# STORMWATER REPORT

# STRATTON HILL

## WRIGHT ROAD AYER, MASSACHUSETTS



**Prepared For:** Fox Meadow Realty Corp.

129 Skyfields Drive Groton, MA 01450

**Prepared By:** DILLIS & ROY CIVIL DESIGN GROUP, INC.

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**Revised: October 20<sup>th</sup>, 2023**April 25<sup>th</sup>, 2023
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## 1.0 Project Narrative

## 1.1 Project Type

The applicant, Fox Meadow Realty Corp. is proposing the construction of a 35-lot subdivision under the Open Space Residential Development (OSRD) Special Regulations (Section 10.1 of the Ayer Zoning Bylaw). The existing property (referred to herin as "the site") is located on the northerly side of Wright Road and contains Stratton Hill Road. The proposed housing units consist of 33 single-family dwellings approximately 2,400 SF in area & two duplexes approximately 3,700 SF in area. The proposed scope of construction also includes a private roadway, on-site parking, stormwater management systems, new utility connections and their associated appurtenances. The proposed development is intended to be serviced by municipal water & sewer systems.

## 1.2 Purpose and Scope

This report has been prepared to comply with the requirements of the Stormwater Management Standards incorporated in the Massachusetts Wetlands Protection Act Regulations, 310 CMR 10.00. These standards are intended to promote increased groundwater recharge and prevent stormwater discharges from causing or contributing to the pollution of surface waters and ground waters of the Commonwealth. The standards aim to accomplish these goals by encouraging the greater use of low impact development (LID) techniques and improving the operation and maintenance of stormwater best management practices (BMP).

This report addresses compliance of the proposed development with each of the ten stormwater standards, it provides calculations to support the compliance information, and it provides a Long-Term Pollution Prevention Plan and an Operation and Maintenance Plan for the stormwater management system.

## 1.3 LID Measures

Care has been taken to lay out the proposed site in a manner that works with existing topography. The existing partially constructed stormwater management area along Wright Road has been utilized in the design. BMP's have been selected to manage the stormwater runoff. Stormwater from the proposed impervious surface locations is routed to infiltration basins via land flow, curb and gutter systems, or conventional storm drain systems. The stormwater basins will reduce run off rates below pre-developed rates while providing water quality pre-treatment by sediment forebays.

## 1.4 Site Description

As mentioned, the site is located on the northerly side of Wright Road and contains Stratton Hill Road with the lots created by the subdivision (see

Middlesex Registry of Deeds plan 829 of 2005) (Assessor's map 6, Parcels 1, 2, 3, 7, 8, and 11 through 55). The site contains a partially constructed road with a partially constructed stormwater management area & infrastructure. Freshwater wetlands subject to the protections of the Ayer Wetlands Bylaw are located to the east, north and west of Stratton Hill Road. The project site falls within the Zoning District Residence A-1. The abutting properties to the East and West are in the same district and consist of undeveloped woodlands and single-family homes on Wright Road. Directly South of the site is the Zoning District A-2 where there are more single-family homes. The North side of the property abuts the Groton town line which contains more undeveloped woodland. The site contains a ridge line from south to north bisecting the overland stormwater flows to the east & west. Design point designation for hydraulic assessment is described later in this report (Section 2.2).

The site currently has access from Stratton Hill Road which branches off Wright Road. With Long Pond to the East, the Groton town line to the North and more wooded properties to the West, the proposed southerly access presents the most practical means of entering the site.

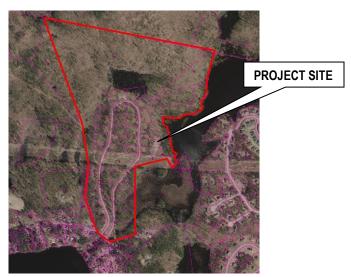


Figure 1 – Massachusetts GIS Map

The site is bisected by a cleared utility easement that contains overhead transmission lines. As noted above, portions of the site have been altered by prior construction activities. Incidentally, both analysis of vegetation and presence of hydric soils were used to determine the limits of resource areas as depicted on the attached site plans. The project site is subject to an ANRAD, DEP file #100-0445.

The site is chiefly comprised of Charlton-Hollis-Rock outcrop and Hollis-Rock outcrop soils with moderate to slightly steep slopes. The NRCS soil survey information indicates that all of the site is underlain by soils classified as belonging to Hydrologic Soil Groups A, B & D.

- Soils belonging to group A have a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.
- Soils belonging to group B have a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained, or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.
- Soils belonging to group D have a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

Please refer to Appendix C within this report for further information regarding the soils on-site & existing test hole data.

Based on the most recently available Flood Insurance Rate map for the Town of Ayer, a portion of the site is located within a mapped flood area of special concern associated with Long Pond. This area would be subject to inundation during the 100-year frequency storm event, which would be considered Bordering Land Subject to Flooding. This information was obtained from the Federal Flood Insurance Rate (FIRM) Flood Plain Maps for Ayer, Massachusetts (refer to Appendix A – Flood Map). Based on site observations and topography, the Bordering Land Subject to flooding is located entirely within the identified wetland that borders Long Pond.

In accordance with regulation 310 CMR 10.59, no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species. Specified habitat sites of rare species have been identified by the Massachusetts Natural Heritage and Endangered Species Program of the Division of Fisheries and Wildlife. The Massachusetts Natural Heritage Atlas 14th Edition indicates that the entirety of the site is located within Priority Habitat PH 2029 and is sited as an Area of Critical Environmental Concern (ACEC).

## 1.5 Proposed Stormwater Management System

Runoff from the proposed development will be conveyed and treated through a combination of Best Management Practices (BMP's). The following is a brief discussion of each conveyance and treatment BMP proposed.

## Deep Sump Hooded Catch Basin

Deep sump hooded catch basins are proposed to convey the runoff from the proposed paved areas and roofs to the infiltration basins. These catch basins will discharge to manholes and conventional storm drains.

## **Infiltration Basin**

The infiltration basins are designed to reduce the runoff rates and increase the groundwater recharge rates. Sediment forebays designed at the entrance of each basin were included to decrease the velocity of flow and increase the settlement of heavy solids prior to the infiltration basin. Riprap will also be installed at the inlet of the sediment forebays and the outlet of the basins to control the overflow of stormwater into the adjacent wetlands and reduce the potential for scouring.

## **Grassed Swales**

Proposed swales have been designed to convey the flows from the 100-year frequency event. The grass swales will receive runoff from a portion of the proposed roofs and will convey the stormwater flows to associated proposed infiltration basins.

## 1.6 Methods of Analysis

The United States Department of Agriculture Natural Resources Conservation Service (NRCS) soil cover complex methods (TR-20) were employed to compute runoff quantities for the subject property. Watershed analysis demonstrates that natural drainage patterns drain toward the wetlands (design point). Two design points were modeled to analyze the total runoff from the site. HydroCAD 10.0 computer software was employed in this hydrologic analysis.

A comparison of pre- and post-development runoff quantities at the analysis points were performed in order to design a stormwater management system that will limit peak rates of runoff from the development to predevelopment levels for 24-hour rainfall events of 2-, 10-, 25- and 100-year return frequencies. Watershed boundaries for existing conditions are depicted on the attached Predevelopment Watershed Plan. Post-Developed watershed boundaries are indicated on the Post-development Watershed Plan.

## 2.0 Stormwater Standards Compliance

## 2.1 Standard 1 – Untreated Discharge

The stormwater management system for the proposed development will not result in any new discharges of untreated stormwater to wetland resource areas. Stormwater management structures have been designed such that there is no erosion or scour to wetland resource areas or waters of the Commonwealth.

## 2.2 Standard 2 – Peak Rate Attenuation

Hydrologic calculations for existing and proposed site conditions are included in Appendices D and E respectively. Calculations for 24-hour rainfall events of 2-, 10-, 25- and 100-year return frequencies are provided. The following table provides a summary of peak rates of runoff related to each of these storms for the design point through which all runoff from the subject property must flow. For all rainfall events considered, the proposed stormwater management system will control runoff from the development such that corresponding peak flows at the design point will be lower than pre-developed rates. Two design points have been designated for the analysis. The site is bisected by a ridgeline that delivers overland flow to the East & to the West. The resulting Eastern design point has been designated as Design Point-A & the Western design point has been designated as Design Point-B. Proposed Infiltration Basin #1 will receive runoff from Wright Road, thus, the post-developed hydrologic calculations include a sub catchment for this area to ensure that the stormwater area is sized accordingly. This results in the post-developed area exceeding the pre-developed area within the attached hydrologic calculations.

Table 1: Wetland Design Point Runoff Summary

	<b>Pre-Developed</b>	Post-Developed
	(ft <sup>3</sup> / sec)	$(ft^3 / sec)$
	Design Point "	'A"
2-Year	3.64	3.28
10-Year	27.96	24.40
25-Year	51.45	37.64
100-Year	96.24	63.37
	Design Point "	<i>B</i> "
2-Year	1.66	0.77
10-Year*	13.45	7.97
25-Year	25.08	18.11
100-Year	48.47	38.01

## 2.3 Standard 3 – Recharge

The site is chiefly comprised of Charlton-Hollis-Rock outcrop and Hollis-Rock outcrop soils with moderate to slightly steep slopes. The NRCS soil survey information indicates that all of the site is underlain by soils classified as belonging to Hydrologic Soil Groups A, B & D. Extensive soil testing and evaluation confirms the C-horizon as a loamy sandy loam throughout the site. As such the proposed stormwater management areas (#1 & #2) have been designed with an exfiltration rate of 2.41 inches per hour. Infiltration Basin #3 has been designed with an exfiltration rate of 1.02 inches per hour. Please refer to Appendix C for the test hole data that was utilized during the design process.

Recharge calculations can be found in Appendix F.

## 2.4 Standard 4 – Water Quality

TSS removal calculations have been provided (Appendix F) showing that the proposed TSS removal efficiency from these areas will be 80% using the infiltration basins with the sediment forebay & deep sump hooded catch basin pretreatment. Two TSS calculation sheets have been provided. The sheet with a deep sump catch basin being routed into a sediment forebay shows proper pretreatment before entering the infiltration basins. The sheet with deep sump catch basin being routed into a infiltration basin shows there is enough TSS removal within the whole system.

## 2.5 Standard 5 – Land Uses with Higher Pollutant Loads

The current and proposed uses of the subject site do not constitute land use with higher potential pollutant load, thus Standard 5 does not apply to the proposed project.

## 2.6 Standard 6 -Critical Areas

The proposed project does not contain a stormwater discharge within or near to any of the areas as defined as "Critical Areas" at 314 CMR 9.02 and 310 CMR 10.04.

## 2.7 Standard 7 – Redevelopment

The proposed project does not meet the standards to be considered a Redevelopment project.

# 2.8 Standard 8 – Construction Period Pollution Prevention Plan and Erosion and Sediment Control

Since the project is subject to the filing of an Environmental Protection Agency Notice of Intent (EPA NOI), and the work will be pursuant to the NPDES Construction General Permit for disturbance to an area greater than 1 acre & proposes treated discharge to waters of U.S., a copy of the Stormwater Pollution Prevention Plan (SWPPP) will be submitted prior to construction. The SWPPP will satisfy the Standard 8 Construction Period Pollution prevention. And Erosion and Sediment Control Plan is included in the attached Site Plans.

## 2.9 Standard 9 – Operation and Maintenance Plan

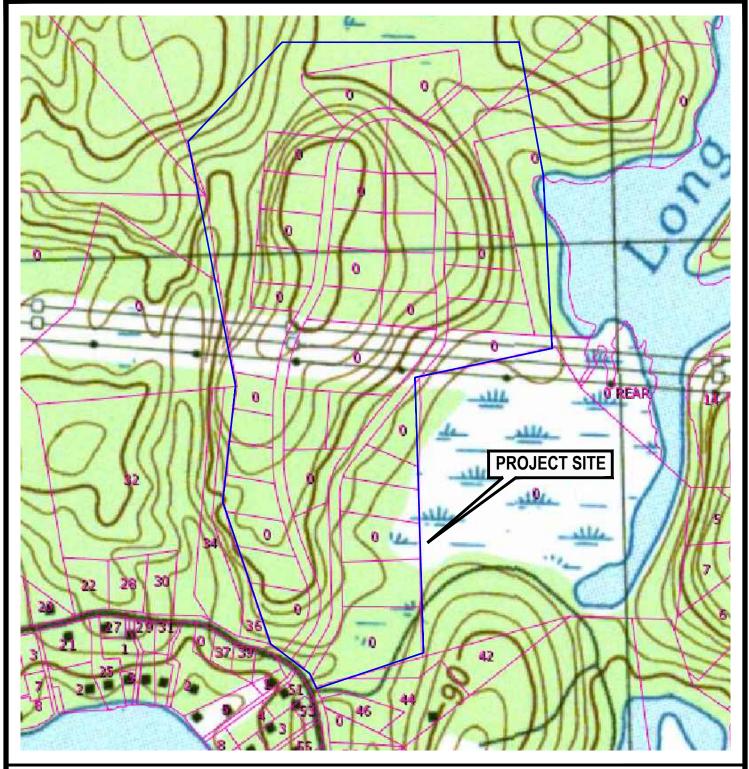
Refer to Appendix H for a complete copy of the Stormwater Operation and Maintenance Plan.

## 2.10 Standard 10 – Prohibition of Illicit Discharge

An illicit discharge statement will be prepared after approvals are received and prior to construction.

# 3.0 Appendices

Appendix A - Locus & Flood Map



# FIGURE 1 - LOCUS MAP

NOT TO SCALE

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CIVIL ENGINEERS LAND SURVEYORS
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LUNENBURG, MA 01462

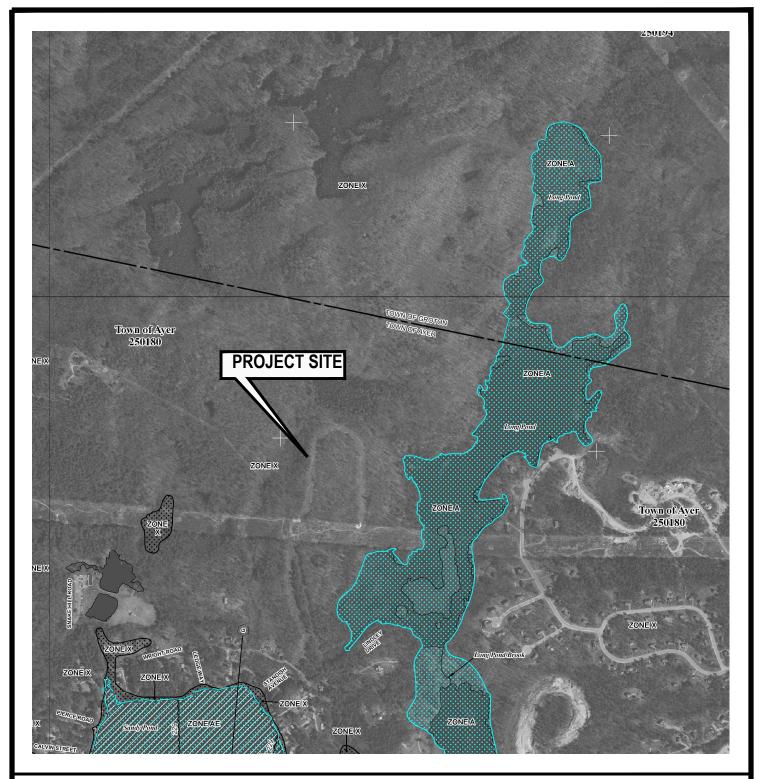
WETLAND CONSULTANTS
PHONE: (978) 779-6091
www.dillisandroy.com

References: 1988 USGS Ayer

Massachusetts Topographic Map

Prepared For: Fox Meadow Realty Corporation

129 Skyfields Drive Groton, MA



# **FIGURE 2 - FLOOD MAP**

1"=1,000' ±

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1 Main Street, Suite #1 Lunenburg, Massachusetts



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**References:** FIRM - Flood Insurance Rate Map

Community-Panel Number: 25017C0208E

Prepared For: Fox Meadow Realty Corporation

129 Skyfields Drive Groton, MA Stormwater Report Stratton Hill April 25<sup>th</sup>, 2023 Fox Meadow Realty Corp.

# Appendix B - Checklist for Stormwater Report



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# **Checklist for Stormwater Report**

## A. Introduction

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.





A Stormwater Report must be submitted with the Notice of Intent permit application to document compliance with the Stormwater Management Standards. The following checklist is NOT a substitute for the Stormwater Report (which should provide more substantive and detailed information) but is offered here as a tool to help the applicant organize their Stormwater Management documentation for their Report and for the reviewer to assess this information in a consistent format. As noted in the Checklist, the Stormwater Report must contain the engineering computations and supporting information set forth in Volume 3 of the Massachusetts Stormwater Handbook. The Stormwater Report must be prepared and certified by a Registered Professional Engineer (RPE) licensed in the Commonwealth.

The Stormwater Report must include:

- The Stormwater Checklist completed and stamped by a Registered Professional Engineer (see page 2) that certifies that the Stormwater Report contains all required submittals. This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8<sup>2</sup>
- Operation and Maintenance Plan required by Standard 9

In addition to all plans and supporting information, the Stormwater Report must include a brief narrative describing stormwater management practices, including environmentally sensitive site design and LID techniques, along with a diagram depicting runoff through the proposed BMP treatment train. Plans are required to show existing and proposed conditions, identify all wetland resource areas, NRCS soil types, critical areas, Land Uses with Higher Potential Pollutant Loads (LUHPPL), and any areas on the site where infiltration rate is greater than 2.4 inches per hour. The Plans shall identify the drainage areas for both existing and proposed conditions at a scale that enables verification of supporting calculations.

As noted in the Checklist, the Stormwater Management Report shall document compliance with each of the Stormwater Management Standards as provided in the Massachusetts Stormwater Handbook. The soils evaluation and calculations shall be done using the methodologies set forth in Volume 3 of the Massachusetts Stormwater Handbook.

To ensure that the Stormwater Report is complete, applicants are required to fill in the Stormwater Report Checklist by checking the box to indicate that the specified information has been included in the Stormwater Report. If any of the information specified in the checklist has not been submitted, the applicant must provide an explanation. The completed Stormwater Report Checklist and Certification must be submitted with the Stormwater Report.

<sup>&</sup>lt;sup>1</sup> The Stormwater Report may also include the Illicit Discharge Compliance Statement required by Standard 10. If not included in the Stormwater Report, the Illicit Discharge Compliance Statement must be submitted prior to the discharge of stormwater runoff to the post-construction best management practices.

<sup>&</sup>lt;sup>2</sup> For some complex projects, it may not be possible to include the Construction Period Erosion and Sedimentation Control Plan in the Stormwater Report. In that event, the issuing authority has the discretion to issue an Order of Conditions that approves the project and includes a condition requiring the proponent to submit the Construction Period Erosion and Sedimentation Control Plan before commencing any land disturbance activity on the site.



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# **Checklist for Stormwater Report**

## B. Stormwater Checklist and Certification

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

*Note:* Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the item is not applicable (N.A.) and provide the reasons for that determination.

A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

## **Registered Professional Engineer's Certification**

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

	and Signature  w M Wak  Te and Date	10/14/2023	FRANCIS M McPARTLAN CIVIL No. 49572
	Checklist		
<b>Project Type:</b> Is the application for new redevelopment?	development, redevelop	oment, or a mix o	of new and
Redevelopment			
☐ Mix of New Development and Redev	relopment		



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# **Checklist for Stormwater Report**

## Checklist (continued)

**LID Measures:** Stormwater Standards require LID measures to be considered. Document what environmentally sensitive design and LID Techniques were considered during the planning and design of the project:

$\boxtimes$	No disturbance to any Wetland Resource Areas
	Site Design Practices (e.g. clustered development, reduced frontage setbacks)
	Reduced Impervious Area (Redevelopment Only)
$\boxtimes$	Minimizing disturbance to existing trees and shrubs
	LID Site Design Credit Requested:
	☐ Credit 1
	☐ Credit 2
	☐ Credit 3
	Use of "country drainage" versus curb and gutter conveyance and pipe
	Bioretention Cells (includes Rain Gardens)
	Constructed Stormwater Wetlands (includes Gravel Wetlands designs)
	Treebox Filter
	Water Quality Swale
	Grass Channel
	Green Roof
	Other (describe):
Sta	ndard 1: No New Untreated Discharges
$\boxtimes$	No new untreated discharges
	Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth
	Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.



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# **Checklist for Stormwater Report**

Checklist (continued) Standard 2: Peak Rate Attenuation Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding. Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm. Calculations provided to show that post-development peak discharge rates do not exceed predevelopment rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24hour storm. Standard 3: Recharge Soil Analysis provided. Required Recharge Volume calculation provided. Required Recharge volume reduced through use of the LID site Design Credits. Sizing the infiltration, BMPs is based on the following method: Check the method used. Static Simple Dynamic Dynamic Field<sup>1</sup> Runoff from all impervious areas at the site discharging to the infiltration BMP. Runoff from all impervious areas at the site is *not* discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume. Recharge BMPs have been sized to infiltrate the Required Recharge Volume. Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum extent practicable for the following reason: Site is comprised solely of C and D soils and/or bedrock at the land surface M.G.L. c. 21E sites pursuant to 310 CMR 40.0000 Solid Waste Landfill pursuant to 310 CMR 19.000 Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable. Calculations showing that the infiltration BMPs will drain in 72 hours are provided. Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

<sup>&</sup>lt;sup>1</sup> 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.



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# **Checklist for Stormwater Report**

Checklist (continued)
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## Standard 3: Recharge (continued)

- The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.
- Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.

## Standard 4: Water Quality

The Long-Term Pollution Prevention Plan typically includes the following:

- Good housekeeping practices;
- Provisions for storing materials and waste products inside or under cover;
- Vehicle washing controls;
- Requirements for routine inspections and maintenance of stormwater BMPs;
- Spill prevention and response plans;
- Provisions for maintenance of lawns, gardens, and other landscaped areas;
- Requirements for storage and use of fertilizers, herbicides, and pesticides;
- Pet waste management provisions;
- Provisions for operation and management of septic systems;
- Provisions for solid waste management;
- Snow disposal and plowing plans relative to Wetland Resource Areas;
- Winter Road Salt and/or Sand Use and Storage restrictions;
- Street sweeping schedules;
- Provisions for prevention of illicit discharges to the stormwater management system;
- Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL;
- Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan;
- List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.

applicable, the 44% TSS removal pretreatment requirement, are provided.

$\boxtimes$	A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.
	Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:
	is within the Zone II or Interim Wellhead Protection Area
	is near or to other critical areas
	is within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
	involves runoff from land uses with higher potential pollutant loads.
	The Required Water Quality Volume is reduced through use of the LID site Design Credits.
$\boxtimes$	Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if



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Checklist (continued)

# **Checklist for Stormwater Report**

Sta	ndard 4: Water Quality (continued)
$\boxtimes$	The BMP is sized (and calculations provided) based on:
	☐ The ½" or 1" Water Quality Volume or
	☐ The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.
	The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.
	A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided.
Sta	ndard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs)
	The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.  The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted <i>prior</i> to the discharge of stormwater to the post-construction stormwater BMPs.
	The NPDES Multi-Sector General Permit does <i>not</i> cover the land use.
	LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.
	All exposure has been eliminated.
	All exposure has <i>not</i> been eliminated and all BMPs selected are on MassDEP LUHPPL list.
	The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.
Sta	ndard 6: Critical Areas
	The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.
	Critical areas and BMPs are identified in the Stormwater Report.



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# **Checklist for Stormwater Report**

## Checklist (continued)

	Indard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum ent practicable  The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:
	☐ Limited Project
	<ul> <li>Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area.</li> <li>Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area</li> <li>Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff</li> </ul>
	☐ Bike Path and/or Foot Path
	Redevelopment Project
	Redevelopment portion of mix of new and redevelopment.
	Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report. The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.
Sta	ndard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control
	Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the owing information:
	<ul> <li>Narrative;</li> <li>Construction Period Operation and Maintenance Plan;</li> <li>Names of Persons or Entity Responsible for Plan Compliance;</li> <li>Construction Period Pollution Prevention Measures;</li> <li>Erosion and Sedimentation Control Plan Drawings;</li> <li>Detail drawings and specifications for erosion control BMPs, including sizing calculations;</li> <li>Vegetation Planning;</li> <li>Site Development Plan;</li> <li>Construction Sequencing Plan;</li> <li>Sequencing of Erosion and Sedimentation Controls;</li> <li>Operation and Maintenance of Erosion and Sedimentation Controls;</li> </ul>

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing

the information set forth above has been included in the Stormwater Report.

Inspection Schedule; Maintenance Schedule;

Inspection and Maintenance Log Form.



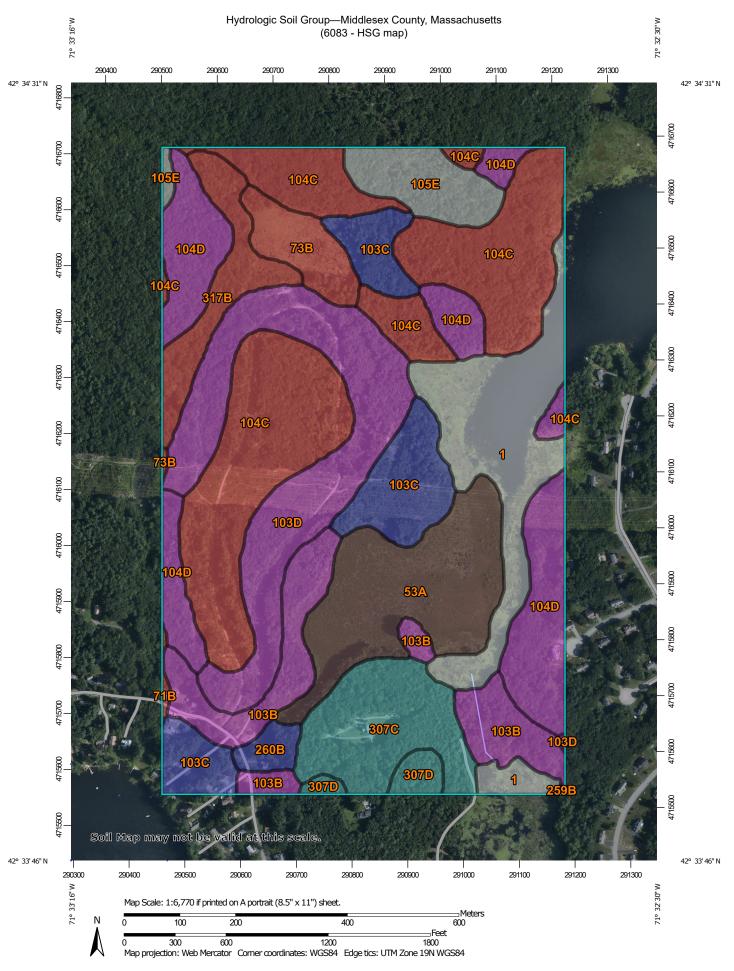
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# **Checklist for Stormwater Report**

Checklist (continued)

	ndard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control ntinued)
	The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has <i>not</i> been included in the Stormwater Report but will be submitted <i>before</i> land disturbance begins.
	The project is <i>not</i> covered by a NPDES Construction General Permit.
	The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report.
	The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins.
Sta	ndard 9: Operation and Maintenance Plan
$\boxtimes$	The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information:
	Name of the stormwater management system owners;
	□ Party responsible for operation and maintenance;
	Schedule for implementation of routine and non-routine maintenance tasks;
	☑ Plan showing the location of all stormwater BMPs maintenance access areas;
	☐ Description and delineation of public safety features;
	☐ Estimated operation and maintenance budget; and
	Operation and Maintenance Log Form.
	The responsible party is <i>not</i> the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions:
	A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs;
	A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions.
Sta	ndard 10: Prohibition of Illicit Discharges
	The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;
	An Illicit Discharge Compliance Statement is attached;
$\boxtimes$	NO Illicit Discharge Compliance Statement is attached but will be submitted <i>prior to</i> the discharge of

# Appendix C - Soils Data



# MAP INFORMATION

The soil surveys that comprise your AOI were mapped at

Warning: Soil Map may not be valid at this scale.

contrasting soils that could have been shown at a more detailed misunderstanding of the detail of mapping and accuracy of soil Enlargement of maps beyond the scale of mapping can cause line placement. The maps do not show the small areas of

Please rely on the bar scale on each map sheet for map

Coordinate System: Web Mercator (EPSG:3857)

distance and area. A projection that preserves area, such as the Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as

Soil map units are labeled (as space allows) for map scales

The orthophoto or other base map on which the soil lines were

compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor

# **Hydrologic Soil Group**

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
1	Water		21.1	10.2%
53A	Freetown muck, ponded, 0 to 1 percent slopes	B/D	20.0	9.7%
71B	Ridgebury fine sandy loam, 3 to 8 percent slopes, extremely stony	D	0.3	0.2%
73B	Whitman fine sandy loam, 0 to 3 percent slopes, extremely stony	D	5.6	2.7%
103B	Charlton-Hollis-Rock outcrop complex, 3 to 8 percent slopes	A	15.5	7.5%
103C	Charlton-Hollis-Rock outcrop complex, 8 to 15 percent slopes	В	15.1	7.3%
103D	Charlton-Hollis-Rock outcrop complex, 15 to 25 percent slopes	A	27.1	13.1%
104C	Hollis-Rock outcrop- Charlton complex, 0 to 15 percent slopes	D	46.2	22.3%
104D	Hollis-Rock outcrop- Charlton complex, 15 to 25 percent slopes	A	23.5	11.3%
105E	Rock outcrop-Hollis complex, 3 to 35 percent slopes		7.3	3.5%
259B	Carver loamy coarse sand, 3 to 8 percent slopes	A	0.0	0.0%
260B	Sudbury fine sandy loam, 3 to 8 percent slopes	В	2.0	1.0%
307C	Paxton fine sandy loam, 8 to 15 percent slopes, extremely stony	С	13.5	6.5%
307D	Paxton fine sandy loam, 15 to 25 percent slopes, extremely stony	С	2.2	1.0%

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
317B	Scituate fine sandy loam, 3 to 8 percent slopes, extremely stony	D	7.9	3.8%
Totals for Area of Interest			207.3	100.0%

## **Description**

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

## **Rating Options**

Aggregation Method: Dominant Condition Component Percent Cutoff: None Specified

Tie-break Rule: Higher

The following test hole data was obtained by R. Wilson & Associates in February of 2000. The locations of the subject test holes are depicted on the attached site plans.

Test Hole: TH200-1		ESHGW Depth:	96"
Date: 02/08/00		<b>ESHGW Elevation:</b>	281.00
<b>Depth from Surface</b>	<b>Soil Horizon</b>	Soil Texture	Soil Mottling
0"-8"	Α	SL	
8"-26"	В	SL	
26"-96"	C1	LS	75% @ 96"
96"-144"	C2	SL	

Test Hole: TH200-2		ESHGW Depth:	84"
Date: 02/08/00		<b>ESHGW Elevation:</b>	280.00
<b>Depth from Surface</b>	<b>Soil Horizon</b>	Soil Texture	Soil Mottling
0"-8"	Α	SL	
8"-24"	В	SL	
24"-120"	С	LS	75% @ 84"

Test Hole: TH200-3		ESHGW Depth:	112"
Date: 02/08/00		<b>ESHGW Elevation:</b>	261.67
<b>Depth from Surface</b>	<b>Soil Horizon</b>	Soil Texture	Soil Mottling
0"-10"	Α	SL	
10"-26"	В	SL	
26"-144"	С	LS	75% @ 112"

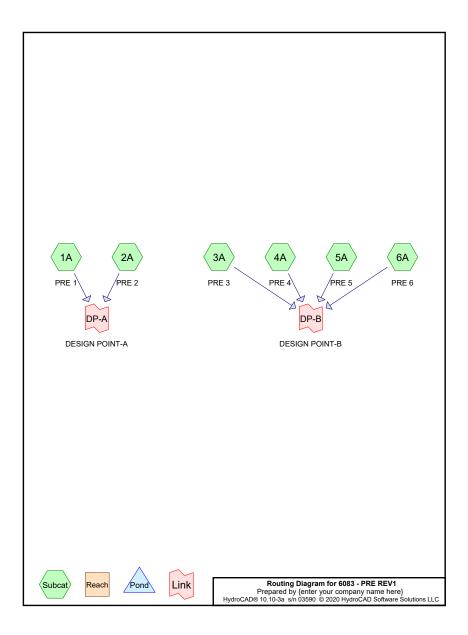
Test Hole: TH200-4		ESHGW Depth:	96"
Date: 02/08/00		<b>ESHGW Elevation:</b>	265.00
<b>Depth from Surface</b>	<b>Soil Horizon</b>	Soil Texture	<b>Soil Mottling</b>
0"-16"	Α	SL	
16"-28"	В	SL	
28"-96"	С	LS	75% @ 96"

Test Hole: TH200-5		ESHGW Depth:	84"
			1 -
Date: 02/08/00		<b>ESHGW Elevation:</b>	253.00
<b>Depth from Surface</b>	Soil Horizon	Soil Texture	<b>Soil Mottling</b>
0"-10"	Α	SL	
10"-24"	В	SL	
24"-84"	С	LS	75% @ 84"

Test Hole: TH200-6		ESHGW Depth:	> 132"
Date: 02/08/00		<b>ESHGW Elevation:</b>	< 245.30
<b>Depth from Surface</b>	<b>Soil Horizon</b>	Soil Texture	Soil Mottling
0"-12"	Α	SL	
12"-20"	В	SL	
20"-132"	С	LS	

Test Hole: TH200-7		ESHGW Depth:	84"
Date: 02/08/00		<b>ESHGW Elevation:</b>	243.00
<b>Depth from Surface</b>	Soil Horizon	Soil Texture	Soil Mottling
0"-8"	Α	SL	
8"-26"	В	SL	
26"-84"	С	LS	75% @ 84"

# Appendix D - Existing Conditions Hydrologic Calculations



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## Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-year	Type III 24-hr		Default	24.00	1	3.14	2
2	10-year	Type III 24-hr		Default	24.00	1	4.84	2
3	25-year	Type III 24-hr		Default	24.00	1	5.89	2
4	100-year	Type III 24-hr		Default	24.00	1	7.52	2

Link DP-B: DESIGN POINT-B

Type III 24-hr 2-year Rainfall=3.14"

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Inflow=1.66 cfs 0.344 af Primary=1.66 cfs 0.344 af

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1A: PRE 1	Runoff Area=1,802,441 sf 0.00% Impervious Runoff Depth=0.23" Flow Length=972' Tc=11.1 min CN=55 Runoff=3.64 cfs 0.805 af
Subcatchment2A: PRE 2	Runoff Area=103,666 sf 0.00% Impervious Runoff Depth=0.00" Flow Length=350' Tc=6.8 min CN=40 Runoff=0.00 cfs 0.000 af
Subcatchment3A: PRE 3	Runoff Area=162,147 sf 0.00% Impervious Runoff Depth=0.02" Flow Length=455' Tc=10.1 min CN=43 Runoff=0.01 cfs 0.005 af
Subcatchment4A: PRE 4	Runoff Area=339,048 sf 0.00% Impervious Runoff Depth=0.23" Flow Length=462' Tc=7.7 min CN=55 Runoff=0.71 cfs 0.151 af
Subcatchment5A: PRE 5	Runoff Area=372,514 sf 0.00% Impervious Runoff Depth=0.26" Flow Length=441' Tc=6.0 min CN=56 Runoff=0.96 cfs 0.186 af
Subcatchment6A: PRE 6	Runoff Area=106,355 sf 0.00% Impervious Runoff Depth=0.00" Flow Length=391' Tc=7.9 min CN=41 Runoff=0.00 cfs 0.001 af
Link DP-A: DESIGN POINT-A	Inflow=3.64 cfs

Total Runoff Area = 66.257 ac Runoff Volume = 1.149 af Average Runoff Depth = 0.21" 100.00% Pervious = 66.257 ac 0.00% Impervious = 0.000 ac

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Type III 24-hr 2-year Rainfall=3.14"

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## Summary for Subcatchment 1A: PRE 1

Runoff = 3.64 cfs @ 12.43 hrs, Volume= 0.805 af, Depth= 0.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Α	rea (sf)	CN	Description				
7	16,166	30	Woods, Go	od, HSG A			
1	14,129	39	>75% Gras	s cover, Go	ood, HSG A		
	13,867	96	Gravel surfa	ace, HSG A	1		
1	22,131			ods, Good, HSG B			
	79,410			, -	ood, HSG B		
	13,218		Gravel surfa				
	43,269		Woods, Go				
2	81,024		>75% Grass cover, Good, HSG D				
19,227 96			Gravel surfa	ace, HSG D	)		
1,802,441 55			Weighted Average				
1,8	02,441		100.00% Pervious Area				
_		۵.			<b>5</b>		
Tc	Length	Slope		Capacity	Description		
(min)	(feet)	(ft/ft)		(cfs)			
3.3	50	0.0800	0.25		Sheet Flow,		
					Grass: Short n= 0.150 P2= 3.10"		
6.8	812	0.0800	1.98		Shallow Concentrated Flow,		
					Short Grass Pasture Kv= 7.0 fps		
1.0	110	0.1400	1.87		Shallow Concentrated Flow,		
					Woodland Kv= 5.0 fps		
11.1	972	Total					

## Summary for Subcatchment 2A: PRE 2

Runoff 0.00 cfs @ 24.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

 Area (sf)	CN	Description			
 40,069	30	Woods, Good, HSG A			
48,855	39	>75% Grass cover, Good, HSG A			
430	96	Gravel surface, HSG A			
1,409	55	Woods, Good, HSG B			
9,106	61	>75% Grass cover, Good, HSG B			
611	96	Gravel surface, HSG B			
 3,186	80	>75% Grass cover, Good, HSG D			
103,666	40	Weighted Average			
103,666		100.00% Pervious Area			

#### Type III 24-hr 2-year Rainfall=3.14"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	50	0.0300	0.17		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.10"
1.9	300	0.1400	2.62		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
6.8	350	Total			

## Summary for Subcatchment 3A: PRE 3

0.01 cfs @ 20.99 hrs, Volume= Runoff =

0.005 af, Depth= 0.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

	Α	rea (sf)	CN	Description						
-	1	17,833	30	Woods, Go	od, HSG A					
		2,183	39	>75% Gras	s cover, Go	ood, HSG A				
		981	96	Gravel surfa	ace, HSG A	4				
		33,839	77	Woods, Go	od, HSG D					
		5,631	80	>75% Gras	s cover, Go	ood, HSG D				
_		1,680	96	Gravel surfa	ace, HSG [	)				
	1	62,147	43	Weighted A	verage					
	1	62,147		100.00% P	ervious Are	a				
	Tc	Length	Slope	Velocity	Capacity	Description				
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	7.5	50	0.0100	0.11		Sheet Flow,				
						Grass: Short n= 0.150 P2= 3.10"				
	2.6	405	0.1400	2.62		Shallow Concentrated Flow,				
_						Short Grass Pasture Kv= 7.0 fps				
	10 1	455	Total							

#### Summary for Subcatchment 4A: PRE 4

0.71 cfs @ 12.37 hrs, Volume= 0.151 af, Depth= 0.23" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Area (sf)	CN	Description
148,304	30	Woods, Good, HSG A
21,369	39	>75% Grass cover, Good, HSG A
6,659	96	Gravel surface, HSG A
155,855	77	Woods, Good, HSG D
6,241	80	>75% Grass cover, Good, HSG D
620	96	Gravel surface, HSG D
339,048	55	Weighted Average
339,048		100.00% Pervious Area

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Type III 24-hr 2-year Rainfall=3.14"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	50	0.0300	0.17		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.10"
1.5	254	0.1700	2.89		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
0.4	36	0.1100	1.66		Shallow Concentrated Flow,
					Woodland Kv= 5.0 fps
0.9	122	0.1100	2.32		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
7.7	462	Total			

#### Summary for Subcatchment 5A: PRE 5

Runoff 0.96 cfs @ 12.32 hrs, Volume= 0.186 af, Depth= 0.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

_	Aı	rea (sf)	CN I	Description		
		20,096	30 \	Noods, Go	od, HSG A	
	1	97,410	39 :	>75% Gras	s cover, Go	ood, HSG A
		5,312	96 (	Gravel surfa	ace, HSG A	1
		8,370	77 \	Noods, Go	od, HSG D	
	1	38,407	80 :	>75% Gras	s cover, Go	ood, HSG D
_		2,919	96 (	Gravel surfa	ace, HSG D	)
	3	72,514	56 \	Neighted A	verage	
	3	72,514		100.00% Pe	ervious Are	a
	Tc	Length	Slope		Capacity	Description
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	3.7	50	0.0600	0.23		Sheet Flow,
						Grass: Short n= 0.150 P2= 3.10"
	2.3	391	0.1700	2.89		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	6.0	441	Total			

#### Summary for Subcatchment 6A: PRE 6

0.00 cfs @ 23.32 hrs, Volume= 0.001 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

#### Type III 24-hr 2-year Rainfall=3.14"

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	Α	rea (sf)	CN [	Description		
_		99,310	39 >	75% Gras	s cover, Go	ood, HSG A
		4,549	61 >	75% Gras	s cover, Go	ood, HSG B
		2,496	80 >	75% Gras	s cover, Go	ood, HSG D
-	1	06,355	41 V	Veighted A	verage	
	1	06,355	1	00.00% Pe	ervious Are	ea
	Tc	Length	Slope	Velocity	Capacity	Description
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	5.7	50	0.0200	0.15		Sheet Flow,
						Grass: Short n= 0.150 P2= 3.10"
	2.2	341	0.1400	2.62		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
-	7.9	391	Total			•

#### Summary for Link DP-A: DESIGN POINT-A

Inflow Area = 43.758 ac, 0.00% Impervious, Inflow Depth = 0.22" for 2-year event

3.64 cfs @ 12.43 hrs, Volume= 0.805 af Inflow

Primary = 3.64 cfs @ 12.43 hrs, Volume= 0.805 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

#### Summary for Link DP-B: DESIGN POINT-B

Inflow Area = 22.499 ac, 0.00% Impervious, Inflow Depth = 0.18" for 2-year event

1.66 cfs @ 12.34 hrs, Volume= 0.344 af Inflow

1.66 cfs @ 12.34 hrs, Volume= Primary = 0.344 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

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Type III 24-hr 10-year Rainfall=4.84"

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Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1A: PRE 1 Runoff Area=1,802,441 sf 0.00% Impervious Runoff Depth=0.90"

Flow Length=972' Tc=11.1 min CN=55 Runoff=27.96 cfs 3.108 af

Runoff Area=103,666 sf 0.00% Impervious Runoff Depth=0.20" Subcatchment2A: PRE 2

Flow Length=350' Tc=6.8 min CN=40 Runoff=0.09 cfs 0.040 af

Runoff Area=162,147 sf 0.00% Impervious Runoff Depth=0.31" Subcatchment3A: PRE 3

Flow Length=455' Tc=10.1 min CN=43 Runoff=0.39 cfs 0.096 af

Runoff Area=339,048 sf 0.00% Impervious Runoff Depth=0.90" Subcatchment4A: PRE 4

Flow Length=462' Tc=7.7 min CN=55 Runoff=5.86 cfs 0.585 af

Subcatchment5A: PRE 5 Runoff Area=372,514 sf 0.00% Impervious Runoff Depth=0.96"

Flow Length=441' Tc=6.0 min CN=56 Runoff=7.66 cfs 0.684 af

Runoff Area=106,355 sf 0.00% Impervious Runoff Depth=0.24" Subcatchment6A: PRE 6

Flow Length=391' Tc=7.9 min CN=41 Runoff=0.14 cfs 0.048 af

Link DP-A: DESIGN POINT-A Inflow=27.96 cfs 3.148 af

Primary=27.96 cfs 3.148 af

Link DP-B: DESIGN POINT-B Inflow=13.45 cfs 1.413 af

Primary=13.45 cfs 1.413 af

Total Runoff Area = 66.257 ac Runoff Volume = 4.561 af Average Runoff Depth = 0.83" 100.00% Pervious = 66.257 ac 0.00% Impervious = 0.000 ac

Type III 24-hr 10-year Rainfall=4.84"

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## Summary for Subcatchment 1A: PRE 1

27.96 cfs @ 12.19 hrs, Volume= 3.108 af, Depth= 0.90" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

	Δ	rea (sf)	CN [	Description		
-		16,166			od, HSG A	
				,	,	
		14,129			, -	pod, HSG A
		13,867			ace, HSG A	
		22,131			od, HSG B	
		79,410				pod, HSG B
		13,218			ace, HSG E	
		43,269			od, HSG D	
	2	81,024	80 >	>75% Gras	s cover, Go	ood, HSG D
_		19,227	96 (	Gravel surfa	ace, HSG [	)
	1,8	02,441	55 \	Neighted A	verage	
	1,8	02,441	1	100.00% P	ervious Are	a
	Tc	Length	Slope	Velocity	Capacity	Description
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	•
	3.3	50	0.0800	0.25		Sheet Flow,
						Grass: Short n= 0.150 P2= 3.10"
	6.8	812	0.0800	1.98		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	1.0	110	0.1400	1.87		Shallow Concentrated Flow.
			2			Woodland Kv= 5.0 fps
_	11.1	972	Total			1
		312	iolai			

#### Summary for Subcatchment 2A: PRE 2

Runoff 0.09 cfs @ 12.48 hrs, Volume= 0.040 af, Depth= 0.20"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

Area (sf)	CN	Description
40,069	30	Woods, Good, HSG A
48,855	39	>75% Grass cover, Good, HSG A
430	96	Gravel surface, HSG A
1,409	55	Woods, Good, HSG B
9,106	61	>75% Grass cover, Good, HSG B
611	96	Gravel surface, HSG B
3,186	80	>75% Grass cover, Good, HSG D
103,666	40	Weighted Average
103,666		100.00% Pervious Area

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Type III 24-hr 10-year Rainfall=4.84"

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	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
•	4.9	50	0.0300	0.17		Sheet Flow,
						Grass: Short n= 0.150 P2= 3.10"
	1.9	300	0.1400	2.62		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	6.8	350	Total			

## Summary for Subcatchment 3A: PRE 3

0.39 cfs @ 12.44 hrs, Volume= Runoff = 0.096 af, Depth= 0.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

	Aı	rea (sf)	CN	Description		
	1	17,833	30	Woods, Go	od, HSG A	
		2,183	39	>75% Gras	s cover, Go	ood, HSG A
		981	96	Gravel surfa	ace, HSG A	<b>\</b>
		33,839	77	Woods, Go	od, HSG D	
		5,631	80	>75% Gras	s cover, Go	ood, HSG D
		1,680	96	Gravel surfa	ace, HSG [	
_	1	62,147	43	Weighted A	verage	
	1	62,147		100.00% Pe	ervious Are	a
	Tc	Length	Slope	<ul> <li>Velocity</li> </ul>	Capacity	Description
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	7.5	50	0.0100	0.11		Sheet Flow,
						Grass: Short n= 0.150 P2= 3.10"
	2.6	405	0.1400	2.62		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	10.1	455	Total			

#### Summary for Subcatchment 4A: PRE 4

Runoff = 5.86 cfs @ 12.14 hrs, Volume= 0.585 af, Depth= 0.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

Area	(sf) CN	Description
148,	304 30	Woods, Good, HSG A
21,	369 39	>75% Grass cover, Good, HSG A
6,	659 96	Gravel surface, HSG A
155,	855 77	Woods, Good, HSG D
6,	241 80	>75% Grass cover, Good, HSG D
	620 96	Gravel surface, HSG D
339, 339,		Weighted Average 100.00% Pervious Area

#### Type III 24-hr 10-year Rainfall=4.84"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	50	0.0300	0.17		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.10"
1.5	254	0.1700	2.89		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
0.4	36	0.1100	1.66		Shallow Concentrated Flow,
					Woodland Kv= 5.0 fps
0.9	122	0.1100	2.32		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
7.7	462	Total			

#### Summary for Subcatchment 5A: PRE 5

Runoff = 7.66 cfs @ 12.11 hrs, Volume= 0.684 af, Depth= 0.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

A	rea (sf)	CN I	Description						
	20,096	30 \	Noods, Go	od, HSG A					
1	97,410	39	>75% Gras	s cover, Go	ood, HSG A				
	5,312	96	Gravel surfa	ace, HSG A	<b>\</b>				
	8,370	77	Noods, Go	od, HSG D					
1	38,407				ood, HSG D				
	2,919	96 (	Gravel surfa	ace, HSG D	)				
3	372,514	56	Neighted A	verage					
3	372,514		100.00% P	ervious Are	a				
Tc	Length	Slope		Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
3.7	50	0.0600	0.23		Sheet Flow,				
					Grass: Short n= 0.150 P2= 3.10"				
2.3	391	0.1700	2.89		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
6.0	441	Total							

#### Summary for Subcatchment 6A: PRE 6

Runoff = 0.14 cfs @ 12.46 hrs, Volume= 0.048 af, Depth= 0.24"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

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Type III 24-hr 10-year Rainfall=4.84"

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	Α	rea (sf)	CN [	Description								
99,310 39 >75% Grass cover, Good, HSG A												
		4,549	61 >	75% Gras	s cover, Go	ood, HSG B						
		2,496	80 >	75% Gras	s cover, Go	ood, HSG D						
	1	06,355	41 \	Veighted A	verage							
	1	06,355		100.00% P	ervious Are	a						
	Tc	Length	Slope	Velocity	Capacity	Description						
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)							
	5.7	50	0.0200	0.15		Sheet Flow,						
						Grass: Short n= 0.150 P2= 3.10"						
	2.2	341	0.1400	2.62		Shallow Concentrated Flow,						
						Short Grass Pasture Kv= 7.0 fps						
	7 9	391	Total									

## Summary for Link DP-A: DESIGN POINT-A

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

## Summary for Link DP-B: DESIGN POINT-B

 Inflow Area = Inflow
 22.499 ac, 13.45 cfs @ 12.12 hrs, Volume= Primary
 13.45 cfs @ 12.12 hrs, Volume= 1.413 af, Atten= 0%, Lag= 0.0 min
 13.45 cfs @ 12.12 hrs, Volume= 1.413 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Type III 24-hr 25-year Rainfall=5.89"

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Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1A: PRE 1 Runoff Area=1,802,441 sf 0.00% Impervious Runoff Depth=1.45"

Flow Length=972' Tc=11.1 min CN=55 Runoff=51.12 cfs 5.017 af

Runoff Area=103,666 sf 0.00% Impervious Runoff Depth=0.47" Subcatchment2A: PRE 2

Flow Length=350' Tc=6.8 min CN=40 Runoff=0.46 cfs 0.093 af

Runoff Area=162,147 sf 0.00% Impervious Runoff Depth=0.64" Subcatchment3A: PRE 3 Flow Length=455' Tc=10.1 min CN=43 Runoff=1.17 cfs 0.197 af

Runoff Area=339,048 sf 0.00% Impervious Runoff Depth=1.45" Subcatchment4A: PRE 4 Flow Length=462' Tc=7.7 min CN=55 Runoff=10.69 cfs 0.944 af

Subcatchment5A: PRE 5 Runoff Area=372,514 sf 0.00% Impervious Runoff Depth=1.53"

Flow Length=441' Tc=6.0 min CN=56 Runoff=13.57 cfs 1.092 af

Runoff Area=106,355 sf 0.00% Impervious Runoff Depth=0.52" Subcatchment6A: PRE 6

Flow Length=391' Tc=7.9 min CN=41 Runoff=0.56 cfs 0.106 af

Link DP-A: DESIGN POINT-A Inflow=51.45 cfs 5.110 af

Primary=51.45 cfs 5.110 af

Link DP-B: DESIGN POINT-B Inflow=25.08 cfs 2.339 af

Primary=25.08 cfs 2.339 af

Total Runoff Area = 66.257 ac Runoff Volume = 7.448 af Average Runoff Depth = 1.35" 100.00% Pervious = 66.257 ac 0.00% Impervious = 0.000 ac

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Type III 24-hr 25-year Rainfall=5.89"

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#### Summary for Subcatchment 1A: PRE 1

5.017 af, Depth= 1.45" Runoff = 51.12 cfs @ 12.18 hrs, Volume=

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Area (sf) CN Descripti					escription					
716,166 30					Woods, Good, HSG A					
	1	14,129	39	>7	75% Grass	s cover, Go	ood, HSG A			
		13,867	96	Gravel surface, HSG A						
		22,131	55			od, HSG B				
		79,410	61			, -	ood, HSG B			
		13,218	96			ace, HSG E				
		43,269	77			od, HSG D				
	281,024 80				>75% Grass cover, Good, HSG D					
	19,227 96				Gravel surface, HSG D					
		02,441	55		Weighted Average					
	1,8	02,441		100.00% Pervious Area						
	<b>.</b>	1	01	_	\	0	Description			
	Tc (min)	Length (feet)	Slop (ft/f		Velocity (ft/sec)	Capacity (cfs)	Description			
						(CIS)	Oh and Flam			
	3.3	50	0.080	U	0.25		Sheet Flow,			
	6.8	040	0.080	^	4.00		Grass: Short n= 0.150 P2= 3.10"			
	0.0	812	0.060	U	1.98		Shallow Concentrated Flow,			
	1.0	110	0.140	^	1.87		Short Grass Pasture Kv= 7.0 fps Shallow Concentrated Flow,			
	1.0	110	0.140	U	1.07		Woodland Kv= 5.0 fps			
	11.1	972	Total				Woodiana IVI - 0.0 Ipo			
	11.1	312	ı olai							

#### Summary for Subcatchment 2A: PRE 2

0.46 cfs @ 12.34 hrs, Volume= 0.093 af, Depth= 0.47" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

 Area (sf)	CN	Description	
 40,069	30	Woods, Good, HSG A	
48,855	39	>75% Grass cover, Good, HSG A	
430	96	Gravel surface, HSG A	
1,409	55	Woods, Good, HSG B	
9,106	61	>75% Grass cover, Good, HSG B	
611	96	Gravel surface, HSG B	
 3,186	80	>75% Grass cover, Good, HSG D	
 103,666	40	Weighted Average	
103,666		100.00% Pervious Area	

#### Type III 24-hr 25-year Rainfall=5.89"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	50	0.0300	0.17		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.10"
1.9	300	0.1400	2.62		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
6.8	350	Total			

## Summary for Subcatchment 3A: PRE 3

1.17 cfs @ 12.30 hrs, Volume= Runoff = 0.197 af, Depth= 0.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

	Α	rea (sf)	CN	Description							
-	1	17,833	30	Woods, Go	od, HSG A						
		2,183	39	>75% Gras	s cover, Go	ood, HSG A					
		981	96	Gravel surfa	ace, HSG A	1					
		33,839	77	Woods, Go	od, HSG D						
		5,631	80	>75% Gras	s cover, Go	ood, HSG D					
_		1,680	96	Gravel surfa	ace, HSG [	)					
	1	62,147	43	Weighted A	verage						
	1	62,147		100.00% P	ervious Are	a					
	Тс	Length	Slope		Capacity	Description					
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
	7.5	50	0.0100	0.11		Sheet Flow,					
						Grass: Short n= 0.150 P2= 3.10"					
	2.6	405	0.1400	2.62		Shallow Concentrated Flow,					
_						Short Grass Pasture Kv= 7.0 fps					
	10.1	455	Total								

#### Summary for Subcatchment 4A: PRE 4

Runoff = 10.69 cfs @ 12.13 hrs, Volume= 0.944 af, Depth= 1.45"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Area (sf)	CN	Description			
148,304	30	Woods, Good, HSG A			
21,369	39	>75% Grass cover, Good, HSG A			
6,659	96	Gravel surface, HSG A			
155,855	77	Woods, Good, HSG D			
6,241	80	>75% Grass cover, Good, HSG D			
620	96	Gravel surface, HSG D			
339,048	55	Weighted Average			
339,048		100.00% Pervious Area			

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Type III 24-hr 25-year Rainfall=5.89"

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_	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
	4.9	50	0.0300	0.17		Sheet Flow,
						Grass: Short n= 0.150 P2= 3.10"
	1.5	254	0.1700	2.89		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	0.4	36	0.1100	1.66		Shallow Concentrated Flow,
						Woodland Kv= 5.0 fps
	0.9	122	0.1100	2.32		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	7.7	462	Total			

#### Summary for Subcatchment 5A: PRE 5

13.57 cfs @ 12.10 hrs, Volume= 1.092 af, Depth= 1.53" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

	Aı	rea (sf)	CN	Description					
_		20,096	30	Woods, Good, HSG A					
	1	97,410	39	>75% Grass cover, Good, HSG A					
		5,312	96	Gravel surface, HSG A					
		8,370	77	Woods, Go	od, HSG D				
	1	38,407				ood, HSG D			
_		2,919	96	Gravel surfa	ace, HSG D	)			
	3	72,514	56	Weighted Average					
	3	72,514		100.00% Pervious Area					
	Тс	Length	Slope	e Velocity	Capacity	Description			
	(min)	(feet)	(ft/ft)		(cfs)	Bookinpuori			
-	3.7	50	0.0600	0.23	<u> </u>	Sheet Flow,			
						Grass: Short n= 0.150 P2= 3.10"			
	2.3	391	0.1700	2.89		Shallow Concentrated Flow,			
_						Short Grass Pasture Kv= 7.0 fps			
	6.0	441	Total						

## Summary for Subcatchment 6A: PRE 6

0.56 cfs @ 12.33 hrs, Volume= 0.106 af, Depth= 0.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

#### Type III 24-hr 25-year Rainfall=5.89"

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	Α	rea (sf)	CN E	escription		
		99,310	39 >	75% Gras	s cover, Go	ood, HSG A
		4,549	61 >	75% Gras	s cover, Go	ood, HSG B
_		2,496	80 >	75% Gras	s cover, Go	ood, HSG D
	1	06,355	41 V	Veighted A	verage	
	1	06,355	1	00.00% Pe	ervious Are	ea
	Тс	Length	Slope	Velocity	Capacity	Description
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	5.7	50	0.0200	0.15		Sheet Flow,
						Grass: Short n= 0.150 P2= 3.10"
	2.2	341	0.1400	2.62		Shallow Concentrated Flow,
_						Short Grass Pasture Kv= 7.0 fps
_	7.9	391	Total	_	_	

## Summary for Link DP-A: DESIGN POINT-A

Inflow Area = 43.758 ac, 0.00% Impervious, Inflow Depth = 1.40" for 25-year event

51.45 cfs @ 12.18 hrs, Volume= 5.110 af Inflow

Primary = 51.45 cfs @ 12.18 hrs, Volume= 5.110 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

#### Summary for Link DP-B: DESIGN POINT-B

Inflow Area =		22.499 ac,	0.00% Impervious,	Inflow Depth = 1.	.25" for 25-year event
Inflow	=	25.08 cfs @	12.12 hrs, Volume	= 2.339 af	-
Primary	=	25.08 cfs @	12.12 hrs, Volume	= 2.339 af	, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

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Type III 24-hr 100-year Rainfall=7.52"

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Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1A: PRE 1 Runoff Area=1,802,441 sf 0.00% Impervious Runoff Depth=2.46"

Flow Length=972' Tc=11.1 min CN=55 Runoff=94.53 cfs 8.487 af

Runoff Area=103,666 sf 0.00% Impervious Runoff Depth=1.05" Subcatchment2A: PRE 2

Flow Length=350' Tc=6.8 min CN=40 Runoff=1.73 cfs 0.208 af

Runoff Area=162,147 sf 0.00% Impervious Runoff Depth=1.31" Subcatchment3A: PRE 3

Flow Length=455' Tc=10.1 min CN=43 Runoff=3.59 cfs 0.406 af

Runoff Area=339,048 sf 0.00% Impervious Runoff Depth=2.46" Subcatchment4A: PRE 4 Flow Length=462' Tc=7.7 min CN=55 Runoff=19.79 cfs 1.596 af

Subcatchment5A: PRE 5 Runoff Area=372,514 sf 0.00% Impervious Runoff Depth=2.56"

Flow Length=441' Tc=6.0 min CN=56 Runoff=24.19 cfs 1.827 af

Runoff Area=106,355 sf 0.00% Impervious Runoff Depth=1.13" Subcatchment6A: PRE 6

Flow Length=391' Tc=7.9 min CN=41 Runoff=2.00 cfs 0.230 af

Link DP-A: DESIGN POINT-A Inflow=96.24 cfs 8.694 af

Primary=96.24 cfs 8.694 af

Link DP-B: DESIGN POINT-B Inflow=48.47 cfs 4.059 af

Primary=48.47 cfs 4.059 af

Total Runoff Area = 66.257 ac Runoff Volume = 12.753 af Average Runoff Depth = 2.31" 100.00% Pervious = 66.257 ac 0.00% Impervious = 0.000 ac

Type III 24-hr 100-year Rainfall=7.52"

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## Summary for Subcatchment 1A: PRE 1

94.53 cfs @ 12.17 hrs, Volume= Runoff 8.487 af, Depth= 2.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Area (sf) CN Description	
716,166 30 Woods, Good, HSG A	
114,129 39 >75% Grass cover, Good, HSG A	
13,867 96 Gravel surface, HSG A	
122,131 55 Woods, Good, HSG B	
79,410 61 >75% Grass cover, Good, HSG B	
13,218 96 Gravel surface, HSG B	
443,269 77 Woods, Good, HSG D	
281,024 80 >75% Grass cover, Good, HSG D	
19,227 96 Gravel surface, HSG D	
1,802,441 55 Weighted Average	
1,802,441 100.00% Pervious Area	
Tc Length Slope Velocity Capacity Description	
(min) (feet) (ft/ft) (ft/sec) (cfs)	
3.3 50 0.0800 0.25 <b>Sheet Flow,</b>	
Grass: Short n= 0.150 P2= 3.10"	
6.8 812 0.0800 1.98 Shallow Concentrated Flow,	
Short Grass Pasture Kv= 7.0 fps	
1.0 110 0.1400 1.87 <b>Shallow Concentrated Flow,</b>	
Woodland Kv= 5.0 fps	
11.1 972 Total	

#### Summary for Subcatchment 2A: PRE 2

1.73 cfs @ 12.15 hrs, Volume= 0.208 af, Depth= 1.05" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Area (sf)	CN	Description
40,069	30	Woods, Good, HSG A
48,855	39	>75% Grass cover, Good, HSG A
430 96 Gravel surface,		Gravel surface, HSG A
1,409 55 Woods,		Woods, Good, HSG B
9,106 61 >75% Grass		>75% Grass cover, Good, HSG B
611 96 Grave		Gravel surface, HSG B
3,186 80		>75% Grass cover, Good, HSG D
103,666	40	Weighted Average
103,666		100.00% Pervious Area

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Tc Length

(feet)

(min)

4.9

1.9

Type III 24-hr 100-year Rainfall=7.52"

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(ft/ft)

Slope Velocity

(ft/sec)

0.17

2.62

Capacity (cfs)	Description
	Sheet Flow, Grass: Short n= 0.150 P2= 3.10" Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps

#### 6.8 350 Total

50 0.0300

300 0.1400

## Summary for Subcatchment 3A: PRE 3

3.59 cfs @ 12.18 hrs, Volume= Runoff = 0.406 af, Depth= 1.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

	Α	rea (sf)	CN	Description			
_	117.833 30 Woods, Good, HSG A						
		2,183	39	>75% Gras	s cover, Go	ood, HSG A	
		981	96	Gravel surfa	ace, HSG A	<b>\</b>	
		33,839	77	Woods, Go	od, HSG D		
		5,631	80	>75% Gras	s cover, Go	ood, HSG D	
		1,680	96	Gravel surfa	ace, HSG D		
	162.147 43			Weighted A	verage		
	162,147 100			100.00% Pervious Area			
	Tc	Length	Slope	<ul><li>Velocity</li></ul>	Capacity	Description	
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
	7.5	50	0.0100	0.11		Sheet Flow,	
						Grass: Short n= 0.150 P2= 3.10"	
	2.6	405	0.1400	2.62		Shallow Concentrated Flow,	
_						Short Grass Pasture Kv= 7.0 fps	
	10.1	455	Total				

#### Summary for Subcatchment 4A: PRE 4

19.79 cfs @ 12.12 hrs, Volume= 1.596 af, Depth= 2.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

 Area (sf)	CN	Description
148,304	30	Woods, Good, HSG A
21,369	39	>75% Grass cover, Good, HSG A
6,659	96	Gravel surface, HSG A
155,855	77	Woods, Good, HSG D
6,241	80	>75% Grass cover, Good, HSG D
620	96	Gravel surface, HSG D
339,048 339,048	55	Weighted Average 100.00% Pervious Area

#### Type III 24-hr 100-year Rainfall=7.52"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	50	0.0300	0.17		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.10"
1.5	254	0.1700	2.89		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
0.4	36	0.1100	1.66		Shallow Concentrated Flow,
					Woodland Kv= 5.0 fps
0.9	122	0.1100	2.32		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
7.7	462	Total			

#### Summary for Subcatchment 5A: PRE 5

24.19 cfs @ 12.10 hrs, Volume= 1.827 af, Depth= 2.56" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

	Α	rea (sf)	CN	Description		
_		20,096	30	Woods, Go	od, HSG A	
	1	97,410	39	>75% Gras	s cover, Go	ood, HSG A
		5,312	96	Gravel surf	ace, HSG A	1
		8,370	77	Woods, Go	od, HSG D	
	1	38,407	80	>75% Gras	s cover, Go	ood, HSG D
_		2,919	96	Gravel surf	ace, HSG [	)
372,514 56 Weighted Average						
	3	72,514		100.00% P	ervious Are	a
	Tc	Length	Slope		Capacity	Description
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	3.7	50	0.0600	0.23		Sheet Flow,
						Grass: Short n= 0.150 P2= 3.10"
	2.3	391	0.1700	2.89		Shallow Concentrated Flow,
_						Short Grass Pasture Kv= 7.0 fps
	6.0	1/11	Total			

## Summary for Subcatchment 6A: PRE 6

2.00 cfs @ 12.16 hrs, Volume= 0.230 af, Depth= 1.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

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Type III 24-hr 100-year Rainfall=7.52"

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Α	rea (sf)	CN I	Description				
	99,310	39 :	>75% Gras	s cover, Go	ood, HSG A		
	4,549	61 :	>75% Gras	s cover, Go	ood, HSG B		
	2,496	80 :	>75% Gras	s cover, Go	ood, HSG D		
1	06,355	41 \	Neighted A	verage			
1	06,355		100.00% Pervious Area				
Tc	Length	Slope	Velocity	Capacity	Description		
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)			
5.7	50	0.0200	0.15		Sheet Flow,		
					Grass: Short n= 0.150 P2= 3.10"		
2.2	341	0.1400	2.62		Shallow Concentrated Flow,		
					Short Grass Pasture Kv= 7.0 fps		
7.9	301	Total					

## Summary for Link DP-A: DESIGN POINT-A

Inflow Are	ea =	43.758 ac,	0.00% Impervious,	Inflow Depth = 2.38'	for 100-year event
Inflow	=	96.24 cfs @	12.17 hrs, Volume=	8.694 af	•
Primary	=	96 24 cfs @	12 17 hrs Volume=	<ul> <li>8 694 af At</li> </ul>	tten= 0% Lag= 0.0 min

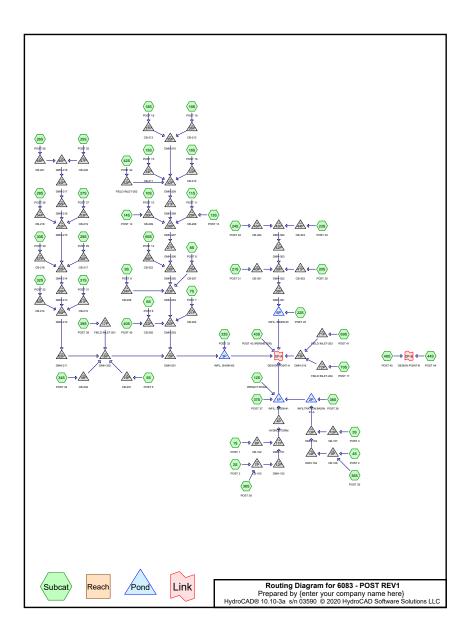
Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

## Summary for Link DP-B: DESIGN POINT-B

Inflow Area =		22.499 ac,	0.00% Impervious,	Inflow Depth = 2.	16" for 100-year event	
Inflow	=	48.47 cfs @	12.11 hrs, Volume	= 4.059 af	-	
Primary	=	48.47 cfs @	12.11 hrs. Volume	<ul> <li>4.059 af.</li> </ul>	Atten= 0%. Lag= 0.0 min	

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

# Appendix E - Proposed Conditions Hydrologic Calculations



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## **Rainfall Events Listing**

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-year	Type III 24-hr		Default	24.00	1	3.14	2
2	10-year	Type III 24-hr		Default	24.00	1	4.84	2
3	25-year	Type III 24-hr		Default	24.00	1	5.89	2
4	100-year	Type III 24-hr		Default	24.00	1	7.52	2

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Type III 24-hr 2-year Rainfall=3.14"

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Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

rtouch routing by otor mu	rane menea
Subcatchment1S: POST1	Runoff Area=4,483 sf 81.80% Impervious Runoff Depth=1.86" Tc=6.0 min CN=87 Runoff=0.22 cfs 0.016 af
Subcatchment2S: POST 2	Runoff Area=4,363 sf 81.46% Impervious Runoff Depth=1.86" Tc=6.0 min CN=87 Runoff=0.21 cfs 0.016 af
Subcatchment3S: POST 3	Runoff Area=5,733 sf 79.87% Impervious Runoff Depth=1.94" Tc=6.0 min CN=88 Runoff=0.29 cfs 0.021 af
Subcatchment4S: POST 4	Runoff Area=6,696 sf 82.11% Impervious Runoff Depth=2.03" Tc=6.0 min CN=89 Runoff=0.36 cfs 0.026 af
Subcatchment5S: POST 5	Runoff Area=1,758 sf 97.61% Impervious Runoff Depth=2.91" Tc=6.0 min CN=98 Runoff=0.12 cfs 0.010 af
Subcatchment6S: POST 6	Runoff Area=2,283 sf 100.00% Impervious Runoff Depth=2.91" Tc=6.0 min CN=98 Runoff=0.16 cfs 0.013 af
Subcatchment7S: POST7	Runoff Area=2,223 sf 100.00% Impervious Runoff Depth=2.91" Tc=6.0 min CN=98 Runoff=0.15 cfs 0.012 af
Subcatchment8S: POST 8	Runoff Area=2,941 sf 100.00% Impervious Runoff Depth=2.91" Tc=6.0 min CN=98 Runoff=0.20 cfs 0.016 af
Subcatchment9S: POST 9	Runoff Area=27,588 sf 31.21% Impervious Runoff Depth=1.05" Tc=11.0 min CN=75 Runoff=0.62 cfs 0.056 af
Subcatchment10S: POST 10	Runoff Area=65,188 sf 21.96% Impervious Runoff Depth=0.42" Flow Length=718' Tc=10.2 min CN=61 Runoff=0.38 cfs 0.052 af
Subcatchment11S: POST11	Runoff Area=3,352 sf 100.00% Impervious Runoff Depth=2.91" Tc=6.0 min CN=98 Runoff=0.23 cfs 0.019 af
Subcatchment12S: WRIGHT ROAD	Runoff Area=24,000 sf 100.00% Impervious Runoff Depth=2.91" Tc=6.0 min CN=98 Runoff=1.64 cfs 0.134 af
Subcatchment13S: POST13	Runoff Area=3,056 sf 100.00% Impervious Runoff Depth=2.91" Tc=6.0 min CN=98 Runoff=0.21 cfs 0.017 af
Subcatchment14S: POST14	Runoff Area=2,995 sf 100.00% Impervious Runoff Depth=2.91" Tc=6.0 min CN=98 Runoff=0.20 cfs 0.017 af
Subcatchment15S: POST15	Runoff Area=27,660 sf 44.08% Impervious Runoff Depth=1.78" Tc=6.0 min CN=86 Runoff=1.30 cfs 0.094 af
Subcatchment16S: POST16	Runoff Area=2,911 sf 100.00% Impervious Runoff Depth=2.91" Tc=6.0 min CN=98 Runoff=0.20 cfs 0.016 af

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11yd100AD@ 10:10-3a 3/1100330 @ 202011ydi	roCAD Software Solutions LLC	Page
Subcatchment18S: POST18	Runoff Area=17,479 sf 31.00% Impervious F Tc=6.0 min CN=86 Runof	
Subcatchment19S: POST 19	Runoff Area=1,672 sf 100.00% Impervious F Tc=6.0 min CN=98 Runof	
Subcatchment20S: POST 20	Runoff Area=15,797 sf 44.75% Impervious F Tc=6.0 min CN=88 Runof	
Subcatchment21S: POST 21	Runoff Area=29,809 sf 45.40% Impervious F Tc=6.0 min CN=88 Runof	
Subcatchment22S: POST 22	Runoff Area=75,352 sf 7.54% Impervious F Tc=6.0 min CN=80 Runof	
Subcatchment23S: POST 23	Runoff Area=17,079 sf 53.86% Impervious F Tc=6.0 min CN=90 Runof	
Subcatchment24S: POST 24	Runoff Area=14,367 sf 39.56% Impervious F Tc=6.0 min CN=87 Runof	
Subcatchment25S: POST 25	Runoff Area=22,287 sf 54.40% Impervious F Tc=6.0 min CN=90 Runof	
Subcatchment26S: POST 26	Runoff Area=7,993 sf 53.05% Impervious F Tc=6.0 min CN=90 Runof	
Subcatchment27S: POST 27	Runoff Area=3,003 sf 100.00% Impervious F Tc=6.0 min CN=98 Runof	Runoff Depth=2.91 f=0.21 cfs 0.017 a
Subcatchment28S: POST 28	Runoff Area=3,037 sf 100.00% Impervious F Tc=6.0 min CN=98 Runof	
Subcatchment29S: POST 29	Runoff Area=2,681 sf 100.00% Impervious F Tc=6.0 min CN=98 Runof	
Subcatchment30S: POST 30	Runoff Area=26,119 sf 46.16% Impervious F Tc=6.0 min CN=88 Runof	
Subcatchment31S: POST 31	Runoff Area=24,121 sf 53.48% Impervious F Tc=6.0 min CN=90 Runof	
Subcatchment32S: POST 32	Runoff Area=35,399 sf 37.89% Impervious F Tc=6.0 min CN=87 Runof	
Subcatchment33S: POST 33	Runoff Area=12,676 sf 72.55% Impervious F Tc=6.0 min CN=93 Runof	
Subcatchment34S: POST 34	Runoff Area=29,453 sf 45.13% Impervious F Tc=6.0 min CN=88 Runof	

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Subcatchment35S: POST 35	Runoff Area=14,637 sf 12.15% Impervious Runoff De Tc=6.0 min CN=61 Runoff=0.10 cfs	pth=0.42" s 0.012 af
Subcatchment36S: POST 36	Runoff Area=7,243 sf 0.00% Impervious Runoff De Tc=6.0 min CN=39 Runoff=0.00 cfs	
Subcatchment37S: POST 37	Runoff Area=13,313 sf 0.00% Impervious Runoff De Tc=6.0 min CN=48 Runoff=0.00 cfs	
Subcatchment38S: POST 38	Runoff Area=12,792 sf 0.00% Impervious Runoff De Tc=6.0 min CN=43 Runoff=0.00 cfs	
Subcatchment39S: POST 39	Runoff Area=10,871 sf 17.45% Impervious Runoff De Tc=6.0 min UI Adjusted CN=79 Runoff=0.37 cfs	
Subcatchment40S: POST 40	Runoff Area=11,225 sf 13.58% Impervious Runoff De Tc=6.0 min UI Adjusted CN=66 Runoff=0.15 cfs	
Subcatchment42S: POST 42	Runoff Area=119,594 sf 10.00% Impervious Runoff De Flow Length=598' Tc=9.3 min CN=81 Runoff=3.99 cfs	
Subcatchment43S: POST 43	Runoff Area=1,029,530 sf 0.73% Impervious Runoff De Flow Length=497' Tc=11.3 min CN=46 Runoff=0.15 cfs	
Subcatchment44S: POST 44	Runoff Area=445,393 sf 2.15% Impervious Runoff De Tc=6.0 min CN=54 Runoff=0.77 cfs	
Subcatchment46S: POST 45	Runoff Area=458,256 sf 0.70% Impervious Runoff De Tc=10.1 min CN=46 Runoff=0.07 cfs	
Subcatchment65S: POST 12	Runoff Area=46,393 sf 25.38% Impervious Runoff De Flow Length=529' Tc=8.6 min CN=68 Runoff=0.66 cfs	
Subcatchment69S: POST 41	Runoff Area=144,249 sf 1.36% Impervious Runoff De Flow Length=555' Tc=9.6 min CN=62 Runoff=0.99 cfs	
Subcatchment70S: POST 17	Runoff Area=71,092 sf 1.02% Impervious Runoff De Tc=6.0 min CN=50 Runoff=0.03 cfs	
Pond 1P: INFIL. BASIN#1 Discarded=0.4	Peak Elev=249.46' Storage=3,718 cf Inflow=2.07 cfs 17 cfs 0.167 af Primary=0.00 cfs 0.000 af Outflow=0.17 cfs	
Pond 2P: INFILTRATIONBASIN #1-A Discarded=0.4	Peak Elev=253.27' Storage=674 cf Inflow=0.74 cfs 15 cfs 0.059 af Primary=0.00 cfs 0.000 af Outflow=0.15 cfs	

Pond 3P: INFIL. BASIN#2

Pond 4P: HYDROSTORM

Peak Elev=268.13' Storage=26,259 cf Inflow=18.22 cfs 1.477 af

Peak Elev=246.17' Inflow=0.43 cfs 0.032 af

Discarded=0.55 cfs 0.497 af Primary=2.51 cfs 0.981 af Outflow=3.06 cfs 1.477 af

12.0" Round Culvert n=0.012 L=50.0' S=0.0160 '/' Outflow=0.43 cfs 0.032 af

Prepared by {enter your company name here} HydroCAD® 10.10-3a s/n 03590 © 2020 HydroCAD Software Solutions LLC Pond 6P: INFIL. BASIN#3 Peak Elev=315.57' Storage=11,380 cf Inflow=6.64 cfs 0.485 af Discarded=0.22 cfs 0.389 af Primary=0.27 cfs 0.096 af Outflow=0.49 cfs 0.485 af Pond 7P: CB-103 Peak Elev=248.18' Inflow=0.21 cfs 0.016 af 12.0" Round Culvert n=0.012 L=20.0' S=0.0050 '/' Outflow=0.21 cfs 0.016 af Pond 8P: CB-102 Peak Elev=247.06' Inflow=0.22 cfs 0.016 af 12.0" Round Culvert n=0.012 L=17.0' S=0.0176 '/' Outflow=0.22 cfs 0.016 af Peak Elev=258.88' Inflow=0.45 cfs 0.038 af Pond 9P: CB-106 12.0" Round Culvert n=0.012 L=10.0' S=0.0300 '/' Outflow=0.45 cfs 0.038 af Pond 10P: CB-107 Peak Elev=259.00' Inflow=0.29 cfs 0.021 af 12.0" Round Culvert n=0.012 L=57.0' S=0.0737 '/' Outflow=0.29 cfs 0.021 af Peak Elev=246.77' Inflow=0.43 cfs 0.032 af Pond 11P: DMH-101 12.0" Round Culvert n=0.012 L=47.0' S=0.0106 '/' Outflow=0.43 cfs 0.032 af Peak Elev=247.95' Inflow=0.21 cfs 0.016 af Pond 12P: DMH-102 12.0" Round Culvert n=0.012 L=113.0' S=0.0071 '/' Outflow=0.21 cfs 0.016 af Peak Elev=254.50' Inflow=0.74 cfs 0.059 af Pond 13P: DMH-103 12.0" Round Culvert n=0.012 L=77.0' S=0.0130 '/' Outflow=0.74 cfs 0.059 af Peak Elev=258.48' Inflow=0.45 cfs 0.038 af Pond 14P: DMH-104 12.0" Round Culvert n=0.012 L=91.0' S=0.0253 '/' Outflow=0.45 cfs 0.038 af Peak Elev=266.50' Inflow=17.45 cfs 1.420 af Pond 15P: DMH-201 36.0" Round Culvert n=0.012 L=41.0' S=0.0390'/ Outflow=17.45 cfs 1.420 af Pond 16P: DMH-202 Peak Elev=278.44' Inflow=8.65 cfs 0.638 af 24.0" Round Culvert n=0.012 L=77.0' S=0.0766 '/' Outflow=8.65 cfs 0.638 af Peak Elev=279.14' Inflow=0.37 cfs 0.027 af Pond 17P: FIELD INLET-201 12.0" Round Culvert n=0.012 L=46.0' S=0.0174 '/' Outflow=0.37 cfs 0.027 af Peak Elev=279.66' Inflow=1.50 cfs 0.109 af Pond 18P: CB-202 12.0" Round Culvert n=0.012 L=19.0' S=0.0474 '/' Outflow=1.50 cfs 0.109 af Pond 19P: CB-201 Peak Elev=278.69' Inflow=0.12 cfs 0.010 af 12.0" Round Culvert n=0.012 L=43.0' S=0.0116 '/' Outflow=0.12 cfs 0.010 af Peak Elev=278.00' Inflow=8.98 cfs 0.782 af Pond 20P: DMH-203 30.0" Round Culvert n=0.012 L=70.0' S=0.0871 '/' Outflow=8.98 cfs 0.782 af Peak Elev=280.31' Inflow=0.15 cfs 0.012 af Pond 21P: CB-204 12.0" Round Culvert n=0.012 L=20.0' S=0.0550 '/' Outflow=0.15 cfs 0.012 af Peak Elev=280.40' Inflow=0.30 cfs 0.026 af Pond 22P: CB-205 12.0" Round Culvert n=0.012 L=33.0' S=0.0333 '/' Outflow=0.30 cfs 0.026 af

Type III 24-hr 2-year Rainfall=3.14"

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Type III 24-hr 2-year Rainfall=3.14"

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Pond 23P: DMH-204	Peak Elev=278.88' Inflow=8.55 cfs 0.744 af 30.0" Round Culvert n=0.012 L=192.0' S=0.0042'/ Outflow=8.55 cfs 0.744 af
Pond 24P: CB-206	Peak Elev=281.96' Inflow=0.62 cfs 0.056 af 24.0" Round Culvert n=0.012 L=16.0' S=0.0188 '/' Outflow=0.62 cfs 0.056 af
Pond 25P: CB-207	Peak Elev=281.85' Inflow=0.20 cfs 0.016 af 12.0" Round Culvert n=0.012 L=16.0' S=0.0188 '/' Outflow=0.20 cfs 0.016 af
Pond 26P: DMH-205	Peak Elev=279.54' Inflow=7.79 cfs 0.672 at 30.0" Round Culvert n=0.012 L=151.0' S=0.0040'/ Outflow=7.79 cfs 0.672 at
Pond 27P: DMH-206	Peak Elev=280.25' Inflow=7.15 cfs 0.609 at 30.0" Round Culvert n=0.012 L=168.0' S=0.0042'/ Outflow=7.15 cfs 0.609 at
Pond 28P: DMH-207	Peak Elev=281.43' Inflow=7.15 cfs 0.609 at 30.0" Round Culvert n=0.012 L=268.0' S=0.0041'/' Outflow=7.15 cfs 0.609 at
Pond 29P: CB-208	Peak Elev=282.57' Inflow=0.44 cfs 0.036 at 12.0" Round Culvert n=0.012 L=14.0' S=0.0143 '/' Outflow=0.44 cfs 0.036 at
ond 30P: CB-209	Peak Elev=282.58' Inflow=0.51 cfs 0.069 at 15.0" Round Culvert n=0.012 L=14.0' S=0.0143 '/' Outflow=0.51 cfs 0.069 at
Pond 31P: DMH-208	Peak Elev=284.76' Inflow=6.27 cfs 0.505 at 24.0" Round Culvert n=0.012 L=165.0' S=0.0170 '/' Outflow=6.27 cfs 0.505 at
Pond 32P: DMH-209	Peak Elev=297.66' Inflow=6.27 cfs 0.505 at 24.0" Round Culvert n=0.012 L=150.0' S=0.0853 '/' Outflow=6.27 cfs 0.505 af
Pond 33P: CB-210	Peak Elev=298.25' Inflow=0.20 cfs 0.016 at 12.0" Round Culvert n=0.012 L=12.0' S=0.0250 '/' Outflow=0.20 cfs 0.016 at
Pond 34P: CB-211	Peak Elev=298.69' Inflow=1.30 cfs 0.094 at 12.0" Round Culvert n=0.012 L=12.0' S=0.0250 '/' Outflow=1.30 cfs 0.094 at
ond 35P: DMH-210	Peak Elev=316.17' Inflow=0.94 cfs 0.069 at 12.0" Round Culvert n=0.012 L=322.0' S=0.0565 '/' Outflow=0.94 cfs 0.069 at
ond 36P: CB-212	Peak Elev=316.18' Inflow=0.11 cfs 0.009 at 12.0" Round Culvert n=0.012 L=13.0' S=0.0231'/' Outflow=0.11 cfs 0.009 at
ond 37P: CB-213	Peak Elev=316.53' Inflow=0.82 cfs 0.060 at 12.0" Round Culvert n=0.012 L=13.0' S=0.0231'/ Outflow=0.82 cfs 0.060 at
Pond 38P: DMH-301	Peak Elev=317.01' Inflow=3.97 cfs 0.290 at 18.0" Round Culvert n=0.012 L=71.0' S=0.0549 '/' Outflow=3.97 cfs 0.290 at
Pond 39P: DMH-302	Peak Elev=320.31' Inflow=3.97 cfs 0.290 a

18.0" Round Culvert n=0.012 L=154.0' S=0.0208'/ Outflow=3.97 cfs 0.290 af

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Pond 40P: CB-301	Peak Elev=320.77' Inflow=1.52 cfs 0.111 at 12.0" Round Cuivert n=0.012 L=12.0' S=0.0250 '/' Outflow=1.52 cfs 0.111 at	
Pond 41P: CB-302	Peak Elev=320.52' Inflow=0.81 cfs 0.059 at 12.0" Round Culvert n=0.012 L=12.0' S=0.0250 '/' Outflow=0.81 cfs 0.059 at	
Pond 42P: DMH-303	Peak Elev=328.71' Inflow=1.65 cfs  0.120 at 12.0" Round Culvert n=0.012 L=129.0' S=0.0636 '/' Outflow=1.65 cfs  0.120 at	
Pond 43P: DMH-304	Peak Elev=336.71' Inflow=1.65 cfs  0.120 at 12.0" Round Culvert n=0.012 L=129.0' S=0.0612 '/' Outflow=1.65 cfs  0.120 at	
Pond 44P: CB-303	Peak Elev=336.97' Inflow=0.94 cfs  0.069 at 12.0" Round Culvert n=0.012 L=17.0' S=0.0235 '/' Outflow=0.94 cfs  0.069 at	
Pond 45P: CB-304	Peak Elev=336.88' Inflow=0.70 cfs 0.051 at 12.0" Round Cuivert n=0.012 L=16.0' S=0.0250 '/' Outflow=0.70 cfs 0.051 at	
Pond 46P: DMH-218	Peak Elev=332.92' Inflow=1.67 cfs 0.122 at 12.0" Round Culvert n=0.012 L=81.0' S=0.0481 '/' Outflow=1.67 cfs 0.122 at	
Pond 47P: CB-220	Peak Elev=333.17' Inflow=1.23 cfs 0.090 at 12.0" Round Culvert n=0.012 L=15.0' S=0.0200 '/' Outflow=1.23 cfs 0.090 at	
Pond 48P: CB-221	Peak Elev=332.87' Inflow=0.44 cfs 0.032 at 12.0" Round Culvert n=0.012 L=9.0' S=0.0333 '/' Outflow=0.44 cfs 0.032 at	
Pond 49P: DMH-217	Peak Elev=328.92' Inflow=1.67 cfs 0.122 at 12.0" Round Culvert n=0.012 L=147.0' S=0.0463 '/' Outflow=1.67 cfs 0.122 at	
Pond 50P: DMH-216	Peak Elev=322.02' Inflow=1.67 cfs 0.122 at 12.0" Round Culvert n=0.012 L=118.0' S=0.0263 '/' Outflow=1.67 cfs 0.122 at	
Pond 52P: DMH-215	Peak Elev=318.72' Inflow=2.08 cfs 0.156 at 15.0" Round Culvert n=0.012 L=247.0' S=0.0320 '/' Outflow=2.08 cfs 0.156 at	
Pond 53P: CB-219	Peak Elev=318.65' Inflow=0.21 cfs 0.017 at 12.0" Round Cuivert n=0.012 L=21.0' S=0.0143 '/' Outflow=0.21 cfs 0.017 at	
Pond 54P: CB-218	Peak Elev=318.65' Inflow=0.21 cfs 0.017 at 12.0" Round Culvert n=0.012 L=19.0' S=0.0158 '/' Outflow=0.21 cfs 0.017 at	
Pond 55P: DMH-214	Peak Elev=310.84' Inflow=3.60 cfs  0.268 at 18.0" Round Culvert n=0.012 L=95.0' S=0.0442 '/' Outflow=3.60 cfs  0.268 at	
Pond 56P: CB-217	Peak Elev=312.43' Inflow=0.18 cfs 0.015 at 12.0" Round Culvert n=0.012 L=20.0' S=0.0150 '/' Outflow=0.18 cfs 0.015 at	
Pond 57P: CB-216	Peak Elev=312.90' Inflow=1.33 cfs  0.097 at 12.0" Round Culvert n=0.012 L=11.0' S=0.0273 '/' Outflow=1.33 cfs  0.097 at	

6083 - POST REV1 Prepared by {enter your cor	Type III 24-hr 2-year Rainf.	all=3.14"
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Pond 58P: DMH-213	Peak Elev=306.54' Inflow=3.60 cfs 18.0" Round Culvert n=0.012 L=226.0' S=0.0677 '/' Outflow=3.60 cfs	
Pond 59P: DMH-212	Peak Elev=291.00' Inflow=6.66 cfs 24.0" Round Culvert n=0.012 L=91.0' S=0.0626 '/' Outflow=6.66 cfs	
Pond 60P: CB-214	Peak Elev=291.34' Inflow=1.74 cfs 12.0" Round Culvert n=0.012 L=10.0' S=0.0300 '/' Outflow=1.74 cfs	
Pond 61P: CB-215	Peak Elev=291.20' Inflow=1.33 cfs 12.0" Round Culvert n=0.012 L=19.0' S=0.0158 '/' Outflow=1.33 cfs	
Pond 62P: DMH-211	$\label{eq:peak_elev} Peak \ Elev=285.20' \ \ Inflow=6.66 \ cfs \\ 24.0" \ \ Round \ \ Culvert \ \ n=0.012 \ \ L=144.0' \ \ S=0.0479 \ \ '' \ \ Outflow=6.66 \ cfs \\$	
Pond 63P: FIELD INLET-202	$\label{eq:peak_elev} Peak Elev=301.77'  Inflow=3.99 \; cfs \\ 24.0" \; Round \; Culvert \;\; n=0.012 \;\; L=137.0' \;\; S=0.0226 \; 'l'  Outflow=3.99 \; cfs \\ 24.0" \;\; Round \;\; Culvert \;\; n=0.012 \;\; L=137.0' \;\; S=0.0226 \; l' \;\; Outflow=3.99 \; cfs \\ 24.0" \;\; Round \;\; Culvert \;\; n=0.012 \;\; L=137.0' \;\; S=0.0226 \; l' \;\; Outflow=3.99 \; cfs \\ 24.0" \;\; Round \;\; Culvert \;\; n=0.012 \;\; L=137.0' \;\; S=0.0226 \; l' \;\; Outflow=3.99 \; cfs \\ 24.0" \;\; Round \;\; Culvert \;\; n=0.012 \;\; L=137.0' \;\; S=0.0226 \; l' \;\; Outflow=3.99 \; cfs \\ 24.0" \;\; Round \;\; Culvert \;\; n=0.012 \;\; L=137.0' \;\; S=0.0226 \; l' \;\; Outflow=3.99 \; cfs \\ 24.0" \;\; Round \;\; Culvert \;\; n=0.012 \;\; L=137.0' \;\; S=0.0226 \; l' \;\; Outflow=3.99 \; cfs \\ 24.0" \;\; Round \;\;\; Round \;\; Round \;\; Round \;\; Round \;\;\; Round \;\; Round \;\;\; Round \;\; Round \;\; Round \;\;\; Round \;\; $	
Pond 66P: CB-222	Peak Elev=282.87' Inflow=0.66 cfs 12.0" Round Culvert n=0.012 L=29.0' S=0.0207 '/' Outflow=0.66 cfs	
Pond 71P: FIELD INLET-203	Peak Elev=279.30' Inflow=0.99 cfs 18.0" Round Culvert n=0.012 L=28.0' S=0.0821 '/' Outflow=0.99 cfs	
Pond 72P: FIELD INLET-204	Peak Elev=278.88' Inflow=0.03 cfs 18.0" Round Culvert n=0.012 L=50.0' S=0.0460 '/' Outflow=0.03 cfs	
Pond 73P: DMH-219	Peak Elev=276.50' Inflow=0.99 cfs 18.0" Round Culvert n=0.012 L=86.0' S=0.0465 '/' Outflow=0.99 cfs	
Link DP-A: DESIGN POINT-A	Inflow=3.28 cfs Primary=3.28 cfs	

Link DP-B: DESIGN POINT-B

Total Runoff Area = 66.808 ac Runoff Volume = 2.650 af Average Runoff Depth = 0.48" 90.24% Pervious = 60.287 ac 9.76% Impervious = 6.520 ac

Inflow=0.77 cfs 0.220 af

Primary=0.77 cfs 0.220 af

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Type III 24-hr 2-year Rainfall=3.14"

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## Summary for Subcatchment 1S: POST 1

Runoff = 0.22 cfs @ 12.09 hrs, Volume= 0.016 af, Depth= 1.86"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

A	rea (sf)	CN	Description							
	3,667	98	Paved parking, HSG A							
	816	39	>75% Gras	s cover, Go	ood, HSG A					
	4,483	87	Weighted A	Weighted Average						
	816		18.20% Per	vious Area						
	3,667		81.80% Impervious Area							
Tc	Length	Slop		Capacity	Description					
(min)	(feet)	(ft/fi	) (ft/sec)	(cfs)						
6.0					Direct Entry,					

## Summary for Subcatchment 2S: POST 2

0.21 cfs @ 12.09 hrs, Volume= Runoff = 0.016 af, Depth= 1.86"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Α	rea (sf)	CN	Description							
	3,554	98	Paved parking, HSG A							
	809	39	>75% Gras	s cover, Go	ood, HSG A					
	4,363	87	Weighted A	Weighted Average						
	809		18.54% Per	vious Area						
	3,554		81.46% Impervious Area							
Tc	Length	Slop	e Velocity	Capacity	Description					
(min)	(feet)	(ft/fi	t) (ft/sec)	(cfs)						
6.0					Direct Entry.					

## Summary for Subcatchment 3S: POST 3

Runoff = 0.29 cfs @ 12.09 hrs, Volume= 0.021 af, Depth= 1.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Type III 24-hr 2-year Rainfall=3.14"

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Α	rea (sf)	CN	Description					
	3.947	98	Paved park	ina. HSG A	\			
	908	39			ood, HSG A			
	632	98	Paved park	ing, HSG D	)			
	246	80	>75% Gras	s cover, Go	ood, HSG D			
	5,733	88	Weighted Average					
	1,154		20.13% Pervious Area					
	4,579		79.87% Impervious Area					
Tc	Length	Slope		Capacity	Description			
(min)	(feet)	(ft/ft	) (ft/sec)	(cfs)				
6.0					Direct Entry,			

## Summary for Subcatchment 4S: POST 4

Runoff 0.36 cfs @ 12.09 hrs, Volume= 0.026 af, Depth= 2.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Α	rea (sf)	CN	Description						
	3,254	98	Paved park	ing, HSG A	A				
	879	39	>75% Ġras	s cover, Go	Good, HSG A				
	2,244	98	Paved park	ing, HSG D	D				
	319	80	>75% Ġras	s cover, Go	Good, HSG D				
	6,696	89	Weighted Average						
	1,198		17.89% Pervious Area						
	5,498		82.11% Impervious Area						
Tc	Length	Slope	Velocity	Capacity	/ Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
6.0					Direct Entry,				

## Summary for Subcatchment 5S: POST 5

0.12 cfs @ 12.09 hrs, Volume= 0.010 af, Depth= 2.91" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Area	(sf)	CN	Description			
	509	98	Paved parking, HSG A			
1,	207	98	Paved parking, HSG D			
	42	80	>75% Grass cover, Good, HSG D			
1,	758	98	Weighted Average			
	42		2.39% Pervious Area			
1.	716		97.61% Impervious Area			

#### 6083 - POST REV1

Type III 24-hr 2-year Rainfall=3.14"

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

## Summary for Subcatchment 6S: POST 6

0.16 cfs @ 12.09 hrs, Volume= 0.013 af, Depth= 2.91" Runoff =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

	Α	rea (sf)	CN [	Description						
		2,283	98 F	Paved parking, HSG A						
		2,283	1	100.00% Impervious Area						
	-		01		0 "	B				
		Length			Capacity	Description				
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	6.0					Direct Entry,				

#### Summary for Subcatchment 7S: POST 7

0.15 cfs @ 12.09 hrs, Volume= Runoff 0.012 af, Depth= 2.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

A	rea (sf)	CN	Description					
	2,223	98	98 Paved parking, HSG A					
	2,223		100.00% Impervious Area					
Tc	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
6.0					Direct Entry,			

#### **Summary for Subcatchment 8S: POST 8**

Runoff 0.20 cfs @ 12.09 hrs, Volume= 0.016 af. Depth= 2.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Area (sf)	CN	Description
2,941	98	Paved parking, HSG A
2,941		100.00% Impervious Area

Type III 24-hr 2-year Rainfall=3.14"

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

## Summary for Subcatchment 9S: POST 9

Runoff = 0.62 cfs @ 12.17 hrs, Volume= 0.056 af, Depth= 1.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Area (sf	) CN	Description						
2,700	98	Roofs, HSG D						
12,01	3 80	>75% Grass cover, Good, HSG D	>75% Grass cover, Good, HSG D					
2,27	1 98	Roofs, HSG A						
3,63	98	Paved parking, HSG A						
6,96	39	>75% Grass cover, Good, HSG A						
27,58	8 75	75 Weighted Average						
18,97	9	68.79% Pervious Area						
8,609	8,609 31.21% Impervious Area							
Tc Leng (min) (fee								
11.0		Direct Entry,						

#### Summary for Subcatchment 10S: POST 10

Runoff 0.38 cfs @ 12.21 hrs, Volume= 0.052 af, Depth= 0.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Area (sf)	CN	Description
2,999	98	Roofs, HSG D
1,658	98	Paved parking, HSG D
413	98	Unconnected pavement, HSG D
16,156	80	>75% Grass cover, Good, HSG D
4,870	98	Roofs, HSG A
3,489	98	Paved parking, HSG A
886	98	Unconnected pavement, HSG A
28,402	39	>75% Grass cover, Good, HSG A
6,315	30	Woods, Good, HSG A
65,188	61	Weighted Average
50,873		78.04% Pervious Area
14,315		21.96% Impervious Area
1,299		9.07% Unconnected

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Type III 24-hr 2-year Rainfall=3.14"

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	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
_	3.7	50	0.0600	0.23		Sheet Flow,
						Grass: Short n= 0.150 P2= 3.10"
	1.6	205	0.0900	2.10		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	0.7	53	0.0700	1.32		Shallow Concentrated Flow,
						Woodland Kv= 5.0 fps
	1.8	152	0.0400	1.40		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	2.4	258	0.0080	1.82		Shallow Concentrated Flow,
_						Paved Kv= 20.3 fps
	10.2	718	Total			

## Summary for Subcatchment 11S: POST 11

0.23 cfs @ 12.09 hrs, Volume= 0.019 af, Depth= 2.91" Runoff =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

A	rea (sf)	CN I	Description					
	3,352	98	B Paved parking, HSG A					
	3,352		100.00% Impervious Area					
Tc	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	<u>'</u>			
6.0					Direct Entry.			

## Summary for Subcatchment 12S: WRIGHT ROAD

1.64 cfs @ 12.09 hrs, Volume= 0.134 af, Depth= 2.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Area (sf)	CN	Description				
24,000	98	98 Paved parking, HSG A				
24,000		100.00% In	pervious A	Area		
Tc Length (min) (feet)	Slop (ft/f	,	Capacity (cfs)	Description		
6.0				Direct Entry,		

Type III 24-hr 2-year Rainfall=3.14"

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## Summary for Subcatchment 13S: POST 13

Runoff 0.21 cfs @ 12.09 hrs, Volume= 0.017 af, Depth= 2.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

A	rea (sf)	CN I	CN Description					
	3,056	98 I	Paved parking, HSG A					
	3,056		100.00% Impervious Area					
Tc _(min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description			
6.0			•		Direct Entry,			

#### Summary for Subcatchment 14S: POST 14

0.20 cfs @ 12.09 hrs, Volume= 0.017 af, Depth= 2.91" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

A	rea (sf)	CN	N Description						
	2,995	98	Paved parking, HSG A						
	2,995		100.00% Impervious Area						
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
6.0	(.001)	(1010)	(12000)	(0.0)	Direct Entry.				

## Summary for Subcatchment 15S: POST 15

Runoff 1.30 cfs @ 12.09 hrs, Volume= 0.094 af, Depth= 1.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Area (sf)	CN	Description
2,736	98	Roofs, HSG D
7,798	98	Paved parking, HSG D
162	98	Unconnected pavement, HSG D
14,432	80	>75% Grass cover, Good, HSG D
1,051	98	Paved parking, HSG A
445	98	Unconnected pavement, HSG A
1,036	39	>75% Grass cover, Good, HSG A
27,660	86	Weighted Average
15,468		55.92% Pervious Area
12,192		44.08% Impervious Area
607		4.98% Unconnected

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Type III 24-hr 2-year Rainfall=3.14"

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Slope Velocity Capacity Description (min) (feet) (ft/ft) (ft/sec) (cfs) Direct Entry, 6.0

#### Summary for Subcatchment 16S: POST 16

Runoff = 0.20 cfs @ 12.09 hrs, Volume= 0.016 af, Depth= 2.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

	Α	rea (sf)	CN	Description							
		921	98	Paved park	Paved parking, HSG A						
		1,990	98	Paved park	Paved parking, HSG D						
		2,911	98	Weighted A	Weighted Average						
		2,911		100.00% Impervious Area							
	Tc	Length	Slop	,	Capacity	Description					
_	(min)	(feet)	(ft/f	t) (ft/sec)	(cfs)						
	6.0					Direct Entry,					

#### Summary for Subcatchment 18S: POST 18

0.82 cfs @ 12.09 hrs, Volume= Runoff 0.060 af, Depth= 1.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

_									
Are	a (sf) C	<u>N D</u>	Description						
•	1,536 9	98 R	oofs, HSG	D					
3	3,103 9	98 P	aved parki	ng, HSG D					
	780 9	98 U	nconnecte	d pavemer	nt, HSG D				
12	2,060 8	30 >	75% Grass	cover, Go	od, HSG D				
17	7,479 8	36 W	Weighted Average						
12	2,060	6	9.00% Per	vious Area					
	5,419	3	1.00% Imp	ervious Are	ea				
	780	1	4.39% Und	onnected					
<b>T</b> . 1		SI	\/-I!4.	0	December				
		Slope							
(min)	(feet)	(ft/ft)	t) (ft/sec) (cfs)						
6.0					Direct Entry,				

## Summary for Subcatchment 19S: POST 19

Runoff = 0.11 cfs @ 12.09 hrs, Volume= 0.009 af, Depth= 2.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Type III 24-hr 2-year Rainfall=3.14"

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A	rea (sf)	CN I	Description					
	1,672	98 F	Paved parking, HSG D					
	1,672	•	100.00% Impervious Area					
_								
Tc	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
6.0	•				Direct Entry,			

## Summary for Subcatchment 20S: POST 20

Runoff = 0.81 cfs @ 12.09 hrs, Volume= 0.059 af, Depth= 1.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Ar	ea (sf)	CN	Description					
	836	98	Roofs, HSC	G D				
	3,970	98	Paved park	ing, HSG D	)			
	1,008	98	Unconnecte	ed roofs, HS	SG D			
	8,728	80	>75% Gras	s cover, Go	ood, HSG D			
	1,255	98	Unconnecte	Unconnected pavement, HSG D				
	15,797	88	Weighted Average					
	8,728		55.25% Per	rvious Area				
	7,069		44.75% Imp	pervious Ar	ea			
	2,263		32.01% Un	connected				
_								
Tc	Length	Slope		Capacity	Description			
(min)	(feet)	(ft/ft	) (ft/sec)	(cfs)				
6.0					Direct Entry,			

#### Summary for Subcatchment 21S: POST 21

Runoff 1.52 cfs @ 12.09 hrs, Volume= 0.111 af, Depth= 1.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

A	rea (sf)	CN	Description				
,	4,656	98	Roofs, HSC	D D			
	8,878	98	Paved park	ing, HSG D	D		
	16,275	80	>75% Ġras	s cover, Go	ood, HSG D		
	29,809	88	Weighted Average				
	16,275		54.60% Pe	vious Area	a		
	13,534		45.40% lm	ervious Ar	rea		
Tc	Length	Slope	,	Capacity	Description		
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)			
6.0					Direct Entry,		

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Type III 24-hr 2-year Rainfall=3.14"

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## Summary for Subcatchment 22S: POST 22

2.67 cfs @ 12.10 hrs, Volume= 0.195 af, Depth= 1.36" Runoff =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

	Ar	ea (sf)	CN	Description						
		5,682	98	Roofs, HSG	D D					
	4	47,489	80	>75% Grass	s cover, Go	ood, HSG D				
	2	20,927	77	Woods, Go	od, HSG D					
		1,254	30	Woods, Go	od, HSG A					
	7	75,352	80	Weighted Average						
	(	69,670		92.46% Per	vious Area					
		5,682		7.54% Impe	ervious Area	a				
(n	Tc nin)	Length (feet)	Slop (ft/f		Capacity (cfs)	Description				
	6.0					Direct Entry,				

## Summary for Subcatchment 23S: POST 23

0.94 cfs @ 12.09 hrs, Volume= 0.069 af, Depth= 2.11" Runoff =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

A	rea (sf)	CN	Description	Description					
	2,928	98	Roofs, HSG	D D					
	6,271	98	Paved park	ing, HSG D	)				
	7,880	80	>75% Gras	s cover, Go	od, HSG D				
	17,079	90	Weighted A	verage					
	7,880		46.14% Per	46.14% Pervious Area					
	9,199		53.86% Imp	ervious Ar	ea				
Tc	Length	Slop	e Velocity	Capacity	Description				
(min)	(feet)	(ft/f	,	(cfs)	2000р				
6.0	. /		<i></i>	` '	Direct Entry,				

#### Summary for Subcatchment 24S: POST 24

Runoff = 0.70 cfs @ 12.09 hrs, Volume= 0.051 af, Depth= 1.86"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Type III 24-hr 2-year Rainfall=3.14"

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Area (sf)	CN	Description						
1,299	98	Roofs, HSC	G D					
3,427	98	Paved park	ing, HSG D					
957	98	Unconnecte	ed pavemei	nt, HSG D				
8,684	80	>75% Gras	s cover, Go	ood, HSG D				
14,367	87	Weighted A	Weighted Average					
8,684		60.44% Pe	rvious Area					
5,683		39.56% Imp	pervious Ar	ea				
957		16.84% Un	connected					
Tc Length			Capacity	Description				
(min) (feet)	) (ft/	ft) (ft/sec)	t) (ft/sec) (cfs)					
6.0				Direct Entry,				

#### Summary for Subcatchment 25S: POST 25

Runoff = 1.23 cfs @ 12.09 hrs, Volume= 0.090 af, Depth= 2.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Area (sf)	CN	Description	Description				
2,925	98	Roofs, HSG	D				
8,071	98	Paved parki	ng, HSG D	D			
1,128	98	Unconnecte	d pavemer	ent, HSG D			
10,163	80	>75% Grass	cover, Go	Good, HSG D			
22,287	90	Weighted Av	Weighted Average				
10,163	}	45.60% Pen	vious Area	a			
12,124	ļ	54.40% Imp	ervious Ar	rea			
1,128	1	9.30% Unco	nnected				
<b>-</b>	. 0.			D			
Tc Lengt			Capacity				
(min) (feet	t) (ft/	ft) (ft/sec)	(cfs)				
6.0				Direct Entry,			

#### Summary for Subcatchment 26S: POST 26

Runoff = 0.44 cfs @ 12.09 hrs, Volume= 0.032 af, Depth= 2.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Area (sf)	CN	Description				
468	98	Roofs, HSG D				
3,772	98	Paved parking, HSG D				
3,753	80	>75% Grass cover, Good, HSG D				
7,993	90	Weighted Average				
3,753		46.95% Pervious Area				
4,240		53.05% Impervious Area				

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Type III 24-hr 2-year Rainfall=3.14"

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

## Summary for Subcatchment 27S: POST 27

Runoff = 0.21 cfs @ 12.09 hrs, Volume= 0.017 af, Depth= 2.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

A	rea (sf)	CN I	N Description					
	3,003	98	8 Paved parking, HSG D					
	3,003		100.00% Impervious Area					
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description			
6.0					Direct Entry,			

#### Summary for Subcatchment 28S: POST 28

Runoff = 0.21 cfs @ 12.09 hrs, Volume= 0.017 af, Depth= 2.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

A	rea (sf)	CN	Description							
	3,037	98	Paved park	Paved parking, HSG D						
	3,037		100.00% Impervious Area							
Tc (min)	Length (feet)	Slope (ft/ft)		Capacity (cfs)	Description					
6.0					Direct Entry,					

#### Summary for Subcatchment 29S: POST 29

Runoff = 0.18 cfs @ 12.09 hrs, Volume= 0.015 af, Depth= 2.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Area (sf)	CN	Description
2,681	98	Paved parking, HSG D
2,681		100.00% Impervious Area

Type III 24-hr 2-year Rainfall=3.14"

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

## Summary for Subcatchment 30S: POST 30

Runoff = 1.33 cfs @ 12.09 hrs, Volume= 0.097 af, Depth= 1.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Ar	rea (sf)	CN	Description		
	3,210	98	Roofs, HSC	D D	
	8,847	98	Paved park	ing, HSG D	D
	14,062	80	>75% Gras	s cover, Go	Good, HSG D
	26,119	88	Weighted A	verage	
	14,062		53.84% Pe	rvious Area	a
	12,057		46.16% Imp	pervious Ar	ırea
_					
Tc	Length	Slop	,	Capacity	
(min)	(feet)	(ft/ft	) (ft/sec)	(cfs)	
6.0					Direct Entry.

#### Summary for Subcatchment 31S: POST 31

1.33 cfs @ 12.09 hrs, Volume= Runoff 0.098 af, Depth= 2.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

A	rea (sf)	CN	Description					
	3,204	98	Roofs, HSC	G D				
	8,044	98	Paved park	ing, HSG D	)			
	1,652	98	Unconnecte	ed pavemei	nt, HSG D			
	11,221	80	>75% Gras	s cover, Go	ood, HSG D			
	24,121	90	Weighted A	verage				
	11,221		46.52% Pe	rvious Area	ı			
	12,900		53.48% Imp	pervious Ar	ea			
	1,652		12.81% Un	connected				
Тс	Length	Slope	) Volocity	Canacity	Description			
(min)	(feet)	(ft/ft	, , , ,					
-	(leet)	(11/11	) (II/Sec)	(CIS)				
6.0					Direct Entry,			

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Type III 24-hr 2-year Rainfall=3.14"

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## Summary for Subcatchment 32S: POST 32

1.74 cfs @ 12.09 hrs, Volume= Runoff = 0.126 af, Depth= 1.86"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Are	a (sf)	CN	Description							
4	1,350	98	Roofs, HSG D							
(	9,063	98	Paved parking, HSG D							
2	1,986	80	>75% Gras	s cover, Go	od, HSG D					
35	5,399	87	Weighted A	verage						
2	1,986		62.11% Per	vious Area						
13	3,413		37.89% Imp	pervious Are	ea					
			·							
Tc L	ength	Slope	e Velocity Capacity Description							
(min)	(feet)	(ft/ft	) (ft/sec)	(ft/sec) (cfs)						
6.0			Direct Entry							

## Summary for Subcatchment 33S: POST 33

0.77 cfs @ 12.09 hrs, Volume= 0.058 af, Depth= 2.39" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

	Α	rea (sf)	CN	Description							
		1,908	98	Roofs, HSG D							
		6,727	98	Paved parking, HSG D							
		456	98	Unconnecte	ed pavemer	nt, HSG D					
		106	98	Paved park	ing, HSG A						
_		3,479	80	>75% Gras	s cover, Go	ood, HSG D					
		12,676	93	Weighted A	verage						
		3,479		27.45% Per	vious Area						
		9,197		72.55% Imp	ervious Ar	ea					
		456		4.96% Unco	onnected						
	Tc	Length	Slop	pe Velocity Capacity Description							
	(min)	(feet)	(ft/ft	(ft/sec) (cfs)							
	6.0			Direct Entry,							

#### Summary for Subcatchment 34S: POST 34

1.50 cfs @ 12.09 hrs, Volume= 0.109 af, Depth= 1.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

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A	rea (sf)	CN I	Description						
	3,227	98 F	Roofs, HSG	B D					
	10,066	98 F	Paved park	ing, HSG D	D				
	16,160	80 >	75% Gras	s cover, Go	ood, HSG D				
	29,453	88 \	Veighted A	verage					
	16,160		54.87% Pei	vious Area	a				
	13,293	4	15.13% Imp	ervious Ar	rea				
Tc	Length	Slope	pe Velocity Capacity Description						
(min)	(feet)	(ft/ft)	(ft/sec) (cfs)						
6.0					Direct Entry,				

#### Summary for Subcatchment 35S: POST 35

Runoff = 0.10 cfs @ 12.13 hrs, Volume= 0.012 af, Depth= 0.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

A	rea (sf)	CN	Description					
	5,253	80	>75% Gras	s cover, Go	lood, HSG D			
	7,605	39	>75% Gras	s cover, Go	lood, HSG A			
	1,779	98	Roofs, HSC	S D				
	14,637	61	Weighted A	verage				
	12,858		87.85% Pe	rvious Area	a			
	1,779		12.15% Imp	pervious Ar	rea			
_								
Tc	Length	Slop		Capacity	Description			
(min)	(feet)	(ft/ft	) (ft/sec)	(cfs)				
6.0					Direct Entry,			

#### Summary for Subcatchment 36S: POST 36

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

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

	A	rea (sf)	CN [	Description						
		7,243	39 >	>75% Grass cover, Good, HSG A						
		7,243	1	100.00% Pervious Area						
	Tc	Length	Slope	Velocity	Capacity	Description				
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
_	6.0					Direct Entry				

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Type III 24-hr 2-year Rainfall=3.14"

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## Summary for Subcatchment 37S: POST 37

Runoff = 0.00 cfs @ 14.66 hrs, Volume= 0.002 af, Depth= 0.08"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Area (sf)	CN	Description					
8,816	39	>75% Grass cover, Good, HSG A	_				
3,764	61	>75% Grass cover, Good, HSG B					
381	96	Gravel surface, HSG A					
352	96	Gravel surface, HSG B					
13,313	48	Weighted Average					
13,313		100.00% Pervious Area					
Tc Length	Slo	pe Velocity Capacity Description					
(min) (feet)	(ft/	/ft) (ft/sec) (cfs)	_				
6.0		Direct Entry					

Direct Entry,

#### Summary for Subcatchment 38S: POST 38

Runoff = 0.00 cfs @ 20.98 hrs, Volume= 0.000 af, Depth= 0.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

	Area (sf)	CN	Description	Description							
	11,263	39	>75% Gras	s cover, Go	Good, HSG A						
	1,102	61	>75% Gras	75% Grass cover, Good, HSG B							
	427	96	Gravel surfa	ace, HSG A	A						
	12,792	43	Weighted A	Weighted Average							
	12,792		100.00% Pe	ervious Are	rea						
_											
	c Length	Slop	,	Capacity							
(mir	n) (feet)	(ft/1	t) (ft/sec)	(cfs)							
6.	0				Direct Entry,						

## Summary for Subcatchment 39S: POST 39

Runoff = 0.37 cfs @ 12.10 hrs, Volume= 0.027 af, Depth= 1.29"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Type III 24-hr 2-year Rainfall=3.14"

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Are	ea (sf)	CN	Adj	Desc				
	810	98		Roof	s, HSG D			
	8,142	80		>75%	Grass co	ver, Good, HSG D		
	835	98		Unco	nnected pa	avement, HSG D		
	832	39		>75%	Grass co	ver, Good, HSG A		
	252	98	98 Unconnected pavement, HSG A					
1	0,871	80 79 Weighted Avera				age, UI Adjusted		
	8,974			82.55	% Perviou	us Area		
	1,897			17.45	5% Impervi	ious Area		
	1,087			57.30	nected			
Tc	Length	Slope	Vel	locity	Capacity	Description		
(min)	(feet)	(ft/ft)	(ft	/sec)	(cfs)			
6.0						Direct Entry.		

#### Summary for Subcatchment 40S: POST 40

Runoff 0.15 cfs @ 12.11 hrs, Volume= 0.013 af, Depth= 0.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Are	ea (sf)	CN /	Adj D	Description					
	1,018	98	R	oofs, HSG D					
	5,471	80	>	'5% Grass co	over, Good, HSG D				
	506	98	U	nconnected p	pavement, HSG A				
	4,230	39	>7	5% Grass co	over, Good, HSG A				
1	11,225	67	66 Weighted Average, UI Adjusted						
	9,701		86	i.42% Perviou	us Area				
	1,524		13	5.58% Imperv	rious Area				
	506		33	33.20% Unconnected					
Tc	Length	Slope	Veloci	ty Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/se	c) (cfs)					
6.0					Direct Entry,				

## Summary for Subcatchment 42S: POST 42

3.99 cfs @ 12.14 hrs, Volume= 0.325 af, Depth= 1.42" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

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Type III 24-hr 2-year Rainfall=3.14"

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Α	rea (sf)	CN E	Description		
	91,127	80 >	75% Gras	s cover, Go	ood, HSG D
	15,663	77 V	Voods, Go	od, HSG D	
	11,784	98 F	Roofs, HSG	D	
	174	98 F	Roofs, HSG	iΑ	
	846	39 >	75% Gras	s cover, Go	ood, HSG A
1	19,594	81 V	Veighted A	verage	
1	07,636			vious Area	
	11,958	1	0.00% Imp	ervious Ar	ea
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
3.3	50	0.0800	0.25		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.10"
1.0	91	0.0430	1.45		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
1.2	72	0.0400	1.00		Shallow Concentrated Flow,
					Woodland Kv= 5.0 fps
0.5	71	0.0980	2.19		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
3.3	314	0.0500	1.57		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
9.3	598	Total			

## Summary for Subcatchment 43S: POST 43 (PERIMETER)

Runoff = 0.15 cfs @ 15.27 hrs, Volume= 0.099 af, Depth= 0.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

 Area (sf)	CN	Description
153,387	39	>75% Grass cover, Good, HSG A
480,558	30	Woods, Good, HSG A
119,742	55	Woods, Good, HSG B
3,192	98	Roofs, HSG D
110,786	61	>75% Grass cover, Good, HSG B
83,132	77	Woods, Good, HSG D
4,334	96	Gravel surface, HSG A
794	96	Gravel surface, HSG D
4,326	98	Unconnected pavement, HSG A
55,819	80	>75% Grass cover, Good, HSG D
13,460	96	Gravel surface, HSG B
 1,029,530	46	Weighted Average
1,022,012		99.27% Pervious Area
7,518		0.73% Impervious Area
4,326		57.54% Unconnected

Type III 24-hr 2-year Rainfall=3.14"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.2	50	0.0800	0.12		Sheet Flow,
					Woods: Light underbrush n= 0.400 P2= 3.10"
3.4	337	0.1100	1.66		Shallow Concentrated Flow,
					Woodland Kv= 5.0 fps
0.7	110	0.1400	2.62		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
11.3	497	Total			

## Summary for Subcatchment 44S: POST 44

Runoff 0.77 cfs @ 12.37 hrs, Volume= 0.177 af, Depth= 0.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Are	ea (sf)	CN Description						
26	2,578	39	>75% Gras	s cover, Go	ood, HSG A			
2	0,513	30	Woods, Go	od, HSG A	1			
	6,364	77	Woods, Go	od, HSG D	)			
13	7,285	80	>75% Gras	s cover, Go	ood, HSG D			
	9,264	98	Roofs, HSC	3 D				
:	3,107	96	Gravel surf	ace, HSG D	D			
	5,953	96	Gravel surf	ace, HSG D	D			
	329	98	Unconnecte	ed pavemer	ent, HSG D			
44	5,393	54	Weighted A	verage				
43	5,800		97.85% Pe	rvious Area	a			
	9,593		2.15% Impe	ervious Area	ea			
	329 3.43% Unconnected							
Tc I	Length	Slop	e Velocity	Capacity	Description			
(min)	(feet)	(ft/f	) (ft/sec)	(cfs)	·			
6.0					Direct Entry,			

#### Summary for Subcatchment 46S: POST 45

Runoff = 0.07 cfs @ 15.26 hrs, Volume= 0.044 af, Depth= 0.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

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Type III 24-hr 2-year Rainfall=3.14"

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Are	ea (sf)	CN	Description					
	11.884	30	Woods, Good, HSG A					
ç	95,851	77	Woods, Good, HSG D					
	7,023	96	Gravel surface, HSG A					
	2,364	96	Gravel surface, HSG D					
7	79,566	39	>75% Grass cover, Good, HSG A					
2	28,376	80	>75% Grass cover, Good, HSG D					
	3,192	98	Roofs, HSG D					
45	58,256	46	Weighted Average					
45	55,064		99.30% Pervious Area					
	3,192	2 0.70% Impervious Area						
Tc	Length	Slop	pe Velocity Capacity Description					
(min)	(feet)	(ft/f	ft) (ft/sec) (cfs)					
10.1			Direct Entry,					

## Direct Entry, Summary for Subcatchment 65S: POST 12

Runoff = 0.66 cfs @ 12.15 hrs, Volume= 0.062 af, Depth= 0.70"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

	Α	rea (sf)	CN I	Description							
		2,804	98	8 Roofs, HSG D							
		2,957	98	Paved park	ing, HSG D	)					
		130	98	<b>Jnconnecte</b>	ed paveme	nt, HSG D					
		15,690				ood, HSG D					
		2,914		Roofs, HSG							
		2,970		Paved park							
_		18,928	39 :	>75% Gras	s cover, Go	ood, HSG A					
		46,393		Weighted A							
		34,618		74.62% Per							
		11,775		25.38% Imp		ea					
		130		1.10% Unc	onnected						
	Тс	Length	Slope	Velocity	Capacity	Description					
	(min)	(feet)	(ft/ft)		(cfs)	Description					
•	3.3	50	0.0800		(013)	Sheet Flow,					
	3.5	30	0.0000	0.23		Grass: Short n= 0.150 P2= 3.10"					
	1.7	142	0.0400	1.40		Shallow Concentrated Flow,					
			0.0.00			Short Grass Pasture Kv= 7.0 fps					
	0.2	43	0.3200	3.96		Shallow Concentrated Flow.					
						Short Grass Pasture Kv= 7.0 fps					
	1.8	144	0.0380	1.36		Shallow Concentrated Flow,					
						Short Grass Pasture Kv= 7.0 fps					
	1.6	150	0.0060	1.57		Shallow Concentrated Flow,					
_						Paved Kv= 20.3 fps					
	8.6	529	Total								

Type III 24-hr 2-year Rainfall=3.14"

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#### Summary for Subcatchment 69S: POST 41

Runoff = 0.99 cfs @ 12.19 hrs, Volume= 0.126 af, Depth= 0.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Aı	rea (sf)	CN	Description					
	4,616	96	Gravel surfa	ace, HSG [	)			
	16,434	77	Woods, Go	od, HSG D				
	25,175	39	>75% Gras	s cover, Go	ood, HSG A			
	31,571	30	Woods, Go	od, HSG A				
	64,485	80	>75% Gras	s cover, Go	ood, HSG D			
	1,968	98	Unconnecte	ed pavemei	nt, HSG D			
1	44,249	62	Weighted A	verage				
1	42,281		98.64% Pe	rvious Area				
	1,968		1.36% Impe	ervious Are	a			
	1,968		100.00% Unconnected					
_								
Tc	Length	Slope		, ,	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
3.0	50	0.1000	0.28		Sheet Flow,			
					Grass: Short n= 0.150 P2= 3.10"			
3.9	392	0.1100	1.66		Shallow Concentrated Flow,			
					Woodland Kv= 5.0 fps			
2.7	113	0.0800	0.71		Shallow Concentrated Flow,			
					Forest w/Heavy Litter Kv= 2.5 fps			
9.6	555	Total						

#### Summary for Subcatchment 70S: POST 17

0.03 cfs @ 12.50 hrs, Volume= Runoff = 0.016 af, Depth= 0.12"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 2-year Rainfall=3.14"

Area (sf)	CN	Description
473	96	Gravel surface, HSG D
12,174	80	>75% Grass cover, Good, HSG D
3,962	96	Gravel surface, HSG A
1,839	30	Woods, Good, HSG A
51,919	39	>75% Grass cover, Good, HSG A
725	98	Unconnected pavement, HSG A
71,092	50	Weighted Average
70,367		98.98% Pervious Area
725		1.02% Impervious Area
725		100.00% Unconnected

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		Velocity (ft/sec)	Description	
6.0			Direct Entry	

## Summary for Pond 1P: INFIL. BASIN #1

[81] Warning: Exceeded Pond 4P by 3.56' @ 13.15 hrs

2.141 ac, 46.19% Impervious, Inflow Depth = 0.94" for 2-year event Inflow Area = 2.07 cfs @ 12.09 hrs, Volume= 0.167 af Inflow = 0.167 af. Atten= 92%. Lag= 59.4 min Outflow = 0.17 cfs @ 13.08 hrs, Volume= Discarded = 0.17 cfs @ 13.08 hrs, Volume= 0.167 af Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 249.46' @ 13.08 hrs Surf.Area= 2,008 sf Storage= 3,718 cf

Plug-Flow detention time= 288.5 min calculated for 0.167 af (100% of inflow) Center-of-Mass det. time= 288.2 min ( 1,060.5 - 772.2 )

Volume	Invert	Avail.S	torage	Storage Descrip	tion		
#1	245.00'	34	,907 cf	<b>Custom Stage</b>	Data (Irregular)∟	isted below (Reca	lc)
Elevation (feet)	Surf./	Area q-ft)	Perim. (feet)	Inc.Store (cubic-feet)	04		
245.00		111	47.0	0	(	) 11	1
246.00		280	66.0	189	189	9 29	1
248.00	1	,100	152.0	1,290	1,479	1,79	9
250.00	2	,410	245.0	3,425	4,905	5 4,76	3
252.00	3	,995	283.0	6,339	11,243	6,44	5
254.00	5	,894	332.0	9,828	21,07	1 8,92	1
256.00	7	,996	370.0	13,837	34,907	7 11,15	7

Device	Routing	Invert	Outlet Devices
#1	Discarded	245.00'	2.410 in/hr Exfiltration over Surface area
			Conductivity to Groundwater Elevation = 243.00'
#2	Primary	255.00'	10.0' long x 13.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60
			Coef (English) 2 60 2 64 2 70 2 66 2 65 2 66 2 65 2 63

Discarded OutFlow Max=0.17 cfs @ 13.08 hrs HW=249.46' (Free Discharge) 1=Exfiltration ( Controls 0.17 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=245.00' (Free Discharge) 2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

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#### Summary for Pond 2P: INFILTRATION BASIN #1-A

[79] Warning: Submerged Pond 13P Primary device # 1 OUTLET by 0.27'

Inflow Area = 0.915 ac, 29.75% Impervious, Inflow Depth = 0.78" for 2-year event

Inflow = 0.74 cfs @ 12.10 hrs, Volume= 0.059 af

Outflow = 0.15 cfs @ 12.57 hrs, Volume= 0.059 af, Atten= 80%, Lag= 28.3 min Discarded = 0.15 cfs @ 12.57 hrs, Volume= 0.059 af

Discarded = 0.15 cfs @ 12.57 hrs, Volume= 0.059 af Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 253.27' @ 12.57 hrs Surf.Area= 2,602 sf Storage= 674 cf

Plug-Flow detention time= 31.9 min calculated for 0.059 af (100% of inflow)

Center-of-Mass det. time= 31.9 min ( 868.7 - 836.8 )

Volume	Invert	Invert Avail.Storage		Storage Description			
#1	253.00'	1	0,119 cf	Custom Stage Dat	a (Irregular)Listed	below (Recalc)	
Elevation	Sur	f.Area	Perim.	Inc.Store	Cum.Store	Wet.Area	
(feet)		(sq-ft)	(feet)	(cubic-feet)	(cubic-feet)	(sq-ft)	
253.00		2,452	186.0	0	0	2,452	
254.00		3,038	205.0	2,740	2,740	3,075	
255.00		3,680	224.0	3,354	6,094	3,758	
256.00		4,380	242.0	4,025	10,119	4,465	

Device	Routing	Invert	Outlet Devices
#1	Discarded	253.00'	2.410 in/hr Exfiltration over Surface area
			Conductivity to Groundwater Elevation = 243.00'
#2	Primary	255.50'	8.0' long x 10.0' breadth Broad-Crested Rectangular Weir
	-		Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60
			Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Discarded OutFlow Max=0.15 cfs @ 12.57 hrs HW=253.27' (Free Discharge)
1=Exfiltration ( Controls 0.15 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=253.00' (Free Discharge) 2=Broad-Crested Rectangular Weir( Controls 0.00 cfs)

#### Summary for Pond 3P: INFIL, BASIN #2

[81] Warning: Exceeded Pond 15P by 2.86' @ 12.85 hrs

Inflow Area = 11.845 ac, 34.26% Impervious, Inflow Depth = 1.50" for 2-year event

Inflow = 18.22 cfs @ 12.10 hrs, Volume= 1.477 af

Outflow = 3.06 cfs @ 12.66 hrs, Volume= 1.477 af, Atten= 83%, Lag= 33.5 min

Discarded = 0.55 cfs @ 12.66 hrs, Volume= 0.497 af Primary = 2.51 cfs @ 12.66 hrs, Volume= 0.981 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

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Peak Elev= 268.13' @ 12.66 hrs Surf.Area= 7,331 sf Storage= 26,259 cf

Plug-Flow detention time= 137.7 min calculated for 1.476 af (100% of inflow) Center-of-Mass det. time= 137.9 min ( 961.6 - 823.7 )

Volume	Invert	: Avail.S	torage	Storage Description		
#1	263.00	87	,659 cf	<b>Custom Stage Dat</b>	<b>a (Irregular)</b> Listed	below (Recalc)
Elevation (fee		urf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
263.0		3.149	223.0	0	0	3,149
264.0		3,847	242.0	3,492	3,492	3,890
266.0	00	5,412	280.0	9,215	12,707	5,552
268.0	00	7,203	317.0	12,572	25,279	7,408
270.0	00	9,220	355.0	16,382	41,661	9,549
272.0	00	11,463	393.0	20,642	62,303	11,931
274.0	00	13,933	430.0	25,356	87,659	14,490
Device	Routing	Inve		et Devices		
#1	Discarded	263.00		0 in/hr Exfiltration of		
#2	Primary	263.00	0' <b>15.0</b> L= 5	ductivity to Groundwa " Round Culvert 7.0' CPP, projecting	յ, no headwall,  Ke	= 0.900
#3	Primary	273.00	n= 0 0' <b>20.0</b> Hea	/ Outlet Invert= 263. .013, Flow Area= 1.2 ' long x 12.0' bread d (feet) 0.20 0.40 0 f. (English) 2.57 2.6	23 sf Ith Broad-Crested .60 0.80 1.00 1.2	Rectangular Weir
#4	Device 2	267.00	o' <b>5.0"</b>	Vert. Orifice/Grate	C= 0.600 Limite	d to weir flow at low heads
#5	Device 2	263.9				d to weir flow at low heads
#6	Device 2	268.70		" x 48.0" Horiz. Orif ted to weir flow at low		00

Discarded OutFlow Max=0.55 cfs @ 12.66 hrs HW=268.13' (Free Discharge)

1=Exfiltration ( Controls 0.55 cfs)

Primary OutFlow Max=2.51 cfs @ 12.66 hrs HW=268.13' (Free Discharge)

-2=Culvert (Passes 2.51 cfs of 9.91 cfs potential flow)

**4=Orifice/Grate** (Orifice Controls 0.63 cfs @ 4.63 fps) **5=Orifice/Grate** (Orifice Controls 1.88 cfs @ 9.56 fps)

5=Ornice/Grate (Ornice Controls 1.88 cis @ 9.56

6=Orifice/Grate (Controls 0.00 cfs)

3=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

## **Summary for Pond 4P: HYDROSTORM**

[79] Warning: Submerged Pond 11P Primary device # 1 OUTLET by 0.27

Inflow Area = 0.369 ac, 44.88% Impervious, Inflow Depth = 1.02" for 2-year event

Inflow = 0.43 cfs @ 12.09 hrs, Volume= 0.032 af

Outflow = 0.43 cfs @ 12.09 hrs, Volume= 0.032 af, Atten= 0%, Lag= 0.0 min

Primary = 0.43 cfs @ 12.09 hrs, Volume= 0.032 af

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Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 246.17' @ 12.09 hrs Flood Elev= 255.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	245.80'	12.0" Round Culvert
			L= 50.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 245.80' / 245.00' S= 0.0160 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.42 cfs @ 12.09 hrs HW=246.16' (Free Discharge)
1=Culvert (Inlet Controls 0.42 cfs @ 1.62 fps)

#### Summary for Pond 6P: INFIL. BASIN #3

[79] Warning: Submerged Pond 38P Primary device # 1 OUTLET by 3.57'

Inflow Area =	3.499 ac, 27.01% Impervious, Inflow I	Depth = 1.66" for 2-year event
Inflow =	6.64 cfs @ 12.09 hrs, Volume=	0.485 af
Outflow =	0.49 cfs @ 13.76 hrs, Volume=	0.485 af, Atten= 93%, Lag= 100.2 min
Discarded =	0.22 cfs @ 13.76 hrs, Volume=	0.389 af
Primary =	0.27 cfs @ 13.76 hrs, Volume=	0.096 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 315.57' @ 13.76 hrs Surf.Area= 4,641 sf Storage= 11,380 cf

Plug-Flow detention time= 519.5 min calculated for 0.485 af (100% of inflow) Center-of-Mass det. time= 520.2 min (1,346.5 - 826.3)

Volume	Invert	Avail.St	orage	Storage Descripti	on		
#1	312.00'	41,	148 cf	Custom Stage D	ata (Irregular)List	ed below (Recalc)	
Elevation (fee		ırf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
312.0	00	1,767	179.0	0	0	1,767	
314.0	00	3,405	239.0	5,083	5,083	3,806	
316.0	00	5,012	284.0	8,365	13,449	5,751	
318.0	00	6,898	329.0	11,860	25,309	8,030	
320.0	00	8,987	367.0	15,839	41,148	10,247	
Device #1	Routing Discarded	Inver 312.00	1.02	et Devices  o in/hr Exfiltration ductivity to Ground			
#2	Primary	312.00		" Round Culvert			
#3	Primary	L lı r 319.50' <b>2</b>		53.0' CPP, projecting, no headwall, Ke= 0.900 tf / Outlet Invert= 312.00' / 310.00' S= 0.0377'/ Cc= 0.900 0.013, Flow Area= 0.79 sf 0' long x 12.0' breadth Broad-Crested Rectangular Weir ad (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 ef. (English) 2.57 2.62 2.70 2.67 2.66 2.67 2.66 2.64			

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#4 Device 2 315.00' 4.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#5 Device 2 316.50' 48.0" x 48.0" Horiz. Orifice/Grate C= 0.600
Limited to weir flow at low heads

Discarded OutFlow Max=0.22 cfs @ 13.76 hrs HW=315.57' (Free Discharge) 1=Exfiltration ( Controls 0.22 cfs)

Primary OutFlow Max=0.27 cfs @ 13.76 hrs HW=315.57' (Free Discharge)

2=Culvert (Passes 0.27 cfs of 5.23 cfs potential flow)

4=Orifice/Grate (Orifice Controls 0.27 cfs @ 3.06 fps)

5=Orifice/Grate ( Controls 0.00 cfs)

3=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

#### Summary for Pond 7P: CB-103

Outflow = 0.21 cfs @ 12.09 hrs, Volume= 0.016 af, Atten= 0%, Lag= 0.0 min

Primary = 0.21 cfs @ 12.09 hrs, Volume= 0.016 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 248.18' @ 12.09 hrs

Flood Elev= 250.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	247.90'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 247.90' / 247.80' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.21 cfs @ 12.09 hrs HW=248.17' (Free Discharge)
1=Culvert (Barrel Controls 0.21 cfs @ 1.82 fps)

#### Summary for Pond 8P: CB-102

 Inflow Area =
 0.103 ac, 81.80% Impervious, Inflow Depth = 1.86" for 2-year event

 Inflow =
 0.22 cfs @ 12.09 hrs, Volume=
 0.016 af

 Outflow =
 0.22 cfs @ 12.09 hrs, Volume=
 0.016 af, Atten= 0%, Lag= 0.0 min

Primary = 0.22 cfs @ 12.09 hrs, Volume= 0.016 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 247.06' @ 12.09 hrs

Flood Elev= 249.80'

Device	Routing	Invert	Outlet Devices	
#1	Primary	246.80'	12.0" Round Culvert	
			L= 17.0' CPP, projecting, no headwall, Ke= 0.900	
		Inlet / Outlet Invert= 246.80' / 246.50' S= 0.0176 '/' Cc= 0.900		
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf	

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Primary OutFlow Max=0.21 cfs @ 12.09 hrs HW=247.06' (Free Discharge) 1=Culvert (Inlet Controls 0.21 cfs @ 1.36 fps)

## Summary for Pond 9P: CB-106

Inflow Area = 0.490 ac, 34.11% Impervious, Inflow Depth = 0.92" for 2-year event

Inflow 0.45 cfs @ 12.10 hrs, Volume= 0.038 af

0.038 af, Atten= 0%, Lag= 0.0 min Outflow = 0.45 cfs @ 12.10 hrs, Volume=

Primary = 0.45 cfs @ 12.10 hrs, Volume= 0.038 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 258.88' @ 12.10 hrs

Flood Flev= 262 50'

Device	Routing	Invert	Outlet Devices
#1	Primary	258.50'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900

Inlet / Outlet Invert= 258.50' / 258.20' S= 0.0300 '/' Cc= 0.900

n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=0.45 cfs @ 12.10 hrs HW=258.88' (Free Discharge) 1=Culvert (Inlet Controls 0.45 cfs @ 1.65 fps)

## Summary for Pond 10P: CB-107

0.132 ac, 79.87% Impervious, Inflow Depth = 1.94" for 2-year event Inflow Area = 0.29 cfs @ 12.09 hrs, Volume= Inflow 0.021 af 0.29 cfs @ 12.09 hrs, Volume= 0.021 af, Atten= 0%, Lag= 0.0 min Outflow

0.29 cfs @ 12.09 hrs. Volume= 0.021 af Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 259.00' @ 12.09 hrs

Flood Elev= 262.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	258.70'	12.0" Round Culvert
	-		L= 57.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 258.70' / 254.50' S= 0.0737 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.29 cfs @ 12.09 hrs HW=259.00' (Free Discharge) 1=Culvert (Inlet Controls 0.29 cfs @ 1.46 fps)

#### Summary for Pond 11P: DMH-101

[79] Warning: Submerged Pond 8P Primary device # 1 OUTLET by 0.27'

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0.369 ac, 44.88% Impervious, Inflow Depth = 1.02" for 2-year event Inflow = 0.43 cfs @ 12.09 hrs, Volume= 0.032 af Outflow = 0.43 cfs @ 12.09 hrs, Volume= 0.032 af, Atten= 0%, Lag= 0.0 min

0.43 cfs @ 12.09 hrs. Volume= 0.032 af Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 246.77' @ 12.09 hrs

Flood Elev= 254.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	246.40'	12.0" Round Culvert
	-		L= 47.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 246.40' / 245.90' S= 0.0106 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.42 cfs @ 12.09 hrs HW=246.77' (Free Discharge)
1=Culvert (Inlet Controls 0.42 cfs @ 1.63 fps)

## Summary for Pond 12P: DMH-102

[79] Warning: Submerged Pond 7P Primary device # 1 INLET by 0.05'

0.266 ac, 30.62% Impervious, Inflow Depth = 0.70" for 2-year event Inflow Area = Inflow 0.21 cfs @ 12.09 hrs, Volume= 0.016 af Outflow = 0.21 cfs @ 12.09 hrs, Volume= 0.016 af, Atten= 0%, Lag= 0.0 min

0.21 cfs @ 12.09 hrs, Volume= Primary = 0.016 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 247.95' @ 12.09 hrs

Flood Elev= 254.00'

Device Routing Invert Outlet Devices #1 Primary 247.70' 12.0" Round Culvert L= 113.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 247.70' / 246.90' S= 0.0071 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.21 cfs @ 12.09 hrs HW=247.95' (Free Discharge) 1=Culvert (Inlet Controls 0.21 cfs @ 1.35 fps)

#### Summary for Pond 13P: DMH-103

Inflow Area = 0.621 ac, 43.80% Impervious, Inflow Depth = 1.14" for 2-year event Inflow = 0.74 cfs @ 12.10 hrs, Volume= 0.059 af Outflow = 0.74 cfs @ 12.10 hrs, Volume= 0.059 af, Atten= 0%, Lag= 0.0 min

Primary = 0.74 cfs @ 12.10 hrs, Volume= 0.059 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs.

Peak Elev= 254.50' @ 12.10 hrs

Flood Flev= 262 20'

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Device	Routing	Invert	Outlet Devices
#1	Primary	254.00'	12.0" Round Culvert L= 77.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 254.00' /253.00' S= 0.0130 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.73 cfs @ 12.10 hrs HW=254.49' (Free Discharge) 1=Culvert (Inlet Controls 0.73 cfs @ 1.89 fps)

#### Summary for Pond 14P: DMH-104

[79] Warning: Submerged Pond 9P Primary device # 1 OUTLET by 0.28'

Inflow Area = 0.490 ac, 34.11% Impervious, Inflow Depth = 0.92" for 2-year event 0.45 cfs @ 12.10 hrs, Volume= Inflow 0.038 af Outflow = 0.45 cfs @ 12.10 hrs, Volume= 0.038 af, Atten= 0%, Lag= 0.0 min 0.45 cfs @ 12.10 hrs, Volume= Primary = 0.038 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 258.48' @ 12.10 hrs Flood Elev= 262.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	258.10'	12.0" Round Culvert
	-		L= 91.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 258.10' / 255.80' S= 0.0253 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=0.45 cfs @ 12.10 hrs HW=258.48' (Free Discharge) 1=Culvert (Inlet Controls 0.45 cfs @ 1.65 fps)

## Summary for Pond 15P: DMH-201

Inflow Area = 11.554 ac, 33.30% Impervious, Inflow Depth = 1.47" for 2-year event Inflow 17.45 cfs @ 12.10 hrs, Volume= 1.420 af

17.45 cfs @ 12.10 hrs, Volume= Outflow = 1.420 af, Atten= 0%, Lag= 0.0 min

17.45 cfs @ 12.10 hrs, Volume= Primary = 1.420 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 266.50' @ 12.10 hrs

Flood Elev= 275.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	264.60'	36.0" Round Culvert
	•		L= 41.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 264.60' / 263.00' S= 0.0390 '/' Cc= 0.900
			n= 0.012 Corrugated PP_smooth interior_Flow Area= 7.07 sf

Primary OutFlow Max=17.29 cfs @ 12.10 hrs HW=266.49' (Free Discharge) 1=Culvert (Inlet Controls 17.29 cfs @ 3.69 fps)

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## Summary for Pond 16P: DMH-202

[79] Warning: Submerged Pond 17P Primary device # 1 OUTLET by 0.43' [79] Warning: Submerged Pond 18P Primary device # 1 OUTLET by 0.43' [79] Warning: Submerged Pond 19P Primary device # 1 OUTLET by 0.43' [79] Warning: Submerged Pond 62P Primary device # 1 OUTLET by 1.43'

Inflow Area = 3.827 ac, 48.20% Impervious, Inflow Depth = 2.00" for 2-year event 8.65 cfs @ 12.09 hrs, Volume= Inflow 0.638 af

Outflow = 8.65 cfs @ 12.09 hrs, Volume=

0.638 af, Atten= 0%, Lag= 0.0 min 8.65 cfs @ 12.09 hrs. Volume= 0.638 af Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 278.44' @ 12.09 hrs

Flood Elev= 283.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	276.90'	24.0" Round Culvert
			L= 77.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 276.90' / 271.00' S= 0.0766 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=8.47 cfs @ 12.09 hrs HW=278.42' (Free Discharge) 1=Culvert (Inlet Controls 8.47 cfs @ 3.31 fps)

#### Summary for Pond 17P: FIELD INLET-201

Inflow Area = 0.250 ac, 17.45% Impervious, Inflow Depth = 1.29" for 2-year event

Inflow = 0.37 cfs @ 12.10 hrs. Volume= 0.027 af

Outflow = 0.37 cfs @ 12.10 hrs, Volume= 0.027 af. Atten= 0%. Lag= 0.0 min

0.37 cfs @ 12.10 hrs, Volume= 0.027 af Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 279.14' @ 12.10 hrs

Flood Elev= 282.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	278.80'	12.0" Round Culvert
			L= 46.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 278.80' / 278.00' S= 0.0174 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.36 cfs @ 12.10 hrs HW=279.14' (Free Discharge) 1=Culvert (Inlet Controls 0.36 cfs @ 1.56 fps)

Type III 24-hr 2-year Rainfall=3.14"

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## Summary for Pond 18P: CB-202

Inflow Area = 0.676 ac, 45.13% Impervious, Inflow Depth = 1.94" for 2-year event

Inflow 1.50 cfs @ 12.09 hrs, Volume= 0.109 af

Outflow = 1.50 cfs @ 12.09 hrs, Volume= 0.109 af, Atten= 0%, Lag= 0.0 min

1.50 cfs @ 12.09 hrs, Volume= Primary = 0.109 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 279.66' @ 12.09 hrs

Flood Elev= 282.90'

Device	Routing	Invert	Outlet Devices
#1	Primary		12.0" Round Culvert
			L= 19.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 278 90' / 278 00' S= 0.0474 '/' Cc= 0.900

Primary OutFlow Max=1.47 cfs @ 12.09 hrs HW=279.65' (Free Discharge)

1=Culvert (Inlet Controls 1.47 cfs @ 2.33 fps)

## Summary for Pond 19P: CB-201

Inflow Area = 0.040 ac, 97.61% Impervious, Inflow Depth = 2.91" for 2-year event 0.010 af

Inflow 0.12 cfs @ 12.09 hrs, Volume=

Outflow = 0.12 cfs @ 12.09 hrs, Volume= 0.010 af, Atten= 0%, Lag= 0.0 min

0.12 cfs @ 12.09 hrs, Volume= Primary = 0.010 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 278.69' @ 12.09 hrs

Flood Elev= 282.50'

Device Routing Invert Outlet Devices

Primary 278.50' 12.0" Round Culvert

> L= 43.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 278.50' / 278.00' S= 0.0116 '/' Cc= 0.900

n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=0.12 cfs @ 12.09 hrs HW=278.69' (Free Discharge)

1=Culvert (Inlet Controls 0.12 cfs @ 1.16 fps)

## Summary for Pond 20P: DMH-203

[79] Warning: Submerged Pond 23P Primary device # 1 INLET by 0.49'

Inflow Area = 7.726 ac, 25.92% Impervious, Inflow Depth = 1.21" for 2-year event

Inflow = 8.98 cfs @ 12.12 hrs, Volume= 0.782 af

8.98 cfs @ 12.12 hrs, Volume= 0.782 af. Atten= 0%. Lag= 0.0 min Outflow =

Primary = 8.98 cfs @ 12.12 hrs, Volume= 0.782 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

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Peak Elev= 278.00' @ 12.12 hrs

Flood Elev= 283.00'

[	Device	Routing	Invert	Outlet Devices
	#1	Primary	276.60'	30.0" Round Culvert
		-		L= 70.0' CPP, projecting, no headwall, Ke= 0.900
				Inlet / Outlet Invert= 276.60' / 270.50' S= 0.0871 '/' Cc= 0.900
				n= 0.012 Corrugated PP, smooth interior, Flow Area= 4.91 sf

Primary OutFlow Max=8.74 cfs @ 12.12 hrs HW=277.98' (Free Discharge)

1=Culvert (Inlet Controls 8.74 cfs @ 3.15 fps)

#### Summary for Pond 21P: CB-204

Inflow Area = 0.051 ac,100.00% Impervious, Inflow Depth = 2.91" for 2-year event

Inflow = 0.15 cfs @ 12.09 hrs, Volume= 0.012 af

0.012 af, Atten= 0%, Lag= 0.0 min Outflow = 0.15 cfs @ 12.09 hrs, Volume=

Primary = 0.15 cfs @ 12.09 hrs, Volume= 0.012 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 280.31' @ 12.09 hrs

Flood Elev= 284.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	280.10'	12.0" Round Culvert
			L= 20.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 280.10' / 279.00' S= 0.0550 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.15 cfs @ 12.09 hrs HW=280.31' (Free Discharge) 1=Culvert (Inlet Controls 0.15 cfs @ 1.23 fps)

#### Summary for Pond 22P: CB-205

Inflow Area = 0.310 ac. 28.18% Impervious. Inflow Depth = 1.00" for 2-year event Inflow 0.30 cfs @ 12.10 hrs, Volume= 0.026 af 0.30 cfs @ 12.10 hrs, Volume= 0.026 af, Atten= 0%, Lag= 0.0 min Outflow =

Primary = 0.30 cfs @ 12.10 hrs. Volume= 0.026 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 280.40' @ 12.10 hrs

Flood Elev= 284.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	280.10'	12.0" Round Culvert
			L= 33.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 280.10' / 279.00' S= 0.0333 '/' Cc= 0.900
			n= 0.012 Corrugated PP smooth interior Flow Area= 0.79 sf

Primary OutFlow Max=0.30 cfs @ 12.10 hrs HW=280.40' (Free Discharge)

1=Culvert (Inlet Controls 0.30 cfs @ 1.48 fps)

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#### Summary for Pond 23P: DMH-204

[79] Warning: Submerged Pond 26P Primary device # 1 INLET by 0.66'

Inflow Area = 7.365 ac, 25.31% Impervious, Inflow Depth = 1.21" for 2-year event

Inflow = 8.55 cfs @ 12.12 hrs, Volume= 0.744 af

Outflow = 8.55 cfs @ 12.12 hrs, Volume= 0.744 af, Atten= 0%, Lag= 0.0 min

Primary = 8.55 cfs @ 12.12 hrs, Volume= 0.744 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 278.88' @ 12.12 hrs

Flood Elev= 285.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	277.50'	30.0" Round Culvert
			L= 192.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 277.50' / 276.70' S= 0.0042 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 4.91 sf

Primary OutFlow Max=8.31 cfs @ 12.12 hrs HW=278.86' (Free Discharge) ↑—1=Culvert (Barrel Controls 8.31 cfs @ 4.43 fps)

#### Summary for Pond 24P: CB-206

Inflow Area = 0.633 ac, 31.21% Impervious, Inflow Depth = 1.05" for 2-year event

Inflow = 0.62 cfs @ 12.17 hrs, Volume= 0.056 af

Outflow = 0.62 cfs @ 12.17 hrs, Volume= 0.056 af, Atten= 0%, Lag= 0.0 min

Primary = 0.62 cfs @ 12.17 hrs, Volume= 0.056 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 281.96' @ 12.17 hrs

Flood Elev= 285.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	281.60'	24.0" Round Culvert
	-		L= 16.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 281.60' / 281.30' S= 0.0188 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=0.61 cfs @ 12.17 hrs HW=281.96' (Free Discharge)
—1=Culvert (Inlet Controls 0.61 cfs @ 1.61 fps)

#### Summary for Pond 25P: CB-207

Inflow Area = 0.068 ac,100.00% Impervious, Inflow Depth = 2.91" for 2-year event

Inflow = 0.20 cfs @ 12.09 hrs, Volume= 0.016 af

Outflow = 0.20 cfs @ 12.09 hrs, Volume= 0.016 af, Atten= 0%, Lag= 0.0 min

Primary = 0.20 cfs @ 12.09 hrs, Volume= 0.016 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

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Peak Elev= 281.85' @ 12.09 hrs

Flood Elev= 285.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	281.60'	12.0" Round Culvert
			L= 16.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 281.60' / 281.30' S= 0.0188 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.20 cfs @ 12.09 hrs HW=281.84' (Free Discharge)
—1=Culvert (Inlet Controls 0.20 cfs @ 1.32 fps)

## Summary for Pond 26P: DMH-205

[79] Warning: Submerged Pond 27P Primary device # 1 INLET by 0.52'

Inflow Area = 6.664 ac, 23.99% Impervious, Inflow Depth = 1.21" for 2-year event

Inflow = 7.79 cfs @ 12.12 hrs, Volume= 0.672 af

Outflow = 7.79 cfs @ 12.12 hrs, Volume= 0.672 af, Atten= 0%, Lag= 0.0 min

Primary = 7.79 cfs @ 12.12 hrs, Volume= 0.672 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 279.54' @ 12.12 hrs

Flood Elev= 286.60'

Primary OutFlow Max=7.57 cfs @ 12.12 hrs HW=279.52' (Free Discharge)

1—1=Culvert (Barrel Controls 7.57 cfs @ 4.21 fps)

#### Summary for Pond 27P: DMH-206

[79] Warning: Submerged Pond 28P Primary device # 1 INLET by 0.04'

Inflow Area = 5.599 ac, 23.73% Impervious, Inflow Depth = 1.31" for 2-year event Inflow = 7.15 cfs @ 12.12 hrs, Volume= 0.609 af

Outflow = 7.15 cfs @ 12.12 hrs, Volume= 0.609 af, Atten= 0%, Lag= 0.0 min Primary = 7.15 cfs @ 12.12 hrs, Volume= 0.609 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 280.25' @ 12.12 hrs

Flood Elev= 286.90'

Device	Routing	Invert	Outlet Devices
#1	Primary		30.0" Round Culvert
			L= 168.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 279.00' / 278.30' S= 0.0042 '/' Cc= 0.900

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n= 0.012 Corrugated PP, smooth interior, Flow Area= 4.91 sf

Primary OutFlow Max=6.96 cfs @ 12.12 hrs HW=280.23' (Free Discharge) 1=Culvert (Barrel Controls 6.96 cfs @ 4.21 fps)

#### Summary for Pond 28P: DMH-207

[79] Warning: Submerged Pond 31P Primary device # 1 OUTLET by 0.72'

Inflow Area = 5.599 ac, 23.73% Impervious, Inflow Depth = 1.31" for 2-year event Inflow 7.15 cfs @ 12.12 hrs, Volume= 0.609 af Outflow = 7.15 cfs @ 12.12 hrs, Volume= 0.609 af. Atten= 0%. Lag= 0.0 min Primary = 7.15 cfs @ 12.12 hrs, Volume= 0.609 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs Peak Elev= 281.43' @ 12.12 hrs Flood Elev= 285.30'

Device Routing Invert Outlet Devices Primary 30.0" Round Culvert

L= 268.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 280.20' / 279.10' S= 0.0041 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 4.91 sf

Primary OutFlow Max=6.96 cfs @ 12.12 hrs HW=281.41' (Free Discharge) 1=Culvert (Inlet Controls 6.96 cfs @ 2.96 fps)

## Summary for Pond 29P: CB-208

Inflow Area = 0.147 ac.100.00% Impervious. Inflow Depth = 2.91" for 2-year event Inflow 0.44 cfs @ 12.09 hrs, Volume= 0.036 af Outflow = 0.44 cfs @ 12.09 hrs, Volume= 0.036 af. Atten= 0%. Lag= 0.0 min

0.44 cfs @ 12.09 hrs. Volume= 0.036 af

Primary

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 282.57' @ 12.09 hrs Flood Elev= 285.20'

Device Routing Invert Outlet Devices Primary 282 20' 12.0" Round Culvert L= 14.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 282.20' / 282.00' S= 0.0143 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.43 cfs @ 12.09 hrs HW=282.57' (Free Discharge) 1=Culvert (Inlet Controls 0.43 cfs @ 1.63 fps)

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#### Summary for Pond 30P: CB-209

Inflow Area = 1.565 ac, 25.39% Impervious, Inflow Depth = 0.53" for 2-year event Inflow 0.51 cfs @ 12.17 hrs, Volume= 0.069 af 0.069 af, Atten= 0%, Lag= 0.0 min Outflow = 0.51 cfs @ 12.17 hrs, Volume=

0.51 cfs @ 12.17 hrs, Volume= Primary = 0.069 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 282.58' @ 12.17 hrs

Flood Elev= 285.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	282.20'	15.0" Round Culvert
	-		L= 14.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 282.20' / 282.00' S= 0.0143 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=0.50 cfs @ 12.17 hrs HW=282.57' (Free Discharge) 1=Culvert (Inlet Controls 0.50 cfs @ 1.64 fps)

#### Summary for Pond 31P: DMH-208

[79] Warning: Submerged Pond 32P Primary device # 1 OUTLET by 1.15'

3.887 ac, 20.17% Impervious, Inflow Depth = 1.56" for 2-year event Inflow Area =

Inflow 6.27 cfs @ 12.12 hrs, Volume= 0.505 af

Outflow = 6.27 cfs @ 12.12 hrs, Volume= 0.505 af, Atten= 0%, Lag= 0.0 min

Primary = 6.27 cfs @ 12.12 hrs, Volume= 0.505 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 284.76' @ 12.12 hrs

Flood Elev= 289.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	283.50'	24.0" Round Culvert
			L= 165.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 283.50' / 280.70' S= 0.0170 '/' Cc= 0.900
			n= 0.012 Corrugated PP smooth interior Flow Area= 3.14 sf

Primary OutFlow Max=6.11 cfs @ 12.12 hrs HW=284.74' (Free Discharge) 1=Culvert (Inlet Controls 6.11 cfs @ 2.99 fps)

#### Summary for Pond 32P: DMH-209

[79] Warning: Submerged Pond 35P Primary device # 1 OUTLET by 0.25

3.887 ac, 20.17% Impervious, Inflow Depth = 1.56" for 2-year event Inflow Area = Inflow = 6.27 cfs @ 12.12 hrs, Volume= 0.505 af

Outflow = 6.27 cfs @ 12.12 hrs, Volume= 0.505 af. Atten= 0%. Lag= 0.0 min

Primary = 6.27 cfs @ 12.12 hrs, Volume= 0.505 af

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Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 297.66' @ 12.12 hrs Flood Elev= 301.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	296.40'	24.0" Round Culvert
			L= 150.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 296.40' / 283.60' S= 0.0853 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 3.14 sf

Primary OutFlow Max=6.11 cfs @ 12.12 hrs HW=297.64' (Free Discharge) 1=Culvert (Inlet Controls 6.11 cfs @ 2.99 fps)

#### Summary for Pond 33P: CB-210

0.016 af

Inflow Area = 0.067 ac,100.00% Impervious, Inflow Depth = 2.91" for 2-year event 0.20 cfs @ 12.09 hrs, Volume= Inflow 0.016 af 0.016 af, Atten= 0%, Lag= 0.0 min Outflow = 0.20 cfs @ 12.09 hrs, Volume=

0.20 cfs @ 12.09 hrs, Volume= Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 298.25' @ 12.09 hrs

Flood Elev= 302.00'

Device Routing Invert Outlet Devices 298.00' 12.0" Round Culvert #1 Primary L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 298.00' / 297.70' S= 0.0250 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=0.19 cfs @ 12.09 hrs HW=298.24' (Free Discharge) 1-1=Culvert (Inlet Controls 0.19 cfs @ 1.32 fps)

#### Summary for Pond 34P: CB-211

Inflow Area = 0.635 ac, 44.08% Impervious, Inflow Depth = 1.78" for 2-year event

1.30 cfs @ 12.09 hrs, Volume= 0.094 af Inflow =

Outflow = 1.30 cfs @ 12.09 hrs. Volume= 0.094 af. Atten= 0%. Lag= 0.0 min

Primary = 1.30 cfs @ 12.09 hrs, Volume= 0.094 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 298.69' @ 12.09 hrs

Flood Elev= 302.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	298.00'	12.0" Round Culvert
	-		L= 12.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 298.00' / 297.70' S= 0.0250 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

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Primary OutFlow Max=1.28 cfs @ 12.09 hrs HW=298.69' (Free Discharge) 1=Culvert (Inlet Controls 1.28 cfs @ 2.23 fps)

#### Summary for Pond 35P: DMH-210

[79] Warning: Submerged Pond 36P Primary device # 1 INLET by 0.17' [79] Warning: Submerged Pond 37P Primary device # 1 INLET by 0.17'

Inflow Area = 0.440 ac, 37.03% Impervious, Inflow Depth = 1.88" for 2-year event 0.94 cfs @ 12.09 hrs, Volume= Inflow 0.069 af Outflow = 0.94 cfs @ 12.09 hrs, Volume= 0.069 af. Atten= 0%. Lag= 0.0 min Primary = 0.94 cfs @ 12.09 hrs, Volume= 0.069 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 316.17' @ 12.09 hrs

Flood Elev= 320.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	315.60'	12.0" Round Culvert L= 322.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 315.60' / 297.40' S= 0.0565 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.92 cfs @ 12.09 hrs HW=316.16' (Free Discharge) 1=Culvert (Inlet Controls 0.92 cfs @ 2.02 fps)

#### Summary for Pond 36P: CB-212

Inflow Area = 0.038 ac.100.00% Impervious. Inflow Depth = 2.91" for 2-year event Inflow = 0.11 cfs @ 12.09 hrs, Volume= 0.009 af

Outflow =

0.11 cfs @ 12.09 hrs, Volume= 0.009 af, Atten= 0%, Lag= 0.0 min 0.009 af

0.11 cfs @ 12.09 hrs. Volume= Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 316.18' @ 12.09 hrs

Flood Elev= 320.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	316.00'	12.0" Round Culvert
			L= 13.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 316.00' / 315.70' S= 0.0231 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.11 cfs @ 12.09 hrs HW=316.18' (Free Discharge) 1=Culvert (Inlet Controls 0.11 cfs @ 1.14 fps)

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#### Summary for Pond 37P: CB-213

Inflow Area = 0.401 ac, 31.00% Impervious, Inflow Depth = 1.78" for 2-year event

Inflow = 0.82 cfs @ 12.09 hrs, Volume= 0.060 af

Outflow = 0.82 cfs @ 12.09 hrs, Volume= 0.060 af, Atten= 0%, Lag= 0.0 min

Primary = 0.82 cfs @ 12.09 hrs, Volume= 0.060 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 316.53' @ 12.09 hrs

Flood Elev= 320.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	316.00'	12.0" Round Culvert
	-		L= 13.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 316.00' / 315.70' S= 0.0231 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.81 cfs @ 12.09 hrs HW=316.52' (Free Discharge) 1-1=Culvert (Inlet Controls 0.81 cfs @ 1.94 fps)

#### Summary for Pond 38P: DMH-301

[79] Warning: Submerged Pond 39P Primary device # 1 OUTLET by 1.01'

Inflow Area = 1.769 ac, 46.05% Impervious, Inflow Depth = 1.97" for 2-vear event

Inflow = 3.97 cfs @ 12.09 hrs, Volume= 0.290 af

Outflow = 3.97 cfs @ 12.09 hrs, Volume= 0.290 af, Atten= 0%, Lag= 0.0 min

Primary = 3.97 cfs @ 12.09 hrs, Volume= 0.290 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 317.01' @ 12.09 hrs

Flood Elev= 320.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	315.90'	18.0" Round Culvert
	-		L= 71.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 315.90' / 312.00' S= 0.0549 '/' Cc= 0.900
			n= 0.012 Corrugated PP_smooth interior_Flow Area= 1.77 sf

Primary OutFlow Max=3.89 cfs @ 12.09 hrs HW=317.00' (Free Discharge)
—1=Culvert (Inlet Controls 3.89 cfs @ 2.81 fps)

#### Summary for Pond 39P: DMH-302

[79] Warning: Submerged Pond 40P Primary device # 1 INLET by 0.31' [79] Warning: Submerged Pond 41P Primary device # 1 INLET by 0.31'

[79] Warning: Submerged Pond 42P Primary device # 1 OUTLET by 0.61'

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 Inflow Area =
 1.769 ac, 46.05% Impervious, Inflow Depth =
 1.97" for 2-year event

 Inflow =
 3.97 cfs @
 12.09 hrs, Volume =
 0.290 af

 Outflow =
 3.97 cfs @
 12.09 hrs, Volume =
 0.290 af, Atten = 0%, Lag = 0.0 min

Primary = 3.97 cfs @ 12.09 hrs. Volume= 0.290 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 320.31' @ 12.09 hrs

Flood Elev= 324.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	319.20'	18.0" Round Culvert
	•		L= 154.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 319.20' / 316.00' S= 0.0208 '/' Cc= 0.900
			n= 0.012 Corrugated PP smooth interior Flow Area= 1.77 sf

Primary OutFlow Max=3.89 cfs @ 12.09 hrs HW=320.30' (Free Discharge) 1=Culvert (Inlet Controls 3.89 cfs @ 2.81 fps)

#### Summary for Pond 40P: CB-301

Inflow Area = 0.684 ac, 45.40% Impervious, Inflow Depth = 1.94" for 2-year event

Inflow = 1.52 cfs @ 12.09 hrs, Volume= 0.111 af

Outflow = 1.52 cfs @ 12.09 hrs, Volume= 0.111 af, Atten= 0%, Lag= 0.0 min

Primary = 1.52 cfs @ 12.09 hrs, Volume= 0.111 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 320.77' @ 12.09 hrs

Flood Elev= 324.00'

Primary OutFlow Max=1.49 cfs @ 12.09 hrs HW=320.76' (Free Discharge)
1=Culvert (Inlet Controls 1.49 cfs @ 2.34 fps)

#### Summary for Pond 41P: CB-302

Inflow Area = 0.363 ac, 44.75% Impervious, Inflow Depth = 1.94" for 2-year event

Inflow = 0.81 cfs @ 12.09 hrs, Volume= 0.059 af

Outflow = 0.81 cfs @ 12.09 hrs, Volume= 0.059 af, Atten= 0%, Lag= 0.0 min

Primary = 0.81 cfs @ 12.09 hrs, Volume= 0.059 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 320.52' @ 12.09 hrs

Flood Elev= 324.00'

Device	Routing	Invert	Outlet Devices	
#1	Primary	320.00'	12.0" Round Culvert	

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L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 320.00' / 319.70' S= 0.0250 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=0.79 cfs @ 12.09 hrs HW=320.52' (Free Discharge) 1=Culvert (Inlet Controls 0.79 cfs @ 1.93 fps)

## Summary for Pond 42P: DMH-303

[79] Warning: Submerged Pond 43P Primary device # 1 OUTLET by 0.71'

Inflow Area = 0.722 ac, 47.33% Impervious, Inflow Depth = 2.00" for 2-year event Inflow 1.65 cfs @ 12.09 hrs, Volume= 0.120 af Outflow = 1.65 cfs @ 12.09 hrs, Volume= 0.120 af, Atten= 0%, Lag= 0.0 min Primary = 1.65 cfs @ 12.09 hrs, Volume= 0 120 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs.

Peak Elev= 328.71' @ 12.09 hrs

Flood Elev= 332.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	327.90'	12.0" Round Culvert
	-		L= 129.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 327.90' / 319.70' S= 0.0636 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.61 cfs @ 12.09 hrs HW=328.70' (Free Discharge) 1=Culvert (Inlet Controls 1.61 cfs @ 2.40 fps)

#### Summary for Pond 43P: DMH-304

[79] Warning: Submerged Pond 44P Primary device # 1 INLET by 0.31' [79] Warning: Submerged Pond 45P Primary device # 1 INLET by 0.31'

Inflow Area = 0.722 ac, 47.33% Impervious, Inflow Depth = 2.00" for 2-year event 1.65 cfs @ 12.09 hrs, Volume= 0.120 af Inflow 0.120 af, Atten= 0%, Lag= 0.0 min Outflow = 1.65 cfs @ 12.09 hrs, Volume= 1.65 cfs @ 12.09 hrs, Volume= Primary = 0.120 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 336.71' @ 12.09 hrs

Flood Elev= 339.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	335.90'	12.0" Round Culvert
			L= 129.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 335.90' / 328.00' S= 0.0612 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=1.61 cfs @ 12.09 hrs HW=336.70' (Free Discharge) 1=Culvert (Inlet Controls 1.61 cfs @ 2.40 fps)

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## Summary for Pond 44P: CB-303

Inflow Area = 0.392 ac, 53.86% Impervious, Inflow Depth = 2.11" for 2-year event Inflow = 0.94 cfs @ 12.09 hrs, Volume= 0.069 af 0.069 af, Atten= 0%, Lag= 0.0 min Outflow = 0.94 cfs @ 12.09 hrs, Volume= 0.94 cfs @ 12.09 hrs, Volume= 0.069 af

Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 336.97' @ 12.09 hrs

Flood Elev= 340.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	336.40'	12.0" Round Culvert L= 17.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 336.40' / 336.00' S= 0.0235 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.92 cfs @ 12.09 hrs HW=336.96' (Free Discharge) 1=Culvert (Inlet Controls 0.92 cfs @ 2.02 fps)

#### Summary for Pond 45P: CB-304

Inflow Area = 0.330 ac, 39.56% Impervious, Inflow Depth = 1.86" for 2-year event Inflow = 0.70 cfs @ 12.09 hrs, Volume= 0.051 af Outflow = 0.70 cfs @ 12.09 hrs, Volume= 0.051 af, Atten= 0%, Lag= 0.0 min Primary = 0.70 cfs @ 12.09 hrs, Volume= 0.051 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 336.88' @ 12.09 hrs

Flood Elev= 340.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	336.40'	12.0" Round Culvert
			L= 16.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 336.40' / 336.00' S= 0.0250 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=0.69 cfs @ 12.09 hrs HW=336.88' (Free Discharge) 1=Culvert (Inlet Controls 0.69 cfs @ 1.86 fps)

#### Summary for Pond 46P: DMH-218

[79] Warning: Submerged Pond 47P Primary device # 1 INLET by 0.41'

[81] Warning: Exceeded Pond 48P by 0.04' @ 12.10 hrs

Inflow Area = 0.695 ac. 54.04% Impervious. Inflow Depth = 2.11" for 2-year event

1.67 cfs @ 12.09 hrs, Volume= 0.122 af Inflow

Outflow = 1.67 cfs @ 12.09 hrs, Volume= 0.122 af. Atten= 0%. Lag= 0.0 min

1.67 cfs @ 12.09 hrs, Volume= Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

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Peak Elev= 332.92' @ 12.09 hrs

Flood Elev= 336.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	332.10'	12.0" Round Culvert
			L= 81.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 332.10' / 328.20' S= 0.0481 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.63 cfs @ 12.09 hrs HW=332.90' (Free Discharge)
1=Culvert (Inlet Controls 1.63 cfs @ 2.41 fps)

#### Summary for Pond 47P: CB-220

 Inflow Area = Inflow = Inflow = 1.23 cfs @ 12.09 hrs, Volume= O.090 af
 0.512 ac, 54.40% Impervious, Inflow Depth = 2.11" for 2-year event on 0.090 af

 Outflow = Inflow = Inflow

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 333.17' @ 12.09 hrs

Flood Elev= 336.50'

Primary OutFlow Max=1.20 cfs @ 12.09 hrs HW=333.16' (Free Discharge)
1=Culvert (Inlet Controls 1.20 cfs @ 2.18 fps)

#### Summary for Pond 48P: CB-221

 Inflow Area =
 0.183 ac, 53.05% Impervious, Inflow Depth = 2.11" for 2-year event

 Inflow =
 0.44 cfs @ 12.09 hrs, Volume=
 0.032 af

 Outflow =
 0.44 cfs @ 12.09 hrs, Volume=
 0.032 af, Atten= 0%, Lag= 0.0 min

 Primary =
 0.44 cfs @ 12.09 hrs, Volume=
 0.032 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 332.87' @ 12.09 hrs

Flood Elev= 336.50'

Primary OutFlow Max=0.43 cfs @ 12.09 hrs HW=332.87' (Free Discharge)
1=Culvert (Inlet Controls 0.43 cfs @ 1.63 fps)

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## Summary for Pond 49P: DMH-217

[79] Warning: Submerged Pond 46P Primary device # 1 OUTLET by 0.71

Outflow = 1.67 cfs @ 12.09 hrs, Volume= 0.122 af, Atten= 0%, Lag= 0.0 min Primary = 1.67 cfs @ 12.09 hrs, Volume= 0.122 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 328.92' @ 12.09 hrs

Flood Elev= 332.20'

Primary OutFlow Max=1.63 cfs @ 12.09 hrs HW=328.90' (Free Discharge) 1=Culvert (Inlet Controls 1.63 cfs @ 2.41 fps)

#### Summary for Pond 50P: DMH-216

[79] Warning: Submerged Pond 49P Primary device # 1 OUTLET by 0.71

 Inflow Area =
 0.695 ac, 54.04% Impervious, Inflow Depth = 2.11" for 2-year event

 Inflow =
 1.67 cfs @ 12.09 hrs, Volume =
 0.122 af

 Outflow =
 1.67 cfs @ 12.09 hrs, Volume =
 0.122 af, Atten = 0%, Lag = 0.0 min

Primary = 1.67 cfs @ 12.09 hrs, Volume= 0.122 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 322.02' @ 12.09 hrs

Flood Elev= 325.30'

Primary OutFlow Max=1.63 cfs @ 12.09 hrs HW=322.00' (Free Discharge) 1=Culvert (Inlet Controls 1.63 cfs @ 2.41 fps)

#### Summary for Pond 52P: DMH-215

[79] Warning: Submerged Pond 50P Primary device # 1 OUTLET by 0.62

[81] Warning: Exceeded Pond 53P by 0.07' @ 12.10 hrs

[81] Warning: Exceeded Pond 54P by 0.07' @ 12.10 hrs

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Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 318.72' @ 12.09 hrs

Flood Elev= 322.40'

Primary OutFlow Max=2.03 cfs @ 12.09 hrs HW=318.71' (Free Discharge) 1=Culvert (Inlet Controls 2.03 cfs @ 2.42 fps)

#### Summary for Pond 53P: CB-219

Inflow Area = 0.069 ac, 100.00% Impervious, Inflow Depth = 2.91" for 2-year event Inflow = 0.21 cfs @ 12.09 hrs, Volume= 0.017 af

Outflow = 0.21 cfs @ 12.09 hrs, Volume= 0.017 af, Atten= 0%, Lag= 0.0 min

Primary = 0.21 cfs @ 12.09 hrs, Volume= 0.017 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 318.65' @ 12.09 hrs

Flood Elev= 322.40'

Primary OutFlow Max=0.20 cfs @ 12.09 hrs HW=318.65' (Free Discharge)
1=Culvert (Inlet Controls 0.20 cfs @ 1.33 fps)

## Summary for Pond 54P: CB-218

Inflow Area = 0.070 ac,100.00% Impervious, Inflow Depth = 2.91" for 2-year event

Inflow = 0.21 cfs @ 12.09 hrs, Volume= 0.017 af

Outflow = 0.21 cfs @ 12.09 hrs, Volume= 0.017 af, Atten= 0%, Lag= 0.0 min

Primary = 0.21 cfs @ 12.09 hrs, Volume= 0.017 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 318.65' @ 12.09 hrs

Flood Elev= 322.40'

Device	Routing	Invert	Outlet Devices	
#1	Primary	318.40'	12.0" Round Culvert	

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L= 19.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 318.40' / 318.10' S= 0.0158 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=0.20 cfs @ 12.09 hrs HW=318.65' (Free Discharge)
1=Culvert (Inlet Controls 0.20 cfs @ 1.34 fps)

## Summary for Pond 55P: DMH-214

[79] Warning: Submerged Pond 52P Primary device # 1 OUTLET by 0.84'

Inflow Area = 1.495 ac, 57.04% Impervious, Inflow Depth = 2.15" for 2-year event

Inflow = 3.60 cfs @ 12.09 hrs, Volume= 0.268 af

Outflow = 3.60 cfs @ 12.09 hrs, Volume= 0.268 af, Atten= 0%, Lag= 0.0 min

Primary = 3.60 cfs @ 12.09 hrs, Volume= 0.268 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 310.84' @ 12.09 hrs

Flood Elev= 315.90'

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 Device
 Routing
 Invert
 Outlet Devices

 #1
 Primary
 309.80'
 18.0" Round Culvert L=95.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 309.80' / 305.60'
 S= 0.0442 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=3.52 cfs @ 12.09 hrs HW=310.83' (Free Discharge)
1=Culvert (Inlet Controls 3.52 cfs @ 2.72 fps)

#### Summary for Pond 56P: CB-217

Inflow Area = 0.062 ac,100.00% Impervious, Inflow Depth = 2.91" for 2-year event

Inflow = 0.18 cfs @ 12.09 hrs, Volume= 0.015 af

Outflow = 0.18 cfs @ 12.09 hrs. Volume= 0.015 af. Atten= 0%. Lag= 0.0 min

Primary = 0.18 cfs @ 12.09 hrs, Volume= 0.015 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 312.43' @ 12.09 hrs

Flood Elev= 316.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	312.20'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 312.20' / 311.90' S= 0.0150 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.18 cfs @ 12.09 hrs HW=312.43' (Free Discharge)
1=Culvert (Inlet Controls 0.18 cfs @ 1.29 fps)

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#### Summary for Pond 57P: CB-216

Inflow Area = 0.600 ac, 46.16% Impervious, Inflow Depth = 1.94" for 2-year event

Inflow = 1.33 cfs @ 12.09 hrs, Volume= 0.097 af

Outflow = 1.33 cfs @ 12.09 hrs, Volume= 0.097 af, Atten= 0%, Lag= 0.0 min

Primary = 1.33 cfs @ 12.09 hrs, Volume= 0.097 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 312.90' @ 12.09 hrs

Flood Elev= 316.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	312.20'	12.0" Round Culvert
	-		L= 11.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 312.20' / 311.90' S= 0.0273 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.31 cfs @ 12.09 hrs HW=312.90' (Free Discharge) 1=Culvert (Inlet Controls 1.31 cfs @ 2.24 fps)

#### Summary for Pond 58P: DMH-213

[79] Warning: Submerged Pond 55P Primary device # 1 OUTLET by 0.94'

Inflow Area = 1.495 ac, 57.04% Impervious, Inflow Depth = 2.15" for 2-year event

Inflow = 3.60 cfs @ 12.09 hrs, Volume= 0.268 af

Outflow = 3.60 cfs @ 12.09 hrs, Volume= 0.268 af, Atten= 0%, Lag= 0.0 min

Primary = 3.60 cfs @ 12.09 hrs, Volume= 0.268 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 306.54' @ 12.09 hrs

Flood Elev= 309.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	305.50'	18.0" Round Culvert
	-		L= 226.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 305.50' / 290.20' S= 0.0677 '/' Cc= 0.900
			n= 0.012 Corrugated PP smooth interior. Flow Δrea= 1.77 sf

Primary OutFlow Max=3.52 cfs @ 12.09 hrs HW=306.53' (Free Discharge)
1=Culvert (Inlet Controls 3.52 cfs @ 2.72 fps)

#### Summary for Pond 59P: DMH-212

[79] Warning:	Submerged	Pond 58P	Primary	device # 1	OUTLET	oy 0.80'
[79] Warning:	Submerged	Pond 60P	Primary	device # 1	INLET by	0.50'
[79] Warning:	Submerged	Pond 61P	Primary	device # 1	INLET by	0.50'

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Primary = 6.66 cfs @ 12.09 hrs, Volume= 0.492 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 291.00' @ 12.09 hrs

Flood Elev= 294.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	289.70'	24.0" Round Culvert
	•		L= 91.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 289.70' / 284.00' S= 0.0626 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=6.52 cfs @ 12.09 hrs HW=290.99' (Free Discharge) 1=Culvert (Inlet Controls 6.52 cfs @ 3.05 fps)

#### Summary for Pond 60P: CB-214

Inflow Area = 0.813 ac, 37.89% Impervious, Inflow Depth = 1.86" for 2-year event

Inflow = 1.74 cfs @ 12.09 hrs, Volume= 0.126 af

Outflow = 1.74 cfs @ 12.09 hrs, Volume= 0.126 af, Atten= 0%, Lag= 0.0 min

Primary = 1.74 cfs @ 12.09 hrs, Volume= 0.126 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 291.34' @ 12.09 hrs

Flood Elev= 294.50'

Primary OutFlow Max=1.70 cfs @ 12.09 hrs HW=291.33' (Free Discharge)
1=Culvert (Inlet Controls 1.70 cfs @ 2.45 fps)

#### Summary for Pond 61P: CB-215

Inflow Area = 0.554 ac, 53.48% Impervious, Inflow Depth = 2.11" for 2-year event

Inflow = 1.33 cfs @ 12.09 hrs, Volume= 0.098 af

Outflow = 1.33 cfs @ 12.09 hrs, Volume= 0.098 af, Atten= 0%, Lag= 0.0 min

Primary = 1.33 cfs @ 12.09 hrs, Volume= 0.098 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 291.20' @ 12.09 hrs

Flood Flev= 294 50'

Device	Routing	Invert	Outlet Devices	
#1	Primary	290.50'	12.0" Round Culvert	

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L= 19.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 290.50' / 290.20' S= 0.0158 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=1.30 cfs @ 12.09 hrs HW=291.19' (Free Discharge) 1=Culvert (Inlet Controls 1.30 cfs @ 2.24 fps)

## Summary for Pond 62P: DMH-211

[79] Warning: Submerged Pond 59P Primary device # 1 OUTLET by 1.20'

Inflow Area = 2.861 ac, 50.91% Impervious, Inflow Depth = 2.06" for 2-year event Inflow 6.66 cfs @ 12.09 hrs, Volume= 0.492 af Outflow = 6.66 cfs @ 12.09 hrs, Volume= 0.492 af, Atten= 0%, Lag= 0.0 min

Primary = 6.66 cfs @ 12.09 hrs, Volume= 0.492 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs. Peak Elev= 285,20' @ 12.09 hrs

Flood Elev= 288.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	283.90'	24.0" Round Culvert
	-		L= 144.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 283.90' / 277.00' S= 0.0479 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=6.52 cfs @ 12.09 hrs HW=285.19' (Free Discharge) 1=Culvert (Inlet Controls 6.52 cfs @ 3.05 fps)

#### Summary for Pond 63P: FIELD INLET-202

Inflow Area = 2.746 ac, 10.00% Impervious, Inflow Depth = 1.42" for 2-year event Inflow 3.99 cfs @ 12.14 hrs, Volume= 0.325 af

0.325 af. Atten= 0%. Lag= 0.0 min 3.99 cfs @ 12.14 hrs, Volume= Outflow =

Primary = 3.99 cfs @ 12.14 hrs. Volume= 0.325 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 301.77' @ 12.14 hrs

Flood Elev= 304.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	300.80'	24.0" Round Culvert
	•		L= 137.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 300.80' / 297.70' S= 0.0226'/' Cc= 0.900 n= 0.012 Corrugated PP smooth interior Flow Area= 3.14 sf

Primary OutFlow Max=3.92 cfs @ 12.14 hrs HW=301.76' (Free Discharge) 1=Culvert (Inlet Controls 3.92 cfs @ 2.63 fps)

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Type III 24-hr 2-year Rainfall=3.14"

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#### Summary for Pond 66P: CB-222

1.065 ac, 25.38% Impervious, Inflow Depth = 0.70" for 2-year event Inflow Area = Inflow = 0.66 cfs @ 12.15 hrs, Volume= 0.062 af 0.062 af, Atten= 0%, Lag= 0.0 min Outflow = 0.66 cfs @ 12.15 hrs, Volume= 0.66 cfs @ 12.15 hrs, Volume= Primary = 0.062 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 282.87' @ 12.15 hrs

Flood Elev= 286.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	282.40'	12.0" Round Culvert L= 29.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 282.40' / 281.80' S= 0.0207'/ Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.66 cfs @ 12.15 hrs HW=282.87' (Free Discharge) 1=Culvert (Inlet Controls 0.66 cfs @ 1.84 fps)

#### Summary for Pond 71P: FIELD INLET-203

Inflow Area = 3.312 ac, 1.36% Impervious, Inflow Depth = 0.46" for 2-year event Inflow = 0.99 cfs @ 12.19 hrs, Volume= 0.126 af 0.99 cfs @ 12.19 hrs, Volume= 0.126 af, Atten= 0%, Lag= 0.0 min Outflow = Primary = 0.99 cfs @ 12.19 hrs, Volume= 0.126 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 279.30' @ 12.19 hrs

Flood Elev= 282.80'

Device Routing Invert Outlet Devices Primary 278.80' 18.0" Round Culvert L= 28.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 278.80' / 276.50' S= 0.0821 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 1.77 sf

Primary OutFlow Max=0.98 cfs @ 12.19 hrs HW=279.30' (Free Discharge) 1=Culvert (Inlet Controls 0.98 cfs @ 1.90 fps)

#### Summary for Pond 72P: FIELD INLET-204

Inflow Area = 1.632 ac. 1.02% Impervious. Inflow Depth = 0.12" for 2-year event Inflow 0.03 cfs @ 12.50 hrs, Volume= 0.016 af Outflow = 0.03 cfs @ 12.50 hrs, Volume= 0.016 af, Atten= 0%, Lag= 0.0 min

Primary = 0.03 cfs @ 12.50 hrs, Volume= 0.016 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs. Peak Elev= 278.88' @ 12.50 hrs

Flood Elev= 282.80'

#### Type III 24-hr 2-year Rainfall=3.14"

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Device	Routing	Invert	Outlet Devices
#1	Primary	278.80'	18.0" Round Culvert L= 50.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 278.80' / 276.50' S= 0.0460 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=0.03 cfs @ 12.50 hrs HW=278.88' (Free Discharge)

1=Culvert (Inlet Controls 0.03 cfs @ 0.77 fps)

#### Summary for Pond 73P: DMH-219

Inflow Area = 4.944 ac, 1.25% Impervious, Inflow Depth = 0.34" for 2-year event 0.99 cfs @ 12.19 hrs, Volume= 0.142 af Inflow Outflow = 0.99 cfs @ 12.19 hrs, Volume= 0.142 af, Atten= 0%, Lag= 0.0 min 0.99 cfs @ 12.19 hrs, Volume= Primary = 0.142 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 276.50' @ 12.19 hrs

Flood Elev= 284.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	276.00'	18.0" Round Culvert
			L= 86.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 276.00' / 272.00' S= 0.0465 '/' Cc= 0.900
			n= 0.012 Corrugated PP smooth interior. Flow Δrea= 1.77 sf

Primary OutFlow Max=0.98 cfs @ 12.19 hrs HW=276.50' (Free Discharge) 1=Culvert (Inlet Controls 0.98 cfs @ 1.90 fps)

#### Summary for Link DP-A: DESIGN POINT-A

46.063 ac, 13.52% Impervious, Inflow Depth = 0.34" for 2-year event Inflow Area = 3.28 cfs @ 12.47 hrs, Volume= 1.317 af Inflow Primary = 3.28 cfs @ 12.47 hrs, Volume= 1.317 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

#### Summary for Link DP-B: DESIGN POINT-B

Inflow Area = 20.745 ac, 1.41% Impervious, Inflow Depth = 0.13" for 2-year event 0.77 cfs @ 12.37 hrs, Volume= Inflow 0.220 af 0.77 cfs @ 12.37 hrs, Volume= 0.220 af, Atten= 0%, Lag= 0.0 min Primary =

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

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Subcatchment1S: POST 1

Type III 24-hr 10-year Rainfall=4.84"

Runoff Area=4 483 sf 81 80% Impervious Runoff Denth=3 42"

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Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: POST1	Runoff Area=4,483 sf 81.80% Impervious Runoff Depth=3.42" Tc=6.0 min CN=87 Runoff=0.40 cfs 0.029 at
Subcatchment2S: POST 2	Runoff Area=4,363 sf 81.46% Impervious Runoff Depth=3.42" Tc=6.0 min CN=87 Runoff=0.39 cfs 0.029 af
Subcatchment3S: POST 3	Runoff Area=5,733 sf 79.87% Impervious Runoff Depth=3.52" Tc=6.0 min CN=88 Runoff=0.52 cfs 0.039 af
Subcatchment4S: POST 4	Runoff Area=6,696 sf 82.11% Impervious Runoff Depth=3.62" Tc=6.0 min CN=89 Runoff=0.62 cfs 0.046 af
Subcatchment5S: POST 5	Runoff Area=1,758 sf 97.61% Impervious Runoff Depth=4.60" Tc=6.0 min CN=98 Runoff=0.19 cfs 0.015 af
Subcatchment6S: POST 6	Runoff Area=2,283 sf 100.00% Impervious Runoff Depth=4.60" Tc=6.0 min CN=98 Runoff=0.24 cfs 0.020 af
Subcatchment7S: POST7	Runoff Area=2,223 sf 100.00% Impervious Runoff Depth=4.60" Tc=6.0 min CN=98 Runoff=0.24 cfs 0.020 af
Subcatchment8S: POST 8	Runoff Area=2,941 sf 100.00% Impervious Runoff Depth=4.60" Tc=6.0 min CN=98 Runoff=0.31 cfs 0.026 at
Subcatchment9S: POST 9	Runoff Area=27,588 sf 31.21% Impervious Runoff Depth=2.32" Tc=11.0 min CN=75 Runoff=1.44 cfs 0.122 af
Subcatchment10S: POST 10	Runoff Area=65,188 sf 21.96% Impervious Runoff Depth=1.27" Flow Length=718' Tc=10.2 min CN=61 Runoff=1.72 cfs 0.159 af
Subcatchment11S: POST 11	Runoff Area=3,352 sf 100.00% Impervious Runoff Depth=4.60" Tc=6.0 min CN=98 Runoff=0.36 cfs 0.030 af
Subcatchment12S: WRIGHT ROAL	Runoff Area=24,000 sf 100.00% Impervious Runoff Depth=4.60" Tc=6.0 min CN=98 Runoff=2.55 cfs 0.211 at
Subcatchment13S: POST 13	Runoff Area=3,056 sf 100.00% Impervious Runoff Depth=4.60" Tc=6.0 min CN=98 Runoff=0.32 cfs 0.027 af
Subcatchment14S: POST 14	Runoff Area=2,995 sf 100.00% Impervious Runoff Depth=4.60" Tc=6.0 min CN=98 Runoff=0.32 cfs 0.026 af
Subcatchment15S: POST 15	Runoff Area=27,660 sf 44.08% Impervious Runoff Depth=3.32" Tc=6.0 min CN=86 Runoff=2.39 cfs 0.176 af
Subcatchment16S: POST 16	Runoff Area=2,911 sf 100.00% Impervious Runoff Depth=4.60" Tc=6.0 min CN=98 Runoff=0.31 cfs 0.026 af

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#### Type III 24-hr 10-year Rainfall=4.84"

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Subcatchment18S: POST 18	Runoff Area=17,479 sf 31.00% Impervious Runoff De Tc=6.0 min CN=86 Runoff=1.51 cfs	
Subcatchment19S: POST 19	Runoff Area=1,672 sf 100.00% Impervious Runoff De Tc=6.0 min CN=98 Runoff=0.18 cfs	
Subcatchment20S: POST 20	Runoff Area=15,797 sf 44.75% Impervious Runoff De Tc=6.0 min CN=88 Runoff=1.43 cfs	
Subcatchment21S: POST 21	Runoff Area=29,809 sf 45.40% Impervious Runoff De Tc=6.0 min CN=88 Runoff=2.70 cfs	
Subcatchment22S: POST 22	Runoff Area=75,352 sf 7.54% Impervious Runoff De Tc=6.0 min CN=80 Runoff=5.47 cfs	
Subcatchment23S: POST 23	Runoff Area=17,079 sf 53.86% Impervious Runoff De Tc=6.0 min CN=90 Runoff=1.62 cfs	
Subcatchment24S: POST 24	Runoff Area=14,367 sf 39.56% Impervious Runoff De Tc=6.0 min CN=87 Runoff=1.27 cfs	
Subcatchment25S: POST 25	Runoff Area=22,287 sf 54.40% Impervious Runoff De Tc=6.0 min CN=90 Runoff=2.11 cfs	
Subcatchment26S: POST 26	Runoff Area=7,993 sf 53.05% Impervious Runoff De Tc=6.0 min CN=90 Runoff=0.76 cfs	
Subcatchment27S: POST 27	Runoff Area=3,003 sf 100.00% Impervious Runoff De Tc=6.0 min CN=98 Runoff=0.32 cfs	
Subcatchment28S: POST 28	Runoff Area=3,037 sf 100.00% Impervious Runoff De Tc=6.0 min CN=98 Runoff=0.32 cfs	
Subcatchment29S: POST 29	Runoff Area=2,681 sf 100.00% Impervious Runoff De Tc=6.0 min CN=98 Runoff=0.28 cfs	
Subcatchment30S: POST 30	Runoff Area=26,119 sf 46.16% Impervious Runoff De Tc=6.0 min CN=88 Runoff=2.37 cfs	
Subcatchment31S: POST 31	Runoff Area=24,121 sf 53.48% Impervious Runoff De Tc=6.0 min CN=90 Runoff=2.28 cfs	
Subcatchment32S: POST 32	Runoff Area=35,399 sf 37.89% Impervious Runoff De Tc=6.0 min CN=87 Runoff=3.13 cfs	
Subcatchment33S: POST 33	Runoff Area=12,676 sf 72.55% Impervious Runoff De Tc=6.0 min CN=93 Runoff=1.27 cfs	
Subcatchment34S: POST 34	Runoff Area=29,453 sf 45.13% Impervious Runoff De Tc=6.0 min CN=88 Runoff=2.67 cfs	

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Subcatchment35S: POST 35	Runoff Area=14,637 sf 12.15% Impervious Runoff Depth=1.27" Tc=6.0 min CN=61 Runoff=0.45 cfs 0.036 af
Subcatchment36S: POST 36	Runoff Area=7,243 sf 0.00% Impervious Runoff Depth=0.17" Tc=6.0 min CN=39 Runoff=0.00 cfs 0.002 af
Subcatchment37S: POST 37	Runoff Area=13,313 sf 0.00% Impervious Runoff Depth=0.53" Tc=6.0 min CN=48 Runoff=0.09 cfs 0.013 af
Subcatchment38S: POST 38	Runoff Area=12,792 sf 0.00% Impervious Runoff Depth=0.31" Tc=6.0 min CN=43 Runoff=0.03 cfs 0.008 af
Subcatchment39S: POST 39	Runoff Area=10,871 sf 17.45% Impervious Runoff Depth=2.66" Tc=6.0 min UI Adjusted CN=79 Runoff=0.76 cfs 0.055 af
Subcatchment40S: POST 40	Runoff Area=11,225 sf 13.58% Impervious Runoff Depth=1.62" Tc=6.0 min UI Adjusted CN=66 Runoff=0.46 cfs 0.035 af
Subcatchment42S: POST 42	Runoff Area=119,594 sf 10.00% Impervious Runoff Depth=2.84" Flow Length=598' Tc=9.3 min CN=81 Runoff=8.04 cfs 0.651 af
Subcatchment43S: POST 43	Runoff Area=1,029,530 sf 0.73% Impervious Runoff Depth=0.44" Flow Length=497' Tc=11.3 min CN=46 Runoff=4.47 cfs 0.860 af
Subcatchment44S: POST 44	Runoff Area=445,393 sf 2.15% Impervious Runoff Depth=0.84" Tc=6.0 min CN=54 Runoff=7.49 cfs 0.719 af
Subcatchment46S: POST 45	Runoff Area=458,256 sf 0.70% Impervious Runoff Depth=0.44" Tc=10.1 min CN=46 Runoff=2.02 cfs 0.383 af
Subcatchment65S: POST 12	Runoff Area=46,393 sf 25.38% Impervious Runoff Depth=1.77" Flow Length=529' Tc=8.6 min CN=68 Runoff=1.91 cfs 0.157 af
Subcatchment69S: POST 41	Runoff Area=144,249 sf 1.36% Impervious Runoff Depth=1.34" Flow Length=555' Tc=9.6 min CN=62 Runoff=4.14 cfs 0.370 af
Subcatchment70S: POST 17	Runoff Area=71,092 sf 1.02% Impervious Runoff Depth=0.63" Tc=6.0 min CN=50 Runoff=0.68 cfs 0.085 af

Type III 24-hr 10-year Rainfall=4.84"

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1 Peak Elev=250.61' Storage=6,507 cf Inflow=3.40 cfs 0.285 af Discarded=0.25 cfs 0.285 af Primary=0.00 cfs 0.000 af Outflow=0.25 cfs 0.285 af Pond 1P: INFIL. BASIN#1

Pond 2P: INFILTRATIONBASIN#1-A Peak Elev=253.74' Storage=1,978 cf Inflow=1.58 cfs 0.128 af Discarded=0.17 cfs 0.128 af Primary=0.00 cfs 0.000 af Outflow=0.17 cfs 0.128 af

Pond 3P: INFIL. BASIN#2

**1#2** Peak Elev=270.06' Storage=42,210 cf Inflow=35.20 cfs 2.837 af Discarded=0.73 cfs 0.622 af Primary=11.83 cfs 2.215 af Outflow=12.56 cfs 2.837 af

Peak Elev=246.31' Inflow=0.78 cfs 0.060 af Pond 4P: HYDROSTORM 12.0" Round Culvert n=0.012 L=50.0' S=0.0160 '/' Outflow=0.78 cfs 0.060 af

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Pond 19P: CB-201

Pond 20P: DMH-203

Pond 21P: CB-204

Pond 22P: CB-205

#### Type III 24-hr 10-year Rainfall=4.84"

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Prepared by {enter your cor HvdroCAD® 10.10-3a s/n 03590	npany name here} )	Page 63
		. ago oc
Pond 6P: INFIL. BASIN#3	Peak Elev=316.69' Storage=17,144 cf Inflow=12.49 cf	s 0.919 af
	carded=0.29 cfs 0.474 af Primary=5.08 cfs 0.446 af Outflow=5.37 cfs	0.919 af
Pond 7P: CB-103	Peak Elev=248.28' Inflow=0.39 cf	
	12.0" Round Culvert n=0.012 L=20.0' S=0.0050 '/' Outflow=0.39 cfs	s 0.031 af
Pond 8P: CB-102	Peak Elev=247.15' Inflow=0.40 cf	
	12.0" Round Culvert n=0.012 L=17.0' S=0.0176 '/' Outflow=0.40 cfs	s 0.029 at
Pond 9P: CB-106	Peak Elev=259.11' Inflow=1.06 cf	o 0 002 of
Polid 9P. CB-106	12.0" Round Culvert n=0.012 L=10.0' S=0.0300 '/' Outflow=1.06 cf	
	12.0 Round Culvert 11-0.012 E-10.0 3-0.0300 / Outilow-1.00 di	5 U.UUZ ai
Pond 10P: CB-107	Peak Elev=259.11' Inflow=0.52 cf	s 0.039 af
	12.0" Round Culvert n=0.012 L=57.0' S=0.0737 '/' Outflow=0.52 cfs	
Pond 11P: DMH-101	Peak Elev=246.91' Inflow=0.78 cf	s 0.060 at
	12.0" Round Culvert n=0.012 L=47.0' S=0.0106 '/' Outflow=0.78 cfs	s 0.060 af
Pond 12P: DMH-102	Peak Elev=248.05' Inflow=0.39 cf	
	12.0" Round Culvert n=0.012 L=113.0' S=0.0071 '/' Outflow=0.39 cfs	s 0.031 af
D140D- DMII 400	Peak Elev=254.79' Inflow=1.58 cf	- 0 101 ef
Pond 13P: DMH-103	12.0" Round Culvert n=0.012 L=77.0' S=0.0130 '/' Outflow=1.58 cf	
	12.0 Round Culvert 11=0.012 L=77.0 S=0.0130 / Outilow=1.56 Ci	s U. IZ I al
Pond 14P: DMH-104	Peak Elev=258.71' Inflow=1.06 cf	s 0.082 at
	12.0" Round Culvert n=0.012 L=91.0' S=0.0253 '/' Outflow=1.06 cf:	
Pond 15P: DMH-201	Peak Elev=267.70' Inflow=33.95 cf	s 2.739 af
	36.0" Round Culvert n=0.012 L=41.0' S=0.0390 '/' Outflow=33.95 cfs	s 2.739 af
Pond 16P: DMH-202	Peak Elev=279.51' Inflow=15.19 cf	
	24.0" Round Culvert n=0.012 L=77.0' S=0.0766 '/' Outflow=15.19 cfs	s 1.140 af
B 1488 FIELD IN FE	DI-FI070 041 1 8	- 0.055 '
Pond 17P: FIELD INLET-201	Peak Elev=279.31' Inflow=0.76 cf 12.0" Round Culvert n=0.012 L=46.0' S=0.0174 '/' Outflow=0.76 cf	
	12.0 Round Culvert n=0.012 L=46.0 S=0.0174 7 Outflow=0.76 Cf	s u.ubb at
Pond 18P: CB-202	Peak Elev=280.20' Inflow=2.67 cf	e 0 108 of
FUIIU 10F. CD-202	Peak Elev-200.20 IIIII0W-2.07 Cl	

12.0" Round Culvert n=0.012 L=19.0' S=0.0474 '/' Outflow=2.67 cfs 0.198 af

12.0" Round Culvert n=0.012 L=43.0' S=0.0116 '/' Outflow=0.19 cfs 0.015 af

30.0" Round Culvert n=0.012 L=70.0' S=0.0871 '/' Outflow=19.12 cfs 1.599 af

12.0" Round Culvert n=0.012 L=20.0' S=0.0550 '/' Outflow=0.24 cfs 0.020 af

12.0" Round Culvert n=0.012 L=33.0' S=0.0333 '/' Outflow=0.70 cfs 0.055 af

Peak Elev=278.74' Inflow=0.19 cfs 0.015 af

Peak Elev=278.88' Inflow=19.12 cfs 1.599 af

Peak Elev=280.37' Inflow=0.24 cfs 0.020 af

Peak Elev=280.58' Inflow=0.70 cfs 0.055 af

6083 - POST REV1	Type III 24-hr 10-year Rainfall=4	1.84"
Prepared by {enter your HydroCAD® 10.10-3a s/n 03	company name here} 3590 © 2020 HydroCAD Software Solutions LLC Pag	e 64
Pond 23P: DMH-204	Peak Elev=279.71' Inflow=18.22 cfs 1.52 30.0" Round Culvert n=0.012 L=192.0' S=0.0042 '/' Outflow=18.22 cfs 1.52	
Pond 24P: CB-206	Peak Elev=282.16' Inflow=1.44 cfs 0.12 24.0" Round Culvert n=0.012 L=16.0' S=0.0188'/ Outflow=1.44 cfs 0.12	
Pond 25P: CB-207	Peak Elev=281.91' Inflow=0.31 cfs 0.02 12.0" Round Culvert n=0.012 L=16.0' S=0.0188'/' Outflow=0.31 cfs 0.02	
Pond 26P: DMH-205	Peak Elev=280.33' Inflow=16.59 cfs 1.37 30.0" Round Culvert n=0.012 L=151.0' S=0.0040 '/' Outflow=16.59 cfs 1.37	
Pond 27P: DMH-206	Peak Elev=280.93' Inflow=14.69 cfs 1.21 30.0" Round Culvert n=0.012 L=168.0' S=0.0042 '/' Outflow=14.69 cfs 1.21	
Pond 28P: DMH-207	Peak Elev=282.09' Inflow=14.69 cfs 1.21 30.0" Round Culvert n=0.012 L=268.0' S=0.0041 '/' Outflow=14.69 cfs 1.21	
Pond 29P: CB-208	Peak Elev=282.67' Inflow=0.68 cfs 0.05 12.0" Round Culvert n=0.012 L=14.0' S=0.0143 '/' Outflow=0.68 cfs 0.05	
Pond 30P: CB-209	Peak Elev=282.99' Inflow=1.96 cfs 0.18 15.0" Round Culvert n=0.012 L=14.0' S=0.0143 '/' Outflow=1.96 cfs 0.18	
Pond 31P: DMH-208	Peak Elev=285.53' Inflow=12.18 cfs 0.97 24.0" Round Culvert n=0.012 L=165.0' S=0.0170 '/' Outflow=12.18 cfs 0.97	
Pond 32P: DMH-209	Peak Elev=298.43' Inflow=12.18 cfs 0.97 24.0" Round Culvert n=0.012 L=150.0' S=0.0853 '/' Outflow=12.18 cfs 0.97	
Pond 33P: CB-210	Peak Elev=298.31' Inflow=0.31 cfs 0.02 12.0" Round Culvert n=0.012 L=12.0' S=0.0250 '/' Outflow=0.31 cfs 0.02	
Pond 34P: CB-211	Peak Elev=299.14' Inflow=2.39 cfs 0.17 12.0" Round Culvert n=0.012 L=12.0' S=0.0250 '/' Outflow=2.39 cfs 0.17	
Pond 35P: DMH-210	Peak Elev=316.42' Inflow=1.69 cfs 0.12 12.0" Round Culvert n=0.012 L=322.0' S=0.0565 '/' Outflow=1.69 cfs 0.12	
Pond 36P: CB-212	Peak Elev=316.23' Inflow=0.18 cfs 0.01 12.0" Round Culvert n=0.012 L=13.0' S=0.0231 '/' Outflow=0.18 cfs 0.01	
Pond 37P: CB-213	Peak Elev=316.76' Inflow=1.51 cfs 0.11 12.0" Round Culvert n=0.012 L=13.0' S=0.0231 '/' Outflow=1.51 cfs 0.11	
Pond 38P: DMH-301	Peak Elev=317.74' Inflow=7.02 cfs 0.52 18.0" Round Culvert n=0.012 L=71.0' S=0.0549 '/' Outflow=7.02 cfs 0.52	
Pond 39P: DMH-302	Peak Elev=321.04' Inflow=7.02 cfs 0.52 18.0" Round Culvert n=0.012 L=154.0' S=0.0208'/ Outflow=7.02 cfs 0.52	

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Pond 40P: CB-301	Peak Elev=321.32' Inflow=2.70 12.0" Round Culvert n=0.012 L=12.0' S=0.0250 '/' Outflow=2.70	
Pond 41P: CB-302	Peak Elev=320.74' Inflow=1.43 12.0" Round Culvert n=0.012 L=12.0' S=0.0250'/ Outflow=1.43	
Pond 42P: DMH-303	Peak Elev=329.33' Inflow=2.89 12.0" Round Culvert n=0.012 L=129.0' S=0.0636 '/' Outflow=2.89	
Pond 43P: DMH-304	Peak Elev=337.33' Inflow=2.89 12.0" Round Culvert n=0.012 L=129.0' S=0.0612'/ Outflow=2.89	
Pond 44P: CB-303	Peak Elev=337.20' Inflow=1.62 12.0" Round Culvert n=0.012 L=17.0' S=0.0235'/' Outflow=1.62	
Pond 45P: CB-304	Peak Elev=337.08' Inflow=1.27 12.0" Round Culvert n=0.012 L=16.0' S=0.0250'/' Outflow=1.27	
Pond 46P: DMH-218	Peak Elev=333.52' Inflow=2.87 12.0" Round Culvert n=0.012 L=81.0' S=0.0481'/ Outflow=2.87	
Pond 47P: CB-220	Peak Elev=333.50' Inflow=2.11 12.0" Round Culvert n=0.012 L=15.0' S=0.0200'/ Outflow=2.11	
Pond 48P: CB-221	Peak Elev=333.00' Inflow=0.76 12.0" Round Culvert n=0.012 L=9.0' S=0.0333'/ Outflow=0.76	
Pond 49P: DMH-217	Peak Elev=329.52' Inflow=2.87 12.0" Round Culvert n=0.012 L=147.0' S=0.0463'/ Outflow=2.87	
Pond 50P: DMH-216	Peak Elev=322.62' Inflow=2.87 12.0" Round Culvert n=0.012 L=118.0' S=0.0263'/ Outflow=2.87	
Pond 52P: DMH-215	Peak Elev=319.08' Inflow=3.51 15.0" Round Culvert n=0.012 L=247.0' S=0.0320'/ Outflow=3.51	
Pond 53P: CB-219	Peak Elev=318.71' Inflow=0.32 12.0" Round Culvert n=0.012 L=21.0' S=0.0143'/ Outflow=0.32	
Pond 54P: CB-218	Peak Elev=318.72' Inflow=0.32 12.0" Round Culvert n=0.012 L=19.0' S=0.0158'/ Outflow=0.32	
Pond 55P: DMH-214	Peak Elev=311.39' Inflow=6.16 18.0" Round Culvert n=0.012 L=95.0' S=0.0442'/ Outflow=6.16	

Pond 56P: CB-217

Pond 57P: CB-216

Peak Elev=312.50' Inflow=0.28 cfs 0.024 af 12.0" Round Culvert n=0.012 L=20.0' S=0.0150 '/' Outflow=0.28 cfs 0.024 af

12.0" Round Culvert n=0.012 L=11.0' S=0.0273 '/' Outflow=2.37 cfs 0.176 af

Peak Elev=313.33' Inflow=2.37 cfs 0.176 af

6083 - POST REV1	Type III 24-hr 10-year Rainf	all=4.84"
Prepared by {enter your con HydroCAD® 10.10-3a s/n 03590		Page 66
Pond 58P: DMH-213	$\label{eq:peak_elev} Peak\ Elev=307.09'  Inflow=6.16\ cfs \\ 18.0'' \ \ Round\ Culvert \ n=0.012 \ \ L=226.0' \ \ S=0.0677 \ '' \qquad Outflow=6.16\ cfs \\$	
Pond 59P: DMH-212	Peak Elev=291.62' Inflow=11.57 cfs 24.0" Round Culvert n=0.012 L=91.0' S=0.0626 '/' Outflow=11.57 cfs	
Pond 60P: CB-214	Peak Elev=292.10' Inflow=3.13 cfs 12.0" Round Culvert n=0.012 L=10.0' S=0.0300 '/' Outflow=3.13 cfs	
Pond 61P: CB-215	Peak Elev=291.58' Inflow=2.28 cfs 12.0" Round Culvert n=0.012 L=19.0' S=0.0158 '/' Outflow=2.28 cfs	
Pond 62P: DMH-211	Peak Elev=285.82' Inflow=11.57 cfs 24.0" Round Culvert n=0.012 L=144.0' S=0.0479 '/' Outflow=11.57 cfs	
Pond 63P: FIELD INLET-202	Peak Elev=302.27' Inflow=8.04 cfs 24.0" Round Culvert n=0.012 L=137.0' S=0.0226 '/' Outflow=8.04 cfs	
Pond 66P: CB-222	Peak Elev=283.30' Inflow=1.91 cfs 12.0" Round Culvert n=0.012 L=29.0' S=0.0207 '/' Outflow=1.91 cfs	
Pond 71P: FIELD INLET-203	Peak Elev=279.94' Inflow=4.14 cfs 18.0" Round Culvert n=0.012 L=28.0' S=0.0821 '/' Outflow=4.14 cfs	
Pond 72P: FIELD INLET-204	Peak Elev=279.21' Inflow=0.68 cfs 18.0" Round Culvert n=0.012 L=50.0' S=0.0460 '/' Outflow=0.68 cfs	
Pond 73P: DMH-219	Peak Elev=277.27' Inflow=4.82 cfs 18.0" Round Culvert n=0.012 L=86.0' S=0.0465 '/' Outflow=4.82 cfs	
Link DP-A: DESIGN POINT-A	Inflow=24.40 cfs Primary=24.40 cfs	
Link DP-B: DESIGN POINT-B	Inflow=7.97 cfs Primary=7.97 cfs	

Total Runoff Area = 66.808 ac Runoff Volume = 6.587 af Average Runoff Depth = 1.18" 90.24% Pervious = 60.287 ac 9.76% Impervious = 6.520 ac

Type III 24-hr 10-year Rainfall=4.84"

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## **Summary for Subcatchment 1S: POST 1**

0.40 cfs @ 12.09 hrs, Volume= Runoff 0.029 af, Depth= 3.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

	Area (sf)	CN	Description		
	3,667	98	Paved parking, HSG A		
	816	39	>75% Grass cover, Good, HSG A		
	4,483	87	Weighted A	verage	
	816		18.20% Pervious Area		
	3,667		81.80% lmp	pervious Ar	rea
Tc	9	Slope	,	Capacity	
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
6.0					Direct Entry,

## Summary for Subcatchment 2S: POST 2

0.39 cfs @ 12.09 hrs, Volume= 0.029 af, Depth= 3.42" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

A	rea (sf)	CN	Description	Description						
	3,554	98	Paved park	ing, HSG A	A					
	809	39	>75% Gras	s cover, Go	lood, HSG A					
	4,363	87	Weighted A	Weighted Average						
	809		18.54% Pe	rvious Area	a					
	3,554		81.46% Imp	pervious Ar	rea					
Tc	Lenath	Slop	e Velocity	Capacity	Description					
(min)	(feet)	(ft/ft	,	(cfs)	Description					
	(ieet)	(IVII	) (IUSEC)	(CIS)						
6.0					Direct Entry,					

## **Summary for Subcatchment 3S: POST 3**

Runoff 0.52 cfs @ 12.09 hrs, Volume= 0.039 af, Depth= 3.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

#### 6083 - POST REV1

Type III 24-hr 10-year Rainfall=4.84"

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		011	<b>5</b>						
Ai	rea (sf)	CN	Description						
	3,947	98	Paved park	ing, HSG A	١				
	908	39	>75% Gras	s cover, Go	ood, HSG A				
	632	98	Paved park	ing, HSG D	)				
	246	80	>75% Gras	s cover, Go	ood, HSG D				
	5,733	88	Weighted Average						
	1,154		20.13% Pe	rvious Area	I				
	4,579		79.87% Imp	pervious Ar	ea				
Tc	Length	Slop	e Velocity	Capacity	Description				
(min)	(feet)	(ft/fi	) (ft/sec)	(cfs)					
6.0					Direct Entry,				

## Summary for Subcatchment 4S: POST 4

0.62 cfs @ 12.09 hrs, Volume= 0.046 af, Depth= 3.62" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

A	rea (sf)	CN	Description								
	3,254	98	Paved parkir	Paved parking, HSG A							
	879	39	>75% Grass	cover, Go	ood, HSG A						
	2,244	98	Paved parkir	ng, HSG D	)						
	319	80	>75% Grass	cover, Go	ood, HSG D						
	6,696	89	Weighted Av	Weighted Average							
	1,198		17.89% Per	vious Area							
	5,498		82.11% Imp	ervious Are	ea						
Tc	Length	Slop		Capacity	Description						
(min)	(feet)	(ft/fi	t) (ft/sec)	(cfs)							
6.0					Direct Entry,						

#### Summary for Subcatchment 5S: POST 5

0.19 cfs @ 12.09 hrs, Volume= 0.015 af, Depth= 4.60" Runoff =

Area (sf)	CN	Description				
509	98	Paved parking, HSG A				
1,207	98	Paved parking, HSG D				
42	80	>75% Grass cover, Good, HSG D				
1,758	98	Weighted Average				
42		2.39% Pervious Area				
1,716		97.61% Impervious Area				

Type III 24-hr 10-year Rainfall=4.84"

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	Tc (min)	Length (feet)	Velocity (ft/sec)	Capacity (cfs)	Description		
•	6.0				Direct Entry.		•

#### Summary for Subcatchment 6S: POST 6

Runoff = 0.24 cfs @ 12.09 hrs, Volume= 0.020 af, Depth= 4.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

A	rea (sf)	CN I	Description						
	2,283	98 I	8 Paved parking, HSG A						
	2,283		100.00% Impervious Area						
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
6.0					Direct Entry,				

#### Summary for Subcatchment 7S: POST 7

Runoff 0.24 cfs @ 12.09 hrs, Volume= 0.020 af, Depth= 4.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

Α	rea (sf)	CN I	Description						
	2,223	98 F	Paved parking, HSG A						
	2,223		100.00% Impervious Area						
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
6.0					Direct Entry,				

#### **Summary for Subcatchment 8S: POST 8**

Runoff 0.31 cfs @ 12.09 hrs, Volume= 0.026 af. Depth= 4.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

Area (sf)	CN	Description			
2,941	98	Paved parking, HSG A			
2,941		100.00% Impervious Area			

#### 6083 - POST REV1

Type III 24-hr 10-year Rainfall=4.84"

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Page 70 Slope Velocity Capacity Description (min) (feet) (ft/ft) (ft/sec) (cfs) Direct Entry, 6.0

#### Summary for Subcatchment 9S: POST 9

1.44 cfs @ 12.16 hrs, Volume= 0.122 af, Depth= 2.32" Runoff =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

Area (sf)	CN	Description	Description							
2,700	98	Roofs, HSG	D							
12,013	80	>75% Grass	s cover, Go	ood, HSG D						
2,271	98	Roofs, HSG	iΑ							
3,638	98	Paved park	ing, HSG A	١						
6,966	39	>75% Grass	s cover, Go	ood, HSG A						
27,588	75	Weighted A	Weighted Average							
18,979		68.79% Per	vious Area							
8,609		31.21% Imp	ervious Are	ea						
Tc Length	Slop	oe Velocity	Capacity	Description						
(min) (feet)	(ft/	ft) (ft/sec)								
11.0				Direct Entry,						

## Summary for Subcatchment 10S: POST 10

Runoff 1.72 cfs @ 12.16 hrs, Volume= 0.159 af, Depth= 1.27"

ea (sf)	CN	Description
2,999	98	Roofs, HSG D
1,658	98	Paved parking, HSG D
413	98	Unconnected pavement, HSG D
16,156	80	>75% Grass cover, Good, HSG D
4,870	98	Roofs, HSG A
3,489	98	Paved parking, HSG A
886	98	Unconnected pavement, HSG A
28,402	39	>75% Grass cover, Good, HSG A
6,315	30	Woods, Good, HSG A
65,188	61	Weighted Average
50,873		78.04% Pervious Area
14,315		21.96% Impervious Area
1,299		9.07% Unconnected
	2,999 1,658 413 16,156 4,870 3,489 886 28,402 6,315 65,188 50,873 14,315	2,999 98 1,658 98 413 98 16,156 80 4,870 98 3,489 98 886 98 28,402 39 6,315 30 65,188 61 50,873 14,315

#### Type III 24-hr 10-year Rainfall=4.84"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.7	50	0.0600	0.23		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.10"
1.6	205	0.0900	2.10		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
0.7	53	0.0700	1.32		Shallow Concentrated Flow,
					Woodland Kv= 5.0 fps
1.8	152	0.0400	1.40		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
2.4	258	0.0080	1.82		Shallow Concentrated Flow,
					Paved Kv= 20.3 fps
10.2	718	Total			

## Summary for Subcatchment 11S: POST 11

0.36 cfs @ 12.09 hrs, Volume= Runoff 0.030 af, Depth= 4.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

	Area (sf)	CN	Description						
	3,352	98	Paved parking, HSG A						
	3,352		100.00% Impervious Area						
Tc	Lenath	Slone	Velocity	Canacity	Description				
(min)	(feet)	(ft/ft)		(cfs)	Description				
6.0	•				Direct Entry.				

## Summary for Subcatchment 12S: WRIGHT ROAD

2.55 cfs @ 12.09 hrs, Volume= Runoff 0.211 af, Depth= 4.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

	A	rea (sf)	CN [	Description						
		24,000	98 F	98 Paved parking, HSG A						
Ī		24,000	1	100.00% Impervious Area						
	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
	6.0					Direct Entry.				

## 6083 - POST REV1

Type III 24-hr 10-year Rainfall=4.84"

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## Summary for Subcatchment 13S: POST 13

0.32 cfs @ 12.09 hrs, Volume= Runoff = 0.027 af, Depth= 4.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

	Α	rea (sf)	CN I	Description						
		3,056	98 I	Paved parking, HSG A						
		3,056		100.00% Impervious Area						
_	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
	6.0					Direct Entry,				

#### Summary for Subcatchment 14S: POST 14

0.32 cfs @ 12.09 hrs, Volume= 0.026 af, Depth= 4.60" Runoff =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

A	rea (sf)	CN	Description						
	2,995	98	Paved parking, HSG A						
	2,995		100.00% Impervious Area						
Tc (min)	Length (feet)	Slope (ft/ft)	velocity (ft/sec)	Capacity (cfs)	Description				
6.0					Direct Entry,				

## Summary for Subcatchment 15S: POST 15

Runoff = 2.39 cfs @ 12.09 hrs, Volume= 0.176 af, Depth= 3.32"

Area (sf)	CN	Description				
2,736	98	Roofs, HSG D				
7,798	98	Paved parking, HSG D				
162	98	Unconnected pavement, HSG D				
14,432	80	>75% Grass cover, Good, HSG D				
1,051	98	Paved parking, HSG A				
445	98	Unconnected pavement, HSG A				
1,036	39	>75% Grass cover, Good, HSG A				
27,660	86	Weighted Average				
15,468		55.92% Pervious Area				
12,192		44.08% Impervious Area				
607		4.98% Unconnected				
	2,736 7,798 162 14,432 1,051 445 1,036 27,660 15,468 12,192	2,736 98 7,798 98 162 98 14,432 80 1,051 98 445 98 1,036 39 27,660 86 15,468 12,192				

Type III 24-hr 10-year Rainfall=4.84"

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

#### Summary for Subcatchment 16S: POST 16

Runoff = 0.31 cfs @ 12.09 hrs, Volume= 0.026 af, Depth= 4.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

A	rea (sf)	CN	Description						
	921	98	Paved parking, HSG A						
	1,990	98	Paved parking, HSG D						
	2,911	98	Weighted Average						
	2,911		100.00% Impervious Area						
Tc (min)	Length (feet)	Slop (ft/ft	,	Capacity (cfs)	Description				
6.0					Direct Entry,				

#### Summary for Subcatchment 18S: POST 18

1.51 cfs @ 12.09 hrs, Volume= Runoff 0.111 af, Depth= 3.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

Are	ea (sf)	CN	Description							
	1.536		Roofs, HSG D							
	3.103		Paved park		)					
	780		Jnconnecte							
1	2,060				ood, HSG D					
1	7,479	86	Weighted Average							
1	2,060	(	69.00% Pei	vious Area						
	5,419		31.00% Imp		ea					
	780		14.39% Un	connected						
_										
	Length	Slope		Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
6.0					Direct Entry,					

## Summary for Subcatchment 19S: POST 19

0.18 cfs @ 12.09 hrs, Volume= Runoff 0.015 af, Depth= 4.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

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Type III 24-hr 10-year Rainfall=4.84"

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A	rea (sf)	CN I	Description						
	1,672	98	Paved parking, HSG D						
	1,672		100.00% Impervious Area						
т.	1	01	M-1	0	Description				
Tc	Length		Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
6.0	•		•		Direct Entry,				

## Summary for Subcatchment 20S: POST 20

Runoff = 1.43 cfs @ 12.09 hrs, Volume= 0.106 af, Depth= 3.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

Aı	ea (sf)	CN	Description						
	836	98	Roofs, HSG	i D					
	3,970	98	Paved park	ing, HSG D	)				
	1,008	98	Unconnecte	d roofs, HS	SG D				
	8,728	80	>75% Grass	s cover, Go	ood, HSG D				
	1,255	98	Unconnecte	d pavemer	nt, HSG D				
	15,797	88	Weighted Average						
	8,728		55.25% Per	vious Area					
	7,069		44.75% Imp	ervious Ar	ea				
	2,263		32.01% Und	connected					
_									
Tc	Length	Slop		Capacity	Description				
(min)	(feet)	(ft/fi	(ft/sec)	(cfs)					
6.0					Direct Entry,				

## Summary for Subcatchment 21S: POST 21

Runoff 2.70 cfs @ 12.09 hrs, Volume= 0.201 af, Depth= 3.52"

Area (sf)	CN	Description							
4,656	98	Roofs, HSG D	Roofs, HSG D						
8,878	98	Paved parking, HSG D	Paved parking, HSG D						
16,275	80	>75% Grass cover, Good, HSG D	_						
29,809	88	Weighted Average	Weighted Average						
16,275		54.60% Pervious Area							
13,534		45.40% Impervious Area							
Tc Length	Slop								
(min) (feet)	(ft/1	ft) (ft/sec) (cfs)	_						
6.0		Direct Entry,							

Type III 24-hr 10-year Rainfall=4.84"

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## Summary for Subcatchment 22S: POST 22

5.47 cfs @ 12.09 hrs, Volume= Runoff 0.397 af, Depth= 2.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

Area	a (sf)	CN	Description						
5	5,682	98	Roofs, HSG	i D					
47	7,489	80	>75% Gras	s cover, Go	ood, HSG D				
20	),927	77	Woods, Go	od, HSG D					
1	,254	30	Woods, Go	od, HSG A					
75	5,352	80	Weighted A	verage					
69	9,670		92.46% Per	vious Area	1				
5	5,682		7.54% Impe	rvious Area	a				
		٥.							
	ength.	Slope		Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
6.0					Direct Entry,				

## Summary for Subcatchment 23S: POST 23

1.62 cfs @ 12.09 hrs, Volume= 0.122 af, Depth= 3.72" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

Are	ea (sf)	CN	Description						
	2,928	98	Roofs, HSG D						
	6,271	98	Paved park	ing, HSG D	D				
	7,880	80	>75% Gras	s cover, Go	Good, HSG D				
1	7,079	90	Weighted Average						
	7,880		46.14% Per	vious Area	a				
	9,199		53.86% Imp	53.86% Impervious Area					
Tc (min)	Length (feet)	Slope (ft/ft		Capacity (cfs)					
6.0					Direct Entry,				

#### Summary for Subcatchment 24S: POST 24

1.27 cfs @ 12.09 hrs, Volume= 0.094 af, Depth= 3.42" Runoff =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

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Type III 24-hr 10-year Rainfall=4.84"

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Ar	ea (sf)	CN	Description							
	1,299	98	Roofs, HSC	Roofs, HSG D						
	3,427	98	Paved park	ing, HSG D	)					
	957	98	Unconnecte	ed pavemer	nt, HSG D					
	8,684	80	>75% Gras	s cover, Go	ood, HSG D					
	14,367	87	Weighted A	verage						
	8,684		60.44% Per	vious Area						
	5,683		39.56% Imp	pervious Are	ea					
	957		16.84% Un	connected						
Tc	Length	Slope		Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
6.0					Direct Entry,					

#### Summary for Subcatchment 25S: POST 25

Runoff = 2.11 cfs @ 12.09 hrs, Volume= 0.159 af, Depth= 3.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

	Area (sf)	CN	Description	Description					
	2,925	98	Roofs, HSG	Roofs, HSG D					
	8,071	98	Paved park	Paved parking, HSG D					
	1,128	98	Unconnecte	Jnconnected pavement, HSG D					
	10,163	80	>75% Grass	>75% Grass cover, Good, HSG D					
	22,287	90	Weighted Average						
	10,163		45.60% Per	vious Area					
	12,124		54.40% Imp	ervious Ar	ea				
	1,128		9.30% Unco	nnected					
_									
To		Slop							
(min)	(feet)	(ft/f	t) (ft/sec)	(cfs)					
6.0					Direct Entry,				

#### Summary for Subcatchment 26S: POST 26

Runoff = 0.76 cfs @ 12.09 hrs, Volume= 0.057 af, Depth= 3.72"

Area (sf)	CN	Description
468	98	Roofs, HSG D
3,772	98	Paved parking, HSG D
3,753	80	>75% Grass cover, Good, HSG D
7,993	90	Weighted Average
3,753		46.95% Pervious Area
4,240		53.05% Impervious Area

Type III 24-hr 10-year Rainfall=4.84"

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

#### Summary for Subcatchment 27S: POST 27

Runoff = 0.32 cfs @ 12.09 hrs, Volume= 0.026 af, Depth= 4.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

A	rea (sf)	CN	CN Description							
	3,003	98	Paved parking, HSG D							
	3,003		100.00% Impervious Area							
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description					
6.0					Direct Entry,					

#### Summary for Subcatchment 28S: POST 28

0.32 cfs @ 12.09 hrs, Volume= Runoff 0.027 af, Depth= 4.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

A	rea (sf)	CN I	Description					
	3,037	98 I	Paved parking, HSG D					
	3,037		100.00% Impervious Area					
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description			
6.0	•		·		Direct Entry,			

#### Summary for Subcatchment 29S: POST 29

Runoff 0.28 cfs @ 12.09 hrs, Volume= 0.024 af. Depth= 4.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

	Area (sf)	CN	Description	
	2,681	98	Paved parking, HSG D	
2.681 100.00% Impervious Area		100.00% Impervious Area		

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Type III 24-hr 10-year Rainfall=4.84"

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

#### Summary for Subcatchment 30S: POST 30

Runoff = 2.37 cfs @ 12.09 hrs, Volume= 0.176 af, Depth= 3.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

	Area (sf)	CN	Description	Description					
	3,210	98	Roofs, HSG	Roofs, HSG D					
	8,847	98	Paved park	Paved parking, HSG D					
	14,062	80	>75% Gras	75% Grass cover, Good, HSG D					
	26,119	88	Weighted A	Weighted Average					
	14,062		53.84% Per	vious Area	I				
	12,057		46.16% Imp	ervious Ar	ea				
	Tc Lengtl		,	Capacity	Description				
_	(min) (feet	(ft/	ft) (ft/sec)	) (ft/sec) (cfs)					
	6.0				Direct Entry,				

#### Summary for Subcatchment 31S: POST 31

2.28 cfs @ 12.09 hrs, Volume= Runoff 0.172 af, Depth= 3.72"

Area (sf)	CN	Description					
3,204	98	Roofs, HSG D					
8,044	98	Paved parking, HSG D					
1,652	98	Inconnected pavement, HSG D					
11,221	80	>75% Grass cover, Good, HSG D					
24,121	90	Weighted Average					
11,221		46.52% Pervious Area					
12,900		53.48% Impervious Area					
1,652		12.81% Unconnected					
Tc Length	Slo	pe Velocity Capacity Description					
(min) (feet)	(ft/	/ft) (ft/sec) (cfs)					
6.0		Direct Entry,					

Type III 24-hr 10-year Rainfall=4.84"

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## Summary for Subcatchment 32S: POST 32

3.13 cfs @ 12.09 hrs, Volume= 0.231 af, Depth= 3.42" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

Area (s	f) CN	Description							
4,35	0 98	Roofs, HSC	D D						
9,06	3 98	Paved park	ing, HSG D	)					
21,98	86 80	>75% Gras	s cover, Go	ood, HSG D					
35,39	9 87	Weighted A	Weighted Average						
21,98	36	62.11% Pe	vious Area						
13,41	3	37.89% Imp	ervious Ar	ea					
Tc Lenç	gth Slo <sub>l</sub>	oe Velocity	Capacity	Description					
(min) (fe	et) (ft/	ft) (ft/sec)	(cfs)						
6.0				Direct Entry.					

#### Summary for Subcatchment 33S: POST 33

1.27 cfs @ 12.09 hrs, Volume= 0.098 af, Depth= 4.04" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

Area	a (sf)	CN	Description					
1	,908	98	Roofs, HSC	G D				
6	5,727	98	Paved park	ing, HSG D	)			
	456	98	Unconnecte	ed pavemei	nt, HSG D			
	106	98	Paved park	ing, HSG A	١			
3	3,479	80	>75% Gras	s cover, Go	ood, HSG D			
12	2,676	93 Weighted Average						
3	3,479		27.45% Pe	rvious Area	I			
9	,197		72.55% Imp	pervious Ar	ea			
	456		4.96% Unc	onnected				
	ength	Slope		Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
6.0					Direct Entry,			

#### Summary for Subcatchment 34S: POST 34

Runoff 2.67 cfs @ 12.09 hrs, Volume= 0.198 af, Depth= 3.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

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Type III 24-hr 10-year Rainfall=4.84"

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Are	a (sf)	CN	Description					
	3,227	98	Roofs, HSC	G D				
10	0,066	98	Paved park	ing, HSG D	)			
16	5,160	80	>75% Gras	s cover, Go	ood, HSG D			
29	9,453	88	Weighted Average					
16	5,160		54.87% Pe	rvious Area				
13	3,293		45.13% lm	pervious Ar	ea			
Tc L (min)	ength	Slope (ft/ft)		Capacity (cfs)	Description			
6.0					Direct Entry,			

#### Summary for Subcatchment 35S: POST 35

0.45 cfs @ 12.10 hrs, Volume= 0.036 af, Depth= 1.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

	Aı	rea (sf)	CN	Description							
		5,253	80	>75% Gras	>75% Grass cover, Good, HSG D						
		7,605	39	>75% Gras	s cover, Go	ood, HSG A					
		1,779	98	Roofs, HSG	i D						
		14,637	61	Weighted A	Weighted Average						
		12,858		87.85% Per	vious Area						
		1,779		12.15% Imp	ervious Ar	ea					
	Tc	Length	Slop		Capacity	Description					
_	(min)	(feet)	(ft/f	t) (ft/sec)	(cfs)						
	6.0					Direct Entry,					

### Summary for Subcatchment 36S: POST 36

Runoff = 0.00 cfs @ 13.64 hrs, Volume= 0.002 af, Depth= 0.17"

A	rea (sf)	CN	Description							
	7,243	39	>75% Grass cover, Good, HSG A							
	7,243		100.00% Pervious Area							
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)						
6.0	(1001)	(10.10)	(.000)	(0.0)	Direct Entry.					

Type III 24-hr 10-year Rainfall=4.84"

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## Summary for Subcatchment 37S: POST 37

0.09 cfs @ 12.16 hrs, Volume= Runoff 0.013 af, Depth= 0.53"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

Are	a (sf)	CN	Description						
	8,816	39	>75% Gras	s cover, Go	ood, HSG A				
;	3,764	61	>75% Gras	s cover, Go	ood, HSG B				
	381	96	Gravel surfa	ace, HSG A	4				
	352	96	Gravel surfa	ace, HSG E	3				
1:	3,313	48	Weighted Average						
1:	3,313		100.00% Pe	ervious Are	a				
Tc l	_ength	Slope	,	Capacity	Description				
(min)	(feet)	(ft/ft	) (ft/sec)	(cfs)					
6.0					Direct Entry.				

Summary for Subcatchment 38S: POST 38

Runoff 0.03 cfs @ 12.37 hrs, Volume= 0.008 af, Depth= 0.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

/	Area (sf)	CN	Description					
	11,263	39	>75% Gras	s cover, Go	ood, HSG A			
	1,102	61	>75% Gras	s cover, Go	ood, HSG B			
	427	96	Gravel surfa	ace, HSG A	4			
	12,792	43	Weighted Average					
	12,792		100.00% Pe	ervious Are	a			
To	Length	Slope	,	Capacity	Description			
(min)	(feet)	(ft/ft)	t) (ft/sec) (cfs)					
6.0					Direct Entry.			

## Summary for Subcatchment 39S: POST 39

0.76 cfs @ 12.09 hrs, Volume= Runoff = 0.055 af, Depth= 2.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

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Type III 24-hr 10-year Rainfall=4.84"

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		011	A 11	Description					
A	rea (st)	CN	Aaj	Description					
	810	98		Roof	s, HSG D				
	8,142	80		>75%	√ Grass co √	over, Good, HSG D			
	835	98		Unco	nnected pa	pavement, HSG D			
	832	39		>75%	Grass co	over, Good, HSG A			
	252	98		Unco	nnected pa	pavement, HSG A			
	10,871	80	79	Weig	hted Avera	rage, UI Adjusted			
	8,974			82.5	5% Perviou	ous Area			
	1,897			17.4	5% Impervi	vious Area			
	1,087			57.30	)% Unconn	nected			
Tc	Length	Slope	· Ve	locity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft	/sec)	(cfs)	<u> </u>			
6.0	•					Direct Entry,			
	Tc (min)	8,142 835 832 252 10,871 8,974 1,897 1,087 Tc Length (min) (feet)	810 98 8,142 80 835 98 832 39 252 98 10,871 80 8,974 1,897 1,087 Tc Length Slope (min) (feet) (ft/ft)	810 98 8,142 80 835 98 832 39 252 98 10,871 80 79 8,974 1,897 1,087 Tc Length Slope Ve (min) (feet) (ft/ft) (ft	810 98 Roof 8,142 80 >759 835 98 Uncc 832 39 >759 252 98 Uncc 10,871 80 79 Weig 8,974 82.55 1,897 17.44 1,087 57.30 Tc Length Slope Velocity (min) (feet) (ft/ft) (ft/sec)	810 98 Roofs, HSG D   8,142 80 >75% Grass c   835 98 Unconnected   832 39 >75% Grass c   252 98 Unconnected   10,871 80 79 Weighted Average   8,974 82.55% Pervication   1,897 1,087   17,45% Imperiation   1,087   57,30% Uncording   1,087			

#### Summary for Subcatchment 40S: POST 40

Runoff 0.46 cfs @ 12.10 hrs, Volume= 0.035 af. Depth= 1.62"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

A	rea (sf)	CN	Adj	Description					
	1,018	98		Roofs, HSG D					
	5,471	80		>75%	Grass co	over, Good, HSG D			
	506	98		Unco	nnected pa	avement, HSG A			
	4,230	39		>75%	Grass co	over, Good, HSG A			
	11,225	67	66	Weighted Average, UI Adjusted					
	9,701			86.42% Pervious Area					
	1,524			13.58	3% Impervi	ious Area			
	506			33.20	)% Unconn	nected			
Tc	Length	Slope		locity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft	/sec)	(cfs)				
6.0						Direct Entry,			

## Summary for Subcatchment 42S: POST 42

8.04 cfs @ 12.13 hrs, Volume= 0.651 af, Depth= 2.84" Runoff

#### Type III 24-hr 10-year Rainfall=4.84"

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					-					
A	rea (sf)	CN D	CN Description							
	91,127	80 >	75% Gras	s cover, Go	ood, HSG D					
	15,663	77 V	Voods, Go	od, HSG D						
	11,784	98 F	Roofs, HSG	D D						
	174	98 F	Roofs, HSG	βA						
	846	39 >	75% Gras	s cover, Go	ood, HSG A					
1	19,594	81 V	Veighted A	verage						
1	07,636	9	0.00% Per	vious Area	l					
	11,958	1	0.00% Imp	ervious Ar	ea					
Tc	Length	Slope	Velocity		Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
3.3	50	0.0800	0.25		Sheet Flow,					
					Grass: Short n= 0.150 P2= 3.10"					
1.0	91	0.0430	1.45		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
1.2	72	0.0400	1.00		Shallow Concentrated Flow,					
					Woodland Kv= 5.0 fps					
0.5	71	0.0980	2.19		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
3.3	314	0.0500	1.57		Shallow Concentrated Flow,					
					Short Grass Pasture Kv= 7.0 fps					
9.3	598	Total								

## Summary for Subcatchment 43S: POST 43 (PERIMETER)

Runoff = 4.47 cfs @ 12.39 hrs, Volume= 0.860 af, Depth= 0.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

 Area (sf)	CN	Description
153,387	39	>75% Grass cover, Good, HSG A
480,558	30	Woods, Good, HSG A
119,742	55	Woods, Good, HSG B
3,192	98	Roofs, HSG D
110,786	61	>75% Grass cover, Good, HSG B
83,132	77	Woods, Good, HSG D
4,334	96	Gravel surface, HSG A
794	96	Gravel surface, HSG D
4,326	98	Unconnected pavement, HSG A
55,819	80	>75% Grass cover, Good, HSG D
13,460	96	Gravel surface, HSG B
1,029,530	46	Weighted Average
1,022,012		99.27% Pervious Area
7,518		0.73% Impervious Area
4,326		57.54% Unconnected

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Type III 24-hr 10-year Rainfall=4.84"

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	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
•	7.2	50	0.0800	0.12		Sheet Flow,
						Woods: Light underbrush n= 0.400 P2= 3.10"
	3.4	337	0.1100	1.66		Shallow Concentrated Flow,
						Woodland Kv= 5.0 fps
	0.7	110	0.1400	2.62		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	11.3	497	Total			

## Summary for Subcatchment 44S: POST 44

7.49 cfs @ 12.12 hrs, Volume= 0.719 af, Depth= 0.84" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

Area (sf)	CN	Description						
262.578	39	>75% Grass cover, Good, HSG A						
20,513	30	Woods, Good, HSG A						
6,364	77	Woods, Good, HSG D						
137,285	80	>75% Grass cover, Good, HSG D						
9,264	98	Roofs, HSG D						
3,107								
5,953 96 Gravel surface, HSG D								
329	98	Unconnected pavement, HSG D						
445,393	54	Weighted Average						
435,800		97.85% Pervious Area						
9,593		2.15% Impervious Area						
329		3.43% Unconnected						
Tc Length	Slop	pe Velocity Capacity Description						
(min) (feet)	(ft/	ft) (ft/sec) (cfs)						
6.0		Direct Entry,						

#### Summary for Subcatchment 46S: POST 45

2.02 cfs @ 12.37 hrs, Volume= 0.383 af, Depth= 0.44" Runoff =

#### Type III 24-hr 10-year Rainfall=4.84"

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Area (sf)	CN	Description				
241,884	30	Woods, Good, HSG A				
95,851	77	Woods, Good, HSG D				
7,023	, and the second					
2,364	96	Gravel surface, HSG D				
79,566	39	>75% Grass cover, Good, HSG A				
28,376	80	>75% Grass cover, Good, HSG D				
3,192	98	Roofs, HSG D				
458,256	46	Weighted Average				
455,064		99.30% Pervious Area				
3,192		0.70% Impervious Area				
Tc Length (min) (feet)	Slo <sub>l</sub> (ft/					
10.1		Direct Entry,				

## Summary for Subcatchment 65S: POST 12

Runoff 1.91 cfs @ 12.13 hrs, Volume= 0.157 af, Depth= 1.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

A	rea (sf)	CN E	escription		
	2,804	98 F	Roofs, HSC	G D	
	2,957	98 F	aved park	ing, HSG [	)
	130				
					ood, HSG D
2,970 98 Paved parking, HSG A					
					000, HSG A
					•
					ea
	130	'	. 10 /0 0110	onnected	
Тс	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
3.3	50	0.0800	0.25		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.10"
1.7	142	0.0400	1.40		Shallow Concentrated Flow,
	40	0.0000	0.00		Short Grass Pasture Kv= 7.0 fps
0.2	43	0.3200	3.96		Shallow Concentrated Flow,
1 0	1//	0 0380	1 26		Short Grass Pasture Kv= 7.0 fps  Shallow Concentrated Flow,
1.0	144	0.0360	1.30		Short Grass Pasture Kv= 7.0 fps
16	150	0.0060	1 57		Shallow Concentrated Flow,
1.0	100	0.0000	1.01		Paved Kv= 20.3 fps
8.6	529	Total			•
	Tc (min) 3.3 1.7 0.2 1.8 1.6	2,957 130 15,690 2,914 2,970 18,928 46,393 34,618 11,775 130 Tc Length (feet) 3.3 50 1.7 142 0.2 43 1.8 144 1.6 150	2,804 98 F 2,957 98 F 130 98 L 15,690 80 > 2,914 98 F 2,970 98 F 18,928 39 > 46,393 68 V 34,618 7 11,775 2 130 1  TC Length (feet) (ft/ft) 3.3 50 0.0800 1.7 142 0.0400 0.2 43 0.3200 1.8 144 0.0380 1.6 150 0.0060	2,804 98 Roofs, HSC 2,957 98 Paved park 130 98 Unconnecte 15,690 80 >75% Gras 2,914 98 Roofs, HSC 2,970 98 Paved park 18,928 39 >75% Gras 46,393 68 Weighted A 34,618 74,62% Pet 11,775 25,38% Imp 130 1.10% Unco Tc Length (feet) (ft/ft) (ft/sec) 3.3 50 0.0800 0.25 1.7 142 0.0400 1.40 0.2 43 0.3200 3.96 1.8 144 0.0380 1.36 1.6 150 0.0060 1.57	2,804 98 Roofs, HSG D 2,957 98 Paved parking, HSG I 130 98 Unconnected paveme 15,690 80 >75% Grass cover, Gr 2,914 98 Roofs, HSG A 2,970 98 Paved parking, HSG A 18,928 39 >75% Grass cover, Gr 46,393 68 Weighted Average 34,618 74.62% Pervious Area 11,775 25.38% Impervious Ar 11,0% Unconnected  Tc Length Slope Velocity Capacity (min) (feet) (ft/ft) (ft/sec) (cfs) 3.3 50 0.0800 0.25  1.7 142 0.0400 1.40  0.2 43 0.3200 3.96  1.8 144 0.0380 1.36  1.6 150 0.0060 1.57

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Type III 24-hr 10-year Rainfall=4.84"

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## Summary for Subcatchment 69S: POST 41

Runoff = 4.14 cfs @ 12.15 hrs, Volume= 0.370 af, Depth= 1.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 10-year Rainfall=4.84"

			-					
	Α	rea (sf)	CN I	Description				
_		4,616	96 (	Gravel surface, HSG D				
		16,434	77 \	Noods, Go	od. HSG D			
		25,175				ood, HSG A		
		31,571		Noods, Go				
	64,485 80			>75% Grass cover, Good, HSG D				
		1,968		Unconnected pavement, HSG D				
-	144,249 62			Neighted A	verage	,		
	144,249 02 142,281 1.968			98.64% Pervious Area				
				1.36% Impervious Area				
		1,968		100.00% U				
	Tc	Length	Slope	Velocity	Capacity	Description		
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	·		
-	3.0	50	0.1000	0.28	•	Sheet Flow,		
						Grass: Short n= 0.150 P2= 3.10"		
	3.9	392	0.1100	1.66		Shallow Concentrated Flow,		
						Woodland Kv= 5.0 fps		
	2.7	113	0.0800	0.71		Shallow Concentrated Flow,		
						Forest w/Heavy Litter Kv= 2.5 fps		
	9.6	555	Total			•		

## Summary for Subcatchment 70S: POST 17

Runoff = 0.68 cfs @ 12.14 hrs, Volume= 0.085 af, Depth= 0.63"

_	Area (sf)	CN	Description
	473	96	Gravel surface, HSG D
	12,174	80	>75% Grass cover, Good, HSG D
	3,962	96	Gravel surface, HSG A
	1,839	30	Woods, Good, HSG A
	51,919	39	>75% Grass cover, Good, HSG A
_	725	98	Unconnected pavement, HSG A
725 98 71,092 50		50	Weighted Average
	70,367		98.98% Pervious Area
	725		1.02% Impervious Area
473 96 Gravel surface, HSG D 12,174 80 >75% Grass cover, Good, HSG D 3,962 96 Gravel surface, HSG A 1,839 30 Woods, Good, HSG A 51,919 39 >75% Grass cover, Good, HSG A 725 98 Unconnected pavement, HSG A 71,092 50 Weighted Average 70,367 98.98% Pervious Area			

Volume

Invert

245.00'

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

## Summary for Pond 1P: INFIL, BASIN #1

[81] Warning: Exceeded Pond 4P by 4.69' @ 13.70 hrs

Inflow Area = 2.141 ac, 46.19% Impervious, Inflow Depth = 1.60" for 10-year event 3.40 cfs @ 12.09 hrs. Volume= 0 285 af Inflow = 0.285 af. Atten= 93%. Lag= 84.1 min Outflow = 0.25 cfs @ 13.49 hrs. Volume= 0.285 af Discarded = 0.25 cfs @ 13.49 hrs, Volume= 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 250.61' @ 13.49 hrs Surf.Area= 2,851 sf Storage= 6,507 cf

Plug-Flow detention time= 343.2 min calculated for 0.285 af (100% of inflow) Center-of-Mass det. time= 343.6 min ( 1.114.0 - 770.4 )

Avail.Storage Storage Description

			,		( 5)	` ,
Elevation	on	Surf.Area	Perim.	Inc.Store	Cum.Store	Wet.Area
(fee	et)	(sq-ft)	(feet)	(cubic-feet)	(cubic-feet)	(sq-ft)
245.0	00	111	47.0	0	0	111
246.0	00	280	66.0	189	189	291
248.0	00	1,100	152.0	1,290	1,479	1,799
250.0	00	2,410	245.0	3,425	4,905	4,763
252.0	00	3,995	283.0	6,339	11,243	6,445
254.0	00	5,894	332.0	9,828	21,071	8,921
256.0	00	7,996	370.0	13,837	34,907	11,157
		_				
Device	Routing	Inv	ert Outlet	Devices		
#1	Discarde	d 245.0	00' <b>2.410</b>	in/hr Exfiltration of	over Surface area	
			Condu	ctivity to Groundwa	ater Elevation = 24	3.00'
#2	Primary	255.0	00' <b>10.0' l</b>	ong x 13.0' bread	Ith Broad-Crested	Rectangular Weir
			Head (	feet) 0.20 0.40 0	.60 0.80 1.00 1.2	0 1.40 1.60
			Coef. (	English) 2.60 2.6	4 2.70 2.66 2.65	2.66 2.65 2.63

34,907 cf Custom Stage Data (Irregular)Listed below (Recalc)

Discarded OutFlow Max=0.25 cfs @ 13.49 hrs HW=250.61' (Free Discharge) 1=Exfiltration ( Controls 0.25 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=245.00' (Free Discharge) 2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

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Type III 24-hr 10-year Rainfall=4.84"

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#### Summary for Pond 2P: INFILTRATION BASIN #1-A

[79] Warning: Submerged Pond 13P Primary device # 1 OUTLET by 0.74'

Inflow Area = 0.915 ac, 29.75% Impervious, Inflow Depth = 1.68" for 10-year event 1.58 cfs @ 12.09 hrs, Volume= Inflow 0.128 af Outflow = 0.17 cfs @ 13.06 hrs, Volume= 0.128 af, Atten= 89%, Lag= 57.7 min Discarded = 0.17 cfs @ 13.06 hrs, Volume= 0.128 af 0.00 cfs @ 0.00 hrs, Volume= 0.000 af Primary =

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs. Peak Elev= 253.74' @ 13.06 hrs Surf.Area= 2.881 sf Storage= 1.978 cf

Plug-Flow detention time= 103.7 min calculated for 0.128 af (100% of inflow) Center-of-Mass det. time= 103.6 min ( 932.7 - 829.0 )

Volume	Invert	Avail.	Storage	Storage Descriptio	n	
#1	253.00'	10	),119 cf	Custom Stage Da	ta (Irregular)Listed	below (Recalc)
Elevation (fee		urf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
253.0	00	2,452	186.0	0	0	2,452
254.0	00	3,038	205.0	2,740	2,740	3,075
255.0	00	3,680	224.0	3,354	6,094	3,758
256.0	00	4,380	242.0	4,025	10,119	4,465
Device	Routing	Inve	ert Outl	et Devices		
#1	Discarded	253.0	00' 2.41	0 in/hr Exfiltration	over Surface area	
#2	Primary	255.5		ductivity to Groundy		

Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

**Discarded OutFlow** Max=0.17 cfs @ 13.06 hrs HW=253.74' (Free Discharge) 1=Exfiltration (Controls 0.17 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=253.00' (Free Discharge) ^\_2=Broad-Crested Rectangular Weir( Controls 0.00 cfs)

#### Summary for Pond 3P: INFIL, BASIN #2

[81] Warning: Exceeded Pond 15P by 4.18' @ 12.60 hrs

11.845 ac, 34.26% Impervious, Inflow Depth = 2.87" for 10-year event Inflow Area = 35.20 cfs @ 12.10 hrs, Volume= 2.837 af Inflow = 12.56 cfs @ 12.43 hrs, Volume= 2.837 af, Atten= 64%, Lag= 19.5 min Outflow = 0.73 cfs @ 12.43 hrs, Volume= Discarded = 0.622 af 11.83 cfs @ 12.43 hrs, Volume= Primary = 2.215 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs.

Device 2

Device 2

Device 2

#5

Volume

#### Type III 24-hr 10-year Rainfall=4.84"

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Peak Elev= 270.06' @ 12.43 hrs Surf.Area= 9,283 sf Storage= 42,210 cf

Invert Avail.Storage Storage Description

Plug-Flow detention time= 110.9 min calculated for 2.837 af (100% of inflow)

Center-of-Mass det. time= 110.7 min ( 920.4 - 809.7 )

VOIGITIO	1111011	, wan.c	norago	Clorage Decempli	J11		
#1	263.00'	87	,659 cf	Custom Stage D	ata (Irregular)Liste	ed below (Recalc)	
Elevation	n Si	urf.Area	Perim.	Inc.Store	Cum.Store	Wet.Area	
(fee	t)	(sq-ft)	(feet)	(cubic-feet)	(cubic-feet)	(sq-ft)	
263.0	00	3,149	223.0	0	0	3,149	
264.0	00	3,847	242.0	3,492	3,492	3,890	
266.0	00	5,412	280.0	9,215	12,707	5,552	
268.0	00	7,203	317.0	12,572	25,279	7,408	
270.0	00	9,220	355.0	16,382	41,661	9,549	
272.0	00	11,463	393.0	20,642	62,303	11,931	
274.0	00	13,933	430.0	25,356	87,659	14,490	
Device	Routing	Inve	rt Outle	et Devices			
#1	Discarded	263.0		0 in/hr Exfiltration ductivity to Ground			
#2	Primary	263.0		" Round Culvert	water Lievation - 2	255.00	
	,			7.0' CPP, projecti	ng, no headwall, k	Ke= 0.900	
			Inlet	/ Outlet Invert= 26	3.00' / 262.00' S=	: 0.0175 '/' Cc= 0.900	
			n= 0	.013, Flow Area=	1.23 sf		
#3	Primary	273.0	0' 20.0	long x 12.0' brea	adth Broad-Crest	ed Rectangular Weir	
	-		Head	d (feet) 0.20 0.40	0.60 0.80 1.00 1	1.20 1.40 1.60	
			Coef	f. (English) 2.57 2	.62 2.70 2.67 2.6	66 2.67 2.66 2.64	

267.00' 5.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads

263.94' 6.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.73 cfs @ 12.43 hrs HW=270.05' (Free Discharge) 1=Exfiltration (Controls 0.73 cfs)

Primary OutFlow Max=11.83 cfs @ 12.43 hrs HW=270.05' (Free Discharge)

- -2=Culvert (Inlet Controls 11.83 cfs @ 9.64 fps)
- 4=Orifice/Grate (Passes < 1.11 cfs potential flow)
- -5=Orifice/Grate (Passes < 2.29 cfs potential flow)
- -6=Orifice/Grate (Passes < 82.51 cfs potential flow)
- -3=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

## Summary for Pond 4P: HYDROSTORM

268.70' 48.0" x 48.0" Horiz. Orifice/Grate C= 0.600

Limited to weir flow at low heads

[79] Warning: Submerged Pond 11P Primary device # 1 OUTLET by 0.41

Inflow Area = 0.369 ac, 44.88% Impervious, Inflow Depth = 1.95" for 10-year event

Inflow 0.78 cfs @ 12.09 hrs, Volume= 0.060 af

0.060 af, Atten= 0%, Lag= 0.0 min Outflow = 0.78 cfs @ 12.09 hrs, Volume=

0.78 cfs @ 12.09 hrs, Volume= 0.060 af Primary =

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Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 246.31' @ 12.09 hrs Flood Elev= 255.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	245.80'	12.0" Round Culvert
			L= 50.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 245.80' / 245.00' S= 0.0160 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.76 cfs @ 12.09 hrs HW=246.31' (Free Discharge) 1=Culvert (Inlet Controls 0.76 cfs @ 1.91 fps)

#### Summary for Pond 6P: INFIL. BASIN #3

[81] Warning: Exceeded Pond 38P by 0.29' @ 14.25 hrs

Inflow Area	1 =	3.499 ac, 27.01% Impervious, Inflow Depth = 3.15" for 10-year event	
Inflow	=	2.49 cfs @ 12.09 hrs, Volume= 0.919 af	
Outflow	=	5.37 cfs @ 12.32 hrs, Volume= 0.919 af, Atten= 57%, Lag= 13.7 mi	in
Discarded	=	0.29 cfs @ 12.32 hrs, Volume= 0.474 af	
Primary	=	5.08 cfs @ 12.32 hrs Volume= 0.446 af	

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 316.69' @ 12.32 hrs Surf.Area= 5,633 sf Storage= 17,144 cf

Plug-Flow detention time= 363.3 min calculated for 0.919 af (100% of inflow) Center-of-Mass det. time= 364.2 min ( 1,173.0 - 808.9 )

Invert Avail.Storage Storage Description

#1	312.00'	41,	148 cf	Custom Stage Da	ta (Irregular)Listed	below (Recalc)	
Elevation (fee		urf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
312.0	00	1,767	179.0	0	0	1,767	
314.0	00	3,405	239.0	5,083	5,083	3,806	
316.0	00	5,012	284.0	8,365	13,449	5,751	
318.0	00	6,898	329.0	11,860	25,309	8,030	
320.0	00	8,987	367.0	15,839	41,148	10,247	
Device #1	Routing Discarded	Inve	) 1.02	et Devices 0 in/hr Exfiltration			
#2	Primary	312.00	)' <b>12.0</b> L= 5	ductivity to Groundw " Round Culvert 3.0' CPP, projectin / Outlet Invert= 312	g, no headwall, Ke		
#3	Primary	319.50	n= 0 )' <b>20.0</b> Hea	.013, Flow Area= 0	79 sf dth Broad-Crested 0.60 0.80 1.00 1.2	Rectangular Weir	

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#4 #5	Device 2 Device 2	4.0" Vert. Orifice/Grate C= 0.600 48.0" x 48.0" Horiz. Orifice/Grate	
		Limited to weir flow at low heads	

Discarded OutFlow Max=0.29 cfs @ 12.32 hrs HW=316.69' (Free Discharge) 1=Exfiltration (Controls 0.29 cfs)

Primary OutFlow Max=4.85 cfs @ 12.32 hrs HW=316.69' (Free Discharge)

-2=Culvert (Passes 4.85 cfs of 6.11 cfs potential flow)
-4=Orifice/Grate (Orifice Controls 0.52 cfs @ 5.94 fps)
-5=Orifice/Grate (Weir Controls 4.33 cfs @ 1.43 fps)

-3=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

## Summary for Pond 7P: CB-103

Inflow Area = 0.266 ac, 30.62% Impervious, Inflow Depth = 1.39" for 10-year event

Inflow = 0.39 cfs @ 12.09 hrs, Volume= 0.031 af

Outflow = 0.39 cfs @ 12.09 hrs, Volume= 0.031 af, Atten= 0%, Lag= 0.0 min

Primary = 0.39 cfs @ 12.09 hrs, Volume= 0.031 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 248.28' @ 12.09 hrs

Flood Elev= 250.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	247.90'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 247.90' / 247.80' S= 0.0050 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.38 cfs @ 12.09 hrs HW=248.27' (Free Discharge)

1=Culvert (Barrel Controls 0.38 cfs @ 2.09 fps)

#### Summary for Pond 8P: CB-102

Inflow Area = 0.103 ac, 81.80% Impervious, Inflow Depth = 3.42" for 10-year event

Inflow = 0.40 cfs @ 12.09 hrs, Volume= 0.029 af

Outflow = 0.40 cfs @ 12.09 hrs, Volume= 0.029 af, Atten= 0%, Lag= 0.0 min

Primary = 0.40 cfs @ 12.09 hrs, Volume= 0.029 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 247.15' @ 12.09 hrs

Flood Elev= 249.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	246.80'	12.0" Round Culvert
			L= 17.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 246.80' / 246.50' S= 0.0176 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

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Primary OutFlow Max=0.39 cfs @ 12.09 hrs HW=247.15' (Free Discharge) 1=Culvert (Inlet Controls 0.39 cfs @ 1.59 fps)

## Summary for Pond 9P: CB-106

Inflow Area = 0.490 ac, 34.11% Impervious, Inflow Depth = 2.01" for 10-year event

Inflow = 1.06 cfs @ 12.10 hrs, Volume= 0.082 af

Outflow = 1.06 cfs @ 12.10 hrs, Volume= 0.082 af, Atten= 0%, Lag= 0.0 min

Primary = 1.06 cfs @ 12.10 hrs, Volume= 0.082 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 259.11' @ 12.10 hrs

Flood Flev= 262 50'

Device	Routing	Invert	Outlet Devices
#1	Primary	258.50'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900

Inlet / Outlet Invert= 258.50' / 258.20' S= 0.0300'/ Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=1.05 cfs @ 12.10 hrs HW=259.11' (Free Discharge)
1=Culvert (Inlet Controls 1.05 cfs @ 2.10 fps)

#### Summary for Pond 10P: CB-107

Inflow Area = 0.132 ac, 79.87% Impervious, Inflow Depth = 3.52" for 10-year event Inflow = 0.52 cfs @ 12.09 hrs, Volume= 0.039 af

Outflow = 0.52 cfs @ 12.09 hrs, Volume= 0.039 af, Atten= 0%, Lag= 0.0 min

Primary = 0.52 cfs @ 12.09 hrs, Volume= 0.039 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 259.11' @ 12.09 hrs

Flood Elev= 262.70'

Device	Routing	Invert	Outlet Devices
#1	Primary		12.0" Round Culvert L= 57.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 258.70' / 254.50' S= 0.0737'/ Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.51 cfs @ 12.09 hrs HW=259.10' (Free Discharge) 1=Culvert (Inlet Controls 0.51 cfs @ 1.71 fps)

#### Summary for Pond 11P: DMH-101

[79] Warning: Submerged Pond 8P Primary device # 1 INLET by 0.11'

[79] Warning: Submerged Pond 12P Primary device # 1 OUTLET by 0.01'

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Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 246.91' @ 12.09 hrs

Flood Elev= 254.00'

 Device
 Routing
 Invert
 Outlet Devices

 #1
 Primary
 246.40'
 12.0" Round Culvert

L= 47.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 246.40' / 245.90' S= 0.0106 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.76 cfs @ 12.09 hrs HW=246.91' (Free Discharge) 1-1=Culvert (Inlet Controls 0.76 cfs @ 1.91 fps)

## Summary for Pond 12P: DMH-102

[79] Warning: Submerged Pond 7P Primary device # 1 INLET by 0.15'

 Inflow Area =
 0.266 ac, 30.62% Impervious, Inflow Depth = 1.39" for 10-year event

 Inflow =
 0.39 cfs @ 12.09 hrs, Volume=
 0.031 af

 Outflow =
 0.39 cfs @ 12.09 hrs, Volume=
 0.031 af, Atten= 0%, Lag= 0.0 min

 Primary =
 0.39 cfs @ 12.09 hrs, Volume=
 0.031 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 248.05' @ 12.09 hrs Flood Elev= 254.00'

Device Routing Invert Outlet Devices

#1 Primary 247.70' 12.0" Round Culvert

| = 113.0' CPP project

L= 113.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 247.70' / 246.90' S= 0.0071 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.37 cfs @ 12.09 hrs HW=248.04' (Free Discharge) 1=Culvert (Inlet Controls 0.37 cfs @ 1.57 fps)

#### Summary for Pond 13P: DMH-103

[79] Warning: Submerged Pond 10P Primary device # 1 OUTLET by 0.29'

Inflow Area = 0.621 ac, 43.80% Impervious, Inflow Depth = 2.33" for 10-year event Inflow = 1.58 cfs @ 12.09 hrs, Volume= 0.121 af

Outflow = 1.58 cfs @ 12.09 hrs, Volume= 0.121 af, Atten= 0%, Lag= 0.0 min

Primary = 1.58 cfs @ 12.09 hrs, Volume= 0.121 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs.

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Peak Elev= 254.79' @ 12.09 hrs

Flood Elev= 262.20'

 
 Device
 Routing
 Invert
 Outlet Devices

 #1
 Primary
 254.00'
 12.0" Round Culvert E = 77.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 254.00' / 253.00'
 S= 0.0130 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.56 cfs @ 12.09 hrs HW=254.78' (Free Discharge)
1=Culvert (Inlet Controls 1.56 cfs @ 2.37 fps)

## Summary for Pond 14P: DMH-104

[79] Warning: Submerged Pond 9P Primary device # 1 INLET by 0.21

Inflow Area = 0.490 ac, 34.11% Impervious, Inflow Depth = 2.01" for 10-year event

Inflow = 1.06 cfs @ 12.10 hrs, Volume= 0.082 af

Outflow = 1.06 cfs @ 12.10 hrs, Volume= 0.082 af, Atten= 0%, Lag= 0.0 min

Primary = 1.06 cfs @ 12.10 hrs, Volume= 0.082 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 258.71' @ 12.10 hrs

Flood Elev= 262.50'

Primary OutFlow Max=1.05 cfs @ 12.10 hrs HW=258.71' (Free Discharge)
1=Culvert (Inlet Controls 1.05 cfs @ 2.10 fps)

#### Summary for Pond 15P: DMH-201

Inflow Area = 11.554 ac, 33.30% Impervious, Inflow Depth = 2.85" for 10-year event

Inflow = 33.95 cfs @ 12.10 hrs, Volume= 2.739 af

Outflow = 33.95 cfs (2.10 hrs, Volume= 2.739 af, Atten= 0%, Lag= 0.0 min

Primary = 33.95 cfs @ 12.10 hrs, Volume= 2.739 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 267.70' @ 12.10 hrs

Flood Elev= 275.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	264.60'	36.0" Round Culvert
			L= 41.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 264.60' / 263.00' S= 0.0390 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 7.07 sf

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Primary OutFlow Max=33.66 cfs @ 12.10 hrs HW=267.67' (Free Discharge)
1=Culvert (Inlet Controls 33.66 cfs @ 4.76 fps)

#### Summary for Pond 16P: DMH-202

[81] Warning: Exceeded Pond 17P by 0.19' @ 12.10 hrs

[79] Warning: Submerged Pond 18P Primary device # 1 INLET by 0.60'

[81] Warning: Exceeded Pond 19P by 0.76' @ 12.10 hrs

[79] Warning: Submerged Pond 62P Primary device # 1 OUTLET by 2.50'

Inflow Area = 3.827 ac, 48.20% Impervious, Inflow Depth = 3.58" for 10-year event

Inflow = 15.19 cfs @ 12.09 hrs, Volume= 1.140 af

Outflow = 15.19 cfs @ 12.09 hrs, Volume= 1.140 af, Atten= 0%, Lag= 0.0 min

Primary = 15.19 cfs @ 12.09 hrs, Volume= 1.140 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs

Peak Elev= 279.51' @ 12.09 hrs

Flood Elev= 283.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	276.90'	24.0" Round Culvert
			L= 77.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 276.90' / 271.00' S= 0.0766 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 3.14 sf

Primary OutFlow Max=14.84 cfs @ 12.09 hrs HW=279.44' (Free Discharge)
1=Culvert (Inlet Controls 14.84 cfs @ 4.72 fps)

#### Summary for Pond 17P: FIELD INLET-201

Inflow Area = 0.250 ac, 17.45% Impervious, Inflow Depth = 2.66" for 10-year event

Inflow = 0.76 cfs @ 12.09 hrs, Volume= 0.055 af

Outflow = 0.76 cfs @ 12.09 hrs, Volume= 0.055 af, Atten= 0%, Lag= 0.0 min

Primary = 0.76 cfs @ 12.09 hrs, Volume= 0.055 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 279.31' @ 12.09 hrs

Flood Elev= 282.20'

Device	Routing	Invert	Outlet Devices
#1	Primary		12.0" Round Culvert L=46.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 278.80' / 278.00' S= 0.0174'/ Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.75 cfs @ 12.09 hrs HW=279.30' (Free Discharge)
1=Culvert (Inlet Controls 0.75 cfs @ 1.90 fps)

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#### Summary for Pond 18P: CB-202

 Inflow Area =
 0.676 ac, 45.13% Impervious, Inflow Depth = 3.52" for 10-year event

 Inflow =
 2.67 cfs @ 12.09 hrs, Volume =
 0.198 af

 Outflow =
 2.67 cfs @ 12.09 hrs, Volume =
 0.198 af, Atten = 0%, Lag = 0.0 min

Primary = 2.67 cfs @ 12.09 hrs, Volume= 0.198 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 280.20' @ 12.09 hrs

Flood Elev= 282.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	278.90'	12.0" Round Culvert
	-		L= 19.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 278.90' / 278.00' S= 0.0474 '/' Cc= 0.900
			n= 0.012 Corrugated PP smooth interior Flow Area= 0.79 sf

Primary OutFlow Max=2.61 cfs @ 12.09 hrs HW=280.16' (Free Discharge) 1=Culvert (Inlet Controls 2.61 cfs @ 3.32 fps)

## Summary for Pond 19P: CB-201

 Inflow Area =
 0.040 ac, 97.61% Impervious, Inflow Depth = 4.60" for 10-year event

 Inflow =
 0.19 cfs @ 12.09 hrs, Volume=
 0.015 af

 Outflow =
 0.19 cfs @ 12.09 hrs, Volume=
 0.015 af, Atten= 0%, Lag= 0.0 min

 Primary =
 0.19 cfs @ 12.09 hrs, Volume=
 0.015 af

....a.) 0.10 010 @ 12.00 1110, 10.0110 a.

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 278.74' @ 12.09 hrs

Flood Elev= 282.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	278.50'	12.0" Round Culvert
	•		L= 43.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 278.50' / 278.00' S= 0.0116 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=0.18 cfs @ 12.09 hrs HW=278.73' (Free Discharge)
1=Culvert (Inlet Controls 0.18 cfs @ 1.30 fps)

#### Summary for Pond 20P: DMH-203

[79] Warning: Submerged Pond 23P Primary device # 1 INLET by 1.36'

 Inflow Area =
 7.726 ac, 25.92% Impervious, Inflow Depth = 2.48" for 10-year event

 Inflow =
 19.12 cfs @ 12.12 hrs, Volume=
 1.599 af

 Outflow =
 19.12 cfs @ 12.12 hrs, Volume=
 1.599 af, Atten= 0%, Lag= 0.0 min

Primary = 19.12 cfs @ 12.12 hrs, Volume= 1.599 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

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Peak Elev= 278.88' @ 12.12 hrs

Flood Elev= 283.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	276.60'	30.0" Round Culvert
	-		L= 70.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 276.60' / 270.50' S= 0.0871 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 4.91 sf

Primary OutFlow Max=18.63 cfs @ 12.12 hrs HW=278.84¹ (Free Discharge) ↑—1=Culvert (Inlet Controls 18.63 cfs @ 4.02 fps)

#### Summary for Pond 21P: CB-204

Inflow Area = 0.051 ac,100.00% Impervious, Inflow Depth = 4.60" for 10-year event Inflow 0.24 cfs @ 12.09 hrs, Volume= 0.020 af 0.24 cfs @ 12.09 hrs, Volume= Outflow 0.020 af, Atten= 0%, Lag= 0.0 min Primary = 0.24 cfs @ 12.09 hrs, Volume= 0.020 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 280.37' @ 12.09 hrs

Flood Elev= 284.10'

Device Routing Invert Outlet Devices Primary 280.10' 12.0" Round Culvert #1 L= 20.0' CPP, projecting, no headwall. Ke= 0.900 Inlet / Outlet Invert= 280.10' / 279.00' S= 0.0550 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=0.23 cfs @ 12.09 hrs HW=280.36' (Free Discharge) 1=Culvert (Inlet Controls 0.23 cfs @ 1.38 fps)

#### Summary for Pond 22P: CB-205

Inflow Area = 0.310 ac. 28.18% Impervious. Inflow Depth = 2.12" for 10-year event Inflow 0.70 cfs @ 12.10 hrs, Volume= 0.055 af 0.70 cfs @ 12.10 hrs, Volume= 0.055 af. Atten= 0%. Lag= 0.0 min Outflow = Primary = 0.70 cfs @ 12.10 hrs. Volume= 0.055 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 280.58' @ 12.10 hrs

Flood Elev= 284.10'

Device Routing Invert Outlet Devices 280.10' #1 Primary 12.0" Round Culvert L= 33.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 280.10' / 279.00' S= 0.0333 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.69 cfs @ 12.10 hrs HW=280.58' (Free Discharge)

1=Culvert (Inlet Controls 0.69 cfs @ 1.86 fps)

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#### Summary for Pond 23P: DMH-204

[79] Warning: Submerged Pond 26P Primary device # 1 INLET by 1.49'

7.365 ac, 25.31% Impervious, Inflow Depth = 2.48" for 10-year event Inflow Area =

Inflow = 18.22 cfs @ 12.12 hrs, Volume= 1.524 af

Outflow = 18.22 cfs @ 12.12 hrs, Volume= 1.524 af, Atten= 0%, Lag= 0.0 min

Primary = 18.22 cfs @ 12.12 hrs, Volume= 1.524 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 279.71' @ 12.12 hrs

Flood Elev= 285.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	277.50'	30.0" Round Culvert
			L= 192.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 277.50' / 276.70' S= 0.0042 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 4.91 sf

Primary OutFlow Max=17.74 cfs @ 12.12 hrs HW=279.67' (Free Discharge) 1=Culvert (Barrel Controls 17.74 cfs @ 5.24 fps)

# Summary for Pond 24P: CB-206

0.633 ac, 31.21% Impervious, Inflow Depth = 2.32" for 10-year event Inflow Area =

Inflow 1.44 cfs @ 12.16 hrs, Volume= 0.122 af

Outflow = 1.44 cfs @ 12.16 hrs, Volume= 0.122 af, Atten= 0%, Lag= 0.0 min

Primary = 1.44 cfs @ 12.16 hrs, Volume= 0.122 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 282.16' @ 12.16 hrs

Flood Elev= 285.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	281.60'	24.0" Round Culvert
	-		L= 16.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 281.60' / 281.30' S= 0.0188 '/' Cc= 0.900
			n= 0.012 Corrugated PP smooth interior Flow Area= 3.14 sf

Primary OutFlow Max=1.42 cfs @ 12.16 hrs HW=282.15' (Free Discharge) 1=Culvert (Inlet Controls 1.42 cfs @ 2.00 fps)

#### Summary for Pond 25P: CB-207

Inflow Area = 0.068 ac,100.00% Impervious, Inflow Depth = 4.60" for 10-year event Inflow 0.31 cfs @ 12.09 hrs. Volume= 0.026 af 0.026 af. Atten= 0%. Lag= 0.0 min Outflow = 0.31 cfs @ 12.09 hrs. Volume=

0.31 cfs @ 12.09 hrs, Volume= Primary = 0.026 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

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Peak Elev= 281.91' @ 12.09 hrs

Flood Elev= 285.60'

Device	Routing	Invert	Outlet Devices
#1	Primary		12.0" Round Culvert L= 16.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 281.60' / 281.30' S= 0.0188'/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.30 cfs @ 12.09 hrs HW=281.91' (Free Discharge) 1-1=Culvert (Inlet Controls 0.30 cfs @ 1.49 fps)

#### Summary for Pond 26P: DMH-205

[79] Warning: Submerged Pond 27P Primary device # 1 INLET by 1.31'

Inflow Area = 6.664 ac, 23.99% Impervious, Inflow Depth = 2.48" for 10-year event

Inflow = 16.59 cfs @ 12.12 hrs, Volume= 1.376 af

Outflow = 16.59 cfs @ 12.12 hrs, Volume= 1.376 af, Atten= 0%, Lag= 0.0 min

Primary = 16.59 cfs @ 12.12 hrs, Volume= 1.376 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 280.33' @ 12.12 hrs

Flood Elev= 286.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	278.20'	30.0" Round Culvert
	-		L= 151.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 278.20' / 277.60' S= 0.0040 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 4.91 sf

Primary OutFlow Max=16.15 cfs @ 12.12 hrs HW=280.29' (Free Discharge)

1=Culvert (Barrel Controls 16.15 cfs @ 4.99 fps)

#### Summary for Pond 27P: DMH-206

[79] Warning: Submerged Pond 28P Primary device # 1 INLET by 0.72'

Inflow Area = 5.599 ac, 23.73% Impervious, Inflow Depth = 2.61" for 10-year event
Inflow = 14.69 cfs @ 12.12 hrs, Volume= 1.219 af
Outflow = 14.69 cfs @ 12.12 hrs, Volume= 1.219 af, Atten= 0%, Lag= 0.0 min

Outflow = 14.69 cfs @ 12.12 nrs, Volume= 1.219 af,
Primary = 14.69 cfs @ 12.12 hrs, Volume= 1.219 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 280.93' @ 12.12 hrs

Flood Elev= 286.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	279.00'	30.0" Round Culvert L= 168.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 279.00' / 278.30' S= 0.0042 '/' Cc= 0.900

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n= 0.012 Corrugated PP, smooth interior, Flow Area= 4.91 sf

Primary OutFlow Max=14.32 cfs @ 12.12 hrs HW=280.90' (Free Discharge)
1=Culvert (Barrel Controls 14.32 cfs @ 4.95 fos)

#### Summary for Pond 28P: DMH-207

[79] Warning: Submerged Pond 29P Primary device # 1 OUTLET by 0.07' [79] Warning: Submerged Pond 30P Primary device # 1 OUTLET by 0.07'

[79] Warning: Submerged Pond 31P Primary device # 1 OUTLET by 1.37

Inflow Area = 5.599 ac, 23.73% Impervious, Inflow Depth = 2.61" for 10-year event

Inflow = 14.69 cfs @ 12.12 hrs, Volume= 1.219 af

Outflow = 14.69 cfs @ 12.12 hrs, Volume= 1.219 af, Atten= 0%, Lag= 0.0 min

Primary = 14.69 cfs @ 12.12 hrs, Volume= 1.219 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 282.09' @ 12.12 hrs

Flood Flev= 285 30'

Device	Routing	Invert	Outlet Devices
#1	Primary	280.20'	30.0" Round Culvert
			L= 268.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 280.20' / 279.10' S= 0.0041 '/' Cc= 0.900
			n= 0.012 Corrugated PP smooth interior Flow Area= 4.91 sf

Primary OutFlow Max=14.32 cfs @ 12.12 hrs HW=282.06' (Free Discharge)

1=Culvert (Inlet Controls 14.32 cfs @ 3.66 fps)

## Summary for Pond 29P: CB-208

Inflow Area = 0.147 ac,100.00% Impervious, Inflow Depth = 4.60" for 10-year event

Inflow = 0.68 cfs @ 12.09 hrs, Volume= 0.056 af

Outflow = 0.68 cfs @ 12.09 hrs, Volume= 0.056 af, Atten= 0%, Lag= 0.0 min

Primary = 0.68 cfs @ 12.09 hrs, Volume= 0.056 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 282.67' @ 12.09 hrs

Flood Elev= 285.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	282.20'	12.0" Round Culvert
			L= 14.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 282.20' / 282.00' S= 0.0143 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.66 cfs @ 12.09 hrs HW=282.67' (Free Discharge) 1=Culvert (Inlet Controls 0.66 cfs @ 1.84 fps)

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## Summary for Pond 30P: CB-209

Inflow Area = 1.565 ac, 25.39% Impervious, Inflow Depth = 1.42" for 10-year event

Inflow 1.96 cfs @ 12.15 hrs, Volume= 0.185 af

Outflow = 1.96 cfs @ 12.15 hrs, Volume= 0.185 af, Atten= 0%, Lag= 0.0 min

1.96 cfs @ 12.15 hrs, Volume= Primary = 0.185 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 282.99' @ 12.15 hrs

Flood Elev= 285.20'

Device Routing Invert Outlet Devices

15.0" Round Culvert Primary 282.20'

L= 14.0' CPP, projecting, no headwall, Ke= 0.900

Inlet / Outlet Invert= 282.20' / 282.00' S= 0.0143 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=1.95 cfs @ 12.15 hrs HW=282.99' (Free Discharge)

1=Culvert (Inlet Controls 1.95 cfs @ 2.39 fps)

#### Summary for Pond 31P: DMH-208

[79] Warning: Submerged Pond 32P Primary device # 1 OUTLET by 1.92'

3.887 ac, 20.17% Impervious, Inflow Depth = 3.02" for 10-year event Inflow Area =

Inflow 12.18 cfs @ 12.11 hrs, Volume= 0.978 af

Outflow = 12.18 cfs @ 12.11 hrs, Volume= 0.978 af, Atten= 0%, Lag= 0.0 min

12.18 cfs @ 12.11 hrs, Volume= Primary = 0.978 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 285.53' @ 12.11 hrs

Flood Elev= 289.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	283.50'	24.0" Round Culvert
	-		L= 165.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 283.50' / 280.70' S= 0.0170 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 3.14 sf

Primary OutFlow Max=11.90 cfs @ 12.11 hrs HW=285.49' (Free Discharge)

1=Culvert (Inlet Controls 11.90 cfs @ 3.79 fps)

#### Summary for Pond 32P: DMH-209

[81] Warning: Exceeded Pond 33P by 0.11' @ 12.10 hrs

[79] Warning: Submerged Pond 34P Primary device # 1 INLET by 0.42'

[79] Warning: Submerged Pond 35P Primary device # 1 OUTLET by 1.02'

[79] Warning: Submerged Pond 63P Primary device # 1 OUTLET by 0.72'

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3.887 ac, 20.17% Impervious, Inflow Depth = 3.02" for 10-year event Inflow = 12.18 cfs @ 12.11 hrs, Volume= 0.978 af

Outflow = 12.18 cfs @ 12.11 hrs, Volume= 0.978 af, Atten= 0%, Lag= 0.0 min

12.18 cfs @ 12.11 hrs. Volume= 0.978 af Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 298.43' @ 12.11 hrs

Flood Elev= 301.40'

Device Routing Invert Outlet Devices 296.40' 24.0" Round Culvert Primary L= 150.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 296.40' / 283.60' S= 0.0853 '/' Cc= 0.900

Primary OutFlow Max=11.89 cfs @ 12.11 hrs HW=298.39' (Free Discharge) 1=Culvert (Inlet Controls 11.89 cfs @ 3.79 fps)

#### Summary for Pond 33P: CB-210

Inflow Area = 0.067 ac.100.00% Impervious. Inflow Depth = 4.60" for 10-year event

0.31 cfs @ 12.09 hrs, Volume= 0.026 af Inflow

Outflow = 0.31 cfs @ 12.09 hrs, Volume= 0.026 af. Atten= 0%. Lag= 0.0 min

Primary = 0.31 cfs @ 12.09 hrs, Volume=

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 298.31' @ 12.09 hrs

Flood Elev= 302.00'

Invert Outlet Devices Device Routing Primary 298.00' 12.0" Round Culvert

L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 298.00' / 297.70' S= 0.0250 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=0.30 cfs @ 12.09 hrs HW=298.30' (Free Discharge)

1=Culvert (Inlet Controls 0.30 cfs @ 1.48 fps)

#### Summary for Pond 34P: CB-211

Inflow Area = 0.635 ac, 44.08% Impervious, Inflow Depth = 3.32" for 10-year event

Inflow 2.39 cfs @ 12.09 hrs, Volume= 0.176 af

Outflow = 2.39 cfs @ 12.09 hrs, Volume= 0.176 af, Atten= 0%, Lag= 0.0 min

Primary = 2.39 cfs @ 12.09 hrs, Volume= 0.176 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 299.14' @ 12.09 hrs

Flood Flev= 302 00'

Device	Routing	Invert	Outlet Devices	
#1	Primary	298.00'	12.0" Round Culvert	

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L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 298.00' / 297.70' S= 0.0250 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.33 cfs @ 12.09 hrs HW=299.11' (Free Discharge) 1=Culvert (Inlet Controls 2.33 cfs @ 2.97 fps)

## Summary for Pond 35P: DMH-210

[81] Warning: Exceeded Pond 36P by 0.19' @ 12.10 hrs

[79] Warning: Submerged Pond 37P Primary device # 1 INLET by 0.42'

nflow Area = 0.440 ac, 37.03% Impervious, Inflow Depth = 3.43" for 10-year event

Inflow = 1.69 cfs @ 12.09 hrs, Volume= 0.126 af

Outflow = 1.69 cfs @ 12.09 hrs, Volume= 0.126 af, Atten= 0%, Lag= 0.0 min

Primary = 1.69 cfs @ 12.09 hrs, Volume= 0.126 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 316.42' @ 12.09 hrs

Flood Elev= 320.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	315.60'	12.0" Round Culvert
	-		L= 322.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 315.60' / 297.40' S= 0.0565 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.65 cfs @ 12.09 hrs HW=316.41' (Free Discharge) 1=Culvert (Inlet Controls 1.65 cfs @ 2.42 fps)

#### Summary for Pond 36P: CB-212

Inflow Area = 0.038 ac.100.00% Impervious. Inflow Depth = 4.60" for 10-year event

Inflow = 0.18 cfs @ 12.09 hrs, Volume= 0.015 af

Outflow = 0.18 cfs @ 12.09 hrs. Volume= 0.015 af. Atten= 0%. Lag= 0.0 min

Primary = 0.18 cfs @ 12.09 hrs, Volume= 0.015 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 316.23' @ 12.09 hrs

Flood Elev= 320.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	316.00'	12.0" Round Culvert
	-		L= 13.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 316.00' / 315.70' S= 0.0231 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.17 cfs @ 12.09 hrs HW=316.23' (Free Discharge)
1=Culvert (Inlet Controls 0.17 cfs @ 1.28 fps)

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#### Summary for Pond 37P: CB-213

Primary = 1.51 cfs @ 12.09 hrs, Volume= 0.111 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 316.76' @ 12.09 hrs

Flood Elev= 320.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	316.00'	12.0" Round Culvert
	•		L= 13.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 316.00' / 315.70' S= 0.0231 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.47 cfs @ 12.09 hrs HW=316.75' (Free Discharge) 1=Culvert (Inlet Controls 1.47 cfs @ 2.33 fps)

### Summary for Pond 38P: DMH-301

[79] Warning: Submerged Pond 39P Primary device # 1 OUTLET by 1.73'

Inflow Area = 1.769 ac, 46.05% Impervious, Inflow Depth = 3.54" for 10-year event

Inflow = 7.02 cfs @ 12.09 hrs, Volume= 0.522 af

Outflow = 7.02 cfs @ 12.09 hrs, Volume= 0.522 af, Atten= 0%, Lag= 0.0 min

Primary = 7.02 cfs @ 12.09 hrs, Volume= 0.522 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 317.74' @ 12.09 hrs

Flood Elev= 320.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	315.90'	18.0" Round Culvert
	-		L= 71.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 315.90' / 312.00' S= 0.0549 '/' Cc= 0.900
			n= 0.012 Corrugated PP smooth interior Flow Area= 1.77 sf

Primary OutFlow Max=6.86 cfs @ 12.09 hrs HW=317.69' (Free Discharge) 1=Culvert (Inlet Controls 6.86 cfs @ 3.88 fps)

#### Summary for Pond 39P: DMH-302

[79] Warning: Submerged Pond 40P Primary device # 1 INLET by 1.03'

[81] Warning: Exceeded Pond 41P by 0.29' @ 12.10 hrs

[79] Warning: Submerged Pond 42P Primary device # 1 OUTLET by 1.33'

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Inflow Area = 1.769 ac, 46.05% Impervious, Inflow Depth = 3.54" for 10-year event 7.02 cfs @ 12.09 hrs, Volume= 0.522 af Inflow = Outflow = 7.02 cfs @ 12.09 hrs, Volume= 0.522 af, Atten= 0%, Lag= 0.0 min Primary = 7.02 cfs @ 12.09 hrs, Volume= 0.522 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 321.04' @ 12.09 hrs

Flood Elev= 324.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	319.20'	18.0" Round Culvert
	-		L= 154.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 319.20' / 316.00' S= 0.0208 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=6.86 cfs @ 12.09 hrs HW=320.99' (Free Discharge) 1=Culvert (Inlet Controls 6.86 cfs @ 3.88 fps)

#### Summary for Pond 40P: CB-301

Inflow Area = 0.684 ac. 45.40% Impervious. Inflow Depth = 3.52" for 10-year event

2.70 cfs @ 12.09 hrs, Volume= 0.201 af Inflow

Outflow = 2.70 cfs @ 12.09 hrs, Volume= 0.201 af. Atten= 0%. Lag= 0.0 min

Primary = 2.70 cfs @ 12.09 hrs, Volume= 0.201 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 321.32' @ 12.09 hrs

Flood Elev= 324.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	320.00'	12.0" Round Culvert
			L= 12.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 320.00' / 319.70' S= 0.0250 '/' Cc= 0.900
			n= 0.012 Corrugated PP_smooth interior_Flow Area= 0.79 sf

Primary OutFlow Max=2.64 cfs @ 12.09 hrs HW=321.28' (Free Discharge) 1=Culvert (Inlet Controls 2.64 cfs @ 3.36 fps)

## Summary for Pond 41P: CB-302

Inflow Area = 0.363 ac, 44.75% Impervious, Inflow Depth = 3.52" for 10-year event

Inflow 1.43 cfs @ 12.09 hrs, Volume= 0.106 af

0.106 af, Atten= 0%, Lag= 0.0 min Outflow = 1.43 cfs @ 12.09 hrs, Volume=

1.43 cfs @ 12.09 hrs, Volume= Primary = 0.106 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 320.74' @ 12.09 hrs

Flood Flev= 324 00'

Device	Routing	Invert	Outlet Devices
#1	Primary	320.00'	12.0" Round Culvert

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L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 320.00' / 319.70' S= 0.0250 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.40 cfs @ 12.09 hrs HW=320.73' (Free Discharge)

1=Culvert (Inlet Controls 1.40 cfs @ 2.29 fps)

## Summary for Pond 42P: DMH-303

[79] Warning: Submerged Pond 43P Primary device # 1 OUTLET by 1.32'

Inflow Area = 0.722 ac, 47.33% Impervious, Inflow Depth = 3.58" for 10-year event

2.89 cfs @ 12.09 hrs, Volume= Inflow 0.216 af

Outflow = 2.89 cfs @ 12.09 hrs, Volume= 0.216 af, Atten= 0%, Lag= 0.0 min

Primary = 2.89 cfs @ 12.09 hrs, Volume= 0.216 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 329.33' @ 12.09 hrs

Flood Elev= 332.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	327.90'	12.0" Round Culvert
			L= 129.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 327.90' / 319.70' S= 0.0636 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.82 cfs @ 12.09 hrs HW=329.29' (Free Discharge) 1=Culvert (Inlet Controls 2.82 cfs @ 3.59 fps)

#### Summary for Pond 43P: DMH-304

[81] Warning: Exceeded Pond 44P by 0.13' @ 12.10 hrs [81] Warning: Exceeded Pond 45P by 0.24' @ 12.10 hrs

Inflow Area = 0.722 ac. 47.33% Impervious. Inflow Depth = 3.58" for 10-year event

2.89 cfs @ 12.09 hrs, Volume= Inflow = 0.216 af

Outflow = 2.89 cfs @ 12.09 hrs, Volume= 0.216 af, Atten= 0%, Lag= 0.0 min

2.89 cfs @ 12.09 hrs, Volume= Primary = 0.216 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 337.33' @ 12.09 hrs

Flood Elev= 339.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	335.90'	12.0" Round Culvert
	-		L= 129.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 335.90' / 328.00' S= 0.0612 '/' Cc= 0.900
			n= 0.012 Corrugated PP_smooth interior_Flow Area= 0.79 sf

Primary OutFlow Max=2.82 cfs @ 12.09 hrs HW=337.29' (Free Discharge) 1=Culvert (Inlet Controls 2.82 cfs @ 3.59 fps)

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## Summary for Pond 44P: CB-303

0.392 ac, 53.86% Impervious, Inflow Depth = 3.72" for 10-year event Inflow Area =

Inflow 1.62 cfs @ 12.09 hrs, Volume= 0.122 af

0.122 af, Atten= 0%, Lag= 0.0 min Outflow = 1.62 cfs @ 12.09 hrs, Volume=

1.62 cfs @ 12.09 hrs, Volume= Primary = 0.122 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 337.20' @ 12.09 hrs

Flood Elev= 340.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	336.40'	12.0" Round Culvert
	•		L= 17.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 336.40' / 336.00' S= 0.0235 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.58 cfs @ 12.09 hrs HW=337.19' (Free Discharge) 1=Culvert (Inlet Controls 1.58 cfs @ 2.38 fps)

#### Summary for Pond 45P: CB-304

Inflow Area = 0.330 ac, 39.56% Impervious, Inflow Depth = 3.42" for 10-year event Inflow 1.27 cfs @ 12.09 hrs, Volume= 0.094 af Outflow = 1.27 cfs @ 12.09 hrs, Volume= 0.094 af. Atten= 0%. Lag= 0.0 min Primary = 1.27 cfs @ 12.09 hrs, Volume= 0.094 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 337.08' @ 12.09 hrs

Flood Elev= 340.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	336.40'	12.0" Round Culvert
			L= 16.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 336.40' / 336.00' S= 0.0250 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.24 cfs @ 12.09 hrs HW=337.07' (Free Discharge) 1=Culvert (Inlet Controls 1.24 cfs @ 2.21 fps)

#### Summary for Pond 46P: DMH-218

[81] Warning: Exceeded Pond 47P by 0.02' @ 12.10 hrs [81] Warning: Exceeded Pond 48P by 0.51' @ 12.10 hrs

Inflow Area = 0.695 ac. 54.04% Impervious. Inflow Depth = 3.72" for 10-year event

2.87 cfs @ 12.09 hrs, Volume= 0.216 af Inflow

2.87 cfs @ 12.09 hrs, Volume= Outflow = 0.216 af. Atten= 0%. Lag= 0.0 min

2.87 cfs @ 12.09 hrs, Volume= 0.216 af Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

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Peak Elev= 333.52' @ 12.09 hrs

Flood Elev= 336.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	332.10'	12.0" Round Culvert L= 81.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 332.10' / 328.20' S= 0.0481'/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.80 cfs @ 12.09 hrs HW=333.48' (Free Discharge) 1=Culvert (Inlet Controls 2.80 cfs @ 3.56 fps)

## Summary for Pond 47P: CB-220

Inflow Area = 0.512 ac, 54.40% Impervious, Inflow Depth = 3.72" for 10-year event Inflow = 2.11 cfs @ 12.09 hrs, Volume= 0.159 af

2.11 cfs @ 12.09 hrs, Volume= 0.159 af, Atten= 0%, Lag= 0.0 min Outflow =

Primary = 2.11 cfs @ 12.09 hrs, Volume= 0.159 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 333.50' @ 12.09 hrs

Flood Elev= 336.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	332.50'	12.0" Round Culvert
			L= 15.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 332.50' / 332.20' S= 0.0200 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.07 cfs @ 12.09 hrs HW=333.47' (Free Discharge) 1=Culvert (Inlet Controls 2.07 cfs @ 2.65 fps)

#### Summary for Pond 48P: CB-221

Inflow Area = 0.183 ac. 53.05% Impervious. Inflow Depth = 3.72" for 10-year event 0.76 cfs @ 12.09 hrs, Volume= Inflow 0.057 af 0.76 cfs @ 12.09 hrs, Volume= 0.057 af, Atten= 0%, Lag= 0.0 min Outflow = Primary = 0.76 cfs @ 12.09 hrs. Volume= 0.057 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 333.00' @ 12.09 hrs

Flood Elev= 336.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	332.50'	12.0" Round Culvert
			L= 9.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 332.50' / 332.20' S= 0.0333 '/' Cc= 0.900
			n= 0.012 Corrugated PP smooth interior Flow Area= 0.79 sf

Primary OutFlow Max=0.74 cfs @ 12.09 hrs HW=333.00' (Free Discharge) 1=Culvert (Inlet Controls 0.74 cfs @ 1.89 fps)

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#### Summary for Pond 49P: DMH-217

[79] Warning: Submerged Pond 46P Primary device # 1 OUTLET by 1.31'

Inflow Area = 0.695 ac, 54.04% Impervious, Inflow Depth = 3.72" for 10-year event

2.87 cfs @ 12.09 hrs, Volume= Inflow 0.216 af

0.216 af, Atten= 0%, Lag= 0.0 min Outflow = 2.87 cfs @ 12.09 hrs, Volume=

Primary = 2.87 cfs @ 12.09 hrs, Volume= 0.216 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 329.52' @ 12.09 hrs

Flood Elev= 332.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	328.10'	12.0" Round Culvert
			L= 147.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 328.10' / 321.30' S= 0.0463 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.80 cfs @ 12.09 hrs HW=329.48' (Free Discharge) 1=Culvert (Inlet Controls 2.80 cfs @ 3.56 fps)

## Summary for Pond 50P: DMH-216

[79] Warning: Submerged Pond 49P Primary device # 1 OUTLET by 1.31'

Inflow Area = 0.695 ac, 54.04% Impervious, Inflow Depth = 3.72" for 10-year event

Inflow 2.87 cfs @ 12.09 hrs. Volume= 0.216 af

0.216 af. Atten= 0%. Lag= 0.0 min Outflow = 2.87 cfs @ 12.09 hrs. Volume=

Primary = 2.87 cfs @ 12.09 hrs. Volume= 0.216 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs

Peak Elev= 322.62' @ 12.09 hrs

Flood Elev= 325.30'

Device Routing Invert Outlet Devices

Primary 321.20' 12.0" Round Culvert

L= 118.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 321.20' / 318.10' S= 0.0263 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.80 cfs @ 12.09 hrs HW=322.58' (Free Discharge) 1=Culvert (Inlet Controls 2.80 cfs @ 3.56 fps)

## Summary for Pond 52P: DMH-215

[79] Warning: Submerged Pond 50P Primary device # 1 OUTLET by 0.97'

[81] Warning: Exceeded Pond 53P by 0.36' @ 12.10 hrs

[81] Warning: Exceeded Pond 54P by 0.36' @ 12.10 hrs

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0.834 ac, 61.69% Impervious, Inflow Depth = 3.87" for 10-year event Inflow = 3.51 cfs @ 12.09 hrs, Volume= 0.269 af

Outflow = 3.51 cfs @ 12.09 hrs, Volume= 0.269 af, Atten= 0%, Lag= 0.0 min

3.51 cfs @ 12.09 hrs. Volume= 0.269 af Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 319.08' @ 12.09 hrs

Flood Elev= 322.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	317.90'	15.0" Round Culvert
	-		L= 247.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 317.90' / 310.00' S= 0.0320 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=3.42 cfs @ 12.09 hrs HW=319.06' (Free Discharge) 1=Culvert (Inlet Controls 3.42 cfs @ 2.89 fps)

#### Summary for Pond 53P: CB-219

Inflow Area = 0.069 ac.100.00% Impervious. Inflow Depth = 4.60" for 10-year event

0.32 cfs @ 12.09 hrs, Volume= 0.026 af Inflow

0.32 cfs @ 12.09 hrs, Volume= Outflow = 0.026 af. Atten= 0%. Lag= 0.0 min

Primary = 0.32 cfs @ 12.09 hrs, Volume=

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 318.71' @ 12.09 hrs

Flood Elev= 322.40'

Device Routing Invert Outlet Devices Primary 318.40' 12.0" Round Culvert L= 21.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 318.40' / 318.10' S= 0.0143 '/' Cc= 0.900

n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.31 cfs @ 12.09 hrs HW=318.71' (Free Discharge) 1=Culvert (Inlet Controls 0.31 cfs @ 1.50 fps)

## Summary for Pond 54P: CB-218

Inflow Area = 0.070 ac,100.00% Impervious, Inflow Depth = 4.60" for 10-year event

Inflow 0.32 cfs @ 12.09 hrs, Volume= 0.027 af

Outflow = 0.32 cfs @ 12.09 hrs, Volume= 0.027 af, Atten= 0%, Lag= 0.0 min

Primary = 0.32 cfs @ 12.09 hrs, Volume= 0.027 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 318.72' @ 12.09 hrs

Flood Flev= 322 40'

Device	Routing	Invert	Outlet Devices	
#1	Primary	318.40'	12.0" Round Culvert	

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L= 19.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 318.40' / 318.10' S= 0.0158 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=0.31 cfs @ 12.09 hrs HW=318.71' (Free Discharge) 1=Culvert (Inlet Controls 0.31 cfs @ 1.50 fps)

## Summary for Pond 55P: DMH-214

[79] Warning: Submerged Pond 52P Primary device # 1 OUTLET by 1.38'

Inflow Area = 1.495 ac, 57.04% Impervious, Inflow Depth = 3.76" for 10-year event

Inflow 6.16 cfs @ 12.09 hrs, Volume= 0.468 af

Outflow = 6.16 cfs @ 12.09 hrs, Volume= 0.468 af, Atten= 0%, Lag= 0.0 min

Primary = 6.16 cfs @ 12.09 hrs, Volume= 0.468 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs.

Peak Elev= 311.39' @ 12.09 hrs

Flood Elev= 315.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	309.80'	18.0" Round Culvert
			L= 95.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 309.80' / 305.60' S= 0.0442 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 1.77 sf

Primary OutFlow Max=6.00 cfs @ 12.09 hrs HW=311.35' (Free Discharge)

1=Culvert (Inlet Controls 6.00 cfs @ 3.40 fps)

#### Summary for Pond 56P: CB-217

Inflow Area = 0.062 ac,100.00% Impervious, Inflow Depth = 4.60" for 10-year event Inflow

0.28 cfs @ 12.09 hrs, Volume= 0.024 af

0.024 af. Atten= 0%. Lag= 0.0 min 0.28 cfs @ 12.09 hrs, Volume= Outflow =

Primary = 0.28 cfs @ 12.09 hrs. Volume= 0.024 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 312.50' @ 12.09 hrs

Flood Elev= 316.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	312.20'	12.0" Round Culvert
	-		L= 20.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 312.20' / 311.90' S= 0.0150 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.28 cfs @ 12.09 hrs HW=312.49' (Free Discharge) 1=Culvert (Inlet Controls 0.28 cfs @ 1.45 fps)

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#### Summary for Pond 57P: CB-216

Inflow Area = 0.600 ac, 46.16% Impervious, Inflow Depth = 3.52" for 10-year event Inflow = 2.37 cfs @ 12.09 hrs, Volume= 0.176 af 0.176 af, Atten= 0%, Lag= 0.0 min Outflow = 2.37 cfs @ 12.09 hrs, Volume=

2.37 cfs @ 12.09 hrs, Volume= Primary = 0.176 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 313.33' @ 12.09 hrs

Flood Elev= 316.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	312.20'	12.0" Round Culvert
	-		L= 11.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 312.20' / 311.90' S= 0.0273 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.31 cfs @ 12.09 hrs HW=313.30' (Free Discharge) 1=Culvert (Inlet Controls 2.31 cfs @ 2.94 fps)

### Summary for Pond 58P: DMH-213

[79] Warning: Submerged Pond 55P Primary device # 1 OUTLET by 1.48'

1.495 ac, 57.04% Impervious, Inflow Depth = 3.76" for 10-year event Inflow Area =

Inflow = 6.16 cfs @ 12.09 hrs, Volume= 0.468 af

Outflow = 6.16 cfs @ 12.09 hrs, Volume= 0.468 af, Atten= 0%, Lag= 0.0 min

Primary = 6.16 cfs @ 12.09 hrs, Volume= 0.468 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 307.09' @ 12.09 hrs

Flood Elev= 309.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	305.50'	18.0" Round Culvert
			L= 226.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 305.50' / 290.20' S= 0.0677 '/' Cc= 0.900
			n= 0.012 Corrugated PP smooth interior Flow Area= 1.77 sf

Primary OutFlow Max=6.00 cfs @ 12.09 hrs HW=307.05' (Free Discharge) 1=Culvert (Inlet Controls 6.00 cfs @ 3.40 fps)

#### Summary for Pond 59P: DMH-212

[79] Warning: Submerged Pond 58P Primary device # 1 OUTLET by 1.41' [79] Warning: Submerged Pond 60P Primary device # 1 INLET by 1.11'

[81] Warning: Exceeded Pond 61P by 0.04' @ 12.10 hrs

Type III 24-hr 10-year Rainfall=4.84"

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Inflow Area = 2.861 ac, 50.91% Impervious, Inflow Depth = 3.65" for 10-year event Inflow = 11.57 cfs @ 12.09 hrs, Volume= 0.871 af Outflow = 11.57 cfs @ 12.09 hrs, Volume= 0.871 af, Atten= 0%, Lag= 0.0 min Primary = 11.57 cfs @ 12.09 hrs, Volume= 0.871 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 291.62' @ 12.09 hrs

Flood Elev= 294.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	289.70'	24.0" Round Culvert
			L= 91.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 289.70' / 284.00' S= 0.0626 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=11.31 cfs @ 12.09 hrs HW=291.58' (Free Discharge) 1=Culvert (Inlet Controls 11.31 cfs @ 3.69 fps)

## Summary for Pond 60P: CB-214

Inflow Area = 0.813 ac. 37.89% Impervious. Inflow Depth = 3.42" for 10-year event

3.13 cfs @ 12.09 hrs, Volume= 0.231 af Inflow

0.231 af. Atten= 0%. Lag= 0.0 min Outflow = 3.13 cfs @ 12.09 hrs, Volume=

Primary = 3.13 cfs @ 12.09 hrs, Volume= 0.231 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 292.10' @ 12.09 hrs

Flood Elev= 294.50'

ļ	Device	Routing	Invert	Outlet Devices
	#1	Primary	290.50'	12.0" Round Culvert
		•		L= 10.0' CPP, projecting, no headwall, Ke= 0.900
				Inlet / Outlet Invert= 290.50' / 290.20' S= 0.0300 '/' Cc= 0.900
				n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=3.06 cfs @ 12.09 hrs HW=292.05' (Free Discharge) 1=Culvert (Inlet Controls 3.06 cfs @ 3.90 fps)

## Summary for Pond 61P: CB-215

Inflow Area = 0.554 ac, 53.48% Impervious, Inflow Depth = 3.72" for 10-year event

Inflow 2.28 cfs @ 12.09 hrs, Volume= 0.172 af

0.172 af, Atten= 0%, Lag= 0.0 min Outflow = 2.28 cfs @ 12.09 hrs, Volume=

2.28 cfs @ 12.09 hrs, Volume= Primary = 0.172 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 291.58' @ 12.09 hrs

Flood Flev= 294 50'

Device	Routing	Invert	Outlet Devices
#1	Primary	290.50'	12.0" Round Culvert

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Type III 24-hr 10-year Rainfall=4.84"

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L= 19.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 290.50' / 290.20' S= 0.0158 '/' Cc= 0.900

n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=2.23 cfs @ 12.09 hrs HW=291.56' (Free Discharge) 1=Culvert (Inlet Controls 2.23 cfs @ 2.84 fps)

## Summary for Pond 62P: DMH-211

[79] Warning: Submerged Pond 59P Primary device # 1 OUTLET by 1.81

Inflow Area = 2.861 ac, 50.91% Impervious, Inflow Depth = 3.65" for 10-year event

11.57 cfs @ 12.09 hrs, Volume= Inflow 0.871 af

Outflow = 11.57 cfs @ 12.09 hrs, Volume= 0.871 af, Atten= 0%, Lag= 0.0 min

Primary = 11.57 cfs @ 12.09 hrs, Volume= 0.871 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 285.82' @ 12.09 hrs

Flood Elev= 288.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	283.90'	24.0" Round Culvert
	-		L= 144.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 283.90' / 277.00' S= 0.0479 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=11.31 cfs @ 12.09 hrs HW=285.78' (Free Discharge) 1=Culvert (Inlet Controls 11.31 cfs @ 3.69 fps)

#### Summary for Pond 63P: FIELD INLET-202

Inflow Area = 2.746 ac, 10.00% Impervious, Inflow Depth = 2.84" for 10-year event

8.04 cfs @ 12.13 hrs, Volume= Inflow = 0.651 af

0.651 af. Atten= 0%. Lag= 0.0 min 8.04 cfs @ 12.13 hrs, Volume= Outflow =

8.04 cfs @ 12.13 hrs. Volume= Primary = 0.651 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 302.27' @ 12.13 hrs

Flood Elev= 304.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	300.80'	24.0" Round Culvert
	-		L= 137.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 300.80' / 297.70' S= 0.0226 '/' Cc= 0.900
			n= 0.012 Corrugated PP_smooth interior_Flow Area= 3.14 sf

Primary OutFlow Max=7.88 cfs @ 12.13 hrs HW=302.25' (Free Discharge)

1=Culvert (Inlet Controls 7.88 cfs @ 3.23 fps)

Type III 24-hr 10-year Rainfall=4.84"

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#### Summary for Pond 66P: CB-222

Inflow Area = 1.065 ac, 25.38% Impervious, Inflow Depth = 1.77" for 10-year event

Inflow 1.91 cfs @ 12.13 hrs, Volume= 0.157 af

Outflow = 1.91 cfs @ 12.13 hrs, Volume= 0.157 af, Atten= 0%, Lag= 0.0 min

1.91 cfs @ 12.13 hrs, Volume= Primary = 0.157 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 283.30' @ 12.13 hrs

Flood Elev= 286.40'

Device Routing Invert Outlet Devices 12.0" Round Culvert Primary 282.40'

L= 29.0' CPP, projecting, no headwall, Ke= 0.900

Inlet / Outlet Invert= 282.40' / 281.80' S= 0.0207 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

n= 0.012 Corrugated PP, smooth interior. Flow Area= 1.77 sf

Primary OutFlow Max=1.87 cfs @ 12.13 hrs HW=283.29' (Free Discharge)

1=Culvert (Inlet Controls 1.87 cfs @ 2.53 fps)

### Summary for Pond 71P: FIELD INLET-203

Inflow Area = 3.312 ac, 1.36% Impervious, Inflow Depth = 1.34" for 10-year event 4.14 cfs @ 12.15 hrs, Volume= Inflow 0.370 af 4.14 cfs @ 12.15 hrs, Volume= 0.370 af. Atten= 0%. Lag= 0.0 min Outflow

Primary = 4.14 cfs @ 12.15 hrs, Volume= 0.370 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 279.94' @ 12.15 hrs

Flood Elev= 282.80'

Device Routing Invert Outlet Devices Primary 278.80' 18.0" Round Culvert L= 28.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 278.80' / 276.50' S= 0.0821 '/' Cc= 0.900

Primary OutFlow Max=4.11 cfs @ 12.15 hrs HW=279.94' (Free Discharge) 1=Culvert (Inlet Controls 4.11 cfs @ 2.86 fps)

#### Summary for Pond 72P: FIELD INLET-204

Inflow Area = 1.632 ac. 1.02% Impervious. Inflow Depth = 0.63" for 10-year event

Inflow 0.68 cfs @ 12.14 hrs, Volume= 0.085 af

Outflow 0.68 cfs @ 12.14 hrs, Volume= 0.085 af, Atten= 0%, Lag= 0.0 min

0.68 cfs @ 12.14 hrs, Volume= 0.085 af Primary

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs.

Peak Elev= 279.21' @ 12.14 hrs

Flood Elev= 282.80'

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Device Routing Invert Outlet Devices 278.80' 18.0" Round Culvert Primary L= 50.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 278.80' / 276.50' S= 0.0460 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=0.67 cfs @ 12.14 hrs HW=279.21' (Free Discharge)

1=Culvert (Inlet Controls 0.67 cfs @ 1.72 fps)

#### Summary for Pond 73P: DMH-219

[79] Warning: Submerged Pond 71P Primary device # 1 OUTLET by 0.77' [79] Warning: Submerged Pond 72P Primary device # 1 OUTLET by 0.77

4.944 ac, 1.25% Impervious, Inflow Depth = 1.11" for 10-year event Inflow Area = Inflow 4.82 cfs @ 12.15 hrs, Volume= 0.455 af = Outflow = 4.82 cfs @ 12.15 hrs, Volume= 0.455 af, Atten= 0%, Lag= 0.0 min Primary = 4.82 cfs @ 12.15 hrs, Volume= 0.455 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs.

Peak Elev= 277.27' @ 12.15 hrs

Flood Elev= 284.00'

Device Routing Invert Outlet Devices 276 00' 18.0" Round Culvert Primary L= 86.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 276.00' / 272.00' S= 0.0465 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=4.80 cfs @ 12.15 hrs HW=277.26' (Free Discharge) 1=Culvert (Inlet Controls 4.80 cfs @ 3.02 fps)

#### Summary for Link DP-A: DESIGN POINT-A

Inflow Area = 46.063 ac. 13.52% Impervious. Inflow Depth = 1.04" for 10-year event 24.40 cfs @ 12.32 hrs, Volume= 3.976 af

Inflow

24.40 cfs @ 12.32 hrs, Volume= Primary = 3.976 af. Atten= 0%. Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

#### Summary for Link DP-B: DESIGN POINT-B

Inflow Area = 20.745 ac, 1.41% Impervious, Inflow Depth = 0.64" for 10-year event

Inflow 7.97 cfs @ 12.13 hrs, Volume= 1.102 af

7.97 cfs @ 12.13 hrs, Volume= 1.102 af, Atten= 0%, Lag= 0.0 min Primary =

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Type III 24-hr 25-year Rainfall=5.89"

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Subcatchment22S: POST 22

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

·	<b>5</b> .
Subcatchment1S: POST1	Runoff Area=4,483 sf 81.80% Impervious Runoff Depth=4.41" Tc=6.0 min CN=87 Runoff=0.51 cfs 0.038 af
Subcatchment2S: POST 2	Runoff Area=4,363 sf 81.46% Impervious Runoff Depth=4.41" Tc=6.0 min CN=87 Runoff=0.49 cfs 0.037 af
Subcatchment3S: POST3	Runoff Area=5,733 sf 79.87% Impervious Runoff Depth=4.52" Tc=6.0 min CN=88 Runoff=0.66 cfs 0.050 af
Subcatchment4S: POST 4	Runoff Area=6,696 sf 82.11% Impervious Runoff Depth=4.63" Tc=6.0 min CN=89 Runoff=0.78 cfs 0.059 af
Subcatchment5S: POST 5	Runoff Area=1,758 sf 97.61% Impervious Runoff Depth=5.65" Tc=6.0 min CN=98 Runoff=0.23 cfs 0.019 af
Subcatchment6S: POST 6	Runoff Area=2,283 sf 100.00% Impervious Runoff Depth=5.65" Tc=6.0 min CN=98 Runoff=0.30 cfs 0.025 af
Subcatchment7S: POST 7	Runoff Area=2,223 sf 100.00% Impervious Runoff Depth=5.65" Tc=6.0 min CN=98 Runoff=0.29 cfs 0.024 af
Subcatchment8S: POST 8	Runoff Area=2,941 sf 100.00% Impervious Runoff Depth=5.65" Tc=6.0 min CN=98 Runoff=0.38 cfs 0.032 af
Subcatchment9S: POST 9	Runoff Area=27,588 sf 31.21% Impervious Runoff Depth=3.19" Tc=11.0 min CN=75 Runoff=1.99 cfs 0.168 af
Subcatchment10S: POST 10	Runoff Area=65,188 sf 21.96% Impervious Runoff Depth=1.93" Flow Length=718' Tc=10.2 min CN=61 Runoff=2.76 cfs 0.241 af
Subcatchment11S: POST 11	Runoff Area=3,352 sf 100.00% Impervious Runoff Depth=5.65" Tc=6.0 min CN=98 Runoff=0.43 cfs 0.036 af
Subcatchment12S: WRIGHT ROAD	Runoff Area=24,000 sf 100.00% Impervious Runoff Depth=5.65" Tc=6.0 min CN=98 Runoff=3.11 cfs 0.260 af
Subcatchment13S: POST13	Runoff Area=3,056 sf 100.00% Impervious Runoff Depth=5.65" Tc=6.0 min CN=98 Runoff=0.40 cfs 0.033 af
Subcatchment14S: POST14	Runoff Area=2,995 sf 100.00% Impervious Runoff Depth=5.65" Tc=6.0 min CN=98 Runoff=0.39 cfs 0.032 af
Subcatchment15S: POST15	Runoff Area=27,660 sf 44.08% Impervious Runoff Depth=4.30" Tc=6.0 min CN=86 Runoff=3.06 cfs 0.228 af
Subcatchment16S: POST16	Runoff Area=2,911 sf 100.00% Impervious Runoff Depth=5.65" Tc=6.0 min CN=98 Runoff=0.38 cfs 0.031 af

Type III 24-hr 25-year Rainfall=5.89"

Runoff Area=75.352 sf 7.54% Impervious Runoff Depth=3.68"

Tc=6.0 min CN=90 Runoff=2.03 cfs 0.155 af

Tc=6.0 min CN=80 Runoff=7.29 cfs 0.531 af

Subcatchment23S: POST 23 Runoff Area=17,079 sf 53.86% Impervious Runoff Depth=4.74"

Subcatchment24S: POST 24 Runoff Area=14,367 sf 39.56% Impervious Runoff Depth=4.41"

Tc=6.0 min CN=87 Runoff=1.62 cfs 0.121 af

 Subcatchment25S: POST 25
 Runoff Area=22,287 sf
 54.40% Impervious
 Runoff Depth=4.74"

 Tc=6.0 min
 CN=90
 Runoff=2.65 cfs
 0.202 af

Subcatchment26S: POST 26 Runoff Area=7,993 sf 53.05% Impervious Runoff Depth=4.74"

Tc=6.0 min CN=90 Runoff=0.95 cfs 0.072 af

Subcatchment27S: POST 27 Runoff Area=3,003 sf 100.00% Impervious Runoff Depth=5.65"

Tc=6.0 min CN=98 Runoff=0.39 cfs 0.032 af

Subcatchment28S: POST 28 Runoff Area=3,037 sf 100.00% Impervious Runoff Depth=5.65"

Tc=6.0 min CN=98 Runoff=0.39 cfs 0.033 af

Subcatchment29S: POST 29 Runoff Area=2,681 sf 100.00% Impervious Runoff Depth=5.65"

Tc=6.0 min CN=98 Runoff=0.35 cfs 0.029 af

Subcatchment30S: POST 30 Runoff Area=26,119 sf 46.16% Impervious Runoff Depth=4.52"

Tc=6.0 min CN=88 Runoff=3.00 cfs 0.226 af

Subcatchment31S: POST 31 Runoff Area=24,121 sf 53.48% Impervious Runoff Depth=4.74"

Tc=6.0 min CN=90 Runoff=2.87 cfs 0.219 af

Subcatchment32S: POST 32 Runoff Area=35,399 sf 37.89% Impervious Runoff Depth=4.41"

Tc=6.0 min CN=87 Runoff=4.00 cfs 0.299 af

Subcatchment33S: POST 33 Runoff Area=12,676 sf 72.55% Impervious Runoff Depth=5.07"

Tc=6.0 min CN=93 Runoff=1.57 cfs 0.123 af

Subcatchment34S: POST 34 Runoff Area=29,453 sf 45.13% Impervious Runoff Depth=4.52"

Tc=6.0 min CN=88 Runoff=3.39 cfs 0.255 af

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Subcatchment35S: POST 35	Runoff Area=14,637 sf 12.15% Impervious R Tc=6.0 min CN=61 Runoff	
Subcatchment36S: POST36	Runoff Area=7,243 sf 0.00% Impervious R Tc=6.0 min CN=39 Runoff	
Subcatchment37S: POST 37	Runoff Area=13,313 sf 0.00% Impervious R Tc=6.0 min CN=48 Runoff	
Subcatchment38S: POST 38	Runoff Area=12,792 sf 0.00% Impervious R Tc=6.0 min CN=43 Runoff	
Subcatchment39S: POST 39	Runoff Area=10,871 sf 17.45% Impervious R Tc=6.0 min UI Adjusted CN=79 Runoff	
Subcatchment40S: POST 40	Runoff Area=11,225 sf 13.58% Impervious R Tc=6.0 min UI Adjusted CN=66 Runoff	
Subcatchment42S: POST 42	Runoff Area=119,594 sf 10.00% Impervious R Flow Length=598' Tc=9.3 min CN=81 Runoff=	
Subcatchment43S: POST 43	Runoff Area=1,029,530 sf 0.73% Impervious R Flow Length=497' Tc=11.3 min CN=46 Runoff=	
Subcatchment44S: POST 44	Runoff Area=445,393 sf 2.15% Impervious R Tc=6.0 min CN=54 Runoff=	
Subcatchment46S: POST 45	Runoff Area=458,256 sf 0.70% Impervious R Tc=10.1 min CN=46 Runoff	
Subcatchment65S: POST 12	Runoff Area=46,393 sf 25.38% Impervious R Flow Length=529' Tc=8.6 min CN=68 Runoff	
Subcatchment69S: POST 41	Runoff Area=144,249 sf 1.36% Impervious R Flow Length=555' Tc=9.6 min CN=62 Runoff	
Subcatchment70S: POST17	Runoff Area=71,092 sf 1.02% Impervious R Tc=6.0 min CN=50 Runoff	
Pond 1P: INFIL. BASIN#1 Discarded=0	Peak Elev=251.24' Storage=8,465 cf Inflow 0.30 cfs 0.364 af Primary=0.00 cfs 0.000 af Outflow	
Pond 2P: INFILTRATIONBASIN#1-A Discarded=0	Peak Elev=254.12' Storage=3,100 cf Inflow 0.19 cfs 0.179 af Primary=0.00 cfs 0.000 af Outflow	
Pond 3P: INFIL. BASIN#2 Discarded=0.8	Peak Elev=271.52' Storage=56,966 cf Inflow= 9 cfs 0.695 af Primary=13.11 cfs 3.043 af Outflow=	

Peak Elev=246.39' Inflow=1.00 cfs 0.080 af

12.0" Round Culvert n=0.012 L=50.0' S=0.0160 '/' Outflow=1.00 cfs 0.080 af

Pond 4P: HYDROSTORM

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		Page 120
Pond 6P: INFIL. BASIN#3	Peak Elev=317.18' Storage=19,985 cf Inflow=16.18 cfs scarded=0.32 cfs 0.499 af Primary=6.46 cfs 0.702 af Outflow=6.78 cfs	
Pond 7P: CB-103	Peak Elev=248.33' Inflow=0.50 cfs 12.0" Round Culvert n=0.012 L=20.0' S=0.0050 '/' Outflow=0.50 cfs	
Pond 8P: CB-102	Peak Elev=247.20' Inflow=0.51 cfs 12.0" Round Culvert n=0.012 L=17.0' S=0.0176 '/' Outflow=0.51 cfs	
Pond 9P: CB-106	Peak Elev=259.26' Inflow=1.49 cfs 12.0" Round Culvert n=0.012 L=10.0' S=0.0300 '/' Outflow=1.49 cfs	
Pond 10P: CB-107	Peak Elev=259.17' Inflow=0.66 cfs 12.0" Round Culvert n=0.012 L=57.0' S=0.0737 '/' Outflow=0.66 cfs	
Pond 11P: DMH-101	Peak Elev=246.99' Inflow=1.00 cfs 12.0" Round Culvert n=0.012 L=47.0' S=0.0106 '/' Outflow=1.00 cfs	
Pond 12P: DMH-102	Peak Elev=248.10' Inflow=0.50 cfs 12.0" Round Culvert n=0.012 L=113.0' S=0.0071 '/' Outflow=0.50 cfs	
Pond 13P: DMH-103	Peak Elev=255.02' Inflow=2.15 cfs 12.0" Round Culvert n=0.012 L=77.0' S=0.0130 '/' Outflow=2.15 cfs	
Pond 14P: DMH-104	Peak Elev=258.86' Inflow=1.49 cfs 12.0" Round Culvert n=0.012 L=91.0' S=0.0253'/ Outflow=1.49 cfs	
Pond 15P: DMH-201	Peak Elev=268.86' Inflow=44.66 cfs 36.0" Round Culvert n=0.012 L=41.0' S=0.0390 '/' Outflow=44.66 cfs	
Pond 16P: DMH-202	Peak Elev=280.49' Inflow=19.24 cfs 24.0" Round Culvert n=0.012 L=77.0' S=0.0766 '/' Outflow=19.24 cfs	
Pond 17P: FIELD INLET-201	Peak Elev=279.40' Inflow=1.02 cfs 12.0" Round Culvert n=0.012 L=46.0' S=0.0174'/' Outflow=1.02 cfs	
Pond 18P: CB-202	Peak Elev=280.68' Inflow=3.39 cfs 12.0" Round Culvert n=0.012 L=19.0' S=0.0474'/ Outflow=3.39 cfs	
Pond 19P: CB-201	Peak Elev=278.76' Inflow=0.23 cfs 12.0" Round Culvert n=0.012 L=43.0' S=0.0116'/ Outflow=0.23 cfs	
Pond 20P: DMH-203	Peak Elev=279.77' Inflow=25.90 cfs 30.0" Round Culvert n=0.012 L=70.0' S=0.0871 '/' Outflow=25.90 cfs	
Pond 21P: CB-204	Peak Elev=280.40' Inflow=0.29 cfs 12.0" Round Culvert n=0.012 L=20.0' S=0.0550 '/' Outflow=0.29 cfs	
Pond 22P: CB-205	Peak Elev=280.68' Inflow=0.98 cfs 12.0" Round Culvert n=0.012 L=33.0' S=0.0333'/' Outflow=0.98 cfs	

6083	_ DO	T	DEV/1	

# Type III 24-hr 25-year Rainfall=5.89"

Type III 24-nr 25-year Raintaii=5.89
company name here} 3590 © 2020 HydroCAD Software Solutions LLC Page 12'
Peak Elev=280.49' Inflow=24.68 cfs 2.055 at
30.0" Round Culvert n=0.012 L=192.0' S=0.0042 // Outflow=24.68 cfs 2.055 af
Peak Elev=282,26' Inflow=1.99 cfs 0.168 a
24.0" Round Culvert n=0.012 L=16.0' S=0.0188 '/' Outflow=1.99 cfs 0.168 at
Peak Elev=281.95' Inflow=0.38 cfs 0.032 a
12.0" Round Culvert n=0.012 L=16.0' S=0.0188 '/' Outflow=0.38 cfs 0.032 at
Peak Elev=280.88' Inflow=22.46 cfs 1.855 a
30.0" Round Culvert n=0.012 L=151.0' S=0.0040 '/' Outflow=22.46 cfs 1.855 at
Peak Elev=281.35' Inflow=19.66 cfs 1.630 a' 30.0" Round Culvert n=0.012 L=168.0' S=0.0042 // Outflow=19.66 cfs 1.630 at
Peak Elev=282.54' Inflow=19.66 cfs 1.630 a 30.0" Round Culvert n=0.012 L=268.0' S=0.0041 '/' Outflow=19.66 cfs 1.630 a
Peak Elev=282.73' Inflow=0.83 cfs 0.069 a 12.0" Round Culvert n=0.012 L=14.0' S=0.0143 '/' Outflow=0.83 cfs 0.069 a
Peak Elev=283.26' Inflow=3.06 cfs 0.273 a
15.0" Round Culvert n=0.012 L=14.0' S=0.0143 '/' Outflow=3.06 cfs 0.273 a
Peak Elev=286.28' Inflow=15.94 cfs 1.287 a
24.0" Round Culvert n=0.012 L=165.0' S=0.0170 '/' Outflow=15.94 cfs 1.287 a
Peak Elev=299.18' Inflow=15.94 cfs 1.287 a
24.0" Round Culvert n=0.012 L=150.0' S=0.0853 '/' Outflow=15.94 cfs 1.287 a
Peak Elev=298.34' Inflow=0.38 cfs 0.031 a
12.0" Round Culvert n=0.012 L=12.0' S=0.0250 '/' Outflow=0.38 cfs 0.031 a
Peak Elev=299.55' Inflow=3.06 cfs 0.228 a 12.0" Round Culvert n=0.012 L=12.0' S=0.0250 '/' Outflow=3.06 cfs 0.228 a
Peak Elev=316.62' Inflow=2.15 cfs 0.162 a 12.0" Round Culvert n=0.012 L=322.0' S=0.0565 '/' Outflow=2.15 cfs 0.162 a
Peak Elev=316.26' Inflow=0.22 cfs 0.018 a
12.0" Round Culvert n=0.012 L=13.0' S=0.0231 '/' Outflow=0.22 cfs 0.018 at
Peak Elev=316.91' Inflow=1.94 cfs 0.144 a
12.0" Round Culvert n=0.012 L=13.0' S=0.0231 '/' Outflow=1.94 cfs 0.144 a
Peak Elev=318.40' Inflow=8.90 cfs 0.670 a
18.0" Round Culvert n=0.012 L=71.0' S=0.0549 '/' Outflow=8.90 cfs 0.670 a
Peak Elev=321.70' Inflow=8.90 cfs 0.670 a
18.0" Round Culvert n=0.012 L=154.0' S=0.0208 '/' Outflow=8.90 cfs 0.670 at

6083 - POST REV1	Type III 24-hr 25-year Rainfali	l=5.89"
Prepared by {enter your control HydroCAD® 10.10-3a s/n 035		ge 122
Pond 40P: CB-301	Peak Elev=321.82' Inflow=3.43 cfs 0 12.0" Round Culvert n=0.012 L=12.0' S=0.0250 '/' Outflow=3.43 cfs 0	
Pond 41P: CB-302	Peak Elev=320.87' Inflow=1.82 cfs 0 12.0" Round Culvert n=0.012 L=12.0' S=0.0250 '/' Outflow=1.82 cfs 0	
Pond 42P: DMH-303	Peak Elev=329.89' Inflow=3.65 cfs 0 12.0" Round Culvert n=0.012 L=129.0' S=0.0636 '/' Outflow=3.65 cfs 0	
Pond 43P: DMH-304	Peak Elev=337.89' Inflow=3.65 cfs 0 12.0" Round Culvert n=0.012 L=129.0' S=0.0612 '/' Outflow=3.65 cfs 0	
Pond 44P: CB-303	Peak Elev=337.35' Inflow=2.03 cfs 0 12.0" Round Culvert n=0.012 L=17.0' S=0.0235 '/' Outflow=2.03 cfs 0	
Pond 45P: CB-304	Peak Elev=337.20' Inflow=1.62 cfs 0 12.0" Round Culvert n=0.012 L=16.0' S=0.0250 '/' Outflow=1.62 cfs 0	
Pond 46P: DMH-218	Peak Elev=334.05' Inflow=3.60 cfs 0 12.0" Round Culvert n=0.012 L=81.0' S=0.0481 '/' Outflow=3.60 cfs 0	
Pond 47P: CB-220	Peak Elev=333.79' Inflow=2.65 cfs 0 12.0" Round Culvert n=0.012 L=15.0' S=0.0200 '/' Outflow=2.65 cfs 0	
Pond 48P: CB-221	Peak Elev=333.07' Inflow=0.95 cfs 0 12.0" Round Culvert n=0.012 L=9.0' S=0.0333 '/' Outflow=0.95 cfs 0	
Pond 49P: DMH-217	Peak Elev=330.05' Inflow=3.60 cfs 0 12.0" Round Culvert n=0.012 L=147.0' S=0.0463 '/' Outflow=3.60 cfs 0	
Pond 50P: DMH-216	Peak Elev=323.15' Inflow=3.60 cfs 0 12.0" Round Culvert n=0.012 L=118.0' S=0.0263 '/' Outflow=3.60 cfs 0	
Pond 52P: DMH-215	Peak Elev=319.41' Inflow=4.38 cfs 0 15.0" Round Culvert n=0.012 L=247.0' S=0.0320 '/' Outflow=4.38 cfs 0	
Pond 53P: CB-219	Peak Elev=318.75' Inflow=0.39 cfs 0 12.0" Round Culvert n=0.012 L=21.0' S=0.0143 '/' Outflow=0.39 cfs 0	
Pond 54P: CB-218	Peak Elev=318.75' Inflow=0.39 cfs 0 12.0" Round Culvert n=0.012 L=19.0' S=0.0158 '/' Outflow=0.39 cfs 0	
Pond 55P: DMH-214	Peak Elev=311.87' Inflow=7.73 cfs 0 18.0" Round Culvert n=0.012 L=95.0' S=0.0442 '/' Outflow=7.73 cfs 0	
Pond 56P: CB-217	Peak Elev=312.53' Inflow=0.35 cfs 0 12.0" Round Culvert n=0.012 L=20.0' S=0.0150 '/' Outflow=0.35 cfs 0	
Pond 57P: CB-216	Peak Elev=313.71' Inflow=3.00 cfs 0 12.0" Round Culvert n=0.012 L=11.0' S=0.0273'/' Outflow=3.00 cfs 0	.226 af

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Pond 58P: DMH-213	Peak Elev=307.5 18.0" Round Culvert n=0.012 L=226.0' S=0.0677 '/'	7' Inflow=7.73 cfs 0.595 af Outflow=7.73 cfs 0.595 af
Pond 59P: DMH-212	Peak Elev=292.19 24.0" Round Culvert n=0.012 L=91.0' S=0.0626 '/'	' Inflow=14.60 cfs 1.112 af Outflow=14.60 cfs 1.112 af
Pond 60P: CB-214	Peak Elev=292.7 12.0" Round Culvert n=0.012 L=10.0' S=0.0300 '/'	9' Inflow=4.00 cfs 0.299 af Outflow=4.00 cfs 0.299 af
Pond 61P: CB-215	Peak Elev=291.9 12.0" Round Culvert n=0.012 L=19.0' S=0.0158 '/'	2' Inflow=2.87 cfs 0.219 af Outflow=2.87 cfs 0.219 af
Pond 62P: DMH-211	Peak Elev=286.39 24.0" Round Culvert n=0.012 L=144.0' S=0.0479 '/'	' Inflow=14.60 cfs 1.112 af Outflow=14.60 cfs 1.112 af
Pond 63P: FIELD INLET-202	Peak Elev=302.59 24.0" Round Culvert n=0.012 L=137.0' S=0.0226 '/'	' Inflow=10.64 cfs 0.866 af Outflow=10.64 cfs 0.866 af
Pond 66P: CB-222	Peak Elev=283.7 12.0" Round Culvert n=0.012 L=29.0' S=0.0207 '/'	7' Inflow=2.79 cfs 0.225 af Outflow=2.79 cfs 0.225 af
Pond 71P: FIELD INLET-203	Peak Elev=280.4 18.0" Round Culvert n=0.012 L=28.0' S=0.0821 '/'	9' Inflow=6.53 cfs 0.556 af Outflow=6.53 cfs 0.556 af
Pond 72P: FIELD INLET-204	Peak Elev=279.4 18.0" Round Culvert n=0.012 L=50.0' S=0.0460 '/'	5' Inflow=1.60 cfs 0.148 af Outflow=1.60 cfs 0.148 af
Pond 73P: DMH-219	Peak Elev=278.1 18.0" Round Culvert n=0.012 L=86.0' S=0.0465 '/'	7' Inflow=8.00 cfs 0.704 af Outflow=8.00 cfs 0.704 af
Link DP-A: DESIGN POINT-A		Inflow=37.64 cfs 6.066 af Primary=37.64 cfs 6.066 af
Link DP-B: DESIGN POINT-E	3	Inflow=18.11 cfs 1.895 af Primary=18.11 cfs 1.895 af

Total Runoff Area = 66.808 ac Runoff Volume = 9.698 af Average Runoff Depth = 1.74" 90.24% Pervious = 60.287 ac 9.76% Impervious = 6.520 ac

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Type III 24-hr 25-year Rainfall=5.89"

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## Summary for Subcatchment 1S: POST 1

Runoff = 0.51 cfs @ 12.09 hrs, Volume= 0.038 af, Depth= 4.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Α	rea (sf)	CN	Description							
	3,667	98	Paved parking, HSG A							
	816	39	>75% Gras	>75% Grass cover, Good, HSG A						
	4,483	87	Weighted A	Weighted Average						
	816		18.20% Pervious Area							
	3,667		81.80% Impervious Area							
_										
Tc	Length	Slop	,	Capacity	Description					
(min)	(feet)	(ft/ft	) (ft/sec)	(cfs)						
6.0					Direct Entry,					

## Summary for Subcatchment 2S: POST 2

0.49 cfs @ 12.09 hrs, Volume= Runoff = 0.037 af, Depth= 4.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Α	rea (sf)	CN	Description						
	3,554	98	Paved parking, HSG A						
	809	39	>75% Gras	s cover, Go	ood, HSG A				
	4,363	87	Weighted A	Weighted Average					
	809		18.54% Pervious Area						
	3,554		81.46% Impervious Area						
Tc	Length	Slop	e Velocity	Capacity	Description				
(min)	(feet)	(ft/fi	t) (ft/sec)	(cfs)					
6.0					Direct Entry.				

## Summary for Subcatchment 3S: POST 3

0.050 af, Depth= 4.52" Runoff = 0.66 cfs @ 12.09 hrs, Volume=

Type III 24-hr 25-year Rainfall=5.89"

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A	rea (sf)	CN	Description					
	3,947	98	Paved park	ing, HSG A	١			
	908	39	>75% Ġras	s cover, Go	ood, HSG A			
	632	98	Paved park	ing, HSG D	)			
	246	80	>75% Ġras	s cover, Go	ood, HSG D			
	5,733	88 Weighted Average						
	1,154	:	20.13% Pervious Area					
	4,579	79.87% Impervious Area						
Tc	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
6.0					Direct Entry.			

## Summary for Subcatchment 4S: POST 4

Runoff = 0.78 cfs @ 12.09 hrs, Volume= 0.059 af, Depth= 4.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

A	rea (sf)	CN	Description					
	3,254	98	Paved park	ing, HSG A	1			
	879	39	>75% Ġras	s cover, Go	ood, HSG A			
	2,244	98	Paved park	ing, HSG D	)			
	319	80	>75% Gras	s cover, Go	ood, HSG D			
	6,696	89	Weighted Average					
	1,198		17.89% Pervious Area					
	5,498		82.11% Impervious Area					
_								
Tc	Length	Slope		Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
6.0					Direct Entry,			

#### Summary for Subcatchment 5S: POST 5

Runoff = 0.23 cfs @ 12.09 hrs, Volume= 0.019 af, Depth= 5.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Area (sf)	CN	Description
509	98	Paved parking, HSG A
1,207	98	Paved parking, HSG D
42	80	>75% Grass cover, Good, HSG D
1,758	98	Weighted Average
42		2.39% Pervious Area
1,716		97.61% Impervious Area

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Type III 24-hr 25-year Rainfall=5.89"

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					Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
6.0					Direct Entry,

## Summary for Subcatchment 6S: POST 6

Runoff = 0.30 cfs @ 12.09 hrs, Volume= 0.025 af, Depth= 5.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

	Α	rea (sf)	CN [	Description						
		2,283	98 F	98 Paved parking, HSG A						
		2,283	1	100.00% Impervious Area						
	Tc	Length	Slope	Velocity	Capacity	Description				
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
-	6.0	•				Direct Entry,				

#### Summary for Subcatchment 7S: POST 7

Runoff = 0.29 cfs @ 12.09 hrs, Volume= 0.024 af, Depth= 5.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

A	rea (sf)	CN	Description					
	2,223	98	8 Paved parking, HSG A					
	2,223		100.00% Impervious Area					
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description			
6.0					Direct Entry,			

#### **Summary for Subcatchment 8S: POST 8**

Runoff = 0.38 cfs @ 12.09 hrs, Volume= 0.032 af, Depth= 5.65"

Area (sf)	CN	Description
2,941	98	Paved parking, HSG A
2,941		100.00% Impervious Area

#### Type III 24-hr 25-year Rainfall=5.89"

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

#### Summary for Subcatchment 9S: POST 9

Runoff = 1.99 cfs @ 12.16 hrs, Volume= 0.168 af, Depth= 3.19"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Area (sf	) CN	Description				
2,700	98	Roofs, HSG D				
12,01	3 80	>75% Grass cover, Good, HSG D				
2,27	1 98	Roofs, HSG A				
3,63	98	Paved parking, HSG A				
6,96	39	>75% Grass cover, Good, HSG A				
27,58	8 75 Weighted Average					
18,97	9	68.79% Pervious Area				
8,609	8,609 31.21% Impervious Area					
Tc Leng (min) (fee						
11.0		Direct Entry,				

#### Summary for Subcatchment 10S: POST 10

Runoff 2.76 cfs @ 12.16 hrs, Volume= 0.241 af, Depth= 1.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Area (sf)	CN	Description		
2,999	98	Roofs, HSG D		
1,658	98	Paved parking, HSG D		
413 98 Unconnected pavement, HSG D				
16,156	80	>75% Grass cover, Good, HSG D		
4,870	98	Roofs, HSG A		
3,489	98	Paved parking, HSG A		
886	98	Unconnected pavement, HSG A		
28,402	>75% Grass cover, Good, HSG A			
6,315	30	Woods, Good, HSG A		
65,188	61	Weighted Average		
50,873		78.04% Pervious Area		
14,315		21.96% Impervious Area		
1,299		9.07% Unconnected		

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Type III 24-hr 25-year Rainfall=5.89"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.7	50	0.0600	0.23		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.10"
1.6	205	0.0900	2.10		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
0.7	53	0.0700	1.32		Shallow Concentrated Flow,
					Woodland Kv= 5.0 fps
1.8	152	0.0400	1.40		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
2.4	258	0.0080	1.82		Shallow Concentrated Flow,
					Paved Kv= 20.3 fps
10.2	718	Total			

#### Summary for Subcatchment 11S: POST 11

0.43 cfs @ 12.09 hrs, Volume= 0.036 af, Depth= 5.65" Runoff =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

_	Α	rea (sf)	CN I	Description						
		3,352	98 I	Paved parking, HSG A						
		3,352		100.00% Impervious Area						
	To	Length	Slope	Volocity	Canacity	Description				
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Description				
-	6.0				, ,	Direct Entry.				

## Summary for Subcatchment 12S: WRIGHT ROAD

3.11 cfs @ 12.09 hrs, Volume= 0.260 af, Depth= 5.65"

Area (sf)	CN	Description					
24,000	98	98 Paved parking, HSG A					
24,000 100.00% Impervio			npervious A	Area			
Tc Length (min) (feet)	Slop (ft/f	ve Velocity (t) (ft/sec)	Capacity (cfs)	Description			
6.0				Direct Entry,			

Type III 24-hr 25-year Rainfall=5.89"

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#### Summary for Subcatchment 13S: POST 13

Runoff 0.40 cfs @ 12.09 hrs, Volume= 0.033 af, Depth= 5.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

	Α	rea (sf)	CN	CN Description					
		3,056	98	98 Paved parking, HSG A					
		3,056		100.00% Impervious Area					
		Length	Slope		Capacity	Description			
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
	6.0					Direct Entry			

#### Summary for Subcatchment 14S: POST 14

Runoff 0.39 cfs @ 12.09 hrs, Volume= 0.032 af, Depth= 5.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

	Α	rea (sf)	CN [	CN Description						
		2,995	98 F	98 Paved parking, HSG A						
		2,995	1	100.00% Impervious Area						
	_									
	Tc	Length	Slope	Velocity	Capacity	Description				
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
_	6.0					Direct Entry.				

## Summary for Subcatchment 15S: POST 15

Runoff 3.06 cfs @ 12.09 hrs, Volume= 0.228 af, Depth= 4.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Area (sf)	CN	Description		
2,736	736 98 Roofs, HSG D			
7,798	98	Paved parking, HSG D		
162	98	Unconnected pavement, HSG D		
14,432	80	>75% Grass cover, Good, HSG D		
1,051	98 Paved parking, HSG A			
445	98	Unconnected pavement, HSG A		
1,036	39	>75% Grass cover, Good, HSG A		
27,660	86	Weighted Average		
15,468		55.92% Pervious Area		
12,192		44.08% Impervious Area		
607		4.98% Unconnected		

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Type III 24-hr 25-year Rainfall=5.89"

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		Velocity (ft/sec)	Description	
6.0			Direct Entry.	

## Summary for Subcatchment 16S: POST 16

0.38 cfs @ 12.09 hrs, Volume= 0.031 af, Depth= 5.65" Runoff =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Α	rea (sf)	CN	Description				
	921	98	Paved park	king, HSG A	A		
	1,990	98	Paved parking, HSG D				
	2,911	98	Weighted Average				
	2,911		100.00% Impervious Area				
Tc	Length	Slop	e Velocity	Capacity	Description		
(min)	(feet)	(ft/f	t) (ft/sec)	(cfs)			
6.0					Direct Entry		

#### Summary for Subcatchment 18S: POST 18

Runoff 1.94 cfs @ 12.09 hrs, Volume= 0.144 af, Depth= 4.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Area (sf)	CN	Description				
1,536	98	Roofs, HSG D				
3,103	98	Paved parking, HSG D				
780	98	Unconnected pavement, HSG D				
12,060	80	>75% Grass cover, Good, HSG D				
17,479	86	Weighted Average				
12,060		69.00% Pervious Area				
5,419		31.00% Impervious Area				
780		14.39% Unconnected				
(min) (feet)	(ft/	ft) (ft/sec) (cfs)				
6.0		Direct Entry,				
	1,536 3,103 780 12,060 17,479 12,060 5,419 780 Tc Length (min) (feet)	1,536 98 3,103 98 780 98 12,060 80 17,479 86 12,060 5,419 780  Tc Length (min) (feet) (ft/				

## Summary for Subcatchment 19S: POST 19

Runoff 0.22 cfs @ 12.09 hrs, Volume= 0.018 af, Depth= 5.65"

#### Type III 24-hr 25-year Rainfall=5.89"

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A	rea (sf)	CN I	Description					
	1,672	98 I	Paved park	ing, HSG D	)			
	1,672		100.00% Impervious Area					
_								
Tc	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
6.0			•		Direct Entry,			

# Summary for Subcatchment 20S: POST 20

Runoff = 1.82 cfs @ 12.09 hrs, Volume= 0.137 af, Depth= 4.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Are	ea (sf)	CN	Description			
	836	98	Roofs, HSC	G D		
	3,970	98	Paved park	ing, HSG D	)	
	1,008	98	Unconnecte	ed roofs, HS	SG D	
	8,728	80	>75% Gras	s cover, Go	ood, HSG D	
	1,255	98	Unconnecte	ed pavemei	nt, HSG D	
1	5,797	88	Weighted A	verage		
	8,728		55.25% Pe	rvious Area	I	
	7,069		44.75% Imp	pervious Ar	ea	
	2,263		32.01% Un	connected		
Тс	Length	Slope		Capacity	Description	
(min)	(feet)	(ft/ft	(ft/sec)	(cfs)		
6.0					Direct Entry,	

#### Summary for Subcatchment 21S: POST 21

Runoff 3.43 cfs @ 12.09 hrs, Volume= 0.258 af, Depth= 4.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

A	rea (sf)	CN	Description		
,	4,656	98	Roofs, HSC	G D	
	8,878	98	Paved park	ing, HSG D	D
	16,275	80	>75% Ġras	s cover, Go	ood, HSG D
	29,809	88	Weighted A	verage	
	16,275		54.60% Pe	rvious Area	a
	13,534		45.40% lmp	pervious Ar	rea
То	Longth	Clone	Volocity	Canacity	Description
Tc	Length	Slope	,	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
6.0					Direct Entry,

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Type III 24-hr 25-year Rainfall=5.89"

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# Summary for Subcatchment 22S: POST 22

Runoff = 7.29 cfs @ 12.09 hrs, Volume= 0.531 af, Depth= 3.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

	Area (sf)	CN	Description				
	5,682	98	Roofs, HSG D				
	47,489	80	>75% Grass cover, Good, HSG D				
	20,927	77	Woods, Good, HSG D				
	1,254	30	Woods, Good, HSG A				
	75,352	80	Weighted Average				
	69,670		92.46% Pervious Area				
	5,682		7.54% Impervious Area				
(mi	Γc Length n) (feet)	Slop (ft/t					
6	.0		Direct Entry,				

## Summary for Subcatchment 23S: POST 23

2.03 cfs @ 12.09 hrs, Volume= 0.155 af, Depth= 4.74" Runoff =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

A	rea (sf)	CN	Description					
	2,928	98	Roofs, HSG	D D				
	6,271	98	Paved park	ing, HSG D	)			
	7,880	80	>75% Gras	s cover, Go	od, HSG D			
	17,079	90	Weighted Average					
	7,880		46.14% Pervious Area					
	9,199		53.86% Impervious Area					
Tc	Length	Slop	e Velocity	Capacity	Description			
(min)	(feet)	(ft/f	,	(cfs)	2000р			
6.0	. /		<i></i>	` '	Direct Entry,			

#### Summary for Subcatchment 24S: POST 24

Runoff = 1.62 cfs @ 12.09 hrs, Volume= 0.121 af, Depth= 4.41"

#### Type III 24-hr 25-year Rainfall=5.89"

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Area (s	sf) CN	Description					
1,29	99 98	Roofs, HSC	D D				
3,42	27 98	Paved park	ing, HSG D	D			
98	57 98	Unconnecte	ed pavemei	ent, HSG D			
8,68	84 80	>75% Gras	s cover, Go	Good, HSG D			
14,30	67 87	87 Weighted Average					
8,68	84	60.44% Pe	vious Area	a			
5,68	83	39.56% Imp	pervious Ar	rea			
9	57	16.84% Un	connected				
Tc Len	gth Slo	ope Velocity	Capacity	Description			
(min) (fe	eet) (f	t/ft) (ft/sec)	(cfs)				
6.0				Direct Entry,			

#### Summary for Subcatchment 25S: POST 25

Runoff 2.65 cfs @ 12.09 hrs, Volume= 0.202 af, Depth= 4.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Area	(sf) C	N D	escription			
2,	925 9	98 F	Roofs, HSG	i D		
8,	071 9	98 F	aved park	ing, HSG D	)	
1,	128 9	98 L	Inconnecte	ed pavemer	nt, HSG D	
10,	163 8	30 >	75% Gras	s cover, Go	od, HSG D	
22,	287 9	90 V	Veighted A	verage		
10,	163	4	5.60% Per	vious Area		
12,	124	5	4.40% Imp	ervious Are	ea	
1,	128	9	.30% Unco	onnected		
		Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description	
6.0				<u> </u>	Direct Entry,	

#### Summary for Subcatchment 26S: POST 26

0.95 cfs @ 12.09 hrs, Volume= 0.072 af, Depth= 4.74" Runoff =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Area (sf)	CN	Description
468	98	Roofs, HSG D
3,772	98	Paved parking, HSG D
3,753	80	>75% Grass cover, Good, HSG D
7,993	90	Weighted Average
3,753		46.95% Pervious Area
4,240		53.05% Impervious Area

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Type III 24-hr 25-year Rainfall=5.89"

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

## Summary for Subcatchment 27S: POST 27

0.39 cfs @ 12.09 hrs, Volume= 0.032 af, Depth= 5.65" Runoff =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

	Α	rea (sf)	CN [	Description					
		3,003	98 F	Paved parking, HSG D					
		3,003	1	00.00% In	pervious A	Area			
	т.	Lameth	Clana	Valacity	Conneitu	Description			
	(min)	Length (feet)	(ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description			
_	6.0	(/	(1411)	(14222)	(/	Direct Entry,			

# Summary for Subcatchment 28S: POST 28

0.39 cfs @ 12.09 hrs, Volume= Runoff 0.033 af, Depth= 5.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

A	rea (sf)	CN	Description		
	3,037	98	Paved park	ing, HSG D	)
	3,037		100.00% In	npervious A	Area
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

#### Summary for Subcatchment 29S: POST 29

Runoff 0.35 cfs @ 12.09 hrs, Volume= 0.029 af. Depth= 5.65"

Area (sf)	CN	Description
2,681	98	Paved parking, HSG D
2,681		100.00% Impervious Area

#### Type III 24-hr 25-year Rainfall=5.89"

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

# Summary for Subcatchment 30S: POST 30

Runoff = 3.00 cfs @ 12.09 hrs, Volume= 0.226 af, Depth= 4.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Α	rea (sf)	CN	Description			
	3,210	98	Roofs, HSC	G D		
	8,847	98	Paved park	ing, HSG D	)	
	14,062	80	>75% Ġras	s cover, Go	ood, HSG D	
	26,119	88	Neighted A	verage		
	14,062	:	53.84% Pei	rvious Area		
	12,057		46.16% Imp	pervious Are	ea	
Tc	Length	Slope	Velocity	Capacity	Description	
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
6.0					Direct Entry	

## Summary for Subcatchment 31S: POST 31

2.87 cfs @ 12.09 hrs, Volume= 0.219 af, Depth= 4.74" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Are	ea (sf)	CN	Description				
	3,204	98	Roofs, HS0	G D			
	8,044	98	Paved park	ing, HSG D	)		
	1,652	98	Unconnect	ed pavemer	nt, HSG D		
1	11,221	80	>75% Gras	s cover, Go	ood, HSG D		
- 2	24,121	90	Weighted A	verage			
1	11,221		46.52% Pe	rvious Area			
1	12,900		53.48% Im		ea		
	1,652		12.81% Un	connected			
	Length	Slop	,	Capacity	Description		
(min)	(feet)	(ft/f	(ft/sec)	(cfs)			
6.0					Direct Entry,		

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Type III 24-hr 25-year Rainfall=5.89"

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# Summary for Subcatchment 32S: POST 32

Runoff = 4.00 cfs @ 12.09 hrs, Volume= 0.299 af, Depth= 4.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Are	a (sf)	CN	Description						
4	1,350	98	Roofs, HSG	D D					
(	9,063	98	Paved parking, HSG D						
2	1,986	80	>75% Gras	s cover, Go	od, HSG D				
35	5,399	87	Weighted A	verage					
2	1,986		62.11% Per	vious Area					
13	3,413		37.89% Imp	pervious Are	ea				
Tc L	ength	Slope	e Velocity	Capacity	Description				
(min)	(feet)	(ft/ft	) (ft/sec)	(cfs)					
6.0					Direct Entry				

# Summary for Subcatchment 33S: POST 33

1.57 cfs @ 12.09 hrs, Volume= 0.123 af, Depth= 5.07" Runoff =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

_	Area (sf)	) CN	Description						
	1,908	98	98 Roofs, HSG D						
	6,727	98	Paved parking, HSG D						
	456	98	Unconnected pavement, HSG D						
	106	98	Paved park	ing, HSG A	١				
	3,479	80	>75% Gras	s cover, Go	ood, HSG D				
	12,676	93	Weighted A	verage					
	3,479	)	27.45% Per	vious Area	ı				
	9,197	,	72.55% Imp	pervious Ar	ea				
	456	<b>i</b>	4.96% Unco	onnected					
	Tc Lengt			Capacity	Description				
	(min) (fee	t) (ft/	ft) (ft/sec)	(cfs)					
	6.0				Direct Entry,				

#### Summary for Subcatchment 34S: POST 34

3.39 cfs @ 12.09 hrs, Volume= 0.255 af, Depth= 4.52"

#### Type III 24-hr 25-year Rainfall=5.89"

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	Area (sf)	CN	Description			
	3,227	98	Roofs, HSC	S D		
	10,066	98	Paved park	ing, HSG D	)	
	16,160	80	>75% Gras	s cover, Go	ood, HSG D	
-	29,453	88	Weighted A	verage		
	16,160		54.87% Pe	rvious Area	ı	
	13,293		45.13% Imp	pervious Ar	ea	
To	Length	Slope	Velocity	Capacity	Description	
(min	) (feet)	(ft/ft)	(ft/sec)	(cfs)		
6.0	)				Direct Entry.	

#### Summary for Subcatchment 35S: POST 35

Runoff = 0.71 cfs @ 12.10 hrs, Volume= 0.054 af, Depth= 1.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Area	(sf) CN	Description			
5,	253 80	>75% Gras	s cover, Go	ood, HSG D	
7,	39	>75% Gras	s cover, Go	ood, HSG A	
1,	779 98	Roofs, HSC	S D		
14,	61	Weighted A	verage		_
12,	358	87.85% Per	vious Area		
1,	779	12.15% Imp	pervious Ar	ea	
	ngth Slop	,	Capacity	Description	
(min)(	feet) (ft/	ft) (ft/sec)	(cfs)		
6.0				Direct Entry,	

# Summary for Subcatchment 36S: POST 36

Runoff = 0.03 cfs @ 12.36 hrs, Volume= 0.006 af, Depth= 0.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

	A	rea (sf)	CN [	Description				
		7,243 39 >75% Grass cover, Good, HSG A						
		7,243	100.00% Pervious Area					
	Tc	Length	Slope	Velocity	Capacity	Description		
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)			
_	6.0					Direct Entry		

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Type III 24-hr 25-year Rainfall=5.89"

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# Summary for Subcatchment 37S: POST 37

Runoff = 0.24 cfs @ 12.12 hrs, Volume= 0.024 af, Depth= 0.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Area (sf)	CN	Description	
8,816	39	>75% Grass cover, Good, HSG A	-
3,764	61	>75% Grass cover, Good, HSG B	
381	96	Gravel surface, HSG A	
352	96	Gravel surface, HSG B	
13,313	48	Weighted Average	
13,313		100.00% Pervious Area	
Tc Length	Slo	pe Velocity Capacity Description	
(min) (feet)	(ft/	ft) (ft/sec) (cfs)	_
6.0		Direct Entry.	

# Summary for Subcatchment 38S: POST 38

Runoff = 0.10 cfs @ 12.16 hrs, Volume= 0.016 af, Depth= 0.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

	Area (sf)	CN	Description
	11,263	39	>75% Grass cover, Good, HSG A
	1,102	61	>75% Grass cover, Good, HSG B
	427	96	Gravel surface, HSG A
	12,792	43	Weighted Average
	12,792		100.00% Pervious Area
	Tc Length	Slop	
(r	nin) (feet)	(ft/	/ft) (ft/sec) (cfs)
	6.0		Direct Entry,

# Summary for Subcatchment 39S: POST 39

Runoff = 1.02 cfs @ 12.09 hrs, Volume= 0.074 af, Depth= 3.58"

#### Type III 24-hr 25-year Rainfall=5.89"

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Area (s	f) CN	l Adj	Desc	ription			
81	0 98	3	Roof	s, HSG D			
8,14	2 80	)	>75%	6 Grass co	over, Good, HSG D		
83	5 98	}	Unco	nnected pa	pavement, HSG D		
83	2 39	)	>75%	<sup>6</sup> Grass co	over, Good, HSG A		
25	2 98	3	Unco	nnected pa	pavement, HSG A		
10,87	1 80	79	Weig	hted Avera	age, UI Adjusted		
8,97	4		82.5	5% Perviou	us Area		
1,89	7		17.4	5% Impervi	vious Area		
1,08	7		57.30	0% Unconn	nected		
Tc Leng	,	•	elocity/	Capacity	·		
(min) (fe	et) (f	ft/ft)	(ft/sec)	(cfs)			
6.0					Direct Entry.		

## Summary for Subcatchment 40S: POST 40

Runoff 0.69 cfs @ 12.10 hrs, Volume= 0.051 af, Depth= 2.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

_	A	rea (sf)	CN /	Adj Desc	cription	
		1,018	98	Roof		
		5,471	80	>75%	6 Grass co	over, Good, HSG D
		506	98	Unco	onnected pa	avement, HSG A
		4,230	39	>75%	6 Grass co	over, Good, HSG A
_		11,225	67	66 Weig	age, UI Adjusted	
		9,701		86.4	2% Perviou	us Area
		1,524		13.5	8% Impervi	rious Area
		506		33.20	0% Unconr	nected
	Tc	Length	Slope	Velocity	Capacity	Description
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	6.0					Direct Entry,

# Summary for Subcatchment 42S: POST 42

10.64 cfs @ 12.13 hrs, Volume= 0.866 af, Depth= 3.78" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

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Type III 24-hr 25-year Rainfall=5.89"

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Α	rea (sf)	<del></del>							
	91,127	80 >	ood, HSG D						
	15,663	77 V	Voods, Go	od, HSG D					
	11,784	98 F	Roofs, HSG	D					
	174	98 F	Roofs, HSG	iΑ					
	846	39 >	75% Gras	s cover, Go	ood, HSG A				
1	19,594	81 V	Veighted A	verage					
1	07,636			vious Area					
	11,958	1	0.00% Imp	ervious Ar	ea				
Tc	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
3.3	50	0.0800	0.25		Sheet Flow,				
					Grass: Short n= 0.150 P2= 3.10"				
1.0	91	0.0430	1.45		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
1.2	72	0.0400	1.00		Shallow Concentrated Flow,				
					Woodland Kv= 5.0 fps				
0.5	71	0.0980	2.19		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
3.3	314	0.0500	1.57		Shallow Concentrated Flow,				
					Short Grass Pasture Kv= 7.0 fps				
9.3	598	Total							

# Summary for Subcatchment 43S: POST 43 (PERIMETER)

Runoff = 11.88 cfs @ 12.22 hrs, Volume= 1.617 af, Depth= 0.82"

Area (sf)	CN	Description
153,387	39	>75% Grass cover, Good, HSG A
480,558	30	Woods, Good, HSG A
119,742	55	Woods, Good, HSG B
3,192	98	Roofs, HSG D
110,786	61	>75% Grass cover, Good, HSG B
83,132	77	Woods, Good, HSG D
4,334	96	Gravel surface, HSG A
794	96	Gravel surface, HSG D
4,326	98	Unconnected pavement, HSG A
55,819	80	>75% Grass cover, Good, HSG D
13,460	96	Gravel surface, HSG B
1,029,530	46	Weighted Average
1,022,012		99.27% Pervious Area
7,518		0.73% Impervious Area
4,326		57.54% Unconnected

#### Type III 24-hr 25-year Rainfall=5.89"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.2	50	0.0800	0.12		Sheet Flow,
					Woods: Light underbrush n= 0.400 P2= 3.10"
3.4	337	0.1100	1.66		Shallow Concentrated Flow,
					Woodland Kv= 5.0 fps
0.7	110	0.1400	2.62		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
11.3	497	Total			

# Summary for Subcatchment 44S: POST 44

14.11 cfs @ 12.11 hrs, Volume= Runoff 1.175 af, Depth= 1.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Area (sf)	CN Description						
262,578	39	>75% Grass cover, Good, HSG A					
20,513	30	Woods, Good, HSG A					
6,364	77	Woods, Good, HSG D					
137,285	80	>75% Grass cover, Good, HSG D					
9,264	98	Roofs, HSG D					
3,107	96	Gravel surface, HSG D					
5,953	96	Gravel surface, HSG D					
329	98	Unconnected pavement, HSG D					
445,393	54	Weighted Average					
435,800		97.85% Pervious Area					
9,593		2.15% Impervious Area					
329		3.43% Unconnected					
Tc Length	Slo	pe Velocity Capacity Description					
(min) (feet)	(ft/	ft) (ft/sec) (cfs)					
6.0		Direct Entry,					

#### Summary for Subcatchment 46S: POST 45

5.43 cfs @ 12.21 hrs, Volume= 0.720 af, Depth= 0.82" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

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Type III 24-hr 25-year Rainfall=5.89"

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Area (sf)	CN	Description						
241,884	30	Woods, Good, HSG A						
95,851	77	Woods, Good, HSG D						
7,023	96	Gravel surface, HSG A						
2,364	96	Gravel surface, HSG D						
79,566	39	>75% Grass cover, Good, HSG A						
28,376	80	>75% Grass cover, Good, HSG D						
3,192	98	Roofs, HSG D						
458,256	46	Weighted Average						
455,064		99.30% Pervious Area						
3,192	0.70% Impervious Area							
Tc Length (min) (feet)	Slo <sub>l</sub> (ft/							
10.1		Direct Entry,						

# Summary for Subcatchment 65S: POST 12

Runoff 2.79 cfs @ 12.13 hrs, Volume= 0.225 af, Depth= 2.54"

A	rea (sf)	CN	Description		
	2,804	98	Roofs, HSC	G D	
	2,957	98	Paved park	ing, HSG D	)
	130	98	Unconnecte	ed paveme	nt, HSG D
	15,690	80	>75% Gras	s cover, Go	ood, HSG D
	2,914	98	Roofs, HSC	βA	
	2,970	98	Paved park	ing, HSG A	1
	18,928	39	>75% Gras	s cover, Go	ood, HSG A
	46,393	68	Weighted A	verage	
	34,618		74.62% Per	rvious Area	l .
	11,775		25.38% Imp		ea
	130		1.10% Unc	onnected	
_		٥.			<b>5</b>
Tc	Length	Slope	,		Description
(min)	(feet)	(ft/ft)		(cfs)	
3.3	50	0.0800	0.25		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.10"
1.7	142	0.0400	1.40		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
0.2	43	0.3200	3.96		Shallow Concentrated Flow,
					Short Grass Pasture Kv= 7.0 fps
1.8	144	0.0380	1.36		Shallow Concentrated Flow,
4.0	450	0.0000	4.57		Short Grass Pasture Kv= 7.0 fps
1.6	150	0.0060	1.57		Shallow Concentrated Flow,
	=				Paved Kv= 20.3 fps
8.6	529	Total			

Type III 24-hr 25-year Rainfall=5.89"

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# Summary for Subcatchment 69S: POST 41

Runoff = 6.53 cfs @ 12.15 hrs, Volume= 0.556 af, Depth= 2.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Α	rea (sf)	CN I	Description		
	4,616	96 (	Gravel surfa	ace, HSG [	)
	16,434	77	Noods, Go	od, HSG D	
	25,175	39	>75% Gras	s cover, Go	ood, HSG A
	31,571	30	Noods, Go	od, HSG A	
	64,485	80 :	>75% Gras	s cover, Go	ood, HSG D
	1,968	98 (	Jnconnecte 4 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	ed pavemei	nt, HSG D
1	44,249	62	Neighted A	verage	
1	42,281	(	98.64% Pe	vious Area	
	1,968		1.36% Impe	ervious Are	a
	1,968		100.00% U	nconnected	1
Tc	Length	Slope	,		Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
3.0	50	0.1000	0.28		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.10"
3.9	392	0.1100	1.66		Shallow Concentrated Flow,
					Woodland Kv= 5.0 fps
2.7	113	0.0800	0.71		Shallow Concentrated Flow,
					Forest w/Heavy Litter Kv= 2.5 fps
9.6	555	Total			

#### Summary for Subcatchment 70S: POST 17

1.60 cfs @ 12.11 hrs, Volume= Runoff = 0.148 af, Depth= 1.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.89"

Area (sf)	CN	Description
473	96	Gravel surface, HSG D
12,174	80	>75% Grass cover, Good, HSG D
3,962	96	Gravel surface, HSG A
1,839	30	Woods, Good, HSG A
51,919	39	>75% Grass cover, Good, HSG A
725	98	Unconnected pavement, HSG A
71,092	50	Weighted Average
70,367		98.98% Pervious Area
725		1.02% Impervious Area
725		100.00% Unconnected

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6.0					Direct Entry	
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
IC	Length	Slope	velocity	Capacity	Description	

# Summary for Pond 1P: INFIL. BASIN #1

[81] Warning: Exceeded Pond 4P by 5.30' @ 13.90 hrs

2.141 ac, 46.19% Impervious, Inflow Depth = 2.04" for 25-year event Inflow Area = 4.33 cfs @ 12.09 hrs, Volume= 0.364 af Inflow = 0.364 af. Atten= 93%. Lag= 96.0 min Outflow = 0.30 cfs @ 13.69 hrs, Volume= 0.364 af Discarded = 0.30 cfs @ 13.69 hrs, Volume= Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 251.24' @ 13.69 hrs Surf.Area= 3,348 sf Storage= 8,465 cf

Plug-Flow detention time= 373.4 min calculated for 0.364 af (100% of inflow) Center-of-Mass det. time= 373.8 min (1,143.5 - 769.7)

Avail Storage Storage Description

volume invert Avail.Storage			Storage Description					
#1	#1 245.00' 34,907 cf		Custom Stage D	Custom Stage Data (Irregular)Listed below (Recalc)				
Elevation (feet)	Surf.Aı (sq	rea Perim. -ft) (feet)		Cum.Store (cubic-feet)	Wet.Area (sq-ft)			
245.00	1	11 47.0	0	0	111			
246.00	2	280 66.0	189	189	291			
248.00	1,1	00 152.0	1,290	1,479	1,799			
250.00	2,4	10 245.0	3,425	4,905	4,763			
252.00	3,9	95 283.0	6,339	11,243	6,445			
254.00	5,8	332.0	9,828	21,071	8,921			
256.00	7,9	996 370.0	13,837	34,907	11,157			

Device	Routing	Invert	Outlet Devices
#1	Discarded	245.00'	2.410 in/hr Exfiltration over Surface area
			Conductivity to Groundwater Elevation = 243.00'
#2	Primary	255.00'	10.0' long x 13.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60
			Coef (English) 2 60 2 64 2 70 2 66 2 65 2 66 2 65 2 63

Discarded OutFlow Max=0.30 cfs @ 13.69 hrs HW=251.24' (Free Discharge) 1=Exfiltration ( Controls 0.30 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=245.00' (Free Discharge) 2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Type III 24-hr 25-year Rainfall=5.89"

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## Summary for Pond 2P: INFILTRATION BASIN #1-A

[79] Warning: Submerged Pond 13P Primary device # 1 INLET by 0.12'

Inflow Area = 0.915 ac, 29.75% Impervious, Inflow Depth = 2.34" for 25-year event

Inflow = 2.23 cfs @ 12.10 hrs, Volume= 0.179 af

Outflow = 0.19 cfs @ 13.62 hrs, Volume= 0.179 af, Atten= 91%, Lag= 91.7 min

Discarded = 0.19 cfs @ 13.62 hrs, Volume= 0.179 af Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs

Peak Elev= 254.12' @ 13.62 hrs Surf.Area= 3,110 sf Storage= 3,100 cf

Plug-Flow detention time= 160.1 min calculated for 0.178 af (100% of inflow)

Center-of-Mass det. time= 160.0 min ( 984.2 - 824.2 )

Volume	Invert	Avail.	Storage	Storage Description	n	
#1	253.00'	1	0,119 cf	Custom Stage Da	ta (Irregular)Listed	below (Recald
Elevation (feet)		f.Area (sɑ-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
253.00		2.452	186.0	0	0	2.452
254.00		3,038	205.0	2,740	2,740	3,075
255.00		3,680	224.0	3,354	6,094	3,758
256.00		4 380	242 0	4 025	10 119	4 465

Device	Routing	Invert	Outlet Devices
#1	Discarded	253.00'	2.410 in/hr Exfiltration over Surface area
			Conductivity to Groundwater Elevation = 243.00'
#2	Primary	255.50'	8.0' long x 10.0' breadth Broad-Crested Rectangular Weir
	•		Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60
			Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Discarded OutFlow Max=0.19 cfs @ 13.62 hrs HW=254.12' (Free Discharge) 1=Exfiltration ( Controls 0.19 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=253.00' (Free Discharge)

2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

#### Summary for Pond 3P: INFIL, BASIN #2

[81] Warning: Exceeded Pond 15P by 5.57' @ 12.60 hrs

Inflow Area = 11.845 ac, 34.26% Impervious, Inflow Depth = 3.79" for 25-year event

Inflow = 46.21 cfs @ 12.10 hrs, Volume= 3.738 af

Outflow = 14.00 cfs (a) 12.47 hrs, Volume= 3.738 af, Atten= 70%, Lag= 22.2 min

Discarded = 0.89 cfs @ 12.47 hrs, Volume= 0.695 af

Primary = 13.11 cfs @ 12.47 hrs, Volume= 3.043 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

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Peak Elev= 271.52' @ 12.47 hrs Surf.Area= 10,906 sf Storage= 56,966 cf

Plug-Flow detention time= 103.3 min calculated for 3.738 af (100% of inflow) Center-of-Mass det. time= 103.0 min ( 906.6 - 803.6 )

Volume	Invert	Avail.	Storage	Storage Description	on	
#1	263.00	' 87	7,659 cf	Custom Stage Da	ata (Irregular)Listed	d below (Recalc)
Elevation	on S	urf.Area	Perim.	Inc.Store	Cum.Store	Wet.Area
(fee	et)	(sq-ft)	(feet)	(cubic-feet)	(cubic-feet)	(sq-ft)
263.0	00	3,149	223.0	0	0	3,149
264.0	00	3,847	242.0	3,492	3,492	3,890
266.	00	5,412	280.0	9,215	12,707	5,552
268.	00	7,203	317.0	12,572	25,279	7,408
270.0	00	9,220	355.0	16,382	41,661	9,549
272.	00	11,463	393.0	20,642	62,303	11,931
274.	00	13,933	430.0	25,356	87,659	14,490
Device	Routing	Inve	ert Outl	et Devices		
#1	Discarded	263.0	0' <b>2.41</b>	0 in/hr Exfiltration	over Surface area	a
			Con	ductivity to Groundy	water Elevation = 25	53.00'
#2	Primary	263.0	0' 15.0	" Round Culvert		
	•		L= 5	7.0' CPP, projectir	ng, no headwall, Ke	e= 0.900
			Inlet	/ Outlet Invert= 263	3.00' / 262.00' S= (	0.0175 '/' Cc= 0.900
			n= 0	0.013, Flow Area= 1	1.23 sf	
#3	Primary	273.0	00' 20.0	' long x 12.0' brea	dth Broad-Creste	d Rectangular Weir
			Hea	d (feet) 0.20 0.40	0.60 0.80 1.00 1.	20 1.40 1.60
				f. (English) 2.57 2.		
#4	Device 2	267.0				ed to weir flow at low heads
#5	Device 2	263.9				ed to weir flow at low heads
#6	Device 2	268.7	'0' <b>48.0</b>	" x 48.0" Horiz. Or	rifice/Grate C= 0.6	000
			Limi	ted to weir flow at Id	ow heads	

Discarded OutFlow Max=0.89 cfs @ 12.47 hrs HW=271.52' (Free Discharge) 1=Exfiltration ( Controls 0.89 cfs)

Primary OutFlow Max=13.11 cfs @ 12.47 hrs HW=271.52' (Free Discharge)

-2=Culvert (Inlet Controls 13.11 cfs @ 10.68 fps)

-4=Orifice/Grate (Passes < 1.36 cfs potential flow)

-5=Orifice/Grate (Passes < 2.56 cfs potential flow)

—6=Orifice/Grate (Passes < 129.32 cfs potential flow)

3=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

## Summary for Pond 4P: HYDROSTORM

[79] Warning: Submerged Pond 11P Primary device # 1 OUTLET by 0.49

Inflow Area = 0.369 ac, 44.88% Impervious, Inflow Depth = 2.61" for 25-year event

Inflow = 1.00 cfs @ 12.09 hrs, Volume= 0.080 af

Outflow = 1.00 cfs (2012,09 hrs, Volume= 0.080 af, Atten= 0%, Lag= 0.0 min

Primary = 1.00 cfs @ 12.09 hrs, Volume= 0.080 af

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Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 246.39' @ 12.09 hrs Flood Elev= 255.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	245.80'	12.0" Round Culvert
			L= 50.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 245.80' / 245.00' S= 0.0160 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=0.98 cfs @ 12.09 hrs HW=246.38' (Free Discharge)
1=Culvert (Inlet Controls 0.98 cfs @ 2.05 fps)

## Summary for Pond 6P: INFIL. BASIN #3

[81] Warning: Exceeded Pond 38P by 0.37' @ 12.50 hrs

 Inflow Area = Inflow = Inflow = Uniform 25-year event
 3.499 ac, 27.01% Impervious, Inflow Depth = 4.12" for 25-year event

 1nflow = Uniform = Uniform 25-year event
 16.18 cfs @ 12.09 hrs, Volume = 1.201 af

 1c 3 2 cfs @ 12.31 hrs, Volume = Uniform 25-year event
 1.201 af, Atten = 58%, Lag = 13.1 min

 1c 3 2 cfs @ 12.31 hrs, Volume = Uniform 25-year event
 0.499 af

 1c 3 2 cfs @ 12.31 hrs, Volume = Uniform 25-year event
 0.702 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 317.18' @ 12.31 hrs Surf.Area= 6,088 sf Storage= 19,985 cf

Plug-Flow detention time= 297.8 min calculated for 1.200 af (100% of inflow) Center-of-Mass det. time= 298.7 min (1,100.3 - 801.6)

Volume	Invert	Avail.St	orage	Storage Descripti	on	
#1	312.00'	41,	148 cf	Custom Stage D	ata (Irregular)List	ed below (Recalc)
Elevation (fee		ırf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
312.0	00	1,767	179.0	0	0	1,767
314.0	00	3,405	239.0	5,083	5,083	3,806
316.0	00	5,012	284.0	8,365	13,449	5,751
318.0	00	6,898	329.0	11,860	25,309	8,030
320.0	00	8,987	367.0	15,839	41,148	10,247
Device #1	Routing Discarded	Inver 312.00	1.02	et Devices  o in/hr Exfiltration ductivity to Ground		
#2	Primary	312.00		" Round Culvert		
#3	Primary	319.50	Inlet n= 0 ' <b>20.0</b> Hea	0.013, Flow Area= ' long x 12.0' bre d (feet) 0.20 0.40	2.00' / 310.00' S= 0.79 sf adth Broad-Crest 0.60 0.80 1.00	= 0.0377 '/' Cc= 0.900 ed Rectangular Weir

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#4 Device 2 315.00' 4.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#5 Device 2 316.50' 48.0" x 48.0" Horiz. Orifice/Grate C= 0.600
Limited to weir flow at low heads

Discarded OutFlow Max=0.32 cfs @ 12.31 hrs HW=317.18' (Free Discharge) 1=Exfiltration ( Controls 0.32 cfs)

Primary OutFlow Max=6.46 cfs @ 12.31 hrs HW=317.18' (Free Discharge)

-2=Culvert (Inlet Controls 6.46 cfs @ 8.22 fps)

4=Orifice/Grate (Passes < 0.60 cfs potential flow)

5=Orifice/Grate (Passes < 29.19 cfs potential flow)

-3=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

## Summary for Pond 7P: CB-103

Inflow Area = 0.266 ac, 30.62% Impervious, Inflow Depth = 1.92" for 25-year event

Inflow = 0.50 cfs @ 12.09 hrs, Volume= 0.043 af

Outflow = 0.50 cfs @ 12.09 hrs, Volume= 0.043 af, Atten= 0%, Lag= 0.0 min

Primary = 0.50 cfs @ 12.09 hrs. Volume= 0.043 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 248.33' @ 12.09 hrs

Flood Elev= 250.90'

Primary OutFlow Max=0.49 cfs @ 12.09 hrs HW=248.33' (Free Discharge)

1=Culvert (Barrel Controls 0.49 cfs @ 2.22 fps)

#### Summary for Pond 8P: CB-102

Inflow Area = 0.103 ac, 81.80% Impervious, Inflow Depth = 4.41" for 25-year event

Inflow = 0.51 cfs @ 12.09 hrs, Volume= 0.038 af

Outflow = 0.51 cfs @ 12.09 hrs, Volume= 0.038 af, Atten= 0%, Lag= 0.0 min

Primary = 0.51 cfs @ 12.09 hrs, Volume= 0.038 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 247.20' @ 12.09 hrs

Flood Elev= 249.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	246.80'	12.0" Round Culvert
			L= 17.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 246.80' / 246.50' S= 0.0176 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

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Primary OutFlow Max=0.49 cfs @ 12.09 hrs HW=247.20' (Free Discharge) 1=Culvert (Inlet Controls 0.49 cfs @ 1.70 fps)

#### Summary for Pond 9P: CB-106

Inflow Area = 0.490 ac, 34.11% Impervious, Inflow Depth = 2.78" for 25-year event 1.49 cfs @ 12.09 hrs, Volume= Inflow 0.113 af

Outflow 1.49 cfs @ 12.09 hrs, Volume= 0.113 af, Atten= 0%, Lag= 0.0 min

Primary = 1.49 cfs @ 12.09 hrs, Volume= 0.113 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 259.26' @ 12.09 hrs

Flood Elev= 262.50'

Device Routing Invert Outlet Devices Primary 258.50' 12.0" Round Culvert

L= 10.0' CPP, projecting, no headwall, Ke= 0.900

Inlet / Outlet Invert= 258.50' / 258.20' S= 0.0300 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=1.47 cfs @ 12.09 hrs HW=259.25' (Free Discharge) 1-1=Culvert (Inlet Controls 1.47 cfs @ 2.33 fps)

#### Summary for Pond 10P: CB-107

Inflow Area = 0.132 ac, 79.87% Impervious, Inflow Depth = 4.52" for 25-year event Inflow 0.66 cfs @ 12.09 hrs, Volume= 0.050 af

0.66 cfs @ 12.09 hrs, Volume= 0.050 af, Atten= 0%, Lag= 0.0 min Outflow

0.66 cfs @ 12.09 hrs. Volume= Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 259.17' @ 12.09 hrs

Flood Elev= 262.70'

Device Routing Invert Outlet Devices 258.70' 12.0" Round Culvert Primary

L= 57.0' CPP, projecting, no headwall. Ke= 0.900 Inlet / Outlet Invert= 258.70' / 254.50' S= 0.0737 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.64 cfs @ 12.09 hrs HW=259.16' (Free Discharge) 1=Culvert (Inlet Controls 0.64 cfs @ 1.82 fps)

#### Summary for Pond 11P: DMH-101

[79] Warning: Submerged Pond 8P Primary device # 1 INLET by 0.19' [79] Warning: Submerged Pond 12P Primary device # 1 OUTLET by 0.09' 6083 - POST REV1

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Inflow Area = 0.369 ac, 44.88% Impervious, Inflow Depth = 2.61" for 25-year event Inflow = 1.00 cfs @ 12.09 hrs, Volume= 0.080 af Outflow = 1.00 cfs @ 12.09 hrs, Volume= 0.080 af, Atten= 0%, Lag= 0.0 min 0.080 af

1.00 cfs @ 12.09 hrs. Volume= Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 246.99' @ 12.09 hrs

Flood Elev= 254.00'

Device Routing Invert Outlet Devices 12.0" Round Culvert Primary 246.40' L= 47.0' CPP, projecting, no headwall. Ke= 0.900 Inlet / Outlet Invert= 246.40' / 245.90' S= 0.0106 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.98 cfs @ 12.09 hrs HW=246.98' (Free Discharge) 1=Culvert (Inlet Controls 0.98 cfs @ 2.05 fps)

# Summary for Pond 12P: DMH-102

[79] Warning: Submerged Pond 7P Primary device # 1 INLET by 0.20

0.266 ac, 30.62% Impervious, Inflow Depth = 1.92" for 25-year event Inflow Area = Inflow 0.50 cfs @ 12.09 hrs, Volume= 0.043 af Outflow = 0.50 cfs @ 12.09 hrs, Volume= 0.043 af, Atten= 0%, Lag= 0.0 min Primary = 0.50 cfs @ 12.09 hrs, Volume= 0.043 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 248.10' @ 12.09 hrs

Flood Elev= 254.00'

Device Routing Invert Outlet Devices #1 Primary 247.70' 12.0" Round Culvert L= 113.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 247.70' / 246.90' S= 0.0071 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.48 cfs @ 12.09 hrs HW=248.09' (Free Discharge) 1=Culvert (Inlet Controls 0.48 cfs @ 1.69 fps)

#### Summary for Pond 13P: DMH-103

[79] Warning: Submerged Pond 10P Primary device # 1 OUTLET by 0.51

Inflow Area = 0.621 ac, 43.80% Impervious, Inflow Depth = 3.15" for 25-year event

Inflow 2.15 cfs @ 12.09 hrs, Volume= 0.163 af

Outflow = 2.15 cfs @ 12.09 hrs, Volume= 0.163 af, Atten= 0%, Lag= 0.0 min

Primary = 2.15 cfs @ 12.09 hrs, Volume= 0 163 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs.

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Peak Elev= 255.02' @ 12.09 hrs

Flood Elev= 262.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	254.00'	12.0" Round Culvert
	-		L= 77.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 254.00' / 253.00' S= 0.0130 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.11 cfs @ 12.09 hrs HW=255.00' (Free Discharge) 1-Culvert (Inlet Controls 2.11 cfs @ 2.69 fps)

#### Summary for Pond 14P: DMH-104

[79] Warning: Submerged Pond 9P Primary device # 1 INLET by 0.36'

Inflow Area = 0.490 ac, 34.11% Impervious, Inflow Depth = 2.78" for 25-year event

Inflow = 1.49 cfs @ 12.09 hrs, Volume= 0.113 af

Outflow = 1.49 cfs @ 12.09 hrs, Volume= 0.113 af, Atten= 0%, Lag= 0.0 min

Primary = 1.49 cfs @ 12.09 hrs, Volume= 0.113 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 258.86' @ 12.09 hrs

Flood Elev= 262.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	258.10'	12.0" Round Culvert
			L= 91.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 258.10' / 255.80' S= 0.0253 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.47 cfs @ 12.09 hrs HW=258.85' (Free Discharge)

1=Culvert (Inlet Controls 1.47 cfs @ 2.33 fps)

#### Summary for Pond 15P: DMH-201

Inflow Area = 11.554 ac, 33.30% Impervious, Inflow Depth = 3.75" for 25-year event

Inflow = 44.66 cfs @ 12.10 hrs. Volume= 3.615 af

Outflow = 44.66 cfs @ 12.10 hrs, Volume= 3.615 af, Atten= 0%, Lag= 0.0 min

Primary = 44.66 cfs @ 12.10 hrs, Volume= 3.615 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 268.86' @ 12.10 hrs

Flood Elev= 275.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	264.60'	36.0" Round Culvert L= 41.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 264.60' / 263.00' S= 0.0390 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 7.07 sf

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Primary OutFlow Max=44.30 cfs @ 12.10 hrs HW=268.82' (Free Discharge)
1=Culvert (Inlet Controls 44.30 cfs @ 6.27 fps)

#### Summary for Pond 16P: DMH-202

[81] Warning: Exceeded Pond 17P by 1.06' @ 12.10 hrs

[79] Warning: Submerged Pond 18P Primary device # 1 INLET by 1.56'

[81] Warning: Exceeded Pond 19P by 1.70' @ 12.10 hrs

[79] Warning: Submerged Pond 62P Primary device # 1 OUTLET by 3.46'

Inflow Area = 3.827 ac, 48.20% Impervious, Inflow Depth = 4.58" for 25-year event

Inflow = 19.24 cfs @ 12.09 hrs, Volume= 1.460 af

Outflow = 19.24 cfs @ 12.09 hrs, Volume= 1.460 af, Atten= 0%, Lag= 0.0 min

Primary = 19.24 cfs @ 12.09 hrs, Volume= 1.460 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 280.49' @ 12.09 hrs

Flood Elev= 283.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	276.90'	24.0" Round Culvert
	•		L= 77.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 276.90' / 271.00' S= 0.0766 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=18.78 cfs @ 12.09 hrs HW=280.37' (Free Discharge)
1=Culvert (Inlet Controls 18.78 cfs @ 5.98 fps)

## Summary for Pond 17P: FIELD INLET-201

Inflow Area = 0.250 ac, 17.45% Impervious, Inflow Depth = 3.58" for 25-year event

Inflow = 1.02 cfs @ 12.09 hrs, Volume= 0.074 af

Outflow = 1.02 cfs @ 12.09 hrs, Volume= 0.074 af, Atten= 0%, Lag= 0.0 min

Primary = 1.02 cfs @ 12.09 hrs, Volume= 0.074 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 279.40' @ 12.09 hrs

Flood Elev= 282.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	278.80'	12.0" Round Culvert L= 46.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 278.80' / 278.00' S= 0.0174 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.00 cfs @ 12.09 hrs HW=279.39' (Free Discharge)

1=Culvert (Inlet Controls 1.00 cfs @ 2.07 fps)

Type III 24-hr 25-year Rainfall=5.89"

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# Summary for Pond 18P: CB-202

Inflow Area = 0.676 ac. 45.13% Impervious. Inflow Depth = 4.52" for 25-year event

Inflow 3.39 cfs @ 12.09 hrs, Volume= 0.255 af

Outflow = 3.39 cfs @ 12.09 hrs, Volume= 0.255 af, Atten= 0%, Lag= 0.0 min

3.39 cfs @ 12.09 hrs, Volume= Primary = 0.255 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 280.68' @ 12.09 hrs

Flood Elev= 282.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	278.90'	12.0" Round Culvert

L= 19.0' CPP, projecting, no headwall, Ke= 0.900

Inlet / Outlet Invert= 278.90' / 278.00' S= 0.0474 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=3.31 cfs @ 12.09 hrs HW=280.63' (Free Discharge)

1=Culvert (Inlet Controls 3.31 cfs @ 4.21 fps)

# Summary for Pond 19P: CB-201

0.040 ac, 97.61% Impervious, Inflow Depth = 5.65" for 25-year event Inflow Area = 0.019 af

Inflow 0.23 cfs @ 12.09 hrs, Volume=

Outflow 0.23 cfs @ 12.09 hrs, Volume= 0.019 af. Atten= 0%. Lag= 0.0 min

0.23 cfs @ 12.09 hrs, Volume= Primary = 0.019 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 278.76' @ 12.09 hrs

Flood Elev= 282.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	278.50'	12.0" Round Culvert

L= 43.0' CPP, projecting, no headwall, Ke= 0.900

Inlet / Outlet Invert= 278.50' / 278.00' S= 0.0116 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=0.22 cfs @ 12.09 hrs HW=278.76' (Free Discharge)

1=Culvert (Inlet Controls 0.22 cfs @ 1.37 fps)

#### Summary for Pond 20P: DMH-203

[79] Warning: Submerged Pond 21P Primary device # 1 OUTLET by 0.72'

[79] Warning: Submerged Pond 22P Primary device # 1 OUTLET by 0.72'

[79] Warning: Submerged Pond 23P Primary device # 1 INLET by 2.22'

7.726 ac, 25.92% Impervious, Inflow Depth = 3.35" for 25-year event Inflow Area =

Inflow 25.90 cfs @ 12.12 hrs. Volume= 2.154 af

Outflow = 25.90 cfs @ 12.12 hrs, Volume= 2.154 af. Atten= 0%. Lag= 0.0 min

Primary = 25.90 cfs @ 12.12 hrs, Volume= 2.154 af 6083 - POST REV1

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Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 279.77' @ 12.12 hrs

Flood Flev= 283 00'

Device Routing Invert Outlet Devices 276.60' 30.0" Round Culvert #1 Primary L= 70.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 276.60' / 270.50' S= 0.0871 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 4.91 sf

Primary OutFlow Max=25.24 cfs @ 12.12 hrs HW=279.68' (Free Discharge)

1=Culvert (Inlet Controls 25.24 cfs @ 5.14 fps)

# Summary for Pond 21P: CB-204

0.051 ac,100.00% Impervious, Inflow Depth = 5.65" for 25-year event Inflow Area =

0.29 cfs @ 12.09 hrs, Volume= 0.024 af Inflow

Outflow = 0.29 cfs @ 12.09 hrs, Volume= 0.024 af, Atten= 0%, Lag= 0.0 min

0.29 cfs @ 12.09 hrs. Volume= 0.024 af Primary =

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs.

Peak Elev= 280.40' @ 12.09 hrs

Flood Elev= 284.10'

Device Routing Invert Outlet Devices

280.10' 12.0" Round Culvert #1 Primary

> L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 280.10' / 279.00' S= 0.0550 '/' Cc= 0.900

n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=0.28 cfs @ 12.09 hrs HW=280.39' (Free Discharge) 1=Culvert (Inlet Controls 0.28 cfs @ 1.45 fps)

#### Summary for Pond 22P: CB-205

0.310 ac, 28.18% Impervious, Inflow Depth = 2.92" for 25-year event Inflow Area =

0.98 cfs @ 12.09 hrs, Volume= 0.075 af Inflow =

Outflow = 0.98 cfs @ 12.09 hrs. Volume= 0.075 af. Atten= 0%. Lag= 0.0 min

Primary = 0.98 cfs @ 12.09 hrs, Volume= 0.075 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 280.68' @ 12.09 hrs

Flood Elev= 284.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	280.10'	12.0" Round Culvert

L= 33.0' CPP, projecting, no headwall, Ke= 0.900

Inlet / Outlet Invert= 280.10' / 279.00' S= 0.0333 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

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Primary OutFlow Max=0.97 cfs @ 12.09 hrs HW=280.68' (Free Discharge) 1=Culvert (Inlet Controls 0.97 cfs @ 2.05 fps)

#### Summary for Pond 23P: DMH-204

[79] Warning: Submerged Pond 26P Primary device # 1 INLET by 2.24'

Inflow Area = 7.365 ac, 25.31% Impervious, Inflow Depth = 3.35" for 25-year event

Inflow = 24.68 cfs @ 12.12 hrs, Volume= 2.055 af

Outflow = 24.68 cfs @ 12.12 hrs, Volume= 2.055 af, Atten= 0%, Lag= 0.0 min

Primary = 24.68 cfs @ 12.12 hrs, Volume= 2.055 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 280.49' @ 12.12 hrs

Flood Elev= 285.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	277.50'	30.0" Round Culvert
			L= 192.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 277.50' / 276.70' S= 0.0042 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 4.91 sf

Primary OutFlow Max=24.04 cfs @ 12.12 hrs HW=280.41' (Free Discharge)

1=Culvert (Inlet Controls 24.04 cfs @ 4.90 fps)

#### Summary for Pond 24P: CB-206

Inflow Area = 0.633 ac, 31.21% Impervious, Inflow Depth = 3.19" for 25-year event

Inflow = 1.99 cfs @ 12.16 hrs. Volume= 0.168 af

Outflow = 1.99 cfs @ 12.16 hrs, Volume= 0.168 af, Atten= 0%, Lag= 0.0 min Primary = 1.99 cfs @ 12.16 hrs, Volume= 0.168 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 282.26' @ 12.16 hrs

Flood Elev= 285.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	281.60'	24.0" Round Culvert
			L= 16.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 281.60' / 281.30' S= 0.0188 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 3.14 sf

Primary OutFlow Max=1.97 cfs @ 12.16 hrs HW=282.26' (Free Discharge)

1=Culvert (Inlet Controls 1.97 cfs @ 2.18 fps)

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## Summary for Pond 25P: CB-207

| Inflow Area = | 0.068 ac,100.00% Impervious, Inflow Depth = 5.65" for 25-year event | Inflow = 0.38 cfs @ 12.09 hrs, Volume= 0.032 af | Outflow = 0.38 cfs @ 12.09 hrs, Volume= 0.032 af, Atten= 0%, Lag= 0.0 min

Primary = 0.38 cfs @ 12.09 hrs, Volume= 0.032 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 281.95' @ 12.09 hrs

Flood Elev= 285.60'

Device	Routing	Invert	Outlet Devices	
#1	Primary	281.60'	12.0" Round Culvert	
			L= 16.0' CPP, projecting, no headwall, Ke= 0.900	
			Inlat / Outlat Invent- 204 COL/ 204 201 C- 0.0400 I/I	

L= 16.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 281.60' / 281.30' S= 0.0188 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.37 cfs @ 12.09 hrs HW=281.94' (Free Discharge) 1-Culvert (Inlet Controls 0.37 cfs @ 1.57 fps)

## Summary for Pond 26P: DMH-205

[79] Warning: Submerged Pond 27P Primary device # 1 INLET by 1.86'

Inflow Area = 6.664 ac, 23.99% Impervious, Inflow Depth = 3.34" for 25-year event

Inflow = 22.46 cfs @ 12.12 hrs, Volume= 1.855 af

Outflow = 22.46 cfs @ 12.12 hrs, Volume= 1.855 af, Atten= 0%, Lag= 0.0 min

Primary = 22.46 cfs @ 12.12 hrs, Volume= 1.855 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 280.88' @ 12.12 hrs

Flood Elev= 286.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	278.20'	30.0" Round Culvert
			L= 151.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 278.20' / 277.60' S= 0.0040 '/' Cc= 0.900
			n= 0.012 Corrugated PP_smooth interior_Flow Area= 4.91 sf

Primary OutFlow Max=21.88 cfs @ 12.12 hrs HW=280.83' (Free Discharge)
1=Culvert (Inlet Controls 21.88 cfs @ 4.46 fps)

#### Summary for Pond 27P: DMH-206

[79] Warning: Submerged Pond 28P Primary device # 1 INLET by 1.13'

Inflow Area = 5.599 ac, 23.73% Impervious, Inflow Depth = 3.49" for 25-year event

Inflow = 19.66 cfs @ 12.12 hrs, Volume= 1.630 af

Outflow = 19.66 cfs @ 12.12 hrs, Volume= 1.630 af, Atten= 0%, Lag= 0.0 min

Primary = 19.66 cfs @ 12.12 hrs, Volume= 1.630 af

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Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 281.35' @ 12.12 hrs Flood Flev= 286.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	279.00'	30.0" Round Culvert
			L= 168.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 279.00' / 278.30' S= 0.0042 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 4.91 sf

Primary OutFlow Max=19.17 cfs @ 12.12 hrs HW=281.31' (Free Discharge)
1=Culvert (Barrel Controls 19.17 cfs @ 5.27 fps)

#### Summary for Pond 28P: DMH-207

[79] Warning: Submerged Pond 29P Primary device # 1 INLET by 0.32' [79] Warning: Submerged Pond 30P Primary device # 1 INLET by 0.32' [79] Warning: Submerged Pond 31P Primary device # 1 OUTLET by 1.82'

 Inflow Area = Inflow = Inflow = Outflow = Primary = 19.66 cfs @ 12.12 hrs, Volume = 1.630 af
 5.599 ac, 23.73% Impervious, Inflow Depth = 3.49" for 25-year event 1.630 af

 Outflow = Outflow = 19.66 cfs @ 12.12 hrs, Volume = 1.630 af
 1.630 af, Atten= 0%, Lag= 0.0 min 1.630 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 282.54' @ 12.12 hrs

Flood Elev= 285.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	280.20'	30.0" Round Culvert
			L= 268.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 280.20' / 279.10' S= 0.0041 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 4.91 sf

Primary OutFlow Max=19.18 cfs @ 12.12 hrs HW=282.49' (Free Discharge)
1=Culvert (Inlet Controls 19.18 cfs @ 4.07 fps)

# Summary for Pond 29P: CB-208

 Inflow Area =
 0.147 ac,100.00% Impervious, Inflow Depth = 5.65" for 25-year event

 Inflow =
 0.83 cfs @ 12.09 hrs, Volume=
 0.069 af

 Outflow =
 0.83 cfs @ 12.09 hrs, Volume=
 0.069 af, Atten= 0%, Lag= 0.0 min

 Primary =
 0.83 cfs @ 12.09 hrs, Volume=
 0.069 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 282.73' @ 12.09 hrs

Flood Elev= 285.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	282.20'	12.0" Round Culvert
	-		L= 14.0' CPP, projecting, no headwall, Ke= 0.900

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Inlet / Outlet Invert= 282.20' / 282.00' S= 0.0143 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.81 cfs @ 12.09 hrs HW=282.72' (Free Discharge)
1=Culvert (Inlet Controls 0.81 cfs @ 1.94 fps)

## Summary for Pond 30P: CB-209

Inflow Area = 1.565 ac, 25.39% Impervious, Inflow Depth = 2.10" for 25-year event

Inflow = 3.06 cfs @ 12.15 hrs, Volume= 0.273 af

Outflow = 3.06 cfs @ 12.15 hrs, Volume= 0.273 af, Atten= 0%, Lag= 0.0 min

Primary = 3.06 cfs @ 12.15 hrs, Volume= 0.273 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 283.26' @ 12.15 hrs

Flood Elev= 285.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	282.20'	15.0" Round Culvert
			L= 14.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 282.20' / 282.00' S= 0.0143 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 1.23 sf

Primary OutFlow Max=3.05 cfs @ 12.15 hrs HW=283.26' (Free Discharge)
1=Culvert (Inlet Controls 3.05 cfs @ 2.76 fps)

#### Summary for Pond 31P: DMH-208

[79] Warning: Submerged Pond 32P Primary device # 1 OUTLET by 2.65'

 Inflow Area = Inflow = Inflow = 0.0tHow = 0.0tHow = 0.0tHow = 15.94 cfs @ 12.11 hrs, Volume= 1.287 af
 3.887 ac, 20.17% Impervious, Inflow Depth = 3.97" for 25-year event 1.287 af

 Outflow = 0.0tHow = 0.0tHow = 0.0tHow = 0.0tHow = 1.287 af
 12.21 hrs, Volume = 1.287 af

 Atten= 0%, Lag= 0.0 min 1.287 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 286.28' @ 12.11 hrs

Flood Elev= 289.60'

Device Routing Invert Outlet Devices

#1 Primary 283.50' 24.0" Round Culvert

L= 165.0' CPP, projecting, no headwall, Ke= 0.900
Inlet / Outlet Invert= 283.50' / 280.70' S= 0.0170' /' Cc= 0.900
n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=15.58 cfs @ 12.11 hrs HW=286.20' (Free Discharge)
1=Culvert (Inlet Controls 15.58 cfs @ 4.96 fps)

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#### Summary for Pond 32P: DMH-209

[81] Warning: Exceeded Pond 33P by 0.81' @ 12.10 hrs

[79] Warning: Submerged Pond 34P Primary device # 1 INLET by 1.15'

[79] Warning: Submerged Pond 35P Primary device # 1 OUTLET by 1.75'

[79] Warning: Submerged Pond 63P Primary device # 1 OUTLET by 1.45'

Inflow Area = 3.887 ac, 20.17% Impervious, Inflow Depth = 3.97" for 25-year event

Inflow = 15.94 cfs @ 12.11 hrs, Volume= 1.287 af

Outflow = 15.94 cfs @ 12.11 hrs, Volume= 1.287 af, Atten= 0%, Lag= 0.0 min

Primary = 15.94 cfs @ 12.11 hrs, Volume= 1.287 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 299.18' @ 12.11 hrs

Flood Elev= 301.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	296.40'	24.0" Round Culvert
			L= 150.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 296.40' / 283.60' S= 0.0853'/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=15.58 cfs @ 12.11 hrs HW=299.10' (Free Discharge)

1=Culvert (Inlet Controls 15.58 cfs @ 4.96 fps)

#### Summary for Pond 33P: CB-210

Inflow Area = 0.067 ac,100.00% Impervious, Inflow Depth = 5.65" for 25-year event

Inflow = 0.38 cfs @ 12.09 hrs. Volume= 0.031 af

Outflow = 0.38 cfs @ 12.09 hrs, Volume= 0.031 af, Atten= 0%, Lag= 0.0 min

Primary = 0.38 cfs @ 12.09 hrs, Volume= 0.031 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 298.34' @ 12.09 hrs

Flood Elev= 302.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	298.00'	12.0" Round Culvert
			L= 12.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 298.00' / 297.70' S= 0.0250 '/' Cc= 0.900
			n= 0.012 Corrugated PP_smooth interior_Flow Area= 0.79 sf

Primary OutFlow Max=0.37 cfs @ 12.09 hrs HW=298.34' (Free Discharge)

1=Culvert (Inlet Controls 0.37 cfs @ 1.56 fps)

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## Summary for Pond 34P: CB-211

 Inflow Area =
 0.635 ac, 44.08% Impervious, Inflow Depth = 4.30" for 25-year event

 Inflow =
 3.06 cfs @ 12.09 hrs, Volume =
 0.228 af

 Outflow =
 3.06 cfs @ 12.09 hrs, Volume =
 0.228 af, Atten = 0%, Lag = 0.0 min

Primary = 3.06 cfs @ 12.09 hrs, Volume= 0.228 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 299.55' @ 12.09 hrs

Flood Elev= 302.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	298.00'	12.0" Round Culvert
	-		L= 12.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 298.00' / 297.70' S= 0.0250 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.99 cfs @ 12.09 hrs HW=299.51' (Free Discharge)
1=Culvert (Inlet Controls 2.99 cfs @ 3.81 fps)

## Summary for Pond 35P: DMH-210

[81] Warning: Exceeded Pond 36P by 0.36' @ 12.10 hrs

[79] Warning: Submerged Pond 37P Primary device # 1 INLET by 0.61'

Inflow Area = 0.440 ac, 37.03% Impervious, Inflow Depth = 4.42" for 25-year event

Inflow = 2.15 cfs @ 12.09 hrs, Volume= 0.162 af

Outflow = 2.15 cfs @ 12.09 hrs, Volume= 0.162 af, Atten= 0%, Lag= 0.0 min

Primary = 2.15 cfs @ 12.09 hrs, Volume= 0.162 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 316.62' @ 12.09 hrs

Flood Elev= 320.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	315.60'	12.0" Round Culvert
	•		L= 322.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 315.60' / 297.40' S= 0.0565 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=2.10 cfs @ 12.09 hrs HW=316.59' (Free Discharge) 1=Culvert (Inlet Controls 2.10 cfs @ 2.68 fps)

# Summary for Pond 36P: CB-212

Inflow Area = 0.038 ac,100.00% Impervious, Inflow Depth = 5.65" for 25-year event

Inflow = 0.22 cfs @ 12.09 hrs, Volume= 0.018 af

Outflow = 0.22 cfs @ 12.09 hrs, Volume= 0.018 af, Atten= 0%, Lag= 0.0 min

Primary = 0.22 cfs @ 12.09 hrs, Volume= 0.018 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

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Peak Elev= 316.26' @ 12.09 hrs

Flood Elev= 320.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	316.00'	12.0" Round Culvert
	-		L= 13.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 316.00' / 315.70' S= 0.0231 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.21 cfs @ 12.09 hrs HW=316.25' (Free Discharge) 1=Culvert (Inlet Controls 0.21 cfs @ 1.35 fps)

# Summary for Pond 37P: CB-213

Inflow Area = 0.401 ac, 31.00% Impervious, Inflow Depth = 4.30" for 25-year event Inflow 1.94 cfs @ 12.09 hrs, Volume= 0.144 af 1.94 cfs @ 12.09 hrs, Volume= 0.144 af, Atten= 0%, Lag= 0.0 min Outflow =

1.94 cfs @ 12.09 hrs, Volume= Primary = 0.144 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 316.91' @ 12.09 hrs

Flood Elev= 320.00'

Device Routing Invert Outlet Devices Primary 316.00' 12.0" Round Culvert #1 L= 13.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 316.00' / 315.70' S= 0.0231 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=1.89 cfs @ 12.09 hrs HW=316.90' (Free Discharge)

1=Culvert (Inlet Controls 1.89 cfs @ 2.55 fps)

#### Summary for Pond 38P: DMH-301

0.670 af

[79] Warning: Submerged Pond 39P Primary device # 1 OUTLET by 2.38'

1.769 ac, 46.05% Impervious, Inflow Depth = 4.55" for 25-year event Inflow Area =

Inflow = 8.90 cfs @ 12.09 hrs. Volume= 0.670 af 8.90 cfs @ 12.09 hrs, Volume=

Outflow = 8.90 cfs @ 12.09 hrs, Volume= 0.670 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 318.40' @ 12.09 hrs

Flood Elev= 320.00'

Primary =

Device	Routing	Invert	Outlet Devices
#1	Primary	315.90'	18.0" Round Culvert
			L= 71.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 315.90' / 312.00' S= 0.0549 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf

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Primary OutFlow Max=8.69 cfs @ 12.09 hrs HW=318.32' (Free Discharge) 1=Culvert (Inlet Controls 8.69 cfs @ 4.92 fps)

# Summary for Pond 39P: DMH-302

[79] Warning: Submerged Pond 40P Primary device # 1 INLET by 1.68'

[81] Warning: Exceeded Pond 41P by 0.81' @ 12.10 hrs

[79] Warning: Submerged Pond 42P Primary device # 1 OUTLET by 1.98

Inflow Area = 1.769 ac, 46.05% Impervious, Inflow Depth = 4.55" for 25-year event Inflow = 8.90 cfs @ 12.09 hrs, Volume= 0.670 af

Outflow = 8.90 cfs @ 12.09 hrs, Volume= 0.670 af, Atten= 0%, Lag= 0.0 min

Primary = 8.90 cfs @ 12.09 hrs, Volume= 0.670 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs. Peak Elev= 321.70' @ 12.09 hrs

Flood Flev= 324 70'

Device Routing Invert Outlet Devices

Primary 319.20' 18.0" Round Culvert

L= 154.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 319.20' / 316.00' S= 0.0208 '/' Cc= 0.900

n= 0.012 Corrugated PP, smooth interior. Flow Area= 1.77 sf

Primary OutFlow Max=8.69 cfs @ 12.09 hrs HW=321.62' (Free Discharge)

1=Culvert (Inlet Controls 8.69 cfs @ 4.92 fps)

## Summary for Pond 40P: CB-301

0.684 ac, 45.40% Impervious, Inflow Depth = 4.52" for 25-year event Inflow Area =

3.43 cfs @ 12.09 hrs, Volume= 0 258 af Inflow = Outflow = 3.43 cfs @ 12.09 hrs. Volume= 0.258 af. Atten= 0%. Lag= 0.0 min

3.43 cfs @ 12.09 hrs. Volume= 0.258 af Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 321.82' @ 12.09 hrs

Flood Elev= 324.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	320.00'	12.0" Round Culvert
			L= 12.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 320.00' / 319.70' S= 0.0250 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.35 cfs @ 12.09 hrs HW=321.76' (Free Discharge)

1=Culvert (Inlet Controls 3.35 cfs @ 4.26 fps)

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# Summary for Pond 41P: CB-302

0.363 ac, 44.75% Impervious, Inflow Depth = 4.52" for 25-year event Inflow Area =

Inflow 1.82 cfs @ 12.09 hrs, Volume= 0.137 af

Outflow = 1.82 cfs @ 12.09 hrs, Volume= 0.137 af, Atten= 0%, Lag= 0.0 min

1.82 cfs @ 12.09 hrs, Volume= Primary = 0.137 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 320.87' @ 12.09 hrs

Flood Elev= 324.00'

Devi	се	Routing	Invert	Outlet Devices
#	1	Primary	320.00'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900

Inlet / Outlet Invert= 320.00' / 319.70' S= 0.0250 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.77 cfs @ 12.09 hrs HW=320.85' (Free Discharge)

1=Culvert (Inlet Controls 1.77 cfs @ 2.48 fps)

## Summary for Pond 42P: DMH-303

[79] Warning: Submerged Pond 43P Primary device # 1 OUTLET by 1.88'

0.722 ac, 47.33% Impervious, Inflow Depth = 4.59" for 25-year event Inflow Area =

Inflow 3.65 cfs @ 12.09 hrs, Volume= 0.276 af

Outflow = 3.65 cfs @ 12.09 hrs, Volume= 0.276 af, Atten= 0%, Lag= 0.0 min

3.65 cfs @ 12.09 hrs, Volume= Primary = 0.276 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs.

Peak Elev= 329.89' @ 12.09 hrs

Flood Elev= 332.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	327.90'	12.0" Round Culvert
	-		L= 129.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 327.90' / 319.70' S= 0.0636 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.57 cfs @ 12.09 hrs HW=329.83' (Free Discharge) 1=Culvert (Inlet Controls 3.57 cfs @ 4.54 fps)

#### Summary for Pond 43P: DMH-304

[81] Warning: Exceeded Pond 44P by 0.53' @ 12.10 hrs [81] Warning: Exceeded Pond 45P by 0.68' @ 12.10 hrs

Inflow Area = 0.722 ac. 47.33% Impervious. Inflow Depth = 4.59" for 25-year event 3.65 cfs @ 12.09 hrs. Volume= 0.276 af Inflow

Outflow = 3.65 cfs @ 12.09 hrs, Volume= 0.276 af, Atten= 0%, Lag= 0.0 min

0.276 af Primary = 3.65 cfs @ 12.09 hrs, Volume=

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Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 337.89' @ 12.09 hrs

Flood Elev= 339.90'

Device Routing Invert Outlet Devices #1 Primary 335.90' 12.0" Round Culvert L= 129.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 335.90' / 328.00' S= 0.0612 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.57 cfs @ 12.09 hrs HW=337.83' (Free Discharge)

1=Culvert (Inlet Controls 3.57 cfs @ 4.54 fps)

#### Summary for Pond 44P: CB-303

Inflow Area = 0.392 ac, 53.86% Impervious, Inflow Depth = 4.74" for 25-year event

Inflow 2.03 cfs @ 12.09 hrs, Volume= 0.155 af

2.03 cfs @ 12.09 hrs, Volume= 0.155 af. Atten= 0%. Lag= 0.0 min Outflow =

Primary = 2.03 cfs @ 12.09 hrs. Volume= 0.155 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 337.35' @ 12.09 hrs

Flood Elev= 340.40'

Invert Outlet Devices Device Routing #1 Primary 336.40' 12.0" Round Culvert L= 17.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 336.40' / 336.00' S= 0.0235 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=1.98 cfs @ 12.09 hrs HW=337.33' (Free Discharge) 1=Culvert (Inlet Controls 1.98 cfs @ 2.60 fps)

#### Summary for Pond 45P: CB-304

0.121 af

0.330 ac, 39.56% Impervious, Inflow Depth = 4.41" for 25-year event Inflow Area =

Inflow 1.62 cfs @ 12.09 hrs. Volume= 0.121 af 1.62 cfs @ 12.09 hrs, Volume=

Outflow = 1.62 cfs @ 12.09 hrs, Volume= 0.121 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 337.20' @ 12.09 hrs

Flood Elev= 340.40'

Primary =

Device	Routing	Invert	Outlet Devices
#1	Primary	336.40'	12.0" Round Culvert
	-		L= 16.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 336.40' / 336.00' S= 0.0250 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

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Primary OutFlow Max=1.58 cfs @ 12.09 hrs HW=337.19' (Free Discharge) 1=Culvert (Inlet Controls 1.58 cfs @ 2.39 fps)

#### Summary for Pond 46P: DMH-218

[81] Warning: Exceeded Pond 47P by 0.26' @ 12.10 hrs [81] Warning: Exceeded Pond 48P by 0.96' @ 12.10 hrs

Inflow Area = 0.695 ac, 54.04% Impervious, Inflow Depth = 4.74" for 25-year event Inflow 3.60 cfs @ 12.09 hrs, Volume= 0.275 af Outflow = 3.60 cfs @ 12.09 hrs, Volume= 0.275 af, Atten= 0%, Lag= 0.0 min Primary = 3.60 cfs @ 12.09 hrs, Volume= 0.275 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 334.05' @ 12.09 hrs

Flood Elev= 336.20'

Device Routing Invert Outlet Devices Primary 12.0" Round Culvert L= 81.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 332.10' / 328.20' S= 0.0481 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=3.51 cfs @ 12.09 hrs HW=333.98' (Free Discharge) 1=Culvert (Inlet Controls 3.51 cfs @ 4.47 fps)

# Summary for Pond 47P: CB-220

Inflow Area = 0.512 ac. 54.40% Impervious. Inflow Depth = 4.74" for 25-year event Inflow 2.65 cfs @ 12.09 hrs, Volume= 0.202 af Outflow = 2.65 cfs @ 12.09 hrs, Volume= 0.202 af, Atten= 0%, Lag= 0.0 min

0.202 af

2.65 cfs @ 12.09 hrs. Volume= Primary

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 333.79' @ 12.09 hrs Flood Elev= 336.50'

Device Routing Invert Outlet Devices Primary 332 50' 12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 332.50' / 332.20' S= 0.0200 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.59 cfs @ 12.09 hrs HW=333.75' (Free Discharge) 1=Culvert (Inlet Controls 2.59 cfs @ 3.29 fps)

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## Summary for Pond 48P: CB-221

Inflow Area = 0.183 ac, 53.05% Impervious, Inflow Depth = 4.74" for 25-year event Inflow 0.95 cfs @ 12.09 hrs, Volume= 0.072 af Outflow = 0.95 cfs @ 12.09 hrs, Volume= 0.072 af, Atten= 0%, Lag= 0.0 min 0.95 cfs @ 12.09 hrs, Volume= Primary = 0.072 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 333.07' @ 12.09 hrs

Flood Elev= 336.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	332.50'	12.0" Round Culvert
	-		L= 9.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 332.50' / 332.20' S= 0.0333 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.93 cfs @ 12.09 hrs HW=333.07' (Free Discharge) 1=Culvert (Inlet Controls 0.93 cfs @ 2.02 fps)

## Summary for Pond 49P: DMH-217

[79] Warning: Submerged Pond 46P Primary device # 1 OUTLET by 1.83'

0.695 ac, 54.04% Impervious, Inflow Depth = 4.74" for 25-year event Inflow Area =

Inflow 3.60 cfs @ 12.09 hrs, Volume= 0.275 af

Outflow = 3.60 cfs @ 12.09 hrs, Volume= 0.275 af, Atten= 0%, Lag= 0.0 min

Primary = 3.60 cfs @ 12.09 hrs, Volume= 0.275 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 330.05' @ 12.09 hrs

Flood Elev= 332.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	328.10'	12.0" Round Culvert
			L= 147.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 328.10' / 321.30' S= 0.0463 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.51 cfs @ 12.09 hrs HW=329.98' (Free Discharge) 1=Culvert (Inlet Controls 3.51 cfs @ 4.47 fps)

#### Summary for Pond 50P: DMH-216

[79] Warning: Submerged Pond 49P Primary device # 1 OUTLET by 1.83

Inflow Area = 0.695 ac, 54.04% Impervious, Inflow Depth = 4.74" for 25-year event Inflow = 3.60 cfs @ 12.09 hrs, Volume= 0.275 af

Outflow = 3.60 cfs @ 12.09 hrs, Volume= 0.275 af, Atten= 0%, Lag= 0.0 min

Primary = 3.60 cfs @ 12.09 hrs, Volume= 0.275 af

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Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 323.15' @ 12.09 hrs Flood Elev= 325.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	321.20'	12.0" Round Culvert
			L= 118.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 321.20' / 318.10' S= 0.0263 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.51 cfs @ 12.09 hrs HW=323.08' (Free Discharge) 1=Culvert (Inlet Controls 3.51 cfs @ 4.47 fps)

# Summary for Pond 52P: DMH-215

[79] Warning: Submerged Pond 50P Primary device # 1 OUTLET by 1.29'

[81] Warning: Exceeded Pond 53P by 0.65' @ 12.10 hrs

[81] Warning: Exceeded Pond 54P by 0.64' @ 12.10 hrs

Inflow Area = 0.834 ac. 61.69% Impervious. Inflow Depth = 4.89" for 25-year event Inflow = 4.38 cfs @ 12.09 hrs, Volume= 0.340 af 4.38 cfs @ 12.09 hrs, Volume= 0.340 af. Atten= 0%. Lag= 0.0 min Outflow =

Primary = 4.38 cfs @ 12.09 hrs, Volume= 0.340 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 319.41' @ 12.09 hrs

Flood Elev= 322.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	317.90'	15.0" Round Culvert
	-		L= 247.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 317.90' / 310.00' S= 0.0320 '/' Cc= 0.900
			n= 0.012 Corrugated PP smooth interior Flow Area= 1.23 sf

Primary OutFlow Max=4.27 cfs @ 12.09 hrs HW=319.36' (Free Discharge) 1=Culvert (Inlet Controls 4.27 cfs @ 3.48 fps)

# Summary for Pond 53P: CB-219

0.069 ac,100.00% Impervious, Inflow Depth = 5.65" for 25-year event Inflow Area = Inflow = 0.032 af

0.39 cfs @ 12.09 hrs, Volume=

Outflow = 0.39 cfs @ 12.09 hrs, Volume= 0.032 af, Atten= 0%, Lag= 0.0 min

0.39 cfs @ 12.09 hrs, Volume= Primary = 0.032 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 318.75' @ 12.09 hrs

Flood Elev= 322.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	318.40'	12.0" Round Culvert
	•		L= 21.0' CPP, projecting, no headwall, Ke= 0.900

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Inlet / Outlet Invert= 318.40' / 318.10' S= 0.0143 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.38 cfs @ 12.09 hrs HW=318.74' (Free Discharge) 1=Culvert (Inlet Controls 0.38 cfs @ 1.58 fps)

## Summary for Pond 54P: CB-218

Inflow Area = 0.070 ac,100.00% Impervious, Inflow Depth = 5.65" for 25-year event

Inflow 0.39 cfs @ 12.09 hrs, Volume= 0.033 af

Outflow = 0.39 cfs @ 12.09 hrs, Volume= 0.033 af, Atten= 0%, Lag= 0.0 min

Primary = 0.39 cfs @ 12.09 hrs, Volume= 0.033 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 318.75' @ 12.09 hrs

Flood Elev= 322.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	318.40'	12.0" Round Culvert
			L= 19.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 318.40' / 318.10' S= 0.0158'/' Cc= 0.900
			n= 0.012 Corrugated PP_smooth interior_Flow Area= 0.79 sf

Primary OutFlow Max=0.38 cfs @ 12.09 hrs HW=318.75' (Free Discharge) 1=Culvert (Inlet Controls 0.38 cfs @ 1.58 fps)

#### Summary for Pond 55P: DMH-214

[79] Warning: Submerged Pond 52P Primary device # 1 OUTLET by 1.85

1.495 ac, 57.04% Impervious, Inflow Depth = 4.77" for 25-year event Inflow Area = 7.73 cfs @ 12.09 hrs, Volume= Inflow = 0.595 af Outflow = 7.73 cfs @ 12.09 hrs. Volume= 0.595 af. Atten= 0%. Lag= 0.0 min

7.73 cfs @ 12.09 hrs, Volume= 0.595 af Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 311.87' @ 12.09 hrs

Flood Elev= 315.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	309.80'	18.0" Round Culvert L= 95.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 309.80' / 305.60' S= 0.0442'/ Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=7.54 cfs @ 12.09 hrs HW=311.81' (Free Discharge) 1=Culvert (Inlet Controls 7.54 cfs @ 4.27 fps)

Type III 24-hr 25-year Rainfall=5.89"

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## Summary for Pond 56P: CB-217

Inflow Area = 0.062 ac,100.00% Impervious, Inflow Depth = 5.65" for 25-year event

Inflow 0.35 cfs @ 12.09 hrs, Volume= 0.029 af

Outflow = 0.35 cfs @ 12.09 hrs, Volume= 0.029 af, Atten= 0%, Lag= 0.0 min

0.35 cfs @ 12.09 hrs, Volume= Primary = 0.029 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 312.53' @ 12.09 hrs

Flood Elev= 316.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	312.20'	<b>12.0" Round Culvert</b> L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 312.20' / 311.90' S= 0.0150 '/' Cc= 0.900

Primary OutFlow Max=0.34 cfs @ 12.09 hrs HW=312.52' (Free Discharge)

1=Culvert (Inlet Controls 0.34 cfs @ 1.53 fps)

# Summary for Pond 57P: CB-216

0.600 ac, 46.16% Impervious, Inflow Depth = 4.52" for 25-year event Inflow Area = 0.226 af

3.00 cfs @ 12.09 hrs, Volume= Inflow Outflow

3.00 cfs @ 12.09 hrs, Volume= 0.226 af. Atten= 0%. Lag= 0.0 min

3.00 cfs @ 12.09 hrs, Volume= Primary = 0.226 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 313.71' @ 12.09 hrs

Flood Elev= 316.20'

Device Routing Invert Outlet Devices

Primary 312.20' 12.0" Round Culvert

> L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 312.20' / 311.90' S= 0.0273 '/' Cc= 0.900

n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=2.93 cfs @ 12.09 hrs HW=313.66' (Free Discharge)

1=Culvert (Inlet Controls 2.93 cfs @ 3.73 fps)

#### Summary for Pond 58P: DMH-213

[79] Warning: Submerged Pond 55P Primary device # 1 OUTLET by 1.95'

Inflow Area = 1.495 ac, 57.04% Impervious, Inflow Depth = 4.77" for 25-year event

Inflow 7.73 cfs @ 12.09 hrs, Volume= 0.595 af

0.595 af. Atten= 0%. Lag= 0.0 min 7.73 cfs @ 12.09 hrs. Volume= Outflow =

Primary = 7.73 cfs @ 12.09 hrs. Volume= 0.595 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

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Peak Elev= 307.57' @ 12.09 hrs

Flood Elev= 309.60'

Device Routing Invert Outlet Devices 305.50' 18.0" Round Culvert #1 Primary L= 226.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 305.50' / 290.20' S= 0.0677 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 1.77 sf

Primary OutFlow Max=7.54 cfs @ 12.09 hrs HW=307.51' (Free Discharge)

1=Culvert (Inlet Controls 7.54 cfs @ 4.27 fps)

# Summary for Pond 59P: DMH-212

[79] Warning: Submerged Pond 58P Primary device # 1 OUTLET by 1.97

[79] Warning: Submerged Pond 60P Primary device # 1 INLET by 1.67'

[81] Warning: Exceeded Pond 61P by 0.26' @ 12.10 hrs

Inflow Area = 2.861 ac, 50.91% Impervious, Inflow Depth = 4.66" for 25-year event

Inflow = 14.60 cfs @ 12.09 hrs, Volume= 1.112 af

Outflow 14.60 cfs @ 12.09 hrs. Volume= 1.112 af. Atten= 0%. Lag= 0.0 min

14.60 cfs @ 12.09 hrs, Volume= Primary = 1.112 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 292.19' @ 12.09 hrs

Flood Elev= 294.20'

Invert Outlet Devices Device Routing

Primary 289.70' 24.0" Round Culvert

L= 91.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 289.70' / 284.00' S= 0.0626 '/' Cc= 0.900

n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=14.24 cfs @ 12.09 hrs HW=292.12' (Free Discharge)

1=Culvert (Inlet Controls 14.24 cfs @ 4.53 fps)

# Summary for Pond 60P: CB-214

Inflow Area = 0.813 ac, 37.89% Impervious, Inflow Depth = 4.41" for 25-year event 4.00 cfs @ 12.09 hrs, Volume= 0 299 af Inflow

Outflow = 4.00 cfs @ 12.09 hrs, Volume=

0.299 af, Atten= 0%, Lag= 0.0 min Primary = 4.00 cfs @ 12.09 hrs, Volume= 0.299 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 292.79' @ 12.09 hrs

Flood Elev= 294.50'

Device	Routing	Invert	Outlet Devices	
#1	Primary	290.50'	12.0" Round Culvert	

L= 10.0' CPP, projecting, no headwall, Ke= 0.900

Inlet / Outlet Invert= 290.50' / 290.20' S= 0.0300 '/' Cc= 0.900

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n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.90 cfs @ 12.09 hrs HW=292.71' (Free Discharge) 1=Culvert (Inlet Controls 3.90 cfs @ 4.97 fps)

#### Summary for Pond 61P: CB-215

Inflow Area = 0.554 ac, 53.48% Impervious, Inflow Depth = 4.74" for 25-year event

Inflow 2.87 cfs @ 12.09 hrs, Volume= 0.219 af

Outflow = 2.87 cfs @ 12.09 hrs, Volume= 0.219 af, Atten= 0%, Lag= 0.0 min Primary = 2.87 cfs @ 12.09 hrs, Volume= 0.219 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 291.92' @ 12.09 hrs

Flood Flev= 294 50'

Device	Routing	Invert	Outlet Devices
#1	Primary	290.50'	12.0" Round Culvert
			L= 19.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 290.50' / 290.20' S= 0.0158 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=2.80 cfs @ 12.09 hrs HW=291.88' (Free Discharge)

1=Culvert (Inlet Controls 2.80 cfs @ 3.56 fps)

#### Summary for Pond 62P: DMH-211

[79] Warning: Submerged Pond 59P Primary device # 1 OUTLET by 2.37'

Inflow Area = 2.861 ac. 50.91% Impervious. Inflow Depth = 4.66" for 25-year event

Inflow = 14.60 cfs @ 12.09 hrs, Volume= 1.112 af

Outflow = 14.60 cfs @ 12.09 hrs, Volume= 1.112 af. Atten= 0%. Lag= 0.0 min

14.60 cfs @ 12.09 hrs. Volume= 1.112 af Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 286.39' @ 12.09 hrs

Flood Elev= 288.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	283.90'	24.0" Round Culvert
			L= 144.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 283.90' / 277.00' S= 0.0479 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 3.14 sf

Primary OutFlow Max=14.24 cfs @ 12.09 hrs HW=286.32' (Free Discharge)

1=Culvert (Inlet Controls 14.24 cfs @ 4.53 fps)

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## **Summary for Pond 63P: FIELD INLET-202**

Inflow Area = 2.746 ac, 10.00% Impervious, Inflow Depth = 3.78" for 25-year event Inflow = 10.64 cfs @ 12.13 hrs, Volume= 0.866 af 0.866 af, Atten= 0%, Lag= 0.0 min Outflow = 10.64 cfs @ 12.13 hrs, Volume=

10.64 cfs @ 12.13 hrs, Volume= Primary = 0.866 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 302.59' @ 12.13 hrs

Flood Elev= 304.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	300.80'	24.0" Round Culvert L= 137.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 300.80' / 297.70' S= 0.0226 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=10.43 cfs @ 12.13 hrs HW=302.56' (Free Discharge) 1=Culvert (Inlet Controls 10.43 cfs @ 3.56 fps)

#### Summary for Pond 66P: CB-222

Inflow Area = 1.065 ac, 25.38% Impervious, Inflow Depth = 2.54" for 25-year event Inflow = 2.79 cfs @ 12.13 hrs, Volume= 0.225 af Outflow = 2.79 cfs @ 12.13 hrs, Volume= 0.225 af, Atten= 0%, Lag= 0.0 min 2.79 cfs @ 12.13 hrs, Volume= Primary = 0.225 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 283.77' @ 12.13 hrs

Flood Elev= 286.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	282.40'	12.0" Round Culvert
	-		L= 29.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 282.40' / 281.80' S= 0.0207 '/' Cc= 0.900
			n= 0.012 Corrugated PP_smooth interior_Flow Area= 0.79 sf

Primary OutFlow Max=2.74 cfs @ 12.13 hrs HW=283.74' (Free Discharge) 1=Culvert (Inlet Controls 2.74 cfs @ 3.48 fps)

#### Summary for Pond 71P: FIELD INLET-203

Inflow Area = 3.312 ac. 1.36% Impervious. Inflow Depth = 2.02" for 25-year event Inflow 6.53 cfs @ 12.15 hrs, Volume= 0.556 af

Outflow = 6.53 cfs @ 12.15 hrs, Volume= 0.556 af, Atten= 0%, Lag= 0.0 min

Primary = 6.53 cfs @ 12.15 hrs, Volume= 0.556 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs.

Peak Elev= 280.49' @ 12.15 hrs

Flood Elev= 282.80'

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Device	Routing	Invert	Outlet Devices
#1	Primary	278.80'	18.0" Round Culvert L= 28.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 278.80' / 276.50' S= 0.0821'/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=6.51 cfs @ 12.15 hrs HW=280.49' (Free Discharge) 1=Culvert (Inlet Controls 6.51 cfs @ 3.68 fps)

#### Summary for Pond 72P: FIELD INLET-204

Inflow Area = 1.632 ac, 1.02% Impervious, Inflow Depth = 1.09" for 25-year event 1.60 cfs @ 12.11 hrs, Volume= 1.60 cfs @ 12.11 hrs, Volume= 0.148 af Inflow Outflow = 0.148 af, Atten= 0%, Lag= 0.0 min 1.60 cfs @ 12.11 hrs, Volume= Primary = 0.148 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 279.45' @ 12.11 hrs

Flood Elev= 282.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	278.80'	18.0" Round Culvert L= 50.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 278.80' / 276.50' S= 0.0460 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=1.55 cfs @ 12.11 hrs HW=279.44' (Free Discharge) 1=Culvert (Inlet Controls 1.55 cfs @ 2.15 fps)

# Summary for Pond 73P: DMH-219

[79] Warning: Submerged Pond 71P Primary device # 1 OUTLET by 1.66' [79] Warning: Submerged Pond 72P Primary device # 1 OUTLET by 1.66'

Inflow Area = 4.944 ac. 1.25% Impervious. Inflow Depth = 1.71" for 25-year event 8.00 cfs @ 12.14 hrs, Volume= Inflow = 0.704 af Outflow = 8.00 cfs @ 12.14 hrs, Volume= 0.704 af, Atten= 0%, Lag= 0.0 min Primary = 8.00 cfs @ 12.14 hrs, Volume= 0.704 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 278.17' @ 12.14 hrs

Flood Elev= 284.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	276.00'	18.0" Round Culvert
			L= 86.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 276.00' / 272.00' S= 0.0465 '/' Cc= 0.900
			n= 0.012 Corrugated PP smooth interior Flow Area= 1.77 sf

Primary OutFlow Max=7.91 cfs @ 12.14 hrs HW=278.14' (Free Discharge) 1=Culvert (Inlet Controls 7.91 cfs @ 4.47 fps)

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## Summary for Link DP-A: DESIGN POINT-A

Inflow Area = 46.063 ac, 13.52% Impervious, Inflow Depth = 1.58" for 25-year event Inflow = 37.64 cfs @ 12.20 hrs, Volume= 6.066 af 37.64 cfs @ 12.20 hrs, Volume= Primary = 6.066 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

#### Summary for Link DP-B: DESIGN POINT-B

Inflow Area = 20.745 ac, 1.41% Impervious, Inflow Depth = 1.10" for 25-year event 1.895 af Inflow = 18.11 cfs @ 12.12 hrs, Volume= Primary = 18.11 cfs @ 12.12 hrs, Volume= 1.895 af. Atten= 0%. Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Type III 24-hr 100-year Rainfall=7.52"

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Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

rtouch routing by otor mu	rane menea
Subcatchment1S: POST1	Runoff Area=4,483 sf 81.80% Impervious Runoff Depth=5.98" Tc=6.0 min CN=87 Runoff=0.68 cfs 0.051 af
Subcatchment2S: POST 2	Runoff Area=4,363 sf 81.46% Impervious Runoff Depth=5.98" Tc=6.0 min CN=87 Runoff=0.66 cfs 0.050 af
Subcatchment3S: POST 3	Runoff Area=5,733 sf 79.87% Impervious Runoff Depth=6.10" Tc=6.0 min CN=88 Runoff=0.88 cfs 0.067 af
Subcatchment4S: POST 4	Runoff Area=6,696 sf 82.11% Impervious Runoff Depth=6.22" Tc=6.0 min CN=89 Runoff=1.04 cfs 0.080 af
Subcatchment5S: POST 5	Runoff Area=1,758 sf 97.61% Impervious Runoff Depth=7.28" Tc=6.0 min CN=98 Runoff=0.29 cfs 0.024 af
Subcatchment6S: POST 6	Runoff Area=2,283 sf 100.00% Impervious Runoff Depth=7.28" Tc=6.0 min CN=98 Runoff=0.38 cfs 0.032 af
Subcatchment7S: POST 7	Runoff Area=2,223 sf 100.00% Impervious Runoff Depth=7.28" Tc=6.0 min CN=98 Runoff=0.37 cfs 0.031 af
Subcatchment8S: POST 8	Runoff Area=2,941 sf 100.00% Impervious Runoff Depth=7.28" Tc=6.0 min CN=98 Runoff=0.49 cfs 0.041 af
Subcatchment9S: POST 9	Runoff Area=27,588 sf 31.21% Impervious Runoff Depth=4.61" Tc=11.0 min CN=75 Runoff=2.87 cfs 0.243 af
Subcatchment10S: POST 10	Runoff Area=65,188 sf 21.96% Impervious Runoff Depth=3.08" Flow Length=718' Tc=10.2 min CN=61 Runoff=4.56 cfs 0.384 af
Subcatchment11S: POST11	Runoff Area=3,352 sf 100.00% Impervious Runoff Depth=7.28" Tc=6.0 min CN=98 Runoff=0.55 cfs 0.047 af
Subcatchment12S: WRIGHT ROAD	Runoff Area=24,000 sf 100.00% Impervious Runoff Depth=7.28" Tc=6.0 min CN=98 Runoff=3.97 cfs 0.334 af
Subcatchment13S: POST 13	Runoff Area=3,056 sf 100.00% Impervious Runoff Depth=7.28" Tc=6.0 min CN=98 Runoff=0.51 cfs 0.043 af
Subcatchment14S: POST14	Runoff Area=2,995 sf 100.00% Impervious Runoff Depth=7.28" Tc=6.0 min CN=98 Runoff=0.50 cfs 0.042 af
Subcatchment15S: POST15	Runoff Area=27,660 sf 44.08% Impervious Runoff Depth=5.87" Tc=6.0 min CN=86 Runoff=4.11 cfs 0.310 af
Subcatchment16S: POST 16	Runoff Area=2,911 sf 100.00% Impervious Runoff Depth=7.28" Tc=6.0 min CN=98 Runoff=0.48 cfs 0.041 af

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HydroCAD® 10.10-3a s/n 03590 © 2020 HydroCAD Software Solutions LLC Page 176 Subcatchment18S: POST 18 Runoff Area=17,479 sf 31.00% Impervious Runoff Depth=5.87" Tc=6.0 min CN=86 Runoff=2.60 cfs 0.196 af Subcatchment19S: POST 19 Runoff Area=1,672 sf 100.00% Impervious Runoff Depth=7.28" Tc=6.0 min CN=98 Runoff=0.28 cfs 0.023 af Subcatchment20S: POST 20 Runoff Area=15,797 sf 44.75% Impervious Runoff Depth=6.10" Tc=6.0 min CN=88 Runoff=2.41 cfs 0.184 af Runoff Area=29.809 sf 45.40% Impervious Runoff Depth=6.10" Subcatchment21S: POST 21 Tc=6.0 min CN=88 Runoff=4.55 cfs 0.348 af Subcatchment22S: POST 22 Runoff Area=75.352 sf 7.54% Impervious Runoff Depth=5.18" Tc=6.0 min CN=80 Runoff=10.14 cfs 0.746 af Subcatchment23S: POST 23 Runoff Area=17,079 sf 53.86% Impervious Runoff Depth=6.33" Tc=6.0 min CN=90 Runoff=2.67 cfs 0.207 af Runoff Area=14,367 sf 39.56% Impervious Runoff Depth=5.98" Subcatchment24S: POST 24 Tc=6.0 min CN=87 Runoff=2.17 cfs 0.164 af Runoff Area=22,287 sf 54.40% Impervious Runoff Depth=6.33" Subcatchment25S: POST 25 Tc=6.0 min CN=90 Runoff=3.48 cfs 0.270 af Runoff Area=7,993 sf 53.05% Impervious Runoff Depth=6.33" Subcatchment26S: POST 26 Tc=6.0 min CN=90 Runoff=1,25 cfs 0.097 af Runoff Area=3,003 sf 100.00% Impervious Runoff Depth=7.28" Subcatchment27S: POST 27 Tc=6.0 min CN=98 Runoff=0.50 cfs 0.042 af Subcatchment28S: POST 28 Runoff Area=3,037 sf 100.00% Impervious Runoff Depth=7.28" Tc=6.0 min CN=98 Runoff=0.50 cfs 0.042 af Runoff Area=2,681 sf 100.00% Impervious Runoff Depth=7.28" Subcatchment29S: POST 29 Tc=6.0 min CN=98 Runoff=0.44 cfs 0.037 af Runoff Area=26.119 sf 46.16% Impervious Runoff Depth=6.10" Subcatchment30S: POST 30 Tc=6.0 min CN=88 Runoff=3.99 cfs 0.305 af Subcatchment31S: POST 31 Runoff Area=24.121 sf 53.48% Impervious Runoff Depth=6.33" Tc=6.0 min CN=90 Runoff=3.77 cfs 0.292 af Subcatchment32S: POST 32 Runoff Area=35,399 sf 37.89% Impervious Runoff Depth=5.98" Tc=6.0 min CN=87 Runoff=5.34 cfs 0.405 af Runoff Area=12,676 sf 72.55% Impervious Runoff Depth=6.69" Subcatchment33S: POST 33 Tc=6.0 min CN=93 Runoff=2.04 cfs 0.162 af Subcatchment34S: POST 34 Runoff Area=29,453 sf 45.13% Impervious Runoff Depth=6.10" Tc=6.0 min CN=88 Runoff=4.50 cfs 0.344 af

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Subcatchment35S: POST 35	Runoff Area=14,637 sf 12.15% Impervious F Tc=6.0 min CN=61 Runoff	
Subcatchment36S: POST 36	Runoff Area=7,243 sf 0.00% Impervious F Tc=6.0 min CN=39 Runoff	
Subcatchment37S: POST 37	Runoff Area=13,313 sf 0.00% Impervious F Tc=6.0 min CN=48 Runoff	
Subcatchment38S: POST 38	Runoff Area=12,792 sf 0.00% Impervious F Tc=6.0 min CN=43 Runoff	
Subcatchment39S: POST 39	Runoff Area=10,871 sf 17.45% Impervious F Tc=6.0 min UI Adjusted CN=79 Runoff	
Subcatchment40S: POST 40	Runoff Area=11,225 sf 13.58% Impervious F Tc=6.0 min UI Adjusted CN=66 Runoff	
Subcatchment42S: POST 42	Runoff Area=119,594 sf 10.00% Impervious F Flow Length=598' Tc=9.3 min CN=81 Runoff=	
Subcatchment43S: POST 43	Runoff Area=1,029,530 sf 0.73% Impervious F Flow Length=497' Tc=11.3 min CN=46 Runoff=	
Subcatchment44S: POST 44	Runoff Area=445,393 sf 2.15% Impervious F Tc=6.0 min CN=54 Runoff=	
Subcatchment46S: POST 45	Runoff Area=458,256 sf 0.70% Impervious F Tc=10.1 min CN=46 Runoff=	
Subcatchment65S: POST 12	Runoff Area=46,393 sf 25.38% Impervious F Flow Length=529' Tc=8.6 min CN=68 Runoff	
Subcatchment69S: POST 41	Runoff Area=144,249 sf 1.36% Impervious F Flow Length=555' Tc=9.6 min CN=62 Runoff=	
Subcatchment70S: POST 17	Runoff Area=71,092 sf 1.02% Impervious F Tc=6.0 min CN=50 Runoff	
Pond 1P: INFIL. BASIN#1 Discarded=	Peak Elev=252.13' Storage=11,784 cf Inflow 0.38 cfs 0.494 af Primary=0.00 cfs 0.000 af Outflow	
Pond 2P: INFILTRATIONBASIN#1-A Discarded=	A Peak Elev=254.76' Storage=5,229 cf Inflow 0.23 cfs 0.265 af Primary=0.00 cfs 0.000 af Outflow	
Pond 3P: INFIL. BASIN#2 Discarded=1.	Peak Elev=273.30' Storage=78,263 cf Inflow= 10 cfs 0.809 af Primary=23.29 cfs 4.379 af Outflow=	

Peak Elev=246.54' Inflow=1.43 cfs 0.115 af

12.0" Round Culvert n=0.012 L=50.0' S=0.0160 '/' Outflow=1.43 cfs 0.115 af

Pond 4P: HYDROSTORM

Dog - FOST KEVT		Type III 24-III	100-year Naman-1.52
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Pond 6P: INFIL. BASIN#3 Dis	Peak Elev=3 scarded=0.40 cfs 0.538 af F		Inflow=21.94 cfs 1.650 af Outflow=7.59 cfs 1.650 af
Pond 7P: CB-103	12.0" Round Culvert n=0.		' Inflow=0.75 cfs 0.063 af Outflow=0.75 cfs 0.063 af
Pond 8P: CB-102	12.0" Round Culvert n=0.		" Inflow=0.68 cfs 0.051 af Outflow=0.68 cfs 0.051 af
Pond 9P: CB-106	12.0" Round Culvert n=0.		' Inflow=2.21 cfs 0.166 af Outflow=2.21 cfs 0.166 af
Pond 10P: CB-107	12.0" Round Culvert n=0.		' Inflow=0.88 cfs 0.067 af Outflow=0.88 cfs 0.067 af
Pond 11P: DMH-101	12.0" Round Culvert n=0.		' Inflow=1.43 cfs 0.115 af Outflow=1.43 cfs 0.115 af
Pond 12P: DMH-102	12.0" Round Culvert n=0.0		' Inflow=0.75 cfs 0.063 af Outflow=0.75 cfs 0.063 af
Pond 13P: DMH-103	12.0" Round Culvert n=0.		' Inflow=3.08 cfs 0.233 af Outflow=3.08 cfs 0.233 af
Pond 14P: DMH-104	12.0" Round Culvert n=0.		' Inflow=2.21 cfs 0.166 af Outflow=2.21 cfs 0.166 af
Pond 15P: DMH-201	36.0" Round Culvert n=0.0		Inflow=61.64 cfs 5.026 af Outflow=61.64 cfs 5.026 af
Pond 16P: DMH-202	24.0" Round Culvert n=0.0		Inflow=25.49 cfs 1.964 af Outflow=25.49 cfs 1.964 af
Pond 17P: FIELD INLET-201			' Inflow=1.43 cfs 0.105 af Outflow=1.43 cfs 0.105 af
Pond 18P: CB-202	12.0" Round Culvert n=0.		o' Inflow=4.50 cfs 0.344 af Outflow=4.50 cfs 0.344 af
Pond 19P: CB-201	12.0" Round Culvert n=0.		' Inflow=0.29 cfs 0.024 af Outflow=0.29 cfs 0.024 af
Pond 20P: DMH-203	30.0" Round Culvert n=0.0		Inflow=36.81 cfs 3.062 af Outflow=36.81 cfs 3.062 af
Pond 21P: CB-204	12.0" Round Culvert n=0.		' Inflow=0.37 cfs 0.031 af Outflow=0.37 cfs 0.031 af
Pond 22P: CB-205	12.0" Round Culvert n=0.		' Inflow=1.45 cfs 0.109 af Outflow=1.45 cfs 0.109 af

Type III 24-hr 100-year Rainfall=7.52"

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Type III 24-hr 100-year Rainfall=7.52"

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Pond 23P: DMH-204	Peak Elev=282.27' Inflow=35.0' 30.0" Round Culvert n=0.012 L=192.0' S=0.0042 '/' Outflow=35.0'	
Pond 24P: CB-206	Peak Elev=282.41' Inflow=2.8' 24.0" Round Culvert n=0.012 L=16.0' S=0.0188'/ Outflow=2.8'	
Pond 25P: CB-207	Peak Elev=281.99' Inflow=0.4' 12.0" Round Culvert n=0.012 L=16.0' S=0.0188'/ Outflow=0.45	
Pond 26P: DMH-205	Peak Elev=282.36' Inflow=31.90	
Pond 27P: DMH-206	Peak Elev=282.43' Inflow=27.6i 30.0" Round Culvert n=0.012 L=168.0' S=0.0042 '/' Outflow=27.6i	
Pond 28P: DMH-207	Peak Elev=283.63' Inflow=27.60 30.0" Round Culvert n=0.012 L=268.0' S=0.0041 '/' Outflow=27.60	
Pond 29P: CB-208	Peak Elev=282.81' Inflow=1.0i 12.0" Round Culvert n=0.012 L=14.0' S=0.0143'/' Outflow=1.06	
Pond 30P: CB-209	Peak Elev=283.95' Inflow=4.9: 15.0" Round Culvert n=0.012 L=14.0' S=0.0143'/' Outflow=4.9:	
Pond 31P: DMH-208	Peak Elev=287.83' Inflow=21.8: 24.0" Round Culvert n=0.012 L=165.0' S=0.0170 '/' Outflow=21.82	
Pond 32P: DMH-209	Peak Elev=300.73' Inflow=21.8: 24.0" Round Culvert n=0.012 L=150.0' S=0.0853 '/' Outflow=21.8:	
Pond 33P: CB-210	Peak Elev=298.39' Inflow=0.4a' 12.0" Round Culvert n=0.012 L=12.0' S=0.0250'/ Outflow=0.4a'	
Pond 34P: CB-211	Peak Elev=300.39' Inflow=4.1 12.0" Round Culvert n=0.012 L=12.0' S=0.0250'/" Outflow=4.1	
Pond 35P: DMH-210	Peak Elev=317.02' Inflow=2.8' 12.0" Round Culvert n=0.012 L=322.0' S=0.0565'/ Outflow=2.8'	
Pond 36P: CB-212	Peak Elev=316.29' Inflow=0.20' 12.0" Round Culvert n=0.012 L=13.0' S=0.0231'/ Outflow=0.20	
Pond 37P: CB-213	Peak Elev=317.26' Inflow=2.6' 12.0" Round Culvert n=0.012 L=13.0' S=0.0231'/' Outflow=2.60	
Pond 38P: DMH-301	Peak Elev=319.73' Inflow=11.8t 18.0" Round Culvert n=0.012 L=71.0' S=0.0549 '/' Outflow=11.8t	
Pond 39P: DMH-302	Peak Elev=323.03' Inflow=11.8 18.0" Round Culvert n=0.012 L=154.0' S=0.0208'/' Outflow=11.80	

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Pond 40P: CB-301	Peak Elev=322.82' Inflow=4.55 cfs 0.348 af
1 0110 401 : OB-001	12.0" Round Culvert n=0.012 L=12.0' S=0.0250 '/' Outflow=4.55 cfs 0.348 af
Pond 41P: CB-302	Peak Elev=321.15' Inflow=2.41 cfs 0.184 af
	12.0" Round Culvert n=0.012 L=12.0' S=0.0250 '/' Outflow=2.41 cfs 0.184 af
Pond 42P: DMH-303	Peak Elev=331.02' Inflow=4.84 cfs 0.371 af
	12.0" Round Culvert n=0.012 L=129.0' S=0.0636 '/' Outflow=4.84 cfs 0.371 af
Pond 43P: DMH-304	Peak Elev=339.01' Inflow=4.84 cfs 0.371 af
F 0110 43F . DIWIT-304	12.0" Round Culvert n=0.012 L=129.0' S=0.0612 '/' Outflow=4.84 cfs 0.371 af
	TELO TROUBLE CARROLL TO COLO E CONTRA
Pond 44P: CB-303	Peak Elev=337.70' Inflow=2.67 cfs 0.207 af
	12.0" Round Culvert n=0.012 L=17.0' S=0.0235 '/' Outflow=2.67 cfs 0.207 af
Pond 45P: CB-304	Peak Elev=337.42' Inflow=2.17 cfs 0.164 af
	12.0" Round Culvert n=0.012 L=16.0' S=0.0250 '/' Outflow=2.17 cfs 0.164 af
Pond 46P: DMH-218	Peak Elev=335.11' Inflow=4.73 cfs 0.367 af
PONG 46P. DIVIN-216	12.0" Round Culvert n=0.012 L=81.0' S=0.0481 '/' Outflow=4.73 cfs 0.367 af
	12.0 Floatid Galfort II 0.012 E 01.0 0 0.0401 / Gallow 4.70 010 0.007 at
Pond 47P: CB-220	Peak Elev=334.36' Inflow=3.48 cfs 0.270 af
	12.0" Round Culvert n=0.012 L=15.0' S=0.0200 '/' Outflow=3.48 cfs 0.270 af
Pond 48P: CB-221	Peak Elev=333.18' Inflow=1.25 cfs 0.097 af
	12.0" Round Culvert n=0.012 L=9.0' S=0.0333 '/' Outflow=1.25 cfs 0.097 af
Pond 49P: DMH-217	Peak Elev=331.11' Inflow=4.73 cfs 0.367 af
Poliu 49F. DMH-217	12.0" Round Culvert n=0.012 L=147.0' S=0.0463 '/' Outflow=4.73 cfs 0.367 af
	12.0 Roding Guiver in 6.012 E 147.0 G 6.0400 / Guillow 4.70 616 6.007 ar
Pond 50P: DMH-216	Peak Elev=324.21' Inflow=4.73 cfs 0.367 af
	12.0" Round Culvert n=0.012 L=118.0' S=0.0263 '/' Outflow=4.73 cfs 0.367 af
Pond 52P: DMH-215	Peak Elev=320.03' Inflow=5.73 cfs 0.451 af
	15.0" Round Culvert n=0.012 L=247.0' S=0.0320 '/' Outflow=5.73 cfs 0.451 af
Pond 53P: CB-219	Peak Elev=318.80' Inflow=0.50 cfs 0.042 af
Folia 55F. CB-219	12.0" Round Culvert n=0.012 L=21.0' S=0.0143 '/' Outflow=0.50 cfs 0.042 af
	12.0 Floatid Galfort II 0.012 E 21.0 G 0.0140 / Gallow 0.00 010 0.042 at
Pond 54P: CB-218	Peak Elev=318.80' Inflow=0.50 cfs 0.042 af
	12.0" Round Culvert n=0.012 L=19.0' S=0.0158 '/' Outflow=0.50 cfs 0.042 af
Pond 55P: DMH-214	Peak Elev=312.83' Inflow=10.17 cfs 0.793 af
	18.0" Round Culvert n=0.012 L=95.0' S=0.0442'/ Outflow=10.17 cfs 0.793 af
Pond 56P: CB-217	Peak Elev=312.58' Inflow=0.44 cfs 0.037 af
1 Olid 50F . OB-217	12.0" Round Culvert n=0.012 L=20.0' S=0.0150 '/' Outflow=0.44 cfs 0.037 af
Pond 57P: CB-216	Peak Elev=314.48' Inflow=3.99 cfs 0.305 af
	12.0" Round Culvert n=0.012 L=11.0' S=0.0273 '/' Outflow=3.99 cfs 0.305 af

Type III 24-hr 100-year Rainfall=7.52"

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Pond 58P: DMH-213	Peak Elev=308.53 18.0" Round Culvert n=0.012 L=226.0' S=0.0677 '/'	' Inflow=10.17 cfs 0.793 af Outflow=10.17 cfs 0.793 af
Pond 59P: DMH-212	Peak Elev=293.30 24.0" Round Culvert n=0.012 L=91.0' S=0.0626'/	' Inflow=19.27 cfs 1.491 af Outflow=19.27 cfs 1.491 af
Pond 60P: CB-214	Peak Elev=294.1 12.0" Round Culvert n=0.012 L=10.0' S=0.0300 '/'	8' Inflow=5.34 cfs 0.405 af Outflow=5.34 cfs 0.405 af
Pond 61P: CB-215	Peak Elev=292.5 12.0" Round Culvert n=0.012 L=19.0' S=0.0158 '/'	9' Inflow=3.77 cfs 0.292 af Outflow=3.77 cfs 0.292 af
Pond 62P: DMH-211	Peak Elev=287.50 24.0" Round Culvert n=0.012 L=144.0' S=0.0479 '/'	' Inflow=19.27 cfs 1.491 af Outflow=19.27 cfs 1.491 af
Pond 63P: FIELD INLET-20	Peak Elev=303.32 24.0" Round Culvert n=0.012 L=137.0' S=0.0226 '/'	' Inflow=14.73 cfs 1.210 af Outflow=14.73 cfs 1.210 af
Pond 66P: CB-222	Peak Elev=284.9 12.0" Round Culvert n=0.012 L=29.0' S=0.0207 '/'	7' Inflow=4.31 cfs 0.340 af Outflow=4.31 cfs 0.340 af
Pond 71P: FIELD INLET-20	Peak Elev=282.06 18.0" Round Culvert n=0.012 L=28.0' S=0.0821'/'	' Inflow=10.65 cfs 0.880 af Outflow=10.65 cfs 0.880 af
Pond 72P: FIELD INLET-20	Peak Elev=279.7 18.0" Round Culvert n=0.012 L=50.0' S=0.0460 '/'	9' Inflow=3.32 cfs 0.267 af Outflow=3.32 cfs 0.267 af
Pond 73P: DMH-219	Peak Elev=280.87 18.0" Round Culvert n=0.012 L=86.0' S=0.0465 '/'	' Inflow=13.65 cfs 1.147 af Outflow=13.65 cfs 1.147 af
Link DP-A: DESIGN POINT	-А	Inflow=63.37 cfs 9.753 af Primary=63.37 cfs 9.753 af

Link DP-B: DESIGN POINT-B

Total Runoff Area = 66.808 ac Runoff Volume = 15.257 af Average Runoff Depth = 2.74" 90.24% Pervious = 60.287 ac 9.76% Impervious = 6.520 ac

Inflow=38.01 cfs 3.398 af

Primary=38.01 cfs 3.398 af

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Type III 24-hr 100-year Rainfall=7.52"

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# Summary for Subcatchment 1S: POST 1

Runoff = 0.68 cfs @ 12.09 hrs, Volume= 0.051 af, Depth= 5.98"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

	Α	rea (sf)	CN	Description					
		3,667	98	Paved parking, HSG A					
_		816	39	>75% Gras	s cover, Go	ood, HSG A			
		4,483	87	Weighted A	Weighted Average				
		816		18.20% Per	18.20% Pervious Area				
		3,667		81.80% Impervious Area					
_	Tc (min)	Length (feet)	Slop (ft/f		Capacity (cfs)	Description			
	6.0					Direct Entry,			

# Summary for Subcatchment 2S: POST 2

0.66 cfs @ 12.09 hrs, Volume= Runoff = 0.050 af, Depth= 5.98"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Α	rea (sf)	CN	Description					
	3,554	98	Paved parking, HSG A					
	809	39	>75% Gras	>75% Grass cover, Good, HSG A				
	4,363	87	Weighted A	Weighted Average				
	809		18.54% Pervious Area					
	3,554		81.46% Impervious Area					
Tc	Length	Slop	e Velocity	Capacity	Description			
(min)	(feet)	(ft/ft	) (ft/sec)	(cfs)				
6.0					Direct Entry.			

# Summary for Subcatchment 3S: POST 3

Runoff = 0.88 cfs @ 12.09 hrs, Volume= 0.067 af, Depth= 6.10"

Type III 24-hr 100-year Rainfall=7.52"

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А	rea (sf)	CN	Description				
	3.947	_	Paved park		4		
	908	39			ood, HSG A		
	632	98	Paved park	ing, HSG D	)		
	246	80	>75% Grass cover, Good, HSG D				
	5,733	88	Weighted Average				
	1,154		20.13% Pervious Area				
	4,579		79.87% Impervious Area				
_							
Tc	Length	Slope		Capacity	Description		
(min)_	(feet)	(ft/ft	(ft/sec)	(cfs)			
6.0					Direct Entry,		

# Summary for Subcatchment 4S: POST 4

Runoff 1.04 cfs @ 12.09 hrs, Volume=

0.080 af, Depth= 6.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

A	rea (sf)	CN	Description				
	3,254	98	Paved park	ing, HSG A	A		
	879	39	>75% Gras	s cover, Go	Good, HSG A		
	2,244	98	Paved park	ing, HSG D	D		
	319	80	>75% Gras	s cover, Go	Good, HSG D		
	6,696	89	Weighted Average				
	1,198		17.89% Per	vious Area	a		
	5,498		82.11% Impervious Area				
Tc	Length	Slope	e Velocity	Capacity	/ Description		
(min)	(feet)	(ft/ft	) (ft/sec)	(cfs)			
6.0					Direct Entry,		

#### Summary for Subcatchment 5S: POST 5

0.29 cfs @ 12.09 hrs, Volume= Runoff = 0.024 af, Depth= 7.28"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Area	(sf)	CN	Description			
	509	98	Paved parking, HSG A			
1,	207	98	Paved parking, HSG D			
	42	80	>75% Grass cover, Good, HSG D			
1,	758	98	Weighted Average			
	42		2.39% Pervious Area			
1.	716		97.61% Impervious Area			

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(min) (feet)

6.0

Type III 24-hr 100-year Rainfall=7.52"

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Slope Velocity Capacity Description (ft/ft) (ft/sec) (cfs) Direct Entry,

## Summary for Subcatchment 6S: POST 6

Runoff = 0.38 cfs @ 12.09 hrs, Volume= 0.032 af, Depth= 7.28"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Α	rea (sf)	CN [	Description						
	2,283	98 F	Paved parking, HSG A						
	2,283	1	100.00% Impervious Area						
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
6.0					Direct Entry,				

#### Summary for Subcatchment 7S: POST 7

0.37 cfs @ 12.09 hrs, Volume= Runoff 0.031 af, Depth= 7.28"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

A	rea (sf)	CN I	Description						
	2,223	98	Paved park	aved parking, HSG A					
	2,223		100.00% Impervious Area						
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
6.0	•		,		Direct Entry,				

#### **Summary for Subcatchment 8S: POST 8**

Runoff 0.49 cfs @ 12.09 hrs, Volume= 0.041 af. Depth= 7.28"

Area (sf)	CN	Description
2,941	98	Paved parking, HSG A
2,941		100.00% Impervious Area

Type III 24-hr 100-year Rainfall=7.52"

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

## Summary for Subcatchment 9S: POST 9

Runoff = 2.87 cfs @ 12.15 hrs, Volume= 0.243 af, Depth= 4.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Area (sf)	CN	Description	Description				
2,700	98	Roofs, HSG	D D				
12,013	80	>75% Gras	s cover, Go	Good, HSG D			
2,271	98	Roofs, HSG	βA				
3,638	98	Paved park	ing, HSG A	A			
6,966	39	>75% Gras	s cover, Go	Good, HSG A			
27,588	75	Weighted A	verage				
18,979		68.79% Per	vious Area	a			
8,609		31.21% Imp	ervious Ar	ırea			
Tc Lengt	h Slo	oe Velocity	Capacity	Description			
(min) (feet	(ft/	ft) (ft/sec)	(cfs)				
11.0				Direct Entry,			

#### Summary for Subcatchment 10S: POST 10

Runoff 4.56 cfs @ 12.15 hrs, Volume= 0.384 af, Depth= 3.08"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Area (sf)	CN	Description			
2,999	98	Roofs, HSG D			
1,658	98	Paved parking, HSG D			
413	98	Unconnected pavement, HSG D			
16,156	80	>75% Grass cover, Good, HSG D			
4,870	98	Roofs, HSG A			
3,489	98	Paved parking, HSG A			
886	98	Unconnected pavement, HSG A			
28,402	39	>75% Grass cover, Good, HSG A			
6,315	30	Woods, Good, HSG A			
65,188	61	Weighted Average			
50,873		78.04% Pervious Area			
14,315		21.96% Impervious Area			
1,299		9.07% Unconnected			

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Type III 24-hr 100-year Rainfall=7.52"

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	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
Ī	3.7	50	0.0600	0.23		Sheet Flow,
						Grass: Short n= 0.150 P2= 3.10"
	1.6	205	0.0900	2.10		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	0.7	53	0.0700	1.32		Shallow Concentrated Flow,
						Woodland Kv= 5.0 fps
	1.8	152	0.0400	1.40		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
	2.4	258	0.0080	1.82		Shallow Concentrated Flow,
						Paved Kv= 20.3 fps
	10.2	718	Total		-	

## Summary for Subcatchment 11S: POST 11

0.55 cfs @ 12.09 hrs, Volume= 0.047 af, Depth= 7.28" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

	Α	rea (sf)	CN	Description					
		3,352	98	Paved parking, HSG A					
		3,352		100.00% Impervious Area					
	Тс	Length	Slope	Velocity	Capacity	Description			
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	<u>'</u>			
_	6.0					Direct Entry			

# Summary for Subcatchment 12S: WRIGHT ROAD

3.97 cfs @ 12.09 hrs, Volume= Runoff = 0.334 af, Depth= 7.28"

Area (sf)	CN	Description					
24,000	98	98 Paved parking, HSG A					
24,000		100.00% In	npervious A	Area			
Tc Length (min) (feet)	Slop (ft/f	ve Velocity (t) (ft/sec)	Capacity (cfs)	Description			
6.0				Direct Entry,			

Type III 24-hr 100-year Rainfall=7.52"

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## Summary for Subcatchment 13S: POST 13

Runoff 0.51 cfs @ 12.09 hrs, Volume=

0.043 af, Depth= 7.28"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

	Α	rea (sf)	CN	Description					
		3,056	98	Paved parking, HSG A					
		3,056		100.00% Impervious Area					
	Тс	Length	Slope	- Velocity	Capacity	Description			
(	(min)	(feet)	(ft/ft	,	(cfs)	2000,194011			
	6.0					Direct Entry			

#### Summary for Subcatchment 14S: POST 14

Runoff 0.50 cfs @ 12.09 hrs, Volume= 0.042 af, Depth= 7.28"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

A	rea (sf)	CN I	Description						
	2,995	98 I	Paved parking, HSG A						
	2,995		100.00% Impervious Area						
Тс	Length		,		Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
6.0					Direct Entry.				

# Summary for Subcatchment 15S: POST 15

Runoff 4.11 cfs @ 12.09 hrs, Volume= 0.310 af, Depth= 5.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Area (sf)	CN	Description
2,736	98	Roofs, HSG D
7,798	98	Paved parking, HSG D
162	98	Unconnected pavement, HSG D
14,432	80	>75% Grass cover, Good, HSG D
1,051	98	Paved parking, HSG A
445	98	Unconnected pavement, HSG A
1,036	39	>75% Grass cover, Good, HSG A
27,660	86	Weighted Average
15,468		55.92% Pervious Area
12,192		44.08% Impervious Area
607		4.98% Unconnected

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Type III 24-hr 100-year Rainfall=7.52"

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

# Summary for Subcatchment 16S: POST 16

0.48 cfs @ 12.09 hrs, Volume= 0.041 af, Depth= 7.28" Runoff =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Aı	rea (sf)	CN	Description						
	921	98	Paved park	Paved parking, HSG A					
	1,990	98	Paved park	aved parking, HSG D					
	2,911	98	Weighted A	verage					
	2,911		100.00% In	100.00% Impervious Area					
Tc (min)	Length (feet)	Slop (ft/f	,	Capacity (cfs)					
6.0	()	(141	., ()	()	Direct Entry.				

#### Summary for Subcatchment 18S: POST 18

Runoff 2.60 cfs @ 12.09 hrs, Volume= 0.196 af, Depth= 5.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Area (sf)	CN	Description
1,536	98	Roofs, HSG D
3,103	98	Paved parking, HSG D
780	98	Unconnected pavement, HSG D
12,060	80	>75% Grass cover, Good, HSG D
17,479	86	Weighted Average
12,060		69.00% Pervious Area
5,419		31.00% Impervious Area
780		14.39% Unconnected
<b>-</b>	01	VI " 0 " D ' "
	(ft/	ft) (ft/sec) (cfs)
6.0		Direct Entry,
	1,536 3,103 780 12,060 17,479 12,060 5,419 780 Tc Length (min) (feet)	1,536 98 3,103 98 780 98 12,060 80 17,479 86 12,060 5,419 780  Tc Length (min) (feet) (ft/

# Summary for Subcatchment 19S: POST 19

Runoff = 0.28 cfs @ 12.09 hrs, Volume= 0.023 af, Depth= 7.28"

Type III 24-hr 100-year Rainfall=7.52"

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А	rea (sf)	CN E	escription		
	1,672	98 F	aved park	ing, HSG D	
	1,672	1	00.00% Im	pervious A	Area
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

# Summary for Subcatchment 20S: POST 20

Runoff = 2.41 cfs @ 12.09 hrs, Volume= 0.184 af, Depth= 6.10"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Ar	ea (sf)	CN	Description			
	836	98	Roofs, HSC	G D		
	3,970	98	Paved park	ing, HSG D	)	
	1,008	98	Unconnecte	ed roofs, H	SG D	
	8,728	80	>75% Gras	s cover, Go	ood, HSG D	
	1,255	98	Unconnecte	ed paveme	nt, HSG D	
	15,797	88	Weighted A	verage		
	8,728		55.25% Per	rvious Area	I	
	7,069		44.75% Imp	pervious Ar	ea	
	2,263		32.01% Un	connected		
_						
Tc	Length	Slope		Capacity	Description	
(min)	(feet)	(ft/ft	) (ft/sec)	(cfs)		
6.0					Direct Entry,	

#### Summary for Subcatchment 21S: POST 21

Runoff = 4.55 cfs @ 12.09 hrs, Volume= 0.348 af, Depth= 6.10"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Are	ea (sf)	CN	Description		
	4,656	98	Roofs, HSC	D D	
	8,878	98	Paved park	ing, HSG D	D
1	6,275	80	>75% Gras	s cover, Go	ood, HSG D
2	9,809	88	Neighted A	verage	
1	6,275		54.60% Pe	vious Area	a
1	3,534		45.40% Imp	ervious Ar	rea
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	2000p.10
6.0					Direct Entry,

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Type III 24-hr 100-year Rainfall=7.52"

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# Summary for Subcatchment 22S: POST 22

Runoff = 10.14 cfs @ 12.09 hrs, Volume= 0.746 af, Depth= 5.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

	Aı	ea (sf)	CN	Description					
		5,682	98	Roofs, HSG	D D				
		47,489	80	>75% Gras	s cover, Go	ood, HSG D			
		20,927	77	Woods, Go	od, HSG D				
		1,254	30	Woods, Go	od, HSG A				
		75,352	80	Weighted A	Weighted Average				
		69,670		92.46% Per	92.46% Pervious Area				
		5,682		7.54% Impe	7.54% Impervious Area				
	То	Longth	Clor	o Volocity	Consoity	Description			
	Tc (min)	Length (feet)	Slop		Capacity (cfs)	Description			
_	(min)	(leet)	(ft/1	i) (li/sec)	(CIS)				
	6.0					Direct Entry,			

## Summary for Subcatchment 23S: POST 23

Runoff = 2.67 cfs @ 12.09 hrs, Volume= 0.207 af, Depth= 6.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

A	rea (sf)	CN	Description		
	2,928	98	Roofs, HSG	D D	
	6,271	98	Paved park	ing, HSG D	D
	7,880	80	>75% Gras	s cover, Go	Good, HSG D
	17,079	90	Weighted A	verage	
	7,880		46.14% Per	rvious Area	a
	9,199		53.86% Imp	pervious Ar	rea
Tc (min)	Length (feet)	Slop (ft/f		Capacity (cfs)	
6.0					Direct Entry,

#### Summary for Subcatchment 24S: POST 24

Runoff = 2.17 cfs @ 12.09 hrs, Volume= 0.164 af, Depth= 5.98"

Type III 24-hr 100-year Rainfall=7.52"

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Area (sf)	CN	Description					
1,299	98	Roofs, HSG D					
3,427	98	Paved parking, HSG D					
957	98	Unconnected pavement, HSG D					
8,684	80	>75% Grass cover, Good, HSG D					
14,367	87	87 Weighted Average					
8,684		60.44% Pervious Area					
5,683		39.56% Impervious Area					
957		16.84% Unconnected					
Tc Length	n Slo <sub>l</sub>	pe Velocity Capacity Description					
(min) (feet)	) (ft/	ft) (ft/sec) (cfs)					
6.0		Direct Entry.					

#### Summary for Subcatchment 25S: POST 25

Runoff 3.48 cfs @ 12.09 hrs, Volume= 0.270 af, Depth= 6.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Area (	sf) CN	Description	
2,9	25 98	Roofs, HSG D	
8,0	71 98	Paved parking, HSG D	
1,1	28 98	Unconnected pavement	t, HSG D
10,1	63 80	>75% Grass cover, God	od, HSG D
22,2	87 90	Weighted Average	
10,1	63	45.60% Pervious Area	
12,1	24	54.40% Impervious Are	a
1,1	28	9.30% Unconnected	
	ngth Slo eet) (ft/	, , , ,	Description
6.0			Direct Entry,

#### Summary for Subcatchment 26S: POST 26

1.25 cfs @ 12.09 hrs, Volume= 0.097 af, Depth= 6.33" Runoff =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Area (sf)	CN	Description			
468	98	Roofs, HSG D			
3,772	98	Paved parking, HSG D			
3,753	80	>75% Grass cover, Good, HSG D			
7,993	90	Weighted Average			
3,753		46.95% Pervious Area			
4,240		53.05% Impervious Area			

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Type III 24-hr 100-year Rainfall=7.52"

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

## Summary for Subcatchment 27S: POST 27

Runoff = 0.50 cfs @ 12.09 hrs, Volume= 0.042 af, Depth= 7.28"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

	Α	rea (sf)	CN [	Description						
		3,003	98 F	Paved parking, HSG D						
		3,003	1	100.00% Impervious Area						
	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description				
_	6.0					Direct Entry,				

# Summary for Subcatchment 28S: POST 28

0.50 cfs @ 12.09 hrs, Volume= Runoff 0.042 af, Depth= 7.28"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Α	rea (sf)	CN	Description	Description					
	3,037	98	Paved park	Paved parking, HSG D					
	3,037		100.00% Impervious Area						
Tc (min)	Length (feet)	Slope (ft/ft	e Velocity ) (ft/sec)	Capacity (cfs)	Description				
6.0					Direct Entry.				

#### Summary for Subcatchment 29S: POST 29

Runoff 0.44 cfs @ 12.09 hrs, Volume= 0.037 af. Depth= 7.28"

Area (sf)	CN	Description			
2,681	98	Paved parking, HSG D			
2,681		100.00% Impervious Area			

Type III 24-hr 100-year Rainfall=7.52"

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

## Summary for Subcatchment 30S: POST 30

Runoff = 3.99 cfs @ 12.09 hrs, Volume= 0.305 af, Depth= 6.10"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Α	rea (sf)	CN	Description							
	3,210	98	Roofs, HSC	G D						
	8,847	98	Paved park	ing, HSG D	)					
	14,062	80	>75% Ġras	s cover, Go	ood, HSG D					
	26,119	88	Neighted A	verage						
	14,062	:	53.84% Pei	rvious Area						
	12,057		46.16% Imp	pervious Are	ea					
Tc	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
6.0					Direct Entry					

## Summary for Subcatchment 31S: POST 31

3.77 cfs @ 12.09 hrs, Volume= Runoff 0.292 af, Depth= 6.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Area (s	sf) CN	Description				
3,20	04 98	Roofs, HSG D				
8,04	14 98	Paved parking, HSG D				
1,65	52 98	Unconnected pavement, HSG D				
11,22	21 80	>75% Grass cover, Good, HSG D				
24,12	21 90	Weighted Average				
11,22	21	46.52% Pervious Area				
12,90	00	53.48% Impervious Area				
1,6	52	12.81% Unconnected				
Tc Len (min) (fe	0	pe Velocity Capacity Description /ft) (ft/sec) (cfs)				
6.0		Direct Entry,				

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Type III 24-hr 100-year Rainfall=7.52"

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# Summary for Subcatchment 32S: POST 32

5.34 cfs @ 12.09 hrs, Volume= 0.405 af, Depth= 5.98" Runoff =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Area (s	f) CN	Description	Description						
4,35	50 98	Roofs, HSC	Roofs, HSG D						
9,06	3 98	Paved park	Paved parking, HSG D						
21,98	36 80	>75% Ġras	s cover, Go	ood, HSG D					
35,39	99 87	Weighted A	verage						
21,98	36	62.11% Pe	rvious Area	I					
13,41	13	37.89% lm	pervious Ar	ea					
Tc Len		,	Capacity	Description					
(min) (fe	et) (ft.	/ft) (ft/sec)	(cfs)						
6.0				Direct Entry					

Summary for Subcatchment 33S: POST 33

2.04 cfs @ 12.09 hrs, Volume= 0.162 af, Depth= 6.69" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

	Α	rea (sf)	CN	Description							
		1,908	98	Roofs, HSG	Roofs, HSG D						
		6,727	98	Paved park	Paved parking, HSG D						
		456	98	Unconnecte	ed pavemer	nt, HSG D					
		106	98	Paved park	Paved parking, HSG A						
_		3,479	80	>75% Gras	>75% Grass cover, Good, HSG D						
		12,676	93	Weighted A	verage						
		3,479		27.45% Per	vious Area						
		9,197		72.55% Imp	ervious Ar	ea					
		456		4.96% Unco	onnected						
	Tc	Length	Slop		Capacity	Description					
	(min)	(feet)	(ft/ft	) (ft/sec)	(cfs)						
	6.0					Direct Entry,					

#### Summary for Subcatchment 34S: POST 34

4.50 cfs @ 12.09 hrs, Volume= 0.344 af, Depth= 6.10"

Type III 24-hr 100-year Rainfall=7.52"

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Area (s	sf) CN	Description	Description						
3,2	27 98	Roofs, HSC	D D						
10,00	66 98	Paved park	ing, HSG D	D					
16,10	80	>75% Gras	s cover, Go	Good, HSG D					
29,4	53 88	Weighted A	verage						
16,10	30	54.87% Per	vious Area	ea					
13,2	93	45.13% Imp	ervious Ar	Area					
				<b>-</b>					
Tc Len		,	Capacity						
(min) (fe	et) (ft/	ft) (ft/sec)	(cfs)						
6.0			Direct Entry,						

## Summary for Subcatchment 35S: POST 35

1.17 cfs @ 12.10 hrs, Volume= 0.086 af, Depth= 3.08"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Α	rea (sf)	CN	Description					
	5,253	80	>75% Gras	s cover, Go	ood, HSG D			
	7,605	39	>75% Gras	s cover, Go	ood, HSG A			
	1,779	98	Roofs, HSC	S D				
	14,637	61	Weighted Average					
	12,858		87.85% Per	rvious Area	a			
	1,779		12.15% Imp	pervious Ar	rea			
Tc (min)	Length (feet)	Slope (ft/ft		Capacity (cfs)	Description			
6.0					Direct Entry,			

# Summary for Subcatchment 36S: POST 36

Runoff 0.10 cfs @ 12.14 hrs, Volume= 0.013 af, Depth= 0.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

	Are	ea (sf)	CN [	Description							
		7,243	39 >	75% Gras	75% Grass cover, Good, HSG A						
		7,243	1	100.00% Pervious Area							
•	Тс	Length	Slope	Velocity	Capacity	Description					
(mi	in)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
6	6.0					Direct Entry.					

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Type III 24-hr 100-year Rainfall=7.52"

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# Summary for Subcatchment 37S: POST 37

0.54 cfs @ 12.11 hrs, Volume= Runoff = 0.045 af, Depth= 1.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Area	(sf)	CN	Description							
8,	816	39	>75% Grass	s cover, Go	ood, HSG A					
3,	764	61	>75% Grass	s cover, Go	ood, HSG B					
	381	96	Gravel surfa	ice, HSG A	١					
;	352	96	Gravel surfa	ice, HSG B	3					
13,	313	48	Weighted A	verage						
13,	313		100.00% Pe	ervious Are	а					
Tc Le	ngth	Slop	e Velocity	Capacity	Description					
(min) (	feet)	(ft/ft	(ft/sec)	(cfs)						
6.0					Direct Entry.					

# Summary for Subcatchment 38S: POST 38

0.33 cfs @ 12.12 hrs, Volume= 0.032 af, Depth= 1.31" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

	Area (sf)	CN	Description							
	11,263	39	>75% Grass cover, Good, HSG A							
	1,102	61	>75% Grass cover, Good, HSG B							
_	427	96	Gravel surface, HSG A							
	12,792	43	Weighted Average							
	12,792		100.00% Pervious Area							
	T	01	was Malasita Camasita Description							
	Tc Length	Slop	1 7 - 1 7 1							
_	(min) (feet)	(ft/	/ft) (ft/sec) (cfs)							
	6.0		Direct Entry,							

## Summary for Subcatchment 39S: POST 39

1.43 cfs @ 12.09 hrs, Volume= Runoff = 0.105 af, Depth= 5.06"

Type III 24-hr 100-year Rainfall=7.52"

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Area (	sf) CN	N Ad	j Desc	Description				
8	10 98	3	Roofs	s, HSG D				
8,1	42 80	)			ver, Good, HSG D			
8	35 98	3	Unco	nnected pa	avement, HSG D			
8	32 39	9	>75%	Grass co	ver, Good, HSG A			
2	52 98	3	Unco	nnected pa	avement, HSG A			
10,8	71 80	79	9 Weig	hted Avera	age, UI Adjusted			
8,9	74		82.55	% Perviou	us Area			
1,8	97		17.45	5% Impervi	ious Area			
1,0	87		57.30	)% Unconr	nected			
Tc Ler	ngth S	lope \	√elocity	Capacity	Description			
(min) (f	eet) (	ft/ft)	(ft/sec)	(cfs)				
6.0					Direct Entry,			

## Summary for Subcatchment 40S: POST 40

Runoff 1.07 cfs @ 12.09 hrs, Volume= 0.078 af, Depth= 3.62"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

P	Area (sf)	CN /	Adj Des	Description					
	1,018	98	Roo	fs, HSG D					
	5,471	80	>75	% Grass co	over, Good, HSG D				
	506	98	Unc	onnected pa	pavement, HSG A				
	4,230	39	>75	% Grass co	over, Good, HSG A				
	11,225	67	66 Wei	Weighted Average, UI Adjusted					
	9,701		86.4	2% Perviou	us Area				
	1,524		13.5	8% Impervi	rious Area				
	506		33.2	0% Unconr	nected				
Tc	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
6.0					Direct Entry.				

# Summary for Subcatchment 42S: POST 42

14.73 cfs @ 12.13 hrs, Volume= 1.210 af, Depth= 5.29" Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

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Type III 24-hr 100-year Rainfall=7.52"

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	Α	rea (sf)	CN I	Description							
•		91,127	80 :	>75% Grass cover, Good, HSG D							
		15,663	77 \	Woods, Go	od, HSG D						
		11,784	98 I	Roofs, HSG	D						
		174	98 I	Roofs, HSG	Α						
		846	39 :	>75% Gras	s cover, Go	ood, HSG A					
	1	19,594	81 \	Weighted A	verage						
	1	07,636	(	90.00% Per	vious Area						
		11,958		10.00% Imp	ervious Ar	ea					
	Tc	Length	Slope			Description					
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
	3.3	50	0.0800	0.25		Sheet Flow,					
						Grass: Short n= 0.150 P2= 3.10"					
	1.0	91	0.0430	1.45		Shallow Concentrated Flow,					
						Short Grass Pasture Kv= 7.0 fps					
	1.2	72	0.0400	1.00		Shallow Concentrated Flow,					
						Woodland Kv= 5.0 fps					
	0.5	71	0.0980	2.19		Shallow Concentrated Flow,					
						Short Grass Pasture Kv= 7.0 fps					
	3.3	314	0.0500	1.57		Shallow Concentrated Flow,					
						Short Grass Pasture Kv= 7.0 fps					
	9.3	598	Total								

# Summary for Subcatchment 43S: POST 43 (PERIMETER)

Runoff = 29.63 cfs @ 12.19 hrs, Volume= 3.116 af, Depth= 1.58"

Area (sf)	CN	Description
153,387	39	>75% Grass cover, Good, HSG A
480,558	30	Woods, Good, HSG A
119,742	55	Woods, Good, HSG B
3,192	98	Roofs, HSG D
110,786	61	>75% Grass cover, Good, HSG B
83,132	77	Woods, Good, HSG D
4,334	96	Gravel surface, HSG A
794	96	Gravel surface, HSG D
4,326	98	Unconnected pavement, HSG A
55,819	80	>75% Grass cover, Good, HSG D
13,460	96	Gravel surface, HSG B
1,029,530	46	Weighted Average
1,022,012		99.27% Pervious Area
7,518		0.73% Impervious Area
4,326		57.54% Unconnected

Type III 24-hr 100-year Rainfall=7.52"

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	Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
	7.2	50	0.0800	0.12		Sheet Flow,
						Woods: Light underbrush n= 0.400 P2= 3.10"
	3.4	337	0.1100	1.66		Shallow Concentrated Flow,
						Woodland Kv= 5.0 fps
	0.7	110	0.1400	2.62		Shallow Concentrated Flow,
						Short Grass Pasture Kv= 7.0 fps
•	11.3	497	Total			·

## Summary for Subcatchment 44S: POST 44

26.21 cfs @ 12.10 hrs, Volume= Runoff = 2.011 af, Depth= 2.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Area (sf)	CN	Description	Description						
262,578	39	>75% Gras	>75% Grass cover, Good, HSG A						
20,513	30	Woods, Go	od, HSG A	1					
6,364	77	Woods, Go	od, HSG D	)					
137,285	80	>75% Gras	s cover, Go	ood, HSG D					
9,264	98	Roofs, HSG	D D						
3,107	96	Gravel surfa	ace, HSG D	D					
5,953	96	Gravel surfa	ace, HSG D	D					
329	98	Unconnecte	ed pavemer	ent, HSG D					
445,393	54	Weighted A	verage						
435,800		97.85% Per	vious Area	a					
9,593		2.15% Impe	ervious Area	ea					
329		3.43% Unco	onnected						
Tc Length	Slo	pe Velocity	Capacity	Description					
(min) (feet)			(cfs)	•					
6.0		•		Direct Entry,					

#### Summary for Subcatchment 46S: POST 45

13.83 cfs @ 12.17 hrs, Volume= 1.387 af, Depth= 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

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Aı	ea (sf)	CN	Description							
2	41,884	30	Woods, Go	od, HSG A	4					
	95,851	77	Woods, Go	od, HSG D	)					
	7,023	96	Gravel surf	ace, HSG A	A					
	2,364	96	Gravel surf	ace, HSG [	D					
	79,566	39	>75% Gras	s cover, Go	lood, HSG A					
	28,376	80	>75% Gras	s cover, Go	lood, HSG D					
	3,192	98	Roofs, HSC	S D						
4	58,256	46	Weighted A	verage						
4	55,064		99.30% Pe	rvious Area	a					
	3,192 0.70% Impervious Area									
Тс	Length	Slop	e Velocity	Capacity	Description					
(min)	(feet)	(ft/f	t) (ft/sec)	(cfs)						
10.1					Direct Entry,					

# Summary for Subcatchment 65S: POST 12

Runoff = 4.31 cfs @ 12.12 hrs, Volume= 0.340 af, Depth= 3.84"

	Α	rea (sf)	CN I	Description						
		2,804	98	Roofs, HSG D						
		2,957	98	Paved parking, HSG D						
		130	98	<b>Jnconnecte</b>	ed paveme	nt, HSG D				
		15,690				ood, HSG D				
		2,914		Roofs, HSG						
		2,970		Paved park						
_		18,928	39 :	>75% Gras	s cover, Go	ood, HSG A				
		46,393		Weighted A						
		34,618		74.62% Per						
		11,775		25.38% Imp		ea				
		130		1.10% Unc	onnected					
	Тс	Length	Slope	Velocity	Capacity	Description				
	(min)	(feet)	(ft/ft)		(cfs)	Description				
•	3.3	50	0.0800		(013)	Sheet Flow,				
	3.5	30	0.0000	0.23		Grass: Short n= 0.150 P2= 3.10"				
	1.7	142	0.0400	1.40		Shallow Concentrated Flow,				
			0.0.00			Short Grass Pasture Kv= 7.0 fps				
	0.2	43	0.3200	3.96		Shallow Concentrated Flow.				
						Short Grass Pasture Kv= 7.0 fps				
	1.8	144	0.0380	1.36		Shallow Concentrated Flow,				
						Short Grass Pasture Kv= 7.0 fps				
	1.6	150	0.0060	1.57		Shallow Concentrated Flow,				
_						Paved Kv= 20.3 fps				
	8.6	529	Total							

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# Summary for Subcatchment 69S: POST 41

10.65 cfs @ 12.14 hrs, Volume= Runoff = 0.880 af, Depth= 3.19"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Ar	ea (sf)	CN	Description		
	4,616	96	Gravel surfa	ace, HSG [	)
	16,434	77	Woods, Go	od, HSG D	
:	25,175	39	>75% Gras	s cover, Go	ood, HSG A
;	31,571	30	Woods, Go	od, HSG A	
(	64,485				ood, HSG D
	1,968	98	Unconnecte	ed pavemei	nt, HSG D
	44,249		Weighted A		
14	42,281		98.64% Pe	rvious Area	l
	1,968 1.36% Impervious Area				
	1,968		100.00% U	nconnected	d
Τ.	1	01	M-146.	0	Description
Tc	Length	Slope		, ,	Description
(min)	(feet)	(ft/ft)		(cfs)	
3.0	50	0.1000	0.28		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.10"
3.9	392	0.1100	1.66		Shallow Concentrated Flow,
					Woodland Kv= 5.0 fps
2.7	113	0.0800	0.71		Shallow Concentrated Flow,
					Forest w/Heavy Litter Kv= 2.5 fps
9.6	555	Total			

#### Summary for Subcatchment 70S: POST 17

3.32 cfs @ 12.10 hrs, Volume= Runoff = 0.267 af, Depth= 1.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Type III 24-hr 100-year Rainfall=7.52"

Area (sf)	CN	Description
473	96	Gravel surface, HSG D
12,174	80	>75% Grass cover, Good, HSG D
3,962	96	Gravel surface, HSG A
1,839	30	Woods, Good, HSG A
51,919	39	>75% Grass cover, Good, HSG A
725	98	Unconnected pavement, HSG A
71,092	50	Weighted Average
70,367		98.98% Pervious Area
725		1.02% Impervious Area
725		100.00% Unconnected

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6.0	(leet)	(11/11)	(ft/sec)	(cfs)	Direct Entry	
					Description	

# Summary for Pond 1P: INFIL. BASIN #1

[81] Warning: Exceeded Pond 4P by 6.17' @ 14.10 hrs

Inflow Area	1 =	2.141 ac, 4	6.19% Imp	ervious, Inflow D	Depth = 2.77"	for 100-	year event
Inflow	=	5.93 cfs @	12.09 hrs,	Volume=	0.494 af		
Outflow	=	0.38 cfs @	13.89 hrs,	Volume=	0.494 af, Atte	n= 94%,	Lag= 107.9 min
Discarded	=	0.38 cfs @	13.89 hrs,	Volume=	0.494 af		
Primary	=	0.00 cfs @	0.00 hrs,	Volume=	0.000 af		

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 252.13' @ 13.89 hrs Surf.Area= 4,110 sf Storage= 11,784 cf

Plug-Flow detention time= 414.8 min calculated for 0.494 af (100% of inflow) Center-of-Mass det. time= 415.3 min (1,184.0 - 768.8) Invert Avail Storage Storage Description

volume	iliveit	Avaii.	Sidrage	Storage Descripti	OH		
#1	245.00'	3	4,907 cf	Custom Stage D	ata (Irregular)List	ted below (Recalc)	
Elevation (feet)		Area sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
245.00		111	47.0	0	0	111	
246.00		280	66.0	189	189	291	
248.00	1	1,100	152.0	1,290	1,479	1,799	
250.00	2	2,410	245.0	3,425	4,905	4,763	
252.00	3	3,995	283.0	6,339	11,243	6,445	
254.00	5	5,894	332.0	9,828	21,071	8,921	
256.00	7	7,996	370.0	13,837	34,907	11,157	
Device R	outing	Inv	ert Outle	et Devices			

Device	Routing	Invert	Outlet Devices
#1	Discarded	245.00'	2.410 in/hr Exfiltration over Surface area
			Conductivity to Groundwater Elevation = 243.00'
#2	Primary	255.00'	10.0' long x 13.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60
			Coef (English) 2 60 2 64 2 70 2 66 2 65 2 66 2 65 2 63

Discarded OutFlow Max=0.38 cfs @ 13.89 hrs HW=252.13' (Free Discharge) 1=Exfiltration ( Controls 0.38 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=245.00' (Free Discharge) 2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

256.00

4.465

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Summary for Pond 2P: INFILTRATION BASIN #1-A

[81] Warning: Exceeded Pond 13P by 0.54' @ 14.80 hrs

Inflow Area = 0.915 ac, 29.75% Impervious, Inflow Depth = 3.47" for 100-year event

3.40 cfs @ 12.09 hrs, Volume= 0.265 af Inflow

Outflow = 0.23 cfs @ 14.14 hrs, Volume= 0.265 af, Atten= 93%, Lag= 123.0 min Discarded = 0.23 cfs @ 14.14 hrs, Volume= 0.265 af

0.000 af Primary = 0.00 cfs @ 0.00 hrs, Volume=

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs Peak Elev= 254.76' @ 14.14 hrs Surf.Area= 3.520 sf Storage= 5.229 cf

242.0

Plug-Flow detention time= 247.3 min calculated for 0.265 af (100% of inflow)

Center-of-Mass det. time= 247.2 min ( 1.064.9 - 817.7 )

4.380

Volume	Invert	Avail	.Storage	Storage Description	า	
#1	253.00'	1	0,119 cf	Custom Stage Dat	ta (Irregular)Liste	d below (Recalc)
Elevation (feet)		.Area sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
253.00	2	2,452	186.0	0	0	2,452
254.00	3	3,038	205.0	2,740	2,740	3,075
255.00	3	3,680	224.0	3,354	6,094	3,758

Device	Routing	Invert	Outlet Devices
#1	Discarded	253.00'	2.410 in/hr Exfiltration over Surface area
			Conductivity to Groundwater Elevation = 243.00'
#2	Primary	255.50'	8.0' long x 10.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60
			Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

4.025

10.119

Discarded OutFlow Max=0.23 cfs @ 14.14 hrs HW=254.76' (Free Discharge) 1=Exfiltration (Controls 0.23 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=253.00' (Free Discharge) 2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

## Summary for Pond 3P: INFIL. BASIN #2

[81] Warning: Exceeded Pond 15P by 7.06' @ 12.65 hrs

11.845 ac, 34.26% Impervious, Inflow Depth = 5.26" for 100-year event Inflow Area =

63.65 cfs @ 12.10 hrs, Volume= 5.188 af Inflow

Outflow = 24.39 cfs @ 12.40 hrs, Volume= 5.188 af, Atten= 62%, Lag= 18.0 min

Discarded = 1.10 cfs @ 12.40 hrs, Volume= 0.809 af

23.29 cfs @ 12.40 hrs, Volume= Primary = 4.379 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs.

Peak Elev= 273.30' @ 12.40 hrs Surf.Area= 13,045 sf Storage= 78,263 cf

Plug-Flow detention time= 97.2 min calculated for 5.184 af (100% of inflow) Center-of-Mass det. time= 97.4 min ( 893.7 - 796.3 )

Volume	Invert	Avail.S	torage	Storage Description		
#1	263.00'	87	,659 cf	Custom Stage Data	a (Irregular)Listed	below (Recalc)
Elevation	on Si	urf.Area	Perim.	Inc.Store	Cum.Store	Wet.Area
(fee	et)	(sq-ft)	(feet)	(cubic-feet)	(cubic-feet)	(sq-ft)
263.0	00	3.149	223.0	Ó	Ó	3,149
264.0	00	3,847	242.0	3,492	3,492	3,890
266.0	00	5,412	280.0	9,215	12,707	5,552
268.0	00	7,203	317.0	12,572	25,279	7,408
270.0		9,220	355.0	16,382	41,661	9,549
272.0		11,463	393.0	20,642	62,303	11,931
274.0	00	13,933	430.0	25,356	87,659	14,490
Device	Routing	Inve		et Devices		
#1	Discarded	263.00	)' <b>2.41</b>	0 in/hr Exfiltration of	ver Surface area	
#2	Primary	263.00	)' <b>15.0</b>	ductivity to Groundwa " Round Culvert 7.0' CPP, projecting		
#3	Primary	273.00	Inlet n= 0 0' <b>20.0</b>	/ Outlet Invert= 263.0.013, Flow Area= 1.2 ' long x 12.0' bread d (feet) 0.20 0.40 0	00' / 262.00' S= 0 23 sf <b>th Broad-Creste</b> d	.0175 '/' Cc= 0.900 I Rectangular Weir
#4 #5 #6	Device 2 Device 2 Device 2	267.00 263.94 268.70	Coef 0' <b>5.0"</b> 4' <b>6.0"</b> 0' <b>48.0</b>	f. (English) 2.57 2.6 Vert. Orifice/Grate	2 2.70 2.67 2.66 C= 0.600 Limited C= 0.600 Limited ice/Grate C= 0.60	2.67 2.66 2.64 d to weir flow at low heads d to weir flow at low heads

Discarded OutFlow Max=1.10 cfs @ 12.40 hrs HW=273.30' (Free Discharge) 1=Exfiltration (Controls 1.10 cfs)

Primary OutFlow Max=23.12 cfs @ 12.40 hrs HW=273.30' (Free Discharge)

-2=Culvert (Inlet Controls 14.51 cfs @ 11.82 fps)

-4=Orifice/Grate (Passes < 1.62 cfs potential flow)

-5=Orifice/Grate (Passes < 2.85 cfs potential flow)

-6=Orifice/Grate (Passes < 165.26 cfs potential flow)

3=Broad-Crested Rectangular Weir (Weir Controls 8.61 cfs @ 1.43 fps)

#### Summary for Pond 4P: HYDROSTORM

[79] Warning: Submerged Pond 11P Primary device # 1 INLET by 0.13'

0.369 ac, 44.88% Impervious, Inflow Depth = 3.72" for 100-year event Inflow Area =

Inflow 1.43 cfs @ 12.09 hrs, Volume= 0.115 af

Outflow = 1.43 cfs @ 12.09 hrs, Volume= 0.115 af, Atten= 0%, Lag= 0.0 min

1.43 cfs @ 12.09 hrs, Volume= Primary = 0.115 af

Type III 24-hr 100-year Rainfall=7.52"

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Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 246.54' @ 12.09 hrs Flood Elev= 255.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	245.80'	12.0" Round Culvert L= 50.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 245.80' / 245.00' S= 0.0160 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.40 cfs @ 12.09 hrs HW=246.53' (Free Discharge)
1=Culvert (Inlet Controls 1.40 cfs @ 2.29 fps)

#### Summary for Pond 6P: INFIL. BASIN #3

[81] Warning: Exceeded Pond 38P by 1.48' @ 12.55 hrs

 Inflow Area = Inflow = Inflow = Uniform = Inflow = Uniform = Unif

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 318.29' @ 12.37 hrs Surf.Area= 7,186 sf Storage= 27,369 cf

Plug-Flow detention time= 240.6 min calculated for 1.649 af (100% of inflow) Center-of-Mass det. time= 241.5 min ( 1,034.6 - 793.1 )

Volume	Invert	Avail.St	orage	Storage Descripti	on		_
#1	312.00'	41,1	148 cf	Custom Stage D	ata (Irregular)List	ed below (Recalc)	
Elevation (fee		urf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
312.0	00	1,767	179.0	0	0	1,767	
314.0	00	3,405	239.0	5,083	5,083	3,806	
316.0	00	5,012	284.0	8,365	13,449	5,751	
318.0	00	6,898	329.0	11,860	25,309	8,030	
320.0	00	8,987	367.0	15,839	41,148	10,247	
Device #1	Routing Discarded	Invert 312.00	1.02	et Devices  o in/hr Exfiltration ductivity to Ground			_
#2	Primary	312.00		" Round Culvert		010.00	
#3	Primary	319.50	Inlet n= 0 <b>20.0</b> Hea	0.013, Flow Area= ' long x 12.0' bre d (feet) 0.20 0.40	2.00' / 310.00' S= 0.79 sf adth Broad-Crest 0.60 0.80 1.00	= 0.0377 '/' Cc= 0.900 ed Rectangular Weir	

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#4 Device 2 315.00' **4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads 
#5 Device 2 316.50' **48.0" x 48.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.40 cfs @ 12.37 hrs HW=318.29' (Free Discharge) 1=Exfiltration ( Controls 0.40 cfs)

Primary OutFlow Max=7.18 cfs @ 12.37 hrs HW=318.29' (Free Discharge)

2=Culvert (Inlet Controls 7.18 cfs @ 9.15 fps)

4=Orifice/Grate (Passes < 0.74 cfs potential flow)

**4=Orifice/Grate** (Passes < 0.74 cfs potential flow) **5=Orifice/Grate** (Passes < 103.05 cfs potential flow)

-3=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

#### Summary for Pond 7P: CB-103

Inflow Area = 0.266 ac, 30.62% Impervious, Inflow Depth = 2.85" for 100-year event

Inflow = 0.75 cfs @ 12.10 hrs, Volume= 0.063 af

Outflow = 0.75 cfs @ 12.10 hrs, Volume= 0.063 af, Atten= 0%, Lag= 0.0 min

Primary = 0.75 cfs @ 12.10 hrs, Volume= 0.063 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 248.45' @ 12.10 hrs

Flood Elev= 250.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	247.90'	12.0" Round Culvert
			L= 20.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 247.90' / 247.80' S= 0.0050 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=0.74 cfs @ 12.10 hrs HW=248.45' (Free Discharge)

1=Culvert (Barrel Controls 0.74 cfs @ 2.45 fps)

#### Summary for Pond 8P: CB-102

 Inflow Area =
 0.103 ac, 81.80% Impervious, Inflow Depth = 5.98" for 100-year event

 Inflow =
 0.68 cfs @ 12.09 hrs, Volume=
 0.051 af

 Outflow =
 0.68 cfs @ 12.09 hrs, Volume=
 0.051 af, Atten= 0%, Lag= 0.0 min

Primary = 0.68 cfs @ 12.09 hrs, Volume= 0.051 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 247.27' @ 12.09 hrs

Flood Elev= 249.80'

j	Device	Routing	Invert	Outlet Devices
	#1	Primary	246.80'	12.0" Round Culvert
				L= 17.0' CPP, projecting, no headwall, Ke= 0.900
				Inlet / Outlet Invert= 246.80' / 246.50' S= 0.0176 '/' Cc= 0.900
				n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

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Primary OutFlow Max=0.66 cfs @ 12.09 hrs HW=247.27' (Free Discharge) 1=Culvert (Inlet Controls 0.66 cfs @ 1.83 fps)

#### Summary for Pond 9P: CB-106

Inflow Area = 0.490 ac, 34.11% Impervious, Inflow Depth = 4.07" for 100-year event Inflow = 2.21 cfs @ 12.09 hrs, Volume= 0.166 af

Outflow = 2.21 cfs @ 12.09 hrs, Volume= 0.166 af, Atten= 0%, Lag= 0.0 min

Primary = 2.21 cfs @ 12.09 hrs, Volume= 0.166 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 259.54' @ 12.09 hrs

Flood Elev= 262.50'

 Device
 Routing
 Invert
 Outlet Devices

 #1
 Primary
 258.50'
 12.0" Round Culvert

L= 10.0' CPP, projecting, no headwall, Ke= 0.900

Inlet / Outlet Invert= 258.50' / 258.20' S= 0.0300 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.17 cfs @ 12.09 hrs HW=259.53' (Free Discharge) 1=Culvert (Inlet Controls 2.17 cfs @ 2.76 fps)

## Summary for Pond 10P: CB-107

Inflow Area = 0.132 ac, 79.87% Impervious, Inflow Depth = 6.10" for 100-year event Inflow = 0.88 cfs @ 12.09 hrs, Volume= 0.067 af

Outflow = 0.88 cfs @ 12.09 hrs, Volume= 0.067 af, Atten= 0%, Laq= 0.0 min

Primary = 0.88 cfs @ 12.09 hrs, Volume= 0.067 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 259.25' @ 12.09 hrs

Flood Elev= 262.70'

 
 Device
 Routing
 Invert
 Outlet Devices

 #1
 Primary
 258.70'
 12.0" Round Culvert L= 57.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 258.70' / 254.50'
 S= 0.0737 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.85 cfs @ 12.09 hrs HW=259.24' (Free Discharge) 1=Culvert (Inlet Controls 0.85 cfs @ 1.97 fps)

#### Summary for Pond 11P: DMH-101

[79] Warning: Submerged Pond 8P Primary device # 1 INLET by 0.33' [79] Warning: Submerged Pond 12P Primary device # 1 OUTLET by 0.23'

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 Inflow Area = Inflow = Inflow = 0.369 ac, 44.88% Impervious, Inflow Depth = 3.72" for 100-year event

 Outflow = 0.43 cfs @ 12.09 hrs, Volume= 0.115 af

 Outflow = 1.43 cfs @ 12.09 hrs, Volume= 0.115 af, Atten= 0%, Lag= 0.0 min

 Primary = 1.43 cfs @ 12.09 hrs, Volume= 0.115 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 247.14' @ 12.09 hrs

Flood Elev= 254.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	246.40'	12.0" Round Culvert
	•		L= 47.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 246.40' / 245.90' S= 0.0106 '/' Cc= 0.900
			n= 0.012 Corrugated PP_smooth interior_Flow Area= 0.79 sf

Primary OutFlow Max=1.40 cfs @ 12.09 hrs HW=247.13' (Free Discharge) 1=Culvert (Inlet Controls 1.40 cfs @ 2.29 fps)

#### Summary for Pond 12P: DMH-102

[79] Warning: Submerged Pond 7P Primary device # 1 INLET by 0.30

 Inflow Area =
 0.266 ac, 30.62% Impervious, Inflow Depth = 2.85" for 100-year event

 Inflow =
 0.75 cfs @ 12.10 hrs, Volume =
 0.063 af

 Outflow =
 0.75 cfs @ 12.10 hrs, Volume =
 0.063 af, Atten = 0%, Lag = 0.0 min

Primary = 0.75 cfs @ 12.10 hrs, Volume= 0.063 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 248.20' @ 12.10 hrs

Flood Elev= 254.00'

Primary OutFlow Max=0.74 cfs @ 12.10 hrs HW=248.20' (Free Discharge)
1=Culvert (Inlet Controls 0.74 cfs @ 1.90 fps)

#### Summary for Pond 13P: DMH-103

[79] Warning: Submerged Pond 10P Primary device # 1 OUTLET by 1.06'

Inflow Area = 0.621 ac, 43.80% Impervious, Inflow Depth = 4.50" for 100-year event

Inflow = 3.08 cfs @ 12.09 hrs, Volume= 0.233 af

Outflow = 3.08 cfs @ 12.09 hrs, Volume= 0.233 af, Atten= 0%, Lag= 0.0 min

Primary = 3.08 cfs @ 12.09 hrs, Volume= 0.233 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs.

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Peak Elev= 255.56' @ 12.09 hrs

Flood Elev= 262.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	254.00'	12.0" Round Culvert
	-		L= 77.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 254.00' / 253.00' S= 0.0130 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.02 cfs @ 12.09 hrs HW=255.52' (Free Discharge) 1=Culvert (Inlet Controls 3.02 cfs @ 3.84 fps)

#### Summary for Pond 14P: DMH-104

[79] Warning: Submerged Pond 9P Primary device # 1 INLET by 0.64'

Inflow Area = 0.490 ac, 34.11% Impervious, Inflow Depth = 4.07" for 100-year event

Inflow 2.21 cfs @ 12.09 hrs, Volume= 0.166 af

0.166 af. Atten= 0%. Lag= 0.0 min Outflow = 2.21 cfs @ 12.09 hrs, Volume=

2.21 cfs @ 12.09 hrs. Volume= Primary = 0.166 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 259.14' @ 12.09 hrs

Flood Elev= 262.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	258.10'	12.0" Round Culvert
	-		L= 91.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 258.10' / 255.80' S= 0.0253 '/' Cc= 0.900
			n= 0.012 Corrugated PP_smooth interior_Flow Area= 0.79 sf

Primary OutFlow Max=2.17 cfs @ 12.09 hrs HW=259.13' (Free Discharge) 1=Culvert (Inlet Controls 2.17 cfs @ 2.76 fps)

#### Summary for Pond 15P: DMH-201

[79] Warning: Submerged Pond 16P Primary device # 1 OUTLET by 0.36'

[79] Warning: Submerged Pond 20P Primary device # 1 OUTLET by 0.86'

11.554 ac, 33.30% Impervious, Inflow Depth = 5.22" for 100-year event Inflow Area =

Inflow = 61.64 cfs @ 12.10 hrs, Volume= 5.026 af

Outflow = 61.64 cfs @ 12.10 hrs, Volume= 5.026 af, Atten= 0%, Lag= 0.0 min

61.64 cfs @ 12.10 hrs, Volume= Primary = 5.026 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 271.36' @ 12.10 hrs

Flood Flev= 275 00'

Device	Routing	Invert	Outlet Devices
#1	Primary	264.60'	36.0" Round Culvert L= 41.0' CPP, projecting, no headwall, Ke= 0.900

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Inlet / Outlet Invert= 264.60' / 263.00' S= 0.0390 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 7.07 sf

Primary OutFlow Max=61.15 cfs @ 12.10 hrs HW=271.28' (Free Discharge) 1=Culvert (Inlet Controls 61.15 cfs @ 8.65 fps)

#### Summary for Pond 16P: DMH-202

[81] Warning: Exceeded Pond 17P by 2.85' @ 12.10 hrs

[81] Warning: Exceeded Pond 18P by 0.75' @ 12.10 hrs

[81] Warning: Exceeded Pond 19P by 3.59' @ 12.10 hrs

[79] Warning: Submerged Pond 62P Primary device # 1 OUTLET by 5.38

Inflow Area = 3.827 ac, 48.20% Impervious, Inflow Depth = 6.16" for 100-year event Inflow = 25.49 cfs @ 12.09 hrs. Volume= 1 964 af

Outflow = 25.49 cfs @ 12.09 hrs. Volume= 1.964 af. Atten= 0%. Lag= 0.0 min

Primary = 25.49 cfs @ 12.09 hrs. Volume= 1.964 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs.

Peak Elev= 282.44' @ 12.09 hrs

Flood Elev= 283.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	276 90'	24.0" Round Culve

L= 77.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 276.90' / 271.00' S= 0.0766 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=24.86 cfs @ 12.09 hrs HW=282.23' (Free Discharge) 1=Culvert (Inlet Controls 24.86 cfs @ 7.91 fps)

## Summary for Pond 17P: FIELD INLET-201

0.250 ac, 17.45% Impervious, Inflow Depth = 5.06" for 100-year event Inflow Area =

Inflow = 1.43 cfs @ 12.09 hrs, Volume= 0.105 af

Outflow = 1.43 cfs @ 12.09 hrs, Volume= 0.105 af, Atten= 0%, Lag= 0.0 min

Primary = 1.43 cfs @ 12.09 hrs, Volume= 0.105 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 279.54' @ 12.09 hrs

Flood Elev= 282.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	278.80'	12.0" Round Culvert

L= 46.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 278.80' / 278.00' S= 0.0174 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.40 cfs @ 12.09 hrs HW=279.53' (Free Discharge) 1=Culvert (Inlet Controls 1.40 cfs @ 2.29 fps)

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#### Summary for Pond 18P: CB-202

Inflow Area = 0.676 ac, 45.13% Impervious, Inflow Depth = 6.10" for 100-year event

Inflow = 4.50 cfs @ 12.09 hrs, Volume= 0.344 af

Outflow = 4.50 cfs @ 12.09 hrs, Volume= 0.344 af, Atten= 0%, Lag= 0.0 min

Primary = 4.50 cfs @ 12.09 hrs, Volume= 0.344 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 281.66' @ 12.09 hrs

Flood Elev= 282.90'

 Device
 Routing
 Invert
 Outlet Devices

 #1
 Primary
 278.90'
 12.0" Round Culvert

L= 19.0' CPP, projecting, no headwall, Ke= 0.900

Inlet / Outlet Invert= 278.90' / 278.00' S= 0.0474'/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=4.39 cfs @ 12.09 hrs HW=281.56' (Free Discharge)

1=Culvert (Inlet Controls 4.39 cfs @ 5.58 fps)

#### Summary for Pond 19P: CB-201

Inflow Area = 0.040 ac, 97.61% Impervious, Inflow Depth = 7.28" for 100-year event Inflow = 0.29 cfs @ 12.09 hrs. Volume= 0.024 af

Inflow = 0.29 cfs @ 12.09 hrs, Volume= Outflow = 0.29 cfs @ 12.09 hrs, Volume=

Outflow = 0.29 cfs @ 12.09 hrs, Volume= 0.024 af, Atten= 0%, Lag= 0.0 min

Primary = 0.29 cfs @ 12.09 hrs, Volume= 0.024 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 278.80' @ 12.09 hrs

Flood Elev= 282.50'

Device Routing Invert Outlet Devices
#1 Primary 278.50' 12.0" Round Culvert

L= 43.0' CPP, projecting, no headwall, Ke= 0.900

Inlet / Outlet Invert= 278.50' / 278.00' S= 0.0116 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=0.28 cfs @ 12.09 hrs HW=278.79' (Free Discharge)

1=Culvert (Inlet Controls 0.28 cfs @ 1.46 fps)

#### Summary for Pond 20P: DMH-203

[81] Warning: Exceeded Pond 21P by 1.20' @ 12.10 hrs

[81] Warning: Exceeded Pond 22P by 0.80' @ 12.10 hrs

[79] Warning: Submerged Pond 23P Primary device # 1 INLET by 4.14'

Inflow Area = 7.726 ac, 25.92% Impervious, Inflow Depth = 4.75" for 100-year event

Inflow = 36.81 cfs @ 12.12 hrs, Volume= 3.062 af

Outflow = 36.81 cfs @ 12.12 hrs, Volume= 3.062 af, Atten= 0%, Lag= 0.0 min

Primary = 36.81 cfs @ 12.12 hrs, Volume= 3.062 af

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Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 281.73' @ 12.12 hrs

Flood Elev= 283.00'

Primary OutFlow Max=35.89 cfs @ 12.12 hrs HW=281.55' (Free Discharge)

1=Culvert (Inlet Controls 35.89 cfs @ 7.31 fps)

## Summary for Pond 21P: CB-204

Inflow Area = 0.051 ac,100.00% Impervious, Inflow Depth = 7.28" for 100-year event

Inflow = 0.37 cfs @ 12.09 hrs, Volume= 0.031 af

Outflow = 0.37 cfs @ 12.09 hrs, Volume= 0.031 af, Atten= 0%, Lag= 0.0 min

Primary = 0.37 cfs @ 12.09 hrs, Volume= 0.031 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs.

Peak Elev= 280.44' @ 12.09 hrs

Flood Elev= 284.10'

Device Routing Invert Outlet Devices

#1 Primary 280.10' 12.0" Round Culvert

L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 280.10' / 279.00' S= 0.0550 '/' Cc= 0.900

n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

n= 0.012 Corrugated PP, smooth interior. Flow Area= 4.91 sf

Primary OutFlow Max=0.36 cfs @ 12.09 hrs HW=280.43' (Free Discharge)

1=Culvert (Inlet Controls 0.36 cfs @ 1.55 fps)

#### Summary for Pond 22P: CB-205

Inflow Area = 0.310 ac, 28.18% Impervious, Inflow Depth = 4.24" for 100-year event

Inflow = 1.45 cfs @ 12.09 hrs, Volume= 0.109 af

Outflow = 1.45 cfs @ 12.09 hrs. Volume= 0.109 af. Atten= 0%. Lag= 0.0 min

Primary = 1.45 cfs @ 12.09 hrs, Volume= 0.109 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 280.84' @ 12.09 hrs

Flood Elev= 284.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	280.10'	12.0" Round Culvert

L= 33.0' CPP, projecting, no headwall, Ke= 0.900

Inlet / Outlet Invert= 280.10' / 279.00' S= 0.0333 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

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Primary OutFlow Max=1.42 cfs @ 12.09 hrs HW=280.83' (Free Discharge) 1=Culvert (Inlet Controls 1.42 cfs @ 2.30 fps)

#### Summary for Pond 23P: DMH-204

[79] Warning: Submerged Pond 24P Primary device # 1 INLET by 0.57'

[81] Warning: Exceeded Pond 25P by 0.18' @ 12.10 hrs

[79] Warning: Submerged Pond 26P Primary device # 1 INLET by 3.97'

Inflow Area = 7.365 ac, 25.31% Impervious, Inflow Depth = 4.76" for 100-year event

Inflow = 35.07 cfs @ 12.12 hrs, Volume= 2.921 af

Outflow = 35.07 cfs @ 12.12 hrs, Volume= 2.921 af, Atten= 0%, Lag= 0.0 min

Primary = 35.07 cfs @ 12.12 hrs, Volume= 2.921 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs.

Peak Elev= 282.27' @ 12.12 hrs

Flood Flev= 285 80'

Device	Routing	Invert	Outlet Devices
#1	Primary	277.50'	30.0" Round Culver

L= 192.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 277.50' / 276.70' S= 0.0042 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 4.91 sf

Primary OutFlow Max=34.17 cfs @ 12.12 hrs HW=282.10' (Free Discharge)

1=Culvert (Inlet Controls 34.17 cfs @ 6.96 fps)

#### Summary for Pond 24P: CB-206

0.633 ac, 31.21% Impervious, Inflow Depth = 4.61" for 100-year event Inflow Area = 2.87 cfs @ 12.15 hrs, Volume= Inflow 0 243 af

Outflow = 2.87 cfs @ 12.15 hrs, Volume= 0.243 af. Atten= 0%. Lag= 0.0 min

2.87 cfs @ 12.15 hrs, Volume= Primary = 0.243 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 282.41' @ 12.15 hrs

Flood Elev= 285.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	281.60'	24.0" Round Culvert
			L= 16.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 281.60' / 281.30' S= 0.0188 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=2.85 cfs @ 12.15 hrs HW=282.40' (Free Discharge)

1=Culvert (Inlet Controls 2.85 cfs @ 2.41 fps)

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#### Summary for Pond 25P: CB-207

Inflow Area = 0.068 ac,100.00% Impervious, Inflow Depth = 7.28" for 100-year event Inflow = 0.49 cfs @ 12.09 hrs, Volume= 0.041 af Outflow = 0.49 cfs @ 12.09 hrs, Volume= 0.041 af, Atten= 0%, Lag= 0.0 min

0.49 cfs @ 12.09 hrs, Volume= Primary = 0.041 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 281.99' @ 12.09 hrs

Flood Elev= 285.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	281.60'	12.0" Round Culvert
			L= 16.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 281.60' / 281.30' S= 0.0188 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.47 cfs @ 12.09 hrs HW=281.99' (Free Discharge) 1=Culvert (Inlet Controls 0.47 cfs @ 1.68 fps)

#### Summary for Pond 26P: DMH-205

[79] Warning: Submerged Pond 27P Primary device # 1 INLET by 3.29' [79] Warning: Submerged Pond 66P Primary device # 1 OUTLET by 0.49'

Inflow Area = 6.664 ac, 23.99% Impervious, Inflow Depth = 4.75" for 100-year event

31.90 cfs @ 12.12 hrs, Volume= 2.637 af Inflow =

Outflow = 31.90 cfs @ 12.12 hrs, Volume= 2.637 af, Atten= 0%, Lag= 0.0 min

31.90 cfs @ 12.12 hrs. Volume= 2.637 af Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 282.36' @ 12.12 hrs

Flood Elev= 286.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	278.20'	30.0" Round Culvert
	•		L= 151.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 278.20' / 277.60' S= 0.0040 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 4.91 sf

Primary OutFlow Max=31.09 cfs @ 12.12 hrs HW=282.23' (Free Discharge) 1=Culvert (Inlet Controls 31.09 cfs @ 6.33 fps)

#### Summary for Pond 27P: DMH-206

[79] Warning: Submerged Pond 28P Primary device # 1 INLET by 2.19'

Inflow Are	ea =	5.599 ac, 23.73% Impervious, Inflow Depth = 4.92" for 100-year event	
Inflow	=	27.60 cfs @ 12.12 hrs, Volume= 2.296 af	
Outflow	=	27.60 cfs @ 12.12 hrs, Volume= 2.296 af, Atten= 0%, Lag= 0.0 min	
Primary	=	27.60 cfs @ 12.12 hrs, Volume= 2.296 af	

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Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 282.43' @ 12.12 hrs Flood Elev= 286.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	279.00'	30.0" Round Culvert
			L= 168.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 279.00' / 278.30' S= 0.0042 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 4.91 sf

Primary OutFlow Max=26.93 cfs @ 12.12 hrs HW=282.33' (Free Discharge) 1=Culvert (Inlet Controls 26.93 cfs @ 5.49 fps)

#### Summary for Pond 28P: DMH-207

[81] Warning: Exceeded Pond 29P by 0.78' @ 12.10 hrs

[79] Warning: Submerged Pond 30P Primary device # 1 INLET by 1.39'

[79] Warning: Submerged Pond 31P Primary device # 1 INLET by 0.09'

Inflow Area = 5.599 ac. 23.73% Impervious. Inflow Depth = 4.92" for 100-year event

Inflow = 27.60 cfs @ 12.12 hrs, Volume= 2.296 af

Outflow = 27.60 cfs @ 12.12 hrs, Volume= 2.296 af, Atten= 0%, Lag= 0.0 min

Primary = 27.60 cfs @ 12.12 hrs, Volume= 2.296 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 283.63' @ 12.12 hrs

Flood Elev= 285.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	280.20'	30.0" Round Culvert
	-		L= 268.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 280.20' / 279.10' S= 0.0041 '/' Cc= 0.900
			n= 0.012 Corrugated PP smooth interior. Flow Area= 4.91 sf

Primary OutFlow Max=26.93 cfs @ 12.12 hrs HW=283.53' (Free Discharge)
1=Culvert (Inlet Controls 26.93 cfs @ 5.49 fps)

#### Summary for Pond 29P: CB-208

Inflow Area = 0.147 ac,100.00% Impervious, Inflow Depth = 7.28" for 100-year event

Inflow = 1.06 cfs @ 12.09 hrs, Volume= 0.089 af

Outflow = 1.06 cfs @ 12.09 hrs, Volume= 0.089 af, Atten= 0%, Lag= 0.0 min

Primary = 1.06 cfs @ 12.09 hrs, Volume= 0.089 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 282.81' @ 12.09 hrs

Flood Elev= 285.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	282.20'	12.0" Round Culvert

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L= 14.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 282.20' / 282.00' S= 0.0143 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.03 cfs @ 12.09 hrs HW=282.80' (Free Discharge)

1=Culvert (Inlet Controls 1.03 cfs @ 2.09 fps)

#### Summary for Pond 30P: CB-209

 Inflow Area =
 1.565 ac, 25.39% Impervious, Inflow Depth = 3.27" for 100-year event

 Inflow =
 4.95 cfs @ 12.15 hrs, Volume=
 0.426 af

 Outflow =
 4.95 cfs @ 12.15 hrs, Volume=
 0.426 af, Atten= 0%, Lag= 0.0 min

Primary = 4.95 cfs @ 12.15 hrs, Volume = 0.426 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 283.95' @ 12.15 hrs

Flood Elev= 285.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	282.20'	15.0" Round Culvert L= 14.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 282.20' / 282.00' S= 0.0143'/ Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=4.92 cfs @ 12.15 hrs HW=283.94' (Free Discharge)
1=Culvert (Inlet Controls 4.92 cfs @ 4.01 fps)

#### Summary for Pond 31P: DMH-208

[79] Warning: Submerged Pond 32P Primary device # 1 OUTLET by 4.19

Primary = 21.82 cfs @ 12.11 hrs, Volume= 1.781 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 287.83' @ 12.11 hrs

Flood Elev= 289.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	283.50'	24.0" Round Culvert
			L= 165.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 283.50' / 280.70' S= 0.0170 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=21.35 cfs @ 12.11 hrs HW=287.70' (Free Discharge)
1=Culvert (Inlet Controls 21.35 cfs @ 6.80 fps)

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#### Summary for Pond 32P: DMH-209

[81] Warning: Exceeded Pond 33P by 2.30' @ 12.10 hrs [81] Warning: Exceeded Pond 34P by 0.64' @ 12.15 hrs

[79] Warning: Submerged Pond 35P Primary device # 1 OUTLET by 3.29'

[79] Warning: Submerged Pond 63P Primary device # 1 OUTLET by 2.99'

Inflow Area = 3.887 ac, 20.17% Impervious, Inflow Depth = 5.50" for 100-year event

Inflow = 21.82 cfs @ 12.11 hrs, Volume= 1.781 af

Outflow = 21.82 cfs @ 12.11 hrs, Volume= 1.781 af, Atten= 0%, Lag= 0.0 min

Primary = 21.82 cfs @ 12.11 hrs, Volume= 1.781 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 300.73' @ 12.11 hrs

Flood Elev= 301.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	296.40'	24.0" Round Culvert
	-		L= 150.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 296.40' / 283.60' S= 0.0853 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=21.35 cfs @ 12.11 hrs HW=300.60' (Free Discharge)

1=Culvert (Inlet Controls 21.35 cfs @ 6.80 fps)

#### Summary for Pond 33P: CB-210

Inflow Area = 0.067 ac,100.00% Impervious, Inflow Depth = 7.28" for 100-year event Inflow = 0.48 cfs @ 12.09 hrs. Volume= 0.041 af

Outflow = 0.48 cfs @ 12.09 hrs, Volume= 0.041 af, Atten= 0%, Lag= 0.0 min

Primary = 0.48 cfs @ 12.09 hrs, Volume= 0.041 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 298.39' @ 12.09 hrs

Flood Elev= 302.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	298.00'	12.0" Round Culvert
			L= 12.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 298.00' / 297.70' S= 0.0250 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.47 cfs @ 12.09 hrs HW=298.39' (Free Discharge)

1=Culvert (Inlet Controls 0.47 cfs @ 1.67 fps)

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#### Summary for Pond 34P: CB-211

 Inflow Area =
 0.635 ac, 44.08% Impervious, Inflow Depth = 5.87" for 100-year event

 Inflow =
 4.11 cfs @ 12.09 hrs, Volume =
 0.310 af

 Outflow =
 4.11 cfs @ 12.09 hrs, Volume =
 0.310 af, Atten = 0%, Lag = 0.0 min

Primary = 4.11 cfs @ 12.09 hrs, Volume= 0.310 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 300.39' @ 12.09 hrs

Flood Elev= 302.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	298.00'	12.0" Round Culvert
	•		L= 12.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 298.00' / 297.70' S= 0.0250 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=4.01 cfs @ 12.09 hrs HW=300.31' (Free Discharge)
—1=Culvert (Inlet Controls 4.01 cfs @ 5.11 fps)

#### Summary for Pond 35P: DMH-210

[81] Warning: Exceeded Pond 36P by 0.72' @ 12.10 hrs

[79] Warning: Submerged Pond 37P Primary device # 1 INLET by 1.01'

Inflow Area = 0.440 ac, 37.03% Impervious, Inflow Depth = 5.99" for 100-year event

Inflow = 2.87 cfs @ 12.09 hrs, Volume= 0.219 af

Outflow = 2.87 cfs @ 12.09 hrs, Volume= 0.219 af, Atten= 0%, Lag= 0.0 min

Primary = 2.87 cfs @ 12.09 hrs, Volume= 0.219 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 317.02' @ 12.09 hrs

Flood Elev= 320.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	315.60'	12.0" Round Culvert
	•		L= 322.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 315.60' / 297.40' S= 0.0565 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=2.80 cfs @ 12.09 hrs HW=316.98' (Free Discharge) 1=Culvert (Inlet Controls 2.80 cfs @ 3.57 fps)

#### Summary for Pond 36P: CB-212

 Inflow Area =
 0.038 ac,100.00% Impervious, Inflow Depth = 7.28" for 100-year event

 Inflow =
 0.28 cfs @ 12.09 hrs, Volume=
 0.023 af

 Outflow =
 0.28 cfs @ 12.09 hrs, Volume=
 0.023 af, Atten= 0%, Lag= 0.0 min

Primary = 0.28 cfs @ 12.09 hrs, Volume= 0.023 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

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Peak Elev= 316.29' @ 12.09 hrs

Flood Elev= 320.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	316.00'	12.0" Round Culvert
	-		L= 13.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 316.00' / 315.70' S= 0.0231 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.27 cfs @ 12.09 hrs HW=316.29' (Free Discharge) 1=Culvert (Inlet Controls 0.27 cfs @ 1.44 fps)

## Summary for Pond 37P: CB-213

Inflow Area = 0.401 ac, 31.00% Impervious, Inflow Depth = 5.87" for 100-year event Inflow 2.60 cfs @ 12.09 hrs, Volume= 0.196 af 2.60 cfs @ 12.09 hrs, Volume= Outflow = 0.196 af, Atten= 0%, Lag= 0.0 min

2.60 cfs @ 12.09 hrs, Volume= Primary = 0.196 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 317.26' @ 12.09 hrs

Flood Elev= 320.00'

Device Routing Invert Outlet Devices Primary 316.00' 12.0" Round Culvert #1 L= 13.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 316.00' / 315.70' S= 0.0231 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=2.54 cfs @ 12.09 hrs HW=317.22' (Free Discharge) 1=Culvert (Inlet Controls 2.54 cfs @ 3.23 fps)

#### Summary for Pond 38P: DMH-301

[79] Warning: Submerged Pond 39P Primary device # 1 INLET by 0.49'

1.769 ac, 46.05% Impervious, Inflow Depth = 6.13" for 100-year event Inflow Area =

Inflow = 11.80 cfs @ 12.09 hrs. Volume= 0.904 af

Outflow = 11.80 cfs @ 12.09 hrs, Volume= 0.904 af, Atten= 0%, Lag= 0.0 min 11.80 cfs @ 12.09 hrs, Volume= 0.904 af Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 319.73' @ 12.09 hrs

Flood Elev= 320.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	315.90'	18.0" Round Culvert
			L= 71.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 315.90' / 312.00' S= 0.0549 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf

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Primary OutFlow Max=11.51 cfs @ 12.09 hrs HW=319.58' (Free Discharge) 1=Culvert (Inlet Controls 11.51 cfs @ 6.51 fps)

#### Summary for Pond 39P: DMH-302

[81] Warning: Exceeded Pond 40P by 0.20' @ 12.10 hrs [81] Warning: Exceeded Pond 41P by 1.84' @ 12.10 hrs

[79] Warning: Submerged Pond 42P Primary device # 1 OUTLET by 3.29

Inflow Area = 1.769 ac, 46.05% Impervious, Inflow Depth = 6.13" for 100-year event Inflow = 11.80 cfs @ 12.09 hrs, Volume= 0.904 af Outflow = 11.80 cfs @ 12.09 hrs, Volume= 0.904 af, Atten= 0%, Lag= 0.0 min

Primary = 11.80 cfs @ 12.09 hrs, Volume= 0.904 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs.

Peak Elev= 323.03' @ 12.09 hrs

Flood Flev= 324 70'

Device Routing Invert Outlet Devices #1 Primary 319.20' 18.0" Round Culvert

L= 154.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 319.20' / 316.00' S= 0.0208 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 1.77 sf

Primary OutFlow Max=11.51 cfs @ 12.09 hrs HW=322.88' (Free Discharge)

1=Culvert (Inlet Controls 11.51 cfs @ 6.51 fps)

#### Summary for Pond 40P: CB-301

0.684 ac, 45.40% Impervious, Inflow Depth = 6.10" for 100-year event Inflow Area = 4.55 cfs @ 12.09 hrs, Volume= Inflow = 0.348 af Outflow 4.55 cfs @ 12.09 hrs. Volume= 0.348 af. Atten= 0%. Lag= 0.0 min 4.55 cfs @ 12.09 hrs. Volume= 0.348 af Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 322.82' @ 12.09 hrs

Flood Elev= 324.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	320.00'	12.0" Round Culvert
	-		L= 12.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 320.00' / 319.70' S= 0.0250 '/' Cc= 0.900
			n= 0.012 Corrugated PP_smooth interior_Flow Area= 0.79 sf

Primary OutFlow Max=4.44 cfs @ 12.09 hrs HW=322.71' (Free Discharge)

1=Culvert (Inlet Controls 4.44 cfs @ 5.65 fps)

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## Summary for Pond 41P: CB-302

Inflow Area = 0.363 ac, 44.75% Impervious, Inflow Depth = 6.10" for 100-year event

Inflow 2.41 cfs @ 12.09 hrs, Volume= 0.184 af

Outflow = 2.41 cfs @ 12.09 hrs, Volume= 0.184 af, Atten= 0%, Lag= 0.0 min

2.41 cfs @ 12.09 hrs, Volume= Primary = 0.184 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 321.15' @ 12.09 hrs

Flood Elev= 324.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	320.00'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 320.00' / 319.70' S= 0.0250 '/' Cc= 0.900

n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.35 cfs @ 12.09 hrs HW=321.12' (Free Discharge)

1=Culvert (Inlet Controls 2.35 cfs @ 3.00 fps)

#### Summary for Pond 42P: DMH-303

[79] Warning: Submerged Pond 43P Primary device # 1 OUTLET by 2.98'

0.722 ac, 47.33% Impervious, Inflow Depth = 6.17" for 100-year event Inflow Area =

Inflow 4.84 cfs @ 12.09 hrs, Volume= 0.371 af

Outflow = 4.84 cfs @ 12.09 hrs, Volume= 0.371 af, Atten= 0%, Lag= 0.0 min

4.84 cfs @ 12.09 hrs, Volume= Primary = 0.371 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 331.02' @ 12.09 hrs

Flood Elev= 332.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	327.90'	12.0" Round Culvert
	-		L= 129.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 327.90' / 319.70' S= 0.0636 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=4.71 cfs @ 12.09 hrs HW=330.89' (Free Discharge) 1=Culvert (Inlet Controls 4.71 cfs @ 6.00 fps)

#### Summary for Pond 43P: DMH-304

[81] Warning: Exceeded Pond 44P by 1.29' @ 12.10 hrs

[81] Warning: Exceeded Pond 45P by 1.56' @ 12.10 hrs

Inflow Area = 0.722 ac, 47.33% Impervious, Inflow Depth = 6.17" for 100-year event 4.84 cfs @ 12.09 hrs. Volume= 0.371 af Inflow 0.371 af, Atten= 0%, Lag= 0.0 min

0.371 af Primary = 4.84 cfs @ 12.09 hrs, Volume=

Outflow = 4.84 cfs @ 12.09 hrs, Volume= 6083 - POST REV1

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Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 339.01' @ 12.09 hrs

Flood Elev= 339.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	335.90'	12.0" Round Culvert
			L= 129.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 335.90' / 328.00' S= 0.0612 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=4.71 cfs @ 12.09 hrs HW=338.89' (Free Discharge)

1=Culvert (Inlet Controls 4.71 cfs @ 6.00 fps)

#### Summary for Pond 44P: CB-303

Inflow Area = 0.392 ac, 53.86% Impervious, Inflow Depth = 6.33" for 100-year event

Inflow 2.67 cfs @ 12.09 hrs, Volume= 0.207 af

2.67 cfs @ 12.09 hrs, Volume= 0.207 af. Atten= 0%. Lag= 0.0 min Outflow =

Primary = 2.67 cfs @ 12.09 hrs. Volume= 0.207 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 337.70' @ 12.09 hrs

Flood Elev= 340.40'

Invert Outlet Devices Device Routing #1 Primary 336.40' 12.0" Round Culvert L= 17.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 336.40' / 336.00' S= 0.0235 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=2.60 cfs @ 12.09 hrs HW=337.66' (Free Discharge) 1=Culvert (Inlet Controls 2.60 cfs @ 3.31 fps)

#### Summary for Pond 45P: CB-304

0.164 af

0.330 ac, 39.56% Impervious, Inflow Depth = 5.98" for 100-year event Inflow Area =

Inflow 2.17 cfs @ 12.09 hrs. Volume= 0.164 af 2.17 cfs @ 12.09 hrs, Volume=

Outflow = 2.17 cfs @ 12.09 hrs, Volume= 0.164 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 337.42' @ 12.09 hrs

Flood Elev= 340.40'

Primary =

Device	Routing	Invert	Outlet Devices
#1	Primary	336.40'	12.0" Round Culvert
	-		L= 16.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 336.40' / 336.00' S= 0.0250 '/' Cc= 0.900
			n= 0.012 Corrugated PP smooth interior. Flow Δrea= 0.79 sf

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Primary OutFlow Max=2.11 cfs @ 12.09 hrs HW=337.40' (Free Discharge) 1=Culvert (Inlet Controls 2.11 cfs @ 2.69 fps)

#### Summary for Pond 46P: DMH-218

[81] Warning: Exceeded Pond 47P by 0.73' @ 12.10 hrs

[81] Warning: Exceeded Pond 48P by 1.90' @ 12.10 hrs

Inflow Area = 0.695 ac, 54.04% Impervious, Inflow Depth = 6.33" for 100-year event Inflow 4.73 cfs @ 12.09 hrs, Volume= 0.367 af Outflow = 4.73 cfs @ 12.09 hrs, Volume= 0.367 af, Atten= 0%, Lag= 0.0 min

Primary = 4.73 cfs @ 12.09 hrs, Volume= 0.367 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 335.11' @ 12.09 hrs Flood Elev= 336.20'

Device Routing Invert Outlet Devices Primary 332.10' 12.0" Round Culvert L= 81.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 332.10' / 328.20' S= 0.0481 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=4.61 cfs @ 12.09 hrs HW=334.99' (Free Discharge) 1=Culvert (Inlet Controls 4.61 cfs @ 5.87 fps)

## Summary for Pond 47P: CB-220

Inflow Area = 0.512 ac. 54.40% Impervious. Inflow Depth = 6.33" for 100-year event

Inflow 3.48 cfs @ 12.09 hrs, Volume= 0.270 af

Outflow = 3.48 cfs @ 12.09 hrs, Volume= 0.270 af, Atten= 0%, Lag= 0.0 min

3.48 cfs @ 12.09 hrs, Volume= 0.270 af Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 334.36' @ 12.09 hrs

Flood Elev= 336.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	332.50'	12.0" Round Culvert
			L= 15.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 332.50' / 332.20' S= 0.0200 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.40 cfs @ 12.09 hrs HW=334.29' (Free Discharge) 1=Culvert (Inlet Controls 3.40 cfs @ 4.32 fps)

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## Summary for Pond 48P: CB-221

0.183 ac, 53.05% Impervious, Inflow Depth = 6.33" for 100-year event Inflow Area = Inflow = 1.25 cfs @ 12.09 hrs, Volume= 0.097 af Outflow = 1.25 cfs @ 12.09 hrs, Volume= 0.097 af, Atten= 0%, Lag= 0.0 min

1.25 cfs @ 12.09 hrs, Volume= Primary = 0.097 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 333.18' @ 12.09 hrs

Flood Elev= 336.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	332.50'	12.0" Round Culvert
	-		L= 9.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 332.50' / 332.20' S= 0.0333 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.22 cfs @ 12.09 hrs HW=333.17' (Free Discharge) 1=Culvert (Inlet Controls 1.22 cfs @ 2.19 fps)

#### Summary for Pond 49P: DMH-217

[79] Warning: Submerged Pond 46P Primary device # 1 OUTLET by 2.87

0.695 ac, 54.04% Impervious, Inflow Depth = 6.33" for 100-year event Inflow Area =

Inflow = 4.73 cfs @ 12.09 hrs, Volume= 0.367 af

Outflow = 4.73 cfs @ 12.09 hrs, Volume= 0.367 af, Atten= 0%, Lag= 0.0 min

Primary = 4.73 cfs @ 12.09 hrs, Volume= 0.367 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 331.11' @ 12.09 hrs

Flood Elev= 332.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	328.10'	12.0" Round Culvert
	-		L= 147.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 328.10' / 321.30' S= 0.0463 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=4.61 cfs @ 12.09 hrs HW=330.99' (Free Discharge) 1=Culvert (Inlet Controls 4.61 cfs @ 5.87 fps)

#### Summary for Pond 50P: DMH-216

[79] Warning: Submerged Pond 49P Primary device # 1 OUTLET by 2.87

0.695 ac, 54.04% Impervious, Inflow Depth = 6.33" for 100-year event Inflow Area = Inflow = 4.73 cfs @ 12.09 hrs, Volume= 0.367 af Outflow = 4.73 cfs @ 12.09 hrs, Volume= 0.367 af, Atten= 0%, Lag= 0.0 min

Primary = 4.73 cfs @ 12.09 hrs, Volume= 0.367 af

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Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 324.21' @ 12.09 hrs Flood Elev= 325.30'

Primary OutFlow Max=4.61 cfs @ 12.09 hrs HW=324.09' (Free Discharge) 1=Culvert (Inlet Controls 4.61 cfs @ 5.87 fps)

#### Summary for Pond 52P: DMH-215

[79] Warning: Submerged Pond 50P Primary device # 1 OUTLET by 1.91'

[81] Warning: Exceeded Pond 53P by 1.21' @ 12.10 hrs

[81] Warning: Exceeded Pond 54P by 1.21' @ 12.10 hrs

Inflow Area = 0.834 ac, 61.69% Impervious, Inflow Depth = 6.49" for 100-year event

Inflow = 5.73 cfs @ 12.09 hrs, Volume= 0.451 af

Outflow = 5.73 cfs @ 12.09 hrs, Volume= 0.451 af, Atten= 0%, Lag= 0.0 min

Primary = 5.73 cfs @ 12.09 hrs, Volume= 0.451 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 320.03' @ 12.09 hrs

Flood Elev= 322.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	317.90'	15.0" Round Culvert
	-		L= 247.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 317.90' / 310.00' S= 0.0320 '/' Cc= 0.900
			n= 0.012 Corrugated PP_smooth interior_Flow Area= 1.23 sf

Primary OutFlow Max=5.59 cfs @ 12.09 hrs HW=319.96' (Free Discharge) 1=Culvert (Inlet Controls 5.59 cfs @ 4.55 fps)

#### Summary for Pond 53P: CB-219

Inflow Area = 0.069 ac,100.00% Impervious, Inflow Depth = 7.28" for 100-year event

Inflow = 0.50 cfs @ 12.09 hrs, Volume= 0.042 af

Outflow = 0.50 cfs @ 12.09 hrs, Volume= 0.042 af, Atten= 0%, Lag= 0.0 min

Primary = 0.50 cfs @ 12.09 hrs, Volume= 0.042 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 318.80' @ 12.09 hrs

Flood Elev= 322.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	318.40'	12.0" Round Culvert
	-		L= 21.0' CPP, projecting, no headwall, Ke= 0.900

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Inlet / Outlet Invert= 318.40' / 318.10' S= 0.0143'/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.48 cfs @ 12.09 hrs HW=318.79' (Free Discharge)
1=Culvert (Inlet Controls 0.48 cfs @ 1.69 fps)

#### Summary for Pond 54P: CB-218

Inflow Area = 0.070 ac,100.00% Impervious, Inflow Depth = 7.28" for 100-year event

Inflow = 0.50 cfs @ 12.09 hrs, Volume= 0.042 af

Outflow = 0.50 cfs @ 12.09 hrs, Volume= 0.042 af, Atten= 0%, Lag= 0.0 min

Primary = 0.50 cfs @ 12.09 hrs, Volume= 0.042 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 318.80' @ 12.09 hrs

Flood Elev= 322.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	318.40'	12.0" Round Culvert
			L= 19.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 318.40' / 318.10' S= 0.0158 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.49 cfs @ 12.09 hrs HW=318.80' (Free Discharge)
1=Culvert (Inlet Controls 0.49 cfs @ 1.69 fps)

#### Summary for Pond 55P: DMH-214

[79] Warning: Submerged Pond 52P Primary device # 1 OUTLET by 2.80'

[81] Warning: Exceeded Pond 56P by 0.23' @ 12.10 hrs

[79] Warning: Submerged Pond 57P Primary device # 1 INLET by 0.60'

Inflow Area = 1.495 ac, 57.04% Impervious, Inflow Depth = 6.37" for 100-year event

Inflow = 10.17 cfs @ 12.09 hrs, Volume= 0.793 af

Outflow = 10.17 cfs @ 12.09 hrs. Volume= 0.793 af. Atten= 0%. Lag= 0.0 min

Primary = 10.17 cfs @ 12.09 hrs, Volume= 0.793 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 312.83' @ 12.09 hrs

Flood Elev= 315.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	309.80'	18.0" Round Culvert L= 95.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 309.80' / 305.60' S= 0.0442 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=9.91 cfs @ 12.09 hrs HW=312.73' (Free Discharge)

Type III 24-hr 100-year Rainfall=7.52"

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## Summary for Pond 56P: CB-217

Inflow Area = 0.062 ac,100.00% Impervious, Inflow Depth = 7.28" for 100-year event

Inflow 0.44 cfs @ 12.09 hrs, Volume= 0.037 af

Outflow = 0.44 cfs @ 12.09 hrs, Volume= 0.037 af, Atten= 0%, Lag= 0.0 min

0.44 cfs @ 12.09 hrs, Volume= Primary = 0.037 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 312.58' @ 12.09 hrs

Flood Elev= 316.20'

Device Routing Invert Outlet Devices 12.0" Round Culvert Primary 312.20'

L= 20.0' CPP, projecting, no headwall, Ke= 0.900

Inlet / Outlet Invert= 312.20' / 311.90' S= 0.0150 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.43 cfs @ 12.09 hrs HW=312.57' (Free Discharge)

1=Culvert (Inlet Controls 0.43 cfs @ 1.63 fps)

#### Summary for Pond 57P: CB-216

Inflow Area = 0.600 ac, 46.16% Impervious, Inflow Depth = 6.10" for 100-year event 0.305 af

3.99 cfs @ 12.09 hrs, Volume= Inflow 3.99 cfs @ 12.09 hrs, Volume= Outflow

0.305 af. Atten= 0%. Lag= 0.0 min

12.0" Round Culvert

Primary = 3.99 cfs @ 12.09 hrs, Volume= 0.305 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 314.48' @ 12.09 hrs

Flood Elev= 316.20'

Primary

Device Routing Invert Outlet Devices

312.20'

L= 11.0' CPP, projecting, no headwall, Ke= 0.900

Inlet / Outlet Invert= 312.20' / 311.90' S= 0.0273 '/' Cc= 0.900

n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=3.89 cfs @ 12.09 hrs HW=314.40' (Free Discharge)

1=Culvert (Inlet Controls 3.89 cfs @ 4.95 fps)

#### Summary for Pond 58P: DMH-213

[79] Warning: Submerged Pond 55P Primary device # 1 OUTLET by 2.90'

Inflow Area = 1.495 ac, 57.04% Impervious, Inflow Depth = 6.37" for 100-year event

Inflow 10.17 cfs @ 12.09 hrs, Volume= 0.793 af

0.793 af. Atten= 0%. Lag= 0.0 min 10.17 cfs @ 12.09 hrs. Volume= Outflow =

Primary = 10.17 cfs @ 12.09 hrs. Volume= 0.793 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

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Type III 24-hr 100-year Rainfall=7.52"

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Peak Elev= 308.53' @ 12.09 hrs

Flood Elev= 309.60'

Device Routing Invert Outlet Devices #1 Primary 305.50' 18.0" Round Culvert L= 226.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 305.50' / 290.20' S= 0.0677 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 1.77 sf

Primary OutFlow Max=9.91 cfs @ 12.09 hrs HW=308.43' (Free Discharge)

1=Culvert (Inlet Controls 9.91 cfs @ 5.61 fps)

#### Summary for Pond 59P: DMH-212

[79] Warning: Submerged Pond 58P Primary device # 1 OUTLET by 3.06'

[79] Warning: Submerged Pond 60P Primary device # 1 INLET by 2.76'

[81] Warning: Exceeded Pond 61P by 0.69' @ 12.10 hrs

2.861 ac, 50.91% Impervious, Inflow Depth = 6.25" for 100-year event Inflow Area =

Inflow = 19.27 cfs @ 12.09 hrs, Volume= 1.491 af

Outflow 19.27 cfs @ 12.09 hrs. Volume= 1.491 af. Atten= 0%. Lag= 0.0 min

19.27 cfs @ 12.09 hrs, Volume= Primary = 1.491 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 293.30' @ 12.09 hrs

Flood Elev= 294.20'

Device Routing Invert Outlet Devices

Primary 289.70' 24.0" Round Culvert

L= 91.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 289.70' / 284.00' S= 0.0626 '/' Cc= 0.900

n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=18.79 cfs @ 12.09 hrs HW=293.17' (Free Discharge)

1=Culvert (Inlet Controls 18.79 cfs @ 5.98 fps)

#### Summary for Pond 60P: CB-214

Inflow Area = 0.813 ac, 37.89% Impervious, Inflow Depth = 5.98" for 100-year event 5.34 cfs @ 12.09 hrs, Volume= 0.405 af Inflow

Outflow = 5.34 cfs @ 12.09 hrs, Volume=

0.405 af, Atten= 0%, Lag= 0.0 min

Primary = 5.34 cfs @ 12.09 hrs, Volume= 0.405 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 294.18' @ 12.09 hrs

Flood Elev= 294.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	290.50'	12.0" Round Culver

L= 10.0' CPP, projecting, no headwall, Ke= 0.900

Inlet / Outlet Invert= 290.50' / 290.20' S= 0.0300 '/' Cc= 0.900

Type III 24-hr 100-year Rainfall=7.52"

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n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=5.20 cfs @ 12.09 hrs HW=294.04' (Free Discharge) 1=Culvert (Inlet Controls 5.20 cfs @ 6.63 fps)

#### Summary for Pond 61P: CB-215

Inflow Area = 0.554 ac, 53.48% Impervious, Inflow Depth = 6.33" for 100-year event Inflow 3.77 cfs @ 12.09 hrs, Volume= 0.292 af 0.292 af, Atten= 0%, Lag= 0.0 min Outflow = 3.77 cfs @ 12.09 hrs, Volume= 0.292 af

Primary = 3.77 cfs @ 12.09 hrs, Volume=

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 292.59' @ 12.09 hrs

Flood Flev= 294 50'

Device	Routing	Invert	Outlet Devices
#1	Primary	290.50'	12.0" Round Culvert
			L= 19.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 290.50' / 290.20' S= 0.0158 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=3.68 cfs @ 12.09 hrs HW=292.52' (Free Discharge) 1=Culvert (Inlet Controls 3.68 cfs @ 4.68 fps)

#### Summary for Pond 62P: DMH-211

[79] Warning: Submerged Pond 59P Primary device # 1 OUTLET by 3.46'

Inflow Area = 2.861 ac. 50.91% Impervious. Inflow Depth = 6.25" for 100-year event

Inflow = 19.27 cfs @ 12.09 hrs, Volume= 1.491 af

Outflow = 19.27 cfs @ 12.09 hrs, Volume= 1.491 af, Atten= 0%, Lag= 0.0 min

19.27 cfs @ 12.09 hrs. Volume= 1.491 af Primary =

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 287.50' @ 12.09 hrs

Flood Elev= 288.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	283.90'	24.0" Round Culvert
			L= 144.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 283.90' / 277.00' S= 0.0479 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 3.14 sf

Primary OutFlow Max=18.79 cfs @ 12.09 hrs HW=287.37' (Free Discharge) 1=Culvert (Inlet Controls 18.79 cfs @ 5.98 fps)

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Type III 24-hr 100-year Rainfall=7.52"

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#### **Summary for Pond 63P: FIELD INLET-202**

Inflow Area = 2.746 ac, 10.00% Impervious, Inflow Depth = 5.29" for 100-year event Inflow = 14.73 cfs @ 12.13 hrs, Volume= 1.210 af 1.210 af, Atten= 0%, Lag= 0.0 min Outflow = 14.73 cfs @ 12.13 hrs, Volume=

14.73 cfs @ 12.13 hrs, Volume= Primary = 1.210 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 303.32' @ 12.13 hrs

Flood Elev= 304.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	300.80'	24.0" Round Culvert
	-		L= 137.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 300.80' / 297.70' S= 0.0226 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=14.42 cfs @ 12.13 hrs HW=303.26' (Free Discharge) 1=Culvert (Inlet Controls 14.42 cfs @ 4.59 fps)

#### Summary for Pond 66P: CB-222

Inflow Area = 1.065 ac, 25.38% Impervious, Inflow Depth = 3.84" for 100-year event Inflow = 4.31 cfs @ 12.12 hrs, Volume= 0.340 af Outflow = 4.31 cfs @ 12.12 hrs, Volume= 0.340 af, Atten= 0%, Lag= 0.0 min Primary = 4.31 cfs @ 12.12 hrs, Volume= 0.340 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 284.97' @ 12.12 hrs

Flood Elev= 286.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	282.40'	12.0" Round Culvert
	-		L= 29.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 282.40' / 281.80' S= 0.0207 '/' Cc= 0.900
			n= 0.012 Corrugated PP smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=4.19 cfs @ 12.12 hrs HW=284.87' (Free Discharge) 1=Culvert (Inlet Controls 4.19 cfs @ 5.33 fps)

#### Summary for Pond 71P: FIELD INLET-203

Inflow Area = 3.312 ac. 1.36% Impervious. Inflow Depth = 3.19" for 100-year event 10.65 cfs @ 12.14 hrs, Volume= Inflow = 0.880 af

Outflow = 10.65 cfs @ 12.14 hrs, Volume= 0.880 af, Atten= 0%, Lag= 0.0 min

Primary = 10.65 cfs @ 12.14 hrs, Volume= 0.880 af

Routing by Stor-Ind method. Time Span= 0.00-72.00 hrs. dt= 0.05 hrs.

Peak Elev= 282.06' @ 12.14 hrs

Flood Elev= 282.80'

#### Type III 24-hr 100-year Rainfall=7.52"

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Device	Routing	Invert	Outlet Devices
#1	Primary	278.80'	18.0" Round Culvert L= 28.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 278.80' / 276.50' S= 0.0821'/ Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=10.55 cfs @ 12.14 hrs HW=282.01' (Free Discharge)

1=Culvert (Inlet Controls 10.55 cfs @ 5.97 fps)

#### Summary for Pond 72P: FIELD INLET-204

Inflow Area = 1.632 ac, 1.02% Impervious, Inflow Depth = 1.96" for 100-year event 3.32 cfs @ 12.10 hrs, Volume= 3.32 cfs @ 12.10 hrs, Volume= 0.267 af Inflow Outflow = 0.267 af, Atten= 0%, Lag= 0.0 min 3.32 cfs @ 12.10 hrs, Volume= Primary = 0.267 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Peak Elev= 279.79' @ 12.10 hrs

Flood Elev= 282.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	278.80'	18.0" Round Culvert L= 50.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 278.80' / 276.50' S= 0.0460 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior. Flow Area= 1.77 sf

Primary OutFlow Max=3.28 cfs @ 12.10 hrs HW=279.79' (Free Discharge) 1=Culvert (Inlet Controls 3.28 cfs @ 2.67 fps)

## Summary for Pond 73P: DMH-219

[79] Warning: Submerged Pond 71P Primary device # 1 INLET by 2.00'

[81] Warning: Exceeded Pond 72P by 1.09' @ 12.15 hrs

Inflow Area = 4.944 ac, 1.25% Impervious, Inflow Depth = 2.78" for 100-year event 13.65 cfs @ 12.13 hrs, Volume= Inflow = . 1.147 af 13.65 cfs @ 12.13 hrs, Volume= Outflow = 1.147 af, Atten= 0%, Lag= 0.0 min Primary = 13.65 cfs @ 12.13 hrs, Volume= 1.147 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 280.87' @ 12.13 hrs

Flood Elev= 284.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	276.00'	18.0" Round Culvert
			L= 86.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 276.00' / 272.00' S= 0.0465 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 1.77 sf

Primary OutFlow Max=13.40 cfs @ 12.13 hrs HW=280.73' (Free Discharge)

1=Culvert (Inlet Controls 13.40 cfs @ 7.58 fps)

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Type III 24-hr 100-year Rainfall=7.52"

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#### Summary for Link DP-A: DESIGN POINT-A

Inflow Area = 46.063 ac, 13.52% Impervious, Inflow Depth = 2.54" for 100-year event Inflow = 63.37 cfs @ 12.17 hrs, Volume= 9.753 af 63.37 cfs @ 12.17 hrs, Volume= Primary = 9.753 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

#### Summary for Link DP-B: DESIGN POINT-B

Inflow Area = 20.745 ac, 1.41% Impervious, Inflow Depth = 1.97" for 100-year event 3.398 af Inflow = 38.01 cfs @ 12.12 hrs, Volume= 3.398 af. Atten= 0%. Lag= 0.0 min Primary = 38.01 cfs @ 12.12 hrs, Volume=

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

## ${\bf Appendix} \; {\bf F-Stormwater} \; {\bf Calculations}$

## Infiltration Basin #1

## Stormwater Recharge Calculations

## **CALCULATIONS**

## Recharge Volume, Rv:

 $R_{v} = A_{C}xF$ 

Hydrologic Soil Group	Impervious Area (Ac) <sup>1</sup>	Target Depth (F)	Recharge Volume (Rv) Ac-feet
A	0.717	0.6	0.036
Total	0.717		0.036

Total Recharge Volume Required = 0.036 Ac-ft
Total Recharge Volume Required (Rv) = 1,562 C.ft
\*Recharge Vol. Provided (from Infil. Basin 1) = 27,464.0 C.ft

## Required Sediment Forebay vol, Fv:

 $F_v = A_C(cu.ft)x0.1inch$  of impervious area

<sup>1</sup> Imp. area captured by ponds, Ap = 0.717 Ac

Required Sediment Forebay vol, Fv= 260 C.ft

Sediment Forebay Volume Provided = Water Quality Unit C.ft

Drawdown Calculations

## **CALCULATIONS**

## **Proposed Infiltration Area Calculations:**

$$Drawdown = \frac{R_V}{(Rawls\ Rate)(Bottom\ Area)}$$

## **Drawdown Calculations:**

Soil Texture:

2 Loamy Sand

> Drawdown is less than 72 Hours as Required

# NOTES:

## Input Values

## **REFERENCES**

Table 2.3.2: Recharge Target Depth by Hydrologic Soil Group

NRCS Hydrologic Soil Group	Approx. Soil Texture	Target Depth Factor (F)
А	sand	0.6 inch
В	loam	0.35 inch
С	silty loam	0.25 inch
D	clay	0.1 inch

## **REFERENCES**

Table 2.3.3: 1982 Rawls Rates

rable ∠.3	.3: 1982 Rawi	s Rates
	NRCS	
	Hydrologic	
Texture Class	Soil Group	Infiltration Rate
1 Sand	Α	8.27 in/hr
2 Loamy Sand	Α	2.41 in/hr
3 Sandy Loam	В	1.02 in/hr
4 Loam	В	0.52 in/hr
5 Silt Loam	С	0.27 in/hr
6 Sandy Clay Loam	С	0.17 in/hr
7 Clay Loam	D	0.09 in/hr
8 Silty Clay Loam	D	0.06 in/hr
9 Sandy Clay	D	0.05 in/hr
10 Silty Clay	D	0.04 in/hr
11 Clay	D	0.02 in/hr

<sup>&</sup>lt;sup>1</sup> = Refer to Proposed Conditions HydroCAD modeling report

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## Stage-Area-Storage for Pond 1P: INFIL. BASIN #1 (continued)

Elevation	Surface	Storage	
(feet)	(sq-ft)	(cubic-feet)	
254.54	6,430	24,397	
254.57	6,460	24,591	
254.60	6,491	24,785	
254.63	6,522	24,980	
254.66	6,552	25,176	
254.69	6,583	25,373	
254.72	6,614	25,571	
254.75	6,645	25,770	
254.78	6,676	25,970	
254.81	6,707	26,171	
254.84	6,738	26,372	
254.87	6,769	26,575	LOWEST OUTLET
254.90	6,800	26,778	
254.93	6,832	26,983	ELEVATION = 255.0
254.96	6,863	27,188	27,464 CF
254.99	6,895		
255.02	6,926	27,395 <u>/</u> 27,602	
	6,958		
255.05 255.08		27,810	
	6,989 7,031	28,019	
255.11	7,021	28,230	
255.14	7,053	28,441	
255.17	7,085	28,653	
255.20	7,117	28,866	
255.23	7,149	29,080	
255.26	7,181	29,295	
255.29	7,213	29,511	
255.32	7,245	29,727	
255.35	7,278	29,945	
255.38	7,310	30,164	
255.41	7,343	30,384	
255.44	7,375	30,605	
255.47	7,408	30,826	
255.50	7,441	31,049	
255.53	7,473	31,273	
255.56	7,506	31,498	
255.59	7,539	31,723	
255.62	7,572	31,950	
255.65	7,605	32,178	
255.68	7,638	32,406	
255.71	7,671	32,636	
255.74	7,705	32,866	
255.77	7,738	33,098	
255.80	7,771	33,331	
255.83	7,805	33,564	
255.86	7,838	33,799	
255.89	7,872	34,035	
255.92	7,906	34,271	
255.95	7,940	34,509	
255.98	7,973	34,748	

## Infiltration Basin #1-A

## Stormwater Recharge Calculations

## **CALCULATIONS**

## Recharge Volume, Rv:

 $R_v = A_C x F$ 

Hydrologic Soil Group	Impervious Area (Ac) <sup>1</sup>	Target Depth (F)	Recharge Volume (Rv) Ac-feet
Α	0.165	0.6	0.008
D	0.107	0.1	0.001
Total	0.272		0.009

Total Recharge Volume Required = 0.009 Ac-ft Total Recharge Volume Required (Rv) = 398 C.ft \*Recharge Vol. Provided (from Infil. Basin 1) = 8,019.0 **C**.ft

## Required Sediment Forebay vol, Fv:

 $F_v = A_C(cu.ft)x0.1inch$  of impervious area 0.272 Ac <sup>1</sup> Imp. area captured by ponds, Ap = Required Sediment Forebay vol, Fv= 99 C.ft Sediment Forebay Volume Provided = 1,395 C.ft

Drawdown Calculations

## **CALCULATIONS**

## **Proposed Infiltration Area Calculations:**

$$Drawdown = \frac{R_V}{(Rawls\ Rate)(Bottom\ Area)}$$

## **Drawdown Calculations:**

Soil Texture:

2 Loamy Sand

<sup>2</sup> Bottom Surface Area (A): 2,451 SF 2.41 in/hr Rawls Rate: 398 C.ft Total Recharge Volume Required = Drawdown: 0.81 hr Drawdown is less than 72 **Hours as Required** 

NOTES:

Input Values

## **REFERENCES**

Table 2.3.2: Recharge Target Depth by Hydrologic Soil Group

NRCS Hydrologic Soil Group	Approx. Soil Texture	Target Depth Factor (F)
Α	sand	0.6 inch
В	loam	0.35 inch
С	silty loam	0.25 inch
D	clay	0.1 inch

## **REFERENCES**

Table 2.2.2.1002 Paula Patas

Table 2.3.3: 1982 Rawls Rates				
	NRCS			
	Hydrologic			
Texture Class	Soil Group	Infiltration Rate		
1 Sand	Α	8.27 in/hr		
2 Loamy Sand	Α	2.41 in/hr		
3 Sandy Loam	В	1.02 in/hr		
4 Loam	В	0.52 in/hr		
5 Silt Loam	С	0.27 in/hr		
6 Sandy Clay Loam	С	0.17 in/hr		
7 Clay Loam	D	0.09 in/hr		
8 Silty Clay Loam	D	0.06 in/hr		
9 Sandy Clay	D	0.05 in/hr		
10 Silty Clay	D	0.04 in/hr		
11 Clay	D	0.02 in/hr		

<sup>&</sup>lt;sup>1</sup> = Refer to Proposed Conditions HydroCAD modeling report

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## Stage-Area-Storage for Pond 2P: INFILTRATION BASIN #1-A (continued)

	· ·	J			`
Elevation	Surface	Storage	Elevation	Surface	Storage
(feet)	(sq-ft)	(cubic-feet)	(feet)	(sq-ft)	(cubic-feet)
255.12	3,761	6,540	255.65	4,128	8,630
255.13	3,768	6,578	255.66	4,135	8,671
255.14	3,774	6,615	255.67	4,142	8,713
255.15	3,781	6,653	255.68	4,149	8,754
255.16	3,788	6,691	255.69	4,156	8,796
255.17	3,795	6,729	255.70	4,164	8,837
255.18	3,802	6,767	255.71	4,171	8,879
255.19	3,808	6,805	255.72	4,178	8,921
255.20	3,815	6,843	255.73	4,185	8,962
255.21	3,822	6,881	255.74	4,192	9,004
255.22	3,829	6,920	255.75	4,199	9,046
255.23	3,836	6,958	255.76	4,206	9,088
255.24	3,842	6,996	255.77	4,214	9,130
255.25	3,849	7,035	255.78	4,221	9,173
255.26	3,856	7,073	255.79	4,228	9,215
255.27	3,863	7,112	255.80	4,235	9,257
255.28	3,870	7,112	255.81	4,242	9,299
255.29	3,877	7,189	255.82	4,250	9,342
255.30	3,884	7,109	255.83	4,257	9,342
255.31	3,890	7,267	255.84	4,264	9,304
255.32	3,897	7,306	255.85	4,271	9,470
				4,278	
255.33	3,904 3,911	7,345	255.86		9,513
255.34		7,384	255.87	4,286 4,293	9,555
255.35	3,918	7,423	255.88	4,293	9,598
255.36	3,925 3,932	7,462	255.89		9,641
255.37		7,502	255.90	4,307	9,684
255.38	3,939	7,541	255.91	4,315	9,727
255.39 255.40	3,946 3,953	7,580 7,620	255.92	4,322 4,329	9,771
			255.93		9,814
255.41	3,960	7,659	255.94	4,336	9,857
255.42	3,967	7,699	255.95	4,344	9,900
255.43	3,974	7,739	255.96	4,351	9,944
255.44	3,980	7,779	255.97	4,358	9,988
255.45	3,987	7,818	255.98	4,365	10,031
255.46	3,994	7,858	255.99	4,373	10,075
255.47	4,001	7,898	256.00	4,380	10,119
255.48	4,008	7,938			
255.49	4,015	7,978			
255.50	4,022	8,019			
255.51	4,029	8,059	LOV	VEST OUTLE	T
255.52	4,036	8,099	FIF	VATION = 25	5 5
255.53	4,043	8,140	_		0.0
255.54	4,050	8,180	0,01	9 CF	
255.55	4,057	8,221			
255.56	4,064	8,261			
255.57	4,072	8,302			
255.58	4,079	8,343			
255.59	4,086	8,383			
255.60	4,093	8,424			
255.61	4,100	8,465			
255.62	4,107	8,506			
255.63	4,114	8,547			

8,589

## Infiltration Area #2

## Stormwater Recharge Calculations

## **CALCULATIONS**

## Recharge Volume, Rv:

 $R_{v} = A_{C}xF$ 

Hydrologic Soil Group	Impervious Area (Ac) <sup>1</sup>	Target Depth (F)	Recharge Volume (Rv) Ac-feet
Α	0.961	0.6	0.048
D	3.098	0.1	0.026
Total	4.059		0.074

Total Recharge Volume Required = 0.074 Ac-ft
Total Recharge Volume Required (Rv) = 3,218 C.ft
\*Recharge Vol. Provided (from Infil. Area 2) = 3,263.0 C.ft

## Required Sediment Forebay vol, Fv:

 $F_v = A_C(cu.ft)x0.1inch$  of impervious area

1 Imp. area captured by ponds, Ap = 4.059 Ac
Required Sediment Forebay vol, Fv= 1,473 C.ft

Sediment Forebay Volume Provided = 1,493.0 C.ft

Drawdown Calculations

## **CALCULATIONS**

## **Proposed Infiltration Area Calculations:**

$$Drawdown = \frac{R_V}{(Rawls\ Rate)(Bottom\ Area)}$$

## **Drawdown Calculations:**

Soil Texture:

2 Loamy Sand

Prawdown is less than 7:

Bottom Surface Area (A):

Rawls Rate:

Rawls Rate:

2.41 in/hr

3,149 SF

2.41 in/hr

3,218 C.ft

Drawdown is less than 7:

Drawdown is less than 72 Hours as Required

**REFERENCES** 

**REFERENCES** 

NRCS Hydrologic

Soil Group

A B

С

D

Soil Group

Table 2.3.2: Recharge Target Depth by Hydrologic

Approx. Soil

Texture

sand

loam

silty loam

clay

Target Depth

Factor (F)

0.6 inch

0.35 inch

0.25 inch

0.1 inch

Table 2.3.3: 1982 Rawls Rates

Table 2.3.3: 1982 Rawls Rates				
	NRCS			
	Hydrologic			
Texture Class	Soil Group	Infiltration Rate		
1 Sand	Α	8.27 in/hr		
2 Loamy Sand	Α	2.41 in/hr		
3 Sandy Loam	В	1.02 in/hr		
4 Loam	В	0.52 in/hr		
5 Silt Loam	С	0.27 in/hr		
6 Sandy Clay Loam	С	0.17 in/hr		
7 Clay Loam	D	0.09 in/hr		
8 Silty Clay Loam	D	0.06 in/hr		
9 Sandy Clay	D	0.05 in/hr		
10 Silty Clay	D	0.04 in/hr		
11 Clay	D	0.02 in/hr		

## NOTES:

Input Values

<sup>&</sup>lt;sup>1</sup> = Refer to Proposed Conditions HydroCAD modeling report

## Stage-Area-Storage for Pond 3P: INFIL. BASIN #2

Elevation	Surface	Storage	Elevation	Surface	Storage	
(feet)	(sq-ft)	(cubic-feet)	(feet)	(sq-ft)	(cubic-feet)	
263.00	3,149	0	264.59	4,281	5,889	
263.03	3,169	95	264.62	4,304	6,018	
263.06	3,189	190	264.65	4,326	6,147	
263.09	3,209	286	264.68	4,349	6,277	
263.12	3,229	383	264.71	4,372	6,408	
263.15	3,249	480	264.74	4,395	6,539	
263.18	3,269	578	264.77	4,418	6,672	
263.21	3,290	676	264.80	4,441	6,805	
263.24	3,310	775	264.83	4,464	6,938	
263.27	3,331	875	264.86	4,487	7,072	
263.30	3,351	975	264.89	4,511	7,207	
263.33	3,372	1,076	264.92	4,534	7,343	
263.36	3,392	1,177	264.95	4,557	7,479	
263.39	3,413	1,279	264.98	4,581	7,616	
263.42	3,434	1,382	265.01	4,604	7,754	
263.45	3,454	1,485	265.04	4,628	7,893	
263.48	3,475	1,589	265.07	4,651	8,032	
263.51	3,496	1,694	265.10	4,675	8,172	
263.54	3,517	1,799	265.13	4,698	8,312	
263.57	3,538	1,905	265.16	4,722	8,454	
263.60	3,559	2,011	265.19	4,746	8,596	
263.63	3,581	2,118	265.22	4,770	8,738	
263.66	3,602	2,226	265.25	4,794	8,882	
263.69	3,623	2,334	265.28	4,818	9,026	
263.72	3,645	2,443	265.31	4,842	9,171	
263.75	3,666	2,553	265.34	4,866	9,317	
263.78	3,687	2,663	265.37	4,890	9,463	
263.81	3,709	2,774	265.40	4,915	9,610	LOWEST OUTLET
263.84	3,731	2,886	265.43	4,939	9,758	ELEVATION = 263.94
263.87	3,752	2,998	265.46	4,963	9,906	_
263.90 263.93	3,774	3,111	265.49 265.52	4,988 5,012	10,056	3,263 CF
263.96	3,796 3,818	3,225 3,339	265.55	5,012 5,037	10,206 10,356	
263.99	3,840	3,454	265.58	5,061	10,508	
264.02	3,861	3,569	265.61	5,086	10,660	
264.05	3,883	3,685	265.64	5,111	10,813	
264.08	3,904	3,802	265.67	5,135	10,967	
264.11	3,926	3,920	265.70	5,160	11,121	
264.14	3,948	4,038	265.73	5,185	11,276	
264.17	3,970	4,157	265.76	5,210	11,432	
264.20	3,992	4,276	265.79	5,235	11,589	
264.23	4,013	4,396	265.82	5,260	11,746	
264.26	4,035	4,517	265.85	5,285	11,904	
264.29	4,057	4,638	265.88	5,311	12,063	
264.32	4,079	4,760	265.91	5,336	12,223	
264.35	4,102	4,883	265.94	5,361	12,384	
264.38	4,124	5,006	265.97	5,387	12,545	
264.41	4,146	5,130	266.00	5,412	12,707	
264.44	4,168	5,255	266.03	5,437	12,870	
264.47	4,191	5,380	266.06	5,462	13,033	
264.50	4,213	5,507	266.09	5,487	13,197	
264.53	4,236	5,633	266.12	5,512	13,362	
264.56	4,258	5,761	266.15	5,537	13,528	

## Infiltration Area #3

## Stormwater Recharge Calculations

## **CALCULATIONS**

## Recharge Volume, Rv:

 $R_{v} = A_{C}xF$ 

Hydrologic Soil Group	Impervious Area (Ac) <sup>1</sup>	Target Depth (F)	Recharge Volume (Rv) Ac-feet
D	0.946	0.1	0.008
Total	0.946		0.008

Total Recharge Volume Required = 0.008 Ac-ft
Total Recharge Volume Required (Rv) = 343 C.ft
\*Recharge Vol. Provided (from Infil. Area 3) = 8,864.0 C.ft

## Required Sediment Forebay vol, Fv:

 $F_v = A_C(cu.ft)x0.1inch$  of impervious area

1 Imp. area captured by ponds, Ap = 0.946 Ac
Required Sediment Forebay vol, Fv= 343 C.ft

Sediment Forebay Volume Provided = 679.0 C.ft

Drawdown Calculations

## **CALCULATIONS**

## **Proposed Infiltration Area Calculations:**

$$Drawdown = \frac{R_V}{(Rawls\ Rate)(Bottom\ Area)}$$

## **Drawdown Calculations:**

Soil Texture:

3 Sandy Loam

Prawdown is less than 7

Drawdown is less than 72 Hours as Required

## REFERENCES

**REFERENCES** 

NRCS Hydrologic

Soil Group

A B

С

D

Soil Group

Table 2.3.2: Recharge Target Depth by Hydrologic

Approx. Soil

Texture

sand

loam

silty loam

clay

Target Depth

Factor (F)

0.6 inch

0.35 inch

0.25 inch

0.1 inch

Table 2.3.3: 1982 Rawls Rates

Table 2.3.3. 1982 Rawls Rates						
	NRCS					
	Hydrologic					
Texture Class	Soil Group	Infiltration Rate				
1 Sand	Α	8.27 in/hr				
2 Loamy Sand	Α	2.41 in/hr				
3 Sandy Loam	В	1.02 in/hr				
4 Loam	В	0.52 in/hr				
5 Silt Loam	С	0.27 in/hr				
6 Sandy Clay Loam	С	0.17 in/hr				
7 Clay Loam	D	0.09 in/hr				
8 Silty Clay Loam	D	0.06 in/hr				
9 Sandy Clay	D	0.05 in/hr				
10 Silty Clay	D	0.04 in/hr				
11 Clay	D	0.02 in/hr				

## NOTES:

**Input Values** 

<sup>&</sup>lt;sup>1</sup> = Refer to Proposed Conditions HydroCAD modeling report

## Stage-Area-Storage for Pond 6P: INFIL. BASIN #3

Elevation	Surface	Storage	Elevation	Surface	Storage
(feet)	(sq-ft)	(cubic-feet)	(feet)	(sq-ft)	(cubic-feet)
312.00	1,767	0	317.30	6,204	20,725
312.10	1,836	180	317.40	6,301	21,350
312.20	1,907	367	317.50	6,398	21,985
312.30	1,979	562	317.60	6,497	22,630
312.40	2,052	763	317.70	6,596	23,285
312.50	2,127	972	317.80	6,696	23,949
312.60	2,202	1,188	317.90	6,797	24,624
312.70	2,280	1,413	318.00	6,898	25,309
312.80	2,358	1,644	318.10	6,996	26,003
312.90	2,438	1,884	318.20	7,094	26,708
313.00	2,519	2,132	318.30	7,194	27,422
313.10	2,602	2,388	318.40	7,294	28,147
313.20	2,686	2,653	318.50	7,394	28,881
313.30	2,771	2,925	318.60	7,496	29,625
313.40	2,858	3,207	318.70	7,598	30,380
313.50	2,946	3,497	318.80	7,700	31,145
313.60	3,035	3,796	318.90	7,804	31,920
313.70	3,125	4,104	319.00	7,908	32,706
313.80	3,217	4,421	319.10	8,013	33,502
313.90	3,310	4,747	319.20	8,118	34,308
314.00	3,405	5,083	319.30	8,224	35,126
314.10	3,478	5,427	319.40	8,331	35,953
314.20	3,552	5,779	319.50	8,439	36,792
314.30	3,626	6,138	319.60	8,547	37,641
314.40	3,702	6,504	319.70	8,656	38,501
314.50	3,778	6,878	319.80	8,766	39,372
314.60	3,855	7,260	319.90	8,876	40,254
314.70	3,932	7,649	320.00	8,987	41,148
314.80	4,011	8,046			
314.90	4,090	8,451			
315.00	4,170	8,864			
315.10	4,251	9,285		LOWEST OU	TI ET
315.20	4,332	9,714			
315.30	4,414	10,152		_ELEVATION =	= 315.00
315.40	4,497	10,597		8,864 CF	
315.50	4,581	11,051		,	
315.60	4,666	11,513			
315.70	4,751	11,984			
315.80	4,837	12,464			
315.90	4,924	12,952			
316.00	5,012	13,449			
316.10	5,099	13,954			
316.20	5,187	14,469			
316.30	5,276	14,992			
316.40	5,365	15,524			
316.50	5,455	16,065			
316.60	5,546	16,615			
316.70	5,638	17,174			
316.80	5,730	17,742			
316.90	5,824	18,320			
317.00	5,917	18,907			
317.10	6,012	19,504			
317.20	6,108	20,110			

## Adjusted Recharge/WQV Calcs

Stormwater Recharge Calculations

## Capture Area Adjustment, Rvadj:

$$R_{v}adj = \frac{A_{t}}{A_{p}}xR_{v}$$

5.994 Ac <sup>1</sup> Imp. area captured by ponds, Ap = Total impervious area on site, AT = 6.520 Ac 14,201 C.ft Recharge volume required, Rv = Capture Rate= 92% OK Capture Area Adjustment Factor= 1.09 Adjusted Recharge Volume Required Rvadj = 15,447 C.ft 47,610.0 C.ft

<sup>1</sup> Total Recharge Volume Provided =

NOTES: Input Values

1 = Sum of Recharge Vol. Provided from Infil. Basin 1, Infil. Basin 2 & 3

Water Quality Calculations

## **CALCULATIONS**

## **Water Quality Calculation:**

$$V_{WQ} = D_{WQ}(ft)x A_T(ft^2)$$

Water Quality Depth =	1	in
Water Quality Depth , Dwo =	0.08	ft.
Total impervious area on site, AT =	6.520	
$A_T =$	284,011	ft <sup>2</sup>
Required Water Quality Volume, VwQ =	23,668	C.ft.

## **REFERENCES**

1 inch depth
Zone II discharges
IWPA discharges
Critical Area
Runoff from LUHPPL
Infiltration rate >2.4 inches/hour
1/2 inch depth
Discharge to other ares
8 inch
9 inch
10 inch
11 inch

October 20, 2023

6083

- 1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
- 2. Select BMP from Drop Down Menu
- 3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Location: TSS removal with pretreatment calculation.

TSS Removal Calculation Worksheet

В	C	D	E	F
	TSS Removal	Starting TSS	Amount	Remaining
BMP <sup>1</sup>	Rate <sup>1</sup>	Load*	Removed (C*D)	Load (D-E)
Deep Sump and Hooded Catch Basin	0.25	1.00	0.25	0.75
Sediment Forebay	0.25	0.75	0.19	0.56
	0.00	0.56	0.00	0.56
	0.00	0.56	0.00	0.56
	0.00	0.56	0.00	0.56

Total TSS Removal =

44%

Separate Form Needs to be Completed for Each Outlet or BMP Train

Project: Stratton Hill
Prepared By: RPV
Date: 25-Apr-23

\*Equals remaining load from previous BMP (E) which enters the BMP

- 1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
- 2. Select BMP from Drop Down Menu
- 3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Location: TSS removal for overall site.

TSS Removal Calculation Worksheet

В	В С		Е	F
	TSS Removal	Starting TSS	Amount	Remaining
BMP <sup>1</sup>	Rate <sup>1</sup>	Load*	Removed (C*D)	Load (D-E)
Deep Sump and Hooded Catch Basin	0.25	1.00	0.25	0.75
Infiltration Basin	0.80	0.75	0.60	0.15
	0.00	0.15	0.00	0.15
	0.00	0.15	0.00	0.15
	0.00	0.15	0.00	0.15

Total TSS Removal =

85%

Separate Form Needs to be Completed for Each Outlet or BMP Train

Project: Stratton Hill
Prepared By: RPV
Date: 25-Apr-23

\*Equals remaining load from previous BMP (E) which enters the BMP



## NOAA Atlas 14, Volume 10, Version 3 Location name: Ayer, Massachusetts, USA\* Latitude: 42.5682°, Longitude: -71.551° Elevation: 309 ft\*\*

\* source: ESRI Maps \*\* source: USGS



## POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sandra Pavlovic, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Orlan Wilhite

NOAA, National Weather Service, Silver Spring, Maryland

PF\_tabular | PF\_graphical | Maps\_&\_aerials

## PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) <sup>1</sup>										
D				Average	recurrence	interval (ye	ears)			
Duration	1	2	5	10	25	50	100	200	500	1000
5-min	0.326 (0.257-0.409)	0.385 (0.304-0.484)	0.482 (0.378-0.607)	0.563 (0.440-0.714)	0.675 (0.509-0.888)	0.758 (0.561-1.02)	0.846 (0.606-1.17)	0.947 (0.640-1.34)	1.09 (0.710-1.59)	1.22 (0.770-1.80)
10-min	0.462 (0.364-0.579)	0.546 (0.430-0.686)	0.684 (0.537-0.861)	0.798 (0.623-1.01)	0.956 (0.722-1.26)	1.07 (0.794-1.44)	1.20 (0.859-1.66)	1.34 (0.907-1.89)	1.55 (1.01-2.25)	1.72 (1.09-2.55)
15-min	0.543 (0.429-0.681)	0.642 (0.506-0.807)	0.804 (0.631-1.01)	0.939 (0.733-1.19)	<b>1.12</b> (0.849-1.48)	1.26 (0.933-1.70)	1.41 (1.01-1.96)	1.58 (1.07-2.22)	1.82 (1.18-2.65)	2.03 (1.28-3.00)
30-min	0.737 (0.582-0.925)	0.873 (0.688-1.10)	1.09 (0.859-1.38)	1.28 (0.997-1.62)	1.53 (1.16-2.01)	1.72 (1.27-2.30)	1.92 (1.38-2.66)	2.15 (1.45-3.03)	2.48 (1.61-3.61)	2.76 (1.75-4.08)
60-min	0.932 (0.735-1.17)	1.10 (0.869-1.38)	1.38 (1.09-1.74)	1.62 (1.26-2.04)	1.93 (1.46-2.54)	<b>2.17</b> (1.61-2.92)	2.43 (1.74-3.37)	2.72 (1.84-3.83)	3.14 (2.04-4.56)	3.49 (2.21-5.16)
2-hr	1.17 (0.931-1.46)	1.41 (1.12-1.75)	1.80 (1.42-2.25)	<b>2.12</b> (1.67-2.66)	<b>2.56</b> (1.95-3.36)	2.90 (2.16-3.87)	3.25 (2.36-4.51)	3.68 (2.49-5.15)	4.32 (2.81-6.23)	4.87 (3.09-7.14)
3-hr	1.34 (1.07-1.66)	1.62 (1.30-2.01)	2.09 (1.66-2.60)	<b>2.47</b> (1.95-3.09)	3.00 (2.30-3.92)	3.40 (2.55-4.53)	3.82 (2.79-5.29)	4.34 (2.95-6.05)	<b>5.13</b> (3.34-7.37)	<b>5.81</b> (3.70-8.49)
6-hr	1.70 (1.37-2.09)	2.07 (1.67-2.55)	2.68 (2.15-3.30)	3.18 (2.53-3.94)	3.87 (2.98-5.02)	4.38 (3.31-5.81)	4.94 (3.63-6.80)	5.62 (3.84-7.78)	6.67 (4.37-9.52)	7.58 (4.84-11.0)
12-hr	2.15 (1.74-2.62)	2.61 (2.12-3.19)	3.37 (2.72-4.13)	4.00 (3.21-4.92)	4.87 (3.78-6.26)	<b>5.51</b> (4.18-7.24)	<b>6.21</b> (4.58-8.47)	7.06 (4.84-9.69)	8.36 (5.49-11.8)	9.47 (6.06-13.6)
24-hr	2.58 (2.11-3.12)	3.14 (2.57-3.81)	4.07 (3.31-4.94)	4.84 (3.91-5.90)	5.89 (4.60-7.52)	6.67 (5.10-8.70)	<b>7.52</b> (5.58-10.2)	8.55 (5.90-11.6)	10.1 (6.68-14.2)	<b>11.5</b> (7.38-16.4)
2-day	2.94 (2.42-3.52)	3.60 (2.97-4.33)	4.69 (3.85-5.66)	5.60 (4.57-6.78)	6.85 (5.39-8.68)	7.77 (5.98-10.1)	8.77 (6.55-11.8)	10.0 (6.92-13.5)	<b>11.9</b> (7.87-16.6)	13.5 (8.71-19.1)
3-day	3.21 (2.66-3.84)	3.93 (3.25-4.70)	5.10 (4.20-6.11)	6.07 (4.97-7.31)	7.40 (5.85-9.33)	8.39 (6.48-10.8)	9.46 (7.08-12.7)	10.8 (7.48-14.5)	<b>12.8</b> (8.47-17.7)	14.5 (9.36-20.4)
4-day	3.47 (2.89-4.13)	<b>4.21</b> (3.50-5.02)	5.42 (4.49-6.48)	6.43 (5.29-7.73)	<b>7.82</b> (6.19-9.81)	8.84 (6.84-11.3)	9.95 (7.46-13.2)	11.3 (7.86-15.1)	13.3 (8.86-18.4)	<b>15.1</b> (9.76-21.2)
7-day	<b>4.17</b> (3.50-4.94)	4.96 (4.15-5.87)	6.24 (5.20-7.41)	7.30 (6.04-8.71)	8.76 (6.98-10.9)	9.85 (7.65-12.5)	11.0 (8.26-14.5)	12.4 (8.66-16.5)	14.4 (9.62-19.8)	16.1 (10.5-22.5)
10-day	4.84 (4.08-5.71)	5.65 (4.75-6.67)	6.97 (5.84-8.25)	8.07 (6.71-9.59)	9.58 (7.64-11.8)	10.7 (8.33-13.5)	11.9 (8.92-15.5)	13.3 (9.31-17.6)	15.2 (10.2-20.8)	16.9 (11.0-23.5)
20-day	6.85 (5.82-8.01)	7.72 (6.54-9.03)	9.13 (7.71-10.7)	10.3 (8.64-12.2)	<b>11.9</b> (9.57-14.5)	13.2 (10.3-16.3)	14.4 (10.8-18.4)	15.7 (11.1-20.6)	17.5 (11.8-23.7)	18.8 (12.3-26.0)
30-day	<b>8.52</b> (7.27-9.91)	9.44 (8.04-11.0)	10.9 (9.27-12.8)	<b>12.2</b> (10.2-14.3)	13.9 (11.2-16.8)	15.2 (11.9-18.7)	16.5 (12.3-20.8)	17.8 (12.6-23.2)	19.4 (13.1-26.1)	20.6 (13.4-28.2)
45-day	10.6 (9.09-12.3)	<b>11.6</b> (9.91-13.4)	13.2 (11.2-15.3)	<b>14.5</b> (12.3-16.9)	16.3 (13.2-19.6)	17.7 (13.9-21.6)	19.1 (14.3-23.9)	20.3 (14.5-26.4)	<b>21.8</b> (14.8-29.3)	22.9 (15.0-31.2)
60-day	<b>12.3</b> (10.6-14.2)	13.4 (11.5-15.4)	15.0 (12.9-17.4)	16.4 (14.0-19.1)	18.4 (14.9-21.9)	19.9 (15.6-24.1)	<b>21.3</b> (15.9-26.4)	<b>22.5</b> (16.1-29.1)	<b>24.0</b> (16.3-32.0)	24.9 (16.4-34.0)

<sup>&</sup>lt;sup>1</sup> Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

## Appendix G – Construction Period Pollution Prevention

The project is covered under the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, which will be submitted in place of the Construction Period Pollution Prevention Plan, prior to any land disturbance.

## Appendix H - Operation and Maintenance Plan

# STORMWATER OPERATION & MAINTENANCE MANUAL

## STRATTON HILL

WRIGHT ROAD AYER, MASSACHUSETTS

**Prepared For:** Fox Meadow Realty Corp.

129 SKYFIELDS DRIVE GROTON, MA 01450

**Prepared By:** DILLIS & ROY CIVIL DESIGN GROUP, INC.

1 Main Street, Suite 1 Lunenburg, MA 01462

**REVISED: September 29th, 2023 April 25th, 2023 6083** 



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## 1.0 Project Narrative

- 1.1 Overview of Drainage System
- 1.2 Routine Operation & Maintenance Tasks
- 1.3 O&M Schedule

## 2.0 Appendices

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## 1.0 Project Narrative

## 1.1 Proposed Stormwater Management System

The proposed stormwater management system was designed to reduce the peak rate of stormwater leaving the site, promote groundwater recharge, and increase the water quality. Runoff from the proposed development will be conveyed and treated using sedimentation forebays & infiltration basins.

## Infiltration Basin with Sediment Forebay

Three infiltration basins with sediment forebays will treat the runoff. The volumes of the infiltration basins were designed to reduce runoff rates up to the 100-year storm event, infiltrate the required recharge volume and sized to handle the appropriate water quality volume. The basins are combined with sediment forebays. The sediment forebays are designed to reduce the velocity of flow which will increase the settlement of heavy solids before emptying to the basins. Riprap will also be installed at the inlet of the sediment forebays to reduce the potential for scouring.

## **Deep Sump Hooded Catch Basins**

Deep sump hooded catch basins are proposed to convey the runoff from the proposed roadway & roofs to the infiltration basins. These catch basins will discharge to manholes and conventional storm drains.

## **Drain Manholes**

Drain manholes are proposed to route stormwater from the deep sump hooded catch basins to the downgradient stormwater management devices (infiltration basins).

## **HydroStorm HS5**

HydroStorm pretreatment units are proposed upgradient of infiltration basin #1 to provide pretreatment of stormwater associated with stormwater runoff from the proposed road. Stormwater will be routed to the HydroStorm by catch basins & culverts and then discharged via a culvert to the proposed infiltration basin.

## 1.2 Operation & Maintenance Tasks

The following activities should be performed routinely to allow for proper functioning of the stormwater system. The following are guidelines referring to each major component of the stormwater management system.

## Street Sweeping

Street sweeping should be performed at least semiannually. For most effective results, sweeping should be performed by a vacuum style truck in the early spring before spring rain events can wash silt and sediment into the stormwater system. Silt and sediment should be disposed of in accordance with local, state and federal guidelines for hazardous waste.

## **Drain Manholes**

Manholes shall be inspected semi-annually for signs of wear, settling, cracking or other fatigue. Manhole casting should be inspected for signs of root intrusion, or significant water infiltration. Manhole sumps should be checked for silt /sediment buildup and cleaned as necessary. Cleaning should be performed by a vacuum truck. Manholes should be resealed as required and outlets should be inspected incidentally with all structure inspections.

## Storm Drain Lines

Storm drainage inlets and outlets should be inspected incidentally with all structure inspections. Evidence of debris intrusion or excessive siltation or sedimentation could result in the need to clean a storm drain line. Flushing or jetting should be performed as required. All flushing and jetting should be performed in the direction away from any outlet devices. A vacuum truck should be used at the opposite end of the flushing or jetting to remove any silt or sediment that is cleaned from the storm drain.

## Deep Sump Catch Basins

Deep sump catch basins shall be inspected at least semi-annually for signs of wear, settling, cracking or other fatigue. Catch basin castings should be inspected for signs of root intrusion, or significant water infiltration. Catch basin sump should be check for silt/sediment buildup and cleaned as necessary. Cleaning should be performed by a vacuum truck. Catch basins should be resealed as required and outlets should be inspected incidentally with all structure inspections.

## Infiltration Basins

Infiltration basins are stormwater runoff impoundments that are constructed over permeable soils and require pretreatment from sediment forebays. Runoff from the design storm is stored until it exfiltrates through the soil of the basin floor. The basins were located to capture most of the runoff from the impervious areas of the site. Each infiltration basin shall be inspected after every major storm event for the first (3) months of operation to ensure that the outlet control devices are working

as designed. Each infiltration basin shall be inspected twice a year following the first (3) months of operation.

Infiltration basins are prone to clogging and failure if proper maintenance is not scheduled. The basin should be inspected at least twice per year or after a major storm event to ensure that the basin is operating as intended. The outlet structures should be inspected for clogging or overflow release velocities that are causing scouring or erosion. The upper stage, side slopes, embankments and emergency spillway should be mowed twice a year.

## *Sediment forebay*

A sediment forebay is required as a pretreatment device prior to discharging stormwater to the extended dry detention basin. It will provide pretreatment by slowing stormwater runoff and increasing settlement of the sediment. The sediment forebay should be inspected monthly and cleaned of accumulated sediment on a quarterly basis. After sediment removal, repair any damaged vegetation by reseeding or resodding. Maintain grass at a height of 4-6 inches.

## Stone Rip Rap

The proposed swales have been designed with angular stone riprap. The stone riprap will be placed approximately 1-foot deep over Tencate Mirafi filter fabric.

Rip Rap should be inspected periodically for signs of failure. Such signs would include, undermining, high velocity wear (displacement of stones downstream), sliding, settlement, siltation, etc. Riprap should be repaired immediately upon the observation of such conditions mentioned.

Periodically, rip rap should be cleaned of silt. Siltation will be most prevalent in low velocity areas (such as directly up-stream of outlet control structures). Silt and sediment should be removed from these areas by hand.

## **Grass Swales**

Swales should be checked for scouring, sloughing, erosion and/or accumulation of silt. The vegetation helps reduce velocity of runoff, which helps to maintain the swale, and encourages the sedimentation filtrations prior to exfiltration. Grass should be moved and kept below 6 inches. Debris and trash should be removed as encountered.

## HydroStorm HS5

Maintenance of the HydroStorm system shall be performed by a vacuum truck. The HydroStorm unit shall be inspected for evidence of sediment build-up within the treatment unit. Maintenance of the unit shall occur when the sediment depth within the treatment unit has reached 8-inches. Oil shall be removed from the oil inspection/cleanout port and sediment shall be removed through the riser pipe. Sludge from the bottom of the unit shall be removed using a vacuum truck. Inlet & outlet pipes shall be inspected concurrently with all routine inspections for signs of clogging, cracking, or deterioration.

## Stormwater System & General Site Inspection Requirements:

The proposed project is subject to the Inspection & Reporting requirements defined by NPDES MS4. A NPDES Permit application and a Stormwater Pollution Prevention Plan (SWPPP) will be prepared and submitted prior to the commencement of construction, detailing the required inspection requirements during the construction process.

## O&M Schedule

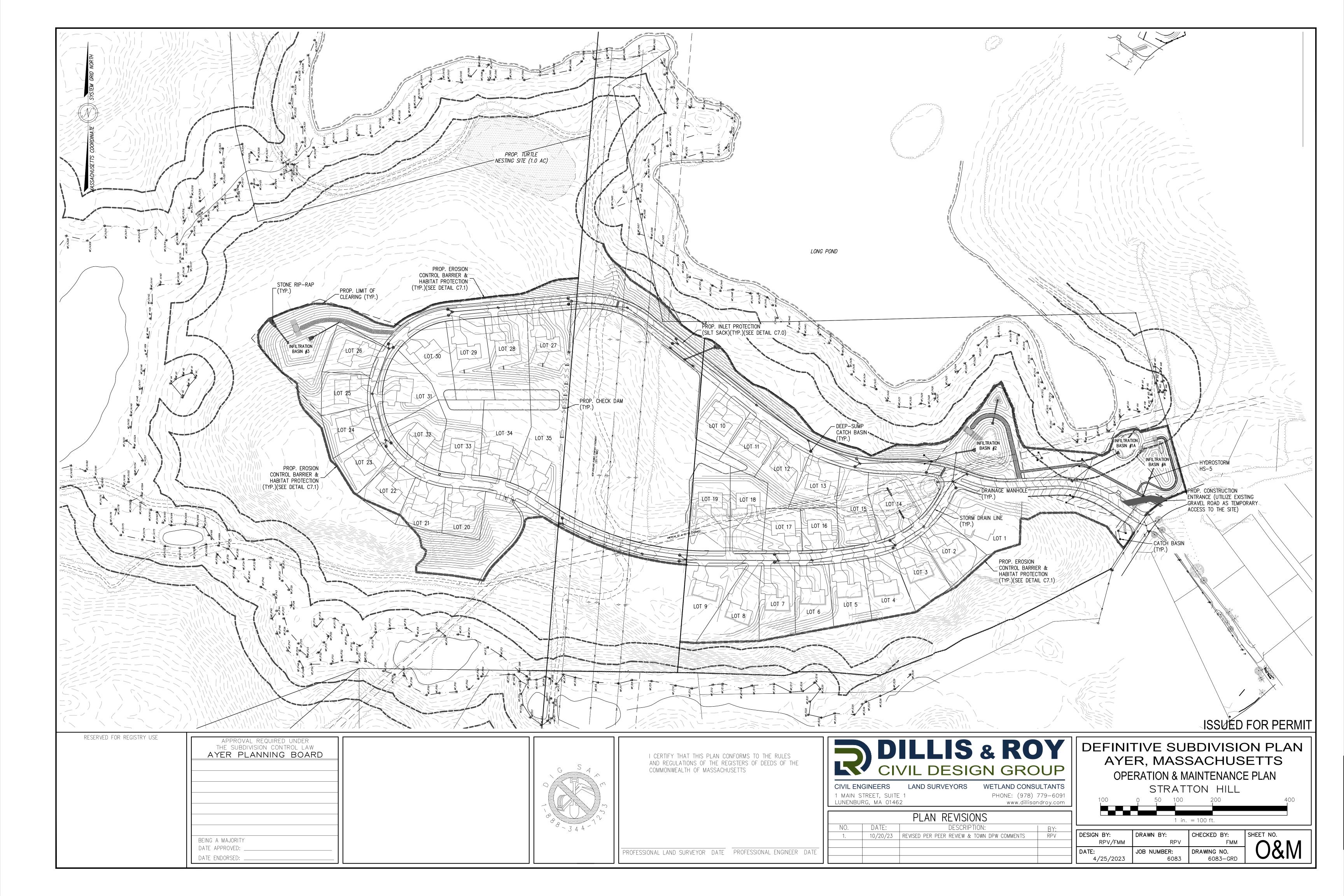
		•	1	T	T		T	
08	zM Task	Monthly	Quarterly	Spring	Fall	2-years	As-required	
1.	Infiltration Basin							
Η	Each infiltration basin shall be inspected afto within a 24-hour timespan) for					rain or r	nore	
	Inspection	J (1)		X	X		X	
	Mowing	3-41	times du	iring th	e growi	ng seaso	n	
	Remove Debris			X	x		X	
	Remove Sediment						X	
	Re-seed						X	
2.	Sediment Forebay							
	Inspection	X		X	X		X	
	Mowing	3-4 times during the growing season						
	Remove Debris		X				X	
	Remove Sediment		X				X	
	Re-seed						X	
3.	Stone Rip Rap							
	Inspection			X				
	Remove Debris			X			X	
	Remove Silt/Sediment					X	X	
	Repair					<u> </u>	X	
4								
4.	Storm drain Lines		<del> </del>					
	Inspection		<del> </del>	X			X	
	Clean						X	
5.	Catchbasins							
	Inspection			X	X			
	Remove Debris						X	
	Remove Silt/Sediment						X	
-	Commercial							
6.	Grass Swales							
	Inspection Clean		1	X			X	
	Ciean			X			X	
7.	Drain Manholes							
	Inspect Rims							
	Inspect inside/inlet and outlet pipes			X	X			
	Remove sediment					X	X	

O&M Task		Monthly	Quarterly	Spring	Fall	2-years	As-required
8.	HydroStorm HS5						
	Inspect			X	X		X
	Remove Silt/Sediment/Oil						X
	Inspect inside/inlet and outlet pipes			X	X		X

#### Annual Estimated Operations & Maintenance Budget - \$2000

An estimated operations & maintenance budget has been approximated by the following:

- 1 operator / inspector per site visit
- Four times a year at \$125.00 per hour



# APPENDIX A

Stormwater Management System Owners/Operators

#### Stormwater Management System Owners/Operators

1. Stormwater Management System Owners: Fox Meadow Realty Corp

2. Current and future operators: Fox Meadow Realty Corp

3. Emergency contact information: Fox Meadow Realty Corp

4. Financial Responsible Party: Fox Meadow Realty Corp

5. Routine Maintenance: Fox Meadow Realty Corp

6. O&M activities: Fox Meadow Realty Corp

7. Record keeping Fox Meadow Realty Corp

# Appendix I - Long Term Pollution Prevention Plan

# LONG TERM POLUTION PREVENTION PLAN

# STRATTON HILL

WRIGHT ROAD AYER, MASSACHUSETTS

**Prepared For:** Fox Meadow Realty Corp.

129 Skyfields Drive Groton, MA 01450

**Prepared By:** DILLIS & ROY CIVIL DESIGN GROUP, INC.

1 Main Street, Suite 1 Lunenburg, MA 01462

April 25<sup>th</sup>, 2023 6083



#### 1.0 Summary

This Long-Term Pollution Prevention Plan (LTPPP) has been prepared by Dillis & Roy Civil Design Group, Inc. pursuant to the Massachusetts Stormwater Regulations. The proposed development consists of the construction of a 37-unit Open Space Residential Development (OSRD) on the northerly side of Wright Road in Ayer.

The layout of the development including the roadways and the locations of buildings and stormwater systems have been carefully planned to minimize disturbance to the existing land and natural features. The stormwater management system has been designed in accordance with the Massachusetts Stormwater Regulations to provide pretreatment of the stormwater prior to discharge to the resource areas.

#### 2.0 Spill Prevention Plan

No hazardous materials other than normal and common household items are expected to be stored on site after the construction period has ended.

It is expected that normal DEP notification procedures would be triggered for major spills such as home heating oil or propane and natural gas leaks.

#### 3.0 Stormwater System O&M

A Stormwater Operation & Maintenance plan has been prepared for the proposed stormwater management system. Refer to this document for details pertaining to the required inspections, routine maintenance, and operation details.

Implementation of the stormwater operation and maintenance plan is critical in order for the site to function as designed, and for the protection of the downstream areas from the potential for scour and erosion.

Special care should be paid to the protection and maintenance of the existing and proposed catch basins that support the drainage system. Refer to the O&M Plan for specific instructions.

#### 4.0 Fertilizers, herbicides and pesticides

Application of fertilizer, herbicides and pesticides shall be performed in a manner consistent with the industry standards for the application.

No application of chemicals is to be performed within the stormwater management areas on the site.

#### 5.0 Snow/Salt Management

#### 5.1 Snow Plowing

The roadway and driveways are designed to comply with the Town of Ayer Standards. It is expected that snow plowing practices and procedures will be used similar to those currently employed by Ayer residents.

#### 5.2 Street Sweeping

The streets should be swept as needed to reduce the potential for silt build up in the drainage pipes and sump catch basins.

#### **6.0** Waste Management

#### 6.1 Septic Systems

On-site portable restrooms will be used during construction. The portable restrooms will be cleaned and maintained on a regular basis and disposal will be performed weekly or as required with a private or public waste removal company.

All portable restrooms will be removed after construction.

#### 6.2 Solid Waste

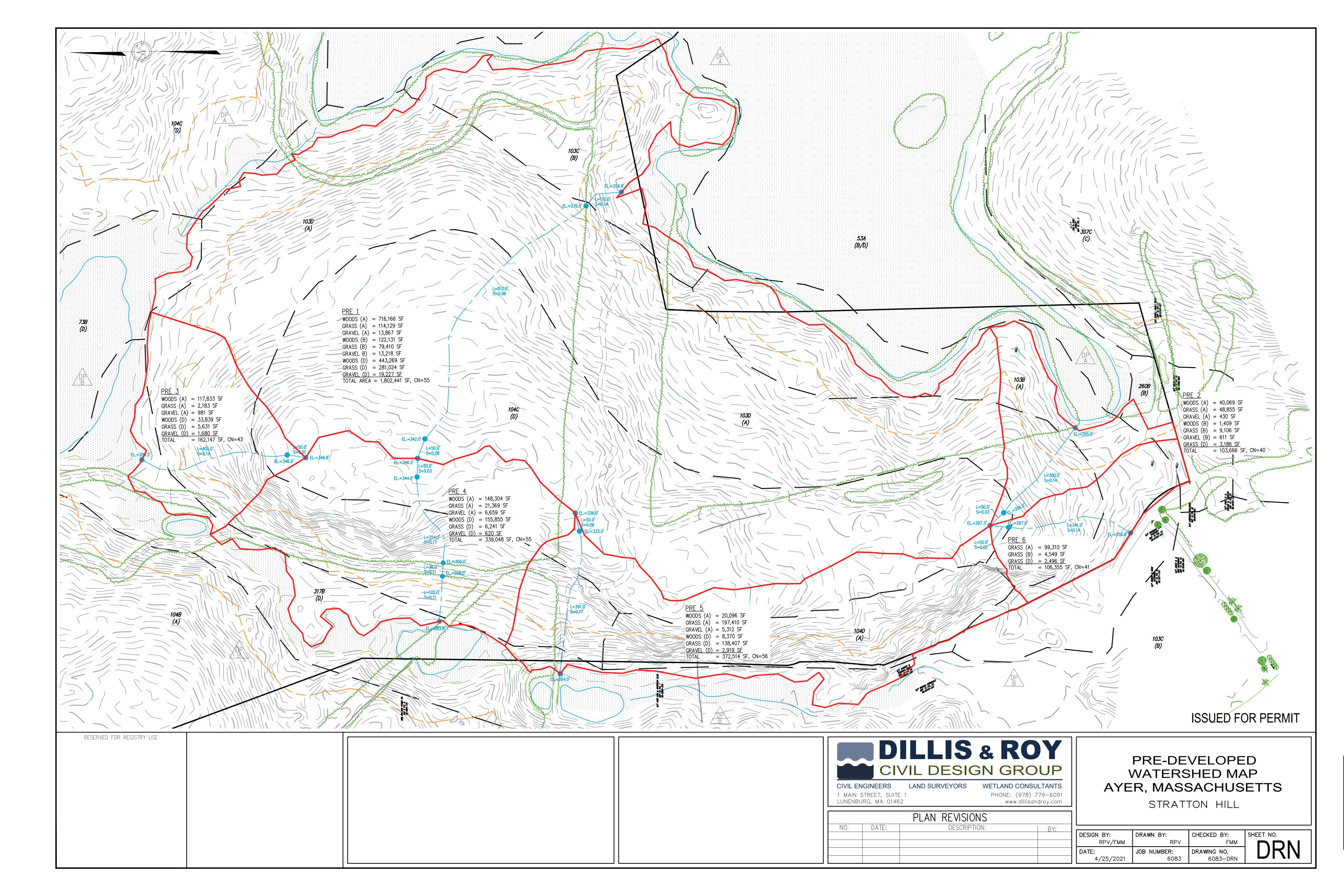
It is expected that the homeowners will contact directly with a private or public waste removal company.

A dumpster will be located on the site during construction. This area will be the primary area for the on-site storage of solid waste prior to pick-up by a waste management company.

Stormwater Report Stratton Hill April 25<sup>th</sup>, 2023 Fox Meadow Realty Corp.

## 4.0 Plans

# **Pre-development Watershed Plan**



# **Post-development Watershed Plan**

