Stormwater Management Narrative

TOWN HOME COTTAGE APARTMENTS

1177 Dix Avenue

Town of Kingsbury

Washington County, New York

Applicant:

Schermerhorn Real Estate Holdings, LLC

536 Bay Road #2

Queensbury, NY 12804

December 2020

Prepared By:

The Environmental Design Partnership, LLP

900 Route 146

Clifton Park, NY 12065

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1.0 Introduction

Schermerhorn Real Estate Holdings, LLC is proposing to develop a 15.7±-acre parcel located on the northern side of Dix Avenue in the Town of Kingsbury, New York. The proposed project will consist of 96 town home cottage apartments, associated driveways and a private access road. The project will result in approximately 12.65± acres of disturbance and 5.3± acres of new impervious area.

The stormwater management system has been designed to provide pollutant removal, reduce channel erosion, prevent overbank flooding, and safely control extreme flood events in accordance with the NYS Stormwater Management Design Manual (Design Manual). The proposed stormwater management system for the project will include eight infiltration basins, porous pavement, and rooftop disconnection which will provide a total storage volume on the order of 2.37± acre-feet.

This narrative presents a review of the design concepts and parameters of the stormwater management system for the proposed town home cottage apartments. The purpose of the stormwater management narrative is to assure that changes in the surface runoff characteristics, as a result of the proposed construction, will not adversely impact adjacent or downstream properties. On-site stormwater management will be implemented in accordance with the Design Manual to accommodate both additional stormwater runoff and to provide water quality treatment according to the green infrastructure standards.

2.0 Existing Conditions

The existing project site consists of a vacant parcel with woods to the north and open grass to the south. The topography of the site is relatively flat with drainage predominantly flowing to low lying areas on site.

The topography of the site consists of gradual slopes, ranging from 1% to 5%, with elevations ranging from 294 to 298 feet above sea level.

The site is bounded by private property to the north, west and east, and by Dix Avenue to the south.

According to the Federal Emergency Management Area (FEMA), the project falls within an area of minimal flood hazards.

2.1 Soil and Groundwater Conditions

The USDA Natural Resources Conservation Service Soil Survey identifies the primary soil groups within the area of proposed development as Oakville Loamy Fine Sand and Cosad Fine Sandy Loam. The USDA Soil Survey identifies the Oakville series as excessively drained soils and classified as Hydrologic Soil Group (HSG) “A”. The USDA Soil Survey identifies the Cosad series as somewhat poorly drained soils and classified as Hydrologic Soil Group (HSG) “C/D”.

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Soil test pits were observed by the Environmental Design Partnership at the site in December, 2014 and in October, 2020. Results from the test pits found the soils to be consistent with the USDA Soil Survey findings. The typical soil profile consists of approximately one foot of topsoil, underlain by one to one and a half feet of light brown medium sand transitioning to gray coarse sand at greater depths. Seasonal high groundwater was observed towards the northern portions of the site approximately 3.5 to 5 feet below the ground surface.

Infiltration tests will be performed on site prior to beginning construction, in accordance with NYSDEC standards. In the interim, a conservative infiltration rate of 5 inches per hour was used for all stormwater calculations.

The results from the test pits and infiltration tests are consistent with the NRCS soil survey records.

3.0 Predevelopment Stormwater Analysis

The existing hydrologic conditions, in the area to be disturbed as a result of the proposed construction, were analyzed using Applied Microcomputer Systems' "HydroCAD" computer modeling program. The HydroCAD stormwater modeling program employs the United States Department of Agriculture's Soil Conservation Service (SCS) Technical Release 20 (TR-20) method for stormwater analysis. Using this modeling technique, the site is divided into "subcatchments" that represent specific areas contributing stormwater runoff to an existing, or proposed drainage feature. The subcatchments typically flow through "reaches" (i.e., swales, channels, or pipes) that convey the stormwater to storm basins or discharge areas.

A hydrologic model of the existing site was prepared using the Hydrocad program. Nine subcatchments were used to represent the existing drainage condition, see Figure 2. The total predevelopment stormwater discharge was modeled for several design storms. Stormwater model results are included in Appendix B.

The existing parameters of topography, vegetation, slope and soil type are all incorporated into the predevelopment model.

Table 1 presents a summary of the pre-development stormwater peak discharge for the 1-year, 10-year and 100-year design storm events at the respective Design Points. As will be discussed in subsequent sections, the post development stormwater discharge rate has been limited to the predevelopment discharge rate for the 1-year, 10-year, and 100-year storm events.

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Table 1: Pre-Development Runoff Rates

Storm Event	Design Point Discharge (cfs)		Total Discharge offsite (cfs)
	OFF1	OFF2	
1-Year (2.19")	0.00	0.00	0.00
10-Year (3.66")	0.00	0.00	0.00
100-Year (6.13")	0.00	0.00	0.00

The predevelopment stormwater discharge was evaluated for several design storms at the Design Points (OFF1 and OFF2). Design Point OFF1 and OFF2 consist of drainage to the east. Stormwater modelling indicates there is no offsite drainage for storm events up to and including the 100-year storm event.

The pre-development Curve Number (CN) for the existing impervious, wooded, and grassy areas was established as 98, 30, and 39, respectively. The total predevelopment curve number was established as 36. The HydroCAD model results for the pre-development conditions are included within Attachment B.

4.0 Stormwater Management Planning and Practice Selection

The site layout and stormwater design for this project was completed while taking into consideration the potential impacts on the existing site and downstream hydrology. The existing site predominately infiltrates stormwater runoff; therefore, the proposed system will rely on infiltration practices. Various measures were taken to help ensure that the post-development hydrology of the site will closely resemble the pre-development hydrology. These measures include building footprint reduction, reduction of clearing and grading, and soil restoration.

The proposed town home cottage apartments are two stories tall. The additional story will reduce the overall building footprints, which in turn will reduce the impervious area on site and the volume of stormwater runoff flowing to the proposed stormwater management areas.

Existing vegetation will be retained on site to the greatest extent possible. Multiple small stormwater management areas are proposed closer to the source of the impervious areas to avoid the need for additional clearing for a large infiltration basin.

Soil restoration has been called for throughout the site in accordance with Chapter 5 of the Design Manual. The soils on site are classified as HSG “A” and will need aeration and topsoil in areas of cut or fill. In high traffic areas that are to remain pervious, the soils shall be fully

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restored by tilling compost into the sub-soils prior to applying topsoil and vegetating. By applying these methods to the soils on the site, the original properties and porosity of the soils will be recovered, which will allow for an improvement in the soil infiltration as well as lawn and landscaping sustainability.

All offsite areas which impact onsite drainage and stormwater flows were also accounted for in the stormwater calculations.

Stormwater management on the site is designed to be infiltration. Infiltration practices are considered a standard SMP with RRv Capacity by the Design Manual. By using infiltration practices that are located relatively close to the source of runoff the post-development hydrology will more closely match the pre-development hydrology.

5.0 Post-Development Stormwater Analysis

The post-development conditions, in the area to be disturbed as a result of the proposed construction, were also analyzed using HydroCAD. A technical description of the HydroCAD program has been included in the previous section.

Eighteen (18) subcatchments were used to represent the post development drainage conditions of the site. Site improvements to the property will consist of constructing 96 town home cottage apartments, associated parking and travel surfaces. Also included, as permanent elements of the development, are connections to the municipal water, on-site septic systems, and on-site stormwater management. Stormwater management practices have been designed to provide storage, infiltration, and attenuation of stormwater runoff from the proposed impervious surfaces on the site.

Stormwater runoff from the site will be managed with eight infiltration basins, porous pavement and rooftop disconnection. A post-development Curve Number (CN) of 98 was assigned to all impervious surfaces within the proposed subdivision. A post-development CN of 39 was assigned to all new grassed areas directly contributing to the proposed stormwater devices. The weighted CN for the post-development conditions for the site is approximately 57. The HydroCAD model results for the post-development conditions are included within Attachment B.

5.1 Stormwater Management Area #1, #3, #5, #6, #7, #11, #13, #15 – Infiltration Basins

Stormwater Management Areas (SMA) #1, #3, #5, #6, #7, #11, #13 & #15 have been designed as infiltration basins. Chapter 3 of the Design Manual recognizes infiltration basins as an acceptable infiltration practice when all the required elements, design guidelines, soil testing and maintenance requirements are followed. Infiltration practices can meet detention and channel protection requirements when the soil infiltration rate is greater than 5 inches per hour. Pretreatment will be provided within sediment forebays which have been sized to treat

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100% of the contributing water quality volume from these areas. The infiltration basins will be three feet above seasonal high groundwater. Drywells will be placed in the infiltration basins to allow for infiltration in frozen ground conditions.

SMA#1 will provide treatment of stormwater runoff from the pavement and lawn areas (Subcatchment 1). The stormwater runoff will either sheet flow directly to SMA#1, or sheet flow to a vegetated swale, which will convey the stormwater runoff to the SMA#1, where it will attenuate and infiltrate. The contributing area to SMA#1 includes approximately 1.29 acres with approximately 0.34 acres of impervious area.

SMA#3 will provide treatment of stormwater runoff from the pavement and lawn areas (Subcatchment 3). The stormwater runoff will either sheet flow directly to SMA#3, or sheet flow to a vegetated swale, which will convey the stormwater runoff to the SMA#3, where it will attenuate and infiltrate. The contributing area to SMA#3 includes approximately 0.69 acres with approximately 0.07 acres of impervious area.

SMA#5 will provide treatment of stormwater runoff from the pavement and lawn areas (Subcatchment 5). The stormwater runoff will either sheet flow directly to SMA#5, or sheet flow to a vegetated swale, which will convey the stormwater runoff to the SMA#5, where it will attenuate and infiltrate. The contributing area to SMA#5 includes approximately 0.66 acres with approximately 0.13 acres of impervious area.

SMA#6 will provide treatment of stormwater runoff from the pavement and lawn areas (Subcatchment 6). The stormwater runoff will either sheet flow directly to SMA#6, or sheet flow to a vegetated swale, which will convey the stormwater runoff to the SMA#6, where it will attenuate and infiltrate. The contributing area to SMA#6 includes approximately 1.06 acres with approximately 0.26 acres of impervious area.

SMA#7 will provide treatment of stormwater runoff from the pavement and lawn areas (Subcatchment 7). The stormwater runoff will either sheet flow directly to SMA#7, or sheet flow to a vegetated swale, which will convey the stormwater runoff to the SMA#7, where it will attenuate and infiltrate. The contributing area to SMA#7 includes approximately 1.22 acres with approximately 0.30 acres of impervious area.

SMA#11 will provide treatment of stormwater runoff from the pavement and lawn areas (Subcatchment 11). The stormwater runoff will either sheet flow directly to SMA#11, or sheet flow to a vegetated swale, which will convey the stormwater runoff to the SMA#11, where it will attenuate and infiltrate. The contributing area to SMA#11 includes approximately 1.13 acres with approximately 0.18 acres of impervious area.

SMA#13 will provide treatment of stormwater runoff from the pavement and lawn areas (Subcatchment 13). The stormwater runoff will either sheet flow directly to SMA#13, or sheet flow to a vegetated swale, which will convey the stormwater runoff to the SMA#13, where it

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will attenuate and infiltrate. The contributing area to SMA#13 includes approximately 0.78 acres with approximately 0.23 acres of impervious area.

SMA#15 will provide treatment of stormwater runoff from the pavement and lawn areas (Subcatchment 15). The stormwater runoff will either sheet flow directly to SMA#15, or sheet flow to a vegetated swale, which will convey the stormwater runoff to the SMA#15, where it will attenuate and infiltrate. The contributing area to SMA#15 includes approximately 0.46 acres with approximately 0.20 acres of impervious area.

The infiltration rate for the design modelling has been conservatively estimated at 5 inches/hour, which is anticipated to be well below the field measured infiltration rate. Field infiltration rates in the proposed infiltration areas will be measured prior to finalizing the design calculations. The stormwater management areas should be able to fully drain in less than 24 hours.

<u>Drainage Calculations for SMA#1</u>

100 Year Storm Runoff Volume contributing to SMA#1: 0.133 Acre-Feet

Infiltration Rate: 5 In./Hour

SMA#1 Surface Area (From CAD): ~1,250 Ft^2

Drainage Time =

0.133 Acre-Feet * 43,560 Ft^2/Acre = 5,796 Ft^3

5,976 Ft^3/1,250 Ft^2 = 4.63 Ft

4.63 Ft * 12 In./1 Ft = 56 In.

56 In./5 In./Hour = **~11.1 Hours to drain**

As indicated by stormwater modelling, the SMA has been designed to fully attenuate and infiltrate the contributing stormwater runoff for stormwater events up to the 100-Year design storm without any overflows.

<u>Drainage Calculations for SMA#3</u>

100 Year Storm Runoff Volume contributing to SMA#3: 0.034 Acre-Feet

Infiltration Rate: 5 In./Hour

SMA#3 Surface Area (From CAD): ~853 Ft^2

Drainage Time =

0.034 Acre-Feet * 43,560 Ft^2/Acre = 1,481 Ft^3

1,481 Ft^3/853 Ft^2 = 1.75 Ft

1.75 Ft * 12 In./1 Ft = 21 In.

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21 In./5 In./Hour = **~4.2 Hours to drain**

As indicated by stormwater modelling, the SMA has been designed to fully attenuate and infiltrate the contributing stormwater runoff for stormwater events up to the 100-Year design storm without any overflows.

Drainage Calculations for SMA#5

100 Year Storm Runoff Volume contributing to SMA#5: 0.052 Acre-Feet

Infiltration Rate: 5 In./Hour

SMA#5 Surface Area (From CAD): ~2,684 Ft^2

Drainage Time =

0.052 Acre-Feet * 43,560 Ft^2/Acre = 2,265 Ft^3

2,265 Ft^3/2,684 Ft^2 = 0.85 Ft

0.85 Ft * 12 In./1 Ft = 10.2 In.

10.2 In./5 In./Hour = **~2.05 Hours to drain**

As indicated by stormwater modelling, the SMA has been designed to fully attenuate and infiltrate the contributing stormwater runoff for stormwater events up to the 100-Year design storm without any overflows.

Drainage Calculations for SMA#6

100 Year Storm Runoff Volume contributing to SMA#6: 0.097 Acre-Feet

Infiltration Rate: 5 In./Hour

SMA#6 Surface Area (From CAD): ~650 Ft^2

Drainage Time =

0.097 Acre-Feet * 43,560 Ft^2/Acre = 4,225 Ft^3

4,225 Ft^3/650 Ft^2 = 6.5 Ft

6.5 Ft * 12 In./1 Ft = 78 In.

78 In./5 In./Hour = **~15.6 Hours to drain**

As indicated by stormwater modelling, the SMA has been designed to fully attenuate and infiltrate the contributing stormwater runoff for stormwater events up to the 100-Year design storm without any overflows.

Drainage Calculations for SMA#7

100 Year Storm Runoff Volume contributing to SMA#7: 0.105 Acre-Feet

Infiltration Rate: 5 In./Hour

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SMA#7 Surface Area (From CAD): ~8,322 Ft^2

Drainage Time =

0.105 Acre-Feet * 43,560 Ft^2/Acre = 4,574 Ft^3

4,574 Ft^3/8,322 Ft^2 = 0.55 Ft

0.55 Ft * 12 In./1 Ft = 6.60 In.

6.60 In./5 In./Hour = **~1.5 Hours to drain**

As indicated by stormwater modelling, the SMA has been designed to fully attenuate and infiltrate the contributing stormwater runoff for stormwater events up to the 100-Year design storm without any overflows.

Drainage Calculations for SMA#11

100 Year Storm Runoff Volume contributing to SMA#11: 0.069 Acre-Feet

Infiltration Rate: 5 In./Hour

SMA#11 Surface Area (From CAD): ~1,880 Ft^2

Drainage Time =

0.069 Acre-Feet * 43,560 Ft^2/Acre = 3,006 Ft^3

3,006 Ft^3/1,880 Ft^2 = 1.60 Ft

1.60 Ft * 12 In./1 Ft = 19.2 In.

19.2 In./5 In./Hour = **~3.85 Hours to drain**

As indicated by stormwater modelling, the SMA has been designed to fully attenuate and infiltrate the contributing stormwater runoff for stormwater events up to the 100-Year design storm without any overflows.

Drainage Calculations for SMA#13

100 Year Storm Runoff Volume contributing to SMA#13: 0.068 Acre-Feet

Infiltration Rate: 5 In./Hour

SMA#13 Surface Area (From CAD): ~710 Ft^2

Drainage Time =

0.068 Acre-Feet * 43,560 Ft^2/Acre = 2,962 Ft^3

2,962 Ft^3/710 Ft^2 = 4.17 Ft

4.17 Ft * 12 In./1 Ft = 50 In.

50 In./5 In./Hour = **~10 Hours to drain**

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As indicated by stormwater modelling, the SMA has been designed to fully attenuate and infiltrate the contributing stormwater runoff for stormwater events up to the 100-Year design storm without any overflows.

Drainage Calculations for SMA#15

100 Year Storm Runoff Volume contributing to SMA#15: 0.067 Acre-Feet

Infiltration Rate: 5 In./Hour

SMA#15 Surface Area (From CAD): ~1,000 Ft^2

Drainage Time =

0.067 Acre-Feet * 43,560 Ft^2/Acre = 2,920 Ft^3

2,920 Ft^3/1,000 Ft^2 = 2.92 Ft

2.92 Ft * 12 In./1 Ft = 35 In.

35 In./5 In./Hour = **~7.0 Hours to drain**

As indicated by stormwater modelling, the SMA has been designed to fully attenuate and infiltrate the contributing stormwater runoff for stormwater events up to the 100-Year design storm without any overflows.

5.2 NYS Unified Stormwater Sizing Criteria

The post-development stormwater management system has been designed based on the Unified Stormwater Sizing Criteria as described in the following sections. The contributing area of each stormwater management area is identified on Figure 3.

5.2.1 Water Quality (WQ_v)

In general, small storm events and the initial runoff from larger storm events are an environmental concern as this stormwater runoff typically contains roadway pollutants and thermal energy stored by the asphalt. In accordance with the Design Manual, this initial runoff is designated as the Water Quality Volume (WQ_v) and special attention is given to this volume of runoff to meet water quality objectives.

The Design Manual identifies several standard practices, such as the proposed infiltration basins and bioretention area, that are acceptable for water quality treatment. These acceptable Stormwater Management Practices (SMPs) can capture and treat the full water quality volume (WQ_v), are capable of 80% TSS removal and 40% TP removal, have acceptable longevity in the field, and have pretreatment mechanism.

The water quality storage volume, WQ_v, is calculated as follows:

$$WQ_v = \frac{P \cdot R_v \cdot A}{12}$$

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Where: WQ_v = water quality volume (acre-feet)

P = 90% rainfall event number

R_v = 0.05+0.009(I), where I is the percent impervious cover

A = site area (acres), impervious area used with I = 100%

Table 2: Required Water Quality Volume

Drainage Area	P	R_v	A (SF)	Required WQ_v (cf)
SMA #1	1.2	0.29	56,035	1,623
SMA#3	1.2	0.13	30,061	406
SMA#5	1.2	0.23	28,617	666
SMA#6	1.2	0.27	46,267	1,231
SMA#7	1.2	0.27	52,949	1,449
SMA#11	1.2	0.19	49,400	949
SMA #13	1.2	0.32	33,899	1,086
SMA #15	1.2	0.43	20,148	872
Total				8,282

5.2.1.1 Pretreatment Practices

In accordance with the Design Manual, the required pre-treatment for infiltration practices is equivalent to 100% of the contributing WQv, when the infiltration rate is greater than 5 inches per hour. The proposed pre-treatment practices include storage in the sediment forebays.

The following tables summarizes the treatment of the WQv in the stormwater management areas.

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Table 3: Pretreatment Water Quality Volume: Infiltration Basin

SMA ID	P	R_v	A (SF)	Required WQ_v (cf)	Provided WQv (cf)
SMA #1	1.2	0.29	56,035	1,623	1,667
SMA #3	1.2	0.13	30,061	406	641
SMA#5	1.2	0.23	28,617	666	780
SMA#6	1.2	0.27	46,267	1,231	1,291
SMA#7	1.2	0.27	52,949	1,449	1,747
SMA#11	1.2	0.19	49,400	949	981
SMA#13	1.2	0.32	33,899	1,086	1,109
SMA#15	1.2	0.43	20,148	872	885

5.2.2 Runoff Reduction Volume (RRv)

The Design Manual specifies that runoff shall be reduced by 100% of the site WQv using standard SMPs with RRv capacity and green infrastructure techniques. The proposed project area on the site is approximately 12.65± acres, with a total post-development impervious area on the order of 5.3± acres. The resulting WQv for these site coverages is computed as 23,478 CF. Runoff reduction will be provided by a combination of standard SMP's with RRv capacity and green infrastructure.

5.2.2.1 Stormwater Management Practices (SMP's)

Stormwater infiltration basins have been proposed to collect, treat and infiltrate the stormwater runoff for a portion of the proposed development. The stormwater infiltration basins are considered standard SMP's with RRv capacity. These practices provide 100% Runoff Reduction of the contributing Water Quality Volume.

5.2.3 Green Infrastructure Practices

The project proposes rooftop disconnection and porous pavement to provide runoff reduction. The following table provides a summary of the Runoff Reduction provided for the proposed development, based on each management practice and technique. The site Runoff Reduction Volume is equivalent to the computed Water Quality volume.

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Table 4: Runoff Reduction Volume Summary

Runoff Reduction Technique	RRv (cf)
SMA#1, 3, 5, 6, 7, 11, 13, 15 (Infiltration Basins)	8,282
SMA#2, 4, 8, 9, 10, 12, 14 (Rooftop Disconnection)	3,677
SMA #16 (Porous Pavement)	11,520
Total Site Reduction	**23,479**
Required WQv	**23,478**
% WQv Reduction	**100%**

Many of the green infrastructure practices recommended in the Design Manual were not applied to the stormwater management design on this site due to either site restrictions or the use of more feasible green infrastructure of standard SMP techniques in place of more restrictive and/or maintenance intensive practices. The following table discusses why the unused green infrastructure practices were not feasible.

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Table 5: Non-Feasible Green Infrastructure Practices

Green Infrastructure Practice	Reason use is not feasible
Tree Planting/Tree Box	Trees will be planted on site but their contribution to RRv reduction is minimal
Conservation of Natural Areas	While natural areas will be conserved on site, their contribution to RRv reduction is minimal.
Vegetated Swale	Vegetated Swales will be used on site but their contribution to RRv reduction is minimal.
Sheetflow to Riparian Buffers or Filter Strips	No riparian areas exist on site
Stream Daylighting	No streams exist on site
Rain Gardens	Rain gardens are not recommended for treatment areas larger than 1,000 square feet. Additionally, rain gardens require more maintenance than the shallow, grass depressions/vegetated swales proposed instead.
Green Roofs	Infiltration areas are more financially feasible and require less maintenance than green roofs.
Stormwater Planters	Stormwater planters would require greater maintenance compared to the methods currently implemented for runoff reduction.
Rain Barrels/Cisterns	Rain Barrels/Cisterns would require greater maintenance compared to the methods currently implemented for runoff reduction.

5.2.4 Channel Protection (Cp_v)

In accordance with the Design Manual, stream channel protection, designed to protect stream channels from erosion, is accomplished by providing 24-hour extended detention of the one-year, 24-hour storm event. The Cp_v requirement is typically satisfied by providing additional storage above the water quality (WQ_v) volume.

According to Chapter 4 of the Design Manual, the stream channel protection requirement does not apply when the entire channel protection volume is reduced through green infrastructure or infiltration systems. All stormwater management practices on this site are designed as infiltration practices; additionally, stormwater modelling indicates the proposed stormwater management areas designed to fully attenuate and infiltrate the contributing stormwater runoff for stormwater events up to the 100-Year design storm without any overflows.

5.2.5 Overbank Flood (Q_p)

Overbank Flood Control Criteria has been established to limit the frequency and magnitude of out-of-bank flooding generated through changes in runoff characteristics as a result of increased impervious surface area. In accordance with the Design Manual, providing sufficient

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storage volume to attenuate the post development 10-year, 24-hour peak discharge rate to the equivalent pre-development discharge rate controls overbank flooding.

The 10-year design storm event was analyzed using the HydroCAD stormwater modeling program (TR-20) under the post-development drainage conditions shown on Figure 3. Using a 10-year, 24-hour design storm of 3.66 inches, the stormwater management areas were designed with sufficient storage volume to limit the post-development 10-year, 24-hour peak discharge rate to the pre-development discharge rate. The following table presents the pre- and post-development discharge rates for the offsite discharge. As indicated, the post-development discharge rate is less than the pre-development rate as required.

Table 6: Overbank Flow Runoff Summary

Design Point	10-year (3.66”) runoff rate (cfs)	
	Predevelopment	Post-Development
OFF1	0.00	0.00
OFF2	0.00	0.00
T (TOTAL)	0.00	0.00

5.2.6 Extreme Storm (Q_f)

In accordance with the Design Manual, the stormwater management system must attenuate the post development 100-year, 24-hour peak discharge rate to the predevelopment rate while providing safe passage of this storm event.

The 100-year storm event was analyzed using the HydroCAD stormwater modeling program (TR-20) under the post-development drainage conditions shown in Figure 3. Using a 100-year, 24-hour design storm of 6.13 inches, the stormwater management areas were designed with sufficient storage volume to limit the post-development 100-year, 24-hour peak discharge rate to the predevelopment discharge rate. The following table presents the pre- and post-development discharge rates for the offsite discharge. As indicated, the post-development discharge rate is less than the predevelopment rate as required.

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Table 7: Extreme Storm Runoff Summary

Design Point	100-year (6.13”) runoff rate (cfs)	
	Predevelopment	Post-Development
OFF1	0.00	0.00
OFF2	0.00	0.00
T (TOTAL)	0.00	0.00

6.0 Summary

Development of the proposed property will change the stormwater drainage characteristics of the site; impervious area will be added and the site will be re-graded to support the proposed improvements. Changes to the stormwater drainage characteristics of the site have been evaluated in accordance with the Design Manual. The proposed stormwater management system has been designed to comply with the recommendations in the Design Manual related to water quality, runoff reduction, channel protection, overbank flood control and extreme flood control for new development projects.

The proposed stormwater management system has been designed to attenuate and treat the stormwater runoff generated from the contributing areas for storm events up to and including the 100-year design storm event. The proposed stormwater management design includes the use of infiltration basins, porous pavement and rooftop disconnection. Stormwater modeling results, based on the proposed site layout, indicate the ability to reduce the overall post-development discharge rate from the site as summarized in Table 8.

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Table 8: Post Development Stormwater Peak Discharge Rates

Peak Discharge Rates in cfs	1-Year Storm	10-Year Storm	100-Year Storm
Pre-Development	0.00	0.00	0.00
Post-Development	0.00	0.00	0.00
Overall Reduction (cfs)	0.00	0.00	0.00

Through the implementation of acceptable stormwater management practices, recommended by the NYS Stormwater Management Design Manual, the proposed project will not adversely affect adjacent or downstream properties.

Prepared by:
The Environmental Design Partnership, LLP

Stephanie Alessandrini, P.E.

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Figures

1. Site Location Map
2. Pre Development Drainage Map
3. Post Development Drainage Map

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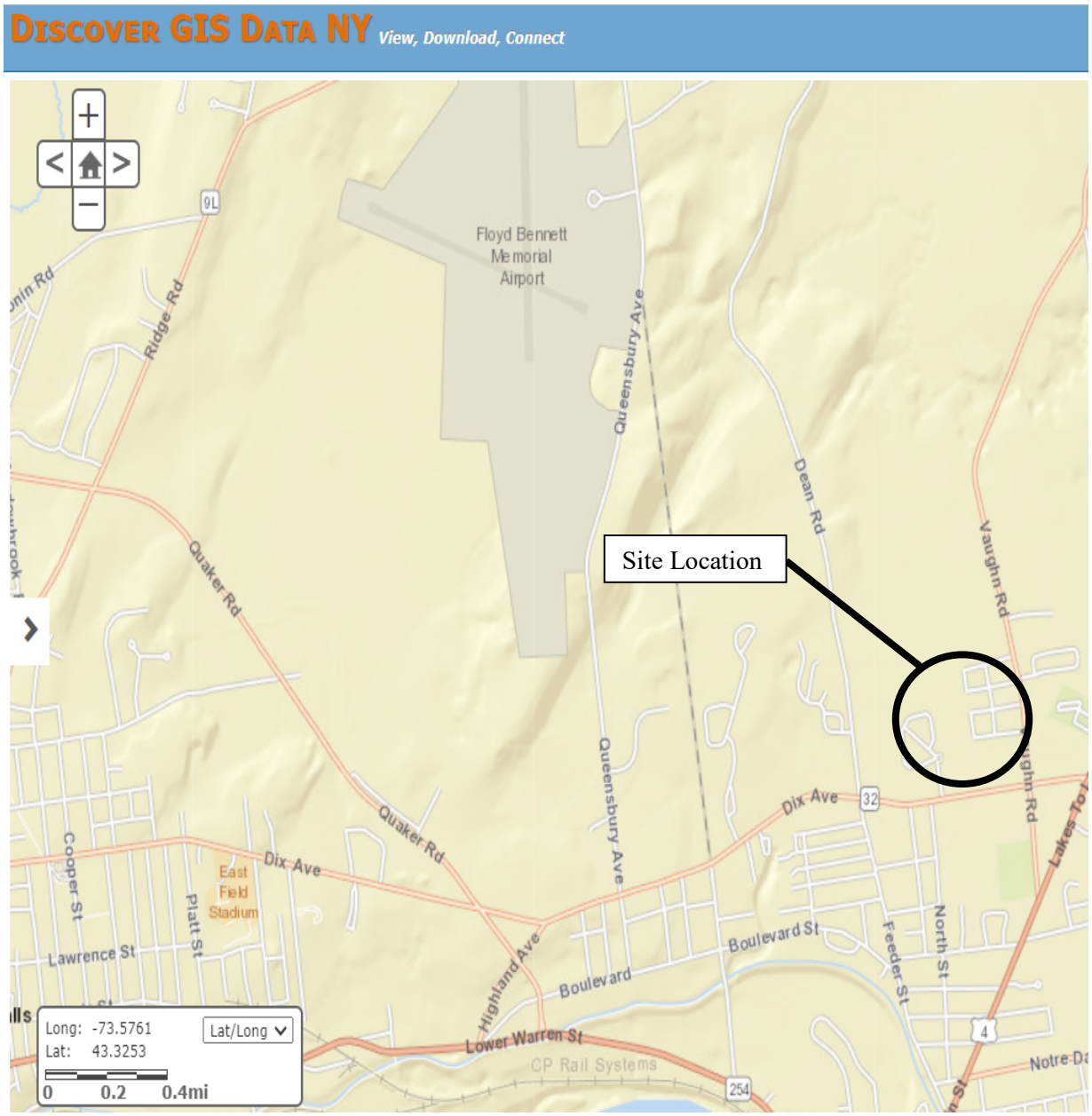
Figure 1: Site Location Map



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Attachment A

Water Quality Calculation

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Runoff Reduction Volume (RRv) Calculations

Project: Dix Ave. Schermerhorn Townhomes

Date: 1/4/2021

Total Site Area =	12.65	acres	P =	1.2	in
Imp=	41.8	%	WQv =	23,478	cf
Rv =	0.426		RRv Min =		

Green Infrastructure

Rooftop Disconnect

Surface Area to be Disconnected (Acres)	Total Impervious Area Remaining (Acres)	I (%)	Rv	WQv	Reduction
0.94	4.35	0.34	0.36	19800	3677

Porous Pavement

Contributing Area (S17 & S18) (Acres)	WQv (cf)	Area (SF)	Stone Depth (ft)	Porosity (%)	Stone Volume (cf)	Reduction (cf)
2.78	11,520	121,260	1.5	40	72756	11520

Reduction from Green Infrastructure = **15,197** cf

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Water Quality Volume (WQv) Calculations

Project: Dix Ave - Schermerhorn

Date: 1/4/2021

SMA I.D.	AREA (SF)	I (SF)	I (%)	Rv	WQv (cu-ft)	WQv Provided (cu-ft)
SMA 1	56,035	14,917	27%	0.29	1,623	12,204
SMA 3	30,061	2,837	9%	0.13	406	2,441
SMA 5	28,617	5,811	20%	0.23	666	5,598
SMA 6	46,267	11,108	24%	0.27	1,231	2,660
SMA 7	52,949	13,162	25%	0.27	1,449	5,651
SMA 11	49,400	7,800	16%	0.19	949	2,521
SMA 13	33,899	10,179	30%	0.32	1,086	2,078
SMA 15	20,148	8,575	43%	0.43	872	1,774
Totals	**317,376**	**74,389**			**8,282**	**34,927**

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Runoff Reduction Volume (RRv) Calculations

Project: Dix Ave. Schermerhorn Townhomes

Date: 1/4/2021

Total Watershed Area	12.65	acres	P =	1.2	in
I=	41.78	%	WQv =	23,478	cf
Rv =	0.426				

Stormwater Management Practices

Infiltration Basin

I.D.	WQv Provided (cf)	% Reduction	Max Reduction (cf) (Contributing WQv)	Reduction (cf)
SMA#1	12,204	100	1,623	1,623
SMA#3	2,441	100	406	406
SMA#5	5,598	100	666	666
SMA#6	2,660	100	1,231	1,231
SMA#7	5,651	100	1,449	1,449
SMA#11	2,521	100	949	949
SMA#13	2,078	100	1,086	1,086
SMA#15	1,774	100	872	872

Green Infrastructure - Rooftop Disconnection

I.D.	Surface Area to be Disconnected (Ac)	Impervious Area Remaining (Ac)	Rv	Reduction (cf)
As Shown	0.94	4.35	0.36	3,677

Porous Pavement

I.D.	Contributing Surface Area (Ac)	WQv (cf)	Area (SF)	Stone Depth	Porosity (%)	Reduction (cf)
S17 & S18	2.78	11,520	121,260	1.5	40	11,520

Reduction from Standard SMPs =	**8,282**	cf
Reduction from GI =	**15,197**	cf
Total Overall RRv =	**23,479**	cf
% Total Reduction=	**100%**	

Attachment B

Stormwater Modeling Calculations

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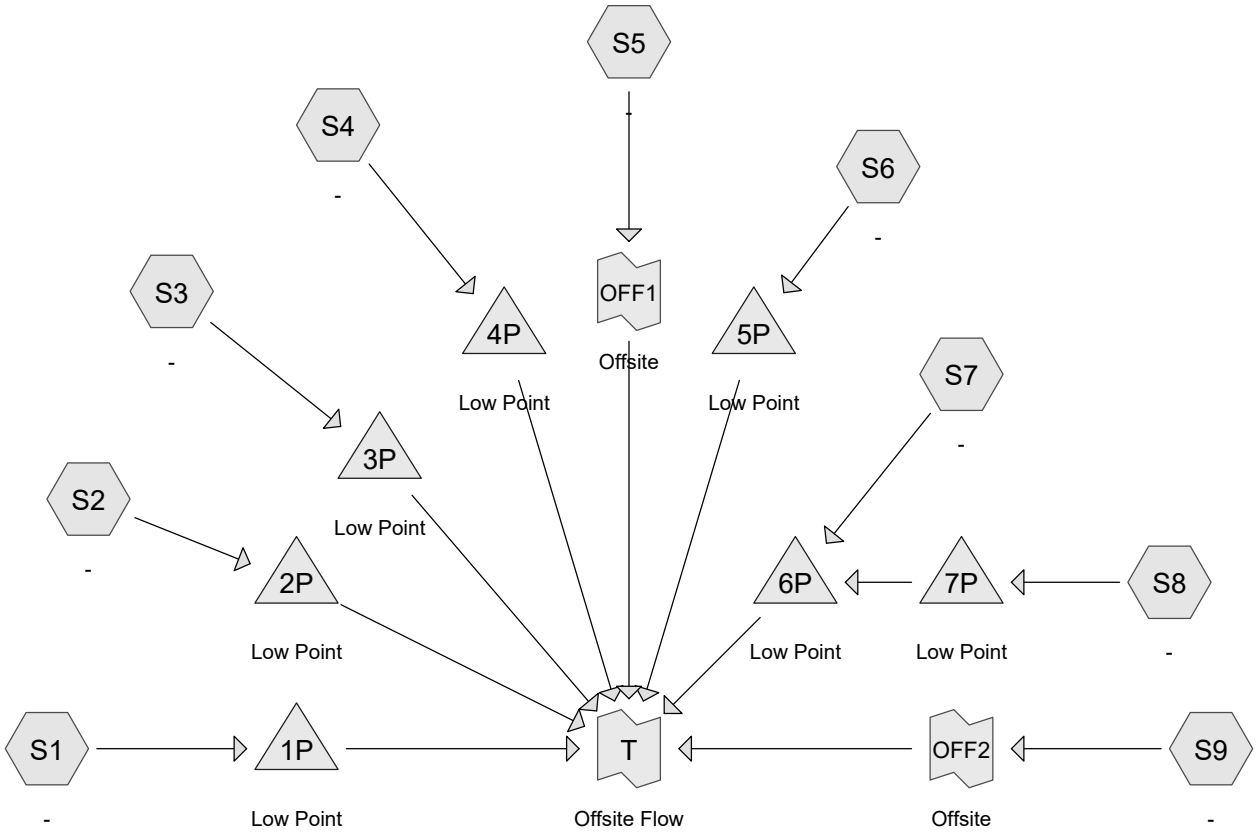

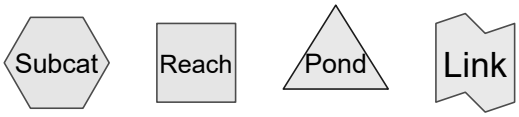

Routing Diagram for Predevelopment - Scherm - Dix Ave
Prepared by The Environmental Design Partnership, Printed 12/31/2020
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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
8.998	39	>75% Grass cover, Good, HSG A (S1, S2, S3, S4)
0.112	98	Paved roads w/curbs & sewers, HSG A (S1, S2)
6.772	30	Woods, Good, HSG A (S4, S5, S6, S7, S8, S9)
15.883	**36**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
15.883	HSG A	S1, S2, S3, S4, S5, S6, S7, S8, S9
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
15.883		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchr Numbers
8.998	0.000	0.000	0.000	0.000	8.998	>75% Grass cover, Good	
0.112	0.000	0.000	0.000	0.000	0.112	Paved roads w/curbs & sewers	
6.772	0.000	0.000	0.000	0.000	6.772	Woods, Good	
15.883	**0.000**	**0.000**	**0.000**	**0.000**	**15.883**	**TOTAL AREA**	

Time span=0.00-200.00 hrs, dt=0.01 hrs, 20001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentS1: - Runoff Area=28,702 sf 10.45% Impervious Runoff Depth=0.00"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=45 Runoff=0.00 cfs 0.000 af

SubcatchmentS2: - Runoff Area=35,524 sf 5.35% Impervious Runoff Depth=0.00"
Flow Length=100' Slope=0.0060 '/' Tc=17.7 min CN=42 Runoff=0.00 cfs 0.000 af

SubcatchmentS3: - Runoff Area=155,090 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=200' Slope=0.0050 '/' Tc=33.2 min CN=39 Runoff=0.00 cfs 0.000 af

SubcatchmentS4: - Runoff Area=313,040 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=200' Slope=0.0100 '/' Tc=35.0 min CN=35 Runoff=0.00 cfs 0.000 af

SubcatchmentS5: - Runoff Area=19,116 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=122' Slope=0.0120 '/' Tc=30.2 min CN=30 Runoff=0.00 cfs 0.000 af

SubcatchmentS6: - Runoff Area=68,819 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=200' Slope=0.0050 '/' Tc=46.5 min CN=30 Runoff=0.00 cfs 0.000 af

SubcatchmentS7: - Runoff Area=46,201 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=120' Slope=0.0085 '/' Tc=34.5 min CN=30 Runoff=0.00 cfs 0.000 af

SubcatchmentS8: - Runoff Area=23,855 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=80' Slope=0.0129 '/' Tc=23.9 min CN=30 Runoff=0.00 cfs 0.000 af

SubcatchmentS9: - Runoff Area=1,518 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=37' Slope=0.0100 '/' Tc=5.8 min CN=30 Runoff=0.00 cfs 0.000 af

Pond 1P: Low Point Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 2P: Low Point Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 3P: Low Point Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 4P: Low Point Peak Elev=198.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 5P: Low Point Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 6P: Low Point Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 7P: Low Point Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Link OFF1: Offsite Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link OFF2: Offsite Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link T: Offsite Flow Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Total Runoff Area = 15.883 ac Runoff Volume = 0.000 af Average Runoff Depth = 0.00"
99.29% Pervious = 15.771 ac 0.71% Impervious = 0.112 ac

Summary for Subcatchment S1: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
3,000	98	Paved roads w/curbs & sewers, HSG A
25,702	39	>75% Grass cover, Good, HSG A
28,702	45	Weighted Average
25,702		89.55% Pervious Area
3,000		10.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S2: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
1,900	98	Paved roads w/curbs & sewers, HSG A
33,624	39	>75% Grass cover, Good, HSG A
35,524	42	Weighted Average
33,624		94.65% Pervious Area
1,900		5.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.7	100	0.0060	0.09		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S3: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
155,090	39	>75% Grass cover, Good, HSG A
155,090		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.2	200	0.0050	0.10		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S4: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
135,495	30	Woods, Good, HSG A
177,545	39	>75% Grass cover, Good, HSG A
313,040	35	Weighted Average
313,040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
31.7	100	0.0100	0.05		**Sheet Flow, Sheet** Woods: Light underbrush n= 0.400 P2= 2.56"
3.3	100	0.0100	0.50		**Shallow Concentrated Flow, Shallow** Woodland Kv= 5.0 fps
35.0	200	Total			

Summary for Subcatchment S5: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
19,116	30	Woods, Good, HSG A
19,116		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
29.5	100	0.0120	0.06		**Sheet Flow, Sheet** Woods: Light underbrush n= 0.400 P2= 2.56"
0.7	22	0.0120	0.55		**Shallow Concentrated Flow, Shallow** Woodland Kv= 5.0 fps
30.2	122	Total			

Summary for Subcatchment S6: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
68,819	30	Woods, Good, HSG A
68,819		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
41.8	100	0.0050	0.04		**Sheet Flow, Sheet** Woods: Light underbrush n= 0.400 P2= 2.56"
4.7	100	0.0050	0.35		**Shallow Concentrated Flow, Shallow** Woodland Kv= 5.0 fps
46.5	200	Total			

Summary for Subcatchment S7: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
46,201	30	Woods, Good, HSG A
46,201		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.8	100	0.0085	0.05		**Sheet Flow, Sheet** Woods: Light underbrush n= 0.400 P2= 2.56"
0.7	20	0.0085	0.46		**Shallow Concentrated Flow, Shallow** Woodland Kv= 5.0 fps
34.5	120	Total			

Summary for Subcatchment S8: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
23,855	30	Woods, Good, HSG A
23,855		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.9	80	0.0129	0.06		**Sheet Flow, Sheet** Woods: Light underbrush n= 0.400 P2= 2.56"

Summary for Subcatchment S9: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
1,518	30	Woods, Good, HSG A
1,518		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.8	37	0.0100	0.11		**Sheet Flow, Sheet Flow** Range n= 0.130 P2= 2.56"

Summary for Pond 1P: Low Point

Inflow Area = 0.659 ac, 10.45% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 1,020 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,749 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,020	126.0	0	0	1,020
199.50	6,834	337.0	1,749	1,749	8,795

Device	Routing	Invert	Outlet Devices
#1	Primary	199.25'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 2P: Low Point

Inflow Area = 0.816 ac, 5.35% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 1,288 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,926 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,288	279.0	0	0	1,288
199.50	7,221	512.0	1,926	1,926	15,956

Device	Routing	Invert	Outlet Devices
#1	Primary	199.25'	**30.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50

Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68
2.72 2.81 2.92 2.97 3.07 3.32

#2 Discarded 199.00' **5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 3P: Low Point

Inflow Area = 3.560 ac, 0.00% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 26,808 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	14,737 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	26,808	1,057.0	0	0	26,808
199.50	32,221	1,108.0	14,737	14,737	35,611

Device	Routing	Invert	Outlet Devices
#1	Primary	199.25'	**25.0' long x 3.0' breadth Broad-Crested Rectangular Weir**
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50
			Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 4P: Low Point

Inflow Area = 7.186 ac, 0.00% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 198.00' @ 0.00 hrs Surf.Area= 77 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	198.00'	6,586 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
198.00	77	47.0	0	0	77
199.00	5,510	306.0	2,079	2,079	7,355
199.50	13,051	450.0	4,507	6,586	16,020

Device	Routing	Invert	Outlet Devices
#1	Discarded	198.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	198.60'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.00' (Free Discharge)
└**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 5P: Low Point

Inflow Area = 1.580 ac, 0.00% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 1,315 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	4,780 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,315	182.0	0	0	1,315
199.50	21,989	600.0	4,780	4,780	27,328

Device	Routing	Invert	Outlet Devices
#1	Primary	199.25'	**200.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 6P: Low Point

Inflow Area = 1.608 ac, 0.00% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 6,086 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	6,772 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	6,086	706.0	0	0	6,086
199.50	22,775	585.0	6,772	6,772	18,521

Device	Routing	Invert	Outlet Devices
#1	Primary	199.10'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 7P: Low Point

Inflow Area =	0.548 ac,	0.00% Impervious,	Inflow Depth =	0.00"	for 1-YEAR event
Inflow =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	
Outflow =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af,	Atten= 0%, Lag= 0.0 min
Discarded =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 915 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,471 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	915	166.0	0	0	915
199.50	5,638	320.0	1,471	1,471	6,872

Device	Routing	Invert	Outlet Devices
#1	Primary	199.25'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Link OFF1: Offsite

Inflow Area = 0.439 ac, 0.00% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Summary for Link OFF2: Offsite

Inflow Area = 0.035 ac, 0.00% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Summary for Link T: Offsite Flow

Inflow Area = 15.883 ac, 0.71% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Time span=0.00-200.00 hrs, dt=0.01 hrs, 20001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentS1: - Runoff Area=28,702 sf 10.45% Impervious Runoff Depth=0.11"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=45 Runoff=0.01 cfs 0.006 af

SubcatchmentS2: - Runoff Area=35,524 sf 5.35% Impervious Runoff Depth=0.05"
Flow Length=100' Slope=0.0060 '/' Tc=17.7 min CN=42 Runoff=0.00 cfs 0.004 af

SubcatchmentS3: - Runoff Area=155,090 sf 0.00% Impervious Runoff Depth=0.02"
Flow Length=200' Slope=0.0050 '/' Tc=33.2 min CN=39 Runoff=0.01 cfs 0.005 af

SubcatchmentS4: - Runoff Area=313,040 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=200' Slope=0.0100 '/' Tc=35.0 min CN=35 Runoff=0.00 cfs 0.000 af

SubcatchmentS5: - Runoff Area=19,116 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=122' Slope=0.0120 '/' Tc=30.2 min CN=30 Runoff=0.00 cfs 0.000 af

SubcatchmentS6: - Runoff Area=68,819 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=200' Slope=0.0050 '/' Tc=46.5 min CN=30 Runoff=0.00 cfs 0.000 af

SubcatchmentS7: - Runoff Area=46,201 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=120' Slope=0.0085 '/' Tc=34.5 min CN=30 Runoff=0.00 cfs 0.000 af

SubcatchmentS8: - Runoff Area=23,855 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=80' Slope=0.0129 '/' Tc=23.9 min CN=30 Runoff=0.00 cfs 0.000 af

SubcatchmentS9: - Runoff Area=1,518 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=37' Slope=0.0100 '/' Tc=5.8 min CN=30 Runoff=0.00 cfs 0.000 af

Pond 1P: Low Point Peak Elev=199.00' Storage=1 cf Inflow=0.01 cfs 0.006 af
Discarded=0.01 cfs 0.006 af Primary=0.00 cfs 0.000 af Outflow=0.01 cfs 0.006 af

Pond 2P: Low Point Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.004 af
Discarded=0.00 cfs 0.004 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.004 af

Pond 3P: Low Point Peak Elev=199.00' Storage=1 cf Inflow=0.01 cfs 0.005 af
Discarded=0.01 cfs 0.005 af Primary=0.00 cfs 0.000 af Outflow=0.01 cfs 0.005 af

Pond 4P: Low Point Peak Elev=198.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 5P: Low Point Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 6P: Low Point Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 7P: Low Point Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Link OFF1: Offsite Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link OFF2: Offsite Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link T: Offsite Flow Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Total Runoff Area = 15.883 ac Runoff Volume = 0.015 af Average Runoff Depth = 0.01"
99.29% Pervious = 15.771 ac 0.71% Impervious = 0.112 ac

Summary for Subcatchment S1: -

Runoff = 0.01 cfs @ 13.03 hrs, Volume= 0.006 af, Depth= 0.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
3,000	98	Paved roads w/curbs & sewers, HSG A
25,702	39	>75% Grass cover, Good, HSG A
28,702	45	Weighted Average
25,702		89.55% Pervious Area
3,000		10.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S2: -

Runoff = 0.00 cfs @ 15.56 hrs, Volume= 0.004 af, Depth= 0.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
1,900	98	Paved roads w/curbs & sewers, HSG A
33,624	39	>75% Grass cover, Good, HSG A
35,524	42	Weighted Average
33,624		94.65% Pervious Area
1,900		5.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.7	100	0.0060	0.09		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S3: -

Runoff = 0.01 cfs @ 24.02 hrs, Volume= 0.005 af, Depth= 0.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
155,090	39	>75% Grass cover, Good, HSG A
155,090		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.2	200	0.0050	0.10		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S4: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
135,495	30	Woods, Good, HSG A
177,545	39	>75% Grass cover, Good, HSG A
313,040	35	Weighted Average
313,040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
31.7	100	0.0100	0.05		**Sheet Flow, Sheet** Woods: Light underbrush n= 0.400 P2= 2.56"
3.3	100	0.0100	0.50		**Shallow Concentrated Flow, Shallow** Woodland Kv= 5.0 fps
35.0	200	Total			

Summary for Subcatchment S5: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
19,116	30	Woods, Good, HSG A
19,116		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
29.5	100	0.0120	0.06		**Sheet Flow, Sheet** Woods: Light underbrush n= 0.400 P2= 2.56"
0.7	22	0.0120	0.55		**Shallow Concentrated Flow, Shallow** Woodland Kv= 5.0 fps
30.2	122	Total			

Summary for Subcatchment S6: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
68,819	30	Woods, Good, HSG A
68,819		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
41.8	100	0.0050	0.04		**Sheet Flow, Sheet** Woods: Light underbrush n= 0.400 P2= 2.56"
4.7	100	0.0050	0.35		**Shallow Concentrated Flow, Shallow** Woodland Kv= 5.0 fps
46.5	200	Total			

Summary for Subcatchment S7: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
46,201	30	Woods, Good, HSG A
46,201		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.8	100	0.0085	0.05		**Sheet Flow, Sheet** Woods: Light underbrush n= 0.400 P2= 2.56"
0.7	20	0.0085	0.46		**Shallow Concentrated Flow, Shallow** Woodland Kv= 5.0 fps
34.5	120	Total			

Summary for Subcatchment S8: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
23,855	30	Woods, Good, HSG A
23,855		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.9	80	0.0129	0.06		**Sheet Flow, Sheet** Woods: Light underbrush n= 0.400 P2= 2.56"

Summary for Subcatchment S9: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
1,518	30	Woods, Good, HSG A
1,518		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.8	37	0.0100	0.11		**Sheet Flow, Sheet Flow** Range n= 0.130 P2= 2.56"

Summary for Pond 1P: Low Point

Inflow Area = 0.659 ac, 10.45% Impervious, Inflow Depth = 0.11" for 10-YEAR event
Inflow = 0.01 cfs @ 13.03 hrs, Volume= 0.006 af
Outflow = 0.01 cfs @ 13.07 hrs, Volume= 0.006 af, Atten= 0%, Lag= 2.2 min
Discarded = 0.01 cfs @ 13.07 hrs, Volume= 0.006 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 13.07 hrs Surf.Area= 1,025 sf Storage= 1 cf

Plug-Flow detention time= 1.4 min calculated for 0.006 af (100% of inflow)
Center-of-Mass det. time= 1.4 min (1,052.8 - 1,051.4)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,749 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,020	126.0	0	0	1,020
199.50	6,834	337.0	1,749	1,749	8,795

Device	Routing	Invert	Outlet Devices
#1	Primary	199.25'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.01 cfs @ 13.07 hrs HW=199.00' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 2P: Low Point

Inflow Area = 0.816 ac, 5.35% Impervious, Inflow Depth = 0.05" for 10-YEAR event
Inflow = 0.00 cfs @ 15.56 hrs, Volume= 0.004 af
Outflow = 0.00 cfs @ 15.60 hrs, Volume= 0.004 af, Atten= 0%, Lag= 2.7 min
Discarded = 0.00 cfs @ 15.60 hrs, Volume= 0.004 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 15.60 hrs Surf.Area= 1,290 sf Storage= 0 cf

Plug-Flow detention time= 1.4 min calculated for 0.004 af (100% of inflow)
Center-of-Mass det. time= 1.4 min (1,124.9 - 1,123.5)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,926 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,288	279.0	0	0	1,288
199.50	7,221	512.0	1,926	1,926	15,956

Device	Routing	Invert	Outlet Devices
#1	Primary	199.25'	**30.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50

Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

#2 Discarded 199.00' **5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 15.60 hrs HW=199.00' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 3P: Low Point

Inflow Area = 3.560 ac, 0.00% Impervious, Inflow Depth = 0.02" for 10-YEAR event
Inflow = 0.01 cfs @ 24.02 hrs, Volume= 0.005 af
Outflow = 0.01 cfs @ 24.06 hrs, Volume= 0.005 af, Atten= 0%, Lag= 2.2 min
Discarded = 0.01 cfs @ 24.06 hrs, Volume= 0.005 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 24.06 hrs Surf.Area= 26,808 sf Storage= 1 cf

Plug-Flow detention time= 1.4 min calculated for 0.005 af (100% of inflow)
Center-of-Mass det. time= 1.4 min (1,246.3 - 1,244.8)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	14,737 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	26,808	1,057.0	0	0	26,808
199.50	32,221	1,108.0	14,737	14,737	35,611

Device	Routing	Invert	Outlet Devices
#1	Primary	199.25'	**25.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.01 cfs @ 24.06 hrs HW=199.00' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 4P: Low Point

Inflow Area = 7.186 ac, 0.00% Impervious, Inflow Depth = 0.00" for 10-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 198.00' @ 0.00 hrs Surf.Area= 77 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	198.00'	6,586 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
198.00	77	47.0	0	0	77
199.00	5,510	306.0	2,079	2,079	7,355
199.50	13,051	450.0	4,507	6,586	16,020

Device	Routing	Invert	Outlet Devices
#1	Discarded	198.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	198.60'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.00' (Free Discharge)
└**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 5P: Low Point

Inflow Area = 1.580 ac, 0.00% Impervious, Inflow Depth = 0.00" for 10-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 1,315 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	4,780 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,315	182.0	0	0	1,315
199.50	21,989	600.0	4,780	4,780	27,328

Device	Routing	Invert	Outlet Devices
#1	Primary	199.25'	**200.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 6P: Low Point

Inflow Area = 1.608 ac, 0.00% Impervious, Inflow Depth = 0.00" for 10-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 6,086 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	6,772 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	6,086	706.0	0	0	6,086
199.50	22,775	585.0	6,772	6,772	18,521

Device	Routing	Invert	Outlet Devices
#1	Primary	199.10'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 7P: Low Point

Inflow Area =	0.548 ac,	0.00% Impervious,	Inflow Depth =	0.00"	for 10-YEAR event
Inflow =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	
Outflow =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af,	Atten= 0%, Lag= 0.0 min
Discarded =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 915 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,471 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	915	166.0	0	0	915
199.50	5,638	320.0	1,471	1,471	6,872

Device	Routing	Invert	Outlet Devices
#1	Primary	199.25'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Link OFF1: Offsite

Inflow Area = 0.439 ac, 0.00% Impervious, Inflow Depth = 0.00" for 10-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Summary for Link OFF2: Offsite

Inflow Area = 0.035 ac, 0.00% Impervious, Inflow Depth = 0.00" for 10-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Summary for Link T: Offsite Flow

Inflow Area = 15.883 ac, 0.71% Impervious, Inflow Depth = 0.00" for 10-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Time span=0.00-200.00 hrs, dt=0.01 hrs, 20001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentS1: - Runoff Area=28,702 sf 10.45% Impervious Runoff Depth=0.85"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=45 Runoff=0.52 cfs 0.047 af

SubcatchmentS2: - Runoff Area=35,524 sf 5.35% Impervious Runoff Depth=0.66"
Flow Length=100' Slope=0.0060 '/' Tc=17.7 min CN=42 Runoff=0.35 cfs 0.045 af

SubcatchmentS3: - Runoff Area=155,090 sf 0.00% Impervious Runoff Depth=0.48"
Flow Length=200' Slope=0.0050 '/' Tc=33.2 min CN=39 Runoff=0.55 cfs 0.143 af

SubcatchmentS4: - Runoff Area=313,040 sf 0.00% Impervious Runoff Depth=0.28"
Flow Length=200' Slope=0.0100 '/' Tc=35.0 min CN=35 Runoff=0.34 cfs 0.167 af

SubcatchmentS5: - Runoff Area=19,116 sf 0.00% Impervious Runoff Depth=0.09"
Flow Length=122' Slope=0.0120 '/' Tc=30.2 min CN=30 Runoff=0.00 cfs 0.003 af

SubcatchmentS6: - Runoff Area=68,819 sf 0.00% Impervious Runoff Depth=0.09"
Flow Length=200' Slope=0.0050 '/' Tc=46.5 min CN=30 Runoff=0.01 cfs 0.011 af

SubcatchmentS7: - Runoff Area=46,201 sf 0.00% Impervious Runoff Depth=0.09"
Flow Length=120' Slope=0.0085 '/' Tc=34.5 min CN=30 Runoff=0.01 cfs 0.008 af

SubcatchmentS8: - Runoff Area=23,855 sf 0.00% Impervious Runoff Depth=0.09"
Flow Length=80' Slope=0.0129 '/' Tc=23.9 min CN=30 Runoff=0.00 cfs 0.004 af

SubcatchmentS9: - Runoff Area=1,518 sf 0.00% Impervious Runoff Depth=0.09"
Flow Length=37' Slope=0.0100 '/' Tc=5.8 min CN=30 Runoff=0.00 cfs 0.000 af

Pond 1P: Low Point Peak Elev=199.13' Storage=200 cf Inflow=0.52 cfs 0.047 af
Discarded=0.28 cfs 0.047 af Primary=0.00 cfs 0.000 af Outflow=0.28 cfs 0.047 af

Pond 2P: Low Point Peak Elev=199.05' Storage=74 cf Inflow=0.35 cfs 0.045 af
Discarded=0.27 cfs 0.045 af Primary=0.00 cfs 0.000 af Outflow=0.27 cfs 0.045 af

Pond 3P: Low Point Peak Elev=199.00' Storage=47 cf Inflow=0.55 cfs 0.143 af
Discarded=0.55 cfs 0.143 af Primary=0.00 cfs 0.000 af Outflow=0.55 cfs 0.143 af

Pond 4P: Low Point Peak Elev=198.51' Storage=375 cf Inflow=0.34 cfs 0.167 af
Discarded=0.28 cfs 0.167 af Primary=0.00 cfs 0.000 af Outflow=0.28 cfs 0.167 af

Pond 5P: Low Point Peak Elev=199.00' Storage=1 cf Inflow=0.01 cfs 0.011 af
Discarded=0.01 cfs 0.011 af Primary=0.00 cfs 0.000 af Outflow=0.01 cfs 0.011 af

Pond 6P: Low Point Peak Elev=199.00' Storage=1 cf Inflow=0.01 cfs 0.008 af
Discarded=0.01 cfs 0.008 af Primary=0.00 cfs 0.000 af Outflow=0.01 cfs 0.008 af

Pond 7P: Low Point Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.004 af
Discarded=0.00 cfs 0.004 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.004 af

Link OFF1: Offsite Inflow=0.00 cfs 0.003 af
Primary=0.00 cfs 0.003 af

Link OFF2: Offsite Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link T: Offsite Flow Inflow=0.00 cfs 0.003 af
Primary=0.00 cfs 0.003 af

Total Runoff Area = 15.883 ac Runoff Volume = 0.428 af Average Runoff Depth = 0.32"
99.29% Pervious = 15.771 ac 0.71% Impervious = 0.112 ac

Summary for Subcatchment S1: -

Runoff = 0.52 cfs @ 12.10 hrs, Volume= 0.047 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
3,000	98	Paved roads w/curbs & sewers, HSG A
25,702	39	>75% Grass cover, Good, HSG A
28,702	45	Weighted Average
25,702		89.55% Pervious Area
3,000		10.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S2: -

Runoff = 0.35 cfs @ 12.16 hrs, Volume= 0.045 af, Depth= 0.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
1,900	98	Paved roads w/curbs & sewers, HSG A
33,624	39	>75% Grass cover, Good, HSG A
35,524	42	Weighted Average
33,624		94.65% Pervious Area
1,900		5.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.7	100	0.0060	0.09		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S3: -

Runoff = 0.55 cfs @ 12.47 hrs, Volume= 0.143 af, Depth= 0.48"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
155,090	39	>75% Grass cover, Good, HSG A
155,090		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.2	200	0.0050	0.10		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S4: -

Runoff = 0.34 cfs @ 12.79 hrs, Volume= 0.167 af, Depth= 0.28"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
135,495	30	Woods, Good, HSG A
177,545	39	>75% Grass cover, Good, HSG A
313,040	35	Weighted Average
313,040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
31.7	100	0.0100	0.05		**Sheet Flow, Sheet** Woods: Light underbrush n= 0.400 P2= 2.56"
3.3	100	0.0100	0.50		**Shallow Concentrated Flow, Shallow** Woodland Kv= 5.0 fps
35.0	200	Total			

Summary for Subcatchment S5: -

Runoff = 0.00 cfs @ 17.75 hrs, Volume= 0.003 af, Depth= 0.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
19,116	30	Woods, Good, HSG A
19,116		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
29.5	100	0.0120	0.06		**Sheet Flow, Sheet** Woods: Light underbrush n= 0.400 P2= 2.56"
0.7	22	0.0120	0.55		**Shallow Concentrated Flow, Shallow** Woodland Kv= 5.0 fps
30.2	122	Total			

Summary for Subcatchment S6: -

Runoff = 0.01 cfs @ 18.03 hrs, Volume= 0.011 af, Depth= 0.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
68,819	30	Woods, Good, HSG A
68,819		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
41.8	100	0.0050	0.04		**Sheet Flow, Sheet** Woods: Light underbrush n= 0.400 P2= 2.56"
4.7	100	0.0050	0.35		**Shallow Concentrated Flow, Shallow** Woodland Kv= 5.0 fps
46.5	200	Total			

Summary for Subcatchment S7: -

Runoff = 0.01 cfs @ 17.90 hrs, Volume= 0.008 af, Depth= 0.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
46,201	30	Woods, Good, HSG A
46,201		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.8	100	0.0085	0.05		**Sheet Flow, Sheet** Woods: Light underbrush n= 0.400 P2= 2.56"
0.7	20	0.0085	0.46		**Shallow Concentrated Flow, Shallow** Woodland Kv= 5.0 fps
34.5	120	Total			

Summary for Subcatchment S8: -

Runoff = 0.00 cfs @ 17.66 hrs, Volume= 0.004 af, Depth= 0.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
23,855	30	Woods, Good, HSG A
23,855		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.9	80	0.0129	0.06		**Sheet Flow, Sheet** Woods: Light underbrush n= 0.400 P2= 2.56"

Summary for Subcatchment S9: -

Runoff = 0.00 cfs @ 17.42 hrs, Volume= 0.000 af, Depth= 0.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
1,518	30	Woods, Good, HSG A
1,518		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.8	37	0.0100	0.11		**Sheet Flow, Sheet Flow** Range n= 0.130 P2= 2.56"

Summary for Pond 1P: Low Point

Inflow Area = 0.659 ac, 10.45% Impervious, Inflow Depth = 0.85" for 100-YEAR event
Inflow = 0.52 cfs @ 12.10 hrs, Volume= 0.047 af
Outflow = 0.28 cfs @ 12.26 hrs, Volume= 0.047 af, Atten= 47%, Lag= 9.7 min
Discarded = 0.28 cfs @ 12.26 hrs, Volume= 0.047 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.13' @ 12.26 hrs Surf.Area= 2,058 sf Storage= 200 cf

Plug-Flow detention time= 4.2 min calculated for 0.047 af (100% of inflow)
Center-of-Mass det. time= 4.2 min (925.1 - 920.9)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,749 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,020	126.0	0	0	1,020
199.50	6,834	337.0	1,749	1,749	8,795

Device	Routing	Invert	Outlet Devices
#1	Primary	199.25'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.28 cfs @ 12.26 hrs HW=199.13' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.28 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 2P: Low Point

Inflow Area =	0.816 ac,	5.35% Impervious,	Inflow Depth =	0.66"	for 100-YEAR event
Inflow =	0.35 cfs @	12.16 hrs,	Volume=	0.045 af	
Outflow =	0.27 cfs @	12.27 hrs,	Volume=	0.045 af,	Atten= 22%, Lag= 6.2 min
Discarded =	0.27 cfs @	12.27 hrs,	Volume=	0.045 af	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.05' @ 12.27 hrs Surf.Area= 1,665 sf Storage= 74 cf

Plug-Flow detention time= 1.8 min calculated for 0.045 af (100% of inflow)
Center-of-Mass det. time= 1.8 min (944.4 - 942.5)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,926 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,288	279.0	0	0	1,288
199.50	7,221	512.0	1,926	1,926	15,956

Device	Routing	Invert	Outlet Devices
#1	Primary	199.25'	**30.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50

Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68
2.72 2.81 2.92 2.97 3.07 3.32

#2 Discarded 199.00' **5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.27 cfs @ 12.27 hrs HW=199.05' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.27 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 3P: Low Point

Inflow Area =	3.560 ac,	0.00% Impervious,	Inflow Depth =	0.48"	for 100-YEAR event
Inflow =	0.55 cfs @	12.47 hrs,	Volume=	0.143 af	
Outflow =	0.55 cfs @	12.49 hrs,	Volume=	0.143 af,	Atten= 0%, Lag= 1.1 min
Discarded =	0.55 cfs @	12.49 hrs,	Volume=	0.143 af	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 12.49 hrs Surf.Area= 26,826 sf Storage= 47 cf

Plug-Flow detention time= 1.4 min calculated for 0.143 af (100% of inflow)
Center-of-Mass det. time= 1.4 min (982.7 - 981.3)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	14,737 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	26,808	1,057.0	0	0	26,808
199.50	32,221	1,108.0	14,737	14,737	35,611

Device	Routing	Invert	Outlet Devices
#1	Primary	199.25'	**25.0' long x 3.0' breadth Broad-Crested Rectangular Weir**
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50
			Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.54 cfs @ 12.49 hrs HW=199.00' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.54 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 4P: Low Point

Inflow Area = 7.186 ac, 0.00% Impervious, Inflow Depth = 0.28" for 100-YEAR event
Inflow = 0.34 cfs @ 12.79 hrs, Volume= 0.167 af
Outflow = 0.28 cfs @ 13.51 hrs, Volume= 0.167 af, Atten= 16%, Lag= 42.8 min
Discarded = 0.28 cfs @ 13.51 hrs, Volume= 0.167 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 198.51' @ 13.51 hrs Surf.Area= 1,768 sf Storage= 375 cf

Plug-Flow detention time= 16.8 min calculated for 0.167 af (100% of inflow)
Center-of-Mass det. time= 16.8 min (1,047.9 - 1,031.1)

Volume	Invert	Avail.Storage	Storage Description
#1	198.00'	6,586 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
198.00	77	47.0	0	0	77
199.00	5,510	306.0	2,079	2,079	7,355
199.50	13,051	450.0	4,507	6,586	16,020

Device	Routing	Invert	Outlet Devices
#1	Discarded	198.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	198.60'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.28 cfs @ 13.51 hrs HW=198.51' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.28 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 5P: Low Point

Inflow Area = 1.580 ac, 0.00% Impervious, Inflow Depth = 0.09" for 100-YEAR event
Inflow = 0.01 cfs @ 18.03 hrs, Volume= 0.011 af
Outflow = 0.01 cfs @ 18.05 hrs, Volume= 0.011 af, Atten= 0%, Lag= 0.9 min
Discarded = 0.01 cfs @ 18.05 hrs, Volume= 0.011 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Peak Elev= 199.00' @ 18.05 hrs Surf.Area= 1,329 sf Storage= 1 cf

Plug-Flow detention time= 1.4 min calculated for 0.011 af (100% of inflow)
Center-of-Mass det. time= 1.4 min (1,157.7 - 1,156.4)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	4,780 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,315	182.0	0	0	1,315
199.50	21,989	600.0	4,780	4,780	27,328

Device	Routing	Invert	Outlet Devices
#1	Primary	199.25'	**200.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.01 cfs @ 18.05 hrs HW=199.00' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 6P: Low Point

Inflow Area =	1.608 ac,	0.00% Impervious,	Inflow Depth =	0.06"	for 100-YEAR event
Inflow =	0.01 cfs @	17.90 hrs,	Volume=	0.008 af	
Outflow =	0.01 cfs @	17.84 hrs,	Volume=	0.008 af,	Atten= 0%, Lag= 0.0 min
Discarded =	0.01 cfs @	17.84 hrs,	Volume=	0.008 af	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 17.84 hrs Surf.Area= 6,089 sf Storage= 1 cf

Plug-Flow detention time= 1.4 min calculated for 0.008 af (100% of inflow)
Center-of-Mass det. time= 1.4 min (1,146.7 - 1,145.2)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	6,772 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	6,086	706.0	0	0	6,086
199.50	22,775	585.0	6,772	6,772	18,521

Device	Routing	Invert	Outlet Devices
#1	Primary	199.10'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.01 cfs @ 17.84 hrs HW=199.00' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 7P: Low Point

Inflow Area =	0.548 ac,	0.00% Impervious,	Inflow Depth =	0.09"	for 100-YEAR event
Inflow =	0.00 cfs @	17.66 hrs,	Volume=	0.004 af	
Outflow =	0.00 cfs @	17.72 hrs,	Volume=	0.004 af,	Atten= 0%, Lag= 3.8 min
Discarded =	0.00 cfs @	17.72 hrs,	Volume=	0.004 af	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 17.72 hrs Surf.Area= 917 sf Storage= 0 cf

Plug-Flow detention time= 1.4 min calculated for 0.004 af (100% of inflow)
Center-of-Mass det. time= 1.4 min (1,136.8 - 1,135.4)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,471 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	915	166.0	0	0	915
199.50	5,638	320.0	1,471	1,471	6,872

Device	Routing	Invert	Outlet Devices
#1	Primary	199.25'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 17.72 hrs HW=199.00' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Link OFF1: Offsite

Inflow Area = 0.439 ac, 0.00% Impervious, Inflow Depth = 0.09" for 100-YEAR event
Inflow = 0.00 cfs @ 17.75 hrs, Volume= 0.003 af
Primary = 0.00 cfs @ 17.75 hrs, Volume= 0.003 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Summary for Link OFF2: Offsite

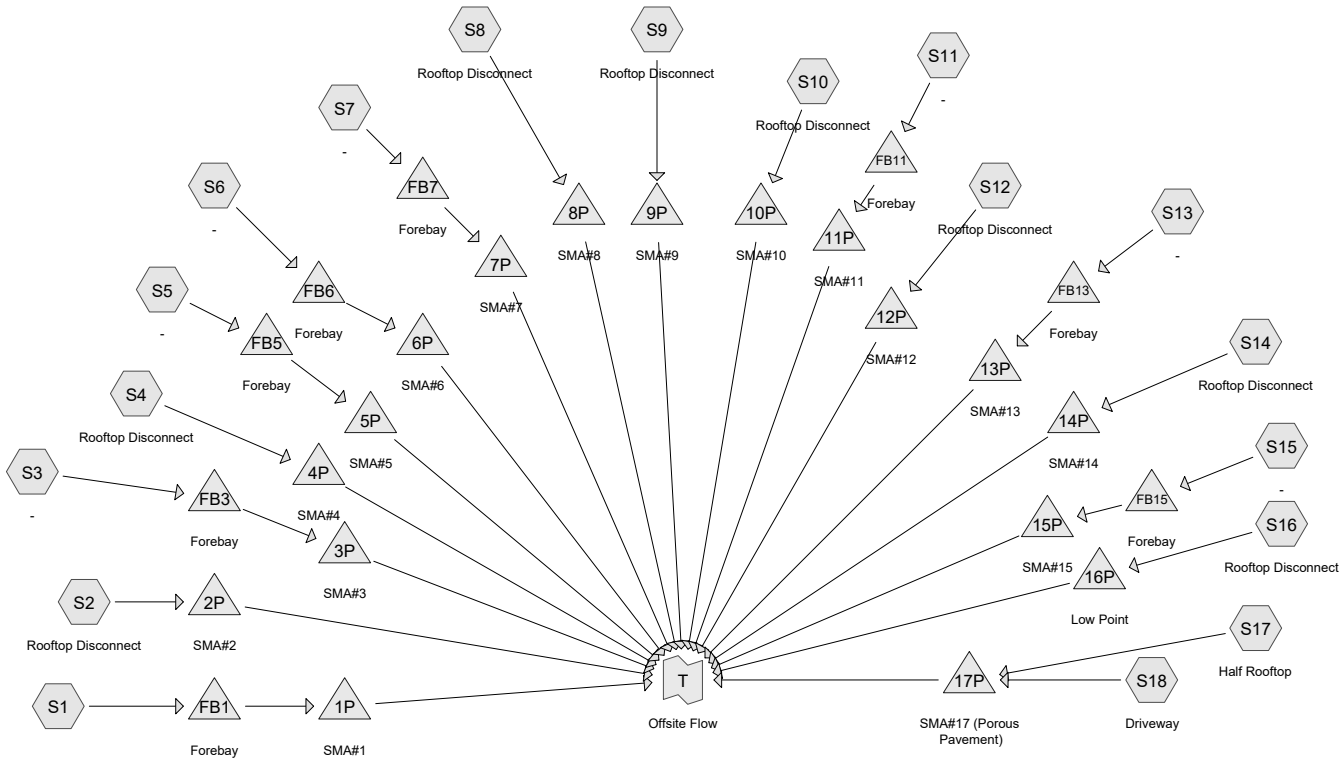
Inflow Area = 0.035 ac, 0.00% Impervious, Inflow Depth = 0.09" for 100-YEAR event
Inflow = 0.00 cfs @ 17.42 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 17.42 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

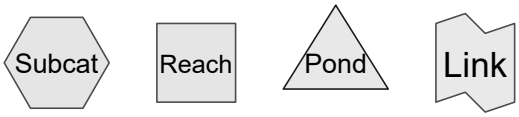
Primary outflow = Inflow, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Summary for Link T: Offsite Flow

Inflow Area = 15.883 ac, 0.71% Impervious, Inflow Depth = 0.00" for 100-YEAR event
Inflow = 0.00 cfs @ 17.75 hrs, Volume= 0.003 af
Primary = 0.00 cfs @ 17.75 hrs, Volume= 0.003 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs





Routing Diagram for Postdevelopment - Scherm - Dix Ave
Prepared by The Environmental Design Partnership, Printed 1/4/2021
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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.089	98	(S17)
8.976	39	>75% Grass cover, Good, HSG A (S1, S10, S11, S12, S13, S14, S15, S16, S2, S3, S4, S5, S6, S7, S8, S9)
0.142	98	Driveway (S18)
2.534	98	Paved parking, HSG A (S1, S10, S11, S12, S13, S14, S15, S16, S2, S3, S4, S5, S6, S7, S8, S9)
1.538	30	Woods, Good, HSG A (S11, S12, S13, S15, S16, S7)
13.279	**50**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
13.048	HSG A	S1, S10, S11, S12, S13, S14, S15, S16, S2, S3, S4, S5, S6, S7, S8, S9
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.231	Other	S17, S18
13.279		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.000	0.089	0.089		S17
8.976	0.000	0.000	0.000	0.000	8.976	>75% Grass cover, Good	S1, S10, S11, S12, S13, S14, S15, S16, S2, S3, S4, S5, S6, S7, S8, S9
0.000	0.000	0.000	0.000	0.142	0.142	Driveway	S18
2.534	0.000	0.000	0.000	0.000	2.534	Paved parking	S1, S10, S11, S12, S13, S14, S15, S16, S2, S3, S4, S5, S6, S7, S8, S9
1.538	0.000	0.000	0.000	0.000	1.538	Woods, Good	S11, S12, S13, S15, S16, S7

Ground Covers (all nodes) (continued)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
13.048	**0.000**	**0.000**	**0.000**	**0.231**	**13.279**	**TOTAL AREA**	

Time span=0.00-200.00 hrs, dt=0.01 hrs, 20001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentS1: Runoff Area=56,035 sf 26.62% Impervious Runoff Depth=0.04"
Flow Length=160' Slope=0.0100 '/' Tc=15.9 min CN=55 Runoff=0.00 cfs 0.004 af

SubcatchmentS10: Rooftop Disconnect Runoff Area=41,351 sf 11.61% Impervious Runoff Depth=0.00"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=46 Runoff=0.00 cfs 0.000 af

SubcatchmentS11: - Runoff Area=49,400 sf 15.79% Impervious Runoff Depth=0.00"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=46 Runoff=0.00 cfs 0.000 af

SubcatchmentS12: Rooftop Disconnect Runoff Area=24,317 sf 19.74% Impervious Runoff Depth=0.00"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=50 Runoff=0.00 cfs 0.000 af

SubcatchmentS13: - Runoff Area=33,899 sf 30.03% Impervious Runoff Depth=0.02"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=53 Runoff=0.00 cfs 0.001 af

SubcatchmentS14: Rooftop Disconnect Runoff Area=19,612 sf 24.47% Impervious Runoff Depth=0.02"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=53 Runoff=0.00 cfs 0.001 af

SubcatchmentS15: - Runoff Area=20,148 sf 42.56% Impervious Runoff Depth=0.15"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=63 Runoff=0.03 cfs 0.006 af

SubcatchmentS16: Rooftop Disconnect Runoff Area=82,450 sf 3.03% Impervious Runoff Depth=0.00"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=37 Runoff=0.00 cfs 0.000 af

SubcatchmentS17: Half Rooftop Runoff Area=3,893 sf 100.00% Impervious Runoff Depth=1.96"
Flow Length=10' Slope=0.0100 '/' Tc=6.0 min CN=98 Runoff=0.27 cfs 0.015 af

SubcatchmentS18: Driveway Runoff Area=6,177 sf 100.00% Impervious Runoff Depth=1.96"
Tc=578.0 min CN=98 Runoff=0.03 cfs 0.023 af

SubcatchmentS2: Rooftop Disconnect Runoff Area=23,336 sf 25.20% Impervious Runoff Depth=0.03"
Flow Length=138' Slope=0.0100 '/' Tc=15.4 min CN=54 Runoff=0.00 cfs 0.001 af

SubcatchmentS3: - Runoff Area=30,061 sf 9.44% Impervious Runoff Depth=0.00"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=45 Runoff=0.00 cfs 0.000 af

SubcatchmentS4: Rooftop Disconnect Runoff Area=25,465 sf 22.27% Impervious Runoff Depth=0.01"
Flow Length=80' Slope=0.0200 '/' Tc=9.2 min CN=52 Runoff=0.00 cfs 0.001 af

SubcatchmentS5: - Runoff Area=28,617 sf 20.31% Impervious Runoff Depth=0.01"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=51 Runoff=0.00 cfs 0.000 af

SubcatchmentS6: - Runoff Area=46,267 sf 24.01% Impervious Runoff Depth=0.02"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=53 Runoff=0.00 cfs 0.002 af

SubcatchmentS7: - Runoff Area=52,949 sf 24.86% Impervious Runoff Depth=0.02"
Flow Length=180' Slope=0.0100 '/' Tc=16.4 min CN=53 Runoff=0.00 cfs 0.002 af

SubcatchmentS8: Rooftop Disconnect Runoff Area=13,880 sf 20.54% Impervious Runoff Depth=0.01"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=51 Runoff=0.00 cfs 0.000 af

SubcatchmentS9: Rooftop Disconnect Runoff Area=20,572 sf 22.70% Impervious Runoff Depth=0.01"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=52 Runoff=0.00 cfs 0.000 af

Pond 1P: SMA#1 Peak Elev=195.50' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 2P: SMA#2 Peak Elev=198.50' Storage=0 cf Inflow=0.00 cfs 0.001 af
Discarded=0.00 cfs 0.001 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.001 af

Pond 3P: SMA#3 Peak Elev=197.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 4P: SMA#4 Peak Elev=198.00' Storage=0 cf Inflow=0.00 cfs 0.001 af
Discarded=0.00 cfs 0.001 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.001 af

Pond 5P: SMA#5 Peak Elev=197.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 6P: SMA#6 Peak Elev=197.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 7P: SMA#7 Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 8P: SMA#8 Peak Elev=200.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 9P: SMA#9 Peak Elev=199.50' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 10P: SMA#10 Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 11P: SMA#11 Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 12P: SMA#12 Peak Elev=200.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Outflow=0.00 cfs 0.000 af

Pond 13P: SMA#13 Peak Elev=198.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 14P: SMA#14 Peak Elev=200.00' Storage=0 cf Inflow=0.00 cfs 0.001 af
Discarded=0.00 cfs 0.001 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.001 af

Pond 15P: SMA#15 Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 16P: Low Point Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 17P: SMA#17 (Porous Pavement) Peak Elev=199.11' Storage=23 cf Inflow=0.28 cfs 0.038 af
Discarded=0.27 cfs 0.038 af Primary=0.00 cfs 0.000 af Outflow=0.27 cfs 0.038 af

Pond FB1: Forebay Peak Elev=195.80' Storage=164 cf Inflow=0.00 cfs 0.004 af
Outflow=0.00 cfs 0.000 af

Pond FB11: Forebay Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Outflow=0.00 cfs 0.000 af

Pond FB13: Forebay Peak Elev=198.10' Storage=53 cf Inflow=0.00 cfs 0.001 af
Outflow=0.00 cfs 0.000 af

Pond FB15: Forebay Peak Elev=199.24' Storage=251 cf Inflow=0.03 cfs 0.006 af
Outflow=0.00 cfs 0.000 af

Pond FB3: Forebay Peak Elev=197.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Outflow=0.00 cfs 0.000 af

Pond FB5: Forebay Peak Elev=197.53' Storage=17 cf Inflow=0.00 cfs 0.000 af
Outflow=0.00 cfs 0.000 af

Pond FB6: Forebay Peak Elev=197.09' Storage=72 cf Inflow=0.00 cfs 0.002 af
Outflow=0.00 cfs 0.000 af

Pond FB7: Forebay Peak Elev=199.03' Storage=82 cf Inflow=0.00 cfs 0.002 af
Outflow=0.00 cfs 0.000 af

Link T: Offsite Flow Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Total Runoff Area = 13.279 ac Runoff Volume = 0.056 af Average Runoff Depth = 0.05"
79.18% Pervious = 10.514 ac 20.82% Impervious = 2.765 ac

Summary for Subcatchment S1:

Runoff = 0.00 cfs @ 15.46 hrs, Volume= 0.004 af, Depth= 0.04"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
14,917	98	Paved parking, HSG A
41,118	39	>75% Grass cover, Good, HSG A
56,035	55	Weighted Average
41,118		73.38% Pervious Area
14,917		26.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Swale** Grass: Short n= 0.150 P2= 2.56"
1.4	60	0.0100	0.70		**Shallow Concentrated Flow, Swale** Short Grass Pasture Kv= 7.0 fps
15.9	160	Total			

Summary for Subcatchment S10: Rooftop Disconnect

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
4,800	98	Paved parking, HSG A
36,551	39	>75% Grass cover, Good, HSG A
41,351	46	Weighted Average
36,551		88.39% Pervious Area
4,800		11.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Swale** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S11: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
7,800	98	Paved parking, HSG A
28,271	39	>75% Grass cover, Good, HSG A
13,329	30	Woods, Good, HSG A
49,400	46	Weighted Average
41,600		84.21% Pervious Area
7,800		15.79% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S12: Rooftop Disconnect

Runoff = 0.00 cfs @ 24.01 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
4,800	98	Paved parking, HSG A
1,796	30	Woods, Good, HSG A
17,721	39	>75% Grass cover, Good, HSG A
24,317	50	Weighted Average
19,517		80.26% Pervious Area
4,800		19.74% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Swale** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S13: -

Runoff = 0.00 cfs @ 23.99 hrs, Volume= 0.001 af, Depth= 0.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
10,179	98	Paved parking, HSG A
10,818	39	>75% Grass cover, Good, HSG A
12,902	30	Woods, Good, HSG A
33,899	53	Weighted Average
23,720		69.97% Pervious Area
10,179		30.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S14: Rooftop Disconnect

Runoff = 0.00 cfs @ 23.99 hrs, Volume= 0.001 af, Depth= 0.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
4,800	98	Paved parking, HSG A
14,812	39	>75% Grass cover, Good, HSG A
19,612	53	Weighted Average
14,812		75.53% Pervious Area
4,800		24.47% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S15: -

Runoff = 0.03 cfs @ 12.15 hrs, Volume= 0.006 af, Depth= 0.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
8,575	98	Paved parking, HSG A
9,573	39	>75% Grass cover, Good, HSG A
2,000	30	Woods, Good, HSG A
20,148	63	Weighted Average
11,573		57.44% Pervious Area
8,575		42.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S16: Rooftop Disconnect

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
2,500	98	Paved parking, HSG A
44,950	39	>75% Grass cover, Good, HSG A
35,000	30	Woods, Good, HSG A
82,450	37	Weighted Average
79,950		96.97% Pervious Area
2,500		3.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S17: Half Rooftop

Runoff = 0.27 cfs @ 11.97 hrs, Volume= 0.015 af, Depth= 1.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

	Area (sf)	CN	Description
*	3,893	98	
	3,893		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	10	0.0100	0.59		**Sheet Flow, Sheet** Smooth surfaces n= 0.011 P2= 2.56"
0.3	10	Total, Increased to minimum Tc = 6.0 min			

Summary for Subcatchment S18: Driveway

Runoff = 0.03 cfs @ 19.27 hrs, Volume= 0.023 af, Depth= 1.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

	Area (sf)	CN	Description
*	6,177	98	Driveway
	6,177		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
578.0					**Direct Entry, Direct**

Summary for Subcatchment S2: Rooftop Disconnect

Runoff = 0.00 cfs @ 17.88 hrs, Volume= 0.001 af, Depth= 0.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
5,880	98	Paved parking, HSG A
17,456	39	>75% Grass cover, Good, HSG A
23,336	54	Weighted Average
17,456		74.80% Pervious Area
5,880		25.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 2.56"
0.9	38	0.0100	0.70		**Shallow Concentrated Flow, Shallow** Short Grass Pasture Kv= 7.0 fps
15.4	138	Total			

Summary for Subcatchment S3: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
27,224	39	>75% Grass cover, Good, HSG A
2,837	98	Paved parking, HSG A
30,061	45	Weighted Average
27,224		90.56% Pervious Area
2,837		9.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Sheets** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S4: Rooftop Disconnect

Runoff = 0.00 cfs @ 24.01 hrs, Volume= 0.001 af, Depth= 0.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
5,670	98	Paved parking, HSG A
19,795	39	>75% Grass cover, Good, HSG A
25,465	52	Weighted Average
19,795		77.73% Pervious Area
5,670		22.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	80	0.0200	0.15		**Sheet Flow, Swale** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S5: -

Runoff = 0.00 cfs @ 24.02 hrs, Volume= 0.000 af, Depth= 0.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
5,811	98	Paved parking, HSG A
22,806	39	>75% Grass cover, Good, HSG A
28,617	51	Weighted Average
22,806		79.69% Pervious Area
5,811		20.31% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S6: -

Runoff = 0.00 cfs @ 23.99 hrs, Volume= 0.002 af, Depth= 0.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
11,108	98	Paved parking, HSG A
35,159	39	>75% Grass cover, Good, HSG A
46,267	53	Weighted Average
35,159		75.99% Pervious Area
11,108		24.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S7: -

Runoff = 0.00 cfs @ 24.00 hrs, Volume= 0.002 af, Depth= 0.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
37,813	39	>75% Grass cover, Good, HSG A
13,162	98	Paved parking, HSG A
1,974	30	Woods, Good, HSG A
52,949	53	Weighted Average
39,787		75.14% Pervious Area
13,162		24.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 2.56"
1.9	80	0.0100	0.70		**Shallow Concentrated Flow, Shallow** Short Grass Pasture Kv= 7.0 fps
16.4	180	Total			

Summary for Subcatchment S8: Rooftop Disconnect

Runoff = 0.00 cfs @ 24.01 hrs, Volume= 0.000 af, Depth= 0.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
2,851	98	Paved parking, HSG A
11,029	39	>75% Grass cover, Good, HSG A
13,880	51	Weighted Average
11,029		79.46% Pervious Area
2,851		20.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S9: Rooftop Disconnect

Runoff = 0.00 cfs @ 24.01 hrs, Volume= 0.000 af, Depth= 0.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=2.19"

Area (sf)	CN	Description
4,670	98	Paved parking, HSG A
15,902	39	>75% Grass cover, Good, HSG A
20,572	52	Weighted Average
15,902		77.30% Pervious Area
4,670		22.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Swale** Grass: Short n= 0.150 P2= 2.56"

Summary for Pond 1P: SMA#1

Inflow Area = 1.286 ac, 26.62% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Peak Elev= 195.50' @ 0.00 hrs Surf.Area= 1,213 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	195.50'	10,537 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
195.50	1,213	222.0	0	0	1,213
196.00	1,554	232.0	690	690	1,592
197.00	2,308	258.0	1,919	2,609	2,635
198.00	3,260	319.0	2,770	5,379	5,450
199.00	7,326	668.0	5,158	10,537	32,866

Device	Routing	Invert	Outlet Devices
#1	Primary	199.17'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	195.50'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=195.50' (Free Discharge)
└**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=195.50' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 2P: SMA#2

Inflow Area = 0.536 ac, 25.20% Impervious, Inflow Depth = 0.03" for 1-YEAR event
Inflow = 0.00 cfs @ 17.88 hrs, Volume= 0.001 af
Outflow = 0.00 cfs @ 17.89 hrs, Volume= 0.001 af, Atten= 0%, Lag= 0.5 min
Discarded = 0.00 cfs @ 17.89 hrs, Volume= 0.001 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 198.50' @ 17.89 hrs Surf.Area= 352 sf Storage= 0 cf

Plug-Flow detention time= 1.9 min calculated for 0.001 af (100% of inflow)
Center-of-Mass det. time= 1.9 min (1,145.3 - 1,143.4)

Volume	Invert	Avail.Storage	Storage Description
#1	198.50'	1,590 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
198.50	352	108.0	0	0	352
199.00	682	194.0	254	254	2,420
200.00	2,122	461.0	1,336	1,590	16,341

Device	Routing	Invert	Outlet Devices
#1	Primary	199.75'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	198.50'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 17.89 hrs HW=198.50' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.50' (Free Discharge)
└**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 3P: SMA#3

Inflow Area = 0.690 ac, 9.44% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 197.00' @ 0.00 hrs Surf.Area= 853 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	197.00'	2,691 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.00	853	131.0	0	0	853
198.00	1,305	161.0	1,071	1,071	1,565
199.00	1,957	227.0	1,620	2,691	3,612

Device	Routing	Invert	Outlet Devices
#1	Discarded	197.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50

Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68
2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└─**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└─**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 4P: SMA#4

Inflow Area = 0.585 ac, 22.27% Impervious, Inflow Depth = 0.01" for 1-YEAR event
Inflow = 0.00 cfs @ 24.01 hrs, Volume= 0.001 af
Outflow = 0.00 cfs @ 24.01 hrs, Volume= 0.001 af, Atten= 0%, Lag= 0.2 min
Discarded = 0.00 cfs @ 24.01 hrs, Volume= 0.001 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 198.00' @ 24.01 hrs Surf.Area= 1,182 sf Storage= 0 cf

Plug-Flow detention time= 1.4 min calculated for 0.001 af (100% of inflow)
Center-of-Mass det. time= 1.4 min (1,209.7 - 1,208.2)

Volume	Invert	Avail.Storage	Storage Description
#1	198.00'	1,465 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
198.00	1,182	138.0	0	0	1,182
199.00	1,767	212.0	1,465	1,465	3,250

Device	Routing	Invert	Outlet Devices
#1	Discarded	198.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	199.00'	**10.0' long x 3.0' breadth Overflow**
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50
			Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 24.01 hrs HW=198.00' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.00' (Free Discharge)
└─**2=Overflow** (Controls 0.00 cfs)

Summary for Pond 5P: SMA#5

Inflow Area = 0.657 ac, 20.31% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 197.00' @ 0.00 hrs Surf.Area= 2,684 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	197.00'	6,805 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.00	2,684	227.0	0	0	2,684
198.00	3,387	254.0	3,029	3,029	3,745
199.00	4,179	274.0	3,776	6,805	4,626

Device	Routing	Invert	Outlet Devices
#1	Discarded	197.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	198.50'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 6P: SMA#6

Inflow Area = 1.062 ac, 24.01% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Peak Elev= 197.00' @ 0.00 hrs Surf.Area= 196 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	197.00'	1,369 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.00	196	143.0	0	0	196
198.00	668	166.0	409	409	782
199.00	1,287	195.0	961	1,369	1,635

Device	Routing	Invert	Outlet Devices
#1	Primary	199.00'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	197.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└─**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 7P: SMA#7

Inflow Area = 1.216 ac, 24.86% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 7,315 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	2,646 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)
#2	199.00'	5,676 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)
		8,322 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	2,268	254.0	0	0	2,268
200.00	3,042	263.0	2,646	2,646	2,720

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	5,047	422.0	0	0	5,047
200.00	6,330	432.0	5,676	5,676	5,850

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 8P: SMA#8

Inflow Area = 0.319 ac, 20.54% Impervious, Inflow Depth = 0.01" for 1-YEAR event
Inflow = 0.00 cfs @ 24.01 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 24.02 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.5 min
Discarded = 0.00 cfs @ 24.02 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 200.00' @ 24.02 hrs Surf.Area= 324 sf Storage= 0 cf

Plug-Flow detention time= 1.4 min calculated for 0.000 af (100% of inflow)
Center-of-Mass det. time= 1.4 min (1,252.5 - 1,251.1)

Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	688 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
200.00	324	105.0	0	0	324
201.00	1,133	279.0	688	688	5,645

Device	Routing	Invert	Outlet Devices
#1	Discarded	200.00'	**5.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#2	Primary	201.00'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 24.02 hrs HW=200.00' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.00' (Free Discharge)
└─**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 9P: SMA#9

Inflow Area = 0.472 ac, 22.70% Impervious, Inflow Depth = 0.01" for 1-YEAR event
Inflow = 0.00 cfs @ 24.01 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 24.01 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.2 min
Discarded = 0.00 cfs @ 24.01 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.50' @ 24.01 hrs Surf.Area= 318 sf Storage= 0 cf

Plug-Flow detention time= 2.1 min calculated for 0.000 af (100% of inflow)
Center-of-Mass det. time= 2.1 min (1,209.5 - 1,207.4)

Volume	Invert	Avail.Storage	Storage Description
#1	199.50'	1,270 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.50	318	186.0	0	0	318
200.00	605	196.0	227	227	637
201.00	1,555	299.0	1,043	1,270	4,701

Device	Routing	Invert	Outlet Devices
#1	Discarded	199.50'	**5.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#2	Primary	200.75'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 24.01 hrs HW=199.50' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.50' (Free Discharge)
└─**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 10P: SMA#10

Inflow Area =	0.949 ac, 11.61% Impervious, Inflow Depth = 0.00" for 1-YEAR event				
Inflow =	0.00 cfs @	0.00 hrs, Volume=	0.000 af		
Outflow =	0.00 cfs @	0.00 hrs, Volume=	0.000 af, Atten= 0%, Lag= 0.0 min		
Discarded =	0.00 cfs @	0.00 hrs, Volume=	0.000 af		
Primary =	0.00 cfs @	0.00 hrs, Volume=	0.000 af		

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 2,382 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	3,399 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	2,382	462.0	0	0	2,382
200.00	4,530	641.0	3,399	3,399	18,103

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 11P: SMA#11

Inflow Area = 1.134 ac, 15.79% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 1,880 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	2,154 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,880	176.0	0	0	1,880
200.00	2,440	198.0	2,154	2,154	2,561

Device	Routing	Invert	Outlet Devices
#1	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 12P: SMA#12

Inflow Area = 0.558 ac, 19.74% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 24.01 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 24.02 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.5 min
Discarded = 0.00 cfs @ 24.02 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 200.00' @ 24.02 hrs Surf.Area= 576 sf Storage= 0 cf

Plug-Flow detention time= 1.3 min calculated for 0.000 af (100% of inflow)
Center-of-Mass det. time= 1.3 min (1,303.4 - 1,302.1)

Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	1,094 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
200.00	576	209.0	0	0	576
201.00	1,712	409.0	1,094	1,094	10,417

Device	Routing	Invert	Outlet Devices
#1	Discarded	200.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 24.02 hrs HW=200.00' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Summary for Pond 13P: SMA#13

Inflow Area = 0.778 ac, 30.03% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 198.00' @ 0.00 hrs Surf.Area= 462 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	198.00'	1,426 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
198.00	462	78.0	0	0	462
199.00	710	88.0	582	582	618
200.00	987	97.0	845	1,426	780

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	198.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.00' (Free Discharge)
└─**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 14P: SMA#14

Inflow Area = 0.450 ac, 24.47% Impervious, Inflow Depth = 0.02" for 1-YEAR event
Inflow = 0.00 cfs @ 23.99 hrs, Volume= 0.001 af
Outflow = 0.00 cfs @ 24.01 hrs, Volume= 0.001 af, Atten= 0%, Lag= 0.9 min
Discarded = 0.00 cfs @ 24.01 hrs, Volume= 0.001 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 200.00' @ 24.01 hrs Surf.Area= 489 sf Storage= 0 cf

Plug-Flow detention time= 1.3 min calculated for 0.001 af (100% of inflow)
Center-of-Mass det. time= 1.3 min (1,170.9 - 1,169.7)

Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	1,109 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
200.00	489	166.0	0	0	489
201.00	1,880	451.0	1,109	1,109	14,486

Device	Routing	Invert	Outlet Devices
#1	Discarded	200.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	201.00'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 24.01 hrs HW=200.00' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.00' (Free Discharge)
└─**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 15P: SMA#15

Inflow Area = 0.463 ac, 42.56% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 919 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,312 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	919	272.0	0	0	919
200.00	1,749	281.0	1,312	1,312	1,402

Device	Routing	Invert	Outlet Devices
#1	Discarded	199.00'	**5.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#2	Primary	199.75'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 16P: Low Point

Inflow Area = 1.893 ac, 3.03% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 6,086 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)

Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	6,772 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	6,086	706.0	0	0	6,086
199.50	22,775	585.0	6,772	6,772	18,521

Device	Routing	Invert	Outlet Devices
#1	Primary	199.10'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 17P: SMA#17 (Porous Pavement)

Inflow Area = 0.231 ac,100.00% Impervious, Inflow Depth = 1.96" for 1-YEAR event
Inflow = 0.28 cfs @ 11.97 hrs, Volume= 0.038 af
Outflow = 0.27 cfs @ 11.99 hrs, Volume= 0.038 af, Atten= 3%, Lag= 1.2 min
Discarded = 0.27 cfs @ 11.99 hrs, Volume= 0.038 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.11' @ 11.99 hrs Surf.Area= 5,145 sf Storage= 23 cf

Plug-Flow detention time= 1.4 min calculated for 0.038 af (100% of inflow)
Center-of-Mass det. time= 1.4 min (1,092.9 - 1,091.5)

Volume	Invert	Avail.Storage	Storage Description
#1	199.10'	5,145 cf	**Custom Stage Data (Irregular)** Listed below (Recalc) 12,863 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.10	5,145	390.0	0	0	5,145
201.60	5,145	390.0	12,863	12,863	6,120

Device	Routing	Invert	Outlet Devices
#1	Discarded	199.10'	**5.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#2	Primary	201.60'	**10.0' long x 1.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32

Discarded OutFlow Max=0.60 cfs @ 11.99 hrs HW=199.11' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.60 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.10' (Free Discharge)
└─**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond FB1: Forebay

Inflow Area = 1.286 ac, 26.62% Impervious, Inflow Depth = 0.04" for 1-YEAR event
Inflow = 0.00 cfs @ 15.46 hrs, Volume= 0.004 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 195.80' @ 24.92 hrs Surf.Area= 594 sf Storage= 164 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	195.50'	2,318 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
195.50	506	97.0	0	0	506
196.00	658	106.0	290	290	660
197.00	1,006	125.0	826	1,116	1,028
198.00	1,410	144.0	1,202	2,318	1,456

Device	Routing	Invert	Outlet Devices
#1	Primary	197.50'	**10.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=195.50' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond FB11: Forebay

Inflow Area = 1.134 ac, 15.79% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 1,453 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,765 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,453	209.0	0	0	1,453
200.00	2,096	219.0	1,765	1,765	1,855

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond FB13: Forebay

Inflow Area = 0.778 ac, 30.03% Impervious, Inflow Depth = 0.02" for 1-YEAR event
Inflow = 0.00 cfs @ 23.99 hrs, Volume= 0.001 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 198.10' @ 24.82 hrs Surf.Area= 549 sf Storage= 53 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	198.00'	1,634 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
198.00	523	93.0	0	0	523
199.00	815	102.0	664	664	693
200.00	1,135	112.0	971	1,634	894

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond FB15: Forebay

Inflow Area = 0.463 ac, 42.56% Impervious, Inflow Depth = 0.15" for 1-YEAR event
Inflow = 0.03 cfs @ 12.15 hrs, Volume= 0.006 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.24' @ 24.82 hrs Surf.Area= 1,105 sf Storage= 251 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,216 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,011	133.0	0	0	1,011
200.00	1,433	143.0	1,216	1,216	1,270

Device	Routing	Invert	Outlet Devices
#1	Primary	199.75'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond FB3: Forebay

Inflow Area = 0.690 ac, 9.44% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 197.00' @ 0.00 hrs Surf.Area= 251 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	197.00'	1,018 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.00	251	70.0	0	0	251
198.00	488	88.0	363	363	491
198.50	628	98.0	278	641	646
199.00	887	124.0	377	1,018	1,109

Device	Routing	Invert	Outlet Devices
#1	Primary	198.50'	**25.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond FB5: Forebay

Inflow Area = 0.657 ac, 20.31% Impervious, Inflow Depth = 0.01" for 1-YEAR event
Inflow = 0.00 cfs @ 24.02 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 197.53' @ 24.82 hrs Surf.Area= 612 sf Storage= 17 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	197.50'	1,314 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.50	603	113.0	0	0	603
198.00	779	122.0	345	345	781
199.00	1,174	141.0	970	1,314	1,200

Device	Routing	Invert	Outlet Devices
#1	Primary	198.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.50' (Free Discharge)
└**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond FB6: Forebay

Inflow Area = 1.062 ac, 24.01% Impervious, Inflow Depth = 0.02" for 1-YEAR event
Inflow = 0.00 cfs @ 23.99 hrs, Volume= 0.002 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 197.09' @ 24.49 hrs Surf.Area= 623 sf Storage= 72 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	197.00'	1,957 cf	**Custom Stage Data (Irregular)** Listed below

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.00	588	113.0	0	0	588
198.00	954	131.0	764	764	958
198.50	1,157	141.0	527	1,291	1,185
199.00	1,515	192.0	666	1,957	2,539

Device	Routing	Invert	Outlet Devices
#1	Primary	198.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond FB7: Forebay

Inflow Area = 1.216 ac, 24.86% Impervious, Inflow Depth = 0.02" for 1-YEAR event
Inflow = 0.00 cfs @ 24.00 hrs, Volume= 0.002 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.03' @ 24.94 hrs Surf.Area= 3,225 sf Storage= 82 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	3,810 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	3,195	410.0	0	0	3,195
200.00	4,461	434.0	3,810	3,810	4,861

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Link T: Offsite Flow

Inflow Area = 13.279 ac, 20.82% Impervious, Inflow Depth = 0.00" for 1-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Time span=0.00-200.00 hrs, dt=0.01 hrs, 20001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentS1: Runoff Area=56,035 sf 26.62% Impervious Runoff Depth=0.40"
Flow Length=160' Slope=0.0100 '/' Tc=15.9 min CN=55 Runoff=0.37 cfs 0.043 af

SubcatchmentS10: Rooftop Disconnect Runoff Area=41,351 sf 11.61% Impervious Runoff Depth=0.13"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=46 Runoff=0.02 cfs 0.010 af

SubcatchmentS11: - Runoff Area=49,400 sf 15.79% Impervious Runoff Depth=0.13"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=46 Runoff=0.02 cfs 0.012 af

SubcatchmentS12: Rooftop Disconnect Runoff Area=24,317 sf 19.74% Impervious Runoff Depth=0.24"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=50 Runoff=0.07 cfs 0.011 af

SubcatchmentS13: - Runoff Area=33,899 sf 30.03% Impervious Runoff Depth=0.33"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=53 Runoff=0.16 cfs 0.021 af

SubcatchmentS14: Rooftop Disconnect Runoff Area=19,612 sf 24.47% Impervious Runoff Depth=0.33"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=53 Runoff=0.13 cfs 0.012 af

SubcatchmentS15: - Runoff Area=20,148 sf 42.56% Impervious Runoff Depth=0.74"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=63 Runoff=0.38 cfs 0.028 af

SubcatchmentS16: Rooftop Disconnect Runoff Area=82,450 sf 3.03% Impervious Runoff Depth=0.00"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=37 Runoff=0.00 cfs 0.001 af

SubcatchmentS17: Half Rooftop Runoff Area=3,893 sf 100.00% Impervious Runoff Depth=3.43"
Flow Length=10' Slope=0.0100 '/' Tc=6.0 min CN=98 Runoff=0.46 cfs 0.026 af

SubcatchmentS18: Driveway Runoff Area=6,177 sf 100.00% Impervious Runoff Depth=3.43"
Tc=578.0 min CN=98 Runoff=0.04 cfs 0.040 af

SubcatchmentS2: Rooftop Disconnect Runoff Area=23,336 sf 25.20% Impervious Runoff Depth=0.37"
Flow Length=138' Slope=0.0100 '/' Tc=15.4 min CN=54 Runoff=0.13 cfs 0.016 af

SubcatchmentS3: - Runoff Area=30,061 sf 9.44% Impervious Runoff Depth=0.11"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=45 Runoff=0.01 cfs 0.006 af

SubcatchmentS4: Rooftop Disconnect Runoff Area=25,465 sf 22.27% Impervious Runoff Depth=0.30"
Flow Length=80' Slope=0.0200 '/' Tc=9.2 min CN=52 Runoff=0.13 cfs 0.015 af

SubcatchmentS5: - Runoff Area=28,617 sf 20.31% Impervious Runoff Depth=0.27"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=51 Runoff=0.08 cfs 0.015 af

SubcatchmentS6: - Runoff Area=46,267 sf 24.01% Impervious Runoff Depth=0.33"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=53 Runoff=0.31 cfs 0.029 af

SubcatchmentS7: - Runoff Area=52,949 sf 24.86% Impervious Runoff Depth=0.33"
Flow Length=180' Slope=0.0100 '/' Tc=16.4 min CN=53 Runoff=0.23 cfs 0.034 af

SubcatchmentS8: Rooftop Disconnect Runoff Area=13,880 sf 20.54% Impervious Runoff Depth=0.27"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=51 Runoff=0.06 cfs 0.007 af

SubcatchmentS9: Rooftop Disconnect Runoff Area=20,572 sf 22.70% Impervious Runoff Depth=0.30"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=52 Runoff=0.11 cfs 0.012 af

Pond 1P: SMA#1 Peak Elev=195.51' Storage=6 cf Inflow=0.02 cfs 0.005 af
Discarded=0.02 cfs 0.005 af Primary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.005 af

Pond 2P: SMA#2 Peak Elev=198.61' Storage=42 cf Inflow=0.13 cfs 0.016 af
Discarded=0.08 cfs 0.016 af Primary=0.00 cfs 0.000 af Outflow=0.08 cfs 0.016 af

Pond 3P: SMA#3 Peak Elev=197.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 4P: SMA#4 Peak Elev=198.01' Storage=10 cf Inflow=0.13 cfs 0.015 af
Discarded=0.12 cfs 0.015 af Primary=0.00 cfs 0.000 af Outflow=0.12 cfs 0.015 af

Pond 5P: SMA#5 Peak Elev=197.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 6P: SMA#6 Peak Elev=197.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 7P: SMA#7 Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 8P: SMA#8 Peak Elev=200.02' Storage=7 cf Inflow=0.06 cfs 0.007 af
Discarded=0.04 cfs 0.007 af Primary=0.00 cfs 0.000 af Outflow=0.04 cfs 0.007 af

Pond 9P: SMA#9 Peak Elev=199.60' Storage=34 cf Inflow=0.11 cfs 0.012 af
Discarded=0.04 cfs 0.012 af Primary=0.00 cfs 0.000 af Outflow=0.04 cfs 0.012 af

Pond 10P: SMA#10 Peak Elev=199.00' Storage=2 cf Inflow=0.02 cfs 0.010 af
Discarded=0.02 cfs 0.010 af Primary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.010 af

Pond 11P: SMA#11 Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 12P: SMA#12 Peak Elev=200.01' Storage=5 cf Inflow=0.07 cfs 0.011 af
Outflow=0.07 cfs 0.011 af

Pond 13P: SMA#13 Peak Elev=198.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 14P: SMA#14 Peak Elev=200.04' Storage=19 cf Inflow=0.13 cfs 0.012 af
Discarded=0.09 cfs 0.012 af Primary=0.00 cfs 0.000 af Outflow=0.09 cfs 0.012 af

Pond 15P: SMA#15 Peak Elev=199.00' Storage=2 cf Inflow=0.02 cfs 0.008 af
Discarded=0.02 cfs 0.008 af Primary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.008 af

Pond 16P: Low Point Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.001 af
Discarded=0.00 cfs 0.001 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.001 af

Pond 17P: SMA#17 (Porous Pavement) Peak Elev=199.12' Storage=39 cf Inflow=0.47 cfs 0.066 af
Discarded=0.45 cfs 0.066 af Primary=0.00 cfs 0.000 af Outflow=0.45 cfs 0.066 af

Pond FB1: Forebay Peak Elev=197.51' Storage=1,673 cf Inflow=0.37 cfs 0.043 af
Outflow=0.02 cfs 0.005 af

Pond FB11: Forebay Peak Elev=199.35' Storage=543 cf Inflow=0.02 cfs 0.012 af
Outflow=0.00 cfs 0.000 af

Pond FB13: Forebay Peak Elev=199.31' Storage=935 cf Inflow=0.16 cfs 0.021 af
Outflow=0.00 cfs 0.000 af

Pond FB15: Forebay Peak Elev=199.75' Storage=877 cf Inflow=0.38 cfs 0.028 af
Outflow=0.02 cfs 0.008 af

Pond FB3: Forebay Peak Elev=197.81' Storage=275 cf Inflow=0.01 cfs 0.006 af
Outflow=0.00 cfs 0.000 af

Pond FB5: Forebay Peak Elev=198.35' Storage=635 cf Inflow=0.08 cfs 0.015 af
Outflow=0.00 cfs 0.000 af

Pond FB6: Forebay Peak Elev=198.49' Storage=1,276 cf Inflow=0.31 cfs 0.029 af
Outflow=0.00 cfs 0.000 af

Pond FB7: Forebay Peak Elev=199.42' Storage=1,460 cf Inflow=0.23 cfs 0.034 af
Outflow=0.00 cfs 0.000 af

Link T: Offsite Flow Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Total Runoff Area = 13.279 ac Runoff Volume = 0.339 af Average Runoff Depth = 0.31"
79.18% Pervious = 10.514 ac 20.82% Impervious = 2.765 ac

Summary for Subcatchment S1:

Runoff = 0.37 cfs @ 12.14 hrs, Volume= 0.043 af, Depth= 0.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
14,917	98	Paved parking, HSG A
41,118	39	>75% Grass cover, Good, HSG A
56,035	55	Weighted Average
41,118		73.38% Pervious Area
14,917		26.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Swale** Grass: Short n= 0.150 P2= 2.56"
1.4	60	0.0100	0.70		**Shallow Concentrated Flow, Swale** Short Grass Pasture Kv= 7.0 fps
15.9	160	Total			

Summary for Subcatchment S10: Rooftop Disconnect

Runoff = 0.02 cfs @ 12.44 hrs, Volume= 0.010 af, Depth= 0.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
4,800	98	Paved parking, HSG A
36,551	39	>75% Grass cover, Good, HSG A
41,351	46	Weighted Average
36,551		88.39% Pervious Area
4,800		11.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Swale** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S11: -

Runoff = 0.02 cfs @ 12.55 hrs, Volume= 0.012 af, Depth= 0.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
7,800	98	Paved parking, HSG A
28,271	39	>75% Grass cover, Good, HSG A
13,329	30	Woods, Good, HSG A
49,400	46	Weighted Average
41,600		84.21% Pervious Area
7,800		15.79% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S12: Rooftop Disconnect

Runoff = 0.07 cfs @ 12.06 hrs, Volume= 0.011 af, Depth= 0.24"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
4,800	98	Paved parking, HSG A
1,796	30	Woods, Good, HSG A
17,721	39	>75% Grass cover, Good, HSG A
24,317	50	Weighted Average
19,517		80.26% Pervious Area
4,800		19.74% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Swale** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S13: -

Runoff = 0.16 cfs @ 12.13 hrs, Volume= 0.021 af, Depth= 0.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
10,179	98	Paved parking, HSG A
10,818	39	>75% Grass cover, Good, HSG A
12,902	30	Woods, Good, HSG A
33,899	53	Weighted Average
23,720		69.97% Pervious Area
10,179		30.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S14: Rooftop Disconnect

Runoff = 0.13 cfs @ 12.04 hrs, Volume= 0.012 af, Depth= 0.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
4,800	98	Paved parking, HSG A
14,812	39	>75% Grass cover, Good, HSG A
19,612	53	Weighted Average
14,812		75.53% Pervious Area
4,800		24.47% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S15: -

Runoff = 0.38 cfs @ 12.09 hrs, Volume= 0.028 af, Depth= 0.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
8,575	98	Paved parking, HSG A
9,573	39	>75% Grass cover, Good, HSG A
2,000	30	Woods, Good, HSG A
20,148	63	Weighted Average
11,573		57.44% Pervious Area
8,575		42.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S16: Rooftop Disconnect

Runoff = 0.00 cfs @ 24.02 hrs, Volume= 0.001 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
2,500	98	Paved parking, HSG A
44,950	39	>75% Grass cover, Good, HSG A
35,000	30	Woods, Good, HSG A
82,450	37	Weighted Average
79,950		96.97% Pervious Area
2,500		3.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S17: Half Rooftop

Runoff = 0.46 cfs @ 11.97 hrs, Volume= 0.026 af, Depth= 3.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

	Area (sf)	CN	Description
*	3,893	98	
	3,893		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	10	0.0100	0.59		**Sheet Flow, Sheet** Smooth surfaces n= 0.011 P2= 2.56"
0.3	10	Total, Increased to minimum Tc = 6.0 min			

Summary for Subcatchment S18: Driveway

Runoff = 0.04 cfs @ 19.27 hrs, Volume= 0.040 af, Depth= 3.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

	Area (sf)	CN	Description
*	6,177	98	Driveway
	6,177		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
578.0					**Direct Entry, Direct**

Summary for Subcatchment S2: Rooftop Disconnect

Runoff = 0.13 cfs @ 12.13 hrs, Volume= 0.016 af, Depth= 0.37"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
5,880	98	Paved parking, HSG A
17,456	39	>75% Grass cover, Good, HSG A
23,336	54	Weighted Average
17,456		74.80% Pervious Area
5,880		25.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 2.56"
0.9	38	0.0100	0.70		**Shallow Concentrated Flow, Shallow** Short Grass Pasture Kv= 7.0 fps
15.4	138	Total			

Summary for Subcatchment S3: -

Runoff = 0.01 cfs @ 12.94 hrs, Volume= 0.006 af, Depth= 0.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
27,224	39	>75% Grass cover, Good, HSG A
2,837	98	Paved parking, HSG A
30,061	45	Weighted Average
27,224		90.56% Pervious Area
2,837		9.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Sheets** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S4: Rooftop Disconnect

Runoff = 0.13 cfs @ 12.06 hrs, Volume= 0.015 af, Depth= 0.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
5,670	98	Paved parking, HSG A
19,795	39	>75% Grass cover, Good, HSG A
25,465	52	Weighted Average
19,795		77.73% Pervious Area
5,670		22.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	80	0.0200	0.15		**Sheet Flow, Swale** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S5: -

Runoff = 0.08 cfs @ 12.14 hrs, Volume= 0.015 af, Depth= 0.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
5,811	98	Paved parking, HSG A
22,806	39	>75% Grass cover, Good, HSG A
28,617	51	Weighted Average
22,806		79.69% Pervious Area
5,811		20.31% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet**
					Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S6: -

Runoff = 0.31 cfs @ 12.04 hrs, Volume= 0.029 af, Depth= 0.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
11,108	98	Paved parking, HSG A
35,159	39	>75% Grass cover, Good, HSG A
46,267	53	Weighted Average
35,159		75.99% Pervious Area
11,108		24.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Sheet**
					Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S7: -

Runoff = 0.23 cfs @ 12.15 hrs, Volume= 0.034 af, Depth= 0.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
37,813	39	>75% Grass cover, Good, HSG A
13,162	98	Paved parking, HSG A
1,974	30	Woods, Good, HSG A
52,949	53	Weighted Average
39,787		75.14% Pervious Area
13,162		24.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet Flow**
					Grass: Short n= 0.150 P2= 2.56"
1.9	80	0.0100	0.70		**Shallow Concentrated Flow, Shallow**
					Short Grass Pasture Kv= 7.0 fps
16.4	180	Total			

Summary for Subcatchment S8: Rooftop Disconnect

Runoff = 0.06 cfs @ 12.05 hrs, Volume= 0.007 af, Depth= 0.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
2,851	98	Paved parking, HSG A
11,029	39	>75% Grass cover, Good, HSG A
13,880	51	Weighted Average
11,029		79.46% Pervious Area
2,851		20.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S9: Rooftop Disconnect

Runoff = 0.11 cfs @ 12.05 hrs, Volume= 0.012 af, Depth= 0.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.66"

Area (sf)	CN	Description
4,670	98	Paved parking, HSG A
15,902	39	>75% Grass cover, Good, HSG A
20,572	52	Weighted Average
15,902		77.30% Pervious Area
4,670		22.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Swale** Grass: Short n= 0.150 P2= 2.56"

Summary for Pond 1P: SMA#1

Inflow Area = 1.286 ac, 26.62% Impervious, Inflow Depth = 0.04" for 10-YEAR event
Inflow = 0.02 cfs @ 21.83 hrs, Volume= 0.005 af
Outflow = 0.02 cfs @ 22.02 hrs, Volume= 0.005 af, Atten= 0%, Lag= 11.2 min
Discarded = 0.02 cfs @ 22.02 hrs, Volume= 0.005 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Peak Elev= 195.51' @ 22.02 hrs Surf.Area= 1,216 sf Storage= 6 cf

Plug-Flow detention time= 5.2 min calculated for 0.005 af (100% of inflow)
Center-of-Mass det. time= 5.2 min (1,375.6 - 1,370.4)

Volume	Invert	Avail.Storage	Storage Description
#1	195.50'	10,537 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
195.50	1,213	222.0	0	0	1,213
196.00	1,554	232.0	690	690	1,592
197.00	2,308	258.0	1,919	2,609	2,635
198.00	3,260	319.0	2,770	5,379	5,450
199.00	7,326	668.0	5,158	10,537	32,866

Device	Routing	Invert	Outlet Devices
#1	Primary	199.17'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	195.50'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.07 cfs @ 22.02 hrs HW=195.51' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.07 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=195.50' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 2P: SMA#2

Inflow Area =	0.536 ac, 25.20% Impervious, Inflow Depth = 0.37" for 10-YEAR event				
Inflow =	0.13 cfs @	12.13 hrs,	Volume=	0.016 af	
Outflow =	0.08 cfs @	12.28 hrs,	Volume=	0.016 af,	Atten= 37%, Lag= 9.1 min
Discarded =	0.08 cfs @	12.28 hrs,	Volume=	0.016 af	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 198.61' @ 12.28 hrs Surf.Area= 416 sf Storage= 42 cf

Plug-Flow detention time= 3.3 min calculated for 0.016 af (100% of inflow)
Center-of-Mass det. time= 3.3 min (949.4 - 946.2)

Volume	Invert	Avail.Storage	Storage Description
#1	198.50'	1,590 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
198.50	352	108.0	0	0	352
199.00	682	194.0	254	254	2,420
200.00	2,122	461.0	1,336	1,590	16,341

Device	Routing	Invert	Outlet Devices
#1	Primary	199.75'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	198.50'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.08 cfs @ 12.28 hrs HW=198.61' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.08 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.50' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 3P: SMA#3

Inflow Area = 0.690 ac, 9.44% Impervious, Inflow Depth = 0.00" for 10-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 197.00' @ 0.00 hrs Surf.Area= 853 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	197.00'	2,691 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.00	853	131.0	0	0	853
198.00	1,305	161.0	1,071	1,071	1,565
199.00	1,957	227.0	1,620	2,691	3,612

Device	Routing	Invert	Outlet Devices
#1	Discarded	197.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50

Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68
2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 4P: SMA#4

Inflow Area = 0.585 ac, 22.27% Impervious, Inflow Depth = 0.30" for 10-YEAR event
Inflow = 0.13 cfs @ 12.06 hrs, Volume= 0.015 af
Outflow = 0.12 cfs @ 12.08 hrs, Volume= 0.015 af, Atten= 5%, Lag= 1.5 min
Discarded = 0.12 cfs @ 12.08 hrs, Volume= 0.015 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 198.01' @ 12.08 hrs Surf.Area= 1,187 sf Storage= 10 cf

Plug-Flow detention time= 1.4 min calculated for 0.015 af (100% of inflow)
Center-of-Mass det. time= 1.4 min (957.9 - 956.5)

Volume	Invert	Avail.Storage	Storage Description
#1	198.00'	1,465 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
198.00	1,182	138.0	0	0	1,182
199.00	1,767	212.0	1,465	1,465	3,250

Device	Routing	Invert	Outlet Devices
#1	Discarded	198.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	199.00'	**10.0' long x 3.0' breadth Overflow**
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50
			Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.12 cfs @ 12.08 hrs HW=198.01' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.12 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.00' (Free Discharge)
└**2=Overflow** (Controls 0.00 cfs)

Summary for Pond 5P: SMA#5

Inflow Area = 0.657 ac, 20.31% Impervious, Inflow Depth = 0.00" for 10-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 197.00' @ 0.00 hrs Surf.Area= 2,684 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	197.00'	6,805 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.00	2,684	227.0	0	0	2,684
198.00	3,387	254.0	3,029	3,029	3,745
199.00	4,179	274.0	3,776	6,805	4,626

Device	Routing	Invert	Outlet Devices
#1	Discarded	197.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	198.50'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 6P: SMA#6

Inflow Area = 1.062 ac, 24.01% Impervious, Inflow Depth = 0.00" for 10-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Peak Elev= 197.00' @ 0.00 hrs Surf.Area= 196 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	197.00'	1,369 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.00	196	143.0	0	0	196
198.00	668	166.0	409	409	782
199.00	1,287	195.0	961	1,369	1,635

Device	Routing	Invert	Outlet Devices
#1	Primary	199.00'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	197.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└─**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 7P: SMA#7

Inflow Area = 1.216 ac, 24.86% Impervious, Inflow Depth = 0.00" for 10-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 7,315 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	2,646 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)
#2	199.00'	5,676 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)
		8,322 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	2,268	254.0	0	0	2,268
200.00	3,042	263.0	2,646	2,646	2,720

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	5,047	422.0	0	0	5,047
200.00	6,330	432.0	5,676	5,676	5,850

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 8P: SMA#8

Inflow Area = 0.319 ac, 20.54% Impervious, Inflow Depth = 0.27" for 10-YEAR event
Inflow = 0.06 cfs @ 12.05 hrs, Volume= 0.007 af
Outflow = 0.04 cfs @ 12.12 hrs, Volume= 0.007 af, Atten= 30%, Lag= 4.1 min
Discarded = 0.04 cfs @ 12.12 hrs, Volume= 0.007 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 200.02' @ 12.12 hrs Surf.Area= 336 sf Storage= 7 cf

Plug-Flow detention time= 1.5 min calculated for 0.007 af (100% of inflow)
Center-of-Mass det. time= 1.5 min (966.3 - 964.8)

Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	688 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
200.00	324	105.0	0	0	324
201.00	1,133	279.0	688	688	5,645

Device	Routing	Invert	Outlet Devices
#1	Discarded	200.00'	**5.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#2	Primary	201.00'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.04 cfs @ 12.12 hrs HW=200.02' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.00' (Free Discharge)
└─**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 9P: SMA#9

Inflow Area =	0.472 ac,	22.70% Impervious,	Inflow Depth =	0.30"	for 10-YEAR event
Inflow =	0.11 cfs @	12.05 hrs,	Volume=	0.012 af	
Outflow =	0.04 cfs @	12.24 hrs,	Volume=	0.012 af,	Atten= 61%, Lag= 11.9 min
Discarded =	0.04 cfs @	12.24 hrs,	Volume=	0.012 af	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.60' @ 12.24 hrs Surf.Area= 368 sf Storage= 34 cf

Plug-Flow detention time= 4.1 min calculated for 0.012 af (100% of inflow)
Center-of-Mass det. time= 4.1 min (959.8 - 955.6)

Volume	Invert	Avail.Storage	Storage Description
#1	199.50'	1,270 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.50	318	186.0	0	0	318
200.00	605	196.0	227	227	637
201.00	1,555	299.0	1,043	1,270	4,701

Device	Routing	Invert	Outlet Devices
#1	Discarded	199.50'	**5.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#2	Primary	200.75'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.04 cfs @ 12.24 hrs HW=199.60' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.50' (Free Discharge)
└─**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 10P: SMA#10

Inflow Area = 0.949 ac, 11.61% Impervious, Inflow Depth = 0.13" for 10-YEAR event
Inflow = 0.02 cfs @ 12.44 hrs, Volume= 0.010 af
Outflow = 0.02 cfs @ 12.46 hrs, Volume= 0.010 af, Atten= 0%, Lag= 1.4 min
Discarded = 0.02 cfs @ 12.46 hrs, Volume= 0.010 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 12.46 hrs Surf.Area= 2,383 sf Storage= 2 cf

Plug-Flow detention time= 1.4 min calculated for 0.010 af (100% of inflow)
Center-of-Mass det. time= 1.4 min (1,029.3 - 1,028.0)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	3,399 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	2,382	462.0	0	0	2,382
200.00	4,530	641.0	3,399	3,399	18,103

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.02 cfs @ 12.46 hrs HW=199.00' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 11P: SMA#11

Inflow Area = 1.134 ac, 15.79% Impervious, Inflow Depth = 0.00" for 10-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 1,880 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	2,154 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,880	176.0	0	0	1,880
200.00	2,440	198.0	2,154	2,154	2,561

Device	Routing	Invert	Outlet Devices
#1	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 12P: SMA#12

Inflow Area = 0.558 ac, 19.74% Impervious, Inflow Depth = 0.24" for 10-YEAR event
Inflow = 0.07 cfs @ 12.06 hrs, Volume= 0.011 af
Outflow = 0.07 cfs @ 12.08 hrs, Volume= 0.011 af, Atten= 5%, Lag= 1.4 min
Discarded = 0.07 cfs @ 12.08 hrs, Volume= 0.011 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 200.01' @ 12.08 hrs Surf.Area= 583 sf Storage= 5 cf

Plug-Flow detention time= 1.3 min calculated for 0.011 af (100% of inflow)
Center-of-Mass det. time= 1.3 min (976.2 - 974.9)

Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	1,094 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
200.00	576	209.0	0	0	576
201.00	1,712	409.0	1,094	1,094	10,417

Device	Routing	Invert	Outlet Devices
#1	Discarded	200.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.07 cfs @ 12.08 hrs HW=200.01' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.07 cfs)

Summary for Pond 13P: SMA#13

Inflow Area = 0.778 ac, 30.03% Impervious, Inflow Depth = 0.00" for 10-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 198.00' @ 0.00 hrs Surf.Area= 462 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	198.00'	1,426 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
198.00	462	78.0	0	0	462
199.00	710	88.0	582	582	618
200.00	987	97.0	845	1,426	780

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	198.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.00' (Free Discharge)
└**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 14P: SMA#14

Inflow Area =	0.450 ac,	24.47% Impervious,	Inflow Depth =	0.33"	for 10-YEAR event
Inflow =	0.13 cfs @	12.04 hrs,	Volume=	0.012 af	
Outflow =	0.09 cfs @	12.11 hrs,	Volume=	0.012 af,	Atten= 30%, Lag= 3.9 min
Discarded =	0.09 cfs @	12.11 hrs,	Volume=	0.012 af	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 200.04' @ 12.11 hrs Surf.Area= 526 sf Storage= 19 cf

Plug-Flow detention time= 1.5 min calculated for 0.012 af (100% of inflow)
Center-of-Mass det. time= 1.5 min (948.7 - 947.3)

Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	1,109 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
200.00	489	166.0	0	0	489
201.00	1,880	451.0	1,109	1,109	14,486

Device	Routing	Invert	Outlet Devices
#1	Discarded	200.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	201.00'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.09 cfs @ 12.11 hrs HW=200.04' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.09 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 15P: SMA#15

Inflow Area = 0.463 ac, 42.56% Impervious, Inflow Depth = 0.22" for 10-YEAR event
Inflow = 0.02 cfs @ 16.33 hrs, Volume= 0.008 af
Outflow = 0.02 cfs @ 16.36 hrs, Volume= 0.008 af, Atten= 0%, Lag= 1.8 min
Discarded = 0.02 cfs @ 16.36 hrs, Volume= 0.008 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 16.36 hrs Surf.Area= 920 sf Storage= 2 cf

Plug-Flow detention time= 1.4 min calculated for 0.008 af (100% of inflow)
Center-of-Mass det. time= 1.4 min (1,182.7 - 1,181.2)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,312 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	919	272.0	0	0	919
200.00	1,749	281.0	1,312	1,312	1,402

Device	Routing	Invert	Outlet Devices
#1	Discarded	199.00'	**5.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#2	Primary	199.75'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.02 cfs @ 16.36 hrs HW=199.00' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 16P: Low Point

Inflow Area = 1.893 ac, 3.03% Impervious, Inflow Depth = 0.00" for 10-YEAR event
Inflow = 0.00 cfs @ 24.02 hrs, Volume= 0.001 af
Outflow = 0.00 cfs @ 24.04 hrs, Volume= 0.001 af, Atten= 0%, Lag= 1.0 min
Discarded = 0.00 cfs @ 24.04 hrs, Volume= 0.001 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 24.04 hrs Surf.Area= 6,087 sf Storage= 0 cf

Plug-Flow detention time= 1.4 min calculated for 0.001 af (100% of inflow)

Center-of-Mass det. time= 1.4 min (1,336.0 - 1,334.5)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	6,772 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	6,086	706.0	0	0	6,086
199.50	22,775	585.0	6,772	6,772	18,521

Device	Routing	Invert	Outlet Devices
#1	Primary	199.10'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 24.04 hrs HW=199.00' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 17P: SMA#17 (Porous Pavement)

Inflow Area = 0.231 ac,100.00% Impervious, Inflow Depth = 3.43" for 10-YEAR event
Inflow = 0.47 cfs @ 11.97 hrs, Volume= 0.066 af
Outflow = 0.45 cfs @ 11.99 hrs, Volume= 0.066 af, Atten= 3%, Lag= 1.2 min
Discarded = 0.45 cfs @ 11.99 hrs, Volume= 0.066 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.12' @ 11.99 hrs Surf.Area= 5,145 sf Storage= 39 cf

Plug-Flow detention time= 1.4 min calculated for 0.066 af (100% of inflow)
Center-of-Mass det. time= 1.4 min (1,081.1 - 1,079.6)

Volume	Invert	Avail.Storage	Storage Description
#1	199.10'	5,145 cf	**Custom Stage Data (Irregular)** Listed below (Recalc) 12,863 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.10	5,145	390.0	0	0	5,145
201.60	5,145	390.0	12,863	12,863	6,120

Device	Routing	Invert	Outlet Devices
#1	Discarded	199.10'	**5.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#2	Primary	201.60'	**10.0' long x 1.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32

Discarded OutFlow Max=0.60 cfs @ 11.99 hrs HW=199.12' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.60 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.10' (Free Discharge)
└─**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond FB1: Forebay

Inflow Area = 1.286 ac, 26.62% Impervious, Inflow Depth = 0.40" for 10-YEAR event
Inflow = 0.37 cfs @ 12.14 hrs, Volume= 0.043 af
Outflow = 0.02 cfs @ 21.83 hrs, Volume= 0.005 af, Atten= 95%, Lag= 581.8 min
Primary = 0.02 cfs @ 21.83 hrs, Volume= 0.005 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 197.51' @ 21.83 hrs Surf.Area= 1,202 sf Storage= 1,673 cf

Plug-Flow detention time= 645.0 min calculated for 0.005 af (11% of inflow)
Center-of-Mass det. time= 430.9 min (1,370.4 - 939.5)

Volume	Invert	Avail.Storage	Storage Description
#1	195.50'	2,318 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
195.50	506	97.0	0	0	506
196.00	658	106.0	290	290	660
197.00	1,006	125.0	826	1,116	1,028
198.00	1,410	144.0	1,202	2,318	1,456

Device	Routing	Invert	Outlet Devices
#1	Primary	197.50'	**10.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=0.01 cfs @ 21.83 hrs HW=197.51' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Weir Controls 0.01 cfs @ 0.17 fps)

Summary for Pond FB11: Forebay

Inflow Area = 1.134 ac, 15.79% Impervious, Inflow Depth = 0.13" for 10-YEAR event
Inflow = 0.02 cfs @ 12.55 hrs, Volume= 0.012 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.35' @ 24.82 hrs Surf.Area= 1,664 sf Storage= 543 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,765 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,453	209.0	0	0	1,453
200.00	2,096	219.0	1,765	1,765	1,855

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond FB13: Forebay

Inflow Area = 0.778 ac, 30.03% Impervious, Inflow Depth = 0.33" for 10-YEAR event
Inflow = 0.16 cfs @ 12.13 hrs, Volume= 0.021 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.31' @ 24.82 hrs Surf.Area= 910 sf Storage= 935 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	198.00'	1,634 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
198.00	523	93.0	0	0	523
199.00	815	102.0	664	664	693
200.00	1,135	112.0	971	1,634	894

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond FB15: Forebay

Inflow Area = 0.463 ac, 42.56% Impervious, Inflow Depth = 0.74" for 10-YEAR event
Inflow = 0.38 cfs @ 12.09 hrs, Volume= 0.028 af
Outflow = 0.02 cfs @ 16.33 hrs, Volume= 0.008 af, Atten= 95%, Lag= 254.3 min
Primary = 0.02 cfs @ 16.33 hrs, Volume= 0.008 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.75' @ 16.33 hrs Surf.Area= 1,322 sf Storage= 877 cf

Plug-Flow detention time= 455.6 min calculated for 0.008 af (30% of inflow)
Center-of-Mass det. time= 285.1 min (1,181.2 - 896.1)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,216 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,011	133.0	0	0	1,011
200.00	1,433	143.0	1,216	1,216	1,270

Device	Routing	Invert	Outlet Devices
#1	Primary	199.75'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.01 cfs @ 16.33 hrs HW=199.75' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Weir Controls 0.01 cfs @ 0.15 fps)

Summary for Pond FB3: Forebay

Inflow Area = 0.690 ac, 9.44% Impervious, Inflow Depth = 0.11" for 10-YEAR event
Inflow = 0.01 cfs @ 12.94 hrs, Volume= 0.006 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 197.81' @ 24.49 hrs Surf.Area= 437 sf Storage= 275 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	197.00'	1,018 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.00	251	70.0	0	0	251
198.00	488	88.0	363	363	491
198.50	628	98.0	278	641	646
199.00	887	124.0	377	1,018	1,109

Device	Routing	Invert	Outlet Devices
#1	Primary	198.50'	**25.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond FB5: Forebay

Inflow Area = 0.657 ac, 20.31% Impervious, Inflow Depth = 0.27" for 10-YEAR event
Inflow = 0.08 cfs @ 12.14 hrs, Volume= 0.015 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 198.35' @ 24.82 hrs Surf.Area= 906 sf Storage= 635 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	197.50'	1,314 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.50	603	113.0	0	0	603
198.00	779	122.0	345	345	781
199.00	1,174	141.0	970	1,314	1,200

Device	Routing	Invert	Outlet Devices
#1	Primary	198.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.50' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond FB6: Forebay

Inflow Area = 1.062 ac, 24.01% Impervious, Inflow Depth = 0.33" for 10-YEAR event
Inflow = 0.31 cfs @ 12.04 hrs, Volume= 0.029 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 198.49' @ 24.49 hrs Surf.Area= 1,151 sf Storage= 1,276 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	197.00'	1,957 cf	**Custom Stage Data (Irregular)** Listed below

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.00	588	113.0	0	0	588
198.00	954	131.0	764	764	958
198.50	1,157	141.0	527	1,291	1,185
199.00	1,515	192.0	666	1,957	2,539

Device	Routing	Invert	Outlet Devices
#1	Primary	198.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond FB7: Forebay

Inflow Area = 1.216 ac, 24.86% Impervious, Inflow Depth = 0.33" for 10-YEAR event
Inflow = 0.23 cfs @ 12.15 hrs, Volume= 0.034 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.42' @ 24.94 hrs Surf.Area= 3,705 sf Storage= 1,460 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	3,810 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	3,195	410.0	0	0	3,195
200.00	4,461	434.0	3,810	3,810	4,861

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Link T: Offsite Flow

Inflow Area = 13.279 ac, 20.82% Impervious, Inflow Depth = 0.00" for 10-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Time span=0.00-200.00 hrs, dt=0.01 hrs, 20001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentS1: Runoff Area=56,035 sf 26.62% Impervious Runoff Depth=1.59"
Flow Length=160' Slope=0.0100 '/' Tc=15.9 min CN=55 Runoff=2.36 cfs 0.171 af

SubcatchmentS10: Rooftop Disconnect Runoff Area=41,351 sf 11.61% Impervious Runoff Depth=0.92"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=46 Runoff=1.14 cfs 0.073 af

SubcatchmentS11: - Runoff Area=49,400 sf 15.79% Impervious Runoff Depth=0.92"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=46 Runoff=1.01 cfs 0.087 af

SubcatchmentS12: Rooftop Disconnect Runoff Area=24,317 sf 19.74% Impervious Runoff Depth=1.21"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=50 Runoff=0.99 cfs 0.056 af

SubcatchmentS13: - Runoff Area=33,899 sf 30.03% Impervious Runoff Depth=1.44"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=53 Runoff=1.31 cfs 0.093 af

SubcatchmentS14: Rooftop Disconnect Runoff Area=19,612 sf 24.47% Impervious Runoff Depth=1.44"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=53 Runoff=0.99 cfs 0.054 af

SubcatchmentS15: - Runoff Area=20,148 sf 42.56% Impervious Runoff Depth=2.27"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=63 Runoff=1.36 cfs 0.087 af

SubcatchmentS16: Rooftop Disconnect Runoff Area=82,450 sf 3.03% Impervious Runoff Depth=0.38"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=37 Runoff=0.25 cfs 0.059 af

SubcatchmentS17: Half Rooftop Runoff Area=3,893 sf 100.00% Impervious Runoff Depth=5.89"
Flow Length=10' Slope=0.0100 '/' Tc=6.0 min CN=98 Runoff=0.78 cfs 0.044 af

SubcatchmentS18: Driveway Runoff Area=6,177 sf 100.00% Impervious Runoff Depth=5.89"
Tc=578.0 min CN=98 Runoff=0.07 cfs 0.070 af

SubcatchmentS2: Rooftop Disconnect Runoff Area=23,336 sf 25.20% Impervious Runoff Depth=1.51"
Flow Length=138' Slope=0.0100 '/' Tc=15.4 min CN=54 Runoff=0.94 cfs 0.068 af

SubcatchmentS3: - Runoff Area=30,061 sf 9.44% Impervious Runoff Depth=0.85"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=45 Runoff=0.74 cfs 0.049 af

SubcatchmentS4: Rooftop Disconnect Runoff Area=25,465 sf 22.27% Impervious Runoff Depth=1.36"
Flow Length=80' Slope=0.0200 '/' Tc=9.2 min CN=52 Runoff=1.15 cfs 0.066 af

SubcatchmentS5: - Runoff Area=28,617 sf 20.31% Impervious Runoff Depth=1.28"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=51 Runoff=0.95 cfs 0.070 af

SubcatchmentS6: - Runoff Area=46,267 sf 24.01% Impervious Runoff Depth=1.44"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=53 Runoff=2.33 cfs 0.127 af

SubcatchmentS7: - Runoff Area=52,949 sf 24.86% Impervious Runoff Depth=1.44"
Flow Length=180' Slope=0.0100 '/' Tc=16.4 min CN=53 Runoff=1.91 cfs 0.145 af

SubcatchmentS8: Rooftop Disconnect Runoff Area=13,880 sf 20.54% Impervious Runoff Depth=1.28"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=51 Runoff=0.61 cfs 0.034 af

SubcatchmentS9: Rooftop Disconnect Runoff Area=20,572 sf 22.70% Impervious Runoff Depth=1.36"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=52 Runoff=0.97 cfs 0.053 af

Pond 1P: SMA#1 Peak Elev=196.42' Storage=1,408 cf Inflow=1.61 cfs 0.133 af
Discarded=0.23 cfs 0.133 af Primary=0.00 cfs 0.000 af Outflow=0.23 cfs 0.133 af

Pond 2P: SMA#2 Peak Elev=199.25' Storage=463 cf Inflow=0.94 cfs 0.068 af
Discarded=0.57 cfs 0.068 af Primary=0.00 cfs 0.000 af Outflow=0.57 cfs 0.068 af

Pond 3P: SMA#3 Peak Elev=197.03' Storage=30 cf Inflow=0.13 cfs 0.034 af
Discarded=0.10 cfs 0.034 af Primary=0.00 cfs 0.000 af Outflow=0.10 cfs 0.034 af

Pond 4P: SMA#4 Peak Elev=198.51' Storage=679 cf Inflow=1.15 cfs 0.066 af
Discarded=0.25 cfs 0.066 af Primary=0.00 cfs 0.000 af Outflow=0.25 cfs 0.066 af

Pond 5P: SMA#5 Peak Elev=197.03' Storage=70 cf Inflow=0.42 cfs 0.052 af
Discarded=0.31 cfs 0.052 af Primary=0.00 cfs 0.000 af Outflow=0.31 cfs 0.052 af

Pond 6P: SMA#6 Peak Elev=198.70' Storage=1,019 cf Inflow=1.21 cfs 0.097 af
Discarded=0.16 cfs 0.097 af Primary=0.00 cfs 0.000 af Outflow=0.16 cfs 0.097 af

Pond 7P: SMA#7 Peak Elev=199.01' Storage=50 cf Inflow=0.58 cfs 0.105 af
Discarded=0.58 cfs 0.105 af Primary=0.00 cfs 0.000 af Outflow=0.58 cfs 0.105 af

Pond 8P: SMA#8 Peak Elev=200.70' Storage=396 cf Inflow=0.61 cfs 0.034 af
Discarded=0.10 cfs 0.034 af Primary=0.00 cfs 0.000 af Outflow=0.10 cfs 0.034 af

Pond 9P: SMA#9 Peak Elev=200.57' Storage=706 cf Inflow=0.97 cfs 0.053 af
Discarded=0.13 cfs 0.053 af Primary=0.00 cfs 0.000 af Outflow=0.13 cfs 0.053 af

Pond 10P: SMA#10 Peak Elev=199.15' Storage=366 cf Inflow=1.14 cfs 0.073 af
Discarded=0.50 cfs 0.073 af Primary=0.00 cfs 0.000 af Outflow=0.50 cfs 0.073 af

Pond 11P: SMA#11 Peak Elev=199.08' Storage=157 cf Inflow=0.42 cfs 0.069 af
Discarded=0.22 cfs 0.069 af Primary=0.00 cfs 0.000 af Outflow=0.22 cfs 0.069 af

Pond 12P: SMA#12 Peak Elev=200.46' Storage=360 cf Inflow=0.99 cfs 0.056 af
Outflow=0.50 cfs 0.056 af

Pond 13P: SMA#13 Peak Elev=199.31' Storage=817 cf Inflow=0.59 cfs 0.068 af
Discarded=0.08 cfs 0.068 af Primary=0.00 cfs 0.000 af Outflow=0.08 cfs 0.068 af

Pond 14P: SMA#14 Peak Elev=200.45' Storage=326 cf Inflow=0.99 cfs 0.054 af
Discarded=0.60 cfs 0.054 af Primary=0.00 cfs 0.000 af Outflow=0.60 cfs 0.054 af

Pond 15P: SMA#15 Peak Elev=199.66' Storage=765 cf Inflow=1.17 cfs 0.067 af
Discarded=0.17 cfs 0.067 af Primary=0.00 cfs 0.000 af Outflow=0.17 cfs 0.067 af

Pond 16P: Low Point Peak Elev=199.00' Storage=20 cf Inflow=0.25 cfs 0.059 af
Discarded=0.24 cfs 0.059 af Primary=0.00 cfs 0.000 af Outflow=0.24 cfs 0.059 af

Pond 17P: SMA#17 (Porous Pavement) Peak Elev=199.15' Storage=105 cf Inflow=0.79 cfs 0.114 af
Discarded=0.60 cfs 0.114 af Primary=0.00 cfs 0.000 af Outflow=0.60 cfs 0.114 af

Pond FB1: Forebay Peak Elev=197.67' Storage=1,872 cf Inflow=2.36 cfs 0.171 af
Outflow=1.61 cfs 0.133 af

Pond FB11: Forebay Peak Elev=199.54' Storage=876 cf Inflow=1.01 cfs 0.087 af
Outflow=0.42 cfs 0.069 af

Pond FB13: Forebay Peak Elev=199.58' Storage=1,191 cf Inflow=1.31 cfs 0.093 af
Outflow=0.59 cfs 0.068 af

Pond FB15: Forebay Peak Elev=199.83' Storage=983 cf Inflow=1.36 cfs 0.087 af
Outflow=1.17 cfs 0.067 af

Pond FB3: Forebay Peak Elev=198.52' Storage=651 cf Inflow=0.74 cfs 0.049 af
Outflow=0.13 cfs 0.034 af

Pond FB5: Forebay Peak Elev=198.57' Storage=845 cf Inflow=0.95 cfs 0.070 af
Outflow=0.42 cfs 0.052 af

Pond FB6: Forebay Peak Elev=198.63' Storage=1,470 cf Inflow=2.33 cfs 0.127 af
Outflow=1.21 cfs 0.097 af

Pond FB7: Forebay Peak Elev=199.58' Storage=2,067 cf Inflow=1.91 cfs 0.145 af
Outflow=0.58 cfs 0.105 af

Link T: Offsite Flow Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Total Runoff Area = 13.279 ac Runoff Volume = 1.407 af Average Runoff Depth = 1.27"
79.18% Pervious = 10.514 ac 20.82% Impervious = 2.765 ac

Summary for Subcatchment S1:

Runoff = 2.36 cfs @ 12.10 hrs, Volume= 0.171 af, Depth= 1.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
14,917	98	Paved parking, HSG A
41,118	39	>75% Grass cover, Good, HSG A
56,035	55	Weighted Average
41,118		73.38% Pervious Area
14,917		26.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Swale** Grass: Short n= 0.150 P2= 2.56"
1.4	60	0.0100	0.70		**Shallow Concentrated Flow, Swale** Short Grass Pasture Kv= 7.0 fps
15.9	160	Total			

Summary for Subcatchment S10: Rooftop Disconnect

Runoff = 1.14 cfs @ 12.02 hrs, Volume= 0.073 af, Depth= 0.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
4,800	98	Paved parking, HSG A
36,551	39	>75% Grass cover, Good, HSG A
41,351	46	Weighted Average
36,551		88.39% Pervious Area
4,800		11.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Swale** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S11: -

Runoff = 1.01 cfs @ 12.10 hrs, Volume= 0.087 af, Depth= 0.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
7,800	98	Paved parking, HSG A
28,271	39	>75% Grass cover, Good, HSG A
13,329	30	Woods, Good, HSG A
49,400	46	Weighted Average
41,600		84.21% Pervious Area
7,800		15.79% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S12: Rooftop Disconnect

Runoff = 0.99 cfs @ 12.02 hrs, Volume= 0.056 af, Depth= 1.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
4,800	98	Paved parking, HSG A
1,796	30	Woods, Good, HSG A
17,721	39	>75% Grass cover, Good, HSG A
24,317	50	Weighted Average
19,517		80.26% Pervious Area
4,800		19.74% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Swale** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S13: -

Runoff = 1.31 cfs @ 12.08 hrs, Volume= 0.093 af, Depth= 1.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
10,179	98	Paved parking, HSG A
10,818	39	>75% Grass cover, Good, HSG A
12,902	30	Woods, Good, HSG A
33,899	53	Weighted Average
23,720		69.97% Pervious Area
10,179		30.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S14: Rooftop Disconnect

Runoff = 0.99 cfs @ 12.01 hrs, Volume= 0.054 af, Depth= 1.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
4,800	98	Paved parking, HSG A
14,812	39	>75% Grass cover, Good, HSG A
19,612	53	Weighted Average
14,812		75.53% Pervious Area
4,800		24.47% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S15: -

Runoff = 1.36 cfs @ 12.07 hrs, Volume= 0.087 af, Depth= 2.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
8,575	98	Paved parking, HSG A
9,573	39	>75% Grass cover, Good, HSG A
2,000	30	Woods, Good, HSG A
20,148	63	Weighted Average
11,573		57.44% Pervious Area
8,575		42.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S16: Rooftop Disconnect

Runoff = 0.25 cfs @ 12.16 hrs, Volume= 0.059 af, Depth= 0.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
2,500	98	Paved parking, HSG A
44,950	39	>75% Grass cover, Good, HSG A
35,000	30	Woods, Good, HSG A
82,450	37	Weighted Average
79,950		96.97% Pervious Area
2,500		3.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S17: Half Rooftop

Runoff = 0.78 cfs @ 11.97 hrs, Volume= 0.044 af, Depth= 5.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

	Area (sf)	CN	Description
*	3,893	98	
	3,893		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	10	0.0100	0.59		**Sheet Flow, Sheet** Smooth surfaces n= 0.011 P2= 2.56"
0.3	10	Total, Increased to minimum Tc = 6.0 min			

Summary for Subcatchment S18: Driveway

Runoff = 0.07 cfs @ 19.27 hrs, Volume= 0.070 af, Depth= 5.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

	Area (sf)	CN	Description
*	6,177	98	Driveway
	6,177		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
578.0					**Direct Entry, Direct**

Summary for Subcatchment S2: Rooftop Disconnect

Runoff = 0.94 cfs @ 12.10 hrs, Volume= 0.068 af, Depth= 1.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
5,880	98	Paved parking, HSG A
17,456	39	>75% Grass cover, Good, HSG A
23,336	54	Weighted Average
17,456		74.80% Pervious Area
5,880		25.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 2.56"
0.9	38	0.0100	0.70		**Shallow Concentrated Flow, Shallow** Short Grass Pasture Kv= 7.0 fps
15.4	138	Total			

Summary for Subcatchment S3: -

Runoff = 0.74 cfs @ 12.02 hrs, Volume= 0.049 af, Depth= 0.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
27,224	39	>75% Grass cover, Good, HSG A
2,837	98	Paved parking, HSG A
30,061	45	Weighted Average
27,224		90.56% Pervious Area
2,837		9.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Sheets** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S4: Rooftop Disconnect

Runoff = 1.15 cfs @ 12.02 hrs, Volume= 0.066 af, Depth= 1.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
5,670	98	Paved parking, HSG A
19,795	39	>75% Grass cover, Good, HSG A
25,465	52	Weighted Average
19,795		77.73% Pervious Area
5,670		22.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	80	0.0200	0.15		**Sheet Flow, Swale** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S5: -

Runoff = 0.95 cfs @ 12.09 hrs, Volume= 0.070 af, Depth= 1.28"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
5,811	98	Paved parking, HSG A
22,806	39	>75% Grass cover, Good, HSG A
28,617	51	Weighted Average
22,806		79.69% Pervious Area
5,811		20.31% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S6: -

Runoff = 2.33 cfs @ 12.01 hrs, Volume= 0.127 af, Depth= 1.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
11,108	98	Paved parking, HSG A
35,159	39	>75% Grass cover, Good, HSG A
46,267	53	Weighted Average
35,159		75.99% Pervious Area
11,108		24.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S7: -

Runoff = 1.91 cfs @ 12.11 hrs, Volume= 0.145 af, Depth= 1.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
37,813	39	>75% Grass cover, Good, HSG A
13,162	98	Paved parking, HSG A
1,974	30	Woods, Good, HSG A
52,949	53	Weighted Average
39,787		75.14% Pervious Area
13,162		24.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 2.56"
1.9	80	0.0100	0.70		**Shallow Concentrated Flow, Shallow** Short Grass Pasture Kv= 7.0 fps
16.4	180	Total			

Summary for Subcatchment S8: Rooftop Disconnect

Runoff = 0.61 cfs @ 12.01 hrs, Volume= 0.034 af, Depth= 1.28"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
2,851	98	Paved parking, HSG A
11,029	39	>75% Grass cover, Good, HSG A
13,880	51	Weighted Average
11,029		79.46% Pervious Area
2,851		20.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S9: Rooftop Disconnect

Runoff = 0.97 cfs @ 12.01 hrs, Volume= 0.053 af, Depth= 1.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=6.13"

Area (sf)	CN	Description
4,670	98	Paved parking, HSG A
15,902	39	>75% Grass cover, Good, HSG A
20,572	52	Weighted Average
15,902		77.30% Pervious Area
4,670		22.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Swale** Grass: Short n= 0.150 P2= 2.56"

Summary for Pond 1P: SMA#1

Inflow Area = 1.286 ac, 26.62% Impervious, Inflow Depth = 1.24" for 100-YEAR event
Inflow = 1.61 cfs @ 12.21 hrs, Volume= 0.133 af
Outflow = 0.23 cfs @ 13.30 hrs, Volume= 0.133 af, Atten= 86%, Lag= 65.0 min
Discarded = 0.23 cfs @ 13.30 hrs, Volume= 0.133 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Peak Elev= 196.42' @ 13.30 hrs Surf.Area= 1,854 sf Storage= 1,408 cf

Plug-Flow detention time= 56.8 min calculated for 0.133 af (100% of inflow)
Center-of-Mass det. time= 56.8 min (988.7 - 931.9)

Volume	Invert	Avail.Storage	Storage Description
#1	195.50'	10,537 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
195.50	1,213	222.0	0	0	1,213
196.00	1,554	232.0	690	690	1,592
197.00	2,308	258.0	1,919	2,609	2,635
198.00	3,260	319.0	2,770	5,379	5,450
199.00	7,326	668.0	5,158	10,537	32,866

Device	Routing	Invert	Outlet Devices
#1	Primary	199.17'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	195.50'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.23 cfs @ 13.30 hrs HW=196.42' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.23 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=195.50' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 2P: SMA#2

Inflow Area =	0.536 ac, 25.20% Impervious, Inflow Depth = 1.51" for 100-YEAR event				
Inflow =	0.94 cfs @	12.10 hrs,	Volume=	0.068 af	
Outflow =	0.57 cfs @	12.23 hrs,	Volume=	0.068 af,	Atten= 40%, Lag= 8.0 min
Discarded =	0.57 cfs @	12.23 hrs,	Volume=	0.068 af	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.25' @ 12.23 hrs Surf.Area= 973 sf Storage= 463 cf

Plug-Flow detention time= 8.9 min calculated for 0.068 af (100% of inflow)
Center-of-Mass det. time= 8.9 min (893.1 - 884.2)

Volume	Invert	Avail.Storage	Storage Description
#1	198.50'	1,590 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
198.50	352	108.0	0	0	352
199.00	682	194.0	254	254	2,420
200.00	2,122	461.0	1,336	1,590	16,341

Device	Routing	Invert	Outlet Devices
#1	Primary	199.75'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	198.50'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.57 cfs @ 12.23 hrs HW=199.25' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.57 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.50' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 3P: SMA#3

Inflow Area = 0.690 ac, 9.44% Impervious, Inflow Depth = 0.60" for 100-YEAR event
Inflow = 0.13 cfs @ 12.47 hrs, Volume= 0.034 af
Outflow = 0.10 cfs @ 12.67 hrs, Volume= 0.034 af, Atten= 24%, Lag= 12.1 min
Discarded = 0.10 cfs @ 12.67 hrs, Volume= 0.034 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 197.03' @ 12.67 hrs Surf.Area= 867 sf Storage= 30 cf

Plug-Flow detention time= 3.7 min calculated for 0.034 af (100% of inflow)
Center-of-Mass det. time= 3.7 min (1,001.3 - 997.7)

Volume	Invert	Avail.Storage	Storage Description
#1	197.00'	2,691 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.00	853	131.0	0	0	853
198.00	1,305	161.0	1,071	1,071	1,565
199.00	1,957	227.0	1,620	2,691	3,612

Device	Routing	Invert	Outlet Devices
#1	Discarded	197.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50

Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68
2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.10 cfs @ 12.67 hrs HW=197.03' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.10 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└─**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 4P: SMA#4

Inflow Area = 0.585 ac, 22.27% Impervious, Inflow Depth = 1.36" for 100-YEAR event
Inflow = 1.15 cfs @ 12.02 hrs, Volume= 0.066 af
Outflow = 0.25 cfs @ 12.29 hrs, Volume= 0.066 af, Atten= 79%, Lag= 16.1 min
Discarded = 0.25 cfs @ 12.29 hrs, Volume= 0.066 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 198.51' @ 12.29 hrs Surf.Area= 1,468 sf Storage= 679 cf

Plug-Flow detention time= 19.1 min calculated for 0.066 af (100% of inflow)
Center-of-Mass det. time= 19.1 min (904.4 - 885.3)

Volume	Invert	Avail.Storage	Storage Description
#1	198.00'	1,465 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
198.00	1,182	138.0	0	0	1,182
199.00	1,767	212.0	1,465	1,465	3,250

Device	Routing	Invert	Outlet Devices
#1	Discarded	198.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	199.00'	**10.0' long x 3.0' breadth Overflow**
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50
			Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.25 cfs @ 12.29 hrs HW=198.51' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.25 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.00' (Free Discharge)
└─**2=Overflow** (Controls 0.00 cfs)

Summary for Pond 5P: SMA#5

Inflow Area = 0.657 ac, 20.31% Impervious, Inflow Depth = 0.95" for 100-YEAR event
Inflow = 0.42 cfs @ 12.28 hrs, Volume= 0.052 af
Outflow = 0.31 cfs @ 12.39 hrs, Volume= 0.052 af, Atten= 25%, Lag= 6.5 min
Discarded = 0.31 cfs @ 12.39 hrs, Volume= 0.052 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 197.03' @ 12.39 hrs Surf.Area= 2,701 sf Storage= 70 cf

Plug-Flow detention time= 2.9 min calculated for 0.052 af (100% of inflow)
Center-of-Mass det. time= 2.9 min (959.6 - 956.7)

Volume	Invert	Avail.Storage	Storage Description
#1	197.00'	6,805 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.00	2,684	227.0	0	0	2,684
198.00	3,387	254.0	3,029	3,029	3,745
199.00	4,179	274.0	3,776	6,805	4,626

Device	Routing	Invert	Outlet Devices
#1	Discarded	197.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	198.50'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.31 cfs @ 12.39 hrs HW=197.03' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.31 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 6P: SMA#6

Inflow Area = 1.062 ac, 24.01% Impervious, Inflow Depth = 1.10" for 100-YEAR event
Inflow = 1.21 cfs @ 12.11 hrs, Volume= 0.097 af
Outflow = 0.16 cfs @ 13.43 hrs, Volume= 0.097 af, Atten= 87%, Lag= 79.4 min
Discarded = 0.16 cfs @ 13.43 hrs, Volume= 0.097 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Peak Elev= 198.70' @ 13.43 hrs Surf.Area= 1,083 sf Storage= 1,019 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 80.4 min (1,016.2 - 935.8)

Volume	Invert	Avail.Storage	Storage Description
#1	197.00'	1,369 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.00	196	143.0	0	0	196
198.00	668	166.0	409	409	782
199.00	1,287	195.0	961	1,369	1,635

Device	Routing	Invert	Outlet Devices
#1	Primary	199.00'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	197.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.16 cfs @ 13.43 hrs HW=198.70' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.16 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 7P: SMA#7

Inflow Area = 1.216 ac, 24.86% Impervious, Inflow Depth = 1.04" for 100-YEAR event
Inflow = 0.58 cfs @ 12.43 hrs, Volume= 0.105 af
Outflow = 0.58 cfs @ 12.46 hrs, Volume= 0.105 af, Atten= 1%, Lag= 1.7 min
Discarded = 0.58 cfs @ 12.46 hrs, Volume= 0.105 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.01' @ 12.46 hrs Surf.Area= 7,328 sf Storage= 50 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 1.4 min (967.5 - 966.0)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	2,646 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)
#2	199.00'	5,676 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)
		8,322 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	2,268	254.0	0	0	2,268
200.00	3,042	263.0	2,646	2,646	2,720

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	5,047	422.0	0	0	5,047
200.00	6,330	432.0	5,676	5,676	5,850

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.58 cfs @ 12.46 hrs HW=199.01' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.58 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 8P: SMA#8

Inflow Area = 0.319 ac, 20.54% Impervious, Inflow Depth = 1.28" for 100-YEAR event
Inflow = 0.61 cfs @ 12.01 hrs, Volume= 0.034 af
Outflow = 0.10 cfs @ 12.41 hrs, Volume= 0.034 af, Atten= 84%, Lag= 23.9 min
Discarded = 0.10 cfs @ 12.41 hrs, Volume= 0.034 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 200.70' @ 12.41 hrs Surf.Area= 842 sf Storage= 396 cf

Plug-Flow detention time= 33.7 min calculated for 0.034 af (100% of inflow)
Center-of-Mass det. time= 33.7 min (921.8 - 888.1)

Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	688 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
200.00	324	105.0	0	0	324
201.00	1,133	279.0	688	688	5,645

Device	Routing	Invert	Outlet Devices
#1	Discarded	200.00'	**5.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#2	Primary	201.00'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.10 cfs @ 12.41 hrs HW=200.70' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.10 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.00' (Free Discharge)
└─**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 9P: SMA#9

Inflow Area =	0.472 ac,	22.70% Impervious,	Inflow Depth =	1.36"	for 100-YEAR event
Inflow =	0.97 cfs @	12.01 hrs,	Volume=	0.053 af	
Outflow =	0.13 cfs @	12.52 hrs,	Volume=	0.053 af,	Atten= 87%, Lag= 30.5 min
Discarded =	0.13 cfs @	12.52 hrs,	Volume=	0.053 af	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 200.57' @ 12.52 hrs Surf.Area= 1,095 sf Storage= 706 cf

Plug-Flow detention time= 54.6 min calculated for 0.053 af (100% of inflow)
Center-of-Mass det. time= 54.6 min (939.1 - 884.4)

Volume	Invert	Avail.Storage	Storage Description
#1	199.50'	1,270 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.50	318	186.0	0	0	318
200.00	605	196.0	227	227	637
201.00	1,555	299.0	1,043	1,270	4,701

Device	Routing	Invert	Outlet Devices
#1	Discarded	199.50'	**5.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#2	Primary	200.75'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.13 cfs @ 12.52 hrs HW=200.57' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.13 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.50' (Free Discharge)
└─**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 10P: SMA#10

Inflow Area =	0.949 ac, 11.61% Impervious, Inflow Depth = 0.92" for 100-YEAR event				
Inflow =	1.14 cfs @	12.02 hrs,	Volume=	0.073 af	
Outflow =	0.50 cfs @	12.14 hrs,	Volume=	0.073 af,	Atten= 56%, Lag= 7.0 min
Discarded =	0.50 cfs @	12.14 hrs,	Volume=	0.073 af	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.15' @ 12.14 hrs Surf.Area= 2,652 sf Storage= 366 cf

Plug-Flow detention time= 3.9 min calculated for 0.073 af (100% of inflow)
Center-of-Mass det. time= 3.9 min (913.8 - 909.9)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	3,399 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	2,382	462.0	0	0	2,382
200.00	4,530	641.0	3,399	3,399	18,103

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.50 cfs @ 12.14 hrs HW=199.15' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.50 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 11P: SMA#11

Inflow Area = 1.134 ac, 15.79% Impervious, Inflow Depth = 0.73" for 100-YEAR event
Inflow = 0.42 cfs @ 12.32 hrs, Volume= 0.069 af
Outflow = 0.22 cfs @ 12.66 hrs, Volume= 0.069 af, Atten= 47%, Lag= 20.2 min
Discarded = 0.22 cfs @ 12.66 hrs, Volume= 0.069 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.08' @ 12.66 hrs Surf.Area= 1,924 sf Storage= 157 cf

Plug-Flow detention time= 3.3 min calculated for 0.069 af (100% of inflow)
Center-of-Mass det. time= 3.3 min (974.8 - 971.5)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	2,154 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,880	176.0	0	0	1,880
200.00	2,440	198.0	2,154	2,154	2,561

Device	Routing	Invert	Outlet Devices
#1	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.22 cfs @ 12.66 hrs HW=199.08' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.22 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 12P: SMA#12

Inflow Area = 0.558 ac, 19.74% Impervious, Inflow Depth = 1.21" for 100-YEAR event
Inflow = 0.99 cfs @ 12.02 hrs, Volume= 0.056 af
Outflow = 0.50 cfs @ 12.12 hrs, Volume= 0.056 af, Atten= 50%, Lag= 6.0 min
Discarded = 0.50 cfs @ 12.12 hrs, Volume= 0.056 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 200.46' @ 12.12 hrs Surf.Area= 1,020 sf Storage= 360 cf

Plug-Flow detention time= 5.4 min calculated for 0.056 af (100% of inflow)
Center-of-Mass det. time= 5.4 min (897.3 - 892.0)

Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	1,094 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
200.00	576	209.0	0	0	576
201.00	1,712	409.0	1,094	1,094	10,417

Device	Routing	Invert	Outlet Devices
#1	Discarded	200.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.50 cfs @ 12.12 hrs HW=200.46' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.50 cfs)

Summary for Pond 13P: SMA#13

Inflow Area = 0.778 ac, 30.03% Impervious, Inflow Depth = 1.04" for 100-YEAR event
Inflow = 0.59 cfs @ 12.27 hrs, Volume= 0.068 af
Outflow = 0.08 cfs @ 14.71 hrs, Volume= 0.068 af, Atten= 87%, Lag= 146.2 min
Discarded = 0.08 cfs @ 14.71 hrs, Volume= 0.068 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.31' @ 14.71 hrs Surf.Area= 792 sf Storage= 817 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 119.9 min (1,072.2 - 952.3)

Volume	Invert	Avail.Storage	Storage Description
#1	198.00'	1,426 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
198.00	462	78.0	0	0	462
199.00	710	88.0	582	582	618
200.00	987	97.0	845	1,426	780

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	198.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.08 cfs @ 14.71 hrs HW=199.31' (Free Discharge)
└─**2=Exfiltration** (Exfiltration Controls 0.08 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 14P: SMA#14

Inflow Area =	0.450 ac, 24.47% Impervious, Inflow Depth = 1.44" for 100-YEAR event				
Inflow =	0.99 cfs @	12.01 hrs,	Volume=	0.054 af	
Outflow =	0.60 cfs @	12.10 hrs,	Volume=	0.054 af,	Atten= 40%, Lag= 5.0 min
Discarded =	0.60 cfs @	12.10 hrs,	Volume=	0.054 af	
Primary =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 200.45' @ 12.10 hrs Surf.Area= 999 sf Storage= 326 cf

Plug-Flow detention time= 4.5 min calculated for 0.054 af (100% of inflow)
Center-of-Mass det. time= 4.5 min (885.4 - 881.0)

Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	1,109 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
200.00	489	166.0	0	0	489
201.00	1,880	451.0	1,109	1,109	14,486

Device	Routing	Invert	Outlet Devices
#1	Discarded	200.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	201.00'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.60 cfs @ 12.10 hrs HW=200.45' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.60 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.00' (Free Discharge)
└─**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 15P: SMA#15

Inflow Area = 0.463 ac, 42.56% Impervious, Inflow Depth = 1.75" for 100-YEAR event
Inflow = 1.17 cfs @ 12.14 hrs, Volume= 0.067 af
Outflow = 0.17 cfs @ 12.74 hrs, Volume= 0.067 af, Atten= 86%, Lag= 36.0 min
Discarded = 0.17 cfs @ 12.74 hrs, Volume= 0.067 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.66' @ 12.74 hrs Surf.Area= 1,434 sf Storage= 765 cf

Plug-Flow detention time= 36.7 min calculated for 0.067 af (100% of inflow)
Center-of-Mass det. time= 36.7 min (941.2 - 904.5)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,312 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	919	272.0	0	0	919
200.00	1,749	281.0	1,312	1,312	1,402

Device	Routing	Invert	Outlet Devices
#1	Discarded	199.00'	**5.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#2	Primary	199.75'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.17 cfs @ 12.74 hrs HW=199.66' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.17 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 16P: Low Point

Inflow Area = 1.893 ac, 3.03% Impervious, Inflow Depth = 0.38" for 100-YEAR event
Inflow = 0.25 cfs @ 12.16 hrs, Volume= 0.059 af
Outflow = 0.24 cfs @ 12.19 hrs, Volume= 0.059 af, Atten= 2%, Lag= 1.6 min
Discarded = 0.24 cfs @ 12.19 hrs, Volume= 0.059 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 12.19 hrs Surf.Area= 6,162 sf Storage= 20 cf

Plug-Flow detention time= 1.4 min calculated for 0.059 af (100% of inflow)

Center-of-Mass det. time= 1.4 min (986.5 - 985.1)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	6,772 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	6,086	706.0	0	0	6,086
199.50	22,775	585.0	6,772	6,772	18,521

Device	Routing	Invert	Outlet Devices
#1	Primary	199.10'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.24 cfs @ 12.19 hrs HW=199.00' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.24 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 17P: SMA#17 (Porous Pavement)

Inflow Area = 0.231 ac,100.00% Impervious, Inflow Depth = 5.89" for 100-YEAR event
Inflow = 0.79 cfs @ 11.97 hrs, Volume= 0.114 af
Outflow = 0.60 cfs @ 11.92 hrs, Volume= 0.114 af, Atten= 25%, Lag= 0.0 min
Discarded = 0.60 cfs @ 11.92 hrs, Volume= 0.114 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.15' @ 12.02 hrs Surf.Area= 5,145 sf Storage= 105 cf

Plug-Flow detention time= 1.5 min calculated for 0.113 af (100% of inflow)
Center-of-Mass det. time= 1.5 min (1,072.0 - 1,070.5)

Volume	Invert	Avail.Storage	Storage Description
#1	199.10'	5,145 cf	**Custom Stage Data (Irregular)** Listed below (Recalc) 12,863 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.10	5,145	390.0	0	0	5,145
201.60	5,145	390.0	12,863	12,863	6,120

Device	Routing	Invert	Outlet Devices
#1	Discarded	199.10'	**5.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#2	Primary	201.60'	**10.0' long x 1.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32

Discarded OutFlow Max=0.60 cfs @ 11.92 hrs HW=199.13' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.60 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.10' (Free Discharge)
└─**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond FB1: Forebay

Inflow Area = 1.286 ac, 26.62% Impervious, Inflow Depth = 1.59" for 100-YEAR event
Inflow = 2.36 cfs @ 12.10 hrs, Volume= 0.171 af
Outflow = 1.61 cfs @ 12.21 hrs, Volume= 0.133 af, Atten= 32%, Lag= 7.0 min
Primary = 1.61 cfs @ 12.21 hrs, Volume= 0.133 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 197.67' @ 12.21 hrs Surf.Area= 1,268 sf Storage= 1,872 cf

Plug-Flow detention time= 146.6 min calculated for 0.133 af (78% of inflow)
Center-of-Mass det. time= 50.3 min (931.9 - 881.5)

Volume	Invert	Avail.Storage	Storage Description
#1	195.50'	2,318 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
195.50	506	97.0	0	0	506
196.00	658	106.0	290	290	660
197.00	1,006	125.0	826	1,116	1,028
198.00	1,410	144.0	1,202	2,318	1,456

Device	Routing	Invert	Outlet Devices
#1	Primary	197.50'	**10.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=1.60 cfs @ 12.21 hrs HW=197.67' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Weir Controls 1.60 cfs @ 0.97 fps)

Summary for Pond FB11: Forebay

Inflow Area = 1.134 ac, 15.79% Impervious, Inflow Depth = 0.92" for 100-YEAR event
Inflow = 1.01 cfs @ 12.10 hrs, Volume= 0.087 af
Outflow = 0.42 cfs @ 12.32 hrs, Volume= 0.069 af, Atten= 58%, Lag= 13.4 min
Primary = 0.42 cfs @ 12.32 hrs, Volume= 0.069 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.54' @ 12.32 hrs Surf.Area= 1,787 sf Storage= 876 cf

Plug-Flow detention time= 149.6 min calculated for 0.069 af (79% of inflow)
Center-of-Mass det. time= 55.9 min (971.5 - 915.6)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,765 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,453	209.0	0	0	1,453
200.00	2,096	219.0	1,765	1,765	1,855

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.42 cfs @ 12.32 hrs HW=199.54' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Weir Controls 0.42 cfs @ 0.50 fps)

Summary for Pond FB13: Forebay

Inflow Area = 0.778 ac, 30.03% Impervious, Inflow Depth = 1.44" for 100-YEAR event
Inflow = 1.31 cfs @ 12.08 hrs, Volume= 0.093 af
Outflow = 0.59 cfs @ 12.27 hrs, Volume= 0.068 af, Atten= 55%, Lag= 11.1 min
Primary = 0.59 cfs @ 12.27 hrs, Volume= 0.068 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.58' @ 12.27 hrs Surf.Area= 995 sf Storage= 1,191 cf

Plug-Flow detention time= 176.7 min calculated for 0.068 af (73% of inflow)
Center-of-Mass det. time= 65.6 min (952.3 - 886.7)

Volume	Invert	Avail.Storage	Storage Description
#1	198.00'	1,634 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
198.00	523	93.0	0	0	523
199.00	815	102.0	664	664	693
200.00	1,135	112.0	971	1,634	894

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.58 cfs @ 12.27 hrs HW=199.58' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir** (Weir Controls 0.58 cfs @ 0.70 fps)

Summary for Pond FB15: Forebay

Inflow Area = 0.463 ac, 42.56% Impervious, Inflow Depth = 2.27" for 100-YEAR event
Inflow = 1.36 cfs @ 12.07 hrs, Volume= 0.087 af
Outflow = 1.17 cfs @ 12.14 hrs, Volume= 0.067 af, Atten= 14%, Lag= 3.8 min
Primary = 1.17 cfs @ 12.14 hrs, Volume= 0.067 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.83' @ 12.14 hrs Surf.Area= 1,358 sf Storage= 983 cf

Plug-Flow detention time= 140.9 min calculated for 0.067 af (77% of inflow)
Center-of-Mass det. time= 46.1 min (904.5 - 858.4)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,216 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,011	133.0	0	0	1,011
200.00	1,433	143.0	1,216	1,216	1,270

Device	Routing	Invert	Outlet Devices
#1	Primary	199.75'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=1.17 cfs @ 12.14 hrs HW=199.83' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir** (Weir Controls 1.17 cfs @ 0.70 fps)

Summary for Pond FB3: Forebay

Inflow Area = 0.690 ac, 9.44% Impervious, Inflow Depth = 0.85" for 100-YEAR event
Inflow = 0.74 cfs @ 12.02 hrs, Volume= 0.049 af
Outflow = 0.13 cfs @ 12.47 hrs, Volume= 0.034 af, Atten= 82%, Lag= 26.9 min
Primary = 0.13 cfs @ 12.47 hrs, Volume= 0.034 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 198.52' @ 12.47 hrs Surf.Area= 635 sf Storage= 651 cf

Plug-Flow detention time= 204.7 min calculated for 0.034 af (70% of inflow)
Center-of-Mass det. time= 82.5 min (997.7 - 915.2)

Volume	Invert	Avail.Storage	Storage Description
#1	197.00'	1,018 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.00	251	70.0	0	0	251
198.00	488	88.0	363	363	491
198.50	628	98.0	278	641	646
199.00	887	124.0	377	1,018	1,109

Device	Routing	Invert	Outlet Devices
#1	Primary	198.50'	**25.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.12 cfs @ 12.47 hrs HW=198.52' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir** (Weir Controls 0.12 cfs @ 0.30 fps)

Summary for Pond FB5: Forebay

Inflow Area = 0.657 ac, 20.31% Impervious, Inflow Depth = 1.28" for 100-YEAR event
Inflow = 0.95 cfs @ 12.09 hrs, Volume= 0.070 af
Outflow = 0.42 cfs @ 12.28 hrs, Volume= 0.052 af, Atten= 56%, Lag= 11.6 min
Primary = 0.42 cfs @ 12.28 hrs, Volume= 0.052 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 198.57' @ 12.28 hrs Surf.Area= 993 sf Storage= 845 cf

Plug-Flow detention time= 169.7 min calculated for 0.052 af (74% of inflow)
Center-of-Mass det. time= 62.8 min (956.7 - 893.8)

Volume	Invert	Avail.Storage	Storage Description
#1	197.50'	1,314 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.50	603	113.0	0	0	603
198.00	779	122.0	345	345	781
199.00	1,174	141.0	970	1,314	1,200

Device	Routing	Invert	Outlet Devices
#1	Primary	198.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.42 cfs @ 12.28 hrs HW=198.57' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Weir Controls 0.42 cfs @ 0.63 fps)

Summary for Pond FB6: Forebay

Inflow Area = 1.062 ac, 24.01% Impervious, Inflow Depth = 1.44" for 100-YEAR event
Inflow = 2.33 cfs @ 12.01 hrs, Volume= 0.127 af
Outflow = 1.21 cfs @ 12.11 hrs, Volume= 0.097 af, Atten= 48%, Lag= 5.9 min
Primary = 1.21 cfs @ 12.11 hrs, Volume= 0.097 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 198.63' @ 12.11 hrs Surf.Area= 1,253 sf Storage= 1,470 cf

Plug-Flow detention time= 154.6 min calculated for 0.097 af (77% of inflow)
Center-of-Mass det. time= 54.8 min (935.8 - 881.0)

Volume	Invert	Avail.Storage	Storage Description
#1	197.00'	1,957 cf	**Custom Stage Data (Irregular)** Listed below

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.00	588	113.0	0	0	588
198.00	954	131.0	764	764	958
198.50	1,157	141.0	527	1,291	1,185
199.00	1,515	192.0	666	1,957	2,539

Device	Routing	Invert	Outlet Devices
#1	Primary	198.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=1.20 cfs @ 12.11 hrs HW=198.63' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir** (Weir Controls 1.20 cfs @ 0.89 fps)

Summary for Pond FB7: Forebay

Inflow Area = 1.216 ac, 24.86% Impervious, Inflow Depth = 1.44" for 100-YEAR event
Inflow = 1.91 cfs @ 12.11 hrs, Volume= 0.145 af
Outflow = 0.58 cfs @ 12.43 hrs, Volume= 0.105 af, Atten= 69%, Lag= 19.5 min
Primary = 0.58 cfs @ 12.43 hrs, Volume= 0.105 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.58' @ 12.43 hrs Surf.Area= 3,907 sf Storage= 2,067 cf

Plug-Flow detention time= 189.3 min calculated for 0.105 af (72% of inflow)
Center-of-Mass det. time= 77.5 min (966.0 - 888.5)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	3,810 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	3,195	410.0	0	0	3,195
200.00	4,461	434.0	3,810	3,810	4,861

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.58 cfs @ 12.43 hrs HW=199.58' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir** (Weir Controls 0.58 cfs @ 0.70 fps)

Summary for Link T: Offsite Flow

Inflow Area = 13.279 ac, 20.82% Impervious, Inflow Depth = 0.00" for 100-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Time span=0.00-200.00 hrs, dt=0.01 hrs, 20001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentS1: Runoff Area=56,035 sf 26.62% Impervious Runoff Depth=0.00"
Flow Length=160' Slope=0.0100 '/' Tc=15.9 min CN=55 Runoff=0.00 cfs 0.000 af

SubcatchmentS10: Rooftop Disconnect Runoff Area=41,351 sf 11.61% Impervious Runoff Depth=0.00"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=46 Runoff=0.00 cfs 0.000 af

SubcatchmentS11: - Runoff Area=49,400 sf 15.79% Impervious Runoff Depth=0.00"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=46 Runoff=0.00 cfs 0.000 af

SubcatchmentS12: Rooftop Disconnect Runoff Area=24,317 sf 19.74% Impervious Runoff Depth=0.00"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=50 Runoff=0.00 cfs 0.000 af

SubcatchmentS13: - Runoff Area=33,899 sf 30.03% Impervious Runoff Depth=0.00"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=53 Runoff=0.00 cfs 0.000 af

SubcatchmentS14: Rooftop Disconnect Runoff Area=19,612 sf 24.47% Impervious Runoff Depth=0.00"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=53 Runoff=0.00 cfs 0.000 af

SubcatchmentS15: - Runoff Area=20,148 sf 42.56% Impervious Runoff Depth=0.00"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=63 Runoff=0.00 cfs 0.000 af

SubcatchmentS16: Rooftop Disconnect Runoff Area=82,450 sf 3.03% Impervious Runoff Depth=0.00"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=37 Runoff=0.00 cfs 0.000 af

SubcatchmentS17: Half Rooftop Runoff Area=3,893 sf 100.00% Impervious Runoff Depth=0.99"
Flow Length=10' Slope=0.0100 '/' Tc=6.0 min CN=98 Runoff=0.14 cfs 0.007 af

SubcatchmentS18: Driveway Runoff Area=6,177 sf 100.00% Impervious Runoff Depth=0.99"
Tc=578.0 min CN=98 Runoff=0.01 cfs 0.012 af

SubcatchmentS2: Rooftop Disconnect Runoff Area=23,336 sf 25.20% Impervious Runoff Depth=0.00"
Flow Length=138' Slope=0.0100 '/' Tc=15.4 min CN=54 Runoff=0.00 cfs 0.000 af

SubcatchmentS3: - Runoff Area=30,061 sf 9.44% Impervious Runoff Depth=0.00"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=45 Runoff=0.00 cfs 0.000 af

SubcatchmentS4: Rooftop Disconnect Runoff Area=25,465 sf 22.27% Impervious Runoff Depth=0.00"
Flow Length=80' Slope=0.0200 '/' Tc=9.2 min CN=52 Runoff=0.00 cfs 0.000 af

SubcatchmentS5: - Runoff Area=28,617 sf 20.31% Impervious Runoff Depth=0.00"
Flow Length=100' Slope=0.0100 '/' Tc=14.5 min CN=51 Runoff=0.00 cfs 0.000 af

SubcatchmentS6: - Runoff Area=46,267 sf 24.01% Impervious Runoff Depth=0.00"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=53 Runoff=0.00 cfs 0.000 af

SubcatchmentS7: - Runoff Area=52,949 sf 24.86% Impervious Runoff Depth=0.00"
Flow Length=180' Slope=0.0100 '/' Tc=16.4 min CN=53 Runoff=0.00 cfs 0.000 af

SubcatchmentS8: Rooftop Disconnect Runoff Area=13,880 sf 20.54% Impervious Runoff Depth=0.00"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=51 Runoff=0.00 cfs 0.000 af

SubcatchmentS9: Rooftop Disconnect Runoff Area=20,572 sf 22.70% Impervious Runoff Depth=0.00"
Flow Length=50' Slope=0.0100 '/' Tc=8.3 min CN=52 Runoff=0.00 cfs 0.000 af

Pond 1P: SMA#1 Peak Elev=195.50' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 2P: SMA#2 Peak Elev=198.50' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 3P: SMA#3 Peak Elev=197.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 4P: SMA#4 Peak Elev=198.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 5P: SMA#5 Peak Elev=197.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 6P: SMA#6 Peak Elev=197.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 7P: SMA#7 Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 8P: SMA#8 Peak Elev=200.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 9P: SMA#9 Peak Elev=199.50' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 10P: SMA#10 Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 11P: SMA#11 Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 12P: SMA#12 Peak Elev=200.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Outflow=0.00 cfs 0.000 af

Pond 13P: SMA#13 Peak Elev=198.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 14P: SMA#14 Peak Elev=200.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 15P: SMA#15 Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 16P: Low Point Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 17P: SMA#17 (Porous Pavement) Peak Elev=199.11' Storage=12 cf Inflow=0.14 cfs 0.019 af
Discarded=0.14 cfs 0.019 af Primary=0.00 cfs 0.000 af Outflow=0.14 cfs 0.019 af

Pond FB1: Forebay Peak Elev=195.50' Storage=0 cf Inflow=0.00 cfs 0.000 af
Outflow=0.00 cfs 0.000 af

Pond FB11: Forebay Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Outflow=0.00 cfs 0.000 af

Pond FB13: Forebay Peak Elev=198.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Outflow=0.00 cfs 0.000 af

Pond FB15: Forebay Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Outflow=0.00 cfs 0.000 af

Pond FB3: Forebay Peak Elev=197.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Outflow=0.00 cfs 0.000 af

Pond FB5: Forebay Peak Elev=197.50' Storage=0 cf Inflow=0.00 cfs 0.000 af
Outflow=0.00 cfs 0.000 af

Pond FB6: Forebay Peak Elev=197.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Outflow=0.00 cfs 0.000 af

Pond FB7: Forebay Peak Elev=199.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Outflow=0.00 cfs 0.000 af

Link T: Offsite Flow Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Total Runoff Area = 13.279 ac Runoff Volume = 0.019 af Average Runoff Depth = 0.02"
79.18% Pervious = 10.514 ac 20.82% Impervious = 2.765 ac

Summary for Subcatchment S1:

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr WQv Rainfall=1.20"

Area (sf)	CN	Description
14,917	98	Paved parking, HSG A
41,118	39	>75% Grass cover, Good, HSG A
56,035	55	Weighted Average
41,118		73.38% Pervious Area
14,917		26.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Swale** Grass: Short n= 0.150 P2= 2.56"
1.4	60	0.0100	0.70		**Shallow Concentrated Flow, Swale** Short Grass Pasture Kv= 7.0 fps
15.9	160	Total			

Summary for Subcatchment S10: Rooftop Disconnect

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr WQv Rainfall=1.20"

Area (sf)	CN	Description
4,800	98	Paved parking, HSG A
36,551	39	>75% Grass cover, Good, HSG A
41,351	46	Weighted Average
36,551		88.39% Pervious Area
4,800		11.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Swale** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S11: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr WQv Rainfall=1.20"

Area (sf)	CN	Description
7,800	98	Paved parking, HSG A
28,271	39	>75% Grass cover, Good, HSG A
13,329	30	Woods, Good, HSG A
49,400	46	Weighted Average
41,600		84.21% Pervious Area
7,800		15.79% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S12: Rooftop Disconnect

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr WQv Rainfall=1.20"

Area (sf)	CN	Description
4,800	98	Paved parking, HSG A
1,796	30	Woods, Good, HSG A
17,721	39	>75% Grass cover, Good, HSG A
24,317	50	Weighted Average
19,517		80.26% Pervious Area
4,800		19.74% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Swale** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S13: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr WQv Rainfall=1.20"

Area (sf)	CN	Description
10,179	98	Paved parking, HSG A
10,818	39	>75% Grass cover, Good, HSG A
12,902	30	Woods, Good, HSG A
33,899	53	Weighted Average
23,720		69.97% Pervious Area
10,179		30.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S14: Rooftop Disconnect

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr WQv Rainfall=1.20"

Area (sf)	CN	Description
4,800	98	Paved parking, HSG A
14,812	39	>75% Grass cover, Good, HSG A
19,612	53	Weighted Average
14,812		75.53% Pervious Area
4,800		24.47% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S15: -

Runoff = 0.00 cfs @ 24.05 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr WQv Rainfall=1.20"

Area (sf)	CN	Description
8,575	98	Paved parking, HSG A
9,573	39	>75% Grass cover, Good, HSG A
2,000	30	Woods, Good, HSG A
20,148	63	Weighted Average
11,573		57.44% Pervious Area
8,575		42.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S16: Rooftop Disconnect

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr WQv Rainfall=1.20"

Area (sf)	CN	Description
2,500	98	Paved parking, HSG A
44,950	39	>75% Grass cover, Good, HSG A
35,000	30	Woods, Good, HSG A
82,450	37	Weighted Average
79,950		96.97% Pervious Area
2,500		3.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S17: Half Rooftop

Runoff = 0.14 cfs @ 11.97 hrs, Volume= 0.007 af, Depth= 0.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr WQv Rainfall=1.20"

	Area (sf)	CN	Description
*	3,893	98	
	3,893		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	10	0.0100	0.59		**Sheet Flow, Sheet** Smooth surfaces n= 0.011 P2= 2.56"
0.3	10	Total, Increased to minimum Tc = 6.0 min			

Summary for Subcatchment S18: Driveway

Runoff = 0.01 cfs @ 19.90 hrs, Volume= 0.012 af, Depth= 0.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr WQv Rainfall=1.20"

	Area (sf)	CN	Description
*	6,177	98	Driveway
	6,177		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
578.0					**Direct Entry, Direct**

Summary for Subcatchment S2: Rooftop Disconnect

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr WQv Rainfall=1.20"

Area (sf)	CN	Description
5,880	98	Paved parking, HSG A
17,456	39	>75% Grass cover, Good, HSG A
23,336	54	Weighted Average
17,456		74.80% Pervious Area
5,880		25.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet Flow**
					Grass: Short n= 0.150 P2= 2.56"
0.9	38	0.0100	0.70		**Shallow Concentrated Flow, Shallow**
					Short Grass Pasture Kv= 7.0 fps
15.4	138	Total			

Summary for Subcatchment S3: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr WQv Rainfall=1.20"

Area (sf)	CN	Description
27,224	39	>75% Grass cover, Good, HSG A
2,837	98	Paved parking, HSG A
30,061	45	Weighted Average
27,224		90.56% Pervious Area
2,837		9.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Sheets** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S4: Rooftop Disconnect

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr WQv Rainfall=1.20"

Area (sf)	CN	Description
5,670	98	Paved parking, HSG A
19,795	39	>75% Grass cover, Good, HSG A
25,465	52	Weighted Average
19,795		77.73% Pervious Area
5,670		22.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	80	0.0200	0.15		**Sheet Flow, Swale** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S5: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr WQv Rainfall=1.20"

Area (sf)	CN	Description
5,811	98	Paved parking, HSG A
22,806	39	>75% Grass cover, Good, HSG A
28,617	51	Weighted Average
22,806		79.69% Pervious Area
5,811		20.31% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S6: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr WQv Rainfall=1.20"

Area (sf)	CN	Description
11,108	98	Paved parking, HSG A
35,159	39	>75% Grass cover, Good, HSG A
46,267	53	Weighted Average
35,159		75.99% Pervious Area
11,108		24.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S7: -

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr WQv Rainfall=1.20"

Area (sf)	CN	Description
37,813	39	>75% Grass cover, Good, HSG A
13,162	98	Paved parking, HSG A
1,974	30	Woods, Good, HSG A
52,949	53	Weighted Average
39,787		75.14% Pervious Area
13,162		24.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.5	100	0.0100	0.12		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 2.56"
1.9	80	0.0100	0.70		**Shallow Concentrated Flow, Shallow** Short Grass Pasture Kv= 7.0 fps
16.4	180	Total			

Summary for Subcatchment S8: Rooftop Disconnect

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr WQv Rainfall=1.20"

Area (sf)	CN	Description
2,851	98	Paved parking, HSG A
11,029	39	>75% Grass cover, Good, HSG A
13,880	51	Weighted Average
11,029		79.46% Pervious Area
2,851		20.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Sheet** Grass: Short n= 0.150 P2= 2.56"

Summary for Subcatchment S9: Rooftop Disconnect

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Type II 24-hr WQv Rainfall=1.20"

Area (sf)	CN	Description
4,670	98	Paved parking, HSG A
15,902	39	>75% Grass cover, Good, HSG A
20,572	52	Weighted Average
15,902		77.30% Pervious Area
4,670		22.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0100	0.10		**Sheet Flow, Swale** Grass: Short n= 0.150 P2= 2.56"

Summary for Pond 1P: SMA#1

Inflow Area = 1.286 ac, 26.62% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Peak Elev= 195.50' @ 0.00 hrs Surf.Area= 1,213 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	195.50'	10,537 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
195.50	1,213	222.0	0	0	1,213
196.00	1,554	232.0	690	690	1,592
197.00	2,308	258.0	1,919	2,609	2,635
198.00	3,260	319.0	2,770	5,379	5,450
199.00	7,326	668.0	5,158	10,537	32,866

Device	Routing	Invert	Outlet Devices
#1	Primary	199.17'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	195.50'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=195.50' (Free Discharge)
└**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=195.50' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 2P: SMA#2

Inflow Area = 0.536 ac, 25.20% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 198.50' @ 0.00 hrs Surf.Area= 352 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	198.50'	1,590 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
198.50	352	108.0	0	0	352
199.00	682	194.0	254	254	2,420
200.00	2,122	461.0	1,336	1,590	16,341

Device	Routing	Invert	Outlet Devices
#1	Primary	199.75'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	198.50'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.50' (Free Discharge)
└**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.50' (Free Discharge)
└**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 3P: SMA#3

Inflow Area = 0.690 ac, 9.44% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 197.00' @ 0.00 hrs Surf.Area= 853 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	197.00'	2,691 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.00	853	131.0	0	0	853
198.00	1,305	161.0	1,071	1,071	1,565
199.00	1,957	227.0	1,620	2,691	3,612

Device	Routing	Invert	Outlet Devices
#1	Discarded	197.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50

Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68
2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 4P: SMA#4

Inflow Area = 0.585 ac, 22.27% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 198.00' @ 0.00 hrs Surf.Area= 1,182 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	198.00'	1,465 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
198.00	1,182	138.0	0	0	1,182
199.00	1,767	212.0	1,465	1,465	3,250

Device	Routing	Invert	Outlet Devices
#1	Discarded	198.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	199.00'	**10.0' long x 3.0' breadth Overflow**
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50
			Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.00' (Free Discharge)
└**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.00' (Free Discharge)
└**2=Overflow** (Controls 0.00 cfs)

Summary for Pond 5P: SMA#5

Inflow Area = 0.657 ac, 20.31% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 197.00' @ 0.00 hrs Surf.Area= 2,684 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	197.00'	6,805 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.00	2,684	227.0	0	0	2,684
198.00	3,387	254.0	3,029	3,029	3,745
199.00	4,179	274.0	3,776	6,805	4,626

Device	Routing	Invert	Outlet Devices
#1	Discarded	197.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	198.50'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 6P: SMA#6

Inflow Area = 1.062 ac, 24.01% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs

Peak Elev= 197.00' @ 0.00 hrs Surf.Area= 196 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	197.00'	1,369 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.00	196	143.0	0	0	196
198.00	668	166.0	409	409	782
199.00	1,287	195.0	961	1,369	1,635

Device	Routing	Invert	Outlet Devices
#1	Primary	199.00'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	197.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└─**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 7P: SMA#7

Inflow Area = 1.216 ac, 24.86% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 7,315 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	2,646 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)
#2	199.00'	5,676 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)
		8,322 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	2,268	254.0	0	0	2,268
200.00	3,042	263.0	2,646	2,646	2,720

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	5,047	422.0	0	0	5,047
200.00	6,330	432.0	5,676	5,676	5,850

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 8P: SMA#8

Inflow Area = 0.319 ac, 20.54% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 200.00' @ 0.00 hrs Surf.Area= 324 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	688 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
200.00	324	105.0	0	0	324
201.00	1,133	279.0	688	688	5,645

Device	Routing	Invert	Outlet Devices
#1	Discarded	200.00'	**5.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#2	Primary	201.00'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.00' (Free Discharge)
└─**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.00' (Free Discharge)
└─**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 9P: SMA#9

Inflow Area =	0.472 ac, 22.70% Impervious, Inflow Depth = 0.00" for WQv event				
Inflow =	0.00 cfs @	0.00 hrs, Volume=	0.000 af		
Outflow =	0.00 cfs @	0.00 hrs, Volume=	0.000 af, Atten= 0%, Lag= 0.0 min		
Discarded =	0.00 cfs @	0.00 hrs, Volume=	0.000 af		
Primary =	0.00 cfs @	0.00 hrs, Volume=	0.000 af		

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.50' @ 0.00 hrs Surf.Area= 318 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.50'	1,270 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.50	318	186.0	0	0	318
200.00	605	196.0	227	227	637
201.00	1,555	299.0	1,043	1,270	4,701

Device	Routing	Invert	Outlet Devices
#1	Discarded	199.50'	**5.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#2	Primary	200.75'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.50' (Free Discharge)
└─**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.50' (Free Discharge)
└─**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 10P: SMA#10

Inflow Area = 0.949 ac, 11.61% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 2,382 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	3,399 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	2,382	462.0	0	0	2,382
200.00	4,530	641.0	3,399	3,399	18,103

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 11P: SMA#11

Inflow Area = 1.134 ac, 15.79% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 1,880 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	2,154 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,880	176.0	0	0	1,880
200.00	2,440	198.0	2,154	2,154	2,561

Device	Routing	Invert	Outlet Devices
#1	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 12P: SMA#12

Inflow Area = 0.558 ac, 19.74% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 200.00' @ 0.00 hrs Surf.Area= 576 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	1,094 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
200.00	576	209.0	0	0	576
201.00	1,712	409.0	1,094	1,094	10,417

Device	Routing	Invert	Outlet Devices
#1	Discarded	200.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.00' (Free Discharge)
└─**1=Exfiltration** (Controls 0.00 cfs)

Summary for Pond 13P: SMA#13

Inflow Area = 0.778 ac, 30.03% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 198.00' @ 0.00 hrs Surf.Area= 462 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	198.00'	1,426 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
198.00	462	78.0	0	0	462
199.00	710	88.0	582	582	618
200.00	987	97.0	845	1,426	780

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	198.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.00' (Free Discharge)
└─**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 14P: SMA#14

Inflow Area = 0.450 ac, 24.47% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 200.00' @ 0.00 hrs Surf.Area= 489 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	200.00'	1,109 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
200.00	489	166.0	0	0	489
201.00	1,880	451.0	1,109	1,109	14,486

Device	Routing	Invert	Outlet Devices
#1	Discarded	200.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Primary	201.00'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.00' (Free Discharge)
└─**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=200.00' (Free Discharge)
└─**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 15P: SMA#15

Inflow Area = 0.463 ac, 42.56% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 919 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,312 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	919	272.0	0	0	919
200.00	1,749	281.0	1,312	1,312	1,402

Device	Routing	Invert	Outlet Devices
#1	Discarded	199.00'	**5.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#2	Primary	199.75'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 16P: Low Point

Inflow Area = 1.893 ac, 3.03% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 6,086 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)

Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	6,772 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	6,086	706.0	0	0	6,086
199.50	22,775	585.0	6,772	6,772	18,521

Device	Routing	Invert	Outlet Devices
#1	Primary	199.10'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32
#2	Discarded	199.00'	**5.000 in/hr Exfiltration over Wetted area** Phase-In= 0.01'

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**2=Exfiltration** (Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 17P: SMA#17 (Porous Pavement)

Inflow Area = 0.231 ac,100.00% Impervious, Inflow Depth = 0.99" for WQv event
Inflow = 0.14 cfs @ 11.97 hrs, Volume= 0.019 af
Outflow = 0.14 cfs @ 11.99 hrs, Volume= 0.019 af, Atten= 3%, Lag= 1.2 min
Discarded = 0.14 cfs @ 11.99 hrs, Volume= 0.019 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.11' @ 11.99 hrs Surf.Area= 5,145 sf Storage= 12 cf

Plug-Flow detention time= 1.4 min calculated for 0.019 af (100% of inflow)
Center-of-Mass det. time= 1.4 min (1,110.3 - 1,108.9)

Volume	Invert	Avail.Storage	Storage Description
#1	199.10'	5,145 cf	**Custom Stage Data (Irregular)** Listed below (Recalc) 12,863 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.10	5,145	390.0	0	0	5,145
201.60	5,145	390.0	12,863	12,863	6,120

Device	Routing	Invert	Outlet Devices
#1	Discarded	199.10'	**5.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#2	Primary	201.60'	**10.0' long x 1.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32

Discarded OutFlow Max=0.35 cfs @ 11.99 hrs HW=199.11' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.35 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.10' (Free Discharge)
└─**2=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond FB1: Forebay

Inflow Area = 1.286 ac, 26.62% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 195.50' @ 0.00 hrs Surf.Area= 506 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	195.50'	2,318 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
195.50	506	97.0	0	0	506
196.00	658	106.0	290	290	660
197.00	1,006	125.0	826	1,116	1,028
198.00	1,410	144.0	1,202	2,318	1,456

Device	Routing	Invert	Outlet Devices
#1	Primary	197.50'	**10.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=195.50' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond FB11: Forebay

Inflow Area = 1.134 ac, 15.79% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 1,453 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,765 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,453	209.0	0	0	1,453
200.00	2,096	219.0	1,765	1,765	1,855

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond FB13: Forebay

Inflow Area = 0.778 ac, 30.03% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 198.00' @ 0.00 hrs Surf.Area= 523 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	198.00'	1,634 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
198.00	523	93.0	0	0	523
199.00	815	102.0	664	664	693
200.00	1,135	112.0	971	1,634	894

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=198.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond FB15: Forebay

Inflow Area = 0.463 ac, 42.56% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 24.05 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 24.82 hrs Surf.Area= 1,011 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	1,216 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	1,011	133.0	0	0	1,011
200.00	1,433	143.0	1,216	1,216	1,270

Device	Routing	Invert	Outlet Devices
#1	Primary	199.75'	**20.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond FB3: Forebay

Inflow Area = 0.690 ac, 9.44% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 197.00' @ 0.00 hrs Surf.Area= 251 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	197.00'	1,018 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.00	251	70.0	0	0	251
198.00	488	88.0	363	363	491
198.50	628	98.0	278	641	646
199.00	887	124.0	377	1,018	1,109

Device	Routing	Invert	Outlet Devices
#1	Primary	198.50'	**25.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond FB5: Forebay

Inflow Area = 0.657 ac, 20.31% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 197.50' @ 0.00 hrs Surf.Area= 603 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	197.50'	1,314 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.50	603	113.0	0	0	603
198.00	779	122.0	345	345	781
199.00	1,174	141.0	970	1,314	1,200

Device	Routing	Invert	Outlet Devices
#1	Primary	198.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.50' (Free Discharge)
└**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond FB6: Forebay

Inflow Area = 1.062 ac, 24.01% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 197.00' @ 0.00 hrs Surf.Area= 588 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	197.00'	1,957 cf	**Custom Stage Data (Irregular)** Listed below

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
197.00	588	113.0	0	0	588
198.00	954	131.0	764	764	958
198.50	1,157	141.0	527	1,291	1,185
199.00	1,515	192.0	666	1,957	2,539

Device	Routing	Invert	Outlet Devices
#1	Primary	198.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=197.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond FB7: Forebay

Inflow Area = 1.216 ac, 24.86% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs
Peak Elev= 199.00' @ 0.00 hrs Surf.Area= 3,195 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	199.00'	3,810 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
199.00	3,195	410.0	0	0	3,195
200.00	4,461	434.0	3,810	3,810	4,861

Device	Routing	Invert	Outlet Devices
#1	Primary	199.50'	**10.0' long x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=199.00' (Free Discharge)
└─**1=Broad-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Link T: Offsite Flow

Inflow Area = 13.279 ac, 20.82% Impervious, Inflow Depth = 0.00" for WQv event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-200.00 hrs, dt= 0.01 hrs