0	00:00	0.00		
31	CONDUIT	53.76	0	00:45	5.71	0.29	0.48
33	CONDUIT	2.75	0	00:45	2.77	0.06	0.28
34	CONDUIT	12.21	0	00:45	3.04	0.13	0.53
35	CONDUIT	27.08	0	00:46	2.81	0.27	0.74
8	ORIFICE	2.32	0	02:07	1.00		
ch_0	ORIFICE	0.30	0	02:09	1.00		
CH_Weir	ORIFICE	0.00	0	00:00			
DP_S01toMH-WVC_01	CONDUIT	26.62	0	00:45	3.77	0.37	0.70
Out_14-1	ORIFICE	0.25	0	02:09	1.00		
Out_14-2	ORIFICE	0.32	0	02:09	1.00		
Out_14-3	ORIFICE	0.29	0	02:09	1.00		
Out_14-4	ORIFICE	3.65	0	02:09	1.00		
PR_01	CONDUIT	2.66	0	02:05	2.98	0.04	0.18
PR_02	CONDUIT	2.78	0	00:45	3.05	0.04	0.19
PR_03	CONDUIT	6.89	0	00:45	9.18	0.40	0.44
PR_04	CONDUIT	11.98	0	00:45	3.39	0.10	0.40
PR_04A	CONDUIT	11.84	0	00:45	3.26	0.13	0.43
PR_05	CONDUIT	27.19	0	00:45	5.74	0.13	0.40
PR_05a	CONDUIT	28.76	0	00:45	5.05	0.00	0.03
PR_06	CONDUIT	26.08	0	00:46	3.45	0.13	0.64
PR_07	CONDUIT	5.34	0	00:45	6.57	0.45	0.47
PR_08	CONDUIT	13.12	0	00:45	8.20	0.21	0.57
PR_09	CONDUIT	18.67	0	00:45	4.70	0.28	0.95
PR_10	CONDUIT	43.50	0	00:45	9.25	0.36	0.99
PR_13	CONDUIT	4.54	0	02:09	4.27	0.02	0.21
Weir_14-1	ORIFICE	0.00	0	00:00			
Weir_14-2	WEIR	0.00	0	00:00	0.00		

Topic: Storage Volume Click a column header to sort the column.

Storage Unit	Average Volume 1000 ft3	Average Percent Full	Evap Percent Loss	Exfil Percent Loss	Maximum Volume 1000 ft3	Maximum Percent Full	Day of Maximum Volume	Hour of Maximum Volume	Maximum Outflow CFS
Pond_14	8.724	5	0	0	70.211	40	0	02:09	4.62
Pond_CH	13.646	6	0	0	88.508	40	0	02:07	2.62

Topic: Outfall Loading Click a column header to sort the column.

Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
SouthOutfall	72.57	0.61	4.54	1.436

25-Year Storm

Topic: Subcatchment Runoff Click a column header to sort the column.

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
B	2.54	0.00	0.00	1.27	1.25	0.00	1.25	0.33	36.20	0.493
C1	2.54	0.00	0.00	0.08	2.38	0.05	2.43	0.35	35.87	0.957
C2	2.54	0.00	0.00	0.00	2.50	0.00	2.50	0.03	2.49	0.986
G1	2.54	0.00	0.00	0.04	2.43	0.03	2.46	0.22	24.37	0.969
G2	2.54	0.00	0.00	0.04	2.43	0.03	2.46	0.09	9.12	0.969
G3	2.54	0.00	0.00	0.07	2.38	0.05	2.43	0.06	6.93	0.958
G4	2.54	0.00	0.00	0.00	2.50	0.00	2.50	0.01	1.03	0.986
G5	2.54	0.00	0.00	0.07	2.38	0.05	2.43	0.09	10.20	0.958
G6	2.54	0.00	0.00	0.23	2.13	0.16	2.28	0.10	12.29	0.899
G7	2.54	0.00	0.00	0.00	2.50	0.00	2.50	0.04	3.55	0.986
H1	2.54	0.00	0.00	0.00	2.50	0.00	2.50	0.03	3.34	0.986
H2	2.54	0.00	0.00	0.40	1.88	0.23	2.11	0.29	33.41	0.830
H3	2.54	0.00	0.00	0.00	2.50	0.00	2.50	0.01	1.67	0.986
I1	2.54	0.00	0.00	0.00	2.50	0.00	2.50	0.01	1.53	0.986
I2	2.54	0.00	0.00	0.07	2.38	0.05	2.43	0.17	19.63	0.957
I3	2.54	0.00	0.00	0.00	2.50	0.00	2.50	0.01	1.32	0.986

Topic: Node Inflow Click a column header to sort the column.

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Day of Maximum Inflow	Hour of Maximum Inflow	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
DP_S01	JUNCTION	0.00	36.38	0	00:45	0	0.332	0.220
DP_S02	JUNCTION	0.00	71.42	0	00:45	0	0.712	0.031
DP_S04	JUNCTION	1.67	3.35	0	02:05	0.015	1.02	-0.009
DP_S05	JUNCTION	1.53	4.00	0	00:45	0.0136	1.03	0.004
DP_S06	JUNCTION	3.34	16.28	0	00:45	0.0333	1.16	0.019
DP_S07	JUNCTION	20.94	36.14	0	00:45	0.185	1.34	0.017
DP_S08	JUNCTION	1.03	37.06	0	00:45	0.00884	1.35	0.001
DP_S09	JUNCTION	10.20	17.12	0	00:45	0.0885	0.149	0.392
DP_S10	JUNCTION	15.84	57.21	0	00:45	0.137	0.506	-0.365
DP_S11	JUNCTION	0.00	5.99	0	02:07	0	1.85	0.000
J_G2	JUNCTION	9.12	9.12	0	00:45	0.0889	0.0889	-0.002
J_G3	JUNCTION	6.93	6.93	0	00:45	0.0601	0.0601	-0.000
J_G7	JUNCTION	24.37	24.37	0	00:45	0.221	0.221	0.167
JN_B	JUNCTION	36.20	36.20	0	00:45	0.333	0.333	0.142
JN_C1	JUNCTION	38.35	71.47	0	00:45	0.379	0.712	-0.008
MH4-A	JUNCTION	0.00	3.98	0	00:45	0	1.03	-0.032
MH4-C	JUNCTION	0.00	15.94	0	00:45	0	1.16	-0.003
MH-MulberryWD_01	JUNCTION	0.00	44.15	0	00:45	0	1.35	0.104
MH-MulberryWD_02	JUNCTION	0.00	16.11	0	00:45	0	1.16	0.001
MH-WVC_01	JUNCTION	0.00	35.60	0	00:45	0	0.332	-0.302
Pond_14	STORAGE	0.00	90.85	0	00:45	0	1.86	-0.114
Pond_CH	STORAGE	33.41	103.72	0	00:45	0.295	1.01	-0.084
S02+CH2	JUNCTION	0.00	71.39	0	00:45	0	0.712	0.184
SouthOutfall	OUTFALL	0.00	5.99	0	02:07	0	1.85	0.000

Topic: Node Depth

Click a column header to sort the column.

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Day of Maximum Depth	Hour of Maximum Depth	Maximum Reported Depth Feet
DP_S01	JUNCTION	0.02	3.19	6921.38	0	00:45	3.10
DP_S02	JUNCTION	0.13	3.81	6920.16	0	00:45	3.78
DP_S04	JUNCTION	0.14	0.78	6914.33	0	02:05	0.78
DP_S05	JUNCTION	0.14	0.86	6913.82	0	00:45	0.86
DP_S06	JUNCTION	0.14	1.76	6913.17	0	00:45	1.75
DP_S07	JUNCTION	0.13	2.61	6911.05	0	00:45	2.61
DP_S08	JUNCTION	0.02	1.72	6909.02	0	00:46	1.72
DP_S09	JUNCTION	0.01	0.90	6907.78	0	00:45	0.90
DP_S10	JUNCTION	0.32	4.39	6906.47	0	02:07	4.39
DP_S11	JUNCTION	0.20	1.08	6898.58	0	02:07	1.08
J_G2	JUNCTION	0.01	0.78	6915.25	0	00:45	0.78
J_G3	JUNCTION	0.01	0.83	6909.01	0	00:45	0.83
J_G7	JUNCTION	0.22	3.71	6906.47	0	02:07	3.71
JN_B	JUNCTION	0.01	1.73	6923.63	0	00:44	1.73
JN_C1	JUNCTION	0.11	4.17	6920.72	0	00:45	4.15
MH4-A	JUNCTION	0.14	0.85	6913.28	0	00:45	0.84
MH4-C	JUNCTION	0.14	2.20	6911.16	0	00:45	2.19
MH-MulberryWD_01	JUNCTION	0.13	2.58	6909.00	0	00:45	2.52
MH-MulberryWD_02	JUNCTION	0.14	1.75	6911.96	0	00:45	1.72
MH-WVC_01	JUNCTION	0.06	3.73	6920.89	0	00:45	3.70
Pond_14	STORAGE	3.69	8.47	6906.47	0	02:07	8.47
Pond_CH	STORAGE	1.24	4.74	6918.48	0	02:07	4.74
S02+CH2	JUNCTION	0.26	3.49	6919.29	0	00:45	3.47
SouthOutfall	OUTFALL	0.08	0.37	6895.90	0	02:07	0.37

Topic: Link Flow Click a column header to sort the column.

Link	Type	Maximum |Flow| CFS	Day of Maximum Flow	Hour of Maximum Flow	Maximum |Velocity| ft/sec	Max / Full Flow	Max / Full Depth
10	CONDUIT	71.42	0	00:45	4.84	0.51	0.87
16	ORIFICE	0.05	0	02:07	1.00		
26	CONDUIT	36.38	0	00:45	7.01	0.56	0.72
28	CONDUIT	71.39	0	00:45	5.54	0.51	0.76
3	WEIR	0.00	0	00:00	0.00		
31	CONDUIT	71.32	0	00:45	6.23	0.39	0.57
33	CONDUIT	3.92	0	00:45	2.94	0.08	0.35
34	CONDUIT	16.46	0	00:45	3.16	0.18	0.64
35	CONDUIT	36.05	0	00:45	2.99	0.35	0.92
8	ORIFICE	2.97	0	02:07	1.00		
ch_0	ORIFICE	0.32	0	02:08	1.00		
CH_Weir	ORIFICE	0.00	0	00:00			
DP_S01toMH-WVC_01	CONDUIT	35.60	0	00:45	3.87	0.50	0.92
Out_14-1	ORIFICE	0.28	0	02:07	1.00		
Out_14-2	ORIFICE	0.36	0	02:07	1.00		
Out_14-3	ORIFICE	0.33	0	02:07	1.00		
Out_14-4	ORIFICE	4.20	0	02:07	1.00		
PR_01	CONDUIT	3.35	0	02:05	3.10	0.05	0.21
PR_02	CONDUIT	3.98	0	00:45	3.17	0.06	0.23
PR_03	CONDUIT	9.11	0	00:45	9.86	0.53	0.52
PR_04	CONDUIT	16.11	0	00:45	3.62	0.14	0.47
PR_04A	CONDUIT	15.94	0	00:45	3.35	0.17	0.52
PR_05	CONDUIT	36.04	0	00:45	6.23	0.18	0.47
PR_05a	CONDUIT	44.15	0	00:45	5.15	0.00	0.04
PR_06	CONDUIT	35.35	0	00:45	3.71	0.17	0.76
PR_07	CONDUIT	6.92	0	00:45	7.02	0.59	0.55
PR_08	CONDUIT	17.04	0	00:45	8.27	0.28	0.62
PR_09	CONDUIT	24.35	0	00:45	4.81	0.37	1.00
PR_10	CONDUIT	56.49	0	00:45	9.02	0.47	1.00
PR_13	CONDUIT	5.99	0	02:07	4.57	0.03	0.24
Weir_14-1	ORIFICE	0.78	0	02:07			
Weir_14-2	WEIR	0.00	0	00:00	0.00		

Topic: Storage Volume Click a column header to sort the column.

Storage Unit	Average Volume 1000 ft3	Average Percent Full	Evap Percent Loss	Exfil Percent Loss	Maximum Volume 1000 ft3	Maximum Percent Full	Day of Maximum Volume	Hour of Maximum Volume	Maximum Outflow CFS
Pond_14	10.988	6	0	0	93.303	53	0	02:07	5.99
Pond_CH	16.071	7	0	0	114.538	52	0	02:07	3.29

Topic: Outfall Loading Click a column header to sort the column.

Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
SouthOutfall	74.63	0.77	5.99	1.855

50-Year Storm

Topic: Subcatchment Runoff Click a column header to sort the column.

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
B	3.01	0.00	0.00	1.51	1.49	0.00	1.49	0.40	43.44	0.494
C1	3.01	0.00	0.00	0.08	2.83	0.07	2.90	0.42	43.58	0.962
C2	3.01	0.00	0.00	0.00	2.97	0.00	2.97	0.03	3.02	0.988
G1	3.01	0.00	0.00	0.05	2.88	0.04	2.93	0.26	29.26	0.973
G2	3.01	0.00	0.00	0.05	2.88	0.04	2.93	0.11	11.04	0.973
G3	3.01	0.00	0.00	0.08	2.83	0.07	2.90	0.07	8.29	0.963
G4	3.01	0.00	0.00	0.00	2.98	0.00	2.98	0.01	1.22	0.988
G5	3.01	0.00	0.00	0.08	2.83	0.07	2.90	0.11	12.20	0.963
G6	3.01	0.00	0.00	0.24	2.53	0.21	2.74	0.12	14.75	0.910
G7	3.01	0.00	0.00	0.00	2.97	0.00	2.97	0.04	4.31	0.988
H1	3.01	0.00	0.00	0.00	2.97	0.00	2.97	0.04	4.04	0.988
H2	3.01	0.00	0.00	0.43	2.23	0.32	2.55	0.36	40.96	0.848
H3	3.01	0.00	0.00	0.00	2.97	0.00	2.97	0.02	2.00	0.988
I1	3.01	0.00	0.00	0.00	2.97	0.00	2.97	0.02	1.83	0.988
I2	3.01	0.00	0.00	0.08	2.83	0.07	2.90	0.21	23.54	0.963
I3	3.01	0.00	0.00	0.00	2.97	0.00	2.97	0.01	1.57	0.988

Topic: Node Inflow

Click a column header to sort the column.

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Day of Maximum Inflow	Hour of Maximum Inflow	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
DP_S01	JUNCTION	0.00	42.09	0	00:45	0	0.394	0.145
DP_S02	JUNCTION	0.00	88.13	0	00:45	0	0.847	0.027
DP_S04	JUNCTION	2.00	3.82	0	02:05	0.0178	1.22	-0.007
DP_S05	JUNCTION	1.83	5.18	0	00:45	0.0162	1.24	0.004
DP_S06	JUNCTION	4.04	19.98	0	00:45	0.0396	1.38	0.019
DP_S07	JUNCTION	25.11	44.00	0	00:45	0.221	1.6	0.022
DP_S08	JUNCTION	1.22	45.11	0	00:45	0.0105	1.61	-0.002
DP_S09	JUNCTION	12.20	20.47	0	00:45	0.105	0.177	0.267
DP_S10	JUNCTION	19.06	68.68	0	00:45	0.164	0.603	-0.226
DP_S11	JUNCTION	0.00	12.62	0	01:16	0	2.21	0.000
J_G2	JUNCTION	11.04	11.04	0	00:45	0.106	0.106	-0.002
J_G3	JUNCTION	8.29	8.29	0	00:45	0.0716	0.0716	-0.000
J_G7	JUNCTION	29.26	29.26	0	00:45	0.262	0.262	0.144
JN_B	JUNCTION	43.44	43.44	0	00:45	0.395	0.395	0.235
JN_C1	JUNCTION	46.60	88.14	0	00:45	0.452	0.847	-0.010
MH4-A	JUNCTION	0.00	5.15	0	00:45	0	1.24	-0.032
MH4-C	JUNCTION	0.00	19.61	0	00:45	0	1.38	-0.003
MH-MulberryWD_01	JUNCTION	0.00	46.97	0	00:45	0	1.61	0.114
MH-MulberryWD_02	JUNCTION	0.00	19.79	0	00:45	0	1.38	0.001
MH-WVC_01	JUNCTION	0.00	42.20	0	00:45	0	0.394	-0.264
Pond_14	STORAGE	0.00	108.43	0	00:45	0	2.22	-0.124
Pond_CH	STORAGE	40.96	128.64	0	00:45	0.357	1.2	-0.085
S02+CH2	JUNCTION	0.00	88.11	0	00:45	0	0.847	0.192
SouthOutfall	OUTFALL	0.00	12.62	0	01:16	0	2.21	0.000

Topic: Node Depth

Click a column header to sort the column.

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Day of Maximum Depth	Hour of Maximum Depth	Maximum Reported Depth Feet
DP_S01	JUNCTION	0.03	5.46	6923.65	0	00:43	4.09
DP_S02	JUNCTION	0.18	4.36	6920.71	0	00:45	4.35
DP_S04	JUNCTION	0.15	0.84	6914.39	0	02:05	0.84
DP_S05	JUNCTION	0.15	0.99	6913.95	0	00:45	0.99
DP_S06	JUNCTION	0.15	1.97	6913.38	0	00:45	1.96
DP_S07	JUNCTION	0.15	2.91	6911.35	0	00:45	2.91
DP_S08	JUNCTION	0.03	1.98	6909.28	0	00:45	1.95
DP_S09	JUNCTION	0.01	0.99	6907.87	0	00:45	0.99
DP_S10	JUNCTION	0.37	4.74	6906.82	0	01:16	4.74
DP_S11	JUNCTION	0.21	1.63	6899.13	0	01:16	1.63
J_G2	JUNCTION	0.01	0.88	6915.35	0	00:45	0.88
J_G3	JUNCTION	0.01	0.93	6909.11	0	00:45	0.93
J_G7	JUNCTION	0.26	4.07	6906.83	0	01:16	4.07
JN_B	JUNCTION	0.01	2.22	6924.12	0	00:45	2.20
JN_C1	JUNCTION	0.15	4.83	6921.38	0	00:45	4.82
MH4-A	JUNCTION	0.15	1.01	6913.44	0	00:45	0.99
MH4-C	JUNCTION	0.15	2.52	6911.48	0	00:45	2.51
MH-MulberryWD_01	JUNCTION	0.15	2.86	6909.28	0	00:45	2.85
MH-MulberryWD_02	JUNCTION	0.15	1.96	6912.17	0	00:45	1.94
MH-WVC_01	JUNCTION	0.09	4.46	6921.62	0	00:45	4.45
Pond_14	STORAGE	3.76	8.82	6906.82	0	01:16	8.82
Pond_CH	STORAGE	1.32	5.27	6919.01	0	02:07	5.27
S02+CH2	JUNCTION	0.31	3.93	6919.73	0	00:45	3.92
SouthOutfall	OUTFALL	0.08	0.53	6896.06	0	01:16	0.53

Topic: Link Flow Click a column header to sort the column.

Link	Type	Maximum |Flow| CFS	Day of Maximum Flow	Hour of Maximum Flow	Maximum |Velocity| ft/sec	Max / Full Flow	Max / Full Depth
10	CONDUIT	88.13	0	00:45	5.59	0.63	0.97
16	ORIFICE	0.05	0	01:16	1.00		
26	CONDUIT	42.09	0	00:45	7.11	0.64	0.87
28	CONDUIT	88.11	0	00:45	6.03	0.63	0.86
3	WEIR	0.00	0	00:00	0.00		
31	CONDUIT	87.98	0	00:45	6.68	0.48	0.65
33	CONDUIT	5.21	0	00:45	3.05	0.11	0.41
34	CONDUIT	20.23	0	00:45	3.23	0.22	0.73
35	CONDUIT	42.30	0	00:45	3.37	0.42	1.00
8	ORIFICE	3.41	0	02:07	1.00		
ch_0	ORIFICE	0.34	0	02:08	1.00		
CH_Weir	ORIFICE	0.00	0	00:00			
DP_S01toMH-WVC_01	CONDUIT	42.20	0	00:45	4.39	0.59	1.00
Out_14-1	ORIFICE	0.28	0	01:16	1.00		
Out_14-2	ORIFICE	0.37	0	01:16	1.00		
Out_14-3	ORIFICE	0.34	0	01:16	1.00		
Out_14-4	ORIFICE	4.38	0	01:16	1.00		
PR_01	CONDUIT	3.82	0	02:05	3.11	0.06	0.25
PR_02	CONDUIT	5.15	0	00:45	3.21	0.08	0.28
PR_03	CONDUIT	11.03	0	00:45	10.33	0.64	0.58
PR_04	CONDUIT	19.79	0	00:45	3.81	0.17	0.53
PR_04A	CONDUIT	19.61	0	00:45	3.38	0.21	0.60
PR_05	CONDUIT	43.90	0	00:45	6.49	0.22	0.54
PR_05a	CONDUIT	46.97	0	00:45	5.22	0.00	0.05
PR_06	CONDUIT	42.63	0	00:45	3.91	0.21	0.84
PR_07	CONDUIT	8.28	0	00:45	7.31	0.70	0.62
PR_08	CONDUIT	20.39	0	00:45	7.97	0.33	0.65
PR_09	CONDUIT	29.24	0	00:45	4.91	0.44	1.00
PR_10	CONDUIT	67.34	0	00:45	8.68	0.56	1.00
PR_13	CONDUIT	12.62	0	01:16	5.51	0.07	0.36
Weir_14-1	ORIFICE	7.19	0	01:16			
Weir_14-2	WEIR	0.00	0	00:00	0.00		

Topic: Storage Volume Click a column header to sort the column.

Storage Unit	Average Volume 1000 ft3	Average Percent Full	Evap Percent Loss	Exfil Percent Loss	Maximum Volume 1000 ft3	Maximum Percent Full	Day of Maximum Volume	Hour of Maximum Volume	Maximum Outflow CFS
Pond_14	12.055	7	0	0	101.839	58	0	01:16	12.62
Pond_CH	18.312	8	0	0	137.493	62	0	02:07	3.75

Topic: Outfall Loading Click a column header to sort the column.

Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
SouthOutfall	76.17	0.90	12.62	2.214

100-Year Storm

Topic: Subcatchment Runoff Click a column header to sort the column.

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
B	3.51	0.00	0.00	1.76	1.74	0.00	1.74	0.46	51.23	0.495
C1	3.51	0.00	0.00	0.08	3.30	0.09	3.39	0.50	51.90	0.966
C2	3.51	0.00	0.00	0.00	3.48	0.00	3.48	0.03	3.59	0.990
G1	3.51	0.00	0.00	0.05	3.37	0.06	3.43	0.31	34.51	0.976
G2	3.51	0.00	0.00	0.05	3.37	0.06	3.43	0.12	13.11	0.976
G3	3.51	0.00	0.00	0.08	3.30	0.09	3.40	0.08	9.74	0.967
G4	3.51	0.00	0.00	0.00	3.48	0.00	3.48	0.01	1.43	0.990
G5	3.51	0.00	0.00	0.08	3.30	0.09	3.40	0.12	14.35	0.967
G6	3.51	0.00	0.00	0.25	2.96	0.27	3.23	0.14	17.37	0.920
G7	3.51	0.00	0.00	0.00	3.48	0.00	3.48	0.05	5.13	0.990
H1	3.51	0.00	0.00	0.00	3.48	0.00	3.48	0.05	4.80	0.990
H2	3.51	0.00	0.00	0.45	2.61	0.43	3.04	0.42	49.12	0.864
H3	3.51	0.00	0.00	0.00	3.48	0.00	3.48	0.02	2.35	0.990
I1	3.51	0.00	0.00	0.00	3.48	0.00	3.48	0.02	2.15	0.990
I2	3.51	0.00	0.00	0.08	3.30	0.09	3.40	0.24	27.74	0.967
I3	3.51	0.00	0.00	0.00	3.48	0.00	3.48	0.02	1.84	0.990

Topic: Node Inflow

Click a column header to sort the column.

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Day of Maximum Inflow	Hour of Maximum Inflow	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
DP_S01	JUNCTION	0.00	51.22	0	00:45	0	0.46	-0.128
DP_S02	JUNCTION	0.00	106.64	0	00:45	0	0.992	0.023
DP_S04	JUNCTION	2.35	4.47	0	00:45	0.0208	1.44	-0.006
DP_S05	JUNCTION	2.15	6.57	0	00:45	0.0189	1.46	0.005
DP_S06	JUNCTION	4.80	24.13	0	00:45	0.0463	1.63	0.018
DP_S07	JUNCTION	29.58	52.51	0	00:45	0.259	1.88	0.021
DP_S08	JUNCTION	1.43	53.83	0	00:45	0.0123	1.9	0.007
DP_S09	JUNCTION	14.35	24.07	0	00:45	0.124	0.208	0.268
DP_S10	JUNCTION	22.50	80.91	0	00:45	0.193	0.708	-0.250
DP_S11	JUNCTION	0.00	20.28	0	01:10	0	2.6	-0.000
J_G2	JUNCTION	13.11	13.11	0	00:45	0.124	0.124	-0.002
J_G3	JUNCTION	9.74	9.74	0	00:45	0.084	0.084	-0.000
J_G7	JUNCTION	34.51	34.51	0	00:45	0.307	0.307	0.106
JN_B	JUNCTION	51.23	51.23	0	00:45	0.462	0.462	0.388
JN_C1	JUNCTION	55.49	106.68	0	00:45	0.53	0.992	-0.008
MH4-A	JUNCTION	0.00	6.54	0	00:45	0	1.46	-0.031
MH4-C	JUNCTION	0.00	23.73	0	00:45	0	1.63	-0.005
MH-MulberryWD_01	JUNCTION	0.00	71.00	0	00:45	0	1.9	0.102
MH-MulberryWD_02	JUNCTION	0.00	23.93	0	00:45	0	1.63	0.001
MH-WVC_01	JUNCTION	0.00	51.22	0	00:45	0	0.461	-0.218
Pond_14	STORAGE	0.00	129.80	0	00:45	0	2.6	-0.143
Pond_CH	STORAGE	49.12	155.41	0	00:45	0.424	1.41	-0.084
S02+CH2	JUNCTION	0.00	106.67	0	00:45	0	0.992	0.196
SouthOutfall	OUTFALL	0.00	20.28	0	01:10	0	2.6	0.000

Topic: Node Depth Click a column header to sort the column.

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Day of Maximum Depth	Hour of Maximum Depth	Maximum Reported Depth Feet
DP_S01	JUNCTION	0.05	6.66	6924.85	0	00:42	5.38
DP_S02	JUNCTION	0.23	4.92	6921.27	0	00:45	4.92
DP_S04	JUNCTION	0.17	0.91	6914.46	0	00:45	0.91
DP_S05	JUNCTION	0.17	1.13	6914.09	0	00:45	1.13
DP_S06	JUNCTION	0.16	2.19	6913.60	0	00:45	2.18
DP_S07	JUNCTION	0.16	3.21	6911.65	0	00:45	3.21
DP_S08	JUNCTION	0.03	2.39	6909.69	0	00:45	2.35
DP_S09	JUNCTION	0.01	1.08	6907.96	0	00:45	1.08
DP_S10	JUNCTION	0.42	5.10	6907.18	0	01:10	5.10
DP_S11	JUNCTION	0.23	2.12	6899.62	0	01:10	2.12
J_G2	JUNCTION	0.01	0.99	6915.46	0	00:45	0.99
J_G3	JUNCTION	0.01	1.04	6909.22	0	00:45	1.04
J_G7	JUNCTION	0.30	4.43	6907.19	0	01:10	4.43
JN_B	JUNCTION	0.01	6.50	6928.40	0	00:43	4.67
JN_C1	JUNCTION	0.20	5.67	6922.22	0	00:45	5.66
MH4-A	JUNCTION	0.17	1.24	6913.67	0	00:45	1.22
MH4-C	JUNCTION	0.16	2.85	6911.81	0	00:45	2.84
MH-MulberryWD_01	JUNCTION	0.16	3.22	6909.64	0	00:45	3.17
MH-MulberryWD_02	JUNCTION	0.16	2.18	6912.39	0	00:45	2.16
MH-WVC_01	JUNCTION	0.13	5.41	6922.57	0	00:45	5.41
Pond_14	STORAGE	3.84	9.17	6907.17	0	01:10	9.17
Pond_CH	STORAGE	1.42	5.82	6919.56	0	02:07	5.82
S02+CH2	JUNCTION	0.37	4.36	6920.16	0	00:45	4.36
SouthOutfall	OUTFALL	0.09	0.67	6896.20	0	01:10	0.67

Topic: Link Flow

Click a column header to sort the column.

Link	Type	Maximum |Flow| CFS	Day of Maximum Flow	Hour of Maximum Flow	Maximum |Velocity| ft/sec	Max / Full Flow	Max / Full Depth
10	CONDUIT	106.64	0	00:45	6.70	0.77	1.00
16	ORIFICE	0.05	0	01:10	1.00		
26	CONDUIT	51.22	0	00:45	7.25	0.78	1.00
28	CONDUIT	106.67	0	00:45	6.92	0.77	0.93
3	WEIR	0.00	0	00:00	0.00		
31	CONDUIT	106.43	0	00:45	7.15	0.58	0.76
33	CONDUIT	6.65	0	00:45	3.14	0.14	0.49
34	CONDUIT	24.40	0	00:45	3.28	0.26	0.82
35	CONDUIT	51.19	0	00:45	4.07	0.50	1.00
8	ORIFICE	3.82	0	02:07	1.00		
ch_0	ORIFICE	0.36	0	02:08	1.00		
CH_Weir	ORIFICE	0.00	0	00:00			
DP_S01toMH-WVC_01	CONDUIT	51.22	0	00:45	5.32	0.72	1.00
Out_14-1	ORIFICE	0.29	0	01:10	1.00		
Out_14-2	ORIFICE	0.38	0	01:10	1.00		
Out_14-3	ORIFICE	0.35	0	01:10	1.00		
Out_14-4	ORIFICE	4.55	0	01:10	1.00		
PR_01	CONDUIT	4.45	0	00:45	3.12	0.07	0.29
PR_02	CONDUIT	6.54	0	00:45	3.25	0.10	0.34
PR_03	CONDUIT	13.10	0	00:45	10.72	0.77	0.66
PR_04	CONDUIT	23.93	0	00:45	4.02	0.21	0.59
PR_04A	CONDUIT	23.73	0	00:45	3.49	0.26	0.67
PR_05	CONDUIT	52.42	0	00:45	6.81	0.26	0.63
PR_05a	CONDUIT	71.00	0	00:45	5.29	0.00	0.05
PR_06	CONDUIT	52.74	0	00:45	4.42	0.26	0.90
PR_07	CONDUIT	9.73	0	00:45	7.55	0.82	0.69
PR_08	CONDUIT	23.99	0	00:45	7.92	0.39	0.72
PR_09	CONDUIT	34.43	0	00:45	5.15	0.52	1.00
PR_10	CONDUIT	78.15	0	00:45	8.81	0.65	1.00
PR_13	CONDUIT	20.28	0	01:10	6.30	0.11	0.46
Weir_14-1	ORIFICE	14.65	0	01:10			
Weir_14-2	WEIR	0.00	0	00:00	0.00		

Topic: Storage Volume Click a column header to sort the column.

Storage Unit	Average Volume 1000 ft3	Average Percent Full	Evap Percent Loss	Exfil Percent Loss	Maximum Volume 1000 ft3	Maximum Percent Full	Day of Maximum Volume	Hour of Maximum Volume	Maximum Outflow CFS
Pond_14	13.112	8	0	0	110.577	63	0	01:10	20.28
Pond_CH	20.891	9	0	0	162.420	73	0	02:07	4.17

Topic: Outfall Loading Click a column header to sort the column.

Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
SouthOutfall	77.67	1.04	20.28	2.603