
STORMWATER POLLUTION PREVENTION PLAN

AMS BUCHANAN

**ALBANY POST ROAD & CRAFT LANE
VILLAGE OF BUCHANAN, NEW YORK**

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Prepared by:



JMC Project 22062

Date: 11/08/2023
Revised: 12/26/2023
01/26/2024

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C-100	Site Layout Plan	01/26/2024
C-200	Site Grading Plan	01/26/2024
C-300	Site Utilities Plan	01/26/2024
C-400	Site Erosion and Sediment Control Plan	01/26/2024
C-500	Site Lighting Plan	01/26/2024
C-700	Truck Turning Plan (SU-30)	01/26/2024
C-701	Truck Turning Plan (Firetruck)	01/26/2024
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C-902	Construction Details	01/26/2024
C-903	Construction Details	01/26/2024
C-904	Construction Details	01/26/2024
C-905	Construction Details	01/26/2024
C-906	Construction Details	01/26/2024
C-907	Construction Details	01/26/2024
C-908	Construction Details	01/26/2024
C-909	Construction Details	01/26/2024
C-910	Construction Details	01/26/2024
C-911	Construction Details	01/26/2024
C-912	Construction Details	01/26/2024
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I. INTRODUCTION

This Stormwater Pollution Prevention Plan has been prepared for the 5.96-acre AMS Buchanan site, located in the Village of Buchanan, Westchester County, New York (hereinafter referred to as the "Site"). The site is bordered by Craft Lane to the north, commercial properties to the south and west, and ConEdison to the east. The development has been designed in accordance with the following:

- Requirements of the New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit No. GP-0-20-001, effective January 29, 2020.
- Chapter 166 "Stormwater Management" of the Village of Buchanan Zoning Code
- New York State Stormwater Management Design Manual

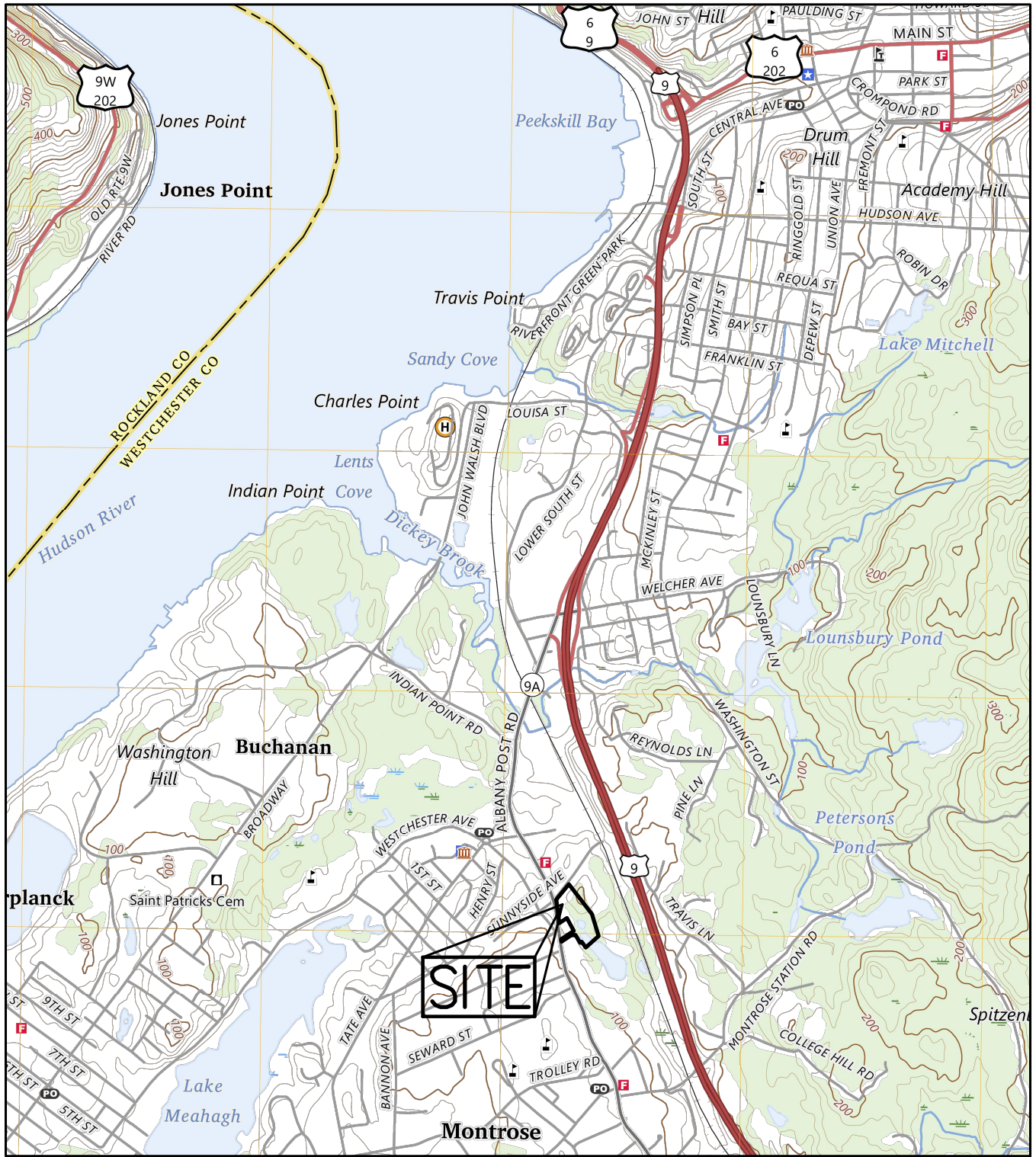
The proposed improvements on the Site consist of a multi-family apartment building comprised of four residential stories above a one-story parking structure. The building will contain 148 two- and one-bedroom dwelling units and 223 parking spaces. 149 of the parking spaces will be located within the structure and the remaining 74 will be in a parking area northwest of the building.

II. STORMWATER MANAGEMENT PLANNING

In order to be eligible for coverage under the NYSDEC SPDES General Permit No. GP-0-20-001 for Stormwater Discharges from Construction Activities, the Stormwater Pollution Prevention Plan (SWPPP) includes stormwater management practices (SMP's) from the publication "New York State Stormwater Management Design Manual," last revised January 2015.

A Stormwater Pollution Prevention Plan has been prepared for this project because it is a construction activity that involves:

- Soil disturbances of one (1) or more acres of land.



AMS BUCHANAN

ALBANY POST ROAD & CRAFT LANE VILLAGE OF BUCHANAN, NEW YORK

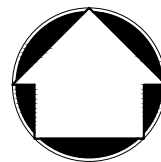
SITE LOCATION MAP

DATE: 11/01/2023

JMC PROJECT: 22062

FIGURE: 01

SCALE: 1" = 2,000'



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The proposed stormwater facilities have been designed such that the quantity and quality of stormwater runoff during and after construction are not adversely altered or are enhanced when compared to pre-development conditions.

Based on the GIS information provided by the website of the New York State Office of Parks, Recreation and Historic Places, the site does not contain, nor is it immediately adjacent to any properties listed on the State or National Register of Historic Places.

The Six Step Process for Stormwater Site Planning and Practice Selection

Stormwater management using green infrastructure is summarized in the six-step process described below. The six-step process was adhered to when developing this SWPPP. Information is provided in this SWPPP which documents compliance with the required process as follows:

Step 1: Site Planning

Implement planning practices that protect natural resources and utilize the hydrology of the site. Strong consideration must be given to reducing impervious cover to aid in the preservation of natural resources including protecting natural areas, avoiding sensitive areas and minimizing grading and soil disturbance.

Step 2: Determine Water Quality Treatment Volume (WQv)

Determine the required WQv for the site based on the site layout, impervious areas and sub-catchments. This initial calculation of WQv will have to be revised after green infrastructure techniques are applied. The following method has been used to calculate the WQv.

- **90% Rule** - According to the New York State Stormwater Design Manual, Section 4.1, the water quality volume is determined from the 90% rule. The method is based on 90% of the average annual stormwater runoff volume which must be provided due to

Criteria **Spatial** Results

1. Navigate to your area of interest

Option A: Zoom to a County or Municipality
 Select County... Select Municipality...

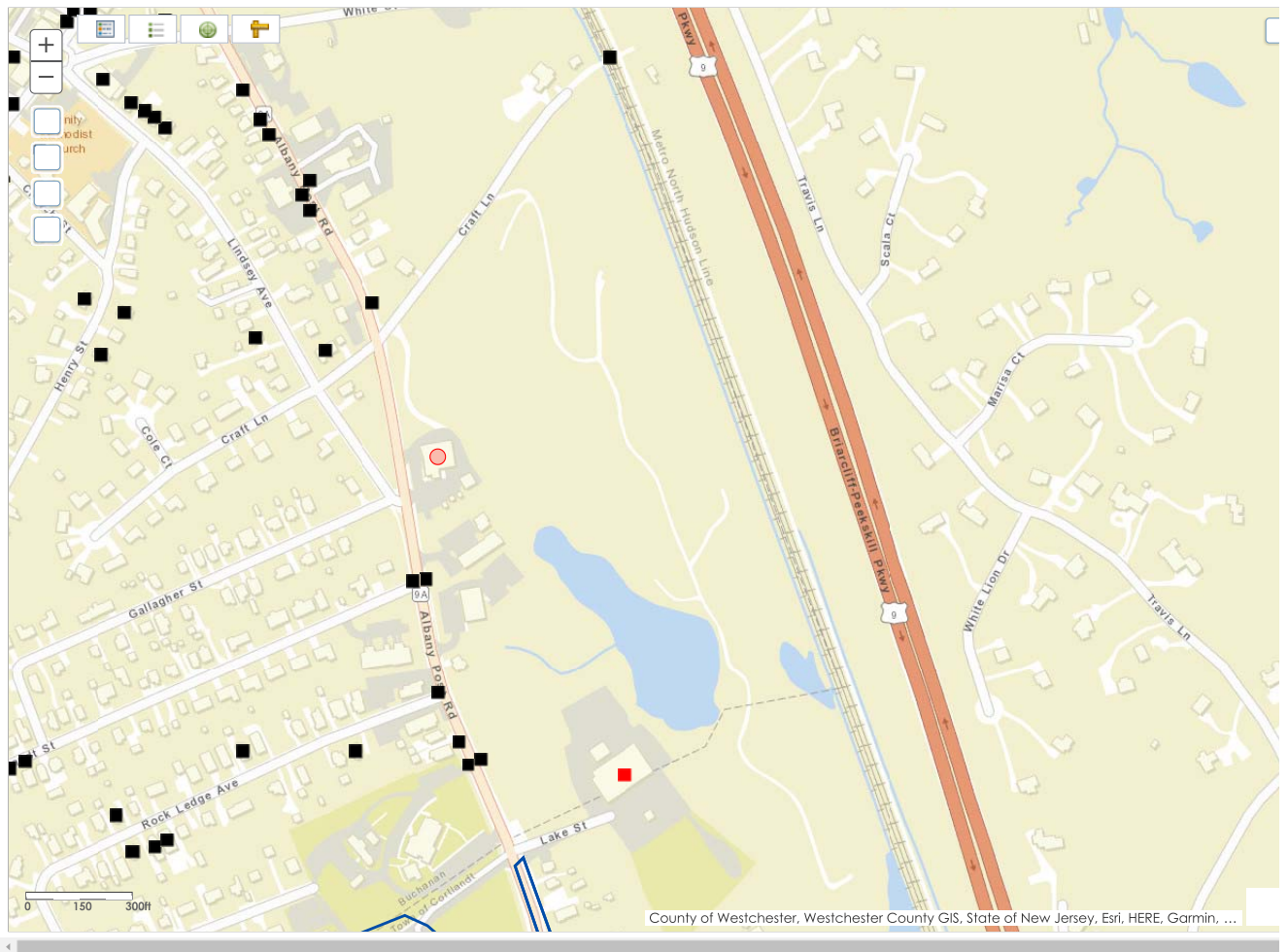
Option B: Find an Address Location

2. Define or refine the location/area for your search

Click a button below to activate the draw tool and draw the shape on the map

3. Generate a search radius around your graphic (Optional)

Generate a Foot buffer



County of Westchester, Westchester County GIS, State of New Jersey, Esri, HERE, Garmin, ...

impervious surfaces. The Water Quality Volume (denoted as the WQv) is designed to improve water quality sizing to capture and treat 90% of the average annual stormwater runoff volume. The WQv is directly related to the amount of impervious cover created at a site. The average rainfall storm depth for 90% of storms in New York State in one year is used to calculate a volume of runoff. The rainfall depth depends on the location of the site within the state. From this depth of rainfall, the required water quality volume is calculated.

Due to the physical constraints of the site such as bedrock, groundwater, and urban fill, some of the proposed stormwater BMP's proposed to treat water quality are limited to proprietary/alternative practices rather than standard practices. The alternative practices are designed to treat stormwater runoff and/or provide water quantity control.

Step 3: Runoff Reduction Volumes (RRv) by Applying Green Infrastructure Techniques and Standard SMP's

RRv is required for this project since it is a new development.

Green infrastructure techniques or standard SMP's with RRv capacity can potentially reduce the required WQv by incorporating combinations of green infrastructure techniques and standard SMP's within each drainage area on the site.

Green infrastructure techniques are grouped into two categories:

- Practices resulting in a reduction of contributing area such as preservation/restoration of conservation areas, vegetated channels, etc.
- Practices resulting in a reduction of contributing volume such as green roofs, stormwater planters, and rain gardens.

Apply a combination of green infrastructure techniques and standard SMPs with RRv capacity to provide 100% of the WQv calculated in Step 2. If the RRv calculated in this step is greater than

or equal to the WQv in Step 2, the RRv requirement has been met and Step 4 can be skipped. If the RRv provided cannot meet or exceed 100% of the WQv, the project must, at a minimum, reduce a percentage of the runoff from impervious areas to be constructed on the site. The percent reduction is based on the Hydrologic Soil Group(s) (HSG) of the site and is defined as Specific Reduction Factor (S).

The Minimum RRv capacity required must be provided by green infrastructure techniques to verify that the RRv requirement has been met. The RRv that is provided by the green infrastructure techniques can then be subtracted from the Total Required WQv that must be provided by the SMP's.

Step 4: Determine the minimum RRv Required

The minimum RRv is calculated similar to the WQV. However, it is determined using only the new impervious cover and accounts for the hydrologic soil group present. In no case shall the runoff reduction achieved from the newly constructed impervious area be less than the minimum runoff reduction volume (RRv_{min}).

Step 5: Apply Standard Stormwater Management Practices to Address Remaining Water Quality Volume

Apply the standard SMP's to meet additional water quality volume requirements that cannot be addressed by applying the green infrastructure techniques. The standard SMP's with RRv capacity must be implemented to verify that the RRv requirement has been met.

Step 6: Apply Volume and Peak Rate Control Practices to Meet Water Quantity Requirements

The Channel Protection Volume (CPv), Overbank Flood Control (Qp) and Extreme Flood Control (Qf) must be met for the plan to be completed. This is accomplished by using practices such as infiltration basins, dry detention basins, etc. to meet water quantity requirements. The following standards must be met:

I. Stream Channel Protection (CPv)

Stream Channel Protection Volume Requirements (CPv) are designed to protect stream channels from erosion. In New York State this goal is accomplished by providing 24-hour extended detention of the one-year, 24-hour storm event, remained from runoff reduction. Reduction of runoff for meeting stream channel protection objectives, where site conditions allow, is encouraged and the volume reduction achieved through green infrastructure can be deducted from CPv. Trout waters may be exempted from the 24-hour ED requirement, with only 12 hours of extended detention required to meet this criterion. Detention time may be calculated using either a center of mass method or plug flow calculation method.

- Per the May 2022 draft Stormwater Management Design Manual, CPv is not required where the 1-year post-development peak discharge is less than or equal to 2.0 cfs. The 1-year post-development peak flows from the two detention systems on the site are 0.23 cfs and 0.78 cfs.

2. Overbank Flood (Qp) which is the 10 year storm.

Overbank control requires storage to attenuate the post development 10-year, 24-hour peak discharge rate (Qp) to predevelopment rates.

3. Extreme Storm (Qf) which is the 100 year storm.

100 Year Control requires storage to attenuate the post development 100-year, 24-hour peak discharge rate (Qf) to predevelopment rates.

Based on the foregoing, this project is eligible for coverage under NYSDEC SPDES General Permit No. GP-0-20-001.

III. STUDY METHODOLOGY

Runoff rates were calculated based upon the standards set forth by the United States Department of Agriculture Natural Resources Conservation Service Technical Release 55, Urban Hydrology for Small Watersheds (TR-55), dated June 1986. The methodology set forth in TR-55 considers a multitude of characteristics for watershed areas including soil types, soil permeability, vegetative cover, time of concentration, topography, rainfall intensity, ponding areas, etc.

The 1, 10, 25, 100-year storm recurrence intervals were reviewed in the design of the stormwater management facilities (see Appendix A - Existing & Proposed Hydrologic Calculations).

Anticipated drainage conditions were analyzed taking into account the rate of runoff which will result from the construction of buildings, parking areas and other impervious surfaces associated with the site development.

Base Data and Design Criteria

For the stormwater management analysis, the following base information and methodology were used:

1. The site drainage patterns and outfall facilities were reviewed by JMC personnel for the purpose of gathering background data and confirming existing mapping of the watershed areas.
2. An Existing Drainage Area Map was developed from the topographical survey. The drainage area map reflects the existing conditions within and around the project area.
3. A Proposed Drainage Area Map was developed from the proposed grading design superimposed over the topographical survey. The drainage area map reflects the proposed

conditions within the project area and the existing conditions to remain in the surrounding area.

4. The United States Department of Agriculture (USDA) Web Soil Survey of the site available on its website at <http://websoilsurvey.nrcd.usda.gov>.
5. The United States Department of Agriculture Natural Resources Conservation Service National Engineering Handbook, Section 4 - Hydrology", dated March 1985.
6. The United States Department of Agriculture Natural Resources Conservation Service Technical Report No. 55, Urban Hydrology for Small Watersheds (TR-55), dated June 1986.
7. United States Department of Commerce Weather Bureau Technical Release No. 40 Rainfall Frequency Atlas of the United States.

The time of concentration was calculated using the methods described in Chapter 3 of TR-55, Second Edition, June 1986. Manning's kinematics wave equation was used to determine the travel time of sheet flow. The 2-year 24-hour precipitation amount of 3.37 inches was used in the equation for all storm events. The travel time for shallow concentrated flow was computed using Figure 3-1 and Table 3-1 of TR-55. Manning's Equation was used to determine the travel time for channel reaches.

8. All hydrologic calculations were performed with the Bentley PondPack software package version 10.0.
9. The New York State Stormwater Management Design Manual, revised January 2015.
10. New York Standards and Specifications for Erosion and Sediment Control, November 2016.

11. The storm flows for the 1-, 10-, 25-, & 100-year recurrence interval storms were analyzed for the total watershed areas. The Type III distribution design storm for a 24-hour duration was used and the mass rainfall for each design storm was taken from the Extreme Precipitation in New York & New England developed by the Natural Resource Conservation Service (NRCS) and the Northeast Regional Climate Center (NRCC) as follows:

24 Hour Rainfall Amounts

Design Storm Recurrence Interval	Inches of Rainfall
1 Year	2.75
10 Year	5.08
25 Year	6.44
100 Year	9.23

IV. EXISTING CONDITIONS

The existing conditions of the project site consists of an existing gravel drive and forested area over a previously developed quarry site. After stormwater runoff exits the project site, it flows to a stormwater pipe underneath the intersection of Albany Post Road and Craft Lane, with a portion of the site running into a pond on the south end of the site.

The following natural features, conservation areas, resource areas and drainage patterns of the project site have been identified and utilized to develop Drawing DA-1 “Existing Drainage Area Map” which is included in Appendix I:

- Wetlands (jurisdictional, wetland of special concern)
- Buffers (stream, wetland, forest, etc.)
- Forest, vegetative cover
- Topography (contour lines, existing flow paths, steep slopes, etc.)
- Soil (hydrologic soil groups, highly erodible soils, etc.)

Based on the USDA Web soil survey, all on-site soils belong to hydrological group D or are not rated. The soil types, boundaries and drainage areas/designations are depicted on Drawing DA-1 within Appendix I.

Three separate Design Points (DP-1 through DP-3) were identified for comparing peak rates of runoff in existing and proposed conditions. Similarly, three separate drainage areas were identified in existing conditions based on the existing drainage divides at the site. The numbers included in the name of each drainage area correspond to the Design Point they drain towards.

The following is a description of each of the drainage areas analyzed in the existing conditions analysis:

Existing Drainage Area 1 (EDA-1) is 0.52 acres in size and is located on the eastern portion of the site along the property line. This area consists of wooded area. This drainage area drains overland towards the property to the east. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 77 and 12 minutes, respectively.

Existing Drainage Area 2 (EDA-2) is 1.42 acres in size and is located on the southern portion of the site along the property line. This area consists of wooded area and an existing pond. This drainage area drains overland towards the pond. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 80 and 28 minutes, respectively.

Drainage Area 2 Offsite (DA-2 Offsite) is 23.06 acres in size and is located to the south of the property. This area consists of wooded and industrial areas. This drainage area drains overland towards the pond. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 71 and 28 minutes, respectively.

Existing Drainage Area 3 (EDA-3) is 4.03 acres in size and is located on the northwestern portion of the site. This area consists of an existing gravel entrance road and wooded area. This drainage area drains towards an inlet at the property corner, which is connected to a collapsed pipe underneath Craft Lane. The Curve Number (CN) and Time of Concentration (Tc) for this

drainage area are 78 and 34 minutes, respectively.

Drainage Area 3 Offsite (DA-3 Offsite) is 2.22 acres in size and is located to the north and west of the property. This area consists of the neighboring streets and a small portion of wooded area to the east. This drainage area drains overland towards the inlet at Design Point 3. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 88 and 15 minutes, respectively.

The peak rates of runoff to the design points from the drainage areas for each storm are shown in the table below:

Table I
Summary of Peak Rates of Runoff in Existing Conditions
(Cubic Feet per Second)

Storm Recurrence Interval	DP-1	DP-2	DP-3
1 year	0.40	9.31	4.56
10 year	1.26	36.29	12.10
25 year	1.81	54.55	16.74
100 year	2.97	94.58	26.40

V. PROPOSED CONDITIONS

The proposed improvements on the Site consist of a multi-family apartment building comprised of four residential stories above a one-story parking structure. The building will contain 148 two- and one-bedroom dwelling units and 223 parking spaces. 149 of the parking spaces will be located within the structure and the remaining 74 will be in a parking area northwest of the building.

The proposed drainage improvements include a variety of stormwater practices, such as stormwater planters, green roof areas, JellyFish Filter systems and subsurface storage. This section describes the design and analysis of the proposed conditions used to demonstrate that the SWPPP meets the requirements of the General Permit.

The Six Step Process For Stormwater Site Planning and Practice Selection

Step 1: Site Planning

The following practices and site features were incorporated in the site design:

- Preserving hydrology - Maintaining drainage divides
- Wetlands and buffers – The site includes 0.16 acres of wetlands and 0.59 acres of wetland buffers. The project requires the disturbance of 0 acres of wetlands and 0.25 acres of wetland buffers.
- Floodplain considerations - The site doesn't lie within the 100 year flood zone according to the National Flood Insurance Program Flood Insurance Rate Map (FIRM) No. 36119C0018F, effective date 09/28/2007.
- Forest, vegetative cover – The maximum amount of forest and vegetative cover has been maintained and/or provided.
- Critical areas have been preserved.
- Topography (contour lines, existing flow paths, steep slopes, etc.) has been maintained or disturbed to the minimum extent practicable.
- Soil (hydrologic soil groups, highly erodible soils, etc.)
- Bedrock, significant geology features have been accounted for.

Step 2: Determine Water Quality Treatment Volume (WQv)

Step 3: Runoff Reduction Volumes (RRv) by Applying Green Infrastructure Techniques and Standard SMP's

- **Green Roofs**
- **Stormwater Planters**

Step 4: Determine the minimum RRv Required

RRV_{min} calculations can be found in Appendix 'B'. A specific reduction factor of 0.20 was used due to the type D HSG classification of the existing disturbed soils. RRV_{min} was met through

- **Green Roofs**
- **Stormwater Planters**

Step 5: Apply Standard Stormwater Management Practices to Address Remaining Water Quality Volume

Non Standard/Alternative SMP's to Address Remaining Water Quality Volume (for Redevelopment Projects)

- **Hydrodynamic Separators**
- **Media Filters**

Step 6: Apply Volume and Peak Rate Control Practices to Meet Water Quantity Requirements

- **Subsurface Detention Systems**

All practices exceed the required elements of SMP criteria as outlined in Chapter 6 of the NYS Stormwater Management Design Manual. A summary of each category is provided below.

1. Feasibility – Stormwater practices are designed based upon unique physical environmental considerations noted in the NYS Stormwater Management Design Manual (NYSSMDM).
2. Conveyance – The design conveys runoff to the designed stormwater practice in a manner that is safe, minimizes erosion and disruption to natural drainage channel and promotes filtering and infiltration.
3. Pretreatment – All stormwater practices provide pretreatment as required in accordance with NYSSMDM design guidelines.

4. Treatment Geometry – The plan provides water quality treatment in accordance with NYSSMDM guidelines.
5. Environmental/Landscaping –Extensive landscaping has been provided for each proposed stormwater practice to enhance pollutant removal and provide aesthetic enhancement to the property.
6. Maintenance – Maintenance for the environment practices has been provided and is detail the SWPPP Report as required. Maintenance access is provided in the design plans.

In order to determine the post-development rates of runoff generated on-site, the following drainage areas were analyzed in the post-development conditions. These areas are graphically depicted on Drawing DA-2 "Proposed Drainage Area Map" located in Appendix "I".

Three separate Design Points (DP-1 through DP-3) were identified for comparing peak rates of runoff in existing and proposed conditions. Similarly, seven separate drainage areas were identified in proposed conditions based on the proposed drainage divides at the site. The numbers included in the name of each drainage area correspond to the Design Point they drain towards.

The following is a description of each of the drainage areas analyzed in the proposed conditions analysis:

Proposed Drainage Area 1 (PDA-1) is 0.25 acres in size and is located on the eastern portion of the site along the property line. This area consists of wooded area. This drainage area drains overland towards the property to the east. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 77 and 12 minutes, respectively.

Proposed Drainage Area 2A (PDA-2A) is 0.92 acres in size and is located on the southern portion of the site along the property line. This area consists of existing wooded area, an existing pond, and landscaped area. This drainage area drains overland towards the pond. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 82 and 27

minutes, respectively.

Proposed Drainage Area 2B (PDA-2B) is 0.50 acres in size and is comprised of portions of the building roof and courtyard area. This area is directed into stormwater planters along the south side of the building. After being treated by the planters, the runoff is directed into a subsurface detention system, which slowly releases the water into the existing pond. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 95 and 6 minutes, respectively.

Proposed Drainage Area 2C (PDA-2C) is 0.42 acres in size and is comprised of portions of the building roof surrounding the courtyard area. This area is directed into intensive green roof planters along the edge of the courtyard. The green roof soil media will have a porosity of at least 50%. After being treated by the green roof, the runoff is directed into a subsurface detention system, which slowly releases the water into the existing pond. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 98 and 6 minutes, respectively.

Proposed Drainage Area 2D (PDA-2D) is 0.18 acres in size and is comprised of portions of the courtyard area which drain into the planters. This area is directed into extensive green roof planters within the courtyard. The green roof soil media will have a porosity of at least 50%. After being treated by the green roof, the runoff is directed into a subsurface detention system, which slowly releases the water into the existing pond. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 98 and 6 minutes, respectively.

Proposed Drainage Area 2E (PDA-2E) is 0.09 acres in size and is located on the southeastern corner of the site. This area consists of existing wooded area and landscaped area. This drainage area is collected by a drain inlet and directed to the subsurface detention system, which slowly releases the water into the existing pond. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 77 and 8 minutes, respectively.

Drainage Area 2 Offsite (DA-2 Offsite) is 23.06 acres in size and is located to the south of the property. This area consists of wooded and industrial areas. This drainage area drains overland towards the pond. The Curve Number (CN) and Time of Concentration (Tc) for this drainage

area are 71 and 28 minutes, respectively.

Proposed Drainage Area 3A (EDA-3A) is 1.22 acres in size and is located on the northwestern portion of the site. This area consists of existing wooded area which will remain unchanged during construction. This drainage area drains towards an inlet at the property corner. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 77 and 17 minutes, respectively.

Proposed Drainage Area 3B (EDA-3B) is 2.38 acres in size and is located on the northwestern portion of the site. This area contains portions of the building roof area along with the proposed driveway and parking surfaces. This drainage area drains towards a JellyFish filter and subsurface detention system located under the parking area. The subsurface system slowly releases the stormwater into a new storm sewer, replacing the existing pipe underneath Craft Lane. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 92 and 6 minutes, respectively.

Drainage Area 3 Offsite (DA-3 Offsite) is 2.22 acres in size and is located to the north and west of the property. This area consists of the neighboring streets and a small portion of wooded area to the east. This drainage area drains overland towards the inlet at Design Point 3. The Curve Number (CN) and Time of Concentration (Tc) for this drainage area are 88 and 15 minutes, respectively.

The peak rates of runoff to the design point of each of the analyzed drainage areas for each storm are shown on the table below:

Table 2
Summary of Proposed Peak Rates of Runoff in Proposed Conditions
(Cubic Feet per Second)

Storm Recurrence Interval	DP-1	DP-2	DP-3
1 year	0.19	9.23	4.56
10 year	0.60	35.79	12.04
25 year	0.86	54.17	16.59
100 year	1.41	94.09	25.60

The reductions in peak rates of runoff from proposed to existing conditions are shown on the table below:

Table 3
Percent Reductions in Peak Rates of Runoff (Existing vs. Proposed Conditions)
(Cubic Feet per Second)

Design Point	Storm Recurrence Frequency (Years)	Existing Peak Runoff Rate (cfs)	Proposed Peak Runoff Rate (cfs)	Percent Reduction (%)
1	1 year	0.40	0.19	52.50%
	10 year	1.26	0.60	52.38%
	25 year	1.81	0.86	52.49%
	100 year	2.97	1.41	52.53%
2	1 year	9.31	9.23	0.86%
	10 year	36.29	35.79	1.38%
	25 year	54.55	54.17	0.70%
	100 year	94.58	94.09	0.52%
3	1 year	4.56	4.56	0.400%
	10 year	12.10	12.04	0.50%
	25 year	16.74	16.59	0.90%
	100 year	26.40	25.60	3.03%

As demonstrated in Table 3, the proposed stormwater improvements will result in reductions of peak rates of runoff for all storms and design points analyzed.

PIPE HYDAULIC CAPACITY CALCULATIONS

The hydraulic calculations of the proposed drainage pipe conveyance system for a 25-yr storm event are located in Appendix C. The Rational Method was used to demonstrate within a table and profile views that the 25 year flows can be accommodated without flooding.

VI. SOIL EROSION & SEDIMENT CONTROL

A potential impact of the proposed development on any soils or slopes will be that of erosion and transport of sediment during construction. An Erosion and Sediment Control Management Program will be established for the proposed development, beginning at the start of construction and continuing throughout its course, as outlined in the "New York State Standards and Specifications for Erosion and Sediment Control," November 2016. A continuing maintenance program will be implemented for the control of sediment transport and erosion control after construction and throughout the useful life of the project.

The Operator shall have a qualified professional conduct an assessment of the site prior to the commencement of construction and certify that the appropriate erosion and sediment controls, as shown on the Sediment & Erosion Control Plans, have been adequately installed to ensure overall preparedness of the site for the commencement of construction. In addition, the Operator shall have a qualified professional conduct one site inspection at least every seven calendar days and at least two site inspections every seven calendar days when greater than five acres of soil is disturbed at any one time.

Prior to the commencement of construction activity, the owner or operator must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP. The owner or operator shall have each of the contractors and subcontractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the trained contractor. The owner or operator shall ensure that at least one trained contractor is on site on a daily basis when soil disturbance activities are being performed. The owner or operator shall have each of the contractors and subcontractors identified above sign a copy of the certification statement provided in Appendix F before they commence any construction activity.

Soil Description

As provided by the United States Department of Agriculture, Soil Conservation Service "Web Soil Survey," soil classifications which exist on the subject site are described below.

Soils are placed into four hydrologic groups: A, B, C, and D. In the definitions of the classes, infiltration rate is the rate at which water enters the soil at the surface and is controlled by the surface conditions. Transmission rate is the rate at which water moves in the soil and is controlled by soil properties. Definitions of the classes are as follows:

- A. (Low runoff potential). The soils have a high infiltration rate even when thoroughly wetted. They chiefly consist of deep, well drained to excessively drained sands or gravels. They have a high rate of water transmission.

- B. The soils have a moderate infiltration rate when thoroughly wetted. They chiefly are moderately deep to deep, moderately well drained to well drained soils that have moderately fine to moderately coarse textures. They have a moderate rate of water transmission.

- C. The soils have a slow infiltration rate when thoroughly wetted. They chiefly have a layer that impedes downward movement of water or have moderately fine to fine texture. They have a slow rate of water transmission.

- D. (High runoff potential). The soils have a very slow infiltration rate when thoroughly wetted. They chiefly consist of clay soils that have a high swelling potential, soils that have a permanent high water table, soils that have a claypan or clay layer at or near the surface, and shallow soils over nearly impervious material. They have a very slow rate of water transmission.

A soil's tendency to erode is also described in the USDA web soil survey. The ratings in this interpretation indicate the hazard of soil loss from unsurfaced areas. The ratings are based on soil erosion factor K, slope, and content of rock fragments. The hazard is described as "slight,"

"moderate," or "SEVERE." A rating of "slight" indicates that little or no erosion is likely; "moderate" indicates that some erosion is likely, that the temporarily unsurfaced / unstabilized during construction may require occasional maintenance, and that simple erosion-control measures are needed; and "SEVERE" indicates that significant erosion is expected, that the roads or trails require frequent maintenance, and that erosion-control measures are needed.

Per the Soil Survey, the following soils listed below are present at the site. Following this list is a detailed description of each soil type found on the property:

SYM.	HYDRO.	SOIL GROUP	DESCRIPTION
Pv	Not Rated		Pits, quarry
W	Not Rated		Water
CuD	D		Chatfield-Hollis-Rock, outcrop complex, 0-15%
CtC	D		Chatfield-Hollis-Rock complex, 0-15%, very rocky
HrF	D		Hollis-Rock outcrop complex, 35-60%
UIC	Not Rated		Urban land-Charlonton-Chatfield complex, rolling
UmC	Not Rated		Urban land-Chatfield-Rock outcrop complex, rolling

Pv, Pits, quarry

This soil is comprised of 80 percent quarry pits and 3 percent minor components. It typically has unweathered bedrock. There is no soil group or drainage capacity ratings for this soil.

Hydrologic group: **NOT RATED**

W, Water

This soil is surface water. There is no soil group or drainage capacity ratings for this soil.

Hydrologic group: **NOT RATED**

CuD, Chatfield-Hollis-Rock, outcrop complex, 0 to 15 percent slopes

This soil is comprised of 35% Chatfield, 30% Hollis, and 20% rock outcrop. The landform is typically ridges and hills with a coarse-loamy melt-out till derived from granite, gneiss, and/or schist. The soil is well drained with a high class of runoff and low water table.

Hydrologic group: **D**

CtC, Chatfield-Hollis-Rock complex, 0 to 15 percent slopes, very rocky

This soil is comprised of 39% Chatfield, 26% Hollis, and 17% rock outcrop. The landform is typically ridges and hills with a coarse-loamy melt-out till derived from granite, gneiss, and/or schist. The soil is well drained with a high class of runoff and low water table.

Hydrologic group: **D**

HrF, Hollis-Rock outcrop complex, 35 to 60 percent slopes

This soil is comprised of 60% Hollis, 20% rock outcrop, and 4% minor components. The landform is typically ridges and hills with a coarse-loamy melt-out till derived from granite, gneiss, and/or schist. The soil is somewhat excessively drained with a very high class of runoff and low water table.

Hydrologic group: **D**

UIC, Urban land-Charlton-Chatfield complex, rolling, very rocky

This soil is comprised of 40% Urban land, 20% Charlton and similar soils, 15% Chatfield and similar soils and 3% minor components. The landform is typically till plains, ridges and hills with an acid loamy till derived mainly from schist, gneiss, or granite. The soil is well drained with a low water table.

Hydrologic group: **Not Rated**

UmC, Urban land-Chatfield-Rock outcrop complex, rolling

This soil is comprised of 50% Urban land, 20% Chatfield and similar soils, 15% rock outcrop and 1% minor components. The landform is typically ridges and hills with a loamy till derived mainly from granite, gneiss, or schist. The soil is well drained with a low water table.

Hydrologic group: **Not Rated**

The soil disturbance of the proposed project includes 6,715 square feet of Phase F soils and 2,445 square feet of Phase D soils with a slopes greater than 25% for a total of 9,160 square feet.

On-Site Pollution Prevention

There are temporary pollution prevention measures used to control litter and construction debris on site, such as:

- Silt Fence
- Manufactured Insert Inlet Protection
- Excavated Drop Inlet Protection

There will be inlet protection provided for all storm drains and inlets with the use of curb gutter inlet protection structures and stone & block drop inlet protection, which keep silt, sediment and construction litter and debris out of the on-site stormwater drainage system.

Temporary Control Measures

Temporary control measures and facilities will include silt fences, construction ditches, stabilized construction access, temporary seeding, mulching and sediment traps with temporary riser and anti-vortex devices.

Throughout the construction of the proposed development, temporary control facilities will be implemented to control on-site erosion and sediment transfer. Construction ditches, if required, will be used to direct stormwater runoff to temporary sediment traps for settlement. The sediment traps will be constructed as part of this project will serve as temporary sediment basins to remove sediment and pollutants from the stormwater runoff produced during construction. Descriptions of the temporary sediment & erosion controls that will be used during the development of the site including silt fence, stabilized construction access, seeding, mulching and inlet protection are as follows:

- I. Silt Fence is constructed using a geotextile fabric. The fence will be either 18 inches or 30 inches high. The height of the fence can be increased in the event of placing these devices on uncompacted fills or extremely loose undisturbed soils. The fences will not be placed in areas which receive concentrated flows such as ditches, swales and channels nor will the filter fabric material be placed across the entrance to pipes, culverts, spillway structures, sediment traps or basins.

2. Stabilized Construction Access consists of AASHTO No. 1 rock. The rock entrance will be a minimum of 50 feet in length by 24 feet in width by 8 inches in depth.
3. Seeding will be used to create a vegetative surface to stabilize disturbed earth until at least 80% of the disturbed area has a perennial vegetative cover. This amount is required to adequately function as a sediment and erosion control facility. Grass lining will also be used to line temporary channels and the surrounding disturbed areas.
4. Mulching is used as an anchor for seeding and disturbed areas to reduce soil loss due to storm events. These areas will be mulched with straw at a rate of 3 tons per acre such that the mulch forms a continuous blanket. Mulch must be placed after seeding or within 48 hours after seeding is completed.
5. Inlet Protection will be provided for all stormwater basins and inlets with the use of curb & gutter inlet protection and stone & block inlet protection structures, which will keep silt, sediment and construction debris out of the storm system. Existing structures within existing paved areas will be protected using “Manufactured Insert Inlet Protection” inside the structures.

The contractor shall be responsible for maintaining the temporary sediment and erosion control measures throughout construction. This maintenance will include, but not be limited to, the following tasks:

1. For dust control purposes, moisten all exposed graded areas with water at least twice a day in those areas where soil is exposed and cannot be planted with a temporary cover due to construction operations or the season (December through March).
2. Inspection of erosion and sediment control measures shall be performed at the end of each construction day and immediately following each rainfall event. All required repairs shall be immediately executed by the contractor.

3. Sediment deposits shall be removed when they reach approximately $\frac{1}{3}$ the height of the silt fence. All such sediment shall be properly disposed of in fill areas on the site, as directed by the Owner's Field Representative. Fill shall be protected following disposal with mulch, temporary and/or permanent vegetation and be completely circumscribed on the downhill side by silt fence.
4. Rake all exposed areas parallel to the slope during earthwork operations.
5. Following final grading, the disturbed area shall be stabilized with a permanent surface treatment (i.e. turf grass, pavement or sidewalk). During rough grading, areas which are not to be disturbed for seven or more days shall be stabilized with the temporary seed mixture, as defined on the plans. Seed all piles of dirt in exposed soil areas that will not receive a permanent surface treatment.

Concrete Material and Equipment Management

Concrete washouts shall be used to contain concrete and liquids when the chutes of concrete mixers and hoppers of concrete pumps are rinsed out after delivery. The washout facilities consolidate solid for easier disposal and prevent runoff of liquids. The wash water is alkaline and contains high levels of chromium, which can leach into the ground and contaminate groundwater. It can also migrate to a storm drain, which can increase the pH of area waters and harm aquatic life. Solids that are improperly disposed of can clog storm drain pipes and cause flooding. Installing concrete washout facilities not only prevents pollution but also is a matter of good housekeeping at your construction site.

Prefabricated concrete washout containers can be delivered to the site to provide maintenance and disposal of materials. Regular pick-ups of solid and liquid waste materials will be necessary. To prevent leaks on the job site, ensure that prefabricated washout containers are watertight. A self installed concrete washout facility can be utilized although they are much less reliable than prefabricated containers and are prone to leaks. There are many design options for the washout, but they are preferably built below-grade to prevent breaches and reduce the

likelihood of runoff. Above-grade structures can also be used if they are sized and constructed correctly and are diligently maintained. One of the most common problems with self-installed concrete washout facilities is that they can leak or be breached as a result of constant use, therefore the contractor shall be sure to use quality materials and inspect the facilities on a daily basis.

Washouts must be sized to handle solids, wash water, and rainfall to prevent overflow. Concrete Washout Systems, Inc. estimates that 7 gallons of wash water are used to wash one truck chute and 50 gallons are used to wash out the hopper of a concrete pump truck.

For larger sites, a below-grade washout should be at least 10 feet wide and sized to contain all liquid and solid waste expected to be generated in between cleanout periods. A minimum of 12-inches of freeboard must be provided. The pit must be lined with plastic sheeting of at least 10-mil thickness without holes or tears to prevent leaching of liquids into the ground. Concrete wash water should never be placed in a pit that is connected to the storm drain system or that drains to nearby waterways.

An above-grade washout can be constructed at least 10 feet wide by 10 feet long and sized to contain all liquid and solid waste expected to be generated in between cleanout periods. A minimum of 4-inches of freeboard must be provided. The washout structures can be constructed with staked straw bales or sandbags double-or triple lined with plastic sheeting of at least 10-mil thickness without holes or tears.

Concrete washout facilities shall not be located within 100 feet of storm drains, open ditches, or water bodies and should be placed in locations that allow for convenient access for concrete trucks. The contractor shall check all concrete washout facilities daily to determine if they have been filled to 75 percent capacity, which is when materials need to be removed. Both above-and below-ground self-installed washouts should be inspected daily to ensure that plastic linings are intact and sidewalls have not been damaged by construction activities. Prefabricated washout containers should be inspected daily as well as to ensure the container is not leaking or nearing 75 percent capacity. Inspectors should also note whether the facilities are being used regularly.

Additional signage for washouts may be needed in more convenient locations if concrete truck operators are not utilizing them.

The washout structures must be drained or covered prior to predicted rainstorms to prevent overflows. Hardened solids either whole or broken must be removed and then they may be reused onsite or hauled away for recycling.

Once materials are removed from the concrete washout, a new structure must be built or excavated, or if the previous structure is still intact, inspect it for signs of weakening or damage and make any necessary repairs. Line the structure with new plastic that is free of holes or tears and replace signage if necessary. It is very important that new plastic be used after every cleaning because pumps and concrete removal equipment can damage the existing liner.

Construction Site Chemical Control

The purpose of this management measure is to prevent the generation of nonpoint source pollution from construction sites due to improper handling and usage of nutrients and toxic substances, and to prevent the movement of toxic substances from the construction site.

Many potential pollutants other than sediment are associated with construction activities. These pollutants include pesticides; fertilizers used for vegetative stabilization; petrochemicals; construction chemicals such as concrete products, sealers, and paints; wash water associated with these products; paper; wood; garbage; and sanitary waste.

Disposal of excess pesticides and pesticide-related wastes should conform to registered label directions for the disposal and storage of pesticides and pesticide containers set forth in applicable Federal, State and local regulations that govern their usage, handling, storage, and disposal.

Pesticides should be disposed of through either a licensed waste management firm or a treatment, storage and disposal (TSD) facility. Containers should be triple-rinsed before disposal, and rinse waters should be reused as product.

Other practices include setting aside a locked storage area, tightly closing lids, storing in a cool, dry place, checking containers periodically for leaks or deterioration, maintaining a list of products in storage, using plastic sheeting to line the storage areas, and notifying neighboring property owners prior to spraying.

When storing petroleum products, follow these guidelines:

- Create a shelter around the area with cover and wind protection;
- Line the storage area with a double layer of plastic sheeting or similar material;
- Create an impervious berm around the perimeter with a capacity of 110 percent greater than that of the largest container;
- Clearly label all products;
- Keep tanks off the ground; and
- Keep lids securely fastened.

Post spill procedure information and have persons trained in spill handling on site or on call at all times. Materials for cleaning up spills should be kept on site and easily available. Spills should be cleaned up immediately and the contaminated material properly disposed of. Maintain and wash equipment and machinery in confined areas specifically designed to control runoff.

Thinners or solvents should not be discharged into sanitary or storm systems when cleaning machinery. Use alternative methods for cleaning larger equipment parts, such as high-pressure, high-temperature water washes, or steam cleaning. Equipment-washing detergents can be used, and wash water may be discharged into sanitary sewers if solids are removed from the solution first. (This practice should be verified with the local sewer authority.) Small parts can be cleaned with degreasing solvents, which can then be reused or recycled.

Solid Waste Management and Portable Sanitary Management

The purpose of this management measure is to prevent the potential for solid waste such as construction debris, trash, etc. from construction sites due to improper handling and storage. Debris and litter should be removed periodically from the BMP's and surrounding areas to prevent clogging of pipes and structures. All construction material shall be stored in designated staging areas. Roll-off containers shall be placed on site and all empty containers, construction debris and litter shall be placed in the containers.

Portable sanitary units may be utilized on-site or bathrooms will be provided within construction trailers. A sanitation removal company will be hired to pump/remove any sanitary waste. In the event that portable sanitary units are used and then cleaned after being emptied, the rinse water may not be disposed of to the storm drain system. It shall be contained for later disposal if it can't be disposed of on-site. Remove paper and trash before cleaning the portable sanitary units. The portable sanitary units shall be located away from the storm drain system if possible. Provide over head cover for wash areas if possible. Maintain spill response material and equipment on site to eliminate the potential for contaminants and wash water from entering the storm drain system.

Permanent Control Measures and Facilities for Long Term Protection

Towards the completion of construction, permanent sediment and erosion control measures will be developed for long term erosion protection. The following permanent control measures and facilities have been proposed to be implemented for the project:

- I. Stormwater Planters are proposed along the south side of the building to collect and filter runoff from portions of the building rooftops. Small drainage areas, less than 15,000 square feet will be collected by gutters and roof drain leaders and discharged into stormwater planters that will infiltrate the smaller storms and then discharge the higher storms through risers/standpipes directly into the underground storm pipes to the proposed stormwater management basins. Stormwater Planters act as small basins that treat stormwater as it flows through plant material and a soil matrix and is discharged to the storm drain system. These practices are elevated above the existing grade, surrounded by a concrete wall and consist of a reservoir with a depth of 12 inches, grass/landscaping with a layer of mulch, 12 inches of

sandy loam topsoil and a sand/gravel layer a minimum of 24 inches wide that extends down to the native soil. Filtration through these layers will enable removal of pollutants and sediment generated by the rooftop and other small impervious areas. Refer to Appendix 'B' for the Runoff Reduction and Water Quality Volume Sizing Calculations.

2. Catch Basins will be used to remove some of the coarse sand and grit sediment before entering the drainage system. Each catch basin will be constructed with an 18 inch deep sump.
3. Rip-Rap Energy Dissipators At discharge points from the stormwater drainage system into the stormwater management basins, rip-rap pads consisting of angular rocks will be placed to dissipate velocity and reduce the risk of erosion.
4. Seeding of at least 80% perennial vegetative cover will be used to produce a permanent uniform erosion resistant surface. The seeded areas will be mulched with straw at a rate of 2 tons per acre such that the mulch forms a continuous blanket.
5. Green Roof - The proposed building will be constructed with an intensive green roof which will provide hydrologic source control and water quality volume for the rooftop runoff. The green roof must provide volume reduction equal to or greater than the required minimum RRv. This reduction is achieved when runoff is captured, routed through green infrastructure, infiltrated to the ground, reused, reduced by evapotranspiration and eventually removed from the stormwater discharge from the site. After determining the minimum RRv required, which depends on factors such as the Hydrologic Soil Group (HSG) and the amount of impervious area within the targeted drainage area, the remaining water quality volume is directed to a standard practice.
6. Subsurface Detention Systems – Two subsurface detention systems are proposed to detain and slowly release stormwater runoff using an outlet control structure.

Specifications for Soil Restoration

Prior to the final stabilization of the disturbed areas, soil restoration will be required for all vegetated areas to recover the original properties and porosity of the soil. Soil Restoration Requirements are provided on Table 7 below:

Table 7

Soil Restoration Requirements

Type of Soil Disturbance	Soil Restoration Requirement		Comments/Examples
No soil disturbance	Restoration not permitted		Preservation of Natural Features
Minimal soil disturbance	Restoration not required		Clearing and grubbing
Areas where topsoil is stripped only – no change in grade	HSG A&B	HSG C&D	Protect area from any ongoing construction activities
	apply 6 inches of topsoil	Aerate* and apply 6 inches of topsoil	
Areas of cut or fill	HSG A&B	HSG C&D	Clearing and grubbing
	Aerate and apply 6 inches of topsoil	Apply full Soil Restoration**	
Heavy traffic areas on site (especially) in a zone 5-25 feet around buildings but not within a 5 foot perimeter around foundation walls)	Apply full Soil Restoration (decompaction and compost enhancement)		
Areas where Runoff Reduction and/or Infiltration practices are applied	Restoration not required, but may be applied to enhance the reduction specified for appropriate practices.		Keep construction equipment from crossing these areas. To protect newly installed practice from any ongoing construction activities construct a single phase operation fence area.
Redevelopment projects	Soil Restoration is required on redevelopment projects in areas where existing impervious area will be converted to pervious area.		

* Aeration includes the use of machines such as tractor-drawn implements with coulters making a narrow slit in the soil, a roller with many spikes making indentations in the soil, or prongs which function like a mini-subsoiler.

** Per "Deep Ripping and De-compaction, DEC 2008."

During periods of relatively low to moderate subsoil moisture, the disturbed subsoils are returned to rough grade and the following full soil restoration steps applied:

1. Apply 3 inches of compost over subsoil.
2. Till compost into subsoil to a depth of at least 12 inches using a cat-mounted ripper, tractor-mounted disc, or tiller, mixing, and circulating air and compost into subsoils.
3. Rock-pick until uplifted stone/rock materials of four inches and larger size are cleaned off the site.

Specifications for Final Stabilization of Graded Areas

Final stabilization of graded areas consists of the placement of topsoil and installation of landscaping (unless the area is to be paved, or a building is to be constructed in the location). Topsoil is to be spread as soon as grading operations are completed. Topsoil is to be placed to a minimum depth of six inches on all embankments, planting areas and seeding/sod areas. The subgrade is to be scarified to a depth of two inches to provide a bond of the topsoil with the subsoil. Topsoil is to be raked to an even surface and cleared of all debris, roots, stones and other unsatisfactory material.

Planting operations shall be conducted under favorable weather conditions as follows:

- Permanent Lawns - April 15 (provided soil is frost-free and not excessively moist) to May 15; August 15 to October 15.
- Temporary Lawn Seeding - if outside of the time periods noted above, the areas shall be seeded immediately on completion of topsoil operations with annual ryegrass (Italian rye) at a

rate of six pounds per 1,000 square feet. Temporary lawn installation is permitted provided the soil is frost-free and not excessively moist. The permanent lawn is to be installed the next planting season.

On slopes with a grade of 3 horizontal to 1 vertical or greater, and in swales, a geotextile netting or mat shall be installed for stabilization purposes as shown on the Plans. Seeded areas are to be mulched with straw or hay at an application rate of 70-90 pounds per 1,000 s.f. Straw or hay mulch must be spread uniformly and anchored immediately after spreading to prevent wind blowing. Mulches must be inspected periodically and in particular after rainstorms to check for erosion. If erosion is observed, additional mulch must be applied. Netting shall be inspected after rainstorms for dislocation or failure; any damage shall be repaired immediately.

All denuded surfaces which will be exposed for a period of over fourteen days or more shall be temporarily hydroseeded with (a) perennial ryegrass at a rate of 40 lbs per acre (1.0 lb per 1000 square feet); (b) Certified "Aroostook" winter rye (cereal rye) @ 100 lb per acre (2.5 lb/1000 s.f.) to be used in the months of October and November.

Permanent turfgrass cover is to consist of a seed mixture as follows:

(a) Sunny sites

Kentucky Bluegrass	2.0-2.6 pounds/1000 square feet
Perennial Ryegrass	0.6-0.7 pounds/1000 square feet
Fine Fescue	0.4-0.6 pounds/1000 square feet

(b) Shady sites

Kentucky Bluegrass	0.8-1.0 pounds/1000 square feet
Perennial Ryegrass	0.6-0.7 pounds/1000 square feet
Fine Fescue	2.6-3.3 pounds/1000 square feet

All plant materials shall comply with the standards of the American Association of Nurserymen with respect to height and caliper as described in its publication American Standard for Nursery Stock, latest edition.

VII. CONSTRUCTION PHASE AND POST-CONSTRUCTION MAINTENANCE

During the construction phase and following construction of the project, a number of maintenance measures will be taken with respect to the site maintenance. Measures to be taken included the following:

I. During Construction

A comprehensive sediment and erosion control plan will be in place during the construction period. Maintenance measures for sediment and erosion controls will include:

A qualified professional acceptable to the municipality will be hired by the owner or operator to monitor the installation and maintenance of the sediment and erosion control plans. The qualified professional shall report directly to the Engineering Consultant and shall be responsible for ensuring compliance with the design of the sediment and erosion control plans.

The qualified professional so hired will inspect all sediment and erosion control measures at least every seven calendar days. In the event that there has been a variance with the design of the sediment and erosion control measures so that the ability of the measures to adequately perform the intended function is lessened or compromised and/or the facilities are not adequately maintained, the qualified professional shall be required to report such variance to the Engineering Consultant within 48 hours and shall be empowered to order immediate repairs to the sediment and erosion control measures.

The qualified professional will also be responsible for observing the adequacy of the vegetation growth (trees, shrubs, groundcovers and turfgrasses) in newly graded areas and for ordering

additional plantings in the event that the established plant materials do not adequately protect the ground surface from erosion.

2. Following Construction

Site maintenance activities on the property will include:

- Grounds maintenance, including mowing of lawns;
- Planting of trees, shrubs and groundcovers; pruning of trees and shrubs;
- Application of fertilizer and herbicides;
- Maintenance of stormwater management area;

Grounds maintenance on the site will be performed by landscaping contractor.

Fertilizer is typically applied twice in the year - once in the spring and once in the fall. The application of fertilizer is usually necessary to maintain healthy lawn growth due to competition for nutrients with trees and shrubs and since the clippings are often removed. It is not recommended that fertilizer be applied during the summer. It is at this time that lawns are typically dormant.

Fertilizers come in three basic types: (1) Organic; (2) Soluble synthetic and (3) Slow release.

Organic fertilizers are derived from plant or animal waste. Since they are heavier and bulkier than other fertilizers, it is necessary to apply a much greater amount at one time. Soluble synthetic fertilizers are predictable with determining the exact impact on a lawn. However more applications are necessary since their effect is often short term. Slow release fertilizers have a high percentage of nitrogen so quantities that need be handled at one time are smaller. Slow release fertilizers will be utilized by the project.

Per Chapter 863, Article XXVIII of Westchester County Code of Ordinances, no fertilizer containing more than 0% phosphorus shall be used, unless testing confirms the need for additional phosphorus.

Fertilizer shall be applied by the landscape contractor in accordance with the manufacturer's instructions. The application of fertilizer does require some skill on the part of the operator. Should there be a spill of fertilizer, the landscape contractor shall be required to scrape or vacuum it up. The area will then be watered in accordance with the manufacturer's instructions to ensure that the fertilizer becomes soluble and available to plants and does not run off.

Buchanan Dev AMS LLC will be responsible for the long-term operation and maintenance of the permanent stormwater management practices. The permanent stormwater management practices shall be maintained in accordance with the Maintenance Inspection Checklists provided in Appendix E.

VIII. CONCLUSION

This Stormwater Pollution Prevention Plan has been prepared to describe the project's pre and post-development stormwater management improvements and its sediment and erosion control improvements to be utilized during construction. The proposed permanent improvements and the interim improvements to be utilized during construction have been designed in accordance with the requirements of the:

- New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit No. GP-0-20-001, effective January 29, 2020.
- Chapter 166 "Stormwater Management" of the Village of Buchanan Zoning Code
- New York State Stormwater Management Design Manual.

The project employs a variety of practices to enhance stormwater quality and reduce peak rates of runoff associated with the proposed building and parking improvements. These measures include green roofs, stormwater planters, JellyFish filter, and subsurface detention systems.

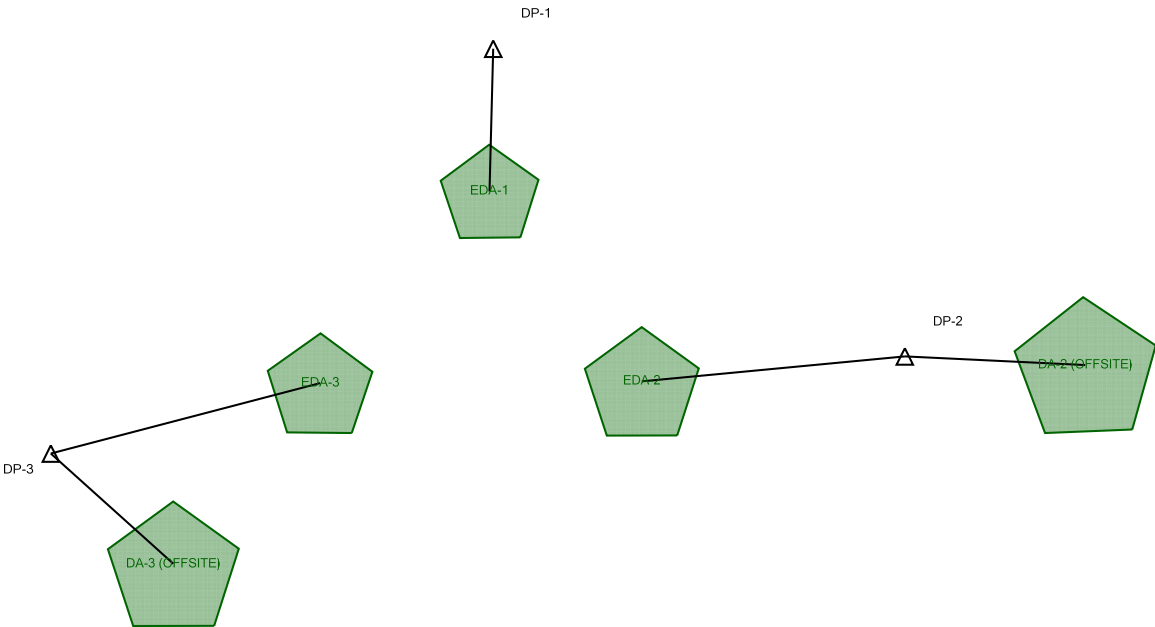
These improvements will also mitigate runoff volumes from the proposed improvements as runoff volumes will be slightly reduced or maintained in all the analyzed storms.

Based on the foregoing, it is our professional opinion that the proposed improvements will provide water quantity and quality enhancements which exceed the above mentioned requirements and are not anticipated to have any adverse impacts to the site or any surrounding areas.

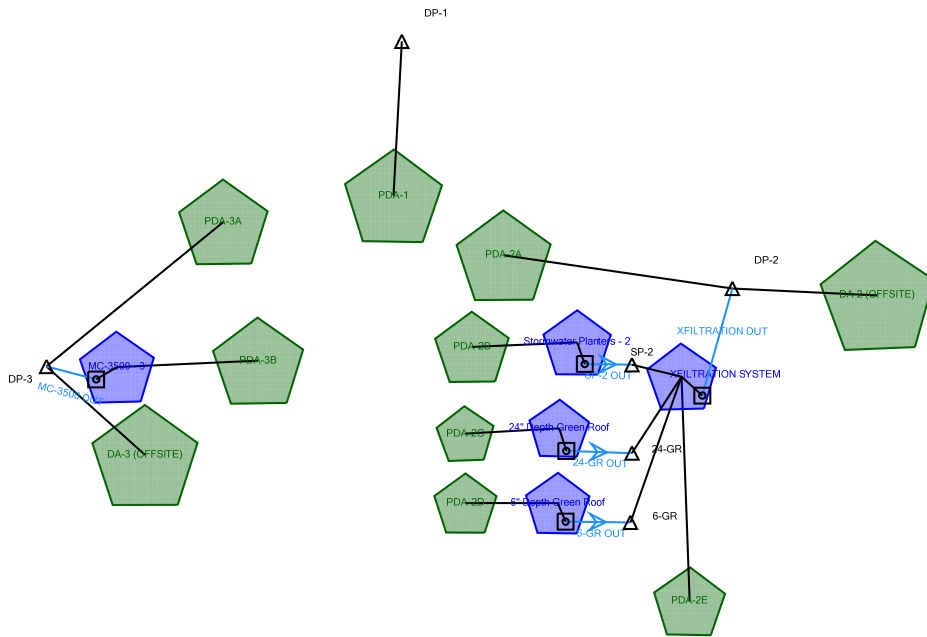
APPENDIX A

***EXISTING & PROPOSED HYDROLOGIC
CALCULATIONS***

Scenario: Pre-Development 1 year



Scenario: Post-Development 1 year



Existing and Proposed Hydrologic Calculations

Project Summary

Title	AMS Buchanan
Engineer	Michael Thompson, PE
Company	JMC, PLLC
Date	1/23/2024

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Existing and Proposed Hydrologic Calculations

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ft ³)	Time to Peak (hours)	Peak Flow (ft ³ /s)
EDA-1	Pre-Development 1 year	1	1,698	12.150	0.40
EDA-1	Pre-Development 10 year	10	5,070	12.150	1.26
EDA-1	Pre-Development 25 year	25	7,287	12.150	1.81
EDA-1	Pre-Development 100 year	100	12,091	12.150	2.97
EDA-3	Pre-Development 1 year	1	13,835	12.450	2.26
EDA-3	Pre-Development 10 year	10	40,362	12.400	6.82
EDA-3	Pre-Development 25 year	25	57,672	12.400	9.73
EDA-3	Pre-Development 100 year	100	95,021	12.400	15.85
EDA-2	Pre-Development 1 year	1	5,442	12.350	0.99
EDA-2	Pre-Development 10 year	10	15,145	12.350	2.82
EDA-2	Pre-Development 25 year	25	21,377	12.350	3.95
EDA-2	Pre-Development 100 year	100	34,716	12.300	6.32
PDA-1	Post-Development 1 year	1	808	12.150	0.19
PDA-1	Post-Development 10 year	10	2,411	12.150	0.60
PDA-1	Post-Development 25 year	25	3,466	12.150	0.86
PDA-1	Post-Development 100 year	100	5,751	12.150	1.41
PDA-2A	Post-Development 1 year	1	3,950	12.350	0.74
PDA-2A	Post-Development 10 year	10	10,512	12.300	1.99
PDA-2A	Post-Development 25 year	25	14,663	12.300	2.76
PDA-2A	Post-Development 100 year	100	23,483	12.300	4.35
PDA-3B	Post-Development 1 year	1	16,654	12.100	4.56
PDA-3B	Post-Development 10 year	10	36,040	12.100	9.44
PDA-3B	Post-Development 25 year	25	47,586	12.100	12.24

Existing and Proposed Hydrologic Calculations

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ft ³)	Time to Peak (hours)	Peak Flow (ft ³ /s)
PDA-3B	Post-Development 100 year	100	71,460	12.100	17.94
PDA-2B	Post-Development 1 year	1	3,987	12.100	1.05
PDA-2B	Post-Development 10 year	10	8,132	12.100	2.05
PDA-2B	Post-Development 25 year	25	10,573	12.100	2.63
PDA-2B	Post-Development 100 year	100	15,596	12.100	3.81
PDA-2C	Post-Development 1 year	1	3,814	12.100	0.94
PDA-2C	Post-Development 10 year	10	7,332	12.100	1.76
PDA-2C	Post-Development 25 year	25	9,388	12.100	2.24
PDA-2C	Post-Development 100 year	100	13,610	12.100	3.22
PDA-2D	Post-Development 1 year	1	1,605	12.100	0.40
PDA-2D	Post-Development 10 year	10	3,085	12.100	0.74
PDA-2D	Post-Development 25 year	25	3,951	12.100	0.94
PDA-2D	Post-Development 100 year	100	5,727	12.100	1.35
PDA-2E	Post-Development 1 year	1	305	12.150	0.08
PDA-2E	Post-Development 10 year	10	909	12.100	0.24
PDA-2E	Post-Development 25 year	25	1,306	12.100	0.35
PDA-2E	Post-Development 100 year	100	2,167	12.100	0.57
PDA-3A	Post-Development 1 year	1	3,983	12.200	0.88
PDA-3A	Post-Development 10 year	10	11,893	12.200	2.76
PDA-3A	Post-Development 25 year	25	17,095	12.200	3.96
PDA-3A	Post-Development 100 year	100	28,366	12.200	6.48
DA-3 (OFFSITE)	Pre-Development 1 year	1	12,844	12.200	2.98
DA-3 (OFFSITE)	Post-Development 1 year	1	12,844	12.200	2.98

Existing and Proposed Hydrologic Calculations

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ft ³)	Time to Peak (hours)	Peak Flow (ft ³ /s)
DA-3 (OFFSITE)	Pre-Development 10 year	10	30,115	12.200	6.79
DA-3 (OFFSITE)	Post-Development 10 year	10	30,115	12.200	6.79
DA-3 (OFFSITE)	Pre-Development 25 year	25	40,618	12.200	9.02
DA-3 (OFFSITE)	Post-Development 25 year	25	40,618	12.200	9.02
DA-3 (OFFSITE)	Pre-Development 100 year	100	62,527	12.150	13.59
DA-3 (OFFSITE)	Post-Development 100 year	100	62,527	12.150	13.59
DA-2 (OFFSITE)	Pre-Development 1 year	1	51,575	12.400	8.33
DA-2 (OFFSITE)	Post-Development 1 year	1	51,575	12.400	8.33
DA-2 (OFFSITE)	Pre-Development 10 year	10	181,173	12.350	33.47
DA-2 (OFFSITE)	Post-Development 10 year	10	181,173	12.350	33.47
DA-2 (OFFSITE)	Pre-Development 25 year	25	271,174	12.350	50.59
DA-2 (OFFSITE)	Post-Development 25 year	25	271,174	12.350	50.59
DA-2 (OFFSITE)	Pre-Development 100 year	100	471,772	12.300	88.26
DA-2 (OFFSITE)	Post-Development 100 year	100	471,772	12.300	88.26

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ft ³)	Time to Peak (hours)	Peak Flow (ft ³ /s)
DP-1	Pre-Development 1 year	1	1,698	12.150	0.40
DP-1	Post-Development 1 year	1	808	12.150	0.19
DP-1	Pre-Development 10 year	10	5,070	12.150	1.26
DP-1	Post-Development 10 year	10	2,411	12.150	0.60
DP-1	Pre-Development 25 year	25	7,287	12.150	1.81
DP-1	Post-Development 25 year	25	3,466	12.150	0.86

Existing and Proposed Hydrologic Calculations

Subsection: Master Network Summary

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ft ³)	Time to Peak (hours)	Peak Flow (ft ³ /s)
DP-1	Pre-Development 100 year	100	12,091	12.150	2.97
DP-1	Post-Development 100 year	100	5,751	12.150	1.41
DP-3	Pre-Development 1 year	1	26,679	12.250	4.56
DP-3	Post-Development 1 year	1	33,204	12.200	4.56
DP-3	Pre-Development 10 year	10	70,478	12.250	12.10
DP-3	Post-Development 10 year	10	77,501	12.200	12.04
DP-3	Pre-Development 25 year	25	98,290	12.250	16.74
DP-3	Post-Development 25 year	25	104,586	12.200	16.59
DP-3	Pre-Development 100 year	100	157,548	12.250	26.40
DP-3	Post-Development 100 year	100	161,218	12.200	25.60
DP-2	Pre-Development 1 year	1	57,017	12.400	9.31
DP-2	Post-Development 1 year	1	64,794	12.400	9.23
DP-2	Pre-Development 10 year	10	196,318	12.350	36.29
DP-2	Post-Development 10 year	10	208,319	12.350	35.79
DP-2	Pre-Development 25 year	25	292,551	12.350	54.55
DP-2	Post-Development 25 year	25	307,486	12.350	54.17
DP-2	Pre-Development 100 year	100	506,488	12.300	94.58
DP-2	Post-Development 100 year	100	527,537	12.300	94.09

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ft ³)	Time to Peak (hours)	Peak Flow (ft ³ /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ft ³)
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Existing and Proposed Hydrologic Calculations

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ft ³)	Time to Peak (hours)	Peak Flow (ft ³ /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ft ³)
Stormwater Planters - 2 (IN)	Post-Development 1 year	1	3,987	12.100	1.05	(N/A)	(N/A)
Stormwater Planters - 2 (OUT)	Post-Development 1 year	1	3,992	11.600	0.14	79.24	1,324
Stormwater Planters - 2 (IN)	Post-Development 10 year	10	8,132	12.100	2.05	(N/A)	(N/A)
Stormwater Planters - 2 (OUT)	Post-Development 10 year	10	8,137	12.600	0.35	79.85	3,158
Stormwater Planters - 2 (IN)	Post-Development 25 year	25	10,573	12.100	2.63	(N/A)	(N/A)
Stormwater Planters - 2 (OUT)	Post-Development 25 year	25	10,393	12.300	1.19	79.95	3,482
Stormwater Planters - 2 (IN)	Post-Development 100 year	100	15,596	12.100	3.81	(N/A)	(N/A)
Stormwater Planters - 2 (OUT)	Post-Development 100 year	100	14,695	12.150	3.33	80.12	3,982
24" Depth Green Roof (IN)	Post-Development 1 year	1	3,814	12.100	0.94	(N/A)	(N/A)
24" Depth Green Roof (OUT)	Post-Development 1 year	1	3,817	11.250	0.09	94.46	1,398
24" Depth Green Roof (IN)	Post-Development 10 year	10	7,332	12.100	1.76	(N/A)	(N/A)
24" Depth Green Roof (OUT)	Post-Development 10 year	10	6,928	12.200	1.34	95.24	2,253
24" Depth Green Roof (IN)	Post-Development 25 year	25	9,388	12.100	2.24	(N/A)	(N/A)
24" Depth Green Roof (OUT)	Post-Development 25 year	25	8,686	12.100	2.71	95.27	2,322
24" Depth Green Roof (IN)	Post-Development 100 year	100	13,610	12.100	3.22	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ft ³)	Time to Peak (hours)	Peak Flow (ft ³ /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ft ³)
24" Depth Green Roof (OUT)	Post-Development 100 year	100	12,417	12.100	3.20	95.29	2,346
6" Depth Green Roof (IN)	Post-Development 1 year	1	1,605	12.100	0.40	(N/A)	(N/A)
6" Depth Green Roof (OUT)	Post-Development 1 year	1	1,610	11.800	0.13	93.29	282
6" Depth Green Roof (IN)	Post-Development 10 year	10	3,085	12.100	0.74	(N/A)	(N/A)
6" Depth Green Roof (OUT)	Post-Development 10 year	10	3,090	11.650	0.13	93.68	819
6" Depth Green Roof (IN)	Post-Development 25 year	25	3,951	12.100	0.94	(N/A)	(N/A)
6" Depth Green Roof (OUT)	Post-Development 25 year	25	3,955	12.250	0.53	93.72	950
6" Depth Green Roof (IN)	Post-Development 100 year	100	5,727	12.100	1.35	(N/A)	(N/A)
6" Depth Green Roof (OUT)	Post-Development 100 year	100	5,731	12.150	1.27	93.75	1,017
MC-3500 - 3 (IN)	Post-Development 1 year	1	16,654	12.100	4.56	(N/A)	(N/A)
MC-3500 - 3 (OUT)	Post-Development 1 year	1	16,378	12.600	0.78	64.31	6,851
MC-3500 - 3 (IN)	Post-Development 10 year	10	36,040	12.100	9.44	(N/A)	(N/A)
MC-3500 - 3 (OUT)	Post-Development 10 year	10	35,493	12.450	2.92	65.42	13,634
MC-3500 - 3 (IN)	Post-Development 25 year	25	47,586	12.100	12.24	(N/A)	(N/A)
MC-3500 - 3 (OUT)	Post-Development 25 year	25	46,872	12.400	3.92	66.14	17,625

Existing and Proposed Hydrologic Calculations

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ft ³)	Time to Peak (hours)	Peak Flow (ft ³ /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ft ³)
MC-3500 - 3 (IN)	Post-Development 100 year	100	71,460	12.100	17.94	(N/A)	(N/A)
MC-3500 - 3 (OUT)	Post-Development 100 year	100	70,325	12.400	6.05	68.35	25,706
XFILTRATION SYSTEM (IN)	Post-Development 1 year	1	9,724	12.150	0.44	(N/A)	(N/A)
XFILTRATION SYSTEM (OUT)	Post-Development 1 year	1	9,269	17.100	0.23	72.75	2,633
XFILTRATION SYSTEM (IN)	Post-Development 10 year	10	19,064	12.200	1.81	(N/A)	(N/A)
XFILTRATION SYSTEM (OUT)	Post-Development 10 year	10	16,635	13.050	0.55	73.22	3,797
XFILTRATION SYSTEM (IN)	Post-Development 25 year	25	24,341	12.100	3.33	(N/A)	(N/A)
XFILTRATION SYSTEM (OUT)	Post-Development 25 year	25	21,649	12.700	1.01	74.03	5,892
XFILTRATION SYSTEM (IN)	Post-Development 100 year	100	35,011	12.150	8.12	(N/A)	(N/A)
XFILTRATION SYSTEM (OUT)	Post-Development 100 year	100	32,283	12.600	1.67	76.27	11,262

Existing and Proposed Hydrologic Calculations

Subsection: Time-Depth Curve

Return Event: 1 years

Label: Time-Depth - 1

Storm Event: 1 year

Scenario: Pre-Development 1 year

Time-Depth Curve: 1 year

Label	1 year
Start Time	0.000 hours
Increment	0.100 hours
End Time	24.000 hours
Return Event	1 years

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.100 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.000	0.0	0.0	0.0	0.0	0.0
0.500	0.0	0.0	0.0	0.0	0.0
1.000	0.0	0.0	0.0	0.0	0.0
1.500	0.0	0.0	0.0	0.0	0.1
2.000	0.1	0.1	0.1	0.1	0.1
2.500	0.1	0.1	0.1	0.1	0.1
3.000	0.1	0.1	0.1	0.1	0.1
3.500	0.1	0.1	0.1	0.1	0.1
4.000	0.1	0.1	0.1	0.1	0.1
4.500	0.1	0.1	0.1	0.1	0.2
5.000	0.2	0.2	0.2	0.2	0.2
5.500	0.2	0.2	0.2	0.2	0.2
6.000	0.2	0.2	0.2	0.2	0.2
6.500	0.2	0.2	0.2	0.2	0.2
7.000	0.2	0.3	0.3	0.3	0.3
7.500	0.3	0.3	0.3	0.3	0.3
8.000	0.3	0.3	0.3	0.3	0.3
8.500	0.4	0.4	0.4	0.4	0.4
9.000	0.4	0.4	0.4	0.4	0.4
9.500	0.5	0.5	0.5	0.5	0.5
10.000	0.5	0.5	0.5	0.6	0.6
10.500	0.6	0.6	0.6	0.6	0.7
11.000	0.7	0.7	0.7	0.8	0.8
11.500	0.8	0.9	0.9	1.0	1.1
12.000	1.4	1.6	1.7	1.8	1.9
12.500	1.9	2.0	2.0	2.0	2.0
13.000	2.1	2.1	2.1	2.1	2.1
13.500	2.2	2.2	2.2	2.2	2.2
14.000	2.2	2.2	2.3	2.3	2.3
14.500	2.3	2.3	2.3	2.3	2.3
15.000	2.3	2.4	2.4	2.4	2.4
15.500	2.4	2.4	2.4	2.4	2.4
16.000	2.4	2.4	2.5	2.5	2.5
16.500	2.5	2.5	2.5	2.5	2.5

Existing and Proposed Hydrologic Calculations

Subsection: Time-Depth Curve

Return Event: 1 years

Label: Time-Depth - 1

Storm Event: 1 year

Scenario: Pre-Development 1 year

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.100 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
17.000	2.5	2.5	2.5	2.5	2.5
17.500	2.5	2.5	2.5	2.5	2.5
18.000	2.6	2.6	2.6	2.6	2.6
18.500	2.6	2.6	2.6	2.6	2.6
19.000	2.6	2.6	2.6	2.6	2.6
19.500	2.6	2.6	2.6	2.6	2.6
20.000	2.6	2.6	2.6	2.6	2.6
20.500	2.6	2.7	2.7	2.7	2.7
21.000	2.7	2.7	2.7	2.7	2.7
21.500	2.7	2.7	2.7	2.7	2.7
22.000	2.7	2.7	2.7	2.7	2.7
22.500	2.7	2.7	2.7	2.7	2.7
23.000	2.7	2.7	2.7	2.7	2.7
23.500	2.7	2.7	2.7	2.7	2.7
24.000	2.8	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time-Depth Curve

Return Event: 10 years

Label: Time-Depth - 1

Storm Event: 10 year

Scenario: Pre-Development 10 year

Time-Depth Curve: 10 year

Label	10 year
Start Time	0.000 hours
Increment	0.100 hours
End Time	24.000 hours
Return Event	10 years

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.100 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.000	0.0	0.0	0.0	0.0	0.0
0.500	0.0	0.0	0.0	0.0	0.0
1.000	0.1	0.1	0.1	0.1	0.1
1.500	0.1	0.1	0.1	0.1	0.1
2.000	0.1	0.1	0.1	0.1	0.1
2.500	0.1	0.1	0.1	0.1	0.2
3.000	0.2	0.2	0.2	0.2	0.2
3.500	0.2	0.2	0.2	0.2	0.2
4.000	0.2	0.2	0.2	0.2	0.2
4.500	0.3	0.3	0.3	0.3	0.3
5.000	0.3	0.3	0.3	0.3	0.3
5.500	0.3	0.3	0.3	0.3	0.4
6.000	0.4	0.4	0.4	0.4	0.4
6.500	0.4	0.4	0.4	0.4	0.4
7.000	0.5	0.5	0.5	0.5	0.5
7.500	0.5	0.5	0.5	0.6	0.6
8.000	0.6	0.6	0.6	0.6	0.6
8.500	0.7	0.7	0.7	0.7	0.7
9.000	0.7	0.8	0.8	0.8	0.8
9.500	0.8	0.9	0.9	0.9	0.9
10.000	1.0	1.0	1.0	1.0	1.1
10.500	1.1	1.1	1.2	1.2	1.2
11.000	1.3	1.3	1.4	1.4	1.5
11.500	1.5	1.6	1.7	1.9	2.1
12.000	2.5	3.0	3.2	3.4	3.5
12.500	3.6	3.6	3.7	3.7	3.8
13.000	3.8	3.8	3.9	3.9	3.9
13.500	4.0	4.0	4.0	4.1	4.1
14.000	4.1	4.1	4.2	4.2	4.2
14.500	4.2	4.3	4.3	4.3	4.3
15.000	4.3	4.4	4.4	4.4	4.4
15.500	4.4	4.4	4.5	4.5	4.5
16.000	4.5	4.5	4.5	4.5	4.6
16.500	4.6	4.6	4.6	4.6	4.6

Existing and Proposed Hydrologic Calculations

Subsection: Time-Depth Curve

Return Event: 10 years

Label: Time-Depth - 1

Storm Event: 10 year

Scenario: Pre-Development 10 year

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.100 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
17.000	4.6	4.6	4.6	4.7	4.7
17.500	4.7	4.7	4.7	4.7	4.7
18.000	4.7	4.7	4.7	4.7	4.7
18.500	4.8	4.8	4.8	4.8	4.8
19.000	4.8	4.8	4.8	4.8	4.8
19.500	4.8	4.8	4.8	4.8	4.9
20.000	4.9	4.9	4.9	4.9	4.9
20.500	4.9	4.9	4.9	4.9	4.9
21.000	4.9	4.9	4.9	4.9	4.9
21.500	5.0	5.0	5.0	5.0	5.0
22.000	5.0	5.0	5.0	5.0	5.0
22.500	5.0	5.0	5.0	5.0	5.0
23.000	5.0	5.0	5.0	5.0	5.1
23.500	5.1	5.1	5.1	5.1	5.1
24.000	5.1	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time-Depth Curve

Return Event: 100 years

Label: Time-Depth - 1

Storm Event: 100 year

Scenario: Pre-Development 100 year

Time-Depth Curve: 100 year

Label	100 year
Start Time	0.000 hours
Increment	0.100 hours
End Time	24.000 hours
Return Event	100 years

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.100 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.000	0.0	0.0	0.0	0.0	0.0
0.500	0.0	0.1	0.1	0.1	0.1
1.000	0.1	0.1	0.1	0.1	0.1
1.500	0.1	0.1	0.2	0.2	0.2
2.000	0.2	0.2	0.2	0.2	0.2
2.500	0.2	0.2	0.3	0.3	0.3
3.000	0.3	0.3	0.3	0.3	0.3
3.500	0.3	0.4	0.4	0.4	0.4
4.000	0.4	0.4	0.4	0.4	0.4
4.500	0.5	0.5	0.5	0.5	0.5
5.000	0.5	0.5	0.6	0.6	0.6
5.500	0.6	0.6	0.6	0.6	0.6
6.000	0.7	0.7	0.7	0.7	0.7
6.500	0.7	0.8	0.8	0.8	0.8
7.000	0.8	0.9	0.9	0.9	0.9
7.500	0.9	1.0	1.0	1.0	1.0
8.000	1.1	1.1	1.1	1.1	1.2
8.500	1.2	1.2	1.2	1.3	1.3
9.000	1.3	1.4	1.4	1.5	1.5
9.500	1.5	1.6	1.6	1.7	1.7
10.000	1.7	1.8	1.8	1.9	1.9
10.500	2.0	2.1	2.1	2.2	2.2
11.000	2.3	2.4	2.5	2.5	2.6
11.500	2.8	2.9	3.1	3.4	3.8
12.000	4.6	5.4	5.8	6.1	6.3
12.500	6.5	6.6	6.7	6.8	6.9
13.000	6.9	7.0	7.1	7.1	7.2
13.500	7.2	7.3	7.3	7.4	7.4
14.000	7.5	7.5	7.6	7.6	7.7
14.500	7.7	7.7	7.8	7.8	7.8
15.000	7.9	7.9	8.0	8.0	8.0
15.500	8.0	8.1	8.1	8.1	8.2
16.000	8.2	8.2	8.2	8.2	8.3
16.500	8.3	8.3	8.3	8.4	8.4

Existing and Proposed Hydrologic Calculations

Subsection: Time-Depth Curve

Return Event: 100 years

Label: Time-Depth - 1

Storm Event: 100 year

Scenario: Pre-Development 100 year

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.100 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
17.000	8.4	8.4	8.4	8.5	8.5
17.500	8.5	8.5	8.5	8.5	8.6
18.000	8.6	8.6	8.6	8.6	8.6
18.500	8.6	8.7	8.7	8.7	8.7
19.000	8.7	8.7	8.7	8.7	8.8
19.500	8.8	8.8	8.8	8.8	8.8
20.000	8.8	8.8	8.9	8.9	8.9
20.500	8.9	8.9	8.9	8.9	8.9
21.000	8.9	9.0	9.0	9.0	9.0
21.500	9.0	9.0	9.0	9.0	9.0
22.000	9.1	9.1	9.1	9.1	9.1
22.500	9.1	9.1	9.1	9.1	9.1
23.000	9.1	9.2	9.2	9.2	9.2
23.500	9.2	9.2	9.2	9.2	9.2
24.000	9.2	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time-Depth Curve

Return Event: 25 years

Label: Time-Depth - 1

Storm Event: 25 year

Scenario: Pre-Development 25 year

Time-Depth Curve: 25 year

Label	25 year
Start Time	0.000 hours
Increment	0.100 hours
End Time	24.000 hours
Return Event	25 years

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.100 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.000	0.0	0.0	0.0	0.0	0.0
0.500	0.0	0.0	0.0	0.1	0.1
1.000	0.1	0.1	0.1	0.1	0.1
1.500	0.1	0.1	0.1	0.1	0.1
2.000	0.1	0.1	0.1	0.1	0.2
2.500	0.2	0.2	0.2	0.2	0.2
3.000	0.2	0.2	0.2	0.2	0.2
3.500	0.2	0.2	0.3	0.3	0.3
4.000	0.3	0.3	0.3	0.3	0.3
4.500	0.3	0.3	0.3	0.3	0.4
5.000	0.4	0.4	0.4	0.4	0.4
5.500	0.4	0.4	0.4	0.4	0.5
6.000	0.5	0.5	0.5	0.5	0.5
6.500	0.5	0.5	0.5	0.6	0.6
7.000	0.6	0.6	0.6	0.6	0.6
7.500	0.7	0.7	0.7	0.7	0.7
8.000	0.7	0.8	0.8	0.8	0.8
8.500	0.8	0.8	0.9	0.9	0.9
9.000	0.9	1.0	1.0	1.0	1.0
9.500	1.1	1.1	1.1	1.2	1.2
10.000	1.2	1.2	1.3	1.3	1.4
10.500	1.4	1.4	1.5	1.5	1.6
11.000	1.6	1.7	1.7	1.8	1.8
11.500	1.9	2.0	2.2	2.4	2.7
12.000	3.2	3.8	4.0	4.3	4.4
12.500	4.5	4.6	4.7	4.7	4.8
13.000	4.8	4.9	4.9	5.0	5.0
13.500	5.0	5.1	5.1	5.2	5.2
14.000	5.2	5.3	5.3	5.3	5.3
14.500	5.4	5.4	5.4	5.5	5.5
15.000	5.5	5.5	5.5	5.6	5.6
15.500	5.6	5.6	5.7	5.7	5.7
16.000	5.7	5.7	5.7	5.8	5.8
16.500	5.8	5.8	5.8	5.8	5.8

Existing and Proposed Hydrologic Calculations

Subsection: Time-Depth Curve

Return Event: 25 years

Label: Time-Depth - 1

Storm Event: 25 year

Scenario: Pre-Development 25 year

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.100 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
17.000	5.9	5.9	5.9	5.9	5.9
17.500	5.9	5.9	5.9	6.0	6.0
18.000	6.0	6.0	6.0	6.0	6.0
18.500	6.0	6.0	6.0	6.1	6.1
19.000	6.1	6.1	6.1	6.1	6.1
19.500	6.1	6.1	6.1	6.1	6.2
20.000	6.2	6.2	6.2	6.2	6.2
20.500	6.2	6.2	6.2	6.2	6.2
21.000	6.2	6.3	6.3	6.3	6.3
21.500	6.3	6.3	6.3	6.3	6.3
22.000	6.3	6.3	6.3	6.3	6.3
22.500	6.3	6.4	6.4	6.4	6.4
23.000	6.4	6.4	6.4	6.4	6.4
23.500	6.4	6.4	6.4	6.4	6.4
24.000	6.4	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Return Event: 1 years

Label: DA-2 (OFFSITE)

Storm Event: 1 year

Scenario: Pre-Development 1 year

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.400
Slope	0.020 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.08 ft/s
Segment Time of Concentration	0.347 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	764.00 ft
Is Paved?	False
Slope	0.014 ft/ft
Average Velocity	1.91 ft/s
Segment Time of Concentration	0.111 hours
Segment #3: TR-55 Shallow Concentrated Flow	
Hydraulic Length	31.00 ft
Is Paved?	False
Slope	0.516 ft/ft
Average Velocity	11.59 ft/s
Segment Time of Concentration	0.001 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.459 hours

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Label: DA-2 (OFFSITE)

Scenario: Pre-Development 1 year

Return Event: 1 years

Storm Event: 1 year

==== SCS Channel Flow

$$T_c = \frac{R = Q_a / W_p}{V = (1.49 * (R^{2/3}) * (S_f^{-0.5})) / n}$$

Where: $(L_f / V) / 3600$
R= Hydraulic radius
A_q= Flow area, square feet
W_p= Wetted perimeter, feet
V= Velocity, ft/sec
S_f= Slope, ft/ft
n= Manning's n
T_c= Time of concentration, hours
L_f= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

$$T_c = \frac{\text{Unpaved surface:}}{V = 16.1345 * (S_f^{0.5})}$$

$$\text{Paved Surface:}$$
$$V = 20.3282 * (S_f^{0.5})$$

Where: $(L_f / V) / 3600$
V= Velocity, ft/sec
S_f= Slope, ft/ft
T_c= Time of concentration, hours
L_f= Flow length, feet

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Return Event: 1 years

Label: DA-3 (OFFSITE)

Storm Event: 1 year

Scenario: Pre-Development 1 year

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.150
Slope	0.015 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.16 ft/s
Segment Time of Concentration	0.178 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	896.00 ft
Is Paved?	False
Slope	0.040 ft/ft
Average Velocity	3.21 ft/s
Segment Time of Concentration	0.078 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.255 hours

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Label: DA-3 (OFFSITE)

Scenario: Pre-Development 1 year

Return Event: 1 years

Storm Event: 1 year

==== SCS Channel Flow

$$T_c = \frac{R = Q_a / W_p}{V = (1.49 * (R^{2/3}) * (S_f^{-0.5})) / n}$$

Where: $(L_f / V) / 3600$
R= Hydraulic radius
A_q= Flow area, square feet
W_p= Wetted perimeter, feet
V= Velocity, ft/sec
S_f= Slope, ft/ft
n= Manning's n
T_c= Time of concentration, hours
L_f= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

$$T_c = \frac{\text{Unpaved surface:}}{V = 16.1345 * (S_f^{0.5})}$$

$$\text{Paved Surface:}$$
$$V = 20.3282 * (S_f^{0.5})$$

Where: $(L_f / V) / 3600$
V= Velocity, ft/sec
S_f= Slope, ft/ft
T_c= Time of concentration, hours
L_f= Flow length, feet

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Label: EDA-1

Scenario: Pre-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Time of Concentration Results

Segment #1: TR-55 Sheet Flow

Hydraulic Length	100.00 ft
Manning's n	0.400
Slope	0.080 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.14 ft/s
Segment Time of Concentration	0.200 hours

Segment #2: TR-55 Shallow Concentrated Flow

Hydraulic Length	31.00 ft
Is Paved?	False
Slope	0.032 ft/ft
Average Velocity	2.89 ft/s
Segment Time of Concentration	0.003 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.203 hours
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Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Label: EDA-1

Scenario: Pre-Development 1 year

Return Event: 1 years

Storm Event: 1 year

==== SCS Channel Flow

$$T_c = \frac{R = Q_a / W_p}{V = (1.49 * (R^{2/3}) * (S_f^{-0.5})) / n}$$

Where:

$$(L_f / V) / 3600$$

R= Hydraulic radius
A_q= Flow area, square feet
W_p= Wetted perimeter, feet
V= Velocity, ft/sec
S_f= Slope, ft/ft
n= Manning's n
T_c= Time of concentration, hours
L_f= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

$$T_c = \frac{\text{Unpaved surface:}}{V = 16.1345 * (S_f^{0.5})}$$

$$\text{Paved Surface:}$$
$$V = 20.3282 * (S_f^{0.5})$$

Where:

$$(L_f / V) / 3600$$

V= Velocity, ft/sec
S_f= Slope, ft/ft
T_c= Time of concentration, hours
L_f= Flow length, feet

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Return Event: 1 years

Label: EDA-2

Storm Event: 1 year

Scenario: Pre-Development 1 year

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.400
Slope	0.010 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.06 ft/s
Segment Time of Concentration	0.458 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	121.00 ft
Is Paved?	False
Slope	0.050 ft/ft
Average Velocity	3.61 ft/s
Segment Time of Concentration	0.009 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.467 hours

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Label: EDA-2

Scenario: Pre-Development 1 year

Return Event: 1 years

Storm Event: 1 year

==== SCS Channel Flow

$$T_c = \frac{R = Q_a / W_p}{V = (1.49 * (R^{2/3}) * (S_f^{-0.5})) / n}$$

Where:

$$(L_f / V) / 3600$$

R= Hydraulic radius
A_q= Flow area, square feet
W_p= Wetted perimeter, feet
V= Velocity, ft/sec
S_f= Slope, ft/ft
n= Manning's n
T_c= Time of concentration, hours
L_f= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

$$T_c = \frac{\text{Unpaved surface:}}{V = 16.1345 * (S_f^{0.5})}$$

$$\text{Paved Surface:}$$
$$V = 20.3282 * (S_f^{0.5})$$

Where:

$$(L_f / V) / 3600$$

V= Velocity, ft/sec
S_f= Slope, ft/ft
T_c= Time of concentration, hours
L_f= Flow length, feet

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Return Event: 1 years

Label: EDA-3

Storm Event: 1 year

Scenario: Pre-Development 1 year

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.400
Slope	0.007 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.05 ft/s
Segment Time of Concentration	0.528 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	471.00 ft
Is Paved?	False
Slope	0.025 ft/ft
Average Velocity	2.55 ft/s
Segment Time of Concentration	0.051 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.580 hours

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Label: EDA-3

Scenario: Pre-Development 1 year

Return Event: 1 years

Storm Event: 1 year

==== SCS Channel Flow

$$T_c = \frac{R = Q_a / W_p}{V = (1.49 * (R^{2/3}) * (S_f^{-0.5})) / n}$$

Where:

$$(L_f / V) / 3600$$

R= Hydraulic radius
A_q= Flow area, square feet
W_p= Wetted perimeter, feet
V= Velocity, ft/sec
S_f= Slope, ft/ft
n= Manning's n
T_c= Time of concentration, hours
L_f= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

$$T_c = \frac{\text{Unpaved surface:}}{V = 16.1345 * (S_f^{0.5})}$$

$$\text{Paved Surface:}$$
$$V = 20.3282 * (S_f^{0.5})$$

Where:

$$(L_f / V) / 3600$$

V= Velocity, ft/sec
S_f= Slope, ft/ft
T_c= Time of concentration, hours
L_f= Flow length, feet

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Label: PDA-1

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Time of Concentration Results

Segment #1: TR-55 Sheet Flow

Hydraulic Length	100.00 ft
Manning's n	0.400
Slope	0.080 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.14 ft/s
Segment Time of Concentration	0.199 hours

Segment #2: TR-55 Shallow Concentrated Flow

Hydraulic Length	31.00 ft
Is Paved?	False
Slope	0.032 ft/ft
Average Velocity	2.89 ft/s
Segment Time of Concentration	0.003 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.202 hours
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Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Label: PDA-1

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

==== SCS Channel Flow

$$T_c = \frac{R = Q_a / W_p}{V = (1.49 * (R^{2/3}) * (S_f^{-0.5})) / n}$$

Where: $(L_f / V) / 3600$
R= Hydraulic radius
A_q= Flow area, square feet
W_p= Wetted perimeter, feet
V= Velocity, ft/sec
S_f= Slope, ft/ft
n= Manning's n
T_c= Time of concentration, hours
L_f= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

$$T_c = \frac{\text{Unpaved surface:}}{V = 16.1345 * (S_f^{0.5})}$$

$$\text{Paved Surface:}$$
$$V = 20.3282 * (S_f^{0.5})$$

Where: $(L_f / V) / 3600$
V= Velocity, ft/sec
S_f= Slope, ft/ft
T_c= Time of concentration, hours
L_f= Flow length, feet

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Return Event: 1 years

Label: PDA-2A

Storm Event: 1 year

Scenario: Post-Development 1 year

Time of Concentration Results

Segment #1: TR-55 Sheet Flow	
Hydraulic Length	100.00 ft
Manning's n	0.400
Slope	0.011 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.06 ft/s
Segment Time of Concentration	0.441 hours
Segment #2: TR-55 Shallow Concentrated Flow	
Hydraulic Length	50.00 ft
Is Paved?	False
Slope	0.400 ft/ft
Average Velocity	10.20 ft/s
Segment Time of Concentration	0.001 hours
Time of Concentration (Composite)	
Time of Concentration (Composite)	0.442 hours

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Return Event: 1 years

Label: PDA-2A

Storm Event: 1 year

Scenario: Post-Development 1 year

==== SCS Channel Flow

$$T_c = \frac{R = Q_a / W_p}{V = (1.49 * (R^{2/3}) * (S_f^{-0.5})) / n}$$

$$\text{Where: } (L_f / V) / 3600$$

R= Hydraulic radius
A_q= Flow area, square feet
W_p= Wetted perimeter, feet
V= Velocity, ft/sec
S_f= Slope, ft/ft
n= Manning's n
T_c= Time of concentration, hours
L_f= Flow length, feet

==== SCS TR-55 Shallow Concentration Flow

$$T_c = \frac{\text{Unpaved surface:}}{V = 16.1345 * (S_f^{0.5})}$$

$$\text{Paved Surface:}$$
$$V = 20.3282 * (S_f^{0.5})$$

$$\text{Where: } (L_f / V) / 3600$$

V= Velocity, ft/sec
S_f= Slope, ft/ft
T_c= Time of concentration, hours
L_f= Flow length, feet

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Label: PDA-2B

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Time of Concentration Results

Segment #1: User Defined Tc	
Time of Concentration	0.100 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.100 hours

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Label: PDA-2B

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

==== User Defined

Tc = Value entered by user

Where: Tc= Time of concentration, hours

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Label: PDA-2C

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Time of Concentration Results

Segment #1: User Defined Tc	
Time of Concentration	0.100 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.100 hours

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Label: PDA-2C

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

==== User Defined

Tc = Value entered by user

Where: Tc= Time of concentration, hours

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Label: PDA-2D

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Time of Concentration Results

Segment #1: User Defined Tc	
Time of Concentration	0.100 hours

Time of Concentration (Composite)	
Time of Concentration (Composite)	0.100 hours

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Label: PDA-2D

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

==== User Defined

Tc = Value entered by user

Where: Tc= Time of concentration, hours

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Label: PDA-2E

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Time of Concentration Results

Segment #1: TR-55 Sheet Flow

Hydraulic Length	100.00 ft
Manning's n	0.400
Slope	0.230 ft/ft
2 Year 24 Hour Depth	3.4 in
Average Velocity	0.21 ft/s
Segment Time of Concentration	0.131 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.131 hours
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Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Label: PDA-2E

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

==== SCS Channel Flow

$$T_c = \frac{R = Q_a / W_p}{V = (1.49 * (R^{2/3}) * (S_f^{-0.5})) / n}$$

$$\text{Where: } (L_f / V) / 3600$$

R= Hydraulic radius
A_q= Flow area, square feet
W_p= Wetted perimeter, feet
V= Velocity, ft/sec
S_f= Slope, ft/ft
n= Manning's n
T_c= Time of concentration, hours
L_f= Flow length, feet

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Label: PDA-3A

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Time of Concentration Results

Segment #1: TR-55 Sheet Flow

Hydraulic Length	100.00 ft
Manning's n	0.400
Slope	0.060 ft/ft
2 Year 24 Hour Depth	2.8 in
Average Velocity	0.11 ft/s
Segment Time of Concentration	0.247 hours

Segment #2: TR-55 Channel Flow

Flow Area	1.2 ft ²
Hydraulic Length	443.00 ft
Manning's n	0.011
Slope	0.072 ft/ft
Wetted Perimeter	3.93 ft
Average Velocity	16.77 ft/s
Segment Time of Concentration	0.007 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.254 hours
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Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Label: PDA-3A

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

==== SCS Channel Flow

$$T_c = \frac{R}{Q_a / W_p}$$
$$V = (1.49 * (R^{2/3}) * (S_f^{-0.5})) / n$$

Where:

$(L_f / V) / 3600$

R= Hydraulic radius
A_q= Flow area, square feet
W_p= Wetted perimeter, feet
V= Velocity, ft/sec
S_f= Slope, ft/ft
n= Manning's n
T_c= Time of concentration, hours
L_f= Flow length, feet

==== SCS TR-55 Sheet Flow

$$T_c = \frac{(0.007 * ((n * L_f)^{0.8}))}{((P^{0.5}) * (S_f^{0.4}))}$$

Where:

T_c= Time of concentration, hours
n= Manning's n
L_f= Flow length, feet
P= 2yr, 24hr Rain depth, inches
S_f= Slope, %

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Label: PDA-3B

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Time of Concentration Results

Segment #1: User Defined Tc

Time of Concentration	0.100 hours
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Time of Concentration (Composite)

Time of Concentration (Composite)	0.100 hours
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Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Label: PDA-3B

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

==== User Defined

Tc = Value entered by user
Where: Tc= Time of concentration, hours

Existing and Proposed Hydrologic Calculations

Subsection: Runoff CN-Area
 Label: DA-2 (OFFSITE)
 Scenario: Pre-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Runoff Curve Number Data

Soil/Surface Description	CN	Area (ft ²)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil B	55.000	631,149	0.0	0.0	55.000
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil B	98.000	373,154	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	1,004,303	(N/A)	(N/A)	70.977

Existing and Proposed Hydrologic Calculations

Subsection: Runoff CN-Area
 Label: DA-3 (OFFSITE)
 Scenario: Pre-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Runoff Curve Number Data

Soil/Surface Description	CN	Area (ft ²)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil D	77.000	45,717	0.0	0.0	77.000
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil D	98.000	50,990	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	96,707	(N/A)	(N/A)	88.073

Existing and Proposed Hydrologic Calculations

Subsection: Runoff CN-Area

Return Event: 1 years

Label: EDA-1

Storm Event: 1 year

Scenario: Pre-Development 1 year

Runoff Curve Number Data

Soil/Surface Description	CN	Area (ft ²)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil D	77.000	22,667	0.0	0.0	77.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	22,667	(N/A)	(N/A)	77.000

Existing and Proposed Hydrologic Calculations

Subsection: Runoff CN-Area
 Label: EDA-2
 Scenario: Pre-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Runoff Curve Number Data

Soil/Surface Description	CN	Area (ft ²)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil D	77.000	54,880	0.0	0.0	77.000
POND	100.000	6,764	0.0	0.0	100.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	61,644	(N/A)	(N/A)	79.524

Existing and Proposed Hydrologic Calculations

Subsection: Runoff CN-Area
 Label: EDA-3
 Scenario: Pre-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Runoff Curve Number Data

Soil/Surface Description	CN	Area (ft ²)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil D	77.000	167,198	0.0	0.0	77.000
Impervious Areas - Gravel (w/ right-of-way) - Soil D	91.000	8,159	0.0	0.0	91.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	175,357	(N/A)	(N/A)	77.651

Existing and Proposed Hydrologic Calculations

Subsection: Runoff CN-Area
 Label: PDA-1
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Runoff Curve Number Data

Soil/Surface Description	CN	Area (ft ²)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil D	77.000	10,780	0.0	0.0	77.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	10,780	(N/A)	(N/A)	77.000

Existing and Proposed Hydrologic Calculations

Subsection: Runoff CN-Area
 Label: PDA-2A
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Runoff Curve Number Data

Soil/Surface Description	CN	Area (ft ²)	C (%)	UC (%)	Adjusted CN
POND	100.000	6,764	0.0	0.0	100.000
Woods - good - Soil D	77.000	24,245	0.0	0.0	77.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil D	80.000	9,206	0.0	0.0	80.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	40,215	(N/A)	(N/A)	81.555

Existing and Proposed Hydrologic Calculations

Subsection: Runoff CN-Area
 Label: PDA-2B
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Runoff Curve Number Data

Soil/Surface Description	CN	Area (ft ²)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil D	98.000	18,622	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil D	80.000	3,087	0.0	0.0	80.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	21,709	(N/A)	(N/A)	95.440

Existing and Proposed Hydrologic Calculations

Subsection: Runoff CN-Area
 Label: PDA-2C
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Runoff Curve Number Data

Soil/Surface Description	CN	Area (ft ²)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil D	98.000	18,180	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	18,180	(N/A)	(N/A)	98.000

Existing and Proposed Hydrologic Calculations

Subsection: Runoff CN-Area
 Label: PDA-2D
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Runoff Curve Number Data

Soil/Surface Description	CN	Area (ft ²)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil D	98.000	7,650	0.0	0.0	98.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	7,650	(N/A)	(N/A)	98.000

Existing and Proposed Hydrologic Calculations

Subsection: Runoff CN-Area
 Label: PDA-2E
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Runoff Curve Number Data

Soil/Surface Description	CN	Area (ft ²)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil D	77.000	3,388	0.0	0.0	77.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil D	80.000	672	0.0	0.0	80.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	4,060	(N/A)	(N/A)	77.497

Existing and Proposed Hydrologic Calculations

Subsection: Runoff CN-Area

Return Event: 1 years

Label: PDA-3A

Storm Event: 1 year

Scenario: Post-Development 1 year

Runoff Curve Number Data

Soil/Surface Description	CN	Area (ft ²)	C (%)	UC (%)	Adjusted CN
Woods - good - Soil D	77.000	53,198	0.0	0.0	77.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	53,198	(N/A)	(N/A)	77.000

Existing and Proposed Hydrologic Calculations

Subsection: Runoff CN-Area
 Label: PDA-3B
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Runoff Curve Number Data

Soil/Surface Description	CN	Area (ft ²)	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil D	98.000	69,329	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil D	80.000	34,532	0.0	0.0	80.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	103,861	(N/A)	(N/A)	92.015

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 1 years

Label: DA-2 (OFFSITE)

Storm Event: 1 year

Scenario: Pre-Development 1 year

Storm Event	1 year
Return Event	1 years
Duration	24.000 hours
Depth	2.8 in
Time of Concentration (Composite)	0.459 hours
Area (User Defined)	1,004,303 ft ²

Computational Time Increment	0.061 hours
Time to Peak (Computed)	12.366 hours
Flow (Peak, Computed)	8.33 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.400 hours
Flow (Peak Interpolated Output)	8.33 ft ³ /s

Drainage Area	
SCS CN (Composite)	71.000
Area (User Defined)	1,004,303 ft ²
Maximum Retention (Pervious)	4.1 in
Maximum Retention (Pervious, 20 percent)	0.8 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.6 in
Runoff Volume (Pervious)	51,972 ft ³

Hydrograph Volume (Area under Hydrograph curve)	
Volume	51,575 ft ³

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.459 hours
Computational Time Increment	0.061 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Label: DA-2 (OFFSITE)

Scenario: Pre-Development 1 year

Return Event: 1 years

Storm Event: 1 year

SCS Unit Hydrograph Parameters

Unit peak, qp	56.90 ft ³ /s
Unit peak time, Tp	0.306 hours
Unit receding limb, Tr	1.224 hours
Total unit time, Tb	1.530 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 1 years

Label: DA-3 (OFFSITE)

Storm Event: 1 year

Scenario: Pre-Development 1 year

Storm Event	1 year
Return Event	1 years
Duration	24.000 hours
Depth	2.8 in
Time of Concentration (Composite)	0.255 hours
Area (User Defined)	96,707 ft ²

Computational Time Increment	0.034 hours
Time to Peak (Computed)	12.185 hours
Flow (Peak, Computed)	3.00 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	2.98 ft ³ /s

Drainage Area	
SCS CN (Composite)	88.000
Area (User Defined)	96,707 ft ²
Maximum Retention (Pervious)	1.4 in
Maximum Retention (Pervious, 20 percent)	0.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.6 in
Runoff Volume (Pervious)	12,876 ft ³

Hydrograph Volume (Area under Hydrograph curve)	
Volume	12,844 ft ³

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.255 hours
Computational Time Increment	0.034 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Label: DA-3 (OFFSITE)

Scenario: Pre-Development 1 year

Return Event: 1 years

Storm Event: 1 year

SCS Unit Hydrograph Parameters

Unit peak, q_p	9.85 ft ³ /s
Unit peak time, T_p	0.170 hours
Unit receding limb, T_r	0.681 hours
Total unit time, T_b	0.851 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 10 years

Label: DA-3 (OFFSITE)

Storm Event: 10 year

Scenario: Post-Development 10 year

Storm Event	10 year
Return Event	10 years
Duration	24.000 hours
Depth	5.1 in
Time of Concentration (Composite)	0.255 hours
Area (User Defined)	96,707 ft ²
<hr/>	
Computational Time Increment	0.034 hours
Time to Peak (Computed)	12.185 hours
Flow (Peak, Computed)	6.88 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	6.79 ft ³ /s
<hr/>	
Drainage Area	
SCS CN (Composite)	88.000
Area (User Defined)	96,707 ft ²
Maximum Retention (Pervious)	1.4 in
Maximum Retention (Pervious, 20 percent)	0.3 in
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.7 in
Runoff Volume (Pervious)	30,180 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	30,115 ft ³
<hr/>	
SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.255 hours
Computational Time Increment	0.034 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Label: DA-3 (OFFSITE)

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

SCS Unit Hydrograph Parameters

Unit peak, qp	9.85 ft ³ /s
Unit peak time, Tp	0.170 hours
Unit receding limb, Tr	0.681 hours
Total unit time, Tb	0.851 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 1 years

Label: EDA-1

Storm Event: 1 year

Scenario: Pre-Development 1 year

Storm Event	1 year
Return Event	1 years
Duration	24.000 hours
Depth	2.8 in
Time of Concentration (Composite)	0.203 hours
Area (User Defined)	22,667 ft ²

Computational Time Increment	0.027 hours
Time to Peak (Computed)	12.170 hours
Flow (Peak, Computed)	0.41 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	0.40 ft ³ /s

Drainage Area	
SCS CN (Composite)	77.000
Area (User Defined)	22,667 ft ²
Maximum Retention (Pervious)	3.0 in
Maximum Retention (Pervious, 20 percent)	0.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.9 in
Runoff Volume (Pervious)	1,703 ft ³

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1,698 ft ³

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.203 hours
Computational Time Increment	0.027 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Label: EDA-1

Scenario: Pre-Development 1 year

Return Event: 1 years

Storm Event: 1 year

SCS Unit Hydrograph Parameters

Unit peak, qp	2.90 ft ³ /s
Unit peak time, Tp	0.136 hours
Unit receding limb, Tr	0.542 hours
Total unit time, Tb	0.678 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 1 years

Label: EDA-2

Storm Event: 1 year

Scenario: Pre-Development 1 year

Storm Event	1 year
Return Event	1 years
Duration	24.000 hours
Depth	2.8 in
Time of Concentration (Composite)	0.467 hours
Area (User Defined)	61,644 ft ²
<hr/>	
Computational Time Increment	0.062 hours
Time to Peak (Computed)	12.341 hours
Flow (Peak, Computed)	0.99 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.350 hours
Flow (Peak Interpolated Output)	0.99 ft ³ /s
<hr/>	
Drainage Area	
SCS CN (Composite)	80.000
Area (User Defined)	61,644 ft ²
Maximum Retention (Pervious)	2.5 in
Maximum Retention (Pervious, 20 percent)	0.5 in
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.1 in
Runoff Volume (Pervious)	5,475 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	5,442 ft ³
<hr/>	
SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.467 hours
Computational Time Increment	0.062 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Label: EDA-2

Scenario: Pre-Development 1 year

Return Event: 1 years

Storm Event: 1 year

SCS Unit Hydrograph Parameters

Unit peak, q_p	3.43 ft ³ /s
Unit peak time, T_p	0.312 hours
Unit receding limb, T_r	1.247 hours
Total unit time, T_b	1.558 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 1 years

Label: EDA-3

Storm Event: 1 year

Scenario: Pre-Development 1 year

Storm Event	1 year
Return Event	1 years
Duration	24.000 hours
Depth	2.8 in
Time of Concentration (Composite)	0.580 hours
Area (User Defined)	175,357 ft ²
<hr/>	
Computational Time Increment	0.077 hours
Time to Peak (Computed)	12.444 hours
Flow (Peak, Computed)	2.27 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.450 hours
Flow (Peak Interpolated Output)	2.26 ft ³ /s
<hr/>	
Drainage Area	
SCS CN (Composite)	78.000
Area (User Defined)	175,357 ft ²
Maximum Retention (Pervious)	2.8 in
Maximum Retention (Pervious, 20 percent)	0.6 in
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	13,947 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	13,835 ft ³
<hr/>	
SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.580 hours
Computational Time Increment	0.077 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Label: EDA-3

Scenario: Pre-Development 1 year

Return Event: 1 years

Storm Event: 1 year

SCS Unit Hydrograph Parameters

Unit peak, q_p	7.87 ft ³ /s
Unit peak time, T_p	0.386 hours
Unit receding limb, T_r	1.546 hours
Total unit time, T_b	1.932 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 1 years

Label: PDA-1

Storm Event: 1 year

Scenario: Post-Development 1 year

Storm Event	1 year
Return Event	1 years
Duration	24.000 hours
Depth	2.8 in
Time of Concentration (Composite)	0.202 hours
Area (User Defined)	10,780 ft ²

Computational Time Increment	0.027 hours
Time to Peak (Computed)	12.171 hours
Flow (Peak, Computed)	0.19 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	0.19 ft ³ /s

Drainage Area	
SCS CN (Composite)	77.000
Area (User Defined)	10,780 ft ²
Maximum Retention (Pervious)	3.0 in
Maximum Retention (Pervious, 20 percent)	0.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.9 in
Runoff Volume (Pervious)	810 ft ³

Hydrograph Volume (Area under Hydrograph curve)	
Volume	808 ft ³

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.202 hours
Computational Time Increment	0.027 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Label: PDA-1

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

SCS Unit Hydrograph Parameters

Unit peak, q_p	1.39 ft ³ /s
Unit peak time, T_p	0.135 hours
Unit receding limb, T_r	0.540 hours
Total unit time, T_b	0.675 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 1 years

Label: PDA-2A

Storm Event: 1 year

Scenario: Post-Development 1 year

Storm Event	1 year
Return Event	1 years
Duration	24.000 hours
Depth	2.8 in
Time of Concentration (Composite)	0.442 hours
Area (User Defined)	40,215 ft ²

Computational Time Increment	0.059 hours
Time to Peak (Computed)	12.327 hours
Flow (Peak, Computed)	0.75 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.350 hours
Flow (Peak Interpolated Output)	0.74 ft ³ /s

Drainage Area	
SCS CN (Composite)	82.000
Area (User Defined)	40,215 ft ²
Maximum Retention (Pervious)	2.2 in
Maximum Retention (Pervious, 20 percent)	0.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.2 in
Runoff Volume (Pervious)	3,972 ft ³

Hydrograph Volume (Area under Hydrograph curve)	
Volume	3,950 ft ³

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.442 hours
Computational Time Increment	0.059 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Label: PDA-2A

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

SCS Unit Hydrograph Parameters

Unit peak, q_p	2.36 ft ³ /s
Unit peak time, T_p	0.295 hours
Unit receding limb, T_r	1.180 hours
Total unit time, T_b	1.475 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 1 years

Label: PDA-2B

Storm Event: 1 year

Scenario: Post-Development 1 year

Storm Event	1 year
Return Event	1 years
Duration	24.000 hours
Depth	2.8 in
Time of Concentration (Composite)	0.100 hours
Area (User Defined)	21,709 ft ²

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.107 hours
Flow (Peak, Computed)	1.05 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	1.05 ft ³ /s

Drainage Area	
SCS CN (Composite)	95.000
Area (User Defined)	21,709 ft ²
Maximum Retention (Pervious)	0.5 in
Maximum Retention (Pervious, 20 percent)	0.1 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.2 in
Runoff Volume (Pervious)	3,990 ft ³

Hydrograph Volume (Area under Hydrograph curve)	
Volume	3,987 ft ³

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.100 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Label: PDA-2B

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

SCS Unit Hydrograph Parameters

Unit peak, q_p	5.65 ft ³ /s
Unit peak time, T_p	0.067 hours
Unit receding limb, T_r	0.267 hours
Total unit time, T_b	0.333 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 1 years

Label: PDA-2C

Storm Event: 1 year

Scenario: Post-Development 1 year

Storm Event	1 year
Return Event	1 years
Duration	24.000 hours
Depth	2.8 in
Time of Concentration (Composite)	0.100 hours
Area (User Defined)	18,180 ft ²

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.107 hours
Flow (Peak, Computed)	0.94 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	0.94 ft ³ /s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	18,180 ft ²
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.5 in
Runoff Volume (Pervious)	3,817 ft ³

Hydrograph Volume (Area under Hydrograph curve)	
Volume	3,814 ft ³

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.100 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Label: PDA-2C

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

SCS Unit Hydrograph Parameters

Unit peak, q_p	4.73 ft ³ /s
Unit peak time, T_p	0.067 hours
Unit receding limb, T_r	0.267 hours
Total unit time, T_b	0.333 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 1 years

Label: PDA-2D

Storm Event: 1 year

Scenario: Post-Development 1 year

Storm Event	1 year
Return Event	1 years
Duration	24.000 hours
Depth	2.8 in
Time of Concentration (Composite)	0.100 hours
Area (User Defined)	7,650 ft ²

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.107 hours
Flow (Peak, Computed)	0.40 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	0.40 ft ³ /s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	7,650 ft ²
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.5 in
Runoff Volume (Pervious)	1,606 ft ³

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1,605 ft ³

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.100 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Label: PDA-2D

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

SCS Unit Hydrograph Parameters

Unit peak, q_p	1.99 ft ³ /s
Unit peak time, T_p	0.067 hours
Unit receding limb, T_r	0.267 hours
Total unit time, T_b	0.333 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 1 years

Label: PDA-2E

Storm Event: 1 year

Scenario: Post-Development 1 year

Storm Event	1 year
Return Event	1 years
Duration	24.000 hours
Depth	2.8 in
Time of Concentration (Composite)	0.131 hours
Area (User Defined)	4,060 ft ²

Computational Time Increment	0.018 hours
Time to Peak (Computed)	12.131 hours
Flow (Peak, Computed)	0.08 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	0.08 ft ³ /s

Drainage Area	
SCS CN (Composite)	77.000
Area (User Defined)	4,060 ft ²
Maximum Retention (Pervious)	3.0 in
Maximum Retention (Pervious, 20 percent)	0.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.9 in
Runoff Volume (Pervious)	305 ft ³

Hydrograph Volume (Area under Hydrograph curve)	
Volume	305 ft ³

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.131 hours
Computational Time Increment	0.018 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Label: PDA-2E

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

SCS Unit Hydrograph Parameters

Unit peak, q_p	0.80 ft ³ /s
Unit peak time, T_p	0.088 hours
Unit receding limb, T_r	0.350 hours
Total unit time, T_b	0.438 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 1 years

Label: PDA-3A

Storm Event: 1 year

Scenario: Post-Development 1 year

Storm Event	1 year
Return Event	1 years
Duration	24.000 hours
Depth	2.8 in
Time of Concentration (Composite)	0.254 hours
Area (User Defined)	53,198 ft ²

Computational Time Increment	0.034 hours
Time to Peak (Computed)	12.221 hours
Flow (Peak, Computed)	0.88 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	0.88 ft ³ /s

Drainage Area	
SCS CN (Composite)	77.000
Area (User Defined)	53,198 ft ²
Maximum Retention (Pervious)	3.0 in
Maximum Retention (Pervious, 20 percent)	0.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.9 in
Runoff Volume (Pervious)	3,997 ft ³

Hydrograph Volume (Area under Hydrograph curve)	
Volume	3,983 ft ³

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.254 hours
Computational Time Increment	0.034 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Label: PDA-3A

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	5.45 ft ³ /s
Unit peak time, Tp	0.169 hours
Unit receding limb, Tr	0.677 hours
Total unit time, Tb	0.846 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 1 years

Label: PDA-3B

Storm Event: 1 year

Scenario: Post-Development 1 year

Storm Event	1 year
Return Event	1 years
Duration	24.000 hours
Depth	2.8 in
Time of Concentration (Composite)	0.100 hours
Area (User Defined)	103,861 ft ²

Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.107 hours
Flow (Peak, Computed)	4.57 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	4.56 ft ³ /s

Drainage Area	
SCS CN (Composite)	92.000
Area (User Defined)	103,861 ft ²
Maximum Retention (Pervious)	0.9 in
Maximum Retention (Pervious, 20 percent)	0.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.9 in
Runoff Volume (Pervious)	16,669 ft ³

Hydrograph Volume (Area under Hydrograph curve)	
Volume	16,654 ft ³

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.100 hours
Computational Time Increment	0.013 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Label: PDA-3B

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

SCS Unit Hydrograph Parameters

Unit peak, q_p	27.02 ft ³ /s
Unit peak time, T_p	0.067 hours
Unit receding limb, T_r	0.267 hours
Total unit time, T_b	0.333 hours

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-1

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Summary for Hydrograph Addition at 'DP-1'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-1

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-1	808	12.150	0.19
Flow (In)	DP-1	808	12.150	0.19

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-1

Scenario: Pre-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Summary for Hydrograph Addition at 'DP-1'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	EDA-1

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	EDA-1	1,698	12.150	0.40
Flow (In)	DP-1	1,698	12.150	0.40

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-1

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

Summary for Hydrograph Addition at 'DP-1'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-1

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-1	2,411	12.150	0.60
Flow (In)	DP-1	2,411	12.150	0.60

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-1

Scenario: Pre-Development 10 year

Return Event: 10 years

Storm Event: 10 year

Summary for Hydrograph Addition at 'DP-1'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	EDA-1

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	EDA-1	5,070	12.150	1.26
Flow (In)	DP-1	5,070	12.150	1.26

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-1

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Summary for Hydrograph Addition at 'DP-1'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-1

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-1	3,466	12.150	0.86
Flow (In)	DP-1	3,466	12.150	0.86

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-1

Scenario: Pre-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Summary for Hydrograph Addition at 'DP-1'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	EDA-1

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	EDA-1	7,287	12.150	1.81
Flow (In)	DP-1	7,287	12.150	1.81

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-1

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Summary for Hydrograph Addition at 'DP-1'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-1

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-1	5,751	12.150	1.41
Flow (In)	DP-1	5,751	12.150	1.41

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-1

Scenario: Pre-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Summary for Hydrograph Addition at 'DP-1'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	EDA-1

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	EDA-1	12,091	12.150	2.97
Flow (In)	DP-1	12,091	12.150	2.97

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-2

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Summary for Hydrograph Addition at 'DP-2'

Upstream Link	Upstream Node
XFILTRATION OUT	XFILTRATION SYSTEM
<Catchment to Outflow Node>	PDA-2A
<Catchment to Outflow Node>	DA-2 (OFFSITE)

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	XFILTRATION OUT	9,269	17.100	0.23
Flow (From)	PDA-2A	3,950	12.350	0.74
Flow (From)	DA-2 (OFFSITE)	51,575	12.400	8.33
Flow (In)	DP-2	64,794	12.400	9.23

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-2

Scenario: Pre-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Summary for Hydrograph Addition at 'DP-2'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	EDA-2
<Catchment to Outflow Node>	DA-2 (OFFSITE)

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	EDA-2	5,442	12.350	0.99
Flow (From)	DA-2 (OFFSITE)	51,575	12.400	8.33
Flow (In)	DP-2	57,017	12.400	9.31

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-2

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

Summary for Hydrograph Addition at 'DP-2'

Upstream Link	Upstream Node
XFILTRATION OUT	XFILTRATION SYSTEM
<Catchment to Outflow Node>	PDA-2A
<Catchment to Outflow Node>	DA-2 (OFFSITE)

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	XFILTRATION OUT	16,635	13.050	0.55
Flow (From)	PDA-2A	10,512	12.300	1.99
Flow (From)	DA-2 (OFFSITE)	181,173	12.350	33.47
Flow (In)	DP-2	208,319	12.350	35.79

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-2

Scenario: Pre-Development 10 year

Return Event: 10 years

Storm Event: 10 year

Summary for Hydrograph Addition at 'DP-2'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	EDA-2
<Catchment to Outflow Node>	DA-2 (OFFSITE)

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	EDA-2	15,145	12.350	2.82
Flow (From)	DA-2 (OFFSITE)	181,173	12.350	33.47
Flow (In)	DP-2	196,318	12.350	36.29

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-2

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Summary for Hydrograph Addition at 'DP-2'

Upstream Link	Upstream Node
XFILTRATION OUT	XFILTRATION SYSTEM
<Catchment to Outflow Node>	PDA-2A
<Catchment to Outflow Node>	DA-2 (OFFSITE)

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	XFILTRATION OUT	21,649	12.700	1.01
Flow (From)	PDA-2A	14,663	12.300	2.76
Flow (From)	DA-2 (OFFSITE)	271,174	12.350	50.59
Flow (In)	DP-2	307,486	12.350	54.17

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-2

Scenario: Pre-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Summary for Hydrograph Addition at 'DP-2'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	EDA-2
<Catchment to Outflow Node>	DA-2 (OFFSITE)

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	EDA-2	21,377	12.350	3.95
Flow (From)	DA-2 (OFFSITE)	271,174	12.350	50.59
Flow (In)	DP-2	292,551	12.350	54.55

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-2

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Summary for Hydrograph Addition at 'DP-2'

Upstream Link	Upstream Node
XFILTRATION OUT	XFILTRATION SYSTEM
<Catchment to Outflow Node>	PDA-2A
<Catchment to Outflow Node>	DA-2 (OFFSITE)

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	XFILTRATION OUT	32,283	12.600	1.67
Flow (From)	PDA-2A	23,483	12.300	4.35
Flow (From)	DA-2 (OFFSITE)	471,772	12.300	88.26
Flow (In)	DP-2	527,537	12.300	94.09

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-2

Scenario: Pre-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Summary for Hydrograph Addition at 'DP-2'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	EDA-2
<Catchment to Outflow Node>	DA-2 (OFFSITE)

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	EDA-2	34,716	12.300	6.32
Flow (From)	DA-2 (OFFSITE)	471,772	12.300	88.26
Flow (In)	DP-2	506,488	12.300	94.58

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-3

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Summary for Hydrograph Addition at 'DP-3'

Upstream Link	Upstream Node
MC-3500 OUT	MC-3500 - 3
<Catchment to Outflow Node>	PDA-3A
<Catchment to Outflow Node>	DA-3 (OFFSITE)

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	MC-3500 OUT	16,378	12.600	0.78
Flow (From)	PDA-3A	3,983	12.200	0.88
Flow (From)	DA-3 (OFFSITE)	12,844	12.200	2.98
Flow (In)	DP-3	33,204	12.200	4.56

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-3

Scenario: Pre-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Summary for Hydrograph Addition at 'DP-3'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	DA-3 (OFFSITE)
<Catchment to Outflow Node>	EDA-3

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	DA-3 (OFFSITE)	12,844	12.200	2.98
Flow (From)	EDA-3	13,835	12.450	2.26
Flow (In)	DP-3	26,679	12.250	4.56

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-3

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

Summary for Hydrograph Addition at 'DP-3'

Upstream Link	Upstream Node
MC-3500 OUT	MC-3500 - 3
<Catchment to Outflow Node>	PDA-3A
<Catchment to Outflow Node>	DA-3 (OFFSITE)

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	MC-3500 OUT	35,493	12.450	2.92
Flow (From)	PDA-3A	11,893	12.200	2.76
Flow (From)	DA-3 (OFFSITE)	30,115	12.200	6.79
Flow (In)	DP-3	77,501	12.200	12.04

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-3

Scenario: Pre-Development 10 year

Return Event: 10 years

Storm Event: 10 year

Summary for Hydrograph Addition at 'DP-3'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	DA-3 (OFFSITE)
<Catchment to Outflow Node>	EDA-3

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	DA-3 (OFFSITE)	30,115	12.200	6.79
Flow (From)	EDA-3	40,362	12.400	6.82
Flow (In)	DP-3	70,478	12.250	12.10

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-3

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Summary for Hydrograph Addition at 'DP-3'

Upstream Link	Upstream Node
MC-3500 OUT	MC-3500 - 3
<Catchment to Outflow Node>	PDA-3A
<Catchment to Outflow Node>	DA-3 (OFFSITE)

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	MC-3500 OUT	46,872	12.400	3.92
Flow (From)	PDA-3A	17,095	12.200	3.96
Flow (From)	DA-3 (OFFSITE)	40,618	12.200	9.02
Flow (In)	DP-3	104,586	12.200	16.59

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-3

Scenario: Pre-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Summary for Hydrograph Addition at 'DP-3'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	DA-3 (OFFSITE)
<Catchment to Outflow Node>	EDA-3

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	DA-3 (OFFSITE)	40,618	12.200	9.02
Flow (From)	EDA-3	57,672	12.400	9.73
Flow (In)	DP-3	98,290	12.250	16.74

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-3

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Summary for Hydrograph Addition at 'DP-3'

Upstream Link	Upstream Node
MC-3500 OUT	MC-3500 - 3
<Catchment to Outflow Node>	PDA-3A
<Catchment to Outflow Node>	DA-3 (OFFSITE)

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	MC-3500 OUT	70,325	12.400	6.05
Flow (From)	PDA-3A	28,366	12.200	6.48
Flow (From)	DA-3 (OFFSITE)	62,527	12.150	13.59
Flow (In)	DP-3	161,218	12.200	25.60

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Label: DP-3

Scenario: Pre-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Summary for Hydrograph Addition at 'DP-3'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	DA-3 (OFFSITE)
<Catchment to Outflow Node>	EDA-3

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	DA-3 (OFFSITE)	62,527	12.150	13.59
Flow (From)	EDA-3	95,021	12.400	15.85
Flow (In)	DP-3	157,548	12.250	26.40

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 1 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	93.00	93.00	93.00	93.00	93.00
0.250	93.00	93.00	93.00	93.00	93.00
0.500	93.00	93.00	93.00	93.00	93.00
0.750	93.00	93.00	93.00	93.00	93.00
1.000	93.00	93.00	93.00	93.00	93.00
1.250	93.00	93.00	93.00	93.00	93.00
1.500	93.00	93.00	93.00	93.00	93.00
1.750	93.00	93.00	93.00	93.00	93.00
2.000	93.00	93.00	93.00	93.00	93.00
2.250	93.00	93.00	93.00	93.00	93.00
2.500	93.00	93.00	93.00	93.00	93.00
2.750	93.00	93.00	93.00	93.00	93.00
3.000	93.00	93.00	93.00	93.00	93.00
3.250	93.00	93.00	93.00	93.00	93.00
3.500	93.00	93.00	93.00	93.00	93.00
3.750	93.00	93.00	93.00	93.00	93.00
4.000	93.00	93.00	93.00	93.00	93.00
4.250	93.00	93.00	93.00	93.00	93.00
4.500	93.00	93.00	93.00	93.00	93.00
4.750	93.00	93.00	93.00	93.00	93.00
5.000	93.00	93.00	93.00	93.00	93.00
5.250	93.00	93.00	93.00	93.00	93.00
5.500	93.00	93.00	93.00	93.00	93.00
5.750	93.00	93.00	93.00	93.00	93.00
6.000	93.00	93.00	93.00	93.00	93.00
6.250	93.00	93.00	93.00	93.00	93.00
6.500	93.00	93.00	93.00	93.00	93.00
6.750	93.00	93.00	93.00	93.00	93.00
7.000	93.00	93.00	93.00	93.00	93.00
7.250	93.00	93.00	93.00	93.00	93.00
7.500	93.00	93.00	93.00	93.00	93.00
7.750	93.00	93.00	93.00	93.00	93.00
8.000	93.00	93.00	93.00	93.00	93.00
8.250	93.00	93.00	93.00	93.00	93.00
8.500	93.00	93.00	93.00	93.00	93.00
8.750	93.00	93.00	93.00	93.00	93.00
9.000	93.00	93.00	93.00	93.00	93.00
9.250	93.00	93.00	93.00	93.00	93.00
9.500	93.00	93.00	93.00	93.00	93.00
9.750	93.00	93.00	93.00	93.00	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 1 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	93.00	93.00	93.00	93.00	93.00
10.250	93.00	93.00	93.00	93.00	93.00
10.500	93.00	93.00	93.00	93.00	93.00
10.750	93.00	93.00	93.00	93.00	93.00
11.000	93.00	93.00	93.00	93.00	93.00
11.250	93.02	93.02	93.03	93.03	93.04
11.500	93.05	93.07	93.09	93.12	93.16
11.750	93.21	93.25	93.30	93.36	93.44
12.000	93.55	93.69	93.84	93.98	94.09
12.250	94.17	94.24	94.29	94.33	94.37
12.500	94.40	94.42	94.43	94.44	94.45
12.750	94.45	94.46	94.46	94.46	94.46
13.000	94.46	94.46	94.46	94.46	94.46
13.250	94.46	94.46	94.46	94.45	94.45
13.500	94.45	94.44	94.44	94.44	94.43
13.750	94.43	94.42	94.42	94.41	94.41
14.000	94.40	94.40	94.39	94.39	94.38
14.250	94.37	94.37	94.36	94.35	94.35
14.500	94.34	94.33	94.33	94.32	94.31
14.750	94.30	94.30	94.29	94.28	94.27
15.000	94.26	94.26	94.25	94.24	94.23
15.250	94.22	94.21	94.20	94.20	94.19
15.500	94.18	94.17	94.16	94.15	94.14
15.750	94.13	94.12	94.11	94.10	94.09
16.000	94.08	94.07	94.06	94.05	94.04
16.250	94.02	94.01	94.00	93.99	93.98
16.500	93.97	93.96	93.95	93.94	93.93
16.750	93.91	93.90	93.89	93.88	93.87
17.000	93.86	93.85	93.83	93.82	93.81
17.250	93.80	93.79	93.77	93.76	93.75
17.500	93.74	93.73	93.71	93.70	93.69
17.750	93.68	93.66	93.65	93.64	93.63
18.000	93.61	93.60	93.59	93.58	93.56
18.250	93.55	93.54	93.53	93.51	93.50
18.500	93.49	93.47	93.46	93.45	93.44
18.750	93.42	93.41	93.40	93.38	93.37
19.000	93.36	93.35	93.33	93.32	93.31
19.250	93.29	93.28	93.27	93.25	93.24
19.500	93.23	93.21	93.20	93.18	93.16
19.750	93.14	93.12	93.10	93.07	93.04
20.000	93.02	93.00	93.00	93.00	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 1 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	93.00	93.00	93.00	93.00	93.00
20.500	93.00	93.00	93.00	93.00	93.00
20.750	93.00	93.00	93.00	93.00	93.00
21.000	93.00	93.00	93.00	93.00	93.00
21.250	93.00	93.00	93.00	93.00	93.00
21.500	93.00	93.00	93.00	93.00	93.00
21.750	93.00	93.00	93.00	93.00	93.00
22.000	93.00	93.00	93.00	93.00	93.00
22.250	93.00	93.00	93.00	93.00	93.00
22.500	93.00	93.00	93.00	93.00	93.00
22.750	93.00	93.00	93.00	93.00	93.00
23.000	93.00	93.00	93.00	93.00	93.00
23.250	93.00	93.00	93.00	93.00	93.00
23.500	93.00	93.00	93.00	93.00	93.00
23.750	93.00	93.00	93.00	93.00	93.00
24.000	93.00	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 10 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	93.00	93.00	93.00	93.00	93.00
0.250	93.00	93.00	93.00	93.00	93.00
0.500	93.00	93.00	93.00	93.00	93.00
0.750	93.00	93.00	93.00	93.00	93.00
1.000	93.00	93.00	93.00	93.00	93.00
1.250	93.00	93.00	93.00	93.00	93.00
1.500	93.00	93.00	93.00	93.00	93.00
1.750	93.00	93.00	93.00	93.00	93.00
2.000	93.00	93.00	93.00	93.00	93.00
2.250	93.00	93.00	93.00	93.00	93.00
2.500	93.00	93.00	93.00	93.00	93.00
2.750	93.00	93.00	93.00	93.00	93.00
3.000	93.00	93.00	93.00	93.00	93.00
3.250	93.00	93.00	93.00	93.00	93.00
3.500	93.00	93.00	93.00	93.00	93.00
3.750	93.00	93.00	93.00	93.00	93.00
4.000	93.00	93.00	93.00	93.00	93.00
4.250	93.00	93.00	93.00	93.00	93.00
4.500	93.00	93.00	93.00	93.00	93.00
4.750	93.00	93.00	93.00	93.00	93.00
5.000	93.00	93.00	93.00	93.00	93.00
5.250	93.00	93.00	93.00	93.00	93.00
5.500	93.00	93.00	93.00	93.00	93.00
5.750	93.00	93.00	93.00	93.00	93.00
6.000	93.00	93.00	93.00	93.00	93.00
6.250	93.00	93.00	93.00	93.00	93.00
6.500	93.00	93.00	93.00	93.00	93.00
6.750	93.00	93.00	93.00	93.00	93.00
7.000	93.00	93.00	93.00	93.00	93.00
7.250	93.00	93.00	93.00	93.00	93.00
7.500	93.00	93.00	93.00	93.00	93.00
7.750	93.00	93.00	93.00	93.00	93.00
8.000	93.00	93.00	93.00	93.00	93.00
8.250	93.00	93.00	93.00	93.00	93.00
8.500	93.00	93.00	93.00	93.00	93.00
8.750	93.00	93.00	93.00	93.00	93.00
9.000	93.00	93.00	93.00	93.00	93.00
9.250	93.00	93.00	93.00	93.00	93.00
9.500	93.00	93.00	93.00	93.00	93.02
9.750	93.02	93.02	93.02	93.02	93.02

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 10 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	93.03	93.03	93.04	93.04	93.05
10.250	93.05	93.06	93.07	93.08	93.09
10.500	93.10	93.11	93.12	93.13	93.14
10.750	93.16	93.17	93.18	93.20	93.21
11.000	93.22	93.23	93.24	93.25	93.27
11.250	93.29	93.30	93.32	93.34	93.37
11.500	93.39	93.42	93.46	93.50	93.56
11.750	93.64	93.73	93.84	93.97	94.13
12.000	94.35	94.63	94.92	95.18	95.24
12.250	95.23	95.23	95.23	95.22	95.22
12.500	95.22	95.22	95.21	95.21	95.21
12.750	95.21	95.21	95.21	95.21	95.21
13.000	95.21	95.21	95.21	95.21	95.21
13.250	95.21	95.21	95.21	95.21	95.21
13.500	95.21	95.21	95.21	95.21	95.21
13.750	95.21	95.21	95.21	95.21	95.21
14.000	95.21	95.21	95.21	95.21	95.21
14.250	95.21	95.21	95.21	95.21	95.21
14.500	95.21	95.21	95.21	95.21	95.21
14.750	95.21	95.21	95.21	95.21	95.21
15.000	95.21	95.21	95.21	95.21	95.20
15.250	95.20	95.20	95.20	95.20	95.19
15.500	95.19	95.19	95.19	95.18	95.18
15.750	95.18	95.17	95.17	95.16	95.16
16.000	95.15	95.15	95.14	95.14	95.13
16.250	95.13	95.12	95.12	95.11	95.11
16.500	95.10	95.10	95.09	95.08	95.08
16.750	95.07	95.06	95.05	95.05	95.04
17.000	95.03	95.02	95.01	95.01	95.00
17.250	94.99	94.98	94.97	94.96	94.96
17.500	94.95	94.94	94.93	94.92	94.91
17.750	94.90	94.89	94.88	94.87	94.86
18.000	94.85	94.84	94.83	94.82	94.81
18.250	94.80	94.79	94.78	94.77	94.76
18.500	94.75	94.74	94.73	94.72	94.71
18.750	94.70	94.69	94.68	94.67	94.66
19.000	94.65	94.64	94.63	94.62	94.61
19.250	94.60	94.59	94.58	94.57	94.56
19.500	94.55	94.53	94.52	94.51	94.50
19.750	94.49	94.48	94.47	94.46	94.45
20.000	94.44	94.43	94.42	94.40	94.39

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 10 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	94.38	94.37	94.36	94.35	94.34
20.500	94.33	94.31	94.30	94.29	94.28
20.750	94.27	94.26	94.25	94.24	94.22
21.000	94.21	94.20	94.19	94.18	94.17
21.250	94.16	94.14	94.13	94.12	94.11
21.500	94.10	94.09	94.07	94.06	94.05
21.750	94.04	94.03	94.02	94.00	93.99
22.000	93.98	93.97	93.96	93.94	93.93
22.250	93.92	93.91	93.90	93.88	93.87
22.500	93.86	93.85	93.84	93.82	93.81
22.750	93.80	93.79	93.78	93.76	93.75
23.000	93.74	93.73	93.71	93.70	93.69
23.250	93.68	93.66	93.65	93.64	93.63
23.500	93.61	93.60	93.59	93.58	93.56
23.750	93.55	93.54	93.53	93.51	93.50
24.000	93.49	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 25 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	93.00	93.00	93.00	93.00	93.00
0.250	93.00	93.00	93.00	93.00	93.00
0.500	93.00	93.00	93.00	93.00	93.00
0.750	93.00	93.00	93.00	93.00	93.00
1.000	93.00	93.00	93.00	93.00	93.00
1.250	93.00	93.00	93.00	93.00	93.00
1.500	93.00	93.00	93.00	93.00	93.00
1.750	93.00	93.00	93.00	93.00	93.00
2.000	93.00	93.00	93.00	93.00	93.00
2.250	93.00	93.00	93.00	93.00	93.00
2.500	93.00	93.00	93.00	93.00	93.00
2.750	93.00	93.00	93.00	93.00	93.00
3.000	93.00	93.00	93.00	93.00	93.00
3.250	93.00	93.00	93.00	93.00	93.00
3.500	93.00	93.00	93.00	93.00	93.00
3.750	93.00	93.00	93.00	93.00	93.00
4.000	93.00	93.00	93.00	93.00	93.00
4.250	93.00	93.00	93.00	93.00	93.00
4.500	93.00	93.00	93.00	93.00	93.00
4.750	93.00	93.00	93.00	93.00	93.00
5.000	93.00	93.00	93.00	93.00	93.00
5.250	93.00	93.00	93.00	93.00	93.00
5.500	93.00	93.00	93.00	93.00	93.00
5.750	93.00	93.00	93.00	93.00	93.00
6.000	93.00	93.00	93.00	93.00	93.00
6.250	93.00	93.00	93.00	93.00	93.00
6.500	93.00	93.00	93.00	93.00	93.00
6.750	93.00	93.00	93.00	93.00	93.00
7.000	93.00	93.00	93.00	93.00	93.00
7.250	93.00	93.00	93.00	93.00	93.00
7.500	93.00	93.00	93.00	93.00	93.00
7.750	93.00	93.00	93.00	93.00	93.00
8.000	93.00	93.00	93.00	93.00	93.00
8.250	93.00	93.00	93.00	93.00	93.00
8.500	93.00	93.00	93.00	93.00	93.00
8.750	93.00	93.00	93.02	93.02	93.02
9.000	93.02	93.02	93.02	93.03	93.03
9.250	93.04	93.04	93.05	93.05	93.06
9.500	93.07	93.08	93.08	93.09	93.10
9.750	93.11	93.12	93.13	93.14	93.15

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 25 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	93.16	93.17	93.18	93.19	93.20
10.250	93.21	93.22	93.23	93.24	93.25
10.500	93.26	93.28	93.29	93.30	93.32
10.750	93.33	93.35	93.36	93.38	93.40
11.000	93.41	93.43	93.45	93.47	93.49
11.250	93.52	93.55	93.58	93.61	93.64
11.500	93.68	93.72	93.77	93.83	93.91
11.750	94.02	94.14	94.28	94.45	94.66
12.000	94.94	95.22	95.27	95.26	95.25
12.250	95.24	95.23	95.23	95.23	95.22
12.500	95.22	95.22	95.22	95.22	95.22
12.750	95.21	95.21	95.21	95.21	95.21
13.000	95.21	95.21	95.21	95.21	95.21
13.250	95.21	95.21	95.21	95.21	95.21
13.500	95.21	95.21	95.21	95.21	95.21
13.750	95.21	95.21	95.21	95.21	95.21
14.000	95.21	95.21	95.21	95.21	95.21
14.250	95.21	95.21	95.21	95.21	95.21
14.500	95.21	95.21	95.21	95.21	95.21
14.750	95.21	95.21	95.21	95.21	95.21
15.000	95.21	95.21	95.21	95.21	95.21
15.250	95.21	95.21	95.21	95.21	95.21
15.500	95.21	95.21	95.21	95.21	95.21
15.750	95.21	95.21	95.21	95.20	95.20
16.000	95.20	95.20	95.20	95.19	95.19
16.250	95.19	95.19	95.18	95.18	95.18
16.500	95.17	95.17	95.16	95.16	95.16
16.750	95.15	95.15	95.14	95.14	95.14
17.000	95.13	95.13	95.12	95.12	95.11
17.250	95.11	95.10	95.10	95.09	95.08
17.500	95.08	95.07	95.06	95.05	95.05
17.750	95.04	95.03	95.02	95.02	95.01
18.000	95.00	94.99	94.98	94.98	94.97
18.250	94.96	94.95	94.94	94.93	94.93
18.500	94.92	94.91	94.90	94.89	94.88
18.750	94.87	94.86	94.86	94.85	94.84
19.000	94.83	94.82	94.81	94.80	94.79
19.250	94.78	94.78	94.77	94.76	94.75
19.500	94.74	94.73	94.72	94.71	94.70
19.750	94.69	94.68	94.67	94.66	94.65
20.000	94.64	94.63	94.62	94.61	94.60

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 25 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	94.59	94.58	94.58	94.57	94.56
20.500	94.55	94.54	94.53	94.52	94.51
20.750	94.50	94.49	94.48	94.47	94.45
21.000	94.44	94.43	94.42	94.41	94.40
21.250	94.39	94.38	94.37	94.36	94.35
21.500	94.34	94.33	94.32	94.31	94.30
21.750	94.29	94.28	94.27	94.26	94.25
22.000	94.24	94.22	94.21	94.20	94.19
22.250	94.18	94.17	94.16	94.15	94.14
22.500	94.13	94.12	94.10	94.09	94.08
22.750	94.07	94.06	94.05	94.04	94.03
23.000	94.01	94.00	93.99	93.98	93.97
23.250	93.96	93.95	93.93	93.92	93.91
23.500	93.90	93.89	93.88	93.87	93.85
23.750	93.84	93.83	93.82	93.81	93.80
24.000	93.78	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 100 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	93.00	93.00	93.00	93.00	93.00
0.250	93.00	93.00	93.00	93.00	93.00
0.500	93.00	93.00	93.00	93.00	93.00
0.750	93.00	93.00	93.00	93.00	93.00
1.000	93.00	93.00	93.00	93.00	93.00
1.250	93.00	93.00	93.00	93.00	93.00
1.500	93.00	93.00	93.00	93.00	93.00
1.750	93.00	93.00	93.00	93.00	93.00
2.000	93.00	93.00	93.00	93.00	93.00
2.250	93.00	93.00	93.00	93.00	93.00
2.500	93.00	93.00	93.00	93.00	93.00
2.750	93.00	93.00	93.00	93.00	93.00
3.000	93.00	93.00	93.00	93.00	93.00
3.250	93.00	93.00	93.00	93.00	93.00
3.500	93.00	93.00	93.00	93.00	93.00
3.750	93.00	93.00	93.00	93.00	93.00
4.000	93.00	93.00	93.00	93.00	93.00
4.250	93.00	93.00	93.00	93.00	93.00
4.500	93.00	93.00	93.00	93.00	93.00
4.750	93.00	93.00	93.00	93.00	93.00
5.000	93.00	93.00	93.00	93.00	93.00
5.250	93.00	93.00	93.00	93.00	93.00
5.500	93.00	93.00	93.00	93.00	93.00
5.750	93.00	93.00	93.00	93.00	93.00
6.000	93.00	93.00	93.00	93.00	93.00
6.250	93.00	93.00	93.00	93.00	93.00
6.500	93.00	93.00	93.00	93.00	93.00
6.750	93.00	93.00	93.00	93.00	93.00
7.000	93.00	93.00	93.00	93.00	93.00
7.250	93.00	93.00	93.00	93.00	93.00
7.500	93.00	93.00	93.00	93.00	93.02
7.750	93.02	93.02	93.02	93.02	93.02
8.000	93.02	93.03	93.03	93.03	93.04
8.250	93.04	93.05	93.06	93.06	93.07
8.500	93.08	93.09	93.10	93.11	93.12
8.750	93.13	93.14	93.15	93.17	93.18
9.000	93.19	93.20	93.21	93.22	93.23
9.250	93.24	93.26	93.27	93.28	93.29
9.500	93.30	93.32	93.33	93.34	93.36
9.750	93.37	93.39	93.40	93.42	93.43

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 100 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	93.45	93.47	93.49	93.50	93.52
10.250	93.54	93.56	93.58	93.61	93.63
10.500	93.65	93.68	93.70	93.73	93.76
10.750	93.79	93.81	93.84	93.88	93.91
11.000	93.94	93.97	94.01	94.04	94.08
11.250	94.13	94.17	94.22	94.28	94.33
11.500	94.39	94.46	94.54	94.63	94.76
11.750	94.91	95.10	95.22	95.25	95.25
12.000	95.27	95.28	95.29	95.28	95.26
12.250	95.25	95.24	95.24	95.24	95.23
12.500	95.23	95.22	95.22	95.22	95.22
12.750	95.22	95.22	95.22	95.22	95.22
13.000	95.22	95.22	95.21	95.21	95.21
13.250	95.21	95.21	95.21	95.21	95.21
13.500	95.21	95.21	95.21	95.21	95.21
13.750	95.21	95.21	95.21	95.21	95.21
14.000	95.21	95.21	95.21	95.21	95.21
14.250	95.21	95.21	95.21	95.21	95.21
14.500	95.21	95.21	95.21	95.21	95.21
14.750	95.21	95.21	95.21	95.21	95.21
15.000	95.21	95.21	95.21	95.21	95.21
15.250	95.21	95.21	95.21	95.21	95.21
15.500	95.21	95.21	95.21	95.21	95.21
15.750	95.21	95.21	95.21	95.21	95.21
16.000	95.21	95.21	95.21	95.21	95.21
16.250	95.21	95.21	95.21	95.21	95.21
16.500	95.21	95.21	95.21	95.21	95.21
16.750	95.21	95.21	95.21	95.21	95.21
17.000	95.21	95.21	95.21	95.21	95.20
17.250	95.20	95.20	95.20	95.20	95.20
17.500	95.20	95.19	95.19	95.19	95.19
17.750	95.18	95.18	95.18	95.17	95.17
18.000	95.17	95.16	95.16	95.15	95.15
18.250	95.15	95.14	95.14	95.13	95.13
18.500	95.12	95.12	95.12	95.11	95.11
18.750	95.10	95.10	95.09	95.09	95.08
19.000	95.07	95.07	95.06	95.06	95.05
19.250	95.04	95.04	95.03	95.03	95.02
19.500	95.01	95.01	95.00	94.99	94.99
19.750	94.98	94.97	94.97	94.96	94.95
20.000	94.95	94.94	94.93	94.92	94.92

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 100 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	94.91	94.90	94.90	94.89	94.88
20.500	94.87	94.87	94.86	94.85	94.84
20.750	94.84	94.83	94.82	94.81	94.81
21.000	94.80	94.79	94.78	94.78	94.77
21.250	94.76	94.75	94.74	94.74	94.73
21.500	94.72	94.71	94.70	94.70	94.69
21.750	94.68	94.67	94.66	94.65	94.65
22.000	94.64	94.63	94.62	94.61	94.60
22.250	94.59	94.59	94.58	94.57	94.56
22.500	94.55	94.54	94.53	94.52	94.51
22.750	94.51	94.50	94.49	94.48	94.47
23.000	94.46	94.45	94.44	94.43	94.42
23.250	94.41	94.40	94.39	94.38	94.37
23.500	94.36	94.36	94.35	94.34	94.33
23.750	94.32	94.31	94.30	94.29	94.28
24.000	94.27	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation
 Label: 6" Depth Green Roof (OUT)
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	93.00	93.00	93.00	93.00	93.00
0.250	93.00	93.00	93.00	93.00	93.00
0.500	93.00	93.00	93.00	93.00	93.00
0.750	93.00	93.00	93.00	93.00	93.00
1.000	93.00	93.00	93.00	93.00	93.00
1.250	93.00	93.00	93.00	93.00	93.00
1.500	93.00	93.00	93.00	93.00	93.00
1.750	93.00	93.00	93.00	93.00	93.00
2.000	93.00	93.00	93.00	93.00	93.00
2.250	93.00	93.00	93.00	93.00	93.00
2.500	93.00	93.00	93.00	93.00	93.00
2.750	93.00	93.00	93.00	93.00	93.00
3.000	93.00	93.00	93.00	93.00	93.00
3.250	93.00	93.00	93.00	93.00	93.00
3.500	93.00	93.00	93.00	93.00	93.00
3.750	93.00	93.00	93.00	93.00	93.00
4.000	93.00	93.00	93.00	93.00	93.00
4.250	93.00	93.00	93.00	93.00	93.00
4.500	93.00	93.00	93.00	93.00	93.00
4.750	93.00	93.00	93.00	93.00	93.00
5.000	93.00	93.00	93.00	93.00	93.00
5.250	93.00	93.00	93.00	93.00	93.00
5.500	93.00	93.00	93.00	93.00	93.00
5.750	93.00	93.00	93.00	93.00	93.00
6.000	93.00	93.00	93.00	93.00	93.00
6.250	93.00	93.00	93.00	93.00	93.00
6.500	93.00	93.00	93.00	93.00	93.00
6.750	93.00	93.00	93.00	93.00	93.00
7.000	93.00	93.00	93.00	93.00	93.00
7.250	93.00	93.00	93.00	93.00	93.00
7.500	93.00	93.00	93.00	93.00	93.00
7.750	93.00	93.00	93.00	93.00	93.00
8.000	93.00	93.00	93.00	93.00	93.00
8.250	93.00	93.00	93.00	93.00	93.00
8.500	93.00	93.00	93.00	93.00	93.00
8.750	93.00	93.00	93.00	93.00	93.00
9.000	93.00	93.00	93.00	93.00	93.00
9.250	93.00	93.00	93.00	93.00	93.00
9.500	93.00	93.00	93.00	93.00	93.00
9.750	93.00	93.00	93.00	93.00	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation
 Label: 6" Depth Green Roof (OUT)
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	93.00	93.00	93.00	93.00	93.00
10.250	93.00	93.00	93.00	93.00	93.00
10.500	93.00	93.00	93.00	93.00	93.00
10.750	93.00	93.00	93.00	93.00	93.00
11.000	93.00	93.00	93.00	93.00	93.00
11.250	93.00	93.00	93.00	93.00	93.00
11.500	93.00	93.00	93.00	93.00	93.00
11.750	93.00	93.02	93.03	93.04	93.06
12.000	93.11	93.16	93.21	93.24	93.26
12.250	93.27	93.28	93.29	93.29	93.29
12.500	93.29	93.28	93.27	93.26	93.25
12.750	93.24	93.23	93.22	93.21	93.20
13.000	93.18	93.17	93.15	93.13	93.11
13.250	93.09	93.06	93.04	93.00	93.00
13.500	93.00	93.00	93.00	93.00	93.00
13.750	93.00	93.00	93.00	93.00	93.00
14.000	93.00	93.00	93.00	93.00	93.00
14.250	93.00	93.00	93.00	93.00	93.00
14.500	93.00	93.00	93.00	93.00	93.00
14.750	93.00	93.00	93.00	93.00	93.00
15.000	93.00	93.00	93.00	93.00	93.00
15.250	93.00	93.00	93.00	93.00	93.00
15.500	93.00	93.00	93.00	93.00	93.00
15.750	93.00	93.00	93.00	93.00	93.00
16.000	93.00	93.00	93.00	93.00	93.00
16.250	93.00	93.00	93.00	93.00	93.00
16.500	93.00	93.00	93.00	93.00	93.00
16.750	93.00	93.00	93.00	93.00	93.00
17.000	93.00	93.00	93.00	93.00	93.00
17.250	93.00	93.00	93.00	93.00	93.00
17.500	93.00	93.00	93.00	93.00	93.00
17.750	93.00	93.00	93.00	93.00	93.00
18.000	93.00	93.00	93.00	93.00	93.00
18.250	93.00	93.00	93.00	93.00	93.00
18.500	93.00	93.00	93.00	93.00	93.00
18.750	93.00	93.00	93.00	93.00	93.00
19.000	93.00	93.00	93.00	93.00	93.00
19.250	93.00	93.00	93.00	93.00	93.00
19.500	93.00	93.00	93.00	93.00	93.00
19.750	93.00	93.00	93.00	93.00	93.00
20.000	93.00	93.00	93.00	93.00	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation
 Label: 6" Depth Green Roof (OUT)
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	93.00	93.00	93.00	93.00	93.00
20.500	93.00	93.00	93.00	93.00	93.00
20.750	93.00	93.00	93.00	93.00	93.00
21.000	93.00	93.00	93.00	93.00	93.00
21.250	93.00	93.00	93.00	93.00	93.00
21.500	93.00	93.00	93.00	93.00	93.00
21.750	93.00	93.00	93.00	93.00	93.00
22.000	93.00	93.00	93.00	93.00	93.00
22.250	93.00	93.00	93.00	93.00	93.00
22.500	93.00	93.00	93.00	93.00	93.00
22.750	93.00	93.00	93.00	93.00	93.00
23.000	93.00	93.00	93.00	93.00	93.00
23.250	93.00	93.00	93.00	93.00	93.00
23.500	93.00	93.00	93.00	93.00	93.00
23.750	93.00	93.00	93.00	93.00	93.00
24.000	93.00	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 10 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	93.00	93.00	93.00	93.00	93.00
0.250	93.00	93.00	93.00	93.00	93.00
0.500	93.00	93.00	93.00	93.00	93.00
0.750	93.00	93.00	93.00	93.00	93.00
1.000	93.00	93.00	93.00	93.00	93.00
1.250	93.00	93.00	93.00	93.00	93.00
1.500	93.00	93.00	93.00	93.00	93.00
1.750	93.00	93.00	93.00	93.00	93.00
2.000	93.00	93.00	93.00	93.00	93.00
2.250	93.00	93.00	93.00	93.00	93.00
2.500	93.00	93.00	93.00	93.00	93.00
2.750	93.00	93.00	93.00	93.00	93.00
3.000	93.00	93.00	93.00	93.00	93.00
3.250	93.00	93.00	93.00	93.00	93.00
3.500	93.00	93.00	93.00	93.00	93.00
3.750	93.00	93.00	93.00	93.00	93.00
4.000	93.00	93.00	93.00	93.00	93.00
4.250	93.00	93.00	93.00	93.00	93.00
4.500	93.00	93.00	93.00	93.00	93.00
4.750	93.00	93.00	93.00	93.00	93.00
5.000	93.00	93.00	93.00	93.00	93.00
5.250	93.00	93.00	93.00	93.00	93.00
5.500	93.00	93.00	93.00	93.00	93.00
5.750	93.00	93.00	93.00	93.00	93.00
6.000	93.00	93.00	93.00	93.00	93.00
6.250	93.00	93.00	93.00	93.00	93.00
6.500	93.00	93.00	93.00	93.00	93.00
6.750	93.00	93.00	93.00	93.00	93.00
7.000	93.00	93.00	93.00	93.00	93.00
7.250	93.00	93.00	93.00	93.00	93.00
7.500	93.00	93.00	93.00	93.00	93.00
7.750	93.00	93.00	93.00	93.00	93.00
8.000	93.00	93.00	93.00	93.00	93.00
8.250	93.00	93.00	93.00	93.00	93.00
8.500	93.00	93.00	93.00	93.00	93.00
8.750	93.00	93.00	93.00	93.00	93.00
9.000	93.00	93.00	93.00	93.00	93.00
9.250	93.00	93.00	93.00	93.00	93.00
9.500	93.00	93.00	93.00	93.00	93.00
9.750	93.00	93.00	93.00	93.00	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 10 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	93.00	93.00	93.00	93.00	93.00
10.250	93.00	93.00	93.00	93.00	93.00
10.500	93.00	93.00	93.00	93.00	93.00
10.750	93.00	93.00	93.00	93.00	93.00
11.000	93.00	93.00	93.00	93.00	93.00
11.250	93.00	93.00	93.00	93.00	93.00
11.500	93.00	93.00	93.00	93.02	93.04
11.750	93.06	93.09	93.13	93.17	93.22
12.000	93.28	93.35	93.43	93.50	93.56
12.250	93.60	93.62	93.64	93.66	93.67
12.500	93.67	93.68	93.68	93.67	93.67
12.750	93.67	93.66	93.66	93.65	93.65
13.000	93.64	93.64	93.63	93.62	93.62
13.250	93.61	93.60	93.60	93.59	93.58
13.500	93.57	93.56	93.55	93.54	93.53
13.750	93.52	93.51	93.50	93.49	93.48
14.000	93.47	93.46	93.45	93.44	93.43
14.250	93.42	93.40	93.39	93.38	93.37
14.500	93.36	93.35	93.34	93.32	93.31
14.750	93.30	93.29	93.28	93.27	93.25
15.000	93.24	93.23	93.22	93.20	93.19
15.250	93.17	93.15	93.13	93.11	93.08
15.500	93.06	93.03	93.00	93.00	93.00
15.750	93.00	93.00	93.00	93.00	93.00
16.000	93.00	93.00	93.00	93.00	93.00
16.250	93.00	93.00	93.00	93.00	93.00
16.500	93.00	93.00	93.00	93.00	93.00
16.750	93.00	93.00	93.00	93.00	93.00
17.000	93.00	93.00	93.00	93.00	93.00
17.250	93.00	93.00	93.00	93.00	93.00
17.500	93.00	93.00	93.00	93.00	93.00
17.750	93.00	93.00	93.00	93.00	93.00
18.000	93.00	93.00	93.00	93.00	93.00
18.250	93.00	93.00	93.00	93.00	93.00
18.500	93.00	93.00	93.00	93.00	93.00
18.750	93.00	93.00	93.00	93.00	93.00
19.000	93.00	93.00	93.00	93.00	93.00
19.250	93.00	93.00	93.00	93.00	93.00
19.500	93.00	93.00	93.00	93.00	93.00
19.750	93.00	93.00	93.00	93.00	93.00
20.000	93.00	93.00	93.00	93.00	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 10 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	93.00	93.00	93.00	93.00	93.00
20.500	93.00	93.00	93.00	93.00	93.00
20.750	93.00	93.00	93.00	93.00	93.00
21.000	93.00	93.00	93.00	93.00	93.00
21.250	93.00	93.00	93.00	93.00	93.00
21.500	93.00	93.00	93.00	93.00	93.00
21.750	93.00	93.00	93.00	93.00	93.00
22.000	93.00	93.00	93.00	93.00	93.00
22.250	93.00	93.00	93.00	93.00	93.00
22.500	93.00	93.00	93.00	93.00	93.00
22.750	93.00	93.00	93.00	93.00	93.00
23.000	93.00	93.00	93.00	93.00	93.00
23.250	93.00	93.00	93.00	93.00	93.00
23.500	93.00	93.00	93.00	93.00	93.00
23.750	93.00	93.00	93.00	93.00	93.00
24.000	93.00	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 25 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	93.00	93.00	93.00	93.00	93.00
0.250	93.00	93.00	93.00	93.00	93.00
0.500	93.00	93.00	93.00	93.00	93.00
0.750	93.00	93.00	93.00	93.00	93.00
1.000	93.00	93.00	93.00	93.00	93.00
1.250	93.00	93.00	93.00	93.00	93.00
1.500	93.00	93.00	93.00	93.00	93.00
1.750	93.00	93.00	93.00	93.00	93.00
2.000	93.00	93.00	93.00	93.00	93.00
2.250	93.00	93.00	93.00	93.00	93.00
2.500	93.00	93.00	93.00	93.00	93.00
2.750	93.00	93.00	93.00	93.00	93.00
3.000	93.00	93.00	93.00	93.00	93.00
3.250	93.00	93.00	93.00	93.00	93.00
3.500	93.00	93.00	93.00	93.00	93.00
3.750	93.00	93.00	93.00	93.00	93.00
4.000	93.00	93.00	93.00	93.00	93.00
4.250	93.00	93.00	93.00	93.00	93.00
4.500	93.00	93.00	93.00	93.00	93.00
4.750	93.00	93.00	93.00	93.00	93.00
5.000	93.00	93.00	93.00	93.00	93.00
5.250	93.00	93.00	93.00	93.00	93.00
5.500	93.00	93.00	93.00	93.00	93.00
5.750	93.00	93.00	93.00	93.00	93.00
6.000	93.00	93.00	93.00	93.00	93.00
6.250	93.00	93.00	93.00	93.00	93.00
6.500	93.00	93.00	93.00	93.00	93.00
6.750	93.00	93.00	93.00	93.00	93.00
7.000	93.00	93.00	93.00	93.00	93.00
7.250	93.00	93.00	93.00	93.00	93.00
7.500	93.00	93.00	93.00	93.00	93.00
7.750	93.00	93.00	93.00	93.00	93.00
8.000	93.00	93.00	93.00	93.00	93.00
8.250	93.00	93.00	93.00	93.00	93.00
8.500	93.00	93.00	93.00	93.00	93.00
8.750	93.00	93.00	93.00	93.00	93.00
9.000	93.00	93.00	93.00	93.00	93.00
9.250	93.00	93.00	93.00	93.00	93.00
9.500	93.00	93.00	93.00	93.00	93.00
9.750	93.00	93.00	93.00	93.00	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 25 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	93.00	93.00	93.00	93.00	93.00
10.250	93.00	93.00	93.00	93.00	93.00
10.500	93.00	93.00	93.00	93.00	93.00
10.750	93.00	93.00	93.00	93.00	93.00
11.000	93.00	93.00	93.00	93.00	93.00
11.250	93.00	93.00	93.00	93.00	93.00
11.500	93.00	93.02	93.03	93.04	93.07
11.750	93.11	93.15	93.20	93.24	93.29
12.000	93.37	93.46	93.57	93.65	93.71
12.250	93.72	93.72	93.72	93.72	93.72
12.500	93.71	93.71	93.71	93.71	93.71
12.750	93.71	93.71	93.71	93.71	93.70
13.000	93.70	93.70	93.69	93.69	93.69
13.250	93.68	93.67	93.67	93.66	93.66
13.500	93.65	93.65	93.64	93.63	93.63
13.750	93.62	93.61	93.61	93.60	93.59
14.000	93.58	93.57	93.57	93.56	93.55
14.250	93.54	93.53	93.52	93.51	93.50
14.500	93.49	93.48	93.47	93.46	93.45
14.750	93.44	93.43	93.42	93.40	93.39
15.000	93.38	93.37	93.36	93.35	93.34
15.250	93.33	93.32	93.30	93.29	93.28
15.500	93.27	93.26	93.25	93.23	93.22
15.750	93.21	93.20	93.18	93.16	93.14
16.000	93.12	93.10	93.07	93.04	93.02
16.250	93.00	93.00	93.00	93.00	93.00
16.500	93.00	93.00	93.00	93.00	93.00
16.750	93.00	93.00	93.00	93.00	93.00
17.000	93.00	93.00	93.00	93.00	93.00
17.250	93.00	93.00	93.00	93.00	93.00
17.500	93.00	93.00	93.00	93.00	93.00
17.750	93.00	93.00	93.00	93.00	93.00
18.000	93.00	93.00	93.00	93.00	93.00
18.250	93.00	93.00	93.00	93.00	93.00
18.500	93.00	93.00	93.00	93.00	93.00
18.750	93.00	93.00	93.00	93.00	93.00
19.000	93.00	93.00	93.00	93.00	93.00
19.250	93.00	93.00	93.00	93.00	93.00
19.500	93.00	93.00	93.00	93.00	93.00
19.750	93.00	93.00	93.00	93.00	93.00
20.000	93.00	93.00	93.00	93.00	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 25 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	93.00	93.00	93.00	93.00	93.00
20.500	93.00	93.00	93.00	93.00	93.00
20.750	93.00	93.00	93.00	93.00	93.00
21.000	93.00	93.00	93.00	93.00	93.00
21.250	93.00	93.00	93.00	93.00	93.00
21.500	93.00	93.00	93.00	93.00	93.00
21.750	93.00	93.00	93.00	93.00	93.00
22.000	93.00	93.00	93.00	93.00	93.00
22.250	93.00	93.00	93.00	93.00	93.00
22.500	93.00	93.00	93.00	93.00	93.00
22.750	93.00	93.00	93.00	93.00	93.00
23.000	93.00	93.00	93.00	93.00	93.00
23.250	93.00	93.00	93.00	93.00	93.00
23.500	93.00	93.00	93.00	93.00	93.00
23.750	93.00	93.00	93.00	93.00	93.00
24.000	93.00	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 100 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	93.00	93.00	93.00	93.00	93.00
0.250	93.00	93.00	93.00	93.00	93.00
0.500	93.00	93.00	93.00	93.00	93.00
0.750	93.00	93.00	93.00	93.00	93.00
1.000	93.00	93.00	93.00	93.00	93.00
1.250	93.00	93.00	93.00	93.00	93.00
1.500	93.00	93.00	93.00	93.00	93.00
1.750	93.00	93.00	93.00	93.00	93.00
2.000	93.00	93.00	93.00	93.00	93.00
2.250	93.00	93.00	93.00	93.00	93.00
2.500	93.00	93.00	93.00	93.00	93.00
2.750	93.00	93.00	93.00	93.00	93.00
3.000	93.00	93.00	93.00	93.00	93.00
3.250	93.00	93.00	93.00	93.00	93.00
3.500	93.00	93.00	93.00	93.00	93.00
3.750	93.00	93.00	93.00	93.00	93.00
4.000	93.00	93.00	93.00	93.00	93.00
4.250	93.00	93.00	93.00	93.00	93.00
4.500	93.00	93.00	93.00	93.00	93.00
4.750	93.00	93.00	93.00	93.00	93.00
5.000	93.00	93.00	93.00	93.00	93.00
5.250	93.00	93.00	93.00	93.00	93.00
5.500	93.00	93.00	93.00	93.00	93.00
5.750	93.00	93.00	93.00	93.00	93.00
6.000	93.00	93.00	93.00	93.00	93.00
6.250	93.00	93.00	93.00	93.00	93.00
6.500	93.00	93.00	93.00	93.00	93.00
6.750	93.00	93.00	93.00	93.00	93.00
7.000	93.00	93.00	93.00	93.00	93.00
7.250	93.00	93.00	93.00	93.00	93.00
7.500	93.00	93.00	93.00	93.00	93.00
7.750	93.00	93.00	93.00	93.00	93.00
8.000	93.00	93.00	93.00	93.00	93.00
8.250	93.00	93.00	93.00	93.00	93.00
8.500	93.00	93.00	93.00	93.00	93.00
8.750	93.00	93.00	93.00	93.00	93.00
9.000	93.00	93.00	93.00	93.00	93.00
9.250	93.00	93.00	93.00	93.00	93.00
9.500	93.00	93.00	93.00	93.00	93.00
9.750	93.00	93.00	93.00	93.00	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 100 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	93.00	93.00	93.00	93.00	93.00
10.250	93.00	93.00	93.00	93.00	93.00
10.500	93.00	93.00	93.00	93.00	93.00
10.750	93.00	93.00	93.00	93.00	93.00
11.000	93.00	93.00	93.00	93.00	93.02
11.250	93.02	93.03	93.03	93.04	93.05
11.500	93.07	93.08	93.11	93.14	93.18
11.750	93.22	93.27	93.32	93.39	93.47
12.000	93.58	93.70	93.75	93.75	93.74
12.250	93.73	93.73	93.72	93.72	93.72
12.500	93.72	93.71	93.71	93.71	93.71
12.750	93.71	93.71	93.71	93.71	93.71
13.000	93.71	93.71	93.71	93.71	93.71
13.250	93.71	93.71	93.71	93.70	93.70
13.500	93.70	93.70	93.70	93.69	93.69
13.750	93.69	93.68	93.68	93.67	93.67
14.000	93.66	93.66	93.66	93.65	93.64
14.250	93.64	93.63	93.63	93.62	93.62
14.500	93.61	93.61	93.60	93.59	93.59
14.750	93.58	93.57	93.56	93.55	93.54
15.000	93.54	93.53	93.52	93.51	93.50
15.250	93.49	93.48	93.47	93.47	93.46
15.500	93.45	93.44	93.43	93.42	93.41
15.750	93.40	93.39	93.38	93.37	93.35
16.000	93.34	93.33	93.32	93.31	93.30
16.250	93.29	93.28	93.27	93.25	93.24
16.500	93.23	93.22	93.21	93.19	93.18
16.750	93.16	93.14	93.12	93.10	93.08
17.000	93.05	93.03	93.00	93.00	93.00
17.250	93.00	93.00	93.00	93.00	93.00
17.500	93.00	93.00	93.00	93.00	93.00
17.750	93.00	93.00	93.00	93.00	93.00
18.000	93.00	93.00	93.00	93.00	93.00
18.250	93.00	93.00	93.00	93.00	93.00
18.500	93.00	93.00	93.00	93.00	93.00
18.750	93.00	93.00	93.00	93.00	93.00
19.000	93.00	93.00	93.00	93.00	93.00
19.250	93.00	93.00	93.00	93.00	93.00
19.500	93.00	93.00	93.00	93.00	93.00
19.750	93.00	93.00	93.00	93.00	93.00
20.000	93.00	93.00	93.00	93.00	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 100 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	93.00	93.00	93.00	93.00	93.00
20.500	93.00	93.00	93.00	93.00	93.00
20.750	93.00	93.00	93.00	93.00	93.00
21.000	93.00	93.00	93.00	93.00	93.00
21.250	93.00	93.00	93.00	93.00	93.00
21.500	93.00	93.00	93.00	93.00	93.00
21.750	93.00	93.00	93.00	93.00	93.00
22.000	93.00	93.00	93.00	93.00	93.00
22.250	93.00	93.00	93.00	93.00	93.00
22.500	93.00	93.00	93.00	93.00	93.00
22.750	93.00	93.00	93.00	93.00	93.00
23.000	93.00	93.00	93.00	93.00	93.00
23.250	93.00	93.00	93.00	93.00	93.00
23.500	93.00	93.00	93.00	93.00	93.00
23.750	93.00	93.00	93.00	93.00	93.00
24.000	93.00	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 1 years

Label: MC-3500 - 3 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	62.85	62.85	62.85	62.85	62.85
0.250	62.85	62.85	62.85	62.85	62.85
0.500	62.85	62.85	62.85	62.85	62.85
0.750	62.85	62.85	62.85	62.85	62.85
1.000	62.85	62.85	62.85	62.85	62.85
1.250	62.85	62.85	62.85	62.85	62.85
1.500	62.85	62.85	62.85	62.85	62.85
1.750	62.85	62.85	62.85	62.85	62.85
2.000	62.85	62.85	62.85	62.85	62.85
2.250	62.85	62.85	62.85	62.85	62.85
2.500	62.85	62.85	62.85	62.85	62.85
2.750	62.85	62.85	62.85	62.85	62.85
3.000	62.85	62.85	62.85	62.85	62.85
3.250	62.85	62.85	62.85	62.85	62.85
3.500	62.85	62.85	62.85	62.85	62.85
3.750	62.85	62.85	62.85	62.85	62.85
4.000	62.85	62.85	62.85	62.85	62.85
4.250	62.85	62.85	62.85	62.85	62.85
4.500	62.85	62.85	62.85	62.85	62.85
4.750	62.85	62.85	62.85	62.85	62.85
5.000	62.85	62.85	62.85	62.85	62.85
5.250	62.85	62.85	62.85	62.85	62.85
5.500	62.85	62.85	62.85	62.85	62.85
5.750	62.85	62.85	62.85	62.85	62.85
6.000	62.85	62.85	62.85	62.85	62.85
6.250	62.85	62.85	62.85	62.85	62.85
6.500	62.85	62.86	62.86	62.86	62.86
6.750	62.86	62.86	62.86	62.86	62.86
7.000	62.86	62.86	62.86	62.86	62.86
7.250	62.86	62.87	62.87	62.87	62.87
7.500	62.87	62.87	62.87	62.87	62.87
7.750	62.88	62.88	62.88	62.88	62.88
8.000	62.88	62.88	62.88	62.89	62.89
8.250	62.89	62.89	62.89	62.89	62.89
8.500	62.90	62.90	62.90	62.90	62.90
8.750	62.91	62.91	62.91	62.91	62.92
9.000	62.92	62.92	62.92	62.93	62.93
9.250	62.93	62.93	62.94	62.94	62.94
9.500	62.95	62.95	62.95	62.96	62.96
9.750	62.96	62.97	62.97	62.97	62.98

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation
 Label: MC-3500 - 3 (OUT)
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	62.98	62.99	62.99	62.99	63.00
10.250	63.00	63.01	63.01	63.02	63.02
10.500	63.03	63.03	63.04	63.04	63.05
10.750	63.06	63.06	63.07	63.08	63.08
11.000	63.09	63.10	63.11	63.11	63.12
11.250	63.13	63.14	63.16	63.17	63.18
11.500	63.20	63.22	63.24	63.27	63.31
11.750	63.35	63.39	63.44	63.50	63.57
12.000	63.67	63.81	63.93	64.03	64.11
12.250	64.17	64.21	64.25	64.27	64.29
12.500	64.31	64.31	64.31	64.31	64.31
12.750	64.30	64.30	64.29	64.29	64.28
13.000	64.27	64.26	64.26	64.25	64.24
13.250	64.23	64.22	64.21	64.20	64.19
13.500	64.18	64.17	64.16	64.15	64.14
13.750	64.13	64.12	64.11	64.10	64.09
14.000	64.08	64.07	64.06	64.05	64.03
14.250	64.02	64.01	64.00	63.99	63.98
14.500	63.97	63.96	63.95	63.94	63.93
14.750	63.92	63.91	63.90	63.89	63.88
15.000	63.87	63.85	63.84	63.83	63.81
15.250	63.80	63.79	63.77	63.76	63.75
15.500	63.74	63.72	63.71	63.70	63.68
15.750	63.67	63.66	63.65	63.64	63.62
16.000	63.61	63.60	63.59	63.58	63.57
16.250	63.55	63.54	63.53	63.52	63.51
16.500	63.50	63.49	63.48	63.47	63.46
16.750	63.45	63.44	63.43	63.42	63.41
17.000	63.41	63.40	63.39	63.38	63.37
17.250	63.36	63.35	63.34	63.33	63.32
17.500	63.31	63.30	63.28	63.27	63.26
17.750	63.25	63.24	63.23	63.22	63.22
18.000	63.21	63.20	63.19	63.18	63.18
18.250	63.17	63.16	63.15	63.15	63.14
18.500	63.14	63.13	63.12	63.12	63.11
18.750	63.11	63.10	63.10	63.09	63.09
19.000	63.09	63.08	63.08	63.07	63.07
19.250	63.07	63.06	63.06	63.06	63.05
19.500	63.05	63.05	63.04	63.04	63.04
19.750	63.04	63.03	63.03	63.03	63.03
20.000	63.02	63.02	63.02	63.02	63.02

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 1 years

Label: MC-3500 - 3 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	63.01	63.01	63.01	63.01	63.01
20.500	63.00	63.00	63.00	63.00	63.00
20.750	63.00	63.00	62.99	62.99	62.99
21.000	62.99	62.99	62.99	62.99	62.99
21.250	62.98	62.98	62.98	62.98	62.98
21.500	62.98	62.98	62.98	62.98	62.97
21.750	62.97	62.97	62.97	62.97	62.97
22.000	62.97	62.97	62.97	62.97	62.97
22.250	62.97	62.96	62.96	62.96	62.96
22.500	62.96	62.96	62.96	62.96	62.96
22.750	62.96	62.96	62.96	62.96	62.96
23.000	62.95	62.95	62.95	62.95	62.95
23.250	62.95	62.95	62.95	62.95	62.95
23.500	62.95	62.95	62.95	62.95	62.95
23.750	62.95	62.95	62.94	62.94	62.94
24.000	62.94	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 10 years

Label: MC-3500 - 3 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	62.85	62.85	62.85	62.85	62.85
0.250	62.85	62.85	62.85	62.85	62.85
0.500	62.85	62.85	62.85	62.85	62.85
0.750	62.85	62.85	62.85	62.85	62.85
1.000	62.85	62.85	62.85	62.85	62.85
1.250	62.85	62.85	62.85	62.85	62.85
1.500	62.85	62.85	62.85	62.85	62.85
1.750	62.85	62.85	62.85	62.85	62.85
2.000	62.85	62.85	62.85	62.85	62.85
2.250	62.85	62.85	62.85	62.85	62.85
2.500	62.85	62.85	62.85	62.85	62.85
2.750	62.85	62.85	62.85	62.85	62.85
3.000	62.85	62.85	62.85	62.85	62.85
3.250	62.85	62.85	62.85	62.85	62.85
3.500	62.85	62.85	62.85	62.85	62.85
3.750	62.85	62.85	62.85	62.85	62.85
4.000	62.85	62.85	62.86	62.86	62.86
4.250	62.86	62.86	62.86	62.86	62.86
4.500	62.86	62.86	62.86	62.87	62.87
4.750	62.87	62.87	62.87	62.87	62.87
5.000	62.87	62.88	62.88	62.88	62.88
5.250	62.88	62.88	62.88	62.88	62.89
5.500	62.89	62.89	62.89	62.89	62.89
5.750	62.89	62.90	62.90	62.90	62.90
6.000	62.90	62.90	62.91	62.91	62.91
6.250	62.91	62.91	62.91	62.92	62.92
6.500	62.92	62.92	62.93	62.93	62.93
6.750	62.93	62.93	62.94	62.94	62.94
7.000	62.94	62.95	62.95	62.95	62.96
7.250	62.96	62.96	62.96	62.97	62.97
7.500	62.97	62.98	62.98	62.98	62.99
7.750	62.99	62.99	63.00	63.00	63.00
8.000	63.01	63.01	63.01	63.02	63.02
8.250	63.03	63.03	63.03	63.04	63.04
8.500	63.05	63.05	63.06	63.06	63.07
8.750	63.08	63.08	63.09	63.09	63.10
9.000	63.11	63.11	63.12	63.13	63.13
9.250	63.14	63.15	63.15	63.16	63.17
9.500	63.18	63.18	63.19	63.20	63.21
9.750	63.22	63.23	63.23	63.24	63.25

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 10 years

Label: MC-3500 - 3 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	63.26	63.27	63.28	63.29	63.30
10.250	63.31	63.32	63.33	63.34	63.35
10.500	63.36	63.37	63.37	63.38	63.39
10.750	63.40	63.41	63.42	63.43	63.44
11.000	63.45	63.47	63.48	63.49	63.51
11.250	63.52	63.54	63.56	63.58	63.61
11.500	63.63	63.66	63.69	63.74	63.80
11.750	63.87	63.94	64.02	64.12	64.24
12.000	64.41	64.63	64.86	65.07	65.22
12.250	65.31	65.36	65.40	65.42	65.42
12.500	65.41	65.38	65.34	65.30	65.26
12.750	65.22	65.19	65.15	65.11	65.08
13.000	65.05	65.01	64.98	64.95	64.93
13.250	64.90	64.87	64.85	64.83	64.81
13.500	64.79	64.77	64.75	64.73	64.71
13.750	64.69	64.67	64.65	64.64	64.62
14.000	64.60	64.59	64.57	64.55	64.54
14.250	64.52	64.51	64.50	64.48	64.47
14.500	64.46	64.44	64.43	64.42	64.41
14.750	64.40	64.39	64.38	64.37	64.36
15.000	64.35	64.34	64.33	64.32	64.31
15.250	64.30	64.29	64.28	64.27	64.26
15.500	64.25	64.24	64.23	64.22	64.21
15.750	64.20	64.19	64.17	64.16	64.15
16.000	64.14	64.13	64.12	64.11	64.10
16.250	64.09	64.08	64.07	64.05	64.04
16.500	64.03	64.02	64.01	64.00	63.99
16.750	63.98	63.97	63.96	63.95	63.94
17.000	63.93	63.92	63.90	63.89	63.88
17.250	63.87	63.86	63.85	63.84	63.83
17.500	63.81	63.80	63.79	63.77	63.76
17.750	63.75	63.74	63.72	63.71	63.70
18.000	63.69	63.67	63.66	63.65	63.64
18.250	63.63	63.62	63.61	63.59	63.58
18.500	63.57	63.56	63.55	63.54	63.53
18.750	63.52	63.52	63.51	63.50	63.49
19.000	63.48	63.47	63.46	63.45	63.44
19.250	63.44	63.43	63.42	63.41	63.41
19.500	63.40	63.39	63.38	63.38	63.37
19.750	63.36	63.35	63.35	63.34	63.33
20.000	63.32	63.31	63.30	63.29	63.28

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 10 years

Label: MC-3500 - 3 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	63.27	63.26	63.26	63.25	63.24
20.500	63.24	63.23	63.22	63.22	63.21
20.750	63.20	63.20	63.19	63.19	63.18
21.000	63.18	63.17	63.17	63.16	63.16
21.250	63.16	63.15	63.15	63.14	63.14
21.500	63.14	63.13	63.13	63.13	63.12
21.750	63.12	63.12	63.11	63.11	63.11
22.000	63.11	63.10	63.10	63.10	63.10
22.250	63.09	63.09	63.09	63.09	63.09
22.500	63.08	63.08	63.08	63.08	63.07
22.750	63.07	63.07	63.07	63.07	63.07
23.000	63.06	63.06	63.06	63.06	63.06
23.250	63.06	63.05	63.05	63.05	63.05
23.500	63.05	63.05	63.04	63.04	63.04
23.750	63.04	63.04	63.04	63.04	63.04
24.000	63.03	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 25 years

Label: MC-3500 - 3 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	62.85	62.85	62.85	62.85	62.85
0.250	62.85	62.85	62.85	62.85	62.85
0.500	62.85	62.85	62.85	62.85	62.85
0.750	62.85	62.85	62.85	62.85	62.85
1.000	62.85	62.85	62.85	62.85	62.85
1.250	62.85	62.85	62.85	62.85	62.85
1.500	62.85	62.85	62.85	62.85	62.85
1.750	62.85	62.85	62.85	62.85	62.85
2.000	62.85	62.85	62.85	62.85	62.85
2.250	62.85	62.85	62.85	62.85	62.85
2.500	62.85	62.85	62.85	62.85	62.85
2.750	62.85	62.85	62.85	62.85	62.85
3.000	62.85	62.85	62.85	62.85	62.85
3.250	62.85	62.85	62.86	62.86	62.86
3.500	62.86	62.86	62.86	62.86	62.86
3.750	62.86	62.87	62.87	62.87	62.87
4.000	62.87	62.87	62.87	62.88	62.88
4.250	62.88	62.88	62.88	62.88	62.89
4.500	62.89	62.89	62.89	62.89	62.89
4.750	62.90	62.90	62.90	62.90	62.90
5.000	62.91	62.91	62.91	62.91	62.91
5.250	62.92	62.92	62.92	62.92	62.92
5.500	62.93	62.93	62.93	62.93	62.94
5.750	62.94	62.94	62.94	62.94	62.95
6.000	62.95	62.95	62.95	62.96	62.96
6.250	62.96	62.96	62.97	62.97	62.97
6.500	62.98	62.98	62.98	62.99	62.99
6.750	62.99	63.00	63.00	63.00	63.01
7.000	63.01	63.01	63.02	63.02	63.02
7.250	63.03	63.03	63.04	63.04	63.05
7.500	63.05	63.05	63.06	63.06	63.07
7.750	63.07	63.08	63.08	63.09	63.09
8.000	63.10	63.10	63.11	63.11	63.12
8.250	63.12	63.13	63.13	63.14	63.15
8.500	63.15	63.16	63.17	63.18	63.18
8.750	63.19	63.20	63.21	63.22	63.22
9.000	63.23	63.24	63.25	63.26	63.27
9.250	63.28	63.29	63.30	63.31	63.32
9.500	63.33	63.34	63.35	63.36	63.36
9.750	63.37	63.38	63.38	63.39	63.40

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 25 years

Label: MC-3500 - 3 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	63.41	63.42	63.43	63.43	63.44
10.250	63.45	63.46	63.48	63.49	63.50
10.500	63.51	63.52	63.54	63.55	63.56
10.750	63.58	63.59	63.61	63.62	63.64
11.000	63.66	63.67	63.69	63.71	63.73
11.250	63.76	63.78	63.81	63.84	63.86
11.500	63.89	63.92	63.95	64.00	64.06
11.750	64.14	64.23	64.34	64.47	64.64
12.000	64.86	65.14	65.42	65.69	65.88
12.250	66.00	66.07	66.12	66.14	66.13
12.500	66.11	66.06	66.01	65.94	65.88
12.750	65.81	65.75	65.69	65.63	65.57
13.000	65.51	65.46	65.40	65.34	65.30
13.250	65.25	65.20	65.16	65.12	65.09
13.500	65.05	65.02	64.99	64.96	64.93
13.750	64.91	64.88	64.86	64.84	64.82
14.000	64.80	64.78	64.76	64.74	64.72
14.250	64.70	64.69	64.67	64.65	64.64
14.500	64.62	64.61	64.59	64.58	64.56
14.750	64.55	64.54	64.52	64.51	64.50
15.000	64.49	64.47	64.46	64.45	64.44
15.250	64.43	64.42	64.41	64.40	64.39
15.500	64.38	64.37	64.36	64.35	64.34
15.750	64.33	64.32	64.31	64.30	64.29
16.000	64.28	64.27	64.26	64.25	64.24
16.250	64.23	64.22	64.21	64.20	64.19
16.500	64.18	64.17	64.16	64.15	64.14
16.750	64.13	64.12	64.11	64.10	64.09
17.000	64.08	64.07	64.06	64.05	64.04
17.250	64.03	64.02	64.01	64.00	63.99
17.500	63.98	63.97	63.96	63.95	63.94
17.750	63.93	63.92	63.91	63.90	63.89
18.000	63.88	63.87	63.86	63.84	63.83
18.250	63.82	63.80	63.79	63.78	63.77
18.500	63.76	63.74	63.73	63.72	63.71
18.750	63.70	63.69	63.68	63.67	63.66
19.000	63.64	63.63	63.62	63.61	63.61
19.250	63.60	63.59	63.58	63.57	63.56
19.500	63.55	63.54	63.53	63.52	63.52
19.750	63.51	63.50	63.49	63.48	63.48
20.000	63.47	63.46	63.45	63.45	63.44

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 25 years

Label: MC-3500 - 3 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	63.43	63.43	63.42	63.41	63.40
20.500	63.40	63.39	63.39	63.38	63.37
20.750	63.37	63.36	63.35	63.35	63.34
21.000	63.33	63.32	63.31	63.31	63.30
21.250	63.29	63.28	63.28	63.27	63.26
21.500	63.26	63.25	63.25	63.24	63.23
21.750	63.23	63.22	63.22	63.21	63.21
22.000	63.20	63.20	63.20	63.19	63.19
22.250	63.18	63.18	63.18	63.17	63.17
22.500	63.17	63.16	63.16	63.16	63.15
22.750	63.15	63.15	63.14	63.14	63.14
23.000	63.14	63.13	63.13	63.13	63.12
23.250	63.12	63.12	63.12	63.12	63.11
23.500	63.11	63.11	63.11	63.10	63.10
23.750	63.10	63.10	63.10	63.09	63.09
24.000	63.09	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 100 years

Label: MC-3500 - 3 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	62.85	62.85	62.85	62.85	62.85
0.250	62.85	62.85	62.85	62.85	62.85
0.500	62.85	62.85	62.85	62.85	62.85
0.750	62.85	62.85	62.85	62.85	62.85
1.000	62.85	62.85	62.85	62.85	62.85
1.250	62.85	62.85	62.85	62.85	62.85
1.500	62.85	62.85	62.85	62.85	62.85
1.750	62.85	62.85	62.85	62.85	62.85
2.000	62.85	62.85	62.85	62.85	62.85
2.250	62.85	62.85	62.85	62.85	62.86
2.500	62.86	62.86	62.86	62.86	62.86
2.750	62.86	62.87	62.87	62.87	62.87
3.000	62.87	62.88	62.88	62.88	62.88
3.250	62.88	62.89	62.89	62.89	62.89
3.500	62.90	62.90	62.90	62.91	62.91
3.750	62.91	62.91	62.92	62.92	62.92
4.000	62.93	62.93	62.93	62.94	62.94
4.250	62.94	62.94	62.95	62.95	62.95
4.500	62.96	62.96	62.96	62.97	62.97
4.750	62.97	62.98	62.98	62.99	62.99
5.000	62.99	63.00	63.00	63.00	63.01
5.250	63.01	63.01	63.02	63.02	63.02
5.500	63.03	63.03	63.04	63.04	63.04
5.750	63.05	63.05	63.05	63.06	63.06
6.000	63.06	63.07	63.07	63.08	63.08
6.250	63.08	63.09	63.09	63.10	63.10
6.500	63.11	63.11	63.12	63.12	63.13
6.750	63.13	63.14	63.14	63.15	63.15
7.000	63.16	63.17	63.17	63.18	63.18
7.250	63.19	63.20	63.20	63.21	63.22
7.500	63.22	63.23	63.24	63.24	63.25
7.750	63.26	63.27	63.27	63.28	63.29
8.000	63.30	63.30	63.31	63.32	63.33
8.250	63.34	63.34	63.35	63.36	63.37
8.500	63.37	63.38	63.39	63.39	63.40
8.750	63.41	63.42	63.43	63.44	63.45
9.000	63.46	63.47	63.48	63.49	63.50
9.250	63.51	63.52	63.54	63.55	63.56
9.500	63.57	63.59	63.60	63.61	63.63
9.750	63.64	63.65	63.67	63.68	63.70

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 100 years

Label: MC-3500 - 3 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	63.71	63.73	63.74	63.76	63.78
10.250	63.79	63.81	63.83	63.85	63.86
10.500	63.88	63.90	63.91	63.93	63.95
10.750	63.96	63.98	64.00	64.02	64.04
11.000	64.06	64.09	64.11	64.13	64.16
11.250	64.19	64.22	64.25	64.29	64.33
11.500	64.37	64.42	64.47	64.54	64.63
11.750	64.75	64.88	65.04	65.21	65.43
12.000	65.76	66.19	66.69	67.27	67.76
12.250	68.05	68.22	68.32	68.35	68.32
12.500	68.23	68.10	67.94	67.76	67.58
12.750	67.40	67.23	67.08	66.93	66.80
13.000	66.69	66.58	66.48	66.37	66.28
13.250	66.19	66.11	66.03	65.95	65.87
13.500	65.80	65.74	65.68	65.61	65.56
13.750	65.50	65.44	65.39	65.34	65.29
14.000	65.25	65.20	65.17	65.13	65.09
14.250	65.06	65.03	65.00	64.98	64.95
14.500	64.93	64.90	64.88	64.86	64.84
14.750	64.83	64.81	64.79	64.78	64.76
15.000	64.74	64.73	64.71	64.70	64.68
15.250	64.67	64.65	64.64	64.63	64.61
15.500	64.60	64.59	64.57	64.56	64.55
15.750	64.54	64.52	64.51	64.50	64.49
16.000	64.48	64.47	64.46	64.44	64.43
16.250	64.42	64.41	64.40	64.39	64.39
16.500	64.38	64.37	64.36	64.35	64.34
16.750	64.33	64.33	64.32	64.31	64.30
17.000	64.29	64.28	64.28	64.27	64.26
17.250	64.25	64.24	64.23	64.22	64.21
17.500	64.21	64.20	64.19	64.18	64.17
17.750	64.16	64.15	64.14	64.13	64.12
18.000	64.11	64.10	64.09	64.08	64.07
18.250	64.07	64.06	64.05	64.04	64.03
18.500	64.02	64.01	64.00	63.99	63.98
18.750	63.97	63.96	63.96	63.95	63.94
19.000	63.93	63.92	63.91	63.90	63.90
19.250	63.89	63.88	63.87	63.86	63.85
19.500	63.84	63.83	63.82	63.81	63.80
19.750	63.79	63.78	63.77	63.76	63.75
20.000	63.74	63.73	63.72	63.71	63.70

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 100 years

Label: MC-3500 - 3 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	63.69	63.69	63.68	63.67	63.66
20.500	63.65	63.64	63.63	63.63	63.62
20.750	63.61	63.60	63.60	63.59	63.58
21.000	63.57	63.57	63.56	63.55	63.55
21.250	63.54	63.53	63.53	63.52	63.51
21.500	63.51	63.50	63.49	63.49	63.48
21.750	63.47	63.47	63.46	63.46	63.45
22.000	63.45	63.44	63.43	63.43	63.42
22.250	63.42	63.41	63.41	63.40	63.40
22.500	63.39	63.39	63.38	63.38	63.37
22.750	63.37	63.36	63.36	63.35	63.35
23.000	63.34	63.33	63.33	63.32	63.31
23.250	63.31	63.30	63.30	63.29	63.28
23.500	63.28	63.27	63.27	63.26	63.26
23.750	63.25	63.25	63.24	63.24	63.24
24.000	63.23	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 1 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	78.81	78.81	78.81	78.81	78.81
0.250	78.81	78.81	78.81	78.81	78.81
0.500	78.81	78.81	78.81	78.81	78.81
0.750	78.81	78.81	78.81	78.81	78.81
1.000	78.81	78.81	78.81	78.81	78.81
1.250	78.81	78.81	78.81	78.81	78.81
1.500	78.81	78.81	78.81	78.81	78.81
1.750	78.81	78.81	78.81	78.81	78.81
2.000	78.81	78.81	78.81	78.81	78.81
2.250	78.81	78.81	78.81	78.81	78.81
2.500	78.81	78.81	78.81	78.81	78.81
2.750	78.81	78.81	78.81	78.81	78.81
3.000	78.81	78.81	78.81	78.81	78.81
3.250	78.81	78.81	78.81	78.81	78.81
3.500	78.81	78.81	78.81	78.81	78.81
3.750	78.81	78.81	78.81	78.81	78.81
4.000	78.81	78.81	78.81	78.81	78.81
4.250	78.81	78.81	78.81	78.81	78.81
4.500	78.81	78.81	78.81	78.81	78.81
4.750	78.81	78.81	78.81	78.81	78.81
5.000	78.81	78.81	78.81	78.81	78.81
5.250	78.81	78.81	78.81	78.81	78.81
5.500	78.81	78.81	78.81	78.81	78.81
5.750	78.81	78.81	78.81	78.81	78.81
6.000	78.81	78.81	78.81	78.81	78.81
6.250	78.81	78.81	78.81	78.81	78.81
6.500	78.81	78.81	78.81	78.81	78.81
6.750	78.81	78.81	78.81	78.81	78.81
7.000	78.81	78.81	78.81	78.81	78.81
7.250	78.81	78.81	78.81	78.81	78.81
7.500	78.81	78.81	78.81	78.81	78.81
7.750	78.81	78.81	78.81	78.81	78.81
8.000	78.81	78.81	78.81	78.81	78.81
8.250	78.81	78.81	78.81	78.81	78.81
8.500	78.81	78.81	78.81	78.81	78.81
8.750	78.81	78.81	78.81	78.81	78.81
9.000	78.81	78.81	78.81	78.81	78.81
9.250	78.81	78.81	78.81	78.81	78.81
9.500	78.81	78.81	78.81	78.81	78.81
9.750	78.81	78.81	78.81	78.81	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 1 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	78.81	78.81	78.81	78.81	78.81
10.250	78.81	78.81	78.81	78.81	78.81
10.500	78.81	78.81	78.81	78.81	78.81
10.750	78.81	78.81	78.81	78.81	78.81
11.000	78.81	78.81	78.81	78.81	78.81
11.250	78.81	78.81	78.81	78.81	78.81
11.500	78.81	78.81	78.82	78.82	78.82
11.750	78.83	78.84	78.86	78.88	78.90
12.000	78.94	78.99	79.04	79.09	79.13
12.250	79.16	79.18	79.20	79.22	79.23
12.500	79.23	79.24	79.24	79.24	79.24
12.750	79.24	79.24	79.24	79.24	79.24
13.000	79.24	79.24	79.23	79.23	79.23
13.250	79.23	79.22	79.22	79.22	79.21
13.500	79.21	79.21	79.20	79.20	79.20
13.750	79.19	79.19	79.18	79.18	79.18
14.000	79.17	79.17	79.16	79.16	79.15
14.250	79.15	79.14	79.14	79.13	79.13
14.500	79.12	79.12	79.11	79.11	79.10
14.750	79.10	79.09	79.09	79.08	79.08
15.000	79.07	79.07	79.06	79.06	79.05
15.250	79.05	79.04	79.04	79.03	79.02
15.500	79.02	79.01	79.01	79.00	79.00
15.750	78.99	78.98	78.98	78.97	78.97
16.000	78.96	78.95	78.95	78.94	78.93
16.250	78.93	78.92	78.91	78.91	78.90
16.500	78.90	78.89	78.88	78.88	78.87
16.750	78.86	78.86	78.85	78.84	78.84
17.000	78.83	78.82	78.82	78.81	78.81
17.250	78.81	78.81	78.81	78.81	78.81
17.500	78.81	78.81	78.81	78.81	78.81
17.750	78.81	78.81	78.81	78.81	78.81
18.000	78.81	78.81	78.81	78.81	78.81
18.250	78.81	78.81	78.81	78.81	78.81
18.500	78.81	78.81	78.81	78.81	78.81
18.750	78.81	78.81	78.81	78.81	78.81
19.000	78.81	78.81	78.81	78.81	78.81
19.250	78.81	78.81	78.81	78.81	78.81
19.500	78.81	78.81	78.81	78.81	78.81
19.750	78.81	78.81	78.81	78.81	78.81
20.000	78.81	78.81	78.81	78.81	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 1 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	78.81	78.81	78.81	78.81	78.81
20.500	78.81	78.81	78.81	78.81	78.81
20.750	78.81	78.81	78.81	78.81	78.81
21.000	78.81	78.81	78.81	78.81	78.81
21.250	78.81	78.81	78.81	78.81	78.81
21.500	78.81	78.81	78.81	78.81	78.81
21.750	78.81	78.81	78.81	78.81	78.81
22.000	78.81	78.81	78.81	78.81	78.81
22.250	78.81	78.81	78.81	78.81	78.81
22.500	78.81	78.81	78.81	78.81	78.81
22.750	78.81	78.81	78.81	78.81	78.81
23.000	78.81	78.81	78.81	78.81	78.81
23.250	78.81	78.81	78.81	78.81	78.81
23.500	78.81	78.81	78.81	78.81	78.81
23.750	78.81	78.81	78.81	78.81	78.81
24.000	78.81	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 10 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	78.81	78.81	78.81	78.81	78.81
0.250	78.81	78.81	78.81	78.81	78.81
0.500	78.81	78.81	78.81	78.81	78.81
0.750	78.81	78.81	78.81	78.81	78.81
1.000	78.81	78.81	78.81	78.81	78.81
1.250	78.81	78.81	78.81	78.81	78.81
1.500	78.81	78.81	78.81	78.81	78.81
1.750	78.81	78.81	78.81	78.81	78.81
2.000	78.81	78.81	78.81	78.81	78.81
2.250	78.81	78.81	78.81	78.81	78.81
2.500	78.81	78.81	78.81	78.81	78.81
2.750	78.81	78.81	78.81	78.81	78.81
3.000	78.81	78.81	78.81	78.81	78.81
3.250	78.81	78.81	78.81	78.81	78.81
3.500	78.81	78.81	78.81	78.81	78.81
3.750	78.81	78.81	78.81	78.81	78.81
4.000	78.81	78.81	78.81	78.81	78.81
4.250	78.81	78.81	78.81	78.81	78.81
4.500	78.81	78.81	78.81	78.81	78.81
4.750	78.81	78.81	78.81	78.81	78.81
5.000	78.81	78.81	78.81	78.81	78.81
5.250	78.81	78.81	78.81	78.81	78.81
5.500	78.81	78.81	78.81	78.81	78.81
5.750	78.81	78.81	78.81	78.81	78.81
6.000	78.81	78.81	78.81	78.81	78.81
6.250	78.81	78.81	78.81	78.81	78.81
6.500	78.81	78.81	78.81	78.81	78.81
6.750	78.81	78.81	78.81	78.81	78.81
7.000	78.81	78.81	78.81	78.81	78.81
7.250	78.81	78.81	78.81	78.81	78.81
7.500	78.81	78.81	78.81	78.81	78.81
7.750	78.81	78.81	78.81	78.81	78.81
8.000	78.81	78.81	78.81	78.81	78.81
8.250	78.81	78.81	78.81	78.81	78.81
8.500	78.81	78.81	78.81	78.81	78.81
8.750	78.81	78.81	78.81	78.81	78.81
9.000	78.81	78.81	78.81	78.81	78.81
9.250	78.81	78.81	78.81	78.81	78.81
9.500	78.81	78.81	78.81	78.81	78.81
9.750	78.81	78.81	78.81	78.81	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 10 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	78.81	78.81	78.81	78.81	78.81
10.250	78.81	78.81	78.81	78.81	78.81
10.500	78.81	78.81	78.81	78.81	78.81
10.750	78.81	78.82	78.82	78.82	78.82
11.000	78.82	78.82	78.82	78.82	78.83
11.250	78.83	78.84	78.84	78.85	78.85
11.500	78.86	78.87	78.88	78.89	78.91
11.750	78.94	78.97	79.01	79.06	79.12
12.000	79.20	79.30	79.42	79.52	79.60
12.250	79.67	79.72	79.76	79.80	79.82
12.500	79.84	79.85	79.85	79.84	79.84
12.750	79.84	79.84	79.83	79.83	79.83
13.000	79.83	79.82	79.82	79.82	79.82
13.250	79.82	79.82	79.82	79.82	79.82
13.500	79.81	79.81	79.81	79.81	79.81
13.750	79.81	79.81	79.81	79.81	79.81
14.000	79.81	79.81	79.81	79.81	79.81
14.250	79.80	79.80	79.80	79.80	79.80
14.500	79.80	79.79	79.79	79.79	79.79
14.750	79.79	79.78	79.78	79.78	79.78
15.000	79.77	79.77	79.77	79.77	79.76
15.250	79.76	79.76	79.75	79.75	79.75
15.500	79.74	79.74	79.74	79.73	79.73
15.750	79.73	79.72	79.72	79.71	79.71
16.000	79.71	79.70	79.70	79.69	79.69
16.250	79.68	79.68	79.67	79.67	79.66
16.500	79.66	79.66	79.65	79.65	79.64
16.750	79.64	79.63	79.63	79.62	79.62
17.000	79.61	79.61	79.60	79.59	79.59
17.250	79.58	79.58	79.57	79.57	79.56
17.500	79.56	79.55	79.55	79.54	79.54
17.750	79.53	79.52	79.52	79.51	79.51
18.000	79.50	79.49	79.49	79.48	79.48
18.250	79.47	79.46	79.46	79.45	79.45
18.500	79.44	79.43	79.43	79.42	79.42
18.750	79.41	79.40	79.40	79.39	79.39
19.000	79.38	79.37	79.37	79.36	79.36
19.250	79.35	79.34	79.34	79.33	79.32
19.500	79.32	79.31	79.31	79.30	79.29
19.750	79.29	79.28	79.27	79.27	79.26
20.000	79.26	79.25	79.24	79.24	79.23

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 10 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	79.22	79.22	79.21	79.20	79.20
20.500	79.19	79.18	79.18	79.17	79.17
20.750	79.16	79.15	79.15	79.14	79.13
21.000	79.13	79.12	79.11	79.11	79.10
21.250	79.09	79.09	79.08	79.07	79.07
21.500	79.06	79.05	79.05	79.04	79.03
21.750	79.03	79.02	79.01	79.01	79.00
22.000	78.99	78.99	78.98	78.97	78.97
22.250	78.96	78.95	78.95	78.94	78.93
22.500	78.93	78.92	78.91	78.91	78.90
22.750	78.89	78.89	78.88	78.87	78.87
23.000	78.86	78.85	78.84	78.84	78.83
23.250	78.82	78.82	78.81	78.81	78.81
23.500	78.81	78.81	78.81	78.81	78.81
23.750	78.81	78.81	78.81	78.81	78.81
24.000	78.81	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 25 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	78.81	78.81	78.81	78.81	78.81
0.250	78.81	78.81	78.81	78.81	78.81
0.500	78.81	78.81	78.81	78.81	78.81
0.750	78.81	78.81	78.81	78.81	78.81
1.000	78.81	78.81	78.81	78.81	78.81
1.250	78.81	78.81	78.81	78.81	78.81
1.500	78.81	78.81	78.81	78.81	78.81
1.750	78.81	78.81	78.81	78.81	78.81
2.000	78.81	78.81	78.81	78.81	78.81
2.250	78.81	78.81	78.81	78.81	78.81
2.500	78.81	78.81	78.81	78.81	78.81
2.750	78.81	78.81	78.81	78.81	78.81
3.000	78.81	78.81	78.81	78.81	78.81
3.250	78.81	78.81	78.81	78.81	78.81
3.500	78.81	78.81	78.81	78.81	78.81
3.750	78.81	78.81	78.81	78.81	78.81
4.000	78.81	78.81	78.81	78.81	78.81
4.250	78.81	78.81	78.81	78.81	78.81
4.500	78.81	78.81	78.81	78.81	78.81
4.750	78.81	78.81	78.81	78.81	78.81
5.000	78.81	78.81	78.81	78.81	78.81
5.250	78.81	78.81	78.81	78.81	78.81
5.500	78.81	78.81	78.81	78.81	78.81
5.750	78.81	78.81	78.81	78.81	78.81
6.000	78.81	78.81	78.81	78.81	78.81
6.250	78.81	78.81	78.81	78.81	78.81
6.500	78.81	78.81	78.81	78.81	78.81
6.750	78.81	78.81	78.81	78.81	78.81
7.000	78.81	78.81	78.81	78.81	78.81
7.250	78.81	78.81	78.81	78.81	78.81
7.500	78.81	78.81	78.81	78.81	78.81
7.750	78.81	78.81	78.81	78.81	78.81
8.000	78.81	78.81	78.81	78.81	78.81
8.250	78.81	78.81	78.81	78.81	78.81
8.500	78.81	78.81	78.81	78.81	78.81
8.750	78.81	78.81	78.81	78.81	78.81
9.000	78.81	78.81	78.81	78.81	78.81
9.250	78.81	78.81	78.81	78.81	78.81
9.500	78.81	78.81	78.81	78.81	78.81
9.750	78.81	78.81	78.81	78.81	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 25 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	78.81	78.81	78.81	78.81	78.82
10.250	78.82	78.82	78.82	78.82	78.82
10.500	78.82	78.83	78.83	78.83	78.83
10.750	78.84	78.84	78.84	78.85	78.85
11.000	78.85	78.86	78.86	78.87	78.88
11.250	78.88	78.89	78.90	78.91	78.92
11.500	78.93	78.95	78.96	78.98	79.01
11.750	79.05	79.10	79.15	79.21	79.29
12.000	79.40	79.53	79.68	79.81	79.91
12.250	79.94	79.95	79.95	79.94	79.93
12.500	79.92	79.90	79.89	79.88	79.87
12.750	79.86	79.86	79.85	79.85	79.84
13.000	79.84	79.84	79.83	79.83	79.83
13.250	79.83	79.83	79.83	79.82	79.82
13.500	79.82	79.82	79.82	79.82	79.82
13.750	79.82	79.82	79.82	79.82	79.82
14.000	79.82	79.81	79.81	79.81	79.81
14.250	79.81	79.81	79.81	79.81	79.81
14.500	79.81	79.81	79.81	79.81	79.81
14.750	79.81	79.81	79.81	79.81	79.81
15.000	79.81	79.80	79.80	79.80	79.80
15.250	79.80	79.80	79.80	79.79	79.79
15.500	79.79	79.79	79.79	79.78	79.78
15.750	79.78	79.78	79.77	79.77	79.77
16.000	79.76	79.76	79.76	79.75	79.75
16.250	79.75	79.74	79.74	79.74	79.73
16.500	79.73	79.72	79.72	79.72	79.71
16.750	79.71	79.70	79.70	79.70	79.69
17.000	79.69	79.68	79.68	79.67	79.67
17.250	79.67	79.66	79.66	79.65	79.65
17.500	79.64	79.64	79.63	79.63	79.62
17.750	79.62	79.61	79.61	79.60	79.60
18.000	79.59	79.59	79.58	79.58	79.57
18.250	79.57	79.56	79.56	79.55	79.55
18.500	79.54	79.53	79.53	79.52	79.52
18.750	79.51	79.51	79.50	79.50	79.49
19.000	79.49	79.48	79.47	79.47	79.46
19.250	79.46	79.45	79.45	79.44	79.43
19.500	79.43	79.42	79.42	79.41	79.41
19.750	79.40	79.39	79.39	79.38	79.38
20.000	79.37	79.37	79.36	79.35	79.35

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 25 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	79.34	79.34	79.33	79.32	79.32
20.500	79.31	79.31	79.30	79.29	79.29
20.750	79.28	79.28	79.27	79.26	79.26
21.000	79.25	79.25	79.24	79.23	79.23
21.250	79.22	79.22	79.21	79.20	79.20
21.500	79.19	79.19	79.18	79.17	79.17
21.750	79.16	79.15	79.15	79.14	79.14
22.000	79.13	79.12	79.12	79.11	79.10
22.250	79.10	79.09	79.09	79.08	79.07
22.500	79.07	79.06	79.05	79.05	79.04
22.750	79.03	79.03	79.02	79.02	79.01
23.000	79.00	79.00	78.99	78.98	78.98
23.250	78.97	78.96	78.96	78.95	78.94
23.500	78.94	78.93	78.92	78.92	78.91
23.750	78.90	78.90	78.89	78.88	78.88
24.000	78.87	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 100 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	78.81	78.81	78.81	78.81	78.81
0.250	78.81	78.81	78.81	78.81	78.81
0.500	78.81	78.81	78.81	78.81	78.81
0.750	78.81	78.81	78.81	78.81	78.81
1.000	78.81	78.81	78.81	78.81	78.81
1.250	78.81	78.81	78.81	78.81	78.81
1.500	78.81	78.81	78.81	78.81	78.81
1.750	78.81	78.81	78.81	78.81	78.81
2.000	78.81	78.81	78.81	78.81	78.81
2.250	78.81	78.81	78.81	78.81	78.81
2.500	78.81	78.81	78.81	78.81	78.81
2.750	78.81	78.81	78.81	78.81	78.81
3.000	78.81	78.81	78.81	78.81	78.81
3.250	78.81	78.81	78.81	78.81	78.81
3.500	78.81	78.81	78.81	78.81	78.81
3.750	78.81	78.81	78.81	78.81	78.81
4.000	78.81	78.81	78.81	78.81	78.81
4.250	78.81	78.81	78.81	78.81	78.81
4.500	78.81	78.81	78.81	78.81	78.81
4.750	78.81	78.81	78.81	78.81	78.81
5.000	78.81	78.81	78.81	78.81	78.81
5.250	78.81	78.81	78.81	78.81	78.81
5.500	78.81	78.81	78.81	78.81	78.81
5.750	78.81	78.81	78.81	78.81	78.81
6.000	78.81	78.81	78.81	78.81	78.81
6.250	78.81	78.81	78.81	78.81	78.81
6.500	78.81	78.81	78.81	78.81	78.81
6.750	78.81	78.81	78.81	78.81	78.81
7.000	78.81	78.81	78.81	78.81	78.81
7.250	78.81	78.81	78.81	78.81	78.81
7.500	78.81	78.81	78.81	78.81	78.81
7.750	78.81	78.81	78.81	78.81	78.81
8.000	78.81	78.81	78.81	78.81	78.81
8.250	78.81	78.81	78.81	78.81	78.81
8.500	78.81	78.81	78.81	78.81	78.81
8.750	78.81	78.81	78.81	78.81	78.82
9.000	78.82	78.82	78.82	78.82	78.82
9.250	78.82	78.82	78.83	78.83	78.83
9.500	78.83	78.83	78.84	78.84	78.84
9.750	78.85	78.85	78.85	78.86	78.86

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 100 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	78.86	78.87	78.87	78.88	78.88
10.250	78.89	78.89	78.90	78.91	78.91
10.500	78.92	78.93	78.93	78.94	78.95
10.750	78.96	78.97	78.98	78.99	79.00
11.000	79.01	79.02	79.03	79.04	79.05
11.250	79.07	79.08	79.10	79.12	79.14
11.500	79.16	79.18	79.21	79.25	79.29
11.750	79.35	79.42	79.50	79.60	79.71
12.000	79.87	80.01	80.09	80.12	80.10
12.250	80.06	80.03	80.01	79.99	79.97
12.500	79.95	79.93	79.92	79.91	79.90
12.750	79.89	79.88	79.88	79.87	79.87
13.000	79.86	79.86	79.85	79.85	79.85
13.250	79.85	79.84	79.84	79.84	79.84
13.500	79.84	79.84	79.84	79.84	79.83
13.750	79.83	79.83	79.83	79.83	79.83
14.000	79.83	79.83	79.83	79.83	79.83
14.250	79.82	79.82	79.82	79.82	79.82
14.500	79.82	79.82	79.82	79.82	79.82
14.750	79.82	79.82	79.82	79.82	79.82
15.000	79.82	79.82	79.82	79.82	79.82
15.250	79.82	79.81	79.81	79.81	79.81
15.500	79.81	79.81	79.81	79.81	79.81
15.750	79.81	79.81	79.81	79.81	79.81
16.000	79.81	79.81	79.81	79.80	79.80
16.250	79.80	79.80	79.80	79.80	79.79
16.500	79.79	79.79	79.79	79.79	79.79
16.750	79.78	79.78	79.78	79.78	79.77
17.000	79.77	79.77	79.77	79.76	79.76
17.250	79.76	79.76	79.75	79.75	79.75
17.500	79.74	79.74	79.74	79.73	79.73
17.750	79.73	79.72	79.72	79.72	79.71
18.000	79.71	79.70	79.70	79.70	79.69
18.250	79.69	79.68	79.68	79.68	79.67
18.500	79.67	79.66	79.66	79.66	79.65
18.750	79.65	79.64	79.64	79.63	79.63
19.000	79.63	79.62	79.62	79.61	79.61
19.250	79.60	79.60	79.60	79.59	79.59
19.500	79.58	79.58	79.57	79.57	79.56
19.750	79.56	79.55	79.55	79.55	79.54
20.000	79.54	79.53	79.53	79.52	79.52

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 100 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	79.51	79.51	79.50	79.50	79.49
20.500	79.49	79.48	79.48	79.47	79.47
20.750	79.46	79.46	79.45	79.45	79.44
21.000	79.44	79.43	79.43	79.42	79.42
21.250	79.41	79.41	79.40	79.40	79.39
21.500	79.39	79.38	79.38	79.37	79.37
21.750	79.36	79.36	79.35	79.34	79.34
22.000	79.33	79.33	79.32	79.32	79.31
22.250	79.31	79.30	79.30	79.29	79.29
22.500	79.28	79.27	79.27	79.26	79.26
22.750	79.25	79.25	79.24	79.23	79.23
23.000	79.22	79.22	79.21	79.21	79.20
23.250	79.20	79.19	79.18	79.18	79.17
23.500	79.17	79.16	79.15	79.15	79.14
23.750	79.14	79.13	79.13	79.12	79.11
24.000	79.11	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation
 Label: XFILTRATION SYSTEM (OUT)
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	71.50	71.51	71.51	71.51	71.51
0.250	71.51	71.51	71.51	71.51	71.51
0.500	71.51	71.51	71.51	71.51	71.51
0.750	71.51	71.51	71.51	71.51	71.51
1.000	71.51	71.51	71.51	71.50	71.50
1.250	71.50	71.50	71.50	71.50	71.50
1.500	71.50	71.50	71.50	71.50	71.50
1.750	71.50	71.50	71.50	71.50	71.50
2.000	71.50	71.50	71.50	71.50	71.50
2.250	71.50	71.50	71.50	71.50	71.51
2.500	71.51	71.51	71.51	71.51	71.51
2.750	71.51	71.51	71.51	71.51	71.51
3.000	71.51	71.51	71.51	71.51	71.51
3.250	71.51	71.51	71.51	71.51	71.51
3.500	71.51	71.51	71.51	71.51	71.51
3.750	71.51	71.51	71.52	71.52	71.52
4.000	71.52	71.52	71.52	71.52	71.52
4.250	71.52	71.52	71.52	71.52	71.52
4.500	71.52	71.52	71.53	71.53	71.53
4.750	71.53	71.53	71.53	71.53	71.53
5.000	71.53	71.53	71.53	71.53	71.53
5.250	71.54	71.54	71.54	71.54	71.54
5.500	71.54	71.54	71.54	71.54	71.54
5.750	71.55	71.55	71.55	71.55	71.55
6.000	71.55	71.55	71.55	71.55	71.55
6.250	71.56	71.56	71.56	71.56	71.56
6.500	71.56	71.56	71.56	71.57	71.57
6.750	71.57	71.57	71.57	71.57	71.57
7.000	71.58	71.58	71.58	71.58	71.58
7.250	71.58	71.59	71.59	71.59	71.59
7.500	71.59	71.59	71.60	71.60	71.60
7.750	71.60	71.60	71.61	71.61	71.61
8.000	71.61	71.61	71.62	71.62	71.62
8.250	71.62	71.63	71.63	71.63	71.63
8.500	71.64	71.64	71.64	71.65	71.65
8.750	71.65	71.65	71.66	71.66	71.66
9.000	71.67	71.67	71.68	71.68	71.68
9.250	71.69	71.69	71.70	71.70	71.70
9.500	71.71	71.71	71.72	71.72	71.73
9.750	71.73	71.73	71.74	71.74	71.75

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation
 Label: XFILTRATION SYSTEM (OUT)
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	71.75	71.76	71.76	71.77	71.77
10.250	71.78	71.79	71.79	71.80	71.80
10.500	71.81	71.82	71.82	71.83	71.84
10.750	71.84	71.85	71.86	71.87	71.88
11.000	71.88	71.89	71.90	71.91	71.92
11.250	71.93	71.94	71.95	71.97	71.98
11.500	71.99	72.01	72.02	72.03	72.05
11.750	72.06	72.08	72.10	72.12	72.14
12.000	72.16	72.18	72.20	72.22	72.25
12.250	72.27	72.29	72.30	72.32	72.34
12.500	72.36	72.37	72.39	72.40	72.42
12.750	72.43	72.45	72.46	72.48	72.49
13.000	72.50	72.51	72.53	72.54	72.55
13.250	72.56	72.57	72.59	72.60	72.60
13.500	72.61	72.61	72.62	72.62	72.62
13.750	72.63	72.63	72.63	72.64	72.64
14.000	72.64	72.65	72.65	72.65	72.66
14.250	72.66	72.66	72.66	72.67	72.67
14.500	72.67	72.67	72.68	72.68	72.68
14.750	72.68	72.69	72.69	72.69	72.69
15.000	72.70	72.70	72.70	72.70	72.70
15.250	72.71	72.71	72.71	72.71	72.71
15.500	72.71	72.72	72.72	72.72	72.72
15.750	72.72	72.72	72.72	72.73	72.73
16.000	72.73	72.73	72.73	72.73	72.73
16.250	72.73	72.74	72.74	72.74	72.74
16.500	72.74	72.74	72.74	72.74	72.74
16.750	72.74	72.75	72.75	72.75	72.75
17.000	72.75	72.75	72.75	72.75	72.74
17.250	72.74	72.73	72.72	72.71	72.71
17.500	72.70	72.69	72.68	72.68	72.67
17.750	72.66	72.65	72.65	72.64	72.63
18.000	72.62	72.62	72.61	72.60	72.60
18.250	72.59	72.58	72.57	72.57	72.56
18.500	72.55	72.55	72.54	72.53	72.53
18.750	72.52	72.51	72.51	72.50	72.49
19.000	72.49	72.48	72.47	72.47	72.46
19.250	72.46	72.45	72.44	72.44	72.43
19.500	72.42	72.42	72.41	72.41	72.40
19.750	72.39	72.39	72.38	72.38	72.37
20.000	72.37	72.36	72.35	72.33	72.32

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 1 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	72.31	72.30	72.29	72.28	72.27
20.500	72.26	72.25	72.24	72.23	72.22
20.750	72.21	72.20	72.19	72.18	72.17
21.000	72.16	72.15	72.14	72.13	72.12
21.250	72.11	72.10	72.10	72.09	72.08
21.500	72.07	72.06	72.05	72.05	72.04
21.750	72.03	72.02	72.01	72.01	72.00
22.000	71.99	71.98	71.97	71.96	71.95
22.250	71.94	71.94	71.93	71.92	71.91
22.500	71.91	71.90	71.89	71.88	71.88
22.750	71.87	71.87	71.86	71.85	71.85
23.000	71.84	71.84	71.83	71.82	71.82
23.250	71.81	71.81	71.80	71.80	71.79
23.500	71.79	71.79	71.78	71.78	71.77
23.750	71.77	71.76	71.76	71.76	71.75
24.000	71.75	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 10 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	71.50	71.51	71.51	71.51	71.51
0.250	71.51	71.51	71.51	71.51	71.51
0.500	71.51	71.51	71.51	71.51	71.51
0.750	71.51	71.51	71.51	71.51	71.51
1.000	71.51	71.51	71.51	71.51	71.51
1.250	71.51	71.51	71.51	71.51	71.51
1.500	71.51	71.51	71.51	71.51	71.51
1.750	71.51	71.51	71.51	71.51	71.51
2.000	71.51	71.52	71.52	71.52	71.52
2.250	71.52	71.52	71.52	71.52	71.52
2.500	71.52	71.52	71.53	71.53	71.53
2.750	71.53	71.53	71.53	71.53	71.54
3.000	71.54	71.54	71.54	71.54	71.54
3.250	71.54	71.55	71.55	71.55	71.55
3.500	71.55	71.55	71.56	71.56	71.56
3.750	71.56	71.56	71.56	71.57	71.57
4.000	71.57	71.57	71.57	71.58	71.58
4.250	71.58	71.58	71.58	71.59	71.59
4.500	71.59	71.59	71.59	71.60	71.60
4.750	71.60	71.60	71.60	71.61	71.61
5.000	71.61	71.61	71.61	71.62	71.62
5.250	71.62	71.62	71.63	71.63	71.63
5.500	71.63	71.63	71.64	71.64	71.64
5.750	71.64	71.64	71.65	71.65	71.65
6.000	71.65	71.66	71.66	71.66	71.66
6.250	71.67	71.67	71.67	71.67	71.68
6.500	71.68	71.68	71.68	71.69	71.69
6.750	71.69	71.70	71.70	71.70	71.71
7.000	71.71	71.71	71.72	71.72	71.72
7.250	71.73	71.73	71.73	71.74	71.74
7.500	71.74	71.75	71.75	71.76	71.76
7.750	71.76	71.77	71.77	71.78	71.78
8.000	71.78	71.79	71.79	71.80	71.80
8.250	71.81	71.81	71.82	71.82	71.83
8.500	71.83	71.84	71.85	71.85	71.86
8.750	71.86	71.87	71.88	71.88	71.89
9.000	71.90	71.91	71.91	71.92	71.93
9.250	71.94	71.95	71.95	71.96	71.97
9.500	71.98	71.99	72.00	72.00	72.01
9.750	72.02	72.03	72.03	72.04	72.05

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 10 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	72.06	72.07	72.08	72.08	72.09
10.250	72.10	72.11	72.12	72.13	72.14
10.500	72.15	72.16	72.17	72.18	72.19
10.750	72.20	72.21	72.22	72.24	72.25
11.000	72.26	72.27	72.28	72.29	72.30
11.250	72.31	72.32	72.34	72.35	72.36
11.500	72.38	72.39	72.40	72.42	72.44
11.750	72.45	72.47	72.49	72.51	72.53
12.000	72.55	72.58	72.60	72.63	72.71
12.250	72.81	72.88	72.94	72.99	73.03
12.500	73.07	73.11	73.13	73.15	73.17
12.750	73.18	73.20	73.20	73.21	73.22
13.000	73.22	73.22	73.22	73.22	73.21
13.250	73.21	73.21	73.20	73.20	73.19
13.500	73.19	73.18	73.18	73.17	73.17
13.750	73.16	73.16	73.15	73.14	73.14
14.000	73.13	73.13	73.12	73.12	73.11
14.250	73.11	73.10	73.10	73.09	73.09
14.500	73.08	73.08	73.07	73.07	73.07
14.750	73.06	73.06	73.06	73.05	73.05
15.000	73.05	73.05	73.04	73.04	73.04
15.250	73.04	73.03	73.03	73.03	73.03
15.500	73.03	73.02	73.02	73.02	73.01
15.750	73.00	72.99	72.99	72.98	72.97
16.000	72.97	72.96	72.95	72.95	72.94
16.250	72.94	72.93	72.93	72.92	72.92
16.500	72.91	72.91	72.90	72.90	72.89
16.750	72.89	72.89	72.88	72.88	72.88
17.000	72.87	72.87	72.87	72.86	72.86
17.250	72.86	72.85	72.85	72.85	72.85
17.500	72.85	72.84	72.84	72.84	72.84
17.750	72.83	72.83	72.83	72.83	72.83
18.000	72.82	72.82	72.82	72.82	72.82
18.250	72.82	72.82	72.81	72.81	72.81
18.500	72.81	72.81	72.81	72.81	72.81
18.750	72.80	72.80	72.80	72.80	72.80
19.000	72.80	72.80	72.80	72.80	72.80
19.250	72.80	72.79	72.79	72.79	72.79
19.500	72.79	72.79	72.79	72.79	72.79
19.750	72.79	72.79	72.79	72.79	72.79
20.000	72.79	72.79	72.79	72.79	72.78

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 10 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	72.78	72.78	72.78	72.78	72.78
20.500	72.78	72.78	72.78	72.78	72.78
20.750	72.78	72.78	72.78	72.78	72.78
21.000	72.78	72.78	72.78	72.78	72.78
21.250	72.78	72.78	72.78	72.78	72.78
21.500	72.78	72.78	72.78	72.78	72.78
21.750	72.78	72.78	72.77	72.77	72.77
22.000	72.77	72.77	72.77	72.77	72.77
22.250	72.77	72.77	72.77	72.77	72.77
22.500	72.77	72.77	72.77	72.77	72.77
22.750	72.77	72.77	72.77	72.77	72.77
23.000	72.77	72.77	72.77	72.77	72.77
23.250	72.77	72.77	72.77	72.76	72.75
23.500	72.74	72.74	72.73	72.72	72.71
23.750	72.70	72.70	72.69	72.68	72.67
24.000	72.67	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 25 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	71.50	71.51	71.51	71.51	71.51
0.250	71.51	71.51	71.51	71.51	71.51
0.500	71.51	71.51	71.51	71.51	71.51
0.750	71.51	71.51	71.51	71.51	71.51
1.000	71.51	71.51	71.51	71.51	71.51
1.250	71.51	71.51	71.51	71.51	71.51
1.500	71.51	71.51	71.52	71.52	71.52
1.750	71.52	71.52	71.52	71.52	71.52
2.000	71.53	71.53	71.53	71.53	71.53
2.250	71.53	71.53	71.54	71.54	71.54
2.500	71.54	71.54	71.55	71.55	71.55
2.750	71.55	71.55	71.56	71.56	71.56
3.000	71.56	71.56	71.57	71.57	71.57
3.250	71.57	71.58	71.58	71.58	71.58
3.500	71.59	71.59	71.59	71.59	71.60
3.750	71.60	71.60	71.60	71.61	71.61
4.000	71.61	71.61	71.62	71.62	71.62
4.250	71.62	71.63	71.63	71.63	71.63
4.500	71.64	71.64	71.64	71.65	71.65
4.750	71.65	71.65	71.66	71.66	71.66
5.000	71.67	71.67	71.67	71.67	71.68
5.250	71.68	71.68	71.69	71.69	71.69
5.500	71.69	71.70	71.70	71.70	71.70
5.750	71.71	71.71	71.71	71.72	71.72
6.000	71.72	71.72	71.73	71.73	71.73
6.250	71.74	71.74	71.74	71.75	71.75
6.500	71.75	71.76	71.76	71.76	71.77
6.750	71.77	71.78	71.78	71.78	71.79
7.000	71.79	71.80	71.80	71.81	71.81
7.250	71.81	71.82	71.82	71.83	71.83
7.500	71.84	71.84	71.85	71.85	71.86
7.750	71.86	71.87	71.88	71.88	71.89
8.000	71.89	71.90	71.90	71.91	71.91
8.250	71.92	71.93	71.93	71.94	71.95
8.500	71.96	71.96	71.97	71.98	71.99
8.750	72.00	72.00	72.01	72.02	72.03
9.000	72.03	72.04	72.05	72.06	72.07
9.250	72.07	72.08	72.09	72.10	72.11
9.500	72.12	72.13	72.14	72.15	72.16
9.750	72.17	72.18	72.19	72.20	72.21

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation
 Label: XFILTRATION SYSTEM (OUT)
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	72.22	72.23	72.24	72.25	72.26
10.250	72.27	72.28	72.29	72.30	72.31
10.500	72.32	72.33	72.34	72.35	72.36
10.750	72.37	72.38	72.40	72.41	72.42
11.000	72.43	72.44	72.45	72.46	72.47
11.250	72.48	72.50	72.51	72.52	72.53
11.500	72.55	72.56	72.57	72.59	72.60
11.750	72.62	72.64	72.66	72.68	72.70
12.000	72.73	72.77	72.91	73.09	73.24
12.250	73.41	73.56	73.69	73.80	73.89
12.500	73.95	73.99	74.01	74.02	74.03
12.750	74.02	74.01	74.00	73.99	73.97
13.000	73.95	73.93	73.91	73.89	73.87
13.250	73.85	73.82	73.80	73.78	73.75
13.500	73.73	73.71	73.68	73.66	73.64
13.750	73.62	73.60	73.57	73.55	73.53
14.000	73.51	73.49	73.47	73.45	73.43
14.250	73.41	73.39	73.37	73.36	73.34
14.500	73.32	73.31	73.30	73.28	73.27
14.750	73.26	73.24	73.23	73.22	73.21
15.000	73.20	73.19	73.18	73.17	73.16
15.250	73.16	73.15	73.14	73.13	73.13
15.500	73.12	73.11	73.11	73.10	73.10
15.750	73.09	73.09	73.08	73.08	73.07
16.000	73.07	73.06	73.06	73.06	73.05
16.250	73.05	73.04	73.03	73.02	73.01
16.500	73.01	73.00	72.99	72.98	72.98
16.750	72.97	72.96	72.96	72.95	72.95
17.000	72.94	72.94	72.93	72.93	72.92
17.250	72.92	72.91	72.91	72.90	72.90
17.500	72.89	72.89	72.89	72.88	72.88
17.750	72.88	72.87	72.87	72.87	72.86
18.000	72.86	72.86	72.86	72.85	72.85
18.250	72.85	72.85	72.84	72.84	72.84
18.500	72.84	72.84	72.83	72.83	72.83
18.750	72.83	72.83	72.83	72.82	72.82
19.000	72.82	72.82	72.82	72.82	72.82
19.250	72.82	72.81	72.81	72.81	72.81
19.500	72.81	72.81	72.81	72.81	72.81
19.750	72.81	72.80	72.80	72.80	72.80
20.000	72.80	72.80	72.80	72.80	72.80

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 25 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	72.80	72.80	72.80	72.80	72.80
20.500	72.80	72.79	72.79	72.79	72.79
20.750	72.79	72.79	72.79	72.79	72.79
21.000	72.79	72.79	72.79	72.79	72.79
21.250	72.79	72.79	72.79	72.79	72.79
21.500	72.79	72.79	72.79	72.79	72.79
21.750	72.79	72.78	72.78	72.78	72.78
22.000	72.78	72.78	72.78	72.78	72.78
22.250	72.78	72.78	72.78	72.78	72.78
22.500	72.78	72.78	72.78	72.78	72.78
22.750	72.78	72.78	72.78	72.78	72.78
23.000	72.78	72.78	72.78	72.78	72.78
23.250	72.78	72.78	72.78	72.78	72.78
23.500	72.78	72.78	72.78	72.78	72.78
23.750	72.78	72.78	72.78	72.78	72.77
24.000	72.77	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 100 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	71.50	71.51	71.51	71.51	71.51
0.250	71.51	71.51	71.51	71.51	71.51
0.500	71.51	71.51	71.51	71.51	71.51
0.750	71.51	71.51	71.51	71.51	71.51
1.000	71.51	71.51	71.52	71.52	71.52
1.250	71.52	71.52	71.52	71.53	71.53
1.500	71.53	71.53	71.54	71.54	71.54
1.750	71.54	71.55	71.55	71.55	71.56
2.000	71.56	71.56	71.56	71.57	71.57
2.250	71.57	71.58	71.58	71.58	71.59
2.500	71.59	71.59	71.60	71.60	71.60
2.750	71.61	71.61	71.61	71.62	71.62
3.000	71.63	71.63	71.63	71.64	71.64
3.250	71.65	71.65	71.65	71.66	71.66
3.500	71.66	71.67	71.67	71.68	71.68
3.750	71.68	71.69	71.69	71.70	71.70
4.000	71.71	71.71	71.71	71.72	71.72
4.250	71.73	71.73	71.73	71.74	71.74
4.500	71.75	71.75	71.75	71.76	71.76
4.750	71.77	71.77	71.77	71.78	71.78
5.000	71.79	71.79	71.80	71.80	71.80
5.250	71.81	71.81	71.82	71.82	71.82
5.500	71.83	71.83	71.84	71.84	71.84
5.750	71.85	71.85	71.86	71.86	71.87
6.000	71.87	71.87	71.88	71.88	71.89
6.250	71.89	71.89	71.90	71.90	71.91
6.500	71.91	71.92	71.93	71.93	71.94
6.750	71.94	71.95	71.95	71.96	71.97
7.000	71.97	71.98	71.99	71.99	72.00
7.250	72.00	72.01	72.02	72.02	72.03
7.500	72.03	72.04	72.05	72.05	72.06
7.750	72.07	72.08	72.08	72.09	72.10
8.000	72.11	72.11	72.12	72.13	72.14
8.250	72.14	72.15	72.16	72.17	72.18
8.500	72.19	72.20	72.21	72.22	72.23
8.750	72.24	72.25	72.26	72.27	72.28
9.000	72.29	72.30	72.31	72.32	72.33
9.250	72.34	72.35	72.36	72.37	72.38
9.500	72.39	72.40	72.41	72.42	72.43
9.750	72.44	72.45	72.46	72.47	72.48

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 100 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	72.49	72.50	72.51	72.52	72.53
10.250	72.54	72.55	72.56	72.57	72.58
10.500	72.59	72.60	72.61	72.62	72.63
10.750	72.64	72.65	72.66	72.67	72.69
11.000	72.70	72.71	72.72	72.73	72.75
11.250	72.76	72.77	72.78	72.79	72.80
11.500	72.82	72.83	72.84	72.85	72.86
11.750	72.88	72.89	72.93	73.02	73.15
12.000	73.33	73.60	74.00	74.48	74.92
12.250	75.27	75.54	75.77	75.94	76.08
12.500	76.19	76.25	76.27	76.26	76.24
12.750	76.20	76.16	76.11	76.06	76.01
13.000	75.96	75.90	75.85	75.79	75.73
13.250	75.68	75.62	75.56	75.50	75.45
13.500	75.40	75.34	75.29	75.24	75.19
13.750	75.13	75.08	75.03	74.98	74.93
14.000	74.88	74.84	74.79	74.74	74.70
14.250	74.65	74.60	74.56	74.51	74.47
14.500	74.43	74.39	74.35	74.31	74.27
14.750	74.23	74.19	74.15	74.11	74.08
15.000	74.04	74.00	73.97	73.94	73.90
15.250	73.87	73.84	73.80	73.77	73.74
15.500	73.71	73.68	73.66	73.63	73.60
15.750	73.57	73.54	73.52	73.49	73.47
16.000	73.44	73.42	73.40	73.38	73.36
16.250	73.34	73.32	73.31	73.29	73.27
16.500	73.26	73.25	73.23	73.22	73.21
16.750	73.20	73.19	73.18	73.17	73.16
17.000	73.15	73.14	73.13	73.12	73.11
17.250	73.10	73.08	73.07	73.06	73.05
17.500	73.04	73.03	73.02	73.02	73.01
17.750	73.00	72.99	72.99	72.98	72.97
18.000	72.97	72.96	72.96	72.95	72.94
18.250	72.94	72.93	72.93	72.92	72.92
18.500	72.92	72.91	72.91	72.90	72.90
18.750	72.90	72.89	72.89	72.89	72.88
19.000	72.88	72.88	72.87	72.87	72.87
19.250	72.87	72.86	72.86	72.86	72.86
19.500	72.86	72.85	72.85	72.85	72.85
19.750	72.85	72.84	72.84	72.84	72.84
20.000	72.84	72.84	72.84	72.83	72.83

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 100 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	72.83	72.83	72.83	72.83	72.83
20.500	72.83	72.82	72.82	72.82	72.82
20.750	72.82	72.82	72.82	72.82	72.82
21.000	72.82	72.82	72.81	72.81	72.81
21.250	72.81	72.81	72.81	72.81	72.81
21.500	72.81	72.81	72.81	72.81	72.81
21.750	72.81	72.81	72.81	72.80	72.80
22.000	72.80	72.80	72.80	72.80	72.80
22.250	72.80	72.80	72.80	72.80	72.80
22.500	72.80	72.80	72.80	72.80	72.80
22.750	72.80	72.80	72.80	72.80	72.80
23.000	72.80	72.80	72.79	72.79	72.79
23.250	72.79	72.79	72.79	72.79	72.79
23.500	72.79	72.79	72.79	72.79	72.79
23.750	72.79	72.79	72.79	72.79	72.79
24.000	72.79	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume
 Label: 24" Depth Green Roof
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
0.000	0	0	0	0	0
0.250	0	0	0	0	0
0.500	0	0	0	0	0
0.750	0	0	0	0	0
1.000	0	0	0	0	0
1.250	0	0	0	0	0
1.500	0	0	0	0	0
1.750	0	0	0	0	0
2.000	0	0	0	0	0
2.250	0	0	0	0	0
2.500	0	0	0	0	0
2.750	0	0	0	0	0
3.000	0	0	0	0	0
3.250	0	0	0	0	0
3.500	0	0	0	0	0
3.750	0	0	0	0	0
4.000	0	0	0	0	0
4.250	0	0	0	0	0
4.500	0	0	0	0	0
4.750	0	0	0	0	0
5.000	0	0	0	0	0
5.250	0	0	0	0	0
5.500	0	0	0	0	0
5.750	0	0	0	0	0
6.000	0	0	0	0	0
6.250	0	0	0	0	0
6.500	0	0	0	0	0
6.750	0	0	0	0	0
7.000	0	0	0	0	0
7.250	0	0	0	0	0
7.500	0	0	0	0	0
7.750	0	0	0	0	0
8.000	0	0	0	0	0
8.250	0	0	0	0	0
8.500	0	0	0	0	0
8.750	0	0	0	0	0
9.000	0	0	0	0	0
9.250	0	0	0	0	0
9.500	0	0	0	0	0
9.750	0	0	0	0	0

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume
 Label: 24" Depth Green Roof
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
10.000	0	0	0	0	0
10.250	0	0	0	0	0
10.500	0	0	0	0	0
10.750	0	0	0	0	0
11.000	0	0	0	0	0
11.250	9	11	13	17	22
11.500	27	35	46	61	81
11.750	122	164	216	276	355
12.000	467	609	760	903	1,016
12.250	1,099	1,166	1,221	1,267	1,303
12.500	1,330	1,350	1,363	1,372	1,379
12.750	1,384	1,389	1,393	1,396	1,397
13.000	1,398	1,398	1,398	1,396	1,395
13.250	1,393	1,391	1,389	1,386	1,383
13.500	1,380	1,377	1,373	1,369	1,365
13.750	1,361	1,356	1,352	1,347	1,341
14.000	1,336	1,330	1,324	1,318	1,312
14.250	1,305	1,299	1,292	1,285	1,278
14.500	1,271	1,264	1,257	1,250	1,242
14.750	1,234	1,227	1,219	1,211	1,203
15.000	1,195	1,186	1,178	1,169	1,161
15.250	1,152	1,143	1,134	1,125	1,116
15.500	1,106	1,097	1,087	1,077	1,068
15.750	1,058	1,047	1,037	1,027	1,016
16.000	1,006	995	984	974	963
16.250	952	941	930	918	907
16.500	896	885	873	862	851
16.750	839	828	816	804	793
17.000	781	769	757	745	733
17.250	721	709	697	685	673
17.500	661	648	636	624	611
17.750	599	586	573	561	548
18.000	535	522	510	497	484
18.250	471	458	445	432	419
18.500	406	393	380	367	354
18.750	341	328	314	301	288
19.000	275	262	249	235	222
19.250	209	196	182	169	156
19.500	143	129	116	95	81
19.750	71	60	49	35	22
20.000	8	0	0	0	0

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume
 Label: 24" Depth Green Roof
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
20.250	0	0	0	0	0
20.500	0	0	0	0	0
20.750	0	0	0	0	0
21.000	0	0	0	0	0
21.250	0	0	0	0	0
21.500	0	0	0	0	0
21.750	0	0	0	0	0
22.000	0	0	0	0	0
22.250	0	0	0	0	0
22.500	0	0	0	0	0
22.750	0	0	0	0	0
23.000	0	0	0	0	0
23.250	0	0	0	0	0
23.500	0	0	0	0	0
23.750	0	0	0	0	0
24.000	0	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 10 years

Label: 24" Depth Green Roof

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
0.000	0	0	0	0	0
0.250	0	0	0	0	0
0.500	0	0	0	0	0
0.750	0	0	0	0	0
1.000	0	0	0	0	0
1.250	0	0	0	0	0
1.500	0	0	0	0	0
1.750	0	0	0	0	0
2.000	0	0	0	0	0
2.250	0	0	0	0	0
2.500	0	0	0	0	0
2.750	0	0	0	0	0
3.000	0	0	0	0	0
3.250	0	0	0	0	0
3.500	0	0	0	0	0
3.750	0	0	0	0	0
4.000	0	0	0	0	0
4.250	0	0	0	0	0
4.500	0	0	0	0	0
4.750	0	0	0	0	0
5.000	0	0	0	0	0
5.250	0	0	0	0	0
5.500	0	0	0	0	0
5.750	0	0	0	0	0
6.000	0	0	0	0	0
6.250	0	0	0	0	0
6.500	0	0	0	0	0
6.750	0	0	0	0	0
7.000	0	0	0	0	0
7.250	0	0	0	0	0
7.500	0	0	0	0	0
7.750	0	0	0	0	0
8.000	0	0	0	0	0
8.250	0	0	0	0	0
8.500	0	0	0	0	0
8.750	0	0	0	0	0
9.000	0	0	0	0	0
9.250	0	0	0	0	0
9.500	0	0	0	0	8
9.750	9	9	10	11	13

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 10 years

Label: 24" Depth Green Roof

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
10.000	14	16	18	21	24
10.250	27	31	35	40	45
10.500	51	56	61	67	73
10.750	79	86	97	112	123
11.000	133	144	156	169	184
11.250	201	219	239	260	284
11.500	309	338	375	422	483
11.750	561	656	767	896	1,058
12.000	1,283	1,562	1,859	2,124	2,253
12.250	2,233	2,228	2,222	2,217	2,212
12.500	2,207	2,203	2,201	2,199	2,198
12.750	2,197	2,197	2,196	2,196	2,195
13.000	2,195	2,194	2,194	2,194	2,194
13.250	2,193	2,193	2,193	2,193	2,193
13.500	2,193	2,193	2,192	2,192	2,192
13.750	2,192	2,192	2,192	2,192	2,192
14.000	2,191	2,191	2,191	2,191	2,191
14.250	2,191	2,191	2,191	2,191	2,191
14.500	2,191	2,191	2,191	2,191	2,190
14.750	2,190	2,190	2,189	2,188	2,187
15.000	2,186	2,184	2,182	2,180	2,178
15.250	2,176	2,173	2,170	2,165	2,160
15.500	2,154	2,148	2,142	2,135	2,128
15.750	2,122	2,116	2,112	2,108	2,104
16.000	2,099	2,094	2,089	2,084	2,079
16.250	2,074	2,069	2,063	2,058	2,052
16.500	2,047	2,040	2,033	2,026	2,019
16.750	2,011	2,004	1,996	1,988	1,980
17.000	1,972	1,964	1,956	1,948	1,940
17.250	1,931	1,923	1,914	1,906	1,897
17.500	1,888	1,879	1,870	1,861	1,851
17.750	1,842	1,832	1,823	1,813	1,803
18.000	1,794	1,784	1,774	1,764	1,753
18.250	1,743	1,733	1,723	1,713	1,702
18.500	1,692	1,682	1,672	1,661	1,651
18.750	1,640	1,630	1,619	1,609	1,598
19.000	1,588	1,577	1,567	1,556	1,545
19.250	1,535	1,524	1,513	1,502	1,491
19.500	1,481	1,470	1,459	1,448	1,437
19.750	1,426	1,415	1,404	1,393	1,381
20.000	1,370	1,359	1,348	1,337	1,326

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 10 years

Label: 24" Depth Green Roof

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
20.250	1,314	1,303	1,292	1,280	1,269
20.500	1,258	1,246	1,235	1,223	1,212
20.750	1,200	1,189	1,177	1,166	1,154
21.000	1,143	1,131	1,119	1,108	1,096
21.250	1,084	1,073	1,061	1,049	1,037
21.500	1,026	1,014	1,002	990	978
21.750	966	954	942	930	918
22.000	906	894	882	870	858
22.250	846	834	821	809	797
22.500	785	773	760	748	736
22.750	723	711	699	686	674
23.000	661	649	636	624	611
23.250	599	586	573	561	548
23.500	535	523	510	497	485
23.750	472	459	446	433	420
24.000	408	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 25 years

Label: 24" Depth Green Roof

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
0.000	0	0	0	0	0
0.250	0	0	0	0	0
0.500	0	0	0	0	0
0.750	0	0	0	0	0
1.000	0	0	0	0	0
1.250	0	0	0	0	0
1.500	0	0	0	0	0
1.750	0	0	0	0	0
2.000	0	0	0	0	0
2.250	0	0	0	0	0
2.500	0	0	0	0	0
2.750	0	0	0	0	0
3.000	0	0	0	0	0
3.250	0	0	0	0	0
3.500	0	0	0	0	0
3.750	0	0	0	0	0
4.000	0	0	0	0	0
4.250	0	0	0	0	0
4.500	0	0	0	0	0
4.750	0	0	0	0	0
5.000	0	0	0	0	0
5.250	0	0	0	0	0
5.500	0	0	0	0	0
5.750	0	0	0	0	0
6.000	0	0	0	0	0
6.250	0	0	0	0	0
6.500	0	0	0	0	0
6.750	0	0	0	0	0
7.000	0	0	0	0	0
7.250	0	0	0	0	0
7.500	0	0	0	0	0
7.750	0	0	0	0	0
8.000	0	0	0	0	0
8.250	0	0	0	0	0
8.500	0	0	0	0	0
8.750	0	0	8	8	9
9.000	10	11	12	14	16
9.250	19	21	24	27	31
9.500	34	38	43	47	52
9.750	56	60	65	70	75

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 25 years

Label: 24" Depth Green Roof

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
10.000	80	86	94	106	118
10.250	126	136	146	157	168
10.500	180	192	205	219	233
10.750	248	263	279	295	313
11.000	330	349	369	390	413
11.250	439	466	496	528	563
11.500	599	641	692	756	839
11.750	943	1,068	1,214	1,382	1,592
12.000	1,883	2,209	2,322	2,283	2,268
12.250	2,247	2,239	2,231	2,225	2,219
12.500	2,213	2,208	2,205	2,202	2,201
12.750	2,200	2,200	2,199	2,198	2,198
13.000	2,197	2,197	2,196	2,196	2,196
13.250	2,195	2,195	2,195	2,195	2,195
13.500	2,195	2,194	2,194	2,194	2,194
13.750	2,194	2,194	2,193	2,193	2,193
14.000	2,193	2,193	2,193	2,193	2,192
14.250	2,192	2,192	2,192	2,192	2,192
14.500	2,192	2,192	2,192	2,192	2,192
14.750	2,192	2,192	2,191	2,191	2,191
15.000	2,191	2,191	2,191	2,191	2,191
15.250	2,191	2,191	2,191	2,191	2,191
15.500	2,190	2,190	2,189	2,188	2,187
15.750	2,185	2,184	2,181	2,179	2,176
16.000	2,173	2,170	2,165	2,159	2,153
16.250	2,147	2,140	2,134	2,127	2,121
16.500	2,116	2,113	2,109	2,105	2,101
16.750	2,097	2,093	2,088	2,084	2,080
17.000	2,075	2,070	2,065	2,061	2,056
17.250	2,051	2,045	2,039	2,033	2,026
17.500	2,019	2,012	2,005	1,997	1,990
17.750	1,982	1,975	1,967	1,959	1,951
18.000	1,943	1,935	1,926	1,918	1,909
18.250	1,901	1,892	1,884	1,875	1,866
18.500	1,858	1,849	1,840	1,831	1,823
18.750	1,814	1,805	1,796	1,787	1,778
19.000	1,769	1,760	1,751	1,741	1,732
19.250	1,723	1,714	1,704	1,695	1,686
19.500	1,676	1,667	1,657	1,648	1,638
19.750	1,629	1,619	1,609	1,599	1,590
20.000	1,580	1,570	1,560	1,550	1,540

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 25 years

Label: 24" Depth Green Roof

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
20.250	1,531	1,521	1,511	1,501	1,490
20.500	1,480	1,470	1,460	1,450	1,440
20.750	1,430	1,419	1,409	1,399	1,388
21.000	1,378	1,368	1,357	1,347	1,336
21.250	1,326	1,315	1,305	1,294	1,284
21.500	1,273	1,262	1,252	1,241	1,230
21.750	1,219	1,209	1,198	1,187	1,176
22.000	1,165	1,154	1,143	1,132	1,121
22.250	1,110	1,099	1,088	1,077	1,066
22.500	1,055	1,043	1,032	1,021	1,010
22.750	998	987	976	964	953
23.000	941	930	918	907	895
23.250	884	872	860	849	837
23.500	825	814	802	790	778
23.750	766	754	742	731	719
24.000	707	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 100 years

Label: 24" Depth Green Roof

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
0.000	0	0	0	0	0
0.250	0	0	0	0	0
0.500	0	0	0	0	0
0.750	0	0	0	0	0
1.000	0	0	0	0	0
1.250	0	0	0	0	0
1.500	0	0	0	0	0
1.750	0	0	0	0	0
2.000	0	0	0	0	0
2.250	0	0	0	0	0
2.500	0	0	0	0	0
2.750	0	0	0	0	0
3.000	0	0	0	0	0
3.250	0	0	0	0	0
3.500	0	0	0	0	0
3.750	0	0	0	0	0
4.000	0	0	0	0	0
4.250	0	0	0	0	0
4.500	0	0	0	0	0
4.750	0	0	0	0	0
5.000	0	0	0	0	0
5.250	0	0	0	0	0
5.500	0	0	0	0	0
5.750	0	0	0	0	0
6.000	0	0	0	0	0
6.250	0	0	0	0	0
6.500	0	0	0	0	0
6.750	0	0	0	0	0
7.000	0	0	0	0	0
7.250	0	0	0	0	0
7.500	0	0	0	0	8
7.750	8	9	9	10	11
8.000	12	13	15	17	19
8.250	22	25	28	32	36
8.500	41	46	51	56	61
8.750	66	72	78	84	93
9.000	107	119	128	138	148
9.250	159	170	182	194	206
9.500	219	232	246	259	274
9.750	289	304	319	335	352

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 100 years

Label: 24" Depth Green Roof

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
10.000	369	386	404	422	442
10.250	462	483	504	527	551
10.500	575	600	626	653	681
10.750	709	738	769	800	832
11.000	864	898	934	972	1,013
11.250	1,056	1,103	1,154	1,207	1,264
11.500	1,324	1,391	1,471	1,571	1,697
11.750	1,854	2,041	2,215	2,273	2,278
12.000	2,318	2,341	2,346	2,335	2,301
12.250	2,274	2,261	2,251	2,242	2,234
12.500	2,225	2,218	2,213	2,209	2,208
12.750	2,206	2,205	2,205	2,204	2,203
13.000	2,202	2,201	2,200	2,200	2,200
13.250	2,199	2,199	2,199	2,199	2,199
13.500	2,198	2,198	2,198	2,198	2,197
13.750	2,197	2,197	2,197	2,196	2,196
14.000	2,196	2,196	2,196	2,195	2,195
14.250	2,195	2,195	2,195	2,195	2,195
14.500	2,195	2,195	2,194	2,194	2,194
14.750	2,194	2,194	2,194	2,194	2,194
15.000	2,194	2,193	2,193	2,193	2,193
15.250	2,193	2,193	2,193	2,193	2,192
15.500	2,192	2,192	2,192	2,192	2,192
15.750	2,192	2,192	2,192	2,191	2,191
16.000	2,191	2,191	2,191	2,191	2,191
16.250	2,191	2,191	2,191	2,191	2,191
16.500	2,191	2,191	2,191	2,191	2,190
16.750	2,190	2,190	2,189	2,188	2,187
17.000	2,186	2,185	2,183	2,182	2,180
17.250	2,178	2,175	2,173	2,170	2,166
17.500	2,162	2,157	2,151	2,146	2,140
17.750	2,134	2,128	2,122	2,117	2,114
18.000	2,110	2,106	2,102	2,098	2,094
18.250	2,090	2,085	2,081	2,077	2,073
18.500	2,068	2,064	2,059	2,055	2,050
18.750	2,046	2,041	2,035	2,029	2,023
19.000	2,017	2,011	2,005	1,999	1,993
19.250	1,987	1,980	1,974	1,968	1,961
19.500	1,955	1,948	1,942	1,935	1,928
19.750	1,921	1,915	1,908	1,901	1,894
20.000	1,887	1,880	1,873	1,866	1,858

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 100 years

Label: 24" Depth Green Roof

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
20.250	1,851	1,844	1,837	1,829	1,822
20.500	1,815	1,807	1,800	1,792	1,784
20.750	1,777	1,769	1,761	1,754	1,746
21.000	1,738	1,730	1,722	1,714	1,706
21.250	1,698	1,690	1,682	1,674	1,666
21.500	1,658	1,649	1,641	1,633	1,624
21.750	1,616	1,608	1,599	1,591	1,582
22.000	1,573	1,565	1,556	1,547	1,539
22.250	1,530	1,521	1,512	1,503	1,494
22.500	1,485	1,476	1,467	1,458	1,449
22.750	1,440	1,430	1,421	1,412	1,402
23.000	1,393	1,384	1,374	1,365	1,355
23.250	1,345	1,336	1,326	1,316	1,307
23.500	1,297	1,287	1,277	1,267	1,257
23.750	1,247	1,237	1,227	1,217	1,207
24.000	1,197	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 1 years

Label: 6" Depth Green Roof

Storm Event: 1 year

Scenario: Post-Development 1 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
0.000	0	0	0	0	0
0.250	0	0	0	0	0
0.500	0	0	0	0	0
0.750	0	0	0	0	0
1.000	0	0	0	0	0
1.250	0	0	0	0	0
1.500	0	0	0	0	0
1.750	0	0	0	0	0
2.000	0	0	0	0	0
2.250	0	0	0	0	0
2.500	0	0	0	0	0
2.750	0	0	0	0	0
3.000	0	0	0	0	0
3.250	0	0	0	0	0
3.500	0	0	0	0	0
3.750	0	0	0	0	0
4.000	0	0	0	0	0
4.250	0	0	0	0	0
4.500	0	0	0	0	0
4.750	0	0	0	0	0
5.000	0	0	0	0	0
5.250	0	0	0	0	0
5.500	0	0	0	0	0
5.750	0	0	0	0	0
6.000	0	0	0	0	0
6.250	0	0	0	0	0
6.500	0	0	0	0	0
6.750	0	0	0	0	0
7.000	0	0	0	0	0
7.250	0	0	0	0	0
7.500	0	0	0	0	0
7.750	0	0	0	0	0
8.000	0	0	0	0	0
8.250	0	0	0	0	0
8.500	0	0	0	0	0
8.750	0	0	0	0	0
9.000	0	0	0	0	0
9.250	0	0	0	0	0
9.500	0	0	0	0	0
9.750	0	0	0	0	0

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume
 Label: 6" Depth Green Roof
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
10.000	0	0	0	0	0
10.250	0	0	0	0	0
10.500	0	0	0	0	0
10.750	0	0	0	0	0
11.000	0	0	0	0	0
11.250	0	0	0	0	0
11.500	0	0	0	0	0
11.750	0	13	19	28	45
12.000	75	109	166	211	242
12.250	261	272	279	282	281
12.500	277	269	258	245	232
12.750	218	204	189	174	159
13.000	135	116	102	89	75
13.250	60	43	25	0	0
13.500	0	0	0	0	0
13.750	0	0	0	0	0
14.000	0	0	0	0	0
14.250	0	0	0	0	0
14.500	0	0	0	0	0
14.750	0	0	0	0	0
15.000	0	0	0	0	0
15.250	0	0	0	0	0
15.500	0	0	0	0	0
15.750	0	0	0	0	0
16.000	0	0	0	0	0
16.250	0	0	0	0	0
16.500	0	0	0	0	0
16.750	0	0	0	0	0
17.000	0	0	0	0	0
17.250	0	0	0	0	0
17.500	0	0	0	0	0
17.750	0	0	0	0	0
18.000	0	0	0	0	0
18.250	0	0	0	0	0
18.500	0	0	0	0	0
18.750	0	0	0	0	0
19.000	0	0	0	0	0
19.250	0	0	0	0	0
19.500	0	0	0	0	0
19.750	0	0	0	0	0
20.000	0	0	0	0	0

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 1 years

Label: 6" Depth Green Roof

Storm Event: 1 year

Scenario: Post-Development 1 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
20.250	0	0	0	0	0
20.500	0	0	0	0	0
20.750	0	0	0	0	0
21.000	0	0	0	0	0
21.250	0	0	0	0	0
21.500	0	0	0	0	0
21.750	0	0	0	0	0
22.000	0	0	0	0	0
22.250	0	0	0	0	0
22.500	0	0	0	0	0
22.750	0	0	0	0	0
23.000	0	0	0	0	0
23.250	0	0	0	0	0
23.500	0	0	0	0	0
23.750	0	0	0	0	0
24.000	0	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 10 years

Label: 6" Depth Green Roof

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
0.000	0	0	0	0	0
0.250	0	0	0	0	0
0.500	0	0	0	0	0
0.750	0	0	0	0	0
1.000	0	0	0	0	0
1.250	0	0	0	0	0
1.500	0	0	0	0	0
1.750	0	0	0	0	0
2.000	0	0	0	0	0
2.250	0	0	0	0	0
2.500	0	0	0	0	0
2.750	0	0	0	0	0
3.000	0	0	0	0	0
3.250	0	0	0	0	0
3.500	0	0	0	0	0
3.750	0	0	0	0	0
4.000	0	0	0	0	0
4.250	0	0	0	0	0
4.500	0	0	0	0	0
4.750	0	0	0	0	0
5.000	0	0	0	0	0
5.250	0	0	0	0	0
5.500	0	0	0	0	0
5.750	0	0	0	0	0
6.000	0	0	0	0	0
6.250	0	0	0	0	0
6.500	0	0	0	0	0
6.750	0	0	0	0	0
7.000	0	0	0	0	0
7.250	0	0	0	0	0
7.500	0	0	0	0	0
7.750	0	0	0	0	0
8.000	0	0	0	0	0
8.250	0	0	0	0	0
8.500	0	0	0	0	0
8.750	0	0	0	0	0
9.000	0	0	0	0	0
9.250	0	0	0	0	0
9.500	0	0	0	0	0
9.750	0	0	0	0	0

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 10 years

Label: 6" Depth Green Roof

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
10.000	0	0	0	0	0
10.250	0	0	0	0	0
10.500	0	0	0	0	0
10.750	0	0	0	0	0
11.000	0	0	0	0	0
11.250	0	0	0	0	0
11.500	0	0	0	15	25
11.750	41	65	91	121	186
12.000	264	365	474	576	655
12.250	710	744	770	791	805
12.500	814	819	819	816	811
12.750	806	801	795	788	781
13.000	773	765	756	747	738
13.250	728	719	708	696	683
13.500	670	657	644	631	617
13.750	603	589	575	561	546
14.000	532	517	502	487	471
14.250	456	440	425	409	393
14.500	378	362	346	329	313
14.750	297	280	264	247	231
15.000	214	197	180	163	139
15.250	117	103	89	75	59
15.500	41	23	0	0	0
15.750	0	0	0	0	0
16.000	0	0	0	0	0
16.250	0	0	0	0	0
16.500	0	0	0	0	0
16.750	0	0	0	0	0
17.000	0	0	0	0	0
17.250	0	0	0	0	0
17.500	0	0	0	0	0
17.750	0	0	0	0	0
18.000	0	0	0	0	0
18.250	0	0	0	0	0
18.500	0	0	0	0	0
18.750	0	0	0	0	0
19.000	0	0	0	0	0
19.250	0	0	0	0	0
19.500	0	0	0	0	0
19.750	0	0	0	0	0
20.000	0	0	0	0	0

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 10 years

Label: 6" Depth Green Roof

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
20.250	0	0	0	0	0
20.500	0	0	0	0	0
20.750	0	0	0	0	0
21.000	0	0	0	0	0
21.250	0	0	0	0	0
21.500	0	0	0	0	0
21.750	0	0	0	0	0
22.000	0	0	0	0	0
22.250	0	0	0	0	0
22.500	0	0	0	0	0
22.750	0	0	0	0	0
23.000	0	0	0	0	0
23.250	0	0	0	0	0
23.500	0	0	0	0	0
23.750	0	0	0	0	0
24.000	0	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 25 years

Label: 6" Depth Green Roof

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
0.000	0	0	0	0	0
0.250	0	0	0	0	0
0.500	0	0	0	0	0
0.750	0	0	0	0	0
1.000	0	0	0	0	0
1.250	0	0	0	0	0
1.500	0	0	0	0	0
1.750	0	0	0	0	0
2.000	0	0	0	0	0
2.250	0	0	0	0	0
2.500	0	0	0	0	0
2.750	0	0	0	0	0
3.000	0	0	0	0	0
3.250	0	0	0	0	0
3.500	0	0	0	0	0
3.750	0	0	0	0	0
4.000	0	0	0	0	0
4.250	0	0	0	0	0
4.500	0	0	0	0	0
4.750	0	0	0	0	0
5.000	0	0	0	0	0
5.250	0	0	0	0	0
5.500	0	0	0	0	0
5.750	0	0	0	0	0
6.000	0	0	0	0	0
6.250	0	0	0	0	0
6.500	0	0	0	0	0
6.750	0	0	0	0	0
7.000	0	0	0	0	0
7.250	0	0	0	0	0
7.500	0	0	0	0	0
7.750	0	0	0	0	0
8.000	0	0	0	0	0
8.250	0	0	0	0	0
8.500	0	0	0	0	0
8.750	0	0	0	0	0
9.000	0	0	0	0	0
9.250	0	0	0	0	0
9.500	0	0	0	0	0
9.750	0	0	0	0	0

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 25 years

Label: 6" Depth Green Roof

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
10.000	0	0	0	0	0
10.250	0	0	0	0	0
10.500	0	0	0	0	0
10.750	0	0	0	0	0
11.000	0	0	0	0	0
11.250	0	0	0	0	0
11.500	0	13	18	29	47
11.750	74	103	157	211	283
12.000	389	524	669	787	911
12.250	950	944	938	934	929
12.500	925	921	918	916	915
12.750	913	911	908	903	898
13.000	892	884	872	859	845
13.250	831	819	810	802	794
13.500	786	778	770	761	752
13.750	743	734	725	715	703
14.000	691	678	665	652	639
14.250	625	612	598	585	571
14.500	557	543	529	514	500
14.750	486	471	456	441	426
15.000	411	396	381	365	350
15.250	334	318	302	286	270
15.500	254	237	221	204	187
15.750	170	152	125	109	95
16.000	81	67	49	31	14
16.250	0	0	0	0	0
16.500	0	0	0	0	0
16.750	0	0	0	0	0
17.000	0	0	0	0	0
17.250	0	0	0	0	0
17.500	0	0	0	0	0
17.750	0	0	0	0	0
18.000	0	0	0	0	0
18.250	0	0	0	0	0
18.500	0	0	0	0	0
18.750	0	0	0	0	0
19.000	0	0	0	0	0
19.250	0	0	0	0	0
19.500	0	0	0	0	0
19.750	0	0	0	0	0
20.000	0	0	0	0	0

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 25 years

Label: 6" Depth Green Roof

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
20.250	0	0	0	0	0
20.500	0	0	0	0	0
20.750	0	0	0	0	0
21.000	0	0	0	0	0
21.250	0	0	0	0	0
21.500	0	0	0	0	0
21.750	0	0	0	0	0
22.000	0	0	0	0	0
22.250	0	0	0	0	0
22.500	0	0	0	0	0
22.750	0	0	0	0	0
23.000	0	0	0	0	0
23.250	0	0	0	0	0
23.500	0	0	0	0	0
23.750	0	0	0	0	0
24.000	0	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 100 years

Label: 6" Depth Green Roof

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
0.000	0	0	0	0	0
0.250	0	0	0	0	0
0.500	0	0	0	0	0
0.750	0	0	0	0	0
1.000	0	0	0	0	0
1.250	0	0	0	0	0
1.500	0	0	0	0	0
1.750	0	0	0	0	0
2.000	0	0	0	0	0
2.250	0	0	0	0	0
2.500	0	0	0	0	0
2.750	0	0	0	0	0
3.000	0	0	0	0	0
3.250	0	0	0	0	0
3.500	0	0	0	0	0
3.750	0	0	0	0	0
4.000	0	0	0	0	0
4.250	0	0	0	0	0
4.500	0	0	0	0	0
4.750	0	0	0	0	0
5.000	0	0	0	0	0
5.250	0	0	0	0	0
5.500	0	0	0	0	0
5.750	0	0	0	0	0
6.000	0	0	0	0	0
6.250	0	0	0	0	0
6.500	0	0	0	0	0
6.750	0	0	0	0	0
7.000	0	0	0	0	0
7.250	0	0	0	0	0
7.500	0	0	0	0	0
7.750	0	0	0	0	0
8.000	0	0	0	0	0
8.250	0	0	0	0	0
8.500	0	0	0	0	0
8.750	0	0	0	0	0
9.000	0	0	0	0	0
9.250	0	0	0	0	0
9.500	0	0	0	0	0
9.750	0	0	0	0	0

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 100 years

Label: 6" Depth Green Roof

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
10.000	0	0	0	0	0
10.250	0	0	0	0	0
10.500	0	0	0	0	0
10.750	0	0	0	0	0
11.000	0	0	0	0	12
11.250	15	18	23	29	37
11.500	46	58	74	95	128
11.750	188	250	326	414	528
12.000	691	894	1,013	1,017	995
12.250	973	962	954	947	940
12.500	934	928	924	921	920
12.750	919	918	917	917	916
13.000	915	915	914	912	910
13.250	907	904	901	897	893
13.500	889	882	874	866	856
13.750	847	836	826	817	810
14.000	803	797	790	783	776
14.250	768	761	753	746	738
14.500	730	722	713	703	692
14.750	682	671	659	648	637
15.000	625	613	601	589	577
15.250	564	551	539	526	512
15.500	499	486	472	458	444
15.750	430	415	401	386	371
16.000	356	341	326	310	295
16.250	279	263	248	232	216
16.500	200	184	168	149	123
16.750	109	96	83	70	53
17.000	36	19	0	0	0
17.250	0	0	0	0	0
17.500	0	0	0	0	0
17.750	0	0	0	0	0
18.000	0	0	0	0	0
18.250	0	0	0	0	0
18.500	0	0	0	0	0
18.750	0	0	0	0	0
19.000	0	0	0	0	0
19.250	0	0	0	0	0
19.500	0	0	0	0	0
19.750	0	0	0	0	0
20.000	0	0	0	0	0

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 100 years

Label: 6" Depth Green Roof

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
20.250	0	0	0	0	0
20.500	0	0	0	0	0
20.750	0	0	0	0	0
21.000	0	0	0	0	0
21.250	0	0	0	0	0
21.500	0	0	0	0	0
21.750	0	0	0	0	0
22.000	0	0	0	0	0
22.250	0	0	0	0	0
22.500	0	0	0	0	0
22.750	0	0	0	0	0
23.000	0	0	0	0	0
23.250	0	0	0	0	0
23.500	0	0	0	0	0
23.750	0	0	0	0	0
24.000	0	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 1 years

Label: MC-3500 - 3

Storm Event: 1 year

Scenario: Post-Development 1 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
0.000	0	0	0	0	0
0.250	0	0	0	0	0
0.500	0	0	0	0	0
0.750	0	0	0	0	0
1.000	0	0	0	0	0
1.250	0	0	0	0	0
1.500	0	0	0	0	0
1.750	0	0	0	0	0
2.000	0	0	0	0	0
2.250	0	0	0	0	0
2.500	0	0	0	0	0
2.750	0	0	0	0	0
3.000	0	0	0	0	0
3.250	0	0	0	0	0
3.500	0	0	0	0	0
3.750	0	0	0	0	0
4.000	0	0	0	0	0
4.250	0	0	0	0	0
4.500	0	0	0	0	0
4.750	0	0	0	0	0
5.000	0	0	0	0	0
5.250	0	0	0	0	0
5.500	0	0	0	0	1
5.750	1	1	2	2	3
6.000	4	4	5	6	7
6.250	8	9	10	12	13
6.500	14	16	17	19	21
6.750	22	24	26	28	30
7.000	33	35	37	39	42
7.250	45	47	50	53	56
7.500	59	62	65	68	71
7.750	75	78	82	85	89
8.000	93	96	100	105	109
8.250	113	118	123	128	133
8.500	138	144	150	156	162
8.750	168	175	182	188	196
9.000	203	211	218	226	234
9.250	243	251	260	269	278
9.500	287	297	307	317	327
9.750	337	348	358	369	380

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 1 years

Label: MC-3500 - 3

Storm Event: 1 year

Scenario: Post-Development 1 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
10.000	392	403	415	427	440
10.250	453	467	482	496	512
10.500	528	544	561	579	597
10.750	615	634	653	673	694
11.000	715	736	760	785	812
11.250	842	875	911	950	991
11.500	1,035	1,086	1,151	1,237	1,353
11.750	1,497	1,613	1,753	1,919	2,136
12.000	2,716	3,596	4,365	5,028	5,543
12.250	5,906	6,188	6,413	6,588	6,717
12.500	6,799	6,840	6,851	6,840	6,819
12.750	6,793	6,761	6,724	6,684	6,639
13.000	6,590	6,536	6,481	6,423	6,364
13.250	6,304	6,243	6,182	6,121	6,059
13.500	5,996	5,933	5,869	5,805	5,740
13.750	5,674	5,608	5,542	5,475	5,406
14.000	5,338	5,268	5,199	5,129	5,059
14.250	4,990	4,921	4,851	4,782	4,713
14.500	4,645	4,576	4,507	4,439	4,371
14.750	4,303	4,235	4,167	4,099	4,032
15.000	3,964	3,897	3,817	3,726	3,635
15.250	3,546	3,458	3,371	3,284	3,198
15.500	3,114	3,030	2,946	2,864	2,782
15.750	2,702	2,621	2,542	2,463	2,385
16.000	2,308	2,231	2,196	2,162	2,128
16.250	2,095	2,063	2,031	1,999	1,968
16.500	1,937	1,907	1,877	1,847	1,818
16.750	1,790	1,761	1,734	1,706	1,679
17.000	1,652	1,626	1,600	1,574	1,549
17.250	1,524	1,499	1,468	1,430	1,394
17.500	1,358	1,324	1,291	1,259	1,228
17.750	1,198	1,169	1,141	1,114	1,087
18.000	1,061	1,036	1,012	989	966
18.250	945	924	904	884	866
18.500	848	830	814	797	782
18.750	767	752	738	725	711
19.000	699	687	675	663	652
19.250	642	631	621	612	602
19.500	593	585	576	568	560
19.750	552	545	537	530	523
20.000	517	510	504	498	492

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 1 years

Label: MC-3500 - 3

Storm Event: 1 year

Scenario: Post-Development 1 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
20.250	486	480	475	470	465
20.500	460	455	450	445	441
20.750	437	432	428	424	420
21.000	417	413	409	406	402
21.250	399	396	392	389	386
21.500	383	380	377	374	371
21.750	369	366	363	361	358
22.000	356	353	351	348	346
22.250	344	341	339	337	335
22.500	332	330	328	326	324
22.750	322	320	318	316	314
23.000	312	310	308	306	304
23.250	302	300	299	297	295
23.500	293	291	290	288	286
23.750	284	283	281	279	277
24.000	276	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 10 years

Label: MC-3500 - 3

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
0.000	0	0	0	0	0
0.250	0	0	0	0	0
0.500	0	0	0	0	0
0.750	0	0	0	0	0
1.000	0	0	0	0	0
1.250	0	0	0	0	0
1.500	0	0	0	0	0
1.750	0	0	0	0	0
2.000	0	0	0	0	0
2.250	0	0	0	0	0
2.500	0	0	0	0	0
2.750	0	0	0	0	0
3.000	0	0	0	0	0
3.250	0	0	0	0	0
3.500	1	1	2	3	4
3.750	5	6	8	9	11
4.000	13	15	17	19	21
4.250	23	26	29	31	34
4.500	37	40	43	46	49
4.750	53	56	60	63	67
5.000	71	74	78	82	86
5.250	90	94	98	103	107
5.500	111	115	120	124	129
5.750	133	138	143	147	152
6.000	157	162	166	172	177
6.250	182	187	193	199	205
6.500	211	217	224	230	237
6.750	244	251	258	266	273
7.000	281	289	297	305	313
7.250	322	330	339	348	357
7.500	366	375	385	394	404
7.750	414	424	434	445	455
8.000	466	476	487	499	510
8.250	523	535	549	562	577
8.500	591	606	622	638	654
8.750	671	688	706	724	743
9.000	762	781	801	821	842
9.250	862	884	905	927	950
9.500	972	995	1,019	1,043	1,067
9.750	1,091	1,116	1,141	1,166	1,192

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 10 years

Label: MC-3500 - 3

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
10.000	1,218	1,244	1,271	1,299	1,327
10.250	1,358	1,389	1,421	1,455	1,488
10.500	1,511	1,534	1,559	1,585	1,612
10.750	1,640	1,669	1,699	1,731	1,763
11.000	1,796	1,831	1,868	1,909	1,953
11.250	2,003	2,056	2,115	2,177	2,264
11.500	2,423	2,604	2,833	3,131	3,526
11.750	3,984	4,433	4,968	5,588	6,375
12.000	7,489	8,862	10,270	11,552	12,435
12.250	12,965	13,303	13,517	13,624	13,634
12.500	13,553	13,394	13,184	12,951	12,714
12.750	12,482	12,257	12,040	11,828	11,620
13.000	11,416	11,219	11,029	10,847	10,675
13.250	10,513	10,360	10,216	10,080	9,948
13.500	9,819	9,693	9,569	9,449	9,331
13.750	9,216	9,103	8,993	8,885	8,779
14.000	8,675	8,572	8,471	8,373	8,277
14.250	8,185	8,095	8,008	7,923	7,841
14.500	7,761	7,683	7,607	7,534	7,462
14.750	7,392	7,324	7,258	7,193	7,130
15.000	7,069	7,008	6,946	6,884	6,822
15.250	6,759	6,695	6,631	6,567	6,501
15.500	6,436	6,370	6,303	6,236	6,169
15.750	6,100	6,032	5,963	5,894	5,824
16.000	5,753	5,683	5,612	5,541	5,470
16.250	5,399	5,328	5,257	5,186	5,116
16.500	5,045	4,976	4,906	4,836	4,767
16.750	4,698	4,629	4,561	4,492	4,424
17.000	4,356	4,288	4,221	4,153	4,086
17.250	4,019	3,952	3,886	3,803	3,713
17.500	3,625	3,537	3,450	3,365	3,280
17.750	3,196	3,114	3,032	2,950	2,870
18.000	2,791	2,712	2,635	2,559	2,483
18.250	2,410	2,337	2,265	2,214	2,182
18.500	2,151	2,121	2,091	2,062	2,033
18.750	2,004	1,977	1,949	1,922	1,895
19.000	1,869	1,843	1,818	1,793	1,768
19.250	1,744	1,720	1,697	1,674	1,651
19.500	1,628	1,606	1,585	1,563	1,542
19.750	1,521	1,501	1,478	1,446	1,416
20.000	1,387	1,359	1,332	1,305	1,280

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 10 years

Label: MC-3500 - 3

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
20.250	1,256	1,233	1,210	1,188	1,167
20.500	1,146	1,127	1,108	1,089	1,071
20.750	1,054	1,038	1,022	1,006	991
21.000	977	963	949	936	923
21.250	911	899	887	876	865
21.500	854	844	834	824	814
21.750	805	796	788	779	771
22.000	763	755	747	740	733
22.250	725	719	712	705	699
22.500	692	686	680	674	668
22.750	663	657	652	646	641
23.000	636	631	625	620	616
23.250	611	606	601	597	593
23.500	588	584	579	575	571
23.750	567	563	559	555	550
24.000	547	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 25 years

Label: MC-3500 - 3

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
0.000	0	0	0	0	0
0.250	0	0	0	0	0
0.500	0	0	0	0	0
0.750	0	0	0	0	0
1.000	0	0	0	0	0
1.250	0	0	0	0	0
1.500	0	0	0	0	0
1.750	0	0	0	0	0
2.000	0	0	0	0	0
2.250	0	0	0	0	0
2.500	0	0	0	0	0
2.750	0	0	1	1	2
3.000	3	4	6	8	9
3.250	11	14	16	19	21
3.500	24	27	31	34	37
3.750	41	45	49	53	57
4.000	61	65	70	75	79
4.250	84	89	94	99	104
4.500	109	115	120	126	131
4.750	137	142	148	154	160
5.000	166	172	178	184	190
5.250	197	203	209	216	222
5.500	229	235	242	248	255
5.750	262	269	275	282	289
6.000	296	303	310	317	325
6.250	332	340	348	356	365
6.500	374	383	392	402	411
6.750	421	431	442	452	463
7.000	474	485	496	508	519
7.250	531	543	556	568	581
7.500	594	607	620	633	647
7.750	660	674	688	702	717
8.000	731	746	761	776	793
8.250	809	827	845	864	883
8.500	903	924	945	967	990
8.750	1,013	1,036	1,060	1,085	1,110
9.000	1,136	1,162	1,189	1,216	1,244
9.250	1,272	1,300	1,329	1,359	1,389
9.500	1,419	1,450	1,481	1,503	1,523
9.750	1,544	1,566	1,589	1,612	1,635

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 25 years

Label: MC-3500 - 3

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
10.000	1,659	1,684	1,710	1,737	1,765
10.250	1,795	1,826	1,858	1,892	1,927
10.500	1,964	2,001	2,040	2,081	2,122
10.750	2,165	2,209	2,286	2,388	2,493
11.000	2,601	2,713	2,831	2,959	3,099
11.250	3,251	3,416	3,595	3,787	3,957
11.500	4,118	4,302	4,533	4,833	5,229
11.750	5,729	6,333	7,046	7,867	8,882
12.000	10,270	11,966	13,659	15,179	16,226
12.250	16,875	17,283	17,522	17,625	17,608
12.500	17,479	17,246	16,942	16,594	16,234
12.750	15,882	15,538	15,198	14,861	14,524
13.000	14,184	13,848	13,520	13,201	12,904
13.250	12,625	12,364	12,118	11,887	11,668
13.500	11,459	11,262	11,076	10,900	10,734
13.750	10,577	10,428	10,286	10,152	10,023
14.000	9,896	9,772	9,650	9,531	9,416
14.250	9,304	9,195	9,090	8,987	8,887
14.500	8,790	8,696	8,603	8,512	8,424
14.750	8,338	8,254	8,172	8,091	8,013
15.000	7,937	7,862	7,789	7,718	7,648
15.250	7,579	7,512	7,446	7,382	7,318
15.500	7,256	7,195	7,135	7,076	7,017
15.750	6,958	6,898	6,836	6,774	6,711
16.000	6,647	6,583	6,518	6,453	6,387
16.250	6,321	6,256	6,190	6,125	6,060
16.500	5,994	5,929	5,864	5,798	5,733
16.750	5,668	5,603	5,538	5,472	5,407
17.000	5,341	5,275	5,209	5,144	5,078
17.250	5,013	4,947	4,881	4,816	4,750
17.500	4,685	4,620	4,554	4,489	4,423
17.750	4,358	4,293	4,227	4,162	4,097
18.000	4,032	3,966	3,901	3,827	3,739
18.250	3,654	3,570	3,487	3,405	3,325
18.500	3,246	3,168	3,092	3,017	2,942
18.750	2,870	2,798	2,727	2,658	2,590
19.000	2,522	2,456	2,391	2,327	2,263
19.250	2,216	2,188	2,161	2,134	2,107
19.500	2,081	2,055	2,030	2,005	1,980
19.750	1,956	1,932	1,908	1,885	1,862
20.000	1,839	1,817	1,795	1,773	1,751

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 25 years

Label: MC-3500 - 3

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
20.250	1,730	1,710	1,689	1,669	1,649
20.500	1,630	1,611	1,592	1,573	1,555
20.750	1,536	1,518	1,501	1,482	1,455
21.000	1,429	1,404	1,379	1,356	1,333
21.250	1,311	1,290	1,269	1,250	1,230
21.500	1,212	1,194	1,176	1,159	1,143
21.750	1,127	1,112	1,097	1,082	1,068
22.000	1,055	1,041	1,029	1,016	1,004
22.250	992	981	969	959	948
22.500	938	928	918	908	899
22.750	890	881	872	864	856
23.000	848	840	832	824	817
23.250	809	802	795	788	782
23.500	775	769	762	756	750
23.750	743	737	732	726	720
24.000	714	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 100 years

Label: MC-3500 - 3

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
0.000	0	0	0	0	0
0.250	0	0	0	0	0
0.500	0	0	0	0	0
0.750	0	0	0	0	0
1.000	0	0	0	0	0
1.250	0	0	0	0	0
1.500	0	0	0	0	0
1.750	0	0	0	0	0
2.000	0	1	2	3	5
2.250	7	9	11	14	18
2.500	21	25	29	33	38
2.750	43	48	53	59	65
3.000	71	77	83	90	97
3.250	104	111	118	126	133
3.500	141	149	157	165	174
3.750	182	190	199	208	217
4.000	226	235	244	253	263
4.250	272	282	291	301	311
4.500	321	331	341	351	361
4.750	371	381	391	402	412
5.000	422	433	443	454	465
5.250	475	486	496	507	518
5.500	529	539	550	561	572
5.750	583	594	605	616	627
6.000	638	649	660	671	683
6.250	695	708	721	734	748
6.500	762	776	791	806	822
6.750	838	854	870	887	904
7.000	921	939	957	975	994
7.250	1,012	1,031	1,051	1,070	1,090
7.500	1,110	1,130	1,151	1,172	1,193
7.750	1,214	1,235	1,257	1,279	1,301
8.000	1,323	1,345	1,368	1,392	1,417
8.250	1,442	1,469	1,493	1,512	1,531
8.500	1,551	1,573	1,595	1,618	1,642
8.750	1,667	1,693	1,720	1,748	1,776
9.000	1,806	1,836	1,868	1,900	1,932
9.250	1,966	2,001	2,036	2,072	2,109
9.500	2,147	2,185	2,224	2,306	2,395
9.750	2,486	2,578	2,672	2,768	2,864

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 100 years

Label: MC-3500 - 3

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
10.000	2,963	3,063	3,165	3,271	3,381
10.250	3,494	3,612	3,734	3,861	3,957
10.500	4,057	4,160	4,266	4,377	4,491
10.750	4,608	4,729	4,854	4,983	5,114
11.000	5,250	5,390	5,538	5,696	5,868
11.250	6,054	6,256	6,474	6,706	6,954
11.500	7,217	7,509	7,861	8,304	8,870
11.750	9,565	10,395	11,352	12,397	13,702
12.000	15,567	17,898	20,325	22,479	23,953
12.250	24,817	25,334	25,616	25,706	25,620
12.500	25,370	24,982	24,501	23,966	23,420
12.750	22,879	22,377	21,884	21,329	20,809
13.000	20,327	19,843	19,329	18,825	18,361
13.250	17,919	17,489	17,055	16,631	16,221
13.500	15,833	15,464	15,108	14,763	14,422
13.750	14,089	13,767	13,456	13,157	12,878
14.000	12,615	12,367	12,133	11,913	11,705
14.250	11,507	11,321	11,146	10,982	10,828
14.500	10,682	10,545	10,415	10,293	10,178
14.750	10,067	9,960	9,854	9,751	9,650
15.000	9,552	9,455	9,360	9,267	9,176
15.250	9,086	8,998	8,912	8,827	8,743
15.500	8,661	8,579	8,498	8,419	8,340
15.750	8,263	8,187	8,112	8,037	7,964
16.000	7,891	7,820	7,750	7,682	7,615
16.250	7,550	7,486	7,425	7,365	7,307
16.500	7,250	7,195	7,141	7,088	7,036
16.750	6,985	6,932	6,880	6,827	6,773
17.000	6,719	6,665	6,610	6,555	6,500
17.250	6,444	6,388	6,331	6,275	6,217
17.500	6,160	6,102	6,043	5,985	5,926
17.750	5,866	5,807	5,747	5,686	5,626
18.000	5,565	5,503	5,441	5,379	5,318
18.250	5,257	5,196	5,135	5,075	5,015
18.500	4,956	4,897	4,838	4,780	4,722
18.750	4,664	4,607	4,550	4,493	4,436
19.000	4,380	4,324	4,269	4,214	4,159
19.250	4,104	4,050	3,996	3,942	3,889
19.500	3,825	3,753	3,683	3,613	3,544
19.750	3,477	3,410	3,344	3,279	3,215
20.000	3,151	3,089	3,027	2,966	2,907

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 100 years

Label: MC-3500 - 3

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
20.250	2,848	2,790	2,733	2,676	2,620
20.500	2,565	2,511	2,458	2,405	2,353
20.750	2,302	2,252	2,217	2,194	2,172
21.000	2,151	2,129	2,108	2,087	2,067
21.250	2,047	2,026	2,007	1,987	1,968
21.500	1,949	1,930	1,911	1,893	1,875
21.750	1,857	1,839	1,822	1,804	1,787
22.000	1,770	1,754	1,737	1,721	1,705
22.250	1,689	1,673	1,657	1,642	1,627
22.500	1,611	1,596	1,582	1,567	1,553
22.750	1,538	1,524	1,510	1,496	1,480
23.000	1,459	1,438	1,417	1,398	1,378
23.250	1,360	1,342	1,324	1,307	1,291
23.500	1,275	1,259	1,244	1,229	1,215
23.750	1,200	1,187	1,173	1,160	1,147
24.000	1,134	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume
 Label: Stormwater Planters - 2
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
0.000	0	0	0	0	0
0.250	0	0	0	0	0
0.500	0	0	0	0	0
0.750	0	0	0	0	0
1.000	0	0	0	0	0
1.250	0	0	0	0	0
1.500	0	0	0	0	0
1.750	0	0	0	0	0
2.000	0	0	0	0	0
2.250	0	0	0	0	0
2.500	0	0	0	0	0
2.750	0	0	0	0	0
3.000	0	0	0	0	0
3.250	0	0	0	0	0
3.500	0	0	0	0	0
3.750	0	0	0	0	0
4.000	0	0	0	0	0
4.250	0	0	0	0	0
4.500	0	0	0	0	0
4.750	0	0	0	0	0
5.000	0	0	0	0	0
5.250	0	0	0	0	0
5.500	0	0	0	0	0
5.750	0	0	0	0	0
6.000	0	0	0	0	0
6.250	0	0	0	0	0
6.500	0	0	0	0	0
6.750	0	0	0	0	0
7.000	0	0	0	0	0
7.250	0	0	0	0	0
7.500	0	0	0	0	0
7.750	0	0	0	0	0
8.000	0	0	0	0	0
8.250	0	0	0	0	0
8.500	0	0	0	0	0
8.750	0	0	0	0	0
9.000	0	0	0	0	0
9.250	0	0	0	0	0
9.500	0	0	0	0	0
9.750	0	0	0	0	0

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume
 Label: Stormwater Planters - 2
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
10.000	0	0	0	0	0
10.250	0	0	0	0	0
10.500	0	0	0	0	0
10.750	0	0	0	0	0
11.000	0	0	0	0	0
11.250	0	0	0	0	0
11.500	0	0	16	25	42
11.750	68	105	151	208	285
12.000	399	547	708	861	981
12.250	1,068	1,136	1,192	1,237	1,272
12.500	1,296	1,311	1,320	1,323	1,324
12.750	1,324	1,323	1,320	1,317	1,312
13.000	1,306	1,299	1,292	1,284	1,275
13.250	1,266	1,257	1,248	1,238	1,228
13.500	1,218	1,208	1,197	1,186	1,174
13.750	1,163	1,151	1,139	1,126	1,113
14.000	1,100	1,087	1,073	1,060	1,046
14.250	1,032	1,018	1,003	989	974
14.500	960	945	930	915	899
14.750	884	868	853	837	821
15.000	805	789	772	756	739
15.250	722	706	689	671	654
15.500	637	619	601	583	565
15.750	547	529	511	492	473
16.000	455	436	417	397	378
16.250	359	340	320	301	281
16.500	262	242	222	203	183
16.750	163	143	123	103	83
17.000	63	42	22	0	0
17.250	0	0	0	0	0
17.500	0	0	0	0	0
17.750	0	0	0	0	0
18.000	0	0	0	0	0
18.250	0	0	0	0	0
18.500	0	0	0	0	0
18.750	0	0	0	0	0
19.000	0	0	0	0	0
19.250	0	0	0	0	0
19.500	0	0	0	0	0
19.750	0	0	0	0	0
20.000	0	0	0	0	0

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume
 Label: Stormwater Planters - 2
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
20.250	0	0	0	0	0
20.500	0	0	0	0	0
20.750	0	0	0	0	0
21.000	0	0	0	0	0
21.250	0	0	0	0	0
21.500	0	0	0	0	0
21.750	0	0	0	0	0
22.000	0	0	0	0	0
22.250	0	0	0	0	0
22.500	0	0	0	0	0
22.750	0	0	0	0	0
23.000	0	0	0	0	0
23.250	0	0	0	0	0
23.500	0	0	0	0	0
23.750	0	0	0	0	0
24.000	0	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 10 years

Label: Stormwater Planters - 2

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
0.000	0	0	0	0	0
0.250	0	0	0	0	0
0.500	0	0	0	0	0
0.750	0	0	0	0	0
1.000	0	0	0	0	0
1.250	0	0	0	0	0
1.500	0	0	0	0	0
1.750	0	0	0	0	0
2.000	0	0	0	0	0
2.250	0	0	0	0	0
2.500	0	0	0	0	0
2.750	0	0	0	0	0
3.000	0	0	0	0	0
3.250	0	0	0	0	0
3.500	0	0	0	0	0
3.750	0	0	0	0	0
4.000	0	0	0	0	0
4.250	0	0	0	0	0
4.500	0	0	0	0	0
4.750	0	0	0	0	0
5.000	0	0	0	0	0
5.250	0	0	0	0	0
5.500	0	0	0	0	0
5.750	0	0	0	0	0
6.000	0	0	0	0	0
6.250	0	0	0	0	0
6.500	0	0	0	0	0
6.750	0	0	0	0	0
7.000	0	0	0	0	0
7.250	0	0	0	0	0
7.500	0	0	0	0	0
7.750	0	0	0	0	0
8.000	0	0	0	0	0
8.250	0	0	0	0	0
8.500	0	0	0	0	0
8.750	0	0	0	0	0
9.000	0	0	0	0	0
9.250	0	0	0	0	0
9.500	0	0	0	0	0
9.750	0	0	0	0	0

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 10 years

Label: Stormwater Planters - 2

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
10.000	0	0	0	0	0
10.250	0	0	0	0	0
10.500	0	0	0	0	13
10.750	14	16	18	20	23
11.000	27	32	37	44	53
11.250	64	77	92	108	127
11.500	148	174	207	253	316
11.750	397	498	618	758	937
12.000	1,191	1,507	1,846	2,168	2,425
12.250	2,616	2,771	2,902	3,011	3,093
12.500	3,140	3,157	3,158	3,151	3,143
12.750	3,134	3,126	3,119	3,112	3,106
13.000	3,099	3,093	3,088	3,083	3,079
13.250	3,075	3,072	3,070	3,068	3,066
13.500	3,064	3,062	3,061	3,059	3,057
13.750	3,056	3,054	3,053	3,051	3,049
14.000	3,047	3,045	3,042	3,039	3,035
14.250	3,031	3,027	3,022	3,018	3,013
14.500	3,008	3,002	2,996	2,991	2,984
14.750	2,978	2,971	2,964	2,957	2,949
15.000	2,941	2,933	2,925	2,916	2,908
15.250	2,899	2,889	2,880	2,870	2,860
15.500	2,849	2,839	2,828	2,816	2,805
15.750	2,793	2,781	2,769	2,757	2,744
16.000	2,731	2,718	2,704	2,691	2,677
16.250	2,663	2,649	2,635	2,621	2,606
16.500	2,592	2,577	2,563	2,548	2,533
16.750	2,518	2,503	2,488	2,472	2,457
17.000	2,441	2,426	2,410	2,394	2,378
17.250	2,362	2,345	2,329	2,313	2,296
17.500	2,279	2,262	2,246	2,228	2,211
17.750	2,194	2,177	2,159	2,142	2,124
18.000	2,106	2,088	2,070	2,052	2,034
18.250	2,016	1,997	1,979	1,961	1,942
18.500	1,924	1,906	1,887	1,869	1,850
18.750	1,832	1,813	1,795	1,776	1,757
19.000	1,739	1,720	1,701	1,682	1,664
19.250	1,645	1,626	1,607	1,588	1,569
19.500	1,550	1,531	1,512	1,493	1,474
19.750	1,454	1,435	1,416	1,397	1,377
20.000	1,358	1,338	1,319	1,300	1,280

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 10 years

Label: Stormwater Planters - 2

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
20.250	1,261	1,241	1,221	1,202	1,182
20.500	1,163	1,143	1,123	1,104	1,084
20.750	1,064	1,044	1,024	1,005	985
21.000	965	945	925	905	885
21.250	865	845	825	805	785
21.500	764	744	724	704	683
21.750	663	643	623	602	582
22.000	561	541	521	500	480
22.250	459	438	418	397	377
22.500	356	335	315	294	273
22.750	252	231	211	190	169
23.000	148	127	106	85	64
23.250	43	22	0	0	0
23.500	0	0	0	0	0
23.750	0	0	0	0	0
24.000	0	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 25 years

Label: Stormwater Planters - 2

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
0.000	0	0	0	0	0
0.250	0	0	0	0	0
0.500	0	0	0	0	0
0.750	0	0	0	0	0
1.000	0	0	0	0	0
1.250	0	0	0	0	0
1.500	0	0	0	0	0
1.750	0	0	0	0	0
2.000	0	0	0	0	0
2.250	0	0	0	0	0
2.500	0	0	0	0	0
2.750	0	0	0	0	0
3.000	0	0	0	0	0
3.250	0	0	0	0	0
3.500	0	0	0	0	0
3.750	0	0	0	0	0
4.000	0	0	0	0	0
4.250	0	0	0	0	0
4.500	0	0	0	0	0
4.750	0	0	0	0	0
5.000	0	0	0	0	0
5.250	0	0	0	0	0
5.500	0	0	0	0	0
5.750	0	0	0	0	0
6.000	0	0	0	0	0
6.250	0	0	0	0	0
6.500	0	0	0	0	0
6.750	0	0	0	0	0
7.000	0	0	0	0	0
7.250	0	0	0	0	0
7.500	0	0	0	0	0
7.750	0	0	0	0	0
8.000	0	0	0	0	0
8.250	0	0	0	0	0
8.500	0	0	0	0	0
8.750	0	0	0	0	0
9.000	0	0	0	0	0
9.250	0	0	0	0	0
9.500	0	0	0	0	0
9.750	0	0	0	0	0

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 25 years

Label: Stormwater Planters - 2

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
10.000	0	0	13	14	16
10.250	18	21	24	29	34
10.500	39	46	53	61	69
10.750	79	89	99	111	123
11.000	136	149	165	182	201
11.250	223	247	274	304	336
11.500	371	412	463	530	619
11.750	732	869	1,032	1,220	1,459
12.000	1,792	2,205	2,647	3,064	3,345
12.250	3,458	3,482	3,471	3,445	3,412
12.500	3,376	3,338	3,301	3,264	3,234
12.750	3,209	3,190	3,174	3,160	3,148
13.000	3,138	3,129	3,120	3,113	3,108
13.250	3,103	3,099	3,096	3,093	3,090
13.500	3,088	3,086	3,083	3,081	3,079
13.750	3,077	3,075	3,073	3,071	3,069
14.000	3,067	3,065	3,063	3,062	3,060
14.250	3,059	3,058	3,056	3,055	3,054
14.500	3,053	3,052	3,051	3,050	3,049
14.750	3,048	3,046	3,044	3,042	3,039
15.000	3,036	3,033	3,029	3,025	3,021
15.250	3,016	3,011	3,006	3,000	2,994
15.500	2,988	2,981	2,975	2,967	2,960
15.750	2,952	2,943	2,935	2,926	2,916
16.000	2,907	2,897	2,887	2,876	2,866
16.250	2,855	2,844	2,833	2,822	2,811
16.500	2,799	2,787	2,776	2,764	2,752
16.750	2,740	2,727	2,715	2,702	2,689
17.000	2,677	2,663	2,650	2,637	2,623
17.250	2,610	2,596	2,582	2,568	2,554
17.500	2,539	2,525	2,510	2,496	2,481
17.750	2,466	2,450	2,435	2,419	2,404
18.000	2,388	2,372	2,356	2,340	2,324
18.250	2,308	2,291	2,275	2,259	2,242
18.500	2,226	2,209	2,193	2,176	2,160
18.750	2,143	2,126	2,109	2,093	2,076
19.000	2,059	2,042	2,025	2,008	1,991
19.250	1,974	1,957	1,940	1,922	1,905
19.500	1,888	1,870	1,853	1,836	1,818
19.750	1,801	1,783	1,765	1,748	1,730
20.000	1,712	1,695	1,677	1,659	1,641

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 25 years

Label: Stormwater Planters - 2

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
20.250	1,623	1,605	1,587	1,569	1,551
20.500	1,533	1,515	1,497	1,479	1,460
20.750	1,442	1,424	1,405	1,387	1,369
21.000	1,350	1,332	1,313	1,295	1,276
21.250	1,258	1,239	1,221	1,202	1,183
21.500	1,164	1,146	1,127	1,108	1,089
21.750	1,070	1,051	1,032	1,013	994
22.000	975	956	937	918	899
22.250	879	860	841	822	802
22.500	783	763	744	724	705
22.750	685	666	646	627	607
23.000	587	567	548	528	508
23.250	488	468	448	428	408
23.500	388	368	348	328	308
23.750	288	267	247	227	206
24.000	186	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 100 years

Label: Stormwater Planters - 2

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
0.000	0	0	0	0	0
0.250	0	0	0	0	0
0.500	0	0	0	0	0
0.750	0	0	0	0	0
1.000	0	0	0	0	0
1.250	0	0	0	0	0
1.500	0	0	0	0	0
1.750	0	0	0	0	0
2.000	0	0	0	0	0
2.250	0	0	0	0	0
2.500	0	0	0	0	0
2.750	0	0	0	0	0
3.000	0	0	0	0	0
3.250	0	0	0	0	0
3.500	0	0	0	0	0
3.750	0	0	0	0	0
4.000	0	0	0	0	0
4.250	0	0	0	0	0
4.500	0	0	0	0	0
4.750	0	0	0	0	0
5.000	0	0	0	0	0
5.250	0	0	0	0	0
5.500	0	0	0	0	0
5.750	0	0	0	0	0
6.000	0	0	0	0	0
6.250	0	0	0	0	0
6.500	0	0	0	0	0
6.750	0	0	0	0	0
7.000	0	0	0	0	0
7.250	0	0	0	0	0
7.500	0	0	0	0	0
7.750	0	0	0	0	0
8.000	0	0	0	0	0
8.250	0	0	0	0	0
8.500	0	0	0	0	0
8.750	0	13	14	15	16
9.000	19	21	24	28	32
9.250	37	42	47	53	60
9.500	67	75	83	91	101
9.750	110	120	131	142	153

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 100 years

Label: Stormwater Planters - 2

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
10.000	166	178	192	206	221
10.250	237	254	272	291	311
10.500	332	354	377	401	426
10.750	453	480	508	537	567
11.000	598	631	666	703	744
11.250	788	836	888	944	1,003
11.500	1,066	1,138	1,225	1,335	1,477
11.750	1,654	1,867	2,115	2,401	2,760
12.000	3,224	3,654	3,903	3,982	3,927
12.250	3,820	3,729	3,659	3,599	3,540
12.500	3,482	3,428	3,382	3,344	3,314
12.750	3,288	3,267	3,249	3,233	3,218
13.000	3,205	3,192	3,181	3,172	3,164
13.250	3,157	3,152	3,147	3,143	3,140
13.500	3,136	3,133	3,130	3,127	3,124
13.750	3,121	3,118	3,115	3,112	3,109
14.000	3,106	3,104	3,101	3,098	3,096
14.250	3,094	3,093	3,091	3,089	3,088
14.500	3,086	3,085	3,084	3,082	3,081
14.750	3,079	3,078	3,077	3,075	3,074
15.000	3,073	3,071	3,070	3,069	3,067
15.250	3,066	3,064	3,063	3,062	3,060
15.500	3,059	3,058	3,056	3,055	3,054
15.750	3,052	3,051	3,049	3,048	3,045
16.000	3,043	3,039	3,036	3,032	3,028
16.250	3,024	3,019	3,014	3,009	3,004
16.500	2,999	2,993	2,988	2,981	2,975
16.750	2,969	2,962	2,955	2,948	2,941
17.000	2,934	2,926	2,918	2,910	2,902
17.250	2,893	2,885	2,876	2,867	2,857
17.500	2,848	2,838	2,828	2,818	2,808
17.750	2,797	2,786	2,775	2,764	2,753
18.000	2,741	2,729	2,717	2,705	2,693
18.250	2,681	2,668	2,656	2,644	2,631
18.500	2,619	2,606	2,593	2,581	2,568
18.750	2,555	2,542	2,529	2,516	2,503
19.000	2,490	2,477	2,463	2,450	2,437
19.250	2,423	2,410	2,396	2,382	2,369
19.500	2,355	2,341	2,327	2,313	2,299
19.750	2,285	2,271	2,257	2,242	2,228
20.000	2,214	2,199	2,185	2,170	2,155

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 100 years

Label: Stormwater Planters - 2

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
20.250	2,141	2,126	2,111	2,096	2,082
20.500	2,067	2,052	2,037	2,022	2,007
20.750	1,991	1,976	1,961	1,946	1,930
21.000	1,915	1,900	1,884	1,869	1,853
21.250	1,837	1,822	1,806	1,790	1,775
21.500	1,759	1,743	1,727	1,711	1,695
21.750	1,679	1,663	1,647	1,630	1,614
22.000	1,598	1,581	1,565	1,549	1,532
22.250	1,516	1,499	1,482	1,466	1,449
22.500	1,432	1,415	1,398	1,381	1,364
22.750	1,347	1,330	1,313	1,296	1,279
23.000	1,262	1,244	1,227	1,210	1,192
23.250	1,175	1,157	1,140	1,122	1,104
23.500	1,087	1,069	1,051	1,033	1,015
23.750	997	979	961	943	925
24.000	907	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 1 years

Label: XFILTRATION SYSTEM

Storm Event: 1 year

Scenario: Post-Development 1 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
0.000	0	14	13	13	13
0.250	12	12	12	11	11
0.500	11	11	10	10	10
0.750	10	9	9	9	9
1.000	8	8	8	8	8
1.250	7	7	7	7	7
1.500	7	6	6	6	6
1.750	6	6	6	6	6
2.000	6	6	6	7	7
2.250	7	7	7	8	8
2.500	8	9	9	10	10
2.750	10	11	11	12	12
3.000	13	13	14	15	15
3.250	16	16	17	18	18
3.500	19	20	21	21	22
3.750	23	24	24	25	26
4.000	27	28	29	30	31
4.250	32	33	34	35	36
4.500	37	39	40	41	42
4.750	43	45	46	47	48
5.000	50	51	52	54	55
5.250	57	58	59	61	62
5.500	64	65	67	68	70
5.750	71	73	74	76	78
6.000	79	81	82	84	86
6.250	87	89	91	93	95
6.500	97	99	101	103	105
6.750	107	110	112	114	117
7.000	119	122	124	127	130
7.250	132	135	138	140	143
7.500	146	149	152	155	158
7.750	161	164	168	171	174
8.000	177	181	184	188	191
8.250	195	199	203	207	211
8.500	216	220	225	229	234
8.750	239	245	250	255	261
9.000	266	273	280	287	295
9.250	302	310	318	326	334
9.500	342	351	359	368	377
9.750	385	394	403	413	422

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume
 Label: XFILTRATION SYSTEM
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
10.000	431	441	451	461	471
10.250	482	493	504	516	528
10.500	540	553	566	580	594
10.750	609	623	639	654	670
11.000	686	703	720	739	759
11.250	780	803	826	850	876
11.500	902	929	956	985	1,017
11.750	1,052	1,090	1,129	1,169	1,209
12.000	1,251	1,298	1,349	1,400	1,450
12.250	1,498	1,543	1,586	1,628	1,668
12.500	1,706	1,742	1,778	1,812	1,846
12.750	1,879	1,911	1,943	1,975	2,006
13.000	2,036	2,065	2,094	2,122	2,150
13.250	2,178	2,205	2,232	2,257	2,274
13.500	2,283	2,293	2,302	2,310	2,319
13.750	2,328	2,336	2,344	2,352	2,359
14.000	2,367	2,374	2,381	2,388	2,395
14.250	2,402	2,408	2,415	2,421	2,427
14.500	2,434	2,440	2,446	2,453	2,459
14.750	2,465	2,471	2,476	2,482	2,488
15.000	2,493	2,498	2,503	2,508	2,513
15.250	2,518	2,523	2,527	2,532	2,536
15.500	2,541	2,545	2,549	2,553	2,557
15.750	2,560	2,564	2,568	2,571	2,574
16.000	2,578	2,581	2,584	2,587	2,590
16.250	2,593	2,596	2,598	2,601	2,604
16.500	2,606	2,609	2,611	2,614	2,616
16.750	2,618	2,621	2,623	2,625	2,627
17.000	2,629	2,631	2,633	2,629	2,615
17.250	2,595	2,576	2,557	2,537	2,518
17.500	2,499	2,480	2,461	2,442	2,424
17.750	2,407	2,389	2,372	2,355	2,338
18.000	2,321	2,305	2,288	2,271	2,255
18.250	2,238	2,222	2,206	2,190	2,174
18.500	2,158	2,142	2,126	2,111	2,096
18.750	2,080	2,065	2,050	2,035	2,020
19.000	2,004	1,989	1,974	1,959	1,944
19.250	1,930	1,915	1,901	1,887	1,873
19.500	1,859	1,845	1,832	1,818	1,805
19.750	1,792	1,778	1,765	1,753	1,740
20.000	1,727	1,708	1,682	1,657	1,631

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume
 Label: XFILTRATION SYSTEM
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
20.250	1,605	1,580	1,555	1,530	1,505
20.500	1,480	1,456	1,432	1,409	1,385
20.750	1,362	1,339	1,316	1,294	1,272
21.000	1,252	1,232	1,213	1,193	1,174
21.250	1,156	1,137	1,118	1,100	1,082
21.500	1,064	1,046	1,029	1,011	994
21.750	977	960	944	927	910
22.000	892	874	856	839	822
22.250	806	790	775	759	744
22.500	730	716	702	688	675
22.750	662	650	637	625	613
23.000	602	591	580	569	559
23.250	548	539	529	519	510
23.500	501	492	484	475	467
23.750	459	451	443	436	428
24.000	421	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 10 years

Label: XFILTRATION SYSTEM

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
0.000	0	14	13	13	13
0.250	12	12	12	11	11
0.500	11	11	10	10	10
0.750	10	9	9	9	9
1.000	9	9	9	9	9
1.250	10	10	11	12	12
1.500	13	14	15	16	17
1.750	18	19	20	21	22
2.000	23	24	26	27	28
2.250	30	31	33	34	36
2.500	38	39	41	43	45
2.750	47	49	51	53	56
3.000	58	60	62	65	67
3.250	70	72	75	77	80
3.500	83	85	88	91	94
3.750	96	99	102	105	108
4.000	111	114	117	120	123
4.250	126	129	132	135	139
4.500	142	145	148	151	155
4.750	158	161	165	168	171
5.000	174	178	181	185	188
5.250	191	195	198	201	205
5.500	208	212	215	219	222
5.750	226	229	232	236	239
6.000	243	246	250	254	257
6.250	261	265	269	274	279
6.500	284	290	295	301	306
6.750	312	318	324	331	337
7.000	343	350	356	363	370
7.250	377	384	391	398	406
7.500	413	421	428	436	444
7.750	451	459	467	475	484
8.000	492	500	509	517	526
8.250	535	545	555	565	576
8.500	587	599	611	623	635
8.750	648	661	675	688	703
9.000	717	731	746	761	777
9.250	793	809	825	841	858
9.500	875	892	909	926	941
9.750	957	974	990	1,006	1,023

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 10 years

Label: XFILTRATION SYSTEM

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
10.000	1,040	1,057	1,074	1,092	1,110
10.250	1,129	1,148	1,167	1,187	1,208
10.500	1,229	1,251	1,273	1,298	1,323
10.750	1,349	1,374	1,400	1,425	1,451
11.000	1,476	1,502	1,527	1,553	1,579
11.250	1,606	1,634	1,662	1,690	1,719
11.500	1,748	1,779	1,812	1,848	1,885
11.750	1,924	1,965	2,007	2,050	2,096
12.000	2,148	2,209	2,275	2,342	2,520
12.250	2,772	2,955	3,105	3,228	3,332
12.500	3,426	3,508	3,576	3,629	3,671
12.750	3,708	3,737	3,760	3,777	3,788
13.000	3,795	3,797	3,795	3,790	3,783
13.250	3,774	3,764	3,754	3,742	3,730
13.500	3,717	3,704	3,690	3,676	3,662
13.750	3,648	3,634	3,620	3,606	3,591
14.000	3,577	3,562	3,549	3,535	3,522
14.250	3,509	3,497	3,486	3,474	3,463
14.500	3,453	3,443	3,433	3,423	3,414
14.750	3,405	3,396	3,388	3,381	3,374
15.000	3,367	3,360	3,354	3,348	3,342
15.250	3,337	3,332	3,327	3,322	3,318
15.500	3,314	3,310	3,303	3,288	3,268
15.750	3,250	3,231	3,214	3,197	3,180
16.000	3,164	3,148	3,133	3,119	3,105
16.250	3,092	3,079	3,066	3,054	3,042
16.500	3,031	3,020	3,010	3,000	2,990
16.750	2,980	2,971	2,963	2,954	2,946
17.000	2,938	2,930	2,923	2,916	2,909
17.250	2,902	2,895	2,889	2,883	2,877
17.500	2,871	2,866	2,860	2,855	2,850
17.750	2,845	2,840	2,836	2,831	2,826
18.000	2,822	2,817	2,813	2,809	2,805
18.250	2,801	2,798	2,794	2,791	2,787
18.500	2,784	2,781	2,778	2,775	2,772
18.750	2,770	2,767	2,765	2,762	2,760
19.000	2,758	2,755	2,753	2,751	2,749
19.250	2,747	2,745	2,744	2,742	2,740
19.500	2,739	2,737	2,735	2,734	2,732
19.750	2,731	2,730	2,728	2,727	2,726
20.000	2,724	2,723	2,722	2,721	2,720

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 10 years

Label: XFILTRATION SYSTEM

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
20.250	2,719	2,718	2,717	2,716	2,715
20.500	2,714	2,713	2,712	2,711	2,710
20.750	2,709	2,708	2,708	2,707	2,706
21.000	2,705	2,705	2,704	2,703	2,703
21.250	2,702	2,701	2,701	2,700	2,699
21.500	2,699	2,698	2,698	2,697	2,696
21.750	2,696	2,695	2,695	2,694	2,694
22.000	2,693	2,693	2,692	2,692	2,691
22.250	2,691	2,690	2,690	2,689	2,689
22.500	2,689	2,688	2,688	2,687	2,687
22.750	2,686	2,686	2,686	2,685	2,685
23.000	2,684	2,684	2,684	2,683	2,683
23.250	2,682	2,682	2,676	2,659	2,638
23.500	2,617	2,597	2,576	2,556	2,536
23.750	2,516	2,496	2,476	2,457	2,437
24.000	2,419	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 25 years

Label: XFILTRATION SYSTEM

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
0.000	0	14	13	13	13
0.250	12	12	12	11	11
0.500	11	11	10	10	10
0.750	10	10	10	10	10
1.000	11	11	12	13	14
1.250	15	16	18	19	21
1.500	22	24	25	27	29
1.750	30	32	34	36	38
2.000	40	42	45	47	50
2.250	52	55	57	60	63
2.500	66	69	72	75	78
2.750	81	84	88	91	94
3.000	98	101	105	109	112
3.250	116	120	123	127	131
3.500	135	139	143	147	151
3.750	155	159	163	167	171
4.000	175	179	183	188	192
4.250	196	200	205	209	213
4.500	217	222	226	231	235
4.750	239	244	248	252	257
5.000	261	266	271	276	281
5.250	287	292	298	303	309
5.500	314	320	325	331	336
5.750	342	348	353	359	364
6.000	370	375	381	386	392
6.250	398	404	411	417	424
6.500	430	437	445	452	459
6.750	467	475	482	490	499
7.000	507	515	524	532	541
7.250	550	559	568	578	587
7.500	597	607	617	627	637
7.750	648	658	669	680	690
8.000	701	712	724	735	747
8.250	760	772	786	799	814
8.500	828	843	859	875	891
8.750	908	924	939	955	971
9.000	988	1,004	1,021	1,038	1,056
9.250	1,073	1,091	1,109	1,128	1,147
9.500	1,166	1,185	1,204	1,224	1,244
9.750	1,264	1,286	1,309	1,333	1,356

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 25 years

Label: XFILTRATION SYSTEM

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
10.000	1,380	1,404	1,428	1,453	1,477
10.250	1,501	1,526	1,550	1,575	1,600
10.500	1,624	1,649	1,673	1,697	1,721
10.750	1,746	1,770	1,794	1,819	1,843
11.000	1,868	1,893	1,918	1,943	1,970
11.250	1,997	2,025	2,053	2,081	2,111
11.500	2,142	2,173	2,206	2,240	2,276
11.750	2,314	2,355	2,398	2,446	2,502
12.000	2,569	2,680	3,025	3,476	3,866
12.250	4,284	4,679	5,021	5,319	5,543
12.500	5,701	5,802	5,861	5,887	5,892
12.750	5,881	5,861	5,832	5,796	5,755
13.000	5,709	5,658	5,604	5,547	5,489
13.250	5,430	5,370	5,307	5,244	5,182
13.500	5,120	5,058	4,996	4,936	4,880
13.750	4,823	4,767	4,711	4,656	4,601
14.000	4,547	4,492	4,439	4,388	4,339
14.250	4,291	4,246	4,202	4,160	4,119
14.500	4,079	4,040	4,002	3,965	3,930
14.750	3,896	3,864	3,833	3,804	3,776
15.000	3,749	3,723	3,698	3,675	3,653
15.250	3,633	3,613	3,595	3,577	3,559
15.500	3,543	3,527	3,512	3,498	3,484
15.750	3,472	3,459	3,448	3,437	3,427
16.000	3,417	3,407	3,398	3,390	3,382
16.250	3,367	3,344	3,322	3,300	3,280
16.500	3,261	3,242	3,225	3,207	3,191
16.750	3,175	3,160	3,145	3,130	3,116
17.000	3,103	3,090	3,078	3,066	3,054
17.250	3,043	3,032	3,022	3,011	3,002
17.500	2,992	2,983	2,974	2,966	2,957
17.750	2,949	2,941	2,934	2,926	2,919
18.000	2,912	2,906	2,899	2,893	2,887
18.250	2,881	2,875	2,870	2,865	2,860
18.500	2,855	2,850	2,846	2,841	2,837
18.750	2,833	2,829	2,825	2,821	2,817
19.000	2,814	2,810	2,807	2,804	2,801
19.250	2,798	2,795	2,792	2,789	2,787
19.500	2,784	2,782	2,779	2,777	2,775
19.750	2,772	2,770	2,768	2,766	2,764
20.000	2,762	2,760	2,759	2,757	2,755

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 25 years

Label: XFILTRATION SYSTEM

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
20.250	2,754	2,752	2,751	2,749	2,748
20.500	2,746	2,745	2,743	2,742	2,741
20.750	2,740	2,739	2,737	2,736	2,735
21.000	2,734	2,733	2,732	2,731	2,730
21.250	2,729	2,728	2,727	2,726	2,725
21.500	2,725	2,724	2,723	2,722	2,721
21.750	2,720	2,720	2,719	2,718	2,718
22.000	2,717	2,716	2,715	2,715	2,714
22.250	2,713	2,713	2,712	2,711	2,711
22.500	2,710	2,710	2,709	2,708	2,708
22.750	2,707	2,707	2,706	2,706	2,705
23.000	2,704	2,704	2,703	2,703	2,702
23.250	2,702	2,701	2,701	2,700	2,700
23.500	2,699	2,699	2,698	2,698	2,697
23.750	2,697	2,696	2,696	2,695	2,695
24.000	2,694	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 100 years

Label: XFILTRATION SYSTEM

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
0.000	0	14	13	13	13
0.250	12	12	12	11	11
0.500	11	11	11	11	12
0.750	13	14	15	17	19
1.000	21	23	25	28	30
1.250	33	36	39	42	46
1.500	50	53	57	61	65
1.750	70	74	78	83	88
2.000	92	97	102	106	111
2.250	116	121	127	132	137
2.500	142	148	153	159	164
2.750	170	176	182	187	193
3.000	199	205	211	217	223
3.250	229	235	242	248	254
3.500	260	267	274	282	289
3.750	297	305	313	321	329
4.000	337	345	353	361	369
4.250	377	385	393	401	409
4.500	417	425	433	441	449
4.750	457	465	473	481	489
5.000	497	505	513	521	529
5.250	537	545	553	561	569
5.500	577	585	593	601	609
5.750	617	625	633	641	649
6.000	657	665	674	682	690
6.250	699	708	718	727	737
6.500	747	758	768	779	790
6.750	802	813	825	837	849
7.000	862	874	887	900	914
7.250	926	938	950	963	976
7.500	990	1,003	1,018	1,032	1,046
7.750	1,061	1,076	1,091	1,107	1,122
8.000	1,138	1,153	1,169	1,185	1,202
8.250	1,219	1,236	1,254	1,272	1,292
8.500	1,314	1,335	1,357	1,380	1,403
8.750	1,427	1,451	1,475	1,499	1,522
9.000	1,546	1,570	1,594	1,618	1,642
9.250	1,665	1,688	1,711	1,734	1,757
9.500	1,780	1,803	1,826	1,849	1,872
9.750	1,894	1,917	1,940	1,963	1,986

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 100 years

Label: XFILTRATION SYSTEM

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
10.000	2,009	2,031	2,053	2,075	2,098
10.250	2,120	2,143	2,166	2,189	2,213
10.500	2,237	2,261	2,286	2,310	2,335
10.750	2,361	2,386	2,412	2,439	2,468
11.000	2,497	2,526	2,556	2,587	2,619
11.250	2,651	2,681	2,711	2,740	2,769
11.500	2,797	2,825	2,852	2,881	2,912
11.750	2,947	2,985	3,069	3,296	3,625
12.000	4,086	4,776	5,834	7,086	8,213
12.250	9,079	9,715	10,228	10,605	10,896
12.500	11,106	11,221	11,262	11,247	11,199
12.750	11,134	11,054	10,962	10,860	10,749
13.000	10,644	10,533	10,418	10,291	10,157
13.250	10,022	9,890	9,758	9,626	9,502
13.500	9,378	9,255	9,125	8,992	8,860
13.750	8,732	8,606	8,481	8,358	8,238
14.000	8,119	8,000	7,875	7,749	7,625
14.250	7,505	7,390	7,276	7,164	7,054
14.500	6,947	6,841	6,737	6,630	6,522
14.750	6,416	6,312	6,212	6,117	6,022
15.000	5,930	5,838	5,749	5,661	5,574
15.250	5,490	5,407	5,322	5,238	5,155
15.500	5,074	4,994	4,918	4,846	4,775
15.750	4,706	4,638	4,571	4,505	4,442
16.000	4,381	4,323	4,268	4,216	4,166
16.250	4,119	4,073	4,028	3,986	3,945
16.500	3,907	3,870	3,835	3,802	3,771
16.750	3,741	3,713	3,686	3,662	3,639
17.000	3,618	3,598	3,575	3,546	3,514
17.250	3,483	3,454	3,427	3,401	3,376
17.500	3,353	3,331	3,310	3,290	3,271
17.750	3,253	3,235	3,218	3,202	3,186
18.000	3,170	3,156	3,141	3,127	3,114
18.250	3,101	3,089	3,077	3,066	3,055
18.500	3,044	3,034	3,024	3,015	3,005
18.750	2,997	2,988	2,980	2,972	2,965
19.000	2,957	2,950	2,943	2,937	2,931
19.250	2,924	2,919	2,913	2,907	2,902
19.500	2,897	2,892	2,887	2,883	2,878
19.750	2,874	2,870	2,865	2,862	2,858
20.000	2,854	2,851	2,847	2,844	2,841

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 100 years

Label: XFILTRATION SYSTEM

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ft³)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)	Volume (ft ³)
20.250	2,837	2,834	2,831	2,828	2,826
20.500	2,823	2,820	2,817	2,815	2,813
20.750	2,810	2,808	2,806	2,803	2,801
21.000	2,799	2,797	2,795	2,793	2,792
21.250	2,790	2,788	2,786	2,785	2,783
21.500	2,782	2,780	2,779	2,777	2,776
21.750	2,774	2,773	2,772	2,770	2,769
22.000	2,768	2,767	2,765	2,764	2,763
22.250	2,762	2,761	2,760	2,759	2,757
22.500	2,756	2,755	2,754	2,753	2,752
22.750	2,752	2,751	2,750	2,749	2,748
23.000	2,747	2,746	2,745	2,744	2,743
23.250	2,743	2,742	2,741	2,740	2,739
23.500	2,738	2,738	2,737	2,736	2,735
23.750	2,734	2,734	2,733	2,732	2,731
24.000	2,731	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Area Volume Curve

Return Event: 1 years

Label: 24" Depth Green Roof

Storm Event: 1 year

Scenario: Post-Development 1 year

Elevation (ft)	Planimeter (ft ²)	Area (ft ²)	A1+A2+sq (A1*A2) (ft ²)	Volume (ft ³)	Volume (Total) (ft ³)
93.00	0.0	508	0	0	0
93.17	0.0	508	1,523	86	86
93.18	0.0	1,016	2,241	7	94
95.17	0.0	1,016	3,047	2,021	2,115
95.18	0.0	2,031	4,483	15	2,130
95.30	0.0	2,031	6,093	244	2,373

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Area Volume Curve

Return Event: 10 years

Label: 24" Depth Green Roof

Storm Event: 10 year

Scenario: Post-Development 10 year

Elevation (ft)	Planimeter (ft ²)	Area (ft ²)	A1+A2+sqr (A1*A2) (ft ²)	Volume (ft ³)	Volume (Total) (ft ³)
93.00	0.0	508	0	0	0
93.17	0.0	508	1,523	86	86
93.18	0.0	1,016	2,241	7	94
95.17	0.0	1,016	3,047	2,021	2,115
95.18	0.0	2,031	4,483	15	2,130
95.30	0.0	2,031	6,093	244	2,373

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Area Volume Curve

Return Event: 25 years

Label: 24" Depth Green Roof

Storm Event: 25 year

Scenario: Post-Development 25 year

Elevation (ft)	Planimeter (ft ²)	Area (ft ²)	A1+A2+sq (A1*A2) (ft ²)	Volume (ft ³)	Volume (Total) (ft ³)
93.00	0.0	508	0	0	0
93.17	0.0	508	1,523	86	86
93.18	0.0	1,016	2,241	7	94
95.17	0.0	1,016	3,047	2,021	2,115
95.18	0.0	2,031	4,483	15	2,130
95.30	0.0	2,031	6,093	244	2,373

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Area Volume Curve

Return Event: 100 years

Label: 24" Depth Green Roof

Storm Event: 100 year

Scenario: Post-Development 100 year

Elevation (ft)	Planimeter (ft ²)	Area (ft ²)	A1+A2+sq (A1*A2) (ft ²)	Volume (ft ³)	Volume (Total) (ft ³)
93.00	0.0	508	0	0	0
93.17	0.0	508	1,523	86	86
93.18	0.0	1,016	2,241	7	94
95.17	0.0	1,016	3,047	2,021	2,115
95.18	0.0	2,031	4,483	15	2,130
95.30	0.0	2,031	6,093	244	2,373

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Area Volume Curve

Return Event: 1 years

Label: 6" Depth Green Roof

Storm Event: 1 year

Scenario: Post-Development 1 year

Elevation (ft)	Planimeter (ft ²)	Area (ft ²)	A1+A2+sq (A1*A2) (ft ²)	Volume (ft ³)	Volume (Total) (ft ³)
93.00	0.0	696	0	0	0
93.17	0.0	696	2,088	118	118
93.18	0.0	1,392	3,072	10	129
93.67	0.0	1,392	4,176	682	811
93.68	0.0	2,784	6,145	20	831
93.75	0.0	2,784	8,352	195	1,026

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Area Volume Curve

Return Event: 10 years

Label: 6" Depth Green Roof

Storm Event: 10 year

Scenario: Post-Development 10 year

Elevation (ft)	Planimeter (ft ²)	Area (ft ²)	A1+A2+sq (A1*A2) (ft ²)	Volume (ft ³)	Volume (Total) (ft ³)
93.00	0.0	696	0	0	0
93.17	0.0	696	2,088	118	118
93.18	0.0	1,392	3,072	10	129
93.67	0.0	1,392	4,176	682	811
93.68	0.0	2,784	6,145	20	831
93.75	0.0	2,784	8,352	195	1,026

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Area Volume Curve

Return Event: 25 years

Label: 6" Depth Green Roof

Storm Event: 25 year

Scenario: Post-Development 25 year

Elevation (ft)	Planimeter (ft ²)	Area (ft ²)	A1+A2+sqr (A1*A2) (ft ²)	Volume (ft ³)	Volume (Total) (ft ³)
93.00	0.0	696	0	0	0
93.17	0.0	696	2,088	118	118
93.18	0.0	1,392	3,072	10	129
93.67	0.0	1,392	4,176	682	811
93.68	0.0	2,784	6,145	20	831
93.75	0.0	2,784	8,352	195	1,026

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Area Volume Curve

Return Event: 100 years

Label: 6" Depth Green Roof

Storm Event: 100 year

Scenario: Post-Development 100 year

Elevation (ft)	Planimeter (ft ²)	Area (ft ²)	A1+A2+sq (A1*A2) (ft ²)	Volume (ft ³)	Volume (Total) (ft ³)
93.00	0.0	696	0	0	0
93.17	0.0	696	2,088	118	118
93.18	0.0	1,392	3,072	10	129
93.67	0.0	1,392	4,176	682	811
93.68	0.0	2,784	6,145	20	831
93.75	0.0	2,784	8,352	195	1,026

Existing and Proposed Hydrologic Calculations

Subsection: Elevation vs. Volume Curve

Return Event: 1 years

Label: MC-3500 - 3

Storm Event: 1 year

Scenario: Post-Development 1 year

Elevation-Volume

Pond Elevation (ft)	Pond Volume (ft ³)
62.85	0
63.60	2,229
63.85	3,865
64.10	5,483
64.35	7,084
64.60	8,662
64.85	10,217
65.10	11,741
65.35	13,232
65.60	14,682
65.85	16,086
66.10	17,436
66.35	18,721
66.60	19,927
66.85	21,030
67.10	21,951
67.35	22,741
68.35	25,712

Existing and Proposed Hydrologic Calculations

Subsection: Elevation vs. Volume Curve

Return Event: 10 years

Label: MC-3500 - 3

Storm Event: 10 year

Scenario: Post-Development 10 year

Elevation-Volume

Pond Elevation (ft)	Pond Volume (ft ³)
62.85	0
63.60	2,229
63.85	3,865
64.10	5,483
64.35	7,084
64.60	8,662
64.85	10,217
65.10	11,741
65.35	13,232
65.60	14,682
65.85	16,086
66.10	17,436
66.35	18,721
66.60	19,927
66.85	21,030
67.10	21,951
67.35	22,741
68.35	25,712

Existing and Proposed Hydrologic Calculations

Subsection: Elevation vs. Volume Curve

Return Event: 25 years

Label: MC-3500 - 3

Storm Event: 25 year

Scenario: Post-Development 25 year

Elevation-Volume

Pond Elevation (ft)	Pond Volume (ft ³)
62.85	0
63.60	2,229
63.85	3,865
64.10	5,483
64.35	7,084
64.60	8,662
64.85	10,217
65.10	11,741
65.35	13,232
65.60	14,682
65.85	16,086
66.10	17,436
66.35	18,721
66.60	19,927
66.85	21,030
67.10	21,951
67.35	22,741
68.35	25,712

Existing and Proposed Hydrologic Calculations

Subsection: Elevation vs. Volume Curve

Return Event: 100 years

Label: MC-3500 - 3

Storm Event: 100 year

Scenario: Post-Development 100 year

Elevation-Volume

Pond Elevation (ft)	Pond Volume (ft ³)
62.85	0
63.60	2,229
63.85	3,865
64.10	5,483
64.35	7,084
64.60	8,662
64.85	10,217
65.10	11,741
65.35	13,232
65.60	14,682
65.85	16,086
66.10	17,436
66.35	18,721
66.60	19,927
66.85	21,030
67.10	21,951
67.35	22,741
68.35	25,712

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Area Volume Curve

Return Event: 1 years

Label: Stormwater Planters - 2

Storm Event: 1 year

Scenario: Post-Development 1 year

Elevation (ft)	Planimeter (ft ²)	Area (ft ²)	A1+A2+sqr (A1*A2) (ft ²)	Volume (ft ³)	Volume (Total) (ft ³)
78.81	0.0	3,050	0	0	0
80.31	0.0	3,050	9,150	4,575	4,575

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Area Volume Curve

Return Event: 10 years

Label: Stormwater Planters - 2

Storm Event: 10 year

Scenario: Post-Development 10 year

Elevation (ft)	Planimeter (ft ²)	Area (ft ²)	A1+A2+sqr (A1*A2) (ft ²)	Volume (ft ³)	Volume (Total) (ft ³)
78.81	0.0	3,050	0	0	0
80.31	0.0	3,050	9,150	4,575	4,575

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Area Volume Curve

Return Event: 25 years

Label: Stormwater Planters - 2

Storm Event: 25 year

Scenario: Post-Development 25 year

Elevation (ft)	Planimeter (ft ²)	Area (ft ²)	A1+A2+sqr (A1*A2) (ft ²)	Volume (ft ³)	Volume (Total) (ft ³)
78.81	0.0	3,050	0	0	0
80.31	0.0	3,050	9,150	4,575	4,575

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Area Volume Curve

Return Event: 100 years

Label: Stormwater Planters - 2

Storm Event: 100 year

Scenario: Post-Development 100 year

Elevation (ft)	Planimeter (ft ²)	Area (ft ²)	A1+A2+sqr (A1*A2) (ft ²)	Volume (ft ³)	Volume (Total) (ft ³)
78.81	0.0	3,050	0	0	0
80.31	0.0	3,050	9,150	4,575	4,575

Existing and Proposed Hydrologic Calculations

Subsection: Elevation vs. Volume Curve

Return Event: 1 years

Label: XFILTRATION SYSTEM

Storm Event: 1 year

Scenario: Post-Development 1 year

Elevation-Volume

Pond Elevation (ft)	Pond Volume (ft ³)
71.50	0
71.67	269
71.83	580
72.00	917
72.17	1,273
72.33	1,646
72.50	2,032
72.67	2,428
72.83	2,835
73.00	3,248
73.17	3,669
73.33	4,094
73.50	4,523
73.67	4,956
73.83	5,390
74.00	5,826
74.17	6,261
74.33	6,696
74.50	7,128
74.67	7,558
74.83	7,983
75.00	8,403
75.17	8,817
75.33	9,223
75.50	9,620
75.67	10,006
75.83	10,378
76.00	10,735
76.17	11,072
76.33	11,383
76.50	11,652

Existing and Proposed Hydrologic Calculations

Subsection: Elevation vs. Volume Curve

Return Event: 10 years

Label: XFILTRATION SYSTEM

Storm Event: 10 year

Scenario: Post-Development 10 year

Elevation-Volume

Pond Elevation (ft)	Pond Volume (ft ³)
71.50	0
71.67	269
71.83	580
72.00	917
72.17	1,273
72.33	1,646
72.50	2,032
72.67	2,428
72.83	2,835
73.00	3,248
73.17	3,669
73.33	4,094
73.50	4,523
73.67	4,956
73.83	5,390
74.00	5,826
74.17	6,261
74.33	6,696
74.50	7,128
74.67	7,558
74.83	7,983
75.00	8,403
75.17	8,817
75.33	9,223
75.50	9,620
75.67	10,006
75.83	10,378
76.00	10,735
76.17	11,072
76.33	11,383
76.50	11,652

Existing and Proposed Hydrologic Calculations

Subsection: Elevation vs. Volume Curve

Return Event: 25 years

Label: XFILTRATION SYSTEM

Storm Event: 25 year

Scenario: Post-Development 25 year

Elevation-Volume

Pond Elevation (ft)	Pond Volume (ft ³)
71.50	0
71.67	269
71.83	580
72.00	917
72.17	1,273
72.33	1,646
72.50	2,032
72.67	2,428
72.83	2,835
73.00	3,248
73.17	3,669
73.33	4,094
73.50	4,523
73.67	4,956
73.83	5,390
74.00	5,826
74.17	6,261
74.33	6,696
74.50	7,128
74.67	7,558
74.83	7,983
75.00	8,403
75.17	8,817
75.33	9,223
75.50	9,620
75.67	10,006
75.83	10,378
76.00	10,735
76.17	11,072
76.33	11,383
76.50	11,652

Existing and Proposed Hydrologic Calculations

Subsection: Elevation vs. Volume Curve

Return Event: 100 years

Label: XFILTRATION SYSTEM

Storm Event: 100 year

Scenario: Post-Development 100 year

Elevation-Volume

Pond Elevation (ft)	Pond Volume (ft ³)
71.50	0
71.67	269
71.83	580
72.00	917
72.17	1,273
72.33	1,646
72.50	2,032
72.67	2,428
72.83	2,835
73.00	3,248
73.17	3,669
73.33	4,094
73.50	4,523
73.67	4,956
73.83	5,390
74.00	5,826
74.17	6,261
74.33	6,696
74.50	7,128
74.67	7,558
74.83	7,983
75.00	8,403
75.17	8,817
75.33	9,223
75.50	9,620
75.67	10,006
75.83	10,378
76.00	10,735
76.17	11,072
76.33	11,383
76.50	11,652

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data
 Label: 24-GR OUT
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	93.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	95.30 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	95.30
Rectangular Weir Tailwater Settings	Weir - 1 Tailwater	Forward	TW	95.21 (N/A)	95.30 (N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data
 Label: 24-GR OUT
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Structure ID: User Defined Rating Table - 1
 Structure Type: User Defined Table

Elevation (ft)	Flow (ft ³ /s)
0.00	0.09
2.00	0.09
2.30	0.09

Structure ID: Weir - 1
 Structure Type: Rectangular Weir

Number of Openings	1
Elevation	95.21 ft
Weir Length	45.00 ft
Weir Coefficient	3.00 (ft ^{0.5})/s

Structure ID: TW
 Structure Type: TW Setup, DS Channel

Tailwater Type	Free Outfall
----------------	--------------

Convergence Tolerances

Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 1 years

Label: 24-GR OUT

Storm Event: 1 year

Scenario: Post-Development 1 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = User Defined Rating Table - 1 (User Defined Table)

Upstream ID = (Pond Water Surface)

Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.09	(N/A)	0.00
93.10	0.09	(N/A)	0.00
93.20	0.09	(N/A)	0.00
93.30	0.09	(N/A)	0.00
93.40	0.09	(N/A)	0.00
93.50	0.09	(N/A)	0.00
93.60	0.09	(N/A)	0.00
93.70	0.09	(N/A)	0.00
93.80	0.09	(N/A)	0.00
93.90	0.09	(N/A)	0.00
94.00	0.09	(N/A)	0.00
94.10	0.09	(N/A)	0.00
94.20	0.09	(N/A)	0.00
94.30	0.09	(N/A)	0.00
94.40	0.09	(N/A)	0.00
94.50	0.09	(N/A)	0.00
94.60	0.09	(N/A)	0.00
94.70	0.09	(N/A)	0.00
94.80	0.09	(N/A)	0.00
94.90	0.09	(N/A)	0.00
95.00	0.09	(N/A)	0.00
95.10	0.09	(N/A)	0.00
95.20	0.09	(N/A)	0.00
95.21	0.09	(N/A)	0.00
95.30	0.09	(N/A)	0.00

Computation Messages

Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: 24-GR OUT

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = User Defined Rating Table - 1 (User Defined Table)

Upstream ID = (Pond Water Surface)

Downstream ID = Tailwater (Pond Outfall)

Computation Messages

Interpolated from input table

Interpolated from input table

Interpolated from input table

Interpolated from input table

Interpolated from input table

Interpolated from input table

Interpolated from input table

Interpolated from input table

Interpolated from input table

Interpolated from input table

Interpolated from input table

Interpolated from input table

Interpolated from input table

Interpolated from input table

Interpolated from input table

Interpolated from input table

Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 1 years

Label: 24-GR OUT

Storm Event: 1 year

Scenario: Post-Development 1 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Weir - 1 (Rectangular Weir)

Upstream ID = (Pond Water Surface)

Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.00	(N/A)	0.00
93.10	0.00	(N/A)	0.00
93.20	0.00	(N/A)	0.00
93.30	0.00	(N/A)	0.00
93.40	0.00	(N/A)	0.00
93.50	0.00	(N/A)	0.00
93.60	0.00	(N/A)	0.00
93.70	0.00	(N/A)	0.00
93.80	0.00	(N/A)	0.00
93.90	0.00	(N/A)	0.00
94.00	0.00	(N/A)	0.00
94.10	0.00	(N/A)	0.00
94.20	0.00	(N/A)	0.00
94.30	0.00	(N/A)	0.00
94.40	0.00	(N/A)	0.00
94.50	0.00	(N/A)	0.00
94.60	0.00	(N/A)	0.00
94.70	0.00	(N/A)	0.00
94.80	0.00	(N/A)	0.00
94.90	0.00	(N/A)	0.00
95.00	0.00	(N/A)	0.00
95.10	0.00	(N/A)	0.00
95.20	0.00	(N/A)	0.00
95.21	0.00	(N/A)	0.00
95.30	3.65	(N/A)	0.00

Computation Messages

HW & TW below
 Inv.El.=95.210
 HW & TW below
 Inv.El.=95.210
 HW & TW below
 Inv.El.=95.210
 HW & TW below
 Inv.El.=95.210
 HW & TW below
 Inv.El.=95.210

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: 24-GR OUT

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Weir - 1 (Rectangular Weir)

Upstream ID = (Pond Water Surface)

Downstream ID = Tailwater (Pond Outfall)

Computation Messages

HW & TW below
Inv.El.=95.210

HW & TW below
Inv.El.=95.210

HW & TW below
Inv.El.=95.210

HW & TW below
Inv.El.=95.210

HW & TW below
Inv.El.=95.210

HW & TW below
Inv.El.=95.210

HW & TW below
Inv.El.=95.210

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HW & TW below
Inv.El.=95.210

HW & TW below
Inv.El.=95.210

HW & TW below
Inv.El.=95.210

HW & TW below
Inv.El.=95.210

H=.00; Htw=.00;
Qfree=.00;

H=.09; Htw=.00;
Qfree=3.65;

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Return Event: 1 years

Label: 24-GR OUT

Storm Event: 1 year

Scenario: Post-Development 1 year

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.09	(N/A)	0.00
93.10	0.09	(N/A)	0.00
93.20	0.09	(N/A)	0.00
93.30	0.09	(N/A)	0.00
93.40	0.09	(N/A)	0.00
93.50	0.09	(N/A)	0.00
93.60	0.09	(N/A)	0.00
93.70	0.09	(N/A)	0.00
93.80	0.09	(N/A)	0.00
93.90	0.09	(N/A)	0.00
94.00	0.09	(N/A)	0.00
94.10	0.09	(N/A)	0.00
94.20	0.09	(N/A)	0.00
94.30	0.09	(N/A)	0.00
94.40	0.09	(N/A)	0.00
94.50	0.09	(N/A)	0.00
94.60	0.09	(N/A)	0.00
94.70	0.09	(N/A)	0.00
94.80	0.09	(N/A)	0.00
94.90	0.09	(N/A)	0.00
95.00	0.09	(N/A)	0.00
95.10	0.09	(N/A)	0.00
95.20	0.09	(N/A)	0.00
95.21	0.09	(N/A)	0.00
95.30	3.74	(N/A)	0.00

Contributing Structures

User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Label: 24-GR OUT

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Composite Outflow Summary

Contributing Structures
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
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User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1 + Weir - 1
User Defined Rating Table - 1 + Weir - 1

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 10 years

Label: 24-GR OUT

Storm Event: 10 year

Scenario: Post-Development 10 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	93.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	95.30 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	95.30
Rectangular Weir Tailwater Settings	Weir - 1 Tailwater	Forward	TW	95.21 (N/A)	95.30 (N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Label: 24-GR OUT

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

Structure ID: User Defined Rating Table - 1
 Structure Type: User Defined Table

Elevation (ft)	Flow (ft ³ /s)
0.00	0.09
2.00	0.09
2.30	0.09

Structure ID: Weir - 1
 Structure Type: Rectangular Weir

Number of Openings	1
Elevation	95.21 ft
Weir Length	45.00 ft
Weir Coefficient	3.00 (ft ^{0.5})/s

Structure ID: TW
 Structure Type: TW Setup, DS Channel

Tailwater Type	Free Outfall
----------------	--------------

Convergence Tolerances

Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: 24-GR OUT
 Scenario: Post-Development 10 year

Return Event: 10 years
 Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = User Defined Rating Table - 1 (User Defined Table)

Upstream ID = (Pond Water Surface)
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.09	(N/A)	0.00
93.10	0.09	(N/A)	0.00
93.20	0.09	(N/A)	0.00
93.30	0.09	(N/A)	0.00
93.40	0.09	(N/A)	0.00
93.50	0.09	(N/A)	0.00
93.60	0.09	(N/A)	0.00
93.70	0.09	(N/A)	0.00
93.80	0.09	(N/A)	0.00
93.90	0.09	(N/A)	0.00
94.00	0.09	(N/A)	0.00
94.10	0.09	(N/A)	0.00
94.20	0.09	(N/A)	0.00
94.30	0.09	(N/A)	0.00
94.40	0.09	(N/A)	0.00
94.50	0.09	(N/A)	0.00
94.60	0.09	(N/A)	0.00
94.70	0.09	(N/A)	0.00
94.80	0.09	(N/A)	0.00
94.90	0.09	(N/A)	0.00
95.00	0.09	(N/A)	0.00
95.10	0.09	(N/A)	0.00
95.20	0.09	(N/A)	0.00
95.21	0.09	(N/A)	0.00
95.30	0.09	(N/A)	0.00

Computation Messages

Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
Label: 24-GR OUT
Scenario: Post-Development 10 year

Return Event: 10 years
Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE
Structure ID = User Defined Rating Table - 1 (User Defined Table)

Upstream ID = (Pond Water Surface)
Downstream ID = Tailwater (Pond Outfall)

Computation Messages

Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table
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Interpolated from input table
Interpolated from input table
Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: 24-GR OUT
 Scenario: Post-Development 10 year

Return Event: 10 years
 Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Weir - 1 (Rectangular Weir)

 Upstream ID = (Pond Water Surface)
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.00	(N/A)	0.00
93.10	0.00	(N/A)	0.00
93.20	0.00	(N/A)	0.00
93.30	0.00	(N/A)	0.00
93.40	0.00	(N/A)	0.00
93.50	0.00	(N/A)	0.00
93.60	0.00	(N/A)	0.00
93.70	0.00	(N/A)	0.00
93.80	0.00	(N/A)	0.00
93.90	0.00	(N/A)	0.00
94.00	0.00	(N/A)	0.00
94.10	0.00	(N/A)	0.00
94.20	0.00	(N/A)	0.00
94.30	0.00	(N/A)	0.00
94.40	0.00	(N/A)	0.00
94.50	0.00	(N/A)	0.00
94.60	0.00	(N/A)	0.00
94.70	0.00	(N/A)	0.00
94.80	0.00	(N/A)	0.00
94.90	0.00	(N/A)	0.00
95.00	0.00	(N/A)	0.00
95.10	0.00	(N/A)	0.00
95.20	0.00	(N/A)	0.00
95.21	0.00	(N/A)	0.00
95.30	3.65	(N/A)	0.00

Computation Messages

HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
Label: 24-GR OUT
Scenario: Post-Development 10 year

Return Event: 10 years
Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE
Structure ID = Weir - 1 (Rectangular Weir)

Upstream ID = (Pond Water Surface)
Downstream ID = Tailwater (Pond Outfall)

Computation Messages

HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 H=.00; Htw=.00; Qfree=.00; H=.09; Htw=.00; Qfree=3.65;

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve
 Label: 24-GR OUT
 Scenario: Post-Development 10 year

Return Event: 10 years
 Storm Event: 10 year

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.09	(N/A)	0.00
93.10	0.09	(N/A)	0.00
93.20	0.09	(N/A)	0.00
93.30	0.09	(N/A)	0.00
93.40	0.09	(N/A)	0.00
93.50	0.09	(N/A)	0.00
93.60	0.09	(N/A)	0.00
93.70	0.09	(N/A)	0.00
93.80	0.09	(N/A)	0.00
93.90	0.09	(N/A)	0.00
94.00	0.09	(N/A)	0.00
94.10	0.09	(N/A)	0.00
94.20	0.09	(N/A)	0.00
94.30	0.09	(N/A)	0.00
94.40	0.09	(N/A)	0.00
94.50	0.09	(N/A)	0.00
94.60	0.09	(N/A)	0.00
94.70	0.09	(N/A)	0.00
94.80	0.09	(N/A)	0.00
94.90	0.09	(N/A)	0.00
95.00	0.09	(N/A)	0.00
95.10	0.09	(N/A)	0.00
95.20	0.09	(N/A)	0.00
95.21	0.09	(N/A)	0.00
95.30	3.74	(N/A)	0.00

Contributing Structures

User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve
Label: 24-GR OUT
Scenario: Post-Development 10 year

Return Event: 10 years
Storm Event: 10 year

Composite Outflow Summary

Contributing Structures
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
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User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1 + Weir - 1
User Defined Rating Table - 1 + Weir - 1

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 25 years

Label: 24-GR OUT

Storm Event: 25 year

Scenario: Post-Development 25 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	93.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	95.30 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	95.30
Rectangular Weir Tailwater Settings	Weir - 1 Tailwater	Forward	TW	95.21 (N/A)	95.30 (N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Label: 24-GR OUT

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Structure ID: User Defined Rating Table - 1
 Structure Type: User Defined Table

Elevation (ft)	Flow (ft ³ /s)
0.00	0.09
2.00	0.09
2.30	0.09

Structure ID: Weir - 1
 Structure Type: Rectangular Weir

Number of Openings	1
Elevation	95.21 ft
Weir Length	45.00 ft
Weir Coefficient	3.00 (ft ^{0.5})/s

Structure ID: TW
 Structure Type: TW Setup, DS Channel

Tailwater Type	Free Outfall
----------------	--------------

Convergence Tolerances

Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: 24-GR OUT
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = User Defined Rating Table - 1 (User Defined Table)

Upstream ID = (Pond Water Surface)
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.09	(N/A)	0.00
93.10	0.09	(N/A)	0.00
93.20	0.09	(N/A)	0.00
93.30	0.09	(N/A)	0.00
93.40	0.09	(N/A)	0.00
93.50	0.09	(N/A)	0.00
93.60	0.09	(N/A)	0.00
93.70	0.09	(N/A)	0.00
93.80	0.09	(N/A)	0.00
93.90	0.09	(N/A)	0.00
94.00	0.09	(N/A)	0.00
94.10	0.09	(N/A)	0.00
94.20	0.09	(N/A)	0.00
94.30	0.09	(N/A)	0.00
94.40	0.09	(N/A)	0.00
94.50	0.09	(N/A)	0.00
94.60	0.09	(N/A)	0.00
94.70	0.09	(N/A)	0.00
94.80	0.09	(N/A)	0.00
94.90	0.09	(N/A)	0.00
95.00	0.09	(N/A)	0.00
95.10	0.09	(N/A)	0.00
95.20	0.09	(N/A)	0.00
95.21	0.09	(N/A)	0.00
95.30	0.09	(N/A)	0.00

Computation Messages

Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
Label: 24-GR OUT
Scenario: Post-Development 25 year

Return Event: 25 years
Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = User Defined Rating Table - 1 (User Defined Table)

Upstream ID = (Pond Water Surface)
Downstream ID = Tailwater (Pond Outfall)

Computation Messages

Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table
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Interpolated from input table
Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: 24-GR OUT
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Weir - 1 (Rectangular Weir)

 Upstream ID = (Pond Water Surface)
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.00	(N/A)	0.00
93.10	0.00	(N/A)	0.00
93.20	0.00	(N/A)	0.00
93.30	0.00	(N/A)	0.00
93.40	0.00	(N/A)	0.00
93.50	0.00	(N/A)	0.00
93.60	0.00	(N/A)	0.00
93.70	0.00	(N/A)	0.00
93.80	0.00	(N/A)	0.00
93.90	0.00	(N/A)	0.00
94.00	0.00	(N/A)	0.00
94.10	0.00	(N/A)	0.00
94.20	0.00	(N/A)	0.00
94.30	0.00	(N/A)	0.00
94.40	0.00	(N/A)	0.00
94.50	0.00	(N/A)	0.00
94.60	0.00	(N/A)	0.00
94.70	0.00	(N/A)	0.00
94.80	0.00	(N/A)	0.00
94.90	0.00	(N/A)	0.00
95.00	0.00	(N/A)	0.00
95.10	0.00	(N/A)	0.00
95.20	0.00	(N/A)	0.00
95.21	0.00	(N/A)	0.00
95.30	3.65	(N/A)	0.00

Computation Messages

HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
Label: 24-GR OUT
Scenario: Post-Development 25 year

Return Event: 25 years
Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE
Structure ID = Weir - 1 (Rectangular Weir)

Upstream ID = (Pond Water Surface)
Downstream ID = Tailwater (Pond Outfall)

Computation Messages

HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 H=.00; Htw=.00; Qfree=.00; H=.09; Htw=.00; Qfree=3.65;

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve
 Label: 24-GR OUT
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.09	(N/A)	0.00
93.10	0.09	(N/A)	0.00
93.20	0.09	(N/A)	0.00
93.30	0.09	(N/A)	0.00
93.40	0.09	(N/A)	0.00
93.50	0.09	(N/A)	0.00
93.60	0.09	(N/A)	0.00
93.70	0.09	(N/A)	0.00
93.80	0.09	(N/A)	0.00
93.90	0.09	(N/A)	0.00
94.00	0.09	(N/A)	0.00
94.10	0.09	(N/A)	0.00
94.20	0.09	(N/A)	0.00
94.30	0.09	(N/A)	0.00
94.40	0.09	(N/A)	0.00
94.50	0.09	(N/A)	0.00
94.60	0.09	(N/A)	0.00
94.70	0.09	(N/A)	0.00
94.80	0.09	(N/A)	0.00
94.90	0.09	(N/A)	0.00
95.00	0.09	(N/A)	0.00
95.10	0.09	(N/A)	0.00
95.20	0.09	(N/A)	0.00
95.21	0.09	(N/A)	0.00
95.30	3.74	(N/A)	0.00

Contributing Structures

User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve
Label: 24-GR OUT
Scenario: Post-Development 25 year

Return Event: 25 years
Storm Event: 25 year

Composite Outflow Summary

Contributing Structures
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
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User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1 + Weir - 1
User Defined Rating Table - 1 + Weir - 1

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 100 years

Label: 24-GR OUT

Storm Event: 100 year

Scenario: Post-Development 100 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	93.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	95.30 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	95.30
Rectangular Weir Tailwater Settings	Weir - 1 Tailwater	Forward	TW	95.21 (N/A)	95.30 (N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 100 years

Label: 24-GR OUT

Storm Event: 100 year

Scenario: Post-Development 100 year

Structure ID: User Defined Rating Table - 1
 Structure Type: User Defined Table

Elevation (ft)	Flow (ft ³ /s)
0.00	0.09
2.00	0.09
2.30	0.09

Structure ID: Weir - 1
 Structure Type: Rectangular Weir

Number of Openings	1
Elevation	95.21 ft
Weir Length	45.00 ft
Weir Coefficient	3.00 (ft ^{0.5})/s

Structure ID: TW
 Structure Type: TW Setup, DS Channel

Tailwater Type	Free Outfall
----------------	--------------

Convergence Tolerances

Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: 24-GR OUT
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = User Defined Rating Table - 1 (User Defined Table)

 Upstream ID = (Pond Water Surface)
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.09	(N/A)	0.00
93.10	0.09	(N/A)	0.00
93.20	0.09	(N/A)	0.00
93.30	0.09	(N/A)	0.00
93.40	0.09	(N/A)	0.00
93.50	0.09	(N/A)	0.00
93.60	0.09	(N/A)	0.00
93.70	0.09	(N/A)	0.00
93.80	0.09	(N/A)	0.00
93.90	0.09	(N/A)	0.00
94.00	0.09	(N/A)	0.00
94.10	0.09	(N/A)	0.00
94.20	0.09	(N/A)	0.00
94.30	0.09	(N/A)	0.00
94.40	0.09	(N/A)	0.00
94.50	0.09	(N/A)	0.00
94.60	0.09	(N/A)	0.00
94.70	0.09	(N/A)	0.00
94.80	0.09	(N/A)	0.00
94.90	0.09	(N/A)	0.00
95.00	0.09	(N/A)	0.00
95.10	0.09	(N/A)	0.00
95.20	0.09	(N/A)	0.00
95.21	0.09	(N/A)	0.00
95.30	0.09	(N/A)	0.00

Computation Messages

Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: 24-GR OUT

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = User Defined Rating Table - 1 (User Defined Table)

Upstream ID = (Pond Water Surface)

Downstream ID = Tailwater (Pond Outfall)

Computation Messages

Interpolated from input table

Interpolated from input table

Interpolated from input table

Interpolated from input table

Interpolated from input table

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Interpolated from input table

Interpolated from input table

Interpolated from input table

Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: 24-GR OUT
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Weir - 1 (Rectangular Weir)

 Upstream ID = (Pond Water Surface)
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.00	(N/A)	0.00
93.10	0.00	(N/A)	0.00
93.20	0.00	(N/A)	0.00
93.30	0.00	(N/A)	0.00
93.40	0.00	(N/A)	0.00
93.50	0.00	(N/A)	0.00
93.60	0.00	(N/A)	0.00
93.70	0.00	(N/A)	0.00
93.80	0.00	(N/A)	0.00
93.90	0.00	(N/A)	0.00
94.00	0.00	(N/A)	0.00
94.10	0.00	(N/A)	0.00
94.20	0.00	(N/A)	0.00
94.30	0.00	(N/A)	0.00
94.40	0.00	(N/A)	0.00
94.50	0.00	(N/A)	0.00
94.60	0.00	(N/A)	0.00
94.70	0.00	(N/A)	0.00
94.80	0.00	(N/A)	0.00
94.90	0.00	(N/A)	0.00
95.00	0.00	(N/A)	0.00
95.10	0.00	(N/A)	0.00
95.20	0.00	(N/A)	0.00
95.21	0.00	(N/A)	0.00
95.30	3.65	(N/A)	0.00

Computation Messages

HW & TW below Inv.El.=95.210
HW & TW below Inv.El.=95.210
HW & TW below Inv.El.=95.210
HW & TW below Inv.El.=95.210
HW & TW below Inv.El.=95.210
HW & TW below Inv.El.=95.210

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
Label: 24-GR OUT
Scenario: Post-Development 100 year

Return Event: 100 years
Storm Event: 100 year

RATING TABLE FOR ONE OUTLET TYPE
Structure ID = Weir - 1 (Rectangular Weir)

Upstream ID = (Pond Water Surface)
Downstream ID = Tailwater (Pond Outfall)

Computation Messages

HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 HW & TW below Inv.El.=95.210 H=.00; Htw=.00; Qfree=.00; H=.09; Htw=.00; Qfree=3.65;

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve
 Label: 24-GR OUT
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.09	(N/A)	0.00
93.10	0.09	(N/A)	0.00
93.20	0.09	(N/A)	0.00
93.30	0.09	(N/A)	0.00
93.40	0.09	(N/A)	0.00
93.50	0.09	(N/A)	0.00
93.60	0.09	(N/A)	0.00
93.70	0.09	(N/A)	0.00
93.80	0.09	(N/A)	0.00
93.90	0.09	(N/A)	0.00
94.00	0.09	(N/A)	0.00
94.10	0.09	(N/A)	0.00
94.20	0.09	(N/A)	0.00
94.30	0.09	(N/A)	0.00
94.40	0.09	(N/A)	0.00
94.50	0.09	(N/A)	0.00
94.60	0.09	(N/A)	0.00
94.70	0.09	(N/A)	0.00
94.80	0.09	(N/A)	0.00
94.90	0.09	(N/A)	0.00
95.00	0.09	(N/A)	0.00
95.10	0.09	(N/A)	0.00
95.20	0.09	(N/A)	0.00
95.21	0.09	(N/A)	0.00
95.30	3.74	(N/A)	0.00

Contributing Structures

- User Defined Rating Table - 1
- User Defined Rating Table - 1
- User Defined Rating Table - 1
- User Defined Rating Table - 1
- User Defined Rating Table - 1
- User Defined Rating Table - 1
- User Defined Rating Table - 1
- User Defined Rating Table - 1
- User Defined Rating Table - 1

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve
Label: 24-GR OUT
Scenario: Post-Development 100 year

Return Event: 100 years
Storm Event: 100 year

Composite Outflow Summary

Contributing Structures
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
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User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1 + Weir - 1
User Defined Rating Table - 1 + Weir - 1

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data
 Label: 6-GR OUT
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	93.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	93.75 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	93.75
Rectangular Weir Tailwater Settings	Weir - 1 Tailwater	Forward	TW	93.71 (N/A)	93.75 (N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Label: 6-GR OUT

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Structure ID: User Defined Rating Table - 1
 Structure Type: User Defined Table

Elevation (ft)	Flow (ft ³ /s)
0.00	0.13
0.50	0.13
0.75	0.13

Structure ID: Weir - 1
 Structure Type: Rectangular Weir

Number of Openings	1
Elevation	93.71 ft
Weir Length	52.00 ft
Weir Coefficient	3.00 (ft ^{0.5})/s

Structure ID: TW
 Structure Type: TW Setup, DS Channel

Tailwater Type	Free Outfall
----------------	--------------

Convergence Tolerances

Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 1 years

Label: 6-GR OUT

Storm Event: 1 year

Scenario: Post-Development 1 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = User Defined Rating Table - 1 (User Defined Table)

Upstream ID = (Pond Water Surface)

Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.13	(N/A)	0.00
93.10	0.13	(N/A)	0.00
93.20	0.13	(N/A)	0.00
93.30	0.13	(N/A)	0.00
93.40	0.13	(N/A)	0.00
93.50	0.13	(N/A)	0.00
93.60	0.13	(N/A)	0.00
93.70	0.13	(N/A)	0.00
93.71	0.13	(N/A)	0.00
93.75	0.13	(N/A)	0.00

Computation Messages

Interpolated from input table
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 Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 1 years

Label: 6-GR OUT

Storm Event: 1 year

Scenario: Post-Development 1 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Weir - 1 (Rectangular Weir)

Upstream ID = (Pond Water Surface)

Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.00	(N/A)	0.00
93.10	0.00	(N/A)	0.00
93.20	0.00	(N/A)	0.00
93.30	0.00	(N/A)	0.00
93.40	0.00	(N/A)	0.00
93.50	0.00	(N/A)	0.00
93.60	0.00	(N/A)	0.00
93.70	0.00	(N/A)	0.00
93.71	0.00	(N/A)	0.00
93.75	1.25	(N/A)	0.00

Computation Messages

HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 H=.00; Htw=.00;
 Qfree=.00;
 H=.04; Htw=.00;
 Qfree=1.25;

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Return Event: 1 years

Label: 6-GR OUT

Storm Event: 1 year

Scenario: Post-Development 1 year

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.13	(N/A)	0.00
93.10	0.13	(N/A)	0.00
93.20	0.13	(N/A)	0.00
93.30	0.13	(N/A)	0.00
93.40	0.13	(N/A)	0.00
93.50	0.13	(N/A)	0.00
93.60	0.13	(N/A)	0.00
93.70	0.13	(N/A)	0.00
93.71	0.13	(N/A)	0.00
93.75	1.38	(N/A)	0.00

Contributing Structures

User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1 + Weir - 1
User Defined Rating Table - 1 + Weir - 1

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 10 years

Label: 6-GR OUT

Storm Event: 10 year

Scenario: Post-Development 10 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	93.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	93.75 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	93.75
Rectangular Weir Tailwater Settings	Weir - 1 Tailwater	Forward	TW	93.71 (N/A)	93.75 (N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Label: 6-GR OUT

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

Structure ID: User Defined Rating Table - 1
 Structure Type: User Defined Table

Elevation (ft)	Flow (ft ³ /s)
0.00	0.13
0.50	0.13
0.75	0.13

Structure ID: Weir - 1
 Structure Type: Rectangular Weir

Number of Openings	1
Elevation	93.71 ft
Weir Length	52.00 ft
Weir Coefficient	3.00 (ft ^{0.5})/s

Structure ID: TW
 Structure Type: TW Setup, DS Channel

Tailwater Type	Free Outfall
----------------	--------------

Convergence Tolerances

Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: 6-GR OUT
 Scenario: Post-Development 10 year

Return Event: 10 years
 Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = User Defined Rating Table - 1 (User Defined Table)

Upstream ID = (Pond Water Surface)
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.13	(N/A)	0.00
93.10	0.13	(N/A)	0.00
93.20	0.13	(N/A)	0.00
93.30	0.13	(N/A)	0.00
93.40	0.13	(N/A)	0.00
93.50	0.13	(N/A)	0.00
93.60	0.13	(N/A)	0.00
93.70	0.13	(N/A)	0.00
93.71	0.13	(N/A)	0.00
93.75	0.13	(N/A)	0.00

Computation Messages

Interpolated from input table
 Interpolated from input table
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 Interpolated from input table
 Interpolated from input table
 Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: 6-GR OUT
 Scenario: Post-Development 10 year

Return Event: 10 years
 Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Weir - 1 (Rectangular Weir)

 Upstream ID = (Pond Water Surface)
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.00	(N/A)	0.00
93.10	0.00	(N/A)	0.00
93.20	0.00	(N/A)	0.00
93.30	0.00	(N/A)	0.00
93.40	0.00	(N/A)	0.00
93.50	0.00	(N/A)	0.00
93.60	0.00	(N/A)	0.00
93.70	0.00	(N/A)	0.00
93.71	0.00	(N/A)	0.00
93.75	1.25	(N/A)	0.00

Computation Messages

HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 H=.00; Htw=.00;
 Qfree=.00;
 H=.04; Htw=.00;
 Qfree=1.25;

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve
 Label: 6-GR OUT
 Scenario: Post-Development 10 year

Return Event: 10 years
 Storm Event: 10 year

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.13	(N/A)	0.00
93.10	0.13	(N/A)	0.00
93.20	0.13	(N/A)	0.00
93.30	0.13	(N/A)	0.00
93.40	0.13	(N/A)	0.00
93.50	0.13	(N/A)	0.00
93.60	0.13	(N/A)	0.00
93.70	0.13	(N/A)	0.00
93.71	0.13	(N/A)	0.00
93.75	1.38	(N/A)	0.00

Contributing Structures

User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1 + Weir - 1
User Defined Rating Table - 1 + Weir - 1

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 25 years

Label: 6-GR OUT

Storm Event: 25 year

Scenario: Post-Development 25 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	93.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	93.75 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	93.75
Rectangular Weir Tailwater Settings	Weir - 1 Tailwater	Forward	TW	93.71 (N/A)	93.75 (N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Label: 6-GR OUT

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)		Flow (ft ³ /s)
0.00		0.13
0.50		0.13
0.75		0.13

Structure ID: Weir - 1
Structure Type: Rectangular Weir

Number of Openings	1
Elevation	93.71 ft
Weir Length	52.00 ft
Weir Coefficient	3.00 (ft ^{0.5})/s

Structure ID: TW
Structure Type: TW Setup, DS Channel

Tailwater Type	Free Outfall
----------------	--------------

Convergence Tolerances

Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: 6-GR OUT
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = User Defined Rating Table - 1 (User Defined Table)

Upstream ID = (Pond Water Surface)
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.13	(N/A)	0.00
93.10	0.13	(N/A)	0.00
93.20	0.13	(N/A)	0.00
93.30	0.13	(N/A)	0.00
93.40	0.13	(N/A)	0.00
93.50	0.13	(N/A)	0.00
93.60	0.13	(N/A)	0.00
93.70	0.13	(N/A)	0.00
93.71	0.13	(N/A)	0.00
93.75	0.13	(N/A)	0.00

Computation Messages

Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: 6-GR OUT
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Weir - 1 (Rectangular Weir)

 Upstream ID = (Pond Water Surface)
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.00	(N/A)	0.00
93.10	0.00	(N/A)	0.00
93.20	0.00	(N/A)	0.00
93.30	0.00	(N/A)	0.00
93.40	0.00	(N/A)	0.00
93.50	0.00	(N/A)	0.00
93.60	0.00	(N/A)	0.00
93.70	0.00	(N/A)	0.00
93.71	0.00	(N/A)	0.00
93.75	1.25	(N/A)	0.00

Computation Messages

HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 H=.00; Htw=.00;
 Qfree=.00;
 H=.04; Htw=.00;
 Qfree=1.25;

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Return Event: 25 years

Label: 6-GR OUT

Storm Event: 25 year

Scenario: Post-Development 25 year

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.13	(N/A)	0.00
93.10	0.13	(N/A)	0.00
93.20	0.13	(N/A)	0.00
93.30	0.13	(N/A)	0.00
93.40	0.13	(N/A)	0.00
93.50	0.13	(N/A)	0.00
93.60	0.13	(N/A)	0.00
93.70	0.13	(N/A)	0.00
93.71	0.13	(N/A)	0.00
93.75	1.38	(N/A)	0.00

Contributing Structures

User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1 + Weir - 1
User Defined Rating Table - 1 + Weir - 1

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 100 years

Label: 6-GR OUT

Storm Event: 100 year

Scenario: Post-Development 100 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	93.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	93.75 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	93.75
Rectangular Weir Tailwater Settings	Weir - 1 Tailwater	Forward	TW	93.71 (N/A)	93.75 (N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 100 years

Label: 6-GR OUT

Storm Event: 100 year

Scenario: Post-Development 100 year

Structure ID: User Defined Rating Table - 1
 Structure Type: User Defined Table

Elevation (ft)	Flow (ft ³ /s)
0.00	0.13
0.50	0.13
0.75	0.13

Structure ID: Weir - 1
 Structure Type: Rectangular Weir

Number of Openings	1
Elevation	93.71 ft
Weir Length	52.00 ft
Weir Coefficient	3.00 (ft ^{0.5})/s

Structure ID: TW
 Structure Type: TW Setup, DS Channel

Tailwater Type	Free Outfall
----------------	--------------

Convergence Tolerances

Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: 6-GR OUT
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = User Defined Rating Table - 1 (User Defined Table)

Upstream ID = (Pond Water Surface)
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.13	(N/A)	0.00
93.10	0.13	(N/A)	0.00
93.20	0.13	(N/A)	0.00
93.30	0.13	(N/A)	0.00
93.40	0.13	(N/A)	0.00
93.50	0.13	(N/A)	0.00
93.60	0.13	(N/A)	0.00
93.70	0.13	(N/A)	0.00
93.71	0.13	(N/A)	0.00
93.75	0.13	(N/A)	0.00

Computation Messages

Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: 6-GR OUT
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Weir - 1 (Rectangular Weir)

 Upstream ID = (Pond Water Surface)
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.00	(N/A)	0.00
93.10	0.00	(N/A)	0.00
93.20	0.00	(N/A)	0.00
93.30	0.00	(N/A)	0.00
93.40	0.00	(N/A)	0.00
93.50	0.00	(N/A)	0.00
93.60	0.00	(N/A)	0.00
93.70	0.00	(N/A)	0.00
93.71	0.00	(N/A)	0.00
93.75	1.25	(N/A)	0.00

Computation Messages

HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 HW & TW below
 Inv.El.=93.710
 H=.00; Htw=.00;
 Qfree=.00;
 H=.04; Htw=.00;
 Qfree=1.25;

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve
 Label: 6-GR OUT
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
93.00	0.13	(N/A)	0.00
93.10	0.13	(N/A)	0.00
93.20	0.13	(N/A)	0.00
93.30	0.13	(N/A)	0.00
93.40	0.13	(N/A)	0.00
93.50	0.13	(N/A)	0.00
93.60	0.13	(N/A)	0.00
93.70	0.13	(N/A)	0.00
93.71	0.13	(N/A)	0.00
93.75	1.38	(N/A)	0.00

Contributing Structures

User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1
User Defined Rating Table - 1 + Weir - 1
User Defined Rating Table - 1 + Weir - 1

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data
 Label: MC-3500 - 3 OUT
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	62.85 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	68.35 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	Culvert - 1	62.85	68.35
Orifice-Circular	Orifice - 2	Forward	Culvert - 1	64.35	68.35
Culvert-Circular	Culvert - 1	Forward	TW	62.85	68.35
Tailwater Settings	Tailwater			(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 1 years

Label: MC-3500 - 3 OUT

Storm Event: 1 year

Scenario: Post-Development 1 year

Structure ID: Culvert - 1	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	15.0 in
Length	94.00 ft
Length (Computed Barrel)	94.01 ft
Slope (Computed)	0.012 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.023
Kr	0.200
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 1
K	0.0018
M	2.5000
C	0.0243
Y	0.8300
T1 ratio (HW/D)	1.075
T2 ratio (HW/D)	1.213
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	64.19 ft	T1 Flow	4.80 ft ³ /s
T2 Elevation	64.37 ft	T2 Flow	5.49 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Label: MC-3500 - 3 OUT

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Structure ID: Orifice - 1	
Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	62.85 ft
Orifice Diameter	5.5 in
Orifice Coefficient	0.600

Structure ID: Orifice - 2	
Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	64.35 ft
Orifice Diameter	9.5 in
Orifice Coefficient	0.600

Structure ID: TW	
Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: MC-3500 - 3 OUT
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Culvert - 1 (Culvert-Circular)

 Mannings open channel maximum capacity: 7.52 ft³/s
 Upstream ID = Orifice - 1, Orifice - 2
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
62.85	0.00	0.00	0.00	Free Outfall	0.00	0.00	(N/A)	0.00
63.35	0.34	63.17	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
63.85	0.60	63.28	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
64.35	0.80	63.35	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
64.85	1.55	63.57	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
65.35	2.81	63.85	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
65.85	3.57	64.00	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
66.35	4.19	64.12	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
66.85	4.72	64.22	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
67.35	5.20	64.31	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
67.85	5.65	64.39	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
68.35	6.06	64.47	Free Outfall	Free Outfall	0.00	0.01	(N/A)	0.00

Message

WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .078ft Dcr= .226ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .107ft Dcr= .302ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .125ft Dcr= .350ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .184ft Dcr= .494ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .270ft Dcr= .673ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .321ft Dcr= .762ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .365ft Dcr= .829ft
 CRIT.DEPTH Hev= .00ft

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: MC-3500 - 3 OUT

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Culvert - 1 (Culvert-Circular)

Mannings open channel maximum capacity: 7.52 ft³/s

Upstream ID = Orifice - 1, Orifice - 2

Downstream ID = Tailwater (Pond Outfall)

Message

CRIT.DEPTH CONTROL
Vh= .405ft Dcr= .881ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .444ft Dcr= .925ft
CRIT.DEPTH Hev= .00ft
INLET CONTROL...
Submerged: HW =1.54
INLET CONTROL...
Submerged: HW =1.62

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: MC-3500 - 3 OUT
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Orifice - 1 (Orifice-Circular)

Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
62.85	0.00	0.00	0.00	0.00	0.00	0.00	(N/A)	0.00
63.35	0.34	63.35	63.17	63.17	0.00	0.00	(N/A)	0.00
63.85	0.60	63.85	63.28	63.28	0.00	0.00	(N/A)	0.00
64.35	0.79	64.35	63.35	63.35	0.00	0.00	(N/A)	0.00
64.85	0.90	64.85	63.57	63.57	0.00	0.00	(N/A)	0.00
65.35	0.97	65.35	63.85	63.85	0.00	0.00	(N/A)	0.00
65.85	1.08	65.85	64.00	64.00	0.00	0.00	(N/A)	0.00
66.35	1.19	66.35	64.12	64.12	0.00	0.00	(N/A)	0.00
66.85	1.29	66.85	64.22	64.22	0.00	0.00	(N/A)	0.00
67.35	1.39	67.35	64.31	64.31	0.00	0.00	(N/A)	0.00
67.85	1.48	67.85	64.39	64.39	0.00	0.00	(N/A)	0.00
68.35	1.56	68.35	64.47	64.47	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 H = .18
 H = .57
 H = 1.00
 H = 1.28
 H = 1.50
 H = 1.85
 H = 2.23
 H = 2.63
 H = 3.04
 H = 3.46
 H = 3.88

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: MC-3500 - 3 OUT
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Orifice - 2 (Orifice-Circular)

Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
62.85	0.00	0.00	0.00	0.00	0.00	0.00	(N/A)	0.00
63.35	0.00	0.00	0.00	63.17	0.00	0.00	(N/A)	0.00
63.85	0.00	0.00	0.00	63.28	0.00	0.00	(N/A)	0.00
64.35	0.00	0.00	0.00	63.35	0.00	0.00	(N/A)	0.00
64.85	0.65	64.85	Free Outfall	63.57	0.00	0.00	(N/A)	0.00
65.35	1.84	65.35	Free Outfall	63.85	0.00	0.00	(N/A)	0.00
65.85	2.49	65.85	Free Outfall	64.00	0.00	0.00	(N/A)	0.00
66.35	3.00	66.35	Free Outfall	64.12	0.00	0.00	(N/A)	0.00
66.85	3.44	66.85	Free Outfall	64.22	0.00	0.00	(N/A)	0.00
67.35	3.82	67.35	Free Outfall	64.31	0.00	0.00	(N/A)	0.00
67.85	4.17	67.85	64.39	64.39	0.00	0.00	(N/A)	0.00
68.35	4.50	68.35	64.47	64.47	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .138ft Dcr= .361ft
 CRIT.DEPTH Hev= .00ft
 H =.60
 H =1.10
 H =1.60
 H =2.10
 H =2.60
 H =3.10
 H =3.60

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Return Event: 1 years

Label: MC-3500 - 3 OUT

Storm Event: 1 year

Scenario: Post-Development 1 year

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
62.85	0.00	(N/A)	0.00
63.35	0.34	(N/A)	0.00
63.85	0.60	(N/A)	0.00
64.35	0.79	(N/A)	0.00
64.85	1.55	(N/A)	0.00
65.35	2.81	(N/A)	0.00
65.85	3.57	(N/A)	0.00
66.35	4.19	(N/A)	0.00
66.85	4.72	(N/A)	0.00
67.35	5.20	(N/A)	0.00
67.85	5.65	(N/A)	0.00
68.35	6.06	(N/A)	0.00

Contributing Structures

(no Q: Orifice - 1, Orifice - 2, Culvert - 1)
 Orifice - 1, Culvert - 1
 (no Q: Orifice - 2)
 Orifice - 1, Culvert - 1
 (no Q: Orifice - 2)
 Orifice - 1, Culvert - 1
 (no Q: Orifice - 2)
 Orifice - 1, Orifice - 2, Culvert - 1
 Orifice - 1, Orifice - 2, Culvert - 1
 Orifice - 1, Orifice - 2, Culvert - 1
 Orifice - 1, Orifice - 2, Culvert - 1
 Orifice - 1, Orifice - 2, Culvert - 1
 Orifice - 1, Orifice - 2, Culvert - 1
 Orifice - 1, Orifice - 2, Culvert - 1
 Orifice - 1, Orifice - 2, Culvert - 1
 Orifice - 1, Orifice - 2, Culvert - 1

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 10 years

Label: MC-3500 - 3 OUT

Storm Event: 10 year

Scenario: Post-Development 10 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	62.85 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	68.35 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	Culvert - 1	62.85	68.35
Orifice-Circular	Orifice - 2	Forward	Culvert - 1	64.35	68.35
Culvert-Circular	Culvert - 1	Forward	TW	62.85	68.35
Tailwater Settings	Tailwater			(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 10 years

Label: MC-3500 - 3 OUT

Storm Event: 10 year

Scenario: Post-Development 10 year

Structure ID: Culvert - 1	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	15.0 in
Length	94.00 ft
Length (Computed Barrel)	94.01 ft
Slope (Computed)	0.012 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.023
Kr	0.200
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 1
K	0.0018
M	2.5000
C	0.0243
Y	0.8300
T1 ratio (HW/D)	1.075
T2 ratio (HW/D)	1.213
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	64.19 ft	T1 Flow	4.80 ft ³ /s
T2 Elevation	64.37 ft	T2 Flow	5.49 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Label: MC-3500 - 3 OUT

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

Structure ID: Orifice - 1	
Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	62.85 ft
Orifice Diameter	5.5 in
Orifice Coefficient	0.600
Structure ID: Orifice - 2	
Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	64.35 ft
Orifice Diameter	9.5 in
Orifice Coefficient	0.600
Structure ID: TW	
Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall
Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: MC-3500 - 3 OUT
 Scenario: Post-Development 10 year

Return Event: 10 years
 Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Culvert - 1 (Culvert-Circular)

 Mannings open channel maximum capacity: 7.52 ft³/s
 Upstream ID = Orifice - 1, Orifice - 2
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
62.85	0.00	0.00	0.00	Free Outfall	0.00	0.00	(N/A)	0.00
63.35	0.34	63.17	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
63.85	0.60	63.28	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
64.35	0.80	63.35	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
64.85	1.55	63.57	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
65.35	2.81	63.85	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
65.85	3.57	64.00	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
66.35	4.19	64.12	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
66.85	4.72	64.22	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
67.35	5.20	64.31	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
67.85	5.65	64.39	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
68.35	6.06	64.47	Free Outfall	Free Outfall	0.00	0.01	(N/A)	0.00

Message

WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .078ft Dcr= .226ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .107ft Dcr= .302ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .125ft Dcr= .350ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .184ft Dcr= .494ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .270ft Dcr= .673ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .321ft Dcr= .762ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .365ft Dcr= .829ft
 CRIT.DEPTH Hev= .00ft

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: MC-3500 - 3 OUT

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Culvert - 1 (Culvert-Circular)

Mannings open channel maximum capacity: 7.52 ft³/s

Upstream ID = Orifice - 1, Orifice - 2

Downstream ID = Tailwater (Pond Outfall)

Message

CRIT.DEPTH CONTROL
Vh= .405ft Dcr= .881ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .444ft Dcr= .925ft
CRIT.DEPTH Hev= .00ft
INLET CONTROL...
Submerged: HW =1.54
INLET CONTROL...
Submerged: HW =1.62

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: MC-3500 - 3 OUT
 Scenario: Post-Development 10 year

Return Event: 10 years
 Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Orifice - 1 (Orifice-Circular)

Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
62.85	0.00	0.00	0.00	0.00	0.00	0.00	(N/A)	0.00
63.35	0.34	63.35	63.17	63.17	0.00	0.00	(N/A)	0.00
63.85	0.60	63.85	63.28	63.28	0.00	0.00	(N/A)	0.00
64.35	0.79	64.35	63.35	63.35	0.00	0.00	(N/A)	0.00
64.85	0.90	64.85	63.57	63.57	0.00	0.00	(N/A)	0.00
65.35	0.97	65.35	63.85	63.85	0.00	0.00	(N/A)	0.00
65.85	1.08	65.85	64.00	64.00	0.00	0.00	(N/A)	0.00
66.35	1.19	66.35	64.12	64.12	0.00	0.00	(N/A)	0.00
66.85	1.29	66.85	64.22	64.22	0.00	0.00	(N/A)	0.00
67.35	1.39	67.35	64.31	64.31	0.00	0.00	(N/A)	0.00
67.85	1.48	67.85	64.39	64.39	0.00	0.00	(N/A)	0.00
68.35	1.56	68.35	64.47	64.47	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 H = .18
 H = .57
 H = 1.00
 H = 1.28
 H = 1.50
 H = 1.85
 H = 2.23
 H = 2.63
 H = 3.04
 H = 3.46
 H = 3.88

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: MC-3500 - 3 OUT
 Scenario: Post-Development 10 year

Return Event: 10 years
 Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Orifice - 2 (Orifice-Circular)

Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
62.85	0.00	0.00	0.00	0.00	0.00	0.00	(N/A)	0.00
63.35	0.00	0.00	0.00	63.17	0.00	0.00	(N/A)	0.00
63.85	0.00	0.00	0.00	63.28	0.00	0.00	(N/A)	0.00
64.35	0.00	0.00	0.00	63.35	0.00	0.00	(N/A)	0.00
64.85	0.65	64.85	Free Outfall	63.57	0.00	0.00	(N/A)	0.00
65.35	1.84	65.35	Free Outfall	63.85	0.00	0.00	(N/A)	0.00
65.85	2.49	65.85	Free Outfall	64.00	0.00	0.00	(N/A)	0.00
66.35	3.00	66.35	Free Outfall	64.12	0.00	0.00	(N/A)	0.00
66.85	3.44	66.85	Free Outfall	64.22	0.00	0.00	(N/A)	0.00
67.35	3.82	67.35	Free Outfall	64.31	0.00	0.00	(N/A)	0.00
67.85	4.17	67.85	64.39	64.39	0.00	0.00	(N/A)	0.00
68.35	4.50	68.35	64.47	64.47	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .138ft Dcr= .361ft
 CRIT.DEPTH Hev= .00ft
 H =.60
 H =1.10
 H =1.60
 H =2.10
 H =2.60
 H =3.10
 H =3.60

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve
 Label: MC-3500 - 3 OUT
 Scenario: Post-Development 10 year

Return Event: 10 years
 Storm Event: 10 year

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
62.85	0.00	(N/A)	0.00
63.35	0.34	(N/A)	0.00
63.85	0.60	(N/A)	0.00
64.35	0.79	(N/A)	0.00
64.85	1.55	(N/A)	0.00
65.35	2.81	(N/A)	0.00
65.85	3.57	(N/A)	0.00
66.35	4.19	(N/A)	0.00
66.85	4.72	(N/A)	0.00
67.35	5.20	(N/A)	0.00
67.85	5.65	(N/A)	0.00
68.35	6.06	(N/A)	0.00

Contributing Structures

(no Q: Orifice - 1,Orifice - 2,Culvert - 1) Orifice - 1,Culvert - 1 (no Q: Orifice - 2) Orifice - 1,Culvert - 1 (no Q: Orifice - 2) Orifice - 1,Culvert - 1 (no Q: Orifice - 2) Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1
--

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data
 Label: MC-3500 - 3 OUT
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	62.85 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	68.35 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	Culvert - 1	62.85	68.35
Orifice-Circular	Orifice - 2	Forward	Culvert - 1	64.35	68.35
Culvert-Circular	Culvert - 1	Forward	TW	62.85	68.35
Tailwater Settings	Tailwater			(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 25 years

Label: MC-3500 - 3 OUT

Storm Event: 25 year

Scenario: Post-Development 25 year

Structure ID: Culvert - 1	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	15.0 in
Length	94.00 ft
Length (Computed Barrel)	94.01 ft
Slope (Computed)	0.012 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.023
Kr	0.200
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 1
K	0.0018
M	2.5000
C	0.0243
Y	0.8300
T1 ratio (HW/D)	1.075
T2 ratio (HW/D)	1.213
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	64.19 ft	T1 Flow	4.80 ft ³ /s
T2 Elevation	64.37 ft	T2 Flow	5.49 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Label: MC-3500 - 3 OUT

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Structure ID: Orifice - 1	
Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	62.85 ft
Orifice Diameter	5.5 in
Orifice Coefficient	0.600
Structure ID: Orifice - 2	
Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	64.35 ft
Orifice Diameter	9.5 in
Orifice Coefficient	0.600
Structure ID: TW	
Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall
Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: MC-3500 - 3 OUT
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Culvert - 1 (Culvert-Circular)

 Mannings open channel maximum capacity: 7.52 ft³/s
 Upstream ID = Orifice - 1, Orifice - 2
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
62.85	0.00	0.00	0.00	Free Outfall	0.00	0.00	(N/A)	0.00
63.35	0.34	63.17	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
63.85	0.60	63.28	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
64.35	0.80	63.35	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
64.85	1.55	63.57	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
65.35	2.81	63.85	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
65.85	3.57	64.00	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
66.35	4.19	64.12	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
66.85	4.72	64.22	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
67.35	5.20	64.31	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
67.85	5.65	64.39	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
68.35	6.06	64.47	Free Outfall	Free Outfall	0.00	0.01	(N/A)	0.00

Message

WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .078ft Dcr= .226ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .107ft Dcr= .302ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .125ft Dcr= .350ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .184ft Dcr= .494ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .270ft Dcr= .673ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .321ft Dcr= .762ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .365ft Dcr= .829ft
 CRIT.DEPTH Hev= .00ft

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: MC-3500 - 3 OUT

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Culvert - 1 (Culvert-Circular)

Mannings open channel maximum capacity: 7.52 ft³/s

Upstream ID = Orifice - 1, Orifice - 2

Downstream ID = Tailwater (Pond Outfall)

Message

CRIT.DEPTH CONTROL
Vh= .405ft Dcr= .881ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .444ft Dcr= .925ft
CRIT.DEPTH Hev= .00ft
INLET CONTROL...
Submerged: HW =1.54
INLET CONTROL...
Submerged: HW =1.62

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: MC-3500 - 3 OUT
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Orifice - 1 (Orifice-Circular)

Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
62.85	0.00	0.00	0.00	0.00	0.00	0.00	(N/A)	0.00
63.35	0.34	63.35	63.17	63.17	0.00	0.00	(N/A)	0.00
63.85	0.60	63.85	63.28	63.28	0.00	0.00	(N/A)	0.00
64.35	0.79	64.35	63.35	63.35	0.00	0.00	(N/A)	0.00
64.85	0.90	64.85	63.57	63.57	0.00	0.00	(N/A)	0.00
65.35	0.97	65.35	63.85	63.85	0.00	0.00	(N/A)	0.00
65.85	1.08	65.85	64.00	64.00	0.00	0.00	(N/A)	0.00
66.35	1.19	66.35	64.12	64.12	0.00	0.00	(N/A)	0.00
66.85	1.29	66.85	64.22	64.22	0.00	0.00	(N/A)	0.00
67.35	1.39	67.35	64.31	64.31	0.00	0.00	(N/A)	0.00
67.85	1.48	67.85	64.39	64.39	0.00	0.00	(N/A)	0.00
68.35	1.56	68.35	64.47	64.47	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 H = .18
 H = .57
 H = 1.00
 H = 1.28
 H = 1.50
 H = 1.85
 H = 2.23
 H = 2.63
 H = 3.04
 H = 3.46
 H = 3.88

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: MC-3500 - 3 OUT
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Orifice - 2 (Orifice-Circular)

Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
62.85	0.00	0.00	0.00	0.00	0.00	0.00	(N/A)	0.00
63.35	0.00	0.00	0.00	63.17	0.00	0.00	(N/A)	0.00
63.85	0.00	0.00	0.00	63.28	0.00	0.00	(N/A)	0.00
64.35	0.00	0.00	0.00	63.35	0.00	0.00	(N/A)	0.00
64.85	0.65	64.85	Free Outfall	63.57	0.00	0.00	(N/A)	0.00
65.35	1.84	65.35	Free Outfall	63.85	0.00	0.00	(N/A)	0.00
65.85	2.49	65.85	Free Outfall	64.00	0.00	0.00	(N/A)	0.00
66.35	3.00	66.35	Free Outfall	64.12	0.00	0.00	(N/A)	0.00
66.85	3.44	66.85	Free Outfall	64.22	0.00	0.00	(N/A)	0.00
67.35	3.82	67.35	Free Outfall	64.31	0.00	0.00	(N/A)	0.00
67.85	4.17	67.85	64.39	64.39	0.00	0.00	(N/A)	0.00
68.35	4.50	68.35	64.47	64.47	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .138ft Dcr= .361ft
 CRIT.DEPTH Hev= .00ft
 H =.60
 H =1.10
 H =1.60
 H =2.10
 H =2.60
 H =3.10
 H =3.60

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Label: MC-3500 - 3 OUT

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
62.85	0.00	(N/A)	0.00
63.35	0.34	(N/A)	0.00
63.85	0.60	(N/A)	0.00
64.35	0.79	(N/A)	0.00
64.85	1.55	(N/A)	0.00
65.35	2.81	(N/A)	0.00
65.85	3.57	(N/A)	0.00
66.35	4.19	(N/A)	0.00
66.85	4.72	(N/A)	0.00
67.35	5.20	(N/A)	0.00
67.85	5.65	(N/A)	0.00
68.35	6.06	(N/A)	0.00

Contributing Structures

(no Q: Orifice - 1,Orifice - 2,Culvert - 1) Orifice - 1,Culvert - 1 (no Q: Orifice - 2) Orifice - 1,Culvert - 1 (no Q: Orifice - 2) Orifice - 1,Culvert - 1 (no Q: Orifice - 2) Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1
--

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 100 years

Label: MC-3500 - 3 OUT

Storm Event: 100 year

Scenario: Post-Development 100 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	62.85 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	68.35 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	Culvert - 1	62.85	68.35
Orifice-Circular	Orifice - 2	Forward	Culvert - 1	64.35	68.35
Culvert-Circular	Culvert - 1	Forward	TW	62.85	68.35
Tailwater Settings	Tailwater			(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 100 years

Label: MC-3500 - 3 OUT

Storm Event: 100 year

Scenario: Post-Development 100 year

Structure ID: Culvert - 1	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	15.0 in
Length	94.00 ft
Length (Computed Barrel)	94.01 ft
Slope (Computed)	0.012 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.023
Kr	0.200
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 1
K	0.0018
M	2.5000
C	0.0243
Y	0.8300
T1 ratio (HW/D)	1.075
T2 ratio (HW/D)	1.213
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	64.19 ft	T1 Flow	4.80 ft ³ /s
T2 Elevation	64.37 ft	T2 Flow	5.49 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 100 years

Label: MC-3500 - 3 OUT

Storm Event: 100 year

Scenario: Post-Development 100 year

Structure ID: Orifice - 1	
Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	62.85 ft
Orifice Diameter	5.5 in
Orifice Coefficient	0.600
Structure ID: Orifice - 2	
Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	64.35 ft
Orifice Diameter	9.5 in
Orifice Coefficient	0.600
Structure ID: TW	
Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall
Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: MC-3500 - 3 OUT
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Culvert - 1 (Culvert-Circular)

 Mannings open channel maximum capacity: 7.52 ft³/s
 Upstream ID = Orifice - 1, Orifice - 2
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
62.85	0.00	0.00	0.00	Free Outfall	0.00	0.00	(N/A)	0.00
63.35	0.34	63.17	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
63.85	0.60	63.28	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
64.35	0.80	63.35	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
64.85	1.55	63.57	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
65.35	2.81	63.85	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
65.85	3.57	64.00	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
66.35	4.19	64.12	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
66.85	4.72	64.22	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
67.35	5.20	64.31	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
67.85	5.65	64.39	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
68.35	6.06	64.47	Free Outfall	Free Outfall	0.00	0.01	(N/A)	0.00

Message

WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .078ft Dcr= .226ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .107ft Dcr= .302ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .125ft Dcr= .350ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .184ft Dcr= .494ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .270ft Dcr= .673ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .321ft Dcr= .762ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .365ft Dcr= .829ft
 CRIT.DEPTH Hev= .00ft

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
Label: MC-3500 - 3 OUT
Scenario: Post-Development 100 year

Return Event: 100 years
Storm Event: 100 year

RATING TABLE FOR ONE OUTLET TYPE
Structure ID = Culvert - 1 (Culvert-Circular)

Mannings open channel maximum capacity: 7.52 ft³/s
Upstream ID = Orifice - 1, Orifice - 2
Downstream ID = Tailwater (Pond Outfall)

Message
CRIT.DEPTH CONTROL Vh= .405ft Dcr= .881ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .444ft Dcr= .925ft CRIT.DEPTH Hev= .00ft
INLET CONTROL... Submerged: HW =1.54
INLET CONTROL... Submerged: HW =1.62

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: MC-3500 - 3 OUT
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Orifice - 1 (Orifice-Circular)

Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
62.85	0.00	0.00	0.00	0.00	0.00	0.00	(N/A)	0.00
63.35	0.34	63.35	63.17	63.17	0.00	0.00	(N/A)	0.00
63.85	0.60	63.85	63.28	63.28	0.00	0.00	(N/A)	0.00
64.35	0.79	64.35	63.35	63.35	0.00	0.00	(N/A)	0.00
64.85	0.90	64.85	63.57	63.57	0.00	0.00	(N/A)	0.00
65.35	0.97	65.35	63.85	63.85	0.00	0.00	(N/A)	0.00
65.85	1.08	65.85	64.00	64.00	0.00	0.00	(N/A)	0.00
66.35	1.19	66.35	64.12	64.12	0.00	0.00	(N/A)	0.00
66.85	1.29	66.85	64.22	64.22	0.00	0.00	(N/A)	0.00
67.35	1.39	67.35	64.31	64.31	0.00	0.00	(N/A)	0.00
67.85	1.48	67.85	64.39	64.39	0.00	0.00	(N/A)	0.00
68.35	1.56	68.35	64.47	64.47	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 H = .18
 H = .57
 H = 1.00
 H = 1.28
 H = 1.50
 H = 1.85
 H = 2.23
 H = 2.63
 H = 3.04
 H = 3.46
 H = 3.88

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 100 years

Label: MC-3500 - 3 OUT

Storm Event: 100 year

Scenario: Post-Development 100 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Orifice - 2 (Orifice-Circular)

Upstream ID = (Pond Water Surface)

Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
62.85	0.00	0.00	0.00	0.00	0.00	0.00	(N/A)	0.00
63.35	0.00	0.00	0.00	63.17	0.00	0.00	(N/A)	0.00
63.85	0.00	0.00	0.00	63.28	0.00	0.00	(N/A)	0.00
64.35	0.00	0.00	0.00	63.35	0.00	0.00	(N/A)	0.00
64.85	0.65	64.85	Free Outfall	63.57	0.00	0.00	(N/A)	0.00
65.35	1.84	65.35	Free Outfall	63.85	0.00	0.00	(N/A)	0.00
65.85	2.49	65.85	Free Outfall	64.00	0.00	0.00	(N/A)	0.00
66.35	3.00	66.35	Free Outfall	64.12	0.00	0.00	(N/A)	0.00
66.85	3.44	66.85	Free Outfall	64.22	0.00	0.00	(N/A)	0.00
67.35	3.82	67.35	Free Outfall	64.31	0.00	0.00	(N/A)	0.00
67.85	4.17	67.85	64.39	64.39	0.00	0.00	(N/A)	0.00
68.35	4.50	68.35	64.47	64.47	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .138ft Dcr= .361ft
 CRIT.DEPTH Hev= .00ft
 H =.60
 H =1.10
 H =1.60
 H =2.10
 H =2.60
 H =3.10
 H =3.60

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Return Event: 100 years

Label: MC-3500 - 3 OUT

Storm Event: 100 year

Scenario: Post-Development 100 year

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
62.85	0.00	(N/A)	0.00
63.35	0.34	(N/A)	0.00
63.85	0.60	(N/A)	0.00
64.35	0.79	(N/A)	0.00
64.85	1.55	(N/A)	0.00
65.35	2.81	(N/A)	0.00
65.85	3.57	(N/A)	0.00
66.35	4.19	(N/A)	0.00
66.85	4.72	(N/A)	0.00
67.35	5.20	(N/A)	0.00
67.85	5.65	(N/A)	0.00
68.35	6.06	(N/A)	0.00

Contributing Structures

(no Q: Orifice - 1, Orifice - 2, Culvert - 1)
Orifice - 1, Culvert - 1
(no Q: Orifice - 2)
Orifice - 1, Culvert - 1
(no Q: Orifice - 2)
Orifice - 1, Culvert - 1
(no Q: Orifice - 2)
Orifice - 1, Orifice - 2, Culvert - 1
Orifice - 1, Orifice - 2, Culvert - 1
Orifice - 1, Orifice - 2, Culvert - 1
Orifice - 1, Orifice - 2, Culvert - 1
Orifice - 1, Orifice - 2, Culvert - 1
Orifice - 1, Orifice - 2, Culvert - 1
Orifice - 1, Orifice - 2, Culvert - 1
Orifice - 1, Orifice - 2, Culvert - 1
Orifice - 1, Orifice - 2, Culvert - 1
Orifice - 1, Orifice - 2, Culvert - 1
Orifice - 1, Orifice - 2, Culvert - 1

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data
 Label: SP-2 OUT
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	78.81 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	80.31 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	Culvert - 1	0.00	80.31
Stand Pipe	Riser - 1	Forward	Culvert - 1	79.81	80.31
Stand Pipe	Riser - 2	Forward	Culvert - 1	79.81	80.31
Culvert-Circular	Culvert - 1	Forward	TW	74.56	80.31
Tailwater Settings	Tailwater			(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Label: SP-2 OUT

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft ³ /s)
0.00	0.14
1.00	0.14
1.50	0.14

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 1 years

Label: SP-2 OUT

Storm Event: 1 year

Scenario: Post-Development 1 year

Structure ID: Culvert - 1	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	15.0 in
Length	9.69 ft
Length (Computed Barrel)	9.69 ft
Slope (Computed)	0.010 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.023
Kr	0.200
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 1
K	0.0018
M	2.5000
C	0.0243
Y	0.8300
T1 ratio (HW/D)	1.076
T2 ratio (HW/D)	1.214
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	75.91 ft	T1 Flow	4.80 ft ³ /s
T2 Elevation	76.08 ft	T2 Flow	5.49 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 1 years

Label: SP-2 OUT

Storm Event: 1 year

Scenario: Post-Development 1 year

Structure ID: Riser - 1	
Structure Type: Stand Pipe	
<hr/>	
Number of Openings	1
Elevation	79.81 ft
Diameter	12.0 in
Orifice Area	0.8 ft ²
Orifice Coefficient	0.600
Weir Length	3.14 ft
Weir Coefficient	3.00 (ft ^{0.5})/s
K Reverse	1.000
Manning's n	0.000
Kev, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

Structure ID: Riser - 2	
Structure Type: Stand Pipe	
<hr/>	
Number of Openings	1
Elevation	79.81 ft
Diameter	12.0 in
Orifice Area	0.8 ft ²
Orifice Coefficient	0.600
Weir Length	3.14 ft
Weir Coefficient	3.00 (ft ^{0.5})/s
K Reverse	1.000
Manning's n	0.000
Kev, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

Structure ID: TW	
Structure Type: TW Setup, DS Channel	
<hr/>	
Tailwater Type	Free Outfall

Convergence Tolerances	
<hr/>	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Label: SP-2 OUT

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Convergence Tolerances

Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: SP-2 OUT
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = User Defined Rating Table - 1 (User Defined Table)

Upstream ID = (Pond Water Surface)

Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
78.81	0.14	78.81	74.76	74.76	0.00	0.00	(N/A)	0.00
78.91	0.14	78.91	74.76	74.76	0.00	0.00	(N/A)	0.00
79.01	0.14	79.01	74.76	74.76	0.00	0.00	(N/A)	0.00
79.11	0.14	79.11	74.76	74.76	0.00	0.00	(N/A)	0.00
79.21	0.14	79.21	74.76	74.76	0.00	0.00	(N/A)	0.00
79.31	0.14	79.31	74.76	74.76	0.00	0.00	(N/A)	0.00
79.41	0.14	79.41	74.76	74.76	0.00	0.00	(N/A)	0.00
79.51	0.14	79.51	74.76	74.76	0.00	0.00	(N/A)	0.00
79.61	0.14	79.61	74.76	74.76	0.00	0.00	(N/A)	0.00
79.71	0.14	79.71	74.76	74.76	0.00	0.00	(N/A)	0.00
79.81	0.14	79.81	74.76	74.76	0.00	0.00	(N/A)	0.00
79.91	0.14	79.91	75.04	75.04	0.00	0.00	(N/A)	0.00
80.01	0.14	80.01	75.34	75.34	0.00	0.00	(N/A)	0.00
80.11	0.14	80.11	75.64	75.64	0.00	0.00	(N/A)	0.00
80.21	0.14	80.21	75.96	75.96	0.00	0.00	(N/A)	0.00
80.31	0.14	80.31	76.08	76.08	0.00	0.00	(N/A)	0.00

Message

Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: SP-2 OUT

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = User Defined Rating Table - 1 (User Defined Table)

Upstream ID = (Pond Water Surface)

Downstream ID = Culvert - 1 (Culvert-Circular)

Message
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: SP-2 OUT
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Culvert - 1 (Culvert-Circular)

 Mannings open channel maximum capacity: 7.06 ft³/s
 Upstream ID = User Defined Rating Table - 1, Riser - 1, Riser - 2
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
78.81	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
78.91	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.01	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.11	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.21	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.31	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.41	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.51	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.61	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.71	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.81	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.91	0.74	75.04	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
80.01	1.83	75.34	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
80.11	3.24	75.64	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
80.21	4.91	75.96	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
80.31	5.49	76.08	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00

Message

```

CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
    
```

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: SP-2 OUT

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Culvert - 1 (Culvert-Circular)

Mannings open channel maximum capacity: 7.06 ft³/s

Upstream ID = User Defined Rating Table - 1, Riser - 1, Riser - 2

Downstream ID = Tailwater (Pond Outfall)

Message
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE
CRIT.DEPTH CONTROL Vh= .204ft Dcr= .537ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .299ft Dcr= .725ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .420ft Dcr= .899ft CRIT.DEPTH Hev= .00ft
INLET CONTROL... Transition: HW =1.52

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: SP-2 OUT
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Riser - 1 (Stand Pipe)

 Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
78.81	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
78.91	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.01	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.11	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.21	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.31	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.41	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.51	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.61	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.71	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.81	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.91	0.30	79.91	Free Outfall	75.04	0.00	0.00	(N/A)	0.00
80.01	0.84	80.01	Free Outfall	75.34	0.00	0.00	(N/A)	0.00
80.11	1.55	80.11	Free Outfall	75.64	0.00	0.00	(N/A)	0.00
80.21	2.38	80.21	Free Outfall	75.96	0.00	0.00	(N/A)	0.00
80.31	2.67	80.31	Free Outfall	76.08	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: SP-2 OUT

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Riser - 1 (Stand Pipe)

Upstream ID = (Pond Water Surface)

Downstream ID = Culvert - 1 (Culvert-Circular)

Message
WS below an invert; no flow.
WS below an invert; no flow.
Weir: H =0.1ft
Weir: H =0.2ft
Weir: H =0.3ft
Weir: H =0.4ft
Orifice: H = .50; Riser orifice equation controlling.

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: SP-2 OUT
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Riser - 2 (Stand Pipe)

 Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
78.81	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
78.91	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.01	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.11	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.21	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.31	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.41	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.51	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.61	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.71	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.81	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.91	0.30	79.91	Free Outfall	75.04	0.00	0.00	(N/A)	0.00
80.01	0.84	80.01	Free Outfall	75.34	0.00	0.00	(N/A)	0.00
80.11	1.55	80.11	Free Outfall	75.64	0.00	0.00	(N/A)	0.00
80.21	2.38	80.21	Free Outfall	75.96	0.00	0.00	(N/A)	0.00
80.31	2.67	80.31	Free Outfall	76.08	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: SP-2 OUT

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Riser - 2 (Stand Pipe)

Upstream ID = (Pond Water Surface)

Downstream ID = Culvert - 1 (Culvert-Circular)

Message

WS below an invert; no flow.

WS below an invert; no flow.

Weir: H =0.1ft

Weir: H =0.2ft

Weir: H =0.3ft

Weir: H =0.4ft

Orifice: H = .50; Riser orifice equation controlling.

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Return Event: 1 years

Label: SP-2 OUT

Storm Event: 1 year

Scenario: Post-Development 1 year

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
78.81	0.14	(N/A)	0.00
78.91	0.14	(N/A)	0.00
79.01	0.14	(N/A)	0.00
79.11	0.14	(N/A)	0.00
79.21	0.14	(N/A)	0.00
79.31	0.14	(N/A)	0.00
79.41	0.14	(N/A)	0.00
79.51	0.14	(N/A)	0.00
79.61	0.14	(N/A)	0.00
79.71	0.14	(N/A)	0.00
79.81	0.14	(N/A)	0.00
79.91	0.74	(N/A)	0.00
80.01	1.83	(N/A)	0.00
80.11	3.24	(N/A)	0.00
80.21	4.91	(N/A)	0.00
80.31	5.49	(N/A)	0.00

Contributing Structures

User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Label: SP-2 OUT

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Composite Outflow Summary

Contributing Structures

User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)

User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)

User Defined Rating
Table - 1,Riser - 1,Riser -
2,Culvert - 1

User Defined Rating
Table - 1,Riser - 1,Riser -
2,Culvert - 1

User Defined Rating
Table - 1,Riser - 1,Riser -
2,Culvert - 1

User Defined Rating
Table - 1,Riser - 1,Riser -
2,Culvert - 1

User Defined Rating
Table - 1,Riser - 1,Riser -
2,Culvert - 1

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 10 years

Label: SP-2 OUT

Storm Event: 10 year

Scenario: Post-Development 10 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	78.81 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	80.31 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	Culvert - 1	0.00	80.31
Stand Pipe	Riser - 1	Forward	Culvert - 1	79.81	80.31
Stand Pipe	Riser - 2	Forward	Culvert - 1	79.81	80.31
Culvert-Circular	Culvert - 1	Forward	TW	74.56	80.31
Tailwater Settings	Tailwater			(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Label: SP-2 OUT

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft ³ /s)
0.00	0.14
1.00	0.14
1.50	0.14

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 10 years

Label: SP-2 OUT

Storm Event: 10 year

Scenario: Post-Development 10 year

Structure ID: Culvert - 1	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	15.0 in
Length	9.69 ft
Length (Computed Barrel)	9.69 ft
Slope (Computed)	0.010 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.023
Kr	0.200
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 1
K	0.0018
M	2.5000
C	0.0243
Y	0.8300
T1 ratio (HW/D)	1.076
T2 ratio (HW/D)	1.214
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	75.91 ft	T1 Flow	4.80 ft ³ /s
T2 Elevation	76.08 ft	T2 Flow	5.49 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 10 years

Label: SP-2 OUT

Storm Event: 10 year

Scenario: Post-Development 10 year

Structure ID: Riser - 1	
Structure Type: Stand Pipe	
<hr/>	
Number of Openings	1
Elevation	79.81 ft
Diameter	12.0 in
Orifice Area	0.8 ft ²
Orifice Coefficient	0.600
Weir Length	3.14 ft
Weir Coefficient	3.00 (ft ^{0.5})/s
K Reverse	1.000
Manning's n	0.000
Kev, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

Structure ID: Riser - 2	
Structure Type: Stand Pipe	
<hr/>	
Number of Openings	1
Elevation	79.81 ft
Diameter	12.0 in
Orifice Area	0.8 ft ²
Orifice Coefficient	0.600
Weir Length	3.14 ft
Weir Coefficient	3.00 (ft ^{0.5})/s
K Reverse	1.000
Manning's n	0.000
Kev, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

Structure ID: TW	
Structure Type: TW Setup, DS Channel	
<hr/>	
Tailwater Type	Free Outfall

Convergence Tolerances	
<hr/>	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Label: SP-2 OUT

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

Convergence Tolerances	
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: SP-2 OUT
 Scenario: Post-Development 10 year

Return Event: 10 years
 Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = User Defined Rating Table - 1 (User Defined Table)

Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
78.81	0.14	78.81	74.76	74.76	0.00	0.00	(N/A)	0.00
78.91	0.14	78.91	74.76	74.76	0.00	0.00	(N/A)	0.00
79.01	0.14	79.01	74.76	74.76	0.00	0.00	(N/A)	0.00
79.11	0.14	79.11	74.76	74.76	0.00	0.00	(N/A)	0.00
79.21	0.14	79.21	74.76	74.76	0.00	0.00	(N/A)	0.00
79.31	0.14	79.31	74.76	74.76	0.00	0.00	(N/A)	0.00
79.41	0.14	79.41	74.76	74.76	0.00	0.00	(N/A)	0.00
79.51	0.14	79.51	74.76	74.76	0.00	0.00	(N/A)	0.00
79.61	0.14	79.61	74.76	74.76	0.00	0.00	(N/A)	0.00
79.71	0.14	79.71	74.76	74.76	0.00	0.00	(N/A)	0.00
79.81	0.14	79.81	74.76	74.76	0.00	0.00	(N/A)	0.00
79.91	0.14	79.91	75.04	75.04	0.00	0.00	(N/A)	0.00
80.01	0.14	80.01	75.34	75.34	0.00	0.00	(N/A)	0.00
80.11	0.14	80.11	75.64	75.64	0.00	0.00	(N/A)	0.00
80.21	0.14	80.21	75.96	75.96	0.00	0.00	(N/A)	0.00
80.31	0.14	80.31	76.08	76.08	0.00	0.00	(N/A)	0.00

Message
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: SP-2 OUT

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = User Defined Rating Table - 1 (User Defined Table)

Upstream ID = (Pond Water Surface)

Downstream ID = Culvert - 1 (Culvert-Circular)

Message
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: SP-2 OUT
 Scenario: Post-Development 10 year

Return Event: 10 years
 Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Culvert - 1 (Culvert-Circular)

 Mannings open channel maximum capacity: 7.06 ft³/s
 Upstream ID = User Defined Rating Table - 1, Riser - 1, Riser - 2
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
78.81	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
78.91	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.01	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.11	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.21	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.31	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.41	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.51	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.61	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.71	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.81	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.91	0.74	75.04	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
80.01	1.83	75.34	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
80.11	3.24	75.64	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
80.21	4.91	75.96	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
80.31	5.49	76.08	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00

Message

```

CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
    
```


Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
Label: SP-2 OUT
Scenario: Post-Development 10 year

Return Event: 10 years
Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE
Structure ID = Culvert - 1 (Culvert-Circular)

Mannings open channel maximum capacity: 7.06 ft³/s
Upstream ID = User Defined Rating Table - 1, Riser - 1, Riser - 2
Downstream ID = Tailwater (Pond Outfall)

Message
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE
CRIT.DEPTH CONTROL Vh= .204ft Dcr= .537ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .299ft Dcr= .725ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .420ft Dcr= .899ft CRIT.DEPTH Hev= .00ft
INLET CONTROL... Transition: HW =1.52

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: SP-2 OUT
 Scenario: Post-Development 10 year

Return Event: 10 years
 Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Riser - 1 (Stand Pipe)

Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
78.81	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
78.91	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.01	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.11	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.21	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.31	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.41	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.51	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.61	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.71	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.81	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.91	0.30	79.91	Free Outfall	75.04	0.00	0.00	(N/A)	0.00
80.01	0.84	80.01	Free Outfall	75.34	0.00	0.00	(N/A)	0.00
80.11	1.55	80.11	Free Outfall	75.64	0.00	0.00	(N/A)	0.00
80.21	2.38	80.21	Free Outfall	75.96	0.00	0.00	(N/A)	0.00
80.31	2.67	80.31	Free Outfall	76.08	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: SP-2 OUT

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Riser - 1 (Stand Pipe)

Upstream ID = (Pond Water Surface)

Downstream ID = Culvert - 1 (Culvert-Circular)

Message
WS below an invert; no flow.
WS below an invert; no flow.
Weir: H =0.1ft
Weir: H =0.2ft
Weir: H =0.3ft
Weir: H =0.4ft
Orifice: H = .50; Riser orifice equation controlling.

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: SP-2 OUT
 Scenario: Post-Development 10 year

Return Event: 10 years
 Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Riser - 2 (Stand Pipe)

 Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
78.81	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
78.91	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.01	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.11	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.21	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.31	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.41	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.51	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.61	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.71	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.81	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.91	0.30	79.91	Free Outfall	75.04	0.00	0.00	(N/A)	0.00
80.01	0.84	80.01	Free Outfall	75.34	0.00	0.00	(N/A)	0.00
80.11	1.55	80.11	Free Outfall	75.64	0.00	0.00	(N/A)	0.00
80.21	2.38	80.21	Free Outfall	75.96	0.00	0.00	(N/A)	0.00
80.31	2.67	80.31	Free Outfall	76.08	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: SP-2 OUT

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Riser - 2 (Stand Pipe)

Upstream ID = (Pond Water Surface)

Downstream ID = Culvert - 1 (Culvert-Circular)

Message
WS below an invert; no flow.
WS below an invert; no flow.
Weir: H =0.1ft
Weir: H =0.2ft
Weir: H =0.3ft
Weir: H =0.4ft
Orifice: H = .50; Riser orifice equation controlling.

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve
 Label: SP-2 OUT
 Scenario: Post-Development 10 year

Return Event: 10 years
 Storm Event: 10 year

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
78.81	0.14	(N/A)	0.00
78.91	0.14	(N/A)	0.00
79.01	0.14	(N/A)	0.00
79.11	0.14	(N/A)	0.00
79.21	0.14	(N/A)	0.00
79.31	0.14	(N/A)	0.00
79.41	0.14	(N/A)	0.00
79.51	0.14	(N/A)	0.00
79.61	0.14	(N/A)	0.00
79.71	0.14	(N/A)	0.00
79.81	0.14	(N/A)	0.00
79.91	0.74	(N/A)	0.00
80.01	1.83	(N/A)	0.00
80.11	3.24	(N/A)	0.00
80.21	4.91	(N/A)	0.00
80.31	5.49	(N/A)	0.00

Contributing Structures

User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Label: SP-2 OUT

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

Composite Outflow Summary

Contributing Structures

User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)

User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)

User Defined Rating
Table - 1,Riser - 1,Riser -
2,Culvert - 1

User Defined Rating
Table - 1,Riser - 1,Riser -
2,Culvert - 1

User Defined Rating
Table - 1,Riser - 1,Riser -
2,Culvert - 1

User Defined Rating
Table - 1,Riser - 1,Riser -
2,Culvert - 1

User Defined Rating
Table - 1,Riser - 1,Riser -
2,Culvert - 1

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 25 years

Label: SP-2 OUT

Storm Event: 25 year

Scenario: Post-Development 25 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	78.81 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	80.31 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	Culvert - 1	0.00	80.31
Stand Pipe	Riser - 1	Forward	Culvert - 1	79.81	80.31
Stand Pipe	Riser - 2	Forward	Culvert - 1	79.81	80.31
Culvert-Circular	Culvert - 1	Forward	TW	74.56	80.31
Tailwater Settings	Tailwater			(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Label: SP-2 OUT

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft ³ /s)
0.00	0.14
1.00	0.14
1.50	0.14

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Label: SP-2 OUT

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Structure ID: Culvert - 1	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	15.0 in
Length	9.69 ft
Length (Computed Barrel)	9.69 ft
Slope (Computed)	0.010 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.023
Kr	0.200
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 1
K	0.0018
M	2.5000
C	0.0243
Y	0.8300
T1 ratio (HW/D)	1.076
T2 ratio (HW/D)	1.214
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	75.91 ft	T1 Flow	4.80 ft ³ /s
T2 Elevation	76.08 ft	T2 Flow	5.49 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 25 years

Label: SP-2 OUT

Storm Event: 25 year

Scenario: Post-Development 25 year

Structure ID: Riser - 1	
Structure Type: Stand Pipe	
<hr/>	
Number of Openings	1
Elevation	79.81 ft
Diameter	12.0 in
Orifice Area	0.8 ft ²
Orifice Coefficient	0.600
Weir Length	3.14 ft
Weir Coefficient	3.00 (ft ^{0.5})/s
K Reverse	1.000
Manning's n	0.000
Kev, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

Structure ID: Riser - 2	
Structure Type: Stand Pipe	
<hr/>	
Number of Openings	1
Elevation	79.81 ft
Diameter	12.0 in
Orifice Area	0.8 ft ²
Orifice Coefficient	0.600
Weir Length	3.14 ft
Weir Coefficient	3.00 (ft ^{0.5})/s
K Reverse	1.000
Manning's n	0.000
Kev, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

Structure ID: TW	
Structure Type: TW Setup, DS Channel	
<hr/>	
Tailwater Type	Free Outfall

Convergence Tolerances	
<hr/>	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Label: SP-2 OUT

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Convergence Tolerances	
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: SP-2 OUT
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = User Defined Rating Table - 1 (User Defined Table)

Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
78.81	0.14	78.81	74.76	74.76	0.00	0.00	(N/A)	0.00
78.91	0.14	78.91	74.76	74.76	0.00	0.00	(N/A)	0.00
79.01	0.14	79.01	74.76	74.76	0.00	0.00	(N/A)	0.00
79.11	0.14	79.11	74.76	74.76	0.00	0.00	(N/A)	0.00
79.21	0.14	79.21	74.76	74.76	0.00	0.00	(N/A)	0.00
79.31	0.14	79.31	74.76	74.76	0.00	0.00	(N/A)	0.00
79.41	0.14	79.41	74.76	74.76	0.00	0.00	(N/A)	0.00
79.51	0.14	79.51	74.76	74.76	0.00	0.00	(N/A)	0.00
79.61	0.14	79.61	74.76	74.76	0.00	0.00	(N/A)	0.00
79.71	0.14	79.71	74.76	74.76	0.00	0.00	(N/A)	0.00
79.81	0.14	79.81	74.76	74.76	0.00	0.00	(N/A)	0.00
79.91	0.14	79.91	75.04	75.04	0.00	0.00	(N/A)	0.00
80.01	0.14	80.01	75.34	75.34	0.00	0.00	(N/A)	0.00
80.11	0.14	80.11	75.64	75.64	0.00	0.00	(N/A)	0.00
80.21	0.14	80.21	75.96	75.96	0.00	0.00	(N/A)	0.00
80.31	0.14	80.31	76.08	76.08	0.00	0.00	(N/A)	0.00

Message
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: SP-2 OUT

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = User Defined Rating Table - 1 (User Defined Table)

Upstream ID = (Pond Water Surface)

Downstream ID = Culvert - 1 (Culvert-Circular)

Message
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: SP-2 OUT
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Culvert - 1 (Culvert-Circular)

 Mannings open channel maximum capacity: 7.06 ft³/s
 Upstream ID = User Defined Rating Table - 1, Riser - 1, Riser - 2
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
78.81	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
78.91	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.01	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.11	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.21	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.31	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.41	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.51	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.61	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.71	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.81	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.91	0.74	75.04	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
80.01	1.83	75.34	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
80.11	3.24	75.64	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
80.21	4.91	75.96	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
80.31	5.49	76.08	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00

Message

```

CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
    
```

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
Label: SP-2 OUT
Scenario: Post-Development 25 year

Return Event: 25 years
Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Culvert - 1 (Culvert-Circular)

Mannings open channel maximum capacity: 7.06 ft³/s
Upstream ID = User Defined Rating Table - 1, Riser - 1, Riser - 2
Downstream ID = Tailwater (Pond Outfall)

Message
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE
CRIT.DEPTH CONTROL Vh= .204ft Dcr= .537ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .299ft Dcr= .725ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .420ft Dcr= .899ft CRIT.DEPTH Hev= .00ft
INLET CONTROL... Transition: HW =1.52

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: SP-2 OUT
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Riser - 1 (Stand Pipe)

Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
78.81	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
78.91	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.01	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.11	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.21	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.31	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.41	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.51	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.61	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.71	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.81	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.91	0.30	79.91	Free Outfall	75.04	0.00	0.00	(N/A)	0.00
80.01	0.84	80.01	Free Outfall	75.34	0.00	0.00	(N/A)	0.00
80.11	1.55	80.11	Free Outfall	75.64	0.00	0.00	(N/A)	0.00
80.21	2.38	80.21	Free Outfall	75.96	0.00	0.00	(N/A)	0.00
80.31	2.67	80.31	Free Outfall	76.08	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: SP-2 OUT

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Riser - 1 (Stand Pipe)

Upstream ID = (Pond Water Surface)

Downstream ID = Culvert - 1 (Culvert-Circular)

Message
WS below an invert; no flow.
WS below an invert; no flow.
Weir: H =0.1ft
Weir: H =0.2ft
Weir: H =0.3ft
Weir: H =0.4ft
Orifice: H = .50; Riser orifice equation controlling.

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: SP-2 OUT
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Riser - 2 (Stand Pipe)

Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
78.81	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
78.91	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.01	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.11	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.21	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.31	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.41	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.51	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.61	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.71	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.81	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.91	0.30	79.91	Free Outfall	75.04	0.00	0.00	(N/A)	0.00
80.01	0.84	80.01	Free Outfall	75.34	0.00	0.00	(N/A)	0.00
80.11	1.55	80.11	Free Outfall	75.64	0.00	0.00	(N/A)	0.00
80.21	2.38	80.21	Free Outfall	75.96	0.00	0.00	(N/A)	0.00
80.31	2.67	80.31	Free Outfall	76.08	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: SP-2 OUT

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Riser - 2 (Stand Pipe)

Upstream ID = (Pond Water Surface)

Downstream ID = Culvert - 1 (Culvert-Circular)

Message
WS below an invert; no flow.
WS below an invert; no flow.
Weir: H =0.1ft
Weir: H =0.2ft
Weir: H =0.3ft
Weir: H =0.4ft
Orifice: H = .50; Riser orifice equation controlling.

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve
 Label: SP-2 OUT
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
78.81	0.14	(N/A)	0.00
78.91	0.14	(N/A)	0.00
79.01	0.14	(N/A)	0.00
79.11	0.14	(N/A)	0.00
79.21	0.14	(N/A)	0.00
79.31	0.14	(N/A)	0.00
79.41	0.14	(N/A)	0.00
79.51	0.14	(N/A)	0.00
79.61	0.14	(N/A)	0.00
79.71	0.14	(N/A)	0.00
79.81	0.14	(N/A)	0.00
79.91	0.74	(N/A)	0.00
80.01	1.83	(N/A)	0.00
80.11	3.24	(N/A)	0.00
80.21	4.91	(N/A)	0.00
80.31	5.49	(N/A)	0.00

Contributing Structures

User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Label: SP-2 OUT

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Composite Outflow Summary

Contributing Structures

User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)

User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)

User Defined Rating
Table - 1,Riser - 1,Riser -
2,Culvert - 1

User Defined Rating
Table - 1,Riser - 1,Riser -
2,Culvert - 1

User Defined Rating
Table - 1,Riser - 1,Riser -
2,Culvert - 1

User Defined Rating
Table - 1,Riser - 1,Riser -
2,Culvert - 1

User Defined Rating
Table - 1,Riser - 1,Riser -
2,Culvert - 1

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 100 years

Label: SP-2 OUT

Storm Event: 100 year

Scenario: Post-Development 100 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	78.81 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	80.31 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	Culvert - 1	0.00	80.31
Stand Pipe	Riser - 1	Forward	Culvert - 1	79.81	80.31
Stand Pipe	Riser - 2	Forward	Culvert - 1	79.81	80.31
Culvert-Circular	Culvert - 1	Forward	TW	74.56	80.31
Tailwater Settings	Tailwater			(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Label: SP-2 OUT

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft ³ /s)
0.00	0.14
1.00	0.14
1.50	0.14

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 100 years

Label: SP-2 OUT

Storm Event: 100 year

Scenario: Post-Development 100 year

Structure ID: Culvert - 1	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	15.0 in
Length	9.69 ft
Length (Computed Barrel)	9.69 ft
Slope (Computed)	0.010 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.023
Kr	0.200
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 1
K	0.0018
M	2.5000
C	0.0243
Y	0.8300
T1 ratio (HW/D)	1.076
T2 ratio (HW/D)	1.214
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	75.91 ft	T1 Flow	4.80 ft ³ /s
T2 Elevation	76.08 ft	T2 Flow	5.49 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 100 years

Label: SP-2 OUT

Storm Event: 100 year

Scenario: Post-Development 100 year

Structure ID: Riser - 1
Structure Type: Stand Pipe

Number of Openings	1
Elevation	79.81 ft
Diameter	12.0 in
Orifice Area	0.8 ft ²
Orifice Coefficient	0.600
Weir Length	3.14 ft
Weir Coefficient	3.00 (ft ^{0.5})/s
K Reverse	1.000
Manning's n	0.000
Kev, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

Structure ID: Riser - 2
Structure Type: Stand Pipe

Number of Openings	1
Elevation	79.81 ft
Diameter	12.0 in
Orifice Area	0.8 ft ²
Orifice Coefficient	0.600
Weir Length	3.14 ft
Weir Coefficient	3.00 (ft ^{0.5})/s
K Reverse	1.000
Manning's n	0.000
Kev, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

Structure ID: TW
Structure Type: TW Setup, DS Channel

Tailwater Type	Free Outfall
----------------	--------------

Convergence Tolerances

Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Label: SP-2 OUT

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Convergence Tolerances	
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 100 years

Label: SP-2 OUT

Storm Event: 100 year

Scenario: Post-Development 100 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = User Defined Rating Table - 1 (User Defined Table)

Upstream ID = (Pond Water Surface)

Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
78.81	0.14	78.81	74.76	74.76	0.00	0.00	(N/A)	0.00
78.91	0.14	78.91	74.76	74.76	0.00	0.00	(N/A)	0.00
79.01	0.14	79.01	74.76	74.76	0.00	0.00	(N/A)	0.00
79.11	0.14	79.11	74.76	74.76	0.00	0.00	(N/A)	0.00
79.21	0.14	79.21	74.76	74.76	0.00	0.00	(N/A)	0.00
79.31	0.14	79.31	74.76	74.76	0.00	0.00	(N/A)	0.00
79.41	0.14	79.41	74.76	74.76	0.00	0.00	(N/A)	0.00
79.51	0.14	79.51	74.76	74.76	0.00	0.00	(N/A)	0.00
79.61	0.14	79.61	74.76	74.76	0.00	0.00	(N/A)	0.00
79.71	0.14	79.71	74.76	74.76	0.00	0.00	(N/A)	0.00
79.81	0.14	79.81	74.76	74.76	0.00	0.00	(N/A)	0.00
79.91	0.14	79.91	75.04	75.04	0.00	0.00	(N/A)	0.00
80.01	0.14	80.01	75.34	75.34	0.00	0.00	(N/A)	0.00
80.11	0.14	80.11	75.64	75.64	0.00	0.00	(N/A)	0.00
80.21	0.14	80.21	75.96	75.96	0.00	0.00	(N/A)	0.00
80.31	0.14	80.31	76.08	76.08	0.00	0.00	(N/A)	0.00

Message

Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table
 Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: SP-2 OUT

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = User Defined Rating Table - 1 (User Defined Table)

Upstream ID = (Pond Water Surface)

Downstream ID = Culvert - 1 (Culvert-Circular)

Message
Interpolated from input table
Interpolated from input table
Interpolated from input table
Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: SP-2 OUT
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Culvert - 1 (Culvert-Circular)

 Mannings open channel maximum capacity: 7.06 ft³/s
 Upstream ID = User Defined Rating Table - 1, Riser - 1, Riser - 2
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
78.81	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
78.91	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.01	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.11	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.21	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.31	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.41	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.51	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.61	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.71	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.81	0.14	74.76	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
79.91	0.74	75.04	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
80.01	1.83	75.34	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
80.11	3.24	75.64	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
80.21	4.91	75.96	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
80.31	5.49	76.08	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00

Message

```

CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
    
```

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
Label: SP-2 OUT
Scenario: Post-Development 100 year

Return Event: 100 years
Storm Event: 100 year

RATING TABLE FOR ONE OUTLET TYPE
Structure ID = Culvert - 1 (Culvert-Circular)

Mannings open channel maximum capacity: 7.06 ft³/s
Upstream ID = User Defined Rating Table - 1, Riser - 1, Riser - 2
Downstream ID = Tailwater (Pond Outfall)

Message
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .049ft Dcr= .145ft CRIT.DEPTH Hev= .00ft
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE
CRIT.DEPTH CONTROL Vh= .204ft Dcr= .537ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .299ft Dcr= .725ft CRIT.DEPTH Hev= .00ft
CRIT.DEPTH CONTROL Vh= .420ft Dcr= .899ft CRIT.DEPTH Hev= .00ft
INLET CONTROL... Transition: HW =1.52

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: SP-2 OUT
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Riser - 1 (Stand Pipe)

 Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
78.81	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
78.91	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.01	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.11	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.21	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.31	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.41	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.51	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.61	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.71	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.81	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.91	0.30	79.91	Free Outfall	75.04	0.00	0.00	(N/A)	0.00
80.01	0.84	80.01	Free Outfall	75.34	0.00	0.00	(N/A)	0.00
80.11	1.55	80.11	Free Outfall	75.64	0.00	0.00	(N/A)	0.00
80.21	2.38	80.21	Free Outfall	75.96	0.00	0.00	(N/A)	0.00
80.31	2.67	80.31	Free Outfall	76.08	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
Label: SP-2 OUT
Scenario: Post-Development 100 year

Return Event: 100 years
Storm Event: 100 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Riser - 1 (Stand Pipe)

Upstream ID = (Pond Water Surface)

Downstream ID = Culvert - 1 (Culvert-Circular)

Message
WS below an invert; no flow.
WS below an invert; no flow.
Weir: H =0.1ft
Weir: H =0.2ft
Weir: H =0.3ft
Weir: H =0.4ft
Orifice: H =.50; Riser orifice equation controlling.

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: SP-2 OUT
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Riser - 2 (Stand Pipe)

Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
78.81	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
78.91	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.01	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.11	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.21	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.31	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.41	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.51	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.61	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.71	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.81	0.00	0.00	0.00	74.76	0.00	0.00	(N/A)	0.00
79.91	0.30	79.91	Free Outfall	75.04	0.00	0.00	(N/A)	0.00
80.01	0.84	80.01	Free Outfall	75.34	0.00	0.00	(N/A)	0.00
80.11	1.55	80.11	Free Outfall	75.64	0.00	0.00	(N/A)	0.00
80.21	2.38	80.21	Free Outfall	75.96	0.00	0.00	(N/A)	0.00
80.31	2.67	80.31	Free Outfall	76.08	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: SP-2 OUT

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Riser - 2 (Stand Pipe)

Upstream ID = (Pond Water Surface)

Downstream ID = Culvert - 1 (Culvert-Circular)

Message
WS below an invert; no flow.
WS below an invert; no flow.
Weir: H =0.1ft
Weir: H =0.2ft
Weir: H =0.3ft
Weir: H =0.4ft
Orifice: H =.50; Riser orifice equation controlling.

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve
 Label: SP-2 OUT
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
78.81	0.14	(N/A)	0.00
78.91	0.14	(N/A)	0.00
79.01	0.14	(N/A)	0.00
79.11	0.14	(N/A)	0.00
79.21	0.14	(N/A)	0.00
79.31	0.14	(N/A)	0.00
79.41	0.14	(N/A)	0.00
79.51	0.14	(N/A)	0.00
79.61	0.14	(N/A)	0.00
79.71	0.14	(N/A)	0.00
79.81	0.14	(N/A)	0.00
79.91	0.74	(N/A)	0.00
80.01	1.83	(N/A)	0.00
80.11	3.24	(N/A)	0.00
80.21	4.91	(N/A)	0.00
80.31	5.49	(N/A)	0.00

Contributing Structures

User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)
User Defined Rating
Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve
Label: SP-2 OUT
Scenario: Post-Development 100 year

Return Event: 100 years
Storm Event: 100 year

Composite Outflow Summary

Contributing Structures
User Defined Rating Table - 1,Culvert - 1 (no Q: Riser - 1,Riser - 2)
User Defined Rating Table - 1,Culvert - 1 (no Q: Riser - 1,Riser - 2)
User Defined Rating Table - 1,Riser - 1,Riser - 2,Culvert - 1
User Defined Rating Table - 1,Riser - 1,Riser - 2,Culvert - 1
User Defined Rating Table - 1,Riser - 1,Riser - 2,Culvert - 1
User Defined Rating Table - 1,Riser - 1,Riser - 2,Culvert - 1
User Defined Rating Table - 1,Riser - 1,Riser - 2,Culvert - 1

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data
 Label: XFILTRATION SYSTEM
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	71.50 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	76.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	Culvert - 1	71.50	76.50
Orifice-Circular	Orifice - 2	Forward	Culvert - 1	72.75	76.50
Culvert-Circular	Culvert - 1	Forward	TW	71.50	76.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data
 Label: XFILTRATION SYSTEM
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Structure ID: Culvert - 1	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	15.0 in
Length	33.36 ft
Length (Computed Barrel)	33.36 ft
Slope (Computed)	0.015 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.023
Kr	0.200
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 1
K	0.0018
M	2.5000
C	0.0243
Y	0.8300
T1 ratio (HW/D)	1.074
T2 ratio (HW/D)	1.211
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	72.84 ft	T1 Flow	4.80 ft ³ /s
T2 Elevation	73.01 ft	T2 Flow	5.49 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data
 Label: XFILTRATION SYSTEM
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Structure ID: Orifice - 1	
Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	71.50 ft
Orifice Diameter	3.0 in
Orifice Coefficient	0.600

Structure ID: Orifice - 2	
Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	72.75 ft
Orifice Diameter	5.0 in
Orifice Coefficient	0.600

Structure ID: TW	
Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 1 years

Label: XFILTRATION SYSTEM

Storm Event: 1 year

Scenario: Post-Development 1 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Culvert - 1 (Culvert-Circular)

Mannings open channel maximum capacity: 8.51 ft³/s

Upstream ID = Orifice - 1, Orifice - 2

Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
71.50	0.00	0.00	0.00	Free Outfall	0.00	0.00	(N/A)	0.00
72.00	0.13	71.70	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
72.50	0.20	71.75	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
72.75	0.23	71.77	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
73.00	0.37	71.84	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
73.50	0.77	72.00	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
74.00	1.00	72.06	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
74.50	1.18	72.12	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
75.00	1.34	72.16	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
75.50	1.49	72.20	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
76.00	1.61	72.23	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
76.50	1.72	72.26	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .048ft Dcr= .139ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .060ft Dcr= .174ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .064ft Dcr= .187ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .083ft Dcr= .237ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .123ft Dcr= .344ft
 CRIT.DEPTH Hev= .00ft
 FLOW PRECEDENCE SET
 TO UPSTREAM
 CONTROLLING
 STRUCTURE

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: XFILTRATION SYSTEM

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Culvert - 1 (Culvert-Circular)

Mannings open channel maximum capacity: 8.51 ft³/s

Upstream ID = Orifice - 1, Orifice - 2

Downstream ID = Tailwater (Pond Outfall)

Message
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 1 years

Label: XFILTRATION SYSTEM

Storm Event: 1 year

Scenario: Post-Development 1 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Orifice - 1 (Orifice-Circular)

Upstream ID = (Pond Water Surface)

Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
71.50	0.00	0.00	0.00	0.00	0.00	0.00	(N/A)	0.00
72.00	0.13	72.00	71.70	71.70	0.00	0.00	(N/A)	0.00
72.50	0.21	72.50	71.75	71.75	0.00	0.00	(N/A)	0.00
72.75	0.23	72.75	71.76	71.77	0.00	0.00	(N/A)	0.00
73.00	0.25	73.00	71.84	71.84	0.00	0.00	(N/A)	0.00
73.50	0.29	73.50	71.99	72.00	0.00	0.00	(N/A)	0.00
74.00	0.33	74.00	72.06	72.06	0.00	0.00	(N/A)	0.00
74.50	0.36	74.50	72.12	72.12	0.00	0.00	(N/A)	0.00
75.00	0.40	75.00	72.16	72.16	0.00	0.00	(N/A)	0.00
75.50	0.43	75.50	72.20	72.20	0.00	0.00	(N/A)	0.00
76.00	0.46	76.00	72.23	72.23	0.00	0.00	(N/A)	0.00
76.50	0.49	76.50	72.26	72.26	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 H =.30
 H =.75
 H =.99
 H =1.16
 H =1.51
 H =1.94
 H =2.38
 H =2.84
 H =3.30
 H =3.77
 H =4.24

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: XFILTRATION SYSTEM
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Orifice - 2 (Orifice-Circular)

Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
71.50	0.00	0.00	0.00	0.00	0.00	0.00	(N/A)	0.00
72.00	0.00	0.00	0.00	71.70	0.00	0.00	(N/A)	0.00
72.50	0.00	0.00	0.00	71.75	0.00	0.00	(N/A)	0.00
72.75	0.00	0.00	0.00	71.77	0.00	0.00	(N/A)	0.00
73.00	0.12	73.00	Free Outfall	71.84	0.00	0.00	(N/A)	0.00
73.50	0.48	73.50	Free Outfall	72.00	0.00	0.00	(N/A)	0.00
74.00	0.67	74.00	Free Outfall	72.06	0.00	0.00	(N/A)	0.00
74.50	0.81	74.50	Free Outfall	72.12	0.00	0.00	(N/A)	0.00
75.00	0.94	75.00	Free Outfall	72.16	0.00	0.00	(N/A)	0.00
75.50	1.05	75.50	Free Outfall	72.20	0.00	0.00	(N/A)	0.00
76.00	1.14	76.00	Free Outfall	72.23	0.00	0.00	(N/A)	0.00
76.50	1.24	76.50	Free Outfall	72.26	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .069ft Dcr= .181ft
 CRIT.DEPTH Hev= .00ft
 H =.54
 H =1.04
 H =1.54
 H =2.04
 H =2.54
 H =3.04
 H =3.54

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve
 Label: XFILTRATION SYSTEM
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
71.50	0.00	(N/A)	0.00
72.00	0.13	(N/A)	0.00
72.50	0.20	(N/A)	0.00
72.75	0.23	(N/A)	0.00
73.00	0.37	(N/A)	0.00
73.50	0.77	(N/A)	0.00
74.00	1.00	(N/A)	0.00
74.50	1.18	(N/A)	0.00
75.00	1.34	(N/A)	0.00
75.50	1.48	(N/A)	0.00
76.00	1.60	(N/A)	0.00
76.50	1.72	(N/A)	0.00

Contributing Structures

(no Q: Orifice - 1, Orifice - 2, Culvert - 1)
 Orifice - 1, Culvert - 1
 (no Q: Orifice - 2)
 Orifice - 1, Culvert - 1
 (no Q: Orifice - 2)
 Orifice - 1, Culvert - 1
 (no Q: Orifice - 2)
 Orifice - 1, Orifice - 2, Culvert - 1
 Orifice - 1, Orifice - 2, Culvert - 1
 Orifice - 1, Orifice - 2, Culvert - 1
 Orifice - 1, Orifice - 2, Culvert - 1
 Orifice - 1, Orifice - 2, Culvert - 1
 Orifice - 1, Orifice - 2, Culvert - 1
 Orifice - 1, Orifice - 2, Culvert - 1
 Orifice - 1, Orifice - 2, Culvert - 1
 Orifice - 1, Orifice - 2, Culvert - 1

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 10 years

Label: XFILTRATION SYSTEM

Storm Event: 10 year

Scenario: Post-Development 10 year

Requested Pond Water Surface Elevations

Minimum (Headwater)	71.50 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	76.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	Culvert - 1	71.50	76.50
Orifice-Circular	Orifice - 2	Forward	Culvert - 1	72.75	76.50
Culvert-Circular	Culvert - 1	Forward	TW	71.50	76.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 10 years

Label: XFILTRATION SYSTEM

Storm Event: 10 year

Scenario: Post-Development 10 year

Structure ID: Culvert - 1	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	15.0 in
Length	33.36 ft
Length (Computed Barrel)	33.36 ft
Slope (Computed)	0.015 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.023
Kr	0.200
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 1
K	0.0018
M	2.5000
C	0.0243
Y	0.8300
T1 ratio (HW/D)	1.074
T2 ratio (HW/D)	1.211
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	72.84 ft	T1 Flow	4.80 ft ³ /s
T2 Elevation	73.01 ft	T2 Flow	5.49 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Label: XFILTRATION SYSTEM

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

Structure ID: Orifice - 1	
Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	71.50 ft
Orifice Diameter	3.0 in
Orifice Coefficient	0.600
Structure ID: Orifice - 2	
Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	72.75 ft
Orifice Diameter	5.0 in
Orifice Coefficient	0.600
Structure ID: TW	
Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall
Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: XFILTRATION SYSTEM
 Scenario: Post-Development 10 year

Return Event: 10 years
 Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Culvert - 1 (Culvert-Circular)

 Mannings open channel maximum capacity: 8.51 ft³/s
 Upstream ID = Orifice - 1, Orifice - 2
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
71.50	0.00	0.00	0.00	Free Outfall	0.00	0.00	(N/A)	0.00
72.00	0.13	71.70	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
72.50	0.20	71.75	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
72.75	0.23	71.77	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
73.00	0.37	71.84	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
73.50	0.77	72.00	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
74.00	1.00	72.06	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
74.50	1.18	72.12	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
75.00	1.34	72.16	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
75.50	1.49	72.20	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
76.00	1.61	72.23	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
76.50	1.72	72.26	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .048ft Dcr= .139ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .060ft Dcr= .174ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .064ft Dcr= .187ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .083ft Dcr= .237ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .123ft Dcr= .344ft
 CRIT.DEPTH Hev= .00ft
 FLOW PRECEDENCE SET
 TO UPSTREAM
 CONTROLLING
 STRUCTURE

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: XFILTRATION SYSTEM

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Culvert - 1 (Culvert-Circular)

Mannings open channel maximum capacity: 8.51 ft³/s

Upstream ID = Orifice - 1, Orifice - 2

Downstream ID = Tailwater (Pond Outfall)

Message
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: XFILTRATION SYSTEM
 Scenario: Post-Development 10 year

Return Event: 10 years
 Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Orifice - 1 (Orifice-Circular)

Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
71.50	0.00	0.00	0.00	0.00	0.00	0.00	(N/A)	0.00
72.00	0.13	72.00	71.70	71.70	0.00	0.00	(N/A)	0.00
72.50	0.21	72.50	71.75	71.75	0.00	0.00	(N/A)	0.00
72.75	0.23	72.75	71.76	71.77	0.00	0.00	(N/A)	0.00
73.00	0.25	73.00	71.84	71.84	0.00	0.00	(N/A)	0.00
73.50	0.29	73.50	71.99	72.00	0.00	0.00	(N/A)	0.00
74.00	0.33	74.00	72.06	72.06	0.00	0.00	(N/A)	0.00
74.50	0.36	74.50	72.12	72.12	0.00	0.00	(N/A)	0.00
75.00	0.40	75.00	72.16	72.16	0.00	0.00	(N/A)	0.00
75.50	0.43	75.50	72.20	72.20	0.00	0.00	(N/A)	0.00
76.00	0.46	76.00	72.23	72.23	0.00	0.00	(N/A)	0.00
76.50	0.49	76.50	72.26	72.26	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 H =.30
 H =.75
 H =.99
 H =1.16
 H =1.51
 H =1.94
 H =2.38
 H =2.84
 H =3.30
 H =3.77
 H =4.24

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: XFILTRATION SYSTEM
 Scenario: Post-Development 10 year

Return Event: 10 years
 Storm Event: 10 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Orifice - 2 (Orifice-Circular)

Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
71.50	0.00	0.00	0.00	0.00	0.00	0.00	(N/A)	0.00
72.00	0.00	0.00	0.00	71.70	0.00	0.00	(N/A)	0.00
72.50	0.00	0.00	0.00	71.75	0.00	0.00	(N/A)	0.00
72.75	0.00	0.00	0.00	71.77	0.00	0.00	(N/A)	0.00
73.00	0.12	73.00	Free Outfall	71.84	0.00	0.00	(N/A)	0.00
73.50	0.48	73.50	Free Outfall	72.00	0.00	0.00	(N/A)	0.00
74.00	0.67	74.00	Free Outfall	72.06	0.00	0.00	(N/A)	0.00
74.50	0.81	74.50	Free Outfall	72.12	0.00	0.00	(N/A)	0.00
75.00	0.94	75.00	Free Outfall	72.16	0.00	0.00	(N/A)	0.00
75.50	1.05	75.50	Free Outfall	72.20	0.00	0.00	(N/A)	0.00
76.00	1.14	76.00	Free Outfall	72.23	0.00	0.00	(N/A)	0.00
76.50	1.24	76.50	Free Outfall	72.26	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .069ft Dcr= .181ft
 CRIT.DEPTH Hev= .00ft
 H =.54
 H =1.04
 H =1.54
 H =2.04
 H =2.54
 H =3.04
 H =3.54

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve
 Label: XFILTRATION SYSTEM
 Scenario: Post-Development 10 year

Return Event: 10 years
 Storm Event: 10 year

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
71.50	0.00	(N/A)	0.00
72.00	0.13	(N/A)	0.00
72.50	0.20	(N/A)	0.00
72.75	0.23	(N/A)	0.00
73.00	0.37	(N/A)	0.00
73.50	0.77	(N/A)	0.00
74.00	1.00	(N/A)	0.00
74.50	1.18	(N/A)	0.00
75.00	1.34	(N/A)	0.00
75.50	1.48	(N/A)	0.00
76.00	1.60	(N/A)	0.00
76.50	1.72	(N/A)	0.00

Contributing Structures

(no Q: Orifice - 1,Orifice - 2,Culvert - 1)
 Orifice - 1,Culvert - 1
 (no Q: Orifice - 2)
 Orifice - 1,Culvert - 1
 (no Q: Orifice - 2)
 Orifice - 1,Culvert - 1
 (no Q: Orifice - 2)
 Orifice - 1,Orifice - 2,Culvert - 1
 Orifice - 1,Orifice - 2,Culvert - 1
 Orifice - 1,Orifice - 2,Culvert - 1
 Orifice - 1,Orifice - 2,Culvert - 1
 Orifice - 1,Orifice - 2,Culvert - 1
 Orifice - 1,Orifice - 2,Culvert - 1
 Orifice - 1,Orifice - 2,Culvert - 1
 Orifice - 1,Orifice - 2,Culvert - 1
 Orifice - 1,Orifice - 2,Culvert - 1

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data
 Label: XFILTRATION SYSTEM
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	71.50 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	76.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	Culvert - 1	71.50	76.50
Orifice-Circular	Orifice - 2	Forward	Culvert - 1	72.75	76.50
Culvert-Circular	Culvert - 1	Forward	TW	71.50	76.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 25 years

Label: XFILTRATION SYSTEM

Storm Event: 25 year

Scenario: Post-Development 25 year

Structure ID: Culvert - 1	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	15.0 in
Length	33.36 ft
Length (Computed Barrel)	33.36 ft
Slope (Computed)	0.015 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.023
Kr	0.200
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 1
K	0.0018
M	2.5000
C	0.0243
Y	0.8300
T1 ratio (HW/D)	1.074
T2 ratio (HW/D)	1.211
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	72.84 ft	T1 Flow	4.80 ft ³ /s
T2 Elevation	73.01 ft	T2 Flow	5.49 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Label: XFILTRATION SYSTEM

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Structure ID: Orifice - 1	
Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	71.50 ft
Orifice Diameter	3.0 in
Orifice Coefficient	0.600
Structure ID: Orifice - 2	
Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	72.75 ft
Orifice Diameter	5.0 in
Orifice Coefficient	0.600
Structure ID: TW	
Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall
Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: XFILTRATION SYSTEM
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Culvert - 1 (Culvert-Circular)

 Mannings open channel maximum capacity: 8.51 ft³/s
 Upstream ID = Orifice - 1, Orifice - 2
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
71.50	0.00	0.00	0.00	Free Outfall	0.00	0.00	(N/A)	0.00
72.00	0.13	71.70	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
72.50	0.20	71.75	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
72.75	0.23	71.77	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
73.00	0.37	71.84	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
73.50	0.77	72.00	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
74.00	1.00	72.06	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
74.50	1.18	72.12	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
75.00	1.34	72.16	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
75.50	1.49	72.20	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
76.00	1.61	72.23	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
76.50	1.72	72.26	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .048ft Dcr= .139ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .060ft Dcr= .174ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .064ft Dcr= .187ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .083ft Dcr= .237ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .123ft Dcr= .344ft
 CRIT.DEPTH Hev= .00ft
 FLOW PRECEDENCE SET
 TO UPSTREAM
 CONTROLLING
 STRUCTURE

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Label: XFILTRATION SYSTEM

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Culvert - 1 (Culvert-Circular)

Mannings open channel maximum capacity: 8.51 ft³/s

Upstream ID = Orifice - 1, Orifice - 2

Downstream ID = Tailwater (Pond Outfall)

Message
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: XFILTRATION SYSTEM
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Orifice - 1 (Orifice-Circular)

Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
71.50	0.00	0.00	0.00	0.00	0.00	0.00	(N/A)	0.00
72.00	0.13	72.00	71.70	71.70	0.00	0.00	(N/A)	0.00
72.50	0.21	72.50	71.75	71.75	0.00	0.00	(N/A)	0.00
72.75	0.23	72.75	71.76	71.77	0.00	0.00	(N/A)	0.00
73.00	0.25	73.00	71.84	71.84	0.00	0.00	(N/A)	0.00
73.50	0.29	73.50	71.99	72.00	0.00	0.00	(N/A)	0.00
74.00	0.33	74.00	72.06	72.06	0.00	0.00	(N/A)	0.00
74.50	0.36	74.50	72.12	72.12	0.00	0.00	(N/A)	0.00
75.00	0.40	75.00	72.16	72.16	0.00	0.00	(N/A)	0.00
75.50	0.43	75.50	72.20	72.20	0.00	0.00	(N/A)	0.00
76.00	0.46	76.00	72.23	72.23	0.00	0.00	(N/A)	0.00
76.50	0.49	76.50	72.26	72.26	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 H =.30
 H =.75
 H =.99
 H =1.16
 H =1.51
 H =1.94
 H =2.38
 H =2.84
 H =3.30
 H =3.77
 H =4.24

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: XFILTRATION SYSTEM
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Orifice - 2 (Orifice-Circular)

Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
71.50	0.00	0.00	0.00	0.00	0.00	0.00	(N/A)	0.00
72.00	0.00	0.00	0.00	71.70	0.00	0.00	(N/A)	0.00
72.50	0.00	0.00	0.00	71.75	0.00	0.00	(N/A)	0.00
72.75	0.00	0.00	0.00	71.77	0.00	0.00	(N/A)	0.00
73.00	0.12	73.00	Free Outfall	71.84	0.00	0.00	(N/A)	0.00
73.50	0.48	73.50	Free Outfall	72.00	0.00	0.00	(N/A)	0.00
74.00	0.67	74.00	Free Outfall	72.06	0.00	0.00	(N/A)	0.00
74.50	0.81	74.50	Free Outfall	72.12	0.00	0.00	(N/A)	0.00
75.00	0.94	75.00	Free Outfall	72.16	0.00	0.00	(N/A)	0.00
75.50	1.05	75.50	Free Outfall	72.20	0.00	0.00	(N/A)	0.00
76.00	1.14	76.00	Free Outfall	72.23	0.00	0.00	(N/A)	0.00
76.50	1.24	76.50	Free Outfall	72.26	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .069ft Dcr= .181ft
 CRIT.DEPTH Hev= .00ft
 H =.54
 H =1.04
 H =1.54
 H =2.04
 H =2.54
 H =3.04
 H =3.54

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve
 Label: XFILTRATION SYSTEM
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
71.50	0.00	(N/A)	0.00
72.00	0.13	(N/A)	0.00
72.50	0.20	(N/A)	0.00
72.75	0.23	(N/A)	0.00
73.00	0.37	(N/A)	0.00
73.50	0.77	(N/A)	0.00
74.00	1.00	(N/A)	0.00
74.50	1.18	(N/A)	0.00
75.00	1.34	(N/A)	0.00
75.50	1.48	(N/A)	0.00
76.00	1.60	(N/A)	0.00
76.50	1.72	(N/A)	0.00

Contributing Structures

(no Q: Orifice - 1,Orifice - 2,Culvert - 1) Orifice - 1,Culvert - 1 (no Q: Orifice - 2) Orifice - 1,Culvert - 1 (no Q: Orifice - 2) Orifice - 1,Culvert - 1 (no Q: Orifice - 2) Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1 Orifice - 1,Orifice - 2,Culvert - 1
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Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 100 years

Label: XFILTRATION SYSTEM

Storm Event: 100 year

Scenario: Post-Development 100 year

Requested Pond Water Surface Elevations

Minimum (Headwater)	71.50 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	76.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	Culvert - 1	71.50	76.50
Orifice-Circular	Orifice - 2	Forward	Culvert - 1	72.75	76.50
Culvert-Circular	Culvert - 1	Forward	TW	71.50	76.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 100 years

Label: XFILTRATION SYSTEM

Storm Event: 100 year

Scenario: Post-Development 100 year

Structure ID: Culvert - 1	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	15.0 in
Length	33.36 ft
Length (Computed Barrel)	33.36 ft
Slope (Computed)	0.015 ft/ft

Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.023
Kr	0.200
Convergence Tolerance	0.00 ft

Inlet Control Data	
Equation Form	Form 1
K	0.0018
M	2.5000
C	0.0243
Y	0.8300
T1 ratio (HW/D)	1.074
T2 ratio (HW/D)	1.211
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	72.84 ft	T1 Flow	4.80 ft ³ /s
T2 Elevation	73.01 ft	T2 Flow	5.49 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 100 years

Label: XFILTRATION SYSTEM

Storm Event: 100 year

Scenario: Post-Development 100 year

Structure ID: Orifice - 1	
Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	71.50 ft
Orifice Diameter	3.0 in
Orifice Coefficient	0.600
Structure ID: Orifice - 2	
Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	72.75 ft
Orifice Diameter	5.0 in
Orifice Coefficient	0.600
Structure ID: TW	
Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall
Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: XFILTRATION SYSTEM
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Culvert - 1 (Culvert-Circular)

 Mannings open channel maximum capacity: 8.51 ft³/s
 Upstream ID = Orifice - 1, Orifice - 2
 Downstream ID = Tailwater (Pond Outfall)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
71.50	0.00	0.00	0.00	Free Outfall	0.00	0.00	(N/A)	0.00
72.00	0.13	71.70	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
72.50	0.20	71.75	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
72.75	0.23	71.77	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
73.00	0.37	71.84	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
73.50	0.77	72.00	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
74.00	1.00	72.06	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
74.50	1.18	72.12	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
75.00	1.34	72.16	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
75.50	1.49	72.20	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
76.00	1.61	72.23	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
76.50	1.72	72.26	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .048ft Dcr= .139ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .060ft Dcr= .174ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .064ft Dcr= .187ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .083ft Dcr= .237ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .123ft Dcr= .344ft
 CRIT.DEPTH Hev= .00ft
 FLOW PRECEDENCE SET
 TO UPSTREAM
 CONTROLLING
 STRUCTURE

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
Label: XFILTRATION SYSTEM
Scenario: Post-Development 100 year

Return Event: 100 years
Storm Event: 100 year

RATING TABLE FOR ONE OUTLET TYPE
Structure ID = Culvert - 1 (Culvert-Circular)

Mannings open channel maximum capacity: 8.51 ft³/s
Upstream ID = Orifice - 1, Orifice - 2
Downstream ID = Tailwater (Pond Outfall)

Message
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves
 Label: XFILTRATION SYSTEM
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

RATING TABLE FOR ONE OUTLET TYPE
 Structure ID = Orifice - 1 (Orifice-Circular)

Upstream ID = (Pond Water Surface)
 Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
71.50	0.00	0.00	0.00	0.00	0.00	0.00	(N/A)	0.00
72.00	0.13	72.00	71.70	71.70	0.00	0.00	(N/A)	0.00
72.50	0.21	72.50	71.75	71.75	0.00	0.00	(N/A)	0.00
72.75	0.23	72.75	71.76	71.77	0.00	0.00	(N/A)	0.00
73.00	0.25	73.00	71.84	71.84	0.00	0.00	(N/A)	0.00
73.50	0.29	73.50	71.99	72.00	0.00	0.00	(N/A)	0.00
74.00	0.33	74.00	72.06	72.06	0.00	0.00	(N/A)	0.00
74.50	0.36	74.50	72.12	72.12	0.00	0.00	(N/A)	0.00
75.00	0.40	75.00	72.16	72.16	0.00	0.00	(N/A)	0.00
75.50	0.43	75.50	72.20	72.20	0.00	0.00	(N/A)	0.00
76.00	0.46	76.00	72.23	72.23	0.00	0.00	(N/A)	0.00
76.50	0.49	76.50	72.26	72.26	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 H =.30
 H =.75
 H =.99
 H =1.16
 H =1.51
 H =1.94
 H =2.38
 H =2.84
 H =3.30
 H =3.77
 H =4.24

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 100 years

Label: XFILTRATION SYSTEM

Storm Event: 100 year

Scenario: Post-Development 100 year

RATING TABLE FOR ONE OUTLET TYPE

Structure ID = Orifice - 2 (Orifice-Circular)

Upstream ID = (Pond Water Surface)

Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft ³ /s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line Error (ft)	Convergence Error (ft ³ /s)	Downstream Channel Tailwater (ft)	Tailwater Error (ft)
71.50	0.00	0.00	0.00	0.00	0.00	0.00	(N/A)	0.00
72.00	0.00	0.00	0.00	71.70	0.00	0.00	(N/A)	0.00
72.50	0.00	0.00	0.00	71.75	0.00	0.00	(N/A)	0.00
72.75	0.00	0.00	0.00	71.77	0.00	0.00	(N/A)	0.00
73.00	0.12	73.00	Free Outfall	71.84	0.00	0.00	(N/A)	0.00
73.50	0.48	73.50	Free Outfall	72.00	0.00	0.00	(N/A)	0.00
74.00	0.67	74.00	Free Outfall	72.06	0.00	0.00	(N/A)	0.00
74.50	0.81	74.50	Free Outfall	72.12	0.00	0.00	(N/A)	0.00
75.00	0.94	75.00	Free Outfall	72.16	0.00	0.00	(N/A)	0.00
75.50	1.05	75.50	Free Outfall	72.20	0.00	0.00	(N/A)	0.00
76.00	1.14	76.00	Free Outfall	72.23	0.00	0.00	(N/A)	0.00
76.50	1.24	76.50	Free Outfall	72.26	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .069ft Dcr= .181ft
 CRIT.DEPTH Hev= .00ft
 H =.54
 H =1.04
 H =1.54
 H =2.04
 H =2.54
 H =3.04
 H =3.54

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve
 Label: XFILTRATION SYSTEM
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft ³ /s)	Tailwater Elevation (ft)	Convergence Error (ft)
71.50	0.00	(N/A)	0.00
72.00	0.13	(N/A)	0.00
72.50	0.20	(N/A)	0.00
72.75	0.23	(N/A)	0.00
73.00	0.37	(N/A)	0.00
73.50	0.77	(N/A)	0.00
74.00	1.00	(N/A)	0.00
74.50	1.18	(N/A)	0.00
75.00	1.34	(N/A)	0.00
75.50	1.48	(N/A)	0.00
76.00	1.60	(N/A)	0.00
76.50	1.72	(N/A)	0.00

Contributing Structures

(no Q: Orifice - 1,Orifice - 2,Culvert - 1)
 Orifice - 1,Culvert - 1
 (no Q: Orifice - 2)
 Orifice - 1,Culvert - 1
 (no Q: Orifice - 2)
 Orifice - 1,Culvert - 1
 (no Q: Orifice - 2)
 Orifice - 1,Orifice - 2,Culvert - 1
 Orifice - 1,Orifice - 2,Culvert - 1
 Orifice - 1,Orifice - 2,Culvert - 1
 Orifice - 1,Orifice - 2,Culvert - 1
 Orifice - 1,Orifice - 2,Culvert - 1
 Orifice - 1,Orifice - 2,Culvert - 1
 Orifice - 1,Orifice - 2,Culvert - 1
 Orifice - 1,Orifice - 2,Culvert - 1
 Orifice - 1,Orifice - 2,Culvert - 1
 Orifice - 1,Orifice - 2,Culvert - 1

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 1 years

Label: 24" Depth Green Roof

Storm Event: 1 year

Scenario: Post-Development 1 year

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	93.00 ft
Volume (Initial)	0 ft ³
Flow (Initial Outlet)	0.09 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.09 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ft ³)	Area (ft ²)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
93.00	0.09	0	508	0.00	0.09	0.09
93.10	0.09	51	508	0.00	0.09	0.65
93.20	0.09	114	1,016	0.00	0.09	1.36
93.30	0.09	216	1,016	0.00	0.09	2.49
93.40	0.09	317	1,016	0.00	0.09	3.61
93.50	0.09	419	1,016	0.00	0.09	4.74
93.60	0.09	520	1,016	0.00	0.09	5.87
93.70	0.09	622	1,016	0.00	0.09	7.00
93.80	0.09	723	1,016	0.00	0.09	8.13
93.90	0.09	825	1,016	0.00	0.09	9.26
94.00	0.09	926	1,016	0.00	0.09	10.38
94.10	0.09	1,028	1,016	0.00	0.09	11.51
94.20	0.09	1,130	1,016	0.00	0.09	12.64
94.30	0.09	1,231	1,016	0.00	0.09	13.77
94.40	0.09	1,333	1,016	0.00	0.09	14.90
94.50	0.09	1,434	1,016	0.00	0.09	16.03
94.60	0.09	1,536	1,016	0.00	0.09	17.15
94.70	0.09	1,637	1,016	0.00	0.09	18.28
94.80	0.09	1,739	1,016	0.00	0.09	19.41
94.90	0.09	1,840	1,016	0.00	0.09	20.54
95.00	0.09	1,942	1,016	0.00	0.09	21.67
95.10	0.09	2,044	1,016	0.00	0.09	22.80
95.20	0.09	2,170	2,031	0.00	0.09	24.20
95.21	0.09	2,191	2,031	0.00	0.09	24.43
95.30	3.74	2,373	2,031	0.00	3.74	30.10

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 10 years

Label: 24" Depth Green Roof

Storm Event: 10 year

Scenario: Post-Development 10 year

Infiltration	
Infiltration Method (Computed)	No Infiltration
Initial Conditions	
Elevation (Water Surface, Initial)	93.00 ft
Volume (Initial)	0 ft ³
Flow (Initial Outlet)	0.09 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.09 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ft ³)	Area (ft ²)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
93.00	0.09	0	508	0.00	0.09	0.09
93.10	0.09	51	508	0.00	0.09	0.65
93.20	0.09	114	1,016	0.00	0.09	1.36
93.30	0.09	216	1,016	0.00	0.09	2.49
93.40	0.09	317	1,016	0.00	0.09	3.61
93.50	0.09	419	1,016	0.00	0.09	4.74
93.60	0.09	520	1,016	0.00	0.09	5.87
93.70	0.09	622	1,016	0.00	0.09	7.00
93.80	0.09	723	1,016	0.00	0.09	8.13
93.90	0.09	825	1,016	0.00	0.09	9.26
94.00	0.09	926	1,016	0.00	0.09	10.38
94.10	0.09	1,028	1,016	0.00	0.09	11.51
94.20	0.09	1,130	1,016	0.00	0.09	12.64
94.30	0.09	1,231	1,016	0.00	0.09	13.77
94.40	0.09	1,333	1,016	0.00	0.09	14.90
94.50	0.09	1,434	1,016	0.00	0.09	16.03
94.60	0.09	1,536	1,016	0.00	0.09	17.15
94.70	0.09	1,637	1,016	0.00	0.09	18.28
94.80	0.09	1,739	1,016	0.00	0.09	19.41
94.90	0.09	1,840	1,016	0.00	0.09	20.54
95.00	0.09	1,942	1,016	0.00	0.09	21.67
95.10	0.09	2,044	1,016	0.00	0.09	22.80
95.20	0.09	2,170	2,031	0.00	0.09	24.20
95.21	0.09	2,191	2,031	0.00	0.09	24.43
95.30	3.74	2,373	2,031	0.00	3.74	30.10

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 25 years

Label: 24" Depth Green Roof

Storm Event: 25 year

Scenario: Post-Development 25 year

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	93.00 ft
Volume (Initial)	0 ft ³
Flow (Initial Outlet)	0.09 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.09 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ft ³)	Area (ft ²)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
93.00	0.09	0	508	0.00	0.09	0.09
93.10	0.09	51	508	0.00	0.09	0.65
93.20	0.09	114	1,016	0.00	0.09	1.36
93.30	0.09	216	1,016	0.00	0.09	2.49
93.40	0.09	317	1,016	0.00	0.09	3.61
93.50	0.09	419	1,016	0.00	0.09	4.74
93.60	0.09	520	1,016	0.00	0.09	5.87
93.70	0.09	622	1,016	0.00	0.09	7.00
93.80	0.09	723	1,016	0.00	0.09	8.13
93.90	0.09	825	1,016	0.00	0.09	9.26
94.00	0.09	926	1,016	0.00	0.09	10.38
94.10	0.09	1,028	1,016	0.00	0.09	11.51
94.20	0.09	1,130	1,016	0.00	0.09	12.64
94.30	0.09	1,231	1,016	0.00	0.09	13.77
94.40	0.09	1,333	1,016	0.00	0.09	14.90
94.50	0.09	1,434	1,016	0.00	0.09	16.03
94.60	0.09	1,536	1,016	0.00	0.09	17.15
94.70	0.09	1,637	1,016	0.00	0.09	18.28
94.80	0.09	1,739	1,016	0.00	0.09	19.41
94.90	0.09	1,840	1,016	0.00	0.09	20.54
95.00	0.09	1,942	1,016	0.00	0.09	21.67
95.10	0.09	2,044	1,016	0.00	0.09	22.80
95.20	0.09	2,170	2,031	0.00	0.09	24.20
95.21	0.09	2,191	2,031	0.00	0.09	24.43
95.30	3.74	2,373	2,031	0.00	3.74	30.10

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 100 years

Label: 24" Depth Green Roof

Storm Event: 100 year

Scenario: Post-Development 100 year

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	93.00 ft
Volume (Initial)	0 ft ³
Flow (Initial Outlet)	0.09 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.09 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ft ³)	Area (ft ²)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
93.00	0.09	0	508	0.00	0.09	0.09
93.10	0.09	51	508	0.00	0.09	0.65
93.20	0.09	114	1,016	0.00	0.09	1.36
93.30	0.09	216	1,016	0.00	0.09	2.49
93.40	0.09	317	1,016	0.00	0.09	3.61
93.50	0.09	419	1,016	0.00	0.09	4.74
93.60	0.09	520	1,016	0.00	0.09	5.87
93.70	0.09	622	1,016	0.00	0.09	7.00
93.80	0.09	723	1,016	0.00	0.09	8.13
93.90	0.09	825	1,016	0.00	0.09	9.26
94.00	0.09	926	1,016	0.00	0.09	10.38
94.10	0.09	1,028	1,016	0.00	0.09	11.51
94.20	0.09	1,130	1,016	0.00	0.09	12.64
94.30	0.09	1,231	1,016	0.00	0.09	13.77
94.40	0.09	1,333	1,016	0.00	0.09	14.90
94.50	0.09	1,434	1,016	0.00	0.09	16.03
94.60	0.09	1,536	1,016	0.00	0.09	17.15
94.70	0.09	1,637	1,016	0.00	0.09	18.28
94.80	0.09	1,739	1,016	0.00	0.09	19.41
94.90	0.09	1,840	1,016	0.00	0.09	20.54
95.00	0.09	1,942	1,016	0.00	0.09	21.67
95.10	0.09	2,044	1,016	0.00	0.09	22.80
95.20	0.09	2,170	2,031	0.00	0.09	24.20
95.21	0.09	2,191	2,031	0.00	0.09	24.43
95.30	3.74	2,373	2,031	0.00	3.74	30.10

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 1 years

Label: 24" Depth Green Roof (IN)

Storm Event: 1 year

Scenario: Post-Development 1 year

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	93.00 ft		
Volume (Initial)	0 ft ³		
Flow (Initial Outlet)	0.09 ft ³ /s		
Flow (Initial Infiltration)	0.00 ft ³ /s		
Flow (Initial, Total)	0.09 ft ³ /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	0.94 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	0.09 ft ³ /s	Time to Peak (Flow, Outlet)	11.250 hours
Peak Values			
Elevation (Water Surface, Peak)	94.46 ft		
Volume (Peak)	1,398 ft ³		
Mass Balance (ft ³)			
Volume (Initial)	0 ft ³		
Volume (Total Inflow)	3,814 ft ³		
Volume (Total Infiltration)	0 ft ³		
Volume (Total Outlet Outflow)	3,817 ft ³		
Volume (Retained)	0 ft ³		
Volume (Unrouted)	3 ft ³		
Error (Mass Balance)	0.1 %		

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 10 years

Label: 24" Depth Green Roof (IN)

Storm Event: 10 year

Scenario: Post-Development 10 year

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	93.00 ft		
Volume (Initial)	0 ft ³		
Flow (Initial Outlet)	0.09 ft ³ /s		
Flow (Initial Infiltration)	0.00 ft ³ /s		
Flow (Initial, Total)	0.09 ft ³ /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	1.76 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	1.34 ft ³ /s	Time to Peak (Flow, Outlet)	12.200 hours
Peak Conditions			
Elevation (Water Surface, Peak)	95.24 ft		
Volume (Peak)	2,253 ft ³		
Mass Balance (ft ³)			
Volume (Initial)	0 ft ³		
Volume (Total Inflow)	7,332 ft ³		
Volume (Total Infiltration)	0 ft ³		
Volume (Total Outlet Outflow)	6,928 ft ³		
Volume (Retained)	391 ft ³		
Volume (Unrouted)	-12 ft ³		
Error (Mass Balance)	0.2 %		

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 25 years

Label: 24" Depth Green Roof (IN)

Storm Event: 25 year

Scenario: Post-Development 25 year

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	93.00 ft		
Volume (Initial)	0 ft ³		
Flow (Initial Outlet)	0.09 ft ³ /s		
Flow (Initial Infiltration)	0.00 ft ³ /s		
Flow (Initial, Total)	0.09 ft ³ /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	2.24 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	2.71 ft ³ /s	Time to Peak (Flow, Outlet)	12.100 hours
Peak Conditions			
Elevation (Water Surface, Peak)	95.27 ft		
Volume (Peak)	2,322 ft ³		
Mass Balance (ft ³)			
Volume (Initial)	0 ft ³		
Volume (Total Inflow)	9,388 ft ³		
Volume (Total Infiltration)	0 ft ³		
Volume (Total Outlet Outflow)	8,686 ft ³		
Volume (Retained)	690 ft ³		
Volume (Unrouted)	-12 ft ³		
Error (Mass Balance)	0.1 %		

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 100 years

Label: 24" Depth Green Roof (IN)

Storm Event: 100 year

Scenario: Post-Development 100 year

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	93.00 ft		
Volume (Initial)	0 ft ³		
Flow (Initial Outlet)	0.09 ft ³ /s		
Flow (Initial Infiltration)	0.00 ft ³ /s		
Flow (Initial, Total)	0.09 ft ³ /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	3.22 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	3.20 ft ³ /s	Time to Peak (Flow, Outlet)	12.100 hours
Peak Conditions			
Elevation (Water Surface, Peak)	95.29 ft		
Volume (Peak)	2,346 ft ³		
Mass Balance (ft ³)			
Volume (Initial)	0 ft ³		
Volume (Total Inflow)	13,610 ft ³		
Volume (Total Infiltration)	0 ft ³		
Volume (Total Outlet Outflow)	12,417 ft ³		
Volume (Retained)	1,181 ft ³		
Volume (Unrouted)	-12 ft ³		
Error (Mass Balance)	0.1 %		

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
0.000	0.00	0.00	0.09	0.00	0.05	0	93.00
0.050	0.00	0.00	0.00	0.00	0.00	0	93.00
0.100	0.00	0.00	0.00	0.00	0.00	0	93.00
0.150	0.00	0.00	0.00	0.00	0.00	0	93.00
0.200	0.00	0.00	0.00	0.00	0.00	0	93.00
0.250	0.00	0.00	0.00	0.00	0.00	0	93.00
0.300	0.00	0.00	0.00	0.00	0.00	0	93.00
0.350	0.00	0.00	0.00	0.00	0.00	0	93.00
0.400	0.00	0.00	0.00	0.00	0.00	0	93.00
0.450	0.00	0.00	0.00	0.00	0.00	0	93.00
0.500	0.00	0.00	0.00	0.00	0.00	0	93.00
0.550	0.00	0.00	0.00	0.00	0.00	0	93.00
0.600	0.00	0.00	0.00	0.00	0.00	0	93.00
0.650	0.00	0.00	0.00	0.00	0.00	0	93.00
0.700	0.00	0.00	0.00	0.00	0.00	0	93.00
0.750	0.00	0.00	0.00	0.00	0.00	0	93.00
0.800	0.00	0.00	0.00	0.00	0.00	0	93.00
0.850	0.00	0.00	0.00	0.00	0.00	0	93.00
0.900	0.00	0.00	0.00	0.00	0.00	0	93.00
0.950	0.00	0.00	0.00	0.00	0.00	0	93.00
1.000	0.00	0.00	0.00	0.00	0.00	0	93.00
1.050	0.00	0.00	0.00	0.00	0.00	0	93.00
1.100	0.00	0.00	0.00	0.00	0.00	0	93.00
1.150	0.00	0.00	0.00	0.00	0.00	0	93.00
1.200	0.00	0.00	0.00	0.00	0.00	0	93.00
1.250	0.00	0.00	0.00	0.00	0.00	0	93.00
1.300	0.00	0.00	0.00	0.00	0.00	0	93.00
1.350	0.00	0.00	0.00	0.00	0.00	0	93.00
1.400	0.00	0.00	0.00	0.00	0.00	0	93.00
1.450	0.00	0.00	0.00	0.00	0.00	0	93.00
1.500	0.00	0.00	0.00	0.00	0.00	0	93.00
1.550	0.00	0.00	0.00	0.00	0.00	0	93.00
1.600	0.00	0.00	0.00	0.00	0.00	0	93.00
1.650	0.00	0.00	0.00	0.00	0.00	0	93.00
1.700	0.00	0.00	0.00	0.00	0.00	0	93.00
1.750	0.00	0.00	0.00	0.00	0.00	0	93.00
1.800	0.00	0.00	0.00	0.00	0.00	0	93.00
1.850	0.00	0.00	0.00	0.00	0.00	0	93.00
1.900	0.00	0.00	0.00	0.00	0.00	0	93.00
1.950	0.00	0.00	0.00	0.00	0.00	0	93.00
2.000	0.00	0.00	0.00	0.00	0.00	0	93.00
2.050	0.00	0.00	0.00	0.00	0.00	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
2.100	0.00	0.00	0.00	0.00	0.00	0	93.00
2.150	0.00	0.00	0.00	0.00	0.00	0	93.00
2.200	0.00	0.00	0.00	0.00	0.00	0	93.00
2.250	0.00	0.00	0.00	0.00	0.00	0	93.00
2.300	0.00	0.00	0.00	0.00	0.00	0	93.00
2.350	0.00	0.00	0.00	0.00	0.00	0	93.00
2.400	0.00	0.00	0.00	0.00	0.00	0	93.00
2.450	0.00	0.00	0.00	0.00	0.00	0	93.00
2.500	0.00	0.00	0.01	0.00	0.00	0	93.00
2.550	0.00	0.00	0.01	0.00	0.00	0	93.00
2.600	0.00	0.00	0.01	0.00	0.00	0	93.00
2.650	0.00	0.00	0.01	0.00	0.00	0	93.00
2.700	0.00	0.00	0.01	0.00	0.00	0	93.00
2.750	0.00	0.00	0.01	0.00	0.00	0	93.00
2.800	0.00	0.00	0.01	0.00	0.00	0	93.00
2.850	0.00	0.00	0.01	0.00	0.00	0	93.00
2.900	0.00	0.00	0.01	0.00	0.00	0	93.00
2.950	0.00	0.00	0.01	0.00	0.00	0	93.00
3.000	0.00	0.00	0.01	0.00	0.00	0	93.00
3.050	0.00	0.00	0.01	0.00	0.00	0	93.00
3.100	0.00	0.00	0.01	0.00	0.00	0	93.00
3.150	0.00	0.00	0.01	0.00	0.00	0	93.00
3.200	0.00	0.00	0.01	0.00	0.00	0	93.00
3.250	0.00	0.00	0.01	0.00	0.00	0	93.00
3.300	0.00	0.00	0.01	0.00	0.00	0	93.00
3.350	0.01	0.00	0.01	0.00	0.00	0	93.00
3.400	0.01	0.00	0.01	0.00	0.01	0	93.00
3.450	0.01	0.00	0.01	0.00	0.01	0	93.00
3.500	0.01	0.00	0.01	0.00	0.01	0	93.00
3.550	0.01	0.00	0.01	0.00	0.01	0	93.00
3.600	0.01	0.00	0.01	0.00	0.01	0	93.00
3.650	0.01	0.00	0.01	0.00	0.01	0	93.00
3.700	0.01	0.00	0.01	0.00	0.01	0	93.00
3.750	0.01	0.00	0.01	0.00	0.01	0	93.00
3.800	0.01	0.00	0.01	0.00	0.01	0	93.00
3.850	0.01	0.00	0.01	0.00	0.01	0	93.00
3.900	0.01	0.00	0.01	0.00	0.01	0	93.00
3.950	0.01	0.00	0.01	0.00	0.01	0	93.00
4.000	0.01	0.00	0.01	0.00	0.01	0	93.00
4.050	0.01	0.00	0.01	0.00	0.01	0	93.00
4.100	0.01	0.00	0.01	0.00	0.01	0	93.00
4.150	0.01	0.00	0.01	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
4.200	0.01	0.00	0.01	0.00	0.01	0	93.00
4.250	0.01	0.00	0.02	0.00	0.01	0	93.00
4.300	0.01	0.00	0.02	0.00	0.01	0	93.00
4.350	0.01	0.00	0.02	0.00	0.01	0	93.00
4.400	0.01	0.00	0.02	0.00	0.01	0	93.00
4.450	0.01	0.00	0.02	0.00	0.01	0	93.00
4.500	0.01	0.00	0.02	0.00	0.01	0	93.00
4.550	0.01	0.00	0.02	0.00	0.01	0	93.00
4.600	0.01	0.00	0.02	0.00	0.01	0	93.00
4.650	0.01	0.00	0.02	0.00	0.01	0	93.00
4.700	0.01	0.00	0.02	0.00	0.01	0	93.00
4.750	0.01	0.00	0.02	0.00	0.01	0	93.00
4.800	0.01	0.00	0.02	0.00	0.01	0	93.00
4.850	0.01	0.00	0.02	0.00	0.01	0	93.00
4.900	0.01	0.00	0.02	0.00	0.01	0	93.00
4.950	0.01	0.00	0.02	0.00	0.01	0	93.00
5.000	0.01	0.00	0.02	0.00	0.01	0	93.00
5.050	0.01	0.00	0.02	0.00	0.01	0	93.00
5.100	0.01	0.00	0.02	0.00	0.01	0	93.00
5.150	0.01	0.00	0.02	0.00	0.01	0	93.00
5.200	0.01	0.00	0.02	0.00	0.01	0	93.00
5.250	0.01	0.00	0.02	0.00	0.01	0	93.00
5.300	0.01	0.00	0.02	0.00	0.01	0	93.00
5.350	0.01	0.00	0.02	0.00	0.01	0	93.00
5.400	0.01	0.00	0.02	0.00	0.01	0	93.00
5.450	0.01	0.00	0.02	0.00	0.01	0	93.00
5.500	0.01	0.00	0.02	0.00	0.01	0	93.00
5.550	0.01	0.00	0.02	0.00	0.01	0	93.00
5.600	0.01	0.00	0.02	0.00	0.01	0	93.00
5.650	0.01	0.00	0.02	0.00	0.01	0	93.00
5.700	0.01	0.00	0.02	0.00	0.01	0	93.00
5.750	0.01	0.00	0.02	0.00	0.01	0	93.00
5.800	0.01	0.00	0.02	0.00	0.01	0	93.00
5.850	0.01	0.00	0.02	0.00	0.01	0	93.00
5.900	0.01	0.00	0.02	0.00	0.01	0	93.00
5.950	0.01	0.00	0.02	0.00	0.01	0	93.00
6.000	0.01	0.00	0.02	0.00	0.01	0	93.00
6.050	0.01	0.00	0.02	0.00	0.01	0	93.00
6.100	0.01	0.00	0.03	0.00	0.01	0	93.00
6.150	0.01	0.00	0.03	0.00	0.01	0	93.00
6.200	0.01	0.00	0.03	0.00	0.01	0	93.00
6.250	0.01	0.00	0.03	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
6.300	0.01	0.00	0.03	0.00	0.01	0	93.00
6.350	0.01	0.00	0.03	0.00	0.01	0	93.00
6.400	0.01	0.00	0.03	0.00	0.01	0	93.00
6.450	0.01	0.00	0.03	0.00	0.01	0	93.00
6.500	0.01	0.00	0.03	0.00	0.01	0	93.00
6.550	0.02	0.00	0.03	0.00	0.02	0	93.00
6.600	0.02	0.00	0.03	0.00	0.02	0	93.00
6.650	0.02	0.00	0.03	0.00	0.02	0	93.00
6.700	0.02	0.00	0.03	0.00	0.02	0	93.00
6.750	0.02	0.00	0.03	0.00	0.02	0	93.00
6.800	0.02	0.00	0.03	0.00	0.02	0	93.00
6.850	0.02	0.00	0.03	0.00	0.02	0	93.00
6.900	0.02	0.00	0.03	0.00	0.02	0	93.00
6.950	0.02	0.00	0.03	0.00	0.02	0	93.00
7.000	0.02	0.00	0.04	0.00	0.02	0	93.00
7.050	0.02	0.00	0.04	0.00	0.02	0	93.00
7.100	0.02	0.00	0.04	0.00	0.02	0	93.00
7.150	0.02	0.00	0.04	0.00	0.02	0	93.00
7.200	0.02	0.00	0.04	0.00	0.02	0	93.00
7.250	0.02	0.00	0.04	0.00	0.02	0	93.00
7.300	0.02	0.00	0.04	0.00	0.02	0	93.00
7.350	0.02	0.00	0.04	0.00	0.02	0	93.00
7.400	0.02	0.00	0.04	0.00	0.02	0	93.00
7.450	0.02	0.00	0.04	0.00	0.02	0	93.00
7.500	0.02	0.00	0.04	0.00	0.02	0	93.00
7.550	0.02	0.00	0.04	0.00	0.02	0	93.00
7.600	0.02	0.00	0.04	0.00	0.02	0	93.00
7.650	0.02	0.00	0.04	0.00	0.02	0	93.00
7.700	0.02	0.00	0.04	0.00	0.02	0	93.00
7.750	0.02	0.00	0.04	0.00	0.02	0	93.00
7.800	0.02	0.00	0.05	0.00	0.02	0	93.00
7.850	0.02	0.00	0.05	0.00	0.02	0	93.00
7.900	0.02	0.00	0.05	0.00	0.02	0	93.00
7.950	0.02	0.00	0.05	0.00	0.02	0	93.00
8.000	0.02	0.00	0.05	0.00	0.02	0	93.00
8.050	0.02	0.00	0.05	0.00	0.02	0	93.00
8.100	0.02	0.00	0.05	0.00	0.02	0	93.00
8.150	0.03	0.00	0.05	0.00	0.03	0	93.00
8.200	0.03	0.00	0.05	0.00	0.03	0	93.00
8.250	0.03	0.00	0.05	0.00	0.03	0	93.00
8.300	0.03	0.00	0.05	0.00	0.03	0	93.00
8.350	0.03	0.00	0.06	0.00	0.03	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
8.400	0.03	0.00	0.06	0.00	0.03	0	93.00
8.450	0.03	0.00	0.06	0.00	0.03	0	93.00
8.500	0.03	0.00	0.06	0.00	0.03	0	93.00
8.550	0.03	0.00	0.06	0.00	0.03	0	93.00
8.600	0.03	0.00	0.06	0.00	0.03	0	93.00
8.650	0.03	0.00	0.06	0.00	0.03	0	93.00
8.700	0.03	0.00	0.06	0.00	0.03	0	93.00
8.750	0.03	0.00	0.07	0.00	0.03	0	93.00
8.800	0.03	0.00	0.07	0.00	0.03	0	93.00
8.850	0.03	0.00	0.07	0.00	0.03	0	93.00
8.900	0.04	0.00	0.07	0.00	0.03	0	93.00
8.950	0.04	0.00	0.07	0.00	0.04	0	93.00
9.000	0.04	0.00	0.07	0.00	0.04	0	93.00
9.050	0.04	0.00	0.07	0.00	0.04	0	93.00
9.100	0.04	0.00	0.08	0.00	0.04	0	93.00
9.150	0.04	0.00	0.08	0.00	0.04	0	93.00
9.200	0.04	0.00	0.08	0.00	0.04	0	93.00
9.250	0.04	0.00	0.08	0.00	0.04	0	93.00
9.300	0.04	0.00	0.08	0.00	0.04	0	93.00
9.350	0.04	0.00	0.08	0.00	0.04	0	93.00
9.400	0.04	0.00	0.08	0.00	0.04	0	93.00
9.450	0.04	0.00	0.08	0.00	0.04	0	93.00
9.500	0.04	0.00	0.09	0.00	0.04	0	93.00
9.550	0.04	0.00	0.09	0.00	0.04	0	93.00
9.600	0.04	0.00	0.09	0.00	0.04	0	93.00
9.650	0.05	0.00	0.09	0.00	0.05	0	93.00
9.700	0.05	0.00	0.09	0.00	0.05	0	93.00
9.750	0.05	0.00	0.09	0.00	0.05	0	93.00
9.800	0.05	0.00	0.09	0.00	0.05	0	93.00
9.850	0.05	0.00	0.10	0.00	0.05	0	93.00
9.900	0.05	0.00	0.10	0.00	0.05	0	93.00
9.950	0.05	0.00	0.10	0.00	0.05	0	93.00
10.000	0.05	0.00	0.10	0.00	0.05	0	93.00
10.050	0.05	0.00	0.10	0.00	0.05	0	93.00
10.100	0.05	0.00	0.10	0.00	0.05	0	93.00
10.150	0.05	0.00	0.11	0.00	0.05	0	93.00
10.200	0.06	0.00	0.11	0.00	0.05	0	93.00
10.250	0.06	0.00	0.11	0.00	0.06	0	93.00
10.300	0.06	0.00	0.11	0.00	0.06	0	93.00
10.350	0.06	0.00	0.12	0.00	0.06	0	93.00
10.400	0.06	0.00	0.12	0.00	0.06	0	93.00
10.450	0.06	0.00	0.12	0.00	0.06	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
10.500	0.06	0.00	0.13	0.00	0.06	0	93.00
10.550	0.06	0.00	0.13	0.00	0.06	0	93.00
10.600	0.07	0.00	0.13	0.00	0.07	0	93.00
10.650	0.07	0.00	0.13	0.00	0.07	0	93.00
10.700	0.07	0.00	0.14	0.00	0.07	0	93.00
10.750	0.07	0.00	0.14	0.00	0.07	0	93.00
10.800	0.07	0.00	0.14	0.00	0.07	0	93.00
10.850	0.07	0.00	0.14	0.00	0.07	0	93.00
10.900	0.07	0.00	0.15	0.00	0.07	0	93.00
10.950	0.08	0.00	0.15	0.00	0.08	0	93.00
11.000	0.08	0.00	0.15	0.00	0.08	0	93.00
11.050	0.08	0.00	0.16	0.00	0.08	0	93.00
11.100	0.08	0.00	0.16	0.00	0.08	0	93.00
11.150	0.09	0.00	0.17	0.00	0.09	0	93.00
11.200	0.09	0.00	0.18	0.00	0.09	0	93.00
11.250	0.10	0.01	0.19	0.00	0.09	9	93.02
11.300	0.10	0.03	0.21	0.00	0.09	11	93.02
11.350	0.11	0.06	0.24	0.00	0.09	13	93.03
11.400	0.11	0.10	0.28	0.00	0.09	17	93.03
11.450	0.12	0.15	0.33	0.00	0.09	22	93.04
11.500	0.12	0.21	0.39	0.00	0.09	27	93.05
11.550	0.14	0.30	0.48	0.00	0.09	35	93.07
11.600	0.17	0.42	0.60	0.00	0.09	46	93.09
11.650	0.20	0.61	0.79	0.00	0.09	61	93.12
11.700	0.25	0.89	1.07	0.00	0.09	81	93.16
11.750	0.30	1.26	1.44	0.00	0.09	122	93.21
11.800	0.35	1.73	1.91	0.00	0.09	164	93.25
11.850	0.40	2.31	2.49	0.00	0.09	216	93.30
11.900	0.45	2.98	3.16	0.00	0.09	276	93.36
11.950	0.60	3.85	4.03	0.00	0.09	355	93.44
12.000	0.83	5.10	5.28	0.00	0.09	467	93.55
12.050	0.92	6.67	6.85	0.00	0.09	609	93.69
12.100	0.94	8.35	8.53	0.00	0.09	760	93.84
12.150	0.83	9.95	10.13	0.00	0.09	903	93.98
12.200	0.61	11.20	11.38	0.00	0.09	1,016	94.09
12.250	0.50	12.13	12.31	0.00	0.09	1,099	94.17
12.300	0.42	12.86	13.04	0.00	0.09	1,166	94.24
12.350	0.37	13.48	13.66	0.00	0.09	1,221	94.29
12.400	0.32	13.98	14.16	0.00	0.09	1,267	94.33
12.450	0.27	14.39	14.57	0.00	0.09	1,303	94.37
12.500	0.21	14.69	14.87	0.00	0.09	1,330	94.40
12.550	0.18	14.90	15.08	0.00	0.09	1,350	94.42

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
12.600	0.15	15.05	15.23	0.00	0.09	1,363	94.43
12.650	0.13	15.15	15.33	0.00	0.09	1,372	94.44
12.700	0.12	15.23	15.41	0.00	0.09	1,379	94.45
12.750	0.12	15.29	15.47	0.00	0.09	1,384	94.45
12.800	0.11	15.35	15.53	0.00	0.09	1,389	94.46
12.850	0.11	15.39	15.57	0.00	0.09	1,393	94.46
12.900	0.10	15.42	15.60	0.00	0.09	1,396	94.46
12.950	0.10	15.44	15.62	0.00	0.09	1,397	94.46
13.000	0.09	15.45	15.63	0.00	0.09	1,398	94.46
13.050	0.09	15.45	15.63	0.00	0.09	1,398	94.46
13.100	0.08	15.44	15.62	0.00	0.09	1,398	94.46
13.150	0.08	15.43	15.61	0.00	0.09	1,396	94.46
13.200	0.08	15.41	15.59	0.00	0.09	1,395	94.46
13.250	0.08	15.39	15.57	0.00	0.09	1,393	94.46
13.300	0.08	15.36	15.54	0.00	0.09	1,391	94.46
13.350	0.08	15.34	15.52	0.00	0.09	1,389	94.46
13.400	0.07	15.31	15.49	0.00	0.09	1,386	94.45
13.450	0.07	15.28	15.46	0.00	0.09	1,383	94.45
13.500	0.07	15.24	15.42	0.00	0.09	1,380	94.45
13.550	0.07	15.21	15.39	0.00	0.09	1,377	94.44
13.600	0.07	15.17	15.35	0.00	0.09	1,373	94.44
13.650	0.07	15.13	15.31	0.00	0.09	1,369	94.44
13.700	0.07	15.08	15.26	0.00	0.09	1,365	94.43
13.750	0.07	15.03	15.21	0.00	0.09	1,361	94.43
13.800	0.06	14.98	15.16	0.00	0.09	1,356	94.42
13.850	0.06	14.93	15.11	0.00	0.09	1,352	94.42
13.900	0.06	14.87	15.05	0.00	0.09	1,347	94.41
13.950	0.06	14.81	14.99	0.00	0.09	1,341	94.41
14.000	0.06	14.75	14.93	0.00	0.09	1,336	94.40
14.050	0.06	14.69	14.87	0.00	0.09	1,330	94.40
14.100	0.06	14.62	14.80	0.00	0.09	1,324	94.39
14.150	0.06	14.55	14.73	0.00	0.09	1,318	94.39
14.200	0.05	14.48	14.66	0.00	0.09	1,312	94.38
14.250	0.05	14.41	14.59	0.00	0.09	1,305	94.37
14.300	0.05	14.34	14.52	0.00	0.09	1,299	94.37
14.350	0.05	14.26	14.44	0.00	0.09	1,292	94.36
14.400	0.05	14.19	14.37	0.00	0.09	1,285	94.35
14.450	0.05	14.11	14.29	0.00	0.09	1,278	94.35
14.500	0.05	14.04	14.22	0.00	0.09	1,271	94.34
14.550	0.05	13.96	14.14	0.00	0.09	1,264	94.33
14.600	0.05	13.88	14.06	0.00	0.09	1,257	94.33
14.650	0.05	13.79	13.97	0.00	0.09	1,250	94.32

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
14.700	0.05	13.71	13.89	0.00	0.09	1,242	94.31
14.750	0.05	13.63	13.81	0.00	0.09	1,234	94.30
14.800	0.05	13.54	13.72	0.00	0.09	1,227	94.30
14.850	0.05	13.45	13.63	0.00	0.09	1,219	94.29
14.900	0.05	13.36	13.54	0.00	0.09	1,211	94.28
14.950	0.04	13.28	13.46	0.00	0.09	1,203	94.27
15.000	0.04	13.18	13.36	0.00	0.09	1,195	94.26
15.050	0.04	13.09	13.27	0.00	0.09	1,186	94.26
15.100	0.04	13.00	13.18	0.00	0.09	1,178	94.25
15.150	0.04	12.90	13.08	0.00	0.09	1,169	94.24
15.200	0.04	12.81	12.99	0.00	0.09	1,161	94.23
15.250	0.04	12.71	12.89	0.00	0.09	1,152	94.22
15.300	0.04	12.61	12.79	0.00	0.09	1,143	94.21
15.350	0.04	12.51	12.69	0.00	0.09	1,134	94.20
15.400	0.04	12.41	12.59	0.00	0.09	1,125	94.20
15.450	0.04	12.31	12.49	0.00	0.09	1,116	94.19
15.500	0.04	12.20	12.38	0.00	0.09	1,106	94.18
15.550	0.04	12.10	12.28	0.00	0.09	1,097	94.17
15.600	0.04	11.99	12.17	0.00	0.09	1,087	94.16
15.650	0.04	11.88	12.06	0.00	0.09	1,077	94.15
15.700	0.03	11.77	11.95	0.00	0.09	1,068	94.14
15.750	0.03	11.66	11.84	0.00	0.09	1,058	94.13
15.800	0.03	11.55	11.73	0.00	0.09	1,047	94.12
15.850	0.03	11.43	11.61	0.00	0.09	1,037	94.11
15.900	0.03	11.32	11.50	0.00	0.09	1,027	94.10
15.950	0.03	11.20	11.38	0.00	0.09	1,016	94.09
16.000	0.03	11.09	11.27	0.00	0.09	1,006	94.08
16.050	0.03	10.97	11.15	0.00	0.09	995	94.07
16.100	0.03	10.85	11.03	0.00	0.09	984	94.06
16.150	0.03	10.73	10.91	0.00	0.09	974	94.05
16.200	0.03	10.61	10.79	0.00	0.09	963	94.04
16.250	0.03	10.48	10.66	0.00	0.09	952	94.02
16.300	0.03	10.36	10.54	0.00	0.09	941	94.01
16.350	0.03	10.24	10.42	0.00	0.09	930	94.00
16.400	0.03	10.12	10.30	0.00	0.09	918	93.99
16.450	0.03	9.99	10.17	0.00	0.09	907	93.98
16.500	0.03	9.87	10.05	0.00	0.09	896	93.97
16.550	0.03	9.74	9.92	0.00	0.09	885	93.96
16.600	0.03	9.62	9.80	0.00	0.09	873	93.95
16.650	0.03	9.49	9.67	0.00	0.09	862	93.94
16.700	0.03	9.36	9.54	0.00	0.09	851	93.93
16.750	0.03	9.23	9.41	0.00	0.09	839	93.91

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
16.800	0.03	9.11	9.29	0.00	0.09	828	93.90
16.850	0.03	8.98	9.16	0.00	0.09	816	93.89
16.900	0.03	8.85	9.03	0.00	0.09	804	93.88
16.950	0.02	8.72	8.90	0.00	0.09	793	93.87
17.000	0.02	8.59	8.77	0.00	0.09	781	93.86
17.050	0.02	8.46	8.64	0.00	0.09	769	93.85
17.100	0.02	8.32	8.50	0.00	0.09	757	93.83
17.150	0.02	8.19	8.37	0.00	0.09	745	93.82
17.200	0.02	8.06	8.24	0.00	0.09	733	93.81
17.250	0.02	7.93	8.11	0.00	0.09	721	93.80
17.300	0.02	7.79	7.97	0.00	0.09	709	93.79
17.350	0.02	7.66	7.84	0.00	0.09	697	93.77
17.400	0.02	7.52	7.70	0.00	0.09	685	93.76
17.450	0.02	7.39	7.57	0.00	0.09	673	93.75
17.500	0.02	7.25	7.43	0.00	0.09	661	93.74
17.550	0.02	7.11	7.29	0.00	0.09	648	93.73
17.600	0.02	6.98	7.16	0.00	0.09	636	93.71
17.650	0.02	6.84	7.02	0.00	0.09	624	93.70
17.700	0.02	6.70	6.88	0.00	0.09	611	93.69
17.750	0.02	6.56	6.74	0.00	0.09	599	93.68
17.800	0.02	6.42	6.60	0.00	0.09	586	93.66
17.850	0.02	6.28	6.46	0.00	0.09	573	93.65
17.900	0.02	6.14	6.32	0.00	0.09	561	93.64
17.950	0.02	6.00	6.18	0.00	0.09	548	93.63
18.000	0.02	5.86	6.04	0.00	0.09	535	93.61
18.050	0.02	5.71	5.89	0.00	0.09	522	93.60
18.100	0.02	5.57	5.75	0.00	0.09	510	93.59
18.150	0.02	5.43	5.61	0.00	0.09	497	93.58
18.200	0.02	5.28	5.46	0.00	0.09	484	93.56
18.250	0.02	5.14	5.32	0.00	0.09	471	93.55
18.300	0.02	5.00	5.18	0.00	0.09	458	93.54
18.350	0.02	4.85	5.03	0.00	0.09	445	93.53
18.400	0.02	4.71	4.89	0.00	0.09	432	93.51
18.450	0.02	4.56	4.74	0.00	0.09	419	93.50
18.500	0.02	4.42	4.60	0.00	0.09	406	93.49
18.550	0.02	4.28	4.46	0.00	0.09	393	93.47
18.600	0.02	4.13	4.31	0.00	0.09	380	93.46
18.650	0.02	3.99	4.17	0.00	0.09	367	93.45
18.700	0.02	3.84	4.02	0.00	0.09	354	93.44
18.750	0.02	3.70	3.88	0.00	0.09	341	93.42
18.800	0.02	3.55	3.73	0.00	0.09	328	93.41
18.850	0.02	3.40	3.58	0.00	0.09	314	93.40

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
18.900	0.02	3.26	3.44	0.00	0.09	301	93.38
18.950	0.02	3.11	3.29	0.00	0.09	288	93.37
19.000	0.02	2.97	3.15	0.00	0.09	275	93.36
19.050	0.02	2.82	3.00	0.00	0.09	262	93.35
19.100	0.02	2.67	2.85	0.00	0.09	249	93.33
19.150	0.02	2.53	2.71	0.00	0.09	235	93.32
19.200	0.02	2.38	2.56	0.00	0.09	222	93.31
19.250	0.02	2.23	2.41	0.00	0.09	209	93.29
19.300	0.02	2.08	2.26	0.00	0.09	196	93.28
19.350	0.02	1.94	2.12	0.00	0.09	182	93.27
19.400	0.02	1.79	1.97	0.00	0.09	169	93.25
19.450	0.02	1.64	1.82	0.00	0.09	156	93.24
19.500	0.02	1.49	1.67	0.00	0.09	143	93.23
19.550	0.02	1.35	1.53	0.00	0.09	129	93.21
19.600	0.02	1.20	1.38	0.00	0.09	116	93.20
19.650	0.02	1.05	1.23	0.00	0.09	95	93.18
19.700	0.02	0.90	1.08	0.00	0.09	81	93.16
19.750	0.02	0.75	0.93	0.00	0.09	71	93.14
19.800	0.02	0.60	0.78	0.00	0.09	60	93.12
19.850	0.02	0.45	0.63	0.00	0.09	49	93.10
19.900	0.02	0.30	0.48	0.00	0.09	35	93.07
19.950	0.02	0.15	0.33	0.00	0.09	22	93.04
20.000	0.02	0.00	0.18	0.00	0.09	8	93.02
20.050	0.02	0.00	0.03	0.00	0.02	0	93.00
20.100	0.01	0.00	0.03	0.00	0.01	0	93.00
20.150	0.01	0.00	0.03	0.00	0.01	0	93.00
20.200	0.01	0.00	0.03	0.00	0.01	0	93.00
20.250	0.01	0.00	0.03	0.00	0.01	0	93.00
20.300	0.01	0.00	0.03	0.00	0.01	0	93.00
20.350	0.01	0.00	0.03	0.00	0.01	0	93.00
20.400	0.01	0.00	0.03	0.00	0.01	0	93.00
20.450	0.01	0.00	0.03	0.00	0.01	0	93.00
20.500	0.01	0.00	0.03	0.00	0.01	0	93.00
20.550	0.01	0.00	0.03	0.00	0.01	0	93.00
20.600	0.01	0.00	0.03	0.00	0.01	0	93.00
20.650	0.01	0.00	0.03	0.00	0.01	0	93.00
20.700	0.01	0.00	0.03	0.00	0.01	0	93.00
20.750	0.01	0.00	0.03	0.00	0.01	0	93.00
20.800	0.01	0.00	0.03	0.00	0.01	0	93.00
20.850	0.01	0.00	0.03	0.00	0.01	0	93.00
20.900	0.01	0.00	0.03	0.00	0.01	0	93.00
20.950	0.01	0.00	0.03	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
21.000	0.01	0.00	0.03	0.00	0.01	0	93.00
21.050	0.01	0.00	0.03	0.00	0.01	0	93.00
21.100	0.01	0.00	0.03	0.00	0.01	0	93.00
21.150	0.01	0.00	0.03	0.00	0.01	0	93.00
21.200	0.01	0.00	0.03	0.00	0.01	0	93.00
21.250	0.01	0.00	0.03	0.00	0.01	0	93.00
21.300	0.01	0.00	0.03	0.00	0.01	0	93.00
21.350	0.01	0.00	0.03	0.00	0.01	0	93.00
21.400	0.01	0.00	0.03	0.00	0.01	0	93.00
21.450	0.01	0.00	0.03	0.00	0.01	0	93.00
21.500	0.01	0.00	0.03	0.00	0.01	0	93.00
21.550	0.01	0.00	0.03	0.00	0.01	0	93.00
21.600	0.01	0.00	0.03	0.00	0.01	0	93.00
21.650	0.01	0.00	0.03	0.00	0.01	0	93.00
21.700	0.01	0.00	0.03	0.00	0.01	0	93.00
21.750	0.01	0.00	0.03	0.00	0.01	0	93.00
21.800	0.01	0.00	0.03	0.00	0.01	0	93.00
21.850	0.01	0.00	0.03	0.00	0.01	0	93.00
21.900	0.01	0.00	0.03	0.00	0.01	0	93.00
21.950	0.01	0.00	0.03	0.00	0.01	0	93.00
22.000	0.01	0.00	0.03	0.00	0.01	0	93.00
22.050	0.01	0.00	0.02	0.00	0.01	0	93.00
22.100	0.01	0.00	0.02	0.00	0.01	0	93.00
22.150	0.01	0.00	0.02	0.00	0.01	0	93.00
22.200	0.01	0.00	0.02	0.00	0.01	0	93.00
22.250	0.01	0.00	0.02	0.00	0.01	0	93.00
22.300	0.01	0.00	0.02	0.00	0.01	0	93.00
22.350	0.01	0.00	0.02	0.00	0.01	0	93.00
22.400	0.01	0.00	0.02	0.00	0.01	0	93.00
22.450	0.01	0.00	0.02	0.00	0.01	0	93.00
22.500	0.01	0.00	0.02	0.00	0.01	0	93.00
22.550	0.01	0.00	0.02	0.00	0.01	0	93.00
22.600	0.01	0.00	0.02	0.00	0.01	0	93.00
22.650	0.01	0.00	0.02	0.00	0.01	0	93.00
22.700	0.01	0.00	0.02	0.00	0.01	0	93.00
22.750	0.01	0.00	0.02	0.00	0.01	0	93.00
22.800	0.01	0.00	0.02	0.00	0.01	0	93.00
22.850	0.01	0.00	0.02	0.00	0.01	0	93.00
22.900	0.01	0.00	0.02	0.00	0.01	0	93.00
22.950	0.01	0.00	0.02	0.00	0.01	0	93.00
23.000	0.01	0.00	0.02	0.00	0.01	0	93.00
23.050	0.01	0.00	0.02	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
23.100	0.01	0.00	0.02	0.00	0.01	0	93.00
23.150	0.01	0.00	0.02	0.00	0.01	0	93.00
23.200	0.01	0.00	0.02	0.00	0.01	0	93.00
23.250	0.01	0.00	0.02	0.00	0.01	0	93.00
23.300	0.01	0.00	0.02	0.00	0.01	0	93.00
23.350	0.01	0.00	0.02	0.00	0.01	0	93.00
23.400	0.01	0.00	0.02	0.00	0.01	0	93.00
23.450	0.01	0.00	0.02	0.00	0.01	0	93.00
23.500	0.01	0.00	0.02	0.00	0.01	0	93.00
23.550	0.01	0.00	0.02	0.00	0.01	0	93.00
23.600	0.01	0.00	0.02	0.00	0.01	0	93.00
23.650	0.01	0.00	0.02	0.00	0.01	0	93.00
23.700	0.01	0.00	0.02	0.00	0.01	0	93.00
23.750	0.01	0.00	0.02	0.00	0.01	0	93.00
23.800	0.01	0.00	0.02	0.00	0.01	0	93.00
23.850	0.01	0.00	0.02	0.00	0.01	0	93.00
23.900	0.01	0.00	0.02	0.00	0.01	0	93.00
23.950	0.01	0.00	0.02	0.00	0.01	0	93.00
24.000	0.01	0.00	0.02	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
0.000	0.00	0.00	0.09	0.00	0.05	0	93.00
0.050	0.00	0.00	0.00	0.00	0.00	0	93.00
0.100	0.00	0.00	0.00	0.00	0.00	0	93.00
0.150	0.00	0.00	0.00	0.00	0.00	0	93.00
0.200	0.00	0.00	0.00	0.00	0.00	0	93.00
0.250	0.00	0.00	0.00	0.00	0.00	0	93.00
0.300	0.00	0.00	0.00	0.00	0.00	0	93.00
0.350	0.00	0.00	0.00	0.00	0.00	0	93.00
0.400	0.00	0.00	0.00	0.00	0.00	0	93.00
0.450	0.00	0.00	0.00	0.00	0.00	0	93.00
0.500	0.00	0.00	0.00	0.00	0.00	0	93.00
0.550	0.00	0.00	0.00	0.00	0.00	0	93.00
0.600	0.00	0.00	0.00	0.00	0.00	0	93.00
0.650	0.00	0.00	0.00	0.00	0.00	0	93.00
0.700	0.00	0.00	0.00	0.00	0.00	0	93.00
0.750	0.00	0.00	0.00	0.00	0.00	0	93.00
0.800	0.00	0.00	0.00	0.00	0.00	0	93.00
0.850	0.00	0.00	0.00	0.00	0.00	0	93.00
0.900	0.00	0.00	0.00	0.00	0.00	0	93.00
0.950	0.00	0.00	0.00	0.00	0.00	0	93.00
1.000	0.00	0.00	0.00	0.00	0.00	0	93.00
1.050	0.00	0.00	0.00	0.00	0.00	0	93.00
1.100	0.00	0.00	0.00	0.00	0.00	0	93.00
1.150	0.00	0.00	0.00	0.00	0.00	0	93.00
1.200	0.00	0.00	0.01	0.00	0.00	0	93.00
1.250	0.00	0.00	0.01	0.00	0.00	0	93.00
1.300	0.00	0.00	0.01	0.00	0.00	0	93.00
1.350	0.00	0.00	0.01	0.00	0.00	0	93.00
1.400	0.00	0.00	0.01	0.00	0.00	0	93.00
1.450	0.00	0.00	0.01	0.00	0.00	0	93.00
1.500	0.01	0.00	0.01	0.00	0.01	0	93.00
1.550	0.01	0.00	0.01	0.00	0.01	0	93.00
1.600	0.01	0.00	0.01	0.00	0.01	0	93.00
1.650	0.01	0.00	0.01	0.00	0.01	0	93.00
1.700	0.01	0.00	0.01	0.00	0.01	0	93.00
1.750	0.01	0.00	0.01	0.00	0.01	0	93.00
1.800	0.01	0.00	0.01	0.00	0.01	0	93.00
1.850	0.01	0.00	0.01	0.00	0.01	0	93.00
1.900	0.01	0.00	0.02	0.00	0.01	0	93.00
1.950	0.01	0.00	0.02	0.00	0.01	0	93.00
2.000	0.01	0.00	0.02	0.00	0.01	0	93.00
2.050	0.01	0.00	0.02	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
2.100	0.01	0.00	0.02	0.00	0.01	0	93.00
2.150	0.01	0.00	0.02	0.00	0.01	0	93.00
2.200	0.01	0.00	0.02	0.00	0.01	0	93.00
2.250	0.01	0.00	0.02	0.00	0.01	0	93.00
2.300	0.01	0.00	0.02	0.00	0.01	0	93.00
2.350	0.01	0.00	0.02	0.00	0.01	0	93.00
2.400	0.01	0.00	0.02	0.00	0.01	0	93.00
2.450	0.01	0.00	0.02	0.00	0.01	0	93.00
2.500	0.01	0.00	0.02	0.00	0.01	0	93.00
2.550	0.01	0.00	0.02	0.00	0.01	0	93.00
2.600	0.01	0.00	0.02	0.00	0.01	0	93.00
2.650	0.01	0.00	0.02	0.00	0.01	0	93.00
2.700	0.01	0.00	0.02	0.00	0.01	0	93.00
2.750	0.01	0.00	0.03	0.00	0.01	0	93.00
2.800	0.01	0.00	0.03	0.00	0.01	0	93.00
2.850	0.01	0.00	0.03	0.00	0.01	0	93.00
2.900	0.01	0.00	0.03	0.00	0.01	0	93.00
2.950	0.01	0.00	0.03	0.00	0.01	0	93.00
3.000	0.01	0.00	0.03	0.00	0.01	0	93.00
3.050	0.01	0.00	0.03	0.00	0.01	0	93.00
3.100	0.01	0.00	0.03	0.00	0.01	0	93.00
3.150	0.01	0.00	0.03	0.00	0.01	0	93.00
3.200	0.02	0.00	0.03	0.00	0.02	0	93.00
3.250	0.02	0.00	0.03	0.00	0.02	0	93.00
3.300	0.02	0.00	0.03	0.00	0.02	0	93.00
3.350	0.02	0.00	0.03	0.00	0.02	0	93.00
3.400	0.02	0.00	0.03	0.00	0.02	0	93.00
3.450	0.02	0.00	0.03	0.00	0.02	0	93.00
3.500	0.02	0.00	0.03	0.00	0.02	0	93.00
3.550	0.02	0.00	0.03	0.00	0.02	0	93.00
3.600	0.02	0.00	0.03	0.00	0.02	0	93.00
3.650	0.02	0.00	0.03	0.00	0.02	0	93.00
3.700	0.02	0.00	0.04	0.00	0.02	0	93.00
3.750	0.02	0.00	0.04	0.00	0.02	0	93.00
3.800	0.02	0.00	0.04	0.00	0.02	0	93.00
3.850	0.02	0.00	0.04	0.00	0.02	0	93.00
3.900	0.02	0.00	0.04	0.00	0.02	0	93.00
3.950	0.02	0.00	0.04	0.00	0.02	0	93.00
4.000	0.02	0.00	0.04	0.00	0.02	0	93.00
4.050	0.02	0.00	0.04	0.00	0.02	0	93.00
4.100	0.02	0.00	0.04	0.00	0.02	0	93.00
4.150	0.02	0.00	0.04	0.00	0.02	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
4.200	0.02	0.00	0.04	0.00	0.02	0	93.00
4.250	0.02	0.00	0.04	0.00	0.02	0	93.00
4.300	0.02	0.00	0.04	0.00	0.02	0	93.00
4.350	0.02	0.00	0.04	0.00	0.02	0	93.00
4.400	0.02	0.00	0.04	0.00	0.02	0	93.00
4.450	0.02	0.00	0.04	0.00	0.02	0	93.00
4.500	0.02	0.00	0.04	0.00	0.02	0	93.00
4.550	0.02	0.00	0.04	0.00	0.02	0	93.00
4.600	0.02	0.00	0.04	0.00	0.02	0	93.00
4.650	0.02	0.00	0.05	0.00	0.02	0	93.00
4.700	0.02	0.00	0.05	0.00	0.02	0	93.00
4.750	0.02	0.00	0.05	0.00	0.02	0	93.00
4.800	0.02	0.00	0.05	0.00	0.02	0	93.00
4.850	0.02	0.00	0.05	0.00	0.02	0	93.00
4.900	0.02	0.00	0.05	0.00	0.02	0	93.00
4.950	0.02	0.00	0.05	0.00	0.02	0	93.00
5.000	0.02	0.00	0.05	0.00	0.02	0	93.00
5.050	0.02	0.00	0.05	0.00	0.02	0	93.00
5.100	0.02	0.00	0.05	0.00	0.02	0	93.00
5.150	0.03	0.00	0.05	0.00	0.02	0	93.00
5.200	0.03	0.00	0.05	0.00	0.03	0	93.00
5.250	0.03	0.00	0.05	0.00	0.03	0	93.00
5.300	0.03	0.00	0.05	0.00	0.03	0	93.00
5.350	0.03	0.00	0.05	0.00	0.03	0	93.00
5.400	0.03	0.00	0.05	0.00	0.03	0	93.00
5.450	0.03	0.00	0.05	0.00	0.03	0	93.00
5.500	0.03	0.00	0.05	0.00	0.03	0	93.00
5.550	0.03	0.00	0.05	0.00	0.03	0	93.00
5.600	0.03	0.00	0.05	0.00	0.03	0	93.00
5.650	0.03	0.00	0.05	0.00	0.03	0	93.00
5.700	0.03	0.00	0.05	0.00	0.03	0	93.00
5.750	0.03	0.00	0.06	0.00	0.03	0	93.00
5.800	0.03	0.00	0.06	0.00	0.03	0	93.00
5.850	0.03	0.00	0.06	0.00	0.03	0	93.00
5.900	0.03	0.00	0.06	0.00	0.03	0	93.00
5.950	0.03	0.00	0.06	0.00	0.03	0	93.00
6.000	0.03	0.00	0.06	0.00	0.03	0	93.00
6.050	0.03	0.00	0.06	0.00	0.03	0	93.00
6.100	0.03	0.00	0.06	0.00	0.03	0	93.00
6.150	0.03	0.00	0.06	0.00	0.03	0	93.00
6.200	0.03	0.00	0.06	0.00	0.03	0	93.00
6.250	0.03	0.00	0.06	0.00	0.03	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
6.300	0.03	0.00	0.06	0.00	0.03	0	93.00
6.350	0.03	0.00	0.06	0.00	0.03	0	93.00
6.400	0.03	0.00	0.06	0.00	0.03	0	93.00
6.450	0.03	0.00	0.07	0.00	0.03	0	93.00
6.500	0.03	0.00	0.07	0.00	0.03	0	93.00
6.550	0.03	0.00	0.07	0.00	0.03	0	93.00
6.600	0.03	0.00	0.07	0.00	0.03	0	93.00
6.650	0.04	0.00	0.07	0.00	0.03	0	93.00
6.700	0.04	0.00	0.07	0.00	0.04	0	93.00
6.750	0.04	0.00	0.07	0.00	0.04	0	93.00
6.800	0.04	0.00	0.07	0.00	0.04	0	93.00
6.850	0.04	0.00	0.07	0.00	0.04	0	93.00
6.900	0.04	0.00	0.08	0.00	0.04	0	93.00
6.950	0.04	0.00	0.08	0.00	0.04	0	93.00
7.000	0.04	0.00	0.08	0.00	0.04	0	93.00
7.050	0.04	0.00	0.08	0.00	0.04	0	93.00
7.100	0.04	0.00	0.08	0.00	0.04	0	93.00
7.150	0.04	0.00	0.08	0.00	0.04	0	93.00
7.200	0.04	0.00	0.08	0.00	0.04	0	93.00
7.250	0.04	0.00	0.08	0.00	0.04	0	93.00
7.300	0.04	0.00	0.08	0.00	0.04	0	93.00
7.350	0.04	0.00	0.09	0.00	0.04	0	93.00
7.400	0.04	0.00	0.09	0.00	0.04	0	93.00
7.450	0.04	0.00	0.09	0.00	0.04	0	93.00
7.500	0.04	0.00	0.09	0.00	0.04	0	93.00
7.550	0.05	0.00	0.09	0.00	0.05	0	93.00
7.600	0.05	0.00	0.09	0.00	0.05	0	93.00
7.650	0.05	0.00	0.09	0.00	0.05	0	93.00
7.700	0.05	0.00	0.09	0.00	0.05	0	93.00
7.750	0.05	0.00	0.09	0.00	0.05	0	93.00
7.800	0.05	0.00	0.10	0.00	0.05	0	93.00
7.850	0.05	0.00	0.10	0.00	0.05	0	93.00
7.900	0.05	0.00	0.10	0.00	0.05	0	93.00
7.950	0.05	0.00	0.10	0.00	0.05	0	93.00
8.000	0.05	0.00	0.10	0.00	0.05	0	93.00
8.050	0.05	0.00	0.10	0.00	0.05	0	93.00
8.100	0.05	0.00	0.10	0.00	0.05	0	93.00
8.150	0.05	0.00	0.11	0.00	0.05	0	93.00
8.200	0.05	0.00	0.11	0.00	0.05	0	93.00
8.250	0.06	0.00	0.11	0.00	0.05	0	93.00
8.300	0.06	0.00	0.11	0.00	0.06	0	93.00
8.350	0.06	0.00	0.11	0.00	0.06	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
8.400	0.06	0.00	0.12	0.00	0.06	0	93.00
8.450	0.06	0.00	0.12	0.00	0.06	0	93.00
8.500	0.06	0.00	0.12	0.00	0.06	0	93.00
8.550	0.06	0.00	0.12	0.00	0.06	0	93.00
8.600	0.06	0.00	0.13	0.00	0.06	0	93.00
8.650	0.07	0.00	0.13	0.00	0.06	0	93.00
8.700	0.07	0.00	0.13	0.00	0.07	0	93.00
8.750	0.07	0.00	0.13	0.00	0.07	0	93.00
8.800	0.07	0.00	0.14	0.00	0.07	0	93.00
8.850	0.07	0.00	0.14	0.00	0.07	0	93.00
8.900	0.07	0.00	0.14	0.00	0.07	0	93.00
8.950	0.07	0.00	0.14	0.00	0.07	0	93.00
9.000	0.07	0.00	0.15	0.00	0.07	0	93.00
9.050	0.08	0.00	0.15	0.00	0.07	0	93.00
9.100	0.08	0.00	0.15	0.00	0.08	0	93.00
9.150	0.08	0.00	0.15	0.00	0.08	0	93.00
9.200	0.08	0.00	0.16	0.00	0.08	0	93.00
9.250	0.08	0.00	0.16	0.00	0.08	0	93.00
9.300	0.08	0.00	0.16	0.00	0.08	0	93.00
9.350	0.08	0.00	0.16	0.00	0.08	0	93.00
9.400	0.08	0.00	0.17	0.00	0.08	0	93.00
9.450	0.09	0.00	0.17	0.00	0.08	0	93.00
9.500	0.09	0.00	0.17	0.00	0.09	0	93.00
9.550	0.09	0.00	0.17	0.00	0.09	0	93.00
9.600	0.09	0.00	0.18	0.00	0.09	0	93.00
9.650	0.09	0.00	0.18	0.00	0.09	0	93.00
9.700	0.09	0.00	0.18	0.00	0.09	8	93.02
9.750	0.09	0.01	0.19	0.00	0.09	9	93.02
9.800	0.09	0.01	0.19	0.00	0.09	9	93.02
9.850	0.10	0.02	0.20	0.00	0.09	10	93.02
9.900	0.10	0.04	0.22	0.00	0.09	11	93.02
9.950	0.10	0.05	0.23	0.00	0.09	13	93.02
10.000	0.10	0.07	0.25	0.00	0.09	14	93.03
10.050	0.10	0.09	0.27	0.00	0.09	16	93.03
10.100	0.10	0.11	0.29	0.00	0.09	18	93.04
10.150	0.10	0.14	0.32	0.00	0.09	21	93.04
10.200	0.11	0.17	0.35	0.00	0.09	24	93.05
10.250	0.11	0.21	0.39	0.00	0.09	27	93.05
10.300	0.11	0.25	0.43	0.00	0.09	31	93.06
10.350	0.12	0.30	0.48	0.00	0.09	35	93.07
10.400	0.12	0.35	0.53	0.00	0.09	40	93.08
10.450	0.12	0.41	0.59	0.00	0.09	45	93.09

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
10.500	0.12	0.47	0.65	0.00	0.09	51	93.10
10.550	0.13	0.54	0.72	0.00	0.09	56	93.11
10.600	0.13	0.62	0.80	0.00	0.09	61	93.12
10.650	0.13	0.70	0.88	0.00	0.09	67	93.13
10.700	0.13	0.78	0.96	0.00	0.09	73	93.14
10.750	0.14	0.87	1.05	0.00	0.09	79	93.16
10.800	0.14	0.96	1.14	0.00	0.09	86	93.17
10.850	0.14	1.06	1.24	0.00	0.09	97	93.18
10.900	0.14	1.17	1.35	0.00	0.09	112	93.20
10.950	0.15	1.28	1.46	0.00	0.09	123	93.21
11.000	0.15	1.39	1.57	0.00	0.09	133	93.22
11.050	0.15	1.51	1.69	0.00	0.09	144	93.23
11.100	0.16	1.65	1.83	0.00	0.09	156	93.24
11.150	0.17	1.79	1.97	0.00	0.09	169	93.25
11.200	0.18	1.96	2.14	0.00	0.09	184	93.27
11.250	0.19	2.14	2.32	0.00	0.09	201	93.29
11.300	0.20	2.34	2.52	0.00	0.09	219	93.30
11.350	0.21	2.56	2.74	0.00	0.09	239	93.32
11.400	0.22	2.80	2.98	0.00	0.09	260	93.34
11.450	0.22	3.06	3.24	0.00	0.09	284	93.37
11.500	0.24	3.35	3.53	0.00	0.09	309	93.39
11.550	0.27	3.67	3.85	0.00	0.09	338	93.42
11.600	0.32	4.07	4.25	0.00	0.09	375	93.46
11.650	0.39	4.59	4.77	0.00	0.09	422	93.50
11.700	0.48	5.28	5.46	0.00	0.09	483	93.56
11.750	0.57	6.15	6.33	0.00	0.09	561	93.64
11.800	0.67	7.20	7.38	0.00	0.09	656	93.73
11.850	0.75	8.44	8.62	0.00	0.09	767	93.84
11.900	0.86	9.87	10.05	0.00	0.09	896	93.97
11.950	1.12	11.67	11.85	0.00	0.09	1,058	94.13
12.000	1.56	14.17	14.35	0.00	0.09	1,283	94.35
12.050	1.72	17.27	17.45	0.00	0.09	1,562	94.63
12.100	1.76	20.57	20.75	0.00	0.09	1,859	94.92
12.150	1.55	23.70	23.88	0.00	0.09	2,124	95.18
12.200	1.13	23.69	26.38	0.00	1.34	2,253	95.24
12.250	0.92	23.87	25.75	0.00	0.94	2,233	95.23
12.300	0.79	23.92	25.59	0.00	0.83	2,228	95.23
12.350	0.69	23.97	25.40	0.00	0.71	2,222	95.23
12.400	0.59	24.02	25.25	0.00	0.62	2,217	95.22
12.450	0.50	24.06	25.10	0.00	0.52	2,212	95.22
12.500	0.40	24.10	24.96	0.00	0.43	2,207	95.22
12.550	0.33	24.13	24.83	0.00	0.35	2,203	95.22

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
12.600	0.27	24.16	24.74	0.00	0.29	2,201	95.21
12.650	0.25	24.18	24.68	0.00	0.25	2,199	95.21
12.700	0.23	24.18	24.66	0.00	0.24	2,198	95.21
12.750	0.22	24.19	24.64	0.00	0.22	2,197	95.21
12.800	0.21	24.19	24.62	0.00	0.21	2,197	95.21
12.850	0.20	24.20	24.61	0.00	0.20	2,196	95.21
12.900	0.19	24.20	24.59	0.00	0.19	2,196	95.21
12.950	0.18	24.21	24.57	0.00	0.18	2,195	95.21
13.000	0.17	24.21	24.56	0.00	0.17	2,195	95.21
13.050	0.16	24.22	24.55	0.00	0.17	2,194	95.21
13.100	0.16	24.22	24.54	0.00	0.16	2,194	95.21
13.150	0.15	24.22	24.53	0.00	0.15	2,194	95.21
13.200	0.15	24.22	24.52	0.00	0.15	2,194	95.21
13.250	0.15	24.22	24.52	0.00	0.15	2,193	95.21
13.300	0.14	24.22	24.51	0.00	0.15	2,193	95.21
13.350	0.14	24.23	24.51	0.00	0.14	2,193	95.21
13.400	0.14	24.23	24.51	0.00	0.14	2,193	95.21
13.450	0.14	24.23	24.50	0.00	0.14	2,193	95.21
13.500	0.13	24.23	24.50	0.00	0.13	2,193	95.21
13.550	0.13	24.23	24.49	0.00	0.13	2,193	95.21
13.600	0.13	24.23	24.49	0.00	0.13	2,192	95.21
13.650	0.13	24.23	24.49	0.00	0.13	2,192	95.21
13.700	0.12	24.23	24.48	0.00	0.12	2,192	95.21
13.750	0.12	24.23	24.48	0.00	0.12	2,192	95.21
13.800	0.12	24.24	24.47	0.00	0.12	2,192	95.21
13.850	0.12	24.24	24.47	0.00	0.12	2,192	95.21
13.900	0.11	24.24	24.47	0.00	0.11	2,192	95.21
13.950	0.11	24.24	24.46	0.00	0.11	2,192	95.21
14.000	0.11	24.24	24.46	0.00	0.11	2,191	95.21
14.050	0.11	24.24	24.46	0.00	0.11	2,191	95.21
14.100	0.10	24.24	24.45	0.00	0.10	2,191	95.21
14.150	0.10	24.24	24.45	0.00	0.10	2,191	95.21
14.200	0.10	24.24	24.45	0.00	0.10	2,191	95.21
14.250	0.10	24.24	24.45	0.00	0.10	2,191	95.21
14.300	0.10	24.24	24.44	0.00	0.10	2,191	95.21
14.350	0.10	24.25	24.44	0.00	0.10	2,191	95.21
14.400	0.10	24.25	24.44	0.00	0.10	2,191	95.21
14.450	0.10	24.25	24.44	0.00	0.10	2,191	95.21
14.500	0.09	24.25	24.44	0.00	0.09	2,191	95.21
14.550	0.09	24.25	24.43	0.00	0.09	2,191	95.21
14.600	0.09	24.25	24.43	0.00	0.09	2,191	95.21
14.650	0.09	24.25	24.43	0.00	0.09	2,191	95.21

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
14.700	0.09	24.25	24.43	0.00	0.09	2,190	95.21
14.750	0.09	24.25	24.43	0.00	0.09	2,190	95.21
14.800	0.09	24.24	24.42	0.00	0.09	2,190	95.21
14.850	0.09	24.23	24.41	0.00	0.09	2,189	95.21
14.900	0.08	24.22	24.40	0.00	0.09	2,188	95.21
14.950	0.08	24.21	24.39	0.00	0.09	2,187	95.21
15.000	0.08	24.20	24.38	0.00	0.09	2,186	95.21
15.050	0.08	24.18	24.36	0.00	0.09	2,184	95.21
15.100	0.08	24.16	24.34	0.00	0.09	2,182	95.21
15.150	0.08	24.14	24.32	0.00	0.09	2,180	95.21
15.200	0.08	24.11	24.29	0.00	0.09	2,178	95.20
15.250	0.08	24.08	24.26	0.00	0.09	2,176	95.20
15.300	0.07	24.06	24.24	0.00	0.09	2,173	95.20
15.350	0.07	24.02	24.20	0.00	0.09	2,170	95.20
15.400	0.07	23.99	24.17	0.00	0.09	2,165	95.20
15.450	0.07	23.95	24.13	0.00	0.09	2,160	95.19
15.500	0.07	23.91	24.09	0.00	0.09	2,154	95.19
15.550	0.07	23.87	24.05	0.00	0.09	2,148	95.19
15.600	0.07	23.83	24.01	0.00	0.09	2,142	95.19
15.650	0.07	23.78	23.96	0.00	0.09	2,135	95.18
15.700	0.06	23.73	23.91	0.00	0.09	2,128	95.18
15.750	0.06	23.68	23.86	0.00	0.09	2,122	95.18
15.800	0.06	23.62	23.80	0.00	0.09	2,116	95.17
15.850	0.06	23.57	23.75	0.00	0.09	2,112	95.17
15.900	0.06	23.51	23.69	0.00	0.09	2,108	95.16
15.950	0.06	23.45	23.63	0.00	0.09	2,104	95.16
16.000	0.06	23.38	23.56	0.00	0.09	2,099	95.15
16.050	0.06	23.32	23.50	0.00	0.09	2,094	95.15
16.100	0.06	23.25	23.43	0.00	0.09	2,089	95.14
16.150	0.05	23.18	23.36	0.00	0.09	2,084	95.14
16.200	0.05	23.11	23.29	0.00	0.09	2,079	95.13
16.250	0.05	23.04	23.22	0.00	0.09	2,074	95.13
16.300	0.05	22.96	23.14	0.00	0.09	2,069	95.12
16.350	0.05	22.89	23.07	0.00	0.09	2,063	95.12
16.400	0.05	22.81	22.99	0.00	0.09	2,058	95.11
16.450	0.05	22.74	22.92	0.00	0.09	2,052	95.11
16.500	0.05	22.66	22.84	0.00	0.09	2,047	95.10
16.550	0.05	22.58	22.76	0.00	0.09	2,040	95.10
16.600	0.05	22.50	22.68	0.00	0.09	2,033	95.09
16.650	0.05	22.42	22.60	0.00	0.09	2,026	95.08
16.700	0.05	22.34	22.52	0.00	0.09	2,019	95.08
16.750	0.05	22.26	22.44	0.00	0.09	2,011	95.07

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
16.800	0.05	22.17	22.35	0.00	0.09	2,004	95.06
16.850	0.05	22.09	22.27	0.00	0.09	1,996	95.05
16.900	0.05	22.00	22.18	0.00	0.09	1,988	95.05
16.950	0.05	21.91	22.09	0.00	0.09	1,980	95.04
17.000	0.05	21.83	22.01	0.00	0.09	1,972	95.03
17.050	0.05	21.74	21.92	0.00	0.09	1,964	95.02
17.100	0.04	21.65	21.83	0.00	0.09	1,956	95.01
17.150	0.04	21.56	21.74	0.00	0.09	1,948	95.01
17.200	0.04	21.46	21.64	0.00	0.09	1,940	95.00
17.250	0.04	21.37	21.55	0.00	0.09	1,931	94.99
17.300	0.04	21.27	21.45	0.00	0.09	1,923	94.98
17.350	0.04	21.18	21.36	0.00	0.09	1,914	94.97
17.400	0.04	21.08	21.26	0.00	0.09	1,906	94.96
17.450	0.04	20.98	21.16	0.00	0.09	1,897	94.96
17.500	0.04	20.89	21.07	0.00	0.09	1,888	94.95
17.550	0.04	20.79	20.97	0.00	0.09	1,879	94.94
17.600	0.04	20.69	20.87	0.00	0.09	1,870	94.93
17.650	0.04	20.58	20.76	0.00	0.09	1,861	94.92
17.700	0.04	20.48	20.66	0.00	0.09	1,851	94.91
17.750	0.04	20.38	20.56	0.00	0.09	1,842	94.90
17.800	0.04	20.27	20.45	0.00	0.09	1,832	94.89
17.850	0.04	20.16	20.34	0.00	0.09	1,823	94.88
17.900	0.04	20.06	20.24	0.00	0.09	1,813	94.87
17.950	0.04	19.95	20.13	0.00	0.09	1,803	94.86
18.000	0.03	19.84	20.02	0.00	0.09	1,794	94.85
18.050	0.03	19.73	19.91	0.00	0.09	1,784	94.84
18.100	0.03	19.62	19.80	0.00	0.09	1,774	94.83
18.150	0.03	19.51	19.69	0.00	0.09	1,764	94.82
18.200	0.03	19.39	19.57	0.00	0.09	1,753	94.81
18.250	0.03	19.28	19.46	0.00	0.09	1,743	94.80
18.300	0.03	19.17	19.35	0.00	0.09	1,733	94.79
18.350	0.03	19.05	19.23	0.00	0.09	1,723	94.78
18.400	0.03	18.94	19.12	0.00	0.09	1,713	94.77
18.450	0.03	18.83	19.01	0.00	0.09	1,702	94.76
18.500	0.03	18.71	18.89	0.00	0.09	1,692	94.75
18.550	0.03	18.60	18.78	0.00	0.09	1,682	94.74
18.600	0.03	18.48	18.66	0.00	0.09	1,672	94.73
18.650	0.03	18.37	18.55	0.00	0.09	1,661	94.72
18.700	0.03	18.25	18.43	0.00	0.09	1,651	94.71
18.750	0.03	18.14	18.32	0.00	0.09	1,640	94.70
18.800	0.03	18.02	18.20	0.00	0.09	1,630	94.69
18.850	0.03	17.90	18.08	0.00	0.09	1,619	94.68

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
18.900	0.03	17.79	17.97	0.00	0.09	1,609	94.67
18.950	0.03	17.67	17.85	0.00	0.09	1,598	94.66
19.000	0.03	17.55	17.73	0.00	0.09	1,588	94.65
19.050	0.03	17.43	17.61	0.00	0.09	1,577	94.64
19.100	0.03	17.32	17.50	0.00	0.09	1,567	94.63
19.150	0.03	17.20	17.38	0.00	0.09	1,556	94.62
19.200	0.03	17.08	17.26	0.00	0.09	1,545	94.61
19.250	0.03	16.96	17.14	0.00	0.09	1,535	94.60
19.300	0.03	16.84	17.02	0.00	0.09	1,524	94.59
19.350	0.03	16.72	16.90	0.00	0.09	1,513	94.58
19.400	0.03	16.60	16.78	0.00	0.09	1,502	94.57
19.450	0.03	16.48	16.66	0.00	0.09	1,491	94.56
19.500	0.03	16.36	16.54	0.00	0.09	1,481	94.55
19.550	0.03	16.24	16.42	0.00	0.09	1,470	94.53
19.600	0.03	16.12	16.30	0.00	0.09	1,459	94.52
19.650	0.03	16.00	16.18	0.00	0.09	1,448	94.51
19.700	0.03	15.87	16.05	0.00	0.09	1,437	94.50
19.750	0.03	15.75	15.93	0.00	0.09	1,426	94.49
19.800	0.03	15.63	15.81	0.00	0.09	1,415	94.48
19.850	0.03	15.51	15.69	0.00	0.09	1,404	94.47
19.900	0.03	15.38	15.56	0.00	0.09	1,393	94.46
19.950	0.03	15.26	15.44	0.00	0.09	1,381	94.45
20.000	0.03	15.14	15.32	0.00	0.09	1,370	94.44
20.050	0.03	15.01	15.19	0.00	0.09	1,359	94.43
20.100	0.03	14.89	15.07	0.00	0.09	1,348	94.42
20.150	0.03	14.76	14.94	0.00	0.09	1,337	94.40
20.200	0.03	14.64	14.82	0.00	0.09	1,326	94.39
20.250	0.03	14.51	14.69	0.00	0.09	1,314	94.38
20.300	0.03	14.39	14.57	0.00	0.09	1,303	94.37
20.350	0.03	14.26	14.44	0.00	0.09	1,292	94.36
20.400	0.03	14.14	14.32	0.00	0.09	1,280	94.35
20.450	0.03	14.01	14.19	0.00	0.09	1,269	94.34
20.500	0.03	13.88	14.06	0.00	0.09	1,258	94.33
20.550	0.03	13.76	13.94	0.00	0.09	1,246	94.31
20.600	0.03	13.63	13.81	0.00	0.09	1,235	94.30
20.650	0.03	13.50	13.68	0.00	0.09	1,223	94.29
20.700	0.03	13.38	13.56	0.00	0.09	1,212	94.28
20.750	0.03	13.25	13.43	0.00	0.09	1,200	94.27
20.800	0.03	13.12	13.30	0.00	0.09	1,189	94.26
20.850	0.03	12.99	13.17	0.00	0.09	1,177	94.25
20.900	0.03	12.86	13.04	0.00	0.09	1,166	94.24
20.950	0.03	12.73	12.91	0.00	0.09	1,154	94.22

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
21.000	0.03	12.61	12.79	0.00	0.09	1,143	94.21
21.050	0.03	12.48	12.66	0.00	0.09	1,131	94.20
21.100	0.03	12.35	12.53	0.00	0.09	1,119	94.19
21.150	0.03	12.22	12.40	0.00	0.09	1,108	94.18
21.200	0.03	12.09	12.27	0.00	0.09	1,096	94.17
21.250	0.02	11.96	12.14	0.00	0.09	1,084	94.16
21.300	0.02	11.83	12.01	0.00	0.09	1,073	94.14
21.350	0.02	11.70	11.88	0.00	0.09	1,061	94.13
21.400	0.02	11.57	11.75	0.00	0.09	1,049	94.12
21.450	0.02	11.44	11.62	0.00	0.09	1,037	94.11
21.500	0.02	11.30	11.48	0.00	0.09	1,026	94.10
21.550	0.02	11.17	11.35	0.00	0.09	1,014	94.09
21.600	0.02	11.04	11.22	0.00	0.09	1,002	94.07
21.650	0.02	10.91	11.09	0.00	0.09	990	94.06
21.700	0.02	10.78	10.96	0.00	0.09	978	94.05
21.750	0.02	10.64	10.82	0.00	0.09	966	94.04
21.800	0.02	10.51	10.69	0.00	0.09	954	94.03
21.850	0.02	10.38	10.56	0.00	0.09	942	94.02
21.900	0.02	10.25	10.43	0.00	0.09	930	94.00
21.950	0.02	10.11	10.29	0.00	0.09	918	93.99
22.000	0.02	9.98	10.16	0.00	0.09	906	93.98
22.050	0.02	9.85	10.03	0.00	0.09	894	93.97
22.100	0.02	9.71	9.89	0.00	0.09	882	93.96
22.150	0.02	9.58	9.76	0.00	0.09	870	93.94
22.200	0.02	9.44	9.62	0.00	0.09	858	93.93
22.250	0.02	9.31	9.49	0.00	0.09	846	93.92
22.300	0.02	9.17	9.35	0.00	0.09	834	93.91
22.350	0.02	9.04	9.22	0.00	0.09	821	93.90
22.400	0.02	8.90	9.08	0.00	0.09	809	93.88
22.450	0.02	8.77	8.95	0.00	0.09	797	93.87
22.500	0.02	8.63	8.81	0.00	0.09	785	93.86
22.550	0.02	8.49	8.67	0.00	0.09	773	93.85
22.600	0.02	8.36	8.54	0.00	0.09	760	93.84
22.650	0.02	8.22	8.40	0.00	0.09	748	93.82
22.700	0.02	8.08	8.26	0.00	0.09	736	93.81
22.750	0.02	7.95	8.13	0.00	0.09	723	93.80
22.800	0.02	7.81	7.99	0.00	0.09	711	93.79
22.850	0.02	7.67	7.85	0.00	0.09	699	93.78
22.900	0.02	7.53	7.71	0.00	0.09	686	93.76
22.950	0.02	7.40	7.58	0.00	0.09	674	93.75
23.000	0.02	7.26	7.44	0.00	0.09	661	93.74
23.050	0.02	7.12	7.30	0.00	0.09	649	93.73

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
23.100	0.02	6.98	7.16	0.00	0.09	636	93.71
23.150	0.02	6.84	7.02	0.00	0.09	624	93.70
23.200	0.02	6.70	6.88	0.00	0.09	611	93.69
23.250	0.02	6.56	6.74	0.00	0.09	599	93.68
23.300	0.02	6.42	6.60	0.00	0.09	586	93.66
23.350	0.02	6.28	6.46	0.00	0.09	573	93.65
23.400	0.02	6.14	6.32	0.00	0.09	561	93.64
23.450	0.02	6.00	6.18	0.00	0.09	548	93.63
23.500	0.02	5.86	6.04	0.00	0.09	535	93.61
23.550	0.02	5.72	5.90	0.00	0.09	523	93.60
23.600	0.02	5.58	5.76	0.00	0.09	510	93.59
23.650	0.02	5.44	5.62	0.00	0.09	497	93.58
23.700	0.02	5.29	5.47	0.00	0.09	485	93.56
23.750	0.02	5.15	5.33	0.00	0.09	472	93.55
23.800	0.02	5.01	5.19	0.00	0.09	459	93.54
23.850	0.02	4.87	5.05	0.00	0.09	446	93.53
23.900	0.02	4.72	4.90	0.00	0.09	433	93.51
23.950	0.02	4.58	4.76	0.00	0.09	420	93.50
24.000	0.02	4.44	4.62	0.00	0.09	408	93.49

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
0.000	0.00	0.00	0.09	0.00	0.05	0	93.00
0.050	0.00	0.00	0.00	0.00	0.00	0	93.00
0.100	0.00	0.00	0.00	0.00	0.00	0	93.00
0.150	0.00	0.00	0.00	0.00	0.00	0	93.00
0.200	0.00	0.00	0.00	0.00	0.00	0	93.00
0.250	0.00	0.00	0.00	0.00	0.00	0	93.00
0.300	0.00	0.00	0.00	0.00	0.00	0	93.00
0.350	0.00	0.00	0.00	0.00	0.00	0	93.00
0.400	0.00	0.00	0.00	0.00	0.00	0	93.00
0.450	0.00	0.00	0.00	0.00	0.00	0	93.00
0.500	0.00	0.00	0.00	0.00	0.00	0	93.00
0.550	0.00	0.00	0.00	0.00	0.00	0	93.00
0.600	0.00	0.00	0.00	0.00	0.00	0	93.00
0.650	0.00	0.00	0.00	0.00	0.00	0	93.00
0.700	0.00	0.00	0.00	0.00	0.00	0	93.00
0.750	0.00	0.00	0.00	0.00	0.00	0	93.00
0.800	0.00	0.00	0.00	0.00	0.00	0	93.00
0.850	0.00	0.00	0.00	0.00	0.00	0	93.00
0.900	0.00	0.00	0.01	0.00	0.00	0	93.00
0.950	0.00	0.00	0.01	0.00	0.00	0	93.00
1.000	0.00	0.00	0.01	0.00	0.00	0	93.00
1.050	0.00	0.00	0.01	0.00	0.00	0	93.00
1.100	0.01	0.00	0.01	0.00	0.01	0	93.00
1.150	0.01	0.00	0.01	0.00	0.01	0	93.00
1.200	0.01	0.00	0.01	0.00	0.01	0	93.00
1.250	0.01	0.00	0.01	0.00	0.01	0	93.00
1.300	0.01	0.00	0.02	0.00	0.01	0	93.00
1.350	0.01	0.00	0.02	0.00	0.01	0	93.00
1.400	0.01	0.00	0.02	0.00	0.01	0	93.00
1.450	0.01	0.00	0.02	0.00	0.01	0	93.00
1.500	0.01	0.00	0.02	0.00	0.01	0	93.00
1.550	0.01	0.00	0.02	0.00	0.01	0	93.00
1.600	0.01	0.00	0.02	0.00	0.01	0	93.00
1.650	0.01	0.00	0.02	0.00	0.01	0	93.00
1.700	0.01	0.00	0.02	0.00	0.01	0	93.00
1.750	0.01	0.00	0.02	0.00	0.01	0	93.00
1.800	0.01	0.00	0.02	0.00	0.01	0	93.00
1.850	0.01	0.00	0.02	0.00	0.01	0	93.00
1.900	0.01	0.00	0.03	0.00	0.01	0	93.00
1.950	0.01	0.00	0.03	0.00	0.01	0	93.00
2.000	0.01	0.00	0.03	0.00	0.01	0	93.00
2.050	0.01	0.00	0.03	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
2.100	0.01	0.00	0.03	0.00	0.01	0	93.00
2.150	0.01	0.00	0.03	0.00	0.01	0	93.00
2.200	0.01	0.00	0.03	0.00	0.01	0	93.00
2.250	0.02	0.00	0.03	0.00	0.01	0	93.00
2.300	0.02	0.00	0.03	0.00	0.02	0	93.00
2.350	0.02	0.00	0.03	0.00	0.02	0	93.00
2.400	0.02	0.00	0.03	0.00	0.02	0	93.00
2.450	0.02	0.00	0.03	0.00	0.02	0	93.00
2.500	0.02	0.00	0.03	0.00	0.02	0	93.00
2.550	0.02	0.00	0.03	0.00	0.02	0	93.00
2.600	0.02	0.00	0.04	0.00	0.02	0	93.00
2.650	0.02	0.00	0.04	0.00	0.02	0	93.00
2.700	0.02	0.00	0.04	0.00	0.02	0	93.00
2.750	0.02	0.00	0.04	0.00	0.02	0	93.00
2.800	0.02	0.00	0.04	0.00	0.02	0	93.00
2.850	0.02	0.00	0.04	0.00	0.02	0	93.00
2.900	0.02	0.00	0.04	0.00	0.02	0	93.00
2.950	0.02	0.00	0.04	0.00	0.02	0	93.00
3.000	0.02	0.00	0.04	0.00	0.02	0	93.00
3.050	0.02	0.00	0.04	0.00	0.02	0	93.00
3.100	0.02	0.00	0.04	0.00	0.02	0	93.00
3.150	0.02	0.00	0.04	0.00	0.02	0	93.00
3.200	0.02	0.00	0.04	0.00	0.02	0	93.00
3.250	0.02	0.00	0.04	0.00	0.02	0	93.00
3.300	0.02	0.00	0.05	0.00	0.02	0	93.00
3.350	0.02	0.00	0.05	0.00	0.02	0	93.00
3.400	0.02	0.00	0.05	0.00	0.02	0	93.00
3.450	0.02	0.00	0.05	0.00	0.02	0	93.00
3.500	0.02	0.00	0.05	0.00	0.02	0	93.00
3.550	0.02	0.00	0.05	0.00	0.02	0	93.00
3.600	0.02	0.00	0.05	0.00	0.02	0	93.00
3.650	0.02	0.00	0.05	0.00	0.02	0	93.00
3.700	0.03	0.00	0.05	0.00	0.03	0	93.00
3.750	0.03	0.00	0.05	0.00	0.03	0	93.00
3.800	0.03	0.00	0.05	0.00	0.03	0	93.00
3.850	0.03	0.00	0.05	0.00	0.03	0	93.00
3.900	0.03	0.00	0.05	0.00	0.03	0	93.00
3.950	0.03	0.00	0.05	0.00	0.03	0	93.00
4.000	0.03	0.00	0.05	0.00	0.03	0	93.00
4.050	0.03	0.00	0.05	0.00	0.03	0	93.00
4.100	0.03	0.00	0.06	0.00	0.03	0	93.00
4.150	0.03	0.00	0.06	0.00	0.03	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
4.200	0.03	0.00	0.06	0.00	0.03	0	93.00
4.250	0.03	0.00	0.06	0.00	0.03	0	93.00
4.300	0.03	0.00	0.06	0.00	0.03	0	93.00
4.350	0.03	0.00	0.06	0.00	0.03	0	93.00
4.400	0.03	0.00	0.06	0.00	0.03	0	93.00
4.450	0.03	0.00	0.06	0.00	0.03	0	93.00
4.500	0.03	0.00	0.06	0.00	0.03	0	93.00
4.550	0.03	0.00	0.06	0.00	0.03	0	93.00
4.600	0.03	0.00	0.06	0.00	0.03	0	93.00
4.650	0.03	0.00	0.06	0.00	0.03	0	93.00
4.700	0.03	0.00	0.06	0.00	0.03	0	93.00
4.750	0.03	0.00	0.06	0.00	0.03	0	93.00
4.800	0.03	0.00	0.06	0.00	0.03	0	93.00
4.850	0.03	0.00	0.06	0.00	0.03	0	93.00
4.900	0.03	0.00	0.06	0.00	0.03	0	93.00
4.950	0.03	0.00	0.07	0.00	0.03	0	93.00
5.000	0.03	0.00	0.07	0.00	0.03	0	93.00
5.050	0.03	0.00	0.07	0.00	0.03	0	93.00
5.100	0.03	0.00	0.07	0.00	0.03	0	93.00
5.150	0.03	0.00	0.07	0.00	0.03	0	93.00
5.200	0.03	0.00	0.07	0.00	0.03	0	93.00
5.250	0.03	0.00	0.07	0.00	0.03	0	93.00
5.300	0.03	0.00	0.07	0.00	0.03	0	93.00
5.350	0.03	0.00	0.07	0.00	0.03	0	93.00
5.400	0.04	0.00	0.07	0.00	0.04	0	93.00
5.450	0.04	0.00	0.07	0.00	0.04	0	93.00
5.500	0.04	0.00	0.07	0.00	0.04	0	93.00
5.550	0.04	0.00	0.07	0.00	0.04	0	93.00
5.600	0.04	0.00	0.07	0.00	0.04	0	93.00
5.650	0.04	0.00	0.07	0.00	0.04	0	93.00
5.700	0.04	0.00	0.07	0.00	0.04	0	93.00
5.750	0.04	0.00	0.07	0.00	0.04	0	93.00
5.800	0.04	0.00	0.07	0.00	0.04	0	93.00
5.850	0.04	0.00	0.07	0.00	0.04	0	93.00
5.900	0.04	0.00	0.08	0.00	0.04	0	93.00
5.950	0.04	0.00	0.08	0.00	0.04	0	93.00
6.000	0.04	0.00	0.08	0.00	0.04	0	93.00
6.050	0.04	0.00	0.08	0.00	0.04	0	93.00
6.100	0.04	0.00	0.08	0.00	0.04	0	93.00
6.150	0.04	0.00	0.08	0.00	0.04	0	93.00
6.200	0.04	0.00	0.08	0.00	0.04	0	93.00
6.250	0.04	0.00	0.08	0.00	0.04	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
6.300	0.04	0.00	0.08	0.00	0.04	0	93.00
6.350	0.04	0.00	0.08	0.00	0.04	0	93.00
6.400	0.04	0.00	0.09	0.00	0.04	0	93.00
6.450	0.04	0.00	0.09	0.00	0.04	0	93.00
6.500	0.04	0.00	0.09	0.00	0.04	0	93.00
6.550	0.05	0.00	0.09	0.00	0.04	0	93.00
6.600	0.05	0.00	0.09	0.00	0.05	0	93.00
6.650	0.05	0.00	0.09	0.00	0.05	0	93.00
6.700	0.05	0.00	0.09	0.00	0.05	0	93.00
6.750	0.05	0.00	0.10	0.00	0.05	0	93.00
6.800	0.05	0.00	0.10	0.00	0.05	0	93.00
6.850	0.05	0.00	0.10	0.00	0.05	0	93.00
6.900	0.05	0.00	0.10	0.00	0.05	0	93.00
6.950	0.05	0.00	0.10	0.00	0.05	0	93.00
7.000	0.05	0.00	0.10	0.00	0.05	0	93.00
7.050	0.05	0.00	0.10	0.00	0.05	0	93.00
7.100	0.05	0.00	0.11	0.00	0.05	0	93.00
7.150	0.05	0.00	0.11	0.00	0.05	0	93.00
7.200	0.05	0.00	0.11	0.00	0.05	0	93.00
7.250	0.05	0.00	0.11	0.00	0.05	0	93.00
7.300	0.06	0.00	0.11	0.00	0.06	0	93.00
7.350	0.06	0.00	0.11	0.00	0.06	0	93.00
7.400	0.06	0.00	0.11	0.00	0.06	0	93.00
7.450	0.06	0.00	0.11	0.00	0.06	0	93.00
7.500	0.06	0.00	0.12	0.00	0.06	0	93.00
7.550	0.06	0.00	0.12	0.00	0.06	0	93.00
7.600	0.06	0.00	0.12	0.00	0.06	0	93.00
7.650	0.06	0.00	0.12	0.00	0.06	0	93.00
7.700	0.06	0.00	0.12	0.00	0.06	0	93.00
7.750	0.06	0.00	0.12	0.00	0.06	0	93.00
7.800	0.06	0.00	0.12	0.00	0.06	0	93.00
7.850	0.06	0.00	0.13	0.00	0.06	0	93.00
7.900	0.06	0.00	0.13	0.00	0.06	0	93.00
7.950	0.07	0.00	0.13	0.00	0.06	0	93.00
8.000	0.07	0.00	0.13	0.00	0.07	0	93.00
8.050	0.07	0.00	0.13	0.00	0.07	0	93.00
8.100	0.07	0.00	0.13	0.00	0.07	0	93.00
8.150	0.07	0.00	0.14	0.00	0.07	0	93.00
8.200	0.07	0.00	0.14	0.00	0.07	0	93.00
8.250	0.07	0.00	0.14	0.00	0.07	0	93.00
8.300	0.07	0.00	0.15	0.00	0.07	0	93.00
8.350	0.08	0.00	0.15	0.00	0.07	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
8.400	0.08	0.00	0.15	0.00	0.08	0	93.00
8.450	0.08	0.00	0.16	0.00	0.08	0	93.00
8.500	0.08	0.00	0.16	0.00	0.08	0	93.00
8.550	0.08	0.00	0.16	0.00	0.08	0	93.00
8.600	0.08	0.00	0.16	0.00	0.08	0	93.00
8.650	0.08	0.00	0.17	0.00	0.08	0	93.00
8.700	0.09	0.00	0.17	0.00	0.09	0	93.00
8.750	0.09	0.00	0.17	0.00	0.09	0	93.00
8.800	0.09	0.00	0.18	0.00	0.09	0	93.00
8.850	0.09	0.00	0.18	0.00	0.09	8	93.02
8.900	0.09	0.00	0.18	0.00	0.09	8	93.02
8.950	0.09	0.01	0.19	0.00	0.09	9	93.02
9.000	0.10	0.02	0.20	0.00	0.09	10	93.02
9.050	0.10	0.03	0.21	0.00	0.09	11	93.02
9.100	0.10	0.05	0.23	0.00	0.09	12	93.02
9.150	0.10	0.07	0.25	0.00	0.09	14	93.03
9.200	0.10	0.09	0.27	0.00	0.09	16	93.03
9.250	0.10	0.12	0.30	0.00	0.09	19	93.04
9.300	0.11	0.14	0.32	0.00	0.09	21	93.04
9.350	0.11	0.18	0.36	0.00	0.09	24	93.05
9.400	0.11	0.21	0.39	0.00	0.09	27	93.05
9.450	0.11	0.25	0.43	0.00	0.09	31	93.06
9.500	0.11	0.29	0.47	0.00	0.09	34	93.07
9.550	0.11	0.34	0.52	0.00	0.09	38	93.08
9.600	0.11	0.38	0.56	0.00	0.09	43	93.08
9.650	0.12	0.43	0.61	0.00	0.09	47	93.09
9.700	0.12	0.49	0.67	0.00	0.09	52	93.10
9.750	0.12	0.55	0.73	0.00	0.09	56	93.11
9.800	0.12	0.61	0.79	0.00	0.09	60	93.12
9.850	0.12	0.67	0.85	0.00	0.09	65	93.13
9.900	0.12	0.74	0.92	0.00	0.09	70	93.14
9.950	0.13	0.81	0.99	0.00	0.09	75	93.15
10.000	0.13	0.88	1.06	0.00	0.09	80	93.16
10.050	0.13	0.96	1.14	0.00	0.09	86	93.17
10.100	0.13	1.04	1.22	0.00	0.09	94	93.18
10.150	0.13	1.12	1.30	0.00	0.09	106	93.19
10.200	0.14	1.22	1.40	0.00	0.09	118	93.20
10.250	0.14	1.31	1.49	0.00	0.09	126	93.21
10.300	0.14	1.42	1.60	0.00	0.09	136	93.22
10.350	0.15	1.53	1.71	0.00	0.09	146	93.23
10.400	0.15	1.65	1.83	0.00	0.09	157	93.24
10.450	0.15	1.78	1.96	0.00	0.09	168	93.25

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
10.500	0.16	1.91	2.09	0.00	0.09	180	93.26
10.550	0.16	2.04	2.22	0.00	0.09	192	93.28
10.600	0.16	2.19	2.37	0.00	0.09	205	93.29
10.650	0.17	2.34	2.52	0.00	0.09	219	93.30
10.700	0.17	2.50	2.68	0.00	0.09	233	93.32
10.750	0.17	2.66	2.84	0.00	0.09	248	93.33
10.800	0.18	2.83	3.01	0.00	0.09	263	93.35
10.850	0.18	3.01	3.19	0.00	0.09	279	93.36
10.900	0.18	3.19	3.37	0.00	0.09	295	93.38
10.950	0.19	3.38	3.56	0.00	0.09	313	93.40
11.000	0.19	3.58	3.76	0.00	0.09	330	93.41
11.050	0.20	3.79	3.97	0.00	0.09	349	93.43
11.100	0.20	4.00	4.18	0.00	0.09	369	93.45
11.150	0.21	4.24	4.42	0.00	0.09	390	93.47
11.200	0.23	4.50	4.68	0.00	0.09	413	93.49
11.250	0.24	4.78	4.96	0.00	0.09	439	93.52
11.300	0.25	5.09	5.27	0.00	0.09	466	93.55
11.350	0.26	5.42	5.60	0.00	0.09	496	93.58
11.400	0.28	5.78	5.96	0.00	0.09	528	93.61
11.450	0.29	6.16	6.34	0.00	0.09	563	93.64
11.500	0.30	6.57	6.75	0.00	0.09	599	93.68
11.550	0.34	7.03	7.21	0.00	0.09	641	93.72
11.600	0.40	7.59	7.77	0.00	0.09	692	93.77
11.650	0.49	8.31	8.49	0.00	0.09	756	93.83
11.700	0.61	9.23	9.41	0.00	0.09	839	93.91
11.750	0.72	10.39	10.57	0.00	0.09	943	94.02
11.800	0.85	11.77	11.95	0.00	0.09	1,068	94.14
11.850	0.96	13.40	13.58	0.00	0.09	1,214	94.28
11.900	1.09	15.26	15.44	0.00	0.09	1,382	94.45
11.950	1.43	17.60	17.78	0.00	0.09	1,592	94.66
12.000	1.98	20.83	21.01	0.00	0.09	1,883	94.94
12.050	2.18	24.09	25.00	0.00	0.46	2,209	95.22
12.100	2.24	23.09	28.51	0.00	2.71	2,322	95.27
12.150	1.97	23.43	27.30	0.00	1.93	2,283	95.26
12.200	1.43	23.56	26.83	0.00	1.63	2,268	95.25
12.250	1.17	23.75	26.17	0.00	1.21	2,247	95.24
12.300	1.00	23.82	25.93	0.00	1.05	2,239	95.23
12.350	0.88	23.89	25.70	0.00	0.91	2,231	95.23
12.400	0.74	23.94	25.51	0.00	0.78	2,225	95.23
12.450	0.63	24.00	25.32	0.00	0.66	2,219	95.22
12.500	0.51	24.05	25.14	0.00	0.54	2,213	95.22
12.550	0.42	24.09	24.98	0.00	0.44	2,208	95.22

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
12.600	0.35	24.13	24.86	0.00	0.37	2,205	95.22
12.650	0.31	24.15	24.79	0.00	0.32	2,202	95.22
12.700	0.29	24.16	24.75	0.00	0.30	2,201	95.22
12.750	0.28	24.16	24.73	0.00	0.28	2,200	95.21
12.800	0.27	24.17	24.71	0.00	0.27	2,200	95.21
12.850	0.26	24.17	24.69	0.00	0.26	2,199	95.21
12.900	0.24	24.18	24.67	0.00	0.25	2,198	95.21
12.950	0.23	24.19	24.65	0.00	0.23	2,198	95.21
13.000	0.22	24.19	24.63	0.00	0.22	2,197	95.21
13.050	0.21	24.20	24.62	0.00	0.21	2,197	95.21
13.100	0.20	24.20	24.60	0.00	0.20	2,196	95.21
13.150	0.19	24.20	24.59	0.00	0.19	2,196	95.21
13.200	0.19	24.20	24.59	0.00	0.19	2,196	95.21
13.250	0.19	24.21	24.58	0.00	0.19	2,195	95.21
13.300	0.18	24.21	24.58	0.00	0.18	2,195	95.21
13.350	0.18	24.21	24.57	0.00	0.18	2,195	95.21
13.400	0.18	24.21	24.57	0.00	0.18	2,195	95.21
13.450	0.17	24.21	24.56	0.00	0.17	2,195	95.21
13.500	0.17	24.21	24.56	0.00	0.17	2,195	95.21
13.550	0.17	24.21	24.55	0.00	0.17	2,194	95.21
13.600	0.16	24.22	24.55	0.00	0.16	2,194	95.21
13.650	0.16	24.22	24.54	0.00	0.16	2,194	95.21
13.700	0.16	24.22	24.54	0.00	0.16	2,194	95.21
13.750	0.15	24.22	24.53	0.00	0.15	2,194	95.21
13.800	0.15	24.22	24.52	0.00	0.15	2,194	95.21
13.850	0.15	24.22	24.52	0.00	0.15	2,193	95.21
13.900	0.14	24.22	24.51	0.00	0.15	2,193	95.21
13.950	0.14	24.23	24.51	0.00	0.14	2,193	95.21
14.000	0.14	24.23	24.50	0.00	0.14	2,193	95.21
14.050	0.14	24.23	24.50	0.00	0.14	2,193	95.21
14.100	0.13	24.23	24.50	0.00	0.13	2,193	95.21
14.150	0.13	24.23	24.49	0.00	0.13	2,193	95.21
14.200	0.13	24.23	24.49	0.00	0.13	2,192	95.21
14.250	0.13	24.23	24.49	0.00	0.13	2,192	95.21
14.300	0.13	24.23	24.49	0.00	0.13	2,192	95.21
14.350	0.12	24.23	24.48	0.00	0.12	2,192	95.21
14.400	0.12	24.23	24.48	0.00	0.12	2,192	95.21
14.450	0.12	24.23	24.48	0.00	0.12	2,192	95.21
14.500	0.12	24.24	24.48	0.00	0.12	2,192	95.21
14.550	0.12	24.24	24.47	0.00	0.12	2,192	95.21
14.600	0.12	24.24	24.47	0.00	0.12	2,192	95.21
14.650	0.11	24.24	24.47	0.00	0.12	2,192	95.21

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
14.700	0.11	24.24	24.47	0.00	0.11	2,192	95.21
14.750	0.11	24.24	24.46	0.00	0.11	2,192	95.21
14.800	0.11	24.24	24.46	0.00	0.11	2,192	95.21
14.850	0.11	24.24	24.46	0.00	0.11	2,191	95.21
14.900	0.11	24.24	24.46	0.00	0.11	2,191	95.21
14.950	0.11	24.24	24.45	0.00	0.11	2,191	95.21
15.000	0.10	24.24	24.45	0.00	0.10	2,191	95.21
15.050	0.10	24.24	24.45	0.00	0.10	2,191	95.21
15.100	0.10	24.24	24.45	0.00	0.10	2,191	95.21
15.150	0.10	24.24	24.44	0.00	0.10	2,191	95.21
15.200	0.10	24.25	24.44	0.00	0.10	2,191	95.21
15.250	0.10	24.25	24.44	0.00	0.10	2,191	95.21
15.300	0.09	24.25	24.44	0.00	0.10	2,191	95.21
15.350	0.09	24.25	24.43	0.00	0.09	2,191	95.21
15.400	0.09	24.25	24.43	0.00	0.09	2,191	95.21
15.450	0.09	24.25	24.43	0.00	0.09	2,191	95.21
15.500	0.09	24.25	24.43	0.00	0.09	2,190	95.21
15.550	0.09	24.24	24.42	0.00	0.09	2,190	95.21
15.600	0.09	24.23	24.41	0.00	0.09	2,189	95.21
15.650	0.08	24.22	24.40	0.00	0.09	2,188	95.21
15.700	0.08	24.21	24.39	0.00	0.09	2,187	95.21
15.750	0.08	24.19	24.37	0.00	0.09	2,185	95.21
15.800	0.08	24.17	24.35	0.00	0.09	2,184	95.21
15.850	0.08	24.15	24.33	0.00	0.09	2,181	95.21
15.900	0.08	24.12	24.30	0.00	0.09	2,179	95.20
15.950	0.07	24.09	24.27	0.00	0.09	2,176	95.20
16.000	0.07	24.06	24.24	0.00	0.09	2,173	95.20
16.050	0.07	24.02	24.20	0.00	0.09	2,170	95.20
16.100	0.07	23.99	24.17	0.00	0.09	2,165	95.20
16.150	0.07	23.95	24.13	0.00	0.09	2,159	95.19
16.200	0.07	23.90	24.08	0.00	0.09	2,153	95.19
16.250	0.07	23.86	24.04	0.00	0.09	2,147	95.19
16.300	0.07	23.82	24.00	0.00	0.09	2,140	95.19
16.350	0.07	23.77	23.95	0.00	0.09	2,134	95.18
16.400	0.07	23.72	23.90	0.00	0.09	2,127	95.18
16.450	0.07	23.67	23.85	0.00	0.09	2,121	95.18
16.500	0.06	23.62	23.80	0.00	0.09	2,116	95.17
16.550	0.06	23.57	23.75	0.00	0.09	2,113	95.17
16.600	0.06	23.52	23.70	0.00	0.09	2,109	95.16
16.650	0.06	23.47	23.65	0.00	0.09	2,105	95.16
16.700	0.06	23.41	23.59	0.00	0.09	2,101	95.16
16.750	0.06	23.36	23.54	0.00	0.09	2,097	95.15

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
16.800	0.06	23.30	23.48	0.00	0.09	2,093	95.15
16.850	0.06	23.24	23.42	0.00	0.09	2,088	95.14
16.900	0.06	23.18	23.36	0.00	0.09	2,084	95.14
16.950	0.06	23.11	23.29	0.00	0.09	2,080	95.14
17.000	0.06	23.05	23.23	0.00	0.09	2,075	95.13
17.050	0.06	22.99	23.17	0.00	0.09	2,070	95.13
17.100	0.06	22.92	23.10	0.00	0.09	2,065	95.12
17.150	0.06	22.85	23.03	0.00	0.09	2,061	95.12
17.200	0.06	22.78	22.96	0.00	0.09	2,056	95.11
17.250	0.05	22.71	22.89	0.00	0.09	2,051	95.11
17.300	0.05	22.64	22.82	0.00	0.09	2,045	95.10
17.350	0.05	22.57	22.75	0.00	0.09	2,039	95.10
17.400	0.05	22.49	22.67	0.00	0.09	2,033	95.09
17.450	0.05	22.42	22.60	0.00	0.09	2,026	95.08
17.500	0.05	22.34	22.52	0.00	0.09	2,019	95.08
17.550	0.05	22.26	22.44	0.00	0.09	2,012	95.07
17.600	0.05	22.18	22.36	0.00	0.09	2,005	95.06
17.650	0.05	22.10	22.28	0.00	0.09	1,997	95.05
17.700	0.05	22.02	22.20	0.00	0.09	1,990	95.05
17.750	0.05	21.94	22.12	0.00	0.09	1,982	95.04
17.800	0.05	21.85	22.03	0.00	0.09	1,975	95.03
17.850	0.05	21.76	21.94	0.00	0.09	1,967	95.02
17.900	0.05	21.68	21.86	0.00	0.09	1,959	95.02
17.950	0.05	21.59	21.77	0.00	0.09	1,951	95.01
18.000	0.04	21.50	21.68	0.00	0.09	1,943	95.00
18.050	0.04	21.41	21.59	0.00	0.09	1,935	94.99
18.100	0.04	21.31	21.49	0.00	0.09	1,926	94.98
18.150	0.04	21.22	21.40	0.00	0.09	1,918	94.98
18.200	0.04	21.12	21.30	0.00	0.09	1,909	94.97
18.250	0.04	21.03	21.21	0.00	0.09	1,901	94.96
18.300	0.04	20.94	21.12	0.00	0.09	1,892	94.95
18.350	0.04	20.84	21.02	0.00	0.09	1,884	94.94
18.400	0.04	20.74	20.92	0.00	0.09	1,875	94.93
18.450	0.04	20.65	20.83	0.00	0.09	1,866	94.93
18.500	0.04	20.55	20.73	0.00	0.09	1,858	94.92
18.550	0.04	20.45	20.63	0.00	0.09	1,849	94.91
18.600	0.04	20.36	20.54	0.00	0.09	1,840	94.90
18.650	0.04	20.26	20.44	0.00	0.09	1,831	94.89
18.700	0.04	20.16	20.34	0.00	0.09	1,823	94.88
18.750	0.04	20.06	20.24	0.00	0.09	1,814	94.87
18.800	0.04	19.96	20.14	0.00	0.09	1,805	94.86
18.850	0.04	19.86	20.04	0.00	0.09	1,796	94.86

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
18.900	0.04	19.76	19.94	0.00	0.09	1,787	94.85
18.950	0.04	19.66	19.84	0.00	0.09	1,778	94.84
19.000	0.04	19.56	19.74	0.00	0.09	1,769	94.83
19.050	0.04	19.46	19.64	0.00	0.09	1,760	94.82
19.100	0.04	19.36	19.54	0.00	0.09	1,751	94.81
19.150	0.04	19.26	19.44	0.00	0.09	1,741	94.80
19.200	0.04	19.16	19.34	0.00	0.09	1,732	94.79
19.250	0.04	19.05	19.23	0.00	0.09	1,723	94.78
19.300	0.04	18.95	19.13	0.00	0.09	1,714	94.78
19.350	0.04	18.85	19.03	0.00	0.09	1,704	94.77
19.400	0.04	18.74	18.92	0.00	0.09	1,695	94.76
19.450	0.04	18.64	18.82	0.00	0.09	1,686	94.75
19.500	0.04	18.53	18.71	0.00	0.09	1,676	94.74
19.550	0.04	18.43	18.61	0.00	0.09	1,667	94.73
19.600	0.04	18.32	18.50	0.00	0.09	1,657	94.72
19.650	0.04	18.22	18.40	0.00	0.09	1,648	94.71
19.700	0.04	18.11	18.29	0.00	0.09	1,638	94.70
19.750	0.04	18.00	18.18	0.00	0.09	1,629	94.69
19.800	0.04	17.90	18.08	0.00	0.09	1,619	94.68
19.850	0.04	17.79	17.97	0.00	0.09	1,609	94.67
19.900	0.04	17.68	17.86	0.00	0.09	1,599	94.66
19.950	0.04	17.57	17.75	0.00	0.09	1,590	94.65
20.000	0.04	17.46	17.64	0.00	0.09	1,580	94.64
20.050	0.04	17.36	17.54	0.00	0.09	1,570	94.63
20.100	0.04	17.25	17.43	0.00	0.09	1,560	94.62
20.150	0.03	17.14	17.32	0.00	0.09	1,550	94.61
20.200	0.03	17.03	17.21	0.00	0.09	1,540	94.60
20.250	0.03	16.92	17.10	0.00	0.09	1,531	94.59
20.300	0.03	16.81	16.99	0.00	0.09	1,521	94.58
20.350	0.03	16.69	16.87	0.00	0.09	1,511	94.58
20.400	0.03	16.58	16.76	0.00	0.09	1,501	94.57
20.450	0.03	16.47	16.65	0.00	0.09	1,490	94.56
20.500	0.03	16.36	16.54	0.00	0.09	1,480	94.55
20.550	0.03	16.25	16.43	0.00	0.09	1,470	94.54
20.600	0.03	16.13	16.31	0.00	0.09	1,460	94.53
20.650	0.03	16.02	16.20	0.00	0.09	1,450	94.52
20.700	0.03	15.91	16.09	0.00	0.09	1,440	94.51
20.750	0.03	15.79	15.97	0.00	0.09	1,430	94.50
20.800	0.03	15.68	15.86	0.00	0.09	1,419	94.49
20.850	0.03	15.57	15.75	0.00	0.09	1,409	94.48
20.900	0.03	15.45	15.63	0.00	0.09	1,399	94.47
20.950	0.03	15.34	15.52	0.00	0.09	1,388	94.45

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
21.000	0.03	15.22	15.40	0.00	0.09	1,378	94.44
21.050	0.03	15.11	15.29	0.00	0.09	1,368	94.43
21.100	0.03	14.99	15.17	0.00	0.09	1,357	94.42
21.150	0.03	14.87	15.05	0.00	0.09	1,347	94.41
21.200	0.03	14.76	14.94	0.00	0.09	1,336	94.40
21.250	0.03	14.64	14.82	0.00	0.09	1,326	94.39
21.300	0.03	14.53	14.71	0.00	0.09	1,315	94.38
21.350	0.03	14.41	14.59	0.00	0.09	1,305	94.37
21.400	0.03	14.29	14.47	0.00	0.09	1,294	94.36
21.450	0.03	14.17	14.35	0.00	0.09	1,284	94.35
21.500	0.03	14.05	14.23	0.00	0.09	1,273	94.34
21.550	0.03	13.94	14.12	0.00	0.09	1,262	94.33
21.600	0.03	13.82	14.00	0.00	0.09	1,252	94.32
21.650	0.03	13.70	13.88	0.00	0.09	1,241	94.31
21.700	0.03	13.58	13.76	0.00	0.09	1,230	94.30
21.750	0.03	13.46	13.64	0.00	0.09	1,219	94.29
21.800	0.03	13.34	13.52	0.00	0.09	1,209	94.28
21.850	0.03	13.22	13.40	0.00	0.09	1,198	94.27
21.900	0.03	13.10	13.28	0.00	0.09	1,187	94.26
21.950	0.03	12.98	13.16	0.00	0.09	1,176	94.25
22.000	0.03	12.86	13.04	0.00	0.09	1,165	94.24
22.050	0.03	12.74	12.92	0.00	0.09	1,154	94.22
22.100	0.03	12.61	12.79	0.00	0.09	1,143	94.21
22.150	0.03	12.49	12.67	0.00	0.09	1,132	94.20
22.200	0.03	12.37	12.55	0.00	0.09	1,121	94.19
22.250	0.03	12.25	12.43	0.00	0.09	1,110	94.18
22.300	0.03	12.12	12.30	0.00	0.09	1,099	94.17
22.350	0.03	12.00	12.18	0.00	0.09	1,088	94.16
22.400	0.03	11.88	12.06	0.00	0.09	1,077	94.15
22.450	0.03	11.75	11.93	0.00	0.09	1,066	94.14
22.500	0.03	11.63	11.81	0.00	0.09	1,055	94.13
22.550	0.03	11.50	11.68	0.00	0.09	1,043	94.12
22.600	0.03	11.38	11.56	0.00	0.09	1,032	94.10
22.650	0.03	11.25	11.43	0.00	0.09	1,021	94.09
22.700	0.03	11.13	11.31	0.00	0.09	1,010	94.08
22.750	0.03	11.00	11.18	0.00	0.09	998	94.07
22.800	0.03	10.88	11.06	0.00	0.09	987	94.06
22.850	0.03	10.75	10.93	0.00	0.09	976	94.05
22.900	0.03	10.62	10.80	0.00	0.09	964	94.04
22.950	0.03	10.50	10.68	0.00	0.09	953	94.03
23.000	0.03	10.37	10.55	0.00	0.09	941	94.01
23.050	0.03	10.24	10.42	0.00	0.09	930	94.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
23.100	0.03	10.11	10.29	0.00	0.09	918	93.99
23.150	0.03	9.99	10.17	0.00	0.09	907	93.98
23.200	0.03	9.86	10.04	0.00	0.09	895	93.97
23.250	0.03	9.73	9.91	0.00	0.09	884	93.96
23.300	0.03	9.60	9.78	0.00	0.09	872	93.95
23.350	0.03	9.47	9.65	0.00	0.09	860	93.93
23.400	0.03	9.34	9.52	0.00	0.09	849	93.92
23.450	0.03	9.21	9.39	0.00	0.09	837	93.91
23.500	0.02	9.08	9.26	0.00	0.09	825	93.90
23.550	0.02	8.95	9.13	0.00	0.09	814	93.89
23.600	0.02	8.82	9.00	0.00	0.09	802	93.88
23.650	0.02	8.69	8.87	0.00	0.09	790	93.87
23.700	0.02	8.56	8.74	0.00	0.09	778	93.85
23.750	0.02	8.42	8.60	0.00	0.09	766	93.84
23.800	0.02	8.29	8.47	0.00	0.09	754	93.83
23.850	0.02	8.16	8.34	0.00	0.09	742	93.82
23.900	0.02	8.03	8.21	0.00	0.09	731	93.81
23.950	0.02	7.89	8.07	0.00	0.09	719	93.80
24.000	0.02	7.76	7.94	0.00	0.09	707	93.78

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
0.000	0.00	0.00	0.09	0.00	0.05	0	93.00
0.050	0.00	0.00	0.00	0.00	0.00	0	93.00
0.100	0.00	0.00	0.00	0.00	0.00	0	93.00
0.150	0.00	0.00	0.00	0.00	0.00	0	93.00
0.200	0.00	0.00	0.00	0.00	0.00	0	93.00
0.250	0.00	0.00	0.00	0.00	0.00	0	93.00
0.300	0.00	0.00	0.00	0.00	0.00	0	93.00
0.350	0.00	0.00	0.00	0.00	0.00	0	93.00
0.400	0.00	0.00	0.00	0.00	0.00	0	93.00
0.450	0.00	0.00	0.00	0.00	0.00	0	93.00
0.500	0.00	0.00	0.00	0.00	0.00	0	93.00
0.550	0.00	0.00	0.00	0.00	0.00	0	93.00
0.600	0.00	0.00	0.00	0.00	0.00	0	93.00
0.650	0.00	0.00	0.01	0.00	0.00	0	93.00
0.700	0.01	0.00	0.01	0.00	0.00	0	93.00
0.750	0.01	0.00	0.01	0.00	0.01	0	93.00
0.800	0.01	0.00	0.02	0.00	0.01	0	93.00
0.850	0.01	0.00	0.02	0.00	0.01	0	93.00
0.900	0.01	0.00	0.02	0.00	0.01	0	93.00
0.950	0.01	0.00	0.02	0.00	0.01	0	93.00
1.000	0.01	0.00	0.02	0.00	0.01	0	93.00
1.050	0.01	0.00	0.03	0.00	0.01	0	93.00
1.100	0.01	0.00	0.03	0.00	0.01	0	93.00
1.150	0.02	0.00	0.03	0.00	0.01	0	93.00
1.200	0.02	0.00	0.03	0.00	0.02	0	93.00
1.250	0.02	0.00	0.03	0.00	0.02	0	93.00
1.300	0.02	0.00	0.03	0.00	0.02	0	93.00
1.350	0.02	0.00	0.04	0.00	0.02	0	93.00
1.400	0.02	0.00	0.04	0.00	0.02	0	93.00
1.450	0.02	0.00	0.04	0.00	0.02	0	93.00
1.500	0.02	0.00	0.04	0.00	0.02	0	93.00
1.550	0.02	0.00	0.04	0.00	0.02	0	93.00
1.600	0.02	0.00	0.04	0.00	0.02	0	93.00
1.650	0.02	0.00	0.04	0.00	0.02	0	93.00
1.700	0.02	0.00	0.04	0.00	0.02	0	93.00
1.750	0.02	0.00	0.05	0.00	0.02	0	93.00
1.800	0.02	0.00	0.05	0.00	0.02	0	93.00
1.850	0.02	0.00	0.05	0.00	0.02	0	93.00
1.900	0.02	0.00	0.05	0.00	0.02	0	93.00
1.950	0.02	0.00	0.05	0.00	0.02	0	93.00
2.000	0.02	0.00	0.05	0.00	0.02	0	93.00
2.050	0.03	0.00	0.05	0.00	0.03	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
2.100	0.03	0.00	0.05	0.00	0.03	0	93.00
2.150	0.03	0.00	0.05	0.00	0.03	0	93.00
2.200	0.03	0.00	0.05	0.00	0.03	0	93.00
2.250	0.03	0.00	0.05	0.00	0.03	0	93.00
2.300	0.03	0.00	0.06	0.00	0.03	0	93.00
2.350	0.03	0.00	0.06	0.00	0.03	0	93.00
2.400	0.03	0.00	0.06	0.00	0.03	0	93.00
2.450	0.03	0.00	0.06	0.00	0.03	0	93.00
2.500	0.03	0.00	0.06	0.00	0.03	0	93.00
2.550	0.03	0.00	0.06	0.00	0.03	0	93.00
2.600	0.03	0.00	0.06	0.00	0.03	0	93.00
2.650	0.03	0.00	0.06	0.00	0.03	0	93.00
2.700	0.03	0.00	0.06	0.00	0.03	0	93.00
2.750	0.03	0.00	0.06	0.00	0.03	0	93.00
2.800	0.03	0.00	0.07	0.00	0.03	0	93.00
2.850	0.03	0.00	0.07	0.00	0.03	0	93.00
2.900	0.03	0.00	0.07	0.00	0.03	0	93.00
2.950	0.03	0.00	0.07	0.00	0.03	0	93.00
3.000	0.03	0.00	0.07	0.00	0.03	0	93.00
3.050	0.04	0.00	0.07	0.00	0.03	0	93.00
3.100	0.04	0.00	0.07	0.00	0.04	0	93.00
3.150	0.04	0.00	0.07	0.00	0.04	0	93.00
3.200	0.04	0.00	0.07	0.00	0.04	0	93.00
3.250	0.04	0.00	0.07	0.00	0.04	0	93.00
3.300	0.04	0.00	0.07	0.00	0.04	0	93.00
3.350	0.04	0.00	0.08	0.00	0.04	0	93.00
3.400	0.04	0.00	0.08	0.00	0.04	0	93.00
3.450	0.04	0.00	0.08	0.00	0.04	0	93.00
3.500	0.04	0.00	0.08	0.00	0.04	0	93.00
3.550	0.04	0.00	0.08	0.00	0.04	0	93.00
3.600	0.04	0.00	0.08	0.00	0.04	0	93.00
3.650	0.04	0.00	0.08	0.00	0.04	0	93.00
3.700	0.04	0.00	0.08	0.00	0.04	0	93.00
3.750	0.04	0.00	0.08	0.00	0.04	0	93.00
3.800	0.04	0.00	0.08	0.00	0.04	0	93.00
3.850	0.04	0.00	0.08	0.00	0.04	0	93.00
3.900	0.04	0.00	0.08	0.00	0.04	0	93.00
3.950	0.04	0.00	0.09	0.00	0.04	0	93.00
4.000	0.04	0.00	0.09	0.00	0.04	0	93.00
4.050	0.04	0.00	0.09	0.00	0.04	0	93.00
4.100	0.04	0.00	0.09	0.00	0.04	0	93.00
4.150	0.04	0.00	0.09	0.00	0.04	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
4.200	0.04	0.00	0.09	0.00	0.04	0	93.00
4.250	0.05	0.00	0.09	0.00	0.04	0	93.00
4.300	0.05	0.00	0.09	0.00	0.05	0	93.00
4.350	0.05	0.00	0.09	0.00	0.05	0	93.00
4.400	0.05	0.00	0.09	0.00	0.05	0	93.00
4.450	0.05	0.00	0.09	0.00	0.05	0	93.00
4.500	0.05	0.00	0.09	0.00	0.05	0	93.00
4.550	0.05	0.00	0.09	0.00	0.05	0	93.00
4.600	0.05	0.00	0.10	0.00	0.05	0	93.00
4.650	0.05	0.00	0.10	0.00	0.05	0	93.00
4.700	0.05	0.00	0.10	0.00	0.05	0	93.00
4.750	0.05	0.00	0.10	0.00	0.05	0	93.00
4.800	0.05	0.00	0.10	0.00	0.05	0	93.00
4.850	0.05	0.00	0.10	0.00	0.05	0	93.00
4.900	0.05	0.00	0.10	0.00	0.05	0	93.00
4.950	0.05	0.00	0.10	0.00	0.05	0	93.00
5.000	0.05	0.00	0.10	0.00	0.05	0	93.00
5.050	0.05	0.00	0.10	0.00	0.05	0	93.00
5.100	0.05	0.00	0.10	0.00	0.05	0	93.00
5.150	0.05	0.00	0.10	0.00	0.05	0	93.00
5.200	0.05	0.00	0.10	0.00	0.05	0	93.00
5.250	0.05	0.00	0.10	0.00	0.05	0	93.00
5.300	0.05	0.00	0.11	0.00	0.05	0	93.00
5.350	0.05	0.00	0.11	0.00	0.05	0	93.00
5.400	0.05	0.00	0.11	0.00	0.05	0	93.00
5.450	0.05	0.00	0.11	0.00	0.05	0	93.00
5.500	0.05	0.00	0.11	0.00	0.05	0	93.00
5.550	0.05	0.00	0.11	0.00	0.05	0	93.00
5.600	0.06	0.00	0.11	0.00	0.05	0	93.00
5.650	0.06	0.00	0.11	0.00	0.06	0	93.00
5.700	0.06	0.00	0.11	0.00	0.06	0	93.00
5.750	0.06	0.00	0.11	0.00	0.06	0	93.00
5.800	0.06	0.00	0.11	0.00	0.06	0	93.00
5.850	0.06	0.00	0.11	0.00	0.06	0	93.00
5.900	0.06	0.00	0.11	0.00	0.06	0	93.00
5.950	0.06	0.00	0.11	0.00	0.06	0	93.00
6.000	0.06	0.00	0.12	0.00	0.06	0	93.00
6.050	0.06	0.00	0.12	0.00	0.06	0	93.00
6.100	0.06	0.00	0.12	0.00	0.06	0	93.00
6.150	0.06	0.00	0.12	0.00	0.06	0	93.00
6.200	0.06	0.00	0.12	0.00	0.06	0	93.00
6.250	0.06	0.00	0.12	0.00	0.06	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
6.300	0.06	0.00	0.12	0.00	0.06	0	93.00
6.350	0.06	0.00	0.13	0.00	0.06	0	93.00
6.400	0.06	0.00	0.13	0.00	0.06	0	93.00
6.450	0.07	0.00	0.13	0.00	0.07	0	93.00
6.500	0.07	0.00	0.13	0.00	0.07	0	93.00
6.550	0.07	0.00	0.13	0.00	0.07	0	93.00
6.600	0.07	0.00	0.14	0.00	0.07	0	93.00
6.650	0.07	0.00	0.14	0.00	0.07	0	93.00
6.700	0.07	0.00	0.14	0.00	0.07	0	93.00
6.750	0.07	0.00	0.14	0.00	0.07	0	93.00
6.800	0.07	0.00	0.14	0.00	0.07	0	93.00
6.850	0.07	0.00	0.15	0.00	0.07	0	93.00
6.900	0.07	0.00	0.15	0.00	0.07	0	93.00
6.950	0.08	0.00	0.15	0.00	0.08	0	93.00
7.000	0.08	0.00	0.15	0.00	0.08	0	93.00
7.050	0.08	0.00	0.15	0.00	0.08	0	93.00
7.100	0.08	0.00	0.16	0.00	0.08	0	93.00
7.150	0.08	0.00	0.16	0.00	0.08	0	93.00
7.200	0.08	0.00	0.16	0.00	0.08	0	93.00
7.250	0.08	0.00	0.16	0.00	0.08	0	93.00
7.300	0.08	0.00	0.16	0.00	0.08	0	93.00
7.350	0.08	0.00	0.17	0.00	0.08	0	93.00
7.400	0.08	0.00	0.17	0.00	0.08	0	93.00
7.450	0.09	0.00	0.17	0.00	0.08	0	93.00
7.500	0.09	0.00	0.17	0.00	0.09	0	93.00
7.550	0.09	0.00	0.17	0.00	0.09	0	93.00
7.600	0.09	0.00	0.18	0.00	0.09	0	93.00
7.650	0.09	0.00	0.18	0.00	0.09	0	93.00
7.700	0.09	0.00	0.18	0.00	0.09	8	93.02
7.750	0.09	0.00	0.18	0.00	0.09	8	93.02
7.800	0.09	0.01	0.19	0.00	0.09	9	93.02
7.850	0.09	0.01	0.19	0.00	0.09	9	93.02
7.900	0.09	0.02	0.20	0.00	0.09	10	93.02
7.950	0.10	0.03	0.21	0.00	0.09	11	93.02
8.000	0.10	0.04	0.22	0.00	0.09	12	93.02
8.050	0.10	0.06	0.24	0.00	0.09	13	93.03
8.100	0.10	0.07	0.25	0.00	0.09	15	93.03
8.150	0.10	0.10	0.28	0.00	0.09	17	93.03
8.200	0.10	0.12	0.30	0.00	0.09	19	93.04
8.250	0.11	0.15	0.33	0.00	0.09	22	93.04
8.300	0.11	0.18	0.36	0.00	0.09	25	93.05
8.350	0.11	0.22	0.40	0.00	0.09	28	93.06

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
8.400	0.11	0.26	0.44	0.00	0.09	32	93.06
8.450	0.11	0.31	0.49	0.00	0.09	36	93.07
8.500	0.12	0.36	0.54	0.00	0.09	41	93.08
8.550	0.12	0.42	0.60	0.00	0.09	46	93.09
8.600	0.12	0.48	0.66	0.00	0.09	51	93.10
8.650	0.12	0.55	0.73	0.00	0.09	56	93.11
8.700	0.13	0.61	0.79	0.00	0.09	61	93.12
8.750	0.13	0.69	0.87	0.00	0.09	66	93.13
8.800	0.13	0.77	0.95	0.00	0.09	72	93.14
8.850	0.13	0.85	1.03	0.00	0.09	78	93.15
8.900	0.14	0.94	1.12	0.00	0.09	84	93.17
8.950	0.14	1.03	1.21	0.00	0.09	93	93.18
9.000	0.14	1.13	1.31	0.00	0.09	107	93.19
9.050	0.14	1.23	1.41	0.00	0.09	119	93.20
9.100	0.14	1.33	1.51	0.00	0.09	128	93.21
9.150	0.15	1.44	1.62	0.00	0.09	138	93.22
9.200	0.15	1.56	1.74	0.00	0.09	148	93.23
9.250	0.15	1.68	1.86	0.00	0.09	159	93.24
9.300	0.15	1.80	1.98	0.00	0.09	170	93.26
9.350	0.16	1.93	2.11	0.00	0.09	182	93.27
9.400	0.16	2.06	2.24	0.00	0.09	194	93.28
9.450	0.16	2.20	2.38	0.00	0.09	206	93.29
9.500	0.16	2.34	2.52	0.00	0.09	219	93.30
9.550	0.16	2.49	2.67	0.00	0.09	232	93.32
9.600	0.17	2.64	2.82	0.00	0.09	246	93.33
9.650	0.17	2.79	2.97	0.00	0.09	259	93.34
9.700	0.17	2.95	3.13	0.00	0.09	274	93.36
9.750	0.17	3.12	3.30	0.00	0.09	289	93.37
9.800	0.18	3.29	3.47	0.00	0.09	304	93.39
9.850	0.18	3.46	3.64	0.00	0.09	319	93.40
9.900	0.18	3.64	3.82	0.00	0.09	335	93.42
9.950	0.18	3.82	4.00	0.00	0.09	352	93.43
10.000	0.18	4.01	4.19	0.00	0.09	369	93.45
10.050	0.19	4.20	4.38	0.00	0.09	386	93.47
10.100	0.19	4.40	4.58	0.00	0.09	404	93.49
10.150	0.19	4.60	4.78	0.00	0.09	422	93.50
10.200	0.20	4.82	5.00	0.00	0.09	442	93.52
10.250	0.20	5.04	5.22	0.00	0.09	462	93.54
10.300	0.21	5.27	5.45	0.00	0.09	483	93.56
10.350	0.21	5.52	5.70	0.00	0.09	504	93.58
10.400	0.22	5.77	5.95	0.00	0.09	527	93.61
10.450	0.22	6.03	6.21	0.00	0.09	551	93.63

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
10.500	0.23	6.30	6.48	0.00	0.09	575	93.65
10.550	0.23	6.58	6.76	0.00	0.09	600	93.68
10.600	0.24	6.87	7.05	0.00	0.09	626	93.70
10.650	0.24	7.16	7.34	0.00	0.09	653	93.73
10.700	0.25	7.47	7.65	0.00	0.09	681	93.76
10.750	0.25	7.79	7.97	0.00	0.09	709	93.79
10.800	0.26	8.12	8.30	0.00	0.09	738	93.81
10.850	0.26	8.45	8.63	0.00	0.09	769	93.84
10.900	0.27	8.80	8.98	0.00	0.09	800	93.88
10.950	0.27	9.15	9.33	0.00	0.09	832	93.91
11.000	0.27	9.51	9.69	0.00	0.09	864	93.94
11.050	0.28	9.89	10.07	0.00	0.09	898	93.97
11.100	0.29	10.29	10.47	0.00	0.09	934	94.01
11.150	0.31	10.71	10.89	0.00	0.09	972	94.04
11.200	0.33	11.16	11.34	0.00	0.09	1,013	94.08
11.250	0.34	11.65	11.83	0.00	0.09	1,056	94.13
11.300	0.36	12.17	12.35	0.00	0.09	1,103	94.17
11.350	0.38	12.73	12.91	0.00	0.09	1,154	94.22
11.400	0.40	13.32	13.50	0.00	0.09	1,207	94.28
11.450	0.41	13.95	14.13	0.00	0.09	1,264	94.33
11.500	0.43	14.62	14.80	0.00	0.09	1,324	94.39
11.550	0.49	15.36	15.54	0.00	0.09	1,391	94.46
11.600	0.58	16.25	16.43	0.00	0.09	1,471	94.54
11.650	0.71	17.36	17.54	0.00	0.09	1,571	94.63
11.700	0.88	18.77	18.95	0.00	0.09	1,697	94.76
11.750	1.04	20.51	20.69	0.00	0.09	1,854	94.91
11.800	1.22	22.58	22.76	0.00	0.09	2,041	95.10
11.850	1.38	24.04	25.18	0.00	0.57	2,215	95.22
11.900	1.57	23.52	26.98	0.00	1.73	2,273	95.25
11.950	2.05	23.48	27.14	0.00	1.83	2,278	95.25
12.000	2.85	23.13	28.38	0.00	2.62	2,318	95.27
12.050	3.14	22.92	29.11	0.00	3.09	2,341	95.28
12.100	3.22	22.87	29.27	0.00	3.20	2,346	95.29
12.150	2.82	22.97	28.91	0.00	2.97	2,335	95.28
12.200	2.06	23.27	27.86	0.00	2.29	2,301	95.26
12.250	1.68	23.51	27.02	0.00	1.75	2,274	95.25
12.300	1.43	23.62	26.63	0.00	1.50	2,261	95.24
12.350	1.26	23.71	26.31	0.00	1.30	2,251	95.24
12.400	1.07	23.79	26.04	0.00	1.12	2,242	95.24
12.450	0.91	23.87	25.77	0.00	0.95	2,234	95.23
12.500	0.73	23.94	25.50	0.00	0.78	2,225	95.23
12.550	0.61	24.01	25.28	0.00	0.63	2,218	95.22

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
12.600	0.50	24.05	25.12	0.00	0.53	2,213	95.22
12.650	0.45	24.09	25.00	0.00	0.46	2,209	95.22
12.700	0.42	24.10	24.96	0.00	0.43	2,208	95.22
12.750	0.40	24.11	24.92	0.00	0.41	2,206	95.22
12.800	0.38	24.12	24.89	0.00	0.39	2,205	95.22
12.850	0.37	24.12	24.87	0.00	0.37	2,205	95.22
12.900	0.35	24.13	24.84	0.00	0.35	2,204	95.22
12.950	0.33	24.14	24.81	0.00	0.33	2,203	95.22
13.000	0.31	24.15	24.78	0.00	0.32	2,202	95.22
13.050	0.30	24.16	24.76	0.00	0.30	2,201	95.22
13.100	0.29	24.16	24.74	0.00	0.29	2,200	95.21
13.150	0.28	24.17	24.72	0.00	0.28	2,200	95.21
13.200	0.27	24.17	24.72	0.00	0.27	2,200	95.21
13.250	0.27	24.17	24.71	0.00	0.27	2,199	95.21
13.300	0.26	24.17	24.70	0.00	0.26	2,199	95.21
13.350	0.26	24.17	24.69	0.00	0.26	2,199	95.21
13.400	0.25	24.18	24.69	0.00	0.25	2,199	95.21
13.450	0.25	24.18	24.68	0.00	0.25	2,199	95.21
13.500	0.24	24.18	24.67	0.00	0.25	2,198	95.21
13.550	0.24	24.18	24.66	0.00	0.24	2,198	95.21
13.600	0.23	24.18	24.66	0.00	0.24	2,198	95.21
13.650	0.23	24.19	24.65	0.00	0.23	2,198	95.21
13.700	0.23	24.19	24.64	0.00	0.23	2,197	95.21
13.750	0.22	24.19	24.63	0.00	0.22	2,197	95.21
13.800	0.22	24.19	24.63	0.00	0.22	2,197	95.21
13.850	0.21	24.19	24.62	0.00	0.21	2,197	95.21
13.900	0.21	24.20	24.61	0.00	0.21	2,196	95.21
13.950	0.20	24.20	24.61	0.00	0.20	2,196	95.21
14.000	0.20	24.20	24.60	0.00	0.20	2,196	95.21
14.050	0.19	24.20	24.59	0.00	0.19	2,196	95.21
14.100	0.19	24.20	24.59	0.00	0.19	2,196	95.21
14.150	0.19	24.21	24.58	0.00	0.19	2,195	95.21
14.200	0.18	24.21	24.58	0.00	0.19	2,195	95.21
14.250	0.18	24.21	24.57	0.00	0.18	2,195	95.21
14.300	0.18	24.21	24.57	0.00	0.18	2,195	95.21
14.350	0.18	24.21	24.57	0.00	0.18	2,195	95.21
14.400	0.18	24.21	24.56	0.00	0.18	2,195	95.21
14.450	0.17	24.21	24.56	0.00	0.17	2,195	95.21
14.500	0.17	24.21	24.56	0.00	0.17	2,195	95.21
14.550	0.17	24.21	24.55	0.00	0.17	2,195	95.21
14.600	0.17	24.21	24.55	0.00	0.17	2,194	95.21
14.650	0.16	24.22	24.55	0.00	0.17	2,194	95.21

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
14.700	0.16	24.22	24.54	0.00	0.16	2,194	95.21
14.750	0.16	24.22	24.54	0.00	0.16	2,194	95.21
14.800	0.16	24.22	24.54	0.00	0.16	2,194	95.21
14.850	0.16	24.22	24.53	0.00	0.16	2,194	95.21
14.900	0.15	24.22	24.53	0.00	0.15	2,194	95.21
14.950	0.15	24.22	24.53	0.00	0.15	2,194	95.21
15.000	0.15	24.22	24.52	0.00	0.15	2,194	95.21
15.050	0.15	24.22	24.52	0.00	0.15	2,193	95.21
15.100	0.14	24.22	24.51	0.00	0.15	2,193	95.21
15.150	0.14	24.23	24.51	0.00	0.14	2,193	95.21
15.200	0.14	24.23	24.51	0.00	0.14	2,193	95.21
15.250	0.14	24.23	24.50	0.00	0.14	2,193	95.21
15.300	0.14	24.23	24.50	0.00	0.14	2,193	95.21
15.350	0.13	24.23	24.50	0.00	0.13	2,193	95.21
15.400	0.13	24.23	24.49	0.00	0.13	2,193	95.21
15.450	0.13	24.23	24.49	0.00	0.13	2,192	95.21
15.500	0.13	24.23	24.49	0.00	0.13	2,192	95.21
15.550	0.12	24.23	24.48	0.00	0.13	2,192	95.21
15.600	0.12	24.23	24.48	0.00	0.12	2,192	95.21
15.650	0.12	24.24	24.48	0.00	0.12	2,192	95.21
15.700	0.12	24.24	24.47	0.00	0.12	2,192	95.21
15.750	0.12	24.24	24.47	0.00	0.12	2,192	95.21
15.800	0.11	24.24	24.47	0.00	0.11	2,192	95.21
15.850	0.11	24.24	24.46	0.00	0.11	2,192	95.21
15.900	0.11	24.24	24.46	0.00	0.11	2,191	95.21
15.950	0.11	24.24	24.46	0.00	0.11	2,191	95.21
16.000	0.10	24.24	24.45	0.00	0.11	2,191	95.21
16.050	0.10	24.24	24.45	0.00	0.10	2,191	95.21
16.100	0.10	24.24	24.45	0.00	0.10	2,191	95.21
16.150	0.10	24.24	24.44	0.00	0.10	2,191	95.21
16.200	0.10	24.25	24.44	0.00	0.10	2,191	95.21
16.250	0.10	24.25	24.44	0.00	0.10	2,191	95.21
16.300	0.10	24.25	24.44	0.00	0.10	2,191	95.21
16.350	0.10	24.25	24.44	0.00	0.10	2,191	95.21
16.400	0.09	24.25	24.44	0.00	0.09	2,191	95.21
16.450	0.09	24.25	24.44	0.00	0.09	2,191	95.21
16.500	0.09	24.25	24.43	0.00	0.09	2,191	95.21
16.550	0.09	24.25	24.43	0.00	0.09	2,191	95.21
16.600	0.09	24.25	24.43	0.00	0.09	2,191	95.21
16.650	0.09	24.25	24.43	0.00	0.09	2,191	95.21
16.700	0.09	24.25	24.43	0.00	0.09	2,190	95.21
16.750	0.09	24.24	24.42	0.00	0.09	2,190	95.21

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
16.800	0.09	24.24	24.42	0.00	0.09	2,190	95.21
16.850	0.09	24.23	24.41	0.00	0.09	2,189	95.21
16.900	0.09	24.22	24.40	0.00	0.09	2,188	95.21
16.950	0.08	24.21	24.39	0.00	0.09	2,187	95.21
17.000	0.08	24.20	24.38	0.00	0.09	2,186	95.21
17.050	0.08	24.18	24.36	0.00	0.09	2,185	95.21
17.100	0.08	24.17	24.35	0.00	0.09	2,183	95.21
17.150	0.08	24.15	24.33	0.00	0.09	2,182	95.21
17.200	0.08	24.13	24.31	0.00	0.09	2,180	95.20
17.250	0.08	24.11	24.29	0.00	0.09	2,178	95.20
17.300	0.08	24.08	24.26	0.00	0.09	2,175	95.20
17.350	0.08	24.05	24.23	0.00	0.09	2,173	95.20
17.400	0.08	24.03	24.21	0.00	0.09	2,170	95.20
17.450	0.07	24.00	24.18	0.00	0.09	2,166	95.20
17.500	0.07	23.96	24.14	0.00	0.09	2,162	95.20
17.550	0.07	23.93	24.11	0.00	0.09	2,157	95.19
17.600	0.07	23.89	24.07	0.00	0.09	2,151	95.19
17.650	0.07	23.85	24.03	0.00	0.09	2,146	95.19
17.700	0.07	23.81	23.99	0.00	0.09	2,140	95.19
17.750	0.07	23.77	23.95	0.00	0.09	2,134	95.18
17.800	0.07	23.73	23.91	0.00	0.09	2,128	95.18
17.850	0.07	23.68	23.86	0.00	0.09	2,122	95.18
17.900	0.07	23.64	23.82	0.00	0.09	2,117	95.17
17.950	0.06	23.59	23.77	0.00	0.09	2,114	95.17
18.000	0.06	23.53	23.71	0.00	0.09	2,110	95.17
18.050	0.06	23.48	23.66	0.00	0.09	2,106	95.16
18.100	0.06	23.42	23.60	0.00	0.09	2,102	95.16
18.150	0.06	23.37	23.55	0.00	0.09	2,098	95.15
18.200	0.06	23.31	23.49	0.00	0.09	2,094	95.15
18.250	0.06	23.25	23.43	0.00	0.09	2,090	95.15
18.300	0.06	23.20	23.38	0.00	0.09	2,085	95.14
18.350	0.06	23.14	23.32	0.00	0.09	2,081	95.14
18.400	0.06	23.08	23.26	0.00	0.09	2,077	95.13
18.450	0.06	23.02	23.20	0.00	0.09	2,073	95.13
18.500	0.06	22.96	23.14	0.00	0.09	2,068	95.12
18.550	0.06	22.90	23.08	0.00	0.09	2,064	95.12
18.600	0.06	22.84	23.02	0.00	0.09	2,059	95.12
18.650	0.06	22.77	22.95	0.00	0.09	2,055	95.11
18.700	0.06	22.71	22.89	0.00	0.09	2,050	95.11
18.750	0.06	22.65	22.83	0.00	0.09	2,046	95.10
18.800	0.06	22.58	22.76	0.00	0.09	2,041	95.10
18.850	0.06	22.52	22.70	0.00	0.09	2,035	95.09

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
18.900	0.06	22.45	22.63	0.00	0.09	2,029	95.09
18.950	0.06	22.39	22.57	0.00	0.09	2,023	95.08
19.000	0.06	22.32	22.50	0.00	0.09	2,017	95.07
19.050	0.06	22.26	22.44	0.00	0.09	2,011	95.07
19.100	0.06	22.19	22.37	0.00	0.09	2,005	95.06
19.150	0.06	22.12	22.30	0.00	0.09	1,999	95.06
19.200	0.06	22.05	22.23	0.00	0.09	1,993	95.05
19.250	0.06	21.98	22.16	0.00	0.09	1,987	95.04
19.300	0.05	21.91	22.09	0.00	0.09	1,980	95.04
19.350	0.05	21.84	22.02	0.00	0.09	1,974	95.03
19.400	0.05	21.77	21.95	0.00	0.09	1,968	95.03
19.450	0.05	21.70	21.88	0.00	0.09	1,961	95.02
19.500	0.05	21.63	21.81	0.00	0.09	1,955	95.01
19.550	0.05	21.56	21.74	0.00	0.09	1,948	95.01
19.600	0.05	21.48	21.66	0.00	0.09	1,942	95.00
19.650	0.05	21.41	21.59	0.00	0.09	1,935	94.99
19.700	0.05	21.33	21.51	0.00	0.09	1,928	94.99
19.750	0.05	21.26	21.44	0.00	0.09	1,921	94.98
19.800	0.05	21.18	21.36	0.00	0.09	1,915	94.97
19.850	0.05	21.11	21.29	0.00	0.09	1,908	94.97
19.900	0.05	21.03	21.21	0.00	0.09	1,901	94.96
19.950	0.05	20.95	21.13	0.00	0.09	1,894	94.95
20.000	0.05	20.88	21.06	0.00	0.09	1,887	94.95
20.050	0.05	20.80	20.98	0.00	0.09	1,880	94.94
20.100	0.05	20.72	20.90	0.00	0.09	1,873	94.93
20.150	0.05	20.64	20.82	0.00	0.09	1,866	94.92
20.200	0.05	20.56	20.74	0.00	0.09	1,858	94.92
20.250	0.05	20.48	20.66	0.00	0.09	1,851	94.91
20.300	0.05	20.40	20.58	0.00	0.09	1,844	94.90
20.350	0.05	20.32	20.50	0.00	0.09	1,837	94.90
20.400	0.05	20.24	20.42	0.00	0.09	1,829	94.89
20.450	0.05	20.15	20.33	0.00	0.09	1,822	94.88
20.500	0.05	20.07	20.25	0.00	0.09	1,815	94.87
20.550	0.05	19.99	20.17	0.00	0.09	1,807	94.87
20.600	0.05	19.91	20.09	0.00	0.09	1,800	94.86
20.650	0.05	19.82	20.00	0.00	0.09	1,792	94.85
20.700	0.05	19.74	19.92	0.00	0.09	1,784	94.84
20.750	0.05	19.65	19.83	0.00	0.09	1,777	94.84
20.800	0.05	19.57	19.75	0.00	0.09	1,769	94.83
20.850	0.05	19.48	19.66	0.00	0.09	1,761	94.82
20.900	0.05	19.40	19.58	0.00	0.09	1,754	94.81
20.950	0.05	19.31	19.49	0.00	0.09	1,746	94.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
21.000	0.05	19.22	19.40	0.00	0.09	1,738	94.80
21.050	0.05	19.13	19.31	0.00	0.09	1,730	94.79
21.100	0.05	19.05	19.23	0.00	0.09	1,722	94.78
21.150	0.05	18.96	19.14	0.00	0.09	1,714	94.78
21.200	0.05	18.87	19.05	0.00	0.09	1,706	94.77
21.250	0.05	18.78	18.96	0.00	0.09	1,698	94.76
21.300	0.05	18.69	18.87	0.00	0.09	1,690	94.75
21.350	0.04	18.60	18.78	0.00	0.09	1,682	94.74
21.400	0.04	18.51	18.69	0.00	0.09	1,674	94.74
21.450	0.04	18.42	18.60	0.00	0.09	1,666	94.73
21.500	0.04	18.33	18.51	0.00	0.09	1,658	94.72
21.550	0.04	18.24	18.42	0.00	0.09	1,649	94.71
21.600	0.04	18.14	18.32	0.00	0.09	1,641	94.70
21.650	0.04	18.05	18.23	0.00	0.09	1,633	94.70
21.700	0.04	17.96	18.14	0.00	0.09	1,624	94.69
21.750	0.04	17.87	18.05	0.00	0.09	1,616	94.68
21.800	0.04	17.77	17.95	0.00	0.09	1,608	94.67
21.850	0.04	17.68	17.86	0.00	0.09	1,599	94.66
21.900	0.04	17.58	17.76	0.00	0.09	1,591	94.65
21.950	0.04	17.49	17.67	0.00	0.09	1,582	94.65
22.000	0.04	17.39	17.57	0.00	0.09	1,573	94.64
22.050	0.04	17.30	17.48	0.00	0.09	1,565	94.63
22.100	0.04	17.20	17.38	0.00	0.09	1,556	94.62
22.150	0.04	17.10	17.28	0.00	0.09	1,547	94.61
22.200	0.04	17.01	17.19	0.00	0.09	1,539	94.60
22.250	0.04	16.91	17.09	0.00	0.09	1,530	94.59
22.300	0.04	16.81	16.99	0.00	0.09	1,521	94.59
22.350	0.04	16.71	16.89	0.00	0.09	1,512	94.58
22.400	0.04	16.61	16.79	0.00	0.09	1,503	94.57
22.450	0.04	16.51	16.69	0.00	0.09	1,494	94.56
22.500	0.04	16.41	16.59	0.00	0.09	1,485	94.55
22.550	0.04	16.31	16.49	0.00	0.09	1,476	94.54
22.600	0.04	16.21	16.39	0.00	0.09	1,467	94.53
22.650	0.04	16.11	16.29	0.00	0.09	1,458	94.52
22.700	0.04	16.01	16.19	0.00	0.09	1,449	94.51
22.750	0.04	15.91	16.09	0.00	0.09	1,440	94.51
22.800	0.04	15.80	15.98	0.00	0.09	1,430	94.50
22.850	0.04	15.70	15.88	0.00	0.09	1,421	94.49
22.900	0.04	15.60	15.78	0.00	0.09	1,412	94.48
22.950	0.04	15.49	15.67	0.00	0.09	1,402	94.47
23.000	0.04	15.39	15.57	0.00	0.09	1,393	94.46
23.050	0.04	15.28	15.46	0.00	0.09	1,384	94.45

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 24" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
23.100	0.04	15.18	15.36	0.00	0.09	1,374	94.44
23.150	0.04	15.07	15.25	0.00	0.09	1,365	94.43
23.200	0.04	14.97	15.15	0.00	0.09	1,355	94.42
23.250	0.04	14.86	15.04	0.00	0.09	1,345	94.41
23.300	0.04	14.75	14.93	0.00	0.09	1,336	94.40
23.350	0.04	14.65	14.83	0.00	0.09	1,326	94.39
23.400	0.04	14.54	14.72	0.00	0.09	1,316	94.38
23.450	0.04	14.43	14.61	0.00	0.09	1,307	94.37
23.500	0.04	14.32	14.50	0.00	0.09	1,297	94.36
23.550	0.04	14.21	14.39	0.00	0.09	1,287	94.36
23.600	0.04	14.10	14.28	0.00	0.09	1,277	94.35
23.650	0.03	13.99	14.17	0.00	0.09	1,267	94.34
23.700	0.03	13.88	14.06	0.00	0.09	1,257	94.33
23.750	0.03	13.77	13.95	0.00	0.09	1,247	94.32
23.800	0.03	13.66	13.84	0.00	0.09	1,237	94.31
23.850	0.03	13.55	13.73	0.00	0.09	1,227	94.30
23.900	0.03	13.44	13.62	0.00	0.09	1,217	94.29
23.950	0.03	13.32	13.50	0.00	0.09	1,207	94.28
24.000	0.03	13.21	13.39	0.00	0.09	1,197	94.27

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Label: 24" Depth Green Roof (IN)

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Summary for Hydrograph Addition at '24" Depth Green Roof'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-2C

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-2C	3,814	12.100	0.94
Flow (In)	24" Depth Green Roof	3,814	12.100	0.94

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Label: 24" Depth Green Roof (IN)

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

Summary for Hydrograph Addition at '24" Depth Green Roof'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-2C

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-2C	7,332	12.100	1.76
Flow (In)	24" Depth Green Roof	7,332	12.100	1.76

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Label: 24" Depth Green Roof (IN)

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Summary for Hydrograph Addition at '24" Depth Green Roof'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-2C

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-2C	9,388	12.100	2.24
Flow (In)	24" Depth Green Roof	9,388	12.100	2.24

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary
 Label: 24" Depth Green Roof (IN)
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

Summary for Hydrograph Addition at '24" Depth Green Roof'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-2C

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-2C	13,610	12.100	3.22
Flow (In)	24" Depth Green Roof	13,610	12.100	3.22

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 1 years

Label: 6" Depth Green Roof

Storm Event: 1 year

Scenario: Post-Development 1 year

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	93.00 ft
Volume (Initial)	0 ft ³
Flow (Initial Outlet)	0.13 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.13 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ft ³)	Area (ft ²)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
93.00	0.13	0	696	0.00	0.13	0.13
93.10	0.13	70	696	0.00	0.13	0.90
93.20	0.13	156	1,392	0.00	0.13	1.87
93.30	0.13	296	1,392	0.00	0.13	3.41
93.40	0.13	435	1,392	0.00	0.13	4.96
93.50	0.13	574	1,392	0.00	0.13	6.51
93.60	0.13	713	1,392	0.00	0.13	8.05
93.70	0.13	887	2,784	0.00	0.13	9.98
93.71	0.13	915	2,784	0.00	0.13	10.29
93.75	1.38	1,026	2,784	0.00	1.38	12.78

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 10 years

Label: 6" Depth Green Roof

Storm Event: 10 year

Scenario: Post-Development 10 year

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	93.00 ft
Volume (Initial)	0 ft ³
Flow (Initial Outlet)	0.13 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.13 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ft ³)	Area (ft ²)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
93.00	0.13	0	696	0.00	0.13	0.13
93.10	0.13	70	696	0.00	0.13	0.90
93.20	0.13	156	1,392	0.00	0.13	1.87
93.30	0.13	296	1,392	0.00	0.13	3.41
93.40	0.13	435	1,392	0.00	0.13	4.96
93.50	0.13	574	1,392	0.00	0.13	6.51
93.60	0.13	713	1,392	0.00	0.13	8.05
93.70	0.13	887	2,784	0.00	0.13	9.98
93.71	0.13	915	2,784	0.00	0.13	10.29
93.75	1.38	1,026	2,784	0.00	1.38	12.78

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 25 years

Label: 6" Depth Green Roof

Storm Event: 25 year

Scenario: Post-Development 25 year

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	93.00 ft
Volume (Initial)	0 ft ³
Flow (Initial Outlet)	0.13 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.13 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ft ³)	Area (ft ²)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
93.00	0.13	0	696	0.00	0.13	0.13
93.10	0.13	70	696	0.00	0.13	0.90
93.20	0.13	156	1,392	0.00	0.13	1.87
93.30	0.13	296	1,392	0.00	0.13	3.41
93.40	0.13	435	1,392	0.00	0.13	4.96
93.50	0.13	574	1,392	0.00	0.13	6.51
93.60	0.13	713	1,392	0.00	0.13	8.05
93.70	0.13	887	2,784	0.00	0.13	9.98
93.71	0.13	915	2,784	0.00	0.13	10.29
93.75	1.38	1,026	2,784	0.00	1.38	12.78

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 100 years

Label: 6" Depth Green Roof

Storm Event: 100 year

Scenario: Post-Development 100 year

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	93.00 ft
Volume (Initial)	0 ft ³
Flow (Initial Outlet)	0.13 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.13 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ft ³)	Area (ft ²)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
93.00	0.13	0	696	0.00	0.13	0.13
93.10	0.13	70	696	0.00	0.13	0.90
93.20	0.13	156	1,392	0.00	0.13	1.87
93.30	0.13	296	1,392	0.00	0.13	3.41
93.40	0.13	435	1,392	0.00	0.13	4.96
93.50	0.13	574	1,392	0.00	0.13	6.51
93.60	0.13	713	1,392	0.00	0.13	8.05
93.70	0.13	887	2,784	0.00	0.13	9.98
93.71	0.13	915	2,784	0.00	0.13	10.29
93.75	1.38	1,026	2,784	0.00	1.38	12.78

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 1 years

Label: 6" Depth Green Roof (IN)

Storm Event: 1 year

Scenario: Post-Development 1 year

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	93.00 ft		
Volume (Initial)	0 ft ³		
Flow (Initial Outlet)	0.13 ft ³ /s		
Flow (Initial Infiltration)	0.00 ft ³ /s		
Flow (Initial, Total)	0.13 ft ³ /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	0.40 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	0.13 ft ³ /s	Time to Peak (Flow, Outlet)	11.800 hours
Peak Conditions			
Elevation (Water Surface, Peak)	93.29 ft		
Volume (Peak)	282 ft ³		
Mass Balance (ft ³)			
Volume (Initial)	0 ft ³		
Volume (Total Inflow)	1,605 ft ³		
Volume (Total Infiltration)	0 ft ³		
Volume (Total Outlet Outflow)	1,610 ft ³		
Volume (Retained)	0 ft ³		
Volume (Unrouted)	5 ft ³		
Error (Mass Balance)	0.3 %		

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 10 years

Label: 6" Depth Green Roof (IN)

Storm Event: 10 year

Scenario: Post-Development 10 year

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	93.00 ft		
Volume (Initial)	0 ft ³		
Flow (Initial Outlet)	0.13 ft ³ /s		
Flow (Initial Infiltration)	0.00 ft ³ /s		
Flow (Initial, Total)	0.13 ft ³ /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	0.74 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	0.13 ft ³ /s	Time to Peak (Flow, Outlet)	11.650 hours
Peak Conditions			
Elevation (Water Surface, Peak)	93.68 ft		
Volume (Peak)	819 ft ³		
Mass Balance (ft ³)			
Volume (Initial)	0 ft ³		
Volume (Total Inflow)	3,085 ft ³		
Volume (Total Infiltration)	0 ft ³		
Volume (Total Outlet Outflow)	3,090 ft ³		
Volume (Retained)	0 ft ³		
Volume (Unrouted)	5 ft ³		
Error (Mass Balance)	0.2 %		

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 25 years

Label: 6" Depth Green Roof (IN)

Storm Event: 25 year

Scenario: Post-Development 25 year

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	93.00 ft		
Volume (Initial)	0 ft ³		
Flow (Initial Outlet)	0.13 ft ³ /s		
Flow (Initial Infiltration)	0.00 ft ³ /s		
Flow (Initial, Total)	0.13 ft ³ /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	0.94 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	0.53 ft ³ /s	Time to Peak (Flow, Outlet)	12.250 hours
Peak Conditions			
Elevation (Water Surface, Peak)	93.72 ft		
Volume (Peak)	950 ft ³		
Mass Balance (ft ³)			
Volume (Initial)	0 ft ³		
Volume (Total Inflow)	3,951 ft ³		
Volume (Total Infiltration)	0 ft ³		
Volume (Total Outlet Outflow)	3,955 ft ³		
Volume (Retained)	0 ft ³		
Volume (Unrouted)	5 ft ³		
Error (Mass Balance)	0.1 %		

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 100 years

Label: 6" Depth Green Roof (IN)

Storm Event: 100 year

Scenario: Post-Development 100 year

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	93.00 ft		
Volume (Initial)	0 ft ³		
Flow (Initial Outlet)	0.13 ft ³ /s		
Flow (Initial Infiltration)	0.00 ft ³ /s		
Flow (Initial, Total)	0.13 ft ³ /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	1.35 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	1.27 ft ³ /s	Time to Peak (Flow, Outlet)	12.150 hours
Peak Values			
Elevation (Water Surface, Peak)	93.75 ft		
Volume (Peak)	1,017 ft ³		
Mass Balance (ft ³)			
Volume (Initial)	0 ft ³		
Volume (Total Inflow)	5,727 ft ³		
Volume (Total Infiltration)	0 ft ³		
Volume (Total Outlet Outflow)	5,731 ft ³		
Volume (Retained)	0 ft ³		
Volume (Unrouted)	4 ft ³		
Error (Mass Balance)	0.1 %		

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
0.000	0.00	0.00	0.13	0.00	0.06	0	93.00
0.050	0.00	0.00	0.00	0.00	0.00	0	93.00
0.100	0.00	0.00	0.00	0.00	0.00	0	93.00
0.150	0.00	0.00	0.00	0.00	0.00	0	93.00
0.200	0.00	0.00	0.00	0.00	0.00	0	93.00
0.250	0.00	0.00	0.00	0.00	0.00	0	93.00
0.300	0.00	0.00	0.00	0.00	0.00	0	93.00
0.350	0.00	0.00	0.00	0.00	0.00	0	93.00
0.400	0.00	0.00	0.00	0.00	0.00	0	93.00
0.450	0.00	0.00	0.00	0.00	0.00	0	93.00
0.500	0.00	0.00	0.00	0.00	0.00	0	93.00
0.550	0.00	0.00	0.00	0.00	0.00	0	93.00
0.600	0.00	0.00	0.00	0.00	0.00	0	93.00
0.650	0.00	0.00	0.00	0.00	0.00	0	93.00
0.700	0.00	0.00	0.00	0.00	0.00	0	93.00
0.750	0.00	0.00	0.00	0.00	0.00	0	93.00
0.800	0.00	0.00	0.00	0.00	0.00	0	93.00
0.850	0.00	0.00	0.00	0.00	0.00	0	93.00
0.900	0.00	0.00	0.00	0.00	0.00	0	93.00
0.950	0.00	0.00	0.00	0.00	0.00	0	93.00
1.000	0.00	0.00	0.00	0.00	0.00	0	93.00
1.050	0.00	0.00	0.00	0.00	0.00	0	93.00
1.100	0.00	0.00	0.00	0.00	0.00	0	93.00
1.150	0.00	0.00	0.00	0.00	0.00	0	93.00
1.200	0.00	0.00	0.00	0.00	0.00	0	93.00
1.250	0.00	0.00	0.00	0.00	0.00	0	93.00
1.300	0.00	0.00	0.00	0.00	0.00	0	93.00
1.350	0.00	0.00	0.00	0.00	0.00	0	93.00
1.400	0.00	0.00	0.00	0.00	0.00	0	93.00
1.450	0.00	0.00	0.00	0.00	0.00	0	93.00
1.500	0.00	0.00	0.00	0.00	0.00	0	93.00
1.550	0.00	0.00	0.00	0.00	0.00	0	93.00
1.600	0.00	0.00	0.00	0.00	0.00	0	93.00
1.650	0.00	0.00	0.00	0.00	0.00	0	93.00
1.700	0.00	0.00	0.00	0.00	0.00	0	93.00
1.750	0.00	0.00	0.00	0.00	0.00	0	93.00
1.800	0.00	0.00	0.00	0.00	0.00	0	93.00
1.850	0.00	0.00	0.00	0.00	0.00	0	93.00
1.900	0.00	0.00	0.00	0.00	0.00	0	93.00
1.950	0.00	0.00	0.00	0.00	0.00	0	93.00
2.000	0.00	0.00	0.00	0.00	0.00	0	93.00
2.050	0.00	0.00	0.00	0.00	0.00	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
2.100	0.00	0.00	0.00	0.00	0.00	0	93.00
2.150	0.00	0.00	0.00	0.00	0.00	0	93.00
2.200	0.00	0.00	0.00	0.00	0.00	0	93.00
2.250	0.00	0.00	0.00	0.00	0.00	0	93.00
2.300	0.00	0.00	0.00	0.00	0.00	0	93.00
2.350	0.00	0.00	0.00	0.00	0.00	0	93.00
2.400	0.00	0.00	0.00	0.00	0.00	0	93.00
2.450	0.00	0.00	0.00	0.00	0.00	0	93.00
2.500	0.00	0.00	0.00	0.00	0.00	0	93.00
2.550	0.00	0.00	0.00	0.00	0.00	0	93.00
2.600	0.00	0.00	0.00	0.00	0.00	0	93.00
2.650	0.00	0.00	0.00	0.00	0.00	0	93.00
2.700	0.00	0.00	0.00	0.00	0.00	0	93.00
2.750	0.00	0.00	0.00	0.00	0.00	0	93.00
2.800	0.00	0.00	0.00	0.00	0.00	0	93.00
2.850	0.00	0.00	0.00	0.00	0.00	0	93.00
2.900	0.00	0.00	0.00	0.00	0.00	0	93.00
2.950	0.00	0.00	0.00	0.00	0.00	0	93.00
3.000	0.00	0.00	0.00	0.00	0.00	0	93.00
3.050	0.00	0.00	0.00	0.00	0.00	0	93.00
3.100	0.00	0.00	0.00	0.00	0.00	0	93.00
3.150	0.00	0.00	0.00	0.00	0.00	0	93.00
3.200	0.00	0.00	0.00	0.00	0.00	0	93.00
3.250	0.00	0.00	0.00	0.00	0.00	0	93.00
3.300	0.00	0.00	0.00	0.00	0.00	0	93.00
3.350	0.00	0.00	0.00	0.00	0.00	0	93.00
3.400	0.00	0.00	0.00	0.00	0.00	0	93.00
3.450	0.00	0.00	0.00	0.00	0.00	0	93.00
3.500	0.00	0.00	0.00	0.00	0.00	0	93.00
3.550	0.00	0.00	0.00	0.00	0.00	0	93.00
3.600	0.00	0.00	0.00	0.00	0.00	0	93.00
3.650	0.00	0.00	0.00	0.00	0.00	0	93.00
3.700	0.00	0.00	0.01	0.00	0.00	0	93.00
3.750	0.00	0.00	0.01	0.00	0.00	0	93.00
3.800	0.00	0.00	0.01	0.00	0.00	0	93.00
3.850	0.00	0.00	0.01	0.00	0.00	0	93.00
3.900	0.00	0.00	0.01	0.00	0.00	0	93.00
3.950	0.00	0.00	0.01	0.00	0.00	0	93.00
4.000	0.00	0.00	0.01	0.00	0.00	0	93.00
4.050	0.00	0.00	0.01	0.00	0.00	0	93.00
4.100	0.00	0.00	0.01	0.00	0.00	0	93.00
4.150	0.00	0.00	0.01	0.00	0.00	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
4.200	0.00	0.00	0.01	0.00	0.00	0	93.00
4.250	0.00	0.00	0.01	0.00	0.00	0	93.00
4.300	0.00	0.00	0.01	0.00	0.00	0	93.00
4.350	0.00	0.00	0.01	0.00	0.00	0	93.00
4.400	0.00	0.00	0.01	0.00	0.00	0	93.00
4.450	0.00	0.00	0.01	0.00	0.00	0	93.00
4.500	0.00	0.00	0.01	0.00	0.00	0	93.00
4.550	0.00	0.00	0.01	0.00	0.00	0	93.00
4.600	0.00	0.00	0.01	0.00	0.00	0	93.00
4.650	0.00	0.00	0.01	0.00	0.00	0	93.00
4.700	0.00	0.00	0.01	0.00	0.00	0	93.00
4.750	0.00	0.00	0.01	0.00	0.00	0	93.00
4.800	0.00	0.00	0.01	0.00	0.00	0	93.00
4.850	0.00	0.00	0.01	0.00	0.00	0	93.00
4.900	0.00	0.00	0.01	0.00	0.00	0	93.00
4.950	0.00	0.00	0.01	0.00	0.00	0	93.00
5.000	0.00	0.00	0.01	0.00	0.00	0	93.00
5.050	0.00	0.00	0.01	0.00	0.00	0	93.00
5.100	0.00	0.00	0.01	0.00	0.00	0	93.00
5.150	0.00	0.00	0.01	0.00	0.00	0	93.00
5.200	0.00	0.00	0.01	0.00	0.00	0	93.00
5.250	0.00	0.00	0.01	0.00	0.00	0	93.00
5.300	0.00	0.00	0.01	0.00	0.00	0	93.00
5.350	0.00	0.00	0.01	0.00	0.00	0	93.00
5.400	0.00	0.00	0.01	0.00	0.00	0	93.00
5.450	0.00	0.00	0.01	0.00	0.00	0	93.00
5.500	0.00	0.00	0.01	0.00	0.00	0	93.00
5.550	0.00	0.00	0.01	0.00	0.00	0	93.00
5.600	0.00	0.00	0.01	0.00	0.00	0	93.00
5.650	0.00	0.00	0.01	0.00	0.00	0	93.00
5.700	0.00	0.00	0.01	0.00	0.00	0	93.00
5.750	0.00	0.00	0.01	0.00	0.00	0	93.00
5.800	0.00	0.00	0.01	0.00	0.00	0	93.00
5.850	0.01	0.00	0.01	0.00	0.01	0	93.00
5.900	0.01	0.00	0.01	0.00	0.01	0	93.00
5.950	0.01	0.00	0.01	0.00	0.01	0	93.00
6.000	0.01	0.00	0.01	0.00	0.01	0	93.00
6.050	0.01	0.00	0.01	0.00	0.01	0	93.00
6.100	0.01	0.00	0.01	0.00	0.01	0	93.00
6.150	0.01	0.00	0.01	0.00	0.01	0	93.00
6.200	0.01	0.00	0.01	0.00	0.01	0	93.00
6.250	0.01	0.00	0.01	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
6.300	0.01	0.00	0.01	0.00	0.01	0	93.00
6.350	0.01	0.00	0.01	0.00	0.01	0	93.00
6.400	0.01	0.00	0.01	0.00	0.01	0	93.00
6.450	0.01	0.00	0.01	0.00	0.01	0	93.00
6.500	0.01	0.00	0.01	0.00	0.01	0	93.00
6.550	0.01	0.00	0.01	0.00	0.01	0	93.00
6.600	0.01	0.00	0.01	0.00	0.01	0	93.00
6.650	0.01	0.00	0.01	0.00	0.01	0	93.00
6.700	0.01	0.00	0.01	0.00	0.01	0	93.00
6.750	0.01	0.00	0.01	0.00	0.01	0	93.00
6.800	0.01	0.00	0.01	0.00	0.01	0	93.00
6.850	0.01	0.00	0.01	0.00	0.01	0	93.00
6.900	0.01	0.00	0.01	0.00	0.01	0	93.00
6.950	0.01	0.00	0.01	0.00	0.01	0	93.00
7.000	0.01	0.00	0.01	0.00	0.01	0	93.00
7.050	0.01	0.00	0.02	0.00	0.01	0	93.00
7.100	0.01	0.00	0.02	0.00	0.01	0	93.00
7.150	0.01	0.00	0.02	0.00	0.01	0	93.00
7.200	0.01	0.00	0.02	0.00	0.01	0	93.00
7.250	0.01	0.00	0.02	0.00	0.01	0	93.00
7.300	0.01	0.00	0.02	0.00	0.01	0	93.00
7.350	0.01	0.00	0.02	0.00	0.01	0	93.00
7.400	0.01	0.00	0.02	0.00	0.01	0	93.00
7.450	0.01	0.00	0.02	0.00	0.01	0	93.00
7.500	0.01	0.00	0.02	0.00	0.01	0	93.00
7.550	0.01	0.00	0.02	0.00	0.01	0	93.00
7.600	0.01	0.00	0.02	0.00	0.01	0	93.00
7.650	0.01	0.00	0.02	0.00	0.01	0	93.00
7.700	0.01	0.00	0.02	0.00	0.01	0	93.00
7.750	0.01	0.00	0.02	0.00	0.01	0	93.00
7.800	0.01	0.00	0.02	0.00	0.01	0	93.00
7.850	0.01	0.00	0.02	0.00	0.01	0	93.00
7.900	0.01	0.00	0.02	0.00	0.01	0	93.00
7.950	0.01	0.00	0.02	0.00	0.01	0	93.00
8.000	0.01	0.00	0.02	0.00	0.01	0	93.00
8.050	0.01	0.00	0.02	0.00	0.01	0	93.00
8.100	0.01	0.00	0.02	0.00	0.01	0	93.00
8.150	0.01	0.00	0.02	0.00	0.01	0	93.00
8.200	0.01	0.00	0.02	0.00	0.01	0	93.00
8.250	0.01	0.00	0.02	0.00	0.01	0	93.00
8.300	0.01	0.00	0.02	0.00	0.01	0	93.00
8.350	0.01	0.00	0.02	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
8.400	0.01	0.00	0.02	0.00	0.01	0	93.00
8.450	0.01	0.00	0.02	0.00	0.01	0	93.00
8.500	0.01	0.00	0.02	0.00	0.01	0	93.00
8.550	0.01	0.00	0.03	0.00	0.01	0	93.00
8.600	0.01	0.00	0.03	0.00	0.01	0	93.00
8.650	0.01	0.00	0.03	0.00	0.01	0	93.00
8.700	0.01	0.00	0.03	0.00	0.01	0	93.00
8.750	0.01	0.00	0.03	0.00	0.01	0	93.00
8.800	0.01	0.00	0.03	0.00	0.01	0	93.00
8.850	0.01	0.00	0.03	0.00	0.01	0	93.00
8.900	0.01	0.00	0.03	0.00	0.01	0	93.00
8.950	0.02	0.00	0.03	0.00	0.01	0	93.00
9.000	0.02	0.00	0.03	0.00	0.02	0	93.00
9.050	0.02	0.00	0.03	0.00	0.02	0	93.00
9.100	0.02	0.00	0.03	0.00	0.02	0	93.00
9.150	0.02	0.00	0.03	0.00	0.02	0	93.00
9.200	0.02	0.00	0.03	0.00	0.02	0	93.00
9.250	0.02	0.00	0.03	0.00	0.02	0	93.00
9.300	0.02	0.00	0.03	0.00	0.02	0	93.00
9.350	0.02	0.00	0.03	0.00	0.02	0	93.00
9.400	0.02	0.00	0.04	0.00	0.02	0	93.00
9.450	0.02	0.00	0.04	0.00	0.02	0	93.00
9.500	0.02	0.00	0.04	0.00	0.02	0	93.00
9.550	0.02	0.00	0.04	0.00	0.02	0	93.00
9.600	0.02	0.00	0.04	0.00	0.02	0	93.00
9.650	0.02	0.00	0.04	0.00	0.02	0	93.00
9.700	0.02	0.00	0.04	0.00	0.02	0	93.00
9.750	0.02	0.00	0.04	0.00	0.02	0	93.00
9.800	0.02	0.00	0.04	0.00	0.02	0	93.00
9.850	0.02	0.00	0.04	0.00	0.02	0	93.00
9.900	0.02	0.00	0.04	0.00	0.02	0	93.00
9.950	0.02	0.00	0.04	0.00	0.02	0	93.00
10.000	0.02	0.00	0.04	0.00	0.02	0	93.00
10.050	0.02	0.00	0.04	0.00	0.02	0	93.00
10.100	0.02	0.00	0.04	0.00	0.02	0	93.00
10.150	0.02	0.00	0.04	0.00	0.02	0	93.00
10.200	0.02	0.00	0.05	0.00	0.02	0	93.00
10.250	0.02	0.00	0.05	0.00	0.02	0	93.00
10.300	0.02	0.00	0.05	0.00	0.02	0	93.00
10.350	0.02	0.00	0.05	0.00	0.02	0	93.00
10.400	0.03	0.00	0.05	0.00	0.03	0	93.00
10.450	0.03	0.00	0.05	0.00	0.03	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
10.500	0.03	0.00	0.05	0.00	0.03	0	93.00
10.550	0.03	0.00	0.05	0.00	0.03	0	93.00
10.600	0.03	0.00	0.06	0.00	0.03	0	93.00
10.650	0.03	0.00	0.06	0.00	0.03	0	93.00
10.700	0.03	0.00	0.06	0.00	0.03	0	93.00
10.750	0.03	0.00	0.06	0.00	0.03	0	93.00
10.800	0.03	0.00	0.06	0.00	0.03	0	93.00
10.850	0.03	0.00	0.06	0.00	0.03	0	93.00
10.900	0.03	0.00	0.06	0.00	0.03	0	93.00
10.950	0.03	0.00	0.06	0.00	0.03	0	93.00
11.000	0.03	0.00	0.06	0.00	0.03	0	93.00
11.050	0.03	0.00	0.07	0.00	0.03	0	93.00
11.100	0.03	0.00	0.07	0.00	0.03	0	93.00
11.150	0.04	0.00	0.07	0.00	0.04	0	93.00
11.200	0.04	0.00	0.08	0.00	0.04	0	93.00
11.250	0.04	0.00	0.08	0.00	0.04	0	93.00
11.300	0.04	0.00	0.08	0.00	0.04	0	93.00
11.350	0.05	0.00	0.09	0.00	0.04	0	93.00
11.400	0.05	0.00	0.09	0.00	0.05	0	93.00
11.450	0.05	0.00	0.10	0.00	0.05	0	93.00
11.500	0.05	0.00	0.10	0.00	0.05	0	93.00
11.550	0.06	0.00	0.11	0.00	0.06	0	93.00
11.600	0.07	0.00	0.13	0.00	0.06	0	93.00
11.650	0.09	0.00	0.16	0.00	0.08	0	93.00
11.700	0.11	0.00	0.19	0.00	0.10	0	93.00
11.750	0.13	0.00	0.23	0.00	0.12	0	93.00
11.800	0.15	0.02	0.27	0.00	0.13	13	93.02
11.850	0.17	0.08	0.33	0.00	0.13	19	93.03
11.900	0.19	0.18	0.44	0.00	0.13	28	93.04
11.950	0.25	0.37	0.62	0.00	0.13	45	93.06
12.000	0.35	0.71	0.97	0.00	0.13	75	93.11
12.050	0.39	1.19	1.45	0.00	0.13	109	93.16
12.100	0.40	1.72	1.98	0.00	0.13	166	93.21
12.150	0.35	2.21	2.47	0.00	0.13	211	93.24
12.200	0.25	2.56	2.82	0.00	0.13	242	93.26
12.250	0.21	2.77	3.02	0.00	0.13	261	93.27
12.300	0.18	2.90	3.15	0.00	0.13	272	93.28
12.350	0.16	2.98	3.23	0.00	0.13	279	93.29
12.400	0.13	3.01	3.27	0.00	0.13	282	93.29
12.450	0.11	3.00	3.26	0.00	0.13	281	93.29
12.500	0.09	2.95	3.20	0.00	0.13	277	93.29
12.550	0.08	2.86	3.11	0.00	0.13	269	93.28

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
12.600	0.06	2.74	2.99	0.00	0.13	258	93.27
12.650	0.06	2.60	2.86	0.00	0.13	245	93.26
12.700	0.05	2.45	2.71	0.00	0.13	232	93.25
12.750	0.05	2.30	2.55	0.00	0.13	218	93.24
12.800	0.05	2.14	2.40	0.00	0.13	204	93.23
12.850	0.05	1.98	2.23	0.00	0.13	189	93.22
12.900	0.04	1.81	2.07	0.00	0.13	174	93.21
12.950	0.04	1.64	1.89	0.00	0.13	159	93.20
13.000	0.04	1.46	1.72	0.00	0.13	135	93.18
13.050	0.04	1.28	1.54	0.00	0.13	116	93.17
13.100	0.04	1.10	1.35	0.00	0.13	102	93.15
13.150	0.03	0.91	1.17	0.00	0.13	89	93.13
13.200	0.03	0.72	0.98	0.00	0.13	75	93.11
13.250	0.03	0.54	0.79	0.00	0.13	60	93.09
13.300	0.03	0.35	0.60	0.00	0.13	43	93.06
13.350	0.03	0.15	0.41	0.00	0.13	25	93.04
13.400	0.03	0.00	0.22	0.00	0.11	0	93.00
13.450	0.03	0.00	0.06	0.00	0.03	0	93.00
13.500	0.03	0.00	0.06	0.00	0.03	0	93.00
13.550	0.03	0.00	0.06	0.00	0.03	0	93.00
13.600	0.03	0.00	0.06	0.00	0.03	0	93.00
13.650	0.03	0.00	0.06	0.00	0.03	0	93.00
13.700	0.03	0.00	0.06	0.00	0.03	0	93.00
13.750	0.03	0.00	0.06	0.00	0.03	0	93.00
13.800	0.03	0.00	0.05	0.00	0.03	0	93.00
13.850	0.03	0.00	0.05	0.00	0.03	0	93.00
13.900	0.03	0.00	0.05	0.00	0.03	0	93.00
13.950	0.03	0.00	0.05	0.00	0.03	0	93.00
14.000	0.02	0.00	0.05	0.00	0.02	0	93.00
14.050	0.02	0.00	0.05	0.00	0.02	0	93.00
14.100	0.02	0.00	0.05	0.00	0.02	0	93.00
14.150	0.02	0.00	0.05	0.00	0.02	0	93.00
14.200	0.02	0.00	0.05	0.00	0.02	0	93.00
14.250	0.02	0.00	0.05	0.00	0.02	0	93.00
14.300	0.02	0.00	0.05	0.00	0.02	0	93.00
14.350	0.02	0.00	0.04	0.00	0.02	0	93.00
14.400	0.02	0.00	0.04	0.00	0.02	0	93.00
14.450	0.02	0.00	0.04	0.00	0.02	0	93.00
14.500	0.02	0.00	0.04	0.00	0.02	0	93.00
14.550	0.02	0.00	0.04	0.00	0.02	0	93.00
14.600	0.02	0.00	0.04	0.00	0.02	0	93.00
14.650	0.02	0.00	0.04	0.00	0.02	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
14.700	0.02	0.00	0.04	0.00	0.02	0	93.00
14.750	0.02	0.00	0.04	0.00	0.02	0	93.00
14.800	0.02	0.00	0.04	0.00	0.02	0	93.00
14.850	0.02	0.00	0.04	0.00	0.02	0	93.00
14.900	0.02	0.00	0.04	0.00	0.02	0	93.00
14.950	0.02	0.00	0.04	0.00	0.02	0	93.00
15.000	0.02	0.00	0.04	0.00	0.02	0	93.00
15.050	0.02	0.00	0.04	0.00	0.02	0	93.00
15.100	0.02	0.00	0.04	0.00	0.02	0	93.00
15.150	0.02	0.00	0.04	0.00	0.02	0	93.00
15.200	0.02	0.00	0.04	0.00	0.02	0	93.00
15.250	0.02	0.00	0.03	0.00	0.02	0	93.00
15.300	0.02	0.00	0.03	0.00	0.02	0	93.00
15.350	0.02	0.00	0.03	0.00	0.02	0	93.00
15.400	0.02	0.00	0.03	0.00	0.02	0	93.00
15.450	0.02	0.00	0.03	0.00	0.02	0	93.00
15.500	0.02	0.00	0.03	0.00	0.02	0	93.00
15.550	0.02	0.00	0.03	0.00	0.02	0	93.00
15.600	0.02	0.00	0.03	0.00	0.02	0	93.00
15.650	0.01	0.00	0.03	0.00	0.02	0	93.00
15.700	0.01	0.00	0.03	0.00	0.01	0	93.00
15.750	0.01	0.00	0.03	0.00	0.01	0	93.00
15.800	0.01	0.00	0.03	0.00	0.01	0	93.00
15.850	0.01	0.00	0.03	0.00	0.01	0	93.00
15.900	0.01	0.00	0.03	0.00	0.01	0	93.00
15.950	0.01	0.00	0.03	0.00	0.01	0	93.00
16.000	0.01	0.00	0.03	0.00	0.01	0	93.00
16.050	0.01	0.00	0.03	0.00	0.01	0	93.00
16.100	0.01	0.00	0.03	0.00	0.01	0	93.00
16.150	0.01	0.00	0.03	0.00	0.01	0	93.00
16.200	0.01	0.00	0.02	0.00	0.01	0	93.00
16.250	0.01	0.00	0.02	0.00	0.01	0	93.00
16.300	0.01	0.00	0.02	0.00	0.01	0	93.00
16.350	0.01	0.00	0.02	0.00	0.01	0	93.00
16.400	0.01	0.00	0.02	0.00	0.01	0	93.00
16.450	0.01	0.00	0.02	0.00	0.01	0	93.00
16.500	0.01	0.00	0.02	0.00	0.01	0	93.00
16.550	0.01	0.00	0.02	0.00	0.01	0	93.00
16.600	0.01	0.00	0.02	0.00	0.01	0	93.00
16.650	0.01	0.00	0.02	0.00	0.01	0	93.00
16.700	0.01	0.00	0.02	0.00	0.01	0	93.00
16.750	0.01	0.00	0.02	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
16.800	0.01	0.00	0.02	0.00	0.01	0	93.00
16.850	0.01	0.00	0.02	0.00	0.01	0	93.00
16.900	0.01	0.00	0.02	0.00	0.01	0	93.00
16.950	0.01	0.00	0.02	0.00	0.01	0	93.00
17.000	0.01	0.00	0.02	0.00	0.01	0	93.00
17.050	0.01	0.00	0.02	0.00	0.01	0	93.00
17.100	0.01	0.00	0.02	0.00	0.01	0	93.00
17.150	0.01	0.00	0.02	0.00	0.01	0	93.00
17.200	0.01	0.00	0.02	0.00	0.01	0	93.00
17.250	0.01	0.00	0.02	0.00	0.01	0	93.00
17.300	0.01	0.00	0.02	0.00	0.01	0	93.00
17.350	0.01	0.00	0.02	0.00	0.01	0	93.00
17.400	0.01	0.00	0.02	0.00	0.01	0	93.00
17.450	0.01	0.00	0.02	0.00	0.01	0	93.00
17.500	0.01	0.00	0.02	0.00	0.01	0	93.00
17.550	0.01	0.00	0.02	0.00	0.01	0	93.00
17.600	0.01	0.00	0.02	0.00	0.01	0	93.00
17.650	0.01	0.00	0.02	0.00	0.01	0	93.00
17.700	0.01	0.00	0.02	0.00	0.01	0	93.00
17.750	0.01	0.00	0.02	0.00	0.01	0	93.00
17.800	0.01	0.00	0.02	0.00	0.01	0	93.00
17.850	0.01	0.00	0.02	0.00	0.01	0	93.00
17.900	0.01	0.00	0.02	0.00	0.01	0	93.00
17.950	0.01	0.00	0.02	0.00	0.01	0	93.00
18.000	0.01	0.00	0.02	0.00	0.01	0	93.00
18.050	0.01	0.00	0.02	0.00	0.01	0	93.00
18.100	0.01	0.00	0.02	0.00	0.01	0	93.00
18.150	0.01	0.00	0.02	0.00	0.01	0	93.00
18.200	0.01	0.00	0.02	0.00	0.01	0	93.00
18.250	0.01	0.00	0.02	0.00	0.01	0	93.00
18.300	0.01	0.00	0.02	0.00	0.01	0	93.00
18.350	0.01	0.00	0.02	0.00	0.01	0	93.00
18.400	0.01	0.00	0.02	0.00	0.01	0	93.00
18.450	0.01	0.00	0.02	0.00	0.01	0	93.00
18.500	0.01	0.00	0.01	0.00	0.01	0	93.00
18.550	0.01	0.00	0.01	0.00	0.01	0	93.00
18.600	0.01	0.00	0.01	0.00	0.01	0	93.00
18.650	0.01	0.00	0.01	0.00	0.01	0	93.00
18.700	0.01	0.00	0.01	0.00	0.01	0	93.00
18.750	0.01	0.00	0.01	0.00	0.01	0	93.00
18.800	0.01	0.00	0.01	0.00	0.01	0	93.00
18.850	0.01	0.00	0.01	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
18.900	0.01	0.00	0.01	0.00	0.01	0	93.00
18.950	0.01	0.00	0.01	0.00	0.01	0	93.00
19.000	0.01	0.00	0.01	0.00	0.01	0	93.00
19.050	0.01	0.00	0.01	0.00	0.01	0	93.00
19.100	0.01	0.00	0.01	0.00	0.01	0	93.00
19.150	0.01	0.00	0.01	0.00	0.01	0	93.00
19.200	0.01	0.00	0.01	0.00	0.01	0	93.00
19.250	0.01	0.00	0.01	0.00	0.01	0	93.00
19.300	0.01	0.00	0.01	0.00	0.01	0	93.00
19.350	0.01	0.00	0.01	0.00	0.01	0	93.00
19.400	0.01	0.00	0.01	0.00	0.01	0	93.00
19.450	0.01	0.00	0.01	0.00	0.01	0	93.00
19.500	0.01	0.00	0.01	0.00	0.01	0	93.00
19.550	0.01	0.00	0.01	0.00	0.01	0	93.00
19.600	0.01	0.00	0.01	0.00	0.01	0	93.00
19.650	0.01	0.00	0.01	0.00	0.01	0	93.00
19.700	0.01	0.00	0.01	0.00	0.01	0	93.00
19.750	0.01	0.00	0.01	0.00	0.01	0	93.00
19.800	0.01	0.00	0.01	0.00	0.01	0	93.00
19.850	0.01	0.00	0.01	0.00	0.01	0	93.00
19.900	0.01	0.00	0.01	0.00	0.01	0	93.00
19.950	0.01	0.00	0.01	0.00	0.01	0	93.00
20.000	0.01	0.00	0.01	0.00	0.01	0	93.00
20.050	0.01	0.00	0.01	0.00	0.01	0	93.00
20.100	0.01	0.00	0.01	0.00	0.01	0	93.00
20.150	0.01	0.00	0.01	0.00	0.01	0	93.00
20.200	0.01	0.00	0.01	0.00	0.01	0	93.00
20.250	0.01	0.00	0.01	0.00	0.01	0	93.00
20.300	0.01	0.00	0.01	0.00	0.01	0	93.00
20.350	0.01	0.00	0.01	0.00	0.01	0	93.00
20.400	0.01	0.00	0.01	0.00	0.01	0	93.00
20.450	0.01	0.00	0.01	0.00	0.01	0	93.00
20.500	0.01	0.00	0.01	0.00	0.01	0	93.00
20.550	0.01	0.00	0.01	0.00	0.01	0	93.00
20.600	0.01	0.00	0.01	0.00	0.01	0	93.00
20.650	0.01	0.00	0.01	0.00	0.01	0	93.00
20.700	0.01	0.00	0.01	0.00	0.01	0	93.00
20.750	0.01	0.00	0.01	0.00	0.01	0	93.00
20.800	0.01	0.00	0.01	0.00	0.01	0	93.00
20.850	0.01	0.00	0.01	0.00	0.01	0	93.00
20.900	0.01	0.00	0.01	0.00	0.01	0	93.00
20.950	0.01	0.00	0.01	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
21.000	0.01	0.00	0.01	0.00	0.01	0	93.00
21.050	0.01	0.00	0.01	0.00	0.01	0	93.00
21.100	0.01	0.00	0.01	0.00	0.01	0	93.00
21.150	0.01	0.00	0.01	0.00	0.01	0	93.00
21.200	0.01	0.00	0.01	0.00	0.01	0	93.00
21.250	0.01	0.00	0.01	0.00	0.01	0	93.00
21.300	0.01	0.00	0.01	0.00	0.01	0	93.00
21.350	0.01	0.00	0.01	0.00	0.01	0	93.00
21.400	0.01	0.00	0.01	0.00	0.01	0	93.00
21.450	0.01	0.00	0.01	0.00	0.01	0	93.00
21.500	0.01	0.00	0.01	0.00	0.01	0	93.00
21.550	0.01	0.00	0.01	0.00	0.01	0	93.00
21.600	0.01	0.00	0.01	0.00	0.01	0	93.00
21.650	0.01	0.00	0.01	0.00	0.01	0	93.00
21.700	0.01	0.00	0.01	0.00	0.01	0	93.00
21.750	0.01	0.00	0.01	0.00	0.01	0	93.00
21.800	0.01	0.00	0.01	0.00	0.01	0	93.00
21.850	0.01	0.00	0.01	0.00	0.01	0	93.00
21.900	0.01	0.00	0.01	0.00	0.01	0	93.00
21.950	0.01	0.00	0.01	0.00	0.01	0	93.00
22.000	0.01	0.00	0.01	0.00	0.01	0	93.00
22.050	0.01	0.00	0.01	0.00	0.01	0	93.00
22.100	0.01	0.00	0.01	0.00	0.01	0	93.00
22.150	0.01	0.00	0.01	0.00	0.01	0	93.00
22.200	0.01	0.00	0.01	0.00	0.01	0	93.00
22.250	0.01	0.00	0.01	0.00	0.01	0	93.00
22.300	0.01	0.00	0.01	0.00	0.01	0	93.00
22.350	0.01	0.00	0.01	0.00	0.01	0	93.00
22.400	0.01	0.00	0.01	0.00	0.01	0	93.00
22.450	0.01	0.00	0.01	0.00	0.01	0	93.00
22.500	0.00	0.00	0.01	0.00	0.00	0	93.00
22.550	0.00	0.00	0.01	0.00	0.00	0	93.00
22.600	0.00	0.00	0.01	0.00	0.00	0	93.00
22.650	0.00	0.00	0.01	0.00	0.00	0	93.00
22.700	0.00	0.00	0.01	0.00	0.00	0	93.00
22.750	0.00	0.00	0.01	0.00	0.00	0	93.00
22.800	0.00	0.00	0.01	0.00	0.00	0	93.00
22.850	0.00	0.00	0.01	0.00	0.00	0	93.00
22.900	0.00	0.00	0.01	0.00	0.00	0	93.00
22.950	0.00	0.00	0.01	0.00	0.00	0	93.00
23.000	0.00	0.00	0.01	0.00	0.00	0	93.00
23.050	0.00	0.00	0.01	0.00	0.00	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
23.100	0.00	0.00	0.01	0.00	0.00	0	93.00
23.150	0.00	0.00	0.01	0.00	0.00	0	93.00
23.200	0.00	0.00	0.01	0.00	0.00	0	93.00
23.250	0.00	0.00	0.01	0.00	0.00	0	93.00
23.300	0.00	0.00	0.01	0.00	0.00	0	93.00
23.350	0.00	0.00	0.01	0.00	0.00	0	93.00
23.400	0.00	0.00	0.01	0.00	0.00	0	93.00
23.450	0.00	0.00	0.01	0.00	0.00	0	93.00
23.500	0.00	0.00	0.01	0.00	0.00	0	93.00
23.550	0.00	0.00	0.01	0.00	0.00	0	93.00
23.600	0.00	0.00	0.01	0.00	0.00	0	93.00
23.650	0.00	0.00	0.01	0.00	0.00	0	93.00
23.700	0.00	0.00	0.01	0.00	0.00	0	93.00
23.750	0.00	0.00	0.01	0.00	0.00	0	93.00
23.800	0.00	0.00	0.01	0.00	0.00	0	93.00
23.850	0.00	0.00	0.01	0.00	0.00	0	93.00
23.900	0.00	0.00	0.01	0.00	0.00	0	93.00
23.950	0.00	0.00	0.01	0.00	0.00	0	93.00
24.000	0.00	0.00	0.01	0.00	0.00	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
0.000	0.00	0.00	0.13	0.00	0.06	0	93.00
0.050	0.00	0.00	0.00	0.00	0.00	0	93.00
0.100	0.00	0.00	0.00	0.00	0.00	0	93.00
0.150	0.00	0.00	0.00	0.00	0.00	0	93.00
0.200	0.00	0.00	0.00	0.00	0.00	0	93.00
0.250	0.00	0.00	0.00	0.00	0.00	0	93.00
0.300	0.00	0.00	0.00	0.00	0.00	0	93.00
0.350	0.00	0.00	0.00	0.00	0.00	0	93.00
0.400	0.00	0.00	0.00	0.00	0.00	0	93.00
0.450	0.00	0.00	0.00	0.00	0.00	0	93.00
0.500	0.00	0.00	0.00	0.00	0.00	0	93.00
0.550	0.00	0.00	0.00	0.00	0.00	0	93.00
0.600	0.00	0.00	0.00	0.00	0.00	0	93.00
0.650	0.00	0.00	0.00	0.00	0.00	0	93.00
0.700	0.00	0.00	0.00	0.00	0.00	0	93.00
0.750	0.00	0.00	0.00	0.00	0.00	0	93.00
0.800	0.00	0.00	0.00	0.00	0.00	0	93.00
0.850	0.00	0.00	0.00	0.00	0.00	0	93.00
0.900	0.00	0.00	0.00	0.00	0.00	0	93.00
0.950	0.00	0.00	0.00	0.00	0.00	0	93.00
1.000	0.00	0.00	0.00	0.00	0.00	0	93.00
1.050	0.00	0.00	0.00	0.00	0.00	0	93.00
1.100	0.00	0.00	0.00	0.00	0.00	0	93.00
1.150	0.00	0.00	0.00	0.00	0.00	0	93.00
1.200	0.00	0.00	0.00	0.00	0.00	0	93.00
1.250	0.00	0.00	0.00	0.00	0.00	0	93.00
1.300	0.00	0.00	0.00	0.00	0.00	0	93.00
1.350	0.00	0.00	0.00	0.00	0.00	0	93.00
1.400	0.00	0.00	0.00	0.00	0.00	0	93.00
1.450	0.00	0.00	0.00	0.00	0.00	0	93.00
1.500	0.00	0.00	0.00	0.00	0.00	0	93.00
1.550	0.00	0.00	0.00	0.00	0.00	0	93.00
1.600	0.00	0.00	0.00	0.00	0.00	0	93.00
1.650	0.00	0.00	0.01	0.00	0.00	0	93.00
1.700	0.00	0.00	0.01	0.00	0.00	0	93.00
1.750	0.00	0.00	0.01	0.00	0.00	0	93.00
1.800	0.00	0.00	0.01	0.00	0.00	0	93.00
1.850	0.00	0.00	0.01	0.00	0.00	0	93.00
1.900	0.00	0.00	0.01	0.00	0.00	0	93.00
1.950	0.00	0.00	0.01	0.00	0.00	0	93.00
2.000	0.00	0.00	0.01	0.00	0.00	0	93.00
2.050	0.00	0.00	0.01	0.00	0.00	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
2.100	0.00	0.00	0.01	0.00	0.00	0	93.00
2.150	0.00	0.00	0.01	0.00	0.00	0	93.00
2.200	0.00	0.00	0.01	0.00	0.00	0	93.00
2.250	0.00	0.00	0.01	0.00	0.00	0	93.00
2.300	0.00	0.00	0.01	0.00	0.00	0	93.00
2.350	0.00	0.00	0.01	0.00	0.00	0	93.00
2.400	0.00	0.00	0.01	0.00	0.00	0	93.00
2.450	0.00	0.00	0.01	0.00	0.00	0	93.00
2.500	0.00	0.00	0.01	0.00	0.00	0	93.00
2.550	0.00	0.00	0.01	0.00	0.00	0	93.00
2.600	0.00	0.00	0.01	0.00	0.00	0	93.00
2.650	0.01	0.00	0.01	0.00	0.01	0	93.00
2.700	0.01	0.00	0.01	0.00	0.01	0	93.00
2.750	0.01	0.00	0.01	0.00	0.01	0	93.00
2.800	0.01	0.00	0.01	0.00	0.01	0	93.00
2.850	0.01	0.00	0.01	0.00	0.01	0	93.00
2.900	0.01	0.00	0.01	0.00	0.01	0	93.00
2.950	0.01	0.00	0.01	0.00	0.01	0	93.00
3.000	0.01	0.00	0.01	0.00	0.01	0	93.00
3.050	0.01	0.00	0.01	0.00	0.01	0	93.00
3.100	0.01	0.00	0.01	0.00	0.01	0	93.00
3.150	0.01	0.00	0.01	0.00	0.01	0	93.00
3.200	0.01	0.00	0.01	0.00	0.01	0	93.00
3.250	0.01	0.00	0.01	0.00	0.01	0	93.00
3.300	0.01	0.00	0.01	0.00	0.01	0	93.00
3.350	0.01	0.00	0.01	0.00	0.01	0	93.00
3.400	0.01	0.00	0.01	0.00	0.01	0	93.00
3.450	0.01	0.00	0.01	0.00	0.01	0	93.00
3.500	0.01	0.00	0.01	0.00	0.01	0	93.00
3.550	0.01	0.00	0.01	0.00	0.01	0	93.00
3.600	0.01	0.00	0.01	0.00	0.01	0	93.00
3.650	0.01	0.00	0.01	0.00	0.01	0	93.00
3.700	0.01	0.00	0.01	0.00	0.01	0	93.00
3.750	0.01	0.00	0.02	0.00	0.01	0	93.00
3.800	0.01	0.00	0.02	0.00	0.01	0	93.00
3.850	0.01	0.00	0.02	0.00	0.01	0	93.00
3.900	0.01	0.00	0.02	0.00	0.01	0	93.00
3.950	0.01	0.00	0.02	0.00	0.01	0	93.00
4.000	0.01	0.00	0.02	0.00	0.01	0	93.00
4.050	0.01	0.00	0.02	0.00	0.01	0	93.00
4.100	0.01	0.00	0.02	0.00	0.01	0	93.00
4.150	0.01	0.00	0.02	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
4.200	0.01	0.00	0.02	0.00	0.01	0	93.00
4.250	0.01	0.00	0.02	0.00	0.01	0	93.00
4.300	0.01	0.00	0.02	0.00	0.01	0	93.00
4.350	0.01	0.00	0.02	0.00	0.01	0	93.00
4.400	0.01	0.00	0.02	0.00	0.01	0	93.00
4.450	0.01	0.00	0.02	0.00	0.01	0	93.00
4.500	0.01	0.00	0.02	0.00	0.01	0	93.00
4.550	0.01	0.00	0.02	0.00	0.01	0	93.00
4.600	0.01	0.00	0.02	0.00	0.01	0	93.00
4.650	0.01	0.00	0.02	0.00	0.01	0	93.00
4.700	0.01	0.00	0.02	0.00	0.01	0	93.00
4.750	0.01	0.00	0.02	0.00	0.01	0	93.00
4.800	0.01	0.00	0.02	0.00	0.01	0	93.00
4.850	0.01	0.00	0.02	0.00	0.01	0	93.00
4.900	0.01	0.00	0.02	0.00	0.01	0	93.00
4.950	0.01	0.00	0.02	0.00	0.01	0	93.00
5.000	0.01	0.00	0.02	0.00	0.01	0	93.00
5.050	0.01	0.00	0.02	0.00	0.01	0	93.00
5.100	0.01	0.00	0.02	0.00	0.01	0	93.00
5.150	0.01	0.00	0.02	0.00	0.01	0	93.00
5.200	0.01	0.00	0.02	0.00	0.01	0	93.00
5.250	0.01	0.00	0.02	0.00	0.01	0	93.00
5.300	0.01	0.00	0.02	0.00	0.01	0	93.00
5.350	0.01	0.00	0.02	0.00	0.01	0	93.00
5.400	0.01	0.00	0.02	0.00	0.01	0	93.00
5.450	0.01	0.00	0.02	0.00	0.01	0	93.00
5.500	0.01	0.00	0.02	0.00	0.01	0	93.00
5.550	0.01	0.00	0.02	0.00	0.01	0	93.00
5.600	0.01	0.00	0.02	0.00	0.01	0	93.00
5.650	0.01	0.00	0.02	0.00	0.01	0	93.00
5.700	0.01	0.00	0.02	0.00	0.01	0	93.00
5.750	0.01	0.00	0.02	0.00	0.01	0	93.00
5.800	0.01	0.00	0.02	0.00	0.01	0	93.00
5.850	0.01	0.00	0.02	0.00	0.01	0	93.00
5.900	0.01	0.00	0.02	0.00	0.01	0	93.00
5.950	0.01	0.00	0.02	0.00	0.01	0	93.00
6.000	0.01	0.00	0.02	0.00	0.01	0	93.00
6.050	0.01	0.00	0.02	0.00	0.01	0	93.00
6.100	0.01	0.00	0.02	0.00	0.01	0	93.00
6.150	0.01	0.00	0.03	0.00	0.01	0	93.00
6.200	0.01	0.00	0.03	0.00	0.01	0	93.00
6.250	0.01	0.00	0.03	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
6.300	0.01	0.00	0.03	0.00	0.01	0	93.00
6.350	0.01	0.00	0.03	0.00	0.01	0	93.00
6.400	0.01	0.00	0.03	0.00	0.01	0	93.00
6.450	0.01	0.00	0.03	0.00	0.01	0	93.00
6.500	0.01	0.00	0.03	0.00	0.01	0	93.00
6.550	0.01	0.00	0.03	0.00	0.01	0	93.00
6.600	0.01	0.00	0.03	0.00	0.01	0	93.00
6.650	0.01	0.00	0.03	0.00	0.01	0	93.00
6.700	0.02	0.00	0.03	0.00	0.01	0	93.00
6.750	0.02	0.00	0.03	0.00	0.02	0	93.00
6.800	0.02	0.00	0.03	0.00	0.02	0	93.00
6.850	0.02	0.00	0.03	0.00	0.02	0	93.00
6.900	0.02	0.00	0.03	0.00	0.02	0	93.00
6.950	0.02	0.00	0.03	0.00	0.02	0	93.00
7.000	0.02	0.00	0.03	0.00	0.02	0	93.00
7.050	0.02	0.00	0.03	0.00	0.02	0	93.00
7.100	0.02	0.00	0.03	0.00	0.02	0	93.00
7.150	0.02	0.00	0.03	0.00	0.02	0	93.00
7.200	0.02	0.00	0.03	0.00	0.02	0	93.00
7.250	0.02	0.00	0.04	0.00	0.02	0	93.00
7.300	0.02	0.00	0.04	0.00	0.02	0	93.00
7.350	0.02	0.00	0.04	0.00	0.02	0	93.00
7.400	0.02	0.00	0.04	0.00	0.02	0	93.00
7.450	0.02	0.00	0.04	0.00	0.02	0	93.00
7.500	0.02	0.00	0.04	0.00	0.02	0	93.00
7.550	0.02	0.00	0.04	0.00	0.02	0	93.00
7.600	0.02	0.00	0.04	0.00	0.02	0	93.00
7.650	0.02	0.00	0.04	0.00	0.02	0	93.00
7.700	0.02	0.00	0.04	0.00	0.02	0	93.00
7.750	0.02	0.00	0.04	0.00	0.02	0	93.00
7.800	0.02	0.00	0.04	0.00	0.02	0	93.00
7.850	0.02	0.00	0.04	0.00	0.02	0	93.00
7.900	0.02	0.00	0.04	0.00	0.02	0	93.00
7.950	0.02	0.00	0.04	0.00	0.02	0	93.00
8.000	0.02	0.00	0.04	0.00	0.02	0	93.00
8.050	0.02	0.00	0.04	0.00	0.02	0	93.00
8.100	0.02	0.00	0.04	0.00	0.02	0	93.00
8.150	0.02	0.00	0.04	0.00	0.02	0	93.00
8.200	0.02	0.00	0.05	0.00	0.02	0	93.00
8.250	0.02	0.00	0.05	0.00	0.02	0	93.00
8.300	0.02	0.00	0.05	0.00	0.02	0	93.00
8.350	0.02	0.00	0.05	0.00	0.02	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
8.400	0.02	0.00	0.05	0.00	0.02	0	93.00
8.450	0.03	0.00	0.05	0.00	0.03	0	93.00
8.500	0.03	0.00	0.05	0.00	0.03	0	93.00
8.550	0.03	0.00	0.05	0.00	0.03	0	93.00
8.600	0.03	0.00	0.05	0.00	0.03	0	93.00
8.650	0.03	0.00	0.05	0.00	0.03	0	93.00
8.700	0.03	0.00	0.06	0.00	0.03	0	93.00
8.750	0.03	0.00	0.06	0.00	0.03	0	93.00
8.800	0.03	0.00	0.06	0.00	0.03	0	93.00
8.850	0.03	0.00	0.06	0.00	0.03	0	93.00
8.900	0.03	0.00	0.06	0.00	0.03	0	93.00
8.950	0.03	0.00	0.06	0.00	0.03	0	93.00
9.000	0.03	0.00	0.06	0.00	0.03	0	93.00
9.050	0.03	0.00	0.06	0.00	0.03	0	93.00
9.100	0.03	0.00	0.06	0.00	0.03	0	93.00
9.150	0.03	0.00	0.07	0.00	0.03	0	93.00
9.200	0.03	0.00	0.07	0.00	0.03	0	93.00
9.250	0.03	0.00	0.07	0.00	0.03	0	93.00
9.300	0.03	0.00	0.07	0.00	0.03	0	93.00
9.350	0.03	0.00	0.07	0.00	0.03	0	93.00
9.400	0.04	0.00	0.07	0.00	0.04	0	93.00
9.450	0.04	0.00	0.07	0.00	0.04	0	93.00
9.500	0.04	0.00	0.07	0.00	0.04	0	93.00
9.550	0.04	0.00	0.07	0.00	0.04	0	93.00
9.600	0.04	0.00	0.07	0.00	0.04	0	93.00
9.650	0.04	0.00	0.08	0.00	0.04	0	93.00
9.700	0.04	0.00	0.08	0.00	0.04	0	93.00
9.750	0.04	0.00	0.08	0.00	0.04	0	93.00
9.800	0.04	0.00	0.08	0.00	0.04	0	93.00
9.850	0.04	0.00	0.08	0.00	0.04	0	93.00
9.900	0.04	0.00	0.08	0.00	0.04	0	93.00
9.950	0.04	0.00	0.08	0.00	0.04	0	93.00
10.000	0.04	0.00	0.08	0.00	0.04	0	93.00
10.050	0.04	0.00	0.08	0.00	0.04	0	93.00
10.100	0.04	0.00	0.09	0.00	0.04	0	93.00
10.150	0.04	0.00	0.09	0.00	0.04	0	93.00
10.200	0.05	0.00	0.09	0.00	0.04	0	93.00
10.250	0.05	0.00	0.09	0.00	0.05	0	93.00
10.300	0.05	0.00	0.09	0.00	0.05	0	93.00
10.350	0.05	0.00	0.10	0.00	0.05	0	93.00
10.400	0.05	0.00	0.10	0.00	0.05	0	93.00
10.450	0.05	0.00	0.10	0.00	0.05	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
10.500	0.05	0.00	0.10	0.00	0.05	0	93.00
10.550	0.05	0.00	0.10	0.00	0.05	0	93.00
10.600	0.05	0.00	0.11	0.00	0.05	0	93.00
10.650	0.05	0.00	0.11	0.00	0.05	0	93.00
10.700	0.06	0.00	0.11	0.00	0.06	0	93.00
10.750	0.06	0.00	0.11	0.00	0.06	0	93.00
10.800	0.06	0.00	0.12	0.00	0.06	0	93.00
10.850	0.06	0.00	0.12	0.00	0.06	0	93.00
10.900	0.06	0.00	0.12	0.00	0.06	0	93.00
10.950	0.06	0.00	0.12	0.00	0.06	0	93.00
11.000	0.06	0.00	0.12	0.00	0.06	0	93.00
11.050	0.06	0.00	0.13	0.00	0.06	0	93.00
11.100	0.07	0.00	0.13	0.00	0.07	0	93.00
11.150	0.07	0.00	0.14	0.00	0.07	0	93.00
11.200	0.07	0.00	0.14	0.00	0.07	0	93.00
11.250	0.08	0.00	0.15	0.00	0.08	0	93.00
11.300	0.08	0.00	0.16	0.00	0.08	0	93.00
11.350	0.09	0.00	0.17	0.00	0.08	0	93.00
11.400	0.09	0.00	0.18	0.00	0.09	0	93.00
11.450	0.09	0.00	0.19	0.00	0.09	0	93.00
11.500	0.10	0.00	0.19	0.00	0.10	0	93.00
11.550	0.11	0.00	0.21	0.00	0.11	0	93.00
11.600	0.13	0.00	0.25	0.00	0.12	0	93.00
11.650	0.16	0.04	0.30	0.00	0.13	15	93.02
11.700	0.20	0.15	0.40	0.00	0.13	25	93.04
11.750	0.24	0.33	0.59	0.00	0.13	41	93.06
11.800	0.28	0.60	0.85	0.00	0.13	65	93.09
11.850	0.32	0.94	1.19	0.00	0.13	91	93.13
11.900	0.36	1.36	1.61	0.00	0.13	121	93.17
11.950	0.47	1.93	2.19	0.00	0.13	186	93.22
12.000	0.66	2.81	3.06	0.00	0.13	264	93.28
12.050	0.72	3.93	4.19	0.00	0.13	365	93.35
12.100	0.74	5.14	5.40	0.00	0.13	474	93.43
12.150	0.65	6.28	6.53	0.00	0.13	576	93.50
12.200	0.48	7.15	7.40	0.00	0.13	655	93.56
12.250	0.39	7.76	8.01	0.00	0.13	710	93.60
12.300	0.33	8.22	8.48	0.00	0.13	744	93.62
12.350	0.29	8.59	8.84	0.00	0.13	770	93.64
12.400	0.25	8.87	9.12	0.00	0.13	791	93.66
12.450	0.21	9.07	9.32	0.00	0.13	805	93.67
12.500	0.17	9.19	9.45	0.00	0.13	814	93.67
12.550	0.14	9.24	9.50	0.00	0.13	819	93.68

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
12.600	0.12	9.24	9.50	0.00	0.13	819	93.68
12.650	0.10	9.21	9.46	0.00	0.13	816	93.67
12.700	0.10	9.15	9.41	0.00	0.13	811	93.67
12.750	0.09	9.09	9.34	0.00	0.13	806	93.67
12.800	0.09	9.01	9.27	0.00	0.13	801	93.66
12.850	0.08	8.93	9.18	0.00	0.13	795	93.66
12.900	0.08	8.84	9.09	0.00	0.13	788	93.65
12.950	0.08	8.74	8.99	0.00	0.13	781	93.65
13.000	0.07	8.63	8.89	0.00	0.13	773	93.64
13.050	0.07	8.51	8.77	0.00	0.13	765	93.64
13.100	0.07	8.39	8.65	0.00	0.13	756	93.63
13.150	0.06	8.27	8.52	0.00	0.13	747	93.62
13.200	0.06	8.14	8.39	0.00	0.13	738	93.62
13.250	0.06	8.01	8.26	0.00	0.13	728	93.61
13.300	0.06	7.87	8.13	0.00	0.13	719	93.60
13.350	0.06	7.74	7.99	0.00	0.13	708	93.60
13.400	0.06	7.60	7.86	0.00	0.13	696	93.59
13.450	0.06	7.46	7.72	0.00	0.13	683	93.58
13.500	0.06	7.32	7.58	0.00	0.13	670	93.57
13.550	0.06	7.17	7.43	0.00	0.13	657	93.56
13.600	0.05	7.03	7.28	0.00	0.13	644	93.55
13.650	0.05	6.88	7.14	0.00	0.13	631	93.54
13.700	0.05	6.73	6.99	0.00	0.13	617	93.53
13.750	0.05	6.58	6.83	0.00	0.13	603	93.52
13.800	0.05	6.42	6.68	0.00	0.13	589	93.51
13.850	0.05	6.26	6.52	0.00	0.13	575	93.50
13.900	0.05	6.11	6.36	0.00	0.13	561	93.49
13.950	0.05	5.94	6.20	0.00	0.13	546	93.48
14.000	0.05	5.78	6.04	0.00	0.13	532	93.47
14.050	0.04	5.61	5.87	0.00	0.13	517	93.46
14.100	0.04	5.45	5.70	0.00	0.13	502	93.45
14.150	0.04	5.28	5.53	0.00	0.13	487	93.44
14.200	0.04	5.11	5.36	0.00	0.13	471	93.43
14.250	0.04	4.94	5.19	0.00	0.13	456	93.42
14.300	0.04	4.77	5.02	0.00	0.13	440	93.40
14.350	0.04	4.59	4.85	0.00	0.13	425	93.39
14.400	0.04	4.42	4.67	0.00	0.13	409	93.38
14.450	0.04	4.24	4.50	0.00	0.13	393	93.37
14.500	0.04	4.07	4.32	0.00	0.13	378	93.36
14.550	0.04	3.89	4.15	0.00	0.13	362	93.35
14.600	0.04	3.71	3.97	0.00	0.13	346	93.34
14.650	0.04	3.53	3.79	0.00	0.13	329	93.32

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
14.700	0.04	3.35	3.61	0.00	0.13	313	93.31
14.750	0.04	3.17	3.43	0.00	0.13	297	93.30
14.800	0.04	2.99	3.24	0.00	0.13	280	93.29
14.850	0.04	2.80	3.06	0.00	0.13	264	93.28
14.900	0.04	2.62	2.88	0.00	0.13	247	93.27
14.950	0.04	2.43	2.69	0.00	0.13	231	93.25
15.000	0.03	2.25	2.50	0.00	0.13	214	93.24
15.050	0.03	2.06	2.32	0.00	0.13	197	93.23
15.100	0.03	1.87	2.13	0.00	0.13	180	93.22
15.150	0.03	1.68	1.94	0.00	0.13	163	93.20
15.200	0.03	1.49	1.75	0.00	0.13	139	93.19
15.250	0.03	1.30	1.56	0.00	0.13	117	93.17
15.300	0.03	1.11	1.36	0.00	0.13	103	93.15
15.350	0.03	0.91	1.17	0.00	0.13	89	93.13
15.400	0.03	0.72	0.97	0.00	0.13	75	93.11
15.450	0.03	0.52	0.78	0.00	0.13	59	93.08
15.500	0.03	0.33	0.58	0.00	0.13	41	93.06
15.550	0.03	0.13	0.38	0.00	0.13	23	93.03
15.600	0.03	0.00	0.19	0.00	0.09	0	93.00
15.650	0.03	0.00	0.06	0.00	0.03	0	93.00
15.700	0.03	0.00	0.06	0.00	0.03	0	93.00
15.750	0.03	0.00	0.05	0.00	0.03	0	93.00
15.800	0.03	0.00	0.05	0.00	0.03	0	93.00
15.850	0.03	0.00	0.05	0.00	0.03	0	93.00
15.900	0.03	0.00	0.05	0.00	0.03	0	93.00
15.950	0.02	0.00	0.05	0.00	0.02	0	93.00
16.000	0.02	0.00	0.05	0.00	0.02	0	93.00
16.050	0.02	0.00	0.05	0.00	0.02	0	93.00
16.100	0.02	0.00	0.05	0.00	0.02	0	93.00
16.150	0.02	0.00	0.05	0.00	0.02	0	93.00
16.200	0.02	0.00	0.05	0.00	0.02	0	93.00
16.250	0.02	0.00	0.05	0.00	0.02	0	93.00
16.300	0.02	0.00	0.04	0.00	0.02	0	93.00
16.350	0.02	0.00	0.04	0.00	0.02	0	93.00
16.400	0.02	0.00	0.04	0.00	0.02	0	93.00
16.450	0.02	0.00	0.04	0.00	0.02	0	93.00
16.500	0.02	0.00	0.04	0.00	0.02	0	93.00
16.550	0.02	0.00	0.04	0.00	0.02	0	93.00
16.600	0.02	0.00	0.04	0.00	0.02	0	93.00
16.650	0.02	0.00	0.04	0.00	0.02	0	93.00
16.700	0.02	0.00	0.04	0.00	0.02	0	93.00
16.750	0.02	0.00	0.04	0.00	0.02	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
16.800	0.02	0.00	0.04	0.00	0.02	0	93.00
16.850	0.02	0.00	0.04	0.00	0.02	0	93.00
16.900	0.02	0.00	0.04	0.00	0.02	0	93.00
16.950	0.02	0.00	0.04	0.00	0.02	0	93.00
17.000	0.02	0.00	0.04	0.00	0.02	0	93.00
17.050	0.02	0.00	0.04	0.00	0.02	0	93.00
17.100	0.02	0.00	0.04	0.00	0.02	0	93.00
17.150	0.02	0.00	0.04	0.00	0.02	0	93.00
17.200	0.02	0.00	0.04	0.00	0.02	0	93.00
17.250	0.02	0.00	0.04	0.00	0.02	0	93.00
17.300	0.02	0.00	0.04	0.00	0.02	0	93.00
17.350	0.02	0.00	0.04	0.00	0.02	0	93.00
17.400	0.02	0.00	0.04	0.00	0.02	0	93.00
17.450	0.02	0.00	0.03	0.00	0.02	0	93.00
17.500	0.02	0.00	0.03	0.00	0.02	0	93.00
17.550	0.02	0.00	0.03	0.00	0.02	0	93.00
17.600	0.02	0.00	0.03	0.00	0.02	0	93.00
17.650	0.02	0.00	0.03	0.00	0.02	0	93.00
17.700	0.02	0.00	0.03	0.00	0.02	0	93.00
17.750	0.02	0.00	0.03	0.00	0.02	0	93.00
17.800	0.02	0.00	0.03	0.00	0.02	0	93.00
17.850	0.02	0.00	0.03	0.00	0.02	0	93.00
17.900	0.02	0.00	0.03	0.00	0.02	0	93.00
17.950	0.01	0.00	0.03	0.00	0.02	0	93.00
18.000	0.01	0.00	0.03	0.00	0.01	0	93.00
18.050	0.01	0.00	0.03	0.00	0.01	0	93.00
18.100	0.01	0.00	0.03	0.00	0.01	0	93.00
18.150	0.01	0.00	0.03	0.00	0.01	0	93.00
18.200	0.01	0.00	0.03	0.00	0.01	0	93.00
18.250	0.01	0.00	0.03	0.00	0.01	0	93.00
18.300	0.01	0.00	0.03	0.00	0.01	0	93.00
18.350	0.01	0.00	0.03	0.00	0.01	0	93.00
18.400	0.01	0.00	0.03	0.00	0.01	0	93.00
18.450	0.01	0.00	0.03	0.00	0.01	0	93.00
18.500	0.01	0.00	0.03	0.00	0.01	0	93.00
18.550	0.01	0.00	0.03	0.00	0.01	0	93.00
18.600	0.01	0.00	0.03	0.00	0.01	0	93.00
18.650	0.01	0.00	0.03	0.00	0.01	0	93.00
18.700	0.01	0.00	0.03	0.00	0.01	0	93.00
18.750	0.01	0.00	0.03	0.00	0.01	0	93.00
18.800	0.01	0.00	0.03	0.00	0.01	0	93.00
18.850	0.01	0.00	0.03	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
18.900	0.01	0.00	0.03	0.00	0.01	0	93.00
18.950	0.01	0.00	0.03	0.00	0.01	0	93.00
19.000	0.01	0.00	0.03	0.00	0.01	0	93.00
19.050	0.01	0.00	0.03	0.00	0.01	0	93.00
19.100	0.01	0.00	0.03	0.00	0.01	0	93.00
19.150	0.01	0.00	0.03	0.00	0.01	0	93.00
19.200	0.01	0.00	0.03	0.00	0.01	0	93.00
19.250	0.01	0.00	0.03	0.00	0.01	0	93.00
19.300	0.01	0.00	0.03	0.00	0.01	0	93.00
19.350	0.01	0.00	0.03	0.00	0.01	0	93.00
19.400	0.01	0.00	0.03	0.00	0.01	0	93.00
19.450	0.01	0.00	0.03	0.00	0.01	0	93.00
19.500	0.01	0.00	0.02	0.00	0.01	0	93.00
19.550	0.01	0.00	0.02	0.00	0.01	0	93.00
19.600	0.01	0.00	0.02	0.00	0.01	0	93.00
19.650	0.01	0.00	0.02	0.00	0.01	0	93.00
19.700	0.01	0.00	0.02	0.00	0.01	0	93.00
19.750	0.01	0.00	0.02	0.00	0.01	0	93.00
19.800	0.01	0.00	0.02	0.00	0.01	0	93.00
19.850	0.01	0.00	0.02	0.00	0.01	0	93.00
19.900	0.01	0.00	0.02	0.00	0.01	0	93.00
19.950	0.01	0.00	0.02	0.00	0.01	0	93.00
20.000	0.01	0.00	0.02	0.00	0.01	0	93.00
20.050	0.01	0.00	0.02	0.00	0.01	0	93.00
20.100	0.01	0.00	0.02	0.00	0.01	0	93.00
20.150	0.01	0.00	0.02	0.00	0.01	0	93.00
20.200	0.01	0.00	0.02	0.00	0.01	0	93.00
20.250	0.01	0.00	0.02	0.00	0.01	0	93.00
20.300	0.01	0.00	0.02	0.00	0.01	0	93.00
20.350	0.01	0.00	0.02	0.00	0.01	0	93.00
20.400	0.01	0.00	0.02	0.00	0.01	0	93.00
20.450	0.01	0.00	0.02	0.00	0.01	0	93.00
20.500	0.01	0.00	0.02	0.00	0.01	0	93.00
20.550	0.01	0.00	0.02	0.00	0.01	0	93.00
20.600	0.01	0.00	0.02	0.00	0.01	0	93.00
20.650	0.01	0.00	0.02	0.00	0.01	0	93.00
20.700	0.01	0.00	0.02	0.00	0.01	0	93.00
20.750	0.01	0.00	0.02	0.00	0.01	0	93.00
20.800	0.01	0.00	0.02	0.00	0.01	0	93.00
20.850	0.01	0.00	0.02	0.00	0.01	0	93.00
20.900	0.01	0.00	0.02	0.00	0.01	0	93.00
20.950	0.01	0.00	0.02	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
21.000	0.01	0.00	0.02	0.00	0.01	0	93.00
21.050	0.01	0.00	0.02	0.00	0.01	0	93.00
21.100	0.01	0.00	0.02	0.00	0.01	0	93.00
21.150	0.01	0.00	0.02	0.00	0.01	0	93.00
21.200	0.01	0.00	0.02	0.00	0.01	0	93.00
21.250	0.01	0.00	0.02	0.00	0.01	0	93.00
21.300	0.01	0.00	0.02	0.00	0.01	0	93.00
21.350	0.01	0.00	0.02	0.00	0.01	0	93.00
21.400	0.01	0.00	0.02	0.00	0.01	0	93.00
21.450	0.01	0.00	0.02	0.00	0.01	0	93.00
21.500	0.01	0.00	0.02	0.00	0.01	0	93.00
21.550	0.01	0.00	0.02	0.00	0.01	0	93.00
21.600	0.01	0.00	0.02	0.00	0.01	0	93.00
21.650	0.01	0.00	0.02	0.00	0.01	0	93.00
21.700	0.01	0.00	0.02	0.00	0.01	0	93.00
21.750	0.01	0.00	0.02	0.00	0.01	0	93.00
21.800	0.01	0.00	0.02	0.00	0.01	0	93.00
21.850	0.01	0.00	0.02	0.00	0.01	0	93.00
21.900	0.01	0.00	0.02	0.00	0.01	0	93.00
21.950	0.01	0.00	0.02	0.00	0.01	0	93.00
22.000	0.01	0.00	0.02	0.00	0.01	0	93.00
22.050	0.01	0.00	0.02	0.00	0.01	0	93.00
22.100	0.01	0.00	0.02	0.00	0.01	0	93.00
22.150	0.01	0.00	0.02	0.00	0.01	0	93.00
22.200	0.01	0.00	0.02	0.00	0.01	0	93.00
22.250	0.01	0.00	0.02	0.00	0.01	0	93.00
22.300	0.01	0.00	0.02	0.00	0.01	0	93.00
22.350	0.01	0.00	0.02	0.00	0.01	0	93.00
22.400	0.01	0.00	0.02	0.00	0.01	0	93.00
22.450	0.01	0.00	0.02	0.00	0.01	0	93.00
22.500	0.01	0.00	0.02	0.00	0.01	0	93.00
22.550	0.01	0.00	0.02	0.00	0.01	0	93.00
22.600	0.01	0.00	0.02	0.00	0.01	0	93.00
22.650	0.01	0.00	0.02	0.00	0.01	0	93.00
22.700	0.01	0.00	0.02	0.00	0.01	0	93.00
22.750	0.01	0.00	0.02	0.00	0.01	0	93.00
22.800	0.01	0.00	0.02	0.00	0.01	0	93.00
22.850	0.01	0.00	0.02	0.00	0.01	0	93.00
22.900	0.01	0.00	0.02	0.00	0.01	0	93.00
22.950	0.01	0.00	0.02	0.00	0.01	0	93.00
23.000	0.01	0.00	0.02	0.00	0.01	0	93.00
23.050	0.01	0.00	0.02	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
23.100	0.01	0.00	0.02	0.00	0.01	0	93.00
23.150	0.01	0.00	0.02	0.00	0.01	0	93.00
23.200	0.01	0.00	0.02	0.00	0.01	0	93.00
23.250	0.01	0.00	0.02	0.00	0.01	0	93.00
23.300	0.01	0.00	0.02	0.00	0.01	0	93.00
23.350	0.01	0.00	0.02	0.00	0.01	0	93.00
23.400	0.01	0.00	0.02	0.00	0.01	0	93.00
23.450	0.01	0.00	0.02	0.00	0.01	0	93.00
23.500	0.01	0.00	0.02	0.00	0.01	0	93.00
23.550	0.01	0.00	0.02	0.00	0.01	0	93.00
23.600	0.01	0.00	0.02	0.00	0.01	0	93.00
23.650	0.01	0.00	0.02	0.00	0.01	0	93.00
23.700	0.01	0.00	0.02	0.00	0.01	0	93.00
23.750	0.01	0.00	0.02	0.00	0.01	0	93.00
23.800	0.01	0.00	0.02	0.00	0.01	0	93.00
23.850	0.01	0.00	0.02	0.00	0.01	0	93.00
23.900	0.01	0.00	0.02	0.00	0.01	0	93.00
23.950	0.01	0.00	0.02	0.00	0.01	0	93.00
24.000	0.01	0.00	0.02	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
0.000	0.00	0.00	0.13	0.00	0.06	0	93.00
0.050	0.00	0.00	0.00	0.00	0.00	0	93.00
0.100	0.00	0.00	0.00	0.00	0.00	0	93.00
0.150	0.00	0.00	0.00	0.00	0.00	0	93.00
0.200	0.00	0.00	0.00	0.00	0.00	0	93.00
0.250	0.00	0.00	0.00	0.00	0.00	0	93.00
0.300	0.00	0.00	0.00	0.00	0.00	0	93.00
0.350	0.00	0.00	0.00	0.00	0.00	0	93.00
0.400	0.00	0.00	0.00	0.00	0.00	0	93.00
0.450	0.00	0.00	0.00	0.00	0.00	0	93.00
0.500	0.00	0.00	0.00	0.00	0.00	0	93.00
0.550	0.00	0.00	0.00	0.00	0.00	0	93.00
0.600	0.00	0.00	0.00	0.00	0.00	0	93.00
0.650	0.00	0.00	0.00	0.00	0.00	0	93.00
0.700	0.00	0.00	0.00	0.00	0.00	0	93.00
0.750	0.00	0.00	0.00	0.00	0.00	0	93.00
0.800	0.00	0.00	0.00	0.00	0.00	0	93.00
0.850	0.00	0.00	0.00	0.00	0.00	0	93.00
0.900	0.00	0.00	0.00	0.00	0.00	0	93.00
0.950	0.00	0.00	0.00	0.00	0.00	0	93.00
1.000	0.00	0.00	0.00	0.00	0.00	0	93.00
1.050	0.00	0.00	0.00	0.00	0.00	0	93.00
1.100	0.00	0.00	0.00	0.00	0.00	0	93.00
1.150	0.00	0.00	0.00	0.00	0.00	0	93.00
1.200	0.00	0.00	0.01	0.00	0.00	0	93.00
1.250	0.00	0.00	0.01	0.00	0.00	0	93.00
1.300	0.00	0.00	0.01	0.00	0.00	0	93.00
1.350	0.00	0.00	0.01	0.00	0.00	0	93.00
1.400	0.00	0.00	0.01	0.00	0.00	0	93.00
1.450	0.00	0.00	0.01	0.00	0.00	0	93.00
1.500	0.00	0.00	0.01	0.00	0.00	0	93.00
1.550	0.00	0.00	0.01	0.00	0.00	0	93.00
1.600	0.00	0.00	0.01	0.00	0.00	0	93.00
1.650	0.00	0.00	0.01	0.00	0.00	0	93.00
1.700	0.00	0.00	0.01	0.00	0.00	0	93.00
1.750	0.00	0.00	0.01	0.00	0.00	0	93.00
1.800	0.01	0.00	0.01	0.00	0.01	0	93.00
1.850	0.01	0.00	0.01	0.00	0.01	0	93.00
1.900	0.01	0.00	0.01	0.00	0.01	0	93.00
1.950	0.01	0.00	0.01	0.00	0.01	0	93.00
2.000	0.01	0.00	0.01	0.00	0.01	0	93.00
2.050	0.01	0.00	0.01	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
2.100	0.01	0.00	0.01	0.00	0.01	0	93.00
2.150	0.01	0.00	0.01	0.00	0.01	0	93.00
2.200	0.01	0.00	0.01	0.00	0.01	0	93.00
2.250	0.01	0.00	0.01	0.00	0.01	0	93.00
2.300	0.01	0.00	0.01	0.00	0.01	0	93.00
2.350	0.01	0.00	0.01	0.00	0.01	0	93.00
2.400	0.01	0.00	0.01	0.00	0.01	0	93.00
2.450	0.01	0.00	0.01	0.00	0.01	0	93.00
2.500	0.01	0.00	0.01	0.00	0.01	0	93.00
2.550	0.01	0.00	0.01	0.00	0.01	0	93.00
2.600	0.01	0.00	0.01	0.00	0.01	0	93.00
2.650	0.01	0.00	0.02	0.00	0.01	0	93.00
2.700	0.01	0.00	0.02	0.00	0.01	0	93.00
2.750	0.01	0.00	0.02	0.00	0.01	0	93.00
2.800	0.01	0.00	0.02	0.00	0.01	0	93.00
2.850	0.01	0.00	0.02	0.00	0.01	0	93.00
2.900	0.01	0.00	0.02	0.00	0.01	0	93.00
2.950	0.01	0.00	0.02	0.00	0.01	0	93.00
3.000	0.01	0.00	0.02	0.00	0.01	0	93.00
3.050	0.01	0.00	0.02	0.00	0.01	0	93.00
3.100	0.01	0.00	0.02	0.00	0.01	0	93.00
3.150	0.01	0.00	0.02	0.00	0.01	0	93.00
3.200	0.01	0.00	0.02	0.00	0.01	0	93.00
3.250	0.01	0.00	0.02	0.00	0.01	0	93.00
3.300	0.01	0.00	0.02	0.00	0.01	0	93.00
3.350	0.01	0.00	0.02	0.00	0.01	0	93.00
3.400	0.01	0.00	0.02	0.00	0.01	0	93.00
3.450	0.01	0.00	0.02	0.00	0.01	0	93.00
3.500	0.01	0.00	0.02	0.00	0.01	0	93.00
3.550	0.01	0.00	0.02	0.00	0.01	0	93.00
3.600	0.01	0.00	0.02	0.00	0.01	0	93.00
3.650	0.01	0.00	0.02	0.00	0.01	0	93.00
3.700	0.01	0.00	0.02	0.00	0.01	0	93.00
3.750	0.01	0.00	0.02	0.00	0.01	0	93.00
3.800	0.01	0.00	0.02	0.00	0.01	0	93.00
3.850	0.01	0.00	0.02	0.00	0.01	0	93.00
3.900	0.01	0.00	0.02	0.00	0.01	0	93.00
3.950	0.01	0.00	0.02	0.00	0.01	0	93.00
4.000	0.01	0.00	0.02	0.00	0.01	0	93.00
4.050	0.01	0.00	0.02	0.00	0.01	0	93.00
4.100	0.01	0.00	0.02	0.00	0.01	0	93.00
4.150	0.01	0.00	0.02	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
4.200	0.01	0.00	0.02	0.00	0.01	0	93.00
4.250	0.01	0.00	0.02	0.00	0.01	0	93.00
4.300	0.01	0.00	0.02	0.00	0.01	0	93.00
4.350	0.01	0.00	0.02	0.00	0.01	0	93.00
4.400	0.01	0.00	0.02	0.00	0.01	0	93.00
4.450	0.01	0.00	0.02	0.00	0.01	0	93.00
4.500	0.01	0.00	0.03	0.00	0.01	0	93.00
4.550	0.01	0.00	0.03	0.00	0.01	0	93.00
4.600	0.01	0.00	0.03	0.00	0.01	0	93.00
4.650	0.01	0.00	0.03	0.00	0.01	0	93.00
4.700	0.01	0.00	0.03	0.00	0.01	0	93.00
4.750	0.01	0.00	0.03	0.00	0.01	0	93.00
4.800	0.01	0.00	0.03	0.00	0.01	0	93.00
4.850	0.01	0.00	0.03	0.00	0.01	0	93.00
4.900	0.01	0.00	0.03	0.00	0.01	0	93.00
4.950	0.01	0.00	0.03	0.00	0.01	0	93.00
5.000	0.01	0.00	0.03	0.00	0.01	0	93.00
5.050	0.01	0.00	0.03	0.00	0.01	0	93.00
5.100	0.01	0.00	0.03	0.00	0.01	0	93.00
5.150	0.01	0.00	0.03	0.00	0.01	0	93.00
5.200	0.01	0.00	0.03	0.00	0.01	0	93.00
5.250	0.01	0.00	0.03	0.00	0.01	0	93.00
5.300	0.01	0.00	0.03	0.00	0.01	0	93.00
5.350	0.01	0.00	0.03	0.00	0.01	0	93.00
5.400	0.01	0.00	0.03	0.00	0.01	0	93.00
5.450	0.01	0.00	0.03	0.00	0.01	0	93.00
5.500	0.02	0.00	0.03	0.00	0.01	0	93.00
5.550	0.02	0.00	0.03	0.00	0.02	0	93.00
5.600	0.02	0.00	0.03	0.00	0.02	0	93.00
5.650	0.02	0.00	0.03	0.00	0.02	0	93.00
5.700	0.02	0.00	0.03	0.00	0.02	0	93.00
5.750	0.02	0.00	0.03	0.00	0.02	0	93.00
5.800	0.02	0.00	0.03	0.00	0.02	0	93.00
5.850	0.02	0.00	0.03	0.00	0.02	0	93.00
5.900	0.02	0.00	0.03	0.00	0.02	0	93.00
5.950	0.02	0.00	0.03	0.00	0.02	0	93.00
6.000	0.02	0.00	0.03	0.00	0.02	0	93.00
6.050	0.02	0.00	0.03	0.00	0.02	0	93.00
6.100	0.02	0.00	0.03	0.00	0.02	0	93.00
6.150	0.02	0.00	0.03	0.00	0.02	0	93.00
6.200	0.02	0.00	0.03	0.00	0.02	0	93.00
6.250	0.02	0.00	0.03	0.00	0.02	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
6.300	0.02	0.00	0.03	0.00	0.02	0	93.00
6.350	0.02	0.00	0.04	0.00	0.02	0	93.00
6.400	0.02	0.00	0.04	0.00	0.02	0	93.00
6.450	0.02	0.00	0.04	0.00	0.02	0	93.00
6.500	0.02	0.00	0.04	0.00	0.02	0	93.00
6.550	0.02	0.00	0.04	0.00	0.02	0	93.00
6.600	0.02	0.00	0.04	0.00	0.02	0	93.00
6.650	0.02	0.00	0.04	0.00	0.02	0	93.00
6.700	0.02	0.00	0.04	0.00	0.02	0	93.00
6.750	0.02	0.00	0.04	0.00	0.02	0	93.00
6.800	0.02	0.00	0.04	0.00	0.02	0	93.00
6.850	0.02	0.00	0.04	0.00	0.02	0	93.00
6.900	0.02	0.00	0.04	0.00	0.02	0	93.00
6.950	0.02	0.00	0.04	0.00	0.02	0	93.00
7.000	0.02	0.00	0.04	0.00	0.02	0	93.00
7.050	0.02	0.00	0.04	0.00	0.02	0	93.00
7.100	0.02	0.00	0.04	0.00	0.02	0	93.00
7.150	0.02	0.00	0.04	0.00	0.02	0	93.00
7.200	0.02	0.00	0.05	0.00	0.02	0	93.00
7.250	0.02	0.00	0.05	0.00	0.02	0	93.00
7.300	0.02	0.00	0.05	0.00	0.02	0	93.00
7.350	0.02	0.00	0.05	0.00	0.02	0	93.00
7.400	0.02	0.00	0.05	0.00	0.02	0	93.00
7.450	0.02	0.00	0.05	0.00	0.02	0	93.00
7.500	0.02	0.00	0.05	0.00	0.02	0	93.00
7.550	0.02	0.00	0.05	0.00	0.02	0	93.00
7.600	0.03	0.00	0.05	0.00	0.03	0	93.00
7.650	0.03	0.00	0.05	0.00	0.03	0	93.00
7.700	0.03	0.00	0.05	0.00	0.03	0	93.00
7.750	0.03	0.00	0.05	0.00	0.03	0	93.00
7.800	0.03	0.00	0.05	0.00	0.03	0	93.00
7.850	0.03	0.00	0.05	0.00	0.03	0	93.00
7.900	0.03	0.00	0.05	0.00	0.03	0	93.00
7.950	0.03	0.00	0.05	0.00	0.03	0	93.00
8.000	0.03	0.00	0.05	0.00	0.03	0	93.00
8.050	0.03	0.00	0.06	0.00	0.03	0	93.00
8.100	0.03	0.00	0.06	0.00	0.03	0	93.00
8.150	0.03	0.00	0.06	0.00	0.03	0	93.00
8.200	0.03	0.00	0.06	0.00	0.03	0	93.00
8.250	0.03	0.00	0.06	0.00	0.03	0	93.00
8.300	0.03	0.00	0.06	0.00	0.03	0	93.00
8.350	0.03	0.00	0.06	0.00	0.03	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
8.400	0.03	0.00	0.06	0.00	0.03	0	93.00
8.450	0.03	0.00	0.07	0.00	0.03	0	93.00
8.500	0.03	0.00	0.07	0.00	0.03	0	93.00
8.550	0.03	0.00	0.07	0.00	0.03	0	93.00
8.600	0.03	0.00	0.07	0.00	0.03	0	93.00
8.650	0.04	0.00	0.07	0.00	0.04	0	93.00
8.700	0.04	0.00	0.07	0.00	0.04	0	93.00
8.750	0.04	0.00	0.07	0.00	0.04	0	93.00
8.800	0.04	0.00	0.07	0.00	0.04	0	93.00
8.850	0.04	0.00	0.08	0.00	0.04	0	93.00
8.900	0.04	0.00	0.08	0.00	0.04	0	93.00
8.950	0.04	0.00	0.08	0.00	0.04	0	93.00
9.000	0.04	0.00	0.08	0.00	0.04	0	93.00
9.050	0.04	0.00	0.08	0.00	0.04	0	93.00
9.100	0.04	0.00	0.08	0.00	0.04	0	93.00
9.150	0.04	0.00	0.08	0.00	0.04	0	93.00
9.200	0.04	0.00	0.09	0.00	0.04	0	93.00
9.250	0.04	0.00	0.09	0.00	0.04	0	93.00
9.300	0.04	0.00	0.09	0.00	0.04	0	93.00
9.350	0.04	0.00	0.09	0.00	0.04	0	93.00
9.400	0.05	0.00	0.09	0.00	0.05	0	93.00
9.450	0.05	0.00	0.09	0.00	0.05	0	93.00
9.500	0.05	0.00	0.09	0.00	0.05	0	93.00
9.550	0.05	0.00	0.09	0.00	0.05	0	93.00
9.600	0.05	0.00	0.10	0.00	0.05	0	93.00
9.650	0.05	0.00	0.10	0.00	0.05	0	93.00
9.700	0.05	0.00	0.10	0.00	0.05	0	93.00
9.750	0.05	0.00	0.10	0.00	0.05	0	93.00
9.800	0.05	0.00	0.10	0.00	0.05	0	93.00
9.850	0.05	0.00	0.10	0.00	0.05	0	93.00
9.900	0.05	0.00	0.10	0.00	0.05	0	93.00
9.950	0.05	0.00	0.11	0.00	0.05	0	93.00
10.000	0.05	0.00	0.11	0.00	0.05	0	93.00
10.050	0.05	0.00	0.11	0.00	0.05	0	93.00
10.100	0.06	0.00	0.11	0.00	0.05	0	93.00
10.150	0.06	0.00	0.11	0.00	0.06	0	93.00
10.200	0.06	0.00	0.11	0.00	0.06	0	93.00
10.250	0.06	0.00	0.12	0.00	0.06	0	93.00
10.300	0.06	0.00	0.12	0.00	0.06	0	93.00
10.350	0.06	0.00	0.12	0.00	0.06	0	93.00
10.400	0.06	0.00	0.13	0.00	0.06	0	93.00
10.450	0.06	0.00	0.13	0.00	0.06	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
10.500	0.07	0.00	0.13	0.00	0.07	0	93.00
10.550	0.07	0.00	0.13	0.00	0.07	0	93.00
10.600	0.07	0.00	0.14	0.00	0.07	0	93.00
10.650	0.07	0.00	0.14	0.00	0.07	0	93.00
10.700	0.07	0.00	0.14	0.00	0.07	0	93.00
10.750	0.07	0.00	0.14	0.00	0.07	0	93.00
10.800	0.07	0.00	0.15	0.00	0.07	0	93.00
10.850	0.08	0.00	0.15	0.00	0.08	0	93.00
10.900	0.08	0.00	0.15	0.00	0.08	0	93.00
10.950	0.08	0.00	0.16	0.00	0.08	0	93.00
11.000	0.08	0.00	0.16	0.00	0.08	0	93.00
11.050	0.08	0.00	0.16	0.00	0.08	0	93.00
11.100	0.09	0.00	0.17	0.00	0.08	0	93.00
11.150	0.09	0.00	0.18	0.00	0.09	0	93.00
11.200	0.10	0.00	0.18	0.00	0.09	0	93.00
11.250	0.10	0.00	0.19	0.00	0.10	0	93.00
11.300	0.11	0.00	0.21	0.00	0.10	0	93.00
11.350	0.11	0.00	0.22	0.00	0.11	0	93.00
11.400	0.12	0.00	0.23	0.00	0.11	0	93.00
11.450	0.12	0.00	0.24	0.00	0.12	0	93.00
11.500	0.13	0.00	0.25	0.00	0.12	0	93.00
11.550	0.14	0.01	0.27	0.00	0.13	13	93.02
11.600	0.17	0.07	0.33	0.00	0.13	18	93.03
11.650	0.21	0.19	0.45	0.00	0.13	29	93.04
11.700	0.26	0.40	0.66	0.00	0.13	47	93.07
11.750	0.30	0.70	0.96	0.00	0.13	74	93.11
11.800	0.36	1.11	1.36	0.00	0.13	103	93.15
11.850	0.40	1.61	1.87	0.00	0.13	157	93.20
11.900	0.46	2.22	2.47	0.00	0.13	211	93.24
11.950	0.60	3.02	3.28	0.00	0.13	283	93.29
12.000	0.83	4.20	4.46	0.00	0.13	389	93.37
12.050	0.92	5.70	5.95	0.00	0.13	524	93.46
12.100	0.94	7.30	7.56	0.00	0.13	669	93.57
12.150	0.83	8.82	9.07	0.00	0.13	787	93.65
12.200	0.60	9.99	10.25	0.00	0.13	911	93.71
12.250	0.49	10.03	11.09	0.00	0.53	950	93.72
12.300	0.42	10.03	10.95	0.00	0.46	944	93.72
12.350	0.37	10.03	10.82	0.00	0.39	938	93.72
12.400	0.31	10.03	10.71	0.00	0.34	934	93.72
12.450	0.27	10.03	10.61	0.00	0.29	929	93.72
12.500	0.21	10.03	10.51	0.00	0.24	925	93.71
12.550	0.18	10.03	10.43	0.00	0.20	921	93.71

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
12.600	0.15	10.03	10.36	0.00	0.16	918	93.71
12.650	0.13	10.03	10.31	0.00	0.14	916	93.71
12.700	0.12	10.03	10.29	0.00	0.13	915	93.71
12.750	0.12	10.02	10.28	0.00	0.13	913	93.71
12.800	0.11	9.99	10.25	0.00	0.13	911	93.71
12.850	0.11	9.96	10.21	0.00	0.13	908	93.71
12.900	0.10	9.91	10.17	0.00	0.13	903	93.71
12.950	0.10	9.85	10.11	0.00	0.13	898	93.70
13.000	0.09	9.79	10.04	0.00	0.13	892	93.70
13.050	0.09	9.71	9.96	0.00	0.13	884	93.70
13.100	0.08	9.62	9.88	0.00	0.13	872	93.69
13.150	0.08	9.53	9.79	0.00	0.13	859	93.69
13.200	0.08	9.44	9.69	0.00	0.13	845	93.69
13.250	0.08	9.34	9.60	0.00	0.13	831	93.68
13.300	0.08	9.24	9.50	0.00	0.13	819	93.67
13.350	0.08	9.14	9.39	0.00	0.13	810	93.67
13.400	0.07	9.03	9.29	0.00	0.13	802	93.66
13.450	0.07	8.92	9.18	0.00	0.13	794	93.66
13.500	0.07	8.81	9.07	0.00	0.13	786	93.65
13.550	0.07	8.70	8.95	0.00	0.13	778	93.65
13.600	0.07	8.58	8.84	0.00	0.13	770	93.64
13.650	0.07	8.46	8.72	0.00	0.13	761	93.63
13.700	0.07	8.34	8.59	0.00	0.13	752	93.63
13.750	0.06	8.21	8.47	0.00	0.13	743	93.62
13.800	0.06	8.08	8.34	0.00	0.13	734	93.61
13.850	0.06	7.95	8.21	0.00	0.13	725	93.61
13.900	0.06	7.82	8.08	0.00	0.13	715	93.60
13.950	0.06	7.68	7.94	0.00	0.13	703	93.59
14.000	0.06	7.55	7.80	0.00	0.13	691	93.58
14.050	0.06	7.40	7.66	0.00	0.13	678	93.57
14.100	0.06	7.26	7.52	0.00	0.13	665	93.57
14.150	0.05	7.12	7.37	0.00	0.13	652	93.56
14.200	0.05	6.97	7.22	0.00	0.13	639	93.55
14.250	0.05	6.82	7.08	0.00	0.13	625	93.54
14.300	0.05	6.67	6.93	0.00	0.13	612	93.53
14.350	0.05	6.52	6.78	0.00	0.13	598	93.52
14.400	0.05	6.37	6.62	0.00	0.13	585	93.51
14.450	0.05	6.21	6.47	0.00	0.13	571	93.50
14.500	0.05	6.06	6.32	0.00	0.13	557	93.49
14.550	0.05	5.90	6.16	0.00	0.13	543	93.48
14.600	0.05	5.75	6.00	0.00	0.13	529	93.47
14.650	0.05	5.59	5.84	0.00	0.13	514	93.46

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
14.700	0.05	5.43	5.68	0.00	0.13	500	93.45
14.750	0.05	5.27	5.52	0.00	0.13	486	93.44
14.800	0.05	5.10	5.36	0.00	0.13	471	93.43
14.850	0.05	4.94	5.20	0.00	0.13	456	93.42
14.900	0.05	4.77	5.03	0.00	0.13	441	93.40
14.950	0.04	4.61	4.86	0.00	0.13	426	93.39
15.000	0.04	4.44	4.70	0.00	0.13	411	93.38
15.050	0.04	4.27	4.53	0.00	0.13	396	93.37
15.100	0.04	4.10	4.36	0.00	0.13	381	93.36
15.150	0.04	3.93	4.19	0.00	0.13	365	93.35
15.200	0.04	3.76	4.01	0.00	0.13	350	93.34
15.250	0.04	3.58	3.84	0.00	0.13	334	93.33
15.300	0.04	3.41	3.66	0.00	0.13	318	93.32
15.350	0.04	3.23	3.48	0.00	0.13	302	93.30
15.400	0.04	3.05	3.31	0.00	0.13	286	93.29
15.450	0.04	2.87	3.13	0.00	0.13	270	93.28
15.500	0.04	2.69	2.95	0.00	0.13	254	93.27
15.550	0.04	2.51	2.76	0.00	0.13	237	93.26
15.600	0.04	2.32	2.58	0.00	0.13	221	93.25
15.650	0.04	2.14	2.40	0.00	0.13	204	93.23
15.700	0.03	1.95	2.21	0.00	0.13	187	93.22
15.750	0.03	1.77	2.02	0.00	0.13	170	93.21
15.800	0.03	1.58	1.83	0.00	0.13	152	93.20
15.850	0.03	1.39	1.64	0.00	0.13	125	93.18
15.900	0.03	1.20	1.45	0.00	0.13	109	93.16
15.950	0.03	1.00	1.26	0.00	0.13	95	93.14
16.000	0.03	0.81	1.06	0.00	0.13	81	93.12
16.050	0.03	0.61	0.87	0.00	0.13	67	93.10
16.100	0.03	0.42	0.67	0.00	0.13	49	93.07
16.150	0.03	0.22	0.48	0.00	0.13	31	93.04
16.200	0.03	0.02	0.28	0.00	0.13	14	93.02
16.250	0.03	0.00	0.08	0.00	0.04	0	93.00
16.300	0.03	0.00	0.06	0.00	0.03	0	93.00
16.350	0.03	0.00	0.06	0.00	0.03	0	93.00
16.400	0.03	0.00	0.06	0.00	0.03	0	93.00
16.450	0.03	0.00	0.06	0.00	0.03	0	93.00
16.500	0.03	0.00	0.05	0.00	0.03	0	93.00
16.550	0.03	0.00	0.05	0.00	0.03	0	93.00
16.600	0.03	0.00	0.05	0.00	0.03	0	93.00
16.650	0.03	0.00	0.05	0.00	0.03	0	93.00
16.700	0.03	0.00	0.05	0.00	0.03	0	93.00
16.750	0.03	0.00	0.05	0.00	0.03	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
16.800	0.03	0.00	0.05	0.00	0.03	0	93.00
16.850	0.03	0.00	0.05	0.00	0.03	0	93.00
16.900	0.02	0.00	0.05	0.00	0.03	0	93.00
16.950	0.02	0.00	0.05	0.00	0.02	0	93.00
17.000	0.02	0.00	0.05	0.00	0.02	0	93.00
17.050	0.02	0.00	0.05	0.00	0.02	0	93.00
17.100	0.02	0.00	0.05	0.00	0.02	0	93.00
17.150	0.02	0.00	0.05	0.00	0.02	0	93.00
17.200	0.02	0.00	0.05	0.00	0.02	0	93.00
17.250	0.02	0.00	0.05	0.00	0.02	0	93.00
17.300	0.02	0.00	0.05	0.00	0.02	0	93.00
17.350	0.02	0.00	0.05	0.00	0.02	0	93.00
17.400	0.02	0.00	0.04	0.00	0.02	0	93.00
17.450	0.02	0.00	0.04	0.00	0.02	0	93.00
17.500	0.02	0.00	0.04	0.00	0.02	0	93.00
17.550	0.02	0.00	0.04	0.00	0.02	0	93.00
17.600	0.02	0.00	0.04	0.00	0.02	0	93.00
17.650	0.02	0.00	0.04	0.00	0.02	0	93.00
17.700	0.02	0.00	0.04	0.00	0.02	0	93.00
17.750	0.02	0.00	0.04	0.00	0.02	0	93.00
17.800	0.02	0.00	0.04	0.00	0.02	0	93.00
17.850	0.02	0.00	0.04	0.00	0.02	0	93.00
17.900	0.02	0.00	0.04	0.00	0.02	0	93.00
17.950	0.02	0.00	0.04	0.00	0.02	0	93.00
18.000	0.02	0.00	0.04	0.00	0.02	0	93.00
18.050	0.02	0.00	0.04	0.00	0.02	0	93.00
18.100	0.02	0.00	0.04	0.00	0.02	0	93.00
18.150	0.02	0.00	0.04	0.00	0.02	0	93.00
18.200	0.02	0.00	0.04	0.00	0.02	0	93.00
18.250	0.02	0.00	0.04	0.00	0.02	0	93.00
18.300	0.02	0.00	0.04	0.00	0.02	0	93.00
18.350	0.02	0.00	0.04	0.00	0.02	0	93.00
18.400	0.02	0.00	0.04	0.00	0.02	0	93.00
18.450	0.02	0.00	0.04	0.00	0.02	0	93.00
18.500	0.02	0.00	0.04	0.00	0.02	0	93.00
18.550	0.02	0.00	0.03	0.00	0.02	0	93.00
18.600	0.02	0.00	0.03	0.00	0.02	0	93.00
18.650	0.02	0.00	0.03	0.00	0.02	0	93.00
18.700	0.02	0.00	0.03	0.00	0.02	0	93.00
18.750	0.02	0.00	0.03	0.00	0.02	0	93.00
18.800	0.02	0.00	0.03	0.00	0.02	0	93.00
18.850	0.02	0.00	0.03	0.00	0.02	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
18.900	0.02	0.00	0.03	0.00	0.02	0	93.00
18.950	0.02	0.00	0.03	0.00	0.02	0	93.00
19.000	0.02	0.00	0.03	0.00	0.02	0	93.00
19.050	0.02	0.00	0.03	0.00	0.02	0	93.00
19.100	0.02	0.00	0.03	0.00	0.02	0	93.00
19.150	0.02	0.00	0.03	0.00	0.02	0	93.00
19.200	0.02	0.00	0.03	0.00	0.02	0	93.00
19.250	0.02	0.00	0.03	0.00	0.02	0	93.00
19.300	0.02	0.00	0.03	0.00	0.02	0	93.00
19.350	0.02	0.00	0.03	0.00	0.02	0	93.00
19.400	0.02	0.00	0.03	0.00	0.02	0	93.00
19.450	0.02	0.00	0.03	0.00	0.02	0	93.00
19.500	0.02	0.00	0.03	0.00	0.02	0	93.00
19.550	0.02	0.00	0.03	0.00	0.02	0	93.00
19.600	0.02	0.00	0.03	0.00	0.02	0	93.00
19.650	0.02	0.00	0.03	0.00	0.02	0	93.00
19.700	0.02	0.00	0.03	0.00	0.02	0	93.00
19.750	0.02	0.00	0.03	0.00	0.02	0	93.00
19.800	0.02	0.00	0.03	0.00	0.02	0	93.00
19.850	0.02	0.00	0.03	0.00	0.02	0	93.00
19.900	0.02	0.00	0.03	0.00	0.02	0	93.00
19.950	0.02	0.00	0.03	0.00	0.02	0	93.00
20.000	0.01	0.00	0.03	0.00	0.01	0	93.00
20.050	0.01	0.00	0.03	0.00	0.01	0	93.00
20.100	0.01	0.00	0.03	0.00	0.01	0	93.00
20.150	0.01	0.00	0.03	0.00	0.01	0	93.00
20.200	0.01	0.00	0.03	0.00	0.01	0	93.00
20.250	0.01	0.00	0.03	0.00	0.01	0	93.00
20.300	0.01	0.00	0.03	0.00	0.01	0	93.00
20.350	0.01	0.00	0.03	0.00	0.01	0	93.00
20.400	0.01	0.00	0.03	0.00	0.01	0	93.00
20.450	0.01	0.00	0.03	0.00	0.01	0	93.00
20.500	0.01	0.00	0.03	0.00	0.01	0	93.00
20.550	0.01	0.00	0.03	0.00	0.01	0	93.00
20.600	0.01	0.00	0.03	0.00	0.01	0	93.00
20.650	0.01	0.00	0.03	0.00	0.01	0	93.00
20.700	0.01	0.00	0.03	0.00	0.01	0	93.00
20.750	0.01	0.00	0.03	0.00	0.01	0	93.00
20.800	0.01	0.00	0.03	0.00	0.01	0	93.00
20.850	0.01	0.00	0.03	0.00	0.01	0	93.00
20.900	0.01	0.00	0.03	0.00	0.01	0	93.00
20.950	0.01	0.00	0.03	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
21.000	0.01	0.00	0.03	0.00	0.01	0	93.00
21.050	0.01	0.00	0.03	0.00	0.01	0	93.00
21.100	0.01	0.00	0.03	0.00	0.01	0	93.00
21.150	0.01	0.00	0.03	0.00	0.01	0	93.00
21.200	0.01	0.00	0.03	0.00	0.01	0	93.00
21.250	0.01	0.00	0.03	0.00	0.01	0	93.00
21.300	0.01	0.00	0.03	0.00	0.01	0	93.00
21.350	0.01	0.00	0.03	0.00	0.01	0	93.00
21.400	0.01	0.00	0.03	0.00	0.01	0	93.00
21.450	0.01	0.00	0.03	0.00	0.01	0	93.00
21.500	0.01	0.00	0.03	0.00	0.01	0	93.00
21.550	0.01	0.00	0.03	0.00	0.01	0	93.00
21.600	0.01	0.00	0.03	0.00	0.01	0	93.00
21.650	0.01	0.00	0.03	0.00	0.01	0	93.00
21.700	0.01	0.00	0.03	0.00	0.01	0	93.00
21.750	0.01	0.00	0.03	0.00	0.01	0	93.00
21.800	0.01	0.00	0.03	0.00	0.01	0	93.00
21.850	0.01	0.00	0.03	0.00	0.01	0	93.00
21.900	0.01	0.00	0.03	0.00	0.01	0	93.00
21.950	0.01	0.00	0.02	0.00	0.01	0	93.00
22.000	0.01	0.00	0.02	0.00	0.01	0	93.00
22.050	0.01	0.00	0.02	0.00	0.01	0	93.00
22.100	0.01	0.00	0.02	0.00	0.01	0	93.00
22.150	0.01	0.00	0.02	0.00	0.01	0	93.00
22.200	0.01	0.00	0.02	0.00	0.01	0	93.00
22.250	0.01	0.00	0.02	0.00	0.01	0	93.00
22.300	0.01	0.00	0.02	0.00	0.01	0	93.00
22.350	0.01	0.00	0.02	0.00	0.01	0	93.00
22.400	0.01	0.00	0.02	0.00	0.01	0	93.00
22.450	0.01	0.00	0.02	0.00	0.01	0	93.00
22.500	0.01	0.00	0.02	0.00	0.01	0	93.00
22.550	0.01	0.00	0.02	0.00	0.01	0	93.00
22.600	0.01	0.00	0.02	0.00	0.01	0	93.00
22.650	0.01	0.00	0.02	0.00	0.01	0	93.00
22.700	0.01	0.00	0.02	0.00	0.01	0	93.00
22.750	0.01	0.00	0.02	0.00	0.01	0	93.00
22.800	0.01	0.00	0.02	0.00	0.01	0	93.00
22.850	0.01	0.00	0.02	0.00	0.01	0	93.00
22.900	0.01	0.00	0.02	0.00	0.01	0	93.00
22.950	0.01	0.00	0.02	0.00	0.01	0	93.00
23.000	0.01	0.00	0.02	0.00	0.01	0	93.00
23.050	0.01	0.00	0.02	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
23.100	0.01	0.00	0.02	0.00	0.01	0	93.00
23.150	0.01	0.00	0.02	0.00	0.01	0	93.00
23.200	0.01	0.00	0.02	0.00	0.01	0	93.00
23.250	0.01	0.00	0.02	0.00	0.01	0	93.00
23.300	0.01	0.00	0.02	0.00	0.01	0	93.00
23.350	0.01	0.00	0.02	0.00	0.01	0	93.00
23.400	0.01	0.00	0.02	0.00	0.01	0	93.00
23.450	0.01	0.00	0.02	0.00	0.01	0	93.00
23.500	0.01	0.00	0.02	0.00	0.01	0	93.00
23.550	0.01	0.00	0.02	0.00	0.01	0	93.00
23.600	0.01	0.00	0.02	0.00	0.01	0	93.00
23.650	0.01	0.00	0.02	0.00	0.01	0	93.00
23.700	0.01	0.00	0.02	0.00	0.01	0	93.00
23.750	0.01	0.00	0.02	0.00	0.01	0	93.00
23.800	0.01	0.00	0.02	0.00	0.01	0	93.00
23.850	0.01	0.00	0.02	0.00	0.01	0	93.00
23.900	0.01	0.00	0.02	0.00	0.01	0	93.00
23.950	0.01	0.00	0.02	0.00	0.01	0	93.00
24.000	0.01	0.00	0.02	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
0.000	0.00	0.00	0.13	0.00	0.06	0	93.00
0.050	0.00	0.00	0.00	0.00	0.00	0	93.00
0.100	0.00	0.00	0.00	0.00	0.00	0	93.00
0.150	0.00	0.00	0.00	0.00	0.00	0	93.00
0.200	0.00	0.00	0.00	0.00	0.00	0	93.00
0.250	0.00	0.00	0.00	0.00	0.00	0	93.00
0.300	0.00	0.00	0.00	0.00	0.00	0	93.00
0.350	0.00	0.00	0.00	0.00	0.00	0	93.00
0.400	0.00	0.00	0.00	0.00	0.00	0	93.00
0.450	0.00	0.00	0.00	0.00	0.00	0	93.00
0.500	0.00	0.00	0.00	0.00	0.00	0	93.00
0.550	0.00	0.00	0.00	0.00	0.00	0	93.00
0.600	0.00	0.00	0.00	0.00	0.00	0	93.00
0.650	0.00	0.00	0.00	0.00	0.00	0	93.00
0.700	0.00	0.00	0.00	0.00	0.00	0	93.00
0.750	0.00	0.00	0.01	0.00	0.00	0	93.00
0.800	0.00	0.00	0.01	0.00	0.00	0	93.00
0.850	0.00	0.00	0.01	0.00	0.00	0	93.00
0.900	0.00	0.00	0.01	0.00	0.00	0	93.00
0.950	0.00	0.00	0.01	0.00	0.00	0	93.00
1.000	0.01	0.00	0.01	0.00	0.01	0	93.00
1.050	0.01	0.00	0.01	0.00	0.01	0	93.00
1.100	0.01	0.00	0.01	0.00	0.01	0	93.00
1.150	0.01	0.00	0.01	0.00	0.01	0	93.00
1.200	0.01	0.00	0.01	0.00	0.01	0	93.00
1.250	0.01	0.00	0.01	0.00	0.01	0	93.00
1.300	0.01	0.00	0.01	0.00	0.01	0	93.00
1.350	0.01	0.00	0.02	0.00	0.01	0	93.00
1.400	0.01	0.00	0.02	0.00	0.01	0	93.00
1.450	0.01	0.00	0.02	0.00	0.01	0	93.00
1.500	0.01	0.00	0.02	0.00	0.01	0	93.00
1.550	0.01	0.00	0.02	0.00	0.01	0	93.00
1.600	0.01	0.00	0.02	0.00	0.01	0	93.00
1.650	0.01	0.00	0.02	0.00	0.01	0	93.00
1.700	0.01	0.00	0.02	0.00	0.01	0	93.00
1.750	0.01	0.00	0.02	0.00	0.01	0	93.00
1.800	0.01	0.00	0.02	0.00	0.01	0	93.00
1.850	0.01	0.00	0.02	0.00	0.01	0	93.00
1.900	0.01	0.00	0.02	0.00	0.01	0	93.00
1.950	0.01	0.00	0.02	0.00	0.01	0	93.00
2.000	0.01	0.00	0.02	0.00	0.01	0	93.00
2.050	0.01	0.00	0.02	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
2.100	0.01	0.00	0.02	0.00	0.01	0	93.00
2.150	0.01	0.00	0.02	0.00	0.01	0	93.00
2.200	0.01	0.00	0.02	0.00	0.01	0	93.00
2.250	0.01	0.00	0.02	0.00	0.01	0	93.00
2.300	0.01	0.00	0.02	0.00	0.01	0	93.00
2.350	0.01	0.00	0.02	0.00	0.01	0	93.00
2.400	0.01	0.00	0.02	0.00	0.01	0	93.00
2.450	0.01	0.00	0.02	0.00	0.01	0	93.00
2.500	0.01	0.00	0.02	0.00	0.01	0	93.00
2.550	0.01	0.00	0.03	0.00	0.01	0	93.00
2.600	0.01	0.00	0.03	0.00	0.01	0	93.00
2.650	0.01	0.00	0.03	0.00	0.01	0	93.00
2.700	0.01	0.00	0.03	0.00	0.01	0	93.00
2.750	0.01	0.00	0.03	0.00	0.01	0	93.00
2.800	0.01	0.00	0.03	0.00	0.01	0	93.00
2.850	0.01	0.00	0.03	0.00	0.01	0	93.00
2.900	0.01	0.00	0.03	0.00	0.01	0	93.00
2.950	0.01	0.00	0.03	0.00	0.01	0	93.00
3.000	0.01	0.00	0.03	0.00	0.01	0	93.00
3.050	0.01	0.00	0.03	0.00	0.01	0	93.00
3.100	0.01	0.00	0.03	0.00	0.01	0	93.00
3.150	0.02	0.00	0.03	0.00	0.02	0	93.00
3.200	0.02	0.00	0.03	0.00	0.02	0	93.00
3.250	0.02	0.00	0.03	0.00	0.02	0	93.00
3.300	0.02	0.00	0.03	0.00	0.02	0	93.00
3.350	0.02	0.00	0.03	0.00	0.02	0	93.00
3.400	0.02	0.00	0.03	0.00	0.02	0	93.00
3.450	0.02	0.00	0.03	0.00	0.02	0	93.00
3.500	0.02	0.00	0.03	0.00	0.02	0	93.00
3.550	0.02	0.00	0.03	0.00	0.02	0	93.00
3.600	0.02	0.00	0.03	0.00	0.02	0	93.00
3.650	0.02	0.00	0.03	0.00	0.02	0	93.00
3.700	0.02	0.00	0.03	0.00	0.02	0	93.00
3.750	0.02	0.00	0.03	0.00	0.02	0	93.00
3.800	0.02	0.00	0.03	0.00	0.02	0	93.00
3.850	0.02	0.00	0.04	0.00	0.02	0	93.00
3.900	0.02	0.00	0.04	0.00	0.02	0	93.00
3.950	0.02	0.00	0.04	0.00	0.02	0	93.00
4.000	0.02	0.00	0.04	0.00	0.02	0	93.00
4.050	0.02	0.00	0.04	0.00	0.02	0	93.00
4.100	0.02	0.00	0.04	0.00	0.02	0	93.00
4.150	0.02	0.00	0.04	0.00	0.02	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
4.200	0.02	0.00	0.04	0.00	0.02	0	93.00
4.250	0.02	0.00	0.04	0.00	0.02	0	93.00
4.300	0.02	0.00	0.04	0.00	0.02	0	93.00
4.350	0.02	0.00	0.04	0.00	0.02	0	93.00
4.400	0.02	0.00	0.04	0.00	0.02	0	93.00
4.450	0.02	0.00	0.04	0.00	0.02	0	93.00
4.500	0.02	0.00	0.04	0.00	0.02	0	93.00
4.550	0.02	0.00	0.04	0.00	0.02	0	93.00
4.600	0.02	0.00	0.04	0.00	0.02	0	93.00
4.650	0.02	0.00	0.04	0.00	0.02	0	93.00
4.700	0.02	0.00	0.04	0.00	0.02	0	93.00
4.750	0.02	0.00	0.04	0.00	0.02	0	93.00
4.800	0.02	0.00	0.04	0.00	0.02	0	93.00
4.850	0.02	0.00	0.04	0.00	0.02	0	93.00
4.900	0.02	0.00	0.04	0.00	0.02	0	93.00
4.950	0.02	0.00	0.04	0.00	0.02	0	93.00
5.000	0.02	0.00	0.04	0.00	0.02	0	93.00
5.050	0.02	0.00	0.04	0.00	0.02	0	93.00
5.100	0.02	0.00	0.04	0.00	0.02	0	93.00
5.150	0.02	0.00	0.04	0.00	0.02	0	93.00
5.200	0.02	0.00	0.04	0.00	0.02	0	93.00
5.250	0.02	0.00	0.04	0.00	0.02	0	93.00
5.300	0.02	0.00	0.04	0.00	0.02	0	93.00
5.350	0.02	0.00	0.04	0.00	0.02	0	93.00
5.400	0.02	0.00	0.04	0.00	0.02	0	93.00
5.450	0.02	0.00	0.05	0.00	0.02	0	93.00
5.500	0.02	0.00	0.05	0.00	0.02	0	93.00
5.550	0.02	0.00	0.05	0.00	0.02	0	93.00
5.600	0.02	0.00	0.05	0.00	0.02	0	93.00
5.650	0.02	0.00	0.05	0.00	0.02	0	93.00
5.700	0.02	0.00	0.05	0.00	0.02	0	93.00
5.750	0.02	0.00	0.05	0.00	0.02	0	93.00
5.800	0.02	0.00	0.05	0.00	0.02	0	93.00
5.850	0.02	0.00	0.05	0.00	0.02	0	93.00
5.900	0.02	0.00	0.05	0.00	0.02	0	93.00
5.950	0.02	0.00	0.05	0.00	0.02	0	93.00
6.000	0.02	0.00	0.05	0.00	0.02	0	93.00
6.050	0.02	0.00	0.05	0.00	0.02	0	93.00
6.100	0.02	0.00	0.05	0.00	0.02	0	93.00
6.150	0.03	0.00	0.05	0.00	0.03	0	93.00
6.200	0.03	0.00	0.05	0.00	0.03	0	93.00
6.250	0.03	0.00	0.05	0.00	0.03	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
6.300	0.03	0.00	0.05	0.00	0.03	0	93.00
6.350	0.03	0.00	0.05	0.00	0.03	0	93.00
6.400	0.03	0.00	0.05	0.00	0.03	0	93.00
6.450	0.03	0.00	0.05	0.00	0.03	0	93.00
6.500	0.03	0.00	0.06	0.00	0.03	0	93.00
6.550	0.03	0.00	0.06	0.00	0.03	0	93.00
6.600	0.03	0.00	0.06	0.00	0.03	0	93.00
6.650	0.03	0.00	0.06	0.00	0.03	0	93.00
6.700	0.03	0.00	0.06	0.00	0.03	0	93.00
6.750	0.03	0.00	0.06	0.00	0.03	0	93.00
6.800	0.03	0.00	0.06	0.00	0.03	0	93.00
6.850	0.03	0.00	0.06	0.00	0.03	0	93.00
6.900	0.03	0.00	0.06	0.00	0.03	0	93.00
6.950	0.03	0.00	0.06	0.00	0.03	0	93.00
7.000	0.03	0.00	0.06	0.00	0.03	0	93.00
7.050	0.03	0.00	0.06	0.00	0.03	0	93.00
7.100	0.03	0.00	0.07	0.00	0.03	0	93.00
7.150	0.03	0.00	0.07	0.00	0.03	0	93.00
7.200	0.03	0.00	0.07	0.00	0.03	0	93.00
7.250	0.03	0.00	0.07	0.00	0.03	0	93.00
7.300	0.03	0.00	0.07	0.00	0.03	0	93.00
7.350	0.04	0.00	0.07	0.00	0.03	0	93.00
7.400	0.04	0.00	0.07	0.00	0.04	0	93.00
7.450	0.04	0.00	0.07	0.00	0.04	0	93.00
7.500	0.04	0.00	0.07	0.00	0.04	0	93.00
7.550	0.04	0.00	0.07	0.00	0.04	0	93.00
7.600	0.04	0.00	0.07	0.00	0.04	0	93.00
7.650	0.04	0.00	0.07	0.00	0.04	0	93.00
7.700	0.04	0.00	0.08	0.00	0.04	0	93.00
7.750	0.04	0.00	0.08	0.00	0.04	0	93.00
7.800	0.04	0.00	0.08	0.00	0.04	0	93.00
7.850	0.04	0.00	0.08	0.00	0.04	0	93.00
7.900	0.04	0.00	0.08	0.00	0.04	0	93.00
7.950	0.04	0.00	0.08	0.00	0.04	0	93.00
8.000	0.04	0.00	0.08	0.00	0.04	0	93.00
8.050	0.04	0.00	0.08	0.00	0.04	0	93.00
8.100	0.04	0.00	0.08	0.00	0.04	0	93.00
8.150	0.04	0.00	0.08	0.00	0.04	0	93.00
8.200	0.04	0.00	0.09	0.00	0.04	0	93.00
8.250	0.04	0.00	0.09	0.00	0.04	0	93.00
8.300	0.05	0.00	0.09	0.00	0.04	0	93.00
8.350	0.05	0.00	0.09	0.00	0.05	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
8.400	0.05	0.00	0.09	0.00	0.05	0	93.00
8.450	0.05	0.00	0.10	0.00	0.05	0	93.00
8.500	0.05	0.00	0.10	0.00	0.05	0	93.00
8.550	0.05	0.00	0.10	0.00	0.05	0	93.00
8.600	0.05	0.00	0.10	0.00	0.05	0	93.00
8.650	0.05	0.00	0.10	0.00	0.05	0	93.00
8.700	0.05	0.00	0.11	0.00	0.05	0	93.00
8.750	0.05	0.00	0.11	0.00	0.05	0	93.00
8.800	0.05	0.00	0.11	0.00	0.05	0	93.00
8.850	0.06	0.00	0.11	0.00	0.06	0	93.00
8.900	0.06	0.00	0.11	0.00	0.06	0	93.00
8.950	0.06	0.00	0.11	0.00	0.06	0	93.00
9.000	0.06	0.00	0.12	0.00	0.06	0	93.00
9.050	0.06	0.00	0.12	0.00	0.06	0	93.00
9.100	0.06	0.00	0.12	0.00	0.06	0	93.00
9.150	0.06	0.00	0.12	0.00	0.06	0	93.00
9.200	0.06	0.00	0.12	0.00	0.06	0	93.00
9.250	0.06	0.00	0.13	0.00	0.06	0	93.00
9.300	0.06	0.00	0.13	0.00	0.06	0	93.00
9.350	0.07	0.00	0.13	0.00	0.06	0	93.00
9.400	0.07	0.00	0.13	0.00	0.07	0	93.00
9.450	0.07	0.00	0.13	0.00	0.07	0	93.00
9.500	0.07	0.00	0.14	0.00	0.07	0	93.00
9.550	0.07	0.00	0.14	0.00	0.07	0	93.00
9.600	0.07	0.00	0.14	0.00	0.07	0	93.00
9.650	0.07	0.00	0.14	0.00	0.07	0	93.00
9.700	0.07	0.00	0.14	0.00	0.07	0	93.00
9.750	0.07	0.00	0.14	0.00	0.07	0	93.00
9.800	0.07	0.00	0.15	0.00	0.07	0	93.00
9.850	0.07	0.00	0.15	0.00	0.07	0	93.00
9.900	0.08	0.00	0.15	0.00	0.08	0	93.00
9.950	0.08	0.00	0.15	0.00	0.08	0	93.00
10.000	0.08	0.00	0.15	0.00	0.08	0	93.00
10.050	0.08	0.00	0.16	0.00	0.08	0	93.00
10.100	0.08	0.00	0.16	0.00	0.08	0	93.00
10.150	0.08	0.00	0.16	0.00	0.08	0	93.00
10.200	0.08	0.00	0.17	0.00	0.08	0	93.00
10.250	0.09	0.00	0.17	0.00	0.08	0	93.00
10.300	0.09	0.00	0.17	0.00	0.09	0	93.00
10.350	0.09	0.00	0.18	0.00	0.09	0	93.00
10.400	0.09	0.00	0.18	0.00	0.09	0	93.00
10.450	0.09	0.00	0.19	0.00	0.09	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
10.500	0.10	0.00	0.19	0.00	0.09	0	93.00
10.550	0.10	0.00	0.19	0.00	0.10	0	93.00
10.600	0.10	0.00	0.20	0.00	0.10	0	93.00
10.650	0.10	0.00	0.20	0.00	0.10	0	93.00
10.700	0.10	0.00	0.21	0.00	0.10	0	93.00
10.750	0.11	0.00	0.21	0.00	0.10	0	93.00
10.800	0.11	0.00	0.21	0.00	0.11	0	93.00
10.850	0.11	0.00	0.22	0.00	0.11	0	93.00
10.900	0.11	0.00	0.22	0.00	0.11	0	93.00
10.950	0.11	0.00	0.22	0.00	0.11	0	93.00
11.000	0.12	0.00	0.23	0.00	0.11	0	93.00
11.050	0.12	0.00	0.23	0.00	0.12	0	93.00
11.100	0.12	0.00	0.24	0.00	0.12	0	93.00
11.150	0.13	0.00	0.25	0.00	0.13	0	93.00
11.200	0.14	0.01	0.27	0.00	0.13	12	93.02
11.250	0.14	0.04	0.29	0.00	0.13	15	93.02
11.300	0.15	0.07	0.33	0.00	0.13	18	93.03
11.350	0.16	0.13	0.39	0.00	0.13	23	93.03
11.400	0.17	0.20	0.46	0.00	0.13	29	93.04
11.450	0.17	0.28	0.54	0.00	0.13	37	93.05
11.500	0.18	0.38	0.64	0.00	0.13	46	93.07
11.550	0.21	0.52	0.77	0.00	0.13	58	93.08
11.600	0.24	0.71	0.97	0.00	0.13	74	93.11
11.650	0.30	1.00	1.25	0.00	0.13	95	93.14
11.700	0.37	1.41	1.67	0.00	0.13	128	93.18
11.750	0.44	1.96	2.22	0.00	0.13	188	93.22
11.800	0.51	2.65	2.91	0.00	0.13	250	93.27
11.850	0.58	3.49	3.75	0.00	0.13	326	93.32
11.900	0.66	4.47	4.73	0.00	0.13	414	93.39
11.950	0.86	5.74	6.00	0.00	0.13	528	93.47
12.000	1.20	7.54	7.80	0.00	0.13	691	93.58
12.050	1.32	9.81	10.06	0.00	0.13	894	93.70
12.100	1.35	10.03	12.48	0.00	1.23	1,013	93.75
12.150	1.19	10.02	12.57	0.00	1.27	1,017	93.75
12.200	0.87	10.03	12.08	0.00	1.03	995	93.74
12.250	0.71	10.03	11.60	0.00	0.79	973	93.73
12.300	0.60	10.03	11.34	0.00	0.66	962	93.73
12.350	0.53	10.03	11.16	0.00	0.57	954	93.72
12.400	0.45	10.03	11.01	0.00	0.49	947	93.72
12.450	0.38	10.03	10.86	0.00	0.42	940	93.72
12.500	0.31	10.03	10.72	0.00	0.34	934	93.72
12.550	0.26	10.03	10.59	0.00	0.28	928	93.71

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
12.600	0.21	10.03	10.50	0.00	0.23	924	93.71
12.650	0.19	10.03	10.43	0.00	0.20	921	93.71
12.700	0.18	10.03	10.40	0.00	0.18	920	93.71
12.750	0.17	10.03	10.38	0.00	0.17	919	93.71
12.800	0.16	10.03	10.36	0.00	0.17	918	93.71
12.850	0.15	10.03	10.35	0.00	0.16	917	93.71
12.900	0.15	10.03	10.33	0.00	0.15	917	93.71
12.950	0.14	10.03	10.32	0.00	0.14	916	93.71
13.000	0.13	10.03	10.30	0.00	0.13	915	93.71
13.050	0.13	10.03	10.29	0.00	0.13	915	93.71
13.100	0.12	10.02	10.28	0.00	0.13	914	93.71
13.150	0.12	10.00	10.26	0.00	0.13	912	93.71
13.200	0.11	9.98	10.24	0.00	0.13	910	93.71
13.250	0.11	9.95	10.21	0.00	0.13	907	93.71
13.300	0.11	9.92	10.17	0.00	0.13	904	93.71
13.350	0.11	9.88	10.14	0.00	0.13	901	93.71
13.400	0.11	9.84	10.10	0.00	0.13	897	93.70
13.450	0.10	9.80	10.05	0.00	0.13	893	93.70
13.500	0.10	9.75	10.00	0.00	0.13	889	93.70
13.550	0.10	9.70	9.95	0.00	0.13	882	93.70
13.600	0.10	9.64	9.90	0.00	0.13	874	93.70
13.650	0.10	9.58	9.83	0.00	0.13	866	93.69
13.700	0.09	9.51	9.77	0.00	0.13	856	93.69
13.750	0.09	9.45	9.70	0.00	0.13	847	93.69
13.800	0.09	9.37	9.63	0.00	0.13	836	93.68
13.850	0.09	9.30	9.55	0.00	0.13	826	93.68
13.900	0.09	9.22	9.47	0.00	0.13	817	93.67
13.950	0.09	9.13	9.39	0.00	0.13	810	93.67
14.000	0.08	9.05	9.30	0.00	0.13	803	93.66
14.050	0.08	8.96	9.21	0.00	0.13	797	93.66
14.100	0.08	8.86	9.12	0.00	0.13	790	93.66
14.150	0.08	8.76	9.02	0.00	0.13	783	93.65
14.200	0.08	8.66	8.92	0.00	0.13	776	93.64
14.250	0.08	8.56	8.82	0.00	0.13	768	93.64
14.300	0.08	8.46	8.72	0.00	0.13	761	93.63
14.350	0.07	8.35	8.61	0.00	0.13	753	93.63
14.400	0.07	8.25	8.50	0.00	0.13	746	93.62
14.450	0.07	8.14	8.39	0.00	0.13	738	93.62
14.500	0.07	8.03	8.28	0.00	0.13	730	93.61
14.550	0.07	7.91	8.17	0.00	0.13	722	93.61
14.600	0.07	7.80	8.06	0.00	0.13	713	93.60
14.650	0.07	7.68	7.94	0.00	0.13	703	93.59

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
14.700	0.07	7.57	7.82	0.00	0.13	692	93.59
14.750	0.07	7.45	7.70	0.00	0.13	682	93.58
14.800	0.07	7.32	7.58	0.00	0.13	671	93.57
14.850	0.07	7.20	7.46	0.00	0.13	659	93.56
14.900	0.06	7.07	7.33	0.00	0.13	648	93.55
14.950	0.06	6.95	7.20	0.00	0.13	637	93.54
15.000	0.06	6.82	7.07	0.00	0.13	625	93.54
15.050	0.06	6.68	6.94	0.00	0.13	613	93.53
15.100	0.06	6.55	6.81	0.00	0.13	601	93.52
15.150	0.06	6.42	6.67	0.00	0.13	589	93.51
15.200	0.06	6.28	6.53	0.00	0.13	577	93.50
15.250	0.06	6.14	6.40	0.00	0.13	564	93.49
15.300	0.06	6.00	6.26	0.00	0.13	551	93.48
15.350	0.06	5.86	6.11	0.00	0.13	539	93.47
15.400	0.06	5.71	5.97	0.00	0.13	526	93.47
15.450	0.05	5.57	5.82	0.00	0.13	512	93.46
15.500	0.05	5.42	5.67	0.00	0.13	499	93.45
15.550	0.05	5.27	5.52	0.00	0.13	486	93.44
15.600	0.05	5.11	5.37	0.00	0.13	472	93.43
15.650	0.05	4.96	5.22	0.00	0.13	458	93.42
15.700	0.05	4.80	5.06	0.00	0.13	444	93.41
15.750	0.05	4.65	4.90	0.00	0.13	430	93.40
15.800	0.05	4.49	4.74	0.00	0.13	415	93.39
15.850	0.05	4.33	4.58	0.00	0.13	401	93.38
15.900	0.05	4.16	4.42	0.00	0.13	386	93.37
15.950	0.04	4.00	4.25	0.00	0.13	371	93.35
16.000	0.04	3.83	4.09	0.00	0.13	356	93.34
16.050	0.04	3.66	3.92	0.00	0.13	341	93.33
16.100	0.04	3.49	3.75	0.00	0.13	326	93.32
16.150	0.04	3.32	3.58	0.00	0.13	310	93.31
16.200	0.04	3.15	3.40	0.00	0.13	295	93.30
16.250	0.04	2.97	3.23	0.00	0.13	279	93.29
16.300	0.04	2.80	3.06	0.00	0.13	263	93.28
16.350	0.04	2.62	2.88	0.00	0.13	248	93.27
16.400	0.04	2.45	2.70	0.00	0.13	232	93.25
16.450	0.04	2.27	2.53	0.00	0.13	216	93.24
16.500	0.04	2.09	2.35	0.00	0.13	200	93.23
16.550	0.04	1.92	2.17	0.00	0.13	184	93.22
16.600	0.04	1.74	1.99	0.00	0.13	168	93.21
16.650	0.04	1.56	1.81	0.00	0.13	149	93.19
16.700	0.04	1.38	1.63	0.00	0.13	123	93.18
16.750	0.04	1.19	1.45	0.00	0.13	109	93.16

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
16.800	0.04	1.01	1.27	0.00	0.13	96	93.14
16.850	0.04	0.83	1.08	0.00	0.13	83	93.12
16.900	0.04	0.64	0.90	0.00	0.13	70	93.10
16.950	0.04	0.46	0.72	0.00	0.13	53	93.08
17.000	0.03	0.27	0.53	0.00	0.13	36	93.05
17.050	0.03	0.09	0.34	0.00	0.13	19	93.03
17.100	0.03	0.00	0.16	0.00	0.08	0	93.00
17.150	0.03	0.00	0.07	0.00	0.03	0	93.00
17.200	0.03	0.00	0.07	0.00	0.03	0	93.00
17.250	0.03	0.00	0.07	0.00	0.03	0	93.00
17.300	0.03	0.00	0.07	0.00	0.03	0	93.00
17.350	0.03	0.00	0.06	0.00	0.03	0	93.00
17.400	0.03	0.00	0.06	0.00	0.03	0	93.00
17.450	0.03	0.00	0.06	0.00	0.03	0	93.00
17.500	0.03	0.00	0.06	0.00	0.03	0	93.00
17.550	0.03	0.00	0.06	0.00	0.03	0	93.00
17.600	0.03	0.00	0.06	0.00	0.03	0	93.00
17.650	0.03	0.00	0.06	0.00	0.03	0	93.00
17.700	0.03	0.00	0.06	0.00	0.03	0	93.00
17.750	0.03	0.00	0.06	0.00	0.03	0	93.00
17.800	0.03	0.00	0.06	0.00	0.03	0	93.00
17.850	0.03	0.00	0.06	0.00	0.03	0	93.00
17.900	0.03	0.00	0.06	0.00	0.03	0	93.00
17.950	0.03	0.00	0.05	0.00	0.03	0	93.00
18.000	0.03	0.00	0.05	0.00	0.03	0	93.00
18.050	0.03	0.00	0.05	0.00	0.03	0	93.00
18.100	0.03	0.00	0.05	0.00	0.03	0	93.00
18.150	0.03	0.00	0.05	0.00	0.03	0	93.00
18.200	0.03	0.00	0.05	0.00	0.03	0	93.00
18.250	0.03	0.00	0.05	0.00	0.03	0	93.00
18.300	0.03	0.00	0.05	0.00	0.03	0	93.00
18.350	0.03	0.00	0.05	0.00	0.03	0	93.00
18.400	0.03	0.00	0.05	0.00	0.03	0	93.00
18.450	0.03	0.00	0.05	0.00	0.03	0	93.00
18.500	0.03	0.00	0.05	0.00	0.03	0	93.00
18.550	0.02	0.00	0.05	0.00	0.03	0	93.00
18.600	0.02	0.00	0.05	0.00	0.02	0	93.00
18.650	0.02	0.00	0.05	0.00	0.02	0	93.00
18.700	0.02	0.00	0.05	0.00	0.02	0	93.00
18.750	0.02	0.00	0.05	0.00	0.02	0	93.00
18.800	0.02	0.00	0.05	0.00	0.02	0	93.00
18.850	0.02	0.00	0.05	0.00	0.02	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
18.900	0.02	0.00	0.05	0.00	0.02	0	93.00
18.950	0.02	0.00	0.05	0.00	0.02	0	93.00
19.000	0.02	0.00	0.05	0.00	0.02	0	93.00
19.050	0.02	0.00	0.05	0.00	0.02	0	93.00
19.100	0.02	0.00	0.05	0.00	0.02	0	93.00
19.150	0.02	0.00	0.05	0.00	0.02	0	93.00
19.200	0.02	0.00	0.05	0.00	0.02	0	93.00
19.250	0.02	0.00	0.05	0.00	0.02	0	93.00
19.300	0.02	0.00	0.05	0.00	0.02	0	93.00
19.350	0.02	0.00	0.05	0.00	0.02	0	93.00
19.400	0.02	0.00	0.05	0.00	0.02	0	93.00
19.450	0.02	0.00	0.05	0.00	0.02	0	93.00
19.500	0.02	0.00	0.05	0.00	0.02	0	93.00
19.550	0.02	0.00	0.05	0.00	0.02	0	93.00
19.600	0.02	0.00	0.04	0.00	0.02	0	93.00
19.650	0.02	0.00	0.04	0.00	0.02	0	93.00
19.700	0.02	0.00	0.04	0.00	0.02	0	93.00
19.750	0.02	0.00	0.04	0.00	0.02	0	93.00
19.800	0.02	0.00	0.04	0.00	0.02	0	93.00
19.850	0.02	0.00	0.04	0.00	0.02	0	93.00
19.900	0.02	0.00	0.04	0.00	0.02	0	93.00
19.950	0.02	0.00	0.04	0.00	0.02	0	93.00
20.000	0.02	0.00	0.04	0.00	0.02	0	93.00
20.050	0.02	0.00	0.04	0.00	0.02	0	93.00
20.100	0.02	0.00	0.04	0.00	0.02	0	93.00
20.150	0.02	0.00	0.04	0.00	0.02	0	93.00
20.200	0.02	0.00	0.04	0.00	0.02	0	93.00
20.250	0.02	0.00	0.04	0.00	0.02	0	93.00
20.300	0.02	0.00	0.04	0.00	0.02	0	93.00
20.350	0.02	0.00	0.04	0.00	0.02	0	93.00
20.400	0.02	0.00	0.04	0.00	0.02	0	93.00
20.450	0.02	0.00	0.04	0.00	0.02	0	93.00
20.500	0.02	0.00	0.04	0.00	0.02	0	93.00
20.550	0.02	0.00	0.04	0.00	0.02	0	93.00
20.600	0.02	0.00	0.04	0.00	0.02	0	93.00
20.650	0.02	0.00	0.04	0.00	0.02	0	93.00
20.700	0.02	0.00	0.04	0.00	0.02	0	93.00
20.750	0.02	0.00	0.04	0.00	0.02	0	93.00
20.800	0.02	0.00	0.04	0.00	0.02	0	93.00
20.850	0.02	0.00	0.04	0.00	0.02	0	93.00
20.900	0.02	0.00	0.04	0.00	0.02	0	93.00
20.950	0.02	0.00	0.04	0.00	0.02	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
21.000	0.02	0.00	0.04	0.00	0.02	0	93.00
21.050	0.02	0.00	0.04	0.00	0.02	0	93.00
21.100	0.02	0.00	0.04	0.00	0.02	0	93.00
21.150	0.02	0.00	0.04	0.00	0.02	0	93.00
21.200	0.02	0.00	0.04	0.00	0.02	0	93.00
21.250	0.02	0.00	0.04	0.00	0.02	0	93.00
21.300	0.02	0.00	0.04	0.00	0.02	0	93.00
21.350	0.02	0.00	0.04	0.00	0.02	0	93.00
21.400	0.02	0.00	0.04	0.00	0.02	0	93.00
21.450	0.02	0.00	0.04	0.00	0.02	0	93.00
21.500	0.02	0.00	0.04	0.00	0.02	0	93.00
21.550	0.02	0.00	0.04	0.00	0.02	0	93.00
21.600	0.02	0.00	0.04	0.00	0.02	0	93.00
21.650	0.02	0.00	0.04	0.00	0.02	0	93.00
21.700	0.02	0.00	0.04	0.00	0.02	0	93.00
21.750	0.02	0.00	0.04	0.00	0.02	0	93.00
21.800	0.02	0.00	0.04	0.00	0.02	0	93.00
21.850	0.02	0.00	0.04	0.00	0.02	0	93.00
21.900	0.02	0.00	0.04	0.00	0.02	0	93.00
21.950	0.02	0.00	0.04	0.00	0.02	0	93.00
22.000	0.02	0.00	0.04	0.00	0.02	0	93.00
22.050	0.02	0.00	0.04	0.00	0.02	0	93.00
22.100	0.02	0.00	0.04	0.00	0.02	0	93.00
22.150	0.02	0.00	0.03	0.00	0.02	0	93.00
22.200	0.02	0.00	0.03	0.00	0.02	0	93.00
22.250	0.02	0.00	0.03	0.00	0.02	0	93.00
22.300	0.02	0.00	0.03	0.00	0.02	0	93.00
22.350	0.02	0.00	0.03	0.00	0.02	0	93.00
22.400	0.02	0.00	0.03	0.00	0.02	0	93.00
22.450	0.02	0.00	0.03	0.00	0.02	0	93.00
22.500	0.02	0.00	0.03	0.00	0.02	0	93.00
22.550	0.02	0.00	0.03	0.00	0.02	0	93.00
22.600	0.02	0.00	0.03	0.00	0.02	0	93.00
22.650	0.02	0.00	0.03	0.00	0.02	0	93.00
22.700	0.02	0.00	0.03	0.00	0.02	0	93.00
22.750	0.02	0.00	0.03	0.00	0.02	0	93.00
22.800	0.02	0.00	0.03	0.00	0.02	0	93.00
22.850	0.02	0.00	0.03	0.00	0.02	0	93.00
22.900	0.02	0.00	0.03	0.00	0.02	0	93.00
22.950	0.02	0.00	0.03	0.00	0.02	0	93.00
23.000	0.02	0.00	0.03	0.00	0.02	0	93.00
23.050	0.02	0.00	0.03	0.00	0.02	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: 6" Depth Green Roof (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
23.100	0.02	0.00	0.03	0.00	0.02	0	93.00
23.150	0.02	0.00	0.03	0.00	0.02	0	93.00
23.200	0.02	0.00	0.03	0.00	0.02	0	93.00
23.250	0.02	0.00	0.03	0.00	0.02	0	93.00
23.300	0.02	0.00	0.03	0.00	0.02	0	93.00
23.350	0.02	0.00	0.03	0.00	0.02	0	93.00
23.400	0.02	0.00	0.03	0.00	0.02	0	93.00
23.450	0.02	0.00	0.03	0.00	0.02	0	93.00
23.500	0.01	0.00	0.03	0.00	0.02	0	93.00
23.550	0.01	0.00	0.03	0.00	0.01	0	93.00
23.600	0.01	0.00	0.03	0.00	0.01	0	93.00
23.650	0.01	0.00	0.03	0.00	0.01	0	93.00
23.700	0.01	0.00	0.03	0.00	0.01	0	93.00
23.750	0.01	0.00	0.03	0.00	0.01	0	93.00
23.800	0.01	0.00	0.03	0.00	0.01	0	93.00
23.850	0.01	0.00	0.03	0.00	0.01	0	93.00
23.900	0.01	0.00	0.03	0.00	0.01	0	93.00
23.950	0.01	0.00	0.03	0.00	0.01	0	93.00
24.000	0.01	0.00	0.03	0.00	0.01	0	93.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Label: 6" Depth Green Roof (IN)

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Summary for Hydrograph Addition at '6" Depth Green Roof'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-2D

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-2D	1,605	12.100	0.40
Flow (In)	6" Depth Green Roof	1,605	12.100	0.40

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Label: 6" Depth Green Roof (IN)

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

Summary for Hydrograph Addition at '6" Depth Green Roof'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-2D

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-2D	3,085	12.100	0.74
Flow (In)	6" Depth Green Roof	3,085	12.100	0.74

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Label: 6" Depth Green Roof (IN)

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Summary for Hydrograph Addition at '6" Depth Green Roof'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-2D

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-2D	3,951	12.100	0.94
Flow (In)	6" Depth Green Roof	3,951	12.100	0.94

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Label: 6" Depth Green Roof (IN)

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Summary for Hydrograph Addition at '6" Depth Green Roof'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-2D

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-2D	5,727	12.100	1.35
Flow (In)	6" Depth Green Roof	5,727	12.100	1.35

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 1 years

Label: MC-3500 - 3

Storm Event: 1 year

Scenario: Post-Development 1 year

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	62.85 ft
Volume (Initial)	0 ft ³
Flow (Initial Outlet)	0.00 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.00 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ft ³)	Area (ft ²)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
62.85	0.00	0	0	0.00	0.00	0.00
63.35	0.34	1,486	0	0.00	0.34	16.85
63.85	0.60	3,865	0	0.00	0.60	43.54
64.35	0.79	7,084	0	0.00	0.79	79.51
64.85	1.55	10,217	0	0.00	1.55	115.08
65.35	2.81	13,232	0	0.00	2.81	149.84
65.85	3.57	16,086	0	0.00	3.57	182.30
66.35	4.19	18,721	0	0.00	4.19	212.20
66.85	4.72	21,030	0	0.00	4.72	238.39
67.35	5.20	22,741	0	0.00	5.20	257.88
67.85	5.65	24,227	0	0.00	5.65	274.83
68.35	6.06	25,712	0	0.00	6.06	291.74

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 10 years

Label: MC-3500 - 3

Storm Event: 10 year

Scenario: Post-Development 10 year

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	62.85 ft
Volume (Initial)	0 ft ³
Flow (Initial Outlet)	0.00 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.00 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ft ³)	Area (ft ²)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
62.85	0.00	0	0	0.00	0.00	0.00
63.35	0.34	1,486	0	0.00	0.34	16.85
63.85	0.60	3,865	0	0.00	0.60	43.54
64.35	0.79	7,084	0	0.00	0.79	79.51
64.85	1.55	10,217	0	0.00	1.55	115.08
65.35	2.81	13,232	0	0.00	2.81	149.84
65.85	3.57	16,086	0	0.00	3.57	182.30
66.35	4.19	18,721	0	0.00	4.19	212.20
66.85	4.72	21,030	0	0.00	4.72	238.39
67.35	5.20	22,741	0	0.00	5.20	257.88
67.85	5.65	24,227	0	0.00	5.65	274.83
68.35	6.06	25,712	0	0.00	6.06	291.74

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Label: MC-3500 - 3

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	62.85 ft
Volume (Initial)	0 ft ³
Flow (Initial Outlet)	0.00 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.00 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ft ³)	Area (ft ²)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
62.85	0.00	0	0	0.00	0.00	0.00
63.35	0.34	1,486	0	0.00	0.34	16.85
63.85	0.60	3,865	0	0.00	0.60	43.54
64.35	0.79	7,084	0	0.00	0.79	79.51
64.85	1.55	10,217	0	0.00	1.55	115.08
65.35	2.81	13,232	0	0.00	2.81	149.84
65.85	3.57	16,086	0	0.00	3.57	182.30
66.35	4.19	18,721	0	0.00	4.19	212.20
66.85	4.72	21,030	0	0.00	4.72	238.39
67.35	5.20	22,741	0	0.00	5.20	257.88
67.85	5.65	24,227	0	0.00	5.65	274.83
68.35	6.06	25,712	0	0.00	6.06	291.74

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 100 years

Label: MC-3500 - 3

Storm Event: 100 year

Scenario: Post-Development 100 year

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	62.85 ft
Volume (Initial)	0 ft ³
Flow (Initial Outlet)	0.00 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.00 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ft ³)	Area (ft ²)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
62.85	0.00	0	0	0.00	0.00	0.00
63.35	0.34	1,486	0	0.00	0.34	16.85
63.85	0.60	3,865	0	0.00	0.60	43.54
64.35	0.79	7,084	0	0.00	0.79	79.51
64.85	1.55	10,217	0	0.00	1.55	115.08
65.35	2.81	13,232	0	0.00	2.81	149.84
65.85	3.57	16,086	0	0.00	3.57	182.30
66.35	4.19	18,721	0	0.00	4.19	212.20
66.85	4.72	21,030	0	0.00	4.72	238.39
67.35	5.20	22,741	0	0.00	5.20	257.88
67.85	5.65	24,227	0	0.00	5.65	274.83
68.35	6.06	25,712	0	0.00	6.06	291.74

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 1 years

Label: MC-3500 - 3 (IN)

Storm Event: 1 year

Scenario: Post-Development 1 year

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	62.85 ft		
Volume (Initial)	0 ft ³		
Flow (Initial Outlet)	0.00 ft ³ /s		
Flow (Initial Infiltration)	0.00 ft ³ /s		
Flow (Initial, Total)	0.00 ft ³ /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	4.56 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	0.78 ft ³ /s	Time to Peak (Flow, Outlet)	12.600 hours
Peak Values			
Elevation (Water Surface, Peak)	64.31 ft		
Volume (Peak)	6,851 ft ³		
Mass Balance (ft ³)			
Volume (Initial)	0 ft ³		
Volume (Total Inflow)	16,654 ft ³		
Volume (Total Infiltration)	0 ft ³		
Volume (Total Outlet Outflow)	16,378 ft ³		
Volume (Retained)	265 ft ³		
Volume (Unrouted)	-11 ft ³		
Error (Mass Balance)	0.1 %		

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Label: MC-3500 - 3 (IN)

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

Infiltration			
Infiltration Method (Computed)	No Infiltration		

Initial Conditions			
Elevation (Water Surface, Initial)	62.85 ft		
Volume (Initial)	0 ft ³		
Flow (Initial Outlet)	0.00 ft ³ /s		
Flow (Initial Infiltration)	0.00 ft ³ /s		
Flow (Initial, Total)	0.00 ft ³ /s		
Time Increment	0.050 hours		

Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	9.44 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	2.92 ft ³ /s	Time to Peak (Flow, Outlet)	12.450 hours

Elevation (Water Surface, Peak)	65.42 ft		
Volume (Peak)	13,634 ft ³		

Mass Balance (ft ³)	
Volume (Initial)	0 ft ³
Volume (Total Inflow)	36,040 ft ³
Volume (Total Infiltration)	0 ft ³
Volume (Total Outlet Outflow)	35,493 ft ³
Volume (Retained)	525 ft ³
Volume (Unrouted)	-22 ft ³
Error (Mass Balance)	0.1 %

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Label: MC-3500 - 3 (IN)

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	62.85 ft		
Volume (Initial)	0 ft ³		
Flow (Initial Outlet)	0.00 ft ³ /s		
Flow (Initial Infiltration)	0.00 ft ³ /s		
Flow (Initial, Total)	0.00 ft ³ /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	12.24 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	3.92 ft ³ /s	Time to Peak (Flow, Outlet)	12.400 hours
Peak Conditions			
Elevation (Water Surface, Peak)	66.14 ft		
Volume (Peak)	17,625 ft ³		
Mass Balance (ft ³)			
Volume (Initial)	0 ft ³		
Volume (Total Inflow)	47,586 ft ³		
Volume (Total Infiltration)	0 ft ³		
Volume (Total Outlet Outflow)	46,872 ft ³		
Volume (Retained)	685 ft ³		
Volume (Unrouted)	-29 ft ³		
Error (Mass Balance)	0.1 %		

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 100 years

Label: MC-3500 - 3 (IN)

Storm Event: 100 year

Scenario: Post-Development 100 year

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	62.85 ft		
Volume (Initial)	0 ft ³		
Flow (Initial Outlet)	0.00 ft ³ /s		
Flow (Initial Infiltration)	0.00 ft ³ /s		
Flow (Initial, Total)	0.00 ft ³ /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	17.94 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	6.05 ft ³ /s	Time to Peak (Flow, Outlet)	12.400 hours
Elevation (Water Surface, Peak)	68.35 ft		
Volume (Peak)	25,706 ft ³		
Mass Balance (ft ³)			
Volume (Initial)	0 ft ³		
Volume (Total Inflow)	71,460 ft ³		
Volume (Total Infiltration)	0 ft ³		
Volume (Total Outlet Outflow)	70,325 ft ³		
Volume (Retained)	1,089 ft ³		
Volume (Unrouted)	-45 ft ³		
Error (Mass Balance)	0.1 %		

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 3 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
0.000	0.00	0.00	0.00	0.00	0.00	0	62.85
0.050	0.00	0.00	0.00	0.00	0.00	0	62.85
0.100	0.00	0.00	0.00	0.00	0.00	0	62.85
0.150	0.00	0.00	0.00	0.00	0.00	0	62.85
0.200	0.00	0.00	0.00	0.00	0.00	0	62.85
0.250	0.00	0.00	0.00	0.00	0.00	0	62.85
0.300	0.00	0.00	0.00	0.00	0.00	0	62.85
0.350	0.00	0.00	0.00	0.00	0.00	0	62.85
0.400	0.00	0.00	0.00	0.00	0.00	0	62.85
0.450	0.00	0.00	0.00	0.00	0.00	0	62.85
0.500	0.00	0.00	0.00	0.00	0.00	0	62.85
0.550	0.00	0.00	0.00	0.00	0.00	0	62.85
0.600	0.00	0.00	0.00	0.00	0.00	0	62.85
0.650	0.00	0.00	0.00	0.00	0.00	0	62.85
0.700	0.00	0.00	0.00	0.00	0.00	0	62.85
0.750	0.00	0.00	0.00	0.00	0.00	0	62.85
0.800	0.00	0.00	0.00	0.00	0.00	0	62.85
0.850	0.00	0.00	0.00	0.00	0.00	0	62.85
0.900	0.00	0.00	0.00	0.00	0.00	0	62.85
0.950	0.00	0.00	0.00	0.00	0.00	0	62.85
1.000	0.00	0.00	0.00	0.00	0.00	0	62.85
1.050	0.00	0.00	0.00	0.00	0.00	0	62.85
1.100	0.00	0.00	0.00	0.00	0.00	0	62.85
1.150	0.00	0.00	0.00	0.00	0.00	0	62.85
1.200	0.00	0.00	0.00	0.00	0.00	0	62.85
1.250	0.00	0.00	0.00	0.00	0.00	0	62.85
1.300	0.00	0.00	0.00	0.00	0.00	0	62.85
1.350	0.00	0.00	0.00	0.00	0.00	0	62.85
1.400	0.00	0.00	0.00	0.00	0.00	0	62.85
1.450	0.00	0.00	0.00	0.00	0.00	0	62.85
1.500	0.00	0.00	0.00	0.00	0.00	0	62.85
1.550	0.00	0.00	0.00	0.00	0.00	0	62.85
1.600	0.00	0.00	0.00	0.00	0.00	0	62.85
1.650	0.00	0.00	0.00	0.00	0.00	0	62.85
1.700	0.00	0.00	0.00	0.00	0.00	0	62.85
1.750	0.00	0.00	0.00	0.00	0.00	0	62.85
1.800	0.00	0.00	0.00	0.00	0.00	0	62.85
1.850	0.00	0.00	0.00	0.00	0.00	0	62.85
1.900	0.00	0.00	0.00	0.00	0.00	0	62.85
1.950	0.00	0.00	0.00	0.00	0.00	0	62.85
2.000	0.00	0.00	0.00	0.00	0.00	0	62.85
2.050	0.00	0.00	0.00	0.00	0.00	0	62.85

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 3 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
2.100	0.00	0.00	0.00	0.00	0.00	0	62.85
2.150	0.00	0.00	0.00	0.00	0.00	0	62.85
2.200	0.00	0.00	0.00	0.00	0.00	0	62.85
2.250	0.00	0.00	0.00	0.00	0.00	0	62.85
2.300	0.00	0.00	0.00	0.00	0.00	0	62.85
2.350	0.00	0.00	0.00	0.00	0.00	0	62.85
2.400	0.00	0.00	0.00	0.00	0.00	0	62.85
2.450	0.00	0.00	0.00	0.00	0.00	0	62.85
2.500	0.00	0.00	0.00	0.00	0.00	0	62.85
2.550	0.00	0.00	0.00	0.00	0.00	0	62.85
2.600	0.00	0.00	0.00	0.00	0.00	0	62.85
2.650	0.00	0.00	0.00	0.00	0.00	0	62.85
2.700	0.00	0.00	0.00	0.00	0.00	0	62.85
2.750	0.00	0.00	0.00	0.00	0.00	0	62.85
2.800	0.00	0.00	0.00	0.00	0.00	0	62.85
2.850	0.00	0.00	0.00	0.00	0.00	0	62.85
2.900	0.00	0.00	0.00	0.00	0.00	0	62.85
2.950	0.00	0.00	0.00	0.00	0.00	0	62.85
3.000	0.00	0.00	0.00	0.00	0.00	0	62.85
3.050	0.00	0.00	0.00	0.00	0.00	0	62.85
3.100	0.00	0.00	0.00	0.00	0.00	0	62.85
3.150	0.00	0.00	0.00	0.00	0.00	0	62.85
3.200	0.00	0.00	0.00	0.00	0.00	0	62.85
3.250	0.00	0.00	0.00	0.00	0.00	0	62.85
3.300	0.00	0.00	0.00	0.00	0.00	0	62.85
3.350	0.00	0.00	0.00	0.00	0.00	0	62.85
3.400	0.00	0.00	0.00	0.00	0.00	0	62.85
3.450	0.00	0.00	0.00	0.00	0.00	0	62.85
3.500	0.00	0.00	0.00	0.00	0.00	0	62.85
3.550	0.00	0.00	0.00	0.00	0.00	0	62.85
3.600	0.00	0.00	0.00	0.00	0.00	0	62.85
3.650	0.00	0.00	0.00	0.00	0.00	0	62.85
3.700	0.00	0.00	0.00	0.00	0.00	0	62.85
3.750	0.00	0.00	0.00	0.00	0.00	0	62.85
3.800	0.00	0.00	0.00	0.00	0.00	0	62.85
3.850	0.00	0.00	0.00	0.00	0.00	0	62.85
3.900	0.00	0.00	0.00	0.00	0.00	0	62.85
3.950	0.00	0.00	0.00	0.00	0.00	0	62.85
4.000	0.00	0.00	0.00	0.00	0.00	0	62.85
4.050	0.00	0.00	0.00	0.00	0.00	0	62.85
4.100	0.00	0.00	0.00	0.00	0.00	0	62.85
4.150	0.00	0.00	0.00	0.00	0.00	0	62.85

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 3 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
4.200	0.00	0.00	0.00	0.00	0.00	0	62.85
4.250	0.00	0.00	0.00	0.00	0.00	0	62.85
4.300	0.00	0.00	0.00	0.00	0.00	0	62.85
4.350	0.00	0.00	0.00	0.00	0.00	0	62.85
4.400	0.00	0.00	0.00	0.00	0.00	0	62.85
4.450	0.00	0.00	0.00	0.00	0.00	0	62.85
4.500	0.00	0.00	0.00	0.00	0.00	0	62.85
4.550	0.00	0.00	0.00	0.00	0.00	0	62.85
4.600	0.00	0.00	0.00	0.00	0.00	0	62.85
4.650	0.00	0.00	0.00	0.00	0.00	0	62.85
4.700	0.00	0.00	0.00	0.00	0.00	0	62.85
4.750	0.00	0.00	0.00	0.00	0.00	0	62.85
4.800	0.00	0.00	0.00	0.00	0.00	0	62.85
4.850	0.00	0.00	0.00	0.00	0.00	0	62.85
4.900	0.00	0.00	0.00	0.00	0.00	0	62.85
4.950	0.00	0.00	0.00	0.00	0.00	0	62.85
5.000	0.00	0.00	0.00	0.00	0.00	0	62.85
5.050	0.00	0.00	0.00	0.00	0.00	0	62.85
5.100	0.00	0.00	0.00	0.00	0.00	0	62.85
5.150	0.00	0.00	0.00	0.00	0.00	0	62.85
5.200	0.00	0.00	0.00	0.00	0.00	0	62.85
5.250	0.00	0.00	0.00	0.00	0.00	0	62.85
5.300	0.00	0.00	0.00	0.00	0.00	0	62.85
5.350	0.00	0.00	0.00	0.00	0.00	0	62.85
5.400	0.00	0.00	0.00	0.00	0.00	0	62.85
5.450	0.00	0.00	0.00	0.00	0.00	0	62.85
5.500	0.00	0.00	0.00	0.00	0.00	0	62.85
5.550	0.00	0.00	0.00	0.00	0.00	0	62.85
5.600	0.00	0.00	0.00	0.00	0.00	0	62.85
5.650	0.00	0.00	0.00	0.00	0.00	0	62.85
5.700	0.00	0.01	0.01	0.00	0.00	1	62.85
5.750	0.00	0.01	0.01	0.00	0.00	1	62.85
5.800	0.00	0.01	0.02	0.00	0.00	1	62.85
5.850	0.00	0.02	0.02	0.00	0.00	2	62.85
5.900	0.00	0.03	0.03	0.00	0.00	2	62.85
5.950	0.00	0.03	0.03	0.00	0.00	3	62.85
6.000	0.00	0.04	0.04	0.00	0.00	4	62.85
6.050	0.01	0.05	0.05	0.00	0.00	4	62.85
6.100	0.01	0.06	0.06	0.00	0.00	5	62.85
6.150	0.01	0.07	0.07	0.00	0.00	6	62.85
6.200	0.01	0.08	0.08	0.00	0.00	7	62.85
6.250	0.01	0.09	0.09	0.00	0.00	8	62.85

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 3 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
6.300	0.01	0.10	0.10	0.00	0.00	9	62.85
6.350	0.01	0.11	0.12	0.00	0.00	10	62.85
6.400	0.01	0.13	0.13	0.00	0.00	12	62.85
6.450	0.01	0.14	0.15	0.00	0.00	13	62.85
6.500	0.01	0.16	0.16	0.00	0.00	14	62.85
6.550	0.01	0.17	0.18	0.00	0.00	16	62.86
6.600	0.01	0.19	0.20	0.00	0.00	17	62.86
6.650	0.01	0.21	0.22	0.00	0.00	19	62.86
6.700	0.01	0.22	0.23	0.00	0.00	21	62.86
6.750	0.02	0.24	0.25	0.00	0.01	22	62.86
6.800	0.02	0.26	0.28	0.00	0.01	24	62.86
6.850	0.02	0.29	0.30	0.00	0.01	26	62.86
6.900	0.02	0.31	0.32	0.00	0.01	28	62.86
6.950	0.02	0.33	0.34	0.00	0.01	30	62.86
7.000	0.02	0.35	0.37	0.00	0.01	33	62.86
7.050	0.02	0.38	0.39	0.00	0.01	35	62.86
7.100	0.02	0.40	0.42	0.00	0.01	37	62.86
7.150	0.02	0.43	0.45	0.00	0.01	39	62.86
7.200	0.02	0.46	0.48	0.00	0.01	42	62.86
7.250	0.02	0.48	0.50	0.00	0.01	45	62.86
7.300	0.03	0.51	0.53	0.00	0.01	47	62.87
7.350	0.03	0.54	0.57	0.00	0.01	50	62.87
7.400	0.03	0.57	0.60	0.00	0.01	53	62.87
7.450	0.03	0.61	0.63	0.00	0.01	56	62.87
7.500	0.03	0.64	0.66	0.00	0.01	59	62.87
7.550	0.03	0.67	0.70	0.00	0.01	62	62.87
7.600	0.03	0.70	0.73	0.00	0.01	65	62.87
7.650	0.03	0.74	0.77	0.00	0.02	68	62.87
7.700	0.03	0.78	0.81	0.00	0.02	71	62.87
7.750	0.04	0.81	0.85	0.00	0.02	75	62.88
7.800	0.04	0.85	0.88	0.00	0.02	78	62.88
7.850	0.04	0.89	0.92	0.00	0.02	82	62.88
7.900	0.04	0.93	0.97	0.00	0.02	85	62.88
7.950	0.04	0.97	1.01	0.00	0.02	89	62.88
8.000	0.04	1.01	1.05	0.00	0.02	93	62.88
8.050	0.04	1.05	1.09	0.00	0.02	96	62.88
8.100	0.05	1.09	1.14	0.00	0.02	100	62.88
8.150	0.05	1.14	1.19	0.00	0.02	105	62.89
8.200	0.05	1.18	1.23	0.00	0.02	109	62.89
8.250	0.05	1.23	1.28	0.00	0.03	113	62.89
8.300	0.05	1.28	1.34	0.00	0.03	118	62.89
8.350	0.06	1.34	1.39	0.00	0.03	123	62.89

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 3 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
8.400	0.06	1.39	1.45	0.00	0.03	128	62.89
8.450	0.06	1.45	1.51	0.00	0.03	133	62.89
8.500	0.06	1.51	1.57	0.00	0.03	138	62.90
8.550	0.06	1.57	1.63	0.00	0.03	144	62.90
8.600	0.07	1.63	1.70	0.00	0.03	150	62.90
8.650	0.07	1.69	1.77	0.00	0.04	156	62.90
8.700	0.07	1.76	1.84	0.00	0.04	162	62.90
8.750	0.07	1.83	1.91	0.00	0.04	168	62.91
8.800	0.08	1.90	1.98	0.00	0.04	175	62.91
8.850	0.08	1.98	2.06	0.00	0.04	182	62.91
8.900	0.08	2.05	2.14	0.00	0.04	188	62.91
8.950	0.08	2.13	2.22	0.00	0.04	196	62.92
9.000	0.09	2.21	2.30	0.00	0.05	203	62.92
9.050	0.09	2.29	2.39	0.00	0.05	211	62.92
9.100	0.09	2.38	2.47	0.00	0.05	218	62.92
9.150	0.10	2.46	2.56	0.00	0.05	226	62.93
9.200	0.10	2.55	2.66	0.00	0.05	234	62.93
9.250	0.10	2.64	2.75	0.00	0.06	243	62.93
9.300	0.11	2.73	2.85	0.00	0.06	251	62.93
9.350	0.11	2.83	2.95	0.00	0.06	260	62.94
9.400	0.11	2.93	3.05	0.00	0.06	269	62.94
9.450	0.11	3.03	3.15	0.00	0.06	278	62.94
9.500	0.12	3.13	3.26	0.00	0.07	287	62.95
9.550	0.12	3.23	3.37	0.00	0.07	297	62.95
9.600	0.12	3.34	3.48	0.00	0.07	307	62.95
9.650	0.13	3.45	3.59	0.00	0.07	317	62.96
9.700	0.13	3.56	3.71	0.00	0.07	327	62.96
9.750	0.13	3.67	3.82	0.00	0.08	337	62.96
9.800	0.14	3.78	3.94	0.00	0.08	348	62.97
9.850	0.14	3.90	4.06	0.00	0.08	358	62.97
9.900	0.15	4.02	4.19	0.00	0.08	369	62.97
9.950	0.15	4.14	4.31	0.00	0.09	380	62.98
10.000	0.15	4.26	4.44	0.00	0.09	392	62.98
10.050	0.16	4.39	4.57	0.00	0.09	403	62.99
10.100	0.16	4.52	4.71	0.00	0.09	415	62.99
10.150	0.17	4.65	4.85	0.00	0.10	427	62.99
10.200	0.17	4.79	4.99	0.00	0.10	440	63.00
10.250	0.18	4.93	5.14	0.00	0.10	453	63.00
10.300	0.18	5.08	5.30	0.00	0.11	467	63.01
10.350	0.19	5.24	5.46	0.00	0.11	482	63.01
10.400	0.20	5.40	5.63	0.00	0.11	496	63.02
10.450	0.20	5.57	5.80	0.00	0.12	512	63.02

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 3 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
10.500	0.21	5.74	5.98	0.00	0.12	528	63.03
10.550	0.22	5.92	6.17	0.00	0.12	544	63.03
10.600	0.22	6.11	6.36	0.00	0.13	561	63.04
10.650	0.23	6.30	6.56	0.00	0.13	579	63.04
10.700	0.24	6.49	6.76	0.00	0.14	597	63.05
10.750	0.24	6.69	6.97	0.00	0.14	615	63.06
10.800	0.25	6.90	7.19	0.00	0.14	634	63.06
10.850	0.26	7.11	7.41	0.00	0.15	653	63.07
10.900	0.27	7.33	7.64	0.00	0.15	673	63.08
10.950	0.27	7.55	7.87	0.00	0.16	694	63.08
11.000	0.28	7.78	8.10	0.00	0.16	715	63.09
11.050	0.29	8.02	8.35	0.00	0.17	736	63.10
11.100	0.31	8.27	8.61	0.00	0.17	760	63.11
11.150	0.32	8.54	8.90	0.00	0.18	785	63.11
11.200	0.35	8.84	9.21	0.00	0.18	812	63.12
11.250	0.37	9.17	9.55	0.00	0.19	842	63.13
11.300	0.39	9.53	9.92	0.00	0.20	875	63.14
11.350	0.41	9.92	10.33	0.00	0.21	911	63.16
11.400	0.44	10.34	10.77	0.00	0.22	950	63.17
11.450	0.46	10.79	11.24	0.00	0.23	991	63.18
11.500	0.49	11.27	11.74	0.00	0.24	1,035	63.20
11.550	0.56	11.82	12.31	0.00	0.25	1,086	63.22
11.600	0.67	12.53	13.05	0.00	0.26	1,151	63.24
11.650	0.83	13.47	14.03	0.00	0.28	1,237	63.27
11.700	1.05	14.73	15.35	0.00	0.31	1,353	63.31
11.750	1.26	16.36	17.04	0.00	0.34	1,497	63.35
11.800	1.51	18.40	19.12	0.00	0.36	1,613	63.39
11.850	1.73	20.88	21.65	0.00	0.38	1,753	63.44
11.900	2.02	23.80	24.63	0.00	0.41	1,919	63.50
11.950	2.71	27.62	28.52	0.00	0.45	2,136	63.57
12.000	3.85	33.16	34.17	0.00	0.51	2,716	63.67
12.050	4.35	40.19	41.35	0.00	0.58	3,596	63.81
12.100	4.56	47.84	49.10	0.00	0.63	4,365	63.93
12.150	4.07	55.12	56.46	0.00	0.67	5,028	64.03
12.200	3.00	60.79	62.19	0.00	0.70	5,543	64.11
12.250	2.48	64.83	66.28	0.00	0.72	5,906	64.17
12.300	2.13	67.96	69.44	0.00	0.74	6,188	64.21
12.350	1.88	70.46	71.97	0.00	0.75	6,413	64.25
12.400	1.60	72.41	73.94	0.00	0.76	6,588	64.27
12.450	1.37	73.84	75.39	0.00	0.77	6,717	64.29
12.500	1.10	74.75	76.31	0.00	0.78	6,799	64.31
12.550	0.92	75.21	76.77	0.00	0.78	6,840	64.31

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 3 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
12.600	0.76	75.33	76.89	0.00	0.78	6,851	64.31
12.650	0.68	75.21	76.77	0.00	0.78	6,840	64.31
12.700	0.64	74.98	76.53	0.00	0.78	6,819	64.31
12.750	0.61	74.68	76.23	0.00	0.78	6,793	64.30
12.800	0.58	74.33	75.87	0.00	0.77	6,761	64.30
12.850	0.56	73.92	75.47	0.00	0.77	6,724	64.29
12.900	0.53	73.47	75.01	0.00	0.77	6,684	64.29
12.950	0.51	72.97	74.51	0.00	0.77	6,639	64.28
13.000	0.48	72.42	73.95	0.00	0.76	6,590	64.27
13.050	0.46	71.83	73.36	0.00	0.76	6,536	64.26
13.100	0.44	71.21	72.73	0.00	0.76	6,481	64.26
13.150	0.43	70.57	72.08	0.00	0.75	6,423	64.25
13.200	0.42	69.91	71.41	0.00	0.75	6,364	64.24
13.250	0.41	69.25	70.74	0.00	0.75	6,304	64.23
13.300	0.40	68.58	70.06	0.00	0.74	6,243	64.22
13.350	0.40	67.90	69.38	0.00	0.74	6,182	64.21
13.400	0.39	67.22	68.69	0.00	0.74	6,121	64.20
13.450	0.38	66.53	67.99	0.00	0.73	6,059	64.19
13.500	0.38	65.83	67.29	0.00	0.73	5,996	64.18
13.550	0.37	65.13	66.58	0.00	0.72	5,933	64.17
13.600	0.36	64.42	65.86	0.00	0.72	5,869	64.16
13.650	0.36	63.70	65.14	0.00	0.72	5,805	64.15
13.700	0.35	62.98	64.41	0.00	0.71	5,740	64.14
13.750	0.34	62.26	63.67	0.00	0.71	5,674	64.13
13.800	0.33	61.52	62.93	0.00	0.70	5,608	64.12
13.850	0.33	60.78	62.18	0.00	0.70	5,542	64.11
13.900	0.32	60.04	61.43	0.00	0.70	5,475	64.10
13.950	0.31	59.29	60.67	0.00	0.69	5,406	64.09
14.000	0.31	58.53	59.91	0.00	0.69	5,338	64.08
14.050	0.30	57.77	59.14	0.00	0.68	5,268	64.07
14.100	0.29	57.00	58.36	0.00	0.68	5,199	64.06
14.150	0.29	56.24	57.59	0.00	0.68	5,129	64.05
14.200	0.29	55.47	56.82	0.00	0.67	5,059	64.03
14.250	0.28	54.71	56.04	0.00	0.67	4,990	64.02
14.300	0.28	53.95	55.27	0.00	0.66	4,921	64.01
14.350	0.28	53.19	54.51	0.00	0.66	4,851	64.00
14.400	0.27	52.43	53.74	0.00	0.66	4,782	63.99
14.450	0.27	51.67	52.97	0.00	0.65	4,713	63.98
14.500	0.27	50.91	52.21	0.00	0.65	4,645	63.97
14.550	0.26	50.16	51.45	0.00	0.64	4,576	63.96
14.600	0.26	49.41	50.68	0.00	0.64	4,507	63.95
14.650	0.26	48.66	49.92	0.00	0.63	4,439	63.94

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 3 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
14.700	0.25	47.91	49.17	0.00	0.63	4,371	63.93
14.750	0.25	47.16	48.41	0.00	0.63	4,303	63.92
14.800	0.25	46.41	47.65	0.00	0.62	4,235	63.91
14.850	0.24	45.66	46.90	0.00	0.62	4,167	63.90
14.900	0.24	44.92	46.15	0.00	0.61	4,099	63.89
14.950	0.24	44.18	45.40	0.00	0.61	4,032	63.88
15.000	0.23	43.43	44.65	0.00	0.61	3,964	63.87
15.050	0.23	42.69	43.90	0.00	0.60	3,897	63.85
15.100	0.23	41.96	43.15	0.00	0.60	3,817	63.84
15.150	0.22	41.23	42.41	0.00	0.59	3,726	63.83
15.200	0.22	40.51	41.67	0.00	0.58	3,635	63.81
15.250	0.22	39.79	40.94	0.00	0.57	3,546	63.80
15.300	0.21	39.09	40.22	0.00	0.57	3,458	63.79
15.350	0.21	38.39	39.51	0.00	0.56	3,371	63.77
15.400	0.21	37.70	38.80	0.00	0.55	3,284	63.76
15.450	0.20	37.01	38.11	0.00	0.55	3,198	63.75
15.500	0.20	36.33	37.41	0.00	0.54	3,114	63.74
15.550	0.20	35.66	36.73	0.00	0.53	3,030	63.72
15.600	0.19	35.00	36.05	0.00	0.53	2,946	63.71
15.650	0.19	34.34	35.38	0.00	0.52	2,864	63.70
15.700	0.18	33.68	34.71	0.00	0.51	2,782	63.68
15.750	0.18	33.04	34.05	0.00	0.51	2,702	63.67
15.800	0.18	32.40	33.40	0.00	0.50	2,621	63.66
15.850	0.17	31.76	32.75	0.00	0.49	2,542	63.65
15.900	0.17	31.13	32.11	0.00	0.49	2,463	63.64
15.950	0.17	30.51	31.47	0.00	0.48	2,385	63.62
16.000	0.16	29.89	30.84	0.00	0.48	2,308	63.61
16.050	0.16	29.28	30.22	0.00	0.47	2,231	63.60
16.100	0.16	28.67	29.60	0.00	0.46	2,196	63.59
16.150	0.16	28.07	28.99	0.00	0.46	2,162	63.58
16.200	0.15	27.48	28.38	0.00	0.45	2,128	63.57
16.250	0.15	26.90	27.79	0.00	0.45	2,095	63.55
16.300	0.15	26.33	27.21	0.00	0.44	2,063	63.54
16.350	0.15	25.76	26.63	0.00	0.43	2,031	63.53
16.400	0.15	25.21	26.06	0.00	0.43	1,999	63.52
16.450	0.15	24.66	25.50	0.00	0.42	1,968	63.51
16.500	0.15	24.11	24.95	0.00	0.42	1,937	63.50
16.550	0.14	23.58	24.41	0.00	0.41	1,907	63.49
16.600	0.14	23.06	23.87	0.00	0.41	1,877	63.48
16.650	0.14	22.54	23.34	0.00	0.40	1,847	63.47
16.700	0.14	22.03	22.82	0.00	0.40	1,818	63.46
16.750	0.14	21.52	22.30	0.00	0.39	1,790	63.45

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 3 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
16.800	0.14	21.02	21.80	0.00	0.39	1,761	63.44
16.850	0.14	20.53	21.30	0.00	0.38	1,734	63.43
16.900	0.13	20.05	20.80	0.00	0.38	1,706	63.42
16.950	0.13	19.57	20.32	0.00	0.37	1,679	63.41
17.000	0.13	19.10	19.84	0.00	0.37	1,652	63.41
17.050	0.13	18.64	19.36	0.00	0.36	1,626	63.40
17.100	0.13	18.18	18.89	0.00	0.36	1,600	63.39
17.150	0.13	17.73	18.43	0.00	0.35	1,574	63.38
17.200	0.12	17.28	17.98	0.00	0.35	1,549	63.37
17.250	0.12	16.84	17.53	0.00	0.34	1,524	63.36
17.300	0.12	16.40	17.08	0.00	0.34	1,499	63.35
17.350	0.12	15.98	16.65	0.00	0.33	1,468	63.34
17.400	0.12	15.57	16.22	0.00	0.33	1,430	63.33
17.450	0.12	15.17	15.80	0.00	0.32	1,394	63.32
17.500	0.12	14.79	15.40	0.00	0.31	1,358	63.31
17.550	0.11	14.41	15.02	0.00	0.30	1,324	63.30
17.600	0.11	14.05	14.64	0.00	0.29	1,291	63.28
17.650	0.11	13.70	14.28	0.00	0.29	1,259	63.27
17.700	0.11	13.37	13.93	0.00	0.28	1,228	63.26
17.750	0.11	13.04	13.59	0.00	0.27	1,198	63.25
17.800	0.11	12.72	13.26	0.00	0.27	1,169	63.24
17.850	0.11	12.42	12.94	0.00	0.26	1,141	63.23
17.900	0.10	12.12	12.63	0.00	0.25	1,114	63.22
17.950	0.10	11.83	12.33	0.00	0.25	1,087	63.22
18.000	0.10	11.55	12.03	0.00	0.24	1,061	63.21
18.050	0.10	11.28	11.75	0.00	0.24	1,036	63.20
18.100	0.10	11.02	11.48	0.00	0.23	1,012	63.19
18.150	0.10	10.76	11.21	0.00	0.22	989	63.18
18.200	0.10	10.52	10.96	0.00	0.22	966	63.18
18.250	0.10	10.28	10.71	0.00	0.21	945	63.17
18.300	0.10	10.06	10.48	0.00	0.21	924	63.16
18.350	0.10	9.84	10.25	0.00	0.21	904	63.15
18.400	0.10	9.63	10.03	0.00	0.20	884	63.15
18.450	0.09	9.42	9.82	0.00	0.20	866	63.14
18.500	0.09	9.23	9.61	0.00	0.19	848	63.14
18.550	0.09	9.04	9.41	0.00	0.19	830	63.13
18.600	0.09	8.85	9.22	0.00	0.18	814	63.12
18.650	0.09	8.68	9.04	0.00	0.18	797	63.12
18.700	0.09	8.51	8.86	0.00	0.18	782	63.11
18.750	0.09	8.34	8.69	0.00	0.17	767	63.11
18.800	0.09	8.19	8.53	0.00	0.17	752	63.10
18.850	0.09	8.03	8.37	0.00	0.17	738	63.10

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 3 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
18.900	0.09	7.89	8.22	0.00	0.16	725	63.09
18.950	0.09	7.74	8.07	0.00	0.16	711	63.09
19.000	0.09	7.61	7.92	0.00	0.16	699	63.09
19.050	0.09	7.47	7.79	0.00	0.16	687	63.08
19.100	0.09	7.34	7.65	0.00	0.15	675	63.08
19.150	0.09	7.22	7.52	0.00	0.15	663	63.07
19.200	0.09	7.10	7.40	0.00	0.15	652	63.07
19.250	0.09	6.98	7.28	0.00	0.15	642	63.07
19.300	0.09	6.87	7.16	0.00	0.14	631	63.06
19.350	0.09	6.76	7.05	0.00	0.14	621	63.06
19.400	0.09	6.66	6.94	0.00	0.14	612	63.06
19.450	0.09	6.56	6.83	0.00	0.14	602	63.05
19.500	0.09	6.46	6.73	0.00	0.13	593	63.05
19.550	0.08	6.36	6.63	0.00	0.13	585	63.05
19.600	0.08	6.27	6.53	0.00	0.13	576	63.04
19.650	0.08	6.18	6.44	0.00	0.13	568	63.04
19.700	0.08	6.09	6.35	0.00	0.13	560	63.04
19.750	0.08	6.01	6.26	0.00	0.13	552	63.04
19.800	0.08	5.93	6.17	0.00	0.12	545	63.03
19.850	0.08	5.85	6.09	0.00	0.12	537	63.03
19.900	0.08	5.77	6.01	0.00	0.12	530	63.03
19.950	0.08	5.69	5.93	0.00	0.12	523	63.03
20.000	0.08	5.62	5.86	0.00	0.12	517	63.02
20.050	0.08	5.55	5.78	0.00	0.12	510	63.02
20.100	0.08	5.48	5.71	0.00	0.11	504	63.02
20.150	0.08	5.42	5.64	0.00	0.11	498	63.02
20.200	0.08	5.35	5.57	0.00	0.11	492	63.02
20.250	0.08	5.29	5.51	0.00	0.11	486	63.01
20.300	0.08	5.23	5.45	0.00	0.11	480	63.01
20.350	0.08	5.17	5.39	0.00	0.11	475	63.01
20.400	0.08	5.11	5.33	0.00	0.11	470	63.01
20.450	0.08	5.06	5.27	0.00	0.11	465	63.01
20.500	0.08	5.00	5.21	0.00	0.10	460	63.00
20.550	0.08	4.95	5.16	0.00	0.10	455	63.00
20.600	0.08	4.90	5.10	0.00	0.10	450	63.00
20.650	0.08	4.85	5.05	0.00	0.10	445	63.00
20.700	0.08	4.80	5.00	0.00	0.10	441	63.00
20.750	0.08	4.75	4.95	0.00	0.10	437	63.00
20.800	0.08	4.71	4.90	0.00	0.10	432	63.00
20.850	0.07	4.66	4.86	0.00	0.10	428	62.99
20.900	0.07	4.62	4.81	0.00	0.10	424	62.99
20.950	0.07	4.57	4.77	0.00	0.10	420	62.99

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 3 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
21.000	0.07	4.53	4.72	0.00	0.09	417	62.99
21.050	0.07	4.49	4.68	0.00	0.09	413	62.99
21.100	0.07	4.45	4.64	0.00	0.09	409	62.99
21.150	0.07	4.42	4.60	0.00	0.09	406	62.99
21.200	0.07	4.38	4.56	0.00	0.09	402	62.99
21.250	0.07	4.34	4.52	0.00	0.09	399	62.98
21.300	0.07	4.30	4.48	0.00	0.09	396	62.98
21.350	0.07	4.27	4.45	0.00	0.09	392	62.98
21.400	0.07	4.24	4.41	0.00	0.09	389	62.98
21.450	0.07	4.20	4.38	0.00	0.09	386	62.98
21.500	0.07	4.17	4.34	0.00	0.09	383	62.98
21.550	0.07	4.14	4.31	0.00	0.09	380	62.98
21.600	0.07	4.10	4.28	0.00	0.09	377	62.98
21.650	0.07	4.07	4.24	0.00	0.09	374	62.98
21.700	0.07	4.04	4.21	0.00	0.08	371	62.97
21.750	0.07	4.01	4.18	0.00	0.08	369	62.97
21.800	0.07	3.98	4.15	0.00	0.08	366	62.97
21.850	0.07	3.95	4.12	0.00	0.08	363	62.97
21.900	0.07	3.93	4.09	0.00	0.08	361	62.97
21.950	0.07	3.90	4.06	0.00	0.08	358	62.97
22.000	0.07	3.87	4.03	0.00	0.08	356	62.97
22.050	0.07	3.84	4.00	0.00	0.08	353	62.97
22.100	0.07	3.82	3.98	0.00	0.08	351	62.97
22.150	0.07	3.79	3.95	0.00	0.08	348	62.97
22.200	0.07	3.77	3.92	0.00	0.08	346	62.97
22.250	0.07	3.74	3.90	0.00	0.08	344	62.97
22.300	0.06	3.71	3.87	0.00	0.08	341	62.96
22.350	0.06	3.69	3.84	0.00	0.08	339	62.96
22.400	0.06	3.66	3.82	0.00	0.08	337	62.96
22.450	0.06	3.64	3.79	0.00	0.08	335	62.96
22.500	0.06	3.62	3.77	0.00	0.08	332	62.96
22.550	0.06	3.59	3.74	0.00	0.08	330	62.96
22.600	0.06	3.57	3.72	0.00	0.07	328	62.96
22.650	0.06	3.55	3.70	0.00	0.07	326	62.96
22.700	0.06	3.53	3.67	0.00	0.07	324	62.96
22.750	0.06	3.50	3.65	0.00	0.07	322	62.96
22.800	0.06	3.48	3.63	0.00	0.07	320	62.96
22.850	0.06	3.46	3.60	0.00	0.07	318	62.96
22.900	0.06	3.44	3.58	0.00	0.07	316	62.96
22.950	0.06	3.42	3.56	0.00	0.07	314	62.96
23.000	0.06	3.39	3.54	0.00	0.07	312	62.95
23.050	0.06	3.37	3.51	0.00	0.07	310	62.95

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 3 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
23.100	0.06	3.35	3.49	0.00	0.07	308	62.95
23.150	0.06	3.33	3.47	0.00	0.07	306	62.95
23.200	0.06	3.31	3.45	0.00	0.07	304	62.95
23.250	0.06	3.29	3.43	0.00	0.07	302	62.95
23.300	0.06	3.27	3.41	0.00	0.07	300	62.95
23.350	0.06	3.25	3.39	0.00	0.07	299	62.95
23.400	0.06	3.23	3.36	0.00	0.07	297	62.95
23.450	0.06	3.21	3.34	0.00	0.07	295	62.95
23.500	0.06	3.19	3.32	0.00	0.07	293	62.95
23.550	0.06	3.17	3.30	0.00	0.07	291	62.95
23.600	0.06	3.15	3.28	0.00	0.07	290	62.95
23.650	0.06	3.13	3.26	0.00	0.07	288	62.95
23.700	0.06	3.11	3.24	0.00	0.07	286	62.95
23.750	0.05	3.09	3.22	0.00	0.06	284	62.95
23.800	0.05	3.08	3.20	0.00	0.06	283	62.95
23.850	0.05	3.06	3.18	0.00	0.06	281	62.94
23.900	0.05	3.04	3.16	0.00	0.06	279	62.94
23.950	0.05	3.02	3.14	0.00	0.06	277	62.94
24.000	0.05	3.00	3.12	0.00	0.06	276	62.94

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 3 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
0.000	0.00	0.00	0.00	0.00	0.00	0	62.85
0.050	0.00	0.00	0.00	0.00	0.00	0	62.85
0.100	0.00	0.00	0.00	0.00	0.00	0	62.85
0.150	0.00	0.00	0.00	0.00	0.00	0	62.85
0.200	0.00	0.00	0.00	0.00	0.00	0	62.85
0.250	0.00	0.00	0.00	0.00	0.00	0	62.85
0.300	0.00	0.00	0.00	0.00	0.00	0	62.85
0.350	0.00	0.00	0.00	0.00	0.00	0	62.85
0.400	0.00	0.00	0.00	0.00	0.00	0	62.85
0.450	0.00	0.00	0.00	0.00	0.00	0	62.85
0.500	0.00	0.00	0.00	0.00	0.00	0	62.85
0.550	0.00	0.00	0.00	0.00	0.00	0	62.85
0.600	0.00	0.00	0.00	0.00	0.00	0	62.85
0.650	0.00	0.00	0.00	0.00	0.00	0	62.85
0.700	0.00	0.00	0.00	0.00	0.00	0	62.85
0.750	0.00	0.00	0.00	0.00	0.00	0	62.85
0.800	0.00	0.00	0.00	0.00	0.00	0	62.85
0.850	0.00	0.00	0.00	0.00	0.00	0	62.85
0.900	0.00	0.00	0.00	0.00	0.00	0	62.85
0.950	0.00	0.00	0.00	0.00	0.00	0	62.85
1.000	0.00	0.00	0.00	0.00	0.00	0	62.85
1.050	0.00	0.00	0.00	0.00	0.00	0	62.85
1.100	0.00	0.00	0.00	0.00	0.00	0	62.85
1.150	0.00	0.00	0.00	0.00	0.00	0	62.85
1.200	0.00	0.00	0.00	0.00	0.00	0	62.85
1.250	0.00	0.00	0.00	0.00	0.00	0	62.85
1.300	0.00	0.00	0.00	0.00	0.00	0	62.85
1.350	0.00	0.00	0.00	0.00	0.00	0	62.85
1.400	0.00	0.00	0.00	0.00	0.00	0	62.85
1.450	0.00	0.00	0.00	0.00	0.00	0	62.85
1.500	0.00	0.00	0.00	0.00	0.00	0	62.85
1.550	0.00	0.00	0.00	0.00	0.00	0	62.85
1.600	0.00	0.00	0.00	0.00	0.00	0	62.85
1.650	0.00	0.00	0.00	0.00	0.00	0	62.85
1.700	0.00	0.00	0.00	0.00	0.00	0	62.85
1.750	0.00	0.00	0.00	0.00	0.00	0	62.85
1.800	0.00	0.00	0.00	0.00	0.00	0	62.85
1.850	0.00	0.00	0.00	0.00	0.00	0	62.85
1.900	0.00	0.00	0.00	0.00	0.00	0	62.85
1.950	0.00	0.00	0.00	0.00	0.00	0	62.85
2.000	0.00	0.00	0.00	0.00	0.00	0	62.85
2.050	0.00	0.00	0.00	0.00	0.00	0	62.85

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 3 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
2.100	0.00	0.00	0.00	0.00	0.00	0	62.85
2.150	0.00	0.00	0.00	0.00	0.00	0	62.85
2.200	0.00	0.00	0.00	0.00	0.00	0	62.85
2.250	0.00	0.00	0.00	0.00	0.00	0	62.85
2.300	0.00	0.00	0.00	0.00	0.00	0	62.85
2.350	0.00	0.00	0.00	0.00	0.00	0	62.85
2.400	0.00	0.00	0.00	0.00	0.00	0	62.85
2.450	0.00	0.00	0.00	0.00	0.00	0	62.85
2.500	0.00	0.00	0.00	0.00	0.00	0	62.85
2.550	0.00	0.00	0.00	0.00	0.00	0	62.85
2.600	0.00	0.00	0.00	0.00	0.00	0	62.85
2.650	0.00	0.00	0.00	0.00	0.00	0	62.85
2.700	0.00	0.00	0.00	0.00	0.00	0	62.85
2.750	0.00	0.00	0.00	0.00	0.00	0	62.85
2.800	0.00	0.00	0.00	0.00	0.00	0	62.85
2.850	0.00	0.00	0.00	0.00	0.00	0	62.85
2.900	0.00	0.00	0.00	0.00	0.00	0	62.85
2.950	0.00	0.00	0.00	0.00	0.00	0	62.85
3.000	0.00	0.00	0.00	0.00	0.00	0	62.85
3.050	0.00	0.00	0.00	0.00	0.00	0	62.85
3.100	0.00	0.00	0.00	0.00	0.00	0	62.85
3.150	0.00	0.00	0.00	0.00	0.00	0	62.85
3.200	0.00	0.00	0.00	0.00	0.00	0	62.85
3.250	0.00	0.00	0.00	0.00	0.00	0	62.85
3.300	0.00	0.00	0.00	0.00	0.00	0	62.85
3.350	0.00	0.00	0.00	0.00	0.00	0	62.85
3.400	0.00	0.00	0.00	0.00	0.00	0	62.85
3.450	0.00	0.00	0.00	0.00	0.00	0	62.85
3.500	0.00	0.01	0.01	0.00	0.00	1	62.85
3.550	0.00	0.01	0.01	0.00	0.00	1	62.85
3.600	0.00	0.02	0.02	0.00	0.00	2	62.85
3.650	0.01	0.03	0.03	0.00	0.00	3	62.85
3.700	0.01	0.04	0.04	0.00	0.00	4	62.85
3.750	0.01	0.05	0.05	0.00	0.00	5	62.85
3.800	0.01	0.07	0.07	0.00	0.00	6	62.85
3.850	0.01	0.08	0.09	0.00	0.00	8	62.85
3.900	0.01	0.10	0.10	0.00	0.00	9	62.85
3.950	0.01	0.12	0.12	0.00	0.00	11	62.85
4.000	0.01	0.14	0.14	0.00	0.00	13	62.85
4.050	0.01	0.16	0.16	0.00	0.00	15	62.85
4.100	0.02	0.18	0.19	0.00	0.00	17	62.86
4.150	0.02	0.20	0.21	0.00	0.00	19	62.86

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 3 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
4.200	0.02	0.23	0.24	0.00	0.00	21	62.86
4.250	0.02	0.26	0.27	0.00	0.01	23	62.86
4.300	0.02	0.28	0.29	0.00	0.01	26	62.86
4.350	0.02	0.31	0.32	0.00	0.01	29	62.86
4.400	0.02	0.34	0.35	0.00	0.01	31	62.86
4.450	0.02	0.37	0.39	0.00	0.01	34	62.86
4.500	0.02	0.40	0.42	0.00	0.01	37	62.86
4.550	0.03	0.44	0.45	0.00	0.01	40	62.86
4.600	0.03	0.47	0.49	0.00	0.01	43	62.86
4.650	0.03	0.50	0.52	0.00	0.01	46	62.87
4.700	0.03	0.54	0.56	0.00	0.01	49	62.87
4.750	0.03	0.57	0.60	0.00	0.01	53	62.87
4.800	0.03	0.61	0.64	0.00	0.01	56	62.87
4.850	0.03	0.65	0.68	0.00	0.01	60	62.87
4.900	0.03	0.69	0.72	0.00	0.01	63	62.87
4.950	0.04	0.73	0.76	0.00	0.02	67	62.87
5.000	0.04	0.77	0.80	0.00	0.02	71	62.87
5.050	0.04	0.81	0.84	0.00	0.02	74	62.88
5.100	0.04	0.85	0.89	0.00	0.02	78	62.88
5.150	0.04	0.89	0.93	0.00	0.02	82	62.88
5.200	0.04	0.94	0.98	0.00	0.02	86	62.88
5.250	0.04	0.98	1.02	0.00	0.02	90	62.88
5.300	0.04	1.03	1.07	0.00	0.02	94	62.88
5.350	0.05	1.07	1.12	0.00	0.02	98	62.88
5.400	0.05	1.12	1.16	0.00	0.02	103	62.88
5.450	0.05	1.16	1.21	0.00	0.02	107	62.89
5.500	0.05	1.21	1.26	0.00	0.03	111	62.89
5.550	0.05	1.26	1.31	0.00	0.03	115	62.89
5.600	0.05	1.30	1.36	0.00	0.03	120	62.89
5.650	0.05	1.35	1.41	0.00	0.03	124	62.89
5.700	0.05	1.40	1.46	0.00	0.03	129	62.89
5.750	0.06	1.45	1.51	0.00	0.03	133	62.89
5.800	0.06	1.50	1.56	0.00	0.03	138	62.90
5.850	0.06	1.55	1.62	0.00	0.03	143	62.90
5.900	0.06	1.60	1.67	0.00	0.03	147	62.90
5.950	0.06	1.65	1.72	0.00	0.03	152	62.90
6.000	0.06	1.71	1.78	0.00	0.04	157	62.90
6.050	0.06	1.76	1.83	0.00	0.04	162	62.90
6.100	0.07	1.81	1.89	0.00	0.04	166	62.91
6.150	0.07	1.87	1.94	0.00	0.04	172	62.91
6.200	0.07	1.92	2.00	0.00	0.04	177	62.91
6.250	0.07	1.98	2.06	0.00	0.04	182	62.91

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 3 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
6.300	0.07	2.04	2.13	0.00	0.04	187	62.91
6.350	0.08	2.10	2.19	0.00	0.04	193	62.91
6.400	0.08	2.16	2.26	0.00	0.05	199	62.92
6.450	0.08	2.23	2.32	0.00	0.05	205	62.92
6.500	0.08	2.30	2.39	0.00	0.05	211	62.92
6.550	0.08	2.36	2.46	0.00	0.05	217	62.92
6.600	0.09	2.43	2.54	0.00	0.05	224	62.93
6.650	0.09	2.51	2.61	0.00	0.05	230	62.93
6.700	0.09	2.58	2.69	0.00	0.05	237	62.93
6.750	0.09	2.66	2.77	0.00	0.06	244	62.93
6.800	0.10	2.73	2.85	0.00	0.06	251	62.93
6.850	0.10	2.81	2.93	0.00	0.06	258	62.94
6.900	0.10	2.89	3.01	0.00	0.06	266	62.94
6.950	0.10	2.97	3.10	0.00	0.06	273	62.94
7.000	0.11	3.06	3.19	0.00	0.06	281	62.94
7.050	0.11	3.14	3.27	0.00	0.07	289	62.95
7.100	0.11	3.23	3.36	0.00	0.07	297	62.95
7.150	0.12	3.32	3.46	0.00	0.07	305	62.95
7.200	0.12	3.41	3.55	0.00	0.07	313	62.96
7.250	0.12	3.50	3.65	0.00	0.07	322	62.96
7.300	0.12	3.59	3.74	0.00	0.08	330	62.96
7.350	0.13	3.69	3.84	0.00	0.08	339	62.96
7.400	0.13	3.79	3.94	0.00	0.08	348	62.97
7.450	0.13	3.88	4.05	0.00	0.08	357	62.97
7.500	0.13	3.98	4.15	0.00	0.08	366	62.97
7.550	0.14	4.09	4.26	0.00	0.09	375	62.98
7.600	0.14	4.19	4.36	0.00	0.09	385	62.98
7.650	0.14	4.29	4.47	0.00	0.09	394	62.98
7.700	0.15	4.40	4.58	0.00	0.09	404	62.99
7.750	0.15	4.51	4.70	0.00	0.09	414	62.99
7.800	0.15	4.62	4.81	0.00	0.10	424	62.99
7.850	0.16	4.73	4.92	0.00	0.10	434	63.00
7.900	0.16	4.84	5.04	0.00	0.10	445	63.00
7.950	0.16	4.95	5.16	0.00	0.10	455	63.00
8.000	0.16	5.07	5.28	0.00	0.11	466	63.01
8.050	0.17	5.18	5.40	0.00	0.11	476	63.01
8.100	0.17	5.30	5.52	0.00	0.11	487	63.01
8.150	0.18	5.43	5.65	0.00	0.11	499	63.02
8.200	0.18	5.56	5.79	0.00	0.12	510	63.02
8.250	0.19	5.69	5.93	0.00	0.12	523	63.03
8.300	0.19	5.83	6.07	0.00	0.12	535	63.03
8.350	0.20	5.97	6.22	0.00	0.12	549	63.03

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 3 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
8.400	0.21	6.12	6.38	0.00	0.13	562	63.04
8.450	0.21	6.27	6.54	0.00	0.13	577	63.04
8.500	0.22	6.43	6.70	0.00	0.13	591	63.05
8.550	0.22	6.60	6.87	0.00	0.14	606	63.05
8.600	0.23	6.77	7.05	0.00	0.14	622	63.06
8.650	0.23	6.94	7.23	0.00	0.15	638	63.06
8.700	0.24	7.12	7.42	0.00	0.15	654	63.07
8.750	0.25	7.30	7.61	0.00	0.15	671	63.08
8.800	0.25	7.49	7.81	0.00	0.16	688	63.08
8.850	0.26	7.69	8.01	0.00	0.16	706	63.09
8.900	0.27	7.88	8.21	0.00	0.16	724	63.09
8.950	0.27	8.08	8.42	0.00	0.17	743	63.10
9.000	0.28	8.29	8.64	0.00	0.17	762	63.11
9.050	0.29	8.50	8.86	0.00	0.18	781	63.11
9.100	0.29	8.72	9.08	0.00	0.18	801	63.12
9.150	0.30	8.94	9.31	0.00	0.19	821	63.13
9.200	0.31	9.16	9.54	0.00	0.19	842	63.13
9.250	0.31	9.39	9.78	0.00	0.20	862	63.14
9.300	0.32	9.62	10.02	0.00	0.20	884	63.15
9.350	0.33	9.85	10.27	0.00	0.21	905	63.15
9.400	0.33	10.09	10.51	0.00	0.21	927	63.16
9.450	0.34	10.34	10.77	0.00	0.22	950	63.17
9.500	0.35	10.58	11.03	0.00	0.22	972	63.18
9.550	0.36	10.83	11.29	0.00	0.23	995	63.18
9.600	0.36	11.09	11.55	0.00	0.23	1,019	63.19
9.650	0.37	11.35	11.82	0.00	0.24	1,043	63.20
9.700	0.38	11.61	12.09	0.00	0.24	1,067	63.21
9.750	0.38	11.87	12.37	0.00	0.25	1,091	63.22
9.800	0.39	12.14	12.65	0.00	0.25	1,116	63.23
9.850	0.40	12.41	12.93	0.00	0.26	1,141	63.23
9.900	0.41	12.69	13.22	0.00	0.27	1,166	63.24
9.950	0.41	12.97	13.51	0.00	0.27	1,192	63.25
10.000	0.42	13.25	13.80	0.00	0.28	1,218	63.26
10.050	0.43	13.54	14.10	0.00	0.28	1,244	63.27
10.100	0.44	13.83	14.41	0.00	0.29	1,271	63.28
10.150	0.45	14.13	14.72	0.00	0.30	1,299	63.29
10.200	0.47	14.45	15.05	0.00	0.30	1,327	63.30
10.250	0.48	14.77	15.39	0.00	0.31	1,358	63.31
10.300	0.49	15.11	15.75	0.00	0.32	1,389	63.32
10.350	0.51	15.47	16.11	0.00	0.32	1,421	63.33
10.400	0.52	15.83	16.49	0.00	0.33	1,455	63.34
10.450	0.53	16.21	16.89	0.00	0.34	1,488	63.35

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 3 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
10.500	0.55	16.61	17.29	0.00	0.34	1,511	63.36
10.550	0.56	17.02	17.72	0.00	0.35	1,534	63.37
10.600	0.58	17.46	18.16	0.00	0.35	1,559	63.37
10.650	0.59	17.92	18.63	0.00	0.36	1,585	63.38
10.700	0.61	18.39	19.11	0.00	0.36	1,612	63.39
10.750	0.62	18.89	19.62	0.00	0.37	1,640	63.40
10.800	0.63	19.40	20.14	0.00	0.37	1,669	63.41
10.850	0.65	19.93	20.68	0.00	0.38	1,699	63.42
10.900	0.66	20.48	21.24	0.00	0.38	1,731	63.43
10.950	0.68	21.05	21.82	0.00	0.39	1,763	63.44
11.000	0.69	21.64	22.42	0.00	0.39	1,796	63.45
11.050	0.72	22.25	23.05	0.00	0.40	1,831	63.47
11.100	0.75	22.91	23.72	0.00	0.41	1,868	63.48
11.150	0.79	23.62	24.44	0.00	0.41	1,909	63.49
11.200	0.84	24.40	25.24	0.00	0.42	1,953	63.51
11.250	0.88	25.27	26.13	0.00	0.43	2,003	63.52
11.300	0.94	26.22	27.09	0.00	0.44	2,056	63.54
11.350	0.99	27.24	28.14	0.00	0.45	2,115	63.56
11.400	1.04	28.35	29.27	0.00	0.46	2,177	63.58
11.450	1.09	29.54	30.48	0.00	0.47	2,264	63.61
11.500	1.15	30.81	31.77	0.00	0.48	2,423	63.63
11.550	1.30	32.26	33.26	0.00	0.50	2,604	63.66
11.600	1.56	34.09	35.12	0.00	0.52	2,833	63.69
11.650	1.91	36.47	37.56	0.00	0.54	3,131	63.74
11.700	2.40	39.63	40.78	0.00	0.57	3,526	63.80
11.750	2.84	43.65	44.87	0.00	0.61	3,984	63.87
11.800	3.37	48.59	49.86	0.00	0.63	4,433	63.94
11.850	3.84	54.46	55.80	0.00	0.67	4,968	64.02
11.900	4.41	61.30	62.71	0.00	0.70	5,588	64.12
11.950	5.84	70.04	71.55	0.00	0.75	6,375	64.24
12.000	8.18	82.28	84.07	0.00	0.89	7,489	64.41
12.050	9.11	97.13	99.58	0.00	1.22	8,862	64.63
12.100	9.44	112.53	115.68	0.00	1.57	10,270	64.86
12.150	8.34	126.09	130.30	0.00	2.11	11,552	65.07
12.200	6.11	135.59	140.54	0.00	2.48	12,435	65.22
12.250	5.02	141.32	146.72	0.00	2.70	12,965	65.31
12.300	4.29	144.97	150.63	0.00	2.83	13,303	65.36
12.350	3.77	147.25	153.02	0.00	2.89	13,517	65.40
12.400	3.21	148.39	154.22	0.00	2.92	13,624	65.42
12.450	2.74	148.50	154.34	0.00	2.92	13,634	65.42
12.500	2.18	147.63	153.43	0.00	2.90	13,553	65.41
12.550	1.84	145.94	151.65	0.00	2.86	13,394	65.38

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 3 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
12.600	1.50	143.69	149.28	0.00	2.79	13,184	65.34
12.650	1.36	141.17	146.56	0.00	2.69	12,951	65.30
12.700	1.27	138.61	143.80	0.00	2.59	12,714	65.26
12.750	1.22	136.10	141.10	0.00	2.50	12,482	65.22
12.800	1.16	133.67	138.48	0.00	2.40	12,257	65.19
12.850	1.11	131.32	135.94	0.00	2.31	12,040	65.15
12.900	1.05	129.03	133.47	0.00	2.22	11,828	65.11
12.950	1.00	126.81	131.08	0.00	2.13	11,620	65.08
13.000	0.94	124.66	128.75	0.00	2.05	11,416	65.05
13.050	0.90	122.57	126.50	0.00	1.97	11,219	65.01
13.100	0.86	120.55	124.33	0.00	1.89	11,029	64.98
13.150	0.84	118.63	122.26	0.00	1.81	10,847	64.95
13.200	0.83	116.82	120.30	0.00	1.74	10,675	64.93
13.250	0.81	115.10	118.45	0.00	1.68	10,513	64.90
13.300	0.80	113.49	116.71	0.00	1.61	10,360	64.87
13.350	0.78	111.96	115.07	0.00	1.55	10,216	64.85
13.400	0.77	110.47	113.51	0.00	1.52	10,080	64.83
13.450	0.76	109.02	112.00	0.00	1.49	9,948	64.81
13.500	0.74	107.61	110.52	0.00	1.46	9,819	64.79
13.550	0.73	106.23	109.08	0.00	1.43	9,693	64.77
13.600	0.71	104.88	107.67	0.00	1.40	9,569	64.75
13.650	0.70	103.56	106.29	0.00	1.37	9,449	64.73
13.700	0.68	102.27	104.94	0.00	1.34	9,331	64.71
13.750	0.67	101.01	103.63	0.00	1.31	9,216	64.69
13.800	0.66	99.78	102.34	0.00	1.28	9,103	64.67
13.850	0.64	98.57	101.08	0.00	1.25	8,993	64.65
13.900	0.63	97.38	99.84	0.00	1.23	8,885	64.64
13.950	0.62	96.22	98.63	0.00	1.20	8,779	64.62
14.000	0.60	95.09	97.44	0.00	1.18	8,675	64.60
14.050	0.59	93.97	96.28	0.00	1.15	8,572	64.59
14.100	0.58	92.88	95.14	0.00	1.13	8,471	64.57
14.150	0.57	91.82	94.03	0.00	1.10	8,373	64.55
14.200	0.56	90.79	92.96	0.00	1.08	8,277	64.54
14.250	0.56	89.79	91.91	0.00	1.06	8,185	64.52
14.300	0.55	88.83	90.90	0.00	1.04	8,095	64.51
14.350	0.54	87.88	89.92	0.00	1.02	8,008	64.50
14.400	0.54	86.97	88.96	0.00	1.00	7,923	64.48
14.450	0.53	86.08	88.04	0.00	0.98	7,841	64.47
14.500	0.52	85.22	87.13	0.00	0.96	7,761	64.46
14.550	0.52	84.38	86.26	0.00	0.94	7,683	64.44
14.600	0.51	83.56	85.41	0.00	0.92	7,607	64.43
14.650	0.50	82.77	84.58	0.00	0.90	7,534	64.42

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 3 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
14.700	0.50	82.00	83.77	0.00	0.89	7,462	64.41
14.750	0.49	81.24	82.98	0.00	0.87	7,392	64.40
14.800	0.48	80.51	82.22	0.00	0.85	7,324	64.39
14.850	0.48	79.80	81.47	0.00	0.84	7,258	64.38
14.900	0.47	79.10	80.74	0.00	0.82	7,193	64.37
14.950	0.46	78.42	80.03	0.00	0.81	7,130	64.36
15.000	0.45	77.75	79.33	0.00	0.79	7,069	64.35
15.050	0.45	77.07	78.65	0.00	0.79	7,008	64.34
15.100	0.44	76.39	77.96	0.00	0.79	6,946	64.33
15.150	0.43	75.70	77.26	0.00	0.78	6,884	64.32
15.200	0.43	75.00	76.56	0.00	0.78	6,822	64.31
15.250	0.42	74.30	75.85	0.00	0.77	6,759	64.30
15.300	0.41	73.60	75.14	0.00	0.77	6,695	64.29
15.350	0.41	72.89	74.42	0.00	0.77	6,631	64.28
15.400	0.40	72.17	73.69	0.00	0.76	6,567	64.27
15.450	0.39	71.44	72.96	0.00	0.76	6,501	64.26
15.500	0.39	70.72	72.23	0.00	0.76	6,436	64.25
15.550	0.38	69.98	71.48	0.00	0.75	6,370	64.24
15.600	0.37	69.24	70.74	0.00	0.75	6,303	64.23
15.650	0.37	68.50	69.98	0.00	0.74	6,236	64.22
15.700	0.36	67.75	69.22	0.00	0.74	6,169	64.21
15.750	0.35	66.99	68.46	0.00	0.73	6,100	64.20
15.800	0.35	66.23	67.69	0.00	0.73	6,032	64.19
15.850	0.34	65.46	66.92	0.00	0.73	5,963	64.17
15.900	0.33	64.69	66.13	0.00	0.72	5,894	64.16
15.950	0.33	63.91	65.35	0.00	0.72	5,824	64.15
16.000	0.32	63.13	64.56	0.00	0.71	5,753	64.14
16.050	0.31	62.35	63.77	0.00	0.71	5,683	64.13
16.100	0.31	61.56	62.97	0.00	0.71	5,612	64.12
16.150	0.31	60.77	62.17	0.00	0.70	5,541	64.11
16.200	0.30	59.99	61.38	0.00	0.70	5,470	64.10
16.250	0.30	59.20	60.59	0.00	0.69	5,399	64.09
16.300	0.30	58.42	59.80	0.00	0.69	5,328	64.08
16.350	0.29	57.64	59.01	0.00	0.68	5,257	64.07
16.400	0.29	56.87	58.22	0.00	0.68	5,186	64.05
16.450	0.29	56.09	57.44	0.00	0.68	5,116	64.04
16.500	0.28	55.32	56.66	0.00	0.67	5,045	64.03
16.550	0.28	54.55	55.89	0.00	0.67	4,976	64.02
16.600	0.28	53.79	55.11	0.00	0.66	4,906	64.01
16.650	0.27	53.02	54.34	0.00	0.66	4,836	64.00
16.700	0.27	52.26	53.57	0.00	0.65	4,767	63.99
16.750	0.27	51.50	52.80	0.00	0.65	4,698	63.98

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 3 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
16.800	0.27	50.75	52.04	0.00	0.65	4,629	63.97
16.850	0.26	49.99	51.27	0.00	0.64	4,561	63.96
16.900	0.26	49.24	50.51	0.00	0.64	4,492	63.95
16.950	0.26	48.49	49.76	0.00	0.63	4,424	63.94
17.000	0.25	47.74	49.00	0.00	0.63	4,356	63.93
17.050	0.25	47.00	48.25	0.00	0.63	4,288	63.92
17.100	0.25	46.25	47.50	0.00	0.62	4,221	63.90
17.150	0.25	45.51	46.75	0.00	0.62	4,153	63.89
17.200	0.24	44.78	46.00	0.00	0.61	4,086	63.88
17.250	0.24	44.04	45.26	0.00	0.61	4,019	63.87
17.300	0.24	43.30	44.52	0.00	0.61	3,952	63.86
17.350	0.23	42.57	43.78	0.00	0.60	3,886	63.85
17.400	0.23	41.85	43.04	0.00	0.59	3,803	63.84
17.450	0.23	41.13	42.31	0.00	0.59	3,713	63.83
17.500	0.22	40.42	41.58	0.00	0.58	3,625	63.81
17.550	0.22	39.72	40.87	0.00	0.57	3,537	63.80
17.600	0.22	39.03	40.16	0.00	0.57	3,450	63.79
17.650	0.22	38.34	39.46	0.00	0.56	3,365	63.77
17.700	0.21	37.67	38.77	0.00	0.55	3,280	63.76
17.750	0.21	37.00	38.09	0.00	0.55	3,196	63.75
17.800	0.21	36.33	37.41	0.00	0.54	3,114	63.74
17.850	0.20	35.68	36.74	0.00	0.53	3,032	63.72
17.900	0.20	35.03	36.08	0.00	0.53	2,950	63.71
17.950	0.20	34.39	35.43	0.00	0.52	2,870	63.70
18.000	0.19	33.75	34.78	0.00	0.51	2,791	63.69
18.050	0.19	33.13	34.14	0.00	0.51	2,712	63.67
18.100	0.19	32.50	33.51	0.00	0.50	2,635	63.66
18.150	0.19	31.89	32.88	0.00	0.50	2,559	63.65
18.200	0.19	31.29	32.27	0.00	0.49	2,483	63.64
18.250	0.19	30.70	31.67	0.00	0.48	2,410	63.63
18.300	0.19	30.12	31.08	0.00	0.48	2,337	63.62
18.350	0.19	29.55	30.49	0.00	0.47	2,265	63.61
18.400	0.18	28.99	29.92	0.00	0.47	2,214	63.59
18.450	0.18	28.43	29.36	0.00	0.46	2,182	63.58
18.500	0.18	27.89	28.80	0.00	0.46	2,151	63.57
18.550	0.18	27.36	28.26	0.00	0.45	2,121	63.56
18.600	0.18	26.83	27.72	0.00	0.44	2,091	63.55
18.650	0.18	26.31	27.19	0.00	0.44	2,062	63.54
18.700	0.18	25.80	26.67	0.00	0.43	2,033	63.53
18.750	0.18	25.30	26.16	0.00	0.43	2,004	63.52
18.800	0.18	24.81	25.66	0.00	0.42	1,977	63.52
18.850	0.18	24.33	25.17	0.00	0.42	1,949	63.51

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 3 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
18.900	0.18	23.85	24.68	0.00	0.41	1,922	63.50
18.950	0.17	23.38	24.20	0.00	0.41	1,895	63.49
19.000	0.17	22.92	23.73	0.00	0.41	1,869	63.48
19.050	0.17	22.46	23.27	0.00	0.40	1,843	63.47
19.100	0.17	22.02	22.81	0.00	0.40	1,818	63.46
19.150	0.17	21.58	22.36	0.00	0.39	1,793	63.45
19.200	0.17	21.14	21.92	0.00	0.39	1,768	63.44
19.250	0.17	20.72	21.48	0.00	0.38	1,744	63.44
19.300	0.17	20.30	21.05	0.00	0.38	1,720	63.43
19.350	0.17	19.88	20.63	0.00	0.37	1,697	63.42
19.400	0.17	19.48	20.22	0.00	0.37	1,674	63.41
19.450	0.17	19.08	19.81	0.00	0.37	1,651	63.41
19.500	0.16	18.68	19.41	0.00	0.36	1,628	63.40
19.550	0.16	18.29	19.01	0.00	0.36	1,606	63.39
19.600	0.16	17.91	18.62	0.00	0.36	1,585	63.38
19.650	0.16	17.53	18.24	0.00	0.35	1,563	63.38
19.700	0.16	17.16	17.86	0.00	0.35	1,542	63.37
19.750	0.16	16.80	17.48	0.00	0.34	1,521	63.36
19.800	0.16	16.43	17.12	0.00	0.34	1,501	63.35
19.850	0.16	16.08	16.75	0.00	0.34	1,478	63.35
19.900	0.16	15.74	16.40	0.00	0.33	1,446	63.34
19.950	0.16	15.41	16.06	0.00	0.32	1,416	63.33
20.000	0.16	15.10	15.73	0.00	0.32	1,387	63.32
20.050	0.16	14.79	15.41	0.00	0.31	1,359	63.31
20.100	0.15	14.49	15.10	0.00	0.30	1,332	63.30
20.150	0.15	14.21	14.80	0.00	0.30	1,305	63.29
20.200	0.15	13.93	14.52	0.00	0.29	1,280	63.28
20.250	0.15	13.67	14.24	0.00	0.29	1,256	63.27
20.300	0.15	13.41	13.97	0.00	0.28	1,233	63.26
20.350	0.15	13.17	13.72	0.00	0.28	1,210	63.26
20.400	0.15	12.93	13.47	0.00	0.27	1,188	63.25
20.450	0.15	12.70	13.23	0.00	0.27	1,167	63.24
20.500	0.15	12.48	13.00	0.00	0.26	1,146	63.24
20.550	0.15	12.26	12.77	0.00	0.26	1,127	63.23
20.600	0.15	12.06	12.56	0.00	0.25	1,108	63.22
20.650	0.15	11.86	12.35	0.00	0.25	1,089	63.22
20.700	0.15	11.66	12.15	0.00	0.24	1,071	63.21
20.750	0.15	11.47	11.95	0.00	0.24	1,054	63.20
20.800	0.15	11.29	11.77	0.00	0.24	1,038	63.20
20.850	0.14	11.12	11.58	0.00	0.23	1,022	63.19
20.900	0.14	10.95	11.41	0.00	0.23	1,006	63.19
20.950	0.14	10.79	11.24	0.00	0.23	991	63.18

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 3 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
21.000	0.14	10.63	11.07	0.00	0.22	977	63.18
21.050	0.14	10.48	10.91	0.00	0.22	963	63.17
21.100	0.14	10.33	10.76	0.00	0.22	949	63.17
21.150	0.14	10.18	10.61	0.00	0.21	936	63.16
21.200	0.14	10.05	10.47	0.00	0.21	923	63.16
21.250	0.14	9.91	10.32	0.00	0.21	911	63.16
21.300	0.14	9.78	10.19	0.00	0.20	899	63.15
21.350	0.14	9.65	10.06	0.00	0.20	887	63.15
21.400	0.14	9.53	9.93	0.00	0.20	876	63.14
21.450	0.14	9.41	9.80	0.00	0.20	865	63.14
21.500	0.14	9.30	9.68	0.00	0.19	854	63.14
21.550	0.13	9.18	9.57	0.00	0.19	844	63.13
21.600	0.13	9.07	9.45	0.00	0.19	834	63.13
21.650	0.13	8.97	9.34	0.00	0.19	824	63.13
21.700	0.13	8.86	9.23	0.00	0.19	814	63.12
21.750	0.13	8.76	9.13	0.00	0.18	805	63.12
21.800	0.13	8.67	9.03	0.00	0.18	796	63.12
21.850	0.13	8.57	8.93	0.00	0.18	788	63.11
21.900	0.13	8.48	8.83	0.00	0.18	779	63.11
21.950	0.13	8.39	8.74	0.00	0.18	771	63.11
22.000	0.13	8.30	8.65	0.00	0.17	763	63.11
22.050	0.13	8.22	8.56	0.00	0.17	755	63.10
22.100	0.13	8.13	8.47	0.00	0.17	747	63.10
22.150	0.13	8.05	8.39	0.00	0.17	740	63.10
22.200	0.13	7.97	8.31	0.00	0.17	733	63.10
22.250	0.13	7.90	8.23	0.00	0.16	725	63.09
22.300	0.12	7.82	8.15	0.00	0.16	719	63.09
22.350	0.12	7.75	8.07	0.00	0.16	712	63.09
22.400	0.12	7.67	7.99	0.00	0.16	705	63.09
22.450	0.12	7.60	7.92	0.00	0.16	699	63.09
22.500	0.12	7.53	7.85	0.00	0.16	692	63.08
22.550	0.12	7.47	7.78	0.00	0.16	686	63.08
22.600	0.12	7.40	7.71	0.00	0.15	680	63.08
22.650	0.12	7.34	7.64	0.00	0.15	674	63.08
22.700	0.12	7.27	7.58	0.00	0.15	668	63.07
22.750	0.12	7.21	7.51	0.00	0.15	663	63.07
22.800	0.12	7.15	7.45	0.00	0.15	657	63.07
22.850	0.12	7.09	7.39	0.00	0.15	652	63.07
22.900	0.12	7.03	7.33	0.00	0.15	646	63.07
22.950	0.12	6.97	7.27	0.00	0.15	641	63.07
23.000	0.12	6.92	7.21	0.00	0.14	636	63.06
23.050	0.12	6.86	7.15	0.00	0.14	631	63.06

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 3 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
23.100	0.11	6.81	7.09	0.00	0.14	625	63.06
23.150	0.11	6.75	7.04	0.00	0.14	620	63.06
23.200	0.11	6.70	6.98	0.00	0.14	616	63.06
23.250	0.11	6.65	6.93	0.00	0.14	611	63.06
23.300	0.11	6.60	6.87	0.00	0.14	606	63.05
23.350	0.11	6.55	6.82	0.00	0.14	601	63.05
23.400	0.11	6.50	6.77	0.00	0.14	597	63.05
23.450	0.11	6.45	6.72	0.00	0.13	593	63.05
23.500	0.11	6.40	6.67	0.00	0.13	588	63.05
23.550	0.11	6.35	6.62	0.00	0.13	584	63.05
23.600	0.11	6.31	6.57	0.00	0.13	579	63.04
23.650	0.11	6.26	6.52	0.00	0.13	575	63.04
23.700	0.11	6.21	6.47	0.00	0.13	571	63.04
23.750	0.11	6.17	6.43	0.00	0.13	567	63.04
23.800	0.11	6.12	6.38	0.00	0.13	563	63.04
23.850	0.10	6.08	6.33	0.00	0.13	559	63.04
23.900	0.10	6.04	6.29	0.00	0.13	555	63.04
23.950	0.10	5.99	6.24	0.00	0.13	550	63.04
24.000	0.10	5.95	6.20	0.00	0.12	547	63.03

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 3 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
0.000	0.00	0.00	0.00	0.00	0.00	0	62.85
0.050	0.00	0.00	0.00	0.00	0.00	0	62.85
0.100	0.00	0.00	0.00	0.00	0.00	0	62.85
0.150	0.00	0.00	0.00	0.00	0.00	0	62.85
0.200	0.00	0.00	0.00	0.00	0.00	0	62.85
0.250	0.00	0.00	0.00	0.00	0.00	0	62.85
0.300	0.00	0.00	0.00	0.00	0.00	0	62.85
0.350	0.00	0.00	0.00	0.00	0.00	0	62.85
0.400	0.00	0.00	0.00	0.00	0.00	0	62.85
0.450	0.00	0.00	0.00	0.00	0.00	0	62.85
0.500	0.00	0.00	0.00	0.00	0.00	0	62.85
0.550	0.00	0.00	0.00	0.00	0.00	0	62.85
0.600	0.00	0.00	0.00	0.00	0.00	0	62.85
0.650	0.00	0.00	0.00	0.00	0.00	0	62.85
0.700	0.00	0.00	0.00	0.00	0.00	0	62.85
0.750	0.00	0.00	0.00	0.00	0.00	0	62.85
0.800	0.00	0.00	0.00	0.00	0.00	0	62.85
0.850	0.00	0.00	0.00	0.00	0.00	0	62.85
0.900	0.00	0.00	0.00	0.00	0.00	0	62.85
0.950	0.00	0.00	0.00	0.00	0.00	0	62.85
1.000	0.00	0.00	0.00	0.00	0.00	0	62.85
1.050	0.00	0.00	0.00	0.00	0.00	0	62.85
1.100	0.00	0.00	0.00	0.00	0.00	0	62.85
1.150	0.00	0.00	0.00	0.00	0.00	0	62.85
1.200	0.00	0.00	0.00	0.00	0.00	0	62.85
1.250	0.00	0.00	0.00	0.00	0.00	0	62.85
1.300	0.00	0.00	0.00	0.00	0.00	0	62.85
1.350	0.00	0.00	0.00	0.00	0.00	0	62.85
1.400	0.00	0.00	0.00	0.00	0.00	0	62.85
1.450	0.00	0.00	0.00	0.00	0.00	0	62.85
1.500	0.00	0.00	0.00	0.00	0.00	0	62.85
1.550	0.00	0.00	0.00	0.00	0.00	0	62.85
1.600	0.00	0.00	0.00	0.00	0.00	0	62.85
1.650	0.00	0.00	0.00	0.00	0.00	0	62.85
1.700	0.00	0.00	0.00	0.00	0.00	0	62.85
1.750	0.00	0.00	0.00	0.00	0.00	0	62.85
1.800	0.00	0.00	0.00	0.00	0.00	0	62.85
1.850	0.00	0.00	0.00	0.00	0.00	0	62.85
1.900	0.00	0.00	0.00	0.00	0.00	0	62.85
1.950	0.00	0.00	0.00	0.00	0.00	0	62.85
2.000	0.00	0.00	0.00	0.00	0.00	0	62.85
2.050	0.00	0.00	0.00	0.00	0.00	0	62.85

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 3 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
2.100	0.00	0.00	0.00	0.00	0.00	0	62.85
2.150	0.00	0.00	0.00	0.00	0.00	0	62.85
2.200	0.00	0.00	0.00	0.00	0.00	0	62.85
2.250	0.00	0.00	0.00	0.00	0.00	0	62.85
2.300	0.00	0.00	0.00	0.00	0.00	0	62.85
2.350	0.00	0.00	0.00	0.00	0.00	0	62.85
2.400	0.00	0.00	0.00	0.00	0.00	0	62.85
2.450	0.00	0.00	0.00	0.00	0.00	0	62.85
2.500	0.00	0.00	0.00	0.00	0.00	0	62.85
2.550	0.00	0.00	0.00	0.00	0.00	0	62.85
2.600	0.00	0.00	0.00	0.00	0.00	0	62.85
2.650	0.00	0.00	0.00	0.00	0.00	0	62.85
2.700	0.00	0.00	0.00	0.00	0.00	0	62.85
2.750	0.00	0.00	0.00	0.00	0.00	0	62.85
2.800	0.00	0.00	0.00	0.00	0.00	0	62.85
2.850	0.00	0.01	0.01	0.00	0.00	1	62.85
2.900	0.00	0.01	0.01	0.00	0.00	1	62.85
2.950	0.01	0.02	0.02	0.00	0.00	2	62.85
3.000	0.01	0.03	0.04	0.00	0.00	3	62.85
3.050	0.01	0.05	0.05	0.00	0.00	4	62.85
3.100	0.01	0.06	0.07	0.00	0.00	6	62.85
3.150	0.01	0.08	0.09	0.00	0.00	8	62.85
3.200	0.01	0.10	0.11	0.00	0.00	9	62.85
3.250	0.01	0.12	0.13	0.00	0.00	11	62.85
3.300	0.02	0.15	0.16	0.00	0.00	14	62.85
3.350	0.02	0.18	0.18	0.00	0.00	16	62.86
3.400	0.02	0.20	0.21	0.00	0.00	19	62.86
3.450	0.02	0.23	0.24	0.00	0.00	21	62.86
3.500	0.02	0.26	0.28	0.00	0.01	24	62.86
3.550	0.02	0.30	0.31	0.00	0.01	27	62.86
3.600	0.03	0.33	0.35	0.00	0.01	31	62.86
3.650	0.03	0.37	0.39	0.00	0.01	34	62.86
3.700	0.03	0.41	0.42	0.00	0.01	37	62.86
3.750	0.03	0.45	0.47	0.00	0.01	41	62.86
3.800	0.03	0.49	0.51	0.00	0.01	45	62.87
3.850	0.03	0.53	0.55	0.00	0.01	49	62.87
3.900	0.03	0.57	0.60	0.00	0.01	53	62.87
3.950	0.04	0.62	0.64	0.00	0.01	57	62.87
4.000	0.04	0.67	0.69	0.00	0.01	61	62.87
4.050	0.04	0.71	0.74	0.00	0.01	65	62.87
4.100	0.04	0.76	0.79	0.00	0.02	70	62.87
4.150	0.04	0.81	0.85	0.00	0.02	75	62.88

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 3 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
4.200	0.04	0.86	0.90	0.00	0.02	79	62.88
4.250	0.05	0.91	0.95	0.00	0.02	84	62.88
4.300	0.05	0.97	1.01	0.00	0.02	89	62.88
4.350	0.05	1.02	1.06	0.00	0.02	94	62.88
4.400	0.05	1.08	1.12	0.00	0.02	99	62.88
4.450	0.05	1.13	1.18	0.00	0.02	104	62.89
4.500	0.05	1.19	1.24	0.00	0.02	109	62.89
4.550	0.06	1.25	1.30	0.00	0.03	115	62.89
4.600	0.06	1.31	1.36	0.00	0.03	120	62.89
4.650	0.06	1.37	1.42	0.00	0.03	126	62.89
4.700	0.06	1.43	1.49	0.00	0.03	131	62.89
4.750	0.06	1.49	1.55	0.00	0.03	137	62.90
4.800	0.06	1.55	1.61	0.00	0.03	142	62.90
4.850	0.07	1.61	1.68	0.00	0.03	148	62.90
4.900	0.07	1.68	1.75	0.00	0.04	154	62.90
4.950	0.07	1.74	1.81	0.00	0.04	160	62.90
5.000	0.07	1.81	1.88	0.00	0.04	166	62.91
5.050	0.07	1.87	1.95	0.00	0.04	172	62.91
5.100	0.07	1.94	2.02	0.00	0.04	178	62.91
5.150	0.08	2.00	2.09	0.00	0.04	184	62.91
5.200	0.08	2.07	2.16	0.00	0.04	190	62.91
5.250	0.08	2.14	2.23	0.00	0.04	197	62.92
5.300	0.08	2.21	2.30	0.00	0.05	203	62.92
5.350	0.08	2.28	2.37	0.00	0.05	209	62.92
5.400	0.08	2.35	2.45	0.00	0.05	216	62.92
5.450	0.09	2.42	2.52	0.00	0.05	222	62.92
5.500	0.09	2.49	2.59	0.00	0.05	229	62.93
5.550	0.09	2.56	2.67	0.00	0.05	235	62.93
5.600	0.09	2.63	2.74	0.00	0.05	242	62.93
5.650	0.09	2.70	2.82	0.00	0.06	248	62.93
5.700	0.10	2.78	2.89	0.00	0.06	255	62.94
5.750	0.10	2.85	2.97	0.00	0.06	262	62.94
5.800	0.10	2.92	3.04	0.00	0.06	269	62.94
5.850	0.10	3.00	3.12	0.00	0.06	275	62.94
5.900	0.10	3.07	3.20	0.00	0.06	282	62.94
5.950	0.10	3.15	3.28	0.00	0.07	289	62.95
6.000	0.11	3.22	3.35	0.00	0.07	296	62.95
6.050	0.11	3.30	3.43	0.00	0.07	303	62.95
6.100	0.11	3.37	3.51	0.00	0.07	310	62.95
6.150	0.11	3.45	3.60	0.00	0.07	317	62.96
6.200	0.12	3.53	3.68	0.00	0.07	325	62.96
6.250	0.12	3.61	3.77	0.00	0.08	332	62.96

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 3 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
6.300	0.12	3.70	3.86	0.00	0.08	340	62.96
6.350	0.12	3.79	3.95	0.00	0.08	348	62.97
6.400	0.13	3.88	4.04	0.00	0.08	356	62.97
6.450	0.13	3.97	4.14	0.00	0.08	365	62.97
6.500	0.13	4.07	4.24	0.00	0.08	374	62.98
6.550	0.14	4.17	4.34	0.00	0.09	383	62.98
6.600	0.14	4.27	4.45	0.00	0.09	392	62.98
6.650	0.14	4.37	4.55	0.00	0.09	402	62.99
6.700	0.15	4.48	4.66	0.00	0.09	411	62.99
6.750	0.15	4.58	4.78	0.00	0.10	421	62.99
6.800	0.15	4.69	4.89	0.00	0.10	431	63.00
6.850	0.16	4.81	5.01	0.00	0.10	442	63.00
6.900	0.16	4.92	5.13	0.00	0.10	452	63.00
6.950	0.17	5.04	5.25	0.00	0.11	463	63.01
7.000	0.17	5.16	5.37	0.00	0.11	474	63.01
7.050	0.17	5.28	5.50	0.00	0.11	485	63.01
7.100	0.18	5.40	5.63	0.00	0.11	496	63.02
7.150	0.18	5.53	5.76	0.00	0.12	508	63.02
7.200	0.18	5.65	5.89	0.00	0.12	519	63.02
7.250	0.19	5.78	6.02	0.00	0.12	531	63.03
7.300	0.19	5.91	6.16	0.00	0.12	543	63.03
7.350	0.20	6.05	6.30	0.00	0.13	556	63.04
7.400	0.20	6.18	6.44	0.00	0.13	568	63.04
7.450	0.20	6.32	6.59	0.00	0.13	581	63.05
7.500	0.21	6.46	6.73	0.00	0.13	594	63.05
7.550	0.21	6.60	6.88	0.00	0.14	607	63.05
7.600	0.21	6.75	7.03	0.00	0.14	620	63.06
7.650	0.22	6.89	7.18	0.00	0.14	633	63.06
7.700	0.22	7.04	7.33	0.00	0.15	647	63.07
7.750	0.23	7.19	7.49	0.00	0.15	660	63.07
7.800	0.23	7.34	7.64	0.00	0.15	674	63.08
7.850	0.23	7.49	7.80	0.00	0.16	688	63.08
7.900	0.24	7.64	7.96	0.00	0.16	702	63.09
7.950	0.24	7.80	8.13	0.00	0.16	717	63.09
8.000	0.25	7.96	8.29	0.00	0.17	731	63.10
8.050	0.25	8.12	8.46	0.00	0.17	746	63.10
8.100	0.26	8.28	8.63	0.00	0.17	761	63.11
8.150	0.26	8.45	8.80	0.00	0.18	776	63.11
8.200	0.27	8.63	8.99	0.00	0.18	793	63.12
8.250	0.28	8.81	9.18	0.00	0.18	809	63.12
8.300	0.29	9.00	9.38	0.00	0.19	827	63.13
8.350	0.29	9.20	9.58	0.00	0.19	845	63.13

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 3 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
8.400	0.30	9.40	9.79	0.00	0.20	864	63.14
8.450	0.31	9.61	10.01	0.00	0.20	883	63.15
8.500	0.32	9.83	10.24	0.00	0.21	903	63.15
8.550	0.33	10.06	10.48	0.00	0.21	924	63.16
8.600	0.33	10.29	10.72	0.00	0.21	945	63.17
8.650	0.34	10.53	10.97	0.00	0.22	967	63.18
8.700	0.35	10.77	11.22	0.00	0.22	990	63.18
8.750	0.36	11.02	11.48	0.00	0.23	1,013	63.19
8.800	0.37	11.28	11.75	0.00	0.24	1,036	63.20
8.850	0.38	11.54	12.02	0.00	0.24	1,060	63.21
8.900	0.39	11.81	12.30	0.00	0.25	1,085	63.22
8.950	0.39	12.08	12.59	0.00	0.25	1,110	63.22
9.000	0.40	12.36	12.88	0.00	0.26	1,136	63.23
9.050	0.41	12.65	13.17	0.00	0.26	1,162	63.24
9.100	0.42	12.94	13.48	0.00	0.27	1,189	63.25
9.150	0.43	13.23	13.79	0.00	0.28	1,216	63.26
9.200	0.44	13.53	14.10	0.00	0.28	1,244	63.27
9.250	0.45	13.84	14.42	0.00	0.29	1,272	63.28
9.300	0.46	14.15	14.74	0.00	0.30	1,300	63.29
9.350	0.46	14.47	15.07	0.00	0.30	1,329	63.30
9.400	0.47	14.79	15.41	0.00	0.31	1,359	63.31
9.450	0.48	15.11	15.75	0.00	0.32	1,389	63.32
9.500	0.49	15.44	16.09	0.00	0.32	1,419	63.33
9.550	0.50	15.78	16.44	0.00	0.33	1,450	63.34
9.600	0.51	16.12	16.79	0.00	0.34	1,481	63.35
9.650	0.52	16.47	17.15	0.00	0.34	1,503	63.36
9.700	0.53	16.83	17.52	0.00	0.34	1,523	63.36
9.750	0.54	17.20	17.90	0.00	0.35	1,544	63.37
9.800	0.55	17.58	18.29	0.00	0.35	1,566	63.38
9.850	0.56	17.98	18.69	0.00	0.36	1,589	63.38
9.900	0.57	18.38	19.10	0.00	0.36	1,612	63.39
9.950	0.58	18.80	19.53	0.00	0.36	1,635	63.40
10.000	0.59	19.23	19.96	0.00	0.37	1,659	63.41
10.050	0.60	19.67	20.41	0.00	0.37	1,684	63.42
10.100	0.61	20.12	20.88	0.00	0.38	1,710	63.43
10.150	0.63	20.60	21.36	0.00	0.38	1,737	63.43
10.200	0.64	21.09	21.87	0.00	0.39	1,765	63.44
10.250	0.66	21.61	22.40	0.00	0.39	1,795	63.45
10.300	0.68	22.16	22.96	0.00	0.40	1,826	63.46
10.350	0.70	22.73	23.54	0.00	0.40	1,858	63.48
10.400	0.72	23.33	24.14	0.00	0.41	1,892	63.49
10.450	0.73	23.94	24.77	0.00	0.42	1,927	63.50

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 3 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
10.500	0.75	24.58	25.43	0.00	0.42	1,964	63.51
10.550	0.77	25.25	26.11	0.00	0.43	2,001	63.52
10.600	0.79	25.94	26.81	0.00	0.44	2,040	63.54
10.650	0.81	26.65	27.53	0.00	0.44	2,081	63.55
10.700	0.83	27.38	28.28	0.00	0.45	2,122	63.56
10.750	0.84	28.14	29.05	0.00	0.46	2,165	63.58
10.800	0.86	28.91	29.84	0.00	0.47	2,209	63.59
10.850	0.88	29.71	30.66	0.00	0.47	2,286	63.61
10.900	0.90	30.53	31.49	0.00	0.48	2,388	63.62
10.950	0.92	31.37	32.35	0.00	0.49	2,493	63.64
11.000	0.94	32.23	33.23	0.00	0.50	2,601	63.66
11.050	0.97	33.13	34.14	0.00	0.51	2,713	63.67
11.100	1.01	34.08	35.11	0.00	0.52	2,831	63.69
11.150	1.06	35.10	36.15	0.00	0.53	2,959	63.71
11.200	1.13	36.21	37.29	0.00	0.54	3,099	63.73
11.250	1.19	37.43	38.53	0.00	0.55	3,251	63.76
11.300	1.26	38.76	39.88	0.00	0.56	3,416	63.78
11.350	1.32	40.19	41.34	0.00	0.58	3,595	63.81
11.400	1.40	41.72	42.90	0.00	0.59	3,787	63.84
11.450	1.46	43.36	44.57	0.00	0.61	3,957	63.86
11.500	1.53	45.12	46.35	0.00	0.62	4,118	63.89
11.550	1.74	47.15	48.40	0.00	0.63	4,302	63.92
11.600	2.08	49.69	50.97	0.00	0.64	4,533	63.95
11.650	2.54	52.98	54.30	0.00	0.66	4,833	64.00
11.700	3.18	57.34	58.70	0.00	0.68	5,229	64.06
11.750	3.76	62.86	64.28	0.00	0.71	5,729	64.14
11.800	4.45	69.57	71.07	0.00	0.75	6,333	64.23
11.850	5.05	77.49	79.07	0.00	0.79	7,046	64.34
11.900	5.79	86.37	88.33	0.00	0.98	7,867	64.47
11.950	7.65	97.35	99.81	0.00	1.23	8,882	64.64
12.000	10.68	112.53	115.68	0.00	1.58	10,270	64.86
12.050	11.86	130.52	135.07	0.00	2.28	11,966	65.14
12.100	12.24	148.77	154.62	0.00	2.92	13,659	65.42
12.150	10.79	165.16	171.81	0.00	3.32	15,179	65.69
12.200	7.90	176.66	183.86	0.00	3.60	16,226	65.88
12.250	6.48	183.54	191.04	0.00	3.75	16,875	66.00
12.300	5.53	187.87	195.55	0.00	3.84	17,283	66.07
12.350	4.86	190.46	198.25	0.00	3.90	17,522	66.12
12.400	4.13	191.60	199.45	0.00	3.92	17,625	66.14
12.450	3.52	191.42	199.26	0.00	3.92	17,608	66.13
12.500	2.81	189.98	197.75	0.00	3.89	17,479	66.11
12.550	2.36	187.48	195.15	0.00	3.83	17,246	66.06

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 3 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
12.600	1.93	184.25	191.78	0.00	3.76	16,942	66.01
12.650	1.75	180.56	187.93	0.00	3.68	16,594	65.94
12.700	1.64	176.74	183.94	0.00	3.60	16,234	65.88
12.750	1.56	172.91	179.94	0.00	3.51	15,882	65.81
12.800	1.49	169.12	175.96	0.00	3.42	15,538	65.75
12.850	1.42	165.37	172.03	0.00	3.33	15,198	65.69
12.900	1.35	161.66	168.14	0.00	3.24	14,861	65.63
12.950	1.28	158.00	164.29	0.00	3.15	14,524	65.57
13.000	1.21	154.37	160.49	0.00	3.06	14,184	65.51
13.050	1.16	150.79	156.74	0.00	2.97	13,848	65.46
13.100	1.11	147.28	153.06	0.00	2.89	13,520	65.40
13.150	1.08	143.87	149.47	0.00	2.80	13,201	65.34
13.200	1.06	140.66	146.01	0.00	2.67	12,904	65.30
13.250	1.04	137.65	142.76	0.00	2.56	12,625	65.25
13.300	1.02	134.82	139.72	0.00	2.45	12,364	65.20
13.350	1.01	132.17	136.85	0.00	2.34	12,118	65.16
13.400	0.99	129.67	134.16	0.00	2.24	11,887	65.12
13.450	0.97	127.32	131.62	0.00	2.15	11,668	65.09
13.500	0.95	125.11	129.24	0.00	2.07	11,459	65.05
13.550	0.93	123.02	126.99	0.00	1.99	11,262	65.02
13.600	0.91	121.05	124.87	0.00	1.91	11,076	64.99
13.650	0.90	119.19	122.87	0.00	1.84	10,900	64.96
13.700	0.88	117.44	120.97	0.00	1.77	10,734	64.93
13.750	0.86	115.77	119.18	0.00	1.70	10,577	64.91
13.800	0.84	114.20	117.48	0.00	1.64	10,428	64.88
13.850	0.83	112.70	115.87	0.00	1.58	10,286	64.86
13.900	0.81	111.26	114.34	0.00	1.54	10,152	64.84
13.950	0.79	109.85	112.86	0.00	1.51	10,023	64.82
14.000	0.77	108.46	111.41	0.00	1.47	9,896	64.80
14.050	0.76	107.09	109.98	0.00	1.44	9,772	64.78
14.100	0.74	105.76	108.59	0.00	1.41	9,650	64.76
14.150	0.73	104.46	107.23	0.00	1.39	9,531	64.74
14.200	0.72	103.20	105.91	0.00	1.36	9,416	64.72
14.250	0.71	101.97	104.63	0.00	1.33	9,304	64.70
14.300	0.70	100.78	103.39	0.00	1.30	9,195	64.69
14.350	0.70	99.63	102.18	0.00	1.28	9,090	64.67
14.400	0.69	98.50	101.01	0.00	1.25	8,987	64.65
14.450	0.68	97.41	99.87	0.00	1.23	8,887	64.64
14.500	0.67	96.35	98.76	0.00	1.21	8,790	64.62
14.550	0.66	95.31	97.68	0.00	1.18	8,696	64.61
14.600	0.65	94.31	96.63	0.00	1.16	8,603	64.59
14.650	0.64	93.33	95.60	0.00	1.14	8,512	64.58

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 3 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
14.700	0.63	92.37	94.61	0.00	1.12	8,424	64.56
14.750	0.63	91.44	93.63	0.00	1.10	8,338	64.55
14.800	0.62	90.54	92.69	0.00	1.08	8,254	64.54
14.850	0.61	89.65	91.76	0.00	1.06	8,172	64.52
14.900	0.60	88.79	90.86	0.00	1.04	8,091	64.51
14.950	0.59	87.94	89.98	0.00	1.02	8,013	64.50
15.000	0.58	87.12	89.12	0.00	1.00	7,937	64.49
15.050	0.57	86.31	88.28	0.00	0.98	7,862	64.47
15.100	0.56	85.52	87.45	0.00	0.96	7,789	64.46
15.150	0.56	84.75	86.65	0.00	0.95	7,718	64.45
15.200	0.55	84.00	85.86	0.00	0.93	7,648	64.44
15.250	0.54	83.26	85.09	0.00	0.91	7,579	64.43
15.300	0.53	82.53	84.33	0.00	0.90	7,512	64.42
15.350	0.52	81.82	83.59	0.00	0.88	7,446	64.41
15.400	0.51	81.13	82.86	0.00	0.87	7,382	64.40
15.450	0.51	80.44	82.15	0.00	0.85	7,318	64.39
15.500	0.50	79.77	81.44	0.00	0.84	7,256	64.38
15.550	0.49	79.11	80.76	0.00	0.82	7,195	64.37
15.600	0.48	78.47	80.08	0.00	0.81	7,135	64.36
15.650	0.47	77.83	79.41	0.00	0.79	7,076	64.35
15.700	0.46	77.18	78.76	0.00	0.79	7,017	64.34
15.750	0.45	76.52	78.09	0.00	0.79	6,958	64.33
15.800	0.44	75.85	77.41	0.00	0.78	6,898	64.32
15.850	0.44	75.17	76.73	0.00	0.78	6,836	64.31
15.900	0.43	74.48	76.03	0.00	0.78	6,774	64.30
15.950	0.42	73.78	75.32	0.00	0.77	6,711	64.29
16.000	0.41	73.07	74.60	0.00	0.77	6,647	64.28
16.050	0.40	72.35	73.88	0.00	0.76	6,583	64.27
16.100	0.40	71.63	73.15	0.00	0.76	6,518	64.26
16.150	0.39	70.90	72.41	0.00	0.76	6,453	64.25
16.200	0.39	70.17	71.68	0.00	0.75	6,387	64.24
16.250	0.38	69.44	70.94	0.00	0.75	6,321	64.23
16.300	0.38	68.72	70.20	0.00	0.74	6,256	64.22
16.350	0.38	67.99	69.47	0.00	0.74	6,190	64.21
16.400	0.37	67.26	68.74	0.00	0.74	6,125	64.20
16.450	0.37	66.54	68.00	0.00	0.73	6,060	64.19
16.500	0.36	65.81	67.27	0.00	0.73	5,994	64.18
16.550	0.36	65.08	66.53	0.00	0.72	5,929	64.17
16.600	0.36	64.36	65.80	0.00	0.72	5,864	64.16
16.650	0.35	63.63	65.07	0.00	0.72	5,798	64.15
16.700	0.35	62.91	64.33	0.00	0.71	5,733	64.14
16.750	0.34	62.18	63.60	0.00	0.71	5,668	64.13

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 3 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
16.800	0.34	61.46	62.87	0.00	0.70	5,603	64.12
16.850	0.34	60.74	62.14	0.00	0.70	5,538	64.11
16.900	0.33	60.01	61.41	0.00	0.70	5,472	64.10
16.950	0.33	59.29	60.68	0.00	0.69	5,407	64.09
17.000	0.32	58.57	59.94	0.00	0.69	5,341	64.08
17.050	0.32	57.84	59.21	0.00	0.68	5,275	64.07
17.100	0.32	57.12	58.48	0.00	0.68	5,209	64.06
17.150	0.31	56.40	57.75	0.00	0.68	5,144	64.05
17.200	0.31	55.68	57.03	0.00	0.67	5,078	64.04
17.250	0.31	54.96	56.30	0.00	0.67	5,013	64.03
17.300	0.30	54.24	55.57	0.00	0.66	4,947	64.02
17.350	0.30	53.52	54.84	0.00	0.66	4,881	64.01
17.400	0.29	52.80	54.11	0.00	0.66	4,816	64.00
17.450	0.29	52.08	53.38	0.00	0.65	4,750	63.99
17.500	0.29	51.36	52.66	0.00	0.65	4,685	63.98
17.550	0.28	50.64	51.93	0.00	0.65	4,620	63.97
17.600	0.28	49.92	51.20	0.00	0.64	4,554	63.96
17.650	0.28	49.20	50.47	0.00	0.64	4,489	63.95
17.700	0.27	48.48	49.75	0.00	0.63	4,423	63.94
17.750	0.27	47.76	49.02	0.00	0.63	4,358	63.93
17.800	0.26	47.05	48.30	0.00	0.63	4,293	63.92
17.850	0.26	46.33	47.57	0.00	0.62	4,227	63.91
17.900	0.26	45.61	46.85	0.00	0.62	4,162	63.90
17.950	0.25	44.89	46.12	0.00	0.61	4,097	63.89
18.000	0.25	44.18	45.40	0.00	0.61	4,032	63.88
18.050	0.25	43.46	44.67	0.00	0.61	3,966	63.87
18.100	0.24	42.74	43.95	0.00	0.60	3,901	63.86
18.150	0.24	42.04	43.23	0.00	0.60	3,827	63.84
18.200	0.24	41.34	42.52	0.00	0.59	3,739	63.83
18.250	0.24	40.65	41.82	0.00	0.58	3,654	63.82
18.300	0.24	39.98	41.13	0.00	0.58	3,570	63.80
18.350	0.24	39.32	40.46	0.00	0.57	3,487	63.79
18.400	0.24	38.66	39.79	0.00	0.56	3,405	63.78
18.450	0.24	38.02	39.14	0.00	0.56	3,325	63.77
18.500	0.23	37.39	38.49	0.00	0.55	3,246	63.76
18.550	0.23	36.77	37.86	0.00	0.54	3,168	63.74
18.600	0.23	36.16	37.23	0.00	0.54	3,092	63.73
18.650	0.23	35.56	36.62	0.00	0.53	3,017	63.72
18.700	0.23	34.96	36.02	0.00	0.53	2,942	63.71
18.750	0.23	34.38	35.42	0.00	0.52	2,870	63.70
18.800	0.23	33.81	34.84	0.00	0.51	2,798	63.69
18.850	0.23	33.24	34.26	0.00	0.51	2,727	63.68

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 3 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
18.900	0.22	32.69	33.70	0.00	0.50	2,658	63.67
18.950	0.22	32.14	33.14	0.00	0.50	2,590	63.66
19.000	0.22	31.60	32.59	0.00	0.49	2,522	63.64
19.050	0.22	31.07	32.05	0.00	0.49	2,456	63.63
19.100	0.22	30.55	31.52	0.00	0.48	2,391	63.62
19.150	0.22	30.04	30.99	0.00	0.48	2,327	63.61
19.200	0.22	29.53	30.48	0.00	0.47	2,263	63.61
19.250	0.22	29.03	29.97	0.00	0.47	2,216	63.60
19.300	0.22	28.54	29.47	0.00	0.46	2,188	63.59
19.350	0.21	28.06	28.97	0.00	0.46	2,161	63.58
19.400	0.21	27.58	28.49	0.00	0.45	2,134	63.57
19.450	0.21	27.12	28.01	0.00	0.45	2,107	63.56
19.500	0.21	26.65	27.54	0.00	0.44	2,081	63.55
19.550	0.21	26.20	27.07	0.00	0.44	2,055	63.54
19.600	0.21	25.75	26.62	0.00	0.43	2,030	63.53
19.650	0.21	25.31	26.17	0.00	0.43	2,005	63.52
19.700	0.21	24.87	25.72	0.00	0.42	1,980	63.52
19.750	0.21	24.44	25.28	0.00	0.42	1,956	63.51
19.800	0.20	24.02	24.85	0.00	0.42	1,932	63.50
19.850	0.20	23.60	24.43	0.00	0.41	1,908	63.49
19.900	0.20	23.19	24.01	0.00	0.41	1,885	63.48
19.950	0.20	22.79	23.60	0.00	0.40	1,862	63.48
20.000	0.20	22.39	23.19	0.00	0.40	1,839	63.47
20.050	0.20	21.99	22.79	0.00	0.40	1,817	63.46
20.100	0.20	21.61	22.39	0.00	0.39	1,795	63.45
20.150	0.20	21.22	22.00	0.00	0.39	1,773	63.45
20.200	0.20	20.85	21.62	0.00	0.38	1,751	63.44
20.250	0.20	20.48	21.24	0.00	0.38	1,730	63.43
20.300	0.19	20.11	20.87	0.00	0.38	1,710	63.43
20.350	0.19	19.75	20.50	0.00	0.37	1,689	63.42
20.400	0.19	19.40	20.14	0.00	0.37	1,669	63.41
20.450	0.19	19.05	19.78	0.00	0.37	1,649	63.40
20.500	0.19	18.71	19.43	0.00	0.36	1,630	63.40
20.550	0.19	18.37	19.09	0.00	0.36	1,611	63.39
20.600	0.19	18.03	18.75	0.00	0.36	1,592	63.39
20.650	0.19	17.71	18.41	0.00	0.35	1,573	63.38
20.700	0.19	17.38	18.08	0.00	0.35	1,555	63.37
20.750	0.19	17.06	17.75	0.00	0.35	1,536	63.37
20.800	0.19	16.74	17.43	0.00	0.34	1,518	63.36
20.850	0.19	16.44	17.12	0.00	0.34	1,501	63.35
20.900	0.18	16.13	16.80	0.00	0.34	1,482	63.35
20.950	0.18	15.84	16.50	0.00	0.33	1,455	63.34

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 3 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
21.000	0.18	15.55	16.20	0.00	0.32	1,429	63.33
21.050	0.18	15.28	15.92	0.00	0.32	1,404	63.32
21.100	0.18	15.01	15.64	0.00	0.31	1,379	63.31
21.150	0.18	14.76	15.37	0.00	0.31	1,356	63.31
21.200	0.18	14.51	15.12	0.00	0.30	1,333	63.30
21.250	0.18	14.27	14.87	0.00	0.30	1,311	63.29
21.300	0.18	14.04	14.63	0.00	0.29	1,290	63.28
21.350	0.18	13.82	14.39	0.00	0.29	1,269	63.28
21.400	0.18	13.60	14.17	0.00	0.28	1,250	63.27
21.450	0.17	13.39	13.95	0.00	0.28	1,230	63.26
21.500	0.17	13.19	13.74	0.00	0.28	1,212	63.26
21.550	0.17	12.99	13.53	0.00	0.27	1,194	63.25
21.600	0.17	12.80	13.33	0.00	0.27	1,176	63.25
21.650	0.17	12.62	13.14	0.00	0.26	1,159	63.24
21.700	0.17	12.44	12.96	0.00	0.26	1,143	63.23
21.750	0.17	12.27	12.78	0.00	0.26	1,127	63.23
21.800	0.17	12.10	12.60	0.00	0.25	1,112	63.22
21.850	0.17	11.94	12.44	0.00	0.25	1,097	63.22
21.900	0.17	11.78	12.27	0.00	0.25	1,082	63.21
21.950	0.17	11.63	12.11	0.00	0.24	1,068	63.21
22.000	0.17	11.48	11.96	0.00	0.24	1,055	63.20
22.050	0.16	11.34	11.81	0.00	0.24	1,041	63.20
22.100	0.16	11.20	11.66	0.00	0.23	1,029	63.20
22.150	0.16	11.06	11.52	0.00	0.23	1,016	63.19
22.200	0.16	10.93	11.38	0.00	0.23	1,004	63.19
22.250	0.16	10.80	11.25	0.00	0.23	992	63.18
22.300	0.16	10.67	11.12	0.00	0.22	981	63.18
22.350	0.16	10.55	10.99	0.00	0.22	969	63.18
22.400	0.16	10.43	10.87	0.00	0.22	959	63.17
22.450	0.16	10.32	10.75	0.00	0.22	948	63.17
22.500	0.16	10.21	10.63	0.00	0.21	938	63.17
22.550	0.16	10.10	10.52	0.00	0.21	928	63.16
22.600	0.16	9.99	10.41	0.00	0.21	918	63.16
22.650	0.15	9.89	10.30	0.00	0.21	908	63.16
22.700	0.15	9.79	10.20	0.00	0.20	899	63.15
22.750	0.15	9.69	10.09	0.00	0.20	890	63.15
22.800	0.15	9.59	9.99	0.00	0.20	881	63.15
22.850	0.15	9.50	9.89	0.00	0.20	872	63.14
22.900	0.15	9.40	9.80	0.00	0.20	864	63.14
22.950	0.15	9.31	9.70	0.00	0.19	856	63.14
23.000	0.15	9.23	9.61	0.00	0.19	848	63.14
23.050	0.15	9.14	9.52	0.00	0.19	840	63.13

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 3 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
23.100	0.15	9.05	9.43	0.00	0.19	832	63.13
23.150	0.15	8.97	9.34	0.00	0.19	824	63.13
23.200	0.14	8.89	9.26	0.00	0.19	817	63.12
23.250	0.14	8.81	9.18	0.00	0.18	809	63.12
23.300	0.14	8.73	9.10	0.00	0.18	802	63.12
23.350	0.14	8.65	9.02	0.00	0.18	795	63.12
23.400	0.14	8.58	8.94	0.00	0.18	788	63.12
23.450	0.14	8.51	8.86	0.00	0.18	782	63.11
23.500	0.14	8.44	8.79	0.00	0.18	775	63.11
23.550	0.14	8.36	8.71	0.00	0.17	769	63.11
23.600	0.14	8.29	8.64	0.00	0.17	762	63.11
23.650	0.14	8.23	8.57	0.00	0.17	756	63.10
23.700	0.14	8.16	8.50	0.00	0.17	750	63.10
23.750	0.14	8.09	8.43	0.00	0.17	743	63.10
23.800	0.13	8.03	8.36	0.00	0.17	737	63.10
23.850	0.13	7.96	8.29	0.00	0.17	732	63.10
23.900	0.13	7.90	8.23	0.00	0.16	726	63.09
23.950	0.13	7.83	8.16	0.00	0.16	720	63.09
24.000	0.13	7.77	8.10	0.00	0.16	714	63.09

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 3 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
0.000	0.00	0.00	0.00	0.00	0.00	0	62.85
0.050	0.00	0.00	0.00	0.00	0.00	0	62.85
0.100	0.00	0.00	0.00	0.00	0.00	0	62.85
0.150	0.00	0.00	0.00	0.00	0.00	0	62.85
0.200	0.00	0.00	0.00	0.00	0.00	0	62.85
0.250	0.00	0.00	0.00	0.00	0.00	0	62.85
0.300	0.00	0.00	0.00	0.00	0.00	0	62.85
0.350	0.00	0.00	0.00	0.00	0.00	0	62.85
0.400	0.00	0.00	0.00	0.00	0.00	0	62.85
0.450	0.00	0.00	0.00	0.00	0.00	0	62.85
0.500	0.00	0.00	0.00	0.00	0.00	0	62.85
0.550	0.00	0.00	0.00	0.00	0.00	0	62.85
0.600	0.00	0.00	0.00	0.00	0.00	0	62.85
0.650	0.00	0.00	0.00	0.00	0.00	0	62.85
0.700	0.00	0.00	0.00	0.00	0.00	0	62.85
0.750	0.00	0.00	0.00	0.00	0.00	0	62.85
0.800	0.00	0.00	0.00	0.00	0.00	0	62.85
0.850	0.00	0.00	0.00	0.00	0.00	0	62.85
0.900	0.00	0.00	0.00	0.00	0.00	0	62.85
0.950	0.00	0.00	0.00	0.00	0.00	0	62.85
1.000	0.00	0.00	0.00	0.00	0.00	0	62.85
1.050	0.00	0.00	0.00	0.00	0.00	0	62.85
1.100	0.00	0.00	0.00	0.00	0.00	0	62.85
1.150	0.00	0.00	0.00	0.00	0.00	0	62.85
1.200	0.00	0.00	0.00	0.00	0.00	0	62.85
1.250	0.00	0.00	0.00	0.00	0.00	0	62.85
1.300	0.00	0.00	0.00	0.00	0.00	0	62.85
1.350	0.00	0.00	0.00	0.00	0.00	0	62.85
1.400	0.00	0.00	0.00	0.00	0.00	0	62.85
1.450	0.00	0.00	0.00	0.00	0.00	0	62.85
1.500	0.00	0.00	0.00	0.00	0.00	0	62.85
1.550	0.00	0.00	0.00	0.00	0.00	0	62.85
1.600	0.00	0.00	0.00	0.00	0.00	0	62.85
1.650	0.00	0.00	0.00	0.00	0.00	0	62.85
1.700	0.00	0.00	0.00	0.00	0.00	0	62.85
1.750	0.00	0.00	0.00	0.00	0.00	0	62.85
1.800	0.00	0.00	0.00	0.00	0.00	0	62.85
1.850	0.00	0.00	0.00	0.00	0.00	0	62.85
1.900	0.00	0.00	0.00	0.00	0.00	0	62.85
1.950	0.00	0.00	0.00	0.00	0.00	0	62.85
2.000	0.00	0.00	0.00	0.00	0.00	0	62.85
2.050	0.00	0.01	0.01	0.00	0.00	1	62.85

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 3 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
2.100	0.01	0.02	0.02	0.00	0.00	2	62.85
2.150	0.01	0.03	0.03	0.00	0.00	3	62.85
2.200	0.01	0.05	0.05	0.00	0.00	5	62.85
2.250	0.01	0.07	0.07	0.00	0.00	7	62.85
2.300	0.02	0.10	0.10	0.00	0.00	9	62.85
2.350	0.02	0.12	0.13	0.00	0.00	11	62.85
2.400	0.02	0.16	0.16	0.00	0.00	14	62.85
2.450	0.02	0.19	0.20	0.00	0.00	18	62.86
2.500	0.03	0.23	0.24	0.00	0.00	21	62.86
2.550	0.03	0.27	0.28	0.00	0.01	25	62.86
2.600	0.03	0.32	0.33	0.00	0.01	29	62.86
2.650	0.03	0.36	0.38	0.00	0.01	33	62.86
2.700	0.04	0.41	0.43	0.00	0.01	38	62.86
2.750	0.04	0.47	0.49	0.00	0.01	43	62.86
2.800	0.04	0.52	0.55	0.00	0.01	48	62.87
2.850	0.04	0.58	0.61	0.00	0.01	53	62.87
2.900	0.05	0.64	0.67	0.00	0.01	59	62.87
2.950	0.05	0.71	0.74	0.00	0.01	65	62.87
3.000	0.05	0.77	0.80	0.00	0.02	71	62.87
3.050	0.05	0.84	0.87	0.00	0.02	77	62.88
3.100	0.06	0.91	0.95	0.00	0.02	83	62.88
3.150	0.06	0.98	1.02	0.00	0.02	90	62.88
3.200	0.06	1.05	1.10	0.00	0.02	97	62.88
3.250	0.06	1.13	1.18	0.00	0.02	104	62.88
3.300	0.07	1.21	1.26	0.00	0.03	111	62.89
3.350	0.07	1.29	1.34	0.00	0.03	118	62.89
3.400	0.07	1.37	1.43	0.00	0.03	126	62.89
3.450	0.07	1.45	1.51	0.00	0.03	133	62.89
3.500	0.08	1.54	1.60	0.00	0.03	141	62.90
3.550	0.08	1.62	1.69	0.00	0.03	149	62.90
3.600	0.08	1.71	1.78	0.00	0.04	157	62.90
3.650	0.08	1.80	1.87	0.00	0.04	165	62.91
3.700	0.09	1.89	1.97	0.00	0.04	174	62.91
3.750	0.09	1.98	2.06	0.00	0.04	182	62.91
3.800	0.09	2.07	2.16	0.00	0.04	190	62.91
3.850	0.09	2.17	2.26	0.00	0.05	199	62.92
3.900	0.10	2.26	2.36	0.00	0.05	208	62.92
3.950	0.10	2.36	2.46	0.00	0.05	217	62.92
4.000	0.10	2.46	2.56	0.00	0.05	226	62.93
4.050	0.10	2.56	2.66	0.00	0.05	235	62.93
4.100	0.11	2.66	2.77	0.00	0.06	244	62.93
4.150	0.11	2.76	2.87	0.00	0.06	253	62.94

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 3 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
4.200	0.11	2.86	2.98	0.00	0.06	263	62.94
4.250	0.11	2.96	3.09	0.00	0.06	272	62.94
4.300	0.12	3.07	3.19	0.00	0.06	282	62.94
4.350	0.12	3.17	3.30	0.00	0.07	291	62.95
4.400	0.12	3.28	3.41	0.00	0.07	301	62.95
4.450	0.13	3.38	3.52	0.00	0.07	311	62.95
4.500	0.13	3.49	3.64	0.00	0.07	321	62.96
4.550	0.13	3.60	3.75	0.00	0.08	331	62.96
4.600	0.13	3.71	3.86	0.00	0.08	341	62.96
4.650	0.14	3.82	3.98	0.00	0.08	351	62.97
4.700	0.14	3.93	4.09	0.00	0.08	361	62.97
4.750	0.14	4.04	4.21	0.00	0.08	371	62.97
4.800	0.14	4.15	4.32	0.00	0.09	381	62.98
4.850	0.15	4.26	4.44	0.00	0.09	391	62.98
4.900	0.15	4.37	4.55	0.00	0.09	402	62.99
4.950	0.15	4.48	4.67	0.00	0.09	412	62.99
5.000	0.15	4.60	4.79	0.00	0.10	422	62.99
5.050	0.16	4.71	4.91	0.00	0.10	433	63.00
5.100	0.16	4.83	5.03	0.00	0.10	443	63.00
5.150	0.16	4.94	5.15	0.00	0.10	454	63.00
5.200	0.16	5.06	5.27	0.00	0.11	465	63.01
5.250	0.17	5.17	5.39	0.00	0.11	475	63.01
5.300	0.17	5.29	5.51	0.00	0.11	486	63.01
5.350	0.17	5.40	5.63	0.00	0.11	496	63.02
5.400	0.17	5.52	5.75	0.00	0.12	507	63.02
5.450	0.18	5.64	5.87	0.00	0.12	518	63.02
5.500	0.18	5.75	5.99	0.00	0.12	529	63.03
5.550	0.18	5.87	6.12	0.00	0.12	539	63.03
5.600	0.19	5.99	6.24	0.00	0.13	550	63.04
5.650	0.19	6.11	6.36	0.00	0.13	561	63.04
5.700	0.19	6.23	6.49	0.00	0.13	572	63.04
5.750	0.19	6.34	6.61	0.00	0.13	583	63.05
5.800	0.20	6.46	6.73	0.00	0.13	594	63.05
5.850	0.20	6.58	6.86	0.00	0.14	605	63.05
5.900	0.20	6.70	6.98	0.00	0.14	616	63.06
5.950	0.20	6.82	7.10	0.00	0.14	627	63.06
6.000	0.21	6.94	7.23	0.00	0.14	638	63.06
6.050	0.21	7.06	7.35	0.00	0.15	649	63.07
6.100	0.21	7.18	7.48	0.00	0.15	660	63.07
6.150	0.22	7.31	7.61	0.00	0.15	671	63.08
6.200	0.22	7.43	7.75	0.00	0.16	683	63.08
6.250	0.23	7.57	7.88	0.00	0.16	695	63.08

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 3 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
6.300	0.23	7.70	8.03	0.00	0.16	708	63.09
6.350	0.24	7.85	8.17	0.00	0.16	721	63.09
6.400	0.24	7.99	8.32	0.00	0.17	734	63.10
6.450	0.25	8.14	8.48	0.00	0.17	748	63.10
6.500	0.25	8.29	8.64	0.00	0.17	762	63.11
6.550	0.26	8.45	8.80	0.00	0.18	776	63.11
6.600	0.26	8.61	8.97	0.00	0.18	791	63.12
6.650	0.27	8.78	9.14	0.00	0.18	806	63.12
6.700	0.27	8.94	9.32	0.00	0.19	822	63.13
6.750	0.28	9.12	9.50	0.00	0.19	838	63.13
6.800	0.28	9.29	9.68	0.00	0.19	854	63.14
6.850	0.29	9.47	9.87	0.00	0.20	870	63.14
6.900	0.30	9.65	10.06	0.00	0.20	887	63.15
6.950	0.30	9.84	10.25	0.00	0.21	904	63.15
7.000	0.31	10.03	10.45	0.00	0.21	921	63.16
7.050	0.31	10.22	10.65	0.00	0.21	939	63.17
7.100	0.32	10.42	10.85	0.00	0.22	957	63.17
7.150	0.32	10.61	11.06	0.00	0.22	975	63.18
7.200	0.33	10.82	11.27	0.00	0.23	994	63.18
7.250	0.33	11.02	11.48	0.00	0.23	1,012	63.19
7.300	0.34	11.23	11.70	0.00	0.23	1,031	63.20
7.350	0.35	11.44	11.91	0.00	0.24	1,051	63.20
7.400	0.35	11.65	12.14	0.00	0.24	1,070	63.21
7.450	0.36	11.86	12.36	0.00	0.25	1,090	63.22
7.500	0.36	12.08	12.59	0.00	0.25	1,110	63.22
7.550	0.37	12.30	12.82	0.00	0.26	1,130	63.23
7.600	0.38	12.53	13.05	0.00	0.26	1,151	63.24
7.650	0.38	12.75	13.28	0.00	0.27	1,172	63.24
7.700	0.39	12.98	13.52	0.00	0.27	1,193	63.25
7.750	0.39	13.21	13.76	0.00	0.28	1,214	63.26
7.800	0.40	13.44	14.01	0.00	0.28	1,235	63.27
7.850	0.41	13.68	14.25	0.00	0.29	1,257	63.27
7.900	0.41	13.92	14.50	0.00	0.29	1,279	63.28
7.950	0.42	14.16	14.75	0.00	0.30	1,301	63.29
8.000	0.42	14.40	15.00	0.00	0.30	1,323	63.30
8.050	0.43	14.64	15.25	0.00	0.31	1,345	63.30
8.100	0.44	14.89	15.51	0.00	0.31	1,368	63.31
8.150	0.45	15.15	15.78	0.00	0.32	1,392	63.32
8.200	0.46	15.42	16.06	0.00	0.32	1,417	63.33
8.250	0.47	15.70	16.36	0.00	0.33	1,442	63.34
8.300	0.49	15.99	16.66	0.00	0.33	1,469	63.34
8.350	0.50	16.30	16.98	0.00	0.34	1,493	63.35

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 3 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
8.400	0.51	16.62	17.31	0.00	0.34	1,512	63.36
8.450	0.52	16.96	17.65	0.00	0.35	1,531	63.37
8.500	0.54	17.32	18.02	0.00	0.35	1,551	63.37
8.550	0.55	17.70	18.40	0.00	0.35	1,573	63.38
8.600	0.56	18.09	18.80	0.00	0.36	1,595	63.39
8.650	0.57	18.50	19.22	0.00	0.36	1,618	63.39
8.700	0.58	18.92	19.65	0.00	0.37	1,642	63.40
8.750	0.60	19.36	20.10	0.00	0.37	1,667	63.41
8.800	0.61	19.82	20.57	0.00	0.37	1,693	63.42
8.850	0.62	20.29	21.05	0.00	0.38	1,720	63.43
8.900	0.64	20.78	21.55	0.00	0.38	1,748	63.44
8.950	0.65	21.29	22.07	0.00	0.39	1,776	63.45
9.000	0.66	21.81	22.60	0.00	0.39	1,806	63.46
9.050	0.67	22.34	23.14	0.00	0.40	1,836	63.47
9.100	0.69	22.89	23.70	0.00	0.41	1,868	63.48
9.150	0.70	23.46	24.28	0.00	0.41	1,900	63.49
9.200	0.71	24.04	24.87	0.00	0.42	1,932	63.50
9.250	0.73	24.63	25.47	0.00	0.42	1,966	63.51
9.300	0.74	25.24	26.09	0.00	0.43	2,001	63.52
9.350	0.75	25.86	26.73	0.00	0.43	2,036	63.54
9.400	0.77	26.49	27.38	0.00	0.44	2,072	63.55
9.450	0.78	27.14	28.04	0.00	0.45	2,109	63.56
9.500	0.79	27.81	28.71	0.00	0.45	2,147	63.57
9.550	0.81	28.48	29.40	0.00	0.46	2,185	63.59
9.600	0.82	29.17	30.11	0.00	0.47	2,224	63.60
9.650	0.83	29.87	30.82	0.00	0.47	2,306	63.61
9.700	0.85	30.59	31.55	0.00	0.48	2,395	63.63
9.750	0.86	31.31	32.29	0.00	0.49	2,486	63.64
9.800	0.87	32.05	33.05	0.00	0.50	2,578	63.65
9.850	0.89	32.80	33.81	0.00	0.50	2,672	63.67
9.900	0.90	33.57	34.59	0.00	0.51	2,768	63.68
9.950	0.91	34.34	35.38	0.00	0.52	2,864	63.70
10.000	0.93	35.13	36.18	0.00	0.53	2,963	63.71
10.050	0.94	35.93	37.00	0.00	0.54	3,063	63.73
10.100	0.96	36.75	37.84	0.00	0.54	3,165	63.74
10.150	0.99	37.59	38.70	0.00	0.55	3,271	63.76
10.200	1.01	38.47	39.59	0.00	0.56	3,381	63.78
10.250	1.04	39.38	40.52	0.00	0.57	3,494	63.79
10.300	1.07	40.32	41.48	0.00	0.58	3,612	63.81
10.350	1.09	41.30	42.48	0.00	0.59	3,734	63.83
10.400	1.12	42.31	43.51	0.00	0.60	3,861	63.85
10.450	1.14	43.36	44.57	0.00	0.61	3,957	63.86

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 3 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
10.500	1.17	44.45	45.67	0.00	0.61	4,057	63.88
10.550	1.20	45.58	46.82	0.00	0.62	4,160	63.90
10.600	1.22	46.75	48.00	0.00	0.62	4,266	63.91
10.650	1.25	47.97	49.23	0.00	0.63	4,377	63.93
10.700	1.28	49.22	50.50	0.00	0.64	4,491	63.95
10.750	1.30	50.51	51.80	0.00	0.64	4,608	63.96
10.800	1.33	51.85	53.15	0.00	0.65	4,729	63.98
10.850	1.36	53.22	54.54	0.00	0.66	4,854	64.00
10.900	1.39	54.63	55.96	0.00	0.67	4,983	64.02
10.950	1.41	56.08	57.43	0.00	0.68	5,114	64.04
11.000	1.44	57.57	58.93	0.00	0.68	5,250	64.06
11.050	1.49	59.11	60.49	0.00	0.69	5,390	64.09
11.100	1.55	60.74	62.14	0.00	0.70	5,538	64.11
11.150	1.62	62.50	63.92	0.00	0.71	5,696	64.13
11.200	1.72	64.40	65.84	0.00	0.72	5,868	64.16
11.250	1.81	66.48	67.94	0.00	0.73	6,054	64.19
11.300	1.92	68.72	70.21	0.00	0.74	6,256	64.22
11.350	2.01	71.14	72.65	0.00	0.76	6,474	64.25
11.400	2.12	73.72	75.26	0.00	0.77	6,706	64.29
11.450	2.21	76.47	78.05	0.00	0.79	6,954	64.33
11.500	2.32	79.35	81.00	0.00	0.83	7,217	64.37
11.550	2.63	82.51	84.30	0.00	0.90	7,509	64.42
11.600	3.13	86.30	88.27	0.00	0.98	7,861	64.47
11.650	3.81	91.08	93.25	0.00	1.09	8,304	64.54
11.700	4.78	97.22	99.67	0.00	1.22	8,870	64.63
11.750	5.63	104.83	107.62	0.00	1.39	9,565	64.75
11.800	6.64	113.85	117.11	0.00	1.63	10,395	64.88
11.850	7.52	123.98	128.02	0.00	2.02	11,352	65.04
11.900	8.60	135.18	140.10	0.00	2.46	12,397	65.21
11.950	11.32	149.23	155.10	0.00	2.94	13,702	65.43
12.000	15.75	169.44	176.30	0.00	3.43	15,567	65.76
12.050	17.43	194.64	202.62	0.00	3.99	17,898	66.19
12.100	17.94	220.92	230.02	0.00	4.55	20,325	66.69
12.150	15.78	244.40	254.64	0.00	5.12	22,479	67.27
12.200	11.53	260.58	271.71	0.00	5.57	23,953	67.76
12.250	9.45	269.94	281.56	0.00	5.81	24,817	68.05
12.300	8.05	275.53	287.44	0.00	5.95	25,334	68.22
12.350	7.07	278.60	290.66	0.00	6.03	25,616	68.32
12.400	6.01	279.57	291.68	0.00	6.05	25,706	68.35
12.450	5.12	278.64	290.70	0.00	6.03	25,620	68.32
12.500	4.08	275.92	287.85	0.00	5.96	25,370	68.23
12.550	3.43	271.72	283.43	0.00	5.86	24,982	68.10

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 3 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
12.600	2.81	266.51	277.96	0.00	5.73	24,501	67.94
12.650	2.54	260.71	271.86	0.00	5.57	23,966	67.76
12.700	2.37	254.81	265.62	0.00	5.41	23,420	67.58
12.750	2.27	248.96	259.45	0.00	5.24	22,879	67.40
12.800	2.16	243.20	253.39	0.00	5.09	22,377	67.23
12.850	2.06	237.53	247.42	0.00	4.95	21,884	67.08
12.900	1.95	231.95	241.55	0.00	4.80	21,329	66.93
12.950	1.86	226.43	235.77	0.00	4.67	20,809	66.80
13.000	1.75	220.94	230.04	0.00	4.55	20,327	66.69
13.050	1.68	215.51	224.38	0.00	4.44	19,843	66.58
13.100	1.61	210.15	218.80	0.00	4.32	19,329	66.48
13.150	1.57	204.91	213.33	0.00	4.21	18,825	66.37
13.200	1.54	199.82	208.02	0.00	4.10	18,361	66.28
13.250	1.51	194.88	202.86	0.00	3.99	17,919	66.19
13.300	1.48	190.09	197.87	0.00	3.89	17,489	66.11
13.350	1.46	185.45	193.03	0.00	3.79	17,055	66.03
13.400	1.43	180.95	188.34	0.00	3.69	16,631	65.95
13.450	1.41	176.59	183.79	0.00	3.60	16,221	65.87
13.500	1.38	172.38	179.38	0.00	3.50	15,833	65.80
13.550	1.35	168.31	175.11	0.00	3.40	15,464	65.74
13.600	1.33	164.38	170.99	0.00	3.30	15,108	65.68
13.650	1.30	160.58	167.01	0.00	3.21	14,763	65.61
13.700	1.27	156.91	163.16	0.00	3.12	14,422	65.56
13.750	1.25	153.36	159.43	0.00	3.04	14,089	65.50
13.800	1.22	149.92	155.83	0.00	2.95	13,767	65.44
13.850	1.20	146.60	152.34	0.00	2.87	13,456	65.39
13.900	1.17	143.40	148.96	0.00	2.78	13,157	65.34
13.950	1.14	140.38	145.71	0.00	2.66	12,878	65.29
14.000	1.12	137.54	142.64	0.00	2.55	12,615	65.25
14.050	1.10	134.85	139.75	0.00	2.45	12,367	65.20
14.100	1.07	132.32	137.02	0.00	2.35	12,133	65.17
14.150	1.06	129.94	134.45	0.00	2.26	11,913	65.13
14.200	1.04	127.71	132.05	0.00	2.17	11,705	65.09
14.250	1.03	125.62	129.79	0.00	2.09	11,507	65.06
14.300	1.02	123.65	127.67	0.00	2.01	11,321	65.03
14.350	1.01	121.80	125.67	0.00	1.94	11,146	65.00
14.400	0.99	120.06	123.80	0.00	1.87	10,982	64.98
14.450	0.98	118.43	122.04	0.00	1.81	10,828	64.95
14.500	0.97	116.89	120.38	0.00	1.75	10,682	64.93
14.550	0.96	115.44	118.81	0.00	1.69	10,545	64.90
14.600	0.94	114.07	117.34	0.00	1.64	10,415	64.88
14.650	0.93	112.78	115.94	0.00	1.58	10,293	64.86

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 3 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
14.700	0.92	111.54	114.63	0.00	1.54	10,178	64.84
14.750	0.91	110.33	113.36	0.00	1.52	10,067	64.83
14.800	0.89	109.15	112.13	0.00	1.49	9,960	64.81
14.850	0.88	108.00	110.93	0.00	1.46	9,854	64.79
14.900	0.87	106.87	109.75	0.00	1.44	9,751	64.78
14.950	0.86	105.76	108.59	0.00	1.41	9,650	64.76
15.000	0.84	104.68	107.46	0.00	1.39	9,552	64.74
15.050	0.83	103.62	106.36	0.00	1.37	9,455	64.73
15.100	0.82	102.58	105.27	0.00	1.34	9,360	64.71
15.150	0.81	101.57	104.21	0.00	1.32	9,267	64.70
15.200	0.79	100.57	103.16	0.00	1.30	9,176	64.68
15.250	0.78	99.59	102.14	0.00	1.28	9,086	64.67
15.300	0.77	98.62	101.14	0.00	1.26	8,998	64.65
15.350	0.76	97.68	100.15	0.00	1.23	8,912	64.64
15.400	0.74	96.75	99.18	0.00	1.21	8,827	64.63
15.450	0.73	95.83	98.22	0.00	1.19	8,743	64.61
15.500	0.72	94.93	97.28	0.00	1.17	8,661	64.60
15.550	0.71	94.05	96.36	0.00	1.15	8,579	64.59
15.600	0.69	93.18	95.45	0.00	1.13	8,498	64.57
15.650	0.68	92.32	94.55	0.00	1.12	8,419	64.56
15.700	0.67	91.47	93.67	0.00	1.10	8,340	64.55
15.750	0.65	90.64	92.79	0.00	1.08	8,263	64.54
15.800	0.64	89.82	91.93	0.00	1.06	8,187	64.52
15.850	0.63	89.00	91.09	0.00	1.04	8,112	64.51
15.900	0.62	88.20	90.25	0.00	1.02	8,037	64.50
15.950	0.60	87.41	89.42	0.00	1.01	7,964	64.49
16.000	0.59	86.63	88.61	0.00	0.99	7,891	64.48
16.050	0.58	85.86	87.80	0.00	0.97	7,820	64.47
16.100	0.57	85.10	87.01	0.00	0.95	7,750	64.46
16.150	0.56	84.36	86.24	0.00	0.94	7,682	64.44
16.200	0.56	83.64	85.49	0.00	0.92	7,615	64.43
16.250	0.55	82.94	84.75	0.00	0.91	7,550	64.42
16.300	0.55	82.26	84.04	0.00	0.89	7,486	64.41
16.350	0.54	81.59	83.35	0.00	0.88	7,425	64.40
16.400	0.54	80.95	82.67	0.00	0.86	7,365	64.39
16.450	0.53	80.32	82.01	0.00	0.85	7,307	64.39
16.500	0.53	79.71	81.37	0.00	0.83	7,250	64.38
16.550	0.52	79.11	80.75	0.00	0.82	7,195	64.37
16.600	0.51	78.53	80.14	0.00	0.81	7,141	64.36
16.650	0.51	77.96	79.55	0.00	0.80	7,088	64.35
16.700	0.50	77.39	78.97	0.00	0.79	7,036	64.34
16.750	0.50	76.81	78.39	0.00	0.79	6,985	64.33

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 3 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
16.800	0.49	76.23	77.80	0.00	0.79	6,932	64.33
16.850	0.49	75.65	77.21	0.00	0.78	6,880	64.32
16.900	0.48	75.06	76.61	0.00	0.78	6,827	64.31
16.950	0.48	74.46	76.01	0.00	0.78	6,773	64.30
17.000	0.47	73.86	75.41	0.00	0.77	6,719	64.29
17.050	0.46	73.26	74.80	0.00	0.77	6,665	64.28
17.100	0.46	72.65	74.19	0.00	0.77	6,610	64.28
17.150	0.45	72.04	73.57	0.00	0.76	6,555	64.27
17.200	0.45	71.43	72.95	0.00	0.76	6,500	64.26
17.250	0.44	70.81	72.32	0.00	0.76	6,444	64.25
17.300	0.44	70.18	71.69	0.00	0.75	6,388	64.24
17.350	0.43	69.56	71.05	0.00	0.75	6,331	64.23
17.400	0.43	68.92	70.41	0.00	0.75	6,275	64.22
17.450	0.42	68.29	69.77	0.00	0.74	6,217	64.21
17.500	0.42	67.65	69.12	0.00	0.74	6,160	64.21
17.550	0.41	67.00	68.47	0.00	0.73	6,102	64.20
17.600	0.40	66.35	67.82	0.00	0.73	6,043	64.19
17.650	0.40	65.70	67.16	0.00	0.73	5,985	64.18
17.700	0.39	65.05	66.50	0.00	0.72	5,926	64.17
17.750	0.39	64.39	65.83	0.00	0.72	5,866	64.16
17.800	0.38	63.73	65.16	0.00	0.72	5,807	64.15
17.850	0.38	63.06	64.48	0.00	0.71	5,747	64.14
17.900	0.37	62.39	63.81	0.00	0.71	5,686	64.13
17.950	0.37	61.71	63.13	0.00	0.71	5,626	64.12
18.000	0.36	61.04	62.44	0.00	0.70	5,565	64.11
18.050	0.36	60.35	61.75	0.00	0.70	5,503	64.10
18.100	0.35	59.67	61.06	0.00	0.69	5,441	64.09
18.150	0.35	58.99	60.37	0.00	0.69	5,379	64.08
18.200	0.35	58.32	59.69	0.00	0.69	5,318	64.07
18.250	0.35	57.64	59.01	0.00	0.68	5,257	64.07
18.300	0.34	56.97	58.33	0.00	0.68	5,196	64.06
18.350	0.34	56.31	57.66	0.00	0.68	5,135	64.05
18.400	0.34	55.65	56.99	0.00	0.67	5,075	64.04
18.450	0.34	54.99	56.33	0.00	0.67	5,015	64.03
18.500	0.34	54.34	55.67	0.00	0.67	4,956	64.02
18.550	0.34	53.69	55.01	0.00	0.66	4,897	64.01
18.600	0.34	53.04	54.36	0.00	0.66	4,838	64.00
18.650	0.33	52.40	53.71	0.00	0.65	4,780	63.99
18.700	0.33	51.76	53.07	0.00	0.65	4,722	63.98
18.750	0.33	51.13	52.42	0.00	0.65	4,664	63.97
18.800	0.33	50.50	51.79	0.00	0.64	4,607	63.96
18.850	0.33	49.87	51.15	0.00	0.64	4,550	63.96

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 3 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
18.900	0.32	49.25	50.52	0.00	0.64	4,493	63.95
18.950	0.32	48.62	49.89	0.00	0.63	4,436	63.94
19.000	0.32	48.01	49.27	0.00	0.63	4,380	63.93
19.050	0.32	47.40	48.65	0.00	0.63	4,324	63.92
19.100	0.32	46.79	48.03	0.00	0.62	4,269	63.91
19.150	0.32	46.18	47.42	0.00	0.62	4,214	63.90
19.200	0.32	45.57	46.81	0.00	0.62	4,159	63.90
19.250	0.31	44.97	46.20	0.00	0.61	4,104	63.89
19.300	0.31	44.38	45.60	0.00	0.61	4,050	63.88
19.350	0.31	43.78	45.00	0.00	0.61	3,996	63.87
19.400	0.31	43.19	44.40	0.00	0.60	3,942	63.86
19.450	0.31	42.61	43.81	0.00	0.60	3,889	63.85
19.500	0.30	42.03	43.22	0.00	0.60	3,825	63.84
19.550	0.30	41.45	42.63	0.00	0.59	3,753	63.83
19.600	0.30	40.89	42.06	0.00	0.59	3,683	63.82
19.650	0.30	40.33	41.49	0.00	0.58	3,613	63.81
19.700	0.30	39.78	40.93	0.00	0.57	3,544	63.80
19.750	0.30	39.24	40.37	0.00	0.57	3,477	63.79
19.800	0.30	38.70	39.83	0.00	0.56	3,410	63.78
19.850	0.29	38.18	39.29	0.00	0.56	3,344	63.77
19.900	0.29	37.66	38.76	0.00	0.55	3,279	63.76
19.950	0.29	37.14	38.24	0.00	0.55	3,215	63.75
20.000	0.29	36.64	37.72	0.00	0.54	3,151	63.74
20.050	0.29	36.14	37.21	0.00	0.54	3,089	63.73
20.100	0.29	35.64	36.71	0.00	0.53	3,027	63.72
20.150	0.28	35.16	36.21	0.00	0.53	2,966	63.71
20.200	0.28	34.68	35.72	0.00	0.52	2,907	63.70
20.250	0.28	34.21	35.24	0.00	0.52	2,848	63.69
20.300	0.28	33.74	34.77	0.00	0.51	2,790	63.69
20.350	0.28	33.29	34.30	0.00	0.51	2,733	63.68
20.400	0.28	32.83	33.84	0.00	0.50	2,676	63.67
20.450	0.28	32.39	33.39	0.00	0.50	2,620	63.66
20.500	0.28	31.95	32.94	0.00	0.50	2,565	63.65
20.550	0.27	31.52	32.50	0.00	0.49	2,511	63.64
20.600	0.27	31.09	32.06	0.00	0.49	2,458	63.63
20.650	0.27	30.67	31.64	0.00	0.48	2,405	63.63
20.700	0.27	30.25	31.21	0.00	0.48	2,353	63.62
20.750	0.27	29.84	30.79	0.00	0.47	2,302	63.61
20.800	0.27	29.44	30.38	0.00	0.47	2,252	63.60
20.850	0.27	29.04	29.97	0.00	0.47	2,217	63.60
20.900	0.27	28.65	29.57	0.00	0.46	2,194	63.59
20.950	0.26	28.26	29.18	0.00	0.46	2,172	63.58

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 3 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
21.000	0.26	27.88	28.79	0.00	0.46	2,151	63.57
21.050	0.26	27.50	28.41	0.00	0.45	2,129	63.57
21.100	0.26	27.13	28.03	0.00	0.45	2,108	63.56
21.150	0.26	26.76	27.65	0.00	0.44	2,087	63.55
21.200	0.26	26.40	27.28	0.00	0.44	2,067	63.55
21.250	0.26	26.04	26.92	0.00	0.44	2,047	63.54
21.300	0.26	25.69	26.56	0.00	0.43	2,026	63.53
21.350	0.25	25.34	26.20	0.00	0.43	2,007	63.53
21.400	0.25	25.00	25.85	0.00	0.43	1,987	63.52
21.450	0.25	24.66	25.50	0.00	0.42	1,968	63.51
21.500	0.25	24.32	25.16	0.00	0.42	1,949	63.51
21.550	0.25	23.99	24.82	0.00	0.42	1,930	63.50
21.600	0.25	23.66	24.49	0.00	0.41	1,911	63.49
21.650	0.25	23.34	24.16	0.00	0.41	1,893	63.49
21.700	0.25	23.02	23.83	0.00	0.41	1,875	63.48
21.750	0.24	22.70	23.51	0.00	0.40	1,857	63.47
21.800	0.24	22.39	23.19	0.00	0.40	1,839	63.47
21.850	0.24	22.08	22.88	0.00	0.40	1,822	63.46
21.900	0.24	21.78	22.57	0.00	0.39	1,804	63.46
21.950	0.24	21.48	22.26	0.00	0.39	1,787	63.45
22.000	0.24	21.18	21.96	0.00	0.39	1,770	63.45
22.050	0.24	20.89	21.66	0.00	0.39	1,754	63.44
22.100	0.24	20.60	21.36	0.00	0.38	1,737	63.43
22.150	0.24	20.31	21.07	0.00	0.38	1,721	63.43
22.200	0.23	20.03	20.78	0.00	0.38	1,705	63.42
22.250	0.23	19.74	20.49	0.00	0.37	1,689	63.42
22.300	0.23	19.47	20.21	0.00	0.37	1,673	63.41
22.350	0.23	19.19	19.92	0.00	0.37	1,657	63.41
22.400	0.23	18.92	19.65	0.00	0.37	1,642	63.40
22.450	0.23	18.65	19.37	0.00	0.36	1,627	63.40
22.500	0.23	18.38	19.10	0.00	0.36	1,611	63.39
22.550	0.22	18.12	18.83	0.00	0.36	1,596	63.39
22.600	0.22	17.86	18.57	0.00	0.35	1,582	63.38
22.650	0.22	17.60	18.31	0.00	0.35	1,567	63.38
22.700	0.22	17.35	18.05	0.00	0.35	1,553	63.37
22.750	0.22	17.09	17.79	0.00	0.35	1,538	63.37
22.800	0.22	16.84	17.53	0.00	0.34	1,524	63.36
22.850	0.22	16.60	17.28	0.00	0.34	1,510	63.36
22.900	0.22	16.35	17.03	0.00	0.34	1,496	63.35
22.950	0.22	16.11	16.78	0.00	0.34	1,480	63.35
23.000	0.21	15.88	16.54	0.00	0.33	1,459	63.34
23.050	0.21	15.65	16.30	0.00	0.33	1,438	63.33

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 3 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
23.100	0.21	15.43	16.07	0.00	0.32	1,417	63.33
23.150	0.21	15.21	15.85	0.00	0.32	1,398	63.32
23.200	0.21	15.00	15.63	0.00	0.31	1,378	63.31
23.250	0.21	14.80	15.42	0.00	0.31	1,360	63.31
23.300	0.21	14.61	15.22	0.00	0.31	1,342	63.30
23.350	0.21	14.41	15.02	0.00	0.30	1,324	63.30
23.400	0.20	14.23	14.82	0.00	0.30	1,307	63.29
23.450	0.20	14.05	14.64	0.00	0.29	1,291	63.28
23.500	0.20	13.88	14.46	0.00	0.29	1,275	63.28
23.550	0.20	13.71	14.28	0.00	0.29	1,259	63.27
23.600	0.20	13.54	14.10	0.00	0.28	1,244	63.27
23.650	0.20	13.38	13.94	0.00	0.28	1,229	63.26
23.700	0.20	13.22	13.77	0.00	0.28	1,215	63.26
23.750	0.20	13.07	13.61	0.00	0.27	1,200	63.25
23.800	0.19	12.92	13.46	0.00	0.27	1,187	63.25
23.850	0.19	12.77	13.30	0.00	0.27	1,173	63.24
23.900	0.19	12.63	13.15	0.00	0.26	1,160	63.24
23.950	0.19	12.48	13.01	0.00	0.26	1,147	63.24
24.000	0.19	12.35	12.86	0.00	0.26	1,134	63.23

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Label: MC-3500 - 3 (IN)

Scenario: Post-Development 1 year

Return Event: 1 years

Storm Event: 1 year

Summary for Hydrograph Addition at 'MC-3500 - 3'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-3B

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-3B	16,654	12.100	4.56
Flow (In)	MC-3500 - 3	16,654	12.100	4.56

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Label: MC-3500 - 3 (IN)

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

Summary for Hydrograph Addition at 'MC-3500 - 3'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-3B

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-3B	36,040	12.100	9.44
Flow (In)	MC-3500 - 3	36,040	12.100	9.44

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Label: MC-3500 - 3 (IN)

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Summary for Hydrograph Addition at 'MC-3500 - 3'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-3B

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-3B	47,586	12.100	12.24
Flow (In)	MC-3500 - 3	47,586	12.100	12.24

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Label: MC-3500 - 3 (IN)

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Summary for Hydrograph Addition at 'MC-3500 - 3'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-3B

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-3B	71,460	12.100	17.94
Flow (In)	MC-3500 - 3	71,460	12.100	17.94

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 1 years

Label: Stormwater Planters - 2

Storm Event: 1 year

Scenario: Post-Development 1 year

Infiltration	
Infiltration Method (Computed)	No Infiltration
Initial Conditions	
Elevation (Water Surface, Initial)	78.81 ft
Volume (Initial)	0 ft ³
Flow (Initial Outlet)	0.14 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.14 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ft ³)	Area (ft ²)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
78.81	0.14	0	3,050	0.00	0.14	0.14
78.91	0.14	305	3,050	0.00	0.14	3.53
79.01	0.14	610	3,050	0.00	0.14	6.92
79.11	0.14	915	3,050	0.00	0.14	10.31
79.21	0.14	1,220	3,050	0.00	0.14	13.70
79.31	0.14	1,525	3,050	0.00	0.14	17.09
79.41	0.14	1,830	3,050	0.00	0.14	20.47
79.51	0.14	2,135	3,050	0.00	0.14	23.86
79.61	0.14	2,440	3,050	0.00	0.14	27.25
79.71	0.14	2,745	3,050	0.00	0.14	30.64
79.81	0.14	3,050	3,050	0.00	0.14	34.03
79.91	0.74	3,355	3,050	0.00	0.74	38.01
80.01	1.83	3,660	3,050	0.00	1.83	42.49
80.11	3.24	3,965	3,050	0.00	3.24	47.29
80.21	4.91	4,270	3,050	0.00	4.91	52.36
80.31	5.49	4,575	3,050	0.00	5.49	56.32

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 10 years

Label: Stormwater Planters - 2

Storm Event: 10 year

Scenario: Post-Development 10 year

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	78.81 ft
Volume (Initial)	0 ft ³
Flow (Initial Outlet)	0.14 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.14 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ft ³)	Area (ft ²)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
78.81	0.14	0	3,050	0.00	0.14	0.14
78.91	0.14	305	3,050	0.00	0.14	3.53
79.01	0.14	610	3,050	0.00	0.14	6.92
79.11	0.14	915	3,050	0.00	0.14	10.31
79.21	0.14	1,220	3,050	0.00	0.14	13.70
79.31	0.14	1,525	3,050	0.00	0.14	17.09
79.41	0.14	1,830	3,050	0.00	0.14	20.47
79.51	0.14	2,135	3,050	0.00	0.14	23.86
79.61	0.14	2,440	3,050	0.00	0.14	27.25
79.71	0.14	2,745	3,050	0.00	0.14	30.64
79.81	0.14	3,050	3,050	0.00	0.14	34.03
79.91	0.74	3,355	3,050	0.00	0.74	38.01
80.01	1.83	3,660	3,050	0.00	1.83	42.49
80.11	3.24	3,965	3,050	0.00	3.24	47.29
80.21	4.91	4,270	3,050	0.00	4.91	52.36
80.31	5.49	4,575	3,050	0.00	5.49	56.32

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 25 years

Label: Stormwater Planters - 2

Storm Event: 25 year

Scenario: Post-Development 25 year

Infiltration	
Infiltration Method (Computed)	No Infiltration
Initial Conditions	
Elevation (Water Surface, Initial)	78.81 ft
Volume (Initial)	0 ft ³
Flow (Initial Outlet)	0.14 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.14 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ft ³)	Area (ft ²)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
78.81	0.14	0	3,050	0.00	0.14	0.14
78.91	0.14	305	3,050	0.00	0.14	3.53
79.01	0.14	610	3,050	0.00	0.14	6.92
79.11	0.14	915	3,050	0.00	0.14	10.31
79.21	0.14	1,220	3,050	0.00	0.14	13.70
79.31	0.14	1,525	3,050	0.00	0.14	17.09
79.41	0.14	1,830	3,050	0.00	0.14	20.47
79.51	0.14	2,135	3,050	0.00	0.14	23.86
79.61	0.14	2,440	3,050	0.00	0.14	27.25
79.71	0.14	2,745	3,050	0.00	0.14	30.64
79.81	0.14	3,050	3,050	0.00	0.14	34.03
79.91	0.74	3,355	3,050	0.00	0.74	38.01
80.01	1.83	3,660	3,050	0.00	1.83	42.49
80.11	3.24	3,965	3,050	0.00	3.24	47.29
80.21	4.91	4,270	3,050	0.00	4.91	52.36
80.31	5.49	4,575	3,050	0.00	5.49	56.32

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 100 years

Label: Stormwater Planters - 2

Storm Event: 100 year

Scenario: Post-Development 100 year

Infiltration	
Infiltration Method (Computed)	No Infiltration
Initial Conditions	
Elevation (Water Surface, Initial)	78.81 ft
Volume (Initial)	0 ft ³
Flow (Initial Outlet)	0.14 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.14 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ft ³)	Area (ft ²)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
78.81	0.14	0	3,050	0.00	0.14	0.14
78.91	0.14	305	3,050	0.00	0.14	3.53
79.01	0.14	610	3,050	0.00	0.14	6.92
79.11	0.14	915	3,050	0.00	0.14	10.31
79.21	0.14	1,220	3,050	0.00	0.14	13.70
79.31	0.14	1,525	3,050	0.00	0.14	17.09
79.41	0.14	1,830	3,050	0.00	0.14	20.47
79.51	0.14	2,135	3,050	0.00	0.14	23.86
79.61	0.14	2,440	3,050	0.00	0.14	27.25
79.71	0.14	2,745	3,050	0.00	0.14	30.64
79.81	0.14	3,050	3,050	0.00	0.14	34.03
79.91	0.74	3,355	3,050	0.00	0.74	38.01
80.01	1.83	3,660	3,050	0.00	1.83	42.49
80.11	3.24	3,965	3,050	0.00	3.24	47.29
80.21	4.91	4,270	3,050	0.00	4.91	52.36
80.31	5.49	4,575	3,050	0.00	5.49	56.32

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 1 years

Label: Stormwater Planters - 2 (IN)

Storm Event: 1 year

Scenario: Post-Development 1 year

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	78.81 ft		
Volume (Initial)	0 ft ³		
Flow (Initial Outlet)	0.14 ft ³ /s		
Flow (Initial Infiltration)	0.00 ft ³ /s		
Flow (Initial, Total)	0.14 ft ³ /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	1.05 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	0.14 ft ³ /s	Time to Peak (Flow, Outlet)	11.600 hours
Peak Conditions			
Elevation (Water Surface, Peak)	79.24 ft		
Volume (Peak)	1,324 ft ³		
Mass Balance (ft ³)			
Volume (Initial)	0 ft ³		
Volume (Total Inflow)	3,987 ft ³		
Volume (Total Infiltration)	0 ft ³		
Volume (Total Outlet Outflow)	3,992 ft ³		
Volume (Retained)	0 ft ³		
Volume (Unrouted)	5 ft ³		
Error (Mass Balance)	0.1 %		

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 10 years

Label: Stormwater Planters - 2 (IN)

Storm Event: 10 year

Scenario: Post-Development 10 year

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	78.81 ft		
Volume (Initial)	0 ft ³		
Flow (Initial Outlet)	0.14 ft ³ /s		
Flow (Initial Infiltration)	0.00 ft ³ /s		
Flow (Initial, Total)	0.14 ft ³ /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	2.05 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	0.35 ft ³ /s	Time to Peak (Flow, Outlet)	12.600 hours
Peak Conditions			
Elevation (Water Surface, Peak)	79.85 ft		
Volume (Peak)	3,158 ft ³		
Mass Balance (ft ³)			
Volume (Initial)	0 ft ³		
Volume (Total Inflow)	8,132 ft ³		
Volume (Total Infiltration)	0 ft ³		
Volume (Total Outlet Outflow)	8,137 ft ³		
Volume (Retained)	0 ft ³		
Volume (Unrouted)	4 ft ³		
Error (Mass Balance)	0.1 %		

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 25 years

Label: Stormwater Planters - 2 (IN)

Storm Event: 25 year

Scenario: Post-Development 25 year

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	78.81 ft		
Volume (Initial)	0 ft ³		
Flow (Initial Outlet)	0.14 ft ³ /s		
Flow (Initial Infiltration)	0.00 ft ³ /s		
Flow (Initial, Total)	0.14 ft ³ /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	2.63 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	1.19 ft ³ /s	Time to Peak (Flow, Outlet)	12.300 hours
Peak Conditions			
Elevation (Water Surface, Peak)	79.95 ft		
Volume (Peak)	3,482 ft ³		
Mass Balance (ft ³)			
Volume (Initial)	0 ft ³		
Volume (Total Inflow)	10,573 ft ³		
Volume (Total Infiltration)	0 ft ³		
Volume (Total Outlet Outflow)	10,393 ft ³		
Volume (Retained)	161 ft ³		
Volume (Unrouted)	-19 ft ³		
Error (Mass Balance)	0.2 %		

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 100 years

Label: Stormwater Planters - 2 (IN)

Storm Event: 100 year

Scenario: Post-Development 100 year

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	78.81 ft		
Volume (Initial)	0 ft ³		
Flow (Initial Outlet)	0.14 ft ³ /s		
Flow (Initial Infiltration)	0.00 ft ³ /s		
Flow (Initial, Total)	0.14 ft ³ /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	3.81 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	3.33 ft ³ /s	Time to Peak (Flow, Outlet)	12.150 hours
Peak Conditions			
Elevation (Water Surface, Peak)	80.12 ft		
Volume (Peak)	3,982 ft ³		
Mass Balance (ft ³)			
Volume (Initial)	0 ft ³		
Volume (Total Inflow)	15,596 ft ³		
Volume (Total Infiltration)	0 ft ³		
Volume (Total Outlet Outflow)	14,695 ft ³		
Volume (Retained)	882 ft ³		
Volume (Unrouted)	-19 ft ³		
Error (Mass Balance)	0.1 %		

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
0.000	0.00	0.00	0.14	0.00	0.07	0	78.81
0.050	0.00	0.00	0.00	0.00	0.00	0	78.81
0.100	0.00	0.00	0.00	0.00	0.00	0	78.81
0.150	0.00	0.00	0.00	0.00	0.00	0	78.81
0.200	0.00	0.00	0.00	0.00	0.00	0	78.81
0.250	0.00	0.00	0.00	0.00	0.00	0	78.81
0.300	0.00	0.00	0.00	0.00	0.00	0	78.81
0.350	0.00	0.00	0.00	0.00	0.00	0	78.81
0.400	0.00	0.00	0.00	0.00	0.00	0	78.81
0.450	0.00	0.00	0.00	0.00	0.00	0	78.81
0.500	0.00	0.00	0.00	0.00	0.00	0	78.81
0.550	0.00	0.00	0.00	0.00	0.00	0	78.81
0.600	0.00	0.00	0.00	0.00	0.00	0	78.81
0.650	0.00	0.00	0.00	0.00	0.00	0	78.81
0.700	0.00	0.00	0.00	0.00	0.00	0	78.81
0.750	0.00	0.00	0.00	0.00	0.00	0	78.81
0.800	0.00	0.00	0.00	0.00	0.00	0	78.81
0.850	0.00	0.00	0.00	0.00	0.00	0	78.81
0.900	0.00	0.00	0.00	0.00	0.00	0	78.81
0.950	0.00	0.00	0.00	0.00	0.00	0	78.81
1.000	0.00	0.00	0.00	0.00	0.00	0	78.81
1.050	0.00	0.00	0.00	0.00	0.00	0	78.81
1.100	0.00	0.00	0.00	0.00	0.00	0	78.81
1.150	0.00	0.00	0.00	0.00	0.00	0	78.81
1.200	0.00	0.00	0.00	0.00	0.00	0	78.81
1.250	0.00	0.00	0.00	0.00	0.00	0	78.81
1.300	0.00	0.00	0.00	0.00	0.00	0	78.81
1.350	0.00	0.00	0.00	0.00	0.00	0	78.81
1.400	0.00	0.00	0.00	0.00	0.00	0	78.81
1.450	0.00	0.00	0.00	0.00	0.00	0	78.81
1.500	0.00	0.00	0.00	0.00	0.00	0	78.81
1.550	0.00	0.00	0.00	0.00	0.00	0	78.81
1.600	0.00	0.00	0.00	0.00	0.00	0	78.81
1.650	0.00	0.00	0.00	0.00	0.00	0	78.81
1.700	0.00	0.00	0.00	0.00	0.00	0	78.81
1.750	0.00	0.00	0.00	0.00	0.00	0	78.81
1.800	0.00	0.00	0.00	0.00	0.00	0	78.81
1.850	0.00	0.00	0.00	0.00	0.00	0	78.81
1.900	0.00	0.00	0.00	0.00	0.00	0	78.81
1.950	0.00	0.00	0.00	0.00	0.00	0	78.81
2.000	0.00	0.00	0.00	0.00	0.00	0	78.81
2.050	0.00	0.00	0.00	0.00	0.00	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
2.100	0.00	0.00	0.00	0.00	0.00	0	78.81
2.150	0.00	0.00	0.00	0.00	0.00	0	78.81
2.200	0.00	0.00	0.00	0.00	0.00	0	78.81
2.250	0.00	0.00	0.00	0.00	0.00	0	78.81
2.300	0.00	0.00	0.00	0.00	0.00	0	78.81
2.350	0.00	0.00	0.00	0.00	0.00	0	78.81
2.400	0.00	0.00	0.00	0.00	0.00	0	78.81
2.450	0.00	0.00	0.00	0.00	0.00	0	78.81
2.500	0.00	0.00	0.00	0.00	0.00	0	78.81
2.550	0.00	0.00	0.00	0.00	0.00	0	78.81
2.600	0.00	0.00	0.00	0.00	0.00	0	78.81
2.650	0.00	0.00	0.00	0.00	0.00	0	78.81
2.700	0.00	0.00	0.00	0.00	0.00	0	78.81
2.750	0.00	0.00	0.00	0.00	0.00	0	78.81
2.800	0.00	0.00	0.00	0.00	0.00	0	78.81
2.850	0.00	0.00	0.00	0.00	0.00	0	78.81
2.900	0.00	0.00	0.00	0.00	0.00	0	78.81
2.950	0.00	0.00	0.00	0.00	0.00	0	78.81
3.000	0.00	0.00	0.00	0.00	0.00	0	78.81
3.050	0.00	0.00	0.00	0.00	0.00	0	78.81
3.100	0.00	0.00	0.00	0.00	0.00	0	78.81
3.150	0.00	0.00	0.00	0.00	0.00	0	78.81
3.200	0.00	0.00	0.00	0.00	0.00	0	78.81
3.250	0.00	0.00	0.00	0.00	0.00	0	78.81
3.300	0.00	0.00	0.00	0.00	0.00	0	78.81
3.350	0.00	0.00	0.00	0.00	0.00	0	78.81
3.400	0.00	0.00	0.00	0.00	0.00	0	78.81
3.450	0.00	0.00	0.00	0.00	0.00	0	78.81
3.500	0.00	0.00	0.00	0.00	0.00	0	78.81
3.550	0.00	0.00	0.00	0.00	0.00	0	78.81
3.600	0.00	0.00	0.00	0.00	0.00	0	78.81
3.650	0.00	0.00	0.00	0.00	0.00	0	78.81
3.700	0.00	0.00	0.00	0.00	0.00	0	78.81
3.750	0.00	0.00	0.00	0.00	0.00	0	78.81
3.800	0.00	0.00	0.00	0.00	0.00	0	78.81
3.850	0.00	0.00	0.00	0.00	0.00	0	78.81
3.900	0.00	0.00	0.00	0.00	0.00	0	78.81
3.950	0.00	0.00	0.00	0.00	0.00	0	78.81
4.000	0.00	0.00	0.00	0.00	0.00	0	78.81
4.050	0.00	0.00	0.00	0.00	0.00	0	78.81
4.100	0.00	0.00	0.00	0.00	0.00	0	78.81
4.150	0.00	0.00	0.00	0.00	0.00	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
4.200	0.00	0.00	0.00	0.00	0.00	0	78.81
4.250	0.00	0.00	0.00	0.00	0.00	0	78.81
4.300	0.00	0.00	0.00	0.00	0.00	0	78.81
4.350	0.00	0.00	0.00	0.00	0.00	0	78.81
4.400	0.00	0.00	0.00	0.00	0.00	0	78.81
4.450	0.00	0.00	0.00	0.00	0.00	0	78.81
4.500	0.00	0.00	0.00	0.00	0.00	0	78.81
4.550	0.00	0.00	0.00	0.00	0.00	0	78.81
4.600	0.00	0.00	0.00	0.00	0.00	0	78.81
4.650	0.00	0.00	0.00	0.00	0.00	0	78.81
4.700	0.00	0.00	0.00	0.00	0.00	0	78.81
4.750	0.00	0.00	0.00	0.00	0.00	0	78.81
4.800	0.00	0.00	0.01	0.00	0.00	0	78.81
4.850	0.00	0.00	0.01	0.00	0.00	0	78.81
4.900	0.00	0.00	0.01	0.00	0.00	0	78.81
4.950	0.00	0.00	0.01	0.00	0.00	0	78.81
5.000	0.00	0.00	0.01	0.00	0.00	0	78.81
5.050	0.00	0.00	0.01	0.00	0.00	0	78.81
5.100	0.00	0.00	0.01	0.00	0.00	0	78.81
5.150	0.00	0.00	0.01	0.00	0.00	0	78.81
5.200	0.00	0.00	0.01	0.00	0.00	0	78.81
5.250	0.00	0.00	0.01	0.00	0.00	0	78.81
5.300	0.00	0.00	0.01	0.00	0.00	0	78.81
5.350	0.00	0.00	0.01	0.00	0.00	0	78.81
5.400	0.00	0.00	0.01	0.00	0.00	0	78.81
5.450	0.00	0.00	0.01	0.00	0.00	0	78.81
5.500	0.00	0.00	0.01	0.00	0.00	0	78.81
5.550	0.00	0.00	0.01	0.00	0.00	0	78.81
5.600	0.00	0.00	0.01	0.00	0.00	0	78.81
5.650	0.00	0.00	0.01	0.00	0.00	0	78.81
5.700	0.01	0.00	0.01	0.00	0.00	0	78.81
5.750	0.01	0.00	0.01	0.00	0.01	0	78.81
5.800	0.01	0.00	0.01	0.00	0.01	0	78.81
5.850	0.01	0.00	0.01	0.00	0.01	0	78.81
5.900	0.01	0.00	0.01	0.00	0.01	0	78.81
5.950	0.01	0.00	0.01	0.00	0.01	0	78.81
6.000	0.01	0.00	0.01	0.00	0.01	0	78.81
6.050	0.01	0.00	0.01	0.00	0.01	0	78.81
6.100	0.01	0.00	0.01	0.00	0.01	0	78.81
6.150	0.01	0.00	0.01	0.00	0.01	0	78.81
6.200	0.01	0.00	0.01	0.00	0.01	0	78.81
6.250	0.01	0.00	0.01	0.00	0.01	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
6.300	0.01	0.00	0.01	0.00	0.01	0	78.81
6.350	0.01	0.00	0.01	0.00	0.01	0	78.81
6.400	0.01	0.00	0.01	0.00	0.01	0	78.81
6.450	0.01	0.00	0.02	0.00	0.01	0	78.81
6.500	0.01	0.00	0.02	0.00	0.01	0	78.81
6.550	0.01	0.00	0.02	0.00	0.01	0	78.81
6.600	0.01	0.00	0.02	0.00	0.01	0	78.81
6.650	0.01	0.00	0.02	0.00	0.01	0	78.81
6.700	0.01	0.00	0.02	0.00	0.01	0	78.81
6.750	0.01	0.00	0.02	0.00	0.01	0	78.81
6.800	0.01	0.00	0.02	0.00	0.01	0	78.81
6.850	0.01	0.00	0.02	0.00	0.01	0	78.81
6.900	0.01	0.00	0.02	0.00	0.01	0	78.81
6.950	0.01	0.00	0.02	0.00	0.01	0	78.81
7.000	0.01	0.00	0.02	0.00	0.01	0	78.81
7.050	0.01	0.00	0.02	0.00	0.01	0	78.81
7.100	0.01	0.00	0.02	0.00	0.01	0	78.81
7.150	0.01	0.00	0.02	0.00	0.01	0	78.81
7.200	0.01	0.00	0.02	0.00	0.01	0	78.81
7.250	0.01	0.00	0.02	0.00	0.01	0	78.81
7.300	0.01	0.00	0.02	0.00	0.01	0	78.81
7.350	0.01	0.00	0.03	0.00	0.01	0	78.81
7.400	0.01	0.00	0.03	0.00	0.01	0	78.81
7.450	0.01	0.00	0.03	0.00	0.01	0	78.81
7.500	0.01	0.00	0.03	0.00	0.01	0	78.81
7.550	0.01	0.00	0.03	0.00	0.01	0	78.81
7.600	0.01	0.00	0.03	0.00	0.01	0	78.81
7.650	0.01	0.00	0.03	0.00	0.01	0	78.81
7.700	0.01	0.00	0.03	0.00	0.01	0	78.81
7.750	0.02	0.00	0.03	0.00	0.02	0	78.81
7.800	0.02	0.00	0.03	0.00	0.02	0	78.81
7.850	0.02	0.00	0.03	0.00	0.02	0	78.81
7.900	0.02	0.00	0.03	0.00	0.02	0	78.81
7.950	0.02	0.00	0.03	0.00	0.02	0	78.81
8.000	0.02	0.00	0.03	0.00	0.02	0	78.81
8.050	0.02	0.00	0.03	0.00	0.02	0	78.81
8.100	0.02	0.00	0.04	0.00	0.02	0	78.81
8.150	0.02	0.00	0.04	0.00	0.02	0	78.81
8.200	0.02	0.00	0.04	0.00	0.02	0	78.81
8.250	0.02	0.00	0.04	0.00	0.02	0	78.81
8.300	0.02	0.00	0.04	0.00	0.02	0	78.81
8.350	0.02	0.00	0.04	0.00	0.02	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
8.400	0.02	0.00	0.04	0.00	0.02	0	78.81
8.450	0.02	0.00	0.04	0.00	0.02	0	78.81
8.500	0.02	0.00	0.04	0.00	0.02	0	78.81
8.550	0.02	0.00	0.05	0.00	0.02	0	78.81
8.600	0.02	0.00	0.05	0.00	0.02	0	78.81
8.650	0.02	0.00	0.05	0.00	0.02	0	78.81
8.700	0.03	0.00	0.05	0.00	0.02	0	78.81
8.750	0.03	0.00	0.05	0.00	0.03	0	78.81
8.800	0.03	0.00	0.05	0.00	0.03	0	78.81
8.850	0.03	0.00	0.05	0.00	0.03	0	78.81
8.900	0.03	0.00	0.06	0.00	0.03	0	78.81
8.950	0.03	0.00	0.06	0.00	0.03	0	78.81
9.000	0.03	0.00	0.06	0.00	0.03	0	78.81
9.050	0.03	0.00	0.06	0.00	0.03	0	78.81
9.100	0.03	0.00	0.06	0.00	0.03	0	78.81
9.150	0.03	0.00	0.06	0.00	0.03	0	78.81
9.200	0.03	0.00	0.06	0.00	0.03	0	78.81
9.250	0.03	0.00	0.07	0.00	0.03	0	78.81
9.300	0.03	0.00	0.07	0.00	0.03	0	78.81
9.350	0.03	0.00	0.07	0.00	0.03	0	78.81
9.400	0.04	0.00	0.07	0.00	0.04	0	78.81
9.450	0.04	0.00	0.07	0.00	0.04	0	78.81
9.500	0.04	0.00	0.07	0.00	0.04	0	78.81
9.550	0.04	0.00	0.07	0.00	0.04	0	78.81
9.600	0.04	0.00	0.08	0.00	0.04	0	78.81
9.650	0.04	0.00	0.08	0.00	0.04	0	78.81
9.700	0.04	0.00	0.08	0.00	0.04	0	78.81
9.750	0.04	0.00	0.08	0.00	0.04	0	78.81
9.800	0.04	0.00	0.08	0.00	0.04	0	78.81
9.850	0.04	0.00	0.08	0.00	0.04	0	78.81
9.900	0.04	0.00	0.09	0.00	0.04	0	78.81
9.950	0.04	0.00	0.09	0.00	0.04	0	78.81
10.000	0.05	0.00	0.09	0.00	0.04	0	78.81
10.050	0.05	0.00	0.09	0.00	0.05	0	78.81
10.100	0.05	0.00	0.09	0.00	0.05	0	78.81
10.150	0.05	0.00	0.10	0.00	0.05	0	78.81
10.200	0.05	0.00	0.10	0.00	0.05	0	78.81
10.250	0.05	0.00	0.10	0.00	0.05	0	78.81
10.300	0.05	0.00	0.10	0.00	0.05	0	78.81
10.350	0.05	0.00	0.11	0.00	0.05	0	78.81
10.400	0.06	0.00	0.11	0.00	0.06	0	78.81
10.450	0.06	0.00	0.11	0.00	0.06	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
10.500	0.06	0.00	0.12	0.00	0.06	0	78.81
10.550	0.06	0.00	0.12	0.00	0.06	0	78.81
10.600	0.06	0.00	0.12	0.00	0.06	0	78.81
10.650	0.06	0.00	0.13	0.00	0.06	0	78.81
10.700	0.07	0.00	0.13	0.00	0.06	0	78.81
10.750	0.07	0.00	0.13	0.00	0.07	0	78.81
10.800	0.07	0.00	0.14	0.00	0.07	0	78.81
10.850	0.07	0.00	0.14	0.00	0.07	0	78.81
10.900	0.07	0.00	0.14	0.00	0.07	0	78.81
10.950	0.07	0.00	0.15	0.00	0.07	0	78.81
11.000	0.08	0.00	0.15	0.00	0.07	0	78.81
11.050	0.08	0.00	0.15	0.00	0.08	0	78.81
11.100	0.08	0.00	0.16	0.00	0.08	0	78.81
11.150	0.09	0.00	0.17	0.00	0.08	0	78.81
11.200	0.09	0.00	0.18	0.00	0.09	0	78.81
11.250	0.10	0.00	0.19	0.00	0.09	0	78.81
11.300	0.10	0.00	0.20	0.00	0.10	0	78.81
11.350	0.11	0.00	0.21	0.00	0.11	0	78.81
11.400	0.11	0.00	0.22	0.00	0.11	0	78.81
11.450	0.12	0.00	0.23	0.00	0.12	0	78.81
11.500	0.13	0.00	0.25	0.00	0.12	0	78.81
11.550	0.14	0.00	0.27	0.00	0.13	0	78.81
11.600	0.17	0.03	0.31	0.00	0.14	16	78.82
11.650	0.21	0.13	0.41	0.00	0.14	25	78.82
11.700	0.26	0.32	0.61	0.00	0.14	42	78.82
11.750	0.31	0.62	0.90	0.00	0.14	68	78.83
11.800	0.37	1.02	1.30	0.00	0.14	105	78.84
11.850	0.42	1.54	1.82	0.00	0.14	151	78.86
11.900	0.49	2.17	2.45	0.00	0.14	208	78.88
11.950	0.65	3.02	3.30	0.00	0.14	285	78.90
12.000	0.91	4.30	4.58	0.00	0.14	399	78.94
12.050	1.01	5.94	6.22	0.00	0.14	547	78.99
12.100	1.05	7.73	8.01	0.00	0.14	708	79.04
12.150	0.93	9.43	9.71	0.00	0.14	861	79.09
12.200	0.68	10.76	11.04	0.00	0.14	981	79.13
12.250	0.56	11.72	12.01	0.00	0.14	1,068	79.16
12.300	0.48	12.48	12.77	0.00	0.14	1,136	79.18
12.350	0.42	13.10	13.39	0.00	0.14	1,192	79.20
12.400	0.36	13.60	13.89	0.00	0.14	1,237	79.22
12.450	0.31	13.99	14.27	0.00	0.14	1,272	79.23
12.500	0.24	14.26	14.54	0.00	0.14	1,296	79.23
12.550	0.21	14.43	14.71	0.00	0.14	1,311	79.24

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
12.600	0.17	14.52	14.80	0.00	0.14	1,320	79.24
12.650	0.15	14.56	14.84	0.00	0.14	1,323	79.24
12.700	0.14	14.57	14.86	0.00	0.14	1,324	79.24
12.750	0.14	14.57	14.85	0.00	0.14	1,324	79.24
12.800	0.13	14.56	14.84	0.00	0.14	1,323	79.24
12.850	0.12	14.53	14.81	0.00	0.14	1,320	79.24
12.900	0.12	14.49	14.77	0.00	0.14	1,317	79.24
12.950	0.11	14.44	14.72	0.00	0.14	1,312	79.24
13.000	0.11	14.37	14.65	0.00	0.14	1,306	79.24
13.050	0.10	14.30	14.58	0.00	0.14	1,299	79.24
13.100	0.10	14.21	14.50	0.00	0.14	1,292	79.23
13.150	0.09	14.12	14.41	0.00	0.14	1,284	79.23
13.200	0.09	14.03	14.31	0.00	0.14	1,275	79.23
13.250	0.09	13.93	14.21	0.00	0.14	1,266	79.23
13.300	0.09	13.83	14.11	0.00	0.14	1,257	79.22
13.350	0.09	13.73	14.01	0.00	0.14	1,248	79.22
13.400	0.09	13.62	13.90	0.00	0.14	1,238	79.22
13.450	0.08	13.51	13.79	0.00	0.14	1,228	79.21
13.500	0.08	13.39	13.68	0.00	0.14	1,218	79.21
13.550	0.08	13.28	13.56	0.00	0.14	1,208	79.21
13.600	0.08	13.16	13.44	0.00	0.14	1,197	79.20
13.650	0.08	13.03	13.32	0.00	0.14	1,186	79.20
13.700	0.08	12.91	13.19	0.00	0.14	1,174	79.20
13.750	0.08	12.78	13.06	0.00	0.14	1,163	79.19
13.800	0.07	12.65	12.93	0.00	0.14	1,151	79.19
13.850	0.07	12.51	12.79	0.00	0.14	1,139	79.18
13.900	0.07	12.37	12.65	0.00	0.14	1,126	79.18
13.950	0.07	12.23	12.51	0.00	0.14	1,113	79.18
14.000	0.07	12.09	12.37	0.00	0.14	1,100	79.17
14.050	0.07	11.94	12.22	0.00	0.14	1,087	79.17
14.100	0.06	11.79	12.07	0.00	0.14	1,073	79.16
14.150	0.06	11.63	11.92	0.00	0.14	1,060	79.16
14.200	0.06	11.48	11.76	0.00	0.14	1,046	79.15
14.250	0.06	11.32	11.61	0.00	0.14	1,032	79.15
14.300	0.06	11.17	11.45	0.00	0.14	1,018	79.14
14.350	0.06	11.01	11.29	0.00	0.14	1,003	79.14
14.400	0.06	10.85	11.13	0.00	0.14	989	79.13
14.450	0.06	10.68	10.97	0.00	0.14	974	79.13
14.500	0.06	10.52	10.80	0.00	0.14	960	79.12
14.550	0.06	10.36	10.64	0.00	0.14	945	79.12
14.600	0.06	10.19	10.47	0.00	0.14	930	79.11
14.650	0.06	10.02	10.30	0.00	0.14	915	79.11

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
14.700	0.06	9.85	10.13	0.00	0.14	899	79.10
14.750	0.05	9.68	9.96	0.00	0.14	884	79.10
14.800	0.05	9.51	9.79	0.00	0.14	868	79.09
14.850	0.05	9.33	9.62	0.00	0.14	853	79.09
14.900	0.05	9.16	9.44	0.00	0.14	837	79.08
14.950	0.05	8.98	9.26	0.00	0.14	821	79.08
15.000	0.05	8.80	9.08	0.00	0.14	805	79.07
15.050	0.05	8.62	8.90	0.00	0.14	789	79.07
15.100	0.05	8.44	8.72	0.00	0.14	772	79.06
15.150	0.05	8.26	8.54	0.00	0.14	756	79.06
15.200	0.05	8.07	8.35	0.00	0.14	739	79.05
15.250	0.05	7.89	8.17	0.00	0.14	722	79.05
15.300	0.05	7.70	7.98	0.00	0.14	706	79.04
15.350	0.05	7.51	7.79	0.00	0.14	689	79.04
15.400	0.05	7.32	7.60	0.00	0.14	671	79.03
15.450	0.04	7.13	7.41	0.00	0.14	654	79.02
15.500	0.04	6.93	7.21	0.00	0.14	637	79.02
15.550	0.04	6.74	7.02	0.00	0.14	619	79.01
15.600	0.04	6.54	6.82	0.00	0.14	601	79.01
15.650	0.04	6.34	6.62	0.00	0.14	583	79.00
15.700	0.04	6.14	6.42	0.00	0.14	565	79.00
15.750	0.04	5.94	6.22	0.00	0.14	547	78.99
15.800	0.04	5.74	6.02	0.00	0.14	529	78.98
15.850	0.04	5.53	5.81	0.00	0.14	511	78.98
15.900	0.04	5.33	5.61	0.00	0.14	492	78.97
15.950	0.04	5.12	5.40	0.00	0.14	473	78.97
16.000	0.04	4.91	5.19	0.00	0.14	455	78.96
16.050	0.04	4.70	4.98	0.00	0.14	436	78.95
16.100	0.03	4.49	4.77	0.00	0.14	417	78.95
16.150	0.03	4.27	4.56	0.00	0.14	397	78.94
16.200	0.03	4.06	4.34	0.00	0.14	378	78.93
16.250	0.03	3.85	4.13	0.00	0.14	359	78.93
16.300	0.03	3.63	3.91	0.00	0.14	340	78.92
16.350	0.03	3.42	3.70	0.00	0.14	320	78.91
16.400	0.03	3.20	3.48	0.00	0.14	301	78.91
16.450	0.03	2.98	3.27	0.00	0.14	281	78.90
16.500	0.03	2.77	3.05	0.00	0.14	262	78.90
16.550	0.03	2.55	2.83	0.00	0.14	242	78.89
16.600	0.03	2.33	2.61	0.00	0.14	222	78.88
16.650	0.03	2.11	2.39	0.00	0.14	203	78.88
16.700	0.03	1.89	2.17	0.00	0.14	183	78.87
16.750	0.03	1.67	1.95	0.00	0.14	163	78.86

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
16.800	0.03	1.45	1.73	0.00	0.14	143	78.86
16.850	0.03	1.22	1.51	0.00	0.14	123	78.85
16.900	0.03	1.00	1.28	0.00	0.14	103	78.84
16.950	0.03	0.78	1.06	0.00	0.14	83	78.84
17.000	0.03	0.55	0.84	0.00	0.14	63	78.83
17.050	0.03	0.33	0.61	0.00	0.14	42	78.82
17.100	0.03	0.10	0.39	0.00	0.14	22	78.82
17.150	0.03	0.00	0.16	0.00	0.08	0	78.81
17.200	0.03	0.00	0.05	0.00	0.03	0	78.81
17.250	0.03	0.00	0.05	0.00	0.03	0	78.81
17.300	0.03	0.00	0.05	0.00	0.03	0	78.81
17.350	0.03	0.00	0.05	0.00	0.03	0	78.81
17.400	0.03	0.00	0.05	0.00	0.03	0	78.81
17.450	0.03	0.00	0.05	0.00	0.03	0	78.81
17.500	0.03	0.00	0.05	0.00	0.03	0	78.81
17.550	0.02	0.00	0.05	0.00	0.03	0	78.81
17.600	0.02	0.00	0.05	0.00	0.02	0	78.81
17.650	0.02	0.00	0.05	0.00	0.02	0	78.81
17.700	0.02	0.00	0.05	0.00	0.02	0	78.81
17.750	0.02	0.00	0.05	0.00	0.02	0	78.81
17.800	0.02	0.00	0.05	0.00	0.02	0	78.81
17.850	0.02	0.00	0.05	0.00	0.02	0	78.81
17.900	0.02	0.00	0.05	0.00	0.02	0	78.81
17.950	0.02	0.00	0.04	0.00	0.02	0	78.81
18.000	0.02	0.00	0.04	0.00	0.02	0	78.81
18.050	0.02	0.00	0.04	0.00	0.02	0	78.81
18.100	0.02	0.00	0.04	0.00	0.02	0	78.81
18.150	0.02	0.00	0.04	0.00	0.02	0	78.81
18.200	0.02	0.00	0.04	0.00	0.02	0	78.81
18.250	0.02	0.00	0.04	0.00	0.02	0	78.81
18.300	0.02	0.00	0.04	0.00	0.02	0	78.81
18.350	0.02	0.00	0.04	0.00	0.02	0	78.81
18.400	0.02	0.00	0.04	0.00	0.02	0	78.81
18.450	0.02	0.00	0.04	0.00	0.02	0	78.81
18.500	0.02	0.00	0.04	0.00	0.02	0	78.81
18.550	0.02	0.00	0.04	0.00	0.02	0	78.81
18.600	0.02	0.00	0.04	0.00	0.02	0	78.81
18.650	0.02	0.00	0.04	0.00	0.02	0	78.81
18.700	0.02	0.00	0.04	0.00	0.02	0	78.81
18.750	0.02	0.00	0.04	0.00	0.02	0	78.81
18.800	0.02	0.00	0.04	0.00	0.02	0	78.81
18.850	0.02	0.00	0.04	0.00	0.02	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
18.900	0.02	0.00	0.04	0.00	0.02	0	78.81
18.950	0.02	0.00	0.04	0.00	0.02	0	78.81
19.000	0.02	0.00	0.04	0.00	0.02	0	78.81
19.050	0.02	0.00	0.04	0.00	0.02	0	78.81
19.100	0.02	0.00	0.04	0.00	0.02	0	78.81
19.150	0.02	0.00	0.04	0.00	0.02	0	78.81
19.200	0.02	0.00	0.04	0.00	0.02	0	78.81
19.250	0.02	0.00	0.04	0.00	0.02	0	78.81
19.300	0.02	0.00	0.04	0.00	0.02	0	78.81
19.350	0.02	0.00	0.04	0.00	0.02	0	78.81
19.400	0.02	0.00	0.04	0.00	0.02	0	78.81
19.450	0.02	0.00	0.04	0.00	0.02	0	78.81
19.500	0.02	0.00	0.04	0.00	0.02	0	78.81
19.550	0.02	0.00	0.04	0.00	0.02	0	78.81
19.600	0.02	0.00	0.04	0.00	0.02	0	78.81
19.650	0.02	0.00	0.04	0.00	0.02	0	78.81
19.700	0.02	0.00	0.04	0.00	0.02	0	78.81
19.750	0.02	0.00	0.04	0.00	0.02	0	78.81
19.800	0.02	0.00	0.04	0.00	0.02	0	78.81
19.850	0.02	0.00	0.04	0.00	0.02	0	78.81
19.900	0.02	0.00	0.04	0.00	0.02	0	78.81
19.950	0.02	0.00	0.04	0.00	0.02	0	78.81
20.000	0.02	0.00	0.04	0.00	0.02	0	78.81
20.050	0.02	0.00	0.04	0.00	0.02	0	78.81
20.100	0.02	0.00	0.03	0.00	0.02	0	78.81
20.150	0.02	0.00	0.03	0.00	0.02	0	78.81
20.200	0.02	0.00	0.03	0.00	0.02	0	78.81
20.250	0.02	0.00	0.03	0.00	0.02	0	78.81
20.300	0.02	0.00	0.03	0.00	0.02	0	78.81
20.350	0.02	0.00	0.03	0.00	0.02	0	78.81
20.400	0.02	0.00	0.03	0.00	0.02	0	78.81
20.450	0.02	0.00	0.03	0.00	0.02	0	78.81
20.500	0.02	0.00	0.03	0.00	0.02	0	78.81
20.550	0.02	0.00	0.03	0.00	0.02	0	78.81
20.600	0.02	0.00	0.03	0.00	0.02	0	78.81
20.650	0.02	0.00	0.03	0.00	0.02	0	78.81
20.700	0.02	0.00	0.03	0.00	0.02	0	78.81
20.750	0.02	0.00	0.03	0.00	0.02	0	78.81
20.800	0.02	0.00	0.03	0.00	0.02	0	78.81
20.850	0.02	0.00	0.03	0.00	0.02	0	78.81
20.900	0.02	0.00	0.03	0.00	0.02	0	78.81
20.950	0.02	0.00	0.03	0.00	0.02	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
21.000	0.02	0.00	0.03	0.00	0.02	0	78.81
21.050	0.02	0.00	0.03	0.00	0.02	0	78.81
21.100	0.02	0.00	0.03	0.00	0.02	0	78.81
21.150	0.02	0.00	0.03	0.00	0.02	0	78.81
21.200	0.02	0.00	0.03	0.00	0.02	0	78.81
21.250	0.02	0.00	0.03	0.00	0.02	0	78.81
21.300	0.02	0.00	0.03	0.00	0.02	0	78.81
21.350	0.02	0.00	0.03	0.00	0.02	0	78.81
21.400	0.02	0.00	0.03	0.00	0.02	0	78.81
21.450	0.02	0.00	0.03	0.00	0.02	0	78.81
21.500	0.02	0.00	0.03	0.00	0.02	0	78.81
21.550	0.02	0.00	0.03	0.00	0.02	0	78.81
21.600	0.02	0.00	0.03	0.00	0.02	0	78.81
21.650	0.02	0.00	0.03	0.00	0.02	0	78.81
21.700	0.01	0.00	0.03	0.00	0.02	0	78.81
21.750	0.01	0.00	0.03	0.00	0.01	0	78.81
21.800	0.01	0.00	0.03	0.00	0.01	0	78.81
21.850	0.01	0.00	0.03	0.00	0.01	0	78.81
21.900	0.01	0.00	0.03	0.00	0.01	0	78.81
21.950	0.01	0.00	0.03	0.00	0.01	0	78.81
22.000	0.01	0.00	0.03	0.00	0.01	0	78.81
22.050	0.01	0.00	0.03	0.00	0.01	0	78.81
22.100	0.01	0.00	0.03	0.00	0.01	0	78.81
22.150	0.01	0.00	0.03	0.00	0.01	0	78.81
22.200	0.01	0.00	0.03	0.00	0.01	0	78.81
22.250	0.01	0.00	0.03	0.00	0.01	0	78.81
22.300	0.01	0.00	0.03	0.00	0.01	0	78.81
22.350	0.01	0.00	0.03	0.00	0.01	0	78.81
22.400	0.01	0.00	0.03	0.00	0.01	0	78.81
22.450	0.01	0.00	0.03	0.00	0.01	0	78.81
22.500	0.01	0.00	0.03	0.00	0.01	0	78.81
22.550	0.01	0.00	0.03	0.00	0.01	0	78.81
22.600	0.01	0.00	0.03	0.00	0.01	0	78.81
22.650	0.01	0.00	0.03	0.00	0.01	0	78.81
22.700	0.01	0.00	0.03	0.00	0.01	0	78.81
22.750	0.01	0.00	0.03	0.00	0.01	0	78.81
22.800	0.01	0.00	0.03	0.00	0.01	0	78.81
22.850	0.01	0.00	0.03	0.00	0.01	0	78.81
22.900	0.01	0.00	0.03	0.00	0.01	0	78.81
22.950	0.01	0.00	0.03	0.00	0.01	0	78.81
23.000	0.01	0.00	0.03	0.00	0.01	0	78.81
23.050	0.01	0.00	0.03	0.00	0.01	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
23.100	0.01	0.00	0.03	0.00	0.01	0	78.81
23.150	0.01	0.00	0.03	0.00	0.01	0	78.81
23.200	0.01	0.00	0.03	0.00	0.01	0	78.81
23.250	0.01	0.00	0.03	0.00	0.01	0	78.81
23.300	0.01	0.00	0.03	0.00	0.01	0	78.81
23.350	0.01	0.00	0.03	0.00	0.01	0	78.81
23.400	0.01	0.00	0.03	0.00	0.01	0	78.81
23.450	0.01	0.00	0.02	0.00	0.01	0	78.81
23.500	0.01	0.00	0.02	0.00	0.01	0	78.81
23.550	0.01	0.00	0.02	0.00	0.01	0	78.81
23.600	0.01	0.00	0.02	0.00	0.01	0	78.81
23.650	0.01	0.00	0.02	0.00	0.01	0	78.81
23.700	0.01	0.00	0.02	0.00	0.01	0	78.81
23.750	0.01	0.00	0.02	0.00	0.01	0	78.81
23.800	0.01	0.00	0.02	0.00	0.01	0	78.81
23.850	0.01	0.00	0.02	0.00	0.01	0	78.81
23.900	0.01	0.00	0.02	0.00	0.01	0	78.81
23.950	0.01	0.00	0.02	0.00	0.01	0	78.81
24.000	0.01	0.00	0.02	0.00	0.01	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
0.000	0.00	0.00	0.14	0.00	0.07	0	78.81
0.050	0.00	0.00	0.00	0.00	0.00	0	78.81
0.100	0.00	0.00	0.00	0.00	0.00	0	78.81
0.150	0.00	0.00	0.00	0.00	0.00	0	78.81
0.200	0.00	0.00	0.00	0.00	0.00	0	78.81
0.250	0.00	0.00	0.00	0.00	0.00	0	78.81
0.300	0.00	0.00	0.00	0.00	0.00	0	78.81
0.350	0.00	0.00	0.00	0.00	0.00	0	78.81
0.400	0.00	0.00	0.00	0.00	0.00	0	78.81
0.450	0.00	0.00	0.00	0.00	0.00	0	78.81
0.500	0.00	0.00	0.00	0.00	0.00	0	78.81
0.550	0.00	0.00	0.00	0.00	0.00	0	78.81
0.600	0.00	0.00	0.00	0.00	0.00	0	78.81
0.650	0.00	0.00	0.00	0.00	0.00	0	78.81
0.700	0.00	0.00	0.00	0.00	0.00	0	78.81
0.750	0.00	0.00	0.00	0.00	0.00	0	78.81
0.800	0.00	0.00	0.00	0.00	0.00	0	78.81
0.850	0.00	0.00	0.00	0.00	0.00	0	78.81
0.900	0.00	0.00	0.00	0.00	0.00	0	78.81
0.950	0.00	0.00	0.00	0.00	0.00	0	78.81
1.000	0.00	0.00	0.00	0.00	0.00	0	78.81
1.050	0.00	0.00	0.00	0.00	0.00	0	78.81
1.100	0.00	0.00	0.00	0.00	0.00	0	78.81
1.150	0.00	0.00	0.00	0.00	0.00	0	78.81
1.200	0.00	0.00	0.00	0.00	0.00	0	78.81
1.250	0.00	0.00	0.00	0.00	0.00	0	78.81
1.300	0.00	0.00	0.00	0.00	0.00	0	78.81
1.350	0.00	0.00	0.00	0.00	0.00	0	78.81
1.400	0.00	0.00	0.00	0.00	0.00	0	78.81
1.450	0.00	0.00	0.00	0.00	0.00	0	78.81
1.500	0.00	0.00	0.00	0.00	0.00	0	78.81
1.550	0.00	0.00	0.00	0.00	0.00	0	78.81
1.600	0.00	0.00	0.00	0.00	0.00	0	78.81
1.650	0.00	0.00	0.00	0.00	0.00	0	78.81
1.700	0.00	0.00	0.00	0.00	0.00	0	78.81
1.750	0.00	0.00	0.00	0.00	0.00	0	78.81
1.800	0.00	0.00	0.00	0.00	0.00	0	78.81
1.850	0.00	0.00	0.00	0.00	0.00	0	78.81
1.900	0.00	0.00	0.00	0.00	0.00	0	78.81
1.950	0.00	0.00	0.00	0.00	0.00	0	78.81
2.000	0.00	0.00	0.00	0.00	0.00	0	78.81
2.050	0.00	0.00	0.00	0.00	0.00	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
2.100	0.00	0.00	0.00	0.00	0.00	0	78.81
2.150	0.00	0.00	0.00	0.00	0.00	0	78.81
2.200	0.00	0.00	0.00	0.00	0.00	0	78.81
2.250	0.00	0.00	0.00	0.00	0.00	0	78.81
2.300	0.00	0.00	0.00	0.00	0.00	0	78.81
2.350	0.00	0.00	0.00	0.00	0.00	0	78.81
2.400	0.00	0.00	0.00	0.00	0.00	0	78.81
2.450	0.00	0.00	0.00	0.00	0.00	0	78.81
2.500	0.00	0.00	0.00	0.00	0.00	0	78.81
2.550	0.00	0.00	0.00	0.00	0.00	0	78.81
2.600	0.00	0.00	0.00	0.00	0.00	0	78.81
2.650	0.00	0.00	0.00	0.00	0.00	0	78.81
2.700	0.00	0.00	0.01	0.00	0.00	0	78.81
2.750	0.00	0.00	0.01	0.00	0.00	0	78.81
2.800	0.00	0.00	0.01	0.00	0.00	0	78.81
2.850	0.00	0.00	0.01	0.00	0.00	0	78.81
2.900	0.00	0.00	0.01	0.00	0.00	0	78.81
2.950	0.00	0.00	0.01	0.00	0.00	0	78.81
3.000	0.00	0.00	0.01	0.00	0.00	0	78.81
3.050	0.00	0.00	0.01	0.00	0.00	0	78.81
3.100	0.01	0.00	0.01	0.00	0.00	0	78.81
3.150	0.01	0.00	0.01	0.00	0.01	0	78.81
3.200	0.01	0.00	0.01	0.00	0.01	0	78.81
3.250	0.01	0.00	0.01	0.00	0.01	0	78.81
3.300	0.01	0.00	0.01	0.00	0.01	0	78.81
3.350	0.01	0.00	0.01	0.00	0.01	0	78.81
3.400	0.01	0.00	0.01	0.00	0.01	0	78.81
3.450	0.01	0.00	0.01	0.00	0.01	0	78.81
3.500	0.01	0.00	0.01	0.00	0.01	0	78.81
3.550	0.01	0.00	0.01	0.00	0.01	0	78.81
3.600	0.01	0.00	0.02	0.00	0.01	0	78.81
3.650	0.01	0.00	0.02	0.00	0.01	0	78.81
3.700	0.01	0.00	0.02	0.00	0.01	0	78.81
3.750	0.01	0.00	0.02	0.00	0.01	0	78.81
3.800	0.01	0.00	0.02	0.00	0.01	0	78.81
3.850	0.01	0.00	0.02	0.00	0.01	0	78.81
3.900	0.01	0.00	0.02	0.00	0.01	0	78.81
3.950	0.01	0.00	0.02	0.00	0.01	0	78.81
4.000	0.01	0.00	0.02	0.00	0.01	0	78.81
4.050	0.01	0.00	0.02	0.00	0.01	0	78.81
4.100	0.01	0.00	0.02	0.00	0.01	0	78.81
4.150	0.01	0.00	0.02	0.00	0.01	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
4.200	0.01	0.00	0.02	0.00	0.01	0	78.81
4.250	0.01	0.00	0.02	0.00	0.01	0	78.81
4.300	0.01	0.00	0.02	0.00	0.01	0	78.81
4.350	0.01	0.00	0.02	0.00	0.01	0	78.81
4.400	0.01	0.00	0.02	0.00	0.01	0	78.81
4.450	0.01	0.00	0.03	0.00	0.01	0	78.81
4.500	0.01	0.00	0.03	0.00	0.01	0	78.81
4.550	0.01	0.00	0.03	0.00	0.01	0	78.81
4.600	0.01	0.00	0.03	0.00	0.01	0	78.81
4.650	0.01	0.00	0.03	0.00	0.01	0	78.81
4.700	0.01	0.00	0.03	0.00	0.01	0	78.81
4.750	0.01	0.00	0.03	0.00	0.01	0	78.81
4.800	0.01	0.00	0.03	0.00	0.01	0	78.81
4.850	0.02	0.00	0.03	0.00	0.02	0	78.81
4.900	0.02	0.00	0.03	0.00	0.02	0	78.81
4.950	0.02	0.00	0.03	0.00	0.02	0	78.81
5.000	0.02	0.00	0.03	0.00	0.02	0	78.81
5.050	0.02	0.00	0.03	0.00	0.02	0	78.81
5.100	0.02	0.00	0.03	0.00	0.02	0	78.81
5.150	0.02	0.00	0.03	0.00	0.02	0	78.81
5.200	0.02	0.00	0.03	0.00	0.02	0	78.81
5.250	0.02	0.00	0.03	0.00	0.02	0	78.81
5.300	0.02	0.00	0.04	0.00	0.02	0	78.81
5.350	0.02	0.00	0.04	0.00	0.02	0	78.81
5.400	0.02	0.00	0.04	0.00	0.02	0	78.81
5.450	0.02	0.00	0.04	0.00	0.02	0	78.81
5.500	0.02	0.00	0.04	0.00	0.02	0	78.81
5.550	0.02	0.00	0.04	0.00	0.02	0	78.81
5.600	0.02	0.00	0.04	0.00	0.02	0	78.81
5.650	0.02	0.00	0.04	0.00	0.02	0	78.81
5.700	0.02	0.00	0.04	0.00	0.02	0	78.81
5.750	0.02	0.00	0.04	0.00	0.02	0	78.81
5.800	0.02	0.00	0.04	0.00	0.02	0	78.81
5.850	0.02	0.00	0.04	0.00	0.02	0	78.81
5.900	0.02	0.00	0.04	0.00	0.02	0	78.81
5.950	0.02	0.00	0.04	0.00	0.02	0	78.81
6.000	0.02	0.00	0.04	0.00	0.02	0	78.81
6.050	0.02	0.00	0.04	0.00	0.02	0	78.81
6.100	0.02	0.00	0.05	0.00	0.02	0	78.81
6.150	0.02	0.00	0.05	0.00	0.02	0	78.81
6.200	0.02	0.00	0.05	0.00	0.02	0	78.81
6.250	0.02	0.00	0.05	0.00	0.02	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
6.300	0.03	0.00	0.05	0.00	0.02	0	78.81
6.350	0.03	0.00	0.05	0.00	0.03	0	78.81
6.400	0.03	0.00	0.05	0.00	0.03	0	78.81
6.450	0.03	0.00	0.05	0.00	0.03	0	78.81
6.500	0.03	0.00	0.05	0.00	0.03	0	78.81
6.550	0.03	0.00	0.06	0.00	0.03	0	78.81
6.600	0.03	0.00	0.06	0.00	0.03	0	78.81
6.650	0.03	0.00	0.06	0.00	0.03	0	78.81
6.700	0.03	0.00	0.06	0.00	0.03	0	78.81
6.750	0.03	0.00	0.06	0.00	0.03	0	78.81
6.800	0.03	0.00	0.06	0.00	0.03	0	78.81
6.850	0.03	0.00	0.06	0.00	0.03	0	78.81
6.900	0.03	0.00	0.06	0.00	0.03	0	78.81
6.950	0.03	0.00	0.07	0.00	0.03	0	78.81
7.000	0.03	0.00	0.07	0.00	0.03	0	78.81
7.050	0.03	0.00	0.07	0.00	0.03	0	78.81
7.100	0.03	0.00	0.07	0.00	0.03	0	78.81
7.150	0.04	0.00	0.07	0.00	0.04	0	78.81
7.200	0.04	0.00	0.07	0.00	0.04	0	78.81
7.250	0.04	0.00	0.07	0.00	0.04	0	78.81
7.300	0.04	0.00	0.07	0.00	0.04	0	78.81
7.350	0.04	0.00	0.08	0.00	0.04	0	78.81
7.400	0.04	0.00	0.08	0.00	0.04	0	78.81
7.450	0.04	0.00	0.08	0.00	0.04	0	78.81
7.500	0.04	0.00	0.08	0.00	0.04	0	78.81
7.550	0.04	0.00	0.08	0.00	0.04	0	78.81
7.600	0.04	0.00	0.08	0.00	0.04	0	78.81
7.650	0.04	0.00	0.08	0.00	0.04	0	78.81
7.700	0.04	0.00	0.08	0.00	0.04	0	78.81
7.750	0.04	0.00	0.09	0.00	0.04	0	78.81
7.800	0.04	0.00	0.09	0.00	0.04	0	78.81
7.850	0.04	0.00	0.09	0.00	0.04	0	78.81
7.900	0.05	0.00	0.09	0.00	0.05	0	78.81
7.950	0.05	0.00	0.09	0.00	0.05	0	78.81
8.000	0.05	0.00	0.09	0.00	0.05	0	78.81
8.050	0.05	0.00	0.09	0.00	0.05	0	78.81
8.100	0.05	0.00	0.10	0.00	0.05	0	78.81
8.150	0.05	0.00	0.10	0.00	0.05	0	78.81
8.200	0.05	0.00	0.10	0.00	0.05	0	78.81
8.250	0.05	0.00	0.10	0.00	0.05	0	78.81
8.300	0.05	0.00	0.11	0.00	0.05	0	78.81
8.350	0.06	0.00	0.11	0.00	0.05	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
8.400	0.06	0.00	0.11	0.00	0.06	0	78.81
8.450	0.06	0.00	0.11	0.00	0.06	0	78.81
8.500	0.06	0.00	0.12	0.00	0.06	0	78.81
8.550	0.06	0.00	0.12	0.00	0.06	0	78.81
8.600	0.06	0.00	0.12	0.00	0.06	0	78.81
8.650	0.06	0.00	0.13	0.00	0.06	0	78.81
8.700	0.07	0.00	0.13	0.00	0.06	0	78.81
8.750	0.07	0.00	0.13	0.00	0.07	0	78.81
8.800	0.07	0.00	0.13	0.00	0.07	0	78.81
8.850	0.07	0.00	0.14	0.00	0.07	0	78.81
8.900	0.07	0.00	0.14	0.00	0.07	0	78.81
8.950	0.07	0.00	0.14	0.00	0.07	0	78.81
9.000	0.07	0.00	0.15	0.00	0.07	0	78.81
9.050	0.08	0.00	0.15	0.00	0.07	0	78.81
9.100	0.08	0.00	0.15	0.00	0.08	0	78.81
9.150	0.08	0.00	0.15	0.00	0.08	0	78.81
9.200	0.08	0.00	0.16	0.00	0.08	0	78.81
9.250	0.08	0.00	0.16	0.00	0.08	0	78.81
9.300	0.08	0.00	0.16	0.00	0.08	0	78.81
9.350	0.08	0.00	0.17	0.00	0.08	0	78.81
9.400	0.09	0.00	0.17	0.00	0.08	0	78.81
9.450	0.09	0.00	0.17	0.00	0.09	0	78.81
9.500	0.09	0.00	0.18	0.00	0.09	0	78.81
9.550	0.09	0.00	0.18	0.00	0.09	0	78.81
9.600	0.09	0.00	0.18	0.00	0.09	0	78.81
9.650	0.09	0.00	0.19	0.00	0.09	0	78.81
9.700	0.10	0.00	0.19	0.00	0.09	0	78.81
9.750	0.10	0.00	0.19	0.00	0.10	0	78.81
9.800	0.10	0.00	0.19	0.00	0.10	0	78.81
9.850	0.10	0.00	0.20	0.00	0.10	0	78.81
9.900	0.10	0.00	0.20	0.00	0.10	0	78.81
9.950	0.10	0.00	0.20	0.00	0.10	0	78.81
10.000	0.10	0.00	0.21	0.00	0.10	0	78.81
10.050	0.11	0.00	0.21	0.00	0.11	0	78.81
10.100	0.11	0.00	0.21	0.00	0.11	0	78.81
10.150	0.11	0.00	0.22	0.00	0.11	0	78.81
10.200	0.11	0.00	0.23	0.00	0.11	0	78.81
10.250	0.12	0.00	0.23	0.00	0.12	0	78.81
10.300	0.12	0.00	0.24	0.00	0.12	0	78.81
10.350	0.12	0.00	0.24	0.00	0.12	0	78.81
10.400	0.13	0.00	0.25	0.00	0.12	0	78.81
10.450	0.13	0.00	0.26	0.00	0.13	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
10.500	0.13	0.00	0.26	0.00	0.13	0	78.81
10.550	0.14	0.00	0.27	0.00	0.13	0	78.81
10.600	0.14	0.00	0.27	0.00	0.14	0	78.81
10.650	0.14	0.00	0.28	0.00	0.14	0	78.81
10.700	0.14	0.00	0.29	0.00	0.14	13	78.81
10.750	0.15	0.01	0.30	0.00	0.14	14	78.81
10.800	0.15	0.03	0.31	0.00	0.14	16	78.82
10.850	0.15	0.05	0.34	0.00	0.14	18	78.82
10.900	0.16	0.08	0.37	0.00	0.14	20	78.82
10.950	0.16	0.12	0.40	0.00	0.14	23	78.82
11.000	0.16	0.16	0.44	0.00	0.14	27	78.82
11.050	0.17	0.21	0.49	0.00	0.14	32	78.82
11.100	0.18	0.27	0.55	0.00	0.14	37	78.82
11.150	0.18	0.35	0.63	0.00	0.14	44	78.82
11.200	0.20	0.45	0.73	0.00	0.14	53	78.83
11.250	0.21	0.57	0.85	0.00	0.14	64	78.83
11.300	0.22	0.71	0.99	0.00	0.14	77	78.84
11.350	0.23	0.88	1.16	0.00	0.14	92	78.84
11.400	0.24	1.06	1.35	0.00	0.14	108	78.85
11.450	0.25	1.27	1.56	0.00	0.14	127	78.85
11.500	0.26	1.51	1.79	0.00	0.14	148	78.86
11.550	0.30	1.79	2.07	0.00	0.14	174	78.87
11.600	0.36	2.16	2.44	0.00	0.14	207	78.88
11.650	0.43	2.67	2.95	0.00	0.14	253	78.89
11.700	0.54	3.37	3.65	0.00	0.14	316	78.91
11.750	0.64	4.27	4.55	0.00	0.14	397	78.94
11.800	0.76	5.39	5.67	0.00	0.14	498	78.97
11.850	0.86	6.72	7.00	0.00	0.14	618	79.01
11.900	0.98	8.28	8.56	0.00	0.14	758	79.06
11.950	1.29	10.28	10.56	0.00	0.14	937	79.12
12.000	1.80	13.09	13.37	0.00	0.14	1,191	79.20
12.050	1.99	16.60	16.88	0.00	0.14	1,507	79.30
12.100	2.05	20.37	20.65	0.00	0.14	1,846	79.42
12.150	1.81	23.95	24.23	0.00	0.14	2,168	79.52
12.200	1.32	26.80	27.08	0.00	0.14	2,425	79.60
12.250	1.08	28.92	29.20	0.00	0.14	2,616	79.67
12.300	0.92	30.65	30.93	0.00	0.14	2,771	79.72
12.350	0.81	32.10	32.38	0.00	0.14	2,902	79.76
12.400	0.69	33.32	33.60	0.00	0.14	3,011	79.80
12.450	0.59	34.14	34.59	0.00	0.23	3,093	79.82
12.500	0.47	34.57	35.20	0.00	0.32	3,140	79.84
12.550	0.39	34.73	35.43	0.00	0.35	3,157	79.85

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
12.600	0.32	34.74	35.45	0.00	0.35	3,158	79.85
12.650	0.29	34.68	35.35	0.00	0.34	3,151	79.84
12.700	0.27	34.60	35.24	0.00	0.32	3,143	79.84
12.750	0.26	34.52	35.13	0.00	0.31	3,134	79.84
12.800	0.25	34.45	35.03	0.00	0.29	3,126	79.84
12.850	0.24	34.38	34.93	0.00	0.28	3,119	79.83
12.900	0.22	34.32	34.84	0.00	0.26	3,112	79.83
12.950	0.21	34.26	34.76	0.00	0.25	3,106	79.83
13.000	0.20	34.20	34.67	0.00	0.24	3,099	79.83
13.050	0.19	34.14	34.59	0.00	0.22	3,093	79.82
13.100	0.18	34.09	34.52	0.00	0.21	3,088	79.82
13.150	0.18	34.05	34.46	0.00	0.20	3,083	79.82
13.200	0.18	34.01	34.40	0.00	0.20	3,079	79.82
13.250	0.17	33.98	34.36	0.00	0.19	3,075	79.82
13.300	0.17	33.95	34.32	0.00	0.18	3,072	79.82
13.350	0.17	33.93	34.29	0.00	0.18	3,070	79.82
13.400	0.16	33.91	34.26	0.00	0.18	3,068	79.82
13.450	0.16	33.89	34.24	0.00	0.17	3,066	79.82
13.500	0.16	33.88	34.21	0.00	0.17	3,064	79.81
13.550	0.16	33.86	34.19	0.00	0.16	3,062	79.81
13.600	0.15	33.84	34.17	0.00	0.16	3,061	79.81
13.650	0.15	33.83	34.15	0.00	0.16	3,059	79.81
13.700	0.15	33.81	34.13	0.00	0.16	3,057	79.81
13.750	0.14	33.80	34.10	0.00	0.15	3,056	79.81
13.800	0.14	33.79	34.08	0.00	0.15	3,054	79.81
13.850	0.14	33.77	34.06	0.00	0.15	3,053	79.81
13.900	0.13	33.76	34.04	0.00	0.14	3,051	79.81
13.950	0.13	33.74	34.02	0.00	0.14	3,049	79.81
14.000	0.13	33.72	34.00	0.00	0.14	3,047	79.81
14.050	0.13	33.69	33.97	0.00	0.14	3,045	79.81
14.100	0.12	33.66	33.94	0.00	0.14	3,042	79.81
14.150	0.12	33.62	33.90	0.00	0.14	3,039	79.81
14.200	0.12	33.58	33.86	0.00	0.14	3,035	79.81
14.250	0.12	33.54	33.82	0.00	0.14	3,031	79.80
14.300	0.12	33.49	33.77	0.00	0.14	3,027	79.80
14.350	0.12	33.44	33.72	0.00	0.14	3,022	79.80
14.400	0.11	33.39	33.67	0.00	0.14	3,018	79.80
14.450	0.11	33.34	33.62	0.00	0.14	3,013	79.80
14.500	0.11	33.28	33.56	0.00	0.14	3,008	79.80
14.550	0.11	33.22	33.50	0.00	0.14	3,002	79.79
14.600	0.11	33.15	33.44	0.00	0.14	2,996	79.79
14.650	0.11	33.09	33.37	0.00	0.14	2,991	79.79

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
14.700	0.11	33.02	33.30	0.00	0.14	2,984	79.79
14.750	0.10	32.95	33.23	0.00	0.14	2,978	79.79
14.800	0.10	32.87	33.15	0.00	0.14	2,971	79.78
14.850	0.10	32.79	33.07	0.00	0.14	2,964	79.78
14.900	0.10	32.71	32.99	0.00	0.14	2,957	79.78
14.950	0.10	32.63	32.91	0.00	0.14	2,949	79.78
15.000	0.10	32.54	32.82	0.00	0.14	2,941	79.77
15.050	0.10	32.45	32.73	0.00	0.14	2,933	79.77
15.100	0.09	32.36	32.64	0.00	0.14	2,925	79.77
15.150	0.09	32.26	32.55	0.00	0.14	2,916	79.77
15.200	0.09	32.17	32.45	0.00	0.14	2,908	79.76
15.250	0.09	32.07	32.35	0.00	0.14	2,899	79.76
15.300	0.09	31.96	32.24	0.00	0.14	2,889	79.76
15.350	0.09	31.85	32.14	0.00	0.14	2,880	79.75
15.400	0.09	31.74	32.03	0.00	0.14	2,870	79.75
15.450	0.08	31.63	31.91	0.00	0.14	2,860	79.75
15.500	0.08	31.52	31.80	0.00	0.14	2,849	79.74
15.550	0.08	31.40	31.68	0.00	0.14	2,839	79.74
15.600	0.08	31.28	31.56	0.00	0.14	2,828	79.74
15.650	0.08	31.15	31.43	0.00	0.14	2,816	79.73
15.700	0.08	31.03	31.31	0.00	0.14	2,805	79.73
15.750	0.08	30.90	31.18	0.00	0.14	2,793	79.73
15.800	0.07	30.76	31.04	0.00	0.14	2,781	79.72
15.850	0.07	30.63	30.91	0.00	0.14	2,769	79.72
15.900	0.07	30.49	30.77	0.00	0.14	2,757	79.71
15.950	0.07	30.35	30.63	0.00	0.14	2,744	79.71
16.000	0.07	30.20	30.48	0.00	0.14	2,731	79.71
16.050	0.07	30.06	30.34	0.00	0.14	2,718	79.70
16.100	0.07	29.91	30.19	0.00	0.14	2,704	79.70
16.150	0.06	29.76	30.04	0.00	0.14	2,691	79.69
16.200	0.06	29.60	29.88	0.00	0.14	2,677	79.69
16.250	0.06	29.45	29.73	0.00	0.14	2,663	79.68
16.300	0.06	29.29	29.57	0.00	0.14	2,649	79.68
16.350	0.06	29.14	29.42	0.00	0.14	2,635	79.67
16.400	0.06	28.98	29.26	0.00	0.14	2,621	79.67
16.450	0.06	28.82	29.10	0.00	0.14	2,606	79.66
16.500	0.06	28.66	28.94	0.00	0.14	2,592	79.66
16.550	0.06	28.50	28.78	0.00	0.14	2,577	79.66
16.600	0.06	28.33	28.62	0.00	0.14	2,563	79.65
16.650	0.06	28.17	28.45	0.00	0.14	2,548	79.65
16.700	0.06	28.00	28.29	0.00	0.14	2,533	79.64
16.750	0.06	27.84	28.12	0.00	0.14	2,518	79.64

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
16.800	0.06	27.67	27.95	0.00	0.14	2,503	79.63
16.850	0.06	27.50	27.78	0.00	0.14	2,488	79.63
16.900	0.06	27.33	27.61	0.00	0.14	2,472	79.62
16.950	0.05	27.16	27.44	0.00	0.14	2,457	79.62
17.000	0.05	26.98	27.27	0.00	0.14	2,441	79.61
17.050	0.05	26.81	27.09	0.00	0.14	2,426	79.61
17.100	0.05	26.63	26.92	0.00	0.14	2,410	79.60
17.150	0.05	26.46	26.74	0.00	0.14	2,394	79.59
17.200	0.05	26.28	26.56	0.00	0.14	2,378	79.59
17.250	0.05	26.10	26.38	0.00	0.14	2,362	79.58
17.300	0.05	25.92	26.20	0.00	0.14	2,345	79.58
17.350	0.05	25.74	26.02	0.00	0.14	2,329	79.57
17.400	0.05	25.55	25.84	0.00	0.14	2,313	79.57
17.450	0.05	25.37	25.65	0.00	0.14	2,296	79.56
17.500	0.05	25.18	25.47	0.00	0.14	2,279	79.56
17.550	0.05	25.00	25.28	0.00	0.14	2,262	79.55
17.600	0.05	24.81	25.09	0.00	0.14	2,246	79.55
17.650	0.05	24.62	24.90	0.00	0.14	2,228	79.54
17.700	0.05	24.43	24.71	0.00	0.14	2,211	79.54
17.750	0.04	24.24	24.52	0.00	0.14	2,194	79.53
17.800	0.04	24.04	24.33	0.00	0.14	2,177	79.52
17.850	0.04	23.85	24.13	0.00	0.14	2,159	79.52
17.900	0.04	23.65	23.94	0.00	0.14	2,142	79.51
17.950	0.04	23.46	23.74	0.00	0.14	2,124	79.51
18.000	0.04	23.26	23.54	0.00	0.14	2,106	79.50
18.050	0.04	23.06	23.34	0.00	0.14	2,088	79.49
18.100	0.04	22.86	23.14	0.00	0.14	2,070	79.49
18.150	0.04	22.66	22.94	0.00	0.14	2,052	79.48
18.200	0.04	22.46	22.74	0.00	0.14	2,034	79.48
18.250	0.04	22.25	22.54	0.00	0.14	2,016	79.47
18.300	0.04	22.05	22.33	0.00	0.14	1,997	79.46
18.350	0.04	21.85	22.13	0.00	0.14	1,979	79.46
18.400	0.04	21.65	21.93	0.00	0.14	1,961	79.45
18.450	0.04	21.44	21.72	0.00	0.14	1,942	79.45
18.500	0.04	21.24	21.52	0.00	0.14	1,924	79.44
18.550	0.04	21.03	21.32	0.00	0.14	1,906	79.43
18.600	0.04	20.83	21.11	0.00	0.14	1,887	79.43
18.650	0.04	20.62	20.91	0.00	0.14	1,869	79.42
18.700	0.04	20.42	20.70	0.00	0.14	1,850	79.42
18.750	0.04	20.21	20.50	0.00	0.14	1,832	79.41
18.800	0.04	20.01	20.29	0.00	0.14	1,813	79.40
18.850	0.04	19.80	20.08	0.00	0.14	1,795	79.40

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
18.900	0.04	19.59	19.88	0.00	0.14	1,776	79.39
18.950	0.04	19.39	19.67	0.00	0.14	1,757	79.39
19.000	0.04	19.18	19.46	0.00	0.14	1,739	79.38
19.050	0.04	18.97	19.25	0.00	0.14	1,720	79.37
19.100	0.04	18.76	19.04	0.00	0.14	1,701	79.37
19.150	0.04	18.55	18.84	0.00	0.14	1,682	79.36
19.200	0.04	18.34	18.63	0.00	0.14	1,664	79.36
19.250	0.04	18.13	18.42	0.00	0.14	1,645	79.35
19.300	0.04	17.92	18.21	0.00	0.14	1,626	79.34
19.350	0.04	17.71	18.00	0.00	0.14	1,607	79.34
19.400	0.04	17.50	17.79	0.00	0.14	1,588	79.33
19.450	0.04	17.29	17.57	0.00	0.14	1,569	79.32
19.500	0.04	17.08	17.36	0.00	0.14	1,550	79.32
19.550	0.03	16.87	17.15	0.00	0.14	1,531	79.31
19.600	0.03	16.66	16.94	0.00	0.14	1,512	79.31
19.650	0.03	16.44	16.73	0.00	0.14	1,493	79.30
19.700	0.03	16.23	16.51	0.00	0.14	1,474	79.29
19.750	0.03	16.02	16.30	0.00	0.14	1,454	79.29
19.800	0.03	15.80	16.09	0.00	0.14	1,435	79.28
19.850	0.03	15.59	15.87	0.00	0.14	1,416	79.27
19.900	0.03	15.38	15.66	0.00	0.14	1,397	79.27
19.950	0.03	15.16	15.44	0.00	0.14	1,377	79.26
20.000	0.03	14.95	15.23	0.00	0.14	1,358	79.26
20.050	0.03	14.73	15.01	0.00	0.14	1,338	79.25
20.100	0.03	14.51	14.80	0.00	0.14	1,319	79.24
20.150	0.03	14.30	14.58	0.00	0.14	1,300	79.24
20.200	0.03	14.08	14.36	0.00	0.14	1,280	79.23
20.250	0.03	13.87	14.15	0.00	0.14	1,261	79.22
20.300	0.03	13.65	13.93	0.00	0.14	1,241	79.22
20.350	0.03	13.43	13.71	0.00	0.14	1,221	79.21
20.400	0.03	13.21	13.49	0.00	0.14	1,202	79.20
20.450	0.03	13.00	13.28	0.00	0.14	1,182	79.20
20.500	0.03	12.78	13.06	0.00	0.14	1,163	79.19
20.550	0.03	12.56	12.84	0.00	0.14	1,143	79.18
20.600	0.03	12.34	12.62	0.00	0.14	1,123	79.18
20.650	0.03	12.12	12.40	0.00	0.14	1,104	79.17
20.700	0.03	11.90	12.18	0.00	0.14	1,084	79.17
20.750	0.03	11.68	11.96	0.00	0.14	1,064	79.16
20.800	0.03	11.46	11.74	0.00	0.14	1,044	79.15
20.850	0.03	11.24	11.52	0.00	0.14	1,024	79.15
20.900	0.03	11.02	11.30	0.00	0.14	1,005	79.14
20.950	0.03	10.80	11.08	0.00	0.14	985	79.13

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
21.000	0.03	10.58	10.86	0.00	0.14	965	79.13
21.050	0.03	10.36	10.64	0.00	0.14	945	79.12
21.100	0.03	10.14	10.42	0.00	0.14	925	79.11
21.150	0.03	9.91	10.20	0.00	0.14	905	79.11
21.200	0.03	9.69	9.97	0.00	0.14	885	79.10
21.250	0.03	9.47	9.75	0.00	0.14	865	79.09
21.300	0.03	9.25	9.53	0.00	0.14	845	79.09
21.350	0.03	9.02	9.30	0.00	0.14	825	79.08
21.400	0.03	8.80	9.08	0.00	0.14	805	79.07
21.450	0.03	8.58	8.86	0.00	0.14	785	79.07
21.500	0.03	8.35	8.63	0.00	0.14	764	79.06
21.550	0.03	8.13	8.41	0.00	0.14	744	79.05
21.600	0.03	7.90	8.18	0.00	0.14	724	79.05
21.650	0.03	7.68	7.96	0.00	0.14	704	79.04
21.700	0.03	7.45	7.74	0.00	0.14	683	79.03
21.750	0.03	7.23	7.51	0.00	0.14	663	79.03
21.800	0.03	7.00	7.28	0.00	0.14	643	79.02
21.850	0.03	6.78	7.06	0.00	0.14	623	79.01
21.900	0.03	6.55	6.83	0.00	0.14	602	79.01
21.950	0.03	6.32	6.61	0.00	0.14	582	79.00
22.000	0.03	6.10	6.38	0.00	0.14	561	78.99
22.050	0.03	5.87	6.15	0.00	0.14	541	78.99
22.100	0.03	5.64	5.92	0.00	0.14	521	78.98
22.150	0.03	5.42	5.70	0.00	0.14	500	78.97
22.200	0.03	5.19	5.47	0.00	0.14	480	78.97
22.250	0.03	4.96	5.24	0.00	0.14	459	78.96
22.300	0.03	4.73	5.01	0.00	0.14	438	78.95
22.350	0.03	4.50	4.78	0.00	0.14	418	78.95
22.400	0.03	4.27	4.55	0.00	0.14	397	78.94
22.450	0.03	4.04	4.33	0.00	0.14	377	78.93
22.500	0.03	3.81	4.10	0.00	0.14	356	78.93
22.550	0.03	3.58	3.87	0.00	0.14	335	78.92
22.600	0.03	3.35	3.64	0.00	0.14	315	78.91
22.650	0.03	3.12	3.41	0.00	0.14	294	78.91
22.700	0.03	2.89	3.17	0.00	0.14	273	78.90
22.750	0.03	2.66	2.94	0.00	0.14	252	78.89
22.800	0.03	2.43	2.71	0.00	0.14	231	78.89
22.850	0.02	2.20	2.48	0.00	0.14	211	78.88
22.900	0.02	1.97	2.25	0.00	0.14	190	78.87
22.950	0.02	1.73	2.02	0.00	0.14	169	78.87
23.000	0.02	1.50	1.78	0.00	0.14	148	78.86
23.050	0.02	1.27	1.55	0.00	0.14	127	78.85

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
23.100	0.02	1.04	1.32	0.00	0.14	106	78.84
23.150	0.02	0.80	1.08	0.00	0.14	85	78.84
23.200	0.02	0.57	0.85	0.00	0.14	64	78.83
23.250	0.02	0.34	0.62	0.00	0.14	43	78.82
23.300	0.02	0.10	0.38	0.00	0.14	22	78.82
23.350	0.02	0.00	0.15	0.00	0.07	0	78.81
23.400	0.02	0.00	0.05	0.00	0.02	0	78.81
23.450	0.02	0.00	0.05	0.00	0.02	0	78.81
23.500	0.02	0.00	0.05	0.00	0.02	0	78.81
23.550	0.02	0.00	0.05	0.00	0.02	0	78.81
23.600	0.02	0.00	0.05	0.00	0.02	0	78.81
23.650	0.02	0.00	0.05	0.00	0.02	0	78.81
23.700	0.02	0.00	0.05	0.00	0.02	0	78.81
23.750	0.02	0.00	0.05	0.00	0.02	0	78.81
23.800	0.02	0.00	0.04	0.00	0.02	0	78.81
23.850	0.02	0.00	0.04	0.00	0.02	0	78.81
23.900	0.02	0.00	0.04	0.00	0.02	0	78.81
23.950	0.02	0.00	0.04	0.00	0.02	0	78.81
24.000	0.02	0.00	0.04	0.00	0.02	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
0.000	0.00	0.00	0.14	0.00	0.07	0	78.81
0.050	0.00	0.00	0.00	0.00	0.00	0	78.81
0.100	0.00	0.00	0.00	0.00	0.00	0	78.81
0.150	0.00	0.00	0.00	0.00	0.00	0	78.81
0.200	0.00	0.00	0.00	0.00	0.00	0	78.81
0.250	0.00	0.00	0.00	0.00	0.00	0	78.81
0.300	0.00	0.00	0.00	0.00	0.00	0	78.81
0.350	0.00	0.00	0.00	0.00	0.00	0	78.81
0.400	0.00	0.00	0.00	0.00	0.00	0	78.81
0.450	0.00	0.00	0.00	0.00	0.00	0	78.81
0.500	0.00	0.00	0.00	0.00	0.00	0	78.81
0.550	0.00	0.00	0.00	0.00	0.00	0	78.81
0.600	0.00	0.00	0.00	0.00	0.00	0	78.81
0.650	0.00	0.00	0.00	0.00	0.00	0	78.81
0.700	0.00	0.00	0.00	0.00	0.00	0	78.81
0.750	0.00	0.00	0.00	0.00	0.00	0	78.81
0.800	0.00	0.00	0.00	0.00	0.00	0	78.81
0.850	0.00	0.00	0.00	0.00	0.00	0	78.81
0.900	0.00	0.00	0.00	0.00	0.00	0	78.81
0.950	0.00	0.00	0.00	0.00	0.00	0	78.81
1.000	0.00	0.00	0.00	0.00	0.00	0	78.81
1.050	0.00	0.00	0.00	0.00	0.00	0	78.81
1.100	0.00	0.00	0.00	0.00	0.00	0	78.81
1.150	0.00	0.00	0.00	0.00	0.00	0	78.81
1.200	0.00	0.00	0.00	0.00	0.00	0	78.81
1.250	0.00	0.00	0.00	0.00	0.00	0	78.81
1.300	0.00	0.00	0.00	0.00	0.00	0	78.81
1.350	0.00	0.00	0.00	0.00	0.00	0	78.81
1.400	0.00	0.00	0.00	0.00	0.00	0	78.81
1.450	0.00	0.00	0.00	0.00	0.00	0	78.81
1.500	0.00	0.00	0.00	0.00	0.00	0	78.81
1.550	0.00	0.00	0.00	0.00	0.00	0	78.81
1.600	0.00	0.00	0.00	0.00	0.00	0	78.81
1.650	0.00	0.00	0.00	0.00	0.00	0	78.81
1.700	0.00	0.00	0.00	0.00	0.00	0	78.81
1.750	0.00	0.00	0.00	0.00	0.00	0	78.81
1.800	0.00	0.00	0.00	0.00	0.00	0	78.81
1.850	0.00	0.00	0.00	0.00	0.00	0	78.81
1.900	0.00	0.00	0.00	0.00	0.00	0	78.81
1.950	0.00	0.00	0.00	0.00	0.00	0	78.81
2.000	0.00	0.00	0.00	0.00	0.00	0	78.81
2.050	0.00	0.00	0.00	0.00	0.00	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
2.100	0.00	0.00	0.01	0.00	0.00	0	78.81
2.150	0.00	0.00	0.01	0.00	0.00	0	78.81
2.200	0.00	0.00	0.01	0.00	0.00	0	78.81
2.250	0.00	0.00	0.01	0.00	0.00	0	78.81
2.300	0.00	0.00	0.01	0.00	0.00	0	78.81
2.350	0.00	0.00	0.01	0.00	0.00	0	78.81
2.400	0.01	0.00	0.01	0.00	0.00	0	78.81
2.450	0.01	0.00	0.01	0.00	0.01	0	78.81
2.500	0.01	0.00	0.01	0.00	0.01	0	78.81
2.550	0.01	0.00	0.01	0.00	0.01	0	78.81
2.600	0.01	0.00	0.01	0.00	0.01	0	78.81
2.650	0.01	0.00	0.01	0.00	0.01	0	78.81
2.700	0.01	0.00	0.01	0.00	0.01	0	78.81
2.750	0.01	0.00	0.02	0.00	0.01	0	78.81
2.800	0.01	0.00	0.02	0.00	0.01	0	78.81
2.850	0.01	0.00	0.02	0.00	0.01	0	78.81
2.900	0.01	0.00	0.02	0.00	0.01	0	78.81
2.950	0.01	0.00	0.02	0.00	0.01	0	78.81
3.000	0.01	0.00	0.02	0.00	0.01	0	78.81
3.050	0.01	0.00	0.02	0.00	0.01	0	78.81
3.100	0.01	0.00	0.02	0.00	0.01	0	78.81
3.150	0.01	0.00	0.02	0.00	0.01	0	78.81
3.200	0.01	0.00	0.02	0.00	0.01	0	78.81
3.250	0.01	0.00	0.02	0.00	0.01	0	78.81
3.300	0.01	0.00	0.02	0.00	0.01	0	78.81
3.350	0.01	0.00	0.02	0.00	0.01	0	78.81
3.400	0.01	0.00	0.03	0.00	0.01	0	78.81
3.450	0.01	0.00	0.03	0.00	0.01	0	78.81
3.500	0.01	0.00	0.03	0.00	0.01	0	78.81
3.550	0.01	0.00	0.03	0.00	0.01	0	78.81
3.600	0.01	0.00	0.03	0.00	0.01	0	78.81
3.650	0.01	0.00	0.03	0.00	0.01	0	78.81
3.700	0.02	0.00	0.03	0.00	0.01	0	78.81
3.750	0.02	0.00	0.03	0.00	0.02	0	78.81
3.800	0.02	0.00	0.03	0.00	0.02	0	78.81
3.850	0.02	0.00	0.03	0.00	0.02	0	78.81
3.900	0.02	0.00	0.03	0.00	0.02	0	78.81
3.950	0.02	0.00	0.03	0.00	0.02	0	78.81
4.000	0.02	0.00	0.03	0.00	0.02	0	78.81
4.050	0.02	0.00	0.04	0.00	0.02	0	78.81
4.100	0.02	0.00	0.04	0.00	0.02	0	78.81
4.150	0.02	0.00	0.04	0.00	0.02	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
4.200	0.02	0.00	0.04	0.00	0.02	0	78.81
4.250	0.02	0.00	0.04	0.00	0.02	0	78.81
4.300	0.02	0.00	0.04	0.00	0.02	0	78.81
4.350	0.02	0.00	0.04	0.00	0.02	0	78.81
4.400	0.02	0.00	0.04	0.00	0.02	0	78.81
4.450	0.02	0.00	0.04	0.00	0.02	0	78.81
4.500	0.02	0.00	0.04	0.00	0.02	0	78.81
4.550	0.02	0.00	0.04	0.00	0.02	0	78.81
4.600	0.02	0.00	0.04	0.00	0.02	0	78.81
4.650	0.02	0.00	0.04	0.00	0.02	0	78.81
4.700	0.02	0.00	0.05	0.00	0.02	0	78.81
4.750	0.02	0.00	0.05	0.00	0.02	0	78.81
4.800	0.02	0.00	0.05	0.00	0.02	0	78.81
4.850	0.02	0.00	0.05	0.00	0.02	0	78.81
4.900	0.02	0.00	0.05	0.00	0.02	0	78.81
4.950	0.02	0.00	0.05	0.00	0.02	0	78.81
5.000	0.03	0.00	0.05	0.00	0.03	0	78.81
5.050	0.03	0.00	0.05	0.00	0.03	0	78.81
5.100	0.03	0.00	0.05	0.00	0.03	0	78.81
5.150	0.03	0.00	0.05	0.00	0.03	0	78.81
5.200	0.03	0.00	0.05	0.00	0.03	0	78.81
5.250	0.03	0.00	0.05	0.00	0.03	0	78.81
5.300	0.03	0.00	0.05	0.00	0.03	0	78.81
5.350	0.03	0.00	0.06	0.00	0.03	0	78.81
5.400	0.03	0.00	0.06	0.00	0.03	0	78.81
5.450	0.03	0.00	0.06	0.00	0.03	0	78.81
5.500	0.03	0.00	0.06	0.00	0.03	0	78.81
5.550	0.03	0.00	0.06	0.00	0.03	0	78.81
5.600	0.03	0.00	0.06	0.00	0.03	0	78.81
5.650	0.03	0.00	0.06	0.00	0.03	0	78.81
5.700	0.03	0.00	0.06	0.00	0.03	0	78.81
5.750	0.03	0.00	0.06	0.00	0.03	0	78.81
5.800	0.03	0.00	0.06	0.00	0.03	0	78.81
5.850	0.03	0.00	0.06	0.00	0.03	0	78.81
5.900	0.03	0.00	0.06	0.00	0.03	0	78.81
5.950	0.03	0.00	0.06	0.00	0.03	0	78.81
6.000	0.03	0.00	0.07	0.00	0.03	0	78.81
6.050	0.03	0.00	0.07	0.00	0.03	0	78.81
6.100	0.03	0.00	0.07	0.00	0.03	0	78.81
6.150	0.03	0.00	0.07	0.00	0.03	0	78.81
6.200	0.04	0.00	0.07	0.00	0.03	0	78.81
6.250	0.04	0.00	0.07	0.00	0.04	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
6.300	0.04	0.00	0.07	0.00	0.04	0	78.81
6.350	0.04	0.00	0.07	0.00	0.04	0	78.81
6.400	0.04	0.00	0.08	0.00	0.04	0	78.81
6.450	0.04	0.00	0.08	0.00	0.04	0	78.81
6.500	0.04	0.00	0.08	0.00	0.04	0	78.81
6.550	0.04	0.00	0.08	0.00	0.04	0	78.81
6.600	0.04	0.00	0.08	0.00	0.04	0	78.81
6.650	0.04	0.00	0.08	0.00	0.04	0	78.81
6.700	0.04	0.00	0.09	0.00	0.04	0	78.81
6.750	0.04	0.00	0.09	0.00	0.04	0	78.81
6.800	0.04	0.00	0.09	0.00	0.04	0	78.81
6.850	0.05	0.00	0.09	0.00	0.05	0	78.81
6.900	0.05	0.00	0.09	0.00	0.05	0	78.81
6.950	0.05	0.00	0.09	0.00	0.05	0	78.81
7.000	0.05	0.00	0.10	0.00	0.05	0	78.81
7.050	0.05	0.00	0.10	0.00	0.05	0	78.81
7.100	0.05	0.00	0.10	0.00	0.05	0	78.81
7.150	0.05	0.00	0.10	0.00	0.05	0	78.81
7.200	0.05	0.00	0.10	0.00	0.05	0	78.81
7.250	0.05	0.00	0.10	0.00	0.05	0	78.81
7.300	0.05	0.00	0.11	0.00	0.05	0	78.81
7.350	0.05	0.00	0.11	0.00	0.05	0	78.81
7.400	0.05	0.00	0.11	0.00	0.05	0	78.81
7.450	0.06	0.00	0.11	0.00	0.06	0	78.81
7.500	0.06	0.00	0.11	0.00	0.06	0	78.81
7.550	0.06	0.00	0.11	0.00	0.06	0	78.81
7.600	0.06	0.00	0.12	0.00	0.06	0	78.81
7.650	0.06	0.00	0.12	0.00	0.06	0	78.81
7.700	0.06	0.00	0.12	0.00	0.06	0	78.81
7.750	0.06	0.00	0.12	0.00	0.06	0	78.81
7.800	0.06	0.00	0.12	0.00	0.06	0	78.81
7.850	0.06	0.00	0.12	0.00	0.06	0	78.81
7.900	0.06	0.00	0.13	0.00	0.06	0	78.81
7.950	0.06	0.00	0.13	0.00	0.06	0	78.81
8.000	0.07	0.00	0.13	0.00	0.06	0	78.81
8.050	0.07	0.00	0.13	0.00	0.07	0	78.81
8.100	0.07	0.00	0.13	0.00	0.07	0	78.81
8.150	0.07	0.00	0.14	0.00	0.07	0	78.81
8.200	0.07	0.00	0.14	0.00	0.07	0	78.81
8.250	0.07	0.00	0.14	0.00	0.07	0	78.81
8.300	0.07	0.00	0.15	0.00	0.07	0	78.81
8.350	0.08	0.00	0.15	0.00	0.08	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
8.400	0.08	0.00	0.15	0.00	0.08	0	78.81
8.450	0.08	0.00	0.16	0.00	0.08	0	78.81
8.500	0.08	0.00	0.16	0.00	0.08	0	78.81
8.550	0.08	0.00	0.17	0.00	0.08	0	78.81
8.600	0.09	0.00	0.17	0.00	0.08	0	78.81
8.650	0.09	0.00	0.17	0.00	0.09	0	78.81
8.700	0.09	0.00	0.18	0.00	0.09	0	78.81
8.750	0.09	0.00	0.18	0.00	0.09	0	78.81
8.800	0.09	0.00	0.18	0.00	0.09	0	78.81
8.850	0.09	0.00	0.19	0.00	0.09	0	78.81
8.900	0.10	0.00	0.19	0.00	0.10	0	78.81
8.950	0.10	0.00	0.19	0.00	0.10	0	78.81
9.000	0.10	0.00	0.20	0.00	0.10	0	78.81
9.050	0.10	0.00	0.20	0.00	0.10	0	78.81
9.100	0.10	0.00	0.21	0.00	0.10	0	78.81
9.150	0.11	0.00	0.21	0.00	0.10	0	78.81
9.200	0.11	0.00	0.21	0.00	0.11	0	78.81
9.250	0.11	0.00	0.22	0.00	0.11	0	78.81
9.300	0.11	0.00	0.22	0.00	0.11	0	78.81
9.350	0.11	0.00	0.23	0.00	0.11	0	78.81
9.400	0.12	0.00	0.23	0.00	0.11	0	78.81
9.450	0.12	0.00	0.23	0.00	0.12	0	78.81
9.500	0.12	0.00	0.24	0.00	0.12	0	78.81
9.550	0.12	0.00	0.24	0.00	0.12	0	78.81
9.600	0.12	0.00	0.24	0.00	0.12	0	78.81
9.650	0.13	0.00	0.25	0.00	0.12	0	78.81
9.700	0.13	0.00	0.25	0.00	0.13	0	78.81
9.750	0.13	0.00	0.26	0.00	0.13	0	78.81
9.800	0.13	0.00	0.26	0.00	0.13	0	78.81
9.850	0.13	0.00	0.26	0.00	0.13	0	78.81
9.900	0.14	0.00	0.27	0.00	0.13	0	78.81
9.950	0.14	0.00	0.27	0.00	0.14	0	78.81
10.000	0.14	0.00	0.28	0.00	0.14	0	78.81
10.050	0.14	0.00	0.28	0.00	0.14	0	78.81
10.100	0.14	0.00	0.29	0.00	0.14	13	78.81
10.150	0.15	0.01	0.30	0.00	0.14	14	78.81
10.200	0.15	0.03	0.31	0.00	0.14	16	78.82
10.250	0.16	0.06	0.34	0.00	0.14	18	78.82
10.300	0.16	0.09	0.37	0.00	0.14	21	78.82
10.350	0.16	0.13	0.41	0.00	0.14	24	78.82
10.400	0.17	0.18	0.46	0.00	0.14	29	78.82
10.450	0.17	0.23	0.52	0.00	0.14	34	78.82

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
10.500	0.17	0.30	0.58	0.00	0.14	39	78.82
10.550	0.18	0.37	0.65	0.00	0.14	46	78.83
10.600	0.18	0.45	0.73	0.00	0.14	53	78.83
10.650	0.19	0.54	0.82	0.00	0.14	61	78.83
10.700	0.19	0.63	0.91	0.00	0.14	69	78.83
10.750	0.19	0.73	1.01	0.00	0.14	79	78.84
10.800	0.20	0.84	1.13	0.00	0.14	89	78.84
10.850	0.20	0.96	1.24	0.00	0.14	99	78.84
10.900	0.21	1.09	1.37	0.00	0.14	111	78.85
10.950	0.21	1.22	1.51	0.00	0.14	123	78.85
11.000	0.21	1.37	1.65	0.00	0.14	136	78.85
11.050	0.22	1.52	1.80	0.00	0.14	149	78.86
11.100	0.23	1.69	1.97	0.00	0.14	165	78.86
11.150	0.24	1.88	2.16	0.00	0.14	182	78.87
11.200	0.26	2.09	2.37	0.00	0.14	201	78.88
11.250	0.27	2.34	2.62	0.00	0.14	223	78.88
11.300	0.28	2.61	2.89	0.00	0.14	247	78.89
11.350	0.30	2.91	3.19	0.00	0.14	274	78.90
11.400	0.31	3.24	3.52	0.00	0.14	304	78.91
11.450	0.33	3.60	3.88	0.00	0.14	336	78.92
11.500	0.34	3.98	4.27	0.00	0.14	371	78.93
11.550	0.39	4.44	4.72	0.00	0.14	412	78.95
11.600	0.46	5.01	5.29	0.00	0.14	463	78.96
11.650	0.56	5.75	6.03	0.00	0.14	530	78.98
11.700	0.71	6.74	7.02	0.00	0.14	619	79.01
11.750	0.83	7.99	8.27	0.00	0.14	732	79.05
11.800	0.98	9.52	9.80	0.00	0.14	869	79.10
11.850	1.11	11.33	11.61	0.00	0.14	1,032	79.15
11.900	1.27	13.42	13.70	0.00	0.14	1,220	79.21
11.950	1.66	16.07	16.35	0.00	0.14	1,459	79.29
12.000	2.31	19.76	20.05	0.00	0.14	1,792	79.40
12.050	2.56	24.36	24.64	0.00	0.14	2,205	79.53
12.100	2.63	29.27	29.55	0.00	0.14	2,647	79.68
12.150	2.31	33.88	34.21	0.00	0.17	3,064	79.81
12.200	1.69	36.45	37.88	0.00	0.72	3,345	79.91
12.250	1.38	37.32	39.52	0.00	1.10	3,458	79.94
12.300	1.18	37.50	39.88	0.00	1.19	3,482	79.95
12.350	1.04	37.41	39.71	0.00	1.15	3,471	79.95
12.400	0.88	37.22	39.33	0.00	1.06	3,445	79.94
12.450	0.75	36.97	38.85	0.00	0.94	3,412	79.93
12.500	0.60	36.70	38.32	0.00	0.81	3,376	79.92
12.550	0.50	36.39	37.80	0.00	0.70	3,338	79.90

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
12.600	0.41	36.04	37.30	0.00	0.63	3,301	79.89
12.650	0.37	35.71	36.83	0.00	0.56	3,264	79.88
12.700	0.35	35.43	36.43	0.00	0.50	3,234	79.87
12.750	0.33	35.21	36.11	0.00	0.45	3,209	79.86
12.800	0.32	35.03	35.85	0.00	0.41	3,190	79.86
12.850	0.30	34.88	35.64	0.00	0.38	3,174	79.85
12.900	0.29	34.76	35.47	0.00	0.36	3,160	79.85
12.950	0.27	34.65	35.31	0.00	0.33	3,148	79.84
13.000	0.26	34.55	35.18	0.00	0.31	3,138	79.84
13.050	0.25	34.47	35.06	0.00	0.29	3,129	79.84
13.100	0.24	34.39	34.95	0.00	0.28	3,120	79.83
13.150	0.23	34.33	34.86	0.00	0.26	3,113	79.83
13.200	0.22	34.28	34.78	0.00	0.25	3,108	79.83
13.250	0.22	34.23	34.72	0.00	0.24	3,103	79.83
13.300	0.22	34.20	34.67	0.00	0.24	3,099	79.83
13.350	0.21	34.17	34.63	0.00	0.23	3,096	79.83
13.400	0.21	34.14	34.59	0.00	0.22	3,093	79.82
13.450	0.21	34.12	34.56	0.00	0.22	3,090	79.82
13.500	0.20	34.09	34.52	0.00	0.21	3,088	79.82
13.550	0.20	34.07	34.49	0.00	0.21	3,086	79.82
13.600	0.19	34.05	34.47	0.00	0.21	3,083	79.82
13.650	0.19	34.03	34.44	0.00	0.20	3,081	79.82
13.700	0.19	34.02	34.41	0.00	0.20	3,079	79.82
13.750	0.18	34.00	34.38	0.00	0.19	3,077	79.82
13.800	0.18	33.98	34.36	0.00	0.19	3,075	79.82
13.850	0.17	33.96	34.33	0.00	0.19	3,073	79.82
13.900	0.17	33.94	34.31	0.00	0.18	3,071	79.82
13.950	0.17	33.92	34.28	0.00	0.18	3,069	79.82
14.000	0.16	33.90	34.25	0.00	0.17	3,067	79.82
14.050	0.16	33.89	34.23	0.00	0.17	3,065	79.81
14.100	0.16	33.87	34.20	0.00	0.17	3,063	79.81
14.150	0.15	33.85	34.18	0.00	0.16	3,062	79.81
14.200	0.15	33.84	34.16	0.00	0.16	3,060	79.81
14.250	0.15	33.83	34.14	0.00	0.16	3,059	79.81
14.300	0.15	33.82	34.13	0.00	0.16	3,058	79.81
14.350	0.15	33.81	34.11	0.00	0.15	3,056	79.81
14.400	0.15	33.80	34.10	0.00	0.15	3,055	79.81
14.450	0.14	33.79	34.09	0.00	0.15	3,054	79.81
14.500	0.14	33.78	34.07	0.00	0.15	3,053	79.81
14.550	0.14	33.77	34.06	0.00	0.15	3,052	79.81
14.600	0.14	33.76	34.05	0.00	0.14	3,051	79.81
14.650	0.14	33.75	34.03	0.00	0.14	3,050	79.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
14.700	0.13	33.74	34.02	0.00	0.14	3,049	79.81
14.750	0.13	33.73	34.01	0.00	0.14	3,048	79.81
14.800	0.13	33.71	33.99	0.00	0.14	3,046	79.81
14.850	0.13	33.68	33.97	0.00	0.14	3,044	79.81
14.900	0.13	33.66	33.94	0.00	0.14	3,042	79.81
14.950	0.13	33.63	33.91	0.00	0.14	3,039	79.81
15.000	0.12	33.60	33.88	0.00	0.14	3,036	79.81
15.050	0.12	33.56	33.84	0.00	0.14	3,033	79.80
15.100	0.12	33.52	33.80	0.00	0.14	3,029	79.80
15.150	0.12	33.47	33.76	0.00	0.14	3,025	79.80
15.200	0.12	33.43	33.71	0.00	0.14	3,021	79.80
15.250	0.11	33.37	33.66	0.00	0.14	3,016	79.80
15.300	0.11	33.32	33.60	0.00	0.14	3,011	79.80
15.350	0.11	33.26	33.54	0.00	0.14	3,006	79.80
15.400	0.11	33.20	33.48	0.00	0.14	3,000	79.79
15.450	0.11	33.13	33.41	0.00	0.14	2,994	79.79
15.500	0.10	33.06	33.34	0.00	0.14	2,988	79.79
15.550	0.10	32.99	33.27	0.00	0.14	2,981	79.79
15.600	0.10	32.91	33.19	0.00	0.14	2,975	79.79
15.650	0.10	32.83	33.11	0.00	0.14	2,967	79.78
15.700	0.10	32.74	33.03	0.00	0.14	2,960	79.78
15.750	0.10	32.65	32.94	0.00	0.14	2,952	79.78
15.800	0.09	32.56	32.84	0.00	0.14	2,943	79.78
15.850	0.09	32.47	32.75	0.00	0.14	2,935	79.77
15.900	0.09	32.37	32.65	0.00	0.14	2,926	79.77
15.950	0.09	32.26	32.55	0.00	0.14	2,916	79.77
16.000	0.09	32.16	32.44	0.00	0.14	2,907	79.76
16.050	0.09	32.05	32.33	0.00	0.14	2,897	79.76
16.100	0.08	31.93	32.22	0.00	0.14	2,887	79.76
16.150	0.08	31.82	32.10	0.00	0.14	2,876	79.75
16.200	0.08	31.70	31.98	0.00	0.14	2,866	79.75
16.250	0.08	31.58	31.86	0.00	0.14	2,855	79.75
16.300	0.08	31.46	31.74	0.00	0.14	2,844	79.74
16.350	0.08	31.34	31.62	0.00	0.14	2,833	79.74
16.400	0.08	31.21	31.49	0.00	0.14	2,822	79.74
16.450	0.08	31.09	31.37	0.00	0.14	2,811	79.73
16.500	0.08	30.96	31.24	0.00	0.14	2,799	79.73
16.550	0.08	30.83	31.11	0.00	0.14	2,787	79.72
16.600	0.08	30.70	30.98	0.00	0.14	2,776	79.72
16.650	0.07	30.57	30.85	0.00	0.14	2,764	79.72
16.700	0.07	30.43	30.72	0.00	0.14	2,752	79.71
16.750	0.07	30.30	30.58	0.00	0.14	2,740	79.71

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
16.800	0.07	30.16	30.44	0.00	0.14	2,727	79.70
16.850	0.07	30.02	30.31	0.00	0.14	2,715	79.70
16.900	0.07	29.88	30.16	0.00	0.14	2,702	79.70
16.950	0.07	29.74	30.02	0.00	0.14	2,689	79.69
17.000	0.07	29.60	29.88	0.00	0.14	2,677	79.69
17.050	0.07	29.45	29.73	0.00	0.14	2,663	79.68
17.100	0.07	29.31	29.59	0.00	0.14	2,650	79.68
17.150	0.07	29.16	29.44	0.00	0.14	2,637	79.67
17.200	0.07	29.01	29.29	0.00	0.14	2,623	79.67
17.250	0.06	28.86	29.14	0.00	0.14	2,610	79.67
17.300	0.06	28.70	28.99	0.00	0.14	2,596	79.66
17.350	0.06	28.55	28.83	0.00	0.14	2,582	79.66
17.400	0.06	28.39	28.67	0.00	0.14	2,568	79.65
17.450	0.06	28.24	28.52	0.00	0.14	2,554	79.65
17.500	0.06	28.08	28.36	0.00	0.14	2,539	79.64
17.550	0.06	27.91	28.20	0.00	0.14	2,525	79.64
17.600	0.06	27.75	28.03	0.00	0.14	2,510	79.63
17.650	0.06	27.59	27.87	0.00	0.14	2,496	79.63
17.700	0.06	27.42	27.70	0.00	0.14	2,481	79.62
17.750	0.06	27.25	27.54	0.00	0.14	2,466	79.62
17.800	0.06	27.09	27.37	0.00	0.14	2,450	79.61
17.850	0.06	26.91	27.20	0.00	0.14	2,435	79.61
17.900	0.05	26.74	27.02	0.00	0.14	2,419	79.60
17.950	0.05	26.57	26.85	0.00	0.14	2,404	79.60
18.000	0.05	26.39	26.67	0.00	0.14	2,388	79.59
18.050	0.05	26.22	26.50	0.00	0.14	2,372	79.59
18.100	0.05	26.04	26.32	0.00	0.14	2,356	79.58
18.150	0.05	25.86	26.14	0.00	0.14	2,340	79.58
18.200	0.05	25.68	25.96	0.00	0.14	2,324	79.57
18.250	0.05	25.50	25.78	0.00	0.14	2,308	79.57
18.300	0.05	25.32	25.60	0.00	0.14	2,291	79.56
18.350	0.05	25.14	25.42	0.00	0.14	2,275	79.56
18.400	0.05	24.95	25.24	0.00	0.14	2,259	79.55
18.450	0.05	24.77	25.05	0.00	0.14	2,242	79.55
18.500	0.05	24.59	24.87	0.00	0.14	2,226	79.54
18.550	0.05	24.41	24.69	0.00	0.14	2,209	79.53
18.600	0.05	24.22	24.50	0.00	0.14	2,193	79.53
18.650	0.05	24.04	24.32	0.00	0.14	2,176	79.52
18.700	0.05	23.85	24.14	0.00	0.14	2,160	79.52
18.750	0.05	23.67	23.95	0.00	0.14	2,143	79.51
18.800	0.05	23.48	23.77	0.00	0.14	2,126	79.51
18.850	0.05	23.30	23.58	0.00	0.14	2,109	79.50

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
18.900	0.05	23.11	23.39	0.00	0.14	2,093	79.50
18.950	0.05	22.92	23.21	0.00	0.14	2,076	79.49
19.000	0.05	22.74	23.02	0.00	0.14	2,059	79.49
19.050	0.05	22.55	22.83	0.00	0.14	2,042	79.48
19.100	0.05	22.36	22.64	0.00	0.14	2,025	79.47
19.150	0.05	22.17	22.45	0.00	0.14	2,008	79.47
19.200	0.05	21.98	22.26	0.00	0.14	1,991	79.46
19.250	0.05	21.79	22.07	0.00	0.14	1,974	79.46
19.300	0.05	21.60	21.88	0.00	0.14	1,957	79.45
19.350	0.05	21.41	21.69	0.00	0.14	1,940	79.45
19.400	0.05	21.22	21.50	0.00	0.14	1,922	79.44
19.450	0.04	21.03	21.31	0.00	0.14	1,905	79.43
19.500	0.04	20.83	21.12	0.00	0.14	1,888	79.43
19.550	0.04	20.64	20.92	0.00	0.14	1,870	79.42
19.600	0.04	20.45	20.73	0.00	0.14	1,853	79.42
19.650	0.04	20.26	20.54	0.00	0.14	1,836	79.41
19.700	0.04	20.06	20.34	0.00	0.14	1,818	79.41
19.750	0.04	19.87	20.15	0.00	0.14	1,801	79.40
19.800	0.04	19.67	19.95	0.00	0.14	1,783	79.39
19.850	0.04	19.48	19.76	0.00	0.14	1,765	79.39
19.900	0.04	19.28	19.56	0.00	0.14	1,748	79.38
19.950	0.04	19.08	19.36	0.00	0.14	1,730	79.38
20.000	0.04	18.89	19.17	0.00	0.14	1,712	79.37
20.050	0.04	18.69	18.97	0.00	0.14	1,695	79.37
20.100	0.04	18.49	18.77	0.00	0.14	1,677	79.36
20.150	0.04	18.29	18.57	0.00	0.14	1,659	79.35
20.200	0.04	18.09	18.37	0.00	0.14	1,641	79.35
20.250	0.04	17.89	18.18	0.00	0.14	1,623	79.34
20.300	0.04	17.69	17.98	0.00	0.14	1,605	79.34
20.350	0.04	17.49	17.78	0.00	0.14	1,587	79.33
20.400	0.04	17.29	17.58	0.00	0.14	1,569	79.32
20.450	0.04	17.09	17.38	0.00	0.14	1,551	79.32
20.500	0.04	16.89	17.17	0.00	0.14	1,533	79.31
20.550	0.04	16.69	16.97	0.00	0.14	1,515	79.31
20.600	0.04	16.49	16.77	0.00	0.14	1,497	79.30
20.650	0.04	16.29	16.57	0.00	0.14	1,479	79.29
20.700	0.04	16.08	16.37	0.00	0.14	1,460	79.29
20.750	0.04	15.88	16.16	0.00	0.14	1,442	79.28
20.800	0.04	15.68	15.96	0.00	0.14	1,424	79.28
20.850	0.04	15.48	15.76	0.00	0.14	1,405	79.27
20.900	0.04	15.27	15.55	0.00	0.14	1,387	79.26
20.950	0.04	15.07	15.35	0.00	0.14	1,369	79.26

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
21.000	0.04	14.86	15.14	0.00	0.14	1,350	79.25
21.050	0.04	14.66	14.94	0.00	0.14	1,332	79.25
21.100	0.04	14.45	14.73	0.00	0.14	1,313	79.24
21.150	0.04	14.25	14.53	0.00	0.14	1,295	79.23
21.200	0.04	14.04	14.32	0.00	0.14	1,276	79.23
21.250	0.04	13.83	14.12	0.00	0.14	1,258	79.22
21.300	0.04	13.63	13.91	0.00	0.14	1,239	79.22
21.350	0.04	13.42	13.70	0.00	0.14	1,221	79.21
21.400	0.04	13.21	13.49	0.00	0.14	1,202	79.20
21.450	0.04	13.01	13.29	0.00	0.14	1,183	79.20
21.500	0.04	12.80	13.08	0.00	0.14	1,164	79.19
21.550	0.04	12.59	12.87	0.00	0.14	1,146	79.19
21.600	0.04	12.38	12.66	0.00	0.14	1,127	79.18
21.650	0.04	12.17	12.45	0.00	0.14	1,108	79.17
21.700	0.04	11.96	12.24	0.00	0.14	1,089	79.17
21.750	0.04	11.75	12.03	0.00	0.14	1,070	79.16
21.800	0.04	11.54	11.82	0.00	0.14	1,051	79.15
21.850	0.04	11.33	11.61	0.00	0.14	1,032	79.15
21.900	0.04	11.12	11.40	0.00	0.14	1,013	79.14
21.950	0.04	10.91	11.19	0.00	0.14	994	79.14
22.000	0.03	10.69	10.98	0.00	0.14	975	79.13
22.050	0.03	10.48	10.76	0.00	0.14	956	79.12
22.100	0.03	10.27	10.55	0.00	0.14	937	79.12
22.150	0.03	10.06	10.34	0.00	0.14	918	79.11
22.200	0.03	9.84	10.13	0.00	0.14	899	79.10
22.250	0.03	9.63	9.91	0.00	0.14	879	79.10
22.300	0.03	9.42	9.70	0.00	0.14	860	79.09
22.350	0.03	9.20	9.48	0.00	0.14	841	79.09
22.400	0.03	8.99	9.27	0.00	0.14	822	79.08
22.450	0.03	8.77	9.05	0.00	0.14	802	79.07
22.500	0.03	8.56	8.84	0.00	0.14	783	79.07
22.550	0.03	8.34	8.62	0.00	0.14	763	79.06
22.600	0.03	8.12	8.41	0.00	0.14	744	79.05
22.650	0.03	7.91	8.19	0.00	0.14	724	79.05
22.700	0.03	7.69	7.97	0.00	0.14	705	79.04
22.750	0.03	7.47	7.76	0.00	0.14	685	79.03
22.800	0.03	7.26	7.54	0.00	0.14	666	79.03
22.850	0.03	7.04	7.32	0.00	0.14	646	79.02
22.900	0.03	6.82	7.10	0.00	0.14	627	79.02
22.950	0.03	6.60	6.88	0.00	0.14	607	79.01
23.000	0.03	6.38	6.66	0.00	0.14	587	79.00
23.050	0.03	6.16	6.45	0.00	0.14	567	79.00

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
23.100	0.03	5.94	6.23	0.00	0.14	548	78.99
23.150	0.03	5.72	6.00	0.00	0.14	528	78.98
23.200	0.03	5.50	5.78	0.00	0.14	508	78.98
23.250	0.03	5.28	5.56	0.00	0.14	488	78.97
23.300	0.03	5.06	5.34	0.00	0.14	468	78.96
23.350	0.03	4.84	5.12	0.00	0.14	448	78.96
23.400	0.03	4.62	4.90	0.00	0.14	428	78.95
23.450	0.03	4.39	4.68	0.00	0.14	408	78.94
23.500	0.03	4.17	4.45	0.00	0.14	388	78.94
23.550	0.03	3.95	4.23	0.00	0.14	368	78.93
23.600	0.03	3.73	4.01	0.00	0.14	348	78.92
23.650	0.03	3.50	3.78	0.00	0.14	328	78.92
23.700	0.03	3.28	3.56	0.00	0.14	308	78.91
23.750	0.03	3.05	3.34	0.00	0.14	288	78.90
23.800	0.03	2.83	3.11	0.00	0.14	267	78.90
23.850	0.03	2.60	2.89	0.00	0.14	247	78.89
23.900	0.03	2.38	2.66	0.00	0.14	227	78.88
23.950	0.03	2.15	2.43	0.00	0.14	206	78.88
24.000	0.03	1.93	2.21	0.00	0.14	186	78.87

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
0.000	0.00	0.00	0.14	0.00	0.07	0	78.81
0.050	0.00	0.00	0.00	0.00	0.00	0	78.81
0.100	0.00	0.00	0.00	0.00	0.00	0	78.81
0.150	0.00	0.00	0.00	0.00	0.00	0	78.81
0.200	0.00	0.00	0.00	0.00	0.00	0	78.81
0.250	0.00	0.00	0.00	0.00	0.00	0	78.81
0.300	0.00	0.00	0.00	0.00	0.00	0	78.81
0.350	0.00	0.00	0.00	0.00	0.00	0	78.81
0.400	0.00	0.00	0.00	0.00	0.00	0	78.81
0.450	0.00	0.00	0.00	0.00	0.00	0	78.81
0.500	0.00	0.00	0.00	0.00	0.00	0	78.81
0.550	0.00	0.00	0.00	0.00	0.00	0	78.81
0.600	0.00	0.00	0.00	0.00	0.00	0	78.81
0.650	0.00	0.00	0.00	0.00	0.00	0	78.81
0.700	0.00	0.00	0.00	0.00	0.00	0	78.81
0.750	0.00	0.00	0.00	0.00	0.00	0	78.81
0.800	0.00	0.00	0.00	0.00	0.00	0	78.81
0.850	0.00	0.00	0.00	0.00	0.00	0	78.81
0.900	0.00	0.00	0.00	0.00	0.00	0	78.81
0.950	0.00	0.00	0.00	0.00	0.00	0	78.81
1.000	0.00	0.00	0.00	0.00	0.00	0	78.81
1.050	0.00	0.00	0.00	0.00	0.00	0	78.81
1.100	0.00	0.00	0.00	0.00	0.00	0	78.81
1.150	0.00	0.00	0.00	0.00	0.00	0	78.81
1.200	0.00	0.00	0.00	0.00	0.00	0	78.81
1.250	0.00	0.00	0.00	0.00	0.00	0	78.81
1.300	0.00	0.00	0.00	0.00	0.00	0	78.81
1.350	0.00	0.00	0.00	0.00	0.00	0	78.81
1.400	0.00	0.00	0.00	0.00	0.00	0	78.81
1.450	0.00	0.00	0.01	0.00	0.00	0	78.81
1.500	0.00	0.00	0.01	0.00	0.00	0	78.81
1.550	0.00	0.00	0.01	0.00	0.00	0	78.81
1.600	0.01	0.00	0.01	0.00	0.01	0	78.81
1.650	0.01	0.00	0.01	0.00	0.01	0	78.81
1.700	0.01	0.00	0.01	0.00	0.01	0	78.81
1.750	0.01	0.00	0.01	0.00	0.01	0	78.81
1.800	0.01	0.00	0.02	0.00	0.01	0	78.81
1.850	0.01	0.00	0.02	0.00	0.01	0	78.81
1.900	0.01	0.00	0.02	0.00	0.01	0	78.81
1.950	0.01	0.00	0.02	0.00	0.01	0	78.81
2.000	0.01	0.00	0.02	0.00	0.01	0	78.81
2.050	0.01	0.00	0.02	0.00	0.01	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
2.100	0.01	0.00	0.02	0.00	0.01	0	78.81
2.150	0.01	0.00	0.02	0.00	0.01	0	78.81
2.200	0.01	0.00	0.03	0.00	0.01	0	78.81
2.250	0.01	0.00	0.03	0.00	0.01	0	78.81
2.300	0.01	0.00	0.03	0.00	0.01	0	78.81
2.350	0.01	0.00	0.03	0.00	0.01	0	78.81
2.400	0.02	0.00	0.03	0.00	0.02	0	78.81
2.450	0.02	0.00	0.03	0.00	0.02	0	78.81
2.500	0.02	0.00	0.03	0.00	0.02	0	78.81
2.550	0.02	0.00	0.03	0.00	0.02	0	78.81
2.600	0.02	0.00	0.03	0.00	0.02	0	78.81
2.650	0.02	0.00	0.04	0.00	0.02	0	78.81
2.700	0.02	0.00	0.04	0.00	0.02	0	78.81
2.750	0.02	0.00	0.04	0.00	0.02	0	78.81
2.800	0.02	0.00	0.04	0.00	0.02	0	78.81
2.850	0.02	0.00	0.04	0.00	0.02	0	78.81
2.900	0.02	0.00	0.04	0.00	0.02	0	78.81
2.950	0.02	0.00	0.04	0.00	0.02	0	78.81
3.000	0.02	0.00	0.04	0.00	0.02	0	78.81
3.050	0.02	0.00	0.05	0.00	0.02	0	78.81
3.100	0.02	0.00	0.05	0.00	0.02	0	78.81
3.150	0.02	0.00	0.05	0.00	0.02	0	78.81
3.200	0.03	0.00	0.05	0.00	0.02	0	78.81
3.250	0.03	0.00	0.05	0.00	0.03	0	78.81
3.300	0.03	0.00	0.05	0.00	0.03	0	78.81
3.350	0.03	0.00	0.05	0.00	0.03	0	78.81
3.400	0.03	0.00	0.05	0.00	0.03	0	78.81
3.450	0.03	0.00	0.06	0.00	0.03	0	78.81
3.500	0.03	0.00	0.06	0.00	0.03	0	78.81
3.550	0.03	0.00	0.06	0.00	0.03	0	78.81
3.600	0.03	0.00	0.06	0.00	0.03	0	78.81
3.650	0.03	0.00	0.06	0.00	0.03	0	78.81
3.700	0.03	0.00	0.06	0.00	0.03	0	78.81
3.750	0.03	0.00	0.06	0.00	0.03	0	78.81
3.800	0.03	0.00	0.06	0.00	0.03	0	78.81
3.850	0.03	0.00	0.06	0.00	0.03	0	78.81
3.900	0.03	0.00	0.07	0.00	0.03	0	78.81
3.950	0.03	0.00	0.07	0.00	0.03	0	78.81
4.000	0.03	0.00	0.07	0.00	0.03	0	78.81
4.050	0.03	0.00	0.07	0.00	0.03	0	78.81
4.100	0.04	0.00	0.07	0.00	0.04	0	78.81
4.150	0.04	0.00	0.07	0.00	0.04	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
4.200	0.04	0.00	0.07	0.00	0.04	0	78.81
4.250	0.04	0.00	0.07	0.00	0.04	0	78.81
4.300	0.04	0.00	0.08	0.00	0.04	0	78.81
4.350	0.04	0.00	0.08	0.00	0.04	0	78.81
4.400	0.04	0.00	0.08	0.00	0.04	0	78.81
4.450	0.04	0.00	0.08	0.00	0.04	0	78.81
4.500	0.04	0.00	0.08	0.00	0.04	0	78.81
4.550	0.04	0.00	0.08	0.00	0.04	0	78.81
4.600	0.04	0.00	0.08	0.00	0.04	0	78.81
4.650	0.04	0.00	0.08	0.00	0.04	0	78.81
4.700	0.04	0.00	0.08	0.00	0.04	0	78.81
4.750	0.04	0.00	0.09	0.00	0.04	0	78.81
4.800	0.04	0.00	0.09	0.00	0.04	0	78.81
4.850	0.04	0.00	0.09	0.00	0.04	0	78.81
4.900	0.04	0.00	0.09	0.00	0.04	0	78.81
4.950	0.05	0.00	0.09	0.00	0.04	0	78.81
5.000	0.05	0.00	0.09	0.00	0.05	0	78.81
5.050	0.05	0.00	0.09	0.00	0.05	0	78.81
5.100	0.05	0.00	0.09	0.00	0.05	0	78.81
5.150	0.05	0.00	0.09	0.00	0.05	0	78.81
5.200	0.05	0.00	0.09	0.00	0.05	0	78.81
5.250	0.05	0.00	0.10	0.00	0.05	0	78.81
5.300	0.05	0.00	0.10	0.00	0.05	0	78.81
5.350	0.05	0.00	0.10	0.00	0.05	0	78.81
5.400	0.05	0.00	0.10	0.00	0.05	0	78.81
5.450	0.05	0.00	0.10	0.00	0.05	0	78.81
5.500	0.05	0.00	0.10	0.00	0.05	0	78.81
5.550	0.05	0.00	0.10	0.00	0.05	0	78.81
5.600	0.05	0.00	0.10	0.00	0.05	0	78.81
5.650	0.05	0.00	0.10	0.00	0.05	0	78.81
5.700	0.05	0.00	0.11	0.00	0.05	0	78.81
5.750	0.05	0.00	0.11	0.00	0.05	0	78.81
5.800	0.05	0.00	0.11	0.00	0.05	0	78.81
5.850	0.05	0.00	0.11	0.00	0.05	0	78.81
5.900	0.06	0.00	0.11	0.00	0.05	0	78.81
5.950	0.06	0.00	0.11	0.00	0.06	0	78.81
6.000	0.06	0.00	0.11	0.00	0.06	0	78.81
6.050	0.06	0.00	0.11	0.00	0.06	0	78.81
6.100	0.06	0.00	0.11	0.00	0.06	0	78.81
6.150	0.06	0.00	0.12	0.00	0.06	0	78.81
6.200	0.06	0.00	0.12	0.00	0.06	0	78.81
6.250	0.06	0.00	0.12	0.00	0.06	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
6.300	0.06	0.00	0.12	0.00	0.06	0	78.81
6.350	0.06	0.00	0.12	0.00	0.06	0	78.81
6.400	0.06	0.00	0.13	0.00	0.06	0	78.81
6.450	0.07	0.00	0.13	0.00	0.06	0	78.81
6.500	0.07	0.00	0.13	0.00	0.07	0	78.81
6.550	0.07	0.00	0.13	0.00	0.07	0	78.81
6.600	0.07	0.00	0.14	0.00	0.07	0	78.81
6.650	0.07	0.00	0.14	0.00	0.07	0	78.81
6.700	0.07	0.00	0.14	0.00	0.07	0	78.81
6.750	0.07	0.00	0.14	0.00	0.07	0	78.81
6.800	0.07	0.00	0.15	0.00	0.07	0	78.81
6.850	0.07	0.00	0.15	0.00	0.07	0	78.81
6.900	0.08	0.00	0.15	0.00	0.08	0	78.81
6.950	0.08	0.00	0.15	0.00	0.08	0	78.81
7.000	0.08	0.00	0.16	0.00	0.08	0	78.81
7.050	0.08	0.00	0.16	0.00	0.08	0	78.81
7.100	0.08	0.00	0.16	0.00	0.08	0	78.81
7.150	0.08	0.00	0.16	0.00	0.08	0	78.81
7.200	0.08	0.00	0.17	0.00	0.08	0	78.81
7.250	0.08	0.00	0.17	0.00	0.08	0	78.81
7.300	0.09	0.00	0.17	0.00	0.09	0	78.81
7.350	0.09	0.00	0.17	0.00	0.09	0	78.81
7.400	0.09	0.00	0.18	0.00	0.09	0	78.81
7.450	0.09	0.00	0.18	0.00	0.09	0	78.81
7.500	0.09	0.00	0.18	0.00	0.09	0	78.81
7.550	0.09	0.00	0.18	0.00	0.09	0	78.81
7.600	0.09	0.00	0.19	0.00	0.09	0	78.81
7.650	0.09	0.00	0.19	0.00	0.09	0	78.81
7.700	0.10	0.00	0.19	0.00	0.10	0	78.81
7.750	0.10	0.00	0.19	0.00	0.10	0	78.81
7.800	0.10	0.00	0.20	0.00	0.10	0	78.81
7.850	0.10	0.00	0.20	0.00	0.10	0	78.81
7.900	0.10	0.00	0.20	0.00	0.10	0	78.81
7.950	0.10	0.00	0.20	0.00	0.10	0	78.81
8.000	0.10	0.00	0.21	0.00	0.10	0	78.81
8.050	0.10	0.00	0.21	0.00	0.10	0	78.81
8.100	0.11	0.00	0.21	0.00	0.11	0	78.81
8.150	0.11	0.00	0.22	0.00	0.11	0	78.81
8.200	0.11	0.00	0.22	0.00	0.11	0	78.81
8.250	0.11	0.00	0.23	0.00	0.11	0	78.81
8.300	0.12	0.00	0.23	0.00	0.12	0	78.81
8.350	0.12	0.00	0.24	0.00	0.12	0	78.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
8.400	0.12	0.00	0.24	0.00	0.12	0	78.81
8.450	0.12	0.00	0.25	0.00	0.12	0	78.81
8.500	0.13	0.00	0.25	0.00	0.13	0	78.81
8.550	0.13	0.00	0.26	0.00	0.13	0	78.81
8.600	0.13	0.00	0.26	0.00	0.13	0	78.81
8.650	0.14	0.00	0.27	0.00	0.13	0	78.81
8.700	0.14	0.00	0.27	0.00	0.14	0	78.81
8.750	0.14	0.00	0.28	0.00	0.14	0	78.81
8.800	0.14	0.00	0.28	0.00	0.14	13	78.81
8.850	0.15	0.01	0.29	0.00	0.14	14	78.81
8.900	0.15	0.02	0.30	0.00	0.14	15	78.81
8.950	0.15	0.04	0.32	0.00	0.14	16	78.82
9.000	0.15	0.07	0.35	0.00	0.14	19	78.82
9.050	0.16	0.09	0.38	0.00	0.14	21	78.82
9.100	0.16	0.13	0.41	0.00	0.14	24	78.82
9.150	0.16	0.17	0.45	0.00	0.14	28	78.82
9.200	0.17	0.22	0.50	0.00	0.14	32	78.82
9.250	0.17	0.27	0.55	0.00	0.14	37	78.82
9.300	0.17	0.32	0.61	0.00	0.14	42	78.82
9.350	0.17	0.39	0.67	0.00	0.14	47	78.83
9.400	0.18	0.45	0.74	0.00	0.14	53	78.83
9.450	0.18	0.53	0.81	0.00	0.14	60	78.83
9.500	0.18	0.61	0.89	0.00	0.14	67	78.83
9.550	0.18	0.69	0.97	0.00	0.14	75	78.83
9.600	0.19	0.78	1.06	0.00	0.14	83	78.84
9.650	0.19	0.87	1.16	0.00	0.14	91	78.84
9.700	0.19	0.98	1.26	0.00	0.14	101	78.84
9.750	0.20	1.08	1.36	0.00	0.14	110	78.85
9.800	0.20	1.19	1.48	0.00	0.14	120	78.85
9.850	0.20	1.31	1.59	0.00	0.14	131	78.85
9.900	0.20	1.44	1.72	0.00	0.14	142	78.86
9.950	0.21	1.56	1.85	0.00	0.14	153	78.86
10.000	0.21	1.70	1.98	0.00	0.14	166	78.86
10.050	0.21	1.84	2.12	0.00	0.14	178	78.87
10.100	0.22	1.99	2.27	0.00	0.14	192	78.87
10.150	0.22	2.14	2.43	0.00	0.14	206	78.88
10.200	0.23	2.31	2.59	0.00	0.14	221	78.88
10.250	0.23	2.49	2.77	0.00	0.14	237	78.89
10.300	0.24	2.68	2.96	0.00	0.14	254	78.89
10.350	0.24	2.88	3.16	0.00	0.14	272	78.90
10.400	0.25	3.09	3.37	0.00	0.14	291	78.91
10.450	0.25	3.31	3.60	0.00	0.14	311	78.91

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
10.500	0.26	3.55	3.83	0.00	0.14	332	78.92
10.550	0.27	3.79	4.08	0.00	0.14	354	78.93
10.600	0.27	4.05	4.33	0.00	0.14	377	78.93
10.650	0.28	4.32	4.60	0.00	0.14	401	78.94
10.700	0.28	4.60	4.88	0.00	0.14	426	78.95
10.750	0.29	4.89	5.17	0.00	0.14	453	78.96
10.800	0.29	5.19	5.47	0.00	0.14	480	78.97
10.850	0.30	5.50	5.78	0.00	0.14	508	78.98
10.900	0.31	5.83	6.11	0.00	0.14	537	78.99
10.950	0.31	6.16	6.44	0.00	0.14	567	79.00
11.000	0.32	6.51	6.79	0.00	0.14	598	79.01
11.050	0.33	6.87	7.15	0.00	0.14	631	79.02
11.100	0.34	7.25	7.54	0.00	0.14	666	79.03
11.150	0.36	7.67	7.95	0.00	0.14	703	79.04
11.200	0.38	8.12	8.40	0.00	0.14	744	79.05
11.250	0.40	8.61	8.89	0.00	0.14	788	79.07
11.300	0.42	9.15	9.43	0.00	0.14	836	79.08
11.350	0.44	9.72	10.01	0.00	0.14	888	79.10
11.400	0.46	10.34	10.62	0.00	0.14	944	79.12
11.450	0.48	11.00	11.29	0.00	0.14	1,003	79.14
11.500	0.50	11.71	11.99	0.00	0.14	1,066	79.16
11.550	0.57	12.50	12.78	0.00	0.14	1,138	79.18
11.600	0.68	13.47	13.75	0.00	0.14	1,225	79.21
11.650	0.83	14.69	14.98	0.00	0.14	1,335	79.25
11.700	1.03	16.27	16.55	0.00	0.14	1,477	79.29
11.750	1.21	18.24	18.52	0.00	0.14	1,654	79.35
11.800	1.43	20.60	20.88	0.00	0.14	1,867	79.42
11.850	1.62	23.36	23.65	0.00	0.14	2,115	79.50
11.900	1.84	26.54	26.82	0.00	0.14	2,401	79.60
11.950	2.42	30.52	30.81	0.00	0.14	2,760	79.71
12.000	3.36	35.34	36.30	0.00	0.48	3,224	79.87
12.050	3.71	38.80	42.41	0.00	1.81	3,654	80.01
12.100	3.81	40.41	46.31	0.00	2.95	3,903	80.09
12.150	3.34	40.91	47.57	0.00	3.33	3,982	80.12
12.200	2.44	40.57	46.70	0.00	3.06	3,927	80.10
12.250	2.00	39.88	45.01	0.00	2.57	3,820	80.06
12.300	1.70	39.29	43.58	0.00	2.15	3,729	80.03
12.350	1.49	38.84	42.48	0.00	1.82	3,659	80.01
12.400	1.27	38.38	41.60	0.00	1.61	3,599	79.99
12.450	1.08	37.94	40.73	0.00	1.40	3,540	79.97
12.500	0.86	37.50	39.88	0.00	1.19	3,482	79.95
12.550	0.72	37.09	39.08	0.00	1.00	3,428	79.93

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
12.600	0.59	36.74	38.41	0.00	0.83	3,382	79.92
12.650	0.54	36.44	37.87	0.00	0.71	3,344	79.91
12.700	0.50	36.17	37.48	0.00	0.66	3,314	79.90
12.750	0.48	35.93	37.14	0.00	0.61	3,288	79.89
12.800	0.45	35.74	36.86	0.00	0.56	3,267	79.88
12.850	0.43	35.57	36.63	0.00	0.53	3,249	79.88
12.900	0.41	35.42	36.42	0.00	0.50	3,233	79.87
12.950	0.39	35.29	36.22	0.00	0.47	3,218	79.87
13.000	0.37	35.16	36.05	0.00	0.44	3,205	79.86
13.050	0.35	35.05	35.89	0.00	0.42	3,192	79.86
13.100	0.34	34.95	35.74	0.00	0.40	3,181	79.85
13.150	0.33	34.86	35.62	0.00	0.38	3,172	79.85
13.200	0.32	34.79	35.52	0.00	0.36	3,164	79.85
13.250	0.32	34.73	35.43	0.00	0.35	3,157	79.85
13.300	0.31	34.68	35.36	0.00	0.34	3,152	79.84
13.350	0.31	34.64	35.30	0.00	0.33	3,147	79.84
13.400	0.30	34.60	35.25	0.00	0.32	3,143	79.84
13.450	0.30	34.57	35.20	0.00	0.32	3,140	79.84
13.500	0.29	34.54	35.15	0.00	0.31	3,136	79.84
13.550	0.29	34.51	35.11	0.00	0.30	3,133	79.84
13.600	0.28	34.48	35.07	0.00	0.30	3,130	79.84
13.650	0.27	34.45	35.03	0.00	0.29	3,127	79.84
13.700	0.27	34.42	34.99	0.00	0.28	3,124	79.83
13.750	0.26	34.40	34.95	0.00	0.28	3,121	79.83
13.800	0.26	34.37	34.92	0.00	0.27	3,118	79.83
13.850	0.25	34.34	34.88	0.00	0.27	3,115	79.83
13.900	0.25	34.32	34.84	0.00	0.26	3,112	79.83
13.950	0.24	34.29	34.80	0.00	0.26	3,109	79.83
14.000	0.23	34.26	34.77	0.00	0.25	3,106	79.83
14.050	0.23	34.24	34.73	0.00	0.25	3,104	79.83
14.100	0.23	34.21	34.70	0.00	0.24	3,101	79.83
14.150	0.22	34.19	34.66	0.00	0.24	3,098	79.83
14.200	0.22	34.17	34.63	0.00	0.23	3,096	79.83
14.250	0.22	34.15	34.61	0.00	0.23	3,094	79.82
14.300	0.21	34.14	34.59	0.00	0.22	3,093	79.82
14.350	0.21	34.12	34.56	0.00	0.22	3,091	79.82
14.400	0.21	34.11	34.54	0.00	0.22	3,089	79.82
14.450	0.21	34.10	34.52	0.00	0.21	3,088	79.82
14.500	0.20	34.08	34.51	0.00	0.21	3,086	79.82
14.550	0.20	34.07	34.49	0.00	0.21	3,085	79.82
14.600	0.20	34.06	34.47	0.00	0.21	3,084	79.82
14.650	0.20	34.04	34.45	0.00	0.20	3,082	79.82

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
14.700	0.19	34.03	34.43	0.00	0.20	3,081	79.82
14.750	0.19	34.02	34.41	0.00	0.20	3,079	79.82
14.800	0.19	34.01	34.40	0.00	0.20	3,078	79.82
14.850	0.19	33.99	34.38	0.00	0.19	3,077	79.82
14.900	0.18	33.98	34.36	0.00	0.19	3,075	79.82
14.950	0.18	33.97	34.34	0.00	0.19	3,074	79.82
15.000	0.18	33.96	34.33	0.00	0.18	3,073	79.82
15.050	0.17	33.94	34.31	0.00	0.18	3,071	79.82
15.100	0.17	33.93	34.29	0.00	0.18	3,070	79.82
15.150	0.17	33.92	34.27	0.00	0.18	3,069	79.82
15.200	0.17	33.91	34.25	0.00	0.17	3,067	79.82
15.250	0.16	33.89	34.24	0.00	0.17	3,066	79.82
15.300	0.16	33.88	34.22	0.00	0.17	3,064	79.81
15.350	0.16	33.87	34.20	0.00	0.17	3,063	79.81
15.400	0.16	33.86	34.18	0.00	0.16	3,062	79.81
15.450	0.15	33.84	34.17	0.00	0.16	3,060	79.81
15.500	0.15	33.83	34.15	0.00	0.16	3,059	79.81
15.550	0.15	33.82	34.13	0.00	0.16	3,058	79.81
15.600	0.15	33.81	34.11	0.00	0.15	3,056	79.81
15.650	0.14	33.79	34.09	0.00	0.15	3,055	79.81
15.700	0.14	33.78	34.08	0.00	0.15	3,054	79.81
15.750	0.14	33.77	34.06	0.00	0.15	3,052	79.81
15.800	0.13	33.76	34.04	0.00	0.14	3,051	79.81
15.850	0.13	33.74	34.02	0.00	0.14	3,049	79.81
15.900	0.13	33.72	34.00	0.00	0.14	3,048	79.81
15.950	0.13	33.70	33.98	0.00	0.14	3,045	79.81
16.000	0.12	33.67	33.95	0.00	0.14	3,043	79.81
16.050	0.12	33.63	33.91	0.00	0.14	3,039	79.81
16.100	0.12	33.59	33.87	0.00	0.14	3,036	79.81
16.150	0.12	33.55	33.83	0.00	0.14	3,032	79.80
16.200	0.12	33.50	33.79	0.00	0.14	3,028	79.80
16.250	0.12	33.46	33.74	0.00	0.14	3,024	79.80
16.300	0.12	33.40	33.69	0.00	0.14	3,019	79.80
16.350	0.11	33.35	33.63	0.00	0.14	3,014	79.80
16.400	0.11	33.30	33.58	0.00	0.14	3,009	79.80
16.450	0.11	33.24	33.52	0.00	0.14	3,004	79.79
16.500	0.11	33.18	33.46	0.00	0.14	2,999	79.79
16.550	0.11	33.12	33.40	0.00	0.14	2,993	79.79
16.600	0.11	33.05	33.34	0.00	0.14	2,988	79.79
16.650	0.11	32.99	33.27	0.00	0.14	2,981	79.79
16.700	0.11	32.92	33.20	0.00	0.14	2,975	79.79
16.750	0.10	32.85	33.13	0.00	0.14	2,969	79.78

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
16.800	0.10	32.77	33.05	0.00	0.14	2,962	79.78
16.850	0.10	32.70	32.98	0.00	0.14	2,955	79.78
16.900	0.10	32.62	32.90	0.00	0.14	2,948	79.78
16.950	0.10	32.54	32.82	0.00	0.14	2,941	79.77
17.000	0.10	32.46	32.74	0.00	0.14	2,934	79.77
17.050	0.10	32.37	32.65	0.00	0.14	2,926	79.77
17.100	0.10	32.28	32.56	0.00	0.14	2,918	79.77
17.150	0.10	32.19	32.48	0.00	0.14	2,910	79.76
17.200	0.09	32.10	32.38	0.00	0.14	2,902	79.76
17.250	0.09	32.01	32.29	0.00	0.14	2,893	79.76
17.300	0.09	31.91	32.19	0.00	0.14	2,885	79.76
17.350	0.09	31.81	32.09	0.00	0.14	2,876	79.75
17.400	0.09	31.71	31.99	0.00	0.14	2,867	79.75
17.450	0.09	31.61	31.89	0.00	0.14	2,857	79.75
17.500	0.09	31.50	31.78	0.00	0.14	2,848	79.74
17.550	0.09	31.39	31.67	0.00	0.14	2,838	79.74
17.600	0.08	31.28	31.56	0.00	0.14	2,828	79.74
17.650	0.08	31.17	31.45	0.00	0.14	2,818	79.73
17.700	0.08	31.05	31.34	0.00	0.14	2,808	79.73
17.750	0.08	30.94	31.22	0.00	0.14	2,797	79.73
17.800	0.08	30.82	31.10	0.00	0.14	2,786	79.72
17.850	0.08	30.69	30.98	0.00	0.14	2,775	79.72
17.900	0.08	30.57	30.85	0.00	0.14	2,764	79.72
17.950	0.08	30.44	30.73	0.00	0.14	2,753	79.71
18.000	0.08	30.31	30.60	0.00	0.14	2,741	79.71
18.050	0.07	30.18	30.47	0.00	0.14	2,729	79.70
18.100	0.07	30.05	30.33	0.00	0.14	2,717	79.70
18.150	0.07	29.92	30.20	0.00	0.14	2,705	79.70
18.200	0.07	29.78	30.06	0.00	0.14	2,693	79.69
18.250	0.07	29.65	29.93	0.00	0.14	2,681	79.69
18.300	0.07	29.51	29.79	0.00	0.14	2,668	79.68
18.350	0.07	29.37	29.65	0.00	0.14	2,656	79.68
18.400	0.07	29.23	29.52	0.00	0.14	2,644	79.68
18.450	0.07	29.10	29.38	0.00	0.14	2,631	79.67
18.500	0.07	28.96	29.24	0.00	0.14	2,619	79.67
18.550	0.07	28.82	29.10	0.00	0.14	2,606	79.66
18.600	0.07	28.68	28.96	0.00	0.14	2,593	79.66
18.650	0.07	28.53	28.82	0.00	0.14	2,581	79.66
18.700	0.07	28.39	28.67	0.00	0.14	2,568	79.65
18.750	0.07	28.25	28.53	0.00	0.14	2,555	79.65
18.800	0.07	28.11	28.39	0.00	0.14	2,542	79.64
18.850	0.07	27.96	28.24	0.00	0.14	2,529	79.64

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
18.900	0.07	27.82	28.10	0.00	0.14	2,516	79.63
18.950	0.07	27.67	27.95	0.00	0.14	2,503	79.63
19.000	0.07	27.52	27.81	0.00	0.14	2,490	79.63
19.050	0.07	27.38	27.66	0.00	0.14	2,477	79.62
19.100	0.07	27.23	27.51	0.00	0.14	2,463	79.62
19.150	0.07	27.08	27.36	0.00	0.14	2,450	79.61
19.200	0.07	26.93	27.21	0.00	0.14	2,437	79.61
19.250	0.07	26.78	27.06	0.00	0.14	2,423	79.60
19.300	0.07	26.63	26.91	0.00	0.14	2,410	79.60
19.350	0.07	26.48	26.76	0.00	0.14	2,396	79.60
19.400	0.06	26.33	26.61	0.00	0.14	2,382	79.59
19.450	0.06	26.18	26.46	0.00	0.14	2,369	79.59
19.500	0.06	26.02	26.31	0.00	0.14	2,355	79.58
19.550	0.06	25.87	26.15	0.00	0.14	2,341	79.58
19.600	0.06	25.72	26.00	0.00	0.14	2,327	79.57
19.650	0.06	25.56	25.84	0.00	0.14	2,313	79.57
19.700	0.06	25.40	25.69	0.00	0.14	2,299	79.56
19.750	0.06	25.25	25.53	0.00	0.14	2,285	79.56
19.800	0.06	25.09	25.37	0.00	0.14	2,271	79.55
19.850	0.06	24.93	25.21	0.00	0.14	2,257	79.55
19.900	0.06	24.77	25.06	0.00	0.14	2,242	79.55
19.950	0.06	24.61	24.90	0.00	0.14	2,228	79.54
20.000	0.06	24.45	24.74	0.00	0.14	2,214	79.54
20.050	0.06	24.29	24.58	0.00	0.14	2,199	79.53
20.100	0.06	24.13	24.41	0.00	0.14	2,185	79.53
20.150	0.06	23.97	24.25	0.00	0.14	2,170	79.52
20.200	0.06	23.81	24.09	0.00	0.14	2,155	79.52
20.250	0.06	23.65	23.93	0.00	0.14	2,141	79.51
20.300	0.06	23.48	23.76	0.00	0.14	2,126	79.51
20.350	0.06	23.32	23.60	0.00	0.14	2,111	79.50
20.400	0.06	23.15	23.44	0.00	0.14	2,096	79.50
20.450	0.06	22.99	23.27	0.00	0.14	2,082	79.49
20.500	0.06	22.82	23.10	0.00	0.14	2,067	79.49
20.550	0.06	22.66	22.94	0.00	0.14	2,052	79.48
20.600	0.06	22.49	22.77	0.00	0.14	2,037	79.48
20.650	0.06	22.32	22.60	0.00	0.14	2,022	79.47
20.700	0.06	22.15	22.44	0.00	0.14	2,007	79.47
20.750	0.06	21.99	22.27	0.00	0.14	1,991	79.46
20.800	0.06	21.82	22.10	0.00	0.14	1,976	79.46
20.850	0.06	21.65	21.93	0.00	0.14	1,961	79.45
20.900	0.06	21.48	21.76	0.00	0.14	1,946	79.45
20.950	0.06	21.31	21.59	0.00	0.14	1,930	79.44

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
21.000	0.06	21.14	21.42	0.00	0.14	1,915	79.44
21.050	0.06	20.97	21.25	0.00	0.14	1,900	79.43
21.100	0.05	20.79	21.08	0.00	0.14	1,884	79.43
21.150	0.05	20.62	20.90	0.00	0.14	1,869	79.42
21.200	0.05	20.45	20.73	0.00	0.14	1,853	79.42
21.250	0.05	20.28	20.56	0.00	0.14	1,837	79.41
21.300	0.05	20.10	20.38	0.00	0.14	1,822	79.41
21.350	0.05	19.93	20.21	0.00	0.14	1,806	79.40
21.400	0.05	19.75	20.03	0.00	0.14	1,790	79.40
21.450	0.05	19.58	19.86	0.00	0.14	1,775	79.39
21.500	0.05	19.40	19.68	0.00	0.14	1,759	79.39
21.550	0.05	19.22	19.51	0.00	0.14	1,743	79.38
21.600	0.05	19.05	19.33	0.00	0.14	1,727	79.38
21.650	0.05	18.87	19.15	0.00	0.14	1,711	79.37
21.700	0.05	18.69	18.97	0.00	0.14	1,695	79.37
21.750	0.05	18.51	18.79	0.00	0.14	1,679	79.36
21.800	0.05	18.33	18.61	0.00	0.14	1,663	79.36
21.850	0.05	18.15	18.44	0.00	0.14	1,647	79.35
21.900	0.05	17.97	18.26	0.00	0.14	1,630	79.34
21.950	0.05	17.79	18.07	0.00	0.14	1,614	79.34
22.000	0.05	17.61	17.89	0.00	0.14	1,598	79.33
22.050	0.05	17.43	17.71	0.00	0.14	1,581	79.33
22.100	0.05	17.25	17.53	0.00	0.14	1,565	79.32
22.150	0.05	17.07	17.35	0.00	0.14	1,549	79.32
22.200	0.05	16.88	17.16	0.00	0.14	1,532	79.31
22.250	0.05	16.70	16.98	0.00	0.14	1,516	79.31
22.300	0.05	16.51	16.80	0.00	0.14	1,499	79.30
22.350	0.05	16.33	16.61	0.00	0.14	1,482	79.30
22.400	0.05	16.14	16.42	0.00	0.14	1,466	79.29
22.450	0.05	15.96	16.24	0.00	0.14	1,449	79.29
22.500	0.05	15.77	16.05	0.00	0.14	1,432	79.28
22.550	0.05	15.58	15.87	0.00	0.14	1,415	79.27
22.600	0.05	15.40	15.68	0.00	0.14	1,398	79.27
22.650	0.05	15.21	15.49	0.00	0.14	1,381	79.26
22.700	0.05	15.02	15.30	0.00	0.14	1,364	79.26
22.750	0.05	14.83	15.11	0.00	0.14	1,347	79.25
22.800	0.05	14.64	14.92	0.00	0.14	1,330	79.25
22.850	0.05	14.45	14.73	0.00	0.14	1,313	79.24
22.900	0.05	14.26	14.54	0.00	0.14	1,296	79.23
22.950	0.05	14.07	14.35	0.00	0.14	1,279	79.23
23.000	0.04	13.88	14.16	0.00	0.14	1,262	79.22
23.050	0.04	13.69	13.97	0.00	0.14	1,244	79.22

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: Stormwater Planters - 2 (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
23.100	0.04	13.49	13.77	0.00	0.14	1,227	79.21
23.150	0.04	13.30	13.58	0.00	0.14	1,210	79.21
23.200	0.04	13.11	13.39	0.00	0.14	1,192	79.20
23.250	0.04	12.91	13.19	0.00	0.14	1,175	79.20
23.300	0.04	12.72	13.00	0.00	0.14	1,157	79.19
23.350	0.04	12.52	12.80	0.00	0.14	1,140	79.18
23.400	0.04	12.33	12.61	0.00	0.14	1,122	79.18
23.450	0.04	12.13	12.41	0.00	0.14	1,104	79.17
23.500	0.04	11.93	12.22	0.00	0.14	1,087	79.17
23.550	0.04	11.74	12.02	0.00	0.14	1,069	79.16
23.600	0.04	11.54	11.82	0.00	0.14	1,051	79.15
23.650	0.04	11.34	11.62	0.00	0.14	1,033	79.15
23.700	0.04	11.14	11.42	0.00	0.14	1,015	79.14
23.750	0.04	10.94	11.22	0.00	0.14	997	79.14
23.800	0.04	10.74	11.02	0.00	0.14	979	79.13
23.850	0.04	10.54	10.82	0.00	0.14	961	79.13
23.900	0.04	10.34	10.62	0.00	0.14	943	79.12
23.950	0.04	10.14	10.42	0.00	0.14	925	79.11
24.000	0.04	9.94	10.22	0.00	0.14	907	79.11

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary
 Label: Stormwater Planters - 2 (IN)
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Summary for Hydrograph Addition at 'Stormwater Planters - 2'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-2B

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-2B	3,987	12.100	1.05
Flow (In)	Stormwater Planters - 2	3,987	12.100	1.05

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Label: Stormwater Planters - 2 (IN)

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

Summary for Hydrograph Addition at 'Stormwater Planters - 2'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-2B

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-2B	8,132	12.100	2.05
Flow (In)	Stormwater Planters - 2	8,132	12.100	2.05

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary
 Label: Stormwater Planters - 2 (IN)
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Summary for Hydrograph Addition at 'Stormwater Planters - 2'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-2B

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-2B	10,573	12.100	2.63
Flow (In)	Stormwater Planters - 2	10,573	12.100	2.63

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Label: Stormwater Planters - 2 (IN)

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Summary for Hydrograph Addition at 'Stormwater Planters - 2'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-2B

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-2B	15,596	12.100	3.81
Flow (In)	Stormwater Planters - 2	15,596	12.100	3.81

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 1 years

Label: XFILTRATION SYSTEM

Storm Event: 1 year

Scenario: Post-Development 1 year

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	71.50 ft
Volume (Initial)	0 ft ³
Flow (Initial Outlet)	0.00 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.00 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ft ³)	Area (ft ²)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
71.50	0.00	0	0	0.00	0.00	0.00
72.00	0.13	917	0	0.00	0.13	10.32
72.50	0.20	2,032	0	0.00	0.20	22.78
72.75	0.23	2,631	0	0.00	0.23	29.47
73.00	0.37	3,248	0	0.00	0.37	36.47
73.50	0.77	4,523	0	0.00	0.77	51.03
74.00	1.00	5,826	0	0.00	1.00	65.73
74.50	1.18	7,128	0	0.00	1.18	80.38
75.00	1.34	8,403	0	0.00	1.34	94.71
75.50	1.48	9,620	0	0.00	1.48	108.36
76.00	1.60	10,735	0	0.00	1.60	120.88
76.50	1.72	11,652	0	0.00	1.72	131.18

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 10 years

Label: XFILTRATION SYSTEM

Storm Event: 10 year

Scenario: Post-Development 10 year

Infiltration	
Infiltration Method (Computed)	No Infiltration
Initial Conditions	
Elevation (Water Surface, Initial)	71.50 ft
Volume (Initial)	0 ft ³
Flow (Initial Outlet)	0.00 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.00 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ft ³)	Area (ft ²)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
71.50	0.00	0	0	0.00	0.00	0.00
72.00	0.13	917	0	0.00	0.13	10.32
72.50	0.20	2,032	0	0.00	0.20	22.78
72.75	0.23	2,631	0	0.00	0.23	29.47
73.00	0.37	3,248	0	0.00	0.37	36.47
73.50	0.77	4,523	0	0.00	0.77	51.03
74.00	1.00	5,826	0	0.00	1.00	65.73
74.50	1.18	7,128	0	0.00	1.18	80.38
75.00	1.34	8,403	0	0.00	1.34	94.71
75.50	1.48	9,620	0	0.00	1.48	108.36
76.00	1.60	10,735	0	0.00	1.60	120.88
76.50	1.72	11,652	0	0.00	1.72	131.18

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 25 years

Label: XFILTRATION SYSTEM

Storm Event: 25 year

Scenario: Post-Development 25 year

Infiltration	
Infiltration Method (Computed)	No Infiltration
Initial Conditions	
Elevation (Water Surface, Initial)	71.50 ft
Volume (Initial)	0 ft ³
Flow (Initial Outlet)	0.00 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.00 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ft ³)	Area (ft ²)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
71.50	0.00	0	0	0.00	0.00	0.00
72.00	0.13	917	0	0.00	0.13	10.32
72.50	0.20	2,032	0	0.00	0.20	22.78
72.75	0.23	2,631	0	0.00	0.23	29.47
73.00	0.37	3,248	0	0.00	0.37	36.47
73.50	0.77	4,523	0	0.00	0.77	51.03
74.00	1.00	5,826	0	0.00	1.00	65.73
74.50	1.18	7,128	0	0.00	1.18	80.38
75.00	1.34	8,403	0	0.00	1.34	94.71
75.50	1.48	9,620	0	0.00	1.48	108.36
76.00	1.60	10,735	0	0.00	1.60	120.88
76.50	1.72	11,652	0	0.00	1.72	131.18

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 100 years

Label: XFILTRATION SYSTEM

Storm Event: 100 year

Scenario: Post-Development 100 year

Infiltration	
Infiltration Method (Computed)	No Infiltration
Initial Conditions	
Elevation (Water Surface, Initial)	71.50 ft
Volume (Initial)	0 ft ³
Flow (Initial Outlet)	0.00 ft ³ /s
Flow (Initial Infiltration)	0.00 ft ³ /s
Flow (Initial, Total)	0.00 ft ³ /s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft ³ /s)	Storage (ft ³)	Area (ft ²)	Infiltration (ft ³ /s)	Flow (Total) (ft ³ /s)	2S/t + O (ft ³ /s)
71.50	0.00	0	0	0.00	0.00	0.00
72.00	0.13	917	0	0.00	0.13	10.32
72.50	0.20	2,032	0	0.00	0.20	22.78
72.75	0.23	2,631	0	0.00	0.23	29.47
73.00	0.37	3,248	0	0.00	0.37	36.47
73.50	0.77	4,523	0	0.00	0.77	51.03
74.00	1.00	5,826	0	0.00	1.00	65.73
74.50	1.18	7,128	0	0.00	1.18	80.38
75.00	1.34	8,403	0	0.00	1.34	94.71
75.50	1.48	9,620	0	0.00	1.48	108.36
76.00	1.60	10,735	0	0.00	1.60	120.88
76.50	1.72	11,652	0	0.00	1.72	131.18

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 1 years

Label: XFILTRATION SYSTEM (IN)

Storm Event: 1 year

Scenario: Post-Development 1 year

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	71.50 ft		
Volume (Initial)	0 ft ³		
Flow (Initial Outlet)	0.00 ft ³ /s		
Flow (Initial Infiltration)	0.00 ft ³ /s		
Flow (Initial, Total)	0.00 ft ³ /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	0.44 ft ³ /s	Time to Peak (Flow, In)	12.150 hours
Flow (Peak Outlet)	0.23 ft ³ /s	Time to Peak (Flow, Outlet)	17.100 hours
Peak Conditions			
Elevation (Water Surface, Peak)	72.75 ft		
Volume (Peak)	2,633 ft ³		
Mass Balance (ft ³)			
Volume (Initial)	0 ft ³		
Volume (Total Inflow)	9,724 ft ³		
Volume (Total Infiltration)	0 ft ³		
Volume (Total Outlet Outflow)	9,269 ft ³		
Volume (Retained)	409 ft ³		
Volume (Unrouted)	-47 ft ³		
Error (Mass Balance)	0.5 %		

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 10 years

Label: XFILTRATION SYSTEM (IN)

Storm Event: 10 year

Scenario: Post-Development 10 year

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	71.50 ft		
Volume (Initial)	0 ft ³		
Flow (Initial Outlet)	0.00 ft ³ /s		
Flow (Initial Infiltration)	0.00 ft ³ /s		
Flow (Initial, Total)	0.00 ft ³ /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	1.81 ft ³ /s	Time to Peak (Flow, In)	12.200 hours
Flow (Peak Outlet)	0.55 ft ³ /s	Time to Peak (Flow, Outlet)	13.050 hours
Peak Values			
Elevation (Water Surface, Peak)	73.22 ft		
Volume (Peak)	3,797 ft ³		
Mass Balance (ft ³)			
Volume (Initial)	0 ft ³		
Volume (Total Inflow)	19,064 ft ³		
Volume (Total Infiltration)	0 ft ³		
Volume (Total Outlet Outflow)	16,635 ft ³		
Volume (Retained)	2,380 ft ³		
Volume (Unrouted)	-50 ft ³		
Error (Mass Balance)	0.3 %		

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 25 years

Label: XFILTRATION SYSTEM (IN)

Storm Event: 25 year

Scenario: Post-Development 25 year

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	71.50 ft		
Volume (Initial)	0 ft ³		
Flow (Initial Outlet)	0.00 ft ³ /s		
Flow (Initial Infiltration)	0.00 ft ³ /s		
Flow (Initial, Total)	0.00 ft ³ /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	3.33 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	1.01 ft ³ /s	Time to Peak (Flow, Outlet)	12.700 hours
Peak Conditions			
Elevation (Water Surface, Peak)	74.03 ft		
Volume (Peak)	5,892 ft ³		
Mass Balance (ft ³)			
Volume (Initial)	0 ft ³		
Volume (Total Inflow)	24,341 ft ³		
Volume (Total Infiltration)	0 ft ³		
Volume (Total Outlet Outflow)	21,649 ft ³		
Volume (Retained)	2,649 ft ³		
Volume (Unrouted)	-43 ft ³		
Error (Mass Balance)	0.2 %		

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 100 years

Label: XFILTRATION SYSTEM (IN)

Storm Event: 100 year

Scenario: Post-Development 100 year

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	71.50 ft		
Volume (Initial)	0 ft ³		
Flow (Initial Outlet)	0.00 ft ³ /s		
Flow (Initial Infiltration)	0.00 ft ³ /s		
Flow (Initial, Total)	0.00 ft ³ /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	8.12 ft ³ /s	Time to Peak (Flow, In)	12.150 hours
Flow (Peak Outlet)	1.67 ft ³ /s	Time to Peak (Flow, Outlet)	12.600 hours
Peak Conditions			
Elevation (Water Surface, Peak)	76.27 ft		
Volume (Peak)	11,262 ft ³		
Mass Balance (ft ³)			
Volume (Initial)	0 ft ³		
Volume (Total Inflow)	35,011 ft ³		
Volume (Total Infiltration)	0 ft ³		
Volume (Total Outlet Outflow)	32,283 ft ³		
Volume (Retained)	2,684 ft ³		
Volume (Unrouted)	-44 ft ³		
Error (Mass Balance)	0.1 %		

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
0.000	0.18	0.00	0.00	0.00	0.00	0	71.50
0.050	0.00	0.17	0.18	0.00	0.00	14	71.51
0.100	0.00	0.17	0.17	0.00	0.00	13	71.51
0.150	0.00	0.17	0.17	0.00	0.00	13	71.51
0.200	0.00	0.16	0.17	0.00	0.00	13	71.51
0.250	0.00	0.16	0.16	0.00	0.00	12	71.51
0.300	0.00	0.15	0.16	0.00	0.00	12	71.51
0.350	0.00	0.15	0.15	0.00	0.00	12	71.51
0.400	0.00	0.15	0.15	0.00	0.00	11	71.51
0.450	0.00	0.14	0.15	0.00	0.00	11	71.51
0.500	0.00	0.14	0.14	0.00	0.00	11	71.51
0.550	0.00	0.14	0.14	0.00	0.00	11	71.51
0.600	0.00	0.13	0.14	0.00	0.00	10	71.51
0.650	0.00	0.13	0.13	0.00	0.00	10	71.51
0.700	0.00	0.13	0.13	0.00	0.00	10	71.51
0.750	0.00	0.12	0.13	0.00	0.00	10	71.51
0.800	0.00	0.12	0.12	0.00	0.00	9	71.51
0.850	0.00	0.12	0.12	0.00	0.00	9	71.51
0.900	0.00	0.11	0.12	0.00	0.00	9	71.51
0.950	0.00	0.11	0.11	0.00	0.00	9	71.51
1.000	0.00	0.11	0.11	0.00	0.00	8	71.51
1.050	0.00	0.10	0.11	0.00	0.00	8	71.51
1.100	0.00	0.10	0.10	0.00	0.00	8	71.51
1.150	0.00	0.10	0.10	0.00	0.00	8	71.50
1.200	0.00	0.10	0.10	0.00	0.00	8	71.50
1.250	0.00	0.09	0.10	0.00	0.00	7	71.50
1.300	0.00	0.09	0.09	0.00	0.00	7	71.50
1.350	0.00	0.09	0.09	0.00	0.00	7	71.50
1.400	0.00	0.09	0.09	0.00	0.00	7	71.50
1.450	0.00	0.09	0.09	0.00	0.00	7	71.50
1.500	0.00	0.08	0.09	0.00	0.00	7	71.50
1.550	0.00	0.08	0.08	0.00	0.00	6	71.50
1.600	0.00	0.08	0.08	0.00	0.00	6	71.50
1.650	0.00	0.08	0.08	0.00	0.00	6	71.50
1.700	0.00	0.08	0.08	0.00	0.00	6	71.50
1.750	0.00	0.08	0.08	0.00	0.00	6	71.50
1.800	0.00	0.08	0.08	0.00	0.00	6	71.50
1.850	0.00	0.08	0.08	0.00	0.00	6	71.50
1.900	0.00	0.08	0.08	0.00	0.00	6	71.50
1.950	0.00	0.08	0.08	0.00	0.00	6	71.50
2.000	0.00	0.08	0.08	0.00	0.00	6	71.50
2.050	0.00	0.08	0.08	0.00	0.00	6	71.50

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
2.100	0.00	0.08	0.08	0.00	0.00	6	71.50
2.150	0.00	0.08	0.09	0.00	0.00	7	71.50
2.200	0.00	0.09	0.09	0.00	0.00	7	71.50
2.250	0.00	0.09	0.09	0.00	0.00	7	71.50
2.300	0.00	0.09	0.09	0.00	0.00	7	71.50
2.350	0.00	0.09	0.10	0.00	0.00	7	71.50
2.400	0.00	0.10	0.10	0.00	0.00	8	71.50
2.450	0.00	0.10	0.11	0.00	0.00	8	71.51
2.500	0.00	0.11	0.11	0.00	0.00	8	71.51
2.550	0.00	0.11	0.11	0.00	0.00	9	71.51
2.600	0.00	0.12	0.12	0.00	0.00	9	71.51
2.650	0.00	0.12	0.12	0.00	0.00	10	71.51
2.700	0.00	0.13	0.13	0.00	0.00	10	71.51
2.750	0.00	0.13	0.14	0.00	0.00	10	71.51
2.800	0.00	0.14	0.14	0.00	0.00	11	71.51
2.850	0.01	0.14	0.15	0.00	0.00	11	71.51
2.900	0.01	0.15	0.15	0.00	0.00	12	71.51
2.950	0.01	0.16	0.16	0.00	0.00	12	71.51
3.000	0.01	0.16	0.17	0.00	0.00	13	71.51
3.050	0.01	0.17	0.18	0.00	0.00	13	71.51
3.100	0.01	0.18	0.18	0.00	0.00	14	71.51
3.150	0.01	0.19	0.19	0.00	0.00	15	71.51
3.200	0.01	0.19	0.20	0.00	0.00	15	71.51
3.250	0.01	0.20	0.21	0.00	0.00	16	71.51
3.300	0.01	0.21	0.22	0.00	0.00	16	71.51
3.350	0.01	0.22	0.22	0.00	0.00	17	71.51
3.400	0.01	0.23	0.23	0.00	0.00	18	71.51
3.450	0.01	0.24	0.24	0.00	0.00	18	71.51
3.500	0.01	0.24	0.25	0.00	0.00	19	71.51
3.550	0.01	0.25	0.26	0.00	0.00	20	71.51
3.600	0.01	0.26	0.27	0.00	0.00	21	71.51
3.650	0.01	0.27	0.28	0.00	0.00	21	71.51
3.700	0.01	0.28	0.29	0.00	0.00	22	71.51
3.750	0.01	0.29	0.30	0.00	0.00	23	71.51
3.800	0.01	0.30	0.31	0.00	0.00	24	71.51
3.850	0.01	0.31	0.32	0.00	0.00	24	71.52
3.900	0.01	0.32	0.33	0.00	0.00	25	71.52
3.950	0.01	0.33	0.34	0.00	0.00	26	71.52
4.000	0.01	0.34	0.35	0.00	0.00	27	71.52
4.050	0.01	0.36	0.37	0.00	0.00	28	71.52
4.100	0.01	0.37	0.38	0.00	0.00	29	71.52
4.150	0.01	0.38	0.39	0.00	0.00	30	71.52

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
4.200	0.01	0.39	0.40	0.00	0.01	31	71.52
4.250	0.01	0.41	0.42	0.00	0.01	32	71.52
4.300	0.01	0.42	0.43	0.00	0.01	33	71.52
4.350	0.01	0.43	0.44	0.00	0.01	34	71.52
4.400	0.01	0.45	0.46	0.00	0.01	35	71.52
4.450	0.01	0.46	0.47	0.00	0.01	36	71.52
4.500	0.01	0.48	0.49	0.00	0.01	37	71.52
4.550	0.01	0.49	0.50	0.00	0.01	39	71.52
4.600	0.01	0.50	0.52	0.00	0.01	40	71.53
4.650	0.01	0.52	0.53	0.00	0.01	41	71.53
4.700	0.01	0.54	0.55	0.00	0.01	42	71.53
4.750	0.02	0.55	0.57	0.00	0.01	43	71.53
4.800	0.02	0.57	0.58	0.00	0.01	45	71.53
4.850	0.02	0.58	0.60	0.00	0.01	46	71.53
4.900	0.02	0.60	0.62	0.00	0.01	47	71.53
4.950	0.02	0.62	0.63	0.00	0.01	48	71.53
5.000	0.02	0.63	0.65	0.00	0.01	50	71.53
5.050	0.02	0.65	0.67	0.00	0.01	51	71.53
5.100	0.02	0.67	0.68	0.00	0.01	52	71.53
5.150	0.02	0.68	0.70	0.00	0.01	54	71.53
5.200	0.02	0.70	0.72	0.00	0.01	55	71.53
5.250	0.02	0.72	0.74	0.00	0.01	57	71.54
5.300	0.02	0.74	0.76	0.00	0.01	58	71.54
5.350	0.02	0.76	0.78	0.00	0.01	59	71.54
5.400	0.02	0.77	0.79	0.00	0.01	61	71.54
5.450	0.02	0.79	0.81	0.00	0.01	62	71.54
5.500	0.02	0.81	0.83	0.00	0.01	64	71.54
5.550	0.02	0.83	0.85	0.00	0.01	65	71.54
5.600	0.02	0.85	0.87	0.00	0.01	67	71.54
5.650	0.02	0.87	0.89	0.00	0.01	68	71.54
5.700	0.02	0.89	0.91	0.00	0.01	70	71.54
5.750	0.02	0.91	0.93	0.00	0.01	71	71.55
5.800	0.02	0.93	0.95	0.00	0.01	73	71.55
5.850	0.02	0.95	0.97	0.00	0.01	74	71.55
5.900	0.02	0.97	0.99	0.00	0.01	76	71.55
5.950	0.02	0.99	1.01	0.00	0.01	78	71.55
6.000	0.02	1.01	1.03	0.00	0.01	79	71.55
6.050	0.02	1.03	1.05	0.00	0.01	81	71.55
6.100	0.02	1.05	1.08	0.00	0.01	82	71.55
6.150	0.02	1.07	1.10	0.00	0.01	84	71.55
6.200	0.03	1.09	1.12	0.00	0.01	86	71.55
6.250	0.03	1.11	1.14	0.00	0.01	87	71.56

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
6.300	0.03	1.14	1.16	0.00	0.01	89	71.56
6.350	0.03	1.16	1.19	0.00	0.02	91	71.56
6.400	0.03	1.18	1.21	0.00	0.02	93	71.56
6.450	0.03	1.21	1.24	0.00	0.02	95	71.56
6.500	0.03	1.23	1.26	0.00	0.02	97	71.56
6.550	0.03	1.26	1.29	0.00	0.02	99	71.56
6.600	0.03	1.28	1.32	0.00	0.02	101	71.56
6.650	0.03	1.31	1.35	0.00	0.02	103	71.57
6.700	0.03	1.34	1.37	0.00	0.02	105	71.57
6.750	0.03	1.37	1.40	0.00	0.02	107	71.57
6.800	0.03	1.40	1.43	0.00	0.02	110	71.57
6.850	0.03	1.43	1.46	0.00	0.02	112	71.57
6.900	0.03	1.46	1.49	0.00	0.02	114	71.57
6.950	0.04	1.49	1.52	0.00	0.02	117	71.57
7.000	0.04	1.52	1.56	0.00	0.02	119	71.58
7.050	0.04	1.55	1.59	0.00	0.02	122	71.58
7.100	0.04	1.58	1.62	0.00	0.02	124	71.58
7.150	0.04	1.61	1.66	0.00	0.02	127	71.58
7.200	0.04	1.65	1.69	0.00	0.02	130	71.58
7.250	0.04	1.68	1.73	0.00	0.02	132	71.58
7.300	0.04	1.72	1.76	0.00	0.02	135	71.59
7.350	0.04	1.75	1.80	0.00	0.02	138	71.59
7.400	0.04	1.79	1.83	0.00	0.02	140	71.59
7.450	0.04	1.82	1.87	0.00	0.02	143	71.59
7.500	0.04	1.86	1.91	0.00	0.02	146	71.59
7.550	0.04	1.90	1.95	0.00	0.02	149	71.59
7.600	0.04	1.94	1.99	0.00	0.03	152	71.60
7.650	0.05	1.97	2.03	0.00	0.03	155	71.60
7.700	0.05	2.01	2.07	0.00	0.03	158	71.60
7.750	0.05	2.05	2.11	0.00	0.03	161	71.60
7.800	0.05	2.09	2.15	0.00	0.03	164	71.60
7.850	0.05	2.13	2.19	0.00	0.03	168	71.61
7.900	0.05	2.17	2.23	0.00	0.03	171	71.61
7.950	0.05	2.22	2.27	0.00	0.03	174	71.61
8.000	0.05	2.26	2.32	0.00	0.03	177	71.61
8.050	0.05	2.30	2.36	0.00	0.03	181	71.61
8.100	0.05	2.34	2.40	0.00	0.03	184	71.62
8.150	0.05	2.39	2.45	0.00	0.03	188	71.62
8.200	0.06	2.43	2.50	0.00	0.03	191	71.62
8.250	0.06	2.48	2.55	0.00	0.03	195	71.62
8.300	0.06	2.53	2.60	0.00	0.03	199	71.63
8.350	0.06	2.58	2.65	0.00	0.03	203	71.63

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
8.400	0.06	2.63	2.70	0.00	0.03	207	71.63
8.450	0.06	2.69	2.76	0.00	0.03	211	71.63
8.500	0.06	2.74	2.81	0.00	0.04	216	71.64
8.550	0.07	2.80	2.87	0.00	0.04	220	71.64
8.600	0.07	2.86	2.93	0.00	0.04	225	71.64
8.650	0.07	2.92	3.00	0.00	0.04	229	71.65
8.700	0.07	2.98	3.06	0.00	0.04	234	71.65
8.750	0.07	3.05	3.13	0.00	0.04	239	71.65
8.800	0.07	3.11	3.19	0.00	0.04	245	71.65
8.850	0.08	3.18	3.26	0.00	0.04	250	71.66
8.900	0.08	3.25	3.33	0.00	0.04	255	71.66
8.950	0.08	3.32	3.40	0.00	0.04	261	71.66
9.000	0.08	3.39	3.48	0.00	0.04	266	71.67
9.050	0.08	3.46	3.55	0.00	0.05	273	71.67
9.100	0.08	3.54	3.63	0.00	0.05	280	71.68
9.150	0.09	3.61	3.71	0.00	0.05	287	71.68
9.200	0.09	3.69	3.78	0.00	0.05	295	71.68
9.250	0.09	3.77	3.87	0.00	0.05	302	71.69
9.300	0.09	3.85	3.95	0.00	0.05	310	71.69
9.350	0.09	3.93	4.03	0.00	0.05	318	71.70
9.400	0.09	4.01	4.12	0.00	0.05	326	71.70
9.450	0.10	4.10	4.20	0.00	0.05	334	71.70
9.500	0.10	4.18	4.29	0.00	0.05	342	71.71
9.550	0.10	4.27	4.38	0.00	0.06	351	71.71
9.600	0.10	4.36	4.47	0.00	0.06	359	71.72
9.650	0.10	4.44	4.56	0.00	0.06	368	71.72
9.700	0.11	4.53	4.65	0.00	0.06	377	71.73
9.750	0.11	4.63	4.75	0.00	0.06	385	71.73
9.800	0.11	4.72	4.84	0.00	0.06	394	71.73
9.850	0.11	4.81	4.94	0.00	0.06	403	71.74
9.900	0.11	4.91	5.04	0.00	0.06	413	71.74
9.950	0.11	5.00	5.14	0.00	0.07	422	71.75
10.000	0.12	5.10	5.24	0.00	0.07	431	71.75
10.050	0.12	5.20	5.34	0.00	0.07	441	71.76
10.100	0.12	5.30	5.44	0.00	0.07	451	71.76
10.150	0.12	5.41	5.55	0.00	0.07	461	71.77
10.200	0.13	5.51	5.65	0.00	0.07	471	71.77
10.250	0.13	5.62	5.77	0.00	0.07	482	71.78
10.300	0.13	5.74	5.88	0.00	0.07	493	71.79
10.350	0.14	5.85	6.01	0.00	0.08	504	71.79
10.400	0.14	5.97	6.13	0.00	0.08	516	71.80
10.450	0.14	6.10	6.26	0.00	0.08	528	71.80

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
10.500	0.15	6.23	6.39	0.00	0.08	540	71.81
10.550	0.15	6.36	6.53	0.00	0.08	553	71.82
10.600	0.15	6.50	6.67	0.00	0.08	566	71.82
10.650	0.16	6.64	6.81	0.00	0.09	580	71.83
10.700	0.16	6.78	6.96	0.00	0.09	594	71.84
10.750	0.17	6.93	7.11	0.00	0.09	609	71.84
10.800	0.17	7.08	7.26	0.00	0.09	623	71.85
10.850	0.17	7.23	7.42	0.00	0.09	639	71.86
10.900	0.18	7.39	7.58	0.00	0.10	654	71.87
10.950	0.18	7.55	7.75	0.00	0.10	670	71.88
11.000	0.18	7.72	7.92	0.00	0.10	686	71.88
11.050	0.19	7.88	8.09	0.00	0.10	703	71.89
11.100	0.20	8.06	8.27	0.00	0.10	720	71.90
11.150	0.21	8.25	8.46	0.00	0.11	739	71.91
11.200	0.22	8.45	8.67	0.00	0.11	759	71.92
11.250	0.23	8.67	8.90	0.00	0.11	780	71.93
11.300	0.23	8.90	9.13	0.00	0.12	803	71.94
11.350	0.24	9.14	9.37	0.00	0.12	826	71.95
11.400	0.25	9.38	9.63	0.00	0.12	850	71.97
11.450	0.26	9.64	9.89	0.00	0.13	876	71.98
11.500	0.27	9.91	10.17	0.00	0.13	902	71.99
11.550	0.28	10.19	10.46	0.00	0.13	929	72.01
11.600	0.30	10.51	10.78	0.00	0.13	956	72.02
11.650	0.32	10.86	11.13	0.00	0.14	985	72.03
11.700	0.34	11.23	11.51	0.00	0.14	1,017	72.05
11.750	0.36	11.65	11.93	0.00	0.14	1,052	72.06
11.800	0.37	12.09	12.38	0.00	0.14	1,090	72.08
11.850	0.38	12.55	12.84	0.00	0.15	1,129	72.10
11.900	0.38	13.01	13.31	0.00	0.15	1,169	72.12
11.950	0.39	13.49	13.79	0.00	0.15	1,209	72.14
12.000	0.41	13.98	14.29	0.00	0.15	1,251	72.16
12.050	0.43	14.50	14.81	0.00	0.16	1,298	72.18
12.100	0.44	15.04	15.36	0.00	0.16	1,349	72.20
12.150	0.44	15.58	15.91	0.00	0.16	1,400	72.22
12.200	0.43	16.11	16.45	0.00	0.17	1,450	72.25
12.250	0.41	16.61	16.95	0.00	0.17	1,498	72.27
12.300	0.41	17.09	17.44	0.00	0.17	1,543	72.29
12.350	0.40	17.55	17.90	0.00	0.18	1,586	72.30
12.400	0.40	17.99	18.35	0.00	0.18	1,628	72.32
12.450	0.39	18.42	18.78	0.00	0.18	1,668	72.34
12.500	0.39	18.83	19.20	0.00	0.18	1,706	72.36
12.550	0.38	19.23	19.60	0.00	0.19	1,742	72.37

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
12.600	0.38	19.61	19.99	0.00	0.19	1,778	72.39
12.650	0.38	19.99	20.37	0.00	0.19	1,812	72.40
12.700	0.37	20.35	20.74	0.00	0.19	1,846	72.42
12.750	0.37	20.71	21.10	0.00	0.19	1,879	72.43
12.800	0.37	21.06	21.46	0.00	0.20	1,911	72.45
12.850	0.37	21.41	21.81	0.00	0.20	1,943	72.46
12.900	0.37	21.75	22.16	0.00	0.20	1,975	72.48
12.950	0.37	22.09	22.50	0.00	0.20	2,006	72.49
13.000	0.37	22.42	22.83	0.00	0.20	2,036	72.50
13.050	0.37	22.75	23.16	0.00	0.21	2,065	72.51
13.100	0.37	23.08	23.49	0.00	0.21	2,094	72.53
13.150	0.37	23.40	23.82	0.00	0.21	2,122	72.54
13.200	0.37	23.72	24.14	0.00	0.21	2,150	72.55
13.250	0.37	24.03	24.45	0.00	0.21	2,178	72.56
13.300	0.37	24.34	24.77	0.00	0.21	2,205	72.57
13.350	0.37	24.65	25.08	0.00	0.21	2,232	72.59
13.400	0.35	24.94	25.37	0.00	0.22	2,257	72.60
13.450	0.27	25.12	25.56	0.00	0.22	2,274	72.60
13.500	0.27	25.23	25.66	0.00	0.22	2,283	72.61
13.550	0.27	25.34	25.77	0.00	0.22	2,293	72.61
13.600	0.27	25.44	25.88	0.00	0.22	2,302	72.62
13.650	0.27	25.54	25.98	0.00	0.22	2,310	72.62
13.700	0.27	25.64	26.08	0.00	0.22	2,319	72.62
13.750	0.27	25.73	26.17	0.00	0.22	2,328	72.63
13.800	0.27	25.83	26.27	0.00	0.22	2,336	72.63
13.850	0.27	25.92	26.36	0.00	0.22	2,344	72.63
13.900	0.26	26.01	26.45	0.00	0.22	2,352	72.64
13.950	0.26	26.10	26.54	0.00	0.22	2,359	72.64
14.000	0.26	26.18	26.62	0.00	0.22	2,367	72.64
14.050	0.26	26.26	26.71	0.00	0.22	2,374	72.65
14.100	0.26	26.34	26.79	0.00	0.22	2,381	72.65
14.150	0.26	26.42	26.87	0.00	0.22	2,388	72.65
14.200	0.26	26.50	26.95	0.00	0.22	2,395	72.66
14.250	0.26	26.58	27.02	0.00	0.22	2,402	72.66
14.300	0.26	26.65	27.10	0.00	0.22	2,408	72.66
14.350	0.26	26.72	27.17	0.00	0.22	2,415	72.66
14.400	0.26	26.80	27.24	0.00	0.22	2,421	72.67
14.450	0.26	26.87	27.32	0.00	0.22	2,427	72.67
14.500	0.26	26.94	27.39	0.00	0.22	2,434	72.67
14.550	0.26	27.00	27.45	0.00	0.23	2,440	72.67
14.600	0.26	27.07	27.52	0.00	0.23	2,446	72.68
14.650	0.26	27.13	27.59	0.00	0.23	2,453	72.68

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
14.700	0.26	27.20	27.65	0.00	0.23	2,459	72.68
14.750	0.26	27.26	27.71	0.00	0.23	2,465	72.68
14.800	0.26	27.32	27.78	0.00	0.23	2,471	72.69
14.850	0.26	27.38	27.84	0.00	0.23	2,476	72.69
14.900	0.26	27.44	27.90	0.00	0.23	2,482	72.69
14.950	0.26	27.50	27.95	0.00	0.23	2,488	72.69
15.000	0.26	27.56	28.01	0.00	0.23	2,493	72.70
15.050	0.26	27.61	28.07	0.00	0.23	2,498	72.70
15.100	0.25	27.66	28.12	0.00	0.23	2,503	72.70
15.150	0.25	27.72	28.17	0.00	0.23	2,508	72.70
15.200	0.25	27.77	28.23	0.00	0.23	2,513	72.70
15.250	0.25	27.82	28.28	0.00	0.23	2,518	72.71
15.300	0.25	27.87	28.33	0.00	0.23	2,523	72.71
15.350	0.25	27.92	28.38	0.00	0.23	2,527	72.71
15.400	0.25	27.96	28.42	0.00	0.23	2,532	72.71
15.450	0.25	28.01	28.47	0.00	0.23	2,536	72.71
15.500	0.25	28.05	28.51	0.00	0.23	2,541	72.71
15.550	0.25	28.10	28.56	0.00	0.23	2,545	72.72
15.600	0.25	28.14	28.60	0.00	0.23	2,549	72.72
15.650	0.25	28.18	28.64	0.00	0.23	2,553	72.72
15.700	0.25	28.22	28.68	0.00	0.23	2,557	72.72
15.750	0.25	28.26	28.72	0.00	0.23	2,560	72.72
15.800	0.25	28.30	28.76	0.00	0.23	2,564	72.72
15.850	0.25	28.34	28.80	0.00	0.23	2,568	72.72
15.900	0.25	28.37	28.84	0.00	0.23	2,571	72.73
15.950	0.25	28.41	28.87	0.00	0.23	2,574	72.73
16.000	0.25	28.44	28.91	0.00	0.23	2,578	72.73
16.050	0.25	28.48	28.94	0.00	0.23	2,581	72.73
16.100	0.25	28.51	28.97	0.00	0.23	2,584	72.73
16.150	0.25	28.54	29.00	0.00	0.23	2,587	72.73
16.200	0.25	28.57	29.03	0.00	0.23	2,590	72.73
16.250	0.25	28.60	29.06	0.00	0.23	2,593	72.73
16.300	0.25	28.63	29.09	0.00	0.23	2,596	72.74
16.350	0.25	28.66	29.12	0.00	0.23	2,598	72.74
16.400	0.25	28.69	29.15	0.00	0.23	2,601	72.74
16.450	0.25	28.71	29.18	0.00	0.23	2,604	72.74
16.500	0.25	28.74	29.21	0.00	0.23	2,606	72.74
16.550	0.25	28.77	29.23	0.00	0.23	2,609	72.74
16.600	0.25	28.79	29.26	0.00	0.23	2,611	72.74
16.650	0.25	28.82	29.28	0.00	0.23	2,614	72.74
16.700	0.25	28.84	29.31	0.00	0.23	2,616	72.74
16.750	0.25	28.87	29.33	0.00	0.23	2,618	72.74

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
16.800	0.25	28.89	29.36	0.00	0.23	2,621	72.75
16.850	0.25	28.92	29.38	0.00	0.23	2,623	72.75
16.900	0.25	28.94	29.41	0.00	0.23	2,625	72.75
16.950	0.24	28.96	29.43	0.00	0.23	2,627	72.75
17.000	0.24	28.98	29.45	0.00	0.23	2,629	72.75
17.050	0.24	29.00	29.47	0.00	0.23	2,631	72.75
17.100	0.24	29.02	29.49	0.00	0.23	2,633	72.75
17.150	0.18	28.98	29.45	0.00	0.23	2,629	72.75
17.200	0.13	28.83	29.30	0.00	0.23	2,615	72.74
17.250	0.13	28.63	29.09	0.00	0.23	2,595	72.74
17.300	0.13	28.42	28.89	0.00	0.23	2,576	72.73
17.350	0.13	28.22	28.68	0.00	0.23	2,557	72.72
17.400	0.13	28.02	28.48	0.00	0.23	2,537	72.71
17.450	0.13	27.82	28.28	0.00	0.23	2,518	72.71
17.500	0.13	27.62	28.08	0.00	0.23	2,499	72.70
17.550	0.13	27.42	27.87	0.00	0.23	2,480	72.69
17.600	0.13	27.22	27.68	0.00	0.23	2,461	72.68
17.650	0.13	27.03	27.48	0.00	0.23	2,442	72.68
17.700	0.13	26.83	27.28	0.00	0.22	2,424	72.67
17.750	0.13	26.63	27.08	0.00	0.22	2,407	72.66
17.800	0.12	26.44	26.88	0.00	0.22	2,389	72.65
17.850	0.12	26.24	26.69	0.00	0.22	2,372	72.65
17.900	0.12	26.05	26.49	0.00	0.22	2,355	72.64
17.950	0.12	25.86	26.30	0.00	0.22	2,338	72.63
18.000	0.12	25.67	26.10	0.00	0.22	2,321	72.62
18.050	0.12	25.47	25.91	0.00	0.22	2,305	72.62
18.100	0.12	25.28	25.72	0.00	0.22	2,288	72.61
18.150	0.12	25.09	25.53	0.00	0.22	2,271	72.60
18.200	0.12	24.91	25.34	0.00	0.22	2,255	72.60
18.250	0.12	24.72	25.15	0.00	0.21	2,238	72.59
18.300	0.12	24.53	24.96	0.00	0.21	2,222	72.58
18.350	0.12	24.35	24.78	0.00	0.21	2,206	72.57
18.400	0.12	24.17	24.59	0.00	0.21	2,190	72.57
18.450	0.12	23.98	24.41	0.00	0.21	2,174	72.56
18.500	0.12	23.80	24.23	0.00	0.21	2,158	72.55
18.550	0.12	23.63	24.05	0.00	0.21	2,142	72.55
18.600	0.12	23.45	23.87	0.00	0.21	2,126	72.54
18.650	0.12	23.27	23.69	0.00	0.21	2,111	72.53
18.700	0.12	23.10	23.51	0.00	0.21	2,096	72.53
18.750	0.12	22.92	23.34	0.00	0.21	2,080	72.52
18.800	0.12	22.75	23.16	0.00	0.21	2,065	72.51
18.850	0.12	22.58	22.99	0.00	0.21	2,050	72.51

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
18.900	0.12	22.41	22.82	0.00	0.20	2,035	72.50
18.950	0.12	22.24	22.65	0.00	0.20	2,020	72.49
19.000	0.12	22.07	22.48	0.00	0.20	2,004	72.49
19.050	0.12	21.91	22.31	0.00	0.20	1,989	72.48
19.100	0.12	21.75	22.15	0.00	0.20	1,974	72.47
19.150	0.12	21.58	21.98	0.00	0.20	1,959	72.47
19.200	0.12	21.42	21.82	0.00	0.20	1,944	72.46
19.250	0.12	21.26	21.66	0.00	0.20	1,930	72.46
19.300	0.12	21.11	21.50	0.00	0.20	1,915	72.45
19.350	0.12	20.95	21.34	0.00	0.20	1,901	72.44
19.400	0.12	20.80	21.19	0.00	0.19	1,887	72.44
19.450	0.12	20.65	21.03	0.00	0.19	1,873	72.43
19.500	0.12	20.49	20.88	0.00	0.19	1,859	72.42
19.550	0.12	20.35	20.73	0.00	0.19	1,845	72.42
19.600	0.12	20.20	20.58	0.00	0.19	1,832	72.41
19.650	0.12	20.05	20.43	0.00	0.19	1,818	72.41
19.700	0.12	19.91	20.29	0.00	0.19	1,805	72.40
19.750	0.12	19.76	20.14	0.00	0.19	1,792	72.39
19.800	0.12	19.62	20.00	0.00	0.19	1,778	72.39
19.850	0.12	19.48	19.85	0.00	0.19	1,765	72.38
19.900	0.12	19.34	19.71	0.00	0.19	1,753	72.38
19.950	0.12	19.20	19.57	0.00	0.19	1,740	72.37
20.000	0.12	19.07	19.43	0.00	0.18	1,727	72.37
20.050	0.04	18.86	19.22	0.00	0.18	1,708	72.36
20.100	0.04	18.58	18.94	0.00	0.18	1,682	72.35
20.150	0.04	18.30	18.66	0.00	0.18	1,657	72.33
20.200	0.04	18.02	18.38	0.00	0.18	1,631	72.32
20.250	0.04	17.75	18.11	0.00	0.18	1,605	72.31
20.300	0.04	17.48	17.83	0.00	0.18	1,580	72.30
20.350	0.04	17.22	17.56	0.00	0.17	1,555	72.29
20.400	0.04	16.95	17.29	0.00	0.17	1,530	72.28
20.450	0.04	16.69	17.03	0.00	0.17	1,505	72.27
20.500	0.04	16.43	16.77	0.00	0.17	1,480	72.26
20.550	0.04	16.17	16.51	0.00	0.17	1,456	72.25
20.600	0.04	15.92	16.25	0.00	0.17	1,432	72.24
20.650	0.04	15.67	16.00	0.00	0.16	1,409	72.23
20.700	0.04	15.42	15.75	0.00	0.16	1,385	72.22
20.750	0.04	15.18	15.50	0.00	0.16	1,362	72.21
20.800	0.04	14.93	15.25	0.00	0.16	1,339	72.20
20.850	0.04	14.69	15.01	0.00	0.16	1,316	72.19
20.900	0.04	14.46	14.77	0.00	0.16	1,294	72.18
20.950	0.04	14.22	14.53	0.00	0.16	1,272	72.17

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
21.000	0.04	13.99	14.30	0.00	0.15	1,252	72.16
21.050	0.04	13.76	14.06	0.00	0.15	1,232	72.15
21.100	0.04	13.53	13.83	0.00	0.15	1,213	72.14
21.150	0.04	13.30	13.60	0.00	0.15	1,193	72.13
21.200	0.04	13.08	13.38	0.00	0.15	1,174	72.12
21.250	0.04	12.86	13.15	0.00	0.15	1,156	72.11
21.300	0.04	12.64	12.93	0.00	0.15	1,137	72.10
21.350	0.04	12.42	12.71	0.00	0.14	1,118	72.10
21.400	0.04	12.21	12.50	0.00	0.14	1,100	72.09
21.450	0.04	12.00	12.28	0.00	0.14	1,082	72.08
21.500	0.04	11.79	12.07	0.00	0.14	1,064	72.07
21.550	0.04	11.58	11.86	0.00	0.14	1,046	72.06
21.600	0.04	11.37	11.65	0.00	0.14	1,029	72.05
21.650	0.04	11.17	11.44	0.00	0.14	1,011	72.05
21.700	0.04	10.97	11.24	0.00	0.14	994	72.04
21.750	0.04	10.77	11.04	0.00	0.14	977	72.03
21.800	0.03	10.57	10.84	0.00	0.13	960	72.02
21.850	0.03	10.37	10.64	0.00	0.13	944	72.01
21.900	0.03	10.18	10.44	0.00	0.13	927	72.01
21.950	0.03	9.99	10.25	0.00	0.13	910	72.00
22.000	0.03	9.80	10.06	0.00	0.13	892	71.99
22.050	0.03	9.62	9.87	0.00	0.13	874	71.98
22.100	0.03	9.44	9.69	0.00	0.12	856	71.97
22.150	0.03	9.27	9.51	0.00	0.12	839	71.96
22.200	0.03	9.10	9.33	0.00	0.12	822	71.95
22.250	0.03	8.93	9.17	0.00	0.12	806	71.94
22.300	0.03	8.77	9.00	0.00	0.11	790	71.94
22.350	0.03	8.61	8.84	0.00	0.11	775	71.93
22.400	0.03	8.46	8.68	0.00	0.11	759	71.92
22.450	0.03	8.31	8.52	0.00	0.11	744	71.91
22.500	0.03	8.16	8.37	0.00	0.11	730	71.91
22.550	0.03	8.02	8.22	0.00	0.10	716	71.90
22.600	0.03	7.88	8.08	0.00	0.10	702	71.89
22.650	0.03	7.74	7.94	0.00	0.10	688	71.88
22.700	0.03	7.60	7.80	0.00	0.10	675	71.88
22.750	0.03	7.47	7.67	0.00	0.10	662	71.87
22.800	0.03	7.35	7.54	0.00	0.10	650	71.87
22.850	0.03	7.22	7.41	0.00	0.09	637	71.86
22.900	0.03	7.10	7.28	0.00	0.09	625	71.85
22.950	0.03	6.98	7.16	0.00	0.09	613	71.85
23.000	0.03	6.86	7.04	0.00	0.09	602	71.84
23.050	0.03	6.75	6.92	0.00	0.09	591	71.84

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 1 year

Scenario: Post-Development 1 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
23.100	0.03	6.63	6.81	0.00	0.09	580	71.83
23.150	0.03	6.53	6.69	0.00	0.08	569	71.82
23.200	0.03	6.42	6.59	0.00	0.08	559	71.82
23.250	0.03	6.31	6.48	0.00	0.08	548	71.81
23.300	0.03	6.21	6.37	0.00	0.08	539	71.81
23.350	0.03	6.11	6.27	0.00	0.08	529	71.80
23.400	0.03	6.01	6.17	0.00	0.08	519	71.80
23.450	0.03	5.92	6.07	0.00	0.08	510	71.79
23.500	0.03	5.82	5.98	0.00	0.08	501	71.79
23.550	0.03	5.73	5.88	0.00	0.07	492	71.79
23.600	0.03	5.64	5.79	0.00	0.07	484	71.78
23.650	0.03	5.56	5.70	0.00	0.07	475	71.78
23.700	0.03	5.47	5.61	0.00	0.07	467	71.77
23.750	0.03	5.39	5.53	0.00	0.07	459	71.77
23.800	0.03	5.30	5.44	0.00	0.07	451	71.76
23.850	0.03	5.22	5.36	0.00	0.07	443	71.76
23.900	0.03	5.15	5.28	0.00	0.07	436	71.76
23.950	0.03	5.07	5.20	0.00	0.07	428	71.75
24.000	0.03	4.99	5.12	0.00	0.06	421	71.75

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
0.000	0.18	0.00	0.00	0.00	0.00	0	71.50
0.050	0.00	0.17	0.18	0.00	0.00	14	71.51
0.100	0.00	0.17	0.17	0.00	0.00	13	71.51
0.150	0.00	0.17	0.17	0.00	0.00	13	71.51
0.200	0.00	0.16	0.17	0.00	0.00	13	71.51
0.250	0.00	0.16	0.16	0.00	0.00	12	71.51
0.300	0.00	0.15	0.16	0.00	0.00	12	71.51
0.350	0.00	0.15	0.15	0.00	0.00	12	71.51
0.400	0.00	0.15	0.15	0.00	0.00	11	71.51
0.450	0.00	0.14	0.15	0.00	0.00	11	71.51
0.500	0.00	0.14	0.14	0.00	0.00	11	71.51
0.550	0.00	0.14	0.14	0.00	0.00	11	71.51
0.600	0.00	0.13	0.14	0.00	0.00	10	71.51
0.650	0.00	0.13	0.13	0.00	0.00	10	71.51
0.700	0.00	0.13	0.13	0.00	0.00	10	71.51
0.750	0.00	0.12	0.13	0.00	0.00	10	71.51
0.800	0.00	0.12	0.12	0.00	0.00	9	71.51
0.850	0.00	0.12	0.12	0.00	0.00	9	71.51
0.900	0.00	0.11	0.12	0.00	0.00	9	71.51
0.950	0.00	0.11	0.11	0.00	0.00	9	71.51
1.000	0.00	0.11	0.11	0.00	0.00	9	71.51
1.050	0.00	0.11	0.11	0.00	0.00	9	71.51
1.100	0.00	0.11	0.12	0.00	0.00	9	71.51
1.150	0.00	0.12	0.12	0.00	0.00	9	71.51
1.200	0.00	0.12	0.12	0.00	0.00	9	71.51
1.250	0.00	0.13	0.13	0.00	0.00	10	71.51
1.300	0.01	0.13	0.14	0.00	0.00	10	71.51
1.350	0.01	0.14	0.14	0.00	0.00	11	71.51
1.400	0.01	0.15	0.15	0.00	0.00	12	71.51
1.450	0.01	0.16	0.16	0.00	0.00	12	71.51
1.500	0.01	0.17	0.17	0.00	0.00	13	71.51
1.550	0.01	0.18	0.18	0.00	0.00	14	71.51
1.600	0.01	0.19	0.19	0.00	0.00	15	71.51
1.650	0.01	0.20	0.20	0.00	0.00	16	71.51
1.700	0.01	0.21	0.22	0.00	0.00	17	71.51
1.750	0.01	0.22	0.23	0.00	0.00	18	71.51
1.800	0.01	0.24	0.24	0.00	0.00	19	71.51
1.850	0.01	0.25	0.26	0.00	0.00	20	71.51
1.900	0.01	0.27	0.27	0.00	0.00	21	71.51
1.950	0.01	0.28	0.29	0.00	0.00	22	71.51
2.000	0.01	0.30	0.30	0.00	0.00	23	71.51
2.050	0.01	0.31	0.32	0.00	0.00	24	71.52

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
2.100	0.01	0.33	0.34	0.00	0.00	26	71.52
2.150	0.01	0.34	0.35	0.00	0.00	27	71.52
2.200	0.01	0.36	0.37	0.00	0.00	28	71.52
2.250	0.01	0.38	0.39	0.00	0.00	30	71.52
2.300	0.01	0.40	0.41	0.00	0.01	31	71.52
2.350	0.02	0.42	0.43	0.00	0.01	33	71.52
2.400	0.02	0.44	0.45	0.00	0.01	34	71.52
2.450	0.02	0.46	0.47	0.00	0.01	36	71.52
2.500	0.02	0.48	0.49	0.00	0.01	38	71.52
2.550	0.02	0.50	0.51	0.00	0.01	39	71.52
2.600	0.02	0.52	0.54	0.00	0.01	41	71.53
2.650	0.02	0.55	0.56	0.00	0.01	43	71.53
2.700	0.02	0.57	0.59	0.00	0.01	45	71.53
2.750	0.02	0.60	0.61	0.00	0.01	47	71.53
2.800	0.02	0.62	0.64	0.00	0.01	49	71.53
2.850	0.02	0.65	0.67	0.00	0.01	51	71.53
2.900	0.02	0.68	0.70	0.00	0.01	53	71.53
2.950	0.02	0.71	0.72	0.00	0.01	56	71.54
3.000	0.02	0.73	0.75	0.00	0.01	58	71.54
3.050	0.02	0.76	0.78	0.00	0.01	60	71.54
3.100	0.03	0.79	0.81	0.00	0.01	62	71.54
3.150	0.03	0.82	0.85	0.00	0.01	65	71.54
3.200	0.03	0.86	0.88	0.00	0.01	67	71.54
3.250	0.03	0.89	0.91	0.00	0.01	70	71.54
3.300	0.03	0.92	0.94	0.00	0.01	72	71.55
3.350	0.03	0.95	0.98	0.00	0.01	75	71.55
3.400	0.03	0.98	1.01	0.00	0.01	77	71.55
3.450	0.03	1.02	1.04	0.00	0.01	80	71.55
3.500	0.03	1.05	1.08	0.00	0.01	83	71.55
3.550	0.03	1.09	1.11	0.00	0.01	85	71.55
3.600	0.03	1.12	1.15	0.00	0.01	88	71.56
3.650	0.03	1.16	1.19	0.00	0.02	91	71.56
3.700	0.03	1.19	1.22	0.00	0.02	94	71.56
3.750	0.03	1.23	1.26	0.00	0.02	96	71.56
3.800	0.03	1.26	1.30	0.00	0.02	99	71.56
3.850	0.04	1.30	1.33	0.00	0.02	102	71.56
3.900	0.04	1.34	1.37	0.00	0.02	105	71.57
3.950	0.04	1.37	1.41	0.00	0.02	108	71.57
4.000	0.04	1.41	1.45	0.00	0.02	111	71.57
4.050	0.04	1.45	1.49	0.00	0.02	114	71.57
4.100	0.04	1.49	1.53	0.00	0.02	117	71.57
4.150	0.04	1.53	1.57	0.00	0.02	120	71.58

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
4.200	0.04	1.57	1.61	0.00	0.02	123	71.58
4.250	0.04	1.61	1.65	0.00	0.02	126	71.58
4.300	0.04	1.64	1.69	0.00	0.02	129	71.58
4.350	0.04	1.68	1.73	0.00	0.02	132	71.58
4.400	0.04	1.72	1.77	0.00	0.02	135	71.59
4.450	0.04	1.76	1.81	0.00	0.02	139	71.59
4.500	0.04	1.80	1.85	0.00	0.02	142	71.59
4.550	0.04	1.85	1.89	0.00	0.02	145	71.59
4.600	0.05	1.89	1.94	0.00	0.02	148	71.59
4.650	0.05	1.93	1.98	0.00	0.03	151	71.60
4.700	0.05	1.97	2.02	0.00	0.03	155	71.60
4.750	0.05	2.01	2.06	0.00	0.03	158	71.60
4.800	0.05	2.05	2.11	0.00	0.03	161	71.60
4.850	0.05	2.09	2.15	0.00	0.03	165	71.60
4.900	0.05	2.14	2.19	0.00	0.03	168	71.61
4.950	0.05	2.18	2.23	0.00	0.03	171	71.61
5.000	0.05	2.22	2.28	0.00	0.03	174	71.61
5.050	0.05	2.26	2.32	0.00	0.03	178	71.61
5.100	0.05	2.31	2.37	0.00	0.03	181	71.61
5.150	0.05	2.35	2.41	0.00	0.03	185	71.62
5.200	0.05	2.39	2.45	0.00	0.03	188	71.62
5.250	0.05	2.43	2.50	0.00	0.03	191	71.62
5.300	0.05	2.48	2.54	0.00	0.03	195	71.62
5.350	0.05	2.52	2.59	0.00	0.03	198	71.63
5.400	0.06	2.56	2.63	0.00	0.03	201	71.63
5.450	0.06	2.61	2.68	0.00	0.03	205	71.63
5.500	0.06	2.65	2.72	0.00	0.03	208	71.63
5.550	0.06	2.69	2.76	0.00	0.04	212	71.63
5.600	0.06	2.74	2.81	0.00	0.04	215	71.64
5.650	0.06	2.78	2.85	0.00	0.04	219	71.64
5.700	0.06	2.83	2.90	0.00	0.04	222	71.64
5.750	0.06	2.87	2.95	0.00	0.04	226	71.64
5.800	0.06	2.91	2.99	0.00	0.04	229	71.64
5.850	0.06	2.96	3.04	0.00	0.04	232	71.65
5.900	0.06	3.00	3.08	0.00	0.04	236	71.65
5.950	0.06	3.05	3.13	0.00	0.04	239	71.65
6.000	0.06	3.09	3.17	0.00	0.04	243	71.65
6.050	0.06	3.14	3.22	0.00	0.04	246	71.66
6.100	0.06	3.18	3.26	0.00	0.04	250	71.66
6.150	0.07	3.23	3.31	0.00	0.04	254	71.66
6.200	0.07	3.27	3.36	0.00	0.04	257	71.66
6.250	0.07	3.32	3.41	0.00	0.04	261	71.67

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
6.300	0.07	3.37	3.46	0.00	0.04	265	71.67
6.350	0.07	3.42	3.51	0.00	0.04	269	71.67
6.400	0.07	3.47	3.56	0.00	0.05	274	71.67
6.450	0.07	3.53	3.62	0.00	0.05	279	71.68
6.500	0.07	3.58	3.67	0.00	0.05	284	71.68
6.550	0.08	3.64	3.73	0.00	0.05	290	71.68
6.600	0.08	3.69	3.79	0.00	0.05	295	71.68
6.650	0.08	3.75	3.85	0.00	0.05	301	71.69
6.700	0.08	3.81	3.91	0.00	0.05	306	71.69
6.750	0.08	3.87	3.97	0.00	0.05	312	71.69
6.800	0.08	3.93	4.04	0.00	0.05	318	71.70
6.850	0.08	4.00	4.10	0.00	0.05	324	71.70
6.900	0.09	4.06	4.17	0.00	0.05	331	71.70
6.950	0.09	4.13	4.23	0.00	0.05	337	71.71
7.000	0.09	4.19	4.30	0.00	0.05	343	71.71
7.050	0.09	4.26	4.37	0.00	0.06	350	71.71
7.100	0.09	4.33	4.44	0.00	0.06	356	71.72
7.150	0.09	4.40	4.51	0.00	0.06	363	71.72
7.200	0.09	4.47	4.58	0.00	0.06	370	71.72
7.250	0.10	4.54	4.66	0.00	0.06	377	71.73
7.300	0.10	4.61	4.73	0.00	0.06	384	71.73
7.350	0.10	4.69	4.81	0.00	0.06	391	71.73
7.400	0.10	4.76	4.88	0.00	0.06	398	71.74
7.450	0.10	4.84	4.96	0.00	0.06	406	71.74
7.500	0.10	4.91	5.04	0.00	0.06	413	71.74
7.550	0.10	4.99	5.12	0.00	0.06	421	71.75
7.600	0.11	5.07	5.20	0.00	0.07	428	71.75
7.650	0.11	5.15	5.28	0.00	0.07	436	71.76
7.700	0.11	5.23	5.36	0.00	0.07	444	71.76
7.750	0.11	5.31	5.45	0.00	0.07	451	71.76
7.800	0.11	5.39	5.53	0.00	0.07	459	71.77
7.850	0.11	5.47	5.62	0.00	0.07	467	71.77
7.900	0.11	5.56	5.70	0.00	0.07	475	71.78
7.950	0.12	5.64	5.79	0.00	0.07	484	71.78
8.000	0.12	5.73	5.88	0.00	0.07	492	71.78
8.050	0.12	5.81	5.96	0.00	0.08	500	71.79
8.100	0.12	5.90	6.05	0.00	0.08	509	71.79
8.150	0.12	5.99	6.15	0.00	0.08	517	71.80
8.200	0.13	6.08	6.24	0.00	0.08	526	71.80
8.250	0.13	6.18	6.34	0.00	0.08	535	71.81
8.300	0.13	6.28	6.44	0.00	0.08	545	71.81
8.350	0.14	6.38	6.55	0.00	0.08	555	71.82

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
8.400	0.14	6.49	6.66	0.00	0.08	565	71.82
8.450	0.14	6.60	6.77	0.00	0.09	576	71.83
8.500	0.15	6.71	6.89	0.00	0.09	587	71.83
8.550	0.15	6.83	7.01	0.00	0.09	599	71.84
8.600	0.15	6.95	7.13	0.00	0.09	611	71.85
8.650	0.16	7.07	7.26	0.00	0.09	623	71.85
8.700	0.16	7.20	7.39	0.00	0.09	635	71.86
8.750	0.16	7.33	7.52	0.00	0.10	648	71.86
8.800	0.17	7.46	7.66	0.00	0.10	661	71.87
8.850	0.17	7.60	7.80	0.00	0.10	675	71.88
8.900	0.17	7.74	7.94	0.00	0.10	688	71.88
8.950	0.18	7.88	8.09	0.00	0.10	703	71.89
9.000	0.18	8.03	8.24	0.00	0.10	717	71.90
9.050	0.18	8.18	8.39	0.00	0.11	731	71.91
9.100	0.19	8.33	8.54	0.00	0.11	746	71.91
9.150	0.19	8.48	8.70	0.00	0.11	761	71.92
9.200	0.19	8.64	8.86	0.00	0.11	777	71.93
9.250	0.20	8.80	9.02	0.00	0.11	793	71.94
9.300	0.20	8.96	9.19	0.00	0.12	809	71.95
9.350	0.20	9.12	9.36	0.00	0.12	825	71.95
9.400	0.21	9.29	9.53	0.00	0.12	841	71.96
9.450	0.21	9.46	9.70	0.00	0.12	858	71.97
9.500	0.21	9.63	9.88	0.00	0.13	875	71.98
9.550	0.22	9.80	10.06	0.00	0.13	892	71.99
9.600	0.22	9.98	10.24	0.00	0.13	909	72.00
9.650	0.22	10.16	10.42	0.00	0.13	926	72.00
9.700	0.23	10.35	10.61	0.00	0.13	941	72.01
9.750	0.23	10.53	10.80	0.00	0.13	957	72.02
9.800	0.23	10.72	10.99	0.00	0.13	974	72.03
9.850	0.23	10.91	11.18	0.00	0.14	990	72.03
9.900	0.23	11.11	11.38	0.00	0.14	1,006	72.04
9.950	0.24	11.30	11.58	0.00	0.14	1,023	72.05
10.000	0.24	11.50	11.78	0.00	0.14	1,040	72.06
10.050	0.24	11.70	11.98	0.00	0.14	1,057	72.07
10.100	0.25	11.90	12.19	0.00	0.14	1,074	72.08
10.150	0.25	12.11	12.40	0.00	0.14	1,092	72.08
10.200	0.25	12.32	12.61	0.00	0.14	1,110	72.09
10.250	0.26	12.54	12.83	0.00	0.15	1,129	72.10
10.300	0.26	12.77	13.06	0.00	0.15	1,148	72.11
10.350	0.27	13.00	13.29	0.00	0.15	1,167	72.12
10.400	0.27	13.23	13.53	0.00	0.15	1,187	72.13
10.450	0.27	13.47	13.78	0.00	0.15	1,208	72.14

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
10.500	0.28	13.72	14.03	0.00	0.15	1,229	72.15
10.550	0.28	13.98	14.29	0.00	0.15	1,251	72.16
10.600	0.29	14.24	14.55	0.00	0.16	1,273	72.17
10.650	0.29	14.50	14.82	0.00	0.16	1,298	72.18
10.700	0.29	14.77	15.09	0.00	0.16	1,323	72.19
10.750	0.30	15.04	15.36	0.00	0.16	1,349	72.20
10.800	0.30	15.31	15.64	0.00	0.16	1,374	72.21
10.850	0.30	15.58	15.91	0.00	0.16	1,400	72.22
10.900	0.30	15.85	16.18	0.00	0.17	1,425	72.24
10.950	0.30	16.12	16.45	0.00	0.17	1,451	72.25
11.000	0.30	16.39	16.72	0.00	0.17	1,476	72.26
11.050	0.31	16.66	17.00	0.00	0.17	1,502	72.27
11.100	0.31	16.93	17.27	0.00	0.17	1,527	72.28
11.150	0.31	17.20	17.55	0.00	0.17	1,553	72.29
11.200	0.32	17.48	17.83	0.00	0.18	1,579	72.30
11.250	0.32	17.76	18.12	0.00	0.18	1,606	72.31
11.300	0.33	18.06	18.41	0.00	0.18	1,634	72.32
11.350	0.33	18.35	18.71	0.00	0.18	1,662	72.34
11.400	0.34	18.66	19.02	0.00	0.18	1,690	72.35
11.450	0.34	18.97	19.34	0.00	0.18	1,719	72.36
11.500	0.35	19.29	19.66	0.00	0.19	1,748	72.38
11.550	0.36	19.62	20.00	0.00	0.19	1,779	72.39
11.600	0.38	19.99	20.37	0.00	0.19	1,812	72.40
11.650	0.39	20.38	20.76	0.00	0.19	1,848	72.42
11.700	0.40	20.78	21.17	0.00	0.19	1,885	72.44
11.750	0.41	21.20	21.60	0.00	0.20	1,924	72.45
11.800	0.43	21.64	22.04	0.00	0.20	1,965	72.47
11.850	0.44	22.10	22.50	0.00	0.20	2,007	72.49
11.900	0.45	22.58	22.99	0.00	0.21	2,050	72.51
11.950	0.48	23.10	23.51	0.00	0.21	2,096	72.53
12.000	0.54	23.70	24.12	0.00	0.21	2,148	72.55
12.050	0.58	24.38	24.81	0.00	0.21	2,209	72.58
12.100	0.60	25.13	25.56	0.00	0.22	2,275	72.60
12.150	0.60	25.89	26.33	0.00	0.22	2,342	72.63
12.200	1.81	27.84	28.30	0.00	0.23	2,520	72.71
12.250	1.37	30.49	31.02	0.00	0.26	2,772	72.81
12.300	1.24	32.48	33.09	0.00	0.31	2,955	72.88
12.350	1.10	34.14	34.82	0.00	0.34	3,105	72.94
12.400	0.99	35.49	36.23	0.00	0.37	3,228	72.99
12.450	0.96	36.65	37.45	0.00	0.40	3,332	73.03
12.500	0.95	37.69	38.56	0.00	0.43	3,426	73.07
12.550	0.89	38.61	39.53	0.00	0.46	3,508	73.11

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
12.600	0.82	39.37	40.32	0.00	0.48	3,576	73.13
12.650	0.76	39.96	40.95	0.00	0.50	3,629	73.15
12.700	0.73	40.43	41.45	0.00	0.51	3,671	73.17
12.750	0.70	40.81	41.85	0.00	0.52	3,708	73.18
12.800	0.67	41.11	42.17	0.00	0.53	3,737	73.20
12.850	0.64	41.35	42.42	0.00	0.54	3,760	73.20
12.900	0.62	41.52	42.60	0.00	0.54	3,777	73.21
12.950	0.59	41.64	42.73	0.00	0.55	3,788	73.22
13.000	0.57	41.71	42.80	0.00	0.55	3,795	73.22
13.050	0.55	41.73	42.82	0.00	0.55	3,797	73.22
13.100	0.53	41.71	42.80	0.00	0.55	3,795	73.22
13.150	0.51	41.66	42.75	0.00	0.55	3,790	73.22
13.200	0.50	41.58	42.67	0.00	0.54	3,783	73.21
13.250	0.49	41.49	42.58	0.00	0.54	3,774	73.21
13.300	0.48	41.39	42.47	0.00	0.54	3,764	73.21
13.350	0.48	41.28	42.35	0.00	0.53	3,754	73.20
13.400	0.47	41.16	42.22	0.00	0.53	3,742	73.20
13.450	0.46	41.03	42.09	0.00	0.53	3,730	73.19
13.500	0.45	40.90	41.95	0.00	0.52	3,717	73.19
13.550	0.45	40.77	41.81	0.00	0.52	3,704	73.18
13.600	0.44	40.62	41.66	0.00	0.52	3,690	73.18
13.650	0.44	40.48	41.50	0.00	0.51	3,676	73.17
13.700	0.43	40.33	41.34	0.00	0.51	3,662	73.17
13.750	0.42	40.18	41.18	0.00	0.50	3,648	73.16
13.800	0.42	40.02	41.02	0.00	0.50	3,634	73.16
13.850	0.41	39.86	40.85	0.00	0.49	3,620	73.15
13.900	0.41	39.70	40.68	0.00	0.49	3,606	73.14
13.950	0.40	39.54	40.51	0.00	0.48	3,591	73.14
14.000	0.40	39.38	40.34	0.00	0.48	3,577	73.13
14.050	0.39	39.22	40.17	0.00	0.48	3,562	73.13
14.100	0.39	39.06	40.00	0.00	0.47	3,549	73.12
14.150	0.39	38.91	39.85	0.00	0.47	3,535	73.12
14.200	0.39	38.77	39.69	0.00	0.46	3,522	73.11
14.250	0.39	38.63	39.54	0.00	0.46	3,509	73.11
14.300	0.39	38.49	39.40	0.00	0.45	3,497	73.10
14.350	0.38	38.36	39.26	0.00	0.45	3,486	73.10
14.400	0.38	38.24	39.13	0.00	0.45	3,474	73.09
14.450	0.38	38.11	39.00	0.00	0.44	3,463	73.09
14.500	0.38	38.00	38.88	0.00	0.44	3,453	73.08
14.550	0.38	37.88	38.76	0.00	0.44	3,443	73.08
14.600	0.38	37.77	38.64	0.00	0.43	3,433	73.07
14.650	0.38	37.67	38.53	0.00	0.43	3,423	73.07

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
14.700	0.37	37.56	38.42	0.00	0.43	3,414	73.07
14.750	0.37	37.46	38.31	0.00	0.42	3,405	73.06
14.800	0.37	37.37	38.21	0.00	0.42	3,396	73.06
14.850	0.37	37.28	38.12	0.00	0.42	3,388	73.06
14.900	0.37	37.19	38.03	0.00	0.42	3,381	73.05
14.950	0.37	37.11	37.94	0.00	0.41	3,374	73.05
15.000	0.37	37.04	37.86	0.00	0.41	3,367	73.05
15.050	0.37	36.96	37.78	0.00	0.41	3,360	73.05
15.100	0.37	36.89	37.71	0.00	0.41	3,354	73.04
15.150	0.37	36.83	37.64	0.00	0.41	3,348	73.04
15.200	0.37	36.77	37.57	0.00	0.40	3,342	73.04
15.250	0.37	36.71	37.51	0.00	0.40	3,337	73.04
15.300	0.37	36.65	37.45	0.00	0.40	3,332	73.03
15.350	0.37	36.60	37.39	0.00	0.40	3,327	73.03
15.400	0.37	36.54	37.34	0.00	0.40	3,322	73.03
15.450	0.37	36.50	37.29	0.00	0.40	3,318	73.03
15.500	0.37	36.45	37.24	0.00	0.40	3,314	73.03
15.550	0.37	36.40	37.19	0.00	0.39	3,310	73.02
15.600	0.34	36.33	37.11	0.00	0.39	3,303	73.02
15.650	0.27	36.16	36.93	0.00	0.39	3,288	73.02
15.700	0.27	35.94	36.70	0.00	0.38	3,268	73.01
15.750	0.27	35.73	36.48	0.00	0.37	3,250	73.00
15.800	0.27	35.53	36.27	0.00	0.37	3,231	72.99
15.850	0.27	35.34	36.07	0.00	0.37	3,214	72.99
15.900	0.27	35.15	35.87	0.00	0.36	3,197	72.98
15.950	0.27	34.96	35.68	0.00	0.36	3,180	72.97
16.000	0.27	34.79	35.50	0.00	0.35	3,164	72.97
16.050	0.27	34.62	35.32	0.00	0.35	3,148	72.96
16.100	0.26	34.45	35.15	0.00	0.35	3,133	72.95
16.150	0.26	34.29	34.98	0.00	0.34	3,119	72.95
16.200	0.26	34.14	34.82	0.00	0.34	3,105	72.94
16.250	0.26	33.99	34.66	0.00	0.34	3,092	72.94
16.300	0.26	33.85	34.52	0.00	0.33	3,079	72.93
16.350	0.26	33.71	34.37	0.00	0.33	3,066	72.93
16.400	0.26	33.57	34.23	0.00	0.33	3,054	72.92
16.450	0.26	33.45	34.10	0.00	0.33	3,042	72.92
16.500	0.26	33.32	33.97	0.00	0.32	3,031	72.91
16.550	0.26	33.20	33.84	0.00	0.32	3,020	72.91
16.600	0.26	33.09	33.72	0.00	0.32	3,010	72.90
16.650	0.26	32.97	33.61	0.00	0.32	3,000	72.90
16.700	0.26	32.87	33.50	0.00	0.31	2,990	72.89
16.750	0.26	32.76	33.39	0.00	0.31	2,980	72.89

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
16.800	0.26	32.66	33.28	0.00	0.31	2,971	72.89
16.850	0.26	32.57	33.18	0.00	0.31	2,963	72.88
16.900	0.26	32.47	33.08	0.00	0.31	2,954	72.88
16.950	0.26	32.38	32.99	0.00	0.30	2,946	72.88
17.000	0.26	32.29	32.90	0.00	0.30	2,938	72.87
17.050	0.26	32.21	32.81	0.00	0.30	2,930	72.87
17.100	0.26	32.13	32.72	0.00	0.30	2,923	72.87
17.150	0.26	32.05	32.64	0.00	0.30	2,916	72.86
17.200	0.26	31.97	32.56	0.00	0.30	2,909	72.86
17.250	0.26	31.90	32.48	0.00	0.29	2,902	72.86
17.300	0.26	31.82	32.41	0.00	0.29	2,895	72.85
17.350	0.26	31.75	32.34	0.00	0.29	2,889	72.85
17.400	0.26	31.69	32.27	0.00	0.29	2,883	72.85
17.450	0.26	31.62	32.20	0.00	0.29	2,877	72.85
17.500	0.26	31.56	32.13	0.00	0.29	2,871	72.85
17.550	0.26	31.50	32.07	0.00	0.29	2,866	72.84
17.600	0.25	31.44	32.01	0.00	0.28	2,860	72.84
17.650	0.25	31.38	31.95	0.00	0.28	2,855	72.84
17.700	0.25	31.32	31.89	0.00	0.28	2,850	72.84
17.750	0.25	31.27	31.83	0.00	0.28	2,845	72.83
17.800	0.25	31.22	31.78	0.00	0.28	2,840	72.83
17.850	0.25	31.16	31.72	0.00	0.28	2,836	72.83
17.900	0.25	31.11	31.67	0.00	0.28	2,831	72.83
17.950	0.25	31.07	31.62	0.00	0.28	2,826	72.83
18.000	0.25	31.02	31.57	0.00	0.28	2,822	72.82
18.050	0.25	30.97	31.52	0.00	0.28	2,817	72.82
18.100	0.25	30.93	31.48	0.00	0.27	2,813	72.82
18.150	0.25	30.88	31.43	0.00	0.27	2,809	72.82
18.200	0.25	30.84	31.39	0.00	0.27	2,805	72.82
18.250	0.25	30.80	31.34	0.00	0.27	2,801	72.82
18.300	0.25	30.76	31.30	0.00	0.27	2,798	72.82
18.350	0.25	30.73	31.26	0.00	0.27	2,794	72.81
18.400	0.25	30.69	31.23	0.00	0.27	2,791	72.81
18.450	0.25	30.65	31.19	0.00	0.27	2,787	72.81
18.500	0.25	30.62	31.16	0.00	0.27	2,784	72.81
18.550	0.25	30.59	31.12	0.00	0.27	2,781	72.81
18.600	0.25	30.56	31.09	0.00	0.27	2,778	72.81
18.650	0.25	30.53	31.06	0.00	0.27	2,775	72.81
18.700	0.25	30.50	31.03	0.00	0.27	2,772	72.81
18.750	0.25	30.47	31.00	0.00	0.26	2,770	72.80
18.800	0.25	30.44	30.97	0.00	0.26	2,767	72.80
18.850	0.25	30.41	30.94	0.00	0.26	2,765	72.80

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
18.900	0.25	30.39	30.91	0.00	0.26	2,762	72.80
18.950	0.25	30.36	30.89	0.00	0.26	2,760	72.80
19.000	0.25	30.34	30.86	0.00	0.26	2,758	72.80
19.050	0.25	30.32	30.84	0.00	0.26	2,755	72.80
19.100	0.25	30.29	30.82	0.00	0.26	2,753	72.80
19.150	0.25	30.27	30.79	0.00	0.26	2,751	72.80
19.200	0.25	30.25	30.77	0.00	0.26	2,749	72.80
19.250	0.25	30.23	30.75	0.00	0.26	2,747	72.80
19.300	0.25	30.21	30.73	0.00	0.26	2,745	72.79
19.350	0.25	30.19	30.71	0.00	0.26	2,744	72.79
19.400	0.25	30.17	30.69	0.00	0.26	2,742	72.79
19.450	0.25	30.15	30.67	0.00	0.26	2,740	72.79
19.500	0.25	30.14	30.65	0.00	0.26	2,739	72.79
19.550	0.25	30.12	30.63	0.00	0.26	2,737	72.79
19.600	0.25	30.10	30.62	0.00	0.26	2,735	72.79
19.650	0.25	30.09	30.60	0.00	0.26	2,734	72.79
19.700	0.25	30.07	30.58	0.00	0.26	2,732	72.79
19.750	0.25	30.06	30.57	0.00	0.26	2,731	72.79
19.800	0.25	30.04	30.55	0.00	0.26	2,730	72.79
19.850	0.25	30.03	30.54	0.00	0.26	2,728	72.79
19.900	0.25	30.01	30.52	0.00	0.26	2,727	72.79
19.950	0.25	30.00	30.51	0.00	0.25	2,726	72.79
20.000	0.25	29.99	30.50	0.00	0.25	2,724	72.79
20.050	0.25	29.97	30.48	0.00	0.25	2,723	72.79
20.100	0.25	29.96	30.47	0.00	0.25	2,722	72.79
20.150	0.25	29.95	30.46	0.00	0.25	2,721	72.79
20.200	0.25	29.94	30.45	0.00	0.25	2,720	72.78
20.250	0.25	29.93	30.43	0.00	0.25	2,719	72.78
20.300	0.25	29.92	30.42	0.00	0.25	2,718	72.78
20.350	0.25	29.90	30.41	0.00	0.25	2,717	72.78
20.400	0.25	29.89	30.40	0.00	0.25	2,716	72.78
20.450	0.25	29.88	30.39	0.00	0.25	2,715	72.78
20.500	0.25	29.87	30.38	0.00	0.25	2,714	72.78
20.550	0.25	29.86	30.37	0.00	0.25	2,713	72.78
20.600	0.25	29.85	30.36	0.00	0.25	2,712	72.78
20.650	0.25	29.85	30.35	0.00	0.25	2,711	72.78
20.700	0.25	29.84	30.34	0.00	0.25	2,710	72.78
20.750	0.25	29.83	30.33	0.00	0.25	2,709	72.78
20.800	0.25	29.82	30.32	0.00	0.25	2,708	72.78
20.850	0.25	29.81	30.31	0.00	0.25	2,708	72.78
20.900	0.25	29.80	30.30	0.00	0.25	2,707	72.78
20.950	0.25	29.79	30.30	0.00	0.25	2,706	72.78

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
21.000	0.25	29.79	30.29	0.00	0.25	2,705	72.78
21.050	0.25	29.78	30.28	0.00	0.25	2,705	72.78
21.100	0.25	29.77	30.27	0.00	0.25	2,704	72.78
21.150	0.25	29.76	30.26	0.00	0.25	2,703	72.78
21.200	0.25	29.76	30.26	0.00	0.25	2,703	72.78
21.250	0.25	29.75	30.25	0.00	0.25	2,702	72.78
21.300	0.25	29.74	30.24	0.00	0.25	2,701	72.78
21.350	0.25	29.74	30.23	0.00	0.25	2,701	72.78
21.400	0.25	29.73	30.23	0.00	0.25	2,700	72.78
21.450	0.25	29.72	30.22	0.00	0.25	2,699	72.78
21.500	0.25	29.72	30.21	0.00	0.25	2,699	72.78
21.550	0.25	29.71	30.21	0.00	0.25	2,698	72.78
21.600	0.25	29.70	30.20	0.00	0.25	2,698	72.78
21.650	0.25	29.70	30.20	0.00	0.25	2,697	72.78
21.700	0.25	29.69	30.19	0.00	0.25	2,696	72.78
21.750	0.25	29.69	30.18	0.00	0.25	2,696	72.78
21.800	0.25	29.68	30.18	0.00	0.25	2,695	72.78
21.850	0.25	29.68	30.17	0.00	0.25	2,695	72.77
21.900	0.25	29.67	30.17	0.00	0.25	2,694	72.77
21.950	0.25	29.66	30.16	0.00	0.25	2,694	72.77
22.000	0.24	29.66	30.15	0.00	0.25	2,693	72.77
22.050	0.24	29.65	30.15	0.00	0.25	2,693	72.77
22.100	0.24	29.65	30.14	0.00	0.25	2,692	72.77
22.150	0.24	29.64	30.14	0.00	0.25	2,692	72.77
22.200	0.24	29.64	30.13	0.00	0.25	2,691	72.77
22.250	0.24	29.63	30.13	0.00	0.25	2,691	72.77
22.300	0.24	29.63	30.12	0.00	0.25	2,690	72.77
22.350	0.24	29.62	30.12	0.00	0.25	2,690	72.77
22.400	0.24	29.62	30.11	0.00	0.25	2,689	72.77
22.450	0.24	29.61	30.11	0.00	0.25	2,689	72.77
22.500	0.24	29.61	30.10	0.00	0.25	2,689	72.77
22.550	0.24	29.60	30.10	0.00	0.25	2,688	72.77
22.600	0.24	29.60	30.09	0.00	0.25	2,688	72.77
22.650	0.24	29.59	30.09	0.00	0.25	2,687	72.77
22.700	0.24	29.59	30.08	0.00	0.25	2,687	72.77
22.750	0.24	29.59	30.08	0.00	0.25	2,686	72.77
22.800	0.24	29.58	30.07	0.00	0.25	2,686	72.77
22.850	0.24	29.58	30.07	0.00	0.25	2,686	72.77
22.900	0.24	29.57	30.06	0.00	0.25	2,685	72.77
22.950	0.24	29.57	30.06	0.00	0.25	2,685	72.77
23.000	0.24	29.56	30.06	0.00	0.25	2,684	72.77
23.050	0.24	29.56	30.05	0.00	0.25	2,684	72.77

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 10 year

Scenario: Post-Development 10 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
23.100	0.24	29.56	30.05	0.00	0.25	2,684	72.77
23.150	0.24	29.55	30.04	0.00	0.25	2,683	72.77
23.200	0.24	29.55	30.04	0.00	0.25	2,683	72.77
23.250	0.24	29.54	30.03	0.00	0.25	2,682	72.77
23.300	0.24	29.54	30.03	0.00	0.25	2,682	72.77
23.350	0.18	29.47	29.96	0.00	0.24	2,676	72.77
23.400	0.13	29.29	29.77	0.00	0.24	2,659	72.76
23.450	0.13	29.07	29.54	0.00	0.24	2,638	72.75
23.500	0.13	28.86	29.32	0.00	0.23	2,617	72.74
23.550	0.12	28.64	29.11	0.00	0.23	2,597	72.74
23.600	0.12	28.43	28.89	0.00	0.23	2,576	72.73
23.650	0.12	28.22	28.68	0.00	0.23	2,556	72.72
23.700	0.12	28.01	28.47	0.00	0.23	2,536	72.71
23.750	0.12	27.80	28.25	0.00	0.23	2,516	72.70
23.800	0.12	27.59	28.05	0.00	0.23	2,496	72.70
23.850	0.12	27.38	27.84	0.00	0.23	2,476	72.69
23.900	0.12	27.18	27.63	0.00	0.23	2,457	72.68
23.950	0.12	26.98	27.43	0.00	0.22	2,437	72.67
24.000	0.12	26.77	27.22	0.00	0.22	2,419	72.67

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
0.000	0.18	0.00	0.00	0.00	0.00	0	71.50
0.050	0.00	0.17	0.18	0.00	0.00	14	71.51
0.100	0.00	0.17	0.17	0.00	0.00	13	71.51
0.150	0.00	0.17	0.17	0.00	0.00	13	71.51
0.200	0.00	0.16	0.17	0.00	0.00	13	71.51
0.250	0.00	0.16	0.16	0.00	0.00	12	71.51
0.300	0.00	0.15	0.16	0.00	0.00	12	71.51
0.350	0.00	0.15	0.15	0.00	0.00	12	71.51
0.400	0.00	0.15	0.15	0.00	0.00	11	71.51
0.450	0.00	0.14	0.15	0.00	0.00	11	71.51
0.500	0.00	0.14	0.14	0.00	0.00	11	71.51
0.550	0.00	0.14	0.14	0.00	0.00	11	71.51
0.600	0.00	0.13	0.14	0.00	0.00	10	71.51
0.650	0.00	0.13	0.13	0.00	0.00	10	71.51
0.700	0.00	0.13	0.13	0.00	0.00	10	71.51
0.750	0.00	0.12	0.13	0.00	0.00	10	71.51
0.800	0.00	0.12	0.13	0.00	0.00	10	71.51
0.850	0.00	0.12	0.13	0.00	0.00	10	71.51
0.900	0.00	0.13	0.13	0.00	0.00	10	71.51
0.950	0.00	0.13	0.13	0.00	0.00	10	71.51
1.000	0.01	0.14	0.14	0.00	0.00	11	71.51
1.050	0.01	0.15	0.15	0.00	0.00	11	71.51
1.100	0.01	0.16	0.16	0.00	0.00	12	71.51
1.150	0.01	0.17	0.17	0.00	0.00	13	71.51
1.200	0.01	0.18	0.18	0.00	0.00	14	71.51
1.250	0.01	0.19	0.20	0.00	0.00	15	71.51
1.300	0.01	0.21	0.21	0.00	0.00	16	71.51
1.350	0.01	0.23	0.23	0.00	0.00	18	71.51
1.400	0.01	0.24	0.25	0.00	0.00	19	71.51
1.450	0.01	0.26	0.27	0.00	0.00	21	71.51
1.500	0.01	0.28	0.29	0.00	0.00	22	71.51
1.550	0.01	0.30	0.31	0.00	0.00	24	71.51
1.600	0.01	0.32	0.33	0.00	0.00	25	71.52
1.650	0.02	0.34	0.35	0.00	0.00	27	71.52
1.700	0.02	0.36	0.37	0.00	0.00	29	71.52
1.750	0.02	0.39	0.40	0.00	0.01	30	71.52
1.800	0.02	0.41	0.42	0.00	0.01	32	71.52
1.850	0.02	0.43	0.44	0.00	0.01	34	71.52
1.900	0.02	0.46	0.47	0.00	0.01	36	71.52
1.950	0.02	0.49	0.50	0.00	0.01	38	71.52
2.000	0.02	0.51	0.53	0.00	0.01	40	71.53
2.050	0.02	0.54	0.55	0.00	0.01	42	71.53

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
2.100	0.02	0.57	0.58	0.00	0.01	45	71.53
2.150	0.02	0.60	0.62	0.00	0.01	47	71.53
2.200	0.02	0.63	0.65	0.00	0.01	50	71.53
2.250	0.03	0.66	0.68	0.00	0.01	52	71.53
2.300	0.03	0.70	0.71	0.00	0.01	55	71.53
2.350	0.03	0.73	0.75	0.00	0.01	57	71.54
2.400	0.03	0.77	0.79	0.00	0.01	60	71.54
2.450	0.03	0.80	0.82	0.00	0.01	63	71.54
2.500	0.03	0.84	0.86	0.00	0.01	66	71.54
2.550	0.03	0.88	0.90	0.00	0.01	69	71.54
2.600	0.03	0.91	0.94	0.00	0.01	72	71.55
2.650	0.03	0.95	0.98	0.00	0.01	75	71.55
2.700	0.03	0.99	1.02	0.00	0.01	78	71.55
2.750	0.03	1.03	1.06	0.00	0.01	81	71.55
2.800	0.04	1.07	1.10	0.00	0.01	84	71.55
2.850	0.04	1.12	1.15	0.00	0.01	88	71.56
2.900	0.04	1.16	1.19	0.00	0.02	91	71.56
2.950	0.04	1.20	1.23	0.00	0.02	94	71.56
3.000	0.04	1.25	1.28	0.00	0.02	98	71.56
3.050	0.04	1.29	1.32	0.00	0.02	101	71.56
3.100	0.04	1.34	1.37	0.00	0.02	105	71.57
3.150	0.04	1.38	1.42	0.00	0.02	109	71.57
3.200	0.04	1.43	1.47	0.00	0.02	112	71.57
3.250	0.04	1.47	1.51	0.00	0.02	116	71.57
3.300	0.04	1.52	1.56	0.00	0.02	120	71.58
3.350	0.04	1.57	1.61	0.00	0.02	123	71.58
3.400	0.05	1.62	1.66	0.00	0.02	127	71.58
3.450	0.05	1.67	1.71	0.00	0.02	131	71.58
3.500	0.05	1.72	1.76	0.00	0.02	135	71.59
3.550	0.05	1.77	1.81	0.00	0.02	139	71.59
3.600	0.05	1.82	1.86	0.00	0.02	143	71.59
3.650	0.05	1.87	1.91	0.00	0.02	147	71.59
3.700	0.05	1.92	1.97	0.00	0.02	151	71.60
3.750	0.05	1.97	2.02	0.00	0.03	155	71.60
3.800	0.05	2.02	2.07	0.00	0.03	159	71.60
3.850	0.05	2.07	2.12	0.00	0.03	163	71.60
3.900	0.05	2.12	2.18	0.00	0.03	167	71.61
3.950	0.05	2.18	2.23	0.00	0.03	171	71.61
4.000	0.06	2.23	2.29	0.00	0.03	175	71.61
4.050	0.06	2.28	2.34	0.00	0.03	179	71.61
4.100	0.06	2.33	2.39	0.00	0.03	183	71.62
4.150	0.06	2.39	2.45	0.00	0.03	188	71.62

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
4.200	0.06	2.44	2.50	0.00	0.03	192	71.62
4.250	0.06	2.49	2.56	0.00	0.03	196	71.62
4.300	0.06	2.55	2.62	0.00	0.03	200	71.63
4.350	0.06	2.60	2.67	0.00	0.03	205	71.63
4.400	0.06	2.66	2.73	0.00	0.03	209	71.63
4.450	0.06	2.71	2.78	0.00	0.04	213	71.63
4.500	0.06	2.77	2.84	0.00	0.04	217	71.64
4.550	0.06	2.82	2.90	0.00	0.04	222	71.64
4.600	0.07	2.88	2.95	0.00	0.04	226	71.64
4.650	0.07	2.93	3.01	0.00	0.04	231	71.65
4.700	0.07	2.99	3.07	0.00	0.04	235	71.65
4.750	0.07	3.04	3.12	0.00	0.04	239	71.65
4.800	0.07	3.10	3.18	0.00	0.04	244	71.65
4.850	0.07	3.16	3.24	0.00	0.04	248	71.66
4.900	0.07	3.21	3.30	0.00	0.04	252	71.66
4.950	0.07	3.27	3.35	0.00	0.04	257	71.66
5.000	0.07	3.33	3.41	0.00	0.04	261	71.67
5.050	0.07	3.38	3.47	0.00	0.04	266	71.67
5.100	0.07	3.44	3.53	0.00	0.04	271	71.67
5.150	0.07	3.49	3.59	0.00	0.05	276	71.67
5.200	0.07	3.55	3.64	0.00	0.05	281	71.68
5.250	0.08	3.61	3.70	0.00	0.05	287	71.68
5.300	0.08	3.66	3.76	0.00	0.05	292	71.68
5.350	0.08	3.72	3.82	0.00	0.05	298	71.69
5.400	0.08	3.78	3.88	0.00	0.05	303	71.69
5.450	0.08	3.84	3.94	0.00	0.05	309	71.69
5.500	0.08	3.89	3.99	0.00	0.05	314	71.69
5.550	0.08	3.95	4.05	0.00	0.05	320	71.70
5.600	0.08	4.01	4.11	0.00	0.05	325	71.70
5.650	0.08	4.06	4.17	0.00	0.05	331	71.70
5.700	0.08	4.12	4.23	0.00	0.05	336	71.70
5.750	0.08	4.18	4.29	0.00	0.05	342	71.71
5.800	0.08	4.23	4.35	0.00	0.06	348	71.71
5.850	0.08	4.29	4.40	0.00	0.06	353	71.71
5.900	0.09	4.35	4.46	0.00	0.06	359	71.72
5.950	0.09	4.41	4.52	0.00	0.06	364	71.72
6.000	0.09	4.46	4.58	0.00	0.06	370	71.72
6.050	0.09	4.52	4.64	0.00	0.06	375	71.72
6.100	0.09	4.58	4.70	0.00	0.06	381	71.73
6.150	0.09	4.64	4.76	0.00	0.06	386	71.73
6.200	0.09	4.70	4.82	0.00	0.06	392	71.73
6.250	0.09	4.76	4.88	0.00	0.06	398	71.74

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
6.300	0.10	4.82	4.95	0.00	0.06	404	71.74
6.350	0.10	4.89	5.01	0.00	0.06	411	71.74
6.400	0.10	4.95	5.08	0.00	0.06	417	71.75
6.450	0.10	5.02	5.15	0.00	0.07	424	71.75
6.500	0.10	5.09	5.23	0.00	0.07	430	71.75
6.550	0.10	5.16	5.30	0.00	0.07	437	71.76
6.600	0.11	5.24	5.37	0.00	0.07	445	71.76
6.650	0.11	5.31	5.45	0.00	0.07	452	71.76
6.700	0.11	5.39	5.53	0.00	0.07	459	71.77
6.750	0.11	5.47	5.61	0.00	0.07	467	71.77
6.800	0.11	5.55	5.69	0.00	0.07	475	71.78
6.850	0.11	5.63	5.78	0.00	0.07	482	71.78
6.900	0.12	5.71	5.86	0.00	0.07	490	71.78
6.950	0.12	5.80	5.95	0.00	0.08	499	71.79
7.000	0.12	5.88	6.04	0.00	0.08	507	71.79
7.050	0.12	5.97	6.12	0.00	0.08	515	71.80
7.100	0.12	6.06	6.22	0.00	0.08	524	71.80
7.150	0.13	6.15	6.31	0.00	0.08	532	71.81
7.200	0.13	6.24	6.40	0.00	0.08	541	71.81
7.250	0.13	6.33	6.50	0.00	0.08	550	71.81
7.300	0.13	6.42	6.59	0.00	0.08	559	71.82
7.350	0.13	6.52	6.69	0.00	0.08	568	71.82
7.400	0.14	6.62	6.79	0.00	0.09	578	71.83
7.450	0.14	6.71	6.89	0.00	0.09	587	71.83
7.500	0.14	6.81	6.99	0.00	0.09	597	71.84
7.550	0.14	6.91	7.09	0.00	0.09	607	71.84
7.600	0.14	7.02	7.20	0.00	0.09	617	71.85
7.650	0.14	7.12	7.30	0.00	0.09	627	71.85
7.700	0.15	7.22	7.41	0.00	0.09	637	71.86
7.750	0.15	7.33	7.52	0.00	0.10	648	71.86
7.800	0.15	7.43	7.63	0.00	0.10	658	71.87
7.850	0.15	7.54	7.74	0.00	0.10	669	71.88
7.900	0.15	7.65	7.85	0.00	0.10	680	71.88
7.950	0.16	7.76	7.96	0.00	0.10	690	71.89
8.000	0.16	7.87	8.08	0.00	0.10	701	71.89
8.050	0.16	7.98	8.19	0.00	0.10	712	71.90
8.100	0.16	8.10	8.31	0.00	0.11	724	71.90
8.150	0.17	8.21	8.43	0.00	0.11	735	71.91
8.200	0.17	8.34	8.55	0.00	0.11	747	71.91
8.250	0.17	8.46	8.68	0.00	0.11	760	71.92
8.300	0.18	8.59	8.81	0.00	0.11	772	71.93
8.350	0.18	8.73	8.95	0.00	0.11	786	71.93

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
8.400	0.19	8.87	9.10	0.00	0.12	799	71.94
8.450	0.19	9.01	9.24	0.00	0.12	814	71.95
8.500	0.20	9.16	9.40	0.00	0.12	828	71.96
8.550	0.20	9.31	9.55	0.00	0.12	843	71.96
8.600	0.20	9.47	9.71	0.00	0.12	859	71.97
8.650	0.21	9.63	9.88	0.00	0.13	875	71.98
8.700	0.21	9.79	10.05	0.00	0.13	891	71.99
8.750	0.22	9.96	10.22	0.00	0.13	908	72.00
8.800	0.22	10.14	10.40	0.00	0.13	924	72.00
8.850	0.22	10.32	10.58	0.00	0.13	939	72.01
8.900	0.23	10.51	10.77	0.00	0.13	955	72.02
8.950	0.23	10.69	10.96	0.00	0.13	971	72.03
9.000	0.23	10.89	11.16	0.00	0.14	988	72.03
9.050	0.24	11.08	11.36	0.00	0.14	1,004	72.04
9.100	0.24	11.28	11.56	0.00	0.14	1,021	72.05
9.150	0.24	11.48	11.76	0.00	0.14	1,038	72.06
9.200	0.24	11.69	11.97	0.00	0.14	1,056	72.07
9.250	0.25	11.89	12.18	0.00	0.14	1,073	72.07
9.300	0.25	12.10	12.39	0.00	0.14	1,091	72.08
9.350	0.25	12.32	12.61	0.00	0.14	1,109	72.09
9.400	0.26	12.53	12.83	0.00	0.15	1,128	72.10
9.450	0.26	12.75	13.05	0.00	0.15	1,147	72.11
9.500	0.26	12.98	13.27	0.00	0.15	1,166	72.12
9.550	0.26	13.20	13.50	0.00	0.15	1,185	72.13
9.600	0.27	13.43	13.73	0.00	0.15	1,204	72.14
9.650	0.27	13.66	13.97	0.00	0.15	1,224	72.15
9.700	0.27	13.90	14.21	0.00	0.15	1,244	72.16
9.750	0.28	14.14	14.45	0.00	0.16	1,264	72.17
9.800	0.28	14.38	14.69	0.00	0.16	1,286	72.18
9.850	0.28	14.62	14.94	0.00	0.16	1,309	72.19
9.900	0.28	14.87	15.19	0.00	0.16	1,333	72.20
9.950	0.29	15.12	15.44	0.00	0.16	1,356	72.21
10.000	0.29	15.37	15.69	0.00	0.16	1,380	72.22
10.050	0.29	15.62	15.95	0.00	0.16	1,404	72.23
10.100	0.30	15.88	16.21	0.00	0.17	1,428	72.24
10.150	0.30	16.14	16.47	0.00	0.17	1,453	72.25
10.200	0.30	16.40	16.73	0.00	0.17	1,477	72.26
10.250	0.30	16.65	16.99	0.00	0.17	1,501	72.27
10.300	0.30	16.91	17.26	0.00	0.17	1,526	72.28
10.350	0.30	17.17	17.52	0.00	0.17	1,550	72.29
10.400	0.31	17.43	17.78	0.00	0.17	1,575	72.30
10.450	0.31	17.69	18.04	0.00	0.18	1,600	72.31

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
10.500	0.31	17.95	18.31	0.00	0.18	1,624	72.32
10.550	0.31	18.21	18.57	0.00	0.18	1,649	72.33
10.600	0.31	18.47	18.84	0.00	0.18	1,673	72.34
10.650	0.31	18.74	19.10	0.00	0.18	1,697	72.35
10.700	0.32	19.00	19.37	0.00	0.18	1,721	72.36
10.750	0.32	19.26	19.64	0.00	0.19	1,746	72.37
10.800	0.32	19.53	19.90	0.00	0.19	1,770	72.38
10.850	0.32	19.79	20.17	0.00	0.19	1,794	72.40
10.900	0.32	20.06	20.44	0.00	0.19	1,819	72.41
10.950	0.33	20.33	20.71	0.00	0.19	1,843	72.42
11.000	0.33	20.59	20.98	0.00	0.19	1,868	72.43
11.050	0.33	20.86	21.25	0.00	0.20	1,893	72.44
11.100	0.33	21.13	21.53	0.00	0.20	1,918	72.45
11.150	0.34	21.41	21.81	0.00	0.20	1,943	72.46
11.200	0.35	21.70	22.10	0.00	0.20	1,970	72.47
11.250	0.35	21.99	22.40	0.00	0.20	1,997	72.48
11.300	0.36	22.29	22.70	0.00	0.20	2,025	72.50
11.350	0.37	22.61	23.02	0.00	0.21	2,053	72.51
11.400	0.37	22.94	23.35	0.00	0.21	2,081	72.52
11.450	0.38	23.27	23.69	0.00	0.21	2,111	72.53
11.500	0.39	23.62	24.04	0.00	0.21	2,142	72.55
11.550	0.40	23.98	24.40	0.00	0.21	2,173	72.56
11.600	0.40	24.35	24.78	0.00	0.21	2,206	72.57
11.650	0.41	24.74	25.17	0.00	0.21	2,240	72.59
11.700	0.43	25.15	25.58	0.00	0.22	2,276	72.60
11.750	0.44	25.58	26.02	0.00	0.22	2,314	72.62
11.800	0.46	26.04	26.48	0.00	0.22	2,355	72.64
11.850	0.48	26.54	26.98	0.00	0.22	2,398	72.66
11.900	0.50	27.07	27.52	0.00	0.23	2,446	72.68
11.950	0.54	27.65	28.11	0.00	0.23	2,502	72.70
12.000	0.62	28.35	28.81	0.00	0.23	2,569	72.73
12.050	1.04	29.52	30.01	0.00	0.24	2,680	72.77
12.100	3.33	33.25	33.90	0.00	0.32	3,025	72.91
12.150	2.57	38.26	39.15	0.00	0.45	3,476	73.09
12.200	2.76	42.44	43.58	0.00	0.57	3,866	73.24
12.250	3.07	46.87	48.27	0.00	0.70	4,284	73.41
12.300	2.89	51.23	52.83	0.00	0.80	4,679	73.56
12.350	2.62	55.02	56.74	0.00	0.86	5,021	73.69
12.400	2.32	58.14	59.96	0.00	0.91	5,319	73.80
12.450	2.02	60.58	62.48	0.00	0.95	5,543	73.89
12.500	1.70	62.34	64.29	0.00	0.98	5,701	73.95
12.550	1.43	63.47	65.46	0.00	0.99	5,802	73.99

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
12.600	1.23	64.12	66.13	0.00	1.00	5,861	74.01
12.650	1.08	64.42	66.44	0.00	1.01	5,887	74.02
12.700	0.98	64.47	66.48	0.00	1.01	5,892	74.03
12.750	0.92	64.35	66.36	0.00	1.01	5,881	74.02
12.800	0.86	64.12	66.13	0.00	1.00	5,861	74.01
12.850	0.82	63.80	65.80	0.00	1.00	5,832	74.00
12.900	0.77	63.41	65.39	0.00	0.99	5,796	73.99
12.950	0.74	62.95	64.92	0.00	0.99	5,755	73.97
13.000	0.70	62.43	64.39	0.00	0.98	5,709	73.95
13.050	0.67	61.87	63.80	0.00	0.97	5,658	73.93
13.100	0.65	61.26	63.18	0.00	0.96	5,604	73.91
13.150	0.62	60.63	62.53	0.00	0.95	5,547	73.89
13.200	0.61	59.99	61.87	0.00	0.94	5,489	73.87
13.250	0.59	59.33	61.19	0.00	0.93	5,430	73.85
13.300	0.58	58.67	60.51	0.00	0.92	5,370	73.82
13.350	0.57	58.01	59.83	0.00	0.91	5,307	73.80
13.400	0.56	57.36	59.15	0.00	0.90	5,244	73.78
13.450	0.55	56.70	58.47	0.00	0.89	5,182	73.75
13.500	0.55	56.05	57.80	0.00	0.88	5,120	73.73
13.550	0.54	55.40	57.13	0.00	0.87	5,058	73.71
13.600	0.53	54.75	56.47	0.00	0.86	4,996	73.68
13.650	0.52	54.11	55.80	0.00	0.85	4,936	73.66
13.700	0.51	53.48	55.15	0.00	0.84	4,880	73.64
13.750	0.51	52.84	54.50	0.00	0.83	4,823	73.62
13.800	0.50	52.22	53.85	0.00	0.82	4,767	73.60
13.850	0.49	51.59	53.21	0.00	0.81	4,711	73.57
13.900	0.48	50.97	52.57	0.00	0.80	4,656	73.55
13.950	0.47	50.36	51.93	0.00	0.79	4,601	73.53
14.000	0.47	49.75	51.30	0.00	0.78	4,547	73.51
14.050	0.46	49.15	50.68	0.00	0.76	4,492	73.49
14.100	0.45	48.57	50.06	0.00	0.75	4,439	73.47
14.150	0.45	48.01	49.47	0.00	0.73	4,388	73.45
14.200	0.44	47.47	48.90	0.00	0.71	4,339	73.43
14.250	0.44	46.96	48.35	0.00	0.70	4,291	73.41
14.300	0.43	46.46	47.83	0.00	0.68	4,246	73.39
14.350	0.43	45.98	47.32	0.00	0.67	4,202	73.37
14.400	0.43	45.52	46.84	0.00	0.66	4,160	73.36
14.450	0.42	45.08	46.37	0.00	0.64	4,119	73.34
14.500	0.42	44.65	45.92	0.00	0.63	4,079	73.32
14.550	0.41	44.24	45.49	0.00	0.62	4,040	73.31
14.600	0.41	43.85	45.07	0.00	0.61	4,002	73.30
14.650	0.41	43.47	44.67	0.00	0.60	3,965	73.28

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
14.700	0.40	43.11	44.28	0.00	0.59	3,930	73.27
14.750	0.40	42.76	43.91	0.00	0.58	3,896	73.26
14.800	0.40	42.43	43.56	0.00	0.57	3,864	73.24
14.850	0.40	42.11	43.22	0.00	0.56	3,833	73.23
14.900	0.40	41.80	42.90	0.00	0.55	3,804	73.22
14.950	0.40	41.51	42.59	0.00	0.54	3,776	73.21
15.000	0.39	41.23	42.30	0.00	0.53	3,749	73.20
15.050	0.39	40.97	42.02	0.00	0.53	3,723	73.19
15.100	0.39	40.71	41.75	0.00	0.52	3,698	73.18
15.150	0.39	40.46	41.49	0.00	0.51	3,675	73.17
15.200	0.39	40.23	41.24	0.00	0.50	3,653	73.16
15.250	0.38	40.00	41.00	0.00	0.50	3,633	73.16
15.300	0.38	39.79	40.77	0.00	0.49	3,613	73.15
15.350	0.38	39.58	40.55	0.00	0.49	3,595	73.14
15.400	0.38	39.38	40.34	0.00	0.48	3,577	73.13
15.450	0.38	39.18	40.13	0.00	0.47	3,559	73.13
15.500	0.38	39.00	39.94	0.00	0.47	3,543	73.12
15.550	0.38	38.82	39.75	0.00	0.46	3,527	73.11
15.600	0.38	38.66	39.57	0.00	0.46	3,512	73.11
15.650	0.38	38.50	39.41	0.00	0.45	3,498	73.10
15.700	0.37	38.35	39.25	0.00	0.45	3,484	73.10
15.750	0.37	38.21	39.10	0.00	0.45	3,472	73.09
15.800	0.37	38.07	38.95	0.00	0.44	3,459	73.09
15.850	0.37	37.94	38.82	0.00	0.44	3,448	73.08
15.900	0.37	37.82	38.69	0.00	0.43	3,437	73.08
15.950	0.37	37.70	38.57	0.00	0.43	3,427	73.07
16.000	0.37	37.59	38.45	0.00	0.43	3,417	73.07
16.050	0.37	37.49	38.34	0.00	0.43	3,407	73.06
16.100	0.37	37.39	38.23	0.00	0.42	3,398	73.06
16.150	0.37	37.30	38.14	0.00	0.42	3,390	73.06
16.200	0.37	37.21	38.04	0.00	0.42	3,382	73.05
16.250	0.28	37.04	37.86	0.00	0.41	3,367	73.05
16.300	0.27	36.79	37.59	0.00	0.40	3,344	73.04
16.350	0.27	36.53	37.33	0.00	0.40	3,322	73.03
16.400	0.27	36.30	37.08	0.00	0.39	3,300	73.02
16.450	0.27	36.07	36.84	0.00	0.38	3,280	73.01
16.500	0.27	35.86	36.61	0.00	0.38	3,261	73.01
16.550	0.27	35.65	36.40	0.00	0.37	3,242	73.00
16.600	0.27	35.46	36.19	0.00	0.37	3,225	72.99
16.650	0.27	35.27	36.00	0.00	0.36	3,207	72.98
16.700	0.27	35.08	35.81	0.00	0.36	3,191	72.98
16.750	0.27	34.91	35.62	0.00	0.36	3,175	72.97

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
16.800	0.27	34.74	35.45	0.00	0.35	3,160	72.96
16.850	0.27	34.57	35.28	0.00	0.35	3,145	72.96
16.900	0.27	34.42	35.11	0.00	0.35	3,130	72.95
16.950	0.27	34.26	34.95	0.00	0.34	3,116	72.95
17.000	0.27	34.12	34.80	0.00	0.34	3,103	72.94
17.050	0.27	33.97	34.65	0.00	0.34	3,090	72.94
17.100	0.27	33.84	34.51	0.00	0.33	3,078	72.93
17.150	0.27	33.70	34.37	0.00	0.33	3,066	72.93
17.200	0.27	33.58	34.24	0.00	0.33	3,054	72.92
17.250	0.26	33.45	34.11	0.00	0.33	3,043	72.92
17.300	0.26	33.33	33.98	0.00	0.32	3,032	72.91
17.350	0.26	33.22	33.86	0.00	0.32	3,022	72.91
17.400	0.26	33.11	33.74	0.00	0.32	3,011	72.90
17.450	0.26	33.00	33.63	0.00	0.32	3,002	72.90
17.500	0.26	32.89	33.52	0.00	0.32	2,992	72.89
17.550	0.26	32.79	33.42	0.00	0.31	2,983	72.89
17.600	0.26	32.69	33.32	0.00	0.31	2,974	72.89
17.650	0.26	32.60	33.22	0.00	0.31	2,966	72.88
17.700	0.26	32.51	33.12	0.00	0.31	2,957	72.88
17.750	0.26	32.42	33.03	0.00	0.31	2,949	72.88
17.800	0.26	32.33	32.94	0.00	0.30	2,941	72.87
17.850	0.26	32.25	32.85	0.00	0.30	2,934	72.87
17.900	0.26	32.17	32.77	0.00	0.30	2,926	72.87
17.950	0.26	32.09	32.69	0.00	0.30	2,919	72.86
18.000	0.26	32.01	32.61	0.00	0.30	2,912	72.86
18.050	0.26	31.94	32.53	0.00	0.30	2,906	72.86
18.100	0.26	31.87	32.45	0.00	0.29	2,899	72.86
18.150	0.26	31.80	32.38	0.00	0.29	2,893	72.85
18.200	0.26	31.73	32.31	0.00	0.29	2,887	72.85
18.250	0.26	31.67	32.25	0.00	0.29	2,881	72.85
18.300	0.26	31.60	32.18	0.00	0.29	2,875	72.85
18.350	0.26	31.54	32.12	0.00	0.29	2,870	72.84
18.400	0.26	31.49	32.06	0.00	0.29	2,865	72.84
18.450	0.26	31.43	32.00	0.00	0.28	2,860	72.84
18.500	0.26	31.38	31.94	0.00	0.28	2,855	72.84
18.550	0.26	31.32	31.89	0.00	0.28	2,850	72.84
18.600	0.26	31.27	31.84	0.00	0.28	2,846	72.83
18.650	0.26	31.23	31.79	0.00	0.28	2,841	72.83
18.700	0.26	31.18	31.74	0.00	0.28	2,837	72.83
18.750	0.26	31.14	31.69	0.00	0.28	2,833	72.83
18.800	0.26	31.09	31.65	0.00	0.28	2,829	72.83
18.850	0.26	31.05	31.60	0.00	0.28	2,825	72.83

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
18.900	0.26	31.01	31.56	0.00	0.28	2,821	72.82
18.950	0.26	30.97	31.52	0.00	0.28	2,817	72.82
19.000	0.26	30.93	31.48	0.00	0.27	2,814	72.82
19.050	0.26	30.90	31.44	0.00	0.27	2,810	72.82
19.100	0.26	30.86	31.41	0.00	0.27	2,807	72.82
19.150	0.25	30.83	31.37	0.00	0.27	2,804	72.82
19.200	0.25	30.79	31.34	0.00	0.27	2,801	72.82
19.250	0.25	30.76	31.30	0.00	0.27	2,798	72.82
19.300	0.25	30.73	31.27	0.00	0.27	2,795	72.81
19.350	0.25	30.70	31.24	0.00	0.27	2,792	72.81
19.400	0.25	30.67	31.21	0.00	0.27	2,789	72.81
19.450	0.25	30.65	31.18	0.00	0.27	2,787	72.81
19.500	0.25	30.62	31.15	0.00	0.27	2,784	72.81
19.550	0.25	30.59	31.13	0.00	0.27	2,782	72.81
19.600	0.25	30.57	31.10	0.00	0.27	2,779	72.81
19.650	0.25	30.54	31.07	0.00	0.27	2,777	72.81
19.700	0.25	30.52	31.05	0.00	0.27	2,775	72.81
19.750	0.25	30.49	31.03	0.00	0.27	2,772	72.81
19.800	0.25	30.47	31.00	0.00	0.26	2,770	72.80
19.850	0.25	30.45	30.98	0.00	0.26	2,768	72.80
19.900	0.25	30.43	30.96	0.00	0.26	2,766	72.80
19.950	0.25	30.41	30.94	0.00	0.26	2,764	72.80
20.000	0.25	30.39	30.91	0.00	0.26	2,762	72.80
20.050	0.25	30.37	30.89	0.00	0.26	2,760	72.80
20.100	0.25	30.35	30.87	0.00	0.26	2,759	72.80
20.150	0.25	30.33	30.86	0.00	0.26	2,757	72.80
20.200	0.25	30.31	30.84	0.00	0.26	2,755	72.80
20.250	0.25	30.30	30.82	0.00	0.26	2,754	72.80
20.300	0.25	30.28	30.80	0.00	0.26	2,752	72.80
20.350	0.25	30.26	30.79	0.00	0.26	2,751	72.80
20.400	0.25	30.25	30.77	0.00	0.26	2,749	72.80
20.450	0.25	30.23	30.75	0.00	0.26	2,748	72.80
20.500	0.25	30.22	30.74	0.00	0.26	2,746	72.80
20.550	0.25	30.20	30.72	0.00	0.26	2,745	72.79
20.600	0.25	30.19	30.71	0.00	0.26	2,743	72.79
20.650	0.25	30.18	30.69	0.00	0.26	2,742	72.79
20.700	0.25	30.16	30.68	0.00	0.26	2,741	72.79
20.750	0.25	30.15	30.67	0.00	0.26	2,740	72.79
20.800	0.25	30.14	30.65	0.00	0.26	2,739	72.79
20.850	0.25	30.12	30.64	0.00	0.26	2,737	72.79
20.900	0.25	30.11	30.63	0.00	0.26	2,736	72.79
20.950	0.25	30.10	30.61	0.00	0.26	2,735	72.79

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
21.000	0.25	30.09	30.60	0.00	0.26	2,734	72.79
21.050	0.25	30.08	30.59	0.00	0.26	2,733	72.79
21.100	0.25	30.07	30.58	0.00	0.26	2,732	72.79
21.150	0.25	30.06	30.57	0.00	0.26	2,731	72.79
21.200	0.25	30.05	30.56	0.00	0.26	2,730	72.79
21.250	0.25	30.04	30.55	0.00	0.26	2,729	72.79
21.300	0.25	30.03	30.54	0.00	0.26	2,728	72.79
21.350	0.25	30.02	30.53	0.00	0.26	2,727	72.79
21.400	0.25	30.01	30.52	0.00	0.25	2,726	72.79
21.450	0.25	30.00	30.51	0.00	0.25	2,725	72.79
21.500	0.25	29.99	30.50	0.00	0.25	2,725	72.79
21.550	0.25	29.98	30.49	0.00	0.25	2,724	72.79
21.600	0.25	29.97	30.48	0.00	0.25	2,723	72.79
21.650	0.25	29.96	30.47	0.00	0.25	2,722	72.79
21.700	0.25	29.95	30.46	0.00	0.25	2,721	72.79
21.750	0.25	29.95	30.45	0.00	0.25	2,720	72.79
21.800	0.25	29.94	30.45	0.00	0.25	2,720	72.78
21.850	0.25	29.93	30.44	0.00	0.25	2,719	72.78
21.900	0.25	29.92	30.43	0.00	0.25	2,718	72.78
21.950	0.25	29.92	30.42	0.00	0.25	2,718	72.78
22.000	0.25	29.91	30.41	0.00	0.25	2,717	72.78
22.050	0.25	29.90	30.41	0.00	0.25	2,716	72.78
22.100	0.25	29.89	30.40	0.00	0.25	2,715	72.78
22.150	0.25	29.89	30.39	0.00	0.25	2,715	72.78
22.200	0.25	29.88	30.38	0.00	0.25	2,714	72.78
22.250	0.25	29.87	30.38	0.00	0.25	2,713	72.78
22.300	0.25	29.86	30.37	0.00	0.25	2,713	72.78
22.350	0.25	29.86	30.36	0.00	0.25	2,712	72.78
22.400	0.25	29.85	30.35	0.00	0.25	2,711	72.78
22.450	0.25	29.84	30.35	0.00	0.25	2,711	72.78
22.500	0.25	29.84	30.34	0.00	0.25	2,710	72.78
22.550	0.25	29.83	30.33	0.00	0.25	2,710	72.78
22.600	0.25	29.83	30.33	0.00	0.25	2,709	72.78
22.650	0.25	29.82	30.32	0.00	0.25	2,708	72.78
22.700	0.25	29.81	30.31	0.00	0.25	2,708	72.78
22.750	0.25	29.81	30.31	0.00	0.25	2,707	72.78
22.800	0.25	29.80	30.30	0.00	0.25	2,707	72.78
22.850	0.25	29.79	30.30	0.00	0.25	2,706	72.78
22.900	0.25	29.79	30.29	0.00	0.25	2,706	72.78
22.950	0.25	29.78	30.28	0.00	0.25	2,705	72.78
23.000	0.25	29.78	30.28	0.00	0.25	2,704	72.78
23.050	0.25	29.77	30.27	0.00	0.25	2,704	72.78

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
23.100	0.25	29.77	30.27	0.00	0.25	2,703	72.78
23.150	0.25	29.76	30.26	0.00	0.25	2,703	72.78
23.200	0.25	29.75	30.25	0.00	0.25	2,702	72.78
23.250	0.25	29.75	30.25	0.00	0.25	2,702	72.78
23.300	0.25	29.74	30.24	0.00	0.25	2,701	72.78
23.350	0.25	29.74	30.24	0.00	0.25	2,701	72.78
23.400	0.25	29.73	30.23	0.00	0.25	2,700	72.78
23.450	0.25	29.73	30.22	0.00	0.25	2,700	72.78
23.500	0.25	29.72	30.22	0.00	0.25	2,699	72.78
23.550	0.25	29.72	30.21	0.00	0.25	2,699	72.78
23.600	0.25	29.71	30.21	0.00	0.25	2,698	72.78
23.650	0.25	29.71	30.20	0.00	0.25	2,698	72.78
23.700	0.25	29.70	30.20	0.00	0.25	2,697	72.78
23.750	0.25	29.69	30.19	0.00	0.25	2,697	72.78
23.800	0.25	29.69	30.19	0.00	0.25	2,696	72.78
23.850	0.25	29.68	30.18	0.00	0.25	2,696	72.78
23.900	0.25	29.68	30.18	0.00	0.25	2,695	72.78
23.950	0.25	29.67	30.17	0.00	0.25	2,695	72.77
24.000	0.25	29.67	30.16	0.00	0.25	2,694	72.77

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
0.000	0.18	0.00	0.00	0.00	0.00	0	71.50
0.050	0.00	0.17	0.18	0.00	0.00	14	71.51
0.100	0.00	0.17	0.17	0.00	0.00	13	71.51
0.150	0.00	0.17	0.17	0.00	0.00	13	71.51
0.200	0.00	0.16	0.17	0.00	0.00	13	71.51
0.250	0.00	0.16	0.16	0.00	0.00	12	71.51
0.300	0.00	0.15	0.16	0.00	0.00	12	71.51
0.350	0.00	0.15	0.15	0.00	0.00	12	71.51
0.400	0.00	0.15	0.15	0.00	0.00	11	71.51
0.450	0.00	0.14	0.15	0.00	0.00	11	71.51
0.500	0.00	0.14	0.14	0.00	0.00	11	71.51
0.550	0.00	0.14	0.14	0.00	0.00	11	71.51
0.600	0.00	0.14	0.14	0.00	0.00	11	71.51
0.650	0.00	0.14	0.14	0.00	0.00	11	71.51
0.700	0.01	0.15	0.15	0.00	0.00	12	71.51
0.750	0.01	0.16	0.16	0.00	0.00	13	71.51
0.800	0.01	0.18	0.18	0.00	0.00	14	71.51
0.850	0.01	0.19	0.20	0.00	0.00	15	71.51
0.900	0.01	0.21	0.22	0.00	0.00	17	71.51
0.950	0.02	0.24	0.24	0.00	0.00	19	71.51
1.000	0.02	0.26	0.27	0.00	0.00	21	71.51
1.050	0.02	0.29	0.30	0.00	0.00	23	71.51
1.100	0.02	0.32	0.33	0.00	0.00	25	71.52
1.150	0.02	0.35	0.36	0.00	0.00	28	71.52
1.200	0.02	0.39	0.40	0.00	0.01	30	71.52
1.250	0.02	0.42	0.43	0.00	0.01	33	71.52
1.300	0.03	0.46	0.47	0.00	0.01	36	71.52
1.350	0.03	0.50	0.51	0.00	0.01	39	71.52
1.400	0.03	0.54	0.55	0.00	0.01	42	71.53
1.450	0.03	0.58	0.60	0.00	0.01	46	71.53
1.500	0.03	0.63	0.65	0.00	0.01	50	71.53
1.550	0.03	0.68	0.70	0.00	0.01	53	71.53
1.600	0.04	0.73	0.75	0.00	0.01	57	71.54
1.650	0.04	0.78	0.80	0.00	0.01	61	71.54
1.700	0.04	0.83	0.85	0.00	0.01	65	71.54
1.750	0.04	0.89	0.91	0.00	0.01	70	71.54
1.800	0.04	0.94	0.97	0.00	0.01	74	71.55
1.850	0.04	1.00	1.02	0.00	0.01	78	71.55
1.900	0.04	1.06	1.08	0.00	0.01	83	71.55
1.950	0.04	1.11	1.14	0.00	0.01	88	71.56
2.000	0.05	1.17	1.20	0.00	0.02	92	71.56
2.050	0.05	1.23	1.27	0.00	0.02	97	71.56

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
2.100	0.05	1.29	1.33	0.00	0.02	102	71.56
2.150	0.05	1.35	1.39	0.00	0.02	106	71.57
2.200	0.05	1.42	1.45	0.00	0.02	111	71.57
2.250	0.05	1.48	1.52	0.00	0.02	116	71.57
2.300	0.05	1.54	1.58	0.00	0.02	121	71.58
2.350	0.05	1.61	1.65	0.00	0.02	127	71.58
2.400	0.06	1.68	1.72	0.00	0.02	132	71.58
2.450	0.06	1.74	1.79	0.00	0.02	137	71.59
2.500	0.06	1.81	1.86	0.00	0.02	142	71.59
2.550	0.06	1.88	1.93	0.00	0.02	148	71.59
2.600	0.06	1.95	2.00	0.00	0.03	153	71.60
2.650	0.06	2.02	2.07	0.00	0.03	159	71.60
2.700	0.06	2.09	2.15	0.00	0.03	164	71.60
2.750	0.06	2.16	2.22	0.00	0.03	170	71.61
2.800	0.07	2.24	2.30	0.00	0.03	176	71.61
2.850	0.07	2.31	2.37	0.00	0.03	182	71.61
2.900	0.07	2.39	2.45	0.00	0.03	187	71.62
2.950	0.07	2.46	2.52	0.00	0.03	193	71.62
3.000	0.07	2.54	2.60	0.00	0.03	199	71.63
3.050	0.07	2.61	2.68	0.00	0.03	205	71.63
3.100	0.07	2.69	2.76	0.00	0.03	211	71.63
3.150	0.08	2.76	2.84	0.00	0.04	217	71.64
3.200	0.08	2.84	2.92	0.00	0.04	223	71.64
3.250	0.08	2.92	2.99	0.00	0.04	229	71.65
3.300	0.08	3.00	3.07	0.00	0.04	235	71.65
3.350	0.08	3.08	3.16	0.00	0.04	242	71.65
3.400	0.08	3.15	3.24	0.00	0.04	248	71.66
3.450	0.08	3.23	3.32	0.00	0.04	254	71.66
3.500	0.08	3.31	3.40	0.00	0.04	260	71.66
3.550	0.08	3.39	3.48	0.00	0.04	267	71.67
3.600	0.09	3.47	3.56	0.00	0.05	274	71.67
3.650	0.09	3.55	3.65	0.00	0.05	282	71.68
3.700	0.09	3.63	3.73	0.00	0.05	289	71.68
3.750	0.09	3.72	3.81	0.00	0.05	297	71.68
3.800	0.09	3.80	3.90	0.00	0.05	305	71.69
3.850	0.09	3.88	3.98	0.00	0.05	313	71.69
3.900	0.09	3.96	4.06	0.00	0.05	321	71.70
3.950	0.09	4.04	4.15	0.00	0.05	329	71.70
4.000	0.10	4.12	4.23	0.00	0.05	337	71.71
4.050	0.10	4.21	4.31	0.00	0.05	345	71.71
4.100	0.10	4.29	4.40	0.00	0.06	353	71.71
4.150	0.10	4.37	4.48	0.00	0.06	361	71.72

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
4.200	0.10	4.45	4.57	0.00	0.06	369	71.72
4.250	0.10	4.53	4.65	0.00	0.06	377	71.73
4.300	0.10	4.62	4.74	0.00	0.06	385	71.73
4.350	0.10	4.70	4.82	0.00	0.06	393	71.73
4.400	0.10	4.78	4.91	0.00	0.06	401	71.74
4.450	0.11	4.87	4.99	0.00	0.06	409	71.74
4.500	0.11	4.95	5.08	0.00	0.06	417	71.75
4.550	0.11	5.03	5.16	0.00	0.07	425	71.75
4.600	0.11	5.11	5.25	0.00	0.07	433	71.75
4.650	0.11	5.20	5.33	0.00	0.07	441	71.76
4.700	0.11	5.28	5.42	0.00	0.07	449	71.76
4.750	0.11	5.36	5.50	0.00	0.07	457	71.77
4.800	0.11	5.45	5.59	0.00	0.07	465	71.77
4.850	0.11	5.53	5.67	0.00	0.07	473	71.77
4.900	0.12	5.61	5.76	0.00	0.07	481	71.78
4.950	0.12	5.70	5.84	0.00	0.07	489	71.78
5.000	0.12	5.78	5.93	0.00	0.08	497	71.79
5.050	0.12	5.86	6.01	0.00	0.08	505	71.79
5.100	0.12	5.94	6.10	0.00	0.08	513	71.80
5.150	0.12	6.03	6.18	0.00	0.08	521	71.80
5.200	0.12	6.11	6.27	0.00	0.08	529	71.80
5.250	0.12	6.19	6.35	0.00	0.08	537	71.81
5.300	0.12	6.27	6.44	0.00	0.08	545	71.81
5.350	0.12	6.36	6.52	0.00	0.08	553	71.82
5.400	0.13	6.44	6.61	0.00	0.08	561	71.82
5.450	0.13	6.52	6.69	0.00	0.08	569	71.82
5.500	0.13	6.60	6.78	0.00	0.09	577	71.83
5.550	0.13	6.69	6.86	0.00	0.09	585	71.83
5.600	0.13	6.77	6.94	0.00	0.09	593	71.84
5.650	0.13	6.85	7.03	0.00	0.09	601	71.84
5.700	0.13	6.93	7.11	0.00	0.09	609	71.84
5.750	0.13	7.01	7.20	0.00	0.09	617	71.85
5.800	0.13	7.10	7.28	0.00	0.09	625	71.85
5.850	0.13	7.18	7.36	0.00	0.09	633	71.86
5.900	0.14	7.26	7.45	0.00	0.09	641	71.86
5.950	0.14	7.34	7.53	0.00	0.10	649	71.87
6.000	0.14	7.42	7.62	0.00	0.10	657	71.87
6.050	0.14	7.51	7.70	0.00	0.10	665	71.87
6.100	0.14	7.59	7.79	0.00	0.10	674	71.88
6.150	0.14	7.67	7.87	0.00	0.10	682	71.88
6.200	0.15	7.76	7.96	0.00	0.10	690	71.89
6.250	0.15	7.85	8.05	0.00	0.10	699	71.89

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
6.300	0.15	7.94	8.15	0.00	0.10	708	71.89
6.350	0.15	8.04	8.24	0.00	0.10	718	71.90
6.400	0.16	8.13	8.34	0.00	0.11	727	71.90
6.450	0.16	8.23	8.45	0.00	0.11	737	71.91
6.500	0.16	8.34	8.55	0.00	0.11	747	71.91
6.550	0.16	8.44	8.66	0.00	0.11	758	71.92
6.600	0.17	8.55	8.77	0.00	0.11	768	71.93
6.650	0.17	8.66	8.88	0.00	0.11	779	71.93
6.700	0.17	8.77	9.00	0.00	0.11	790	71.94
6.750	0.17	8.89	9.12	0.00	0.12	802	71.94
6.800	0.18	9.00	9.24	0.00	0.12	813	71.95
6.850	0.18	9.12	9.36	0.00	0.12	825	71.95
6.900	0.18	9.25	9.49	0.00	0.12	837	71.96
6.950	0.19	9.37	9.61	0.00	0.12	849	71.97
7.000	0.19	9.50	9.74	0.00	0.12	862	71.97
7.050	0.19	9.63	9.88	0.00	0.13	874	71.98
7.100	0.19	9.76	10.01	0.00	0.13	887	71.99
7.150	0.20	9.89	10.15	0.00	0.13	900	71.99
7.200	0.20	10.03	10.29	0.00	0.13	914	72.00
7.250	0.20	10.16	10.43	0.00	0.13	926	72.00
7.300	0.20	10.31	10.57	0.00	0.13	938	72.01
7.350	0.21	10.45	10.72	0.00	0.13	950	72.02
7.400	0.21	10.60	10.87	0.00	0.13	963	72.02
7.450	0.21	10.75	11.02	0.00	0.13	976	72.03
7.500	0.22	10.91	11.18	0.00	0.14	990	72.03
7.550	0.22	11.07	11.35	0.00	0.14	1,003	72.04
7.600	0.22	11.24	11.51	0.00	0.14	1,018	72.05
7.650	0.22	11.41	11.68	0.00	0.14	1,032	72.05
7.700	0.23	11.58	11.86	0.00	0.14	1,046	72.06
7.750	0.23	11.75	12.03	0.00	0.14	1,061	72.07
7.800	0.23	11.93	12.21	0.00	0.14	1,076	72.08
7.850	0.23	12.11	12.39	0.00	0.14	1,091	72.08
7.900	0.23	12.28	12.57	0.00	0.14	1,107	72.09
7.950	0.24	12.46	12.76	0.00	0.15	1,122	72.10
8.000	0.24	12.65	12.94	0.00	0.15	1,138	72.11
8.050	0.24	12.83	13.13	0.00	0.15	1,153	72.11
8.100	0.24	13.02	13.31	0.00	0.15	1,169	72.12
8.150	0.25	13.21	13.51	0.00	0.15	1,185	72.13
8.200	0.25	13.40	13.70	0.00	0.15	1,202	72.14
8.250	0.25	13.60	13.90	0.00	0.15	1,219	72.14
8.300	0.26	13.80	14.11	0.00	0.15	1,236	72.15
8.350	0.26	14.01	14.32	0.00	0.15	1,254	72.16

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
8.400	0.26	14.22	14.54	0.00	0.16	1,272	72.17
8.450	0.27	14.44	14.76	0.00	0.16	1,292	72.18
8.500	0.27	14.67	14.98	0.00	0.16	1,314	72.19
8.550	0.28	14.90	15.22	0.00	0.16	1,335	72.20
8.600	0.28	15.13	15.45	0.00	0.16	1,357	72.21
8.650	0.28	15.37	15.70	0.00	0.16	1,380	72.22
8.700	0.29	15.61	15.94	0.00	0.16	1,403	72.23
8.750	0.29	15.86	16.19	0.00	0.17	1,427	72.24
8.800	0.29	16.12	16.45	0.00	0.17	1,451	72.25
8.850	0.30	16.37	16.71	0.00	0.17	1,475	72.26
8.900	0.30	16.62	16.96	0.00	0.17	1,499	72.27
8.950	0.30	16.88	17.22	0.00	0.17	1,522	72.28
9.000	0.30	17.13	17.48	0.00	0.17	1,546	72.29
9.050	0.30	17.38	17.73	0.00	0.17	1,570	72.30
9.100	0.30	17.63	17.99	0.00	0.18	1,594	72.31
9.150	0.30	17.88	18.24	0.00	0.18	1,618	72.32
9.200	0.31	18.14	18.49	0.00	0.18	1,642	72.33
9.250	0.31	18.39	18.75	0.00	0.18	1,665	72.34
9.300	0.31	18.64	19.00	0.00	0.18	1,688	72.35
9.350	0.31	18.89	19.25	0.00	0.18	1,711	72.36
9.400	0.31	19.14	19.51	0.00	0.19	1,734	72.37
9.450	0.31	19.39	19.76	0.00	0.19	1,757	72.38
9.500	0.31	19.64	20.01	0.00	0.19	1,780	72.39
9.550	0.31	19.88	20.26	0.00	0.19	1,803	72.40
9.600	0.32	20.13	20.52	0.00	0.19	1,826	72.41
9.650	0.32	20.38	20.77	0.00	0.19	1,849	72.42
9.700	0.32	20.63	21.02	0.00	0.19	1,872	72.43
9.750	0.32	20.88	21.27	0.00	0.20	1,894	72.44
9.800	0.32	21.13	21.52	0.00	0.20	1,917	72.45
9.850	0.32	21.38	21.77	0.00	0.20	1,940	72.46
9.900	0.32	21.62	22.02	0.00	0.20	1,963	72.47
9.950	0.33	21.87	22.27	0.00	0.20	1,986	72.48
10.000	0.33	22.12	22.52	0.00	0.20	2,009	72.49
10.050	0.33	22.37	22.77	0.00	0.20	2,031	72.50
10.100	0.33	22.61	23.03	0.00	0.21	2,053	72.51
10.150	0.33	22.87	23.28	0.00	0.21	2,075	72.52
10.200	0.34	23.12	23.53	0.00	0.21	2,098	72.53
10.250	0.34	23.38	23.79	0.00	0.21	2,120	72.54
10.300	0.34	23.63	24.05	0.00	0.21	2,143	72.55
10.350	0.34	23.90	24.32	0.00	0.21	2,166	72.56
10.400	0.35	24.16	24.59	0.00	0.21	2,189	72.57
10.450	0.35	24.43	24.86	0.00	0.21	2,213	72.58

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
10.500	0.35	24.70	25.13	0.00	0.21	2,237	72.59
10.550	0.36	24.98	25.41	0.00	0.22	2,261	72.60
10.600	0.36	25.26	25.69	0.00	0.22	2,286	72.61
10.650	0.36	25.54	25.98	0.00	0.22	2,310	72.62
10.700	0.36	25.82	26.26	0.00	0.22	2,335	72.63
10.750	0.37	26.11	26.55	0.00	0.22	2,361	72.64
10.800	0.37	26.40	26.85	0.00	0.22	2,386	72.65
10.850	0.37	26.70	27.14	0.00	0.22	2,412	72.66
10.900	0.38	26.99	27.44	0.00	0.23	2,439	72.67
10.950	0.38	27.29	27.75	0.00	0.23	2,468	72.69
11.000	0.38	27.60	28.05	0.00	0.23	2,497	72.70
11.050	0.38	27.90	28.36	0.00	0.23	2,526	72.71
11.100	0.39	28.22	28.68	0.00	0.23	2,556	72.72
11.150	0.40	28.54	29.01	0.00	0.23	2,587	72.73
11.200	0.40	28.88	29.34	0.00	0.23	2,619	72.75
11.250	0.40	29.21	29.68	0.00	0.24	2,651	72.76
11.300	0.41	29.53	30.02	0.00	0.24	2,681	72.77
11.350	0.41	29.85	30.35	0.00	0.25	2,711	72.78
11.400	0.41	30.15	30.67	0.00	0.26	2,740	72.79
11.450	0.42	30.46	30.99	0.00	0.26	2,769	72.80
11.500	0.42	30.75	31.29	0.00	0.27	2,797	72.82
11.550	0.43	31.05	31.60	0.00	0.28	2,825	72.83
11.600	0.44	31.35	31.91	0.00	0.28	2,852	72.84
11.650	0.46	31.67	32.25	0.00	0.29	2,881	72.85
11.700	0.48	32.01	32.61	0.00	0.30	2,912	72.86
11.750	0.51	32.39	33.00	0.00	0.30	2,947	72.88
11.800	0.54	32.81	33.44	0.00	0.31	2,985	72.89
11.850	1.05	33.74	34.40	0.00	0.33	3,069	72.93
11.900	2.24	36.25	37.03	0.00	0.39	3,296	73.02
11.950	2.41	39.91	40.90	0.00	0.50	3,625	73.15
12.000	3.67	44.73	46.00	0.00	0.63	4,086	73.33
12.050	5.56	52.32	53.95	0.00	0.82	4,776	73.60
12.100	7.95	63.83	65.83	0.00	1.00	5,834	74.00
12.150	8.12	77.55	79.90	0.00	1.17	7,086	74.48
12.200	6.82	89.88	92.50	0.00	1.31	8,213	74.92
12.250	5.47	99.34	102.17	0.00	1.41	9,079	75.27
12.300	4.61	106.44	109.42	0.00	1.49	9,715	75.54
12.350	3.96	111.92	115.01	0.00	1.54	10,228	75.77
12.400	3.45	116.15	119.32	0.00	1.59	10,605	75.94
12.450	2.96	119.31	122.56	0.00	1.62	10,896	76.08
12.500	2.47	121.45	124.75	0.00	1.65	11,106	76.19
12.550	2.05	122.65	125.97	0.00	1.66	11,221	76.25

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
12.600	1.71	123.06	126.40	0.00	1.67	11,262	76.27
12.650	1.47	122.91	126.24	0.00	1.66	11,247	76.26
12.700	1.36	122.41	125.73	0.00	1.66	11,199	76.24
12.750	1.27	121.74	125.04	0.00	1.65	11,134	76.20
12.800	1.20	120.92	124.20	0.00	1.64	11,054	76.16
12.850	1.13	119.98	123.24	0.00	1.63	10,962	76.11
12.900	1.07	118.95	122.18	0.00	1.62	10,860	76.06
12.950	1.01	117.82	121.03	0.00	1.61	10,749	76.01
13.000	0.96	116.61	119.79	0.00	1.59	10,644	75.96
13.050	0.91	115.32	118.47	0.00	1.58	10,533	75.90
13.100	0.87	113.97	117.10	0.00	1.56	10,418	75.85
13.150	0.84	112.58	115.68	0.00	1.55	10,291	75.79
13.200	0.82	111.17	114.25	0.00	1.54	10,157	75.73
13.250	0.80	109.76	112.80	0.00	1.52	10,022	75.68
13.300	0.79	108.33	111.34	0.00	1.51	9,890	75.62
13.350	0.77	106.90	109.89	0.00	1.49	9,758	75.56
13.400	0.76	105.48	108.43	0.00	1.48	9,626	75.50
13.450	0.74	104.06	106.98	0.00	1.46	9,502	75.45
13.500	0.73	102.64	105.54	0.00	1.45	9,378	75.40
13.550	0.72	101.23	104.09	0.00	1.43	9,255	75.34
13.600	0.71	99.82	102.66	0.00	1.42	9,125	75.29
13.650	0.70	98.43	101.23	0.00	1.40	8,992	75.24
13.700	0.69	97.03	99.81	0.00	1.39	8,860	75.19
13.750	0.67	95.64	98.39	0.00	1.37	8,732	75.13
13.800	0.66	94.26	96.98	0.00	1.36	8,606	75.08
13.850	0.65	92.89	95.58	0.00	1.34	8,481	75.03
13.900	0.64	91.52	94.18	0.00	1.33	8,358	74.98
13.950	0.63	90.16	92.79	0.00	1.32	8,238	74.93
14.000	0.62	88.81	91.41	0.00	1.30	8,119	74.88
14.050	0.61	87.46	90.03	0.00	1.28	8,000	74.84
14.100	0.60	86.13	88.67	0.00	1.27	7,875	74.79
14.150	0.59	84.81	87.32	0.00	1.26	7,749	74.74
14.200	0.58	83.50	85.98	0.00	1.24	7,625	74.70
14.250	0.58	82.20	84.66	0.00	1.23	7,505	74.65
14.300	0.57	80.93	83.35	0.00	1.21	7,390	74.60
14.350	0.56	79.66	82.06	0.00	1.20	7,276	74.56
14.400	0.56	78.42	80.79	0.00	1.18	7,164	74.51
14.450	0.55	77.19	79.53	0.00	1.17	7,054	74.47
14.500	0.55	75.98	78.29	0.00	1.15	6,947	74.43
14.550	0.54	74.79	77.07	0.00	1.14	6,841	74.39
14.600	0.54	73.62	75.87	0.00	1.12	6,737	74.35
14.650	0.53	72.47	74.69	0.00	1.11	6,630	74.31

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
14.700	0.53	71.34	73.53	0.00	1.09	6,522	74.27
14.750	0.52	70.22	72.38	0.00	1.08	6,416	74.23
14.800	0.51	69.12	71.26	0.00	1.07	6,312	74.19
14.850	0.51	68.04	70.15	0.00	1.05	6,212	74.15
14.900	0.50	66.98	69.06	0.00	1.04	6,117	74.11
14.950	0.50	65.93	67.98	0.00	1.03	6,022	74.08
15.000	0.49	64.89	66.92	0.00	1.01	5,930	74.04
15.050	0.49	63.87	65.87	0.00	1.00	5,838	74.00
15.100	0.48	62.87	64.84	0.00	0.98	5,749	73.97
15.150	0.48	61.90	63.83	0.00	0.97	5,661	73.94
15.200	0.47	60.94	62.84	0.00	0.95	5,574	73.90
15.250	0.47	60.00	61.88	0.00	0.94	5,490	73.87
15.300	0.46	59.08	60.92	0.00	0.92	5,407	73.84
15.350	0.46	58.17	59.99	0.00	0.91	5,322	73.80
15.400	0.45	57.29	59.08	0.00	0.90	5,238	73.77
15.450	0.45	56.42	58.18	0.00	0.88	5,155	73.74
15.500	0.44	55.57	57.30	0.00	0.87	5,074	73.71
15.550	0.43	54.73	56.44	0.00	0.86	4,994	73.68
15.600	0.43	53.91	55.59	0.00	0.84	4,918	73.66
15.650	0.42	53.10	54.76	0.00	0.83	4,846	73.63
15.700	0.42	52.31	53.94	0.00	0.82	4,775	73.60
15.750	0.41	51.53	53.14	0.00	0.80	4,706	73.57
15.800	0.41	50.77	52.35	0.00	0.79	4,638	73.54
15.850	0.40	50.02	51.58	0.00	0.78	4,571	73.52
15.900	0.40	49.29	50.82	0.00	0.77	4,505	73.49
15.950	0.40	48.59	50.09	0.00	0.75	4,442	73.47
16.000	0.40	47.93	49.39	0.00	0.73	4,381	73.44
16.050	0.39	47.30	48.72	0.00	0.71	4,323	73.42
16.100	0.39	46.70	48.09	0.00	0.69	4,268	73.40
16.150	0.39	46.13	47.49	0.00	0.68	4,216	73.38
16.200	0.39	45.59	46.91	0.00	0.66	4,166	73.36
16.250	0.39	45.08	46.37	0.00	0.64	4,119	73.34
16.300	0.39	44.59	45.85	0.00	0.63	4,073	73.32
16.350	0.38	44.13	45.36	0.00	0.62	4,028	73.31
16.400	0.38	43.68	44.89	0.00	0.60	3,986	73.29
16.450	0.38	43.26	44.45	0.00	0.59	3,945	73.27
16.500	0.38	42.87	44.03	0.00	0.58	3,907	73.26
16.550	0.38	42.49	43.63	0.00	0.57	3,870	73.25
16.600	0.38	42.13	43.25	0.00	0.56	3,835	73.23
16.650	0.38	41.78	42.88	0.00	0.55	3,802	73.22
16.700	0.38	41.46	42.54	0.00	0.54	3,771	73.21
16.750	0.38	41.15	42.21	0.00	0.53	3,741	73.20

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
16.800	0.38	40.86	41.91	0.00	0.52	3,713	73.19
16.850	0.38	40.58	41.61	0.00	0.51	3,686	73.18
16.900	0.38	40.32	41.34	0.00	0.51	3,662	73.17
16.950	0.38	40.08	41.08	0.00	0.50	3,639	73.16
17.000	0.38	39.84	40.83	0.00	0.49	3,618	73.15
17.050	0.38	39.62	40.59	0.00	0.49	3,598	73.14
17.100	0.33	39.36	40.32	0.00	0.48	3,575	73.13
17.150	0.28	39.03	39.97	0.00	0.47	3,546	73.12
17.200	0.28	38.67	39.59	0.00	0.46	3,514	73.11
17.250	0.28	38.33	39.23	0.00	0.45	3,483	73.10
17.300	0.28	38.01	38.89	0.00	0.44	3,454	73.08
17.350	0.28	37.71	38.57	0.00	0.43	3,427	73.07
17.400	0.28	37.42	38.27	0.00	0.42	3,401	73.06
17.450	0.28	37.15	37.98	0.00	0.42	3,376	73.05
17.500	0.28	36.89	37.70	0.00	0.41	3,353	73.04
17.550	0.28	36.64	37.44	0.00	0.40	3,331	73.03
17.600	0.28	36.40	37.19	0.00	0.39	3,310	73.02
17.650	0.28	36.18	36.95	0.00	0.39	3,290	73.02
17.700	0.27	35.97	36.73	0.00	0.38	3,271	73.01
17.750	0.27	35.77	36.52	0.00	0.38	3,253	73.00
17.800	0.27	35.57	36.31	0.00	0.37	3,235	72.99
17.850	0.27	35.38	36.12	0.00	0.37	3,218	72.99
17.900	0.27	35.20	35.93	0.00	0.36	3,202	72.98
17.950	0.27	35.03	35.75	0.00	0.36	3,186	72.97
18.000	0.27	34.86	35.57	0.00	0.36	3,170	72.97
18.050	0.27	34.70	35.40	0.00	0.35	3,156	72.96
18.100	0.27	34.54	35.24	0.00	0.35	3,141	72.96
18.150	0.27	34.38	35.08	0.00	0.35	3,127	72.95
18.200	0.27	34.24	34.92	0.00	0.34	3,114	72.94
18.250	0.27	34.10	34.78	0.00	0.34	3,101	72.94
18.300	0.27	33.96	34.64	0.00	0.34	3,089	72.93
18.350	0.27	33.83	34.50	0.00	0.33	3,077	72.93
18.400	0.27	33.70	34.37	0.00	0.33	3,066	72.92
18.450	0.27	33.58	34.24	0.00	0.33	3,055	72.92
18.500	0.27	33.46	34.12	0.00	0.33	3,044	72.92
18.550	0.27	33.35	34.00	0.00	0.32	3,034	72.91
18.600	0.27	33.24	33.89	0.00	0.32	3,024	72.91
18.650	0.27	33.14	33.78	0.00	0.32	3,015	72.90
18.700	0.27	33.04	33.67	0.00	0.32	3,005	72.90
18.750	0.27	32.94	33.57	0.00	0.32	2,997	72.90
18.800	0.27	32.85	33.48	0.00	0.31	2,988	72.89
18.850	0.27	32.76	33.38	0.00	0.31	2,980	72.89

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
18.900	0.27	32.67	33.29	0.00	0.31	2,972	72.89
18.950	0.27	32.59	33.21	0.00	0.31	2,965	72.88
19.000	0.27	32.51	33.12	0.00	0.31	2,957	72.88
19.050	0.27	32.43	33.04	0.00	0.31	2,950	72.88
19.100	0.27	32.35	32.96	0.00	0.30	2,943	72.87
19.150	0.27	32.28	32.89	0.00	0.30	2,937	72.87
19.200	0.27	32.21	32.81	0.00	0.30	2,931	72.87
19.250	0.27	32.14	32.74	0.00	0.30	2,924	72.87
19.300	0.27	32.08	32.68	0.00	0.30	2,919	72.86
19.350	0.27	32.02	32.61	0.00	0.30	2,913	72.86
19.400	0.27	31.96	32.55	0.00	0.30	2,907	72.86
19.450	0.26	31.90	32.49	0.00	0.29	2,902	72.86
19.500	0.26	31.84	32.43	0.00	0.29	2,897	72.86
19.550	0.26	31.79	32.37	0.00	0.29	2,892	72.85
19.600	0.26	31.73	32.32	0.00	0.29	2,887	72.85
19.650	0.26	31.68	32.26	0.00	0.29	2,883	72.85
19.700	0.26	31.63	32.21	0.00	0.29	2,878	72.85
19.750	0.26	31.59	32.16	0.00	0.29	2,874	72.85
19.800	0.26	31.54	32.11	0.00	0.29	2,870	72.84
19.850	0.26	31.49	32.07	0.00	0.29	2,865	72.84
19.900	0.26	31.45	32.02	0.00	0.29	2,862	72.84
19.950	0.26	31.41	31.98	0.00	0.28	2,858	72.84
20.000	0.26	31.37	31.94	0.00	0.28	2,854	72.84
20.050	0.26	31.33	31.89	0.00	0.28	2,851	72.84
20.100	0.26	31.29	31.86	0.00	0.28	2,847	72.84
20.150	0.26	31.25	31.82	0.00	0.28	2,844	72.83
20.200	0.26	31.22	31.78	0.00	0.28	2,841	72.83
20.250	0.26	31.18	31.74	0.00	0.28	2,837	72.83
20.300	0.26	31.15	31.71	0.00	0.28	2,834	72.83
20.350	0.26	31.12	31.68	0.00	0.28	2,831	72.83
20.400	0.26	31.09	31.64	0.00	0.28	2,828	72.83
20.450	0.26	31.06	31.61	0.00	0.28	2,826	72.83
20.500	0.26	31.03	31.58	0.00	0.28	2,823	72.83
20.550	0.26	31.00	31.55	0.00	0.28	2,820	72.82
20.600	0.26	30.97	31.52	0.00	0.28	2,817	72.82
20.650	0.26	30.95	31.50	0.00	0.27	2,815	72.82
20.700	0.26	30.92	31.47	0.00	0.27	2,813	72.82
20.750	0.26	30.89	31.44	0.00	0.27	2,810	72.82
20.800	0.26	30.87	31.42	0.00	0.27	2,808	72.82
20.850	0.26	30.85	31.39	0.00	0.27	2,806	72.82
20.900	0.26	30.82	31.37	0.00	0.27	2,803	72.82
20.950	0.26	30.80	31.34	0.00	0.27	2,801	72.82

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - 0 (ft ³ /s)	2S/t + 0 (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
21.000	0.26	30.78	31.32	0.00	0.27	2,799	72.82
21.050	0.26	30.76	31.30	0.00	0.27	2,797	72.82
21.100	0.26	30.74	31.28	0.00	0.27	2,795	72.81
21.150	0.26	30.72	31.26	0.00	0.27	2,793	72.81
21.200	0.26	30.70	31.24	0.00	0.27	2,792	72.81
21.250	0.26	30.68	31.22	0.00	0.27	2,790	72.81
21.300	0.26	30.66	31.20	0.00	0.27	2,788	72.81
21.350	0.26	30.64	31.18	0.00	0.27	2,786	72.81
21.400	0.26	30.63	31.16	0.00	0.27	2,785	72.81
21.450	0.26	30.61	31.14	0.00	0.27	2,783	72.81
21.500	0.26	30.59	31.13	0.00	0.27	2,782	72.81
21.550	0.26	30.58	31.11	0.00	0.27	2,780	72.81
21.600	0.26	30.56	31.09	0.00	0.27	2,779	72.81
21.650	0.26	30.55	31.08	0.00	0.27	2,777	72.81
21.700	0.26	30.53	31.06	0.00	0.27	2,776	72.81
21.750	0.26	30.52	31.05	0.00	0.27	2,774	72.81
21.800	0.26	30.50	31.03	0.00	0.27	2,773	72.81
21.850	0.26	30.49	31.02	0.00	0.26	2,772	72.81
21.900	0.26	30.47	31.00	0.00	0.26	2,770	72.80
21.950	0.26	30.46	30.99	0.00	0.26	2,769	72.80
22.000	0.26	30.45	30.97	0.00	0.26	2,768	72.80
22.050	0.26	30.43	30.96	0.00	0.26	2,767	72.80
22.100	0.26	30.42	30.95	0.00	0.26	2,765	72.80
22.150	0.26	30.41	30.93	0.00	0.26	2,764	72.80
22.200	0.26	30.40	30.92	0.00	0.26	2,763	72.80
22.250	0.26	30.38	30.91	0.00	0.26	2,762	72.80
22.300	0.26	30.37	30.90	0.00	0.26	2,761	72.80
22.350	0.26	30.36	30.89	0.00	0.26	2,760	72.80
22.400	0.26	30.35	30.87	0.00	0.26	2,759	72.80
22.450	0.26	30.34	30.86	0.00	0.26	2,757	72.80
22.500	0.26	30.33	30.85	0.00	0.26	2,756	72.80
22.550	0.26	30.32	30.84	0.00	0.26	2,755	72.80
22.600	0.26	30.31	30.83	0.00	0.26	2,754	72.80
22.650	0.26	30.29	30.82	0.00	0.26	2,753	72.80
22.700	0.26	30.28	30.81	0.00	0.26	2,752	72.80
22.750	0.26	30.27	30.80	0.00	0.26	2,752	72.80
22.800	0.26	30.26	30.79	0.00	0.26	2,751	72.80
22.850	0.26	30.25	30.77	0.00	0.26	2,750	72.80
22.900	0.25	30.24	30.76	0.00	0.26	2,749	72.80
22.950	0.25	30.24	30.75	0.00	0.26	2,748	72.80
23.000	0.25	30.23	30.74	0.00	0.26	2,747	72.80
23.050	0.25	30.22	30.73	0.00	0.26	2,746	72.80

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: XFILTRATION SYSTEM (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Pond Routing Calculations (Total Out)

Time (hours)	Flow (Total In) (ft ³ /s)	2S/t - O (ft ³ /s)	2S/t + O (ft ³ /s)	Infiltration (ft ³ /s)	Flow (Outlet) (ft ³ /s)	Volume (ft ³)	Elevation (ft)
23.100	0.25	30.21	30.73	0.00	0.26	2,745	72.79
23.150	0.25	30.20	30.72	0.00	0.26	2,744	72.79
23.200	0.25	30.19	30.71	0.00	0.26	2,743	72.79
23.250	0.25	30.18	30.70	0.00	0.26	2,743	72.79
23.300	0.25	30.17	30.69	0.00	0.26	2,742	72.79
23.350	0.25	30.16	30.68	0.00	0.26	2,741	72.79
23.400	0.25	30.15	30.67	0.00	0.26	2,740	72.79
23.450	0.25	30.14	30.66	0.00	0.26	2,739	72.79
23.500	0.25	30.14	30.65	0.00	0.26	2,738	72.79
23.550	0.25	30.13	30.64	0.00	0.26	2,738	72.79
23.600	0.25	30.12	30.63	0.00	0.26	2,737	72.79
23.650	0.25	30.11	30.63	0.00	0.26	2,736	72.79
23.700	0.25	30.10	30.62	0.00	0.26	2,735	72.79
23.750	0.25	30.09	30.61	0.00	0.26	2,734	72.79
23.800	0.25	30.09	30.60	0.00	0.26	2,734	72.79
23.850	0.25	30.08	30.59	0.00	0.26	2,733	72.79
23.900	0.25	30.07	30.58	0.00	0.26	2,732	72.79
23.950	0.25	30.06	30.57	0.00	0.26	2,731	72.79
24.000	0.25	30.05	30.57	0.00	0.26	2,731	72.79

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary
 Label: XFILTRATION SYSTEM (IN)
 Scenario: Post-Development 1 year

Return Event: 1 years
 Storm Event: 1 year

Summary for Hydrograph Addition at 'XFILTRATION SYSTEM'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-2E
6-GR OUT	6" Depth Green Roof
SP-2 OUT	Stormwater Planters - 2
24-GR OUT	24" Depth Green Roof

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-2E	305	12.150	0.08
Flow (From)	6-GR OUT	1,610	11.800	0.13
Flow (From)	SP-2 OUT	3,992	11.600	0.14
Flow (From)	24-GR OUT	3,817	11.250	0.09
Flow (In)	XFILTRATION SYSTEM	9,724	12.150	0.44

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Label: XFILTRATION SYSTEM (IN)

Scenario: Post-Development 10 year

Return Event: 10 years

Storm Event: 10 year

Summary for Hydrograph Addition at 'XFILTRATION SYSTEM'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-2E
6-GR OUT	6" Depth Green Roof
SP-2 OUT	Stormwater Planters - 2
24-GR OUT	24" Depth Green Roof

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-2E	909	12.100	0.24
Flow (From)	6-GR OUT	3,090	11.650	0.13
Flow (From)	SP-2 OUT	8,137	12.600	0.35
Flow (From)	24-GR OUT	6,928	12.200	1.34
Flow (In)	XFILTRATION SYSTEM	19,064	12.200	1.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Label: XFILTRATION SYSTEM (IN)

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Summary for Hydrograph Addition at 'XFILTRATION SYSTEM'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-2E
6-GR OUT	6" Depth Green Roof
SP-2 OUT	Stormwater Planters - 2
24-GR OUT	24" Depth Green Roof

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-2E	1,306	12.100	0.35
Flow (From)	6-GR OUT	3,955	12.250	0.53
Flow (From)	SP-2 OUT	10,393	12.300	1.19
Flow (From)	24-GR OUT	8,686	12.100	2.71
Flow (In)	XFILTRATION SYSTEM	24,341	12.100	3.33

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Return Event: 100 years

Label: XFILTRATION SYSTEM (IN)

Storm Event: 100 year

Scenario: Post-Development 100 year

Summary for Hydrograph Addition at 'XFILTRATION SYSTEM'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	PDA-2E
6-GR OUT	6" Depth Green Roof
SP-2 OUT	Stormwater Planters - 2
24-GR OUT	24" Depth Green Roof

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	PDA-2E	2,167	12.100	0.57
Flow (From)	6-GR OUT	5,731	12.150	1.27
Flow (From)	SP-2 OUT	14,695	12.150	3.33
Flow (From)	24-GR OUT	12,417	12.100	3.20
Flow (In)	XFILTRATION SYSTEM	35,011	12.150	8.12

STORM_Tech RECHARGER MC-3500

THE VOLUMES ACCOUNT FOR VOID SPACE IN THE 9" STONE BASE AND SURROUNDING STONE

ADDITIONAL STONE IS CALCULATED AT 40% VOID SPACE

	HEIGHT f.t.	STAGE f.t.	Chamber with Stone cf/unit	End Cap with Stone cf/end cap				
STONE COVER	4.75	5.50	178.96	46.96				
StormTech Crown	3.75	4.50	158.42	40.13				
StormTech	3.50	4.25	152.95	38.41				
StormTech	3.25	4.00	146.55	36.64				
StormTech	3.00	3.75	138.86	34.77				
StormTech	2.75	3.50	130.44	32.81				
StormTech	2.50	3.25	121.47	30.75				
StormTech	2.25	3.00	112.04	28.58				
StormTech	2.00	2.75	102.24	26.30				
StormTech	1.75	2.50	92.12	23.93				
StormTech	1.50	2.25	81.72	21.45				
StormTech	1.25	2.00	71.09	18.88				
StormTech	1.00	1.75	60.25	16.24				
StormTech	0.75	1.50	49.25	13.52				
StormTech	0.50	1.25	38.09	10.76				
StormTech	0.25	1.00	26.81	7.96				
StormTech Invert	0.00	0.75	15.41	5.12				
BOTTOM BROKEN STONE	GRAVEL	0.00	0.00	0.00				
					AREA/UNIT	s.f.	-	51.40
					HEIGHT		3.75	3.75
					DIM.			LAY-UP
					LENGTH	f.t.	7.50	7.17
					WIDE	f.t.	6.42	6.42
					CUMMULATIVE			
					in/hr		0.00	
					cfs/unit		0	

VOLUME OF STORAGE IN EACH STAGE (cf.)

INCREMENT BASE	14	STORM-TECH RECHARGER MC-3500																		GUIDANCE			
		GRAVEL																		CONSTANT	infiltrate	Storage +	
		STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	FLOW RATE	AREA*UNIT	in 12 hrs	Infiltration
	inch	0	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	66				
	No UNIT	0.00	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	5.50				
	ELEV.	62.85	63.60	63.85	64.10	64.35	64.60	64.85	65.10	65.35	65.60	65.85	66.10	66.35	66.60	66.85	67.10	67.35	68.35	cfs		cf	cf
End Caps	14	0.00	5.12	7.96	10.76	13.52	16.24	18.88	21.45	23.93	26.30	28.58	30.75	32.81	34.77	36.64	38.41	40.13	46.96				
Chambers	0	0.00	15.41	26.81	38.09	49.25	60.25	71.09	81.72	92.12	102.2	112.04	121.47	130.44	138.86	146.55	152.95	158.42	178.96	0.000	0.00	-	20,547
14	0.00	287.42	486.78	684	879	1,071	1,260	1,444	1,625	1,800	1,969	2,131	2,286	2,431	2,565	2,679	2,780	3,163	0.000	719.60	-	2,286	
28	0.00	503.16	862.12	1,217	1,568	1,914	2,255	2,588	2,914	3,231	3,537	3,832	4,112	4,375	4,616	4,820	4,998	5,668	0.000	1,439.20	-	4,112	
42	0.00	718.90	1,237.46	1,750	2,258	2,758	3,250	3,733	4,204	4,662	5,106	5,532	5,938	6,319	6,668	6,962	7,215	8,174	0.000	2,158.80	-	5,938	
56	0.00	934.64	1,612.80	2,284	2,947	3,601	4,245	4,877	5,494	6,094	6,674	7,233	7,764	8,263	8,720	9,103	9,433	10,679	0.000	2,878.40	-	7,764	
70	0.00	1,150.38	1,988.14	2,817	3,637	4,445	5,241	6,021	6,783	7,525	8,243	8,933	9,590	10,207	10,771	11,244	11,651	13,185	0.000	3,598.00	-	9,590	
84	0.00	1,366.12	2,363.48	3,350	4,326	5,288	6,236	7,165	8,073	8,956	9,811	10,634	11,416	12,151	12,823	13,386	13,869	15,690	0.000	4,317.60	-	11,416	
98	0.00	1,581.86	2,738.82	3,883	5,016	6,132	7,231	8,309	9,363	10,388	11,380	12,335	13,242	14,095	14,875	15,527	16,087	18,196	0.000	5,037.20	-	13,242	
112	0.00	1,797.60	3,114.16	4,417	5,705	6,975	8,226	9,453	10,652	11,819	12,949	14,035	15,069	16,039	16,927	17,668	18,305	20,701	0.000	5,756.80	-	15,069	
126	0.00	2,013.34	3,489.50	4,950	6,395	7,819	9,222	10,597	11,942	13,250	14,517	15,736	16,895	17,983	18,978	19,809	20,523	23,206	0.000	6,476.40	-	16,895	
140	0.00	2,229.08	3,864.84	5,483	7,084	8,662	10,217	11,741	13,232	14,682	16,086	17,436	18,721	19,927	21,030	21,951	22,741	25,712	0.000	7,196.00	-	18,721	
154	0.00	2,444.82	4,240.18	6,017	7,774	9,506	11,212	12,885	14,522	16,113	17,654	19,137	20,547	21,871	23,082	24,092	24,959	28,217	0.000	7,915.60	-	20,547	
168	0.00	2,660.56	4,615.52	6,550	8,463	10,349	12,207	14,029	15,811	17,545	19,223	20,837	22,373	23,815	25,133	26,233	27,176	30,723	0.000	8,635.20	-	22,373	
182	0.00	2,876.30	4,990.86	7,083	9,153	11,193	13,203	15,173	17,101	18,976	20,791	22,538	24,199	25,759	27,185	28,375	29,394	33,228	0.000	9,354.80	-	24,199	
196	0.00	3,092.04	5,366.20	7,616	9,842	12,036	14,198	16,317	18,391	20,407	22,360	24,239	26,026	27,703	29,237	30,516	31,612	35,734	0.000	10,074.40	-	26,026	
210	0.00	3,307.78	5,741.54	8,150	10,532	12,880	15,193	17,462	19,680	21,839	23,929	25,939	27,852	29,647	31,288	32,657	33,830	38,239	0.000	10,794.00	-	27,852	
224	0.00	3,523.52	6,116.88	8,683	11,221	13,723	16,188	18,606	20,970	23,270	25,497	27,640	29,678	31,591	33,340	34,799	36,048	40,744	0.000	11,513.60	-	29,678	
238	0.00	3,739.26	6,492.22	9,216	11,911	14,567	17,184	19,750	22,260	24,701	27,066	29,340	31,504	33,535	35,392	36,940	38,266	43,250	0.000	12,233.20	-	31,504	
252	0.00	3,955.00	6,867.56	9,749	12,600	15,410	18,179	20,894	23,549	26,133	28,634	31,041	33,330	35,480	37,444	39,081	40,484	45,755	0.000	12,952.80	-	33,330	
266	0.00	4,170.74	7,242.90	10,283	13,290	16,254	19,174	22,038	24,839	27,564	30,203	32,742	35,156	37,424	39,495	41,222	42,702	48,261	0.000	13,672.40	-	35,156	
280	0.00	4,386.48	7,618.24	10,816	13,979	17,097	20,170	23,182	26,129	28,995	31,771	34,442	36,983	39,368	41,547	43,364	44,919	50,766	0.000	14,392.00	-	36,983	
294	0.00	4,602.22	7,993.58	11,349	14,669	17,941	21,165	24,326	27,418	30,427	33,340	36,143	38,809	41,312	43,599	45,505	47,137	53,272	0.000	15,111.60	-	38,809	
308	0.00	4,817.96	8,368.92	11,882	15,358	18,784	22,160	25,470	28,708	31,858	34,908	37,843	40,635	43,256	45,650	47,646	49,355	55,777	0.000	15,831.20	-	40,635	
322	0.00	5,033.70	8,744.26	12,416	16,048	19,628	23,155	26,614	29,998	33,289	36,477	39,544	42,461	45,200	47,702	49,788	51,573	58,283	0.000	16,550.80	-	42,461	
336	0.00	5,249.44	9,119.60	12,949	16,737	20,471	24,151	27,758	31,287	34,721	38,046	41,244	44,287	47,144	49,754	51,929	53,791	60,788	0.000	17,270.40	-	44,287	
350	0.00	5,465.18	9,494.94	13,482	17,427	21,315	25,146	28,902	32,577	36,152	39,614	42,945	46,113	49,088	51,805	54,070	56,009	63,293	0.000	17,990.00	-	46,113	
364	0.00	5,680.92	9,870.28	14,015	18,116	22,158	26,141	30,046	33,867	37,584	41,183	44,646	47,940	51,032	53,857	56,212	58,227	65,799	0.000	18,709.60	-	47,940	
378	0.00	5,896.66	10,245.62	14,549	18,806	23,002	27,136	31,190	35,156	39,015	42,751	46,346	49,766	52,976	55,909	58,353	60,445	68,304	0.000	19,429.20	-	49,766	
392	0.00	6,112.40	10,620.96	15,082	19,495	23,845	28,132	32,335	36,446	40,446	44,320	48,047	51,592	54,920	57,961	60,494	62,662	70,810	0.000	20,148.80	-	51,592	
406	0.00	6,328.14	10,996.30	15,615	20,185	24,689	29,127	33,479	37,736	41,878	45,888	49,747	53,418	56,864	60,012	62,635	64,880	73,315	0.000	20,868.40	-	53,418	
420	0.00	6,543.88	11,371.64	16,148	20,874	25,532	30,122	34,623	39,025	43,309	47,457	51,448	55,244	58,808	62,064	64,777	67,098	75,821	0.000	21,588.00	-	55,244	
434	0.00	6,759.62	11,746.98	16,682	21,564	26,376	31,117	35,767	40,315	44,740	49,025	53,148	57,070	60,752	64,116	66,918	69,316	78,326	0.000	22,307.60	-	57,070	
448	0.00	6,975.36	12,122.32	17,215	22,253	27,219	32,113	36,911	41,605	46,172	50,594	54,849	58,896	62,696	66,167	69,059	71,534	80,832	0.000	23,027.20	-	58,896	
462	0.00	7,191.10	12,497.66	17,748	22,943	28,063	33,108	38,055	42,894	47,603	52,163	56,550	60,723	64,640	68,219	71,201	73,752	83,337	0.000	23,746.80	-	60,723	
476	0.00	7,406.84	12,873.00	18,281	23,632	28,906	34,1																



Date: 1/22/2024
 Project Name: System 1 - Xfiltration - 43570 (1-22-2024 20-51-32)

CMP: Underground Detention System Storage Volume Estimation

City / County:
 State:

Designed By:
 Company:
 Telephone:

=Adjustable Input Cells

Contech Engineered Solutions, LLC is pleased to offer the following estimate of storage volume for the above named project. The results are submitted as an estimate only, without liability on the part of Contech Engineered Solutions, LLC for accuracy or suitability to any particular application and are subject to verification of the Engineer of Record. **This tool is only applicable for rectangular shaped systems.**

Summary of Inputs

System Information		Backfill Information		Pipe & Analysis Information	
Out-to-out length (ft):	145.0	Backfill Porosity (%):	40%	System Diameter (in):	60
Out-to-out width (ft):	20.0	Depth Above Pipe (in):	0.0	Pipe Spacing (in):	30
Number of Manifolds (ea):	1.0	Depth Below Pipe (in):	0.0	Incremental Analysis (in):	2
Number of Barrels (ea):	3.0	Width At Ends (ft):	1.0	System Invert (Elevation):	0
		Width At Sides (ft):	1.0		

Storage Volume Estimation

System		Pipe		Stone		Total System		Miscellaneous	
Depth (ft)	Elevation (ft)	Incremental Storage (cf)	Cumulative Storage (cf)	Incremental Storage (cf)	Cumulative Storage (cf)	Incremental Storage (cf)	Cumulative Storage (cf)	Percent Open Storage (%)	Ave. Surface Area (sf)
0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0%	1,293.6
0.17	0.16	88.4	88.4	180.3	180.3	268.6	268.6	32.9%	1,767.5
0.33	0.33	159.0	247.4	152.0	332.3	311.0	579.6	42.7%	1,952.1
0.50	0.50	202.3	449.6	134.7	466.9	337.0	916.6	49.1%	2,085.6
0.67	0.66	235.2	684.8	121.5	588.5	356.7	1,273.3	53.8%	2,191.0
0.83	0.83	261.7	946.5	110.9	699.4	372.6	1,645.9	57.5%	2,277.5
1.00	1.00	283.6	1,230.1	102.2	801.6	385.8	2,031.6	60.5%	2,349.6
1.17	1.16	302.0	1,532.1	94.8	896.4	396.8	2,428.4	63.1%	2,410.2
1.33	1.33	317.4	1,849.5	88.6	985.0	406.1	2,834.5	65.2%	2,461.1
1.50	1.50	330.4	2,179.9	83.5	1,068.5	413.8	3,248.3	67.1%	2,503.4
1.67	1.66	341.0	2,520.9	79.2	1,147.6	420.2	3,668.5	68.7%	2,538.1
1.83	1.83	349.7	2,870.6	75.7	1,223.4	425.4	4,094.0	70.1%	2,565.8
2.00	2.00	356.5	3,227.1	73.0	1,296.4	429.5	4,523.4	71.3%	2,586.9
2.17	2.16	361.5	3,588.5	71.0	1,367.4	432.5	4,955.9	72.4%	2,601.8
2.33	2.33	364.8	3,953.3	69.7	1,437.1	434.5	5,390.4	73.3%	2,610.7
2.50	2.50	366.4	4,319.7	69.0	1,506.1	435.4	5,825.8	74.1%	2,613.6
2.67	2.66	366.4	4,686.1	69.0	1,575.2	435.4	6,261.3	74.8%	2,610.7
2.83	2.83	364.8	5,050.8	69.7	1,644.9	434.5	6,695.7	75.4%	2,601.8
3.00	3.00	361.5	5,412.3	71.0	1,715.9	432.5	7,128.2	75.9%	2,586.9
3.17	3.16	356.5	5,768.8	73.0	1,788.9	429.5	7,557.7	76.3%	2,565.8
3.33	3.33	349.7	6,118.5	75.7	1,864.6	425.4	7,983.1	76.6%	2,538.1
3.50	3.50	341.0	6,459.5	79.2	1,943.8	420.2	8,403.3	76.9%	2,503.4
3.67	3.66	330.4	6,789.9	83.5	2,027.2	413.8	8,817.1	77.0%	2,461.1
3.83	3.83	317.4	7,107.3	88.6	2,115.9	406.1	9,223.2	77.1%	2,410.2
4.00	4.00	302.0	7,409.3	94.8	2,210.7	396.8	9,620.0	77.0%	2,349.6
4.17	4.16	283.6	7,692.9	102.2	2,312.8	385.8	10,005.8	76.9%	2,277.5
4.33	4.33	261.7	7,954.6	110.9	2,423.8	372.6	10,378.4	76.6%	2,191.0
4.50	4.50	235.2	8,189.8	121.5	2,545.3	356.7	10,735.1	76.3%	2,085.6
4.67	4.66	202.3	8,392.0	134.7	2,680.0	337.0	11,072.0	75.8%	1,952.1
4.83	4.83	159.0	8,551.0	152.0	2,832.0	311.0	11,383.0	75.1%	1,767.5
5.00	5.00	88.4	8,639.4	180.3	3,012.2	268.6	11,651.6	74.1%	1,293.6

These results are submitted to you as a guideline only, without liability on the part of CONTECH Engineered Solutions, LLC for accuracy or suitability to any particular application, and are subject to your verification.

APPENDIX B

NYSDEC STORMWATER SIZING CALCULATIONS

**RUNOFF REDUCTION VOLUME, WATER QUALITY VOLUME AND
STREAM CHANNEL PROTECTION SIZING CALCULATIONS**

Multi-Family Development Albany Post Road
3119 Albany Post Road
Village of Buchanan, NY

JMC Project: **22062**

Drawing Reference: **DA-1, DA-2**

Computed by: **MT**

Checked by: **XX**

WATER QUALITY VOLUME WORKSHEET

JMC Project: **22062**
 Design Point: **SITE**

Multi-Family Development Albany Post Road Drainage Area: **SITE**

Initial Water Quality Treatment Volume						
DESCRIPTION	Design Storm	Area	Impervious Area	Percent Impervious	Runoff Coefficient	Total Required WQ Volume
SYMBOL	P	A	I	%I	R _v	WQ _v
VALUE	1.5	3.87	2.53	65.48	0.639285587	13,461
UNITS	In	Ac	Ac	%	CF	CF
VALUE	Enhanced Phosphorus Removal (WQ _v = 1-yr Storm Runoff)					

Runoff Reduction Techniques (Area)			
DESCRIPTION	Total Area	Impervious Area	
SYMBOL	A	I	
Conservation of Natural Areas			
Sheetflow to Riparian Buffers or Filter Strips			
Vegetated Swale			
Tree Planting / Tree Pit			
Disconnection of Rooftop Runoff			
Stream Daylighting			
TOTAL			
UNITS	Ac	Ac	

Adjusted Water Quality Treatment Volume						
DESCRIPTION	Design Storm	Area	Impervious Area	Percent Impervious	Runoff Coefficient	Total Required WQ Volume
SYMBOL	P	A	I	%I	R _v	WQ _v
VALUE	1.5	3.87	2.53	65.48	0.639285587	13,461
UNITS	In	Ac	Ac	%	CF	CF
VALUE	Enhanced Phosphorus Removal (WQ _v = 1-yr Storm Runoff)					

Net Water Quality Treatment Volume = Adjusted WQ _v - Provided RR _v		
Initial Water Quality Treatment Volume	13,461	CF
Adjusted Water Quality Treatment Volume	13,461	CF
Provided Runoff Reduction Volume	3,792	CF
Net Water Quality Treatment Volume	9,669	CF

RUNOFF REDUCTION VOLUME WORKSHEET

JMC Project: **22062**

Design Point: **X**

Multi-Family Development Albany Post Road	Drainage Area:	XXX
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Total Water Quality Treatment Volume			
DESCRIPTION	SYMBOL	VALUE	UNITS
Initial Water Quality Volume	WQ _v	13,461	CF
Adjusted Water Quality Volume	WQ _v	13,461	CF

Minimum Runoff Reduction Volume			
DESCRIPTION	SYMBOL	VALUE	UNITS
Design Storm [90% Rainfall Event Number] or [1-yr Storm Depth]	P	1.5	In
Total Area of <i>new</i> Impervious Cover	A _{ic}	2.53	Ac
Hydrologic Soil Group (HSG) Specific Reduction Factor	S	0.20	
Runoff Coefficient [0.05 + 0.009 x %I]	R _v	0.95	CF
Impervious Cover targeted for Runoff Reduction [S x A _{ic}]	A _i	0.51	Ac
TOTAL VOLUME Required [RR_v = (P x R_v x A_i) / 12]	RR_v	2,619	CF

Runoff Reduction Techniques (Volume)			
GREEN INFRASTRUCTURE PRACTICE / SMP	SYMBOL	VALUE	UNITS
Stormwater Planter #1	RR _v	481	CF
Stormwater Planter #2	RR _v	182	CF
Green Roof #1	RR _v	923	CF
Green Roof #2	RR _v	133	CF
Green Roof #3	RR _v	153	CF
Green Roof #4	RR _v	781	CF
Green Roof #5	RR _v	210	CF
Green Roof #6	RR _v	311	CF
Green Roof #7	RR _v	62	CF
Green Roof #8	RR _v	22	CF
Green Roof #9	RR _v	271	CF
Green Roof #10	RR _v	82	CF
Green Roof #11	RR _v	83	CF
Green Roof #12	RR _v	98	CF
TOTAL	RR_v	3,792	CF

Runoff Reduction	
Is Total RR _v > Adjusted WQ _v ?	NO
Is Total RR _v > Minimum RR _v ?	YES

STORMWATER PLANTER WORKSHEET

JMC Project: **22062**

Design Point: **2**

Stormwater Planter #1

Drainage Area: PDA-2B

Site Data for Drainage Area to be Treated by Practice

DESCRIPTION	SYMBOL	VALUE	UNITS
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I	0.31	Ac
Area	A	0.31	Ac
Percent Impervious	%I	100.00	%
Runoff Coefficient [0.05 + 0.009 x %I]	R _v	0.95	CF
TOTAL VOLUME Required [WQ _v = (P x R _v x A) / 12]	WQ _v	1,603	CF
Design Storm [1-yr Storm Depth]	P		In
TOTAL VOLUME Required (TMDL) [WQ _v = 1-yr Storm Runoff]	WQ _v		CF

Minimum Planter Bed Area

DESCRIPTION	SYMBOL	VALUE	UNITS
Water Quality Volume	WQ _v	1,603	CF
Coefficient of permeability of filter media (hydraulic conductivity)	k	4.00	Ft / Day
Planter bed Depth (soil media)	d _f	1.50	Ft
Average Height of water above planter bed	h _f	0.50	Ft
Design planter bed drain Time	t _f	4.00	Hours
Required Surface Area of Planter Bed [A _f = (WQ _v x d _f) / (k x (h _f + d _f) x t _f)]	A _f	1,803.52	SF

Proposed Area

DESCRIPTION	SYMBOL	VALUE	UNITS
Calculated planter bed area (Length x Width)			SF
Surface Area of Planter Bed Provided	A _f	1,838.00	SF
Actual Volume Provided		919	CF

Runoff Reduction

DESCRIPTION	VALUE	UNITS
Is Proposed Af > Required Af ?	YES	
Type of Planter	FLOW-THROUGH	
RR _v Provided for Infiltration Planter	1,603	CF
RR _v Provided for Flow-Through Planter in HSG 'C' Soils	721	CF
RR _v Provided for Flow-Through Planter in HSG 'D' Soils	481	CF

STORMWATER PLANTER WORKSHEET

JMC Project: **22062**

Design Point: **2**

Stormwater Planter #2

Drainage Area: PDA-2B

Site Data for Drainage Area to be Treated by Practice

DESCRIPTION	SYMBOL	VALUE	UNITS
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I	0.12	Ac
Area	A	0.12	Ac
Percent Impervious	%I	100.00	%
Runoff Coefficient [0.05 + 0.009 x %I]	R _v	0.95	CF
TOTAL VOLUME Required [WQ _v = (P x R _v x A) / 12]	WQ _v	608	CF
Design Storm [1-yr Storm Depth]	P		In
TOTAL VOLUME Required (TMDL) [WQ _v = 1-yr Storm Runoff]	WQ _v		CF

Minimum Planter Bed Area

DESCRIPTION	SYMBOL	VALUE	UNITS
Water Quality Volume	WQ _v	608	CF
Coefficient of permeability of filter media (hydraulic conductivity)	k	4.00	Ft / Day
Planter bed Depth (soil media)	d _f	1.50	Ft
Average Height of water above planter bed	h _f	0.50	Ft
Design planter bed drain Time	t _f	4.00	Hours
Required Surface Area of Planter Bed [A _f = (WQ _v x d _f) / (k x (h _f + d _f) x t _f)]	A _f	684.27	SF

Proposed Area

DESCRIPTION	SYMBOL	VALUE	UNITS
Calculated planter bed area (Length x Width)			SF
Surface Area of Planter Bed Provided	A _f	1,212.00	SF
Actual Volume Provided		606	CF

Runoff Reduction

DESCRIPTION	VALUE	UNITS
Is Proposed Af > Required Af ?	YES	
Type of Planter	FLOW-THROUGH	
RR _v Provided for Infiltration Planter	608	CF
RR _v Provided for Flow-Through Planter in HSG 'C' Soils	274	CF
RR _v Provided for Flow-Through Planter in HSG 'D' Soils	182	CF

GREEN ROOF WORKSHEET

JMC Project: **22062**

Design Point: **2**

Drainage Area: **PDA-2C**

Green Roof #1

Site Data for Drainage Area to be Treated by Practice

DESCRIPTION	SYMBOL	VALUE	UNITS
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I_N	0.18	
Area	A	0.18	Ac
Percent Impervious	%I	100.00	%
Runoff Volume [$0.05 + 0.009 \times \%I$]	R_V	0.95	CF
TOTAL VOLUME Required [$WQ_V = (P \times R_V \times A) / 12$]	WQ_V	920	CF

Proposed Green Roof

DESCRIPTION	SYMBOL	VALUE	UNITS
Green Roof surface AREA	A_{RG}	852.00	SF
DEPTH of the Soil Media	D_{SM}	2.00	Ft
DEPTH of the Drainage Layer	D_{DL}	0.17	Ft
DEPTH of Ponding above surface	D_P	0.04	Ft
Porosity of the Soil Media	n_{SM}	50%	%
Porosity of the Drainage Layer	n_{DL}	25%	%
VOLUME provided in Soil Media [$V_{SM} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{SM}	852.00	CF
VOLUME provided in Drainage Layer [$V_{DL} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{DL}	35.50	CF
VOLUME provided in Ponding Area [$D_P \times A_{RG}$]		35.50	CF
TOTAL VOLUME Provided [$WQ_V \leq V_{SM} + V_{DL} + (D_P \times A_{RG})$]	WQ_V	923	CF

Runoff Reduction

DESCRIPTION	SYMBOL	VALUE	UNITS
Runoff Reduction volume provided	RR_V	923	CF

GREEN ROOF WORKSHEET

JMC Project: **22062**

Design Point: **2**

Drainage Area: **PDA-2C**

Green Roof #2

Site Data for Drainage Area to be Treated by Practice

DESCRIPTION	SYMBOL	VALUE	UNITS
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I_N	0.03	
Area	A	0.03	Ac
Percent Impervious	%I	100.00	%
Runoff Volume [0.05 + 0.009 x %I]	R_V	0.95	CF
TOTAL VOLUME Required [$WQ_V = (P \times R_V \times A) / 12$]	WQ_V	131	CF

Proposed Green Roof

DESCRIPTION	SYMBOL	VALUE	UNITS
Green Roof surface AREA	A_{RG}	123.00	SF
DEPTH of the Soil Media	D_{SM}	2.00	Ft
DEPTH of the Drainage Layer	D_{DL}	0.17	Ft
DEPTH of Ponding above surface	D_P	0.04	Ft
Porosity of the Soil Media	n_{SM}	50%	%
Porosity of the Drainage Layer	n_{DL}	25%	%
VOLUME provided in Soil Media [$V_{SM} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{SM}	123.00	CF
VOLUME provided in Drainage Layer [$V_{DL} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{DL}	5.13	CF
VOLUME provided in Ponding Area [$D_P \times A_{RG}$]		5.13	CF
TOTAL VOLUME Provided [$WQ_V \leq V_{SM} + V_{DL} + (D_P \times A_{RG})$]	WQ_V	133	CF

Runoff Reduction

DESCRIPTION	SYMBOL	VALUE	UNITS
Runoff Reduction volume provided	RR_V	133	CF

GREEN ROOF WORKSHEET

JMC Project: **22062**

Design Point: **2**

Drainage Area: **PDA-2C**

Green Roof #3

Site Data for Drainage Area to be Treated by Practice

DESCRIPTION	SYMBOL	VALUE	UNITS
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I_N	0.03	
Area	A	0.03	Ac
Percent Impervious	%I	100.00	%
Runoff Volume [0.05 + 0.009 x %I]	R_V	0.95	CF
TOTAL VOLUME Required [$WQ_V = (P \times R_V \times A) / 12$]	WQ_V	151	CF

Proposed Green Roof

DESCRIPTION	SYMBOL	VALUE	UNITS
Green Roof surface AREA	A_{RG}	141.00	SF
DEPTH of the Soil Media	D_{SM}	2.00	Ft
DEPTH of the Drainage Layer	D_{DL}	0.17	Ft
DEPTH of Ponding above surface	D_P	0.04	Ft
Porosity of the Soil Media	n_{SM}	50%	%
Porosity of the Drainage Layer	n_{DL}	25%	%
VOLUME provided in Soil Media [$V_{SM} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{SM}	141.00	CF
VOLUME provided in Drainage Layer [$V_{DL} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{DL}	5.88	CF
VOLUME provided in Ponding Area [$D_P \times A_{RG}$]		5.88	CF
TOTAL VOLUME Provided [$WQ_V \leq V_{SM} + V_{DL} + (D_P \times A_{RG})$]	WQ_V	153	CF

Runoff Reduction

DESCRIPTION	SYMBOL	VALUE	UNITS
Runoff Reduction volume provided	RR_V	153	CF

GREEN ROOF WORKSHEET

JMC Project: **22062**

Design Point: **2**

Drainage Area: **PDA-2C**

Green Roof #4

Site Data for Drainage Area to be Treated by Practice

DESCRIPTION	SYMBOL	VALUE	UNITS
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I_N	0.15	
Area	A	0.15	Ac
Percent Impervious	%I	100.00	%
Runoff Volume [0.05 + 0.009 x %I]	R_V	0.95	CF
TOTAL VOLUME Required [$WQ_V = (P \times R_V \times A) / 12$]	WQ_V	781	CF

Proposed Green Roof

DESCRIPTION	SYMBOL	VALUE	UNITS
Green Roof surface AREA	A_{RG}	721.00	SF
DEPTH of the Soil Media	D_{SM}	2.00	Ft
DEPTH of the Drainage Layer	D_{DL}	0.17	Ft
DEPTH of Ponding above surface	D_P	0.04	Ft
Porosity of the Soil Media	n_{SM}	50%	%
Porosity of the Drainage Layer	n_{DL}	25%	%
VOLUME provided in Soil Media [$V_{SM} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{SM}	721.00	CF
VOLUME provided in Drainage Layer [$V_{DL} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{DL}	30.04	CF
VOLUME provided in Ponding Area [$D_P \times A_{RG}$]		30.04	CF
TOTAL VOLUME Provided [$WQ_V \leq V_{SM} + V_{DL} + (D_P \times A_{RG})$]	WQ_V	781	CF

Runoff Reduction

DESCRIPTION	SYMBOL	VALUE	UNITS
Runoff Reduction volume provided	RR_V	781	CF

GREEN ROOF WORKSHEET

JMC Project: **22062**

Design Point: **2**

Drainage Area: **PDA-2C**

Green Roof #5

Site Data for Drainage Area to be Treated by Practice

DESCRIPTION	SYMBOL	VALUE	UNITS
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I_N	0.03	
Area	A	0.03	Ac
Percent Impervious	%I	100.00	%
Runoff Volume [$0.05 + 0.009 \times \%I$]	R_V	0.95	CF
TOTAL VOLUME Required [$WQ_V = (P \times R_V \times A) / 12$]	WQ_V	176	CF

Proposed Green Roof

DESCRIPTION	SYMBOL	VALUE	UNITS
Green Roof surface AREA	A_{RG}	194.00	SF
DEPTH of the Soil Media	D_{SM}	2.00	Ft
DEPTH of the Drainage Layer	D_{DL}	0.17	Ft
DEPTH of Ponding above surface	D_P	0.04	Ft
Porosity of the Soil Media	n_{SM}	50%	%
Porosity of the Drainage Layer	n_{DL}	25%	%
VOLUME provided in Soil Media [$V_{SM} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{SM}	194.00	CF
VOLUME provided in Drainage Layer [$V_{DL} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{DL}	8.08	CF
VOLUME provided in Ponding Area [$D_P \times A_{RG}$]		8.08	CF
TOTAL VOLUME Provided [$WQ_V \leq V_{SM} + V_{DL} + (D_P \times A_{RG})$]	WQ_V	210	CF

Runoff Reduction

DESCRIPTION	SYMBOL	VALUE	UNITS
Runoff Reduction volume provided	RR_V	210	CF

GREEN ROOF WORKSHEET

JMC Project: **22062**

Design Point: **2**

Drainage Area: **PDA-2D**

Green Roof #6

Site Data for Drainage Area to be Treated by Practice

DESCRIPTION	SYMBOL	VALUE	UNITS
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I_N	0.06	
Area	A	0.06	Ac
Percent Impervious	%I	100.00	%
Runoff Volume [0.05 + 0.009 x %I]	R_V	0.95	CF
TOTAL VOLUME Required [$WQ_V = (P \times R_V \times A) / 12$]	WQ_V	309	CF

Proposed Green Roof

DESCRIPTION	SYMBOL	VALUE	UNITS
Green Roof surface AREA	A_{RG}	933.00	SF
DEPTH of the Soil Media	D_{SM}	0.50	Ft
DEPTH of the Drainage Layer	D_{DL}	0.17	Ft
DEPTH of Ponding above surface	D_P	0.04	Ft
Porosity of the Soil Media	n_{SM}	50%	%
Porosity of the Drainage Layer	n_{DL}	25%	%
VOLUME provided in Soil Media [$V_{SM} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{SM}	233.25	CF
VOLUME provided in Drainage Layer [$V_{DL} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{DL}	38.88	CF
VOLUME provided in Ponding Area [$D_P \times A_{RG}$]		38.88	CF
TOTAL VOLUME Provided [$WQ_V \leq V_{SM} + V_{DL} + (D_P \times A_{RG})$]	WQ_V	311	CF

Runoff Reduction

DESCRIPTION	SYMBOL	VALUE	UNITS
Runoff Reduction volume provided	RR_V	311	CF

GREEN ROOF WORKSHEET

JMC Project: **22062**

Design Point: **2**

Drainage Area: **PDA-2D**

Green Roof #7

Site Data for Drainage Area to be Treated by Practice

DESCRIPTION	SYMBOL	VALUE	UNITS
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I_N	0.01	
Area	A	0.01	Ac
Percent Impervious	%I	100.00	%
Runoff Volume [$0.05 + 0.009 \times \%I$]	R_V	0.95	CF
TOTAL VOLUME Required [$WQ_V = (P \times R_V \times A) / 12$]	WQ_V	59	CF

Proposed Green Roof

DESCRIPTION	SYMBOL	VALUE	UNITS
Green Roof surface AREA	A_{RG}	185.00	SF
DEPTH of the Soil Media	D_{SM}	0.50	Ft
DEPTH of the Drainage Layer	D_{DL}	0.17	Ft
DEPTH of Ponding above surface	D_P	0.04	Ft
Porosity of the Soil Media	n_{SM}	50%	%
Porosity of the Drainage Layer	n_{DL}	25%	%
VOLUME provided in Soil Media [$V_{SM} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{SM}	46.25	CF
VOLUME provided in Drainage Layer [$V_{DL} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{DL}	7.71	CF
VOLUME provided in Ponding Area [$D_P \times A_{RG}$]		7.71	CF
TOTAL VOLUME Provided [$WQ_V \leq V_{SM} + V_{DL} + (D_P \times A_{RG})$]	WQ_V	62	CF

Runoff Reduction

DESCRIPTION	SYMBOL	VALUE	UNITS
Runoff Reduction volume provided	RR_V	62	CF

GREEN ROOF WORKSHEET

JMC Project: **22062**

Design Point: **2**

Drainage Area: **PDA-2D**

Green Roof #8

Site Data for Drainage Area to be Treated by Practice

DESCRIPTION	SYMBOL	VALUE	UNITS
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I_N	0.00	
Area	A	0.00	Ac
Percent Impervious	%I	100.00	%
Runoff Volume [$0.05 + 0.009 \times \%I$]	R_V	0.95	CF
TOTAL VOLUME Required [$WQ_V = (P \times R_V \times A) / 12$]	WQ_V	18	CF

Proposed Green Roof

DESCRIPTION	SYMBOL	VALUE	UNITS
Green Roof surface AREA	A_{RG}	66.00	SF
DEPTH of the Soil Media	D_{SM}	0.50	Ft
DEPTH of the Drainage Layer	D_{DL}	0.17	Ft
DEPTH of Ponding above surface	D_P	0.04	Ft
Porosity of the Soil Media	n_{SM}	50%	%
Porosity of the Drainage Layer	n_{DL}	25%	%
VOLUME provided in Soil Media [$V_{SM} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{SM}	16.50	CF
VOLUME provided in Drainage Layer [$V_{DL} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{DL}	2.75	CF
VOLUME provided in Ponding Area [$D_P \times A_{RG}$]		2.75	CF
TOTAL VOLUME Provided [$WQ_V \leq V_{SM} + V_{DL} + (D_P \times A_{RG})$]	WQ_V	22	CF

Runoff Reduction

DESCRIPTION	SYMBOL	VALUE	UNITS
Runoff Reduction volume provided	RR_V	22	CF

GREEN ROOF WORKSHEET

JMC Project: **22062**

Design Point: **2**

Drainage Area: **PDA-2D**

Green Roof #9

Site Data for Drainage Area to be Treated by Practice

DESCRIPTION	SYMBOL	VALUE	UNITS
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I_N	0.05	
Area	A	0.05	Ac
Percent Impervious	%I	100.00	%
Runoff Volume [$0.05 + 0.009 \times \%I$]	R_V	0.95	CF
TOTAL VOLUME Required [$WQ_V = (P \times R_V \times A) / 12$]	WQ_V	270	CF

Proposed Green Roof

DESCRIPTION	SYMBOL	VALUE	UNITS
Green Roof surface AREA	A_{RG}	812.00	SF
DEPTH of the Soil Media	D_{SM}	0.50	Ft
DEPTH of the Drainage Layer	D_{DL}	0.17	Ft
DEPTH of Ponding above surface	D_P	0.04	Ft
Porosity of the Soil Media	n_{SM}	50%	%
Porosity of the Drainage Layer	n_{DL}	25%	%
VOLUME provided in Soil Media [$V_{SM} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{SM}	203.00	CF
VOLUME provided in Drainage Layer [$V_{DL} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{DL}	33.83	CF
VOLUME provided in Ponding Area [$D_P \times A_{RG}$]		33.83	CF
TOTAL VOLUME Provided [$WQ_V \leq V_{SM} + V_{DL} + (D_P \times A_{RG})$]	WQ_V	271	CF

Runoff Reduction

DESCRIPTION	SYMBOL	VALUE	UNITS
Runoff Reduction volume provided	RR_V	271	CF

GREEN ROOF WORKSHEET

JMC Project: **22062**

Design Point: **2**

Drainage Area: **PDA-2D**

Green Roof #10

Site Data for Drainage Area to be Treated by Practice

DESCRIPTION	SYMBOL	VALUE	UNITS
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I_N	0.01	
Area	A	0.01	Ac
Percent Impervious	%I	100.00	%
Runoff Volume [$0.05 + 0.009 \times \%I$]	R_V	0.95	CF
TOTAL VOLUME Required [$WQ_V = (P \times R_V \times A) / 12$]	WQ_V	77	CF

Proposed Green Roof

DESCRIPTION	SYMBOL	VALUE	UNITS
Green Roof surface AREA	A_{RG}	246.00	SF
DEPTH of the Soil Media	D_{SM}	0.50	Ft
DEPTH of the Drainage Layer	D_{DL}	0.17	Ft
DEPTH of Ponding above surface	D_P	0.04	Ft
Porosity of the Soil Media	n_{SM}	50%	%
Porosity of the Drainage Layer	n_{DL}	25%	%
VOLUME provided in Soil Media [$V_{SM} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{SM}	61.50	CF
VOLUME provided in Drainage Layer [$V_{DL} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{DL}	10.25	CF
VOLUME provided in Ponding Area [$D_P \times A_{RG}$]		10.25	CF
TOTAL VOLUME Provided [$WQ_V \leq V_{SM} + V_{DL} + (D_P \times A_{RG})$]	WQ_V	82	CF

Runoff Reduction

DESCRIPTION	SYMBOL	VALUE	UNITS
Runoff Reduction volume provided	RR_V	82	CF

GREEN ROOF WORKSHEET

JMC Project: **22062**

Design Point: **2**

Drainage Area: **PDA-2D**

Green Roof #11

Site Data for Drainage Area to be Treated by Practice

DESCRIPTION	SYMBOL	VALUE	UNITS
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I_N	0.02	
Area	A	0.02	Ac
Percent Impervious	%I	100.00	%
Runoff Volume [$0.05 + 0.009 \times \%I$]	R_V	0.95	CF
TOTAL VOLUME Required [$WQ_V = (P \times R_V \times A) / 12$]	WQ_V	80	CF

Proposed Green Roof

DESCRIPTION	SYMBOL	VALUE	UNITS
Green Roof surface AREA	A_{RG}	248.00	SF
DEPTH of the Soil Media	D_{SM}	0.50	Ft
DEPTH of the Drainage Layer	D_{DL}	0.17	Ft
DEPTH of Ponding above surface	D_P	0.04	Ft
Porosity of the Soil Media	n_{SM}	50%	%
Porosity of the Drainage Layer	n_{DL}	25%	%
VOLUME provided in Soil Media [$V_{SM} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{SM}	62.00	CF
VOLUME provided in Drainage Layer [$V_{DL} = A_{RG} \times D_{DL} \times n_{DL}$]	V_{DL}	10.33	CF
VOLUME provided in Ponding Area [$D_P \times A_{RG}$]		10.33	CF
TOTAL VOLUME Provided [$WQ_V \leq V_{SM} + V_{DL} + (D_P \times A_{RG})$]	WQ_V	83	CF

Runoff Reduction

DESCRIPTION	SYMBOL	VALUE	UNITS
Runoff Reduction volume provided	RR_V	83	CF

GREEN ROOF WORKSHEET

JMC Project: **22062**
 Design Point: **2**
 Drainage Area: **PDA-2D**

Green Roof #12

Site Data for Drainage Area to be Treated by Practice

DESCRIPTION	SYMBOL	VALUE	UNITS
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I_N	0.02	
Area	A	0.02	Ac
Percent Impervious	%I	100.00	%
Runoff Volume [$0.05 + 0.009 \times \%I$]	R_V	0.95	CF
TOTAL VOLUME Required [$WQ_V = (P \times R_V \times A) / 12$]	WQ_V	95	CF

Proposed Green Roof

DESCRIPTION	SYMBOL	VALUE	UNITS
Green Roof surface AREA	A_{RG}	294.00	SF
DEPTH of the Soil Media	D_{SM}	0.50	Ft
DEPTH of the Drainage Layer	D_{DL}	0.17	Ft
DEPTH of Ponding above surface	D_P	0.04	Ft
Porosity of the Soil Media	n_{SM}	50%	%
Porosity of the Drainage Layer	n_{DL}	25%	%
VOLUME provided in Soil Media [$V_{SM} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{SM}	73.50	CF
VOLUME provided in Drainage Layer [$V_{DL} = A_{RG} \times D_{SM} \times n_{SM}$]	V_{DL}	12.25	CF
VOLUME provided in Ponding Area [$D_P \times A_{RG}$]		12.25	CF
TOTAL VOLUME Provided [$WQ_V \leq V_{SM} + V_{DL} + (D_P \times A_{RG})$]	WQ_V	98	CF

Runoff Reduction

DESCRIPTION	SYMBOL	VALUE	UNITS
Runoff Reduction volume provided	RR_V	98	CF

PROPRIETARY PRACTICE WORKSHEET

JMC Project: **22062**

Design Point: **3**

Drainage Area: **PDA-3**

Water Quality Structure

Rainfall Distribution Type: **III**


		A	B	C
Coefficients for the equation unit peak	C_0	-1.774	0.3301	2.4577
$[R = I_a / P]$	C_1	1.8622	-0.7397	-0.4627
$[C_i = A \times R^2 + B \times R + C]$	C_2	-0.0648	0.2276	-0.1932

Site Data for Drainage Area to be Treated by Practice			
DESCRIPTION	SYMBOL	VALUE	UNITS
Design Storm [90% Rainfall Event Number]	P	1.5	In
Impervious Area	I	1.59	Ac
Area	A	3.61	Ac
Percent Impervious	%I	44.14	%
Runoff Coefficient $[0.05 + 0.009 \times \%I]$	R_v	0.45	CF
TOTAL VOLUME Required $[WQ_v = (P \times R_v \times A) / 12]$	WQ_v	8,781	CF
Design Storm [1-yr Storm Depth]	P		In
TOTAL VOLUME Required (TMDL) $[WQ_v = 1\text{-yr Storm Runoff}]$	WQ_v		CF

Water Quality Peak Flow Calculation			
DESCRIPTION	SYMBOL	VALUE	UNITS
Water Quality Volume	WQ_v	8,781	CF
Design Storm [90% Rainfall Event Number] or [1-yr Storm Depth]	P	1.5	In
Time of Concentration	t_c	0.1560	Hr
Runoff Volume $[Q = WQ_v / (A \times 3630)]$	Q	0.67	In
Curve Number $[CN = 1000 / (10 + 5P + 10Q - 10 \times (Q^2 + 1.25 QP)^{1/2})]$	CN	89.77	
Curve Number	CN	90	
Initial Abstraction $[I_a = 200 / CN - 2]$	I_a	0.23	In
Ratio $[R = I_a / P]$	R	0.15	
$C_0 = A \times R^2 + B \times R + C$	C_0	2.47	
$C_1 = A \times R^2 + B \times R + C$	C_1	-0.53	
$C_2 = A \times R^2 + B \times R + C$	C_2	-0.16	
Unit Peak Discharge	q_u	619.44	cfs/mi ² /in
Peak Discharge $[Q_p = q_u \times A \times Q / 640]$	Q_p	2.34	cfs

Proposed Device			
DESCRIPTION	SYMBOL	VALUE	UNITS
Water Quality Peak Flow Provided	Q_p	2.9	cfs
Water Quality Volume Provided $[WQ_v = 640 \times 3600 \times Q_p / q_u]$	WQ_v	10,935	CF
Model Designation		JFPD0808	
Quantity		1	

Specifications

Product Line:

Product:
rooflite intensive 600
600 Weight Class:
60 - 70 lb/ft ³

NOTE:

Because rooftop gardens are living systems, Skyland USA, LLC can only guarantee their products to meet the specified properties at the time of delivery. Therefore, any claim of potential non-compliance must be at this time. All warranty claims made subsequent to the delivery of the product will not be honored.

The details contained in these specifications correspond with Skyland USA's technical knowledge at the time of publication. Skyland USA, LLC reserves the right to update and adjust these performance specification values periodically, to modify the named properties of the product in accordance with new insight and best practices, due to the availability of local materials, or special product conditions related to plant selection, nutrients requirements, or environmental conditions.

rooflite® intensive 600

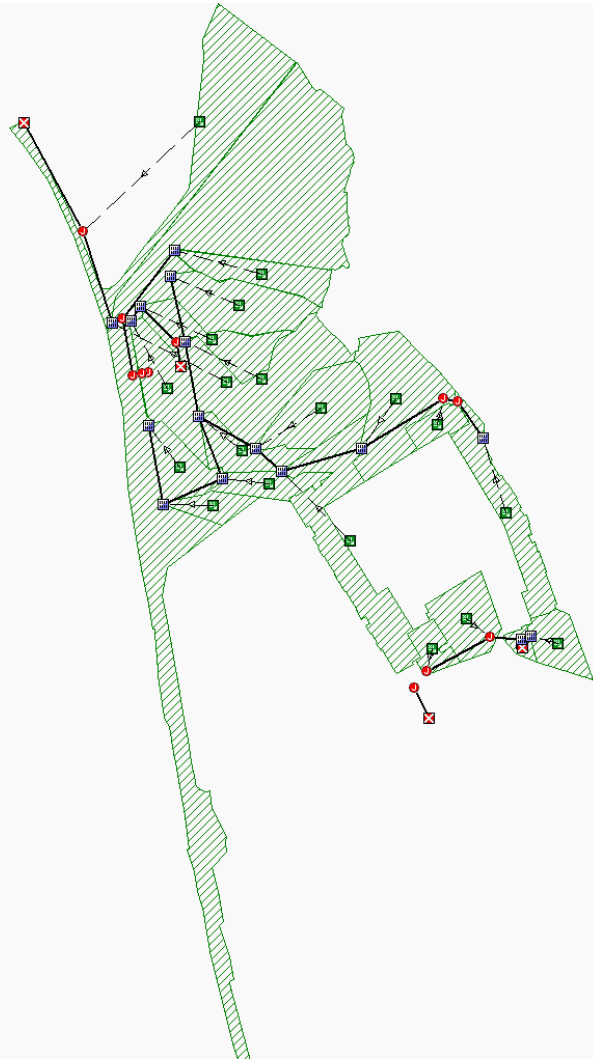
Weight Class* 60-70 lb/ft³

A planting medium for intensive vegetative (green) roof systems with a separate drain layer, designed to retain stormwater and to promote long lasting vigorous plant growth, and which meets the requirements described in ASTM E2777-14 Standard Guide for Vegetative (Green) Roof Systems and detailed below. rooflite intensive 600 is the 60 to 70 lb/ft³ fully saturated weight class of the rooflite intensive product line*. rooflite® intensive 600 is a precisely balanced blend of carefully selected lightweight mineral aggregates and premium organic components, like USCC STA approved compost complying with the following technical and performance requirements:

Particle Size Distribution (ASTM D422-63)			
Proportion of particles < 0.05 mm		Mass %	≤ 20
Proportion of particles < 0.25 mm	#60 mesh	Mass %	15 - 40
Proportion of particles < 1.00 mm	#18 mesh	Mass %	25 - 60
Proportion of particles < 2.00 mm	#10 mesh	Mass %	40 - 80
Proportion of particles < 3.20 mm	1/8-inch mesh	Mass %	50 - 90
Proportion of particles < 6.30 mm	1/4-inch mesh	Mass %	75 - 100
Proportion of particles < 9.50 mm	3/8-inch mesh	Mass %	90 - 100
Proportion of particles < 12.50 mm	1/2-inch mesh	Mass %	100
Bulk Density Measurements (ASTM E2399)*			
Bulk Density dry weight basis		lb/ft ³	25 - 45
Bulk Density at maximum water-holding capacity		lb/ft ³	60 - 70
Water/Air Measurements (ASTM E2399)			
Total Pore Volume		Vol. %	≥ 50
Maximum water-holding capacity		Vol. %	45 - 65
Air-filled porosity at maximum water-holding capacity		Vol. %	≥ 7
Water permeability (saturated hydraulic conductivity)		in/min	0.0118 - 1.18
pH and Salt Content			
pH (in CaCl ₂)			6.0 - 8.5
Soluble salts (water, 1:10, m:v)		g (KCl)/L	< 2.5
Organic Measurements (LOI at 500°C SM 2540 G)			
Organic matter content		g/L	50 - 90
Nutrient Retention Capacity			
Cation Exchange Capacity (CEC)		meq/100 g	≥ 6
Supplier			
Skyland USA, LLC - visit www.rooflitesoil.com or call 1.877.268.0017			
<p>*rooflite intensive is a product line that is available in different saturated weight classes. These weight classes are designed to guide you in choosing the best option for your project based on your weight requirements. Each weight class is identified by a number that corresponds to the typical weight for fully saturated media based on ASTM E2399. Depending on your specific region, the following weight classes are available for rooflite intensive:</p> <ul style="list-style-type: none"> • intensive 500: saturated weight 50-60 lb/ft³ • intensive 600: saturated weight 60-70 lb/ft³ • intensive 700: saturated weight 70-80 lb/ft³ • intensive 800: saturated weight 80-90 lb/ft³ <p>All Density Measurements reflect typical ranges for the respective rooflite products. For more detailed information please inquire about latest test results.</p>			

APPENDIX C

STORM PIPE CAPACITY CALCULATIONS



STORM PIPE CAPACITY CALCULATIONS FOR PROPOSED CONDITIONS

25 YEAR STORM

From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Pipe Diameter or Height (inches)	Manning's Roughness	Peak Flow (cfs)	Max Flow Velocity (ft/sec)	Design Flow Capacity (cfs)	Max Flow / Design Flow Ratio	Max Flow Depth / Total Depth Ratio	Max Flow Depth (ft)
CI-A-9-1	CI-A-9	85.75	64.85	64.40	0.5200	15.000	0.0130	0.86	4.27	4.68	0.18	0.29	0.36
R-B-6	R-B-5	92.70	76.87	75.94	1.0000	15.000	0.0130	0.27	4.32	6.47	0.04	0.14	0.17
R-B-5	DI-B-4	40.08	75.94	75.63	0.7700	15.000	0.0130	1.16	3.65	5.68	0.20	0.31	0.38
DI-B-A-5	DI-B-4	12.91	75.99	75.63	2.7700	15.000	0.0130	0.21	3.42	10.76	0.02	0.10	0.12
DI-A-16	DMH-A-15	57.84	73.50	72.92	1.0000	15.000	0.0130	1.40	4.73	6.47	0.22	0.32	0.39
CI-A-12	CI-A-11	44.93	70.10	69.25	1.8900	18.000	0.0130	10.62	8.95	14.45	0.73	0.64	0.96
DMH-A-15	DMH-A-14	19.15	72.92	72.72	1.0400	15.000	0.0130	1.40	4.28	6.60	0.21	0.31	0.39
DMH-A-14	DI-A-13	123.34	72.72	71.47	1.0100	15.000	0.0130	1.77	4.58	6.50	0.27	0.35	0.44
DI-A-13	CI-A-12	107.14	71.47	70.10	1.2800	18.000	0.0130	8.44	7.34	11.88	0.71	0.62	0.93
CI-A-8-1	DMH-A-8	65.96	64.50	64.15	0.5300	15.000	0.0130	2.01	3.72	4.71	0.43	0.46	0.57
DI-A-2	DMH-A-1	122.03	61.50	58.20	2.7000	15.000	0.0130	8.35	9.60	10.62	0.79	0.67	0.83
CI-A-10	CI-A-9	99.59	67.25	64.40	2.8600	18.000	0.0130	13.48	11.12	17.77	0.76	0.65	0.98
DMH-A-4	DMH-A-3	74.96	62.50	61.75	1.0000	15.000	0.0130	3.92	5.51	6.46	0.61	0.56	0.70
OCS-A-6	WQS-A-5 (JELLYFISH)	7.17	62.85	62.70	2.0900	15.000	0.0130	3.92	7.28	9.34	0.42	0.45	0.56
CI-A-8-2	CI-A-8-1	22.48	64.65	64.50	0.6700	15.000	0.0130	1.26	3.54	5.28	0.24	0.33	0.42
CI-A-11	CI-A-10	80.33	69.25	67.25	2.4900	18.000	0.0130	11.41	10.14	16.58	0.69	0.61	0.91
CI-A-9	DMH-A-8	11.22	64.40	64.15	2.2300	18.000	0.0130	15.31	10.11	15.68	0.98	0.80	1.20
DMH-A-8	DMH-A-7	30.96	64.15	63.60	1.7800	24.000	0.0130	17.27	9.93	30.15	0.57	0.54	1.09
WQS-A-5 (JELLYFISH)	DMH-A-4	12.21	62.70	62.50	1.6400	15.000	0.0130	3.92	6.65	8.27	0.47	0.48	0.61
DMH-A-1	DI-A-0	161.42	58.20	54.01	2.6000	15.000	0.0130	8.33	9.44	10.41	0.80	0.68	0.85
CI-A-3-1	DMH-A-3	111.19	64.00	61.75	2.0200	15.000	0.0130	0.38	5.66	9.19	0.04	0.14	0.17
DMH-A-3	DI-A-2	12.30	61.75	61.50	2.0300	15.000	0.0130	4.30	7.38	9.21	0.47	0.48	0.60
DI-B-4	BMH-B-3	9.67	75.63	75.54	0.9300	15.000	0.0130	1.41	4.10	6.23	0.23	0.32	0.40
CI-A-10-3	CI-A-10-2	102.00	68.61	68.10	0.5000	15.000	0.0130	0.74	4.31	4.57	0.16	0.27	0.34
CI-A-10-2	CI-A-10-11	66.07	68.10	67.75	0.5300	15.000	0.0130	1.06	3.12	4.70	0.22	0.32	0.40
CI-A-10-11	CI-A-10	94.93	67.75	67.25	0.5300	15.000	0.0130	1.54	3.46	4.69	0.33	0.39	0.49
OCS-B-2	ES-B-1	59.63	71.50	71.20	0.5000	15.000	0.0130	1.01	3.00	4.58	0.22	0.32	0.40

APPENDIX D

SOIL TESTING DATA



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16 August 2023
Revised 15 December 2023

AMS Acquisitions
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Attn: Mr. Ryan Sutherland, AIA LEED AP BD&C
Director of Design and Development

Re: Report on Subsurface Soil and Foundation Investigation
Proposed 4 Story Building
Albany Post Road and Craft Lane
Buchanan, NY (CSA Job #23-34)

Dear Mr. Sutherland:

In accordance with our proposals dated 6 March 2023 and 11 October 2023 and your subsequent authorization, we have completed a Subsurface Soil and Foundation Investigation for the referenced site. The purpose of this study was to determine the nature and engineering properties of the subsurface soil and groundwater conditions for the new construction, to recommend a practical foundation scheme, to determine the allowable bearing capacity of the site soils, to define the transition areas from a pile foundation to shallow spread footings on bedrock, and to preliminary determine the subsurface conditions in the new stormwater management areas.

We understand that the planned construction will consist of a new 4 story building with 1 level of below-grade parking. The proposed construction will also include soil and rock slopes, site retaining walls, stormwater management areas, new underground utilities, and new asphalt-paved driveways and parking areas. To guide us in our study, you have provided us with plans that indicate the existing site conditions and the location of the proposed construction.

Our scope of work for this project included the following:

1. Reviewed the proposed layout, the existing site conditions, the expected soil conditions, and planned this study.
2. Retained Environmental Technical Drilling Inc. to advance 19 test borings at the subject site.
3. Retained American Tree and Landscape Corp. to excavate 12 test pits at the site and Traficante Contracting Inc. to excavate 17 test pits at the site.

4. Laid out the boring and test pit locations in the field, provided full time inspection of the explorations, obtained soil samples, and prepared detailed logs and a Boring & Test Pit Location Plan (Figure 1).
5. Performed soil identification tests on selected soil samples in our laboratory.
6. Analyzed the field and laboratory test data and prepared this report containing the results of this study.

1.0 SITE DESCRIPTION

The subject property is located behind 3115 and 3119 Albany Post Road at the intersection with Craft Lane in Buchanan, Westchester County, New York. The property is currently undeveloped and wooded with varying (sparse to dense) vegetation. The site grades generally slope down from east to west and vary from approximately +120.0 to +66.0.

There is a pond on the adjacent property to the south that extends into the southern portion of the subject site. Historic aerial photographs indicate that the pond was larger at one time and extended further to the north into the area of the proposed building. The pond was filled sometime between 1964 and 1974.

2.0 PROPOSED CONSTRUCTION

We understand that the planned construction will consist of a new 4 story building with 1 level of below-grade parking. The finished floor elevation for the new building will be at elevation +79.0. Based on the existing site conditions, we anticipate that cuts up to 21 feet will be required in the southeast and northeast corners of the building and minor fills up to 2 feet will be required on the west side of the building to achieve the finished floor elevation. Based on the plans, we understand that the proposed construction will also include soil and rock slopes, new retaining walls, stormwater management areas, underground utilities, and asphalt-paved driveways and parking areas.

We also understand that the foundation plan has not been prepared as of the date of this report. Based on provided preliminary information, we expect that the tops of the new footings and piles caps will be about 12 inches to 24 inches below the floor slab elevation and that the footings and pile caps will range from approximately 36 inches to 54 inches in thickness. The preparation of the foundation plan must be coordinated with Carlin-Simpson & Associates, as discussed later in this report.

The following evaluation is based on the information that has been provided to our office as of the date of this report. The recommendations below are considered preliminary in nature and are intended to give guidance in the planning and designing of the new construction. Once the site plans and foundation plans have been further developed, a copy of the plans should be forwarded to our office so that we can review them along with the recommendations in this report. At that time, any changes or additional recommendations can be provided, if required.

3.0 SUBSURFACE CONDITIONS

To determine the subsurface soil and groundwater conditions at the site 19 borings and 29 test pits were performed for the referenced project. The borings were performed by Environmental Technical Drilling Inc. using hollow stem augers and split spoon sampling. The test pits were excavated

by American Tree and Landscape Corp. using a backhoe. Detailed boring and test pit logs have been prepared and are included in this report.

The borings were completed in July 2023 and November 2023 under the full-time inspection of Carlin-Simpson & Associates. The test pits were excavated in June 2023 and November 2023 under the full-time inspection of Carlin-Simpson & Associates. Our field engineer visually identified all of the soil samples obtained during the boring and test pit operations and select samples were tested in our laboratory.

3.1 Soil and Rock

The soil descriptions shown on the boring and test pit logs are based on the Burmister Classification System. In this system, the soil is divided into three components: Sand (S), Silt (\$) and Gravel (G). The major component is indicated in all capital letters, the lesser in lower case letters. The following modifiers indicate the quantity of each lesser component:

<u>Modifier</u>	<u>Quantity</u>
trace (t)	0 -10%
little (l)	10% - 20%
some (s)	20% - 35%
and (a)	35% - 50%

The subsurface soil and rock conditions encountered in the borings and test pits can be summarized as follows:

Stratum 1A The surface layer in 19 of the borings and test pits consists of dark brown or black Topsoil topsoil that ranges from approximately 0'2" to 1'4" in thickness.

Stratum 1B At the surface in 4 of the borings is asphalt pavement that ranges from approximately Asphalt 0'2" to 0'8" in thickness.

Stratum 2 Beneath the surface layers in 14 borings and 16 test pits is existing fill that generally Existing Fill consists of loose to dense brown, gray, black coarse to fine Sand, trace (to some) Silt, trace (to some) coarse to fine Gravel, with varying amounts of cobbles, boulders, organic material, and debris. Organic material and/or debris was noted in 5 of the test pits and 4 of the borings and consisted of roots, buried topsoil, plastic, wood, concrete, brick, and asphalt. The existing fill was encountered to depths ranging from 1'6" to more than 27'0" below the existing ground surface at the boring and test pit locations.

Stratum 3 Below the surface layers and existing fill in many locations is a shallow layer of Sand, Silty Sand, or Sandy Gravel medium dense to dense brown, gray coarse to fine SAND, trace (to and) Silt, trace (to and) coarse to fine Gravel or coarse to fine GRAVEL some (to and), coarse to fine Sand, trace Silt. Many cobbles and boulders were encountered in this stratum. This layer was encountered to depth ranging from 1'0" to 8'3" below the existing ground surface at the boring and test pit locations.

Stratum 4
Clayey Silt
or Silty Clay

Underlying the above layers in borings B-8, B-12, B-103, and B-104 and in test pit TP-12 is soft to stiff brown, gray or mottled red brown, brown, gray Clayey SILT, trace coarse to fine Sand or Silty CLAY, trace fine Sand. Boring B-8 was terminated in this stratum at a depth of 29'0" below the ground surface and test pit TP-12 was terminated in this stratum at a depth of 9'6" below the surface. At boring B-12, this stratum continued to a depth of 10'2" below the ground surface and at borings B-103 and B-104, this layer continued to depths of 23'6" and 33'0" below the surface, respectively.

Stratum 5
Gravelly
Sand

Below the Clayey Silt or Silty Clay in borings B-103 and B-104 is dark gray, black, or brown coarse to fine SAND, trace (to little) Silt, some coarse to fine Gravel that continued to depths of 28'6" and 45'0" below the existing ground surface, respectively.

Stratum 6
Weathered
Bedrock

Beneath the existing fill and virgin soil layers is weathered bedrock. In some test pit locations, the upper few feet of the bedrock was completely weathered and rippable. However, the completely weathered rock quickly transitioned to harder rock. Auger or bucket refusal on probable harder bedrock was encountered in 29 of the boring and test pit locations at depths ranging from 1'0" to 45'0" below the existing ground surface. At boring B-12, spoon refusal on possible bedrock was encountered at a depth of 10'2" below the ground surface.

At borings B-9 and B-101 through B-105, the upper 5 to 10 feet of the bedrock was cored. The rock generally consisted of gray diorite with hornblende and biotite, was moderately jointed, and was slightly to moderately weathered. The rock core recoveries ranged from 92% to 100% and the rock quality designation (RQD) of the recovered cores was 25% and 95%. Based on the rock core RQD values and visual inspection, the upper portion of the bedrock varies from poor to excellent quality ranging from a shattered, very blocky and seamy condition to an intact rock condition.

3.2 Bedrock

Bedrock or refusal on probable bedrock was encountered at depths ranging from 1'0" to 45'0" below the existing ground surface (elevation +34.5 to +90.0) at many of the boring and test pit locations. Based on our experience, the bedrock will generally transition from completely or highly weathered rock to harder bedrock with increasing depth. The bedrock observations are summarized in Table 1 below.

Based on the provided grading plan, cuts are planned for portions of the site. The boring data indicates that many of these excavations will extend into bedrock. Only limited bedrock core samples were obtained from the cut areas outside the building footprint during this investigation. We recommend that additional borings and rock coring be performed for select rock cut areas.

Penetration into the bedrock and completely weathered rock with excavation equipment will depend on the degree of weathering and fracturing in the rock. The upper few feet of rock may be "rippable" by using large construction equipment, but we anticipate that the "rippability" of the bedrock will be variable and very limited. It should not be assumed that the completely weathered rock (very dense material in a soil-like state) can be excavated with conventional equipment. Zones of harder rock will be encountered within the completely weathered rock layer. Where harder rock is encountered in

the site excavations, the use of hydraulic hammers and/or rock blasting will be required to excavate the harder bedrock. Rock removal recommendations are discussed in a later section of this report.

3.3 Groundwater

During this investigation, groundwater was encountered in 17 of the boring and test pit locations at depths ranging from 2'6" to 14'0" (elevations +80.0 to +62.8) below the ground surface. In some locations, the observed groundwater may be trapped in the fill layer or perched on the bedrock surface. The groundwater observations are summarized in Table 1 below.

Groundwater on the subject site will generally be controlled by the topography and the underlying bedrock surface. During construction, we expect that perched or trapped water may be encountered within the existing fill, in the silty site soils, and/or along the soil/rock interface, especially during wet periods. Proper groundwater control measures will be required where water is encountered in the site excavations.

Variations in the location of the long-term water table may occur as a result of changes in precipitation, evaporation, surface water runoff, and other factors not immediately apparent at the time of this exploration.

3.4 Summary of Boring and Test Pit Observations

A summary of the boring and test pit observations is provided in Table 1 below. Borings B-2 through B-8, B-10, B-12, B-13, and B-101 through B-106 were performed within the proposed building area. In addition, test pits TP-6 and TP-101 through TP-117 were performed within the proposed building area.

Table 1 – Summary of Boring and Test Pit Observations

Boring or Test Pit No.	Approximate Existing Ground Surface Elevation	Depth to Bottom of Existing Fill (Elevation)	Depth to Groundwater (Elevation)	Depth to Bedrock (Elevation)
B-1	+70.0	4'0" (+66.0)	NE to 4'0"	AR @ 4'0" (+66.0)
B-2	+78.0	>9'0" (+69.0)	7'0 (+71.0)	NE to 9'0"
B-3	+81.0	1'6" (+79.5)	NE to 5'3"	AR @ 5'3" (+75.8)
B-4	+79.0	>3'7" (+75.4)*	NE to 3'7"	AR @ 3'7" (+75.4)*
B-5	+79.5	5'6" (+74.0)	NE to 6'8"	AR @ 6'8" (+72.8)
B-6	+78.5	2'5" (+76.1)	NE to 2'5"	AR @ 2'5" (+76.1)
B-7	+80.0	NE	NE to 1'2"	AR @ 1'2" (+78.8)
B-8	+79.0	5'6" (+73.5)	14'0" (+65.0)	NE to 29'0"
B-9	+88.0	NE	NE to 1'0"	C @ 1'0" (+87.0)
B-10	+78.5	>27'0" (+51.5)	3'0" (+75.5)	NE to 27'0"
B-11	+88.5	NE	NE to 1'9"	AR @ 1'9" (+86.8)
B-12	+79.0	8'0" (+71.0)	4'7" (+74.4)	SR @ 10'2" (+68.8)
B-13	+79.0	NE	NE to 1'4"	AR @ 1'4" (+77.7)
B-101	+79.0	15'0" (+64.0)	NE to 15'0"	C @ 15'0" (+64.0)
B-102	+78.0	16'0" (+62.0)	NE to 10'0"	C @ 16'0" (+62.0)
B-103	+79.5	12'0" (+67.5)	W @ 12'0" (+67.5)	C @ 28'6" (+51.0)
B-104	+79.5	10'0" (+69.5)	W @ 10'0" (+69.5)	C @ 45'0" (+34.5)

Boring or Test Pit No.	Approximate Existing Ground Surface Elevation	Depth to Bottom of Existing Fill (Elevation)	Depth to Groundwater (Elevation)	Depth to Bedrock (Elevation)
B-105	+78.5	16'0" (+62.5)	W @ 13'0" (+65.5)	C @ 16'0" (+62.5)
B-106	+78.5	11'0" (+67.5)	W @ 5'0" (+73.5)	RR @ 18'6" (+60.0)
TP-1	+68.0	7'9" (+60.3)	5'3" (+62.8)	NE to 8'3"
TP-2	+71.0	5'9" (+65.3)	8'3" (+62.8)	NE to 8'6"
TP-3	+80.0	NE	NE to 1'0"	BR @ 1'0" (+79.0)
TP-4	+78.5	NE	NE to 1'0"	BR @ 1'0" (+77.5)
TP-5	+77.0	>7'6" (+69.5)	6'9" (+70.3)	NE to 7'6"
TP-6	+95.0	NE	NE to 5'0"	BR @ 5'0" (+90.0)
TP-7	+70.0	3'0" (+67.0)	NE to 3'0"	BR @ 3'0" (+67.0)
TP-8	+68.0	4'6" (+63.5)	NE to 4'6"	BR @ 4'6" (+63.5)
TP-9	+82.0	NE	NE to 1'3"	BR @ 1'3" (+80.8)
TP-10	+88.0	NE	NE to 1'1"	BR @ 1'1" (+86.9)
TP-11	+87.0	NE	NE to 2'8"	BR @ 2'8" (+84.3)
TP-12	+72.0	8'2" (+63.8)	7'6" (+64.5)	NE to 9'6"
TP-101	+79.0	5'6" (+73.5)	NE to 5'6"	BR @ 5'6" (+73.5)
TP-102	+79.0	3'0" (+76.0)	T @ 2'6" (+76.5)	BR @ 3'0" (+76.0)
TP-103	+84.0	>7'0" (+77.0)	T @ 4'0" (+80.0)	NE to 7'
TP-104	+86.0	----- Not Performed – No Access -----		
TP-105	+80.0	----- Not Performed – No Access -----		
TP-106	+78.0	5'0" (+73.0)	NE to 6'3"	NE to 6'3"
TP-107	+79.0	4'0" (+75.0)	NE to 5'0"	NE to 5'0"
TP-108	+79.0	3'0" (+76.0)	T @ 3'0" (+76.0)	NE to 4'0"
TP-109	+78.5	4'0" (+74.5)	NE to 7'0"	NE to 7'0"
TP-110	+78.5	6'0" (+72.5)	NE to 6'6"	NE to 6'6"
TP-111	+79.5	6'0" (+73.5)	6'0" (+73.5)	BR @ 6'0" (+73.5)
TP-112	+79.5	NE	NE to 3'0"	BR @ 3'0" (+76.5)
TP-113	+79.0	NE	NE to 6'3"	BR @ 6'3" (+72.7)
TP-114	+79.0	NE	NE to 4'6"	BR @ 4'6" (+74.5)
TP-115	+79.0	NE	NE to 2'0"	BR @ 2'0" (+77.0)
TP-116	+79.0	NE	NE to 5'0"	NE to 5'0"
TP-117	+79.0	>4'6" (+74.5)	T @ 4'0" (+75.0)	NE to 4'6"

NE – Not Encountered

C – Cored Bedrock

AR/BR/RR – Auger, Bucket, Rollerbit Refusal on Bedrock

SR – Spoon Refusal on Possible Bedrock

T – Trapped Groundwater

W – Wet Soil Samples Encountered

(*) – Probable boulders

4.0 SUMMARY OF DESIGN RECOMMENDATIONS

Below is a summary of the major design and construction considerations for this project. Additional recommendations are provided in the following sections of this report.

- Subsurface Conditions (Section 3.0)

- Existing fill was encountered in 31 of the 48 test locations to depths ranging from 1'6" to more than 27'0" below the existing ground surface (elevations +79.5 to +51.5).
- A pond was formerly present in the southwest portion of the proposed building. Borings B-2, B-4, B-10, and B-12 as well as test pit TP-5 encountered fill with boulders, debris (concrete,

brick, plastic, brick), and organic material (roots and topsoil) that had been used to previously fill the pond. Borings B-101 through B-106 also encountered fill with boulders. The fill in this area extended to depths ranging from 3'7" to more than 27'0" below the ground surface. Existing fill outside the pond area extended to depths ranging from 1'6" to 8'2" below the ground surface.

- Groundwater was encountered in 17 of the 48 test locations at depths ranging from 2'6" to 14'0" below the ground surface (elevations +80.0 to +62.8).
 - Weathered bedrock was encountered in 31 of the 48 test locations at depths ranging from 1'0" to 45'0" below the existing ground surface (elevations +90.0 to +34.5). The use of hydraulic hammers and/or blasting will likely be required to achieve subgrade elevations in portions of the site.
 - A summary of the subsurface observations is provided in Table 1.
- *Building Evaluation (Section 5.0)*
 - The existing fill is not suitable for support of the proposed building foundations or floor slab. In addition, the boring and test pit data indicates that there are abrupt changes from deep soil to shallow bedrock within the building area. To eliminate the potential for damaging differential settlements, micropiles shall be used in areas that are underlain by existing fill or virgin soil. Where bedrock is at or above the foundation elevation, shallow spread footings may bear directly on bedrock.
 - Drilled micropiles foundations capable of supporting axial capacities of 100 to 125 tons can be used for the new building. A load test will be required to confirm the micropile capacity.
 - Where shallow spread footings can be constructed directly on bedrock, the net design bearing pressure shall be 8,000 psf.
 - The building floor slab shall be designed as a structural slab for the entire building.
 - Sub-slab drainage may be required for portions of the building.
 - Seismic Site Class is C or Very Dense Soil or Soft Rock Profile.
 - *Additional Site Recommendations (Section 6.0)*
 - *Soil and Rock Slopes (Section 6.2)*
 - Soil slopes (where required) shall be graded on a 2.5H:1V slope or flatter angle.
 - Rock slopes of approximately 4V:1H (76 degrees) can be achieved with proper landing zones, anchoring, and stabilization methods (i.e. rock anchors and steel wire mesh).
 - Additional borings with rock coring are recommended for select rock slope areas.
 - *New Retaining Walls (Section 6.3)*
 - Retaining walls will still be required in areas where rock slopes are not feasible. A cast-in-place steel reinforced concrete wall or a large segmental block wall can be considered for this project.
 - *Utilities (Section 6.3) and Pavement (Section 6.4)*
 - Densified existing fill, virgin soil, new compacted fill, and weathered rock may be used to support the new utilities and pavement.
 - The use of hydraulic hammers and/or blasting may be required in areas to achieve the proposed subgrade elevations.

5.0 BUILDING EVALUATION

We understand that the planned construction will consist of a new 4 story building with 1 level of below-grade parking. The finished floor elevation of the new building will be at +79.0. Based on existing and proposed grades, we anticipate cuts up to 21 feet will be required in the southeast and

northeast corners of the building and minor fills up to 2 feet will be required on the west side of the building. The southeast and northeast cuts will require rock excavation to achieve the planned finished floor elevation. The use of hydraulic hammers and/or blasting (if permitted) will be required.

As discussed above, there was previously a pond located in the proposed building area that was filled sometime between 1964 and 1974. The approximate pond limits are shown on the attached Boring & Test Pit Location Plan (Figure 1). The boring data indicates that the existing fill material within the proposed building area extends to depths ranging from 1'6" to more than 27'0" below the existing ground surface (elevations +79.5 to +51.5). The depth and extent of the existing fill are variable, and the fill may be deeper in unexplored areas of the site. The existing fill is not an acceptable bearing material for the new building foundations or floor slab. The consistency and density of the fill are not predictable. Certain areas may contain clean dense soil while other areas may contain loose material, void spaces, and/or debris, as shown by the boring and test pit data. The existing fill creates the possibility of intolerable differential settlements under loading. In addition, the boring and test pit data indicates that there are abrupt changes from deep soil to shallow bedrock within the proposed building area that can result in unacceptable differential settlement.

To eliminate the potential for damaging differential settlements, micropiles shall be used in areas that are underlain by existing fill or virgin soil. Based on the boring and test pit data, we anticipate that micropiles will be required in the central and southwestern portions of the building. Where bedrock is at or above the foundation elevation, which is expected in the northern and southeastern portions of the building, shallow spread footings may bear directly on bedrock. The approximate limits of these areas are shown on the attached Building Foundation Area Plan (Figure 2). However, this plan is based on the available boring and test pit data and the anticipated foundation and/or pile cap subgrade elevations. The foundation plan was not available at the time of this report; therefore, the delineation lines shown on the plan are subject to change. The preparation of the foundation plan must be coordinated with Carlin-Simpson & Associates.

It should also be noted that borings and test pits were not performed at each column location and conditions are likely to vary between test locations. Additional test pits or probes may be required during construction to further evaluate the subsurface conditions at individual locations. For example, test pits or probes could be performed in transition areas to see if footings can be lowered to bear on rock and/or if piles can be eliminated.

Recommendations for preparation of the building area are provided in Section 5.1 below. Micropile foundation recommendations are provided in Section 5.2. Recommendations for foundations bearing on bedrock are provided in Section 5.3 below. Floor slab and foundation wall recommendations can be found in Section 5.4 and Section 5.5 below, respectively.

5.1 Building Area Preparation

In order to prepare the site for construction, all surface materials such as surface vegetation, topsoil, and asphalt shall be removed from the planned building areas, extending at least 10 feet beyond the new construction limits, where practical.

Rock Removal - Blasting

In order to develop the site and achieve the proposed grades, rock removal will be required. Rock or weathered rock cuts ranging from approximately 2 feet to 27 feet are anticipated. Based on our experience, the in-situ bedrock will be variable, ranging from completely weathered rock to harder

intact bedrock. The top 1 to 5 feet of rock may be “rippable” by using large construction equipment. However, we anticipate that the “rippability” of the bedrock will be variable and very limited. The use of hydraulic hammers and/or blasting will be required to excavate the harder bedrock and zones of harder rock within the completely weathered rock stratum. Nearby structures could be affected by the blasting.

Prior to the start of any construction, a Blasting Management Plan shall be prepared by the blasting contractor for this project. This plan shall be in accordance with State regulations and the Explosive Materials Code, NFPA No. 495, National Fire Prevention Association. Additionally, all blasting should adhere to the provisions of 29 CFR Ch. XVII Section 1910.109 for explosives and blasting agents and to all local requirements.

Prior to any blasting work being done, a licensed professional engineer shall be retained to perform a detailed pre-blast survey of existing structures located within 500 feet of the planned blast area. The pre-blast survey shall be conducted in accordance with the requirements of local authorities. A copy of all reports prepared by the licensed engineer shall be submitted to the Town Engineer and the owner’s representative in a timely manner.

Prior to the beginning of blasting, a notice will be sent to all residential and commercial property owners within a 500-foot radius of the blast area. This notification will be given at least 48 hours before blasting takes place. A contact person will be established and named in this notice to respond to all concerns raised by nearby residents during the blasting phase of the project. The contact person will respond to any inquiries within 24 hours.

The blasting operation shall be monitored by a seismologist using a seismograph. The maximum peak particle velocity on any one component of an instrument measuring three-component motion shall not exceed the limits indicated in Table 2 below.

Table 2 – Distance Versus Peak Particle Velocity Method

Distance from Blast in Feet	Peak Particle Velocity of any One-Component in Inches per Second
0 to 100	1.50
100 to 200	1.25
200 to 500	1.00
500 to 1,000	0.50
Over 1,000	0.25

Each blast will be monitored independently to ensure that this criterion is not exceeded. The monitoring results shall be provided to the blasting contractor as soon as possible so that the blasting program can be modified if necessary.

We recommend that a minimum of 4 monitoring points be established, to the north, east, south and west of the planned blast area. The seismograph sensors should be placed near the closest structure and at any structures identified during the pre-blast survey that are considered to be susceptible to vibration damage. Where possible, the seismograph sensors should be placed on the bedrock surface. This will require shallow excavations through the overburden soils in the monitoring areas.

The blasting contractor must avoid over-blasting the rock. Over-blasting will disturb the deeper intact rock that will be used as bearing material for the proposed foundations. Over-blasting could also disturb exposed rock faces. Any material that is over-blasted will have to be removed. In the building area, the over-blasted material shall be removed under the full-time inspection of Carlin-Simpson & Associates and replaced with concrete. Carlin-Simpson & Associates will be responsible for determining what material is to be removed and will direct the contractor during the excavation.

Handling Groundwater and Wet Subgrades

Based on the boring and test pit data, groundwater is not expected to be encountered above the planned finished floor elevation during construction. However, perched or trapped groundwater may be present in the existing fill, in the silty site soils, along the soil/rock interface, and/or in the bedrock fractures. In the event that perched or trapped groundwater is encountered in the site excavations, proper groundwater control measures (i.e. construction dewatering) will be required.

Where required, temporary groundwater control measures shall consist of 1 or more sumps and pumps. The sumps shall consist of a perforated pipe at least 8 inches in diameter, surrounded by crushed stone and filter fabric. The sump pits must be installed just outside the planned excavation area and at least 2 feet below the lowest anticipated subgrade elevation. The sumps and pumps must be set and in operation prior to excavating below the water table. The pumps shall be used to temporarily lower the surrounding groundwater level and keep the excavation relatively dry.

In the event that the exposed subgrade soil within the excavation becomes wet or soft, stabilizing the subgrade surface may be required. The subgrade may be stabilized with geotextile filter fabric and crushed stone. The geotextile filter fabric shall consist of Mirafi 500X or equivalent. Adjacent layers of geotextile filter fabric should be overlapped a minimum of 6 inches. As necessary, approximately 12 inches of 3/4-inch clean crushed stone will be installed on top of the filter fabric layer to provide a firm working surface, provide protection for the geotextile filter fabric, minimize pumping, and to stabilize the subgrade soil. Carlin Simpson & Associates will determine the need for subgrade stabilization and will direct the contractor during construction.

Installation of New Structural Fill

New fill required to achieve final grades shall consist of either engineer-approved on-site soil or imported sand and gravel. The new fill shall be placed in layers not exceeding one (1) foot in thickness and each layer shall be compacted to at least 95% of its Maximum Modified Dry Density (ASTM D1557). Each layer must be compacted, tested, and approved by the Carlin-Simpson & Associates field representative prior to placing subsequent layers. The suitability of the on-site soil and rock for reuse as compacted fill is discussed in Section 6.6 below.

If imported structural fill will be required during construction, the imported structural fill shall meet the following specified gradation:

<u>US Standard Sieve Size</u>	<u>Percent Finer By Weight</u>
3-inch	100
No. 4	30-80
No. 40	10-50
No. 200	0-20

Based on the grading plan, rock cuts are also required at the site to achieve proposed grades. We anticipate that excavated boulders and rock material will be processed onsite for use of backfill material. Refer to section 6.6 below for recommendations regarding use of excavated cobbles, boulders, and rock material.

5.2 Micropile Foundations

For this project, drilled in-place grout-filled steel pipe piles (micropiles) can be used to support the new building foundations and the floor slab in the existing fill and deep virgin soil areas. Based on the boring and test pit data, we expect that micropiles will be required for the central and southwestern portions of the proposed building, as preliminarily shown on the attached Building Foundation Area Plan (Figure 2). The piles must extend through the existing fill and soil layers and develop their load carrying capacity with a bond zone formed in the underlying bedrock. To accomplish this, the piles must be cased through the existing fill and soil layers.

The depth to bedrock within the anticipated micropile areas of the building varies significantly. Based on the boring and test pit observations, we expect bedrock to be encountered approximately 4'0" to more than 29'0" below the existing ground surface.

The project structural engineer shall determine the number of piles required and their locations. The micropiles shall be designed by a micropile contractor to meet the specified loading conditions as shown on the structural drawings. The piles must also be designed and installed in accordance with the New York State Building Code.

For this project, we recommend that the steel pipe casing have a minimum nominal diameter of 8 inches and a wall thickness of at least 0.408 inches. The casing shall extend at least 1 foot into the bond zone upon the completion of the grouting and shall remain in place permanently. The micropiles shall be filled with cement grout having a minimum 28-day compressive strength of at least 5,000 psi. The grout mix shall be designed and proportioned so as to produce a pumpable mixture. A maximum water/cement ratio of 0.44, by weight is recommended. Center to center spacing shall be at least three times the outside diameter of the steel casing but not less than 30 inches.

For this project, 8-inch diameter piles with an allowable capacity of 100 to 125 tons could be considered for the proposed building. This would require a rock socket length of approximately 8 to 12 feet. The estimated pile lengths, assuming a finished floor elevation at +79.0, can be found in Table 3 below. The structural engineer shall select the required allowable pile capacity based on the design loads of the proposed structure.

Table 3 – Pile Recommendations

Pile Capacity	Estimated Cased Length	Rock Socket Length	Estimated Total Length
100	4 to 45 feet	8 to 10 feet	12 to 55 feet
125	4 to 45 feet	10 to 12 feet	14 to 57 feet

Reinforcing steel extending to the bond zone shall be placed in the casing to the bottom of the bond zone prior to placing grout. The full length of the micropile shall contain either a steel pipe and/or steel reinforcement. Reinforcement steel shall be in accordance with ASTM A615 Grade 60 or 75 or ASTM A722 Grade 150. Preliminarily, we anticipate that the core reinforcement steel will consist of

a single steel threaded bar, ASTM A615 Grade 150 (150 ksi yield strength), extending the full length of the pile. As required for structural design, steel reinforcement bars shall extend from the micropile and up into the pile cap, grade beam, and/or floor slab.

The pile to pile cap or grade beam connection shall be designed by the project structural engineer. The top of the pile should be embedded into the grade beam or pile cap a minimum of 6 inches and should be at least 6 inches from the edges of the grade beam or cap. Typically, the top of the pile is terminated with a bearing plate that extends into the pile cap or grade beam to transfer the applied load. Structural steel plates shall conform to ASTM A36 or ASTM A572 Grade 50.

Based on the boring observations, obstructions and debris (i.e. cobbles, boulders, brick, concrete, etc.) are present within the existing fill layer. Depending upon the depth of the obstruction below the bottom of the pile cap or grade beam, the contractor shall either remove the obstruction or clear away the obstruction by excavating or other means, or abandon the pile and install an additional pile at the locations determined by the project structural engineer.

Micropile Submittals

For this project, the pile contractor will design the individual pile elements and select the pile construction process and installation equipment. The foundation specialty contractor shall submit shop drawings and design calculations to Carlin-Simpson & Associates and the project structural engineer for review and approval.

At a minimum the contractor's submittal should include the following: 1) pile design calculations and shop drawings for all structural steel and pile components prepared and stamped by a New York State registered Professional Engineer; 2) a detailed description of the construction procedure proposed, including type of equipment to be used for installing the piles; 3) a pile location and numbering plan; 4) the proposed concrete or cement grout mix design(s) and procedures for placing the concrete or cement grout; and 5) detailed plans and procedures for the pile load test(s), including load test apparatus set-up for the pile load testing and current calibration report for the hydraulic jack and gauges.

Micropile Load Tests and Inspection

A compressional load test will be required to confirm the micropile contractor's pile design. The test may be performed on either a production pile or a sacrificial pile. However, production piles shall not be used as reaction piles. The pile load test(s) must be performed under the full time inspection of a Carlin-Simpson & Associates representative. Piles used for the pile load test should be installed at least 1 week prior to testing to allow time for the grout to obtain adequate strength for testing.

The piles shall be installed under the full time inspection of a representative from Carlin-Simpson & Associates. At the completion of the pile installation, Carlin-Simpson & Associates will provide a letter of compliance stating that the piles have been installed in accordance with our recommendations and the project specifications, and that they are capable of supporting the design loads.

5.3 New Building Foundations on Bedrock

Where bedrock is near or above the foundation subgrade elevation, which is expected in the northern and southeastern portions of the building, shallow spread footings may bear directly on the

bedrock surface. The preliminary limits of these areas are shown on the attached Building Foundation Area Plan (Figure 2). The new building foundations in these areas may be designed as shallow spread footings using a net design bearing pressure as listed in Table 4 below.

All of the exterior and interior footings shall bear directly on bedrock, which is not susceptible to frost. In some areas, we expect that the footings will have to be lowered or step down approximately 1 to 3 feet below the foundation subgrade elevation to bear on the bedrock surface. Care must be taken during rock excavation to not disturb the bedrock that will remain and support the new foundations. If the bedrock is disturbed/over-blasted, either the unsuitable bearing material will have to be over-excavated and replaced with concrete or micropiles will be required.

The excavations for the new foundations shall be performed under the full-time inspection of Carlin-Simpson & Associates. The on-site representative shall confirm that the foundation bearing material is capable of supporting the design bearing pressure.

Table 4 – Foundation Design Parameters for Rock

Description	Value
Foundation Bearing Material	Bedrock
Net Design Bearing Pressure	8,000 psf
Minimum Column Dimension	30 inches
Minimum Wall Dimension	18 inches

5.4 Floor Slab

The existing fill is not suitable for support of the proposed floor slab. Where a new floor slab will be constructed as part of the proposed construction, we recommend that it be designed as a structural slab. Pile recommendations are discussed in the previous section of this report.

Floor Slab Underdrains

Preliminarily, we believe that a permanent dewatering system consisting of a sub-slab drainage system may be required for the southeast and/or northeast portions of the proposed building where substantial cuts into rock are required to achieve the planned finished floor elevation. Based on the site conditions, we expect that an underdrain system can be drained by gravity to the stormwater management system, but a sump pit and pump system could be required. Carlin-Simpson & Associates will determine the need for and the extent of the sub-slab drainage system as the project plans are further developed.

Where required, the underdrain system shall consist of one or more main drain lines with branching laterals at intervals of no more than 15 feet on centers. The drainpipes shall consist of 4-inch diameter rigid perforated PVC or smooth wall HDPE pipes placed at the bottom of the 12-inch drainage stone layer below the floor slab. The drainpipe and crushed stone shall be separated from the surrounding soil using a geotextile filter fabric (Mirafi 140N or equivalent) to prevent soil from clogging the pipes. The edges of the filter fabric shall be folded on top of the stone fill. The subgrade should be graded (“pitched”) towards the underdrain. Water collected in the underdrain system shall be piped to a suitable discharge location or to a sump pit.

In addition to the underdrain system, the below-grade foundation walls must be waterproofed and a perimeter foundation drain, as described in the following section of this report, must be provided around the outside perimeter of the foundation walls. Water stops shall also be provided where the foundation wall meets the footing and for all concrete joints in the foundation walls and floor slab. Carlin-Simpson & Associates can prepare a drainage plan design and/or provide additional information regarding sumps and an underdrain system as an additional service upon request.

5.5 Foundation Walls

Where foundation walls are required, the soil adjacent to the building walls will exert a horizontal pressure against the wall. This pressure is based on the soil density and Coefficient of Earth Pressure at Rest (k_o), which is applicable to non-yielding building walls. Foundation wall design parameters are listed in Table 5 below.

Table 5 – Foundation Wall Design Parameters

Soil Type	On-Site Soils
Moist Unit Weight (γ)	130 pcf
Coefficient of Earth Pressure at Rest (k_o)	0.5
Equivalent Fluid Pressure	65 psf/ft
Foundation Sliding Coefficient.	
Virgin Soils or New Structural Fill:	0.45
Clean Sound Rock:	0.55

Where foundation walls are required, we recommend that a footing drain be placed around the exterior of the new building to prevent water from accumulating against the foundation wall. This drain may consist of a minimum 4-inch diameter, rigid wall perforated PVC pipe surrounded by at least 12 inches of 3/4-inch clean crushed stone. The stone shall be wrapped in a geotextile fabric, such as Mirafi 140N or equivalent. The foundation drainpipe should be extended to daylight, if possible, or to the stormwater collection system. The outside face of the foundation wall, where it extends below grade, shall be waterproofed.

Outside the building, the backfill placed adjacent to the foundation walls and above the footing drain shall consist of either clean crushed stone or an imported sand and gravel mixture containing less than 10% by weight passing a No. 200 sieve and placed in layers not exceeding 12 inches in thickness. This clean sand and gravel or crushed stone backfill shall extend a minimum of 12 inches horizontally from the back face of the foundation walls, and shall extend vertically up the wall face to 2 feet below the finished ground surface elevation. Where retained soils are not covered by concrete or pavement and are exposed to weather, the top 2 feet of backfill should consist of low permeable soil. This will help to minimize water infiltration behind the wall. Surface grades should be sloped away from the building to prevent water from accumulating adjacent to the wall.

Beyond this point, the foundation walls should be backfilled with suitable soil placed in layers up to 12 inches in thickness. The suitability of the on-site soil for reuse as compacted fill is discussed in a separate section below. The new fill should be compacted with a vibratory drum trench compactor (i.e. Wacker Model RT560), a heavy vibratory plate tamper (i.e. Wacker BPU 3545A or equivalent), or “jumping jack” style tamper (i.e. Wacker Model BS 600) to at least 92% of its Maximum Modified Dry Density (ASTM D1557). Heavy equipment should not be operated near the building walls as damage to the walls could occur.

5.6 Seismic Design Considerations

From site-specific test boring data, the Site Class was determined from New York State Building Code Section 1613.2.2. The site-specific data used to determine the Site Class typically includes soil test borings to determine Standard Penetration resistances (N-values). Based on estimated average N-values in the upper 100 feet of soil profile, the site can be classified as Site Class C – Very Dense Soil and Soft Rock Profile.

New structures should be designed to resist stress produced by lateral forces computed in accordance with Section 1613 of the New York State Building Code. The values in Table 6 shall be used for this project.

Table 6 – Seismic Design Values

Description	Value
Mapped Spectral Response Acceleration for Short Periods, [Fig 1613.2.1 (1)]	$S_S=0.284g$
Mapped Spectral Response Acceleration at 1-Second Period, [Fig 1613.2.1 (2)]	$S_1=0.061g$
Site Coefficient [Table 1613.2.3 (1)]	$F_a= 1.3$
Site Coefficient [Table 1613.2.3 (2)]	$F_v= 1.5$
Max Considered Earthquake Spectral Response for Short Periods [Eq 16-36]	$S_{MS}=0.37g$
Max Considered Earthquake Spectral Response at 1-Second Period [Eq 16-37]	$S_{M1}=0.091g$
Design Spectral Response Acceleration for Short Periods [Eq 16-38]	$S_{DS}=0.246g$
Design Spectral Response Acceleration for 1-Second Period [Eq 16-39]	$S_{D1}=0.061g$

We expect that the proposed building will have a Risk Category of II. Based on this assumption, the Seismic Design Category (SDC) is B. The Risk Category and SDC should be verified by the project structural engineer. In the event that the structure has a different Risk Category, the SDC should be updated in accordance with Section 1613 of the New York State Building Code

Liquefaction Potential

Liquefaction is a phenomenon in which saturated or partially saturated soils lose strength and stiffness when subjected to earthquake-induced ground shaking. Ground shaking of sufficient duration results in the loss of grain-to-grain contact and collapse of the soil skeleton which causes stresses in the soil to be completely transferred to the pore water fluid. Liquefaction is most often observed in saturated, loose sandy soils at depths shallower than 50 feet below the ground surface. Factors known to influence liquefaction potential include composition and thickness of soil layers, grain size, relative density, groundwater level, degree of saturation, and both intensity and duration of ground shaking.

The liquefaction potential was evaluated with the available boring data, including the SPT blow counts, soil classification, total unit weight, soil fines content, and depth to groundwater. We have determined the potential for liquefaction of the non-cohesive soils below the groundwater table and less than 50 feet below the ground surface is considered unlikely. Therefore, a liquefaction evaluation is not required for the site.

6.0 SITE EVALUATION

Our recommendations for the proposed site development including new stormwater management areas, soil and rock slopes, retaining walls, new underground utilities, pavement for new

driveways and parking areas, temporary construction excavations, and the suitability of the existing site soils for reuse as structural fill are provided below. A summary of the boring and test pit observations for the site are provided in Table 1 above.

6.1 Stormwater Management Areas

We understand that the planned construction will include new stormwater management areas. During this study, test pits were excavated to determine the subsurface conditions within the proposed stormwater management areas. The locations were determined by the project Site Engineer. The types of systems, planned locations, and invert elevations were not finalized at the time of this report.

Infiltration tests had been planned for select locations, but were eliminated due to shallow bedrock, existing fill, and/or shallow groundwater conditions. The results of the test pit observations are summarized in Table 1 above.

Stormwater management areas should be a minimum of 3 feet above confining layers, seasonal high groundwater, or the existing groundwater table. Should stormwater management areas be planned in other portions of the property, they should be evaluated on a case-by-case basis. The stormwater management systems must be designed in accordance with the applicable New York State Department of Environmental Conservation (NYSDEC) regulations and the New York State Stormwater Management Design Manual (January 2015). The testing requirements for infiltration systems are outlined in Appendix D of the manual.

6.2 Soil and Rock Slopes

Slopes will be constructed in portions of the site. Based on the grading plan, these slopes will extend up to approximately 27 feet in height. For this site, we anticipate that a slope of approximately 4 vertical to 1 horizontal (76 degrees) may be achieved in rock with proper landing zones, anchoring, and stabilization methods. Above the rock cut, the overburden soil must be graded to a stable slope, typically on a 2.5 horizontal to 1 vertical (2.5H:1V) or flatter.

In rock, the stability of slope is dependent upon the quality of the rock, the jointing and shear zones in the rock, the strike and dip of the rock, and groundwater seepage. We anticipate that unstable blocks of rock and/or highly weathered spalling rock may exist on the face of the new rock cut slope. Rock anchors may be required to stabilize the rock slope. This is discussed in more detail below.

General Rock Excavation Procedures

The excavation of the soil and rock slopes will be carefully advanced in stages. The general procedure for constructing the proposed slopes shall be as follows:

1. In the event that there is overburden soil in a proposed rock slope area, the soil slope shall be constructed first. The soil slope above the top of the rock slope shall be graded on a 2.5H:1V slope or flatter angle.
2. A pre-split line shall be drilled along the proposed rock slope face line. The spacing shall be determined by the blasting contractor and submitted to Carlin-Simpson & Associates for review.

3. The removal of rock can begin. The rock at the planned slope face shall be removed in stages of about 10 feet (maximum) vertically.
4. Carlin-Simpson & Associates will inspect the exposed face of each stage and a rock-anchoring plan will be prepared (if required). The plan will outline anchor locations inclinations and lengths.
5. The required rock anchors will be installed prior to removing the next stage of rock.
6. The process will continue in stages until the excavation is completed.

The blasting contractor must avoid over-blasting the rock in areas where exposed rock faces are planned. Any material that is over-blasted will have to be removed prior to anchoring and/or installation of other stabilization measures. Carlin-Simpson & Associates will be responsible for determining what material is to be removed and will direct the contractor during construction.

Rock Anchors and Rock Face Protection

Based on our experience and the available rock core data, we anticipate that unstable blocks of rock and/or highly weathered spalling rock may exist on the face of the new rock cut slope. Rock bolting or rock anchors with metal strips may be required to stabilize the rock blocks. We are unable to predict the extent of the rock anchors based on the available data. During the excavation of the new slope, Carlin-Simpson & Associates will evaluate the rock blocks as described above. A determination will then be made as to the location, type, and extent of rock anchors required for the rock slope. The rock bolts, anchors, and metal strips will be used to retain potentially unstable blocks of rock, resulting in a stable slope face.

Since portions of the exposed rock face will likely consist of highly weathered and/or highly fractured rock, spalling rock or slope raveling may occur during construction and throughout the life of the slope. Slope raveling is a condition described when small pieces of rock become detached from a rock mass and fall as individual pieces to the toe of the slope. The principal cause of this condition is due to the cyclic expansion and contraction associated with the freezing and thawing of water in the cracks and fissures of the rock mass. A secondary cause is related to the gradual deterioration (weathering) of the materials which hold individual blocks or layers of rock together.

The excavation of all rock slopes shall be carefully advanced in stages as described above. Depending upon the orientation of the joint plans with respect to each other and the face of the rock cut, unstable blocks of rock will likely be present. Rock anchors or bolts, metal strips and protective wire mesh netting will be required to secure the new slope. The extent and design of the rock bolts, rock anchors, etc. will be determined as the slope is excavated. The design of the rock anchors and bolts is performed on an ongoing basis during each stage of rock excavation. The purpose of the rock anchors will be to retain rock blocks that could slide from the new rock face. Once the excavation of each stage has been completed Carlin-Simpson & Associates will conduct an evaluation of the joint patterns and determine the strike and dip of the major planes of weakness. Rock blocks will be identified for anchoring or bolting.

The steel wire mesh on the new rock slope will be used to control loose falling rock in areas. The mesh will be twisted wire hexagonal mesh and shall be either galvanized or PVC coated for corrosion resistance. Draped mesh generally lies directly on the slope with anchors across the top and bottom of the slope. Additional anchors could be installed in the mesh to hold it down and provide

additional resistance to sliding of rolling rocks and debris. The purpose of the mesh is to allow the rocks to move down the slope in a controlled fashion and land in a small catchment area at the base of the slope.

Water is expected to seep out of the joints and fracture zones on the new rock face. The water seepage will need to be evaluated by Carlin-Simpson & Associates during construction. Horizontal rock drains may be required to facilitate drainage and to prevent the buildup of water pressure behind the rock slope, which could destabilize the slope. The need for rock drains will be determined during construction. Conceptually, horizontal drains typically consist of drilling a 3-inch to 4-inch diameter hole approximately 10 to 15 feet into the rock slope on a slight incline. A small section of perforated PVC pipe is then inserted into the hole to keep it open at the rock face. The purpose of the drains is to intercept water flowing through the rock joints. Swales and drainage inlets should be provided along the base of the slope to collect the water seepage.

Rock Slope Stabilization Design and Additional Borings

Based on the available rock data, we preliminarily recommend that an anchored steel wire mesh system with an approximate 10-foot by 10-foot anchor spacing be used to stabilize the proposed rock slopes. The anchors would consist of Grade 75 threaded bars that are installed and grouted in 6-inch diameter drill holes. Preliminarily, anchors lengths of 10 to 15 feet are expected. A minimum 8-foot-wide landing zone (or buffer) is recommended at the base of the slopes to contain fallen rock debris. The landing zone should be pitched slightly towards the toe of the slope.

For the proposed rock cut off the southeast corner of the proposed building, the rock slope will be close to the property line and the finished rock face will be close to the new building (less than 5 feet at the toe). Preliminarily, we expect that an anchored steel wire mesh system can be designed for this location to stabilize the rock slope and control rock fall with a reduced landing zone. However, temporary and permanent construction easements will be required for this rock slope. The temporary easement is needed for construction access at the top of the slope and the permanent easement is needed since anchors (and possibly mesh) will extend beyond the property boundary. It is also possible that the top of the new rock slope will extend slightly beyond the property line in this area.

Based on the site conditions, an additional boring with rock coring is required for the southeast rock slope to determine the rock quality, degree of weathering, and consistency of fractures for the proposed rock cut and to confirm the rock slope stabilization requirements for this area. We also suggest that a few additional borings with rock coring be performed for the other rock slope areas since only limited bedrock core samples were obtained during this investigation. This information will be used to further evaluate the anticipated stability of the excavated rock slopes so that a rock slope stabilization plan can be developed and will also provide additional information to the blasting contractor.

Carlin-Simpson & Associates can prepare a rock slope stabilization plan for inclusion in the construction drawings as an additional service, upon request once the additional borings have been completed. This plan could then be used as a baseline for bidding purposes. Based on the available data, we preliminarily anticipate that the plan will include an anchored steel wire mesh system with a landing zone as discussed above. It should be noted that Carlin-Simpson & Associates will still have to evaluate the rock cuts as they are exposed during construction. Depending on the rock conditions, it may be feasible to reduce the number of rock anchors or to install a draped steel wire mesh system in areas at the site. It is also possible that additional rock anchors will be required to secure unstable rock blocks as described above.

6.3 New Site Retaining Walls

The grading plan indicates that retaining walls will be required to achieve the planned site grades in portions of the site. Upon review, however, we expect that most of the wall areas can be rock slopes as discussed in the previous section of this report. The only exception is the wall on the south side of the proposed building, which tees into the building. A retaining wall will be required near the building, but it can likely transition to a rock cut further away from the building.

The type of retaining walls for this project and the final wall heights were unknown at the time of this report. Design options for this site could include cast-in-place steel reinforced concrete walls or large segmental block gravity walls. Preliminary retaining wall design recommendations are provided below.

A reinforced concrete wall consists of cast-in-place concrete that can be designed as a gravity retaining wall or cantilevered retaining wall. In a gravity wall design, the weight of the concrete alone is used to prevent movement and overturning in the wall. In a cantilevered design, the stem wall is thinner and the base of the wall is wider than that of a gravity wall. However, the cantilevered design utilizes the weight of the soil above the base and steel reinforcing in the concrete to counteract the lateral forces of the retained soil wall.

A segmental block wall, such as Redi-Rock or equivalent, consists of large segmental concrete block units. The wall would be designed as a gravity retaining wall where the weight of the concrete blocks is used to prevent movement and overturning in the wall. Gravity Redi-Rock walls with backslope conditions are typically feasible for retained wall heights up to approximately 9 to 10 feet.

Preparation of Wall Area

In order to prepare the retaining wall area for construction, all surface materials including asphalt, topsoil, and surface vegetation must be completely removed from the new retaining wall area. The removal of the surface materials shall extend at least 5 feet beyond the proposed construction limits, where practical.

After the wall area has been excavated to the required subgrade elevation and prior to the installation of the leveling pad, the exposed subgrade soil must be graded level and proofrolled by several passes of a vibratory compactor. A representative from Carlin-Simpson & Associates shall observe the proofrolling operation. If any unsuitable existing fill or excessive movement is noted during the proofrolling, the unsuitable/soft soil shall be removed and replaced with new compacted fill. The Carlin-Simpson & Associates representative shall be responsible for determining what material, if any, is to be removed and will direct the contractor during this operation.

Drainage and Wall Backfill

A drain must be provided behind the retaining wall to prevent the buildup of hydrostatic pressure against the wall. The drain typically consists of a 4-inch diameter perforated PVC pipe, surrounded by 3/4-inch clean crushed stone and wrapped in a geotextile filter fabric, Mirafi 140N or equivalent. The drain is installed behind the base of the retaining wall to collect the water from behind the wall and is discharged to a suitable location determined by the site engineer. This could be connected into the site stormwater collection system or extended to daylight beyond the wall area.

Behind the wall, the backfill placed adjacent to the wall and above the footing drain shall consist of freely draining aggregate containing less than 10% material by weight passing a No. 4 sieve. This drainage fill shall extend horizontally a minimum of 12 inches from the back of the wall and shall extend vertically to at least 2 feet below final grade behind the wall. Where there is a backslope condition, a drainage swale is also required at the top of the wall to direct surface water away from the retaining wall.

Backfill Behind the Wall

Backfill material required beyond the drainage zone shall consist of engineer-approved on-site soil excavated from site cut areas or imported material as described previously in this report. Carlin Simpson & Associates and the wall design engineer must approve the fill material to be used behind the wall.

New fill that is placed behind the retaining wall shall be compacted with small hand guided vibratory compactors to a minimum density of 92% of its Maximum Modified Dry Density (ASTM D1557). Excessive compaction adjacent to the retaining wall must be avoided. Near the top of the wall and in the slope area above the wall, the fill shall be compacted to at least 95% of its Maximum Modified Dry Density. All fill layers shall be compacted, tested, and approved before placing subsequent layers. Large compaction equipment must not be used within ten (10) feet of the new wall to prevent potential damage to the wall.

Wall Design Recommendations

The base for the new retaining wall shall be placed on virgin soil, bedrock, or new compacted fill approved by Carlin-Simpson & Associates. The wall may also bear on densified existing fill that has been approved by Carlin-Simpson & Associates. Special construction procedures must be employed if the wall foundation bears on dissimilar material (i.e., soil and rock). For gravity segmental block retaining walls, the wall base or foundation must be adequately embedded for internal and global stability and depends on the proposed toe slope and back slope conditions. For reinforced concrete walls, the base or foundation must bear below the frost depth. The new retaining wall foundation shall be designed using parameters listed in Table 7 below.

The soil adjacent to the site retaining walls will exert a horizontal pressure against the walls. This pressure is based on the soil density and the Coefficient of Active Earth Pressure (k_a). The design values listed in Table 7 below shall be used for design of the new retaining walls.

Table 7 – Preliminary Retaining Wall Design Parameters

Description	Value
Foundation Bearing Material	Virgin Soil, Weathered Bedrock, or New Compacted Fill
Net Design Bearing Pressure	4,000 psf (2.0 TSF)
Backfill Moist Unit Weight	130 pcf
Backfill Friction Angle	30 degrees
Cohesion	0 psf
<i>Active Earth Pressure Coefficient (k_a)</i>	
<i>Level Backslope Behind Wall</i>	0.33
<i>3H:1V Backslope Behind Wall</i>	0.39

Description	Value
<i>Equivalent Fluid Pressure (EFP)</i>	
<i>Level Backslope Behind Wall</i>	<i>42.9 pcf</i>
<i>3H:1V Backslope Behind Wall</i>	<i>51.3 pcf</i>
Friction Coefficient	0.45
Minimum Frost Depth	42 inches

The wall design engineer shall prepare a complete wall design (i.e. drawings, specifications, and calculations), which shall be designed and sealed by a Professional Engineer registered in the State of New York and submitted to Carlin-Simpson & Associates for review. Segmental block retaining walls shall be designed in accordance with the recommendations of the NCMA Design Manual for Segmental Retaining Walls (Current Edition) and in accordance with AASHTO standards. The design shall be completed in accordance with acceptable engineering practice, including the evaluation of sliding, overturning, and bearing, as well as global stability. Where applicable, surcharge loads, such as structures, backslopes, tiered retaining walls, vehicle loads, snow loads, construction equipment, temporary materials storage, etc. must also be incorporated into the wall design. Carlin-Simpson & Associates can prepare a large segmental block wall design as an additional service upon request.

6.4 Utilities

New utilities may bear in the densified existing fill, virgin site soils, new compacted fill, completely weathered rock, or bedrock. The bottom of all trenches should be excavated clean and shaped so a hard bottom is provided for the pipe support. If any soft or unsuitable soil conditions are encountered during construction, the unsuitable materials must be removed and replaced with new compacted fill.

Trench hammering or blasting may be required to install the new utilities in portions of the site where weathered rock is encountered above the planned utility invert elevation. Where rock is encountered in the utility excavations, it must be removed to at least 6 inches below planned pipe invert. The over-excavated 6 inches shall then be filled with new sandy fill and compacted to at least 92% of its Maximum Modified Dry Density (ASTM D1557) to act as a cushion on the rock.

For areas where existing fill is encountered within the utility excavations, the subgrade at bottom of the utility excavation shall be compacted in place with a vibratory drum trench compactor or “jumping jack” style tamper. Carlin-Simpson & Associates must evaluate these areas for the presence of soft or unsuitable material within the existing fill matrix. If instability is observed, portions of this fill may have to be removed and replaced with new compacted fill. Carlin-Simpson & Associates will determine this during construction.

In the event that the trench bottom becomes soft due to the inflow of surface or trapped water, the soft soil shall be removed and the excavation filled with a minimum of 6 inches of 3/4-inch clean crushed stone to provide a firm base for support of the pipe. Sump pits and pumps should be adequate to keep the excavations dry.

Any utility pipes below the pile-supported portion of the new building should be attached to the structural floor slab with hangers. This is required so that the utilities do not become damaged due to differential settlement. We also recommend that all of the utility pipes that connect to the new structure be designed with flexible connections.

After the utility is installed, the trench must be backfilled with compacted fill. The fill shall consist of suitable on-site soil or imported sand and gravel. Imported fill shall contain less than 20% by weight passing a No. 200 sieve. Large rock fragments and boulders must not be placed directly against the pipe. Controlled compacted fill shall be placed in 12 inch loose layers and each layer shall be compacted to at least 92% of its Maximum Modified Dry Density (ASTM D1557). The backfill must be free of topsoil, debris, and large boulders or rock fragments.

6.5 Pavement

We understand that the proposed construction will also include new paved driveways and parking areas. Based on the preliminary site plan, we expect that cuts up to approximately 10 feet and fills up to approximately 4 feet will be required to achieve the planned subgrade elevations in the new pavement areas. The densified existing fill, virgin soil, completely weathered bedrock, bedrock, and new compacted fill may be used to support the pavement.

To prepare the new pavement areas, the existing surface materials (i.e. topsoil, vegetation, etc.) must be removed from the planned pavement areas. In the proposed pavement areas, the existing structures and debris resulting from the demolition of these structures must be completely removed from the new pavement area, extending at least 5 feet beyond the new paving limits, where practical. After all debris has been removed, the exposed subgrade soil that is either at or below the planned subgrade elevation shall be proofrolled with a large vibratory drum roller (i.e. Dynapac 250 or equivalent) to densify the underlying soils. The on-site representative from Carlin-Simpson & Associates shall witness the proofrolling operation. If any excessive movement is noted during the proofrolling, the soft or unsuitable soil shall be removed and replaced with new compacted fill.

Areas, where existing fill is encountered, it shall be compacted in place. Carlin-Simpson & Associates must evaluate these areas for the presence of soft or unsuitable material within the existing fill matrix. Portions of this fill may have to be removed and replaced with new compacted fill. Carlin-Simpson & Associates will determine this during construction.

Where new fill is required to achieve final grades, it shall consist of either suitable on-site soil or imported sand and gravel. Imported sand and gravel shall contain less than 20% by weight passing a No. 200 sieve. New fill shall be placed in layers not exceeding 12 inches in loose thickness and each layer shall be compacted to at least 92% of its Maximum Modified Dry Density (ASTM D1557).

After the planned subgrade has been proofrolled and new compacted fill has been placed as required, the new pavement subbase may be placed on the existing site soils, bedrock, and new compacted fill. A layer of densely graded aggregate (DGA) is recommended as a subbase layer for drainage and additional pavement support. See the recommended thicknesses for the pavement sections below.

Where rock is encountered at the subgrade elevation in the cut areas, the subgrade stone should be increased to a depth of 12-inches. In addition, to provide additional drainage, finger drains extending from the catch basins, may be required. This must be evaluated by Carlin-Simpson & Associates at the time of construction. A typical finger drain section consists of an 18 to 24 inch wide trench excavated 12 to 18 inches below the subgrade surface. Each drain should extend 20 to 30 feet from the catch basin and should be sloped toward the catch basin. Geotextile non-woven filter fabric (i.e. Mirafi 140N or equivalent) is placed on the subgrade and up the sidewalls of the excavation, completely lining the excavation. After the trench has been lined with filter fabric, a 4-inch diameter, rigid wall perforated PVC drainpipe is installed and the trench is backfilled with 3/4-inch clean crushed stone. Once the

trench is backfilled to the subgrade elevation, the filter fabric is wrapped over the clean crushed stone. The asphalt pavement section is then installed directly over the filter fabric.

We recommend that the following pavement sections be used for the parking lots and driveways. These pavement sections are subject to local government approval.

Light Duty Areas – Parking Areas

1 ½"	Asphalt Top Course	NYSDOT, Type 6F
2 ½"	Asphalt Base Course	NYSDOT, Type 3
6"	Stone Subbase (DGA)	NYSDOT, Type 1
	Approved Compacted Subgrade (Minimum CBR = 10)	

Heavy Duty Areas – Driveways

2"	Asphalt Top Course	NYSDOT, Type 6F
3"	Asphalt Base Course	NYSDOT, Type 3
8"	Stone Subbase (DGA)	NYSDOT, Type 1
	Approved Compacted Subgrade (Minimum CBR = 10)	

Based on the boring and test pit data, we anticipate that the densified existing site soils, weathered bedrock, and new compacted fill will provide a CBR value that is equal to or greater than 10, which can adequately support the above pavement sections.

6.6 Temporary Construction Excavations and Excavation Protection

Temporary construction excavations shall be conducted in accordance with the most recent OSHA guidelines or applicable federal, state or local codes. A qualified person should evaluate the excavations at the time of construction to determine the appropriate soil or rock type and the allowable slope configuration. Based on the boring data, we believe the site soil and bedrock would have the following classifications as defined by the OSHA guidelines.

<u>Soil/ Rock Type</u>	<u>Possible Classification</u>	<u>Maximum Slope or Bench</u>
Existing Fill	“C”	1½H:1V
Virgin Soil	“B” or “C”	1H:1V or 1½H:1V
Weathered Rock	“B”	1H:1V
Intact Bedrock	“A”	¾H:1V

Temporary support (i.e. trench boxes, sheeting and shoring, etc.) should be used for any excavation that cannot be sloped or benched in accordance with the applicable regulations, where necessary to protect adjacent property, utilities, driveways, and/or structures, or where saturated soils or water seepage is encountered within the excavation. In the event that water is encountered within the excavation, an evaluation of the excavation’s stability must be performed. Perched water or groundwater encountered within the excavation will destabilize the sides of the excavation. Temporary support will be required to stabilize the excavation. Dewatering of the excavation will also be required.

A New York State licensed professional engineer must design all temporary and permanent support systems. The contractor will select the shoring type and submit design calculations for the proposed shoring method to Carlin-Simpson & Associates for review.

The soil adjacent to the temporary support system will exert a horizontal pressure against the system. This pressure is based on the soil unit weight, coefficient of active earth pressure, and depth of the excavation. In addition, the surcharge loads from adjacent driveways, construction equipment, or stored materials near the excavation must be incorporated into the design of the support system, as applicable. The design parameters for temporary excavation support systems are listed in Table 8 below.

Table 8 – Temporary Sheet Piling and Shoring Design Parameters

Description	Soil	Highly Weathered Rock
Moist Unit Weight (pcf)	130	140
Friction Angle (ϕ , deg)	30	36-38
Cohesion (c, psf)	0	0
Active Earth Pressure Coefficient (k_a) ¹	0.33	0.26-0.24
Equivalent Fluid Pressure (pcf)	42.9	36.4-33.6
Passive Earth Pressure Coefficient (k_p) ¹	3.0	3.9-4.2

6.7 Suitability of the In-Situ Soil and Rock for Use as Compacted Fill

The suitability of each stratum for use as compacted fill is discussed below.

Stratum 1A Topsoil

Topsoil is not suitable for use as compacted fill. During construction, it shall be stripped from the construction areas. The topsoil may be reused in non-structural, non-sloped landscape areas or be hauled offsite.

Stratum 1B Asphalt

Asphalt is not suitable for use as compacted fill in the proposed building area. However, the existing asphalt pavement may be reused as subgrade material and mixed with soil for use in the parking lot and driveway areas. The asphalt should be stripped from the work area and stockpiled if to be reused or hauled off site for disposal. Prior to using the asphalt for compacted fill, the material shall be crushed into pieces smaller than 4 inches and mixed with soil.

Stratum 2 Existing Fill

The existing fill generally consists of brown, gray, black coarse to fine Sand, trace (to some) Silt, trace (to some) coarse to fine Gravel, with varying amounts of cobbles, boulders, organic material, and debris. The organic material and debris consisted of roots, buried topsoil, plastic, wood, concrete, brick, and asphalt. The existing fill will only be suitable for reuse if it remains relatively dry for optimum compaction and all of the debris and organic material is removed prior to reuse as compacted fill.

Strata 3 & 5 Sand, Silty Sand, or

The virgin soil consists of brown, gray coarse to fine SAND, trace (to and) Silt, trace (to and) coarse to fine Gravel or coarse to fine GRAVEL some (to and), coarse to fine Sand, trace Silt. Many cobbles and boulders were encountered in

Sandy Gravel this stratum. This stratum is generally suitable for reuse as compacted fill, provided that it remains relatively dry for optimum compaction. See below for requirements for reuse of cobbles and boulders.

Stratum 4
Clayey Silt
or Silty Clay

In select areas of the site, the virgin soil consists of brown, gray or mottled red brown, brown, gray Clayey SILT, trace coarse to fine Sand or Silty CLAY, trace fine Sand. This stratum has a high percentage of silt/clay and will be very moisture sensitive. If the soil becomes too wet, it will be difficult to achieve adequate compaction. In the event that this material is encountered within the site excavations, it will only be suitable for reuse as compacted fill if it remains relatively dry for optimum compaction prior to its use.

Stratum 6
Weathered
Bedrock

Excavated rock may be used as fill material on the site provided that the material is well graded and has been approved by Carlin-Simpson & Associates prior to its use.

All rock fill (including large cobbles and boulders) must be well blended with smaller rock fragments and/or soil. Gradation limits (i.e. maximum particle size for rock placed) will depend on the location of placement as shown in Table 7 below. Excavated rock (and boulders) that are too large for use as structural fill should be processed through a crusher to provide suitable fill material.

Rock fill shall be placed in maximum 12 inch thick layers and compacted with multiple passes of a large vibratory roller to a firm and non-yielding state as determined by the on-site representative from Carlin-Simpson & Associates. Rock fill should not be used where it will interfere with the installation of foundations, pile foundations, or utilities. Also, it shall not be used as backfill directly against concrete walls or utilities.

The boring and test pit data indicates that the on-site soils contain a varying percentage of silt (5% to more than 50%). The higher silt content soils will be moisture sensitive. If the soil becomes too wet, it will be difficult to achieve adequate compaction. In addition, the site soils that extend below the groundwater table are completely saturated and therefore, unsuitable for reuse.

Proper moisture conditioning of the soil will be required. New compacted fill should be within 2% (+/-) of its optimum moisture content at the time of placement. In the event that the on-site material is too wet at the time of placement and cannot be adequately compacted, the soil should be aerated and allowed to dry or the material removed and a drier cleaner fill material used. In the event that the on-site material is too dry at the time of placement and cannot be adequately compacted, water may be needed to increase the soil moisture content for proper compaction.

The in-situ soils which exist throughout the site may become soft and weave if exposed to excessive moisture and construction traffic. The instability will occur quickly when exposed to these elements and it will be difficult to stabilize the subgrade. We recommend that adequate site drainage be implemented early in the construction schedule and if the subgrade becomes wet, the contractor should limit construction activity until the soil has dried.

Excavated boulders, weathered rock, and rock may be used as fill material in designated areas, provided that the material conforms to the required gradation, is well graded, and has been approved prior to use by Carlin-Simpson & Associates. All rock fill must be well blended with smaller rock fragments and/or soil. The recommended maximum particle size for rock placed as fill is shown in

Table 9 below. Excavated rock, too large for use as structural fill, should be processed through a crusher to provide suitable fill material.

Table 9 – Rock Fill Gradation Limitations

Location		Maximum Particle Size
Building Area	Within 2 feet of Finished Floor	3 inches
	More than 2 feet below Finished Floor	6 inches
	More than 6 feet below Finished Floor	12 inches
Outside Building Area (i.e. Pavement and Sidewalk Areas)	Within 18 inches of Finished Grade	3 inches
	More than 18 inches below Finished Grade	6 inches
	More than 3 feet below Finished Grade	12 inches

The minimum compaction requirements for the various areas of the site are summarized in Table 10 below.

Table 10 – Minimum Compaction Requirements

Area	Maximum Modified Dry Density (ASTM D1557)
Below Foundations	95%
Below Floor Slabs	92%
Retaining Wall Subgrade	95%
Retaining Wall Backfill	92%
Pavement Areas	92%
Exterior Slabs and Sidewalks	92%
Utility Trenches	92%
Landscape Areas (Non-Sloped Areas)	90%

Debris Fill and Potential Environmental Concerns

Debris was encountered within the existing fill stratum during this subsurface investigation. In the event that the debris fill is encountered in any of the site excavations, the excavated material will generally not be suitable for reuse as compacted fill unless the debris can be sufficiently separated and removed from the soil fill. The possibility of not being able to reuse all of the excavated existing fill material should be taken into consideration by the project team. This should also be included in the project specifications.

In the event that the debris fill material needs to be hauled off site, environmental testing will likely be required to export the debris fill material. An environmental evaluation of the site was beyond the scope of this study. Proper disposal of all soil must be performed in accordance with applicable federal and state regulations. An environmental engineering firm should be retained by the owner to address these potential issues. The possibility of having to haul off materials should be taken into consideration by the project team.

7.0 GENERAL

The findings, conclusions and recommendations presented in this report represent our professional opinions concerning subsurface conditions at the site. The opinions presented are relative to the dates of our site work and should not be relied on to represent conditions at later dates or at locations not explored. The opinions included herein are based on information provided to us, the data obtained at specific locations during the study and our past experience. If additional information becomes available that might impact our geotechnical opinions, it will be necessary for Carlin-Simpson & Associates to review the information, reassess the potential concerns, and re-evaluate our conclusions and recommendations.

Regardless of the thoroughness of a geotechnical exploration, there is the possibility that conditions between borings and test pits will differ from those encountered at specific boring or test pit locations, that conditions are not as anticipated by the designers and/or the contractors, or that either natural events or the construction process have altered the subsurface conditions. These variations are an inherent risk associated with subsurface conditions in this region and the approximate methods used to obtain the data. These variations may not be apparent until construction.

The professional opinions presented in this geotechnical report are not final. Field observations and foundation installation monitoring by the geotechnical engineer, as well as soil density testing and other quality assurance functions associated with site earthwork and foundation construction, are an extension of this report. Therefore, Carlin-Simpson & Associates should be retained by the owner to observe all earthwork and foundation construction, to document that the conditions anticipated in this study actually exist, and to finalize or amend our conclusions and recommendations. Carlin-Simpson & Associates is not responsible or liable for the conclusions and recommendations presented in this report if Carlin-Simpson & Associates does not perform the observation and testing services.

Therefore, in order to preserve continuity in this project, the owner shall retain the services of Carlin-Simpson & Associates to provide full time geotechnical related monitoring and testing during construction. At a minimum, this shall include the observation and testing of the following: 1) the removal of existing fill and unsuitable soil, where required; 2) the proofrolling of the subgrade soil prior to the placement of new compacted fill; 3) the placement and compaction of controlled fill; 4) the installation of pile foundations; 5) the excavation for new foundations bearing on rock; 6) the construction of retaining walls, soil slopes, and rock slopes; and 7) the preparation of the subgrade for the floor slab and pavement areas.

This report has been prepared in accordance with generally accepted geotechnical engineering practice. No other warranty is expressed or implied. The evaluations and recommendations presented in this report are based on the available project information, as well as on the results of the exploration. Carlin-Simpson & Associates should be given the opportunity to review the final drawings and site plans for this project to determine if changes to the recommendations outlined in this report are needed. Should the nature of the project change, these recommendations should be re-evaluated.

This report is provided for the exclusive use of AMS Acquisitions and the project specific design team and may not be used or relied upon in connection with other projects or by other third parties. Carlin-Simpson & Associates disclaims liability for any such third-party use or reliance without express written permission. Use of this report or the findings, conclusions or recommendations by others will be at the sole risk of the user. Carlin-Simpson & Associates is not responsible or liable for the interpretation by others of the data in this report, nor their conclusions, recommendations or opinions.

If the conditions encountered during construction vary significantly from those stated in this report, this office should be notified immediately so that additional recommendations can be made.

Thank you for allowing us to assist you with this project. Should you have any questions or comments, please contact this office.

Very truly yours,

CARLIN-SIMPSON & ASSOCIATES, LLC



MEREDITH R. ANKE, P.E.
Senior Project Engineer



ROBERT B. SIMPSON, P.E.
Principal



File No. 23-34

CARLIN-SIMPSON & ASSOCIATES Sayreville, NJ				TEST BORING LOG				BORING NUMBER B-1	
Project: Proposed 4 Story Building, Albany Post Rd & Craft Ln, Buchanan NY							SHEET NO.: 1 of 1		
Client: AMS Acquisitions							JOB NUMBER: 23-34		
Drilling Contractor: Environmental Technical Drilling							ELEVATION: +70.0		
GROUNDWATER					CASING	SAMPLE	CORE	TUBE	DATUM: Topo
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS			START DATE: 5/Jul/23
No groundwater encountered					DIA.	3 1/4"	1 3/8"		FINISH DATE: 5/Jul/23
				WGHT		140#			DRILLER: Collin
				FALL		30"			INSPECTOR: Mike C
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	S y m	IDENTIFICATION				REMARKS
			3		<u>Dark brown topsoil</u>				0'3"
1		S-1	4		FILL (Br cf S, l \$, t mf G)				Rec = 16" moist
			5						
2			4		<u>FILL (Brown coarse to fine SAND, little Silt, trace medium to fine Gravel)</u>				
			6						
3		S-2	17		FILL (same, l mf G, w/ fine roots)				Rec = 8" moist
			26						
4			50/1"						4'0"
					<u>End of Boring @ 4'0"</u>				
5									Auger refusal 4'0"
6									Moved hole 5' east
7									Auger refusal 3'9"
8									on probable bedrock
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

CARLIN-SIMPSON & ASSOCIATES Sayreville, NJ				TEST BORING LOG				BORING NUMBER B-2	
Project: Proposed 4 Story Building, Albany Post Rd & Craft Ln, Buchanan NY							SHEET NO.: 1 of 1		
Client: AMS Acquisitions							JOB NUMBER: 23-34		
Drilling Contractor: Environmental Technical Drilling							ELEVATION: +78.0		
GROUNDWATER				CASING	SAMPLE	CORE	TUBE	DATUM: Topo	
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS		START DATE: 5/Jul/23	
5/Jul/23		7'0"	Open	DIA.	3 1/4"	1 3/8"		FINISH DATE: 5/Jul/23	
				WGHT		140#		DRILLER: Collin	
				FALL		30"		INSPECTOR: Mike C	
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	S y m	IDENTIFICATION				REMARKS
			6		Black topsoil				0'3"
1		S-1	9		FILL (Br cf S, l (-) \$, a cf G, w/many cobbles, boulders)				Rec = 11" moist
			24						Boulder @ 1'0"
2			17						Auger refusal 2'0", moved hole 2' north
3									Concrete @ 4'0"
			5		FILL (same, s \$, w/roots, topsoil)				Rec = 12" moist
4		S-2	10						
			29		FILL (Brown coarse to fine SAND, little Silt, and coarse to fine Gravel, with cobbles, boulders, debris, roots, topsoil)				
5			26						
			5						
6		S-3	4		FILL (same, br, g w/concrete, plastic, fine roots, mixed topsoil)				Rec = 9" moist
			4						
7			11						
			11						
8		S-4	12		FILL (Dk gr, br \$ s (+), cf S, t f G, w/concrete, wood, fine roots)				Rec = 8" moist to wet
			25						
9			13						9'0"
					End of Boring @ 9'0"				
10									Auger refusal 8'0" on boulder
11									move hole 5' north. Start mud rotary, lost water in existing fill. Could not continue mud rotary. Abandoned boring.
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

CARLIN-SIMPSON & ASSOCIATES Sayreville, NJ				TEST BORING LOG				BORING NUMBER B-3	
Project: Proposed 4 Story Building, Albany Post Rd & Craft Ln, Buchanan NY							SHEET NO.: 1 of 1		
Client: AMS Acquisitions							JOB NUMBER: 23-34		
Drilling Contractor: Environmental Technical Drilling							ELEVATION: +81.0		
GROUNDWATER				CASING	SAMPLE	CORE	TUBE	DATUM: Topo	
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS		START DATE: 5/Jul/23	
No groundwater encountered				DIA.	3 1/4"	1 3/8"		FINISH DATE: 5/Jul/23	
				WGHT		140#		DRILLER: Collin	
				FALL		30"		INSPECTOR: Mike C	
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	S y m	IDENTIFICATION			REMARKS	
1		S-1	2		<u>Black topsoil</u>			0'5"	
			6		<u>FILL (Gray coarse to fine GRAVEL and, coarse to fine Sand, little (-) Silt)</u>			1'6"	
2			12		Gr cf G a, cf S, t \$, w/many cobbles, boulders			Rec = 7" moist	
			9						
3		S-2	12					Rec = 7" moist	
			32						
4			43		<u>Gray coarse to fine GRAVEL and, coarse to fine Sand, trace Silt, with many cobbles, boulders</u>			Auger refusal 5'0" possible boulder, moved hole 5' north	
			14/3"					Rec = 8" moist	
5		S-3	18		same, highly fractured bedrock			5'3"	
			27						
			30/3"						
6					<u>End of Boring @5'3"</u>			Spoon bouncing on possible bedrock 5'3"	
7								Auger refusal 5'3" on probable bedrock	
8									
9									
10									
11									
12									
13									
14									
15									
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17									
18									
19									
20									
21									
22									

CARLIN-SIMPSON & ASSOCIATES Sayreville, NJ				TEST BORING LOG				BORING NUMBER B-4	
Project: Proposed 4 Story Building, Albany Post Rd & Craft Ln, Buchanan NY							SHEET NO.: 1 of 1		
Client: AMS Acquisitions							JOB NUMBER: 23-34		
Drilling Contractor: Environmental Technical Drilling							ELEVATION: +79.0		
GROUNDWATER					CASING	SAMPLE	CORE	TUBE	DATUM: Topo
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS			START DATE: 6/Jul/23
No groundwater encountered					DIA.	3 1/4"	1 3/8"		FINISH DATE: 6/Jul/23
				WGHT		140#			DRILLER: Collin
				FALL		30"			INSPECTOR: Mike C
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	S y m	IDENTIFICATION				REMARKS
1		S-1	4		Black Asphalt 0'3"				Rec = 8" moist
			12		FILL (Lt br gr cf S, t \$, l (-) mf G, shattered boulder)				
2			20		FILL (Light brown, gray coarse to fine SAND, trace Silt, little (-) medium to fine Gravel, shattered boulder)				Rec = 3" moist Auger refusal 4'0", moved 3' N Auger refusal 2'0", moved 8' S Auger refusal 2'6" on possible bedrock
			8						
3		S-2	10		FILL (Br cf S, l (-) \$, a cf G)				
			7						
4			15/1"		3'7"				
5					End of Boring @ 3'7"				
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
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18									
19									
20									
21									
22									

CARLIN-SIMPSON & ASSOCIATES Sayreville, NJ				TEST BORING LOG				BORING NUMBER B-5	
Project: Proposed 4 Story Building, Albany Post Rd & Craft Ln, Buchanan NY				SHEET NO.:				1 of 1	
Client: AMS Acquisitions				JOB NUMBER:				23-34	
Drilling Contractor: Environmental Technical Drilling				ELEVATION:				+79.5	
GROUNDWATER				CASING	SAMPLE	CORE	TUBE	DATUM: Topo	
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS			START DATE: 6/Jul/23
No groundwater encountered				DIA.	3 1/4"	1 3/8"			FINISH DATE: 6/Jul/23
				WGHT		140#			DRILLER: Collin
				FALL		30"			INSPECTOR: Mike C
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	S y m	IDENTIFICATION				REMARKS
			5		Black Asphalt				0'2"
1		S-1	15		FILL (Lt br cf S, l (+) \$, a cf G, boulder)				Rec = 6" moist
			15						
2			9						Boulders @ 2'0"
			7						
3		S-2	4		FILL (Dk br cf S, s (-) \$, l mf G, w/some roots)				Rec = 7" moist
			4		FILL (Brown coarse to fine SAND, little (+) Silt, and coarse to fine Gravel, boulder, roots)				Auger breakthrough 4'
4			3						
5									
			1		FILL (same, s \$, t (+) mf G, w/some roots)				5'6"
6		S-3	1		Lt br cf S, a \$, t (-) mf G				Rec = 18" moist
			15		Light brown coarse to fine SAND, and Silt, trace (-) medium to fine Gravel				
7			10/0"						6'8"
					End of Boring @ 6'8"				Auger refusal 6'8" on probable bedrock
8									
9									
10									
11									
12									
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16									
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20									
21									
22									

CARLIN-SIMPSON & ASSOCIATES Sayreville, NJ				TEST BORING LOG				BORING NUMBER B-6	
Project: Proposed 4 Story Building, Albany Post Rd & Craft Ln, Buchanan NY							SHEET NO.: 1 of 1		
Client: AMS Acquisitions							JOB NUMBER: 23-34		
Drilling Contractor: Environmental Technical Drilling							ELEVATION: +78.5		
GROUNDWATER					CASING	SAMPLE	CORE	TUBE	DATUM: Topo
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS			START DATE: 6/Jul/23
No groundwater encountered					DIA.	3 1/4"	1 3/8"		FINISH DATE: 6/Jul/23
				WGHT		140#			DRILLER: Collin
				FALL		30"			INSPECTOR: Mike C
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	S y m	IDENTIFICATION				REMARKS
1		S-1	27		<u>Black topsoil</u> 0'4"				Rec = 12" Refusal 0'7", moved hole 3' west Auger refusal 2'2" Auger refusal 2'5" on probable bedrock
2			15		<u>Light brown, gray coarse to fine SAND, little Silt, a coarse to fine Gravel, with rock fragments</u>				
3		S-2	23/5"10/0"	same	2'5"				
4					<u>End of Boring @ 2'5"</u>				
5									
6									
7									
8									
9									
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21									
22									

CARLIN-SIMPSON & ASSOCIATES Sayreville, NJ				TEST BORING LOG				BORING NUMBER B-7	
Project: Proposed 4 Story Building, Albany Post Rd & Craft Ln, Buchanan NY							SHEET NO.: 1 of 2		
Client: AMS Acquisitions							JOB NUMBER: 23-34		
Drilling Contractor: Environmental Technical Drilling							ELEVATION: +80.0		
GROUNDWATER					CASING	SAMPLE	CORE	TUBE	DATUM: Topo
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS			START DATE: 6/Jul/23
No groundwater encountered					DIA.	3 1/4"	1 3/8"		FINISH DATE: 6/Jul/23
				WGHT		140#			DRILLER: Collin
				FALL		30"			INSPECTOR: Mike C
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	S y m	IDENTIFICATION				REMARKS
1		S-1	9		Black topsoil				0'3"
2			7		Gray coarse to fine SAND, trace Silt, some (+) coarse to fine Gravel, with rock fragments.				1'2"
3			8/0"		<u>End of Boring @ 1'2"</u>				Rec = 7" moist
4									Auger refusal 1'0", moved 3' south, auger refusal 0'10", moved 3' west,
5									Auger refusal 1'2" on probable bedrock
6									
7									
8									
9									
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11									
12									
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14									
15									
16									
17									
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19									
20									
21									
22									

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.				TEST BORING LOG				BORING NUMBER B-8	
Project: Proposed 4 Story Building, Albany Post Rd & Craft Ln, Buchanan NY				SHEET NO.:		1 of 2			
Client: AMS Acquisitions				JOB NUMBER:		23-34			
Drilling Contractor: Environmental Technical Drilling				ELEVATION:		+79.0			
GROUNDWATER				CASING	SAMPLE	CORE	TUBE	DATUM: Topo	
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS			START DATE: 6/Jul/23
6/Jul/23		14'0"		DIA.	3 1/4"	1 3/8"			FINISH DATE: 7/Jul/23
				WGHT		140#			DRILLER: Collin
				FALL		30"			INSPECTOR: Mike C
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	S y m	IDENTIFICATION				REMARKS
1		S-1	5						Layer of rip rap
			4		Black asphalt			0'8"	
2		S-2	6		FILL (Dk br cf S, l \$, s cf G)				Rec = 10" moist
			4						
3		S-3	4		FILL (same, l (+) \$)				Rec = 2" moist
			7		FILL (Dark brown coarse to fine SAND, little Silt, some coarse to fine Gravel)				
4		S-4	8						
			6						
5		S-5	5						Rec = 6" moist
			6					5'6"	
6		S-6	9		Lt br cf S, s (+) \$, s cf G				
			9		same	Light brown coarse to fine SAND, some (+) Silt, some coarse to fine Gravel			
7		S-7	10						Rec = 2" moist
			9					8'0"	
8		S-8	10						
			12						
9		S-9	14		Lt br, gr Cy \$				Rec = 24" moist
			13						
10		S-10	13						
			7						
11		S-11	11		same				Rec = 10" moist
			12						
12		S-12	11						
			8						
13		S-13	10		same				Rec = 24" moist
			12						
14		S-14	13		Light brown, gray Clayey SILT				
			12						
15		S-15	11		same				Rec = 24" wet
			11						
16		S-16	20						
			7						
17		S-17	9		same, gr				Rec = 24" wet
			10						
18		S-18	10						
			4						
19		S-19	5		same				Rec = 24" wet
			6						
20		S-20	6						
			3						
21		S-21	2		same				Rec = 7" wet
			3						
22		S-22	3						

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.		TEST BORING LOG		BORING NUMBER B-8		
Project:		Proposed 4 Story Building, Albany Post Rd & Craft Ln, Buchanan NY		SHEET NO.: 2 of 2		
Client:		AMS Acquisitions		JOB NUMBER: 23-34		
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	Soil	IDENTIFICATION	REMARKS
23		S-12	4		Lt br, gr Cy \$	Rec = 24" wet
			5			
24			6		<u>Light brown, gray Clayey SILT</u>	Rec = 20" wet
			5			
25		S-13	3			
			4	same		
26			4			
			5			
27		S-14	4			
			5	same		
28			5			
29						
30					<u>End of Boring @ 29'0"</u>	
31						
32						
33						
34						
35						
36						
37						
38						
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43						
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45						
46						
47						

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.				TEST BORING LOG				BORING NUMBER B-9	
Project: Proposed 4 Story Building, Albany Post Rd & Craft Ln, Buchanan NY				SHEET NO.: 1 of 1				JOB NUMBER: 23-34	
Client: AMS Acquisitions				ELEVATION: +88.0				Drilling Contractor: Environmental Technical Drilling	
GROUNDWATER				CASING	SAMPLE	CORE	TUBE	DATUM: Topo	
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS		START DATE: 7/Jul/23	
No Water Reading				DIA.	3 1/4"	1 3/8"		FINISH DATE: 7/Jul/23	
				WGHT		140#		DRILLER: Collin	
				FALL		30"		INSPECTOR: Mike C	
Depth (ft.)	Casing Blows pre Foot	Sample Number	Blows on Sample Spoon per 6"	IDENTIFICATION				REMARKS	
1		S-1	3	<u>Black asphalt</u>				Rec = 4"	
			4	<u>Orange brown coarse to fine SAND, and Silt, little medium to fine Gravel</u>				moist	
2		Run #1	10/2"					Run #1	
3								1'0"-2'6"	
4		Run #2		<u>Gray Gneiss or Norite, massive moderately jointed, slightly to moderately weathered</u>				Run = 18"	
5								Rec = 18" = 100%	
6								RQD = 39%	
7								Run #2	
8								2'6"-6'0"	
9								Run = 42"	
10								Rec = 40" = 95%	
11								RQD = 70%	
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.				TEST BORING LOG				BORING NUMBER B-10		
Project: Proposed 4 Story Building, Albany Post Rd & Craft Ln, Buchanan NY				SHEET NO.:		1 of 2				
Client: AMS Acquisitions				JOB NUMBER:		23-34				
Drilling Contractor: Environmental Technical Drilling				ELEVATION:		+78.5				
GROUNDWATER				CASING	SAMPLE	CORE	TUBE	DATUM: Topo		
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS		START DATE:	10/Jul/23	
11/Jul/23		3'0"		DIA.	3 1/4"	1 3/4"		FINISH DATE:	11/Jul/23	
				WGHT		140#		DRILLER:	Collin	
				FALL		30"		INSPECTOR:	Mike C	
Depth (ft.)	Casing Blows pre Foot	Sample Number	Blows on Sample Spoon per 6"	S Y M	IDENTIFICATION			REMARKS		
1		S-1	8		Black topsoil			0'3"		
			11		FILL (Br cf S, t (+) \$, s cf G, w/rk frg)			Rec = 9" moist		
			10							
2			5							
			6							
3		S-2	8		FILL (same, l \$, a cf G)			Rec = 8" wet		
			15							
4			20		<u>FILL (Brown coarse to fine SAND, little Silt, some coarse to fine Gravel, with rock fragments, asphalt)</u>					
5										
			19							
6		S-3	22		FILL (same, bk cf S, l (-) \$, a cf G, w/asphalt)			Rec = 13" wet		
			13							
7			8							
			7							
8		S-4	3		FILL (Gr, br cf S, a \$, l cf G)			Rec = 20" wet		
			6							
9			45/4"							
10								10'0"		
11										
12		Run #1			<u>FILL (Boulders)</u>					
13										
14										
15								15'0"		
16		S-5	45		FILL (Dk br, gr cf S, a \$, l mf G)			Rec = 8" wet		
			38/4"							
17					<u>FILL (Dark brown, gray coarse to fine SAND, and Silt, little medium to fine Gravel)</u>			Pea gravel in tip of spoon Refusal on boulders		
18										
19								19'0"		
20		S-6	5/0"					Rec = 5" bouncing refusal		
		Run #2			<u>FILL (Boulders)</u>					
21										
22										

Project: Proposed 4 Story Building, Albany Post Rd & Craft Ln, Buchanan NY	SHEET NO.: 2 of 2
Client: AMS Acquisitions	JOB NUMBER: 23-34

Depth (ft.)	Casing Blows pre Foot	Sample Number	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS
23						
24						
25		Run #3			<u>FILL (Boulders)</u>	
26						
27					27'0"	Rollerbit to 27'0" encountered additional boulders.
28					<u>End of Boring @ 27'0"</u>	Abandoned boring.
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
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41						
42						
43						
44						
45						
46						
47						

CARLIN-SIMPSON & ASSOCIATES Sayreville, NJ				TEST BORING LOG				BORING NUMBER B-11	
Project: Proposed 4 Story Building, Albany Post Rd & Craft Ln, Buchanan NY							SHEET NO.: 1 of 1		
Client: AMS Acquisitions							JOB NUMBER: 23-34		
Drilling Contractor: Environmental Technical Drilling							ELEVATION: +79.0		
GROUNDWATER					CASING	SAMPLE	CORE	TUBE	DATUM: Topo
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS			START DATE: 12/Jul/23
No groundwater encountered					DIA.	3 1/4"	1 3/8"		FINISH DATE: 12/Jul/23
				WGHT		140#			DRILLER: Collin
				FALL		30"			INSPECTOR: Mike C
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	S y m	IDENTIFICATION				REMARKS
1		S-1	4		<u>Black topsoil</u> 0'2"				Rec = 12" moist Spoon refusal 1'9" moved NW 3' Auger refusal 1'7" moved NW 5' Auger refusal 1'3" on probable bedrock
			13		<u>Gray, brown coarse to fine SAND, little Silt, some coarse to fine Gravel, with rock fragments</u> 1'9"				
2			20		<u>End of Boring @ 1'9"</u>				
2			25/3"						
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

CARLIN-SIMPSON & ASSOCIATES Sayreville, NJ				TEST BORING LOG				BORING NUMBER B-12	
Project: Proposed 4 Story Building, Albany Post Rd & Craft Ln, Buchanan NY							SHEET NO.: 1 of 1		
Client: AMS Acquisitions							JOB NUMBER: 23-34		
Drilling Contractor: Environmental Technical Drilling							ELEVATION: +79.0		
GROUNDWATER				CASING	SAMPLE	CORE	TUBE	DATUM: Topo	
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS			START DATE: 12/Jul/23
12/Jul/23		4'7"		DIA.	3 1/4"	1 3/8"			FINISH DATE: 12/Jul/23
				WGHT		140#			DRILLER: Collin
				FALL		30"			INSPECTOR: Mike C
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION				REMARKS
			7		<u>Black topsoil</u>				0'3"
1		S-1	14		FILL (Gr, br cf S, t \$, s cf G, w/boulder)				Rec = 16" moist
			19						
2			16						
			9						
3		S-2	26		FILL (same)				Rec = 4" moist
			11		<u>FILL (Gray, brown coarse to fine SAND, trace Silt, some coarse to fine Gravel, with boulder)</u>				
4			8						
			18						
5		S-3	18		FILL (same, s \$)				Rec = 1" wet
			10						
6			5						
			3						
7		S-4	5		FILL (Br cf S, a \$, s cf G, w/Cy \$ pockets)				Rec = 4" wet
			9						
8			5						8'0"
			13						
9		S-5	8		Br, gr Cy \$, w/t cf S				Rec = 14" wet
			5		<u>Brown, gray Clayey SILT, with trace coarse to fine Sand</u>				
10			4						
		S-6	13/2"		same				10'2"
11					<u>End of Boring @ 10'2"</u>				Rec = 3" wet
12									Spoon refusal 10'2" on possible bedrock
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

CARLIN-SIMPSON & ASSOCIATES Sayreville, NJ				TEST BORING LOG				BORING NUMBER B-13	
Project: Proposed 4 Story Building, Albany Post Rd & Craft Ln, Buchanan NY							SHEET NO.: 1 of 1		
Client: AMS Acquisitions							JOB NUMBER: 23-34		
Drilling Contractor: Environmental Technical Drilling							ELEVATION: +79.0		
GROUNDWATER					CASING	SAMPLE	CORE	TUBE	DATUM: Topo
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS			START DATE: 12/Jul/23
No groundwater encountered					DIA.	3 1/4"	1 3/8"		FINISH DATE: 12/Jul/23
				WGHT		140#			DRILLER: Collin
				FALL		30"			INSPECTOR: Mike C
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	S y m	IDENTIFICATION				REMARKS
1		S-1	4		<u>Black topsoil</u> 0'3"				Rec = 11" moist
2			14		<u>Gray brown coarse to fine SAND, little (+) Silt, and coarse to fine Gravel</u> 1'4"				
3					<u>End of Boring @ 1'6"</u>				Auger refusal 1'4" moved 3' west Auger refusal 1'2" moved 3' west Auger refusal 0'8" on probable bedrock
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
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21									
22									

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.					TEST BORING LOG				BORING NUMBER B-101	
Project: Proposed 4 Story Building, 3119 Albany Post Rd, Buchanan NY					SHEET NO.:		1 of 1			
Client: AMS Acquisitions					JOB NUMBER:		23-34			
Drilling Contractor: Environmental Technical Drilling					ELEVATION:		+79.0			
GROUNDWATER					CASING	SAMPLE	CORE	TUBE	DATUM:	Topo
DATE	TIME	DEPTH	CASING	TYPE	Cas	SS	DBL		START DATE:	15 Nov 23
Not Encountered					DIA.	4"	1 3/8"	2"	FINISH DATE:	15 Nov 23
				WGHT	RB	140#			DRILLER:	Vinny
				FALL	3"	30"			INSPECTOR:	JP
Depth (ft.)	Casing Blows pre Foot	Sample Number	Blows on Sample Spoon per 6"	IDENTIFICATION					REMARKS	
1		S-1	5	<u>Topsoil</u>					0'2"	
			11	FILL (Br cf G s, cf S, l \$					Rec = 9"	
			15						moist	
2			29						Boulder	
3										
4										
5										
		S-2	2	FILL (same, s \$)					Rec = 5"	
6			5						moist	
			7	<u>FILL (Brown coarse to fine GRAVEL some, coarse to fine Sand, little Silt</u>						
7			3							
8										
9									Boulders	
10										
11										
12		S-3	50/6"	FILL (No Rec)					Rec = 0	
13										
14										
15									15'0"	
16										
17										
18		Run #1		<u>Dark gray Hornblende Diorite fresh, intact rock</u>					Run # 1	
19									15'0"-20'0"	
									Run = 60"	
									Rec = 60" = 100%	
20									RQD = 57" = 95%	
									20'0"	
				<u>End of Boring 20'0"</u>						
21										
22										

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.				TEST BORING LOG				BORING NUMBER B-102	
Project: Proposed 4 Story Building, 3119 Albany Post Rd, Buchanan NY						SHEET NO.: 1 of 1			
Client: AMS Acquisitions						JOB NUMBER: 23-34			
Drilling Contractor: Environmental Technical Drilling						ELEVATION: +78.0			
GROUNDWATER				CASING	SAMPLE	CORE	TUBE	DATUM: Topo	
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS			START DATE: 16 Nov 23
Not Encountered				DIA.	3 1/4"	1 3/8"			FINISH DATE: 16 Nov 23
				WGHT		140#			DRILLER: Vimmy
				FALL		30"			INSPECTOR: JP
Depth (ft.)	Casing Blows pre Foot	Sample Number	Blows on Sample Spoon per 6"	IDENTIFICATION				REMARKS	
1		S-1	8	Topsoil 0'2"				Rec = 7" moist	
			17	FILL (Br, rd br cf S, s \$, a (-) cf G)					
2			17						
			10					Boulders	
3									
4									
5				<u>FILL (Brown, red brown coarse to fine SAND, some Silt, and (-) coarse to fine Gravel</u>					
6									
7									
8		S-2	4					Rec = 0	
			3	FILL (No Rec)					
9			2						
			2						
10								10'0"	
11		Run #1						Run #1 10'0"-15'0" Run = 60" Rec = 22" = 37%	
12				<u>FILL (Boulders)</u>					
13									
14									
15									
16								16'0"	
17		Run #2						Run #2 16'0"-21'0" Run = 60" Rec = 60" = 100% RQD = 15" = 25%	
18				<u>Dark gray Hornblende Diorite shattered very blocky, seamy, weathered rock</u>					
19									
20									
21									
22				<u>End of Boring @ 21'0"</u>				21'0"	

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.				TEST BORING LOG				BORING NUMBER B-103	
Project: Proposed 4 Story Building, 3119 Albany Post Rd, Buchanan NY				SHEET NO.:				1 of 2	
Client: AMS Acquisitions				JOB NUMBER:				23-34	
Drilling Contractor: Environmental Technical Drilling				ELEVATION:				+79.5	
GROUNDWATER				CASING	SAMPLE	CORE	TUBE	DATUM: Topo	
DATE	TIME	DEPTH	CASING	TYPE	Cas	SS	DBL	START DATE: 16/Nov/23	
				DIA.	4"	1 3/4"	2"	FINISH DATE: 16/Nov/23	
				WGHT	RB	140#		DRILLER: Vinny	
				FALL	3"	30"		INSPECTOR: JP	
Depth (ft.)	Casing Blows pre Foot	Sample Number	Blows on Sample Spoon per 6"	S Y M	IDENTIFICATION			REMARKS	
1		S-1	5		<u>Topsoil</u>			0'2"	
			12		FILL (Br cf S, t \$, s cf G)			Rec = 6" moist	
			50/6"						
2									
3									
4								Boulder fill	
5									
6									
7					<u>FILL (Brown coarse to fine SAND, trace Silt, some coarse to fine Gravel, with boulders)</u>				
8									
9									
10									
11					Boulder				
12								12'0"	
13		S-2	6						
			13		Br, gr C&\$ t, f S			Rec = 24" wet	
			12						
14			10						
15									
16									
17				<u>Brown, gray Clay and SILT trace, medium to fine Sand</u>					
18									
19		S-3	3						
			3		same, \$y C, l (-) mf S			Rec = 18" moist	
			4						
20			6						
21									
22									

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ			TEST BORING LOG		BORING NUMBER B-103	
Project: Proposed 4 Story Building, 3119 Albany Post Rd, Buchanan NY			SHEET NO.:		2 of 2	
Client: AMS Acquisitions			JOB NUMBER:		23-34	
Depth (ft.)	Casing Blows pre Foot	Sample Number	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS
23		S-4			<u>Brown, gray Clay and SILT trace, fine Sand</u> 23'6"	Rec = 9" wet Boulders and cobbles (Decomposed rock)
			10			
24			25	Gr, bk cf S, t (+) \$, s cf G		
			44			
25			22			
26					<u>Gray, black coarse to fine SAND, trace (+) Silt, some coarse to fine Gravel</u>	
27						
28						
				28'6"		
29		Run #1			<u>Dark gray Hornblende Diorite blocky and seamy moderately weathered</u>	Run #1 28'6"-33'6" Run = 60" Rec = 60" = 100% RQD + 42" = 70%
30						
31						
32		Run #2			<u>Shale massive moderately jointed, hard rock</u>	Run #2 33'6"-38'6" Run = 60" Rec = 60" = 100% RQD = 53" = 88%
33						
34						
35						
36						
37						
38						
39					<u>End of Boring @ 38'6"</u>	
40						
41						
42						
43						
44						
45						
46						
47						

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.				TEST BORING LOG				BORING NUMBER B-104			
Project: Proposed 4 Story Building, 3119 Albany Post Rd, Buchanan NY				SHEET NO.: 1 of 4				JOB NUMBER: 23-34			
Client: AMS Acquisitions				ELEVATION: +79.5				DATUM: Topo			
Drilling Contractor: Environmental Technical Drilling				GROUNDWATER				CASING			
DATE				TIME				DEPTH			
CASING				TYPE				SS			
DIA.				WGHT				FALL			
START DATE: 20/Nov/23				FINISH DATE: 20/Nov/23				DRILLER: Vinny			
INSPECTOR: JP											
Depth (ft.)	Casing Blows pre Foot	Sample Number	Blows on Sample Spoon per 6"	S Y M	IDENTIFICATION				REMARKS		
1					FILL (Boulders)				Vinny excavated to 4'0" set casing		
2											
3											
4											
5		S-1	4		FILL (Br cf S, s \$, s cf G, w/boulders)				Rec = 7" moist		
6			5								
7			7		<u>FILL (Brown coarse to fine SAND, some Silt, some coarse to fine Gravel, with boulders)</u>						
8											
9											
10									10'0"		
11		S-2	3		Lt br, gr C&\$ t, cf S				Rec = 22" wet		
12			7								
13			8								
14											
15											
16		S-3	3		same				Rec = 24" wet		
17			5								
18			8								
19											
20									20'0"		
21		S-4	2		Gr \$y C				Rec = 24" wet		
22			1		<u>Gray Silty CLAY</u>						
			.WOH								
			2								

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ		TEST BORING LOG		BORING NUMBER B-104		
Project: Proposed 4 Story Building, 3119 Albany Post Rd, Buchanan NY				SHEET NO.: 2 of 4		
Client: AMS Acquisitions				JOB NUMBER: 23-34		
Depth (ft.)	Casing Blows pre Foot	Sample Number	Blows on Sample Spoon per 6"	SYMBOL	IDENTIFICATION	REMARKS
23						
24						
25						
26		S-5	WOH24		Gr \$y C	Rec = 24" wet
27						
28					<u>Gray Silty CLAY</u>	
29						
30						
31		S-6	1		same, \$&C	Rec = 24" wet
32			1			
33			4			
34						
35						
36		S-7	30		Dk gr cf S, l \$, s cf G	
37			32		<u>Dark gray coarse to fine SAND, little Silt, some coarse to fine Gravel</u>	
38			30			
39						
40						
41		S-8	16		Br cf S, t (+) \$, l cf G	
42			30			
43			38			
44			50			
45						
46		Run #1			<u>Dark gray, green Hornblende Diorite</u>	Run #1 45'0"-49'0" Run = 48" Rec = 48" = 100% RQD = 26" = 54%
47						

CARLIN - SIMPSON & ASSOCIATES Sayreville, NJ		TEST BORING LOG		BORING NUMBER B-104	
Project: Proposed 4 Story Building, 3119 Albany Post Rd, Buchanan NY				SHEET NO.: 3 of 4	

Client: AMS Acquisitions

JOB NUMBER: 23-34

Depth (ft.)	Casing Blows pre Foot	Sample Number	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS
48		Run #1			<u>Dark gray, green Hornblende Diorite</u>	
49					49'0"	
50					<u>End of Boring @ 49'0"</u>	
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67						
68						
69						
70						
71						
72						

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.				TEST BORING LOG				BORING NUMBER B-105	
Project: Proposed 4 Story Building, 3119 Albany Post Rd, Buchanan NY				SHEET NO.: 1 of 1				JOB NUMBER: 23-34	
Client: AMS Acquisitions				ELEVATION: +78.5				DATUM: Topo	
Drilling Contractor: Environmental Technical Drilling				GROUNDWATER				START DATE: 21 Nov 23	
DATE	TIME	DEPTH	CASING	TYPE	Cas	SS	DBL	TUBE	FINISH DATE: 21 Nov 23
				DIA.	4"	1 3/8"	2"		DRILLER: Vinny
				WGHT	RB	140#			INSPECTOR: JP
				FALL	3"	30"			
Depth (ft.)	Casing Blows pre Foot	Sample Number	Blows on Sample Spoon per 6"	IDENTIFICATION				REMARKS	
1				FILL (Boulders)				Boulders	
2									
3									
4									
5									
6									
7									
8		S-1	1	FILL (Br, or cf S, l(+) \$, a cf G)				Rec = 6" moist	
9			6						
10			5						
11			8	FILL (same, a (-) \$, l cf G)				Boulders	
12									
13									
14									
15									
16									
17									
18		S-2	40	FILL (same, a (-) \$, l cf G)				Rec = 4" wet	
19			50/6"						
20									
21		Run #1		Dark gray Hornblende Diorite, blocky and seamy, weathered rock				Run #1 16'0"-21'0" Run = 60" Rec = 55" = 92% RQD = 30" = 50%	
22									
				16'0"					
				21'0"					
				<u>End of boring @ 21'0"</u>					

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.				TEST BORING LOG				BORING NUMBER B-106	
Project: Proposed 4 Story Building, 3119 Albany Post Rd, Buchanan NY				SHEET NO.: 1 of 1				JOB NUMBER: 23-34	
Client: AMS Acquisitions				ELEVATION: +78.5				DATUM: Topo	
Drilling Contractor: Environmental Technical Drilling				GROUNDWATER				START DATE: 27 Nov 23	
DATE	TIME	DEPTH	CASING	TYPE	Cas	SS	DBL	FINISH DATE: 27 Nov 23	
				DIA.	4"	1 3/8"	2"	DRILLER: Vinny	
				WGHT	RB	140#		INSPECTOR: JP	
				FALL	3"	30"			
Depth (ft.)	Casing Blows pre Foot	Sample Number	Blows on Sample Spoon per 6"	IDENTIFICATION				REMARKS	
1									
2									
3									
4				FILL (Boulders)				Boulders	
5									
6		S-1	5	FILL (Gr, br cf S, s \$, s (+) cf G)				Rec = 9"	
7			10	<u>FILL (Gray, brown coarse to fine SAND, some Silt, some (+) coarse to fine Gravel, with boulders)</u>				wet	
8									
9				FILL (Boulders)					
10									
11								11'0"	
12				<u>Brown coarse to fine SAND, little Silt, little coarse to fine Gravel</u>				Drilled smooth	
13									
14								14'0"	
15									
16				<u>Gray, brown coarse to fine SAND, trace Silt, some (+) coarse to fine Gravel, with boulders</u>				Dense drilling Boulders	
17									
18									
19				<u>End of boring @ 18'6"</u>				18'6" Rollerbit refusal 18'6" probable bedrock	
20									
21									
22									

CARLIN-SIMPSON & ASSOCIATES, LLC

Consulting Engineers
Geotechnical & Environmental

Proposed 4-Story Building
Albany Post Rd. & Craft Ln.
Buchanan, NY
23-34

28 June 2023

TP-1 (Elev. +68.0)

0'0"-0'4"	Black topsoil	
0'4"-0'10"	FILL (Gravel, 1" road base)	dense, moist
0'10"-5'3"	FILL (Gray, brown coarse to fine SAND, little Silt, and (-) coarse to fine Gravel, with many cobbles and boulders)	medium dense, dense, moist
5'3"-7'9"	FILL (Dark gray coarse to fine SAND, some (+) Silt, trace (-) fine Gravel, with wood)	loose, moist to wet
7'9"-8'3"	Light gray coarse to fine SAND, and (+) Silt, little (-) medium to fine Gravel)	medium dense, wet
	Groundwater encountered @ 5'3"	

TP-2 (Elev. +71.0)

0'0"-1'0"	Black topsoil	
1'0"-4'9"	FILL (Light brown coarse to fine SAND, little (+) Silt, some (+) coarse to fine Gravel, with many large cobbles boulders, many fine roots)	medium dense, moist
4'9"-5'9"	FILL (Dark gray coarse to fine SAND, little (+) Silt, with trace organics, old topsoil layer)	loose, moist
5'9"-6'9"	Brown coarse to fine SAND, little Silt, some (-) coarse to fine Gravel, with cobbles	medium dense, moist
6'9"-8'6"	Stacked packed boulders. Bucket refusal on large boulder.	dense, moist to wet
	Groundwater encountered @ 8'3"	

28 June 2023

TP-3 (Elev. +80.0)

0'0"-0'4"	Black topsoil	
0'4"-1'0"	Boulders with seams of soil	rippable, moist
1'0"	Refusal on Bedrock	unrippable
	No groundwater encountered	

TP-4 (Elev. +78.5)

0'0"-0'3"	Black topsoil	
0'3"-1'0"	Boulders with seams of soil	rippable
1'0"	Refusal on Bedrock	unrippable
	No groundwater encountered	

TP-5 (Elev. +77.0)

0'0"-0'6"	Black topsoil	
0'6"-2'6"	FILL (Brown coarse to fine SAND, little Silt, some coarse to fine Gravel, with many cobbles, boulders)	loose-med dense, moist
2'6"-4'0"	FILL (Gray, brown coarse to fine SAND, little (+) Silt, little medium to fine Gravel)	dense, moist
4'0"-5'6"	Asphalt	
5'6"-7'6"	FILL (Brown, gray coarse to fine SAND, little (+) Silt, some (+) coarse to fine Gravel, with many cobbles, boulders, with brick)	dense, moist to wet
7'6"	Refusal on boulders (probable fill)	
	Groundwater encountered @ 6'9"	

28 June 2023

TP-6 (Elev. +95.0)

0'0"-0'4"	Black topsoil	
0'4"-1'3"	Brown coarse to fine SAND, little (-) Silt, little (+) coarse to fine Gravel, with many boulders	medium dense, moist
1'3"-5'0"	Brown coarse to fine GRAVEL some (-), coarse to fine Sand, trace (+) Silt, with many cobbles, boulders	dense, moist
5'0"	Refusal on Bedrock, highly fractured and weathered, with soil seams	rippable
	No groundwater encountered	

TP-7 (Elev. +70.0)

0'0"-0'6"	Black topsoil	
0'6"-3'0"	FILL (Brown coarse to fine SAND, little Silt, some (-) coarse to fine Gravel, with a few boulders	dense, moist
3'0"	Refusal on Bedrock	
	No groundwater encountered	

TP-8 (Elev. +68.0)

0'0"-0'10"	Black topsoil	
0'10"-4'6"	FILL (Dark brown coarse to fine SAND, little (+) Silt, some (-) coarse to fine Gravel, with boulders)	loose, moist
4'6"	Refusal on Bedrock	
	No groundwater encountered	

28 June 2023

TP-9 (Elev. +82.0)

0'0"-0'3" Black topsoil

0'3"-1'3" Rippable rock with soil seams (Brown coarse to fine SAND, some (+) Silt, little (-) coarse to fine Gravel) dense, moist

1'3" Refusal on Bedrock

No groundwater encountered

TP-10 (Elev. +88.0)

0'0"-0'2" Black topsoil

0'2"-1'1" Rippable rock with soil seams (Brown coarse to fine SAND, some (-) Silt, little coarse to fine Gravel) dense, moist

1'1" Refusal on Bedrock

No groundwater encountered

TP-11 (Elev. +87.0)

0'0"-0'5" Black topsoil

0'5"-2'8" Rippable rock with soil seams (Brown coarse to fine SAND, some (-) Silt, little (+) coarse to fine Gravel) dense, moist

2'8" Refusal on Bedrock

No groundwater encountered

28 June 2023

TP-12 (Elev. +72.0)

0'0"-1'4"	Black topsoil	
1'4"-4'0"	FILL (Dark brown coarse to fine SAND, and Silt, some coarse to fine Gravel, with boulders, clay pockets, and construction debris)	loose, moist
4'0"-8'2"	FILL (Gray Clayey SILT)	moist-wet, organic odor
8'2"-9'6"	Mottled red brown, brown, gray Clayey SILT	very dense, moist
	Groundwater encountered @ 7'6"	

CARLIN-SIMPSON & ASSOCIATES, LLC

Consulting Engineers
Geotechnical & Environmental

Proposed 4 Story Building
3119 Albany Post Rd.
Buchanan, NY
23-34

6 November 2023

TP-101 (Elev. +79.0)

0'0"-5'6" FILL (Dark brown coarse to fine SAND, little (+) Silt, and coarse to fine Gravel, with many cobbles and boulders)

5'6" Refusal on probable bedrock

No groundwater encountered

TP-102 (Elev. +79.0)

0'0"-3'0" FILL (Boulder and soil fill)

3'0" Refusal on probable bedrock

Trapped water @ 2'6"

TP-103 (Elev. +84.0)

0'0"-7'0" FILL (Boulder and soil fill)

Trapped water @ 4'0"

TP-104 (Elev. +86.0)

No Access

TP-105 (Elev. +80.0)

No Access

6 November 2023

TP-106 (Elev. +78.0)

0'0"-5'0" FILL (Boulder and soil fill)

5'0"-6'3" Brown coarse to fine SAND, and Silt,
trace medium to fine Gravel medium dense, moist

No groundwater encountered

TP-107 (Elev. +79.0)

0'0"-4'0" FILL (Boulder and soil fill)

4'0"-5'0" Light brown SILT and, coarse to fine Sand medium dense, moist

No groundwater encountered

TP-108 (Elev. +79.0)

0'0"-3'0" FILL (Boulder and soil fill)

3'0"-4'0" Light brown SILT and, coarse to fine Sand

Trapped water @ 3'0"

TP-109 (Elev. +78.5)

0'0"-3'6" FILL (Boulder and soil fill)

3'6"-4'0" Brown topsoil

4'0"-7'0" Brown coarse to fine SAND, some (+) Silt medium dense, moist

No groundwater encountered

7 November 2023

TP-110 (Elev. +78.5)

0'0"-6'0" FILL (Boulder and soil fill)

6'0"-6'6" Brown coarse to fine SAND, some Silt,
some coarse to fine Gravel

medium dense, moist

No groundwater encountered

TP-111 (Elev. +79.5)

0'0"-6'0" FILL (Brown coarse to fine SAND,
some Silt, some coarse to fine Gravel, with
cobbles and boulders, topsoil)

6'0" Intact bedrock

Groundwater encountered @ 6'0" (slow inflow)

TP-112 (Elev. +79.5)

0'0"-0'4" Dark brown topsoil

0'4"-3'0" Brown coarse to fine SAND, some (-) Silt,
some (+) coarse to fine Gravel, with many cobbles
and boulders

medium dense, moist

3'0" Intact bedrock (varies/sloping)

No groundwater encountered

TP-113 (Elev. +79.0)

0'0"-6'3" Fractured bedrock

6'3" Refusal on probable bedrock

No groundwater encountered

7 November 2023

TP-114 (Elev. +79.0)

0'0"-0'3"	Brown topsoil	
0'3"-1'0"	Brown coarse to fine SAND, some (-) Silt, some coarse to fine Gravel, with cobbles	medium dense, moist
1'0"-4'6"	Gray fractured bedrock	
4'6"	Intact bedrock	
	No groundwater encountered	

TP-114A (Elev. +79.0)

0'0"-0'8"	Brown coarse to fine SAND, some (-) Silt, some coarse to fine Gravel	medium dense, moist
0'8"	Bedrock	
	No groundwater encountered	

TP-115 (Elev. +79.0)

0'0"-0'4"	Dark brown topsoil	
0'4"-2'0"	Brown coarse to fine SAND, some (-) Silt, some coarse to fine Gravel, with cobbles and boulders	medium dense, moist
2'0"	Intact bedrock	
	No groundwater encountered	

Proposed 4 Story Building
3119 Albany Post Rd.
Buchanan, NY
23-34

7 November 2023

TP-116 (Elev. +78.5)

0'0"-0'5" Brown topsoil

0'5"-5'0" Brown coarse to fine SAND, some (-) Silt,
some coarse to fine Gravel, with cobbles
and boulders

medium dense, moist

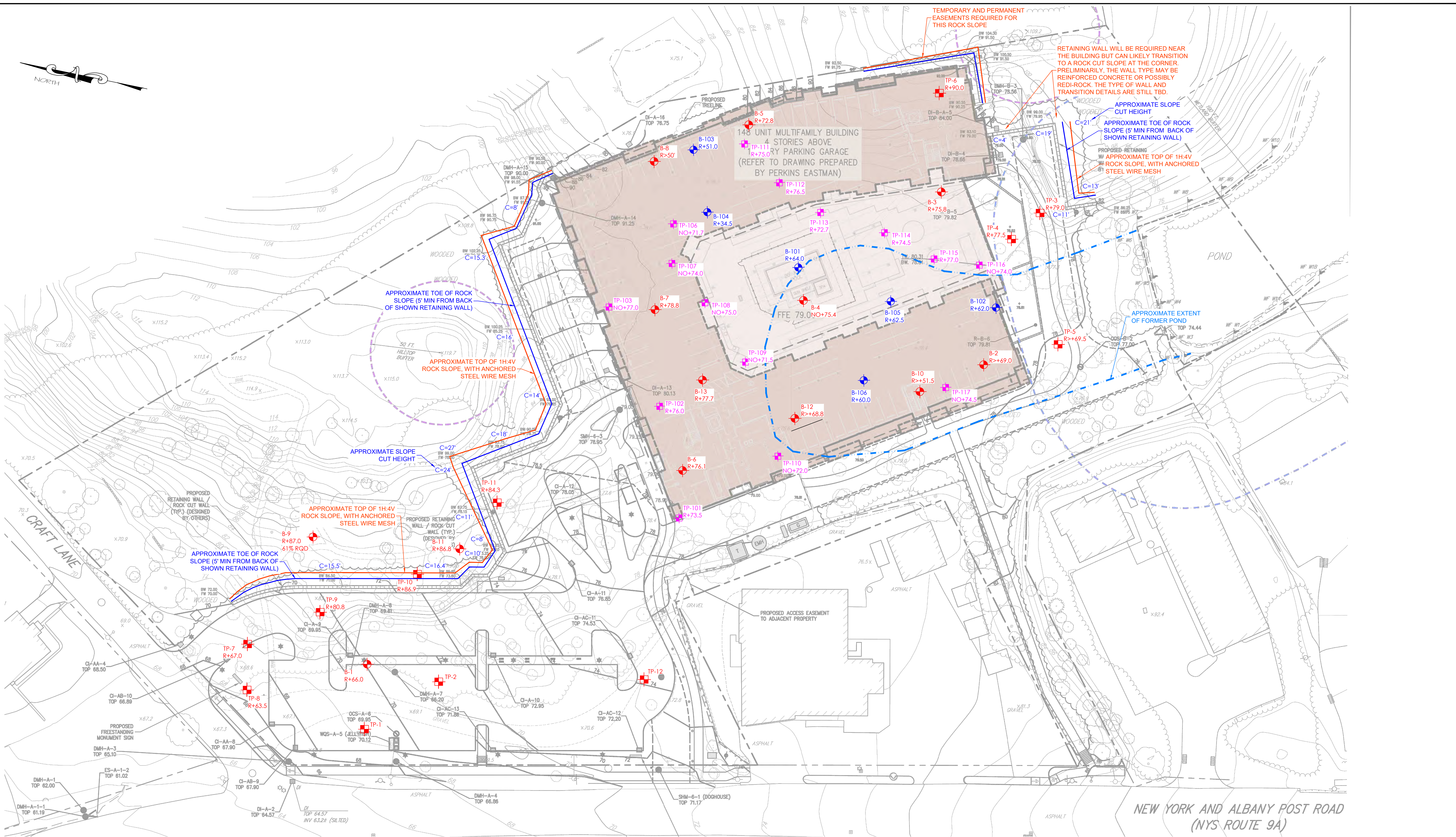
No groundwater encountered

TP-117 (Elev. +80)

0'0"-4'0" FILL (Boulder and soil fill)

4'0"-4'6" Refusal on Asphalt

Trapped water @ 4'0"

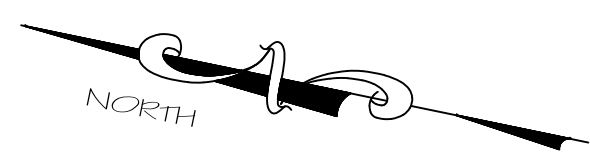


- GENERAL NOTES:**
- GENERAL LAYOUT WAS OBTAINED FROM A DRAWING PREPARED BY JMC PLLC, ENTITLED "SITE GRADING PLAN" DATED 10/17/2023, LAST REVISED 12/15/2023, DWG. NO C-200.
 - BORING AND TEST PIT LOCATIONS WERE LAID OUT IN THE FIELD BY CARLIN-SIMPSON & ASSOCIATES (CSA).
 - BORINGS B-1 THRU B-13 WERE PERFORMED BY ENVIRONMENTAL TECHNICAL DRILLING INC. IN JULY 2023 UNDER THE FULL TIME INSPECTION OF CSA.
 - BORINGS B-101 THRU B-106 WERE PERFORMED BY ENVIRONMENTAL TECHNICAL DRILLING INC. IN NOVEMBER 2023 UNDER THE FULL TIME INSPECTION OF CSA.
 - TEST PITS TP-1 THRU TP-12 WERE PERFORMED BY AMERICAN TREE AND LANDSCAPE CORP. IN JUNE 2023 UNDER THE FULL TIME INSPECTION OF CSA.
 - TEST PITS TP-101 THRU TP-117 WERE PERFORMED BY TRAFICANTE CONTRACTING INC. IN NOVEMBER 2023 UNDER THE FULL TIME INSPECTION OF CSA.
 - ALL LOCATIONS ARE APPROXIMATE.

- LEGEND:**
- ● - BORING LOCATION
 - ■ - TEST PIT LOCATION
 - B-101 - BORING/TEST PIT NUMBER
 - R+64.0 - BEDROCK ELEVATION

ROBERT B. SIMPSON, P.E. PROFESSIONAL ENGINEER		
BORING & TEST PIT LOCATION PLAN		
PROPOSED 4-STORY BUILDING ALBANY POST ROAD & CRAFT LANE BUCHANAN, NEW YORK		
DRAWN MRA	SCALE 1" = 30'	CARLIN-SIMPSON & ASSOCIATES, LLC 61 Main Street Sayreville, NJ 08872 Consulting Geotechnical and Environmental Engineers
CHECKED RBS	DATE 12-15-2023	
PROJECT NO. 23-34	DWG NO. FIG-1	
APPROVED		





GENERAL NOTES:

1. GENERAL LAYOUT WAS OBTAINED FROM A DRAWING PREPARED BY JMC PLLC, ENTITLED "SITE GRADING PLAN" DATED 10/17/2023, LAST REVISED 12/15/2023, DWG. NO C-200.
2. BORING AND TEST PIT LOCATIONS WERE LAID OUT IN THE FIELD BY CARLIN-SIMPSON & ASSOCIATES (CSA).
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4. BORINGS B-101 THRU B-106 WERE PERFORMED BY ENVIRONMENTAL TECHNICAL DRILLING INC. IN NOVEMBER 2023 UNDER THE FULL TIME INSPECTION OF CSA.
5. TEST PITS TP-1 THRU TP-12 WERE PERFORMED BY AMERICAN TREE AND LANDSCAPE CORP. IN JUNE 2023 UNDER THE FULL TIME INSPECTION OF CSA.
6. TEST PITS TP-101 THRU TP-117 WERE PERFORMED BY TRAFICANTE CONTRACTING INC. IN NOVEMBER 2023 UNDER THE FULL TIME INSPECTION OF CSA.
7. ALL LOCATIONS ARE APPROXIMATE.

LEGEND:

- BORING LOCATION
- TEST PIT LOCATION
- APPROXIMATE LIMITS OF WHERE PILES ARE EXPECTED
- APPROXIMATE LIMITS OF WHERE FOOTINGS ON ROCK ARE EXPECTED

ROBERT B. SIMPSON, P.E. PROFESSIONAL ENGINEER	
BUILDING FOUNDATION AREA PLAN	
PROPOSED 4-STORY BUILDING ALBANY POST ROAD & CRAFT LANE BUCHANAN, NEW YORK	
DRAWN: MRA	SCALE: 1" = 30'
CHECKED: RBS	DATE: 12-15-2023
PROJECT NO.: 23-34	DWG NO.: FIG-2
CARLIN-SIMPSON & ASSOCIATES, LLC 61 Main Street Sayreville, NJ 08872 Consulting Geotechnical and Environmental Engineers	





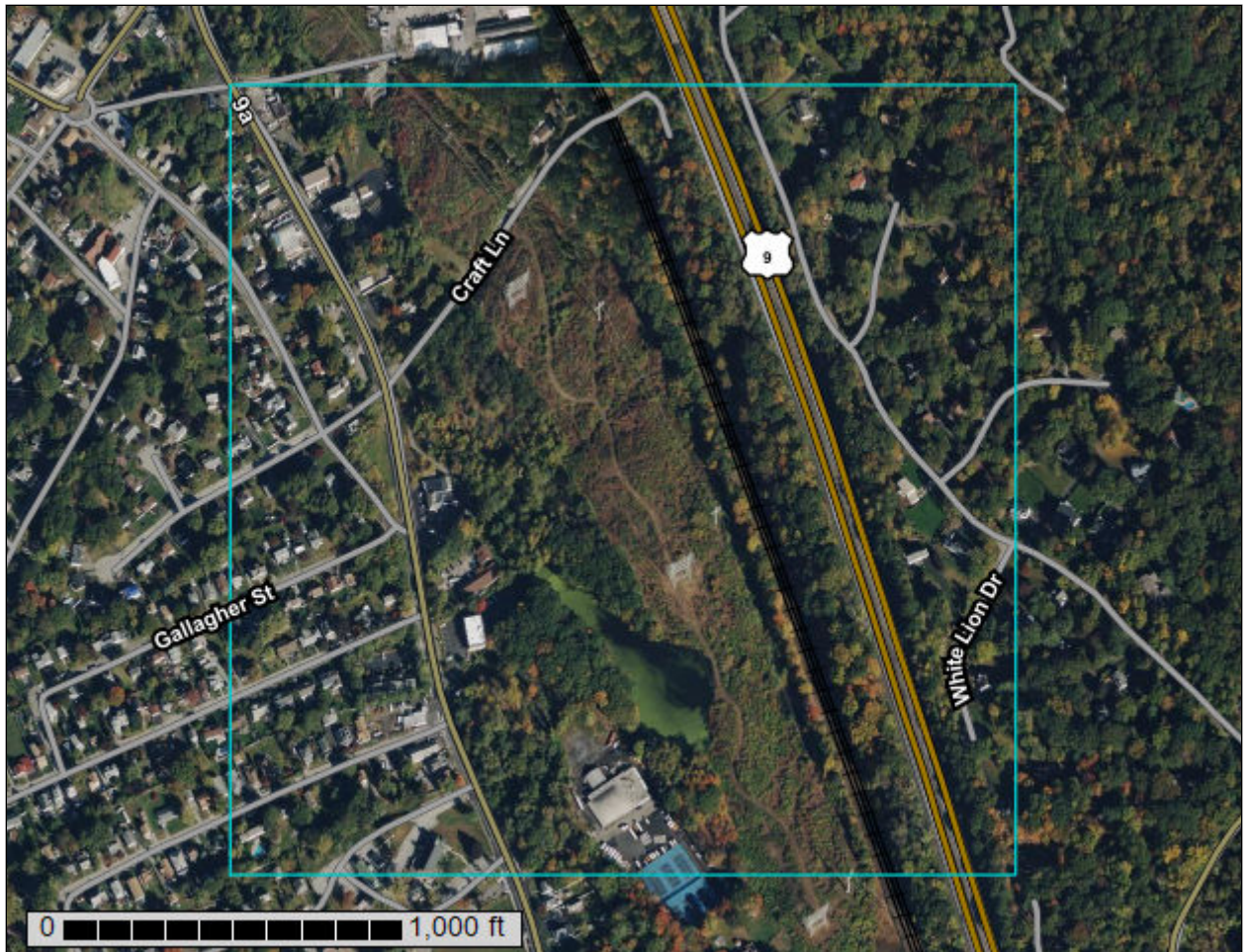
United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Westchester County, New York**



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Soil Map may not be valid at this scale.

Map Scale: 1:5,480 if printed on A portrait (8.5" x 11") sheet.


0 50 100 200 300 Meters

0 250 500 1000 1500 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features


Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

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

Soil Survey Area: Westchester County, New York
 Survey Area Data: Version 18, Sep 10, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 8, 2020—Oct 14, 2020

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CrC	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	23.4	18.8%
CsD	Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky	9.5	7.6%
CtC	Chatfield-Hollis-Rock outcrop complex, 0 to 15 percent slopes	5.4	4.3%
CuD	Chatfield-Hollis-Rock outcrop complex, 15 to 35 percent slopes	36.9	29.6%
HrF	Hollis-Rock outcrop complex, 35 to 60 percent slopes	1.6	1.3%
LcA	Leicester loam, 0 to 3 percent slopes, stony	2.8	2.2%
LcB	Leicester loam, 3 to 8 percent slopes, stony	0.5	0.4%
Pv	Pits, quarry	3.6	2.9%
Uf	Urban land	1.8	1.5%
UIC	Urban land-Charlton-Chatfield complex, rolling, very rocky	20.7	16.6%
UmC	Urban land-Chatfield-Rock outcrop complex, rolling	15.0	12.0%
W	Water	3.5	2.8%
Totals for Area of Interest		124.6	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

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Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion

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of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Westchester County, New York

CrC—Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky

Map Unit Setting

National map unit symbol: 2w698
Elevation: 0 to 1,550 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Charlton, very stony, and similar soils: 50 percent
Chatfield, very stony, and similar soils: 30 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Charlton, Very Stony

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Side slope, crest, nose slope
Down-slope shape: Convex, linear
Across-slope shape: Convex
Parent material: Coarse-loamy melt-out till derived from granite, gneiss, and/or schist

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material
A - 2 to 4 inches: fine sandy loam
Bw - 4 to 27 inches: gravelly fine sandy loam
C - 27 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 3 to 15 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high
(0.14 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: B
Ecological site: F144AY034CT - Well Drained Till Uplands
Hydric soil rating: No

Description of Chatfield, Very Stony

Setting

Landform: Ridges, hills

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Nose slope, side slope, crest

Down-slope shape: Convex

Across-slope shape: Linear, convex

Parent material: Coarse-loamy melt-out till derived from granite, gneiss, and/or schist

Typical profile

O_i - 0 to 1 inches: slightly decomposed plant material

A - 1 to 2 inches: fine sandy loam

B_w - 2 to 30 inches: gravelly fine sandy loam

2R - 30 to 40 inches: bedrock

Properties and qualities

Slope: 3 to 15 percent

Surface area covered with cobbles, stones or boulders: 1.6 percent

Depth to restrictive feature: 20 to 41 inches to lithic bedrock

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (K_{sat}): Very low (0.00 to 0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Minor Components

Leicester, very stony

Percent of map unit: 5 percent

Landform: Drainageways, depressions

Down-slope shape: Linear

Across-slope shape: Concave

Hydric soil rating: Yes

CsD—Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky

Map Unit Setting

National map unit symbol: 2w69k

Elevation: 0 to 1,290 feet

Mean annual precipitation: 36 to 71 inches

Mean annual air temperature: 39 to 55 degrees F

Frost-free period: 140 to 240 days

Farmland classification: Not prime farmland

Map Unit Composition

Chatfield, very stony, and similar soils: 45 percent

Charlton, very stony, and similar soils: 35 percent

Minor components: 6 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Chatfield, Very Stony

Setting

Landform: Ridges, hills

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Nose slope, side slope, crest

Down-slope shape: Convex

Across-slope shape: Linear, convex

Parent material: Coarse-loamy melt-out till derived from granite, gneiss, and/or schist

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material

A - 1 to 2 inches: fine sandy loam

Bw - 2 to 30 inches: gravelly fine sandy loam

2R - 30 to 40 inches: bedrock

Properties and qualities

Slope: 15 to 35 percent

Surface area covered with cobbles, stones or boulders: 1.6 percent

Depth to restrictive feature: 20 to 41 inches to lithic bedrock

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

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Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: B
Ecological site: F144AY034CT - Well Drained Till Uplands
Hydric soil rating: No

Description of Charlton, Very Stony

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex, linear
Across-slope shape: Convex
Parent material: Coarse-loamy melt-out till derived from granite, gneiss, and/or schist

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material
A - 2 to 4 inches: fine sandy loam
Bw - 4 to 27 inches: gravelly fine sandy loam
C - 27 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 15 to 35 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: B
Ecological site: F144AY034CT - Well Drained Till Uplands
Hydric soil rating: No

Minor Components

Leicester, very stony

Percent of map unit: 6 percent
Landform: Hills, ground moraines, drainageways, depressions
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave, linear
Across-slope shape: Concave
Hydric soil rating: Yes

CtC—Chatfield-Hollis-Rock outcrop complex, 0 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2w69g
Elevation: 0 to 1,540 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Chatfield, extremely stony, and similar soils: 39 percent
Hollis, extremely stony, and similar soils: 26 percent
Rock outcrop: 17 percent
Minor components: 1 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Chatfield, Extremely Stony

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Nose slope, side slope, crest
Down-slope shape: Convex
Across-slope shape: Linear, convex
Parent material: Coarse-loamy melt-out till derived from granite, gneiss, and/or schist

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A - 1 to 2 inches: fine sandy loam
Bw - 2 to 30 inches: gravelly fine sandy loam
2R - 30 to 40 inches: bedrock

Properties and qualities

Slope: 0 to 15 percent
Surface area covered with cobbles, stones or boulders: 9.0 percent
Depth to restrictive feature: 20 to 41 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: B
Ecological site: F144AY034CT - Well Drained Till Uplands
Hydric soil rating: No

Description of Hollis, Extremely Stony

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Nose slope, side slope, crest
Down-slope shape: Convex
Across-slope shape: Linear, convex
Parent material: Coarse-loamy melt-out till derived from granite, gneiss, and/or schist

Typical profile

O_i - 0 to 2 inches: slightly decomposed plant material
A - 2 to 7 inches: gravelly fine sandy loam
B_w - 7 to 16 inches: gravelly fine sandy loam
2R - 16 to 26 inches: bedrock

Properties and qualities

Slope: 0 to 15 percent
Surface area covered with cobbles, stones or boulders: 9.0 percent
Depth to restrictive feature: 8 to 23 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (K_{sat}): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 2.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: F144AY033MA - Shallow Dry Till Uplands
Hydric soil rating: No

Description of Rock Outcrop

Setting

Parent material: Igneous and metamorphic rock

Properties and qualities

Slope: 0 to 15 percent
Depth to restrictive feature: 0 inches to lithic bedrock
Runoff class: Very high

Interpretive groups

Land capability classification (irrigated): None specified

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Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Leicester, extremely stony

Percent of map unit: 1 percent
Landform: Hills, ground moraines, drainageways, depressions
Landform position (two-dimensional): Foothills, toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave, linear
Across-slope shape: Concave
Hydric soil rating: Yes

CuD—Chatfield-Hollis-Rock outcrop complex, 15 to 35 percent slopes

Map Unit Setting

National map unit symbol: 2w69h
Elevation: 0 to 1,540 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Chatfield, extremely stony, and similar soils: 35 percent
Hollis, extremely stony, and similar soils: 30 percent
Rock outcrop: 20 percent
Minor components: 4 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Chatfield, Extremely Stony

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Nose slope, side slope, crest
Down-slope shape: Convex
Across-slope shape: Linear, convex
Parent material: Coarse-loamy melt-out till derived from granite, gneiss, and/or schist

Typical profile

O_i - 0 to 1 inches: slightly decomposed plant material
A - 1 to 2 inches: fine sandy loam
B_w - 2 to 30 inches: gravelly fine sandy loam
2R - 30 to 40 inches: bedrock

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Properties and qualities

Slope: 15 to 35 percent
Surface area covered with cobbles, stones or boulders: 9.0 percent
Depth to restrictive feature: 20 to 41 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: B
Ecological site: F144AY034CT - Well Drained Till Uplands
Hydric soil rating: No

Description of Hollis, Extremely Stony

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Nose slope, side slope, crest
Down-slope shape: Convex
Across-slope shape: Linear, convex
Parent material: Coarse-loamy melt-out till derived from granite, gneiss, and/or schist

Typical profile

O_i - 0 to 2 inches: slightly decomposed plant material
A - 2 to 7 inches: gravelly fine sandy loam
B_w - 7 to 16 inches: gravelly fine sandy loam
2R - 16 to 26 inches: bedrock

Properties and qualities

Slope: 15 to 35 percent
Surface area covered with cobbles, stones or boulders: 9.0 percent
Depth to restrictive feature: 8 to 23 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 2.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D

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Ecological site: F144AY033MA - Shallow Dry Till Uplands
Hydric soil rating: No

Description of Rock Outcrop

Setting

Landform: Ridges, hills
Parent material: Igneous and metamorphic rock

Typical profile

R - 0 to 79 inches: bedrock

Properties and qualities

Slope: 15 to 35 percent
Depth to restrictive feature: 0 inches to lithic bedrock
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Available water supply, 0 to 60 inches: Very low (about 0.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Leicester, extremely stony

Percent of map unit: 4 percent
Landform: Hills, ground moraines, drainageways, depressions
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave, linear
Across-slope shape: Concave
Hydric soil rating: Yes

HrF—Hollis-Rock outcrop complex, 35 to 60 percent slopes

Map Unit Setting

National map unit symbol: 2w69q
Elevation: 0 to 1,540 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 145 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Hollis, very stony, and similar soils: 60 percent

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Rock outcrop: 20 percent

Minor components: 4 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hollis, Very Stony

Setting

Landform: Ridges, hills

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Nose slope, side slope, crest

Down-slope shape: Convex

Across-slope shape: Linear, convex

Parent material: Coarse-loamy melt-out till derived from granite, gneiss, and/or schist

Typical profile

O_i - 0 to 2 inches: slightly decomposed plant material

A - 2 to 7 inches: gravelly fine sandy loam

B_w - 7 to 16 inches: gravelly fine sandy loam

2R - 16 to 26 inches: bedrock

Properties and qualities

Slope: 35 to 60 percent

Surface area covered with cobbles, stones or boulders: 1.6 percent

Depth to restrictive feature: 8 to 23 inches to lithic bedrock

Drainage class: Somewhat excessively drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (K_{sat}): Very low (0.00 to 0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water supply, 0 to 60 inches: Very low (about 2.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: D

Ecological site: F144AY033MA - Shallow Dry Till Uplands

Hydric soil rating: No

Description of Rock Outcrop

Setting

Landform: Ridges, hills

Parent material: Igneous and metamorphic rock

Typical profile

R - 0 to 79 inches: bedrock

Properties and qualities

Slope: 35 to 60 percent

Depth to restrictive feature: 0 inches to lithic bedrock

Runoff class: Very high

Capacity of the most limiting layer to transmit water (K_{sat}): Very low (0.00 to 0.00 in/hr)

Available water supply, 0 to 60 inches: Very low (about 0.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Leicester, very stony

Percent of map unit: 4 percent
Landform: Hills, ground moraines, drainageways, depressions
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave, linear
Across-slope shape: Concave
Hydric soil rating: Yes

LcA—Leicester loam, 0 to 3 percent slopes, stony

Map Unit Setting

National map unit symbol: bd8v
Elevation: 0 to 1,120 feet
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days
Farmland classification: Not prime farmland

Map Unit Composition

Leicester, poorly drained, and similar soils: 50 percent
Leicester, somewhat poorly drained, and similar soils: 35 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Leicester, Poorly Drained

Setting

Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Loamy acid till derived mostly from schist and gneiss

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 26 inches: sandy loam
C - 26 to 60 inches: sandy loam

Custom Soil Resource Report

Properties and qualities

Slope: 0 to 3 percent
Surface area covered with cobbles, stones or boulders: 0.1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A/D
Ecological site: F144AY009CT - Wet Till Depressions
Hydric soil rating: Yes

Description of Leicester, Somewhat Poorly Drained

Setting

Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Loamy acid till derived mostly from schist and gneiss

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 26 inches: sandy loam
C - 26 to 60 inches: sandy loam

Properties and qualities

Slope: 0 to 3 percent
Surface area covered with cobbles, stones or boulders: 0.1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A/D
Ecological site: F144AY009CT - Wet Till Depressions
Hydric soil rating: No

Minor Components

Sun

Percent of map unit: 7 percent

Custom Soil Resource Report

Landform: Depressions
Hydric soil rating: Yes

Leicester, very stony

Percent of map unit: 3 percent
Landform: Depressions
Hydric soil rating: Yes

LcB—Leicester loam, 3 to 8 percent slopes, stony

Map Unit Setting

National map unit symbol: bd8w
Elevation: 0 to 1,120 feet
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days
Farmland classification: Not prime farmland

Map Unit Composition

Leicester, somewhat poorly drained, and similar soils: 50 percent
Leicester, poorly drained, and similar soils: 35 percent
Minor components: 7 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Leicester, Somewhat Poorly Drained

Setting

Landform: Till plains, ridges, hills
Landform position (two-dimensional): Footslope, summit
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Loamy acid till derived mostly from schist and gneiss

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 26 inches: sandy loam
C - 26 to 60 inches: sandy loam

Properties and qualities

Slope: 3 to 8 percent
Surface area covered with cobbles, stones or boulders: 0.1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 5.95 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A/D
Ecological site: F144AY009CT - Wet Till Depressions
Hydric soil rating: No

Description of Leicester, Poorly Drained

Setting

Landform: Till plains, ridges, hills
Landform position (two-dimensional): Footslope, summit
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Loamy acid till derived mostly from schist and gneiss

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 26 inches: sandy loam
C - 26 to 60 inches: sandy loam

Properties and qualities

Slope: 3 to 8 percent
Surface area covered with cobbles, stones or boulders: 0.1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 5.95 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A/D
Ecological site: F144AY009CT - Wet Till Depressions
Hydric soil rating: Yes

Minor Components

Sun

Percent of map unit: 7 percent
Landform: Depressions
Hydric soil rating: Yes

Pv—Pits, quarry

Map Unit Setting

National map unit symbol: bd97
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days
Farmland classification: Not prime farmland

Map Unit Composition

Pits, quarry: 80 percent
Minor components: 3 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pits, Quarry

Typical profile

H1 - 0 to 60 inches: unweathered bedrock

Minor Components

Sun

Percent of map unit: 3 percent
Landform: Depressions
Hydric soil rating: Yes

Uf—Urban land

Map Unit Setting

National map unit symbol: bd7j
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

UIC—Urban land-Charlton-Chatfield complex, rolling, very rocky

Map Unit Setting

National map unit symbol: bd7n
Elevation: 0 to 1,000 feet
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 40 percent
Charlton and similar soils: 20 percent
Chatfield and similar soils: 15 percent
Minor components: 3 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Charlton

Setting

Landform: Till plains, ridges, hills
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Acid loamy till derived mainly from schist, gneiss, or granite

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 24 inches: sandy loam
H3 - 24 to 60 inches: sandy loam

Properties and qualities

Slope: 2 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Hydrologic Soil Group: B
Ecological site: F144AY034CT - Well Drained Till Uplands
Hydric soil rating: No

Description of Chatfield

Setting

Landform: Ridges, hills

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Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Crest

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loamy till derived mainly from granite, gneiss, or schist

Typical profile

H1 - 0 to 7 inches: loam

H2 - 7 to 24 inches: flaggy silt loam

H3 - 24 to 28 inches: unweathered bedrock

Properties and qualities

Slope: 2 to 15 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: Low (about 3.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Minor Components

Sun

Percent of map unit: 2 percent

Landform: Depressions

Hydric soil rating: Yes

Palms

Percent of map unit: 1 percent

Landform: Swamps, marshes

Hydric soil rating: Yes

UmC—Urban land-Chatfield-Rock outcrop complex, rolling

Map Unit Setting

National map unit symbol: bd7q

Elevation: 100 to 1,000 feet

Mean annual precipitation: 46 to 50 inches

Mean annual air temperature: 46 to 52 degrees F

Frost-free period: 115 to 215 days

Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 50 percent

Chatfield and similar soils: 20 percent

Rock outcrop: 15 percent

Minor components: 1 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Typical profile

H1 - 0 to 6 inches: variable

Description of Chatfield

Setting

Landform: Ridges, hills

Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Crest

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loamy till derived mainly from granite, gneiss, or schist

Typical profile

H1 - 0 to 7 inches: loam

H2 - 7 to 24 inches: flaggy silt loam

H3 - 24 to 28 inches: unweathered bedrock

Properties and qualities

Slope: 3 to 15 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: Low (about 3.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Description of Rock Outcrop

Typical profile

H1 - 0 to 60 inches: unweathered bedrock

Properties and qualities

Slope: 3 to 15 percent

Depth to restrictive feature: 0 inches to lithic bedrock

Capacity of the most limiting layer to transmit water (Ksat): Low to very high (0.01 to 19.98 in/hr)

Minor Components

Sun

Percent of map unit: 1 percent

Landform: Depressions

Hydric soil rating: Yes

W—Water

Map Unit Setting

National map unit symbol: bd7z

Mean annual precipitation: 46 to 50 inches

Mean annual air temperature: 46 to 52 degrees F

Frost-free period: 115 to 215 days

Farmland classification: Not prime farmland

Map Unit Composition

Water: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

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APPENDIX E

***TEMPORARY & PERMANENT EROSION AND
SEDIMENT CONTROL INSPECTION AND
MAINTENANCE CHECKLISTS***

Temporary Erosion and Sediment Control Inspection and Maintenance Checklist

Erosion and Sediment Control Measure	Inspection/Maintenance Intervals	Inspection/Maintenance Requirements
Stabilized Construction Entrance	Daily	<ul style="list-style-type: none"> • Periodic top dressing with additional aggregate as required • Clean sediment in public right-of-ways immediately
Silt Fence	Weekly + After Each Rain	<ul style="list-style-type: none"> • Remove & redistribute sediment when bulges develop in the silt fence.
Inlet Protection	Weekly + After Each Rain	<ul style="list-style-type: none"> • Remove sediment as necessary and replace filter fabric, crushed stone etc. • Any broken and damaged components should be replaced. • Check all materials for proper anchorage and secure as necessary.
Concrete Washout	Daily	<ul style="list-style-type: none"> • Damaged or leaking facilities shall be deactivated and repaired or replaced immediately.
	After Each Rain	<ul style="list-style-type: none"> • Pump excess rainwater that has accumulated over hardened concrete to a stabilized area.
		<ul style="list-style-type: none"> • Remove accumulated hardened material when 75% of the storage capacity of the structure is filled. Replace plastic liner with each cleaning of the washout facility.

Permanent Stormwater Management Practice Inspection and Maintenance Checklist

Stormwater Management Practice	Inspection/Maintenance Intervals	Inspection/Maintenance Requirements
Drain Inlets	Monthly	<ul style="list-style-type: none"> • Check for blockage and/or erosion at top of each inlet. Repair/remove as necessary. • Check for sediment and debris collected within sumps and clean out as necessary.
Subsurface Stormwater Management Detention Facility	Annually + After Major Storms	<ul style="list-style-type: none"> • Check level of sediment and debris accumulated within the system. • Check structural integrity of the system pipes, structures, etc. for cracking, bulging or deterioration. Repair/remove as necessary. • Confirm all inlets and outlet structures/pipes are operating properly.
Up-Flo Filter Water Quality Structure	(See Maintenance Guidelines in Appendix)	<ul style="list-style-type: none"> • Check primary manhole for sediment, debris, trash, etc. Confirm Bay Separator Unit inlet/outlet pipes from primary manhole to the Bay separator Unit are not clogged. • Check storage manhole for sediment, debris, trash, etc. Clean out after 2 feet have accumulated. • Remove any noticeable oil from the water surfaces within the primary and storage manholes.

Permanent Stormwater Management Practice Inspection and Maintenance Checklist (Cont'd)

Stormwater Management Practice	Inspection/Maintenance Intervals	Inspection/Maintenance Requirements
Green Roof	Spring	<ul style="list-style-type: none"> • Annual Soil Test by removing small soil quantities and sending to a testing laboratory for nutrient content, etc. • Begin biweekly weed inspection and removal. • Judiciously apply phosphorus free fertilizer if needed based on the annual soil test results. • Biweekly check for displaced soil, inspect roof drains, remove debris and check for pests.
	Summer	<ul style="list-style-type: none"> • Continue biweekly weed inspection and removal. • Continue biweekly inspection for soil displacement, roof drains, debris, pest control, etc. • Irrigation may be required every 2 or 3 weeks during prolonged hot, dry weather.
	Fall	<ul style="list-style-type: none"> • Continue biweekly weed inspection and removal. • Continue biweekly inspection for soil displacement, roof drains, debris, pest control, etc.
	Winter	<ul style="list-style-type: none"> • Remove snow as needed from access walkways.

Permanent Stormwater Management Practice Inspection and Maintenance Checklist (Cont'd)

Stormwater Management Practice	Inspection/Maintenance Intervals	Inspection/Maintenance Requirements
Stormwater Planters Stormwater Planters	Early Spring (before new growth is 3 inches high)	<ul style="list-style-type: none"> • Cut and remove dead stalks and seed heads remaining from previous season. • Remove sticks and debris. • Prune shrubs if necessary. • Divide and move perennials if they are too crowded. • Replenish mulch layer to maintain a • 3 inch layer of shredded bark.
	Late Spring	<ul style="list-style-type: none"> • Remove weeds. • Water as needed during periods of drought.
	Fall	<ul style="list-style-type: none"> • Removed weeds and diseased plants. • Remove excess leaves. • If fall is dry, continue to water trees and shrubs until ground begins to freeze (later October). These woody plants need moisture entering winter to ensure survival.

The owner/operator responsible for inspection and maintenance as outlined above:

Buchanan Dev AMS LLC
Mr. Ryan Sutherland
86 Main Street, Suite 200
Yonkers, NY 10701
Phone: 212-695-7585
Fax:
Email: RSutherland@amsacquisitions.com

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APPENDIX F

CONTRACTOR'S CERTIFICATION



Site Planning
 Civil Engineering
 Landscape Architecture
 Land Surveying
 Transportation Engineering

Environmental Studies
 Entitlements
 Construction Services
 3D Visualization
 Laser Scanning

JMC Project 22062
 AMS BUCHANAN
 ALBANY POST ROAD & CRAFT LANE
 VILLAGE OF BUCHANAN, NY

CONTRACTOR'S CERTIFICATION

“I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a site inspection. I also understand that the owner or operator must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations.”

Company Name: _____

Address: _____

Telephone Number: _____

Name and Title: _____

Signature: _____ Date: _____

Permit Identification No.: _____

Name and Title of Trained Contractor: _____

Elements of the SWPPP Contractor is responsible for: _____

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APPENDIX G

**SPDES GENERAL PERMIT NO. GP-0-
20-001 NOI & MS4 ACCEPTANCE
FORM**

NOI for coverage under Stormwater General Permit for Construction Activity

version 1.37

(Submission #: HQ0-2B90-Z0H3Y, version 1)

Details

Originally Started By Michael Thompson

Alternate Identifier AMS Buchanan

Submission ID HQ0-2B90-Z0H3Y

Submission Reason New

Status Draft

Form Input

Owner/Operator Information

Owner/Operator Name (Company/Private Owner/Municipality/Agency/Institution, etc.)
Buchanan Dev AMS LLC

Owner/Operator Contact Person Last Name (NOT CONSULTANT)
Sutherland

Owner/Operator Contact Person First Name
Ryan

Owner/Operator Mailing Address
86 Main Street, Suite 200

City
Yonkers

State
NY

Zip
10701

Phone
212-695-7585

Email
RSutherland@AMSAcquisitions.com

Federal Tax ID
NONE PROVIDED

If the owner/operator is an organization, provide the Federal Tax ID number, or Employer Identification Number (EIN), in the format xx-xxxxxx. If the owner/operator is an individual and not an organization, enter "Not Applicable" or "N/A" and do not provide the individual's social security number.

Project Location

Project/Site Name
AMS Buchanan

Street Address (Not P.O. Box)
Albany Post Road & Craft Lane

Side of Street
East

City/Town/Village (THAT ISSUES BUILDING PERMIT)
Buchanan

State
NY

Zip
10701

DEC Region
3

The DEC Region must be provided. Please use the NYSDEC Stormwater Interactive Map (<https://gisservices.dec.ny.gov/gis/stormwater/>) to confirm which DEC Region this site is located in. To view the DEC Regions, click on "Other Useful Reference Layers" on the left side of the map, then click on "DEC Administrative Boundary." Zoom out as needed to see the Region boundaries.
For projects that span multiple Regions, please select a primary Region and then provide the additional Regions as a note in Question 39.

County
WESTCHESTER

Name of Nearest Cross Street
Craft Lane

Distance to Nearest Cross Street (Feet)

0

Project In Relation to Cross Street

South

Tax Map Numbers Section-Block-Parcel

43.16-3-16

Tax Map Numbers

43.16-3-16

If the project does not have tax map numbers (e.g. linear projects), enter "Not Applicable" or "N/A".

1. Coordinates

Provide the Geographic Coordinates for the project site. The two methods are:

- Navigate to the project location on the map (below) and click to place a marker and obtain the XY coordinates.
- The "Find Me" button will provide the lat/long for the person filling out this form. Then pan the map to the correct location and click the map to place a marker and obtain the XY coordinates.

Navigate to your location and click on the map to get the X,Y coordinates

41.25957999347144,-73.93341296295165

Project Details

2. What is the nature of this project?

New Construction

For the purposes of this eNOI, "New Construction" refers to any project that does not involve the disturbance of existing impervious area (i.e. 0 acres). If existing impervious area will be disturbed on the project site, it is considered redevelopment with either increase in impervious area or no increase in impervious area.

3. Select the predominant land use for both pre and post development conditions.

Pre-Development Existing Landuse

Forest

Post-Development Future Land Use

Multifamily Residential

3a. If Single Family Subdivision was selected in question 3, enter the number of subdivision lots.

NONE PROVIDED

4. In accordance with the larger common plan of development or sale, enter the total project site acreage, the acreage to be disturbed and the future impervious area (acreage)within the disturbed area.

*** ROUND TO THE NEAREST TENTH OF AN ACRE. ***

Total Site Area (acres)

6.0

Total Area to be Disturbed (acres)

4.2

Existing Impervious Area to be Disturbed (acres)

0.3

Future Impervious Area Within Disturbed Area (acres)

2.8

5. Do you plan to disturb more than 5 acres of soil at any one time?

No

6. Indicate the percentage (%) of each Hydrologic Soil Group(HSG) at the site.

A (%)

0

B (%)

0

C (%)

0

D (%)

100

7. Is this a phased project?

No

8. Enter the planned start and end dates of the disturbance activities.

Start Date

06/01/2024

End Date

06/30/2025

9. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.

On-site Pond

Drainage ditches and storm sewer systems are not considered surface waterbodies. Please identify the surface waterbody that they discharge to. If the nearest surface waterbody is unnamed, provide a description of the waterbody, such as, "Unnamed tributary to Niagara River."

9a. Type of waterbody identified in question 9?

Lake Off Site
Other Type On Site

Other Waterbody Type Off Site Description

Lake Meahagh

9b. If "wetland" was selected in 9A, how was the wetland identified?

NONE PROVIDED

10. Has the surface waterbody(ies) in question 9 been identified as a 303(d) segment in Appendix E of GP-0-20-001?

Yes

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-20-001?

No

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters?

No

Please use the DEC Stormwater Interactive Map (<https://gisservices.dec.ny.gov/gis/stormwater/>) to confirm if this site is located in one of the watersheds of an AA or AA-S classified water. To view the watershed areas, click on "Permit Related Layers" on the left side of the map, then click on "Class AA AAS Watersheds."

If No, skip question 13.

13. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as D (provided the map unit name is inclusive of slopes greater than 25%), E or F on the USDA Soil Survey?

Yes

If Yes, what is the acreage to be disturbed?

0.2

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area?

Yes

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)?

Yes

16. What is the name of the municipality/entity that owns the separate storm sewer system?

NYS DOT

17. Does any runoff from the site enter a sewer classified as a Combined Sewer?

No

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law?

No

19. Is this property owned by a state authority, state agency, federal government or local government?

No

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.)

No

Required SWPPP Components

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)?

Yes

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)?

Yes

If you answered No in question 22, skip question 23 and the Post-construction Criteria and Post-construction SMP Identification sections.

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual?

Yes

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:

Professional Engineer (P.E.)

SWPPP Preparer

JMC Planning Engineering Landscape Architecture & Land Surveying, PLLC

Contact Name (Last, First)

Villareale, Diego

Mailing Address

120 Bedford Road

City

Armonk

State

NY

Zip

10504

Phone

914-273-5225

Email
DVillareale@jmcpllc.com

Download SWPPP Preparer Certification Form

Please take the following steps to prepare and upload your preparer certification form:

- 1) Click on the link below to download a blank certification form
 - 2) The certified SWPPP preparer should sign this form
 - 3) Scan the signed form
 - 4) Upload the scanned document
- [Download SWPPP Preparer Certification Form](#)

Please upload the SWPPP Preparer Certification

NONE PROVIDED
Comment
NONE PROVIDED

Erosion & Sediment Control Criteria

25. Has a construction sequence schedule for the planned management practices been prepared?

Yes

26. Select all of the erosion and sediment control practices that will be employed on the project site:

Temporary Structural

Stabilized Construction Entrance
Silt Fence
Storm Drain Inlet Protection

Biotechnical

None

Vegetative Measures

Seeding
Topsolling
Mulching

Permanent Structural

Land Grading
Retaining Wall

Other

Concrete Truck Washout

Post-Construction Criteria

*** IMPORTANT: Completion of Questions 27-39 is not required if response to Question 22 is No.**

27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.

Preservation of Undisturbed Area
Locating Development in Less Sensitive Areas
Reduction of Clearing and Grading

27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6("Soil Restoration") of the Design Manual (2010 version).

All disturbed areas will be restored in accordance with the Soil Restoration requirements in Table 5.3 of the Design Manual (see page 5-22).

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout). (Acre-feet)

.309

29. Post-construction SMP Identification

Use the Post-construction SMP Identification section to identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity that were used to reduce the Total WQv Required (#28).

Identify the SMPs to be used by providing the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

Note: Redevelopment projects shall use the Post-Construction SMP Identification section to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29. (acre-feet)

.087

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28)?

No

If Yes, go to question 36. If No, go to question 32.

32. Provide the Minimum RRv required based on HSG. [Minimum RRv Required = (P) (0.95) (Ai) / 12, Ai=(s) (Aic)] (acre-feet)

.060

32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?

Yes

If Yes, go to question 33.

Note: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP.

If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

33. SMPs

Use the Post-construction SMP Identification section to identify the Standard SMPs and, if applicable, the Alternative SMPs to be used to treat the remaining total WQv (=Total WQv Required in #28 - Total RRv Provided in #30).

Also, provide the total impervious area that contributes runoff to each practice selected.

NOTE: Use the Post-construction SMP Identification section to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRv Capacity identified in question #29. (acre-feet)
0.222

Note: For the standard SMPs with RRv capacity, the WQv provided by each practice = the WQv calculated using the contributing drainage area to the practice - provided by the practice. (See Table 3.5 in Design Manual)

34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a).
.309

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)?
Yes

If Yes, go to question 36.

If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

36. Provide the total Channel Protection Storage Volume (CPv required and provided or select waiver (#36a), if applicable.

CPv Required (acre-feet)
NONE PROVIDED

CPv Provided (acre-feet)
NONE PROVIDED

36a. The need to provide channel protection has been waived because:
NONE PROVIDED

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (#37a), if applicable.

Overbank Flood Control Criteria (Qp)

Pre-Development (CFS)
49.65

Post-Development (CFS)
48.45

Total Extreme Flood Control Criteria (Qf)

Pre-Development (CFS)
123.95

Post-Development (CFS)
121.33

37a. The need to meet the Qp and Qf criteria has been waived because:
NONE PROVIDED

38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed?
Yes

If Yes, Identify the entity responsible for the long term Operation and Maintenance
Buchanan Dev AMS LLC

39. Use this space to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). (See question #32a) This space can also be used for other pertinent project information.
NONE PROVIDED

Post-Construction SMP Identification

Runoff Reduction (RR) Techniques, Standard Stormwater Management Practices (SMPs) and Alternative SMPs

Identify the Post-construction SMPs to be used by providing the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

RR Techniques (Area Reduction)

Round to the nearest tenth

Total Contributing Acres for Conservation of Natural Area (RR-1)
NONE PROVIDED

Total Contributing Impervious Acres for Conservation of Natural Area (RR-1)
NONE PROVIDED

Total Contributing Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)
NONE PROVIDED

Total Contributing Impervious Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)
NONE PROVIDED

Total Contributing Acres for Tree Planting/Tree Pit (RR-3)
NONE PROVIDED

Total Contributing Impervious Acres for Tree Planting/Tree Pit (RR-3)
NONE PROVIDED

Total Contributing Acres for Disconnection of Rooftop Runoff (RR-4)
NONE PROVIDED

RR Techniques (Volume Reduction)

Total Contributing Impervious Acres for Disconnection of Rooftop Runoff (RR-4)
NONE PROVIDED

Total Contributing Impervious Acres for Vegetated Swale (RR-5)
NONE PROVIDED

Total Contributing Impervious Acres for Rain Garden (RR-6)
NONE PROVIDED

Total Contributing Impervious Acres for Stormwater Planter (RR-7)
0.43

Total Contributing Impervious Acres for Rain Barrel/Cistern (RR-8)
NONE PROVIDED

Total Contributing Impervious Acres for Porous Pavement (RR-9)
NONE PROVIDED

Total Contributing Impervious Acres for Green Roof (RR-10)
0.59

Standard SMPs with RRv Capacity

Total Contributing Impervious Acres for Infiltration Trench (I-1)
NONE PROVIDED

Total Contributing Impervious Acres for Infiltration Basin (I-2)
NONE PROVIDED

Total Contributing Impervious Acres for Dry Well (I-3)
NONE PROVIDED

Total Contributing Impervious Acres for Underground Infiltration System (I-4)
NONE PROVIDED

Total Contributing Impervious Acres for Bioretention (F-5)
NONE PROVIDED

Total Contributing Impervious Acres for Dry Swale (O-1)
NONE PROVIDED

Standard SMPs

Total Contributing Impervious Acres for Micropool Extended Detention (P-1)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Pond (P-2)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Extended Detention (P-3)
NONE PROVIDED

Total Contributing Impervious Acres for Multiple Pond System (P-4)
NONE PROVIDED

Total Contributing Impervious Acres for Pocket Pond (P-5)
NONE PROVIDED

Total Contributing Impervious Acres for Surface Sand Filter (F-1)
NONE PROVIDED

Total Contributing Impervious Acres for Underground Sand Filter (F-2)
NONE PROVIDED

Total Contributing Impervious Acres for Perimeter Sand Filter (F-3)
NONE PROVIDED

Total Contributing Impervious Acres for Organic Filter (F-4)
NONE PROVIDED

Total Contributing Impervious Acres for Shallow Wetland (W-1)
NONE PROVIDED

Total Contributing Impervious Acres for Extended Detention Wetland (W-2)
NONE PROVIDED

Total Contributing Impervious Acres for Pond/Wetland System (W-3)
NONE PROVIDED

Total Contributing Impervious Acres for Pocket Wetland (W-4)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Swale (O-2)
NONE PROVIDED

Alternative SMPs (DO NOT INCLUDE PRACTICES BEING USED FOR PRETREATMENT ONLY)

Total Contributing Impervious Area for Hydrodynamic
NONE PROVIDED

Total Contributing Impervious Area for Wet Vault
NONE PROVIDED

Total Contributing Impervious Area for Media Filter
1.59

"Other" Alternative SMP?
NONE PROVIDED

Total Contributing Impervious Area for "Other"
NONE PROVIDED

Provide the name and manufacturer of the alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.

Note: Redevelopment projects which do not use RR techniques, shall use questions 28, 29, 33 and 33a to provide SMPs used, total WQv required and total WQv provided for the project.

Manufacturer of Alternative SMP
Contech

Name of Alternative SMP
Jellyfish

Other Permits

40. Identify other DEC permits, existing and new, that are required for this project/facility.
None

If SPDES Multi-Sector GP, then give permit ID
NONE PROVIDED

If Other, then identify
NONE PROVIDED

41. Does this project require a US Army Corps of Engineers Wetland Permit?
No

If "Yes," then indicate Size of Impact, in acres, to the nearest tenth
NONE PROVIDED

42. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned.
NONE PROVIDED

MS4 SWPPP Acceptance

43. Is this project subject to the requirements of a regulated, traditional land use control MS4?
Yes - Please attach the MS4 Acceptance form below

If No, skip question 44

44. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI?
No

Please note that per Part VII.H.4. of GP-0-20-001, the MS4 SWPPP Acceptance Form must be signed by a principal executive officer or ranking elected official of the MS4, or a duly authorized representative of that person.

MS4 SWPPP Acceptance Form Download

Download form from the link below. Complete, sign, and upload.
[MS4 SWPPP Acceptance Form](#)

MS4 Acceptance Form Upload
NONE PROVIDED
Comment
NONE PROVIDED

Owner/Operator Certification

Owner/Operator Certification Form Download

Download the certification form by clicking the link below. Complete, sign, scan, and upload the form.
[Owner/Operator Certification Form \(PDF, 45KB\)](#)

Upload Owner/Operator Certification Form
NONE PROVIDED
Comment
NONE PROVIDED



Department of
Environmental
Conservation

NYS Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

**MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance
Form**

for

Construction Activities Seeking Authorization Under SPDES General Permit

*(NOTE: Attach Completed Form to Notice Of Intent and Submit to Address Above)

I. Project Owner/Operator Information

1. Owner/Operator Name:

2. Contact Person:

3. Street Address:

4. City/State/Zip:

II. Project Site Information

5. Project/Site Name:

6. Street Address:

7. City/State/Zip:

III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information

8. SWPPP Reviewed by:

9. Title/Position:

10. Date Final SWPPP Reviewed and Accepted:

IV. Regulated MS4 Information

11. Name of MS4:

12. MS4 SPDES Permit Identification Number: NYR20A

13. Contact Person:

14. Street Address:

15. City/State/Zip:

16. Telephone Number:

MS4 SWPPP Acceptance Form - continued

V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s). Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

Printed Name:

Title/Position:

Signature:

Date:

VI. Additional Information

APPENDIX H

MAINTENANCE AGREEMENT

ZONING

211 Attachment 5

Village of Buchanan

Schedule B

Sample Stormwater Control Facility Maintenance Agreement

Whereas, the Municipality of _____ (“Municipality”) and the _____ (“facility owner”) want to enter into an agreement to provide for the long-term maintenance and continuation of stormwater control measures approved by the Municipality for the below named project, and

Whereas, the Municipality and the facility owner desire that the stormwater control measures be built in accordance with the approved project plans and thereafter be maintained, cleaned, repaired, replaced and continued in perpetuity in order to ensure optimum performance of the components. Therefore, the Municipality and the facility owner agree as follows:

1. This agreement binds the Municipality and the facility owner, its successors and assigns, to the maintenance provisions depicted in the approved project plans which are attached as Schedule A of this agreement.
2. The facility owner shall maintain, clean, repair, replace and continue the stormwater control measures depicted in Schedule A as necessary to ensure optimum performance of the measures to design specifications. The stormwater control measures shall include, but shall not be limited to, the following: drainage ditches, swales, dry wells, infiltrators, drop inlets, pipes, culverts, soil absorption devices and retention ponds.
3. The facility owner shall be responsible for all expenses related to the maintenance of the stormwater control measures and shall establish a means for the collection and distribution of expenses among parties for any commonly owned facilities.
4. The facility owner shall provide for the periodic inspection of the stormwater control measures, not less than once in every five-year period, to determine the condition and integrity of the measures. Such inspection shall be performed by a professional engineer licensed by the State of New York. The inspecting engineer shall prepare and submit to the Municipality, within 30 days of the inspection, a written report of the findings, including recommendations for those actions necessary for the continuation of the stormwater control measures.
5. The facility owner shall not authorize, undertake or permit alteration, abandonment, modification or discontinuation of the stormwater control measures except in accordance with written approval of the Municipality.
6. The facility owner shall undertake necessary repairs and replacement of the stormwater control measures at the direction of the Municipality or in accordance with the recommendations of the inspecting engineer.
7. The facility owner shall provide to the Municipality, within 30 days of the date of this agreement, a security for the maintenance and continuation of the stormwater control measures in the form of (a Bond, letter of credit or escrow account).

BUCHANAN CODE

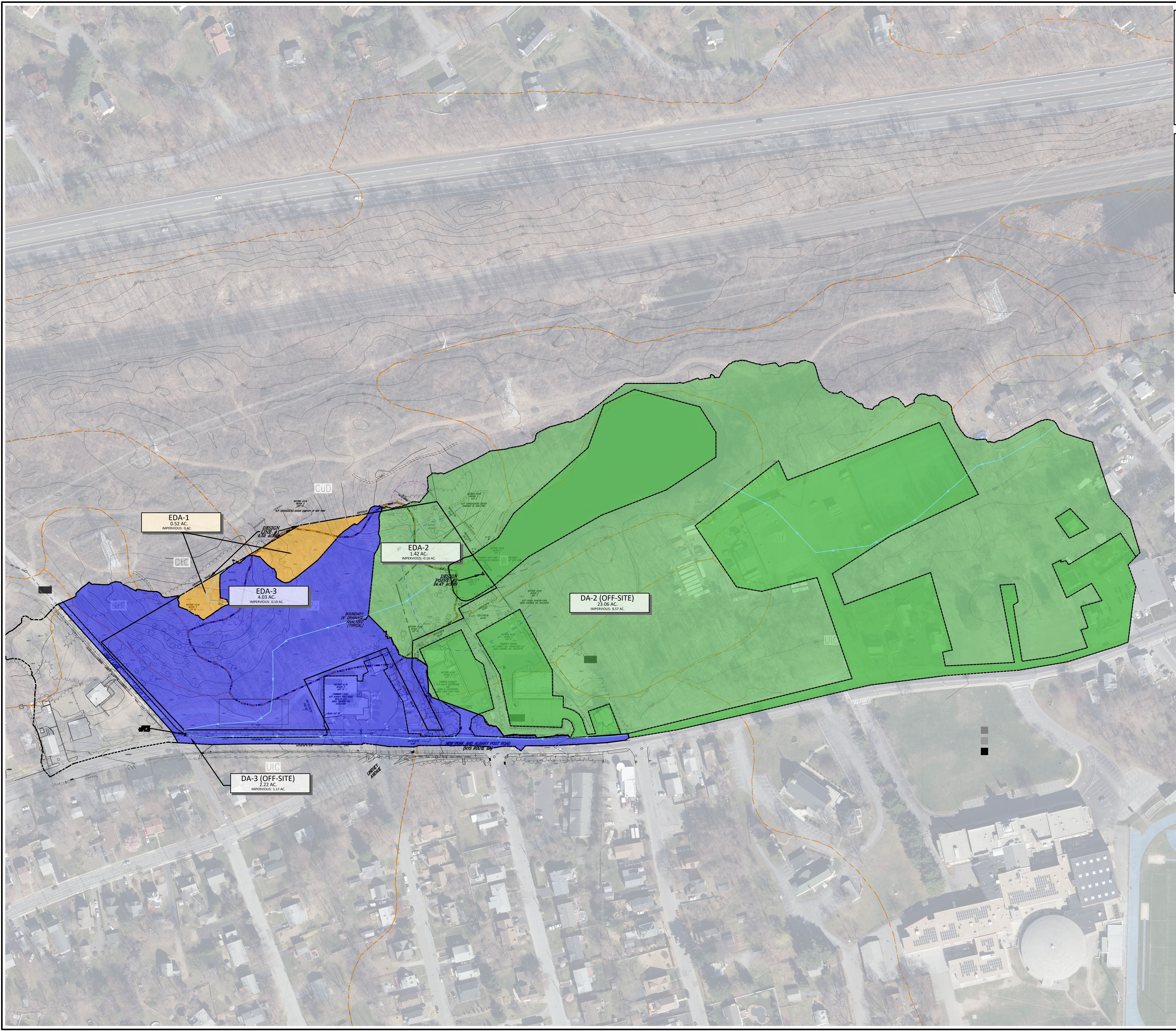
8. This agreement shall be recorded in the office of the County Clerk, County of _____, together with the deed for the common property, and shall be included in the offering plan and/or prospectus approved pursuant to _____.
9. If ever the Municipality determines that the facility owner has failed to construct or maintain the stormwater control measures in accordance with the project plan or has failed to undertake corrective action specified by the Municipality or by the inspecting engineer, the Municipality is authorized to undertake such steps as reasonably necessary for the preservation, continuation or maintenance of the stormwater control measures and to affix the expenses thereof as a lien against the property.
10. This agreement is effective _____.

APPENDIX I

DRAWINGS

NOT FOR CONSTRUCTION

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EXISTING DRAINAGE LEGEND

	EXISTING GRADE
	SURVEYED WETLANDS
	EXISTING STONE WALL
	WATERSHED BOUNDARY LINE
	BOUNDARY OF COVER TYPE LINE
	LIMIT OF SOIL GROUPS LINE
	FLOW PATH LINE
	HYDROLOGIC SOIL GROUP 'C'
	HYDROLOGIC SOIL GROUP 'B'

SOIL TYPE TABLE

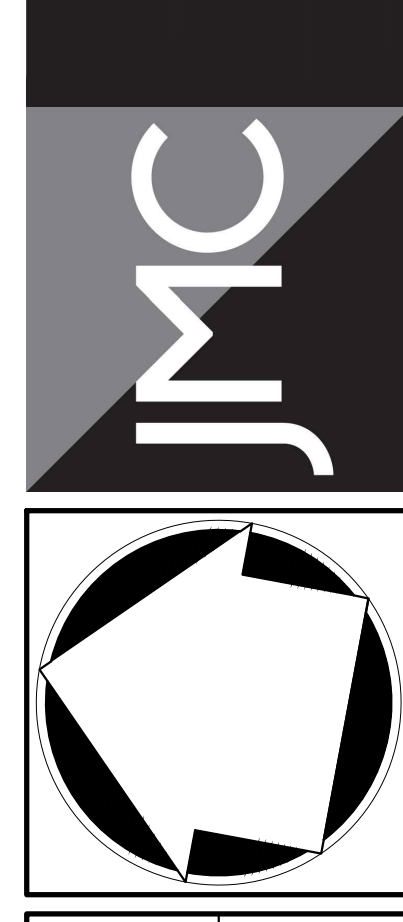
DESIGNATION	HYDROLOGIC GROUP	DESCRIPTION
Pv	NOT RATED	PITS, QUARRY
W	NOT RATED	WATER
CuD	D	CHATFIELD-HOLLIS-ROCK, OUTCROP COMPLEX, 0-15%
CIC	D	CHATFIELD-HOLLIS-ROCK COMPLEX, 0-15%, VERY ROCKY
HIF	D	HOLLIS-ROCK OUTCROP COMPLEX, 35-60%
UIC	NOT RATED	URBAN LAND-CHARLTON-CHATFIELD COMPLEX, ROLLING
UmC	NOT RATED	URBAN LAND-CHATFIELD-ROCK OUTCROP COMPLEX, ROLLING

No.	Revision	Date	By
1.	VILLAGE SUBMISSION	12/06/2023	EJK
2.	REVISED PER VILLAGE ENGINEER COMMENTS	12/26/2023	EJK
4.	VILLAGE SUBMISSION	01/26/2024	SPG

APPLICANT:
BUCHANAN DEV AMS LLC
ONE BRIDGE PLAZA NORTH, SUITE 640
FORT LEE, NJ 07024

ARCHITECT:
PERKINS EASTMAN
677 WASHINGTON BOULEVARD, SUITE 101
STAMFORD, CT 06901

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
JMC Site Development Consultants, LLC
John Mayer Consulting, Inc.
120 BEDFORD ROAD • BRIDGEVIK, NY 10504
voice 914.273.6225 • fax 914.273.2192
www.jmcpllc.com

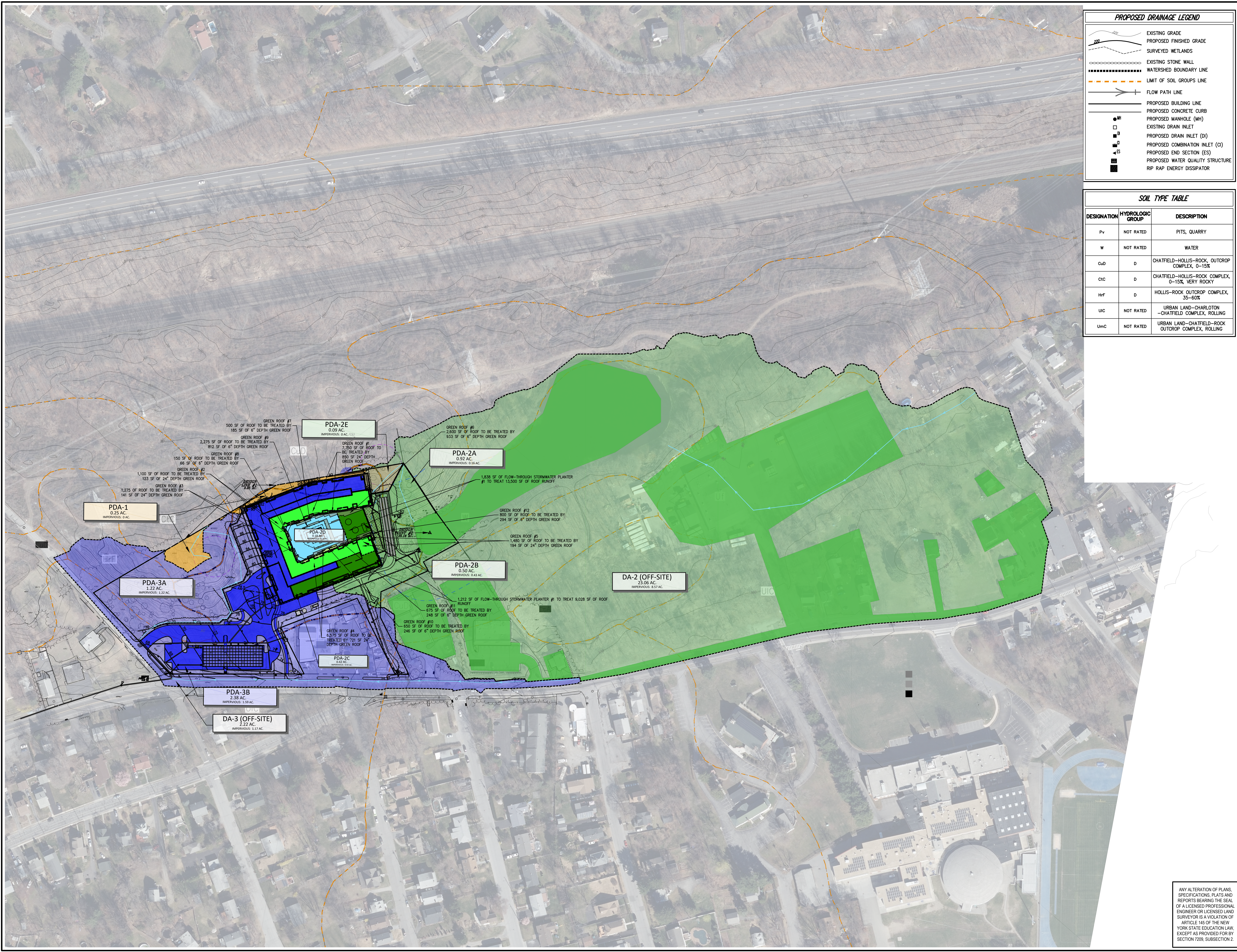


EXISTING DRAINAGE AREA MAP
AMS BUCHANAN
ALBANY POST ROAD & CRAFT LANE
VILLAGE OF BUCHANAN, NEW YORK

Drawn:	EJK	Approved:	AN
Scale:	1" = 80'		
Date:	11/08/2023		
Project No:	22062		
2006-DRAINAGE	EDA		
DA-1			

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF ARTICLE 146 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

NOT FOR CONSTRUCTION



PROPOSED DRAINAGE LEGEND

- EXISTING GRADE
- PROPOSED FINISHED GRADE
- SURVEYED WETLANDS
- EXISTING STONE WALL
- WATERSHED BOUNDARY LINE
- LIMIT OF SOIL GROUPS LINE
- FLOW PATH LINE
- PROPOSED BUILDING LINE
- PROPOSED CONCRETE CURB
- PROPOSED MANHOLE (MH)
- EXISTING DRAIN INLET
- PROPOSED DRAIN INLET (DI)
- PROPOSED COMBINATION INLET (CI)
- PROPOSED END SECTION (ES)
- PROPOSED WATER QUALITY STRUCTURE
- RIP RAP ENERGY DISSIPATOR

SOIL TYPE TABLE

DESIGNATION	HYDROLOGIC GROUP	DESCRIPTION
Pv	NOT RATED	PITS, QUARRY
W	NOT RATED	WATER
CuD	D	CHATFIELD-HOLLIS-ROCK, OUTCROP COMPLEX, 0-15%
CtC	D	CHATFIELD-HOLLIS-ROCK COMPLEX, 0-15%, VERY ROCKY
HfF	D	HOLLIS-ROCK OUTCROP COMPLEX, 35-60%
UIC	NOT RATED	URBAN LAND-CHARLOTTON-CHATFIELD COMPLEX, ROLLING
UmC	NOT RATED	URBAN LAND-CHATFIELD-ROCK OUTCROP COMPLEX, ROLLING

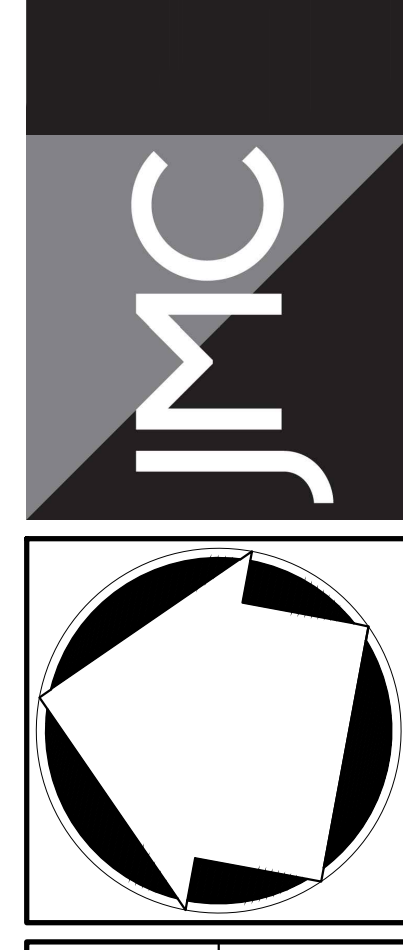
Revision Log

No.	Revision	Date	By
1.	VILLAGE SUBMISSION	12/06/2023	EJK
2.	REVISED PER VILLAGE ENGINEER COMMENTS	12/26/2023	EJK
4.	VILLAGE SUBMISSION	01/26/2024	SFG

BUCHANAN DEV AMS LLC
 ONE BRIDGE PLAZA NORTH, SUITE 640
 FORT LEE, NJ 07024

PERKINS EASTMAN
 677 WASHINGTON BOULEVARD, SUITE 101
 STAMFORD, CT 06901

JMC
 JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC
 JMC Site Development Consultants, LLC
 John Mayer Consulting, Inc.
 120 BEDFORD ROAD • BRIDGEMAN, NY 10504
 voice 914.273.5225 • fax 914.273.2102
 www.jmcpilc.com



PROPOSED DRAINAGE AREA MAP

AMS BUCHANAN
 ALBANY POST ROAD & CRAFT LANE
 VILLAGE OF BUCHANAN, NEW YORK

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF ARTICLE 145 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

Drawn: EJK Approved: AN
 Scale: 1" = 80'
 Date: 11/08/2023
 Project No: 22062
 Title: DRAINAGE
 Drawing No: DA-2