

# Stormwater Management Report

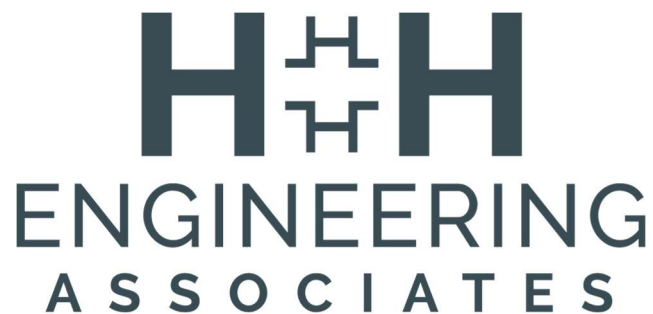
## New Industrial Development

412 Maple Avenue  
Uncasville-Montville, CT 06382

November 8, 2022

Prepared for:  
**Advanced Associates, LLC**  
P.O. Box 164  
Uncasville-Montville, CT 06382

Prepared by:  
**H+H Engineering Associates, LLC**  
232 Greenmanville Avenue  
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Mystic, CT 06355



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## **1. INTRODUCTION**

The project is located at 412 Maple Avenue in Uncasville-Montville, Connecticut (hereinafter referred to as the "Site") and is further identified on the Town of Montville GIS as Map 31 Block 2 Lot 0A0. The Site is located off Maple Avenue, approximately 950 feet northwest of the intersection of CT-163 and Maple Avenue. The Site consists of approximately 6.86 acres that includes two separate commercial/industrial buildings in the southeast corner of the property with a paved drive and paved parking lot, and mostly undeveloped woodland for the remainder of the property (see Figure 1 – Site Location Map). The Site is in the Industrial 'I' Zoning District as defined by Section 13 of the Town of Montville Zoning Regulations (hereinafter "Zoning Regulations"). Abutting properties consist of commercial and industrial uses.

The existing topography in the portion of the Site to be developed is steep, with contours ranging from elevation 212 along the western property line, to elevation 150 along the eastern property line. Per NRCS soil mapping, the underlying soil on the site mostly consists of Canton and Charlton fine sandy loams (Hydrologic Group B) with slopes varying between 3 and 35 percent. The Site is not located within a FEMA flood hazard zone, the Coastal Area Management Zone, or within a National Diversity Data Base (NDDB) Critical Area.

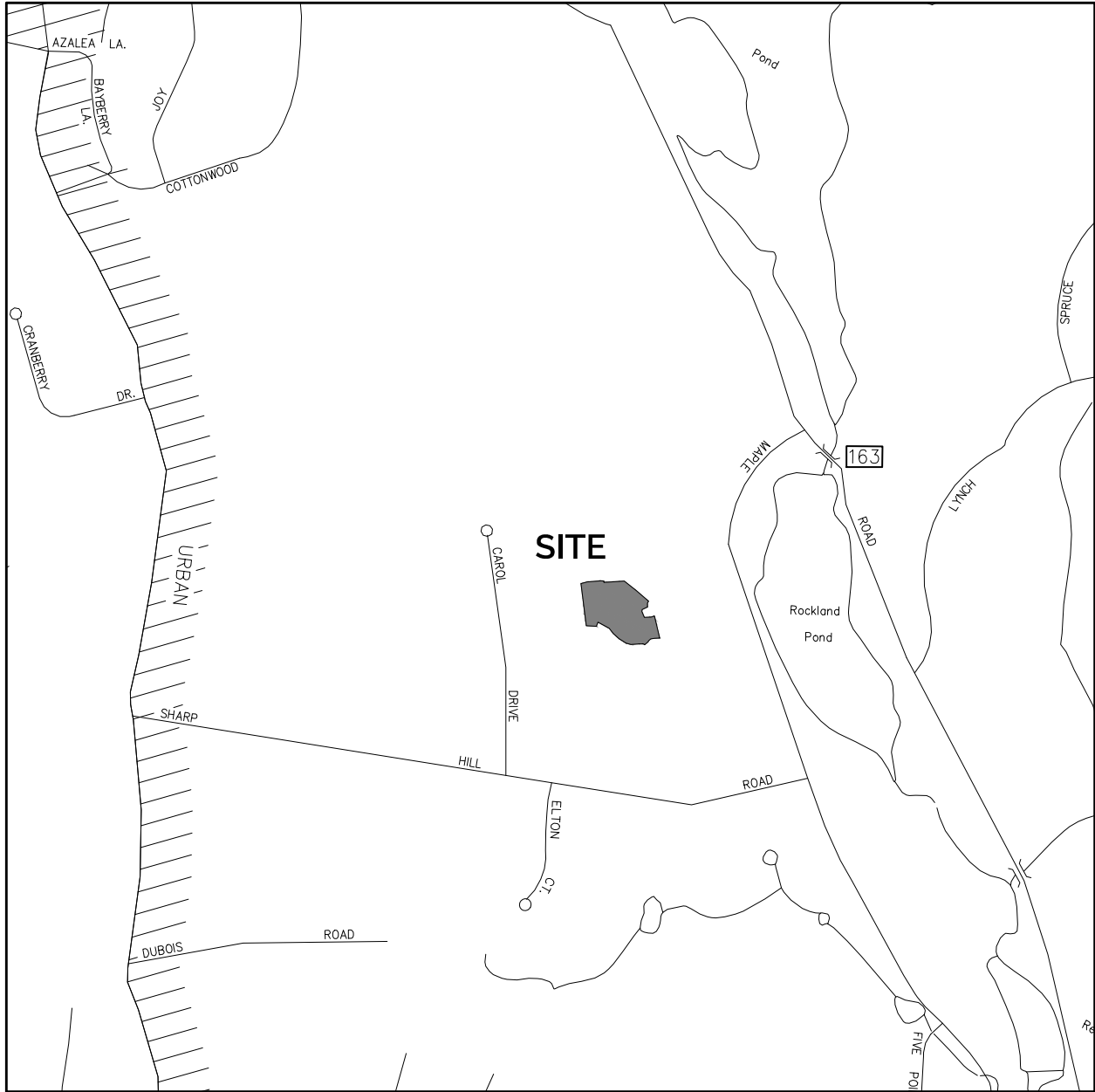
The proposed development consists of the construction of a new 4,000 square-foot industrial building on the northern portion of the Site. Site improvements will include an extension of the access drive from the existing development up to the proposed building, a new parking lot, new utility connections and new stormwater management improvements.

This report presents the basis of the project hydrologic and hydraulic analysis of the site, the design for the new site drainage systems, and Best Management Practices (BMPs) incorporated into the site design to manage and treat stormwater runoff in accordance with the 2004 CT DEEP Stormwater Quality Manual (SQM) and the Town of Montville Zoning Regulations.

## **2. PURPOSE OF REPORT**

This report presents the basis of design for stormwater management including drainage and stormwater treatment. The report demonstrates that the development:

- Does not increase peak rates of runoff from watersheds encompassing the new building, access drive and parking area.
- Does not degrade the quality of receiving groundwater, waterbodies, or watercourses.
- Complies with the 2004 CT DEEP SQM and the Town of Montville Stormwater Management Standards.



PROJECT NO. 2022-0019	SCALE: 1"=1,000'
DRAWN BY: MAA	DATE: 11/8/2022
CHECKED BY: SMM	DATE: 11/8/2022
SHEET NUMBER: 1 OF 1	
DRAWING: <b>FIGURE 1</b>	

**STORMWATER REPORT -  
SITE LOCATION MAP**

**NEW INDUSTRIAL DEVELOPMENT**  
412 MAPLE AVENUE, UNCASVILLE/MONTVILLE, CT  
**ADVANCED ASSOCIATES, LLC**  
P.O. BOX 164, UNCASVILLE-MONTVILLE, CT 06382

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### **3. BASIS OF DESIGN**

The grading, drainage and stormwater management improvements for the project are shown on the Grading & Drainage Plan. The basis of the grading and drainage design is as follows:

1. Rainfall data is from the National Weather Service NOAA Atlas 14, Volume 10, Version 3.
2. Drainage systems are designed to meet the greatest extent practical water quality and peak rate of runoff goals established in the CT DEEP SQM.
3. Stormwater treatment Best Management Practices (BMPs) are designed to remove pollutants, such as nutrients, solids, metals, pathogens, pesticides, and hydrocarbons from stormwater runoff and to reduce temperatures of runoff from paved surfaces during hot weather.
4. BMPs for this project include one underground infiltration/detention system with isolator rows designed to manage and treat runoff generated from the proposed building rooftop and a portion of the parking lot, and two rain gardens designed to manage and treat runoff generated from portions of the parking lot and access drive.
5. A rip-rap apron is located at the discharge for the proposed outlet control structure to reduce velocities and has been sized for the 25-year storm event. The apron is designed in accordance with the State of Connecticut Department of Transportation Drainage Manual, dated October 2000 (Technical Appendix).

### **4. HYDROLOGIC AND HYDRAULIC METHODS**

The methods described in Urban Hydrology for Small Watersheds, 2nd Edition, (Technical Release Number 55 [TR-55]) from the Natural Resources Conservation Service formerly the Soil Conservation Service – [SCS], 1986) were used to calculate stormwater peak-flow generated from pre- and post-development conditions. These methods, which are incorporated into the HydroCAD computer software program, use well documented procedures to calculate stormwater runoff volume, peak-flow rate of discharge, hydrographs and storage volumes required for floodwater reservoirs in small watersheds. The method uses the SCS Runoff Curve Number method to estimate runoff volume, calculates times of concentration, produces tabular hydrographs and estimates basin storage capacity. Output data from all computer analysis and design are provided in the Technical Appendix.

This report presents the basis of the hydrologic and hydraulic analysis and design of the stormwater management including drainage and stormwater treatment systems completed in accordance with the Connecticut Department of Transportation Drainage Manual (Drainage Manual). The report also presents a Stormwater Management Plan prepared in accordance, to the greatest extent practical, with the 2004 CT DEEP SQM. Times of concentration applicable to the pre- and post-development were developed using the NRCS-velocity method. A minimum time of concentration of 5 minutes was used for paved surfaces and 10 minutes for vegetated areas.

## 5. STORMWATER MANAGEMENT

The existing portion of the site to be developed is vacant, undeveloped woods/brush. Site improvements will increase impervious areas, resulting in rate and volume increases of stormwater runoff from the Site. Hydrologic analyses of pre- and post-development conditions were completed to assess these increases and to design mitigation measures for water quality and to reduce post-development discharges.

### 5.1 Pre-Development Drainage Area

The existing drainage pattern for the site in the vicinity of the proposed improvements consists of one drainage area as shown on Figure 2 – Drainage Area Maps, and described as follows:

- **DA1:** Approximately 2.76 acres of woods..

### 5.2 Post-Development Drainage Areas

The proposed development results in the modification of the drainage areas along with changes in impervious coverage (building rooftop, pavement surfaces and concrete surfaces). These conditions are shown on Figure 2 – Drainage Area Maps, and described as follows:

**DA1:** for analysis purposes the proposed condition DA1 was subdivided into 5 subareas.

- **DA1A:** Approximately 0.37 acres of paved parking areas along with wooded upland and new lawn areas that drain to a new rain garden.
- **DA1B:** Approximately 0.38 acres of new building rooftop and paved parking that drains to an ADS Stormtech MC-3500 underground infiltration system.
- **DA1C:** Approximately 1.09 acres of existing woods and brush and a portion of the new access drive..
- **DA1D:** Approximately 0.25 acres of paved access drive and lawn area that drains to a new rain garden.
- **DA1E:** Approximately 0.67 acres of new lawn and existing wood/brush runoff to remain undisturbed.

Modeling results for the pre- and post-development drainage areas are provided in Figure 3 – Stormwater Runoff Summary, and the hydrologic and hydraulic modeling parameters are provided in the HydroCAD printouts (Technical Appendix).

### 5.3 Proposed Condition Stormwater Management BMPs

For the post-development conditions, the intent of the proposed stormwater management improvements is to route stormwater runoff from the impervious surfaces through the proposed stormwater BMPs to provide water quality treatment, peak rate reduction, and promote groundwater recharge through infiltration. Three separate Stormwater Management Areas are included in the design and are described below:

- **Stormwater Management Area A:** Rain Garden – The rain garden is designed to treat and infiltrate in excess of the Water Quality Volume (WQV) from the contributing area and mitigate peak rate of runoff for larger storm events. The permeability of the underlying

natural soil was measured on site and determined to be 9.6 feet/day (4.8 inches/hour). An infiltration rate of 2.4 inches/hour was used for design purposes after applying a Factor of Safety of 2.0 in accordance with the 2004 CT DEEP SQM. The rain garden will treat stormwater runoff by allowing planting to remove pollutants, such as nutrients, solids, metals, pathogens, pesticides, and hydrocarbons from stormwater runoff. Infiltration will also allow for additional cleansing and will reduce temperatures of runoff from paved surfaces during hot weather.

- **Stormwater Management Area B:** ADS Stormtech MC-3500 Underground Infiltration System – Two catch basins within the parking area collect and direct surface runoff to the proposed infiltration system. The proposed ADS Stormtech MC-3500 infiltration system will treat stormwater runoff through filtration using three isolator rows sized to treat in excess of the Water Quality Flow (WQF).. The MC-3500 chambers are connected to an outlet control structure which provides an outlet for discharge of large storm events. An infiltration rate of 2.4 inches/hour was used for design purposes, as previously noted.
- **Stormwater Management Area C:** Rain Garden – The rain garden is designed to treat and infiltrate in excess of the Water Quality Volume (WQV) from the contributing area and mitigate peak rate of runoff for larger storm events. An infiltration rate of 2.4 inches/hour was used for design purposes, as previously noted.

The Water Quality Volume & Water Quality Flow Calculations for Stormwater Management Areas A, B & C are included in the Technical Appendix. A summary of the stage and storage volume for Stormwater Management Areas A, B & C is included in Figure 4 – Stage-Storage Summaries.

#### 5.4 Stormwater Management Area Outlet Locations

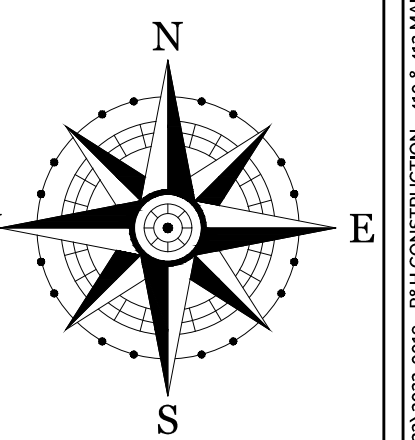
The outlet locations for each proposed Stormwater Management Area are described below:

- **Stormwater Management Area A:** Overflow from large storm events will exit the raingarden via a 15' long rip-rap spillway as shown on the Grading & Drainage Plan.
- **Stormwater Management Area B:** Overflow from large storm events is directed through an outlet control structure to a wooded area to the east of the development, which then sheetflows overland to an existing wetland on site.
- **Stormwater Management Area C:** Overflow from large storm events will exit the raingarden via a 15' long rip-rap spillway as shown on the Grading & Drainage Plan.



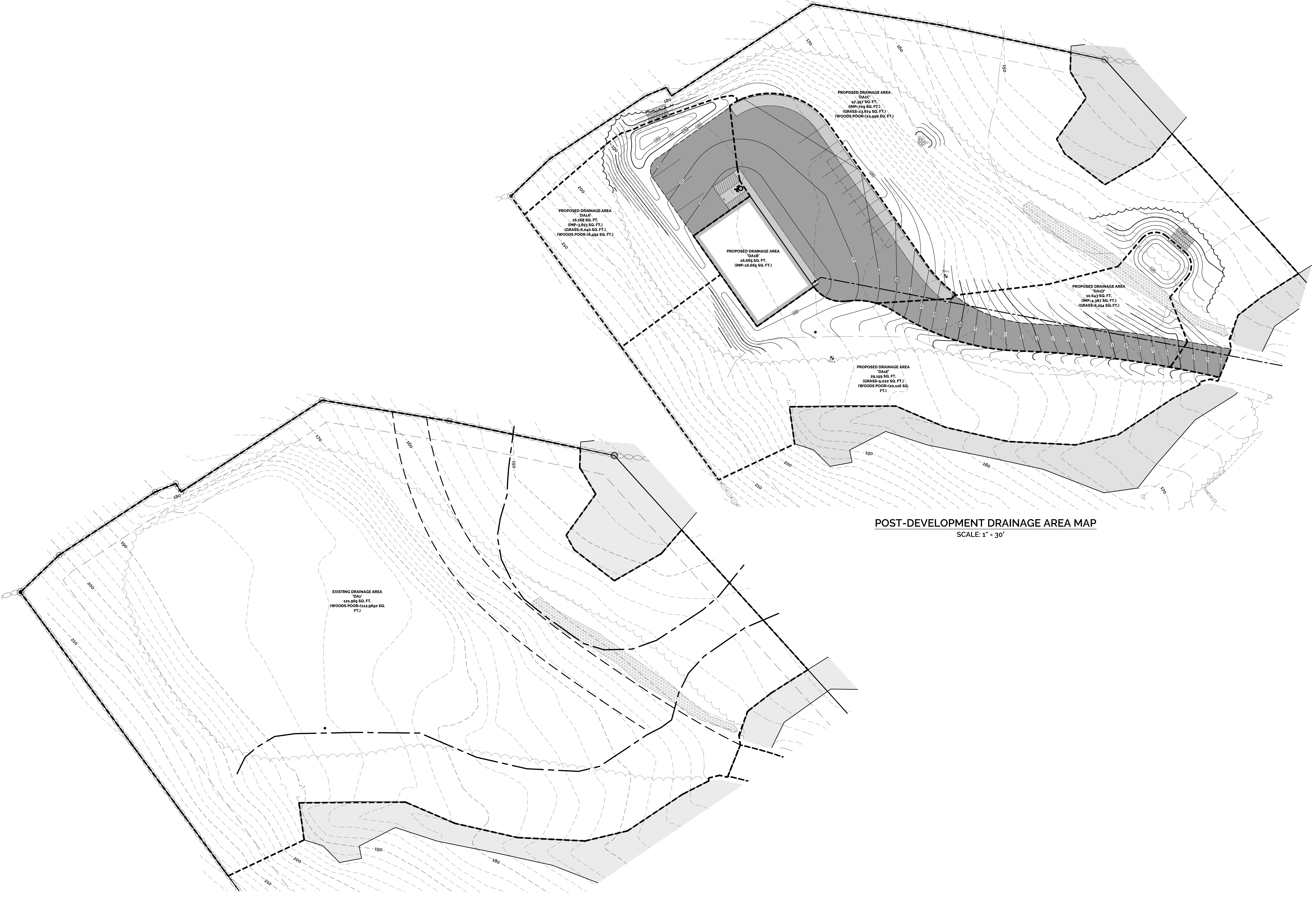
REV.	DESCRIPTION OF REVISION	DATE	APPR.

**DRAINAGE AREA MAPS**  
**NEW INDUSTRIAL DEVELOPMENT**  
PROPERTY ADDRESS:  
**412 MAPLE AVENUE, UNCASVILLE-MONTVILLE, CT 06382**  
PREPARED FOR:  
**ADVANCED ASSOCIATES, LLC**  
**P.O. BOX 464, UNCASVILLE-MONTVILLE, CT 06382**



PROJECT NO. 2022-0019	SCALE 1" = 30'
DRAWN BY: MAA	DATE 11/1/2022
CHECKED BY: SMM	DATE 11/1/2022

DRAWING  
**DA-1**  
SHEET NUMBER: 1 OF 1



Z:\SHARED\H+H ENGINEERING ASSOCIATES\PROJECTS\2022\2022-0019 - 1961 CONSTRUCTION - 412 & 414 MAPLE AVE, MONTVILLE, CT\DWG\DRAINAGE\FIGURE1.DWG 11/1/2022 5:04 PM Plotted: 11/17/2022 9:01 AM

PEAK RATE OF RUNOFF (CFS) SUMMARY			
STORM FREQUENCY	TOTAL SITE DISCHARGE		
	EXISTING	PROPOSED	CHANGE
WQV	0.00	0.00	---
2 YEAR	1.69	1.26	-0.43
10 YEAR	4.50	3.24	-1.26
25 YEAR	6.54	5.38	-1.16
100 YEAR	9.89	9.81	-0.08

RUNOFF VOLUME (CF) SUMMARY			
STORM FREQUENCY	TOTAL SITE DISCHARGE		
	EXISTING	PROPOSED	CHANGE
WQV	0	0	---
2 YEAR	7,733	5,242	-2,491
10 YEAR	18,098	12,734	-5,364
25 YEAR	25,593	18,990	-6,603
100 YEAR	38,116	31,168	-6,948

PROJECT NO. 2022-0019	SCALE: NOT TO SCALE	<b>STORMWATER REPORT - STORMWATER RUNOFF SUMMARY</b>	<b>HHH ENGINEERING ASSOCIATES</b>
DRAWN BY: MAA	DATE: 11/8/2022		
CHECKED BY: SMM	DATE: 11/8/2022		
SHEET NUMBER: 1 OF 1	DRAWING: <b>FIGURE 3</b>		

RAIN GARDEN AREA 'A'		
STORM FREQUENCY	WATER SURFACE ELEVATION (FT.)	STORAGE VOLUME (CF)
WQV	183.00	0
2 YEAR	184.59	703
10 YEAR	185.05	1,132
25 YEAR	185.09	1,175
100 YEAR	185.13	1,214
TOP OF BERM = 185.30 TOP OF SPILLWAY = 185.00 BOTTOM OF BASIN = 183.00		

STORMWATER MANAGEMENT AREA 'B' ADS STORMTECH MC-3500 INFILTRATION SYSTEM		
STORM FREQUENCY	WATER SURFACE ELEVATION (FT.)	STORAGE VOLUME (CF)
WQV	175.97	224
2 YEAR	177.25	1,702
10 YEAR	178.26	3,032
25 YEAR	179.04	3,964
100 YEAR	179.47	4,427
ADS STORMTECH SC-740 INFILTRATION SYSTEM ELEVATIONS: TOP OF STONE ELEV. = 181.15 TOP OF CHAMBER ELEV. = 180.15 BOTTOM OF CHAMBER ELEV. = 176.40 BOTTOM OF STONE ELEV. = 175.65 OUTLET CONTROL STRUCTURE ELEVATIONS: TOP OF FRAME (MANHOLE COVER) ELEV. = 186.00 RECTANGULAR WEIR INV. ELEV. = 180.25 15" INV. IN ELEV. = 176.55 6" LOW FLOW ORIFICE = 179.00 EXFILTRATION RATE = 2.4 IN/HR		

RAIN GARDEN AREA 'C'		
STORM FREQUENCY	WATER SURFACE ELEVATION (FT.)	STORAGE VOLUME (CF)
WQV	156.01	4
2 YEAR	157.08	625
10 YEAR	157.91	1,349
25 YEAR	158.04	1,485
100 YEAR	158.10	1,547
TOP OF BERM = 158.30 TOP OF SPILLWAY = 158.00 BOTTOM OF BASIN=156.00		

PROJECT NO. 2022-0019	SCALE: NOT TO SCALE
DRAWN BY: MAA	DATE: 11/8/2022
CHECKED BY: SMM	DATE: 11/8/2022
SHEET NUMBER:	1 OF 1
DRAWING: <b>FIGURE 4</b>	

**STORMWATER REPORT -  
 STORMWATER TREATMENT PRACTICES  
 STAGE-STORAGE SUMMARIES**  
  
**NEW INDUSTRIAL DEVELOPMENT**  
 412 MAPLE AVENUE, UNCASVILLE/MONTVILLE, CT  
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## **6. SOURCE CONTROL AND POLLUTION PREVENTION MAINTENANCE AND OPERATION**

Source control and pollution prevention practices for this project are intended to eliminate the generation of pollutants at their source, reduce the types and concentration of pollutants in stormwater runoff and to assure that the BMPs continue to function to remove oil and grease and TSS. The site property managers will be responsible for maintaining the stormwater management system and the goal of this section is to inform managers about system operations.

The following maintenance and operation measures are recommended for source control.

### **Parking Lots**

The access drive and parking areas shall be swept once per year, preferably after the end of the winter sanding season.

### **Landscaping**

Normal landscaping maintenance shall consist of pruning, mulching, planting, mowing lawns, raking leaves, etc. Use of fertilizers and pesticides will be controlled and limited to minimal amounts necessary for healthy landscape maintenance.

Trees will be fertilized no more than once in the spring with an organic fertilizer. Shrubs and lawn will be fertilized with an organic slow-release fertilizer each spring. Liming of lawn areas to control pH will also be done in the spring if soil testing indicates that it is necessary.

Pesticides will only be used as a control method when a problem has been clearly identified and other natural control methods are not successful. All pesticide applications shall be by licensed applicators, where necessary.

### **Outdoor Storage**

There will be no outdoor storage of hazardous chemicals, fertilizer, pesticides, or herbicides anywhere on site.

### **Snow Removal & Storage**

Snow shall be shoveled and plowed from sidewalk and parking areas as soon as practical during and after winter storms and deposited in snow storage areas on the site or removed.

### **Catch Basins and Manholes**

A Connecticut-Licensed hauler shall pump the sumps of onsite catch basins and drainage manholes and shall dispose of the sand legally. Road sand may be reused for winter sanding but may not be stored on-site. As part of the hauling contract, the hauler shall notify the property owner in writing where the material is being disposed.

For the first three years each catch basin and drainage manhole shall be inspected every four months, with one inspection occurring during the month of April. Any debris occurring within one foot from the bottom of each sump shall be removed by Vacuum "Vactor" type of

maintenance equipment. After the first three years the inspection schedule may be adjusted to meet actual operating conditions, however, one inspection shall always be conducted in April.

### **Stormtech underground infiltration systems and Isolator Rows**

The Isolator rows shall be cleaned at the end of construction once the contributing areas are fully stabilized. For the first year of operation following construction, the chamber rows shall be inspected once every 6 months.

After the first year of operation, the chambers shall be inspected a minimum of once per year. If upon visual inspection it is found that sediment has accumulated, a stadia rod should be inserted to determine the depth of the sediment. When the average depth of accumulation exceeds 3", a clean-out should be performed and properly disposed off-site. Clean-out should be accomplished using a Jetvac process.

A detailed maintenance logbook shall be kept on-site for the units by the property owner/manager. Information is to include, but not be limited to, the date of inspection, record of sediment depth, general observations, and date of cleaning performed.

Maintenance of all Stormtech systems should follow all manufacturers' recommendations.

### **Rain Gardens**

No pesticides or non-organic fertilizers shall be used in areas draining to the rain garden.

The rain garden shall be inspected every six months and/or after storm events of 2 inches of rainfall or greater. Inspections shall include the following:

- Inspect basin for standing water or other evidence of clogging.
- Check for sediment accumulation, trash, and debris.
- Check for blockages, structural integrity, and evidence of erosion at inlets and overflow spillways.

Regular maintenance of the rain gardens shall include the following:

- Basin floor and side slopes shall be mowed 4" to 6" as needed. Grass clippings, leaves and accumulated sediment and debris shall be removed.
- Prune shrubs as needed.
- Remove excess leaves, debris, and excess sediment from the bottom of the basin, as necessary.
- If there is an accumulation of organic debris or sediment on the floor of the basin, or if ponded water is regularly observed more than 48 hours after a rainfall event, the top 6" shall be removed and the exposed soil surface rototilled to a depth of 12". Sedimentation should be removed when it is visibly dry and readily separates from the basin floor to minimize smearing. After this work has been done, the bottom of the rain garden shall be restored to its original condition.
- Inspect soil and repair eroded areas seasonally or as necessary.
- Remove any invasive species (including roots) that have become established within the basin and embankments.

## **7. CONCLUSION**

The new site improvements are consistent with the applicable zoning regulations. BMPs were incorporated in the site design that attenuate post-development runoff rates, treat the WQV/WQF and infiltrate the WQV and GRV from the development. Overall, the stormwater management system provides quantitative and qualitative improvements for the site.

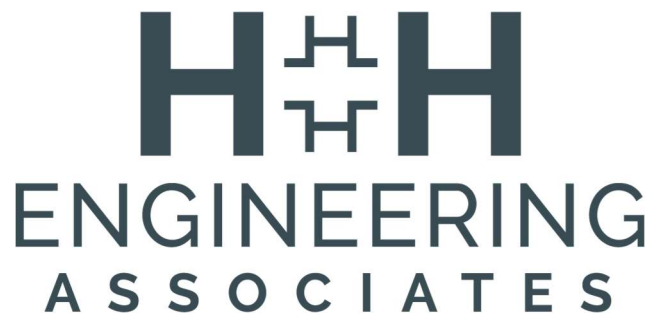
# Technical Appendices for Stormwater Management Report

**New Industrial Development**  
412 Maple Avenue  
Uncasville-Montville, CT 06382

November 8, 2022

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**Appendix A –  
Water Quality Volume  
and Water Quality Flow  
Calculations**



## WQV & WQF CALCULATIONS - STORMWATER MANAGEMENT AREA 'A'

<b>Project:</b> 412 Maple Avenue, Montville CT	<b>Calculated By</b>	<b>Date</b>
<b>Client:</b> Advanced Associates, LLC	SMM	11/8/2022

### Water Quality Volume (WQV)

0.37 ac	A = Area draining to the practice
0.08 ac	$A_I$ = Impervious area draining to the practice
0.22 decimal	I = Percent impervious area draining to the practice, in decimal form
0.25 unitless	$R_V$ = Runoff coefficient = $0.05 + (0.9 \times I)$
0.09 ac-in	$WQV = 1'' \times R_V \times A$
335 cf	WQV conversion (ac-in x 43,560 sf/ac x 1ft/12")

### Water Quality Flow (WQF)

1.00 inches	P = amount of rainfall.
0.25 inches	Q = Water Quality Depth. $Q = WQV / A$
88 unitless	CN = unit peak discharge curve number. $CN = 1000 / (10 + 5P + 10Q - 10 \cdot [Q^2 + 1.25 \cdot Q \cdot P]^{0.5})$
1.4 inches	S = potential maximum retention. $S = (1000 / CN) - 10$
0.276 inches	$I_a$ = initial abstraction. $I_a = 0.2S$
minutes	$T_c$ = Time of Concentration
cfs/mi <sup>2</sup> /in	qu is the unit peak discharge. Obtain this value from TR-55 exhibits 4-II and 4-III
0.000 cfs	WQF = qu x WQV. Conversion: to convert "cfs/mi <sup>2</sup> /in * ac-in" to "cfs" multiply by 1mi <sup>2</sup> /640ac

**Designer** Stormwater Management Area 'A'

**Notes:** Rain Garden

Sizing Calculations:  
 Top of Berm Elevation = 185.30  
 Spillway Elevation = 185.00  
 Storage Capacity Below Spillway Elevation = 1,078 CF  
 Storage Capacity Below Spillway Elevation = 322% WQV  
 Therefore, raingarden is sized to accommodate first 3.2" of rainfall



**WQV & WQF CALCULATIONS - STORMWATER MANAGEMENT AREA 'B'**

<b>Project:</b> 412 Maple Avenue, Montville CT	<b>Calculated By</b>	<b>Date</b>
<b>Client:</b> Advanced Associates, LLC	SMM	11/8/2022

**Water Quality Volume (WQV)**

0.38 ac	A = Area draining to the practice
0.38 ac	$A_i$ = Impervious area draining to the practice
1.00 decimal	I = Percent impervious area draining to the practice, in decimal form
0.95 unitless	$R_v$ = Runoff coefficient = $0.05 + (0.9 \times I)$
0.36 ac-in	$WQV = I^* \times R_v \times A$
1,310 cf	WQV conversion (ac-in x 43,560 sf/ac x 1ft/12")

**Water Quality Flow (WQF)**

1.00 inches	P = amount of rainfall.
0.95 inches	Q = Water Quality Depth. $Q=WQV/A$
100 unitless	CN = unit peak discharge curve number. $CN=1000/(10+5P+10Q-10^*[Q^2+1.25^*Q^*P]^{0.5})$
0.0 inches	S = potential maximum retention. $S = (1000/CN) - 10$
0.009 inches	$I_a$ = initial abstraction. $I_a=0.2S$
5.0 minutes	$T_c$ = Time of Concentration
650.0 cfs/mi <sup>2</sup> /in	qu is the unit peak discharge. Obtain this value from TR-55 exhibits 4-II and 4-III
0.367 cfs/mi <sup>2</sup> /in	WQF = qu x WQV. Conversion: to convert "cfs/mi <sup>2</sup> /in * ac-in" to "cfs" multiply by 1mi <sup>2</sup> /640ac

<b>Designer</b>	<b>Stormwater Management Area 'B'</b>
<b>Notes:</b>	<p><b>ADS Stormtech MC-3500 Infiltration System</b></p> <p>ADS Stormtech MC-3500 Isolator Row Sizing:</p> <p>Three isolator rows are provided.</p> <p>Treated flow rate = 0.40 CFS / unit X 21 units = 8.4 CFS</p> <p>Contributing WQF = 0.35 CFS</p> <p>Treated flow rate &gt; WQF</p> <p>(Inflow rate from 100-year storm event = 3.01 CFS)</p> <p>qu obtained from exhibit 4-III for NRCS type III rainfall distribution</p>



**WQV & WQF CALCULATIONS - STORMWATER MANAGEMENT AREA 'C'**

**Project:** 412 Maple Avenue, Montville CT  
**Client:** Advanced Associates, LLC

**Calculated By** SMM  
**Date** 11/8/2022

**Water Quality Volume (WQV)**

0.25 ac	A = Area draining to the practice
0.10 ac	A <sub>i</sub> = Impervious area draining to the practice
0.40 decimal	I = Percent impervious area draining to the practice, in decimal form
0.41 unitless	R <sub>v</sub> = Runoff coefficient = 0.05 + (0.9 x I)
0.10 ac-in	WQV = I" x R <sub>v</sub> x A
372 cf	WQV conversion (ac-in x 43,560 sf/ac x 1ft/12")

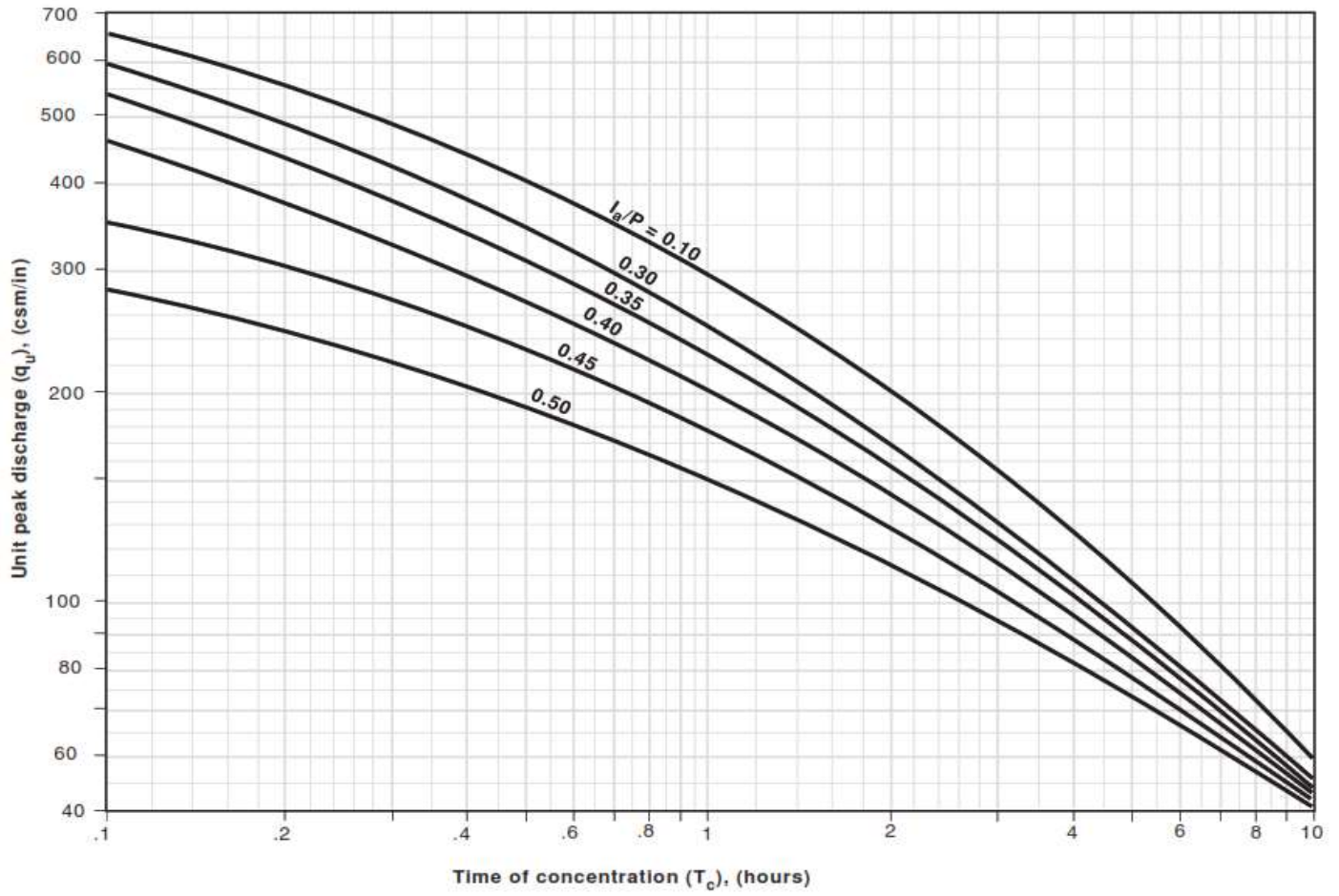
**Water Quality Flow (WQF)**

1.00 inches	P = amount of rainfall.
0.41 inches	Q = Water Quality Depth. Q=WQV/A
92 unitless	CN = unit peak discharge curve number. CN=1000/(10+5P+10Q-10*[Q <sup>2</sup> +1.25*Q*P] <sup>0.5</sup> )
0.9 inches	S = potential maximum retention. S = (1000/CN) - 10
0.170 inches	I <sub>a</sub> = initial abstraction. I <sub>a</sub> =0.2S
minutes	T <sub>c</sub> = Time of Concentration
cfs/mi <sup>2</sup> /in	qu is the unit peak discharge. Obtain this value from TR-55 exhibits 4-II and 4-III
0.000 cfs	WQF = qu x WQV. Conversion: to convert "cfs/mi <sup>2</sup> /in * ac-in" to "cfs" multiply by 1mi <sup>2</sup> /640ac

<b>Design Notes:</b>	<b>Stormwater Management Area 'C'</b>
	<p><b>Rain Garden</b></p> <p>Sizing Calculations:</p> <ul style="list-style-type: none"> <li>Top of Berm Elevation = 158.30</li> <li>Spillway Elevation = 158.00</li> <li>Storage Capacity Below Spillway Elevation = 1,441 CF</li> <li>Storage Capacity Below Spillway Elevation = 387% WQV</li> </ul> <p>Therefore, raingardens sized to accommodate first 3.8" of rainfall</p>



**Exhibit 4-III** Unit peak discharge ( $q_u$ ) for NRCS (SCS) type III rainfall distribution



# **Appendix B – Rip-Rap Apron Design**

**Outlet Protection Design**      Outlet #1

Reference: Connecticut Department of Transportation Drainage Manual, Dated October 2000

- A. Apron width at culvert end ( $W_1$ ) = 3 Sp where Sp = outlet pipe diameter
- B. Apron length (La) =  $\frac{1.8 (Q-5)}{(Sp)^{3/2}} + 10$
- C. Apron width at downstream end (W) = 3Sp + 0.7La where La = apron length

Type A Riprap Apron (Tailwater Condition) : TW < 0.5 dia of outlet

Peak Q(100yr)=  cfs      PIPE DIA=  ft

A.  $W_1 = 3(Sp) =$  ft  ft

B.  $La = \frac{1.8 (Q-5)}{(Sp)^{1.5}} + 10 =$  ft  ft

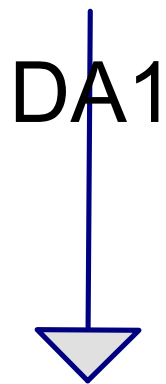
C.  $W_2 = 3(Sp) + 0.7(La) =$  ft  ft

**Table 11.11 Allowable Outlet Velocities for Type A and B Riprap Aprons**

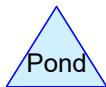
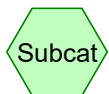
Outlet Velocity - mps (fps)	Riprap Specification
0-2.44 (0-8)	Modified
2.44-3.05 (8-10)	Intermediate
3.05-4.27 (10-14)	Standard

V(25yr)=  fps      Therefore; Use Standard Riprap

**Appendix C –  
Pre-Development  
HydroCAD Report**



Total Site Discharge





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**Rainfall Events Listing (selected events)**

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	WQV	Type III 24-hr		Default	24.00	1	1.00	2
2	2-Year	Type III 24-hr		Default	24.00	1	3.45	2
3	10-Year	Type III 24-hr		Default	24.00	1	5.12	2
4	25-Year	Type III 24-hr		Default	24.00	1	6.16	2
5	100-Year	Type III 24-hr		Default	24.00	1	7.76	2

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**Area Listing (all nodes)**

Area (sq-ft)	CN	Description (subcatchment-numbers)
119,995	66	Woods, Poor, HSG B (DA1)
<b>119,995</b>	<b>66</b>	<b>TOTAL AREA</b>

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**Soil Listing (all nodes)**

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
119,995	HSG B	DA1
0	HSG C	
0	HSG D	
0	Other	
<b>119,995</b>		<b>TOTAL AREA</b>

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**Ground Covers (all nodes)**

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover	Subcatchmen Numbers
0	119,995	0	0	0	119,995	Woods, Poor	D A 1
<b>0</b>	<b>119,995</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>119,995</b>	<b>TOTAL AREA</b>	

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Type III 24-hr WQV Rainfall=1.00"

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Time span=0.00-72.00 hrs, dt=0.04 hrs, 1801 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

**Subcatchment DA1: DA1**

Runoff Area=119,995 sf 0.00% Impervious Runoff Depth=0.00"  
Flow Length=516' Tc=12.5 min CN=66 Runoff=0.00 cfs 0 cf

**Link TSD: Total Site Discharge**

Inflow=0.00 cfs 0 cf  
Primary=0.00 cfs 0 cf

**Total Runoff Area = 119,995 sf Runoff Volume = 0 cf Average Runoff Depth = 0.00"**  
**100.00% Pervious = 119,995 sf 0.00% Impervious = 0 sf**

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Type III 24-hr WQV Rainfall=1.00"

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**Summary for Subcatchment DA1: DA1**

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Depth= 0.00"

Routed to Link TSD : Total Site Discharge

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.04 hrs

Type III 24-hr WQV Rainfall=1.00"

Area (sf)	CN	Description
119,995	66	Woods, Poor, HSG B
119,995		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.2220	0.21		<b>Sheet Flow, Sheetflow</b>
					Woods: Light underbrush n= 0.400 P2= 3.45"
4.6	416	0.0910	1.51		<b>Shallow Concentrated Flow, SHALLOW</b>
					Woodland Kv= 5.0 fps
12.5	516	Total			

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Type III 24-hr WQV Rainfall=1.00"

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**Summary for Link TSD: Total Site Discharge**

Inflow Area = 119,995 sf, 0.00% Impervious, Inflow Depth = 0.00" for WQV event  
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf  
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.04 hrs

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*Type III 24-hr 2-Year Rainfall=3.45"*

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Time span=0.00-72.00 hrs, dt=0.04 hrs, 1801 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

**Subcatchment DA1: DA1**

Runoff Area=119,995 sf 0.00% Impervious Runoff Depth=0.77"  
Flow Length=516' Tc=12.5 min CN=66 Runoff=1.69 cfs 7,733 cf

**Link TSD: Total Site Discharge**

Inflow=1.69 cfs 7,733 cf  
Primary=1.69 cfs 7,733 cf

**Total Runoff Area = 119,995 sf Runoff Volume = 7,733 cf Average Runoff Depth = 0.77"**  
**100.00% Pervious = 119,995 sf 0.00% Impervious = 0 sf**



**pre development**

Type III 24-hr 2-Year Rainfall=3.45"

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**Summary for Subcatchment DA1: DA1**

Runoff = 1.69 cfs @ 12.20 hrs, Volume= 7,733 cf, Depth= 0.77"

Routed to Link TSD : Total Site Discharge

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.04 hrs  
Type III 24-hr 2-Year Rainfall=3.45"

Area (sf)	CN	Description
119,995	66	Woods, Poor, HSG B
119,995		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.2220	0.21		<b>Sheet Flow, Sheetflow</b> Woods: Light underbrush n= 0.400 P2= 3.45"
4.6	416	0.0910	1.51		<b>Shallow Concentrated Flow, SHALLOW</b> Woodland Kv= 5.0 fps
12.5	516	Total			

**pre development**

*Type III 24-hr 2-Year Rainfall=3.45"*

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**Summary for Link TSD: Total Site Discharge**

Inflow Area = 119,995 sf, 0.00% Impervious, Inflow Depth = 0.77" for 2-Year event  
Inflow = 1.69 cfs @ 12.20 hrs, Volume= 7,733 cf  
Primary = 1.69 cfs @ 12.20 hrs, Volume= 7,733 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.04 hrs

**pre development**

*Type III 24-hr 10-Year Rainfall=5.12"*

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Time span=0.00-72.00 hrs, dt=0.04 hrs, 1801 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

**Subcatchment DA1: DA1**

Runoff Area=119,995 sf 0.00% Impervious Runoff Depth=1.81"  
Flow Length=516' Tc=12.5 min CN=66 Runoff=4.50 cfs 18,098 cf

**Link TSD: Total Site Discharge**

Inflow=4.50 cfs 18,098 cf  
Primary=4.50 cfs 18,098 cf

**Total Runoff Area = 119,995 sf Runoff Volume = 18,098 cf Average Runoff Depth = 1.81"**  
**100.00% Pervious = 119,995 sf 0.00% Impervious = 0 sf**

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Type III 24-hr 10-Year Rainfall=5.12"

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**Summary for Subcatchment DA1: DA1**

Runoff = 4.50 cfs @ 12.18 hrs, Volume= 18,098 cf, Depth= 1.81"

Routed to Link TSD : Total Site Discharge

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.04 hrs

Type III 24-hr 10-Year Rainfall=5.12"

Area (sf)	CN	Description
119,995	66	Woods, Poor, HSG B
119,995		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.2220	0.21		<b>Sheet Flow, Sheetflow</b>
					Woods: Light underbrush n= 0.400 P2= 3.45"
4.6	416	0.0910	1.51		<b>Shallow Concentrated Flow, SHALLOW</b>
					Woodland Kv= 5.0 fps
12.5	516	Total			

**pre development**

*Type III 24-hr 10-Year Rainfall=5.12"*

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**Summary for Link TSD: Total Site Discharge**

Inflow Area = 119,995 sf, 0.00% Impervious, Inflow Depth = 1.81" for 10-Year event  
Inflow = 4.50 cfs @ 12.18 hrs, Volume= 18,098 cf  
Primary = 4.50 cfs @ 12.18 hrs, Volume= 18,098 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.04 hrs

**pre development**

Type III 24-hr 25-Year Rainfall=6.16"

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Time span=0.00-72.00 hrs, dt=0.04 hrs, 1801 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

**Subcatchment DA1: DA1**

Runoff Area=119,995 sf 0.00% Impervious Runoff Depth=2.56"  
Flow Length=516' Tc=12.5 min CN=66 Runoff=6.54 cfs 25,593 cf

**Link TSD: Total Site Discharge**

Inflow=6.54 cfs 25,593 cf  
Primary=6.54 cfs 25,593 cf

**Total Runoff Area = 119,995 sf Runoff Volume = 25,593 cf Average Runoff Depth = 2.56"**  
**100.00% Pervious = 119,995 sf 0.00% Impervious = 0 sf**

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Type III 24-hr 25-Year Rainfall=6.16"

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**Summary for Subcatchment DA1: DA1**

Runoff = 6.54 cfs @ 12.18 hrs, Volume= 25,593 cf, Depth= 2.56"

Routed to Link TSD : Total Site Discharge

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.04 hrs

Type III 24-hr 25-Year Rainfall=6.16"

Area (sf)	CN	Description
119,995	66	Woods, Poor, HSG B
119,995		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.2220	0.21		<b>Sheet Flow, Sheetflow</b>
					Woods: Light underbrush n= 0.400 P2= 3.45"
4.6	416	0.0910	1.51		<b>Shallow Concentrated Flow, SHALLOW</b>
					Woodland Kv= 5.0 fps
12.5	516	Total			

**pre development**

*Type III 24-hr 25-Year Rainfall=6.16"*

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**Summary for Link TSD: Total Site Discharge**

Inflow Area = 119,995 sf, 0.00% Impervious, Inflow Depth = 2.56" for 25-Year event  
Inflow = 6.54 cfs @ 12.18 hrs, Volume= 25,593 cf  
Primary = 6.54 cfs @ 12.18 hrs, Volume= 25,593 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.04 hrs



**pre development**

Type III 24-hr 100-Year Rainfall=7.76"

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Time span=0.00-72.00 hrs, dt=0.04 hrs, 1801 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

**Subcatchment DA1: DA1**

Runoff Area=119,995 sf 0.00% Impervious Runoff Depth=3.81"  
Flow Length=516' Tc=12.5 min CN=66 Runoff=9.89 cfs 38,116 cf

**Link TSD: Total Site Discharge**

Inflow=9.89 cfs 38,116 cf  
Primary=9.89 cfs 38,116 cf

**Total Runoff Area = 119,995 sf Runoff Volume = 38,116 cf Average Runoff Depth = 3.81"**  
**100.00% Pervious = 119,995 sf 0.00% Impervious = 0 sf**

**pre development**

Type III 24-hr 100-Year Rainfall=7.76"

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**Summary for Subcatchment DA1: DA1**

Runoff = 9.89 cfs @ 12.18 hrs, Volume= 38,116 cf, Depth= 3.81"

Routed to Link TSD : Total Site Discharge

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.04 hrs  
Type III 24-hr 100-Year Rainfall=7.76"

Area (sf)	CN	Description
119,995	66	Woods, Poor, HSG B
119,995		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	100	0.2220	0.21		<b>Sheet Flow, Sheetflow</b>
					Woods: Light underbrush n= 0.400 P2= 3.45"
4.6	416	0.0910	1.51		<b>Shallow Concentrated Flow, SHALLOW</b>
					Woodland Kv= 5.0 fps
12.5	516	Total			

**pre development**

*Type III 24-hr 100-Year Rainfall=7.76"*

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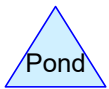
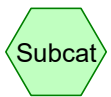
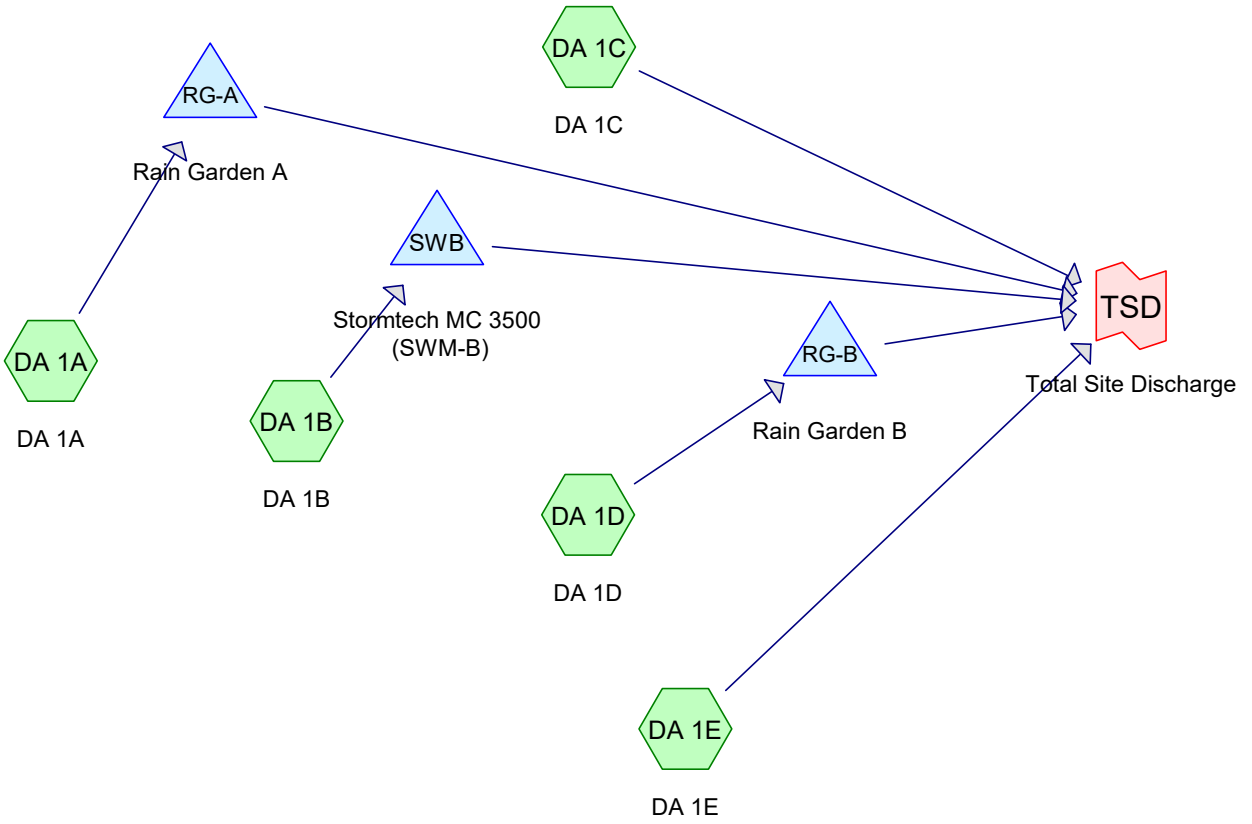
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**Summary for Link TSD: Total Site Discharge**

Inflow Area = 119,995 sf, 0.00% Impervious, Inflow Depth = 3.81" for 100-Year event  
Inflow = 9.89 cfs @ 12.18 hrs, Volume= 38,116 cf  
Primary = 9.89 cfs @ 12.18 hrs, Volume= 38,116 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.04 hrs

**Appendix D –  
Post-Development  
HydroCAD Report**



**Routing Diagram for post development**  
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**post development**

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**Rainfall Events Listing (selected events)**

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	WQV	Type III 24-hr		Default	24.00	1	1.00	2
2	2-Year	Type III 24-hr		Default	24.00	1	3.45	2
3	10-Year	Type III 24-hr		Default	24.00	1	5.12	2
4	25-Year	Type III 24-hr		Default	24.00	1	6.16	2
5	100-Year	Type III 24-hr		Default	24.00	1	7.76	2

**post development**

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**Area Listing (all nodes)**

Area (sq-ft)	CN	Description (subcatchment-numbers)
21,316	69	50-75% Grass cover, Fair, HSG B (DA 1A, DA 1D, DA 1E)
23,674	67	Brush, Poor, HSG B (DA 1C)
21,374	98	Paved parking, HSG B (DA 1A, DA 1B, DA 1C, DA 1D)
4,000	98	Roofs, HSG B (DA 1B)
49,604	66	Woods, Poor, HSG B (DA 1A, DA 1C, DA 1E)
<b>119,968</b>	<b>73</b>	<b>TOTAL AREA</b>

**post development**

**Soil Listing (all nodes)**

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
119,968	HSG B	DA 1A, DA 1B, DA 1C, DA 1D, DA 1E
0	HSG C	
0	HSG D	
0	Other	
<b>119,968</b>		<b>TOTAL AREA</b>



**post development**

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**Ground Covers (all nodes)**

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover
0	21,316	0	0	0	21,316	50-75% Grass cover, Fair
0	23,674	0	0	0	23,674	Brush, Poor
0	21,374	0	0	0	21,374	Paved parking
0	4,000	0	0	0	4,000	Roofs
0	49,604	0	0	0	49,604	Woods, Poor
<b>0</b>	<b>119,968</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>119,968</b>	<b>TOTAL AREA</b>

**post development**

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**Pipe Listing (all nodes)**

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)
1	SWB	175.65	166.00	45.0	0.2144	0.012	0.0	15.0	0.0

**post development**

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Type III 24-hr WQV Rainfall=1.00"

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Time span=0.00-72.00 hrs, dt=0.02 hrs, 3601 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

<b>Subcatchment DA 1A: DA 1A</b>	Runoff Area=16,145 sf 22.38% Impervious Runoff Depth=0.02" Tc=10.0 min CN=74 Runoff=0.00 cfs 31 cf
<b>Subcatchment DA 1B: DA 1B</b>	Runoff Area=16,665 sf 100.00% Impervious Runoff Depth=0.79" Tc=5.0 min CN=98 Runoff=0.35 cfs 1,098 cf
<b>Subcatchment DA 1C: DA 1C</b>	Runoff Area=47,379 sf 1.50% Impervious Runoff Depth=0.00" Tc=10.0 min CN=67 Runoff=0.00 cfs 0 cf
<b>Subcatchment DA 1D: DA 1D</b>	Runoff Area=10,641 sf 41.23% Impervious Runoff Depth=0.10" Tc=5.0 min CN=81 Runoff=0.01 cfs 87 cf
<b>Subcatchment DA 1E: DA 1E</b>	Runoff Area=29,138 sf 0.00% Impervious Runoff Depth=0.00" Flow Length=446' Tc=10.7 min CN=67 Runoff=0.00 cfs 0 cf
<b>Pond RG-A: Rain Garden A</b>	Peak Elev=183.00' Storage=0 cf Inflow=0.00 cfs 31 cf Discarded=0.00 cfs 31 cf Primary=0.00 cfs 0 cf Outflow=0.00 cfs 31 cf
<b>Pond RG-B: Rain Garden B</b>	Peak Elev=156.01' Storage=4 cf Inflow=0.01 cfs 87 cf Discarded=0.01 cfs 87 cf Primary=0.00 cfs 0 cf Outflow=0.01 cfs 87 cf
<b>Pond SWB: Stormtech MC 3500 (SWM-B)</b>	Peak Elev=175.97' Storage=224 cf Inflow=0.35 cfs 1,098 cf Discarded=0.10 cfs 1,098 cf Primary=0.00 cfs 0 cf Outflow=0.10 cfs 1,098 cf
<b>Link TSD: Total Site Discharge</b>	Inflow=0.00 cfs 0 cf Primary=0.00 cfs 0 cf

**Total Runoff Area = 119,968 sf Runoff Volume = 1,217 cf Average Runoff Depth = 0.12"**  
**78.85% Pervious = 94,594 sf 21.15% Impervious = 25,374 sf**

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Type III 24-hr WQV Rainfall=1.00"

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**Summary for Subcatchment DA 1A: DA 1A**

Runoff = 0.00 cfs @ 14.84 hrs, Volume= 31 cf, Depth= 0.02"

Routed to Pond RG-A : Rain Garden A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Type III 24-hr WQV Rainfall=1.00"

Area (sf)	CN	Description
6,492	66	Woods, Poor, HSG B
6,040	69	50-75% Grass cover, Fair, HSG B
3,613	98	Paved parking, HSG B
16,145	74	Weighted Average
12,532		77.62% Pervious Area
3,613		22.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					<b>Direct Entry, direct</b>

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**Summary for Subcatchment DA 1B: DA 1B**

Runoff = 0.35 cfs @ 12.07 hrs, Volume= 1,098 cf, Depth= 0.79"

Routed to Pond SWB : Stormtech MC 3500 (SWM-B)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Type III 24-hr WQV Rainfall=1.00"

Area (sf)	CN	Description
4,000	98	Roofs, HSG B
12,665	98	Paved parking, HSG B
16,665	98	Weighted Average
16,665		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					<b>Direct Entry, direct</b>

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**Summary for Subcatchment DA 1C: DA 1C**

Runoff = 0.00 cfs @ 24.03 hrs, Volume= 0 cf, Depth= 0.00"

Routed to Link TSD : Total Site Discharge

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Type III 24-hr WQV Rainfall=1.00"

Area (sf)	CN	Description
709	98	Paved parking, HSG B
22,996	66	Woods, Poor, HSG B
23,674	67	Brush, Poor, HSG B
47,379	67	Weighted Average
46,670		98.50% Pervious Area
709		1.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					<b>Direct Entry, direct</b>

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**Summary for Subcatchment DA 1D: DA 1D**

Runoff = 0.01 cfs @ 12.14 hrs, Volume= 87 cf, Depth= 0.10"

Routed to Pond RG-B : Rain Garden B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Type III 24-hr WQV Rainfall=1.00"

Area (sf)	CN	Description
4,387	98	Paved parking, HSG B
6,254	69	50-75% Grass cover, Fair, HSG B
10,641	81	Weighted Average
6,254		58.77% Pervious Area
4,387		41.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					<b>Direct Entry, direct</b>

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**Summary for Subcatchment DA 1E: DA 1E**

Runoff = 0.00 cfs @ 24.03 hrs, Volume= 0 cf, Depth= 0.00"

Routed to Link TSD : Total Site Discharge

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Type III 24-hr WQV Rainfall=1.00"

Area (sf)	CN	Description
20,116	66	Woods, Poor, HSG B
9,022	69	50-75% Grass cover, Fair, HSG B
29,138	67	Weighted Average
29,138		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	100	0.2400	0.22		<b>Sheet Flow, Sheetflow</b>
					Woods: Light underbrush n= 0.400 P2= 3.45"
3.0	346	0.0750	1.92		<b>Shallow Concentrated Flow, SHALLOW</b>
					Short Grass Pasture Kv= 7.0 fps
10.7	446	Total			



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**Summary for Pond RG-A: Rain Garden A**

Inflow Area = 16,145 sf, 22.38% Impervious, Inflow Depth = 0.02" for WQV event  
 Inflow = 0.00 cfs @ 14.84 hrs, Volume= 31 cf  
 Outflow = 0.00 cfs @ 14.95 hrs, Volume= 31 cf, Atten= 0%, Lag= 6.3 min  
 Discarded = 0.00 cfs @ 14.95 hrs, Volume= 31 cf  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf  
 Routed to Link TSD : Total Site Discharge

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
 Peak Elev= 183.00' @ 14.95 hrs Surf.Area= 144 sf Storage= 0 cf

Plug-Flow detention time= 6.7 min calculated for 31 cf (100% of inflow)  
 Center-of-Mass det. time= 6.7 min ( 1,069.5 - 1,062.8 )

Volume	Invert	Avail.Storage	Storage Description
#1	183.00'	1,404 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.00	143	0	0
184.00	501	322	322
185.00	1,011	756	1,078
185.30	1,164	326	1,404

Device	Routing	Invert	Outlet Devices
#1	Primary	185.00'	<b>15.0' long x 3.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.41 2.56 2.69 2.67 2.66 2.66 2.65 2.67 2.67 2.70 2.77 2.83 2.87 2.93 3.10 3.19 3.32
#2	Discarded	183.00'	<b>2.400 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.01 cfs @ 14.95 hrs HW=183.00' (Free Discharge)  
 ↑**2=Exfiltration** (Exfiltration Controls 0.01 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=183.00' (Free Discharge)  
 ↑**1=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)

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**Stage-Discharge for Pond RG-A: Rain Garden A**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
183.00	0.00	0.00	0.00	183.52	0.02	0.02	0.00
183.01	0.01	0.01	0.00	183.53	0.02	0.02	0.00
183.02	0.01	0.01	0.00	183.54	0.02	0.02	0.00
183.03	0.01	0.01	0.00	183.55	0.02	0.02	0.00
183.04	0.01	0.01	0.00	183.56	0.02	0.02	0.00
183.05	0.01	0.01	0.00	183.57	0.02	0.02	0.00
183.06	0.01	0.01	0.00	183.58	0.02	0.02	0.00
183.07	0.01	0.01	0.00	183.59	0.02	0.02	0.00
183.08	0.01	0.01	0.00	183.60	0.02	0.02	0.00
183.09	0.01	0.01	0.00	183.61	0.02	0.02	0.00
183.10	0.01	0.01	0.00	183.62	0.02	0.02	0.00
183.11	0.01	0.01	0.00	183.63	0.02	0.02	0.00
183.12	0.01	0.01	0.00	183.64	0.02	0.02	0.00
183.13	0.01	0.01	0.00	183.65	0.02	0.02	0.00
183.14	0.01	0.01	0.00	183.66	0.02	0.02	0.00
183.15	0.01	0.01	0.00	183.67	0.02	0.02	0.00
183.16	0.01	0.01	0.00	183.68	0.02	0.02	0.00
183.17	0.01	0.01	0.00	183.69	0.02	0.02	0.00
183.18	0.01	0.01	0.00	183.70	0.02	0.02	0.00
183.19	0.01	0.01	0.00	183.71	0.02	0.02	0.00
183.20	0.01	0.01	0.00	183.72	0.02	0.02	0.00
183.21	0.01	0.01	0.00	183.73	0.02	0.02	0.00
183.22	0.01	0.01	0.00	183.74	0.02	0.02	0.00
183.23	0.01	0.01	0.00	183.75	0.02	0.02	0.00
183.24	0.01	0.01	0.00	183.76	0.02	0.02	0.00
183.25	0.01	0.01	0.00	183.77	0.02	0.02	0.00
183.26	0.01	0.01	0.00	183.78	0.02	0.02	0.00
183.27	0.01	0.01	0.00	183.79	0.02	0.02	0.00
183.28	0.01	0.01	0.00	183.80	0.02	0.02	0.00
183.29	0.01	0.01	0.00	183.81	0.02	0.02	0.00
183.30	0.01	0.01	0.00	183.82	0.02	0.02	0.00
183.31	0.01	0.01	0.00	183.83	0.02	0.02	0.00
183.32	0.01	0.01	0.00	183.84	0.02	0.02	0.00
183.33	0.01	0.01	0.00	183.85	0.02	0.02	0.00
183.34	0.01	0.01	0.00	183.86	0.03	0.03	0.00
183.35	0.01	0.01	0.00	183.87	0.03	0.03	0.00
183.36	0.02	0.02	0.00	183.88	0.03	0.03	0.00
183.37	0.02	0.02	0.00	183.89	0.03	0.03	0.00
183.38	0.02	0.02	0.00	183.90	0.03	0.03	0.00
183.39	0.02	0.02	0.00	183.91	0.03	0.03	0.00
183.40	0.02	0.02	0.00	183.92	0.03	0.03	0.00
183.41	0.02	0.02	0.00	183.93	0.03	0.03	0.00
183.42	0.02	0.02	0.00	183.94	0.03	0.03	0.00
183.43	0.02	0.02	0.00	183.95	0.03	0.03	0.00
183.44	0.02	0.02	0.00	183.96	0.03	0.03	0.00
183.45	0.02	0.02	0.00	183.97	0.03	0.03	0.00
183.46	0.02	0.02	0.00	183.98	0.03	0.03	0.00
183.47	0.02	0.02	0.00	183.99	0.03	0.03	0.00
183.48	0.02	0.02	0.00	184.00	0.03	0.03	0.00
183.49	0.02	0.02	0.00	184.01	0.03	0.03	0.00
183.50	0.02	0.02	0.00	184.02	0.03	0.03	0.00
183.51	0.02	0.02	0.00	184.03	0.03	0.03	0.00

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**Stage-Discharge for Pond RG-A: Rain Garden A (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
184.04	0.03	0.03	0.00	184.56	0.04	0.04	0.00
184.05	0.03	0.03	0.00	184.57	0.04	0.04	0.00
184.06	0.03	0.03	0.00	184.58	0.04	0.04	0.00
184.07	0.03	0.03	0.00	184.59	0.04	0.04	0.00
184.08	0.03	0.03	0.00	184.60	0.04	0.04	0.00
184.09	0.03	0.03	0.00	184.61	0.05	0.05	0.00
184.10	0.03	0.03	0.00	184.62	0.05	0.05	0.00
184.11	0.03	0.03	0.00	184.63	0.05	0.05	0.00
184.12	0.03	0.03	0.00	184.64	0.05	0.05	0.00
184.13	0.03	0.03	0.00	184.65	0.05	0.05	0.00
184.14	0.03	0.03	0.00	184.66	0.05	0.05	0.00
184.15	0.03	0.03	0.00	184.67	0.05	0.05	0.00
184.16	0.03	0.03	0.00	184.68	0.05	0.05	0.00
184.17	0.03	0.03	0.00	184.69	0.05	0.05	0.00
184.18	0.03	0.03	0.00	184.70	0.05	0.05	0.00
184.19	0.03	0.03	0.00	184.71	0.05	0.05	0.00
184.20	0.03	0.03	0.00	184.72	0.05	0.05	0.00
184.21	0.03	0.03	0.00	184.73	0.05	0.05	0.00
184.22	0.03	0.03	0.00	184.74	0.05	0.05	0.00
184.23	0.03	0.03	0.00	184.75	0.05	0.05	0.00
184.24	0.03	0.03	0.00	184.76	0.05	0.05	0.00
184.25	0.03	0.03	0.00	184.77	0.05	0.05	0.00
184.26	0.04	0.04	0.00	184.78	0.05	0.05	0.00
184.27	0.04	0.04	0.00	184.79	0.05	0.05	0.00
184.28	0.04	0.04	0.00	184.80	0.05	0.05	0.00
184.29	0.04	0.04	0.00	184.81	0.05	0.05	0.00
184.30	0.04	0.04	0.00	184.82	0.05	0.05	0.00
184.31	0.04	0.04	0.00	184.83	0.05	0.05	0.00
184.32	0.04	0.04	0.00	184.84	0.05	0.05	0.00
184.33	0.04	0.04	0.00	184.85	0.05	0.05	0.00
184.34	0.04	0.04	0.00	184.86	0.05	0.05	0.00
184.35	0.04	0.04	0.00	184.87	0.05	0.05	0.00
184.36	0.04	0.04	0.00	184.88	0.05	0.05	0.00
184.37	0.04	0.04	0.00	184.89	0.05	0.05	0.00
184.38	0.04	0.04	0.00	184.90	0.05	0.05	0.00
184.39	0.04	0.04	0.00	184.91	0.05	0.05	0.00
184.40	0.04	0.04	0.00	184.92	0.05	0.05	0.00
184.41	0.04	0.04	0.00	184.93	0.05	0.05	0.00
184.42	0.04	0.04	0.00	184.94	0.05	0.05	0.00
184.43	0.04	0.04	0.00	184.95	0.05	0.05	0.00
184.44	0.04	0.04	0.00	184.96	0.06	0.06	0.00
184.45	0.04	0.04	0.00	184.97	0.06	0.06	0.00
184.46	0.04	0.04	0.00	184.98	0.06	0.06	0.00
184.47	0.04	0.04	0.00	184.99	0.06	0.06	0.00
184.48	0.04	0.04	0.00	185.00	0.06	0.06	0.00
184.49	0.04	0.04	0.00	185.01	0.09	0.06	0.04
184.50	0.04	0.04	0.00	185.02	0.16	0.06	0.10
184.51	0.04	0.04	0.00	185.03	0.24	0.06	0.19
184.52	0.04	0.04	0.00	185.04	0.35	0.06	0.29
184.53	0.04	0.04	0.00	185.05	0.46	0.06	0.40
184.54	0.04	0.04	0.00	185.06	0.59	0.06	0.53
184.55	0.04	0.04	0.00	185.07	0.73	0.06	0.67

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**Stage-Discharge for Pond RG-A: Rain Garden A (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
185.08	0.88	0.06	0.82
185.09	1.03	0.06	0.98
185.10	1.20	0.06	1.14
185.11	1.38	0.06	1.32
185.12	1.56	0.06	1.50
185.13	1.75	0.06	1.69
185.14	1.95	0.06	1.89
185.15	2.16	0.06	2.10
185.16	2.37	0.06	2.31
185.17	2.59	0.06	2.53
185.18	2.82	0.06	2.76
185.19	3.06	0.06	2.99
185.20	3.30	0.06	3.23
185.21	3.55	0.06	3.49
185.22	3.82	0.06	3.75
185.23	4.09	0.06	4.02
185.24	4.37	0.06	4.30
185.25	4.65	0.06	4.59
185.26	4.95	0.06	4.88
185.27	5.25	0.06	5.18
185.28	5.55	0.06	5.49
185.29	5.87	0.06	5.80
185.30	<b>6.19</b>	<b>0.06</b>	<b>6.12</b>

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**Stage-Area-Storage for Pond RG-A: Rain Garden A**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.00	143	0	183.52	329	123
183.01	147	1	183.53	333	126
183.02	150	3	183.54	336	129
183.03	154	4	183.55	340	133
183.04	157	6	183.56	343	136
183.05	161	8	183.57	347	140
183.06	164	9	183.58	351	143
183.07	168	11	183.59	354	147
183.08	172	13	183.60	358	150
183.09	175	14	183.61	361	154
183.10	179	16	183.62	365	157
183.11	182	18	183.63	369	161
183.12	186	20	183.64	372	165
183.13	190	22	183.65	376	169
183.14	193	24	183.66	379	172
183.15	197	25	183.67	383	176
183.16	200	27	183.68	386	180
183.17	204	29	183.69	390	184
183.18	207	32	183.70	394	188
183.19	211	34	183.71	397	192
183.20	215	36	183.72	401	196
183.21	218	38	183.73	404	200
183.22	222	40	183.74	408	204
183.23	225	42	183.75	412	208
183.24	229	45	183.76	415	212
183.25	233	47	183.77	419	216
183.26	236	49	183.78	422	220
183.27	240	52	183.79	426	225
183.28	243	54	183.80	429	229
183.29	247	57	183.81	433	233
183.30	250	59	183.82	437	238
183.31	254	62	183.83	440	242
183.32	258	64	183.84	444	246
183.33	261	67	183.85	447	251
183.34	265	69	183.86	451	255
183.35	268	72	183.87	454	260
183.36	272	75	183.88	458	264
183.37	275	77	183.89	462	269
183.38	279	80	183.90	465	274
183.39	283	83	183.91	469	278
183.40	286	86	183.92	472	283
183.41	290	89	183.93	476	288
183.42	293	92	183.94	480	293
183.43	297	95	183.95	483	297
183.44	301	98	183.96	487	302
183.45	304	101	183.97	490	307
183.46	308	104	183.98	494	312
183.47	311	107	183.99	497	317
183.48	315	110	184.00	501	322
183.49	318	113	184.01	506	327
183.50	322	116	184.02	511	332
183.51	326	119	184.03	516	337

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**Stage-Area-Storage for Pond RG-A: Rain Garden A (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.04	521	342	184.56	787	683
184.05	527	348	184.57	792	690
184.06	532	353	184.58	797	698
184.07	537	358	184.59	802	706
184.08	542	364	184.60	807	714
184.09	547	369	184.61	812	722
184.10	552	375	184.62	817	731
184.11	557	380	184.63	822	739
184.12	562	386	184.64	827	747
184.13	567	391	184.65	833	755
184.14	572	397	184.66	838	764
184.15	578	403	184.67	843	772
184.16	583	409	184.68	848	781
184.17	588	415	184.69	853	789
184.18	593	420	184.70	858	798
184.19	598	426	184.71	863	806
184.20	603	432	184.72	868	815
184.21	608	438	184.73	873	824
184.22	613	445	184.74	878	832
184.23	618	451	184.75	884	841
184.24	623	457	184.76	889	850
184.25	629	463	184.77	894	859
184.26	634	469	184.78	899	868
184.27	639	476	184.79	904	877
184.28	644	482	184.80	909	886
184.29	649	489	184.81	914	895
184.30	654	495	184.82	919	904
184.31	659	502	184.83	924	913
184.32	664	508	184.84	929	923
184.33	669	515	184.85	934	932
184.34	674	522	184.86	940	941
184.35	679	529	184.87	945	951
184.36	685	535	184.88	950	960
184.37	690	542	184.89	955	970
184.38	695	549	184.90	960	979
184.39	700	556	184.91	965	989
184.40	705	563	184.92	970	999
184.41	710	570	184.93	975	1,008
184.42	715	577	184.94	980	1,018
184.43	720	585	184.95	985	1,028
184.44	725	592	184.96	991	1,038
184.45	730	599	184.97	996	1,048
184.46	736	606	184.98	1,001	1,058
184.47	741	614	184.99	1,006	1,068
184.48	746	621	185.00	1,011	1,078
184.49	751	629	185.01	1,016	1,088
184.50	756	636	185.02	1,021	1,098
184.51	761	644	185.03	1,026	1,109
184.52	766	651	185.04	1,031	1,119
184.53	771	659	185.05	1,037	1,129
184.54	776	667	185.06	1,042	1,140
184.55	782	675	185.07	1,047	1,150

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**Stage-Area-Storage for Pond RG-A: Rain Garden A (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.08	1,052	1,161
185.09	1,057	1,171
185.10	1,062	1,182
185.11	1,067	1,192
185.12	1,072	1,203
185.13	1,077	1,214
185.14	1,082	1,225
185.15	1,088	1,235
185.16	1,093	1,246
185.17	1,098	1,257
185.18	1,103	1,268
185.19	1,108	1,279
185.20	1,113	1,290
185.21	1,118	1,302
185.22	1,123	1,313
185.23	1,128	1,324
185.24	1,133	1,335
185.25	1,138	1,347
185.26	1,144	1,358
185.27	1,149	1,370
185.28	1,154	1,381
185.29	1,159	1,393
185.30	<b>1,164</b>	<b>1,404</b>

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**Summary for Pond RG-B: Rain Garden B**

Inflow Area = 10,641 sf, 41.23% Impervious, Inflow Depth = 0.10" for WQV event  
 Inflow = 0.01 cfs @ 12.14 hrs, Volume= 87 cf  
 Outflow = 0.01 cfs @ 12.38 hrs, Volume= 87 cf, Atten= 11%, Lag= 14.3 min  
 Discarded = 0.01 cfs @ 12.38 hrs, Volume= 87 cf  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routed to Link TSD : Total Site Discharge

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
 Peak Elev= 156.01' @ 12.38 hrs Surf.Area= 440 sf Storage= 4 cf

Plug-Flow detention time= 6.8 min calculated for 87 cf (100% of inflow)  
 Center-of-Mass det. time= 6.9 min ( 944.8 - 937.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	156.00'	1,767 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
156.00	437	0	0
157.00	704	571	571
158.00	1,037	871	1,441
158.30	1,135	326	1,767

Device	Routing	Invert	Outlet Devices
#1	Primary	158.00'	<b>15.0' long x 4.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32
#2	Discarded	156.00'	<b>2.400 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.02 cfs @ 12.38 hrs HW=156.01' (Free Discharge)  
 ↑**2=Exfiltration** (Exfiltration Controls 0.02 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=156.00' (Free Discharge)  
 ↑**1=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)



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**Stage-Discharge for Pond RG-B: Rain Garden B**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
156.00	0.00	0.00	0.00	156.52	0.03	0.03	0.00
156.01	0.02	0.02	0.00	156.53	0.03	0.03	0.00
156.02	0.02	0.02	0.00	156.54	0.03	0.03	0.00
156.03	0.02	0.02	0.00	156.55	0.03	0.03	0.00
156.04	0.02	0.02	0.00	156.56	0.03	0.03	0.00
156.05	0.03	0.03	0.00	156.57	0.03	0.03	0.00
156.06	0.03	0.03	0.00	156.58	0.03	0.03	0.00
156.07	0.03	0.03	0.00	156.59	0.03	0.03	0.00
156.08	0.03	0.03	0.00	156.60	0.03	0.03	0.00
156.09	0.03	0.03	0.00	156.61	0.03	0.03	0.00
156.10	0.03	0.03	0.00	156.62	0.03	0.03	0.00
156.11	0.03	0.03	0.00	156.63	0.03	0.03	0.00
156.12	0.03	0.03	0.00	156.64	0.03	0.03	0.00
156.13	0.03	0.03	0.00	156.65	0.03	0.03	0.00
156.14	0.03	0.03	0.00	156.66	0.03	0.03	0.00
156.15	0.03	0.03	0.00	156.67	0.03	0.03	0.00
156.16	0.03	0.03	0.00	156.68	0.03	0.03	0.00
156.17	0.03	0.03	0.00	156.69	0.03	0.03	0.00
156.18	0.03	0.03	0.00	156.70	0.03	0.03	0.00
156.19	0.03	0.03	0.00	156.71	0.03	0.03	0.00
156.20	0.03	0.03	0.00	156.72	0.03	0.03	0.00
156.21	0.03	0.03	0.00	156.73	0.04	0.04	0.00
156.22	0.03	0.03	0.00	156.74	0.04	0.04	0.00
156.23	0.03	0.03	0.00	156.75	0.04	0.04	0.00
156.24	0.03	0.03	0.00	156.76	0.04	0.04	0.00
156.25	0.03	0.03	0.00	156.77	0.04	0.04	0.00
156.26	0.03	0.03	0.00	156.78	0.04	0.04	0.00
156.27	0.03	0.03	0.00	156.79	0.04	0.04	0.00
156.28	0.03	0.03	0.00	156.80	0.04	0.04	0.00
156.29	0.03	0.03	0.00	156.81	0.04	0.04	0.00
156.30	0.03	0.03	0.00	156.82	0.04	0.04	0.00
156.31	0.03	0.03	0.00	156.83	0.04	0.04	0.00
156.32	0.03	0.03	0.00	156.84	0.04	0.04	0.00
156.33	0.03	0.03	0.00	156.85	0.04	0.04	0.00
156.34	0.03	0.03	0.00	156.86	0.04	0.04	0.00
156.35	0.03	0.03	0.00	156.87	0.04	0.04	0.00
156.36	0.03	0.03	0.00	156.88	0.04	0.04	0.00
156.37	0.03	0.03	0.00	156.89	0.04	0.04	0.00
156.38	0.03	0.03	0.00	156.90	0.04	0.04	0.00
156.39	0.03	0.03	0.00	156.91	0.04	0.04	0.00
156.40	0.03	0.03	0.00	156.92	0.04	0.04	0.00
156.41	0.03	0.03	0.00	156.93	0.04	0.04	0.00
156.42	0.03	0.03	0.00	156.94	0.04	0.04	0.00
156.43	0.03	0.03	0.00	156.95	0.04	0.04	0.00
156.44	0.03	0.03	0.00	156.96	0.04	0.04	0.00
156.45	0.03	0.03	0.00	156.97	0.04	0.04	0.00
156.46	0.03	0.03	0.00	156.98	0.04	0.04	0.00
156.47	0.03	0.03	0.00	156.99	0.04	0.04	0.00
156.48	0.03	0.03	0.00	157.00	0.04	0.04	0.00
156.49	0.03	0.03	0.00	157.01	0.04	0.04	0.00
156.50	0.03	0.03	0.00	157.02	0.04	0.04	0.00
156.51	0.03	0.03	0.00	157.03	0.04	0.04	0.00

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**Stage-Discharge for Pond RG-B: Rain Garden B (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
157.04	0.04	0.04	0.00	157.56	0.05	0.05	0.00
157.05	0.04	0.04	0.00	157.57	0.05	0.05	0.00
157.06	0.04	0.04	0.00	157.58	0.05	0.05	0.00
157.07	0.04	0.04	0.00	157.59	0.05	0.05	0.00
157.08	0.04	0.04	0.00	157.60	0.05	0.05	0.00
157.09	0.04	0.04	0.00	157.61	0.05	0.05	0.00
157.10	0.04	0.04	0.00	157.62	0.05	0.05	0.00
157.11	0.04	0.04	0.00	157.63	0.05	0.05	0.00
157.12	0.04	0.04	0.00	157.64	0.05	0.05	0.00
157.13	0.04	0.04	0.00	157.65	0.05	0.05	0.00
157.14	0.04	0.04	0.00	157.66	0.05	0.05	0.00
157.15	0.04	0.04	0.00	157.67	0.05	0.05	0.00
157.16	0.04	0.04	0.00	157.68	0.05	0.05	0.00
157.17	0.04	0.04	0.00	157.69	0.05	0.05	0.00
157.18	0.04	0.04	0.00	157.70	0.05	0.05	0.00
157.19	0.04	0.04	0.00	157.71	0.05	0.05	0.00
157.20	0.04	0.04	0.00	157.72	0.05	0.05	0.00
157.21	0.04	0.04	0.00	157.73	0.05	0.05	0.00
157.22	0.04	0.04	0.00	157.74	0.05	0.05	0.00
157.23	0.04	0.04	0.00	157.75	0.05	0.05	0.00
157.24	0.04	0.04	0.00	157.76	0.05	0.05	0.00
157.25	0.04	0.04	0.00	157.77	0.05	0.05	0.00
157.26	0.04	0.04	0.00	157.78	0.05	0.05	0.00
157.27	0.04	0.04	0.00	157.79	0.05	0.05	0.00
157.28	0.04	0.04	0.00	157.80	0.05	0.05	0.00
157.29	0.04	0.04	0.00	157.81	0.05	0.05	0.00
157.30	0.04	0.04	0.00	157.82	0.05	0.05	0.00
157.31	0.04	0.04	0.00	157.83	0.05	0.05	0.00
157.32	0.05	0.05	0.00	157.84	0.05	0.05	0.00
157.33	0.05	0.05	0.00	157.85	0.05	0.05	0.00
157.34	0.05	0.05	0.00	157.86	0.06	0.06	0.00
157.35	0.05	0.05	0.00	157.87	0.06	0.06	0.00
157.36	0.05	0.05	0.00	157.88	0.06	0.06	0.00
157.37	0.05	0.05	0.00	157.89	0.06	0.06	0.00
157.38	0.05	0.05	0.00	157.90	0.06	0.06	0.00
157.39	0.05	0.05	0.00	157.91	0.06	0.06	0.00
157.40	0.05	0.05	0.00	157.92	0.06	0.06	0.00
157.41	0.05	0.05	0.00	157.93	0.06	0.06	0.00
157.42	0.05	0.05	0.00	157.94	0.06	0.06	0.00
157.43	0.05	0.05	0.00	157.95	0.06	0.06	0.00
157.44	0.05	0.05	0.00	157.96	0.06	0.06	0.00
157.45	0.05	0.05	0.00	157.97	0.06	0.06	0.00
157.46	0.05	0.05	0.00	157.98	0.06	0.06	0.00
157.47	0.05	0.05	0.00	157.99	0.06	0.06	0.00
157.48	0.05	0.05	0.00	158.00	0.06	0.06	0.00
157.49	0.05	0.05	0.00	158.01	0.09	0.06	0.04
157.50	0.05	0.05	0.00	158.02	0.16	0.06	0.10
157.51	0.05	0.05	0.00	158.03	0.24	0.06	0.19
157.52	0.05	0.05	0.00	158.04	0.34	0.06	0.29
157.53	0.05	0.05	0.00	158.05	0.46	0.06	0.40
157.54	0.05	0.05	0.00	158.06	0.58	0.06	0.52
157.55	0.05	0.05	0.00	158.07	0.72	0.06	0.66

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**Stage-Discharge for Pond RG-B: Rain Garden B (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
158.08	0.87	0.06	0.81
158.09	1.02	0.06	0.96
158.10	1.19	0.06	1.13
158.11	1.36	0.06	1.30
158.12	1.54	0.06	1.48
158.13	1.73	0.06	1.67
158.14	1.93	0.06	1.87
158.15	2.13	0.06	2.07
158.16	2.35	0.06	2.28
158.17	2.56	0.06	2.50
158.18	2.79	0.06	2.73
158.19	3.02	0.06	2.96
158.20	3.25	0.06	3.19
158.21	3.51	0.06	3.45
158.22	3.77	0.06	3.71
158.23	4.04	0.06	3.98
158.24	4.32	0.06	4.25
158.25	4.60	0.06	4.54
158.26	4.89	0.06	4.83
158.27	5.19	0.06	5.13
158.28	5.49	0.06	5.43
158.29	5.81	0.06	5.74
158.30	<b>6.13</b>	<b>0.06</b>	<b>6.06</b>

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**Stage-Area-Storage for Pond RG-B: Rain Garden B**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
156.00	437	0	156.52	576	263
156.01	440	4	156.53	579	269
156.02	442	9	156.54	581	275
156.03	445	13	156.55	584	281
156.04	448	18	156.56	587	287
156.05	450	22	156.57	589	292
156.06	453	27	156.58	592	298
156.07	456	31	156.59	595	304
156.08	458	36	156.60	597	310
156.09	461	40	156.61	600	316
156.10	464	45	156.62	603	322
156.11	466	50	156.63	605	328
156.12	469	54	156.64	608	334
156.13	472	59	156.65	611	340
156.14	474	64	156.66	613	347
156.15	477	69	156.67	616	353
156.16	480	73	156.68	619	359
156.17	482	78	156.69	621	365
156.18	485	83	156.70	624	371
156.19	488	88	156.71	627	378
156.20	490	93	156.72	629	384
156.21	493	98	156.73	632	390
156.22	496	103	156.74	635	396
156.23	498	108	156.75	637	403
156.24	501	113	156.76	640	409
156.25	504	118	156.77	643	416
156.26	506	123	156.78	645	422
156.27	509	128	156.79	648	429
156.28	512	133	156.80	651	435
156.29	514	138	156.81	653	442
156.30	517	143	156.82	656	448
156.31	520	148	156.83	659	455
156.32	522	154	156.84	661	461
156.33	525	159	156.85	664	468
156.34	528	164	156.86	667	475
156.35	530	169	156.87	669	481
156.36	533	175	156.88	672	488
156.37	536	180	156.89	675	495
156.38	538	185	156.90	677	501
156.39	541	191	156.91	680	508
156.40	544	196	156.92	683	515
156.41	546	202	156.93	685	522
156.42	549	207	156.94	688	529
156.43	552	213	156.95	691	536
156.44	554	218	156.96	693	543
156.45	557	224	156.97	696	550
156.46	560	229	156.98	699	556
156.47	562	235	156.99	701	563
156.48	565	241	157.00	704	571
156.49	568	246	157.01	707	578
156.50	571	252	157.02	711	585
156.51	573	258	157.03	714	592

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**Stage-Area-Storage for Pond RG-B: Rain Garden B (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
157.04	717	599	157.56	890	1,017
157.05	721	606	157.57	894	1,026
157.06	724	613	157.58	897	1,035
157.07	727	621	157.59	900	1,044
157.08	731	628	157.60	904	1,053
157.09	734	635	157.61	907	1,062
157.10	737	643	157.62	910	1,071
157.11	741	650	157.63	914	1,080
157.12	744	657	157.64	917	1,089
157.13	747	665	157.65	920	1,098
157.14	751	672	157.66	924	1,108
157.15	754	680	157.67	927	1,117
157.16	757	687	157.68	930	1,126
157.17	761	695	157.69	934	1,136
157.18	764	703	157.70	937	1,145
157.19	767	710	157.71	940	1,154
157.20	771	718	157.72	944	1,164
157.21	774	726	157.73	947	1,173
157.22	777	733	157.74	950	1,183
157.23	781	741	157.75	954	1,192
157.24	784	749	157.76	957	1,202
157.25	787	757	157.77	960	1,211
157.26	791	765	157.78	964	1,221
157.27	794	773	157.79	967	1,231
157.28	797	781	157.80	970	1,240
157.29	801	789	157.81	974	1,250
157.30	804	797	157.82	977	1,260
157.31	807	805	157.83	980	1,270
157.32	811	813	157.84	984	1,279
157.33	814	821	157.85	987	1,289
157.34	817	829	157.86	990	1,299
157.35	821	837	157.87	994	1,309
157.36	824	846	157.88	997	1,319
157.37	827	854	157.89	1,000	1,329
157.38	831	862	157.90	1,004	1,339
157.39	834	870	157.91	1,007	1,349
157.40	837	879	157.92	1,010	1,359
157.41	841	887	157.93	1,014	1,369
157.42	844	896	157.94	1,017	1,379
157.43	847	904	157.95	1,020	1,390
157.44	851	912	157.96	1,024	1,400
157.45	854	921	157.97	1,027	1,410
157.46	857	930	157.98	1,030	1,420
157.47	861	938	157.99	1,034	1,431
157.48	864	947	158.00	1,037	1,441
157.49	867	955	158.01	1,040	1,451
157.50	871	964	158.02	1,044	1,462
157.51	874	973	158.03	1,047	1,472
157.52	877	982	158.04	1,050	1,483
157.53	880	990	158.05	1,053	1,493
157.54	884	999	158.06	1,057	1,504
157.55	887	1,008	158.07	1,060	1,514

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**Stage-Area-Storage for Pond RG-B: Rain Garden B (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
158.08	1,063	1,525
158.09	1,066	1,536
158.10	1,070	1,546
158.11	1,073	1,557
158.12	1,076	1,568
158.13	1,079	1,579
158.14	1,083	1,589
158.15	1,086	1,600
158.16	1,089	1,611
158.17	1,093	1,622
158.18	1,096	1,633
158.19	1,099	1,644
158.20	1,102	1,655
158.21	1,106	1,666
158.22	1,109	1,677
158.23	1,112	1,688
158.24	1,115	1,699
158.25	1,119	1,710
158.26	1,122	1,722
158.27	1,125	1,733
158.28	1,128	1,744
158.29	1,132	1,755
158.30	<b>1,135</b>	<b>1,767</b>

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**Summary for Pond SWB: Stormtech MC 3500 (SWM-B)**

Inflow Area = 16,665 sf, 100.00% Impervious, Inflow Depth = 0.79" for WQV event  
 Inflow = 0.35 cfs @ 12.07 hrs, Volume= 1,098 cf  
 Outflow = 0.10 cfs @ 11.90 hrs, Volume= 1,098 cf, Atten= 73%, Lag= 0.0 min  
 Discarded = 0.10 cfs @ 11.90 hrs, Volume= 1,098 cf  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf  
 Routed to Link TSD : Total Site Discharge

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
 Peak Elev= 175.97' @ 12.41 hrs Surf.Area= 1,738 sf Storage= 224 cf

Plug-Flow detention time= 15.1 min calculated for 1,098 cf (100% of inflow)  
 Center-of-Mass det. time= 15.1 min ( 802.0 - 786.9 )

Volume	Invert	Avail.Storage	Storage Description
#1A	175.65'	2,580 cf	<b>8.42'W x 206.46'L x 5.50'H Field A</b> 9,557 cf Overall - 3,108 cf Embedded = 6,449 cf x 40.0% Voids
#2A	176.40'	3,108 cf	<b>ADS_StormTech MC-3500 d +Cap</b> x 28 Inside #1 Effective Size= 70.4"W x 45.0"H => 15.33 sf x 7.17'L = 110.0 cf Overall Size= 77.0"W x 45.0"H x 7.50'L with 0.33' Overlap Cap Storage= 14.9 cf x 2 x 1 rows = 29.8 cf
		5,688 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	175.65'	<b>15.0" Round Outlet Pipe</b> L= 45.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 175.65' / 166.00' S= 0.2144 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf
#2	Device 1	179.00'	<b>6.0" Vert. Low Flow Orifice</b> C= 0.600 Limited to weir flow at low heads
#3	Device 1	180.25'	<b>4.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#4	Discarded	175.65'	<b>2.400 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.10 cfs @ 11.90 hrs HW=175.71' (Free Discharge)  
 ↳ **4=Exfiltration** (Exfiltration Controls 0.10 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=175.65' (Free Discharge)  
 ↳ **1=Outlet Pipe** ( Controls 0.00 cfs)  
 ↳ ↳ **2=Low Flow Orifice** ( Controls 0.00 cfs)  
 ↳ ↳ ↳ **3=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)

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**Pond SWB: Stormtech MC 3500 (SWM-B) - Chamber Wizard Field A**

**Chamber Model = ADS\_StormTech MC-3500 d +Cap (ADS StormTech® MC-3500 d rev 03/14 with Cap volume)**

Effective Size= 70.4"W x 45.0"H => 15.33 sf x 7.17'L = 110.0 cf

Overall Size= 77.0"W x 45.0"H x 7.50'L with 0.33' Overlap

Cap Storage= 14.9 cf x 2 x 1 rows = 29.8 cf

28 Chambers/Row x 7.17' Long +1.85' Cap Length x 2 = 204.46' Row Length +12.0" End Stone x 2 = 206.46' Base Length

1 Rows x 77.0" Wide + 12.0" Side Stone x 2 = 8.42' Base Width

9.0" Stone Base + 45.0" Chamber Height + 12.0" Stone Cover = 5.50' Field Height

28 Chambers x 110.0 cf + 14.9 cf Cap Volume x 2 x 1 Rows = 3,108.5 cf Chamber Storage

9,557.4 cf Field - 3,108.5 cf Chambers = 6,448.9 cf Stone x 40.0% Voids = 2,579.6 cf Stone Storage

Chamber Storage + Stone Storage = 5,688.0 cf = 0.131 af

Overall Storage Efficiency = 59.5%

Overall System Size = 206.46' x 8.42' x 5.50'

28 Chambers

354.0 cy Field

238.8 cy Stone





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Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B)

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
175.65	0.00	0.00	0.00	176.17	0.10	0.10	0.00
175.66	0.10	<b>0.10</b>	0.00	176.18	0.10	0.10	0.00
175.67	0.10	0.10	0.00	176.19	0.10	0.10	0.00
175.68	0.10	0.10	0.00	176.20	0.10	0.10	0.00
175.69	0.10	0.10	0.00	176.21	0.10	0.10	0.00
175.70	0.10	0.10	0.00	176.22	0.10	0.10	0.00
175.71	0.10	0.10	0.00	176.23	0.10	0.10	0.00
175.72	0.10	0.10	0.00	176.24	0.10	0.10	0.00
175.73	0.10	0.10	0.00	176.25	0.10	0.10	0.00
175.74	0.10	0.10	0.00	176.26	0.10	0.10	0.00
175.75	0.10	0.10	0.00	176.27	0.10	0.10	0.00
175.76	0.10	0.10	0.00	176.28	0.10	0.10	0.00
175.77	0.10	0.10	0.00	176.29	0.10	0.10	0.00
175.78	0.10	0.10	0.00	176.30	0.10	0.10	0.00
175.79	0.10	0.10	0.00	176.31	0.10	0.10	0.00
175.80	0.10	0.10	0.00	176.32	0.10	0.10	0.00
175.81	0.10	0.10	0.00	176.33	0.10	0.10	0.00
175.82	0.10	0.10	0.00	176.34	0.10	0.10	0.00
175.83	0.10	0.10	0.00	176.35	0.10	0.10	0.00
175.84	0.10	0.10	0.00	176.36	0.10	0.10	0.00
175.85	0.10	0.10	0.00	176.37	0.10	0.10	0.00
175.86	0.10	0.10	0.00	176.38	0.10	0.10	0.00
175.87	0.10	0.10	0.00	176.39	0.10	0.10	0.00
175.88	0.10	0.10	0.00	176.40	0.10	0.10	0.00
175.89	0.10	0.10	0.00	176.41	0.10	0.10	0.00
175.90	0.10	0.10	0.00	176.42	0.10	0.10	0.00
175.91	0.10	0.10	0.00	176.43	0.10	0.10	0.00
175.92	0.10	0.10	0.00	176.44	0.10	0.10	0.00
175.93	0.10	0.10	0.00	176.45	0.10	0.10	0.00
175.94	0.10	0.10	0.00	176.46	0.10	0.10	0.00
175.95	0.10	0.10	0.00	176.47	0.10	0.10	0.00
175.96	0.10	0.10	0.00	176.48	0.10	0.10	0.00
175.97	0.10	0.10	0.00	176.49	0.10	0.10	0.00
175.98	0.10	0.10	0.00	176.50	0.10	0.10	0.00
175.99	0.10	0.10	0.00	176.51	0.10	0.10	0.00
176.00	0.10	0.10	0.00	176.52	0.10	0.10	0.00
176.01	0.10	0.10	0.00	176.53	0.10	0.10	0.00
176.02	0.10	0.10	0.00	176.54	0.10	0.10	0.00
176.03	0.10	0.10	0.00	176.55	0.10	0.10	0.00
176.04	0.10	0.10	0.00	176.56	0.10	0.10	0.00
176.05	0.10	0.10	0.00	176.57	0.10	0.10	0.00
176.06	0.10	0.10	0.00	176.58	0.10	0.10	0.00
176.07	0.10	0.10	0.00	176.59	0.10	0.10	0.00
176.08	0.10	0.10	0.00	176.60	0.10	0.10	0.00
176.09	0.10	0.10	0.00	176.61	0.10	0.10	0.00
176.10	0.10	0.10	0.00	176.62	0.10	0.10	0.00
176.11	0.10	0.10	0.00	176.63	0.10	0.10	0.00
176.12	0.10	0.10	0.00	176.64	0.10	0.10	0.00
176.13	0.10	0.10	0.00	176.65	0.10	0.10	0.00
176.14	0.10	0.10	0.00	176.66	0.10	0.10	0.00
176.15	0.10	0.10	0.00	176.67	0.10	0.10	0.00
176.16	0.10	0.10	0.00	176.68	0.10	0.10	0.00

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Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
176.69	0.10	0.10	0.00	177.21	0.10	0.10	0.00
176.70	0.10	0.10	0.00	177.22	0.10	0.10	0.00
176.71	0.10	0.10	0.00	177.23	0.10	0.10	0.00
176.72	0.10	0.10	0.00	177.24	0.10	0.10	0.00
176.73	0.10	0.10	0.00	177.25	0.10	0.10	0.00
176.74	0.10	0.10	0.00	177.26	0.10	0.10	0.00
176.75	0.10	0.10	0.00	177.27	0.10	0.10	0.00
176.76	0.10	0.10	0.00	177.28	0.10	0.10	0.00
176.77	0.10	0.10	0.00	177.29	0.10	0.10	0.00
176.78	0.10	0.10	0.00	177.30	0.10	0.10	0.00
176.79	0.10	0.10	0.00	177.31	0.10	0.10	0.00
176.80	0.10	0.10	0.00	177.32	0.10	0.10	0.00
176.81	0.10	0.10	0.00	177.33	0.10	0.10	0.00
176.82	0.10	0.10	0.00	177.34	0.10	0.10	0.00
176.83	0.10	0.10	0.00	177.35	0.10	0.10	0.00
176.84	0.10	0.10	0.00	177.36	0.10	0.10	0.00
176.85	0.10	0.10	0.00	177.37	0.10	0.10	0.00
176.86	0.10	0.10	0.00	177.38	0.10	0.10	0.00
176.87	0.10	0.10	0.00	177.39	0.10	0.10	0.00
176.88	0.10	0.10	0.00	177.40	0.10	0.10	0.00
176.89	0.10	0.10	0.00	177.41	0.10	0.10	0.00
176.90	0.10	0.10	0.00	177.42	0.10	0.10	0.00
176.91	0.10	0.10	0.00	177.43	0.10	0.10	0.00
176.92	0.10	0.10	0.00	177.44	0.10	0.10	0.00
176.93	0.10	0.10	0.00	177.45	0.10	0.10	0.00
176.94	0.10	0.10	0.00	177.46	0.10	0.10	0.00
176.95	0.10	0.10	0.00	177.47	0.10	0.10	0.00
176.96	0.10	0.10	0.00	177.48	0.10	0.10	0.00
176.97	0.10	0.10	0.00	177.49	0.10	0.10	0.00
176.98	0.10	0.10	0.00	177.50	0.10	0.10	0.00
176.99	0.10	0.10	0.00	177.51	0.10	0.10	0.00
177.00	0.10	0.10	0.00	177.52	0.10	0.10	0.00
177.01	0.10	0.10	0.00	177.53	0.10	0.10	0.00
177.02	0.10	0.10	0.00	177.54	0.10	0.10	0.00
177.03	0.10	0.10	0.00	177.55	0.10	0.10	0.00
177.04	0.10	0.10	0.00	177.56	0.10	0.10	0.00
177.05	0.10	0.10	0.00	177.57	0.10	0.10	0.00
177.06	0.10	0.10	0.00	177.58	0.10	0.10	0.00
177.07	0.10	0.10	0.00	177.59	0.10	0.10	0.00
177.08	0.10	0.10	0.00	177.60	0.10	0.10	0.00
177.09	0.10	0.10	0.00	177.61	0.10	0.10	0.00
177.10	0.10	0.10	0.00	177.62	0.10	0.10	0.00
177.11	0.10	0.10	0.00	177.63	0.10	0.10	0.00
177.12	0.10	0.10	0.00	177.64	0.10	0.10	0.00
177.13	0.10	0.10	0.00	177.65	0.10	0.10	0.00
177.14	0.10	0.10	0.00	177.66	0.10	0.10	0.00
177.15	0.10	0.10	0.00	177.67	0.10	0.10	0.00
177.16	0.10	0.10	0.00	177.68	0.10	0.10	0.00
177.17	0.10	0.10	0.00	177.69	0.10	0.10	0.00
177.18	0.10	0.10	0.00	177.70	0.10	0.10	0.00
177.19	0.10	0.10	0.00	177.71	0.10	0.10	0.00
177.20	0.10	0.10	0.00	177.72	0.10	0.10	0.00

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Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
177.73	0.10	0.10	0.00	178.25	0.10	0.10	0.00
177.74	0.10	0.10	0.00	178.26	0.10	0.10	0.00
177.75	0.10	0.10	0.00	178.27	0.10	0.10	0.00
177.76	0.10	0.10	0.00	178.28	0.10	0.10	0.00
177.77	0.10	0.10	0.00	178.29	0.10	0.10	0.00
177.78	0.10	0.10	0.00	178.30	0.10	0.10	0.00
177.79	0.10	0.10	0.00	178.31	0.10	0.10	0.00
177.80	0.10	0.10	0.00	178.32	0.10	0.10	0.00
177.81	0.10	0.10	0.00	178.33	0.10	0.10	0.00
177.82	0.10	0.10	0.00	178.34	0.10	0.10	0.00
177.83	0.10	0.10	0.00	178.35	0.10	0.10	0.00
177.84	0.10	0.10	0.00	178.36	0.10	0.10	0.00
177.85	0.10	0.10	0.00	178.37	0.10	0.10	0.00
177.86	0.10	0.10	0.00	178.38	0.10	0.10	0.00
177.87	0.10	0.10	0.00	178.39	0.10	0.10	0.00
177.88	0.10	0.10	0.00	178.40	0.10	0.10	0.00
177.89	0.10	0.10	0.00	178.41	0.10	0.10	0.00
177.90	0.10	0.10	0.00	178.42	0.10	0.10	0.00
177.91	0.10	0.10	0.00	178.43	0.10	0.10	0.00
177.92	0.10	0.10	0.00	178.44	0.10	0.10	0.00
177.93	0.10	0.10	0.00	178.45	0.10	0.10	0.00
177.94	0.10	0.10	0.00	178.46	0.10	0.10	0.00
177.95	0.10	0.10	0.00	178.47	0.10	0.10	0.00
177.96	0.10	0.10	0.00	178.48	0.10	0.10	0.00
177.97	0.10	0.10	0.00	178.49	0.10	0.10	0.00
177.98	0.10	0.10	0.00	178.50	0.10	0.10	0.00
177.99	0.10	0.10	0.00	178.51	0.10	0.10	0.00
178.00	0.10	0.10	0.00	178.52	0.10	0.10	0.00
178.01	0.10	0.10	0.00	178.53	0.10	0.10	0.00
178.02	0.10	0.10	0.00	178.54	0.10	0.10	0.00
178.03	0.10	0.10	0.00	178.55	0.10	0.10	0.00
178.04	0.10	0.10	0.00	178.56	0.10	0.10	0.00
178.05	0.10	0.10	0.00	178.57	0.10	0.10	0.00
178.06	0.10	0.10	0.00	178.58	0.10	0.10	0.00
178.07	0.10	0.10	0.00	178.59	0.10	0.10	0.00
178.08	0.10	0.10	0.00	178.60	0.10	0.10	0.00
178.09	0.10	0.10	0.00	178.61	0.10	0.10	0.00
178.10	0.10	0.10	0.00	178.62	0.10	0.10	0.00
178.11	0.10	0.10	0.00	178.63	0.10	0.10	0.00
178.12	0.10	0.10	0.00	178.64	0.10	0.10	0.00
178.13	0.10	0.10	0.00	178.65	0.10	0.10	0.00
178.14	0.10	0.10	0.00	178.66	0.10	0.10	0.00
178.15	0.10	0.10	0.00	178.67	0.10	0.10	0.00
178.16	0.10	0.10	0.00	178.68	0.10	0.10	0.00
178.17	0.10	0.10	0.00	178.69	0.10	0.10	0.00
178.18	0.10	0.10	0.00	178.70	0.10	0.10	0.00
178.19	0.10	0.10	0.00	178.71	0.10	0.10	0.00
178.20	0.10	0.10	0.00	178.72	0.10	0.10	0.00
178.21	0.10	0.10	0.00	178.73	0.10	0.10	0.00
178.22	0.10	0.10	0.00	178.74	0.10	0.10	0.00
178.23	0.10	0.10	0.00	178.75	0.10	0.10	0.00
178.24	0.10	0.10	0.00	178.76	0.10	0.10	0.00

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Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
178.77	0.10	0.10	0.00	179.29	0.31	0.10	0.22
178.78	0.10	0.10	0.00	179.30	0.33	0.10	0.23
178.79	0.10	0.10	0.00	179.31	0.34	0.10	0.24
178.80	0.10	0.10	0.00	179.32	0.35	0.10	0.26
178.81	0.10	0.10	0.00	179.33	0.37	0.10	0.27
178.82	0.10	0.10	0.00	179.34	0.38	0.10	0.28
178.83	0.10	0.10	0.00	179.35	0.39	0.10	0.30
178.84	0.10	0.10	0.00	179.36	0.41	0.10	0.31
178.85	0.10	0.10	0.00	179.37	0.42	0.10	0.32
178.86	0.10	0.10	0.00	179.38	0.43	0.10	0.34
178.87	0.10	0.10	0.00	179.39	0.45	0.10	0.35
178.88	0.10	0.10	0.00	179.40	0.46	0.10	0.36
178.89	0.10	0.10	0.00	179.41	0.47	0.10	0.38
178.90	0.10	0.10	0.00	179.42	0.49	0.10	0.39
178.91	0.10	0.10	0.00	179.43	0.50	0.10	0.40
178.92	0.10	0.10	0.00	179.44	0.51	0.10	0.41
178.93	0.10	0.10	0.00	179.45	0.52	0.10	0.43
178.94	0.10	0.10	0.00	179.46	0.53	0.10	0.44
178.95	0.10	0.10	0.00	179.47	0.54	0.10	0.45
178.96	0.10	0.10	0.00	179.48	0.55	0.10	0.46
178.97	0.10	0.10	0.00	179.49	0.56	0.10	0.47
178.98	0.10	0.10	0.00	179.50	0.57	0.10	0.47
178.99	0.10	0.10	0.00	179.51	0.58	0.10	0.48
179.00	0.10	0.10	0.00	179.52	0.59	0.10	0.49
179.01	0.10	0.10	0.00	179.53	0.60	0.10	0.50
179.02	0.10	0.10	0.00	179.54	0.61	0.10	0.51
179.03	0.10	0.10	0.00	179.55	0.61	0.10	0.52
179.04	0.10	0.10	0.01	179.56	0.62	0.10	0.53
179.05	0.10	0.10	0.01	179.57	0.63	0.10	0.53
179.06	0.11	0.10	0.01	179.58	0.64	0.10	0.54
179.07	0.11	0.10	0.02	179.59	0.65	0.10	0.55
179.08	0.12	0.10	0.02	179.60	0.66	0.10	0.56
179.09	0.12	0.10	0.02	179.61	0.66	0.10	0.57
179.10	0.13	0.10	0.03	179.62	0.67	0.10	0.58
179.11	0.13	0.10	0.04	179.63	0.68	0.10	0.58
179.12	0.14	0.10	0.04	179.64	0.69	0.10	0.59
179.13	0.15	0.10	0.05	179.65	0.69	0.10	0.60
179.14	0.15	0.10	0.06	179.66	0.70	0.10	0.61
179.15	0.16	0.10	0.07	179.67	0.71	0.10	0.61
179.16	0.17	0.10	0.07	179.68	0.72	0.10	0.62
179.17	0.18	0.10	0.08	179.69	0.72	0.10	0.63
179.18	0.19	0.10	0.09	179.70	0.73	0.10	0.63
179.19	0.20	0.10	0.10	179.71	0.74	0.10	0.64
179.20	0.21	0.10	0.11	179.72	0.74	0.10	0.65
179.21	0.22	0.10	0.12	179.73	0.75	0.10	0.66
179.22	0.23	0.10	0.13	179.74	0.76	0.10	0.66
179.23	0.24	0.10	0.14	179.75	0.77	0.10	0.67
179.24	0.25	0.10	0.16	179.76	0.77	0.10	0.68
179.25	0.26	0.10	0.17	179.77	0.78	0.10	0.68
179.26	0.28	0.10	0.18	179.78	0.78	0.10	0.69
179.27	0.29	0.10	0.19	179.79	0.79	0.10	0.69
179.28	0.30	0.10	0.20	179.80	0.80	0.10	0.70

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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
179.81	0.80	0.10	0.71	180.33	1.33	0.10	1.24
179.82	0.81	0.10	0.71	180.34	1.39	0.10	1.29
179.83	0.82	0.10	0.72	180.35	1.44	0.10	1.35
179.84	0.82	0.10	0.73	180.36	1.50	0.10	1.40
179.85	0.83	0.10	0.73	180.37	1.56	0.10	1.47
179.86	0.83	0.10	0.74	180.38	1.63	0.10	1.53
179.87	0.84	0.10	0.74	180.39	1.69	0.10	1.60
179.88	0.85	0.10	0.75	180.40	1.76	0.10	1.66
179.89	0.85	0.10	0.76	180.41	1.83	0.10	1.74
179.90	0.86	0.10	0.76	180.42	1.90	0.10	1.81
179.91	0.86	0.10	0.77	180.43	1.98	0.10	1.88
179.92	0.87	0.10	0.77	180.44	2.06	0.10	1.96
179.93	0.88	0.10	0.78	180.45	2.13	0.10	2.04
179.94	0.88	0.10	0.79	180.46	2.22	0.10	2.12
179.95	0.89	0.10	0.79	180.47	2.30	0.10	2.20
179.96	0.89	0.10	0.80	180.48	2.39	0.10	2.29
179.97	0.90	0.10	0.80	180.49	2.48	0.10	2.38
179.98	0.90	0.10	0.81	180.50	2.57	0.10	2.47
179.99	0.91	0.10	0.81	180.51	2.66	0.10	2.57
180.00	0.92	0.10	0.82	180.52	2.76	0.10	2.66
180.01	0.92	0.10	0.82	180.53	2.85	0.10	2.76
180.02	0.93	0.10	0.83	180.54	2.95	0.10	2.86
180.03	0.93	0.10	0.83	180.55	3.05	0.10	2.96
180.04	0.94	0.10	0.84	180.56	3.16	0.10	3.06
180.05	0.94	0.10	0.85	180.57	3.26	0.10	3.17
180.06	0.95	0.10	0.85	180.58	3.37	0.10	3.27
180.07	0.95	0.10	0.86	180.59	3.48	0.10	3.38
180.08	0.96	0.10	0.86	180.60	3.59	0.10	3.49
180.09	0.96	0.10	0.87	180.61	3.70	0.10	3.60
180.10	0.97	0.10	0.87	180.62	3.82	0.10	3.72
180.11	0.97	0.10	0.88	180.63	3.93	0.10	3.84
180.12	0.98	0.10	0.88	180.64	4.05	0.10	3.95
180.13	0.98	0.10	0.89	180.65	4.17	0.10	4.07
180.14	0.99	0.10	0.89	180.66	4.29	0.10	4.20
180.15	0.99	0.10	0.90	180.67	4.42	0.10	4.32
180.16	1.00	0.10	0.90	180.68	4.55	0.10	4.45
180.17	1.00	0.10	0.91	180.69	4.68	0.10	4.58
180.18	1.01	0.10	0.91	180.70	4.81	0.10	4.71
180.19	1.01	0.10	0.92	180.71	4.94	0.10	4.85
180.20	1.02	0.10	0.92	180.72	5.08	0.10	4.98
180.21	1.02	0.10	0.93	180.73	5.22	0.10	5.12
180.22	1.03	0.10	0.93	180.74	5.36	0.10	5.26
180.23	1.03	0.10	0.94	180.75	5.50	0.10	5.40
180.24	1.04	0.10	0.94	180.76	5.64	0.10	5.54
180.25	1.04	0.10	0.95	180.77	5.79	0.10	5.69
180.26	1.06	0.10	0.96	180.78	5.93	0.10	5.84
180.27	1.08	0.10	0.99	180.79	6.08	0.10	5.99
180.28	1.11	0.10	1.02	180.80	6.23	0.10	6.14
180.29	1.15	0.10	1.05	180.81	6.39	0.10	6.29
180.30	1.19	0.10	1.09	180.82	6.54	0.10	6.45
180.31	1.23	0.10	1.14	180.83	6.70	0.10	6.60
180.32	1.28	0.10	1.19	180.84	6.86	0.10	6.76

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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
180.85	7.02	0.10	6.92
180.86	7.19	0.10	7.09
180.87	7.36	0.10	7.26
180.88	7.53	0.10	7.43
180.89	7.71	0.10	7.61
180.90	7.88	0.10	7.79
180.91	8.06	0.10	7.97
180.92	8.24	0.10	8.15
180.93	8.43	0.10	8.33
180.94	8.61	0.10	8.52
180.95	8.80	0.10	8.71
180.96	8.99	0.10	8.90
180.97	9.19	0.10	9.09
180.98	9.38	0.10	9.28
180.99	9.58	0.10	9.48
181.00	9.78	0.10	9.68
181.01	9.98	0.10	9.88
181.02	10.18	0.10	10.09
181.03	10.39	0.10	10.29
181.04	10.60	0.10	10.50
181.05	10.81	0.10	10.71
181.06	10.99	0.10	10.90
181.07	11.18	0.10	11.08
181.08	11.37	0.10	11.27
181.09	11.55	0.10	11.46
181.10	11.74	0.10	11.65
181.11	11.93	0.10	11.84
181.12	12.12	0.10	12.03
181.13	12.32	0.10	12.22
181.14	12.51	0.10	12.41
181.15	<b>12.70</b>	0.10	<b>12.61</b>

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
175.65	1,738	0	176.17	1,738	361
175.66	1,738	7	176.18	1,738	368
175.67	1,738	14	176.19	1,738	375
175.68	1,738	21	176.20	1,738	382
175.69	1,738	28	176.21	1,738	389
175.70	1,738	35	176.22	1,738	396
175.71	1,738	42	176.23	1,738	403
175.72	1,738	49	176.24	1,738	410
175.73	1,738	56	176.25	1,738	417
175.74	1,738	63	176.26	1,738	424
175.75	1,738	70	176.27	1,738	431
175.76	1,738	76	176.28	1,738	438
175.77	1,738	83	176.29	1,738	445
175.78	1,738	90	176.30	1,738	452
175.79	1,738	97	176.31	1,738	459
175.80	1,738	104	176.32	1,738	466
175.81	1,738	111	176.33	1,738	473
175.82	1,738	118	176.34	1,738	480
175.83	1,738	125	176.35	1,738	487
175.84	1,738	132	176.36	1,738	494
175.85	1,738	139	176.37	1,738	500
175.86	1,738	146	176.38	1,738	507
175.87	1,738	153	176.39	1,738	514
175.88	1,738	160	176.40	1,738	521
175.89	1,738	167	176.41	1,738	535
175.90	1,738	174	176.42	1,738	549
175.91	1,738	181	176.43	1,738	564
175.92	1,738	188	176.44	1,738	578
175.93	1,738	195	176.45	1,738	592
175.94	1,738	202	176.46	1,738	606
175.95	1,738	209	176.47	1,738	620
175.96	1,738	215	176.48	1,738	634
175.97	1,738	222	176.49	1,738	648
175.98	1,738	229	176.50	1,738	662
175.99	1,738	236	176.51	1,738	676
176.00	1,738	243	176.52	1,738	690
176.01	1,738	250	176.53	1,738	704
176.02	1,738	257	176.54	1,738	718
176.03	1,738	264	176.55	1,738	732
176.04	1,738	271	176.56	1,738	746
176.05	1,738	278	176.57	1,738	760
176.06	1,738	285	176.58	1,738	774
176.07	1,738	292	176.59	1,738	788
176.08	1,738	299	176.60	1,738	802
176.09	1,738	306	176.61	1,738	816
176.10	1,738	313	176.62	1,738	830
176.11	1,738	320	176.63	1,738	844
176.12	1,738	327	176.64	1,738	858
176.13	1,738	334	176.65	1,738	872
176.14	1,738	341	176.66	1,738	886
176.15	1,738	348	176.67	1,738	900
176.16	1,738	354	176.68	1,738	914

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
176.69	1,738	928	177.21	1,738	1,646
176.70	1,738	942	177.22	1,738	1,659
176.71	1,738	956	177.23	1,738	1,673
176.72	1,738	970	177.24	1,738	1,686
176.73	1,738	984	177.25	1,738	1,700
176.74	1,738	998	177.26	1,738	1,714
176.75	1,738	1,012	177.27	1,738	1,727
176.76	1,738	1,025	177.28	1,738	1,741
176.77	1,738	1,039	177.29	1,738	1,754
176.78	1,738	1,053	177.30	1,738	1,768
176.79	1,738	1,067	177.31	1,738	1,782
176.80	1,738	1,081	177.32	1,738	1,795
176.81	1,738	1,095	177.33	1,738	1,809
176.82	1,738	1,109	177.34	1,738	1,822
176.83	1,738	1,123	177.35	1,738	1,836
176.84	1,738	1,137	177.36	1,738	1,849
176.85	1,738	1,150	177.37	1,738	1,863
176.86	1,738	1,164	177.38	1,738	1,876
176.87	1,738	1,178	177.39	1,738	1,890
176.88	1,738	1,192	177.40	1,738	1,903
176.89	1,738	1,206	177.41	1,738	1,917
176.90	1,738	1,220	177.42	1,738	1,930
176.91	1,738	1,233	177.43	1,738	1,944
176.92	1,738	1,247	177.44	1,738	1,957
176.93	1,738	1,261	177.45	1,738	1,971
176.94	1,738	1,275	177.46	1,738	1,984
176.95	1,738	1,289	177.47	1,738	1,998
176.96	1,738	1,303	177.48	1,738	2,011
176.97	1,738	1,316	177.49	1,738	2,025
176.98	1,738	1,330	177.50	1,738	2,038
176.99	1,738	1,344	177.51	1,738	2,051
177.00	1,738	1,358	177.52	1,738	2,065
177.01	1,738	1,371	177.53	1,738	2,078
177.02	1,738	1,385	177.54	1,738	2,092
177.03	1,738	1,399	177.55	1,738	2,105
177.04	1,738	1,413	177.56	1,738	2,118
177.05	1,738	1,427	177.57	1,738	2,132
177.06	1,738	1,440	177.58	1,738	2,145
177.07	1,738	1,454	177.59	1,738	2,158
177.08	1,738	1,468	177.60	1,738	2,172
177.09	1,738	1,481	177.61	1,738	2,185
177.10	1,738	1,495	177.62	1,738	2,198
177.11	1,738	1,509	177.63	1,738	2,212
177.12	1,738	1,523	177.64	1,738	2,225
177.13	1,738	1,536	177.65	1,738	2,238
177.14	1,738	1,550	177.66	1,738	2,252
177.15	1,738	1,564	177.67	1,738	2,265
177.16	1,738	1,577	177.68	1,738	2,278
177.17	1,738	1,591	177.69	1,738	2,291
177.18	1,738	1,605	177.70	1,738	2,305
177.19	1,738	1,618	177.71	1,738	2,318
177.20	1,738	1,632	177.72	1,738	2,331



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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
177.73	1,738	2,344	178.25	1,738	3,017
177.74	1,738	2,358	178.26	1,738	3,030
177.75	1,738	2,371	178.27	1,738	3,042
177.76	1,738	2,384	178.28	1,738	3,055
177.77	1,738	2,397	178.29	1,738	3,067
177.78	1,738	2,410	178.30	1,738	3,080
177.79	1,738	2,423	178.31	1,738	3,092
177.80	1,738	2,437	178.32	1,738	3,105
177.81	1,738	2,450	178.33	1,738	3,117
177.82	1,738	2,463	178.34	1,738	3,130
177.83	1,738	2,476	178.35	1,738	3,143
177.84	1,738	2,489	178.36	1,738	3,155
177.85	1,738	2,502	178.37	1,738	3,167
177.86	1,738	2,515	178.38	1,738	3,180
177.87	1,738	2,528	178.39	1,738	3,192
177.88	1,738	2,541	178.40	1,738	3,205
177.89	1,738	2,554	178.41	1,738	3,217
177.90	1,738	2,567	178.42	1,738	3,230
177.91	1,738	2,581	178.43	1,738	3,242
177.92	1,738	2,594	178.44	1,738	3,254
177.93	1,738	2,607	178.45	1,738	3,267
177.94	1,738	2,620	178.46	1,738	3,279
177.95	1,738	2,633	178.47	1,738	3,291
177.96	1,738	2,646	178.48	1,738	3,304
177.97	1,738	2,658	178.49	1,738	3,316
177.98	1,738	2,671	178.50	1,738	3,328
177.99	1,738	2,684	178.51	1,738	3,341
178.00	1,738	2,697	178.52	1,738	3,353
178.01	1,738	2,710	178.53	1,738	3,365
178.02	1,738	2,723	178.54	1,738	3,377
178.03	1,738	2,736	178.55	1,738	3,389
178.04	1,738	2,749	178.56	1,738	3,402
178.05	1,738	2,762	178.57	1,738	3,414
178.06	1,738	2,775	178.58	1,738	3,426
178.07	1,738	2,788	178.59	1,738	3,438
178.08	1,738	2,800	178.60	1,738	3,450
178.09	1,738	2,813	178.61	1,738	3,462
178.10	1,738	2,826	178.62	1,738	3,474
178.11	1,738	2,839	178.63	1,738	3,487
178.12	1,738	2,852	178.64	1,738	3,499
178.13	1,738	2,864	178.65	1,738	3,511
178.14	1,738	2,877	178.66	1,738	3,523
178.15	1,738	2,890	178.67	1,738	3,535
178.16	1,738	2,903	178.68	1,738	3,547
178.17	1,738	2,915	178.69	1,738	3,559
178.18	1,738	2,928	178.70	1,738	3,571
178.19	1,738	2,941	178.71	1,738	3,582
178.20	1,738	2,954	178.72	1,738	3,594
178.21	1,738	2,966	178.73	1,738	3,606
178.22	1,738	2,979	178.74	1,738	3,618
178.23	1,738	2,992	178.75	1,738	3,630
178.24	1,738	3,004	178.76	1,738	3,642

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
178.77	1,738	3,654	179.29	1,738	4,239
178.78	1,738	3,665	179.30	1,738	4,250
178.79	1,738	3,677	179.31	1,738	4,261
178.80	1,738	3,689	179.32	1,738	4,271
178.81	1,738	3,701	179.33	1,738	4,282
178.82	1,738	3,713	179.34	1,738	4,292
178.83	1,738	3,724	179.35	1,738	4,303
178.84	1,738	3,736	179.36	1,738	4,313
178.85	1,738	3,748	179.37	1,738	4,323
178.86	1,738	3,759	179.38	1,738	4,334
178.87	1,738	3,771	179.39	1,738	4,344
178.88	1,738	3,783	179.40	1,738	4,354
178.89	1,738	3,794	179.41	1,738	4,365
178.90	1,738	3,806	179.42	1,738	4,375
178.91	1,738	3,817	179.43	1,738	4,385
178.92	1,738	3,829	179.44	1,738	4,395
178.93	1,738	3,840	179.45	1,738	4,405
178.94	1,738	3,852	179.46	1,738	4,416
178.95	1,738	3,863	179.47	1,738	4,426
178.96	1,738	3,875	179.48	1,738	4,436
178.97	1,738	3,886	179.49	1,738	4,446
178.98	1,738	3,898	179.50	1,738	4,456
178.99	1,738	3,909	179.51	1,738	4,466
179.00	1,738	3,920	179.52	1,738	4,475
179.01	1,738	3,932	179.53	1,738	4,485
179.02	1,738	3,943	179.54	1,738	4,495
179.03	1,738	3,954	179.55	1,738	4,505
179.04	1,738	3,965	179.56	1,738	4,514
179.05	1,738	3,977	179.57	1,738	4,524
179.06	1,738	3,988	179.58	1,738	4,534
179.07	1,738	3,999	179.59	1,738	4,543
179.08	1,738	4,010	179.60	1,738	4,553
179.09	1,738	4,022	179.61	1,738	4,562
179.10	1,738	4,033	179.62	1,738	4,572
179.11	1,738	4,044	179.63	1,738	4,581
179.12	1,738	4,055	179.64	1,738	4,591
179.13	1,738	4,066	179.65	1,738	4,600
179.14	1,738	4,077	179.66	1,738	4,609
179.15	1,738	4,088	179.67	1,738	4,618
179.16	1,738	4,099	179.68	1,738	4,627
179.17	1,738	4,110	179.69	1,738	4,636
179.18	1,738	4,121	179.70	1,738	4,645
179.19	1,738	4,132	179.71	1,738	4,654
179.20	1,738	4,143	179.72	1,738	4,663
179.21	1,738	4,154	179.73	1,738	4,672
179.22	1,738	4,164	179.74	1,738	4,680
179.23	1,738	4,175	179.75	1,738	4,689
179.24	1,738	4,186	179.76	1,738	4,698
179.25	1,738	4,197	179.77	1,738	4,706
179.26	1,738	4,207	179.78	1,738	4,714
179.27	1,738	4,218	179.79	1,738	4,723
179.28	1,738	4,229	179.80	1,738	4,731

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
179.81	1,738	4,739	180.33	1,738	5,118
179.82	1,738	4,747	180.34	1,738	5,125
179.83	1,738	4,755	180.35	1,738	5,132
179.84	1,738	4,763	180.36	1,738	5,139
179.85	1,738	4,771	180.37	1,738	5,146
179.86	1,738	4,779	180.38	1,738	5,153
179.87	1,738	4,787	180.39	1,738	5,160
179.88	1,738	4,795	180.40	1,738	5,167
179.89	1,738	4,802	180.41	1,738	5,174
179.90	1,738	4,810	180.42	1,738	5,181
179.91	1,738	4,818	180.43	1,738	5,188
179.92	1,738	4,825	180.44	1,738	5,195
179.93	1,738	4,833	180.45	1,738	5,201
179.94	1,738	4,840	180.46	1,738	5,208
179.95	1,738	4,848	180.47	1,738	5,215
179.96	1,738	4,855	180.48	1,738	5,222
179.97	1,738	4,863	180.49	1,738	5,229
179.98	1,738	4,870	180.50	1,738	5,236
179.99	1,738	4,878	180.51	1,738	5,243
180.00	1,738	4,885	180.52	1,738	5,250
180.01	1,738	4,893	180.53	1,738	5,257
180.02	1,738	4,900	180.54	1,738	5,264
180.03	1,738	4,907	180.55	1,738	5,271
180.04	1,738	4,915	180.56	1,738	5,278
180.05	1,738	4,922	180.57	1,738	5,285
180.06	1,738	4,929	180.58	1,738	5,292
180.07	1,738	4,936	180.59	1,738	5,299
180.08	1,738	4,944	180.60	1,738	5,306
180.09	1,738	4,951	180.61	1,738	5,313
180.10	1,738	4,958	180.62	1,738	5,320
180.11	1,738	4,965	180.63	1,738	5,327
180.12	1,738	4,972	180.64	1,738	5,334
180.13	1,738	4,979	180.65	1,738	5,340
180.14	1,738	4,986	180.66	1,738	5,347
180.15	1,738	4,993	180.67	1,738	5,354
180.16	1,738	5,000	180.68	1,738	5,361
180.17	1,738	5,007	180.69	1,738	5,368
180.18	1,738	5,014	180.70	1,738	5,375
180.19	1,738	5,021	180.71	1,738	5,382
180.20	1,738	5,028	180.72	1,738	5,389
180.21	1,738	5,035	180.73	1,738	5,396
180.22	1,738	5,042	180.74	1,738	5,403
180.23	1,738	5,049	180.75	1,738	5,410
180.24	1,738	5,055	180.76	1,738	5,417
180.25	1,738	5,062	180.77	1,738	5,424
180.26	1,738	5,069	180.78	1,738	5,431
180.27	1,738	5,076	180.79	1,738	5,438
180.28	1,738	5,083	180.80	1,738	5,445
180.29	1,738	5,090	180.81	1,738	5,452
180.30	1,738	5,097	180.82	1,738	5,459
180.31	1,738	5,104	180.83	1,738	5,466
180.32	1,738	5,111	180.84	1,738	5,473

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Type III 24-hr WQV Rainfall=1.00"

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
180.85	1,738	5,479
180.86	1,738	5,486
180.87	1,738	5,493
180.88	1,738	5,500
180.89	1,738	5,507
180.90	1,738	5,514
180.91	1,738	5,521
180.92	1,738	5,528
180.93	1,738	5,535
180.94	1,738	5,542
180.95	1,738	5,549
180.96	1,738	5,556
180.97	1,738	5,563
180.98	1,738	5,570
180.99	1,738	5,577
181.00	1,738	5,584
181.01	1,738	5,591
181.02	1,738	5,598
181.03	1,738	5,605
181.04	1,738	5,612
181.05	1,738	5,619
181.06	1,738	5,625
181.07	1,738	5,632
181.08	1,738	5,639
181.09	1,738	5,646
181.10	1,738	5,653
181.11	1,738	5,660
181.12	1,738	5,667
181.13	1,738	5,674
181.14	1,738	5,681
181.15	1,738	<b>5,688</b>

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Type III 24-hr WQV Rainfall=1.00"

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**Summary for Link TSD: Total Site Discharge**

Inflow Area = 119,968 sf, 21.15% Impervious, Inflow Depth = 0.00" for WQV event  
Inflow = 0.00 cfs @ 24.03 hrs, Volume= 0 cf  
Primary = 0.00 cfs @ 24.03 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

**post development**

Type III 24-hr 2-Year Rainfall=3.45"

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Time span=0.00-72.00 hrs, dt=0.02 hrs, 3601 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

**Subcatchment DA 1A: DA 1A** Runoff Area=16,145 sf 22.38% Impervious Runoff Depth=1.21"  
Tc=10.0 min CN=74 Runoff=0.44 cfs 1,622 cf

**Subcatchment DA 1B: DA 1B** Runoff Area=16,665 sf 100.00% Impervious Runoff Depth=3.22"  
Tc=5.0 min CN=98 Runoff=1.33 cfs 4,467 cf

**Subcatchment DA 1C: DA 1C** Runoff Area=47,379 sf 1.50% Impervious Runoff Depth=0.82"  
Tc=10.0 min CN=67 Runoff=0.79 cfs 3,246 cf

**Subcatchment DA 1D: DA 1D** Runoff Area=10,641 sf 41.23% Impervious Runoff Depth=1.67"  
Tc=5.0 min CN=81 Runoff=0.49 cfs 1,479 cf

**Subcatchment DA 1E: DA 1E** Runoff Area=29,138 sf 0.00% Impervious Runoff Depth=0.82"  
Flow Length=446' Tc=10.7 min CN=67 Runoff=0.47 cfs 1,996 cf

**Pond RG-A: Rain Garden A** Peak Elev=184.59' Storage=703 cf Inflow=0.44 cfs 1,622 cf  
Discarded=0.04 cfs 1,622 cf Primary=0.00 cfs 0 cf Outflow=0.04 cfs 1,622 cf

**Pond RG-B: Rain Garden B** Peak Elev=157.08' Storage=625 cf Inflow=0.49 cfs 1,479 cf  
Discarded=0.04 cfs 1,479 cf Primary=0.00 cfs 0 cf Outflow=0.04 cfs 1,479 cf

**Pond SWB: Stormtech MC 3500 (SWM-B)** Peak Elev=177.25' Storage=1,702 cf Inflow=1.33 cfs 4,467 cf  
Discarded=0.10 cfs 4,467 cf Primary=0.00 cfs 0 cf Outflow=0.10 cfs 4,467 cf

**Link TSD: Total Site Discharge** Inflow=1.26 cfs 5,242 cf  
Primary=1.26 cfs 5,242 cf

**Total Runoff Area = 119,968 sf Runoff Volume = 12,811 cf Average Runoff Depth = 1.28"**  
**78.85% Pervious = 94,594 sf 21.15% Impervious = 25,374 sf**

**post development**

Type III 24-hr 2-Year Rainfall=3.45"

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**Summary for Subcatchment DA 1A: DA 1A**

Runoff = 0.44 cfs @ 12.15 hrs, Volume= 1,622 cf, Depth= 1.21"

Routed to Pond RG-A : Rain Garden A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
Type III 24-hr 2-Year Rainfall=3.45"

Area (sf)	CN	Description
6,492	66	Woods, Poor, HSG B
6,040	69	50-75% Grass cover, Fair, HSG B
3,613	98	Paved parking, HSG B
16,145	74	Weighted Average
12,532		77.62% Pervious Area
3,613		22.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					<b>Direct Entry, direct</b>

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Type III 24-hr 2-Year Rainfall=3.45"

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**Summary for Subcatchment DA 1B: DA 1B**

Runoff = 1.33 cfs @ 12.07 hrs, Volume= 4,467 cf, Depth= 3.22"  
Routed to Pond SWB : Stormtech MC 3500 (SWM-B)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
Type III 24-hr 2-Year Rainfall=3.45"

Area (sf)	CN	Description
4,000	98	Roofs, HSG B
12,665	98	Paved parking, HSG B
16,665	98	Weighted Average
16,665		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					<b>Direct Entry, direct</b>



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Type III 24-hr 2-Year Rainfall=3.45"

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**Summary for Subcatchment DA 1C: DA 1C**

Runoff = 0.79 cfs @ 12.16 hrs, Volume= 3,246 cf, Depth= 0.82"  
Routed to Link TSD : Total Site Discharge

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
Type III 24-hr 2-Year Rainfall=3.45"

Area (sf)	CN	Description
709	98	Paved parking, HSG B
22,996	66	Woods, Poor, HSG B
23,674	67	Brush, Poor, HSG B
47,379	67	Weighted Average
46,670		98.50% Pervious Area
709		1.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					<b>Direct Entry, direct</b>

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Type III 24-hr 2-Year Rainfall=3.45"

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**Summary for Subcatchment DA 1D: DA 1D**

Runoff = 0.49 cfs @ 12.08 hrs, Volume= 1,479 cf, Depth= 1.67"

Routed to Pond RG-B : Rain Garden B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Type III 24-hr 2-Year Rainfall=3.45"

Area (sf)	CN	Description
4,387	98	Paved parking, HSG B
6,254	69	50-75% Grass cover, Fair, HSG B
10,641	81	Weighted Average
6,254		58.77% Pervious Area
4,387		41.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					<b>Direct Entry, direct</b>

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Type III 24-hr 2-Year Rainfall=3.45"

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**Summary for Subcatchment DA 1E: DA 1E**

Runoff = 0.47 cfs @ 12.17 hrs, Volume= 1,996 cf, Depth= 0.82"

Routed to Link TSD : Total Site Discharge

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Type III 24-hr 2-Year Rainfall=3.45"

Area (sf)	CN	Description
20,116	66	Woods, Poor, HSG B
9,022	69	50-75% Grass cover, Fair, HSG B
29,138	67	Weighted Average
29,138		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	100	0.2400	0.22		<b>Sheet Flow, Sheetflow</b>
					Woods: Light underbrush n= 0.400 P2= 3.45"
3.0	346	0.0750	1.92		<b>Shallow Concentrated Flow, SHALLOW</b>
					Short Grass Pasture Kv= 7.0 fps
10.7	446	Total			

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Type III 24-hr 2-Year Rainfall=3.45"

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**Summary for Pond RG-A: Rain Garden A**

Inflow Area = 16,145 sf, 22.38% Impervious, Inflow Depth = 1.21" for 2-Year event  
 Inflow = 0.44 cfs @ 12.15 hrs, Volume= 1,622 cf  
 Outflow = 0.04 cfs @ 13.79 hrs, Volume= 1,622 cf, Atten= 90%, Lag= 98.8 min  
 Discarded = 0.04 cfs @ 13.79 hrs, Volume= 1,622 cf  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf  
 Routed to Link TSD : Total Site Discharge

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
 Peak Elev= 184.59' @ 13.79 hrs Surf.Area= 800 sf Storage= 703 cf

Plug-Flow detention time= 204.6 min calculated for 1,621 cf (100% of inflow)  
 Center-of-Mass det. time= 204.6 min ( 1,065.7 - 861.2 )

Volume	Invert	Avail.Storage	Storage Description
#1	183.00'	1,404 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.00	143	0	0
184.00	501	322	322
185.00	1,011	756	1,078
185.30	1,164	326	1,404

Device	Routing	Invert	Outlet Devices
#1	Primary	185.00'	<b>15.0' long x 3.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.41 2.56 2.69 2.67 2.66 2.66 2.65 2.67 2.67 2.70 2.77 2.83 2.87 2.93 3.10 3.19 3.32
#2	Discarded	183.00'	<b>2.400 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.04 cfs @ 13.79 hrs HW=184.59' (Free Discharge)  
 ↑**2=Exfiltration** (Exfiltration Controls 0.04 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=183.00' (Free Discharge)  
 ↑**1=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)

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Type III 24-hr 2-Year Rainfall=3.45"

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**Stage-Discharge for Pond RG-A: Rain Garden A**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
183.00	0.00	0.00	0.00	183.52	0.02	0.02	0.00
183.01	0.01	0.01	0.00	183.53	0.02	0.02	0.00
183.02	0.01	0.01	0.00	183.54	0.02	0.02	0.00
183.03	0.01	0.01	0.00	183.55	0.02	0.02	0.00
183.04	0.01	0.01	0.00	183.56	0.02	0.02	0.00
183.05	0.01	0.01	0.00	183.57	0.02	0.02	0.00
183.06	0.01	0.01	0.00	183.58	0.02	0.02	0.00
183.07	0.01	0.01	0.00	183.59	0.02	0.02	0.00
183.08	0.01	0.01	0.00	183.60	0.02	0.02	0.00
183.09	0.01	0.01	0.00	183.61	0.02	0.02	0.00
183.10	0.01	0.01	0.00	183.62	0.02	0.02	0.00
183.11	0.01	0.01	0.00	183.63	0.02	0.02	0.00
183.12	0.01	0.01	0.00	183.64	0.02	0.02	0.00
183.13	0.01	0.01	0.00	183.65	0.02	0.02	0.00
183.14	0.01	0.01	0.00	183.66	0.02	0.02	0.00
183.15	0.01	0.01	0.00	183.67	0.02	0.02	0.00
183.16	0.01	0.01	0.00	183.68	0.02	0.02	0.00
183.17	0.01	0.01	0.00	183.69	0.02	0.02	0.00
183.18	0.01	0.01	0.00	183.70	0.02	0.02	0.00
183.19	0.01	0.01	0.00	183.71	0.02	0.02	0.00
183.20	0.01	0.01	0.00	183.72	0.02	0.02	0.00
183.21	0.01	0.01	0.00	183.73	0.02	0.02	0.00
183.22	0.01	0.01	0.00	183.74	0.02	0.02	0.00
183.23	0.01	0.01	0.00	183.75	0.02	0.02	0.00
183.24	0.01	0.01	0.00	183.76	0.02	0.02	0.00
183.25	0.01	0.01	0.00	183.77	0.02	0.02	0.00
183.26	0.01	0.01	0.00	183.78	0.02	0.02	0.00
183.27	0.01	0.01	0.00	183.79	0.02	0.02	0.00
183.28	0.01	0.01	0.00	183.80	0.02	0.02	0.00
183.29	0.01	0.01	0.00	183.81	0.02	0.02	0.00
183.30	0.01	0.01	0.00	183.82	0.02	0.02	0.00
183.31	0.01	0.01	0.00	183.83	0.02	0.02	0.00
183.32	0.01	0.01	0.00	183.84	0.02	0.02	0.00
183.33	0.01	0.01	0.00	183.85	0.02	0.02	0.00
183.34	0.01	0.01	0.00	183.86	0.03	0.03	0.00
183.35	0.01	0.01	0.00	183.87	0.03	0.03	0.00
183.36	0.02	0.02	0.00	183.88	0.03	0.03	0.00
183.37	0.02	0.02	0.00	183.89	0.03	0.03	0.00
183.38	0.02	0.02	0.00	183.90	0.03	0.03	0.00
183.39	0.02	0.02	0.00	183.91	0.03	0.03	0.00
183.40	0.02	0.02	0.00	183.92	0.03	0.03	0.00
183.41	0.02	0.02	0.00	183.93	0.03	0.03	0.00
183.42	0.02	0.02	0.00	183.94	0.03	0.03	0.00
183.43	0.02	0.02	0.00	183.95	0.03	0.03	0.00
183.44	0.02	0.02	0.00	183.96	0.03	0.03	0.00
183.45	0.02	0.02	0.00	183.97	0.03	0.03	0.00
183.46	0.02	0.02	0.00	183.98	0.03	0.03	0.00
183.47	0.02	0.02	0.00	183.99	0.03	0.03	0.00
183.48	0.02	0.02	0.00	184.00	0.03	0.03	0.00
183.49	0.02	0.02	0.00	184.01	0.03	0.03	0.00
183.50	0.02	0.02	0.00	184.02	0.03	0.03	0.00
183.51	0.02	0.02	0.00	184.03	0.03	0.03	0.00

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**Stage-Discharge for Pond RG-A: Rain Garden A (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
184.04	0.03	0.03	0.00	184.56	0.04	0.04	0.00
184.05	0.03	0.03	0.00	184.57	0.04	0.04	0.00
184.06	0.03	0.03	0.00	184.58	0.04	0.04	0.00
184.07	0.03	0.03	0.00	184.59	0.04	0.04	0.00
184.08	0.03	0.03	0.00	184.60	0.04	0.04	0.00
184.09	0.03	0.03	0.00	184.61	0.05	0.05	0.00
184.10	0.03	0.03	0.00	184.62	0.05	0.05	0.00
184.11	0.03	0.03	0.00	184.63	0.05	0.05	0.00
184.12	0.03	0.03	0.00	184.64	0.05	0.05	0.00
184.13	0.03	0.03	0.00	184.65	0.05	0.05	0.00
184.14	0.03	0.03	0.00	184.66	0.05	0.05	0.00
184.15	0.03	0.03	0.00	184.67	0.05	0.05	0.00
184.16	0.03	0.03	0.00	184.68	0.05	0.05	0.00
184.17	0.03	0.03	0.00	184.69	0.05	0.05	0.00
184.18	0.03	0.03	0.00	184.70	0.05	0.05	0.00
184.19	0.03	0.03	0.00	184.71	0.05	0.05	0.00
184.20	0.03	0.03	0.00	184.72	0.05	0.05	0.00
184.21	0.03	0.03	0.00	184.73	0.05	0.05	0.00
184.22	0.03	0.03	0.00	184.74	0.05	0.05	0.00
184.23	0.03	0.03	0.00	184.75	0.05	0.05	0.00
184.24	0.03	0.03	0.00	184.76	0.05	0.05	0.00
184.25	0.03	0.03	0.00	184.77	0.05	0.05	0.00
184.26	0.04	0.04	0.00	184.78	0.05	0.05	0.00
184.27	0.04	0.04	0.00	184.79	0.05	0.05	0.00
184.28	0.04	0.04	0.00	184.80	0.05	0.05	0.00
184.29	0.04	0.04	0.00	184.81	0.05	0.05	0.00
184.30	0.04	0.04	0.00	184.82	0.05	0.05	0.00
184.31	0.04	0.04	0.00	184.83	0.05	0.05	0.00
184.32	0.04	0.04	0.00	184.84	0.05	0.05	0.00
184.33	0.04	0.04	0.00	184.85	0.05	0.05	0.00
184.34	0.04	0.04	0.00	184.86	0.05	0.05	0.00
184.35	0.04	0.04	0.00	184.87	0.05	0.05	0.00
184.36	0.04	0.04	0.00	184.88	0.05	0.05	0.00
184.37	0.04	0.04	0.00	184.89	0.05	0.05	0.00
184.38	0.04	0.04	0.00	184.90	0.05	0.05	0.00
184.39	0.04	0.04	0.00	184.91	0.05	0.05	0.00
184.40	0.04	0.04	0.00	184.92	0.05	0.05	0.00
184.41	0.04	0.04	0.00	184.93	0.05	0.05	0.00
184.42	0.04	0.04	0.00	184.94	0.05	0.05	0.00
184.43	0.04	0.04	0.00	184.95	0.05	0.05	0.00
184.44	0.04	0.04	0.00	184.96	0.06	0.06	0.00
184.45	0.04	0.04	0.00	184.97	0.06	0.06	0.00
184.46	0.04	0.04	0.00	184.98	0.06	0.06	0.00
184.47	0.04	0.04	0.00	184.99	0.06	0.06	0.00
184.48	0.04	0.04	0.00	185.00	0.06	0.06	0.00
184.49	0.04	0.04	0.00	185.01	0.09	0.06	0.04
184.50	0.04	0.04	0.00	185.02	0.16	0.06	0.10
184.51	0.04	0.04	0.00	185.03	0.24	0.06	0.19
184.52	0.04	0.04	0.00	185.04	0.35	0.06	0.29
184.53	0.04	0.04	0.00	185.05	0.46	0.06	0.40
184.54	0.04	0.04	0.00	185.06	0.59	0.06	0.53
184.55	0.04	0.04	0.00	185.07	0.73	0.06	0.67

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**Stage-Discharge for Pond RG-A: Rain Garden A (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
185.08	0.88	0.06	0.82
185.09	1.03	0.06	0.98
185.10	1.20	0.06	1.14
185.11	1.38	0.06	1.32
185.12	1.56	0.06	1.50
185.13	1.75	0.06	1.69
185.14	1.95	0.06	1.89
185.15	2.16	0.06	2.10
185.16	2.37	0.06	2.31
185.17	2.59	0.06	2.53
185.18	2.82	0.06	2.76
185.19	3.06	0.06	2.99
185.20	3.30	0.06	3.23
185.21	3.55	0.06	3.49
185.22	3.82	0.06	3.75
185.23	4.09	0.06	4.02
185.24	4.37	0.06	4.30
185.25	4.65	0.06	4.59
185.26	4.95	0.06	4.88
185.27	5.25	0.06	5.18
185.28	5.55	0.06	5.49
185.29	5.87	0.06	5.80
185.30	<b>6.19</b>	<b>0.06</b>	<b>6.12</b>

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**Stage-Area-Storage for Pond RG-A: Rain Garden A**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.00	143	0	183.52	329	123
183.01	147	1	183.53	333	126
183.02	150	3	183.54	336	129
183.03	154	4	183.55	340	133
183.04	157	6	183.56	343	136
183.05	161	8	183.57	347	140
183.06	164	9	183.58	351	143
183.07	168	11	183.59	354	147
183.08	172	13	183.60	358	150
183.09	175	14	183.61	361	154
183.10	179	16	183.62	365	157
183.11	182	18	183.63	369	161
183.12	186	20	183.64	372	165
183.13	190	22	183.65	376	169
183.14	193	24	183.66	379	172
183.15	197	25	183.67	383	176
183.16	200	27	183.68	386	180
183.17	204	29	183.69	390	184
183.18	207	32	183.70	394	188
183.19	211	34	183.71	397	192
183.20	215	36	183.72	401	196
183.21	218	38	183.73	404	200
183.22	222	40	183.74	408	204
183.23	225	42	183.75	412	208
183.24	229	45	183.76	415	212
183.25	233	47	183.77	419	216
183.26	236	49	183.78	422	220
183.27	240	52	183.79	426	225
183.28	243	54	183.80	429	229
183.29	247	57	183.81	433	233
183.30	250	59	183.82	437	238
183.31	254	62	183.83	440	242
183.32	258	64	183.84	444	246
183.33	261	67	183.85	447	251
183.34	265	69	183.86	451	255
183.35	268	72	183.87	454	260
183.36	272	75	183.88	458	264
183.37	275	77	183.89	462	269
183.38	279	80	183.90	465	274
183.39	283	83	183.91	469	278
183.40	286	86	183.92	472	283
183.41	290	89	183.93	476	288
183.42	293	92	183.94	480	293
183.43	297	95	183.95	483	297
183.44	301	98	183.96	487	302
183.45	304	101	183.97	490	307
183.46	308	104	183.98	494	312
183.47	311	107	183.99	497	317
183.48	315	110	184.00	501	322
183.49	318	113	184.01	506	327
183.50	322	116	184.02	511	332
183.51	326	119	184.03	516	337



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**Stage-Area-Storage for Pond RG-A: Rain Garden A (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.04	521	342	184.56	787	683
184.05	527	348	184.57	792	690
184.06	532	353	184.58	797	698
184.07	537	358	184.59	802	706
184.08	542	364	184.60	807	714
184.09	547	369	184.61	812	722
184.10	552	375	184.62	817	731
184.11	557	380	184.63	822	739
184.12	562	386	184.64	827	747
184.13	567	391	184.65	833	755
184.14	572	397	184.66	838	764
184.15	578	403	184.67	843	772
184.16	583	409	184.68	848	781
184.17	588	415	184.69	853	789
184.18	593	420	184.70	858	798
184.19	598	426	184.71	863	806
184.20	603	432	184.72	868	815
184.21	608	438	184.73	873	824
184.22	613	445	184.74	878	832
184.23	618	451	184.75	884	841
184.24	623	457	184.76	889	850
184.25	629	463	184.77	894	859
184.26	634	469	184.78	899	868
184.27	639	476	184.79	904	877
184.28	644	482	184.80	909	886
184.29	649	489	184.81	914	895
184.30	654	495	184.82	919	904
184.31	659	502	184.83	924	913
184.32	664	508	184.84	929	923
184.33	669	515	184.85	934	932
184.34	674	522	184.86	940	941
184.35	679	529	184.87	945	951
184.36	685	535	184.88	950	960
184.37	690	542	184.89	955	970
184.38	695	549	184.90	960	979
184.39	700	556	184.91	965	989
184.40	705	563	184.92	970	999
184.41	710	570	184.93	975	1,008
184.42	715	577	184.94	980	1,018
184.43	720	585	184.95	985	1,028
184.44	725	592	184.96	991	1,038
184.45	730	599	184.97	996	1,048
184.46	736	606	184.98	1,001	1,058
184.47	741	614	184.99	1,006	1,068
184.48	746	621	185.00	1,011	1,078
184.49	751	629	185.01	1,016	1,088
184.50	756	636	185.02	1,021	1,098
184.51	761	644	185.03	1,026	1,109
184.52	766	651	185.04	1,031	1,119
184.53	771	659	185.05	1,037	1,129
184.54	776	667	185.06	1,042	1,140
184.55	782	675	185.07	1,047	1,150

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**Stage-Area-Storage for Pond RG-A: Rain Garden A (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.08	1,052	1,161
185.09	1,057	1,171
185.10	1,062	1,182
185.11	1,067	1,192
185.12	1,072	1,203
185.13	1,077	1,214
185.14	1,082	1,225
185.15	1,088	1,235
185.16	1,093	1,246
185.17	1,098	1,257
185.18	1,103	1,268
185.19	1,108	1,279
185.20	1,113	1,290
185.21	1,118	1,302
185.22	1,123	1,313
185.23	1,128	1,324
185.24	1,133	1,335
185.25	1,138	1,347
185.26	1,144	1,358
185.27	1,149	1,370
185.28	1,154	1,381
185.29	1,159	1,393
185.30	<b>1,164</b>	<b>1,404</b>

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**Summary for Pond RG-B: Rain Garden B**

Inflow Area = 10,641 sf, 41.23% Impervious, Inflow Depth = 1.67" for 2-Year event  
 Inflow = 0.49 cfs @ 12.08 hrs, Volume= 1,479 cf  
 Outflow = 0.04 cfs @ 13.41 hrs, Volume= 1,479 cf, Atten= 92%, Lag= 80.0 min  
 Discarded = 0.04 cfs @ 13.41 hrs, Volume= 1,479 cf  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf  
 Routed to Link TSD : Total Site Discharge

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
 Peak Elev= 157.08' @ 13.41 hrs Surf.Area= 729 sf Storage= 625 cf

Plug-Flow detention time= 162.1 min calculated for 1,479 cf (100% of inflow)  
 Center-of-Mass det. time= 162.1 min ( 997.0 - 834.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	156.00'	1,767 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
156.00	437	0	0
157.00	704	571	571
158.00	1,037	871	1,441
158.30	1,135	326	1,767

Device	Routing	Invert	Outlet Devices
#1	Primary	158.00'	<b>15.0' long x 4.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32
#2	Discarded	156.00'	<b>2.400 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.04 cfs @ 13.41 hrs HW=157.08' (Free Discharge)  
 ↑**2=Exfiltration** (Exfiltration Controls 0.04 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=156.00' (Free Discharge)  
 ↑**1=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)

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**Stage-Discharge for Pond RG-B: Rain Garden B**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
156.00	0.00	0.00	0.00	156.52	0.03	0.03	0.00
156.01	0.02	0.02	0.00	156.53	0.03	0.03	0.00
156.02	0.02	0.02	0.00	156.54	0.03	0.03	0.00
156.03	0.02	0.02	0.00	156.55	0.03	0.03	0.00
156.04	0.02	0.02	0.00	156.56	0.03	0.03	0.00
156.05	0.03	0.03	0.00	156.57	0.03	0.03	0.00
156.06	0.03	0.03	0.00	156.58	0.03	0.03	0.00
156.07	0.03	0.03	0.00	156.59	0.03	0.03	0.00
156.08	0.03	0.03	0.00	156.60	0.03	0.03	0.00
156.09	0.03	0.03	0.00	156.61	0.03	0.03	0.00
156.10	0.03	0.03	0.00	156.62	0.03	0.03	0.00
156.11	0.03	0.03	0.00	156.63	0.03	0.03	0.00
156.12	0.03	0.03	0.00	156.64	0.03	0.03	0.00
156.13	0.03	0.03	0.00	156.65	0.03	0.03	0.00
156.14	0.03	0.03	0.00	156.66	0.03	0.03	0.00
156.15	0.03	0.03	0.00	156.67	0.03	0.03	0.00
156.16	0.03	0.03	0.00	156.68	0.03	0.03	0.00
156.17	0.03	0.03	0.00	156.69	0.03	0.03	0.00
156.18	0.03	0.03	0.00	156.70	0.03	0.03	0.00
156.19	0.03	0.03	0.00	156.71	0.03	0.03	0.00
156.20	0.03	0.03	0.00	156.72	0.03	0.03	0.00
156.21	0.03	0.03	0.00	156.73	0.04	0.04	0.00
156.22	0.03	0.03	0.00	156.74	0.04	0.04	0.00
156.23	0.03	0.03	0.00	156.75	0.04	0.04	0.00
156.24	0.03	0.03	0.00	156.76	0.04	0.04	0.00
156.25	0.03	0.03	0.00	156.77	0.04	0.04	0.00
156.26	0.03	0.03	0.00	156.78	0.04	0.04	0.00
156.27	0.03	0.03	0.00	156.79	0.04	0.04	0.00
156.28	0.03	0.03	0.00	156.80	0.04	0.04	0.00
156.29	0.03	0.03	0.00	156.81	0.04	0.04	0.00
156.30	0.03	0.03	0.00	156.82	0.04	0.04	0.00
156.31	0.03	0.03	0.00	156.83	0.04	0.04	0.00
156.32	0.03	0.03	0.00	156.84	0.04	0.04	0.00
156.33	0.03	0.03	0.00	156.85	0.04	0.04	0.00
156.34	0.03	0.03	0.00	156.86	0.04	0.04	0.00
156.35	0.03	0.03	0.00	156.87	0.04	0.04	0.00
156.36	0.03	0.03	0.00	156.88	0.04	0.04	0.00
156.37	0.03	0.03	0.00	156.89	0.04	0.04	0.00
156.38	0.03	0.03	0.00	156.90	0.04	0.04	0.00
156.39	0.03	0.03	0.00	156.91	0.04	0.04	0.00
156.40	0.03	0.03	0.00	156.92	0.04	0.04	0.00
156.41	0.03	0.03	0.00	156.93	0.04	0.04	0.00
156.42	0.03	0.03	0.00	156.94	0.04	0.04	0.00
156.43	0.03	0.03	0.00	156.95	0.04	0.04	0.00
156.44	0.03	0.03	0.00	156.96	0.04	0.04	0.00
156.45	0.03	0.03	0.00	156.97	0.04	0.04	0.00
156.46	0.03	0.03	0.00	156.98	0.04	0.04	0.00
156.47	0.03	0.03	0.00	156.99	0.04	0.04	0.00
156.48	0.03	0.03	0.00	157.00	0.04	0.04	0.00
156.49	0.03	0.03	0.00	157.01	0.04	0.04	0.00
156.50	0.03	0.03	0.00	157.02	0.04	0.04	0.00
156.51	0.03	0.03	0.00	157.03	0.04	0.04	0.00

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**Stage-Discharge for Pond RG-B: Rain Garden B (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
157.04	0.04	0.04	0.00	157.56	0.05	0.05	0.00
157.05	0.04	0.04	0.00	157.57	0.05	0.05	0.00
157.06	0.04	0.04	0.00	157.58	0.05	0.05	0.00
157.07	0.04	0.04	0.00	157.59	0.05	0.05	0.00
157.08	0.04	0.04	0.00	157.60	0.05	0.05	0.00
157.09	0.04	0.04	0.00	157.61	0.05	0.05	0.00
157.10	0.04	0.04	0.00	157.62	0.05	0.05	0.00
157.11	0.04	0.04	0.00	157.63	0.05	0.05	0.00
157.12	0.04	0.04	0.00	157.64	0.05	0.05	0.00
157.13	0.04	0.04	0.00	157.65	0.05	0.05	0.00
157.14	0.04	0.04	0.00	157.66	0.05	0.05	0.00
157.15	0.04	0.04	0.00	157.67	0.05	0.05	0.00
157.16	0.04	0.04	0.00	157.68	0.05	0.05	0.00
157.17	0.04	0.04	0.00	157.69	0.05	0.05	0.00
157.18	0.04	0.04	0.00	157.70	0.05	0.05	0.00
157.19	0.04	0.04	0.00	157.71	0.05	0.05	0.00
157.20	0.04	0.04	0.00	157.72	0.05	0.05	0.00
157.21	0.04	0.04	0.00	157.73	0.05	0.05	0.00
157.22	0.04	0.04	0.00	157.74	0.05	0.05	0.00
157.23	0.04	0.04	0.00	157.75	0.05	0.05	0.00
157.24	0.04	0.04	0.00	157.76	0.05	0.05	0.00
157.25	0.04	0.04	0.00	157.77	0.05	0.05	0.00
157.26	0.04	0.04	0.00	157.78	0.05	0.05	0.00
157.27	0.04	0.04	0.00	157.79	0.05	0.05	0.00
157.28	0.04	0.04	0.00	157.80	0.05	0.05	0.00
157.29	0.04	0.04	0.00	157.81	0.05	0.05	0.00
157.30	0.04	0.04	0.00	157.82	0.05	0.05	0.00
157.31	0.04	0.04	0.00	157.83	0.05	0.05	0.00
157.32	0.05	0.05	0.00	157.84	0.05	0.05	0.00
157.33	0.05	0.05	0.00	157.85	0.05	0.05	0.00
157.34	0.05	0.05	0.00	157.86	0.06	0.06	0.00
157.35	0.05	0.05	0.00	157.87	0.06	0.06	0.00
157.36	0.05	0.05	0.00	157.88	0.06	0.06	0.00
157.37	0.05	0.05	0.00	157.89	0.06	0.06	0.00
157.38	0.05	0.05	0.00	157.90	0.06	0.06	0.00
157.39	0.05	0.05	0.00	157.91	0.06	0.06	0.00
157.40	0.05	0.05	0.00	157.92	0.06	0.06	0.00
157.41	0.05	0.05	0.00	157.93	0.06	0.06	0.00
157.42	0.05	0.05	0.00	157.94	0.06	0.06	0.00
157.43	0.05	0.05	0.00	157.95	0.06	0.06	0.00
157.44	0.05	0.05	0.00	157.96	0.06	0.06	0.00
157.45	0.05	0.05	0.00	157.97	0.06	0.06	0.00
157.46	0.05	0.05	0.00	157.98	0.06	0.06	0.00
157.47	0.05	0.05	0.00	157.99	0.06	0.06	0.00
157.48	0.05	0.05	0.00	158.00	0.06	0.06	0.00
157.49	0.05	0.05	0.00	158.01	0.09	0.06	0.04
157.50	0.05	0.05	0.00	158.02	0.16	0.06	0.10
157.51	0.05	0.05	0.00	158.03	0.24	0.06	0.19
157.52	0.05	0.05	0.00	158.04	0.34	0.06	0.29
157.53	0.05	0.05	0.00	158.05	0.46	0.06	0.40
157.54	0.05	0.05	0.00	158.06	0.58	0.06	0.52
157.55	0.05	0.05	0.00	158.07	0.72	0.06	0.66

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**Stage-Discharge for Pond RG-B: Rain Garden B (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
158.08	0.87	0.06	0.81
158.09	1.02	0.06	0.96
158.10	1.19	0.06	1.13
158.11	1.36	0.06	1.30
158.12	1.54	0.06	1.48
158.13	1.73	0.06	1.67
158.14	1.93	0.06	1.87
158.15	2.13	0.06	2.07
158.16	2.35	0.06	2.28
158.17	2.56	0.06	2.50
158.18	2.79	0.06	2.73
158.19	3.02	0.06	2.96
158.20	3.25	0.06	3.19
158.21	3.51	0.06	3.45
158.22	3.77	0.06	3.71
158.23	4.04	0.06	3.98
158.24	4.32	0.06	4.25
158.25	4.60	0.06	4.54
158.26	4.89	0.06	4.83
158.27	5.19	0.06	5.13
158.28	5.49	0.06	5.43
158.29	5.81	0.06	5.74
158.30	<b>6.13</b>	<b>0.06</b>	<b>6.06</b>

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**Stage-Area-Storage for Pond RG-B: Rain Garden B**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
156.00	437	0	156.52	576	263
156.01	440	4	156.53	579	269
156.02	442	9	156.54	581	275
156.03	445	13	156.55	584	281
156.04	448	18	156.56	587	287
156.05	450	22	156.57	589	292
156.06	453	27	156.58	592	298
156.07	456	31	156.59	595	304
156.08	458	36	156.60	597	310
156.09	461	40	156.61	600	316
156.10	464	45	156.62	603	322
156.11	466	50	156.63	605	328
156.12	469	54	156.64	608	334
156.13	472	59	156.65	611	340
156.14	474	64	156.66	613	347
156.15	477	69	156.67	616	353
156.16	480	73	156.68	619	359
156.17	482	78	156.69	621	365
156.18	485	83	156.70	624	371
156.19	488	88	156.71	627	378
156.20	490	93	156.72	629	384
156.21	493	98	156.73	632	390
156.22	496	103	156.74	635	396
156.23	498	108	156.75	637	403
156.24	501	113	156.76	640	409
156.25	504	118	156.77	643	416
156.26	506	123	156.78	645	422
156.27	509	128	156.79	648	429
156.28	512	133	156.80	651	435
156.29	514	138	156.81	653	442
156.30	517	143	156.82	656	448
156.31	520	148	156.83	659	455
156.32	522	154	156.84	661	461
156.33	525	159	156.85	664	468
156.34	528	164	156.86	667	475
156.35	530	169	156.87	669	481
156.36	533	175	156.88	672	488
156.37	536	180	156.89	675	495
156.38	538	185	156.90	677	501
156.39	541	191	156.91	680	508
156.40	544	196	156.92	683	515
156.41	546	202	156.93	685	522
156.42	549	207	156.94	688	529
156.43	552	213	156.95	691	536
156.44	554	218	156.96	693	543
156.45	557	224	156.97	696	550
156.46	560	229	156.98	699	556
156.47	562	235	156.99	701	563
156.48	565	241	157.00	704	571
156.49	568	246	157.01	707	578
156.50	571	252	157.02	711	585
156.51	573	258	157.03	714	592

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**Stage-Area-Storage for Pond RG-B: Rain Garden B (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
157.04	717	599	157.56	890	1,017
157.05	721	606	157.57	894	1,026
157.06	724	613	157.58	897	1,035
157.07	727	621	157.59	900	1,044
157.08	731	628	157.60	904	1,053
157.09	734	635	157.61	907	1,062
157.10	737	643	157.62	910	1,071
157.11	741	650	157.63	914	1,080
157.12	744	657	157.64	917	1,089
157.13	747	665	157.65	920	1,098
157.14	751	672	157.66	924	1,108
157.15	754	680	157.67	927	1,117
157.16	757	687	157.68	930	1,126
157.17	761	695	157.69	934	1,136
157.18	764	703	157.70	937	1,145
157.19	767	710	157.71	940	1,154
157.20	771	718	157.72	944	1,164
157.21	774	726	157.73	947	1,173
157.22	777	733	157.74	950	1,183
157.23	781	741	157.75	954	1,192
157.24	784	749	157.76	957	1,202
157.25	787	757	157.77	960	1,211
157.26	791	765	157.78	964	1,221
157.27	794	773	157.79	967	1,231
157.28	797	781	157.80	970	1,240
157.29	801	789	157.81	974	1,250
157.30	804	797	157.82	977	1,260
157.31	807	805	157.83	980	1,270
157.32	811	813	157.84	984	1,279
157.33	814	821	157.85	987	1,289
157.34	817	829	157.86	990	1,299
157.35	821	837	157.87	994	1,309
157.36	824	846	157.88	997	1,319
157.37	827	854	157.89	1,000	1,329
157.38	831	862	157.90	1,004	1,339
157.39	834	870	157.91	1,007	1,349
157.40	837	879	157.92	1,010	1,359
157.41	841	887	157.93	1,014	1,369
157.42	844	896	157.94	1,017	1,379
157.43	847	904	157.95	1,020	1,390
157.44	851	912	157.96	1,024	1,400
157.45	854	921	157.97	1,027	1,410
157.46	857	930	157.98	1,030	1,420
157.47	861	938	157.99	1,034	1,431
157.48	864	947	158.00	1,037	1,441
157.49	867	955	158.01	1,040	1,451
157.50	871	964	158.02	1,044	1,462
157.51	874	973	158.03	1,047	1,472
157.52	877	982	158.04	1,050	1,483
157.53	880	990	158.05	1,053	1,493
157.54	884	999	158.06	1,057	1,504
157.55	887	1,008	158.07	1,060	1,514



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**Stage-Area-Storage for Pond RG-B: Rain Garden B (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
158.08	1,063	1,525
158.09	1,066	1,536
158.10	1,070	1,546
158.11	1,073	1,557
158.12	1,076	1,568
158.13	1,079	1,579
158.14	1,083	1,589
158.15	1,086	1,600
158.16	1,089	1,611
158.17	1,093	1,622
158.18	1,096	1,633
158.19	1,099	1,644
158.20	1,102	1,655
158.21	1,106	1,666
158.22	1,109	1,677
158.23	1,112	1,688
158.24	1,115	1,699
158.25	1,119	1,710
158.26	1,122	1,722
158.27	1,125	1,733
158.28	1,128	1,744
158.29	1,132	1,755
158.30	<b>1,135</b>	<b>1,767</b>

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**Summary for Pond SWB: Stormtech MC 3500 (SWM-B)**

Inflow Area = 16,665 sf, 100.00% Impervious, Inflow Depth = 3.22" for 2-Year event  
 Inflow = 1.33 cfs @ 12.07 hrs, Volume= 4,467 cf  
 Outflow = 0.10 cfs @ 11.20 hrs, Volume= 4,467 cf, Atten= 93%, Lag= 0.0 min  
 Discarded = 0.10 cfs @ 11.20 hrs, Volume= 4,467 cf  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf  
 Routed to Link TSD : Total Site Discharge

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
 Peak Elev= 177.25' @ 13.10 hrs Surf.Area= 1,738 sf Storage= 1,702 cf

Plug-Flow detention time= 132.3 min calculated for 4,466 cf (100% of inflow)  
 Center-of-Mass det. time= 132.2 min ( 886.2 - 753.9 )

Volume	Invert	Avail.Storage	Storage Description
#1A	175.65'	2,580 cf	<b>8.42'W x 206.46'L x 5.50'H Field A</b> 9,557 cf Overall - 3,108 cf Embedded = 6,449 cf x 40.0% Voids
#2A	176.40'	3,108 cf	<b>ADS_StormTech MC-3500 d +Cap</b> x 28 Inside #1 Effective Size= 70.4"W x 45.0"H => 15.33 sf x 7.17'L = 110.0 cf Overall Size= 77.0"W x 45.0"H x 7.50'L with 0.33' Overlap Cap Storage= 14.9 cf x 2 x 1 rows = 29.8 cf
		5,688 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	175.65'	<b>15.0" Round Outlet Pipe</b> L= 45.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 175.65' / 166.00' S= 0.2144 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf
#2	Device 1	179.00'	<b>6.0" Vert. Low Flow Orifice</b> C= 0.600 Limited to weir flow at low heads
#3	Device 1	180.25'	<b>4.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#4	Discarded	175.65'	<b>2.400 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.10 cfs @ 11.20 hrs HW=175.71' (Free Discharge)  
 ↳ **4=Exfiltration** (Exfiltration Controls 0.10 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=175.65' (Free Discharge)  
 ↳ **1=Outlet Pipe** ( Controls 0.00 cfs)  
 ↳ ↳ **2=Low Flow Orifice** ( Controls 0.00 cfs)  
 ↳ ↳ ↳ **3=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)

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**Pond SWB: Stormtech MC 3500 (SWM-B) - Chamber Wizard Field A**

**Chamber Model = ADS\_StormTech MC-3500 d +Cap (ADS StormTech® MC-3500 d rev 03/14 with Cap volume)**

Effective Size= 70.4"W x 45.0"H => 15.33 sf x 7.17'L = 110.0 cf

Overall Size= 77.0"W x 45.0"H x 7.50'L with 0.33' Overlap

Cap Storage= 14.9 cf x 2 x 1 rows = 29.8 cf

28 Chambers/Row x 7.17' Long +1.85' Cap Length x 2 = 204.46' Row Length +12.0" End Stone x 2 = 206.46' Base Length

1 Rows x 77.0" Wide + 12.0" Side Stone x 2 = 8.42' Base Width

9.0" Stone Base + 45.0" Chamber Height + 12.0" Stone Cover = 5.50' Field Height

28 Chambers x 110.0 cf + 14.9 cf Cap Volume x 2 x 1 Rows = 3,108.5 cf Chamber Storage

9,557.4 cf Field - 3,108.5 cf Chambers = 6,448.9 cf Stone x 40.0% Voids = 2,579.6 cf Stone Storage

Chamber Storage + Stone Storage = 5,688.0 cf = 0.131 af

Overall Storage Efficiency = 59.5%

Overall System Size = 206.46' x 8.42' x 5.50'

28 Chambers

354.0 cy Field

238.8 cy Stone



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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
175.65	0.00	0.00	0.00	176.17	0.10	0.10	0.00
175.66	0.10	<b>0.10</b>	0.00	176.18	0.10	0.10	0.00
175.67	0.10	0.10	0.00	176.19	0.10	0.10	0.00
175.68	0.10	0.10	0.00	176.20	0.10	0.10	0.00
175.69	0.10	0.10	0.00	176.21	0.10	0.10	0.00
175.70	0.10	0.10	0.00	176.22	0.10	0.10	0.00
175.71	0.10	0.10	0.00	176.23	0.10	0.10	0.00
175.72	0.10	0.10	0.00	176.24	0.10	0.10	0.00
175.73	0.10	0.10	0.00	176.25	0.10	0.10	0.00
175.74	0.10	0.10	0.00	176.26	0.10	0.10	0.00
175.75	0.10	0.10	0.00	176.27	0.10	0.10	0.00
175.76	0.10	0.10	0.00	176.28	0.10	0.10	0.00
175.77	0.10	0.10	0.00	176.29	0.10	0.10	0.00
175.78	0.10	0.10	0.00	176.30	0.10	0.10	0.00
175.79	0.10	0.10	0.00	176.31	0.10	0.10	0.00
175.80	0.10	0.10	0.00	176.32	0.10	0.10	0.00
175.81	0.10	0.10	0.00	176.33	0.10	0.10	0.00
175.82	0.10	0.10	0.00	176.34	0.10	0.10	0.00
175.83	0.10	0.10	0.00	176.35	0.10	0.10	0.00
175.84	0.10	0.10	0.00	176.36	0.10	0.10	0.00
175.85	0.10	0.10	0.00	176.37	0.10	0.10	0.00
175.86	0.10	0.10	0.00	176.38	0.10	0.10	0.00
175.87	0.10	0.10	0.00	176.39	0.10	0.10	0.00
175.88	0.10	0.10	0.00	176.40	0.10	0.10	0.00
175.89	0.10	0.10	0.00	176.41	0.10	0.10	0.00
175.90	0.10	0.10	0.00	176.42	0.10	0.10	0.00
175.91	0.10	0.10	0.00	176.43	0.10	0.10	0.00
175.92	0.10	0.10	0.00	176.44	0.10	0.10	0.00
175.93	0.10	0.10	0.00	176.45	0.10	0.10	0.00
175.94	0.10	0.10	0.00	176.46	0.10	0.10	0.00
175.95	0.10	0.10	0.00	176.47	0.10	0.10	0.00
175.96	0.10	0.10	0.00	176.48	0.10	0.10	0.00
175.97	0.10	0.10	0.00	176.49	0.10	0.10	0.00
175.98	0.10	0.10	0.00	176.50	0.10	0.10	0.00
175.99	0.10	0.10	0.00	176.51	0.10	0.10	0.00
176.00	0.10	0.10	0.00	176.52	0.10	0.10	0.00
176.01	0.10	0.10	0.00	176.53	0.10	0.10	0.00
176.02	0.10	0.10	0.00	176.54	0.10	0.10	0.00
176.03	0.10	0.10	0.00	176.55	0.10	0.10	0.00
176.04	0.10	0.10	0.00	176.56	0.10	0.10	0.00
176.05	0.10	0.10	0.00	176.57	0.10	0.10	0.00
176.06	0.10	0.10	0.00	176.58	0.10	0.10	0.00
176.07	0.10	0.10	0.00	176.59	0.10	0.10	0.00
176.08	0.10	0.10	0.00	176.60	0.10	0.10	0.00
176.09	0.10	0.10	0.00	176.61	0.10	0.10	0.00
176.10	0.10	0.10	0.00	176.62	0.10	0.10	0.00
176.11	0.10	0.10	0.00	176.63	0.10	0.10	0.00
176.12	0.10	0.10	0.00	176.64	0.10	0.10	0.00
176.13	0.10	0.10	0.00	176.65	0.10	0.10	0.00
176.14	0.10	0.10	0.00	176.66	0.10	0.10	0.00
176.15	0.10	0.10	0.00	176.67	0.10	0.10	0.00
176.16	0.10	0.10	0.00	176.68	0.10	0.10	0.00

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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
176.69	0.10	0.10	0.00	177.21	0.10	0.10	0.00
176.70	0.10	0.10	0.00	177.22	0.10	0.10	0.00
176.71	0.10	0.10	0.00	177.23	0.10	0.10	0.00
176.72	0.10	0.10	0.00	177.24	0.10	0.10	0.00
176.73	0.10	0.10	0.00	177.25	0.10	0.10	0.00
176.74	0.10	0.10	0.00	177.26	0.10	0.10	0.00
176.75	0.10	0.10	0.00	177.27	0.10	0.10	0.00
176.76	0.10	0.10	0.00	177.28	0.10	0.10	0.00
176.77	0.10	0.10	0.00	177.29	0.10	0.10	0.00
176.78	0.10	0.10	0.00	177.30	0.10	0.10	0.00
176.79	0.10	0.10	0.00	177.31	0.10	0.10	0.00
176.80	0.10	0.10	0.00	177.32	0.10	0.10	0.00
176.81	0.10	0.10	0.00	177.33	0.10	0.10	0.00
176.82	0.10	0.10	0.00	177.34	0.10	0.10	0.00
176.83	0.10	0.10	0.00	177.35	0.10	0.10	0.00
176.84	0.10	0.10	0.00	177.36	0.10	0.10	0.00
176.85	0.10	0.10	0.00	177.37	0.10	0.10	0.00
176.86	0.10	0.10	0.00	177.38	0.10	0.10	0.00
176.87	0.10	0.10	0.00	177.39	0.10	0.10	0.00
176.88	0.10	0.10	0.00	177.40	0.10	0.10	0.00
176.89	0.10	0.10	0.00	177.41	0.10	0.10	0.00
176.90	0.10	0.10	0.00	177.42	0.10	0.10	0.00
176.91	0.10	0.10	0.00	177.43	0.10	0.10	0.00
176.92	0.10	0.10	0.00	177.44	0.10	0.10	0.00
176.93	0.10	0.10	0.00	177.45	0.10	0.10	0.00
176.94	0.10	0.10	0.00	177.46	0.10	0.10	0.00
176.95	0.10	0.10	0.00	177.47	0.10	0.10	0.00
176.96	0.10	0.10	0.00	177.48	0.10	0.10	0.00
176.97	0.10	0.10	0.00	177.49	0.10	0.10	0.00
176.98	0.10	0.10	0.00	177.50	0.10	0.10	0.00
176.99	0.10	0.10	0.00	177.51	0.10	0.10	0.00
177.00	0.10	0.10	0.00	177.52	0.10	0.10	0.00
177.01	0.10	0.10	0.00	177.53	0.10	0.10	0.00
177.02	0.10	0.10	0.00	177.54	0.10	0.10	0.00
177.03	0.10	0.10	0.00	177.55	0.10	0.10	0.00
177.04	0.10	0.10	0.00	177.56	0.10	0.10	0.00
177.05	0.10	0.10	0.00	177.57	0.10	0.10	0.00
177.06	0.10	0.10	0.00	177.58	0.10	0.10	0.00
177.07	0.10	0.10	0.00	177.59	0.10	0.10	0.00
177.08	0.10	0.10	0.00	177.60	0.10	0.10	0.00
177.09	0.10	0.10	0.00	177.61	0.10	0.10	0.00
177.10	0.10	0.10	0.00	177.62	0.10	0.10	0.00
177.11	0.10	0.10	0.00	177.63	0.10	0.10	0.00
177.12	0.10	0.10	0.00	177.64	0.10	0.10	0.00
177.13	0.10	0.10	0.00	177.65	0.10	0.10	0.00
177.14	0.10	0.10	0.00	177.66	0.10	0.10	0.00
177.15	0.10	0.10	0.00	177.67	0.10	0.10	0.00
177.16	0.10	0.10	0.00	177.68	0.10	0.10	0.00
177.17	0.10	0.10	0.00	177.69	0.10	0.10	0.00
177.18	0.10	0.10	0.00	177.70	0.10	0.10	0.00
177.19	0.10	0.10	0.00	177.71	0.10	0.10	0.00
177.20	0.10	0.10	0.00	177.72	0.10	0.10	0.00

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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
177.73	0.10	0.10	0.00	178.25	0.10	0.10	0.00
177.74	0.10	0.10	0.00	178.26	0.10	0.10	0.00
177.75	0.10	0.10	0.00	178.27	0.10	0.10	0.00
177.76	0.10	0.10	0.00	178.28	0.10	0.10	0.00
177.77	0.10	0.10	0.00	178.29	0.10	0.10	0.00
177.78	0.10	0.10	0.00	178.30	0.10	0.10	0.00
177.79	0.10	0.10	0.00	178.31	0.10	0.10	0.00
177.80	0.10	0.10	0.00	178.32	0.10	0.10	0.00
177.81	0.10	0.10	0.00	178.33	0.10	0.10	0.00
177.82	0.10	0.10	0.00	178.34	0.10	0.10	0.00
177.83	0.10	0.10	0.00	178.35	0.10	0.10	0.00
177.84	0.10	0.10	0.00	178.36	0.10	0.10	0.00
177.85	0.10	0.10	0.00	178.37	0.10	0.10	0.00
177.86	0.10	0.10	0.00	178.38	0.10	0.10	0.00
177.87	0.10	0.10	0.00	178.39	0.10	0.10	0.00
177.88	0.10	0.10	0.00	178.40	0.10	0.10	0.00
177.89	0.10	0.10	0.00	178.41	0.10	0.10	0.00
177.90	0.10	0.10	0.00	178.42	0.10	0.10	0.00
177.91	0.10	0.10	0.00	178.43	0.10	0.10	0.00
177.92	0.10	0.10	0.00	178.44	0.10	0.10	0.00
177.93	0.10	0.10	0.00	178.45	0.10	0.10	0.00
177.94	0.10	0.10	0.00	178.46	0.10	0.10	0.00
177.95	0.10	0.10	0.00	178.47	0.10	0.10	0.00
177.96	0.10	0.10	0.00	178.48	0.10	0.10	0.00
177.97	0.10	0.10	0.00	178.49	0.10	0.10	0.00
177.98	0.10	0.10	0.00	178.50	0.10	0.10	0.00
177.99	0.10	0.10	0.00	178.51	0.10	0.10	0.00
178.00	0.10	0.10	0.00	178.52	0.10	0.10	0.00
178.01	0.10	0.10	0.00	178.53	0.10	0.10	0.00
178.02	0.10	0.10	0.00	178.54	0.10	0.10	0.00
178.03	0.10	0.10	0.00	178.55	0.10	0.10	0.00
178.04	0.10	0.10	0.00	178.56	0.10	0.10	0.00
178.05	0.10	0.10	0.00	178.57	0.10	0.10	0.00
178.06	0.10	0.10	0.00	178.58	0.10	0.10	0.00
178.07	0.10	0.10	0.00	178.59	0.10	0.10	0.00
178.08	0.10	0.10	0.00	178.60	0.10	0.10	0.00
178.09	0.10	0.10	0.00	178.61	0.10	0.10	0.00
178.10	0.10	0.10	0.00	178.62	0.10	0.10	0.00
178.11	0.10	0.10	0.00	178.63	0.10	0.10	0.00
178.12	0.10	0.10	0.00	178.64	0.10	0.10	0.00
178.13	0.10	0.10	0.00	178.65	0.10	0.10	0.00
178.14	0.10	0.10	0.00	178.66	0.10	0.10	0.00
178.15	0.10	0.10	0.00	178.67	0.10	0.10	0.00
178.16	0.10	0.10	0.00	178.68	0.10	0.10	0.00
178.17	0.10	0.10	0.00	178.69	0.10	0.10	0.00
178.18	0.10	0.10	0.00	178.70	0.10	0.10	0.00
178.19	0.10	0.10	0.00	178.71	0.10	0.10	0.00
178.20	0.10	0.10	0.00	178.72	0.10	0.10	0.00
178.21	0.10	0.10	0.00	178.73	0.10	0.10	0.00
178.22	0.10	0.10	0.00	178.74	0.10	0.10	0.00
178.23	0.10	0.10	0.00	178.75	0.10	0.10	0.00
178.24	0.10	0.10	0.00	178.76	0.10	0.10	0.00

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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
178.77	0.10	0.10	0.00	179.29	0.31	0.10	0.22
178.78	0.10	0.10	0.00	179.30	0.33	0.10	0.23
178.79	0.10	0.10	0.00	179.31	0.34	0.10	0.24
178.80	0.10	0.10	0.00	179.32	0.35	0.10	0.26
178.81	0.10	0.10	0.00	179.33	0.37	0.10	0.27
178.82	0.10	0.10	0.00	179.34	0.38	0.10	0.28
178.83	0.10	0.10	0.00	179.35	0.39	0.10	0.30
178.84	0.10	0.10	0.00	179.36	0.41	0.10	0.31
178.85	0.10	0.10	0.00	179.37	0.42	0.10	0.32
178.86	0.10	0.10	0.00	179.38	0.43	0.10	0.34
178.87	0.10	0.10	0.00	179.39	0.45	0.10	0.35
178.88	0.10	0.10	0.00	179.40	0.46	0.10	0.36
178.89	0.10	0.10	0.00	179.41	0.47	0.10	0.38
178.90	0.10	0.10	0.00	179.42	0.49	0.10	0.39
178.91	0.10	0.10	0.00	179.43	0.50	0.10	0.40
178.92	0.10	0.10	0.00	179.44	0.51	0.10	0.41
178.93	0.10	0.10	0.00	179.45	0.52	0.10	0.43
178.94	0.10	0.10	0.00	179.46	0.53	0.10	0.44
178.95	0.10	0.10	0.00	179.47	0.54	0.10	0.45
178.96	0.10	0.10	0.00	179.48	0.55	0.10	0.46
178.97	0.10	0.10	0.00	179.49	0.56	0.10	0.47
178.98	0.10	0.10	0.00	179.50	0.57	0.10	0.47
178.99	0.10	0.10	0.00	179.51	0.58	0.10	0.48
179.00	0.10	0.10	0.00	179.52	0.59	0.10	0.49
179.01	0.10	0.10	0.00	179.53	0.60	0.10	0.50
179.02	0.10	0.10	0.00	179.54	0.61	0.10	0.51
179.03	0.10	0.10	0.00	179.55	0.61	0.10	0.52
179.04	0.10	0.10	0.01	179.56	0.62	0.10	0.53
179.05	0.10	0.10	0.01	179.57	0.63	0.10	0.53
179.06	0.11	0.10	0.01	179.58	0.64	0.10	0.54
179.07	0.11	0.10	0.02	179.59	0.65	0.10	0.55
179.08	0.12	0.10	0.02	179.60	0.66	0.10	0.56
179.09	0.12	0.10	0.02	179.61	0.66	0.10	0.57
179.10	0.13	0.10	0.03	179.62	0.67	0.10	0.58
179.11	0.13	0.10	0.04	179.63	0.68	0.10	0.58
179.12	0.14	0.10	0.04	179.64	0.69	0.10	0.59
179.13	0.15	0.10	0.05	179.65	0.69	0.10	0.60
179.14	0.15	0.10	0.06	179.66	0.70	0.10	0.61
179.15	0.16	0.10	0.07	179.67	0.71	0.10	0.61
179.16	0.17	0.10	0.07	179.68	0.72	0.10	0.62
179.17	0.18	0.10	0.08	179.69	0.72	0.10	0.63
179.18	0.19	0.10	0.09	179.70	0.73	0.10	0.63
179.19	0.20	0.10	0.10	179.71	0.74	0.10	0.64
179.20	0.21	0.10	0.11	179.72	0.74	0.10	0.65
179.21	0.22	0.10	0.12	179.73	0.75	0.10	0.66
179.22	0.23	0.10	0.13	179.74	0.76	0.10	0.66
179.23	0.24	0.10	0.14	179.75	0.77	0.10	0.67
179.24	0.25	0.10	0.16	179.76	0.77	0.10	0.68
179.25	0.26	0.10	0.17	179.77	0.78	0.10	0.68
179.26	0.28	0.10	0.18	179.78	0.78	0.10	0.69
179.27	0.29	0.10	0.19	179.79	0.79	0.10	0.69
179.28	0.30	0.10	0.20	179.80	0.80	0.10	0.70

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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
179.81	0.80	0.10	0.71	180.33	1.33	0.10	1.24
179.82	0.81	0.10	0.71	180.34	1.39	0.10	1.29
179.83	0.82	0.10	0.72	180.35	1.44	0.10	1.35
179.84	0.82	0.10	0.73	180.36	1.50	0.10	1.40
179.85	0.83	0.10	0.73	180.37	1.56	0.10	1.47
179.86	0.83	0.10	0.74	180.38	1.63	0.10	1.53
179.87	0.84	0.10	0.74	180.39	1.69	0.10	1.60
179.88	0.85	0.10	0.75	180.40	1.76	0.10	1.66
179.89	0.85	0.10	0.76	180.41	1.83	0.10	1.74
179.90	0.86	0.10	0.76	180.42	1.90	0.10	1.81
179.91	0.86	0.10	0.77	180.43	1.98	0.10	1.88
179.92	0.87	0.10	0.77	180.44	2.06	0.10	1.96
179.93	0.88	0.10	0.78	180.45	2.13	0.10	2.04
179.94	0.88	0.10	0.79	180.46	2.22	0.10	2.12
179.95	0.89	0.10	0.79	180.47	2.30	0.10	2.20
179.96	0.89	0.10	0.80	180.48	2.39	0.10	2.29
179.97	0.90	0.10	0.80	180.49	2.48	0.10	2.38
179.98	0.90	0.10	0.81	180.50	2.57	0.10	2.47
179.99	0.91	0.10	0.81	180.51	2.66	0.10	2.57
180.00	0.92	0.10	0.82	180.52	2.76	0.10	2.66
180.01	0.92	0.10	0.82	180.53	2.85	0.10	2.76
180.02	0.93	0.10	0.83	180.54	2.95	0.10	2.86
180.03	0.93	0.10	0.83	180.55	3.05	0.10	2.96
180.04	0.94	0.10	0.84	180.56	3.16	0.10	3.06
180.05	0.94	0.10	0.85	180.57	3.26	0.10	3.17
180.06	0.95	0.10	0.85	180.58	3.37	0.10	3.27
180.07	0.95	0.10	0.86	180.59	3.48	0.10	3.38
180.08	0.96	0.10	0.86	180.60	3.59	0.10	3.49
180.09	0.96	0.10	0.87	180.61	3.70	0.10	3.60
180.10	0.97	0.10	0.87	180.62	3.82	0.10	3.72
180.11	0.97	0.10	0.88	180.63	3.93	0.10	3.84
180.12	0.98	0.10	0.88	180.64	4.05	0.10	3.95
180.13	0.98	0.10	0.89	180.65	4.17	0.10	4.07
180.14	0.99	0.10	0.89	180.66	4.29	0.10	4.20
180.15	0.99	0.10	0.90	180.67	4.42	0.10	4.32
180.16	1.00	0.10	0.90	180.68	4.55	0.10	4.45
180.17	1.00	0.10	0.91	180.69	4.68	0.10	4.58
180.18	1.01	0.10	0.91	180.70	4.81	0.10	4.71
180.19	1.01	0.10	0.92	180.71	4.94	0.10	4.85
180.20	1.02	0.10	0.92	180.72	5.08	0.10	4.98
180.21	1.02	0.10	0.93	180.73	5.22	0.10	5.12
180.22	1.03	0.10	0.93	180.74	5.36	0.10	5.26
180.23	1.03	0.10	0.94	180.75	5.50	0.10	5.40
180.24	1.04	0.10	0.94	180.76	5.64	0.10	5.54
180.25	1.04	0.10	0.95	180.77	5.79	0.10	5.69
180.26	1.06	0.10	0.96	180.78	5.93	0.10	5.84
180.27	1.08	0.10	0.99	180.79	6.08	0.10	5.99
180.28	1.11	0.10	1.02	180.80	6.23	0.10	6.14
180.29	1.15	0.10	1.05	180.81	6.39	0.10	6.29
180.30	1.19	0.10	1.09	180.82	6.54	0.10	6.45
180.31	1.23	0.10	1.14	180.83	6.70	0.10	6.60
180.32	1.28	0.10	1.19	180.84	6.86	0.10	6.76



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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
180.85	7.02	0.10	6.92
180.86	7.19	0.10	7.09
180.87	7.36	0.10	7.26
180.88	7.53	0.10	7.43
180.89	7.71	0.10	7.61
180.90	7.88	0.10	7.79
180.91	8.06	0.10	7.97
180.92	8.24	0.10	8.15
180.93	8.43	0.10	8.33
180.94	8.61	0.10	8.52
180.95	8.80	0.10	8.71
180.96	8.99	0.10	8.90
180.97	9.19	0.10	9.09
180.98	9.38	0.10	9.28
180.99	9.58	0.10	9.48
181.00	9.78	0.10	9.68
181.01	9.98	0.10	9.88
181.02	10.18	0.10	10.09
181.03	10.39	0.10	10.29
181.04	10.60	0.10	10.50
181.05	10.81	0.10	10.71
181.06	10.99	0.10	10.90
181.07	11.18	0.10	11.08
181.08	11.37	0.10	11.27
181.09	11.55	0.10	11.46
181.10	11.74	0.10	11.65
181.11	11.93	0.10	11.84
181.12	12.12	0.10	12.03
181.13	12.32	0.10	12.22
181.14	12.51	0.10	12.41
181.15	<b>12.70</b>	0.10	<b>12.61</b>

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
175.65	1,738	0	176.17	1,738	361
175.66	1,738	7	176.18	1,738	368
175.67	1,738	14	176.19	1,738	375
175.68	1,738	21	176.20	1,738	382
175.69	1,738	28	176.21	1,738	389
175.70	1,738	35	176.22	1,738	396
175.71	1,738	42	176.23	1,738	403
175.72	1,738	49	176.24	1,738	410
175.73	1,738	56	176.25	1,738	417
175.74	1,738	63	176.26	1,738	424
175.75	1,738	70	176.27	1,738	431
175.76	1,738	76	176.28	1,738	438
175.77	1,738	83	176.29	1,738	445
175.78	1,738	90	176.30	1,738	452
175.79	1,738	97	176.31	1,738	459
175.80	1,738	104	176.32	1,738	466
175.81	1,738	111	176.33	1,738	473
175.82	1,738	118	176.34	1,738	480
175.83	1,738	125	176.35	1,738	487
175.84	1,738	132	176.36	1,738	494
175.85	1,738	139	176.37	1,738	500
175.86	1,738	146	176.38	1,738	507
175.87	1,738	153	176.39	1,738	514
175.88	1,738	160	176.40	1,738	521
175.89	1,738	167	176.41	1,738	535
175.90	1,738	174	176.42	1,738	549
175.91	1,738	181	176.43	1,738	564
175.92	1,738	188	176.44	1,738	578
175.93	1,738	195	176.45	1,738	592
175.94	1,738	202	176.46	1,738	606
175.95	1,738	209	176.47	1,738	620
175.96	1,738	215	176.48	1,738	634
175.97	1,738	222	176.49	1,738	648
175.98	1,738	229	176.50	1,738	662
175.99	1,738	236	176.51	1,738	676
176.00	1,738	243	176.52	1,738	690
176.01	1,738	250	176.53	1,738	704
176.02	1,738	257	176.54	1,738	718
176.03	1,738	264	176.55	1,738	732
176.04	1,738	271	176.56	1,738	746
176.05	1,738	278	176.57	1,738	760
176.06	1,738	285	176.58	1,738	774
176.07	1,738	292	176.59	1,738	788
176.08	1,738	299	176.60	1,738	802
176.09	1,738	306	176.61	1,738	816
176.10	1,738	313	176.62	1,738	830
176.11	1,738	320	176.63	1,738	844
176.12	1,738	327	176.64	1,738	858
176.13	1,738	334	176.65	1,738	872
176.14	1,738	341	176.66	1,738	886
176.15	1,738	348	176.67	1,738	900
176.16	1,738	354	176.68	1,738	914

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
176.69	1,738	928	177.21	1,738	1,646
176.70	1,738	942	177.22	1,738	1,659
176.71	1,738	956	177.23	1,738	1,673
176.72	1,738	970	177.24	1,738	1,686
176.73	1,738	984	177.25	1,738	1,700
176.74	1,738	998	177.26	1,738	1,714
176.75	1,738	1,012	177.27	1,738	1,727
176.76	1,738	1,025	177.28	1,738	1,741
176.77	1,738	1,039	177.29	1,738	1,754
176.78	1,738	1,053	177.30	1,738	1,768
176.79	1,738	1,067	177.31	1,738	1,782
176.80	1,738	1,081	177.32	1,738	1,795
176.81	1,738	1,095	177.33	1,738	1,809
176.82	1,738	1,109	177.34	1,738	1,822
176.83	1,738	1,123	177.35	1,738	1,836
176.84	1,738	1,137	177.36	1,738	1,849
176.85	1,738	1,150	177.37	1,738	1,863
176.86	1,738	1,164	177.38	1,738	1,876
176.87	1,738	1,178	177.39	1,738	1,890
176.88	1,738	1,192	177.40	1,738	1,903
176.89	1,738	1,206	177.41	1,738	1,917
176.90	1,738	1,220	177.42	1,738	1,930
176.91	1,738	1,233	177.43	1,738	1,944
176.92	1,738	1,247	177.44	1,738	1,957
176.93	1,738	1,261	177.45	1,738	1,971
176.94	1,738	1,275	177.46	1,738	1,984
176.95	1,738	1,289	177.47	1,738	1,998
176.96	1,738	1,303	177.48	1,738	2,011
176.97	1,738	1,316	177.49	1,738	2,025
176.98	1,738	1,330	177.50	1,738	2,038
176.99	1,738	1,344	177.51	1,738	2,051
177.00	1,738	1,358	177.52	1,738	2,065
177.01	1,738	1,371	177.53	1,738	2,078
177.02	1,738	1,385	177.54	1,738	2,092
177.03	1,738	1,399	177.55	1,738	2,105
177.04	1,738	1,413	177.56	1,738	2,118
177.05	1,738	1,427	177.57	1,738	2,132
177.06	1,738	1,440	177.58	1,738	2,145
177.07	1,738	1,454	177.59	1,738	2,158
177.08	1,738	1,468	177.60	1,738	2,172
177.09	1,738	1,481	177.61	1,738	2,185
177.10	1,738	1,495	177.62	1,738	2,198
177.11	1,738	1,509	177.63	1,738	2,212
177.12	1,738	1,523	177.64	1,738	2,225
177.13	1,738	1,536	177.65	1,738	2,238
177.14	1,738	1,550	177.66	1,738	2,252
177.15	1,738	1,564	177.67	1,738	2,265
177.16	1,738	1,577	177.68	1,738	2,278
177.17	1,738	1,591	177.69	1,738	2,291
177.18	1,738	1,605	177.70	1,738	2,305
177.19	1,738	1,618	177.71	1,738	2,318
177.20	1,738	1,632	177.72	1,738	2,331

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
177.73	1,738	2,344	178.25	1,738	3,017
177.74	1,738	2,358	178.26	1,738	3,030
177.75	1,738	2,371	178.27	1,738	3,042
177.76	1,738	2,384	178.28	1,738	3,055
177.77	1,738	2,397	178.29	1,738	3,067
177.78	1,738	2,410	178.30	1,738	3,080
177.79	1,738	2,423	178.31	1,738	3,092
177.80	1,738	2,437	178.32	1,738	3,105
177.81	1,738	2,450	178.33	1,738	3,117
177.82	1,738	2,463	178.34	1,738	3,130
177.83	1,738	2,476	178.35	1,738	3,143
177.84	1,738	2,489	178.36	1,738	3,155
177.85	1,738	2,502	178.37	1,738	3,167
177.86	1,738	2,515	178.38	1,738	3,180
177.87	1,738	2,528	178.39	1,738	3,192
177.88	1,738	2,541	178.40	1,738	3,205
177.89	1,738	2,554	178.41	1,738	3,217
177.90	1,738	2,567	178.42	1,738	3,230
177.91	1,738	2,581	178.43	1,738	3,242
177.92	1,738	2,594	178.44	1,738	3,254
177.93	1,738	2,607	178.45	1,738	3,267
177.94	1,738	2,620	178.46	1,738	3,279
177.95	1,738	2,633	178.47	1,738	3,291
177.96	1,738	2,646	178.48	1,738	3,304
177.97	1,738	2,658	178.49	1,738	3,316
177.98	1,738	2,671	178.50	1,738	3,328
177.99	1,738	2,684	178.51	1,738	3,341
178.00	1,738	2,697	178.52	1,738	3,353
178.01	1,738	2,710	178.53	1,738	3,365
178.02	1,738	2,723	178.54	1,738	3,377
178.03	1,738	2,736	178.55	1,738	3,389
178.04	1,738	2,749	178.56	1,738	3,402
178.05	1,738	2,762	178.57	1,738	3,414
178.06	1,738	2,775	178.58	1,738	3,426
178.07	1,738	2,788	178.59	1,738	3,438
178.08	1,738	2,800	178.60	1,738	3,450
178.09	1,738	2,813	178.61	1,738	3,462
178.10	1,738	2,826	178.62	1,738	3,474
178.11	1,738	2,839	178.63	1,738	3,487
178.12	1,738	2,852	178.64	1,738	3,499
178.13	1,738	2,864	178.65	1,738	3,511
178.14	1,738	2,877	178.66	1,738	3,523
178.15	1,738	2,890	178.67	1,738	3,535
178.16	1,738	2,903	178.68	1,738	3,547
178.17	1,738	2,915	178.69	1,738	3,559
178.18	1,738	2,928	178.70	1,738	3,571
178.19	1,738	2,941	178.71	1,738	3,582
178.20	1,738	2,954	178.72	1,738	3,594
178.21	1,738	2,966	178.73	1,738	3,606
178.22	1,738	2,979	178.74	1,738	3,618
178.23	1,738	2,992	178.75	1,738	3,630
178.24	1,738	3,004	178.76	1,738	3,642

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
178.77	1,738	3,654	179.29	1,738	4,239
178.78	1,738	3,665	179.30	1,738	4,250
178.79	1,738	3,677	179.31	1,738	4,261
178.80	1,738	3,689	179.32	1,738	4,271
178.81	1,738	3,701	179.33	1,738	4,282
178.82	1,738	3,713	179.34	1,738	4,292
178.83	1,738	3,724	179.35	1,738	4,303
178.84	1,738	3,736	179.36	1,738	4,313
178.85	1,738	3,748	179.37	1,738	4,323
178.86	1,738	3,759	179.38	1,738	4,334
178.87	1,738	3,771	179.39	1,738	4,344
178.88	1,738	3,783	179.40	1,738	4,354
178.89	1,738	3,794	179.41	1,738	4,365
178.90	1,738	3,806	179.42	1,738	4,375
178.91	1,738	3,817	179.43	1,738	4,385
178.92	1,738	3,829	179.44	1,738	4,395
178.93	1,738	3,840	179.45	1,738	4,405
178.94	1,738	3,852	179.46	1,738	4,416
178.95	1,738	3,863	179.47	1,738	4,426
178.96	1,738	3,875	179.48	1,738	4,436
178.97	1,738	3,886	179.49	1,738	4,446
178.98	1,738	3,898	179.50	1,738	4,456
178.99	1,738	3,909	179.51	1,738	4,466
179.00	1,738	3,920	179.52	1,738	4,475
179.01	1,738	3,932	179.53	1,738	4,485
179.02	1,738	3,943	179.54	1,738	4,495
179.03	1,738	3,954	179.55	1,738	4,505
179.04	1,738	3,965	179.56	1,738	4,514
179.05	1,738	3,977	179.57	1,738	4,524
179.06	1,738	3,988	179.58	1,738	4,534
179.07	1,738	3,999	179.59	1,738	4,543
179.08	1,738	4,010	179.60	1,738	4,553
179.09	1,738	4,022	179.61	1,738	4,562
179.10	1,738	4,033	179.62	1,738	4,572
179.11	1,738	4,044	179.63	1,738	4,581
179.12	1,738	4,055	179.64	1,738	4,591
179.13	1,738	4,066	179.65	1,738	4,600
179.14	1,738	4,077	179.66	1,738	4,609
179.15	1,738	4,088	179.67	1,738	4,618
179.16	1,738	4,099	179.68	1,738	4,627
179.17	1,738	4,110	179.69	1,738	4,636
179.18	1,738	4,121	179.70	1,738	4,645
179.19	1,738	4,132	179.71	1,738	4,654
179.20	1,738	4,143	179.72	1,738	4,663
179.21	1,738	4,154	179.73	1,738	4,672
179.22	1,738	4,164	179.74	1,738	4,680
179.23	1,738	4,175	179.75	1,738	4,689
179.24	1,738	4,186	179.76	1,738	4,698
179.25	1,738	4,197	179.77	1,738	4,706
179.26	1,738	4,207	179.78	1,738	4,714
179.27	1,738	4,218	179.79	1,738	4,723
179.28	1,738	4,229	179.80	1,738	4,731

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
179.81	1,738	4,739	180.33	1,738	5,118
179.82	1,738	4,747	180.34	1,738	5,125
179.83	1,738	4,755	180.35	1,738	5,132
179.84	1,738	4,763	180.36	1,738	5,139
179.85	1,738	4,771	180.37	1,738	5,146
179.86	1,738	4,779	180.38	1,738	5,153
179.87	1,738	4,787	180.39	1,738	5,160
179.88	1,738	4,795	180.40	1,738	5,167
179.89	1,738	4,802	180.41	1,738	5,174
179.90	1,738	4,810	180.42	1,738	5,181
179.91	1,738	4,818	180.43	1,738	5,188
179.92	1,738	4,825	180.44	1,738	5,195
179.93	1,738	4,833	180.45	1,738	5,201
179.94	1,738	4,840	180.46	1,738	5,208
179.95	1,738	4,848	180.47	1,738	5,215
179.96	1,738	4,855	180.48	1,738	5,222
179.97	1,738	4,863	180.49	1,738	5,229
179.98	1,738	4,870	180.50	1,738	5,236
179.99	1,738	4,878	180.51	1,738	5,243
180.00	1,738	4,885	180.52	1,738	5,250
180.01	1,738	4,893	180.53	1,738	5,257
180.02	1,738	4,900	180.54	1,738	5,264
180.03	1,738	4,907	180.55	1,738	5,271
180.04	1,738	4,915	180.56	1,738	5,278
180.05	1,738	4,922	180.57	1,738	5,285
180.06	1,738	4,929	180.58	1,738	5,292
180.07	1,738	4,936	180.59	1,738	5,299
180.08	1,738	4,944	180.60	1,738	5,306
180.09	1,738	4,951	180.61	1,738	5,313
180.10	1,738	4,958	180.62	1,738	5,320
180.11	1,738	4,965	180.63	1,738	5,327
180.12	1,738	4,972	180.64	1,738	5,334
180.13	1,738	4,979	180.65	1,738	5,340
180.14	1,738	4,986	180.66	1,738	5,347
180.15	1,738	4,993	180.67	1,738	5,354
180.16	1,738	5,000	180.68	1,738	5,361
180.17	1,738	5,007	180.69	1,738	5,368
180.18	1,738	5,014	180.70	1,738	5,375
180.19	1,738	5,021	180.71	1,738	5,382
180.20	1,738	5,028	180.72	1,738	5,389
180.21	1,738	5,035	180.73	1,738	5,396
180.22	1,738	5,042	180.74	1,738	5,403
180.23	1,738	5,049	180.75	1,738	5,410
180.24	1,738	5,055	180.76	1,738	5,417
180.25	1,738	5,062	180.77	1,738	5,424
180.26	1,738	5,069	180.78	1,738	5,431
180.27	1,738	5,076	180.79	1,738	5,438
180.28	1,738	5,083	180.80	1,738	5,445
180.29	1,738	5,090	180.81	1,738	5,452
180.30	1,738	5,097	180.82	1,738	5,459
180.31	1,738	5,104	180.83	1,738	5,466
180.32	1,738	5,111	180.84	1,738	5,473

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Type III 24-hr 2-Year Rainfall=3.45"

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
180.85	1,738	5,479
180.86	1,738	5,486
180.87	1,738	5,493
180.88	1,738	5,500
180.89	1,738	5,507
180.90	1,738	5,514
180.91	1,738	5,521
180.92	1,738	5,528
180.93	1,738	5,535
180.94	1,738	5,542
180.95	1,738	5,549
180.96	1,738	5,556
180.97	1,738	5,563
180.98	1,738	5,570
180.99	1,738	5,577
181.00	1,738	5,584
181.01	1,738	5,591
181.02	1,738	5,598
181.03	1,738	5,605
181.04	1,738	5,612
181.05	1,738	5,619
181.06	1,738	5,625
181.07	1,738	5,632
181.08	1,738	5,639
181.09	1,738	5,646
181.10	1,738	5,653
181.11	1,738	5,660
181.12	1,738	5,667
181.13	1,738	5,674
181.14	1,738	5,681
181.15	1,738	<b>5,688</b>

**post development**

*Type III 24-hr 2-Year Rainfall=3.45"*

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**Summary for Link TSD: Total Site Discharge**

Inflow Area = 119,968 sf, 21.15% Impervious, Inflow Depth = 0.52" for 2-Year event  
Inflow = 1.26 cfs @ 12.16 hrs, Volume= 5,242 cf  
Primary = 1.26 cfs @ 12.16 hrs, Volume= 5,242 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs



**post development**

Type III 24-hr 10-Year Rainfall=5.12"

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Time span=0.00-72.00 hrs, dt=0.02 hrs, 3601 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

**Subcatchment DA 1A: DA 1A** Runoff Area=16,145 sf 22.38% Impervious Runoff Depth=2.46"  
Tc=10.0 min CN=74 Runoff=0.93 cfs 3,310 cf

**Subcatchment DA 1B: DA 1B** Runoff Area=16,665 sf 100.00% Impervious Runoff Depth=4.88"  
Tc=5.0 min CN=98 Runoff=1.98 cfs 6,781 cf

**Subcatchment DA 1C: DA 1C** Runoff Area=47,379 sf 1.50% Impervious Runoff Depth=1.89"  
Tc=10.0 min CN=67 Runoff=2.03 cfs 7,451 cf

**Subcatchment DA 1D: DA 1D** Runoff Area=10,641 sf 41.23% Impervious Runoff Depth=3.09"  
Tc=5.0 min CN=81 Runoff=0.91 cfs 2,741 cf

**Subcatchment DA 1E: DA 1E** Runoff Area=29,138 sf 0.00% Impervious Runoff Depth=1.89"  
Flow Length=446' Tc=10.7 min CN=67 Runoff=1.22 cfs 4,582 cf

**Pond RG-A: Rain Garden A** Peak Elev=185.05' Storage=1,132 cf Inflow=0.93 cfs 3,310 cf  
Discarded=0.06 cfs 2,609 cf Primary=0.45 cfs 702 cf Outflow=0.51 cfs 3,310 cf

**Pond RG-B: Rain Garden B** Peak Elev=157.91' Storage=1,349 cf Inflow=0.91 cfs 2,741 cf  
Discarded=0.06 cfs 2,741 cf Primary=0.00 cfs 0 cf Outflow=0.06 cfs 2,741 cf

**Pond SWB: Stormtech MC 3500 (SWM-B)** Peak Elev=178.26' Storage=3,032 cf Inflow=1.98 cfs 6,781 cf  
Discarded=0.10 cfs 6,781 cf Primary=0.00 cfs 0 cf Outflow=0.10 cfs 6,781 cf

**Link TSD: Total Site Discharge** Inflow=3.24 cfs 12,734 cf  
Primary=3.24 cfs 12,734 cf

**Total Runoff Area = 119,968 sf Runoff Volume = 24,866 cf Average Runoff Depth = 2.49"**  
**78.85% Pervious = 94,594 sf 21.15% Impervious = 25,374 sf**

**post development**

Type III 24-hr 10-Year Rainfall=5.12"

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**Summary for Subcatchment DA 1A: DA 1A**

Runoff = 0.93 cfs @ 12.14 hrs, Volume= 3,310 cf, Depth= 2.46"

Routed to Pond RG-A : Rain Garden A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
Type III 24-hr 10-Year Rainfall=5.12"

Area (sf)	CN	Description
6,492	66	Woods, Poor, HSG B
6,040	69	50-75% Grass cover, Fair, HSG B
3,613	98	Paved parking, HSG B
16,145	74	Weighted Average
12,532		77.62% Pervious Area
3,613		22.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					<b>Direct Entry, direct</b>

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Type III 24-hr 10-Year Rainfall=5.12"

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**Summary for Subcatchment DA 1B: DA 1B**

Runoff = 1.98 cfs @ 12.07 hrs, Volume= 6,781 cf, Depth= 4.88"

Routed to Pond SWB : Stormtech MC 3500 (SWM-B)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Type III 24-hr 10-Year Rainfall=5.12"

Area (sf)	CN	Description
4,000	98	Roofs, HSG B
12,665	98	Paved parking, HSG B
16,665	98	Weighted Average
16,665		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					<b>Direct Entry, direct</b>

**post development**

Type III 24-hr 10-Year Rainfall=5.12"

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**Summary for Subcatchment DA 1C: DA 1C**

Runoff = 2.03 cfs @ 12.15 hrs, Volume= 7,451 cf, Depth= 1.89"

Routed to Link TSD : Total Site Discharge

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Type III 24-hr 10-Year Rainfall=5.12"

Area (sf)	CN	Description
709	98	Paved parking, HSG B
22,996	66	Woods, Poor, HSG B
23,674	67	Brush, Poor, HSG B
47,379	67	Weighted Average
46,670		98.50% Pervious Area
709		1.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					<b>Direct Entry, direct</b>

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Type III 24-hr 10-Year Rainfall=5.12"

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**Summary for Subcatchment DA 1D: DA 1D**

Runoff = 0.91 cfs @ 12.07 hrs, Volume= 2,741 cf, Depth= 3.09"

Routed to Pond RG-B : Rain Garden B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Type III 24-hr 10-Year Rainfall=5.12"

Area (sf)	CN	Description
4,387	98	Paved parking, HSG B
6,254	69	50-75% Grass cover, Fair, HSG B
10,641	81	Weighted Average
6,254		58.77% Pervious Area
4,387		41.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					<b>Direct Entry, direct</b>

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Type III 24-hr 10-Year Rainfall=5.12"

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**Summary for Subcatchment DA 1E: DA 1E**

Runoff = 1.22 cfs @ 12.16 hrs, Volume= 4,582 cf, Depth= 1.89"

Routed to Link TSD : Total Site Discharge

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Type III 24-hr 10-Year Rainfall=5.12"

Area (sf)	CN	Description
20,116	66	Woods, Poor, HSG B
9,022	69	50-75% Grass cover, Fair, HSG B
29,138	67	Weighted Average
29,138		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	100	0.2400	0.22		<b>Sheet Flow, Sheetflow</b>
					Woods: Light underbrush n= 0.400 P2= 3.45"
3.0	346	0.0750	1.92		<b>Shallow Concentrated Flow, SHALLOW</b>
					Short Grass Pasture Kv= 7.0 fps
10.7	446	Total			

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Type III 24-hr 10-Year Rainfall=5.12"

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**Summary for Pond RG-A: Rain Garden A**

Inflow Area = 16,145 sf, 22.38% Impervious, Inflow Depth = 2.46" for 10-Year event  
 Inflow = 0.93 cfs @ 12.14 hrs, Volume= 3,310 cf  
 Outflow = 0.51 cfs @ 12.36 hrs, Volume= 3,310 cf, Atten= 46%, Lag= 12.9 min  
 Discarded = 0.06 cfs @ 12.36 hrs, Volume= 2,609 cf  
 Primary = 0.45 cfs @ 12.36 hrs, Volume= 702 cf  
 Routed to Link TSD : Total Site Discharge

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
 Peak Elev= 185.05' @ 12.36 hrs Surf.Area= 1,038 sf Storage= 1,132 cf

Plug-Flow detention time= 201.5 min calculated for 3,309 cf (100% of inflow)  
 Center-of-Mass det. time= 201.6 min ( 1,041.6 - 840.0 )

Volume	Invert	Avail.Storage	Storage Description
#1	183.00'	1,404 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.00	143	0	0
184.00	501	322	322
185.00	1,011	756	1,078
185.30	1,164	326	1,404

Device	Routing	Invert	Outlet Devices
#1	Primary	185.00'	<b>15.0' long x 3.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.41 2.56 2.69 2.67 2.66 2.66 2.65 2.67 2.67 2.70 2.77 2.83 2.87 2.93 3.10 3.19 3.32
#2	Discarded	183.00'	<b>2.400 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.06 cfs @ 12.36 hrs HW=185.05' (Free Discharge)  
 ↑**2=Exfiltration** (Exfiltration Controls 0.06 cfs)

**Primary OutFlow** Max=0.44 cfs @ 12.36 hrs HW=185.05' (Free Discharge)  
 ↑**1=Broad-Crested Rectangular Weir** (Weir Controls 0.44 cfs @ 0.55 fps)

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Type III 24-hr 10-Year Rainfall=5.12"

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**Stage-Discharge for Pond RG-A: Rain Garden A**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
183.00	0.00	0.00	0.00	183.52	0.02	0.02	0.00
183.01	0.01	0.01	0.00	183.53	0.02	0.02	0.00
183.02	0.01	0.01	0.00	183.54	0.02	0.02	0.00
183.03	0.01	0.01	0.00	183.55	0.02	0.02	0.00
183.04	0.01	0.01	0.00	183.56	0.02	0.02	0.00
183.05	0.01	0.01	0.00	183.57	0.02	0.02	0.00
183.06	0.01	0.01	0.00	183.58	0.02	0.02	0.00
183.07	0.01	0.01	0.00	183.59	0.02	0.02	0.00
183.08	0.01	0.01	0.00	183.60	0.02	0.02	0.00
183.09	0.01	0.01	0.00	183.61	0.02	0.02	0.00
183.10	0.01	0.01	0.00	183.62	0.02	0.02	0.00
183.11	0.01	0.01	0.00	183.63	0.02	0.02	0.00
183.12	0.01	0.01	0.00	183.64	0.02	0.02	0.00
183.13	0.01	0.01	0.00	183.65	0.02	0.02	0.00
183.14	0.01	0.01	0.00	183.66	0.02	0.02	0.00
183.15	0.01	0.01	0.00	183.67	0.02	0.02	0.00
183.16	0.01	0.01	0.00	183.68	0.02	0.02	0.00
183.17	0.01	0.01	0.00	183.69	0.02	0.02	0.00
183.18	0.01	0.01	0.00	183.70	0.02	0.02	0.00
183.19	0.01	0.01	0.00	183.71	0.02	0.02	0.00
183.20	0.01	0.01	0.00	183.72	0.02	0.02	0.00
183.21	0.01	0.01	0.00	183.73	0.02	0.02	0.00
183.22	0.01	0.01	0.00	183.74	0.02	0.02	0.00
183.23	0.01	0.01	0.00	183.75	0.02	0.02	0.00
183.24	0.01	0.01	0.00	183.76	0.02	0.02	0.00
183.25	0.01	0.01	0.00	183.77	0.02	0.02	0.00
183.26	0.01	0.01	0.00	183.78	0.02	0.02	0.00
183.27	0.01	0.01	0.00	183.79	0.02	0.02	0.00
183.28	0.01	0.01	0.00	183.80	0.02	0.02	0.00
183.29	0.01	0.01	0.00	183.81	0.02	0.02	0.00
183.30	0.01	0.01	0.00	183.82	0.02	0.02	0.00
183.31	0.01	0.01	0.00	183.83	0.02	0.02	0.00
183.32	0.01	0.01	0.00	183.84	0.02	0.02	0.00
183.33	0.01	0.01	0.00	183.85	0.02	0.02	0.00
183.34	0.01	0.01	0.00	183.86	0.03	0.03	0.00
183.35	0.01	0.01	0.00	183.87	0.03	0.03	0.00
183.36	0.02	0.02	0.00	183.88	0.03	0.03	0.00
183.37	0.02	0.02	0.00	183.89	0.03	0.03	0.00
183.38	0.02	0.02	0.00	183.90	0.03	0.03	0.00
183.39	0.02	0.02	0.00	183.91	0.03	0.03	0.00
183.40	0.02	0.02	0.00	183.92	0.03	0.03	0.00
183.41	0.02	0.02	0.00	183.93	0.03	0.03	0.00
183.42	0.02	0.02	0.00	183.94	0.03	0.03	0.00
183.43	0.02	0.02	0.00	183.95	0.03	0.03	0.00
183.44	0.02	0.02	0.00	183.96	0.03	0.03	0.00
183.45	0.02	0.02	0.00	183.97	0.03	0.03	0.00
183.46	0.02	0.02	0.00	183.98	0.03	0.03	0.00
183.47	0.02	0.02	0.00	183.99	0.03	0.03	0.00
183.48	0.02	0.02	0.00	184.00	0.03	0.03	0.00
183.49	0.02	0.02	0.00	184.01	0.03	0.03	0.00
183.50	0.02	0.02	0.00	184.02	0.03	0.03	0.00
183.51	0.02	0.02	0.00	184.03	0.03	0.03	0.00



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Type III 24-hr 10-Year Rainfall=5.12"

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**Stage-Discharge for Pond RG-A: Rain Garden A (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
184.04	0.03	0.03	0.00	184.56	0.04	0.04	0.00
184.05	0.03	0.03	0.00	184.57	0.04	0.04	0.00
184.06	0.03	0.03	0.00	184.58	0.04	0.04	0.00
184.07	0.03	0.03	0.00	184.59	0.04	0.04	0.00
184.08	0.03	0.03	0.00	184.60	0.04	0.04	0.00
184.09	0.03	0.03	0.00	184.61	0.05	0.05	0.00
184.10	0.03	0.03	0.00	184.62	0.05	0.05	0.00
184.11	0.03	0.03	0.00	184.63	0.05	0.05	0.00
184.12	0.03	0.03	0.00	184.64	0.05	0.05	0.00
184.13	0.03	0.03	0.00	184.65	0.05	0.05	0.00
184.14	0.03	0.03	0.00	184.66	0.05	0.05	0.00
184.15	0.03	0.03	0.00	184.67	0.05	0.05	0.00
184.16	0.03	0.03	0.00	184.68	0.05	0.05	0.00
184.17	0.03	0.03	0.00	184.69	0.05	0.05	0.00
184.18	0.03	0.03	0.00	184.70	0.05	0.05	0.00
184.19	0.03	0.03	0.00	184.71	0.05	0.05	0.00
184.20	0.03	0.03	0.00	184.72	0.05	0.05	0.00
184.21	0.03	0.03	0.00	184.73	0.05	0.05	0.00
184.22	0.03	0.03	0.00	184.74	0.05	0.05	0.00
184.23	0.03	0.03	0.00	184.75	0.05	0.05	0.00
184.24	0.03	0.03	0.00	184.76	0.05	0.05	0.00
184.25	0.03	0.03	0.00	184.77	0.05	0.05	0.00
184.26	0.04	0.04	0.00	184.78	0.05	0.05	0.00
184.27	0.04	0.04	0.00	184.79	0.05	0.05	0.00
184.28	0.04	0.04	0.00	184.80	0.05	0.05	0.00
184.29	0.04	0.04	0.00	184.81	0.05	0.05	0.00
184.30	0.04	0.04	0.00	184.82	0.05	0.05	0.00
184.31	0.04	0.04	0.00	184.83	0.05	0.05	0.00
184.32	0.04	0.04	0.00	184.84	0.05	0.05	0.00
184.33	0.04	0.04	0.00	184.85	0.05	0.05	0.00
184.34	0.04	0.04	0.00	184.86	0.05	0.05	0.00
184.35	0.04	0.04	0.00	184.87	0.05	0.05	0.00
184.36	0.04	0.04	0.00	184.88	0.05	0.05	0.00
184.37	0.04	0.04	0.00	184.89	0.05	0.05	0.00
184.38	0.04	0.04	0.00	184.90	0.05	0.05	0.00
184.39	0.04	0.04	0.00	184.91	0.05	0.05	0.00
184.40	0.04	0.04	0.00	184.92	0.05	0.05	0.00
184.41	0.04	0.04	0.00	184.93	0.05	0.05	0.00
184.42	0.04	0.04	0.00	184.94	0.05	0.05	0.00
184.43	0.04	0.04	0.00	184.95	0.05	0.05	0.00
184.44	0.04	0.04	0.00	184.96	0.06	0.06	0.00
184.45	0.04	0.04	0.00	184.97	0.06	0.06	0.00
184.46	0.04	0.04	0.00	184.98	0.06	0.06	0.00
184.47	0.04	0.04	0.00	184.99	0.06	0.06	0.00
184.48	0.04	0.04	0.00	185.00	0.06	0.06	0.00
184.49	0.04	0.04	0.00	185.01	0.09	0.06	0.04
184.50	0.04	0.04	0.00	185.02	0.16	0.06	0.10
184.51	0.04	0.04	0.00	185.03	0.24	0.06	0.19
184.52	0.04	0.04	0.00	185.04	0.35	0.06	0.29
184.53	0.04	0.04	0.00	185.05	0.46	0.06	0.40
184.54	0.04	0.04	0.00	185.06	0.59	0.06	0.53
184.55	0.04	0.04	0.00	185.07	0.73	0.06	0.67

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**Stage-Discharge for Pond RG-A: Rain Garden A (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
185.08	0.88	0.06	0.82
185.09	1.03	0.06	0.98
185.10	1.20	0.06	1.14
185.11	1.38	0.06	1.32
185.12	1.56	0.06	1.50
185.13	1.75	0.06	1.69
185.14	1.95	0.06	1.89
185.15	2.16	0.06	2.10
185.16	2.37	0.06	2.31
185.17	2.59	0.06	2.53
185.18	2.82	0.06	2.76
185.19	3.06	0.06	2.99
185.20	3.30	0.06	3.23
185.21	3.55	0.06	3.49
185.22	3.82	0.06	3.75
185.23	4.09	0.06	4.02
185.24	4.37	0.06	4.30
185.25	4.65	0.06	4.59
185.26	4.95	0.06	4.88
185.27	5.25	0.06	5.18
185.28	5.55	0.06	5.49
185.29	5.87	0.06	5.80
185.30	<b>6.19</b>	<b>0.06</b>	<b>6.12</b>

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**Stage-Area-Storage for Pond RG-A: Rain Garden A**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.00	143	0	183.52	329	123
183.01	147	1	183.53	333	126
183.02	150	3	183.54	336	129
183.03	154	4	183.55	340	133
183.04	157	6	183.56	343	136
183.05	161	8	183.57	347	140
183.06	164	9	183.58	351	143
183.07	168	11	183.59	354	147
183.08	172	13	183.60	358	150
183.09	175	14	183.61	361	154
183.10	179	16	183.62	365	157
183.11	182	18	183.63	369	161
183.12	186	20	183.64	372	165
183.13	190	22	183.65	376	169
183.14	193	24	183.66	379	172
183.15	197	25	183.67	383	176
183.16	200	27	183.68	386	180
183.17	204	29	183.69	390	184
183.18	207	32	183.70	394	188
183.19	211	34	183.71	397	192
183.20	215	36	183.72	401	196
183.21	218	38	183.73	404	200
183.22	222	40	183.74	408	204
183.23	225	42	183.75	412	208
183.24	229	45	183.76	415	212
183.25	233	47	183.77	419	216
183.26	236	49	183.78	422	220
183.27	240	52	183.79	426	225
183.28	243	54	183.80	429	229
183.29	247	57	183.81	433	233
183.30	250	59	183.82	437	238
183.31	254	62	183.83	440	242
183.32	258	64	183.84	444	246
183.33	261	67	183.85	447	251
183.34	265	69	183.86	451	255
183.35	268	72	183.87	454	260
183.36	272	75	183.88	458	264
183.37	275	77	183.89	462	269
183.38	279	80	183.90	465	274
183.39	283	83	183.91	469	278
183.40	286	86	183.92	472	283
183.41	290	89	183.93	476	288
183.42	293	92	183.94	480	293
183.43	297	95	183.95	483	297
183.44	301	98	183.96	487	302
183.45	304	101	183.97	490	307
183.46	308	104	183.98	494	312
183.47	311	107	183.99	497	317
183.48	315	110	184.00	501	322
183.49	318	113	184.01	506	327
183.50	322	116	184.02	511	332
183.51	326	119	184.03	516	337

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**Stage-Area-Storage for Pond RG-A: Rain Garden A (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.04	521	342	184.56	787	683
184.05	527	348	184.57	792	690
184.06	532	353	184.58	797	698
184.07	537	358	184.59	802	706
184.08	542	364	184.60	807	714
184.09	547	369	184.61	812	722
184.10	552	375	184.62	817	731
184.11	557	380	184.63	822	739
184.12	562	386	184.64	827	747
184.13	567	391	184.65	833	755
184.14	572	397	184.66	838	764
184.15	578	403	184.67	843	772
184.16	583	409	184.68	848	781
184.17	588	415	184.69	853	789
184.18	593	420	184.70	858	798
184.19	598	426	184.71	863	806
184.20	603	432	184.72	868	815
184.21	608	438	184.73	873	824
184.22	613	445	184.74	878	832
184.23	618	451	184.75	884	841
184.24	623	457	184.76	889	850
184.25	629	463	184.77	894	859
184.26	634	469	184.78	899	868
184.27	639	476	184.79	904	877
184.28	644	482	184.80	909	886
184.29	649	489	184.81	914	895
184.30	654	495	184.82	919	904
184.31	659	502	184.83	924	913
184.32	664	508	184.84	929	923
184.33	669	515	184.85	934	932
184.34	674	522	184.86	940	941
184.35	679	529	184.87	945	951
184.36	685	535	184.88	950	960
184.37	690	542	184.89	955	970
184.38	695	549	184.90	960	979
184.39	700	556	184.91	965	989
184.40	705	563	184.92	970	999
184.41	710	570	184.93	975	1,008
184.42	715	577	184.94	980	1,018
184.43	720	585	184.95	985	1,028
184.44	725	592	184.96	991	1,038
184.45	730	599	184.97	996	1,048
184.46	736	606	184.98	1,001	1,058
184.47	741	614	184.99	1,006	1,068
184.48	746	621	185.00	1,011	1,078
184.49	751	629	185.01	1,016	1,088
184.50	756	636	185.02	1,021	1,098
184.51	761	644	185.03	1,026	1,109
184.52	766	651	185.04	1,031	1,119
184.53	771	659	185.05	1,037	1,129
184.54	776	667	185.06	1,042	1,140
184.55	782	675	185.07	1,047	1,150

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**Stage-Area-Storage for Pond RG-A: Rain Garden A (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.08	1,052	1,161
185.09	1,057	1,171
185.10	1,062	1,182
185.11	1,067	1,192
185.12	1,072	1,203
185.13	1,077	1,214
185.14	1,082	1,225
185.15	1,088	1,235
185.16	1,093	1,246
185.17	1,098	1,257
185.18	1,103	1,268
185.19	1,108	1,279
185.20	1,113	1,290
185.21	1,118	1,302
185.22	1,123	1,313
185.23	1,128	1,324
185.24	1,133	1,335
185.25	1,138	1,347
185.26	1,144	1,358
185.27	1,149	1,370
185.28	1,154	1,381
185.29	1,159	1,393
185.30	<b>1,164</b>	<b>1,404</b>

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**Summary for Pond RG-B: Rain Garden B**

Inflow Area = 10,641 sf, 41.23% Impervious, Inflow Depth = 3.09" for 10-Year event  
 Inflow = 0.91 cfs @ 12.07 hrs, Volume= 2,741 cf  
 Outflow = 0.06 cfs @ 13.94 hrs, Volume= 2,741 cf, Atten= 94%, Lag= 111.7 min  
 Discarded = 0.06 cfs @ 13.94 hrs, Volume= 2,741 cf  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf  
 Routed to Link TSD : Total Site Discharge

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
 Peak Elev= 157.91' @ 13.94 hrs Surf.Area= 1,007 sf Storage= 1,349 cf

Plug-Flow detention time= 274.5 min calculated for 2,741 cf (100% of inflow)  
 Center-of-Mass det. time= 274.4 min ( 1,091.6 - 817.1 )

Volume	Invert	Avail.Storage	Storage Description
#1	156.00'	1,767 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
156.00	437	0	0
157.00	704	571	571
158.00	1,037	871	1,441
158.30	1,135	326	1,767

Device	Routing	Invert	Outlet Devices
#1	Primary	158.00'	<b>15.0' long x 4.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32
#2	Discarded	156.00'	<b>2.400 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.06 cfs @ 13.94 hrs HW=157.91' (Free Discharge)  
 ↑**2=Exfiltration** (Exfiltration Controls 0.06 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=156.00' (Free Discharge)  
 ↑**1=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)

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**Stage-Discharge for Pond RG-B: Rain Garden B**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
156.00	0.00	0.00	0.00	156.52	0.03	0.03	0.00
156.01	0.02	0.02	0.00	156.53	0.03	0.03	0.00
156.02	0.02	0.02	0.00	156.54	0.03	0.03	0.00
156.03	0.02	0.02	0.00	156.55	0.03	0.03	0.00
156.04	0.02	0.02	0.00	156.56	0.03	0.03	0.00
156.05	0.03	0.03	0.00	156.57	0.03	0.03	0.00
156.06	0.03	0.03	0.00	156.58	0.03	0.03	0.00
156.07	0.03	0.03	0.00	156.59	0.03	0.03	0.00
156.08	0.03	0.03	0.00	156.60	0.03	0.03	0.00
156.09	0.03	0.03	0.00	156.61	0.03	0.03	0.00
156.10	0.03	0.03	0.00	156.62	0.03	0.03	0.00
156.11	0.03	0.03	0.00	156.63	0.03	0.03	0.00
156.12	0.03	0.03	0.00	156.64	0.03	0.03	0.00
156.13	0.03	0.03	0.00	156.65	0.03	0.03	0.00
156.14	0.03	0.03	0.00	156.66	0.03	0.03	0.00
156.15	0.03	0.03	0.00	156.67	0.03	0.03	0.00
156.16	0.03	0.03	0.00	156.68	0.03	0.03	0.00
156.17	0.03	0.03	0.00	156.69	0.03	0.03	0.00
156.18	0.03	0.03	0.00	156.70	0.03	0.03	0.00
156.19	0.03	0.03	0.00	156.71	0.03	0.03	0.00
156.20	0.03	0.03	0.00	156.72	0.03	0.03	0.00
156.21	0.03	0.03	0.00	156.73	0.04	0.04	0.00
156.22	0.03	0.03	0.00	156.74	0.04	0.04	0.00
156.23	0.03	0.03	0.00	156.75	0.04	0.04	0.00
156.24	0.03	0.03	0.00	156.76	0.04	0.04	0.00
156.25	0.03	0.03	0.00	156.77	0.04	0.04	0.00
156.26	0.03	0.03	0.00	156.78	0.04	0.04	0.00
156.27	0.03	0.03	0.00	156.79	0.04	0.04	0.00
156.28	0.03	0.03	0.00	156.80	0.04	0.04	0.00
156.29	0.03	0.03	0.00	156.81	0.04	0.04	0.00
156.30	0.03	0.03	0.00	156.82	0.04	0.04	0.00
156.31	0.03	0.03	0.00	156.83	0.04	0.04	0.00
156.32	0.03	0.03	0.00	156.84	0.04	0.04	0.00
156.33	0.03	0.03	0.00	156.85	0.04	0.04	0.00
156.34	0.03	0.03	0.00	156.86	0.04	0.04	0.00
156.35	0.03	0.03	0.00	156.87	0.04	0.04	0.00
156.36	0.03	0.03	0.00	156.88	0.04	0.04	0.00
156.37	0.03	0.03	0.00	156.89	0.04	0.04	0.00
156.38	0.03	0.03	0.00	156.90	0.04	0.04	0.00
156.39	0.03	0.03	0.00	156.91	0.04	0.04	0.00
156.40	0.03	0.03	0.00	156.92	0.04	0.04	0.00
156.41	0.03	0.03	0.00	156.93	0.04	0.04	0.00
156.42	0.03	0.03	0.00	156.94	0.04	0.04	0.00
156.43	0.03	0.03	0.00	156.95	0.04	0.04	0.00
156.44	0.03	0.03	0.00	156.96	0.04	0.04	0.00
156.45	0.03	0.03	0.00	156.97	0.04	0.04	0.00
156.46	0.03	0.03	0.00	156.98	0.04	0.04	0.00
156.47	0.03	0.03	0.00	156.99	0.04	0.04	0.00
156.48	0.03	0.03	0.00	157.00	0.04	0.04	0.00
156.49	0.03	0.03	0.00	157.01	0.04	0.04	0.00
156.50	0.03	0.03	0.00	157.02	0.04	0.04	0.00
156.51	0.03	0.03	0.00	157.03	0.04	0.04	0.00

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**Stage-Discharge for Pond RG-B: Rain Garden B (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
157.04	0.04	0.04	0.00	157.56	0.05	0.05	0.00
157.05	0.04	0.04	0.00	157.57	0.05	0.05	0.00
157.06	0.04	0.04	0.00	157.58	0.05	0.05	0.00
157.07	0.04	0.04	0.00	157.59	0.05	0.05	0.00
157.08	0.04	0.04	0.00	157.60	0.05	0.05	0.00
157.09	0.04	0.04	0.00	157.61	0.05	0.05	0.00
157.10	0.04	0.04	0.00	157.62	0.05	0.05	0.00
157.11	0.04	0.04	0.00	157.63	0.05	0.05	0.00
157.12	0.04	0.04	0.00	157.64	0.05	0.05	0.00
157.13	0.04	0.04	0.00	157.65	0.05	0.05	0.00
157.14	0.04	0.04	0.00	157.66	0.05	0.05	0.00
157.15	0.04	0.04	0.00	157.67	0.05	0.05	0.00
157.16	0.04	0.04	0.00	157.68	0.05	0.05	0.00
157.17	0.04	0.04	0.00	157.69	0.05	0.05	0.00
157.18	0.04	0.04	0.00	157.70	0.05	0.05	0.00
157.19	0.04	0.04	0.00	157.71	0.05	0.05	0.00
157.20	0.04	0.04	0.00	157.72	0.05	0.05	0.00
157.21	0.04	0.04	0.00	157.73	0.05	0.05	0.00
157.22	0.04	0.04	0.00	157.74	0.05	0.05	0.00
157.23	0.04	0.04	0.00	157.75	0.05	0.05	0.00
157.24	0.04	0.04	0.00	157.76	0.05	0.05	0.00
157.25	0.04	0.04	0.00	157.77	0.05	0.05	0.00
157.26	0.04	0.04	0.00	157.78	0.05	0.05	0.00
157.27	0.04	0.04	0.00	157.79	0.05	0.05	0.00
157.28	0.04	0.04	0.00	157.80	0.05	0.05	0.00
157.29	0.04	0.04	0.00	157.81	0.05	0.05	0.00
157.30	0.04	0.04	0.00	157.82	0.05	0.05	0.00
157.31	0.04	0.04	0.00	157.83	0.05	0.05	0.00
157.32	0.05	0.05	0.00	157.84	0.05	0.05	0.00
157.33	0.05	0.05	0.00	157.85	0.05	0.05	0.00
157.34	0.05	0.05	0.00	157.86	0.06	0.06	0.00
157.35	0.05	0.05	0.00	157.87	0.06	0.06	0.00
157.36	0.05	0.05	0.00	157.88	0.06	0.06	0.00
157.37	0.05	0.05	0.00	157.89	0.06	0.06	0.00
157.38	0.05	0.05	0.00	157.90	0.06	0.06	0.00
157.39	0.05	0.05	0.00	157.91	0.06	0.06	0.00
157.40	0.05	0.05	0.00	157.92	0.06	0.06	0.00
157.41	0.05	0.05	0.00	157.93	0.06	0.06	0.00
157.42	0.05	0.05	0.00	157.94	0.06	0.06	0.00
157.43	0.05	0.05	0.00	157.95	0.06	0.06	0.00
157.44	0.05	0.05	0.00	157.96	0.06	0.06	0.00
157.45	0.05	0.05	0.00	157.97	0.06	0.06	0.00
157.46	0.05	0.05	0.00	157.98	0.06	0.06	0.00
157.47	0.05	0.05	0.00	157.99	0.06	0.06	0.00
157.48	0.05	0.05	0.00	158.00	0.06	0.06	0.00
157.49	0.05	0.05	0.00	158.01	0.09	0.06	0.04
157.50	0.05	0.05	0.00	158.02	0.16	0.06	0.10
157.51	0.05	0.05	0.00	158.03	0.24	0.06	0.19
157.52	0.05	0.05	0.00	158.04	0.34	0.06	0.29
157.53	0.05	0.05	0.00	158.05	0.46	0.06	0.40
157.54	0.05	0.05	0.00	158.06	0.58	0.06	0.52
157.55	0.05	0.05	0.00	158.07	0.72	0.06	0.66



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**Stage-Discharge for Pond RG-B: Rain Garden B (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
158.08	0.87	0.06	0.81
158.09	1.02	0.06	0.96
158.10	1.19	0.06	1.13
158.11	1.36	0.06	1.30
158.12	1.54	0.06	1.48
158.13	1.73	0.06	1.67
158.14	1.93	0.06	1.87
158.15	2.13	0.06	2.07
158.16	2.35	0.06	2.28
158.17	2.56	0.06	2.50
158.18	2.79	0.06	2.73
158.19	3.02	0.06	2.96
158.20	3.25	0.06	3.19
158.21	3.51	0.06	3.45
158.22	3.77	0.06	3.71
158.23	4.04	0.06	3.98
158.24	4.32	0.06	4.25
158.25	4.60	0.06	4.54
158.26	4.89	0.06	4.83
158.27	5.19	0.06	5.13
158.28	5.49	0.06	5.43
158.29	5.81	0.06	5.74
158.30	<b>6.13</b>	<b>0.06</b>	<b>6.06</b>

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**Stage-Area-Storage for Pond RG-B: Rain Garden B**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
156.00	437	0	156.52	576	263
156.01	440	4	156.53	579	269
156.02	442	9	156.54	581	275
156.03	445	13	156.55	584	281
156.04	448	18	156.56	587	287
156.05	450	22	156.57	589	292
156.06	453	27	156.58	592	298
156.07	456	31	156.59	595	304
156.08	458	36	156.60	597	310
156.09	461	40	156.61	600	316
156.10	464	45	156.62	603	322
156.11	466	50	156.63	605	328
156.12	469	54	156.64	608	334
156.13	472	59	156.65	611	340
156.14	474	64	156.66	613	347
156.15	477	69	156.67	616	353
156.16	480	73	156.68	619	359
156.17	482	78	156.69	621	365
156.18	485	83	156.70	624	371
156.19	488	88	156.71	627	378
156.20	490	93	156.72	629	384
156.21	493	98	156.73	632	390
156.22	496	103	156.74	635	396
156.23	498	108	156.75	637	403
156.24	501	113	156.76	640	409
156.25	504	118	156.77	643	416
156.26	506	123	156.78	645	422
156.27	509	128	156.79	648	429
156.28	512	133	156.80	651	435
156.29	514	138	156.81	653	442
156.30	517	143	156.82	656	448
156.31	520	148	156.83	659	455
156.32	522	154	156.84	661	461
156.33	525	159	156.85	664	468
156.34	528	164	156.86	667	475
156.35	530	169	156.87	669	481
156.36	533	175	156.88	672	488
156.37	536	180	156.89	675	495
156.38	538	185	156.90	677	501
156.39	541	191	156.91	680	508
156.40	544	196	156.92	683	515
156.41	546	202	156.93	685	522
156.42	549	207	156.94	688	529
156.43	552	213	156.95	691	536
156.44	554	218	156.96	693	543
156.45	557	224	156.97	696	550
156.46	560	229	156.98	699	556
156.47	562	235	156.99	701	563
156.48	565	241	157.00	704	571
156.49	568	246	157.01	707	578
156.50	571	252	157.02	711	585
156.51	573	258	157.03	714	592

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**Stage-Area-Storage for Pond RG-B: Rain Garden B (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
157.04	717	599	157.56	890	1,017
157.05	721	606	157.57	894	1,026
157.06	724	613	157.58	897	1,035
157.07	727	621	157.59	900	1,044
157.08	731	628	157.60	904	1,053
157.09	734	635	157.61	907	1,062
157.10	737	643	157.62	910	1,071
157.11	741	650	157.63	914	1,080
157.12	744	657	157.64	917	1,089
157.13	747	665	157.65	920	1,098
157.14	751	672	157.66	924	1,108
157.15	754	680	157.67	927	1,117
157.16	757	687	157.68	930	1,126
157.17	761	695	157.69	934	1,136
157.18	764	703	157.70	937	1,145
157.19	767	710	157.71	940	1,154
157.20	771	718	157.72	944	1,164
157.21	774	726	157.73	947	1,173
157.22	777	733	157.74	950	1,183
157.23	781	741	157.75	954	1,192
157.24	784	749	157.76	957	1,202
157.25	787	757	157.77	960	1,211
157.26	791	765	157.78	964	1,221
157.27	794	773	157.79	967	1,231
157.28	797	781	157.80	970	1,240
157.29	801	789	157.81	974	1,250
157.30	804	797	157.82	977	1,260
157.31	807	805	157.83	980	1,270
157.32	811	813	157.84	984	1,279
157.33	814	821	157.85	987	1,289
157.34	817	829	157.86	990	1,299
157.35	821	837	157.87	994	1,309
157.36	824	846	157.88	997	1,319
157.37	827	854	157.89	1,000	1,329
157.38	831	862	157.90	1,004	1,339
157.39	834	870	157.91	1,007	1,349
157.40	837	879	157.92	1,010	1,359
157.41	841	887	157.93	1,014	1,369
157.42	844	896	157.94	1,017	1,379
157.43	847	904	157.95	1,020	1,390
157.44	851	912	157.96	1,024	1,400
157.45	854	921	157.97	1,027	1,410
157.46	857	930	157.98	1,030	1,420
157.47	861	938	157.99	1,034	1,431
157.48	864	947	158.00	1,037	1,441
157.49	867	955	158.01	1,040	1,451
157.50	871	964	158.02	1,044	1,462
157.51	874	973	158.03	1,047	1,472
157.52	877	982	158.04	1,050	1,483
157.53	880	990	158.05	1,053	1,493
157.54	884	999	158.06	1,057	1,504
157.55	887	1,008	158.07	1,060	1,514

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**Stage-Area-Storage for Pond RG-B: Rain Garden B (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
158.08	1,063	1,525
158.09	1,066	1,536
158.10	1,070	1,546
158.11	1,073	1,557
158.12	1,076	1,568
158.13	1,079	1,579
158.14	1,083	1,589
158.15	1,086	1,600
158.16	1,089	1,611
158.17	1,093	1,622
158.18	1,096	1,633
158.19	1,099	1,644
158.20	1,102	1,655
158.21	1,106	1,666
158.22	1,109	1,677
158.23	1,112	1,688
158.24	1,115	1,699
158.25	1,119	1,710
158.26	1,122	1,722
158.27	1,125	1,733
158.28	1,128	1,744
158.29	1,132	1,755
158.30	<b>1,135</b>	<b>1,767</b>

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**Summary for Pond SWB: Stormtech MC 3500 (SWM-B)**

Inflow Area = 16,665 sf, 100.00% Impervious, Inflow Depth = 4.88" for 10-Year event  
 Inflow = 1.98 cfs @ 12.07 hrs, Volume= 6,781 cf  
 Outflow = 0.10 cfs @ 10.24 hrs, Volume= 6,781 cf, Atten= 95%, Lag= 0.0 min  
 Discarded = 0.10 cfs @ 10.24 hrs, Volume= 6,781 cf  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf  
 Routed to Link TSD : Total Site Discharge

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
 Peak Elev= 178.26' @ 14.09 hrs Surf.Area= 1,738 sf Storage= 3,032 cf

Plug-Flow detention time= 256.5 min calculated for 6,781 cf (100% of inflow)  
 Center-of-Mass det. time= 256.5 min ( 1,003.2 - 746.7 )

Volume	Invert	Avail.Storage	Storage Description
#1A	175.65'	2,580 cf	<b>8.42'W x 206.46'L x 5.50'H Field A</b> 9,557 cf Overall - 3,108 cf Embedded = 6,449 cf x 40.0% Voids
#2A	176.40'	3,108 cf	<b>ADS_StormTech MC-3500 d +Cap</b> x 28 Inside #1 Effective Size= 70.4"W x 45.0"H => 15.33 sf x 7.17'L = 110.0 cf Overall Size= 77.0"W x 45.0"H x 7.50'L with 0.33' Overlap Cap Storage= 14.9 cf x 2 x 1 rows = 29.8 cf
		5,688 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	175.65'	<b>15.0" Round Outlet Pipe</b> L= 45.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 175.65' / 166.00' S= 0.2144 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf
#2	Device 1	179.00'	<b>6.0" Vert. Low Flow Orifice</b> C= 0.600 Limited to weir flow at low heads
#3	Device 1	180.25'	<b>4.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#4	Discarded	175.65'	<b>2.400 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.10 cfs @ 10.24 hrs HW=175.71' (Free Discharge)  
 ↳ **4=Exfiltration** (Exfiltration Controls 0.10 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=175.65' (Free Discharge)  
 ↳ **1=Outlet Pipe** ( Controls 0.00 cfs)  
 ↳ ↳ **2=Low Flow Orifice** ( Controls 0.00 cfs)  
 ↳ ↳ ↳ **3=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)

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**Pond SWB: Stormtech MC 3500 (SWM-B) - Chamber Wizard Field A**

**Chamber Model = ADS\_StormTech MC-3500 d +Cap (ADS StormTech® MC-3500 d rev 03/14 with Cap volume)**

Effective Size= 70.4"W x 45.0"H => 15.33 sf x 7.17'L = 110.0 cf

Overall Size= 77.0"W x 45.0"H x 7.50'L with 0.33' Overlap

Cap Storage= 14.9 cf x 2 x 1 rows = 29.8 cf

28 Chambers/Row x 7.17' Long +1.85' Cap Length x 2 = 204.46' Row Length +12.0" End Stone x 2 = 206.46' Base Length

1 Rows x 77.0" Wide + 12.0" Side Stone x 2 = 8.42' Base Width

9.0" Stone Base + 45.0" Chamber Height + 12.0" Stone Cover = 5.50' Field Height

28 Chambers x 110.0 cf + 14.9 cf Cap Volume x 2 x 1 Rows = 3,108.5 cf Chamber Storage

9,557.4 cf Field - 3,108.5 cf Chambers = 6,448.9 cf Stone x 40.0% Voids = 2,579.6 cf Stone Storage

Chamber Storage + Stone Storage = 5,688.0 cf = 0.131 af

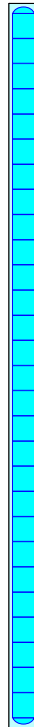
Overall Storage Efficiency = 59.5%

Overall System Size = 206.46' x 8.42' x 5.50'

28 Chambers

354.0 cy Field

238.8 cy Stone



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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
175.65	0.00	0.00	0.00	176.17	0.10	0.10	0.00
175.66	0.10	<b>0.10</b>	0.00	176.18	0.10	0.10	0.00
175.67	0.10	0.10	0.00	176.19	0.10	0.10	0.00
175.68	0.10	0.10	0.00	176.20	0.10	0.10	0.00
175.69	0.10	0.10	0.00	176.21	0.10	0.10	0.00
175.70	0.10	0.10	0.00	176.22	0.10	0.10	0.00
175.71	0.10	0.10	0.00	176.23	0.10	0.10	0.00
175.72	0.10	0.10	0.00	176.24	0.10	0.10	0.00
175.73	0.10	0.10	0.00	176.25	0.10	0.10	0.00
175.74	0.10	0.10	0.00	176.26	0.10	0.10	0.00
175.75	0.10	0.10	0.00	176.27	0.10	0.10	0.00
175.76	0.10	0.10	0.00	176.28	0.10	0.10	0.00
175.77	0.10	0.10	0.00	176.29	0.10	0.10	0.00
175.78	0.10	0.10	0.00	176.30	0.10	0.10	0.00
175.79	0.10	0.10	0.00	176.31	0.10	0.10	0.00
175.80	0.10	0.10	0.00	176.32	0.10	0.10	0.00
175.81	0.10	0.10	0.00	176.33	0.10	0.10	0.00
175.82	0.10	0.10	0.00	176.34	0.10	0.10	0.00
175.83	0.10	0.10	0.00	176.35	0.10	0.10	0.00
175.84	0.10	0.10	0.00	176.36	0.10	0.10	0.00
175.85	0.10	0.10	0.00	176.37	0.10	0.10	0.00
175.86	0.10	0.10	0.00	176.38	0.10	0.10	0.00
175.87	0.10	0.10	0.00	176.39	0.10	0.10	0.00
175.88	0.10	0.10	0.00	176.40	0.10	0.10	0.00
175.89	0.10	0.10	0.00	176.41	0.10	0.10	0.00
175.90	0.10	0.10	0.00	176.42	0.10	0.10	0.00
175.91	0.10	0.10	0.00	176.43	0.10	0.10	0.00
175.92	0.10	0.10	0.00	176.44	0.10	0.10	0.00
175.93	0.10	0.10	0.00	176.45	0.10	0.10	0.00
175.94	0.10	0.10	0.00	176.46	0.10	0.10	0.00
175.95	0.10	0.10	0.00	176.47	0.10	0.10	0.00
175.96	0.10	0.10	0.00	176.48	0.10	0.10	0.00
175.97	0.10	0.10	0.00	176.49	0.10	0.10	0.00
175.98	0.10	0.10	0.00	176.50	0.10	0.10	0.00
175.99	0.10	0.10	0.00	176.51	0.10	0.10	0.00
176.00	0.10	0.10	0.00	176.52	0.10	0.10	0.00
176.01	0.10	0.10	0.00	176.53	0.10	0.10	0.00
176.02	0.10	0.10	0.00	176.54	0.10	0.10	0.00
176.03	0.10	0.10	0.00	176.55	0.10	0.10	0.00
176.04	0.10	0.10	0.00	176.56	0.10	0.10	0.00
176.05	0.10	0.10	0.00	176.57	0.10	0.10	0.00
176.06	0.10	0.10	0.00	176.58	0.10	0.10	0.00
176.07	0.10	0.10	0.00	176.59	0.10	0.10	0.00
176.08	0.10	0.10	0.00	176.60	0.10	0.10	0.00
176.09	0.10	0.10	0.00	176.61	0.10	0.10	0.00
176.10	0.10	0.10	0.00	176.62	0.10	0.10	0.00
176.11	0.10	0.10	0.00	176.63	0.10	0.10	0.00
176.12	0.10	0.10	0.00	176.64	0.10	0.10	0.00
176.13	0.10	0.10	0.00	176.65	0.10	0.10	0.00
176.14	0.10	0.10	0.00	176.66	0.10	0.10	0.00
176.15	0.10	0.10	0.00	176.67	0.10	0.10	0.00
176.16	0.10	0.10	0.00	176.68	0.10	0.10	0.00

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Type III 24-hr 10-Year Rainfall=5.12"

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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
176.69	0.10	0.10	0.00	177.21	0.10	0.10	0.00
176.70	0.10	0.10	0.00	177.22	0.10	0.10	0.00
176.71	0.10	0.10	0.00	177.23	0.10	0.10	0.00
176.72	0.10	0.10	0.00	177.24	0.10	0.10	0.00
176.73	0.10	0.10	0.00	177.25	0.10	0.10	0.00
176.74	0.10	0.10	0.00	177.26	0.10	0.10	0.00
176.75	0.10	0.10	0.00	177.27	0.10	0.10	0.00
176.76	0.10	0.10	0.00	177.28	0.10	0.10	0.00
176.77	0.10	0.10	0.00	177.29	0.10	0.10	0.00
176.78	0.10	0.10	0.00	177.30	0.10	0.10	0.00
176.79	0.10	0.10	0.00	177.31	0.10	0.10	0.00
176.80	0.10	0.10	0.00	177.32	0.10	0.10	0.00
176.81	0.10	0.10	0.00	177.33	0.10	0.10	0.00
176.82	0.10	0.10	0.00	177.34	0.10	0.10	0.00
176.83	0.10	0.10	0.00	177.35	0.10	0.10	0.00
176.84	0.10	0.10	0.00	177.36	0.10	0.10	0.00
176.85	0.10	0.10	0.00	177.37	0.10	0.10	0.00
176.86	0.10	0.10	0.00	177.38	0.10	0.10	0.00
176.87	0.10	0.10	0.00	177.39	0.10	0.10	0.00
176.88	0.10	0.10	0.00	177.40	0.10	0.10	0.00
176.89	0.10	0.10	0.00	177.41	0.10	0.10	0.00
176.90	0.10	0.10	0.00	177.42	0.10	0.10	0.00
176.91	0.10	0.10	0.00	177.43	0.10	0.10	0.00
176.92	0.10	0.10	0.00	177.44	0.10	0.10	0.00
176.93	0.10	0.10	0.00	177.45	0.10	0.10	0.00
176.94	0.10	0.10	0.00	177.46	0.10	0.10	0.00
176.95	0.10	0.10	0.00	177.47	0.10	0.10	0.00
176.96	0.10	0.10	0.00	177.48	0.10	0.10	0.00
176.97	0.10	0.10	0.00	177.49	0.10	0.10	0.00
176.98	0.10	0.10	0.00	177.50	0.10	0.10	0.00
176.99	0.10	0.10	0.00	177.51	0.10	0.10	0.00
177.00	0.10	0.10	0.00	177.52	0.10	0.10	0.00
177.01	0.10	0.10	0.00	177.53	0.10	0.10	0.00
177.02	0.10	0.10	0.00	177.54	0.10	0.10	0.00
177.03	0.10	0.10	0.00	177.55	0.10	0.10	0.00
177.04	0.10	0.10	0.00	177.56	0.10	0.10	0.00
177.05	0.10	0.10	0.00	177.57	0.10	0.10	0.00
177.06	0.10	0.10	0.00	177.58	0.10	0.10	0.00
177.07	0.10	0.10	0.00	177.59	0.10	0.10	0.00
177.08	0.10	0.10	0.00	177.60	0.10	0.10	0.00
177.09	0.10	0.10	0.00	177.61	0.10	0.10	0.00
177.10	0.10	0.10	0.00	177.62	0.10	0.10	0.00
177.11	0.10	0.10	0.00	177.63	0.10	0.10	0.00
177.12	0.10	0.10	0.00	177.64	0.10	0.10	0.00
177.13	0.10	0.10	0.00	177.65	0.10	0.10	0.00
177.14	0.10	0.10	0.00	177.66	0.10	0.10	0.00
177.15	0.10	0.10	0.00	177.67	0.10	0.10	0.00
177.16	0.10	0.10	0.00	177.68	0.10	0.10	0.00
177.17	0.10	0.10	0.00	177.69	0.10	0.10	0.00
177.18	0.10	0.10	0.00	177.70	0.10	0.10	0.00
177.19	0.10	0.10	0.00	177.71	0.10	0.10	0.00
177.20	0.10	0.10	0.00	177.72	0.10	0.10	0.00



**post development**

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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
177.73	0.10	0.10	0.00	178.25	0.10	0.10	0.00
177.74	0.10	0.10	0.00	178.26	0.10	0.10	0.00
177.75	0.10	0.10	0.00	178.27	0.10	0.10	0.00
177.76	0.10	0.10	0.00	178.28	0.10	0.10	0.00
177.77	0.10	0.10	0.00	178.29	0.10	0.10	0.00
177.78	0.10	0.10	0.00	178.30	0.10	0.10	0.00
177.79	0.10	0.10	0.00	178.31	0.10	0.10	0.00
177.80	0.10	0.10	0.00	178.32	0.10	0.10	0.00
177.81	0.10	0.10	0.00	178.33	0.10	0.10	0.00
177.82	0.10	0.10	0.00	178.34	0.10	0.10	0.00
177.83	0.10	0.10	0.00	178.35	0.10	0.10	0.00
177.84	0.10	0.10	0.00	178.36	0.10	0.10	0.00
177.85	0.10	0.10	0.00	178.37	0.10	0.10	0.00
177.86	0.10	0.10	0.00	178.38	0.10	0.10	0.00
177.87	0.10	0.10	0.00	178.39	0.10	0.10	0.00
177.88	0.10	0.10	0.00	178.40	0.10	0.10	0.00
177.89	0.10	0.10	0.00	178.41	0.10	0.10	0.00
177.90	0.10	0.10	0.00	178.42	0.10	0.10	0.00
177.91	0.10	0.10	0.00	178.43	0.10	0.10	0.00
177.92	0.10	0.10	0.00	178.44	0.10	0.10	0.00
177.93	0.10	0.10	0.00	178.45	0.10	0.10	0.00
177.94	0.10	0.10	0.00	178.46	0.10	0.10	0.00
177.95	0.10	0.10	0.00	178.47	0.10	0.10	0.00
177.96	0.10	0.10	0.00	178.48	0.10	0.10	0.00
177.97	0.10	0.10	0.00	178.49	0.10	0.10	0.00
177.98	0.10	0.10	0.00	178.50	0.10	0.10	0.00
177.99	0.10	0.10	0.00	178.51	0.10	0.10	0.00
178.00	0.10	0.10	0.00	178.52	0.10	0.10	0.00
178.01	0.10	0.10	0.00	178.53	0.10	0.10	0.00
178.02	0.10	0.10	0.00	178.54	0.10	0.10	0.00
178.03	0.10	0.10	0.00	178.55	0.10	0.10	0.00
178.04	0.10	0.10	0.00	178.56	0.10	0.10	0.00
178.05	0.10	0.10	0.00	178.57	0.10	0.10	0.00
178.06	0.10	0.10	0.00	178.58	0.10	0.10	0.00
178.07	0.10	0.10	0.00	178.59	0.10	0.10	0.00
178.08	0.10	0.10	0.00	178.60	0.10	0.10	0.00
178.09	0.10	0.10	0.00	178.61	0.10	0.10	0.00
178.10	0.10	0.10	0.00	178.62	0.10	0.10	0.00
178.11	0.10	0.10	0.00	178.63	0.10	0.10	0.00
178.12	0.10	0.10	0.00	178.64	0.10	0.10	0.00
178.13	0.10	0.10	0.00	178.65	0.10	0.10	0.00
178.14	0.10	0.10	0.00	178.66	0.10	0.10	0.00
178.15	0.10	0.10	0.00	178.67	0.10	0.10	0.00
178.16	0.10	0.10	0.00	178.68	0.10	0.10	0.00
178.17	0.10	0.10	0.00	178.69	0.10	0.10	0.00
178.18	0.10	0.10	0.00	178.70	0.10	0.10	0.00
178.19	0.10	0.10	0.00	178.71	0.10	0.10	0.00
178.20	0.10	0.10	0.00	178.72	0.10	0.10	0.00
178.21	0.10	0.10	0.00	178.73	0.10	0.10	0.00
178.22	0.10	0.10	0.00	178.74	0.10	0.10	0.00
178.23	0.10	0.10	0.00	178.75	0.10	0.10	0.00
178.24	0.10	0.10	0.00	178.76	0.10	0.10	0.00

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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
178.77	0.10	0.10	0.00	179.29	0.31	0.10	0.22
178.78	0.10	0.10	0.00	179.30	0.33	0.10	0.23
178.79	0.10	0.10	0.00	179.31	0.34	0.10	0.24
178.80	0.10	0.10	0.00	179.32	0.35	0.10	0.26
178.81	0.10	0.10	0.00	179.33	0.37	0.10	0.27
178.82	0.10	0.10	0.00	179.34	0.38	0.10	0.28
178.83	0.10	0.10	0.00	179.35	0.39	0.10	0.30
178.84	0.10	0.10	0.00	179.36	0.41	0.10	0.31
178.85	0.10	0.10	0.00	179.37	0.42	0.10	0.32
178.86	0.10	0.10	0.00	179.38	0.43	0.10	0.34
178.87	0.10	0.10	0.00	179.39	0.45	0.10	0.35
178.88	0.10	0.10	0.00	179.40	0.46	0.10	0.36
178.89	0.10	0.10	0.00	179.41	0.47	0.10	0.38
178.90	0.10	0.10	0.00	179.42	0.49	0.10	0.39
178.91	0.10	0.10	0.00	179.43	0.50	0.10	0.40
178.92	0.10	0.10	0.00	179.44	0.51	0.10	0.41
178.93	0.10	0.10	0.00	179.45	0.52	0.10	0.43
178.94	0.10	0.10	0.00	179.46	0.53	0.10	0.44
178.95	0.10	0.10	0.00	179.47	0.54	0.10	0.45
178.96	0.10	0.10	0.00	179.48	0.55	0.10	0.46
178.97	0.10	0.10	0.00	179.49	0.56	0.10	0.47
178.98	0.10	0.10	0.00	179.50	0.57	0.10	0.47
178.99	0.10	0.10	0.00	179.51	0.58	0.10	0.48
179.00	0.10	0.10	0.00	179.52	0.59	0.10	0.49
179.01	0.10	0.10	0.00	179.53	0.60	0.10	0.50
179.02	0.10	0.10	0.00	179.54	0.61	0.10	0.51
179.03	0.10	0.10	0.00	179.55	0.61	0.10	0.52
179.04	0.10	0.10	0.01	179.56	0.62	0.10	0.53
179.05	0.10	0.10	0.01	179.57	0.63	0.10	0.53
179.06	0.11	0.10	0.01	179.58	0.64	0.10	0.54
179.07	0.11	0.10	0.02	179.59	0.65	0.10	0.55
179.08	0.12	0.10	0.02	179.60	0.66	0.10	0.56
179.09	0.12	0.10	0.02	179.61	0.66	0.10	0.57
179.10	0.13	0.10	0.03	179.62	0.67	0.10	0.58
179.11	0.13	0.10	0.04	179.63	0.68	0.10	0.58
179.12	0.14	0.10	0.04	179.64	0.69	0.10	0.59
179.13	0.15	0.10	0.05	179.65	0.69	0.10	0.60
179.14	0.15	0.10	0.06	179.66	0.70	0.10	0.61
179.15	0.16	0.10	0.07	179.67	0.71	0.10	0.61
179.16	0.17	0.10	0.07	179.68	0.72	0.10	0.62
179.17	0.18	0.10	0.08	179.69	0.72	0.10	0.63
179.18	0.19	0.10	0.09	179.70	0.73	0.10	0.63
179.19	0.20	0.10	0.10	179.71	0.74	0.10	0.64
179.20	0.21	0.10	0.11	179.72	0.74	0.10	0.65
179.21	0.22	0.10	0.12	179.73	0.75	0.10	0.66
179.22	0.23	0.10	0.13	179.74	0.76	0.10	0.66
179.23	0.24	0.10	0.14	179.75	0.77	0.10	0.67
179.24	0.25	0.10	0.16	179.76	0.77	0.10	0.68
179.25	0.26	0.10	0.17	179.77	0.78	0.10	0.68
179.26	0.28	0.10	0.18	179.78	0.78	0.10	0.69
179.27	0.29	0.10	0.19	179.79	0.79	0.10	0.69
179.28	0.30	0.10	0.20	179.80	0.80	0.10	0.70

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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
179.81	0.80	0.10	0.71	180.33	1.33	0.10	1.24
179.82	0.81	0.10	0.71	180.34	1.39	0.10	1.29
179.83	0.82	0.10	0.72	180.35	1.44	0.10	1.35
179.84	0.82	0.10	0.73	180.36	1.50	0.10	1.40
179.85	0.83	0.10	0.73	180.37	1.56	0.10	1.47
179.86	0.83	0.10	0.74	180.38	1.63	0.10	1.53
179.87	0.84	0.10	0.74	180.39	1.69	0.10	1.60
179.88	0.85	0.10	0.75	180.40	1.76	0.10	1.66
179.89	0.85	0.10	0.76	180.41	1.83	0.10	1.74
179.90	0.86	0.10	0.76	180.42	1.90	0.10	1.81
179.91	0.86	0.10	0.77	180.43	1.98	0.10	1.88
179.92	0.87	0.10	0.77	180.44	2.06	0.10	1.96
179.93	0.88	0.10	0.78	180.45	2.13	0.10	2.04
179.94	0.88	0.10	0.79	180.46	2.22	0.10	2.12
179.95	0.89	0.10	0.79	180.47	2.30	0.10	2.20
179.96	0.89	0.10	0.80	180.48	2.39	0.10	2.29
179.97	0.90	0.10	0.80	180.49	2.48	0.10	2.38
179.98	0.90	0.10	0.81	180.50	2.57	0.10	2.47
179.99	0.91	0.10	0.81	180.51	2.66	0.10	2.57
180.00	0.92	0.10	0.82	180.52	2.76	0.10	2.66
180.01	0.92	0.10	0.82	180.53	2.85	0.10	2.76
180.02	0.93	0.10	0.83	180.54	2.95	0.10	2.86
180.03	0.93	0.10	0.83	180.55	3.05	0.10	2.96
180.04	0.94	0.10	0.84	180.56	3.16	0.10	3.06
180.05	0.94	0.10	0.85	180.57	3.26	0.10	3.17
180.06	0.95	0.10	0.85	180.58	3.37	0.10	3.27
180.07	0.95	0.10	0.86	180.59	3.48	0.10	3.38
180.08	0.96	0.10	0.86	180.60	3.59	0.10	3.49
180.09	0.96	0.10	0.87	180.61	3.70	0.10	3.60
180.10	0.97	0.10	0.87	180.62	3.82	0.10	3.72
180.11	0.97	0.10	0.88	180.63	3.93	0.10	3.84
180.12	0.98	0.10	0.88	180.64	4.05	0.10	3.95
180.13	0.98	0.10	0.89	180.65	4.17	0.10	4.07
180.14	0.99	0.10	0.89	180.66	4.29	0.10	4.20
180.15	0.99	0.10	0.90	180.67	4.42	0.10	4.32
180.16	1.00	0.10	0.90	180.68	4.55	0.10	4.45
180.17	1.00	0.10	0.91	180.69	4.68	0.10	4.58
180.18	1.01	0.10	0.91	180.70	4.81	0.10	4.71
180.19	1.01	0.10	0.92	180.71	4.94	0.10	4.85
180.20	1.02	0.10	0.92	180.72	5.08	0.10	4.98
180.21	1.02	0.10	0.93	180.73	5.22	0.10	5.12
180.22	1.03	0.10	0.93	180.74	5.36	0.10	5.26
180.23	1.03	0.10	0.94	180.75	5.50	0.10	5.40
180.24	1.04	0.10	0.94	180.76	5.64	0.10	5.54
180.25	1.04	0.10	0.95	180.77	5.79	0.10	5.69
180.26	1.06	0.10	0.96	180.78	5.93	0.10	5.84
180.27	1.08	0.10	0.99	180.79	6.08	0.10	5.99
180.28	1.11	0.10	1.02	180.80	6.23	0.10	6.14
180.29	1.15	0.10	1.05	180.81	6.39	0.10	6.29
180.30	1.19	0.10	1.09	180.82	6.54	0.10	6.45
180.31	1.23	0.10	1.14	180.83	6.70	0.10	6.60
180.32	1.28	0.10	1.19	180.84	6.86	0.10	6.76

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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
180.85	7.02	0.10	6.92
180.86	7.19	0.10	7.09
180.87	7.36	0.10	7.26
180.88	7.53	0.10	7.43
180.89	7.71	0.10	7.61
180.90	7.88	0.10	7.79
180.91	8.06	0.10	7.97
180.92	8.24	0.10	8.15
180.93	8.43	0.10	8.33
180.94	8.61	0.10	8.52
180.95	8.80	0.10	8.71
180.96	8.99	0.10	8.90
180.97	9.19	0.10	9.09
180.98	9.38	0.10	9.28
180.99	9.58	0.10	9.48
181.00	9.78	0.10	9.68
181.01	9.98	0.10	9.88
181.02	10.18	0.10	10.09
181.03	10.39	0.10	10.29
181.04	10.60	0.10	10.50
181.05	10.81	0.10	10.71
181.06	10.99	0.10	10.90
181.07	11.18	0.10	11.08
181.08	11.37	0.10	11.27
181.09	11.55	0.10	11.46
181.10	11.74	0.10	11.65
181.11	11.93	0.10	11.84
181.12	12.12	0.10	12.03
181.13	12.32	0.10	12.22
181.14	12.51	0.10	12.41
181.15	<b>12.70</b>	0.10	<b>12.61</b>

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
175.65	1,738	0	176.17	1,738	361
175.66	1,738	7	176.18	1,738	368
175.67	1,738	14	176.19	1,738	375
175.68	1,738	21	176.20	1,738	382
175.69	1,738	28	176.21	1,738	389
175.70	1,738	35	176.22	1,738	396
175.71	1,738	42	176.23	1,738	403
175.72	1,738	49	176.24	1,738	410
175.73	1,738	56	176.25	1,738	417
175.74	1,738	63	176.26	1,738	424
175.75	1,738	70	176.27	1,738	431
175.76	1,738	76	176.28	1,738	438
175.77	1,738	83	176.29	1,738	445
175.78	1,738	90	176.30	1,738	452
175.79	1,738	97	176.31	1,738	459
175.80	1,738	104	176.32	1,738	466
175.81	1,738	111	176.33	1,738	473
175.82	1,738	118	176.34	1,738	480
175.83	1,738	125	176.35	1,738	487
175.84	1,738	132	176.36	1,738	494
175.85	1,738	139	176.37	1,738	500
175.86	1,738	146	176.38	1,738	507
175.87	1,738	153	176.39	1,738	514
175.88	1,738	160	176.40	1,738	521
175.89	1,738	167	176.41	1,738	535
175.90	1,738	174	176.42	1,738	549
175.91	1,738	181	176.43	1,738	564
175.92	1,738	188	176.44	1,738	578
175.93	1,738	195	176.45	1,738	592
175.94	1,738	202	176.46	1,738	606
175.95	1,738	209	176.47	1,738	620
175.96	1,738	215	176.48	1,738	634
175.97	1,738	222	176.49	1,738	648
175.98	1,738	229	176.50	1,738	662
175.99	1,738	236	176.51	1,738	676
176.00	1,738	243	176.52	1,738	690
176.01	1,738	250	176.53	1,738	704
176.02	1,738	257	176.54	1,738	718
176.03	1,738	264	176.55	1,738	732
176.04	1,738	271	176.56	1,738	746
176.05	1,738	278	176.57	1,738	760
176.06	1,738	285	176.58	1,738	774
176.07	1,738	292	176.59	1,738	788
176.08	1,738	299	176.60	1,738	802
176.09	1,738	306	176.61	1,738	816
176.10	1,738	313	176.62	1,738	830
176.11	1,738	320	176.63	1,738	844
176.12	1,738	327	176.64	1,738	858
176.13	1,738	334	176.65	1,738	872
176.14	1,738	341	176.66	1,738	886
176.15	1,738	348	176.67	1,738	900
176.16	1,738	354	176.68	1,738	914

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
176.69	1,738	928	177.21	1,738	1,646
176.70	1,738	942	177.22	1,738	1,659
176.71	1,738	956	177.23	1,738	1,673
176.72	1,738	970	177.24	1,738	1,686
176.73	1,738	984	177.25	1,738	1,700
176.74	1,738	998	177.26	1,738	1,714
176.75	1,738	1,012	177.27	1,738	1,727
176.76	1,738	1,025	177.28	1,738	1,741
176.77	1,738	1,039	177.29	1,738	1,754
176.78	1,738	1,053	177.30	1,738	1,768
176.79	1,738	1,067	177.31	1,738	1,782
176.80	1,738	1,081	177.32	1,738	1,795
176.81	1,738	1,095	177.33	1,738	1,809
176.82	1,738	1,109	177.34	1,738	1,822
176.83	1,738	1,123	177.35	1,738	1,836
176.84	1,738	1,137	177.36	1,738	1,849
176.85	1,738	1,150	177.37	1,738	1,863
176.86	1,738	1,164	177.38	1,738	1,876
176.87	1,738	1,178	177.39	1,738	1,890
176.88	1,738	1,192	177.40	1,738	1,903
176.89	1,738	1,206	177.41	1,738	1,917
176.90	1,738	1,220	177.42	1,738	1,930
176.91	1,738	1,233	177.43	1,738	1,944
176.92	1,738	1,247	177.44	1,738	1,957
176.93	1,738	1,261	177.45	1,738	1,971
176.94	1,738	1,275	177.46	1,738	1,984
176.95	1,738	1,289	177.47	1,738	1,998
176.96	1,738	1,303	177.48	1,738	2,011
176.97	1,738	1,316	177.49	1,738	2,025
176.98	1,738	1,330	177.50	1,738	2,038
176.99	1,738	1,344	177.51	1,738	2,051
177.00	1,738	1,358	177.52	1,738	2,065
177.01	1,738	1,371	177.53	1,738	2,078
177.02	1,738	1,385	177.54	1,738	2,092
177.03	1,738	1,399	177.55	1,738	2,105
177.04	1,738	1,413	177.56	1,738	2,118
177.05	1,738	1,427	177.57	1,738	2,132
177.06	1,738	1,440	177.58	1,738	2,145
177.07	1,738	1,454	177.59	1,738	2,158
177.08	1,738	1,468	177.60	1,738	2,172
177.09	1,738	1,481	177.61	1,738	2,185
177.10	1,738	1,495	177.62	1,738	2,198
177.11	1,738	1,509	177.63	1,738	2,212
177.12	1,738	1,523	177.64	1,738	2,225
177.13	1,738	1,536	177.65	1,738	2,238
177.14	1,738	1,550	177.66	1,738	2,252
177.15	1,738	1,564	177.67	1,738	2,265
177.16	1,738	1,577	177.68	1,738	2,278
177.17	1,738	1,591	177.69	1,738	2,291
177.18	1,738	1,605	177.70	1,738	2,305
177.19	1,738	1,618	177.71	1,738	2,318
177.20	1,738	1,632	177.72	1,738	2,331

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Type III 24-hr 10-Year Rainfall=5.12"

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
177.73	1,738	2,344	178.25	1,738	3,017
177.74	1,738	2,358	178.26	1,738	3,030
177.75	1,738	2,371	178.27	1,738	3,042
177.76	1,738	2,384	178.28	1,738	3,055
177.77	1,738	2,397	178.29	1,738	3,067
177.78	1,738	2,410	178.30	1,738	3,080
177.79	1,738	2,423	178.31	1,738	3,092
177.80	1,738	2,437	178.32	1,738	3,105
177.81	1,738	2,450	178.33	1,738	3,117
177.82	1,738	2,463	178.34	1,738	3,130
177.83	1,738	2,476	178.35	1,738	3,143
177.84	1,738	2,489	178.36	1,738	3,155
177.85	1,738	2,502	178.37	1,738	3,167
177.86	1,738	2,515	178.38	1,738	3,180
177.87	1,738	2,528	178.39	1,738	3,192
177.88	1,738	2,541	178.40	1,738	3,205
177.89	1,738	2,554	178.41	1,738	3,217
177.90	1,738	2,567	178.42	1,738	3,230
177.91	1,738	2,581	178.43	1,738	3,242
177.92	1,738	2,594	178.44	1,738	3,254
177.93	1,738	2,607	178.45	1,738	3,267
177.94	1,738	2,620	178.46	1,738	3,279
177.95	1,738	2,633	178.47	1,738	3,291
177.96	1,738	2,646	178.48	1,738	3,304
177.97	1,738	2,658	178.49	1,738	3,316
177.98	1,738	2,671	178.50	1,738	3,328
177.99	1,738	2,684	178.51	1,738	3,341
178.00	1,738	2,697	178.52	1,738	3,353
178.01	1,738	2,710	178.53	1,738	3,365
178.02	1,738	2,723	178.54	1,738	3,377
178.03	1,738	2,736	178.55	1,738	3,389
178.04	1,738	2,749	178.56	1,738	3,402
178.05	1,738	2,762	178.57	1,738	3,414
178.06	1,738	2,775	178.58	1,738	3,426
178.07	1,738	2,788	178.59	1,738	3,438
178.08	1,738	2,800	178.60	1,738	3,450
178.09	1,738	2,813	178.61	1,738	3,462
178.10	1,738	2,826	178.62	1,738	3,474
178.11	1,738	2,839	178.63	1,738	3,487
178.12	1,738	2,852	178.64	1,738	3,499
178.13	1,738	2,864	178.65	1,738	3,511
178.14	1,738	2,877	178.66	1,738	3,523
178.15	1,738	2,890	178.67	1,738	3,535
178.16	1,738	2,903	178.68	1,738	3,547
178.17	1,738	2,915	178.69	1,738	3,559
178.18	1,738	2,928	178.70	1,738	3,571
178.19	1,738	2,941	178.71	1,738	3,582
178.20	1,738	2,954	178.72	1,738	3,594
178.21	1,738	2,966	178.73	1,738	3,606
178.22	1,738	2,979	178.74	1,738	3,618
178.23	1,738	2,992	178.75	1,738	3,630
178.24	1,738	3,004	178.76	1,738	3,642

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
178.77	1,738	3,654	179.29	1,738	4,239
178.78	1,738	3,665	179.30	1,738	4,250
178.79	1,738	3,677	179.31	1,738	4,261
178.80	1,738	3,689	179.32	1,738	4,271
178.81	1,738	3,701	179.33	1,738	4,282
178.82	1,738	3,713	179.34	1,738	4,292
178.83	1,738	3,724	179.35	1,738	4,303
178.84	1,738	3,736	179.36	1,738	4,313
178.85	1,738	3,748	179.37	1,738	4,323
178.86	1,738	3,759	179.38	1,738	4,334
178.87	1,738	3,771	179.39	1,738	4,344
178.88	1,738	3,783	179.40	1,738	4,354
178.89	1,738	3,794	179.41	1,738	4,365
178.90	1,738	3,806	179.42	1,738	4,375
178.91	1,738	3,817	179.43	1,738	4,385
178.92	1,738	3,829	179.44	1,738	4,395
178.93	1,738	3,840	179.45	1,738	4,405
178.94	1,738	3,852	179.46	1,738	4,416
178.95	1,738	3,863	179.47	1,738	4,426
178.96	1,738	3,875	179.48	1,738	4,436
178.97	1,738	3,886	179.49	1,738	4,446
178.98	1,738	3,898	179.50	1,738	4,456
178.99	1,738	3,909	179.51	1,738	4,466
179.00	1,738	3,920	179.52	1,738	4,475
179.01	1,738	3,932	179.53	1,738	4,485
179.02	1,738	3,943	179.54	1,738	4,495
179.03	1,738	3,954	179.55	1,738	4,505
179.04	1,738	3,965	179.56	1,738	4,514
179.05	1,738	3,977	179.57	1,738	4,524
179.06	1,738	3,988	179.58	1,738	4,534
179.07	1,738	3,999	179.59	1,738	4,543
179.08	1,738	4,010	179.60	1,738	4,553
179.09	1,738	4,022	179.61	1,738	4,562
179.10	1,738	4,033	179.62	1,738	4,572
179.11	1,738	4,044	179.63	1,738	4,581
179.12	1,738	4,055	179.64	1,738	4,591
179.13	1,738	4,066	179.65	1,738	4,600
179.14	1,738	4,077	179.66	1,738	4,609
179.15	1,738	4,088	179.67	1,738	4,618
179.16	1,738	4,099	179.68	1,738	4,627
179.17	1,738	4,110	179.69	1,738	4,636
179.18	1,738	4,121	179.70	1,738	4,645
179.19	1,738	4,132	179.71	1,738	4,654
179.20	1,738	4,143	179.72	1,738	4,663
179.21	1,738	4,154	179.73	1,738	4,672
179.22	1,738	4,164	179.74	1,738	4,680
179.23	1,738	4,175	179.75	1,738	4,689
179.24	1,738	4,186	179.76	1,738	4,698
179.25	1,738	4,197	179.77	1,738	4,706
179.26	1,738	4,207	179.78	1,738	4,714
179.27	1,738	4,218	179.79	1,738	4,723
179.28	1,738	4,229	179.80	1,738	4,731



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Type III 24-hr 10-Year Rainfall=5.12"

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
179.81	1,738	4,739	180.33	1,738	5,118
179.82	1,738	4,747	180.34	1,738	5,125
179.83	1,738	4,755	180.35	1,738	5,132
179.84	1,738	4,763	180.36	1,738	5,139
179.85	1,738	4,771	180.37	1,738	5,146
179.86	1,738	4,779	180.38	1,738	5,153
179.87	1,738	4,787	180.39	1,738	5,160
179.88	1,738	4,795	180.40	1,738	5,167
179.89	1,738	4,802	180.41	1,738	5,174
179.90	1,738	4,810	180.42	1,738	5,181
179.91	1,738	4,818	180.43	1,738	5,188
179.92	1,738	4,825	180.44	1,738	5,195
179.93	1,738	4,833	180.45	1,738	5,201
179.94	1,738	4,840	180.46	1,738	5,208
179.95	1,738	4,848	180.47	1,738	5,215
179.96	1,738	4,855	180.48	1,738	5,222
179.97	1,738	4,863	180.49	1,738	5,229
179.98	1,738	4,870	180.50	1,738	5,236
179.99	1,738	4,878	180.51	1,738	5,243
180.00	1,738	4,885	180.52	1,738	5,250
180.01	1,738	4,893	180.53	1,738	5,257
180.02	1,738	4,900	180.54	1,738	5,264
180.03	1,738	4,907	180.55	1,738	5,271
180.04	1,738	4,915	180.56	1,738	5,278
180.05	1,738	4,922	180.57	1,738	5,285
180.06	1,738	4,929	180.58	1,738	5,292
180.07	1,738	4,936	180.59	1,738	5,299
180.08	1,738	4,944	180.60	1,738	5,306
180.09	1,738	4,951	180.61	1,738	5,313
180.10	1,738	4,958	180.62	1,738	5,320
180.11	1,738	4,965	180.63	1,738	5,327
180.12	1,738	4,972	180.64	1,738	5,334
180.13	1,738	4,979	180.65	1,738	5,340
180.14	1,738	4,986	180.66	1,738	5,347
180.15	1,738	4,993	180.67	1,738	5,354
180.16	1,738	5,000	180.68	1,738	5,361
180.17	1,738	5,007	180.69	1,738	5,368
180.18	1,738	5,014	180.70	1,738	5,375
180.19	1,738	5,021	180.71	1,738	5,382
180.20	1,738	5,028	180.72	1,738	5,389
180.21	1,738	5,035	180.73	1,738	5,396
180.22	1,738	5,042	180.74	1,738	5,403
180.23	1,738	5,049	180.75	1,738	5,410
180.24	1,738	5,055	180.76	1,738	5,417
180.25	1,738	5,062	180.77	1,738	5,424
180.26	1,738	5,069	180.78	1,738	5,431
180.27	1,738	5,076	180.79	1,738	5,438
180.28	1,738	5,083	180.80	1,738	5,445
180.29	1,738	5,090	180.81	1,738	5,452
180.30	1,738	5,097	180.82	1,738	5,459
180.31	1,738	5,104	180.83	1,738	5,466
180.32	1,738	5,111	180.84	1,738	5,473

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Type III 24-hr 10-Year Rainfall=5.12"

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
180.85	1,738	5,479
180.86	1,738	5,486
180.87	1,738	5,493
180.88	1,738	5,500
180.89	1,738	5,507
180.90	1,738	5,514
180.91	1,738	5,521
180.92	1,738	5,528
180.93	1,738	5,535
180.94	1,738	5,542
180.95	1,738	5,549
180.96	1,738	5,556
180.97	1,738	5,563
180.98	1,738	5,570
180.99	1,738	5,577
181.00	1,738	5,584
181.01	1,738	5,591
181.02	1,738	5,598
181.03	1,738	5,605
181.04	1,738	5,612
181.05	1,738	5,619
181.06	1,738	5,625
181.07	1,738	5,632
181.08	1,738	5,639
181.09	1,738	5,646
181.10	1,738	5,653
181.11	1,738	5,660
181.12	1,738	5,667
181.13	1,738	5,674
181.14	1,738	5,681
181.15	1,738	<b>5,688</b>

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*Type III 24-hr 10-Year Rainfall=5.12"*

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**Summary for Link TSD: Total Site Discharge**

Inflow Area = 119,968 sf, 21.15% Impervious, Inflow Depth = 1.27" for 10-Year event  
Inflow = 3.24 cfs @ 12.15 hrs, Volume= 12,734 cf  
Primary = 3.24 cfs @ 12.15 hrs, Volume= 12,734 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

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Type III 24-hr 25-Year Rainfall=6.16"

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Time span=0.00-72.00 hrs, dt=0.02 hrs, 3601 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

**Subcatchment DA 1A: DA 1A** Runoff Area=16,145 sf 22.38% Impervious Runoff Depth=3.32"  
Tc=10.0 min CN=74 Runoff=1.26 cfs 4,467 cf

**Subcatchment DA 1B: DA 1B** Runoff Area=16,665 sf 100.00% Impervious Runoff Depth=5.92"  
Tc=5.0 min CN=98 Runoff=2.38 cfs 8,224 cf

**Subcatchment DA 1C: DA 1C** Runoff Area=47,379 sf 1.50% Impervious Runoff Depth=2.65"  
Tc=10.0 min CN=67 Runoff=2.91 cfs 10,468 cf

**Subcatchment DA 1D: DA 1D** Runoff Area=10,641 sf 41.23% Impervious Runoff Depth=4.03"  
Tc=5.0 min CN=81 Runoff=1.18 cfs 3,573 cf

**Subcatchment DA 1E: DA 1E** Runoff Area=29,138 sf 0.00% Impervious Runoff Depth=2.65"  
Flow Length=446' Tc=10.7 min CN=67 Runoff=1.75 cfs 6,438 cf

**Pond RG-A: Rain Garden A** Peak Elev=185.09' Storage=1,175 cf Inflow=1.26 cfs 4,467 cf  
Discarded=0.06 cfs 2,876 cf Primary=1.04 cfs 1,591 cf Outflow=1.10 cfs 4,467 cf

**Pond RG-B: Rain Garden B** Peak Elev=158.04' Storage=1,485 cf Inflow=1.18 cfs 3,573 cf  
Discarded=0.06 cfs 3,110 cf Primary=0.31 cfs 464 cf Outflow=0.37 cfs 3,573 cf

**Pond SWB: Stormtech MC 3500 (SWM-B)** Peak Elev=179.04' Storage=3,964 cf Inflow=2.38 cfs 8,224 cf  
Discarded=0.10 cfs 8,195 cf Primary=0.01 cfs 29 cf Outflow=0.10 cfs 8,224 cf

**Link TSD: Total Site Discharge** Inflow=5.38 cfs 18,990 cf  
Primary=5.38 cfs 18,990 cf

**Total Runoff Area = 119,968 sf Runoff Volume = 33,170 cf Average Runoff Depth = 3.32"**  
**78.85% Pervious = 94,594 sf 21.15% Impervious = 25,374 sf**

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Type III 24-hr 25-Year Rainfall=6.16"

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**Summary for Subcatchment DA 1A: DA 1A**

Runoff = 1.26 cfs @ 12.14 hrs, Volume= 4,467 cf, Depth= 3.32"

Routed to Pond RG-A : Rain Garden A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
Type III 24-hr 25-Year Rainfall=6.16"

Area (sf)	CN	Description
6,492	66	Woods, Poor, HSG B
6,040	69	50-75% Grass cover, Fair, HSG B
3,613	98	Paved parking, HSG B
16,145	74	Weighted Average
12,532		77.62% Pervious Area
3,613		22.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					<b>Direct Entry, direct</b>

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Type III 24-hr 25-Year Rainfall=6.16"

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**Summary for Subcatchment DA 1B: DA 1B**

Runoff = 2.38 cfs @ 12.07 hrs, Volume= 8,224 cf, Depth= 5.92"

Routed to Pond SWB : Stormtech MC 3500 (SWM-B)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Type III 24-hr 25-Year Rainfall=6.16"

Area (sf)	CN	Description
4,000	98	Roofs, HSG B
12,665	98	Paved parking, HSG B
16,665	98	Weighted Average
16,665		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					<b>Direct Entry, direct</b>

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Type III 24-hr 25-Year Rainfall=6.16"

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**Summary for Subcatchment DA 1C: DA 1C**

Runoff = 2.91 cfs @ 12.14 hrs, Volume= 10,468 cf, Depth= 2.65"

Routed to Link TSD : Total Site Discharge

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Type III 24-hr 25-Year Rainfall=6.16"

Area (sf)	CN	Description
709	98	Paved parking, HSG B
22,996	66	Woods, Poor, HSG B
23,674	67	Brush, Poor, HSG B
47,379	67	Weighted Average
46,670		98.50% Pervious Area
709		1.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					<b>Direct Entry, direct</b>

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Type III 24-hr 25-Year Rainfall=6.16"

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**Summary for Subcatchment DA 1D: DA 1D**

Runoff = 1.18 cfs @ 12.07 hrs, Volume= 3,573 cf, Depth= 4.03"

Routed to Pond RG-B : Rain Garden B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Type III 24-hr 25-Year Rainfall=6.16"

Area (sf)	CN	Description
4,387	98	Paved parking, HSG B
6,254	69	50-75% Grass cover, Fair, HSG B
10,641	81	Weighted Average
6,254		58.77% Pervious Area
4,387		41.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					<b>Direct Entry, direct</b>



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**Summary for Subcatchment DA 1E: DA 1E**

Runoff = 1.75 cfs @ 12.15 hrs, Volume= 6,438 cf, Depth= 2.65"

Routed to Link TSD : Total Site Discharge

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
Type III 24-hr 25-Year Rainfall=6.16"

Area (sf)	CN	Description
20,116	66	Woods, Poor, HSG B
9,022	69	50-75% Grass cover, Fair, HSG B
29,138	67	Weighted Average
29,138		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	100	0.2400	0.22		<b>Sheet Flow, Sheetflow</b>
					Woods: Light underbrush n= 0.400 P2= 3.45"
3.0	346	0.0750	1.92		<b>Shallow Concentrated Flow, SHALLOW</b>
					Short Grass Pasture Kv= 7.0 fps
10.7	446	Total			

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**Summary for Pond RG-A: Rain Garden A**

Inflow Area = 16,145 sf, 22.38% Impervious, Inflow Depth = 3.32" for 25-Year event  
 Inflow = 1.26 cfs @ 12.14 hrs, Volume= 4,467 cf  
 Outflow = 1.10 cfs @ 12.21 hrs, Volume= 4,467 cf, Atten= 13%, Lag= 4.0 min  
 Discarded = 0.06 cfs @ 12.21 hrs, Volume= 2,876 cf  
 Primary = 1.04 cfs @ 12.21 hrs, Volume= 1,591 cf

Routed to Link TSD : Total Site Discharge

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
 Peak Elev= 185.09' @ 12.21 hrs Surf.Area= 1,059 sf Storage= 1,175 cf

Plug-Flow detention time= 167.6 min calculated for 4,465 cf (100% of inflow)  
 Center-of-Mass det. time= 167.6 min ( 999.0 - 831.3 )

Volume	Invert	Avail.Storage	Storage Description
#1	183.00'	1,404 cf	<b>Custom Stage Data (Prismatic) Listed below (Recalc)</b>
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.00	143	0	0
184.00	501	322	322
185.00	1,011	756	1,078
185.30	1,164	326	1,404

Device	Routing	Invert	Outlet Devices
#1	Primary	185.00'	<b>15.0' long x 3.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.41 2.56 2.69 2.67 2.66 2.66 2.65 2.67 2.67 2.70 2.77 2.83 2.87 2.93 3.10 3.19 3.32
#2	Discarded	183.00'	<b>2.400 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.06 cfs @ 12.21 hrs HW=185.09' (Free Discharge)  
 ↑**2=Exfiltration** (Exfiltration Controls 0.06 cfs)

**Primary OutFlow** Max=1.02 cfs @ 12.21 hrs HW=185.09' (Free Discharge)  
 ↑**1=Broad-Crested Rectangular Weir** (Weir Controls 1.02 cfs @ 0.73 fps)

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Type III 24-hr 25-Year Rainfall=6.16"

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**Stage-Discharge for Pond RG-A: Rain Garden A**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
183.00	0.00	0.00	0.00	183.52	0.02	0.02	0.00
183.01	0.01	0.01	0.00	183.53	0.02	0.02	0.00
183.02	0.01	0.01	0.00	183.54	0.02	0.02	0.00
183.03	0.01	0.01	0.00	183.55	0.02	0.02	0.00
183.04	0.01	0.01	0.00	183.56	0.02	0.02	0.00
183.05	0.01	0.01	0.00	183.57	0.02	0.02	0.00
183.06	0.01	0.01	0.00	183.58	0.02	0.02	0.00
183.07	0.01	0.01	0.00	183.59	0.02	0.02	0.00
183.08	0.01	0.01	0.00	183.60	0.02	0.02	0.00
183.09	0.01	0.01	0.00	183.61	0.02	0.02	0.00
183.10	0.01	0.01	0.00	183.62	0.02	0.02	0.00
183.11	0.01	0.01	0.00	183.63	0.02	0.02	0.00
183.12	0.01	0.01	0.00	183.64	0.02	0.02	0.00
183.13	0.01	0.01	0.00	183.65	0.02	0.02	0.00
183.14	0.01	0.01	0.00	183.66	0.02	0.02	0.00
183.15	0.01	0.01	0.00	183.67	0.02	0.02	0.00
183.16	0.01	0.01	0.00	183.68	0.02	0.02	0.00
183.17	0.01	0.01	0.00	183.69	0.02	0.02	0.00
183.18	0.01	0.01	0.00	183.70	0.02	0.02	0.00
183.19	0.01	0.01	0.00	183.71	0.02	0.02	0.00
183.20	0.01	0.01	0.00	183.72	0.02	0.02	0.00
183.21	0.01	0.01	0.00	183.73	0.02	0.02	0.00
183.22	0.01	0.01	0.00	183.74	0.02	0.02	0.00
183.23	0.01	0.01	0.00	183.75	0.02	0.02	0.00
183.24	0.01	0.01	0.00	183.76	0.02	0.02	0.00
183.25	0.01	0.01	0.00	183.77	0.02	0.02	0.00
183.26	0.01	0.01	0.00	183.78	0.02	0.02	0.00
183.27	0.01	0.01	0.00	183.79	0.02	0.02	0.00
183.28	0.01	0.01	0.00	183.80	0.02	0.02	0.00
183.29	0.01	0.01	0.00	183.81	0.02	0.02	0.00
183.30	0.01	0.01	0.00	183.82	0.02	0.02	0.00
183.31	0.01	0.01	0.00	183.83	0.02	0.02	0.00
183.32	0.01	0.01	0.00	183.84	0.02	0.02	0.00
183.33	0.01	0.01	0.00	183.85	0.02	0.02	0.00
183.34	0.01	0.01	0.00	183.86	0.03	0.03	0.00
183.35	0.01	0.01	0.00	183.87	0.03	0.03	0.00
183.36	0.02	0.02	0.00	183.88	0.03	0.03	0.00
183.37	0.02	0.02	0.00	183.89	0.03	0.03	0.00
183.38	0.02	0.02	0.00	183.90	0.03	0.03	0.00
183.39	0.02	0.02	0.00	183.91	0.03	0.03	0.00
183.40	0.02	0.02	0.00	183.92	0.03	0.03	0.00
183.41	0.02	0.02	0.00	183.93	0.03	0.03	0.00
183.42	0.02	0.02	0.00	183.94	0.03	0.03	0.00
183.43	0.02	0.02	0.00	183.95	0.03	0.03	0.00
183.44	0.02	0.02	0.00	183.96	0.03	0.03	0.00
183.45	0.02	0.02	0.00	183.97	0.03	0.03	0.00
183.46	0.02	0.02	0.00	183.98	0.03	0.03	0.00
183.47	0.02	0.02	0.00	183.99	0.03	0.03	0.00
183.48	0.02	0.02	0.00	184.00	0.03	0.03	0.00
183.49	0.02	0.02	0.00	184.01	0.03	0.03	0.00
183.50	0.02	0.02	0.00	184.02	0.03	0.03	0.00
183.51	0.02	0.02	0.00	184.03	0.03	0.03	0.00

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**Stage-Discharge for Pond RG-A: Rain Garden A (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
184.04	0.03	0.03	0.00	184.56	0.04	0.04	0.00
184.05	0.03	0.03	0.00	184.57	0.04	0.04	0.00
184.06	0.03	0.03	0.00	184.58	0.04	0.04	0.00
184.07	0.03	0.03	0.00	184.59	0.04	0.04	0.00
184.08	0.03	0.03	0.00	184.60	0.04	0.04	0.00
184.09	0.03	0.03	0.00	184.61	0.05	0.05	0.00
184.10	0.03	0.03	0.00	184.62	0.05	0.05	0.00
184.11	0.03	0.03	0.00	184.63	0.05	0.05	0.00
184.12	0.03	0.03	0.00	184.64	0.05	0.05	0.00
184.13	0.03	0.03	0.00	184.65	0.05	0.05	0.00
184.14	0.03	0.03	0.00	184.66	0.05	0.05	0.00
184.15	0.03	0.03	0.00	184.67	0.05	0.05	0.00
184.16	0.03	0.03	0.00	184.68	0.05	0.05	0.00
184.17	0.03	0.03	0.00	184.69	0.05	0.05	0.00
184.18	0.03	0.03	0.00	184.70	0.05	0.05	0.00
184.19	0.03	0.03	0.00	184.71	0.05	0.05	0.00
184.20	0.03	0.03	0.00	184.72	0.05	0.05	0.00
184.21	0.03	0.03	0.00	184.73	0.05	0.05	0.00
184.22	0.03	0.03	0.00	184.74	0.05	0.05	0.00
184.23	0.03	0.03	0.00	184.75	0.05	0.05	0.00
184.24	0.03	0.03	0.00	184.76	0.05	0.05	0.00
184.25	0.03	0.03	0.00	184.77	0.05	0.05	0.00
184.26	0.04	0.04	0.00	184.78	0.05	0.05	0.00
184.27	0.04	0.04	0.00	184.79	0.05	0.05	0.00
184.28	0.04	0.04	0.00	184.80	0.05	0.05	0.00
184.29	0.04	0.04	0.00	184.81	0.05	0.05	0.00
184.30	0.04	0.04	0.00	184.82	0.05	0.05	0.00
184.31	0.04	0.04	0.00	184.83	0.05	0.05	0.00
184.32	0.04	0.04	0.00	184.84	0.05	0.05	0.00
184.33	0.04	0.04	0.00	184.85	0.05	0.05	0.00
184.34	0.04	0.04	0.00	184.86	0.05	0.05	0.00
184.35	0.04	0.04	0.00	184.87	0.05	0.05	0.00
184.36	0.04	0.04	0.00	184.88	0.05	0.05	0.00
184.37	0.04	0.04	0.00	184.89	0.05	0.05	0.00
184.38	0.04	0.04	0.00	184.90	0.05	0.05	0.00
184.39	0.04	0.04	0.00	184.91	0.05	0.05	0.00
184.40	0.04	0.04	0.00	184.92	0.05	0.05	0.00
184.41	0.04	0.04	0.00	184.93	0.05	0.05	0.00
184.42	0.04	0.04	0.00	184.94	0.05	0.05	0.00
184.43	0.04	0.04	0.00	184.95	0.05	0.05	0.00
184.44	0.04	0.04	0.00	184.96	0.06	0.06	0.00
184.45	0.04	0.04	0.00	184.97	0.06	0.06	0.00
184.46	0.04	0.04	0.00	184.98	0.06	0.06	0.00
184.47	0.04	0.04	0.00	184.99	0.06	0.06	0.00
184.48	0.04	0.04	0.00	185.00	0.06	0.06	0.00
184.49	0.04	0.04	0.00	185.01	0.09	0.06	0.04
184.50	0.04	0.04	0.00	185.02	0.16	0.06	0.10
184.51	0.04	0.04	0.00	185.03	0.24	0.06	0.19
184.52	0.04	0.04	0.00	185.04	0.35	0.06	0.29
184.53	0.04	0.04	0.00	185.05	0.46	0.06	0.40
184.54	0.04	0.04	0.00	185.06	0.59	0.06	0.53
184.55	0.04	0.04	0.00	185.07	0.73	0.06	0.67

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Type III 24-hr 25-Year Rainfall=6.16"

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**Stage-Discharge for Pond RG-A: Rain Garden A (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
185.08	0.88	0.06	0.82
185.09	1.03	0.06	0.98
185.10	1.20	0.06	1.14
185.11	1.38	0.06	1.32
185.12	1.56	0.06	1.50
185.13	1.75	0.06	1.69
185.14	1.95	0.06	1.89
185.15	2.16	0.06	2.10
185.16	2.37	0.06	2.31
185.17	2.59	0.06	2.53
185.18	2.82	0.06	2.76
185.19	3.06	0.06	2.99
185.20	3.30	0.06	3.23
185.21	3.55	0.06	3.49
185.22	3.82	0.06	3.75
185.23	4.09	0.06	4.02
185.24	4.37	0.06	4.30
185.25	4.65	0.06	4.59
185.26	4.95	0.06	4.88
185.27	5.25	0.06	5.18
185.28	5.55	0.06	5.49
185.29	5.87	0.06	5.80
185.30	<b>6.19</b>	<b>0.06</b>	<b>6.12</b>

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**Stage-Area-Storage for Pond RG-A: Rain Garden A**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.00	143	0	183.52	329	123
183.01	147	1	183.53	333	126
183.02	150	3	183.54	336	129
183.03	154	4	183.55	340	133
183.04	157	6	183.56	343	136
183.05	161	8	183.57	347	140
183.06	164	9	183.58	351	143
183.07	168	11	183.59	354	147
183.08	172	13	183.60	358	150
183.09	175	14	183.61	361	154
183.10	179	16	183.62	365	157
183.11	182	18	183.63	369	161
183.12	186	20	183.64	372	165
183.13	190	22	183.65	376	169
183.14	193	24	183.66	379	172
183.15	197	25	183.67	383	176
183.16	200	27	183.68	386	180
183.17	204	29	183.69	390	184
183.18	207	32	183.70	394	188
183.19	211	34	183.71	397	192
183.20	215	36	183.72	401	196
183.21	218	38	183.73	404	200
183.22	222	40	183.74	408	204
183.23	225	42	183.75	412	208
183.24	229	45	183.76	415	212
183.25	233	47	183.77	419	216
183.26	236	49	183.78	422	220
183.27	240	52	183.79	426	225
183.28	243	54	183.80	429	229
183.29	247	57	183.81	433	233
183.30	250	59	183.82	437	238
183.31	254	62	183.83	440	242
183.32	258	64	183.84	444	246
183.33	261	67	183.85	447	251
183.34	265	69	183.86	451	255
183.35	268	72	183.87	454	260
183.36	272	75	183.88	458	264
183.37	275	77	183.89	462	269
183.38	279	80	183.90	465	274
183.39	283	83	183.91	469	278
183.40	286	86	183.92	472	283
183.41	290	89	183.93	476	288
183.42	293	92	183.94	480	293
183.43	297	95	183.95	483	297
183.44	301	98	183.96	487	302
183.45	304	101	183.97	490	307
183.46	308	104	183.98	494	312
183.47	311	107	183.99	497	317
183.48	315	110	184.00	501	322
183.49	318	113	184.01	506	327
183.50	322	116	184.02	511	332
183.51	326	119	184.03	516	337

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Type III 24-hr 25-Year Rainfall=6.16"

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**Stage-Area-Storage for Pond RG-A: Rain Garden A (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.04	521	342	184.56	787	683
184.05	527	348	184.57	792	690
184.06	532	353	184.58	797	698
184.07	537	358	184.59	802	706
184.08	542	364	184.60	807	714
184.09	547	369	184.61	812	722
184.10	552	375	184.62	817	731
184.11	557	380	184.63	822	739
184.12	562	386	184.64	827	747
184.13	567	391	184.65	833	755
184.14	572	397	184.66	838	764
184.15	578	403	184.67	843	772
184.16	583	409	184.68	848	781
184.17	588	415	184.69	853	789
184.18	593	420	184.70	858	798
184.19	598	426	184.71	863	806
184.20	603	432	184.72	868	815
184.21	608	438	184.73	873	824
184.22	613	445	184.74	878	832
184.23	618	451	184.75	884	841
184.24	623	457	184.76	889	850
184.25	629	463	184.77	894	859
184.26	634	469	184.78	899	868
184.27	639	476	184.79	904	877
184.28	644	482	184.80	909	886
184.29	649	489	184.81	914	895
184.30	654	495	184.82	919	904
184.31	659	502	184.83	924	913
184.32	664	508	184.84	929	923
184.33	669	515	184.85	934	932
184.34	674	522	184.86	940	941
184.35	679	529	184.87	945	951
184.36	685	535	184.88	950	960
184.37	690	542	184.89	955	970
184.38	695	549	184.90	960	979
184.39	700	556	184.91	965	989
184.40	705	563	184.92	970	999
184.41	710	570	184.93	975	1,008
184.42	715	577	184.94	980	1,018
184.43	720	585	184.95	985	1,028
184.44	725	592	184.96	991	1,038
184.45	730	599	184.97	996	1,048
184.46	736	606	184.98	1,001	1,058
184.47	741	614	184.99	1,006	1,068
184.48	746	621	185.00	1,011	1,078
184.49	751	629	185.01	1,016	1,088
184.50	756	636	185.02	1,021	1,098
184.51	761	644	185.03	1,026	1,109
184.52	766	651	185.04	1,031	1,119
184.53	771	659	185.05	1,037	1,129
184.54	776	667	185.06	1,042	1,140
184.55	782	675	185.07	1,047	1,150

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Type III 24-hr 25-Year Rainfall=6.16"

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**Stage-Area-Storage for Pond RG-A: Rain Garden A (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.08	1,052	1,161
185.09	1,057	1,171
185.10	1,062	1,182
185.11	1,067	1,192
185.12	1,072	1,203
185.13	1,077	1,214
185.14	1,082	1,225
185.15	1,088	1,235
185.16	1,093	1,246
185.17	1,098	1,257
185.18	1,103	1,268
185.19	1,108	1,279
185.20	1,113	1,290
185.21	1,118	1,302
185.22	1,123	1,313
185.23	1,128	1,324
185.24	1,133	1,335
185.25	1,138	1,347
185.26	1,144	1,358
185.27	1,149	1,370
185.28	1,154	1,381
185.29	1,159	1,393
185.30	<b>1,164</b>	<b>1,404</b>



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**Summary for Pond RG-B: Rain Garden B**

Inflow Area = 10,641 sf, 41.23% Impervious, Inflow Depth = 4.03" for 25-Year event  
 Inflow = 1.18 cfs @ 12.07 hrs, Volume= 3,573 cf  
 Outflow = 0.37 cfs @ 12.39 hrs, Volume= 3,573 cf, Atten= 69%, Lag= 18.9 min  
 Discarded = 0.06 cfs @ 12.39 hrs, Volume= 3,110 cf  
 Primary = 0.31 cfs @ 12.39 hrs, Volume= 464 cf

Routed to Link TSD : Total Site Discharge

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
 Peak Elev= 158.04' @ 12.39 hrs Surf.Area= 1,051 sf Storage= 1,485 cf

Plug-Flow detention time= 253.5 min calculated for 3,572 cf (100% of inflow)  
 Center-of-Mass det. time= 253.5 min ( 1,063.1 - 809.6 )

Volume	Invert	Avail.Storage	Storage Description
#1	156.00'	1,767 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
156.00	437	0	0
157.00	704	571	571
158.00	1,037	871	1,441
158.30	1,135	326	1,767

Device	Routing	Invert	Outlet Devices
#1	Primary	158.00'	<b>15.0' long x 4.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32
#2	Discarded	156.00'	<b>2.400 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.06 cfs @ 12.39 hrs HW=158.04' (Free Discharge)  
 ↑**2=Exfiltration** (Exfiltration Controls 0.06 cfs)

**Primary OutFlow** Max=0.30 cfs @ 12.39 hrs HW=158.04' (Free Discharge)  
 ↑**1=Broad-Crested Rectangular Weir** (Weir Controls 0.30 cfs @ 0.48 fps)

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**Stage-Discharge for Pond RG-B: Rain Garden B**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
156.00	0.00	0.00	0.00	156.52	0.03	0.03	0.00
156.01	0.02	0.02	0.00	156.53	0.03	0.03	0.00
156.02	0.02	0.02	0.00	156.54	0.03	0.03	0.00
156.03	0.02	0.02	0.00	156.55	0.03	0.03	0.00
156.04	0.02	0.02	0.00	156.56	0.03	0.03	0.00
156.05	0.03	0.03	0.00	156.57	0.03	0.03	0.00
156.06	0.03	0.03	0.00	156.58	0.03	0.03	0.00
156.07	0.03	0.03	0.00	156.59	0.03	0.03	0.00
156.08	0.03	0.03	0.00	156.60	0.03	0.03	0.00
156.09	0.03	0.03	0.00	156.61	0.03	0.03	0.00
156.10	0.03	0.03	0.00	156.62	0.03	0.03	0.00
156.11	0.03	0.03	0.00	156.63	0.03	0.03	0.00
156.12	0.03	0.03	0.00	156.64	0.03	0.03	0.00
156.13	0.03	0.03	0.00	156.65	0.03	0.03	0.00
156.14	0.03	0.03	0.00	156.66	0.03	0.03	0.00
156.15	0.03	0.03	0.00	156.67	0.03	0.03	0.00
156.16	0.03	0.03	0.00	156.68	0.03	0.03	0.00
156.17	0.03	0.03	0.00	156.69	0.03	0.03	0.00
156.18	0.03	0.03	0.00	156.70	0.03	0.03	0.00
156.19	0.03	0.03	0.00	156.71	0.03	0.03	0.00
156.20	0.03	0.03	0.00	156.72	0.03	0.03	0.00
156.21	0.03	0.03	0.00	156.73	0.04	0.04	0.00
156.22	0.03	0.03	0.00	156.74	0.04	0.04	0.00
156.23	0.03	0.03	0.00	156.75	0.04	0.04	0.00
156.24	0.03	0.03	0.00	156.76	0.04	0.04	0.00
156.25	0.03	0.03	0.00	156.77	0.04	0.04	0.00
156.26	0.03	0.03	0.00	156.78	0.04	0.04	0.00
156.27	0.03	0.03	0.00	156.79	0.04	0.04	0.00
156.28	0.03	0.03	0.00	156.80	0.04	0.04	0.00
156.29	0.03	0.03	0.00	156.81	0.04	0.04	0.00
156.30	0.03	0.03	0.00	156.82	0.04	0.04	0.00
156.31	0.03	0.03	0.00	156.83	0.04	0.04	0.00
156.32	0.03	0.03	0.00	156.84	0.04	0.04	0.00
156.33	0.03	0.03	0.00	156.85	0.04	0.04	0.00
156.34	0.03	0.03	0.00	156.86	0.04	0.04	0.00
156.35	0.03	0.03	0.00	156.87	0.04	0.04	0.00
156.36	0.03	0.03	0.00	156.88	0.04	0.04	0.00
156.37	0.03	0.03	0.00	156.89	0.04	0.04	0.00
156.38	0.03	0.03	0.00	156.90	0.04	0.04	0.00
156.39	0.03	0.03	0.00	156.91	0.04	0.04	0.00
156.40	0.03	0.03	0.00	156.92	0.04	0.04	0.00
156.41	0.03	0.03	0.00	156.93	0.04	0.04	0.00
156.42	0.03	0.03	0.00	156.94	0.04	0.04	0.00
156.43	0.03	0.03	0.00	156.95	0.04	0.04	0.00
156.44	0.03	0.03	0.00	156.96	0.04	0.04	0.00
156.45	0.03	0.03	0.00	156.97	0.04	0.04	0.00
156.46	0.03	0.03	0.00	156.98	0.04	0.04	0.00
156.47	0.03	0.03	0.00	156.99	0.04	0.04	0.00
156.48	0.03	0.03	0.00	157.00	0.04	0.04	0.00
156.49	0.03	0.03	0.00	157.01	0.04	0.04	0.00
156.50	0.03	0.03	0.00	157.02	0.04	0.04	0.00
156.51	0.03	0.03	0.00	157.03	0.04	0.04	0.00

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**Stage-Discharge for Pond RG-B: Rain Garden B (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
157.04	0.04	0.04	0.00	157.56	0.05	0.05	0.00
157.05	0.04	0.04	0.00	157.57	0.05	0.05	0.00
157.06	0.04	0.04	0.00	157.58	0.05	0.05	0.00
157.07	0.04	0.04	0.00	157.59	0.05	0.05	0.00
157.08	0.04	0.04	0.00	157.60	0.05	0.05	0.00
157.09	0.04	0.04	0.00	157.61	0.05	0.05	0.00
157.10	0.04	0.04	0.00	157.62	0.05	0.05	0.00
157.11	0.04	0.04	0.00	157.63	0.05	0.05	0.00
157.12	0.04	0.04	0.00	157.64	0.05	0.05	0.00
157.13	0.04	0.04	0.00	157.65	0.05	0.05	0.00
157.14	0.04	0.04	0.00	157.66	0.05	0.05	0.00
157.15	0.04	0.04	0.00	157.67	0.05	0.05	0.00
157.16	0.04	0.04	0.00	157.68	0.05	0.05	0.00
157.17	0.04	0.04	0.00	157.69	0.05	0.05	0.00
157.18	0.04	0.04	0.00	157.70	0.05	0.05	0.00
157.19	0.04	0.04	0.00	157.71	0.05	0.05	0.00
157.20	0.04	0.04	0.00	157.72	0.05	0.05	0.00
157.21	0.04	0.04	0.00	157.73	0.05	0.05	0.00
157.22	0.04	0.04	0.00	157.74	0.05	0.05	0.00
157.23	0.04	0.04	0.00	157.75	0.05	0.05	0.00
157.24	0.04	0.04	0.00	157.76	0.05	0.05	0.00
157.25	0.04	0.04	0.00	157.77	0.05	0.05	0.00
157.26	0.04	0.04	0.00	157.78	0.05	0.05	0.00
157.27	0.04	0.04	0.00	157.79	0.05	0.05	0.00
157.28	0.04	0.04	0.00	157.80	0.05	0.05	0.00
157.29	0.04	0.04	0.00	157.81	0.05	0.05	0.00
157.30	0.04	0.04	0.00	157.82	0.05	0.05	0.00
157.31	0.04	0.04	0.00	157.83	0.05	0.05	0.00
157.32	0.05	0.05	0.00	157.84	0.05	0.05	0.00
157.33	0.05	0.05	0.00	157.85	0.05	0.05	0.00
157.34	0.05	0.05	0.00	157.86	0.06	0.06	0.00
157.35	0.05	0.05	0.00	157.87	0.06	0.06	0.00
157.36	0.05	0.05	0.00	157.88	0.06	0.06	0.00
157.37	0.05	0.05	0.00	157.89	0.06	0.06	0.00
157.38	0.05	0.05	0.00	157.90	0.06	0.06	0.00
157.39	0.05	0.05	0.00	157.91	0.06	0.06	0.00
157.40	0.05	0.05	0.00	157.92	0.06	0.06	0.00
157.41	0.05	0.05	0.00	157.93	0.06	0.06	0.00
157.42	0.05	0.05	0.00	157.94	0.06	0.06	0.00
157.43	0.05	0.05	0.00	157.95	0.06	0.06	0.00
157.44	0.05	0.05	0.00	157.96	0.06	0.06	0.00
157.45	0.05	0.05	0.00	157.97	0.06	0.06	0.00
157.46	0.05	0.05	0.00	157.98	0.06	0.06	0.00
157.47	0.05	0.05	0.00	157.99	0.06	0.06	0.00
157.48	0.05	0.05	0.00	158.00	0.06	0.06	0.00
157.49	0.05	0.05	0.00	158.01	0.09	0.06	0.04
157.50	0.05	0.05	0.00	158.02	0.16	0.06	0.10
157.51	0.05	0.05	0.00	158.03	0.24	0.06	0.19
157.52	0.05	0.05	0.00	158.04	0.34	0.06	0.29
157.53	0.05	0.05	0.00	158.05	0.46	0.06	0.40
157.54	0.05	0.05	0.00	158.06	0.58	0.06	0.52
157.55	0.05	0.05	0.00	158.07	0.72	0.06	0.66

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**Stage-Discharge for Pond RG-B: Rain Garden B (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
158.08	0.87	0.06	0.81
158.09	1.02	0.06	0.96
158.10	1.19	0.06	1.13
158.11	1.36	0.06	1.30
158.12	1.54	0.06	1.48
158.13	1.73	0.06	1.67
158.14	1.93	0.06	1.87
158.15	2.13	0.06	2.07
158.16	2.35	0.06	2.28
158.17	2.56	0.06	2.50
158.18	2.79	0.06	2.73
158.19	3.02	0.06	2.96
158.20	3.25	0.06	3.19
158.21	3.51	0.06	3.45
158.22	3.77	0.06	3.71
158.23	4.04	0.06	3.98
158.24	4.32	0.06	4.25
158.25	4.60	0.06	4.54
158.26	4.89	0.06	4.83
158.27	5.19	0.06	5.13
158.28	5.49	0.06	5.43
158.29	5.81	0.06	5.74
158.30	<b>6.13</b>	<b>0.06</b>	<b>6.06</b>

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**Stage-Area-Storage for Pond RG-B: Rain Garden B**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
156.00	437	0	156.52	576	263
156.01	440	4	156.53	579	269
156.02	442	9	156.54	581	275
156.03	445	13	156.55	584	281
156.04	448	18	156.56	587	287
156.05	450	22	156.57	589	292
156.06	453	27	156.58	592	298
156.07	456	31	156.59	595	304
156.08	458	36	156.60	597	310
156.09	461	40	156.61	600	316
156.10	464	45	156.62	603	322
156.11	466	50	156.63	605	328
156.12	469	54	156.64	608	334
156.13	472	59	156.65	611	340
156.14	474	64	156.66	613	347
156.15	477	69	156.67	616	353
156.16	480	73	156.68	619	359
156.17	482	78	156.69	621	365
156.18	485	83	156.70	624	371
156.19	488	88	156.71	627	378
156.20	490	93	156.72	629	384
156.21	493	98	156.73	632	390
156.22	496	103	156.74	635	396
156.23	498	108	156.75	637	403
156.24	501	113	156.76	640	409
156.25	504	118	156.77	643	416
156.26	506	123	156.78	645	422
156.27	509	128	156.79	648	429
156.28	512	133	156.80	651	435
156.29	514	138	156.81	653	442
156.30	517	143	156.82	656	448
156.31	520	148	156.83	659	455
156.32	522	154	156.84	661	461
156.33	525	159	156.85	664	468
156.34	528	164	156.86	667	475
156.35	530	169	156.87	669	481
156.36	533	175	156.88	672	488
156.37	536	180	156.89	675	495
156.38	538	185	156.90	677	501
156.39	541	191	156.91	680	508
156.40	544	196	156.92	683	515
156.41	546	202	156.93	685	522
156.42	549	207	156.94	688	529
156.43	552	213	156.95	691	536
156.44	554	218	156.96	693	543
156.45	557	224	156.97	696	550
156.46	560	229	156.98	699	556
156.47	562	235	156.99	701	563
156.48	565	241	157.00	704	571
156.49	568	246	157.01	707	578
156.50	571	252	157.02	711	585
156.51	573	258	157.03	714	592

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**Stage-Area-Storage for Pond RG-B: Rain Garden B (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
157.04	717	599	157.56	890	1,017
157.05	721	606	157.57	894	1,026
157.06	724	613	157.58	897	1,035
157.07	727	621	157.59	900	1,044
157.08	731	628	157.60	904	1,053
157.09	734	635	157.61	907	1,062
157.10	737	643	157.62	910	1,071
157.11	741	650	157.63	914	1,080
157.12	744	657	157.64	917	1,089
157.13	747	665	157.65	920	1,098
157.14	751	672	157.66	924	1,108
157.15	754	680	157.67	927	1,117
157.16	757	687	157.68	930	1,126
157.17	761	695	157.69	934	1,136
157.18	764	703	157.70	937	1,145
157.19	767	710	157.71	940	1,154
157.20	771	718	157.72	944	1,164
157.21	774	726	157.73	947	1,173
157.22	777	733	157.74	950	1,183
157.23	781	741	157.75	954	1,192
157.24	784	749	157.76	957	1,202
157.25	787	757	157.77	960	1,211
157.26	791	765	157.78	964	1,221
157.27	794	773	157.79	967	1,231
157.28	797	781	157.80	970	1,240
157.29	801	789	157.81	974	1,250
157.30	804	797	157.82	977	1,260
157.31	807	805	157.83	980	1,270
157.32	811	813	157.84	984	1,279
157.33	814	821	157.85	987	1,289
157.34	817	829	157.86	990	1,299
157.35	821	837	157.87	994	1,309
157.36	824	846	157.88	997	1,319
157.37	827	854	157.89	1,000	1,329
157.38	831	862	157.90	1,004	1,339
157.39	834	870	157.91	1,007	1,349
157.40	837	879	157.92	1,010	1,359
157.41	841	887	157.93	1,014	1,369
157.42	844	896	157.94	1,017	1,379
157.43	847	904	157.95	1,020	1,390
157.44	851	912	157.96	1,024	1,400
157.45	854	921	157.97	1,027	1,410
157.46	857	930	157.98	1,030	1,420
157.47	861	938	157.99	1,034	1,431
157.48	864	947	158.00	1,037	1,441
157.49	867	955	158.01	1,040	1,451
157.50	871	964	158.02	1,044	1,462
157.51	874	973	158.03	1,047	1,472
157.52	877	982	158.04	1,050	1,483
157.53	880	990	158.05	1,053	1,493
157.54	884	999	158.06	1,057	1,504
157.55	887	1,008	158.07	1,060	1,514

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**Stage-Area-Storage for Pond RG-B: Rain Garden B (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
158.08	1,063	1,525
158.09	1,066	1,536
158.10	1,070	1,546
158.11	1,073	1,557
158.12	1,076	1,568
158.13	1,079	1,579
158.14	1,083	1,589
158.15	1,086	1,600
158.16	1,089	1,611
158.17	1,093	1,622
158.18	1,096	1,633
158.19	1,099	1,644
158.20	1,102	1,655
158.21	1,106	1,666
158.22	1,109	1,677
158.23	1,112	1,688
158.24	1,115	1,699
158.25	1,119	1,710
158.26	1,122	1,722
158.27	1,125	1,733
158.28	1,128	1,744
158.29	1,132	1,755
158.30	<b>1,135</b>	<b>1,767</b>

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**Summary for Pond SWB: Stormtech MC 3500 (SWM-B)**

Inflow Area = 16,665 sf, 100.00% Impervious, Inflow Depth = 5.92" for 25-Year event  
 Inflow = 2.38 cfs @ 12.07 hrs, Volume= 8,224 cf  
 Outflow = 0.10 cfs @ 14.55 hrs, Volume= 8,224 cf, Atten= 96%, Lag= 148.7 min  
 Discarded = 0.10 cfs @ 9.58 hrs, Volume= 8,195 cf  
 Primary = 0.01 cfs @ 14.55 hrs, Volume= 29 cf

Routed to Link TSD : Total Site Discharge

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
 Peak Elev= 179.04' @ 14.55 hrs Surf.Area= 1,738 sf Storage= 3,964 cf

Plug-Flow detention time= 339.9 min calculated for 8,221 cf (100% of inflow)  
 Center-of-Mass det. time= 339.9 min ( 1,083.7 - 743.8 )

Volume	Invert	Avail.Storage	Storage Description
#1A	175.65'	2,580 cf	<b>8.42'W x 206.46'L x 5.50'H Field A</b> 9,557 cf Overall - 3,108 cf Embedded = 6,449 cf x 40.0% Voids
#2A	176.40'	3,108 cf	<b>ADS_StormTech MC-3500 d +Cap</b> x 28 Inside #1 Effective Size= 70.4"W x 45.0"H => 15.33 sf x 7.17'L = 110.0 cf Overall Size= 77.0"W x 45.0"H x 7.50'L with 0.33' Overlap Cap Storage= 14.9 cf x 2 x 1 rows = 29.8 cf
		5,688 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	175.65'	<b>15.0" Round Outlet Pipe</b> L= 45.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 175.65' / 166.00' S= 0.2144 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf
#2	Device 1	179.00'	<b>6.0" Vert. Low Flow Orifice</b> C= 0.600 Limited to weir flow at low heads
#3	Device 1	180.25'	<b>4.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#4	Discarded	175.65'	<b>2.400 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.10 cfs @ 9.58 hrs HW=175.71' (Free Discharge)  
 ↳ **4=Exfiltration** (Exfiltration Controls 0.10 cfs)

**Primary OutFlow** Max=0.00 cfs @ 14.55 hrs HW=179.04' (Free Discharge)  
 ↳ **1=Outlet Pipe** (Passes 0.00 cfs of 9.82 cfs potential flow)  
 ↳ **2=Low Flow Orifice** (Orifice Controls 0.00 cfs @ 0.67 fps)  
 ↳ **3=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)



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Type III 24-hr 25-Year Rainfall=6.16"

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**Pond SWB: Stormtech MC 3500 (SWM-B) - Chamber Wizard Field A**

**Chamber Model = ADS\_StormTech MC-3500 d +Cap (ADS StormTech® MC-3500 d rev 03/14 with Cap volume)**

Effective Size= 70.4"W x 45.0"H => 15.33 sf x 7.17'L = 110.0 cf

Overall Size= 77.0"W x 45.0"H x 7.50'L with 0.33' Overlap

Cap Storage= 14.9 cf x 2 x 1 rows = 29.8 cf

28 Chambers/Row x 7.17' Long +1.85' Cap Length x 2 = 204.46' Row Length +12.0" End Stone x 2 = 206.46' Base Length

1 Rows x 77.0" Wide + 12.0" Side Stone x 2 = 8.42' Base Width

9.0" Stone Base + 45.0" Chamber Height + 12.0" Stone Cover = 5.50' Field Height

28 Chambers x 110.0 cf + 14.9 cf Cap Volume x 2 x 1 Rows = 3,108.5 cf Chamber Storage

9,557.4 cf Field - 3,108.5 cf Chambers = 6,448.9 cf Stone x 40.0% Voids = 2,579.6 cf Stone Storage

Chamber Storage + Stone Storage = 5,688.0 cf = 0.131 af

Overall Storage Efficiency = 59.5%

Overall System Size = 206.46' x 8.42' x 5.50'

28 Chambers

354.0 cy Field

238.8 cy Stone



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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
175.65	0.00	0.00	0.00	176.17	0.10	0.10	0.00
175.66	0.10	<b>0.10</b>	0.00	176.18	0.10	0.10	0.00
175.67	0.10	0.10	0.00	176.19	0.10	0.10	0.00
175.68	0.10	0.10	0.00	176.20	0.10	0.10	0.00
175.69	0.10	0.10	0.00	176.21	0.10	0.10	0.00
175.70	0.10	0.10	0.00	176.22	0.10	0.10	0.00
175.71	0.10	0.10	0.00	176.23	0.10	0.10	0.00
175.72	0.10	0.10	0.00	176.24	0.10	0.10	0.00
175.73	0.10	0.10	0.00	176.25	0.10	0.10	0.00
175.74	0.10	0.10	0.00	176.26	0.10	0.10	0.00
175.75	0.10	0.10	0.00	176.27	0.10	0.10	0.00
175.76	0.10	0.10	0.00	176.28	0.10	0.10	0.00
175.77	0.10	0.10	0.00	176.29	0.10	0.10	0.00
175.78	0.10	0.10	0.00	176.30	0.10	0.10	0.00
175.79	0.10	0.10	0.00	176.31	0.10	0.10	0.00
175.80	0.10	0.10	0.00	176.32	0.10	0.10	0.00
175.81	0.10	0.10	0.00	176.33	0.10	0.10	0.00
175.82	0.10	0.10	0.00	176.34	0.10	0.10	0.00
175.83	0.10	0.10	0.00	176.35	0.10	0.10	0.00
175.84	0.10	0.10	0.00	176.36	0.10	0.10	0.00
175.85	0.10	0.10	0.00	176.37	0.10	0.10	0.00
175.86	0.10	0.10	0.00	176.38	0.10	0.10	0.00
175.87	0.10	0.10	0.00	176.39	0.10	0.10	0.00
175.88	0.10	0.10	0.00	176.40	0.10	0.10	0.00
175.89	0.10	0.10	0.00	176.41	0.10	0.10	0.00
175.90	0.10	0.10	0.00	176.42	0.10	0.10	0.00
175.91	0.10	0.10	0.00	176.43	0.10	0.10	0.00
175.92	0.10	0.10	0.00	176.44	0.10	0.10	0.00
175.93	0.10	0.10	0.00	176.45	0.10	0.10	0.00
175.94	0.10	0.10	0.00	176.46	0.10	0.10	0.00
175.95	0.10	0.10	0.00	176.47	0.10	0.10	0.00
175.96	0.10	0.10	0.00	176.48	0.10	0.10	0.00
175.97	0.10	0.10	0.00	176.49	0.10	0.10	0.00
175.98	0.10	0.10	0.00	176.50	0.10	0.10	0.00
175.99	0.10	0.10	0.00	176.51	0.10	0.10	0.00
176.00	0.10	0.10	0.00	176.52	0.10	0.10	0.00
176.01	0.10	0.10	0.00	176.53	0.10	0.10	0.00
176.02	0.10	0.10	0.00	176.54	0.10	0.10	0.00
176.03	0.10	0.10	0.00	176.55	0.10	0.10	0.00
176.04	0.10	0.10	0.00	176.56	0.10	0.10	0.00
176.05	0.10	0.10	0.00	176.57	0.10	0.10	0.00
176.06	0.10	0.10	0.00	176.58	0.10	0.10	0.00
176.07	0.10	0.10	0.00	176.59	0.10	0.10	0.00
176.08	0.10	0.10	0.00	176.60	0.10	0.10	0.00
176.09	0.10	0.10	0.00	176.61	0.10	0.10	0.00
176.10	0.10	0.10	0.00	176.62	0.10	0.10	0.00
176.11	0.10	0.10	0.00	176.63	0.10	0.10	0.00
176.12	0.10	0.10	0.00	176.64	0.10	0.10	0.00
176.13	0.10	0.10	0.00	176.65	0.10	0.10	0.00
176.14	0.10	0.10	0.00	176.66	0.10	0.10	0.00
176.15	0.10	0.10	0.00	176.67	0.10	0.10	0.00
176.16	0.10	0.10	0.00	176.68	0.10	0.10	0.00

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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
176.69	0.10	0.10	0.00	177.21	0.10	0.10	0.00
176.70	0.10	0.10	0.00	177.22	0.10	0.10	0.00
176.71	0.10	0.10	0.00	177.23	0.10	0.10	0.00
176.72	0.10	0.10	0.00	177.24	0.10	0.10	0.00
176.73	0.10	0.10	0.00	177.25	0.10	0.10	0.00
176.74	0.10	0.10	0.00	177.26	0.10	0.10	0.00
176.75	0.10	0.10	0.00	177.27	0.10	0.10	0.00
176.76	0.10	0.10	0.00	177.28	0.10	0.10	0.00
176.77	0.10	0.10	0.00	177.29	0.10	0.10	0.00
176.78	0.10	0.10	0.00	177.30	0.10	0.10	0.00
176.79	0.10	0.10	0.00	177.31	0.10	0.10	0.00
176.80	0.10	0.10	0.00	177.32	0.10	0.10	0.00
176.81	0.10	0.10	0.00	177.33	0.10	0.10	0.00
176.82	0.10	0.10	0.00	177.34	0.10	0.10	0.00
176.83	0.10	0.10	0.00	177.35	0.10	0.10	0.00
176.84	0.10	0.10	0.00	177.36	0.10	0.10	0.00
176.85	0.10	0.10	0.00	177.37	0.10	0.10	0.00
176.86	0.10	0.10	0.00	177.38	0.10	0.10	0.00
176.87	0.10	0.10	0.00	177.39	0.10	0.10	0.00
176.88	0.10	0.10	0.00	177.40	0.10	0.10	0.00
176.89	0.10	0.10	0.00	177.41	0.10	0.10	0.00
176.90	0.10	0.10	0.00	177.42	0.10	0.10	0.00
176.91	0.10	0.10	0.00	177.43	0.10	0.10	0.00
176.92	0.10	0.10	0.00	177.44	0.10	0.10	0.00
176.93	0.10	0.10	0.00	177.45	0.10	0.10	0.00
176.94	0.10	0.10	0.00	177.46	0.10	0.10	0.00
176.95	0.10	0.10	0.00	177.47	0.10	0.10	0.00
176.96	0.10	0.10	0.00	177.48	0.10	0.10	0.00
176.97	0.10	0.10	0.00	177.49	0.10	0.10	0.00
176.98	0.10	0.10	0.00	177.50	0.10	0.10	0.00
176.99	0.10	0.10	0.00	177.51	0.10	0.10	0.00
177.00	0.10	0.10	0.00	177.52	0.10	0.10	0.00
177.01	0.10	0.10	0.00	177.53	0.10	0.10	0.00
177.02	0.10	0.10	0.00	177.54	0.10	0.10	0.00
177.03	0.10	0.10	0.00	177.55	0.10	0.10	0.00
177.04	0.10	0.10	0.00	177.56	0.10	0.10	0.00
177.05	0.10	0.10	0.00	177.57	0.10	0.10	0.00
177.06	0.10	0.10	0.00	177.58	0.10	0.10	0.00
177.07	0.10	0.10	0.00	177.59	0.10	0.10	0.00
177.08	0.10	0.10	0.00	177.60	0.10	0.10	0.00
177.09	0.10	0.10	0.00	177.61	0.10	0.10	0.00
177.10	0.10	0.10	0.00	177.62	0.10	0.10	0.00
177.11	0.10	0.10	0.00	177.63	0.10	0.10	0.00
177.12	0.10	0.10	0.00	177.64	0.10	0.10	0.00
177.13	0.10	0.10	0.00	177.65	0.10	0.10	0.00
177.14	0.10	0.10	0.00	177.66	0.10	0.10	0.00
177.15	0.10	0.10	0.00	177.67	0.10	0.10	0.00
177.16	0.10	0.10	0.00	177.68	0.10	0.10	0.00
177.17	0.10	0.10	0.00	177.69	0.10	0.10	0.00
177.18	0.10	0.10	0.00	177.70	0.10	0.10	0.00
177.19	0.10	0.10	0.00	177.71	0.10	0.10	0.00
177.20	0.10	0.10	0.00	177.72	0.10	0.10	0.00

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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
177.73	0.10	0.10	0.00	178.25	0.10	0.10	0.00
177.74	0.10	0.10	0.00	178.26	0.10	0.10	0.00
177.75	0.10	0.10	0.00	178.27	0.10	0.10	0.00
177.76	0.10	0.10	0.00	178.28	0.10	0.10	0.00
177.77	0.10	0.10	0.00	178.29	0.10	0.10	0.00
177.78	0.10	0.10	0.00	178.30	0.10	0.10	0.00
177.79	0.10	0.10	0.00	178.31	0.10	0.10	0.00
177.80	0.10	0.10	0.00	178.32	0.10	0.10	0.00
177.81	0.10	0.10	0.00	178.33	0.10	0.10	0.00
177.82	0.10	0.10	0.00	178.34	0.10	0.10	0.00
177.83	0.10	0.10	0.00	178.35	0.10	0.10	0.00
177.84	0.10	0.10	0.00	178.36	0.10	0.10	0.00
177.85	0.10	0.10	0.00	178.37	0.10	0.10	0.00
177.86	0.10	0.10	0.00	178.38	0.10	0.10	0.00
177.87	0.10	0.10	0.00	178.39	0.10	0.10	0.00
177.88	0.10	0.10	0.00	178.40	0.10	0.10	0.00
177.89	0.10	0.10	0.00	178.41	0.10	0.10	0.00
177.90	0.10	0.10	0.00	178.42	0.10	0.10	0.00
177.91	0.10	0.10	0.00	178.43	0.10	0.10	0.00
177.92	0.10	0.10	0.00	178.44	0.10	0.10	0.00
177.93	0.10	0.10	0.00	178.45	0.10	0.10	0.00
177.94	0.10	0.10	0.00	178.46	0.10	0.10	0.00
177.95	0.10	0.10	0.00	178.47	0.10	0.10	0.00
177.96	0.10	0.10	0.00	178.48	0.10	0.10	0.00
177.97	0.10	0.10	0.00	178.49	0.10	0.10	0.00
177.98	0.10	0.10	0.00	178.50	0.10	0.10	0.00
177.99	0.10	0.10	0.00	178.51	0.10	0.10	0.00
178.00	0.10	0.10	0.00	178.52	0.10	0.10	0.00
178.01	0.10	0.10	0.00	178.53	0.10	0.10	0.00
178.02	0.10	0.10	0.00	178.54	0.10	0.10	0.00
178.03	0.10	0.10	0.00	178.55	0.10	0.10	0.00
178.04	0.10	0.10	0.00	178.56	0.10	0.10	0.00
178.05	0.10	0.10	0.00	178.57	0.10	0.10	0.00
178.06	0.10	0.10	0.00	178.58	0.10	0.10	0.00
178.07	0.10	0.10	0.00	178.59	0.10	0.10	0.00
178.08	0.10	0.10	0.00	178.60	0.10	0.10	0.00
178.09	0.10	0.10	0.00	178.61	0.10	0.10	0.00
178.10	0.10	0.10	0.00	178.62	0.10	0.10	0.00
178.11	0.10	0.10	0.00	178.63	0.10	0.10	0.00
178.12	0.10	0.10	0.00	178.64	0.10	0.10	0.00
178.13	0.10	0.10	0.00	178.65	0.10	0.10	0.00
178.14	0.10	0.10	0.00	178.66	0.10	0.10	0.00
178.15	0.10	0.10	0.00	178.67	0.10	0.10	0.00
178.16	0.10	0.10	0.00	178.68	0.10	0.10	0.00
178.17	0.10	0.10	0.00	178.69	0.10	0.10	0.00
178.18	0.10	0.10	0.00	178.70	0.10	0.10	0.00
178.19	0.10	0.10	0.00	178.71	0.10	0.10	0.00
178.20	0.10	0.10	0.00	178.72	0.10	0.10	0.00
178.21	0.10	0.10	0.00	178.73	0.10	0.10	0.00
178.22	0.10	0.10	0.00	178.74	0.10	0.10	0.00
178.23	0.10	0.10	0.00	178.75	0.10	0.10	0.00
178.24	0.10	0.10	0.00	178.76	0.10	0.10	0.00

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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
178.77	0.10	0.10	0.00	179.29	0.31	0.10	0.22
178.78	0.10	0.10	0.00	179.30	0.33	0.10	0.23
178.79	0.10	0.10	0.00	179.31	0.34	0.10	0.24
178.80	0.10	0.10	0.00	179.32	0.35	0.10	0.26
178.81	0.10	0.10	0.00	179.33	0.37	0.10	0.27
178.82	0.10	0.10	0.00	179.34	0.38	0.10	0.28
178.83	0.10	0.10	0.00	179.35	0.39	0.10	0.30
178.84	0.10	0.10	0.00	179.36	0.41	0.10	0.31
178.85	0.10	0.10	0.00	179.37	0.42	0.10	0.32
178.86	0.10	0.10	0.00	179.38	0.43	0.10	0.34
178.87	0.10	0.10	0.00	179.39	0.45	0.10	0.35
178.88	0.10	0.10	0.00	179.40	0.46	0.10	0.36
178.89	0.10	0.10	0.00	179.41	0.47	0.10	0.38
178.90	0.10	0.10	0.00	179.42	0.49	0.10	0.39
178.91	0.10	0.10	0.00	179.43	0.50	0.10	0.40
178.92	0.10	0.10	0.00	179.44	0.51	0.10	0.41
178.93	0.10	0.10	0.00	179.45	0.52	0.10	0.43
178.94	0.10	0.10	0.00	179.46	0.53	0.10	0.44
178.95	0.10	0.10	0.00	179.47	0.54	0.10	0.45
178.96	0.10	0.10	0.00	179.48	0.55	0.10	0.46
178.97	0.10	0.10	0.00	179.49	0.56	0.10	0.47
178.98	0.10	0.10	0.00	179.50	0.57	0.10	0.47
178.99	0.10	0.10	0.00	179.51	0.58	0.10	0.48
179.00	0.10	0.10	0.00	179.52	0.59	0.10	0.49
179.01	0.10	0.10	0.00	179.53	0.60	0.10	0.50
179.02	0.10	0.10	0.00	179.54	0.61	0.10	0.51
179.03	0.10	0.10	0.00	179.55	0.61	0.10	0.52
179.04	0.10	0.10	0.01	179.56	0.62	0.10	0.53
179.05	0.10	0.10	0.01	179.57	0.63	0.10	0.53
179.06	0.11	0.10	0.01	179.58	0.64	0.10	0.54
179.07	0.11	0.10	0.02	179.59	0.65	0.10	0.55
179.08	0.12	0.10	0.02	179.60	0.66	0.10	0.56
179.09	0.12	0.10	0.02	179.61	0.66	0.10	0.57
179.10	0.13	0.10	0.03	179.62	0.67	0.10	0.58
179.11	0.13	0.10	0.04	179.63	0.68	0.10	0.58
179.12	0.14	0.10	0.04	179.64	0.69	0.10	0.59
179.13	0.15	0.10	0.05	179.65	0.69	0.10	0.60
179.14	0.15	0.10	0.06	179.66	0.70	0.10	0.61
179.15	0.16	0.10	0.07	179.67	0.71	0.10	0.61
179.16	0.17	0.10	0.07	179.68	0.72	0.10	0.62
179.17	0.18	0.10	0.08	179.69	0.72	0.10	0.63
179.18	0.19	0.10	0.09	179.70	0.73	0.10	0.63
179.19	0.20	0.10	0.10	179.71	0.74	0.10	0.64
179.20	0.21	0.10	0.11	179.72	0.74	0.10	0.65
179.21	0.22	0.10	0.12	179.73	0.75	0.10	0.66
179.22	0.23	0.10	0.13	179.74	0.76	0.10	0.66
179.23	0.24	0.10	0.14	179.75	0.77	0.10	0.67
179.24	0.25	0.10	0.16	179.76	0.77	0.10	0.68
179.25	0.26	0.10	0.17	179.77	0.78	0.10	0.68
179.26	0.28	0.10	0.18	179.78	0.78	0.10	0.69
179.27	0.29	0.10	0.19	179.79	0.79	0.10	0.69
179.28	0.30	0.10	0.20	179.80	0.80	0.10	0.70

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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
179.81	0.80	0.10	0.71	180.33	1.33	0.10	1.24
179.82	0.81	0.10	0.71	180.34	1.39	0.10	1.29
179.83	0.82	0.10	0.72	180.35	1.44	0.10	1.35
179.84	0.82	0.10	0.73	180.36	1.50	0.10	1.40
179.85	0.83	0.10	0.73	180.37	1.56	0.10	1.47
179.86	0.83	0.10	0.74	180.38	1.63	0.10	1.53
179.87	0.84	0.10	0.74	180.39	1.69	0.10	1.60
179.88	0.85	0.10	0.75	180.40	1.76	0.10	1.66
179.89	0.85	0.10	0.76	180.41	1.83	0.10	1.74
179.90	0.86	0.10	0.76	180.42	1.90	0.10	1.81
179.91	0.86	0.10	0.77	180.43	1.98	0.10	1.88
179.92	0.87	0.10	0.77	180.44	2.06	0.10	1.96
179.93	0.88	0.10	0.78	180.45	2.13	0.10	2.04
179.94	0.88	0.10	0.79	180.46	2.22	0.10	2.12
179.95	0.89	0.10	0.79	180.47	2.30	0.10	2.20
179.96	0.89	0.10	0.80	180.48	2.39	0.10	2.29
179.97	0.90	0.10	0.80	180.49	2.48	0.10	2.38
179.98	0.90	0.10	0.81	180.50	2.57	0.10	2.47
179.99	0.91	0.10	0.81	180.51	2.66	0.10	2.57
180.00	0.92	0.10	0.82	180.52	2.76	0.10	2.66
180.01	0.92	0.10	0.82	180.53	2.85	0.10	2.76
180.02	0.93	0.10	0.83	180.54	2.95	0.10	2.86
180.03	0.93	0.10	0.83	180.55	3.05	0.10	2.96
180.04	0.94	0.10	0.84	180.56	3.16	0.10	3.06
180.05	0.94	0.10	0.85	180.57	3.26	0.10	3.17
180.06	0.95	0.10	0.85	180.58	3.37	0.10	3.27
180.07	0.95	0.10	0.86	180.59	3.48	0.10	3.38
180.08	0.96	0.10	0.86	180.60	3.59	0.10	3.49
180.09	0.96	0.10	0.87	180.61	3.70	0.10	3.60
180.10	0.97	0.10	0.87	180.62	3.82	0.10	3.72
180.11	0.97	0.10	0.88	180.63	3.93	0.10	3.84
180.12	0.98	0.10	0.88	180.64	4.05	0.10	3.95
180.13	0.98	0.10	0.89	180.65	4.17	0.10	4.07
180.14	0.99	0.10	0.89	180.66	4.29	0.10	4.20
180.15	0.99	0.10	0.90	180.67	4.42	0.10	4.32
180.16	1.00	0.10	0.90	180.68	4.55	0.10	4.45
180.17	1.00	0.10	0.91	180.69	4.68	0.10	4.58
180.18	1.01	0.10	0.91	180.70	4.81	0.10	4.71
180.19	1.01	0.10	0.92	180.71	4.94	0.10	4.85
180.20	1.02	0.10	0.92	180.72	5.08	0.10	4.98
180.21	1.02	0.10	0.93	180.73	5.22	0.10	5.12
180.22	1.03	0.10	0.93	180.74	5.36	0.10	5.26
180.23	1.03	0.10	0.94	180.75	5.50	0.10	5.40
180.24	1.04	0.10	0.94	180.76	5.64	0.10	5.54
180.25	1.04	0.10	0.95	180.77	5.79	0.10	5.69
180.26	1.06	0.10	0.96	180.78	5.93	0.10	5.84
180.27	1.08	0.10	0.99	180.79	6.08	0.10	5.99
180.28	1.11	0.10	1.02	180.80	6.23	0.10	6.14
180.29	1.15	0.10	1.05	180.81	6.39	0.10	6.29
180.30	1.19	0.10	1.09	180.82	6.54	0.10	6.45
180.31	1.23	0.10	1.14	180.83	6.70	0.10	6.60
180.32	1.28	0.10	1.19	180.84	6.86	0.10	6.76

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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
180.85	7.02	0.10	6.92
180.86	7.19	0.10	7.09
180.87	7.36	0.10	7.26
180.88	7.53	0.10	7.43
180.89	7.71	0.10	7.61
180.90	7.88	0.10	7.79
180.91	8.06	0.10	7.97
180.92	8.24	0.10	8.15
180.93	8.43	0.10	8.33
180.94	8.61	0.10	8.52
180.95	8.80	0.10	8.71
180.96	8.99	0.10	8.90
180.97	9.19	0.10	9.09
180.98	9.38	0.10	9.28
180.99	9.58	0.10	9.48
181.00	9.78	0.10	9.68
181.01	9.98	0.10	9.88
181.02	10.18	0.10	10.09
181.03	10.39	0.10	10.29
181.04	10.60	0.10	10.50
181.05	10.81	0.10	10.71
181.06	10.99	0.10	10.90
181.07	11.18	0.10	11.08
181.08	11.37	0.10	11.27
181.09	11.55	0.10	11.46
181.10	11.74	0.10	11.65
181.11	11.93	0.10	11.84
181.12	12.12	0.10	12.03
181.13	12.32	0.10	12.22
181.14	12.51	0.10	12.41
181.15	<b>12.70</b>	0.10	<b>12.61</b>

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
175.65	1,738	0	176.17	1,738	361
175.66	1,738	7	176.18	1,738	368
175.67	1,738	14	176.19	1,738	375
175.68	1,738	21	176.20	1,738	382
175.69	1,738	28	176.21	1,738	389
175.70	1,738	35	176.22	1,738	396
175.71	1,738	42	176.23	1,738	403
175.72	1,738	49	176.24	1,738	410
175.73	1,738	56	176.25	1,738	417
175.74	1,738	63	176.26	1,738	424
175.75	1,738	70	176.27	1,738	431
175.76	1,738	76	176.28	1,738	438
175.77	1,738	83	176.29	1,738	445
175.78	1,738	90	176.30	1,738	452
175.79	1,738	97	176.31	1,738	459
175.80	1,738	104	176.32	1,738	466
175.81	1,738	111	176.33	1,738	473
175.82	1,738	118	176.34	1,738	480
175.83	1,738	125	176.35	1,738	487
175.84	1,738	132	176.36	1,738	494
175.85	1,738	139	176.37	1,738	500
175.86	1,738	146	176.38	1,738	507
175.87	1,738	153	176.39	1,738	514
175.88	1,738	160	176.40	1,738	521
175.89	1,738	167	176.41	1,738	535
175.90	1,738	174	176.42	1,738	549
175.91	1,738	181	176.43	1,738	564
175.92	1,738	188	176.44	1,738	578
175.93	1,738	195	176.45	1,738	592
175.94	1,738	202	176.46	1,738	606
175.95	1,738	209	176.47	1,738	620
175.96	1,738	215	176.48	1,738	634
175.97	1,738	222	176.49	1,738	648
175.98	1,738	229	176.50	1,738	662
175.99	1,738	236	176.51	1,738	676
176.00	1,738	243	176.52	1,738	690
176.01	1,738	250	176.53	1,738	704
176.02	1,738	257	176.54	1,738	718
176.03	1,738	264	176.55	1,738	732
176.04	1,738	271	176.56	1,738	746
176.05	1,738	278	176.57	1,738	760
176.06	1,738	285	176.58	1,738	774
176.07	1,738	292	176.59	1,738	788
176.08	1,738	299	176.60	1,738	802
176.09	1,738	306	176.61	1,738	816
176.10	1,738	313	176.62	1,738	830
176.11	1,738	320	176.63	1,738	844
176.12	1,738	327	176.64	1,738	858
176.13	1,738	334	176.65	1,738	872
176.14	1,738	341	176.66	1,738	886
176.15	1,738	348	176.67	1,738	900
176.16	1,738	354	176.68	1,738	914



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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
176.69	1,738	928	177.21	1,738	1,646
176.70	1,738	942	177.22	1,738	1,659
176.71	1,738	956	177.23	1,738	1,673
176.72	1,738	970	177.24	1,738	1,686
176.73	1,738	984	177.25	1,738	1,700
176.74	1,738	998	177.26	1,738	1,714
176.75	1,738	1,012	177.27	1,738	1,727
176.76	1,738	1,025	177.28	1,738	1,741
176.77	1,738	1,039	177.29	1,738	1,754
176.78	1,738	1,053	177.30	1,738	1,768
176.79	1,738	1,067	177.31	1,738	1,782
176.80	1,738	1,081	177.32	1,738	1,795
176.81	1,738	1,095	177.33	1,738	1,809
176.82	1,738	1,109	177.34	1,738	1,822
176.83	1,738	1,123	177.35	1,738	1,836
176.84	1,738	1,137	177.36	1,738	1,849
176.85	1,738	1,150	177.37	1,738	1,863
176.86	1,738	1,164	177.38	1,738	1,876
176.87	1,738	1,178	177.39	1,738	1,890
176.88	1,738	1,192	177.40	1,738	1,903
176.89	1,738	1,206	177.41	1,738	1,917
176.90	1,738	1,220	177.42	1,738	1,930
176.91	1,738	1,233	177.43	1,738	1,944
176.92	1,738	1,247	177.44	1,738	1,957
176.93	1,738	1,261	177.45	1,738	1,971
176.94	1,738	1,275	177.46	1,738	1,984
176.95	1,738	1,289	177.47	1,738	1,998
176.96	1,738	1,303	177.48	1,738	2,011
176.97	1,738	1,316	177.49	1,738	2,025
176.98	1,738	1,330	177.50	1,738	2,038
176.99	1,738	1,344	177.51	1,738	2,051
177.00	1,738	1,358	177.52	1,738	2,065
177.01	1,738	1,371	177.53	1,738	2,078
177.02	1,738	1,385	177.54	1,738	2,092
177.03	1,738	1,399	177.55	1,738	2,105
177.04	1,738	1,413	177.56	1,738	2,118
177.05	1,738	1,427	177.57	1,738	2,132
177.06	1,738	1,440	177.58	1,738	2,145
177.07	1,738	1,454	177.59	1,738	2,158
177.08	1,738	1,468	177.60	1,738	2,172
177.09	1,738	1,481	177.61	1,738	2,185
177.10	1,738	1,495	177.62	1,738	2,198
177.11	1,738	1,509	177.63	1,738	2,212
177.12	1,738	1,523	177.64	1,738	2,225
177.13	1,738	1,536	177.65	1,738	2,238
177.14	1,738	1,550	177.66	1,738	2,252
177.15	1,738	1,564	177.67	1,738	2,265
177.16	1,738	1,577	177.68	1,738	2,278
177.17	1,738	1,591	177.69	1,738	2,291
177.18	1,738	1,605	177.70	1,738	2,305
177.19	1,738	1,618	177.71	1,738	2,318
177.20	1,738	1,632	177.72	1,738	2,331

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
177.73	1,738	2,344	178.25	1,738	3,017
177.74	1,738	2,358	178.26	1,738	3,030
177.75	1,738	2,371	178.27	1,738	3,042
177.76	1,738	2,384	178.28	1,738	3,055
177.77	1,738	2,397	178.29	1,738	3,067
177.78	1,738	2,410	178.30	1,738	3,080
177.79	1,738	2,423	178.31	1,738	3,092
177.80	1,738	2,437	178.32	1,738	3,105
177.81	1,738	2,450	178.33	1,738	3,117
177.82	1,738	2,463	178.34	1,738	3,130
177.83	1,738	2,476	178.35	1,738	3,143
177.84	1,738	2,489	178.36	1,738	3,155
177.85	1,738	2,502	178.37	1,738	3,167
177.86	1,738	2,515	178.38	1,738	3,180
177.87	1,738	2,528	178.39	1,738	3,192
177.88	1,738	2,541	178.40	1,738	3,205
177.89	1,738	2,554	178.41	1,738	3,217
177.90	1,738	2,567	178.42	1,738	3,230
177.91	1,738	2,581	178.43	1,738	3,242
177.92	1,738	2,594	178.44	1,738	3,254
177.93	1,738	2,607	178.45	1,738	3,267
177.94	1,738	2,620	178.46	1,738	3,279
177.95	1,738	2,633	178.47	1,738	3,291
177.96	1,738	2,646	178.48	1,738	3,304
177.97	1,738	2,658	178.49	1,738	3,316
177.98	1,738	2,671	178.50	1,738	3,328
177.99	1,738	2,684	178.51	1,738	3,341
178.00	1,738	2,697	178.52	1,738	3,353
178.01	1,738	2,710	178.53	1,738	3,365
178.02	1,738	2,723	178.54	1,738	3,377
178.03	1,738	2,736	178.55	1,738	3,389
178.04	1,738	2,749	178.56	1,738	3,402
178.05	1,738	2,762	178.57	1,738	3,414
178.06	1,738	2,775	178.58	1,738	3,426
178.07	1,738	2,788	178.59	1,738	3,438
178.08	1,738	2,800	178.60	1,738	3,450
178.09	1,738	2,813	178.61	1,738	3,462
178.10	1,738	2,826	178.62	1,738	3,474
178.11	1,738	2,839	178.63	1,738	3,487
178.12	1,738	2,852	178.64	1,738	3,499
178.13	1,738	2,864	178.65	1,738	3,511
178.14	1,738	2,877	178.66	1,738	3,523
178.15	1,738	2,890	178.67	1,738	3,535
178.16	1,738	2,903	178.68	1,738	3,547
178.17	1,738	2,915	178.69	1,738	3,559
178.18	1,738	2,928	178.70	1,738	3,571
178.19	1,738	2,941	178.71	1,738	3,582
178.20	1,738	2,954	178.72	1,738	3,594
178.21	1,738	2,966	178.73	1,738	3,606
178.22	1,738	2,979	178.74	1,738	3,618
178.23	1,738	2,992	178.75	1,738	3,630
178.24	1,738	3,004	178.76	1,738	3,642

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
178.77	1,738	3,654	179.29	1,738	4,239
178.78	1,738	3,665	179.30	1,738	4,250
178.79	1,738	3,677	179.31	1,738	4,261
178.80	1,738	3,689	179.32	1,738	4,271
178.81	1,738	3,701	179.33	1,738	4,282
178.82	1,738	3,713	179.34	1,738	4,292
178.83	1,738	3,724	179.35	1,738	4,303
178.84	1,738	3,736	179.36	1,738	4,313
178.85	1,738	3,748	179.37	1,738	4,323
178.86	1,738	3,759	179.38	1,738	4,334
178.87	1,738	3,771	179.39	1,738	4,344
178.88	1,738	3,783	179.40	1,738	4,354
178.89	1,738	3,794	179.41	1,738	4,365
178.90	1,738	3,806	179.42	1,738	4,375
178.91	1,738	3,817	179.43	1,738	4,385
178.92	1,738	3,829	179.44	1,738	4,395
178.93	1,738	3,840	179.45	1,738	4,405
178.94	1,738	3,852	179.46	1,738	4,416
178.95	1,738	3,863	179.47	1,738	4,426
178.96	1,738	3,875	179.48	1,738	4,436
178.97	1,738	3,886	179.49	1,738	4,446
178.98	1,738	3,898	179.50	1,738	4,456
178.99	1,738	3,909	179.51	1,738	4,466
179.00	1,738	3,920	179.52	1,738	4,475
179.01	1,738	3,932	179.53	1,738	4,485
179.02	1,738	3,943	179.54	1,738	4,495
179.03	1,738	3,954	179.55	1,738	4,505
179.04	1,738	3,965	179.56	1,738	4,514
179.05	1,738	3,977	179.57	1,738	4,524
179.06	1,738	3,988	179.58	1,738	4,534
179.07	1,738	3,999	179.59	1,738	4,543
179.08	1,738	4,010	179.60	1,738	4,553
179.09	1,738	4,022	179.61	1,738	4,562
179.10	1,738	4,033	179.62	1,738	4,572
179.11	1,738	4,044	179.63	1,738	4,581
179.12	1,738	4,055	179.64	1,738	4,591
179.13	1,738	4,066	179.65	1,738	4,600
179.14	1,738	4,077	179.66	1,738	4,609
179.15	1,738	4,088	179.67	1,738	4,618
179.16	1,738	4,099	179.68	1,738	4,627
179.17	1,738	4,110	179.69	1,738	4,636
179.18	1,738	4,121	179.70	1,738	4,645
179.19	1,738	4,132	179.71	1,738	4,654
179.20	1,738	4,143	179.72	1,738	4,663
179.21	1,738	4,154	179.73	1,738	4,672
179.22	1,738	4,164	179.74	1,738	4,680
179.23	1,738	4,175	179.75	1,738	4,689
179.24	1,738	4,186	179.76	1,738	4,698
179.25	1,738	4,197	179.77	1,738	4,706
179.26	1,738	4,207	179.78	1,738	4,714
179.27	1,738	4,218	179.79	1,738	4,723
179.28	1,738	4,229	179.80	1,738	4,731

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Type III 24-hr 25-Year Rainfall=6.16"

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
179.81	1,738	4,739	180.33	1,738	5,118
179.82	1,738	4,747	180.34	1,738	5,125
179.83	1,738	4,755	180.35	1,738	5,132
179.84	1,738	4,763	180.36	1,738	5,139
179.85	1,738	4,771	180.37	1,738	5,146
179.86	1,738	4,779	180.38	1,738	5,153
179.87	1,738	4,787	180.39	1,738	5,160
179.88	1,738	4,795	180.40	1,738	5,167
179.89	1,738	4,802	180.41	1,738	5,174
179.90	1,738	4,810	180.42	1,738	5,181
179.91	1,738	4,818	180.43	1,738	5,188
179.92	1,738	4,825	180.44	1,738	5,195
179.93	1,738	4,833	180.45	1,738	5,201
179.94	1,738	4,840	180.46	1,738	5,208
179.95	1,738	4,848	180.47	1,738	5,215
179.96	1,738	4,855	180.48	1,738	5,222
179.97	1,738	4,863	180.49	1,738	5,229
179.98	1,738	4,870	180.50	1,738	5,236
179.99	1,738	4,878	180.51	1,738	5,243
180.00	1,738	4,885	180.52	1,738	5,250
180.01	1,738	4,893	180.53	1,738	5,257
180.02	1,738	4,900	180.54	1,738	5,264
180.03	1,738	4,907	180.55	1,738	5,271
180.04	1,738	4,915	180.56	1,738	5,278
180.05	1,738	4,922	180.57	1,738	5,285
180.06	1,738	4,929	180.58	1,738	5,292
180.07	1,738	4,936	180.59	1,738	5,299
180.08	1,738	4,944	180.60	1,738	5,306
180.09	1,738	4,951	180.61	1,738	5,313
180.10	1,738	4,958	180.62	1,738	5,320
180.11	1,738	4,965	180.63	1,738	5,327
180.12	1,738	4,972	180.64	1,738	5,334
180.13	1,738	4,979	180.65	1,738	5,340
180.14	1,738	4,986	180.66	1,738	5,347
180.15	1,738	4,993	180.67	1,738	5,354
180.16	1,738	5,000	180.68	1,738	5,361
180.17	1,738	5,007	180.69	1,738	5,368
180.18	1,738	5,014	180.70	1,738	5,375
180.19	1,738	5,021	180.71	1,738	5,382
180.20	1,738	5,028	180.72	1,738	5,389
180.21	1,738	5,035	180.73	1,738	5,396
180.22	1,738	5,042	180.74	1,738	5,403
180.23	1,738	5,049	180.75	1,738	5,410
180.24	1,738	5,055	180.76	1,738	5,417
180.25	1,738	5,062	180.77	1,738	5,424
180.26	1,738	5,069	180.78	1,738	5,431
180.27	1,738	5,076	180.79	1,738	5,438
180.28	1,738	5,083	180.80	1,738	5,445
180.29	1,738	5,090	180.81	1,738	5,452
180.30	1,738	5,097	180.82	1,738	5,459
180.31	1,738	5,104	180.83	1,738	5,466
180.32	1,738	5,111	180.84	1,738	5,473

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Type III 24-hr 25-Year Rainfall=6.16"

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
180.85	1,738	5,479
180.86	1,738	5,486
180.87	1,738	5,493
180.88	1,738	5,500
180.89	1,738	5,507
180.90	1,738	5,514
180.91	1,738	5,521
180.92	1,738	5,528
180.93	1,738	5,535
180.94	1,738	5,542
180.95	1,738	5,549
180.96	1,738	5,556
180.97	1,738	5,563
180.98	1,738	5,570
180.99	1,738	5,577
181.00	1,738	5,584
181.01	1,738	5,591
181.02	1,738	5,598
181.03	1,738	5,605
181.04	1,738	5,612
181.05	1,738	5,619
181.06	1,738	5,625
181.07	1,738	5,632
181.08	1,738	5,639
181.09	1,738	5,646
181.10	1,738	5,653
181.11	1,738	5,660
181.12	1,738	5,667
181.13	1,738	5,674
181.14	1,738	5,681
181.15	1,738	<b>5,688</b>

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*Type III 24-hr 25-Year Rainfall=6.16"*

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**Summary for Link TSD: Total Site Discharge**

Inflow Area = 119,968 sf, 21.15% Impervious, Inflow Depth = 1.90" for 25-Year event  
Inflow = 5.38 cfs @ 12.18 hrs, Volume= 18,990 cf  
Primary = 5.38 cfs @ 12.18 hrs, Volume= 18,990 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

**post development**

Type III 24-hr 100-Year Rainfall=7.76"

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Time span=0.00-72.00 hrs, dt=0.02 hrs, 3601 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

**Subcatchment DA 1A: DA 1A** Runoff Area=16,145 sf 22.38% Impervious Runoff Depth=4.71"  
Tc=10.0 min CN=74 Runoff=1.78 cfs 6,339 cf

**Subcatchment DA 1B: DA 1B** Runoff Area=16,665 sf 100.00% Impervious Runoff Depth=7.52"  
Tc=5.0 min CN=98 Runoff=3.01 cfs 10,444 cf

**Subcatchment DA 1C: DA 1C** Runoff Area=47,379 sf 1.50% Impervious Runoff Depth=3.92"  
Tc=10.0 min CN=67 Runoff=4.36 cfs 15,489 cf

**Subcatchment DA 1D: DA 1D** Runoff Area=10,641 sf 41.23% Impervious Runoff Depth=5.52"  
Tc=5.0 min CN=81 Runoff=1.60 cfs 4,891 cf

**Subcatchment DA 1E: DA 1E** Runoff Area=29,138 sf 0.00% Impervious Runoff Depth=3.92"  
Flow Length=446' Tc=10.7 min CN=67 Runoff=2.62 cfs 9,526 cf

**Pond RG-A: Rain Garden A** Peak Elev=185.13' Storage=1,214 cf Inflow=1.78 cfs 6,339 cf  
Discarded=0.06 cfs 3,234 cf Primary=1.70 cfs 3,105 cf Outflow=1.76 cfs 6,339 cf

**Pond RG-B: Rain Garden B** Peak Elev=158.10' Storage=1,547 cf Inflow=1.60 cfs 4,891 cf  
Discarded=0.06 cfs 3,438 cf Primary=1.14 cfs 1,453 cf Outflow=1.20 cfs 4,891 cf

**Pond SWB: Stormtech MC 3500 (SWM-B)** Peak Elev=179.47' Storage=4,427 cf Inflow=3.01 cfs 10,444 cf  
Discarded=0.10 cfs 8,849 cf Primary=0.45 cfs 1,595 cf Outflow=0.54 cfs 10,444 cf

**Link TSD: Total Site Discharge** Inflow=9.81 cfs 31,168 cf  
Primary=9.81 cfs 31,168 cf

**Total Runoff Area = 119,968 sf Runoff Volume = 46,689 cf Average Runoff Depth = 4.67"**  
**78.85% Pervious = 94,594 sf 21.15% Impervious = 25,374 sf**

**post development**

Type III 24-hr 100-Year Rainfall=7.76"

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**Summary for Subcatchment DA 1A: DA 1A**

Runoff = 1.78 cfs @ 12.14 hrs, Volume= 6,339 cf, Depth= 4.71"

Routed to Pond RG-A : Rain Garden A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
Type III 24-hr 100-Year Rainfall=7.76"

Area (sf)	CN	Description
6,492	66	Woods, Poor, HSG B
6,040	69	50-75% Grass cover, Fair, HSG B
3,613	98	Paved parking, HSG B
16,145	74	Weighted Average
12,532		77.62% Pervious Area
3,613		22.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					<b>Direct Entry, direct</b>



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Type III 24-hr 100-Year Rainfall=7.76"

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**Summary for Subcatchment DA 1B: DA 1B**

Runoff = 3.01 cfs @ 12.07 hrs, Volume= 10,444 cf, Depth= 7.52"

Routed to Pond SWB : Stormtech MC 3500 (SWM-B)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Type III 24-hr 100-Year Rainfall=7.76"

Area (sf)	CN	Description
4,000	98	Roofs, HSG B
12,665	98	Paved parking, HSG B
16,665	98	Weighted Average
16,665		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					<b>Direct Entry, direct</b>

**post development**

Type III 24-hr 100-Year Rainfall=7.76"

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**Summary for Subcatchment DA 1C: DA 1C**

Runoff = 4.36 cfs @ 12.14 hrs, Volume= 15,489 cf, Depth= 3.92"

Routed to Link TSD : Total Site Discharge

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Type III 24-hr 100-Year Rainfall=7.76"

Area (sf)	CN	Description
709	98	Paved parking, HSG B
22,996	66	Woods, Poor, HSG B
23,674	67	Brush, Poor, HSG B
47,379	67	Weighted Average
46,670		98.50% Pervious Area
709		1.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					<b>Direct Entry, direct</b>

**post development**

Type III 24-hr 100-Year Rainfall=7.76"

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**Summary for Subcatchment DA 1D: DA 1D**

Runoff = 1.60 cfs @ 12.07 hrs, Volume= 4,891 cf, Depth= 5.52"

Routed to Pond RG-B : Rain Garden B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Type III 24-hr 100-Year Rainfall=7.76"

Area (sf)	CN	Description
4,387	98	Paved parking, HSG B
6,254	69	50-75% Grass cover, Fair, HSG B
10,641	81	Weighted Average
6,254		58.77% Pervious Area
4,387		41.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					<b>Direct Entry, direct</b>

**post development**

Type III 24-hr 100-Year Rainfall=7.76"

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**Summary for Subcatchment DA 1E: DA 1E**

Runoff = 2.62 cfs @ 12.15 hrs, Volume= 9,526 cf, Depth= 3.92"

Routed to Link TSD : Total Site Discharge

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs

Type III 24-hr 100-Year Rainfall=7.76"

Area (sf)	CN	Description
20,116	66	Woods, Poor, HSG B
9,022	69	50-75% Grass cover, Fair, HSG B
29,138	67	Weighted Average
29,138		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	100	0.2400	0.22		<b>Sheet Flow, Sheetflow</b> Woods: Light underbrush n= 0.400 P2= 3.45"
3.0	346	0.0750	1.92		<b>Shallow Concentrated Flow, SHALLOW</b> Short Grass Pasture Kv= 7.0 fps
10.7	446	Total			

**post development**

Type III 24-hr 100-Year Rainfall=7.76"

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**Summary for Pond RG-A: Rain Garden A**

Inflow Area = 16,145 sf, 22.38% Impervious, Inflow Depth = 4.71" for 100-Year event  
 Inflow = 1.78 cfs @ 12.14 hrs, Volume= 6,339 cf  
 Outflow = 1.76 cfs @ 12.16 hrs, Volume= 6,339 cf, Atten= 1%, Lag= 1.0 min  
 Discarded = 0.06 cfs @ 12.16 hrs, Volume= 3,234 cf  
 Primary = 1.70 cfs @ 12.16 hrs, Volume= 3,105 cf

Routed to Link TSD : Total Site Discharge

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
 Peak Elev= 185.13' @ 12.16 hrs Surf.Area= 1,077 sf Storage= 1,214 cf

Plug-Flow detention time= 135.8 min calculated for 6,337 cf (100% of inflow)  
 Center-of-Mass det. time= 135.9 min ( 957.1 - 821.3 )

Volume	Invert	Avail.Storage	Storage Description
#1	183.00'	1,404 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
183.00	143	0	0
184.00	501	322	322
185.00	1,011	756	1,078
185.30	1,164	326	1,404

Device	Routing	Invert	Outlet Devices
#1	Primary	185.00'	<b>15.0' long x 3.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.41 2.56 2.69 2.67 2.66 2.66 2.65 2.67 2.67 2.70 2.77 2.83 2.87 2.93 3.10 3.19 3.32
#2	Discarded	183.00'	<b>2.400 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.06 cfs @ 12.16 hrs HW=185.13' (Free Discharge)  
 ↑**2=Exfiltration** (Exfiltration Controls 0.06 cfs)

**Primary OutFlow** Max=1.69 cfs @ 12.16 hrs HW=185.13' (Free Discharge)  
 ↑**1=Broad-Crested Rectangular Weir** (Weir Controls 1.69 cfs @ 0.87 fps)

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Type III 24-hr 100-Year Rainfall=7.76"

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**Stage-Discharge for Pond RG-A: Rain Garden A**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
183.00	0.00	0.00	0.00	183.52	0.02	0.02	0.00
183.01	0.01	0.01	0.00	183.53	0.02	0.02	0.00
183.02	0.01	0.01	0.00	183.54	0.02	0.02	0.00
183.03	0.01	0.01	0.00	183.55	0.02	0.02	0.00
183.04	0.01	0.01	0.00	183.56	0.02	0.02	0.00
183.05	0.01	0.01	0.00	183.57	0.02	0.02	0.00
183.06	0.01	0.01	0.00	183.58	0.02	0.02	0.00
183.07	0.01	0.01	0.00	183.59	0.02	0.02	0.00
183.08	0.01	0.01	0.00	183.60	0.02	0.02	0.00
183.09	0.01	0.01	0.00	183.61	0.02	0.02	0.00
183.10	0.01	0.01	0.00	183.62	0.02	0.02	0.00
183.11	0.01	0.01	0.00	183.63	0.02	0.02	0.00
183.12	0.01	0.01	0.00	183.64	0.02	0.02	0.00
183.13	0.01	0.01	0.00	183.65	0.02	0.02	0.00
183.14	0.01	0.01	0.00	183.66	0.02	0.02	0.00
183.15	0.01	0.01	0.00	183.67	0.02	0.02	0.00
183.16	0.01	0.01	0.00	183.68	0.02	0.02	0.00
183.17	0.01	0.01	0.00	183.69	0.02	0.02	0.00
183.18	0.01	0.01	0.00	183.70	0.02	0.02	0.00
183.19	0.01	0.01	0.00	183.71	0.02	0.02	0.00
183.20	0.01	0.01	0.00	183.72	0.02	0.02	0.00
183.21	0.01	0.01	0.00	183.73	0.02	0.02	0.00
183.22	0.01	0.01	0.00	183.74	0.02	0.02	0.00
183.23	0.01	0.01	0.00	183.75	0.02	0.02	0.00
183.24	0.01	0.01	0.00	183.76	0.02	0.02	0.00
183.25	0.01	0.01	0.00	183.77	0.02	0.02	0.00
183.26	0.01	0.01	0.00	183.78	0.02	0.02	0.00
183.27	0.01	0.01	0.00	183.79	0.02	0.02	0.00
183.28	0.01	0.01	0.00	183.80	0.02	0.02	0.00
183.29	0.01	0.01	0.00	183.81	0.02	0.02	0.00
183.30	0.01	0.01	0.00	183.82	0.02	0.02	0.00
183.31	0.01	0.01	0.00	183.83	0.02	0.02	0.00
183.32	0.01	0.01	0.00	183.84	0.02	0.02	0.00
183.33	0.01	0.01	0.00	183.85	0.02	0.02	0.00
183.34	0.01	0.01	0.00	183.86	0.03	0.03	0.00
183.35	0.01	0.01	0.00	183.87	0.03	0.03	0.00
183.36	0.02	0.02	0.00	183.88	0.03	0.03	0.00
183.37	0.02	0.02	0.00	183.89	0.03	0.03	0.00
183.38	0.02	0.02	0.00	183.90	0.03	0.03	0.00
183.39	0.02	0.02	0.00	183.91	0.03	0.03	0.00
183.40	0.02	0.02	0.00	183.92	0.03	0.03	0.00
183.41	0.02	0.02	0.00	183.93	0.03	0.03	0.00
183.42	0.02	0.02	0.00	183.94	0.03	0.03	0.00
183.43	0.02	0.02	0.00	183.95	0.03	0.03	0.00
183.44	0.02	0.02	0.00	183.96	0.03	0.03	0.00
183.45	0.02	0.02	0.00	183.97	0.03	0.03	0.00
183.46	0.02	0.02	0.00	183.98	0.03	0.03	0.00
183.47	0.02	0.02	0.00	183.99	0.03	0.03	0.00
183.48	0.02	0.02	0.00	184.00	0.03	0.03	0.00
183.49	0.02	0.02	0.00	184.01	0.03	0.03	0.00
183.50	0.02	0.02	0.00	184.02	0.03	0.03	0.00
183.51	0.02	0.02	0.00	184.03	0.03	0.03	0.00

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**Stage-Discharge for Pond RG-A: Rain Garden A (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
184.04	0.03	0.03	0.00	184.56	0.04	0.04	0.00
184.05	0.03	0.03	0.00	184.57	0.04	0.04	0.00
184.06	0.03	0.03	0.00	184.58	0.04	0.04	0.00
184.07	0.03	0.03	0.00	184.59	0.04	0.04	0.00
184.08	0.03	0.03	0.00	184.60	0.04	0.04	0.00
184.09	0.03	0.03	0.00	184.61	0.05	0.05	0.00
184.10	0.03	0.03	0.00	184.62	0.05	0.05	0.00
184.11	0.03	0.03	0.00	184.63	0.05	0.05	0.00
184.12	0.03	0.03	0.00	184.64	0.05	0.05	0.00
184.13	0.03	0.03	0.00	184.65	0.05	0.05	0.00
184.14	0.03	0.03	0.00	184.66	0.05	0.05	0.00
184.15	0.03	0.03	0.00	184.67	0.05	0.05	0.00
184.16	0.03	0.03	0.00	184.68	0.05	0.05	0.00
184.17	0.03	0.03	0.00	184.69	0.05	0.05	0.00
184.18	0.03	0.03	0.00	184.70	0.05	0.05	0.00
184.19	0.03	0.03	0.00	184.71	0.05	0.05	0.00
184.20	0.03	0.03	0.00	184.72	0.05	0.05	0.00
184.21	0.03	0.03	0.00	184.73	0.05	0.05	0.00
184.22	0.03	0.03	0.00	184.74	0.05	0.05	0.00
184.23	0.03	0.03	0.00	184.75	0.05	0.05	0.00
184.24	0.03	0.03	0.00	184.76	0.05	0.05	0.00
184.25	0.03	0.03	0.00	184.77	0.05	0.05	0.00
184.26	0.04	0.04	0.00	184.78	0.05	0.05	0.00
184.27	0.04	0.04	0.00	184.79	0.05	0.05	0.00
184.28	0.04	0.04	0.00	184.80	0.05	0.05	0.00
184.29	0.04	0.04	0.00	184.81	0.05	0.05	0.00
184.30	0.04	0.04	0.00	184.82	0.05	0.05	0.00
184.31	0.04	0.04	0.00	184.83	0.05	0.05	0.00
184.32	0.04	0.04	0.00	184.84	0.05	0.05	0.00
184.33	0.04	0.04	0.00	184.85	0.05	0.05	0.00
184.34	0.04	0.04	0.00	184.86	0.05	0.05	0.00
184.35	0.04	0.04	0.00	184.87	0.05	0.05	0.00
184.36	0.04	0.04	0.00	184.88	0.05	0.05	0.00
184.37	0.04	0.04	0.00	184.89	0.05	0.05	0.00
184.38	0.04	0.04	0.00	184.90	0.05	0.05	0.00
184.39	0.04	0.04	0.00	184.91	0.05	0.05	0.00
184.40	0.04	0.04	0.00	184.92	0.05	0.05	0.00
184.41	0.04	0.04	0.00	184.93	0.05	0.05	0.00
184.42	0.04	0.04	0.00	184.94	0.05	0.05	0.00
184.43	0.04	0.04	0.00	184.95	0.05	0.05	0.00
184.44	0.04	0.04	0.00	184.96	0.06	0.06	0.00
184.45	0.04	0.04	0.00	184.97	0.06	0.06	0.00
184.46	0.04	0.04	0.00	184.98	0.06	0.06	0.00
184.47	0.04	0.04	0.00	184.99	0.06	0.06	0.00
184.48	0.04	0.04	0.00	185.00	0.06	0.06	0.00
184.49	0.04	0.04	0.00	185.01	0.09	0.06	0.04
184.50	0.04	0.04	0.00	185.02	0.16	0.06	0.10
184.51	0.04	0.04	0.00	185.03	0.24	0.06	0.19
184.52	0.04	0.04	0.00	185.04	0.35	0.06	0.29
184.53	0.04	0.04	0.00	185.05	0.46	0.06	0.40
184.54	0.04	0.04	0.00	185.06	0.59	0.06	0.53
184.55	0.04	0.04	0.00	185.07	0.73	0.06	0.67

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**Stage-Discharge for Pond RG-A: Rain Garden A (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
185.08	0.88	0.06	0.82
185.09	1.03	0.06	0.98
185.10	1.20	0.06	1.14
185.11	1.38	0.06	1.32
185.12	1.56	0.06	1.50
185.13	1.75	0.06	1.69
185.14	1.95	0.06	1.89
185.15	2.16	0.06	2.10
185.16	2.37	0.06	2.31
185.17	2.59	0.06	2.53
185.18	2.82	0.06	2.76
185.19	3.06	0.06	2.99
185.20	3.30	0.06	3.23
185.21	3.55	0.06	3.49
185.22	3.82	0.06	3.75
185.23	4.09	0.06	4.02
185.24	4.37	0.06	4.30
185.25	4.65	0.06	4.59
185.26	4.95	0.06	4.88
185.27	5.25	0.06	5.18
185.28	5.55	0.06	5.49
185.29	5.87	0.06	5.80
185.30	<b>6.19</b>	<b>0.06</b>	<b>6.12</b>



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**Stage-Area-Storage for Pond RG-A: Rain Garden A**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
183.00	143	0	183.52	329	123
183.01	147	1	183.53	333	126
183.02	150	3	183.54	336	129
183.03	154	4	183.55	340	133
183.04	157	6	183.56	343	136
183.05	161	8	183.57	347	140
183.06	164	9	183.58	351	143
183.07	168	11	183.59	354	147
183.08	172	13	183.60	358	150
183.09	175	14	183.61	361	154
183.10	179	16	183.62	365	157
183.11	182	18	183.63	369	161
183.12	186	20	183.64	372	165
183.13	190	22	183.65	376	169
183.14	193	24	183.66	379	172
183.15	197	25	183.67	383	176
183.16	200	27	183.68	386	180
183.17	204	29	183.69	390	184
183.18	207	32	183.70	394	188
183.19	211	34	183.71	397	192
183.20	215	36	183.72	401	196
183.21	218	38	183.73	404	200
183.22	222	40	183.74	408	204
183.23	225	42	183.75	412	208
183.24	229	45	183.76	415	212
183.25	233	47	183.77	419	216
183.26	236	49	183.78	422	220
183.27	240	52	183.79	426	225
183.28	243	54	183.80	429	229
183.29	247	57	183.81	433	233
183.30	250	59	183.82	437	238
183.31	254	62	183.83	440	242
183.32	258	64	183.84	444	246
183.33	261	67	183.85	447	251
183.34	265	69	183.86	451	255
183.35	268	72	183.87	454	260
183.36	272	75	183.88	458	264
183.37	275	77	183.89	462	269
183.38	279	80	183.90	465	274
183.39	283	83	183.91	469	278
183.40	286	86	183.92	472	283
183.41	290	89	183.93	476	288
183.42	293	92	183.94	480	293
183.43	297	95	183.95	483	297
183.44	301	98	183.96	487	302
183.45	304	101	183.97	490	307
183.46	308	104	183.98	494	312
183.47	311	107	183.99	497	317
183.48	315	110	184.00	501	322
183.49	318	113	184.01	506	327
183.50	322	116	184.02	511	332
183.51	326	119	184.03	516	337

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**Stage-Area-Storage for Pond RG-A: Rain Garden A (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
184.04	521	342	184.56	787	683
184.05	527	348	184.57	792	690
184.06	532	353	184.58	797	698
184.07	537	358	184.59	802	706
184.08	542	364	184.60	807	714
184.09	547	369	184.61	812	722
184.10	552	375	184.62	817	731
184.11	557	380	184.63	822	739
184.12	562	386	184.64	827	747
184.13	567	391	184.65	833	755
184.14	572	397	184.66	838	764
184.15	578	403	184.67	843	772
184.16	583	409	184.68	848	781
184.17	588	415	184.69	853	789
184.18	593	420	184.70	858	798
184.19	598	426	184.71	863	806
184.20	603	432	184.72	868	815
184.21	608	438	184.73	873	824
184.22	613	445	184.74	878	832
184.23	618	451	184.75	884	841
184.24	623	457	184.76	889	850
184.25	629	463	184.77	894	859
184.26	634	469	184.78	899	868
184.27	639	476	184.79	904	877
184.28	644	482	184.80	909	886
184.29	649	489	184.81	914	895
184.30	654	495	184.82	919	904
184.31	659	502	184.83	924	913
184.32	664	508	184.84	929	923
184.33	669	515	184.85	934	932
184.34	674	522	184.86	940	941
184.35	679	529	184.87	945	951
184.36	685	535	184.88	950	960
184.37	690	542	184.89	955	970
184.38	695	549	184.90	960	979
184.39	700	556	184.91	965	989
184.40	705	563	184.92	970	999
184.41	710	570	184.93	975	1,008
184.42	715	577	184.94	980	1,018
184.43	720	585	184.95	985	1,028
184.44	725	592	184.96	991	1,038
184.45	730	599	184.97	996	1,048
184.46	736	606	184.98	1,001	1,058
184.47	741	614	184.99	1,006	1,068
184.48	746	621	185.00	1,011	1,078
184.49	751	629	185.01	1,016	1,088
184.50	756	636	185.02	1,021	1,098
184.51	761	644	185.03	1,026	1,109
184.52	766	651	185.04	1,031	1,119
184.53	771	659	185.05	1,037	1,129
184.54	776	667	185.06	1,042	1,140
184.55	782	675	185.07	1,047	1,150

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**Stage-Area-Storage for Pond RG-A: Rain Garden A (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
185.08	1,052	1,161
185.09	1,057	1,171
185.10	1,062	1,182
185.11	1,067	1,192
185.12	1,072	1,203
185.13	1,077	1,214
185.14	1,082	1,225
185.15	1,088	1,235
185.16	1,093	1,246
185.17	1,098	1,257
185.18	1,103	1,268
185.19	1,108	1,279
185.20	1,113	1,290
185.21	1,118	1,302
185.22	1,123	1,313
185.23	1,128	1,324
185.24	1,133	1,335
185.25	1,138	1,347
185.26	1,144	1,358
185.27	1,149	1,370
185.28	1,154	1,381
185.29	1,159	1,393
185.30	<b>1,164</b>	<b>1,404</b>

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**Summary for Pond RG-B: Rain Garden B**

Inflow Area = 10,641 sf, 41.23% Impervious, Inflow Depth = 5.52" for 100-Year event  
 Inflow = 1.60 cfs @ 12.07 hrs, Volume= 4,891 cf  
 Outflow = 1.20 cfs @ 12.15 hrs, Volume= 4,891 cf, Atten= 25%, Lag= 4.3 min  
 Discarded = 0.06 cfs @ 12.15 hrs, Volume= 3,438 cf  
 Primary = 1.14 cfs @ 12.15 hrs, Volume= 1,453 cf  
 Routed to Link TSD : Total Site Discharge

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
 Peak Elev= 158.10' @ 12.15 hrs Surf.Area= 1,070 sf Storage= 1,547 cf

Plug-Flow detention time= 209.2 min calculated for 4,891 cf (100% of inflow)  
 Center-of-Mass det. time= 209.1 min ( 1,009.9 - 800.7 )

Volume	Invert	Avail.Storage	Storage Description
#1	156.00'	1,767 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
156.00	437	0	0
157.00	704	571	571
158.00	1,037	871	1,441
158.30	1,135	326	1,767

Device	Routing	Invert	Outlet Devices
#1	Primary	158.00'	<b>15.0' long x 4.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32
#2	Discarded	156.00'	<b>2.400 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.06 cfs @ 12.15 hrs HW=158.10' (Free Discharge)  
 ↑**2=Exfiltration** (Exfiltration Controls 0.06 cfs)

**Primary OutFlow** Max=1.11 cfs @ 12.15 hrs HW=158.10' (Free Discharge)  
 ↑**1=Broad-Crested Rectangular Weir** (Weir Controls 1.11 cfs @ 0.75 fps)

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**Stage-Discharge for Pond RG-B: Rain Garden B**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
156.00	0.00	0.00	0.00	156.52	0.03	0.03	0.00
156.01	0.02	0.02	0.00	156.53	0.03	0.03	0.00
156.02	0.02	0.02	0.00	156.54	0.03	0.03	0.00
156.03	0.02	0.02	0.00	156.55	0.03	0.03	0.00
156.04	0.02	0.02	0.00	156.56	0.03	0.03	0.00
156.05	0.03	0.03	0.00	156.57	0.03	0.03	0.00
156.06	0.03	0.03	0.00	156.58	0.03	0.03	0.00
156.07	0.03	0.03	0.00	156.59	0.03	0.03	0.00
156.08	0.03	0.03	0.00	156.60	0.03	0.03	0.00
156.09	0.03	0.03	0.00	156.61	0.03	0.03	0.00
156.10	0.03	0.03	0.00	156.62	0.03	0.03	0.00
156.11	0.03	0.03	0.00	156.63	0.03	0.03	0.00
156.12	0.03	0.03	0.00	156.64	0.03	0.03	0.00
156.13	0.03	0.03	0.00	156.65	0.03	0.03	0.00
156.14	0.03	0.03	0.00	156.66	0.03	0.03	0.00
156.15	0.03	0.03	0.00	156.67	0.03	0.03	0.00
156.16	0.03	0.03	0.00	156.68	0.03	0.03	0.00
156.17	0.03	0.03	0.00	156.69	0.03	0.03	0.00
156.18	0.03	0.03	0.00	156.70	0.03	0.03	0.00
156.19	0.03	0.03	0.00	156.71	0.03	0.03	0.00
156.20	0.03	0.03	0.00	156.72	0.03	0.03	0.00
156.21	0.03	0.03	0.00	156.73	0.04	0.04	0.00
156.22	0.03	0.03	0.00	156.74	0.04	0.04	0.00
156.23	0.03	0.03	0.00	156.75	0.04	0.04	0.00
156.24	0.03	0.03	0.00	156.76	0.04	0.04	0.00
156.25	0.03	0.03	0.00	156.77	0.04	0.04	0.00
156.26	0.03	0.03	0.00	156.78	0.04	0.04	0.00
156.27	0.03	0.03	0.00	156.79	0.04	0.04	0.00
156.28	0.03	0.03	0.00	156.80	0.04	0.04	0.00
156.29	0.03	0.03	0.00	156.81	0.04	0.04	0.00
156.30	0.03	0.03	0.00	156.82	0.04	0.04	0.00
156.31	0.03	0.03	0.00	156.83	0.04	0.04	0.00
156.32	0.03	0.03	0.00	156.84	0.04	0.04	0.00
156.33	0.03	0.03	0.00	156.85	0.04	0.04	0.00
156.34	0.03	0.03	0.00	156.86	0.04	0.04	0.00
156.35	0.03	0.03	0.00	156.87	0.04	0.04	0.00
156.36	0.03	0.03	0.00	156.88	0.04	0.04	0.00
156.37	0.03	0.03	0.00	156.89	0.04	0.04	0.00
156.38	0.03	0.03	0.00	156.90	0.04	0.04	0.00
156.39	0.03	0.03	0.00	156.91	0.04	0.04	0.00
156.40	0.03	0.03	0.00	156.92	0.04	0.04	0.00
156.41	0.03	0.03	0.00	156.93	0.04	0.04	0.00
156.42	0.03	0.03	0.00	156.94	0.04	0.04	0.00
156.43	0.03	0.03	0.00	156.95	0.04	0.04	0.00
156.44	0.03	0.03	0.00	156.96	0.04	0.04	0.00
156.45	0.03	0.03	0.00	156.97	0.04	0.04	0.00
156.46	0.03	0.03	0.00	156.98	0.04	0.04	0.00
156.47	0.03	0.03	0.00	156.99	0.04	0.04	0.00
156.48	0.03	0.03	0.00	157.00	0.04	0.04	0.00
156.49	0.03	0.03	0.00	157.01	0.04	0.04	0.00
156.50	0.03	0.03	0.00	157.02	0.04	0.04	0.00
156.51	0.03	0.03	0.00	157.03	0.04	0.04	0.00

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**Stage-Discharge for Pond RG-B: Rain Garden B (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
157.04	0.04	0.04	0.00	157.56	0.05	0.05	0.00
157.05	0.04	0.04	0.00	157.57	0.05	0.05	0.00
157.06	0.04	0.04	0.00	157.58	0.05	0.05	0.00
157.07	0.04	0.04	0.00	157.59	0.05	0.05	0.00
157.08	0.04	0.04	0.00	157.60	0.05	0.05	0.00
157.09	0.04	0.04	0.00	157.61	0.05	0.05	0.00
157.10	0.04	0.04	0.00	157.62	0.05	0.05	0.00
157.11	0.04	0.04	0.00	157.63	0.05	0.05	0.00
157.12	0.04	0.04	0.00	157.64	0.05	0.05	0.00
157.13	0.04	0.04	0.00	157.65	0.05	0.05	0.00
157.14	0.04	0.04	0.00	157.66	0.05	0.05	0.00
157.15	0.04	0.04	0.00	157.67	0.05	0.05	0.00
157.16	0.04	0.04	0.00	157.68	0.05	0.05	0.00
157.17	0.04	0.04	0.00	157.69	0.05	0.05	0.00
157.18	0.04	0.04	0.00	157.70	0.05	0.05	0.00
157.19	0.04	0.04	0.00	157.71	0.05	0.05	0.00
157.20	0.04	0.04	0.00	157.72	0.05	0.05	0.00
157.21	0.04	0.04	0.00	157.73	0.05	0.05	0.00
157.22	0.04	0.04	0.00	157.74	0.05	0.05	0.00
157.23	0.04	0.04	0.00	157.75	0.05	0.05	0.00
157.24	0.04	0.04	0.00	157.76	0.05	0.05	0.00
157.25	0.04	0.04	0.00	157.77	0.05	0.05	0.00
157.26	0.04	0.04	0.00	157.78	0.05	0.05	0.00
157.27	0.04	0.04	0.00	157.79	0.05	0.05	0.00
157.28	0.04	0.04	0.00	157.80	0.05	0.05	0.00
157.29	0.04	0.04	0.00	157.81	0.05	0.05	0.00
157.30	0.04	0.04	0.00	157.82	0.05	0.05	0.00
157.31	0.04	0.04	0.00	157.83	0.05	0.05	0.00
157.32	0.05	0.05	0.00	157.84	0.05	0.05	0.00
157.33	0.05	0.05	0.00	157.85	0.05	0.05	0.00
157.34	0.05	0.05	0.00	157.86	0.06	0.06	0.00
157.35	0.05	0.05	0.00	157.87	0.06	0.06	0.00
157.36	0.05	0.05	0.00	157.88	0.06	0.06	0.00
157.37	0.05	0.05	0.00	157.89	0.06	0.06	0.00
157.38	0.05	0.05	0.00	157.90	0.06	0.06	0.00
157.39	0.05	0.05	0.00	157.91	0.06	0.06	0.00
157.40	0.05	0.05	0.00	157.92	0.06	0.06	0.00
157.41	0.05	0.05	0.00	157.93	0.06	0.06	0.00
157.42	0.05	0.05	0.00	157.94	0.06	0.06	0.00
157.43	0.05	0.05	0.00	157.95	0.06	0.06	0.00
157.44	0.05	0.05	0.00	157.96	0.06	0.06	0.00
157.45	0.05	0.05	0.00	157.97	0.06	0.06	0.00
157.46	0.05	0.05	0.00	157.98	0.06	0.06	0.00
157.47	0.05	0.05	0.00	157.99	0.06	0.06	0.00
157.48	0.05	0.05	0.00	158.00	0.06	0.06	0.00
157.49	0.05	0.05	0.00	158.01	0.09	0.06	0.04
157.50	0.05	0.05	0.00	158.02	0.16	0.06	0.10
157.51	0.05	0.05	0.00	158.03	0.24	0.06	0.19
157.52	0.05	0.05	0.00	158.04	0.34	0.06	0.29
157.53	0.05	0.05	0.00	158.05	0.46	0.06	0.40
157.54	0.05	0.05	0.00	158.06	0.58	0.06	0.52
157.55	0.05	0.05	0.00	158.07	0.72	0.06	0.66

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**Stage-Discharge for Pond RG-B: Rain Garden B (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
158.08	0.87	0.06	0.81
158.09	1.02	0.06	0.96
158.10	1.19	0.06	1.13
158.11	1.36	0.06	1.30
158.12	1.54	0.06	1.48
158.13	1.73	0.06	1.67
158.14	1.93	0.06	1.87
158.15	2.13	0.06	2.07
158.16	2.35	0.06	2.28
158.17	2.56	0.06	2.50
158.18	2.79	0.06	2.73
158.19	3.02	0.06	2.96
158.20	3.25	0.06	3.19
158.21	3.51	0.06	3.45
158.22	3.77	0.06	3.71
158.23	4.04	0.06	3.98
158.24	4.32	0.06	4.25
158.25	4.60	0.06	4.54
158.26	4.89	0.06	4.83
158.27	5.19	0.06	5.13
158.28	5.49	0.06	5.43
158.29	5.81	0.06	5.74
158.30	<b>6.13</b>	<b>0.06</b>	<b>6.06</b>

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**Stage-Area-Storage for Pond RG-B: Rain Garden B**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
156.00	437	0	156.52	576	263
156.01	440	4	156.53	579	269
156.02	442	9	156.54	581	275
156.03	445	13	156.55	584	281
156.04	448	18	156.56	587	287
156.05	450	22	156.57	589	292
156.06	453	27	156.58	592	298
156.07	456	31	156.59	595	304
156.08	458	36	156.60	597	310
156.09	461	40	156.61	600	316
156.10	464	45	156.62	603	322
156.11	466	50	156.63	605	328
156.12	469	54	156.64	608	334
156.13	472	59	156.65	611	340
156.14	474	64	156.66	613	347
156.15	477	69	156.67	616	353
156.16	480	73	156.68	619	359
156.17	482	78	156.69	621	365
156.18	485	83	156.70	624	371
156.19	488	88	156.71	627	378
156.20	490	93	156.72	629	384
156.21	493	98	156.73	632	390
156.22	496	103	156.74	635	396
156.23	498	108	156.75	637	403
156.24	501	113	156.76	640	409
156.25	504	118	156.77	643	416
156.26	506	123	156.78	645	422
156.27	509	128	156.79	648	429
156.28	512	133	156.80	651	435
156.29	514	138	156.81	653	442
156.30	517	143	156.82	656	448
156.31	520	148	156.83	659	455
156.32	522	154	156.84	661	461
156.33	525	159	156.85	664	468
156.34	528	164	156.86	667	475
156.35	530	169	156.87	669	481
156.36	533	175	156.88	672	488
156.37	536	180	156.89	675	495
156.38	538	185	156.90	677	501
156.39	541	191	156.91	680	508
156.40	544	196	156.92	683	515
156.41	546	202	156.93	685	522
156.42	549	207	156.94	688	529
156.43	552	213	156.95	691	536
156.44	554	218	156.96	693	543
156.45	557	224	156.97	696	550
156.46	560	229	156.98	699	556
156.47	562	235	156.99	701	563
156.48	565	241	157.00	704	571
156.49	568	246	157.01	707	578
156.50	571	252	157.02	711	585
156.51	573	258	157.03	714	592



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**Stage-Area-Storage for Pond RG-B: Rain Garden B (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
157.04	717	599	157.56	890	1,017
157.05	721	606	157.57	894	1,026
157.06	724	613	157.58	897	1,035
157.07	727	621	157.59	900	1,044
157.08	731	628	157.60	904	1,053
157.09	734	635	157.61	907	1,062
157.10	737	643	157.62	910	1,071
157.11	741	650	157.63	914	1,080
157.12	744	657	157.64	917	1,089
157.13	747	665	157.65	920	1,098
157.14	751	672	157.66	924	1,108
157.15	754	680	157.67	927	1,117
157.16	757	687	157.68	930	1,126
157.17	761	695	157.69	934	1,136
157.18	764	703	157.70	937	1,145
157.19	767	710	157.71	940	1,154
157.20	771	718	157.72	944	1,164
157.21	774	726	157.73	947	1,173
157.22	777	733	157.74	950	1,183
157.23	781	741	157.75	954	1,192
157.24	784	749	157.76	957	1,202
157.25	787	757	157.77	960	1,211
157.26	791	765	157.78	964	1,221
157.27	794	773	157.79	967	1,231
157.28	797	781	157.80	970	1,240
157.29	801	789	157.81	974	1,250
157.30	804	797	157.82	977	1,260
157.31	807	805	157.83	980	1,270
157.32	811	813	157.84	984	1,279
157.33	814	821	157.85	987	1,289
157.34	817	829	157.86	990	1,299
157.35	821	837	157.87	994	1,309
157.36	824	846	157.88	997	1,319
157.37	827	854	157.89	1,000	1,329
157.38	831	862	157.90	1,004	1,339
157.39	834	870	157.91	1,007	1,349
157.40	837	879	157.92	1,010	1,359
157.41	841	887	157.93	1,014	1,369
157.42	844	896	157.94	1,017	1,379
157.43	847	904	157.95	1,020	1,390
157.44	851	912	157.96	1,024	1,400
157.45	854	921	157.97	1,027	1,410
157.46	857	930	157.98	1,030	1,420
157.47	861	938	157.99	1,034	1,431
157.48	864	947	158.00	1,037	1,441
157.49	867	955	158.01	1,040	1,451
157.50	871	964	158.02	1,044	1,462
157.51	874	973	158.03	1,047	1,472
157.52	877	982	158.04	1,050	1,483
157.53	880	990	158.05	1,053	1,493
157.54	884	999	158.06	1,057	1,504
157.55	887	1,008	158.07	1,060	1,514

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**Stage-Area-Storage for Pond RG-B: Rain Garden B (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
158.08	1,063	1,525
158.09	1,066	1,536
158.10	1,070	1,546
158.11	1,073	1,557
158.12	1,076	1,568
158.13	1,079	1,579
158.14	1,083	1,589
158.15	1,086	1,600
158.16	1,089	1,611
158.17	1,093	1,622
158.18	1,096	1,633
158.19	1,099	1,644
158.20	1,102	1,655
158.21	1,106	1,666
158.22	1,109	1,677
158.23	1,112	1,688
158.24	1,115	1,699
158.25	1,119	1,710
158.26	1,122	1,722
158.27	1,125	1,733
158.28	1,128	1,744
158.29	1,132	1,755
158.30	<b>1,135</b>	<b>1,767</b>

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**Summary for Pond SWB: Stormtech MC 3500 (SWM-B)**

Inflow Area = 16,665 sf, 100.00% Impervious, Inflow Depth = 7.52" for 100-Year event  
 Inflow = 3.01 cfs @ 12.07 hrs, Volume= 10,444 cf  
 Outflow = 0.54 cfs @ 12.51 hrs, Volume= 10,444 cf, Atten= 82%, Lag= 26.2 min  
 Discarded = 0.10 cfs @ 8.82 hrs, Volume= 8,849 cf  
 Primary = 0.45 cfs @ 12.51 hrs, Volume= 1,595 cf  
 Routed to Link TSD : Total Site Discharge

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs  
 Peak Elev= 179.47' @ 12.51 hrs Surf.Area= 1,738 sf Storage= 4,427 cf

Plug-Flow detention time= 302.0 min calculated for 10,441 cf (100% of inflow)  
 Center-of-Mass det. time= 302.1 min ( 1,042.7 - 740.7 )

Volume	Invert	Avail.Storage	Storage Description
#1A	175.65'	2,580 cf	<b>8.42'W x 206.46'L x 5.50'H Field A</b> 9,557 cf Overall - 3,108 cf Embedded = 6,449 cf x 40.0% Voids
#2A	176.40'	3,108 cf	<b>ADS_StormTech MC-3500 d +Cap</b> x 28 Inside #1 Effective Size= 70.4"W x 45.0"H => 15.33 sf x 7.17'L = 110.0 cf Overall Size= 77.0"W x 45.0"H x 7.50'L with 0.33' Overlap Cap Storage= 14.9 cf x 2 x 1 rows = 29.8 cf
		5,688 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	175.65'	<b>15.0" Round Outlet Pipe</b> L= 45.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 175.65' / 166.00' S= 0.2144 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf
#2	Device 1	179.00'	<b>6.0" Vert. Low Flow Orifice</b> C= 0.600 Limited to weir flow at low heads
#3	Device 1	180.25'	<b>4.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#4	Discarded	175.65'	<b>2.400 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.10 cfs @ 8.82 hrs HW=175.71' (Free Discharge)  
 ↳ **4=Exfiltration** (Exfiltration Controls 0.10 cfs)

**Primary OutFlow** Max=0.45 cfs @ 12.51 hrs HW=179.47' (Free Discharge)  
 ↳ **1=Outlet Pipe** (Passes 0.45 cfs of 10.56 cfs potential flow)  
 ↳ ↳ **2=Low Flow Orifice** (Orifice Controls 0.45 cfs @ 2.34 fps)  
 ↳ ↳ ↳ **3=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)

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**Pond SWB: Stormtech MC 3500 (SWM-B) - Chamber Wizard Field A**

**Chamber Model = ADS\_StormTech MC-3500 d +Cap (ADS StormTech® MC-3500 d rev 03/14 with Cap volume)**

Effective Size= 70.4"W x 45.0"H => 15.33 sf x 7.17'L = 110.0 cf

Overall Size= 77.0"W x 45.0"H x 7.50'L with 0.33' Overlap

Cap Storage= 14.9 cf x 2 x 1 rows = 29.8 cf

28 Chambers/Row x 7.17' Long +1.85' Cap Length x 2 = 204.46' Row Length +12.0" End Stone x 2 = 206.46' Base Length

1 Rows x 77.0" Wide + 12.0" Side Stone x 2 = 8.42' Base Width

9.0" Stone Base + 45.0" Chamber Height + 12.0" Stone Cover = 5.50' Field Height

28 Chambers x 110.0 cf + 14.9 cf Cap Volume x 2 x 1 Rows = 3,108.5 cf Chamber Storage

9,557.4 cf Field - 3,108.5 cf Chambers = 6,448.9 cf Stone x 40.0% Voids = 2,579.6 cf Stone Storage

Chamber Storage + Stone Storage = 5,688.0 cf = 0.131 af

Overall Storage Efficiency = 59.5%

Overall System Size = 206.46' x 8.42' x 5.50'

28 Chambers

354.0 cy Field

238.8 cy Stone



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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
175.65	0.00	0.00	0.00	176.17	0.10	0.10	0.00
175.66	0.10	<b>0.10</b>	0.00	176.18	0.10	0.10	0.00
175.67	0.10	0.10	0.00	176.19	0.10	0.10	0.00
175.68	0.10	0.10	0.00	176.20	0.10	0.10	0.00
175.69	0.10	0.10	0.00	176.21	0.10	0.10	0.00
175.70	0.10	0.10	0.00	176.22	0.10	0.10	0.00
175.71	0.10	0.10	0.00	176.23	0.10	0.10	0.00
175.72	0.10	0.10	0.00	176.24	0.10	0.10	0.00
175.73	0.10	0.10	0.00	176.25	0.10	0.10	0.00
175.74	0.10	0.10	0.00	176.26	0.10	0.10	0.00
175.75	0.10	0.10	0.00	176.27	0.10	0.10	0.00
175.76	0.10	0.10	0.00	176.28	0.10	0.10	0.00
175.77	0.10	0.10	0.00	176.29	0.10	0.10	0.00
175.78	0.10	0.10	0.00	176.30	0.10	0.10	0.00
175.79	0.10	0.10	0.00	176.31	0.10	0.10	0.00
175.80	0.10	0.10	0.00	176.32	0.10	0.10	0.00
175.81	0.10	0.10	0.00	176.33	0.10	0.10	0.00
175.82	0.10	0.10	0.00	176.34	0.10	0.10	0.00
175.83	0.10	0.10	0.00	176.35	0.10	0.10	0.00
175.84	0.10	0.10	0.00	176.36	0.10	0.10	0.00
175.85	0.10	0.10	0.00	176.37	0.10	0.10	0.00
175.86	0.10	0.10	0.00	176.38	0.10	0.10	0.00
175.87	0.10	0.10	0.00	176.39	0.10	0.10	0.00
175.88	0.10	0.10	0.00	176.40	0.10	0.10	0.00
175.89	0.10	0.10	0.00	176.41	0.10	0.10	0.00
175.90	0.10	0.10	0.00	176.42	0.10	0.10	0.00
175.91	0.10	0.10	0.00	176.43	0.10	0.10	0.00
175.92	0.10	0.10	0.00	176.44	0.10	0.10	0.00
175.93	0.10	0.10	0.00	176.45	0.10	0.10	0.00
175.94	0.10	0.10	0.00	176.46	0.10	0.10	0.00
175.95	0.10	0.10	0.00	176.47	0.10	0.10	0.00
175.96	0.10	0.10	0.00	176.48	0.10	0.10	0.00
175.97	0.10	0.10	0.00	176.49	0.10	0.10	0.00
175.98	0.10	0.10	0.00	176.50	0.10	0.10	0.00
175.99	0.10	0.10	0.00	176.51	0.10	0.10	0.00
176.00	0.10	0.10	0.00	176.52	0.10	0.10	0.00
176.01	0.10	0.10	0.00	176.53	0.10	0.10	0.00
176.02	0.10	0.10	0.00	176.54	0.10	0.10	0.00
176.03	0.10	0.10	0.00	176.55	0.10	0.10	0.00
176.04	0.10	0.10	0.00	176.56	0.10	0.10	0.00
176.05	0.10	0.10	0.00	176.57	0.10	0.10	0.00
176.06	0.10	0.10	0.00	176.58	0.10	0.10	0.00
176.07	0.10	0.10	0.00	176.59	0.10	0.10	0.00
176.08	0.10	0.10	0.00	176.60	0.10	0.10	0.00
176.09	0.10	0.10	0.00	176.61	0.10	0.10	0.00
176.10	0.10	0.10	0.00	176.62	0.10	0.10	0.00
176.11	0.10	0.10	0.00	176.63	0.10	0.10	0.00
176.12	0.10	0.10	0.00	176.64	0.10	0.10	0.00
176.13	0.10	0.10	0.00	176.65	0.10	0.10	0.00
176.14	0.10	0.10	0.00	176.66	0.10	0.10	0.00
176.15	0.10	0.10	0.00	176.67	0.10	0.10	0.00
176.16	0.10	0.10	0.00	176.68	0.10	0.10	0.00

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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
176.69	0.10	0.10	0.00	177.21	0.10	0.10	0.00
176.70	0.10	0.10	0.00	177.22	0.10	0.10	0.00
176.71	0.10	0.10	0.00	177.23	0.10	0.10	0.00
176.72	0.10	0.10	0.00	177.24	0.10	0.10	0.00
176.73	0.10	0.10	0.00	177.25	0.10	0.10	0.00
176.74	0.10	0.10	0.00	177.26	0.10	0.10	0.00
176.75	0.10	0.10	0.00	177.27	0.10	0.10	0.00
176.76	0.10	0.10	0.00	177.28	0.10	0.10	0.00
176.77	0.10	0.10	0.00	177.29	0.10	0.10	0.00
176.78	0.10	0.10	0.00	177.30	0.10	0.10	0.00
176.79	0.10	0.10	0.00	177.31	0.10	0.10	0.00
176.80	0.10	0.10	0.00	177.32	0.10	0.10	0.00
176.81	0.10	0.10	0.00	177.33	0.10	0.10	0.00
176.82	0.10	0.10	0.00	177.34	0.10	0.10	0.00
176.83	0.10	0.10	0.00	177.35	0.10	0.10	0.00
176.84	0.10	0.10	0.00	177.36	0.10	0.10	0.00
176.85	0.10	0.10	0.00	177.37	0.10	0.10	0.00
176.86	0.10	0.10	0.00	177.38	0.10	0.10	0.00
176.87	0.10	0.10	0.00	177.39	0.10	0.10	0.00
176.88	0.10	0.10	0.00	177.40	0.10	0.10	0.00
176.89	0.10	0.10	0.00	177.41	0.10	0.10	0.00
176.90	0.10	0.10	0.00	177.42	0.10	0.10	0.00
176.91	0.10	0.10	0.00	177.43	0.10	0.10	0.00
176.92	0.10	0.10	0.00	177.44	0.10	0.10	0.00
176.93	0.10	0.10	0.00	177.45	0.10	0.10	0.00
176.94	0.10	0.10	0.00	177.46	0.10	0.10	0.00
176.95	0.10	0.10	0.00	177.47	0.10	0.10	0.00
176.96	0.10	0.10	0.00	177.48	0.10	0.10	0.00
176.97	0.10	0.10	0.00	177.49	0.10	0.10	0.00
176.98	0.10	0.10	0.00	177.50	0.10	0.10	0.00
176.99	0.10	0.10	0.00	177.51	0.10	0.10	0.00
177.00	0.10	0.10	0.00	177.52	0.10	0.10	0.00
177.01	0.10	0.10	0.00	177.53	0.10	0.10	0.00
177.02	0.10	0.10	0.00	177.54	0.10	0.10	0.00
177.03	0.10	0.10	0.00	177.55	0.10	0.10	0.00
177.04	0.10	0.10	0.00	177.56	0.10	0.10	0.00
177.05	0.10	0.10	0.00	177.57	0.10	0.10	0.00
177.06	0.10	0.10	0.00	177.58	0.10	0.10	0.00
177.07	0.10	0.10	0.00	177.59	0.10	0.10	0.00
177.08	0.10	0.10	0.00	177.60	0.10	0.10	0.00
177.09	0.10	0.10	0.00	177.61	0.10	0.10	0.00
177.10	0.10	0.10	0.00	177.62	0.10	0.10	0.00
177.11	0.10	0.10	0.00	177.63	0.10	0.10	0.00
177.12	0.10	0.10	0.00	177.64	0.10	0.10	0.00
177.13	0.10	0.10	0.00	177.65	0.10	0.10	0.00
177.14	0.10	0.10	0.00	177.66	0.10	0.10	0.00
177.15	0.10	0.10	0.00	177.67	0.10	0.10	0.00
177.16	0.10	0.10	0.00	177.68	0.10	0.10	0.00
177.17	0.10	0.10	0.00	177.69	0.10	0.10	0.00
177.18	0.10	0.10	0.00	177.70	0.10	0.10	0.00
177.19	0.10	0.10	0.00	177.71	0.10	0.10	0.00
177.20	0.10	0.10	0.00	177.72	0.10	0.10	0.00

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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
177.73	0.10	0.10	0.00	178.25	0.10	0.10	0.00
177.74	0.10	0.10	0.00	178.26	0.10	0.10	0.00
177.75	0.10	0.10	0.00	178.27	0.10	0.10	0.00
177.76	0.10	0.10	0.00	178.28	0.10	0.10	0.00
177.77	0.10	0.10	0.00	178.29	0.10	0.10	0.00
177.78	0.10	0.10	0.00	178.30	0.10	0.10	0.00
177.79	0.10	0.10	0.00	178.31	0.10	0.10	0.00
177.80	0.10	0.10	0.00	178.32	0.10	0.10	0.00
177.81	0.10	0.10	0.00	178.33	0.10	0.10	0.00
177.82	0.10	0.10	0.00	178.34	0.10	0.10	0.00
177.83	0.10	0.10	0.00	178.35	0.10	0.10	0.00
177.84	0.10	0.10	0.00	178.36	0.10	0.10	0.00
177.85	0.10	0.10	0.00	178.37	0.10	0.10	0.00
177.86	0.10	0.10	0.00	178.38	0.10	0.10	0.00
177.87	0.10	0.10	0.00	178.39	0.10	0.10	0.00
177.88	0.10	0.10	0.00	178.40	0.10	0.10	0.00
177.89	0.10	0.10	0.00	178.41	0.10	0.10	0.00
177.90	0.10	0.10	0.00	178.42	0.10	0.10	0.00
177.91	0.10	0.10	0.00	178.43	0.10	0.10	0.00
177.92	0.10	0.10	0.00	178.44	0.10	0.10	0.00
177.93	0.10	0.10	0.00	178.45	0.10	0.10	0.00
177.94	0.10	0.10	0.00	178.46	0.10	0.10	0.00
177.95	0.10	0.10	0.00	178.47	0.10	0.10	0.00
177.96	0.10	0.10	0.00	178.48	0.10	0.10	0.00
177.97	0.10	0.10	0.00	178.49	0.10	0.10	0.00
177.98	0.10	0.10	0.00	178.50	0.10	0.10	0.00
177.99	0.10	0.10	0.00	178.51	0.10	0.10	0.00
178.00	0.10	0.10	0.00	178.52	0.10	0.10	0.00
178.01	0.10	0.10	0.00	178.53	0.10	0.10	0.00
178.02	0.10	0.10	0.00	178.54	0.10	0.10	0.00
178.03	0.10	0.10	0.00	178.55	0.10	0.10	0.00
178.04	0.10	0.10	0.00	178.56	0.10	0.10	0.00
178.05	0.10	0.10	0.00	178.57	0.10	0.10	0.00
178.06	0.10	0.10	0.00	178.58	0.10	0.10	0.00
178.07	0.10	0.10	0.00	178.59	0.10	0.10	0.00
178.08	0.10	0.10	0.00	178.60	0.10	0.10	0.00
178.09	0.10	0.10	0.00	178.61	0.10	0.10	0.00
178.10	0.10	0.10	0.00	178.62	0.10	0.10	0.00
178.11	0.10	0.10	0.00	178.63	0.10	0.10	0.00
178.12	0.10	0.10	0.00	178.64	0.10	0.10	0.00
178.13	0.10	0.10	0.00	178.65	0.10	0.10	0.00
178.14	0.10	0.10	0.00	178.66	0.10	0.10	0.00
178.15	0.10	0.10	0.00	178.67	0.10	0.10	0.00
178.16	0.10	0.10	0.00	178.68	0.10	0.10	0.00
178.17	0.10	0.10	0.00	178.69	0.10	0.10	0.00
178.18	0.10	0.10	0.00	178.70	0.10	0.10	0.00
178.19	0.10	0.10	0.00	178.71	0.10	0.10	0.00
178.20	0.10	0.10	0.00	178.72	0.10	0.10	0.00
178.21	0.10	0.10	0.00	178.73	0.10	0.10	0.00
178.22	0.10	0.10	0.00	178.74	0.10	0.10	0.00
178.23	0.10	0.10	0.00	178.75	0.10	0.10	0.00
178.24	0.10	0.10	0.00	178.76	0.10	0.10	0.00

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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
178.77	0.10	0.10	0.00	179.29	0.31	0.10	0.22
178.78	0.10	0.10	0.00	179.30	0.33	0.10	0.23
178.79	0.10	0.10	0.00	179.31	0.34	0.10	0.24
178.80	0.10	0.10	0.00	179.32	0.35	0.10	0.26
178.81	0.10	0.10	0.00	179.33	0.37	0.10	0.27
178.82	0.10	0.10	0.00	179.34	0.38	0.10	0.28
178.83	0.10	0.10	0.00	179.35	0.39	0.10	0.30
178.84	0.10	0.10	0.00	179.36	0.41	0.10	0.31
178.85	0.10	0.10	0.00	179.37	0.42	0.10	0.32
178.86	0.10	0.10	0.00	179.38	0.43	0.10	0.34
178.87	0.10	0.10	0.00	179.39	0.45	0.10	0.35
178.88	0.10	0.10	0.00	179.40	0.46	0.10	0.36
178.89	0.10	0.10	0.00	179.41	0.47	0.10	0.38
178.90	0.10	0.10	0.00	179.42	0.49	0.10	0.39
178.91	0.10	0.10	0.00	179.43	0.50	0.10	0.40
178.92	0.10	0.10	0.00	179.44	0.51	0.10	0.41
178.93	0.10	0.10	0.00	179.45	0.52	0.10	0.43
178.94	0.10	0.10	0.00	179.46	0.53	0.10	0.44
178.95	0.10	0.10	0.00	179.47	0.54	0.10	0.45
178.96	0.10	0.10	0.00	179.48	0.55	0.10	0.46
178.97	0.10	0.10	0.00	179.49	0.56	0.10	0.47
178.98	0.10	0.10	0.00	179.50	0.57	0.10	0.47
178.99	0.10	0.10	0.00	179.51	0.58	0.10	0.48
179.00	0.10	0.10	0.00	179.52	0.59	0.10	0.49
179.01	0.10	0.10	0.00	179.53	0.60	0.10	0.50
179.02	0.10	0.10	0.00	179.54	0.61	0.10	0.51
179.03	0.10	0.10	0.00	179.55	0.61	0.10	0.52
179.04	0.10	0.10	0.01	179.56	0.62	0.10	0.53
179.05	0.10	0.10	0.01	179.57	0.63	0.10	0.53
179.06	0.11	0.10	0.01	179.58	0.64	0.10	0.54
179.07	0.11	0.10	0.02	179.59	0.65	0.10	0.55
179.08	0.12	0.10	0.02	179.60	0.66	0.10	0.56
179.09	0.12	0.10	0.02	179.61	0.66	0.10	0.57
179.10	0.13	0.10	0.03	179.62	0.67	0.10	0.58
179.11	0.13	0.10	0.04	179.63	0.68	0.10	0.58
179.12	0.14	0.10	0.04	179.64	0.69	0.10	0.59
179.13	0.15	0.10	0.05	179.65	0.69	0.10	0.60
179.14	0.15	0.10	0.06	179.66	0.70	0.10	0.61
179.15	0.16	0.10	0.07	179.67	0.71	0.10	0.61
179.16	0.17	0.10	0.07	179.68	0.72	0.10	0.62
179.17	0.18	0.10	0.08	179.69	0.72	0.10	0.63
179.18	0.19	0.10	0.09	179.70	0.73	0.10	0.63
179.19	0.20	0.10	0.10	179.71	0.74	0.10	0.64
179.20	0.21	0.10	0.11	179.72	0.74	0.10	0.65
179.21	0.22	0.10	0.12	179.73	0.75	0.10	0.66
179.22	0.23	0.10	0.13	179.74	0.76	0.10	0.66
179.23	0.24	0.10	0.14	179.75	0.77	0.10	0.67
179.24	0.25	0.10	0.16	179.76	0.77	0.10	0.68
179.25	0.26	0.10	0.17	179.77	0.78	0.10	0.68
179.26	0.28	0.10	0.18	179.78	0.78	0.10	0.69
179.27	0.29	0.10	0.19	179.79	0.79	0.10	0.69
179.28	0.30	0.10	0.20	179.80	0.80	0.10	0.70



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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
179.81	0.80	0.10	0.71	180.33	1.33	0.10	1.24
179.82	0.81	0.10	0.71	180.34	1.39	0.10	1.29
179.83	0.82	0.10	0.72	180.35	1.44	0.10	1.35
179.84	0.82	0.10	0.73	180.36	1.50	0.10	1.40
179.85	0.83	0.10	0.73	180.37	1.56	0.10	1.47
179.86	0.83	0.10	0.74	180.38	1.63	0.10	1.53
179.87	0.84	0.10	0.74	180.39	1.69	0.10	1.60
179.88	0.85	0.10	0.75	180.40	1.76	0.10	1.66
179.89	0.85	0.10	0.76	180.41	1.83	0.10	1.74
179.90	0.86	0.10	0.76	180.42	1.90	0.10	1.81
179.91	0.86	0.10	0.77	180.43	1.98	0.10	1.88
179.92	0.87	0.10	0.77	180.44	2.06	0.10	1.96
179.93	0.88	0.10	0.78	180.45	2.13	0.10	2.04
179.94	0.88	0.10	0.79	180.46	2.22	0.10	2.12
179.95	0.89	0.10	0.79	180.47	2.30	0.10	2.20
179.96	0.89	0.10	0.80	180.48	2.39	0.10	2.29
179.97	0.90	0.10	0.80	180.49	2.48	0.10	2.38
179.98	0.90	0.10	0.81	180.50	2.57	0.10	2.47
179.99	0.91	0.10	0.81	180.51	2.66	0.10	2.57
180.00	0.92	0.10	0.82	180.52	2.76	0.10	2.66
180.01	0.92	0.10	0.82	180.53	2.85	0.10	2.76
180.02	0.93	0.10	0.83	180.54	2.95	0.10	2.86
180.03	0.93	0.10	0.83	180.55	3.05	0.10	2.96
180.04	0.94	0.10	0.84	180.56	3.16	0.10	3.06
180.05	0.94	0.10	0.85	180.57	3.26	0.10	3.17
180.06	0.95	0.10	0.85	180.58	3.37	0.10	3.27
180.07	0.95	0.10	0.86	180.59	3.48	0.10	3.38
180.08	0.96	0.10	0.86	180.60	3.59	0.10	3.49
180.09	0.96	0.10	0.87	180.61	3.70	0.10	3.60
180.10	0.97	0.10	0.87	180.62	3.82	0.10	3.72
180.11	0.97	0.10	0.88	180.63	3.93	0.10	3.84
180.12	0.98	0.10	0.88	180.64	4.05	0.10	3.95
180.13	0.98	0.10	0.89	180.65	4.17	0.10	4.07
180.14	0.99	0.10	0.89	180.66	4.29	0.10	4.20
180.15	0.99	0.10	0.90	180.67	4.42	0.10	4.32
180.16	1.00	0.10	0.90	180.68	4.55	0.10	4.45
180.17	1.00	0.10	0.91	180.69	4.68	0.10	4.58
180.18	1.01	0.10	0.91	180.70	4.81	0.10	4.71
180.19	1.01	0.10	0.92	180.71	4.94	0.10	4.85
180.20	1.02	0.10	0.92	180.72	5.08	0.10	4.98
180.21	1.02	0.10	0.93	180.73	5.22	0.10	5.12
180.22	1.03	0.10	0.93	180.74	5.36	0.10	5.26
180.23	1.03	0.10	0.94	180.75	5.50	0.10	5.40
180.24	1.04	0.10	0.94	180.76	5.64	0.10	5.54
180.25	1.04	0.10	0.95	180.77	5.79	0.10	5.69
180.26	1.06	0.10	0.96	180.78	5.93	0.10	5.84
180.27	1.08	0.10	0.99	180.79	6.08	0.10	5.99
180.28	1.11	0.10	1.02	180.80	6.23	0.10	6.14
180.29	1.15	0.10	1.05	180.81	6.39	0.10	6.29
180.30	1.19	0.10	1.09	180.82	6.54	0.10	6.45
180.31	1.23	0.10	1.14	180.83	6.70	0.10	6.60
180.32	1.28	0.10	1.19	180.84	6.86	0.10	6.76

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**Stage-Discharge for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
180.85	7.02	0.10	6.92
180.86	7.19	0.10	7.09
180.87	7.36	0.10	7.26
180.88	7.53	0.10	7.43
180.89	7.71	0.10	7.61
180.90	7.88	0.10	7.79
180.91	8.06	0.10	7.97
180.92	8.24	0.10	8.15
180.93	8.43	0.10	8.33
180.94	8.61	0.10	8.52
180.95	8.80	0.10	8.71
180.96	8.99	0.10	8.90
180.97	9.19	0.10	9.09
180.98	9.38	0.10	9.28
180.99	9.58	0.10	9.48
181.00	9.78	0.10	9.68
181.01	9.98	0.10	9.88
181.02	10.18	0.10	10.09
181.03	10.39	0.10	10.29
181.04	10.60	0.10	10.50
181.05	10.81	0.10	10.71
181.06	10.99	0.10	10.90
181.07	11.18	0.10	11.08
181.08	11.37	0.10	11.27
181.09	11.55	0.10	11.46
181.10	11.74	0.10	11.65
181.11	11.93	0.10	11.84
181.12	12.12	0.10	12.03
181.13	12.32	0.10	12.22
181.14	12.51	0.10	12.41
181.15	<b>12.70</b>	0.10	<b>12.61</b>

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Type III 24-hr 100-Year Rainfall=7.76"

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
175.65	1,738	0	176.17	1,738	361
175.66	1,738	7	176.18	1,738	368
175.67	1,738	14	176.19	1,738	375
175.68	1,738	21	176.20	1,738	382
175.69	1,738	28	176.21	1,738	389
175.70	1,738	35	176.22	1,738	396
175.71	1,738	42	176.23	1,738	403
175.72	1,738	49	176.24	1,738	410
175.73	1,738	56	176.25	1,738	417
175.74	1,738	63	176.26	1,738	424
175.75	1,738	70	176.27	1,738	431
175.76	1,738	76	176.28	1,738	438
175.77	1,738	83	176.29	1,738	445
175.78	1,738	90	176.30	1,738	452
175.79	1,738	97	176.31	1,738	459
175.80	1,738	104	176.32	1,738	466
175.81	1,738	111	176.33	1,738	473
175.82	1,738	118	176.34	1,738	480
175.83	1,738	125	176.35	1,738	487
175.84	1,738	132	176.36	1,738	494
175.85	1,738	139	176.37	1,738	500
175.86	1,738	146	176.38	1,738	507
175.87	1,738	153	176.39	1,738	514
175.88	1,738	160	176.40	1,738	521
175.89	1,738	167	176.41	1,738	535
175.90	1,738	174	176.42	1,738	549
175.91	1,738	181	176.43	1,738	564
175.92	1,738	188	176.44	1,738	578
175.93	1,738	195	176.45	1,738	592
175.94	1,738	202	176.46	1,738	606
175.95	1,738	209	176.47	1,738	620
175.96	1,738	215	176.48	1,738	634
175.97	1,738	222	176.49	1,738	648
175.98	1,738	229	176.50	1,738	662
175.99	1,738	236	176.51	1,738	676
176.00	1,738	243	176.52	1,738	690
176.01	1,738	250	176.53	1,738	704
176.02	1,738	257	176.54	1,738	718
176.03	1,738	264	176.55	1,738	732
176.04	1,738	271	176.56	1,738	746
176.05	1,738	278	176.57	1,738	760
176.06	1,738	285	176.58	1,738	774
176.07	1,738	292	176.59	1,738	788
176.08	1,738	299	176.60	1,738	802
176.09	1,738	306	176.61	1,738	816
176.10	1,738	313	176.62	1,738	830
176.11	1,738	320	176.63	1,738	844
176.12	1,738	327	176.64	1,738	858
176.13	1,738	334	176.65	1,738	872
176.14	1,738	341	176.66	1,738	886
176.15	1,738	348	176.67	1,738	900
176.16	1,738	354	176.68	1,738	914

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
176.69	1,738	928	177.21	1,738	1,646
176.70	1,738	942	177.22	1,738	1,659
176.71	1,738	956	177.23	1,738	1,673
176.72	1,738	970	177.24	1,738	1,686
176.73	1,738	984	177.25	1,738	1,700
176.74	1,738	998	177.26	1,738	1,714
176.75	1,738	1,012	177.27	1,738	1,727
176.76	1,738	1,025	177.28	1,738	1,741
176.77	1,738	1,039	177.29	1,738	1,754
176.78	1,738	1,053	177.30	1,738	1,768
176.79	1,738	1,067	177.31	1,738	1,782
176.80	1,738	1,081	177.32	1,738	1,795
176.81	1,738	1,095	177.33	1,738	1,809
176.82	1,738	1,109	177.34	1,738	1,822
176.83	1,738	1,123	177.35	1,738	1,836
176.84	1,738	1,137	177.36	1,738	1,849
176.85	1,738	1,150	177.37	1,738	1,863
176.86	1,738	1,164	177.38	1,738	1,876
176.87	1,738	1,178	177.39	1,738	1,890
176.88	1,738	1,192	177.40	1,738	1,903
176.89	1,738	1,206	177.41	1,738	1,917
176.90	1,738	1,220	177.42	1,738	1,930
176.91	1,738	1,233	177.43	1,738	1,944
176.92	1,738	1,247	177.44	1,738	1,957
176.93	1,738	1,261	177.45	1,738	1,971
176.94	1,738	1,275	177.46	1,738	1,984
176.95	1,738	1,289	177.47	1,738	1,998
176.96	1,738	1,303	177.48	1,738	2,011
176.97	1,738	1,316	177.49	1,738	2,025
176.98	1,738	1,330	177.50	1,738	2,038
176.99	1,738	1,344	177.51	1,738	2,051
177.00	1,738	1,358	177.52	1,738	2,065
177.01	1,738	1,371	177.53	1,738	2,078
177.02	1,738	1,385	177.54	1,738	2,092
177.03	1,738	1,399	177.55	1,738	2,105
177.04	1,738	1,413	177.56	1,738	2,118
177.05	1,738	1,427	177.57	1,738	2,132
177.06	1,738	1,440	177.58	1,738	2,145
177.07	1,738	1,454	177.59	1,738	2,158
177.08	1,738	1,468	177.60	1,738	2,172
177.09	1,738	1,481	177.61	1,738	2,185
177.10	1,738	1,495	177.62	1,738	2,198
177.11	1,738	1,509	177.63	1,738	2,212
177.12	1,738	1,523	177.64	1,738	2,225
177.13	1,738	1,536	177.65	1,738	2,238
177.14	1,738	1,550	177.66	1,738	2,252
177.15	1,738	1,564	177.67	1,738	2,265
177.16	1,738	1,577	177.68	1,738	2,278
177.17	1,738	1,591	177.69	1,738	2,291
177.18	1,738	1,605	177.70	1,738	2,305
177.19	1,738	1,618	177.71	1,738	2,318
177.20	1,738	1,632	177.72	1,738	2,331

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
177.73	1,738	2,344	178.25	1,738	3,017
177.74	1,738	2,358	178.26	1,738	3,030
177.75	1,738	2,371	178.27	1,738	3,042
177.76	1,738	2,384	178.28	1,738	3,055
177.77	1,738	2,397	178.29	1,738	3,067
177.78	1,738	2,410	178.30	1,738	3,080
177.79	1,738	2,423	178.31	1,738	3,092
177.80	1,738	2,437	178.32	1,738	3,105
177.81	1,738	2,450	178.33	1,738	3,117
177.82	1,738	2,463	178.34	1,738	3,130
177.83	1,738	2,476	178.35	1,738	3,143
177.84	1,738	2,489	178.36	1,738	3,155
177.85	1,738	2,502	178.37	1,738	3,167
177.86	1,738	2,515	178.38	1,738	3,180
177.87	1,738	2,528	178.39	1,738	3,192
177.88	1,738	2,541	178.40	1,738	3,205
177.89	1,738	2,554	178.41	1,738	3,217
177.90	1,738	2,567	178.42	1,738	3,230
177.91	1,738	2,581	178.43	1,738	3,242
177.92	1,738	2,594	178.44	1,738	3,254
177.93	1,738	2,607	178.45	1,738	3,267
177.94	1,738	2,620	178.46	1,738	3,279
177.95	1,738	2,633	178.47	1,738	3,291
177.96	1,738	2,646	178.48	1,738	3,304
177.97	1,738	2,658	178.49	1,738	3,316
177.98	1,738	2,671	178.50	1,738	3,328
177.99	1,738	2,684	178.51	1,738	3,341
178.00	1,738	2,697	178.52	1,738	3,353
178.01	1,738	2,710	178.53	1,738	3,365
178.02	1,738	2,723	178.54	1,738	3,377
178.03	1,738	2,736	178.55	1,738	3,389
178.04	1,738	2,749	178.56	1,738	3,402
178.05	1,738	2,762	178.57	1,738	3,414
178.06	1,738	2,775	178.58	1,738	3,426
178.07	1,738	2,788	178.59	1,738	3,438
178.08	1,738	2,800	178.60	1,738	3,450
178.09	1,738	2,813	178.61	1,738	3,462
178.10	1,738	2,826	178.62	1,738	3,474
178.11	1,738	2,839	178.63	1,738	3,487
178.12	1,738	2,852	178.64	1,738	3,499
178.13	1,738	2,864	178.65	1,738	3,511
178.14	1,738	2,877	178.66	1,738	3,523
178.15	1,738	2,890	178.67	1,738	3,535
178.16	1,738	2,903	178.68	1,738	3,547
178.17	1,738	2,915	178.69	1,738	3,559
178.18	1,738	2,928	178.70	1,738	3,571
178.19	1,738	2,941	178.71	1,738	3,582
178.20	1,738	2,954	178.72	1,738	3,594
178.21	1,738	2,966	178.73	1,738	3,606
178.22	1,738	2,979	178.74	1,738	3,618
178.23	1,738	2,992	178.75	1,738	3,630
178.24	1,738	3,004	178.76	1,738	3,642

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
178.77	1,738	3,654	179.29	1,738	4,239
178.78	1,738	3,665	179.30	1,738	4,250
178.79	1,738	3,677	179.31	1,738	4,261
178.80	1,738	3,689	179.32	1,738	4,271
178.81	1,738	3,701	179.33	1,738	4,282
178.82	1,738	3,713	179.34	1,738	4,292
178.83	1,738	3,724	179.35	1,738	4,303
178.84	1,738	3,736	179.36	1,738	4,313
178.85	1,738	3,748	179.37	1,738	4,323
178.86	1,738	3,759	179.38	1,738	4,334
178.87	1,738	3,771	179.39	1,738	4,344
178.88	1,738	3,783	179.40	1,738	4,354
178.89	1,738	3,794	179.41	1,738	4,365
178.90	1,738	3,806	179.42	1,738	4,375
178.91	1,738	3,817	179.43	1,738	4,385
178.92	1,738	3,829	179.44	1,738	4,395
178.93	1,738	3,840	179.45	1,738	4,405
178.94	1,738	3,852	179.46	1,738	4,416
178.95	1,738	3,863	179.47	1,738	4,426
178.96	1,738	3,875	179.48	1,738	4,436
178.97	1,738	3,886	179.49	1,738	4,446
178.98	1,738	3,898	179.50	1,738	4,456
178.99	1,738	3,909	179.51	1,738	4,466
179.00	1,738	3,920	179.52	1,738	4,475
179.01	1,738	3,932	179.53	1,738	4,485
179.02	1,738	3,943	179.54	1,738	4,495
179.03	1,738	3,954	179.55	1,738	4,505
179.04	1,738	3,965	179.56	1,738	4,514
179.05	1,738	3,977	179.57	1,738	4,524
179.06	1,738	3,988	179.58	1,738	4,534
179.07	1,738	3,999	179.59	1,738	4,543
179.08	1,738	4,010	179.60	1,738	4,553
179.09	1,738	4,022	179.61	1,738	4,562
179.10	1,738	4,033	179.62	1,738	4,572
179.11	1,738	4,044	179.63	1,738	4,581
179.12	1,738	4,055	179.64	1,738	4,591
179.13	1,738	4,066	179.65	1,738	4,600
179.14	1,738	4,077	179.66	1,738	4,609
179.15	1,738	4,088	179.67	1,738	4,618
179.16	1,738	4,099	179.68	1,738	4,627
179.17	1,738	4,110	179.69	1,738	4,636
179.18	1,738	4,121	179.70	1,738	4,645
179.19	1,738	4,132	179.71	1,738	4,654
179.20	1,738	4,143	179.72	1,738	4,663
179.21	1,738	4,154	179.73	1,738	4,672
179.22	1,738	4,164	179.74	1,738	4,680
179.23	1,738	4,175	179.75	1,738	4,689
179.24	1,738	4,186	179.76	1,738	4,698
179.25	1,738	4,197	179.77	1,738	4,706
179.26	1,738	4,207	179.78	1,738	4,714
179.27	1,738	4,218	179.79	1,738	4,723
179.28	1,738	4,229	179.80	1,738	4,731

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Type III 24-hr 100-Year Rainfall=7.76"

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
179.81	1,738	4,739	180.33	1,738	5,118
179.82	1,738	4,747	180.34	1,738	5,125
179.83	1,738	4,755	180.35	1,738	5,132
179.84	1,738	4,763	180.36	1,738	5,139
179.85	1,738	4,771	180.37	1,738	5,146
179.86	1,738	4,779	180.38	1,738	5,153
179.87	1,738	4,787	180.39	1,738	5,160
179.88	1,738	4,795	180.40	1,738	5,167
179.89	1,738	4,802	180.41	1,738	5,174
179.90	1,738	4,810	180.42	1,738	5,181
179.91	1,738	4,818	180.43	1,738	5,188
179.92	1,738	4,825	180.44	1,738	5,195
179.93	1,738	4,833	180.45	1,738	5,201
179.94	1,738	4,840	180.46	1,738	5,208
179.95	1,738	4,848	180.47	1,738	5,215
179.96	1,738	4,855	180.48	1,738	5,222
179.97	1,738	4,863	180.49	1,738	5,229
179.98	1,738	4,870	180.50	1,738	5,236
179.99	1,738	4,878	180.51	1,738	5,243
180.00	1,738	4,885	180.52	1,738	5,250
180.01	1,738	4,893	180.53	1,738	5,257
180.02	1,738	4,900	180.54	1,738	5,264
180.03	1,738	4,907	180.55	1,738	5,271
180.04	1,738	4,915	180.56	1,738	5,278
180.05	1,738	4,922	180.57	1,738	5,285
180.06	1,738	4,929	180.58	1,738	5,292
180.07	1,738	4,936	180.59	1,738	5,299
180.08	1,738	4,944	180.60	1,738	5,306
180.09	1,738	4,951	180.61	1,738	5,313
180.10	1,738	4,958	180.62	1,738	5,320
180.11	1,738	4,965	180.63	1,738	5,327
180.12	1,738	4,972	180.64	1,738	5,334
180.13	1,738	4,979	180.65	1,738	5,340
180.14	1,738	4,986	180.66	1,738	5,347
180.15	1,738	4,993	180.67	1,738	5,354
180.16	1,738	5,000	180.68	1,738	5,361
180.17	1,738	5,007	180.69	1,738	5,368
180.18	1,738	5,014	180.70	1,738	5,375
180.19	1,738	5,021	180.71	1,738	5,382
180.20	1,738	5,028	180.72	1,738	5,389
180.21	1,738	5,035	180.73	1,738	5,396
180.22	1,738	5,042	180.74	1,738	5,403
180.23	1,738	5,049	180.75	1,738	5,410
180.24	1,738	5,055	180.76	1,738	5,417
180.25	1,738	5,062	180.77	1,738	5,424
180.26	1,738	5,069	180.78	1,738	5,431
180.27	1,738	5,076	180.79	1,738	5,438
180.28	1,738	5,083	180.80	1,738	5,445
180.29	1,738	5,090	180.81	1,738	5,452
180.30	1,738	5,097	180.82	1,738	5,459
180.31	1,738	5,104	180.83	1,738	5,466
180.32	1,738	5,111	180.84	1,738	5,473

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**Stage-Area-Storage for Pond SWB: Stormtech MC 3500 (SWM-B) (continued)**

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
180.85	1,738	5,479
180.86	1,738	5,486
180.87	1,738	5,493
180.88	1,738	5,500
180.89	1,738	5,507
180.90	1,738	5,514
180.91	1,738	5,521
180.92	1,738	5,528
180.93	1,738	5,535
180.94	1,738	5,542
180.95	1,738	5,549
180.96	1,738	5,556
180.97	1,738	5,563
180.98	1,738	5,570
180.99	1,738	5,577
181.00	1,738	5,584
181.01	1,738	5,591
181.02	1,738	5,598
181.03	1,738	5,605
181.04	1,738	5,612
181.05	1,738	5,619
181.06	1,738	5,625
181.07	1,738	5,632
181.08	1,738	5,639
181.09	1,738	5,646
181.10	1,738	5,653
181.11	1,738	5,660
181.12	1,738	5,667
181.13	1,738	5,674
181.14	1,738	5,681
181.15	1,738	<b>5,688</b>



**post development**

*Type III 24-hr 100-Year Rainfall=7.76"*

Prepared by HH Engineering Assoc

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**Summary for Link TSD: Total Site Discharge**

Inflow Area = 119,968 sf, 21.15% Impervious, Inflow Depth = 3.12" for 100-Year event  
Inflow = 9.81 cfs @ 12.15 hrs, Volume= 31,168 cf  
Primary = 9.81 cfs @ 12.15 hrs, Volume= 31,168 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.02 hrs