
STORMWATER POLLUTION PREVENTION PLAN

AMS BUCHANAN

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

Applicant/Operator/ Buchanan Dev AMS LLC
Owner: Mr. Ryan Sutherland
(212) 695-7585

Prepared by:



JMC Project 22062

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

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
I.	INTRODUCTION	I
II.	STORMWATER MANAGEMENT PLANNING.....	I
III.	STUDY METHODOLOGY.....	6
IV.	EXISTING CONDITIONS.....	8
V.	PROPOSED CONDITIONS.....	10
VI.	SOIL EROSION & SEDIMENT CONTROL.....	17
VII.	CONSTRUCTION PHASE AND POST-CONSTRUCTION MAINTENANCE	32
VIII.	CONCLUSION	34

APPENDICES

FIGURES DESCRIPTION

- 1. Site Location Map
- 2. CRIS Search Figure

APPENDIX DESCRIPTION

- A. Existing & Proposed Hydrologic Calculations
- B. NYSDEC Stormwater Sizing Calculations
- C. Storm Pipe Capacity Calculations
- D. Soil Testing Data
- E. Temporary & Permanent Erosion and Sediment Control Inspection and Maintenance Checklists
- F. Contractor's Certification
- G. SPDES General Permit No. GP-0-20-001 NOI & MS4 Acceptance Form
- H. Maintenance Agreement
- I. Drawings
 - DA-1 " Existing Drainage Area Map"
 - DA-2 "Proposed Drainage Area Map"

REFERENCED DRAWINGS FOR SWPPP DESIGN AND DETAILS

JMC SITE PLANS

<u>Dwg. No.</u>	<u>Title</u>	<u>Rev. No./Date</u>
C-000	Cover Sheet	12/26/2023
C-010	Existing Conditions Map	12/26/2023
C-020	Slope Disturbance Plan	12/26/2023
C-030	Tree Removal Plan	12/26/2023
C-100	Site Layout Plan	12/26/2023
C-200	Site Grading Plan	12/26/2023
C-300	Site Utilities Plan	12/26/2023
C-400	Site Erosion and Sediment Control Plan	12/26/2023
C-500	Site Lighting Plan	12/26/2023
C-700	Truck Turning Plan (SU-30)	12/26/2023
C-701	Truck Turning Plan (Firetruck)	12/26/2023
C-900	Construction Details	12/26/2023
C-901	Construction Details	12/26/2023
C-902	Construction Details	12/26/2023
C-903	Construction Details	12/26/2023
C-904	Construction Details	12/26/2023
C-905	Construction Details	12/26/2023
C-906	Construction Details	12/26/2023
C-907	Construction Details	12/26/2023
C-908	Construction Details	12/26/2023
C-909	Construction Details	12/26/2023
C-910	Construction Details	12/26/2023
C-911	Construction Details	12/26/2023
C-912	Construction Details	12/26/2023
L-100	Site Landscaping Plan	12/26/2023

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

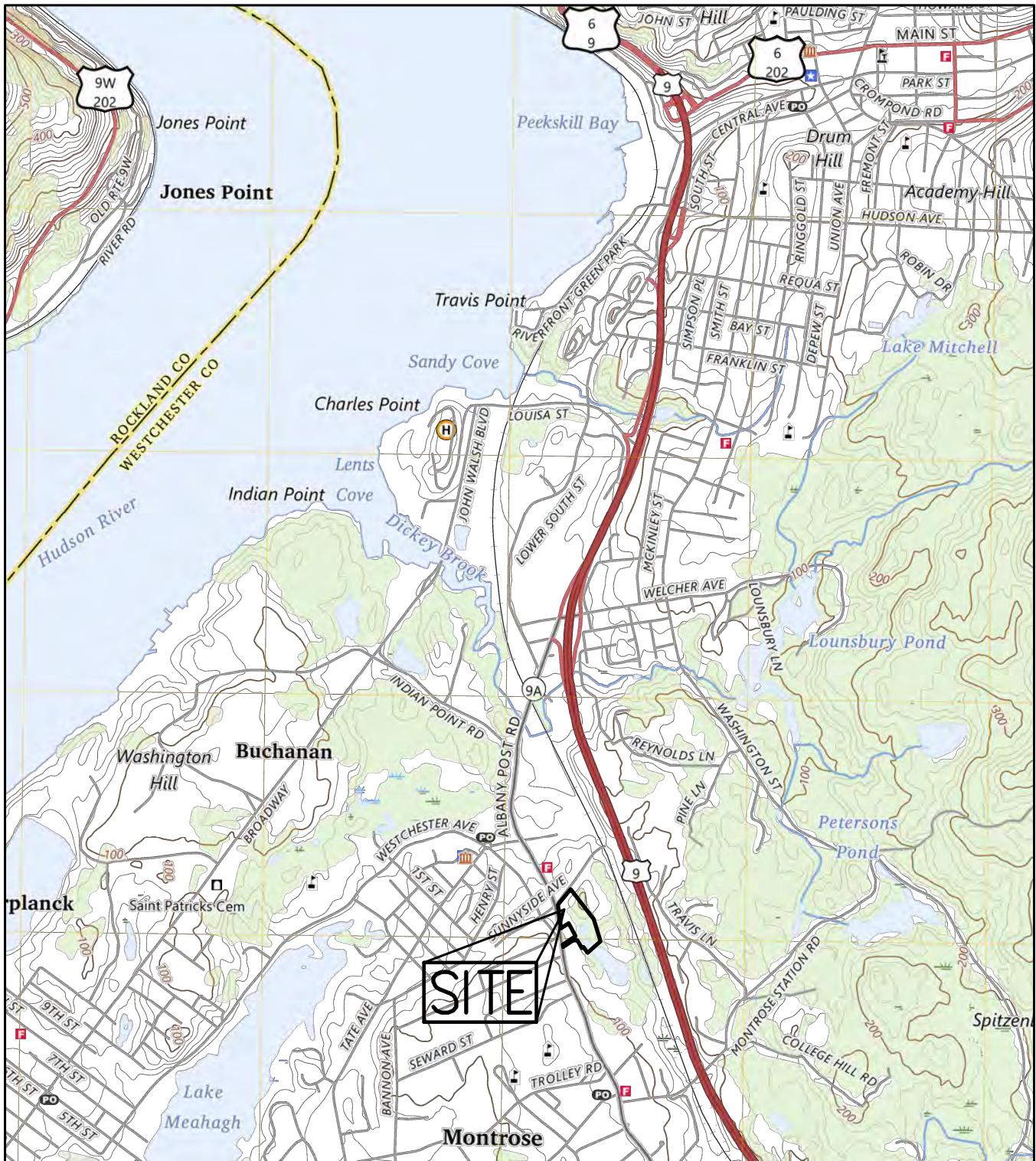
The proposed improvements on the Site consist of a multi-family apartment building comprised of four residential stories above a one-story parking structure. The building will contain 148 two- and one-bedroom dwelling units and 223 parking spaces. 149 of the parking spaces will be located within the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

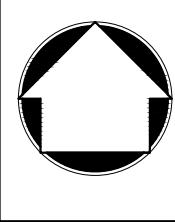
SITE LOCATION MAP

DATE: 11/01/2023

JMC PROJECT: 22062

FIGURE: 01

SCALE: 1" = 2,000'



120 BEDFORD RD
ARMONK
NY 10504
(914) 273-5225
fax 273-2102
JMCPLLC.COM



COPYRIGHT © 2023 by JMC All Rights Reserved. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of JMC PLANNING, ENGINEERING, LANDSCAPE ARCHITECTURE & LAND SURVEYING, PLLC | JMC SITE DEVELOPMENT CONSULTANTS, LLC | JOHN MEYER CONSULTING, INC. (JMC). Any modifications or alterations to this document without the written permission of JMC shall render them invalid and unusable.

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

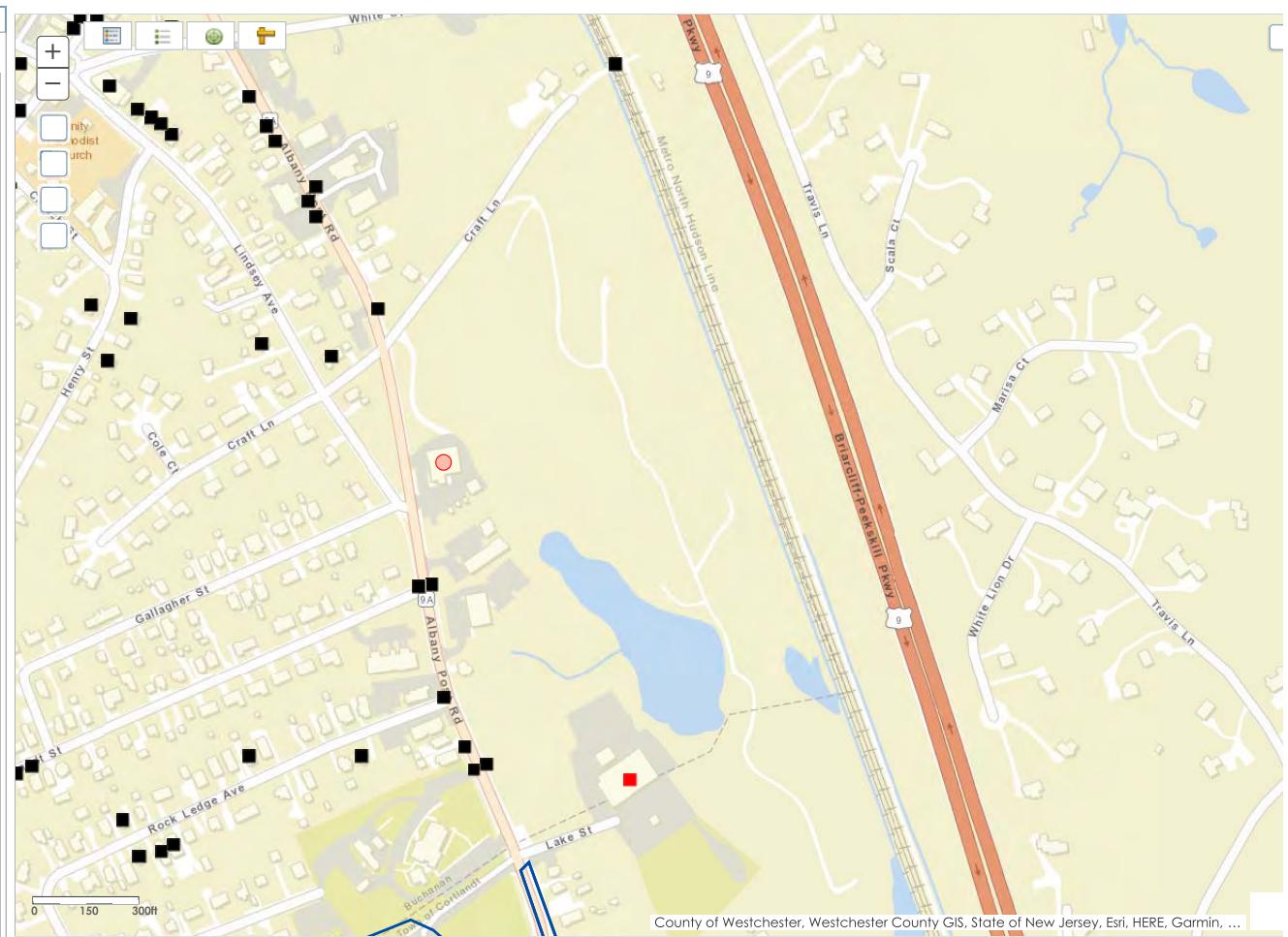
Option B: Find an Address Location

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



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. The SWPPP proposes Water Quality Treatment Option III which implements the use of alternative practices to treat 75 % of the water quality volume from the disturbed, impervious area as well as any additional runoff from tributary areas that are not within the disturbed, impervious area.

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 Manaul, 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.

- II. 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 in 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 I (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. 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 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 intensive green roof planters within the courtyard. 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 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	9.24	4.54
10 year	0.60	35.76	12.09
25 year	0.86	54.13	16.72
100 year	1.41	94.10	25.82

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	9.24	0.75%
	10 year	36.29	35.76	1.46%
	25 year	54.55	54.13	0.77%
	100 year	94.58	94.10	0.51%
3	1 year	4.56	4.54	0.44%
	10 year	12.10	12.09	0.08%
	25 year	16.74	16.72	0.12%
	100 year	26.40	25.82	2.20%

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 HYDRAULIC 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-Charlton-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.

Thinner 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.

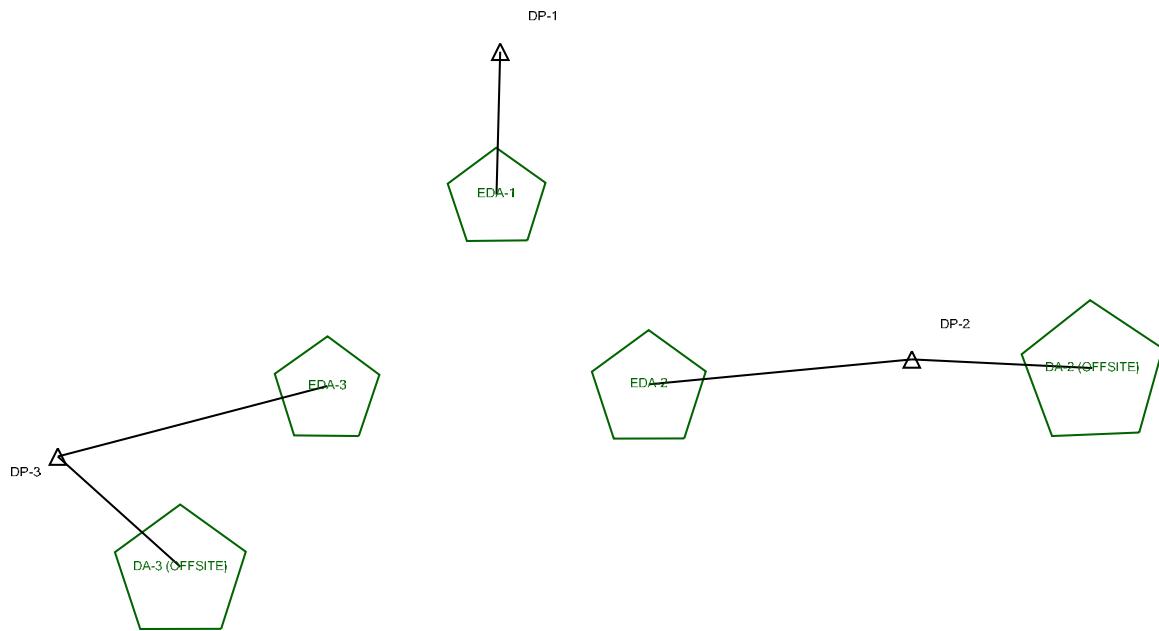
These improvements will also mitigate runoff volumes from the proposed improvements as runoff volumes will be slightly reduced or maintained in all the analyzed storms.

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.

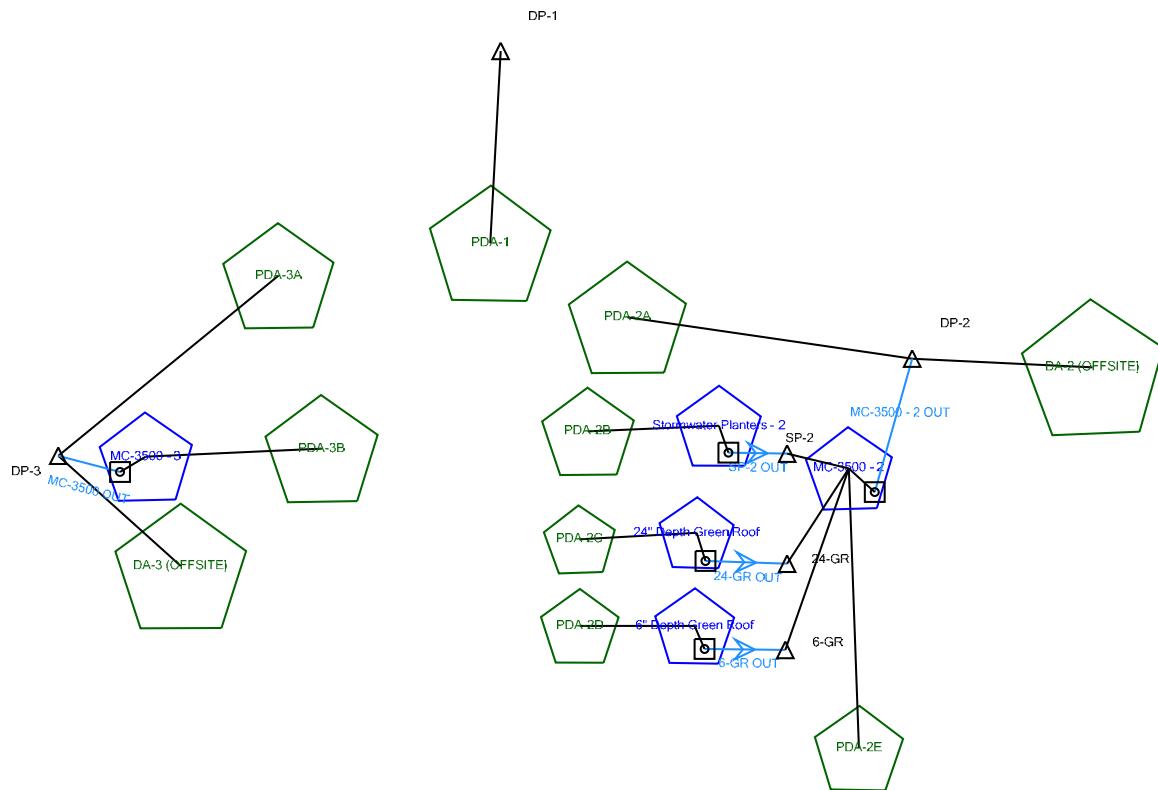
APPENDIX A

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 12/26/2023

Notes

Table of Contents

	Master Network Summary	2
Time-Depth - 1		
	Time-Depth Curve, 1 years (Pre-Development 1 year)	9
	Time-Depth Curve, 10 years (Pre-Development 10 year)	11
	Time-Depth Curve, 100 years (Pre-Development 100 year)	13
	Time-Depth Curve, 25 years (Pre-Development 25 year)	15
DA-2 (OFFSITE)		
	Time of Concentration Calculations, 1 years (Pre-Development 1 year)	17
DA-3 (OFFSITE)		
	Time of Concentration Calculations, 1 years (Pre-Development 1 year)	19
EDA-1		
	Time of Concentration Calculations, 1 years (Pre-Development 1 year)	21
EDA-2		
	Time of Concentration Calculations, 1 years (Pre-Development 1 year)	23
EDA-3		
	Time of Concentration Calculations, 1 years (Pre-Development 1 year)	25
PDA-1		
	Time of Concentration Calculations, 1 years (Post-Development 1 year)	27
PDA-2A		
	Time of Concentration Calculations, 1 years (Post-Development 1 year)	29
PDA-2B		
	Time of Concentration Calculations, 1 years (Post-Development 1 year)	31
PDA-2C		
	Time of Concentration Calculations, 1 years (Post-Development 1 year)	33
PDA-2D		
	Time of Concentration Calculations, 1 years (Post-Development 1 year)	35
PDA-2E		
	Time of Concentration Calculations, 1 years (Post-Development 1 year)	37
PDA-3A		
	Time of Concentration Calculations, 1 years (Post-Development 1 year)	39
PDA-3B		
	Time of Concentration Calculations, 1 years (Post-Development 1 year)	41

Table of Contents

DA-2 (OFFSITE)		
	Runoff CN-Area, 1 years (Pre-Development 1 year)	43
DA-3 (OFFSITE)		
	Runoff CN-Area, 1 years (Pre-Development 1 year)	44
EDA-1		
	Runoff CN-Area, 1 years (Pre-Development 1 year)	45
EDA-2		
	Runoff CN-Area, 1 years (Pre-Development 1 year)	46
EDA-3		
	Runoff CN-Area, 1 years (Pre-Development 1 year)	47
PDA-1		
	Runoff CN-Area, 1 years (Post-Development 1 year)	48
PDA-2A		
	Runoff CN-Area, 1 years (Post-Development 1 year)	49
PDA-2B		
	Runoff CN-Area, 1 years (Post-Development 1 year)	50
PDA-2C		
	Runoff CN-Area, 1 years (Post-Development 1 year)	51
PDA-2D		
	Runoff CN-Area, 1 years (Post-Development 1 year)	52
PDA-2E		
	Runoff CN-Area, 1 years (Post-Development 1 year)	53
PDA-3A		
	Runoff CN-Area, 1 years (Post-Development 1 year)	54
PDA-3B		
	Runoff CN-Area, 1 years (Post-Development 1 year)	55
DA-2 (OFFSITE)		
	Unit Hydrograph Summary, 1 years (Post-Development 1 year)	56
	Unit Hydrograph Summary, 1 years (Pre-Development 1 year)	58
	Unit Hydrograph Summary, 10 years (Post-Development 10 year)	60
	Unit Hydrograph Summary, 10 years (Pre-Development 10 year)	62
	Unit Hydrograph Summary, 25 years (Post-Development 25 year)	64
	Unit Hydrograph Summary, 25 years (Pre-Development 25 year)	66

Table of Contents

	Unit Hydrograph Summary, 100 years (Post-Development 100 year)	68
	Unit Hydrograph Summary, 100 years (Pre-Development 100 year)	70
DA-3 (OFFSITE)		
	Unit Hydrograph Summary, 1 years (Post-Development 1 year)	72
	Unit Hydrograph Summary, 1 years (Pre-Development 1 year)	74
	Unit Hydrograph Summary, 10 years (Post-Development 10 year)	76
	Unit Hydrograph Summary, 10 years (Pre-Development 10 year)	78
	Unit Hydrograph Summary, 25 years (Post-Development 25 year)	80
	Unit Hydrograph Summary, 25 years (Pre-Development 25 year)	82
	Unit Hydrograph Summary, 100 years (Post-Development 100 year)	84
	Unit Hydrograph Summary, 100 years (Pre-Development 100 year)	86
EDA-1		
	Unit Hydrograph Summary, 1 years (Pre-Development 1 year)	88
	Unit Hydrograph Summary, 10 years (Pre-Development 10 year)	90
	Unit Hydrograph Summary, 25 years (Pre-Development 25 year)	92
	Unit Hydrograph Summary, 100 years (Pre-Development 100 year)	94
EDA-2		
	Unit Hydrograph Summary, 1 years (Pre-Development 1 year)	96
	Unit Hydrograph Summary, 10 years (Pre-Development 10 year)	98
	Unit Hydrograph Summary, 25 years (Pre-Development 25 year)	100
	Unit Hydrograph Summary, 100 years (Pre-Development 100 year)	102
EDA-3		
	Unit Hydrograph Summary, 1 years (Pre-Development 1 year)	104
	Unit Hydrograph Summary, 10 years (Pre-Development 10 year)	106
	Unit Hydrograph Summary, 25 years (Pre-Development 25 year)	108
	Unit Hydrograph Summary, 100 years (Pre-Development 100 year)	110
PDA-1		
	Unit Hydrograph Summary, 1 years (Post-Development 1 year)	112
	Unit Hydrograph Summary, 10 years (Post-Development 10 year)	114
	Unit Hydrograph Summary, 25 years (Post-Development 25 year)	116

Table of Contents

	Unit Hydrograph Summary, 100 years (Post-Development 100 year)	118
PDA-2A	Unit Hydrograph Summary, 1 years (Post-Development 1 year)	120
	Unit Hydrograph Summary, 10 years (Post-Development 10 year)	122
	Unit Hydrograph Summary, 25 years (Post-Development 25 year)	124
	Unit Hydrograph Summary, 100 years (Post-Development 100 year)	126
PDA-2B	Unit Hydrograph Summary, 1 years (Post-Development 1 year)	128
	Unit Hydrograph Summary, 10 years (Post-Development 10 year)	130
	Unit Hydrograph Summary, 25 years (Post-Development 25 year)	132
	Unit Hydrograph Summary, 100 years (Post-Development 100 year)	134
PDA-2C	Unit Hydrograph Summary, 1 years (Post-Development 1 year)	136
	Unit Hydrograph Summary, 10 years (Post-Development 10 year)	138
	Unit Hydrograph Summary, 25 years (Post-Development 25 year)	140
	Unit Hydrograph Summary, 100 years (Post-Development 100 year)	142
PDA-2D	Unit Hydrograph Summary, 1 years (Post-Development 1 year)	144
	Unit Hydrograph Summary, 10 years (Post-Development 10 year)	146
	Unit Hydrograph Summary, 25 years (Post-Development 25 year)	148
	Unit Hydrograph Summary, 100 years (Post-Development 100 year)	150
PDA-2E	Unit Hydrograph Summary, 1 years (Post-Development 1 year)	152
	Unit Hydrograph Summary, 10 years (Post-Development 10 year)	154
	Unit Hydrograph Summary, 25 years (Post-Development 25 year)	156
	Unit Hydrograph Summary, 100 years (Post-Development 100 year)	158
PDA-3A	Unit Hydrograph Summary, 1 years (Post-Development 1 year)	160
	Unit Hydrograph Summary, 10 years (Post-Development 10 year)	162
	Unit Hydrograph Summary, 25 years (Post-Development 25 year)	164
	Unit Hydrograph Summary, 100 years (Post-Development 100 year)	166

Table of Contents

PDA-3B	Unit Hydrograph Summary, 1 years (Post-Development 1 year)	168
	Unit Hydrograph Summary, 10 years (Post-Development 10 year)	170
	Unit Hydrograph Summary, 25 years (Post-Development 25 year)	172
	Unit Hydrograph Summary, 100 years (Post-Development 100 year)	174
DP-1		
	Addition Summary, 1 years (Post-Development 1 year)	176
	Addition Summary, 1 years (Pre-Development 1 year)	177
	Addition Summary, 10 years (Post-Development 10 year)	178
	Addition Summary, 10 years (Pre-Development 10 year)	179
	Addition Summary, 25 years (Post-Development 25 year)	180
	Addition Summary, 25 years (Pre-Development 25 year)	181
	Addition Summary, 100 years (Post-Development 100 year)	182
	Addition Summary, 100 years (Pre-Development 100 year)	183
DP-2		
	Addition Summary, 1 years (Post-Development 1 year)	184
	Addition Summary, 1 years (Pre-Development 1 year)	185
	Addition Summary, 10 years (Post-Development 10 year)	186
	Addition Summary, 10 years (Pre-Development 10 year)	187
	Addition Summary, 25 years (Post-Development 25 year)	188
	Addition Summary, 25 years (Pre-Development 25 year)	189
	Addition Summary, 100 years (Post-Development 100 year)	190
	Addition Summary, 100 years (Pre-Development 100 year)	191
DP-3		
	Addition Summary, 1 years (Post-Development 1 year)	192
	Addition Summary, 1 years (Pre-Development 1 year)	193
	Addition Summary, 10 years (Post-Development 10 year)	194
	Addition Summary, 10 years (Pre-Development 10 year)	195
	Addition Summary, 25 years (Post-Development 25 year)	196
	Addition Summary, 25 years (Pre-Development 25 year)	197
	Addition Summary, 100 years (Post-Development 100 year)	198
	Addition Summary, 100 years (Pre-Development 100 year)	199
24" Depth Green Roof (OUT)		
	Time vs. Elevation, 1 years (Post-Development 1 year)	200

Table of Contents

Time vs. Elevation, 10 years (Post-Development 10 year)	203
Time vs. Elevation, 25 years (Post-Development 25 year)	206
Time vs. Elevation, 100 years (Post-Development 100 year)	209
6" Depth Green Roof (OUT)	
Time vs. Elevation, 1 years (Post-Development 1 year)	212
Time vs. Elevation, 10 years (Post-Development 10 year)	215
Time vs. Elevation, 25 years (Post-Development 25 year)	218
Time vs. Elevation, 100 years (Post-Development 100 year)	221
MC-3500 - 2 (OUT)	
Time vs. Elevation, 1 years (Post-Development 1 year)	224
Time vs. Elevation, 10 years (Post-Development 10 year)	227
Time vs. Elevation, 25 years (Post-Development 25 year)	230
Time vs. Elevation, 100 years (Post-Development 100 year)	233
MC-3500 - 3 (OUT)	
Time vs. Elevation, 1 years (Post-Development 1 year)	236
Time vs. Elevation, 10 years (Post-Development 10 year)	239
Time vs. Elevation, 25 years (Post-Development 25 year)	242
Time vs. Elevation, 100 years (Post-Development 100 year)	245
Stormwater Planters - 2 (OUT)	
Time vs. Elevation, 1 years (Post-Development 1 year)	248
Time vs. Elevation, 10 years (Post-Development 10 year)	251
Time vs. Elevation, 25 years (Post-Development 25 year)	254
Time vs. Elevation, 100 years (Post-Development 100 year)	257
24" Depth Green Roof	
Time vs. Volume, 1 years (Post-Development 1 year)	260
Time vs. Volume, 10 years (Post-Development 10 year)	263
Time vs. Volume, 25 years (Post-Development 25 year)	266
Time vs. Volume, 100 years (Post-Development 100 year)	269
6" Depth Green Roof	
Time vs. Volume, 1 years (Post-Development 1 year)	272
Time vs. Volume, 10 years (Post-Development 10 year)	275
Time vs. Volume, 25 years (Post-Development 25 year)	278
Time vs. Volume, 100 years (Post-Development 100 year)	281
MC-3500 - 2	

Table of Contents

Time vs. Volume, 1 years (Post-Development 1 year)	284
Time vs. Volume, 10 years (Post-Development 10 year)	287
Time vs. Volume, 25 years (Post-Development 25 year)	290
Time vs. Volume, 100 years (Post-Development 100 year)	293
MC-3500 - 3	
Time vs. Volume, 1 years (Post-Development 1 year)	296
Time vs. Volume, 10 years (Post-Development 10 year)	299
Time vs. Volume, 25 years (Post-Development 25 year)	302
Time vs. Volume, 100 years (Post-Development 100 year)	305
Stormwater Planters - 2	
Time vs. Volume, 1 years (Post-Development 1 year)	308
Time vs. Volume, 10 years (Post-Development 10 year)	311
Time vs. Volume, 25 years (Post-Development 25 year)	314
Time vs. Volume, 100 years (Post-Development 100 year)	317
24" Depth Green Roof	
Elevation-Area Volume Curve, 1 years (Post-Development 1 year)	320
Elevation-Area Volume Curve, 10 years (Post-Development 10 year)	321
Elevation-Area Volume Curve, 25 years (Post-Development 25 year)	322
Elevation-Area Volume Curve, 100 years (Post-Development 100 year)	323
6" Depth Green Roof	
Elevation-Area Volume Curve, 1 years (Post-Development 1 year)	324
Elevation-Area Volume Curve, 10 years (Post-Development 10 year)	325
Elevation-Area Volume Curve, 25 years (Post-Development 25 year)	326
Elevation-Area Volume Curve, 100 years (Post-Development 100 year)	327
MC-3500 - 2	
Elevation vs. Volume Curve, 1 years (Post-Development 1 year)	328
Elevation vs. Volume Curve, 10 years (Post-Development 10 year)	329
Elevation vs. Volume Curve, 25 years (Post-Development 25 year)	330
Elevation vs. Volume Curve, 100 years (Post-Development 100 year)	331
MC-3500 - 3	
Elevation vs. Volume Curve, 1 years (Post-Development 1 year)	332
Elevation vs. Volume Curve, 10 years (Post-Development 10 year)	333

Table of Contents

Elevation vs. Volume Curve, 25 years (Post-Development 25 year)	334
Elevation vs. Volume Curve, 100 years (Post-Development 100 year)	335
Stormwater Planters - 2	
Elevation-Area Volume Curve, 1 years (Post-Development 1 year)	336
Elevation-Area Volume Curve, 10 years (Post-Development 10 year)	337
Elevation-Area Volume Curve, 25 years (Post-Development 25 year)	338
Elevation-Area Volume Curve, 100 years (Post-Development 100 year)	339
24-GR OUT	
Outlet Input Data, 1 years (Post-Development 1 year)	340
Individual Outlet Curves, 1 years (Post-Development 1 year)	342
Composite Rating Curve, 1 years (Post-Development 1 year)	346
Outlet Input Data, 10 years (Post-Development 10 year)	348
Individual Outlet Curves, 10 years (Post-Development 10 year)	350
Composite Rating Curve, 10 years (Post-Development 10 year)	354
Outlet Input Data, 25 years (Post-Development 25 year)	356
Individual Outlet Curves, 25 years (Post-Development 25 year)	358
Composite Rating Curve, 25 years (Post-Development 25 year)	362
Outlet Input Data, 100 years (Post-Development 100 year)	364
Individual Outlet Curves, 100 years (Post-Development 100 year)	366
Composite Rating Curve, 100 years (Post-Development 100 year)	370
6-GR OUT	
Outlet Input Data, 1 years (Post-Development 1 year)	372
Individual Outlet Curves, 1 years (Post-Development 1 year)	374
Composite Rating Curve, 1 years (Post-Development 1 year)	376
Outlet Input Data, 10 years (Post-Development 10 year)	377
Individual Outlet Curves, 10 years (Post-Development 10 year)	379
Composite Rating Curve, 10 years (Post-Development 10 year)	381
Outlet Input Data, 25 years (Post-Development 25 year)	382
Individual Outlet Curves, 25 years (Post-Development 25 year)	384
Composite Rating Curve, 25 years (Post-Development 25 year)	386
Outlet Input Data, 100 years (Post-Development 100 year)	387
Individual Outlet Curves, 100 years (Post-Development 100 year)	389

Table of Contents

	Composite Rating Curve, 100 years (Post-Development 100 year)	391
MC-3500 - 2 OUT		
	Outlet Input Data, 1 years (Post-Development 1 year)	392
	Individual Outlet Curves, 1 years (Post-Development 1 year)	395
	Composite Rating Curve, 1 years (Post-Development 1 year)	399
	Outlet Input Data, 10 years (Post-Development 10 year)	400
	Individual Outlet Curves, 10 years (Post-Development 10 year)	403
	Composite Rating Curve, 10 years (Post-Development 10 year)	407
	Outlet Input Data, 25 years (Post-Development 25 year)	408
	Individual Outlet Curves, 25 years (Post-Development 25 year)	411
	Composite Rating Curve, 25 years (Post-Development 25 year)	415
	Outlet Input Data, 100 years (Post-Development 100 year)	416
	Individual Outlet Curves, 100 years (Post-Development 100 year)	419
	Composite Rating Curve, 100 years (Post-Development 100 year)	423
MC-3500 - 3 OUT		
	Outlet Input Data, 1 years (Post-Development 1 year)	424
	Individual Outlet Curves, 1 years (Post-Development 1 year)	427
	Composite Rating Curve, 1 years (Post-Development 1 year)	431
	Outlet Input Data, 10 years (Post-Development 10 year)	432
	Individual Outlet Curves, 10 years (Post-Development 10 year)	435
	Composite Rating Curve, 10 years (Post-Development 10 year)	439
	Outlet Input Data, 25 years (Post-Development 25 year)	440
	Individual Outlet Curves, 25 years (Post-Development 25 year)	443
	Composite Rating Curve, 25 years (Post-Development 25 year)	447
	Outlet Input Data, 100 years (Post-Development 100 year)	448
	Individual Outlet Curves, 100 years (Post-Development 100 year)	451
	Composite Rating Curve, 100 years (Post-Development 100 year)	455
SP-2 OUT		
	Outlet Input Data, 1 years (Post-Development 1 year)	456
	Individual Outlet Curves, 1 years (Post-Development 1 year)	461
	Composite Rating Curve, 1 years (Post-Development 1 year)	469
	Outlet Input Data, 10 years (Post-Development 10 year)	471
	Individual Outlet Curves, 10 years (Post-Development 10 year)	476

Table of Contents

Composite Rating Curve, 10 years (Post-Development 10 year)	484
Outlet Input Data, 25 years (Post-Development 25 year)	486
Individual Outlet Curves, 25 years (Post-Development 25 year)	491
Composite Rating Curve, 25 years (Post-Development 25 year)	499
Outlet Input Data, 100 years (Post-Development 100 year)	501
Individual Outlet Curves, 100 years (Post-Development 100 year)	506
Composite Rating Curve, 100 years (Post-Development 100 year)	514
 24" Depth Green Roof	
Elevation-Volume-Flow Table (Pond), 1 years (Post-Development 1 year)	516
Elevation-Volume-Flow Table (Pond), 10 years (Post-Development 10 year)	517
Elevation-Volume-Flow Table (Pond), 25 years (Post-Development 25 year)	518
Elevation-Volume-Flow Table (Pond), 100 years (Post-Development 100 year)	519
 24" Depth Green Roof (IN)	
Level Pool Pond Routing Summary, 1 years (Post-Development 1 year)	520
Level Pool Pond Routing Summary, 10 years (Post-Development 10 year)	521
Level Pool Pond Routing Summary, 25 years (Post-Development 25 year)	522
Level Pool Pond Routing Summary, 100 years (Post-Development 100 year)	523
 24" Depth Green Roof (OUT)	
Pond Routing Calculations (Total Out), 1 years (Post-Development 1 year)	524
Pond Routing Calculations (Total Out), 10 years (Post-Development 10 year)	536
Pond Routing Calculations (Total Out), 25 years (Post-Development 25 year)	548
Pond Routing Calculations (Total Out), 100 years (Post-Development 100 year)	560
 24" Depth Green Roof (IN)	
Pond Inflow Summary, 1 years (Post-Development 1 year)	572
Pond Inflow Summary, 10 years (Post-Development 10 year)	573
Pond Inflow Summary, 25 years (Post-Development 25 year)	574
Pond Inflow Summary, 100 years (Post-Development 100 year)	575
 6" Depth Green Roof	
Elevation-Volume-Flow Table (Pond), 1 years (Post-Development 1 year)	576
Elevation-Volume-Flow Table (Pond), 10 years (Post-Development 10 year)	577
Elevation-Volume-Flow Table (Pond), 25 years (Post-Development 25 year)	578

Table of Contents

Elevation-Volume-Flow Table (Pond), 100 years (Post-Development 100 year)	579
6" Depth Green Roof (IN)	
Level Pool Pond Routing Summary, 1 years (Post-Development 1 year)	580
Level Pool Pond Routing Summary, 10 years (Post-Development 10 year)	581
Level Pool Pond Routing Summary, 25 years (Post-Development 25 year)	582
Level Pool Pond Routing Summary, 100 years (Post-Development 100 year)	583
6" Depth Green Roof (OUT)	
Pond Routing Calculations (Total Out), 1 years (Post-Development 1 year)	584
Pond Routing Calculations (Total Out), 10 years (Post-Development 10 year)	596
Pond Routing Calculations (Total Out), 25 years (Post-Development 25 year)	608
Pond Routing Calculations (Total Out), 100 years (Post-Development 100 year)	620
6" Depth Green Roof (IN)	
Pond Inflow Summary, 1 years (Post-Development 1 year)	632
Pond Inflow Summary, 10 years (Post-Development 10 year)	633
Pond Inflow Summary, 25 years (Post-Development 25 year)	634
Pond Inflow Summary, 100 years (Post-Development 100 year)	635
MC-3500 - 2	
Elevation-Volume-Flow Table (Pond), 1 years (Post-Development 1 year)	636
Elevation-Volume-Flow Table (Pond), 10 years (Post-Development 10 year)	637
Elevation-Volume-Flow Table (Pond), 25 years (Post-Development 25 year)	638
Elevation-Volume-Flow Table (Pond), 100 years (Post-Development 100 year)	639
MC-3500 - 2 (IN)	
Level Pool Pond Routing Summary, 1 years (Post-Development 1 year)	640
Level Pool Pond Routing Summary, 10 years (Post-Development 10 year)	641
Level Pool Pond Routing Summary, 25 years (Post-Development 25 year)	642
Level Pool Pond Routing Summary, 100 years (Post-Development 100 year)	643
MC-3500 - 2 (OUT)	
Pond Routing Calculations (Total Out), 1 years (Post-Development 1 year)	644
Pond Routing Calculations (Total Out), 10 years (Post-Development 10 year)	656
Pond Routing Calculations (Total Out), 25 years (Post-Development 25 year)	668

Table of Contents

<p>Pond Routing Calculations (Total Out), 100 years (Post-Development 100 year) 680</p> <p>MC-3500 - 2 (IN)</p> <p style="margin-left: 20px;">Pond Inflow Summary, 1 years (Post-Development 1 year) 692</p> <p style="margin-left: 20px;">Pond Inflow Summary, 10 years (Post-Development 10 year) 693</p> <p style="margin-left: 20px;">Pond Inflow Summary, 25 years (Post-Development 25 year) 694</p> <p style="margin-left: 20px;">Pond Inflow Summary, 100 years (Post-Development 100 year) 695</p> <p>MC-3500 - 3</p> <p style="margin-left: 20px;">Elevation-Volume-Flow Table (Pond), 1 years (Post-Development 1 year) 696</p> <p style="margin-left: 20px;">Elevation-Volume-Flow Table (Pond), 10 years (Post-Development 10 year) 697</p> <p style="margin-left: 20px;">Elevation-Volume-Flow Table (Pond), 25 years (Post-Development 25 year) 698</p> <p style="margin-left: 20px;">Elevation-Volume-Flow Table (Pond), 100 years (Post-Development 100 year) 699</p> <p>MC-3500 - 3 (IN)</p> <p style="margin-left: 20px;">Level Pool Pond Routing Summary, 1 years (Post-Development 1 year) 700</p> <p style="margin-left: 20px;">Level Pool Pond Routing Summary, 10 years (Post-Development 10 year) 701</p> <p style="margin-left: 20px;">Level Pool Pond Routing Summary, 25 years (Post-Development 25 year) 702</p> <p style="margin-left: 20px;">Level Pool Pond Routing Summary, 100 years (Post-Development 100 year) 703</p> <p>MC-3500 - 3 (OUT)</p> <p style="margin-left: 20px;">Pond Routing Calculations (Total Out), 1 years (Post-Development 1 year) 704</p> <p style="margin-left: 20px;">Pond Routing Calculations (Total Out), 10 years (Post-Development 10 year) 716</p> <p style="margin-left: 20px;">Pond Routing Calculations (Total Out), 25 years (Post-Development 25 year) 728</p> <p style="margin-left: 20px;">Pond Routing Calculations (Total Out), 100 years (Post-Development 100 year) 740</p> <p>MC-3500 - 3 (IN)</p> <p style="margin-left: 20px;">Pond Inflow Summary, 1 years (Post-Development 1 year) 752</p> <p style="margin-left: 20px;">Pond Inflow Summary, 10 years (Post-Development 10 year) 753</p> <p style="margin-left: 20px;">Pond Inflow Summary, 25 years (Post-Development 25 year) 754</p> <p style="margin-left: 20px;">Pond Inflow Summary, 100 years (Post-Development 100 year) 755</p> <p>Stormwater Planters - 2</p> <p style="margin-left: 20px;">Elevation-Volume-Flow Table (Pond), 1 years (Post-Development 1 year) 756</p> <p style="margin-left: 20px;">Elevation-Volume-Flow Table (Pond), 10 years (Post-Development 10 year) 757</p> <p style="margin-left: 20px;">Elevation-Volume-Flow Table (Pond), 25 years (Post-Development 25 year) 758</p> <p style="margin-left: 20px;">Elevation-Volume-Flow Table (Pond), 100 years (Post-Development 100 year) 759</p>	
--	--

Table of Contents

Stormwater Planters - 2 (IN)

Level Pool Pond Routing Summary, 1 years (Post-Development 1 year)	760
Level Pool Pond Routing Summary, 10 years (Post-Development 10 year)	761
Level Pool Pond Routing Summary, 25 years (Post-Development 25 year)	762
Level Pool Pond Routing Summary, 100 years (Post-Development 100 year)	763

Stormwater Planters - 2 (OUT)

Pond Routing Calculations (Total Out), 1 years (Post-Development 1 year)	764
Pond Routing Calculations (Total Out), 10 years (Post-Development 10 year)	776
Pond Routing Calculations (Total Out), 25 years (Post-Development 25 year)	788
Pond Routing Calculations (Total Out), 100 years (Post-Development 100 year)	800

Stormwater Planters - 2 (IN)

Pond Inflow Summary, 1 years (Post-Development 1 year)	812
Pond Inflow Summary, 10 years (Post-Development 10 year)	813
Pond Inflow Summary, 25 years (Post-Development 25 year)	814
Pond Inflow Summary, 100 years (Post-Development 100 year)	815

Existing and Proposed Hydrologic Calculations

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ft³)	Time to Peak (hours)	Peak Flow (ft³/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 (ft³)	Time to Peak (hours)	Peak Flow (ft³/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	3,981	12.200	0.86
PDA-3A	Post-Development 10 year	10	11,889	12.200	2.71
PDA-3A	Post-Development 25 year	25	17,090	12.200	3.89
PDA-3A	Post-Development 100 year	100	28,358	12.200	6.38
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 (ft³)	Time to Peak (hours)	Peak Flow (ft³/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 (ft³)	Time to Peak (hours)	Peak Flow (ft³/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 (ft³)	Time to Peak (hours)	Peak Flow (ft³/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	33,203	12.200	4.54
DP-3	Pre-Development 10 year	10	70,478	12.250	12.10
DP-3	Post-Development 10 year	10	77,498	12.200	12.09
DP-3	Pre-Development 25 year	25	98,290	12.250	16.74
DP-3	Post-Development 25 year	25	104,582	12.200	16.73
DP-3	Pre-Development 100 year	100	157,548	12.250	26.40
DP-3	Post-Development 100 year	100	161,215	12.200	25.82
DP-2	Pre-Development 1 year	1	57,017	12.400	9.31
DP-2	Post-Development 1 year	1	64,974	12.400	9.24
DP-2	Pre-Development 10 year	10	196,318	12.350	36.29
DP-2	Post-Development 10 year	10	208,478	12.350	35.76
DP-2	Pre-Development 25 year	25	292,551	12.350	54.55
DP-2	Post-Development 25 year	25	307,639	12.350	54.13
DP-2	Pre-Development 100 year	100	506,488	12.300	94.58
DP-2	Post-Development 100 year	100	527,682	12.300	94.10

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ft³)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ft³)
AMS Buchanan.ppc 12/21/2023	Bentley Systems, Inc. Haestad Methods Solution Center 27 Siemon Company Drive Suite 200 W Watertown, CT 06795 USA +1-203-755-1666						PondPack CONNECT Edition [10.02.00.01] Page 5 of 815

Existing and Proposed Hydrologic Calculations

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ft³)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ft³)
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 (ft³)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ft³)
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	12.400	3.05	65.40	13,501
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	46,873	12.400	4.12	66.09	17,373

Existing and Proposed Hydrologic Calculations

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ft³)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ft³)
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	70,330	12.400	6.36	68.18	25,195
MC-3500 - 2 (IN)	Post-Development 1 year	1	9,724	12.150	0.44	(N/A)	(N/A)
MC-3500 - 2 (OUT)	Post-Development 1 year	1	9,449	17.100	0.23	72.74	2,443
MC-3500 - 2 (IN)	Post-Development 10 year	10	19,064	12.200	1.81	(N/A)	(N/A)
MC-3500 - 2 (OUT)	Post-Development 10 year	10	16,794	13.150	0.52	73.18	3,699
MC-3500 - 2 (IN)	Post-Development 25 year	25	24,341	12.100	3.33	(N/A)	(N/A)
MC-3500 - 2 (OUT)	Post-Development 25 year	25	21,802	12.700	0.97	73.94	5,778
MC-3500 - 2 (IN)	Post-Development 100 year	100	35,011	12.150	8.12	(N/A)	(N/A)
MC-3500 - 2 (OUT)	Post-Development 100 year	100	32,427	12.600	1.74	76.60	11,020

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)	Depth (in)
17.000	2.5	2.5	2.5	2.5	2.5	2.5
17.500	2.5	2.5	2.5	2.5	2.5	2.5
18.000	2.6	2.6	2.6	2.6	2.6	2.6
18.500	2.6	2.6	2.6	2.6	2.6	2.6
19.000	2.6	2.6	2.6	2.6	2.6	2.6
19.500	2.6	2.6	2.6	2.6	2.6	2.6
20.000	2.6	2.6	2.6	2.6	2.6	2.6
20.500	2.6	2.7	2.7	2.7	2.7	2.7
21.000	2.7	2.7	2.7	2.7	2.7	2.7
21.500	2.7	2.7	2.7	2.7	2.7	2.7
22.000	2.7	2.7	2.7	2.7	2.7	2.7
22.500	2.7	2.7	2.7	2.7	2.7	2.7
23.000	2.7	2.7	2.7	2.7	2.7	2.7
23.500	2.7	2.7	2.7	2.7	2.7	2.7
24.000	2.8	(N/A)	(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)	Depth (in)
17.000	4.6	4.6	4.6	4.6	4.7	4.7
17.500	4.7	4.7	4.7	4.7	4.7	4.7
18.000	4.7	4.7	4.7	4.7	4.7	4.7
18.500	4.8	4.8	4.8	4.8	4.8	4.8
19.000	4.8	4.8	4.8	4.8	4.8	4.8
19.500	4.8	4.8	4.8	4.8	4.9	4.9
20.000	4.9	4.9	4.9	4.9	4.9	4.9
20.500	4.9	4.9	4.9	4.9	4.9	4.9
21.000	4.9	4.9	4.9	4.9	4.9	4.9
21.500	5.0	5.0	5.0	5.0	5.0	5.0
22.000	5.0	5.0	5.0	5.0	5.0	5.0
22.500	5.0	5.0	5.0	5.0	5.0	5.0
23.000	5.0	5.0	5.0	5.0	5.0	5.1
23.500	5.1	5.1	5.1	5.1	5.1	5.1
24.000	5.1	(N/A)	(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)	Depth (in)
17.000	8.4	8.4	8.4	8.4	8.5	8.5
17.500	8.5	8.5	8.5	8.5	8.5	8.6
18.000	8.6	8.6	8.6	8.6	8.6	8.6
18.500	8.6	8.7	8.7	8.7	8.7	8.7
19.000	8.7	8.7	8.7	8.7	8.7	8.8
19.500	8.8	8.8	8.8	8.8	8.8	8.8
20.000	8.8	8.8	8.9	8.9	8.9	8.9
20.500	8.9	8.9	8.9	8.9	8.9	8.9
21.000	8.9	9.0	9.0	9.0	9.0	9.0
21.500	9.0	9.0	9.0	9.0	9.0	9.0
22.000	9.1	9.1	9.1	9.1	9.1	9.1
22.500	9.1	9.1	9.1	9.1	9.1	9.1
23.000	9.1	9.2	9.2	9.2	9.2	9.2
23.500	9.2	9.2	9.2	9.2	9.2	9.2
24.000	9.2	(N/A)	(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

Return Event: 1 years

Label: DA-2 (OFFSITE)

Storm Event: 1 year

Scenario: Pre-Development 1 year

===== SCS Channel Flow

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

$$(L_f / V) / 3600$$

Where:

R= Hydraulic radius

Aq= Flow area, square feet

Wp= Wetted perimeter, feet

V= Velocity, ft/sec

Sf= Slope, ft/ft

n= Manning's n

Tc= Time of concentration, hours

Lf= Flow length, feet

===== SCS TR-55 Shallow Concentration Flow

$$T_c = \frac{V}{(16.1345 * (S_f^{0.5}))}$$

$$(L_f / V) / 3600$$

Where:

V= Velocity, ft/sec

Sf= Slope, ft/ft

Tc= Time of concentration, hours

Lf= 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

Return Event: 1 years

Label: DA-3 (OFFSITE)

Storm Event: 1 year

Scenario: Pre-Development 1 year

===== SCS Channel Flow

Tc =

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

$$(L_f / V) / 3600$$

Where:

R= Hydraulic radius

Aq= Flow area, square feet

Wp= Wetted perimeter, feet

V= Velocity, ft/sec

Sf= Slope, ft/ft

n= Manning's n

Tc= Time of concentration, hours

Lf= Flow length, feet

===== SCS TR-55 Shallow Concentration Flow

Tc =

Unpaved surface:

$$V = 16.1345 * (S_f^{0.5})$$

Paved Surface:

$$V = 20.3282 * (S_f^{0.5})$$

$$(L_f / V) / 3600$$

Where:

V= Velocity, ft/sec

Sf= Slope, ft/ft

Tc= Time of concentration, hours

Lf= Flow length, feet

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Return Event: 1 years

Label: EDA-1

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	0.080 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
-----------------------------------	-------------

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Return Event: 1 years

Label: EDA-1

Storm Event: 1 year

Scenario: Pre-Development 1 year

===== SCS Channel Flow

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

$$(L_f / V) / 3600$$

Where:

R= Hydraulic radius

Aq= Flow area, square feet

Wp= Wetted perimeter, feet

V= Velocity, ft/sec

Sf= Slope, ft/ft

n= Manning's n

Tc= Time of concentration, hours

Lf= Flow length, feet

===== SCS TR-55 Shallow Concentration Flow

$$T_c = \frac{V}{(16.1345 * (S_f^{0.5}))}$$

$$(L_f / V) / 3600$$

Where:

V= Velocity, ft/sec

Sf= Slope, ft/ft

Tc= Time of concentration, hours

Lf= 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

Return Event: 1 years

Label: EDA-2

Storm Event: 1 year

Scenario: Pre-Development 1 year

===== SCS Channel Flow

Tc =

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

$$(L_f / V) / 3600$$

Where:

R= Hydraulic radius

Aq= Flow area, square feet

Wp= Wetted perimeter, feet

V= Velocity, ft/sec

Sf= Slope, ft/ft

n= Manning's n

Tc= Time of concentration, hours

Lf= Flow length, feet

===== SCS TR-55 Shallow Concentration Flow

Tc =

Unpaved surface:

$$V = 16.1345 * (S_f^{0.5})$$

Paved Surface:

$$V = 20.3282 * (S_f^{0.5})$$

$$(L_f / V) / 3600$$

Where:

V= Velocity, ft/sec

Sf= Slope, ft/ft

Tc= Time of concentration, hours

Lf= 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

Return Event: 1 years

Label: EDA-3

Storm Event: 1 year

Scenario: Pre-Development 1 year

===== SCS Channel Flow

Tc =

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

$$(L_f / V) / 3600$$

Where:

R= Hydraulic radius

Aq= Flow area, square feet

Wp= Wetted perimeter, feet

V= Velocity, ft/sec

Sf= Slope, ft/ft

n= Manning's n

Tc= Time of concentration, hours

Lf= Flow length, feet

===== SCS TR-55 Shallow Concentration Flow

Tc =

Unpaved surface:

$$V = 16.1345 * (S_f^{0.5})$$

Paved Surface:

$$V = 20.3282 * (S_f^{0.5})$$

$$(L_f / V) / 3600$$

Where:

V= Velocity, ft/sec

Sf= Slope, ft/ft

Tc= Time of concentration, hours

Lf= Flow length, feet

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Return Event: 1 years

Label: PDA-1

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	0.080 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
-----------------------------------	-------------

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Return Event: 1 years

Label: PDA-1

Storm Event: 1 year

Scenario: Post-Development 1 year

===== SCS Channel Flow

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

$$(L_f / V) / 3600$$

Where:

R= Hydraulic radius
Aq= Flow area, square feet
Wp= Wetted perimeter, feet
V= Velocity, ft/sec
Sf= Slope, ft/ft
n= Manning's n
Tc= Time of concentration, hours
Lf= Flow length, feet

===== SCS TR-55 Shallow Concentration Flow

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

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

$$(L_f / V) / 3600$$

Where:

V= Velocity, ft/sec
Sf= Slope, ft/ft
Tc= Time of concentration, hours
Lf= 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

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

$$(L_f / V) / 3600$$

Where:

R= Hydraulic radius

Aq= Flow area, square feet

Wp= Wetted perimeter, feet

V= Velocity, ft/sec

Sf= Slope, ft/ft

n= Manning's n

Tc= Time of concentration, hours

Lf= Flow length, feet

===== SCS TR-55 Shallow Concentration Flow

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

Paved Surface:

$$V = 20.3282 * (S_f^{0.5})$$

$$(L_f / V) / 3600$$

Where:

V= Velocity, ft/sec

Sf= Slope, ft/ft

Tc= Time of concentration, hours

Lf= Flow length, feet

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Return Event: 1 years

Label: PDA-2B

Storm Event: 1 year

Scenario: Post-Development 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

Return Event: 1 years

Label: PDA-2B

Storm Event: 1 year

Scenario: Post-Development 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

Return Event: 1 years

Label: PDA-2C

Storm Event: 1 year

Scenario: Post-Development 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

Return Event: 1 years

Label: PDA-2C

Storm Event: 1 year

Scenario: Post-Development 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

Return Event: 1 years

Label: PDA-2D

Storm Event: 1 year

Scenario: Post-Development 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

Return Event: 1 years

Label: PDA-2D

Storm Event: 1 year

Scenario: Post-Development 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

Return Event: 1 years

Label: PDA-2E

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	0.230 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
-----------------------------------	-------------

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Return Event: 1 years

Label: PDA-2E

Storm Event: 1 year

Scenario: Post-Development 1 year

===== SCS Channel Flow

Tc =

$$R = Q_a / W_p$$

$$V = (1.49 * (R^{(2/3)}) * (S_f^{(-0.5)})) / n$$

$$(L_f / V) / 3600$$

Where:

R= Hydraulic radius

Aq= Flow area, square feet

Wp= Wetted perimeter, feet

V= Velocity, ft/sec

Sf= Slope, ft/ft

n= Manning's n

Tc= Time of concentration, hours

Lf= Flow length, feet

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Return Event: 1 years

Label: PDA-3A

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	0.060 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 Shallow Concentrated Flow

Hydraulic Length	443.00 ft
Is Paved?	False
Slope	0.072 ft/ft
Average Velocity	4.33 ft/s
Segment Time of Concentration	0.028 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.275 hours
-----------------------------------	-------------

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Return Event: 1 years

Label: PDA-3A

Storm Event: 1 year

Scenario: Post-Development 1 year

===== SCS Channel Flow

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

$$(L_f / V) / 3600$$

Where:

R= Hydraulic radius

Aq= Flow area, square feet

Wp= Wetted perimeter, feet

V= Velocity, ft/sec

Sf= Slope, ft/ft

n= Manning's n

Tc= Time of concentration, hours

Lf= Flow length, feet

===== SCS TR-55 Shallow Concentration Flow

$$T_c = \frac{V}{S_f} = \frac{16.1345 * (S_f^{0.5})}{V}$$

$$(L_f / V) / 3600$$

Where:

V= Velocity, ft/sec

Sf= Slope, ft/ft

Tc= Time of concentration, hours

Lf= Flow length, feet

Existing and Proposed Hydrologic Calculations

Subsection: Time of Concentration Calculations

Return Event: 1 years

Label: PDA-3B

Storm Event: 1 year

Scenario: Post-Development 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

Return Event: 1 years

Label: PDA-3B

Storm Event: 1 year

Scenario: Post-Development 1 year

===== User Defined

Tc = Value entered by user

Where: Tc= Time of concentration, hours

Existing and Proposed Hydrologic Calculations

Subsection: Runoff CN-Area

Return Event: 1 years

Label: DA-2 (OFFSITE)

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 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

Return Event: 1 years

Label: DA-3 (OFFSITE)

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	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 COMPOSITE AREA & WEIGHTED CN --->	77.000 (N/A)	22,667 22,667	0.0 (N/A)	0.0 (N/A)	77.000 77.000

Existing and Proposed Hydrologic Calculations

Subsection: Runoff CN-Area

Return Event: 1 years

Label: EDA-2

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	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

Return Event: 1 years

Label: EDA-3

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	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

Return Event: 1 years

Label: PDA-1

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 COMPOSITE AREA & WEIGHTED CN --->	77.000 (N/A)	10,780 10,780	0.0 (N/A)	0.0 (N/A)	77.000 77.000

Existing and Proposed Hydrologic Calculations

Subsection: Runoff CN-Area

Return Event: 1 years

Label: PDA-2A

Storm Event: 1 year

Scenario: Post-Development 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

Return Event: 1 years

Label: PDA-2B

Storm Event: 1 year

Scenario: Post-Development 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

Return Event: 1 years

Label: PDA-2C

Storm Event: 1 year

Scenario: Post-Development 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

Return Event: 1 years

Label: PDA-2D

Storm Event: 1 year

Scenario: Post-Development 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

Return Event: 1 years

Label: PDA-2E

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	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 COMPOSITE AREA & WEIGHTED CN --->	77.000 (N/A)	53,198 53,198	0.0 (N/A)	0.0 (N/A)	77.000 77.000

Existing and Proposed Hydrologic Calculations

Subsection: Runoff CN-Area

Return Event: 1 years

Label: PDA-3B

Storm Event: 1 year

Scenario: Post-Development 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: Post-Development 1 year

Storm Event	1 year
Return Event	1 years
Duration	24.000 hours
Depth	2.8 in
Time of Concentration (Composite)	0.459 hours
Area (User Defined)	1,004,303 ft ²
<hr/>	
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
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.6 in
Runoff Volume (Pervious)	51,972 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	51,575 ft ³
<hr/>	
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

Return Event: 1 years

Label: DA-2 (OFFSITE)

Storm Event: 1 year

Scenario: Post-Development 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-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
<hr/>	
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
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.6 in
Runoff Volume (Pervious)	51,972 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	51,575 ft ³
<hr/>	
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

Return Event: 1 years

Label: DA-2 (OFFSITE)

Storm Event: 1 year

Scenario: Pre-Development 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: 10 years

Label: DA-2 (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)	0.459 hours
Area (User Defined)	1,004,303 ft ²
<hr/>	
Computational Time Increment	0.061 hours
Time to Peak (Computed)	12.366 hours
Flow (Peak, Computed)	33.53 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.350 hours
Flow (Peak Interpolated Output)	33.47 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.2 in
Runoff Volume (Pervious)	182,210 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	181,173 ft ³
<hr/>	
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

Return Event: 10 years

Label: DA-2 (OFFSITE)

Storm Event: 10 year

Scenario: Post-Development 10 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: 10 years

Label: DA-2 (OFFSITE)

Storm Event: 10 year

Scenario: Pre-Development 10 year

Storm Event	10 year
Return Event	10 years
Duration	24.000 hours
Depth	5.1 in
Time of Concentration (Composite)	0.459 hours
Area (User Defined)	1,004,303 ft ²
<hr/>	
Computational Time Increment	0.061 hours
Time to Peak (Computed)	12.366 hours
Flow (Peak, Computed)	33.53 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.350 hours
Flow (Peak Interpolated Output)	33.47 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.2 in
Runoff Volume (Pervious)	182,210 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	181,173 ft ³
<hr/>	
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

Return Event: 10 years

Label: DA-2 (OFFSITE)

Storm Event: 10 year

Scenario: Pre-Development 10 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: 25 years

Label: DA-2 (OFFSITE)

Storm Event: 25 year

Scenario: Post-Development 25 year

Storm Event	25 year
Return Event	25 years
Duration	24.000 hours
Depth	6.4 in
Time of Concentration (Composite)	0.459 hours
Area (User Defined)	1,004,303 ft ²
<hr/>	
Computational Time Increment	0.061 hours
Time to Peak (Computed)	12.304 hours
Flow (Peak, Computed)	50.69 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.350 hours
Flow (Peak Interpolated Output)	50.59 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.3 in
Runoff Volume (Pervious)	272,598 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	271,174 ft ³
<hr/>	
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

Return Event: 25 years

Label: DA-2 (OFFSITE)

Storm Event: 25 year

Scenario: Post-Development 25 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: 25 years

Label: DA-2 (OFFSITE)

Storm Event: 25 year

Scenario: Pre-Development 25 year

Storm Event	25 year
Return Event	25 years
Duration	24.000 hours
Depth	6.4 in
Time of Concentration (Composite)	0.459 hours
Area (User Defined)	1,004,303 ft ²
<hr/>	
Computational Time Increment	0.061 hours
Time to Peak (Computed)	12.304 hours
Flow (Peak, Computed)	50.69 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.350 hours
Flow (Peak Interpolated Output)	50.59 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.3 in
Runoff Volume (Pervious)	272,598 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	271,174 ft ³
<hr/>	
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

Return Event: 25 years

Label: DA-2 (OFFSITE)

Storm Event: 25 year

Scenario: Pre-Development 25 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
 Label: DA-2 (OFFSITE)
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

Storm Event	100 year
Return Event	100 years
Duration	24.000 hours
Depth	9.2 in
Time of Concentration (Composite)	0.459 hours
Area (User Defined)	1,004,303 ft ²
<hr/>	
Computational Time Increment	0.061 hours
Time to Peak (Computed)	12.304 hours
Flow (Peak, Computed)	88.58 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.300 hours
Flow (Peak Interpolated Output)	88.26 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.7 in
Runoff Volume (Pervious)	473,989 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	471,772 ft ³
<hr/>	
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

Return Event: 100 years

Label: DA-2 (OFFSITE)

Storm Event: 100 year

Scenario: Post-Development 100 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: 100 years

Label: DA-2 (OFFSITE)

Storm Event: 100 year

Scenario: Pre-Development 100 year

Storm Event	100 year
Return Event	100 years
Duration	24.000 hours
Depth	9.2 in
Time of Concentration (Composite)	0.459 hours
Area (User Defined)	1,004,303 ft ²
<hr/>	
Computational Time Increment	0.061 hours
Time to Peak (Computed)	12.304 hours
Flow (Peak, Computed)	88.58 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.300 hours
Flow (Peak Interpolated Output)	88.26 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.7 in
Runoff Volume (Pervious)	473,989 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	471,772 ft ³
<hr/>	
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

Return Event: 100 years

Label: DA-2 (OFFSITE)

Storm Event: 100 year

Scenario: Pre-Development 100 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: Post-Development 1 year

Storm Event	1 year
Return Event	1 years
Duration	24.000 hours
Depth	2.8 in
Time of Concentration (Composite)	0.255 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)	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
<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)	1.6 in
Runoff Volume (Pervious)	12,876 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	12,844 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

Return Event: 1 years

Label: DA-3 (OFFSITE)

Storm Event: 1 year

Scenario: Post-Development 1 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: 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
<hr/>	
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
<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)	1.6 in
Runoff Volume (Pervious)	12,876 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	12,844 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

Return Event: 1 years

Label: DA-3 (OFFSITE)

Storm Event: 1 year

Scenario: Pre-Development 1 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: 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

Return Event: 10 years

Label: DA-3 (OFFSITE)

Storm Event: 10 year

Scenario: Post-Development 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: 10 years

Label: DA-3 (OFFSITE)

Storm Event: 10 year

Scenario: Pre-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

Return Event: 10 years

Label: DA-3 (OFFSITE)

Storm Event: 10 year

Scenario: Pre-Development 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: 25 years

Label: DA-3 (OFFSITE)

Storm Event: 25 year

Scenario: Post-Development 25 year

Storm Event	25 year
Return Event	25 years
Duration	24.000 hours
Depth	6.4 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)	9.15 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	9.02 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)	5.1 in
Runoff Volume (Pervious)	40,702 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	40,618 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

Return Event: 25 years

Label: DA-3 (OFFSITE)

Storm Event: 25 year

Scenario: Post-Development 25 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: 25 years

Label: DA-3 (OFFSITE)

Storm Event: 25 year

Scenario: Pre-Development 25 year

Storm Event	25 year
Return Event	25 years
Duration	24.000 hours
Depth	6.4 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)	9.15 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	9.02 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)	5.1 in
Runoff Volume (Pervious)	40,702 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	40,618 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

Return Event: 25 years

Label: DA-3 (OFFSITE)

Storm Event: 25 year

Scenario: Pre-Development 25 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: 100 years

Label: DA-3 (OFFSITE)

Storm Event: 100 year

Scenario: Post-Development 100 year

Storm Event	100 year
Return Event	100 years
Duration	24.000 hours
Depth	9.2 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)	13.75 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	13.59 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)	7.8 in
Runoff Volume (Pervious)	62,648 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	62,527 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

Return Event: 100 years

Label: DA-3 (OFFSITE)

Storm Event: 100 year

Scenario: Post-Development 100 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: 100 years

Label: DA-3 (OFFSITE)

Storm Event: 100 year

Scenario: Pre-Development 100 year

Storm Event	100 year
Return Event	100 years
Duration	24.000 hours
Depth	9.2 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)	13.75 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	13.59 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)	7.8 in
Runoff Volume (Pervious)	62,648 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	62,527 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

Return Event: 100 years

Label: DA-3 (OFFSITE)

Storm Event: 100 year

Scenario: Pre-Development 100 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
<hr/>	
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
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.9 in
Runoff Volume (Pervious)	1,703 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	1,698 ft ³
<hr/>	
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

Return Event: 1 years

Label: EDA-1

Storm Event: 1 year

Scenario: Pre-Development 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: 10 years

Label: EDA-1

Storm Event: 10 year

Scenario: Pre-Development 10 year

Storm Event	10 year
Return Event	10 years
Duration	24.000 hours
Depth	5.1 in
Time of Concentration (Composite)	0.203 hours
Area (User Defined)	22,667 ft ²
<hr/>	
Computational Time Increment	0.027 hours
Time to Peak (Computed)	12.170 hours
Flow (Peak, Computed)	1.26 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	1.26 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.7 in
Runoff Volume (Pervious)	5,081 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	5,070 ft ³
<hr/>	
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

Return Event: 10 years

Label: EDA-1

Storm Event: 10 year

Scenario: Pre-Development 10 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: 25 years

Label: EDA-1

Storm Event: 25 year

Scenario: Pre-Development 25 year

Storm Event	25 year
Return Event	25 years
Duration	24.000 hours
Depth	6.4 in
Time of Concentration (Composite)	0.203 hours
Area (User Defined)	22,667 ft ²
<hr/>	
Computational Time Increment	0.027 hours
Time to Peak (Computed)	12.143 hours
Flow (Peak, Computed)	1.81 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	1.81 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.9 in
Runoff Volume (Pervious)	7,303 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	7,287 ft ³
<hr/>	
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

Return Event: 25 years

Label: EDA-1

Storm Event: 25 year

Scenario: Pre-Development 25 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: 100 years

Label: EDA-1

Storm Event: 100 year

Scenario: Pre-Development 100 year

Storm Event	100 year
Return Event	100 years
Duration	24.000 hours
Depth	9.2 in
Time of Concentration (Composite)	0.203 hours
Area (User Defined)	22,667 ft ²
<hr/>	
Computational Time Increment	0.027 hours
Time to Peak (Computed)	12.143 hours
Flow (Peak, Computed)	2.97 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	2.97 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	12,114 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	12,091 ft ³
<hr/>	
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

Return Event: 100 years

Label: EDA-1

Storm Event: 100 year

Scenario: Pre-Development 100 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

Return Event: 1 years

Label: EDA-2

Storm Event: 1 year

Scenario: Pre-Development 1 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.43 ft ³ /s
Unit peak time, Tp	0.312 hours
Unit receding limb, Tr	1.247 hours
Total unit time, Tb	1.558 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 10 years

Label: EDA-2

Storm Event: 10 year

Scenario: Pre-Development 10 year

Storm Event	10 year
Return Event	10 years
Duration	24.000 hours
Depth	5.1 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)	2.83 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.350 hours
Flow (Peak Interpolated Output)	2.82 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)	3.0 in
Runoff Volume (Pervious)	15,220 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	15,145 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

Return Event: 10 years

Label: EDA-2

Storm Event: 10 year

Scenario: Pre-Development 10 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.43 ft ³ /s
Unit peak time, Tp	0.312 hours
Unit receding limb, Tr	1.247 hours
Total unit time, Tb	1.558 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 25 years

Label: EDA-2

Storm Event: 25 year

Scenario: Pre-Development 25 year

Storm Event	25 year
Return Event	25 years
Duration	24.000 hours
Depth	6.4 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)	3.98 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.350 hours
Flow (Peak Interpolated Output)	3.95 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)	4.2 in
Runoff Volume (Pervious)	21,475 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	21,377 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

Return Event: 25 years

Label: EDA-2

Storm Event: 25 year

Scenario: Pre-Development 25 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.43 ft ³ /s
Unit peak time, Tp	0.312 hours
Unit receding limb, Tr	1.247 hours
Total unit time, Tb	1.558 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 100 years

Label: EDA-2

Storm Event: 100 year

Scenario: Pre-Development 100 year

Storm Event	100 year
Return Event	100 years
Duration	24.000 hours
Depth	9.2 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)	6.35 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.300 hours
Flow (Peak Interpolated Output)	6.32 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)	6.8 in
Runoff Volume (Pervious)	34,862 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	34,716 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

Return Event: 100 years

Label: EDA-2

Storm Event: 100 year

Scenario: Pre-Development 100 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.43 ft ³ /s
Unit peak time, Tp	0.312 hours
Unit receding limb, Tr	1.247 hours
Total unit time, Tb	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

Return Event: 1 years

Label: EDA-3

Storm Event: 1 year

Scenario: Pre-Development 1 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.87 ft ³ /s
Unit peak time, Tp	0.386 hours
Unit receding limb, Tr	1.546 hours
Total unit time, Tb	1.932 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 10 years

Label: EDA-3

Storm Event: 10 year

Scenario: Pre-Development 10 year

Storm Event	10 year
Return Event	10 years
Duration	24.000 hours
Depth	5.1 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)	6.85 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.400 hours
Flow (Peak Interpolated Output)	6.82 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)	2.8 in
Runoff Volume (Pervious)	40,621 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	40,362 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

Return Event: 10 years

Label: EDA-3

Storm Event: 10 year

Scenario: Pre-Development 10 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.87 ft ³ /s
Unit peak time, Tp	0.386 hours
Unit receding limb, Tr	1.546 hours
Total unit time, Tb	1.932 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 25 years

Label: EDA-3

Storm Event: 25 year

Scenario: Pre-Development 25 year

Storm Event	25 year
Return Event	25 years
Duration	24.000 hours
Depth	6.4 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)	9.74 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.400 hours
Flow (Peak Interpolated Output)	9.73 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)	4.0 in
Runoff Volume (Pervious)	58,016 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	57,672 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

Return Event: 25 years

Label: EDA-3

Storm Event: 25 year

Scenario: Pre-Development 25 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.87 ft ³ /s
Unit peak time, Tp	0.386 hours
Unit receding limb, Tr	1.546 hours
Total unit time, Tb	1.932 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 100 years

Label: EDA-3

Storm Event: 100 year

Scenario: Pre-Development 100 year

Storm Event	100 year
Return Event	100 years
Duration	24.000 hours
Depth	9.2 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)	12.367 hours
Flow (Peak, Computed)	15.89 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.400 hours
Flow (Peak Interpolated Output)	15.85 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)	6.5 in
Runoff Volume (Pervious)	95,540 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	95,021 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

Return Event: 100 years

Label: EDA-3

Storm Event: 100 year

Scenario: Pre-Development 100 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.87 ft ³ /s
Unit peak time, Tp	0.386 hours
Unit receding limb, Tr	1.546 hours
Total unit time, Tb	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
<hr/>	
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
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.9 in
Runoff Volume (Pervious)	810 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	808 ft ³
<hr/>	
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

Return Event: 1 years

Label: PDA-1

Storm Event: 1 year

Scenario: Post-Development 1 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.39 ft ³ /s
Unit peak time, Tp	0.135 hours
Unit receding limb, Tr	0.540 hours
Total unit time, Tb	0.675 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 10 years

Label: PDA-1

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)	0.202 hours
Area (User Defined)	10,780 ft ²
<hr/>	
Computational Time Increment	0.027 hours
Time to Peak (Computed)	12.144 hours
Flow (Peak, Computed)	0.60 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	0.60 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.7 in
Runoff Volume (Pervious)	2,417 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	2,411 ft ³
<hr/>	
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

Return Event: 10 years

Label: PDA-1

Storm Event: 10 year

Scenario: Post-Development 10 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.39 ft ³ /s
Unit peak time, Tp	0.135 hours
Unit receding limb, Tr	0.540 hours
Total unit time, Tb	0.675 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 25 years

Label: PDA-1

Storm Event: 25 year

Scenario: Post-Development 25 year

Storm Event	25 year
Return Event	25 years
Duration	24.000 hours
Depth	6.4 in
Time of Concentration (Composite)	0.202 hours
Area (User Defined)	10,780 ft ²
<hr/>	
Computational Time Increment	0.027 hours
Time to Peak (Computed)	12.144 hours
Flow (Peak, Computed)	0.86 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	0.86 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.9 in
Runoff Volume (Pervious)	3,473 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	3,466 ft ³
<hr/>	
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

Return Event: 25 years

Label: PDA-1

Storm Event: 25 year

Scenario: Post-Development 25 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.39 ft ³ /s
Unit peak time, Tp	0.135 hours
Unit receding limb, Tr	0.540 hours
Total unit time, Tb	0.675 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 100 years

Label: PDA-1

Storm Event: 100 year

Scenario: Post-Development 100 year

Storm Event	100 year
Return Event	100 years
Duration	24.000 hours
Depth	9.2 in
Time of Concentration (Composite)	0.202 hours
Area (User Defined)	10,780 ft ²
<hr/>	
Computational Time Increment	0.027 hours
Time to Peak (Computed)	12.144 hours
Flow (Peak, Computed)	1.42 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	1.41 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	5,761 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	5,751 ft ³
<hr/>	
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

Return Event: 100 years

Label: PDA-1

Storm Event: 100 year

Scenario: Post-Development 100 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.39 ft ³ /s
Unit peak time, Tp	0.135 hours
Unit receding limb, Tr	0.540 hours
Total unit time, Tb	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
<hr/>	
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
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.2 in
Runoff Volume (Pervious)	3,972 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	3,950 ft ³
<hr/>	
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

Return Event: 1 years

Label: PDA-2A

Storm Event: 1 year

Scenario: Post-Development 1 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	2.36 ft ³ /s
Unit peak time, Tp	0.295 hours
Unit receding limb, Tr	1.180 hours
Total unit time, Tb	1.475 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 10 years

Label: PDA-2A

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)	0.442 hours
Area (User Defined)	40,215 ft ²
<hr/>	
Computational Time Increment	0.059 hours
Time to Peak (Computed)	12.327 hours
Flow (Peak, Computed)	2.00 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.300 hours
Flow (Peak Interpolated Output)	1.99 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.2 in
Runoff Volume (Pervious)	10,559 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	10,512 ft ³
<hr/>	
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

Return Event: 10 years

Label: PDA-2A

Storm Event: 10 year

Scenario: Post-Development 10 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	2.36 ft ³ /s
Unit peak time, Tp	0.295 hours
Unit receding limb, Tr	1.180 hours
Total unit time, Tb	1.475 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 25 years

Label: PDA-2A

Storm Event: 25 year

Scenario: Post-Development 25 year

Storm Event	25 year
Return Event	25 years
Duration	24.000 hours
Depth	6.4 in
Time of Concentration (Composite)	0.442 hours
Area (User Defined)	40,215 ft ²
<hr/>	
Computational Time Increment	0.059 hours
Time to Peak (Computed)	12.327 hours
Flow (Peak, Computed)	2.77 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.300 hours
Flow (Peak Interpolated Output)	2.76 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.4 in
Runoff Volume (Pervious)	14,725 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	14,663 ft ³
<hr/>	
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

Return Event: 25 years

Label: PDA-2A

Storm Event: 25 year

Scenario: Post-Development 25 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	2.36 ft ³ /s
Unit peak time, Tp	0.295 hours
Unit receding limb, Tr	1.180 hours
Total unit time, Tb	1.475 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 100 years

Label: PDA-2A

Storm Event: 100 year

Scenario: Post-Development 100 year

Storm Event	100 year
Return Event	100 years
Duration	24.000 hours
Depth	9.2 in
Time of Concentration (Composite)	0.442 hours
Area (User Defined)	40,215 ft ²
<hr/>	
Computational Time Increment	0.059 hours
Time to Peak (Computed)	12.327 hours
Flow (Peak, Computed)	4.35 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.300 hours
Flow (Peak Interpolated Output)	4.35 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	7.0 in
Runoff Volume (Pervious)	23,574 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	23,483 ft ³
<hr/>	
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

Return Event: 100 years

Label: PDA-2A

Storm Event: 100 year

Scenario: Post-Development 100 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	2.36 ft ³ /s
Unit peak time, Tp	0.295 hours
Unit receding limb, Tr	1.180 hours
Total unit time, Tb	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
<hr/>	
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
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.2 in
Runoff Volume (Pervious)	3,990 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	3,987 ft ³
<hr/>	
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

Return Event: 1 years

Label: PDA-2B

Storm Event: 1 year

Scenario: Post-Development 1 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	5.65 ft ³ /s
Unit peak time, Tp	0.067 hours
Unit receding limb, Tr	0.267 hours
Total unit time, Tb	0.333 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 10 years

Label: PDA-2B

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)	0.100 hours
Area (User Defined)	21,709 ft ²
<hr/>	
Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.107 hours
Flow (Peak, Computed)	2.06 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	2.05 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.5 in
Runoff Volume (Pervious)	8,139 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	8,132 ft ³
<hr/>	
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

Return Event: 10 years

Label: PDA-2B

Storm Event: 10 year

Scenario: Post-Development 10 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	5.65 ft ³ /s
Unit peak time, Tp	0.067 hours
Unit receding limb, Tr	0.267 hours
Total unit time, Tb	0.333 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 25 years

Label: PDA-2B

Storm Event: 25 year

Scenario: Post-Development 25 year

Storm Event	25 year
Return Event	25 years
Duration	24.000 hours
Depth	6.4 in
Time of Concentration (Composite)	0.100 hours
Area (User Defined)	21,709 ft ²
<hr/>	
Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.107 hours
Flow (Peak, Computed)	2.63 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	2.63 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.8 in
Runoff Volume (Pervious)	10,581 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	10,573 ft ³
<hr/>	
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

Return Event: 25 years

Label: PDA-2B

Storm Event: 25 year

Scenario: Post-Development 25 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	5.65 ft ³ /s
Unit peak time, Tp	0.067 hours
Unit receding limb, Tr	0.267 hours
Total unit time, Tb	0.333 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 100 years

Label: PDA-2B

Storm Event: 100 year

Scenario: Post-Development 100 year

Storm Event	100 year
Return Event	100 years
Duration	24.000 hours
Depth	9.2 in
Time of Concentration (Composite)	0.100 hours
Area (User Defined)	21,709 ft ²
<hr/>	
Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.107 hours
Flow (Peak, Computed)	3.81 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	3.81 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.6 in
Runoff Volume (Pervious)	15,607 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	15,596 ft ³
<hr/>	
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

Return Event: 100 years

Label: PDA-2B

Storm Event: 100 year

Scenario: Post-Development 100 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	5.65 ft ³ /s
Unit peak time, Tp	0.067 hours
Unit receding limb, Tr	0.267 hours
Total unit time, Tb	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
<hr/>	
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
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.5 in
Runoff Volume (Pervious)	3,817 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	3,814 ft ³
<hr/>	
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

Return Event: 1 years

Label: PDA-2C

Storm Event: 1 year

Scenario: Post-Development 1 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.73 ft ³ /s
Unit peak time, Tp	0.067 hours
Unit receding limb, Tr	0.267 hours
Total unit time, Tb	0.333 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 10 years

Label: PDA-2C

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)	0.100 hours
Area (User Defined)	18,180 ft ²
<hr/>	
Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.107 hours
Flow (Peak, Computed)	1.76 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	1.76 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.8 in
Runoff Volume (Pervious)	7,337 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	7,332 ft ³
<hr/>	
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

Return Event: 10 years

Label: PDA-2C

Storm Event: 10 year

Scenario: Post-Development 10 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.73 ft ³ /s
Unit peak time, Tp	0.067 hours
Unit receding limb, Tr	0.267 hours
Total unit time, Tb	0.333 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 25 years

Label: PDA-2C

Storm Event: 25 year

Scenario: Post-Development 25 year

Storm Event	25 year
Return Event	25 years
Duration	24.000 hours
Depth	6.4 in
Time of Concentration (Composite)	0.100 hours
Area (User Defined)	18,180 ft ²
<hr/>	
Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.107 hours
Flow (Peak, Computed)	2.24 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	2.24 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.2 in
Runoff Volume (Pervious)	9,395 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	9,388 ft ³
<hr/>	
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

Return Event: 25 years

Label: PDA-2C

Storm Event: 25 year

Scenario: Post-Development 25 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.73 ft ³ /s
Unit peak time, Tp	0.067 hours
Unit receding limb, Tr	0.267 hours
Total unit time, Tb	0.333 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 100 years

Label: PDA-2C

Storm Event: 100 year

Scenario: Post-Development 100 year

Storm Event	100 year
Return Event	100 years
Duration	24.000 hours
Depth	9.2 in
Time of Concentration (Composite)	0.100 hours
Area (User Defined)	18,180 ft ²
<hr/>	
Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.093 hours
Flow (Peak, Computed)	3.22 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	3.22 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	9.0 in
Runoff Volume (Pervious)	13,619 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	13,610 ft ³
<hr/>	
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

Return Event: 100 years

Label: PDA-2C

Storm Event: 100 year

Scenario: Post-Development 100 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.73 ft ³ /s
Unit peak time, Tp	0.067 hours
Unit receding limb, Tr	0.267 hours
Total unit time, Tb	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
<hr/>	
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
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.5 in
Runoff Volume (Pervious)	1,606 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	1,605 ft ³
<hr/>	
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

Return Event: 1 years

Label: PDA-2D

Storm Event: 1 year

Scenario: Post-Development 1 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.99 ft ³ /s
Unit peak time, Tp	0.067 hours
Unit receding limb, Tr	0.267 hours
Total unit time, Tb	0.333 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 10 years

Label: PDA-2D

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)	0.100 hours
Area (User Defined)	7,650 ft ²
<hr/>	
Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.107 hours
Flow (Peak, Computed)	0.74 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	0.74 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.8 in
Runoff Volume (Pervious)	3,087 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	3,085 ft ³
<hr/>	
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

Return Event: 10 years

Label: PDA-2D

Storm Event: 10 year

Scenario: Post-Development 10 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.99 ft ³ /s
Unit peak time, Tp	0.067 hours
Unit receding limb, Tr	0.267 hours
Total unit time, Tb	0.333 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 25 years

Label: PDA-2D

Storm Event: 25 year

Scenario: Post-Development 25 year

Storm Event	25 year
Return Event	25 years
Duration	24.000 hours
Depth	6.4 in
Time of Concentration (Composite)	0.100 hours
Area (User Defined)	7,650 ft ²
<hr/>	
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
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.2 in
Runoff Volume (Pervious)	3,953 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	3,951 ft ³
<hr/>	
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

Return Event: 25 years

Label: PDA-2D

Storm Event: 25 year

Scenario: Post-Development 25 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.99 ft ³ /s
Unit peak time, Tp	0.067 hours
Unit receding limb, Tr	0.267 hours
Total unit time, Tb	0.333 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 100 years

Label: PDA-2D

Storm Event: 100 year

Scenario: Post-Development 100 year

Storm Event	100 year
Return Event	100 years
Duration	24.000 hours
Depth	9.2 in
Time of Concentration (Composite)	0.100 hours
Area (User Defined)	7,650 ft ²
<hr/>	
Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.093 hours
Flow (Peak, Computed)	1.35 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	1.35 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	9.0 in
Runoff Volume (Pervious)	5,731 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	5,727 ft ³
<hr/>	
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

Return Event: 100 years

Label: PDA-2D

Storm Event: 100 year

Scenario: Post-Development 100 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.99 ft ³ /s
Unit peak time, Tp	0.067 hours
Unit receding limb, Tr	0.267 hours
Total unit time, Tb	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
<hr/>	
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
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.9 in
Runoff Volume (Pervious)	305 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	305 ft ³
<hr/>	
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

Return Event: 1 years

Label: PDA-2E

Storm Event: 1 year

Scenario: Post-Development 1 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	0.80 ft ³ /s
Unit peak time, Tp	0.088 hours
Unit receding limb, Tr	0.350 hours
Total unit time, Tb	0.438 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 10 years

Label: PDA-2E

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)	0.131 hours
Area (User Defined)	4,060 ft ²
<hr/>	
Computational Time Increment	0.018 hours
Time to Peak (Computed)	12.131 hours
Flow (Peak, Computed)	0.25 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	0.24 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.7 in
Runoff Volume (Pervious)	910 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	909 ft ³
<hr/>	
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

Return Event: 10 years

Label: PDA-2E

Storm Event: 10 year

Scenario: Post-Development 10 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	0.80 ft ³ /s
Unit peak time, Tp	0.088 hours
Unit receding limb, Tr	0.350 hours
Total unit time, Tb	0.438 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 25 years

Label: PDA-2E

Storm Event: 25 year

Scenario: Post-Development 25 year

Storm Event	25 year
Return Event	25 years
Duration	24.000 hours
Depth	6.4 in
Time of Concentration (Composite)	0.131 hours
Area (User Defined)	4,060 ft ²
<hr/>	
Computational Time Increment	0.018 hours
Time to Peak (Computed)	12.114 hours
Flow (Peak, Computed)	0.36 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	0.35 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.9 in
Runoff Volume (Pervious)	1,308 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	1,306 ft ³
<hr/>	
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

Return Event: 25 years

Label: PDA-2E

Storm Event: 25 year

Scenario: Post-Development 25 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	0.80 ft ³ /s
Unit peak time, Tp	0.088 hours
Unit receding limb, Tr	0.350 hours
Total unit time, Tb	0.438 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 100 years

Label: PDA-2E

Storm Event: 100 year

Scenario: Post-Development 100 year

Storm Event	100 year
Return Event	100 years
Duration	24.000 hours
Depth	9.2 in
Time of Concentration (Composite)	0.131 hours
Area (User Defined)	4,060 ft ²
<hr/>	
Computational Time Increment	0.018 hours
Time to Peak (Computed)	12.114 hours
Flow (Peak, Computed)	0.58 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	0.57 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	2,170 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	2,167 ft ³
<hr/>	
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

Return Event: 100 years

Label: PDA-2E

Storm Event: 100 year

Scenario: Post-Development 100 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	0.80 ft ³ /s
Unit peak time, Tp	0.088 hours
Unit receding limb, Tr	0.350 hours
Total unit time, Tb	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)	0.275 hours
Area (User Defined)	53,198 ft ²
<hr/>	
Computational Time Increment	0.037 hours
Time to Peak (Computed)	12.209 hours
Flow (Peak, Computed)	0.87 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	0.86 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.9 in
Runoff Volume (Pervious)	3,997 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	3,981 ft ³
<hr/>	
SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.275 hours
Computational Time Increment	0.037 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

Return Event: 1 years

Label: PDA-3A

Storm Event: 1 year

Scenario: Post-Development 1 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	5.03 ft ³ /s
Unit peak time, Tp	0.183 hours
Unit receding limb, Tr	0.733 hours
Total unit time, Tb	0.917 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 10 years

Label: PDA-3A

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)	0.275 hours
Area (User Defined)	53,198 ft ²
<hr/>	
Computational Time Increment	0.037 hours
Time to Peak (Computed)	12.209 hours
Flow (Peak, Computed)	2.72 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	2.71 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.7 in
Runoff Volume (Pervious)	11,925 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	11,889 ft ³
<hr/>	
SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.275 hours
Computational Time Increment	0.037 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

Return Event: 10 years

Label: PDA-3A

Storm Event: 10 year

Scenario: Post-Development 10 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	5.03 ft ³ /s
Unit peak time, Tp	0.183 hours
Unit receding limb, Tr	0.733 hours
Total unit time, Tb	0.917 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 25 years

Label: PDA-3A

Storm Event: 25 year

Scenario: Post-Development 25 year

Storm Event	25 year
Return Event	25 years
Duration	24.000 hours
Depth	6.4 in
Time of Concentration (Composite)	0.275 hours
Area (User Defined)	53,198 ft ²
<hr/>	
Computational Time Increment	0.037 hours
Time to Peak (Computed)	12.209 hours
Flow (Peak, Computed)	3.90 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	3.89 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.9 in
Runoff Volume (Pervious)	17,139 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	17,090 ft ³
<hr/>	
SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.275 hours
Computational Time Increment	0.037 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

Return Event: 25 years

Label: PDA-3A

Storm Event: 25 year

Scenario: Post-Development 25 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	5.03 ft ³ /s
Unit peak time, Tp	0.183 hours
Unit receding limb, Tr	0.733 hours
Total unit time, Tb	0.917 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 100 years

Label: PDA-3A

Storm Event: 100 year

Scenario: Post-Development 100 year

Storm Event	100 year
Return Event	100 years
Duration	24.000 hours
Depth	9.2 in
Time of Concentration (Composite)	0.275 hours
Area (User Defined)	53,198 ft ²
<hr/>	
Computational Time Increment	0.037 hours
Time to Peak (Computed)	12.209 hours
Flow (Peak, Computed)	6.39 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	6.38 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	28,432 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	28,358 ft ³
<hr/>	
SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.275 hours
Computational Time Increment	0.037 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

Return Event: 100 years

Label: PDA-3A

Storm Event: 100 year

Scenario: Post-Development 100 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	5.03 ft ³ /s
Unit peak time, Tp	0.183 hours
Unit receding limb, Tr	0.733 hours
Total unit time, Tb	0.917 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
<hr/>	
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
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.9 in
Runoff Volume (Pervious)	16,669 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	16,654 ft ³
<hr/>	
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

Return Event: 1 years

Label: PDA-3B

Storm Event: 1 year

Scenario: Post-Development 1 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	27.02 ft ³ /s
Unit peak time, Tp	0.067 hours
Unit receding limb, Tr	0.267 hours
Total unit time, Tb	0.333 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 10 years

Label: PDA-3B

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)	0.100 hours
Area (User Defined)	103,861 ft ²
<hr/>	
Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.107 hours
Flow (Peak, Computed)	9.45 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	9.44 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.2 in
Runoff Volume (Pervious)	36,070 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	36,040 ft ³
<hr/>	
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

Return Event: 10 years

Label: PDA-3B

Storm Event: 10 year

Scenario: Post-Development 10 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	27.02 ft ³ /s
Unit peak time, Tp	0.067 hours
Unit receding limb, Tr	0.267 hours
Total unit time, Tb	0.333 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 25 years

Label: PDA-3B

Storm Event: 25 year

Scenario: Post-Development 25 year

Storm Event	25 year
Return Event	25 years
Duration	24.000 hours
Depth	6.4 in
Time of Concentration (Composite)	0.100 hours
Area (User Defined)	103,861 ft ²
<hr/>	
Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.107 hours
Flow (Peak, Computed)	12.25 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	12.24 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.5 in
Runoff Volume (Pervious)	47,624 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	47,586 ft ³
<hr/>	
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

Return Event: 25 years

Label: PDA-3B

Storm Event: 25 year

Scenario: Post-Development 25 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	27.02 ft ³ /s
Unit peak time, Tp	0.067 hours
Unit receding limb, Tr	0.267 hours
Total unit time, Tb	0.333 hours

Existing and Proposed Hydrologic Calculations

Subsection: Unit Hydrograph Summary

Return Event: 100 years

Label: PDA-3B

Storm Event: 100 year

Scenario: Post-Development 100 year

Storm Event	100 year
Return Event	100 years
Duration	24.000 hours
Depth	9.2 in
Time of Concentration (Composite)	0.100 hours
Area (User Defined)	103,861 ft ²
<hr/>	
Computational Time Increment	0.013 hours
Time to Peak (Computed)	12.107 hours
Flow (Peak, Computed)	17.95 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	17.94 ft ³ /s
<hr/>	
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
<hr/>	
Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.3 in
Runoff Volume (Pervious)	71,514 ft ³
<hr/>	
Hydrograph Volume (Area under Hydrograph curve)	
Volume	71,460 ft ³
<hr/>	
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

Return Event: 100 years

Label: PDA-3B

Storm Event: 100 year

Scenario: Post-Development 100 year

SCS Unit Hydrograph Parameters	
Unit peak, qp	27.02 ft ³ /s
Unit peak time, Tp	0.067 hours
Unit receding limb, Tr	0.267 hours
Total unit time, Tb	0.333 hours

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Return Event: 1 years

Label: DP-1

Storm Event: 1 year

Scenario: Post-Development 1 year

Summary for Hydrograph Addition at 'DP-1'

Upstream Link <Catchment to Outflow Node>	Upstream 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

Return Event: 1 years

Label: DP-1

Storm Event: 1 year

Scenario: Pre-Development 1 year

Summary for Hydrograph Addition at 'DP-1'

Upstream Link <Catchment to Outflow Node>	Upstream 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

Return Event: 10 years

Label: DP-1

Storm Event: 10 year

Scenario: Post-Development 10 year

Summary for Hydrograph Addition at 'DP-1'

Upstream Link <Catchment to Outflow Node>	Upstream 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

Return Event: 10 years

Label: DP-1

Storm Event: 10 year

Scenario: Pre-Development 10 year

Summary for Hydrograph Addition at 'DP-1'

Upstream Link <Catchment to Outflow Node>	Upstream 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

Return Event: 25 years

Label: DP-1

Storm Event: 25 year

Scenario: Post-Development 25 year

Summary for Hydrograph Addition at 'DP-1'

Upstream Link <Catchment to Outflow Node>	Upstream 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

Return Event: 25 years

Label: DP-1

Storm Event: 25 year

Scenario: Pre-Development 25 year

Summary for Hydrograph Addition at 'DP-1'

Upstream Link <Catchment to Outflow Node>	Upstream 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

Return Event: 100 years

Label: DP-1

Storm Event: 100 year

Scenario: Post-Development 100 year

Summary for Hydrograph Addition at 'DP-1'

Upstream Link <Catchment to Outflow Node>	Upstream 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

Return Event: 100 years

Label: DP-1

Storm Event: 100 year

Scenario: Pre-Development 100 year

Summary for Hydrograph Addition at 'DP-1'

Upstream Link <Catchment to Outflow Node>	Upstream 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

Return Event: 1 years

Label: DP-2

Storm Event: 1 year

Scenario: Post-Development 1 year

Summary for Hydrograph Addition at 'DP-2'

Upstream Link	Upstream Node
MC-3500 - 2 OUT	MC-3500 - 2
<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)	MC-3500 - 2 OUT	9,449	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	64,974	12.400	9.24

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Return Event: 1 years

Label: DP-2

Storm Event: 1 year

Scenario: Pre-Development 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

Return Event: 10 years

Label: DP-2

Storm Event: 10 year

Scenario: Post-Development 10 year

Summary for Hydrograph Addition at 'DP-2'

Upstream Link	Upstream Node
MC-3500 - 2 OUT	MC-3500 - 2
<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)	MC-3500 - 2 OUT	16,794	13.150	0.52
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	208,478	12.350	35.76

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Return Event: 10 years

Label: DP-2

Storm Event: 10 year

Scenario: Pre-Development 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

Return Event: 25 years

Label: DP-2

Storm Event: 25 year

Scenario: Post-Development 25 year

Summary for Hydrograph Addition at 'DP-2'

Upstream Link	Upstream Node
MC-3500 - 2 OUT	MC-3500 - 2
<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)	MC-3500 - 2 OUT	21,802	12.700	0.97
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	307,639	12.350	54.13

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Return Event: 25 years

Label: DP-2

Storm Event: 25 year

Scenario: Pre-Development 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

Return Event: 100 years

Label: DP-2

Storm Event: 100 year

Scenario: Post-Development 100 year

Summary for Hydrograph Addition at 'DP-2'

Upstream Link	Upstream Node
MC-3500 - 2 OUT	MC-3500 - 2
<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)	MC-3500 - 2 OUT	32,427	12.600	1.74
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	527,682	12.300	94.10

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Return Event: 100 years

Label: DP-2

Storm Event: 100 year

Scenario: Pre-Development 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

Return Event: 1 years

Label: DP-3

Storm Event: 1 year

Scenario: Post-Development 1 year

Summary for Hydrograph Addition at 'DP-3'

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

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)	MC-3500 OUT	16,378	12.600	0.78
Flow (From)	PDA-3A	3,981	12.200	0.86
Flow (In)	DP-3	33,203	12.200	4.54

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Return Event: 1 years

Label: DP-3

Storm Event: 1 year

Scenario: Pre-Development 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

Return Event: 10 years

Label: DP-3

Storm Event: 10 year

Scenario: Post-Development 10 year

Summary for Hydrograph Addition at 'DP-3'

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

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)	MC-3500 OUT	35,493	12.400	3.05
Flow (From)	PDA-3A	11,889	12.200	2.71
Flow (In)	DP-3	77,498	12.200	12.09

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Return Event: 10 years

Label: DP-3

Storm Event: 10 year

Scenario: Pre-Development 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

Return Event: 25 years

Label: DP-3

Storm Event: 25 year

Scenario: Post-Development 25 year

Summary for Hydrograph Addition at 'DP-3'

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

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)	MC-3500 OUT	46,873	12.400	4.12
Flow (From)	PDA-3A	17,090	12.200	3.89
Flow (In)	DP-3	104,582	12.200	16.73

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Return Event: 25 years

Label: DP-3

Storm Event: 25 year

Scenario: Pre-Development 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

Return Event: 100 years

Label: DP-3

Storm Event: 100 year

Scenario: Post-Development 100 year

Summary for Hydrograph Addition at 'DP-3'

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

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)	MC-3500 OUT	70,330	12.400	6.36
Flow (From)	PDA-3A	28,358	12.200	6.38
Flow (In)	DP-3	161,215	12.200	25.82

Existing and Proposed Hydrologic Calculations

Subsection: Addition Summary

Return Event: 100 years

Label: DP-3

Storm Event: 100 year

Scenario: Pre-Development 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

Bentley Systems, Inc. Haestad Methods Solution Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 201 of 815

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

Bentley Systems, Inc. Haestad Methods Solution Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 204 of 815

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

Bentley Systems, Inc. Haestad Methods Solution Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 207 of 815

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

Bentley Systems, Inc. Haestad Methods Solution Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 210 of 815

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

Return Event: 1 years

Label: 6" 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: 6" 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	93.00	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

Bentley Systems, Inc. Haestad Methods Solution Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 213 of 815

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 1 years

Label: 6" 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: 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

Bentley Systems, Inc. Haestad Methods Solution
Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 219 of 815

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

Bentley Systems, Inc. Haestad Methods Solution Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 222 of 815

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 - 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	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	71.50	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	71.51	71.51	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	71.52	71.52	71.52
3.750	71.52	71.52	71.52	71.52	71.52
4.000	71.52	71.52	71.52	71.52	71.52
4.250	71.52	71.52	71.53	71.53	71.53
4.500	71.53	71.53	71.53	71.53	71.53
4.750	71.53	71.53	71.53	71.54	71.54
5.000	71.54	71.54	71.54	71.54	71.54
5.250	71.54	71.54	71.54	71.54	71.55
5.500	71.55	71.55	71.55	71.55	71.55
5.750	71.55	71.55	71.55	71.56	71.56
6.000	71.56	71.56	71.56	71.56	71.56
6.250	71.56	71.56	71.57	71.57	71.57
6.500	71.57	71.57	71.57	71.57	71.58
6.750	71.58	71.58	71.58	71.58	71.58
7.000	71.59	71.59	71.59	71.59	71.59
7.250	71.60	71.60	71.60	71.60	71.60
7.500	71.61	71.61	71.61	71.61	71.61
7.750	71.62	71.62	71.62	71.62	71.63
8.000	71.63	71.63	71.63	71.63	71.64
8.250	71.64	71.64	71.65	71.65	71.65
8.500	71.65	71.66	71.66	71.66	71.67
8.750	71.67	71.68	71.68	71.68	71.69
9.000	71.69	71.70	71.70	71.70	71.71
9.250	71.71	71.72	71.72	71.73	71.73
9.500	71.74	71.74	71.75	71.75	71.76
9.750	71.76	71.77	71.77	71.78	71.78

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 1 years

Label: MC-3500 - 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	71.79	71.79	71.80	71.81	71.81
10.250	71.82	71.82	71.83	71.84	71.84
10.500	71.85	71.86	71.87	71.88	71.88
10.750	71.89	71.90	71.91	71.92	71.93
11.000	71.94	71.95	71.96	71.97	71.98
11.250	71.99	72.00	72.01	72.02	72.03
11.500	72.04	72.05	72.07	72.08	72.10
11.750	72.11	72.13	72.15	72.17	72.19
12.000	72.21	72.23	72.25	72.27	72.30
12.250	72.32	72.34	72.36	72.37	72.39
12.500	72.41	72.42	72.44	72.45	72.47
12.750	72.48	72.50	72.51	72.52	72.53
13.000	72.54	72.55	72.56	72.57	72.58
13.250	72.59	72.60	72.61	72.62	72.62
13.500	72.63	72.63	72.63	72.63	72.64
13.750	72.64	72.64	72.65	72.65	72.65
14.000	72.65	72.66	72.66	72.66	72.66
14.250	72.67	72.67	72.67	72.67	72.67
14.500	72.68	72.68	72.68	72.68	72.68
14.750	72.69	72.69	72.69	72.69	72.69
15.000	72.70	72.70	72.70	72.70	72.70
15.250	72.70	72.71	72.71	72.71	72.71
15.500	72.71	72.71	72.71	72.72	72.72
15.750	72.72	72.72	72.72	72.72	72.72
16.000	72.72	72.72	72.73	72.73	72.73
16.250	72.73	72.73	72.73	72.73	72.73
16.500	72.73	72.73	72.74	72.74	72.74
16.750	72.74	72.74	72.74	72.74	72.74
17.000	72.74	72.74	72.74	72.74	72.74
17.250	72.73	72.72	72.72	72.71	72.71
17.500	72.70	72.69	72.69	72.68	72.67
17.750	72.67	72.66	72.66	72.65	72.64
18.000	72.64	72.63	72.63	72.62	72.61
18.250	72.61	72.60	72.60	72.59	72.58
18.500	72.58	72.57	72.57	72.56	72.56
18.750	72.55	72.54	72.54	72.53	72.53
19.000	72.52	72.52	72.51	72.51	72.50
19.250	72.49	72.49	72.48	72.47	72.47
19.500	72.46	72.45	72.45	72.44	72.43
19.750	72.43	72.42	72.41	72.41	72.40
20.000	72.40	72.39	72.37	72.36	72.35

Bentley Systems, Inc. Haestad Methods Solution
Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 225 of 815

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 1 years

Label: MC-3500 - 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	72.34	72.33	72.31	72.30	72.29
20.500	72.28	72.27	72.26	72.25	72.24
20.750	72.23	72.22	72.21	72.19	72.18
21.000	72.17	72.16	72.15	72.15	72.14
21.250	72.13	72.12	72.11	72.10	72.09
21.500	72.08	72.07	72.06	72.05	72.04
21.750	72.04	72.03	72.02	72.01	72.00
22.000	71.99	71.98	71.97	71.96	71.94
22.250	71.93	71.92	71.91	71.90	71.89
22.500	71.88	71.87	71.87	71.86	71.85
22.750	71.84	71.83	71.83	71.82	71.81
23.000	71.81	71.80	71.79	71.79	71.78
23.250	71.77	71.77	71.76	71.76	71.75
23.500	71.75	71.74	71.74	71.73	71.73
23.750	71.73	71.72	71.72	71.71	71.71
24.000	71.71	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 10 years

Label: MC-3500 - 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	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	71.52	71.52	71.52
2.000	71.52	71.52	71.52	71.52	71.52
2.250	71.52	71.52	71.53	71.53	71.53
2.500	71.53	71.53	71.53	71.53	71.53
2.750	71.54	71.54	71.54	71.54	71.54
3.000	71.54	71.55	71.55	71.55	71.55
3.250	71.55	71.55	71.56	71.56	71.56
3.500	71.56	71.56	71.57	71.57	71.57
3.750	71.57	71.57	71.58	71.58	71.58
4.000	71.58	71.59	71.59	71.59	71.59
4.250	71.59	71.60	71.60	71.60	71.60
4.500	71.60	71.61	71.61	71.61	71.61
4.750	71.62	71.62	71.62	71.62	71.63
5.000	71.63	71.63	71.63	71.63	71.64
5.250	71.64	71.64	71.64	71.65	71.65
5.500	71.65	71.65	71.66	71.66	71.66
5.750	71.66	71.66	71.67	71.67	71.67
6.000	71.67	71.68	71.68	71.68	71.68
6.250	71.69	71.69	71.69	71.69	71.70
6.500	71.70	71.70	71.71	71.71	71.71
6.750	71.72	71.72	71.72	71.73	71.73
7.000	71.73	71.74	71.74	71.74	71.75
7.250	71.75	71.76	71.76	71.76	71.77
7.500	71.77	71.78	71.78	71.79	71.79
7.750	71.79	71.80	71.80	71.81	71.81
8.000	71.82	71.82	71.83	71.83	71.84
8.250	71.84	71.85	71.85	71.86	71.87
8.500	71.87	71.88	71.89	71.89	71.90
8.750	71.91	71.92	71.92	71.93	71.94
9.000	71.95	71.96	71.96	71.97	71.98
9.250	71.99	72.00	72.01	72.01	72.02
9.500	72.02	72.03	72.04	72.05	72.05
9.750	72.06	72.07	72.08	72.08	72.09

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 10 years

Label: MC-3500 - 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	72.10	72.11	72.11	72.12	72.13
10.250	72.14	72.15	72.16	72.17	72.18
10.500	72.19	72.20	72.21	72.22	72.23
10.750	72.24	72.25	72.26	72.27	72.28
11.000	72.30	72.31	72.32	72.33	72.34
11.250	72.35	72.36	72.38	72.39	72.40
11.500	72.41	72.43	72.44	72.46	72.48
11.750	72.49	72.51	72.52	72.54	72.55
12.000	72.57	72.59	72.62	72.64	72.70
12.250	72.78	72.85	72.90	72.95	72.99
12.500	73.02	73.05	73.08	73.10	73.12
12.750	73.14	73.15	73.16	73.17	73.17
13.000	73.18	73.18	73.18	73.18	73.18
13.250	73.18	73.18	73.18	73.17	73.17
13.500	73.17	73.16	73.16	73.16	73.15
13.750	73.15	73.14	73.14	73.13	73.13
14.000	73.12	73.12	73.11	73.11	73.11
14.250	73.10	73.10	73.09	73.09	73.08
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	73.04	73.03	73.03	73.03
15.500	73.03	73.03	73.02	73.02	73.01
15.750	73.00	73.00	72.99	72.99	72.98
16.000	72.97	72.97	72.96	72.96	72.95
16.250	72.95	72.94	72.94	72.93	72.93
16.500	72.92	72.92	72.91	72.91	72.91
16.750	72.90	72.90	72.90	72.89	72.89
17.000	72.89	72.88	72.88	72.88	72.87
17.250	72.87	72.87	72.87	72.86	72.86
17.500	72.86	72.86	72.85	72.85	72.85
17.750	72.85	72.84	72.84	72.84	72.84
18.000	72.84	72.83	72.83	72.83	72.83
18.250	72.83	72.83	72.82	72.82	72.82
18.500	72.82	72.82	72.82	72.82	72.81
18.750	72.81	72.81	72.81	72.81	72.81
19.000	72.81	72.81	72.81	72.80	72.80
19.250	72.80	72.80	72.80	72.80	72.80
19.500	72.80	72.80	72.80	72.80	72.80
19.750	72.80	72.79	72.79	72.79	72.79
20.000	72.79	72.79	72.79	72.79	72.79

Bentley Systems, Inc. Haestad Methods Solution Center

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

AMS Buchanan.ppc
12/21/2023

PondPack CONNECT Edition

[10.02.00.01]

Page 228 of 815

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 10 years

Label: MC-3500 - 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	72.79	72.79	72.79	72.79	72.79
20.500	72.79	72.79	72.79	72.79	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	72.78	72.78	72.78
22.000	72.78	72.78	72.78	72.78	72.78
22.250	72.78	72.78	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	72.76
23.500	72.75	72.74	72.74	72.73	72.72
23.750	72.72	72.71	72.70	72.70	72.69
24.000	72.68	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 25 years

Label: MC-3500 - 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	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	71.52
1.500	71.52	71.52	71.52	71.52	71.52
1.750	71.52	71.53	71.53	71.53	71.53
2.000	71.53	71.53	71.53	71.54	71.54
2.250	71.54	71.54	71.54	71.55	71.55
2.500	71.55	71.55	71.56	71.56	71.56
2.750	71.56	71.56	71.57	71.57	71.57
3.000	71.57	71.58	71.58	71.58	71.59
3.250	71.59	71.59	71.59	71.60	71.60
3.500	71.60	71.60	71.61	71.61	71.61
3.750	71.62	71.62	71.62	71.62	71.63
4.000	71.63	71.63	71.64	71.64	71.64
4.250	71.65	71.65	71.65	71.65	71.66
4.500	71.66	71.66	71.67	71.67	71.67
4.750	71.67	71.68	71.68	71.68	71.69
5.000	71.69	71.69	71.70	71.70	71.70
5.250	71.70	71.71	71.71	71.71	71.72
5.500	71.72	71.72	71.73	71.73	71.73
5.750	71.73	71.74	71.74	71.74	71.75
6.000	71.75	71.75	71.76	71.76	71.76
6.250	71.76	71.77	71.77	71.77	71.78
6.500	71.78	71.79	71.79	71.79	71.80
6.750	71.80	71.81	71.81	71.82	71.82
7.000	71.83	71.83	71.83	71.84	71.84
7.250	71.85	71.86	71.86	71.87	71.87
7.500	71.88	71.88	71.89	71.89	71.90
7.750	71.90	71.91	71.92	71.92	71.93
8.000	71.93	71.94	71.95	71.95	71.96
8.250	71.97	71.97	71.98	71.99	72.00
8.500	72.00	72.01	72.02	72.02	72.03
8.750	72.03	72.04	72.05	72.06	72.06
9.000	72.07	72.08	72.09	72.09	72.10
9.250	72.11	72.12	72.13	72.14	72.15
9.500	72.16	72.16	72.17	72.18	72.19
9.750	72.20	72.21	72.22	72.23	72.24

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 25 years

Label: MC-3500 - 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	72.25	72.26	72.27	72.28	72.29
10.250	72.30	72.31	72.33	72.34	72.35
10.500	72.36	72.37	72.38	72.39	72.40
10.750	72.41	72.42	72.43	72.44	72.45
11.000	72.46	72.48	72.49	72.50	72.51
11.250	72.52	72.52	72.53	72.54	72.55
11.500	72.57	72.58	72.59	72.60	72.61
11.750	72.63	72.64	72.66	72.67	72.69
12.000	72.71	72.75	72.87	73.03	73.17
12.250	73.32	73.47	73.60	73.71	73.79
12.500	73.85	73.90	73.92	73.93	73.94
12.750	73.94	73.93	73.92	73.91	73.90
13.000	73.88	73.87	73.85	73.83	73.81
13.250	73.79	73.77	73.75	73.73	73.71
13.500	73.68	73.66	73.64	73.62	73.60
13.750	73.58	73.56	73.54	73.52	73.50
14.000	73.48	73.47	73.45	73.43	73.41
14.250	73.40	73.38	73.37	73.35	73.34
14.500	73.32	73.31	73.30	73.28	73.27
14.750	73.26	73.25	73.24	73.23	73.22
15.000	73.21	73.20	73.19	73.18	73.17
15.250	73.17	73.16	73.15	73.14	73.14
15.500	73.13	73.12	73.12	73.11	73.11
15.750	73.10	73.10	73.09	73.09	73.08
16.000	73.08	73.07	73.07	73.07	73.06
16.250	73.06	73.05	73.04	73.03	73.02
16.500	73.02	73.01	73.00	73.00	72.99
16.750	72.98	72.98	72.97	72.97	72.96
17.000	72.96	72.95	72.95	72.94	72.94
17.250	72.93	72.93	72.92	72.92	72.91
17.500	72.91	72.91	72.90	72.90	72.90
17.750	72.89	72.89	72.89	72.88	72.88
18.000	72.88	72.87	72.87	72.87	72.87
18.250	72.86	72.86	72.86	72.86	72.85
18.500	72.85	72.85	72.85	72.85	72.84
18.750	72.84	72.84	72.84	72.84	72.83
19.000	72.83	72.83	72.83	72.83	72.83
19.250	72.83	72.82	72.82	72.82	72.82
19.500	72.82	72.82	72.82	72.82	72.82
19.750	72.81	72.81	72.81	72.81	72.81
20.000	72.81	72.81	72.81	72.81	72.81

Bentley Systems, Inc. Haestad Methods Solution Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 231 of 815

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 25 years

Label: MC-3500 - 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	72.81	72.80	72.80	72.80	72.80
20.500	72.80	72.80	72.80	72.80	72.80
20.750	72.80	72.80	72.80	72.80	72.80
21.000	72.80	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	72.79	72.79	72.79	72.79
22.000	72.79	72.79	72.79	72.79	72.79
22.250	72.79	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	72.78
24.000	72.78	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 100 years

Label: MC-3500 - 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	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	71.52	71.52	71.52	71.52	71.52
1.250	71.53	71.53	71.53	71.53	71.54
1.500	71.54	71.54	71.55	71.55	71.55
1.750	71.56	71.56	71.56	71.57	71.57
2.000	71.57	71.58	71.58	71.58	71.59
2.250	71.59	71.59	71.60	71.60	71.61
2.500	71.61	71.61	71.62	71.62	71.63
2.750	71.63	71.63	71.64	71.64	71.65
3.000	71.65	71.66	71.66	71.66	71.67
3.250	71.67	71.68	71.68	71.69	71.69
3.500	71.69	71.70	71.70	71.71	71.71
3.750	71.72	71.72	71.73	71.73	71.73
4.000	71.74	71.74	71.75	71.75	71.76
4.250	71.76	71.77	71.77	71.77	71.78
4.500	71.78	71.79	71.79	71.80	71.80
4.750	71.80	71.81	71.81	71.82	71.82
5.000	71.83	71.83	71.83	71.84	71.84
5.250	71.85	71.85	71.86	71.86	71.86
5.500	71.87	71.87	71.88	71.88	71.89
5.750	71.89	71.89	71.90	71.90	71.91
6.000	71.91	71.91	71.92	71.92	71.93
6.250	71.93	71.94	71.94	71.95	71.95
6.500	71.96	71.96	71.97	71.98	71.98
6.750	71.99	71.99	72.00	72.00	72.01
7.000	72.01	72.02	72.02	72.03	72.03
7.250	72.04	72.04	72.05	72.06	72.06
7.500	72.07	72.08	72.08	72.09	72.10
7.750	72.10	72.11	72.12	72.12	72.13
8.000	72.14	72.15	72.15	72.16	72.17
8.250	72.18	72.18	72.19	72.20	72.21
8.500	72.22	72.23	72.24	72.25	72.26
8.750	72.27	72.28	72.29	72.30	72.31
9.000	72.32	72.33	72.34	72.35	72.36
9.250	72.37	72.38	72.39	72.40	72.41
9.500	72.42	72.43	72.44	72.45	72.46
9.750	72.47	72.48	72.49	72.50	72.51

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 100 years

Label: MC-3500 - 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	72.52	72.52	72.53	72.54	72.55
10.250	72.56	72.56	72.57	72.58	72.59
10.500	72.60	72.60	72.61	72.62	72.63
10.750	72.64	72.65	72.66	72.67	72.68
11.000	72.69	72.70	72.71	72.72	72.73
11.250	72.74	72.75	72.76	72.77	72.78
11.500	72.79	72.80	72.81	72.82	72.83
11.750	72.85	72.86	72.89	72.97	73.10
12.000	73.26	73.51	73.90	74.39	74.85
12.250	75.25	75.58	75.90	76.17	76.37
12.500	76.51	76.58	76.60	76.58	76.53
12.750	76.48	76.41	76.34	76.27	76.18
13.000	76.10	76.00	75.92	75.84	75.75
13.250	75.67	75.58	75.50	75.44	75.38
13.500	75.32	75.26	75.20	75.14	75.08
13.750	75.02	74.97	74.92	74.87	74.82
14.000	74.77	74.72	74.67	74.63	74.58
14.250	74.53	74.49	74.44	74.40	74.36
14.500	74.32	74.28	74.24	74.21	74.17
14.750	74.13	74.09	74.06	74.02	73.99
15.000	73.96	73.92	73.89	73.86	73.83
15.250	73.80	73.77	73.74	73.72	73.69
15.500	73.66	73.63	73.61	73.58	73.56
15.750	73.53	73.51	73.48	73.46	73.44
16.000	73.42	73.40	73.38	73.36	73.35
16.250	73.33	73.31	73.30	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	73.17
17.000	73.16	73.15	73.14	73.13	73.12
17.250	73.11	73.09	73.08	73.07	73.06
17.500	73.05	73.05	73.04	73.03	73.02
17.750	73.01	73.01	73.00	72.99	72.99
18.000	72.98	72.98	72.97	72.97	72.96
18.250	72.96	72.95	72.95	72.94	72.94
18.500	72.93	72.93	72.92	72.92	72.92
18.750	72.91	72.91	72.91	72.90	72.90
19.000	72.90	72.89	72.89	72.89	72.88
19.250	72.88	72.88	72.88	72.87	72.87
19.500	72.87	72.87	72.87	72.86	72.86
19.750	72.86	72.86	72.86	72.85	72.85
20.000	72.85	72.85	72.85	72.85	72.84

Bentley Systems, Inc. Haestad Methods Solution
Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 234 of 815

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Elevation

Return Event: 100 years

Label: MC-3500 - 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	72.84	72.84	72.84	72.84	72.84
20.500	72.84	72.83	72.83	72.83	72.83
20.750	72.83	72.83	72.83	72.83	72.83
21.000	72.82	72.82	72.82	72.82	72.82
21.250	72.82	72.82	72.82	72.82	72.82
21.500	72.82	72.82	72.81	72.81	72.81
21.750	72.81	72.81	72.81	72.81	72.81
22.000	72.81	72.81	72.81	72.81	72.81
22.250	72.81	72.81	72.81	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	72.80	72.80	72.80
23.250	72.80	72.80	72.80	72.80	72.80
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. 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

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)
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

Bentley Systems, Inc. Haestad Methods Solution Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 237 of 815

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	65.21
12.250	65.30	65.35	65.38	65.40	65.39
12.500	65.38	65.35	65.31	65.27	65.23
12.750	65.19	65.15	65.11	65.08	65.04
13.000	65.01	64.98	64.95	64.92	64.89
13.250	64.87	64.85	64.82	64.80	64.78
13.500	64.76	64.74	64.72	64.70	64.69
13.750	64.67	64.65	64.63	64.62	64.60
14.000	64.58	64.57	64.55	64.54	64.52
14.250	64.51	64.49	64.48	64.47	64.46
14.500	64.44	64.43	64.42	64.41	64.40
14.750	64.39	64.38	64.37	64.36	64.35
15.000	64.34	64.33	64.32	64.31	64.30
15.250	64.29	64.28	64.27	64.26	64.25
15.500	64.24	64.23	64.22	64.21	64.20
15.750	64.19	64.18	64.17	64.16	64.15
16.000	64.13	64.12	64.11	64.10	64.09
16.250	64.08	64.07	64.06	64.05	64.04
16.500	64.03	64.01	64.00	63.99	63.98
16.750	63.97	63.96	63.95	63.94	63.93
17.000	63.92	63.91	63.90	63.89	63.88
17.250	63.87	63.86	63.85	63.83	63.82
17.500	63.81	63.79	63.78	63.77	63.75
17.750	63.74	63.73	63.72	63.70	63.69
18.000	63.68	63.67	63.66	63.64	63.63
18.250	63.62	63.61	63.60	63.59	63.58
18.500	63.57	63.56	63.55	63.54	63.53
18.750	63.52	63.51	63.50	63.49	63.48
19.000	63.47	63.47	63.46	63.45	63.44
19.250	63.43	63.43	63.42	63.41	63.40
19.500	63.39	63.39	63.38	63.37	63.37
19.750	63.36	63.35	63.34	63.33	63.32
20.000	63.31	63.30	63.29	63.29	63.28

Bentley Systems, Inc. Haestad Methods Solution Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 240 of 815

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	63.25	63.25	63.24
20.500	63.23	63.23	63.22	63.21	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	63.15	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	63.08
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	65.68	65.86
12.250	65.97	66.04	66.08	66.09	66.08
12.500	66.05	66.00	65.94	65.87	65.80
12.750	65.73	65.67	65.61	65.55	65.48
13.000	65.43	65.37	65.31	65.26	65.21
13.250	65.17	65.13	65.09	65.05	65.02
13.500	64.99	64.96	64.93	64.91	64.88
13.750	64.86	64.84	64.82	64.80	64.78
14.000	64.76	64.74	64.72	64.70	64.69
14.250	64.67	64.65	64.64	64.62	64.61
14.500	64.59	64.58	64.56	64.55	64.54
14.750	64.52	64.51	64.50	64.49	64.48
15.000	64.47	64.45	64.44	64.43	64.42
15.250	64.41	64.40	64.39	64.38	64.37
15.500	64.36	64.35	64.35	64.34	64.33
15.750	64.32	64.31	64.30	64.29	64.28
16.000	64.27	64.26	64.25	64.24	64.23
16.250	64.22	64.21	64.20	64.19	64.18
16.500	64.17	64.16	64.15	64.14	64.13
16.750	64.12	64.11	64.10	64.09	64.08
17.000	64.07	64.06	64.05	64.04	64.03
17.250	64.02	64.01	64.00	63.99	63.98
17.500	63.97	63.96	63.95	63.94	63.93
17.750	63.92	63.91	63.90	63.89	63.88
18.000	63.87	63.86	63.85	63.83	63.82
18.250	63.81	63.80	63.78	63.77	63.76
18.500	63.75	63.74	63.72	63.71	63.70
18.750	63.69	63.68	63.67	63.66	63.65
19.000	63.64	63.63	63.62	63.61	63.60
19.250	63.59	63.58	63.57	63.56	63.55
19.500	63.54	63.54	63.53	63.52	63.51
19.750	63.50	63.50	63.49	63.48	63.47
20.000	63.46	63.46	63.45	63.44	63.44

Bentley Systems, Inc. Haestad Methods Solution
Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 243 of 815

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	63.42	63.41	63.41	63.40
20.500	63.39	63.39	63.38	63.38	63.37
20.750	63.36	63.36	63.35	63.34	63.33
21.000	63.33	63.32	63.31	63.30	63.29
21.250	63.29	63.28	63.27	63.27	63.26
21.500	63.25	63.25	63.24	63.24	63.23
21.750	63.23	63.22	63.22	63.21	63.21
22.000	63.20	63.20	63.19	63.19	63.19
22.250	63.18	63.18	63.17	63.17	63.17
22.500	63.16	63.16	63.16	63.15	63.15
22.750	63.15	63.15	63.14	63.14	63.14
23.000	63.13	63.13	63.13	63.13	63.12
23.250	63.12	63.12	63.12	63.11	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	64.74	64.88	65.03	65.20	65.42
12.000	65.74	66.17	66.65	67.20	67.66
12.250	67.93	68.09	68.16	68.18	68.13
12.500	68.03	67.88	67.71	67.52	67.33
12.750	67.16	67.00	66.84	66.73	66.61
13.000	66.50	66.39	66.29	66.19	66.10
13.250	66.01	65.93	65.85	65.78	65.71
13.500	65.64	65.58	65.51	65.46	65.40
13.750	65.34	65.29	65.25	65.21	65.17
14.000	65.13	65.09	65.06	65.03	65.00
14.250	64.97	64.95	64.92	64.90	64.88
14.500	64.86	64.84	64.82	64.81	64.79
14.750	64.77	64.76	64.74	64.73	64.71
15.000	64.70	64.69	64.67	64.66	64.64
15.250	64.63	64.62	64.61	64.59	64.58
15.500	64.57	64.56	64.55	64.53	64.52
15.750	64.51	64.50	64.49	64.48	64.47
16.000	64.46	64.45	64.44	64.43	64.42
16.250	64.41	64.40	64.39	64.38	64.37
16.500	64.36	64.35	64.35	64.34	64.33
16.750	64.32	64.31	64.31	64.30	64.29
17.000	64.28	64.27	64.26	64.26	64.25
17.250	64.24	64.23	64.22	64.21	64.20
17.500	64.20	64.19	64.18	64.17	64.16
17.750	64.15	64.14	64.13	64.12	64.11
18.000	64.10	64.09	64.08	64.07	64.07
18.250	64.06	64.05	64.04	64.03	64.02
18.500	64.01	64.00	63.99	63.98	63.97
18.750	63.97	63.96	63.95	63.94	63.93
19.000	63.92	63.91	63.91	63.90	63.89
19.250	63.88	63.87	63.86	63.86	63.85
19.500	63.83	63.82	63.81	63.80	63.79
19.750	63.78	63.77	63.76	63.75	63.74
20.000	63.73	63.72	63.71	63.71	63.70

Bentley Systems, Inc. Haestad Methods Solution
Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 246 of 815

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	63.68	63.67	63.66	63.65
20.500	63.65	63.64	63.63	63.62	63.61
20.750	63.61	63.60	63.59	63.58	63.58
21.000	63.57	63.56	63.55	63.55	63.54
21.250	63.53	63.53	63.52	63.51	63.51
21.500	63.50	63.50	63.49	63.48	63.48
21.750	63.47	63.47	63.46	63.45	63.45
22.000	63.44	63.44	63.43	63.43	63.42
22.250	63.42	63.41	63.40	63.40	63.39
22.500	63.39	63.38	63.38	63.37	63.37
22.750	63.37	63.36	63.36	63.35	63.34
23.000	63.34	63.33	63.32	63.32	63.31
23.250	63.30	63.30	63.29	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	63.23
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

Bentley Systems, Inc. Haestad Methods Solution
Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 249 of 815

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

Bentley Systems, Inc. Haestad Methods Solution Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 252 of 815

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

Bentley Systems, Inc. Haestad Methods Solution
Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 255 of 815

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

Bentley Systems, Inc. Haestad Methods Solution Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 258 of 815

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. Volume

Return Event: 1 years

Label: 24" 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)					
0.000	0	0	0	0	0	0
0.250	0	0	0	0	0	0
0.500	0	0	0	0	0	0
0.750	0	0	0	0	0	0
1.000	0	0	0	0	0	0
1.250	0	0	0	0	0	0
1.500	0	0	0	0	0	0
1.750	0	0	0	0	0	0
2.000	0	0	0	0	0	0
2.250	0	0	0	0	0	0
2.500	0	0	0	0	0	0
2.750	0	0	0	0	0	0
3.000	0	0	0	0	0	0
3.250	0	0	0	0	0	0
3.500	0	0	0	0	0	0
3.750	0	0	0	0	0	0
4.000	0	0	0	0	0	0
4.250	0	0	0	0	0	0
4.500	0	0	0	0	0	0
4.750	0	0	0	0	0	0
5.000	0	0	0	0	0	0
5.250	0	0	0	0	0	0
5.500	0	0	0	0	0	0
5.750	0	0	0	0	0	0
6.000	0	0	0	0	0	0
6.250	0	0	0	0	0	0
6.500	0	0	0	0	0	0
6.750	0	0	0	0	0	0
7.000	0	0	0	0	0	0
7.250	0	0	0	0	0	0
7.500	0	0	0	0	0	0
7.750	0	0	0	0	0	0
8.000	0	0	0	0	0	0
8.250	0	0	0	0	0	0
8.500	0	0	0	0	0	0
8.750	0	0	0	0	0	0
9.000	0	0	0	0	0	0
9.250	0	0	0	0	0	0
9.500	0	0	0	0	0	0
9.750	0	0	0	0	0	0

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 1 years

Label: 24" 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)				
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

Bentley Systems, Inc. Haestad Methods Solution
Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 261 of 815

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 1 years

Label: 24" 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)					
20.250	0	0	0	0	0	0
20.500	0	0	0	0	0	0
20.750	0	0	0	0	0	0
21.000	0	0	0	0	0	0
21.250	0	0	0	0	0	0
21.500	0	0	0	0	0	0
21.750	0	0	0	0	0	0
22.000	0	0	0	0	0	0
22.250	0	0	0	0	0	0
22.500	0	0	0	0	0	0
22.750	0	0	0	0	0	0
23.000	0	0	0	0	0	0
23.250	0	0	0	0	0	0
23.500	0	0	0	0	0	0
23.750	0	0	0	0	0	0
24.000	0	(N/A)	(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)					
0.000	0	0	0	0	0	0
0.250	0	0	0	0	0	0
0.500	0	0	0	0	0	0
0.750	0	0	0	0	0	0
1.000	0	0	0	0	0	0
1.250	0	0	0	0	0	0
1.500	0	0	0	0	0	0
1.750	0	0	0	0	0	0
2.000	0	0	0	0	0	0
2.250	0	0	0	0	0	0
2.500	0	0	0	0	0	0
2.750	0	0	0	0	0	0
3.000	0	0	0	0	0	0
3.250	0	0	0	0	0	0
3.500	0	0	0	0	0	0
3.750	0	0	0	0	0	0
4.000	0	0	0	0	0	0
4.250	0	0	0	0	0	0
4.500	0	0	0	0	0	0
4.750	0	0	0	0	0	0
5.000	0	0	0	0	0	0
5.250	0	0	0	0	0	0
5.500	0	0	0	0	0	0
5.750	0	0	0	0	0	0
6.000	0	0	0	0	0	0
6.250	0	0	0	0	0	0
6.500	0	0	0	0	0	0
6.750	0	0	0	0	0	0
7.000	0	0	0	0	0	0
7.250	0	0	0	0	0	0
7.500	0	0	0	0	0	0
7.750	0	0	0	0	0	0
8.000	0	0	0	0	0	0
8.250	0	0	0	0	0	0
8.500	0	0	0	0	0	0
8.750	0	0	0	0	0	0
9.000	0	0	0	0	0	0
9.250	0	0	0	0	0	0
9.500	0	0	0	0	0	8
9.750	9	9	10	11	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)				
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

Bentley Systems, Inc. Haestad Methods Solution Center

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

PondPack CONNECT Edition

[10.02.00.01]

Page 264 of 815

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)				
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)					
0.000	0	0	0	0	0	0
0.250	0	0	0	0	0	0
0.500	0	0	0	0	0	0
0.750	0	0	0	0	0	0
1.000	0	0	0	0	0	0
1.250	0	0	0	0	0	0
1.500	0	0	0	0	0	0
1.750	0	0	0	0	0	0
2.000	0	0	0	0	0	0
2.250	0	0	0	0	0	0
2.500	0	0	0	0	0	0
2.750	0	0	0	0	0	0
3.000	0	0	0	0	0	0
3.250	0	0	0	0	0	0
3.500	0	0	0	0	0	0
3.750	0	0	0	0	0	0
4.000	0	0	0	0	0	0
4.250	0	0	0	0	0	0
4.500	0	0	0	0	0	0
4.750	0	0	0	0	0	0
5.000	0	0	0	0	0	0
5.250	0	0	0	0	0	0
5.500	0	0	0	0	0	0
5.750	0	0	0	0	0	0
6.000	0	0	0	0	0	0
6.250	0	0	0	0	0	0
6.500	0	0	0	0	0	0
6.750	0	0	0	0	0	0
7.000	0	0	0	0	0	0
7.250	0	0	0	0	0	0
7.500	0	0	0	0	0	0
7.750	0	0	0	0	0	0
8.000	0	0	0	0	0	0
8.250	0	0	0	0	0	0
8.500	0	0	0	0	0	0
8.750	0	0	8	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)				
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

Bentley Systems, Inc. Haestad Methods Solution Center

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

PondPack CONNECT Edition

[10.02.00.01]

Page 267 of 815

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)				
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)					
0.000	0	0	0	0	0	0
0.250	0	0	0	0	0	0
0.500	0	0	0	0	0	0
0.750	0	0	0	0	0	0
1.000	0	0	0	0	0	0
1.250	0	0	0	0	0	0
1.500	0	0	0	0	0	0
1.750	0	0	0	0	0	0
2.000	0	0	0	0	0	0
2.250	0	0	0	0	0	0
2.500	0	0	0	0	0	0
2.750	0	0	0	0	0	0
3.000	0	0	0	0	0	0
3.250	0	0	0	0	0	0
3.500	0	0	0	0	0	0
3.750	0	0	0	0	0	0
4.000	0	0	0	0	0	0
4.250	0	0	0	0	0	0
4.500	0	0	0	0	0	0
4.750	0	0	0	0	0	0
5.000	0	0	0	0	0	0
5.250	0	0	0	0	0	0
5.500	0	0	0	0	0	0
5.750	0	0	0	0	0	0
6.000	0	0	0	0	0	0
6.250	0	0	0	0	0	0
6.500	0	0	0	0	0	0
6.750	0	0	0	0	0	0
7.000	0	0	0	0	0	0
7.250	0	0	0	0	0	0
7.500	0	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)				
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

Bentley Systems, Inc. Haestad Methods Solution Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 270 of 815

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)				
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)					
0.000	0	0	0	0	0	0
0.250	0	0	0	0	0	0
0.500	0	0	0	0	0	0
0.750	0	0	0	0	0	0
1.000	0	0	0	0	0	0
1.250	0	0	0	0	0	0
1.500	0	0	0	0	0	0
1.750	0	0	0	0	0	0
2.000	0	0	0	0	0	0
2.250	0	0	0	0	0	0
2.500	0	0	0	0	0	0
2.750	0	0	0	0	0	0
3.000	0	0	0	0	0	0
3.250	0	0	0	0	0	0
3.500	0	0	0	0	0	0
3.750	0	0	0	0	0	0
4.000	0	0	0	0	0	0
4.250	0	0	0	0	0	0
4.500	0	0	0	0	0	0
4.750	0	0	0	0	0	0
5.000	0	0	0	0	0	0
5.250	0	0	0	0	0	0
5.500	0	0	0	0	0	0
5.750	0	0	0	0	0	0
6.000	0	0	0	0	0	0
6.250	0	0	0	0	0	0
6.500	0	0	0	0	0	0
6.750	0	0	0	0	0	0
7.000	0	0	0	0	0	0
7.250	0	0	0	0	0	0
7.500	0	0	0	0	0	0
7.750	0	0	0	0	0	0
8.000	0	0	0	0	0	0
8.250	0	0	0	0	0	0
8.500	0	0	0	0	0	0
8.750	0	0	0	0	0	0
9.000	0	0	0	0	0	0
9.250	0	0	0	0	0	0
9.500	0	0	0	0	0	0
9.750	0	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)					
10.000	0	0	0	0	0	0
10.250	0	0	0	0	0	0
10.500	0	0	0	0	0	0
10.750	0	0	0	0	0	0
11.000	0	0	0	0	0	0
11.250	0	0	0	0	0	0
11.500	0	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	

Bentley Systems, Inc. Haestad Methods Solution
Center

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

PondPack CONNECT Edition

[10.02.00.01]

Page 273 of 815

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)					
20.250	0	0	0	0	0	0
20.500	0	0	0	0	0	0
20.750	0	0	0	0	0	0
21.000	0	0	0	0	0	0
21.250	0	0	0	0	0	0
21.500	0	0	0	0	0	0
21.750	0	0	0	0	0	0
22.000	0	0	0	0	0	0
22.250	0	0	0	0	0	0
22.500	0	0	0	0	0	0
22.750	0	0	0	0	0	0
23.000	0	0	0	0	0	0
23.250	0	0	0	0	0	0
23.500	0	0	0	0	0	0
23.750	0	0	0	0	0	0
24.000	0	(N/A)	(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)					
0.000	0	0	0	0	0	0
0.250	0	0	0	0	0	0
0.500	0	0	0	0	0	0
0.750	0	0	0	0	0	0
1.000	0	0	0	0	0	0
1.250	0	0	0	0	0	0
1.500	0	0	0	0	0	0
1.750	0	0	0	0	0	0
2.000	0	0	0	0	0	0
2.250	0	0	0	0	0	0
2.500	0	0	0	0	0	0
2.750	0	0	0	0	0	0
3.000	0	0	0	0	0	0
3.250	0	0	0	0	0	0
3.500	0	0	0	0	0	0
3.750	0	0	0	0	0	0
4.000	0	0	0	0	0	0
4.250	0	0	0	0	0	0
4.500	0	0	0	0	0	0
4.750	0	0	0	0	0	0
5.000	0	0	0	0	0	0
5.250	0	0	0	0	0	0
5.500	0	0	0	0	0	0
5.750	0	0	0	0	0	0
6.000	0	0	0	0	0	0
6.250	0	0	0	0	0	0
6.500	0	0	0	0	0	0
6.750	0	0	0	0	0	0
7.000	0	0	0	0	0	0
7.250	0	0	0	0	0	0
7.500	0	0	0	0	0	0
7.750	0	0	0	0	0	0
8.000	0	0	0	0	0	0
8.250	0	0	0	0	0	0
8.500	0	0	0	0	0	0
8.750	0	0	0	0	0	0
9.000	0	0	0	0	0	0
9.250	0	0	0	0	0	0
9.500	0	0	0	0	0	0
9.750	0	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)					
10.000	0	0	0	0	0	0
10.250	0	0	0	0	0	0
10.500	0	0	0	0	0	0
10.750	0	0	0	0	0	0
11.000	0	0	0	0	0	0
11.250	0	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)					
20.250	0	0	0	0	0	0
20.500	0	0	0	0	0	0
20.750	0	0	0	0	0	0
21.000	0	0	0	0	0	0
21.250	0	0	0	0	0	0
21.500	0	0	0	0	0	0
21.750	0	0	0	0	0	0
22.000	0	0	0	0	0	0
22.250	0	0	0	0	0	0
22.500	0	0	0	0	0	0
22.750	0	0	0	0	0	0
23.000	0	0	0	0	0	0
23.250	0	0	0	0	0	0
23.500	0	0	0	0	0	0
23.750	0	0	0	0	0	0
24.000	0	(N/A)	(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)					
0.000	0	0	0	0	0	0
0.250	0	0	0	0	0	0
0.500	0	0	0	0	0	0
0.750	0	0	0	0	0	0
1.000	0	0	0	0	0	0
1.250	0	0	0	0	0	0
1.500	0	0	0	0	0	0
1.750	0	0	0	0	0	0
2.000	0	0	0	0	0	0
2.250	0	0	0	0	0	0
2.500	0	0	0	0	0	0
2.750	0	0	0	0	0	0
3.000	0	0	0	0	0	0
3.250	0	0	0	0	0	0
3.500	0	0	0	0	0	0
3.750	0	0	0	0	0	0
4.000	0	0	0	0	0	0
4.250	0	0	0	0	0	0
4.500	0	0	0	0	0	0
4.750	0	0	0	0	0	0
5.000	0	0	0	0	0	0
5.250	0	0	0	0	0	0
5.500	0	0	0	0	0	0
5.750	0	0	0	0	0	0
6.000	0	0	0	0	0	0
6.250	0	0	0	0	0	0
6.500	0	0	0	0	0	0
6.750	0	0	0	0	0	0
7.000	0	0	0	0	0	0
7.250	0	0	0	0	0	0
7.500	0	0	0	0	0	0
7.750	0	0	0	0	0	0
8.000	0	0	0	0	0	0
8.250	0	0	0	0	0	0
8.500	0	0	0	0	0	0
8.750	0	0	0	0	0	0
9.000	0	0	0	0	0	0
9.250	0	0	0	0	0	0
9.500	0	0	0	0	0	0
9.750	0	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)					
10.000	0	0	0	0	0	0
10.250	0	0	0	0	0	0
10.500	0	0	0	0	0	0
10.750	0	0	0	0	0	0
11.000	0	0	0	0	0	0
11.250	0	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	

Bentley Systems, Inc. Haestad Methods Solution
Center

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

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)					
20.250	0	0	0	0	0	0
20.500	0	0	0	0	0	0
20.750	0	0	0	0	0	0
21.000	0	0	0	0	0	0
21.250	0	0	0	0	0	0
21.500	0	0	0	0	0	0
21.750	0	0	0	0	0	0
22.000	0	0	0	0	0	0
22.250	0	0	0	0	0	0
22.500	0	0	0	0	0	0
22.750	0	0	0	0	0	0
23.000	0	0	0	0	0	0
23.250	0	0	0	0	0	0
23.500	0	0	0	0	0	0
23.750	0	0	0	0	0	0
24.000	0	(N/A)	(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)					
0.000	0	0	0	0	0	0
0.250	0	0	0	0	0	0
0.500	0	0	0	0	0	0
0.750	0	0	0	0	0	0
1.000	0	0	0	0	0	0
1.250	0	0	0	0	0	0
1.500	0	0	0	0	0	0
1.750	0	0	0	0	0	0
2.000	0	0	0	0	0	0
2.250	0	0	0	0	0	0
2.500	0	0	0	0	0	0
2.750	0	0	0	0	0	0
3.000	0	0	0	0	0	0
3.250	0	0	0	0	0	0
3.500	0	0	0	0	0	0
3.750	0	0	0	0	0	0
4.000	0	0	0	0	0	0
4.250	0	0	0	0	0	0
4.500	0	0	0	0	0	0
4.750	0	0	0	0	0	0
5.000	0	0	0	0	0	0
5.250	0	0	0	0	0	0
5.500	0	0	0	0	0	0
5.750	0	0	0	0	0	0
6.000	0	0	0	0	0	0
6.250	0	0	0	0	0	0
6.500	0	0	0	0	0	0
6.750	0	0	0	0	0	0
7.000	0	0	0	0	0	0
7.250	0	0	0	0	0	0
7.500	0	0	0	0	0	0
7.750	0	0	0	0	0	0
8.000	0	0	0	0	0	0
8.250	0	0	0	0	0	0
8.500	0	0	0	0	0	0
8.750	0	0	0	0	0	0
9.000	0	0	0	0	0	0
9.250	0	0	0	0	0	0
9.500	0	0	0	0	0	0
9.750	0	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)				
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

Bentley Systems, Inc. Haestad Methods Solution
Center

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

AMS Buchanan.ppc
12/21/2023

PondPack CONNECT Edition
[10.02.00.01]
Page 282 of 815

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

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 1 years

Label: MC-3500 - 2

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)					
0.000	0	16	15	15	15	14
0.250	14	13	13	12	12	12
0.500	12	11	11	10	10	10
0.750	10	9	9	9	9	8
1.000	8	8	8	7	7	7
1.250	7	7	6	6	6	6
1.500	6	6	5	5	5	5
1.750	5	5	5	5	5	5
2.000	5	5	5	6	6	6
2.250	6	6	7	7	7	7
2.500	8	8	9	9	9	9
2.750	10	10	11	11	12	
3.000	13	13	14	14	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	38	40	41	42	
4.750	43	44	46	47	48	
5.000	49	51	52	53	55	
5.250	56	57	59	60	61	
5.500	63	64	66	67	68	
5.750	70	71	73	74	76	
6.000	77	79	80	82	83	
6.250	85	87	88	90	92	
6.500	94	96	98	100	102	
6.750	104	106	108	111	113	
7.000	115	118	120	122	125	
7.250	128	130	133	135	138	
7.500	141	144	147	149	152	
7.750	155	158	161	164	167	
8.000	170	174	177	180	183	
8.250	187	191	195	198	203	
8.500	207	211	216	220	225	
8.750	230	235	240	245	250	
9.000	256	261	267	273	279	
9.250	285	291	297	303	310	
9.500	316	322	329	336	343	
9.750	350	356	364	371	378	

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 1 years

Label: MC-3500 - 2

Storm Event: 1 year

Scenario: Post-Development 1 year

Time vs. Volume (ft^3)

Output Time increment = 0.050 hours

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

Time (hours)	Volume (ft^3)				
10.000	385	392	400	408	416
10.250	424	432	441	451	460
10.500	470	480	490	501	512
10.750	523	535	546	558	571
11.000	583	596	609	624	640
11.250	657	672	684	697	710
11.500	724	740	757	776	796
11.750	819	843	868	894	919
12.000	946	975	1,008	1,075	1,139
12.250	1,199	1,257	1,312	1,365	1,417
12.500	1,466	1,514	1,560	1,604	1,648
12.750	1,691	1,733	1,764	1,794	1,823
13.000	1,853	1,882	1,910	1,939	1,967
13.250	1,994	2,022	2,049	2,075	2,091
13.500	2,101	2,110	2,119	2,128	2,136
13.750	2,145	2,153	2,161	2,169	2,176
14.000	2,184	2,191	2,198	2,205	2,212
14.250	2,219	2,225	2,232	2,238	2,244
14.500	2,250	2,257	2,262	2,268	2,274
14.750	2,280	2,285	2,290	2,296	2,301
15.000	2,306	2,311	2,316	2,321	2,325
15.250	2,330	2,334	2,339	2,343	2,347
15.500	2,351	2,355	2,359	2,363	2,367
15.750	2,371	2,374	2,378	2,381	2,384
16.000	2,387	2,390	2,393	2,396	2,399
16.250	2,402	2,405	2,408	2,410	2,413
16.500	2,416	2,418	2,421	2,423	2,426
16.750	2,428	2,430	2,432	2,435	2,437
17.000	2,439	2,441	2,443	2,440	2,426
17.250	2,408	2,389	2,371	2,353	2,335
17.500	2,317	2,299	2,281	2,263	2,245
17.750	2,227	2,209	2,192	2,174	2,156
18.000	2,138	2,121	2,103	2,086	2,068
18.250	2,051	2,034	2,017	2,000	1,983
18.500	1,966	1,949	1,933	1,916	1,900
18.750	1,884	1,867	1,851	1,835	1,819
19.000	1,803	1,787	1,772	1,756	1,741
19.250	1,721	1,700	1,679	1,659	1,638
19.500	1,618	1,598	1,579	1,559	1,540
19.750	1,521	1,502	1,483	1,465	1,446
20.000	1,428	1,401	1,366	1,330	1,295

Bentley Systems, Inc. Haestad Methods Solution Center

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

PondPack CONNECT Edition

[10.02.00.01]

Page 285 of 815

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 1 years

Label: MC-3500 - 2

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)				
20.250	1,260	1,225	1,191	1,157	1,124
20.500	1,091	1,058	1,026	998	984
20.750	970	956	942	928	914
21.000	901	888	875	862	849
21.250	836	823	811	799	787
21.500	774	763	751	739	728
21.750	716	705	694	683	672
22.000	657	640	624	608	593
22.250	578	564	551	537	524
22.500	512	500	488	477	466
22.750	456	445	436	426	417
23.000	408	399	391	382	374
23.250	367	359	352	345	338
23.500	332	325	319	313	307
23.750	302	296	291	286	280
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 - 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)					
0.000	0	16	15	15	15	14
0.250	14	13	13	12	12	12
0.500	12	11	11	10	10	10
0.750	10	9	9	9	9	9
1.000	8	8	9	9	9	9
1.250	10	10	11	11	12	
1.500	13	14	15	16	17	
1.750	18	19	20	21	23	
2.000	24	25	26	28	29	
2.250	30	32	33	35	37	
2.500	39	40	42	44	46	
2.750	48	50	52	54	57	
3.000	59	61	64	66	68	
3.250	71	73	76	78	81	
3.500	84	86	89	92	94	
3.750	97	100	103	105	108	
4.000	111	114	117	120	123	
4.250	125	128	131	134	137	
4.500	140	143	146	149	152	
4.750	155	158	161	164	167	
5.000	170	173	177	180	183	
5.250	186	189	192	195	198	
5.500	201	204	207	210	214	
5.750	217	220	223	226	229	
6.000	232	235	238	242	245	
6.250	248	252	255	259	263	
6.500	267	271	275	279	284	
6.750	288	293	297	302	307	
7.000	312	317	322	327	332	
7.250	337	343	348	354	359	
7.500	365	370	376	382	388	
7.750	394	400	406	412	418	
8.000	424	431	437	444	451	
8.250	458	465	473	481	489	
8.500	498	506	516	525	534	
8.750	544	554	565	575	586	
9.000	597	608	620	631	643	
9.250	655	667	675	684	692	
9.500	701	710	719	728	738	
9.750	748	758	768	778	789	

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 10 years

Label: MC-3500 - 2

Storm Event: 10 year

Scenario: Post-Development 10 year

Time vs. Volume (ft^3)

Output Time increment = 0.050 hours

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

Time (hours)	Volume (ft^3)				
10.000	799	810	821	832	843
10.250	855	867	879	892	905
10.500	919	932	946	961	975
10.750	990	1,008	1,040	1,072	1,104
11.000	1,136	1,168	1,201	1,233	1,267
11.250	1,301	1,336	1,371	1,408	1,446
11.500	1,484	1,524	1,568	1,615	1,664
11.750	1,715	1,759	1,800	1,843	1,889
12.000	1,943	2,004	2,072	2,141	2,317
12.250	2,559	2,745	2,901	3,030	3,142
12.500	3,246	3,339	3,416	3,479	3,530
12.750	3,572	3,607	3,636	3,659	3,676
13.000	3,688	3,695	3,699	3,699	3,697
13.250	3,693	3,688	3,682	3,674	3,666
13.500	3,657	3,647	3,637	3,626	3,614
13.750	3,602	3,589	3,576	3,563	3,549
14.000	3,536	3,522	3,509	3,496	3,483
14.250	3,471	3,459	3,447	3,436	3,425
14.500	3,414	3,404	3,393	3,384	3,374
14.750	3,365	3,356	3,347	3,339	3,332
15.000	3,324	3,317	3,310	3,304	3,298
15.250	3,292	3,286	3,281	3,276	3,271
15.500	3,266	3,262	3,254	3,238	3,217
15.750	3,197	3,178	3,160	3,142	3,124
16.000	3,107	3,091	3,075	3,059	3,044
16.250	3,029	3,015	3,001	2,988	2,975
16.500	2,962	2,950	2,938	2,926	2,915
16.750	2,904	2,894	2,884	2,874	2,864
17.000	2,855	2,845	2,837	2,828	2,820
17.250	2,811	2,804	2,796	2,788	2,781
17.500	2,774	2,767	2,760	2,754	2,747
17.750	2,741	2,735	2,729	2,723	2,718
18.000	2,712	2,707	2,702	2,697	2,692
18.250	2,687	2,682	2,678	2,674	2,669
18.500	2,665	2,661	2,657	2,654	2,650
18.750	2,647	2,643	2,640	2,637	2,633
19.000	2,630	2,628	2,625	2,622	2,619
19.250	2,617	2,614	2,612	2,609	2,607
19.500	2,605	2,602	2,600	2,598	2,596
19.750	2,594	2,592	2,590	2,588	2,587
20.000	2,585	2,583	2,581	2,580	2,578

Bentley Systems, Inc. Haestad Methods Solution Center

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 10 years

Label: MC-3500 - 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)				
20.250	2,577	2,575	2,574	2,572	2,571
20.500	2,570	2,568	2,567	2,566	2,564
20.750	2,563	2,562	2,561	2,560	2,559
21.000	2,558	2,557	2,556	2,555	2,554
21.250	2,553	2,552	2,551	2,550	2,549
21.500	2,548	2,547	2,547	2,546	2,545
21.750	2,544	2,543	2,543	2,542	2,541
22.000	2,540	2,540	2,539	2,538	2,538
22.250	2,537	2,536	2,536	2,535	2,534
22.500	2,534	2,533	2,533	2,532	2,532
22.750	2,531	2,530	2,530	2,529	2,529
23.000	2,528	2,528	2,527	2,527	2,526
23.250	2,526	2,525	2,519	2,502	2,482
23.500	2,462	2,442	2,423	2,403	2,384
23.750	2,365	2,346	2,327	2,308	2,290
24.000	2,271	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 25 years

Label: MC-3500 - 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)					
0.000	0	16	15	15	15	14
0.250	14	13	13	12	12	12
0.500	12	11	11	10	10	10
0.750	10	10	10	10	10	10
1.000	11	12	12	13	13	14
1.250	16	17	18	20	21	
1.500	23	24	26	28	30	
1.750	32	33	35	38	40	
2.000	42	44	47	49	52	
2.250	54	57	59	62	65	
2.500	68	71	74	77	80	
2.750	83	87	90	93	97	
3.000	100	104	107	111	114	
3.250	118	121	125	129	132	
3.500	136	140	143	147	151	
3.750	155	159	162	166	170	
4.000	174	178	182	186	190	
4.250	194	198	202	206	209	
4.500	213	217	221	225	229	
4.750	233	237	241	245	249	
5.000	253	257	261	265	269	
5.250	273	277	281	285	289	
5.500	293	297	301	305	309	
5.750	313	317	321	325	329	
6.000	333	337	341	345	349	
6.250	353	358	362	367	372	
6.500	377	382	387	393	398	
6.750	404	410	416	422	428	
7.000	434	441	447	454	461	
7.250	467	474	481	488	496	
7.500	503	510	518	525	533	
7.750	540	548	556	564	572	
8.000	580	588	597	605	614	
8.250	623	633	643	654	665	
8.500	673	680	688	696	705	
8.750	713	723	732	742	752	
9.000	763	773	784	794	805	
9.250	816	828	839	851	863	
9.500	875	887	899	912	924	
9.750	937	950	963	977	990	

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 25 years

Label: MC-3500 - 2

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Volume (ft^3)

Output Time increment = 0.050 hours

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

Time (hours)	Volume (ft^3)				
10.000	1,007	1,037	1,068	1,099	1,130
10.250	1,160	1,191	1,222	1,253	1,284
10.500	1,315	1,347	1,378	1,409	1,441
10.750	1,472	1,504	1,536	1,567	1,599
11.000	1,631	1,663	1,696	1,729	1,756
11.250	1,782	1,809	1,837	1,866	1,896
11.500	1,927	1,959	1,992	2,027	2,064
11.750	2,103	2,144	2,189	2,237	2,290
12.000	2,353	2,461	2,807	3,275	3,675
12.250	4,097	4,506	4,863	5,159	5,391
12.500	5,557	5,667	5,734	5,768	5,778
12.750	5,775	5,761	5,738	5,709	5,673
13.000	5,633	5,587	5,538	5,486	5,433
13.250	5,379	5,323	5,268	5,211	5,155
13.500	5,098	5,042	4,986	4,930	4,874
13.750	4,819	4,763	4,709	4,654	4,599
14.000	4,546	4,495	4,445	4,396	4,348
14.250	4,303	4,258	4,216	4,174	4,134
14.500	4,096	4,058	4,022	3,987	3,953
14.750	3,920	3,889	3,859	3,829	3,801
15.000	3,774	3,748	3,723	3,699	3,675
15.250	3,653	3,631	3,610	3,590	3,571
15.500	3,552	3,534	3,517	3,501	3,485
15.750	3,470	3,456	3,443	3,430	3,417
16.000	3,406	3,394	3,384	3,374	3,364
16.250	3,347	3,322	3,297	3,273	3,251
16.500	3,229	3,209	3,189	3,171	3,153
16.750	3,135	3,118	3,102	3,086	3,070
17.000	3,055	3,041	3,026	3,013	2,999
17.250	2,986	2,974	2,962	2,950	2,938
17.500	2,927	2,916	2,905	2,895	2,885
17.750	2,875	2,866	2,857	2,848	2,839
18.000	2,830	2,822	2,814	2,806	2,798
18.250	2,791	2,784	2,777	2,770	2,764
18.500	2,757	2,751	2,745	2,740	2,734
18.750	2,729	2,723	2,718	2,713	2,709
19.000	2,704	2,700	2,695	2,691	2,687
19.250	2,683	2,679	2,675	2,672	2,668
19.500	2,664	2,661	2,658	2,655	2,652
19.750	2,649	2,646	2,643	2,640	2,637
20.000	2,635	2,632	2,630	2,627	2,625

Bentley Systems, Inc. Haestad Methods Solution Center

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 25 years

Label: MC-3500 - 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)				
20.250	2,623	2,620	2,618	2,616	2,614
20.500	2,612	2,610	2,608	2,606	2,605
20.750	2,603	2,601	2,599	2,598	2,596
21.000	2,595	2,593	2,592	2,590	2,589
21.250	2,587	2,586	2,585	2,583	2,582
21.500	2,581	2,580	2,579	2,577	2,576
21.750	2,575	2,574	2,573	2,572	2,571
22.000	2,570	2,569	2,568	2,567	2,566
22.250	2,565	2,564	2,563	2,562	2,562
22.500	2,561	2,560	2,559	2,558	2,557
22.750	2,557	2,556	2,555	2,554	2,554
23.000	2,553	2,552	2,551	2,551	2,550
23.250	2,549	2,548	2,548	2,547	2,546
23.500	2,546	2,545	2,544	2,544	2,543
23.750	2,543	2,542	2,541	2,541	2,540
24.000	2,539	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 100 years

Label: MC-3500 - 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)					
0.000	0	16	15	15	15	14
0.250	14	13	13	12	12	12
0.500	12	11	11	12	12	12
0.750	13	14	16	18	20	
1.000	22	24	27	30	32	
1.250	35	38	42	45	49	
1.500	53	57	61	65	69	
1.750	74	78	83	88	92	
2.000	97	102	107	111	116	
2.250	121	126	131	137	142	
2.500	147	152	158	163	169	
2.750	174	180	185	191	197	
3.000	202	208	214	219	225	
3.250	231	237	243	248	254	
3.500	260	266	272	278	284	
3.750	290	295	301	307	313	
4.000	319	325	331	337	342	
4.250	348	354	360	366	372	
4.500	378	383	389	395	401	
4.750	407	412	418	424	430	
5.000	435	441	447	453	458	
5.250	464	470	475	481	487	
5.500	492	498	503	509	514	
5.750	520	526	531	537	542	
6.000	548	553	559	565	571	
6.250	577	583	590	597	604	
6.500	611	619	627	635	643	
6.750	651	660	668	674	680	
7.000	686	692	699	706	713	
7.250	720	727	735	743	751	
7.500	759	768	777	786	795	
7.750	804	813	823	832	842	
8.000	852	862	872	882	892	
8.250	903	914	925	937	949	
8.500	961	973	986	999	1,025	
8.750	1,055	1,085	1,116	1,146	1,176	
9.000	1,207	1,237	1,267	1,297	1,327	
9.250	1,357	1,387	1,417	1,447	1,477	
9.500	1,507	1,537	1,567	1,596	1,626	
9.750	1,656	1,685	1,715	1,743	1,764	

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 100 years

Label: MC-3500 - 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)				
10.000	1,786	1,808	1,830	1,852	1,874
10.250	1,897	1,920	1,944	1,968	1,992
10.500	2,016	2,041	2,066	2,091	2,117
10.750	2,143	2,169	2,196	2,223	2,250
11.000	2,278	2,306	2,335	2,364	2,395
11.250	2,426	2,457	2,488	2,519	2,549
11.500	2,579	2,608	2,639	2,671	2,705
11.750	2,743	2,785	2,873	3,109	3,456
12.000	3,914	4,618	5,680	6,941	8,071
12.250	8,949	9,581	10,078	10,443	10,719
12.500	10,901	10,996	11,020	10,992	10,934
12.750	10,860	10,775	10,679	10,576	10,465
13.000	10,348	10,225	10,108	9,989	9,870
13.250	9,731	9,593	9,455	9,334	9,214
13.500	9,094	8,976	8,848	8,720	8,593
13.750	8,467	8,347	8,230	8,115	8,000
14.000	7,887	7,770	7,653	7,536	7,421
14.250	7,307	7,196	7,090	6,985	6,882
14.500	6,781	6,681	6,582	6,482	6,384
14.750	6,287	6,191	6,097	6,005	5,914
15.000	5,827	5,742	5,658	5,575	5,495
15.250	5,415	5,337	5,260	5,183	5,108
15.500	5,033	4,960	4,888	4,817	4,748
15.750	4,679	4,612	4,547	4,484	4,425
16.000	4,368	4,313	4,261	4,210	4,163
16.250	4,117	4,073	4,031	3,992	3,953
16.500	3,917	3,882	3,848	3,816	3,785
16.750	3,756	3,728	3,702	3,676	3,652
17.000	3,629	3,608	3,583	3,550	3,516
17.250	3,483	3,451	3,421	3,393	3,365
17.500	3,339	3,314	3,291	3,268	3,246
17.750	3,226	3,206	3,187	3,169	3,151
18.000	3,134	3,118	3,102	3,086	3,071
18.250	3,057	3,042	3,029	3,015	3,003
18.500	2,990	2,978	2,967	2,955	2,944
18.750	2,934	2,924	2,914	2,904	2,895
19.000	2,886	2,877	2,868	2,860	2,852
19.250	2,845	2,837	2,830	2,823	2,816
19.500	2,809	2,803	2,797	2,790	2,785
19.750	2,779	2,773	2,768	2,763	2,758
20.000	2,753	2,748	2,743	2,738	2,734

Bentley Systems, Inc. Haestad Methods Solution Center

PondPack CONNECT Edition

[10.02.00.01]

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 100 years

Label: MC-3500 - 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)				
20.250	2,730	2,726	2,722	2,718	2,714
20.500	2,710	2,706	2,703	2,700	2,696
20.750	2,693	2,690	2,687	2,684	2,681
21.000	2,678	2,675	2,673	2,670	2,667
21.250	2,665	2,663	2,660	2,658	2,656
21.500	2,653	2,651	2,649	2,647	2,645
21.750	2,643	2,641	2,639	2,638	2,636
22.000	2,634	2,632	2,631	2,629	2,627
22.250	2,626	2,624	2,623	2,621	2,620
22.500	2,618	2,617	2,615	2,614	2,613
22.750	2,611	2,610	2,609	2,607	2,606
23.000	2,605	2,604	2,603	2,601	2,600
23.250	2,599	2,598	2,597	2,596	2,595
23.500	2,594	2,593	2,591	2,590	2,589
23.750	2,588	2,587	2,586	2,585	2,584
24.000	2,583	(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)					
0.000	0	0	0	0	0	0
0.250	0	0	0	0	0	0
0.500	0	0	0	0	0	0
0.750	0	0	0	0	0	0
1.000	0	0	0	0	0	0
1.250	0	0	0	0	0	0
1.500	0	0	0	0	0	0
1.750	0	0	0	0	0	0
2.000	0	0	0	0	0	0
2.250	0	0	0	0	0	0
2.500	0	0	0	0	0	0
2.750	0	0	0	0	0	0
3.000	0	0	0	0	0	0
3.250	0	0	0	0	0	0
3.500	0	0	0	0	0	0
3.750	0	0	0	0	0	0
4.000	0	0	0	0	0	0
4.250	0	0	0	0	0	0
4.500	0	0	0	0	0	0
4.750	0	0	0	0	0	0
5.000	0	0	0	0	0	0
5.250	0	0	0	0	0	0
5.500	0	0	0	0	0	1
5.750	1	1	2	2	2	3
6.000	4	4	5	6	6	7
6.250	8	9	10	12	12	13
6.500	14	16	17	19	19	21
6.750	22	24	26	28	28	30
7.000	33	35	37	39	39	42
7.250	45	47	50	53	53	56
7.500	59	62	65	68	68	71
7.750	75	78	82	85	85	89
8.000	93	96	100	105	105	109
8.250	113	118	123	128	128	133
8.500	138	144	150	156	156	162
8.750	168	175	182	188	188	196
9.000	203	211	218	226	226	234
9.250	243	251	260	269	269	278
9.500	287	297	307	317	317	327
9.750	337	348	358	369	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)				
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

Bentley Systems, Inc. Haestad Methods Solution
Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 297 of 815

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)				
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)					
0.000	0	0	0	0	0	0
0.250	0	0	0	0	0	0
0.500	0	0	0	0	0	0
0.750	0	0	0	0	0	0
1.000	0	0	0	0	0	0
1.250	0	0	0	0	0	0
1.500	0	0	0	0	0	0
1.750	0	0	0	0	0	0
2.000	0	0	0	0	0	0
2.250	0	0	0	0	0	0
2.500	0	0	0	0	0	0
2.750	0	0	0	0	0	0
3.000	0	0	0	0	0	0
3.250	0	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 (ft^3)

Output Time increment = 0.050 hours

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

Time (hours)	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	7,488	8,860	10,265	11,539	12,406
12.250	12,916	13,229	13,418	13,501	13,488
12.500	13,384	13,207	12,987	12,744	12,500
12.750	12,264	12,036	11,818	11,605	11,398
13.000	11,198	11,005	10,822	10,647	10,484
13.250	10,330	10,187	10,051	9,919	9,790
13.500	9,664	9,542	9,422	9,305	9,191
13.750	9,079	8,970	8,863	8,759	8,656
14.000	8,554	8,454	8,357	8,262	8,170
14.250	8,081	7,994	7,910	7,829	7,750
14.500	7,673	7,598	7,526	7,455	7,386
14.750	7,319	7,254	7,191	7,129	7,068
15.000	7,009	6,948	6,888	6,826	6,764
15.250	6,702	6,639	6,576	6,512	6,447
15.500	6,382	6,317	6,251	6,184	6,117
15.750	6,050	5,982	5,913	5,844	5,775
16.000	5,705	5,635	5,565	5,494	5,423
16.250	5,352	5,282	5,212	5,141	5,071
16.500	5,002	4,932	4,863	4,794	4,725
16.750	4,657	4,588	4,520	4,452	4,384
17.000	4,317	4,250	4,182	4,115	4,049
17.250	3,982	3,916	3,844	3,754	3,665
17.500	3,578	3,491	3,405	3,321	3,237
17.750	3,154	3,072	2,991	2,911	2,831
18.000	2,753	2,675	2,598	2,522	2,448
18.250	2,375	2,303	2,232	2,199	2,168
18.500	2,137	2,107	2,077	2,048	2,020
18.750	1,992	1,964	1,937	1,910	1,883
19.000	1,857	1,832	1,807	1,782	1,757
19.250	1,733	1,710	1,686	1,664	1,641
19.500	1,619	1,597	1,575	1,554	1,533
19.750	1,513	1,492	1,464	1,434	1,404
20.000	1,375	1,348	1,321	1,295	1,270

Bentley Systems, Inc. Haestad Methods Solution Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 300 of 815

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)				
20.250	1,246	1,223	1,201	1,179	1,159
20.500	1,139	1,119	1,100	1,082	1,065
20.750	1,048	1,032	1,016	1,000	986
21.000	971	958	944	931	919
21.250	906	895	883	872	861
21.500	851	840	830	821	811
21.750	802	794	785	777	768
22.000	761	753	745	738	731
22.250	724	717	710	703	697
22.500	691	685	679	673	667
22.750	661	656	650	645	640
23.000	635	630	625	620	615
23.250	610	605	601	596	592
23.500	587	583	579	575	570
23.750	566	562	558	554	550
24.000	546	(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)					
0.000	0	0	0	0	0	0
0.250	0	0	0	0	0	0
0.500	0	0	0	0	0	0
0.750	0	0	0	0	0	0
1.000	0	0	0	0	0	0
1.250	0	0	0	0	0	0
1.500	0	0	0	0	0	0
1.750	0	0	0	0	0	0
2.000	0	0	0	0	0	0
2.250	0	0	0	0	0	0
2.500	0	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)				
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	8,880
12.000	10,265	11,951	13,621	15,111	16,120
12.250	16,729	17,098	17,303	17,373	17,320
12.500	17,151	16,883	16,549	16,175	15,803
12.750	15,438	15,078	14,725	14,367	14,014
13.000	13,667	13,327	13,005	12,703	12,421
13.250	12,158	11,913	11,683	11,465	11,261
13.500	11,070	10,892	10,724	10,567	10,419
13.750	10,280	10,149	10,022	9,898	9,777
14.000	9,657	9,540	9,425	9,313	9,205
14.250	9,099	8,997	8,898	8,801	8,707
14.500	8,615	8,525	8,438	8,352	8,269
14.750	8,188	8,109	8,032	7,957	7,883
15.000	7,812	7,741	7,673	7,606	7,540
15.250	7,475	7,412	7,350	7,290	7,230
15.500	7,171	7,114	7,057	7,000	6,943
15.750	6,884	6,825	6,764	6,703	6,641
16.000	6,577	6,514	6,449	6,385	6,320
16.250	6,255	6,190	6,126	6,061	5,996
16.500	5,931	5,867	5,802	5,738	5,673
16.750	5,608	5,544	5,479	5,414	5,349
17.000	5,284	5,219	5,154	5,089	5,024
17.250	4,959	4,894	4,829	4,764	4,699
17.500	4,634	4,569	4,504	4,439	4,374
17.750	4,310	4,245	4,180	4,115	4,051
18.000	3,986	3,921	3,854	3,766	3,680
18.250	3,596	3,513	3,431	3,350	3,271
18.500	3,193	3,117	3,041	2,967	2,894
18.750	2,822	2,751	2,682	2,613	2,546
19.000	2,479	2,414	2,349	2,286	2,227
19.250	2,199	2,171	2,144	2,117	2,091
19.500	2,065	2,040	2,014	1,990	1,965
19.750	1,941	1,917	1,894	1,871	1,848
20.000	1,826	1,804	1,782	1,760	1,739

Bentley Systems, Inc. Haestad Methods Solution Center

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

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)				
20.250	1,719	1,698	1,678	1,658	1,638
20.500	1,619	1,600	1,581	1,563	1,545
20.750	1,527	1,509	1,492	1,467	1,441
21.000	1,415	1,391	1,367	1,344	1,322
21.250	1,300	1,279	1,259	1,240	1,221
21.500	1,203	1,185	1,168	1,151	1,135
21.750	1,120	1,105	1,090	1,076	1,062
22.000	1,049	1,036	1,023	1,011	999
22.250	987	976	965	954	944
22.500	934	924	914	905	896
22.750	887	878	870	861	853
23.000	845	837	829	822	814
23.250	807	800	793	786	780
23.500	773	767	760	754	748
23.750	742	736	730	724	719
24.000	713	(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)					
0.000	0	0	0	0	0	0
0.250	0	0	0	0	0	0
0.500	0	0	0	0	0	0
0.750	0	0	0	0	0	0
1.000	0	0	0	0	0	0
1.250	0	0	0	0	0	0
1.500	0	0	0	0	0	0
1.750	0	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 (ft^3)

Output Time increment = 0.050 hours

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

Time (hours)	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	7,860	8,301	8,866
11.750	9,559	10,385	11,334	12,365	13,646
12.000	15,481	17,775	20,161	22,272	23,673
12.250	24,478	24,936	25,161	25,195	25,056
12.500	24,756	24,324	23,803	23,233	22,664
12.750	22,141	21,574	20,993	20,482	19,977
13.000	19,436	18,897	18,392	17,912	17,447
13.250	16,976	16,520	16,081	15,674	15,284
13.500	14,909	14,545	14,187	13,844	13,513
13.750	13,195	12,902	12,628	12,370	12,129
14.000	11,903	11,690	11,487	11,296	11,119
14.250	10,953	10,798	10,654	10,519	10,392
14.500	10,274	10,162	10,056	9,952	9,850
14.750	9,750	9,653	9,558	9,464	9,373
15.000	9,283	9,195	9,109	9,024	8,941
15.250	8,859	8,779	8,700	8,622	8,544
15.500	8,467	8,392	8,318	8,244	8,172
15.750	8,101	8,030	7,961	7,892	7,824
16.000	7,756	7,690	7,625	7,561	7,499
16.250	7,438	7,379	7,322	7,266	7,212
16.500	7,159	7,108	7,057	7,007	6,956
16.750	6,906	6,854	6,802	6,750	6,697
17.000	6,644	6,591	6,537	6,483	6,428
17.250	6,373	6,318	6,262	6,206	6,149
17.500	6,092	6,035	5,978	5,920	5,861
17.750	5,803	5,744	5,684	5,625	5,565
18.000	5,504	5,443	5,382	5,321	5,260
18.250	5,199	5,139	5,079	5,019	4,960
18.500	4,901	4,843	4,785	4,727	4,670
18.750	4,612	4,556	4,499	4,443	4,387
19.000	4,331	4,276	4,221	4,166	4,112
19.250	4,058	4,004	3,951	3,897	3,837
19.500	3,766	3,695	3,626	3,557	3,489
19.750	3,423	3,357	3,292	3,228	3,165
20.000	3,102	3,041	2,980	2,920	2,862

Bentley Systems, Inc. Haestad Methods Solution Center

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

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)				
20.250	2,804	2,746	2,690	2,634	2,579
20.500	2,525	2,472	2,420	2,368	2,316
20.750	2,266	2,223	2,201	2,179	2,157
21.000	2,136	2,115	2,094	2,073	2,053
21.250	2,033	2,013	1,994	1,974	1,955
21.500	1,937	1,918	1,899	1,881	1,863
21.750	1,846	1,828	1,811	1,794	1,777
22.000	1,760	1,744	1,728	1,711	1,696
22.250	1,680	1,664	1,649	1,633	1,618
22.500	1,603	1,588	1,574	1,559	1,545
22.750	1,531	1,517	1,503	1,489	1,469
23.000	1,448	1,428	1,408	1,388	1,370
23.250	1,351	1,334	1,317	1,300	1,284
23.500	1,268	1,253	1,238	1,223	1,209
23.750	1,195	1,181	1,168	1,155	1,142
24.000	1,130	(N/A)	(N/A)	(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 1 years

Label: Stormwater Planters - 2

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

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 1 years

Label: Stormwater Planters - 2

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)				
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

Bentley Systems, Inc. Haestad Methods Solution
Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 309 of 815

Existing and Proposed Hydrologic Calculations

Subsection: Time vs. Volume

Return Event: 1 years

Label: Stormwater Planters - 2

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

Bentley Systems, Inc. Haestad Methods Solution Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 312 of 815

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

Bentley Systems, Inc. Haestad Methods Solution Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 315 of 815

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)				
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)					
0.000	0	0	0	0	0	0
0.250	0	0	0	0	0	0
0.500	0	0	0	0	0	0
0.750	0	0	0	0	0	0
1.000	0	0	0	0	0	0
1.250	0	0	0	0	0	0
1.500	0	0	0	0	0	0
1.750	0	0	0	0	0	0
2.000	0	0	0	0	0	0
2.250	0	0	0	0	0	0
2.500	0	0	0	0	0	0
2.750	0	0	0	0	0	0
3.000	0	0	0	0	0	0
3.250	0	0	0	0	0	0
3.500	0	0	0	0	0	0
3.750	0	0	0	0	0	0
4.000	0	0	0	0	0	0
4.250	0	0	0	0	0	0
4.500	0	0	0	0	0	0
4.750	0	0	0	0	0	0
5.000	0	0	0	0	0	0
5.250	0	0	0	0	0	0
5.500	0	0	0	0	0	0
5.750	0	0	0	0	0	0
6.000	0	0	0	0	0	0
6.250	0	0	0	0	0	0
6.500	0	0	0	0	0	0
6.750	0	0	0	0	0	0
7.000	0	0	0	0	0	0
7.250	0	0	0	0	0	0
7.500	0	0	0	0	0	0
7.750	0	0	0	0	0	0
8.000	0	0	0	0	0	0
8.250	0	0	0	0	0	0
8.500	0	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)				
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

Bentley Systems, Inc. Haestad Methods Solution Center

PondPack CONNECT Edition

[10.02.00.01]

AMS Buchanan.ppc
12/21/2023

27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

Page 318 of 815

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)				
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: 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+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: 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+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: 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+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: 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+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: 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+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: 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+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 vs. Volume Curve

Return Event: 1 years

Label: MC-3500 - 2

Storm Event: 1 year

Scenario: Post-Development 1 year

Elevation-Volume

Pond Elevation (ft)	Pond Volume (ft ³)
71.50	0
72.25	1,002
72.50	1,737
72.75	2,464
73.00	3,184
73.25	3,893
73.50	4,592
73.75	5,277
74.00	5,947
74.25	6,599
74.50	7,230
74.75	7,837
75.00	8,415
75.25	8,957
75.50	9,452
75.75	9,866
76.00	10,221
77.00	11,556

Existing and Proposed Hydrologic Calculations

Subsection: Elevation vs. Volume Curve

Return Event: 10 years

Label: MC-3500 - 2

Storm Event: 10 year

Scenario: Post-Development 10 year

Elevation-Volume

Pond Elevation (ft)	Pond Volume (ft ³)
71.50	0
72.25	1,002
72.50	1,737
72.75	2,464
73.00	3,184
73.25	3,893
73.50	4,592
73.75	5,277
74.00	5,947
74.25	6,599
74.50	7,230
74.75	7,837
75.00	8,415
75.25	8,957
75.50	9,452
75.75	9,866
76.00	10,221
77.00	11,556

Existing and Proposed Hydrologic Calculations

Subsection: Elevation vs. Volume Curve

Return Event: 25 years

Label: MC-3500 - 2

Storm Event: 25 year

Scenario: Post-Development 25 year

Elevation-Volume

Pond Elevation (ft)	Pond Volume (ft ³)
71.50	0
72.25	1,002
72.50	1,737
72.75	2,464
73.00	3,184
73.25	3,893
73.50	4,592
73.75	5,277
74.00	5,947
74.25	6,599
74.50	7,230
74.75	7,837
75.00	8,415
75.25	8,957
75.50	9,452
75.75	9,866
76.00	10,221
77.00	11,556

Existing and Proposed Hydrologic Calculations

Subsection: Elevation vs. Volume Curve

Return Event: 100 years

Label: MC-3500 - 2

Storm Event: 100 year

Scenario: Post-Development 100 year

Elevation-Volume

Pond Elevation (ft)	Pond Volume (ft ³)
71.50	0
72.25	1,002
72.50	1,737
72.75	2,464
73.00	3,184
73.25	3,893
73.50	4,592
73.75	5,277
74.00	5,947
74.25	6,599
74.50	7,230
74.75	7,837
75.00	8,415
75.25	8,957
75.50	9,452
75.75	9,866
76.00	10,221
77.00	11,556

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: Outlet Input Data

Return Event: 1 years

Label: 24-GR OUT

Storm Event: 1 year

Scenario: Post-Development 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	Forward	TW	95.21 (N/A)	95.30 (N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 1 years

Label: 24-GR OUT

Storm Event: 1 year

Scenario: Post-Development 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

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)

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

```

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)

Computation Messages

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
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

Return Event: 1 years

Label: 24-GR OUT

Storm Event: 1 year

Scenario: Post-Development 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
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
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	Forward	TW	95.21 (N/A)	95.30 (N/A)

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

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: 10 years

Label: 24-GR OUT

Storm Event: 10 year

Scenario: Post-Development 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

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 10 years

Label: 24-GR OUT

Storm Event: 10 year

Scenario: Post-Development 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

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 10 years

Label: 24-GR OUT

Storm Event: 10 year

Scenario: Post-Development 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

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 10 years

Label: 24-GR OUT

Storm Event: 10 year

Scenario: Post-Development 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  
H=.00; Htw=.00;  
Qfree=.00;  
H=.09; Htw=.00;  
Qfree=3.65;
```

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Return Event: 10 years

Label: 24-GR OUT

Storm Event: 10 year

Scenario: Post-Development 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
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

Return Event: 10 years

Label: 24-GR OUT

Storm Event: 10 year

Scenario: Post-Development 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
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
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	Forward	TW	95.21 (N/A)	95.30 (N/A)

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

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: 25 years

Label: 24-GR OUT

Storm Event: 25 year

Scenario: Post-Development 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

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 25 years

Label: 24-GR OUT

Storm Event: 25 year

Scenario: Post-Development 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

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 25 years

Label: 24-GR OUT

Storm Event: 25 year

Scenario: Post-Development 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

```

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 25 years

Label: 24-GR OUT

Storm Event: 25 year

Scenario: Post-Development 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
H=.00; Htw=.00;
Qfree=.00;
H=.09; Htw=.00;
Qfree=3.65;

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Return Event: 25 years

Label: 24-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	0.09	(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
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

Return Event: 25 years

Label: 24-GR OUT

Storm Event: 25 year

Scenario: Post-Development 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
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
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: 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	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

Return Event: 100 years

Label: 24-GR 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 = 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

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 100 years

Label: 24-GR 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 = Tailwater (Pond Outfall)

Computation Messages

Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 100 years

Label: 24-GR OUT

Storm Event: 100 year

Scenario: Post-Development 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

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 100 years

Label: 24-GR OUT

Storm Event: 100 year

Scenario: Post-Development 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  
H=.00; Htw=.00;  
Qfree=.00;  
H=.09; Htw=.00;  
Qfree=3.65;
```

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Return Event: 100 years

Label: 24-GR 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)
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
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

Return Event: 100 years

Label: 24-GR OUT

Storm Event: 100 year

Scenario: Post-Development 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
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
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: 1 years

Label: 6-GR OUT

Storm Event: 1 year

Scenario: Post-Development 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	Forward	TW	93.71 (N/A)	93.75 (N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 1 years

Label: 6-GR OUT

Storm Event: 1 year

Scenario: Post-Development 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
 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
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 + 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	Forward	TW	93.71 (N/A)	93.75 (N/A)

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

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: 10 years

Label: 6-GR OUT

Storm Event: 10 year

Scenario: Post-Development 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

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 10 years

Label: 6-GR OUT

Storm Event: 10 year

Scenario: Post-Development 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
H=.00; Htw=.00;
Qfree=.00;
H=.04; Htw=.00;
Qfree=1.25;
```

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Return Event: 10 years

Label: 6-GR OUT

Storm Event: 10 year

Scenario: Post-Development 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	Forward	TW	93.71 (N/A)	93.75 (N/A)

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

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: 25 years

Label: 6-GR OUT

Storm Event: 25 year

Scenario: Post-Development 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

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 25 years

Label: 6-GR OUT

Storm Event: 25 year

Scenario: Post-Development 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
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	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

Return Event: 100 years

Label: 6-GR 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 = 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

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 100 years

Label: 6-GR OUT

Storm Event: 100 year

Scenario: Post-Development 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
H=.00; Htw=.00;
Qfree=.00;
H=.04; Htw=.00;
Qfree=1.25;
```

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Return Event: 100 years

Label: 6-GR 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)
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: 1 years

Label: MC-3500 - 2 OUT

Storm Event: 1 year

Scenario: Post-Development 1 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	71.50 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	77.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	Culvert - 1	71.50	77.00
Orifice-Circular	Orifice - 2	Forward	Culvert - 1	72.75	77.00
Culvert-Circular	Culvert - 1	Forward	TW	71.50	77.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 1 years

Label: MC-3500 - 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	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

Return Event: 1 years

Label: MC-3500 - 2 OUT

Storm Event: 1 year

Scenario: Post-Development 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: MC-3500 - 2 OUT

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	71.75	Free Outfall	0.00	0.00	(N/A)	0.00
72.50	0.20	71.75	71.77	Free Outfall	0.00	0.00	(N/A)	0.00
72.75	0.23	71.77	71.84	Free Outfall	0.00	0.00	(N/A)	0.00
73.00	0.37	71.84	72.00	Free Outfall	0.00	0.00	(N/A)	0.00
73.50	0.77	72.00	72.06	Free Outfall	0.00	0.00	(N/A)	0.00
74.00	1.00	72.06	72.12	Free Outfall	0.00	0.00	(N/A)	0.00
74.50	1.18	72.12	72.16	Free Outfall	0.00	0.00	(N/A)	0.00
75.00	1.34	72.16	72.20	Free Outfall	0.00	0.00	(N/A)	0.00
75.50	1.49	72.20	72.23	Free Outfall	0.00	0.00	(N/A)	0.00
76.00	1.61	72.23	72.26	Free Outfall	0.00	0.00	(N/A)	0.00
76.50	1.72	72.26	72.28	Free Outfall	0.00	0.00	(N/A)	0.00
77.00	1.83	72.28	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

Return Event: 1 years

Label: MC-3500 - 2 OUT

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)

Message
FLOW PRECEDENCE SET TO UPSTREAM CONTROLLING STRUCTURE

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 1 years

Label: MC-3500 - 2 OUT

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 (ft³/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 (ft³/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
77.00	0.51	77.00	72.28	72.28	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
H =4.72

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 1 years

Label: MC-3500 - 2 OUT

Storm Event: 1 year

Scenario: Post-Development 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 (ft³/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 (ft³/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
77.00	1.32	77.00	Free Outfall	72.28	0.00	0.00	(N/A)	0.00

Message

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
 H =4.04

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Return Event: 1 years

Label: MC-3500 - 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)
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
77.00	1.83	(N/A)	0.00

Contributing Structures

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 10 years

Label: MC-3500 - 2 OUT

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)	77.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	Culvert - 1	71.50	77.00
Orifice-Circular	Orifice - 2	Forward	Culvert - 1	72.75	77.00
Culvert-Circular	Culvert - 1	Forward	TW	71.50	77.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 10 years

Label: MC-3500 - 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	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

Return Event: 10 years

Label: MC-3500 - 2 OUT

Storm Event: 10 year

Scenario: Post-Development 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

Return Event: 10 years

Label: MC-3500 - 2 OUT

Storm Event: 10 year

Scenario: Post-Development 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	71.75	Free Outfall	0.00	0.00	(N/A)	0.00
72.50	0.20	71.75	71.77	Free Outfall	0.00	0.00	(N/A)	0.00
72.75	0.23	71.77	71.84	Free Outfall	0.00	0.00	(N/A)	0.00
73.00	0.37	71.84	72.00	Free Outfall	0.00	0.00	(N/A)	0.00
73.50	0.77	72.00	72.06	Free Outfall	0.00	0.00	(N/A)	0.00
74.00	1.00	72.06	72.12	Free Outfall	0.00	0.00	(N/A)	0.00
74.50	1.18	72.12	72.16	Free Outfall	0.00	0.00	(N/A)	0.00
75.00	1.34	72.16	72.20	Free Outfall	0.00	0.00	(N/A)	0.00
75.50	1.49	72.20	72.23	Free Outfall	0.00	0.00	(N/A)	0.00
76.00	1.61	72.23	72.26	Free Outfall	0.00	0.00	(N/A)	0.00
76.50	1.72	72.26	72.28	Free Outfall	0.00	0.00	(N/A)	0.00
77.00	1.83	72.28		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

Return Event: 10 years

Label: MC-3500 - 2 OUT

Storm Event: 10 year

Scenario: Post-Development 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

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 10 years

Label: MC-3500 - 2 OUT

Storm Event: 10 year

Scenario: Post-Development 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 (ft³/s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line (ft)	Convergence Error (ft³/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
77.00	0.51	77.00	72.28	72.28	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

H = 4.72

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 10 years

Label: MC-3500 - 2 OUT

Storm Event: 10 year

Scenario: Post-Development 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 (ft³/s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line (ft)	Convergence Error (ft³/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
77.00	1.32	77.00	Free Outfall	72.28	0.00	0.00	(N/A)	0.00

Message

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
 H =4.04

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Return Event: 10 years

Label: MC-3500 - 2 OUT

Storm Event: 10 year

Scenario: Post-Development 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
77.00	1.83	(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
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: 25 years

Label: MC-3500 - 2 OUT

Storm Event: 25 year

Scenario: Post-Development 25 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	71.50 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	77.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	Culvert - 1	71.50	77.00
Orifice-Circular	Orifice - 2	Forward	Culvert - 1	72.75	77.00
Culvert-Circular	Culvert - 1	Forward	TW	71.50	77.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 25 years

Label: MC-3500 - 2 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	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

Return Event: 25 years

Label: MC-3500 - 2 OUT

Storm Event: 25 year

Scenario: Post-Development 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

Return Event: 25 years

Label: MC-3500 - 2 OUT

Storm Event: 25 year

Scenario: Post-Development 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	71.70	Free Outfall	0.00	0.00	(N/A)	0.00
72.50	0.20	71.75	71.75	Free Outfall	0.00	0.00	(N/A)	0.00
72.75	0.23	71.77	71.77	Free Outfall	0.00	0.00	(N/A)	0.00
73.00	0.37	71.84	71.84	Free Outfall	0.00	0.00	(N/A)	0.00
73.50	0.77	72.00	72.00	Free Outfall	0.00	0.00	(N/A)	0.00
74.00	1.00	72.06	72.06	Free Outfall	0.00	0.00	(N/A)	0.00
74.50	1.18	72.12	72.12	Free Outfall	0.00	0.00	(N/A)	0.00
75.00	1.34	72.16	72.16	Free Outfall	0.00	0.00	(N/A)	0.00
75.50	1.49	72.20	72.20	Free Outfall	0.00	0.00	(N/A)	0.00
76.00	1.61	72.23	72.23	Free Outfall	0.00	0.00	(N/A)	0.00
76.50	1.72	72.26	72.26	Free Outfall	0.00	0.00	(N/A)	0.00
77.00	1.83	72.28	72.28	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

Return Event: 25 years

Label: MC-3500 - 2 OUT

Storm Event: 25 year

Scenario: Post-Development 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

AMS Buchanan.ppc

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 25 years

Label: MC-3500 - 2 OUT

Storm Event: 25 year

Scenario: Post-Development 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 (ft³/s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line (ft)	Convergence Error (ft³/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
77.00	0.51	77.00	72.28	72.28	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
H =4.72

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 25 years

Label: MC-3500 - 2 OUT

Storm Event: 25 year

Scenario: Post-Development 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 (ft³/s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line (ft)	Convergence Error (ft³/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
77.00	1.32	77.00	Free Outfall	72.28	0.00	0.00	(N/A)	0.00

Message

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
 H =4.04

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Return Event: 25 years

Label: MC-3500 - 2 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)
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
77.00	1.83	(N/A)	0.00

Contributing Structures

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 100 years

Label: MC-3500 - 2 OUT

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)	77.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	Culvert - 1	71.50	77.00
Orifice-Circular	Orifice - 2	Forward	Culvert - 1	72.75	77.00
Culvert-Circular	Culvert - 1	Forward	TW	71.50	77.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Existing and Proposed Hydrologic Calculations

Subsection: Outlet Input Data

Return Event: 100 years

Label: MC-3500 - 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	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: MC-3500 - 2 OUT

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

Return Event: 100 years

Label: MC-3500 - 2 OUT

Storm Event: 100 year

Scenario: Post-Development 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	71.75	Free Outfall	0.00	0.00	(N/A)	0.00
72.50	0.20	71.75	71.77	Free Outfall	0.00	0.00	(N/A)	0.00
72.75	0.23	71.77	71.84	Free Outfall	0.00	0.00	(N/A)	0.00
73.00	0.37	71.84	72.00	Free Outfall	0.00	0.00	(N/A)	0.00
73.50	0.77	72.00	72.06	Free Outfall	0.00	0.00	(N/A)	0.00
74.00	1.00	72.06	72.12	Free Outfall	0.00	0.00	(N/A)	0.00
74.50	1.18	72.12	72.16	Free Outfall	0.00	0.00	(N/A)	0.00
75.00	1.34	72.16	72.20	Free Outfall	0.00	0.00	(N/A)	0.00
75.50	1.49	72.20	72.23	Free Outfall	0.00	0.00	(N/A)	0.00
76.00	1.61	72.23	72.26	Free Outfall	0.00	0.00	(N/A)	0.00
76.50	1.72	72.26	72.28	Free Outfall	0.00	0.00	(N/A)	0.00
77.00	1.83	72.28	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

Return Event: 100 years

Label: MC-3500 - 2 OUT

Storm Event: 100 year

Scenario: Post-Development 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

AMS Buchanan.ppc

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 100 years

Label: MC-3500 - 2 OUT

Storm Event: 100 year

Scenario: Post-Development 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 (ft³/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 (ft³/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
77.00	0.51	77.00	72.28	72.28	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
H =4.72

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 100 years

Label: MC-3500 - 2 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 (ft³/s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line (ft)	Convergence Error (ft³/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
77.00	1.32	77.00	Free Outfall	72.28	0.00	0.00	(N/A)	0.00

Message

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
 H =4.04

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Return Event: 100 years

Label: MC-3500 - 2 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)
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
77.00	1.83	(N/A)	0.00

Contributing Structures

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

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

Return Event: 1 years

Label: MC-3500 - 3 OUT

Storm Event: 1 year

Scenario: Post-Development 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	10.0 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: MC-3500 - 3 OUT

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: 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	1.57	63.57	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
65.35	2.97	63.88	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
65.85	3.80	64.04	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
66.35	4.47	64.17	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
66.85	5.06	64.28	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
67.35	5.63	64.39	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
67.85	6.07	64.47	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
68.35	6.51	64.56	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= .186ft Dcr= .497ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .281ft Dcr= .693ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .338ft Dcr= .788ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .387ft Dcr= .857ft
 CRIT.DEPTH Hev= .00ft

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 1 years

Label: MC-3500 - 3 OUT

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: 7.52 ft³/s

Upstream ID = Orifice - 1, Orifice - 2

Downstream ID = Tailwater (Pond Outfall)

Message

```
CRIT.DEPTH CONTROL
Vh= .432ft Dcr= .912ft
CRIT.DEPTH Hev= .00ft
INLET CONTROL...
Submerged: HW =1.54
INLET CONTROL...
Submerged: HW =1.62
INLET CONTROL...
Submerged: HW =1.71
```

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 1 years

Label: MC-3500 - 3 OUT

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 (ft³/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 (ft³/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	0.96	65.35	63.88	63.88	0.00	0.00	(N/A)	0.00
65.85	1.07	65.85	64.04	64.04	0.00	0.00	(N/A)	0.00
66.35	1.17	66.35	64.17	64.17	0.00	0.00	(N/A)	0.00
66.85	1.27	66.85	64.28	64.28	0.00	0.00	(N/A)	0.00
67.35	1.37	67.35	64.39	64.39	0.00	0.00	(N/A)	0.00
67.85	1.46	67.85	64.47	64.47	0.00	0.00	(N/A)	0.00
68.35	1.55	68.35	64.56	64.56	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 =1.47

H =1.81

H =2.18

H =2.57

H =2.96

H =3.38

H =3.79

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 1 years

Label: MC-3500 - 3 OUT

Storm Event: 1 year

Scenario: Post-Development 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 (ft³/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 (ft³/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	0.68	64.85	Free Outfall	63.57	0.00	0.00	(N/A)	0.00
65.35	2.00	65.35	Free Outfall	63.88	0.00	0.00	(N/A)	0.00
65.85	2.73	65.85	Free Outfall	64.04	0.00	0.00	(N/A)	0.00
66.35	3.30	66.35	Free Outfall	64.17	0.00	0.00	(N/A)	0.00
66.85	3.79	66.85	Free Outfall	64.28	0.00	0.00	(N/A)	0.00
67.35	4.22	67.35	64.39	64.39	0.00	0.00	(N/A)	0.00
67.85	4.61	67.85	64.47	64.47	0.00	0.00	(N/A)	0.00
68.35	4.97	68.35	64.56	64.56	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .137ft Dcr= .362ft
 CRIT.DEPTH Hev= .00ft
 H =.58
 H =1.08
 H =1.58
 H =2.08
 H =2.58
 H =3.08
 H =3.58

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	1.57	(N/A)	0.00
65.35	2.97	(N/A)	0.00
65.85	3.80	(N/A)	0.00
66.35	4.47	(N/A)	0.00
66.85	5.06	(N/A)	0.00
67.35	5.59	(N/A)	0.00
67.85	6.07	(N/A)	0.00
68.35	6.51	(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
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

Return Event: 10 years

Label: MC-3500 - 3 OUT

Storm Event: 10 year

Scenario: Post-Development 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	10.0 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: 10 years

Label: MC-3500 - 3 OUT

Storm Event: 10 year

Scenario: Post-Development 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	1.57	63.57	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
65.35	2.97	63.88	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
65.85	3.80	64.04	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
66.35	4.47	64.17	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
66.85	5.06	64.28	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
67.35	5.63	64.39	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
67.85	6.07	64.47	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
68.35	6.51	64.56	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= .186ft Dcr= .497ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .281ft Dcr= .693ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .338ft Dcr= .788ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .387ft Dcr= .857ft
 CRIT.DEPTH Hev= .00ft

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 10 years

Label: MC-3500 - 3 OUT

Storm Event: 10 year

Scenario: Post-Development 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= .432ft Dcr= .912ft

CRIT.DEPTH Hev= .00ft

INLET CONTROL...

Submerged: HW =1.54

INLET CONTROL...

Submerged: HW =1.62

INLET CONTROL...

Submerged: HW =1.71

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 10 years

Label: MC-3500 - 3 OUT

Storm Event: 10 year

Scenario: Post-Development 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 (ft³/s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line (ft)	Convergence Error (ft³/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	0.96	65.35	63.88	63.88	0.00	0.00	(N/A)	0.00
65.85	1.07	65.85	64.04	64.04	0.00	0.00	(N/A)	0.00
66.35	1.17	66.35	64.17	64.17	0.00	0.00	(N/A)	0.00
66.85	1.27	66.85	64.28	64.28	0.00	0.00	(N/A)	0.00
67.35	1.37	67.35	64.39	64.39	0.00	0.00	(N/A)	0.00
67.85	1.46	67.85	64.47	64.47	0.00	0.00	(N/A)	0.00
68.35	1.55	68.35	64.56	64.56	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 =1.47

H =1.81

H =2.18

H =2.57

H =2.96

H =3.38

H =3.79

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 10 years

Label: MC-3500 - 3 OUT

Storm Event: 10 year

Scenario: Post-Development 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 (ft³/s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line (ft)	Convergence Error (ft³/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	0.68	64.85	Free Outfall	63.57	0.00	0.00	(N/A)	0.00
65.35	2.00	65.35	Free Outfall	63.88	0.00	0.00	(N/A)	0.00
65.85	2.73	65.85	Free Outfall	64.04	0.00	0.00	(N/A)	0.00
66.35	3.30	66.35	Free Outfall	64.17	0.00	0.00	(N/A)	0.00
66.85	3.79	66.85	Free Outfall	64.28	0.00	0.00	(N/A)	0.00
67.35	4.22	67.35	64.39	64.39	0.00	0.00	(N/A)	0.00
67.85	4.61	67.85	64.47	64.47	0.00	0.00	(N/A)	0.00
68.35	4.97	68.35	64.56	64.56	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .137ft Dcr= .362ft
 CRIT.DEPTH Hev= .00ft
 H =.58
 H =1.08
 H =1.58
 H =2.08
 H =2.58
 H =3.08
 H =3.58

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Return Event: 10 years

Label: MC-3500 - 3 OUT

Storm Event: 10 year

Scenario: Post-Development 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	1.57	(N/A)	0.00
65.35	2.97	(N/A)	0.00
65.85	3.80	(N/A)	0.00
66.35	4.47	(N/A)	0.00
66.85	5.06	(N/A)	0.00
67.35	5.59	(N/A)	0.00
67.85	6.07	(N/A)	0.00
68.35	6.51	(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

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

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

Return Event: 25 years

Label: MC-3500 - 3 OUT

Storm Event: 25 year

Scenario: Post-Development 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	10.0 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: 25 years

Label: MC-3500 - 3 OUT

Storm Event: 25 year

Scenario: Post-Development 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	1.57	63.57	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
65.35	2.97	63.88	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
65.85	3.80	64.04	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
66.35	4.47	64.17	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
66.85	5.06	64.28	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
67.35	5.63	64.39	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
67.85	6.07	64.47	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
68.35	6.51	64.56	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= .186ft Dcr= .497ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .281ft Dcr= .693ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .338ft Dcr= .788ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .387ft Dcr= .857ft
 CRIT.DEPTH Hev= .00ft

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 25 years

Label: MC-3500 - 3 OUT

Storm Event: 25 year

Scenario: Post-Development 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= .432ft Dcr= .912ft

CRIT.DEPTH Hev= .00ft

INLET CONTROL...

Submerged: HW =1.54

INLET CONTROL...

Submerged: HW =1.62

INLET CONTROL...

Submerged: HW =1.71

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 25 years

Label: MC-3500 - 3 OUT

Storm Event: 25 year

Scenario: Post-Development 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 (ft³/s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line (ft)	Convergence Error (ft³/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	0.96	65.35	63.88	63.88	0.00	0.00	(N/A)	0.00
65.85	1.07	65.85	64.04	64.04	0.00	0.00	(N/A)	0.00
66.35	1.17	66.35	64.17	64.17	0.00	0.00	(N/A)	0.00
66.85	1.27	66.85	64.28	64.28	0.00	0.00	(N/A)	0.00
67.35	1.37	67.35	64.39	64.39	0.00	0.00	(N/A)	0.00
67.85	1.46	67.85	64.47	64.47	0.00	0.00	(N/A)	0.00
68.35	1.55	68.35	64.56	64.56	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 =1.47

H =1.81

H =2.18

H =2.57

H =2.96

H =3.38

H =3.79

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 25 years

Label: MC-3500 - 3 OUT

Storm Event: 25 year

Scenario: Post-Development 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 (ft³/s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line (ft)	Convergence Error (ft³/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	0.68	64.85	Free Outfall	63.57	0.00	0.00	(N/A)	0.00
65.35	2.00	65.35	Free Outfall	63.88	0.00	0.00	(N/A)	0.00
65.85	2.73	65.85	Free Outfall	64.04	0.00	0.00	(N/A)	0.00
66.35	3.30	66.35	Free Outfall	64.17	0.00	0.00	(N/A)	0.00
66.85	3.79	66.85	Free Outfall	64.28	0.00	0.00	(N/A)	0.00
67.35	4.22	67.35	64.39	64.39	0.00	0.00	(N/A)	0.00
67.85	4.61	67.85	64.47	64.47	0.00	0.00	(N/A)	0.00
68.35	4.97	68.35	64.56	64.56	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .137ft Dcr= .362ft
 CRIT.DEPTH Hev= .00ft
 H =.58
 H =1.08
 H =1.58
 H =2.08
 H =2.58
 H =3.08
 H =3.58

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Return Event: 25 years

Label: MC-3500 - 3 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)
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	1.57	(N/A)	0.00
65.35	2.97	(N/A)	0.00
65.85	3.80	(N/A)	0.00
66.35	4.47	(N/A)	0.00
66.85	5.06	(N/A)	0.00
67.35	5.59	(N/A)	0.00
67.85	6.07	(N/A)	0.00
68.35	6.51	(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

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	10.0 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: 100 years

Label: MC-3500 - 3 OUT

Storm Event: 100 year

Scenario: Post-Development 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	1.57	63.57	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
65.35	2.97	63.88	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
65.85	3.80	64.04	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
66.35	4.47	64.17	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
66.85	5.06	64.28	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
67.35	5.63	64.39	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
67.85	6.07	64.47	Free Outfall	Free Outfall	0.00	0.00	(N/A)	0.00
68.35	6.51	64.56	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= .186ft Dcr= .497ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .281ft Dcr= .693ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .338ft Dcr= .788ft
 CRIT.DEPTH Hev= .00ft
 CRIT.DEPTH CONTROL
 Vh= .387ft Dcr= .857ft
 CRIT.DEPTH Hev= .00ft

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 = 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= .432ft Dcr= .912ft

CRIT.DEPTH Hev= .00ft

INLET CONTROL...

Submerged: HW =1.54

INLET CONTROL...

Submerged: HW =1.62

INLET CONTROL...

Submerged: HW =1.71

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 - 1 (Orifice-Circular)

Upstream ID = (Pond Water Surface)

Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft³/s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line (ft)	Convergence Error (ft³/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	0.96	65.35	63.88	63.88	0.00	0.00	(N/A)	0.00
65.85	1.07	65.85	64.04	64.04	0.00	0.00	(N/A)	0.00
66.35	1.17	66.35	64.17	64.17	0.00	0.00	(N/A)	0.00
66.85	1.27	66.85	64.28	64.28	0.00	0.00	(N/A)	0.00
67.35	1.37	67.35	64.39	64.39	0.00	0.00	(N/A)	0.00
67.85	1.46	67.85	64.47	64.47	0.00	0.00	(N/A)	0.00
68.35	1.55	68.35	64.56	64.56	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 =1.47

H =1.81

H =2.18

H =2.57

H =2.96

H =3.38

H =3.79

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 (ft³/s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line (ft)	Convergence Error (ft³/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	0.68	64.85	Free Outfall	63.57	0.00	0.00	(N/A)	0.00
65.35	2.00	65.35	Free Outfall	63.88	0.00	0.00	(N/A)	0.00
65.85	2.73	65.85	Free Outfall	64.04	0.00	0.00	(N/A)	0.00
66.35	3.30	66.35	Free Outfall	64.17	0.00	0.00	(N/A)	0.00
66.85	3.79	66.85	Free Outfall	64.28	0.00	0.00	(N/A)	0.00
67.35	4.22	67.35	64.39	64.39	0.00	0.00	(N/A)	0.00
67.85	4.61	67.85	64.47	64.47	0.00	0.00	(N/A)	0.00
68.35	4.97	68.35	64.56	64.56	0.00	0.00	(N/A)	0.00

Message

WS below an invert; no flow.
 CRIT.DEPTH CONTROL
 Vh= .137ft Dcr= .362ft
 CRIT.DEPTH Hev= .00ft
 H =.58
 H =1.08
 H =1.58
 H =2.08
 H =2.58
 H =3.08
 H =3.58

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	1.57	(N/A)	0.00
65.35	2.97	(N/A)	0.00
65.85	3.80	(N/A)	0.00
66.35	4.47	(N/A)	0.00
66.85	5.06	(N/A)	0.00
67.35	5.59	(N/A)	0.00
67.85	6.07	(N/A)	0.00
68.35	6.51	(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

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

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

Return Event: 1 years

Label: SP-2 OUT

Storm Event: 1 year

Scenario: Post-Development 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
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

Return Event: 1 years

Label: SP-2 OUT

Storm Event: 1 year

Scenario: Post-Development 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

Return Event: 1 years

Label: SP-2 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 = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft³/s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line (ft)	Convergence Error (ft³/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

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 1 years

Label: SP-2 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 = Culvert - 1 (Culvert-Circular)

Message
Interpolated from input table

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 1 years

Label: SP-2 OUT

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: 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
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
```

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 1 years

Label: SP-2 OUT

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: 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
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

Return Event: 1 years

Label: SP-2 OUT

Storm Event: 1 year

Scenario: Post-Development 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 (ft³/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 (ft³/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.

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 1 years

Label: SP-2 OUT

Storm Event: 1 year

Scenario: Post-Development 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

Return Event: 1 years

Label: SP-2 OUT

Storm Event: 1 year

Scenario: Post-Development 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 (ft³/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 (ft³/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.

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 1 years

Label: SP-2 OUT

Storm Event: 1 year

Scenario: Post-Development 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)
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

Return Event: 1 years

Label: SP-2 OUT

Storm Event: 1 year

Scenario: Post-Development 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

Return Event: 10 years

Label: SP-2 OUT

Storm Event: 10 year

Scenario: Post-Development 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
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

Return Event: 10 years

Label: SP-2 OUT

Storm Event: 10 year

Scenario: Post-Development 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

Return Event: 10 years

Label: SP-2 OUT

Storm Event: 10 year

Scenario: Post-Development 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 (ft³/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 (ft³/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

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 10 years

Label: SP-2 OUT

Storm Event: 10 year

Scenario: Post-Development 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

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 10 years

Label: SP-2 OUT

Storm Event: 10 year

Scenario: Post-Development 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
CRIT.DEPTH CONTROL
Vh= .049ft Dcr= .145ft
CRIT.DEPTH Hev= .00ft
```

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 10 years

Label: SP-2 OUT

Storm Event: 10 year

Scenario: Post-Development 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
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

Return Event: 10 years

Label: SP-2 OUT

Storm Event: 10 year

Scenario: Post-Development 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 (ft³/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 (ft³/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.

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 10 years

Label: SP-2 OUT

Storm Event: 10 year

Scenario: Post-Development 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

Return Event: 10 years

Label: SP-2 OUT

Storm Event: 10 year

Scenario: Post-Development 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 (ft³/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 (ft³/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.

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 10 years

Label: SP-2 OUT

Storm Event: 10 year

Scenario: Post-Development 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

Return Event: 10 years

Label: SP-2 OUT

Storm Event: 10 year

Scenario: Post-Development 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)
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

Return Event: 10 years

Label: SP-2 OUT

Storm Event: 10 year

Scenario: Post-Development 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

Return Event: 25 years

Label: SP-2 OUT

Storm Event: 25 year

Scenario: Post-Development 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

Return Event: 25 years

Label: SP-2 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	9.69 ft
Length (Computed Barrel)	9.69 ft
Slope (Computed)	0.010 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)	1.076
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

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

Return Event: 25 years

Label: SP-2 OUT

Storm Event: 25 year

Scenario: Post-Development 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

Return Event: 25 years

Label: SP-2 OUT

Storm Event: 25 year

Scenario: Post-Development 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 (ft³/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 (ft³/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

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 25 years

Label: SP-2 OUT

Storm Event: 25 year

Scenario: Post-Development 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

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 25 years

Label: SP-2 OUT

Storm Event: 25 year

Scenario: Post-Development 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
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

Return Event: 25 years

Label: SP-2 OUT

Storm Event: 25 year

Scenario: Post-Development 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
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

Return Event: 25 years

Label: SP-2 OUT

Storm Event: 25 year

Scenario: Post-Development 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 (ft³/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 (ft³/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.

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 25 years

Label: SP-2 OUT

Storm Event: 25 year

Scenario: Post-Development 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

Return Event: 25 years

Label: SP-2 OUT

Storm Event: 25 year

Scenario: Post-Development 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 (ft³/s)	(into) Headwater Hydraulic Grade Line (ft)	Converge Downstream Hydraulic Grade Line (ft)	Next Downstream Hydraulic Grade Line (ft)	Downstream Hydraulic Grade Line (ft)	Convergence Error (ft³/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.

Existing and Proposed Hydrologic Calculations

Subsection: Individual Outlet Curves

Return Event: 25 years

Label: SP-2 OUT

Storm Event: 25 year

Scenario: Post-Development 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

Return Event: 25 years

Label: SP-2 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)
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)

User Defined Rating

Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Return Event: 25 years

Label: SP-2 OUT

Storm Event: 25 year

Scenario: Post-Development 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

Return Event: 100 years

Label: SP-2 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	0.14
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

Return Event: 100 years

Label: SP-2 OUT

Storm Event: 100 year

Scenario: Post-Development 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 (ft³/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 (ft³/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

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)

Message
Interpolated from input table

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 = 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

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 = 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
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

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 = Riser - 1 (Stand Pipe)

Upstream ID = (Pond Water Surface)

Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft³/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 (ft³/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.

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 = 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

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 = Riser - 2 (Stand Pipe)

Upstream ID = (Pond Water Surface)

Downstream ID = Culvert - 1 (Culvert-Circular)

Water Surface Elevation (ft)	Device Flow (ft³/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 (ft³/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.

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 = 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: 100 years

Label: SP-2 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)
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)

User Defined Rating

Table - 1,Culvert - 1 (no
Q: Riser - 1,Riser - 2)

Existing and Proposed Hydrologic Calculations

Subsection: Composite Rating Curve

Return Event: 100 years

Label: SP-2 OUT

Storm Event: 100 year

Scenario: Post-Development 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: 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

Elevation (Water Surface, Peak)	94.46 ft
Volume (Peak)	1,398 ft ³

Mass Balance (ft³)

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

Elevation (Water Surface, Peak)	95.24 ft
Volume (Peak)	2,253 ft ³

Mass Balance (ft³)

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

Elevation (Water Surface, Peak)	95.27 ft
Volume (Peak)	2,322 ft ³

Mass Balance (ft³)

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

Elevation (Water Surface, Peak)	95.29 ft
Volume (Peak)	2,346 ft ³

Mass Balance (ft³)

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 - 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	0.00	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 - 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	0.01	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 - 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	0.01	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 - 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	0.03	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 - 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	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 - 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	0.02	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 - 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	0.03	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 - 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	0.00	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 - 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	0.01	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 - 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	0.02	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 - 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	0.03	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 - 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	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 - 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	0.12	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 - 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	0.27	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 - 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	0.09	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 - 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	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 - 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	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 - 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	0.00	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 - 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	0.01	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 - 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	0.03	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 - 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	0.04	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 - 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	0.35	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 - 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	0.11	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 - 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	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 - 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	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 - 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	0.03	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 - 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	0.00	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 - 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	0.03	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 - 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	0.00	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 - 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	0.06	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 - 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	0.11	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 - 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	0.23	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 - 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	0.16	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 - 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	0.09	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 - 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	0.06	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

Return Event: 1 years

Label: 24" Depth Green Roof (IN)

Storm Event: 1 year

Scenario: Post-Development 1 year

Summary for Hydrograph Addition at '24" Depth Green Roof'

Upstream Link <Catchment to Outflow Node>	Upstream 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

Return Event: 10 years

Label: 24" Depth Green Roof (IN)

Storm Event: 10 year

Scenario: Post-Development 10 year

Summary for Hydrograph Addition at '24" Depth Green Roof'

Upstream Link <Catchment to Outflow Node>	Upstream 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

Return Event: 25 years

Label: 24" Depth Green Roof (IN)

Storm Event: 25 year

Scenario: Post-Development 25 year

Summary for Hydrograph Addition at '24" Depth Green Roof'

Upstream Link <Catchment to Outflow Node>	Upstream 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

Return Event: 100 years

Label: 24" Depth Green Roof (IN)

Storm Event: 100 year

Scenario: Post-Development 100 year

Summary for Hydrograph Addition at '24" Depth Green Roof'

Upstream Link <Catchment to Outflow Node>	Upstream 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
Label: 6" Depth Green Roof (IN)
Scenario: Post-Development 1 year

Return Event: 1 years
Storm Event: 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

Elevation (Water Surface, Peak)	93.29 ft
Volume (Peak)	282 ft ³

Mass Balance (ft³)

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

Elevation (Water Surface, Peak)	93.68 ft
Volume (Peak)	819 ft ³

Mass Balance (ft³)

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

Elevation (Water Surface, Peak)	93.72 ft
Volume (Peak)	950 ft ³

Mass Balance (ft³)

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

Elevation (Water Surface, Peak)	93.75 ft
Volume (Peak)	1,017 ft ³

Mass Balance (ft³)

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 - 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	0.00	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 - 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	0.00	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 - 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	0.01	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 - 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	0.01	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 - 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	0.01	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 - 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	0.00	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 - 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	0.00	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 - 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	0.01	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 - 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	0.01	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 - 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	0.01	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 - 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	0.02	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 - 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	0.12	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 - 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	0.04	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 - 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	0.02	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 - 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	0.03	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 - 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	0.02	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 - 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: 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)
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 - 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	0.01	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 - 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	0.01	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 - 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	0.02	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 - 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	0.03	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 - 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	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 - 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	0.02	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 - 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	0.03	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 - 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: 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)
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 - 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	0.01	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 - 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	0.02	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 - 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	0.03	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 - 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	0.05	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 - 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	0.02	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 - 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	0.02	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

Return Event: 1 years

Label: 6" Depth Green Roof (IN)

Storm Event: 1 year

Scenario: Post-Development 1 year

Summary for Hydrograph Addition at '6" Depth Green Roof'

Upstream Link <Catchment to Outflow Node>	Upstream 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

Return Event: 10 years

Label: 6" Depth Green Roof (IN)

Storm Event: 10 year

Scenario: Post-Development 10 year

Summary for Hydrograph Addition at '6" Depth Green Roof'

Upstream Link <Catchment to Outflow Node>	Upstream 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

Return Event: 25 years

Label: 6" Depth Green Roof (IN)

Storm Event: 25 year

Scenario: Post-Development 25 year

Summary for Hydrograph Addition at '6" Depth Green Roof'

Upstream Link <Catchment to Outflow Node>	Upstream 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

Return Event: 100 years

Label: 6" Depth Green Roof (IN)

Storm Event: 100 year

Scenario: Post-Development 100 year

Summary for Hydrograph Addition at '6" Depth Green Roof'

Upstream Link <Catchment to Outflow Node>	Upstream 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 - 2

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	668	0	0.00	0.13	7.55
72.50	0.20	1,737	0	0.00	0.20	19.50
72.75	0.23	2,464	0	0.00	0.23	27.61
73.00	0.37	3,184	0	0.00	0.37	35.75
73.50	0.77	4,592	0	0.00	0.77	51.79
74.00	1.00	5,947	0	0.00	1.00	67.08
74.50	1.18	7,230	0	0.00	1.18	81.51
75.00	1.34	8,415	0	0.00	1.34	94.84
75.50	1.48	9,452	0	0.00	1.48	106.50
76.00	1.60	10,221	0	0.00	1.60	115.17
76.50	1.72	10,889	0	0.00	1.72	122.71
77.00	1.83	11,556	0	0.00	1.83	130.23

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 10 years

Label: MC-3500 - 2

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	668	0	0.00	0.13	7.55
72.50	0.20	1,737	0	0.00	0.20	19.50
72.75	0.23	2,464	0	0.00	0.23	27.61
73.00	0.37	3,184	0	0.00	0.37	35.75
73.50	0.77	4,592	0	0.00	0.77	51.79
74.00	1.00	5,947	0	0.00	1.00	67.08
74.50	1.18	7,230	0	0.00	1.18	81.51
75.00	1.34	8,415	0	0.00	1.34	94.84
75.50	1.48	9,452	0	0.00	1.48	106.50
76.00	1.60	10,221	0	0.00	1.60	115.17
76.50	1.72	10,889	0	0.00	1.72	122.71
77.00	1.83	11,556	0	0.00	1.83	130.23

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 25 years

Label: MC-3500 - 2

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	668	0	0.00	0.13	7.55
72.50	0.20	1,737	0	0.00	0.20	19.50
72.75	0.23	2,464	0	0.00	0.23	27.61
73.00	0.37	3,184	0	0.00	0.37	35.75
73.50	0.77	4,592	0	0.00	0.77	51.79
74.00	1.00	5,947	0	0.00	1.00	67.08
74.50	1.18	7,230	0	0.00	1.18	81.51
75.00	1.34	8,415	0	0.00	1.34	94.84
75.50	1.48	9,452	0	0.00	1.48	106.50
76.00	1.60	10,221	0	0.00	1.60	115.17
76.50	1.72	10,889	0	0.00	1.72	122.71
77.00	1.83	11,556	0	0.00	1.83	130.23

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 100 years

Label: MC-3500 - 2

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	668	0	0.00	0.13	7.55
72.50	0.20	1,737	0	0.00	0.20	19.50
72.75	0.23	2,464	0	0.00	0.23	27.61
73.00	0.37	3,184	0	0.00	0.37	35.75
73.50	0.77	4,592	0	0.00	0.77	51.79
74.00	1.00	5,947	0	0.00	1.00	67.08
74.50	1.18	7,230	0	0.00	1.18	81.51
75.00	1.34	8,415	0	0.00	1.34	94.84
75.50	1.48	9,452	0	0.00	1.48	106.50
76.00	1.60	10,221	0	0.00	1.60	115.17
76.50	1.72	10,889	0	0.00	1.72	122.71
77.00	1.83	11,556	0	0.00	1.83	130.23

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 1 years

Label: MC-3500 - 2 (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

Elevation (Water Surface, Peak)	72.74 ft
Volume (Peak)	2,443 ft ³

Mass Balance (ft³)

Volume (Initial)	0 ft ³
Volume (Total Inflow)	9,724 ft ³
Volume (Total Infiltration)	0 ft ³
Volume (Total Outlet Outflow)	9,449 ft ³
Volume (Retained)	266 ft ³
Volume (Unrouted)	-10 ft ³
Error (Mass Balance)	0.1 %

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 10 years

Label: MC-3500 - 2 (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)	0.52 ft ³ /s	Time to Peak (Flow, Outlet)	13.150 hours

Elevation (Water Surface, Peak)	73.18 ft
Volume (Peak)	3,699 ft ³

Mass Balance (ft³)

Volume (Initial)	0 ft ³
Volume (Total Inflow)	19,064 ft ³
Volume (Total Infiltration)	0 ft ³
Volume (Total Outlet Outflow)	16,794 ft ³
Volume (Retained)	2,230 ft ³
Volume (Unrouted)	-41 ft ³
Error (Mass Balance)	0.2 %

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 25 years

Label: MC-3500 - 2 (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)	0.97 ft ³ /s	Time to Peak (Flow, Outlet)	12.700 hours

Elevation (Water Surface, Peak)	73.94 ft
Volume (Peak)	5,778 ft ³

Mass Balance (ft³)

Volume (Initial)	0 ft ³
Volume (Total Inflow)	24,341 ft ³
Volume (Total Infiltration)	0 ft ³
Volume (Total Outlet Outflow)	21,802 ft ³
Volume (Retained)	2,495 ft ³
Volume (Unrouted)	-44 ft ³
Error (Mass Balance)	0.2 %

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 100 years

Label: MC-3500 - 2 (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)	1.74 ft ³ /s	Time to Peak (Flow, Outlet)	12.600 hours

Elevation (Water Surface, Peak)	76.60 ft
Volume (Peak)	11,020 ft ³

Mass Balance (ft³)

Volume (Initial)	0 ft ³
Volume (Total Inflow)	35,011 ft ³
Volume (Total Infiltration)	0 ft ³
Volume (Total Outlet Outflow)	32,427 ft ³
Volume (Retained)	2,538 ft ³
Volume (Unrouted)	-46 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 - 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)
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	16	71.51
0.100	0.00	0.17	0.17	0.00	0.00	15	71.51
0.150	0.00	0.16	0.17	0.00	0.00	15	71.51
0.200	0.00	0.16	0.16	0.00	0.00	14	71.51
0.250	0.00	0.15	0.16	0.00	0.00	14	71.51
0.300	0.00	0.15	0.15	0.00	0.00	13	71.51
0.350	0.00	0.14	0.15	0.00	0.00	13	71.51
0.400	0.00	0.14	0.14	0.00	0.00	12	71.51
0.450	0.00	0.13	0.14	0.00	0.00	12	71.51
0.500	0.00	0.13	0.13	0.00	0.00	12	71.51
0.550	0.00	0.12	0.13	0.00	0.00	11	71.51
0.600	0.00	0.12	0.12	0.00	0.00	11	71.51
0.650	0.00	0.11	0.12	0.00	0.00	10	71.51
0.700	0.00	0.11	0.11	0.00	0.00	10	71.51
0.750	0.00	0.11	0.11	0.00	0.00	10	71.51
0.800	0.00	0.10	0.11	0.00	0.00	9	71.51
0.850	0.00	0.10	0.10	0.00	0.00	9	71.51
0.900	0.00	0.10	0.10	0.00	0.00	9	71.51
0.950	0.00	0.09	0.10	0.00	0.00	8	71.51
1.000	0.00	0.09	0.09	0.00	0.00	8	71.51
1.050	0.00	0.09	0.09	0.00	0.00	8	71.51
1.100	0.00	0.08	0.09	0.00	0.00	8	71.51
1.150	0.00	0.08	0.08	0.00	0.00	7	71.51
1.200	0.00	0.08	0.08	0.00	0.00	7	71.51
1.250	0.00	0.07	0.08	0.00	0.00	7	71.51
1.300	0.00	0.07	0.07	0.00	0.00	7	71.50
1.350	0.00	0.07	0.07	0.00	0.00	6	71.50
1.400	0.00	0.07	0.07	0.00	0.00	6	71.50
1.450	0.00	0.06	0.07	0.00	0.00	6	71.50
1.500	0.00	0.06	0.06	0.00	0.00	6	71.50
1.550	0.00	0.06	0.06	0.00	0.00	6	71.50
1.600	0.00	0.06	0.06	0.00	0.00	5	71.50
1.650	0.00	0.06	0.06	0.00	0.00	5	71.50
1.700	0.00	0.06	0.06	0.00	0.00	5	71.50
1.750	0.00	0.05	0.06	0.00	0.00	5	71.50
1.800	0.00	0.05	0.06	0.00	0.00	5	71.50
1.850	0.00	0.05	0.06	0.00	0.00	5	71.50
1.900	0.00	0.05	0.06	0.00	0.00	5	71.50
1.950	0.00	0.06	0.06	0.00	0.00	5	71.50
2.000	0.00	0.06	0.06	0.00	0.00	5	71.50
2.050	0.00	0.06	0.06	0.00	0.00	5	71.50

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 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)
2.100	0.00	0.06	0.06	0.00	0.00	5	71.50
2.150	0.00	0.06	0.06	0.00	0.00	6	71.50
2.200	0.00	0.06	0.07	0.00	0.00	6	71.50
2.250	0.00	0.07	0.07	0.00	0.00	6	71.50
2.300	0.00	0.07	0.07	0.00	0.00	6	71.50
2.350	0.00	0.07	0.08	0.00	0.00	7	71.51
2.400	0.00	0.08	0.08	0.00	0.00	7	71.51
2.450	0.00	0.08	0.08	0.00	0.00	7	71.51
2.500	0.00	0.08	0.09	0.00	0.00	8	71.51
2.550	0.00	0.09	0.09	0.00	0.00	8	71.51
2.600	0.00	0.09	0.10	0.00	0.00	9	71.51
2.650	0.00	0.10	0.10	0.00	0.00	9	71.51
2.700	0.00	0.10	0.11	0.00	0.00	9	71.51
2.750	0.00	0.11	0.11	0.00	0.00	10	71.51
2.800	0.00	0.11	0.12	0.00	0.00	10	71.51
2.850	0.01	0.12	0.12	0.00	0.00	11	71.51
2.900	0.01	0.13	0.13	0.00	0.00	11	71.51
2.950	0.01	0.13	0.14	0.00	0.00	12	71.51
3.000	0.01	0.14	0.14	0.00	0.00	13	71.51
3.050	0.01	0.14	0.15	0.00	0.00	13	71.51
3.100	0.01	0.15	0.16	0.00	0.00	14	71.51
3.150	0.01	0.16	0.16	0.00	0.00	14	71.51
3.200	0.01	0.16	0.17	0.00	0.00	15	71.51
3.250	0.01	0.17	0.18	0.00	0.00	16	71.51
3.300	0.01	0.18	0.18	0.00	0.00	16	71.51
3.350	0.01	0.19	0.19	0.00	0.00	17	71.51
3.400	0.01	0.19	0.20	0.00	0.00	18	71.51
3.450	0.01	0.20	0.21	0.00	0.00	18	71.51
3.500	0.01	0.21	0.22	0.00	0.00	19	71.51
3.550	0.01	0.22	0.22	0.00	0.00	20	71.51
3.600	0.01	0.22	0.23	0.00	0.00	21	71.52
3.650	0.01	0.23	0.24	0.00	0.00	21	71.52
3.700	0.01	0.24	0.25	0.00	0.00	22	71.52
3.750	0.01	0.25	0.26	0.00	0.00	23	71.52
3.800	0.01	0.26	0.27	0.00	0.00	24	71.52
3.850	0.01	0.27	0.28	0.00	0.00	24	71.52
3.900	0.01	0.28	0.29	0.00	0.00	25	71.52
3.950	0.01	0.28	0.30	0.00	0.01	26	71.52
4.000	0.01	0.29	0.31	0.00	0.01	27	71.52
4.050	0.01	0.30	0.32	0.00	0.01	28	71.52
4.100	0.01	0.31	0.33	0.00	0.01	29	71.52
4.150	0.01	0.33	0.34	0.00	0.01	30	71.52

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 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)
4.200	0.01	0.34	0.35	0.00	0.01	31	71.52
4.250	0.01	0.35	0.36	0.00	0.01	32	71.52
4.300	0.01	0.36	0.37	0.00	0.01	33	71.52
4.350	0.01	0.37	0.38	0.00	0.01	34	71.53
4.400	0.01	0.38	0.40	0.00	0.01	35	71.53
4.450	0.01	0.39	0.41	0.00	0.01	36	71.53
4.500	0.01	0.41	0.42	0.00	0.01	37	71.53
4.550	0.01	0.42	0.43	0.00	0.01	38	71.53
4.600	0.01	0.43	0.45	0.00	0.01	40	71.53
4.650	0.01	0.44	0.46	0.00	0.01	41	71.53
4.700	0.01	0.46	0.47	0.00	0.01	42	71.53
4.750	0.02	0.47	0.49	0.00	0.01	43	71.53
4.800	0.02	0.48	0.50	0.00	0.01	44	71.53
4.850	0.02	0.50	0.51	0.00	0.01	46	71.53
4.900	0.02	0.51	0.53	0.00	0.01	47	71.54
4.950	0.02	0.52	0.54	0.00	0.01	48	71.54
5.000	0.02	0.54	0.56	0.00	0.01	49	71.54
5.050	0.02	0.55	0.57	0.00	0.01	51	71.54
5.100	0.02	0.57	0.59	0.00	0.01	52	71.54
5.150	0.02	0.58	0.60	0.00	0.01	53	71.54
5.200	0.02	0.60	0.62	0.00	0.01	55	71.54
5.250	0.02	0.61	0.63	0.00	0.01	56	71.54
5.300	0.02	0.62	0.65	0.00	0.01	57	71.54
5.350	0.02	0.64	0.66	0.00	0.01	59	71.54
5.400	0.02	0.65	0.68	0.00	0.01	60	71.54
5.450	0.02	0.67	0.69	0.00	0.01	61	71.55
5.500	0.02	0.69	0.71	0.00	0.01	63	71.55
5.550	0.02	0.70	0.73	0.00	0.01	64	71.55
5.600	0.02	0.72	0.74	0.00	0.01	66	71.55
5.650	0.02	0.73	0.76	0.00	0.01	67	71.55
5.700	0.02	0.75	0.77	0.00	0.01	68	71.55
5.750	0.02	0.76	0.79	0.00	0.01	70	71.55
5.800	0.02	0.78	0.81	0.00	0.01	71	71.55
5.850	0.02	0.79	0.82	0.00	0.01	73	71.55
5.900	0.02	0.81	0.84	0.00	0.01	74	71.56
5.950	0.02	0.83	0.86	0.00	0.01	76	71.56
6.000	0.02	0.84	0.87	0.00	0.02	77	71.56
6.050	0.02	0.86	0.89	0.00	0.02	79	71.56
6.100	0.02	0.88	0.91	0.00	0.02	80	71.56
6.150	0.02	0.89	0.92	0.00	0.02	82	71.56
6.200	0.03	0.91	0.94	0.00	0.02	83	71.56
6.250	0.03	0.93	0.96	0.00	0.02	85	71.56

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 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)
6.300	0.03	0.95	0.98	0.00	0.02	87	71.56
6.350	0.03	0.96	1.00	0.00	0.02	88	71.57
6.400	0.03	0.98	1.02	0.00	0.02	90	71.57
6.450	0.03	1.00	1.04	0.00	0.02	92	71.57
6.500	0.03	1.02	1.06	0.00	0.02	94	71.57
6.550	0.03	1.05	1.08	0.00	0.02	96	71.57
6.600	0.03	1.07	1.10	0.00	0.02	98	71.57
6.650	0.03	1.09	1.13	0.00	0.02	100	71.57
6.700	0.03	1.11	1.15	0.00	0.02	102	71.58
6.750	0.03	1.13	1.18	0.00	0.02	104	71.58
6.800	0.03	1.16	1.20	0.00	0.02	106	71.58
6.850	0.03	1.18	1.22	0.00	0.02	108	71.58
6.900	0.03	1.21	1.25	0.00	0.02	111	71.58
6.950	0.04	1.23	1.28	0.00	0.02	113	71.58
7.000	0.04	1.26	1.30	0.00	0.02	115	71.59
7.050	0.04	1.28	1.33	0.00	0.02	118	71.59
7.100	0.04	1.31	1.36	0.00	0.02	120	71.59
7.150	0.04	1.34	1.38	0.00	0.02	122	71.59
7.200	0.04	1.36	1.41	0.00	0.02	125	71.59
7.250	0.04	1.39	1.44	0.00	0.02	128	71.60
7.300	0.04	1.42	1.47	0.00	0.03	130	71.60
7.350	0.04	1.45	1.50	0.00	0.03	133	71.60
7.400	0.04	1.48	1.53	0.00	0.03	135	71.60
7.450	0.04	1.51	1.56	0.00	0.03	138	71.60
7.500	0.04	1.54	1.59	0.00	0.03	141	71.61
7.550	0.04	1.57	1.62	0.00	0.03	144	71.61
7.600	0.04	1.60	1.66	0.00	0.03	147	71.61
7.650	0.05	1.63	1.69	0.00	0.03	149	71.61
7.700	0.05	1.66	1.72	0.00	0.03	152	71.61
7.750	0.05	1.69	1.76	0.00	0.03	155	71.62
7.800	0.05	1.73	1.79	0.00	0.03	158	71.62
7.850	0.05	1.76	1.82	0.00	0.03	161	71.62
7.900	0.05	1.79	1.86	0.00	0.03	164	71.62
7.950	0.05	1.83	1.89	0.00	0.03	167	71.63
8.000	0.05	1.86	1.93	0.00	0.03	170	71.63
8.050	0.05	1.89	1.96	0.00	0.03	174	71.63
8.100	0.05	1.93	2.00	0.00	0.03	177	71.63
8.150	0.05	1.97	2.04	0.00	0.04	180	71.63
8.200	0.06	2.00	2.07	0.00	0.04	183	71.64
8.250	0.06	2.04	2.11	0.00	0.04	187	71.64
8.300	0.06	2.08	2.16	0.00	0.04	191	71.64
8.350	0.06	2.12	2.20	0.00	0.04	195	71.65

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 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)
8.400	0.06	2.17	2.24	0.00	0.04	198	71.65
8.450	0.06	2.21	2.29	0.00	0.04	203	71.65
8.500	0.06	2.26	2.34	0.00	0.04	207	71.65
8.550	0.07	2.31	2.39	0.00	0.04	211	71.66
8.600	0.07	2.35	2.44	0.00	0.04	216	71.66
8.650	0.07	2.40	2.49	0.00	0.04	220	71.66
8.700	0.07	2.46	2.54	0.00	0.04	225	71.67
8.750	0.07	2.51	2.60	0.00	0.05	230	71.67
8.800	0.07	2.56	2.66	0.00	0.05	235	71.68
8.850	0.08	2.62	2.71	0.00	0.05	240	71.68
8.900	0.08	2.68	2.77	0.00	0.05	245	71.68
8.950	0.08	2.73	2.83	0.00	0.05	250	71.69
9.000	0.08	2.79	2.89	0.00	0.05	256	71.69
9.050	0.08	2.85	2.96	0.00	0.05	261	71.70
9.100	0.08	2.92	3.02	0.00	0.05	267	71.70
9.150	0.09	2.98	3.09	0.00	0.05	273	71.70
9.200	0.09	3.04	3.15	0.00	0.05	279	71.71
9.250	0.09	3.11	3.22	0.00	0.06	285	71.71
9.300	0.09	3.17	3.29	0.00	0.06	291	71.72
9.350	0.09	3.24	3.36	0.00	0.06	297	71.72
9.400	0.09	3.31	3.43	0.00	0.06	303	71.73
9.450	0.10	3.38	3.50	0.00	0.06	310	71.73
9.500	0.10	3.45	3.57	0.00	0.06	316	71.74
9.550	0.10	3.52	3.65	0.00	0.06	322	71.74
9.600	0.10	3.59	3.72	0.00	0.06	329	71.75
9.650	0.10	3.67	3.80	0.00	0.07	336	71.75
9.700	0.11	3.74	3.87	0.00	0.07	343	71.76
9.750	0.11	3.81	3.95	0.00	0.07	350	71.76
9.800	0.11	3.89	4.03	0.00	0.07	356	71.77
9.850	0.11	3.97	4.11	0.00	0.07	364	71.77
9.900	0.11	4.05	4.19	0.00	0.07	371	71.78
9.950	0.11	4.12	4.27	0.00	0.07	378	71.78
10.000	0.12	4.20	4.35	0.00	0.08	385	71.79
10.050	0.12	4.28	4.44	0.00	0.08	392	71.79
10.100	0.12	4.37	4.52	0.00	0.08	400	71.80
10.150	0.12	4.45	4.61	0.00	0.08	408	71.81
10.200	0.13	4.54	4.70	0.00	0.08	416	71.81
10.250	0.13	4.63	4.79	0.00	0.08	424	71.82
10.300	0.13	4.72	4.89	0.00	0.08	432	71.82
10.350	0.14	4.82	4.99	0.00	0.09	441	71.83
10.400	0.14	4.92	5.10	0.00	0.09	451	71.84
10.450	0.14	5.02	5.20	0.00	0.09	460	71.84

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 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	0.15	5.13	5.31	0.00	0.09	470	71.85
10.550	0.15	5.24	5.43	0.00	0.09	480	71.86
10.600	0.15	5.35	5.54	0.00	0.10	490	71.87
10.650	0.16	5.47	5.67	0.00	0.10	501	71.88
10.700	0.16	5.59	5.79	0.00	0.10	512	71.88
10.750	0.17	5.71	5.92	0.00	0.10	523	71.89
10.800	0.17	5.84	6.05	0.00	0.10	535	71.90
10.850	0.17	5.96	6.18	0.00	0.11	546	71.91
10.900	0.18	6.10	6.31	0.00	0.11	558	71.92
10.950	0.18	6.23	6.45	0.00	0.11	571	71.93
11.000	0.18	6.37	6.59	0.00	0.11	583	71.94
11.050	0.19	6.51	6.74	0.00	0.12	596	71.95
11.100	0.20	6.65	6.89	0.00	0.12	609	71.96
11.150	0.21	6.81	7.06	0.00	0.12	624	71.97
11.200	0.22	6.98	7.23	0.00	0.13	640	71.98
11.250	0.23	7.17	7.43	0.00	0.13	657	71.99
11.300	0.23	7.37	7.63	0.00	0.13	672	72.00
11.350	0.24	7.58	7.84	0.00	0.13	684	72.01
11.400	0.25	7.80	8.07	0.00	0.13	697	72.02
11.450	0.26	8.04	8.31	0.00	0.14	710	72.03
11.500	0.27	8.29	8.56	0.00	0.14	724	72.04
11.550	0.28	8.56	8.84	0.00	0.14	740	72.05
11.600	0.30	8.86	9.15	0.00	0.14	757	72.07
11.650	0.32	9.19	9.48	0.00	0.14	776	72.08
11.700	0.34	9.56	9.85	0.00	0.14	796	72.10
11.750	0.36	9.96	10.25	0.00	0.15	819	72.11
11.800	0.37	10.39	10.69	0.00	0.15	843	72.13
11.850	0.38	10.83	11.14	0.00	0.15	868	72.15
11.900	0.38	11.28	11.59	0.00	0.16	894	72.17
11.950	0.39	11.74	12.06	0.00	0.16	919	72.19
12.000	0.41	12.22	12.54	0.00	0.16	946	72.21
12.050	0.43	12.72	13.05	0.00	0.16	975	72.23
12.100	0.44	13.25	13.58	0.00	0.17	1,008	72.25
12.150	0.44	13.78	14.12	0.00	0.17	1,075	72.27
12.200	0.43	14.29	14.64	0.00	0.17	1,139	72.30
12.250	0.41	14.78	15.13	0.00	0.18	1,199	72.32
12.300	0.41	15.24	15.60	0.00	0.18	1,257	72.34
12.350	0.40	15.68	16.05	0.00	0.18	1,312	72.36
12.400	0.40	16.11	16.48	0.00	0.19	1,365	72.37
12.450	0.39	16.52	16.90	0.00	0.19	1,417	72.39
12.500	0.39	16.92	17.30	0.00	0.19	1,466	72.41
12.550	0.38	17.30	17.69	0.00	0.19	1,514	72.42

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 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)
12.600	0.38	17.67	18.06	0.00	0.20	1,560	72.44
12.650	0.38	18.03	18.43	0.00	0.20	1,604	72.45
12.700	0.37	18.38	18.78	0.00	0.20	1,648	72.47
12.750	0.37	18.72	19.13	0.00	0.20	1,691	72.48
12.800	0.37	19.06	19.47	0.00	0.20	1,733	72.50
12.850	0.37	19.40	19.81	0.00	0.21	1,764	72.51
12.900	0.37	19.73	20.14	0.00	0.21	1,794	72.52
12.950	0.37	20.05	20.47	0.00	0.21	1,823	72.53
13.000	0.37	20.38	20.79	0.00	0.21	1,853	72.54
13.050	0.37	20.70	21.12	0.00	0.21	1,882	72.55
13.100	0.37	21.01	21.44	0.00	0.21	1,910	72.56
13.150	0.37	21.33	21.75	0.00	0.21	1,939	72.57
13.200	0.37	21.64	22.06	0.00	0.21	1,967	72.58
13.250	0.37	21.95	22.38	0.00	0.21	1,994	72.59
13.300	0.37	22.25	22.68	0.00	0.22	2,022	72.60
13.350	0.37	22.55	22.99	0.00	0.22	2,049	72.61
13.400	0.35	22.84	23.27	0.00	0.22	2,075	72.62
13.450	0.27	23.02	23.46	0.00	0.22	2,091	72.62
13.500	0.27	23.12	23.56	0.00	0.22	2,101	72.63
13.550	0.27	23.22	23.66	0.00	0.22	2,110	72.63
13.600	0.27	23.32	23.76	0.00	0.22	2,119	72.63
13.650	0.27	23.42	23.86	0.00	0.22	2,128	72.63
13.700	0.27	23.52	23.96	0.00	0.22	2,136	72.64
13.750	0.27	23.61	24.05	0.00	0.22	2,145	72.64
13.800	0.27	23.70	24.14	0.00	0.22	2,153	72.64
13.850	0.27	23.79	24.23	0.00	0.22	2,161	72.65
13.900	0.26	23.88	24.32	0.00	0.22	2,169	72.65
13.950	0.26	23.96	24.40	0.00	0.22	2,176	72.65
14.000	0.26	24.04	24.49	0.00	0.22	2,184	72.65
14.050	0.26	24.12	24.57	0.00	0.22	2,191	72.66
14.100	0.26	24.20	24.65	0.00	0.22	2,198	72.66
14.150	0.26	24.28	24.73	0.00	0.22	2,205	72.66
14.200	0.26	24.35	24.80	0.00	0.22	2,212	72.66
14.250	0.26	24.43	24.88	0.00	0.22	2,219	72.67
14.300	0.26	24.50	24.95	0.00	0.22	2,225	72.67
14.350	0.26	24.57	25.02	0.00	0.22	2,232	72.67
14.400	0.26	24.64	25.09	0.00	0.22	2,238	72.67
14.450	0.26	24.71	25.16	0.00	0.23	2,244	72.67
14.500	0.26	24.78	25.23	0.00	0.23	2,250	72.68
14.550	0.26	24.85	25.30	0.00	0.23	2,257	72.68
14.600	0.26	24.91	25.36	0.00	0.23	2,262	72.68
14.650	0.26	24.98	25.43	0.00	0.23	2,268	72.68

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 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	0.26	25.04	25.49	0.00	0.23	2,274	72.68
14.750	0.26	25.10	25.56	0.00	0.23	2,280	72.69
14.800	0.26	25.16	25.62	0.00	0.23	2,285	72.69
14.850	0.26	25.22	25.68	0.00	0.23	2,290	72.69
14.900	0.26	25.28	25.74	0.00	0.23	2,296	72.69
14.950	0.26	25.34	25.79	0.00	0.23	2,301	72.69
15.000	0.26	25.40	25.85	0.00	0.23	2,306	72.70
15.050	0.26	25.45	25.91	0.00	0.23	2,311	72.70
15.100	0.25	25.50	25.96	0.00	0.23	2,316	72.70
15.150	0.25	25.56	26.01	0.00	0.23	2,321	72.70
15.200	0.25	25.61	26.07	0.00	0.23	2,325	72.70
15.250	0.25	25.66	26.12	0.00	0.23	2,330	72.70
15.300	0.25	25.71	26.17	0.00	0.23	2,334	72.71
15.350	0.25	25.76	26.22	0.00	0.23	2,339	72.71
15.400	0.25	25.81	26.26	0.00	0.23	2,343	72.71
15.450	0.25	25.85	26.31	0.00	0.23	2,347	72.71
15.500	0.25	25.90	26.36	0.00	0.23	2,351	72.71
15.550	0.25	25.94	26.40	0.00	0.23	2,355	72.71
15.600	0.25	25.99	26.45	0.00	0.23	2,359	72.71
15.650	0.25	26.03	26.49	0.00	0.23	2,363	72.72
15.700	0.25	26.07	26.53	0.00	0.23	2,367	72.72
15.750	0.25	26.11	26.57	0.00	0.23	2,371	72.72
15.800	0.25	26.15	26.61	0.00	0.23	2,374	72.72
15.850	0.25	26.19	26.65	0.00	0.23	2,378	72.72
15.900	0.25	26.22	26.69	0.00	0.23	2,381	72.72
15.950	0.25	26.26	26.72	0.00	0.23	2,384	72.72
16.000	0.25	26.30	26.76	0.00	0.23	2,387	72.72
16.050	0.25	26.33	26.79	0.00	0.23	2,390	72.72
16.100	0.25	26.36	26.83	0.00	0.23	2,393	72.73
16.150	0.25	26.40	26.86	0.00	0.23	2,396	72.73
16.200	0.25	26.43	26.89	0.00	0.23	2,399	72.73
16.250	0.25	26.46	26.92	0.00	0.23	2,402	72.73
16.300	0.25	26.49	26.95	0.00	0.23	2,405	72.73
16.350	0.25	26.52	26.98	0.00	0.23	2,408	72.73
16.400	0.25	26.55	27.01	0.00	0.23	2,410	72.73
16.450	0.25	26.58	27.04	0.00	0.23	2,413	72.73
16.500	0.25	26.61	27.07	0.00	0.23	2,416	72.73
16.550	0.25	26.64	27.10	0.00	0.23	2,418	72.73
16.600	0.25	26.66	27.13	0.00	0.23	2,421	72.74
16.650	0.25	26.69	27.16	0.00	0.23	2,423	72.74
16.700	0.25	26.72	27.18	0.00	0.23	2,426	72.74
16.750	0.25	26.74	27.21	0.00	0.23	2,428	72.74

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 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	0.25	26.77	27.23	0.00	0.23	2,430	72.74
16.850	0.25	26.79	27.26	0.00	0.23	2,432	72.74
16.900	0.25	26.82	27.28	0.00	0.23	2,435	72.74
16.950	0.24	26.84	27.31	0.00	0.23	2,437	72.74
17.000	0.24	26.87	27.33	0.00	0.23	2,439	72.74
17.050	0.24	26.89	27.36	0.00	0.23	2,441	72.74
17.100	0.24	26.91	27.38	0.00	0.23	2,443	72.74
17.150	0.18	26.87	27.34	0.00	0.23	2,440	72.74
17.200	0.13	26.72	27.19	0.00	0.23	2,426	72.74
17.250	0.13	26.52	26.98	0.00	0.23	2,408	72.73
17.300	0.13	26.32	26.78	0.00	0.23	2,389	72.72
17.350	0.13	26.12	26.58	0.00	0.23	2,371	72.72
17.400	0.13	25.92	26.37	0.00	0.23	2,353	72.71
17.450	0.13	25.72	26.17	0.00	0.23	2,335	72.71
17.500	0.13	25.51	25.97	0.00	0.23	2,317	72.70
17.550	0.13	25.32	25.77	0.00	0.23	2,299	72.69
17.600	0.13	25.12	25.57	0.00	0.23	2,281	72.69
17.650	0.13	24.92	25.37	0.00	0.23	2,263	72.68
17.700	0.13	24.72	25.17	0.00	0.23	2,245	72.67
17.750	0.13	24.52	24.97	0.00	0.22	2,227	72.67
17.800	0.12	24.32	24.77	0.00	0.22	2,209	72.66
17.850	0.12	24.13	24.57	0.00	0.22	2,192	72.66
17.900	0.12	23.93	24.38	0.00	0.22	2,174	72.65
17.950	0.12	23.74	24.18	0.00	0.22	2,156	72.64
18.000	0.12	23.54	23.98	0.00	0.22	2,138	72.64
18.050	0.12	23.35	23.79	0.00	0.22	2,121	72.63
18.100	0.12	23.15	23.59	0.00	0.22	2,103	72.63
18.150	0.12	22.96	23.39	0.00	0.22	2,086	72.62
18.200	0.12	22.76	23.20	0.00	0.22	2,068	72.61
18.250	0.12	22.57	23.01	0.00	0.22	2,051	72.61
18.300	0.12	22.38	22.82	0.00	0.22	2,034	72.60
18.350	0.12	22.19	22.62	0.00	0.22	2,017	72.60
18.400	0.12	22.01	22.44	0.00	0.22	2,000	72.59
18.450	0.12	21.82	22.25	0.00	0.21	1,983	72.58
18.500	0.12	21.63	22.06	0.00	0.21	1,966	72.58
18.550	0.12	21.45	21.87	0.00	0.21	1,949	72.57
18.600	0.12	21.26	21.69	0.00	0.21	1,933	72.57
18.650	0.12	21.08	21.50	0.00	0.21	1,916	72.56
18.700	0.12	20.90	21.32	0.00	0.21	1,900	72.56
18.750	0.12	20.72	21.14	0.00	0.21	1,884	72.55
18.800	0.12	20.54	20.96	0.00	0.21	1,867	72.54
18.850	0.12	20.36	20.78	0.00	0.21	1,851	72.54

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 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)
18.900	0.12	20.18	20.60	0.00	0.21	1,835	72.53
18.950	0.12	20.00	20.42	0.00	0.21	1,819	72.53
19.000	0.12	19.83	20.24	0.00	0.21	1,803	72.52
19.050	0.12	19.65	20.07	0.00	0.21	1,787	72.52
19.100	0.12	19.48	19.89	0.00	0.21	1,772	72.51
19.150	0.12	19.31	19.72	0.00	0.21	1,756	72.51
19.200	0.12	19.14	19.54	0.00	0.20	1,741	72.50
19.250	0.12	18.97	19.37	0.00	0.20	1,721	72.49
19.300	0.12	18.80	19.20	0.00	0.20	1,700	72.49
19.350	0.12	18.63	19.03	0.00	0.20	1,679	72.48
19.400	0.12	18.47	18.87	0.00	0.20	1,659	72.47
19.450	0.12	18.30	18.70	0.00	0.20	1,638	72.47
19.500	0.12	18.14	18.54	0.00	0.20	1,618	72.46
19.550	0.12	17.98	18.38	0.00	0.20	1,598	72.45
19.600	0.12	17.82	18.22	0.00	0.20	1,579	72.45
19.650	0.12	17.67	18.06	0.00	0.20	1,559	72.44
19.700	0.12	17.51	17.90	0.00	0.19	1,540	72.43
19.750	0.12	17.36	17.75	0.00	0.19	1,521	72.43
19.800	0.12	17.21	17.59	0.00	0.19	1,502	72.42
19.850	0.12	17.06	17.44	0.00	0.19	1,483	72.41
19.900	0.12	16.91	17.29	0.00	0.19	1,465	72.41
19.950	0.12	16.76	17.14	0.00	0.19	1,446	72.40
20.000	0.12	16.62	17.00	0.00	0.19	1,428	72.40
20.050	0.04	16.40	16.78	0.00	0.19	1,401	72.39
20.100	0.04	16.11	16.49	0.00	0.19	1,366	72.37
20.150	0.04	15.83	16.20	0.00	0.18	1,330	72.36
20.200	0.04	15.54	15.91	0.00	0.18	1,295	72.35
20.250	0.04	15.26	15.63	0.00	0.18	1,260	72.34
20.300	0.04	14.99	15.34	0.00	0.18	1,225	72.33
20.350	0.04	14.71	15.07	0.00	0.18	1,191	72.31
20.400	0.04	14.44	14.79	0.00	0.18	1,157	72.30
20.450	0.04	14.17	14.52	0.00	0.17	1,124	72.29
20.500	0.04	13.91	14.25	0.00	0.17	1,091	72.28
20.550	0.04	13.65	13.99	0.00	0.17	1,058	72.27
20.600	0.04	13.39	13.73	0.00	0.17	1,026	72.26
20.650	0.04	13.13	13.47	0.00	0.17	998	72.25
20.700	0.04	12.88	13.21	0.00	0.17	984	72.24
20.750	0.04	12.63	12.96	0.00	0.16	970	72.23
20.800	0.04	12.38	12.70	0.00	0.16	956	72.22
20.850	0.04	12.13	12.46	0.00	0.16	942	72.21
20.900	0.04	11.89	12.21	0.00	0.16	928	72.19
20.950	0.04	11.65	11.97	0.00	0.16	914	72.18

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 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)
21.000	0.04	11.41	11.73	0.00	0.16	901	72.17
21.050	0.04	11.18	11.49	0.00	0.16	888	72.16
21.100	0.04	10.95	11.25	0.00	0.15	875	72.15
21.150	0.04	10.72	11.02	0.00	0.15	862	72.15
21.200	0.04	10.49	10.79	0.00	0.15	849	72.14
21.250	0.04	10.26	10.56	0.00	0.15	836	72.13
21.300	0.04	10.04	10.34	0.00	0.15	823	72.12
21.350	0.04	9.82	10.12	0.00	0.15	811	72.11
21.400	0.04	9.60	9.89	0.00	0.15	799	72.10
21.450	0.04	9.39	9.68	0.00	0.14	787	72.09
21.500	0.04	9.18	9.46	0.00	0.14	774	72.08
21.550	0.04	8.97	9.25	0.00	0.14	763	72.07
21.600	0.04	8.76	9.04	0.00	0.14	751	72.06
21.650	0.04	8.55	8.83	0.00	0.14	739	72.05
21.700	0.04	8.35	8.62	0.00	0.14	728	72.04
21.750	0.04	8.14	8.42	0.00	0.14	716	72.04
21.800	0.03	7.94	8.21	0.00	0.13	705	72.03
21.850	0.03	7.75	8.01	0.00	0.13	694	72.02
21.900	0.03	7.55	7.82	0.00	0.13	683	72.01
21.950	0.03	7.36	7.62	0.00	0.13	672	72.00
22.000	0.03	7.17	7.43	0.00	0.13	657	71.99
22.050	0.03	6.99	7.24	0.00	0.13	640	71.98
22.100	0.03	6.81	7.05	0.00	0.12	624	71.97
22.150	0.03	6.64	6.88	0.00	0.12	608	71.96
22.200	0.03	6.47	6.71	0.00	0.12	593	71.94
22.250	0.03	6.31	6.54	0.00	0.11	578	71.93
22.300	0.03	6.16	6.38	0.00	0.11	564	71.92
22.350	0.03	6.01	6.23	0.00	0.11	551	71.91
22.400	0.03	5.86	6.08	0.00	0.11	537	71.90
22.450	0.03	5.72	5.93	0.00	0.10	524	71.89
22.500	0.03	5.59	5.79	0.00	0.10	512	71.88
22.550	0.03	5.46	5.65	0.00	0.10	500	71.87
22.600	0.03	5.33	5.52	0.00	0.10	488	71.87
22.650	0.03	5.21	5.40	0.00	0.09	477	71.86
22.700	0.03	5.09	5.27	0.00	0.09	466	71.85
22.750	0.03	4.97	5.15	0.00	0.09	456	71.84
22.800	0.03	4.86	5.04	0.00	0.09	445	71.83
22.850	0.03	4.75	4.93	0.00	0.09	436	71.83
22.900	0.03	4.65	4.82	0.00	0.08	426	71.82
22.950	0.03	4.55	4.71	0.00	0.08	417	71.81
23.000	0.03	4.45	4.61	0.00	0.08	408	71.81
23.050	0.03	4.36	4.51	0.00	0.08	399	71.80

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 1 years

Label: MC-3500 - 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	0.03	4.26	4.42	0.00	0.08	391	71.79
23.150	0.03	4.17	4.32	0.00	0.07	382	71.79
23.200	0.03	4.09	4.23	0.00	0.07	374	71.78
23.250	0.03	4.00	4.15	0.00	0.07	367	71.77
23.300	0.03	3.92	4.06	0.00	0.07	359	71.77
23.350	0.03	3.84	3.98	0.00	0.07	352	71.76
23.400	0.03	3.77	3.90	0.00	0.07	345	71.76
23.450	0.03	3.69	3.82	0.00	0.07	338	71.75
23.500	0.03	3.62	3.75	0.00	0.06	332	71.75
23.550	0.03	3.55	3.68	0.00	0.06	325	71.74
23.600	0.03	3.48	3.61	0.00	0.06	319	71.74
23.650	0.03	3.42	3.54	0.00	0.06	313	71.73
23.700	0.03	3.35	3.47	0.00	0.06	307	71.73
23.750	0.03	3.29	3.41	0.00	0.06	302	71.73
23.800	0.03	3.23	3.35	0.00	0.06	296	71.72
23.850	0.03	3.17	3.29	0.00	0.06	291	71.72
23.900	0.03	3.12	3.23	0.00	0.06	286	71.71
23.950	0.03	3.06	3.17	0.00	0.05	280	71.71
24.000	0.03	3.01	3.12	0.00	0.05	276	71.71

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 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)
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	16	71.51
0.100	0.00	0.17	0.17	0.00	0.00	15	71.51
0.150	0.00	0.16	0.17	0.00	0.00	15	71.51
0.200	0.00	0.16	0.16	0.00	0.00	14	71.51
0.250	0.00	0.15	0.16	0.00	0.00	14	71.51
0.300	0.00	0.15	0.15	0.00	0.00	13	71.51
0.350	0.00	0.14	0.15	0.00	0.00	13	71.51
0.400	0.00	0.14	0.14	0.00	0.00	12	71.51
0.450	0.00	0.13	0.14	0.00	0.00	12	71.51
0.500	0.00	0.13	0.13	0.00	0.00	12	71.51
0.550	0.00	0.12	0.13	0.00	0.00	11	71.51
0.600	0.00	0.12	0.12	0.00	0.00	11	71.51
0.650	0.00	0.11	0.12	0.00	0.00	10	71.51
0.700	0.00	0.11	0.11	0.00	0.00	10	71.51
0.750	0.00	0.11	0.11	0.00	0.00	10	71.51
0.800	0.00	0.10	0.11	0.00	0.00	9	71.51
0.850	0.00	0.10	0.10	0.00	0.00	9	71.51
0.900	0.00	0.10	0.10	0.00	0.00	9	71.51
0.950	0.00	0.09	0.10	0.00	0.00	9	71.51
1.000	0.00	0.09	0.10	0.00	0.00	8	71.51
1.050	0.00	0.09	0.10	0.00	0.00	8	71.51
1.100	0.00	0.09	0.10	0.00	0.00	9	71.51
1.150	0.00	0.10	0.10	0.00	0.00	9	71.51
1.200	0.00	0.10	0.10	0.00	0.00	9	71.51
1.250	0.00	0.10	0.11	0.00	0.00	10	71.51
1.300	0.01	0.11	0.11	0.00	0.00	10	71.51
1.350	0.01	0.12	0.12	0.00	0.00	11	71.51
1.400	0.01	0.12	0.13	0.00	0.00	11	71.51
1.450	0.01	0.13	0.14	0.00	0.00	12	71.51
1.500	0.01	0.14	0.15	0.00	0.00	13	71.51
1.550	0.01	0.15	0.16	0.00	0.00	14	71.51
1.600	0.01	0.16	0.17	0.00	0.00	15	71.51
1.650	0.01	0.17	0.18	0.00	0.00	16	71.51
1.700	0.01	0.18	0.19	0.00	0.00	17	71.51
1.750	0.01	0.20	0.20	0.00	0.00	18	71.51
1.800	0.01	0.21	0.22	0.00	0.00	19	71.51
1.850	0.01	0.22	0.23	0.00	0.00	20	71.52
1.900	0.01	0.23	0.24	0.00	0.00	21	71.52
1.950	0.01	0.25	0.26	0.00	0.00	23	71.52
2.000	0.01	0.26	0.27	0.00	0.00	24	71.52
2.050	0.01	0.27	0.28	0.00	0.00	25	71.52

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 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)
2.100	0.01	0.29	0.30	0.00	0.01	26	71.52
2.150	0.01	0.30	0.31	0.00	0.01	28	71.52
2.200	0.01	0.32	0.33	0.00	0.01	29	71.52
2.250	0.01	0.33	0.34	0.00	0.01	30	71.52
2.300	0.01	0.35	0.36	0.00	0.01	32	71.52
2.350	0.02	0.37	0.38	0.00	0.01	33	71.53
2.400	0.02	0.38	0.40	0.00	0.01	35	71.53
2.450	0.02	0.40	0.42	0.00	0.01	37	71.53
2.500	0.02	0.42	0.44	0.00	0.01	39	71.53
2.550	0.02	0.44	0.46	0.00	0.01	40	71.53
2.600	0.02	0.46	0.48	0.00	0.01	42	71.53
2.650	0.02	0.48	0.50	0.00	0.01	44	71.53
2.700	0.02	0.50	0.52	0.00	0.01	46	71.53
2.750	0.02	0.53	0.54	0.00	0.01	48	71.54
2.800	0.02	0.55	0.57	0.00	0.01	50	71.54
2.850	0.02	0.57	0.59	0.00	0.01	52	71.54
2.900	0.02	0.59	0.62	0.00	0.01	54	71.54
2.950	0.02	0.62	0.64	0.00	0.01	57	71.54
3.000	0.02	0.64	0.67	0.00	0.01	59	71.54
3.050	0.02	0.67	0.69	0.00	0.01	61	71.55
3.100	0.03	0.69	0.72	0.00	0.01	64	71.55
3.150	0.03	0.72	0.75	0.00	0.01	66	71.55
3.200	0.03	0.75	0.77	0.00	0.01	68	71.55
3.250	0.03	0.77	0.80	0.00	0.01	71	71.55
3.300	0.03	0.80	0.83	0.00	0.01	73	71.55
3.350	0.03	0.83	0.86	0.00	0.01	76	71.56
3.400	0.03	0.86	0.89	0.00	0.02	78	71.56
3.450	0.03	0.88	0.92	0.00	0.02	81	71.56
3.500	0.03	0.91	0.95	0.00	0.02	84	71.56
3.550	0.03	0.94	0.97	0.00	0.02	86	71.56
3.600	0.03	0.97	1.00	0.00	0.02	89	71.57
3.650	0.03	1.00	1.04	0.00	0.02	92	71.57
3.700	0.03	1.03	1.07	0.00	0.02	94	71.57
3.750	0.03	1.06	1.10	0.00	0.02	97	71.57
3.800	0.03	1.09	1.13	0.00	0.02	100	71.57
3.850	0.04	1.12	1.16	0.00	0.02	103	71.58
3.900	0.04	1.15	1.19	0.00	0.02	105	71.58
3.950	0.04	1.18	1.22	0.00	0.02	108	71.58
4.000	0.04	1.21	1.26	0.00	0.02	111	71.58
4.050	0.04	1.24	1.29	0.00	0.02	114	71.59
4.100	0.04	1.27	1.32	0.00	0.02	117	71.59
4.150	0.04	1.31	1.35	0.00	0.02	120	71.59

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 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)
4.200	0.04	1.34	1.39	0.00	0.02	123	71.59
4.250	0.04	1.37	1.42	0.00	0.02	125	71.59
4.300	0.04	1.40	1.45	0.00	0.03	128	71.60
4.350	0.04	1.43	1.48	0.00	0.03	131	71.60
4.400	0.04	1.47	1.52	0.00	0.03	134	71.60
4.450	0.04	1.50	1.55	0.00	0.03	137	71.60
4.500	0.04	1.53	1.58	0.00	0.03	140	71.60
4.550	0.04	1.56	1.62	0.00	0.03	143	71.61
4.600	0.05	1.60	1.65	0.00	0.03	146	71.61
4.650	0.05	1.63	1.69	0.00	0.03	149	71.61
4.700	0.05	1.66	1.72	0.00	0.03	152	71.61
4.750	0.05	1.69	1.75	0.00	0.03	155	71.62
4.800	0.05	1.73	1.79	0.00	0.03	158	71.62
4.850	0.05	1.76	1.82	0.00	0.03	161	71.62
4.900	0.05	1.79	1.86	0.00	0.03	164	71.62
4.950	0.05	1.83	1.89	0.00	0.03	167	71.63
5.000	0.05	1.86	1.93	0.00	0.03	170	71.63
5.050	0.05	1.89	1.96	0.00	0.03	173	71.63
5.100	0.05	1.93	2.00	0.00	0.03	177	71.63
5.150	0.05	1.96	2.03	0.00	0.04	180	71.63
5.200	0.05	1.99	2.07	0.00	0.04	183	71.64
5.250	0.05	2.03	2.10	0.00	0.04	186	71.64
5.300	0.05	2.06	2.14	0.00	0.04	189	71.64
5.350	0.05	2.10	2.17	0.00	0.04	192	71.64
5.400	0.06	2.13	2.21	0.00	0.04	195	71.65
5.450	0.06	2.16	2.24	0.00	0.04	198	71.65
5.500	0.06	2.20	2.27	0.00	0.04	201	71.65
5.550	0.06	2.23	2.31	0.00	0.04	204	71.65
5.600	0.06	2.26	2.34	0.00	0.04	207	71.66
5.650	0.06	2.30	2.38	0.00	0.04	210	71.66
5.700	0.06	2.33	2.41	0.00	0.04	214	71.66
5.750	0.06	2.37	2.45	0.00	0.04	217	71.66
5.800	0.06	2.40	2.49	0.00	0.04	220	71.66
5.850	0.06	2.43	2.52	0.00	0.04	223	71.67
5.900	0.06	2.47	2.56	0.00	0.04	226	71.67
5.950	0.06	2.50	2.59	0.00	0.04	229	71.67
6.000	0.06	2.53	2.63	0.00	0.05	232	71.67
6.050	0.06	2.57	2.66	0.00	0.05	235	71.68
6.100	0.06	2.60	2.70	0.00	0.05	238	71.68
6.150	0.07	2.64	2.73	0.00	0.05	242	71.68
6.200	0.07	2.67	2.77	0.00	0.05	245	71.68
6.250	0.07	2.71	2.81	0.00	0.05	248	71.69

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 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)
6.300	0.07	2.75	2.85	0.00	0.05	252	71.69
6.350	0.07	2.79	2.89	0.00	0.05	255	71.69
6.400	0.07	2.83	2.93	0.00	0.05	259	71.69
6.450	0.07	2.87	2.97	0.00	0.05	263	71.70
6.500	0.07	2.91	3.02	0.00	0.05	267	71.70
6.550	0.08	2.96	3.06	0.00	0.05	271	71.70
6.600	0.08	3.00	3.11	0.00	0.05	275	71.71
6.650	0.08	3.05	3.16	0.00	0.05	279	71.71
6.700	0.08	3.10	3.21	0.00	0.06	284	71.71
6.750	0.08	3.14	3.26	0.00	0.06	288	71.72
6.800	0.08	3.19	3.31	0.00	0.06	293	71.72
6.850	0.08	3.24	3.36	0.00	0.06	297	71.72
6.900	0.09	3.30	3.41	0.00	0.06	302	71.73
6.950	0.09	3.35	3.47	0.00	0.06	307	71.73
7.000	0.09	3.40	3.52	0.00	0.06	312	71.73
7.050	0.09	3.46	3.58	0.00	0.06	317	71.74
7.100	0.09	3.51	3.64	0.00	0.06	322	71.74
7.150	0.09	3.57	3.70	0.00	0.06	327	71.74
7.200	0.09	3.62	3.75	0.00	0.07	332	71.75
7.250	0.10	3.68	3.81	0.00	0.07	337	71.75
7.300	0.10	3.74	3.87	0.00	0.07	343	71.76
7.350	0.10	3.80	3.94	0.00	0.07	348	71.76
7.400	0.10	3.86	4.00	0.00	0.07	354	71.76
7.450	0.10	3.92	4.06	0.00	0.07	359	71.77
7.500	0.10	3.98	4.12	0.00	0.07	365	71.77
7.550	0.10	4.04	4.19	0.00	0.07	370	71.78
7.600	0.11	4.11	4.25	0.00	0.07	376	71.78
7.650	0.11	4.17	4.32	0.00	0.07	382	71.79
7.700	0.11	4.23	4.39	0.00	0.08	388	71.79
7.750	0.11	4.30	4.45	0.00	0.08	394	71.79
7.800	0.11	4.37	4.52	0.00	0.08	400	71.80
7.850	0.11	4.43	4.59	0.00	0.08	406	71.80
7.900	0.11	4.50	4.66	0.00	0.08	412	71.81
7.950	0.12	4.57	4.73	0.00	0.08	418	71.81
8.000	0.12	4.63	4.80	0.00	0.08	424	71.82
8.050	0.12	4.70	4.87	0.00	0.08	431	71.82
8.100	0.12	4.77	4.94	0.00	0.09	437	71.83
8.150	0.12	4.84	5.02	0.00	0.09	444	71.83
8.200	0.13	4.92	5.09	0.00	0.09	451	71.84
8.250	0.13	5.00	5.17	0.00	0.09	458	71.84
8.300	0.13	5.08	5.26	0.00	0.09	465	71.85
8.350	0.14	5.16	5.35	0.00	0.09	473	71.85

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 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)
8.400	0.14	5.25	5.44	0.00	0.09	481	71.86
8.450	0.14	5.34	5.53	0.00	0.10	489	71.87
8.500	0.15	5.43	5.63	0.00	0.10	498	71.87
8.550	0.15	5.53	5.73	0.00	0.10	506	71.88
8.600	0.15	5.63	5.83	0.00	0.10	516	71.89
8.650	0.16	5.73	5.93	0.00	0.10	525	71.89
8.700	0.16	5.83	6.04	0.00	0.10	534	71.90
8.750	0.16	5.94	6.15	0.00	0.11	544	71.91
8.800	0.17	6.05	6.27	0.00	0.11	554	71.92
8.850	0.17	6.16	6.39	0.00	0.11	565	71.92
8.900	0.17	6.28	6.51	0.00	0.11	575	71.93
8.950	0.18	6.40	6.63	0.00	0.11	586	71.94
9.000	0.18	6.52	6.75	0.00	0.12	597	71.95
9.050	0.18	6.64	6.88	0.00	0.12	608	71.96
9.100	0.19	6.76	7.01	0.00	0.12	620	71.96
9.150	0.19	6.89	7.14	0.00	0.12	631	71.97
9.200	0.19	7.02	7.27	0.00	0.13	643	71.98
9.250	0.20	7.15	7.41	0.00	0.13	655	71.99
9.300	0.20	7.29	7.55	0.00	0.13	667	72.00
9.350	0.20	7.42	7.69	0.00	0.13	675	72.01
9.400	0.21	7.57	7.83	0.00	0.13	684	72.01
9.450	0.21	7.72	7.98	0.00	0.13	692	72.02
9.500	0.21	7.87	8.14	0.00	0.13	701	72.02
9.550	0.22	8.03	8.30	0.00	0.14	710	72.03
9.600	0.22	8.19	8.47	0.00	0.14	719	72.04
9.650	0.22	8.36	8.64	0.00	0.14	728	72.05
9.700	0.23	8.53	8.81	0.00	0.14	738	72.05
9.750	0.23	8.71	8.99	0.00	0.14	748	72.06
9.800	0.23	8.88	9.17	0.00	0.14	758	72.07
9.850	0.23	9.06	9.35	0.00	0.14	768	72.08
9.900	0.23	9.25	9.53	0.00	0.14	778	72.08
9.950	0.24	9.43	9.72	0.00	0.14	789	72.09
10.000	0.24	9.62	9.91	0.00	0.15	799	72.10
10.050	0.24	9.80	10.10	0.00	0.15	810	72.11
10.100	0.25	10.00	10.29	0.00	0.15	821	72.11
10.150	0.25	10.19	10.49	0.00	0.15	832	72.12
10.200	0.25	10.39	10.69	0.00	0.15	843	72.13
10.250	0.26	10.60	10.90	0.00	0.15	855	72.14
10.300	0.26	10.81	11.12	0.00	0.15	867	72.15
10.350	0.27	11.03	11.34	0.00	0.15	879	72.16
10.400	0.27	11.26	11.57	0.00	0.16	892	72.17
10.450	0.27	11.49	11.80	0.00	0.16	905	72.18

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 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)
10.500	0.28	11.72	12.04	0.00	0.16	919	72.19
10.550	0.28	11.97	12.29	0.00	0.16	932	72.20
10.600	0.29	12.21	12.54	0.00	0.16	946	72.21
10.650	0.29	12.47	12.79	0.00	0.16	961	72.22
10.700	0.29	12.73	13.06	0.00	0.16	975	72.23
10.750	0.30	12.98	13.32	0.00	0.17	990	72.24
10.800	0.30	13.24	13.58	0.00	0.17	1,008	72.25
10.850	0.30	13.50	13.84	0.00	0.17	1,040	72.26
10.900	0.30	13.76	14.10	0.00	0.17	1,072	72.27
10.950	0.30	14.02	14.36	0.00	0.17	1,104	72.28
11.000	0.30	14.27	14.62	0.00	0.17	1,136	72.30
11.050	0.31	14.53	14.88	0.00	0.18	1,168	72.31
11.100	0.31	14.79	15.14	0.00	0.18	1,201	72.32
11.150	0.31	15.05	15.41	0.00	0.18	1,233	72.33
11.200	0.32	15.32	15.68	0.00	0.18	1,267	72.34
11.250	0.32	15.59	15.96	0.00	0.18	1,301	72.35
11.300	0.33	15.87	16.24	0.00	0.18	1,336	72.36
11.350	0.33	16.16	16.53	0.00	0.19	1,371	72.38
11.400	0.34	16.45	16.83	0.00	0.19	1,408	72.39
11.450	0.34	16.76	17.14	0.00	0.19	1,446	72.40
11.500	0.35	17.06	17.45	0.00	0.19	1,484	72.41
11.550	0.36	17.38	17.77	0.00	0.19	1,524	72.43
11.600	0.38	17.73	18.13	0.00	0.20	1,568	72.44
11.650	0.39	18.11	18.51	0.00	0.20	1,615	72.46
11.700	0.40	18.51	18.91	0.00	0.20	1,664	72.48
11.750	0.41	18.92	19.32	0.00	0.20	1,715	72.49
11.800	0.43	19.34	19.76	0.00	0.21	1,759	72.51
11.850	0.44	19.79	20.21	0.00	0.21	1,800	72.52
11.900	0.45	20.27	20.69	0.00	0.21	1,843	72.54
11.950	0.48	20.78	21.20	0.00	0.21	1,889	72.55
12.000	0.54	21.37	21.80	0.00	0.21	1,943	72.57
12.050	0.58	22.06	22.49	0.00	0.22	2,004	72.59
12.100	0.60	22.80	23.24	0.00	0.22	2,072	72.62
12.150	0.60	23.56	24.00	0.00	0.22	2,141	72.64
12.200	1.81	25.51	25.97	0.00	0.23	2,317	72.70
12.250	1.37	28.18	28.69	0.00	0.25	2,559	72.78
12.300	1.24	30.21	30.79	0.00	0.29	2,745	72.85
12.350	1.10	31.91	32.55	0.00	0.32	2,901	72.90
12.400	0.99	33.32	34.01	0.00	0.34	3,030	72.95
12.450	0.96	34.54	35.27	0.00	0.37	3,142	72.99
12.500	0.95	35.67	36.45	0.00	0.39	3,246	73.02
12.550	0.89	36.67	37.50	0.00	0.42	3,339	73.05

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 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)
12.600	0.82	37.50	38.38	0.00	0.44	3,416	73.08
12.650	0.76	38.17	39.09	0.00	0.46	3,479	73.10
12.700	0.73	38.72	39.66	0.00	0.47	3,530	73.12
12.750	0.70	39.18	40.14	0.00	0.48	3,572	73.14
12.800	0.67	39.55	40.54	0.00	0.49	3,607	73.15
12.850	0.64	39.86	40.86	0.00	0.50	3,636	73.16
12.900	0.62	40.11	41.12	0.00	0.51	3,659	73.17
12.950	0.59	40.29	41.32	0.00	0.51	3,676	73.17
13.000	0.57	40.42	41.45	0.00	0.52	3,688	73.18
13.050	0.55	40.50	41.54	0.00	0.52	3,695	73.18
13.100	0.53	40.54	41.58	0.00	0.52	3,699	73.18
13.150	0.51	40.54	41.58	0.00	0.52	3,699	73.18
13.200	0.50	40.52	41.56	0.00	0.52	3,697	73.18
13.250	0.49	40.48	41.51	0.00	0.52	3,693	73.18
13.300	0.48	40.42	41.46	0.00	0.52	3,688	73.18
13.350	0.48	40.35	41.38	0.00	0.51	3,682	73.18
13.400	0.47	40.27	41.30	0.00	0.51	3,674	73.17
13.450	0.46	40.18	41.20	0.00	0.51	3,666	73.17
13.500	0.45	40.09	41.10	0.00	0.51	3,657	73.17
13.550	0.45	39.98	40.99	0.00	0.50	3,647	73.16
13.600	0.44	39.87	40.87	0.00	0.50	3,637	73.16
13.650	0.44	39.75	40.75	0.00	0.50	3,626	73.16
13.700	0.43	39.63	40.62	0.00	0.49	3,614	73.15
13.750	0.42	39.50	40.48	0.00	0.49	3,602	73.15
13.800	0.42	39.36	40.34	0.00	0.49	3,589	73.14
13.850	0.41	39.22	40.19	0.00	0.48	3,576	73.14
13.900	0.41	39.08	40.04	0.00	0.48	3,563	73.13
13.950	0.40	38.93	39.89	0.00	0.48	3,549	73.13
14.000	0.40	38.78	39.73	0.00	0.47	3,536	73.12
14.050	0.39	38.64	39.58	0.00	0.47	3,522	73.12
14.100	0.39	38.50	39.43	0.00	0.47	3,509	73.11
14.150	0.39	38.36	39.28	0.00	0.46	3,496	73.11
14.200	0.39	38.22	39.13	0.00	0.46	3,483	73.11
14.250	0.39	38.09	39.00	0.00	0.45	3,471	73.10
14.300	0.39	37.96	38.86	0.00	0.45	3,459	73.10
14.350	0.38	37.83	38.73	0.00	0.45	3,447	73.09
14.400	0.38	37.71	38.60	0.00	0.44	3,436	73.09
14.450	0.38	37.59	38.48	0.00	0.44	3,425	73.08
14.500	0.38	37.48	38.35	0.00	0.44	3,414	73.08
14.550	0.38	37.36	38.24	0.00	0.44	3,404	73.08
14.600	0.38	37.26	38.12	0.00	0.43	3,393	73.07
14.650	0.38	37.15	38.01	0.00	0.43	3,384	73.07

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 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)
14.700	0.37	37.05	37.90	0.00	0.43	3,374	73.07
14.750	0.37	36.95	37.80	0.00	0.42	3,365	73.06
14.800	0.37	36.85	37.69	0.00	0.42	3,356	73.06
14.850	0.37	36.76	37.60	0.00	0.42	3,347	73.06
14.900	0.37	36.67	37.51	0.00	0.42	3,339	73.05
14.950	0.37	36.59	37.42	0.00	0.42	3,332	73.05
15.000	0.37	36.51	37.34	0.00	0.41	3,324	73.05
15.050	0.37	36.44	37.26	0.00	0.41	3,317	73.05
15.100	0.37	36.36	37.18	0.00	0.41	3,310	73.04
15.150	0.37	36.29	37.11	0.00	0.41	3,304	73.04
15.200	0.37	36.23	37.04	0.00	0.41	3,298	73.04
15.250	0.37	36.17	36.97	0.00	0.40	3,292	73.04
15.300	0.37	36.10	36.91	0.00	0.40	3,286	73.04
15.350	0.37	36.05	36.85	0.00	0.40	3,281	73.03
15.400	0.37	35.99	36.79	0.00	0.40	3,276	73.03
15.450	0.37	35.94	36.74	0.00	0.40	3,271	73.03
15.500	0.37	35.89	36.68	0.00	0.40	3,266	73.03
15.550	0.37	35.84	36.63	0.00	0.40	3,262	73.03
15.600	0.34	35.76	36.55	0.00	0.39	3,254	73.02
15.650	0.27	35.59	36.37	0.00	0.39	3,238	73.02
15.700	0.27	35.36	36.13	0.00	0.38	3,217	73.01
15.750	0.27	35.15	35.90	0.00	0.38	3,197	73.00
15.800	0.27	34.94	35.68	0.00	0.37	3,178	73.00
15.850	0.27	34.74	35.48	0.00	0.37	3,160	72.99
15.900	0.27	34.54	35.27	0.00	0.37	3,142	72.99
15.950	0.27	34.35	35.08	0.00	0.36	3,124	72.98
16.000	0.27	34.17	34.88	0.00	0.36	3,107	72.97
16.050	0.27	33.98	34.70	0.00	0.36	3,091	72.97
16.100	0.26	33.81	34.51	0.00	0.35	3,075	72.96
16.150	0.26	33.64	34.34	0.00	0.35	3,059	72.96
16.200	0.26	33.47	34.17	0.00	0.35	3,044	72.95
16.250	0.26	33.31	34.00	0.00	0.34	3,029	72.95
16.300	0.26	33.16	33.84	0.00	0.34	3,015	72.94
16.350	0.26	33.01	33.68	0.00	0.34	3,001	72.94
16.400	0.26	32.86	33.53	0.00	0.34	2,988	72.93
16.450	0.26	32.72	33.38	0.00	0.33	2,975	72.93
16.500	0.26	32.58	33.24	0.00	0.33	2,962	72.92
16.550	0.26	32.45	33.10	0.00	0.33	2,950	72.92
16.600	0.26	32.32	32.97	0.00	0.33	2,938	72.91
16.650	0.26	32.19	32.84	0.00	0.32	2,926	72.91
16.700	0.26	32.07	32.71	0.00	0.32	2,915	72.91
16.750	0.26	31.95	32.59	0.00	0.32	2,904	72.90

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 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	0.26	31.84	32.47	0.00	0.32	2,894	72.90
16.850	0.26	31.72	32.35	0.00	0.32	2,884	72.90
16.900	0.26	31.61	32.24	0.00	0.31	2,874	72.89
16.950	0.26	31.51	32.13	0.00	0.31	2,864	72.89
17.000	0.26	31.41	32.03	0.00	0.31	2,855	72.89
17.050	0.26	31.31	31.92	0.00	0.31	2,845	72.88
17.100	0.26	31.21	31.82	0.00	0.31	2,837	72.88
17.150	0.26	31.12	31.73	0.00	0.30	2,828	72.88
17.200	0.26	31.03	31.63	0.00	0.30	2,820	72.87
17.250	0.26	30.94	31.54	0.00	0.30	2,811	72.87
17.300	0.26	30.85	31.45	0.00	0.30	2,804	72.87
17.350	0.26	30.77	31.36	0.00	0.30	2,796	72.87
17.400	0.26	30.69	31.28	0.00	0.30	2,788	72.86
17.450	0.26	30.61	31.20	0.00	0.30	2,781	72.86
17.500	0.26	30.53	31.12	0.00	0.29	2,774	72.86
17.550	0.26	30.45	31.04	0.00	0.29	2,767	72.86
17.600	0.25	30.38	30.96	0.00	0.29	2,760	72.85
17.650	0.25	30.31	30.89	0.00	0.29	2,754	72.85
17.700	0.25	30.24	30.82	0.00	0.29	2,747	72.85
17.750	0.25	30.17	30.75	0.00	0.29	2,741	72.85
17.800	0.25	30.10	30.68	0.00	0.29	2,735	72.84
17.850	0.25	30.04	30.61	0.00	0.29	2,729	72.84
17.900	0.25	29.98	30.55	0.00	0.28	2,723	72.84
17.950	0.25	29.92	30.48	0.00	0.28	2,718	72.84
18.000	0.25	29.86	30.42	0.00	0.28	2,712	72.84
18.050	0.25	29.80	30.36	0.00	0.28	2,707	72.83
18.100	0.25	29.74	30.30	0.00	0.28	2,702	72.83
18.150	0.25	29.68	30.24	0.00	0.28	2,697	72.83
18.200	0.25	29.63	30.19	0.00	0.28	2,692	72.83
18.250	0.25	29.58	30.13	0.00	0.28	2,687	72.83
18.300	0.25	29.53	30.08	0.00	0.28	2,682	72.83
18.350	0.25	29.48	30.03	0.00	0.28	2,678	72.82
18.400	0.25	29.43	29.98	0.00	0.27	2,674	72.82
18.450	0.25	29.39	29.93	0.00	0.27	2,669	72.82
18.500	0.25	29.34	29.89	0.00	0.27	2,665	72.82
18.550	0.25	29.30	29.84	0.00	0.27	2,661	72.82
18.600	0.25	29.26	29.80	0.00	0.27	2,657	72.82
18.650	0.25	29.21	29.76	0.00	0.27	2,654	72.82
18.700	0.25	29.17	29.72	0.00	0.27	2,650	72.81
18.750	0.25	29.14	29.68	0.00	0.27	2,647	72.81
18.800	0.25	29.10	29.64	0.00	0.27	2,643	72.81
18.850	0.25	29.06	29.60	0.00	0.27	2,640	72.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 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)
18.900	0.25	29.03	29.56	0.00	0.27	2,637	72.81
18.950	0.25	28.99	29.53	0.00	0.27	2,633	72.81
19.000	0.25	28.96	29.49	0.00	0.27	2,630	72.81
19.050	0.25	28.93	29.46	0.00	0.27	2,628	72.81
19.100	0.25	28.90	29.43	0.00	0.27	2,625	72.81
19.150	0.25	28.87	29.40	0.00	0.26	2,622	72.80
19.200	0.25	28.84	29.37	0.00	0.26	2,619	72.80
19.250	0.25	28.81	29.34	0.00	0.26	2,617	72.80
19.300	0.25	28.78	29.31	0.00	0.26	2,614	72.80
19.350	0.25	28.75	29.28	0.00	0.26	2,612	72.80
19.400	0.25	28.73	29.25	0.00	0.26	2,609	72.80
19.450	0.25	28.70	29.23	0.00	0.26	2,607	72.80
19.500	0.25	28.68	29.20	0.00	0.26	2,605	72.80
19.550	0.25	28.65	29.18	0.00	0.26	2,602	72.80
19.600	0.25	28.63	29.15	0.00	0.26	2,600	72.80
19.650	0.25	28.61	29.13	0.00	0.26	2,598	72.80
19.700	0.25	28.58	29.10	0.00	0.26	2,596	72.80
19.750	0.25	28.56	29.08	0.00	0.26	2,594	72.80
19.800	0.25	28.54	29.06	0.00	0.26	2,592	72.79
19.850	0.25	28.52	29.04	0.00	0.26	2,590	72.79
19.900	0.25	28.50	29.02	0.00	0.26	2,588	72.79
19.950	0.25	28.48	29.00	0.00	0.26	2,587	72.79
20.000	0.25	28.46	28.98	0.00	0.26	2,585	72.79
20.050	0.25	28.44	28.96	0.00	0.26	2,583	72.79
20.100	0.25	28.43	28.94	0.00	0.26	2,581	72.79
20.150	0.25	28.41	28.92	0.00	0.26	2,580	72.79
20.200	0.25	28.39	28.90	0.00	0.26	2,578	72.79
20.250	0.25	28.37	28.89	0.00	0.26	2,577	72.79
20.300	0.25	28.36	28.87	0.00	0.26	2,575	72.79
20.350	0.25	28.34	28.85	0.00	0.26	2,574	72.79
20.400	0.25	28.33	28.84	0.00	0.26	2,572	72.79
20.450	0.25	28.31	28.82	0.00	0.25	2,571	72.79
20.500	0.25	28.30	28.80	0.00	0.25	2,570	72.79
20.550	0.25	28.28	28.79	0.00	0.25	2,568	72.79
20.600	0.25	28.27	28.78	0.00	0.25	2,567	72.79
20.650	0.25	28.25	28.76	0.00	0.25	2,566	72.79
20.700	0.25	28.24	28.75	0.00	0.25	2,564	72.78
20.750	0.25	28.23	28.73	0.00	0.25	2,563	72.78
20.800	0.25	28.21	28.72	0.00	0.25	2,562	72.78
20.850	0.25	28.20	28.71	0.00	0.25	2,561	72.78
20.900	0.25	28.19	28.69	0.00	0.25	2,560	72.78
20.950	0.25	28.18	28.68	0.00	0.25	2,559	72.78

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 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	0.25	28.17	28.67	0.00	0.25	2,558	72.78
21.050	0.25	28.15	28.66	0.00	0.25	2,557	72.78
21.100	0.25	28.14	28.65	0.00	0.25	2,556	72.78
21.150	0.25	28.13	28.64	0.00	0.25	2,555	72.78
21.200	0.25	28.12	28.63	0.00	0.25	2,554	72.78
21.250	0.25	28.11	28.61	0.00	0.25	2,553	72.78
21.300	0.25	28.10	28.60	0.00	0.25	2,552	72.78
21.350	0.25	28.09	28.59	0.00	0.25	2,551	72.78
21.400	0.25	28.08	28.58	0.00	0.25	2,550	72.78
21.450	0.25	28.07	28.57	0.00	0.25	2,549	72.78
21.500	0.25	28.06	28.56	0.00	0.25	2,548	72.78
21.550	0.25	28.05	28.55	0.00	0.25	2,547	72.78
21.600	0.25	28.04	28.54	0.00	0.25	2,547	72.78
21.650	0.25	28.04	28.54	0.00	0.25	2,546	72.78
21.700	0.25	28.03	28.53	0.00	0.25	2,545	72.78
21.750	0.25	28.02	28.52	0.00	0.25	2,544	72.78
21.800	0.25	28.01	28.51	0.00	0.25	2,543	72.78
21.850	0.25	28.00	28.50	0.00	0.25	2,543	72.78
21.900	0.25	27.99	28.49	0.00	0.25	2,542	72.78
21.950	0.25	27.99	28.48	0.00	0.25	2,541	72.78
22.000	0.24	27.98	28.48	0.00	0.25	2,540	72.78
22.050	0.24	27.97	28.47	0.00	0.25	2,540	72.78
22.100	0.24	27.96	28.46	0.00	0.25	2,539	72.78
22.150	0.24	27.96	28.45	0.00	0.25	2,538	72.78
22.200	0.24	27.95	28.45	0.00	0.25	2,538	72.78
22.250	0.24	27.94	28.44	0.00	0.25	2,537	72.78
22.300	0.24	27.93	28.43	0.00	0.25	2,536	72.78
22.350	0.24	27.93	28.42	0.00	0.25	2,536	72.77
22.400	0.24	27.92	28.42	0.00	0.25	2,535	72.77
22.450	0.24	27.91	28.41	0.00	0.25	2,534	72.77
22.500	0.24	27.91	28.40	0.00	0.25	2,534	72.77
22.550	0.24	27.90	28.39	0.00	0.25	2,533	72.77
22.600	0.24	27.89	28.39	0.00	0.25	2,533	72.77
22.650	0.24	27.89	28.38	0.00	0.25	2,532	72.77
22.700	0.24	27.88	28.38	0.00	0.25	2,532	72.77
22.750	0.24	27.87	28.37	0.00	0.25	2,531	72.77
22.800	0.24	27.87	28.36	0.00	0.25	2,530	72.77
22.850	0.24	27.86	28.36	0.00	0.25	2,530	72.77
22.900	0.24	27.86	28.35	0.00	0.25	2,529	72.77
22.950	0.24	27.85	28.34	0.00	0.25	2,529	72.77
23.000	0.24	27.84	28.34	0.00	0.25	2,528	72.77
23.050	0.24	27.84	28.33	0.00	0.25	2,528	72.77

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 10 years

Label: MC-3500 - 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	0.24	27.83	28.33	0.00	0.25	2,527	72.77
23.150	0.24	27.83	28.32	0.00	0.25	2,527	72.77
23.200	0.24	27.82	28.31	0.00	0.25	2,526	72.77
23.250	0.24	27.82	28.31	0.00	0.25	2,526	72.77
23.300	0.24	27.81	28.30	0.00	0.25	2,525	72.77
23.350	0.18	27.74	28.23	0.00	0.24	2,519	72.77
23.400	0.13	27.56	28.04	0.00	0.24	2,502	72.76
23.450	0.13	27.34	27.81	0.00	0.24	2,482	72.76
23.500	0.13	27.12	27.59	0.00	0.23	2,462	72.75
23.550	0.12	26.90	27.37	0.00	0.23	2,442	72.74
23.600	0.12	26.69	27.15	0.00	0.23	2,423	72.74
23.650	0.12	26.47	26.94	0.00	0.23	2,403	72.73
23.700	0.12	26.26	26.72	0.00	0.23	2,384	72.72
23.750	0.12	26.05	26.51	0.00	0.23	2,365	72.72
23.800	0.12	25.84	26.30	0.00	0.23	2,346	72.71
23.850	0.12	25.63	26.09	0.00	0.23	2,327	72.70
23.900	0.12	25.42	25.88	0.00	0.23	2,308	72.70
23.950	0.12	25.21	25.67	0.00	0.23	2,290	72.69
24.000	0.12	25.01	25.46	0.00	0.23	2,271	72.68

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 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)
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	16	71.51
0.100	0.00	0.17	0.17	0.00	0.00	15	71.51
0.150	0.00	0.16	0.17	0.00	0.00	15	71.51
0.200	0.00	0.16	0.16	0.00	0.00	14	71.51
0.250	0.00	0.15	0.16	0.00	0.00	14	71.51
0.300	0.00	0.15	0.15	0.00	0.00	13	71.51
0.350	0.00	0.14	0.15	0.00	0.00	13	71.51
0.400	0.00	0.14	0.14	0.00	0.00	12	71.51
0.450	0.00	0.13	0.14	0.00	0.00	12	71.51
0.500	0.00	0.13	0.13	0.00	0.00	12	71.51
0.550	0.00	0.12	0.13	0.00	0.00	11	71.51
0.600	0.00	0.12	0.12	0.00	0.00	11	71.51
0.650	0.00	0.11	0.12	0.00	0.00	10	71.51
0.700	0.00	0.11	0.11	0.00	0.00	10	71.51
0.750	0.00	0.11	0.11	0.00	0.00	10	71.51
0.800	0.00	0.10	0.11	0.00	0.00	10	71.51
0.850	0.00	0.11	0.11	0.00	0.00	10	71.51
0.900	0.00	0.11	0.11	0.00	0.00	10	71.51
0.950	0.00	0.11	0.12	0.00	0.00	10	71.51
1.000	0.01	0.12	0.12	0.00	0.00	11	71.51
1.050	0.01	0.13	0.13	0.00	0.00	12	71.51
1.100	0.01	0.13	0.14	0.00	0.00	12	71.51
1.150	0.01	0.15	0.15	0.00	0.00	13	71.51
1.200	0.01	0.16	0.16	0.00	0.00	14	71.51
1.250	0.01	0.17	0.18	0.00	0.00	16	71.51
1.300	0.01	0.18	0.19	0.00	0.00	17	71.51
1.350	0.01	0.20	0.21	0.00	0.00	18	71.51
1.400	0.01	0.22	0.22	0.00	0.00	20	71.51
1.450	0.01	0.23	0.24	0.00	0.00	21	71.52
1.500	0.01	0.25	0.26	0.00	0.00	23	71.52
1.550	0.01	0.27	0.28	0.00	0.00	24	71.52
1.600	0.01	0.29	0.30	0.00	0.01	26	71.52
1.650	0.02	0.30	0.32	0.00	0.01	28	71.52
1.700	0.02	0.32	0.34	0.00	0.01	30	71.52
1.750	0.02	0.34	0.36	0.00	0.01	32	71.52
1.800	0.02	0.37	0.38	0.00	0.01	33	71.53
1.850	0.02	0.39	0.40	0.00	0.01	35	71.53
1.900	0.02	0.41	0.42	0.00	0.01	38	71.53
1.950	0.02	0.43	0.45	0.00	0.01	40	71.53
2.000	0.02	0.46	0.47	0.00	0.01	42	71.53
2.050	0.02	0.48	0.50	0.00	0.01	44	71.53

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 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)
2.100	0.02	0.51	0.53	0.00	0.01	47	71.53
2.150	0.02	0.53	0.55	0.00	0.01	49	71.54
2.200	0.02	0.56	0.58	0.00	0.01	52	71.54
2.250	0.03	0.59	0.61	0.00	0.01	54	71.54
2.300	0.03	0.62	0.64	0.00	0.01	57	71.54
2.350	0.03	0.65	0.67	0.00	0.01	59	71.54
2.400	0.03	0.68	0.70	0.00	0.01	62	71.55
2.450	0.03	0.71	0.74	0.00	0.01	65	71.55
2.500	0.03	0.74	0.77	0.00	0.01	68	71.55
2.550	0.03	0.77	0.80	0.00	0.01	71	71.55
2.600	0.03	0.81	0.84	0.00	0.01	74	71.56
2.650	0.03	0.84	0.87	0.00	0.02	77	71.56
2.700	0.03	0.88	0.91	0.00	0.02	80	71.56
2.750	0.03	0.91	0.94	0.00	0.02	83	71.56
2.800	0.04	0.95	0.98	0.00	0.02	87	71.56
2.850	0.04	0.98	1.02	0.00	0.02	90	71.57
2.900	0.04	1.02	1.05	0.00	0.02	93	71.57
2.950	0.04	1.05	1.09	0.00	0.02	97	71.57
3.000	0.04	1.09	1.13	0.00	0.02	100	71.57
3.050	0.04	1.13	1.17	0.00	0.02	104	71.58
3.100	0.04	1.17	1.21	0.00	0.02	107	71.58
3.150	0.04	1.21	1.25	0.00	0.02	111	71.58
3.200	0.04	1.24	1.29	0.00	0.02	114	71.59
3.250	0.04	1.28	1.33	0.00	0.02	118	71.59
3.300	0.04	1.32	1.37	0.00	0.02	121	71.59
3.350	0.04	1.36	1.41	0.00	0.02	125	71.59
3.400	0.05	1.40	1.45	0.00	0.03	129	71.60
3.450	0.05	1.44	1.50	0.00	0.03	132	71.60
3.500	0.05	1.48	1.54	0.00	0.03	136	71.60
3.550	0.05	1.52	1.58	0.00	0.03	140	71.60
3.600	0.05	1.57	1.62	0.00	0.03	143	71.61
3.650	0.05	1.61	1.66	0.00	0.03	147	71.61
3.700	0.05	1.65	1.71	0.00	0.03	151	71.61
3.750	0.05	1.69	1.75	0.00	0.03	155	71.62
3.800	0.05	1.73	1.79	0.00	0.03	159	71.62
3.850	0.05	1.77	1.84	0.00	0.03	162	71.62
3.900	0.05	1.82	1.88	0.00	0.03	166	71.62
3.950	0.05	1.86	1.92	0.00	0.03	170	71.63
4.000	0.06	1.90	1.97	0.00	0.03	174	71.63
4.050	0.06	1.94	2.01	0.00	0.03	178	71.63
4.100	0.06	1.99	2.06	0.00	0.04	182	71.64
4.150	0.06	2.03	2.10	0.00	0.04	186	71.64

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 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)
4.200	0.06	2.07	2.15	0.00	0.04	190	71.64
4.250	0.06	2.11	2.19	0.00	0.04	194	71.65
4.300	0.06	2.16	2.23	0.00	0.04	198	71.65
4.350	0.06	2.20	2.28	0.00	0.04	202	71.65
4.400	0.06	2.24	2.32	0.00	0.04	206	71.65
4.450	0.06	2.29	2.37	0.00	0.04	209	71.66
4.500	0.06	2.33	2.41	0.00	0.04	213	71.66
4.550	0.06	2.37	2.46	0.00	0.04	217	71.66
4.600	0.07	2.42	2.50	0.00	0.04	221	71.67
4.650	0.07	2.46	2.55	0.00	0.04	225	71.67
4.700	0.07	2.50	2.59	0.00	0.04	229	71.67
4.750	0.07	2.55	2.64	0.00	0.05	233	71.67
4.800	0.07	2.59	2.68	0.00	0.05	237	71.68
4.850	0.07	2.63	2.73	0.00	0.05	241	71.68
4.900	0.07	2.68	2.77	0.00	0.05	245	71.68
4.950	0.07	2.72	2.82	0.00	0.05	249	71.69
5.000	0.07	2.77	2.86	0.00	0.05	253	71.69
5.050	0.07	2.81	2.91	0.00	0.05	257	71.69
5.100	0.07	2.85	2.95	0.00	0.05	261	71.70
5.150	0.07	2.90	3.00	0.00	0.05	265	71.70
5.200	0.07	2.94	3.04	0.00	0.05	269	71.70
5.250	0.08	2.98	3.09	0.00	0.05	273	71.70
5.300	0.08	3.03	3.13	0.00	0.05	277	71.71
5.350	0.08	3.07	3.18	0.00	0.06	281	71.71
5.400	0.08	3.11	3.23	0.00	0.06	285	71.71
5.450	0.08	3.16	3.27	0.00	0.06	289	71.72
5.500	0.08	3.20	3.31	0.00	0.06	293	71.72
5.550	0.08	3.24	3.36	0.00	0.06	297	71.72
5.600	0.08	3.29	3.40	0.00	0.06	301	71.73
5.650	0.08	3.33	3.45	0.00	0.06	305	71.73
5.700	0.08	3.37	3.49	0.00	0.06	309	71.73
5.750	0.08	3.42	3.54	0.00	0.06	313	71.73
5.800	0.08	3.46	3.58	0.00	0.06	317	71.74
5.850	0.08	3.50	3.63	0.00	0.06	321	71.74
5.900	0.09	3.55	3.67	0.00	0.06	325	71.74
5.950	0.09	3.59	3.72	0.00	0.06	329	71.75
6.000	0.09	3.63	3.76	0.00	0.07	333	71.75
6.050	0.09	3.67	3.81	0.00	0.07	337	71.75
6.100	0.09	3.72	3.85	0.00	0.07	341	71.76
6.150	0.09	3.76	3.90	0.00	0.07	345	71.76
6.200	0.09	3.81	3.94	0.00	0.07	349	71.76
6.250	0.09	3.85	3.99	0.00	0.07	353	71.76

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 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)
6.300	0.10	3.90	4.04	0.00	0.07	358	71.77
6.350	0.10	3.95	4.10	0.00	0.07	362	71.77
6.400	0.10	4.01	4.15	0.00	0.07	367	71.77
6.450	0.10	4.06	4.21	0.00	0.07	372	71.78
6.500	0.10	4.11	4.26	0.00	0.07	377	71.78
6.550	0.10	4.17	4.32	0.00	0.07	382	71.79
6.600	0.11	4.23	4.38	0.00	0.08	387	71.79
6.650	0.11	4.29	4.44	0.00	0.08	393	71.79
6.700	0.11	4.35	4.51	0.00	0.08	398	71.80
6.750	0.11	4.41	4.57	0.00	0.08	404	71.80
6.800	0.11	4.48	4.64	0.00	0.08	410	71.81
6.850	0.11	4.54	4.70	0.00	0.08	416	71.81
6.900	0.12	4.61	4.77	0.00	0.08	422	71.82
6.950	0.12	4.67	4.84	0.00	0.08	428	71.82
7.000	0.12	4.74	4.91	0.00	0.09	434	71.83
7.050	0.12	4.81	4.98	0.00	0.09	441	71.83
7.100	0.12	4.88	5.06	0.00	0.09	447	71.83
7.150	0.13	4.95	5.13	0.00	0.09	454	71.84
7.200	0.13	5.03	5.21	0.00	0.09	461	71.84
7.250	0.13	5.10	5.28	0.00	0.09	467	71.85
7.300	0.13	5.18	5.36	0.00	0.09	474	71.86
7.350	0.13	5.25	5.44	0.00	0.09	481	71.86
7.400	0.14	5.33	5.52	0.00	0.10	488	71.87
7.450	0.14	5.41	5.60	0.00	0.10	496	71.87
7.500	0.14	5.49	5.68	0.00	0.10	503	71.88
7.550	0.14	5.57	5.77	0.00	0.10	510	71.88
7.600	0.14	5.65	5.85	0.00	0.10	518	71.89
7.650	0.14	5.73	5.94	0.00	0.10	525	71.89
7.700	0.15	5.82	6.02	0.00	0.10	533	71.90
7.750	0.15	5.90	6.11	0.00	0.11	540	71.90
7.800	0.15	5.98	6.20	0.00	0.11	548	71.91
7.850	0.15	6.07	6.29	0.00	0.11	556	71.92
7.900	0.15	6.16	6.38	0.00	0.11	564	71.92
7.950	0.16	6.24	6.47	0.00	0.11	572	71.93
8.000	0.16	6.33	6.56	0.00	0.11	580	71.93
8.050	0.16	6.42	6.65	0.00	0.12	588	71.94
8.100	0.16	6.51	6.75	0.00	0.12	597	71.95
8.150	0.17	6.61	6.84	0.00	0.12	605	71.95
8.200	0.17	6.70	6.94	0.00	0.12	614	71.96
8.250	0.17	6.81	7.05	0.00	0.12	623	71.97
8.300	0.18	6.91	7.16	0.00	0.12	633	71.97
8.350	0.18	7.02	7.27	0.00	0.13	643	71.98

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 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)
8.400	0.19	7.14	7.39	0.00	0.13	654	71.99
8.450	0.19	7.25	7.51	0.00	0.13	665	72.00
8.500	0.20	7.38	7.64	0.00	0.13	673	72.00
8.550	0.20	7.51	7.77	0.00	0.13	680	72.01
8.600	0.20	7.65	7.91	0.00	0.13	688	72.02
8.650	0.21	7.79	8.06	0.00	0.13	696	72.02
8.700	0.21	7.94	8.21	0.00	0.13	705	72.03
8.750	0.22	8.10	8.37	0.00	0.14	713	72.03
8.800	0.22	8.26	8.53	0.00	0.14	723	72.04
8.850	0.22	8.43	8.71	0.00	0.14	732	72.05
8.900	0.23	8.61	8.88	0.00	0.14	742	72.06
8.950	0.23	8.78	9.06	0.00	0.14	752	72.06
9.000	0.23	8.96	9.25	0.00	0.14	763	72.07
9.050	0.24	9.15	9.43	0.00	0.14	773	72.08
9.100	0.24	9.34	9.62	0.00	0.14	784	72.09
9.150	0.24	9.53	9.82	0.00	0.14	794	72.09
9.200	0.24	9.72	10.01	0.00	0.15	805	72.10
9.250	0.25	9.92	10.21	0.00	0.15	816	72.11
9.300	0.25	10.12	10.41	0.00	0.15	828	72.12
9.350	0.25	10.32	10.62	0.00	0.15	839	72.13
9.400	0.26	10.53	10.83	0.00	0.15	851	72.14
9.450	0.26	10.74	11.04	0.00	0.15	863	72.15
9.500	0.26	10.95	11.26	0.00	0.15	875	72.16
9.550	0.26	11.16	11.47	0.00	0.15	887	72.16
9.600	0.27	11.38	11.69	0.00	0.16	899	72.17
9.650	0.27	11.60	11.92	0.00	0.16	912	72.18
9.700	0.27	11.83	12.15	0.00	0.16	924	72.19
9.750	0.28	12.05	12.38	0.00	0.16	937	72.20
9.800	0.28	12.28	12.61	0.00	0.16	950	72.21
9.850	0.28	12.52	12.84	0.00	0.16	963	72.22
9.900	0.28	12.75	13.08	0.00	0.16	977	72.23
9.950	0.29	12.99	13.32	0.00	0.17	990	72.24
10.000	0.29	13.23	13.57	0.00	0.17	1,007	72.25
10.050	0.29	13.48	13.82	0.00	0.17	1,037	72.26
10.100	0.30	13.72	14.07	0.00	0.17	1,068	72.27
10.150	0.30	13.97	14.32	0.00	0.17	1,099	72.28
10.200	0.30	14.22	14.57	0.00	0.17	1,130	72.29
10.250	0.30	14.47	14.82	0.00	0.18	1,160	72.30
10.300	0.30	14.71	15.07	0.00	0.18	1,191	72.31
10.350	0.30	14.96	15.32	0.00	0.18	1,222	72.33
10.400	0.31	15.21	15.57	0.00	0.18	1,253	72.34
10.450	0.31	15.46	15.82	0.00	0.18	1,284	72.35

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 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	0.31	15.71	16.08	0.00	0.18	1,315	72.36
10.550	0.31	15.96	16.33	0.00	0.18	1,347	72.37
10.600	0.31	16.21	16.58	0.00	0.19	1,378	72.38
10.650	0.31	16.46	16.84	0.00	0.19	1,409	72.39
10.700	0.32	16.72	17.10	0.00	0.19	1,441	72.40
10.750	0.32	16.97	17.35	0.00	0.19	1,472	72.41
10.800	0.32	17.22	17.61	0.00	0.19	1,504	72.42
10.850	0.32	17.48	17.87	0.00	0.19	1,536	72.43
10.900	0.32	17.73	18.13	0.00	0.20	1,567	72.44
10.950	0.33	17.99	18.38	0.00	0.20	1,599	72.45
11.000	0.33	18.25	18.64	0.00	0.20	1,631	72.46
11.050	0.33	18.50	18.91	0.00	0.20	1,663	72.48
11.100	0.33	18.77	19.17	0.00	0.20	1,696	72.49
11.150	0.34	19.03	19.44	0.00	0.20	1,729	72.50
11.200	0.35	19.31	19.72	0.00	0.21	1,756	72.51
11.250	0.35	19.59	20.01	0.00	0.21	1,782	72.52
11.300	0.36	19.89	20.30	0.00	0.21	1,809	72.52
11.350	0.37	20.20	20.62	0.00	0.21	1,837	72.53
11.400	0.37	20.52	20.94	0.00	0.21	1,866	72.54
11.450	0.38	20.85	21.27	0.00	0.21	1,896	72.55
11.500	0.39	21.20	21.62	0.00	0.21	1,927	72.57
11.550	0.40	21.55	21.98	0.00	0.21	1,959	72.58
11.600	0.40	21.92	22.35	0.00	0.21	1,992	72.59
11.650	0.41	22.31	22.74	0.00	0.22	2,027	72.60
11.700	0.43	22.71	23.15	0.00	0.22	2,064	72.61
11.750	0.44	23.14	23.58	0.00	0.22	2,103	72.63
11.800	0.46	23.60	24.05	0.00	0.22	2,144	72.64
11.850	0.48	24.10	24.55	0.00	0.22	2,189	72.66
11.900	0.50	24.63	25.08	0.00	0.22	2,237	72.67
11.950	0.54	25.22	25.67	0.00	0.23	2,290	72.69
12.000	0.62	25.92	26.38	0.00	0.23	2,353	72.71
12.050	1.04	27.11	27.58	0.00	0.23	2,461	72.75
12.100	3.33	30.89	31.49	0.00	0.30	2,807	72.87
12.150	2.57	35.99	36.79	0.00	0.40	3,275	73.03
12.200	2.76	40.29	41.31	0.00	0.51	3,675	73.17
12.250	3.07	44.85	46.11	0.00	0.63	4,097	73.32
12.300	2.89	49.31	50.80	0.00	0.75	4,506	73.47
12.350	2.62	53.18	54.82	0.00	0.82	4,863	73.60
12.400	2.32	56.39	58.12	0.00	0.87	5,159	73.71
12.450	2.02	58.92	60.73	0.00	0.90	5,391	73.79
12.500	1.70	60.77	62.63	0.00	0.93	5,557	73.85
12.550	1.43	61.99	63.89	0.00	0.95	5,667	73.90

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 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)
12.600	1.23	62.72	64.65	0.00	0.96	5,734	73.92
12.650	1.08	63.09	65.03	0.00	0.97	5,768	73.93
12.700	0.98	63.21	65.15	0.00	0.97	5,778	73.94
12.750	0.92	63.17	65.11	0.00	0.97	5,775	73.94
12.800	0.86	63.02	64.95	0.00	0.97	5,761	73.93
12.850	0.82	62.77	64.70	0.00	0.96	5,738	73.92
12.900	0.77	62.44	64.36	0.00	0.96	5,709	73.91
12.950	0.74	62.05	63.96	0.00	0.95	5,673	73.90
13.000	0.70	61.60	63.49	0.00	0.95	5,633	73.88
13.050	0.67	61.10	62.97	0.00	0.94	5,587	73.87
13.100	0.65	60.56	62.41	0.00	0.93	5,538	73.85
13.150	0.62	59.98	61.82	0.00	0.92	5,486	73.83
13.200	0.61	59.39	61.21	0.00	0.91	5,433	73.81
13.250	0.59	58.79	60.59	0.00	0.90	5,379	73.79
13.300	0.58	58.18	59.97	0.00	0.89	5,323	73.77
13.350	0.57	57.57	59.34	0.00	0.88	5,268	73.75
13.400	0.56	56.95	58.70	0.00	0.87	5,211	73.73
13.450	0.55	56.34	58.07	0.00	0.87	5,155	73.71
13.500	0.55	55.73	57.44	0.00	0.86	5,098	73.68
13.550	0.54	55.12	56.81	0.00	0.85	5,042	73.66
13.600	0.53	54.51	56.19	0.00	0.84	4,986	73.64
13.650	0.52	53.91	55.56	0.00	0.83	4,930	73.62
13.700	0.51	53.30	54.94	0.00	0.82	4,874	73.60
13.750	0.51	52.70	54.32	0.00	0.81	4,819	73.58
13.800	0.50	52.11	53.71	0.00	0.80	4,763	73.56
13.850	0.49	51.51	53.09	0.00	0.79	4,709	73.54
13.900	0.48	50.92	52.48	0.00	0.78	4,654	73.52
13.950	0.47	50.33	51.88	0.00	0.77	4,599	73.50
14.000	0.47	49.75	51.27	0.00	0.76	4,546	73.48
14.050	0.46	49.19	50.68	0.00	0.74	4,495	73.47
14.100	0.45	48.64	50.10	0.00	0.73	4,445	73.45
14.150	0.45	48.11	49.54	0.00	0.72	4,396	73.43
14.200	0.44	47.59	49.00	0.00	0.70	4,348	73.41
14.250	0.44	47.09	48.47	0.00	0.69	4,303	73.40
14.300	0.43	46.61	47.97	0.00	0.68	4,258	73.38
14.350	0.43	46.14	47.47	0.00	0.67	4,216	73.37
14.400	0.43	45.69	47.00	0.00	0.65	4,174	73.35
14.450	0.42	45.26	46.54	0.00	0.64	4,134	73.34
14.500	0.42	44.84	46.10	0.00	0.63	4,096	73.32
14.550	0.41	44.43	45.67	0.00	0.62	4,058	73.31
14.600	0.41	44.03	45.25	0.00	0.61	4,022	73.30
14.650	0.41	43.65	44.85	0.00	0.60	3,987	73.28

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 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)
14.700	0.40	43.28	44.46	0.00	0.59	3,953	73.27
14.750	0.40	42.92	44.09	0.00	0.58	3,920	73.26
14.800	0.40	42.58	43.73	0.00	0.57	3,889	73.25
14.850	0.40	42.26	43.38	0.00	0.56	3,859	73.24
14.900	0.40	41.94	43.05	0.00	0.56	3,829	73.23
14.950	0.40	41.64	42.73	0.00	0.55	3,801	73.22
15.000	0.39	41.35	42.43	0.00	0.54	3,774	73.21
15.050	0.39	41.07	42.13	0.00	0.53	3,748	73.20
15.100	0.39	40.80	41.85	0.00	0.53	3,723	73.19
15.150	0.39	40.54	41.58	0.00	0.52	3,699	73.18
15.200	0.39	40.29	41.31	0.00	0.51	3,675	73.17
15.250	0.38	40.05	41.06	0.00	0.51	3,653	73.17
15.300	0.38	39.81	40.81	0.00	0.50	3,631	73.16
15.350	0.38	39.59	40.58	0.00	0.49	3,610	73.15
15.400	0.38	39.37	40.35	0.00	0.49	3,590	73.14
15.450	0.38	39.16	40.13	0.00	0.48	3,571	73.14
15.500	0.38	38.96	39.91	0.00	0.48	3,552	73.13
15.550	0.38	38.77	39.71	0.00	0.47	3,534	73.12
15.600	0.38	38.58	39.52	0.00	0.47	3,517	73.12
15.650	0.38	38.41	39.33	0.00	0.46	3,501	73.11
15.700	0.37	38.24	39.16	0.00	0.46	3,485	73.11
15.750	0.37	38.08	38.99	0.00	0.45	3,470	73.10
15.800	0.37	37.93	38.83	0.00	0.45	3,456	73.10
15.850	0.37	37.78	38.68	0.00	0.45	3,443	73.09
15.900	0.37	37.65	38.53	0.00	0.44	3,430	73.09
15.950	0.37	37.51	38.39	0.00	0.44	3,417	73.08
16.000	0.37	37.39	38.26	0.00	0.44	3,406	73.08
16.050	0.37	37.27	38.13	0.00	0.43	3,394	73.07
16.100	0.37	37.15	38.01	0.00	0.43	3,384	73.07
16.150	0.37	37.04	37.90	0.00	0.43	3,374	73.07
16.200	0.37	36.94	37.79	0.00	0.42	3,364	73.06
16.250	0.28	36.76	37.59	0.00	0.42	3,347	73.06
16.300	0.27	36.49	37.31	0.00	0.41	3,322	73.05
16.350	0.27	36.22	37.03	0.00	0.41	3,297	73.04
16.400	0.27	35.96	36.76	0.00	0.40	3,273	73.03
16.450	0.27	35.72	36.51	0.00	0.39	3,251	73.02
16.500	0.27	35.49	36.26	0.00	0.39	3,229	73.02
16.550	0.27	35.27	36.03	0.00	0.38	3,209	73.01
16.600	0.27	35.06	35.81	0.00	0.38	3,189	73.00
16.650	0.27	34.86	35.60	0.00	0.37	3,171	73.00
16.700	0.27	34.66	35.40	0.00	0.37	3,153	72.99
16.750	0.27	34.47	35.20	0.00	0.36	3,135	72.98

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 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)
16.800	0.27	34.28	35.01	0.00	0.36	3,118	72.98
16.850	0.27	34.10	34.82	0.00	0.36	3,102	72.97
16.900	0.27	33.93	34.64	0.00	0.35	3,086	72.97
16.950	0.27	33.76	34.46	0.00	0.35	3,070	72.96
17.000	0.27	33.60	34.30	0.00	0.35	3,055	72.96
17.050	0.27	33.44	34.13	0.00	0.35	3,041	72.95
17.100	0.27	33.28	33.97	0.00	0.34	3,026	72.95
17.150	0.27	33.13	33.81	0.00	0.34	3,013	72.94
17.200	0.27	32.99	33.66	0.00	0.34	2,999	72.94
17.250	0.26	32.85	33.52	0.00	0.34	2,986	72.93
17.300	0.26	32.71	33.38	0.00	0.33	2,974	72.93
17.350	0.26	32.58	33.24	0.00	0.33	2,962	72.92
17.400	0.26	32.45	33.10	0.00	0.33	2,950	72.92
17.450	0.26	32.32	32.97	0.00	0.33	2,938	72.91
17.500	0.26	32.20	32.85	0.00	0.32	2,927	72.91
17.550	0.26	32.08	32.72	0.00	0.32	2,916	72.91
17.600	0.26	31.96	32.60	0.00	0.32	2,905	72.90
17.650	0.26	31.85	32.49	0.00	0.32	2,895	72.90
17.700	0.26	31.74	32.37	0.00	0.32	2,885	72.90
17.750	0.26	31.63	32.26	0.00	0.31	2,875	72.89
17.800	0.26	31.53	32.15	0.00	0.31	2,866	72.89
17.850	0.26	31.43	32.05	0.00	0.31	2,857	72.89
17.900	0.26	31.33	31.95	0.00	0.31	2,848	72.88
17.950	0.26	31.24	31.85	0.00	0.31	2,839	72.88
18.000	0.26	31.14	31.75	0.00	0.31	2,830	72.88
18.050	0.26	31.05	31.66	0.00	0.30	2,822	72.87
18.100	0.26	30.96	31.57	0.00	0.30	2,814	72.87
18.150	0.26	30.88	31.48	0.00	0.30	2,806	72.87
18.200	0.26	30.79	31.39	0.00	0.30	2,798	72.87
18.250	0.26	30.71	31.31	0.00	0.30	2,791	72.86
18.300	0.26	30.64	31.23	0.00	0.30	2,784	72.86
18.350	0.26	30.56	31.15	0.00	0.29	2,777	72.86
18.400	0.26	30.49	31.07	0.00	0.29	2,770	72.86
18.450	0.26	30.42	31.00	0.00	0.29	2,764	72.85
18.500	0.26	30.35	30.93	0.00	0.29	2,757	72.85
18.550	0.26	30.28	30.86	0.00	0.29	2,751	72.85
18.600	0.26	30.22	30.79	0.00	0.29	2,745	72.85
18.650	0.26	30.15	30.73	0.00	0.29	2,740	72.85
18.700	0.26	30.09	30.66	0.00	0.29	2,734	72.84
18.750	0.26	30.03	30.60	0.00	0.29	2,729	72.84
18.800	0.26	29.98	30.54	0.00	0.28	2,723	72.84
18.850	0.26	29.92	30.49	0.00	0.28	2,718	72.84

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 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	0.26	29.87	30.43	0.00	0.28	2,713	72.84
18.950	0.26	29.81	30.38	0.00	0.28	2,709	72.83
19.000	0.26	29.76	30.33	0.00	0.28	2,704	72.83
19.050	0.26	29.71	30.27	0.00	0.28	2,700	72.83
19.100	0.26	29.67	30.23	0.00	0.28	2,695	72.83
19.150	0.25	29.62	30.18	0.00	0.28	2,691	72.83
19.200	0.25	29.58	30.13	0.00	0.28	2,687	72.83
19.250	0.25	29.53	30.09	0.00	0.28	2,683	72.83
19.300	0.25	29.49	30.04	0.00	0.28	2,679	72.82
19.350	0.25	29.45	30.00	0.00	0.28	2,675	72.82
19.400	0.25	29.41	29.96	0.00	0.27	2,672	72.82
19.450	0.25	29.37	29.92	0.00	0.27	2,668	72.82
19.500	0.25	29.33	29.88	0.00	0.27	2,664	72.82
19.550	0.25	29.30	29.84	0.00	0.27	2,661	72.82
19.600	0.25	29.26	29.80	0.00	0.27	2,658	72.82
19.650	0.25	29.23	29.77	0.00	0.27	2,655	72.82
19.700	0.25	29.19	29.73	0.00	0.27	2,652	72.82
19.750	0.25	29.16	29.70	0.00	0.27	2,649	72.81
19.800	0.25	29.13	29.67	0.00	0.27	2,646	72.81
19.850	0.25	29.10	29.63	0.00	0.27	2,643	72.81
19.900	0.25	29.07	29.60	0.00	0.27	2,640	72.81
19.950	0.25	29.04	29.57	0.00	0.27	2,637	72.81
20.000	0.25	29.01	29.54	0.00	0.27	2,635	72.81
20.050	0.25	28.98	29.51	0.00	0.27	2,632	72.81
20.100	0.25	28.95	29.49	0.00	0.27	2,630	72.81
20.150	0.25	28.93	29.46	0.00	0.27	2,627	72.81
20.200	0.25	28.90	29.43	0.00	0.27	2,625	72.81
20.250	0.25	28.88	29.41	0.00	0.26	2,623	72.81
20.300	0.25	28.85	29.38	0.00	0.26	2,620	72.80
20.350	0.25	28.83	29.36	0.00	0.26	2,618	72.80
20.400	0.25	28.80	29.33	0.00	0.26	2,616	72.80
20.450	0.25	28.78	29.31	0.00	0.26	2,614	72.80
20.500	0.25	28.76	29.29	0.00	0.26	2,612	72.80
20.550	0.25	28.74	29.26	0.00	0.26	2,610	72.80
20.600	0.25	28.72	29.24	0.00	0.26	2,608	72.80
20.650	0.25	28.70	29.22	0.00	0.26	2,606	72.80
20.700	0.25	28.68	29.20	0.00	0.26	2,605	72.80
20.750	0.25	28.66	29.18	0.00	0.26	2,603	72.80
20.800	0.25	28.64	29.16	0.00	0.26	2,601	72.80
20.850	0.25	28.62	29.14	0.00	0.26	2,599	72.80
20.900	0.25	28.60	29.12	0.00	0.26	2,598	72.80
20.950	0.25	28.59	29.11	0.00	0.26	2,596	72.80

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 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	0.25	28.57	29.09	0.00	0.26	2,595	72.80
21.050	0.25	28.55	29.07	0.00	0.26	2,593	72.79
21.100	0.25	28.54	29.06	0.00	0.26	2,592	72.79
21.150	0.25	28.52	29.04	0.00	0.26	2,590	72.79
21.200	0.25	28.51	29.02	0.00	0.26	2,589	72.79
21.250	0.25	28.49	29.01	0.00	0.26	2,587	72.79
21.300	0.25	28.48	28.99	0.00	0.26	2,586	72.79
21.350	0.25	28.46	28.98	0.00	0.26	2,585	72.79
21.400	0.25	28.45	28.96	0.00	0.26	2,583	72.79
21.450	0.25	28.43	28.95	0.00	0.26	2,582	72.79
21.500	0.25	28.42	28.93	0.00	0.26	2,581	72.79
21.550	0.25	28.41	28.92	0.00	0.26	2,580	72.79
21.600	0.25	28.39	28.91	0.00	0.26	2,579	72.79
21.650	0.25	28.38	28.89	0.00	0.26	2,577	72.79
21.700	0.25	28.37	28.88	0.00	0.26	2,576	72.79
21.750	0.25	28.36	28.87	0.00	0.26	2,575	72.79
21.800	0.25	28.35	28.86	0.00	0.26	2,574	72.79
21.850	0.25	28.33	28.84	0.00	0.26	2,573	72.79
21.900	0.25	28.32	28.83	0.00	0.26	2,572	72.79
21.950	0.25	28.31	28.82	0.00	0.25	2,571	72.79
22.000	0.25	28.30	28.81	0.00	0.25	2,570	72.79
22.050	0.25	28.29	28.80	0.00	0.25	2,569	72.79
22.100	0.25	28.28	28.79	0.00	0.25	2,568	72.79
22.150	0.25	28.27	28.78	0.00	0.25	2,567	72.79
22.200	0.25	28.26	28.77	0.00	0.25	2,566	72.79
22.250	0.25	28.25	28.75	0.00	0.25	2,565	72.79
22.300	0.25	28.24	28.74	0.00	0.25	2,564	72.78
22.350	0.25	28.23	28.73	0.00	0.25	2,563	72.78
22.400	0.25	28.22	28.72	0.00	0.25	2,562	72.78
22.450	0.25	28.21	28.71	0.00	0.25	2,562	72.78
22.500	0.25	28.20	28.70	0.00	0.25	2,561	72.78
22.550	0.25	28.19	28.70	0.00	0.25	2,560	72.78
22.600	0.25	28.18	28.69	0.00	0.25	2,559	72.78
22.650	0.25	28.17	28.68	0.00	0.25	2,558	72.78
22.700	0.25	28.16	28.67	0.00	0.25	2,557	72.78
22.750	0.25	28.15	28.66	0.00	0.25	2,557	72.78
22.800	0.25	28.15	28.65	0.00	0.25	2,556	72.78
22.850	0.25	28.14	28.64	0.00	0.25	2,555	72.78
22.900	0.25	28.13	28.63	0.00	0.25	2,554	72.78
22.950	0.25	28.12	28.62	0.00	0.25	2,554	72.78
23.000	0.25	28.11	28.62	0.00	0.25	2,553	72.78
23.050	0.25	28.10	28.61	0.00	0.25	2,552	72.78

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 25 years

Label: MC-3500 - 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)
23.100	0.25	28.10	28.60	0.00	0.25	2,551	72.78
23.150	0.25	28.09	28.59	0.00	0.25	2,551	72.78
23.200	0.25	28.08	28.58	0.00	0.25	2,550	72.78
23.250	0.25	28.07	28.57	0.00	0.25	2,549	72.78
23.300	0.25	28.07	28.57	0.00	0.25	2,548	72.78
23.350	0.25	28.06	28.56	0.00	0.25	2,548	72.78
23.400	0.25	28.05	28.55	0.00	0.25	2,547	72.78
23.450	0.25	28.04	28.54	0.00	0.25	2,546	72.78
23.500	0.25	28.04	28.54	0.00	0.25	2,546	72.78
23.550	0.25	28.03	28.53	0.00	0.25	2,545	72.78
23.600	0.25	28.02	28.52	0.00	0.25	2,544	72.78
23.650	0.25	28.01	28.51	0.00	0.25	2,544	72.78
23.700	0.25	28.01	28.51	0.00	0.25	2,543	72.78
23.750	0.25	28.00	28.50	0.00	0.25	2,543	72.78
23.800	0.25	27.99	28.49	0.00	0.25	2,542	72.78
23.850	0.25	27.99	28.49	0.00	0.25	2,541	72.78
23.900	0.25	27.98	28.48	0.00	0.25	2,541	72.78
23.950	0.25	27.97	28.47	0.00	0.25	2,540	72.78
24.000	0.25	27.97	28.46	0.00	0.25	2,539	72.78

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 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)
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	16	71.51
0.100	0.00	0.17	0.17	0.00	0.00	15	71.51
0.150	0.00	0.16	0.17	0.00	0.00	15	71.51
0.200	0.00	0.16	0.16	0.00	0.00	14	71.51
0.250	0.00	0.15	0.16	0.00	0.00	14	71.51
0.300	0.00	0.15	0.15	0.00	0.00	13	71.51
0.350	0.00	0.14	0.15	0.00	0.00	13	71.51
0.400	0.00	0.14	0.14	0.00	0.00	12	71.51
0.450	0.00	0.13	0.14	0.00	0.00	12	71.51
0.500	0.00	0.13	0.13	0.00	0.00	12	71.51
0.550	0.00	0.12	0.13	0.00	0.00	11	71.51
0.600	0.00	0.12	0.13	0.00	0.00	11	71.51
0.650	0.00	0.13	0.13	0.00	0.00	12	71.51
0.700	0.01	0.13	0.14	0.00	0.00	12	71.51
0.750	0.01	0.14	0.15	0.00	0.00	13	71.51
0.800	0.01	0.16	0.16	0.00	0.00	14	71.51
0.850	0.01	0.17	0.18	0.00	0.00	16	71.51
0.900	0.01	0.19	0.20	0.00	0.00	18	71.51
0.950	0.02	0.22	0.22	0.00	0.00	20	71.51
1.000	0.02	0.24	0.25	0.00	0.00	22	71.52
1.050	0.02	0.27	0.28	0.00	0.00	24	71.52
1.100	0.02	0.29	0.30	0.00	0.01	27	71.52
1.150	0.02	0.32	0.33	0.00	0.01	30	71.52
1.200	0.02	0.35	0.37	0.00	0.01	32	71.52
1.250	0.02	0.39	0.40	0.00	0.01	35	71.53
1.300	0.03	0.42	0.44	0.00	0.01	38	71.53
1.350	0.03	0.46	0.47	0.00	0.01	42	71.53
1.400	0.03	0.49	0.51	0.00	0.01	45	71.53
1.450	0.03	0.53	0.55	0.00	0.01	49	71.54
1.500	0.03	0.58	0.60	0.00	0.01	53	71.54
1.550	0.03	0.62	0.64	0.00	0.01	57	71.54
1.600	0.04	0.67	0.69	0.00	0.01	61	71.55
1.650	0.04	0.71	0.74	0.00	0.01	65	71.55
1.700	0.04	0.76	0.79	0.00	0.01	69	71.55
1.750	0.04	0.81	0.84	0.00	0.01	74	71.56
1.800	0.04	0.86	0.89	0.00	0.02	78	71.56
1.850	0.04	0.91	0.94	0.00	0.02	83	71.56
1.900	0.04	0.96	0.99	0.00	0.02	88	71.57
1.950	0.04	1.01	1.04	0.00	0.02	92	71.57
2.000	0.05	1.06	1.10	0.00	0.02	97	71.57
2.050	0.05	1.11	1.15	0.00	0.02	102	71.58

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 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)
2.100	0.05	1.16	1.20	0.00	0.02	107	71.58
2.150	0.05	1.22	1.26	0.00	0.02	111	71.58
2.200	0.05	1.27	1.31	0.00	0.02	116	71.59
2.250	0.05	1.32	1.37	0.00	0.02	121	71.59
2.300	0.05	1.38	1.43	0.00	0.02	126	71.59
2.350	0.05	1.43	1.49	0.00	0.03	131	71.60
2.400	0.06	1.49	1.54	0.00	0.03	137	71.60
2.450	0.06	1.55	1.60	0.00	0.03	142	71.61
2.500	0.06	1.61	1.66	0.00	0.03	147	71.61
2.550	0.06	1.66	1.72	0.00	0.03	152	71.61
2.600	0.06	1.72	1.78	0.00	0.03	158	71.62
2.650	0.06	1.78	1.85	0.00	0.03	163	71.62
2.700	0.06	1.84	1.91	0.00	0.03	169	71.63
2.750	0.06	1.90	1.97	0.00	0.03	174	71.63
2.800	0.07	1.96	2.03	0.00	0.04	180	71.63
2.850	0.07	2.02	2.10	0.00	0.04	185	71.64
2.900	0.07	2.08	2.16	0.00	0.04	191	71.64
2.950	0.07	2.15	2.22	0.00	0.04	197	71.65
3.000	0.07	2.21	2.29	0.00	0.04	202	71.65
3.050	0.07	2.27	2.35	0.00	0.04	208	71.66
3.100	0.07	2.33	2.42	0.00	0.04	214	71.66
3.150	0.08	2.40	2.48	0.00	0.04	219	71.66
3.200	0.08	2.46	2.55	0.00	0.04	225	71.67
3.250	0.08	2.52	2.61	0.00	0.05	231	71.67
3.300	0.08	2.58	2.68	0.00	0.05	237	71.68
3.350	0.08	2.65	2.74	0.00	0.05	243	71.68
3.400	0.08	2.71	2.81	0.00	0.05	248	71.69
3.450	0.08	2.78	2.88	0.00	0.05	254	71.69
3.500	0.08	2.84	2.94	0.00	0.05	260	71.69
3.550	0.08	2.90	3.01	0.00	0.05	266	71.70
3.600	0.09	2.97	3.07	0.00	0.05	272	71.70
3.650	0.09	3.03	3.14	0.00	0.05	278	71.71
3.700	0.09	3.10	3.21	0.00	0.06	284	71.71
3.750	0.09	3.16	3.27	0.00	0.06	290	71.72
3.800	0.09	3.22	3.34	0.00	0.06	295	71.72
3.850	0.09	3.29	3.41	0.00	0.06	301	71.73
3.900	0.09	3.35	3.47	0.00	0.06	307	71.73
3.950	0.09	3.42	3.54	0.00	0.06	313	71.73
4.000	0.10	3.48	3.61	0.00	0.06	319	71.74
4.050	0.10	3.55	3.67	0.00	0.06	325	71.74
4.100	0.10	3.61	3.74	0.00	0.06	331	71.75
4.150	0.10	3.67	3.81	0.00	0.07	337	71.75

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 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)
4.200	0.10	3.74	3.87	0.00	0.07	342	71.76
4.250	0.10	3.80	3.94	0.00	0.07	348	71.76
4.300	0.10	3.87	4.00	0.00	0.07	354	71.77
4.350	0.10	3.93	4.07	0.00	0.07	360	71.77
4.400	0.10	3.99	4.14	0.00	0.07	366	71.77
4.450	0.11	4.06	4.20	0.00	0.07	372	71.78
4.500	0.11	4.12	4.27	0.00	0.07	378	71.78
4.550	0.11	4.19	4.34	0.00	0.08	383	71.79
4.600	0.11	4.25	4.40	0.00	0.08	389	71.79
4.650	0.11	4.31	4.47	0.00	0.08	395	71.80
4.700	0.11	4.38	4.53	0.00	0.08	401	71.80
4.750	0.11	4.44	4.60	0.00	0.08	407	71.80
4.800	0.11	4.50	4.66	0.00	0.08	412	71.81
4.850	0.11	4.56	4.73	0.00	0.08	418	71.81
4.900	0.12	4.63	4.79	0.00	0.08	424	71.82
4.950	0.12	4.69	4.86	0.00	0.08	430	71.82
5.000	0.12	4.75	4.92	0.00	0.09	435	71.83
5.050	0.12	4.82	4.99	0.00	0.09	441	71.83
5.100	0.12	4.88	5.05	0.00	0.09	447	71.83
5.150	0.12	4.94	5.12	0.00	0.09	453	71.84
5.200	0.12	5.00	5.18	0.00	0.09	458	71.84
5.250	0.12	5.06	5.25	0.00	0.09	464	71.85
5.300	0.12	5.13	5.31	0.00	0.09	470	71.85
5.350	0.12	5.19	5.37	0.00	0.09	475	71.86
5.400	0.13	5.25	5.44	0.00	0.09	481	71.86
5.450	0.13	5.31	5.50	0.00	0.10	487	71.86
5.500	0.13	5.37	5.56	0.00	0.10	492	71.87
5.550	0.13	5.43	5.63	0.00	0.10	498	71.87
5.600	0.13	5.49	5.69	0.00	0.10	503	71.88
5.650	0.13	5.55	5.75	0.00	0.10	509	71.88
5.700	0.13	5.62	5.82	0.00	0.10	514	71.89
5.750	0.13	5.68	5.88	0.00	0.10	520	71.89
5.800	0.13	5.74	5.94	0.00	0.10	526	71.89
5.850	0.13	5.80	6.01	0.00	0.10	531	71.90
5.900	0.14	5.86	6.07	0.00	0.11	537	71.90
5.950	0.14	5.92	6.13	0.00	0.11	542	71.91
6.000	0.14	5.98	6.19	0.00	0.11	548	71.91
6.050	0.14	6.04	6.26	0.00	0.11	553	71.91
6.100	0.14	6.10	6.32	0.00	0.11	559	71.92
6.150	0.14	6.16	6.39	0.00	0.11	565	71.92
6.200	0.15	6.23	6.45	0.00	0.11	571	71.93
6.250	0.15	6.30	6.52	0.00	0.11	577	71.93

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 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)
6.300	0.15	6.37	6.59	0.00	0.11	583	71.94
6.350	0.15	6.44	6.67	0.00	0.12	590	71.94
6.400	0.16	6.51	6.75	0.00	0.12	597	71.95
6.450	0.16	6.59	6.83	0.00	0.12	604	71.95
6.500	0.16	6.67	6.91	0.00	0.12	611	71.96
6.550	0.16	6.75	7.00	0.00	0.12	619	71.96
6.600	0.17	6.84	7.08	0.00	0.12	627	71.97
6.650	0.17	6.93	7.17	0.00	0.12	635	71.98
6.700	0.17	7.02	7.27	0.00	0.13	643	71.98
6.750	0.17	7.11	7.36	0.00	0.13	651	71.99
6.800	0.18	7.20	7.46	0.00	0.13	660	71.99
6.850	0.18	7.30	7.56	0.00	0.13	668	72.00
6.900	0.18	7.40	7.66	0.00	0.13	674	72.00
6.950	0.19	7.50	7.76	0.00	0.13	680	72.01
7.000	0.19	7.61	7.87	0.00	0.13	686	72.01
7.050	0.19	7.72	7.99	0.00	0.13	692	72.02
7.100	0.19	7.84	8.10	0.00	0.13	699	72.02
7.150	0.20	7.96	8.23	0.00	0.13	706	72.03
7.200	0.20	8.08	8.35	0.00	0.14	713	72.03
7.250	0.20	8.21	8.48	0.00	0.14	720	72.04
7.300	0.20	8.34	8.62	0.00	0.14	727	72.04
7.350	0.21	8.48	8.75	0.00	0.14	735	72.05
7.400	0.21	8.62	8.90	0.00	0.14	743	72.06
7.450	0.21	8.76	9.04	0.00	0.14	751	72.06
7.500	0.22	8.91	9.19	0.00	0.14	759	72.07
7.550	0.22	9.06	9.34	0.00	0.14	768	72.08
7.600	0.22	9.21	9.50	0.00	0.14	777	72.08
7.650	0.22	9.37	9.66	0.00	0.14	786	72.09
7.700	0.23	9.53	9.82	0.00	0.14	795	72.10
7.750	0.23	9.70	9.99	0.00	0.15	804	72.10
7.800	0.23	9.86	10.16	0.00	0.15	813	72.11
7.850	0.23	10.03	10.33	0.00	0.15	823	72.12
7.900	0.23	10.20	10.50	0.00	0.15	832	72.12
7.950	0.24	10.37	10.67	0.00	0.15	842	72.13
8.000	0.24	10.55	10.85	0.00	0.15	852	72.14
8.050	0.24	10.72	11.02	0.00	0.15	862	72.15
8.100	0.24	10.90	11.20	0.00	0.15	872	72.15
8.150	0.25	11.08	11.38	0.00	0.15	882	72.16
8.200	0.25	11.26	11.57	0.00	0.16	892	72.17
8.250	0.25	11.45	11.76	0.00	0.16	903	72.18
8.300	0.26	11.64	11.96	0.00	0.16	914	72.18
8.350	0.26	11.84	12.16	0.00	0.16	925	72.19

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 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	0.26	12.05	12.37	0.00	0.16	937	72.20
8.450	0.27	12.26	12.58	0.00	0.16	949	72.21
8.500	0.27	12.47	12.80	0.00	0.16	961	72.22
8.550	0.28	12.69	13.02	0.00	0.16	973	72.23
8.600	0.28	12.92	13.25	0.00	0.17	986	72.24
8.650	0.28	13.14	13.48	0.00	0.17	999	72.25
8.700	0.29	13.38	13.72	0.00	0.17	1,025	72.26
8.750	0.29	13.62	13.96	0.00	0.17	1,055	72.27
8.800	0.29	13.86	14.21	0.00	0.17	1,085	72.28
8.850	0.30	14.11	14.45	0.00	0.17	1,116	72.29
8.900	0.30	14.35	14.70	0.00	0.17	1,146	72.30
8.950	0.30	14.59	14.95	0.00	0.18	1,176	72.31
9.000	0.30	14.84	15.19	0.00	0.18	1,207	72.32
9.050	0.30	15.08	15.44	0.00	0.18	1,237	72.33
9.100	0.30	15.32	15.68	0.00	0.18	1,267	72.34
9.150	0.30	15.56	15.93	0.00	0.18	1,297	72.35
9.200	0.31	15.81	16.17	0.00	0.18	1,327	72.36
9.250	0.31	16.05	16.42	0.00	0.19	1,357	72.37
9.300	0.31	16.29	16.66	0.00	0.19	1,387	72.38
9.350	0.31	16.53	16.90	0.00	0.19	1,417	72.39
9.400	0.31	16.77	17.15	0.00	0.19	1,447	72.40
9.450	0.31	17.01	17.39	0.00	0.19	1,477	72.41
9.500	0.31	17.25	17.63	0.00	0.19	1,507	72.42
9.550	0.31	17.49	17.88	0.00	0.19	1,537	72.43
9.600	0.32	17.73	18.12	0.00	0.20	1,567	72.44
9.650	0.32	17.97	18.36	0.00	0.20	1,596	72.45
9.700	0.32	18.20	18.60	0.00	0.20	1,626	72.46
9.750	0.32	18.44	18.84	0.00	0.20	1,656	72.47
9.800	0.32	18.68	19.08	0.00	0.20	1,685	72.48
9.850	0.32	18.92	19.33	0.00	0.20	1,715	72.49
9.900	0.32	19.16	19.57	0.00	0.20	1,743	72.50
9.950	0.33	19.40	19.81	0.00	0.21	1,764	72.51
10.000	0.33	19.64	20.05	0.00	0.21	1,786	72.52
10.050	0.33	19.88	20.29	0.00	0.21	1,808	72.52
10.100	0.33	20.12	20.54	0.00	0.21	1,830	72.53
10.150	0.33	20.37	20.79	0.00	0.21	1,852	72.54
10.200	0.34	20.62	21.04	0.00	0.21	1,874	72.55
10.250	0.34	20.87	21.29	0.00	0.21	1,897	72.56
10.300	0.34	21.13	21.55	0.00	0.21	1,920	72.56
10.350	0.34	21.38	21.81	0.00	0.21	1,944	72.57
10.400	0.35	21.65	22.08	0.00	0.21	1,968	72.58
10.450	0.35	21.91	22.34	0.00	0.21	1,992	72.59

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 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)
10.500	0.35	22.18	22.62	0.00	0.22	2,016	72.60
10.550	0.36	22.46	22.89	0.00	0.22	2,041	72.60
10.600	0.36	22.73	23.17	0.00	0.22	2,066	72.61
10.650	0.36	23.02	23.45	0.00	0.22	2,091	72.62
10.700	0.36	23.30	23.74	0.00	0.22	2,117	72.63
10.750	0.37	23.59	24.03	0.00	0.22	2,143	72.64
10.800	0.37	23.88	24.32	0.00	0.22	2,169	72.65
10.850	0.37	24.18	24.62	0.00	0.22	2,196	72.66
10.900	0.38	24.47	24.92	0.00	0.22	2,223	72.67
10.950	0.38	24.78	25.23	0.00	0.23	2,250	72.68
11.000	0.38	25.08	25.54	0.00	0.23	2,278	72.69
11.050	0.38	25.39	25.85	0.00	0.23	2,306	72.70
11.100	0.39	25.71	26.17	0.00	0.23	2,335	72.71
11.150	0.40	26.04	26.50	0.00	0.23	2,364	72.72
11.200	0.40	26.38	26.84	0.00	0.23	2,395	72.73
11.250	0.40	26.72	27.18	0.00	0.23	2,426	72.74
11.300	0.41	27.07	27.53	0.00	0.23	2,457	72.75
11.350	0.41	27.41	27.88	0.00	0.24	2,488	72.76
11.400	0.41	27.74	28.23	0.00	0.24	2,519	72.77
11.450	0.42	28.07	28.57	0.00	0.25	2,549	72.78
11.500	0.42	28.40	28.91	0.00	0.26	2,579	72.79
11.550	0.43	28.72	29.24	0.00	0.26	2,608	72.80
11.600	0.44	29.05	29.59	0.00	0.27	2,639	72.81
11.650	0.46	29.40	29.95	0.00	0.27	2,671	72.82
11.700	0.48	29.78	30.34	0.00	0.28	2,705	72.83
11.750	0.51	30.19	30.77	0.00	0.29	2,743	72.85
11.800	0.54	30.65	31.24	0.00	0.30	2,785	72.86
11.850	1.05	31.61	32.24	0.00	0.31	2,873	72.89
11.900	2.24	34.18	34.90	0.00	0.36	3,109	72.97
11.950	2.41	37.93	38.83	0.00	0.45	3,456	73.10
12.000	3.67	42.86	44.01	0.00	0.58	3,914	73.26
12.050	5.56	50.53	52.08	0.00	0.78	4,618	73.51
12.100	7.95	62.13	64.04	0.00	0.95	5,680	73.90
12.150	8.12	75.93	78.20	0.00	1.14	6,941	74.39
12.200	6.82	88.30	90.87	0.00	1.29	8,071	74.85
12.250	5.47	97.78	100.59	0.00	1.40	8,949	75.25
12.300	4.61	104.86	107.85	0.00	1.50	9,581	75.58
12.350	3.96	110.27	113.42	0.00	1.58	10,078	75.90
12.400	3.45	114.39	117.67	0.00	1.64	10,443	76.17
12.450	2.96	117.41	120.79	0.00	1.69	10,719	76.37
12.500	2.47	119.40	122.84	0.00	1.72	10,901	76.51
12.550	2.05	120.44	123.92	0.00	1.74	10,996	76.58

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 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)
12.600	1.71	120.70	124.19	0.00	1.74	11,020	76.60
12.650	1.47	120.40	123.88	0.00	1.74	10,992	76.58
12.700	1.36	119.76	123.22	0.00	1.73	10,934	76.53
12.750	1.27	118.95	122.39	0.00	1.72	10,860	76.48
12.800	1.20	118.02	121.42	0.00	1.70	10,775	76.41
12.850	1.13	116.97	120.34	0.00	1.68	10,679	76.34
12.900	1.07	115.84	119.18	0.00	1.67	10,576	76.27
12.950	1.01	114.63	117.93	0.00	1.65	10,465	76.18
13.000	0.96	113.35	116.60	0.00	1.63	10,348	76.10
13.050	0.91	112.01	115.22	0.00	1.60	10,225	76.00
13.100	0.87	110.63	113.79	0.00	1.58	10,108	75.92
13.150	0.84	109.22	112.34	0.00	1.56	9,989	75.84
13.200	0.82	107.80	110.88	0.00	1.54	9,870	75.75
13.250	0.80	106.38	109.42	0.00	1.52	9,731	75.67
13.300	0.79	104.98	107.97	0.00	1.50	9,593	75.58
13.350	0.77	103.58	106.53	0.00	1.48	9,455	75.50
13.400	0.76	102.19	105.11	0.00	1.46	9,334	75.44
13.450	0.74	100.81	103.69	0.00	1.44	9,214	75.38
13.500	0.73	99.44	102.29	0.00	1.43	9,094	75.32
13.550	0.72	98.07	100.89	0.00	1.41	8,976	75.26
13.600	0.71	96.72	99.50	0.00	1.39	8,848	75.20
13.650	0.70	95.37	98.12	0.00	1.38	8,720	75.14
13.700	0.69	94.04	96.75	0.00	1.36	8,593	75.08
13.750	0.67	92.71	95.40	0.00	1.34	8,467	75.02
13.800	0.66	91.39	94.05	0.00	1.33	8,347	74.97
13.850	0.65	90.09	92.71	0.00	1.31	8,230	74.92
13.900	0.64	88.79	91.38	0.00	1.30	8,115	74.87
13.950	0.63	87.50	90.06	0.00	1.28	8,000	74.82
14.000	0.62	86.22	88.75	0.00	1.26	7,887	74.77
14.050	0.61	84.94	87.44	0.00	1.25	7,770	74.72
14.100	0.60	83.68	86.15	0.00	1.23	7,653	74.67
14.150	0.59	82.43	84.87	0.00	1.22	7,536	74.63
14.200	0.58	81.20	83.60	0.00	1.20	7,421	74.58
14.250	0.58	79.98	82.35	0.00	1.19	7,307	74.53
14.300	0.57	78.77	81.12	0.00	1.17	7,196	74.49
14.350	0.56	77.59	79.91	0.00	1.16	7,090	74.44
14.400	0.56	76.42	78.71	0.00	1.14	6,985	74.40
14.450	0.55	75.27	77.53	0.00	1.13	6,882	74.36
14.500	0.55	74.14	76.37	0.00	1.12	6,781	74.32
14.550	0.54	73.03	75.23	0.00	1.10	6,681	74.28
14.600	0.54	71.93	74.11	0.00	1.09	6,582	74.24
14.650	0.53	70.85	73.00	0.00	1.07	6,482	74.21

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 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)
14.700	0.53	69.79	71.91	0.00	1.06	6,384	74.17
14.750	0.52	68.75	70.84	0.00	1.05	6,287	74.13
14.800	0.51	67.72	69.78	0.00	1.03	6,191	74.09
14.850	0.51	66.70	68.74	0.00	1.02	6,097	74.06
14.900	0.50	65.70	67.72	0.00	1.01	6,005	74.02
14.950	0.50	64.72	66.70	0.00	0.99	5,914	73.99
15.000	0.49	63.75	65.71	0.00	0.98	5,827	73.96
15.050	0.49	62.81	64.74	0.00	0.96	5,742	73.92
15.100	0.48	61.88	63.78	0.00	0.95	5,658	73.89
15.150	0.48	60.97	62.84	0.00	0.94	5,575	73.86
15.200	0.47	60.07	61.92	0.00	0.92	5,495	73.83
15.250	0.47	59.19	61.01	0.00	0.91	5,415	73.80
15.300	0.46	58.33	60.12	0.00	0.90	5,337	73.77
15.350	0.46	57.48	59.25	0.00	0.88	5,260	73.74
15.400	0.45	56.65	58.39	0.00	0.87	5,183	73.72
15.450	0.45	55.83	57.55	0.00	0.86	5,108	73.69
15.500	0.44	55.03	56.72	0.00	0.85	5,033	73.66
15.550	0.43	54.23	55.90	0.00	0.83	4,960	73.63
15.600	0.43	53.45	55.10	0.00	0.82	4,888	73.61
15.650	0.42	52.69	54.31	0.00	0.81	4,817	73.58
15.700	0.42	51.94	53.53	0.00	0.80	4,748	73.56
15.750	0.41	51.19	52.77	0.00	0.79	4,679	73.53
15.800	0.41	50.46	52.02	0.00	0.78	4,612	73.51
15.850	0.40	49.76	51.28	0.00	0.76	4,547	73.48
15.900	0.40	49.08	50.56	0.00	0.74	4,484	73.46
15.950	0.40	48.43	49.88	0.00	0.72	4,425	73.44
16.000	0.40	47.80	49.22	0.00	0.71	4,368	73.42
16.050	0.39	47.21	48.59	0.00	0.69	4,313	73.40
16.100	0.39	46.64	47.99	0.00	0.68	4,261	73.38
16.150	0.39	46.09	47.42	0.00	0.66	4,210	73.36
16.200	0.39	45.57	46.87	0.00	0.65	4,163	73.35
16.250	0.39	45.07	46.34	0.00	0.64	4,117	73.33
16.300	0.39	44.59	45.84	0.00	0.62	4,073	73.31
16.350	0.38	44.14	45.36	0.00	0.61	4,031	73.30
16.400	0.38	43.70	44.90	0.00	0.60	3,992	73.29
16.450	0.38	43.29	44.47	0.00	0.59	3,953	73.27
16.500	0.38	42.89	44.05	0.00	0.58	3,917	73.26
16.550	0.38	42.51	43.65	0.00	0.57	3,882	73.25
16.600	0.38	42.15	43.27	0.00	0.56	3,848	73.23
16.650	0.38	41.80	42.90	0.00	0.55	3,816	73.22
16.700	0.38	41.47	42.56	0.00	0.54	3,785	73.21
16.750	0.38	41.15	42.22	0.00	0.53	3,756	73.20

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 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)
16.800	0.38	40.85	41.91	0.00	0.53	3,728	73.19
16.850	0.38	40.57	41.61	0.00	0.52	3,702	73.18
16.900	0.38	40.30	41.32	0.00	0.51	3,676	73.17
16.950	0.38	40.04	41.05	0.00	0.51	3,652	73.17
17.000	0.38	39.79	40.79	0.00	0.50	3,629	73.16
17.050	0.38	39.56	40.55	0.00	0.49	3,608	73.15
17.100	0.33	39.29	40.26	0.00	0.49	3,583	73.14
17.150	0.28	38.94	39.90	0.00	0.48	3,550	73.13
17.200	0.28	38.57	39.50	0.00	0.47	3,516	73.12
17.250	0.28	38.22	39.13	0.00	0.46	3,483	73.11
17.300	0.28	37.88	38.78	0.00	0.45	3,451	73.09
17.350	0.28	37.55	38.44	0.00	0.44	3,421	73.08
17.400	0.28	37.25	38.11	0.00	0.43	3,393	73.07
17.450	0.28	36.95	37.80	0.00	0.42	3,365	73.06
17.500	0.28	36.67	37.51	0.00	0.42	3,339	73.05
17.550	0.28	36.41	37.23	0.00	0.41	3,314	73.05
17.600	0.28	36.15	36.96	0.00	0.40	3,291	73.04
17.650	0.28	35.91	36.70	0.00	0.40	3,268	73.03
17.700	0.27	35.67	36.46	0.00	0.39	3,246	73.02
17.750	0.27	35.45	36.22	0.00	0.39	3,226	73.01
17.800	0.27	35.24	36.00	0.00	0.38	3,206	73.01
17.850	0.27	35.04	35.79	0.00	0.37	3,187	73.00
17.900	0.27	34.84	35.58	0.00	0.37	3,169	72.99
17.950	0.27	34.65	35.38	0.00	0.37	3,151	72.99
18.000	0.27	34.46	35.19	0.00	0.36	3,134	72.98
18.050	0.27	34.28	35.00	0.00	0.36	3,118	72.98
18.100	0.27	34.11	34.82	0.00	0.36	3,102	72.97
18.150	0.27	33.94	34.65	0.00	0.35	3,086	72.97
18.200	0.27	33.77	34.48	0.00	0.35	3,071	72.96
18.250	0.27	33.61	34.31	0.00	0.35	3,057	72.96
18.300	0.27	33.46	34.15	0.00	0.35	3,042	72.95
18.350	0.27	33.31	34.00	0.00	0.34	3,029	72.95
18.400	0.27	33.16	33.85	0.00	0.34	3,015	72.94
18.450	0.27	33.02	33.70	0.00	0.34	3,003	72.94
18.500	0.27	32.89	33.56	0.00	0.34	2,990	72.93
18.550	0.27	32.76	33.42	0.00	0.33	2,978	72.93
18.600	0.27	32.63	33.29	0.00	0.33	2,967	72.92
18.650	0.27	32.51	33.17	0.00	0.33	2,955	72.92
18.700	0.27	32.39	33.04	0.00	0.33	2,944	72.92
18.750	0.27	32.27	32.92	0.00	0.33	2,934	72.91
18.800	0.27	32.16	32.81	0.00	0.32	2,924	72.91
18.850	0.27	32.05	32.69	0.00	0.32	2,914	72.91

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 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)
18.900	0.27	31.95	32.59	0.00	0.32	2,904	72.90
18.950	0.27	31.85	32.48	0.00	0.32	2,895	72.90
19.000	0.27	31.75	32.38	0.00	0.32	2,886	72.90
19.050	0.27	31.65	32.28	0.00	0.31	2,877	72.89
19.100	0.27	31.56	32.18	0.00	0.31	2,868	72.89
19.150	0.27	31.47	32.09	0.00	0.31	2,860	72.89
19.200	0.27	31.38	32.00	0.00	0.31	2,852	72.88
19.250	0.27	31.30	31.91	0.00	0.31	2,845	72.88
19.300	0.27	31.22	31.83	0.00	0.31	2,837	72.88
19.350	0.27	31.14	31.75	0.00	0.31	2,830	72.88
19.400	0.27	31.06	31.67	0.00	0.30	2,823	72.87
19.450	0.26	30.98	31.59	0.00	0.30	2,816	72.87
19.500	0.26	30.91	31.51	0.00	0.30	2,809	72.87
19.550	0.26	30.84	31.44	0.00	0.30	2,803	72.87
19.600	0.26	30.77	31.37	0.00	0.30	2,797	72.87
19.650	0.26	30.71	31.30	0.00	0.30	2,790	72.86
19.700	0.26	30.64	31.24	0.00	0.30	2,785	72.86
19.750	0.26	30.58	31.17	0.00	0.30	2,779	72.86
19.800	0.26	30.52	31.11	0.00	0.29	2,773	72.86
19.850	0.26	30.46	31.05	0.00	0.29	2,768	72.86
19.900	0.26	30.40	30.99	0.00	0.29	2,763	72.85
19.950	0.26	30.35	30.93	0.00	0.29	2,758	72.85
20.000	0.26	30.29	30.87	0.00	0.29	2,753	72.85
20.050	0.26	30.24	30.82	0.00	0.29	2,748	72.85
20.100	0.26	30.19	30.77	0.00	0.29	2,743	72.85
20.150	0.26	30.14	30.72	0.00	0.29	2,738	72.85
20.200	0.26	30.09	30.67	0.00	0.29	2,734	72.84
20.250	0.26	30.05	30.62	0.00	0.29	2,730	72.84
20.300	0.26	30.00	30.57	0.00	0.28	2,726	72.84
20.350	0.26	29.96	30.52	0.00	0.28	2,722	72.84
20.400	0.26	29.91	30.48	0.00	0.28	2,718	72.84
20.450	0.26	29.87	30.44	0.00	0.28	2,714	72.84
20.500	0.26	29.83	30.39	0.00	0.28	2,710	72.84
20.550	0.26	29.79	30.35	0.00	0.28	2,706	72.83
20.600	0.26	29.75	30.31	0.00	0.28	2,703	72.83
20.650	0.26	29.72	30.27	0.00	0.28	2,700	72.83
20.700	0.26	29.68	30.24	0.00	0.28	2,696	72.83
20.750	0.26	29.64	30.20	0.00	0.28	2,693	72.83
20.800	0.26	29.61	30.16	0.00	0.28	2,690	72.83
20.850	0.26	29.58	30.13	0.00	0.28	2,687	72.83
20.900	0.26	29.54	30.10	0.00	0.28	2,684	72.83
20.950	0.26	29.51	30.06	0.00	0.28	2,681	72.83

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 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)
21.000	0.26	29.48	30.03	0.00	0.28	2,678	72.82
21.050	0.26	29.45	30.00	0.00	0.28	2,675	72.82
21.100	0.26	29.42	29.97	0.00	0.27	2,673	72.82
21.150	0.26	29.39	29.94	0.00	0.27	2,670	72.82
21.200	0.26	29.37	29.91	0.00	0.27	2,667	72.82
21.250	0.26	29.34	29.88	0.00	0.27	2,665	72.82
21.300	0.26	29.31	29.86	0.00	0.27	2,663	72.82
21.350	0.26	29.29	29.83	0.00	0.27	2,660	72.82
21.400	0.26	29.26	29.80	0.00	0.27	2,658	72.82
21.450	0.26	29.24	29.78	0.00	0.27	2,656	72.82
21.500	0.26	29.21	29.75	0.00	0.27	2,653	72.82
21.550	0.26	29.19	29.73	0.00	0.27	2,651	72.82
21.600	0.26	29.17	29.71	0.00	0.27	2,649	72.81
21.650	0.26	29.14	29.68	0.00	0.27	2,647	72.81
21.700	0.26	29.12	29.66	0.00	0.27	2,645	72.81
21.750	0.26	29.10	29.64	0.00	0.27	2,643	72.81
21.800	0.26	29.08	29.62	0.00	0.27	2,641	72.81
21.850	0.26	29.06	29.59	0.00	0.27	2,639	72.81
21.900	0.26	29.04	29.57	0.00	0.27	2,638	72.81
21.950	0.26	29.02	29.55	0.00	0.27	2,636	72.81
22.000	0.26	29.00	29.53	0.00	0.27	2,634	72.81
22.050	0.26	28.98	29.51	0.00	0.27	2,632	72.81
22.100	0.26	28.96	29.49	0.00	0.27	2,631	72.81
22.150	0.26	28.94	29.48	0.00	0.27	2,629	72.81
22.200	0.26	28.93	29.46	0.00	0.27	2,627	72.81
22.250	0.26	28.91	29.44	0.00	0.27	2,626	72.81
22.300	0.26	28.89	29.42	0.00	0.27	2,624	72.81
22.350	0.26	28.88	29.40	0.00	0.26	2,623	72.81
22.400	0.26	28.86	29.39	0.00	0.26	2,621	72.80
22.450	0.26	28.84	29.37	0.00	0.26	2,620	72.80
22.500	0.26	28.83	29.35	0.00	0.26	2,618	72.80
22.550	0.26	28.81	29.34	0.00	0.26	2,617	72.80
22.600	0.26	28.80	29.32	0.00	0.26	2,615	72.80
22.650	0.26	28.78	29.31	0.00	0.26	2,614	72.80
22.700	0.26	28.77	29.29	0.00	0.26	2,613	72.80
22.750	0.26	28.75	29.28	0.00	0.26	2,611	72.80
22.800	0.26	28.74	29.26	0.00	0.26	2,610	72.80
22.850	0.26	28.72	29.25	0.00	0.26	2,609	72.80
22.900	0.25	28.71	29.23	0.00	0.26	2,607	72.80
22.950	0.25	28.70	29.22	0.00	0.26	2,606	72.80
23.000	0.25	28.68	29.21	0.00	0.26	2,605	72.80
23.050	0.25	28.67	29.19	0.00	0.26	2,604	72.80

Existing and Proposed Hydrologic Calculations

Subsection: Pond Routing Calculations (Total Out)

Return Event: 100 years

Label: MC-3500 - 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	0.25	28.66	29.18	0.00	0.26	2,603	72.80
23.150	0.25	28.64	29.17	0.00	0.26	2,601	72.80
23.200	0.25	28.63	29.15	0.00	0.26	2,600	72.80
23.250	0.25	28.62	29.14	0.00	0.26	2,599	72.80
23.300	0.25	28.61	29.13	0.00	0.26	2,598	72.80
23.350	0.25	28.59	29.11	0.00	0.26	2,597	72.80
23.400	0.25	28.58	29.10	0.00	0.26	2,596	72.80
23.450	0.25	28.57	29.09	0.00	0.26	2,595	72.80
23.500	0.25	28.56	29.08	0.00	0.26	2,594	72.79
23.550	0.25	28.55	29.07	0.00	0.26	2,593	72.79
23.600	0.25	28.54	29.05	0.00	0.26	2,591	72.79
23.650	0.25	28.52	29.04	0.00	0.26	2,590	72.79
23.700	0.25	28.51	29.03	0.00	0.26	2,589	72.79
23.750	0.25	28.50	29.02	0.00	0.26	2,588	72.79
23.800	0.25	28.49	29.01	0.00	0.26	2,587	72.79
23.850	0.25	28.48	29.00	0.00	0.26	2,586	72.79
23.900	0.25	28.47	28.98	0.00	0.26	2,585	72.79
23.950	0.25	28.46	28.97	0.00	0.26	2,584	72.79
24.000	0.25	28.45	28.96	0.00	0.26	2,583	72.79

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Return Event: 1 years

Label: MC-3500 - 2 (IN)

Storm Event: 1 year

Scenario: Post-Development 1 year

Summary for Hydrograph Addition at 'MC-3500 - 2'

Upstream Link	Upstream Node
6-GR OUT	6" Depth Green Roof
<Catchment to Outflow Node>	PDA-2E
24-GR OUT	24" Depth Green Roof
SP-2 OUT	Stormwater Planters - 2

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	6-GR OUT	1,610	11.800	0.13
Flow (From)	PDA-2E	305	12.150	0.08
Flow (From)	24-GR OUT	3,817	11.250	0.09
Flow (From)	SP-2 OUT	3,992	11.600	0.14
Flow (In)	MC-3500 - 2	9,724	12.150	0.44

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Return Event: 10 years

Label: MC-3500 - 2 (IN)

Storm Event: 10 year

Scenario: Post-Development 10 year

Summary for Hydrograph Addition at 'MC-3500 - 2'

Upstream Link	Upstream Node
6-GR OUT	6" Depth Green Roof
<Catchment to Outflow Node>	PDA-2E
24-GR OUT	24" Depth Green Roof
SP-2 OUT	Stormwater Planters - 2

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	6-GR OUT	3,090	11.650	0.13
Flow (From)	PDA-2E	909	12.100	0.24
Flow (From)	24-GR OUT	6,928	12.200	1.34
Flow (From)	SP-2 OUT	8,137	12.600	0.35
Flow (In)	MC-3500 - 2	19,064	12.200	1.81

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Return Event: 25 years

Label: MC-3500 - 2 (IN)

Storm Event: 25 year

Scenario: Post-Development 25 year

Summary for Hydrograph Addition at 'MC-3500 - 2'

Upstream Link	Upstream Node
6-GR OUT	6" Depth Green Roof
<Catchment to Outflow Node>	PDA-2E
24-GR OUT	24" Depth Green Roof
SP-2 OUT	Stormwater Planters - 2

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	6-GR OUT	3,955	12.250	0.53
Flow (From)	PDA-2E	1,306	12.100	0.35
Flow (From)	24-GR OUT	8,686	12.100	2.71
Flow (From)	SP-2 OUT	10,393	12.300	1.19
Flow (In)	MC-3500 - 2	24,341	12.100	3.33

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Return Event: 100 years

Label: MC-3500 - 2 (IN)

Storm Event: 100 year

Scenario: Post-Development 100 year

Summary for Hydrograph Addition at 'MC-3500 - 2'

Upstream Link	Upstream Node
6-GR OUT	6" Depth Green Roof
<Catchment to Outflow Node>	PDA-2E
24-GR OUT	24" Depth Green Roof
SP-2 OUT	Stormwater Planters - 2

Node Inflows

Inflow Type	Element	Volume (ft ³)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	6-GR OUT	5,731	12.150	1.27
Flow (From)	PDA-2E	2,167	12.100	0.57
Flow (From)	24-GR OUT	12,417	12.100	3.20
Flow (From)	SP-2 OUT	14,695	12.150	3.33
Flow (In)	MC-3500 - 2	35,011	12.150	8.12

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	1.57	10,217	0	0.00	1.57	115.10
65.35	2.97	13,232	0	0.00	2.97	149.99
65.85	3.80	16,086	0	0.00	3.80	182.53
66.35	4.47	18,721	0	0.00	4.47	212.49
66.85	5.06	21,030	0	0.00	5.06	238.72
67.35	5.59	22,741	0	0.00	5.59	258.26
67.85	6.07	24,227	0	0.00	6.07	275.25
68.35	6.51	25,712	0	0.00	6.51	292.20

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	1.57	10,217	0	0.00	1.57	115.10
65.35	2.97	13,232	0	0.00	2.97	149.99
65.85	3.80	16,086	0	0.00	3.80	182.53
66.35	4.47	18,721	0	0.00	4.47	212.49
66.85	5.06	21,030	0	0.00	5.06	238.72
67.35	5.59	22,741	0	0.00	5.59	258.26
67.85	6.07	24,227	0	0.00	6.07	275.25
68.35	6.51	25,712	0	0.00	6.51	292.20

Existing and Proposed Hydrologic Calculations

Subsection: Elevation-Volume-Flow Table (Pond)

Return Event: 25 years

Label: MC-3500 - 3

Storm Event: 25 year

Scenario: Post-Development 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	1.57	10,217	0	0.00	1.57	115.10
65.35	2.97	13,232	0	0.00	2.97	149.99
65.85	3.80	16,086	0	0.00	3.80	182.53
66.35	4.47	18,721	0	0.00	4.47	212.49
66.85	5.06	21,030	0	0.00	5.06	238.72
67.35	5.59	22,741	0	0.00	5.59	258.26
67.85	6.07	24,227	0	0.00	6.07	275.25
68.35	6.51	25,712	0	0.00	6.51	292.20

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	1.57	10,217	0	0.00	1.57	115.10
65.35	2.97	13,232	0	0.00	2.97	149.99
65.85	3.80	16,086	0	0.00	3.80	182.53
66.35	4.47	18,721	0	0.00	4.47	212.49
66.85	5.06	21,030	0	0.00	5.06	238.72
67.35	5.59	22,741	0	0.00	5.59	258.26
67.85	6.07	24,227	0	0.00	6.07	275.25
68.35	6.51	25,712	0	0.00	6.51	292.20

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

Elevation (Water Surface, Peak)	64.31 ft
Volume (Peak)	6,851 ft ³

Mass Balance (ft³)

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

Return Event: 10 years

Label: MC-3500 - 3 (IN)

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

Inflow/Outflow Hydrograph Summary

Flow (Peak In)	9.44 ft ³ /s	Time to Peak (Flow, In)	12.100 hours
Flow (Peak Outlet)	3.05 ft ³ /s	Time to Peak (Flow, Outlet)	12.400 hours

Elevation (Water Surface, Peak)	65.40 ft
Volume (Peak)	13,501 ft ³

Mass Balance (ft³)

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)	524 ft ³
Volume (Unrouted)	-22 ft ³
Error (Mass Balance)	0.1 %

Existing and Proposed Hydrologic Calculations

Subsection: Level Pool Pond Routing Summary

Return Event: 25 years

Label: MC-3500 - 3 (IN)

Storm Event: 25 year

Scenario: Post-Development 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)	4.12 ft ³ /s	Time to Peak (Flow, Outlet)	12.400 hours

Elevation (Water Surface, Peak)	66.09 ft
Volume (Peak)	17,373 ft ³

Mass Balance (ft³)

Volume (Initial)	0 ft ³
Volume (Total Inflow)	47,586 ft ³
Volume (Total Infiltration)	0 ft ³
Volume (Total Outlet Outflow)	46,873 ft ³
Volume (Retained)	684 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)	6.36 ft ³ /s	Time to Peak (Flow, Outlet)	12.400 hours

Elevation (Water Surface, Peak)	68.18 ft
Volume (Peak)	25,195 ft ³

Mass Balance (ft³)

Volume (Initial)	0 ft ³
Volume (Total Inflow)	71,460 ft ³
Volume (Total Infiltration)	0 ft ³
Volume (Total Outlet Outflow)	70,330 ft ³
Volume (Retained)	1,085 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 - 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	0.00	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 - 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	0.00	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 - 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	0.00	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 - 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	0.01	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 - 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	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 - 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	0.21	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 - 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	0.76	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 - 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	0.09	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 - 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	0.07	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 - 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	0.06	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 - 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	0.00	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 - 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	0.00	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 - 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	0.02	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 - 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	0.07	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 - 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	0.21	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	7,488	64.41
12.050	9.11	97.10	99.57	0.00	1.23	8,860	64.63
12.100	9.44	112.46	115.65	0.00	1.60	10,265	64.86
12.150	8.34	125.87	130.23	0.00	2.18	11,539	65.07
12.200	6.11	135.16	140.32	0.00	2.58	12,406	65.21
12.250	5.02	140.65	146.29	0.00	2.82	12,916	65.30
12.300	4.29	144.02	149.96	0.00	2.97	13,229	65.35
12.350	3.77	146.03	152.08	0.00	3.02	13,418	65.38
12.400	3.21	146.92	153.01	0.00	3.05	13,501	65.40
12.450	2.74	146.78	152.86	0.00	3.04	13,488	65.39
12.500	2.18	145.68	151.70	0.00	3.01	13,384	65.38
12.550	1.84	143.78	149.70	0.00	2.96	13,207	65.35

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)
12.600	1.50	141.41	147.12	0.00	2.85	12,987	65.31
12.650	1.36	138.80	144.28	0.00	2.74	12,744	65.27
12.700	1.27	136.17	141.43	0.00	2.63	12,500	65.23
12.750	1.22	133.63	138.66	0.00	2.52	12,264	65.19
12.800	1.16	131.18	136.00	0.00	2.41	12,036	65.15
12.850	1.11	128.83	133.44	0.00	2.31	11,818	65.11
12.900	1.05	126.57	130.98	0.00	2.21	11,605	65.08
12.950	1.00	124.38	128.61	0.00	2.11	11,398	65.04
13.000	0.94	122.28	126.33	0.00	2.02	11,198	65.01
13.050	0.90	120.25	124.12	0.00	1.94	11,005	64.98
13.100	0.86	118.32	122.02	0.00	1.85	10,822	64.95
13.150	0.84	116.48	120.02	0.00	1.77	10,647	64.92
13.200	0.83	114.76	118.15	0.00	1.70	10,484	64.89
13.250	0.81	113.14	116.39	0.00	1.63	10,330	64.87
13.300	0.80	111.62	114.75	0.00	1.57	10,187	64.85
13.350	0.78	110.13	113.20	0.00	1.53	10,051	64.82
13.400	0.77	108.68	111.68	0.00	1.50	9,919	64.80
13.450	0.76	107.27	110.21	0.00	1.47	9,790	64.78
13.500	0.74	105.90	108.77	0.00	1.44	9,664	64.76
13.550	0.73	104.56	107.37	0.00	1.41	9,542	64.74
13.600	0.71	103.25	106.00	0.00	1.38	9,422	64.72
13.650	0.70	101.97	104.66	0.00	1.35	9,305	64.70
13.700	0.68	100.72	103.35	0.00	1.32	9,191	64.69
13.750	0.67	99.50	102.08	0.00	1.29	9,079	64.67
13.800	0.66	98.30	100.83	0.00	1.26	8,970	64.65
13.850	0.64	97.14	99.60	0.00	1.23	8,863	64.63
13.900	0.63	95.99	98.41	0.00	1.21	8,759	64.62
13.950	0.62	94.87	97.23	0.00	1.18	8,656	64.60
14.000	0.60	93.77	96.09	0.00	1.16	8,554	64.58
14.050	0.59	92.69	94.96	0.00	1.13	8,454	64.57
14.100	0.58	91.64	93.86	0.00	1.11	8,357	64.55
14.150	0.57	90.62	92.79	0.00	1.09	8,262	64.54
14.200	0.56	89.63	91.75	0.00	1.06	8,170	64.52
14.250	0.56	88.66	90.75	0.00	1.04	8,081	64.51
14.300	0.55	87.73	89.77	0.00	1.02	7,994	64.49
14.350	0.54	86.82	88.82	0.00	1.00	7,910	64.48
14.400	0.54	85.95	87.90	0.00	0.98	7,829	64.47
14.450	0.53	85.09	87.01	0.00	0.96	7,750	64.46
14.500	0.52	84.27	86.15	0.00	0.94	7,673	64.44
14.550	0.52	83.46	85.30	0.00	0.92	7,598	64.43
14.600	0.51	82.68	84.48	0.00	0.90	7,526	64.42
14.650	0.50	81.92	83.69	0.00	0.89	7,455	64.41

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)
14.700	0.50	81.18	82.91	0.00	0.87	7,386	64.40
14.750	0.49	80.45	82.16	0.00	0.85	7,319	64.39
14.800	0.48	79.75	81.43	0.00	0.84	7,254	64.38
14.850	0.48	79.07	80.71	0.00	0.82	7,191	64.37
14.900	0.47	78.40	80.01	0.00	0.81	7,129	64.36
14.950	0.46	77.74	79.33	0.00	0.79	7,068	64.35
15.000	0.45	77.08	78.66	0.00	0.79	7,009	64.34
15.050	0.45	76.41	77.98	0.00	0.79	6,948	64.33
15.100	0.44	75.74	77.30	0.00	0.78	6,888	64.32
15.150	0.43	75.05	76.61	0.00	0.78	6,826	64.31
15.200	0.43	74.37	75.92	0.00	0.78	6,764	64.30
15.250	0.42	73.67	75.22	0.00	0.77	6,702	64.29
15.300	0.41	72.97	74.51	0.00	0.77	6,639	64.28
15.350	0.41	72.27	73.80	0.00	0.76	6,576	64.27
15.400	0.40	71.56	73.08	0.00	0.76	6,512	64.26
15.450	0.39	70.84	72.35	0.00	0.76	6,447	64.25
15.500	0.39	70.12	71.62	0.00	0.75	6,382	64.24
15.550	0.38	69.39	70.89	0.00	0.75	6,317	64.23
15.600	0.37	68.66	70.14	0.00	0.74	6,251	64.22
15.650	0.37	67.92	69.40	0.00	0.74	6,184	64.21
15.700	0.36	67.17	68.65	0.00	0.74	6,117	64.20
15.750	0.35	66.42	67.89	0.00	0.73	6,050	64.19
15.800	0.35	65.67	67.12	0.00	0.73	5,982	64.18
15.850	0.34	64.91	66.36	0.00	0.72	5,913	64.17
15.900	0.33	64.14	65.58	0.00	0.72	5,844	64.16
15.950	0.33	63.37	64.80	0.00	0.71	5,775	64.15
16.000	0.32	62.60	64.02	0.00	0.71	5,705	64.13
16.050	0.31	61.82	63.23	0.00	0.71	5,635	64.12
16.100	0.31	61.04	62.44	0.00	0.70	5,565	64.11
16.150	0.31	60.25	61.65	0.00	0.70	5,494	64.10
16.200	0.30	59.47	60.86	0.00	0.69	5,423	64.09
16.250	0.30	58.69	60.07	0.00	0.69	5,352	64.08
16.300	0.30	57.92	59.29	0.00	0.69	5,282	64.07
16.350	0.29	57.15	58.51	0.00	0.68	5,212	64.06
16.400	0.29	56.37	57.73	0.00	0.68	5,141	64.05
16.450	0.29	55.61	56.95	0.00	0.67	5,071	64.04
16.500	0.28	54.84	56.18	0.00	0.67	5,002	64.03
16.550	0.28	54.08	55.41	0.00	0.66	4,932	64.01
16.600	0.28	53.32	54.64	0.00	0.66	4,863	64.00
16.650	0.27	52.56	53.87	0.00	0.66	4,794	63.99
16.700	0.27	51.80	53.10	0.00	0.65	4,725	63.98
16.750	0.27	51.05	52.34	0.00	0.65	4,657	63.97

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)
16.800	0.27	50.30	51.58	0.00	0.64	4,588	63.96
16.850	0.26	49.55	50.82	0.00	0.64	4,520	63.95
16.900	0.26	48.80	50.07	0.00	0.64	4,452	63.94
16.950	0.26	48.05	49.32	0.00	0.63	4,384	63.93
17.000	0.25	47.31	48.57	0.00	0.63	4,317	63.92
17.050	0.25	46.57	47.82	0.00	0.62	4,250	63.91
17.100	0.25	45.83	47.07	0.00	0.62	4,182	63.90
17.150	0.25	45.10	46.33	0.00	0.61	4,115	63.89
17.200	0.24	44.36	45.59	0.00	0.61	4,049	63.88
17.250	0.24	43.63	44.84	0.00	0.61	3,982	63.87
17.300	0.24	42.90	44.11	0.00	0.60	3,916	63.86
17.350	0.23	42.18	43.37	0.00	0.60	3,844	63.85
17.400	0.23	41.46	42.64	0.00	0.59	3,754	63.83
17.450	0.23	40.75	41.92	0.00	0.58	3,665	63.82
17.500	0.22	40.05	41.20	0.00	0.58	3,578	63.81
17.550	0.22	39.35	40.49	0.00	0.57	3,491	63.79
17.600	0.22	38.67	39.79	0.00	0.56	3,405	63.78
17.650	0.22	37.99	39.10	0.00	0.56	3,321	63.77
17.700	0.21	37.32	38.42	0.00	0.55	3,237	63.75
17.750	0.21	36.66	37.74	0.00	0.54	3,154	63.74
17.800	0.21	36.00	37.07	0.00	0.54	3,072	63.73
17.850	0.20	35.35	36.41	0.00	0.53	2,991	63.72
17.900	0.20	34.71	35.76	0.00	0.52	2,911	63.70
17.950	0.20	34.07	35.11	0.00	0.52	2,831	63.69
18.000	0.19	33.45	34.47	0.00	0.51	2,753	63.68
18.050	0.19	32.82	33.83	0.00	0.50	2,675	63.67
18.100	0.19	32.21	33.21	0.00	0.50	2,598	63.66
18.150	0.19	31.60	32.59	0.00	0.49	2,522	63.64
18.200	0.19	31.01	31.98	0.00	0.49	2,448	63.63
18.250	0.19	30.42	31.38	0.00	0.48	2,375	63.62
18.300	0.19	29.85	30.80	0.00	0.47	2,303	63.61
18.350	0.19	29.28	30.22	0.00	0.47	2,232	63.60
18.400	0.18	28.73	29.65	0.00	0.46	2,199	63.59
18.450	0.18	28.18	29.09	0.00	0.46	2,168	63.58
18.500	0.18	27.64	28.54	0.00	0.45	2,137	63.57
18.550	0.18	27.11	28.00	0.00	0.45	2,107	63.56
18.600	0.18	26.59	27.47	0.00	0.44	2,077	63.55
18.650	0.18	26.08	26.95	0.00	0.44	2,048	63.54
18.700	0.18	25.57	26.44	0.00	0.43	2,020	63.53
18.750	0.18	25.08	25.93	0.00	0.43	1,992	63.52
18.800	0.18	24.59	25.43	0.00	0.42	1,964	63.51
18.850	0.18	24.11	24.94	0.00	0.42	1,937	63.50

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	23.63	24.46	0.00	0.41	1,910	63.49
18.950	0.17	23.17	23.98	0.00	0.41	1,883	63.48
19.000	0.17	22.71	23.52	0.00	0.40	1,857	63.47
19.050	0.17	22.26	23.06	0.00	0.40	1,832	63.47
19.100	0.17	21.82	22.61	0.00	0.39	1,807	63.46
19.150	0.17	21.38	22.16	0.00	0.39	1,782	63.45
19.200	0.17	20.95	21.72	0.00	0.39	1,757	63.44
19.250	0.17	20.53	21.29	0.00	0.38	1,733	63.43
19.300	0.17	20.11	20.87	0.00	0.38	1,710	63.43
19.350	0.17	19.70	20.45	0.00	0.37	1,686	63.42
19.400	0.17	19.30	20.04	0.00	0.37	1,664	63.41
19.450	0.17	18.90	19.63	0.00	0.37	1,641	63.40
19.500	0.16	18.51	19.23	0.00	0.36	1,619	63.39
19.550	0.16	18.13	18.84	0.00	0.36	1,597	63.39
19.600	0.16	17.75	18.45	0.00	0.35	1,575	63.38
19.650	0.16	17.37	18.07	0.00	0.35	1,554	63.37
19.700	0.16	17.00	17.70	0.00	0.35	1,533	63.37
19.750	0.16	16.64	17.33	0.00	0.34	1,513	63.36
19.800	0.16	16.28	16.96	0.00	0.34	1,492	63.35
19.850	0.16	15.94	16.60	0.00	0.33	1,464	63.34
19.900	0.16	15.60	16.25	0.00	0.33	1,434	63.33
19.950	0.16	15.28	15.92	0.00	0.32	1,404	63.32
20.000	0.16	14.97	15.59	0.00	0.31	1,375	63.31
20.050	0.16	14.67	15.28	0.00	0.31	1,348	63.30
20.100	0.15	14.38	14.98	0.00	0.30	1,321	63.29
20.150	0.15	14.10	14.68	0.00	0.29	1,295	63.29
20.200	0.15	13.83	14.40	0.00	0.29	1,270	63.28
20.250	0.15	13.57	14.13	0.00	0.28	1,246	63.27
20.300	0.15	13.31	13.87	0.00	0.28	1,223	63.26
20.350	0.15	13.07	13.62	0.00	0.27	1,201	63.25
20.400	0.15	12.84	13.37	0.00	0.27	1,179	63.25
20.450	0.15	12.61	13.14	0.00	0.26	1,159	63.24
20.500	0.15	12.39	12.91	0.00	0.26	1,139	63.23
20.550	0.15	12.18	12.69	0.00	0.25	1,119	63.23
20.600	0.15	11.98	12.48	0.00	0.25	1,100	63.22
20.650	0.15	11.78	12.27	0.00	0.25	1,082	63.21
20.700	0.15	11.59	12.07	0.00	0.24	1,065	63.21
20.750	0.15	11.40	11.88	0.00	0.24	1,048	63.20
20.800	0.15	11.23	11.70	0.00	0.23	1,032	63.20
20.850	0.14	11.06	11.52	0.00	0.23	1,016	63.19
20.900	0.14	10.89	11.34	0.00	0.23	1,000	63.19
20.950	0.14	10.73	11.18	0.00	0.22	986	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	10.57	11.01	0.00	0.22	971	63.18
21.050	0.14	10.42	10.86	0.00	0.22	958	63.17
21.100	0.14	10.28	10.71	0.00	0.21	944	63.17
21.150	0.14	10.14	10.56	0.00	0.21	931	63.16
21.200	0.14	10.00	10.42	0.00	0.21	919	63.16
21.250	0.14	9.86	10.28	0.00	0.21	906	63.15
21.300	0.14	9.74	10.14	0.00	0.20	895	63.15
21.350	0.14	9.61	10.01	0.00	0.20	883	63.15
21.400	0.14	9.49	9.89	0.00	0.20	872	63.14
21.450	0.14	9.37	9.76	0.00	0.20	861	63.14
21.500	0.14	9.26	9.64	0.00	0.19	851	63.14
21.550	0.13	9.15	9.53	0.00	0.19	840	63.13
21.600	0.13	9.04	9.42	0.00	0.19	830	63.13
21.650	0.13	8.93	9.31	0.00	0.19	821	63.13
21.700	0.13	8.83	9.20	0.00	0.18	811	63.12
21.750	0.13	8.73	9.10	0.00	0.18	802	63.12
21.800	0.13	8.64	9.00	0.00	0.18	794	63.12
21.850	0.13	8.54	8.90	0.00	0.18	785	63.11
21.900	0.13	8.45	8.81	0.00	0.18	777	63.11
21.950	0.13	8.36	8.71	0.00	0.17	768	63.11
22.000	0.13	8.28	8.62	0.00	0.17	761	63.11
22.050	0.13	8.19	8.54	0.00	0.17	753	63.10
22.100	0.13	8.11	8.45	0.00	0.17	745	63.10
22.150	0.13	8.03	8.37	0.00	0.17	738	63.10
22.200	0.13	7.95	8.28	0.00	0.17	731	63.10
22.250	0.13	7.88	8.20	0.00	0.16	724	63.09
22.300	0.12	7.80	8.13	0.00	0.16	717	63.09
22.350	0.12	7.73	8.05	0.00	0.16	710	63.09
22.400	0.12	7.66	7.98	0.00	0.16	703	63.09
22.450	0.12	7.59	7.90	0.00	0.16	697	63.08
22.500	0.12	7.52	7.83	0.00	0.16	691	63.08
22.550	0.12	7.45	7.76	0.00	0.16	685	63.08
22.600	0.12	7.39	7.69	0.00	0.15	679	63.08
22.650	0.12	7.32	7.63	0.00	0.15	673	63.08
22.700	0.12	7.26	7.56	0.00	0.15	667	63.07
22.750	0.12	7.20	7.50	0.00	0.15	661	63.07
22.800	0.12	7.14	7.44	0.00	0.15	656	63.07
22.850	0.12	7.08	7.37	0.00	0.15	650	63.07
22.900	0.12	7.02	7.31	0.00	0.15	645	63.07
22.950	0.12	6.96	7.25	0.00	0.15	640	63.07
23.000	0.12	6.91	7.20	0.00	0.14	635	63.06
23.050	0.12	6.85	7.14	0.00	0.14	630	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 - 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	0.11	6.80	7.08	0.00	0.14	625	63.06
23.150	0.11	6.74	7.03	0.00	0.14	620	63.06
23.200	0.11	6.69	6.97	0.00	0.14	615	63.06
23.250	0.11	6.64	6.92	0.00	0.14	610	63.06
23.300	0.11	6.59	6.86	0.00	0.14	605	63.05
23.350	0.11	6.54	6.81	0.00	0.14	601	63.05
23.400	0.11	6.49	6.76	0.00	0.14	596	63.05
23.450	0.11	6.44	6.71	0.00	0.13	592	63.05
23.500	0.11	6.39	6.66	0.00	0.13	587	63.05
23.550	0.11	6.35	6.61	0.00	0.13	583	63.05
23.600	0.11	6.30	6.56	0.00	0.13	579	63.04
23.650	0.11	6.25	6.51	0.00	0.13	575	63.04
23.700	0.11	6.21	6.47	0.00	0.13	570	63.04
23.750	0.11	6.16	6.42	0.00	0.13	566	63.04
23.800	0.11	6.12	6.37	0.00	0.13	562	63.04
23.850	0.10	6.07	6.33	0.00	0.13	558	63.04
23.900	0.10	6.03	6.28	0.00	0.13	554	63.04
23.950	0.10	5.99	6.24	0.00	0.13	550	63.04
24.000	0.10	5.94	6.19	0.00	0.12	546	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 - 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	0.00	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 - 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	0.12	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 - 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	0.30	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	86.36	88.33	0.00	0.99	7,867	64.47
11.950	7.65	97.32	99.80	0.00	1.24	8,880	64.64
12.000	10.68	112.46	115.65	0.00	1.60	10,265	64.86
12.050	11.86	130.26	135.00	0.00	2.37	11,951	65.14
12.100	12.24	148.20	154.36	0.00	3.08	13,621	65.42
12.150	10.79	164.21	171.24	0.00	3.51	15,111	65.68
12.200	7.90	175.29	182.91	0.00	3.81	16,120	65.86
12.250	6.48	181.75	189.67	0.00	3.96	16,729	65.97
12.300	5.53	185.65	193.76	0.00	4.05	17,098	66.04
12.350	4.86	187.83	196.04	0.00	4.10	17,303	66.08
12.400	4.13	188.57	196.82	0.00	4.12	17,373	66.09
12.450	3.52	188.01	196.23	0.00	4.11	17,320	66.08
12.500	2.81	186.21	194.34	0.00	4.07	17,151	66.05
12.550	2.36	183.38	191.38	0.00	4.00	16,883	66.00

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	179.84	187.68	0.00	3.92	16,549	65.94
12.650	1.75	175.88	183.52	0.00	3.82	16,175	65.87
12.700	1.64	171.83	179.26	0.00	3.72	15,803	65.80
12.750	1.56	167.81	175.02	0.00	3.61	15,438	65.73
12.800	1.49	163.85	170.85	0.00	3.50	15,078	65.67
12.850	1.42	159.96	166.76	0.00	3.40	14,725	65.61
12.900	1.35	156.14	162.73	0.00	3.29	14,367	65.55
12.950	1.28	152.39	158.77	0.00	3.19	14,014	65.48
13.000	1.21	148.69	154.88	0.00	3.09	13,667	65.43
13.050	1.16	145.07	151.06	0.00	3.00	13,327	65.37
13.100	1.11	141.61	147.34	0.00	2.86	13,005	65.31
13.150	1.08	138.36	143.80	0.00	2.72	12,703	65.26
13.200	1.06	135.32	140.50	0.00	2.59	12,421	65.21
13.250	1.04	132.49	137.42	0.00	2.47	12,158	65.17
13.300	1.02	129.85	134.55	0.00	2.35	11,913	65.13
13.350	1.01	127.39	131.88	0.00	2.24	11,683	65.09
13.400	0.99	125.09	129.38	0.00	2.15	11,465	65.05
13.450	0.97	122.94	127.05	0.00	2.05	11,261	65.02
13.500	0.95	120.93	124.86	0.00	1.96	11,070	64.99
13.550	0.93	119.05	122.82	0.00	1.88	10,892	64.96
13.600	0.91	117.29	120.90	0.00	1.81	10,724	64.93
13.650	0.90	115.63	119.10	0.00	1.73	10,567	64.91
13.700	0.88	114.08	117.41	0.00	1.67	10,419	64.88
13.750	0.86	112.61	115.82	0.00	1.60	10,280	64.86
13.800	0.84	111.20	114.31	0.00	1.56	10,149	64.84
13.850	0.83	109.82	112.87	0.00	1.53	10,022	64.82
13.900	0.81	108.46	111.45	0.00	1.49	9,898	64.80
13.950	0.79	107.13	110.06	0.00	1.46	9,777	64.78
14.000	0.77	105.82	108.69	0.00	1.43	9,657	64.76
14.050	0.76	104.54	107.35	0.00	1.40	9,540	64.74
14.100	0.74	103.28	106.03	0.00	1.38	9,425	64.72
14.150	0.73	102.06	104.75	0.00	1.35	9,313	64.70
14.200	0.72	100.87	103.51	0.00	1.32	9,205	64.69
14.250	0.71	99.72	102.31	0.00	1.29	9,099	64.67
14.300	0.70	98.60	101.13	0.00	1.27	8,997	64.65
14.350	0.70	97.51	100.00	0.00	1.24	8,898	64.64
14.400	0.69	96.45	98.89	0.00	1.22	8,801	64.62
14.450	0.68	95.43	97.82	0.00	1.20	8,707	64.61
14.500	0.67	94.43	96.77	0.00	1.17	8,615	64.59
14.550	0.66	93.46	95.76	0.00	1.15	8,525	64.58
14.600	0.65	92.51	94.77	0.00	1.13	8,438	64.56
14.650	0.64	91.59	93.81	0.00	1.11	8,352	64.55

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)
14.700	0.63	90.70	92.87	0.00	1.09	8,269	64.54
14.750	0.63	89.82	91.96	0.00	1.07	8,188	64.52
14.800	0.62	88.97	91.07	0.00	1.05	8,109	64.51
14.850	0.61	88.14	90.20	0.00	1.03	8,032	64.50
14.900	0.60	87.33	89.35	0.00	1.01	7,957	64.49
14.950	0.59	86.54	88.52	0.00	0.99	7,883	64.48
15.000	0.58	85.76	87.71	0.00	0.97	7,812	64.47
15.050	0.57	85.01	86.92	0.00	0.96	7,741	64.45
15.100	0.56	84.27	86.15	0.00	0.94	7,673	64.44
15.150	0.56	83.54	85.39	0.00	0.92	7,606	64.43
15.200	0.55	82.83	84.65	0.00	0.91	7,540	64.42
15.250	0.54	82.14	83.92	0.00	0.89	7,475	64.41
15.300	0.53	81.46	83.21	0.00	0.88	7,412	64.40
15.350	0.52	80.79	82.51	0.00	0.86	7,350	64.39
15.400	0.51	80.13	81.82	0.00	0.85	7,290	64.38
15.450	0.51	79.49	81.15	0.00	0.83	7,230	64.37
15.500	0.50	78.86	80.49	0.00	0.82	7,171	64.36
15.550	0.49	78.24	79.84	0.00	0.80	7,114	64.35
15.600	0.48	77.62	79.20	0.00	0.79	7,057	64.35
15.650	0.47	76.99	78.57	0.00	0.79	7,000	64.34
15.700	0.46	76.35	77.92	0.00	0.79	6,943	64.33
15.750	0.45	75.70	77.26	0.00	0.78	6,884	64.32
15.800	0.44	75.03	76.59	0.00	0.78	6,825	64.31
15.850	0.44	74.36	75.91	0.00	0.78	6,764	64.30
15.900	0.43	73.68	75.22	0.00	0.77	6,703	64.29
15.950	0.42	72.99	74.53	0.00	0.77	6,641	64.28
16.000	0.41	72.29	73.82	0.00	0.76	6,577	64.27
16.050	0.40	71.58	73.10	0.00	0.76	6,514	64.26
16.100	0.40	70.87	72.38	0.00	0.76	6,449	64.25
16.150	0.39	70.15	71.65	0.00	0.75	6,385	64.24
16.200	0.39	69.43	70.92	0.00	0.75	6,320	64.23
16.250	0.38	68.71	70.20	0.00	0.74	6,255	64.22
16.300	0.38	67.99	69.47	0.00	0.74	6,190	64.21
16.350	0.38	67.27	68.74	0.00	0.74	6,126	64.20
16.400	0.37	66.55	68.01	0.00	0.73	6,061	64.19
16.450	0.37	65.83	67.29	0.00	0.73	5,996	64.18
16.500	0.36	65.11	66.56	0.00	0.72	5,931	64.17
16.550	0.36	64.39	65.84	0.00	0.72	5,867	64.16
16.600	0.36	63.68	65.11	0.00	0.72	5,802	64.15
16.650	0.35	62.96	64.38	0.00	0.71	5,738	64.14
16.700	0.35	62.24	63.66	0.00	0.71	5,673	64.13
16.750	0.34	61.52	62.93	0.00	0.70	5,608	64.12

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	60.81	62.21	0.00	0.70	5,544	64.11
16.850	0.34	60.09	61.48	0.00	0.70	5,479	64.10
16.900	0.33	59.37	60.76	0.00	0.69	5,414	64.09
16.950	0.33	58.66	60.04	0.00	0.69	5,349	64.08
17.000	0.32	57.94	59.31	0.00	0.69	5,284	64.07
17.050	0.32	57.23	58.59	0.00	0.68	5,219	64.06
17.100	0.32	56.51	57.87	0.00	0.68	5,154	64.05
17.150	0.31	55.80	57.14	0.00	0.67	5,089	64.04
17.200	0.31	55.08	56.42	0.00	0.67	5,024	64.03
17.250	0.31	54.37	55.70	0.00	0.67	4,959	64.02
17.300	0.30	53.65	54.97	0.00	0.66	4,894	64.01
17.350	0.30	52.94	54.25	0.00	0.66	4,829	64.00
17.400	0.29	52.22	53.53	0.00	0.65	4,764	63.99
17.450	0.29	51.51	52.81	0.00	0.65	4,699	63.98
17.500	0.29	50.80	52.09	0.00	0.65	4,634	63.97
17.550	0.28	50.08	51.37	0.00	0.64	4,569	63.96
17.600	0.28	49.37	50.65	0.00	0.64	4,504	63.95
17.650	0.28	48.66	49.93	0.00	0.63	4,439	63.94
17.700	0.27	47.94	49.21	0.00	0.63	4,374	63.93
17.750	0.27	47.23	48.49	0.00	0.63	4,310	63.92
17.800	0.26	46.52	47.77	0.00	0.62	4,245	63.91
17.850	0.26	45.81	47.05	0.00	0.62	4,180	63.90
17.900	0.26	45.10	46.33	0.00	0.61	4,115	63.89
17.950	0.25	44.38	45.61	0.00	0.61	4,051	63.88
18.000	0.25	43.67	44.89	0.00	0.61	3,986	63.87
18.050	0.25	42.96	44.17	0.00	0.60	3,921	63.86
18.100	0.24	42.25	43.45	0.00	0.60	3,854	63.85
18.150	0.24	41.55	42.74	0.00	0.59	3,766	63.83
18.200	0.24	40.87	42.04	0.00	0.59	3,680	63.82
18.250	0.24	40.19	41.35	0.00	0.58	3,596	63.81
18.300	0.24	39.53	40.67	0.00	0.57	3,513	63.80
18.350	0.24	38.87	40.00	0.00	0.57	3,431	63.78
18.400	0.24	38.23	39.35	0.00	0.56	3,350	63.77
18.450	0.24	37.60	38.70	0.00	0.55	3,271	63.76
18.500	0.23	36.97	38.06	0.00	0.55	3,193	63.75
18.550	0.23	36.36	37.44	0.00	0.54	3,117	63.74
18.600	0.23	35.76	36.82	0.00	0.53	3,041	63.72
18.650	0.23	35.16	36.22	0.00	0.53	2,967	63.71
18.700	0.23	34.58	35.62	0.00	0.52	2,894	63.70
18.750	0.23	34.00	35.03	0.00	0.52	2,822	63.69
18.800	0.23	33.44	34.46	0.00	0.51	2,751	63.68
18.850	0.23	32.88	33.89	0.00	0.51	2,682	63.67

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	32.33	33.33	0.00	0.50	2,613	63.66
18.950	0.22	31.79	32.78	0.00	0.49	2,546	63.65
19.000	0.22	31.26	32.24	0.00	0.49	2,479	63.64
19.050	0.22	30.74	31.70	0.00	0.48	2,414	63.63
19.100	0.22	30.22	31.18	0.00	0.48	2,349	63.62
19.150	0.22	29.71	30.66	0.00	0.47	2,286	63.61
19.200	0.22	29.21	30.15	0.00	0.47	2,227	63.60
19.250	0.22	28.72	29.65	0.00	0.46	2,199	63.59
19.300	0.22	28.24	29.16	0.00	0.46	2,171	63.58
19.350	0.21	27.76	28.67	0.00	0.45	2,144	63.57
19.400	0.21	27.29	28.19	0.00	0.45	2,117	63.56
19.450	0.21	26.83	27.72	0.00	0.44	2,091	63.55
19.500	0.21	26.37	27.25	0.00	0.44	2,065	63.54
19.550	0.21	25.92	26.79	0.00	0.44	2,040	63.54
19.600	0.21	25.48	26.34	0.00	0.43	2,014	63.53
19.650	0.21	25.04	25.90	0.00	0.43	1,990	63.52
19.700	0.21	24.61	25.46	0.00	0.42	1,965	63.51
19.750	0.21	24.19	25.02	0.00	0.42	1,941	63.50
19.800	0.20	23.77	24.60	0.00	0.41	1,917	63.50
19.850	0.20	23.36	24.18	0.00	0.41	1,894	63.49
19.900	0.20	22.95	23.76	0.00	0.41	1,871	63.48
19.950	0.20	22.55	23.35	0.00	0.40	1,848	63.47
20.000	0.20	22.16	22.95	0.00	0.40	1,826	63.46
20.050	0.20	21.77	22.56	0.00	0.39	1,804	63.46
20.100	0.20	21.38	22.16	0.00	0.39	1,782	63.45
20.150	0.20	21.01	21.78	0.00	0.39	1,760	63.44
20.200	0.20	20.63	21.40	0.00	0.38	1,739	63.44
20.250	0.20	20.27	21.03	0.00	0.38	1,719	63.43
20.300	0.19	19.91	20.66	0.00	0.38	1,698	63.42
20.350	0.19	19.55	20.30	0.00	0.37	1,678	63.41
20.400	0.19	19.20	19.94	0.00	0.37	1,658	63.41
20.450	0.19	18.86	19.59	0.00	0.36	1,638	63.40
20.500	0.19	18.52	19.24	0.00	0.36	1,619	63.39
20.550	0.19	18.18	18.90	0.00	0.36	1,600	63.39
20.600	0.19	17.85	18.56	0.00	0.35	1,581	63.38
20.650	0.19	17.53	18.23	0.00	0.35	1,563	63.38
20.700	0.19	17.21	17.90	0.00	0.35	1,545	63.37
20.750	0.19	16.89	17.58	0.00	0.35	1,527	63.36
20.800	0.19	16.58	17.26	0.00	0.34	1,509	63.36
20.850	0.19	16.27	16.95	0.00	0.34	1,492	63.35
20.900	0.18	15.97	16.64	0.00	0.33	1,467	63.34
20.950	0.18	15.68	16.34	0.00	0.33	1,441	63.33

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	15.41	16.05	0.00	0.32	1,415	63.33
21.050	0.18	15.14	15.77	0.00	0.32	1,391	63.32
21.100	0.18	14.88	15.50	0.00	0.31	1,367	63.31
21.150	0.18	14.63	15.24	0.00	0.31	1,344	63.30
21.200	0.18	14.39	14.99	0.00	0.30	1,322	63.29
21.250	0.18	14.15	14.74	0.00	0.30	1,300	63.29
21.300	0.18	13.92	14.51	0.00	0.29	1,279	63.28
21.350	0.18	13.71	14.28	0.00	0.29	1,259	63.27
21.400	0.18	13.49	14.06	0.00	0.28	1,240	63.27
21.450	0.17	13.29	13.84	0.00	0.28	1,221	63.26
21.500	0.17	13.09	13.64	0.00	0.27	1,203	63.25
21.550	0.17	12.90	13.44	0.00	0.27	1,185	63.25
21.600	0.17	12.71	13.24	0.00	0.27	1,168	63.24
21.650	0.17	12.53	13.05	0.00	0.26	1,151	63.24
21.700	0.17	12.36	12.87	0.00	0.26	1,135	63.23
21.750	0.17	12.19	12.70	0.00	0.25	1,120	63.23
21.800	0.17	12.02	12.53	0.00	0.25	1,105	63.22
21.850	0.17	11.86	12.36	0.00	0.25	1,090	63.22
21.900	0.17	11.71	12.20	0.00	0.24	1,076	63.21
21.950	0.17	11.56	12.04	0.00	0.24	1,062	63.21
22.000	0.17	11.41	11.89	0.00	0.24	1,049	63.20
22.050	0.16	11.27	11.74	0.00	0.24	1,036	63.20
22.100	0.16	11.14	11.60	0.00	0.23	1,023	63.19
22.150	0.16	11.00	11.46	0.00	0.23	1,011	63.19
22.200	0.16	10.87	11.33	0.00	0.23	999	63.19
22.250	0.16	10.75	11.20	0.00	0.22	987	63.18
22.300	0.16	10.62	11.07	0.00	0.22	976	63.18
22.350	0.16	10.50	10.94	0.00	0.22	965	63.17
22.400	0.16	10.39	10.82	0.00	0.22	954	63.17
22.450	0.16	10.27	10.70	0.00	0.21	944	63.17
22.500	0.16	10.16	10.59	0.00	0.21	934	63.16
22.550	0.16	10.06	10.48	0.00	0.21	924	63.16
22.600	0.16	9.95	10.37	0.00	0.21	914	63.16
22.650	0.15	9.85	10.26	0.00	0.21	905	63.15
22.700	0.15	9.75	10.16	0.00	0.20	896	63.15
22.750	0.15	9.65	10.06	0.00	0.20	887	63.15
22.800	0.15	9.56	9.96	0.00	0.20	878	63.15
22.850	0.15	9.46	9.86	0.00	0.20	870	63.14
22.900	0.15	9.37	9.76	0.00	0.20	861	63.14
22.950	0.15	9.28	9.67	0.00	0.19	853	63.14
23.000	0.15	9.20	9.58	0.00	0.19	845	63.13
23.050	0.15	9.11	9.49	0.00	0.19	837	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 - 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	0.15	9.03	9.40	0.00	0.19	829	63.13
23.150	0.15	8.94	9.32	0.00	0.19	822	63.13
23.200	0.14	8.86	9.23	0.00	0.19	814	63.12
23.250	0.14	8.79	9.15	0.00	0.18	807	63.12
23.300	0.14	8.71	9.07	0.00	0.18	800	63.12
23.350	0.14	8.63	8.99	0.00	0.18	793	63.12
23.400	0.14	8.56	8.92	0.00	0.18	786	63.11
23.450	0.14	8.49	8.84	0.00	0.18	780	63.11
23.500	0.14	8.42	8.77	0.00	0.18	773	63.11
23.550	0.14	8.35	8.70	0.00	0.17	767	63.11
23.600	0.14	8.28	8.62	0.00	0.17	760	63.11
23.650	0.14	8.21	8.55	0.00	0.17	754	63.10
23.700	0.14	8.14	8.48	0.00	0.17	748	63.10
23.750	0.14	8.08	8.41	0.00	0.17	742	63.10
23.800	0.13	8.01	8.35	0.00	0.17	736	63.10
23.850	0.13	7.95	8.28	0.00	0.17	730	63.10
23.900	0.13	7.88	8.21	0.00	0.16	724	63.09
23.950	0.13	7.82	8.15	0.00	0.16	719	63.09
24.000	0.13	7.76	8.08	0.00	0.16	713	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 - 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	0.00	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 - 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	0.01	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 - 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	0.11	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	82.50	84.30	0.00	0.90	7,509	64.42
11.600	3.13	86.29	88.26	0.00	0.99	7,860	64.47
11.650	3.81	91.04	93.23	0.00	1.10	8,301	64.54
11.700	4.78	97.16	99.63	0.00	1.24	8,866	64.63
11.750	5.63	104.75	107.57	0.00	1.41	9,559	64.74
11.800	6.64	113.72	117.02	0.00	1.65	10,385	64.88
11.850	7.52	123.72	127.89	0.00	2.09	11,334	65.03
11.900	8.60	134.71	139.84	0.00	2.56	12,365	65.20
11.950	11.32	148.46	154.63	0.00	3.09	13,646	65.42
12.000	15.75	168.28	175.53	0.00	3.62	15,481	65.74
12.050	17.43	193.01	201.46	0.00	4.23	17,775	66.17
12.100	17.94	218.73	228.38	0.00	4.83	20,161	66.65
12.150	15.78	241.60	252.46	0.00	5.43	22,272	67.20
12.200	11.53	257.14	268.92	0.00	5.89	23,673	67.66
12.250	9.45	265.84	278.13	0.00	6.14	24,478	67.93
12.300	8.05	270.79	283.34	0.00	6.28	24,936	68.09
12.350	7.07	273.22	285.91	0.00	6.35	25,161	68.16
12.400	6.01	273.59	286.30	0.00	6.36	25,195	68.18
12.450	5.12	272.09	284.72	0.00	6.31	25,056	68.13
12.500	4.08	268.85	281.30	0.00	6.23	24,756	68.03
12.550	3.43	264.17	276.36	0.00	6.10	24,324	67.88

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)
12.600	2.81	258.55	270.41	0.00	5.93	23,803	67.71
12.650	2.54	252.40	263.89	0.00	5.75	23,233	67.52
12.700	2.37	246.20	257.31	0.00	5.56	22,664	67.33
12.750	2.27	240.07	250.84	0.00	5.38	22,141	67.16
12.800	2.16	234.07	244.49	0.00	5.21	21,574	67.00
12.850	2.06	228.19	238.29	0.00	5.05	20,993	66.84
12.900	1.95	222.38	232.21	0.00	4.91	20,482	66.73
12.950	1.86	216.64	226.20	0.00	4.78	19,977	66.61
13.000	1.75	210.96	220.26	0.00	4.65	19,436	66.50
13.050	1.68	205.37	214.40	0.00	4.52	18,897	66.39
13.100	1.61	199.88	208.66	0.00	4.39	18,392	66.29
13.150	1.57	194.53	203.06	0.00	4.26	17,912	66.19
13.200	1.54	189.36	197.64	0.00	4.14	17,447	66.10
13.250	1.51	184.36	192.40	0.00	4.02	16,976	66.01
13.300	1.48	179.53	187.35	0.00	3.91	16,520	65.93
13.350	1.46	174.87	182.47	0.00	3.80	16,081	65.85
13.400	1.43	170.41	177.76	0.00	3.68	15,674	65.78
13.450	1.41	166.11	173.24	0.00	3.56	15,284	65.71
13.500	1.38	161.99	168.90	0.00	3.45	14,909	65.64
13.550	1.35	158.03	164.73	0.00	3.35	14,545	65.58
13.600	1.33	154.23	160.71	0.00	3.24	14,187	65.51
13.650	1.30	150.57	156.85	0.00	3.14	13,844	65.46
13.700	1.27	147.04	153.14	0.00	3.05	13,513	65.40
13.750	1.25	143.66	149.56	0.00	2.95	13,195	65.34
13.800	1.22	140.50	146.13	0.00	2.81	12,902	65.29
13.850	1.20	137.55	142.92	0.00	2.69	12,628	65.25
13.900	1.17	134.78	139.91	0.00	2.57	12,370	65.21
13.950	1.14	132.18	137.09	0.00	2.45	12,129	65.17
14.000	1.12	129.75	134.44	0.00	2.35	11,903	65.13
14.050	1.10	127.46	131.96	0.00	2.25	11,690	65.09
14.100	1.07	125.32	129.63	0.00	2.16	11,487	65.06
14.150	1.06	123.32	127.45	0.00	2.07	11,296	65.03
14.200	1.04	121.45	125.42	0.00	1.99	11,119	65.00
14.250	1.03	119.70	123.52	0.00	1.91	10,953	64.97
14.300	1.02	118.07	121.75	0.00	1.84	10,798	64.95
14.350	1.01	116.55	120.10	0.00	1.77	10,654	64.92
14.400	0.99	115.13	118.55	0.00	1.71	10,519	64.90
14.450	0.98	113.79	117.10	0.00	1.65	10,392	64.88
14.500	0.97	112.54	115.75	0.00	1.60	10,274	64.86
14.550	0.96	111.35	114.47	0.00	1.56	10,162	64.84
14.600	0.94	110.18	113.25	0.00	1.53	10,056	64.82
14.650	0.93	109.04	112.06	0.00	1.51	9,952	64.81

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	107.93	110.89	0.00	1.48	9,850	64.79
14.750	0.91	106.84	109.75	0.00	1.46	9,750	64.77
14.800	0.89	105.77	108.64	0.00	1.43	9,653	64.76
14.850	0.88	104.73	107.55	0.00	1.41	9,558	64.74
14.900	0.87	103.71	106.48	0.00	1.39	9,464	64.73
14.950	0.86	102.71	105.43	0.00	1.36	9,373	64.71
15.000	0.84	101.73	104.41	0.00	1.34	9,283	64.70
15.050	0.83	100.77	103.40	0.00	1.32	9,195	64.69
15.100	0.82	99.82	102.42	0.00	1.30	9,109	64.67
15.150	0.81	98.90	101.45	0.00	1.28	9,024	64.66
15.200	0.79	97.99	100.50	0.00	1.25	8,941	64.64
15.250	0.78	97.09	99.56	0.00	1.23	8,859	64.63
15.300	0.77	96.21	98.64	0.00	1.21	8,779	64.62
15.350	0.76	95.35	97.74	0.00	1.19	8,700	64.61
15.400	0.74	94.50	96.85	0.00	1.17	8,622	64.59
15.450	0.73	93.66	95.97	0.00	1.16	8,544	64.58
15.500	0.72	92.83	95.11	0.00	1.14	8,467	64.57
15.550	0.71	92.02	94.26	0.00	1.12	8,392	64.56
15.600	0.69	91.22	93.42	0.00	1.10	8,318	64.55
15.650	0.68	90.43	92.59	0.00	1.08	8,244	64.53
15.700	0.67	89.65	91.78	0.00	1.06	8,172	64.52
15.750	0.65	88.88	90.97	0.00	1.05	8,101	64.51
15.800	0.64	88.12	90.18	0.00	1.03	8,030	64.50
15.850	0.63	87.37	89.39	0.00	1.01	7,961	64.49
15.900	0.62	86.63	88.61	0.00	0.99	7,892	64.48
15.950	0.60	85.89	87.85	0.00	0.98	7,824	64.47
16.000	0.59	85.17	87.09	0.00	0.96	7,756	64.46
16.050	0.58	84.45	86.34	0.00	0.94	7,690	64.45
16.100	0.57	83.75	85.60	0.00	0.93	7,625	64.44
16.150	0.56	83.06	84.88	0.00	0.91	7,561	64.43
16.200	0.56	82.39	84.18	0.00	0.90	7,499	64.42
16.250	0.55	81.73	83.50	0.00	0.88	7,438	64.41
16.300	0.55	81.10	82.83	0.00	0.87	7,379	64.40
16.350	0.54	80.48	82.19	0.00	0.85	7,322	64.39
16.400	0.54	79.88	81.56	0.00	0.84	7,266	64.38
16.450	0.53	79.29	80.95	0.00	0.83	7,212	64.37
16.500	0.53	78.72	80.35	0.00	0.81	7,159	64.36
16.550	0.52	78.17	79.77	0.00	0.80	7,108	64.35
16.600	0.51	77.62	79.20	0.00	0.79	7,057	64.35
16.650	0.51	77.06	78.64	0.00	0.79	7,007	64.34
16.700	0.50	76.50	78.07	0.00	0.79	6,956	64.33
16.750	0.50	75.93	77.50	0.00	0.78	6,906	64.32

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)
16.800	0.49	75.36	76.92	0.00	0.78	6,854	64.31
16.850	0.49	74.79	76.34	0.00	0.78	6,802	64.31
16.900	0.48	74.21	75.75	0.00	0.77	6,750	64.30
16.950	0.48	73.62	75.16	0.00	0.77	6,697	64.29
17.000	0.47	73.03	74.57	0.00	0.77	6,644	64.28
17.050	0.46	72.44	73.97	0.00	0.76	6,591	64.27
17.100	0.46	71.84	73.36	0.00	0.76	6,537	64.26
17.150	0.45	71.24	72.75	0.00	0.76	6,483	64.26
17.200	0.45	70.63	72.14	0.00	0.75	6,428	64.25
17.250	0.44	70.02	71.52	0.00	0.75	6,373	64.24
17.300	0.44	69.40	70.90	0.00	0.75	6,318	64.23
17.350	0.43	68.79	70.27	0.00	0.74	6,262	64.22
17.400	0.43	68.16	69.64	0.00	0.74	6,206	64.21
17.450	0.42	67.53	69.01	0.00	0.74	6,149	64.20
17.500	0.42	66.90	68.37	0.00	0.73	6,092	64.20
17.550	0.41	66.27	67.73	0.00	0.73	6,035	64.19
17.600	0.40	65.63	67.08	0.00	0.73	5,978	64.18
17.650	0.40	64.98	66.43	0.00	0.72	5,920	64.17
17.700	0.39	64.33	65.77	0.00	0.72	5,861	64.16
17.750	0.39	63.68	65.12	0.00	0.72	5,803	64.15
17.800	0.38	63.03	64.45	0.00	0.71	5,744	64.14
17.850	0.38	62.37	63.79	0.00	0.71	5,684	64.13
17.900	0.37	61.70	63.12	0.00	0.71	5,625	64.12
17.950	0.37	61.04	62.44	0.00	0.70	5,565	64.11
18.000	0.36	60.37	61.76	0.00	0.70	5,504	64.10
18.050	0.36	59.69	61.08	0.00	0.69	5,443	64.09
18.100	0.35	59.02	60.40	0.00	0.69	5,382	64.08
18.150	0.35	58.34	59.72	0.00	0.69	5,321	64.07
18.200	0.35	57.67	59.04	0.00	0.68	5,260	64.07
18.250	0.35	57.01	58.37	0.00	0.68	5,199	64.06
18.300	0.34	56.35	57.70	0.00	0.68	5,139	64.05
18.350	0.34	55.69	57.03	0.00	0.67	5,079	64.04
18.400	0.34	55.03	56.37	0.00	0.67	5,019	64.03
18.450	0.34	54.38	55.72	0.00	0.67	4,960	64.02
18.500	0.34	53.74	55.06	0.00	0.66	4,901	64.01
18.550	0.34	53.09	54.41	0.00	0.66	4,843	64.00
18.600	0.34	52.46	53.77	0.00	0.66	4,785	63.99
18.650	0.33	51.82	53.12	0.00	0.65	4,727	63.98
18.700	0.33	51.19	52.48	0.00	0.65	4,670	63.97
18.750	0.33	50.56	51.85	0.00	0.64	4,612	63.97
18.800	0.33	49.93	51.22	0.00	0.64	4,556	63.96
18.850	0.33	49.31	50.59	0.00	0.64	4,499	63.95

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)
18.900	0.32	48.70	49.97	0.00	0.63	4,443	63.94
18.950	0.32	48.08	49.34	0.00	0.63	4,387	63.93
19.000	0.32	47.47	48.73	0.00	0.63	4,331	63.92
19.050	0.32	46.86	48.11	0.00	0.62	4,276	63.91
19.100	0.32	46.26	47.50	0.00	0.62	4,221	63.91
19.150	0.32	45.66	46.89	0.00	0.62	4,166	63.90
19.200	0.32	45.06	46.29	0.00	0.61	4,112	63.89
19.250	0.31	44.47	45.69	0.00	0.61	4,058	63.88
19.300	0.31	43.87	45.09	0.00	0.61	4,004	63.87
19.350	0.31	43.29	44.50	0.00	0.61	3,951	63.86
19.400	0.31	42.70	43.90	0.00	0.60	3,897	63.86
19.450	0.31	42.12	43.32	0.00	0.60	3,837	63.85
19.500	0.30	41.55	42.73	0.00	0.59	3,766	63.83
19.550	0.30	40.98	42.16	0.00	0.59	3,695	63.82
19.600	0.30	40.43	41.59	0.00	0.58	3,626	63.81
19.650	0.30	39.88	41.03	0.00	0.58	3,557	63.80
19.700	0.30	39.34	40.48	0.00	0.57	3,489	63.79
19.750	0.30	38.81	39.93	0.00	0.56	3,423	63.78
19.800	0.30	38.28	39.40	0.00	0.56	3,357	63.77
19.850	0.29	37.76	38.87	0.00	0.55	3,292	63.76
19.900	0.29	37.25	38.35	0.00	0.55	3,228	63.75
19.950	0.29	36.74	37.83	0.00	0.54	3,165	63.74
20.000	0.29	36.24	37.32	0.00	0.54	3,102	63.73
20.050	0.29	35.75	36.82	0.00	0.53	3,041	63.72
20.100	0.29	35.27	36.33	0.00	0.53	2,980	63.71
20.150	0.28	34.79	35.84	0.00	0.52	2,920	63.71
20.200	0.28	34.32	35.36	0.00	0.52	2,862	63.70
20.250	0.28	33.85	34.88	0.00	0.51	2,804	63.69
20.300	0.28	33.40	34.42	0.00	0.51	2,746	63.68
20.350	0.28	32.95	33.96	0.00	0.51	2,690	63.67
20.400	0.28	32.50	33.50	0.00	0.50	2,634	63.66
20.450	0.28	32.06	33.05	0.00	0.50	2,579	63.65
20.500	0.28	31.63	32.61	0.00	0.49	2,525	63.65
20.550	0.27	31.20	32.18	0.00	0.49	2,472	63.64
20.600	0.27	30.78	31.75	0.00	0.48	2,420	63.63
20.650	0.27	30.37	31.33	0.00	0.48	2,368	63.62
20.700	0.27	29.96	30.91	0.00	0.48	2,316	63.61
20.750	0.27	29.55	30.50	0.00	0.47	2,266	63.61
20.800	0.27	29.15	30.09	0.00	0.47	2,223	63.60
20.850	0.27	28.76	29.69	0.00	0.46	2,201	63.59
20.900	0.27	28.37	29.29	0.00	0.46	2,179	63.58
20.950	0.26	27.99	28.90	0.00	0.46	2,157	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 - 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	0.26	27.62	28.52	0.00	0.45	2,136	63.57
21.050	0.26	27.25	28.14	0.00	0.45	2,115	63.56
21.100	0.26	26.88	27.77	0.00	0.45	2,094	63.55
21.150	0.26	26.52	27.40	0.00	0.44	2,073	63.55
21.200	0.26	26.16	27.03	0.00	0.44	2,053	63.54
21.250	0.26	25.81	26.67	0.00	0.43	2,033	63.53
21.300	0.26	25.46	26.32	0.00	0.43	2,013	63.53
21.350	0.25	25.11	25.97	0.00	0.43	1,994	63.52
21.400	0.25	24.77	25.62	0.00	0.42	1,974	63.51
21.450	0.25	24.44	25.28	0.00	0.42	1,955	63.51
21.500	0.25	24.11	24.94	0.00	0.42	1,937	63.50
21.550	0.25	23.78	24.61	0.00	0.41	1,918	63.50
21.600	0.25	23.45	24.28	0.00	0.41	1,899	63.49
21.650	0.25	23.13	23.95	0.00	0.41	1,881	63.48
21.700	0.25	22.82	23.63	0.00	0.40	1,863	63.48
21.750	0.24	22.51	23.31	0.00	0.40	1,846	63.47
21.800	0.24	22.20	23.00	0.00	0.40	1,828	63.47
21.850	0.24	21.90	22.69	0.00	0.40	1,811	63.46
21.900	0.24	21.60	22.38	0.00	0.39	1,794	63.45
21.950	0.24	21.30	22.08	0.00	0.39	1,777	63.45
22.000	0.24	21.00	21.78	0.00	0.39	1,760	63.44
22.050	0.24	20.71	21.48	0.00	0.38	1,744	63.44
22.100	0.24	20.43	21.19	0.00	0.38	1,728	63.43
22.150	0.24	20.14	20.90	0.00	0.38	1,711	63.43
22.200	0.23	19.86	20.61	0.00	0.37	1,696	63.42
22.250	0.23	19.58	20.33	0.00	0.37	1,680	63.42
22.300	0.23	19.31	20.05	0.00	0.37	1,664	63.41
22.350	0.23	19.03	19.77	0.00	0.37	1,649	63.40
22.400	0.23	18.77	19.49	0.00	0.36	1,633	63.40
22.450	0.23	18.50	19.22	0.00	0.36	1,618	63.39
22.500	0.23	18.24	18.95	0.00	0.36	1,603	63.39
22.550	0.22	17.98	18.69	0.00	0.36	1,588	63.38
22.600	0.22	17.72	18.43	0.00	0.35	1,574	63.38
22.650	0.22	17.46	18.17	0.00	0.35	1,559	63.37
22.700	0.22	17.21	17.91	0.00	0.35	1,545	63.37
22.750	0.22	16.96	17.65	0.00	0.35	1,531	63.37
22.800	0.22	16.71	17.40	0.00	0.34	1,517	63.36
22.850	0.22	16.47	17.15	0.00	0.34	1,503	63.36
22.900	0.22	16.23	16.90	0.00	0.34	1,489	63.35
22.950	0.22	15.99	16.66	0.00	0.33	1,469	63.34
23.000	0.21	15.76	16.42	0.00	0.33	1,448	63.34
23.050	0.21	15.54	16.19	0.00	0.32	1,428	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	15.32	15.96	0.00	0.32	1,408	63.32
23.150	0.21	15.11	15.74	0.00	0.32	1,388	63.32
23.200	0.21	14.91	15.53	0.00	0.31	1,370	63.31
23.250	0.21	14.71	15.32	0.00	0.31	1,351	63.30
23.300	0.21	14.52	15.12	0.00	0.30	1,334	63.30
23.350	0.21	14.33	14.93	0.00	0.30	1,317	63.29
23.400	0.20	14.15	14.74	0.00	0.30	1,300	63.29
23.450	0.20	13.97	14.56	0.00	0.29	1,284	63.28
23.500	0.20	13.80	14.38	0.00	0.29	1,268	63.28
23.550	0.20	13.63	14.20	0.00	0.28	1,253	63.27
23.600	0.20	13.47	14.03	0.00	0.28	1,238	63.27
23.650	0.20	13.31	13.87	0.00	0.28	1,223	63.26
23.700	0.20	13.15	13.70	0.00	0.27	1,209	63.26
23.750	0.20	13.00	13.55	0.00	0.27	1,195	63.25
23.800	0.19	12.86	13.39	0.00	0.27	1,181	63.25
23.850	0.19	12.71	13.24	0.00	0.27	1,168	63.24
23.900	0.19	12.57	13.10	0.00	0.26	1,155	63.24
23.950	0.19	12.43	12.95	0.00	0.26	1,142	63.23
24.000	0.19	12.30	12.81	0.00	0.26	1,130	63.23

Existing and Proposed Hydrologic Calculations

Subsection: Pond Inflow Summary

Return Event: 1 years

Label: MC-3500 - 3 (IN)

Storm Event: 1 year

Scenario: Post-Development 1 year

Summary for Hydrograph Addition at 'MC-3500 - 3'

Upstream Link <Catchment to Outflow Node>	Upstream 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

Return Event: 10 years

Label: MC-3500 - 3 (IN)

Storm Event: 10 year

Scenario: Post-Development 10 year

Summary for Hydrograph Addition at 'MC-3500 - 3'

Upstream Link <Catchment to Outflow Node>	Upstream 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

Return Event: 25 years

Label: MC-3500 - 3 (IN)

Storm Event: 25 year

Scenario: Post-Development 25 year

Summary for Hydrograph Addition at 'MC-3500 - 3'

Upstream Link <Catchment to Outflow Node>	Upstream 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

Return Event: 100 years

Label: MC-3500 - 3 (IN)

Storm Event: 100 year

Scenario: Post-Development 100 year

Summary for Hydrograph Addition at 'MC-3500 - 3'

Upstream Link <Catchment to Outflow Node>	Upstream 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

Elevation (Water Surface, Peak)	79.24 ft
Volume (Peak)	1,324 ft ³

Mass Balance (ft³)

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

Elevation (Water Surface, Peak)	79.85 ft
Volume (Peak)	3,158 ft ³

Mass Balance (ft³)

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

Elevation (Water Surface, Peak)	79.95 ft
Volume (Peak)	3,482 ft ³

Mass Balance (ft³)

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

Elevation (Water Surface, Peak)	80.12 ft
Volume (Peak)	3,982 ft ³

Mass Balance (ft³)

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 - 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	0.00	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 - 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	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 - 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	0.00	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 - 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	0.01	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 - 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	0.02	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 - 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	0.17	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 - 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	0.02	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 - 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	0.02	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 - 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	0.00	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 - 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	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 - 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	0.01	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 - 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	0.03	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 - 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	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 - 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	0.13	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 - 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	0.32	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 - 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	0.11	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 - 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	19.59	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 - 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	0.00	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 - 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	0.01	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 - 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	0.02	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 - 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	0.04	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 - 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	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 - 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	0.41	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 - 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	0.13	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 - 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	0.07	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 - 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	0.03	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 - 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	0.00	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 - 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	0.01	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 - 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	0.00	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 - 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	0.06	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 - 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	0.26	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 - 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	0.59	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 - 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	0.19	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 - 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	0.10	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 - 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	0.07	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 - 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	0.06	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

Return Event: 1 years

Label: Stormwater Planters - 2 (IN)

Storm Event: 1 year

Scenario: Post-Development 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

Return Event: 10 years

Label: Stormwater Planters - 2 (IN)

Storm Event: 10 year

Scenario: Post-Development 10 year

Summary for Hydrograph Addition at 'Stormwater Planters - 2'

Upstream Link <Catchment to Outflow Node>	Upstream 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

Return Event: 25 years

Label: Stormwater Planters - 2 (IN)

Storm Event: 25 year

Scenario: Post-Development 25 year

Summary for Hydrograph Addition at 'Stormwater Planters - 2'

Upstream Link <Catchment to Outflow Node>	Upstream 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

Return Event: 100 years

Label: Stormwater Planters - 2 (IN)

Storm Event: 100 year

Scenario: Post-Development 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

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		DIM. s.f.	LAY-UP -
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 HEIGHT	51.40 3.75	
INFILTRATION		0.00	in/hr	0 cfs/unit	LENGTH f.t.	7.50	7.17
ELEVATION BOTTOM STONE		71.50		CUMMULATIVE	WIDE f.t.	6.42	6.42

VOLUME OF STORAGE IN EACH STAGE (cf.)

INCREMENT BASE	21	STORM-TECH RECHARGER MC-3500														GUIDANCE			
		GRAVEL	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	CONSTANT		infiltrate	Storage + W-quantity Volume	
inch	0	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54		
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.	71.50	72.25	72.50	72.75	73.00	73.25	73.50	73.75	74.00	74.25	74.50	74.75	75.00	75.25	75.50	75.75	76.00	77.00	
End Caps	6	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
21	0.00	354.33	610.77	864	1,115	1,363	1,606	1,845	2,078	2,305	2,524	2,735	2,936	3,125	3,297	3,442	3,568	4,040	0.000 0.00
42	0.00	677.94	1,173.78	1,664	2,150	2,628	3,099	3,561	4,013	4,452	4,877	5,286	5,675	6,041	6,375	6,654	6,894	7,798	0.000 2,158.80
63	0.00	1,001.55	1,736.79	2,464	3,184	3,893	4,592	5,277	5,947	6,599	7,230	7,837	8,415	8,957	9,452	9,866	10,221	11,556	0.000 3,238.20
84	0.00	1,325.16	2,299.80	3,264	4,218	5,158	6,085	6,993	7,882	8,746	9,583	10,388	11,154	11,873	12,530	13,078	13,548	15,314	0.000 4,317.80
105	0.00	1,648.77	2,862.81	4,064	5,252	6,424	7,578	8,709	9,816	10,893	11,936	12,939	13,893	14,789	15,608	16,290	16,875	19,073	0.000 5,397.00
126	0.00	1,972.38	3,425.82	4,864	6,287	7,689	9,071	10,425	11,751	13,040	14,289	15,490	16,632	17,705	18,685	19,502	20,202	22,831	0.000 6,476.40
147	0.00	2,295.99	3,988.83	5,664	7,321	8,954	10,564	12,142	13,685	15,187	16,641	18,041	19,372	20,621	21,763	22,714	23,529	26,589	0.000 7,555.80
168	0.00	2,619.60	4,551.84	6,464	8,355	10,219	12,056	13,858	15,620	17,334	18,994	20,591	22,111	23,537	24,840	25,926	26,855	30,347	0.000 8,635.20
189	0.00	2,943.21	5,114.85	7,264	9,389	11,485	13,549	15,574	17,554	19,481	21,347	23,142	24,850	26,453	27,918	29,138	30,182	34,105	0.000 9,714.60
210	0.00	3,266.82	5,677.86	8,063	10,424	12,750	15,042	17,290	19,489	21,628	23,700	25,693	27,589	29,369	30,995	32,350	33,509	37,863	0.000 10,794.00
231	0.00	3,590.43	6,240.87	8,863	11,458	14,015	16,535	19,006	21,423	23,775	26,053	28,244	30,329	32,285	34,073	35,562	36,836	41,622	0.000 11,873.40
252	0.00	3,914.04	6,803.88	9,663	12,492	15,280	18,028	20,722	23,358	25,922	28,406	30,795	33,068	35,201	37,150	38,774	40,163	45,380	0.000 12,952.80
273	0.00	4,237.65	7,366.89	10,463	13,526	16,546	19,521	22,438	25,292	28,069	30,758	33,346	35,807	38,117	40,228	41,986	43,489	49,138	0.000 14,032.20
294	0.00	4,561.26	7,929.90	11,263	14,561	17,811	21,014	24,154	27,227	30,216	33,111	35,897	38,546	41,033	43,306	45,198	46,816	52,896	0.000 15,111.60
315	0.00	4,884.87	8,492.91	12,063	15,595	19,076	22,507	25,871	29,161	32,363	35,464	38,448	41,285	43,950	46,383	48,410	50,143	56,654	0.000 16,191.00
336	0.00	5,208.48	9,055.92	12,863	16,629	20,341	24,000	27,587	31,096	34,510	37,817	40,998	44,025	46,866	49,461	51,622	53,470	60,412	0.000 17,270.40
357	0.00	5,532.09	9,618.93	13,663	17,663	21,607	25,492	29,303	33,030	36,657	40,170	43,549	46,764	49,782	52,538	54,834	56,797	64,170	0.000 18,349.80
378	0.00	5,855.70	10,181.94	14,463	18,698	22,872	26,985	31,019	34,965	38,805	42,523	46,100	49,503	52,698	55,616	58,046	60,124	67,929	0.000 19,429.20
399	0.00	6,179.31	10,744.95	15,262	19,732	24,137	28,478	32,735	36,899	40,952	44,875	48,651	52,242	55,614	58,693	61,258	63,450	71,687	0.000 20,508.60
420	0.00	6,502.92	11,307.96	16,062	20,766	25,402	29,971	34,451	38,834	43,099	47,228	51,202	54,982	58,530	61,771	64,469	66,777	75,445	0.000 21,588.00
441	0.00	6,826.53	11,870.97	16,862	21,800	26,668	31,464	36,167	40,769	45,246	49,581	53,753	57,721	61,446	64,848	67,681	70,104	79,203	0.000 22,667.40
462	0.00	7,150.14	12,433.98	17,662	22,835	27,933	32,957	37,883	42,703	47,393	51,934	56,304	60,460	64,362	67,926	70,893	73,431	82,961	0.000 23,746.80
483	0.00	7,473.75	12,996.99	18,462	23,869	29,198	34,450	39,599	44,638	49,540	54,287	58,855	63,199	67,278	71,003	74,105	76,758	86,719	0.000 24,826.20
504	0.00	7,797.36	13,560.00	19,262	24,903	30,463	35,943	41,316	46,572	51,687	56,640	61,405	65,939	70,194	74,081	77,317	80,084	90,478	0.000 25,905.60
525	0.00	8,120.97	14,123.01	20,062	25,937	31,729	37,436	43,032	48,507	53,834	58,992	63,956	68,678	73,110	77,159	80,529	83,411	94,236	0.000 26,985.00
546	0.00	8,444.58	14,686.02	20,862	26,972	32,994	38,928	44,748	50,441	55,981	61,345	66,507	71,417	76,026	80,236	83,741	86,738	97,994	0.000 28,064.40
567	0.00	8,768.19	15,249.03	21,662	28,006	34,259	40,421	46,464	52,376	58,128	63,698	69,058	74,156	78,942	83,314	86,953	90,065	101,752	0.000 29,143.80
588	0.00	9,091.80	15,812.04	22,461	29,040	35,524	41,914	48,180	54,310	60,275	66,051	71,609	76,896	81,858	86,391	90,165	93,392	105,510	0.000 30,223.20
609	0.00	9,415.41	16,375.05	23,261	30,074	36,790	43,407	49,896	56,245	62,422	68,404	74,160	79,635	84,774	89,469	93,377	96,719	109,268	0.000 31,302.60
630	0.00	9,739.02	16,938.06	24,061	31,109	38,055	44,900	51,612	58,179	64,569	70,757	76,711	82,374	87,690	92,546	96,589	100,045	113,027	0.000 32,382.00
651	0.00	10,062.63	17,501.07	24,861	32,143	39,320	46,393	53,328	60,114	66,716	73,110	79,261	85,113	90,606	95,624	99,801	103,372	116,785	0.000 33,461.40
672	0.00	10,386.24	18,064.08	25,661	33,177	40,585	47,886	55,045	62,048	68,863	75,462	81,812	87,853	93,523	98,701	103,013	106,699	120,543	0.000 34,540.80
693	0.00	10,709.85	18,627.09	26,461	34,211	41,851	49,379	56,761	63,983	71,010	77,815	84,363	90,592	96,439	101,779	106,225	110,026	124,301	0.000 35,620.20
714	0.00	11,033.46	19,190.10	27,261	35,246	43,116	50,872	58,477	65,917	73,157	80,168	86,914	93,331	99,355	104,857	109,4			

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		DIM. s.f.	LAY-UP -
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	51.40	
					HEIGHT	3.75	3.75
INFILTRATION		0.00	in/hr	0 cfs/unit	LENGTH	f.t.	7.50
ELEVATION BOTTOM STONE		62.85		CUMMULATIVE	WIDE	f.t.	6.42
							7.17

VOLUME OF STORAGE IN EACH STAGE (cf.)

INCREMENT BASE	14	STORM-TECH RECHARGER MC-3500														GUIDANCE				
		STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	STAGE	CONSTANT		infiltrate	Storage +
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	FLOW RATE AREA*UNIT	in 12 hrs Infiltration
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
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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	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 0.00	22,307.60 - 57,070
448	0.00	6,975.36	12,122.32</td																	

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

<i>DESCRIPTION</i>	Design Storm	Area	Impervious Area	Percent Impervious	Runoff Coefficient	Total Required WQ Volume
<i>SYMBOL</i>	P	A	I	%I	R _V	WQ _V
<i>VALUE</i>	1.5	3.87	2.53	65.48	0.639285587	13,461
<i>UNITS</i>	In	Ac	Ac	%	CF	CF
<i>VALUE</i>	Enhanced Phosphorus Removal (WQ _V = 1-yr Storm Runoff)					

Runoff Reduction Techniques (Area)

	<i>DESCRIPTION</i>	Total Area	Impervious Area	
	<i>SYMBOL</i>	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				
<i>TOTAL</i>				
<i>UNITS</i>	Ac	Ac		

Adjusted Water Quality Treatment Volume

<i>DESCRIPTION</i>	Design Storm	Area	Impervious Area	Percent Impervious	Runoff Coefficient	Total Required WQ Volume
<i>SYMBOL</i>	P	A	I	%I	R _V	WQ _V
<i>VALUE</i>	1.5	3.87	2.53	65.48	0.639285587	13,461
<i>UNITS</i>	In	Ac	Ac	%	CF	CF
<i>VALUE</i>	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

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
<i>Is Proposed Af > Required Af ?</i>	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
<i>Is Proposed Af > Required Af ?</i>	YES	
Type of Planter	FLOW-THROUGH	
RRv Provided for Infiltration Planter	608	CF
RRv Provided for Flow-Through Planter in HSG 'C' Soils	274	CF
RRv 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 x %I]	R _V	0.95	CF
TOTAL VOLUME Required [WQ _V = (P x R _V x 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} x D _{SM} x n _{SM}]	V _{SM}	852.00	CF
VOLUME provided in Drainage Layer [V _{DL} = A _{RG} x D _{DL} x n _{SM}]	V _{DL}	35.50	CF
VOLUME provided in Ponding Area [D _P x A _{RG}]		35.50	CF
TOTAL VOLUME Provided [WQ _V ≤ V _{SM} + V _{DL} + (D _P x 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 x R _V x 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} x D _{SM} x n _{SM}]	V _{SM}	123.00	CF
VOLUME provided in Drainage Layer [V _{DL} = A _{RG} x D _{DL} x n _{SM}]	V _{DL}	5.13	CF
VOLUME provided in Ponding Area [D _P x A _{RG}]		5.13	CF
TOTAL VOLUME Provided [WQ _V ≤ V _{SM} + V _{DL} + (D _P x 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 x R_V x 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} x D _{SM} x n _{SM}]	V _{SM}	141.00	CF
VOLUME provided in Drainage Layer [V _{DL} = A _{RG} x D _{DL} x n _{DL}]	V _{DL}	5.88	CF
VOLUME provided in Ponding Area [D _P x A _{RG}]		5.88	CF
TOTAL VOLUME Provided [WQ_V ≤ V_{SM} + V_{DL} + (D_P x 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 x R_V x 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} x D _{SM} x n _{SM}]	V _{SM}	721.00	CF
VOLUME provided in Drainage Layer [V _{DL} = A _{RG} x D _{DL} x n _{SM}]	V _{DL}	30.04	CF
VOLUME provided in Ponding Area [D _P x A _{RG}]		30.04	CF
TOTAL VOLUME Provided [WQ_V ≤ V_{SM} + V_{DL} + (D_P x 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 x %I]	R _V	0.95	CF
TOTAL VOLUME Required [WQ_V = (P x R_V x 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} x D _{SM} x n _{SM}]	V _{SM}	194.00	CF
VOLUME provided in Drainage Layer [V _{DL} = A _{RG} x D _{DL} x n _{DL}]	V _{DL}	8.08	CF
VOLUME provided in Ponding Area [D _P x A _{RG}]		8.08	CF
TOTAL VOLUME Provided [WQ_V ≤ V_{SM} + V_{DL} + (D_P x 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 x R_V x 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} x D _{SM} x n _{SM}]	V _{SM}	233.25	CF
VOLUME provided in Drainage Layer [V _{DL} = A _{RG} x D _{DL} x n _{SM}]	V _{DL}	38.88	CF
VOLUME provided in Ponding Area [D _P x A _{RG}]		38.88	CF
TOTAL VOLUME Provided [WQ_V ≤ V_{SM} + V_{DL} + (D_P x 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 x %I]	R _V	0.95	CF
TOTAL VOLUME Required [WQ_V = (P x R_V x 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} x D _{SM} x n _{SM}]	V _{SM}	46.25	CF
VOLUME provided in Drainage Layer [V _{DL} = A _{RG} x D _{DL} x n _{SM}]	V _{DL}	7.71	CF
VOLUME provided in Ponding Area [D _P x A _{RG}]		7.71	CF
TOTAL VOLUME Provided [WQ_V ≤ V_{SM} + V_{DL} + (D_P x 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 x %I]	R _V	0.95	CF
TOTAL VOLUME Required [WQ_V = (P x R_V x 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} x D _{SM} x n _{SM}]	V _{SM}	16.50	CF
VOLUME provided in Drainage Layer [V _{DL} = A _{RG} x D _{DL} x n _{SM}]	V _{DL}	2.75	CF
VOLUME provided in Ponding Area [D _P x A _{RG}]		2.75	CF
TOTAL VOLUME Provided [WQ_V ≤ V_{SM} + V_{DL} + (D_P x 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 x %I]	R _V	0.95	CF
TOTAL VOLUME Required [WQ_V = (P x R_V x 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} x D _{SM} x n _{SM}]	V _{SM}	203.00	CF
VOLUME provided in Drainage Layer [V _{DL} = A _{RG} x D _{DL} x n _{SM}]	V _{DL}	33.83	CF
VOLUME provided in Ponding Area [D _P x A _{RG}]		33.83	CF
TOTAL VOLUME Provided [WQ_V ≤ V_{SM} + V_{DL} + (D_P x 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 x %I]	R _V	0.95	CF
TOTAL VOLUME Required [WQ_V = (P x R_V x 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} x D _{SM} x n _{SM}]	V _{SM}	61.50	CF
VOLUME provided in Drainage Layer [V _{DL} = A _{RG} x D _{DL} x n _{SM}]	V _{DL}	10.25	CF
VOLUME provided in Ponding Area [D _P x A _{RG}]		10.25	CF
TOTAL VOLUME Provided [WQ_V ≤ V_{SM} + V_{DL} + (D_P x 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 x %I]	R _V	0.95	CF
TOTAL VOLUME Required [WQ_V = (P x R_V x 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} x D _{SM} x n _{SM}]	V _{SM}	62.00	CF
VOLUME provided in Drainage Layer [V _{DL} = A _{RG} x D _{DL} x n _{SM}]	V _{DL}	10.33	CF
VOLUME provided in Ponding Area [D _P x A _{RG}]		10.33	CF
TOTAL VOLUME Provided [WQ_V ≤ V_{SM} + V_{DL} + (D_P x 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 x %I]	R _V	0.95	CF
TOTAL VOLUME Required [WQ_V = (P x R_V x 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} x D _{SM} x n _{SM}]	V _{SM}	73.50	CF
VOLUME provided in Drainage Layer [V _{DL} = A _{RG} x D _{DL} x n _{SM}]	V _{DL}	12.25	CF
VOLUME provided in Ponding Area [D _P x A _{RG}]		12.25	CF
TOTAL VOLUME Provided [WQ_V ≤ V_{SM} + V_{DL} + (D_P x 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 [R = I _a / P] [C _i = A x R ² + B x R + C]	C ₀ C ₁ C ₂	-1.774 1.8622 -0.0648	0.3301 -0.7397 0.2276	2.4577 -0.4627 -0.1932

Site Data for Drainage Area to be Treated by Practice

<i>DESCRIPTION</i>	<i>SYMBOL</i>	<i>VALUE</i>	<i>UNITS</i>
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 x %I]	R _V	0.45	CF
TOTAL VOLUME Required [WQ _V = (P x R _V x A) / 12]	WQ _V	8,781	CF
Design Storm [1-yr Storm Depth]	P		In
TOTAL VOLUME Required (TMDL) [WQ _V = 1-yr Storm Runoff]	WQ _V		CF

Water Quality Peak Flow Calculation

<i>DESCRIPTION</i>	<i>SYMBOL</i>	<i>VALUE</i>	<i>UNITS</i>
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 x 3630)]	Q	0.67	In
Curve Number [CN = 1000 / (10 + 5P + 10Q - 10 x (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 x R ² + B x R + C	C ₀	2.47	
C ₁ = A x R ² + B x R + C	C ₁	-0.53	
C ₂ = A x R ² + B x R + C	C ₂	-0.16	
Unit Peak Discharge	q _u	619.44	cfs/mi ² /in
Peak Discharge [Q _p = q _u x A x Q / 640]	Q _p	2.34	cfs

Proposed Device

<i>DESCRIPTION</i>	<i>SYMBOL</i>	<i>VALUE</i>	<i>UNITS</i>
Water Quality Peak Flow Provided	Q _p	2.9	cfs
Water Quality Volume Provided [WQ _V = 640 x 3600 x Q _p / q _u]	WQ _V	10,935	CF
Model Designation		JFPD0808	
Quantity		1	

Specifications

Product Line:	 rooflite intensive
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 %
Proportion of particles < 1.00 mm	#18 mesh	Mass %
Proportion of particles < 2.00 mm	#10 mesh	Mass %
Proportion of particles < 3.20 mm	1/8-inch mesh	Mass %
Proportion of particles < 6.30 mm	1/4-inch mesh	Mass %
Proportion of particles < 9.50 mm	3/8-inch mesh	Mass %
Proportion of particles < 12.50 mm	1/2-inch mesh	Mass %

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

***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:

- 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

All Density Measurements reflect typical ranges for the respective rooflite products. For more detailed information please inquire about latest test results.

©Skyland USA, LLC - August 2023

APPENDIX C

STORM PIPE CAPACITY CALCULATIONS



Autodesk Storm and Sanitary Analysis

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 Capacity (cfs)	Max Flow Depth / Total Depth Ratio	
CI-A-9-1	CI-A-9	85.75	64.70	64.30	0.4700	15.000	0.0130	0.86	4.12	4.43	0.30	
R-B-6	R-B-5	92.70	76.87	75.94	1.0000	15.000	0.0130	0.27	4.32	6.47	0.14	
R-B-5	DI-B-4	40.08	75.94	75.63	0.7700	15.000	0.0130	1.16	3.65	5.68	0.31	
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	0.10	
DI-A-16	DMH-A-15	57.84	73.50	72.92	1.0000	15.000	0.0130	1.40	4.73	6.47	0.32	
CI-A-12	CI-A-11	44.93	70.10	69.25	1.8900	15.000	0.0130	9.61	8.59	8.89	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	0.31	
DMH-A-14	DI-A-13	123.34	72.72	71.47	1.0100	15.000	0.0130	1.77	4.58	6.50	0.35	
DI-A-13	CI-A-12	107.14	71.47	70.10	1.2800	15.000	0.0130	7.90	7.04	7.30	0.96	
CI-A-8-1	DMH-A-8	65.96	64.43	64.13	0.4500	15.000	0.0130	2.01	3.52	4.36	0.48	
DI-A-2	DMH-A-1	122.03	61.50	58.20	2.7000	15.000	0.0130	11.49	10.17	10.62	0.93	
CI-A-10	CI-A-9	99.59	67.25	64.30	2.9600	15.000	0.0130	12.03	10.67	11.12	0.96	
DMH-A-4	DMH-A-3	74.96	62.50	61.75	1.0000	15.000	0.0130	4.12	5.57	6.46	0.58	
OCS-A-6	WQS-A-5 (JELLYFISH)	7.17	62.85	62.70	2.0900	15.000	0.0130	4.12	7.37	9.34	0.46	
CI-A-8-2	CI-A-8-1	22.48	64.54	64.43	0.5000	15.000	0.0130	1.26	3.19	4.56	0.36	
CI-A-11	CI-A-10	80.33	69.25	67.25	2.4900	15.000	0.0130	10.98	9.90	10.19	0.92	
CI-A-9	DMH-A-8	11.22	64.30	64.13	1.5200	18.000	0.0130	13.59	8.59	12.93	0.93	
DMH-A-8	DMH-A-7	30.96	64.13	63.60	1.7100	18.000	0.0130	14.83	9.24	13.74	0.95	
WQS-A-5 (JELLYFISH)	DMH-A-4	12.21	62.70	62.50	1.6400	15.000	0.0130	4.12	6.73	8.27	0.50	
DMH-A-1	DI-A-0	161.42	58.20	54.01	2.6000	15.000	0.0130	11.25	10.16	10.41	0.93	
DI-A-0	Structure - (191)	98.90	53.91	51.10	2.8400	15.000	0.0130	11.78	10.48	10.89	0.95	
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	0.14	
DMH-A-3	DI-A-2	12.30	61.75	61.50	2.0300	15.000	0.0130	4.50	7.46	9.21	0.49	
DI-B-4	BMH-B-3	9.67	75.63	75.54	0.9300	15.000	0.0130	1.41	4.10	6.23	0.32	
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	0.27	
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	0.32	
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	0.39	
OCS-B-2	ES-B-1	59.63	71.50	71.20	0.5000	15.000	0.0130	0.97	2.96	4.58	0.31	

APPENDIX D

SOIL TESTING DATA



CARLIN • SIMPSON & ASSOCIATES, LLC

Consulting Geotechnical and Environmental Engineers

61 Main Street, Sayreville, New Jersey 08872
Tel. (732) 432-5757
Fax. (732) 432-5717

Principal:
Robert B. Simpson, P.E.

Associates:
Meredith R. Anke, P.E.
Stephen Rossi, P.E.
Catherine K. Andersen, P.E.
Michal Wroblewski, P.E.
Kurt W. Anke
Eric J. Shaw

16 August 2023

AMS Acquisitions
One Bridge Plaza North
Suite 840
Fort Lee, NJ 07024

Attn: Mr. Ryan Sutherland, AIA LEED AP BD&C
Director of Design and Development

Re: Preliminary 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 proposal dated 6 March 2023 and your subsequent authorization, we have completed a Preliminary 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, 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 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 conceptual 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 13 test borings at the subject site.
3. Retained American Tree and Landscape Corp. to excavate 12 test pits at the subject 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.
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. Preliminarily, the finished floor elevation for the new building will be at elevation +79.5. Based on the existing site conditions, we anticipate that cuts up to 16 feet will be required in the southeast and northeast corners of the building and fills up to 2 feet will be required on the west side of the building to achieve the finished floor elevation. Based on the preliminary plans, we understand that the proposed construction will also include two new retaining walls, stormwater management areas, underground utilities, and asphalt-paved driveways and parking areas.

The recommendations within this report are preliminary in nature and have been generalized for the anticipated development. The recommendations below are intended for planning purposes only and are not intended for final design and construction. Additional subsurface investigation (i.e. borings) is also required for the subject site, as discussed later in this report. The recommendations provided within this report are subject to change pending the supplemental subsurface investigation as well as the final site layout and grading. Once the site and building plans are 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 13 borings and 12 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 the test pits were excavated in June 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:

- | | |
|--|--|
| <u>Stratum 1A</u>
Topsoil | The surface layer in 9 borings and in each of the test pits consists of dark brown or black topsoil that ranges from approximately 0'2" to 1'4" in thickness. |
| <u>Stratum 1B</u>
Asphalt | At the surface in the remaining 4 borings is asphalt pavement that ranges from approximately 0'2" to 0'8" in thickness. |
| <u>Stratum 2</u>
Existing Fill | Beneath the surface layers in 8 borings and 6 test pits is existing fill that generally 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 3 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. |
| <u>Stratum 3</u>
Sand, Silty
Sand, or
Sandy Gravel | Below the surface layers and existing fill in many locations is a shallow layer of 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
Underlying the above layers in borings B-8 and B-12 and in test pit TP-12 is medium stiff to stiff brown, gray or mottled red brown, brown, gray Clayey SILT, trace coarse to 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.

Stratum 5
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 16 of the boring and test pit locations at depths ranging from 1'0" to 6'8" 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 boring B-9, the upper 5 feet of the bedrock was cored. The rock generally consisted of gray Gneiss or Norite, was moderately jointed, and was slightly to moderately weathered. The rock core recovery ranged from 95% to 100% and the rock quality designation (RQD) of the recovered cores was 39% and 70%. Based on the rock core RQD values and visual inspection, the upper portion of the bedrock in the area of B-9 can be described as poor to fair quality ranging from a shattered condition to a blocky and seamy condition.

3.2 Bedrock

Bedrock or refusal on probable bedrock was encountered at depths ranging from 1'0" to 10'2" below the existing ground surface (elevation +63.5 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 preliminary grading plan, cuts are planned for portions of the site. Based on the proposed construction and boring data, some of these excavations will extend into bedrock. Only limited bedrock core samples were obtained during this preliminary investigation. We recommend that additional borings be performed with rock coring to determine the rock quality, degree of weathering, and consistency of fractures in the deeper cut areas for the proposed building and in the proposed retaining wall 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.

3.3 Groundwater

During this investigation, groundwater was encountered in 8 of the boring and test pit locations at depths ranging from 3'0" to 14'0" (elevations +75.5 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.

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. Groundwater on the subject site will be controlled by the topography and the underlying bedrock surface. 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, and B-13 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	+79.0	NE	NE to 1'9"	AR @ 1'9" (+77.3)
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)
<hr/>				
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)

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)
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"

NE – Not Encountered

C – Cored Bedrock

AR/BR – Auger or Bucket Refusal on Probable Bedrock

SR – Spoon Refusal on Possible Bedrock

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 15 of the 25 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. 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 8 of the 25 test locations at depths ranging from 3'0" to 14'0" below the ground surface (elevations +75.5 to +62.8).
- Weathered bedrock was encountered in 18 of the 25 test locations at depths ranging from 1'0" to 10'2" below the existing ground surface (elevations +90.0 to +63.5). 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.
- ***Supplemental borings are required to further evaluate the existing fill and bedrock conditions in the proposed building area.***
- **Additional Site Recommendations (Section 6.0)**
 - ***New Retaining Walls (Section 6.2)***
 - A cast-in-place steel reinforced concrete wall, a large segmental block wall, and a soil/rock nail and shotcrete wall can be considered for this project.
 - ***Additional borings are required to further evaluate the subsurface conditions and to complete the retaining wall recommendations.***
 - ***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. Preliminarily, the finished floor elevation of the new building will be at +79.5. Based on existing and proposed grades, we anticipate cuts up to 16 feet will be required in the southeast and northeast corners of the building and 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 likely 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. 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.

To eliminate the potential for damaging differential settlements, micropiles shall be used in areas that are underlain by existing fill or virgin soil. Preliminarily, 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. ***Supplemental borings are required to further evaluate the existing fill and bedrock conditions within the proposed building area. The borings must extend through numerous boulders in areas and shall include rock coring to evaluate the quality of the underlying bedrock.***

Preliminary 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, rock or weathered rock cuts will be required in areas. 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. Additional blasting requirements and details will be provided once the project plans have been further developed and the supplemental borings have been completed.

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 preliminary grading plans, 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. Preliminarily, we expect that micropiles will be required for the central and southwestern portions of the proposed building. 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 3'7" to more than 29'0" below the existing ground surface. As discussed above, supplemental borings are required to further evaluate the existing fill and bedrock conditions within the proposed building area.

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.

Preliminarily, 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 preliminary estimated pile lengths, assuming a finished floor elevation at +79.5, can be found in Table 2 below. Additional borings are required to finalize the anticipated pile depths. The structural engineer shall select the required allowable pile capacity based on the design loads of the proposed structure.

Table 2 – Pile Recommendations

Pile Capacity	Estimated Cased Length	Rock Socket Length	Estimated Total Length
100	4 to >29 feet	8 to 10 feet	12 to >39 feet
125	4 to >29 feet	10 to 12 feet	14 to >41 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 new building foundations in these areas may be designed as shallow spread footings using a net design bearing pressure as listed in Table 3 below. As discussed above, additional borings are required to further evaluate the existing fill and bedrock conditions within the proposed building area.

All of the exterior and interior footings shall bear directly on bedrock, which is not susceptible to frost. In some areas, however, we expect that the footings may have to step down approximately 1 to 3 feet below the 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 3 – 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 are needed to achieve the planned finished floor elevation. 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 and after the supplemental investigation is completed.

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 4 below.

Table 4 – Foundation Wall Design Parameters

Soil Type	On-Site Soils
Moist Unit Weight (γ)	130pcf
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 5 shall be used for this project.

Table 5– 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, 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 New Site Retaining Walls

We understand that site retaining walls will be required to achieve the planned site grades for the parking and roadway area in the northern portion of the site. The type of retaining walls for this project and the final wall heights were unknown at the time of this report. Preliminary design options for this site could include cast-in-place steel reinforced concrete walls, large segmental block gravity walls, or soil/rock nail and shotcrete walls. The following is a preliminary evaluation of the types of retaining wall systems that may be used for this project. This evaluation is meant to give guidance during the design process.

Based on the preliminary grading plan, the two walls will range up to approximately 6 feet and 11 feet in height, respectively. The walls will primarily be “cut walls” where site grades are being lowered in front of the wall. The preliminary boring and test data indicates that the excavations in the retaining wall areas will consist of mostly weathered bedrock with a small amount of overburden soil. Soil/rock nail and shotcrete walls are preferable in this type of “cut wall” condition, but other wall types may also be feasible.

The following evaluation is based on preliminary information that has been provided to our office as of the date of this report. Once the project 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. In addition, supplemental borings with rock coring will be required for the retaining wall areas. Further retaining wall recommendations and design parameters will be provided after the project plans are further developed and the supplemental subsurface investigation has been completed.

Soil/Rock Nail and Shotcrete Walls

A soil/rock nail wall is constructed using a top-down construction sequence, where the ground is excavated in stages (or lifts) of limited height. Soil/rock nails and a temporary shotcrete facing shall be installed at each excavation stage to provide temporary stability and protection. Upon completion, a final shotcrete facing shall be constructed over the initial facing to provide structural continuity for the entire wall. The final facing may also include an aesthetic finish if desired. Preliminarily a finished slope of 1.0 horizontal to 4.0 vertical (1H:4V) or flatter can be considered for this project. Additional borings with rock coring will be required to determine the allowable finished slope.

Soil/rock nails typically consist of solid threaded bars with corrosion protection. Nails are typically installed at a horizontal and vertical spacing in the range of 4 to 8 feet. The nail vertical spacing is comparable to the typical height of a stable, excavation lift, which is commonly 3 to 5 feet. Nail inclination is typically 10 to 20 degrees from horizontal.

Where applicable, additional surcharge loads, such as structures, tiered retaining walls, vehicle loads, snow loads, construction equipment, temporary materials storage, etc. are also incorporated into the soil/rock nail and shotcrete wall design.

The soil/rock nail 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 the Carlin-Simpson & Associates

for review and approval. Carlin-Simpson & Associates can prepare a wall design as an additional service upon request.

Reinforced Concrete Walls and Segmental Block Retaining Walls

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. In this case, the anticipated maximum retained wall height is 11 feet. Additional borings with rock coring are required to determine the extent and quality of the rock in the wall area and confirm the feasibility for a Redi-Rock retaining wall.

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, 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.

6.3 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.

6.4 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.

6.5 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”	3/4H: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 6 below.

Table 6 – Temporary Sheetings 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

6.6 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.

Stratum 3

Sand, Silty
Sand, or
Sandy Gravel

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 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

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. This stratum has a high percentage of silt 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 5

Weathered
Bedrock

Excavated rock may be used as fill material provided that the material is well graded and has been approved prior to use by Carlin-Simpson & Associates.

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 >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 7 below. Excavated rock, too large for use as structural fill, should be processed through a crusher to provide suitable fill material.

Table 7 – 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 8 below.

Table 8 – 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.

Additional Subsurface Investigation

As discussed above, additional testing is required to complete the recommendations in this report. The borings will be performed for the building, retaining walls, and large cut areas. We also recommend that rock coring be performed at select boring locations to understand the quality of bedrock across the site. One or two monitoring wells may also be installed in the cut areas to better assess the expected groundwater conditions. The additional borings will aid in determining the following: 1) depth and extent of existing fill within the building area; 2) extent of bedrock at the foundation bearing elevation; 3) depth to bedrock and quality of rock in cut areas; 4) determining an appropriate retaining wall system and design parameters; and 5) determining if sub-slab drainage is needed for the building.

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		
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				
1		S-1	3		<u>Dark brown topsoil</u>				
2			4		FILL (Br cf S, 1 \$, t mf G)				
3		S-2	5						
4			4		<u>FILL (Brown coarse to fine SAND, little Silt, trace medium to fine Gravel)</u>				
5			6						
6			17		FILL (same, 1 mf G, w/ fine roots)				
7			26						
8			50/1"						
9					<u>End of Boring @ 4'0"</u>				
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
1			6		Black topsoil				0'3"
2			9		FILL (Br cf S, 1 (-) \$, a cf G, w/many cobbles, boulders)				
3			24						
4			17						
5									
6			5		FILL (same, s \$, w/roots, topsoil)				
7			10						
8			29		<u>FILL (Brown coarse to fine SAND, little Silt, and coarse to fine Gravel, with cobbles, boulders, debris, roots, topsoil)</u>				
9			26						
10			5						
11			4		FILL (same, br, g w/concrete, plastic, fine roots, mixed topsoil)				
12			4						
13			11						
14			11						
15			12		FILL (Dk gr, br \$ s (+), cf S, t f G, w/concrete, wood, fine roots)				
16			25						
17			13						9'0"
18					<u>End of Boring @ 9'0"</u>				
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"
2			6		<u>FILL (Gray coarse to fine GRAVEL and, coarse to fine Sand, little (-) Silt)</u>				1'6"
3			12		Gr cf G a, cf S, t \$, w/many cobbles, boulders				
4		S-2	9						
5			12						
6		S-3	32		<u>Gray coarse to fine GRAVEL and, coarse to fine Sand, trace Silt, with many cobbles, boulders</u>				
7			43						
8			14/3"						
9			18						
10			27		same, highly fractured bedrock				
11			30/3"						5'3"
12					<u>End of Boring @5'3"</u>				
13									
14									
15									
16									
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		<u>Black Asphalt</u>				0'3"
2			12		FILL (Lt br gr cf S, t \$, l (-) mf G, shattered boulder)				
3		S-2	20		<u>FILL (Light brown, gray coarse to fine</u>				
4			8		<u>SAND, trace Silt, little (-) medium to fine</u>				
5			10		<u>Gravel, shattered boulder)</u>				
6			7		FILL (Br cf S, l (-) \$, a cf G)				
7			10						
8			15/1"						3'7"
9					<u>End of Boring @ 3'7"</u>				
10									
11									
12									
13									
14									
15									
16									
17									
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									
Client: AMS Acquisitions									
Drilling Contractor: Environmental Technical Drilling									
GROUNDWATER				CASING	SAMPLE	CORE	TUBE		
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	5		<u>Black Asphalt</u>				0'2"
2			15		FILL (Lt br cf S, 1 (+) \$, a cf G, boulder)				
3			15						
4		S-2	9						
5			7						
6			4		FILL (Dk br cf S, s (-) \$, 1 mf G, w/some roots)				
7		S-3	4		<u>FILL (Brown coarse to fine SAND,</u>				
8			3		<u>little (+) Silt, and coarse to fine Gravel,</u>				
9					<u>boulder, roots)</u>				
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22					<u>Light brown coarse to fine SAND, and Silt,</u>				
					<u>trace (-) medium to fine Gravel</u>				6'8"
					<u>End of Boring @ 6'8"</u>				

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		Black topsoil				0'4"
2			15		Light brown, gray coarse to fine SAND, little Silt, a coarse to fine Gravel, with rock fragments				2'5"
3		S-2	25/1"						
4			23/5"10/0"	same	End of Boring @ 2'5"				
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-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"						
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
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				
1		S-1	5		<u>Black asphalt</u>				
2			4		0'8"				
3			6		FILL (Dk br cf S, l \$, s cf G)				
4			4						
5		S-2	4						
6			7		FILL (same, l (+) \$)				
7			8		<u>FILL (Dark brown coarse to fine SAND,</u>				
8		S-3	6		<u>little Silt, some coarse to fine Gravel)</u>				
9			5						
10			6		5'6"				
11		S-4	9		Lt br cf S, s (+) \$, s cf G				
12			9						
13			10	same	<u>Light brown coarse to fine SAND,</u>				
14		S-5	9		<u>some (+) Silt, some coarse to fine Gravel</u>				
15			10		8'0"				
16			12						
17		S-6	12						
18			7						
19			13						
20		S-7	11	same					
21			10						
22			8						
		S-8	11	same					
			12						
			13						
		S-9	13		<u>Light brown, gray Clayey SILT</u>				
			12						
			11						
		S-10	20						
			7						
			9	same, gr					
		S-11	10						
			10						
			4						
		S-12	5	same					
			6						
			6						
		S-13	3						
			2	same					
			3						
		S-14	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"	S y m	IDENTIFICATION	
23		S-12	4		Lt br, gr Cy \$	
24			5			
25			6			
26			5			
27		S-13	3	same	<u>Light brown, gray Clayey SILT</u>	
28			4	same		
29			5	same		
30			5			
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
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
Client: AMS Acquisitions									JOB NUMBER: 23-34
Drilling Contractor: Environmental Technical Drilling									ELEVATION: +88.0
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 S Sample y Spoon per 6"	IDENTIFICATION					REMARKS
1		S-1	3	<u>Black asphalt</u> 0'2"					Rec = 4" moist
			4	<u>Orange brown coarse to fine SAND,</u> 1'0"					Run #1
2		Run #1	10/2"	<u>and Silt, little medium to fine Gravel</u>					1'0"-2'6"
3									Run = 18"
4		Run #2		<u>Gray Gneiss or Norite, massive moderately</u>					Rec = 18" = 100%
5				<u>jointed, slightly to moderately weathered</u>					RQD = 39%
6									Run #2
									2'6"-6'0"
									Run = 42"
									Rec = 40" = 95%
									RQD = 70%
				<u>End of Boring @ 6'0"</u>					
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-10
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"	S y m	IDENTIFICATION	
23						
24						
25		Run #3			<u>FILL (Boulders)</u>	
26						
27						27'0"
28					<u>End of Boring @ 27'0"</u>	
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
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		Black topsoil				0'2"
2			13		Gray, brown coarse to fine SAND, little Silt, some coarse to fine Gravel, with rock fragments				1'9"
3			20						
4			25/3"						
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"	S y m	IDENTIFICATION				REMARKS
1		S-1	7		Black topsoil				0'3"
2			14		FILL (Gr, br cf S, t \$, s cf G, w/boulder)				
3		S-2	19						
4			16						
5		S-3	9		FILL (same)				
6			26						
7		S-4	11		FILL (Gray, brown coarse to fine SAND, trace Silt, some coarse to fine Gravel, with boulder)				
8			8						
9		S-5	18		FILL (same, s \$)				
10			10						
11		S-6	5						
12			3		FILL (Br cf S, a \$, s cf G, w/Cy \$ pockets)				8'0"
13			5						
14			13						
15			8		Br, gr Cy \$, w/t cf S				
16			5		Brown, gray Clayey SILT, with trace coarse to fine Sand				
17			4						
18			13/2"		same				10'2"
19					End of Boring @ 10'2"				
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		Black topsoil				0'3"
2			14		Gray brown coarse to fine SAND, little (+) Silt, and coarse to fine Gravel				1'4"
3			18/4"		<u>End of Boring @ 1'6"</u>				
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
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"		

Proposed 4-Story Building
Albany Post Rd. & Craft Ln.
Buchanan, NY
23-34

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"		

Proposed 4-Story Building
Albany Post Rd. & Craft Ln.
Buchanan, NY
23-34

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			

Proposed 4-Story Building
Albany Post Rd. & Craft Ln.
Buchanan, NY
23-34

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)

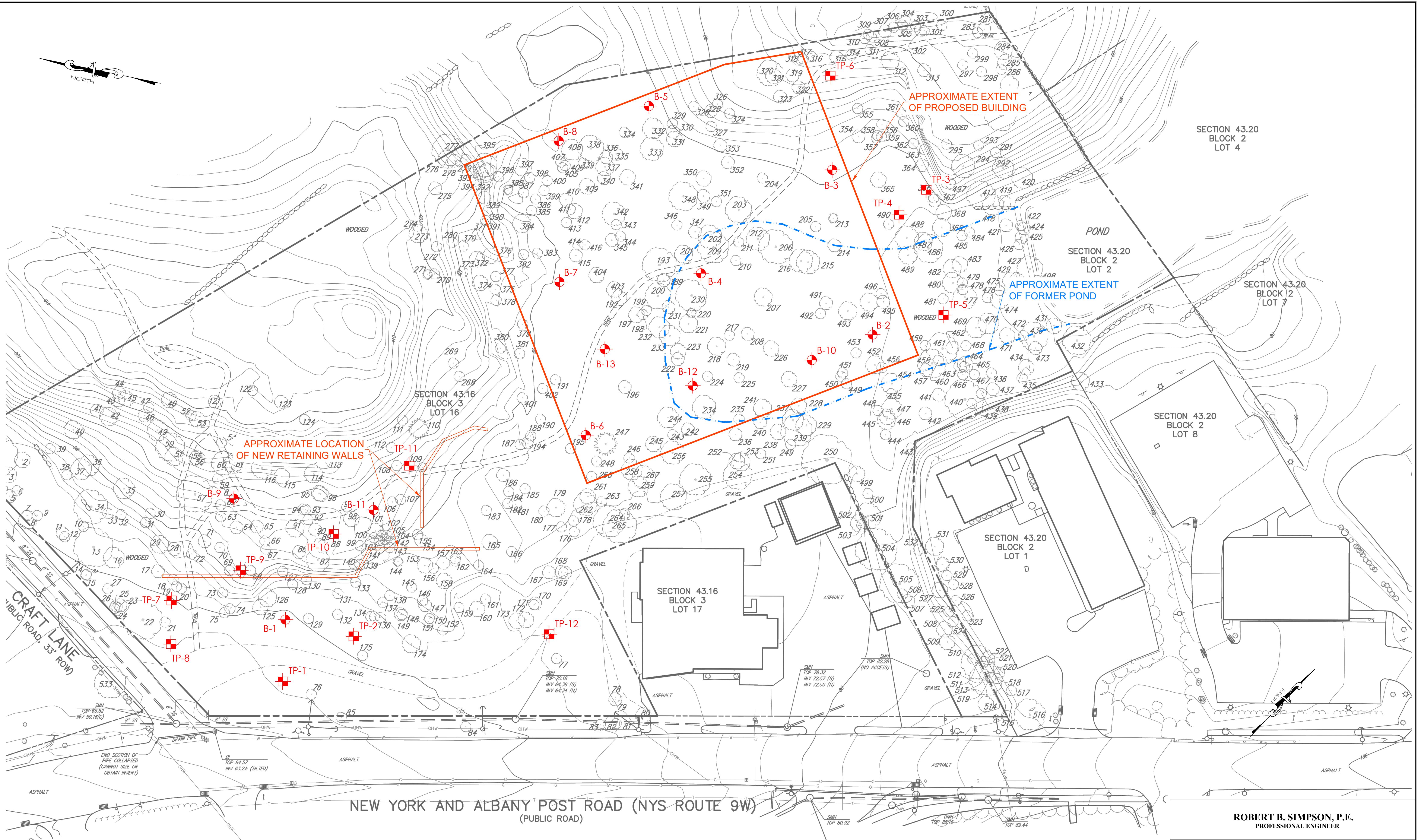
0'0"-0'5"	Black topsoil	
0'5"-2'8"	Rippable rock with soil seams (Brown coarse to fine SAND, some (-) Silt, little (+) coarse to fine Gravel)	dense, moist
2'8"	Refusal on Bedrock	
	No groundwater encountered	

Proposed 4-Story Building
Albany Post Rd. & Craft Ln.
Buchanan, NY
23-34

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"		



GENERAL NOTES:

- GENERAL LAYOUT WAS OBTAINED FROM DRAWINGS PREPARED BY JMC PLC, ENTITLED "TREE SURVEY" DATED 1/27/2023 AND "CONCEPTUAL SITE PLAN" DATED 4/7/2023.
- 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.
- 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.
- ALL LOCATIONS ARE APPROXIMATE.

LEGEND:

- BORING LOCATION
- TEST PIT LOCATION

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	SR/MRA	SCALE	1" = 30'
CHECKED	RBS	DATE	08-15-2023
PROJECT NO.	23-34	DWG NO.	BTLP-1
APPROVED			

CARLIN-SIMPSON & ASSOCIATES, LLC
61 Main Street
Sayreville, NJ 08872
Consulting Geotechnical and Environmental Engineers





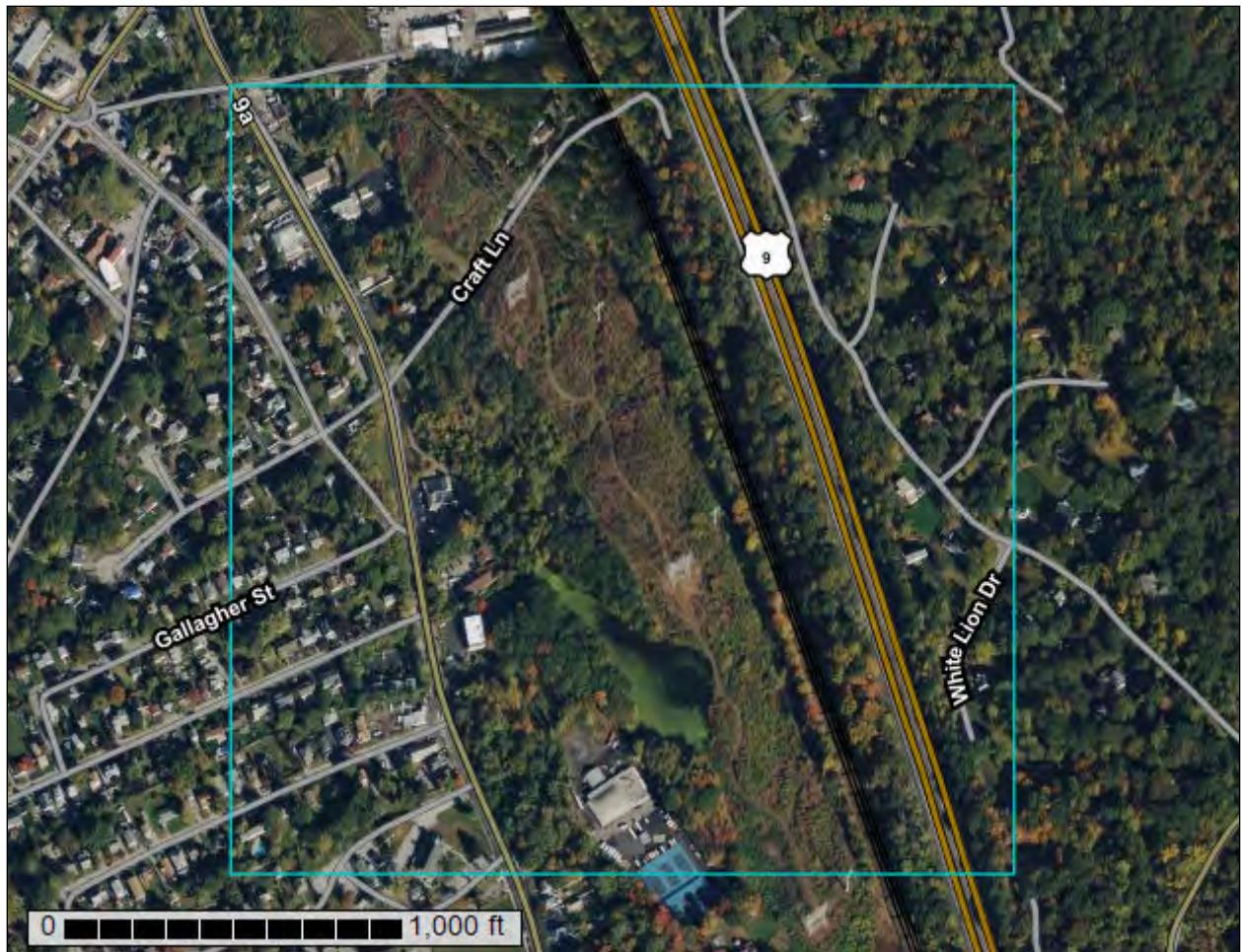
United States
Department of
Agriculture



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.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface.....	2
How Soil Surveys Are Made.....	5
Soil Map.....	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	11
Map Unit Descriptions.....	11
Westchester County, New York.....	14
CrC—Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky.....	14
CsD—Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky.....	16
CtC—Chatfield-Hollis-Rock outcrop complex, 0 to 15 percent slopes.....	18
CuD—Chatfield-Hollis-Rock outcrop complex, 15 to 35 percent slopes.....	20
HrF—Hollis-Rock outcrop complex, 35 to 60 percent slopes.....	22
LcA—Leicester loam, 0 to 3 percent slopes, stony.....	24
LcB—Leicester loam, 3 to 8 percent slopes, stony.....	26
Pv—Pits, quarry.....	28
Uf—Urban land.....	28
UIC—Urban land-Charlton-Chatfield complex, rolling, very rocky.....	29
UmC—Urban land-Chatfield-Rock outcrop complex, rolling.....	30
W—Water.....	32
References.....	33

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

Custom Soil Resource Report

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

Custom Soil Resource Report

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.

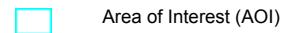
Custom Soil Resource Report
Soil Map



Custom Soil Resource Report

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

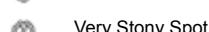


Sodic Spot

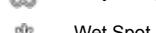
Spoil Area



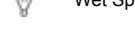
Stony Spot



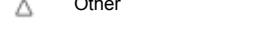
Very Stony Spot



Wet Spot

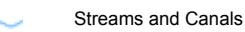


Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



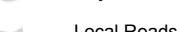
Interstate Highways



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.

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

Custom Soil Resource Report

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

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: 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 (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): 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

Custom Soil Resource Report

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

Oi - 0 to 2 inches: slightly decomposed plant material

A - 2 to 7 inches: gravelly fine sandy loam

Bw - 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 (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

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

Custom Soil Resource Report

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): Footslope, 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

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: 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

Oi - 0 to 2 inches: slightly decomposed plant material
A - 2 to 7 inches: gravelly fine sandy loam
Bw - 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

Custom Soil Resource Report

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

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

Oi - 0 to 2 inches: slightly decomposed plant material

A - 2 to 7 inches: gravelly fine sandy loam

Bw - 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 (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

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 (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, 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

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

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

Custom Soil Resource Report

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.

References

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

APPENDIX E

TEMPORARY & PERMANENT EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE CHECKLISTS

JMC Project 22062
 AMS Buchanan
 Albany Post Road & Craft Lane
 Village of Buchanan, NY

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.

JMC Project 22062
 AMS Buchanan
 Albany Post Road & Craft Lane
 Village of Buchanan, NY

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.

JMC Project 22062
AMS Buchanan
Albany Post Road & Craft Lane
Village of Buchanan, NY

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.

JMC Project 22062
AMS Buchanan
Albany Post Road & Craft Lane
Village of Buchanan, NY

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

p:\2022\22062\drainage\reports\temporary & permanent s&e inspection and maintenance checklist.docx

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:_____

p:\2022\22062\drainage\reports\nys contractors certification.docx

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://giservices.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.

Lake Meahagh/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?

NYSDOT

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
Topsoiling
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

