

STORMWATER REPORT

FOR

**GROTON FARMS
500 MAIN STREET**

IN

GROTON,
MASSACHUSETTS

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CDG PROJECT # 6842

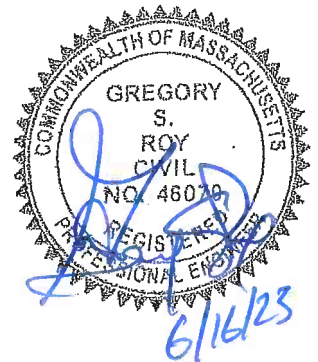


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1.0 Project Narrative

1.1 Project Type

The Applicant, 500 MG LLC is proposing the construction of a residential development on the north side of Route 119 just northerly of the intersection of Mill Street & Main Street. The proposed development consists of 16 quadplex units (1,220 SF ea.), 16 quadplex units (643 SF ea.), 3 apartment buildings (17,818 sf ea.), and clubhouse building (4,950 sf). The proposed work is located on Assessor's Map 216- Block 94, 95, & 96. The proposed scope of construction also includes a private roadway, on-site parking, clubhouse area with associated amenities, stormwater management systems, and new utility connections with their associated appurtenances.

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. BMPs, have been specified to manage the stormwater runoff. Stormwater from the proposed impervious surface locations is routed to constructed stormwater wetlands or wet basin via land flow, curb and gutter systems, or the proposed drainage pipe system. The stormwater areas will reduce run off rates below pre-developed rates while providing water quality pre-treatment by sediment forebays.

1.4 Site Description

The subject site is found on the North side of Route 119 just northerly of the intersection of Mill Street & Main Street. An existing internal road runs from Main Street and travels northeast connecting to the onsite parking lot and existing building. The existing 101,570 SF building is located towards center of the site.

An existing parking lot is located towards the northern corner of the site and wraps around the eastern side of the building. The southwestern half of the site is primarily undeveloped grassed area with clusters of woods. Multiple wetland areas as shown on the attached Site Plans are present on site located to the north, east, and west of the proposed development. Under existing conditions, the wetlands receive untreated stormwater sheet flow and point discharges.

An existing detention basin located adjacent to the building collects and treats a substantial portion of the existing impervious area on site. An outlet pipe runs from the subject detention basin under the existing paved parking area to the north where it then discharges into an existing wetland system. A smaller stormwater management area is located just north of the northern parking area where it receives run-off from portions of the existing parking lot & tributary undeveloped overland flow. The remaining stormwater runoff generated from the existing impervious area that is not collected will sheet flow towards the surrounding wetland systems without any form of treatment.

The NRCS soil survey information indicates that all of the site is underlain by soils classified as belonging to Hydrologic Soil Groups A (Carlton Fine Sandy Loam), B (Charlton-Hollis-Rock outcrop & Hollis-Rock Outcrop-Charlton complex), C (Paxton Fine Sandy Loam) & D (Swansea Muck, Freetown Muck, Ridgebury Fine Sandy Loam & Whitman Fine Sandy Loam).

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.

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.

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.

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 for further information regarding the soils on-site & existing test hole data.

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 stormwater wetlands or wet basin. These catch basins will discharge to manholes and conventional storm drains. Please refer to Sediment Loading Calculations in Appendix F.

Constructed Stormwater Wetlands

Constructed stormwater wetlands are stormwater wetland systems that maximize the removal of pollutants from stormwater runoff through wetland vegetation uptake, retention and settling. Constructed stormwater wetlands temporarily store runoff in shallow pools that support conditions suitable for the growth of wetland plants. Proposed constructed stormwater wetlands must be used with other BMPs, such as sediment forebays, as proposed.

Wet Basin

The proposed reconstructed wet basin utilizes a permanent pool of water as the primary mechanism to treat stormwater runoff. The permanent pool has been set at an elevation to intercept the existing groundwater table to ensure sufficient permanent pool volume. The pool allows sediments to settle (including fine sediments) and removes soluble pollutants. The wet basin has been designed to provide additional dry storage capacity to control peak discharge rates. The wet basin allows incoming stormwater to displace the water present in the pool. This stormwater remains until displaced by runoff from another storm event. Increased retention time allows particulates, including fine sediments, to settle out of the water column. The permanent pool also serves to protect deposited sediments from resuspending during large storm events. A sediment forebay designed at the entrance of the basin was included to decrease the velocity of flow and increase the settlement of heavy solids prior to the basin. Riprap will also be installed at the inlet of the sediment forebays and the outlet of the basin to control the overflow of stormwater into the adjacent wetlands and will reduce the potential for scouring.

Grassed Swales

The grassed channels have been designed with a relatively flat (2.0%) slope to reduced runoff velocity and increase hydraulic residency time to promote particulate settling. The grassed channel has been provided with a sediment forebay for stormwater pretreatment. The grass swales will receive runoff from the proposed roofs along the townhomes & sheet flow from the entrance road. The entrance road has been designed with a 2% cross-slope to pitch towards a grassed swale system to convey the runoff to Stormwater Wetland #1's sediment forebay for additional treatment.

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 demonstrate 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 "NRCC Extreme Precipitation in New York & New England" rainfall rates were used in the hydraulic model. 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.

Table 1: Wetland Design Point Runoff Summary

	Pre-Developed (ft³ / sec)	Post-Developed (ft³ / sec)
<i>Design Point "A"</i>		
2-Year	20.88	13.42
10-Year	38.37	27.87
25-Year	53.28	42.05
100-Year	85.26	76.09

2.3 Standard 3 – Recharge

The NRCS soil survey information indicates that all of the site is underlain by soils classified as belonging to Hydrologic Soil Groups A (Carlton Fine Sandy Loam), B (Charlton-Hollis-Rock outcrop & Hollis-Rock Outcrop-Charlton complex), C (Paxton Fine Sandy Loam) & D (Swansea Muck, Freetown Muck, Ridgebury Fine Sandy Loam & Whitman Fine Sandy Loam). On-site groundwater recharge is provided by (3) infiltration trenches designed to receive the runoff associated with the proposed roofs of the apartment buildings. Each infiltration trench has been designed with an exfiltration rate of 2.41 inches/hour (Loamy/Medium Sand) as confirmed by the attached in-situ soil testing logs. Please refer to Appendix C for further information regarding the soils on-site & existing test hole data.

The recharge standard is being met in virtue of the fact that the impervious area is being reduced on the site. The following table shows a summary of the existing and proposed runoff volumes being discharged offsite. In all design storms, the amount of runoff volume is being reduced under the proposed site conditions. This means that more stormwater is being recharged on site as compared to the preexisting conditions.

Table 1: Wetland Design Point Volume Summary

	Pre-Developed (acre-feet)	Post-Developed (acre-feet)	Increase in Recharge Volume (acre-feet)
<i>Design Point "A"</i>			
2-Year	3.067	2.596	0.471
10-Year	5.690	5.043	0.647
25-Year	7.911	7.202	0.709
100-Year	12.748	11.979	0.769

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 stormwater wetlands/wet basins with the sediment forebay & deep sump hooded catch basins for pretreatment. This BMP train is proposed for both stormwater wetlands along with the proposed wet basin (as documented). Four TSS calculation sheets have been provided. The sheet with a deep sump catch basin into a sediment forebay shows proper pre-treatment before entering the stormwater wetlands/wet basin. An additional pretreatment sheet has been included documenting the proper pretreatment for the collected sheet flow from the entrance road into the grassed channel / sediment forebay. The sheet with deep sump catch basin into a stormwater wetland & wet 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 is located within the Petapawag Watershed. The proposed stormwater management system has been designed in accordance with the specifications and sizing methodologies in Volumes 2 and 3 of the Massachusetts Stormwater Handbook. Please refer to Appendix F for required water quality volumes of 1.0-inch times the proposed impervious area. Proper pre-treatment of at least 44% has been achieved with the proposed BMP trains (as recommended in Table CA 1 Standard 6 within the Massachusetts Stormwater Manual). Please refer to Appendix F for TSS calculations regarding the proposed treatment methods.

2.7 *Standard 7 – Redevelopment*

The proposed project does meet the standards to be considered a Redevelopment project, however the stormwater management system has been designed to meet the standards set forth for a new development project. All requirements have been met with this proposal.

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

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, 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 Map

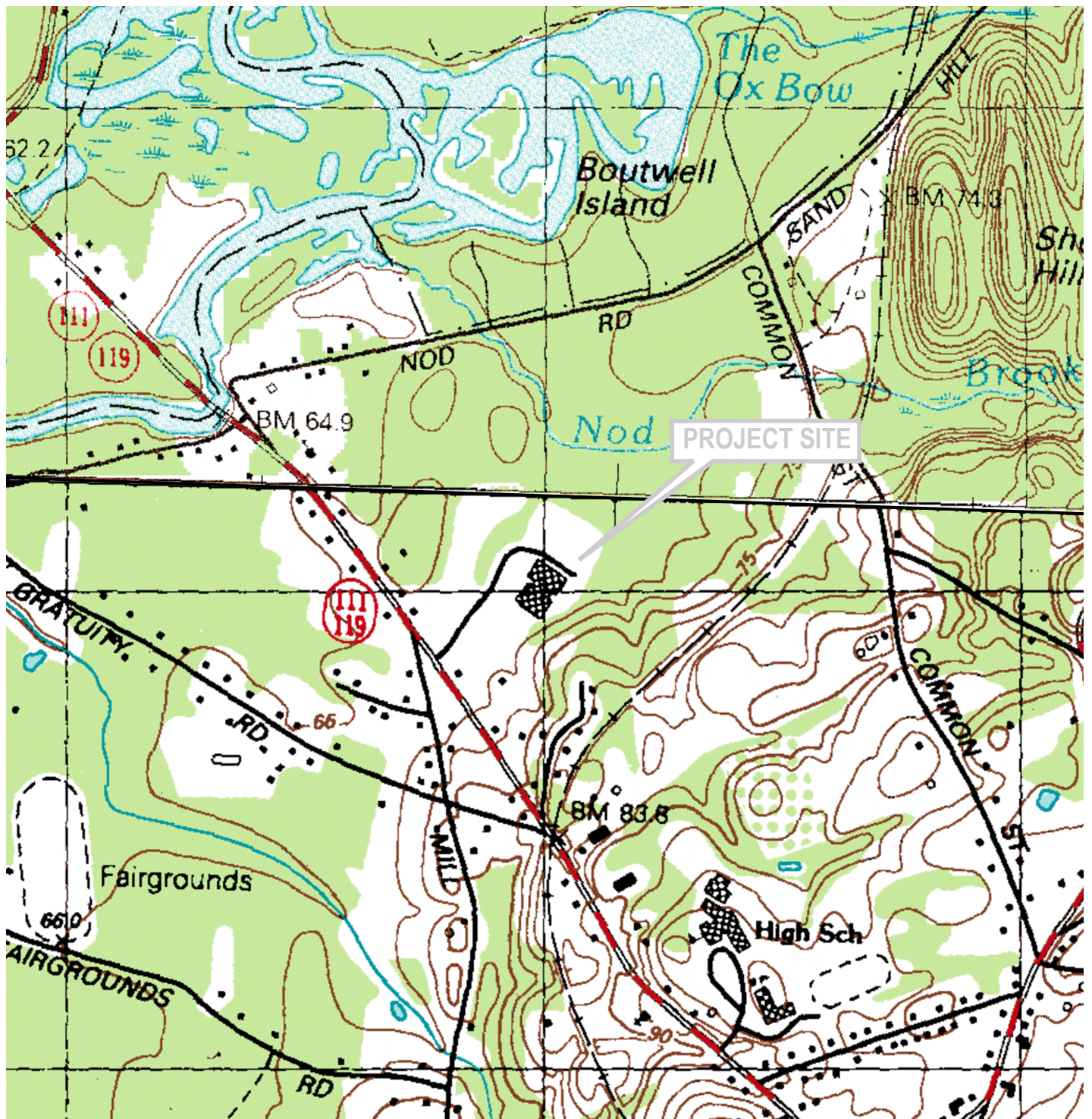


FIGURE 1 - LOCUS MAP

1"=1,000'

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References: 1988 USGS Townsend & Ayer
Massachusetts Topographic Map

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Appendix B - Checklist for Stormwater Report



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.¹ 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 8²
- 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.

¹ 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.

² 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.



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.

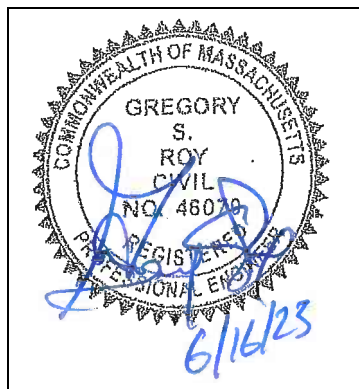
Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the 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.

Registered Professional Engineer Block and Signature



Signature and Date

Checklist

Project Type: Is the application for new development, redevelopment, or a mix of new and redevelopment?

- ☐ New development
- ☐ Redevelopment
- ☐ Mix of New Development and Redevelopment

Although the project would meet the standards as a redevelopment project, the site stormwater system has been designed to fully comply with new construction standards.



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:

- ☐ No disturbance to any Wetland Resource Areas
- ☐ Site Design Practices (e.g. clustered development, reduced frontage setbacks)
- ☐ Reduced Impervious Area (Redevelopment Only)
- ☐ 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): _____

Standard 1: No New Untreated Discharges

- ☐ 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.



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 pre-development 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 24-hour 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 Field¹
- ☐ 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.

The recharge standard is being met in virtue of the fact that the impervious area is being reduced on the site. The following table shows a summary of the existing and proposed runoff volumes being discharged offsite. In all design storms, the amount of runoff volume is being reduced under the proposed site conditions. This means that more stormwater is being recharged on site as compared to the preexisting conditions.

¹ 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.



Checklist for Stormwater Report

Checklist (continued)

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.
- ☐ 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.
 - ☐ Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.



Checklist for Stormwater Report

Checklist (continued)

Standard 4: Water Quality (continued)

- ☐ 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.

Standard 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 **prior to** the discharge of stormwater to the post-construction stormwater BMPs.
- ☐ The NPDES Multi-Sector General Permit does **not** 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 **not** 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.

Standard 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.



Checklist for Stormwater Report

Checklist (continued)

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum extent practicable

- ☐ The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:
 - ☐ Limited Project
 - ☐ 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.
 - ☐ Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area
 - ☐ Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff
 - ☐ 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.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the following information:

- Narrative;
 - Construction Period Operation and Maintenance Plan;
 - Names of Persons or Entity Responsible for Plan Compliance;
 - Construction Period Pollution Prevention Measures;
 - Erosion and Sedimentation Control Plan Drawings;
 - Detail drawings and specifications for erosion control BMPs, including sizing calculations;
 - Vegetation Planning;
 - Site Development Plan;
 - Construction Sequencing Plan;
 - Sequencing of Erosion and Sedimentation Controls;
 - Operation and Maintenance of Erosion and Sedimentation Controls;
 - Inspection Schedule;
 - Maintenance Schedule;
 - Inspection and Maintenance Log Form.
- ☐ A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing the information set forth above has been included in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued)

- ☐ 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 **not** been included in the Stormwater Report but will be submitted **before** land disturbance begins.
- ☐ The project is **not** 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.

Standard 9: Operation and Maintenance Plan

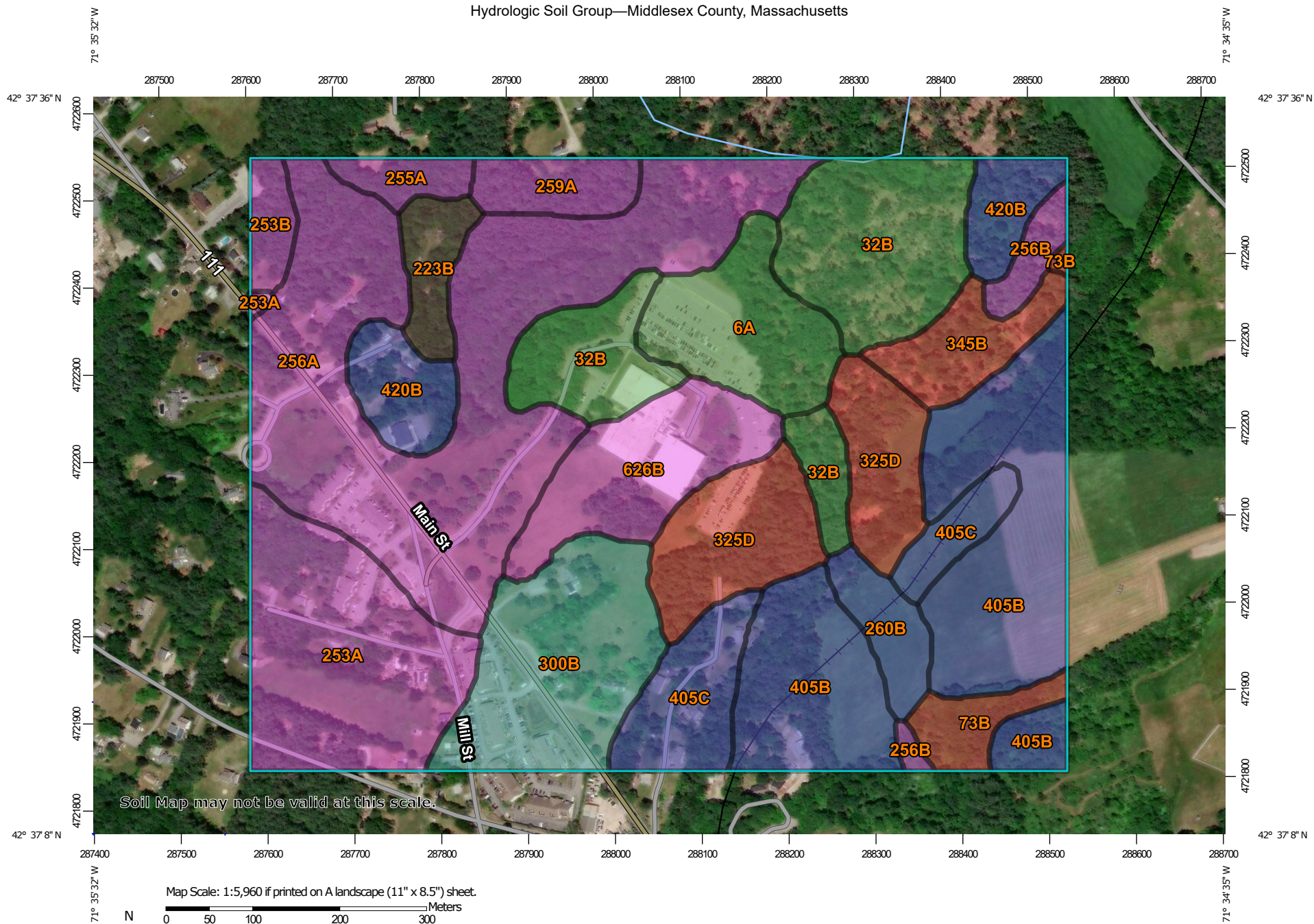
- ☐ The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information:
 - ☐ Name of the stormwater management system owners;
 - ☐ Party responsible for operation and maintenance;
 - ☐ Schedule for implementation of routine and non-routine 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 **not** 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.

Standard 10: Prohibition of Illicit Discharges

- ☐ The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;
- ☐ An Illicit Discharge Compliance Statement is attached;
- ☐ NO Illicit Discharge Compliance Statement is attached but will be submitted **prior to** the discharge of any stormwater to post-construction BMPs.

Appendix C - Soils Data

Hydrologic Soil Group—Middlesex County, Massachusetts



Map Scale: 1:5,960 if printed on A landscape (11" x 8.5") sheet.

0 50 100 200 300 Meters

0 250 500 1000 1500 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84




**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

7/7/2021
Page 1 of 4


MAP LEGEND

Area of Interest (AOI)









 Area of Interest (AOI)

Soils

Soil Rating Polygons





 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points



 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available


Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:25,000.

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

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

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

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

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

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Middlesex County, Massachusetts
 Survey Area Data: Version 20, Jun 9, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 22, 2015—Jun 14, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
6A	Scarboro mucky fine sandy loam, 0 to 3 percent slopes	A/D	7.7	4.7%
32B	Wareham loamy fine sand, 0 to 5 percent slopes	A/D	17.1	10.4%
73B	Whitman fine sandy loam, 0 to 3 percent slopes, extremely stony	D	2.6	1.6%
223B	Scio very fine sandy loam, 3 to 8 percent slopes	B/D	2.8	1.7%
253A	Hinckley loamy sand, 0 to 3 percent slopes	A	15.1	9.2%
253B	Hinckley loamy sand, 3 to 8 percent slopes	A	1.8	1.1%
255A	Windsor loamy sand, 0 to 3 percent slopes	A	1.8	1.1%
256A	Deerfield loamy fine sand, 0 to 3 percent slopes	A	34.5	21.0%
256B	Deerfield loamy fine sand, 3 to 8 percent slopes	A	2.0	1.2%
259A	Carver loamy coarse sand, 0 to 3 percent slopes	A	3.1	1.9%
260B	Sudbury fine sandy loam, 3 to 8 percent slopes	B	2.9	1.8%
300B	Montauk fine sandy loam, 3 to 8 percent slopes	C	12.3	7.5%
325D	Newport channery fine sandy loam, 8 to 25 percent slopes	D	11.5	7.0%
345B	Pittstown silt loam, 3 to 8 percent slopes	D	4.1	2.5%
405B	Charlton fine sandy loam, 3 to 8 percent slopes	B	23.2	14.1%
405C	Charlton fine sandy loam, 8 to 15 percent slopes	B	7.4	4.5%

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
420B	Canton fine sandy loam, 3 to 8 percent slopes	B	6.1	3.7%
626B	Merrimac-Urban land complex, 0 to 8 percent slopes	A	8.4	5.1%
Totals for Area of Interest			164.2	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.

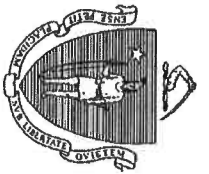
If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher



Commonwealth of Massachusetts
City/Town of Bolton

Form 11 - Soil Suitability Assessment of On-Site Sewage Disposal

Deep Observation Hole Number:

1, 2, 3 Same

11/23/22

Depth (in.)	Soil Horizon/Layer	Soil Matrix: Color- Moist (Munsell)	Redoximorphic Features (mottles)			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
12	AP	10yR 3/4				SL					
30	EX1	10yR 5/6	5YR 5/8	30"	+50	LS					
84	C	2.5Y 6/4				MOD SAND					
			KEEPING / STANDING WATER @ 66"								

Additional Notes:



456
~~345~~

[illegible]

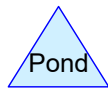
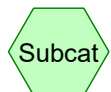
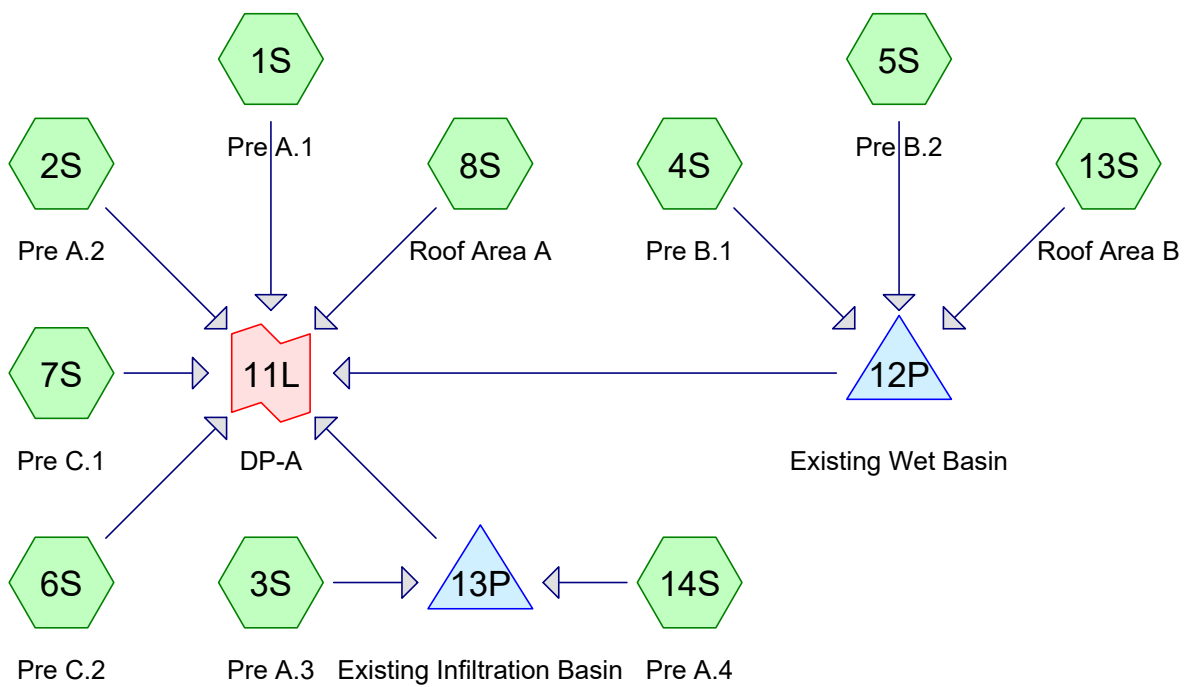
Additional Notes:

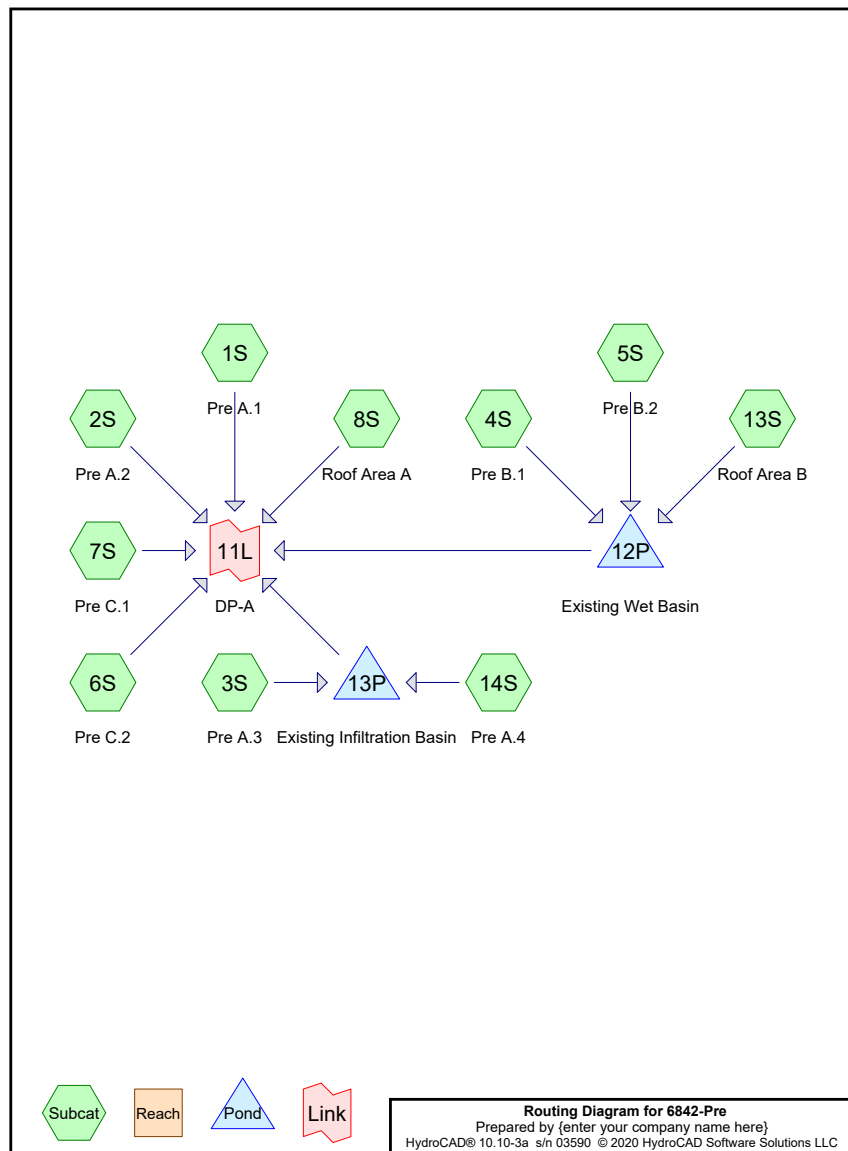
WSP 24

5 wep 96

6 WSP 102

Appendix D - Existing Conditions Hydrologic Calculations





6842-Pre

Type III 24-hr 2-yr Rainfall=3.00"

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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

Subcatchment 1S: Pre A.1	Runoff Area=242,230 sf 49.29% Impervious Runoff Depth=1.66" Flow Length=298' Tc=10.8 min CN=86 Runoff=9.16 cfs 0.770 af
Subcatchment 2S: Pre A.2	Runoff Area=289,668 sf 0.00% Impervious Runoff Depth=0.25" Flow Length=658' Tc=28.0 min CN=57 Runoff=0.53 cfs 0.136 af
Subcatchment 3S: Pre A.3	Runoff Area=19,199 sf 100.00% Impervious Runoff Depth=2.77" Tc=6.0 min CN=98 Runoff=1.25 cfs 0.102 af
Subcatchment 4S: Pre B.1	Runoff Area=220,300 sf 66.26% Impervious Runoff Depth=2.07" Flow Length=736' Tc=24.4 min CN=91 Runoff=7.52 cfs 0.873 af
Subcatchment 5S: Pre B.2	Runoff Area=71,871 sf 5.57% Impervious Runoff Depth=0.71" Flow Length=416' Tc=12.4 min UI Adjusted CN=70 Runoff=0.96 cfs 0.098 af
Subcatchment 6S: Pre C.2	Runoff Area=100,825 sf 0.00% Impervious Runoff Depth=0.91" Flow Length=364' Tc=16.2 min CN=74 Runoff=1.67 cfs 0.175 af
Subcatchment 7S: Pre C.1	Runoff Area=258,507 sf 5.40% Impervious Runoff Depth=0.96" Flow Length=754' Tc=15.2 min CN=75 Runoff=4.68 cfs 0.475 af
Subcatchment 8S: Roof Area A	Runoff Area=71,756 sf 100.00% Impervious Runoff Depth=2.77" Tc=6.0 min CN=98 Runoff=4.68 cfs 0.380 af
Subcatchment 13S: Roof Area B	Runoff Area=29,814 sf 100.00% Impervious Runoff Depth=2.77" Tc=6.0 min CN=98 Runoff=1.94 cfs 0.158 af
Subcatchment 14S: Pre A.4	Runoff Area=31,394 sf 0.00% Impervious Runoff Depth=0.01" Tc=6.0 min CN=43 Runoff=0.00 cfs 0.001 af
Pond 12P: Existing Wet Basin	Peak Elev=214.92' Storage=11,331 cf Inflow=9.06 cfs 1.129 af 15.0" Round Culvert n=0.013 L=517.0' S=0.0011 '/' Outflow=3.60 cfs 1.129 af
Pond 13P: Existing Infiltration Basin	Peak Elev=212.92' Storage=1,264 cf Inflow=1.25 cfs 0.102 af Discarded=0.22 cfs 0.101 af Primary=0.03 cfs 0.001 af Outflow=0.25 cfs 0.102 af
Link 11L: DP-A	Inflow=20.88 cfs 3.067 af Primary=20.88 cfs 3.067 af

Total Runoff Area = 30.660 ac Runoff Volume = 3.168 af Average Runoff Depth = 1.24"
69.74% Pervious = 21.383 ac 30.26% Impervious = 9.277 ac

6842-Pre

Type III 24-hr 2-yr Rainfall=3.00"

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Summary for Subcatchment 1S: Pre A.1

Runoff = 9.16 cfs @ 12.15 hrs, Volume= 0.770 af, Depth= 1.66"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
* 71,903	98	Paved parking, HSG A
41,850	98	Paved parking, HSG B
* 45,336	68	>75% Grass cover, Good, HSG A
* 77,493	79	>75% Grass cover, Good, HSG B
485	98	Unconnected pavement, HSG A
5,163	98	Unconnected pavement, HSG B
242,230	86	Weighted Average
122,829		50.71% Pervious Area
119,401		49.29% Impervious Area
5,648		4.73% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	50	0.0100	0.11		Sheet Flow, Grass: Short n= 0.150 P2= 2.95"
2.9	223	0.0330	1.27		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	25	0.0081	1.83		Shallow Concentrated Flow, Paved Kv= 20.3 fps
10.8	298	Total			

Summary for Subcatchment 2S: Pre A.2

Runoff = 0.53 cfs @ 12.65 hrs, Volume= 0.136 af, Depth= 0.25"

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-yr Rainfall=3.00"

Area (sf)	CN	Description
* 78,930	30	Woods, Good, HSG A
49,074	55	Woods, Good, HSG B
31,909	77	Woods, Good, HSG D
* 116,373	68	>75% Grass cover, Good, HSG A
* 13,268	79	>75% Grass cover, Good, HSG B
* 114	89	>75% Grass cover, Good, HSG D
289,668	57	Weighted Average
289,668		100.00% Pervious Area

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Type III 24-hr 2-yr Rainfall=3.00"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.8	50	0.0600	0.22		Sheet Flow, Grass: Short n= 0.150 P2= 2.95"
21.0	536	0.0037	0.43		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
3.2	72	0.0055	0.37		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
28.0	658	Total			

Summary for Subcatchment 3S: Pre A.3

Runoff = 1.25 cfs @ 12.09 hrs, Volume= 0.102 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
19,199	98	Paved parking, HSG A
19,199		100.00% Impervious Area

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

Summary for Subcatchment 4S: Pre B.1

Runoff = 7.52 cfs @ 12.33 hrs, Volume= 0.873 af, Depth= 2.07"

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-yr Rainfall=3.00"

Area (sf)	CN	Description
59,394	98	Paved parking, HSG A
49,116	98	Paved parking, HSG B
36,430	98	Paved parking, HSG D
* 3,947	68	>75% Grass cover, Good, HSG A
* 9,665	79	>75% Grass cover, Good, HSG B
* 556	89	>75% Grass cover, Good, HSG D
1,032	98	Unconnected pavement, HSG B
60,160	77	Woods, Good, HSG D
220,300	91	Weighted Average
74,328		33.74% Pervious Area
145,972		66.26% Impervious Area
1,032		0.71% Unconnected

6842-Pre

Type III 24-hr 2-yr Rainfall=3.00"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.0	50	0.0300	0.04		Sheet Flow , Woods: Dense underbrush n= 0.800 P2= 2.95"
3.0	100	0.0500	0.56		Shallow Concentrated Flow , Forest w/Heavy Litter Kv= 2.5 fps
2.4	586	0.0410	4.11		Shallow Concentrated Flow , Paved Kv= 20.3 fps
24.4	736	Total			

Summary for Subcatchment 5S: Pre B.2

Runoff = 0.96 cfs @ 12.20 hrs, Volume= 0.098 af, Depth= 0.71"

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-yr Rainfall=3.00"

Area (sf)	CN	Adj	Description
* 16,037	79		>75% Grass cover, Good, HSG B
* 15,072	89		>75% Grass cover, Good, HSG D
2,551	98		Unconnected pavement, HSG B
1,451	98		Unconnected pavement, HSG D
32,793	55		Woods, Good, HSG B
3,967	77		Woods, Good, HSG D
71,871	71	70	Weighted Average, UI Adjusted
67,869			94.43% Pervious Area
4,002			5.57% Impervious Area
4,002			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	50	0.0780	0.11		Sheet Flow , Woods: Light underbrush n= 0.400 P2= 2.95"
0.1	10	0.1000	1.58		Shallow Concentrated Flow , Woodland Kv= 5.0 fps
0.2	39	0.3230	2.84		Shallow Concentrated Flow , Woodland Kv= 5.0 fps
2.8	165	0.0380	0.97		Shallow Concentrated Flow , Woodland Kv= 5.0 fps
0.2	10	0.0200	0.71		Shallow Concentrated Flow , Woodland Kv= 5.0 fps
0.8	55	0.0520	1.14		Shallow Concentrated Flow , Woodland Kv= 5.0 fps
0.8	87	0.1430	1.89		Shallow Concentrated Flow , Woodland Kv= 5.0 fps
12.4	416	Total			

6842-Pre

Type III 24-hr 2-yr Rainfall=3.00"

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Summary for Subcatchment 6S: Pre C.2

Runoff = 1.67 cfs @ 12.25 hrs, Volume= 0.175 af, Depth= 0.91"

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-yr Rainfall=3.00"

Area (sf)	CN	Description
26,537	55	Woods, Good, HSG B
2,127	77	Woods, Good, HSG D
62,399	79	>75% Grass cover, Good, HSG B
* 9,762	89	>75% Grass cover, Good, HSG D
100,825	74	Weighted Average
100,825		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.8	18	0.0160	0.03		Sheet Flow , Woods: Dense underbrush n= 0.800 P2= 2.95"
2.5	33	0.0730	0.22		Sheet Flow , Grass: Short n= 0.150 P2= 2.95"
0.8	121	0.1440	2.66		Shallow Concentrated Flow , Short Grass Pasture Kv= 7.0 fps
0.1	10	0.1790	2.12		Shallow Concentrated Flow , Woodland Kv= 5.0 fps
0.3	41	0.1260	2.48		Shallow Concentrated Flow , Short Grass Pasture Kv= 7.0 fps
1.5	125	0.0800	1.41		Shallow Concentrated Flow , Woodland Kv= 5.0 fps
0.1	6	0.0170	0.91		Shallow Concentrated Flow , Short Grass Pasture Kv= 7.0 fps
0.0	5	0.0210	2.94		Shallow Concentrated Flow , Paved Kv= 20.3 fps
0.1	5	0.0190	0.96		Shallow Concentrated Flow , Short Grass Pasture Kv= 7.0 fps
16.2	364	Total			

Summary for Subcatchment 7S: Pre C.1

Runoff = 4.68 cfs @ 12.23 hrs, Volume= 0.475 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 2-yr Rainfall=3.00"

6842-Pre

Type III 24-hr 2-yr Rainfall=3.00"

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Area (sf)	CN	Description
* 78,314	68	>75% Grass cover, Good, HSG A
* 147,609	79	>75% Grass cover, Good, HSG B
2,514	98	Roofs, HSG B
11,441	98	Paved parking, HSG B
18,629	55	Woods, Good, HSG B
258,507	75	Weighted Average
244,552		94.60% Pervious Area
13,955		5.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	10	0.1000	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.95"
2.7	40	0.0900	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 2.95"
1.1	120	0.0700	1.85		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.5	36	0.0650	1.27		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.6	175	0.0650	1.78		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.0	5	0.0190	2.80		Shallow Concentrated Flow, Paved Kv= 20.3 fps
7.4	368	0.0140	0.83		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
15.2	754	Total			

Summary for Subcatchment 8S: Roof Area A

Runoff = 4.68 cfs @ 12.09 hrs, Volume= 0.380 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
71,756	98	Roofs, HSG B
71,756		100.00% Impervious Area

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

Summary for Subcatchment 13S: Roof Area B

Runoff = 1.94 cfs @ 12.09 hrs, Volume= 0.158 af, Depth= 2.77"

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 2-yr Rainfall=3.00"**6842-Pre**

Type III 24-hr 2-yr Rainfall=3.00"

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Area (sf)	CN	Description
29,814	98	Roofs, HSG B
29,814		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: Pre A.4

Runoff = 0.00 cfs @ 22.18 hrs, Volume= 0.001 af, Depth= 0.01"

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-yr Rainfall=3.00"

Area (sf)	CN	Description
* 10,963	68	>75% Grass cover, Good, HSG A
20,431	30	Woods, Good, HSG A
31,394	43	Weighted Average
31,394		100.00% Pervious Area

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

Summary for Pond 12P: Existing Wet Basin

Inflow Area = 7.392 ac, 55.84% Impervious, Inflow Depth = 1.83" for 2-yr event

Inflow = 9.06 cfs @ 12.31 hrs, Volume= 1.129 af

Outflow = 3.60 cfs @ 12.77 hrs, Volume= 1.129 af, Atten= 60%, Lag= 27.7 min

Primary = 3.60 cfs @ 12.77 hrs, Volume= 1.129 af

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

Peak Elev= 214.92' @ 12.77 hrs Surf.Area= 13,149 sf Storage= 11,331 cf

Plug-Flow detention time= 22.6 min calculated for 1.128 af (100% of inflow)

Center-of-Mass det. time= 22.6 min (841.2 - 818.6)

Volume	Invert	Avail.Storage	Storage	Description
#1	212.30'	64,778 cf		Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
212.30	50	75.0	0	0	50
213.00	556	100.0	180	180	403
214.00	5,786	393.0	2,712	2,892	11,901
215.00	13,981	580.0	9,587	12,479	26,388
216.00	19,970	757.0	16,887	29,366	45,232
217.00	53,560	1,442.0	35,412	64,778	165,106

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Type III 24-hr 2-yr Rainfall=3.00"

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Device	Routing	Invert	Outlet Devices
#1	Primary	212.37'	15.0" Round Culvert L= 517.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 212.37' / 211.80' S= 0.0011 ' /' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 1.23 sf

Primary OutFlow Max=3.60 cfs @ 12.77 hrs HW=214.91' (Free Discharge)

1=Culvert (Barrel Controls 3.60 cfs @ 2.93 fps)

Summary for Pond 13P: Existing Infiltration Basin

Inflow Area =	1.161 ac, 37.95% Impervious, Inflow Depth = 1.06" for 2-yr event
Inflow =	1.25 cfs @ 12.09 hrs, Volume= 0.102 af
Outflow =	0.25 cfs @ 12.52 hrs, Volume= 0.102 af, Atten= 80%, Lag= 25.9 min
Discarded =	0.22 cfs @ 12.52 hrs, Volume= 0.101 af
Primary =	0.03 cfs @ 12.52 hrs, Volume= 0.001 af

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

Peak Elev= 212.92' @ 12.52 hrs Surf.Area= 3,299 sf Storage= 1,264 cf

Plug-Flow detention time= 38.4 min calculated for 0.102 af (100% of inflow)

Center-of-Mass det. time= 38.4 min (798.7 - 760.3)

Volume	Invert	Avail.Storage	Storage Description		
#1	212.50'	11,128 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
212.50	2,793	372.0	0	0	2,793
213.00	3,407	450.0	1,547	1,547	7,899
214.00	4,790	473.0	4,079	5,626	9,651
215.00	6,246	497.0	5,502	11,128	11,566

Device	Routing	Invert	Outlet Devices
#1	Primary	212.83'	15.0" Round Culvert L= 90.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 212.83' / 210.39' S= 0.0271 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Discarded	212.50'	2.410 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 210.40'
#3	Device 1	212.63'	3.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.22 cfs @ 12.52 hrs HW=212.92' (Free Discharge)

2=Exfiltration (Controls 0.22 cfs)

Primary OutFlow Max=0.03 cfs @ 12.52 hrs HW=212.92' (Free Discharge)

1=Culvert (Inlet Controls 0.03 cfs @ 0.78 fps)

3=Orifice/Grate (Passes 0.03 cfs of 0.07 cfs potential flow)

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Type III 24-hr 2-yr Rainfall=3.00"

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Summary for Link 11L: DP-A

Inflow Area =	30.660 ac, 30.26% Impervious, Inflow Depth = 1.20" for 2-yr event
Inflow =	20.88 cfs @ 12.16 hrs, Volume= 3.067 af
Primary =	20.88 cfs @ 12.16 hrs, Volume= 3.067 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-yr Rainfall=4.44"

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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

Subcatchment 1S: Pre A.1Runoff Area=242,230 sf 49.29% Impervious Runoff Depth=2.95"
Flow Length=298' Tc=10.8 min CN=86 Runoff=16.13 cfs 1.366 af**Subcatchment 2S: Pre A.2**Runoff Area=289,668 sf 0.00% Impervious Runoff Depth=0.82"
Flow Length=658' Tc=28.0 min CN=57 Runoff=2.93 cfs 0.455 af**Subcatchment 3S: Pre A.3**Runoff Area=19,199 sf 100.00% Impervious Runoff Depth=4.20"
Tc=6.0 min CN=98 Runoff=1.87 cfs 0.154 af**Subcatchment 4S: Pre B.1**Runoff Area=220,300 sf 66.26% Impervious Runoff Depth=3.44"
Flow Length=736' Tc=24.4 min CN=91 Runoff=12.26 cfs 1.450 af**Subcatchment 5S: Pre B.2**Runoff Area=71,871 sf 5.57% Impervious Runoff Depth=1.63"
Flow Length=416' Tc=12.4 min UJ Adjusted CN=70 Runoff=2.44 cfs 0.224 af**Subcatchment 6S: Pre C.2**Runoff Area=100,825 sf 0.00% Impervious Runoff Depth=1.93"
Flow Length=364' Tc=16.2 min CN=74 Runoff=3.75 cfs 0.372 af**Subcatchment 7S: Pre C.1**Runoff Area=258,507 sf 5.40% Impervious Runoff Depth=2.00"
Flow Length=754' Tc=15.2 min CN=75 Runoff=10.34 cfs 0.991 af**Subcatchment 8S: Roof Area A**Runoff Area=71,756 sf 100.00% Impervious Runoff Depth=4.20"
Tc=6.0 min CN=98 Runoff=6.98 cfs 0.577 af**Subcatchment 13S: Roof Area B**Runoff Area=29,814 sf 100.00% Impervious Runoff Depth=4.20"
Tc=6.0 min CN=98 Runoff=2.90 cfs 0.240 af**Subcatchment 14S: Pre A.4**Runoff Area=31,394 sf 0.00% Impervious Runoff Depth=0.21"
Tc=6.0 min CN=43 Runoff=0.04 cfs 0.013 af**Pond 12P: Existing Wet Basin**Peak Elev=215.76' Storage=24,747 cf Inflow=15.28 cfs 1.914 af
15.0" Round Culvert n=0.013 L=517.0' S=0.0011 '/' Outflow=4.34 cfs 1.914 af**Pond 13P: Existing Infiltration Basin**Peak Elev=213.14' Storage=2,039 cf Inflow=1.87 cfs 0.167 af
Discarded=0.25 cfs 0.151 af Primary=0.13 cfs 0.016 af Outflow=0.39 cfs 0.167 af**Link 11L: DP-A**Inflow=38.37 cfs 5.690 af
Primary=38.37 cfs 5.690 af**Total Runoff Area = 30.660 ac Runoff Volume = 5.841 af Average Runoff Depth = 2.29"**
69.74% Pervious = 21.383 ac 30.26% Impervious = 9.277 ac**6842-Pre**

Type III 24-hr 10-yr Rainfall=4.44"

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Summary for Subcatchment 1S: Pre A.1

Runoff = 16.13 cfs @ 12.15 hrs, Volume= 1.366 af, Depth= 2.95"

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 10-yr Rainfall=4.44"

Area (sf)	CN	Description			
* 71,903	98	Paved parking, HSG A			
41,850	98	Paved parking, HSG B			
* 45,336	68	>75% Grass cover, Good, HSG A			
* 77,493	79	>75% Grass cover, Good, HSG B			
485	98	Unconnected pavement, HSG A			
5,163	98	Unconnected pavement, HSG B			
242,230	86	Weighted Average			
122,829		50.71% Pervious Area			
119,401		49.29% Impervious Area			
5,648		4.73% Unconnected			
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	50	0.0100	0.11		Sheet Flow, Grass: Short n= 0.150 P2= 2.95"
2.9	223	0.0330	1.27		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	25	0.0081	1.83		Shallow Concentrated Flow, Paved Kv= 20.3 fps
10.8	298	Total			

Summary for Subcatchment 2S: Pre A.2

Runoff = 2.93 cfs @ 12.49 hrs, Volume= 0.455 af, Depth= 0.82"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
* 78,930	30	Woods, Good, HSG A
49,074	55	Woods, Good, HSG B
31,909	77	Woods, Good, HSG D
* 116,373	68	>75% Grass cover, Good, HSG A
* 13,268	79	>75% Grass cover, Good, HSG B
* 114	89	>75% Grass cover, Good, HSG D
289,668	57	Weighted Average
289,668		100.00% Pervious Area

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Type III 24-hr 10-yr Rainfall=4.44"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.8	50	0.0600	0.22		Sheet Flow, Grass: Short n= 0.150 P2= 2.95"
21.0	536	0.0037	0.43		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
3.2	72	0.0055	0.37		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
28.0	658	Total			

Summary for Subcatchment 3S: Pre A.3

Runoff = 1.87 cfs @ 12.09 hrs, Volume= 0.154 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
19,199	98	Paved parking, HSG A
19,199		100.00% Impervious Area

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

Summary for Subcatchment 4S: Pre B.1

Runoff = 12.26 cfs @ 12.33 hrs, Volume= 1.450 af, Depth= 3.44"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
59,394	98	Paved parking, HSG A
49,116	98	Paved parking, HSG B
36,430	98	Paved parking, HSG D
* 3,947	68	>75% Grass cover, Good, HSG A
* 9,665	79	>75% Grass cover, Good, HSG B
* 556	89	>75% Grass cover, Good, HSG D
1,032	98	Unconnected pavement, HSG B
60,160	77	Woods, Good, HSG D
220,300	91	Weighted Average
74,328		33.74% Pervious Area
145,972		66.26% Impervious Area
1,032		0.71% Unconnected

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Type III 24-hr 10-yr Rainfall=4.44"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.0	50	0.0300	0.04		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 2.95"
3.0	100	0.0500	0.56		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
2.4	586	0.0410	4.11		Shallow Concentrated Flow, Paved Kv= 20.3 fps
24.4	736	Total			

Summary for Subcatchment 5S: Pre B.2

Runoff = 2.44 cfs @ 12.18 hrs, Volume= 0.224 af, Depth= 1.63"

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 10-yr Rainfall=4.44"

Area (sf)	CN	Adj	Description
* 16,037	79		>75% Grass cover, Good, HSG B
* 15,072	89		>75% Grass cover, Good, HSG D
2,551	98		Unconnected pavement, HSG B
1,451	98		Unconnected pavement, HSG D
32,793	55		Woods, Good, HSG B
3,967	77		Woods, Good, HSG D
71,871	71	70	Weighted Average, UI Adjusted
67,869			94.43% Pervious Area
4,002			5.57% Impervious Area
4,002			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	50	0.0780	0.11		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.95"
0.1	10	0.1000	1.58		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.2	39	0.3230	2.84		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
2.8	165	0.0380	0.97		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.2	10	0.0200	0.71		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.8	55	0.0520	1.14		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.8	87	0.1430	1.89		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.4	416	Total			

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Type III 24-hr 10-yr Rainfall=4.44"

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Summary for Subcatchment 6S: Pre C.2

Runoff = 3.75 cfs @ 12.23 hrs, Volume= 0.372 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 10-yr Rainfall=4.44"

Area (sf)	CN	Description
26,537	55	Woods, Good, HSG B
2,127	77	Woods, Good, HSG D
62,399	79	>75% Grass cover, Good, HSG B
9,762	89	>75% Grass cover, Good, HSG D
100,825	74	Weighted Average
100,825		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.8	18	0.0160	0.03		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 2.95"
2.5	33	0.0730	0.22		Sheet Flow, Grass: Short n= 0.150 P2= 2.95"
0.8	121	0.1440	2.66		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.1	10	0.1790	2.12		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.3	41	0.1260	2.48		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.5	125	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.1	6	0.0170	0.91		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.0	5	0.0210	2.94		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.1	5	0.0190	0.96		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
16.2	364	Total			

Summary for Subcatchment 7S: Pre C.1

Runoff = 10.34 cfs @ 12.22 hrs, Volume= 0.991 af, Depth= 2.00"

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 10-yr Rainfall=4.44"**6842-Pre**

Type III 24-hr 10-yr Rainfall=4.44"

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Area (sf)	CN	Description
* 78,314	68	>75% Grass cover, Good, HSG A
* 147,609	79	>75% Grass cover, Good, HSG B
2,514	98	Roofs, HSG B
11,441	98	Paved parking, HSG B
18,629	55	Woods, Good, HSG B
258,507	75	Weighted Average
244,552		94.60% Pervious Area
13,955		5.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	10	0.1000	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.95"
2.7	40	0.0900	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 2.95"
1.1	120	0.0700	1.85		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.5	36	0.0650	1.27		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.6	175	0.0650	1.78		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.0	5	0.0190	2.80		Shallow Concentrated Flow, Paved Kv= 20.3 fps
7.4	368	0.0140	0.83		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
15.2	754	Total			

Summary for Subcatchment 8S: Roof Area A

Runoff = 6.98 cfs @ 12.09 hrs, Volume= 0.577 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
71,756	98	Roofs, HSG B
71,756		100.00% Impervious Area

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

Summary for Subcatchment 13S: Roof Area B

Runoff = 2.90 cfs @ 12.09 hrs, Volume= 0.240 af, Depth= 4.20"

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-yr Rainfall=4.44"

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Type III 24-hr 10-yr Rainfall=4.44"

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Area (sf)	CN	Description
29,814	98	Roofs, HSG B
29,814		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: Pre A.4

Runoff = 0.04 cfs @ 12.44 hrs, Volume= 0.013 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 10-yr Rainfall=4.44"

Area (sf)	CN	Description
* 10,963	68	>75% Grass cover, Good, HSG A
20,431	30	Woods, Good, HSG A
31,394	43	Weighted Average
31,394		100.00% Pervious Area

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

Summary for Pond 12P: Existing Wet Basin

Inflow Area = 7.392 ac, 55.84% Impervious, Inflow Depth = 3.11" for 10-yr event
 Inflow = 15.28 cfs @ 12.29 hrs, Volume= 1.914 af
 Outflow = 4.34 cfs @ 12.89 hrs, Volume= 1.914 af, Atten= 72%, Lag= 35.8 min
 Primary = 4.34 cfs @ 12.89 hrs, Volume= 1.914 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 215.76' @ 12.89 hrs Surf.Area= 18,432 sf Storage= 24,747 cf

Plug-Flow detention time= 44.0 min calculated for 1.914 af (100% of inflow)
 Center-of-Mass det. time= 43.6 min (850.3 - 806.8)

Volume	Invert	Avail.Storage	Storage Description		
#1	212.30'	64,778 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
212.30	50	75.0	0	0	50
213.00	556	100.0	180	180	403
214.00	5,786	393.0	2,712	2,892	11,901
215.00	13,981	580.0	9,587	12,479	26,388
216.00	19,970	757.0	16,887	29,366	45,232
217.00	53,560	1,442.0	35,412	64,778	165,106

6842-Pre

Type III 24-hr 10-yr Rainfall=4.44"

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Device	Routing	Invert	Outlet Devices
#1	Primary	212.37'	15.0" Round Culvert L= 517.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 212.37' / 211.80' S= 0.0011 ' /' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 1.23 sf

Primary OutFlow Max=4.34 cfs @ 12.89 hrs HW=215.76' (Free Discharge)

1=Culvert (Barrel Controls 4.34 cfs @ 3.54 fps)

Summary for Pond 13P: Existing Infiltration Basin

Inflow Area = 1.161 ac, 37.95% Impervious, Inflow Depth = 1.73" for 10-yr event
 Inflow = 1.87 cfs @ 12.09 hrs, Volume= 0.167 af
 Outflow = 0.39 cfs @ 12.53 hrs, Volume= 0.167 af, Atten= 79%, Lag= 26.4 min
 Discarded = 0.25 cfs @ 12.53 hrs, Volume= 0.151 af
 Primary = 0.13 cfs @ 12.53 hrs, Volume= 0.016 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 213.14' @ 12.53 hrs Surf.Area= 3,587 sf Storage= 2,039 cf

Plug-Flow detention time= 47.4 min calculated for 0.167 af (100% of inflow)
 Center-of-Mass det. time= 47.4 min (816.2 - 768.8)

Volume	Invert	Avail.Storage	Storage Description		
#1	212.50'	11,128 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
212.50	2,793	372.0	0	0	2,793
213.00	3,407	450.0	1,547	1,547	7,899
214.00	4,790	473.0	4,079	5,626	9,651
215.00	6,246	497.0	5,502	11,128	11,566

Device	Routing	Invert	Outlet Devices
#1	Primary	212.83'	15.0" Round Culvert L= 90.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 212.83' / 210.39' S= 0.0271 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Discarded	212.50'	2.410 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 210.40'
#3	Device 1	212.63'	3.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.25 cfs @ 12.53 hrs HW=213.14' (Free Discharge)

2=Exfiltration (Controls 0.25 cfs)

Primary OutFlow Max=0.13 cfs @ 12.53 hrs HW=213.14' (Free Discharge)

1=Culvert (Passes 0.13 cfs of 0.36 cfs potential flow)

3=Orifice/Grate (Orifice Controls 0.13 cfs @ 2.68 fps)

6842-Pre

Type III 24-hr 10-yr Rainfall=4.44"

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Summary for Link 11L: DP-A

Inflow Area = 30.660 ac, 30.26% Impervious, Inflow Depth = 2.23" for 10-yr event
Inflow = 38.37 cfs @ 12.17 hrs, Volume= 5.690 af
Primary = 38.37 cfs @ 12.17 hrs, Volume= 5.690 af, Atten= 0%, Lag= 0.0 min

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

6842-Pre

Type III 24-hr 25-yr Rainfall=5.55"

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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

Subcatchment 1S: Pre A.1 Runoff Area=242,230 sf 49.29% Impervious Runoff Depth=3.98"
Flow Length=298' Tc=10.8 min CN=86 Runoff=21.57 cfs 1.846 af

Subcatchment 2S: Pre A.2 Runoff Area=289,668 sf 0.00% Impervious Runoff Depth=1.41"
Flow Length=658' Tc=28.0 min CN=57 Runoff=5.69 cfs 0.781 af

Subcatchment 3S: Pre A.3 Runoff Area=19,199 sf 100.00% Impervious Runoff Depth=5.31"
Tc=6.0 min CN=98 Runoff=2.34 cfs 0.195 af

Subcatchment 4S: Pre B.1 Runoff Area=220,300 sf 66.26% Impervious Runoff Depth=4.52"
Flow Length=736' Tc=24.4 min CN=91 Runoff=15.90 cfs 1.904 af

Subcatchment 5S: Pre B.2 Runoff Area=71,871 sf 5.57% Impervious Runoff Depth=2.45"
Flow Length=416' Tc=12.4 min UI Adjusted CN=70 Runoff=3.76 cfs 0.337 af

Subcatchment 6S: Pre C.2 Runoff Area=100,825 sf 0.00% Impervious Runoff Depth=2.81"
Flow Length=364' Tc=16.2 min CN=74 Runoff=5.54 cfs 0.542 af

Subcatchment 7S: Pre C.1 Runoff Area=258,507 sf 5.40% Impervious Runoff Depth=2.90"
Flow Length=754' Tc=15.2 min CN=75 Runoff=15.13 cfs 1.435 af

Subcatchment 8S: Roof Area A Runoff Area=71,756 sf 100.00% Impervious Runoff Depth=5.31"
Tc=6.0 min CN=98 Runoff=8.74 cfs 0.729 af

Subcatchment 13S: Roof Area B Runoff Area=29,814 sf 100.00% Impervious Runoff Depth=5.31"
Tc=6.0 min CN=98 Runoff=3.63 cfs 0.303 af

Subcatchment 14S: Pre A.4 Runoff Area=31,394 sf 0.00% Impervious Runoff Depth=0.52"
Tc=6.0 min CN=43 Runoff=0.17 cfs 0.031 af

Pond 12P: Existing Wet Basin Peak Elev=216.30' Storage=36,550 cf Inflow=20.19 cfs 2.544 af
15.0" Round Culvert n=0.013 L=517.0' S=0.0011 '/' Outflow=4.75 cfs 2.544 af

Pond 13P: Existing Infiltration Basin Peak Elev=213.37' Storage=2,908 cf Inflow=2.44 cfs 0.226 af
Discarded=0.29 cfs 0.193 af Primary=0.17 cfs 0.034 af Outflow=0.47 cfs 0.226 af

Link 11L: DP-A Inflow=53.28 cfs 7.911 af
Primary=53.28 cfs 7.911 af

Total Runoff Area = 30.660 ac Runoff Volume = 8.104 af Average Runoff Depth = 3.17"
69.74% Pervious = 21.383 ac 30.26% Impervious = 9.277 ac

6842-Pre

Type III 24-hr 25-yr Rainfall=5.55"

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Summary for Subcatchment 1S: Pre A.1

Runoff = 21.57 cfs @ 12.15 hrs, Volume= 1.846 af, Depth= 3.98"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
* 71,903	98	Paved parking, HSG A
41,850	98	Paved parking, HSG B
* 45,336	68	>75% Grass cover, Good, HSG A
* 77,493	79	>75% Grass cover, Good, HSG B
485	98	Unconnected pavement, HSG A
5,163	98	Unconnected pavement, HSG B
242,230	86	Weighted Average
122,829		50.71% Pervious Area
119,401		49.29% Impervious Area
5,648		4.73% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	50	0.0100	0.11		Sheet Flow, Grass: Short n= 0.150 P2= 2.95"
2.9	223	0.0330	1.27		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	25	0.0081	1.83		Shallow Concentrated Flow, Paved Kv= 20.3 fps
10.8	298	Total			

Summary for Subcatchment 2S: Pre A.2

Runoff = 5.69 cfs @ 12.45 hrs, Volume= 0.781 af, Depth= 1.41"

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-yr Rainfall=5.55"

Area (sf)	CN	Description
* 78,930	30	Woods, Good, HSG A
49,074	55	Woods, Good, HSG B
31,909	77	Woods, Good, HSG D
* 116,373	68	>75% Grass cover, Good, HSG A
* 13,268	79	>75% Grass cover, Good, HSG B
* 114	89	>75% Grass cover, Good, HSG D
289,668	57	Weighted Average
289,668		100.00% Pervious Area

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Type III 24-hr 25-yr Rainfall=5.55"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.8	50	0.0600	0.22		Sheet Flow, Grass: Short n= 0.150 P2= 2.95"
21.0	536	0.0037	0.43		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
3.2	72	0.0055	0.37		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
28.0	658	Total			

Summary for Subcatchment 3S: Pre A.3

Runoff = 2.34 cfs @ 12.09 hrs, Volume= 0.195 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
19,199	98	Paved parking, HSG A
19,199		100.00% Impervious Area

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

Summary for Subcatchment 4S: Pre B.1

Runoff = 15.90 cfs @ 12.32 hrs, Volume= 1.904 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-yr Rainfall=5.55"

Area (sf)	CN	Description
59,394	98	Paved parking, HSG A
49,116	98	Paved parking, HSG B
36,430	98	Paved parking, HSG D
* 3,947	68	>75% Grass cover, Good, HSG A
* 9,665	79	>75% Grass cover, Good, HSG B
* 556	89	>75% Grass cover, Good, HSG D
1,032	98	Unconnected pavement, HSG B
60,160	77	Woods, Good, HSG D
220,300	91	Weighted Average
74,328		33.74% Pervious Area
145,972		66.26% Impervious Area
1,032		0.71% Unconnected

6842-Pre

Type III 24-hr 25-yr Rainfall=5.55"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.0	50	0.0300	0.04		Sheet Flow , Woods: Dense underbrush n= 0.800 P2= 2.95"
3.0	100	0.0500	0.56		Shallow Concentrated Flow , Forest w/Heavy Litter Kv= 2.5 fps
2.4	586	0.0410	4.11		Shallow Concentrated Flow , Paved Kv= 20.3 fps
24.4	736	Total			

Summary for Subcatchment 5S: Pre B.2

Runoff = 3.76 cfs @ 12.18 hrs, Volume= 0.337 af, Depth= 2.45"

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-yr Rainfall=5.55"

Area (sf)	CN	Adj	Description
* 16,037	79		>75% Grass cover, Good, HSG B
* 15,072	89		>75% Grass cover, Good, HSG D
2,551	98		Unconnected pavement, HSG B
1,451	98		Unconnected pavement, HSG D
32,793	55		Woods, Good, HSG B
3,967	77		Woods, Good, HSG D
71,871	71	70	Weighted Average, UI Adjusted
67,869			94.43% Pervious Area
4,002			5.57% Impervious Area
4,002			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	50	0.0780	0.11		Sheet Flow , Woods: Light underbrush n= 0.400 P2= 2.95"
0.1	10	0.1000	1.58		Shallow Concentrated Flow , Woodland Kv= 5.0 fps
0.2	39	0.3230	2.84		Shallow Concentrated Flow , Woodland Kv= 5.0 fps
2.8	165	0.0380	0.97		Shallow Concentrated Flow , Woodland Kv= 5.0 fps
0.2	10	0.0200	0.71		Shallow Concentrated Flow , Woodland Kv= 5.0 fps
0.8	55	0.0520	1.14		Shallow Concentrated Flow , Woodland Kv= 5.0 fps
0.8	87	0.1430	1.89		Shallow Concentrated Flow , Woodland Kv= 5.0 fps
12.4	416	Total			

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Type III 24-hr 25-yr Rainfall=5.55"

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Summary for Subcatchment 6S: Pre C.2

Runoff = 5.54 cfs @ 12.23 hrs, Volume= 0.542 af, Depth= 2.81"

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-yr Rainfall=5.55"

Area (sf)	CN	Description
26,537	55	Woods, Good, HSG B
2,127	77	Woods, Good, HSG D
62,399	79	>75% Grass cover, Good, HSG B
* 9,762	89	>75% Grass cover, Good, HSG D
100,825	74	Weighted Average
100,825		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.8	18	0.0160	0.03		Sheet Flow , Woods: Dense underbrush n= 0.800 P2= 2.95"
2.5	33	0.0730	0.22		Sheet Flow , Grass: Short n= 0.150 P2= 2.95"
0.8	121	0.1440	2.66		Shallow Concentrated Flow , Short Grass Pasture Kv= 7.0 fps
0.1	10	0.1790	2.12		Shallow Concentrated Flow , Woodland Kv= 5.0 fps
0.3	41	0.1260	2.48		Shallow Concentrated Flow , Short Grass Pasture Kv= 7.0 fps
1.5	125	0.0800	1.41		Shallow Concentrated Flow , Woodland Kv= 5.0 fps
0.1	6	0.0170	0.91		Shallow Concentrated Flow , Short Grass Pasture Kv= 7.0 fps
0.0	5	0.0210	2.94		Shallow Concentrated Flow , Paved Kv= 20.3 fps
0.1	5	0.0190	0.96		Shallow Concentrated Flow , Short Grass Pasture Kv= 7.0 fps
16.2	364	Total			

Summary for Subcatchment 7S: Pre C.1

Runoff = 15.13 cfs @ 12.21 hrs, Volume= 1.435 af, Depth= 2.90"

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 25-yr Rainfall=5.55"

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Type III 24-hr 25-yr Rainfall=5.55"

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Area (sf)	CN	Description
* 78,314	68	>75% Grass cover, Good, HSG A
* 147,609	79	>75% Grass cover, Good, HSG B
2,514	98	Roofs, HSG B
11,441	98	Paved parking, HSG B
18,629	55	Woods, Good, HSG B
258,507	75	Weighted Average
244,552		94.60% Pervious Area
13,955		5.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	10	0.1000	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.95"
2.7	40	0.0900	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 2.95"
1.1	120	0.0700	1.85		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.5	36	0.0650	1.27		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.6	175	0.0650	1.78		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.0	5	0.0190	2.80		Shallow Concentrated Flow, Paved Kv= 20.3 fps
7.4	368	0.0140	0.83		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
15.2	754	Total			

Summary for Subcatchment 8S: Roof Area A

Runoff = 8.74 cfs @ 12.09 hrs, Volume= 0.729 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
71,756	98	Roofs, HSG B
71,756		100.00% Impervious Area

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

Summary for Subcatchment 13S: Roof Area B

Runoff = 3.63 cfs @ 12.09 hrs, Volume= 0.303 af, Depth= 5.31"

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 25-yr Rainfall=5.55"**6842-Pre**

Type III 24-hr 25-yr Rainfall=5.55"

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Area (sf)	CN	Description
29,814	98	Roofs, HSG B
29,814		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: Pre A.4

Runoff = 0.17 cfs @ 12.29 hrs, Volume= 0.031 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-yr Rainfall=5.55"

Area (sf)	CN	Description
* 10,963	68	>75% Grass cover, Good, HSG A
20,431	30	Woods, Good, HSG A
31,394	43	Weighted Average
31,394		100.00% Pervious Area

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

Summary for Pond 12P: Existing Wet Basin

Inflow Area = 7.392 ac, 55.84% Impervious, Inflow Depth = 4.13" for 25-yr event
 Inflow = 20.19 cfs @ 12.29 hrs, Volume= 2.544 af
 Outflow = 4.75 cfs @ 12.97 hrs, Volume= 2.544 af, Atten= 76%, Lag= 41.3 min
 Primary = 4.75 cfs @ 12.97 hrs, Volume= 2.544 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 216.30' @ 12.97 hrs Surf.Area= 28,314 sf Storage= 36,550 cfPlug-Flow detention time= 61.3 min calculated for 2.542 af (100% of inflow)
Center-of-Mass det. time= 61.2 min (861.6 - 800.4)

Volume	Invert	Avail.Storage	Storage	Description
#1	212.30'	64,778 cf		Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
212.30	50	75.0	0	0	50
213.00	556	100.0	180	180	403
214.00	5,786	393.0	2,712	2,892	11,901
215.00	13,981	580.0	9,587	12,479	26,388
216.00	19,970	757.0	16,887	29,366	45,232
217.00	53,560	1,442.0	35,412	64,778	165,106

6842-Pre

Type III 24-hr 25-yr Rainfall=5.55"

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Device	Routing	Invert	Outlet Devices
#1	Primary	212.37'	15.0" Round Culvert L= 517.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 212.37' / 211.80' S= 0.0011 ' /' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 1.23 sf

Primary OutFlow Max=4.75 cfs @ 12.97 hrs HW=216.30' (Free Discharge)

1=Culvert (Barrel Controls 4.75 cfs @ 3.87 fps)

Summary for Pond 13P: Existing Infiltration Basin

Inflow Area =	1.161 ac, 37.95% Impervious, Inflow Depth = 2.34" for 25-yr event
Inflow =	2.44 cfs @ 12.09 hrs, Volume= 0.226 af
Outflow =	0.47 cfs @ 12.57 hrs, Volume= 0.226 af, Atten= 81%, Lag= 28.5 min
Discarded =	0.29 cfs @ 12.57 hrs, Volume= 0.193 af
Primary =	0.17 cfs @ 12.57 hrs, Volume= 0.034 af

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

Peak Elev= 213.37' @ 12.57 hrs Surf.Area= 3,895 sf Storage= 2,908 cf

Plug-Flow detention time= 57.3 min calculated for 0.226 af (100% of inflow)

Center-of-Mass det. time= 57.3 min (830.6 - 773.3)

Volume	Invert	Avail.Storage	Storage Description		
#1	212.50'	11,128 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
212.50	2,793	372.0	0	0	2,793
213.00	3,407	450.0	1,547	1,547	7,899
214.00	4,790	473.0	4,079	5,626	9,651
215.00	6,246	497.0	5,502	11,128	11,566

Device	Routing	Invert	Outlet Devices
#1	Primary	212.83'	15.0" Round Culvert L= 90.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 212.83' / 210.39' S= 0.0271 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Discarded	212.50'	2.410 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 210.40'
#3	Device 1	212.63'	3.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.29 cfs @ 12.57 hrs HW=213.37' (Free Discharge)

2=Exfiltration (Controls 0.29 cfs)

Primary OutFlow Max=0.17 cfs @ 12.57 hrs HW=213.37' (Free Discharge)

1=Culvert (Passes 0.17 cfs of 1.01 cfs potential flow)

3=Orifice/Grate (Orifice Controls 0.17 cfs @ 3.55 fps)

6842-Pre

Type III 24-hr 25-yr Rainfall=5.55"

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Summary for Link 11L: DP-A

Inflow Area =	30.660 ac, 30.26% Impervious, Inflow Depth = 3.10" for 25-yr event
Inflow =	53.28 cfs @ 12.17 hrs, Volume= 7.911 af
Primary =	53.28 cfs @ 12.17 hrs, Volume= 7.911 af, Atten= 0%, Lag= 0.0 min

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

6842-Pre

Type III 24-hr 100-yr Rainfall=7.81"

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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

Subcatchment 1S: Pre A.1Runoff Area=242,230 sf 49.29% Impervious Runoff Depth=6.15"
Flow Length=298' Tc=10.8 min CN=86 Runoff=32.63 cfs 2.849 af**Subcatchment 2S: Pre A.2**Runoff Area=289,668 sf 0.00% Impervious Runoff Depth=2.87"
Flow Length=658' Tc=28.0 min CN=57 Runoff=12.56 cfs 1.589 af**Subcatchment 3S: Pre A.3**Runoff Area=19,199 sf 100.00% Impervious Runoff Depth=7.57"
Tc=6.0 min CN=98 Runoff=3.30 cfs 0.278 af**Subcatchment 4S: Pre B.1**Runoff Area=220,300 sf 66.26% Impervious Runoff Depth=6.74"
Flow Length=736' Tc=24.4 min CN=91 Runoff=23.22 cfs 2.839 af**Subcatchment 5S: Pre B.2**Runoff Area=71,871 sf 5.57% Impervious Runoff Depth=4.30"
Flow Length=416' Tc=12.4 min UI Adjusted CN=70 Runoff=6.72 cfs 0.591 af**Subcatchment 6S: Pre C.2**Runoff Area=100,825 sf 0.00% Impervious Runoff Depth=4.76"
Flow Length=364' Tc=16.2 min CN=74 Runoff=9.44 cfs 0.917 af**Subcatchment 7S: Pre C.1**Runoff Area=258,507 sf 5.40% Impervious Runoff Depth=4.87"
Flow Length=754' Tc=15.2 min CN=75 Runoff=25.38 cfs 2.409 af**Subcatchment 8S: Roof Area A**Runoff Area=71,756 sf 100.00% Impervious Runoff Depth=7.57"
Tc=6.0 min CN=98 Runoff=12.33 cfs 1.039 af**Subcatchment 13S: Roof Area B**Runoff Area=29,814 sf 100.00% Impervious Runoff Depth=7.57"
Tc=6.0 min CN=98 Runoff=5.12 cfs 0.432 af**Subcatchment 14S: Pre A.4**Runoff Area=31,394 sf 0.00% Impervious Runoff Depth=1.45"
Tc=6.0 min CN=43 Runoff=0.94 cfs 0.087 af**Pond 12P: Existing Wet Basin**Peak Elev=216.98' Storage=63,901 cf Inflow=30.28 cfs 3.862 af
15.0" Round Culvert n=0.013 L=517.0' S=0.0011 '/' Outflow=5.23 cfs 3.862 af**Pond 13P: Existing Infiltration Basin**Peak Elev=213.93' Storage=5,306 cf Inflow=4.20 cfs 0.365 af
Discarded=0.40 cfs 0.283 af Primary=0.25 cfs 0.082 af Outflow=0.64 cfs 0.365 af**Link 11L: DP-A**Inflow=85.26 cfs 12.748 af
Primary=85.26 cfs 12.748 af**Total Runoff Area = 30.660 ac Runoff Volume = 13.031 af Average Runoff Depth = 5.10"**
69.74% Pervious = 21.383 ac 30.26% Impervious = 9.277 ac**6842-Pre**

Type III 24-hr 100-yr Rainfall=7.81"

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Summary for Subcatchment 1S: Pre A.1

Runoff = 32.63 cfs @ 12.15 hrs, Volume= 2.849 af, Depth= 6.15"

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-yr Rainfall=7.81"

Area (sf)	CN	Description			
* 71,903	98	Paved parking, HSG A			
41,850	98	Paved parking, HSG B			
* 45,336	68	>75% Grass cover, Good, HSG A			
* 77,493	79	>75% Grass cover, Good, HSG B			
485	98	Unconnected pavement, HSG A			
5,163	98	Unconnected pavement, HSG B			
242,230	86	Weighted Average			
122,829		50.71% Pervious Area			
119,401		49.29% Impervious Area			
5,648		4.73% Unconnected			
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	50	0.0100	0.11		Sheet Flow, Grass: Short n= 0.150 P2= 2.95"
2.9	223	0.0330	1.27		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	25	0.0081	1.83		Shallow Concentrated Flow, Paved Kv= 20.3 fps
10.8	298	Total			

Summary for Subcatchment 2S: Pre A.2

Runoff = 12.56 cfs @ 12.42 hrs, Volume= 1.589 af, Depth= 2.87"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
* 78,930	30	Woods, Good, HSG A
49,074	55	Woods, Good, HSG B
31,909	77	Woods, Good, HSG D
* 116,373	68	>75% Grass cover, Good, HSG A
* 13,268	79	>75% Grass cover, Good, HSG B
* 114	89	>75% Grass cover, Good, HSG D
289,668	57	Weighted Average
289,668		100.00% Pervious Area

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Type III 24-hr 100-yr Rainfall=7.81"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.8	50	0.0600	0.22		Sheet Flow, Grass: Short n= 0.150 P2= 2.95"
21.0	536	0.0037	0.43		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
3.2	72	0.0055	0.37		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
28.0	658	Total			

Summary for Subcatchment 3S: Pre A.3

Runoff = 3.30 cfs @ 12.09 hrs, Volume= 0.278 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
19,199	98	Paved parking, HSG A
19,199		100.00% Impervious Area

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

Summary for Subcatchment 4S: Pre B.1

Runoff = 23.22 cfs @ 12.32 hrs, Volume= 2.839 af, Depth= 6.74"

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 100-yr Rainfall=7.81"

Area (sf)	CN	Description
59,394	98	Paved parking, HSG A
49,116	98	Paved parking, HSG B
36,430	98	Paved parking, HSG D
* 3,947	68	>75% Grass cover, Good, HSG A
* 9,665	79	>75% Grass cover, Good, HSG B
* 556	89	>75% Grass cover, Good, HSG D
1,032	98	Unconnected pavement, HSG B
60,160	77	Woods, Good, HSG D
220,300	91	Weighted Average
74,328		33.74% Pervious Area
145,972		66.26% Impervious Area
1,032		0.71% Unconnected

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Type III 24-hr 100-yr Rainfall=7.81"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.0	50	0.0300	0.04		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 2.95"
3.0	100	0.0500	0.56		Shallow Concentrated Flow, Forest w/Heavy Litter Kv= 2.5 fps
2.4	586	0.0410	4.11		Shallow Concentrated Flow, Paved Kv= 20.3 fps
24.4	736	Total			

Summary for Subcatchment 5S: Pre B.2

Runoff = 6.72 cfs @ 12.17 hrs, Volume= 0.591 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 100-yr Rainfall=7.81"

Area (sf)	CN	Adj	Description
* 16,037	79		>75% Grass cover, Good, HSG B
* 15,072	89		>75% Grass cover, Good, HSG D
2,551	98		Unconnected pavement, HSG B
1,451	98		Unconnected pavement, HSG D
32,793	55		Woods, Good, HSG B
3,967	77		Woods, Good, HSG D
71,871	71	70	Weighted Average, UI Adjusted
67,869			94.43% Pervious Area
4,002			5.57% Impervious Area
4,002			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	50	0.0780	0.11		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.95"
0.1	10	0.1000	1.58		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.2	39	0.3230	2.84		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
2.8	165	0.0380	0.97		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.2	10	0.0200	0.71		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.8	55	0.0520	1.14		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.8	87	0.1430	1.89		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.4	416	Total			

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Type III 24-hr 100-yr Rainfall=7.81"

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Summary for Subcatchment 6S: Pre C.2

Runoff = 9.44 cfs @ 12.22 hrs, Volume= 0.917 af, Depth= 4.76"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
26,537	55	Woods, Good, HSG B
2,127	77	Woods, Good, HSG D
62,399	79	>75% Grass cover, Good, HSG B
9,762	89	>75% Grass cover, Good, HSG D
100,825	74	Weighted Average
100,825		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.8	18	0.0160	0.03		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 2.95"
2.5	33	0.0730	0.22		Sheet Flow, Grass: Short n= 0.150 P2= 2.95"
0.8	121	0.1440	2.66		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.1	10	0.1790	2.12		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.3	41	0.1260	2.48		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.5	125	0.0800	1.41		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.1	6	0.0170	0.91		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.0	5	0.0210	2.94		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.1	5	0.0190	0.96		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
16.2	364	Total			

Summary for Subcatchment 7S: Pre C.1

Runoff = 25.38 cfs @ 12.21 hrs, Volume= 2.409 af, Depth= 4.87"

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-yr Rainfall=7.81"**6842-Pre**

Type III 24-hr 100-yr Rainfall=7.81"

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Area (sf)	CN	Description
* 78,314	68	>75% Grass cover, Good, HSG A
* 147,609	79	>75% Grass cover, Good, HSG B
2,514	98	Roofs, HSG B
11,441	98	Paved parking, HSG B
18,629	55	Woods, Good, HSG B
258,507	75	Weighted Average
244,552		94.60% Pervious Area
13,955		5.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	10	0.1000	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.95"
2.7	40	0.0900	0.25		Sheet Flow, Grass: Short n= 0.150 P2= 2.95"
1.1	120	0.0700	1.85		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.5	36	0.0650	1.27		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.6	175	0.0650	1.78		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.0	5	0.0190	2.80		Shallow Concentrated Flow, Paved Kv= 20.3 fps
7.4	368	0.0140	0.83		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
15.2	754	Total			

Summary for Subcatchment 8S: Roof Area A

Runoff = 12.33 cfs @ 12.09 hrs, Volume= 1.039 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
71,756	98	Roofs, HSG B
71,756		100.00% Impervious Area

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

Summary for Subcatchment 13S: Roof Area B

Runoff = 5.12 cfs @ 12.09 hrs, Volume= 0.432 af, Depth= 7.57"

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-yr Rainfall=7.81"

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Type III 24-hr 100-yr Rainfall=7.81"

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Area (sf)	CN	Description
29,814	98	Roofs, HSG B
29,814		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: Pre A.4

Runoff = 0.94 cfs @ 12.11 hrs, Volume= 0.087 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 100-yr Rainfall=7.81"

Area (sf)	CN	Description
* 10,963	68	>75% Grass cover, Good, HSG A
20,431	30	Woods, Good, HSG A
31,394	43	Weighted Average
31,394		100.00% Pervious Area

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

Summary for Pond 12P: Existing Wet Basin

Inflow Area = 7.392 ac, 55.84% Impervious, Inflow Depth = 6.27" for 100-yr event

Inflow = 30.28 cfs @ 12.27 hrs, Volume= 3.862 af

Outflow = 5.23 cfs @ 13.16 hrs, Volume= 3.862 af, Atten= 83%, Lag= 53.0 min

Primary = 5.23 cfs @ 13.16 hrs, Volume= 3.862 af

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

Peak Elev= 216.98' @ 13.16 hrs Surf.Area= 52,875 sf Storage= 63,901 cf

Plug-Flow detention time= 102.8 min calculated for 3.862 af (100% of inflow)

Center-of-Mass det. time= 102.4 min (893.7 - 791.2)

Volume	Invert	Avail.Storage	Storage Description
#1	212.30'	64,778 cf	Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
212.30	50	75.0	0	0	50
213.00	556	100.0	180	180	403
214.00	5,786	393.0	2,712	2,892	11,901
215.00	13,981	580.0	9,587	12,479	26,388
216.00	19,970	757.0	16,887	29,366	45,232
217.00	53,560	1,442.0	35,412	64,778	165,106

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Type III 24-hr 100-yr Rainfall=7.81"

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Device	Routing	Invert	Outlet Devices
#1	Primary	212.37'	15.0" Round Culvert L= 517.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 212.37' / 211.80' S= 0.0011 ' /' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 1.23 sf

Primary OutFlow Max=5.23 cfs @ 13.16 hrs HW=216.98' (Free Discharge)↑**1=Culvert** (Barrel Controls 5.23 cfs @ 4.26 fps)**Summary for Pond 13P: Existing Infiltration Basin**

Inflow Area = 1.161 ac, 37.95% Impervious, Inflow Depth = 3.77" for 100-yr event

Inflow = 4.20 cfs @ 12.09 hrs, Volume= 0.365 af

Outflow = 0.64 cfs @ 12.64 hrs, Volume= 0.365 af, Atten= 85%, Lag= 32.5 min

Discarded = 0.40 cfs @ 12.64 hrs, Volume= 0.283 af

Primary = 0.25 cfs @ 12.64 hrs, Volume= 0.082 af

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

Peak Elev= 213.93' @ 12.64 hrs Surf.Area= 4,689 sf Storage= 5,306 cf

Plug-Flow detention time= 81.3 min calculated for 0.365 af (100% of inflow)

Center-of-Mass det. time= 81.2 min (859.6 - 778.3)

Volume	Invert	Avail.Storage	Storage Description
#1	212.50'	11,128 cf	Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
212.50	2,793	372.0	0	0	2,793
213.00	3,407	450.0	1,547	1,547	7,899
214.00	4,790	473.0	4,079	5,626	9,651
215.00	6,246	497.0	5,502	11,128	11,566

Device	Routing	Invert	Outlet Devices
#1	Primary	212.83'	15.0" Round Culvert L= 90.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 212.83' / 210.39' S= 0.0271 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Discarded	212.50'	2.410 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 210.40'
#3	Device 1	212.63'	3.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.40 cfs @ 12.64 hrs HW=213.93' (Free Discharge)↑**2=Exfiltration** (Controls 0.40 cfs)**Primary OutFlow** Max=0.25 cfs @ 12.64 hrs HW=213.93' (Free Discharge)↑**1=Culvert** (Passes 0.25 cfs of 3.23 cfs potential flow)↑**3=Orifice/Grate** (Orifice Controls 0.25 cfs @ 5.06 fps)

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Type III 24-hr 100-yr Rainfall=7.81"

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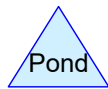
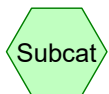
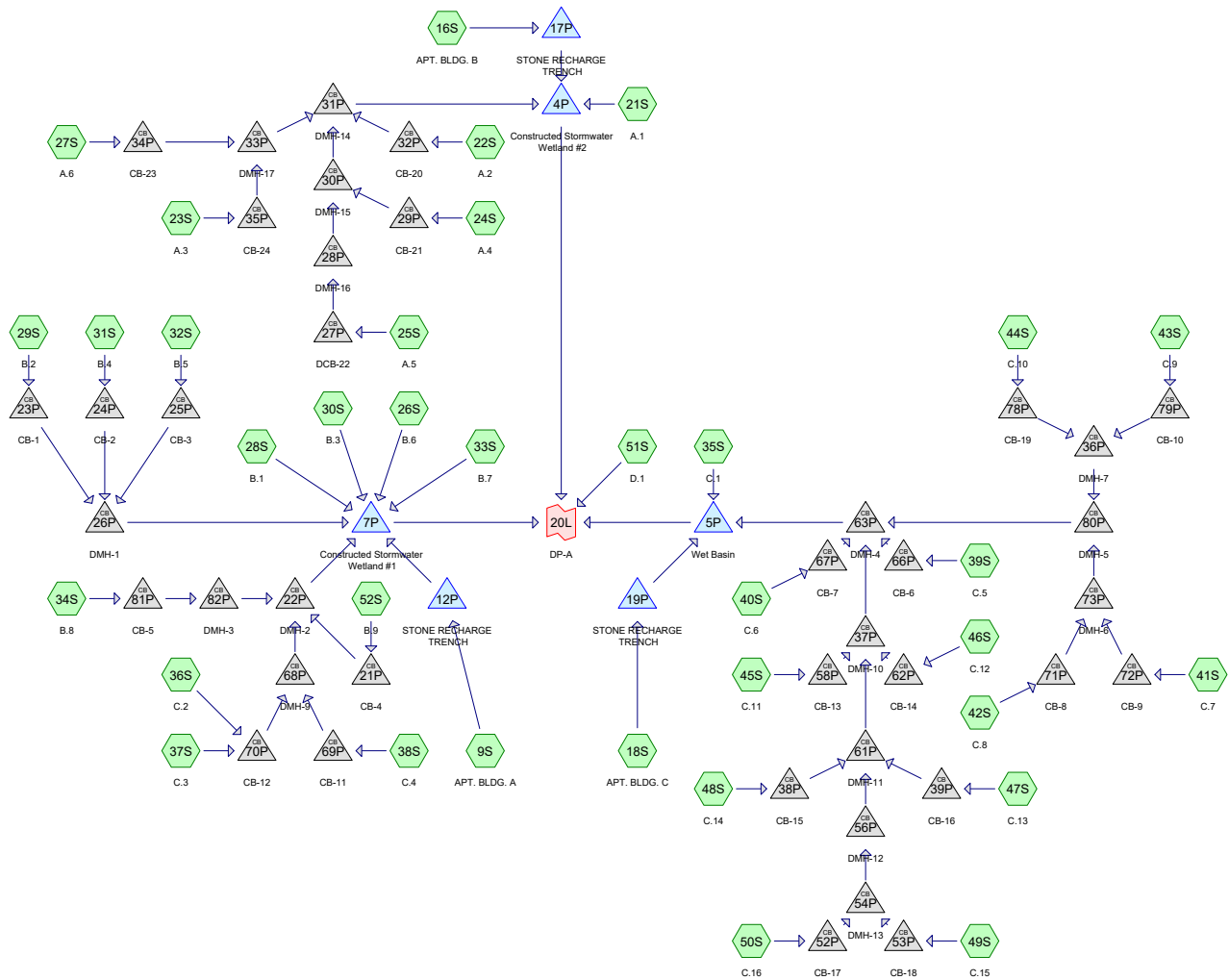
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Summary for Link 11L: DP-A

Inflow Area = 30.660 ac, 30.26% Impervious, Inflow Depth = 4.99" for 100-yr event
Inflow = 85.26 cfs @ 12.17 hrs, Volume= 12.748 af
Primary = 85.26 cfs @ 12.17 hrs, Volume= 12.748 af, 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



Routing Diagram for 6842-Post
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6842-Post*Type III 24-hr 2-yr Rainfall=3.00"*

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Subcatchment 34S: B.8	Runoff Area=12,484 sf 88.82% Impervious Runoff Depth=2.45" Tc=6.0 min CN=95 Runoff=0.76 cfs 0.058 af
Subcatchment 35S: C.1	Runoff Area=236,308 sf 9.34% Impervious Runoff Depth=1.07" Tc=20.0 min UI Adjusted CN=77 Runoff=4.39 cfs 0.484 af
Subcatchment 36S: C.2	Runoff Area=22,516 sf 83.62% Impervious Runoff Depth=2.25" Tc=6.0 min CN=93 Runoff=1.30 cfs 0.097 af
Subcatchment 37S: C.3	Runoff Area=12,429 sf 61.75% Impervious Runoff Depth=1.74" Tc=6.0 min CN=87 Runoff=0.57 cfs 0.041 af
Subcatchment 38S: C.4	Runoff Area=4,655 sf 100.00% Impervious Runoff Depth=2.77" Tc=6.0 min CN=98 Runoff=0.30 cfs 0.025 af
Subcatchment 39S: C.5	Runoff Area=5,857 sf 100.00% Impervious Runoff Depth=2.77" Tc=6.0 min CN=98 Runoff=0.38 cfs 0.031 af
Subcatchment 40S: C.6	Runoff Area=4,047 sf 100.00% Impervious Runoff Depth=2.77" Tc=6.0 min CN=98 Runoff=0.26 cfs 0.021 af
Subcatchment 41S: C.7	Runoff Area=7,188 sf 100.00% Impervious Runoff Depth=2.77" Tc=6.0 min CN=98 Runoff=0.47 cfs 0.038 af
Subcatchment 42S: C.8	Runoff Area=7,639 sf 100.00% Impervious Runoff Depth=2.77" Tc=6.0 min CN=98 Runoff=0.50 cfs 0.040 af
Subcatchment 43S: C.9	Runoff Area=8,732 sf 100.00% Impervious Runoff Depth=2.77" Tc=6.0 min CN=98 Runoff=0.57 cfs 0.046 af
Subcatchment 44S: C.10	Runoff Area=5,326 sf 100.00% Impervious Runoff Depth=2.77" Tc=6.0 min CN=98 Runoff=0.35 cfs 0.028 af
Subcatchment 45S: C.11	Runoff Area=2,631 sf 100.00% Impervious Runoff Depth=2.77" Tc=6.0 min CN=98 Runoff=0.17 cfs 0.014 af
Subcatchment 46S: C.12	Runoff Area=5,910 sf 100.00% Impervious Runoff Depth=2.77" Tc=6.0 min CN=98 Runoff=0.39 cfs 0.031 af
Subcatchment 47S: C.13	Runoff Area=1,987 sf 100.00% Impervious Runoff Depth=2.77" Tc=6.0 min CN=98 Runoff=0.13 cfs 0.011 af
Subcatchment 48S: C.14	Runoff Area=1,885 sf 100.00% Impervious Runoff Depth=2.77" Tc=6.0 min CN=98 Runoff=0.12 cfs 0.010 af
Subcatchment 49S: C.15	Runoff Area=3,487 sf 100.00% Impervious Runoff Depth=2.77" Tc=6.0 min CN=98 Runoff=0.23 cfs 0.018 af
Subcatchment 50S: C.16	Runoff Area=3,508 sf 100.00% Impervious Runoff Depth=2.77" Tc=6.0 min CN=98 Runoff=0.23 cfs 0.019 af
Subcatchment 51S: D.1	Runoff Area=402,771 sf 0.38% Impervious Runoff Depth=0.37" Tc=20.0 min CN=61 Runoff=1.60 cfs 0.281 af

6842-Post*Type III 24-hr 2-yr Rainfall=3.00"*

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Subcatchment 52S: B.9	Runoff Area=15,018 sf 80.72% Impervious Runoff Depth=2.16" Tc=6.0 min CN=92 Runoff=0.84 cfs 0.062 af
Pond 4P: Constructed Stormwater Wetland	Peak Elev=213.66' Storage=8,397 cf Inflow=4.54 cfs 0.372 af Outflow=0.42 cfs 0.371 af
Pond 5P: Wet Basin	Peak Elev=214.56' Storage=5,583 cf Inflow=6.04 cfs 0.792 af Outflow=4.54 cfs 0.792 af
Pond 7P: Constructed Stormwater Wetland	Peak Elev=215.27' Storage=5,032 cf Inflow=10.28 cfs 1.152 af Outflow=9.14 cfs 1.151 af
Pond 12P: STONE RECHARGE TRENCH	Peak Elev=220.30' Storage=1,261 cf Inflow=1.16 cfs 0.094 af Discarded=0.15 cfs 0.094 af Primary=0.00 cfs 0.000 af Outflow=0.15 cfs 0.094 af
Pond 17P: STONE RECHARGE TRENCH	Peak Elev=220.30' Storage=1,261 cf Inflow=1.16 cfs 0.094 af Discarded=0.15 cfs 0.094 af Primary=0.00 cfs 0.000 af Outflow=0.15 cfs 0.094 af
Pond 19P: STONE RECHARGE TRENCH	Peak Elev=220.30' Storage=1,261 cf Inflow=1.16 cfs 0.094 af Discarded=0.15 cfs 0.094 af Primary=0.00 cfs 0.000 af Outflow=0.15 cfs 0.094 af
Pond 21P: CB-4	Peak Elev=216.07' Inflow=0.84 cfs 0.062 af 12.0" Round Culvert n=0.013 L=37.0' S=0.0054 ' Outflow=0.84 cfs 0.062 af
Pond 22P: DMH-2	Peak Elev=216.41' Inflow=3.77 cfs 0.284 af 18.0" Round Culvert n=0.013 L=101.0' S=0.0050 ' Outflow=3.77 cfs 0.284 af
Pond 23P: CB-1	Peak Elev=216.13' Inflow=0.77 cfs 0.058 af 12.0" Round Culvert n=0.013 L=27.0' S=0.0074 ' Outflow=0.77 cfs 0.058 af
Pond 24P: CB-2	Peak Elev=216.82' Inflow=1.09 cfs 0.087 af 12.0" Round Culvert n=0.013 L=20.0' S=0.0400 ' Outflow=1.09 cfs 0.087 af
Pond 25P: CB-3	Peak Elev=217.15' Inflow=1.18 cfs 0.086 af 12.0" Round Culvert n=0.013 L=38.0' S=0.0289 ' Outflow=1.18 cfs 0.086 af
Pond 26P: DMH-1	Peak Elev=216.24' Inflow=3.04 cfs 0.230 af 18.0" Round Culvert n=0.013 L=56.0' S=0.0089 ' Outflow=3.04 cfs 0.230 af
Pond 27P: DCB-22	Peak Elev=216.27' Inflow=1.46 cfs 0.119 af 12.0" Round Culvert n=0.013 L=50.0' S=0.0060 ' Outflow=1.46 cfs 0.119 af
Pond 28P: DMH-16	Peak Elev=215.86' Inflow=1.46 cfs 0.119 af 12.0" Round Culvert n=0.013 L=160.0' S=0.0050 ' Outflow=1.46 cfs 0.119 af
Pond 29P: CB-21	Peak Elev=216.53' Inflow=0.35 cfs 0.028 af 12.0" Round Culvert n=0.013 L=26.0' S=0.0192 ' Outflow=0.35 cfs 0.028 af
Pond 30P: DMH-15	Peak Elev=214.96' Inflow=1.81 cfs 0.147 af 15.0" Round Culvert n=0.013 L=250.0' S=0.0052 ' Outflow=1.81 cfs 0.147 af

6842-Post*Type III 24-hr 2-yr Rainfall=3.00"*

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Pond 31P: DMH-14	Peak Elev=214.01' Inflow=4.10 cfs 0.329 af 18.0" Round Culvert n=0.013 L=61.0' S=0.0049 '/ Outflow=4.10 cfs 0.329 af
Pond 32P: CB-20	Peak Elev=216.06' Inflow=0.90 cfs 0.073 af 12.0" Round Culvert n=0.013 L=12.0' S=0.0167 '/ Outflow=0.90 cfs 0.073 af
Pond 33P: DMH-17	Peak Elev=216.33' Inflow=1.38 cfs 0.108 af 12.0" Round Culvert n=0.013 L=180.0' S=0.0050 '/ Outflow=1.38 cfs 0.108 af
Pond 34P: CB-23	Peak Elev=216.42' Inflow=0.75 cfs 0.056 af 12.0" Round Culvert n=0.013 L=28.0' S=0.0071 '/ Outflow=0.75 cfs 0.056 af
Pond 35P: CB-24	Peak Elev=216.36' Inflow=0.64 cfs 0.052 af 12.0" Round Culvert n=0.013 L=20.0' S=0.0100 '/ Outflow=0.64 cfs 0.052 af
Pond 36P: DMH-7	Peak Elev=216.56' Inflow=0.92 cfs 0.074 af 12.0" Round Culvert n=0.013 L=220.0' S=0.0055 '/ Outflow=0.92 cfs 0.074 af
Pond 37P: DMH-10	Peak Elev=218.71' Inflow=1.26 cfs 0.103 af 15.0" Round Culvert n=0.013 L=122.0' S=0.0295 '/ Outflow=1.26 cfs 0.103 af
Pond 38P: CB-15	Peak Elev=232.39' Inflow=0.12 cfs 0.010 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0333 '/ Outflow=0.12 cfs 0.010 af
Pond 39P: CB-16	Peak Elev=232.40' Inflow=0.13 cfs 0.011 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0333 '/ Outflow=0.13 cfs 0.011 af
Pond 52P: CB-17	Peak Elev=247.66' Inflow=0.23 cfs 0.019 af 12.0" Round Culvert n=0.013 L=18.0' S=0.0500 '/ Outflow=0.23 cfs 0.019 af
Pond 53P: CB-18	Peak Elev=247.66' Inflow=0.23 cfs 0.018 af 12.0" Round Culvert n=0.013 L=18.0' S=0.0500 '/ Outflow=0.23 cfs 0.018 af
Pond 54P: DMH-13	Peak Elev=246.78' Inflow=0.46 cfs 0.037 af 12.0" Round Culvert n=0.013 L=85.0' S=0.0753 '/ Outflow=0.46 cfs 0.037 af
Pond 56P: DMH-12	Peak Elev=240.28' Inflow=0.46 cfs 0.037 af 12.0" Round Culvert n=0.013 L=110.0' S=0.0745 '/ Outflow=0.46 cfs 0.037 af
Pond 58P: CB-13	Peak Elev=219.13' Inflow=0.17 cfs 0.014 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0467 '/ Outflow=0.17 cfs 0.014 af
Pond 61P: DMH-11	Peak Elev=232.09' Inflow=0.71 cfs 0.058 af 12.0" Round Culvert n=0.013 L=198.0' S=0.0677 '/ Outflow=0.71 cfs 0.058 af
Pond 62P: CB-14	Peak Elev=219.25' Inflow=0.39 cfs 0.031 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0467 '/ Outflow=0.39 cfs 0.031 af
Pond 63P: DMH-4	Peak Elev=215.19' Inflow=3.79 cfs 0.308 af 24.0" Round Culvert n=0.013 L=35.0' S=0.0029 '/ Outflow=3.79 cfs 0.308 af
Pond 66P: CB-6	Peak Elev=216.35' Inflow=0.38 cfs 0.031 af 12.0" Round Culvert n=0.013 L=24.0' S=0.0208 '/ Outflow=0.38 cfs 0.031 af

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Pond 67P: CB-7	Peak Elev=216.28' Inflow=0.26 cfs 0.021 af 12.0" Round Culvert n=0.013 L=24.0' S=0.0208 '/ Outflow=0.26 cfs 0.021 af
Pond 68P: DMH-9	Peak Elev=216.94' Inflow=2.17 cfs 0.163 af 15.0" Round Culvert n=0.013 L=79.0' S=0.0089 '/ Outflow=2.17 cfs 0.163 af
Pond 69P: CB-11	Peak Elev=216.63' Inflow=0.30 cfs 0.025 af 12.0" Round Culvert n=0.013 L=14.0' S=0.0071 '/ Outflow=0.30 cfs 0.025 af
Pond 70P: CB-12	Peak Elev=217.14' Inflow=1.87 cfs 0.138 af 15.0" Round Culvert n=0.013 L=14.0' S=0.0071 '/ Outflow=1.87 cfs 0.138 af
Pond 71P: CB-8	Peak Elev=215.92' Inflow=0.50 cfs 0.040 af 12.0" Round Culvert n=0.013 L=32.0' S=0.0062 '/ Outflow=0.50 cfs 0.040 af
Pond 72P: CB-9	Peak Elev=215.91' Inflow=0.47 cfs 0.038 af 12.0" Round Culvert n=0.013 L=37.0' S=0.0054 '/ Outflow=0.47 cfs 0.038 af
Pond 73P: DMH-6	Peak Elev=215.78' Inflow=0.97 cfs 0.079 af 12.0" Round Culvert n=0.013 L=52.0' S=0.0077 '/ Outflow=0.97 cfs 0.079 af
Pond 78P: CB-19	Peak Elev=216.73' Inflow=0.35 cfs 0.028 af 12.0" Round Culvert n=0.013 L=45.0' S=0.0067 '/ Outflow=0.35 cfs 0.028 af
Pond 79P: CB-10	Peak Elev=216.83' Inflow=0.57 cfs 0.046 af 12.0" Round Culvert n=0.013 L=17.0' S=0.0176 '/ Outflow=0.57 cfs 0.046 af
Pond 80P: DMH-5	Peak Elev=215.47' Inflow=1.88 cfs 0.153 af 15.0" Round Culvert n=0.013 L=67.0' S=0.0075 '/ Outflow=1.88 cfs 0.153 af
Pond 81P: CB-5	Peak Elev=216.53' Inflow=0.76 cfs 0.058 af 12.0" Round Culvert n=0.013 L=31.0' S=0.0065 '/ Outflow=0.76 cfs 0.058 af
Pond 82P: DMH-3	Peak Elev=216.22' Inflow=0.76 cfs 0.058 af 12.0" Round Culvert n=0.013 L=70.0' S=0.0057 '/ Outflow=0.76 cfs 0.058 af
Link 20L: DP-A	Inflow=13.42 cfs 2.596 af Primary=13.42 cfs 2.596 af

Total Runoff Area = 30.660 ac Runoff Volume = 2.881 af Average Runoff Depth = 1.13"
75.28% Pervious = 23.079 ac 24.72% Impervious = 7.580 ac

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Type III 24-hr 2-yr Rainfall=3.00"

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Summary for Subcatchment 9S: APT. BLDG. A

Runoff = 1.16 cfs @ 12.09 hrs, Volume= 0.094 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
17,818	98	Roofs, HSG A
17,818		100.00% Impervious Area

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

Summary for Subcatchment 16S: APT. BLDG. B

Runoff = 1.16 cfs @ 12.09 hrs, Volume= 0.094 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
17,818	98	Roofs, HSG A
17,818		100.00% Impervious Area

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

Summary for Subcatchment 18S: APT. BLDG. C

Runoff = 1.16 cfs @ 12.09 hrs, Volume= 0.094 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
17,818	98	Roofs, HSG A
17,818		100.00% Impervious Area

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

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Type III 24-hr 2-yr Rainfall=3.00"

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Summary for Subcatchment 21S: A.1

Runoff = 0.51 cfs @ 12.15 hrs, Volume= 0.044 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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
18,718	77	>75% Grass cover, Good, HSG A
291	43	Woods, Good, HSG A
95	98	Unconnected pavement, HSG A
1,091	98	Roofs, HSG A

20,195	78	Weighted Average
19,009		94.13% Pervious Area
1,186		5.87% Impervious Area
95		8.01% Unconnected

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

Summary for Subcatchment 22S: A.2

Runoff = 0.90 cfs @ 12.09 hrs, Volume= 0.073 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
12,935	98	Paved parking, HSG A
915	98	Roofs, HSG A
13,850	98	Weighted Average
13,850		100.00% Impervious Area

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

Summary for Subcatchment 23S: A.3

Runoff = 0.64 cfs @ 12.09 hrs, Volume= 0.052 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
9,767	98	Paved parking, HSG A
9,767		100.00% Impervious Area

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Type III 24-hr 2-yr Rainfall=3.00"

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

Summary for Subcatchment 24S: A.4

Runoff = 0.35 cfs @ 12.09 hrs, Volume= 0.028 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
227	98	Paved parking, HSG A
5,114	98	Roofs, HSG A
5,341	98	Weighted Average
5,341		100.00% Impervious Area

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

Summary for Subcatchment 25S: A.5

Runoff = 1.46 cfs @ 12.09 hrs, Volume= 0.119 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
22,426	98	Paved parking, HSG A
22,426		100.00% Impervious Area

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

Summary for Subcatchment 26S: B.6

Runoff = 0.84 cfs @ 12.10 hrs, Volume= 0.066 af, Depth= 0.86"

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-yr Rainfall=3.00"**6842-Post**

Type III 24-hr 2-yr Rainfall=3.00"

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Area (sf)	CN	Adj	Description
* 31,146	68		>75% Grass cover, Good, HSG A
3,467	98		Unconnected pavement, HSG A
5,477	98		Roofs, HSG A
40,090	75	73	Weighted Average, UI Adjusted
31,146			77.69% Pervious Area
8,944			22.31% Impervious Area
3,467			38.76% Unconnected

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

Summary for Subcatchment 27S: A.6

Runoff = 0.75 cfs @ 12.09 hrs, Volume= 0.056 af, Depth= 2.35"

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-yr Rainfall=3.00"

Area (sf)	CN	Description
* 8,883	98	Paved parking, HSG A
1,619	68	>75% Grass cover, Good, HSG A
948	98	Unconnected pavement, HSG A
1,117	98	Roofs, HSG A
12,567	94	Weighted Average
1,619		12.88% Pervious Area
10,948		87.12% Impervious Area
948		8.66% Unconnected

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

Summary for Subcatchment 28S: B.1

Runoff = 0.84 cfs @ 12.10 hrs, Volume= 0.063 af, Depth= 1.07"

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-yr Rainfall=3.00"

Area (sf)	CN	Description
* 30,559	77	>75% Grass cover, Good, HSG A
270	98	Unconnected pavement, HSG A
30,829	77	Weighted Average
30,559		99.12% Pervious Area
270		0.88% Impervious Area
270		100.00% Unconnected

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Type III 24-hr 2-yr Rainfall=3.00"

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

Summary for Subcatchment 29S: B.2

Runoff = 0.77 cfs @ 12.09 hrs, Volume= 0.058 af, Depth= 2.25"

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-yr Rainfall=3.00"

Area (sf)	CN	Description
* 2,173	68	>75% Grass cover, Good, HSG A
1,997	98	Unconnected pavement, HSG A
9,211	98	Paved parking, HSG A
13,381	93	Weighted Average
2,173		16.24% Pervious Area
11,208		83.76% Impervious Area
1,997		17.82% Unconnected

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

Summary for Subcatchment 30S: B.3

Runoff = 1.09 cfs @ 12.09 hrs, Volume= 0.087 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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
* 731	68	>75% Grass cover, Good, HSG A
2,575	98	Unconnected pavement, HSG A
13,754	98	Paved parking, HSG A
17,060	97	Weighted Average
731		4.28% Pervious Area
16,329		95.72% Impervious Area
2,575		15.77% Unconnected

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

Summary for Subcatchment 31S: B.4

Runoff = 1.09 cfs @ 12.09 hrs, Volume= 0.087 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 2-yr Rainfall=3.00"**6842-Post**

Type III 24-hr 2-yr Rainfall=3.00"

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Area (sf)	CN	Description
* 731	68	>75% Grass cover, Good, HSG A
2,575	98	Unconnected pavement, HSG A
13,754	98	Paved parking, HSG A
17,060	97	Weighted Average
731		4.28% Pervious Area
16,329		95.72% Impervious Area
2,575		15.77% Unconnected

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

Summary for Subcatchment 32S: B.5

Runoff = 1.18 cfs @ 12.09 hrs, Volume= 0.086 af, Depth= 1.82"

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-yr Rainfall=3.00"

Area (sf)	CN	Description
* 8,616	98	Paved parking, HSG A
8,034	68	>75% Grass cover, Good, HSG A
1,324	98	Unconnected pavement, HSG A
6,653	98	Roofs, HSG A
24,627	88	Weighted Average
8,034		32.62% Pervious Area
16,593		67.38% Impervious Area
1,324		7.98% Unconnected

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

Summary for Subcatchment 33S: B.7

Runoff = 2.99 cfs @ 12.48 hrs, Volume= 0.423 af, Depth= 0.76"

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-yr Rainfall=3.00"

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Type III 24-hr 2-yr Rainfall=3.00"

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	Area (sf)	CN	Description
*	129,407	68	>75% Grass cover, Good, HSG A
*	97,286	79	>75% Grass cover, Good, HSG C
*	9,046	89	>75% Grass cover, Good, HSG D
*	27,194	43	Woods, Good, HSG A
*	15,779	76	Woods, Good, HSG C
*	4,399	82	Woods, Good, HSG D
	1,606	98	Unconnected pavement, HSG A
	319	98	Unconnected pavement, HSG C
	5,475	98	Roofs, HSG A
	290,511	71	Weighted Average
	283,111		97.45% Pervious Area
	7,400		2.55% Impervious Area
	1,925		26.01% Unconnected

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

Summary for Subcatchment 34S: B.8

Runoff = 0.76 cfs @ 12.09 hrs, Volume= 0.058 af, Depth= 2.45"

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 2-yr Rainfall=3.00"

	Area (sf)	CN	Description
	9,724	98	Paved parking, HSG A
*	1,396	68	>75% Grass cover, Good, HSG A
	1,364	98	Unconnected pavement, HSG A
	12,484	95	Weighted Average
	1,396		11.18% Pervious Area
	11,088		88.82% Impervious Area
	1,364		12.30% Unconnected

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

Summary for Subcatchment 35S: C.1

Runoff = 4.39 cfs @ 12.30 hrs, Volume= 0.484 af, Depth= 1.07"

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-yr Rainfall=3.00"**6842-Post**

Type III 24-hr 2-yr Rainfall=3.00"

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	Area (sf)	CN	Adj	Description
*	128,543	68		>75% Grass cover, Good, HSG A
*	69,229	89		>75% Grass cover, Good, HSG D
*	16,469	82		Woods, Good, HSG D
	14,141	98		Unconnected pavement, HSG A
	7,926	98		Roofs, HSG A
	236,308	78	77	Weighted Average, UI Adjusted
	214,241			90.66% Pervious Area
	22,067			9.34% Impervious Area
	14,141			64.08% Unconnected

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

Summary for Subcatchment 36S: C.2

Runoff = 1.30 cfs @ 12.09 hrs, Volume= 0.097 af, Depth= 2.25"

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-yr Rainfall=3.00"

	Area (sf)	CN	Description
	12,989	98	Paved parking, HSG A
*	3,687	68	>75% Grass cover, Good, HSG A
	2,989	98	Unconnected pavement, HSG A
	2,851	98	Roofs, HSG A
	22,516	93	Weighted Average
	3,687		16.38% Pervious Area
	18,829		83.62% Impervious Area
	2,989		15.87% Unconnected

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

Summary for Subcatchment 37S: C.3

Runoff = 0.57 cfs @ 12.09 hrs, Volume= 0.041 af, Depth= 1.74"

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 2-yr Rainfall=3.00"

	Area (sf)	CN	Description
	5,266	98	Paved parking, HSG A
*	4,754	68	>75% Grass cover, Good, HSG A
	509	98	Roofs, HSG A
	1,900	98	Roofs, HSG A
	12,429	87	Weighted Average
	4,754		38.25% Pervious Area
	7,675		61.75% Impervious Area

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Type III 24-hr 2-yr Rainfall=3.00"

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

Summary for Subcatchment 38S: C.4

Runoff = 0.30 cfs @ 12.09 hrs, Volume= 0.025 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
4,655	98	Paved parking, HSG A
4,655		100.00% Impervious Area

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

Summary for Subcatchment 39S: C.5

Runoff = 0.38 cfs @ 12.09 hrs, Volume= 0.031 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
4,080	98	Paved parking, HSG A
1,777	98	Unconnected pavement, HSG A
5,857	98	Weighted Average
5,857		100.00% Impervious Area
1,777		30.34% Unconnected

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

Summary for Subcatchment 40S: C.6

Runoff = 0.26 cfs @ 12.09 hrs, Volume= 0.021 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
4,047	98	Paved parking, HSG A
4,047		100.00% Impervious Area

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Type III 24-hr 2-yr Rainfall=3.00"

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

Summary for Subcatchment 41S: C.7

Runoff = 0.47 cfs @ 12.09 hrs, Volume= 0.038 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
6,072	98	Paved parking, HSG A
1,116	98	Roofs, HSG A
7,188	98	Weighted Average
7,188		100.00% Impervious Area

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

Summary for Subcatchment 42S: C.8

Runoff = 0.50 cfs @ 12.09 hrs, Volume= 0.040 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
7,639	98	Paved parking, HSG A
7,639		100.00% Impervious Area

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

Summary for Subcatchment 43S: C.9

Runoff = 0.57 cfs @ 12.09 hrs, Volume= 0.046 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
8,732	98	Paved parking, HSG A
8,732		100.00% Impervious Area

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Type III 24-hr 2-yr Rainfall=3.00"

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

Summary for Subcatchment 44S: C.10

Runoff = 0.35 cfs @ 12.09 hrs, Volume= 0.028 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
5,326	98	Paved parking, HSG A
5,326		100.00% Impervious Area

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

Summary for Subcatchment 45S: C.11

Runoff = 0.17 cfs @ 12.09 hrs, Volume= 0.014 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
1,483	98	Paved parking, HSG A
946	98	Paved parking, HSG D
126	98	Unconnected pavement, HSG A
76	98	Unconnected pavement, HSG D
2,631	98	Weighted Average
2,631		100.00% Impervious Area
202		7.68% Unconnected

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

Summary for Subcatchment 46S: C.12

Runoff = 0.39 cfs @ 12.09 hrs, Volume= 0.031 af, Depth= 2.77"

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 2-yr Rainfall=3.00"**6842-Post**

Type III 24-hr 2-yr Rainfall=3.00"

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Area (sf)	CN	Description
2,144	98	Paved parking, HSG A
2,121	98	Paved parking, HSG D
853	98	Unconnected pavement, HSG A
696	98	Unconnected pavement, HSG D
96	98	Roofs, HSG A
5,910	98	Weighted Average
5,910		100.00% Impervious Area
1,549		26.21% Unconnected

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

Summary for Subcatchment 47S: C.13

Runoff = 0.13 cfs @ 12.09 hrs, Volume= 0.011 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
1,832	98	Paved parking, HSG D
155	98	Unconnected pavement, HSG D
1,987	98	Weighted Average
1,987		100.00% Impervious Area
155		7.80% Unconnected

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

Summary for Subcatchment 48S: C.14

Runoff = 0.12 cfs @ 12.09 hrs, Volume= 0.010 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
1,744	98	Paved parking, HSG D
141	98	Unconnected pavement, HSG D
1,885	98	Weighted Average
1,885		100.00% Impervious Area
141		7.48% Unconnected

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Type III 24-hr 2-yr Rainfall=3.00"

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

Summary for Subcatchment 49S: C.15

Runoff = 0.23 cfs @ 12.09 hrs, Volume= 0.018 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
3,220	98	Paved parking, HSG D
267	98	Unconnected pavement, HSG D
3,487	98	Weighted Average
3,487		100.00% Impervious Area
267		7.66% Unconnected

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

Summary for Subcatchment 50S: C.16

Runoff = 0.23 cfs @ 12.09 hrs, Volume= 0.019 af, Depth= 2.77"

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 2-yr Rainfall=3.00"

Area (sf)	CN	Description
3,238	98	Paved parking, HSG D
270	98	Unconnected pavement, HSG D
3,508	98	Weighted Average
3,508		100.00% Impervious Area
270		7.70% Unconnected

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

Summary for Subcatchment 51S: D.1

Runoff = 1.60 cfs @ 12.44 hrs, Volume= 0.281 af, Depth= 0.37"

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-yr Rainfall=3.00"**6842-Post**

Type III 24-hr 2-yr Rainfall=3.00"

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Area (sf)	CN	Description
1,527	98	Unconnected pavement, HSG A
* 182,934	68	>75% Grass cover, Good, HSG A
* 518	79	>75% Grass cover, Good, HSG B
* 51,440	89	>75% Grass cover, Good, HSG D
* 160,796	43	Woods, Good, HSG A
* 5,106	65	Woods, Good, HSG B
* 450	82	Woods, Good, HSG D
402,771	61	Weighted Average
401,244		99.62% Pervious Area
1,527		0.38% Impervious Area
1,527		100.00% Unconnected

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

Summary for Subcatchment 52S: B.9

Runoff = 0.84 cfs @ 12.09 hrs, Volume= 0.062 af, Depth= 2.16"

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-yr Rainfall=3.00"

Area (sf)	CN	Description
10,973	98	Paved parking, HSG A
* 2,895	68	>75% Grass cover, Good, HSG A
1,150	98	Unconnected pavement, HSG A
15,018	92	Weighted Average
2,895		19.28% Pervious Area
12,123		80.72% Impervious Area
1,150		9.49% Unconnected

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

Summary for Pond 4P: Constructed Stormwater Wetland #2

Inflow Area = 2.341 ac, 79.77% Impervious, Inflow Depth = 1.91" for 2-yr event
 Inflow = 4.54 cfs @ 12.09 hrs, Volume= 0.372 af
 Outflow = 0.42 cfs @ 13.02 hrs, Volume= 0.371 af, Atten= 91%, Lag= 55.9 min
 Primary = 0.42 cfs @ 13.02 hrs, Volume= 0.371 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 213.66' @ 13.02 hrs Surf.Area= 7,993 sf Storage= 8,397 cf

Plug-Flow detention time= 296.6 min calculated for 0.371 af (100% of inflow)
 Center-of-Mass det. time= 294.5 min (1,068.6 - 774.1)

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Type III 24-hr 2-yr Rainfall=3.00"

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Volume	Invert	Avail.Storage	Storage Description		
#1	212.50'	31,125 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
212.50	6,500	322.0	0	0	6,500
214.00	8,459	362.0	11,187	11,187	8,737
216.00	11,559	453.0	19,938	31,125	14,695

Device	Routing	Invert	Outlet Devices	
#1	Primary	215.50'	20.0' long x 12.0' 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) 2.57 2.62 2.70 2.67 2.66 2.67 2.66 2.64	
#2	Device 3	214.50'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)	
#3	Primary	212.50'	15.0" Round Culvert L= 111.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 212.50' / 210.44' S= 0.0186 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf	
#4	Device 3	212.50'	4.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads	

Primary OutFlow Max=0.42 cfs @ 13.02 hrs HW=213.66' (Free Discharge)

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

3=Culvert (Passes 0.42 cfs of 3.44 cfs potential flow)

2=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

4=Orifice/Grate (Orifice Controls 0.42 cfs @ 4.80 fps)

Summary for Pond 5P: Wet Basin

Inflow Area = 7.170 ac, 31.40% Impervious, Inflow Depth = 1.33" for 2-yr event
 Inflow = 6.04 cfs @ 12.25 hrs, Volume= 0.792 af
 Outflow = 4.54 cfs @ 12.46 hrs, Volume= 0.792 af, Atten= 25%, Lag= 12.4 min
 Primary = 4.54 cfs @ 12.46 hrs, Volume= 0.792 af

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

Peak Elev= 214.56' @ 12.46 hrs Surf.Area= 10,941 sf Storage= 5,583 cf

Plug-Flow detention time= 30.1 min calculated for 0.792 af (100% of inflow)

Center-of-Mass det. time= 30.2 min (856.0 - 825.8)

Volume	Invert	Avail.Storage	Storage Description		
#1	214.00'	103,930 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
214.00	9,189	420.0	0	0	9,189
216.00	16,216	442.0	25,075	25,075	10,927
218.00	20,207	375.0	36,350	61,425	15,359
220.00	22,316	390.0	42,506	103,930	16,550

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Type III 24-hr 2-yr Rainfall=3.00"

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Device	Routing	Invert	Outlet Devices	
#1	Primary	213.43'	24.0" Round Culvert L= 580.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 213.43' / 211.63' S= 0.0031 ' /' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf	
#2	Device 1	214.00'	45.0 deg x 4.0' long Sharp-Crested Vee/Trap Weir Cv= 2.56 (C= 3.20)	
#3	Device 1	215.50'	4.2' long x 4.2' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.53 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.67 2.71 2.72 2.74 2.77 2.85 3.01 3.23	

Primary OutFlow Max=4.54 cfs @ 12.46 hrs HW=214.55' (Free Discharge)

1=Culvert (Barrel Controls 4.54 cfs @ 3.60 fps)

2=Sharp-Crested Vee/Trap Weir (Passes 4.54 cfs of 5.53 cfs potential flow)

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

Summary for Pond 7P: Constructed Stormwater Wetland #1

Inflow Area = 11.903 ac, 28.79% Impervious, Inflow Depth = 1.16" for 2-yr event
 Inflow = 10.28 cfs @ 12.10 hrs, Volume= 1.152 af
 Outflow = 9.14 cfs @ 12.14 hrs, Volume= 1.151 af, Atten= 11%, Lag= 2.9 min
 Primary = 9.14 cfs @ 12.14 hrs, Volume= 1.151 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 215.27' @ 12.14 hrs Surf.Area= 11,623 sf Storage= 5,032 cf

Plug-Flow detention time= 52.4 min calculated for 1.151 af (100% of inflow)

Center-of-Mass det. time= 52.0 min (890.2 - 838.2)

Volume	Invert	Avail.Storage	Storage Description		
#1	214.80'	14,759 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
214.80	9,939	766.0	0	0	9,939
215.00	10,413	771.0	2,035	2,035	10,570
216.00	15,185	1,210.0	12,724	14,759	79,782

Device	Routing	Invert	Outlet Devices	
#1	Primary	215.10'	40.0' 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	
#2	Primary	214.80'	12.0" Round Culvert X 3.00 L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 214.80' / 214.00' S= 0.0320 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf	

Primary OutFlow Max=9.06 cfs @ 12.14 hrs HW=215.27' (Free Discharge)

1=Broad-Crested Rectangular Weir (Weir Controls 7.05 cfs @ 1.03 fps)

2=Culvert (Inlet Controls 2.01 cfs @ 1.84 fps)

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Type III 24-hr 2-yr Rainfall=3.00"

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Summary for Pond 12P: STONE RECHARGE TRENCH

Inflow Area = 0.409 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
Inflow = 1.16 cfs @ 12.09 hrs, Volume = 0.094 af
Outflow = 0.15 cfs @ 12.62 hrs, Volume = 0.094 af, Atten = 87%, Lag = 31.9 min
Discarded = 0.15 cfs @ 12.62 hrs, Volume = 0.094 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 = 220.30' @ 12.62 hrs Surf.Area = 2,427 sf Storage = 1,261 cf

Plug-Flow detention time = 52.7 min calculated for 0.094 af (100% of inflow)
Center-of-Mass det. time = 52.6 min (810.4 - 757.8)

Volume	Invert	Avail.Storage	Storage Description
#1	219.00'	1,942 cf	3.00'W x 809.00'L x 2.00'H Prismatic 4,854 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Primary	221.00'	809.0' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	219.00'	2,410 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 210.00'

Discarded OutFlow Max = 0.15 cfs @ 12.62 hrs HW = 220.30' (Free Discharge)
↳ **2=Exfiltration** (Controls 0.15 cfs)

Primary OutFlow Max = 0.00 cfs @ 0.00 hrs HW = 219.00' (Free Discharge)
↳ **1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 17P: STONE RECHARGE TRENCH

Inflow Area = 0.409 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
Inflow = 1.16 cfs @ 12.09 hrs, Volume = 0.094 af
Outflow = 0.15 cfs @ 12.62 hrs, Volume = 0.094 af, Atten = 87%, Lag = 31.9 min
Discarded = 0.15 cfs @ 12.62 hrs, Volume = 0.094 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 = 220.30' @ 12.62 hrs Surf.Area = 2,427 sf Storage = 1,261 cf

Plug-Flow detention time = 52.7 min calculated for 0.094 af (100% of inflow)
Center-of-Mass det. time = 52.6 min (810.4 - 757.8)

Volume	Invert	Avail.Storage	Storage Description
#1	219.00'	1,942 cf	3.00'W x 809.00'L x 2.00'H Prismatic 4,854 cf Overall x 40.0% Voids

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Type III 24-hr 2-yr Rainfall=3.00"

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Device	Routing	Invert	Outlet Devices
#1	Primary	221.00'	809.0' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	219.00'	2,410 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 210.00'

Discarded OutFlow Max = 0.15 cfs @ 12.62 hrs HW = 220.30' (Free Discharge)
↳ **2=Exfiltration** (Controls 0.15 cfs)

Primary OutFlow Max = 0.00 cfs @ 0.00 hrs HW = 219.00' (Free Discharge)
↳ **1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond 19P: STONE RECHARGE TRENCH

Inflow Area = 0.409 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
Inflow = 1.16 cfs @ 12.09 hrs, Volume = 0.094 af
Outflow = 0.15 cfs @ 12.62 hrs, Volume = 0.094 af, Atten = 87%, Lag = 31.9 min
Discarded = 0.15 cfs @ 12.62 hrs, Volume = 0.094 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 = 220.30' @ 12.62 hrs Surf.Area = 2,427 sf Storage = 1,261 cf

Plug-Flow detention time = 52.7 min calculated for 0.094 af (100% of inflow)
Center-of-Mass det. time = 52.6 min (810.4 - 757.8)

Volume	Invert	Avail.Storage	Storage Description
#1	219.00'	1,942 cf	3.00'W x 809.00'L x 2.00'H Prismatic 4,854 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Primary	221.00'	809.0' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	219.00'	2,410 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 210.00'

Discarded OutFlow Max = 0.15 cfs @ 12.62 hrs HW = 220.30' (Free Discharge)
↳ **2=Exfiltration** (Controls 0.15 cfs)

Primary OutFlow Max = 0.00 cfs @ 0.00 hrs HW = 219.00' (Free Discharge)
↳ **1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

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Type III 24-hr 2-yr Rainfall=3.00"

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Summary for Pond 21P: CB-4

Inflow Area = 0.345 ac, 80.72% Impervious, Inflow Depth = 2.16" for 2-yr event
 Inflow = 0.84 cfs @ 12.09 hrs, Volume= 0.062 af
 Outflow = 0.84 cfs @ 12.09 hrs, Volume= 0.062 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.84 cfs @ 12.09 hrs, Volume= 0.062 af

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

Peak Elev= 216.07' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.50'	12.0" Round Culvert L= 37.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.50' / 215.30' S= 0.0054 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.82 cfs @ 12.09 hrs HW=216.06' (Free Discharge)**1=Culvert** (Barrel Controls 0.82 cfs @ 2.60 fps)**Summary for Pond 22P: DMH-2**

Inflow Area = 1.540 ac, 81.03% Impervious, Inflow Depth = 2.21" for 2-yr event
 Inflow = 3.77 cfs @ 12.09 hrs, Volume= 0.284 af
 Outflow = 3.77 cfs @ 12.09 hrs, Volume= 0.284 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.77 cfs @ 12.09 hrs, Volume= 0.284 af

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

Peak Elev= 216.41' @ 12.09 hrs

Flood Elev= 218.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.30'	18.0" Round Culvert L= 101.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.30' / 214.80' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=3.68 cfs @ 12.09 hrs HW=216.40' (Free Discharge)**1=Culvert** (Barrel Controls 3.68 cfs @ 3.71 fps)**Summary for Pond 23P: CB-1**

Inflow Area = 0.307 ac, 83.76% Impervious, Inflow Depth = 2.25" for 2-yr event
 Inflow = 0.77 cfs @ 12.09 hrs, Volume= 0.058 af
 Outflow = 0.77 cfs @ 12.09 hrs, Volume= 0.058 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.77 cfs @ 12.09 hrs, Volume= 0.058 af

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

Peak Elev= 216.13' @ 12.09 hrs

Flood Elev= 218.60'

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Device	Routing	Invert	Outlet Devices
#1	Primary	215.60'	12.0" Round Culvert L= 27.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.60' / 215.40' S= 0.0074 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.75 cfs @ 12.09 hrs HW=216.12' (Free Discharge)**1=Culvert** (Barrel Controls 0.75 cfs @ 2.67 fps)**Summary for Pond 24P: CB-2**

Inflow Area = 0.392 ac, 95.72% Impervious, Inflow Depth = 2.66" for 2-yr event
 Inflow = 1.09 cfs @ 12.09 hrs, Volume= 0.087 af
 Outflow = 1.09 cfs @ 12.09 hrs, Volume= 0.087 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.09 cfs @ 12.09 hrs, Volume= 0.087 af

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

Peak Elev= 216.82' @ 12.09 hrs

Flood Elev= 219.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.20'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.20' / 215.40' S= 0.0400 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.06 cfs @ 12.09 hrs HW=216.81' (Free Discharge)**1=Culvert** (Inlet Controls 1.06 cfs @ 2.11 fps)**Summary for Pond 25P: CB-3**

Inflow Area = 0.565 ac, 67.38% Impervious, Inflow Depth = 1.82" for 2-yr event
 Inflow = 1.18 cfs @ 12.09 hrs, Volume= 0.086 af
 Outflow = 1.18 cfs @ 12.09 hrs, Volume= 0.086 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.18 cfs @ 12.09 hrs, Volume= 0.086 af

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

Peak Elev= 217.15' @ 12.09 hrs

Flood Elev= 219.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.50'	12.0" Round Culvert L= 38.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.50' / 215.40' S= 0.0289 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.15 cfs @ 12.09 hrs HW=217.14' (Free Discharge)**1=Culvert** (Inlet Controls 1.15 cfs @ 2.16 fps)

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Summary for Pond 26P: DMH-1

Inflow Area = 1.264 ac, 80.14% Impervious, Inflow Depth = 2.18" for 2-yr event
 Inflow = 3.04 cfs @ 12.09 hrs, Volume= 0.230 af
 Outflow = 3.04 cfs @ 12.09 hrs, Volume= 0.230 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.04 cfs @ 12.09 hrs, Volume= 0.230 af

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

Peak Elev= 216.24' @ 12.09 hrs

Flood Elev= 218.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.30'	18.0" Round Culvert L= 56.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.30' / 214.80' S= 0.0089 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=2.97 cfs @ 12.09 hrs HW=216.23' (Free Discharge)

1=Culvert (Inlet Controls 2.97 cfs @ 2.59 fps)

Summary for Pond 27P: DCB-22

Inflow Area = 0.515 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
 Inflow = 1.46 cfs @ 12.09 hrs, Volume= 0.119 af
 Outflow = 1.46 cfs @ 12.09 hrs, Volume= 0.119 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.46 cfs @ 12.09 hrs, Volume= 0.119 af

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

Peak Elev= 216.27' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.50'	12.0" Round Culvert L= 50.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.50' / 215.20' S= 0.0060 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.42 cfs @ 12.09 hrs HW=216.26' (Free Discharge)

1=Culvert (Barrel Controls 1.42 cfs @ 3.08 fps)

Summary for Pond 28P: DMH-16

Inflow Area = 0.515 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
 Inflow = 1.46 cfs @ 12.09 hrs, Volume= 0.119 af
 Outflow = 1.46 cfs @ 12.09 hrs, Volume= 0.119 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.46 cfs @ 12.09 hrs, Volume= 0.119 af

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

Peak Elev= 215.86' @ 12.09 hrs

Flood Elev= 218.70'

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Device	Routing	Invert	Outlet Devices
#1	Primary	215.10'	12.0" Round Culvert L= 160.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.10' / 214.30' S= 0.0050 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.42 cfs @ 12.09 hrs HW=215.85' (Free Discharge)

1=Culvert (Barrel Controls 1.42 cfs @ 3.13 fps)

Summary for Pond 29P: CB-21

Inflow Area = 0.123 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
 Inflow = 0.35 cfs @ 12.09 hrs, Volume= 0.028 af
 Outflow = 0.35 cfs @ 12.09 hrs, Volume= 0.028 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.35 cfs @ 12.09 hrs, Volume= 0.028 af

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

Peak Elev= 216.53' @ 12.09 hrs

Flood Elev= 219.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.20'	12.0" Round Culvert L= 26.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.20' / 215.70' S= 0.0192 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.34 cfs @ 12.09 hrs HW=216.52' (Free Discharge)

1=Culvert (Inlet Controls 0.34 cfs @ 1.53 fps)

Summary for Pond 30P: DMH-15

Inflow Area = 0.637 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
 Inflow = 1.81 cfs @ 12.09 hrs, Volume= 0.147 af
 Outflow = 1.81 cfs @ 12.09 hrs, Volume= 0.147 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.81 cfs @ 12.09 hrs, Volume= 0.147 af

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

Peak Elev= 214.96' @ 12.09 hrs

Flood Elev= 219.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	214.20'	15.0" Round Culvert L= 250.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 214.20' / 212.90' S= 0.0052 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.76 cfs @ 12.09 hrs HW=214.94' (Free Discharge)

1=Culvert (Inlet Controls 1.76 cfs @ 2.32 fps)

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Summary for Pond 31P: DMH-14

Inflow Area = 1.468 ac, 97.47% Impervious, Inflow Depth = 2.69" for 2-yr event
 Inflow = 4.10 cfs @ 12.09 hrs, Volume= 0.329 af
 Outflow = 4.10 cfs @ 12.09 hrs, Volume= 0.329 af, Atten= 0%, Lag= 0.0 min
 Primary = 4.10 cfs @ 12.09 hrs, Volume= 0.329 af

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

Peak Elev= 214.01' @ 12.09 hrs

Flood Elev= 218.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	212.80'	18.0" Round Culvert L= 61.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 212.80' / 212.50' S= 0.0049 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=3.99 cfs @ 12.09 hrs HW=213.99' (Free Discharge)

1=Culvert (Barrel Controls 3.99 cfs @ 3.65 fps)

Summary for Pond 32P: CB-20

Inflow Area = 0.318 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
 Inflow = 0.90 cfs @ 12.09 hrs, Volume= 0.073 af
 Outflow = 0.90 cfs @ 12.09 hrs, Volume= 0.073 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.90 cfs @ 12.09 hrs, Volume= 0.073 af

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

Peak Elev= 216.06' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.50'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.50' / 215.30' S= 0.0167 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.88 cfs @ 12.09 hrs HW=216.05' (Free Discharge)

1=Culvert (Inlet Controls 0.88 cfs @ 1.99 fps)

Summary for Pond 33P: DMH-17

Inflow Area = 0.513 ac, 92.75% Impervious, Inflow Depth = 2.53" for 2-yr event
 Inflow = 1.38 cfs @ 12.09 hrs, Volume= 0.108 af
 Outflow = 1.38 cfs @ 12.09 hrs, Volume= 0.108 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.38 cfs @ 12.09 hrs, Volume= 0.108 af

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

Peak Elev= 216.33' @ 12.09 hrs

Flood Elev= 218.80'

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Device	Routing	Invert	Outlet Devices
#1	Primary	215.60'	12.0" Round Culvert L= 180.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.60' / 214.70' S= 0.0050 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.35 cfs @ 12.09 hrs HW=216.32' (Free Discharge)

1=Culvert (Barrel Controls 1.35 cfs @ 3.11 fps)

Summary for Pond 34P: CB-23

Inflow Area = 0.288 ac, 87.12% Impervious, Inflow Depth = 2.35" for 2-yr event
 Inflow = 0.75 cfs @ 12.09 hrs, Volume= 0.056 af
 Outflow = 0.75 cfs @ 12.09 hrs, Volume= 0.056 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.75 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= 216.42' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.90'	12.0" Round Culvert L= 28.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.90' / 215.70' S= 0.0071 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.73 cfs @ 12.09 hrs HW=216.41' (Free Discharge)

1=Culvert (Barrel Controls 0.73 cfs @ 2.64 fps)

Summary for Pond 35P: CB-24

Inflow Area = 0.224 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
 Inflow = 0.64 cfs @ 12.09 hrs, Volume= 0.052 af
 Outflow = 0.64 cfs @ 12.09 hrs, Volume= 0.052 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.64 cfs @ 12.09 hrs, Volume= 0.052 af

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

Peak Elev= 216.36' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.90'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.90' / 215.70' S= 0.0100 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.62 cfs @ 12.09 hrs HW=216.35' (Free Discharge)

1=Culvert (Inlet Controls 0.62 cfs @ 1.80 fps)

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Summary for Pond 36P: DMH-7

Inflow Area = 0.323 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
 Inflow = 0.92 cfs @ 12.09 hrs, Volume= 0.074 af
 Outflow = 0.92 cfs @ 12.09 hrs, Volume= 0.074 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.92 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= 216.56' @ 12.09 hrs

Flood Elev= 219.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.00'	12.0" Round Culvert L= 220.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.00' / 214.80' S= 0.0055 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.89 cfs @ 12.09 hrs HW=216.55' (Free Discharge)

1=Culvert (Inlet Controls 0.89 cfs @ 2.00 fps)

Summary for Pond 37P: DMH-10

Inflow Area = 0.446 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
 Inflow = 1.26 cfs @ 12.09 hrs, Volume= 0.103 af
 Outflow = 1.26 cfs @ 12.09 hrs, Volume= 0.103 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.26 cfs @ 12.09 hrs, Volume= 0.103 af

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

Peak Elev= 218.71' @ 12.09 hrs

Flood Elev= 222.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	218.10'	15.0" Round Culvert L= 122.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 218.10' / 214.50' S= 0.0295 ' / ' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.23 cfs @ 12.09 hrs HW=218.70' (Free Discharge)

1=Culvert (Inlet Controls 1.23 cfs @ 2.09 fps)

Summary for Pond 38P: CB-15

Inflow Area = 0.043 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
 Inflow = 0.12 cfs @ 12.09 hrs, Volume= 0.010 af
 Outflow = 0.12 cfs @ 12.09 hrs, Volume= 0.010 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.12 cfs @ 12.09 hrs, Volume= 0.010 af

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

Peak Elev= 232.39' @ 12.09 hrs

Flood Elev= 236.20'

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Device	Routing	Invert	Outlet Devices
#1	Primary	232.20'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 232.20' / 231.70' S= 0.0333 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.12 cfs @ 12.09 hrs HW=232.39' (Free Discharge)

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

Summary for Pond 39P: CB-16

Inflow Area = 0.046 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
 Inflow = 0.13 cfs @ 12.09 hrs, Volume= 0.011 af
 Outflow = 0.13 cfs @ 12.09 hrs, Volume= 0.011 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.13 cfs @ 12.09 hrs, Volume= 0.011 af

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

Peak Elev= 232.40' @ 12.09 hrs

Flood Elev= 236.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	232.20'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 232.20' / 231.70' S= 0.0333 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.13 cfs @ 12.09 hrs HW=232.39' (Free Discharge)

1=Culvert (Inlet Controls 0.13 cfs @ 1.18 fps)

Summary for Pond 52P: CB-17

Inflow Area = 0.081 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
 Inflow = 0.23 cfs @ 12.09 hrs, Volume= 0.019 af
 Outflow = 0.23 cfs @ 12.09 hrs, Volume= 0.019 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.23 cfs @ 12.09 hrs, Volume= 0.019 af

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

Peak Elev= 247.66' @ 12.09 hrs

Flood Elev= 251.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	247.40'	12.0" Round Culvert L= 18.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 247.40' / 246.50' S= 0.0500 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.22 cfs @ 12.09 hrs HW=247.66' (Free Discharge)

1=Culvert (Inlet Controls 0.22 cfs @ 1.37 fps)

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Summary for Pond 53P: CB-18

Inflow Area = 0.080 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
Inflow = 0.23 cfs @ 12.09 hrs, Volume= 0.018 af
Outflow = 0.23 cfs @ 12.09 hrs, Volume= 0.018 af, Atten= 0%, Lag= 0.0 min
Primary = 0.23 cfs @ 12.09 hrs, Volume= 0.018 af

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

Peak Elev= 247.66' @ 12.09 hrs

Flood Elev= 251.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	247.40'	12.0" Round Culvert L= 18.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 247.40' / 246.50' S= 0.0500 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.22 cfs @ 12.09 hrs HW=247.66' (Free Discharge)

1=Culvert (Inlet Controls 0.22 cfs @ 1.37 fps)

Summary for Pond 54P: DMH-13

Inflow Area = 0.161 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
Inflow = 0.46 cfs @ 12.09 hrs, Volume= 0.037 af
Outflow = 0.46 cfs @ 12.09 hrs, Volume= 0.037 af, Atten= 0%, Lag= 0.0 min
Primary = 0.46 cfs @ 12.09 hrs, Volume= 0.037 af

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

Peak Elev= 246.78' @ 12.09 hrs

Flood Elev= 250.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	246.40'	12.0" Round Culvert L= 85.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 246.40' / 240.00' S= 0.0753 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.44 cfs @ 12.09 hrs HW=246.78' (Free Discharge)

1=Culvert (Inlet Controls 0.44 cfs @ 1.65 fps)

Summary for Pond 56P: DMH-12

Inflow Area = 0.161 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
Inflow = 0.46 cfs @ 12.09 hrs, Volume= 0.037 af
Outflow = 0.46 cfs @ 12.09 hrs, Volume= 0.037 af, Atten= 0%, Lag= 0.0 min
Primary = 0.46 cfs @ 12.09 hrs, Volume= 0.037 af

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

Peak Elev= 240.28' @ 12.09 hrs

Flood Elev= 244.00'

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Type III 24-hr 2-yr Rainfall=3.00"

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Device	Routing	Invert	Outlet Devices
#1	Primary	239.90'	12.0" Round Culvert L= 110.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 239.90' / 231.70' S= 0.0745 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.44 cfs @ 12.09 hrs HW=240.28' (Free Discharge)

1=Culvert (Inlet Controls 0.44 cfs @ 1.65 fps)

Summary for Pond 58P: CB-13

Inflow Area = 0.060 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
Inflow = 0.17 cfs @ 12.09 hrs, Volume= 0.014 af
Outflow = 0.17 cfs @ 12.09 hrs, Volume= 0.014 af, Atten= 0%, Lag= 0.0 min
Primary = 0.17 cfs @ 12.09 hrs, Volume= 0.014 af

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

Peak Elev= 219.13' @ 12.09 hrs

Flood Elev= 221.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	218.90'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 218.90' / 218.20' S= 0.0467 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.17 cfs @ 12.09 hrs HW=219.12' (Free Discharge)

1=Culvert (Inlet Controls 0.17 cfs @ 1.27 fps)

Summary for Pond 61P: DMH-11

Inflow Area = 0.249 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
Inflow = 0.71 cfs @ 12.09 hrs, Volume= 0.058 af
Outflow = 0.71 cfs @ 12.09 hrs, Volume= 0.058 af, Atten= 0%, Lag= 0.0 min
Primary = 0.71 cfs @ 12.09 hrs, Volume= 0.058 af

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

Peak Elev= 232.09' @ 12.09 hrs

Flood Elev= 235.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	231.60'	12.0" Round Culvert L= 198.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 231.60' / 218.20' S= 0.0677 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.69 cfs @ 12.09 hrs HW=232.08' (Free Discharge)

1=Culvert (Inlet Controls 0.69 cfs @ 1.86 fps)

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Summary for Pond 62P: CB-14

Inflow Area = 0.136 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr 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= 219.25' @ 12.09 hrs

Flood Elev= 221.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	218.90'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 218.90' / 218.20' S= 0.0467 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.37 cfs @ 12.09 hrs HW=219.24' (Free Discharge)**1=Culvert** (Inlet Controls 0.37 cfs @ 1.57 fps)**Summary for Pond 63P: DMH-4**

Inflow Area = 1.336 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
 Inflow = 3.79 cfs @ 12.09 hrs, Volume= 0.308 af
 Outflow = 3.79 cfs @ 12.09 hrs, Volume= 0.308 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.79 cfs @ 12.09 hrs, Volume= 0.308 af

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

Peak Elev= 215.19' @ 12.09 hrs

Flood Elev= 222.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	214.10'	24.0" Round Culvert L= 35.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 214.10' / 214.00' S= 0.0029 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=3.69 cfs @ 12.09 hrs HW=215.17' (Free Discharge)**1=Culvert** (Barrel Controls 3.69 cfs @ 3.12 fps)**Summary for Pond 66P: CB-6**

Inflow Area = 0.134 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr 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= 216.35' @ 12.09 hrs

Flood Elev= 219.00'

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Device	Routing	Invert	Outlet Devices
#1	Primary	216.00'	12.0" Round Culvert L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.00' / 215.50' S= 0.0208 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.37 cfs @ 12.09 hrs HW=216.34' (Free Discharge)**1=Culvert** (Inlet Controls 0.37 cfs @ 1.57 fps)**Summary for Pond 67P: CB-7**

Inflow Area = 0.093 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
 Inflow = 0.26 cfs @ 12.09 hrs, Volume= 0.021 af
 Outflow = 0.26 cfs @ 12.09 hrs, Volume= 0.021 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.26 cfs @ 12.09 hrs, Volume= 0.021 af

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

Peak Elev= 216.28' @ 12.09 hrs

Flood Elev= 219.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.00'	12.0" Round Culvert L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.00' / 215.50' S= 0.0208 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.26 cfs @ 12.09 hrs HW=216.28' (Free Discharge)**1=Culvert** (Inlet Controls 0.26 cfs @ 1.42 fps)**Summary for Pond 68P: DMH-9**

Inflow Area = 0.909 ac, 78.68% Impervious, Inflow Depth = 2.15" for 2-yr event
 Inflow = 2.17 cfs @ 12.09 hrs, Volume= 0.163 af
 Outflow = 2.17 cfs @ 12.09 hrs, Volume= 0.163 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.17 cfs @ 12.09 hrs, Volume= 0.163 af

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

Peak Elev= 216.94' @ 12.09 hrs

Flood Elev= 219.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.10'	15.0" Round Culvert L= 79.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.10' / 215.40' S= 0.0089 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.12 cfs @ 12.09 hrs HW=216.93' (Free Discharge)**1=Culvert** (Inlet Controls 2.12 cfs @ 2.45 fps)

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Summary for Pond 69P: CB-11

Inflow Area = 0.107 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
 Inflow = 0.30 cfs @ 12.09 hrs, Volume= 0.025 af
 Outflow = 0.30 cfs @ 12.09 hrs, Volume= 0.025 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.30 cfs @ 12.09 hrs, Volume= 0.025 af

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

Peak Elev= 216.63' @ 12.09 hrs

Flood Elev= 219.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.30'	12.0" Round Culvert L= 14.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.30' / 216.20' S= 0.0071 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.29 cfs @ 12.09 hrs HW=216.62' (Free Discharge)**1=Culvert** (Barrel Controls 0.29 cfs @ 2.02 fps)**Summary for Pond 70P: CB-12**

Inflow Area = 0.802 ac, 75.84% Impervious, Inflow Depth = 2.07" for 2-yr event
 Inflow = 1.87 cfs @ 12.09 hrs, Volume= 0.138 af
 Outflow = 1.87 cfs @ 12.09 hrs, Volume= 0.138 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.87 cfs @ 12.09 hrs, Volume= 0.138 af

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

Peak Elev= 217.14' @ 12.09 hrs

Flood Elev= 219.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.30'	15.0" Round Culvert L= 14.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.30' / 216.20' S= 0.0071 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.83 cfs @ 12.09 hrs HW=217.13' (Free Discharge)**1=Culvert** (Barrel Controls 1.83 cfs @ 2.98 fps)**Summary for Pond 71P: CB-8**

Inflow Area = 0.175 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
 Inflow = 0.50 cfs @ 12.09 hrs, Volume= 0.040 af
 Outflow = 0.50 cfs @ 12.09 hrs, Volume= 0.040 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.50 cfs @ 12.09 hrs, Volume= 0.040 af

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

Peak Elev= 215.92' @ 12.09 hrs

Flood Elev= 218.50'

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Device	Routing	Invert	Outlet Devices
#1	Primary	215.50'	12.0" Round Culvert L= 32.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.50' / 215.30' S= 0.0062 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.48 cfs @ 12.09 hrs HW=215.91' (Free Discharge)**1=Culvert** (Barrel Controls 0.48 cfs @ 2.35 fps)**Summary for Pond 72P: CB-9**

Inflow Area = 0.165 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
 Inflow = 0.47 cfs @ 12.09 hrs, Volume= 0.038 af
 Outflow = 0.47 cfs @ 12.09 hrs, Volume= 0.038 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.47 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= 215.91' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.50'	12.0" Round Culvert L= 37.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.50' / 215.30' S= 0.0054 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.46 cfs @ 12.09 hrs HW=215.91' (Free Discharge)**1=Culvert** (Barrel Controls 0.46 cfs @ 2.26 fps)**Summary for Pond 73P: DMH-6**

Inflow Area = 0.340 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
 Inflow = 0.97 cfs @ 12.09 hrs, Volume= 0.079 af
 Outflow = 0.97 cfs @ 12.09 hrs, Volume= 0.079 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.97 cfs @ 12.09 hrs, Volume= 0.079 af

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

Peak Elev= 215.78' @ 12.09 hrs

Flood Elev= 219.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.20'	12.0" Round Culvert L= 52.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.20' / 214.80' S= 0.0077 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.94 cfs @ 12.09 hrs HW=215.77' (Free Discharge)**1=Culvert** (Inlet Controls 0.94 cfs @ 2.03 fps)

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Summary for Pond 78P: CB-19

Inflow Area = 0.122 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
 Inflow = 0.35 cfs @ 12.09 hrs, Volume= 0.028 af
 Outflow = 0.35 cfs @ 12.09 hrs, Volume= 0.028 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.35 cfs @ 12.09 hrs, Volume= 0.028 af

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

Peak Elev= 216.73' @ 12.09 hrs

Flood Elev= 219.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.40'	12.0" Round Culvert L= 45.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.40' / 216.10' S= 0.0067 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.34 cfs @ 12.09 hrs HW=216.73' (Free Discharge)**1=Culvert** (Barrel Controls 0.34 cfs @ 2.25 fps)**Summary for Pond 79P: CB-10**

Inflow Area = 0.200 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
 Inflow = 0.57 cfs @ 12.09 hrs, Volume= 0.046 af
 Outflow = 0.57 cfs @ 12.09 hrs, Volume= 0.046 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.57 cfs @ 12.09 hrs, Volume= 0.046 af

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

Peak Elev= 216.83' @ 12.09 hrs

Flood Elev= 219.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.40'	12.0" Round Culvert L= 17.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.40' / 216.10' S= 0.0176 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.55 cfs @ 12.09 hrs HW=216.82' (Free Discharge)**1=Culvert** (Inlet Controls 0.55 cfs @ 1.75 fps)**Summary for Pond 80P: DMH-5**

Inflow Area = 0.663 ac, 100.00% Impervious, Inflow Depth = 2.77" for 2-yr event
 Inflow = 1.88 cfs @ 12.09 hrs, Volume= 0.153 af
 Outflow = 1.88 cfs @ 12.09 hrs, Volume= 0.153 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.88 cfs @ 12.09 hrs, Volume= 0.153 af

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

Peak Elev= 215.47' @ 12.09 hrs

Flood Elev= 220.00'

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Device	Routing	Invert	Outlet Devices
#1	Primary	214.70'	15.0" Round Culvert L= 67.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 214.70' / 214.20' S= 0.0075 ' / ' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.83 cfs @ 12.09 hrs HW=215.46' (Free Discharge)**1=Culvert** (Inlet Controls 1.83 cfs @ 2.34 fps)**Summary for Pond 81P: CB-5**

Inflow Area = 0.287 ac, 88.82% Impervious, Inflow Depth = 2.45" for 2-yr event
 Inflow = 0.76 cfs @ 12.09 hrs, Volume= 0.058 af
 Outflow = 0.76 cfs @ 12.09 hrs, Volume= 0.058 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.76 cfs @ 12.09 hrs, Volume= 0.058 af

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

Peak Elev= 216.53' @ 12.09 hrs

Flood Elev= 219.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.00'	12.0" Round Culvert L= 31.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.00' / 215.80' S= 0.0065 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.74 cfs @ 12.09 hrs HW=216.52' (Free Discharge)**1=Culvert** (Barrel Controls 0.74 cfs @ 2.61 fps)**Summary for Pond 82P: DMH-3**

Inflow Area = 0.287 ac, 88.82% Impervious, Inflow Depth = 2.45" for 2-yr event
 Inflow = 0.76 cfs @ 12.09 hrs, Volume= 0.058 af
 Outflow = 0.76 cfs @ 12.09 hrs, Volume= 0.058 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.76 cfs @ 12.09 hrs, Volume= 0.058 af

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

Peak Elev= 216.22' @ 12.09 hrs

Flood Elev= 218.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.70'	12.0" Round Culvert L= 70.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.70' / 215.30' S= 0.0057 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.74 cfs @ 12.09 hrs HW=216.21' (Free Discharge)**1=Culvert** (Barrel Controls 0.74 cfs @ 2.68 fps)

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Summary for Link 20L: DP-A

Inflow Area = 30.660 ac, 24.72% Impervious, Inflow Depth = 1.02" for 2-yr event
Inflow = 13.42 cfs @ 12.17 hrs, Volume= 2.596 af
Primary = 13.42 cfs @ 12.17 hrs, Volume= 2.596 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-yr Rainfall=4.44"

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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

Subcatchment 9S: APT. BLDG. A	Runoff Area=17,818 sf 100.00% Impervious Runoff Depth=4.20" Tc=6.0 min CN=98 Runoff=1.73 cfs 0.143 af
Subcatchment 16S: APT. BLDG. B	Runoff Area=17,818 sf 100.00% Impervious Runoff Depth=4.20" Tc=6.0 min CN=98 Runoff=1.73 cfs 0.143 af
Subcatchment 18S: APT. BLDG. C	Runoff Area=17,818 sf 100.00% Impervious Runoff Depth=4.20" Tc=6.0 min CN=98 Runoff=1.73 cfs 0.143 af
Subcatchment 21S: A.1	Runoff Area=20,195 sf 5.87% Impervious Runoff Depth=2.24" Tc=10.0 min CN=78 Runoff=1.05 cfs 0.087 af
Subcatchment 22S: A.2	Runoff Area=13,850 sf 100.00% Impervious Runoff Depth=4.20" Tc=6.0 min CN=98 Runoff=1.35 cfs 0.111 af
Subcatchment 23S: A.3	Runoff Area=9,767 sf 100.00% Impervious Runoff Depth=4.20" Tc=6.0 min CN=98 Runoff=0.95 cfs 0.079 af
Subcatchment 24S: A.4	Runoff Area=5,341 sf 100.00% Impervious Runoff Depth=4.20" Tc=6.0 min CN=98 Runoff=0.52 cfs 0.043 af
Subcatchment 25S: A.5	Runoff Area=22,426 sf 100.00% Impervious Runoff Depth=4.20" Tc=6.0 min CN=98 Runoff=2.18 cfs 0.180 af
Subcatchment 26S: B.6	Runoff Area=40,090 sf 22.31% Impervious Runoff Depth=1.85" Tc=6.0 min UI Adjusted CN=73 Runoff=1.93 cfs 0.142 af
Subcatchment 27S: A.6	Runoff Area=12,567 sf 87.12% Impervious Runoff Depth=3.76" Tc=6.0 min CN=94 Runoff=1.16 cfs 0.090 af
Subcatchment 28S: B.1	Runoff Area=30,829 sf 0.88% Impervious Runoff Depth=2.16" Tc=6.0 min CN=77 Runoff=1.75 cfs 0.128 af
Subcatchment 29S: B.2	Runoff Area=13,381 sf 83.76% Impervious Runoff Depth=3.65" Tc=6.0 min CN=93 Runoff=1.22 cfs 0.093 af
Subcatchment 30S: B.3	Runoff Area=17,060 sf 95.72% Impervious Runoff Depth=4.09" Tc=6.0 min CN=97 Runoff=1.64 cfs 0.133 af
Subcatchment 31S: B.4	Runoff Area=17,060 sf 95.72% Impervious Runoff Depth=4.09" Tc=6.0 min CN=97 Runoff=1.64 cfs 0.133 af
Subcatchment 32S: B.5	Runoff Area=24,627 sf 67.38% Impervious Runoff Depth=3.14" Tc=6.0 min CN=88 Runoff=2.00 cfs 0.148 af
Subcatchment 33S: B.7	Runoff Area=290,511 sf 2.55% Impervious Runoff Depth=1.70" Tc=30.0 min CN=71 Runoff=7.30 cfs 0.947 af

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Type III 24-hr 10-yr Rainfall=4.44"

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Subcatchment 34S: B.8	Runoff Area=12,484 sf 88.82% Impervious Runoff Depth=3.87" Tc=6.0 min CN=95 Runoff=1.17 cfs 0.092 af
Subcatchment 35S: C.1	Runoff Area=236,308 sf 9.34% Impervious Runoff Depth=2.16" Tc=20.0 min UI Adjusted CN=77 Runoff=9.18 cfs 0.977 af
Subcatchment 36S: C.2	Runoff Area=22,516 sf 83.62% Impervious Runoff Depth=3.65" Tc=6.0 min CN=93 Runoff=2.05 cfs 0.157 af
Subcatchment 37S: C.3	Runoff Area=12,429 sf 61.75% Impervious Runoff Depth=3.04" Tc=6.0 min CN=87 Runoff=0.98 cfs 0.072 af
Subcatchment 38S: C.4	Runoff Area=4,655 sf 100.00% Impervious Runoff Depth=4.20" Tc=6.0 min CN=98 Runoff=0.45 cfs 0.037 af
Subcatchment 39S: C.5	Runoff Area=5,857 sf 100.00% Impervious Runoff Depth=4.20" Tc=6.0 min CN=98 Runoff=0.57 cfs 0.047 af
Subcatchment 40S: C.6	Runoff Area=4,047 sf 100.00% Impervious Runoff Depth=4.20" Tc=6.0 min CN=98 Runoff=0.39 cfs 0.033 af
Subcatchment 41S: C.7	Runoff Area=7,188 sf 100.00% Impervious Runoff Depth=4.20" Tc=6.0 min CN=98 Runoff=0.70 cfs 0.058 af
Subcatchment 42S: C.8	Runoff Area=7,639 sf 100.00% Impervious Runoff Depth=4.20" Tc=6.0 min CN=98 Runoff=0.74 cfs 0.061 af
Subcatchment 43S: C.9	Runoff Area=8,732 sf 100.00% Impervious Runoff Depth=4.20" Tc=6.0 min CN=98 Runoff=0.85 cfs 0.070 af
Subcatchment 44S: C.10	Runoff Area=5,326 sf 100.00% Impervious Runoff Depth=4.20" Tc=6.0 min CN=98 Runoff=0.52 cfs 0.043 af
Subcatchment 45S: C.11	Runoff Area=2,631 sf 100.00% Impervious Runoff Depth=4.20" Tc=6.0 min CN=98 Runoff=0.26 cfs 0.021 af
Subcatchment 46S: C.12	Runoff Area=5,910 sf 100.00% Impervious Runoff Depth=4.20" Tc=6.0 min CN=98 Runoff=0.57 cfs 0.048 af
Subcatchment 47S: C.13	Runoff Area=1,987 sf 100.00% Impervious Runoff Depth=4.20" Tc=6.0 min CN=98 Runoff=0.19 cfs 0.016 af
Subcatchment 48S: C.14	Runoff Area=1,885 sf 100.00% Impervious Runoff Depth=4.20" Tc=6.0 min CN=98 Runoff=0.18 cfs 0.015 af
Subcatchment 49S: C.15	Runoff Area=3,487 sf 100.00% Impervious Runoff Depth=4.20" Tc=6.0 min CN=98 Runoff=0.34 cfs 0.028 af
Subcatchment 50S: C.16	Runoff Area=3,508 sf 100.00% Impervious Runoff Depth=4.20" Tc=6.0 min CN=98 Runoff=0.34 cfs 0.028 af
Subcatchment 51S: D.1	Runoff Area=402,771 sf 0.38% Impervious Runoff Depth=1.05" Tc=20.0 min CN=61 Runoff=6.57 cfs 0.806 af

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Type III 24-hr 10-yr Rainfall=4.44"

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Subcatchment 52S: B.9	Runoff Area=15,018 sf 80.72% Impervious Runoff Depth=3.54" Tc=6.0 min CN=92 Runoff=1.34 cfs 0.102 af
Pond 4P: Constructed Stormwater Wetland	Peak Elev=214.32' Storage=13,989 cf Inflow=7.09 cfs 0.596 af Outflow=0.54 cfs 0.595 af
Pond 5P: Wet Basin	Peak Elev=215.03' Storage=11,160 cf Inflow=11.71 cfs 1.451 af Outflow=8.19 cfs 1.451 af
Pond 7P: Constructed Stormwater Wetland	Peak Elev=215.37' Storage=6,222 cf Inflow=18.71 cfs 2.191 af Outflow=17.15 cfs 2.191 af
Pond 12P: STONE RECHARGE TRENCH	Peak Elev=221.00' Storage=1,942 cf Inflow=1.73 cfs 0.143 af Discarded=0.17 cfs 0.137 af Primary=0.69 cfs 0.006 af Outflow=0.85 cfs 0.143 af
Pond 17P: STONE RECHARGE TRENCH	Peak Elev=221.00' Storage=1,942 cf Inflow=1.73 cfs 0.143 af Discarded=0.17 cfs 0.137 af Primary=0.69 cfs 0.006 af Outflow=0.85 cfs 0.143 af
Pond 19P: STONE RECHARGE TRENCH	Peak Elev=221.00' Storage=1,942 cf Inflow=1.73 cfs 0.143 af Discarded=0.17 cfs 0.137 af Primary=0.69 cfs 0.006 af Outflow=0.85 cfs 0.143 af
Pond 21P: CB-4	Peak Elev=216.26' Inflow=1.34 cfs 0.102 af 12.0" Round Culvert n=0.013 L=37.0' S=0.0054 ' Outflow=1.34 cfs 0.102 af
Pond 22P: DMH-2	Peak Elev=216.84' Inflow=6.00 cfs 0.461 af 18.0" Round Culvert n=0.013 L=101.0' S=0.0050 ' Outflow=6.00 cfs 0.461 af
Pond 23P: CB-1	Peak Elev=216.29' Inflow=1.22 cfs 0.093 af 12.0" Round Culvert n=0.013 L=27.0' S=0.0074 ' Outflow=1.22 cfs 0.093 af
Pond 24P: CB-2	Peak Elev=217.01' Inflow=1.64 cfs 0.133 af 12.0" Round Culvert n=0.013 L=20.0' S=0.0400 ' Outflow=1.64 cfs 0.133 af
Pond 25P: CB-3	Peak Elev=217.44' Inflow=2.00 cfs 0.148 af 12.0" Round Culvert n=0.013 L=38.0' S=0.0289 ' Outflow=2.00 cfs 0.148 af
Pond 26P: DMH-1	Peak Elev=216.58' Inflow=4.86 cfs 0.375 af 18.0" Round Culvert n=0.013 L=56.0' S=0.0089 ' Outflow=4.86 cfs 0.375 af
Pond 27P: DCB-22	Peak Elev=216.53' Inflow=2.18 cfs 0.180 af 12.0" Round Culvert n=0.013 L=50.0' S=0.0060 ' Outflow=2.18 cfs 0.180 af
Pond 28P: DMH-16	Peak Elev=216.13' Inflow=2.18 cfs 0.180 af 12.0" Round Culvert n=0.013 L=160.0' S=0.0050 ' Outflow=2.18 cfs 0.180 af
Pond 29P: CB-21	Peak Elev=216.61' Inflow=0.52 cfs 0.043 af 12.0" Round Culvert n=0.013 L=26.0' S=0.0192 ' Outflow=0.52 cfs 0.043 af
Pond 30P: DMH-15	Peak Elev=215.17' Inflow=2.70 cfs 0.223 af 15.0" Round Culvert n=0.013 L=250.0' S=0.0052 ' Outflow=2.70 cfs 0.223 af

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Pond 31P: DMH-14	Peak Elev=214.41' Inflow=6.16 cfs 0.504 af 18.0" Round Culvert n=0.013 L=61.0' S=0.0049 '/' Outflow=6.16 cfs 0.504 af
Pond 32P: CB-20	Peak Elev=216.21' Inflow=1.35 cfs 0.111 af 12.0" Round Culvert n=0.013 L=12.0' S=0.0167 '/' Outflow=1.35 cfs 0.111 af
Pond 33P: DMH-17	Peak Elev=216.59' Inflow=2.11 cfs 0.169 af 12.0" Round Culvert n=0.013 L=180.0' S=0.0050 '/' Outflow=2.11 cfs 0.169 af
Pond 34P: CB-23	Peak Elev=216.57' Inflow=1.16 cfs 0.090 af 12.0" Round Culvert n=0.013 L=28.0' S=0.0071 '/' Outflow=1.16 cfs 0.090 af
Pond 35P: CB-24	Peak Elev=216.48' Inflow=0.95 cfs 0.079 af 12.0" Round Culvert n=0.013 L=20.0' S=0.0100 '/' Outflow=0.95 cfs 0.079 af
Pond 36P: DMH-7	Peak Elev=216.72' Inflow=1.37 cfs 0.113 af 12.0" Round Culvert n=0.013 L=220.0' S=0.0055 '/' Outflow=1.37 cfs 0.113 af
Pond 37P: DMH-10	Peak Elev=218.87' Inflow=1.89 cfs 0.156 af 15.0" Round Culvert n=0.013 L=122.0' S=0.0295 '/' Outflow=1.89 cfs 0.156 af
Pond 38P: CB-15	Peak Elev=232.43' Inflow=0.18 cfs 0.015 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0333 '/' Outflow=0.18 cfs 0.015 af
Pond 39P: CB-16	Peak Elev=232.44' Inflow=0.19 cfs 0.016 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0333 '/' Outflow=0.19 cfs 0.016 af
Pond 52P: CB-17	Peak Elev=247.73' Inflow=0.34 cfs 0.028 af 12.0" Round Culvert n=0.013 L=18.0' S=0.0500 '/' Outflow=0.34 cfs 0.028 af
Pond 53P: CB-18	Peak Elev=247.72' Inflow=0.34 cfs 0.028 af 12.0" Round Culvert n=0.013 L=18.0' S=0.0500 '/' Outflow=0.34 cfs 0.028 af
Pond 54P: DMH-13	Peak Elev=246.87' Inflow=0.68 cfs 0.056 af 12.0" Round Culvert n=0.013 L=85.0' S=0.0753 '/' Outflow=0.68 cfs 0.056 af
Pond 56P: DMH-12	Peak Elev=240.37' Inflow=0.68 cfs 0.056 af 12.0" Round Culvert n=0.013 L=110.0' S=0.0745 '/' Outflow=0.68 cfs 0.056 af
Pond 58P: CB-13	Peak Elev=219.18' Inflow=0.26 cfs 0.021 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0467 '/' Outflow=0.26 cfs 0.021 af
Pond 61P: DMH-11	Peak Elev=232.21' Inflow=1.06 cfs 0.087 af 12.0" Round Culvert n=0.013 L=198.0' S=0.0677 '/' Outflow=1.06 cfs 0.087 af
Pond 62P: CB-14	Peak Elev=219.33' Inflow=0.57 cfs 0.048 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0467 '/' Outflow=0.57 cfs 0.048 af
Pond 63P: DMH-4	Peak Elev=215.47' Inflow=5.66 cfs 0.468 af 24.0" Round Culvert n=0.013 L=35.0' S=0.0029 '/' Outflow=5.66 cfs 0.468 af
Pond 66P: CB-6	Peak Elev=216.43' Inflow=0.57 cfs 0.047 af 12.0" Round Culvert n=0.013 L=24.0' S=0.0208 '/' Outflow=0.57 cfs 0.047 af

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Type III 24-hr 10-yr Rainfall=4.44"

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Pond 67P: CB-7	Peak Elev=216.35' Inflow=0.39 cfs 0.033 af 12.0" Round Culvert n=0.013 L=24.0' S=0.0208 '/' Outflow=0.39 cfs 0.033 af
Pond 68P: DMH-9	Peak Elev=217.27' Inflow=3.48 cfs 0.267 af 15.0" Round Culvert n=0.013 L=79.0' S=0.0089 '/' Outflow=3.48 cfs 0.267 af
Pond 69P: CB-11	Peak Elev=216.71' Inflow=0.45 cfs 0.037 af 12.0" Round Culvert n=0.013 L=14.0' S=0.0071 '/' Outflow=0.45 cfs 0.037 af
Pond 70P: CB-12	Peak Elev=217.44' Inflow=3.03 cfs 0.230 af 15.0" Round Culvert n=0.013 L=14.0' S=0.0071 '/' Outflow=3.03 cfs 0.230 af
Pond 71P: CB-8	Peak Elev=216.02' Inflow=0.74 cfs 0.061 af 12.0" Round Culvert n=0.013 L=32.0' S=0.0062 '/' Outflow=0.74 cfs 0.061 af
Pond 72P: CB-9	Peak Elev=216.01' Inflow=0.70 cfs 0.058 af 12.0" Round Culvert n=0.013 L=37.0' S=0.0054 '/' Outflow=0.70 cfs 0.058 af
Pond 73P: DMH-6	Peak Elev=215.94' Inflow=1.44 cfs 0.119 af 12.0" Round Culvert n=0.013 L=52.0' S=0.0077 '/' Outflow=1.44 cfs 0.119 af
Pond 78P: CB-19	Peak Elev=216.81' Inflow=0.52 cfs 0.043 af 12.0" Round Culvert n=0.013 L=45.0' S=0.0067 '/' Outflow=0.52 cfs 0.043 af
Pond 79P: CB-10	Peak Elev=216.94' Inflow=0.85 cfs 0.070 af 12.0" Round Culvert n=0.013 L=17.0' S=0.0176 '/' Outflow=0.85 cfs 0.070 af
Pond 80P: DMH-5	Peak Elev=215.69' Inflow=2.81 cfs 0.232 af 15.0" Round Culvert n=0.013 L=67.0' S=0.0075 '/' Outflow=2.81 cfs 0.232 af
Pond 81P: CB-5	Peak Elev=216.68' Inflow=1.17 cfs 0.092 af 12.0" Round Culvert n=0.013 L=31.0' S=0.0065 '/' Outflow=1.17 cfs 0.092 af
Pond 82P: DMH-3	Peak Elev=216.37' Inflow=1.17 cfs 0.092 af 12.0" Round Culvert n=0.013 L=70.0' S=0.0057 '/' Outflow=1.17 cfs 0.092 af
Link 20L: DP-A	Inflow=27.87 cfs 5.043 af Primary=27.87 cfs 5.043 af

Total Runoff Area = 30.660 ac Runoff Volume = 5.457 af Average Runoff Depth = 2.14"
75.28% Pervious = 23.079 ac 24.72% Impervious = 7.580 ac

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Type III 24-hr 10-yr Rainfall=4.44"

Summary for Subcatchment 9S: APT. BLDG. A

Runoff = 1.73 cfs @ 12.09 hrs, Volume= 0.143 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
17,818	98	Roofs, HSG A
17,818		100.00% Impervious Area

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

Summary for Subcatchment 16S: APT. BLDG. B

Runoff = 1.73 cfs @ 12.09 hrs, Volume= 0.143 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
17,818	98	Roofs, HSG A
17,818		100.00% Impervious Area

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

Summary for Subcatchment 18S: APT. BLDG. C

Runoff = 1.73 cfs @ 12.09 hrs, Volume= 0.143 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
17,818	98	Roofs, HSG A
17,818		100.00% Impervious Area

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

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Type III 24-hr 10-yr Rainfall=4.44"

Summary for Subcatchment 21S: A.1

Runoff = 1.05 cfs @ 12.15 hrs, Volume= 0.087 af, Depth= 2.24"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
18,718	77	>75% Grass cover, Good, HSG A
291	43	Woods, Good, HSG A
95	98	Unconnected pavement, HSG A
1,091	98	Roofs, HSG A

20,195	78	Weighted Average
19,009		94.13% Pervious Area
1,186		5.87% Impervious Area
95		8.01% Unconnected

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

Summary for Subcatchment 22S: A.2

Runoff = 1.35 cfs @ 12.09 hrs, Volume= 0.111 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
12,935	98	Paved parking, HSG A
915	98	Roofs, HSG A
13,850	98	Weighted Average
13,850		100.00% Impervious Area

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

Summary for Subcatchment 23S: A.3

Runoff = 0.95 cfs @ 12.09 hrs, Volume= 0.079 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
9,767	98	Paved parking, HSG A
9,767		100.00% Impervious Area

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Type III 24-hr 10-yr Rainfall=4.44"

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

Summary for Subcatchment 24S: A.4

Runoff = 0.52 cfs @ 12.09 hrs, Volume= 0.043 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
227	98	Paved parking, HSG A
5,114	98	Roofs, HSG A
5,341	98	Weighted Average
5,341		100.00% Impervious Area

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

Summary for Subcatchment 25S: A.5

Runoff = 2.18 cfs @ 12.09 hrs, Volume= 0.180 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
22,426	98	Paved parking, HSG A
22,426		100.00% Impervious Area

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

Summary for Subcatchment 26S: B.6

Runoff = 1.93 cfs @ 12.10 hrs, Volume= 0.142 af, Depth= 1.85"

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-yr Rainfall=4.44"**6842-Post**

Type III 24-hr 10-yr Rainfall=4.44"

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Area (sf)	CN	Adj	Description
* 31,146	68		>75% Grass cover, Good, HSG A
3,467	98		Unconnected pavement, HSG A
5,477	98		Roofs, HSG A
40,090	75	73	Weighted Average, UI Adjusted
31,146			77.69% Pervious Area
8,944			22.31% Impervious Area
3,467			38.76% Unconnected

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

Summary for Subcatchment 27S: A.6

Runoff = 1.16 cfs @ 12.09 hrs, Volume= 0.090 af, Depth= 3.76"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
* 8,883	98	Paved parking, HSG A
1,619	68	>75% Grass cover, Good, HSG A
948	98	Unconnected pavement, HSG A
1,117	98	Roofs, HSG A
12,567	94	Weighted Average
1,619		12.88% Pervious Area
10,948		87.12% Impervious Area
948		8.66% Unconnected

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

Summary for Subcatchment 28S: B.1

Runoff = 1.75 cfs @ 12.09 hrs, Volume= 0.128 af, Depth= 2.16"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
* 30,559	77	>75% Grass cover, Good, HSG A
270	98	Unconnected pavement, HSG A
30,829	77	Weighted Average
30,559		99.12% Pervious Area
270		0.88% Impervious Area
270		100.00% Unconnected

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Type III 24-hr 10-yr Rainfall=4.44"

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

Summary for Subcatchment 29S: B.2

Runoff = 1.22 cfs @ 12.09 hrs, Volume= 0.093 af, Depth= 3.65"

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 10-yr Rainfall=4.44"

Area (sf)	CN	Description
* 2,173	68	>75% Grass cover, Good, HSG A
1,997	98	Unconnected pavement, HSG A
9,211	98	Paved parking, HSG A
13,381	93	Weighted Average
2,173		16.24% Pervious Area
11,208		83.76% Impervious Area
1,997		17.82% Unconnected

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

Summary for Subcatchment 30S: B.3

Runoff = 1.64 cfs @ 12.09 hrs, Volume= 0.133 af, Depth= 4.09"

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 10-yr Rainfall=4.44"

Area (sf)	CN	Description
* 731	68	>75% Grass cover, Good, HSG A
2,575	98	Unconnected pavement, HSG A
13,754	98	Paved parking, HSG A
17,060	97	Weighted Average
731		4.28% Pervious Area
16,329		95.72% Impervious Area
2,575		15.77% Unconnected

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

Summary for Subcatchment 31S: B.4

Runoff = 1.64 cfs @ 12.09 hrs, Volume= 0.133 af, Depth= 4.09"

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 10-yr Rainfall=4.44"**6842-Post**

Type III 24-hr 10-yr Rainfall=4.44"

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Area (sf)	CN	Description
* 731	68	>75% Grass cover, Good, HSG A
2,575	98	Unconnected pavement, HSG A
13,754	98	Paved parking, HSG A
17,060	97	Weighted Average
731		4.28% Pervious Area
16,329		95.72% Impervious Area
2,575		15.77% Unconnected

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

Summary for Subcatchment 32S: B.5

Runoff = 2.00 cfs @ 12.09 hrs, Volume= 0.148 af, Depth= 3.14"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
* 8,616	98	Paved parking, HSG A
8,034	68	>75% Grass cover, Good, HSG A
1,324	98	Unconnected pavement, HSG A
6,653	98	Roofs, HSG A
24,627	88	Weighted Average
8,034		32.62% Pervious Area
16,593		67.38% Impervious Area
1,324		7.98% Unconnected

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

Summary for Subcatchment 33S: B.7

Runoff = 7.30 cfs @ 12.44 hrs, Volume= 0.947 af, Depth= 1.70"

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 10-yr Rainfall=4.44"

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Type III 24-hr 10-yr Rainfall=4.44"

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	Area (sf)	CN	Description
*	129,407	68	>75% Grass cover, Good, HSG A
*	97,286	79	>75% Grass cover, Good, HSG C
*	9,046	89	>75% Grass cover, Good, HSG D
*	27,194	43	Woods, Good, HSG A
*	15,779	76	Woods, Good, HSG C
*	4,399	82	Woods, Good, HSG D
	1,606	98	Unconnected pavement, HSG A
	319	98	Unconnected pavement, HSG C
	5,475	98	Roofs, HSG A
	290,511	71	Weighted Average
	283,111		97.45% Pervious Area
	7,400		2.55% Impervious Area
	1,925		26.01% Unconnected

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

Summary for Subcatchment 34S: B.8

Runoff = 1.17 cfs @ 12.09 hrs, Volume= 0.092 af, Depth= 3.87"

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 10-yr Rainfall=4.44"

	Area (sf)	CN	Description
	9,724	98	Paved parking, HSG A
*	1,396	68	>75% Grass cover, Good, HSG A
	1,364	98	Unconnected pavement, HSG A
	12,484	95	Weighted Average
	1,396		11.18% Pervious Area
	11,088		88.82% Impervious Area
	1,364		12.30% Unconnected

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

Summary for Subcatchment 35S: C.1

Runoff = 9.18 cfs @ 12.28 hrs, Volume= 0.977 af, Depth= 2.16"

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-yr Rainfall=4.44"**6842-Post**

Type III 24-hr 10-yr Rainfall=4.44"

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	Area (sf)	CN	Adj	Description
*	128,543	68		>75% Grass cover, Good, HSG A
*	69,229	89		>75% Grass cover, Good, HSG D
*	16,469	82		Woods, Good, HSG D
	14,141	98		Unconnected pavement, HSG A
	7,926	98		Roofs, HSG A
	236,308	78	77	Weighted Average, UI Adjusted
	214,241			90.66% Pervious Area
	22,067			9.34% Impervious Area
	14,141			64.08% Unconnected

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

Summary for Subcatchment 36S: C.2

Runoff = 2.05 cfs @ 12.09 hrs, Volume= 0.157 af, Depth= 3.65"

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 10-yr Rainfall=4.44"

	Area (sf)	CN	Description
	12,989	98	Paved parking, HSG A
*	3,687	68	>75% Grass cover, Good, HSG A
	2,989	98	Unconnected pavement, HSG A
	2,851	98	Roofs, HSG A
	22,516	93	Weighted Average
	3,687		16.38% Pervious Area
	18,829		83.62% Impervious Area
	2,989		15.87% Unconnected

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

Summary for Subcatchment 37S: C.3

Runoff = 0.98 cfs @ 12.09 hrs, Volume= 0.072 af, Depth= 3.04"

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-yr Rainfall=4.44"

	Area (sf)	CN	Description
	5,266	98	Paved parking, HSG A
*	4,754	68	>75% Grass cover, Good, HSG A
	509	98	Roofs, HSG A
	1,900	98	Roofs, HSG A
	12,429	87	Weighted Average
	4,754		38.25% Pervious Area
	7,675		61.75% Impervious Area

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Type III 24-hr 10-yr Rainfall=4.44"

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

Summary for Subcatchment 38S: C.4

Runoff = 0.45 cfs @ 12.09 hrs, Volume= 0.037 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
4,655	98	Paved parking, HSG A
4,655		100.00% Impervious Area

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

Summary for Subcatchment 39S: C.5

Runoff = 0.57 cfs @ 12.09 hrs, Volume= 0.047 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
4,080	98	Paved parking, HSG A
1,777	98	Unconnected pavement, HSG A
5,857	98	Weighted Average
5,857		100.00% Impervious Area
1,777		30.34% Unconnected

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

Summary for Subcatchment 40S: C.6

Runoff = 0.39 cfs @ 12.09 hrs, Volume= 0.033 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
4,047	98	Paved parking, HSG A
4,047		100.00% Impervious Area

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Type III 24-hr 10-yr Rainfall=4.44"

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

Summary for Subcatchment 41S: C.7

Runoff = 0.70 cfs @ 12.09 hrs, Volume= 0.058 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
6,072	98	Paved parking, HSG A
1,116	98	Roofs, HSG A
7,188	98	Weighted Average
7,188		100.00% Impervious Area

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

Summary for Subcatchment 42S: C.8

Runoff = 0.74 cfs @ 12.09 hrs, Volume= 0.061 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
7,639	98	Paved parking, HSG A
7,639		100.00% Impervious Area

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

Summary for Subcatchment 43S: C.9

Runoff = 0.85 cfs @ 12.09 hrs, Volume= 0.070 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
8,732	98	Paved parking, HSG A
8,732		100.00% Impervious Area

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Type III 24-hr 10-yr Rainfall=4.44"

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

Summary for Subcatchment 44S: C.10

Runoff = 0.52 cfs @ 12.09 hrs, Volume= 0.043 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
5,326	98	Paved parking, HSG A
5,326		100.00% Impervious Area

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

Summary for Subcatchment 45S: C.11

Runoff = 0.26 cfs @ 12.09 hrs, Volume= 0.021 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
1,483	98	Paved parking, HSG A
946	98	Paved parking, HSG D
126	98	Unconnected pavement, HSG A
76	98	Unconnected pavement, HSG D
2,631	98	Weighted Average
2,631		100.00% Impervious Area
202		7.68% Unconnected

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

Summary for Subcatchment 46S: C.12

Runoff = 0.57 cfs @ 12.09 hrs, Volume= 0.048 af, Depth= 4.20"

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-yr Rainfall=4.44"**6842-Post**

Type III 24-hr 10-yr Rainfall=4.44"

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Area (sf)	CN	Description
2,144	98	Paved parking, HSG A
2,121	98	Paved parking, HSG D
853	98	Unconnected pavement, HSG A
696	98	Unconnected pavement, HSG D
96	98	Roofs, HSG A
5,910	98	Weighted Average
5,910		100.00% Impervious Area
1,549		26.21% Unconnected

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

Summary for Subcatchment 47S: C.13

Runoff = 0.19 cfs @ 12.09 hrs, Volume= 0.016 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
1,832	98	Paved parking, HSG D
155	98	Unconnected pavement, HSG D
1,987	98	Weighted Average
1,987		100.00% Impervious Area
155		7.80% Unconnected

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

Summary for Subcatchment 48S: C.14

Runoff = 0.18 cfs @ 12.09 hrs, Volume= 0.015 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
1,744	98	Paved parking, HSG D
141	98	Unconnected pavement, HSG D
1,885	98	Weighted Average
1,885		100.00% Impervious Area
141		7.48% Unconnected

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Type III 24-hr 10-yr Rainfall=4.44"

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

Summary for Subcatchment 49S: C.15

Runoff = 0.34 cfs @ 12.09 hrs, Volume= 0.028 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
3,220	98	Paved parking, HSG D
267	98	Unconnected pavement, HSG D
3,487	98	Weighted Average
3,487		100.00% Impervious Area
267		7.66% Unconnected

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

Summary for Subcatchment 50S: C.16

Runoff = 0.34 cfs @ 12.09 hrs, Volume= 0.028 af, Depth= 4.20"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
3,238	98	Paved parking, HSG D
270	98	Unconnected pavement, HSG D
3,508	98	Weighted Average
3,508		100.00% Impervious Area
270		7.70% Unconnected

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

Summary for Subcatchment 51S: D.1

Runoff = 6.57 cfs @ 12.32 hrs, Volume= 0.806 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 10-yr Rainfall=4.44"**6842-Post**

Type III 24-hr 10-yr Rainfall=4.44"

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Area (sf)	CN	Description
1,527	98	Unconnected pavement, HSG A
* 182,934	68	>75% Grass cover, Good, HSG A
* 518	79	>75% Grass cover, Good, HSG B
* 51,440	89	>75% Grass cover, Good, HSG D
* 160,796	43	Woods, Good, HSG A
* 5,106	65	Woods, Good, HSG B
* 450	82	Woods, Good, HSG D
402,771	61	Weighted Average
401,244		99.62% Pervious Area
1,527		0.38% Impervious Area
1,527		100.00% Unconnected

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

Summary for Subcatchment 52S: B.9

Runoff = 1.34 cfs @ 12.09 hrs, Volume= 0.102 af, Depth= 3.54"

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-yr Rainfall=4.44"

Area (sf)	CN	Description
10,973	98	Paved parking, HSG A
* 2,895	68	>75% Grass cover, Good, HSG A
1,150	98	Unconnected pavement, HSG A
15,018	92	Weighted Average
2,895		19.28% Pervious Area
12,123		80.72% Impervious Area
1,150		9.49% Unconnected

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

Summary for Pond 4P: Constructed Stormwater Wetland #2

Inflow Area = 2.341 ac, 79.77% Impervious, Inflow Depth = 3.06" for 10-yr event
 Inflow = 7.09 cfs @ 12.09 hrs, Volume= 0.596 af
 Outflow = 0.54 cfs @ 13.36 hrs, Volume= 0.595 af, Atten= 92%, Lag= 76.0 min
 Primary = 0.54 cfs @ 13.36 hrs, Volume= 0.595 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 214.32' @ 13.36 hrs Surf.Area= 8,926 sf Storage= 13,989 cf

Plug-Flow detention time= 344.0 min calculated for 0.595 af (100% of inflow)
 Center-of-Mass det. time= 342.4 min (1,109.0 - 766.6)

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Type III 24-hr 10-yr Rainfall=4.44"

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Volume	Invert	Avail.Storage	Storage Description		
#1	212.50'	31,125 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
212.50	6,500	322.0	0	0	6,500
214.00	8,459	362.0	11,187	11,187	8,737
216.00	11,559	453.0	19,938	31,125	14,695

Device	Routing	Invert	Outlet Devices									
#1	Primary	215.50'	20.0' long x 12.0' 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) 2.57 2.62 2.70 2.67 2.66 2.67 2.66 2.64									
#2	Device 3	214.50'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)									
#3	Primary	212.50'	15.0" Round Culvert L= 111.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 212.50' / 210.44' S= 0.0186 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf									
#4	Device 3	212.50'	4.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads									

Primary OutFlow Max=0.54 cfs @ 13.36 hrs HW=214.32' (Free Discharge)

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

3=Culvert (Passes 0.54 cfs of 5.10 cfs potential flow)

2=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

4=Orifice/Grate (Orifice Controls 0.54 cfs @ 6.20 fps)

Summary for Pond 5P: Wet Basin

Inflow Area = 7.170 ac, 31.40% Impervious, Inflow Depth = 2.43" for 10-yr event
 Inflow = 11.71 cfs @ 12.25 hrs, Volume= 1.451 af
 Outflow = 8.19 cfs @ 12.49 hrs, Volume= 1.451 af, Atten= 30%, Lag= 14.4 min
 Primary = 8.19 cfs @ 12.49 hrs, Volume= 1.451 af

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

Peak Elev= 215.03' @ 12.49 hrs Surf.Area= 12,562 sf Storage= 11,160 cf

Plug-Flow detention time= 27.7 min calculated for 1.451 af (100% of inflow)

Center-of-Mass det. time= 27.3 min (843.5 - 816.2)

Volume	Invert	Avail.Storage	Storage Description		
#1	214.00'	103,930 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
214.00	9,189	420.0	0	0	9,189
216.00	16,216	442.0	25,075	25,075	10,927
218.00	20,207	375.0	36,350	61,425	15,359
220.00	22,316	390.0	42,506	103,930	16,550

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Type III 24-hr 10-yr Rainfall=4.44"

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Device	Routing	Invert	Outlet Devices									
#1	Primary	213.43'	24.0" Round Culvert L= 580.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 213.43' / 211.63' S= 0.0031 ' /' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf									
#2	Device 1	214.00'	45.0 deg x 4.0' long Sharp-Crested Vee/Trap Weir Cv= 2.56 (C= 3.20)									
#3	Device 1	215.50'	4.2' long x 4.2' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.53 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.67 2.71 2.72 2.74 2.77 2.85 3.01 3.23									

Primary OutFlow Max=8.18 cfs @ 12.49 hrs HW=215.03' (Free Discharge)

1=Culvert (Barrel Controls 8.18 cfs @ 4.16 fps)

2=Sharp-Crested Vee/Trap Weir (Passes 8.18 cfs of 14.50 cfs potential flow)

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

Summary for Pond 7P: Constructed Stormwater Wetland #1

Inflow Area = 11.903 ac, 28.79% Impervious, Inflow Depth = 2.21" for 10-yr event
 Inflow = 18.71 cfs @ 12.10 hrs, Volume= 2.191 af
 Outflow = 17.15 cfs @ 12.14 hrs, Volume= 2.191 af, Atten= 8%, Lag= 2.4 min
 Primary = 17.15 cfs @ 12.14 hrs, Volume= 2.191 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 215.37' @ 12.14 hrs Surf.Area= 12,086 sf Storage= 6,222 cf

Plug-Flow detention time= 35.1 min calculated for 2.191 af (100% of inflow)

Center-of-Mass det. time= 34.8 min (862.0 - 827.3)

Volume	Invert	Avail.Storage	Storage Description		
#1	214.80'	14,759 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
214.80	9,939	766.0	0	0	9,939
215.00	10,413	771.0	2,035	2,035	10,570
216.00	15,185	1,210.0	12,724	14,759	79,782

Device	Routing	Invert	Outlet Devices									
#1	Primary	215.10'	40.0' 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									
#2	Primary	214.80'	12.0" Round Culvert X 3.00 L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 214.80' / 214.00' S= 0.0320 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf									

Primary OutFlow Max=16.95 cfs @ 12.14 hrs HW=215.37' (Free Discharge)

1=Broad-Crested Rectangular Weir (Weir Controls 14.13 cfs @ 1.31 fps)

2=Culvert (Inlet Controls 2.82 cfs @ 2.03 fps)

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Type III 24-hr 10-yr Rainfall=4.44"

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Summary for Pond 12P: STONE RECHARGE TRENCH

Inflow Area = 0.409 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 1.73 cfs @ 12.09 hrs, Volume= 0.143 af
 Outflow = 0.85 cfs @ 12.40 hrs, Volume= 0.143 af, Atten= 51%, Lag= 18.7 min
 Discarded = 0.17 cfs @ 12.40 hrs, Volume= 0.137 af
 Primary = 0.69 cfs @ 12.40 hrs, Volume= 0.006 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 221.00' @ 12.40 hrs Surf.Area= 2,427 sf Storage= 1,942 cf

Plug-Flow detention time= 81.2 min calculated for 0.143 af (100% of inflow)
 Center-of-Mass det. time= 81.2 min (831.2 - 750.1)

Volume	Invert	Avail.Storage	Storage Description
#1	219.00'	1,942 cf	3.00'W x 809.00'L x 2.00'H Prismatic 4,854 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Primary	221.00'	809.0' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	219.00'	2,410 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 210.00'

Discarded OutFlow Max=0.17 cfs @ 12.40 hrs HW=221.00' (Free Discharge)
 ↳ **2=Exfiltration** (Controls 0.17 cfs)

Primary OutFlow Max=0.22 cfs @ 12.40 hrs HW=221.00' (Free Discharge)
 ↳ **1=Broad-Crested Rectangular Weir** (Weir Controls 0.22 cfs @ 0.12 fps)

Summary for Pond 17P: STONE RECHARGE TRENCH

Inflow Area = 0.409 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 1.73 cfs @ 12.09 hrs, Volume= 0.143 af
 Outflow = 0.85 cfs @ 12.40 hrs, Volume= 0.143 af, Atten= 51%, Lag= 18.7 min
 Discarded = 0.17 cfs @ 12.40 hrs, Volume= 0.137 af
 Primary = 0.69 cfs @ 12.40 hrs, Volume= 0.006 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 221.00' @ 12.40 hrs Surf.Area= 2,427 sf Storage= 1,942 cf

Plug-Flow detention time= 81.2 min calculated for 0.143 af (100% of inflow)
 Center-of-Mass det. time= 81.2 min (831.2 - 750.1)

Volume	Invert	Avail.Storage	Storage Description
#1	219.00'	1,942 cf	3.00'W x 809.00'L x 2.00'H Prismatic 4,854 cf Overall x 40.0% Voids

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Device	Routing	Invert	Outlet Devices
#1	Primary	221.00'	809.0' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	219.00'	2,410 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 210.00'

Discarded OutFlow Max=0.17 cfs @ 12.40 hrs HW=221.00' (Free Discharge)
 ↳ **2=Exfiltration** (Controls 0.17 cfs)

Primary OutFlow Max=0.22 cfs @ 12.40 hrs HW=221.00' (Free Discharge)
 ↳ **1=Broad-Crested Rectangular Weir** (Weir Controls 0.22 cfs @ 0.12 fps)

Summary for Pond 19P: STONE RECHARGE TRENCH

Inflow Area = 0.409 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 1.73 cfs @ 12.09 hrs, Volume= 0.143 af
 Outflow = 0.85 cfs @ 12.40 hrs, Volume= 0.143 af, Atten= 51%, Lag= 18.7 min
 Discarded = 0.17 cfs @ 12.40 hrs, Volume= 0.137 af
 Primary = 0.69 cfs @ 12.40 hrs, Volume= 0.006 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 221.00' @ 12.40 hrs Surf.Area= 2,427 sf Storage= 1,942 cf

Plug-Flow detention time= 81.2 min calculated for 0.143 af (100% of inflow)
 Center-of-Mass det. time= 81.2 min (831.2 - 750.1)

Volume	Invert	Avail.Storage	Storage Description
#1	219.00'	1,942 cf	3.00'W x 809.00'L x 2.00'H Prismatic 4,854 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Primary	221.00'	809.0' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	219.00'	2,410 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 210.00'

Discarded OutFlow Max=0.17 cfs @ 12.40 hrs HW=221.00' (Free Discharge)
 ↳ **2=Exfiltration** (Controls 0.17 cfs)

Primary OutFlow Max=0.22 cfs @ 12.40 hrs HW=221.00' (Free Discharge)
 ↳ **1=Broad-Crested Rectangular Weir** (Weir Controls 0.22 cfs @ 0.12 fps)

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Summary for Pond 21P: CB-4

Inflow Area = 0.345 ac, 80.72% Impervious, Inflow Depth = 3.54" for 10-yr event
 Inflow = 1.34 cfs @ 12.09 hrs, Volume= 0.102 af
 Outflow = 1.34 cfs @ 12.09 hrs, Volume= 0.102 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.34 cfs @ 12.09 hrs, Volume= 0.102 af

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

Peak Elev= 216.26' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.50'	12.0" Round Culvert L= 37.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.50' / 215.30' S= 0.0054 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.31 cfs @ 12.09 hrs HW=216.24' (Free Discharge)**1=Culvert** (Barrel Controls 1.31 cfs @ 2.90 fps)**Summary for Pond 22P: DMH-2**

Inflow Area = 1.540 ac, 81.03% Impervious, Inflow Depth = 3.59" for 10-yr event
 Inflow = 6.00 cfs @ 12.09 hrs, Volume= 0.461 af
 Outflow = 6.00 cfs @ 12.09 hrs, Volume= 0.461 af, Atten= 0%, Lag= 0.0 min
 Primary = 6.00 cfs @ 12.09 hrs, Volume= 0.461 af

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

Peak Elev= 216.84' @ 12.09 hrs

Flood Elev= 218.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.30'	18.0" Round Culvert L= 101.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.30' / 214.80' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=5.86 cfs @ 12.09 hrs HW=216.81' (Free Discharge)**1=Culvert** (Inlet Controls 5.86 cfs @ 3.32 fps)**Summary for Pond 23P: CB-1**

Inflow Area = 0.307 ac, 83.76% Impervious, Inflow Depth = 3.65" for 10-yr event
 Inflow = 1.22 cfs @ 12.09 hrs, Volume= 0.093 af
 Outflow = 1.22 cfs @ 12.09 hrs, Volume= 0.093 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.22 cfs @ 12.09 hrs, Volume= 0.093 af

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

Peak Elev= 216.29' @ 12.09 hrs

Flood Elev= 218.60'

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Device	Routing	Invert	Outlet Devices
#1	Primary	215.60'	12.0" Round Culvert L= 27.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.60' / 215.40' S= 0.0074 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.19 cfs @ 12.09 hrs HW=216.28' (Free Discharge)**1=Culvert** (Barrel Controls 1.19 cfs @ 2.95 fps)**Summary for Pond 24P: CB-2**

Inflow Area = 0.392 ac, 95.72% Impervious, Inflow Depth = 4.09" for 10-yr event
 Inflow = 1.64 cfs @ 12.09 hrs, Volume= 0.133 af
 Outflow = 1.64 cfs @ 12.09 hrs, Volume= 0.133 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.64 cfs @ 12.09 hrs, Volume= 0.133 af

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

Peak Elev= 217.01' @ 12.09 hrs

Flood Elev= 219.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.20'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.20' / 215.40' S= 0.0400 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.60 cfs @ 12.09 hrs HW=216.99' (Free Discharge)**1=Culvert** (Inlet Controls 1.60 cfs @ 2.39 fps)**Summary for Pond 25P: CB-3**

Inflow Area = 0.565 ac, 67.38% Impervious, Inflow Depth = 3.14" for 10-yr event
 Inflow = 2.00 cfs @ 12.09 hrs, Volume= 0.148 af
 Outflow = 2.00 cfs @ 12.09 hrs, Volume= 0.148 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.00 cfs @ 12.09 hrs, Volume= 0.148 af

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

Peak Elev= 217.44' @ 12.09 hrs

Flood Elev= 219.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.50'	12.0" Round Culvert L= 38.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.50' / 215.40' S= 0.0289 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.96 cfs @ 12.09 hrs HW=217.42' (Free Discharge)**1=Culvert** (Inlet Controls 1.96 cfs @ 2.58 fps)

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Summary for Pond 26P: DMH-1

Inflow Area = 1.264 ac, 80.14% Impervious, Inflow Depth = 3.56" for 10-yr event
 Inflow = 4.86 cfs @ 12.09 hrs, Volume= 0.375 af
 Outflow = 4.86 cfs @ 12.09 hrs, Volume= 0.375 af, Atten= 0%, Lag= 0.0 min
 Primary = 4.86 cfs @ 12.09 hrs, Volume= 0.375 af

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

Peak Elev= 216.58' @ 12.09 hrs

Flood Elev= 218.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.30'	18.0" Round Culvert L= 56.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.30' / 214.80' S= 0.0089 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=4.74 cfs @ 12.09 hrs HW=216.55' (Free Discharge)**1=Culvert** (Inlet Controls 4.74 cfs @ 3.01 fps)**Summary for Pond 27P: DCB-22**

Inflow Area = 0.515 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 2.18 cfs @ 12.09 hrs, Volume= 0.180 af
 Outflow = 2.18 cfs @ 12.09 hrs, Volume= 0.180 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.18 cfs @ 12.09 hrs, Volume= 0.180 af

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

Peak Elev= 216.53' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.50'	12.0" Round Culvert L= 50.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.50' / 215.20' S= 0.0060 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.12 cfs @ 12.09 hrs HW=216.51' (Free Discharge)**1=Culvert** (Inlet Controls 2.12 cfs @ 2.71 fps)**Summary for Pond 28P: DMH-16**

Inflow Area = 0.515 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 2.18 cfs @ 12.09 hrs, Volume= 0.180 af
 Outflow = 2.18 cfs @ 12.09 hrs, Volume= 0.180 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.18 cfs @ 12.09 hrs, Volume= 0.180 af

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

Peak Elev= 216.13' @ 12.09 hrs

Flood Elev= 218.70'

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Device	Routing	Invert	Outlet Devices
#1	Primary	215.10'	12.0" Round Culvert L= 160.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.10' / 214.30' S= 0.0050 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.12 cfs @ 12.09 hrs HW=216.10' (Free Discharge)**1=Culvert** (Inlet Controls 2.12 cfs @ 2.70 fps)**Summary for Pond 29P: CB-21**

Inflow Area = 0.123 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 0.52 cfs @ 12.09 hrs, Volume= 0.043 af
 Outflow = 0.52 cfs @ 12.09 hrs, Volume= 0.043 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.52 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= 216.61' @ 12.09 hrs

Flood Elev= 219.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.20'	12.0" Round Culvert L= 26.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.20' / 215.70' S= 0.0192 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.50 cfs @ 12.09 hrs HW=216.60' (Free Discharge)**1=Culvert** (Inlet Controls 0.50 cfs @ 1.71 fps)**Summary for Pond 30P: DMH-15**

Inflow Area = 0.637 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 2.70 cfs @ 12.09 hrs, Volume= 0.223 af
 Outflow = 2.70 cfs @ 12.09 hrs, Volume= 0.223 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.70 cfs @ 12.09 hrs, Volume= 0.223 af

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

Peak Elev= 215.17' @ 12.09 hrs

Flood Elev= 219.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	214.20'	15.0" Round Culvert L= 250.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 214.20' / 212.90' S= 0.0052 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.63 cfs @ 12.09 hrs HW=215.15' (Free Discharge)**1=Culvert** (Inlet Controls 2.63 cfs @ 2.62 fps)

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Summary for Pond 31P: DMH-14

Inflow Area = 1.468 ac, 97.47% Impervious, Inflow Depth = 4.12" for 10-yr event
 Inflow = 6.16 cfs @ 12.09 hrs, Volume= 0.504 af
 Outflow = 6.16 cfs @ 12.09 hrs, Volume= 0.504 af, Atten= 0%, Lag= 0.0 min
 Primary = 6.16 cfs @ 12.09 hrs, Volume= 0.504 af

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

Peak Elev= 214.41' @ 12.09 hrs

Flood Elev= 218.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	212.80'	18.0" Round Culvert L= 61.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 212.80' / 212.50' S= 0.0049 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=6.00 cfs @ 12.09 hrs HW=214.37' (Free Discharge)

1=Culvert (Barrel Controls 6.00 cfs @ 4.02 fps)

Summary for Pond 32P: CB-20

Inflow Area = 0.318 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 1.35 cfs @ 12.09 hrs, Volume= 0.111 af
 Outflow = 1.35 cfs @ 12.09 hrs, Volume= 0.111 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.35 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= 216.21' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.50'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.50' / 215.30' S= 0.0167 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.31 cfs @ 12.09 hrs HW=216.20' (Free Discharge)

1=Culvert (Inlet Controls 1.31 cfs @ 2.24 fps)

Summary for Pond 33P: DMH-17

Inflow Area = 0.513 ac, 92.75% Impervious, Inflow Depth = 3.95" for 10-yr event
 Inflow = 2.11 cfs @ 12.09 hrs, Volume= 0.169 af
 Outflow = 2.11 cfs @ 12.09 hrs, Volume= 0.169 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.11 cfs @ 12.09 hrs, Volume= 0.169 af

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

Peak Elev= 216.59' @ 12.09 hrs

Flood Elev= 218.80'

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Device	Routing	Invert	Outlet Devices
#1	Primary	215.60'	12.0" Round Culvert L= 180.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.60' / 214.70' S= 0.0050 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.06 cfs @ 12.09 hrs HW=216.57' (Free Discharge)

1=Culvert (Inlet Controls 2.06 cfs @ 2.65 fps)

Summary for Pond 34P: CB-23

Inflow Area = 0.288 ac, 87.12% Impervious, Inflow Depth = 3.76" for 10-yr event
 Inflow = 1.16 cfs @ 12.09 hrs, Volume= 0.090 af
 Outflow = 1.16 cfs @ 12.09 hrs, Volume= 0.090 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.16 cfs @ 12.09 hrs, Volume= 0.090 af

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

Peak Elev= 216.57' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.90'	12.0" Round Culvert L= 28.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.90' / 215.70' S= 0.0071 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.13 cfs @ 12.09 hrs HW=216.56' (Free Discharge)

1=Culvert (Barrel Controls 1.13 cfs @ 2.91 fps)

Summary for Pond 35P: CB-24

Inflow Area = 0.224 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 0.95 cfs @ 12.09 hrs, Volume= 0.079 af
 Outflow = 0.95 cfs @ 12.09 hrs, Volume= 0.079 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.95 cfs @ 12.09 hrs, Volume= 0.079 af

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

Peak Elev= 216.48' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.90'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.90' / 215.70' S= 0.0100 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.92 cfs @ 12.09 hrs HW=216.47' (Free Discharge)

1=Culvert (Barrel Controls 0.92 cfs @ 2.90 fps)

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Summary for Pond 36P: DMH-7

Inflow Area = 0.323 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 1.37 cfs @ 12.09 hrs, Volume= 0.113 af
 Outflow = 1.37 cfs @ 12.09 hrs, Volume= 0.113 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.37 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= 216.72' @ 12.09 hrs

Flood Elev= 219.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.00'	12.0" Round Culvert L= 220.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.00' / 214.80' S= 0.0055 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.33 cfs @ 12.09 hrs HW=216.70' (Free Discharge)

1=Culvert (Inlet Controls 1.33 cfs @ 2.25 fps)

Summary for Pond 37P: DMH-10

Inflow Area = 0.446 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 1.89 cfs @ 12.09 hrs, Volume= 0.156 af
 Outflow = 1.89 cfs @ 12.09 hrs, Volume= 0.156 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.89 cfs @ 12.09 hrs, Volume= 0.156 af

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

Peak Elev= 218.87' @ 12.09 hrs

Flood Elev= 222.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	218.10'	15.0" Round Culvert L= 122.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 218.10' / 214.50' S= 0.0295 ' / ' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.84 cfs @ 12.09 hrs HW=218.86' (Free Discharge)

1=Culvert (Inlet Controls 1.84 cfs @ 2.35 fps)

Summary for Pond 38P: CB-15

Inflow Area = 0.043 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr 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= 232.43' @ 12.09 hrs

Flood Elev= 236.20'

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Device	Routing	Invert	Outlet Devices
#1	Primary	232.20'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 232.20' / 231.70' S= 0.0333 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.18 cfs @ 12.09 hrs HW=232.43' (Free Discharge)

1=Culvert (Inlet Controls 0.18 cfs @ 1.29 fps)

Summary for Pond 39P: CB-16

Inflow Area = 0.046 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 0.19 cfs @ 12.09 hrs, Volume= 0.016 af
 Outflow = 0.19 cfs @ 12.09 hrs, Volume= 0.016 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.19 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= 232.44' @ 12.09 hrs

Flood Elev= 236.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	232.20'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 232.20' / 231.70' S= 0.0333 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.19 cfs @ 12.09 hrs HW=232.44' (Free Discharge)

1=Culvert (Inlet Controls 0.19 cfs @ 1.31 fps)

Summary for Pond 52P: CB-17

Inflow Area = 0.081 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 0.34 cfs @ 12.09 hrs, Volume= 0.028 af
 Outflow = 0.34 cfs @ 12.09 hrs, Volume= 0.028 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.34 cfs @ 12.09 hrs, Volume= 0.028 af

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

Peak Elev= 247.73' @ 12.09 hrs

Flood Elev= 251.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	247.40'	12.0" Round Culvert L= 18.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 247.40' / 246.50' S= 0.0500 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.33 cfs @ 12.09 hrs HW=247.72' (Free Discharge)

1=Culvert (Inlet Controls 0.33 cfs @ 1.52 fps)

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Type III 24-hr 10-yr Rainfall=4.44"

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Summary for Pond 53P: CB-18

Inflow Area = 0.080 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 0.34 cfs @ 12.09 hrs, Volume= 0.028 af
 Outflow = 0.34 cfs @ 12.09 hrs, Volume= 0.028 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.34 cfs @ 12.09 hrs, Volume= 0.028 af

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

Peak Elev= 247.72' @ 12.09 hrs

Flood Elev= 251.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	247.40'	12.0" Round Culvert L= 18.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 247.40' / 246.50' S= 0.0500 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.33 cfs @ 12.09 hrs HW=247.72' (Free Discharge)**1=Culvert** (Inlet Controls 0.33 cfs @ 1.52 fps)**Summary for Pond 54P: DMH-13**

Inflow Area = 0.161 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr 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= 246.87' @ 12.09 hrs

Flood Elev= 250.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	246.40'	12.0" Round Culvert L= 85.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 246.40' / 240.00' S= 0.0753 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.66 cfs @ 12.09 hrs HW=246.87' (Free Discharge)**1=Culvert** (Inlet Controls 0.66 cfs @ 1.84 fps)**Summary for Pond 56P: DMH-12**

Inflow Area = 0.161 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr 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= 240.37' @ 12.09 hrs

Flood Elev= 244.00'

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Device	Routing	Invert	Outlet Devices
#1	Primary	239.90'	12.0" Round Culvert L= 110.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 239.90' / 231.70' S= 0.0745 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.66 cfs @ 12.09 hrs HW=240.37' (Free Discharge)**1=Culvert** (Inlet Controls 0.66 cfs @ 1.84 fps)**Summary for Pond 58P: CB-13**

Inflow Area = 0.060 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 0.26 cfs @ 12.09 hrs, Volume= 0.021 af
 Outflow = 0.26 cfs @ 12.09 hrs, Volume= 0.021 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.26 cfs @ 12.09 hrs, Volume= 0.021 af

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

Peak Elev= 219.18' @ 12.09 hrs

Flood Elev= 221.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	218.90'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 218.90' / 218.20' S= 0.0467 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.25 cfs @ 12.09 hrs HW=219.18' (Free Discharge)**1=Culvert** (Inlet Controls 0.25 cfs @ 1.41 fps)**Summary for Pond 61P: DMH-11**

Inflow Area = 0.249 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 1.06 cfs @ 12.09 hrs, Volume= 0.087 af
 Outflow = 1.06 cfs @ 12.09 hrs, Volume= 0.087 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.06 cfs @ 12.09 hrs, Volume= 0.087 af

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

Peak Elev= 232.21' @ 12.09 hrs

Flood Elev= 235.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	231.60'	12.0" Round Culvert L= 198.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 231.60' / 218.20' S= 0.0677 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.03 cfs @ 12.09 hrs HW=232.20' (Free Discharge)**1=Culvert** (Inlet Controls 1.03 cfs @ 2.08 fps)

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Type III 24-hr 10-yr Rainfall=4.44"

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Summary for Pond 62P: CB-14

Inflow Area = 0.136 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 0.57 cfs @ 12.09 hrs, Volume= 0.048 af
 Outflow = 0.57 cfs @ 12.09 hrs, Volume= 0.048 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.57 cfs @ 12.09 hrs, Volume= 0.048 af

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

Peak Elev= 219.33' @ 12.09 hrs

Flood Elev= 221.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	218.90'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 218.90' / 218.20' S= 0.0467 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.56 cfs @ 12.09 hrs HW=219.33' (Free Discharge)

1=Culvert (Inlet Controls 0.56 cfs @ 1.75 fps)

Summary for Pond 63P: DMH-4

Inflow Area = 1.336 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 5.66 cfs @ 12.09 hrs, Volume= 0.468 af
 Outflow = 5.66 cfs @ 12.09 hrs, Volume= 0.468 af, Atten= 0%, Lag= 0.0 min
 Primary = 5.66 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= 215.47' @ 12.09 hrs

Flood Elev= 222.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	214.10'	24.0" Round Culvert L= 35.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 214.10' / 214.00' S= 0.0029 ' / ' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=5.50 cfs @ 12.09 hrs HW=215.44' (Free Discharge)

1=Culvert (Barrel Controls 5.50 cfs @ 3.47 fps)

Summary for Pond 66P: CB-6

Inflow Area = 0.134 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 0.57 cfs @ 12.09 hrs, Volume= 0.047 af
 Outflow = 0.57 cfs @ 12.09 hrs, Volume= 0.047 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.57 cfs @ 12.09 hrs, Volume= 0.047 af

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

Peak Elev= 216.43' @ 12.09 hrs

Flood Elev= 219.00'

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Device	Routing	Invert	Outlet Devices
#1	Primary	216.00'	12.0" Round Culvert L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.00' / 215.50' S= 0.0208 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.55 cfs @ 12.09 hrs HW=216.42' (Free Discharge)

1=Culvert (Inlet Controls 0.55 cfs @ 1.75 fps)

Summary for Pond 67P: CB-7

Inflow Area = 0.093 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr 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= 216.35' @ 12.09 hrs

Flood Elev= 219.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.00'	12.0" Round Culvert L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.00' / 215.50' S= 0.0208 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.38 cfs @ 12.09 hrs HW=216.35' (Free Discharge)

1=Culvert (Inlet Controls 0.38 cfs @ 1.58 fps)

Summary for Pond 68P: DMH-9

Inflow Area = 0.909 ac, 78.68% Impervious, Inflow Depth = 3.52" for 10-yr event
 Inflow = 3.48 cfs @ 12.09 hrs, Volume= 0.267 af
 Outflow = 3.48 cfs @ 12.09 hrs, Volume= 0.267 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.48 cfs @ 12.09 hrs, Volume= 0.267 af

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

Peak Elev= 217.27' @ 12.09 hrs

Flood Elev= 219.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.10'	15.0" Round Culvert L= 79.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.10' / 215.40' S= 0.0089 ' / ' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=3.40 cfs @ 12.09 hrs HW=217.25' (Free Discharge)

1=Culvert (Inlet Controls 3.40 cfs @ 2.88 fps)

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Type III 24-hr 10-yr Rainfall=4.44"

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Summary for Pond 69P: CB-11

Inflow Area = 0.107 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 0.45 cfs @ 12.09 hrs, Volume= 0.037 af
 Outflow = 0.45 cfs @ 12.09 hrs, Volume= 0.037 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.45 cfs @ 12.09 hrs, Volume= 0.037 af

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

Peak Elev= 216.71' @ 12.09 hrs

Flood Elev= 219.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.30'	12.0" Round Culvert L= 14.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.30' / 216.20' S= 0.0071 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.44 cfs @ 12.09 hrs HW=216.70' (Free Discharge)**1=Culvert** (Barrel Controls 0.44 cfs @ 2.21 fps)**Summary for Pond 70P: CB-12**

Inflow Area = 0.802 ac, 75.84% Impervious, Inflow Depth = 3.43" for 10-yr event
 Inflow = 3.03 cfs @ 12.09 hrs, Volume= 0.230 af
 Outflow = 3.03 cfs @ 12.09 hrs, Volume= 0.230 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.03 cfs @ 12.09 hrs, Volume= 0.230 af

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

Peak Elev= 217.44' @ 12.09 hrs

Flood Elev= 219.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.30'	15.0" Round Culvert L= 14.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.30' / 216.20' S= 0.0071 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.96 cfs @ 12.09 hrs HW=217.42' (Free Discharge)**1=Culvert** (Barrel Controls 2.96 cfs @ 3.36 fps)**Summary for Pond 71P: CB-8**

Inflow Area = 0.175 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 0.74 cfs @ 12.09 hrs, Volume= 0.061 af
 Outflow = 0.74 cfs @ 12.09 hrs, Volume= 0.061 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.74 cfs @ 12.09 hrs, Volume= 0.061 af

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

Peak Elev= 216.02' @ 12.09 hrs

Flood Elev= 218.50'

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Type III 24-hr 10-yr Rainfall=4.44"

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Device	Routing	Invert	Outlet Devices
#1	Primary	215.50'	12.0" Round Culvert L= 32.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.50' / 215.30' S= 0.0062 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.72 cfs @ 12.09 hrs HW=216.01' (Free Discharge)**1=Culvert** (Barrel Controls 0.72 cfs @ 2.58 fps)**Summary for Pond 72P: CB-9**

Inflow Area = 0.165 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 0.70 cfs @ 12.09 hrs, Volume= 0.058 af
 Outflow = 0.70 cfs @ 12.09 hrs, Volume= 0.058 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.70 cfs @ 12.09 hrs, Volume= 0.058 af

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

Peak Elev= 216.01' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.50'	12.0" Round Culvert L= 37.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.50' / 215.30' S= 0.0054 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.68 cfs @ 12.09 hrs HW=216.01' (Free Discharge)**1=Culvert** (Barrel Controls 0.68 cfs @ 2.49 fps)**Summary for Pond 73P: DMH-6**

Inflow Area = 0.340 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
 Inflow = 1.44 cfs @ 12.09 hrs, Volume= 0.119 af
 Outflow = 1.44 cfs @ 12.09 hrs, Volume= 0.119 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.44 cfs @ 12.09 hrs, Volume= 0.119 af

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

Peak Elev= 215.94' @ 12.09 hrs

Flood Elev= 219.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.20'	12.0" Round Culvert L= 52.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.20' / 214.80' S= 0.0077 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.40 cfs @ 12.09 hrs HW=215.93' (Free Discharge)**1=Culvert** (Inlet Controls 1.40 cfs @ 2.29 fps)

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Type III 24-hr 10-yr Rainfall=4.44"

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Summary for Pond 78P: CB-19

Inflow Area = 0.122 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
Inflow = 0.52 cfs @ 12.09 hrs, Volume= 0.043 af
Outflow = 0.52 cfs @ 12.09 hrs, Volume= 0.043 af, Atten= 0%, Lag= 0.0 min
Primary = 0.52 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= 216.81' @ 12.09 hrs

Flood Elev= 219.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.40'	12.0" Round Culvert L= 45.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.40' / 216.10' S= 0.0067 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.50 cfs @ 12.09 hrs HW=216.81' (Free Discharge)**1=Culvert** (Barrel Controls 0.50 cfs @ 2.48 fps)**Summary for Pond 79P: CB-10**

Inflow Area = 0.200 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
Inflow = 0.85 cfs @ 12.09 hrs, Volume= 0.070 af
Outflow = 0.85 cfs @ 12.09 hrs, Volume= 0.070 af, Atten= 0%, Lag= 0.0 min
Primary = 0.85 cfs @ 12.09 hrs, Volume= 0.070 af

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

Peak Elev= 216.94' @ 12.09 hrs

Flood Elev= 219.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.40'	12.0" Round Culvert L= 17.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.40' / 216.10' S= 0.0176 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.83 cfs @ 12.09 hrs HW=216.93' (Free Discharge)**1=Culvert** (Inlet Controls 0.83 cfs @ 1.96 fps)**Summary for Pond 80P: DMH-5**

Inflow Area = 0.663 ac, 100.00% Impervious, Inflow Depth = 4.20" for 10-yr event
Inflow = 2.81 cfs @ 12.09 hrs, Volume= 0.232 af
Outflow = 2.81 cfs @ 12.09 hrs, Volume= 0.232 af, Atten= 0%, Lag= 0.0 min
Primary = 2.81 cfs @ 12.09 hrs, Volume= 0.232 af

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

Peak Elev= 215.69' @ 12.09 hrs

Flood Elev= 220.00'

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Device	Routing	Invert	Outlet Devices
#1	Primary	214.70'	15.0" Round Culvert L= 67.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 214.70' / 214.20' S= 0.0075 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.73 cfs @ 12.09 hrs HW=215.68' (Free Discharge)**1=Culvert** (Inlet Controls 2.73 cfs @ 2.66 fps)**Summary for Pond 81P: CB-5**

Inflow Area = 0.287 ac, 88.82% Impervious, Inflow Depth = 3.87" for 10-yr event
Inflow = 1.17 cfs @ 12.09 hrs, Volume= 0.092 af
Outflow = 1.17 cfs @ 12.09 hrs, Volume= 0.092 af, Atten= 0%, Lag= 0.0 min
Primary = 1.17 cfs @ 12.09 hrs, Volume= 0.092 af

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

Peak Elev= 216.68' @ 12.09 hrs

Flood Elev= 219.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.00'	12.0" Round Culvert L= 31.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.00' / 215.80' S= 0.0065 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.14 cfs @ 12.09 hrs HW=216.67' (Free Discharge)**1=Culvert** (Barrel Controls 1.14 cfs @ 2.88 fps)**Summary for Pond 82P: DMH-3**

Inflow Area = 0.287 ac, 88.82% Impervious, Inflow Depth = 3.87" for 10-yr event
Inflow = 1.17 cfs @ 12.09 hrs, Volume= 0.092 af
Outflow = 1.17 cfs @ 12.09 hrs, Volume= 0.092 af, Atten= 0%, Lag= 0.0 min
Primary = 1.17 cfs @ 12.09 hrs, Volume= 0.092 af

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

Peak Elev= 216.37' @ 12.09 hrs

Flood Elev= 218.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.70'	12.0" Round Culvert L= 70.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.70' / 215.30' S= 0.0057 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.14 cfs @ 12.09 hrs HW=216.36' (Free Discharge)**1=Culvert** (Barrel Controls 1.14 cfs @ 2.97 fps)

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Type III 24-hr 10-yr Rainfall=4.44"

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Summary for Link 20L: DP-A

Inflow Area = 30.660 ac, 24.72% Impervious, Inflow Depth = 1.97" for 10-yr event
 Inflow = 27.87 cfs @ 12.37 hrs, Volume= 5.043 af
 Primary = 27.87 cfs @ 12.37 hrs, Volume= 5.043 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 25-yr Rainfall=5.55"

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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

Subcatchment 9S: APT. BLDG. A	Runoff Area=17,818 sf 100.00% Impervious Runoff Depth=5.31" Tc=6.0 min CN=98 Runoff=2.17 cfs 0.181 af
Subcatchment 16S: APT. BLDG. B	Runoff Area=17,818 sf 100.00% Impervious Runoff Depth=5.31" Tc=6.0 min CN=98 Runoff=2.17 cfs 0.181 af
Subcatchment 18S: APT. BLDG. C	Runoff Area=17,818 sf 100.00% Impervious Runoff Depth=5.31" Tc=6.0 min CN=98 Runoff=2.17 cfs 0.181 af
Subcatchment 21S: A.1	Runoff Area=20,195 sf 5.87% Impervious Runoff Depth=3.18" Tc=10.0 min CN=78 Runoff=1.49 cfs 0.123 af
Subcatchment 22S: A.2	Runoff Area=13,850 sf 100.00% Impervious Runoff Depth=5.31" Tc=6.0 min CN=98 Runoff=1.69 cfs 0.141 af
Subcatchment 23S: A.3	Runoff Area=9,767 sf 100.00% Impervious Runoff Depth=5.31" Tc=6.0 min CN=98 Runoff=1.19 cfs 0.099 af
Subcatchment 24S: A.4	Runoff Area=5,341 sf 100.00% Impervious Runoff Depth=5.31" Tc=6.0 min CN=98 Runoff=0.65 cfs 0.054 af
Subcatchment 25S: A.5	Runoff Area=22,426 sf 100.00% Impervious Runoff Depth=5.31" Tc=6.0 min CN=98 Runoff=2.73 cfs 0.228 af
Subcatchment 26S: B.6	Runoff Area=40,090 sf 22.31% Impervious Runoff Depth=2.72" Tc=6.0 min UI Adjusted CN=73 Runoff=2.87 cfs 0.209 af
Subcatchment 27S: A.6	Runoff Area=12,567 sf 87.12% Impervious Runoff Depth=4.85" Tc=6.0 min CN=94 Runoff=1.48 cfs 0.117 af
Subcatchment 28S: B.1	Runoff Area=30,829 sf 0.88% Impervious Runoff Depth=3.09" Tc=6.0 min CN=77 Runoff=2.51 cfs 0.182 af
Subcatchment 29S: B.2	Runoff Area=13,381 sf 83.76% Impervious Runoff Depth=4.74" Tc=6.0 min CN=93 Runoff=1.56 cfs 0.121 af
Subcatchment 30S: B.3	Runoff Area=17,060 sf 95.72% Impervious Runoff Depth=5.20" Tc=6.0 min CN=97 Runoff=2.07 cfs 0.170 af
Subcatchment 31S: B.4	Runoff Area=17,060 sf 95.72% Impervious Runoff Depth=5.20" Tc=6.0 min CN=97 Runoff=2.07 cfs 0.170 af
Subcatchment 32S: B.5	Runoff Area=24,627 sf 67.38% Impervious Runoff Depth=4.19" Tc=6.0 min CN=88 Runoff=2.64 cfs 0.198 af
Subcatchment 33S: B.7	Runoff Area=290,511 sf 2.55% Impervious Runoff Depth=2.54" Tc=30.0 min CN=71 Runoff=11.11 cfs 1.412 af

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Type III 24-hr 25-yr Rainfall=5.55"

Subcatchment 34S: B.8	Runoff Area=12,484 sf 88.82% Impervious Runoff Depth=4.96" Tc=6.0 min CN=95 Runoff=1.49 cfs 0.119 af
Subcatchment 35S: C.1	Runoff Area=236,308 sf 9.34% Impervious Runoff Depth=3.09" Tc=20.0 min UI Adjusted CN=77 Runoff=13.19 cfs 1.397 af
Subcatchment 36S: C.2	Runoff Area=22,516 sf 83.62% Impervious Runoff Depth=4.74" Tc=6.0 min CN=93 Runoff=2.62 cfs 0.204 af
Subcatchment 37S: C.3	Runoff Area=12,429 sf 61.75% Impervious Runoff Depth=4.09" Tc=6.0 min CN=87 Runoff=1.31 cfs 0.097 af
Subcatchment 38S: C.4	Runoff Area=4,655 sf 100.00% Impervious Runoff Depth=5.31" Tc=6.0 min CN=98 Runoff=0.57 cfs 0.047 af
Subcatchment 39S: C.5	Runoff Area=5,857 sf 100.00% Impervious Runoff Depth=5.31" Tc=6.0 min CN=98 Runoff=0.71 cfs 0.060 af
Subcatchment 40S: C.6	Runoff Area=4,047 sf 100.00% Impervious Runoff Depth=5.31" Tc=6.0 min CN=98 Runoff=0.49 cfs 0.041 af
Subcatchment 41S: C.7	Runoff Area=7,188 sf 100.00% Impervious Runoff Depth=5.31" Tc=6.0 min CN=98 Runoff=0.88 cfs 0.073 af
Subcatchment 42S: C.8	Runoff Area=7,639 sf 100.00% Impervious Runoff Depth=5.31" Tc=6.0 min CN=98 Runoff=0.93 cfs 0.078 af
Subcatchment 43S: C.9	Runoff Area=8,732 sf 100.00% Impervious Runoff Depth=5.31" Tc=6.0 min CN=98 Runoff=1.06 cfs 0.089 af
Subcatchment 44S: C.10	Runoff Area=5,326 sf 100.00% Impervious Runoff Depth=5.31" Tc=6.0 min CN=98 Runoff=0.65 cfs 0.054 af
Subcatchment 45S: C.11	Runoff Area=2,631 sf 100.00% Impervious Runoff Depth=5.31" Tc=6.0 min CN=98 Runoff=0.32 cfs 0.027 af
Subcatchment 46S: C.12	Runoff Area=5,910 sf 100.00% Impervious Runoff Depth=5.31" Tc=6.0 min CN=98 Runoff=0.72 cfs 0.060 af
Subcatchment 47S: C.13	Runoff Area=1,987 sf 100.00% Impervious Runoff Depth=5.31" Tc=6.0 min CN=98 Runoff=0.24 cfs 0.020 af
Subcatchment 48S: C.14	Runoff Area=1,885 sf 100.00% Impervious Runoff Depth=5.31" Tc=6.0 min CN=98 Runoff=0.23 cfs 0.019 af
Subcatchment 49S: C.15	Runoff Area=3,487 sf 100.00% Impervious Runoff Depth=5.31" Tc=6.0 min CN=98 Runoff=0.42 cfs 0.035 af
Subcatchment 50S: C.16	Runoff Area=3,508 sf 100.00% Impervious Runoff Depth=5.31" Tc=6.0 min CN=98 Runoff=0.43 cfs 0.036 af
Subcatchment 51S: D.1	Runoff Area=402,771 sf 0.38% Impervious Runoff Depth=1.71" Tc=20.0 min CN=61 Runoff=11.60 cfs 1.318 af

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Type III 24-hr 25-yr Rainfall=5.55"

Subcatchment 52S: B.9	Runoff Area=15,018 sf 80.72% Impervious Runoff Depth=4.63" Tc=6.0 min CN=92 Runoff=1.72 cfs 0.133 af
Pond 4P: Constructed Stormwater Wetland	Peak Elev=214.70' Storage=17,488 cf Inflow=9.06 cfs 0.787 af Outflow=1.78 cfs 0.785 af
Pond 5P: Wet Basin	Peak Elev=215.42' Storage=16,366 cf Inflow=18.51 cfs 2.013 af Outflow=11.16 cfs 2.013 af
Pond 7P: Constructed Stormwater Wetland	Peak Elev=215.44' Storage=7,069 cf Inflow=25.65 cfs 3.086 af Outflow=23.73 cfs 3.085 af
Pond 12P: STONE RECHARGE TRENCH	Peak Elev=221.01' Storage=1,942 cf Inflow=2.17 cfs 0.181 af Discarded=0.17 cfs 0.156 af Primary=2.41 cfs 0.025 af Outflow=2.58 cfs 0.181 af
Pond 17P: STONE RECHARGE TRENCH	Peak Elev=221.01' Storage=1,942 cf Inflow=2.17 cfs 0.181 af Discarded=0.17 cfs 0.156 af Primary=2.41 cfs 0.025 af Outflow=2.58 cfs 0.181 af
Pond 19P: STONE RECHARGE TRENCH	Peak Elev=221.01' Storage=1,942 cf Inflow=2.17 cfs 0.181 af Discarded=0.17 cfs 0.156 af Primary=2.41 cfs 0.025 af Outflow=2.58 cfs 0.181 af
Pond 21P: CB-4	Peak Elev=216.39' Inflow=1.72 cfs 0.133 af 12.0" Round Culvert n=0.013 L=37.0' S=0.0054 ' Outflow=1.72 cfs 0.133 af
Pond 22P: DMH-2	Peak Elev=217.40' Inflow=7.70 cfs 0.600 af 18.0" Round Culvert n=0.013 L=101.0' S=0.0050 ' Outflow=7.70 cfs 0.600 af
Pond 23P: CB-1	Peak Elev=216.41' Inflow=1.56 cfs 0.121 af 12.0" Round Culvert n=0.013 L=27.0' S=0.0074 ' Outflow=1.56 cfs 0.121 af
Pond 24P: CB-2	Peak Elev=217.17' Inflow=2.07 cfs 0.170 af 12.0" Round Culvert n=0.013 L=20.0' S=0.0400 ' Outflow=2.07 cfs 0.170 af
Pond 25P: CB-3	Peak Elev=217.78' Inflow=2.64 cfs 0.198 af 12.0" Round Culvert n=0.013 L=38.0' S=0.0289 ' Outflow=2.64 cfs 0.198 af
Pond 26P: DMH-1	Peak Elev=216.92' Inflow=6.26 cfs 0.488 af 18.0" Round Culvert n=0.013 L=56.0' S=0.0089 ' Outflow=6.26 cfs 0.488 af
Pond 27P: DCB-22	Peak Elev=216.84' Inflow=2.73 cfs 0.228 af 12.0" Round Culvert n=0.013 L=50.0' S=0.0060 ' Outflow=2.73 cfs 0.228 af
Pond 28P: DMH-16	Peak Elev=216.58' Inflow=2.73 cfs 0.228 af 12.0" Round Culvert n=0.013 L=160.0' S=0.0050 ' Outflow=2.73 cfs 0.228 af
Pond 29P: CB-21	Peak Elev=216.66' Inflow=0.65 cfs 0.054 af 12.0" Round Culvert n=0.013 L=26.0' S=0.0192 ' Outflow=0.65 cfs 0.054 af
Pond 30P: DMH-15	Peak Elev=215.34' Inflow=3.38 cfs 0.282 af 15.0" Round Culvert n=0.013 L=250.0' S=0.0052 ' Outflow=3.38 cfs 0.282 af

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Pond 31P: DMH-14	Peak Elev=214.90' Inflow=7.74 cfs 0.639 af 18.0" Round Culvert n=0.013 L=61.0' S=0.0049 '/' Outflow=7.74 cfs 0.639 af
Pond 32P: CB-20	Peak Elev=216.32' Inflow=1.69 cfs 0.141 af 12.0" Round Culvert n=0.013 L=12.0' S=0.0167 '/' Outflow=1.69 cfs 0.141 af
Pond 33P: DMH-17	Peak Elev=217.04' Inflow=2.67 cfs 0.216 af 12.0" Round Culvert n=0.013 L=180.0' S=0.0050 '/' Outflow=2.67 cfs 0.216 af
Pond 34P: CB-23	Peak Elev=216.68' Inflow=1.48 cfs 0.117 af 12.0" Round Culvert n=0.013 L=28.0' S=0.0071 '/' Outflow=1.48 cfs 0.117 af
Pond 35P: CB-24	Peak Elev=216.56' Inflow=1.19 cfs 0.099 af 12.0" Round Culvert n=0.013 L=20.0' S=0.0100 '/' Outflow=1.19 cfs 0.099 af
Pond 36P: DMH-7	Peak Elev=216.83' Inflow=1.71 cfs 0.143 af 12.0" Round Culvert n=0.013 L=220.0' S=0.0055 '/' Outflow=1.71 cfs 0.143 af
Pond 37P: DMH-10	Peak Elev=218.99' Inflow=2.36 cfs 0.197 af 15.0" Round Culvert n=0.013 L=122.0' S=0.0295 '/' Outflow=2.36 cfs 0.197 af
Pond 38P: CB-15	Peak Elev=232.46' Inflow=0.23 cfs 0.019 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0333 '/' Outflow=0.23 cfs 0.019 af
Pond 39P: CB-16	Peak Elev=232.47' Inflow=0.24 cfs 0.020 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0333 '/' Outflow=0.24 cfs 0.020 af
Pond 52P: CB-17	Peak Elev=247.77' Inflow=0.43 cfs 0.036 af 12.0" Round Culvert n=0.013 L=18.0' S=0.0500 '/' Outflow=0.43 cfs 0.036 af
Pond 53P: CB-18	Peak Elev=247.77' Inflow=0.42 cfs 0.035 af 12.0" Round Culvert n=0.013 L=18.0' S=0.0500 '/' Outflow=0.42 cfs 0.035 af
Pond 54P: DMH-13	Peak Elev=246.94' Inflow=0.85 cfs 0.071 af 12.0" Round Culvert n=0.013 L=85.0' S=0.0753 '/' Outflow=0.85 cfs 0.071 af
Pond 56P: DMH-12	Peak Elev=240.44' Inflow=0.85 cfs 0.071 af 12.0" Round Culvert n=0.013 L=110.0' S=0.0745 '/' Outflow=0.85 cfs 0.071 af
Pond 58P: CB-13	Peak Elev=219.22' Inflow=0.32 cfs 0.027 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0467 '/' Outflow=0.32 cfs 0.027 af
Pond 61P: DMH-11	Peak Elev=232.30' Inflow=1.32 cfs 0.110 af 12.0" Round Culvert n=0.013 L=198.0' S=0.0677 '/' Outflow=1.32 cfs 0.110 af
Pond 62P: CB-14	Peak Elev=219.39' Inflow=0.72 cfs 0.060 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0467 '/' Outflow=0.72 cfs 0.060 af
Pond 63P: DMH-4	Peak Elev=215.66' Inflow=7.09 cfs 0.591 af 24.0" Round Culvert n=0.013 L=35.0' S=0.0029 '/' Outflow=7.09 cfs 0.591 af
Pond 66P: CB-6	Peak Elev=216.49' Inflow=0.71 cfs 0.060 af 12.0" Round Culvert n=0.013 L=24.0' S=0.0208 '/' Outflow=0.71 cfs 0.060 af

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Pond 67P: CB-7	Peak Elev=216.40' Inflow=0.49 cfs 0.041 af 12.0" Round Culvert n=0.013 L=24.0' S=0.0208 '/' Outflow=0.49 cfs 0.041 af
Pond 68P: DMH-9	Peak Elev=217.65' Inflow=4.49 cfs 0.349 af 15.0" Round Culvert n=0.013 L=79.0' S=0.0089 '/' Outflow=4.49 cfs 0.349 af
Pond 69P: CB-11	Peak Elev=216.76' Inflow=0.57 cfs 0.047 af 12.0" Round Culvert n=0.013 L=14.0' S=0.0071 '/' Outflow=0.57 cfs 0.047 af
Pond 70P: CB-12	Peak Elev=217.67' Inflow=3.92 cfs 0.301 af 15.0" Round Culvert n=0.013 L=14.0' S=0.0071 '/' Outflow=3.92 cfs 0.301 af
Pond 71P: CB-8	Peak Elev=216.10' Inflow=0.93 cfs 0.078 af 12.0" Round Culvert n=0.013 L=32.0' S=0.0062 '/' Outflow=0.93 cfs 0.078 af
Pond 72P: CB-9	Peak Elev=216.09' Inflow=0.88 cfs 0.073 af 12.0" Round Culvert n=0.013 L=37.0' S=0.0054 '/' Outflow=0.88 cfs 0.073 af
Pond 73P: DMH-6	Peak Elev=216.07' Inflow=1.81 cfs 0.151 af 12.0" Round Culvert n=0.013 L=52.0' S=0.0077 '/' Outflow=1.81 cfs 0.151 af
Pond 78P: CB-19	Peak Elev=216.87' Inflow=0.65 cfs 0.054 af 12.0" Round Culvert n=0.013 L=45.0' S=0.0067 '/' Outflow=0.65 cfs 0.054 af
Pond 79P: CB-10	Peak Elev=217.01' Inflow=1.06 cfs 0.089 af 12.0" Round Culvert n=0.013 L=17.0' S=0.0176 '/' Outflow=1.06 cfs 0.089 af
Pond 80P: DMH-5	Peak Elev=215.88' Inflow=3.52 cfs 0.294 af 15.0" Round Culvert n=0.013 L=67.0' S=0.0075 '/' Outflow=3.52 cfs 0.294 af
Pond 81P: CB-5	Peak Elev=216.79' Inflow=1.49 cfs 0.119 af 12.0" Round Culvert n=0.013 L=31.0' S=0.0065 '/' Outflow=1.49 cfs 0.119 af
Pond 82P: DMH-3	Peak Elev=216.47' Inflow=1.49 cfs 0.119 af 12.0" Round Culvert n=0.013 L=70.0' S=0.0057 '/' Outflow=1.49 cfs 0.119 af
Link 20L: DP-A	Inflow=42.05 cfs 7.202 af Primary=42.05 cfs 7.202 af

Total Runoff Area = 30.660 ac Runoff Volume = 7.672 af Average Runoff Depth = 3.00"
75.28% Pervious = 23.079 ac 24.72% Impervious = 7.580 ac

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Type III 24-hr 25-yr Rainfall=5.55"

Summary for Subcatchment 9S: APT. BLDG. A

Runoff = 2.17 cfs @ 12.09 hrs, Volume= 0.181 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
17,818	98	Roofs, HSG A
17,818		100.00% Impervious Area

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

Summary for Subcatchment 16S: APT. BLDG. B

Runoff = 2.17 cfs @ 12.09 hrs, Volume= 0.181 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
17,818	98	Roofs, HSG A
17,818		100.00% Impervious Area

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

Summary for Subcatchment 18S: APT. BLDG. C

Runoff = 2.17 cfs @ 12.09 hrs, Volume= 0.181 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
17,818	98	Roofs, HSG A
17,818		100.00% Impervious Area

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

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Type III 24-hr 25-yr Rainfall=5.55"

Summary for Subcatchment 21S: A.1

Runoff = 1.49 cfs @ 12.14 hrs, Volume= 0.123 af, Depth= 3.18"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
18,718	77	>75% Grass cover, Good, HSG A
291	43	Woods, Good, HSG A
95	98	Unconnected pavement, HSG A
1,091	98	Roofs, HSG A

20,195	78	Weighted Average
19,009		94.13% Pervious Area
1,186		5.87% Impervious Area
95		8.01% Unconnected

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

Summary for Subcatchment 22S: A.2

Runoff = 1.69 cfs @ 12.09 hrs, Volume= 0.141 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
12,935	98	Paved parking, HSG A
915	98	Roofs, HSG A
13,850	98	Weighted Average
13,850		100.00% Impervious Area

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

Summary for Subcatchment 23S: A.3

Runoff = 1.19 cfs @ 12.09 hrs, Volume= 0.099 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
9,767	98	Paved parking, HSG A
9,767		100.00% Impervious Area

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Type III 24-hr 25-yr Rainfall=5.55"

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

Summary for Subcatchment 24S: A.4

Runoff = 0.65 cfs @ 12.09 hrs, Volume= 0.054 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
227	98	Paved parking, HSG A
5,114	98	Roofs, HSG A
5,341	98	Weighted Average
5,341		100.00% Impervious Area

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

Summary for Subcatchment 25S: A.5

Runoff = 2.73 cfs @ 12.09 hrs, Volume= 0.228 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
22,426	98	Paved parking, HSG A
22,426		100.00% Impervious Area

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

Summary for Subcatchment 26S: B.6

Runoff = 2.87 cfs @ 12.09 hrs, Volume= 0.209 af, Depth= 2.72"

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 25-yr Rainfall=5.55"**6842-Post**

Type III 24-hr 25-yr Rainfall=5.55"

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Area (sf)	CN	Adj	Description
* 31,146	68		>75% Grass cover, Good, HSG A
3,467	98		Unconnected pavement, HSG A
5,477	98		Roofs, HSG A
40,090	75	73	Weighted Average, UI Adjusted
31,146			77.69% Pervious Area
8,944			22.31% Impervious Area
3,467			38.76% Unconnected

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

Summary for Subcatchment 27S: A.6

Runoff = 1.48 cfs @ 12.09 hrs, Volume= 0.117 af, Depth= 4.85"

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-yr Rainfall=5.55"

Area (sf)	CN	Description
* 8,883	98	Paved parking, HSG A
1,619	68	>75% Grass cover, Good, HSG A
948	98	Unconnected pavement, HSG A
1,117	98	Roofs, HSG A
12,567	94	Weighted Average
1,619		12.88% Pervious Area
10,948		87.12% Impervious Area
948		8.66% Unconnected

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

Summary for Subcatchment 28S: B.1

Runoff = 2.51 cfs @ 12.09 hrs, Volume= 0.182 af, Depth= 3.09"

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-yr Rainfall=5.55"

Area (sf)	CN	Description
* 30,559	77	>75% Grass cover, Good, HSG A
270	98	Unconnected pavement, HSG A
30,829	77	Weighted Average
30,559		99.12% Pervious Area
270		0.88% Impervious Area
270		100.00% Unconnected

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Type III 24-hr 25-yr Rainfall=5.55"

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

Summary for Subcatchment 29S: B.2

Runoff = 1.56 cfs @ 12.09 hrs, Volume= 0.121 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-yr Rainfall=5.55"

Area (sf)	CN	Description
* 2,173	68	>75% Grass cover, Good, HSG A
1,997	98	Unconnected pavement, HSG A
9,211	98	Paved parking, HSG A
13,381	93	Weighted Average
2,173		16.24% Pervious Area
11,208		83.76% Impervious Area
1,997		17.82% Unconnected

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

Summary for Subcatchment 30S: B.3

Runoff = 2.07 cfs @ 12.09 hrs, Volume= 0.170 af, Depth= 5.20"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
* 731	68	>75% Grass cover, Good, HSG A
2,575	98	Unconnected pavement, HSG A
13,754	98	Paved parking, HSG A
17,060	97	Weighted Average
731		4.28% Pervious Area
16,329		95.72% Impervious Area
2,575		15.77% Unconnected

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

Summary for Subcatchment 31S: B.4

Runoff = 2.07 cfs @ 12.09 hrs, Volume= 0.170 af, Depth= 5.20"

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 25-yr Rainfall=5.55"**6842-Post**

Type III 24-hr 25-yr Rainfall=5.55"

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Area (sf)	CN	Description
* 731	68	>75% Grass cover, Good, HSG A
2,575	98	Unconnected pavement, HSG A
13,754	98	Paved parking, HSG A
17,060	97	Weighted Average
731		4.28% Pervious Area
16,329		95.72% Impervious Area
2,575		15.77% Unconnected

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

Summary for Subcatchment 32S: B.5

Runoff = 2.64 cfs @ 12.09 hrs, Volume= 0.198 af, Depth= 4.19"

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-yr Rainfall=5.55"

Area (sf)	CN	Description
* 8,616	98	Paved parking, HSG A
8,034	68	>75% Grass cover, Good, HSG A
1,324	98	Unconnected pavement, HSG A
6,653	98	Roofs, HSG A
24,627	88	Weighted Average
8,034		32.62% Pervious Area
16,593		67.38% Impervious Area
1,324		7.98% Unconnected

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

Summary for Subcatchment 33S: B.7

Runoff = 11.11 cfs @ 12.43 hrs, Volume= 1.412 af, Depth= 2.54"

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-yr Rainfall=5.55"

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Type III 24-hr 25-yr Rainfall=5.55"

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	Area (sf)	CN	Description
*	129,407	68	>75% Grass cover, Good, HSG A
*	97,286	79	>75% Grass cover, Good, HSG C
*	9,046	89	>75% Grass cover, Good, HSG D
*	27,194	43	Woods, Good, HSG A
*	15,779	76	Woods, Good, HSG C
*	4,399	82	Woods, Good, HSG D
	1,606	98	Unconnected pavement, HSG A
	319	98	Unconnected pavement, HSG C
	5,475	98	Roofs, HSG A
	290,511	71	Weighted Average
	283,111		97.45% Pervious Area
	7,400		2.55% Impervious Area
	1,925		26.01% Unconnected

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

Summary for Subcatchment 34S: B.8

Runoff = 1.49 cfs @ 12.09 hrs, Volume= 0.119 af, Depth= 4.96"

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 25-yr Rainfall=5.55"

	Area (sf)	CN	Description
	9,724	98	Paved parking, HSG A
*	1,396	68	>75% Grass cover, Good, HSG A
	1,364	98	Unconnected pavement, HSG A
	12,484	95	Weighted Average
	1,396		11.18% Pervious Area
	11,088		88.82% Impervious Area
	1,364		12.30% Unconnected

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

Summary for Subcatchment 35S: C.1

Runoff = 13.19 cfs @ 12.28 hrs, Volume= 1.397 af, Depth= 3.09"

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-yr Rainfall=5.55"**6842-Post**

Type III 24-hr 25-yr Rainfall=5.55"

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	Area (sf)	CN	Adj	Description
*	128,543	68		>75% Grass cover, Good, HSG A
*	69,229	89		>75% Grass cover, Good, HSG D
*	16,469	82		Woods, Good, HSG D
	14,141	98		Unconnected pavement, HSG A
	7,926	98		Roofs, HSG A
	236,308	78	77	Weighted Average, UI Adjusted
	214,241			90.66% Pervious Area
	22,067			9.34% Impervious Area
	14,141			64.08% Unconnected

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

Summary for Subcatchment 36S: C.2

Runoff = 2.62 cfs @ 12.09 hrs, Volume= 0.204 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-yr Rainfall=5.55"

	Area (sf)	CN	Description
	12,989	98	Paved parking, HSG A
*	3,687	68	>75% Grass cover, Good, HSG A
	2,989	98	Unconnected pavement, HSG A
	2,851	98	Roofs, HSG A
	22,516	93	Weighted Average
	3,687		16.38% Pervious Area
	18,829		83.62% Impervious Area
	2,989		15.87% Unconnected

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

Summary for Subcatchment 37S: C.3

Runoff = 1.31 cfs @ 12.09 hrs, Volume= 0.097 af, Depth= 4.09"

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-yr Rainfall=5.55"

	Area (sf)	CN	Description
	5,266	98	Paved parking, HSG A
*	4,754	68	>75% Grass cover, Good, HSG A
	509	98	Roofs, HSG A
	1,900	98	Roofs, HSG A
	12,429	87	Weighted Average
	4,754		38.25% Pervious Area
	7,675		61.75% Impervious Area

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Type III 24-hr 25-yr Rainfall=5.55"

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

Summary for Subcatchment 38S: C.4

Runoff = 0.57 cfs @ 12.09 hrs, Volume= 0.047 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
4,655	98	Paved parking, HSG A
4,655		100.00% Impervious Area

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

Summary for Subcatchment 39S: C.5

Runoff = 0.71 cfs @ 12.09 hrs, Volume= 0.060 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
4,080	98	Paved parking, HSG A
1,777	98	Unconnected pavement, HSG A
5,857	98	Weighted Average
5,857		100.00% Impervious Area
1,777		30.34% Unconnected

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

Summary for Subcatchment 40S: C.6

Runoff = 0.49 cfs @ 12.09 hrs, Volume= 0.041 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
4,047	98	Paved parking, HSG A
4,047		100.00% Impervious Area

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Type III 24-hr 25-yr Rainfall=5.55"

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

Summary for Subcatchment 41S: C.7

Runoff = 0.88 cfs @ 12.09 hrs, Volume= 0.073 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
6,072	98	Paved parking, HSG A
1,116	98	Roofs, HSG A
7,188	98	Weighted Average
7,188		100.00% Impervious Area

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

Summary for Subcatchment 42S: C.8

Runoff = 0.93 cfs @ 12.09 hrs, Volume= 0.078 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
7,639	98	Paved parking, HSG A
7,639		100.00% Impervious Area

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

Summary for Subcatchment 43S: C.9

Runoff = 1.06 cfs @ 12.09 hrs, Volume= 0.089 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
8,732	98	Paved parking, HSG A
8,732		100.00% Impervious Area

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Type III 24-hr 25-yr Rainfall=5.55"

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

Summary for Subcatchment 44S: C.10

Runoff = 0.65 cfs @ 12.09 hrs, Volume= 0.054 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
5,326	98	Paved parking, HSG A
5,326		100.00% Impervious Area

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

Summary for Subcatchment 45S: C.11

Runoff = 0.32 cfs @ 12.09 hrs, Volume= 0.027 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
1,483	98	Paved parking, HSG A
946	98	Paved parking, HSG D
126	98	Unconnected pavement, HSG A
76	98	Unconnected pavement, HSG D
2,631	98	Weighted Average
2,631		100.00% Impervious Area
202		7.68% Unconnected

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

Summary for Subcatchment 46S: C.12

Runoff = 0.72 cfs @ 12.09 hrs, Volume= 0.060 af, Depth= 5.31"

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 25-yr Rainfall=5.55"**6842-Post**

Type III 24-hr 25-yr Rainfall=5.55"

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Area (sf)	CN	Description
2,144	98	Paved parking, HSG A
2,121	98	Paved parking, HSG D
853	98	Unconnected pavement, HSG A
696	98	Unconnected pavement, HSG D
96	98	Roofs, HSG A
5,910	98	Weighted Average
5,910		100.00% Impervious Area
1,549		26.21% Unconnected

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

Summary for Subcatchment 47S: C.13

Runoff = 0.24 cfs @ 12.09 hrs, Volume= 0.020 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
1,832	98	Paved parking, HSG D
155	98	Unconnected pavement, HSG D
1,987	98	Weighted Average
1,987		100.00% Impervious Area
155		7.80% Unconnected

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

Summary for Subcatchment 48S: C.14

Runoff = 0.23 cfs @ 12.09 hrs, Volume= 0.019 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
1,744	98	Paved parking, HSG D
141	98	Unconnected pavement, HSG D
1,885	98	Weighted Average
1,885		100.00% Impervious Area
141		7.48% Unconnected

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Type III 24-hr 25-yr Rainfall=5.55"

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

Summary for Subcatchment 49S: C.15

Runoff = 0.42 cfs @ 12.09 hrs, Volume= 0.035 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
3,220	98	Paved parking, HSG D
267	98	Unconnected pavement, HSG D
3,487	98	Weighted Average
3,487		100.00% Impervious Area
267		7.66% Unconnected

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

Summary for Subcatchment 50S: C.16

Runoff = 0.43 cfs @ 12.09 hrs, Volume= 0.036 af, Depth= 5.31"

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 25-yr Rainfall=5.55"

Area (sf)	CN	Description
3,238	98	Paved parking, HSG D
270	98	Unconnected pavement, HSG D
3,508	98	Weighted Average
3,508		100.00% Impervious Area
270		7.70% Unconnected

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

Summary for Subcatchment 51S: D.1

Runoff = 11.60 cfs @ 12.30 hrs, Volume= 1.318 af, Depth= 1.71"

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-yr Rainfall=5.55"**6842-Post**

Type III 24-hr 25-yr Rainfall=5.55"

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Area (sf)	CN	Description
1,527	98	Unconnected pavement, HSG A
* 182,934	68	>75% Grass cover, Good, HSG A
* 518	79	>75% Grass cover, Good, HSG B
* 51,440	89	>75% Grass cover, Good, HSG D
* 160,796	43	Woods, Good, HSG A
* 5,106	65	Woods, Good, HSG B
* 450	82	Woods, Good, HSG D
402,771	61	Weighted Average
401,244		99.62% Pervious Area
1,527		0.38% Impervious Area
1,527		100.00% Unconnected

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

Summary for Subcatchment 52S: B.9

Runoff = 1.72 cfs @ 12.09 hrs, Volume= 0.133 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-yr Rainfall=5.55"

Area (sf)	CN	Description
10,973	98	Paved parking, HSG A
* 2,895	68	>75% Grass cover, Good, HSG A
1,150	98	Unconnected pavement, HSG A
15,018	92	Weighted Average
2,895		19.28% Pervious Area
12,123		80.72% Impervious Area
1,150		9.49% Unconnected

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

Summary for Pond 4P: Constructed Stormwater Wetland #2

Inflow Area = 2.341 ac, 79.77% Impervious, Inflow Depth = 4.03" for 25-yr event
 Inflow = 9.06 cfs @ 12.09 hrs, Volume= 0.787 af
 Outflow = 1.78 cfs @ 12.57 hrs, Volume= 0.785 af, Atten= 80%, Lag= 28.3 min
 Primary = 1.78 cfs @ 12.57 hrs, Volume= 0.785 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 214.70' @ 12.57 hrs Surf.Area= 9,493 sf Storage= 17,488 cf

Plug-Flow detention time= 327.8 min calculated for 0.785 af (100% of inflow)
 Center-of-Mass det. time= 326.5 min (1,088.7 - 762.2)

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Type III 24-hr 25-yr Rainfall=5.55"

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Volume	Invert	Avail.Storage	Storage Description		
#1	212.50'	31,125 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
212.50	6,500	322.0	0	0	6,500
214.00	8,459	362.0	11,187	11,187	8,737
216.00	11,559	453.0	19,938	31,125	14,695

Device	Routing	Invert	Outlet Devices									
#1	Primary	215.50'	20.0' long x 12.0' 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) 2.57 2.62 2.70 2.67 2.66 2.67 2.66 2.64									
#2	Device 3	214.50'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)									
#3	Primary	212.50'	15.0" Round Culvert L= 111.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 212.50' / 210.44' S= 0.0186 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf									
#4	Device 3	212.50'	4.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads									

Primary OutFlow Max=1.77 cfs @ 12.57 hrs HW=214.70' (Free Discharge)

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

3=Culvert (Passes 1.77 cfs of 5.86 cfs potential flow)

2=Sharp-Crested Rectangular Weir (Weir Controls 1.17 cfs @ 1.47 fps)

4=Orifice/Grate (Orifice Controls 0.60 cfs @ 6.87 fps)

Summary for Pond 5P: Wet Basin

Inflow Area = 7.170 ac, 31.40% Impervious, Inflow Depth = 3.37" for 25-yr event
 Inflow = 18.51 cfs @ 12.20 hrs, Volume= 2.013 af
 Outflow = 11.16 cfs @ 12.49 hrs, Volume= 2.013 af, Atten= 40%, Lag= 17.4 min
 Primary = 11.16 cfs @ 12.49 hrs, Volume= 2.013 af

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

Peak Elev= 215.42' @ 12.49 hrs Surf.Area= 13,984 sf Storage= 16,366 cf

Plug-Flow detention time= 26.3 min calculated for 2.012 af (100% of inflow)

Center-of-Mass det. time= 26.4 min (836.3 - 809.8)

Volume	Invert	Avail.Storage	Storage Description		
#1	214.00'	103,930 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
214.00	9,189	420.0	0	0	9,189
216.00	16,216	442.0	25,075	25,075	10,927
218.00	20,207	375.0	36,350	61,425	15,359
220.00	22,316	390.0	42,506	103,930	16,550

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Type III 24-hr 25-yr Rainfall=5.55"

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Device	Routing	Invert	Outlet Devices									
#1	Primary	213.43'	24.0" Round Culvert L= 580.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 213.43' / 211.63' S= 0.0031 ' /' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf									
#2	Device 1	214.00'	45.0 deg x 4.0' long Sharp-Crested Vee/Trap Weir Cv= 2.56 (C= 3.20)									
#3	Device 1	215.50'	4.2' long x 4.2' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.53 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.67 2.71 2.72 2.74 2.77 2.85 3.01 3.23									

Primary OutFlow Max=11.15 cfs @ 12.49 hrs HW=215.42' (Free Discharge)

1=Culvert (Barrel Controls 11.15 cfs @ 4.43 fps)

2=Sharp-Crested Vee/Trap Weir (Passes 11.15 cfs of 24.25 cfs potential flow)

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

Summary for Pond 7P: Constructed Stormwater Wetland #1

Inflow Area = 11.903 ac, 28.79% Impervious, Inflow Depth = 3.11" for 25-yr event
 Inflow = 25.65 cfs @ 12.10 hrs, Volume= 3.086 af
 Outflow = 23.73 cfs @ 12.14 hrs, Volume= 3.085 af, Atten= 7%, Lag= 2.6 min
 Primary = 23.73 cfs @ 12.14 hrs, Volume= 3.085 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 215.44' @ 12.14 hrs Surf.Area= 12,410 sf Storage= 7,069 cf

Plug-Flow detention time= 26.9 min calculated for 3.083 af (100% of inflow)

Center-of-Mass det. time= 27.9 min (848.5 - 820.5)

Volume	Invert	Avail.Storage	Storage Description		
#1	214.80'	14,759 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
214.80	9,939	766.0	0	0	9,939
215.00	10,413	771.0	2,035	2,035	10,570
216.00	15,185	1,210.0	12,724	14,759	79,782

Device	Routing	Invert	Outlet Devices									
#1	Primary	215.10'	40.0' 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									
#2	Primary	214.80'	12.0" Round Culvert X 3.00 L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 214.80' / 214.00' S= 0.0320 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf									

Primary OutFlow Max=23.62 cfs @ 12.14 hrs HW=215.44' (Free Discharge)

1=Broad-Crested Rectangular Weir (Weir Controls 20.19 cfs @ 1.48 fps)

2=Culvert (Inlet Controls 3.43 cfs @ 2.15 fps)

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Summary for Pond 12P: STONE RECHARGE TRENCH

Inflow Area = 0.409 ac,100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
Inflow = 2.17 cfs @ 12.09 hrs, Volume= 0.181 af
Outflow = 2.58 cfs @ 12.20 hrs, Volume= 0.181 af, Atten= 0%, Lag= 6.8 min
Discarded = 0.17 cfs @ 12.20 hrs, Volume= 0.156 af
Primary = 2.41 cfs @ 12.20 hrs, Volume= 0.025 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 221.01' @ 12.20 hrs Surf.Area= 2,427 sf Storage= 1,942 cf

Plug-Flow detention time= 75.0 min calculated for 0.181 af (100% of inflow)
Center-of-Mass det. time= 74.9 min (821.3 - 746.3)

Volume	Invert	Avail.Storage	Storage Description
#1	219.00'	1,942 cf	3.00'W x 809.00'L x 2.00'H Prismatic 4,854 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Primary	221.00'	809.0' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	219.00'	2,410 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 210.00'

Discarded OutFlow Max=0.17 cfs @ 12.20 hrs HW=221.01' (Free Discharge)
↳ **2=Exfiltration** (Controls 0.17 cfs)

Primary OutFlow Max=1.47 cfs @ 12.20 hrs HW=221.01' (Free Discharge)
↳ **1=Broad-Crested Rectangular Weir** (Weir Controls 1.47 cfs @ 0.24 fps)

Summary for Pond 17P: STONE RECHARGE TRENCH

Inflow Area = 0.409 ac,100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
Inflow = 2.17 cfs @ 12.09 hrs, Volume= 0.181 af
Outflow = 2.58 cfs @ 12.20 hrs, Volume= 0.181 af, Atten= 0%, Lag= 6.8 min
Discarded = 0.17 cfs @ 12.20 hrs, Volume= 0.156 af
Primary = 2.41 cfs @ 12.20 hrs, Volume= 0.025 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 221.01' @ 12.20 hrs Surf.Area= 2,427 sf Storage= 1,942 cf

Plug-Flow detention time= 75.0 min calculated for 0.181 af (100% of inflow)
Center-of-Mass det. time= 74.9 min (821.3 - 746.3)

Volume	Invert	Avail.Storage	Storage Description
#1	219.00'	1,942 cf	3.00'W x 809.00'L x 2.00'H Prismatic 4,854 cf Overall x 40.0% Voids

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Device	Routing	Invert	Outlet Devices
#1	Primary	221.00'	809.0' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	219.00'	2,410 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 210.00'

Discarded OutFlow Max=0.17 cfs @ 12.20 hrs HW=221.01' (Free Discharge)
↳ **2=Exfiltration** (Controls 0.17 cfs)

Primary OutFlow Max=1.47 cfs @ 12.20 hrs HW=221.01' (Free Discharge)
↳ **1=Broad-Crested Rectangular Weir** (Weir Controls 1.47 cfs @ 0.24 fps)

Summary for Pond 19P: STONE RECHARGE TRENCH

Inflow Area = 0.409 ac,100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
Inflow = 2.17 cfs @ 12.09 hrs, Volume= 0.181 af
Outflow = 2.58 cfs @ 12.20 hrs, Volume= 0.181 af, Atten= 0%, Lag= 6.8 min
Discarded = 0.17 cfs @ 12.20 hrs, Volume= 0.156 af
Primary = 2.41 cfs @ 12.20 hrs, Volume= 0.025 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 221.01' @ 12.20 hrs Surf.Area= 2,427 sf Storage= 1,942 cf

Plug-Flow detention time= 75.0 min calculated for 0.181 af (100% of inflow)
Center-of-Mass det. time= 74.9 min (821.3 - 746.3)

Volume	Invert	Avail.Storage	Storage Description
#1	219.00'	1,942 cf	3.00'W x 809.00'L x 2.00'H Prismatic 4,854 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Primary	221.00'	809.0' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	219.00'	2,410 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 210.00'

Discarded OutFlow Max=0.17 cfs @ 12.20 hrs HW=221.01' (Free Discharge)
↳ **2=Exfiltration** (Controls 0.17 cfs)

Primary OutFlow Max=1.47 cfs @ 12.20 hrs HW=221.01' (Free Discharge)
↳ **1=Broad-Crested Rectangular Weir** (Weir Controls 1.47 cfs @ 0.24 fps)

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Summary for Pond 21P: CB-4

Inflow Area = 0.345 ac, 80.72% Impervious, Inflow Depth = 4.63" for 25-yr event
 Inflow = 1.72 cfs @ 12.09 hrs, Volume= 0.133 af
 Outflow = 1.72 cfs @ 12.09 hrs, Volume= 0.133 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.72 cfs @ 12.09 hrs, Volume= 0.133 af

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

Peak Elev= 216.39' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.50'	12.0" Round Culvert L= 37.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.50' / 215.30' S= 0.0054 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.68 cfs @ 12.09 hrs HW=216.37' (Free Discharge)**1=Culvert** (Barrel Controls 1.68 cfs @ 3.07 fps)**Summary for Pond 22P: DMH-2**

Inflow Area = 1.540 ac, 81.03% Impervious, Inflow Depth = 4.68" for 25-yr event
 Inflow = 7.70 cfs @ 12.09 hrs, Volume= 0.600 af
 Outflow = 7.70 cfs @ 12.09 hrs, Volume= 0.600 af, Atten= 0%, Lag= 0.0 min
 Primary = 7.70 cfs @ 12.09 hrs, Volume= 0.600 af

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

Peak Elev= 217.40' @ 12.09 hrs

Flood Elev= 218.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.30'	18.0" Round Culvert L= 101.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.30' / 214.80' S= 0.0050 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=7.44 cfs @ 12.09 hrs HW=217.33' (Free Discharge)**1=Culvert** (Barrel Controls 7.44 cfs @ 4.21 fps)**Summary for Pond 23P: CB-1**

Inflow Area = 0.307 ac, 83.76% Impervious, Inflow Depth = 4.74" for 25-yr event
 Inflow = 1.56 cfs @ 12.09 hrs, Volume= 0.121 af
 Outflow = 1.56 cfs @ 12.09 hrs, Volume= 0.121 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.56 cfs @ 12.09 hrs, Volume= 0.121 af

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

Peak Elev= 216.41' @ 12.09 hrs

Flood Elev= 218.60'

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Device	Routing	Invert	Outlet Devices
#1	Primary	215.60'	12.0" Round Culvert L= 27.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.60' / 215.40' S= 0.0074 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.52 cfs @ 12.09 hrs HW=216.39' (Free Discharge)**1=Culvert** (Barrel Controls 1.52 cfs @ 3.12 fps)**Summary for Pond 24P: CB-2**

Inflow Area = 0.392 ac, 95.72% Impervious, Inflow Depth = 5.20" for 25-yr event
 Inflow = 2.07 cfs @ 12.09 hrs, Volume= 0.170 af
 Outflow = 2.07 cfs @ 12.09 hrs, Volume= 0.170 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.07 cfs @ 12.09 hrs, Volume= 0.170 af

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

Peak Elev= 217.17' @ 12.09 hrs

Flood Elev= 219.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.20'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.20' / 215.40' S= 0.0400 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.01 cfs @ 12.09 hrs HW=217.15' (Free Discharge)**1=Culvert** (Inlet Controls 2.01 cfs @ 2.62 fps)**Summary for Pond 25P: CB-3**

Inflow Area = 0.565 ac, 67.38% Impervious, Inflow Depth = 4.19" for 25-yr event
 Inflow = 2.64 cfs @ 12.09 hrs, Volume= 0.198 af
 Outflow = 2.64 cfs @ 12.09 hrs, Volume= 0.198 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.64 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= 217.78' @ 12.09 hrs

Flood Elev= 219.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.50'	12.0" Round Culvert L= 38.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.50' / 215.40' S= 0.0289 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.58 cfs @ 12.09 hrs HW=217.74' (Free Discharge)**1=Culvert** (Inlet Controls 2.58 cfs @ 3.28 fps)

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Summary for Pond 26P: DMH-1

Inflow Area = 1.264 ac, 80.14% Impervious, Inflow Depth = 4.64" for 25-yr event
 Inflow = 6.26 cfs @ 12.09 hrs, Volume= 0.488 af
 Outflow = 6.26 cfs @ 12.09 hrs, Volume= 0.488 af, Atten= 0%, Lag= 0.0 min
 Primary = 6.26 cfs @ 12.09 hrs, Volume= 0.488 af

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

Peak Elev= 216.92' @ 12.09 hrs

Flood Elev= 218.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.30'	18.0" Round Culvert L= 56.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.30' / 214.80' S= 0.0089 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=6.10 cfs @ 12.09 hrs HW=216.87' (Free Discharge)

1=Culvert (Inlet Controls 6.10 cfs @ 3.45 fps)

Summary for Pond 27P: DCB-22

Inflow Area = 0.515 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 2.73 cfs @ 12.09 hrs, Volume= 0.228 af
 Outflow = 2.73 cfs @ 12.09 hrs, Volume= 0.228 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.73 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= 216.84' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.50'	12.0" Round Culvert L= 50.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.50' / 215.20' S= 0.0060 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.66 cfs @ 12.09 hrs HW=216.79' (Free Discharge)

1=Culvert (Inlet Controls 2.66 cfs @ 3.39 fps)

Summary for Pond 28P: DMH-16

Inflow Area = 0.515 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 2.73 cfs @ 12.09 hrs, Volume= 0.228 af
 Outflow = 2.73 cfs @ 12.09 hrs, Volume= 0.228 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.73 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= 216.58' @ 12.09 hrs

Flood Elev= 218.70'

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Device	Routing	Invert	Outlet Devices
#1	Primary	215.10'	12.0" Round Culvert L= 160.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.10' / 214.30' S= 0.0050 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.63 cfs @ 12.09 hrs HW=216.51' (Free Discharge)

1=Culvert (Barrel Controls 2.63 cfs @ 3.35 fps)

Summary for Pond 29P: CB-21

Inflow Area = 0.123 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 0.65 cfs @ 12.09 hrs, Volume= 0.054 af
 Outflow = 0.65 cfs @ 12.09 hrs, Volume= 0.054 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.65 cfs @ 12.09 hrs, Volume= 0.054 af

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

Peak Elev= 216.66' @ 12.09 hrs

Flood Elev= 219.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.20'	12.0" Round Culvert L= 26.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.20' / 215.70' S= 0.0192 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.63 cfs @ 12.09 hrs HW=216.66' (Free Discharge)

1=Culvert (Inlet Controls 0.63 cfs @ 1.81 fps)

Summary for Pond 30P: DMH-15

Inflow Area = 0.637 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 3.38 cfs @ 12.09 hrs, Volume= 0.282 af
 Outflow = 3.38 cfs @ 12.09 hrs, Volume= 0.282 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.38 cfs @ 12.09 hrs, Volume= 0.282 af

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

Peak Elev= 215.34' @ 12.09 hrs

Flood Elev= 219.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	214.20'	15.0" Round Culvert L= 250.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 214.20' / 212.90' S= 0.0052 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=3.30 cfs @ 12.09 hrs HW=215.32' (Free Discharge)

1=Culvert (Inlet Controls 3.30 cfs @ 2.84 fps)

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Summary for Pond 31P: DMH-14

Inflow Area = 1.468 ac, 97.47% Impervious, Inflow Depth = 5.22" for 25-yr event
 Inflow = 7.74 cfs @ 12.09 hrs, Volume= 0.639 af
 Outflow = 7.74 cfs @ 12.09 hrs, Volume= 0.639 af, Atten= 0%, Lag= 0.0 min
 Primary = 7.74 cfs @ 12.09 hrs, Volume= 0.639 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 214.90' @ 12.09 hrs
 Flood Elev= 218.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	212.80'	18.0" Round Culvert L= 61.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 212.80' / 212.50' S= 0.0049 ' / ' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=7.44 cfs @ 12.09 hrs HW=214.83' (Free Discharge)
 1=Culvert (Barrel Controls 7.44 cfs @ 4.21 fps)

Summary for Pond 32P: CB-20

Inflow Area = 0.318 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 1.69 cfs @ 12.09 hrs, Volume= 0.141 af
 Outflow = 1.69 cfs @ 12.09 hrs, Volume= 0.141 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.69 cfs @ 12.09 hrs, Volume= 0.141 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 216.32' @ 12.09 hrs
 Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.50'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.50' / 215.30' S= 0.0167 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.64 cfs @ 12.09 hrs HW=216.31' (Free Discharge)
 1=Culvert (Inlet Controls 1.64 cfs @ 2.42 fps)

Summary for Pond 33P: DMH-17

Inflow Area = 0.513 ac, 92.75% Impervious, Inflow Depth = 5.05" for 25-yr event
 Inflow = 2.67 cfs @ 12.09 hrs, Volume= 0.216 af
 Outflow = 2.67 cfs @ 12.09 hrs, Volume= 0.216 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.67 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= 217.04' @ 12.09 hrs
 Flood Elev= 218.80'

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Device	Routing	Invert	Outlet Devices
#1	Primary	215.60'	12.0" Round Culvert L= 180.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.60' / 214.70' S= 0.0050 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.58 cfs @ 12.09 hrs HW=216.96' (Free Discharge)
 1=Culvert (Barrel Controls 2.58 cfs @ 3.28 fps)

Summary for Pond 34P: CB-23

Inflow Area = 0.288 ac, 87.12% Impervious, Inflow Depth = 4.85" for 25-yr event
 Inflow = 1.48 cfs @ 12.09 hrs, Volume= 0.117 af
 Outflow = 1.48 cfs @ 12.09 hrs, Volume= 0.117 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.48 cfs @ 12.09 hrs, Volume= 0.117 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 216.68' @ 12.09 hrs
 Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.90'	12.0" Round Culvert L= 28.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.90' / 215.70' S= 0.0071 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.44 cfs @ 12.09 hrs HW=216.67' (Free Discharge)
 1=Culvert (Barrel Controls 1.44 cfs @ 3.07 fps)

Summary for Pond 35P: CB-24

Inflow Area = 0.224 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 1.19 cfs @ 12.09 hrs, Volume= 0.099 af
 Outflow = 1.19 cfs @ 12.09 hrs, Volume= 0.099 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.19 cfs @ 12.09 hrs, Volume= 0.099 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 216.56' @ 12.09 hrs
 Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.90'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.90' / 215.70' S= 0.0100 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.16 cfs @ 12.09 hrs HW=216.55' (Free Discharge)
 1=Culvert (Barrel Controls 1.16 cfs @ 3.03 fps)

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Type III 24-hr 25-yr Rainfall=5.55"

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Summary for Pond 36P: DMH-7

Inflow Area = 0.323 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 1.71 cfs @ 12.09 hrs, Volume= 0.143 af
 Outflow = 1.71 cfs @ 12.09 hrs, Volume= 0.143 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.71 cfs @ 12.09 hrs, Volume= 0.143 af

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

Peak Elev= 216.83' @ 12.09 hrs

Flood Elev= 219.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.00'	12.0" Round Culvert L= 220.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.00' / 214.80' S= 0.0055 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.67 cfs @ 12.09 hrs HW=216.82' (Free Discharge)

1=Culvert (Inlet Controls 1.67 cfs @ 2.43 fps)

Summary for Pond 37P: DMH-10

Inflow Area = 0.446 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 2.36 cfs @ 12.09 hrs, Volume= 0.197 af
 Outflow = 2.36 cfs @ 12.09 hrs, Volume= 0.197 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.36 cfs @ 12.09 hrs, Volume= 0.197 af

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

Peak Elev= 218.99' @ 12.09 hrs

Flood Elev= 222.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	218.10'	15.0" Round Culvert L= 122.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 218.10' / 214.50' S= 0.0295 ' / ' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.30 cfs @ 12.09 hrs HW=218.97' (Free Discharge)

1=Culvert (Inlet Controls 2.30 cfs @ 2.51 fps)

Summary for Pond 38P: CB-15

Inflow Area = 0.043 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 0.23 cfs @ 12.09 hrs, Volume= 0.019 af
 Outflow = 0.23 cfs @ 12.09 hrs, Volume= 0.019 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.23 cfs @ 12.09 hrs, Volume= 0.019 af

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

Peak Elev= 232.46' @ 12.09 hrs

Flood Elev= 236.20'

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Type III 24-hr 25-yr Rainfall=5.55"

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Device	Routing	Invert	Outlet Devices
#1	Primary	232.20'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 232.20' / 231.70' S= 0.0333 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.22 cfs @ 12.09 hrs HW=232.46' (Free Discharge)

1=Culvert (Inlet Controls 0.22 cfs @ 1.37 fps)

Summary for Pond 39P: CB-16

Inflow Area = 0.046 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 0.24 cfs @ 12.09 hrs, Volume= 0.020 af
 Outflow = 0.24 cfs @ 12.09 hrs, Volume= 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= 232.47' @ 12.09 hrs

Flood Elev= 236.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	232.20'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 232.20' / 231.70' S= 0.0333 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.23 cfs @ 12.09 hrs HW=232.47' (Free Discharge)

1=Culvert (Inlet Controls 0.23 cfs @ 1.39 fps)

Summary for Pond 52P: CB-17

Inflow Area = 0.081 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 0.43 cfs @ 12.09 hrs, Volume= 0.036 af
 Outflow = 0.43 cfs @ 12.09 hrs, Volume= 0.036 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.43 cfs @ 12.09 hrs, Volume= 0.036 af

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

Peak Elev= 247.77' @ 12.09 hrs

Flood Elev= 251.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	247.40'	12.0" Round Culvert L= 18.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 247.40' / 246.50' S= 0.0500 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.42 cfs @ 12.09 hrs HW=247.76' (Free Discharge)

1=Culvert (Inlet Controls 0.42 cfs @ 1.62 fps)

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Type III 24-hr 25-yr Rainfall=5.55"

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Summary for Pond 53P: CB-18

Inflow Area = 0.080 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 0.42 cfs @ 12.09 hrs, Volume= 0.035 af
 Outflow = 0.42 cfs @ 12.09 hrs, Volume= 0.035 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.42 cfs @ 12.09 hrs, Volume= 0.035 af

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

Peak Elev= 247.77' @ 12.09 hrs

Flood Elev= 251.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	247.40'	12.0" Round Culvert L= 18.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 247.40' / 246.50' S= 0.0500 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.41 cfs @ 12.09 hrs HW=247.76' (Free Discharge)

1=Culvert (Inlet Controls 0.41 cfs @ 1.62 fps)

Summary for Pond 54P: DMH-13

Inflow Area = 0.161 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 0.85 cfs @ 12.09 hrs, Volume= 0.071 af
 Outflow = 0.85 cfs @ 12.09 hrs, Volume= 0.071 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.85 cfs @ 12.09 hrs, Volume= 0.071 af

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

Peak Elev= 246.94' @ 12.09 hrs

Flood Elev= 250.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	246.40'	12.0" Round Culvert L= 85.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 246.40' / 240.00' S= 0.0753 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.83 cfs @ 12.09 hrs HW=246.93' (Free Discharge)

1=Culvert (Inlet Controls 0.83 cfs @ 1.96 fps)

Summary for Pond 56P: DMH-12

Inflow Area = 0.161 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 0.85 cfs @ 12.09 hrs, Volume= 0.071 af
 Outflow = 0.85 cfs @ 12.09 hrs, Volume= 0.071 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.85 cfs @ 12.09 hrs, Volume= 0.071 af

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

Peak Elev= 240.44' @ 12.09 hrs

Flood Elev= 244.00'

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Device	Routing	Invert	Outlet Devices
#1	Primary	239.90'	12.0" Round Culvert L= 110.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 239.90' / 231.70' S= 0.0745 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.83 cfs @ 12.09 hrs HW=240.43' (Free Discharge)

1=Culvert (Inlet Controls 0.83 cfs @ 1.96 fps)

Summary for Pond 58P: CB-13

Inflow Area = 0.060 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr 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= 219.22' @ 12.09 hrs

Flood Elev= 221.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	218.90'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 218.90' / 218.20' S= 0.0467 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.31 cfs @ 12.09 hrs HW=219.21' (Free Discharge)

1=Culvert (Inlet Controls 0.31 cfs @ 1.50 fps)

Summary for Pond 61P: DMH-11

Inflow Area = 0.249 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 1.32 cfs @ 12.09 hrs, Volume= 0.110 af
 Outflow = 1.32 cfs @ 12.09 hrs, Volume= 0.110 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.32 cfs @ 12.09 hrs, Volume= 0.110 af

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

Peak Elev= 232.30' @ 12.09 hrs

Flood Elev= 235.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	231.60'	12.0" Round Culvert L= 198.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 231.60' / 218.20' S= 0.0677 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.29 cfs @ 12.09 hrs HW=232.29' (Free Discharge)

1=Culvert (Inlet Controls 1.29 cfs @ 2.23 fps)

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Type III 24-hr 25-yr Rainfall=5.55"

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Summary for Pond 62P: CB-14

Inflow Area = 0.136 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 0.72 cfs @ 12.09 hrs, Volume= 0.060 af
 Outflow = 0.72 cfs @ 12.09 hrs, Volume= 0.060 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.72 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= 219.39' @ 12.09 hrs

Flood Elev= 221.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	218.90'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 218.90' / 218.20' S= 0.0467 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.70 cfs @ 12.09 hrs HW=219.38' (Free Discharge)**1=Culvert** (Inlet Controls 0.70 cfs @ 1.87 fps)**Summary for Pond 63P: DMH-4**

Inflow Area = 1.336 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 7.09 cfs @ 12.09 hrs, Volume= 0.591 af
 Outflow = 7.09 cfs @ 12.09 hrs, Volume= 0.591 af, Atten= 0%, Lag= 0.0 min
 Primary = 7.09 cfs @ 12.09 hrs, Volume= 0.591 af

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

Peak Elev= 215.66' @ 12.09 hrs

Flood Elev= 222.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	214.10'	24.0" Round Culvert L= 35.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 214.10' / 214.00' S= 0.0029 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=6.90 cfs @ 12.09 hrs HW=215.63' (Free Discharge)**1=Culvert** (Barrel Controls 6.90 cfs @ 3.69 fps)**Summary for Pond 66P: CB-6**

Inflow Area = 0.134 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 0.71 cfs @ 12.09 hrs, Volume= 0.060 af
 Outflow = 0.71 cfs @ 12.09 hrs, Volume= 0.060 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.71 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= 216.49' @ 12.09 hrs

Flood Elev= 219.00'

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Device	Routing	Invert	Outlet Devices
#1	Primary	216.00'	12.0" Round Culvert L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.00' / 215.50' S= 0.0208 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.69 cfs @ 12.09 hrs HW=216.48' (Free Discharge)**1=Culvert** (Inlet Controls 0.69 cfs @ 1.86 fps)**Summary for Pond 67P: CB-7**

Inflow Area = 0.093 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr 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
 Primary = 0.49 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= 216.40' @ 12.09 hrs

Flood Elev= 219.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.00'	12.0" Round Culvert L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.00' / 215.50' S= 0.0208 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.48 cfs @ 12.09 hrs HW=216.39' (Free Discharge)**1=Culvert** (Inlet Controls 0.48 cfs @ 1.68 fps)**Summary for Pond 68P: DMH-9**

Inflow Area = 0.909 ac, 78.68% Impervious, Inflow Depth = 4.60" for 25-yr event
 Inflow = 4.49 cfs @ 12.09 hrs, Volume= 0.349 af
 Outflow = 4.49 cfs @ 12.09 hrs, Volume= 0.349 af, Atten= 0%, Lag= 0.0 min
 Primary = 4.49 cfs @ 12.09 hrs, Volume= 0.349 af

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

Peak Elev= 217.65' @ 12.09 hrs

Flood Elev= 219.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.10'	15.0" Round Culvert L= 79.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.10' / 215.40' S= 0.0089 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=4.38 cfs @ 12.09 hrs HW=217.61' (Free Discharge)**1=Culvert** (Inlet Controls 4.38 cfs @ 3.57 fps)

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Type III 24-hr 25-yr Rainfall=5.55"

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Summary for Pond 69P: CB-11

Inflow Area = 0.107 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 0.57 cfs @ 12.09 hrs, Volume= 0.047 af
 Outflow = 0.57 cfs @ 12.09 hrs, Volume= 0.047 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.57 cfs @ 12.09 hrs, Volume= 0.047 af

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

Peak Elev= 216.76' @ 12.09 hrs

Flood Elev= 219.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.30'	12.0" Round Culvert L= 14.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.30' / 216.20' S= 0.0071 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.55 cfs @ 12.09 hrs HW=216.76' (Free Discharge)**1=Culvert** (Barrel Controls 0.55 cfs @ 2.33 fps)**Summary for Pond 70P: CB-12**

Inflow Area = 0.802 ac, 75.84% Impervious, Inflow Depth = 4.51" for 25-yr event
 Inflow = 3.92 cfs @ 12.09 hrs, Volume= 0.301 af
 Outflow = 3.92 cfs @ 12.09 hrs, Volume= 0.301 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.92 cfs @ 12.09 hrs, Volume= 0.301 af

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

Peak Elev= 217.67' @ 12.09 hrs

Flood Elev= 219.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.30'	15.0" Round Culvert L= 14.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.30' / 216.20' S= 0.0071 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=3.83 cfs @ 12.09 hrs HW=217.64' (Free Discharge)**1=Culvert** (Barrel Controls 3.83 cfs @ 3.61 fps)**Summary for Pond 71P: CB-8**

Inflow Area = 0.175 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 0.93 cfs @ 12.09 hrs, Volume= 0.078 af
 Outflow = 0.93 cfs @ 12.09 hrs, Volume= 0.078 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.93 cfs @ 12.09 hrs, Volume= 0.078 af

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

Peak Elev= 216.10' @ 12.09 hrs

Flood Elev= 218.50'

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Device	Routing	Invert	Outlet Devices
#1	Primary	215.50'	12.0" Round Culvert L= 32.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.50' / 215.30' S= 0.0062 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.91 cfs @ 12.09 hrs HW=216.09' (Free Discharge)**1=Culvert** (Barrel Controls 0.91 cfs @ 2.72 fps)**Summary for Pond 72P: CB-9**

Inflow Area = 0.165 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 0.88 cfs @ 12.09 hrs, Volume= 0.073 af
 Outflow = 0.88 cfs @ 12.09 hrs, Volume= 0.073 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.88 cfs @ 12.09 hrs, Volume= 0.073 af

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

Peak Elev= 216.09' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.50'	12.0" Round Culvert L= 37.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.50' / 215.30' S= 0.0054 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.85 cfs @ 12.09 hrs HW=216.08' (Free Discharge)**1=Culvert** (Barrel Controls 0.85 cfs @ 2.62 fps)**Summary for Pond 73P: DMH-6**

Inflow Area = 0.340 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 1.81 cfs @ 12.09 hrs, Volume= 0.151 af
 Outflow = 1.81 cfs @ 12.09 hrs, Volume= 0.151 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.81 cfs @ 12.09 hrs, Volume= 0.151 af

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

Peak Elev= 216.07' @ 12.09 hrs

Flood Elev= 219.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.20'	12.0" Round Culvert L= 52.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.20' / 214.80' S= 0.0077 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.76 cfs @ 12.09 hrs HW=216.05' (Free Discharge)**1=Culvert** (Inlet Controls 1.76 cfs @ 2.48 fps)

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Summary for Pond 78P: CB-19

Inflow Area = 0.122 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 0.65 cfs @ 12.09 hrs, Volume= 0.054 af
 Outflow = 0.65 cfs @ 12.09 hrs, Volume= 0.054 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.65 cfs @ 12.09 hrs, Volume= 0.054 af

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

Peak Elev= 216.87' @ 12.09 hrs

Flood Elev= 219.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.40'	12.0" Round Culvert L= 45.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.40' / 216.10' S= 0.0067 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.63 cfs @ 12.09 hrs HW=216.86' (Free Discharge)

1=Culvert (Barrel Controls 0.63 cfs @ 2.62 fps)

Summary for Pond 79P: CB-10

Inflow Area = 0.200 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr 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= 217.01' @ 12.09 hrs

Flood Elev= 219.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.40'	12.0" Round Culvert L= 17.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.40' / 216.10' S= 0.0176 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.03 cfs @ 12.09 hrs HW=217.00' (Free Discharge)

1=Culvert (Inlet Controls 1.03 cfs @ 2.09 fps)

Summary for Pond 80P: DMH-5

Inflow Area = 0.663 ac, 100.00% Impervious, Inflow Depth = 5.31" for 25-yr event
 Inflow = 3.52 cfs @ 12.09 hrs, Volume= 0.294 af
 Outflow = 3.52 cfs @ 12.09 hrs, Volume= 0.294 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.52 cfs @ 12.09 hrs, Volume= 0.294 af

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

Peak Elev= 215.88' @ 12.09 hrs

Flood Elev= 220.00'

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Device	Routing	Invert	Outlet Devices
#1	Primary	214.70'	15.0" Round Culvert L= 67.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 214.70' / 214.20' S= 0.0075 ' / ' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=3.43 cfs @ 12.09 hrs HW=215.86' (Free Discharge)

1=Culvert (Inlet Controls 3.43 cfs @ 2.89 fps)

Summary for Pond 81P: CB-5

Inflow Area = 0.287 ac, 88.82% Impervious, Inflow Depth = 4.96" for 25-yr event
 Inflow = 1.49 cfs @ 12.09 hrs, Volume= 0.119 af
 Outflow = 1.49 cfs @ 12.09 hrs, Volume= 0.119 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.49 cfs @ 12.09 hrs, Volume= 0.119 af

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

Peak Elev= 216.79' @ 12.09 hrs

Flood Elev= 219.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.00'	12.0" Round Culvert L= 31.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.00' / 215.80' S= 0.0065 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.45 cfs @ 12.09 hrs HW=216.78' (Free Discharge)

1=Culvert (Barrel Controls 1.45 cfs @ 3.03 fps)

Summary for Pond 82P: DMH-3

Inflow Area = 0.287 ac, 88.82% Impervious, Inflow Depth = 4.96" for 25-yr event
 Inflow = 1.49 cfs @ 12.09 hrs, Volume= 0.119 af
 Outflow = 1.49 cfs @ 12.09 hrs, Volume= 0.119 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.49 cfs @ 12.09 hrs, Volume= 0.119 af

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

Peak Elev= 216.47' @ 12.09 hrs

Flood Elev= 218.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.70'	12.0" Round Culvert L= 70.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.70' / 215.30' S= 0.0057 ' / ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.45 cfs @ 12.09 hrs HW=216.46' (Free Discharge)

1=Culvert (Barrel Controls 1.45 cfs @ 3.13 fps)

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Summary for Link 20L: DP-A

Inflow Area = 30.660 ac, 24.72% Impervious, Inflow Depth = 2.82" for 25-yr event
Inflow = 42.05 cfs @ 12.34 hrs, Volume= 7.202 af
Primary = 42.05 cfs @ 12.34 hrs, Volume= 7.202 af, Atten= 0%, Lag= 0.0 min

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

6842-Post*Type III 24-hr 100-yr Rainfall=7.81"*

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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

Subcatchment 9S: APT. BLDG. A	Runoff Area=17,818 sf 100.00% Impervious Runoff Depth=7.57" Tc=6.0 min CN=98 Runoff=3.06 cfs 0.258 af
Subcatchment 16S: APT. BLDG. B	Runoff Area=17,818 sf 100.00% Impervious Runoff Depth=7.57" Tc=6.0 min CN=98 Runoff=3.06 cfs 0.258 af
Subcatchment 18S: APT. BLDG. C	Runoff Area=17,818 sf 100.00% Impervious Runoff Depth=7.57" Tc=6.0 min CN=98 Runoff=3.06 cfs 0.258 af
Subcatchment 21S: A.1	Runoff Area=20,195 sf 5.87% Impervious Runoff Depth=5.22" Tc=10.0 min CN=78 Runoff=2.43 cfs 0.202 af
Subcatchment 22S: A.2	Runoff Area=13,850 sf 100.00% Impervious Runoff Depth=7.57" Tc=6.0 min CN=98 Runoff=2.38 cfs 0.201 af
Subcatchment 23S: A.3	Runoff Area=9,767 sf 100.00% Impervious Runoff Depth=7.57" Tc=6.0 min CN=98 Runoff=1.68 cfs 0.141 af
Subcatchment 24S: A.4	Runoff Area=5,341 sf 100.00% Impervious Runoff Depth=7.57" Tc=6.0 min CN=98 Runoff=0.92 cfs 0.077 af
Subcatchment 25S: A.5	Runoff Area=22,426 sf 100.00% Impervious Runoff Depth=7.57" Tc=6.0 min CN=98 Runoff=3.85 cfs 0.325 af
Subcatchment 26S: B.6	Runoff Area=40,090 sf 22.31% Impervious Runoff Depth=4.64" Tc=6.0 min UI Adjusted CN=73 Runoff=4.90 cfs 0.356 af
Subcatchment 27S: A.6	Runoff Area=12,567 sf 87.12% Impervious Runoff Depth=7.09" Tc=6.0 min CN=94 Runoff=2.12 cfs 0.171 af
Subcatchment 28S: B.1	Runoff Area=30,829 sf 0.88% Impervious Runoff Depth=5.10" Tc=6.0 min CN=77 Runoff=4.11 cfs 0.301 af
Subcatchment 29S: B.2	Runoff Area=13,381 sf 83.76% Impervious Runoff Depth=6.97" Tc=6.0 min CN=93 Runoff=2.24 cfs 0.179 af
Subcatchment 30S: B.3	Runoff Area=17,060 sf 95.72% Impervious Runoff Depth=7.45" Tc=6.0 min CN=97 Runoff=2.92 cfs 0.243 af
Subcatchment 31S: B.4	Runoff Area=17,060 sf 95.72% Impervious Runoff Depth=7.45" Tc=6.0 min CN=97 Runoff=2.92 cfs 0.243 af
Subcatchment 32S: B.5	Runoff Area=24,627 sf 67.38% Impervious Runoff Depth=6.38" Tc=6.0 min CN=88 Runoff=3.92 cfs 0.301 af
Subcatchment 33S: B.7	Runoff Area=290,511 sf 2.55% Impervious Runoff Depth=4.41" Tc=30.0 min CN=71 Runoff=19.48 cfs 2.454 af

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Type III 24-hr 100-yr Rainfall=7.81"

Subcatchment 34S: B.8	Runoff Area=12,484 sf 88.82% Impervious Runoff Depth=7.21" Tc=6.0 min CN=95 Runoff=2.12 cfs 0.172 af
Subcatchment 35S: C.1	Runoff Area=236,308 sf 9.34% Impervious Runoff Depth=5.10" Tc=20.0 min UI Adjusted CN=77 Runoff=21.74 cfs 2.306 af
Subcatchment 36S: C.2	Runoff Area=22,516 sf 83.62% Impervious Runoff Depth=6.97" Tc=6.0 min CN=93 Runoff=3.77 cfs 0.300 af
Subcatchment 37S: C.3	Runoff Area=12,429 sf 61.75% Impervious Runoff Depth=6.26" Tc=6.0 min CN=87 Runoff=1.96 cfs 0.149 af
Subcatchment 38S: C.4	Runoff Area=4,655 sf 100.00% Impervious Runoff Depth=7.57" Tc=6.0 min CN=98 Runoff=0.80 cfs 0.067 af
Subcatchment 39S: C.5	Runoff Area=5,857 sf 100.00% Impervious Runoff Depth=7.57" Tc=6.0 min CN=98 Runoff=1.01 cfs 0.085 af
Subcatchment 40S: C.6	Runoff Area=4,047 sf 100.00% Impervious Runoff Depth=7.57" Tc=6.0 min CN=98 Runoff=0.70 cfs 0.059 af
Subcatchment 41S: C.7	Runoff Area=7,188 sf 100.00% Impervious Runoff Depth=7.57" Tc=6.0 min CN=98 Runoff=1.24 cfs 0.104 af
Subcatchment 42S: C.8	Runoff Area=7,639 sf 100.00% Impervious Runoff Depth=7.57" Tc=6.0 min CN=98 Runoff=1.31 cfs 0.111 af
Subcatchment 43S: C.9	Runoff Area=8,732 sf 100.00% Impervious Runoff Depth=7.57" Tc=6.0 min CN=98 Runoff=1.50 cfs 0.126 af
Subcatchment 44S: C.10	Runoff Area=5,326 sf 100.00% Impervious Runoff Depth=7.57" Tc=6.0 min CN=98 Runoff=0.92 cfs 0.077 af
Subcatchment 45S: C.11	Runoff Area=2,631 sf 100.00% Impervious Runoff Depth=7.57" Tc=6.0 min CN=98 Runoff=0.45 cfs 0.038 af
Subcatchment 46S: C.12	Runoff Area=5,910 sf 100.00% Impervious Runoff Depth=7.57" Tc=6.0 min CN=98 Runoff=1.02 cfs 0.086 af
Subcatchment 47S: C.13	Runoff Area=1,987 sf 100.00% Impervious Runoff Depth=7.57" Tc=6.0 min CN=98 Runoff=0.34 cfs 0.029 af
Subcatchment 48S: C.14	Runoff Area=1,885 sf 100.00% Impervious Runoff Depth=7.57" Tc=6.0 min CN=98 Runoff=0.32 cfs 0.027 af
Subcatchment 49S: C.15	Runoff Area=3,487 sf 100.00% Impervious Runoff Depth=7.57" Tc=6.0 min CN=98 Runoff=0.60 cfs 0.051 af
Subcatchment 50S: C.16	Runoff Area=3,508 sf 100.00% Impervious Runoff Depth=7.57" Tc=6.0 min CN=98 Runoff=0.60 cfs 0.051 af
Subcatchment 51S: D.1	Runoff Area=402,771 sf 0.38% Impervious Runoff Depth=3.30" Tc=20.0 min CN=61 Runoff=23.60 cfs 2.543 af

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Type III 24-hr 100-yr Rainfall=7.81"

Subcatchment 52S: B.9	Runoff Area=15,018 sf 80.72% Impervious Runoff Depth=6.86" Tc=6.0 min CN=92 Runoff=2.49 cfs 0.197 af
Pond 4P: Constructed Stormwater	Peak Elev=215.11' Storage=21,459 cf Inflow=15.95 cfs 1.187 af Outflow=6.51 cfs 1.185 af
Pond 5P: Wet Basin	Peak Elev=216.35' Storage=30,936 cf Inflow=27.65 cfs 3.219 af Outflow=13.77 cfs 3.219 af
Pond 7P: Constructed Stormwater Wetland	Peak Elev=215.59' Storage=8,934 cf Inflow=43.15 cfs 5.032 af Outflow=40.47 cfs 5.032 af
Pond 12P: STONE RECHARGE TRENCH	Peak Elev=221.01' Storage=1,942 cf Inflow=3.06 cfs 0.258 af Discarded=0.17 cfs 0.188 af Primary=2.83 cfs 0.070 af Outflow=3.00 cfs 0.258 af
Pond 17P: STONE RECHARGE TRENCH	Peak Elev=221.01' Storage=1,942 cf Inflow=3.06 cfs 0.258 af Discarded=0.17 cfs 0.188 af Primary=2.83 cfs 0.070 af Outflow=3.00 cfs 0.258 af
Pond 19P: STONE RECHARGE TRENCH	Peak Elev=221.01' Storage=1,942 cf Inflow=3.06 cfs 0.258 af Discarded=0.17 cfs 0.188 af Primary=2.83 cfs 0.070 af Outflow=3.00 cfs 0.258 af
Pond 21P: CB-4	Peak Elev=216.69' Inflow=2.49 cfs 0.197 af 12.0" Round Culvert n=0.013 L=37.0' S=0.0054 ' Outflow=2.49 cfs 0.197 af
Pond 22P: DMH-2	Peak Elev=218.79' Inflow=11.14 cfs 0.886 af 18.0" Round Culvert n=0.013 L=101.0' S=0.0050 ' Outflow=11.14 cfs 0.886 af
Pond 23P: CB-1	Peak Elev=216.66' Inflow=2.24 cfs 0.179 af 12.0" Round Culvert n=0.013 L=27.0' S=0.0074 ' Outflow=2.24 cfs 0.179 af
Pond 24P: CB-2	Peak Elev=217.65' Inflow=2.92 cfs 0.243 af 12.0" Round Culvert n=0.013 L=20.0' S=0.0400 ' Outflow=2.92 cfs 0.243 af
Pond 25P: CB-3	Peak Elev=218.72' Inflow=3.92 cfs 0.301 af 12.0" Round Culvert n=0.013 L=38.0' S=0.0289 ' Outflow=3.92 cfs 0.301 af
Pond 26P: DMH-1	Peak Elev=217.87' Inflow=9.09 cfs 0.722 af 18.0" Round Culvert n=0.013 L=56.0' S=0.0089 ' Outflow=9.09 cfs 0.722 af
Pond 27P: DCB-22	Peak Elev=217.66' Inflow=3.85 cfs 0.325 af 12.0" Round Culvert n=0.013 L=50.0' S=0.0060 ' Outflow=3.85 cfs 0.325 af
Pond 28P: DMH-16	Peak Elev=217.88' Inflow=3.85 cfs 0.325 af 12.0" Round Culvert n=0.013 L=160.0' S=0.0050 ' Outflow=3.85 cfs 0.325 af
Pond 29P: CB-21	Peak Elev=216.76' Inflow=0.92 cfs 0.077 af 12.0" Round Culvert n=0.013 L=26.0' S=0.0192 ' Outflow=0.92 cfs 0.077 af
Pond 30P: DMH-15	Peak Elev=215.94' Inflow=4.77 cfs 0.402 af 15.0" Round Culvert n=0.013 L=250.0' S=0.0052 ' Outflow=4.77 cfs 0.402 af

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*Type III 24-hr 100-yr Rainfall=7.81"***Pond 31P: DMH-14**Peak Elev=216.20' Inflow=10.95 cfs 0.915 af
18.0" Round Culvert n=0.013 L=61.0' S=0.0049 '/' Outflow=10.95 cfs 0.915 af**Pond 32P: CB-20**Peak Elev=216.63' Inflow=2.38 cfs 0.201 af
12.0" Round Culvert n=0.013 L=12.0' S=0.0167 '/' Outflow=2.38 cfs 0.201 af**Pond 33P: DMH-17**Peak Elev=218.43' Inflow=3.80 cfs 0.312 af
12.0" Round Culvert n=0.013 L=180.0' S=0.0050 '/' Outflow=3.80 cfs 0.312 af**Pond 34P: CB-23**Peak Elev=216.90' Inflow=2.12 cfs 0.171 af
12.0" Round Culvert n=0.013 L=28.0' S=0.0071 '/' Outflow=2.12 cfs 0.171 af**Pond 35P: CB-24**Peak Elev=216.73' Inflow=1.68 cfs 0.141 af
12.0" Round Culvert n=0.013 L=20.0' S=0.0100 '/' Outflow=1.68 cfs 0.141 af**Pond 36P: DMH-7**Peak Elev=217.15' Inflow=2.42 cfs 0.204 af
12.0" Round Culvert n=0.013 L=220.0' S=0.0055 '/' Outflow=2.42 cfs 0.204 af**Pond 37P: DMH-10**Peak Elev=219.23' Inflow=3.34 cfs 0.281 af
15.0" Round Culvert n=0.013 L=122.0' S=0.0295 '/' Outflow=3.34 cfs 0.281 af**Pond 38P: CB-15**Peak Elev=232.52' Inflow=0.32 cfs 0.027 af
12.0" Round Culvert n=0.013 L=15.0' S=0.0333 '/' Outflow=0.32 cfs 0.027 af**Pond 39P: CB-16**Peak Elev=232.53' Inflow=0.34 cfs 0.029 af
12.0" Round Culvert n=0.013 L=15.0' S=0.0333 '/' Outflow=0.34 cfs 0.029 af**Pond 52P: CB-17**Peak Elev=247.84' Inflow=0.60 cfs 0.051 af
12.0" Round Culvert n=0.013 L=18.0' S=0.0500 '/' Outflow=0.60 cfs 0.051 af**Pond 53P: CB-18**Peak Elev=247.84' Inflow=0.60 cfs 0.051 af
12.0" Round Culvert n=0.013 L=18.0' S=0.0500 '/' Outflow=0.60 cfs 0.051 af**Pond 54P: DMH-13**Peak Elev=247.06' Inflow=1.20 cfs 0.101 af
12.0" Round Culvert n=0.013 L=85.0' S=0.0753 '/' Outflow=1.20 cfs 0.101 af**Pond 56P: DMH-12**Peak Elev=240.56' Inflow=1.20 cfs 0.101 af
12.0" Round Culvert n=0.013 L=110.0' S=0.0745 '/' Outflow=1.20 cfs 0.101 af**Pond 58P: CB-13**Peak Elev=219.28' Inflow=0.45 cfs 0.038 af
12.0" Round Culvert n=0.013 L=15.0' S=0.0467 '/' Outflow=0.45 cfs 0.038 af**Pond 61P: DMH-11**Peak Elev=232.49' Inflow=1.87 cfs 0.157 af
12.0" Round Culvert n=0.013 L=198.0' S=0.0677 '/' Outflow=1.87 cfs 0.157 af**Pond 62P: CB-14**Peak Elev=219.50' Inflow=1.02 cfs 0.086 af
12.0" Round Culvert n=0.013 L=15.0' S=0.0467 '/' Outflow=1.02 cfs 0.086 af**Pond 63P: DMH-4**Peak Elev=216.04' Inflow=10.00 cfs 0.843 af
24.0" Round Culvert n=0.013 L=35.0' S=0.0029 '/' Outflow=10.00 cfs 0.843 af**Pond 66P: CB-6**Peak Elev=216.59' Inflow=1.01 cfs 0.085 af
12.0" Round Culvert n=0.013 L=24.0' S=0.0208 '/' Outflow=1.01 cfs 0.085 af**6842-Post**

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*Type III 24-hr 100-yr Rainfall=7.81"***Pond 67P: CB-7**Peak Elev=216.48' Inflow=0.70 cfs 0.059 af
12.0" Round Culvert n=0.013 L=24.0' S=0.0208 '/' Outflow=0.70 cfs 0.059 af**Pond 68P: DMH-9**Peak Elev=218.68' Inflow=6.53 cfs 0.517 af
15.0" Round Culvert n=0.013 L=79.0' S=0.0089 '/' Outflow=6.53 cfs 0.517 af**Pond 69P: CB-11**Peak Elev=216.86' Inflow=0.80 cfs 0.067 af
12.0" Round Culvert n=0.013 L=14.0' S=0.0071 '/' Outflow=0.80 cfs 0.067 af**Pond 70P: CB-12**Peak Elev=218.43' Inflow=5.73 cfs 0.449 af
15.0" Round Culvert n=0.013 L=14.0' S=0.0071 '/' Outflow=5.73 cfs 0.449 af**Pond 71P: CB-8**Peak Elev=216.24' Inflow=1.31 cfs 0.111 af
12.0" Round Culvert n=0.013 L=32.0' S=0.0062 '/' Outflow=1.31 cfs 0.111 af**Pond 72P: CB-9**Peak Elev=216.22' Inflow=1.24 cfs 0.104 af
12.0" Round Culvert n=0.013 L=37.0' S=0.0054 '/' Outflow=1.24 cfs 0.104 af**Pond 73P: DMH-6**Peak Elev=216.43' Inflow=2.55 cfs 0.215 af
12.0" Round Culvert n=0.013 L=52.0' S=0.0077 '/' Outflow=2.55 cfs 0.215 af**Pond 78P: CB-19**Peak Elev=216.97' Inflow=0.92 cfs 0.077 af
12.0" Round Culvert n=0.013 L=45.0' S=0.0067 '/' Outflow=0.92 cfs 0.077 af**Pond 79P: CB-10**Peak Elev=217.16' Inflow=1.50 cfs 0.126 af
12.0" Round Culvert n=0.013 L=17.0' S=0.0176 '/' Outflow=1.50 cfs 0.126 af**Pond 80P: DMH-5**Peak Elev=216.45' Inflow=4.96 cfs 0.418 af
15.0" Round Culvert n=0.013 L=67.0' S=0.0075 '/' Outflow=4.96 cfs 0.418 af**Pond 81P: CB-5**Peak Elev=217.01' Inflow=2.12 cfs 0.172 af
12.0" Round Culvert n=0.013 L=31.0' S=0.0065 '/' Outflow=2.12 cfs 0.172 af**Pond 82P: DMH-3**Peak Elev=216.70' Inflow=2.12 cfs 0.172 af
12.0" Round Culvert n=0.013 L=70.0' S=0.0057 '/' Outflow=2.12 cfs 0.172 af**Link 20L: DP-A**Inflow=76.09 cfs 11.979 af
Primary=76.09 cfs 11.979 af**Total Runoff Area = 30.660 ac Runoff Volume = 12.544 af Average Runoff Depth = 4.91"**
75.28% Pervious = 23.079 ac 24.72% Impervious = 7.580 ac

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Type III 24-hr 100-yr Rainfall=7.81"

Summary for Subcatchment 9S: APT. BLDG. A

Runoff = 3.06 cfs @ 12.09 hrs, Volume= 0.258 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
17,818	98	Roofs, HSG A
17,818		100.00% Impervious Area

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

Summary for Subcatchment 16S: APT. BLDG. B

Runoff = 3.06 cfs @ 12.09 hrs, Volume= 0.258 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
17,818	98	Roofs, HSG A
17,818		100.00% Impervious Area

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

Summary for Subcatchment 18S: APT. BLDG. C

Runoff = 3.06 cfs @ 12.09 hrs, Volume= 0.258 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
17,818	98	Roofs, HSG A
17,818		100.00% Impervious Area

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

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Type III 24-hr 100-yr Rainfall=7.81"

Summary for Subcatchment 21S: A.1

Runoff = 2.43 cfs @ 12.14 hrs, Volume= 0.202 af, Depth= 5.22"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
18,718	77	>75% Grass cover, Good, HSG A
291	43	Woods, Good, HSG A
95	98	Unconnected pavement, HSG A
1,091	98	Roofs, HSG A

20,195	78	Weighted Average
19,009		94.13% Pervious Area
1,186		5.87% Impervious Area
95		8.01% Unconnected

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

Summary for Subcatchment 22S: A.2

Runoff = 2.38 cfs @ 12.09 hrs, Volume= 0.201 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
12,935	98	Paved parking, HSG A
915	98	Roofs, HSG A
13,850	98	Weighted Average
13,850		100.00% Impervious Area

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

Summary for Subcatchment 23S: A.3

Runoff = 1.68 cfs @ 12.09 hrs, Volume= 0.141 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
9,767	98	Paved parking, HSG A
9,767		100.00% Impervious Area

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Type III 24-hr 100-yr Rainfall=7.81"

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

Summary for Subcatchment 24S: A.4

Runoff = 0.92 cfs @ 12.09 hrs, Volume= 0.077 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
227	98	Paved parking, HSG A
5,114	98	Roofs, HSG A
5,341	98	Weighted Average
5,341		100.00% Impervious Area

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

Summary for Subcatchment 25S: A.5

Runoff = 3.85 cfs @ 12.09 hrs, Volume= 0.325 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
22,426	98	Paved parking, HSG A
22,426		100.00% Impervious Area

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

Summary for Subcatchment 26S: B.6

Runoff = 4.90 cfs @ 12.09 hrs, Volume= 0.356 af, Depth= 4.64"

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 100-yr Rainfall=7.81"**6842-Post**

Type III 24-hr 100-yr Rainfall=7.81"

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Area (sf)	CN	Adj	Description
* 31,146	68		>75% Grass cover, Good, HSG A
3,467	98		Unconnected pavement, HSG A
5,477	98		Roofs, HSG A
40,090	75	73	Weighted Average, UI Adjusted
31,146			77.69% Pervious Area
8,944			22.31% Impervious Area
3,467			38.76% Unconnected

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

Summary for Subcatchment 27S: A.6

Runoff = 2.12 cfs @ 12.09 hrs, Volume= 0.171 af, Depth= 7.09"

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 100-yr Rainfall=7.81"

Area (sf)	CN	Description
* 8,883	98	Paved parking, HSG A
1,619	68	>75% Grass cover, Good, HSG A
948	98	Unconnected pavement, HSG A
1,117	98	Roofs, HSG A
12,567	94	Weighted Average
1,619		12.88% Pervious Area
10,948		87.12% Impervious Area
948		8.66% Unconnected

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

Summary for Subcatchment 28S: B.1

Runoff = 4.11 cfs @ 12.09 hrs, Volume= 0.301 af, Depth= 5.10"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
* 30,559	77	>75% Grass cover, Good, HSG A
270	98	Unconnected pavement, HSG A
30,829	77	Weighted Average
30,559		99.12% Pervious Area
270		0.88% Impervious Area
270		100.00% Unconnected

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Type III 24-hr 100-yr Rainfall=7.81"

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

Summary for Subcatchment 29S: B.2

Runoff = 2.24 cfs @ 12.09 hrs, Volume= 0.179 af, Depth= 6.97"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
* 2,173	68	>75% Grass cover, Good, HSG A
1,997	98	Unconnected pavement, HSG A
9,211	98	Paved parking, HSG A
13,381	93	Weighted Average
2,173		16.24% Pervious Area
11,208		83.76% Impervious Area
1,997		17.82% Unconnected

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

Summary for Subcatchment 30S: B.3

Runoff = 2.92 cfs @ 12.09 hrs, Volume= 0.243 af, Depth= 7.45"

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 100-yr Rainfall=7.81"

Area (sf)	CN	Description
* 731	68	>75% Grass cover, Good, HSG A
2,575	98	Unconnected pavement, HSG A
13,754	98	Paved parking, HSG A
17,060	97	Weighted Average
731		4.28% Pervious Area
16,329		95.72% Impervious Area
2,575		15.77% Unconnected

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

Summary for Subcatchment 31S: B.4

Runoff = 2.92 cfs @ 12.09 hrs, Volume= 0.243 af, Depth= 7.45"

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 100-yr Rainfall=7.81"**6842-Post**

Type III 24-hr 100-yr Rainfall=7.81"

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Area (sf)	CN	Description
* 731	68	>75% Grass cover, Good, HSG A
2,575	98	Unconnected pavement, HSG A
13,754	98	Paved parking, HSG A
17,060	97	Weighted Average
731		4.28% Pervious Area
16,329		95.72% Impervious Area
2,575		15.77% Unconnected

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

Summary for Subcatchment 32S: B.5

Runoff = 3.92 cfs @ 12.09 hrs, Volume= 0.301 af, Depth= 6.38"

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 100-yr Rainfall=7.81"

Area (sf)	CN	Description
* 8,616	98	Paved parking, HSG A
8,034	68	>75% Grass cover, Good, HSG A
1,324	98	Unconnected pavement, HSG A
6,653	98	Roofs, HSG A
24,627	88	Weighted Average
8,034		32.62% Pervious Area
16,593		67.38% Impervious Area
1,324		7.98% Unconnected

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

Summary for Subcatchment 33S: B.7

Runoff = 19.48 cfs @ 12.42 hrs, Volume= 2.454 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 100-yr Rainfall=7.81"

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Type III 24-hr 100-yr Rainfall=7.81"

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	Area (sf)	CN	Description
*	129,407	68	>75% Grass cover, Good, HSG A
*	97,286	79	>75% Grass cover, Good, HSG C
*	9,046	89	>75% Grass cover, Good, HSG D
*	27,194	43	Woods, Good, HSG A
*	15,779	76	Woods, Good, HSG C
*	4,399	82	Woods, Good, HSG D
	1,606	98	Unconnected pavement, HSG A
	319	98	Unconnected pavement, HSG C
	5,475	98	Roofs, HSG A
	290,511	71	Weighted Average
	283,111		97.45% Pervious Area
	7,400		2.55% Impervious Area
	1,925		26.01% Unconnected

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

Summary for Subcatchment 34S: B.8

Runoff = 2.12 cfs @ 12.09 hrs, Volume= 0.172 af, Depth= 7.21"

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 100-yr Rainfall=7.81"

	Area (sf)	CN	Description
	9,724	98	Paved parking, HSG A
*	1,396	68	>75% Grass cover, Good, HSG A
	1,364	98	Unconnected pavement, HSG A
	12,484	95	Weighted Average
	1,396		11.18% Pervious Area
	11,088		88.82% Impervious Area
	1,364		12.30% Unconnected

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

Summary for Subcatchment 35S: C.1

Runoff = 21.74 cfs @ 12.27 hrs, Volume= 2.306 af, Depth= 5.10"

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-yr Rainfall=7.81"**6842-Post**

Type III 24-hr 100-yr Rainfall=7.81"

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	Area (sf)	CN	Adj	Description
*	128,543	68		>75% Grass cover, Good, HSG A
*	69,229	89		>75% Grass cover, Good, HSG D
*	16,469	82		Woods, Good, HSG D
	14,141	98		Unconnected pavement, HSG A
	7,926	98		Roofs, HSG A
	236,308	78	77	Weighted Average, UI Adjusted
	214,241			90.66% Pervious Area
	22,067			9.34% Impervious Area
	14,141			64.08% Unconnected

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

Summary for Subcatchment 36S: C.2

Runoff = 3.77 cfs @ 12.09 hrs, Volume= 0.300 af, Depth= 6.97"

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-yr Rainfall=7.81"

	Area (sf)	CN	Description
	12,989	98	Paved parking, HSG A
*	3,687	68	>75% Grass cover, Good, HSG A
	2,989	98	Unconnected pavement, HSG A
	2,851	98	Roofs, HSG A
	22,516	93	Weighted Average
	3,687		16.38% Pervious Area
	18,829		83.62% Impervious Area
	2,989		15.87% Unconnected

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

Summary for Subcatchment 37S: C.3

Runoff = 1.96 cfs @ 12.09 hrs, Volume= 0.149 af, Depth= 6.26"

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 100-yr Rainfall=7.81"

	Area (sf)	CN	Description
	5,266	98	Paved parking, HSG A
*	4,754	68	>75% Grass cover, Good, HSG A
	509	98	Roofs, HSG A
	1,900	98	Roofs, HSG A
	12,429	87	Weighted Average
	4,754		38.25% Pervious Area
	7,675		61.75% Impervious Area

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Type III 24-hr 100-yr Rainfall=7.81"

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

Summary for Subcatchment 38S: C.4

Runoff = 0.80 cfs @ 12.09 hrs, Volume= 0.067 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
4,655	98	Paved parking, HSG A
4,655		100.00% Impervious Area

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

Summary for Subcatchment 39S: C.5

Runoff = 1.01 cfs @ 12.09 hrs, Volume= 0.085 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
4,080	98	Paved parking, HSG A
1,777	98	Unconnected pavement, HSG A
5,857	98	Weighted Average
5,857		100.00% Impervious Area
1,777		30.34% Unconnected

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

Summary for Subcatchment 40S: C.6

Runoff = 0.70 cfs @ 12.09 hrs, Volume= 0.059 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
4,047	98	Paved parking, HSG A
4,047		100.00% Impervious Area

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Type III 24-hr 100-yr Rainfall=7.81"

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

Summary for Subcatchment 41S: C.7

Runoff = 1.24 cfs @ 12.09 hrs, Volume= 0.104 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
6,072	98	Paved parking, HSG A
1,116	98	Roofs, HSG A
7,188	98	Weighted Average
7,188		100.00% Impervious Area

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

Summary for Subcatchment 42S: C.8

Runoff = 1.31 cfs @ 12.09 hrs, Volume= 0.111 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
7,639	98	Paved parking, HSG A
7,639		100.00% Impervious Area

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

Summary for Subcatchment 43S: C.9

Runoff = 1.50 cfs @ 12.09 hrs, Volume= 0.126 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
8,732	98	Paved parking, HSG A
8,732		100.00% Impervious Area

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Type III 24-hr 100-yr Rainfall=7.81"

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

Summary for Subcatchment 44S: C.10

Runoff = 0.92 cfs @ 12.09 hrs, Volume= 0.077 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
5,326	98	Paved parking, HSG A
5,326		100.00% Impervious Area

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

Summary for Subcatchment 45S: C.11

Runoff = 0.45 cfs @ 12.09 hrs, Volume= 0.038 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
1,483	98	Paved parking, HSG A
946	98	Paved parking, HSG D
126	98	Unconnected pavement, HSG A
76	98	Unconnected pavement, HSG D
2,631	98	Weighted Average
2,631		100.00% Impervious Area
202		7.68% Unconnected

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

Summary for Subcatchment 46S: C.12

Runoff = 1.02 cfs @ 12.09 hrs, Volume= 0.086 af, Depth= 7.57"

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-yr Rainfall=7.81"**6842-Post**

Type III 24-hr 100-yr Rainfall=7.81"

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Area (sf)	CN	Description
2,144	98	Paved parking, HSG A
2,121	98	Paved parking, HSG D
853	98	Unconnected pavement, HSG A
696	98	Unconnected pavement, HSG D
96	98	Roofs, HSG A
5,910	98	Weighted Average
5,910		100.00% Impervious Area
1,549		26.21% Unconnected

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

Summary for Subcatchment 47S: C.13

Runoff = 0.34 cfs @ 12.09 hrs, Volume= 0.029 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
1,832	98	Paved parking, HSG D
155	98	Unconnected pavement, HSG D
1,987	98	Weighted Average
1,987		100.00% Impervious Area
155		7.80% Unconnected

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

Summary for Subcatchment 48S: C.14

Runoff = 0.32 cfs @ 12.09 hrs, Volume= 0.027 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
1,744	98	Paved parking, HSG D
141	98	Unconnected pavement, HSG D
1,885	98	Weighted Average
1,885		100.00% Impervious Area
141		7.48% Unconnected

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Type III 24-hr 100-yr Rainfall=7.81"

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

Summary for Subcatchment 49S: C.15

Runoff = 0.60 cfs @ 12.09 hrs, Volume= 0.051 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
3,220	98	Paved parking, HSG D
267	98	Unconnected pavement, HSG D
3,487	98	Weighted Average
3,487		100.00% Impervious Area
267		7.66% Unconnected

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

Summary for Subcatchment 50S: C.16

Runoff = 0.60 cfs @ 12.09 hrs, Volume= 0.051 af, Depth= 7.57"

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-yr Rainfall=7.81"

Area (sf)	CN	Description
3,238	98	Paved parking, HSG D
270	98	Unconnected pavement, HSG D
3,508	98	Weighted Average
3,508		100.00% Impervious Area
270		7.70% Unconnected

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

Summary for Subcatchment 51S: D.1

Runoff = 23.60 cfs @ 12.29 hrs, Volume= 2.543 af, Depth= 3.30"

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 100-yr Rainfall=7.81"**6842-Post**

Type III 24-hr 100-yr Rainfall=7.81"

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Area (sf)	CN	Description
1,527	98	Unconnected pavement, HSG A
* 182,934	68	>75% Grass cover, Good, HSG A
* 518	79	>75% Grass cover, Good, HSG B
* 51,440	89	>75% Grass cover, Good, HSG D
* 160,796	43	Woods, Good, HSG A
* 5,106	65	Woods, Good, HSG B
* 450	82	Woods, Good, HSG D
402,771	61	Weighted Average
401,244		99.62% Pervious Area
1,527		0.38% Impervious Area
1,527		100.00% Unconnected

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

Summary for Subcatchment 52S: B.9

Runoff = 2.49 cfs @ 12.09 hrs, Volume= 0.197 af, Depth= 6.86"

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 100-yr Rainfall=7.81"

Area (sf)	CN	Description
10,973	98	Paved parking, HSG A
* 2,895	68	>75% Grass cover, Good, HSG A
1,150	98	Unconnected pavement, HSG A
15,018	92	Weighted Average
2,895		19.28% Pervious Area
12,123		80.72% Impervious Area
1,150		9.49% Unconnected

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

Summary for Pond 4P: Constructed Stormwater Wetland #2

Inflow Area = 2.341 ac, 79.77% Impervious, Inflow Depth = 6.08" for 100-yr event
 Inflow = 15.95 cfs @ 12.09 hrs, Volume= 1.187 af
 Outflow = 6.51 cfs @ 12.32 hrs, Volume= 1.185 af, Atten= 59%, Lag= 14.0 min
 Primary = 6.51 cfs @ 12.32 hrs, Volume= 1.185 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 215.11' @ 12.32 hrs Surf.Area= 10,116 sf Storage= 21,459 cf

Plug-Flow detention time= 256.8 min calculated for 1.185 af (100% of inflow)
 Center-of-Mass det. time= 255.9 min (1,012.1 - 756.2)

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Type III 24-hr 100-yr Rainfall=7.81"

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Volume	Invert	Avail.Storage	Storage Description		
#1	212.50'	31,125 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
212.50	6,500	322.0	0	0	6,500
214.00	8,459	362.0	11,187	11,187	8,737
216.00	11,559	453.0	19,938	31,125	14,695

Device	Routing	Invert	Outlet Devices									
#1	Primary	215.50'	20.0' long x 12.0' 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) 2.57 2.62 2.70 2.67 2.66 2.67 2.66 2.64									
#2	Device 3	214.50'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)									
#3	Primary	212.50'	15.0" Round Culvert L= 111.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 212.50' / 210.44' S= 0.0186 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf									
#4	Device 3	212.50'	4.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads									

Primary OutFlow Max=6.56 cfs @ 12.32 hrs HW=215.11' (Free Discharge)

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

3=Culvert (Inlet Controls 6.56 cfs @ 5.35 fps)

2=Sharp-Crested Rectangular Weir (Passes < 5.97 cfs potential flow)

4=Orifice/Grate (Passes < 0.66 cfs potential flow)

Summary for Pond 5P: Wet Basin

Inflow Area = 7.170 ac, 31.40% Impervious, Inflow Depth = 5.39" for 100-yr event
 Inflow = 27.65 cfs @ 12.24 hrs, Volume= 3.219 af
 Outflow = 13.77 cfs @ 12.58 hrs, Volume= 3.219 af, Atten= 50%, Lag= 20.4 min
 Primary = 13.77 cfs @ 12.58 hrs, Volume= 3.219 af

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

Peak Elev= 216.35' @ 12.58 hrs Surf.Area= 16,891 sf Storage= 30,936 cf

Plug-Flow detention time= 28.1 min calculated for 3.217 af (100% of inflow)

Center-of-Mass det. time= 28.2 min (828.4 - 800.3)

Volume	Invert	Avail.Storage	Storage Description		
#1	214.00'	103,930 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
214.00	9,189	420.0	0	0	9,189
216.00	16,216	442.0	25,075	25,075	10,927
218.00	20,207	375.0	36,350	61,425	15,359
220.00	22,316	390.0	42,506	103,930	16,550

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Device	Routing	Invert	Outlet Devices									
#1	Primary	213.43'	24.0" Round Culvert L= 580.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 213.43' / 211.63' S= 0.0031 ' /' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf									
#2	Device 1	214.00'	45.0 deg x 4.0' long Sharp-Crested Vee/Trap Weir Cv= 2.56 (C= 3.20)									
#3	Device 1	215.50'	4.2' long x 4.2' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.53 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.67 2.71 2.72 2.74 2.77 2.85 3.01 3.23									

Primary OutFlow Max=13.77 cfs @ 12.58 hrs HW=216.35' (Free Discharge)

1=Culvert (Barrel Controls 13.77 cfs @ 4.38 fps)

2=Sharp-Crested Vee/Trap Weir (Passes < 55.15 cfs potential flow)

3=Broad-Crested Rectangular Weir (Passes < 8.84 cfs potential flow)

Summary for Pond 7P: Constructed Stormwater Wetland #1

Inflow Area = 11.903 ac, 28.79% Impervious, Inflow Depth = 5.07" for 100-yr event
 Inflow = 43.15 cfs @ 12.10 hrs, Volume= 5.032 af
 Outflow = 40.47 cfs @ 12.13 hrs, Volume= 5.032 af, Atten= 6%, Lag= 1.7 min
 Primary = 40.47 cfs @ 12.13 hrs, Volume= 5.032 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 215.59' @ 12.13 hrs Surf.Area= 13,109 sf Storage= 8,934 cf

Plug-Flow detention time= 20.6 min calculated for 5.032 af (100% of inflow)

Center-of-Mass det. time= 20.2 min (830.6 - 810.4)

Volume	Invert	Avail.Storage	Storage Description		
#1	214.80'	14,759 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
214.80	9,939	766.0	0	0	9,939
215.00	10,413	771.0	2,035	2,035	10,570
216.00	15,185	1,210.0	12,724	14,759	79,782

Device	Routing	Invert	Outlet Devices									
#1	Primary	215.10'	40.0' 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									
#2	Primary	214.80'	12.0" Round Culvert X 3.00 L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 214.80' / 214.00' S= 0.0320 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf									

Primary OutFlow Max=39.94 cfs @ 12.13 hrs HW=215.58' (Free Discharge)

1=Broad-Crested Rectangular Weir (Weir Controls 35.23 cfs @ 1.82 fps)

2=Culvert (Inlet Controls 4.71 cfs @ 2.38 fps)

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Summary for Pond 12P: STONE RECHARGE TRENCH

Inflow Area = 0.409 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 3.06 cfs @ 12.09 hrs, Volume = 0.258 af
 Outflow = 3.00 cfs @ 12.08 hrs, Volume = 0.258 af, Atten = 2%, Lag = 0.0 min
 Discarded = 0.17 cfs @ 12.10 hrs, Volume = 0.188 af
 Primary = 2.83 cfs @ 12.08 hrs, Volume = 0.070 af

Routing by Stor-Ind method, Time Span = 0.00-72.00 hrs, dt = 0.05 hrs
 Peak Elev = 221.01' @ 12.10 hrs Surf.Area = 2,427 sf Storage = 1,942 cf

Plug-Flow detention time = 67.1 min calculated for 0.258 af (100% of inflow)
 Center-of-Mass det. time = 67.1 min (808.6 - 741.5)

Volume	Invert	Avail.Storage	Storage Description
#1	219.00'	1,942 cf	3.00'W x 809.00'L x 2.00'H Prismatic 4,854 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Primary	221.00'	809.0' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	219.00'	2,410 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 210.00'

Discarded OutFlow Max = 0.17 cfs @ 12.10 hrs HW = 221.01' (Free Discharge)
 ↳ **2=Exfiltration** (Controls 0.17 cfs)

Primary OutFlow Max = 1.86 cfs @ 12.08 hrs HW = 221.01' (Free Discharge)
 ↳ **1=Broad-Crested Rectangular Weir** (Weir Controls 1.86 cfs @ 0.26 fps)

Summary for Pond 17P: STONE RECHARGE TRENCH

Inflow Area = 0.409 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 3.06 cfs @ 12.09 hrs, Volume = 0.258 af
 Outflow = 3.00 cfs @ 12.08 hrs, Volume = 0.258 af, Atten = 2%, Lag = 0.0 min
 Discarded = 0.17 cfs @ 12.10 hrs, Volume = 0.188 af
 Primary = 2.83 cfs @ 12.08 hrs, Volume = 0.070 af

Routing by Stor-Ind method, Time Span = 0.00-72.00 hrs, dt = 0.05 hrs
 Peak Elev = 221.01' @ 12.10 hrs Surf.Area = 2,427 sf Storage = 1,942 cf

Plug-Flow detention time = 67.1 min calculated for 0.258 af (100% of inflow)
 Center-of-Mass det. time = 67.1 min (808.6 - 741.5)

Volume	Invert	Avail.Storage	Storage Description
#1	219.00'	1,942 cf	3.00'W x 809.00'L x 2.00'H Prismatic 4,854 cf Overall x 40.0% Voids

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Device	Routing	Invert	Outlet Devices
#1	Primary	221.00'	809.0' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	219.00'	2,410 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 210.00'

Discarded OutFlow Max = 0.17 cfs @ 12.10 hrs HW = 221.01' (Free Discharge)
 ↳ **2=Exfiltration** (Controls 0.17 cfs)

Primary OutFlow Max = 1.86 cfs @ 12.08 hrs HW = 221.01' (Free Discharge)
 ↳ **1=Broad-Crested Rectangular Weir** (Weir Controls 1.86 cfs @ 0.26 fps)

Summary for Pond 19P: STONE RECHARGE TRENCH

Inflow Area = 0.409 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 3.06 cfs @ 12.09 hrs, Volume = 0.258 af
 Outflow = 3.00 cfs @ 12.08 hrs, Volume = 0.258 af, Atten = 2%, Lag = 0.0 min
 Discarded = 0.17 cfs @ 12.10 hrs, Volume = 0.188 af
 Primary = 2.83 cfs @ 12.08 hrs, Volume = 0.070 af

Routing by Stor-Ind method, Time Span = 0.00-72.00 hrs, dt = 0.05 hrs
 Peak Elev = 221.01' @ 12.10 hrs Surf.Area = 2,427 sf Storage = 1,942 cf

Plug-Flow detention time = 67.1 min calculated for 0.258 af (100% of inflow)
 Center-of-Mass det. time = 67.1 min (808.6 - 741.5)

Volume	Invert	Avail.Storage	Storage Description
#1	219.00'	1,942 cf	3.00'W x 809.00'L x 2.00'H Prismatic 4,854 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Primary	221.00'	809.0' long x 1.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32
#2	Discarded	219.00'	2,410 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 210.00'

Discarded OutFlow Max = 0.17 cfs @ 12.10 hrs HW = 221.01' (Free Discharge)
 ↳ **2=Exfiltration** (Controls 0.17 cfs)

Primary OutFlow Max = 1.86 cfs @ 12.08 hrs HW = 221.01' (Free Discharge)
 ↳ **1=Broad-Crested Rectangular Weir** (Weir Controls 1.86 cfs @ 0.26 fps)

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Summary for Pond 21P: CB-4

Inflow Area = 0.345 ac, 80.72% Impervious, Inflow Depth = 6.86" for 100-yr event
 Inflow = 2.49 cfs @ 12.09 hrs, Volume= 0.197 af
 Outflow = 2.49 cfs @ 12.09 hrs, Volume= 0.197 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.49 cfs @ 12.09 hrs, Volume= 0.197 af

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

Peak Elev= 216.69' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.50'	12.0" Round Culvert L= 27.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.50' / 215.30' S= 0.0054 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.43 cfs @ 12.09 hrs HW=216.66' (Free Discharge)

1=Culvert (Inlet Controls 2.43 cfs @ 3.10 fps)

Summary for Pond 22P: DMH-2

Inflow Area = 1.540 ac, 81.03% Impervious, Inflow Depth = 6.90" for 100-yr event
 Inflow = 11.14 cfs @ 12.09 hrs, Volume= 0.886 af
 Outflow = 11.14 cfs @ 12.09 hrs, Volume= 0.886 af, Atten= 0%, Lag= 0.0 min
 Primary = 11.14 cfs @ 12.09 hrs, Volume= 0.886 af

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

Peak Elev= 218.79' @ 12.09 hrs

Flood Elev= 218.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.30'	18.0" Round Culvert L= 101.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.30' / 214.80' S= 0.0050 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=10.85 cfs @ 12.09 hrs HW=218.66' (Free Discharge)

1=Culvert (Inlet Controls 10.85 cfs @ 6.14 fps)

Summary for Pond 23P: CB-1

Inflow Area = 0.307 ac, 83.76% Impervious, Inflow Depth = 6.97" for 100-yr event
 Inflow = 2.24 cfs @ 12.09 hrs, Volume= 0.179 af
 Outflow = 2.24 cfs @ 12.09 hrs, Volume= 0.179 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.24 cfs @ 12.09 hrs, Volume= 0.179 af

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

Peak Elev= 216.66' @ 12.09 hrs

Flood Elev= 218.60'

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Device	Routing	Invert	Outlet Devices
#1	Primary	215.60'	12.0" Round Culvert L= 27.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.60' / 215.40' S= 0.0074 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.18 cfs @ 12.09 hrs HW=216.63' (Free Discharge)

1=Culvert (Inlet Controls 2.18 cfs @ 2.78 fps)

Summary for Pond 24P: CB-2

Inflow Area = 0.392 ac, 95.72% Impervious, Inflow Depth = 7.45" for 100-yr event
 Inflow = 2.92 cfs @ 12.09 hrs, Volume= 0.243 af
 Outflow = 2.92 cfs @ 12.09 hrs, Volume= 0.243 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.92 cfs @ 12.09 hrs, Volume= 0.243 af

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

Peak Elev= 217.65' @ 12.09 hrs

Flood Elev= 219.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.20'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.20' / 215.40' S= 0.0400 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.85 cfs @ 12.09 hrs HW=217.61' (Free Discharge)

1=Culvert (Inlet Controls 2.85 cfs @ 3.62 fps)

Summary for Pond 25P: CB-3

Inflow Area = 0.565 ac, 67.38% Impervious, Inflow Depth = 6.38" for 100-yr event
 Inflow = 3.92 cfs @ 12.09 hrs, Volume= 0.301 af
 Outflow = 3.92 cfs @ 12.09 hrs, Volume= 0.301 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.92 cfs @ 12.09 hrs, Volume= 0.301 af

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

Peak Elev= 218.72' @ 12.09 hrs

Flood Elev= 219.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.50'	12.0" Round Culvert L= 38.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.50' / 215.40' S= 0.0289 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=3.83 cfs @ 12.09 hrs HW=218.64' (Free Discharge)

1=Culvert (Inlet Controls 3.83 cfs @ 4.87 fps)

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Summary for Pond 26P: DMH-1

Inflow Area = 1.264 ac, 80.14% Impervious, Inflow Depth = 6.86" for 100-yr event
 Inflow = 9.09 cfs @ 12.09 hrs, Volume= 0.722 af
 Outflow = 9.09 cfs @ 12.09 hrs, Volume= 0.722 af, Atten= 0%, Lag= 0.0 min
 Primary = 9.09 cfs @ 12.09 hrs, Volume= 0.722 af

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

Peak Elev= 217.87' @ 12.09 hrs

Flood Elev= 218.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.30'	18.0" Round Culvert L= 56.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.30' / 214.80' S= 0.0089 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=8.85 cfs @ 12.09 hrs HW=217.79' (Free Discharge)**1=Culvert** (Inlet Controls 8.85 cfs @ 5.01 fps)**Summary for Pond 27P: DCB-22**

Inflow Area = 0.515 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 3.85 cfs @ 12.09 hrs, Volume= 0.325 af
 Outflow = 3.85 cfs @ 12.09 hrs, Volume= 0.325 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.85 cfs @ 12.09 hrs, Volume= 0.325 af

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

Peak Elev= 217.66' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.50'	12.0" Round Culvert L= 50.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.50' / 215.20' S= 0.0060 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=3.75 cfs @ 12.09 hrs HW=217.58' (Free Discharge)**1=Culvert** (Inlet Controls 3.75 cfs @ 4.78 fps)**Summary for Pond 28P: DMH-16**

Inflow Area = 0.515 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 3.85 cfs @ 12.09 hrs, Volume= 0.325 af
 Outflow = 3.85 cfs @ 12.09 hrs, Volume= 0.325 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.85 cfs @ 12.09 hrs, Volume= 0.325 af

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

Peak Elev= 217.88' @ 12.09 hrs

Flood Elev= 218.70'

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Device	Routing	Invert	Outlet Devices
#1	Primary	215.10'	12.0" Round Culvert L= 160.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.10' / 214.30' S= 0.0050 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=3.75 cfs @ 12.09 hrs HW=217.75' (Free Discharge)**1=Culvert** (Barrel Controls 3.75 cfs @ 4.78 fps)**Summary for Pond 29P: CB-21**

Inflow Area = 0.123 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 0.92 cfs @ 12.09 hrs, Volume= 0.077 af
 Outflow = 0.92 cfs @ 12.09 hrs, Volume= 0.077 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.92 cfs @ 12.09 hrs, Volume= 0.077 af

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

Peak Elev= 216.76' @ 12.09 hrs

Flood Elev= 219.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.20'	12.0" Round Culvert L= 26.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.20' / 215.70' S= 0.0192 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.89 cfs @ 12.09 hrs HW=216.75' (Free Discharge)**1=Culvert** (Inlet Controls 0.89 cfs @ 2.00 fps)**Summary for Pond 30P: DMH-15**

Inflow Area = 0.637 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 4.77 cfs @ 12.09 hrs, Volume= 0.402 af
 Outflow = 4.77 cfs @ 12.09 hrs, Volume= 0.402 af, Atten= 0%, Lag= 0.0 min
 Primary = 4.77 cfs @ 12.09 hrs, Volume= 0.402 af

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

Peak Elev= 215.94' @ 12.09 hrs

Flood Elev= 219.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	214.20'	15.0" Round Culvert L= 250.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 214.20' / 212.90' S= 0.0052 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=4.65 cfs @ 12.09 hrs HW=215.87' (Free Discharge)**1=Culvert** (Barrel Controls 4.65 cfs @ 3.79 fps)

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Summary for Pond 31P: DMH-14

Inflow Area = 1.468 ac, 97.47% Impervious, Inflow Depth = 7.48" for 100-yr event
 Inflow = 10.95 cfs @ 12.09 hrs, Volume= 0.915 af
 Outflow = 10.95 cfs @ 12.09 hrs, Volume= 0.915 af, Atten= 0%, Lag= 0.0 min
 Primary = 10.95 cfs @ 12.09 hrs, Volume= 0.915 af

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

Peak Elev= 216.20' @ 12.09 hrs

Flood Elev= 218.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	212.80'	18.0" Round Culvert L= 61.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 212.80' / 212.50' S= 0.0049 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=10.66 cfs @ 12.09 hrs HW=216.07' (Free Discharge)

1=Culvert (Inlet Controls 10.66 cfs @ 6.03 fps)

Summary for Pond 32P: CB-20

Inflow Area = 0.318 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 2.38 cfs @ 12.09 hrs, Volume= 0.201 af
 Outflow = 2.38 cfs @ 12.09 hrs, Volume= 0.201 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.38 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= 216.63' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.50'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.50' / 215.30' S= 0.0167 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.32 cfs @ 12.09 hrs HW=216.60' (Free Discharge)

1=Culvert (Inlet Controls 2.32 cfs @ 2.95 fps)

Summary for Pond 33P: DMH-17

Inflow Area = 0.513 ac, 92.75% Impervious, Inflow Depth = 7.30" for 100-yr event
 Inflow = 3.80 cfs @ 12.09 hrs, Volume= 0.312 af
 Outflow = 3.80 cfs @ 12.09 hrs, Volume= 0.312 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.80 cfs @ 12.09 hrs, Volume= 0.312 af

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

Peak Elev= 218.43' @ 12.09 hrs

Flood Elev= 218.80'

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Device	Routing	Invert	Outlet Devices
#1	Primary	215.60'	12.0" Round Culvert L= 180.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.60' / 214.70' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=3.70 cfs @ 12.09 hrs HW=218.30' (Free Discharge)

1=Culvert (Barrel Controls 3.70 cfs @ 4.71 fps)

Summary for Pond 34P: CB-23

Inflow Area = 0.288 ac, 87.12% Impervious, Inflow Depth = 7.09" for 100-yr event
 Inflow = 2.12 cfs @ 12.09 hrs, Volume= 0.171 af
 Outflow = 2.12 cfs @ 12.09 hrs, Volume= 0.171 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.12 cfs @ 12.09 hrs, Volume= 0.171 af

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

Peak Elev= 216.90' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.90'	12.0" Round Culvert L= 28.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.90' / 215.70' S= 0.0071 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.07 cfs @ 12.09 hrs HW=216.88' (Free Discharge)

1=Culvert (Barrel Controls 2.07 cfs @ 3.33 fps)

Summary for Pond 35P: CB-24

Inflow Area = 0.224 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 1.68 cfs @ 12.09 hrs, Volume= 0.141 af
 Outflow = 1.68 cfs @ 12.09 hrs, Volume= 0.141 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.68 cfs @ 12.09 hrs, Volume= 0.141 af

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

Peak Elev= 216.73' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.90'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.90' / 215.70' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.63 cfs @ 12.09 hrs HW=216.71' (Free Discharge)

1=Culvert (Barrel Controls 1.63 cfs @ 3.26 fps)

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Summary for Pond 36P: DMH-7

Inflow Area = 0.323 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 2.42 cfs @ 12.09 hrs, Volume= 0.204 af
 Outflow = 2.42 cfs @ 12.09 hrs, Volume= 0.204 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.42 cfs @ 12.09 hrs, Volume= 0.204 af

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

Peak Elev= 217.15' @ 12.09 hrs

Flood Elev= 219.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.00'	12.0" Round Culvert L= 220.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.00' / 214.80' S= 0.0055 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.35 cfs @ 12.09 hrs HW=217.12' (Free Discharge)

1=Culvert (Inlet Controls 2.35 cfs @ 2.99 fps)

Summary for Pond 37P: DMH-10

Inflow Area = 0.446 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 3.34 cfs @ 12.09 hrs, Volume= 0.281 af
 Outflow = 3.34 cfs @ 12.09 hrs, Volume= 0.281 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.34 cfs @ 12.09 hrs, Volume= 0.281 af

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

Peak Elev= 219.23' @ 12.09 hrs

Flood Elev= 222.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	218.10'	15.0" Round Culvert L= 122.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 218.10' / 214.50' S= 0.0295 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=3.25 cfs @ 12.09 hrs HW=219.21' (Free Discharge)

1=Culvert (Inlet Controls 3.25 cfs @ 2.83 fps)

Summary for Pond 38P: CB-15

Inflow Area = 0.043 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr 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= 232.52' @ 12.09 hrs

Flood Elev= 236.20'

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Device	Routing	Invert	Outlet Devices
#1	Primary	232.20'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 232.20' / 231.70' S= 0.0333 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.31 cfs @ 12.09 hrs HW=232.51' (Free Discharge)

1=Culvert (Inlet Controls 0.31 cfs @ 1.50 fps)

Summary for Pond 39P: CB-16

Inflow Area = 0.046 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 0.34 cfs @ 12.09 hrs, Volume= 0.029 af
 Outflow = 0.34 cfs @ 12.09 hrs, Volume= 0.029 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.34 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= 232.53' @ 12.09 hrs

Flood Elev= 236.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	232.20'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 232.20' / 231.70' S= 0.0333 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.33 cfs @ 12.09 hrs HW=232.52' (Free Discharge)

1=Culvert (Inlet Controls 0.33 cfs @ 1.52 fps)

Summary for Pond 52P: CB-17

Inflow Area = 0.081 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 0.60 cfs @ 12.09 hrs, Volume= 0.051 af
 Outflow = 0.60 cfs @ 12.09 hrs, Volume= 0.051 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.60 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= 247.84' @ 12.09 hrs

Flood Elev= 251.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	247.40'	12.0" Round Culvert L= 18.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 247.40' / 246.50' S= 0.0500 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.59 cfs @ 12.09 hrs HW=247.84' (Free Discharge)

1=Culvert (Inlet Controls 0.59 cfs @ 1.78 fps)

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Summary for Pond 53P: CB-18

Inflow Area = 0.080 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 0.60 cfs @ 12.09 hrs, Volume= 0.051 af
 Outflow = 0.60 cfs @ 12.09 hrs, Volume= 0.051 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.60 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= 247.84' @ 12.09 hrs

Flood Elev= 251.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	247.40'	12.0" Round Culvert L= 18.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 247.40' / 246.50' S= 0.0500 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.58 cfs @ 12.09 hrs HW=247.84' (Free Discharge)

1=Culvert (Inlet Controls 0.58 cfs @ 1.77 fps)

Summary for Pond 54P: DMH-13

Inflow Area = 0.161 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 1.20 cfs @ 12.09 hrs, Volume= 0.101 af
 Outflow = 1.20 cfs @ 12.09 hrs, Volume= 0.101 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.20 cfs @ 12.09 hrs, Volume= 0.101 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= 250.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	246.40'	12.0" Round Culvert L= 85.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 246.40' / 240.00' S= 0.0753 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.17 cfs @ 12.09 hrs HW=247.05' (Free Discharge)

1=Culvert (Inlet Controls 1.17 cfs @ 2.17 fps)

Summary for Pond 56P: DMH-12

Inflow Area = 0.161 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 1.20 cfs @ 12.09 hrs, Volume= 0.101 af
 Outflow = 1.20 cfs @ 12.09 hrs, Volume= 0.101 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.20 cfs @ 12.09 hrs, Volume= 0.101 af

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

Peak Elev= 240.56' @ 12.09 hrs

Flood Elev= 244.00'

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Device	Routing	Invert	Outlet Devices
#1	Primary	239.90'	12.0" Round Culvert L= 110.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 239.90' / 231.70' S= 0.0745 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.17 cfs @ 12.09 hrs HW=240.55' (Free Discharge)

1=Culvert (Inlet Controls 1.17 cfs @ 2.17 fps)

Summary for Pond 58P: CB-13

Inflow Area = 0.060 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 0.45 cfs @ 12.09 hrs, Volume= 0.038 af
 Outflow = 0.45 cfs @ 12.09 hrs, Volume= 0.038 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.45 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= 219.28' @ 12.09 hrs

Flood Elev= 221.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	218.90'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 218.90' / 218.20' S= 0.0467 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.44 cfs @ 12.09 hrs HW=219.27' (Free Discharge)

1=Culvert (Inlet Controls 0.44 cfs @ 1.64 fps)

Summary for Pond 61P: DMH-11

Inflow Area = 0.249 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 1.87 cfs @ 12.09 hrs, Volume= 0.157 af
 Outflow = 1.87 cfs @ 12.09 hrs, Volume= 0.157 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.87 cfs @ 12.09 hrs, Volume= 0.157 af

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

Peak Elev= 232.49' @ 12.09 hrs

Flood Elev= 235.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	231.60'	12.0" Round Culvert L= 198.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 231.60' / 218.20' S= 0.0677 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.82 cfs @ 12.09 hrs HW=232.47' (Free Discharge)

1=Culvert (Inlet Controls 1.82 cfs @ 2.51 fps)

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Summary for Pond 62P: CB-14

Inflow Area = 0.136 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 1.02 cfs @ 12.09 hrs, Volume= 0.086 af
 Outflow = 1.02 cfs @ 12.09 hrs, Volume= 0.086 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.02 cfs @ 12.09 hrs, Volume= 0.086 af

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

Peak Elev= 219.50' @ 12.09 hrs

Flood Elev= 221.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	218.90'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 218.90' / 218.20' S= 0.0467 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.99 cfs @ 12.09 hrs HW=219.49' (Free Discharge)

1=Culvert (Inlet Controls 0.99 cfs @ 2.06 fps)

Summary for Pond 63P: DMH-4

Inflow Area = 1.336 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 10.00 cfs @ 12.09 hrs, Volume= 0.843 af
 Outflow = 10.00 cfs @ 12.09 hrs, Volume= 0.843 af, Atten= 0%, Lag= 0.0 min
 Primary = 10.00 cfs @ 12.09 hrs, Volume= 0.843 af

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

Peak Elev= 216.04' @ 12.09 hrs

Flood Elev= 222.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	214.10'	24.0" Round Culvert L= 35.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 214.10' / 214.00' S= 0.0029 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=9.73 cfs @ 12.09 hrs HW=216.00' (Free Discharge)

1=Culvert (Barrel Controls 9.73 cfs @ 4.06 fps)

Summary for Pond 66P: CB-6

Inflow Area = 0.134 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 1.01 cfs @ 12.09 hrs, Volume= 0.085 af
 Outflow = 1.01 cfs @ 12.09 hrs, Volume= 0.085 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.01 cfs @ 12.09 hrs, Volume= 0.085 af

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

Peak Elev= 216.59' @ 12.09 hrs

Flood Elev= 219.00'

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Device	Routing	Invert	Outlet Devices
#1	Primary	216.00'	12.0" Round Culvert L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.00' / 215.50' S= 0.0208 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.98 cfs @ 12.09 hrs HW=216.58' (Free Discharge)

1=Culvert (Inlet Controls 0.98 cfs @ 2.05 fps)

Summary for Pond 67P: CB-7

Inflow Area = 0.093 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 0.70 cfs @ 12.09 hrs, Volume= 0.059 af
 Outflow = 0.70 cfs @ 12.09 hrs, Volume= 0.059 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.70 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= 216.48' @ 12.09 hrs

Flood Elev= 219.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.00'	12.0" Round Culvert L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.00' / 215.50' S= 0.0208 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.68 cfs @ 12.09 hrs HW=216.47' (Free Discharge)

1=Culvert (Inlet Controls 0.68 cfs @ 1.85 fps)

Summary for Pond 68P: DMH-9

Inflow Area = 0.909 ac, 78.68% Impervious, Inflow Depth = 6.82" for 100-yr event
 Inflow = 6.53 cfs @ 12.09 hrs, Volume= 0.517 af
 Outflow = 6.53 cfs @ 12.09 hrs, Volume= 0.517 af, Atten= 0%, Lag= 0.0 min
 Primary = 6.53 cfs @ 12.09 hrs, Volume= 0.517 af

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

Peak Elev= 218.68' @ 12.09 hrs

Flood Elev= 219.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.10'	15.0" Round Culvert L= 79.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.10' / 215.40' S= 0.0089 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=6.36 cfs @ 12.09 hrs HW=218.58' (Free Discharge)

1=Culvert (Inlet Controls 6.36 cfs @ 5.18 fps)

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Summary for Pond 69P: CB-11

Inflow Area = 0.107 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 0.80 cfs @ 12.09 hrs, Volume= 0.067 af
 Outflow = 0.80 cfs @ 12.09 hrs, Volume= 0.067 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.80 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= 216.86' @ 12.09 hrs

Flood Elev= 219.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.30'	12.0" Round Culvert L= 14.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.30' / 216.20' S= 0.0071 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.78 cfs @ 12.09 hrs HW=216.85' (Free Discharge)**1=Culvert** (Barrel Controls 0.78 cfs @ 2.52 fps)**Summary for Pond 70P: CB-12**

Inflow Area = 0.802 ac, 75.84% Impervious, Inflow Depth = 6.72" for 100-yr event
 Inflow = 5.73 cfs @ 12.09 hrs, Volume= 0.449 af
 Outflow = 5.73 cfs @ 12.09 hrs, Volume= 0.449 af, Atten= 0%, Lag= 0.0 min
 Primary = 5.73 cfs @ 12.09 hrs, Volume= 0.449 af

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

Peak Elev= 218.43' @ 12.09 hrs

Flood Elev= 219.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.30'	15.0" Round Culvert L= 14.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.30' / 216.20' S= 0.0071 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=5.58 cfs @ 12.09 hrs HW=218.36' (Free Discharge)**1=Culvert** (Inlet Controls 5.58 cfs @ 4.55 fps)**Summary for Pond 71P: CB-8**

Inflow Area = 0.175 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 1.31 cfs @ 12.09 hrs, Volume= 0.111 af
 Outflow = 1.31 cfs @ 12.09 hrs, Volume= 0.111 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.31 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= 216.24' @ 12.09 hrs

Flood Elev= 218.50'

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Device	Routing	Invert	Outlet Devices
#1	Primary	215.50'	12.0" Round Culvert L= 32.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.50' / 215.30' S= 0.0062 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.28 cfs @ 12.09 hrs HW=216.22' (Free Discharge)**1=Culvert** (Barrel Controls 1.28 cfs @ 2.94 fps)**Summary for Pond 72P: CB-9**

Inflow Area = 0.165 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 1.24 cfs @ 12.09 hrs, Volume= 0.104 af
 Outflow = 1.24 cfs @ 12.09 hrs, Volume= 0.104 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.24 cfs @ 12.09 hrs, Volume= 0.104 af

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

Peak Elev= 216.22' @ 12.09 hrs

Flood Elev= 218.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.50'	12.0" Round Culvert L= 37.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.50' / 215.30' S= 0.0054 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.20 cfs @ 12.09 hrs HW=216.21' (Free Discharge)**1=Culvert** (Barrel Controls 1.20 cfs @ 2.84 fps)**Summary for Pond 73P: DMH-6**

Inflow Area = 0.340 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 2.55 cfs @ 12.09 hrs, Volume= 0.215 af
 Outflow = 2.55 cfs @ 12.09 hrs, Volume= 0.215 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.55 cfs @ 12.09 hrs, Volume= 0.215 af

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

Peak Elev= 216.43' @ 12.09 hrs

Flood Elev= 219.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.20'	12.0" Round Culvert L= 52.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.20' / 214.80' S= 0.0077 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.48 cfs @ 12.09 hrs HW=216.39' (Free Discharge)**1=Culvert** (Inlet Controls 2.48 cfs @ 3.16 fps)

6842-Post

Type III 24-hr 100-yr Rainfall=7.81"

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Summary for Pond 78P: CB-19

Inflow Area = 0.122 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 0.92 cfs @ 12.09 hrs, Volume= 0.077 af
 Outflow = 0.92 cfs @ 12.09 hrs, Volume= 0.077 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.92 cfs @ 12.09 hrs, Volume= 0.077 af

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

Peak Elev= 216.97' @ 12.09 hrs

Flood Elev= 219.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.40'	12.0" Round Culvert L= 45.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.40' / 216.10' S= 0.0067 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.89 cfs @ 12.09 hrs HW=216.96' (Free Discharge)**1=Culvert** (Barrel Controls 0.89 cfs @ 2.83 fps)**Summary for Pond 79P: CB-10**

Inflow Area = 0.200 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 1.50 cfs @ 12.09 hrs, Volume= 0.126 af
 Outflow = 1.50 cfs @ 12.09 hrs, Volume= 0.126 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.50 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= 217.16' @ 12.09 hrs

Flood Elev= 219.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.40'	12.0" Round Culvert L= 17.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.40' / 216.10' S= 0.0176 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=1.46 cfs @ 12.09 hrs HW=217.15' (Free Discharge)**1=Culvert** (Inlet Controls 1.46 cfs @ 2.32 fps)**Summary for Pond 80P: DMH-5**

Inflow Area = 0.663 ac, 100.00% Impervious, Inflow Depth = 7.57" for 100-yr event
 Inflow = 4.96 cfs @ 12.09 hrs, Volume= 0.418 af
 Outflow = 4.96 cfs @ 12.09 hrs, Volume= 0.418 af, Atten= 0%, Lag= 0.0 min
 Primary = 4.96 cfs @ 12.09 hrs, Volume= 0.418 af

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

Peak Elev= 216.45' @ 12.09 hrs

Flood Elev= 220.00'

6842-Post

Type III 24-hr 100-yr Rainfall=7.81"

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Device	Routing	Invert	Outlet Devices
#1	Primary	214.70'	15.0" Round Culvert L= 67.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 214.70' / 214.20' S= 0.0075 ' /' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=4.83 cfs @ 12.09 hrs HW=216.40' (Free Discharge)**1=Culvert** (Inlet Controls 4.83 cfs @ 3.94 fps)**Summary for Pond 81P: CB-5**

Inflow Area = 0.287 ac, 88.82% Impervious, Inflow Depth = 7.21" for 100-yr event
 Inflow = 2.12 cfs @ 12.09 hrs, Volume= 0.172 af
 Outflow = 2.12 cfs @ 12.09 hrs, Volume= 0.172 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.12 cfs @ 12.09 hrs, Volume= 0.172 af

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

Peak Elev= 217.01' @ 12.09 hrs

Flood Elev= 219.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	216.00'	12.0" Round Culvert L= 31.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 216.00' / 215.80' S= 0.0065 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.06 cfs @ 12.09 hrs HW=216.99' (Free Discharge)**1=Culvert** (Barrel Controls 2.06 cfs @ 3.29 fps)**Summary for Pond 82P: DMH-3**

Inflow Area = 0.287 ac, 88.82% Impervious, Inflow Depth = 7.21" for 100-yr event
 Inflow = 2.12 cfs @ 12.09 hrs, Volume= 0.172 af
 Outflow = 2.12 cfs @ 12.09 hrs, Volume= 0.172 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.12 cfs @ 12.09 hrs, Volume= 0.172 af

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

Peak Elev= 216.70' @ 12.09 hrs

Flood Elev= 218.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	215.70'	12.0" Round Culvert L= 70.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 215.70' / 215.30' S= 0.0057 ' /' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.07 cfs @ 12.09 hrs HW=216.68' (Free Discharge)**1=Culvert** (Inlet Controls 2.07 cfs @ 2.65 fps)

6842-Post*Type III 24-hr 100-yr Rainfall=7.81"*

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Summary for Link 20L: DP-A

Inflow Area = 30.660 ac, 24.72% Impervious, Inflow Depth = 4.69" for 100-yr event
Inflow = 76.09 cfs @ 12.27 hrs, Volume= 11.979 af
Primary = 76.09 cfs @ 12.27 hrs, Volume= 11.979 af, Atten= 0%, Lag= 0.0 min

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

Appendix F – Stormwater Calculations

Recharge/WQV Calcs

Stormwater Recharge Calculations

Recharge volume required, Rv = 0 C.ft

The recharge volume standard is being met in virtue of the fact that impervious areas are being reduced on site.

¹ Imp. area captured by Apt. roofs, Ap = 1.23 Ac

¹ Total Recharge Volume Provided = 24,568.0 C.ft

NOTES:

¹ = Sum of Recharge Vol. Provided from apartment building roofs.

Water Quality Calculation:

REFERENCES

$V_{WQ} = D_{WQ}(ft) \times A_T(ft^2)$

Water Quality Depth = 1 in
Water Quality Depth , Dwq = 0.08 ft.
Total impervious area on site, AT = 7.580 Ac.
AT = 330,185 ft²
Required Water Quality Volume, Vwq = 27,515 C.ft.

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

FES-2 & FES-3 Sediment Forebay Sizing Calculations

Stormwater Recharge Calculations

CALCULATIONS

Recharge Volume, Rv:

$R_v = A_c \times F$

Hydrologic Soil Group	Impervious Area (Ac) ¹	Target Depth (F)	Recharge Volume (Rv) Ac-feet
A	1.756	0.6	0.088
C	0.007	0.25	0.000
Total	1.763		0.088

REFERENCES

Table 2.3.2: Recharge Target Depth by Hydrologic Soil Group

NRCS Hydrologic Soil Group	Approx. Soil Texture	Target Depth Factor (F)
A	sand	0.6 inch
B	loam	0.35 inch
C	silty loam	0.25 inch
D	clay	0.1 inch

Required Sediment Forebay vol, Fv:

$F_v = A_c (cu. ft) \times 0.1 inch$ of impervious area

¹ Imp. area captured by ponds, Ap = 1.763 Ac
Required Sediment Forebay vol, Fv= 640 C.ft

Sediment Forebay Volume Provided = 920.0 C.ft

FES-4 Sediment Forebay Sizing Calculations

Stormwater Recharge Calculations

CALCULATIONS

Recharge Volume, Rv:

$R_v = A_c \times F$

Hydrologic Soil Group	Impervious Area (Ac) ¹	Target Depth (F)	Recharge Volume (Rv) Ac-feet
A	1.248	0.6	0.062
Total	1.248		0.062

REFERENCES

Table 2.3.2: Recharge Target Depth by Hydrologic Soil Group

NRCS Hydrologic Soil Group	Approx. Soil Texture	Target Depth Factor (F)
A	sand	0.6 inch
B	loam	0.35 inch
C	silty loam	0.25 inch
D	clay	0.1 inch

Required Sediment Forebay vol, Fv:

$F_v = A_c (cu. ft) \times 0.1 inch$ of impervious area

¹ Imp. area captured by ponds, Ap = 1.248 Ac

Required Sediment Forebay vol, Fv= 453 C.ft

Sediment Forebay Volume Provided = 472.0 C.ft

FES-5 Sediment Forebay Sizing Calculations

Stormwater Recharge Calculations

CALCULATIONS

Recharge Volume, Rv:

$R_v = A_c \times F$

Hydrologic Soil Group	Impervious Area (Ac) ¹	Target Depth (F)	Recharge Volume (Rv) Ac-feet
A	0.998	0.6	0.050
D	0.338	0.1	0.003
Total	1.336		0.053

REFERENCES

Table 2.3.2: Recharge Target Depth by Hydrologic Soil Group

NRCS Hydrologic Soil Group	Approx. Soil Texture	Target Depth Factor (F)
A	sand	0.6 inch
B	loam	0.35 inch
C	silty loam	0.25 inch
D	clay	0.1 inch

Required Sediment Forebay vol, Fv:

$F_v = A_c (cu. ft) \times 0.1 inch$ of impervious area

¹ Imp. area captured by ponds, Ap = 1.336 Ac

Required Sediment Forebay vol, Fv= 485 C.ft

Sediment Forebay Volume Provided = 3,743.0 C.ft

FES-6 Sediment Forebay Sizing Calculations

Stormwater Recharge Calculations

CALCULATIONS

Recharge Volume, Rv:

$R_v = A_c \times F$

Hydrologic Soil Group	Impervious Area (Ac) ¹	Target Depth (F)	Recharge Volume (Rv) Ac-feet
A	1.431	0.6	0.072
Total	1.431		0.072

REFERENCES

Table 2.3.2: Recharge Target Depth by Hydrologic Soil Group

NRCS Hydrologic Soil Group	Approx. Soil Texture	Target Depth Factor (F)
A	sand	0.6 inch
B	loam	0.35 inch
C	silty loam	0.25 inch
D	clay	0.1 inch

Required Sediment Forebay vol, Fv:

$F_v = A_c (cu. ft) \times 0.1 inch$ of impervious area

¹ Imp. area captured by ponds, Ap = 1.431 Ac

Required Sediment Forebay vol, Fv= 519 C.ft

Sediment Forebay Volume Provided = 684.0 C.ft

INSTRUCTIONS:

Version 1, Automated: Mar. 4, 2008

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

B BMP ¹	C TSS Removal Rate ¹	D Starting TSS Load*	E Amount Removed (C*D)	F Remaining 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: 500 Main Street
Prepared By: RPV
Date: 1-Feb-23

*Equals remaining load from previous BMP (E)
which enters the BMP

INSTRUCTIONS:

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.

Version 1, Automated: Mar. 4, 2008

Location: TSS removal with pretreatment calculation.

**TSS Removal
Calculation
Worksheet**

B BMP ¹	C TSS Removal Rate ¹	D Starting TSS Load*	E Amount Removed (C*D)	F Remaining Load (D-E)
Grass Channel	0.50	1.00	0.50	0.50
Sediment Forebay	0.25	0.50	0.13	0.38
	0.00	0.38	0.00	0.38
	0.00	0.38	0.00	0.38
	0.00	0.38	0.00	0.38

Total TSS Removal =

63%

Separate form needs to be
Completed for Each Outlet or
BMP Train

Project: 500 Main Street
Prepared By: RPV
Date: 1-Feb-23

*Equals remaining load from previous BMP (E)
which enters the BMP

INSTRUCTIONS:

Version 1, Automated: Mar. 4, 2008

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

B BMP ¹	C TSS Removal Rate ¹	D Starting TSS Load*	E Amount Removed (C*D)	F Remaining Load (D-E)
Deep Sump and Hooded Catch Basin	0.25	1.00	0.25	0.75
Wet 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: 500 Main Street
Prepared By: RPV
Date: 1-Feb-23

*Equals remaining load from previous BMP (E)
which enters the BMP

INSTRUCTIONS:

Version 1, Automated: Mar. 4, 2008

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**

B BMP ¹	C TSS Removal Rate ¹	D Starting TSS Load*	E Amount Removed (C*D)	F Remaining Load (D-E)
Deep Sump and Hooded Catch Basin	0.25	1.00	0.25	0.75
Constructed Stormwater Wetland	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: 500 Main Street
Prepared By: RPV
Date: 16-Jun-23

*Equals remaining load from previous BMP (E)
which enters the BMP

ENGINEERING
02/09/2023
#6842

LAND SURVEYING

WETLAND CONSULTING

Groton Farms
500 Main Street
Groton, MA

Sediment Loading Calculations

The following pretreatment structure below for the proposed development receives the largest amount of tributary runoff on site to be sanded. This structure was used to analyze the capacity of the four-foot sump within the structure. This area is the sum of all paved areas that will be routed through the pre-treatment device prior to entering the stormwater management areas. The volume of sediment accumulated is based on a sand density of 90 pounds per cubic foot and assumes a frequency of 10 sandings per year. The calculation used is as follows:

$$\text{Annual Sediment Accumulated} = (\text{Area to be sanded in acres}) \times 500 \frac{\text{lbs}}{\text{acre} - \text{storm}} \times \frac{10 \text{ storms}}{90 \frac{\text{lbs}}{\text{ft}^3}}$$

Structure	Area to be Sanded (Acres)	Annual Sediment Accumulated (ft ³)
DCB-12	0.487	27.05

A four-foot sump in these structures equates to a storage area of approximately 50 cubic feet. As such, the accumulated sediment will not cause any clogging to the outlet culverts.

Ryan Vickers, E.I.T.
Civil EngineerGregory S. Roy, P.E.
Principal

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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.

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Appendix H - Operation and Maintenance Plan

STORMWATER OPERATION & MAINTENANCE MANUAL

FOR

**GROTON FARMS
500 MAIN STREET**

IN

**GROTON,
MASSACHUSETTS**

PREPARED BY: DILLIS & ROY
CIVIL DESIGN GROUP, INC.
1 Main Street, Suite 1
Lunenburg, MA 01462

PREPARED FOR: 500 MG LLC
6 LYBERTY WAY
WESTFORD, MA 01886

REVISED: JUNE 16TH, 2023
FEBRUARY 9TH, 2023

CDG PROJECT #6842

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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

Appendix A – Stormwater Management System Owners/Operators

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, stormwater wetlands, & a wet basin. Three proposed apartment buildings will utilize a drip line recharge trench along the building's perimeter.

Constructed Stormwater Wetlands with Sediment Forebay

Two constructed stormwater wetlands with sediment forebays will treat the runoff. Constructed stormwater wetlands are stormwater wetland systems that maximize the removal of pollutants from stormwater runoff through wetland vegetation uptake, retention and settling. Constructed stormwater wetlands temporarily store runoff in shallow pools that support conditions suitable for the growth of wetland plants. 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 stormwater wetlands or wet basin. These catch basins will discharge to manholes and conventional storm drains.

Drip Line Recharge Trenches

Drip line recharge trenches are proposed along the foundations of each dwelling to collect and mitigate any stormwater runoff associated with the proposed roofs. The recharge trenches will consist of ¾" trap stone laid on filter fabric to prevent sediment buildup. The recharge trenches have been designed to accommodate the runoff volume associated with the 100-year storm.

Wet Basin

The proposed reconstructed wet basin utilizes a permanent pool of water as the primary mechanism to treat stormwater runoff. The pool allows sediments to settle (including fine sediments) and removes soluble pollutants. The wet basin has been designed to provide additional dry storage capacity to control peak discharge rates. The wet basin allows incoming stormwater to displace the water present in the pool. This stormwater remains until displaced by runoff from

another storm event. Increased retention time allows particulates, including fine sediments, to settle out of the water column. The permanent pool also serves to protect deposited sediments from resuspending during large storm events. A sediment forebay was designed at the entrance of the basin to decrease the velocity of flow and increase the settlement of heavy solids prior to entering the basin. Riprap will also be installed at the inlet of the sediment forebays and the outlet of the basin to control the overflow of stormwater into the adjacent wetlands and will reduce the potential for scouring.

Grassed Swales

The grassed channels have been designed with a relatively flat (2.0%) slope to reduced runoff velocity and increase hydraulic residency time to promote particulate settling. The grassed channel has been provided with a sediment forebay for stormwater pretreatment. The grass swales will receive runoff from the proposed roofs along the townhomes & sheet flow from the entrance road. The entrance road has been designed with a 2% cross-slope to pitch towards a grassed swale system to convey the runoff to Constructed Stormwater Wetland #1's sediment forebay for additional treatment.

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.

1.2.1 Street Sweeping

Street sweeping should be performed at least annually. 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.

1.2.2 Constructed Stormwater Wetlands

Unlike conventional wet basin systems that require large-scale sediment removal at infrequent intervals, constructed stormwater wetlands require small-scale maintenance at regular intervals to evaluate the health and composition of the plant species.

Proponents must carefully observe the constructed stormwater wetland system over time. In the first three years after construction, inspect the constructed stormwater wetlands twice a year during both the growing and non-growing seasons. This requirement must be included in the Operation

& Maintenance plan. During these inspections, record and map the following information:

- The types and distribution of the dominant wetland plants in the marsh;
- The presence and distribution of planted wetland species;
- The presence and distribution of invasive wetland species (invasives must be removed);
- Indications that other species are replacing the planted wetland species;
- Percentage of standing water that is unvegetated (excluding the deep water cells which are not suitable for emergent plant growth);
- The maximum elevation and the vegetative condition in this zone, if the design elevation of the normal pool is being maintained for wetlands with extended zones;
- Stability of the original depth zones and the micro-topographic features; and
- Accumulation of sediment in the forebay and micropool; and survival rate of plants (cells with dead plants must be replanted).

1.2.3 Sediment Forebay

A sediment forebay is required as a pretreatment device prior to discharging stormwater to the constructed wetlands & wet basin. The sediment forebay 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 re-sodding. Grass should be maintained at a height of 4-6 inches.

1.2.4 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 checked 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.

1.2.5 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.

1.2.6 Drip Line Recharge Trenches

Perform preventive maintenance at least twice a year. Inspect and clean pretreatment BMPs every six months and after every major storm event (2-year return frequency). Remove accumulated sediment, trash, debris, leaves, and grass clippings from mowing. Remove tree seedlings, before they become firmly established. Inspect the infiltration trench after the first several rainfall events, after all major storms, and on regularly scheduled dates twice a year. If the top of the trench is grassed, it must be mowed on a seasonal basis. Grass height must be maintained to be no more than four inches. Routinely remove grass clippings leaves and accumulated sediment from the surface of the trench. Inspect the trench 24 hours or several days after a rain event, to look for ponded water. If there is ponded water at the surface of the trench, it is likely that the trench surface is clogged. To address surface clogging, remove and replace the topsoil or first layer of stone aggregate and the filter fabric. If water is ponded inside the trench, it may indicate that the bottom of the trench has failed. To rehabilitate a failed trench, all accumulated sediment must be stripped from the bottom, the bottom of the trench must be scarified and tilled to induce infiltration, and all the stone aggregate and filter fabric or media must be removed and replaced.

1.2.7 Wet Basin

Inspect the wet basin at least once per year to ensure it is operating as designed. Inspect the outlet structure for evidence of clogging or excessive outflow releases. Potential problems to check include: subsidence, erosion, cracking or tree growth on the embankment, damage to the emergency spillway, sediment accumulation around the outlet, inadequacy of the inlet/outlet channel erosion control measures, changes in the condition of the pilot channel, erosion within the basin and banks, and the emergence of invasive species. Make any necessary repairs immediately. During inspections, note any changes to the wet basin or the contributing watershed area because these may affect basin performance. At least twice a year, mow the upper-stage, side slopes, embankment and emergency spillway. At this time, also check the sediment forebay for accumulated material, sediment, trash, and debris and remove it. Remove sediment from the basin as necessary, and at least once every 10 years. Providing an on-site sediment disposal area will reduce the overall sediment removal costs.

The riprap used for the sediment forebay should be inspected regularly for sediment build up, clogging or other unwanted materials such as trash. The riprap should be cleaned as required.

O&M Schedule

O&M Task		Monthly	Quarterly	Spring	Fall	2-years	As-required
1.	Constructed Stormwater Wetlands						
	<i>Inspection</i>			x	x		x
	<i>Remove Debris</i>			x	x		x
	<i>Remove Sediment</i>						x
	<i>Re-seed</i>						x
2.	Sediment Forebay						
	<i>Inspection</i>	x		x	x		x
	<i>Mowing</i>	3-4 times during the growing season					
	<i>Remove Debris</i>		x				x
	<i>Remove Sediment</i>		x				x
	<i>Re-seed</i>						x
3.	Stone Rip Rap						
	<i>Inspection</i>			x			
	<i>Remove Debris</i>			x			x
	<i>Remove Silt/Sediment</i>					x	x
	<i>Repair</i>						x
4.	Storm Drain Lines						
	<i>Inspection</i>			x			x
	<i>Clean</i>						x
5.	Catch Basin						
	<i>Inspection</i>			x	x		
	<i>Remove Debris</i>						x
	<i>Remove Silt/Sediment</i>						x
7.	Drain Manholes						
	<i>Inspect Rims</i>						
	<i>Inspect inside/inlet and outlet pipes</i>			x	x		
	<i>Remove sediment</i>					x	x
8.	Wet Basin						
	<i>Inspection</i>			x	x		x
	<i>Remove Debris</i>			x	x		x
	<i>Remove Sediment</i>						x

APPENDIX A

Stormwater Management System Owners/Operators

1. Stormwater Management System Owners: To be determined
2. Current and future operators: To be determined
3. Emergency contact information: To be determined
4. Change of trustee: To be determined
5. Financial Responsible Party: To be determined
6. Routine Maintenance: To be determined
7. O&M activities: To be determined
8. Record keeping To be determined

Appendix I - Long Term Pollution Prevention Plan

LONG-TERM POLLUTION PREVENTION PLAN

FOR

**GROTON FARMS
500 MAIN STREET**

IN

**GROTON,
MASSACHUSETTS**

PREPARED BY: DILLIS & ROY
CIVIL DESIGN GROUP, INC.
1 Main Street, Suite 1
Lunenburg, MA 01462

PREPARED FOR: 500 MG LLC
6 LYBERTY WAY
WESTFORD, MA 01886

REVISED: JUNE 16TH, 2023
FEBRUARY 9TH, 2023

CDG PROJECT #6842

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 applicant 500 MG LLC is proposing the construction of a mixed-use development on the north side of Route 119 just northerly of the intersection of Mill Street & Main Street. The proposed development consists of 16 quadplex units (1,220 SF ea.), 16 quadplex units (643 SF ea.), 3 apartment buildings (17,818 sf ea.), and clubhouse building (4,950 sf). The proposed work is located on Assessor's Map 216- Block 94, 95, & 96. The proposed scope of construction also includes a private roadway, on-site parking, clubhouse area with associated amenities, stormwater management systems, and new utility connections with their associated appurtenances.

The layout of the proposed site has been carefully planned to reduce the amount of stormwater leaving the site. The stormwater management system has been designed in accordance with the Massachusetts Stormwater Regulations to provide pretreatment of the stormwater prior to discharge.

2.0 Spill Prevention Plan

No hazardous materials other than normal cleaning 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 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.

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*

It is expected that the site will be plowed by the Groton DPW once the road is

accepted.

5.2 *Salt/Sand Usage*

It is expected that sanding and salting will be performed on an infrequent basis during times when unusually icy conditions persist for periods of time.

5.3 *Street Sweeping*

The Stormwater Operation & Maintenance Plan calls for the road and parking areas to be swept in the spring, after the threat of winter precipitation has passed.

6.0 Waste Management

6.1 *Solid Waste*

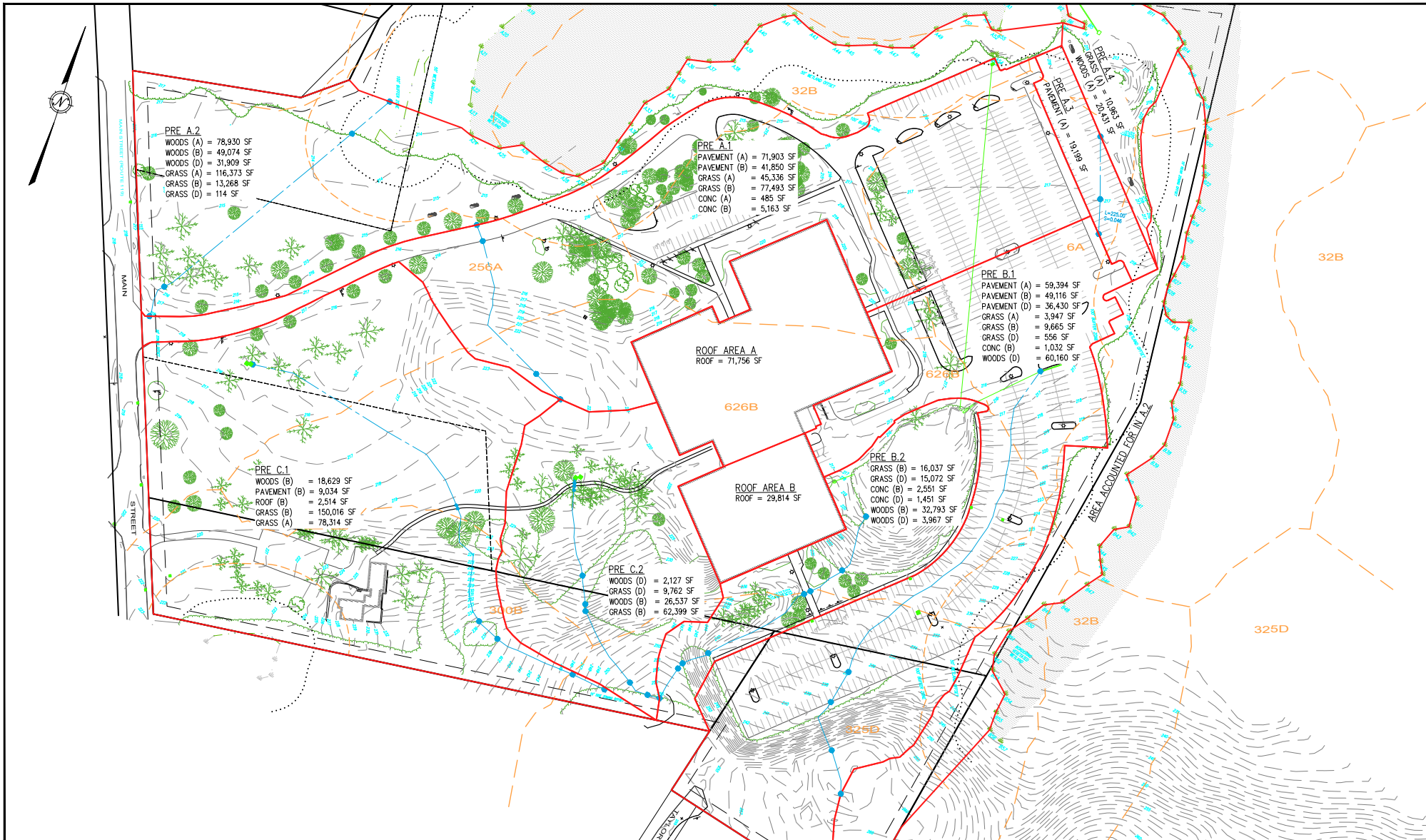
A dumpster will be located on the site during construction. This area will be the primary area for the on-site storage of solid waste prior to pick-up by a waste management company.

4.0 Plans

Stormwater Report
500 Main Street

June 16th, 2023
500 MG LLC

Pre-development Watershed Plan

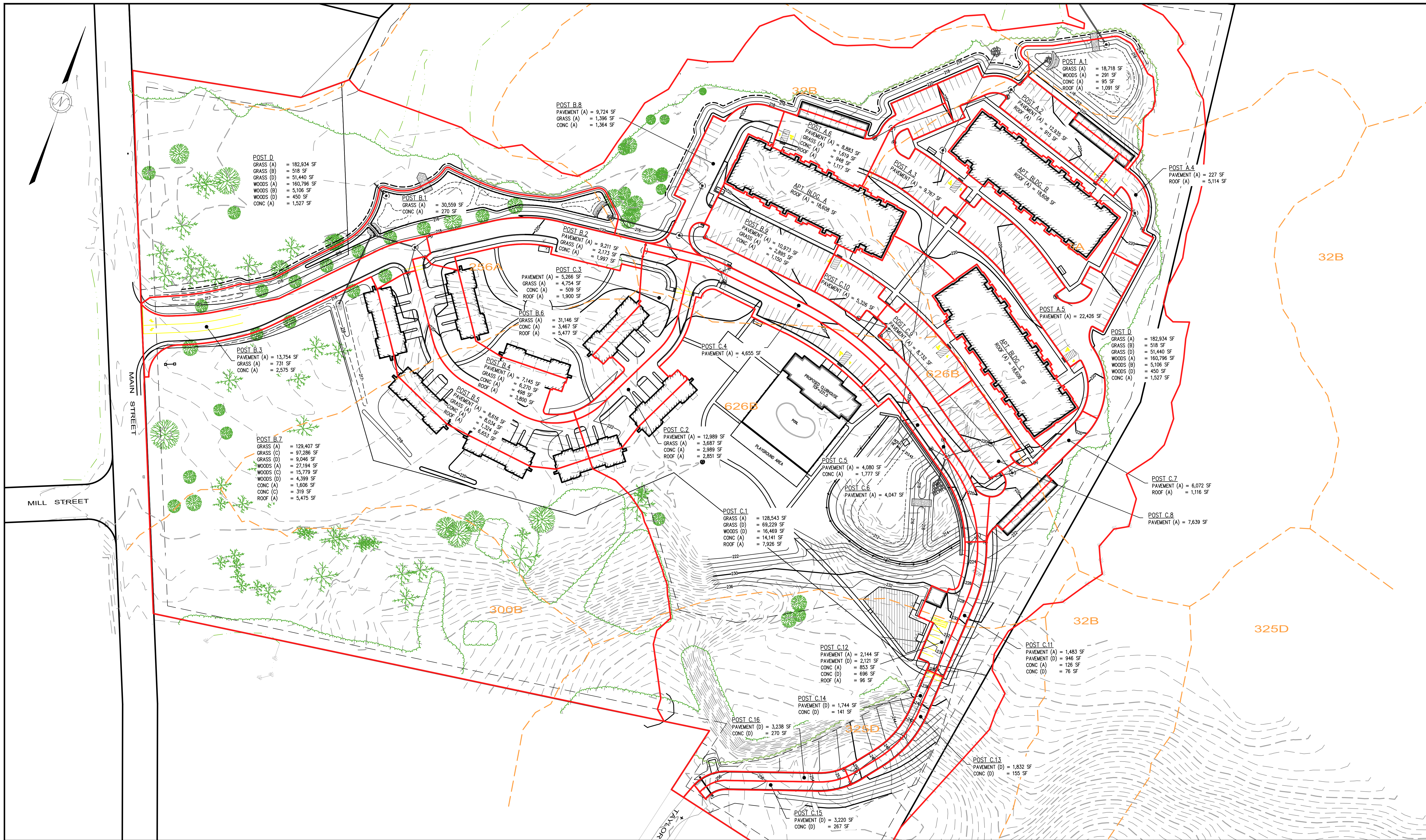


PREPARED BY: DILLIS & ROY CIVIL DESIGN GROUP CIVIL ENGINEERS LAND SURVEYORS WETLAND CONSULTANTS 1 MAIN STREET, SUITE 1 LUNENBURG, MA 01462 PHONE: (978) 779-6091 www.dillisandroy.com	OWNER: 500 MG LLC 6 LYBERTY WAY WESTFORD, MASSACHUSETTS	SCALE: 1 in. = 80 ft.			DATE: 2/09/23	PRE-DEVELOPED WATERSHED MAP 500 MAIN STREET GROTON, MASSACHUSETTS		JOB NO. 6842
	APPLICANT: 500 MG LLC 6 LYBERTY WAY WESTFORD, MASSACHUSETTS				DESIGN BY: GSR	DRAWING NO. 6842-PRE-DEV		
					DRAWN BY: RPV	SHEET NO.		
					CHECKED BY: GSR	DRN		


Stormwater Report
500 Main Street

June 16th, 2023
500 MG LLC

Post-development Watershed Plan



PREPARED BY:



DILLIS & ROY

CIVIL DESIGN GROUP

CIVIL ENGINEERS

LAND SURVEYORS

WETLAND CONSULTANTS

1 MAIN STREET, SUITE 1

LUNENBURG, MA 01462

PHONE: (978) 779-6091

www.dillisandroy.com

OWNER:

500 MG LLC

6 LIBERTY WAY, SUITE 203

WESTFORD, MASSACHUSETTS

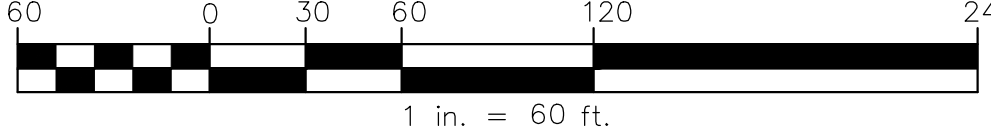
APPLICANT:

500 MG LLC

6 LIBERTY WAY, SUITE 203

WESTFORD, MASSACHUSETTS

SCALE:



1 in. = 60 ft.

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DATE:

2/09/22

DESIGN BY:

GSR

DRAWN BY:

RPV

CHECKED BY:

GSR

POST-DEVELOPED WATERSHED MAP

GROTON FARMS

500 MAIN STREET

GROTON, MASSACHUSETTS

NO.	DATE	DESCRIPTION	BY
1.	06/16/23	REVISED PER PEER REVIEW COMMENTS	RPV

JOB NO.

6842

DRAWING NO.

6842-SP

SHEET NO.

DRN