STORMWATER AND CONTACT WATER MANAGEMENT PLAN

PLANT BRANCH CCR LANDFILL

PUTNAM COUNTY, GEORGIA

FOR

Georgia Power

OCTOBER 2022
REV. 0

GEORGIA REGISTERED No. PE030385 PROFESSIONAL ENGINEER VICTORIA S. CHEPLAK

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10/14/2022

GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

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TABLE OF CONTENTS

LIST OF ACRONYMS

ARC	Atlanta Regional Commission
BMP	Best Management Practice
CCR	Coal Combustion Residuals
CFR	Code of Federal Regulations
CN	Curve Number
EPD	Environmental Protection Division
Ft	Feet
GA	Georgia
GPC	Georgia Power Company
GSMM	Georgia Stormwater Management Manual
GSWCC	Georgia Soil and Water Conservation Commission
Hr	Hour
HSG	Hydrologic Soil Group
In.	Inch
NPDES	National Pollutant Discharge Elimination System
SCS	Soil Conservation Service
SDP	Safe Dams Program
TOC	Time of Concentration
TR-55	Technical Release 55
TSS	Total Suspended Solids
USEPA	United States Environmental Protection Agency
WWTS	Wastewater Treatment System
Yr	Year

1. INTRODUCTION

1.1 PURPOSE

This Stormwater and Contact Water Management Plan (Plan) describes the infrastructure, design criteria, and strategy for the management of stormwater and contact water during the construction of, waste placement in, and installation of final cover on a new, lined, on-site Coal Combustion Residuals (CCR) Landfill at Georgia Power Company (GPC) Plant Branch located in Putnam County, Georgia. The Site formerly operated as a coal-fired power plant that commenced power generation in 1965, ceased generating electricity prior to April 2015, and was decommissioned in 2019.

The purpose of this Plan is to present the strategy, design, and operational procedures/requirements for how stormwater and contact water will be managed for the CCR Landfill to meet the goals of: (i) isolating runoff that contacts CCR material (i.e., "contact water") for collection and treatment; (ii) managing, conveying, and discharging stormwater (i.e., non-contact run-on and runoff); and (iii) complying with the regulatory, design, and operating criteria requirements at each phase of landfill construction (i.e., cell construction, CCR placement, and final cover placement).

1.2 SCOPE OF PLAN

The scope of this Plan covers interim conditions at the CCR Landfill, defined herein as conditions during phased landfill construction, operation, and closure. The Plan addresses the management of contact water and stormwater throughout the interim conditions, including their conveyance and storage through gravity and pressurized systems to appropriate discharge locations or treatment systems.

The Plan is limited in scope as follows:

- This Plan only relates to water management at the CCR Landfill. Free and in-situ water management at Ash Ponds B, C, D, and E, which will be closed by removal of CCR and placement of CCR into the CCR Landfill, is being addressed as part of a separate scope.

- This Plan presents water management strategies and design concepts related to the interim conditions described above. Stormwater management for the final condition, in which the entire CCR Landfill is capped with the final cover system and adjacent disturbed areas have been stabilized/vegetated is addressed in the "Final Cover Stormwater Management System Design and Analysis" calculation package prepared to support the permitting of the Plant Branch CCR Landfill [Geosyntec, 2021a].

- The installation, operation, and maintenance of a dedicated wastewater treatment system (WWTS) at Plant Branch for the treatment of contact water and leachate generated during ash pond closure and landfill operations, and the

management of treated water from the WWTS, is not within the scope of this Plan.

- The management of leachate (liquid that percolates through placed CCR within the lined landfill cells and is collected in sumps of the cells) is not within the scope of this Plan but rather addressed in the "Operations Plan for On-Site CCR Landfill" prepared to support the permitting of the Plant Branch CCR Landfill [Geosyntec, 2022a].

1.3 ORGANIZATION OF PLAN

The remainder of this Plan is organized as follows:

- Section 2 provides a description of the Site, an overview of water management strategies, and applicable design criteria for water management during construction;
- Section 3 presents the conceptual plan for phased landfill construction with a phase-by-phase summary of the key water management features;
- Section 4 details the evaluation process used to demonstrate compliance with the applicable stormwater and contact water management criteria during the construction phases described in Section 3 and presents results; and
- Section 5 provides a list of references cited in this Plan.

2. BACKGROUND

2.1 SITE DESCRIPTION

Plant Branch is located on approximately 3,200 acres of land in Putnam County, off State Route 24 (US 441), on the northern shore of Lake Sinclair near Milledgeville and Eatonton, Georgia. **Figure 1** presents the site layout. Over the course of power generation at the Site, five ponds, identified as Ash Ponds A, B, C, D, and E, were utilized. Ash Pond A, the first pond constructed at the Site, was taken out of service in the late 1960's and was closed in April 2016 by the removal and relocation of its stored CCR to Ash Pond E. Ash Ponds B, C, D, and E are currently inactive and will also be closed by removal. Specifically, the CCR stored in those ponds will be relocated to a new, on-site CCR landfill to be located on the Plant property.

Ash Ponds B, C, and D are located adjacent to one another near the former coal pile area and the Plant building, while Ash Pond E is located approximately 0.6 miles to the northwest. The dike at Ash Pond E, adjacent to the inlet cove of Beaverdam Creek to Lake Sinclair, is classified as a Category I Dam under the Georgia Environmental Protection Division Safe Dams Program (GA EPD SDP). The dikes at Ash Ponds B, C, and D, adjacent to Lake Sinclair, are classified as Category II Dams under the GA EPD SDP.

Discharge from the Site is currently regulated under a National Pollutant Discharge Elimination System (NPDES) permit (Permit No. GA0026051, effective 1 November 2017), which defines acceptable discharge limits into Lake Sinclair. The permit includes four outfalls; three of these outfalls are for emergency overflow ("commingled with stormwater") from Ash Ponds B, C, and E (Outfall Nos. 06, 04, and 05 respectively). Outfall No. 03 is the primary discharge location from the Plant Branch facilities to Lake Sinclair, described as the "Final Ash Pond Discharge commingled with stormwater" and the "Ash Pond B Discharge (Combined Ash Pond System)" in the permit.

2.2 WATER MANAGEMENT STRATEGY AND DESIGN CRITERIA

2.2.1 OVERVIEW

Water management related to construction and operation of the CCR Landfill involves the management of two categories of water: stormwater and contact water. Stormwater and contact water will be segregated using dikes and berms to the extent possible, as the discharge strategy for each differs. Over the course of landfill construction, water management infrastructure (i.e., perimeter channels around the perimeter of the landfill, pipes at three low points within the perimeter channels that discharge to detention ponds, and three detention ponds located in the north, southwest, and southeast portions of the Site) will be used for both stormwater and contact water conveyance and storage at different phases throughout construction.

Water management during landfill construction and operation is subject to regulatory criteria and industry standard-of-care practices (e.g., design storms and appropriate freeboard). While this Plan allows for operational flexibility, certain stormwater and

contact water management features have already been designed because they represent components that are essential to meeting the overall project requirements, such as the stormwater/contact water/leachate storage ponds, perimeter channels, and stormwater pipes. Additionally, the WWTS for the treatment of contact water and leachate generated during ash pond closure and landfill operations, is already in operation. In general, the water management system was designed to meet criteria identified from the following documents:

- "GA EPD CCR Rule" (Georgia Rules for Solid Waste Management, Chapters 391-3-4-.10), which refers to the US Environmental Protection Agency (USEPA) CCR Rule (40 CFR §257) as follows:
    - 391-3-4-.10(9)(c)(1)(vi)(II): New CCR Landfills or lateral expansion of CCR landfills must include a run-on and runoff control plan in compliance with 40 CFR §257.81;
- "USEPA CCR Rule", 40 CFR §257.81(a), which requires the owner or operator of a new CCR landfill to design, construct, operate, and maintain:
    - A run-on control system to prevent flow onto the active portion of the CCR unit during the peak discharge from a 24-hour (hr), 25-year (yr) storm; and
    - A runoff control system from the active portion of the CCR unit to collect and control at least the water volume resulting from a 24-hr, 25-yr storm;
- "Georgia Stormwater Management Manual" (GSMM) [Atlanta Regional Commission (ARC), 2016]; and
- "Manual for Erosion and Sediment Control in Georgia" (Green Book) [Georgia Soil and Water Conservation Commission (GSWCC), 2016].

Additionally, criteria based on general engineering practices and Geosyntec's professional experience were considered. The definitions, handling and discharge strategy, and applicable additional design criteria for each water management system (e.g., contact water and stormwater) are described below.

2.2.2 CONTACT WATER

Contact water is defined as runoff generated from areas of exposed CCR material, as well as free water and interstitial water from within the ash ponds. Contact water will be treated at the on-site WWTS prior to discharge. Therefore, the management strategy for contact water is to convey runoff from the exposed CCR waste faces during landfill operation via lined perimeter channels and stormwater pipes, and/or via interim channels, pipes, and sumps constructed within the waste limit that will drain by gravity or pumping, to dedicated lined contact water/leachate storage areas within the North, Southwest, or Southeast Ponds (see **Figures 2** through **5** for pond locations). The

dedicated contact water/leachate storage areas are separated from stormwater storage areas within the ponds by lined divider dikes. Contact water/leachate collected in the ponds will be promptly conveyed by pumps, forcemain, and/or gravity water management infrastructure to the on-site WWTS or to a loading station for off-site disposal.

It is noted that if stormwater and contact water co-mingle, the entire volume of water will be considered contact water and managed as such.

Design criteria pertaining to the handling, storage, and discharge of contact water are as follows:

- Conveyances must be sized to accommodate up to a 100-yr, 24-hr storm event without overtopping.

- Lined contact water/leachate ponds will be used to store and control at least the volume of contact water resulting from a 100-yr, 24-hr storm, with the following characteristics:

    - No overtopping and no discharge from the pond;

    - Lined with a composite liner system;

    - Operated to promptly drawdown (remove) contact water and transfer it to the on-site WWTS or to a loading station for off-site disposal to re-establish dry conditions after a storm event; and

    - Configured such that the inflow and outflow locations and sediment control features will augment retention time to help reduce total suspended solids (TSS) concentrations.

Contact water treated at the on-site WWTS will be discharged from Outfall No. 03 in accordance with the effluent quality standards established in in NPDES Permit No. GA0026051.

2.2.3 STORMWATER

Stormwater, also referred to as non-contact water, includes:

- run-on from undisturbed areas surrounding the CCR Landfill, based on natural grades, that will flow into the stormwater management infrastructure;

- runoff from disturbed surfaces during grading and construction of the landfill, exclusive of any area containing CCR or contact water, and of support facilities (e.g., roads) associated with the project;

- runoff from temporarily stabilized areas (i.e., tarps and interim soil cover), with full coverage such that generated runoff from these areas has not been in contact with underlying CCR or contact water; and

- runoff from stabilized surfaces (i.e., final cover system and support facilities associated with the project).

Once the final cover system is installed at areas of the landfill that reached final grades, water management infrastructure (i.e., perimeter channels, pipes, and stormwater ponds) will be used to convey and store stormwater. Stormwater management infrastructure will not be used for the conveyance of contact water unless Engineer-approved measures to contain contact water, such as liners, are installed, and the infrastructure is cleaned/liners are removed upon completion of contact water conveyance.

As described above, if stormwater and contact water co-mingle, the entire volume of water will be considered contact water. Because contact water requires treatment, measures will be taken to minimize the amount of stormwater that may co-mingle with contact water. Minimization techniques may include construction of additional berms or channels situated upgradient to divert stormwater away from and around active CCR working areas (i.e., exposed CCR material) or conveyance and storage features that are being used to manage contact water, perimeter dikes and intercell berms that will divide the lined landfill cells, and temporary rain flaps within the landfill cells.

Stormwater does not require treatment by the WWTS and may be discharged directly to receiving water bodies after conveyance through appropriate stormwater management features and erosion and sediment controls in accordance with applicable regulations. Stormwater discharges associated with CCR Landfill construction activities will be included for coverage under the applicable NPDES construction stormwater discharge general permit, NPDES industrial stormwater discharge general permit, and/or the site's NPDES industrial wastewater discharge individual permit (NPDES Permit No. GA0026051).

The perimeter channels, stormwater pipes, and stormwater ponds were designed for the post-closure condition of the landfill, under which more stormwater is generated than the interim conditions; therefore, stormwater management infrastructure will meet required design criteria during interim conditions. Design criteria pertaining to the handling, storage, and discharge of stormwater under final conditions are presented in the "Final Cover Stormwater Management System Design and Analysis" calculation package prepared to support the permitting of the Plant Branch CCR Landfill [Geosyntec, 2021a].

In general,

- conveyances must be sized to accommodate up to the 25-yr, 24-hr storm event with 0.5 feet (ft) of freeboard and the 100-yr, 24-hr storm event without overtopping;

- stormwater pipes should safely convey the 25-yr, 24-hr storm event with either: (i) a headwater depth to pipe diameter ratio less than or equal to 1.2 for pipes with a cross-sectional area greater than 30 square ft; or (ii) a freeboard of 1.5 ft; and safely convey the 100-yr, 24-hr design storm event without overtopping; and

- stormwater ponds should have (i) a drawdown orifice with a minimum diameter of 3 inches (in.); (ii) a principal spillway to safely convey the 25-yr, 24-hr design storm event; and (iii) an emergency spillway to safely convey the 100-yr, 24-hr design storm event with 1 ft of freeboard to the lowest point of the dam embankment.

Stormwater management features utilized strictly under interim conditions may be sized in accordance with appropriate design criteria in the Green Book [GSWCC, 2016] for erosion and sediment control best management practices (BMPs).

3. PHASING APPROACH

3.1 PHASING OVERVIEW

CCR Landfill cell construction, placement of CCR removed from Ash Ponds B, C, D, and E, and final cover placement on the landfill will generally occur in a phased manner. A phasing approach with four phases has been developed; the sequence of the phases and phase activities are summarized below. The phasing approach, and associated stormwater and contact water management techniques, may be adjusted upon approval by the Engineer of Record, with the requirement that design criteria related to stormwater and contact water management are met (See Section 2.2 of this Plan). The analysis presented herein will be re-evaluated upon refinement or adjustment of the phasing approach during the detailed design, and this Plan will be updated as needed. Significant modifications to the phasing approach, and associated stormwater and contact water management techniques, will require GA EPD approval.

Each phase presented represents a snapshot of the Site at the conclusion of the phase. The phase activities and stormwater and contact water management activities are described below. Note that activities in any phase may be implemented in several sub-phases and not all at once.

Phases are depicted schematically in **Figures 2** through **5**; grading associated with landfill construction is not shown for clarity and is presented on the plan sheets within the *Plant Branch CCR Landfill* permit drawing package [Geosyntec, 2022b]. Similarly, the interface between CCR placement and final cover placement in Phases 2 and 3 is depicted in a conceptual manner; the constructed interface will consider final-cover stormwater management features such as top deck diversion berms, drainage benches, and downchutes.

Perimeter channels, interim channels, stormwater pipes, and ponds with interim or permanent liners will be used for both contact water and stormwater management during landfill construction, operation, and closure. The transition from contact water to stormwater management will consist of removing the liner and/or cleaning the liner and pipes. At locations where separate portions of the perimeter channels are used for stormwater and contact water management, the channel portions will be separated by lined interim berms constructed across the channel to segregate types of flow. The interim berm locations shown in the below referenced figures are conceptual and may be adjusted.

Existing water management infrastructure, conveying contact water from Ash Pond E, will be relocated to north of the CCR Landfill (i.e., north of the railroad and access road) during landfill construction and operation. The contact water and leachate managed in the North, Southwest, and Southeast Ponds, will be discharged into leachate or contact water forcemain infrastructure for conveyance to the on-site WWTS or to a loading station for off-site removal.

3.2 PHASE 1

Phase 1 activities consist of the construction of Cells 1, 2, 3, and 4 and CCR placement in Cells 1, 2, 3, and 4. A schematic of Phase 1 is presented as **Figure 2**.

In this phase, the North and Southwest Stormwater/Contact Water/Leachate Ponds and the portions of the perimeter dike, perimeter channels, and associated utility corridors that are

required for operation of Cells 1 through 4 will be constructed. The perimeter channels and North and Southwest ponds will be lined in this phase to convey and retain, respectively, contact water and stormwater generated during CCR placement.

CCR placed during Phase 1 will include the CCR stored within Ash Pond D, to facilitate the future construction of Cells 7, 8, 9, and 10. Placed CCR will also include portions of the CCR stored within Ash Ponds B, C, and/or E based on the CCR removal schedules for the ash ponds. During CCR placement, contact water generated from the working CCR faces will be managed and conveyed through the lined perimeter channels and discharged to the lined North and Southwest Ponds. Disturbed areas, where construction activities have temporarily or permanently ceased, will be stabilized.

3.3 PHASE 2

Phase 2 activities consist of construction of Cells 5 and 6, placement of CCR in Cells 3, 4, 5, and 6, and placement of final cover on Cells 1 and 2, and portions of Cells 3 and 4. An underdrain pipe will also be installed within the former Ash Pond D footprint during Phase 2, upon acknowledgement of removal of CCR from Ash Pond D by GA EPD; the groundwater conveyed by the underdrain pipe will be managed under the appropriate NPDES permit. A schematic of Phase 2 is shown in **Figure 3**.

CCR placed during Phase 2 will include portions of the CCR stored within Ash Ponds B, C, and/or E based on the CCR removal schedules for the ash ponds. Upon placement of final cover on Cells 1 and 2, and portions of Cells 3 and 4, the perimeter channel from the high point at Cell 1 to the Southwest Pond, and the stormwater pipes discharging to the Southwest Pond, will be transitioned from contact water to stormwater management. Additionally, the Southwest Pond, subdivided into three chambers using divider dikes, will be transitioned to manage stormwater in one chamber (with liner removed) while the remaining chambers will manage contact water and leachate (with liner in place).

During CCR placement activities in Phase 2, contact water from the working CCR faces will be managed by either (i) interim contact water channels constructed within the CCR Landfill waste limit, which will convey contact water via pumping or gravity, or (ii) the lined perimeter channels to the stormwater pipes, which will discharge to the lined contact water/leachate storage portion of the North and Southwest Ponds. Disturbed areas, where construction activities have temporarily or permanently ceased, will be stabilized.

3.4 PHASE 3

Phase 3 activities consist of construction of Cells 7, 8, 9, and 10, placement of CCR in Cells 5, 6, 7, 8, 9, and 10, and placement of final cover on the remainder of Cells 3 and 4, and portions of Cells 5 and 6. A schematic of Phase 3 is presented as **Figure 4**.

CCR placed during Phase 3 will include portions of CCR stored within Ash Ponds B, C, and/or E based on the CCR removal schedules for the ash ponds. During construction of Cells 7, 8, 9, and 10, the Southeast Stormwater/Contact Water Pond and the remainder of the perimeter dike, perimeter channels, and associated utility corridors will be constructed. The perimeter

channels and Southeast Pond will be lined in this phase to convey and retain, respectively, contact water generated during CCR placement.

Upon placement of final cover on the remainder of Cells 3 and 4 and portions of Cells 5 and 6, the perimeter channel from the high point at Cell 1 to the North Pond, and the stormwater pipes discharging to the North Pond, will be transitioned from contact water to stormwater management. Additionally, the North Pond, subdivided into three chambers using divider dikes, will be transitioned to manage stormwater in one chamber (with liner removed) while the remaining chambers will manage contact water and leachate (with liner in place).

During CCR placement activities in Phase 3, contact water from the working CCR faces will be managed by either: (i) interim contact water channels constructed within the CCR Landfill waste limit, which will convey contact water via pumping or gravity, or (ii) the lined perimeter channels to the stormwater pipes, which will discharge to the lined contact water/leachate storage portion of the North and Southwest Ponds, or the lined Southeast Pond. Disturbed areas, where construction activities have temporarily or permanently ceased, will be stabilized.

3.5 PHASE 4

Phase 4 activities consist of placement of final cover on the remainder of Cells 5 and 6, and Cells 7, 8, 9, and 10 and stabilizing the remainder of the Site. A schematic of Phase 4 is presented as **Figure 5**.

Upon placement of final cover on the uncovered areas of the landfill, the perimeter channels along the eastern half of the landfill (between the stormwater pipes discharging to the North and Southwest Ponds), the stormwater pipes discharging to the Southeast Pond, and the Southeast Pond itself, will be transitioned from contact water to stormwater management. Additionally, the portion of the North and Southwest Ponds dedicated to contact water management will be transitioned to stormwater management.

4. COMPLIANCE METHODOLOGY

4.1 ANALYSIS METHODOLOGY

The three ponds were designed and analyzed to function in accordance with appropriate design criteria under the post-closure condition of the landfill (assuming ClosureTurf® final cover system installed over the placed CCR), which represents the most conservative estimate of run-on and runoff (i.e., stormwater) generated from the landfill footprint and contributing areas to be managed in the ponds. During interim conditions the North and Southwestern Ponds will manage both contact water and stormwater simultaneously, using divider dikes and/or liner installation/removal sequencing, as previously described, while the Southeastern Pond will manage either stormwater or contact water. Therefore, to evaluate the adequacy of the storage capacity of the water management system during each phase of construction, the total runoff volumes of stormwater and contact water for each phase to the North, Southwest, and Southeast Ponds respectively, were calculated with respect to the available storage for each runoff type for each phase, and freeboard depths based on peak water elevations were assessed. Conveyance features (i.e., perimeter channels, interim channels, pipes, and pumping), as well as storage within the landfill cells, to route runoff from within the landfill footprint into the ponds were not included for conservatism, as these features will be variable and subject to field conditions. Additionally, discharge mechanisms within contact water/leachate chambers were not included for conservatism as these features will also be variable and subject to field conditions. This evaluation was performed for both the 25-yr, 24-hr and 100-yr, 24-hr storm events, as the contact water and stormwater management design criteria focus on these two storm events, as described in Section 2.2 of this Plan.

Stormwater and contact water runoff volumes were calculated using hydrology and hydraulic procedures presented in the Soil Conservation Service (SCS) Technical Release 55 (TR-55) [SCS, 1986], Manning's kinematic equation, and other recognized engineering procedures encoded in HydroCAD™ software [HydroCAD™, 2011].

4.2 DESIGN PARAMETERS

The purpose of this section is to present input design parameters to the HydroCAD™ software model developed to analyze the four phases described in Section 3 of this Plan for the construction, operation, and closure of the CCR Landfill. The analysis and design parameters presented herein will be re-evaluated upon refinement or adjustment of the phasing approach during the detailed design, and this Plan will be updated as needed.

- Rainfall Distribution and Depths: **Figure 6** [SCS, 1986] shows the location of the project site on the rainfall distribution map of the United States. The project site is located in Putnam County, Georgia, which is categorized by SCS as having a Type II Rainfall Distribution. Rainfall depths for the design storm events are: (i) 6.13 in. for the 25-yr, 24- hr storm; and (ii) 7.73 in. for the 100-yr, 24-hr storm [NOAA, 2017], as shown in **Attachment 1**.

- Drainage Areas: Drainage areas for each category of water (e.g., contact water and stormwater) discharging to each of the ponds were developed based upon the phase

being analyzed. **Figures 2** through **5** present the stormwater and contact water drainage area delineations for each of the four phases.

- Hydrologic Soil Group (HSG): Soils were characterized as HSG D due to compaction during cell construction and placement of CCR.

- Curve Numbers: The curve numbers (CNs) corresponding to the land cover were selected based on Table 2-2 of TR-55 [SCS, 1986], the ClosureTurf® Manual [Watershed Geo, 2018], and interpretations within the HydroCAD Manual [HydroCAD, 2011], relevant excerpts of which are provided in **Attachment 2**. **Table 1** summarizes the CNs chosen for the analyses performed in this Plan.

  The acreages and CNs for the drainage areas generating stormwater and contact water in each phase are presented in **Table 2**.

Table 1. Summary of Land Cover Types, Descriptions, and Corresponding CNs

Land Cover Type	Description	CN
Exposed CCR	Newly graded areas (no vegetation), HSG D	94 [SCS, 1986]
Final Cover System	ClosureTurf® [Note 1]	95 Watershed Geo, 2018]
Access Roads and Perimeter Channels	Gravel roads with right-of-ways	96 [Note 2; HydroCAD, 2011]
Water Surfaces	-	98 [SCS, 1986]

Note:

1. Contact water and stormwater management volumes were evaluated for the more conservative scenario of the final cover system. The alternative cover system, ClosureTurf®, will generate more runoff than a soil-geosynthetic composite cover system; therefore, utilizing this cover system for analysis provides a conservative basis for design that allows implementation of either cover system during actual landfill closure.
2. TR-55 provides the CN for gravel roads including the right of way but does not provide a CN for a gravel surface alone. HydroCAD has assessed that the TR-55 CN value for gravel road with right of way appears based on 30% cover of gravel with a CN of 96 and 70% cover of "open space in poor condition". Therefore, HydroCAD [2011] recommends using a CN of 96 for gravel pad surfaces, including roads without right of way.

Table 2. Stormwater and Contact Water Drainage Area Acreages and Curve Numbers

Subcatchment ID	Area (ft^2)	Area (acres)	Land Use Description	CN
PHASE 1				
CW1	173,804	3.99	Access Roads and Perimeter Channels	96
CW2	1,585,402	36.40	Exposed CCR	94
CW3	585,303	13.44	Exposed CCR	94
CW4	86,738	1.99	Access Roads and Perimeter Channels	96
CW5	246,262	5.65	Lined North Contact Water Pond	98
CW6	291,980	6.70	Lined Southwest Contact Water Pond	98
PHASE 2				
CW1	1,015,903	23.32	Exposed CCR	94
CW2	727,268	16.70	Exposed CCR	94
CW3	97,972	2.25	Access Roads and Perimeter Channels	96
CW4	246,262	5.65	Lined North Contact Water Pond	98
CW5	172,969	3.97	Lined Southwest Contact Water Pond	98
SW1	187,120	4.30	Access Roads and Perimeter Channels	96
SW2	1,371,625	31.49	Final Cover System - ClosureTurf	95
SW3	250,674	5.75	Final Cover System - ClosureTurf	95
SW4	119,011	2.73	Southwest Stormwater Pond	98
PHASE 3				
CW1	117,033	2.69	Access Roads and Perimeter Channels	96
CW2	1,124,039	25.80	Exposed CCR	94
CW3	305,217	7.01	Exposed CCR	94
CW4	238,436	5.47	Exposed CCR	94
CW5	656,028	15.06	Exposed CCR	94
CW6	59,186	1.36	Access Roads and Perimeter Channels	96
CW7	134,163	3.08	Lined North Contact Water Pond	98
CW8	164,059	3.77	Lined Southeast Contact Water Pond	98
CW9	42,502	0.98	Lined Southwest Contact Water Pond	98
SW1	187,120	4.30	Access Roads and Perimeter Channels	96
SW2	2,036,737	46.76	Final Cover System - ClosureTurf	95
SW3	786,090	18.05	Final Cover System - ClosureTurf	95
SW4	97,972	2.25	Access Roads and Perimeter Channels	96
SW5	112,099	2.57	North Stormwater Pond	98
SW6	249,478	5.73	Southwest Stormwater Pond	98
PHASE 4				
CW1	28,517	0.65	Lined North Contact Water Pond	98
CW2	42,502	0.98	Lined Southwest Contact Water Pond	98
SW1	187,120	4.30	Access Roads and Perimeter Channels	96
SW2	2,403,773	55.18	Final Cover System - ClosureTurf	95
SW3	1,772,666	40.69	Final Cover System - ClosureTurf	95
SW4	157,213	3.61	Access Roads and Perimeter Channels	96
SW5	962,345	22.09	Final Cover System - ClosureTurf	95
SW6	117,033	2.69	Access Roads and Perimeter Channels	96
SW7	217,745	5.00	North Stormwater Pond	98
SW8	249,478	5.73	Southwest Stormwater Pond	98
SW9	164,059	3.77	Southeast Stormwater Pond	98

- Times of Concentration (TOCs): The flow path associated with the TOC will vary during interim conditions, as CCR material heights and slopes will be constantly changing. Therefore, a standard TOC of 5 minutes was used as the minimum TOC recommended by the Federal Highway Administration [FHWA, 2012]. Under various CCR material configurations during the interim conditions, the TOC may be longer than 5 minutes; however, higher TOCs typically lead to lower peak flow rates; therefore, a TOC of 5 minutes is a conservative estimate with respect to flow rate-related design criteria.

- Contact Water and Stormwater Ponds: The three ponds have been designed to simultaneously or independently store stormwater, contact water, and/or leachate during the CCR Landfill interim conditions, with the stormwater and contact water/leachate storage portions of the ponds separated by lined divider dikes. The stage-storage relationships of the ponds, including the stage-storage within each pond chamber, are included in **Attachment 3**. Additionally, summaries of the designs of the discharge mechanisms in place for the stormwater storage chambers (i.e., outlet structure), as well as elevations of emergency spillways in place during each of the four phase, are also included in Attachment 3, for context with respect to the "Top of Freeboard" elevation referenced in the Section 4.3 of this Plan.

  Leachate Rates: Leachate generation rates for each landfill cell, for each phase of construction, in gallons per acre per day, were obtained from the "Hydrologic Evaluation of Landfill Performance (HELP) Analysis" calculation package, preprepared to support the permitting of the Plant Branch CCR Landfill [Geosyntec, 2021b]. These rates were multiplied by the appropriate cell areas (in acres) and entered as constant flows into the leachate chambers of the ponds over a 24-hour period. Calculations supporting these constant flow rates are included in **Attachment 3**.

4.3 PHASE EVALUATION AND RESULTS

To evaluate the adequacy of the storage capacity of the water management system, the total volumes of stormwater and contact water runoff for each phase of phase of CCR Landfill cell construction, CCR placement, and final cover installation, to the North, Southwest, and Southeast Ponds respectively, were calculated with respect to the available storage for each runoff type for each phase, for the 25-yr, 24-hr and 100-yr, 24-hr storm events. The HydroCAD results, presenting the stormwater and contact water runoff volume calculations and peak water elevations in each chamber type for each phase, are included as **Attachment 4**. The results are summarized by phase and pond in **Table 3 to Table 6**.

The calculated peak water elevation within each chamber type for appropriate type of runoff volume, contributing to each of the three ponds for each phase of construction, based on the stage-storage relationship, was compared to the "Top of Freeboard" elevation for that pond/chamber type. The "Top of Freeboard" elevation generally represents the elevations of the emergency spillway overflow weirs within the divider dikes separating the chambers. This elevation was selected for comparison with the peak water level elevations as an indication if contact water and stormwater were flowing from one chamber type to another, indicating inadequate storage volumes and necessitating additional runoff for treatment and/or cleaning of the chambers prematurely.

The results indicate that for the 25-yr, 24-hr storm event, each chamber type maintains at least 2 ft of freeboard from the "Top of Freeboard" elevation, and that for the 100-yr, 24-hr event, each chamber type has adequate capacity such that the runoff volumes do not overtop the "Top of Freeboard" elevations. The conclusion drawn from the calculations is that the North, Southwest, and Southeast Ponds are capable of managing (i.e., storing and conveying) both contact water and stormwater for the 25-yr, 24-hr and 100-yr, 24-hr storm events during construction and post-closure.

Table 3. Summary of Stormwater and Contact Water Runoff Volumes for Phase 1

Pond ID /Chamber[1]	Total Inflow Volume (ac-ft)		Peak Water Surface Elev. (ft)		Top of Freeboard Elev.[2] (ft)	Freeboard Provided (ft)	
	25-yr, 24-hr	100-yr, 24-hr	25-yr, 24-hr	100-yr, 24-hr		25-yr, 24-hr	100-yr, 24-hr
North Pond							
Chamber 1 (CW)	9.9	12.7	392.1	392.9	398.5	6.4	5.6
Chamber 2 (CW)							
Chamber 3 (CW)							
Southwest Pond							
Chamber 1 (CW)	21.7	28.0	383.8	385.1	386.5	2.7	1.4
Chamber 2 (CW)							
Chamber 3 (CW)							
Southeast Pond							
Chamber 1 (N/A)	-	-	-	-	-	-	-

Notes:

1. CW indicates Chamber is used for contact water, SW indicates Chamber is used for stormwater, N/A indicates the pond has not been constructed at this phase.

2. The Top of Freeboard Elevation represents the elevations of the overflow weirs within the divider dikes separating the chambers.

Table 4. Summary of Stormwater and Contact Water Runoff Volumes for Phase 2

Pond ID /Chamber[1]	Total Inflow Volume (ac-ft)		Peak Water Surface Elev. (ft)		Top of Freeboard Elev.[2] (ft)	Freeboard Provided (ft)	
	25-yr, 24-hr	100-yr, 24-hr	25-yr, 24-hr	100-yr, 24-hr		25-yr, 24-hr	100-yr, 24-hr
North Pond							
Chamber 1 (CW)	14.1	18.1	393.3	394.4	398.5	5.2	4.1
Chamber 2 (CW)							
Chamber 3 (CW)							
Southwest Pond							
Chamber 1 (SW)	17.9	23.0	384.1	385.5	386.5	2.4	1.0
Chamber 2 (CW)	12.6	16.2	384.1	385.4	386.5	2.4	1.1
Chamber 3 (CW)							
Southeast Pond							
Chamber 1 (N/A)	-	-	-	-	-	-	-

Notes:

1. CW indicates chamber is used for contact water, SW indicates chamber is used for stormwater, N/A indicates the pond has not been constructed at this phase.

2. The Top of Freeboard Elevation represents the elevations of the overflow weirs within the divider dikes separating the chambers.

Table 5. Summary of Stormwater and Contact Water Runoff Volumes for Phase 3

Pond ID /Chamber[1]	Total Inflow Volume (ac-ft)		Peak Water Surface Elev. (ft)		Top of Freeboard Elev.[2] (ft)	Freeboard Provided (ft)	
	25-yr, 24-hr	100-yr, 24-hr	25-yr, 24-hr	100-yr, 24-hr		25-yr, 24-hr	100-yr, 24-hr
North Pond							
Chamber 1 (SW)	10.7	13.7	393.3	393.7	398.5	5.2	4.8
Chamber 2 (CW)	11.5	14.8	395.8	397.3	398.5	2.7	1.2
Chamber 3 (CW)							
Southwest Pond							
Chamber 1 (SW)	26.4	34.0	383.7	384.1	386.5	2.8	2.4
Chamber 2 (SW)							
Chamber 3 (CW)	0.6	0.7	381.6	382.1	386.5	4.9	4.4
Southeast Pond							
Chamber 1 (CW)	18.0	23.2	383.4	385.2	385.5	2.1	0.3

Notes:

1. CW indicates chamber is used for contact water, SW indicates chamber is used for stormwater, N/A indicates the pond has not been constructed at this phase.

2. The Top of Freeboard Elevation represents the elevations of the overflow weirs within the divider dikes separating the chambers.

Table 6. Summary of Stormwater and Contact Water Runoff Volumes for Phase 4

Pond ID /Chamber[1]	Total Inflow Volume (ac-ft)		Peak Water Surface Elev.[2] (ft)		Top of Freeboard Elev.[3] (ft)	Freeboard Provided (ft)	
	25-yr, 24-hr	100-yr, 24-hr	25-yr, 24-hr	100-yr, 24-hr		25-yr, 24-hr	100-yr, 24-hr
North Pond							
Chamber 1 (SW)	22.9	29.5	393.7	394.7	398.5	4.8	3.8
Chamber 2 (SW)							
Chamber 3 (CW)	0.4	0.4	396.7	397.0	398.5	1.9	1.6
Southwest Pond							
Chamber 1 (SW)	30.3	39.0	383.9	384.8	386.5	2.6	1.7
Chamber 2 (SW)							
Chamber 3 (CW)	0.5	0.6	385.2	385.5	386.5	1.3	1.0
Southeast Pond							
Chamber 1 (SW)	13.3	17.1	377.5	378.5	385.5	8.0	7.0

Notes:

1. CW indicates chamber is used for contact water, SW indicates chamber is used for stormwater, N/A indicates the pond has not been constructed at this phase.

2. Starting water level of Chamber 3 at North and Southwest Ponds set to the elevation equivalent to storage of 30 days of leachate generation.

3. The Top of Freeboard Elevation represents the elevations of the overflow weirs within the divider dikes separating the chambers.

4.4. CONCLUSION

This Stormwater and Contact Water Management Plan describes the infrastructure, design criteria, and strategy for regulatory-compliant and efficient management of stormwater and contact water during the construction of, waste placement in, and installation of final cover on a new, lined on-site CCR Landfill to be constructed at GPC Plant Branch. Water management during landfill construction, operation, and closure at the CCR Landfill is subject to regulatory criteria related to stormwater and contact water management contained in the GA EPD CCR Rule, USEPA CCR Rule, GSMM, and the Manual for Erosion and Sediment Control in Georgia, as well as additional design considerations incorporated based on general engineering practices and Geosyntec's professional experience. Four phases of landfill interim conditions were conceptually presented and evaluated. The evaluation compared runoff volumes of stormwater and contact water generated:

1. for each of the four considered phases;

2. contributing to respective stormwater and/or contact water chambers at each of the three CCR Landfill stormwater/contact water ponds (i.e., North, Southwest, and Southeast Ponds); and

3. under both the 25-yr, 24-hr and 100-yr, 24-hr storm events.

The results indicate that for the 25-yr, 24-hr storm event, each chamber type maintains at least 2 ft of freeboard from the peak water elevation to the "Top of Freeboard" elevation, and that for the 100-yr, 24-hr event, each chamber type has adequate capacity such that the peak water elevations do not overtop the "Top of Freeboard" elevations. The "Top of Freeboard" elevation generally represents the elevations of the emergency spillway overflow weirs within the divider dikes separating the chambers. This elevation was selected for comparison with the peak water level elevations as an indication if contact water and stormwater were flowing from one chamber type to another, indicating inadequate storage volumes and necessitating additional runoff for treatment and/or cleaning of the chambers prematurely. It is concluded that the North, Southwest, and Southeast Ponds are capable of managing (i.e., storing and conveying) both contact water and stormwater for the 25-yr, 24-hr and 100-yr, 24-hr storm events during construction and post-closure.

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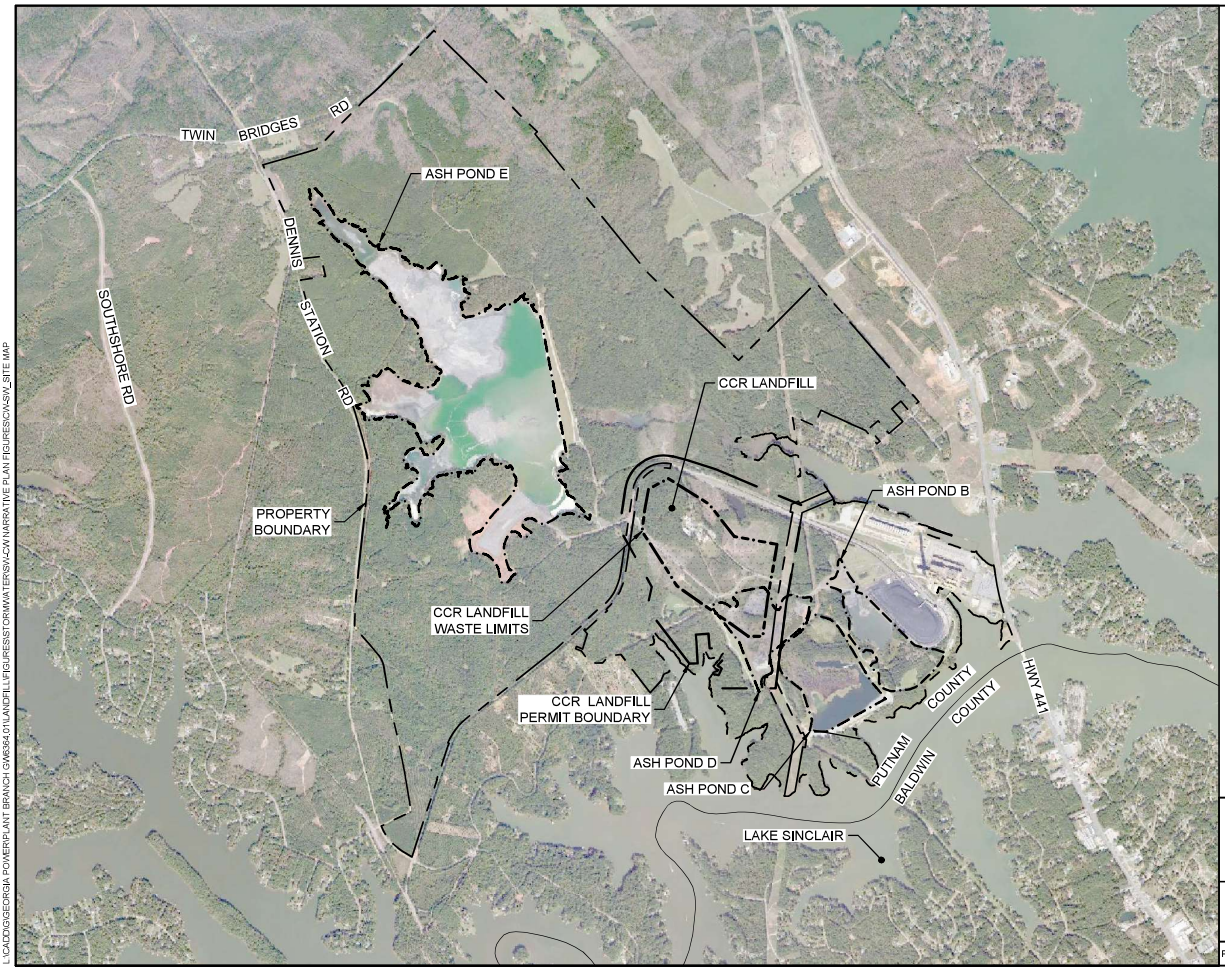
FIGURES



L:\CADD\GEORGIA POWER\PLANT BRANCH GW6364.01\LANDFILL\FIGURES\STORMWATER\SW\-CW NARRATIVE PLAN\ FIGURES\CVA-SW_SITE MAP

SITE LAYOUT

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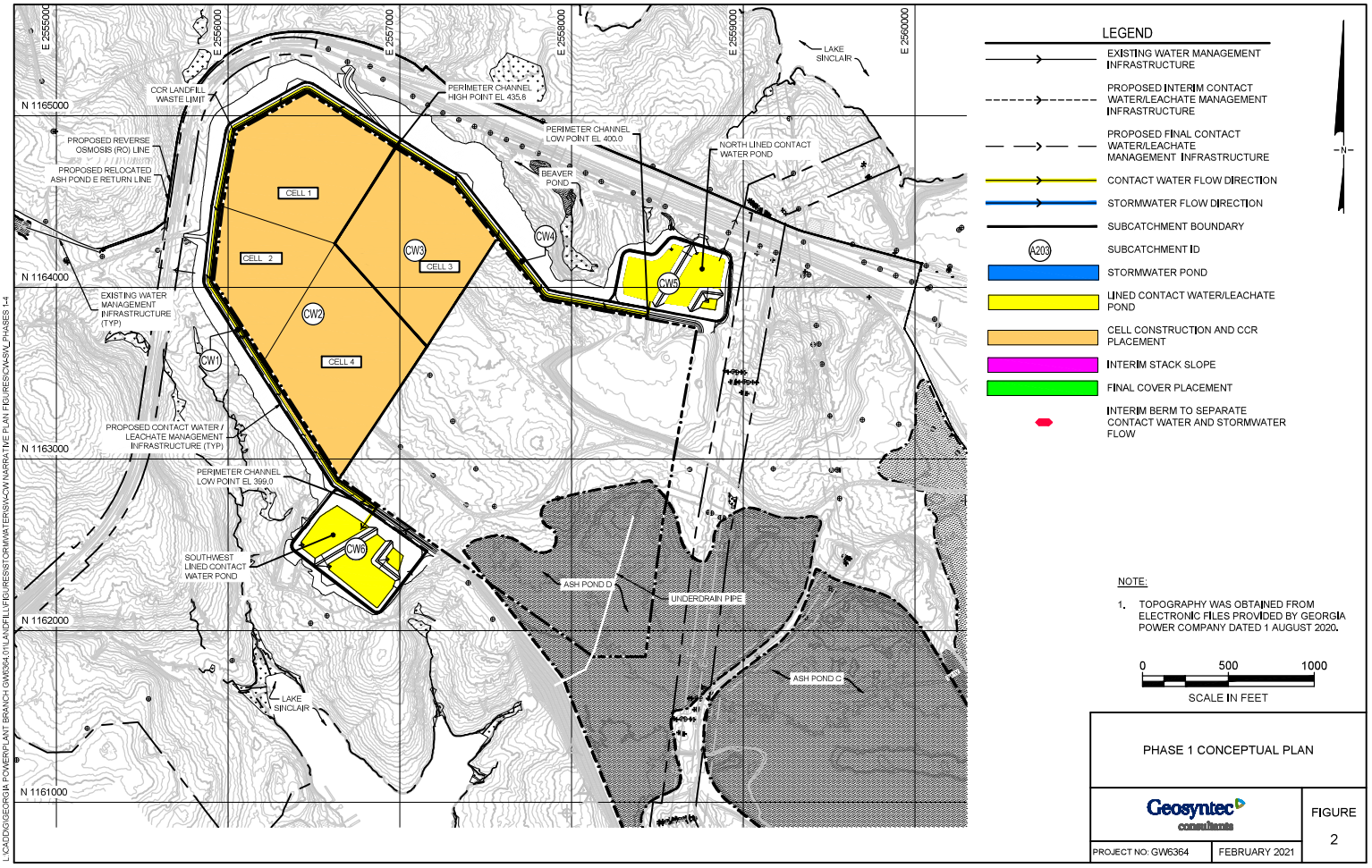
FIGURE 1



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PHASE 1 CONCEPTUAL PLAN

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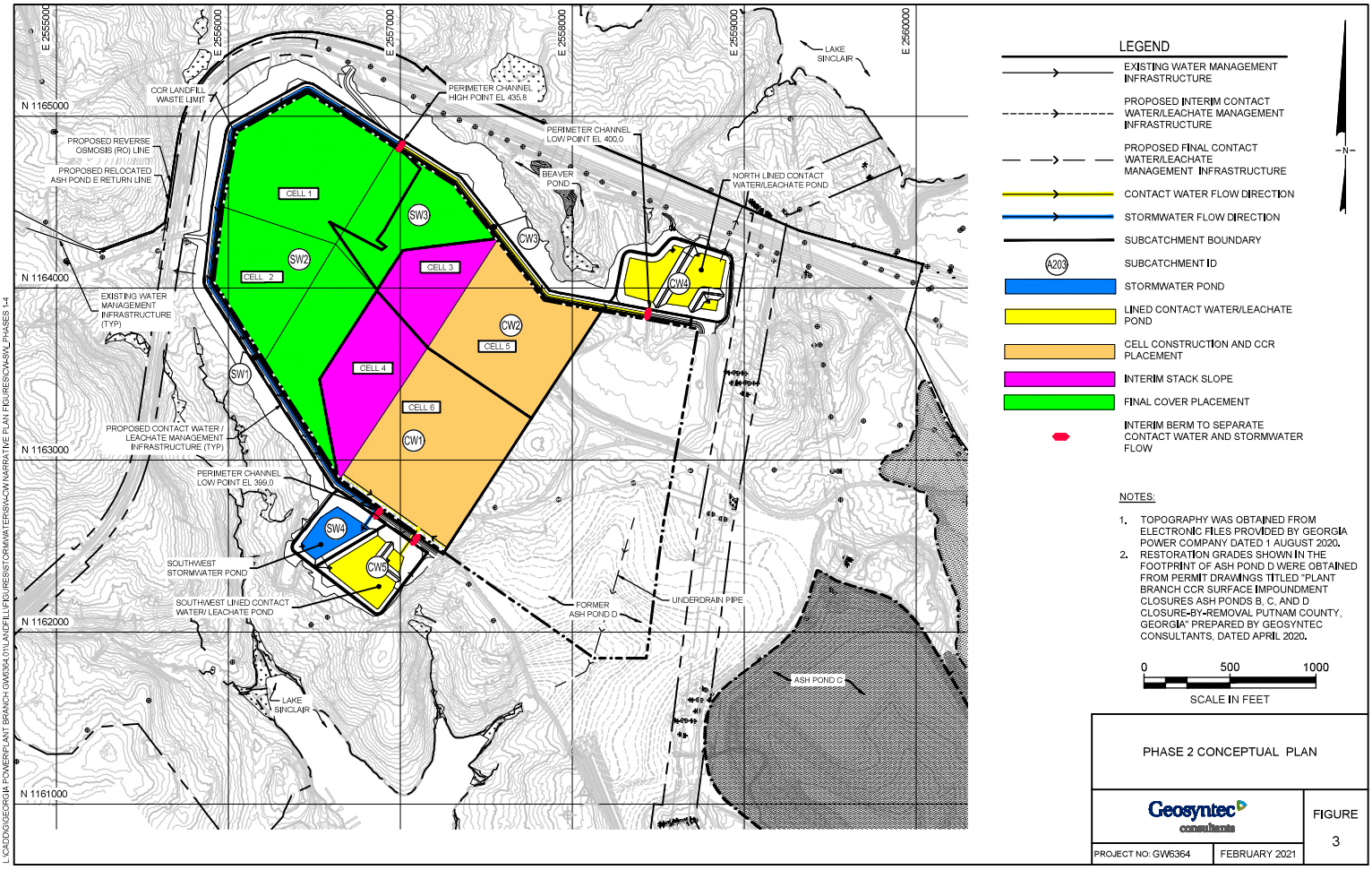
FIGURE 2



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PHASE 2 CONCEPTUAL PLAN

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FIGURE 3

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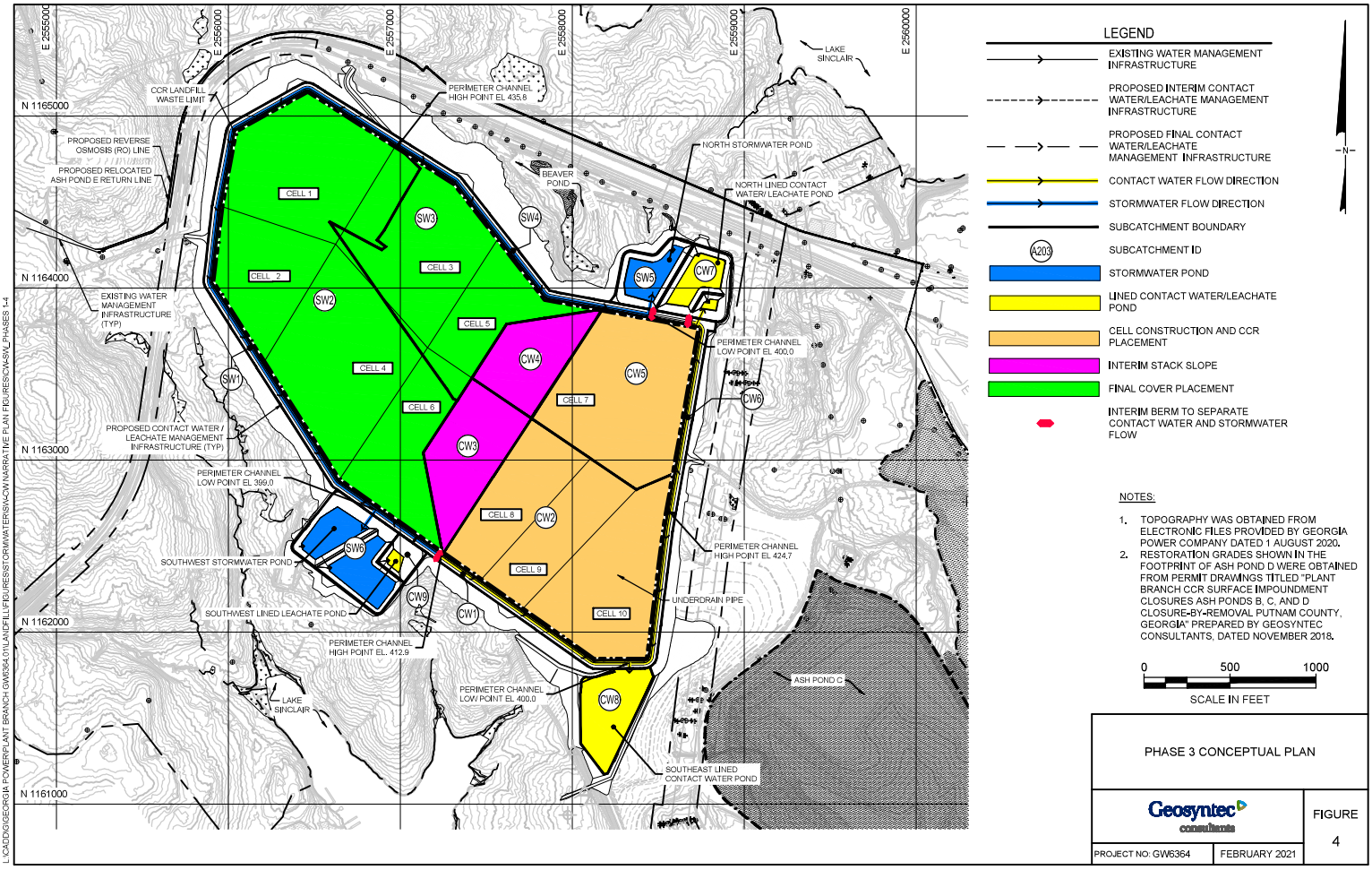

PHASE 3 CONCEPTUAL PLAN

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FIGURE 4

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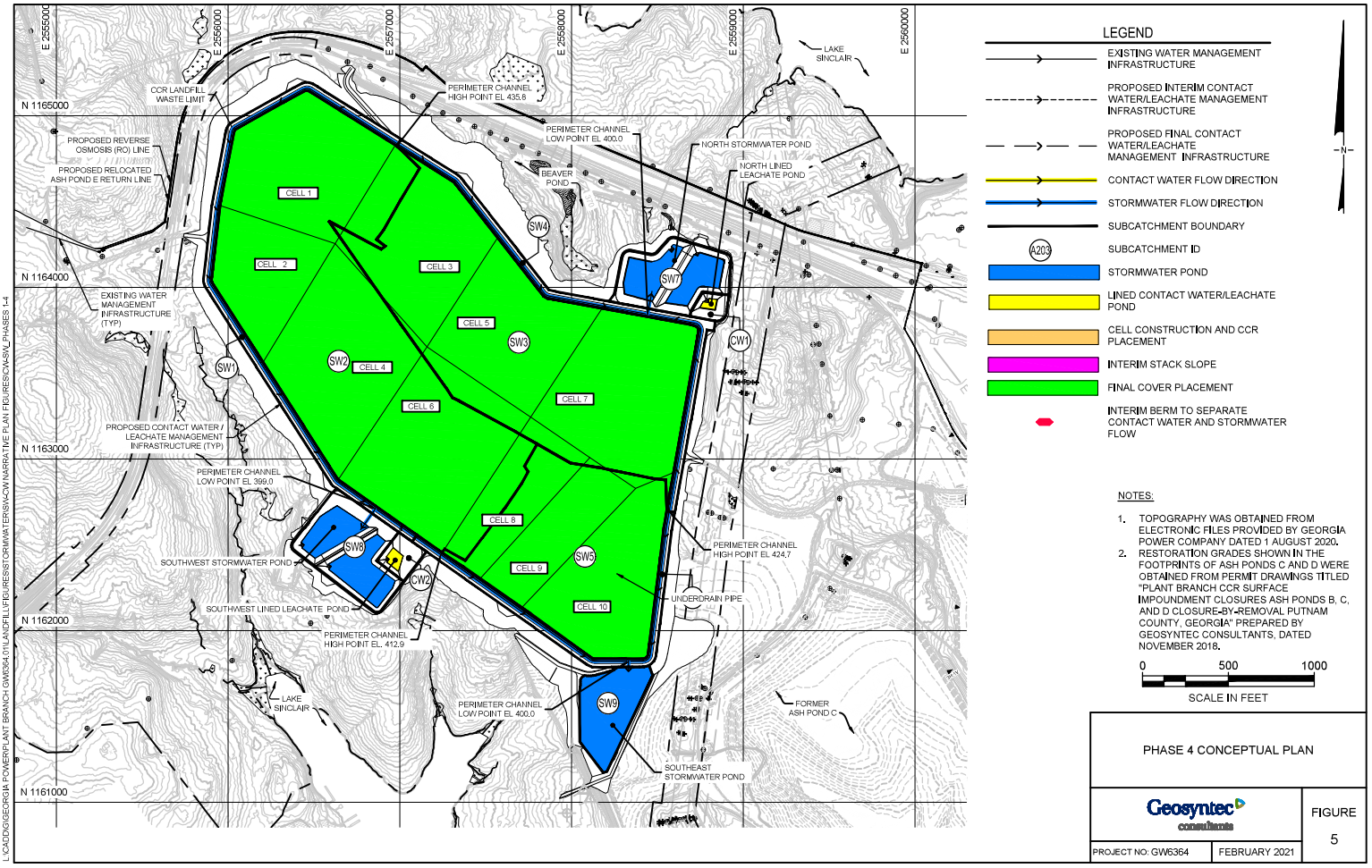

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PHASE 4 CONCEPTUAL PLAN

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FIGURE 5

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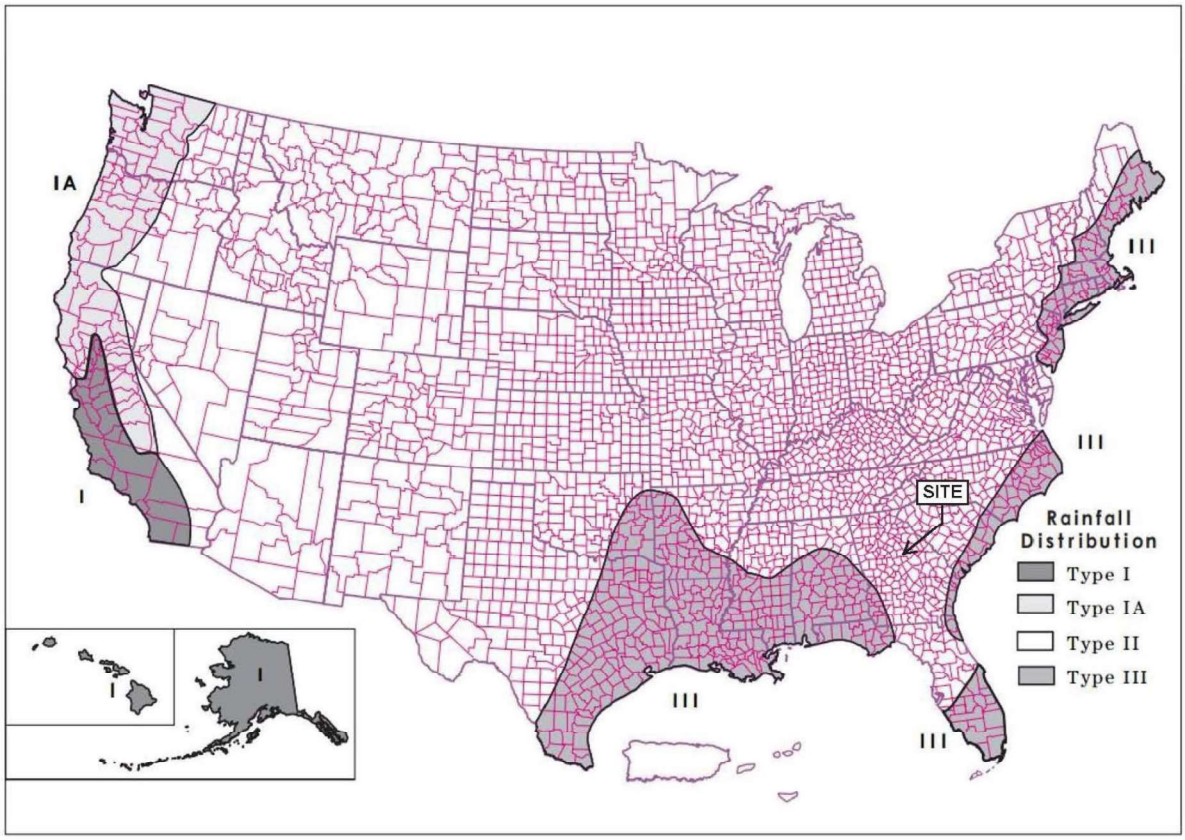


Figure 6. Rainfall Distribution

ATTACHMENTS

ATTACHMENT 1

NOAA PRECIPITATION FREQUENCY ESTIMATES [NOAA, 2017]

NOAA Atlas 14, Volume 9, Version 2
Location name: Eatonton, Georgia, USA*
Latitude: 33.204°, Longitude: -83.3267°
Elevation: 424.59 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Deborah Martin, Sandra Pavlovic, Ishani Roy, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Michael Yekta, Geoffery Bonnin

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.413 (0.343-0.490)	0.476 (0.396-0.566)	0.580 (0.481-0.690)	0.665 (0.549-0.794)	0.781 (0.627-0.950)	0.869 (0.686-1.07)	0.957 (0.736-1.20)	1.05 (0.779-1.33)	1.16 (0.840-1.51)	1.25 (0.886-1.64)
10-min	0.604 (0.503-0.718)	0.698 (0.580-0.829)	0.849 (0.704-1.01)	0.973 (0.803-1.16)	1.14 (0.918-1.39)	1.27 (1.00-1.56)	1.40 (1.08-1.75)	1.53 (1.14-1.95)	1.70 (1.23-2.21)	1.83 (1.30-2.40)
15-min	0.737 (0.613-0.875)	0.851 (0.707-1.01)	1.03 (0.858-1.23)	1.19 (0.980-1.42)	1.39 (1.12-1.70)	1.55 (1.23-1.91)	1.71 (1.32-2.13)	1.87 (1.39-2.38)	2.07 (1.50-2.69)	2.23 (1.58-2.93)
30-min	1.07 (0.889-1.27)	1.24 (1.03-1.47)	1.51 (1.25-1.80)	1.73 (1.43-2.07)	2.04 (1.64-2.48)	2.28 (1.80-2.80)	2.51 (1.93-3.13)	2.74 (2.05-3.49)	3.05 (2.21-3.96)	3.28 (2.33-4.31)
60-min	1.39 (1.15-1.65)	1.60 (1.33-1.90)	1.94 (1.61-2.31)	2.23 (1.84-2.66)	2.63 (2.12-3.21)	2.95 (2.33-3.63)	3.26 (2.52-4.09)	3.59 (2.68-4.57)	4.02 (2.91-5.23)	4.35 (3.09-5.72)
2-hr	1.70 (1.43-2.00)	1.95 (1.64-2.30)	2.37 (1.98-2.80)	2.73 (2.27-3.23)	3.22 (2.62-3.91)	3.62 (2.89-4.42)	4.02 (3.13-5.00)	4.43 (3.34-5.61)	4.99 (3.65-6.44)	5.42 (3.88-7.07)
3-hr	1.89 (1.60-2.21)	2.16 (1.82-2.53)	2.61 (2.20-3.07)	3.01 (2.52-3.54)	3.56 (2.92-4.30)	4.01 (3.22-4.88)	4.47 (3.50-5.54)	4.95 (3.75-6.25)	5.61 (4.12-7.21)	6.12 (4.40-7.94)
6-hr	2.25 (1.92-2.62)	2.57 (2.19-2.98)	3.11 (2.64-3.62)	3.58 (3.03-4.18)	4.26 (3.53-5.11)	4.81 (3.90-5.82)	5.38 (4.25-6.62)	5.98 (4.57-7.50)	6.81 (5.05-8.71)	7.47 (5.41-9.62)
12-hr	2.69 (2.32-3.10)	3.08 (2.65-3.55)	3.75 (3.21-4.32)	4.32 (3.69-5.00)	5.15 (4.30-6.13)	5.82 (4.76-6.98)	6.51 (5.19-7.95)	7.24 (5.59-9.01)	8.25 (6.17-10.5)	9.04 (6.60-11.6)
24-hr	3.18 (2.77-3.63)	3.66 (3.17-4.17)	4.45 (3.86-5.09)	5.14 (4.43-5.89)	6.13 (5.16-7.22)	6.92 (5.71-8.22)	7.73 (6.21-9.35)	8.59 (6.67-10.6)	9.76 (7.35-12.3)	10.7 (7.86-13.5)
2-day	3.72 (3.26-4.20)	4.25 (3.73-4.80)	5.15 (4.51-5.83)	5.93 (5.16-6.73)	7.04 (5.98-8.21)	7.93 (6.61-9.33)	8.84 (7.17-10.6)	9.80 (7.69-12.0)	11.1 (8.44-13.9)	12.1 (9.01-15.3)
3-day	4.09 (3.61-4.60)	4.64 (4.00-5.21)	5.57 (4.80-6.27)	6.38 (5.68-7.20)	7.53 (6.44-8.75)	8.46 (7.10-9.92)	9.43 (7.60-11.2)	10.4 (8.23-12.7)	11.8 (9.02-14.7)	12.9 (9.63-16.2)
4-day	4.40 (3.90-4.92)	4.96 (4.39-5.56)	5.92 (5.23-6.64)	6.76 (5.94-7.60)	7.96 (6.84-9.21)	8.93 (7.51-10.4)	9.93 (8.13-11.8)	11.0 (8.69-13.3)	12.4 (9.53-15.4)	13.6 (10.2-17.0)
7-day	5.17 (4.62-5.74)	5.80 (5.17-6.44)	6.87 (6.11-7.64)	7.80 (6.91-8.71)	9.15 (7.92-10.5)	10.2 (8.68-11.9)	11.4 (9.38-13.4)	12.6 (10.0-15.1)	14.2 (11.0-17.5)	15.5 (11.7-19.3)
10-day	5.86 (5.26-6.47)	6.54 (5.87-7.23)	7.70 (6.89-8.53)	8.71 (7.76-9.68)	10.2 (8.84-11.6)	11.3 (9.66-13.1)	12.5 (10.4-14.7)	13.8 (11.1-16.6)	15.6 (12.1-19.1)	17.0 (12.8-21.0)
20-day	7.90 (7.17-8.65)	8.72 (7.91-9.55)	10.1 (9.12-11.1)	11.2 (10.1-12.4)	12.9 (11.3-14.5)	14.1 (12.2-16.1)	15.4 (12.9-17.9)	16.8 (13.5-19.9)	18.6 (14.5-22.6)	20.0 (15.3-24.6)
30-day	9.69 (8.84-10.5)	10.6 (9.70-11.6)	12.2 (11.1-13.3)	13.4 (12.2-14.7)	15.2 (13.3-17.0)	16.5 (14.2-18.7)	17.8 (14.9-20.5)	19.1 (15.5-22.5)	20.9 (16.4-25.1)	22.2 (17.0-27.1)
45-day	12.0 (11.0-13.0)	13.2 (12.1-14.3)	15.0 (13.7-16.3)	16.4 (14.9-17.9)	18.3 (16.1-20.2)	19.7 (17.0-22.0)	21.0 (17.6-23.9)	22.2 (18.0-25.9)	23.8 (18.7-28.4)	24.9 (19.2-30.2)
60-day	14.1 (13.0-15.2)	15.4 (14.2-16.6)	17.5 (16.1-18.9)	19.1 (17.4-20.7)	21.1 (18.6-23.2)	22.5 (19.5-25.0)	23.8 (20.1-27.0)	24.9 (20.3-28.9)	26.3 (20.7-31.2)	27.2 (21.0-33.0)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

Back to Top

ATTACHMENT 2

TABLE 2-2 OF TR-55,
EXCERPT FROM CLOSURETURF® MANUAL,
AND EXCERPT FROM HYDROCAD

Table 2-2a Runoff curve numbers for urban areas [1/]

Cover description: Cover type and hydrologic condition	Average percent impervious area [2/]	Curve numbers for hydrologic soil group: A	B	C	D
Fully developed urban areas (vegetation established)					
Open space (lawns, parks, golf courses, cemeteries, etc.) [3/]:					
Poor condition (grass cover < 50%)		68	79	86	89
Fair condition (grass cover 50% to 75%)		49	69	79	84
Good condition (grass cover > 75%)		39	61	74	80
Impervious areas:					
Paved parking lots, roofs, driveways, etc. (excluding right-of-way)		98	98	98	98
Streets and roads:					
Paved; curbs and storm sewers (excluding right-of-way)		98	98	98	98
Paved; open ditches (including right-of-way)		83	89	92	93
Gravel (including right-of-way)		76	85	89	91
Dirt (including right-of-way)		72	82	87	89
Western desert urban areas:					
Natural desert landscaping (pervious areas only) [4/]		63	77	85	88
Artificial desert landscaping (impervious weed barrier, desert shrub with 1- to 2-inch sand or gravel mulch and basin borders)		96	96	96	96
Urban districts:					
Commercial and business	85	89	92	94	95
Industrial	72	81	88	91	93
Residential districts by average lot size:					
1/8 acre or less (town houses)	65	77	85	90	92
1/4 acre	38	61	75	83	87
1/3 acre	30	57	72	81	86
1/2 acre	25	54	70	80	85
1 acre	20	51	68	79	84
2 acres	12	46	65	77	82
Developing urban areas					
Newly graded areas (pervious areas only, no vegetation) [5/]		77	86	91	94
Idle lands (CN's are determined using cover types similar to those in table 2-2c).					

1 Average runoff condition, and $I_a = 0.2S$.

2 The average percent impervious area shown was used to develop the composite CN's. Other assumptions are as follows: impervious areas are directly connected to the drainage system, impervious areas have a CN of 98, and pervious areas are considered equivalent to open space in good hydrologic condition. CN's for other combinations of conditions may be computed using figure 2-3 or 2-4.

3 CN's shown are equivalent to those of pasture. Composite CN's may be computed for other combinations of open space cover type.

4 Composite CN's for natural desert landscaping should be computed using figures 2-3 or 2-4 based on the impervious area percentage (CN = 98) and the pervious area CN. The pervious area CN's are assumed equivalent to desert shrub in poor hydrologic condition.

5 Composite CN's to use for the design of temporary measures during grading and construction should be computed using figure 2-3 or 2-4 based on the degree of development (impervious area percentage) and the CN's for the newly graded pervious areas.

Table 2-2c Runoff curve numbers for other agricultural lands [1/]

Cover description		Curve numbers for hydrologic soil group			
Cover type	Hydrologic condition	A	B	C	D
Pasture, grassland, or range—continuous forage for grazing. [2/]	Poor	68	79	86	89
	Fair	49	69	79	84
	Good	39	61	74	80
Meadow—continuous grass, protected from grazing and generally mowed for hay.	—	30	58	71	78
Brush—brush-weed-grass mixture with brush the major element. [3/]	Poor	48	67	77	83
	Fair	35	56	70	77
	Good	30 [4/]	48	65	73
Woods—grass combination (orchard or tree farm). [5/]	Poor	57	73	82	86
	Fair	43	65	76	82
	Good	32	58	72	79
Woods. [6/]	Poor	45	66	77	83
	Fair	36	60	73	79
	Good	30 [4/]	55	70	77
Farmsteads—buildings, lanes, driveways, and surrounding lots.	—	59	74	82	86

1 Average runoff condition, and $I_a = 0.2S$.

2 *Poor:* <50%) ground cover or heavily grazed with no mulch.
Fair: 50 to 75% ground cover and not heavily grazed.
Good: > 75% ground cover and lightly or only occasionally grazed.

3 *Poor*: <50% ground cover.
Fair: 50 to 75% ground cover.
Good: >75% ground cover.

4 Actual curve number is less than 30; use CN = 30 for runoff computations.

5 CN's shown were computed for areas with 50% woods and 50% grass (pasture) cover. Other combinations of conditions may be computed from the CN's for woods and pasture.

6 *Poor:* Forest litter, small trees, and brush are destroyed by heavy grazing or regular burning.
Fair: Woods are grazed but not burned, and some forest litter covers the soil.
Good: Woods are protected from grazing, and litter and brush adequately cover the soil.

5.2 Closure*Turf*® Hydrology Parameters

Currently, many regulatory agencies are requiring run-off curve numbers (RCN) of 95-98 of a typical landfill closure. **Closure***Turf*®'s RCN should be calculated between 92 and 95. This number was derived by TRI Environmental, Inc. and Colorado State University Hydraulics Laboratory in separate tests. Table 2 below shows the typical TR-55 design parameters for Hydrology using **Closure***Turf*®.

Closure*Turf*® Hydrology		
	TR-55 Data	
	Curve Number Depends on Rain Intensity	92[1] - 95
Sheet Flow	Manning's n	
	Slopes >10%	0.12
	Slopes <10%	0.22
	Flow Length	100'-300' dependent on Manning's n until a depth of not more than 0.1 foot is attained in the 2yr 24hr rainfall
	2yr-24hr Rain	SCS
	Land Slope	design
Shallow Concentrated Flow	Flow Length	design
	Slope	design
	Surface (paved/unpaved)	Unpaved
	X-Sect Area	ft^2
Channel Flow	Wetted Perimeter	Linear Feet
	Channel Slope	ft/ft
	Manning's n	0.03[2]
	Flow Length	design

1. RCN ranging from 92 in High Intensity Rainfalls to 95 in normal rainfall events.
2. Manning's n for channel flow will vary with depth of flow.

Table 2: **Closure***Turf*® TR-55 Data

The engineered turf portion of **Closure***Turf*® will have a manning's 'n' under sheet flow that is 0.12 on slopes greater than 10% and 0.22 on slopes less than 10%. In most cases, the time of concentration for sheet flow will have the greatest impact to the overall Tc.

5.3 Drainage Length (CT 1)

Critical slope length is used to define the drainage length between benches or swales where the system will discharge the flow. The graphic below shows the maximum distance allowed between benches or drainage features when using CT 1. The calculations are based on the transmissivity capacity of the Super Gripnet® to handle the flow without inundating the sand for slopes 10 percent or greater. Inundation of

Curve Number Table Excerpt from HydroCad

line	Description	Condition	A	B	C	D	Condensed Description
0	CN Values for Ia = 0.20 S						
1	FULLY DEVELOPED URBAN AREAS	Veg Estab					
2	Open space (Lawns,parks etc.)						
3	grass cover < 50%	Poor	68	79	86	89	<50% Grass cover, Poor
4	grass cover 50% to 75%	Fair	49	69	79	84	50-75% Grass cover, Fair
5	grass cover > 75%	Good	39	61	74	80	>75% Grass cover, Good
W1	Pond and Lake Surfaces						
W2	Classified as Impervious		98	98	98	98	Water Surface
W3	Classified as Pervious	0% imp	98	98	98	98	Water Surface, 0% imp
6	Impervious Areas						
7	Paved parking lots, driveways		98	98	98	98	Paved parking
7a	Unconnected Impervious		98	98	98	98	Unconnected pavement
7b	Roofs		98	98	98	98	Roofs
7c	Unconnected Impervious		98	98	98	98	Unconnected roofs
8	Streets and roads						
9	Paved; curbs and storm sewers		98	98	98	98	Paved roads w/curbs & sewers
10	Paved; open ditches (w/ROW)	50% imp	83	89	92	93	Paved roads w/open ditches, 5
11a	Gravel (w/o right-of-way)		96	96	96	96	Gravel surface
11	Gravel (w/ right-of-way)		76	85	89	91	Gravel roads
12	Dirt (w/ right-of-way)		72	82	87	89	Dirt roads
13	Urban Districts	impervious					
14	Commercial & business	85% imp	89	92	94	95	Urban commercial, 85% imp
15	Industrial	72% imp	81	88	91	93	Urban industrial, 72% imp
16	Residential districts						
17	(by average lot size)	impervious					
18	1/8 acre (town houses)	65% imp	77	85	90	92	1/8 acre lots, 65% imp

ATTACHMENT 3

POND DESIGN SUMMARY INFORMATION

Table 7. North Pond Stage-Storage Relationship

Elevation (ft)	Depth (ft)	Chamber 1		Chamber 2		Chamber 3		Cumulative	
		Surface Area (sq-ft)	Storage (cubic-feet)	Surface Area (sq-ft)	Storage (cubic-feet)	Surface Area (sq-ft)	Storage (cubic-feet)	Surface Area (sq-ft)	Storage (cubic-feet)
387.7	0.0	0	0	0	0	0	0	0	0
388.0	0.3	10,899	0	0	0	0	0	10,899	0
388.5	0.8	35,646	11,043	1,533	0	0	0	37,180	11,043
389.0	1.3	52,176	32,867	28,696	6,144	0	0	80,872	39,011
389.5	1.8	61,323	61,212	56,359	27,022	0	0	117,682	88,234
390.0	2.3	63,042	92,302	58,704	55,786	5,109	0	126,855	148,088
390.5	2.8	64,777	124,256	60,358	85,550	5,567	2,668	130,702	212,474
391.0	3.3	66,528	157,081	62,030	116,147	6,034	5,568	134,592	278,795
391.5	3.8	68,295	190,785	63,721	147,583	6,520	8,705	138,535	347,074
392.0	4.3	70,077	225,378	65,429	179,870	7,023	12,090	142,529	417,338
392.5	4.8	71,876	260,865	67,156	213,015	7,544	15,731	146,575	489,611
393.0	5.3	73,690	297,256	68,900	247,028	8,082	19,637	150,673	563,920
393.5	5.8	75,521	334,557	70,663	281,918	8,639	23,816	154,822	640,291
394.0	6.3	77,367	372,778	72,444	317,694	9,212	28,278	159,023	718,750
394.5	6.8	79,229	411,926	74,243	354,365	9,804	33,031	163,276	799,323
395.0	7.3	81,107	452,009	76,060	391,940	10,414	38,085	167,581	882,034
395.5	7.8	83,001	493,035	77,896	430,428	11,041	43,448	171,937	966,911
396.0	8.3	84,910	535,012	79,749	469,838	11,686	49,129	176,345	1,053,979
396.5	8.8	86,836	577,948	81,621	510,180	12,348	55,136	180,805	1,143,264
397.0	9.3	88,778	621,851	83,512	551,462	13,028	61,480	185,318	1,234,793
397.5	9.8	90,735	666,728	85,421	593,695	13,726	68,168	189,883	1,328,590
398.0	10.3	92,708	712,588	87,349	636,886	14,442	75,209	194,499	1,424,683
398.5	10.8	94,697	759,438	89,295	681,046	15,175	82,613	199,168	1,523,097
399.0	11.3	96,702	807,287	91,259	726,184	15,927	90,387	203,888	1,623,859

Notes:

1. Design of the hydraulic connections (i.e., piping and valves) in stormwater – contact water – leachate pond divider dikes will be included in the detailed design.

Table 8. Southwest Pond Stage-Storage Relationship

Elevation (ft)	Depth (ft)	Chamber 1		Chamber 2		Chamber 3		Cumulative	
		Surface Area (sq-ft)	Storage (cubic-feet)	Surface Area (sq-ft)	Storage (cubic-feet)	Surface Area (sq-ft)	Storage (cubic-feet)	Surface Area (sq-ft)	Storage (cubic-feet)
376.0	0.0	0	0	0	0	0	0	0	0
376.5	0.5	5,226	0	0	0	0	0	5,226	0
377.0	1.0	19,215	5,743	0	0	0	0	19,215	5,743
377.5	1.5	33,119	18,670	1,926	0	0	0	35,045	18,670
378.0	2.0	48,381	38,925	18,146	4,331	0	0	66,528	43,256
378.5	2.5	60,820	66,166	39,900	18,490	0	0	100,720	84,656
379.0	3.0	62,677	97,040	57,130	42,619	5,028	0	124,835	139,658
379.5	3.5	64,293	128,781	72,217	74,882	8,606	3,369	145,116	207,032
380.0	4.0	65,928	161,336	83,774	113,844	9,181	7,815	158,884	282,995
380.5	4.5	67,583	194,713	85,829	156,244	9,775	12,553	163,187	363,510
381.0	5.0	69,257	228,922	87,879	199,670	10,388	17,593	167,524	446,185
381.5	5.5	70,950	263,973	89,948	244,126	11,019	22,944	171,917	531,043
382.0	6.0	72,663	299,875	92,036	289,621	11,669	28,615	176,367	618,111
382.5	6.5	74,394	336,639	94,143	336,164	12,338	34,616	180,874	707,419
383.0	7.0	76,145	374,272	96,268	383,766	13,024	40,956	185,437	798,994
383.5	7.5	77,914	412,786	98,413	432,435	13,730	47,644	190,057	892,865
384.0	8.0	79,703	452,190	100,577	482,182	14,453	54,689	194,734	989,061
384.5	8.5	81,510	492,492	102,761	533,016	15,195	62,100	199,466	1,087,608
385.0	9.0	83,336	533,703	104,963	584,946	15,956	69,887	204,255	1,188,536
385.5	9.5	85,181	575,831	107,184	637,981	16,736	78,059	209,101	1,291,872
386.0	10.0	87,044	618,887	109,425	692,133	17,534	86,626	214,002	1,397,645
386.5	10.5	88,926	662,879	111,684	747,409	18,350	95,596	218,961	1,505,883
387.0	11.0	90,827	707,816	113,963	803,819	19,186	104,979	223,975	1,616,615

Notes:

1. Design of the hydraulic connections (i.e., piping and valves) in stormwater – contact water – leachate pond divider dikes will be included in the detailed design.

Table 9. Southeast Pond Stage-Storage Relationship

Elevation (ft)	Depth (ft)	Surface Area (sq-ft)	Storage (cubic-feet)
367.7	0.0	0	0
368.0	0.3	65	0
368.5	0.8	414	107
369.0	1.3	1,114	475
369.5	1.8	2,314	1,314
370.0	2.3	3,960	2,864
370.5	2.8	5,942	5,323
371.0	3.3	8,260	8,858
371.5	3.8	10,915	13,636
372.0	4.3	13,911	19,828
372.5	4.8	17,292	27,613
373.0	5.3	21,086	37,192
373.5	5.8	25,277	48,766
374.0	6.3	29,769	62,513
374.5	6.8	34,546	78,576
375.0	7.3	39,607	97,100
375.5	7.8	44,934	118,221
376.0	8.3	50,448	142,053
376.5	8.8	56,075	168,672
377.0	9.3	61,565	198,071
377.5	9.8	66,892	230,176
378.0	10.3	72,056	264,905
378.5	10.8	77,057	302,176
379.0	11.3	81,892	341,908
379.5	11.8	86,557	384,014
380.0	12.3	91,048	428,411
380.5	12.8	95,364	475,010
381.0	13.3	99,504	523,723
381.5	13.8	103,470	574,464
382.0	14.3	107,251	627,141
382.5	14.8	110,840	681,661
383.0	15.3	114,235	737,928
383.5	15.8	117,438	795,844
384.0	16.3	120,447	855,314
384.5	16.8	123,264	916,241
385.0	17.3	125,888	978,528
385.5	17.8	128,279	1,042,069
386.0	18.3	130,656	1,106,801
386.5	18.8	133,059	1,172,729
387.0	19.3	137,605	1,240,392

Notes:

1. Design of the hydraulic connections (i.e., piping and valves) in stormwater – contact water – leachate pond divider dikes will be included in the detailed design.

Table 10. North Pond Design Summary

ITEM		NORTH POND		
		DESCRIPTION	PARAMETER VALUE IN UNITS SHOWN	
INVERT ELEVATION		Lowest Bottom Elevation of Pond	ELEVATION (FT MSL)	387.7
PRINCIPAL OUTLET STRUCTURE	Drawdown Orifice	6" Diameter Circular Orifice		387.7
	Principal Spillway Riser	5' X 5' Square Opening at Top of Riser Structure(1)		393.2
	Outlet Pipe (Upstream Invert)	1 - 24" Diameter RCP		387.7
	Outlet Pipe (Downstream Invert)			385.4
EMERGENCY SPILLWAY - INTERIM CONDITION				398.5
EMERGENCY SPILLWAY - FINAL CONDITION		40' Long Broad Crested Rectangular Weir		398.5
DIVIDER DIKE OVERFLOW WEIR				398.5
EMBANKMENT		Value represents minimum embankment elevation		399.0

Note:
1. Dimensions are provided for the interior of the riser structure.

Table 11. Southwest Pond Design Summary

ITEM		SOUTHWEST POND		
		DESCRIPTION	PARAMETER VALUE IN UNITS SHOWN	
INVERT ELEVATION		Lowest Bottom Elevation of Pond	ELEVATION (FT MSL)	376.0
PRINCIPAL OUTLET STRUCTURE	Drawdown Orifice	6" Diameter Circular Orifice		376.0
	Principal Spillway Riser	5 X 5' Square Opening at Top of Riser Structure(1)		383.5
	Outlet Pipe (Upstream Invert)	1 - 24" Diameter RCP		375.5
	Outlet Pipe (Downstream Invert)			370.4
EMERGENCY SPILLWAY - INTERIM CONDITION				386.5
EMERGENCY SPILLWAY - FINAL CONDITION		40' Long Broad Crested Rectangular Weir		385.5
DIVIDER DIKE OVERFLOW WEIR				386.5
EMBANKMENT		Value represents minimum embankment elevation		387.0

Note:
1. Dimensions are provided for the interior of the riser structure.

Table 12. Southeast Pond Design Summary

ITEM		SOUTHEAST POND		
		DESCRIPTION	PARAMETER VALUE IN UNITS SHOWN	
INVERT ELEVATION		Lowest Bottom Elevation of Pond	ELEVATION (FT MSL)	367.7
PRINCIPAL OUTLET STRUCTURE	Drawdown Orifice	6" Diameter Circular Orifice		367.7
	Principal Spillway Riser	5' X 5' Square Opening at Top of Riser Structure(1)		372.2
	Outlet Pipe (Upstream Invert)	1 - 18" Diameter RCP		367.7
	Outlet Pipe (Downstream Invert)			351.0
EMERGENCY SPILLWAY - INTERIM CONDITION				386.5
EMERGENCY SPILLWAY - FINAL CONDITION		40' Long Broad Crested Rectangular Weir		385.5
DIVIDER DIKE OVERFLOW WEIR				386.5
EMBANKMENT		Value represents minimum embankment elevation		387.0

Note:
1. Dimensions are provided for the interior of the riser structure.

Table 13. Leachate Generation Rate Calculations

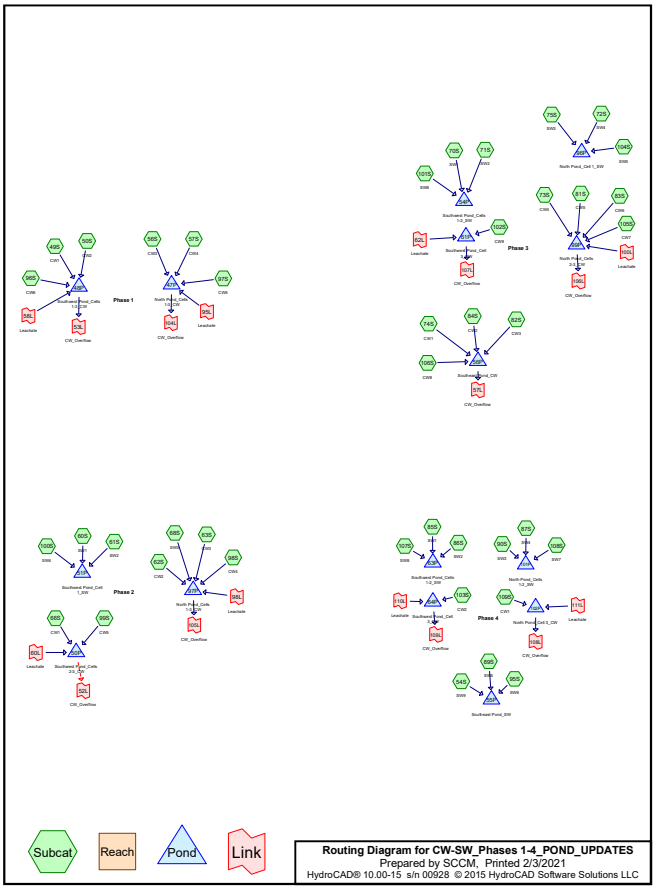
Landfill Cell Number	Landfill Cell Area (ac)	Phase 1		Phase 2		Phase 3		Phase 4	
		Leachate Unit Production Rate (gal/ac/day)	Leachate Generation Rate (cfs)	Leachate Unit Production Rate (gal/ac/day)	Leachate Generation Rate (cfs)	Leachate Unit Production Rate (gal/ac/day)	Leachate Generation Rate (cfs)	Leachate Unit Production Rate (gal/ac/day)	Leachate Generation Rate (cfs)
North Pond									
1	12.6	965	0.02	14	0.00	14	0.00	200	0.00
3	13.2	965	0.02	121	0.00	14	0.00	200	0.00
5	11.4	965	0.02	965	0.02	121	0.00	200	0.00
7	14.6	0	0.00	965	0.02	965	0.02	200	0.00
Total Generation Rate (cfs)		**0.06**		**0.04**		**0.02**		**0.02**	
Southwest Pond									
2	7.9	965	0.01	14	0.00	14	0.00	200	0.00
4	14.9	965	0.02	121	0.00	14	0.00	200	0.00
6	15.6	965	0.02	965	0.02	121	0.00	200	0.00
8	7.4	0	0.00	965	0.01	965	0.01	200	0.00
9	6.6	0	0.00	965	0.01	965	0.01	200	0.00
10	11.1	0	0.00	965	0.02	965	0.02	200	0.00
Total Generation Rate (cfs)		**0.06**		**0.06**		**0.04**		**0.02**	

Notes:

1. Leachate distribution assumes use of permanent leachate forcemains. Leachate forcemains do not direct flow to the Southeast Pond; this pond is excluded from this table.
2. Total generation rate is modeled as a 24-hour constant rate inflow to simulate leachate inflows to the North and Southwest Ponds.

ATTACHMENT 4

HYDROCAD RESULTS FOR EACH PHASE



Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
33.708	96	Access Roads/Perimeter Channel (49S, 57S, 60S, 63S, 70S, 72S, 74S, 83S, 85S, 87S, 95S)
143.196	94	Exposed CCR Surface (50S, 56S, 62S, 66S, 73S, 81S, 82S, 84S)
220.016	95	Final Cover System - ClosureTurf (61S, 68S, 71S, 75S, 86S, 89S, 90S)
56.958	98	Water Surface, HSG D (54S, 96S, 97S, 98S, 99S, 100S, 101S, 102S, 103S, 104S, 105S, 106S, 107S, 108S, 109S)
453.877	**95**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
56.958	HSG D	54S, 96S, 97S, 98S, 99S, 100S, 101S, 102S, 103S, 104S, 105S, 106S, 107S, 108S, 109S
396.920	Other	49S, 50S, 56S, 57S, 60S, 61S, 62S, 63S, 66S, 68S, 70S, 71S, 72S, 73S, 74S, 75S, 81S, 82S, 83S, 84S, 85S, 86S, 87S, 89S, 90S, 95S
453.877		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.000	33.708	33.708	Access Roads/Perimeter Channel	49S, 57S, 60S, 63S, 70S, 72S, 74S, 83S, 85S, 87S, 95S

Ground Covers (all nodes) (continued)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.000	143.196	143.196	Exposed CCR Surface	5,50S,56S,62S,66S,73S,81S,82S,84S
0.000	0.000	0.000	0.000	220.016	220.016	Final Cover System - ClosureTurf	6,68S,71S,75S

Ground Covers (all nodes) (continued)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	56.958	0.000	56.958	Water Surface	5,40S,96S,97S,98S,99S,100S,101S,102S,103S,104S,1

Ground Covers (all nodes) (continued)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	**0.000**	**0.000**	**56.958**	**396.920**	**453.877**	**TOTAL AREA**	

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	51P	375.50	370.40	125.0	0.0408	0.012	24.0	0.0	0.0
2	54P	375.50	370.40	125.0	0.0408	0.012	24.0	0.0	0.0
3	55P	367.70	351.00	208.0	0.0803	0.012	18.0	0.0	0.0
4	63P	375.50	370.40	125.0	0.0408	0.012	24.0	0.0	0.0
5	96P	387.70	385.40	93.0	0.0247	0.012	24.0	0.0	0.0
6	101P	387.70	385.40	93.0	0.0247	0.012	24.0	0.0	0.0

Time span=0.00-480.00 hrs, dt=0.05 hrs, 9601 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 49S: CW1 Runoff Area=173,804 sf 0.00% Impervious Runoff Depth=5.66"
Tc=5.0 min CN=96 Runoff=34.89 cfs 1.881 af

Subcatchment 50S: CW2 Runoff Area=1,585,402 sf 0.00% Impervious Runoff Depth=5.43"
Tc=5.0 min CN=94 Runoff=313.30 cfs 16.455 af

Subcatchment 54S: SW9 Runoff Area=164,059 sf 100.00% Impervious Runoff Depth=5.89"
Tc=5.0 min CN=98 Runoff=33.27 cfs 1.849 af

Subcatchment 56S: CW3 Runoff Area=585,303 sf 0.00% Impervious Runoff Depth=5.43"
Tc=5.0 min CN=94 Runoff=115.67 cfs 6.075 af

Subcatchment 57S: CW4 Runoff Area=86,738 sf 0.00% Impervious Runoff Depth=5.66"
Tc=5.0 min CN=96 Runoff=17.41 cfs 0.939 af

Subcatchment 60S: SW1 Runoff Area=187,120 sf 0.00% Impervious Runoff Depth=5.66"
Tc=5.0 min CN=96 Runoff=37.57 cfs 2.025 af

Subcatchment 61S: SW2 Runoff Area=1,371,625 sf 0.00% Impervious Runoff Depth=5.54"
Tc=5.0 min CN=95 Runoff=273.38 cfs 14.539 af

Subcatchment 62S: CW2 Runoff Area=727,268 sf 0.00% Impervious Runoff Depth=5.43"
Tc=5.0 min CN=94 Runoff=143.72 cfs 7.548 af

Subcatchment 63S: CW3 Runoff Area=97,972 sf 0.00% Impervious Runoff Depth=5.66"
Tc=5.0 min CN=96 Runoff=19.67 cfs 1.060 af

Subcatchment 66S: CW1 Runoff Area=1,015,903 sf 0.00% Impervious Runoff Depth=5.43"
Tc=5.0 min CN=94 Runoff=200.76 cfs 10.544 af

Subcatchment 68S: SW3 Runoff Area=250,674 sf 0.00% Impervious Runoff Depth=5.54"
Tc=5.0 min CN=95 Runoff=49.96 cfs 2.657 af

Subcatchment 70S: SW1 Runoff Area=187,120 sf 0.00% Impervious Runoff Depth=5.66"
Tc=5.0 min CN=96 Runoff=37.57 cfs 2.025 af

Subcatchment 71S: SW2 Runoff Area=2,036,737 sf 0.00% Impervious Runoff Depth=5.54"
Tc=5.0 min CN=95 Runoff=405.94 cfs 21.589 af

Subcatchment 72S: SW4 Runoff Area=97,972 sf 0.00% Impervious Runoff Depth=5.66"
Tc=5.0 min CN=96 Runoff=19.67 cfs 1.060 af

Subcatchment 73S: CW4 Runoff Area=238,436 sf 0.00% Impervious Runoff Depth=5.43"
Tc=5.0 min CN=94 Runoff=47.12 cfs 2.475 af

Subcatchment 74S: CW1 Runoff Area=117,033 sf 0.00% Impervious Runoff Depth=5.66"
Tc=5.0 min CN=96 Runoff=23.49 cfs 1.267 af

Subcatchment 75S: SW3 Runoff Area=786,090 sf 0.00% Impervious Runoff Depth=5.54"
Tc=5.0 min CN=95 Runoff=156.68 cfs 8.332 af

Subcatchment 81S: CW5 Runoff Area=656,028 sf 0.00% Impervious Runoff Depth=5.43"
Tc=5.0 min CN=94 Runoff=129.64 cfs 6.809 af

Subcatchment 82S: CW3 Runoff Area=305,217 sf 0.00% Impervious Runoff Depth=5.43"
Tc=5.0 min CN=94 Runoff=60.32 cfs 3.168 af

Subcatchment 83S: CW6 Runoff Area=59,186 sf 0.00% Impervious Runoff Depth=5.66"
Tc=5.0 min CN=96 Runoff=11.88 cfs 0.641 af

Subcatchment 84S: CW2 Runoff Area=1,124,039 sf 0.00% Impervious Runoff Depth=5.43"
Tc=5.0 min CN=94 Runoff=222.13 cfs 11.667 af

Subcatchment 85S: SW1 Runoff Area=187,120 sf 0.00% Impervious Runoff Depth=5.66"
Tc=5.0 min CN=96 Runoff=37.57 cfs 2.025 af

Subcatchment 86S: SW2 Runoff Area=2,403,773 sf 0.00% Impervious Runoff Depth=5.54"
Tc=5.0 min CN=95 Runoff=479.09 cfs 25.479 af

Subcatchment 87S: SW4 Runoff Area=157,213 sf 0.00% Impervious Runoff Depth=5.66"
Tc=5.0 min CN=96 Runoff=31.56 cfs 1.701 af

Subcatchment 89S: SW5 Runoff Area=962,345 sf 0.00% Impervious Runoff Depth=5.54"
Tc=5.0 min CN=95 Runoff=191.80 cfs 10.201 af

Subcatchment 90S: SW3 Runoff Area=1,772,666 sf 0.00% Impervious Runoff Depth=5.54"
Tc=5.0 min CN=95 Runoff=353.31 cfs 18.790 af

Subcatchment 95S: SW6 Runoff Area=117,033 sf 0.00% Impervious Runoff Depth=5.66"
Tc=5.0 min CN=96 Runoff=23.49 cfs 1.267 af

Subcatchment 96S: CW6 Runoff Area=291,980 sf 100.00% Impervious Runoff Depth=5.89"
Tc=5.0 min CN=98 Runoff=59.21 cfs 3.291 af

Subcatchment 97S: CW5 Runoff Area=246,262 sf 100.00% Impervious Runoff Depth=5.89"
Tc=5.0 min CN=98 Runoff=49.94 cfs 2.776 af

Subcatchment 98S: CW4 Runoff Area=246,262 sf 100.00% Impervious Runoff Depth=5.89"
Tc=5.0 min CN=98 Runoff=49.94 cfs 2.776 af

Subcatchment 99S: CW5 Runoff Area=172,969 sf 100.00% Impervious Runoff Depth=5.89"
Tc=5.0 min CN=98 Runoff=35.08 cfs 1.950 af

Subcatchment 100S: SW4 Runoff Area=119,011 sf 100.00% Impervious Runoff Depth=5.89"
Tc=5.0 min CN=98 Runoff=24.14 cfs 1.341 af

Subcatchment 101S: SW6 Runoff Area=249,478 sf 100.00% Impervious Runoff Depth=5.89"
Tc=5.0 min CN=98 Runoff=50.60 cfs 2.812 af

Subcatchment 102S: CW9 Runoff Area=42,502 sf 100.00% Impervious Runoff Depth=5.89"
Tc=5.0 min CN=98 Runoff=8.62 cfs 0.479 af

Subcatchment 103S: CW2 Runoff Area=42,502 sf 100.00% Impervious Runoff Depth=5.89"
Tc=5.0 min CN=98 Runoff=8.62 cfs 0.479 af

Subcatchment 104S: SW5 Runoff Area=112,099 sf 100.00% Impervious Runoff Depth=5.89"
Tc=5.0 min CN=98 Runoff=22.73 cfs 1.263 af

Subcatchment 105S: CW7 Runoff Area=134,163 sf 100.00% Impervious Runoff Depth=5.89"
Tc=5.0 min CN=98 Runoff=27.21 cfs 1.512 af

Subcatchment 106S: CW8 Runoff Area=164,059 sf 100.00% Impervious Runoff Depth=5.89"
Tc=5.0 min CN=98 Runoff=33.27 cfs 1.849 af

Subcatchment 107S: SW8 Runoff Area=249,478 sf 100.00% Impervious Runoff Depth=5.89"
Tc=5.0 min CN=98 Runoff=50.60 cfs 2.812 af

Subcatchment 108S: SW7 Runoff Area=217,745 sf 100.00% Impervious Runoff Depth=5.89"
Tc=5.0 min CN=98 Runoff=44.16 cfs 2.454 af

Subcatchment 109S: CW1 Runoff Area=28,517 sf 100.00% Impervious Runoff Depth=5.89"
Tc=5.0 min CN=98 Runoff=5.78 cfs 0.321 af

Pond 47P: North Pond_Cells 1-3_CW Peak Elev=392.06' Storage=431,606 cf Inflow=183.08 cfs 9.909 af
Outflow=0.00 cfs 0.000 af

Pond 48P: Southwest Pond_Cells Peak Elev=383.76' Storage=947,254 cf Inflow=407.47 cfs 21.746 af
Outflow=0.00 cfs 0.000 af

Pond 50P: Southwest Pond_Cells Peak Elev=384.09' Storage=549,419 cf Inflow=235.90 cfs 12.613 af
Outflow=0.00 cfs 0.000 af

Pond 51P: Southwest Pond_Cell 1_SW Peak Elev=384.10' Storage=462,296 cf Inflow=335.08 cfs 17.905 af
Primary=33.23 cfs 17.905 af Secondary=0.00 cfs 0.000 af Outflow=33.23 cfs 17.905 af

Pond 54P: Southwest Pond_Cells Peak Elev=383.70' Storage=885,308 cf Inflow=494.10 cfs 26.426 af
Primary=8.67 cfs 26.426 af Secondary=0.00 cfs 0.000 af Outflow=8.67 cfs 26.426 af

Pond 55P: Southeast Pond_SW Peak Elev=377.52' Storage=231,753 cf Inflow=248.57 cfs 13.316 af
Primary=25.62 cfs 13.317 af Secondary=0.00 cfs 0.000 af Outflow=25.62 cfs 13.317 af

Pond 56P: Southeast Pond_CW Peak Elev=383.38' Storage=781,891 cf Inflow=339.21 cfs 17.950 af
Outflow=0.00 cfs 0.000 af

Pond 61P: Southwest Pond_Cell 3_CW Peak Elev=381.62' Storage=24,330 cf Inflow=8.66 cfs 0.559 af
Outflow=0.00 cfs 0.000 af

Pond 63P: Southwest Pond_Cells Peak Elev=383.90' Storage=920,236 cf Inflow=567.25 cfs 30.316 af
Primary=19.25 cfs 30.316 af Secondary=0.00 cfs 0.000 af Outflow=19.25 cfs 30.316 af

Pond 64P: Southwest Pond_Cell 3_CW Peak Elev=385.19' Storage=73,062 cf Inflow=8.64 cfs 0.519 af
Outflow=0.00 cfs 0.000 af

Pond 96P: North Pond_Cell 1_SW Peak Elev=393.33' Storage=323,829 cf Inflow=199.08 cfs 10.656 af
Primary=5.27 cfs 10.656 af Secondary=0.00 cfs 0.000 af Outflow=5.27 cfs 10.656 af

Pond 97P: North Pond_Cells 1-3_CW Peak Elev=393.30' Storage=615,096 cf Inflow=263.33 cfs 14.121 af
Outflow=0.00 cfs 0.000 af

Pond 99P: North Pond_Cells 2-3_CW Peak Elev=395.76' Storage=499,902 cf Inflow=215.87 cfs 11.476 af
Outflow=0.00 cfs 0.000 af

Pond 101P: North Pond_Cells 1-2_SW Peak Elev=393.68' Storage=647,640 cf Inflow=429.03 cfs 22.945 af
Primary=24.11 cfs 22.945 af Secondary=0.00 cfs 0.000 af Outflow=24.11 cfs 22.945 af

Pond 102P: North Pond_Cell 3_CW Peak Elev=396.65' Storage=57,006 cf Inflow=5.80 cfs 0.361 af
Outflow=0.00 cfs 0.000 af

Link 52L: CW_Overflow Primary=0.00 cfs 0.000 af

Link 53L: CW_Overflow Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link 57L: CW_Overflow Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link 58L: Leachate Manual Hydrograph Inflow=0.06 cfs 0.119 af
Primary=0.06 cfs 0.119 af

Link 60L: Leachate Manual Hydrograph Inflow=0.06 cfs 0.119 af
Primary=0.06 cfs 0.119 af

Link 62L: Leachate Manual Hydrograph Inflow=0.04 cfs 0.080 af
Primary=0.04 cfs 0.080 af

Link 95L: Leachate Manual Hydrograph Inflow=0.06 cfs 0.119 af
Primary=0.06 cfs 0.119 af

Link 98L: Leachate Manual Hydrograph Inflow=0.04 cfs 0.080 af
Primary=0.04 cfs 0.080 af

Link 100L: Leachate Manual Hydrograph Inflow=0.02 cfs 0.040 af
Primary=0.02 cfs 0.040 af

Link 104L: CW_Overflow Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link 105L: CW_Overflow Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link 106L: CW_Overflow Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link 107L: CW_Overflow Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link 108L: CW_Overflow Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link 109L: CW_Overflow Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link 110L: Leachate Manual Hydrograph Inflow=0.02 cfs 0.040 af
Primary=0.02 cfs 0.040 af

Link 111L: Leachate Manual Hydrograph Inflow=0.02 cfs 0.040 af
Primary=0.02 cfs 0.040 af

Total Runoff Area = 453.877 ac Runoff Volume = 210.183 af Average Runoff Depth = 5.56"
87.45% Pervious = 396.920 ac 12.55% Impervious = 56.958 ac

Summary for Subcatchment 49S: CW1

[49] Hint: Tc<2dt may require smaller dt

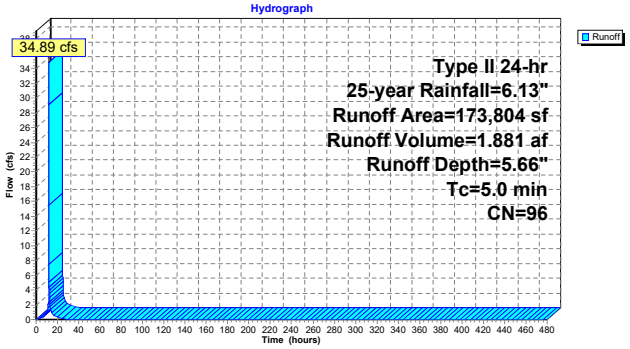
Runoff = 34.89 cfs @ 11.95 hrs, Volume= 1.881 af, Depth= 5.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	173,804	96	Access Roads/Perimeter Channel
	173,804		100.00% Pervious Area

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

Subcatchment 49S: CW1



Summary for Subcatchment 50S: CW2

[49] Hint: Tc<2dt may require smaller dt

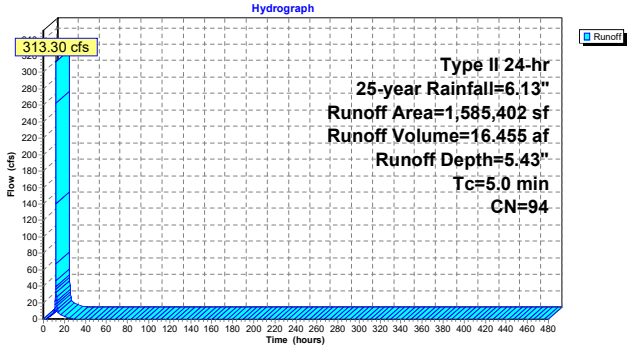
Runoff = 313.30 cfs @ 11.95 hrs, Volume= 16.455 af, Depth= 5.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	1,585,402	94	Exposed CCR Surface
	1,585,402		100.00% Pervious Area

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

Subcatchment 50S: CW2



Summary for Subcatchment 54S: SW9

[49] Hint: Tc<2dt may require smaller dt

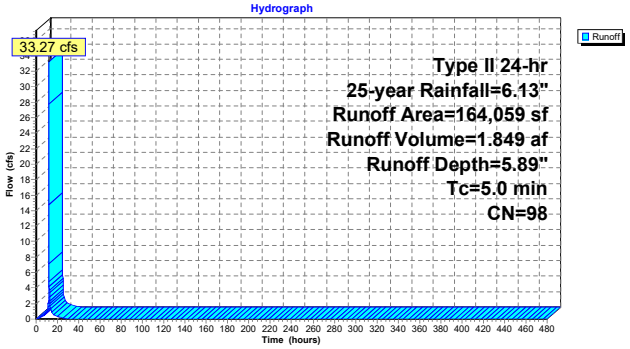
Runoff = 33.27 cfs @ 11.95 hrs, Volume= 1.849 af, Depth= 5.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	164,059	98	Water Surface, HSG D
	164,059		100.00% Impervious Area

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

Subcatchment 54S: SW9



Summary for Subcatchment 56S: CW3

[49] Hint: Tc<2dt may require smaller dt

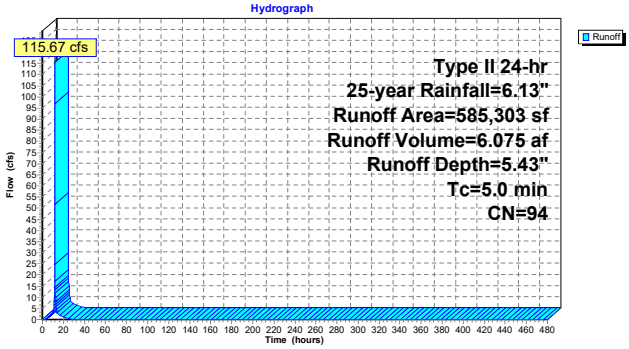
Runoff = 115.67 cfs @ 11.95 hrs, Volume= 6.075 af, Depth= 5.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	585,303	94	Exposed CCR Surface
	585,303		100.00% Pervious Area

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

Subcatchment 56S: CW3



Summary for Subcatchment 57S: CW4

[49] Hint: Tc<2dt may require smaller dt

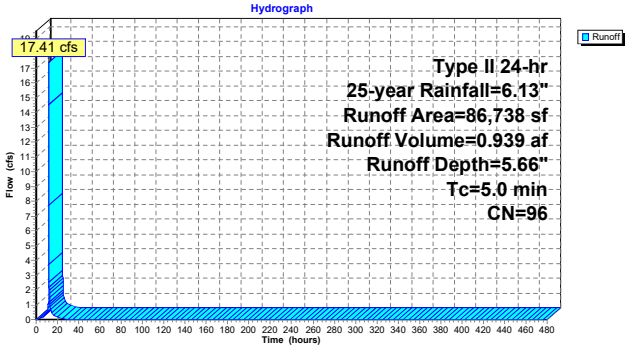
Runoff = 17.41 cfs @ 11.95 hrs, Volume= 0.939 af, Depth= 5.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	86,738	96	Access Roads/Perimeter Channel
	86,738		100.00% Pervious Area

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

Subcatchment 57S: CW4



Summary for Subcatchment 60S: SW1

[49] Hint: Tc<2dt may require smaller dt

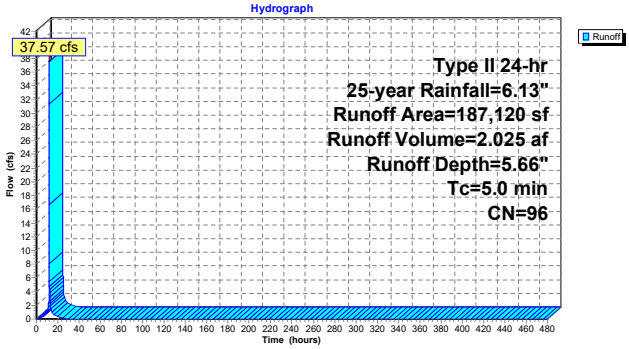
Runoff = 37.57 cfs @ 11.95 hrs, Volume= 2.025 af, Depth= 5.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	187,120	96	Access Roads/Perimeter Channel
	187,120		100.00% Pervious Area

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

Subcatchment 60S: SW1



Summary for Subcatchment 61S: SW2

[49] Hint: Tc<2dt may require smaller dt

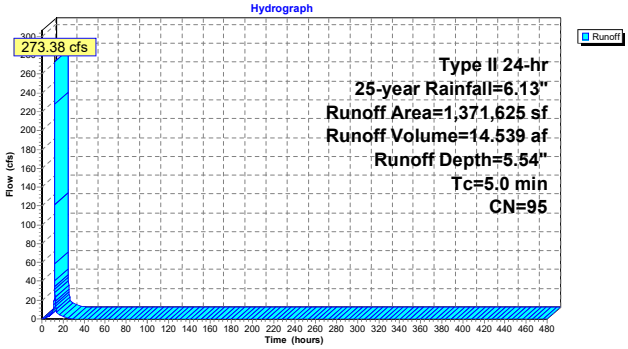
Runoff = 273.38 cfs @ 11.95 hrs, Volume= 14.539 af, Depth= 5.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	1,371,625	95	Final Cover System - ClosureTurf
	1,371,625		100.00% Pervious Area

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

Subcatchment 61S: SW2



Summary for Subcatchment 62S: CW2

[49] Hint: Tc<2dt may require smaller dt

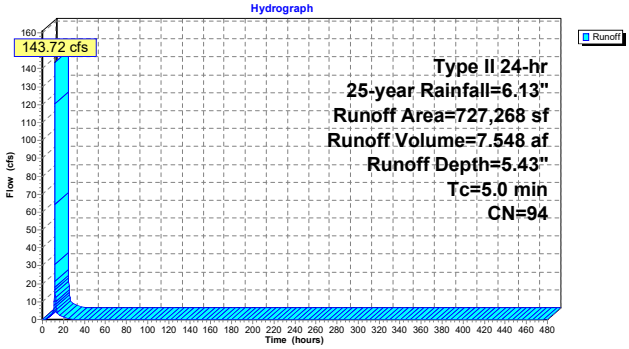
Runoff = 143.72 cfs @ 11.95 hrs, Volume= 7.548 af, Depth= 5.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	727,268	94	Exposed CCR Surface
	727,268		100.00% Pervious Area

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

Subcatchment 62S: CW2



Summary for Subcatchment 63S: CW3

[49] Hint: Tc<2dt may require smaller dt

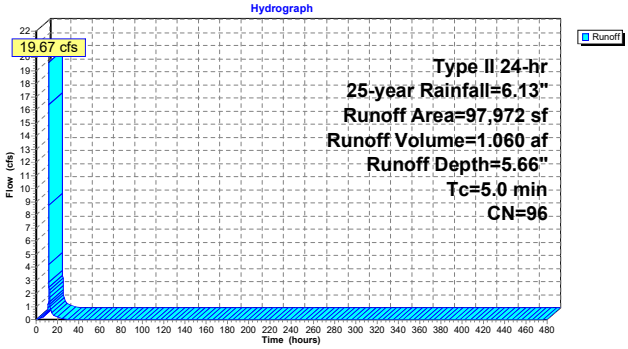
Runoff = 19.67 cfs @ 11.95 hrs, Volume= 1.060 af, Depth= 5.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	97,972	96	Access Roads/Perimeter Channel
	97,972		100.00% Pervious Area

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

Subcatchment 63S: CW3



Summary for Subcatchment 66S: CW1

[49] Hint: Tc<2dt may require smaller dt

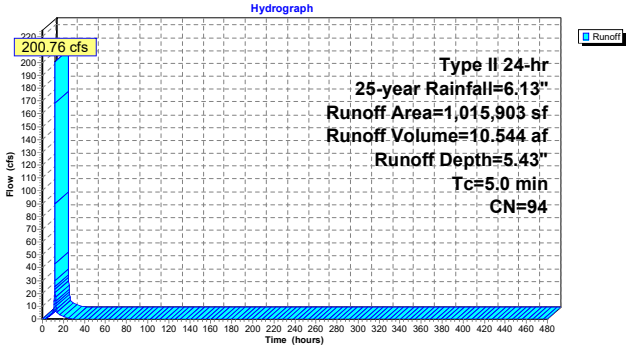
Runoff = 200.76 cfs @ 11.95 hrs, Volume= 10.544 af, Depth= 5.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	1,015,903	94	Exposed CCR Surface
	1,015,903		100.00% Pervious Area

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

Subcatchment 66S: CW1



Summary for Subcatchment 68S: SW3

[49] Hint: Tc<2dt may require smaller dt

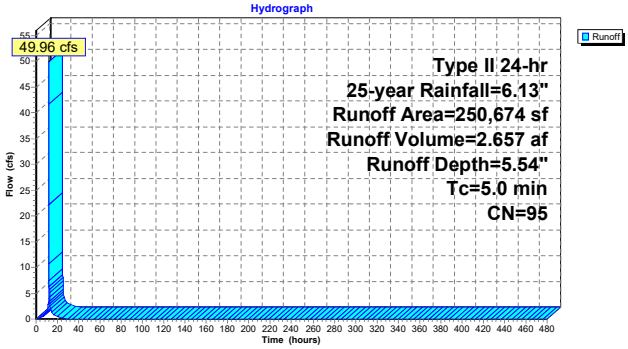
Runoff = 49.96 cfs @ 11.95 hrs, Volume= 2.657 af, Depth= 5.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	250,674	95	Final Cover System - ClosureTurf
	250,674		100.00% Pervious Area

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

Subcatchment 68S: SW3



Summary for Subcatchment 70S: SW1

[49] Hint: Tc<2dt may require smaller dt

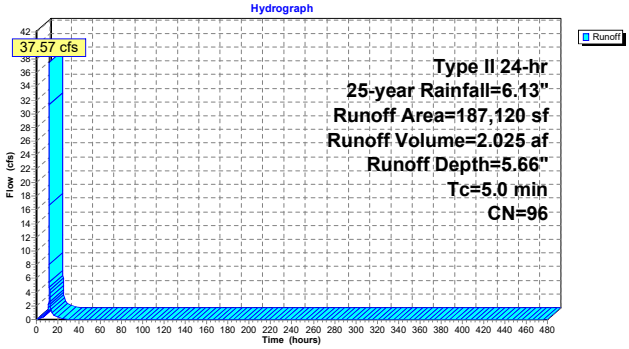
Runoff = 37.57 cfs @ 11.95 hrs, Volume= 2.025 af, Depth= 5.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	187,120	96	Access Roads/Perimeter Channel
	187,120		100.00% Pervious Area

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

Subcatchment 70S: SW1



Summary for Subcatchment 71S: SW2

[49] Hint: Tc<2dt may require smaller dt

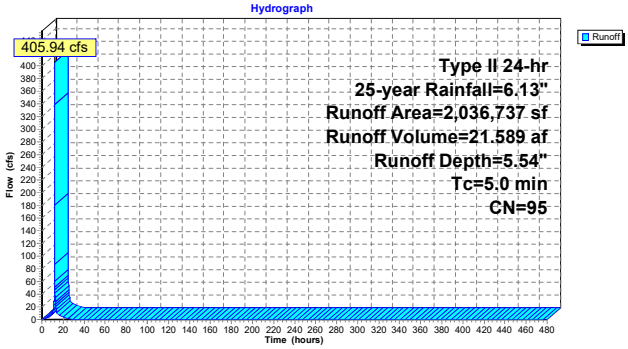
Runoff = 405.94 cfs @ 11.95 hrs, Volume= 21.589 af, Depth= 5.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	2,036,737	95	Final Cover System - ClosureTurf
	2,036,737		100.00% Pervious Area

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

Subcatchment 71S: SW2



Summary for Subcatchment 72S: SW4

[49] Hint: Tc<2dt may require smaller dt

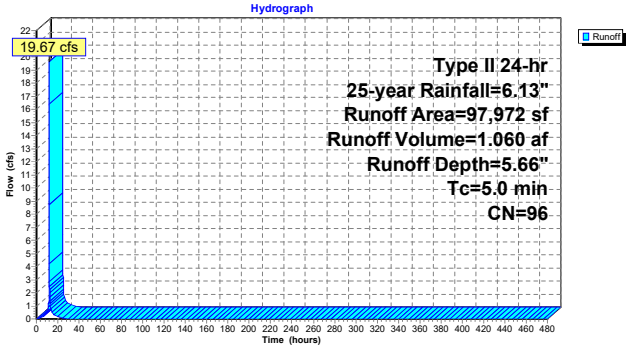
Runoff = 19.67 cfs @ 11.95 hrs, Volume= 1.060 af, Depth= 5.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	97,972	96	Access Roads/Perimeter Channel
	97,972		100.00% Pervious Area

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

Subcatchment 72S: SW4



Summary for Subcatchment 73S: CW4

[49] Hint: Tc<2dt may require smaller dt

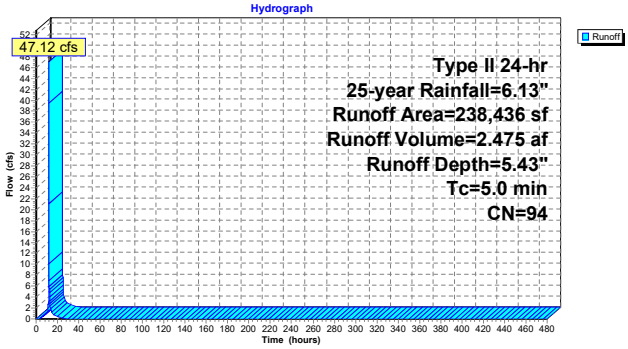
Runoff = 47.12 cfs @ 11.95 hrs, Volume= 2.475 af, Depth= 5.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	238,436	94	Exposed CCR Surface
	238,436		100.00% Pervious Area

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

Subcatchment 73S: CW4



Summary for Subcatchment 74S: CW1

[49] Hint: Tc<2dt may require smaller dt

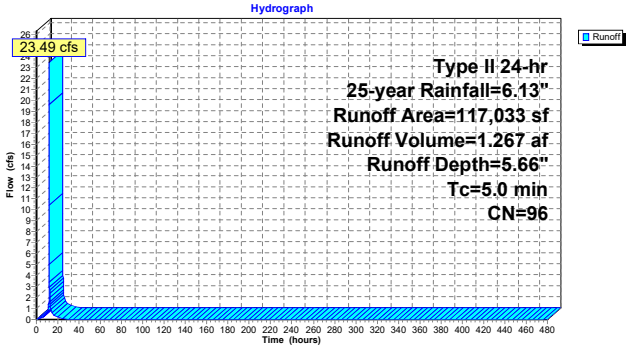
Runoff = 23.49 cfs @ 11.95 hrs, Volume= 1.267 af, Depth= 5.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	117,033	96	Access Roads/Perimeter Channel
	117,033		100.00% Pervious Area

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

Subcatchment 74S: CW1



Summary for Subcatchment 75S: SW3

[49] Hint: Tc<2dt may require smaller dt

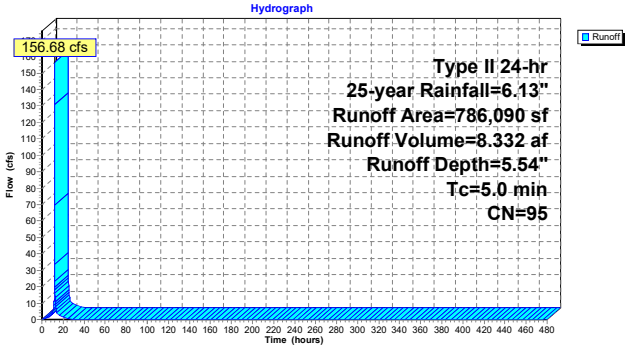
Runoff = 156.68 cfs @ 11.95 hrs, Volume= 8.332 af, Depth= 5.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	786,090	95	Final Cover System - ClosureTurf
	786,090		100.00% Pervious Area

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

Subcatchment 75S: SW3



Summary for Subcatchment 81S: CW5

[49] Hint: Tc<2dt may require smaller dt

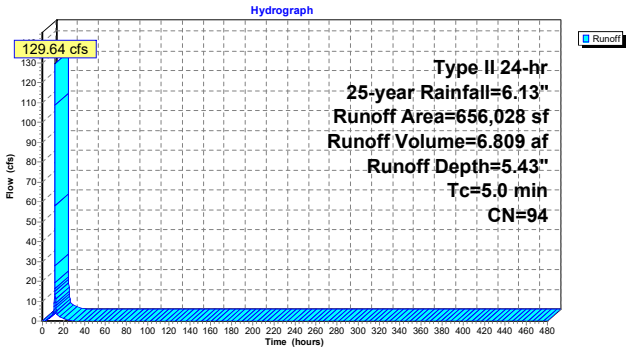
Runoff = 129.64 cfs @ 11.95 hrs, Volume= 6.809 af, Depth= 5.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	656,028	94	Exposed CCR Surface
	656,028		100.00% Pervious Area

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

Subcatchment 81S: CW5



Summary for Subcatchment 82S: CW3

[49] Hint: Tc<2dt may require smaller dt

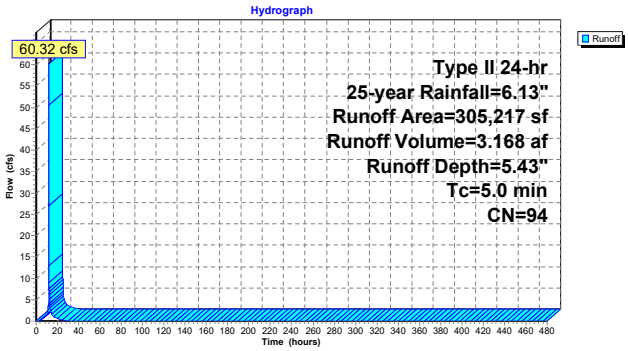
Runoff = 60.32 cfs @ 11.95 hrs, Volume= 3.168 af, Depth= 5.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	305,217	94	Exposed CCR Surface
	305,217		100.00% Pervious Area

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

Subcatchment 82S: CW3



Summary for Subcatchment 83S: CW6

[49] Hint: Tc<2dt may require smaller dt

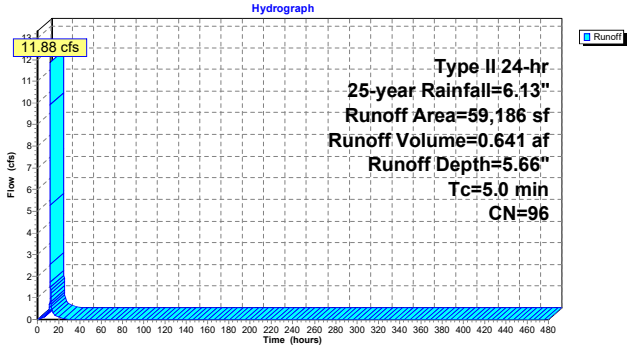
Runoff = 11.88 cfs @ 11.95 hrs, Volume= 0.641 af, Depth= 5.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	59,186	96	Access Roads/Perimeter Channel
	59,186		100.00% Pervious Area

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

Subcatchment 83S: CW6



Summary for Subcatchment 84S: CW2

[49] Hint: Tc<2dt may require smaller dt

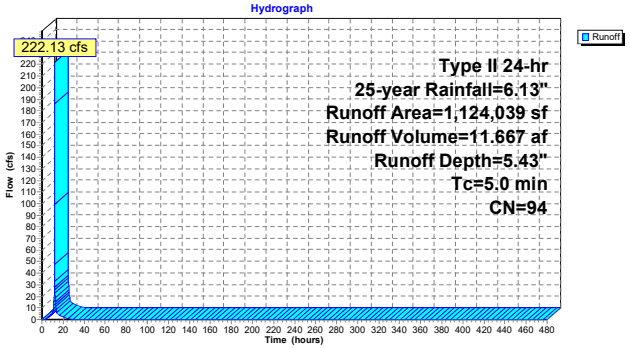
Runoff = 222.13 cfs @ 11.95 hrs, Volume= 11.667 af, Depth= 5.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	1,124,039	94	Exposed CCR Surface
	1,124,039		100.00% Pervious Area

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

Subcatchment 84S: CW2



Summary for Subcatchment 85S: SW1

[49] Hint: Tc<2dt may require smaller dt

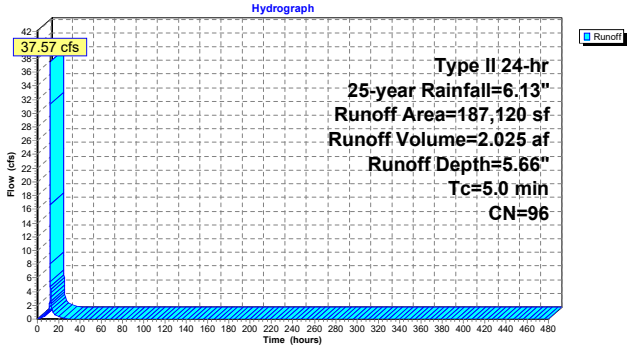
Runoff = 37.57 cfs @ 11.95 hrs, Volume= 2.025 af, Depth= 5.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	187,120	96	Access Roads/Perimeter Channel
	187,120		100.00% Pervious Area

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

Subcatchment 85S: SW1



Summary for Subcatchment 86S: SW2

[49] Hint: Tc<2dt may require smaller dt

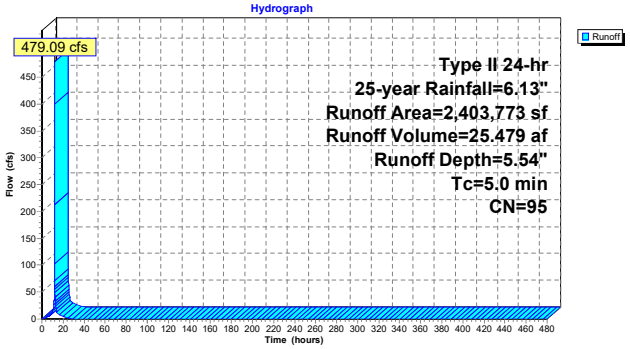
Runoff = 479.09 cfs @ 11.95 hrs, Volume= 25.479 af, Depth= 5.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	2,403,773	95	Final Cover System - ClosureTurf
	2,403,773		100.00% Pervious Area

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

Subcatchment 86S: SW2



Summary for Subcatchment 87S: SW4

[49] Hint: Tc<2dt may require smaller dt

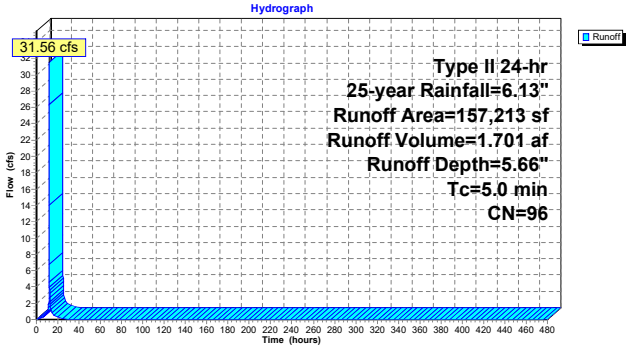
Runoff = 31.56 cfs @ 11.95 hrs, Volume= 1.701 af, Depth= 5.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	157,213	96	Access Roads/Perimeter Channel
	157,213		100.00% Pervious Area

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

Subcatchment 87S: SW4



Summary for Subcatchment 89S: SW5

[49] Hint: Tc<2dt may require smaller dt

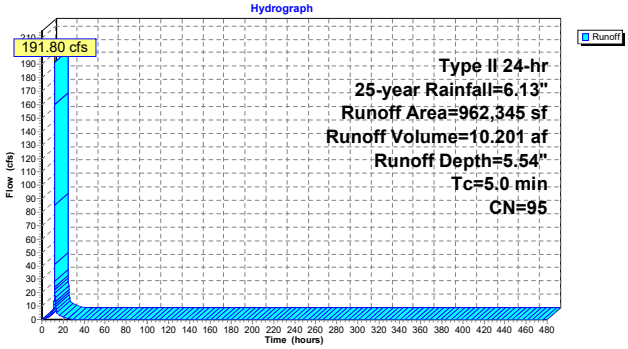
Runoff = 191.80 cfs @ 11.95 hrs, Volume= 10.201 af, Depth= 5.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	962,345	95	Final Cover System - ClosureTurf
	962,345		100.00% Pervious Area

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

Subcatchment 89S: SW5



Summary for Subcatchment 90S: SW3

[49] Hint: Tc<2dt may require smaller dt

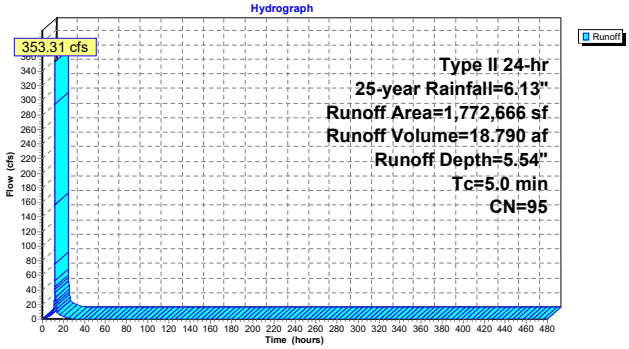
Runoff = 353.31 cfs @ 11.95 hrs, Volume= 18.790 af, Depth= 5.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	1,772,666	95	Final Cover System - ClosureTurf
	1,772,666		100.00% Pervious Area

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

Subcatchment 90S: SW3



Summary for Subcatchment 95S: SW6

[49] Hint: Tc<2dt may require smaller dt

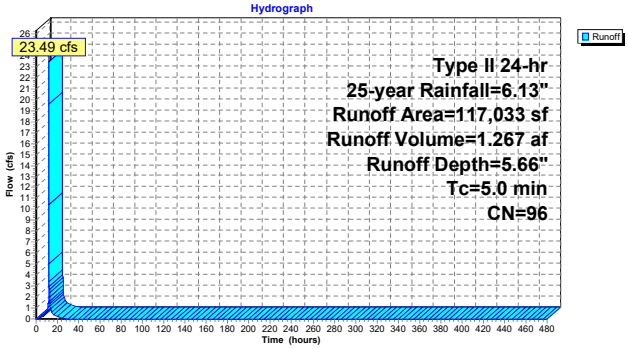
Runoff = 23.49 cfs @ 11.95 hrs, Volume= 1.267 af, Depth= 5.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

	Area (sf)	CN	Description
*	117,033	96	Access Roads/Perimeter Channel
	117,033		100.00% Pervious Area

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

Subcatchment 95S: SW6



Summary for Subcatchment 96S: CW6

[49] Hint: Tc<2dt may require smaller dt

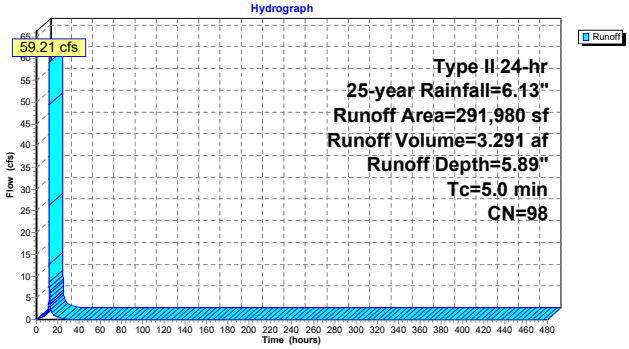
Runoff = 59.21 cfs @ 11.95 hrs, Volume= 3.291 af, Depth= 5.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

Area (sf)	CN	Description
291,980	98	Water Surface, HSG D
291,980		100.00% Impervious Area

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

Subcatchment 96S: CW6



Summary for Subcatchment 97S: CW5

[49] Hint: Tc<2dt may require smaller dt

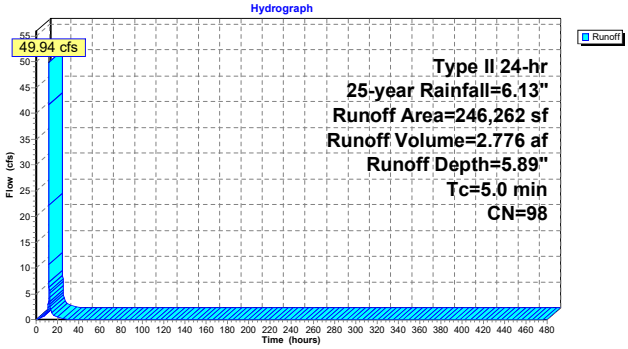
Runoff = 49.94 cfs @ 11.95 hrs, Volume= 2.776 af, Depth= 5.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

Area (sf)	CN	Description
246,262	98	Water Surface, HSG D
246,262		100.00% Impervious Area

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

Subcatchment 97S: CW5



Summary for Subcatchment 98S: CW4

[49] Hint: Tc<2dt may require smaller dt

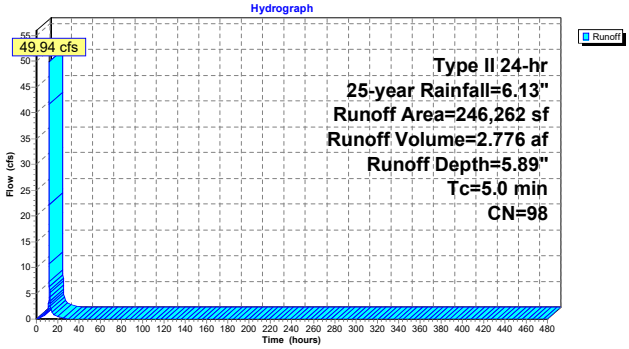
Runoff = 49.94 cfs @ 11.95 hrs, Volume= 2.776 af, Depth= 5.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

Area (sf)	CN	Description
246,262	98	Water Surface, HSG D
246,262		100.00% Impervious Area

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

Subcatchment 98S: CW4



Summary for Subcatchment 99S: CW5

[49] Hint: Tc<2dt may require smaller dt

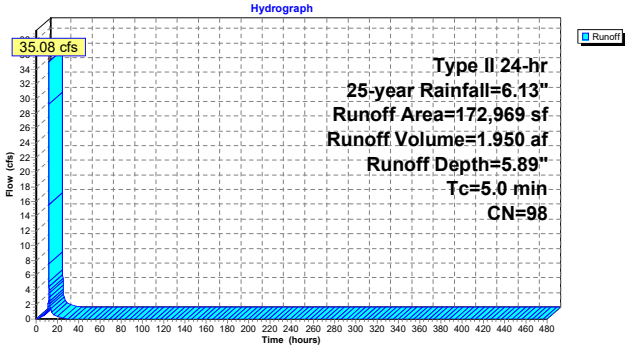
Runoff = 35.08 cfs @ 11.95 hrs, Volume= 1.950 af, Depth= 5.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

Area (sf)	CN	Description
172,969	98	Water Surface, HSG D
172,969		100.00% Impervious Area

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

Subcatchment 99S: CW5



Summary for Subcatchment 100S: SW4

[49] Hint: Tc<2dt may require smaller dt

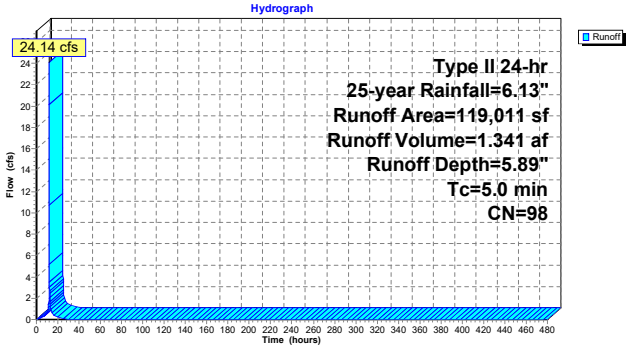
Runoff = 24.14 cfs @ 11.95 hrs, Volume= 1.341 af, Depth= 5.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

Area (sf)	CN	Description
119,011	98	Water Surface, HSG D
119,011		100.00% Impervious Area

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

Subcatchment 100S: SW4



Summary for Subcatchment 101S: SW6

[49] Hint: Tc<2dt may require smaller dt

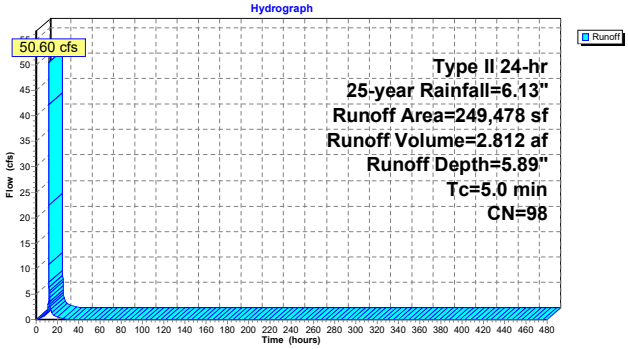
Runoff = 50.60 cfs @ 11.95 hrs, Volume= 2.812 af, Depth= 5.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

Area (sf)	CN	Description
249,478	98	Water Surface, HSG D
249,478		100.00% Impervious Area

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

Subcatchment 101S: SW6



Summary for Subcatchment 102S: CW9

[49] Hint: Tc<2dt may require smaller dt

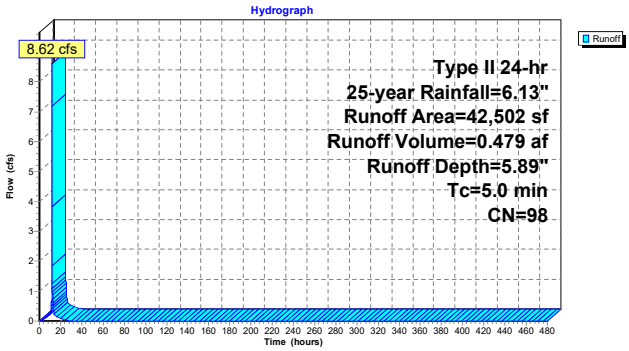
Runoff = 8.62 cfs @ 11.95 hrs, Volume= 0.479 af, Depth= 5.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

Area (sf)	CN	Description
42,502	98	Water Surface, HSG D
42,502		100.00% Impervious Area

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

Subcatchment 102S: CW9



Summary for Subcatchment 103S: CW2

[49] Hint: Tc<2dt may require smaller dt

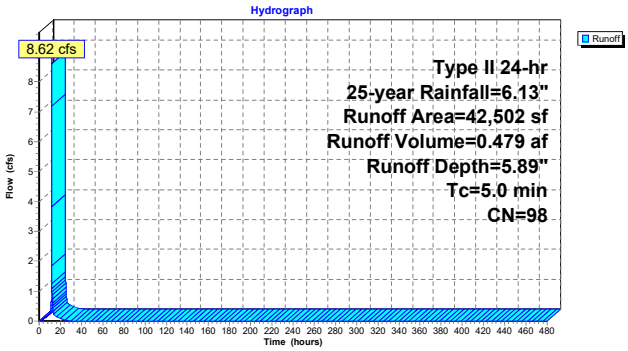
Runoff = 8.62 cfs @ 11.95 hrs, Volume= 0.479 af, Depth= 5.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

Area (sf)	CN	Description
42,502	98	Water Surface, HSG D
42,502		100.00% Impervious Area

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

Subcatchment 103S: CW2



Summary for Subcatchment 104S: SW5

[49] Hint: Tc<2dt may require smaller dt

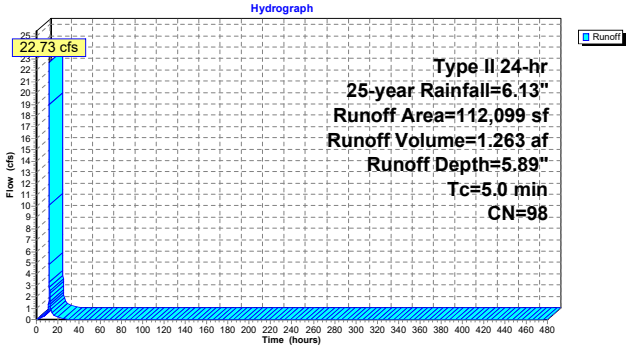
Runoff = 22.73 cfs @ 11.95 hrs, Volume= 1.263 af, Depth= 5.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

Area (sf)	CN	Description
112,099	98	Water Surface, HSG D
112,099		100.00% Impervious Area

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

Subcatchment 104S: SW5



Summary for Subcatchment 105S: CW7

[49] Hint: Tc<2dt may require smaller dt

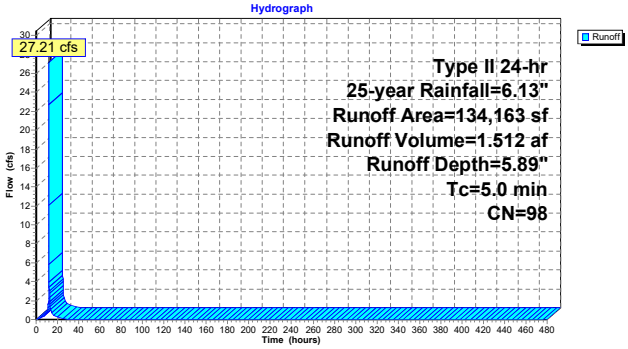
Runoff = 27.21 cfs @ 11.95 hrs, Volume= 1.512 af, Depth= 5.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

Area (sf)	CN	Description
134,163	98	Water Surface, HSG D
134,163		100.00% Impervious Area

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

Subcatchment 105S: CW7



Summary for Subcatchment 106S: CW8

[49] Hint: Tc<2dt may require smaller dt

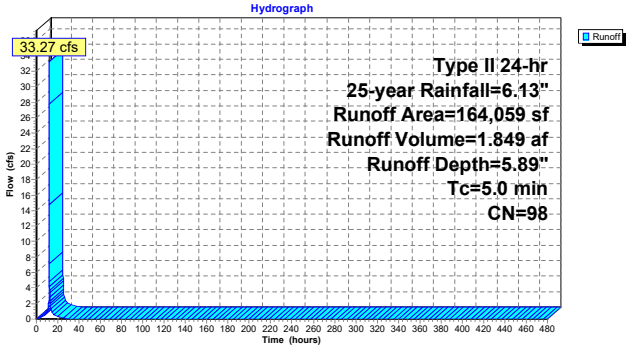
Runoff = 33.27 cfs @ 11.95 hrs, Volume= 1.849 af, Depth= 5.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

Area (sf)	CN	Description
164,059	98	Water Surface, HSG D
164,059		100.00% Impervious Area

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

Subcatchment 106S: CW8



Summary for Subcatchment 107S: SW8

[49] Hint: Tc<2dt may require smaller dt

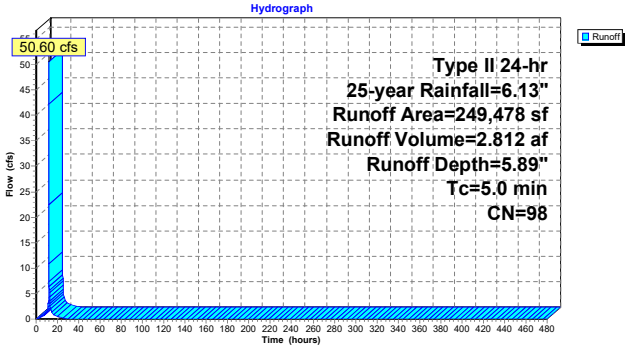
Runoff = 50.60 cfs @ 11.95 hrs, Volume= 2.812 af, Depth= 5.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

Area (sf)	CN	Description
249,478	98	Water Surface, HSG D
249,478		100.00% Impervious Area

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

Subcatchment 107S: SW8



Summary for Subcatchment 108S: SW7

[49] Hint: Tc<2dt may require smaller dt

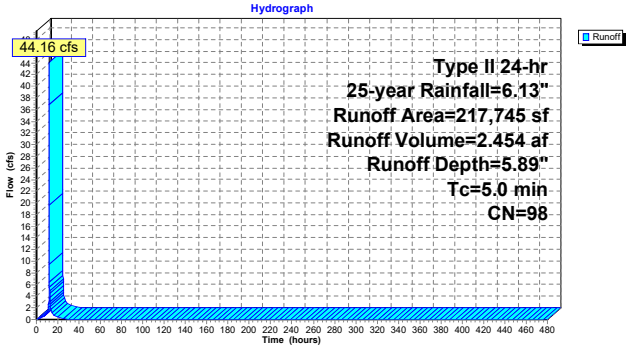
Runoff = 44.16 cfs @ 11.95 hrs, Volume= 2.454 af, Depth= 5.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

Area (sf)	CN	Description
217,745	98	Water Surface, HSG D
217,745		100.00% Impervious Area

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

Subcatchment 108S: SW7



Summary for Subcatchment 109S: CW1

[49] Hint: Tc<2dt may require smaller dt

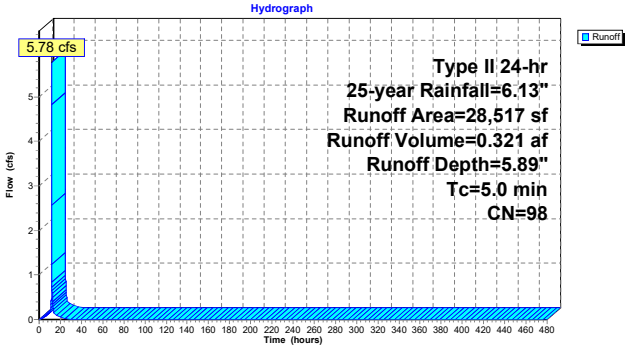
Runoff = 5.78 cfs @ 11.95 hrs, Volume= 0.321 af, Depth= 5.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-year Rainfall=6.13"

Area (sf)	CN	Description
28,517	98	Water Surface, HSG D
28,517		100.00% Impervious Area

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

Subcatchment 109S: CW1



Summary for Pond 47P: North Pond_Cells 1-3_CW

Inflow Area = 21.081 ac, 26.82% Impervious, Inflow Depth = 5.64" for 25-year event
Inflow = 183.08 cfs @ 11.95 hrs, Volume= 9.909 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 392.06' @ 24.35 hrs Surf.Area= 143,005 sf Storage= 431,606 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

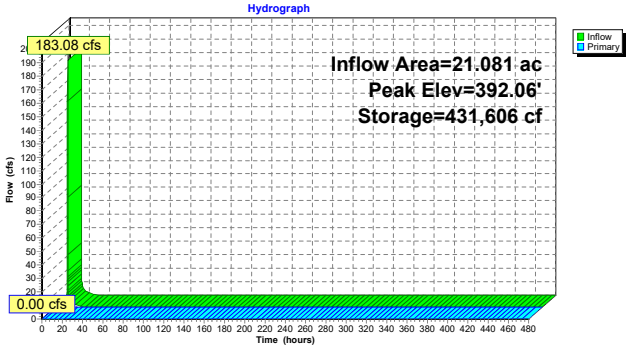
Volume	Invert	Avail.Storage	Storage Description
#1	387.70'	1,629,758 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
387.70	0	0	0
388.00	10,899	1,635	1,635
388.50	37,180	12,020	13,655
389.00	80,872	29,513	43,168
389.50	117,682	49,639	92,806
390.00	126,855	61,134	153,940
390.50	130,702	64,389	218,330
391.00	134,592	66,324	284,653
391.50	138,535	68,282	352,935
392.00	142,529	70,266	423,201
392.50	146,575	72,276	495,477
393.00	150,673	74,312	569,789
393.50	154,822	76,374	646,163
394.00	159,023	78,461	724,624
394.50	163,276	80,575	805,199
395.00	167,581	82,714	887,913
395.50	171,937	84,880	972,792
396.00	176,345	87,071	1,059,863
396.50	180,805	89,288	1,149,150
397.00	185,318	91,531	1,240,681
397.50	189,883	93,800	1,334,481
398.00	194,499	96,096	1,430,577
398.50	199,168	98,417	1,528,994
399.00	203,888	100,764	1,629,758

Device	Routing	Invert	Outlet Devices
#1	Primary	398.50'	**40.0' long x 4.5' breadth Emergency Spillway** 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) 2.36 2.52 2.70 2.68 2.67 2.67 2.65 2.66 2.66 2.67 2.70 2.70 2.72 2.75 2.81 2.93 3.10

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=387.70' (Free Discharge)
1=Emergency Spillway (Controls 0.00 cfs)

Pond 47P: North Pond_Cells 1-3_CW



Summary for Pond 48P: Southwest Pond_Cells 1-3_CW

Inflow Area = 47.089 ac, 14.23% Impervious, Inflow Depth = 5.54" for 25-year event
Inflow = 407.47 cfs @ 11.95 hrs, Volume= 21.746 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 383.76' @ 24.35 hrs Surf.Area= 192,468 sf Storage= 947,254 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

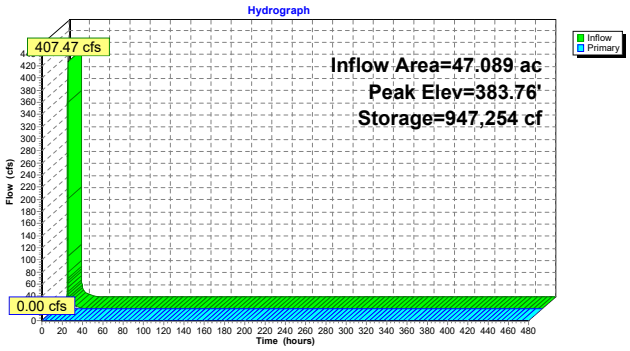
Volume	Invert	Avail.Storage	Storage Description
#1	376.00'	1,621,719 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
376.00	0	0	0
376.50	5,226	1,307	1,307
377.00	19,215	6,110	7,417
377.50	35,045	13,565	20,982
378.00	66,528	25,393	46,375
378.50	100,720	41,812	88,187
379.00	124,835	56,389	144,576
379.50	145,116	67,488	212,064
380.00	158,884	76,000	288,064
380.50	163,187	80,518	368,581
381.00	167,524	82,678	451,259
381.50	171,917	84,860	536,119
382.00	176,367	87,071	623,190
382.50	180,874	89,310	712,501
383.00	185,437	91,578	804,078
383.50	190,057	93,874	897,952
384.00	194,734	96,198	994,150
384.50	199,466	98,550	1,092,700
385.00	204,255	100,930	1,193,630
385.50	209,101	103,339	1,296,969
386.00	214,002	105,776	1,402,745
386.50	218,961	108,241	1,510,985
387.00	223,975	110,734	1,621,719

Device	Routing	Invert	Outlet Devices
#1	Primary	386.50'	**40.0' long x 4.5' breadth Emergency spillway** 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) 2.36 2.52 2.70 2.68 2.67 2.67 2.65 2.66 2.66 2.67 2.70 2.70 2.72 2.75 2.81 2.93 3.10

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=376.01' (Free Discharge)
1=Emergency spillway (Controls 0.00 cfs)

Pond 48P: Southwest Pond_Cells 1-3_CW



Summary for Pond 50P: Southwest Pond_Cells 2-3_CW

Inflow Area = 27.293 ac, 14.55% Impervious, Inflow Depth = 5.55" for 25-year event
Inflow = 235.90 cfs @ 11.95 hrs, Volume= 12.613 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 384.09' @ 24.35 hrs Surf.Area= 115,536 sf Storage= 549,419 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

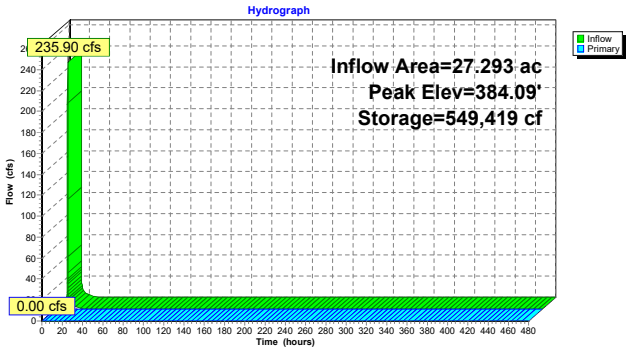
Volume	Invert	Avail.Storage	Storage Description
#1	377.50'	911,398 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
377.50	1,926	0	0
378.00	18,146	5,018	5,018
378.50	39,900	14,512	19,530
379.00	62,158	25,515	45,044
379.50	80,823	35,745	80,789
380.00	92,955	43,445	124,234
380.50	95,604	47,140	171,374
381.00	98,267	48,468	219,841
381.50	100,967	49,809	269,650
382.00	103,705	51,168	320,818
382.50	106,480	52,546	373,364
383.00	109,293	53,943	427,307
383.50	112,143	55,359	482,666
384.00	115,031	56,794	539,460
384.50	117,956	58,247	597,707
385.00	120,919	59,719	657,425
385.50	123,920	61,210	718,635
386.00	126,958	62,720	781,355
386.50	130,034	64,248	845,603
387.00	133,148	65,796	911,398

Device	Routing	Invert	Outlet Devices
#1	Primary	386.50'	**20.0' long x 10.0' breadth Divider Overtop** 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

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=377.50' (Free Discharge)
1=Divider Overtop (Controls 0.00 cfs)

Pond 50P: Southwest Pond_Cells 2-3_CW



Summary for Pond 51P: Southwest Pond_Cell 1_SW

Inflow Area = 38.516 ac, 7.09% Impervious, Inflow Depth = 5.58" for 25-year event
Inflow = 335.08 cfs @ 11.95 hrs, Volume= 17.905 af
Outflow = 33.23 cfs @ 12.34 hrs, Volume= 17.905 af, Atten= 90%, Lag= 23.5 min
Primary = 33.23 cfs @ 12.34 hrs, Volume= 17.905 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 384.10' @ 12.34 hrs Surf.Area= 80,069 sf Storage= 462,296 cf

Plug-Flow detention time= 1,301.8 min calculated for 17.903 af (100% of inflow)
Center-of-Mass det. time= 1,302.1 min (2,058.5 - 756.4)

Volume	Invert	Avail.Storage	Storage Description
#1	376.00'	709,839 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
376.00	0	0	0
376.50	5,226	1,307	1,307
377.00	19,215	6,110	7,417
377.50	33,119	13,084	20,500
378.00	48,381	20,375	40,875
378.50	60,820	27,300	68,176
379.00	62,677	30,874	99,050
379.50	64,293	31,743	130,792
380.00	65,928	32,555	163,348
380.50	67,583	33,378	196,725
381.00	69,257	34,210	230,935
381.50	70,950	35,052	265,987
382.00	72,663	35,903	301,890
382.50	74,394	36,764	338,655
383.00	76,145	37,635	376,289
383.50	77,914	38,515	414,804
384.00	79,703	39,404	454,208
384.50	81,510	40,303	494,512
385.00	83,336	41,212	535,723
385.50	85,181	42,129	577,852
386.00	87,044	43,056	620,909
386.50	88,926	43,993	664,901
387.00	90,827	44,938	709,839

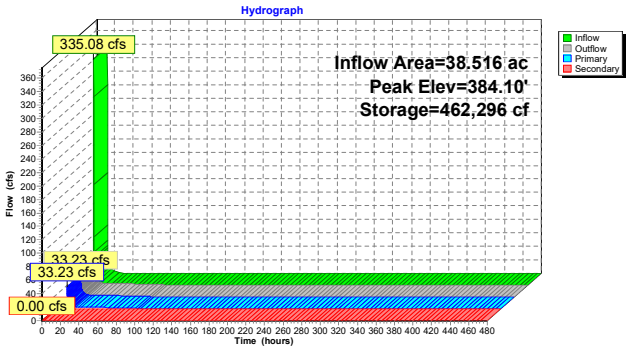
Device	Routing	Invert	Outlet Devices
#1	Primary	375.50'	**24.0" Round Culvert** L= 125.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 375.50' / 370.40' S= 0.0408 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#2	Device 1	376.00'	**6.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	383.50'	**60.0" x 60.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	385.50'	**40.0' long x 20.0' 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) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=33.11 cfs @ 12.34 hrs HW=384.10' (Free Discharge)
└**1=Culvert** (Passes 33.11 cfs of 41.70 cfs potential flow)
└**2=Orifice/Grate** (Orifice Controls 2.65 cfs @ 13.49 fps)
└**3=Orifice/Grate** (Weir Controls 30.46 cfs @ 2.53 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=376.00' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 51P: Southwest Pond_Cell 1_SW



Summary for Pond 54P: Southwest Pond_Cells 1-2_SW

Inflow Area = 56.780 ac, 10.09% Impervious, Inflow Depth = 5.58" for 25-year event
Inflow = 494.10 cfs @ 11.95 hrs, Volume= 26.426 af
Outflow = 8.67 cfs @ 15.81 hrs, Volume= 26.426 af, Atten= 98%, Lag= 231.4 min
Primary = 8.67 cfs @ 15.81 hrs, Volume= 26.426 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 383.70' @ 15.81 hrs Surf.Area= 177,948 sf Storage= 885,308 cf

Plug-Flow detention time= 3,038.4 min calculated for 26.426 af (100% of inflow)
Center-of-Mass det. time= 3,038.4 min (3,794.4 - 756.0)

Volume	Invert	Avail.Storage	Storage Description
#1	376.00'	1,515,433 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
376.00	0	0	0
376.50	5,226	1,307	1,307
377.00	19,215	6,110	7,417
377.50	35,045	13,565	20,982
378.00	66,528	25,393	46,375
378.50	100,720	41,812	88,187
379.00	119,807	55,132	143,319
379.50	136,511	64,080	207,398
380.00	149,703	71,554	278,952
380.50	153,412	75,779	354,731
381.00	157,136	77,637	432,368
381.50	160,898	79,509	511,876
382.00	164,698	81,399	593,275
382.50	168,537	83,309	676,584
383.00	172,413	85,238	761,821
383.50	176,328	87,185	849,007
384.00	180,280	89,152	938,159
384.50	184,271	91,138	1,029,296
385.00	188,299	93,143	1,122,439
385.50	192,365	95,166	1,217,605
386.00	196,469	97,209	1,314,813
386.50	200,610	99,270	1,414,083
387.00	204,790	101,350	1,515,433

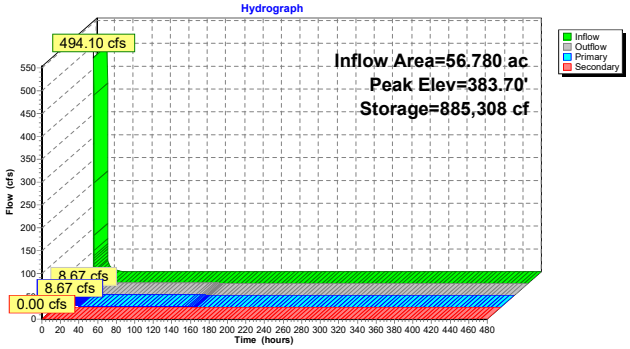
Device	Routing	Invert	Outlet Devices
#1	Primary	375.50'	**24.0" Round Culvert** L= 125.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 375.50' / 370.40' S= 0.0408 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#2	Device 1	376.00'	**6.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	383.50'	**60.0" x 60.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	385.50'	**40.0' long x 20.0' 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) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=8.65 cfs @ 15.81 hrs HW=383.70' (Free Discharge)
└**1=Culvert** (Passes 8.65 cfs of 40.60 cfs potential flow)
└**2=Orifice/Grate** (Orifice Controls 2.58 cfs @ 13.15 fps)
└**3=Orifice/Grate** (Weir Controls 6.07 cfs @ 1.48 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=376.00' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 54P: Southwest Pond_Cells 1-2_SW



Summary for Pond 55P: Southeast Pond_SW

Inflow Area = 28.545 ac, 13.19% Impervious, Inflow Depth = 5.60" for 25-year event
Inflow = 248.57 cfs @ 11.95 hrs, Volume= 13.316 af
Outflow = 25.62 cfs @ 12.32 hrs, Volume= 13.317 af, Atten= 90%, Lag= 21.9 min
Primary = 25.62 cfs @ 12.32 hrs, Volume= 13.317 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 377.52' @ 12.32 hrs Surf.Area= 67,091 sf Storage= 231,753 cf

Plug-Flow detention time= 99.0 min calculated for 13.315 af (100% of inflow)
Center-of-Mass det. time= 99.0 min (854.4 - 755.3)

Volume	Invert	Avail.Storage	Storage Description
#1	367.70'	1,240,740 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
367.70	0	0	0
368.00	65	10	10
368.50	414	120	130
369.00	1,114	382	512
369.50	2,314	857	1,369
370.00	3,960	1,569	2,937
370.50	5,942	2,476	5,413
371.00	8,260	3,551	8,963
371.50	10,915	4,794	13,757
372.00	13,911	6,207	19,963
372.50	17,292	7,801	27,764
373.00	21,086	9,595	37,359
373.50	25,277	11,591	48,949
374.00	29,769	13,762	62,711
374.50	34,546	16,079	78,790
375.00	39,607	18,538	97,328
375.50	44,934	21,135	118,463
376.00	50,448	23,846	142,309
376.50	56,075	26,631	168,939
377.00	61,565	29,410	198,349
377.50	66,892	32,114	230,464
378.00	72,056	34,737	265,201
378.50	77,057	37,278	302,479
379.00	81,892	39,737	342,216
379.50	86,557	42,112	384,328
380.00	91,048	44,401	428,730
380.50	95,364	46,603	475,333
381.00	99,504	48,717	524,050
381.50	103,470	50,744	574,793
382.00	107,251	52,680	627,473
382.50	110,840	54,523	681,996
383.00	114,235	56,269	738,265
383.50	117,438	57,918	796,183
384.00	120,447	59,471	855,654
384.50	123,264	60,928	916,582
385.00	125,888	62,288	978,870
385.50	128,279	63,542	1,042,412
386.00	130,656	64,734	1,107,146
386.50	133,059	65,929	1,173,074
387.00	137,605	67,666	1,240,740

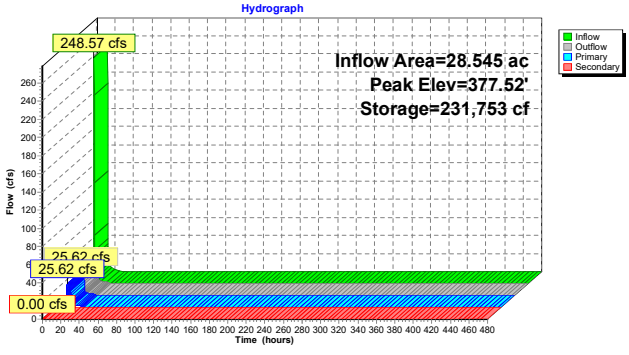
Device	Routing	Invert	Outlet Devices
#1	Primary	367.70'	**18.0" Round Culvert** L= 208.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 367.70' / 351.00' S= 0.0803 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf
#2	Device 1	367.70'	**6.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	372.20'	**60.0" x 60.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	385.50'	**40.0' long x 20.0' 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) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=25.62 cfs @ 12.32 hrs HW=377.52' (Free Discharge)
└**1=Culvert** (Inlet Controls 25.62 cfs @ 14.50 fps)
└**2=Orifice/Grate** (Passes < 2.92 cfs potential flow)
└**3=Orifice/Grate** (Passes < 277.61 cfs potential flow)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=367.70' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 55P: Southeast Pond_SW



Summary for Pond 56P: Southeast Pond_CW

Inflow Area = 39.264 ac, 9.59% Impervious, Inflow Depth = 5.49" for 25-year event
Inflow = 339.21 cfs @ 11.95 hrs, Volume= 17.950 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 383.38' @ 24.35 hrs Surf.Area= 116,656 sf Storage= 781,891 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

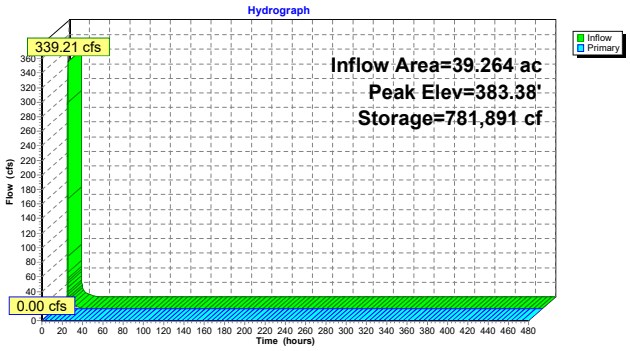
Volume	Invert	Avail.Storage	Storage Description
#1	367.70'	1,240,740 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
367.70	0	0	0
368.00	65	10	10
368.50	414	120	130
369.00	1,114	382	512
369.50	2,314	857	1,369
370.00	3,960	1,569	2,937
370.50	5,942	2,476	5,413
371.00	8,260	3,551	8,963
371.50	10,915	4,794	13,757
372.00	13,911	6,207	19,963
372.50	17,292	7,801	27,764
373.00	21,086	9,595	37,359
373.50	25,277	11,591	48,949
374.00	29,769	13,762	62,711
374.50	34,546	16,079	78,790
375.00	39,607	18,538	97,328
375.50	44,934	21,135	118,463
376.00	50,448	23,846	142,309
376.50	56,075	26,631	168,939
377.00	61,565	29,410	198,349
377.50	66,892	32,114	230,464
378.00	72,056	34,737	265,201
378.50	77,057	37,278	302,479
379.00	81,892	39,737	342,216
379.50	86,557	42,112	384,328
380.00	91,048	44,401	428,730
380.50	95,364	46,603	475,333
381.00	99,504	48,717	524,050
381.50	103,470	50,744	574,793
382.00	107,251	52,680	627,473
382.50	110,840	54,523	681,996
383.00	114,235	56,269	738,265
383.50	117,438	57,918	796,183
384.00	120,447	59,471	855,654
384.50	123,264	60,928	916,582
385.00	125,888	62,288	978,870
385.50	128,279	63,542	1,042,412
386.00	130,656	64,734	1,107,146
386.50	133,059	65,929	1,173,074
387.00	137,605	67,666	1,240,740

Device	Routing	Invert	Outlet Devices
#1	Primary	386.50'	**40.0' long x 4.5' 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) 2.36 2.52 2.70 2.68 2.67 2.67 2.65 2.66 2.66 2.67 2.70 2.70 2.72 2.75 2.81 2.93 3.10

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=367.70' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 56P: Southeast Pond_CW



Summary for Pond 61P: Southwest Pond_Cell 3_CW

Inflow Area = 0.976 ac,100.00% Impervious, Inflow Depth = 6.87" for 25-year event
Inflow = 8.66 cfs @ 11.95 hrs, Volume= 0.559 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 381.62' @ 24.35 hrs Surf.Area= 11,176 sf Storage= 24,330 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

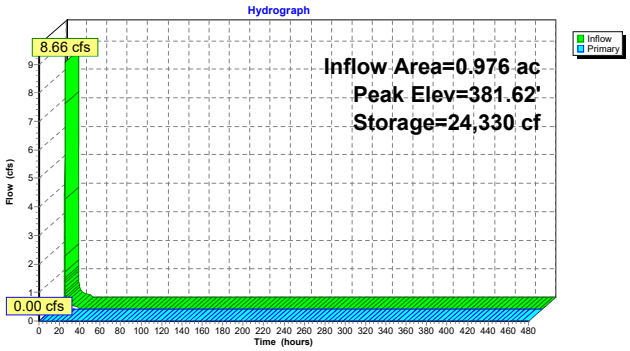
Volume	Invert	Avail.Storage	Storage Description
#1	379.00'	105,031 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
379.00	5,028	0	0
379.50	8,606	3,409	3,409
380.00	9,181	4,447	7,855
380.50	9,775	4,739	12,594
381.00	10,388	5,041	17,635
381.50	11,019	5,352	22,987
382.00	11,669	5,672	28,659
382.50	12,338	6,002	34,661
383.00	13,024	6,341	41,001
383.50	13,730	6,689	47,690
384.00	14,453	7,046	54,735
384.50	15,195	7,412	62,147
385.00	15,956	7,788	69,935
385.50	16,736	8,173	78,108
386.00	17,534	8,568	86,676
386.50	18,350	8,971	95,647
387.00	19,186	9,384	105,031

Device	Routing	Invert	Outlet Devices
#1	Primary	386.50'	**20.0' long x 10.0' breadth Divider Overtop** 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

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=379.00' (Free Discharge)
└**1=Divider Overtop** (Controls 0.00 cfs)

Pond 61P: Southwest Pond_Cell 3_CW



Summary for Pond 63P: Southwest Pond_Cells 1-2_SW

Inflow Area = 65.206 ac, 8.78% Impervious, Inflow Depth = 5.58" for 25-year event
Inflow = 567.25 cfs @ 11.95 hrs, Volume= 30.316 af
Outflow = 19.25 cfs @ 13.54 hrs, Volume= 30.316 af, Atten= 97%, Lag= 95.2 min
Primary = 19.25 cfs @ 13.54 hrs, Volume= 30.316 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 383.90' @ 13.54 hrs Surf.Area= 179,493 sf Storage= 920,236 cf

Plug-Flow detention time= 2,673.6 min calculated for 30.313 af (100% of inflow)
Center-of-Mass det. time= 2,674.1 min (3,430.5 - 756.3)

Volume	Invert	Avail.Storage	Storage Description
#1	376.00'	1,515,433 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
376.00	0	0	0
376.50	5,226	1,307	1,307
377.00	19,215	6,110	7,417
377.50	35,045	13,565	20,982
378.00	66,528	25,393	46,375
378.50	100,720	41,812	88,187
379.00	119,807	55,132	143,319
379.50	136,511	64,080	207,398
380.00	149,703	71,554	278,952
380.50	153,412	75,779	354,731
381.00	157,136	77,637	432,368
381.50	160,898	79,509	511,876
382.00	164,698	81,399	593,275
382.50	168,537	83,309	676,584
383.00	172,413	85,238	761,821
383.50	176,328	87,185	849,007
384.00	180,280	89,152	938,159
384.50	184,271	91,138	1,029,296
385.00	188,299	93,143	1,122,439
385.50	192,365	95,166	1,217,605
386.00	196,469	97,209	1,314,813
386.50	200,610	99,270	1,414,083
387.00	204,790	101,350	1,515,433

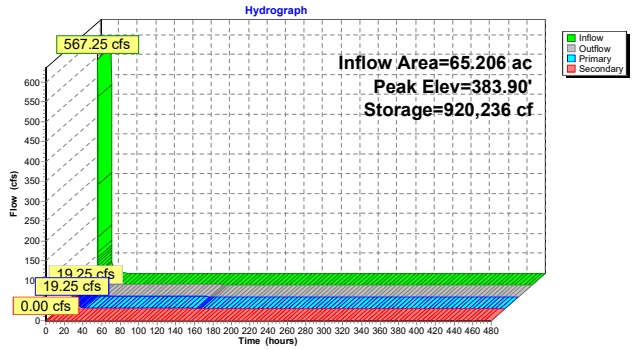
Device	Routing	Invert	Outlet Devices
#1	Primary	375.50'	**24.0" Round Culvert** L= 125.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 375.50' / 370.40' S= 0.0408 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#2	Device 1	376.00'	**6.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	383.50'	**60.0" x 60.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	385.50'	**40.0' long x 20.0' 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) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=19.18 cfs @ 13.54 hrs HW=383.90' (Free Discharge)
└**1=Culvert** (Passes 19.18 cfs of 41.15 cfs potential flow)
└**2=Orifice/Grate** (Orifice Controls 2.61 cfs @ 13.32 fps)
└**3=Orifice/Grate** (Weir Controls 16.56 cfs @ 2.07 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=376.00' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 63P: Southwest Pond_Cells 1-2_SW



Summary for Pond 64P: Southwest Pond_Cell 3_CW

Inflow Area = 0.976 ac,100.00% Impervious, Inflow Depth = 6.38" for 25-year event
Inflow = 8.64 cfs @ 11.95 hrs, Volume= 0.519 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Starting Elev= 383.70' Surf.Area= 14,019 sf Storage= 50,464 cf
Peak Elev= 385.19' @ 24.35 hrs Surf.Area= 16,259 sf Storage= 73,062 cf (22,598 cf above start)

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

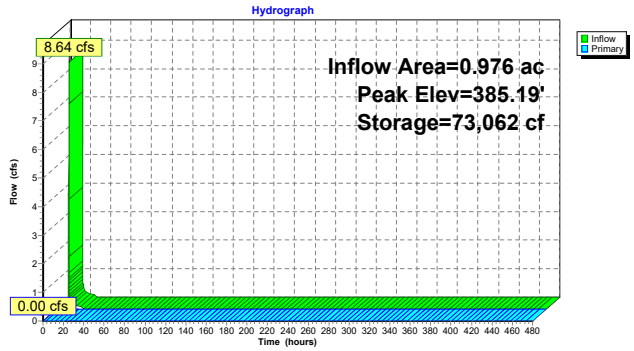
Volume	Invert	Avail.Storage	Storage Description
#1	379.00'	105,031 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
379.00	5,028	0	0
379.50	8,606	3,409	3,409
380.00	9,181	4,447	7,855
380.50	9,775	4,739	12,594
381.00	10,388	5,041	17,635
381.50	11,019	5,352	22,987
382.00	11,669	5,672	28,659
382.50	12,338	6,002	34,661
383.00	13,024	6,341	41,001
383.50	13,730	6,689	47,690
384.00	14,453	7,046	54,735
384.50	15,195	7,412	62,147
385.00	15,956	7,788	69,935
385.50	16,736	8,173	78,108
386.00	17,534	8,568	86,676
386.50	18,350	8,971	95,647
387.00	19,186	9,384	105,031

Device	Routing	Invert	Outlet Devices
#1	Primary	386.50'	**20.0' long x 10.0' breadth Divider Overtop** 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

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=383.70' (Free Discharge)
└**1=Divider Overtop** (Controls 0.00 cfs)

Pond 64P: Southwest Pond_Cell 3_CW



Summary for Pond 96P: North Pond_Cell 1_SW

Inflow Area = 22.869 ac, 11.25% Impervious, Inflow Depth = 5.59" for 25-year event
Inflow = 199.08 cfs @ 11.95 hrs, Volume= 10.656 af
Outflow = 5.27 cfs @ 14.06 hrs, Volume= 10.656 af, Atten= 97%, Lag= 126.4 min
Primary = 5.27 cfs @ 14.06 hrs, Volume= 10.656 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 393.33' @ 14.06 hrs Surf.Area= 74,882 sf Storage= 323,829 cf

Plug-Flow detention time= 1,508.3 min calculated for 10.655 af (100% of inflow)
Center-of-Mass det. time= 1,508.6 min (2,264.3 - 755.7)

Volume	Invert	Avail.Storage	Storage Description
#1	387.70'	809,695 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
387.70	0	0	0
388.00	10,899	1,635	1,635
388.50	35,646	11,636	13,271
389.00	52,176	21,956	35,227
389.50	61,323	28,375	63,601
390.00	63,042	31,091	94,693
390.50	64,777	31,955	126,647
391.00	66,528	32,826	159,474
391.50	68,295	33,706	193,179
392.00	70,077	34,593	227,772
392.50	71,876	35,488	263,261
393.00	73,690	36,392	299,652
393.50	75,521	37,303	336,955
394.00	77,367	38,222	375,177
394.50	79,229	39,149	414,326
395.00	81,107	40,084	454,410
395.50	83,001	41,027	495,437
396.00	84,910	41,978	537,415
396.50	86,836	42,937	580,351
397.00	88,778	43,904	624,255
397.50	90,735	44,878	669,133
398.00	92,708	45,861	714,994
398.50	94,697	46,851	761,845
399.00	96,702	47,850	809,695

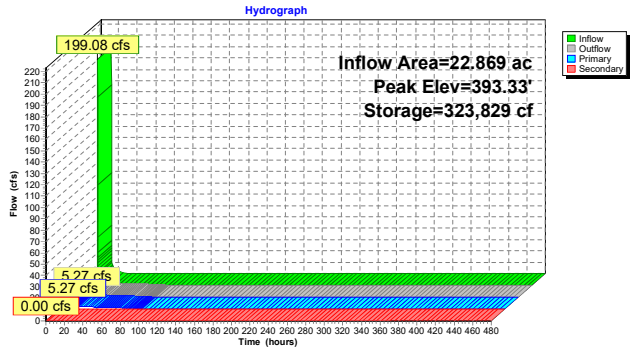
Device	Routing	Invert	Outlet Devices
#1	Primary	387.70'	**24.0" Round Culvert** L= 93.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 387.70' / 385.40' S= 0.0247 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#2	Device 1	387.70'	**6.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	393.20'	**60.0" x 60.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

#4 Secondary 398.50' **40.0' long x 20.0' 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) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=5.10 cfs @ 14.06 hrs HW=393.33' (Free Discharge)
└**1=Culvert** (Passes 5.10 cfs of 32.53 cfs potential flow)
└**2=Orifice/Grate** (Orifice Controls 2.19 cfs @ 11.16 fps)
└**3=Orifice/Grate** (Weir Controls 2.91 cfs @ 1.16 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=387.70' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 96P: North Pond_Cell 1_SW



Summary for Pond 97P: North Pond_Cells 1-3_CW

Inflow Area = 30.353 ac, 18.63% Impervious, Inflow Depth = 5.58" for 25-year event
Inflow = 263.33 cfs @ 11.95 hrs, Volume= 14.121 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 393.30' @ 24.35 hrs Surf.Area= 153,148 sf Storage= 615,096 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

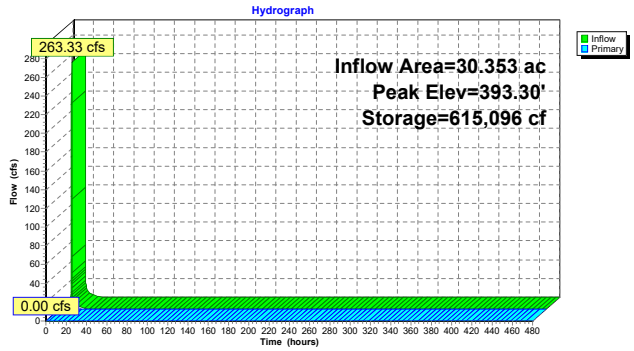
Volume	Invert	Avail.Storage	Storage Description
#1	387.70'	1,629,758 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
387.70	0	0	0
388.00	10,899	1,635	1,635
388.50	37,180	12,020	13,655
389.00	80,872	29,513	43,168
389.50	117,682	49,639	92,806
390.00	126,855	61,134	153,940
390.50	130,702	64,389	218,330
391.00	134,592	66,324	284,653
391.50	138,535	68,282	352,935
392.00	142,529	70,266	423,201
392.50	146,575	72,276	495,477
393.00	150,673	74,312	569,789
393.50	154,822	76,374	646,163
394.00	159,023	78,461	724,624
394.50	163,276	80,575	805,199
395.00	167,581	82,714	887,913
395.50	171,937	84,880	972,792
396.00	176,345	87,071	1,059,863
396.50	180,805	89,288	1,149,150
397.00	185,318	91,531	1,240,681
397.50	189,883	93,800	1,334,481
398.00	194,499	96,096	1,430,577
398.50	199,168	98,417	1,528,994
399.00	203,888	100,764	1,629,758

Device	Routing	Invert	Outlet Devices
#1	Primary	398.50'	**40.0' long x 4.5' breadth Emergency Spillway** 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) 2.36 2.52 2.70 2.68 2.67 2.67 2.65 2.66 2.66 2.67 2.70 2.70 2.72 2.75 2.81 2.93 3.10

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=387.70' (Free Discharge)
└**1=Emergency Spillway** (Controls 0.00 cfs)

Pond 97P: North Pond_Cells 1-3_CW



Summary for Pond 99P: North Pond_Cells 2-3_CW

Inflow Area = 24.973 ac, 12.33% Impervious, Inflow Depth = 5.51" for 25-year event
Inflow = 215.87 cfs @ 11.95 hrs, Volume= 11.476 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 395.76' @ 24.35 hrs Surf.Area= 90,215 sf Storage= 499,902 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

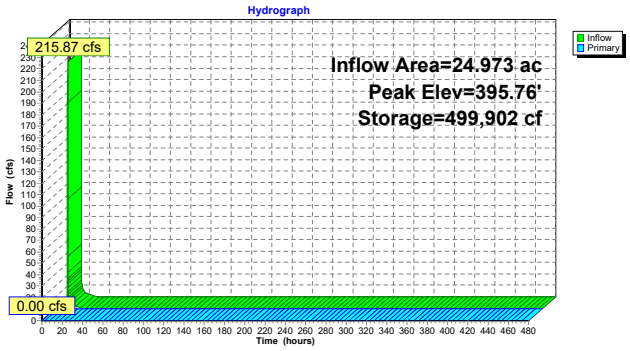
Volume	Invert	Avail.Storage	Storage Description
#1	388.50'	819,680 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
388.50	1,533	0	0
389.00	28,696	7,557	7,557
389.50	56,359	21,264	28,821
390.00	63,813	30,043	58,864
390.50	65,925	32,435	91,299
391.00	68,065	33,498	124,796
391.50	70,240	34,576	159,372
392.00	72,452	35,673	195,045
392.50	74,699	36,788	231,833
393.00	76,983	37,921	269,754
393.50	79,302	39,071	308,825
394.00	81,657	40,240	349,065
394.50	84,047	41,426	390,491
395.00	86,474	42,630	433,121
395.50	88,936	43,853	476,973
396.00	91,435	45,093	522,066
396.50	93,969	46,351	568,417
397.00	96,540	47,627	616,044
397.50	99,148	48,922	664,966
398.00	101,791	50,235	715,201
398.50	104,470	51,565	766,766
399.00	107,185	52,914	819,680

Device	Routing	Invert	Outlet Devices
#1	Primary	398.50'	**20.0' long x 10.0' breadth Divider overtop** 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

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=388.50' (Free Discharge)
└**1=Divider overtop** (Controls 0.00 cfs)

Pond 99P: North Pond_Cells 2-3_CW



Summary for Pond 101P: North Pond_Cells 1-2_SW

Inflow Area = 49.303 ac, 10.14% Impervious, Inflow Depth = 5.58" for 25-year event
Inflow = 429.03 cfs @ 11.95 hrs, Volume= 22.945 af
Outflow = 24.11 cfs @ 12.72 hrs, Volume= 22.945 af, Atten= 94%, Lag= 45.9 min
Primary = 24.11 cfs @ 12.72 hrs, Volume= 22.945 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 393.68' @ 12.72 hrs Surf.Area= 147,497 sf Storage= 647,640 cf

Plug-Flow detention time= 2,073.0 min calculated for 22.945 af (100% of inflow)
Center-of-Mass det. time= 2,072.9 min (2,828.9 - 756.0)

Volume	Invert	Avail.Storage	Storage Description
#1	387.70'	1,538,079 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
387.70	0	0	0
388.00	10,899	1,635	1,635
388.50	37,180	12,020	13,655
389.00	80,872	29,513	43,168
389.50	117,682	49,639	92,806
390.00	121,746	59,857	152,663
390.50	125,135	61,720	214,383
391.00	128,558	63,423	277,807
391.50	132,015	65,143	342,950
392.00	135,506	66,880	409,830
392.50	139,032	68,635	478,465
393.00	142,591	70,406	548,870
393.50	146,184	72,194	621,064
394.00	149,811	73,999	695,063
394.50	153,472	75,821	770,884
395.00	157,167	77,660	848,543
395.50	160,896	79,516	928,059
396.00	164,660	81,389	1,009,448
396.50	168,457	83,279	1,092,727
397.00	172,290	85,187	1,177,914
397.50	176,156	87,112	1,265,026
398.00	180,057	89,053	1,354,079
398.50	183,992	91,012	1,445,091
399.00	187,961	92,988	1,538,079

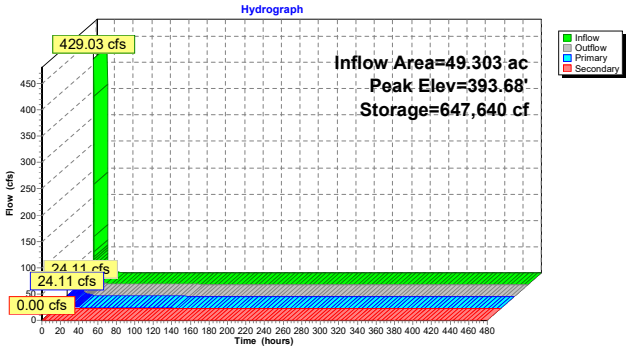
Device	Routing	Invert	Outlet Devices
#1	Primary	387.70'	**24.0" Round Culvert** L= 93.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 387.70' / 385.40' S= 0.0247 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#2	Device 1	387.70'	**6.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	393.20'	**60.0" x 60.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

#4	Secondary	398.50'	**40.0' long x 20.0' 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) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=24.07 cfs @ 12.72 hrs HW=393.68' (Free Discharge)
└**1=Culvert** (Passes 24.07 cfs of 33.76 cfs potential flow)
└**2=Orifice/Grate** (Orifice Controls 2.26 cfs @ 11.53 fps)
└**3=Orifice/Grate** (Weir Controls 21.81 cfs @ 2.27 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=387.70' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 101P: North Pond_Cells 1-2_SW



Summary for Pond 102P: North Pond_Cell 3_CW

Inflow Area = 0.655 ac,100.00% Impervious, Inflow Depth = 6.62" for 25-year event
Inflow = 5.80 cfs @ 11.95 hrs, Volume= 0.361 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Starting Elev= 395.30' Surf.Area= 10,790 sf Storage= 41,274 cf
Peak Elev= 396.65' @ 24.35 hrs Surf.Area= 12,551 sf Storage= 57,006 cf (15,732 cf above start)

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

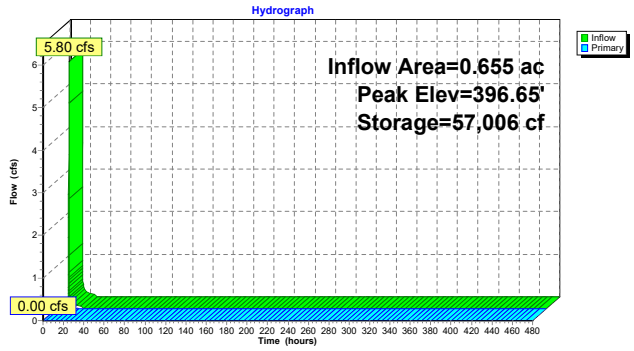
Volume	Invert	Avail.Storage	Storage Description
#1	390.00'	90,402 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
390.00	5,109	0	0
390.50	5,567	2,669	2,669
391.00	6,034	2,900	5,569
391.50	6,520	3,139	8,708
392.00	7,023	3,386	12,094
392.50	7,544	3,642	15,735
393.00	8,082	3,907	19,642
393.50	8,639	4,180	23,822
394.00	9,212	4,463	28,285
394.50	9,804	4,754	33,039
395.00	10,414	5,055	38,093
395.50	11,041	5,364	43,457
396.00	11,686	5,682	49,139
396.50	12,348	6,009	55,147
397.00	13,028	6,344	61,491
397.50	13,726	6,689	68,180
398.00	14,442	7,042	75,222
398.50	15,175	7,404	82,626
399.00	15,927	7,776	90,402

Device	Routing	Invert	Outlet Devices
#1	Primary	398.50'	**20.0' long x 10.0' breadth Divider overtop** 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

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=395.30' (Free Discharge)
└**1=Divider overtop** (Controls 0.00 cfs)

Pond 102P: North Pond_Cell 3_CW



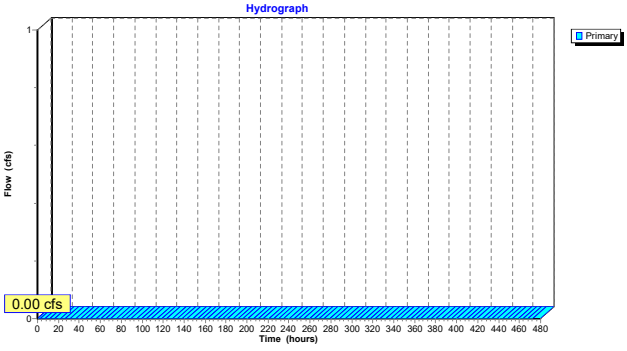
Summary for Link 52L: CW_Overflow

[43] Hint: Has no inflow (Outflow=Zero)

Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

Link 52L: CW_Overflow

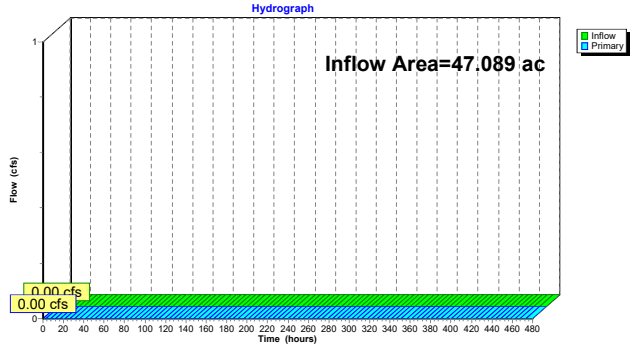


Summary for Link 53L: CW_Overflow

Inflow Area = 47.089 ac, 14.23% Impervious, Inflow Depth = 0.00" for 25-year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

Link 53L: CW_Overflow

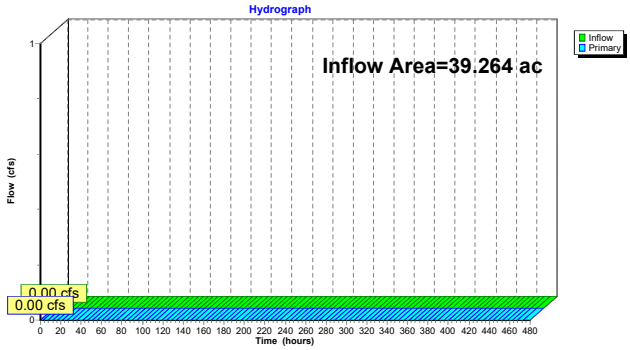


Summary for Link 57L: CW_Overflow

Inflow Area = 39.264 ac, 9.59% Impervious, Inflow Depth = 0.00" for 25-year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

Link 57L: CW_Overflow



Summary for Link 58L: Leachate

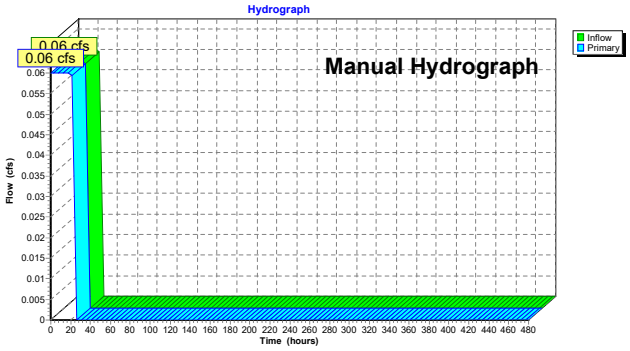
Inflow = 0.06 cfs @ 0.00 hrs, Volume= 0.119 af
Primary = 0.06 cfs @ 0.00 hrs, Volume= 0.119 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

25 Point manual hydrograph, To= 0.00 hrs, dt= 1.00 hrs, cfs =

0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
0.06	0.06	0.06	0.06	0.06					

Link 58L: Leachate



Summary for Link 60L: Leachate

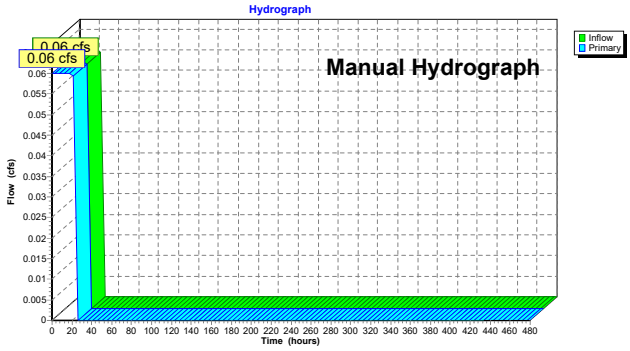
Inflow = 0.06 cfs @ 0.00 hrs, Volume= 0.119 af
Primary = 0.06 cfs @ 0.00 hrs, Volume= 0.119 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

25 Point manual hydrograph, To= 0.00 hrs, dt= 1.00 hrs, cfs =

0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
0.06	0.06	0.06	0.06	0.06					

Link 60L: Leachate



Summary for Link 62L: Leachate

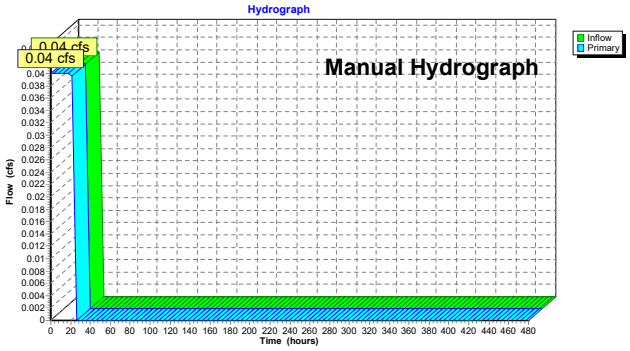
Inflow = 0.04 cfs @ 0.00 hrs, Volume= 0.080 af
Primary = 0.04 cfs @ 0.00 hrs, Volume= 0.080 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

25 Point manual hydrograph, To= 0.00 hrs, dt= 1.00 hrs, cfs =

0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04					

Link 62L: Leachate



Summary for Link 95L: Leachate

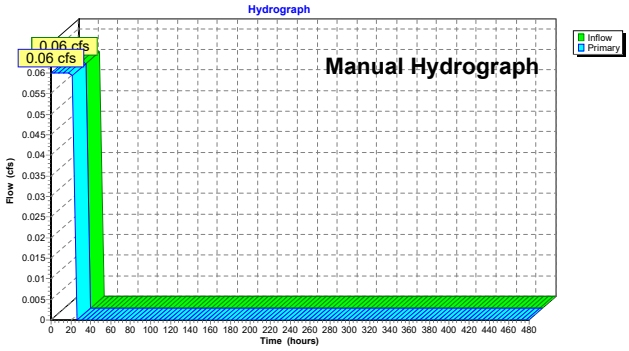
Inflow = 0.06 cfs @ 0.00 hrs, Volume= 0.119 af
Primary = 0.06 cfs @ 0.00 hrs, Volume= 0.119 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

25 Point manual hydrograph, To= 0.00 hrs, dt= 1.00 hrs, cfs =

0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
0.06	0.06	0.06	0.06	0.06					

Link 95L: Leachate



Summary for Link 98L: Leachate

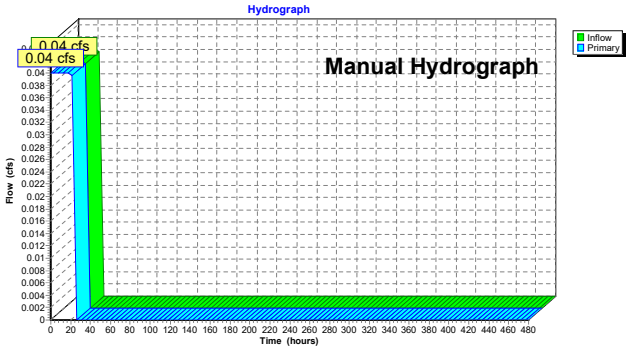
Inflow = 0.04 cfs @ 0.00 hrs, Volume= 0.080 af
Primary = 0.04 cfs @ 0.00 hrs, Volume= 0.080 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

25 Point manual hydrograph, To= 0.00 hrs, dt= 1.00 hrs, cfs =

0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04					

Link 98L: Leachate



Summary for Link 100L: Leachate

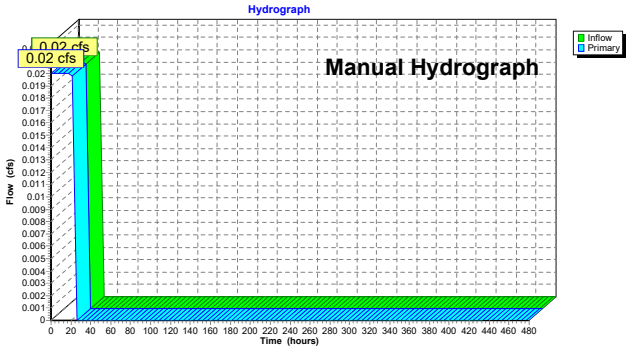
Inflow = 0.02 cfs @ 0.00 hrs, Volume= 0.040 af
Primary = 0.02 cfs @ 0.00 hrs, Volume= 0.040 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

25 Point manual hydrograph, To= 0.00 hrs, dt= 1.00 hrs, cfs =

0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02					

Link 100L: Leachate

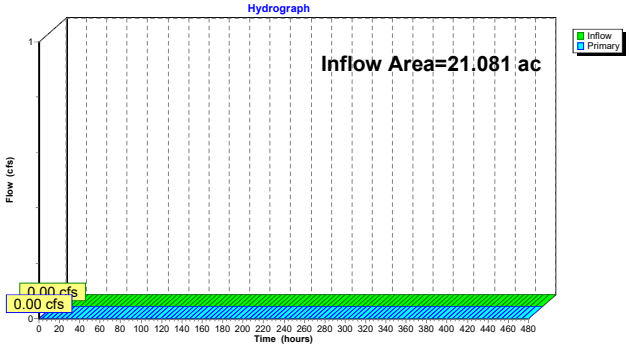


Summary for Link 104L: CW_Overflow

Inflow Area = 21.081 ac, 26.82% Impervious, Inflow Depth = 0.00" for 25-year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

Link 104L: CW_Overflow

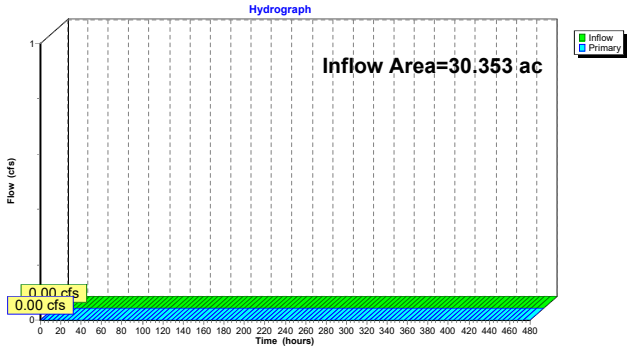


Summary for Link 105L: CW_Overflow

Inflow Area = 30.353 ac, 18.63% Impervious, Inflow Depth = 0.00" for 25-year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

Link 105L: CW_Overflow

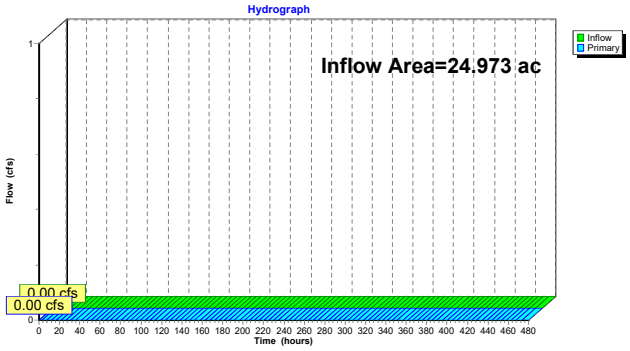


Summary for Link 106L: CW_Overflow

Inflow Area = 24.973 ac, 12.33% Impervious, Inflow Depth = 0.00" for 25-year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

Link 106L: CW_Overflow

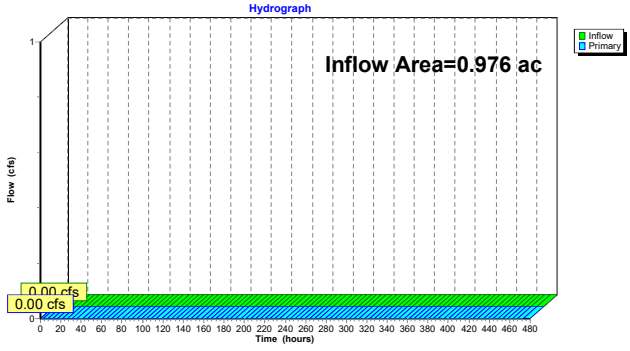


Summary for Link 107L: CW_Overflow

Inflow Area = 0.976 ac,100.00% Impervious, Inflow Depth = 0.00" for 25-year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

Link 107L: CW_Overflow

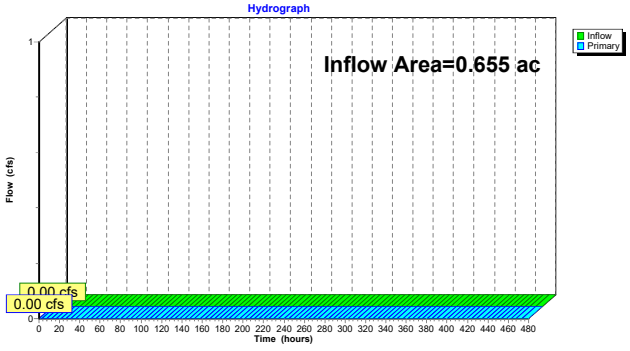


Summary for Link 108L: CW_Overflow

Inflow Area = 0.655 ac,100.00% Impervious, Inflow Depth = 0.00" for 25-year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

Link 108L: CW_Overflow

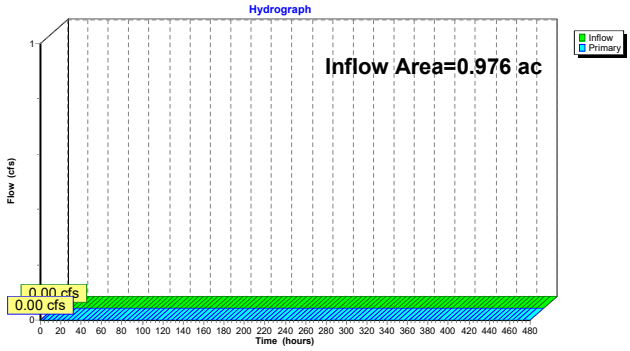


Summary for Link 109L: CW_Overflow

Inflow Area = 0.976 ac,100.00% Impervious, Inflow Depth = 0.00" for 25-year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

Link 109L: CW_Overflow



Summary for Link 110L: Leachate

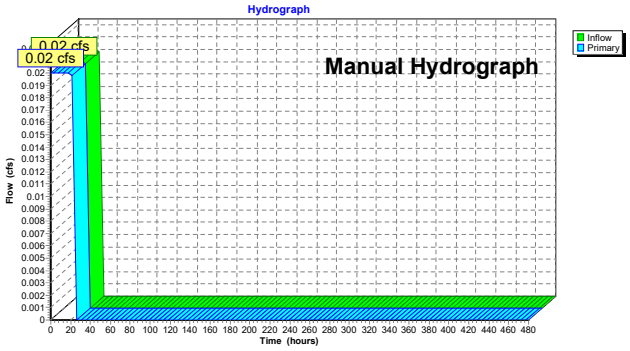
Inflow = 0.02 cfs @ 0.00 hrs, Volume= 0.040 af
Primary = 0.02 cfs @ 0.00 hrs, Volume= 0.040 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

25 Point manual hydrograph, To= 0.00 hrs, dt= 1.00 hrs, cfs =

0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02					

Link 110L: Leachate



Summary for Link 111L: Leachate

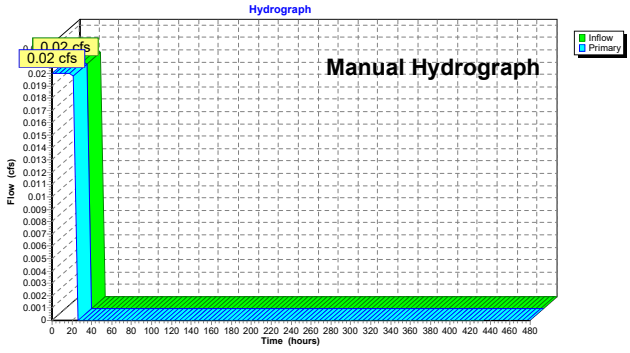
Inflow = 0.02 cfs @ 0.00 hrs, Volume= 0.040 af
Primary = 0.02 cfs @ 0.00 hrs, Volume= 0.040 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

25 Point manual hydrograph, To= 0.00 hrs, dt= 1.00 hrs, cfs =

0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02					

Link 111L: Leachate



Time span=0.00-480.00 hrs, dt=0.05 hrs, 9601 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 49S: CW1 Runoff Area=173,804 sf 0.00% Impervious Runoff Depth=7.25"
Tc=5.0 min CN=96 Runoff=44.21 cfs 2.411 af

Subcatchment 50S: CW2 Runoff Area=1,585,402 sf 0.00% Impervious Runoff Depth=7.01"
Tc=5.0 min CN=94 Runoff=399.03 cfs 21.272 af

Subcatchment 54S: SW9 Runoff Area=164,059 sf 100.00% Impervious Runoff Depth=7.49"
Tc=5.0 min CN=98 Runoff=42.01 cfs 2.351 af

Subcatchment 56S: CW3 Runoff Area=585,303 sf 0.00% Impervious Runoff Depth=7.01"
Tc=5.0 min CN=94 Runoff=147.31 cfs 7.853 af

Subcatchment 57S: CW4 Runoff Area=86,738 sf 0.00% Impervious Runoff Depth=7.25"
Tc=5.0 min CN=96 Runoff=22.06 cfs 1.203 af

Subcatchment 60S: SW1 Runoff Area=187,120 sf 0.00% Impervious Runoff Depth=7.25"
Tc=5.0 min CN=96 Runoff=47.60 cfs 2.596 af

Subcatchment 61S: SW2 Runoff Area=1,371,625 sf 0.00% Impervious Runoff Depth=7.13"
Tc=5.0 min CN=95 Runoff=347.22 cfs 18.716 af

Subcatchment 62S: CW2 Runoff Area=727,268 sf 0.00% Impervious Runoff Depth=7.01"
Tc=5.0 min CN=94 Runoff=183.04 cfs 9.758 af

Subcatchment 63S: CW3 Runoff Area=97,972 sf 0.00% Impervious Runoff Depth=7.25"
Tc=5.0 min CN=96 Runoff=24.92 cfs 1.359 af

Subcatchment 66S: CW1 Runoff Area=1,015,903 sf 0.00% Impervious Runoff Depth=7.01"
Tc=5.0 min CN=94 Runoff=255.69 cfs 13.631 af

Subcatchment 68S: SW3 Runoff Area=250,674 sf 0.00% Impervious Runoff Depth=7.13"
Tc=5.0 min CN=95 Runoff=63.46 cfs 3.420 af

Subcatchment 70S: SW1 Runoff Area=187,120 sf 0.00% Impervious Runoff Depth=7.25"
Tc=5.0 min CN=96 Runoff=47.60 cfs 2.596 af

Subcatchment 71S: SW2 Runoff Area=2,036,737 sf 0.00% Impervious Runoff Depth=7.13"
Tc=5.0 min CN=95 Runoff=515.59 cfs 27.791 af

Subcatchment 72S: SW4 Runoff Area=97,972 sf 0.00% Impervious Runoff Depth=7.25"
Tc=5.0 min CN=96 Runoff=24.92 cfs 1.359 af

Subcatchment 73S: CW4 Runoff Area=238,436 sf 0.00% Impervious Runoff Depth=7.01"
Tc=5.0 min CN=94 Runoff=60.01 cfs 3.199 af

Subcatchment 74S: CW1 Runoff Area=117,033 sf 0.00% Impervious Runoff Depth=7.25"
Tc=5.0 min CN=96 Runoff=29.77 cfs 1.624 af

Subcatchment 75S: SW3 Runoff Area=786,090 sf 0.00% Impervious Runoff Depth=7.13"
Tc=5.0 min CN=95 Runoff=198.99 cfs 10.726 af

Subcatchment 81S: CW5 Runoff Area=656,028 sf 0.00% Impervious Runoff Depth=7.01"
Tc=5.0 min CN=94 Runoff=165.11 cfs 8.802 af

Subcatchment 82S: CW3 Runoff Area=305,217 sf 0.00% Impervious Runoff Depth=7.01"
Tc=5.0 min CN=94 Runoff=76.82 cfs 4.095 af

Subcatchment 83S: CW6 Runoff Area=59,186 sf 0.00% Impervious Runoff Depth=7.25"
Tc=5.0 min CN=96 Runoff=15.06 cfs 0.821 af

Subcatchment 84S: CW2 Runoff Area=1,124,039 sf 0.00% Impervious Runoff Depth=7.01"
Tc=5.0 min CN=94 Runoff=282.91 cfs 15.082 af

Subcatchment 85S: SW1 Runoff Area=187,120 sf 0.00% Impervious Runoff Depth=7.25"
Tc=5.0 min CN=96 Runoff=47.60 cfs 2.596 af

Subcatchment 86S: SW2 Runoff Area=2,403,773 sf 0.00% Impervious Runoff Depth=7.13"
Tc=5.0 min CN=95 Runoff=608.50 cfs 32.799 af

Subcatchment 87S: SW4 Runoff Area=157,213 sf 0.00% Impervious Runoff Depth=7.25"
Tc=5.0 min CN=96 Runoff=39.99 cfs 2.181 af

Subcatchment 89S: SW5 Runoff Area=962,345 sf 0.00% Impervious Runoff Depth=7.13"
Tc=5.0 min CN=95 Runoff=243.61 cfs 13.131 af

Subcatchment 90S: SW3 Runoff Area=1,772,666 sf 0.00% Impervious Runoff Depth=7.13"
Tc=5.0 min CN=95 Runoff=448.74 cfs 24.188 af

Subcatchment 95S: SW6 Runoff Area=117,033 sf 0.00% Impervious Runoff Depth=7.25"
Tc=5.0 min CN=96 Runoff=29.77 cfs 1.624 af

Subcatchment 96S: CW6 Runoff Area=291,980 sf 100.00% Impervious Runoff Depth=7.49"
Tc=5.0 min CN=98 Runoff=74.77 cfs 4.184 af

Subcatchment 97S: CW5 Runoff Area=246,262 sf 100.00% Impervious Runoff Depth=7.49"
Tc=5.0 min CN=98 Runoff=63.06 cfs 3.529 af

Subcatchment 98S: CW4 Runoff Area=246,262 sf 100.00% Impervious Runoff Depth=7.49"
Tc=5.0 min CN=98 Runoff=63.06 cfs 3.529 af

Subcatchment 99S: CW5 Runoff Area=172,969 sf 100.00% Impervious Runoff Depth=7.49"
Tc=5.0 min CN=98 Runoff=44.29 cfs 2.479 af

Subcatchment 100S: SW4 Runoff Area=119,011 sf 100.00% Impervious Runoff Depth=7.49"
Tc=5.0 min CN=98 Runoff=30.48 cfs 1.705 af

Subcatchment 101S: SW6 Runoff Area=249,478 sf 100.00% Impervious Runoff Depth=7.49"
Tc=5.0 min CN=98 Runoff=63.88 cfs 3.575 af

Subcatchment 102S: CW9 Runoff Area=42,502 sf 100.00% Impervious Runoff Depth=7.49"
Tc=5.0 min CN=98 Runoff=10.88 cfs 0.609 af

Subcatchment 103S: CW2 Runoff Area=42,502 sf 100.00% Impervious Runoff Depth=7.49"
Tc=5.0 min CN=98 Runoff=10.88 cfs 0.609 af

Subcatchment 104S: SW5 Runoff Area=112,099 sf 100.00% Impervious Runoff Depth=7.49"
Tc=5.0 min CN=98 Runoff=28.71 cfs 1.606 af

Subcatchment 105S: CW7 Runoff Area=134,163 sf 100.00% Impervious Runoff Depth=7.49"
Tc=5.0 min CN=98 Runoff=34.36 cfs 1.923 af

Subcatchment 106S: CW8 Runoff Area=164,059 sf 100.00% Impervious Runoff Depth=7.49"
Tc=5.0 min CN=98 Runoff=42.01 cfs 2.351 af

Subcatchment 107S: SW8 Runoff Area=249,478 sf 100.00% Impervious Runoff Depth=7.49"
Tc=5.0 min CN=98 Runoff=63.88 cfs 3.575 af

Subcatchment 108S: SW7 Runoff Area=217,745 sf 100.00% Impervious Runoff Depth=7.49"
Tc=5.0 min CN=98 Runoff=55.76 cfs 3.120 af

Subcatchment 109S: CW1 Runoff Area=28,517 sf 100.00% Impervious Runoff Depth=7.49"
Tc=5.0 min CN=98 Runoff=7.30 cfs 0.409 af

Pond 47P: North Pond_Cells 1-3_CW Peak Elev=392.89' Storage=553,408 cf Inflow=232.50 cfs 12.705 af
Outflow=0.00 cfs 0.000 af

Pond 48P: Southwest Pond_Cells Peak Elev=385.12' Storage=1,219,073 cf Inflow=518.06 cfs 27.986 af
Outflow=0.00 cfs 0.000 af

Pond 50P: Southwest Pond_Cells Peak Elev=385.41' Storage=706,909 cf Inflow=300.04 cfs 16.228 af
Outflow=0.00 cfs 0.000 af

Pond 51P: Southwest Pond_Cell 1_SW Peak Elev=385.54' Storage=581,241 cf Inflow=425.29 cfs 23.017 af
Primary=45.48 cfs 22.998 af Secondary=1.13 cfs 0.019 af Outflow=46.61 cfs 23.017 af

Pond 54P: Southwest Pond_Cells Peak Elev=384.14' Storage=962,818 cf Inflow=627.07 cfs 33.962 af
Primary=35.87 cfs 33.962 af Secondary=0.00 cfs 0.000 af Outflow=35.87 cfs 33.962 af

Pond 55P: Southeast Pond_SW Peak Elev=378.54' Storage=305,648 cf Inflow=315.39 cfs 17.105 af
Primary=27.03 cfs 17.106 af Secondary=0.00 cfs 0.000 af Outflow=27.03 cfs 17.106 af

Pond 56P: Southeast Pond_CW Peak Elev=385.23' Storage=1,008,455 cf Inflow=431.51 cfs 23.151 af
Outflow=0.00 cfs 0.000 af

Pond 61P: Southwest Pond_Cell 3_CW Peak Elev=382.11' Storage=29,993 cf Inflow=10.92 cfs 0.689 af
Outflow=0.00 cfs 0.000 af

Pond 63P: Southwest Pond_Cells Peak Elev=384.76' Storage=1,077,662 cf Inflow=719.98 cfs 38.970 af
Primary=43.48 cfs 38.970 af Secondary=0.00 cfs 0.000 af Outflow=43.48 cfs 38.970 af

Pond 64P: Southwest Pond_Cell 3_CW Peak Elev=385.54' Storage=78,725 cf Inflow=10.90 cfs 0.649 af
Outflow=0.00 cfs 0.000 af

Pond 96P: North Pond_Cell 1_SW Peak Elev=393.72' Storage=353,526 cf Inflow=252.62 cfs 13.692 af
Primary=26.75 cfs 13.692 af Secondary=0.00 cfs 0.000 af Outflow=26.75 cfs 13.692 af

Pond 97P: North Pond_Cells 1-3_CW Peak Elev=394.41' Storage=790,420 cf Inflow=334.52 cfs 18.146 af
Outflow=0.00 cfs 0.000 af

Pond 99P: North Pond_Cells 2-3_CW Peak Elev=397.29' Storage=644,011 cf Inflow=274.56 cfs 14.785 af
Outflow=0.00 cfs 0.000 af

Pond 101P: North Pond_Cells 1-2_SW Peak Elev=394.71' Storage=802,820 cf Inflow=544.49 cfs 29.489 af
Primary=37.07 cfs 29.489 af Secondary=0.00 cfs 0.000 af Outflow=37.07 cfs 29.489 af

Pond 102P: North Pond_Cell 3_CW Peak Elev=396.95' Storage=60,805 cf Inflow=7.32 cfs 0.448 af
Outflow=0.00 cfs 0.000 af

Link 52L: CW_Overflow
Primary=0.00 cfs 0.000 af

Link 53L: CW_Overflow
Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link 57L: CW_Overflow
Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link 58L: Leachate Manual Hydrograph Inflow=0.06 cfs 0.119 af
Primary=0.06 cfs 0.119 af

Link 60L: Leachate Manual Hydrograph Inflow=0.06 cfs 0.119 af
Primary=0.06 cfs 0.119 af

Link 62L: Leachate Manual Hydrograph Inflow=0.04 cfs 0.080 af
Primary=0.04 cfs 0.080 af

Link 95L: Leachate Manual Hydrograph Inflow=0.06 cfs 0.119 af
Primary=0.06 cfs 0.119 af

Link 98L: Leachate Manual Hydrograph Inflow=0.04 cfs 0.080 af
Primary=0.04 cfs 0.080 af

Link 100L: Leachate Manual Hydrograph Inflow=0.02 cfs 0.040 af
Primary=0.02 cfs 0.040 af

Link 104L: CW_Overflow
Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link 105L: CW_Overflow
Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link 106L: CW_Overflow
Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link 107L: CW_Overflow
Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link 108L: CW_Overflow
Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link 109L: CW_Overflow
Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link 110L: Leachate Manual Hydrograph Inflow=0.02 cfs 0.040 af
Primary=0.02 cfs 0.040 af

Link 111L: Leachate Manual Hydrograph Inflow=0.02 cfs 0.040 af
Primary=0.02 cfs 0.040 af

Total Runoff Area = 453.877 ac Runoff Volume = 270.384 af Average Runoff Depth = 7.15"
87.45% Pervious = 396.920 ac 12.55% Impervious = 56.958 ac

Summary for Subcatchment 49S: CW1

[49] Hint: Tc<2dt may require smaller dt

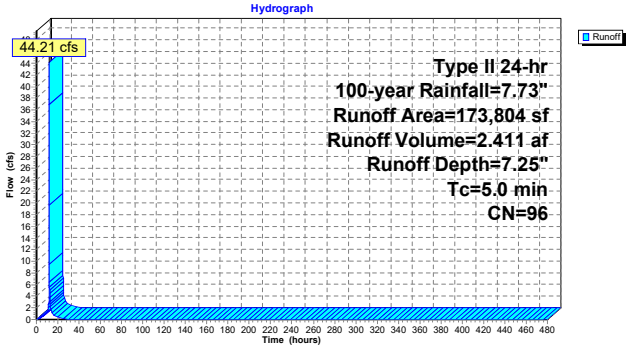
Runoff = 44.21 cfs @ 11.95 hrs, Volume= 2.411 af, Depth= 7.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	173,804	96	Access Roads/Perimeter Channel
	173,804		100.00% Pervious Area

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

Subcatchment 49S: CW1



Summary for Subcatchment 50S: CW2

[49] Hint: Tc<2dt may require smaller dt

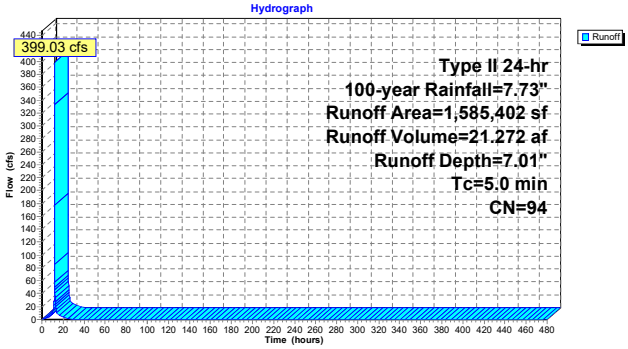
Runoff = 399.03 cfs @ 11.95 hrs, Volume= 21.272 af, Depth= 7.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	1,585,402	94	Exposed CCR Surface
	1,585,402		100.00% Pervious Area

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

Subcatchment 50S: CW2



Summary for Subcatchment 54S: SW9

[49] Hint: Tc<2dt may require smaller dt

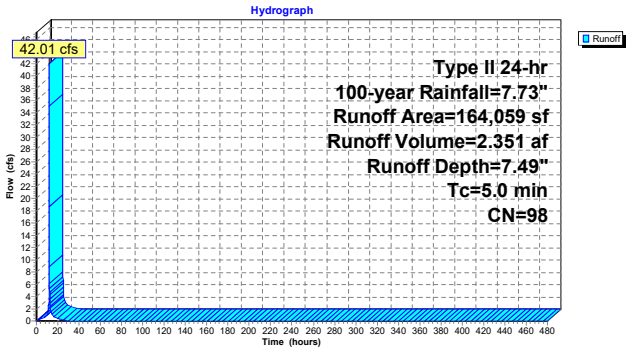
Runoff = 42.01 cfs @ 11.95 hrs, Volume= 2.351 af, Depth= 7.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	164,059	98	Water Surface, HSG D
	164,059		100.00% Impervious Area

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

Subcatchment 54S: SW9



Summary for Subcatchment 56S: CW3

[49] Hint: Tc<2dt may require smaller dt

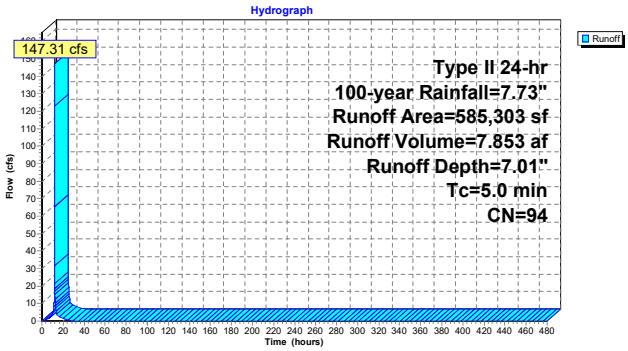
Runoff = 147.31 cfs @ 11.95 hrs, Volume= 7.853 af, Depth= 7.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	585,303	94	Exposed CCR Surface
	585,303		100.00% Pervious Area

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

Subcatchment 56S: CW3



Summary for Subcatchment 57S: CW4

[49] Hint: Tc<2dt may require smaller dt

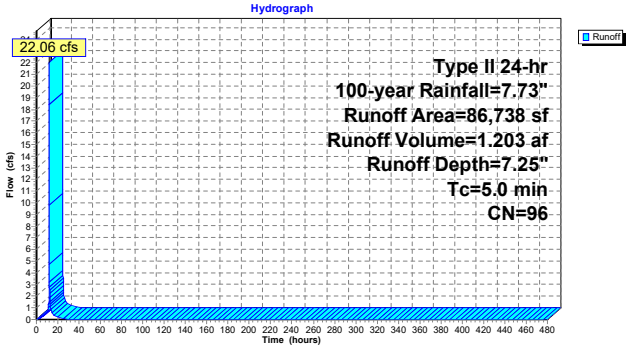
Runoff = 22.06 cfs @ 11.95 hrs, Volume= 1.203 af, Depth= 7.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	86,738	96	Access Roads/Perimeter Channel
	86,738		100.00% Pervious Area

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

Subcatchment 57S: CW4



Summary for Subcatchment 60S: SW1

[49] Hint: Tc<2dt may require smaller dt

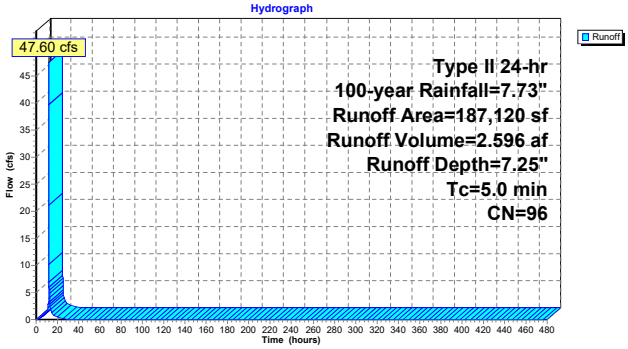
Runoff = 47.60 cfs @ 11.95 hrs, Volume= 2.596 af, Depth= 7.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	187,120	96	Access Roads/Perimeter Channel
	187,120		100.00% Pervious Area

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

Subcatchment 60S: SW1



Summary for Subcatchment 61S: SW2

[49] Hint: Tc<2dt may require smaller dt

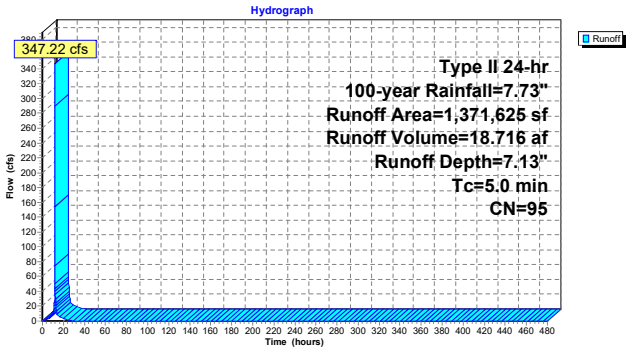
Runoff = 347.22 cfs @ 11.95 hrs, Volume= 18.716 af, Depth= 7.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	1,371,625	95	Final Cover System - ClosureTurf
	1,371,625		100.00% Pervious Area

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

Subcatchment 61S: SW2



Summary for Subcatchment 62S: CW2

[49] Hint: Tc<2dt may require smaller dt

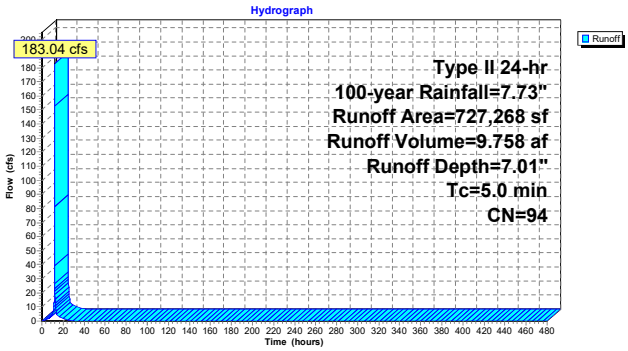
Runoff = 183.04 cfs @ 11.95 hrs, Volume= 9.758 af, Depth= 7.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	727,268	94	Exposed CCR Surface
	727,268		100.00% Pervious Area

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

Subcatchment 62S: CW2



Summary for Subcatchment 63S: CW3

[49] Hint: Tc<2dt may require smaller dt

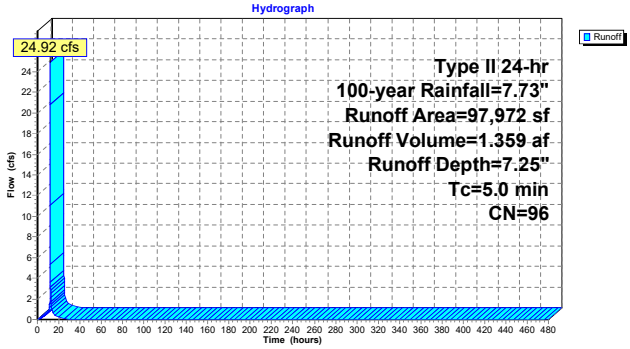
Runoff = 24.92 cfs @ 11.95 hrs, Volume= 1.359 af, Depth= 7.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	97,972	96	Access Roads/Perimeter Channel
	97,972		100.00% Pervious Area

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

Subcatchment 63S: CW3



Summary for Subcatchment 66S: CW1

[49] Hint: Tc<2dt may require smaller dt

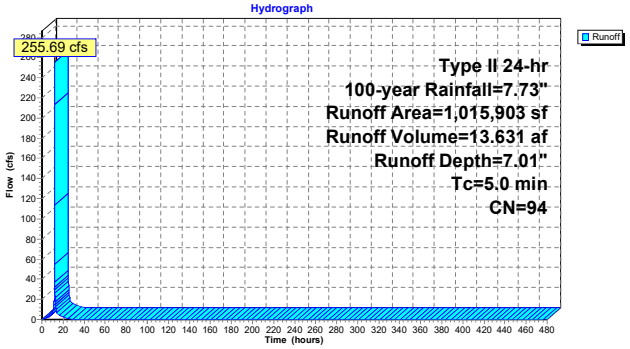
Runoff = 255.69 cfs @ 11.95 hrs, Volume= 13.631 af, Depth= 7.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	1,015,903	94	Exposed CCR Surface
	1,015,903		100.00% Pervious Area

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

Subcatchment 66S: CW1



Summary for Subcatchment 68S: SW3

[49] Hint: Tc<2dt may require smaller dt

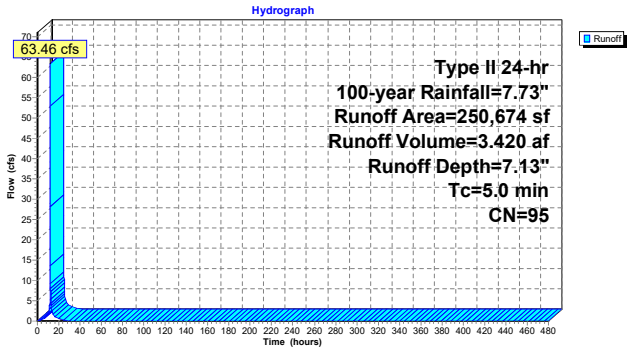
Runoff = 63.46 cfs @ 11.95 hrs, Volume= 3.420 af, Depth= 7.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	250,674	95	Final Cover System - ClosureTurf
	250,674		100.00% Pervious Area

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

Subcatchment 68S: SW3



Summary for Subcatchment 70S: SW1

[49] Hint: Tc<2dt may require smaller dt

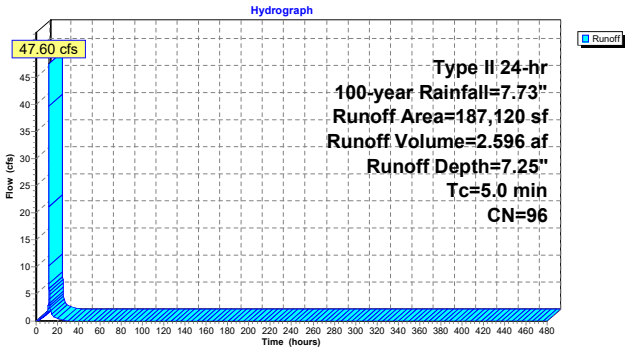
Runoff = 47.60 cfs @ 11.95 hrs, Volume= 2.596 af, Depth= 7.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	187,120	96	Access Roads/Perimeter Channel
	187,120		100.00% Pervious Area

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

Subcatchment 70S: SW1



Summary for Subcatchment 71S: SW2

[49] Hint: Tc<2dt may require smaller dt

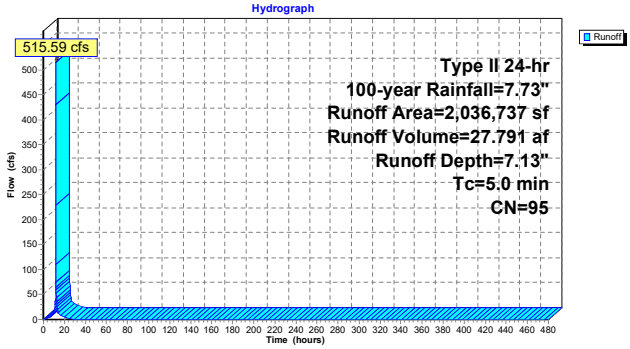
Runoff = 515.59 cfs @ 11.95 hrs, Volume= 27.791 af, Depth= 7.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	2,036,737	95	Final Cover System - ClosureTurf
	2,036,737		100.00% Pervious Area

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

Subcatchment 71S: SW2



Summary for Subcatchment 72S: SW4

[49] Hint: Tc<2dt may require smaller dt

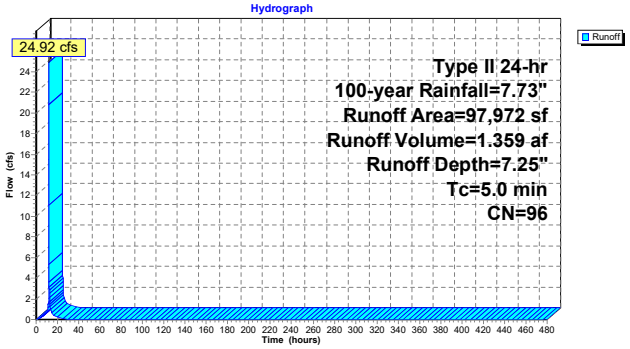
Runoff = 24.92 cfs @ 11.95 hrs, Volume= 1.359 af, Depth= 7.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	97,972	96	Access Roads/Perimeter Channel
	97,972		100.00% Pervious Area

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

Subcatchment 72S: SW4



Summary for Subcatchment 73S: CW4

[49] Hint: Tc<2dt may require smaller dt

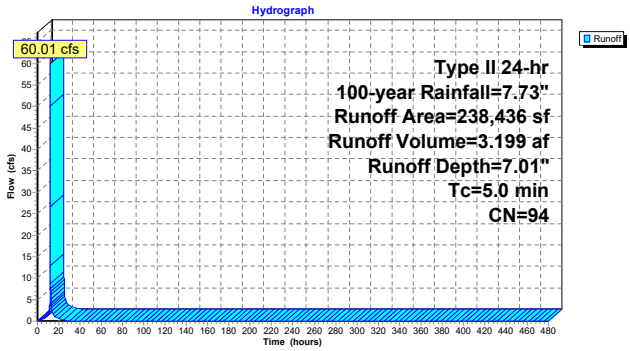
Runoff = 60.01 cfs @ 11.95 hrs, Volume= 3.199 af, Depth= 7.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	238,436	94	Exposed CCR Surface
	238,436		100.00% Pervious Area

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

Subcatchment 73S: CW4



Summary for Subcatchment 74S: CW1

[49] Hint: Tc<2dt may require smaller dt

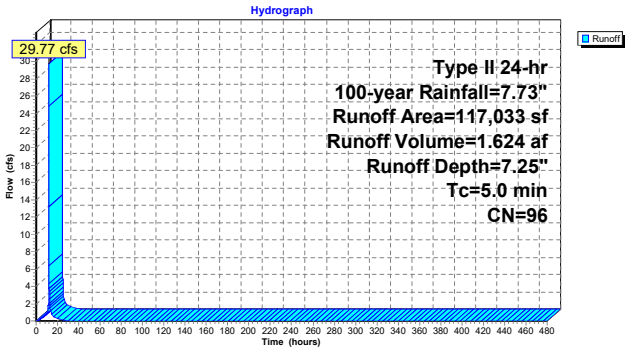
Runoff = 29.77 cfs @ 11.95 hrs, Volume= 1.624 af, Depth= 7.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	117,033	96	Access Roads/Perimeter Channel
	117,033		100.00% Pervious Area

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

Subcatchment 74S: CW1



Summary for Subcatchment 75S: SW3

[49] Hint: Tc<2dt may require smaller dt

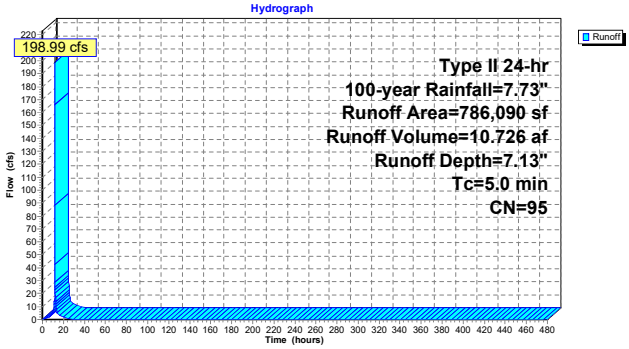
Runoff = 198.99 cfs @ 11.95 hrs, Volume= 10.726 af, Depth= 7.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	786,090	95	Final Cover System - ClosureTurf
	786,090		100.00% Pervious Area

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

Subcatchment 75S: SW3



Summary for Subcatchment 81S: CW5

[49] Hint: Tc<2dt may require smaller dt

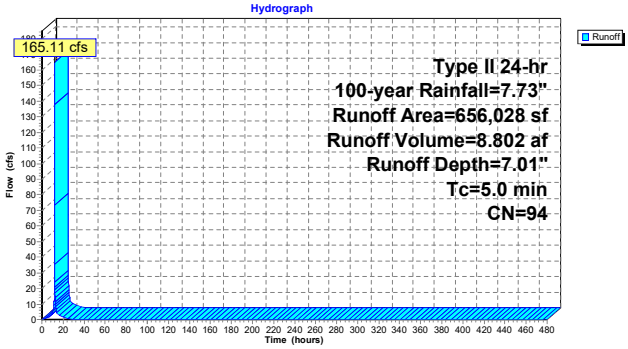
Runoff = 165.11 cfs @ 11.95 hrs, Volume= 8.802 af, Depth= 7.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	656,028	94	Exposed CCR Surface
	656,028		100.00% Pervious Area

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

Subcatchment 81S: CW5



Summary for Subcatchment 82S: CW3

[49] Hint: Tc<2dt may require smaller dt

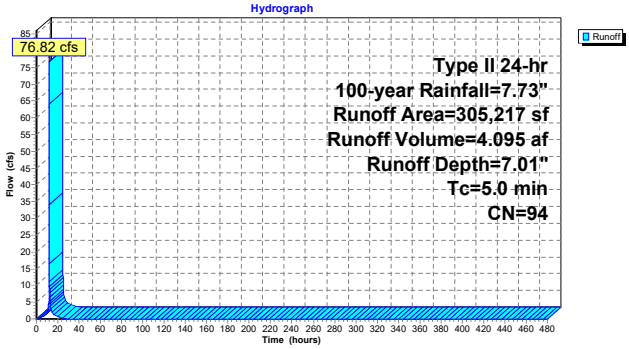
Runoff = 76.82 cfs @ 11.95 hrs, Volume= 4.095 af, Depth= 7.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	305,217	94	Exposed CCR Surface
	305,217		100.00% Pervious Area

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

Subcatchment 82S: CW3



Summary for Subcatchment 83S: CW6

[49] Hint: Tc<2dt may require smaller dt

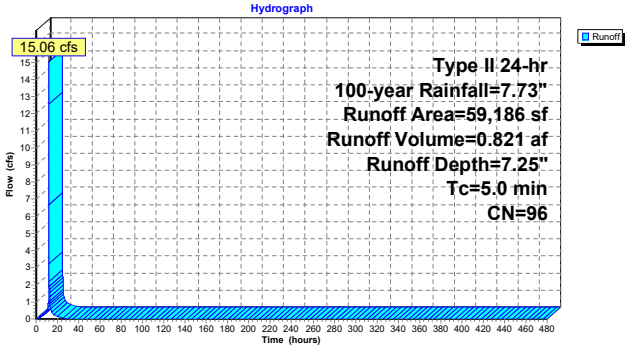
Runoff = 15.06 cfs @ 11.95 hrs, Volume= 0.821 af, Depth= 7.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	59,186	96	Access Roads/Perimeter Channel
	59,186		100.00% Pervious Area

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

Subcatchment 83S: CW6



Summary for Subcatchment 84S: CW2

[49] Hint: Tc<2dt may require smaller dt

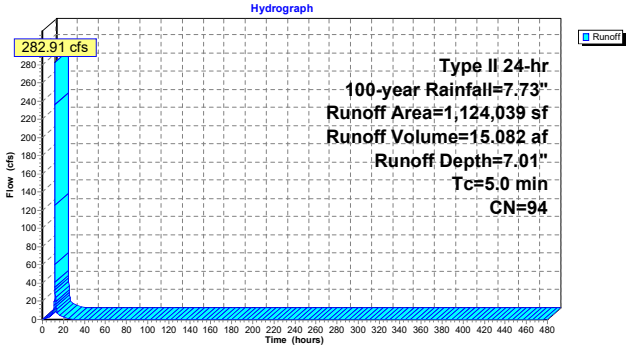
Runoff = 282.91 cfs @ 11.95 hrs, Volume= 15.082 af, Depth= 7.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	1,124,039	94	Exposed CCR Surface
	1,124,039		100.00% Pervious Area

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

Subcatchment 84S: CW2



Summary for Subcatchment 85S: SW1

[49] Hint: Tc<2dt may require smaller dt

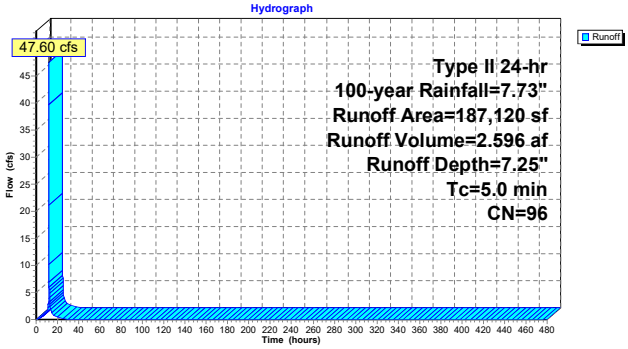
Runoff = 47.60 cfs @ 11.95 hrs, Volume= 2.596 af, Depth= 7.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	187,120	96	Access Roads/Perimeter Channel
	187,120		100.00% Pervious Area

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

Subcatchment 85S: SW1



Summary for Subcatchment 86S: SW2

[49] Hint: Tc<2dt may require smaller dt

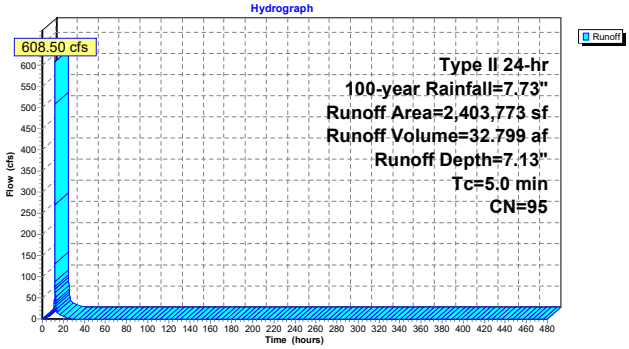
Runoff = 608.50 cfs @ 11.95 hrs, Volume= 32.799 af, Depth= 7.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	2,403,773	95	Final Cover System - ClosureTurf
	2,403,773		100.00% Pervious Area

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

Subcatchment 86S: SW2



Summary for Subcatchment 87S: SW4

[49] Hint: Tc<2dt may require smaller dt

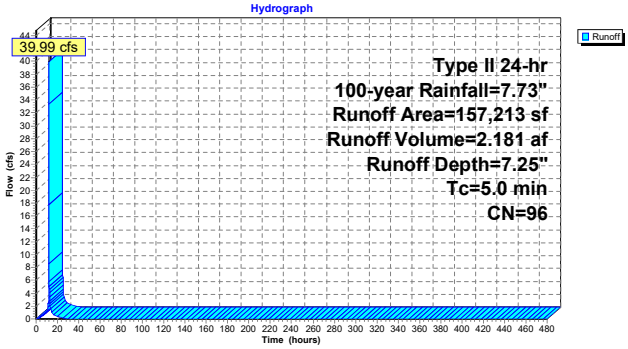
Runoff = 39.99 cfs @ 11.95 hrs, Volume= 2.181 af, Depth= 7.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	157,213	96	Access Roads/Perimeter Channel
	157,213		100.00% Pervious Area

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

Subcatchment 87S: SW4



Summary for Subcatchment 89S: SW5

[49] Hint: Tc<2dt may require smaller dt

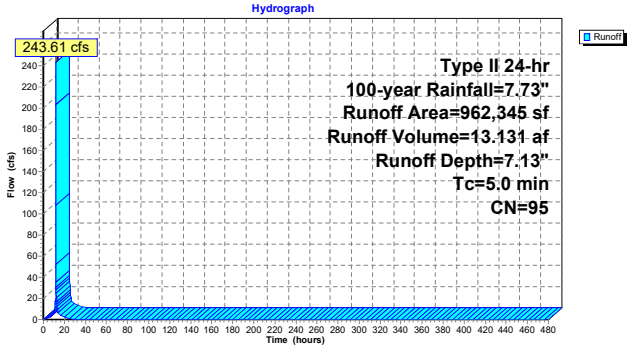
Runoff = 243.61 cfs @ 11.95 hrs, Volume= 13.131 af, Depth= 7.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	962,345	95	Final Cover System - ClosureTurf
	962,345		100.00% Pervious Area

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

Subcatchment 89S: SW5



Summary for Subcatchment 90S: SW3

[49] Hint: Tc<2dt may require smaller dt

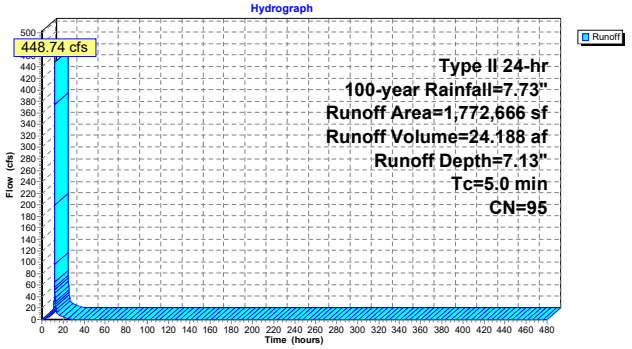
Runoff = 448.74 cfs @ 11.95 hrs, Volume= 24.188 af, Depth= 7.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	1,772,666	95	Final Cover System - ClosureTurf
	1,772,666		100.00% Pervious Area

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

Subcatchment 90S: SW3



Summary for Subcatchment 95S: SW6

[49] Hint: Tc<2dt may require smaller dt

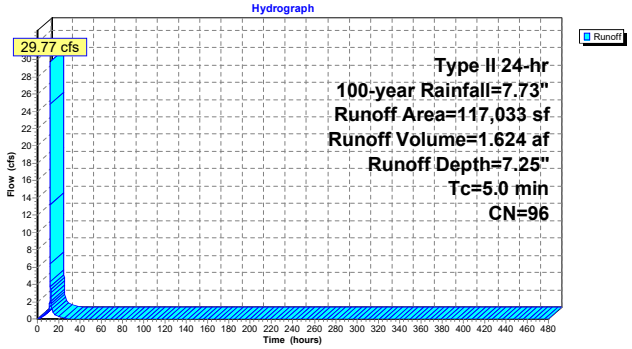
Runoff = 29.77 cfs @ 11.95 hrs, Volume= 1.624 af, Depth= 7.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
*	117,033	96	Access Roads/Perimeter Channel
	117,033		100.00% Pervious Area

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

Subcatchment 95S: SW6



Summary for Subcatchment 96S: CW6

[49] Hint: Tc<2dt may require smaller dt

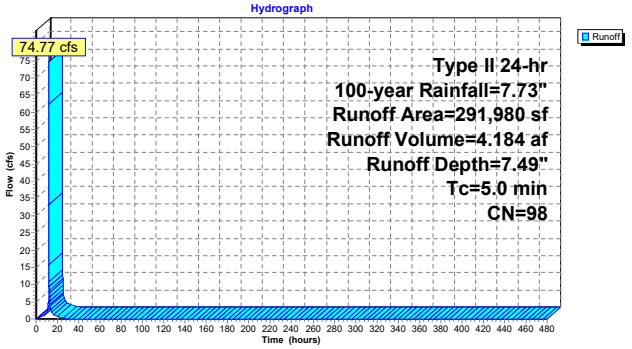
Runoff = 74.77 cfs @ 11.95 hrs, Volume= 4.184 af, Depth= 7.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

	Area (sf)	CN	Description
	291,980	98	Water Surface, HSG D
	291,980		100.00% Impervious Area

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

Subcatchment 96S: CW6



Summary for Subcatchment 97S: CW5

[49] Hint: Tc<2dt may require smaller dt

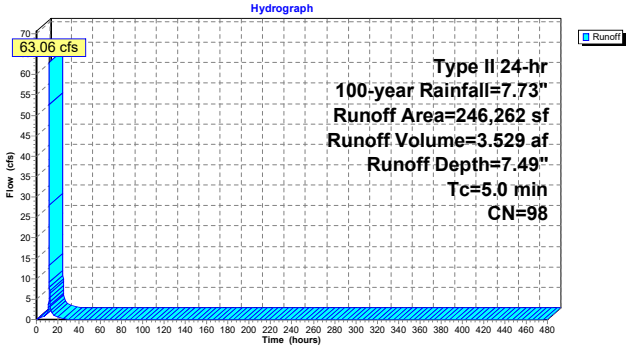
Runoff = 63.06 cfs @ 11.95 hrs, Volume= 3.529 af, Depth= 7.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

Area (sf)	CN	Description
246,262	98	Water Surface, HSG D
246,262		100.00% Impervious Area

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

Subcatchment 97S: CW5



Summary for Subcatchment 98S: CW4

[49] Hint: Tc<2dt may require smaller dt

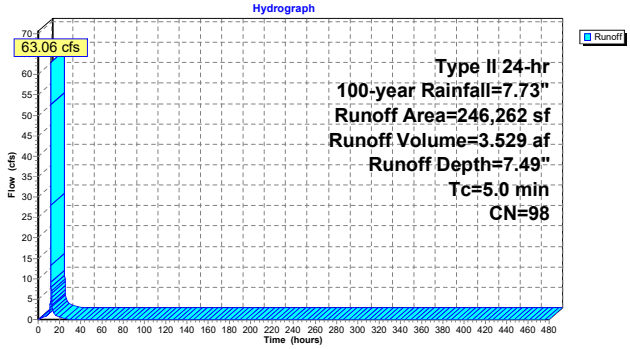
Runoff = 63.06 cfs @ 11.95 hrs, Volume= 3.529 af, Depth= 7.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

Area (sf)	CN	Description
246,262	98	Water Surface, HSG D
246,262		100.00% Impervious Area

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

Subcatchment 98S: CW4



Summary for Subcatchment 99S: CW5

[49] Hint: Tc<2dt may require smaller dt

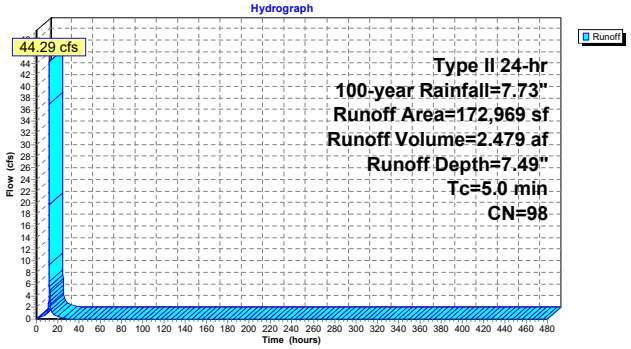
Runoff = 44.29 cfs @ 11.95 hrs, Volume= 2.479 af, Depth= 7.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

Area (sf)	CN	Description
172,969	98	Water Surface, HSG D
172,969		100.00% Impervious Area

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

Subcatchment 99S: CW5



Summary for Subcatchment 100S: SW4

[49] Hint: Tc<2dt may require smaller dt

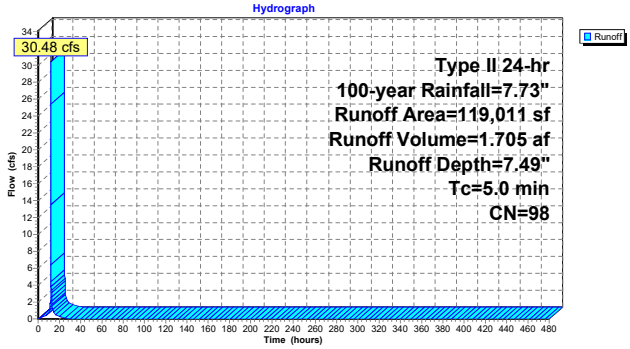
Runoff = 30.48 cfs @ 11.95 hrs, Volume= 1.705 af, Depth= 7.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

Area (sf)	CN	Description
119,011	98	Water Surface, HSG D
119,011		100.00% Impervious Area

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

Subcatchment 100S: SW4



Summary for Subcatchment 101S: SW6

[49] Hint: Tc<2dt may require smaller dt

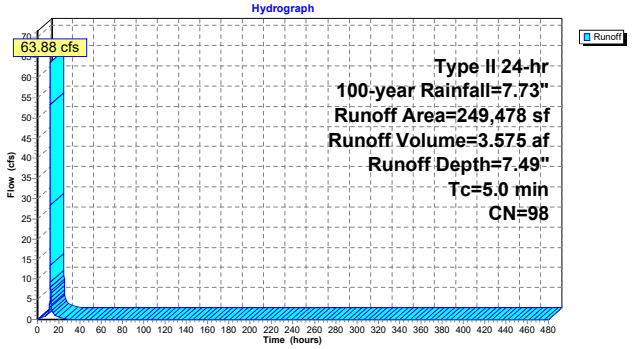
Runoff = 63.88 cfs @ 11.95 hrs, Volume= 3.575 af, Depth= 7.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

Area (sf)	CN	Description
249,478	98	Water Surface, HSG D
249,478		100.00% Impervious Area

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

Subcatchment 101S: SW6



Summary for Subcatchment 102S: CW9

[49] Hint: Tc<2dt may require smaller dt

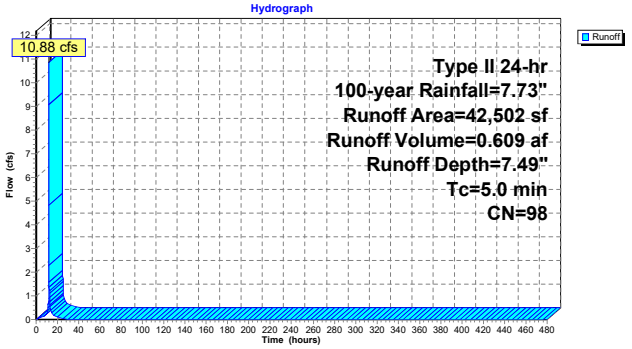
Runoff = 10.88 cfs @ 11.95 hrs, Volume= 0.609 af, Depth= 7.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

Area (sf)	CN	Description
42,502	98	Water Surface, HSG D
42,502		100.00% Impervious Area

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

Subcatchment 102S: CW9



Summary for Subcatchment 103S: CW2

[49] Hint: Tc<2dt may require smaller dt

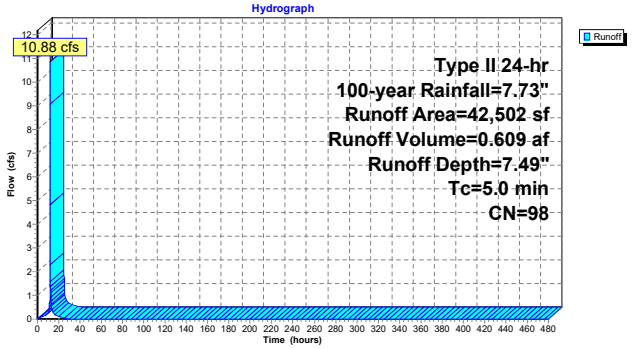
Runoff = 10.88 cfs @ 11.95 hrs, Volume= 0.609 af, Depth= 7.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

Area (sf)	CN	Description
42,502	98	Water Surface, HSG D
42,502		100.00% Impervious Area

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

Subcatchment 103S: CW2



Summary for Subcatchment 104S: SW5

[49] Hint: Tc<2dt may require smaller dt

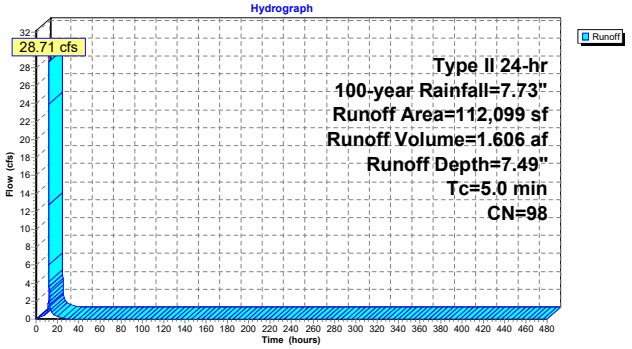
Runoff = 28.71 cfs @ 11.95 hrs, Volume= 1.606 af, Depth= 7.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

Area (sf)	CN	Description
112,099	98	Water Surface, HSG D
112,099		100.00% Impervious Area

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

Subcatchment 104S: SW5



Summary for Subcatchment 105S: CW7

[49] Hint: Tc<2dt may require smaller dt

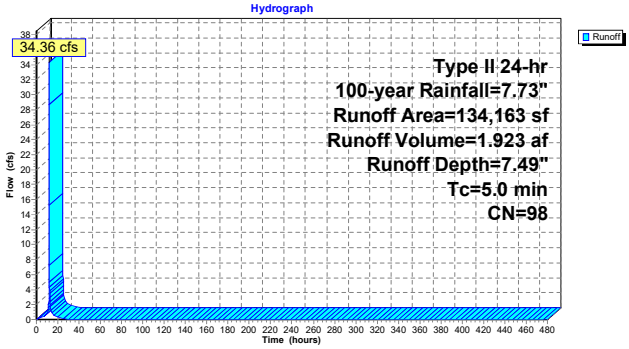
Runoff = 34.36 cfs @ 11.95 hrs, Volume= 1.923 af, Depth= 7.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

Area (sf)	CN	Description
134,163	98	Water Surface, HSG D
134,163		100.00% Impervious Area

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

Subcatchment 105S: CW7



Summary for Subcatchment 106S: CW8

[49] Hint: Tc<2dt may require smaller dt

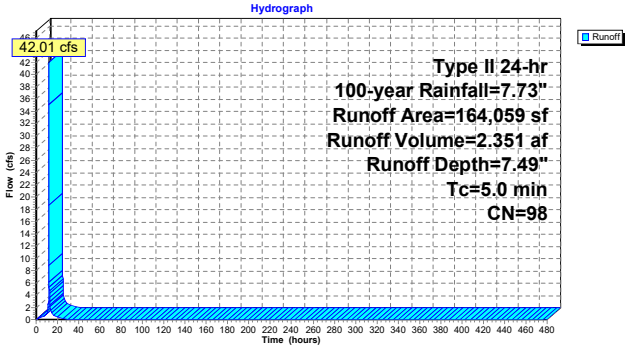
Runoff = 42.01 cfs @ 11.95 hrs, Volume= 2.351 af, Depth= 7.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

Area (sf)	CN	Description
164,059	98	Water Surface, HSG D
164,059		100.00% Impervious Area

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

Subcatchment 106S: CW8



Summary for Subcatchment 107S: SW8

[49] Hint: Tc<2dt may require smaller dt

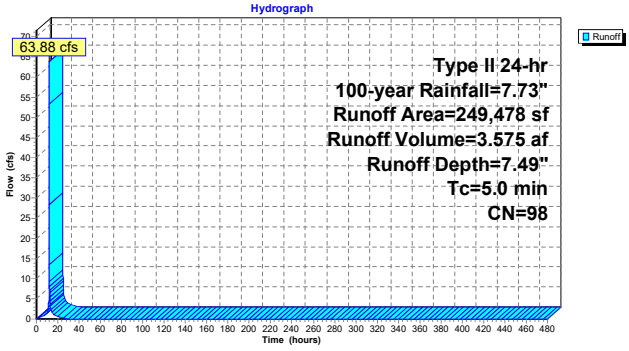
Runoff = 63.88 cfs @ 11.95 hrs, Volume= 3.575 af, Depth= 7.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

Area (sf)	CN	Description
249,478	98	Water Surface, HSG D
249,478		100.00% Impervious Area

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

Subcatchment 107S: SW8



Summary for Subcatchment 108S: SW7

[49] Hint: Tc<2dt may require smaller dt

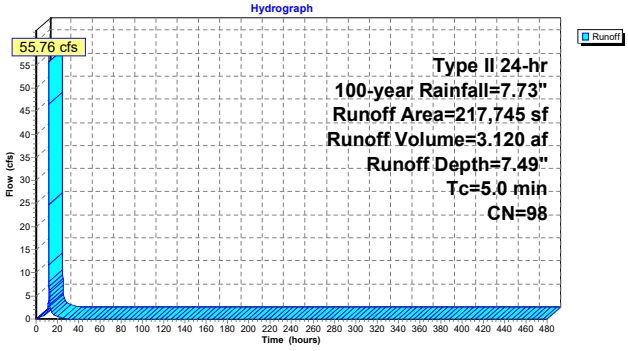
Runoff = 55.76 cfs @ 11.95 hrs, Volume= 3.120 af, Depth= 7.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

Area (sf)	CN	Description
217,745	98	Water Surface, HSG D
217,745		100.00% Impervious Area

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

Subcatchment 108S: SW7



Summary for Subcatchment 109S: CW1

[49] Hint: Tc<2dt may require smaller dt

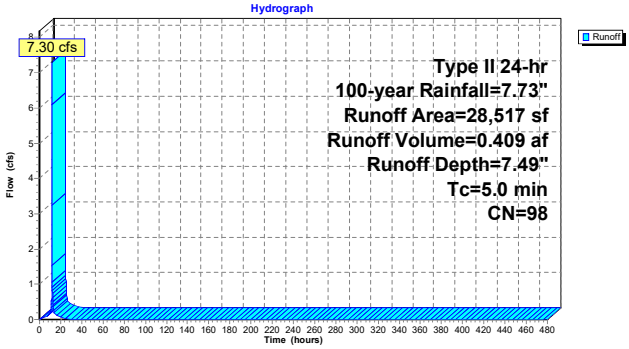
Runoff = 7.30 cfs @ 11.95 hrs, Volume= 0.409 af, Depth= 7.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-year Rainfall=7.73"

Area (sf)	CN	Description
28,517	98	Water Surface, HSG D
28,517		100.00% Impervious Area

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

Subcatchment 109S: CW1



Summary for Pond 47P: North Pond_Cells 1-3_CW

Inflow Area = 21.081 ac, 26.82% Impervious, Inflow Depth = 7.23" for 100-year event
Inflow = 232.50 cfs @ 11.95 hrs, Volume= 12.705 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 392.89' @ 24.35 hrs Surf.Area= 149,779 sf Storage= 553,408 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

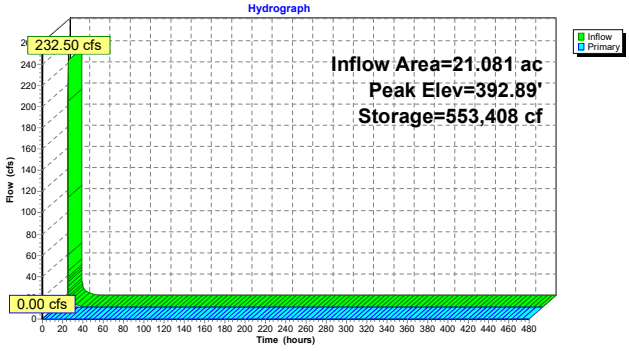
Volume	Invert	Avail.Storage	Storage Description
#1	387.70'	1,629,758 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
387.70	0	0	0
388.00	10,899	1,635	1,635
388.50	37,180	12,020	13,655
389.00	80,872	29,513	43,168
389.50	117,682	49,639	92,806
390.00	126,855	61,134	153,940
390.50	130,702	64,389	218,330
391.00	134,592	66,324	284,653
391.50	138,535	68,282	352,935
392.00	142,529	70,266	423,201
392.50	146,575	72,276	495,477
393.00	150,673	74,312	569,789
393.50	154,822	76,374	646,163
394.00	159,023	78,461	724,624
394.50	163,276	80,575	805,199
395.00	167,581	82,714	887,913
395.50	171,937	84,880	972,792
396.00	176,345	87,071	1,059,863
396.50	180,805	89,288	1,149,150
397.00	185,318	91,531	1,240,681
397.50	189,883	93,800	1,334,481
398.00	194,499	96,096	1,430,577
398.50	199,168	98,417	1,528,994
399.00	203,888	100,764	1,629,758

Device	Routing	Invert	Outlet Devices
#1	Primary	398.50'	**40.0' long x 4.5' breadth Emergency Spillway** 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) 2.36 2.52 2.70 2.68 2.67 2.67 2.65 2.66 2.66 2.67 2.70 2.70 2.72 2.75 2.81 2.93 3.10

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=387.70' (Free Discharge)
└**1=Emergency Spillway** (Controls 0.00 cfs)

Pond 47P: North Pond_Cells 1-3_CW



Summary for Pond 48P: Southwest Pond_Cells 1-3_CW

Inflow Area = 47.089 ac, 14.23% Impervious, Inflow Depth = 7.13" for 100-year event
Inflow = 518.06 cfs @ 11.95 hrs, Volume= 27.986 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 385.12' @ 24.35 hrs Surf.Area= 205,459 sf Storage= 1,219,073 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

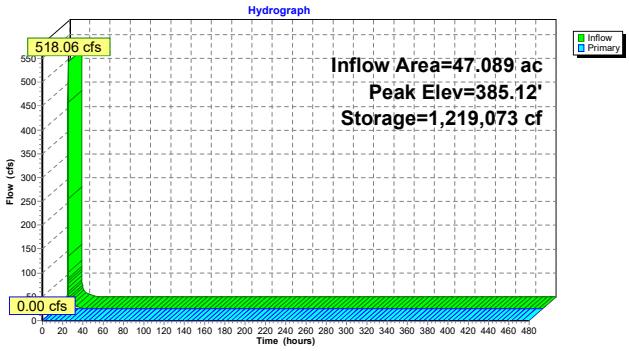
Volume	Invert	Avail.Storage	Storage Description
#1	376.00'	1,621,719 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
376.00	0	0	0
376.50	5,226	1,307	1,307
377.00	19,215	6,110	7,417
377.50	35,045	13,565	20,982
378.00	66,528	25,393	46,375
378.50	100,720	41,812	88,187
379.00	124,835	56,389	144,576
379.50	145,116	67,488	212,064
380.00	158,884	76,000	288,064
380.50	163,187	80,518	368,581
381.00	167,524	82,678	451,259
381.50	171,917	84,860	536,119
382.00	176,367	87,071	623,190
382.50	180,874	89,310	712,501
383.00	185,437	91,578	804,078
383.50	190,057	93,874	897,952
384.00	194,734	96,198	994,150
384.50	199,466	98,550	1,092,700
385.00	204,255	100,930	1,193,630
385.50	209,101	103,339	1,296,969
386.00	214,002	105,776	1,402,745
386.50	218,961	108,241	1,510,985
387.00	223,975	110,734	1,621,719

Device	Routing	Invert	Outlet Devices
#1	Primary	386.50'	**40.0' long x 4.5' breadth Emergency spillway** 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) 2.36 2.52 2.70 2.68 2.67 2.67 2.65 2.66 2.66 2.67 2.70 2.70 2.72 2.75 2.81 2.93 3.10

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=376.01' (Free Discharge)
└**1=Emergency spillway** (Controls 0.00 cfs)

Pond 48P: Southwest Pond_Cells 1-3_CW



Summary for Pond 50P: Southwest Pond_Cells 2-3_CW

Inflow Area = 27.293 ac, 14.55% Impervious, Inflow Depth = 7.14" for 100-year event
Inflow = 300.04 cfs @ 11.95 hrs, Volume= 16.228 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 385.41' @ 24.35 hrs Surf.Area= 123,351 sf Storage= 706,909 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

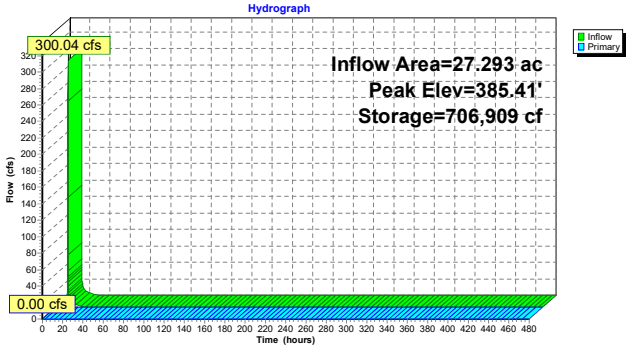
Volume	Invert	Avail.Storage	Storage Description
#1	377.50'	911,398 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
377.50	1,926	0	0
378.00	18,146	5,018	5,018
378.50	39,900	14,512	19,530
379.00	62,158	25,515	45,044
379.50	80,823	35,745	80,789
380.00	92,955	43,445	124,234
380.50	95,604	47,140	171,374
381.00	98,267	48,468	219,841
381.50	100,967	49,809	269,650
382.00	103,705	51,168	320,818
382.50	106,480	52,546	373,364
383.00	109,293	53,943	427,307
383.50	112,143	55,359	482,666
384.00	115,031	56,794	539,460
384.50	117,956	58,247	597,707
385.00	120,919	59,719	657,425
385.50	123,920	61,210	718,635
386.00	126,958	62,720	781,355
386.50	130,034	64,248	845,603
387.00	133,148	65,796	911,398

Device	Routing	Invert	Outlet Devices
#1	Primary	386.50'	**20.0' long x 10.0' breadth Divider Overtop** 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

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=377.50' (Free Discharge)
1=Divider Overtop (Controls 0.00 cfs)

Pond 50P: Southwest Pond_Cells 2-3_CW



Summary for Pond 51P: Southwest Pond_Cell 1_SW

Inflow Area = 38.516 ac, 7.09% Impervious, Inflow Depth = 7.17" for 100-year event
Inflow = 425.29 cfs @ 11.95 hrs, Volume= 23.017 af
Outflow = 46.61 cfs @ 12.27 hrs, Volume= 23.017 af, Atten= 89%, Lag= 19.4 min
Primary = 45.48 cfs @ 12.27 hrs, Volume= 22.998 af
Secondary = 1.13 cfs @ 12.27 hrs, Volume= 0.019 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 385.54' @ 12.27 hrs Surf.Area= 85,329 sf Storage= 581,241 cf

Plug-Flow detention time= 1,042.2 min calculated for 23.014 af (100% of inflow)
Center-of-Mass det. time= 1,042.5 min (1,793.7 - 751.2)

Volume	Invert	Avail.Storage	Storage Description
#1	376.00'	709,839 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
376.00	0	0	0
376.50	5,226	1,307	1,307
377.00	19,215	6,110	7,417
377.50	33,119	13,084	20,500
378.00	48,381	20,375	40,875
378.50	60,820	27,300	68,176
379.00	62,677	30,874	99,050
379.50	64,293	31,743	130,792
380.00	65,928	32,555	163,348
380.50	67,583	33,378	196,725
381.00	69,257	34,210	230,935
381.50	70,950	35,052	265,987
382.00	72,663	35,903	301,890
382.50	74,394	36,764	338,655
383.00	76,145	37,635	376,289
383.50	77,914	38,515	414,804
384.00	79,703	39,404	454,208
384.50	81,510	40,303	494,512
385.00	83,336	41,212	535,723
385.50	85,181	42,129	577,852
386.00	87,044	43,056	620,909
386.50	88,926	43,993	664,901
387.00	90,827	44,938	709,839

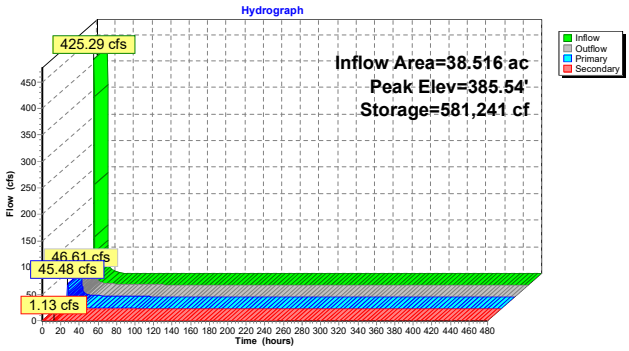
Device	Routing	Invert	Outlet Devices
#1	Primary	375.50'	**24.0" Round Culvert** L= 125.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 375.50' / 370.40' S= 0.0408 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#2	Device 1	376.00'	**6.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	383.50'	**60.0" x 60.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	385.50'	**40.0' long x 20.0' 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) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=45.48 cfs @ 12.27 hrs HW=385.54' (Free Discharge)
└**1=Culvert** (Inlet Controls 45.48 cfs @ 14.48 fps)
└**2=Orifice/Grate** (Passes < 2.88 cfs potential flow)
└**3=Orifice/Grate** (Passes < 171.87 cfs potential flow)

Secondary OutFlow Max=0.81 cfs @ 12.27 hrs HW=385.54' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** (Weir Controls 0.81 cfs @ 0.53 fps)

Pond 51P: Southwest Pond_Cell 1_SW



Summary for Pond 54P: Southwest Pond_Cells 1-2_SW

Inflow Area = 56.780 ac, 10.09% Impervious, Inflow Depth = 7.18" for 100-year event
Inflow = 627.07 cfs @ 11.95 hrs, Volume= 33.962 af
Outflow = 35.87 cfs @ 12.69 hrs, Volume= 33.962 af, Atten= 94%, Lag= 44.1 min
Primary = 35.87 cfs @ 12.69 hrs, Volume= 33.962 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 384.14' @ 12.69 hrs Surf.Area= 181,369 sf Storage= 962,818 cf

Plug-Flow detention time= 2,404.7 min calculated for 33.958 af (100% of inflow)
Center-of-Mass det. time= 2,405.3 min (3,156.2 - 750.9)

Volume	Invert	Avail.Storage	Storage Description
#1	376.00'	1,515,433 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
376.00	0	0	0
376.50	5,226	1,307	1,307
377.00	19,215	6,110	7,417
377.50	35,045	13,565	20,982
378.00	66,528	25,393	46,375
378.50	100,720	41,812	88,187
379.00	119,807	55,132	143,319
379.50	136,511	64,080	207,398
380.00	149,703	71,554	278,952
380.50	153,412	75,779	354,731
381.00	157,136	77,637	432,368
381.50	160,898	79,509	511,876
382.00	164,698	81,399	593,275
382.50	168,537	83,309	676,584
383.00	172,413	85,238	761,821
383.50	176,328	87,185	849,007
384.00	180,280	89,152	938,159
384.50	184,271	91,138	1,029,296
385.00	188,299	93,143	1,122,439
385.50	192,365	95,166	1,217,605
386.00	196,469	97,209	1,314,813
386.50	200,610	99,270	1,414,083
387.00	204,790	101,350	1,515,433

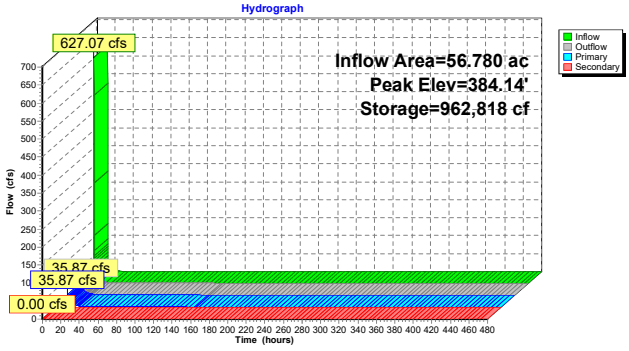
Device	Routing	Invert	Outlet Devices
#1	Primary	375.50'	**24.0" Round Culvert** L= 125.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 375.50' / 370.40' S= 0.0408 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#2	Device 1	376.00'	**6.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	383.50'	**60.0" x 60.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	385.50'	**40.0' long x 20.0' 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) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=35.85 cfs @ 12.69 hrs HW=384.14' (Free Discharge)
└**1=Culvert** (Passes 35.85 cfs of 41.80 cfs potential flow)
└**2=Orifice/Grate** (Orifice Controls 2.65 cfs @ 13.52 fps)
└**3=Orifice/Grate** (Weir Controls 33.19 cfs @ 2.61 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=376.00' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 54P: Southwest Pond_Cells 1-2_SW



Summary for Pond 55P: Southeast Pond_SW

Inflow Area = 28.545 ac, 13.19% Impervious, Inflow Depth = 7.19" for 100-year event
Inflow = 315.39 cfs @ 11.95 hrs, Volume= 17.105 af
Outflow = 27.03 cfs @ 12.42 hrs, Volume= 17.106 af, Atten= 91%, Lag= 28.3 min
Primary = 27.03 cfs @ 12.42 hrs, Volume= 17.106 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 378.54' @ 12.42 hrs Surf.Area= 77,454 sf Storage= 305,648 cf

Plug-Flow detention time= 111.1 min calculated for 17.104 af (100% of inflow)
Center-of-Mass det. time= 111.1 min (861.4 - 750.3)

Volume	Invert	Avail.Storage	Storage Description
#1	367.70'	1,240,740 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
367.70	0	0	0
368.00	65	10	10
368.50	414	120	130
369.00	1,114	382	512
369.50	2,314	857	1,369
370.00	3,960	1,569	2,937
370.50	5,942	2,476	5,413
371.00	8,260	3,551	8,963
371.50	10,915	4,794	13,757
372.00	13,911	6,207	19,963
372.50	17,292	7,801	27,764
373.00	21,086	9,595	37,359
373.50	25,277	11,591	48,949
374.00	29,769	13,762	62,711
374.50	34,546	16,079	78,790
375.00	39,607	18,538	97,328
375.50	44,934	21,135	118,463
376.00	50,448	23,846	142,309
376.50	56,075	26,631	168,939
377.00	61,565	29,410	198,349
377.50	66,892	32,114	230,464
378.00	72,056	34,737	265,201
378.50	77,057	37,278	302,479
379.00	81,892	39,737	342,216
379.50	86,557	42,112	384,328
380.00	91,048	44,401	428,730
380.50	95,364	46,603	475,333
381.00	99,504	48,717	524,050
381.50	103,470	50,744	574,793
382.00	107,251	52,680	627,473
382.50	110,840	54,523	681,996
383.00	114,235	56,269	738,265
383.50	117,438	57,918	796,183
384.00	120,447	59,471	855,654
384.50	123,264	60,928	916,582
385.00	125,888	62,288	978,870
385.50	128,279	63,542	1,042,412
386.00	130,656	64,734	1,107,146
386.50	133,059	65,929	1,173,074
387.00	137,605	67,666	1,240,740

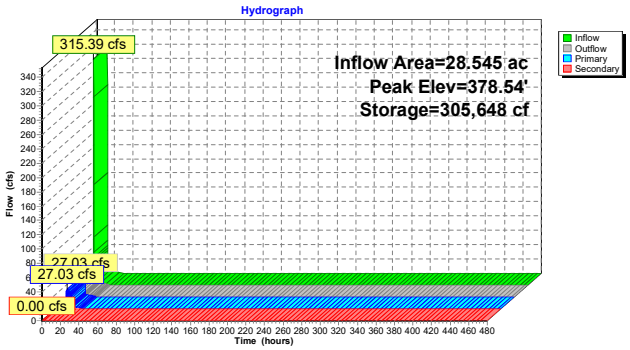
Device	Routing	Invert	Outlet Devices
#1	Primary	367.70'	**18.0" Round Culvert** L= 208.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 367.70' / 351.00' S= 0.0803 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf
#2	Device 1	367.70'	**6.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	372.20'	**60.0" x 60.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	385.50'	**40.0' long x 20.0' 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) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=27.03 cfs @ 12.42 hrs HW=378.54' (Free Discharge)
└**1=Culvert** (Inlet Controls 27.03 cfs @ 15.29 fps)
└**2=Orifice/Grate** (Passes < 3.08 cfs potential flow)
└**3=Orifice/Grate** (Passes < 303.10 cfs potential flow)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=367.70' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 55P: Southeast Pond_SW



Summary for Pond 56P: Southeast Pond_CW

Inflow Area = 39.264 ac, 9.59% Impervious, Inflow Depth = 7.08" for 100-year event
Inflow = 431.51 cfs @ 11.95 hrs, Volume= 23.151 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 385.23' @ 24.35 hrs Surf.Area= 127,007 sf Storage= 1,008,455 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

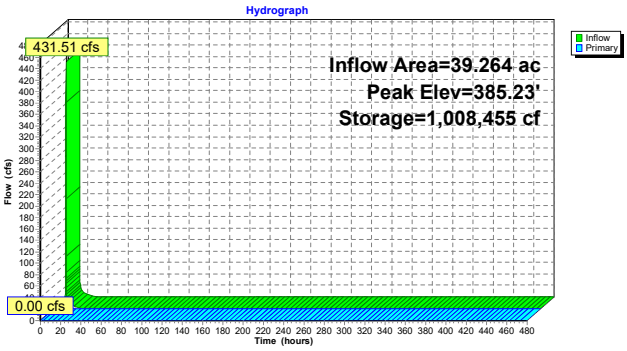
Volume	Invert	Avail.Storage	Storage Description
#1	367.70'	1,240,740 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
367.70	0	0	0
368.00	65	10	10
368.50	414	120	130
369.00	1,114	382	512
369.50	2,314	857	1,369
370.00	3,960	1,569	2,937
370.50	5,942	2,476	5,413
371.00	8,260	3,551	8,963
371.50	10,915	4,794	13,757
372.00	13,911	6,207	19,963
372.50	17,292	7,801	27,764
373.00	21,086	9,595	37,359
373.50	25,277	11,591	48,949
374.00	29,769	13,762	62,711
374.50	34,546	16,079	78,790
375.00	39,607	18,538	97,328
375.50	44,934	21,135	118,463
376.00	50,448	23,846	142,309
376.50	56,075	26,631	168,939
377.00	61,565	29,410	198,349
377.50	66,892	32,114	230,464
378.00	72,056	34,737	265,201
378.50	77,057	37,278	302,479
379.00	81,892	39,737	342,216
379.50	86,557	42,112	384,328
380.00	91,048	44,401	428,730
380.50	95,364	46,603	475,333
381.00	99,504	48,717	524,050
381.50	103,470	50,744	574,793
382.00	107,251	52,680	627,473
382.50	110,840	54,523	681,996
383.00	114,235	56,269	738,265
383.50	117,438	57,918	796,183
384.00	120,447	59,471	855,654
384.50	123,264	60,928	916,582
385.00	125,888	62,288	978,870
385.50	128,279	63,542	1,042,412
386.00	130,656	64,734	1,107,146
386.50	133,059	65,929	1,173,074
387.00	137,605	67,666	1,240,740

Device	Routing	Invert	Outlet Devices
#1	Primary	386.50'	**40.0' long x 4.5' 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) 2.36 2.52 2.70 2.68 2.67 2.67 2.65 2.66 2.66 2.67 2.70 2.70 2.72 2.75 2.81 2.93 3.10

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=367.70' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 56P: Southeast Pond_CW



Summary for Pond 61P: Southwest Pond_Cell 3_CW

Inflow Area = 0.976 ac,100.00% Impervious, Inflow Depth = 8.47" for 100-year event
Inflow = 10.92 cfs @ 11.95 hrs, Volume= 0.689 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 382.11' @ 24.35 hrs Surf.Area= 11,821 sf Storage= 29,993 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

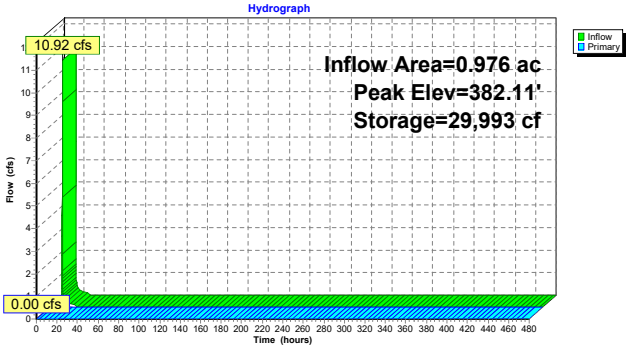
Volume	Invert	Avail.Storage	Storage Description
#1	379.00'	105,031 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
379.00	5,028	0	0
379.50	8,606	3,409	3,409
380.00	9,181	4,447	7,855
380.50	9,775	4,739	12,594
381.00	10,388	5,041	17,635
381.50	11,019	5,352	22,987
382.00	11,669	5,672	28,659
382.50	12,338	6,002	34,661
383.00	13,024	6,341	41,001
383.50	13,730	6,689	47,690
384.00	14,453	7,046	54,735
384.50	15,195	7,412	62,147
385.00	15,956	7,788	69,935
385.50	16,736	8,173	78,108
386.00	17,534	8,568	86,676
386.50	18,350	8,971	95,647
387.00	19,186	9,384	105,031

Device	Routing	Invert	Outlet Devices
#1	Primary	386.50'	**20.0' long x 10.0' breadth Divider Overtop** 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

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=379.00' (Free Discharge)
↑**1=Divider Overtop** (Controls 0.00 cfs)

Pond 61P: Southwest Pond_Cell 3_CW



Summary for Pond 63P: Southwest Pond_Cells 1-2_SW

Inflow Area = 65.206 ac, 8.78% Impervious, Inflow Depth = 7.17" for 100-year event
Inflow = 719.98 cfs @ 11.95 hrs, Volume= 38.970 af
Outflow = 43.48 cfs @ 12.62 hrs, Volume= 38.970 af, Atten= 94%, Lag= 40.0 min
Primary = 43.48 cfs @ 12.62 hrs, Volume= 38.970 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 384.76' @ 12.62 hrs Surf.Area= 186,373 sf Storage= 1,077,662 cf

Plug-Flow detention time= 2,117.9 min calculated for 38.966 af (100% of inflow)
Center-of-Mass det. time= 2,118.4 min (2,869.6 - 751.2)

Volume	Invert	Avail.Storage	Storage Description
#1	376.00'	1,515,433 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
376.00	0	0	0
376.50	5,226	1,307	1,307
377.00	19,215	6,110	7,417
377.50	35,045	13,565	20,982
378.00	66,528	25,393	46,375
378.50	100,720	41,812	88,187
379.00	119,807	55,132	143,319
379.50	136,511	64,080	207,398
380.00	149,703	71,554	278,952
380.50	153,412	75,779	354,731
381.00	157,136	77,637	432,368
381.50	160,898	79,509	511,876
382.00	164,698	81,399	593,275
382.50	168,537	83,309	676,584
383.00	172,413	85,238	761,821
383.50	176,328	87,185	849,007
384.00	180,280	89,152	938,159
384.50	184,271	91,138	1,029,296
385.00	188,299	93,143	1,122,439
385.50	192,365	95,166	1,217,605
386.00	196,469	97,209	1,314,813
386.50	200,610	99,270	1,414,083
387.00	204,790	101,350	1,515,433

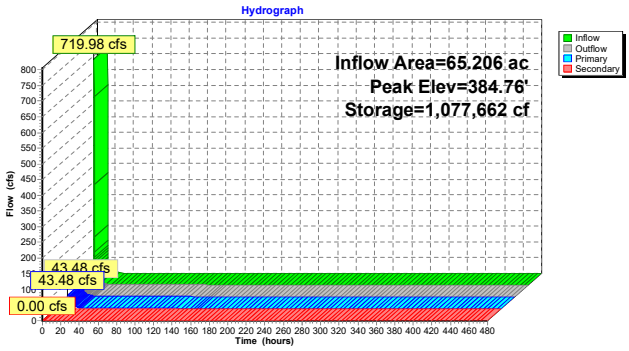
Device	Routing	Invert	Outlet Devices
#1	Primary	375.50'	**24.0" Round Culvert** L= 125.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 375.50' / 370.40' S= 0.0408 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#2	Device 1	376.00'	**6.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	383.50'	**60.0" x 60.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	385.50'	**40.0' long x 20.0' 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)	2.68	2.70	2.70	2.64	2.63	2.64	2.64	2.63

Primary OutFlow Max=43.48 cfs @ 12.62 hrs HW=384.76' (Free Discharge)
└**1=Culvert** (Inlet Controls 43.48 cfs @ 13.84 fps)
└**2=Orifice/Grate** (Passes < 2.76 cfs potential flow)
└**3=Orifice/Grate** (Passes < 92.57 cfs potential flow)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=376.00' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 63P: Southwest Pond_Cells 1-2_SW



Summary for Pond 64P: Southwest Pond_Cell 3_CW

Inflow Area = 0.976 ac,100.00% Impervious, Inflow Depth = 7.98" for 100-year event
Inflow = 10.90 cfs @ 11.95 hrs, Volume= 0.649 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Starting Elev= 383.70' Surf.Area= 14,019 sf Storage= 50,464 cf
Peak Elev= 385.54' @ 24.35 hrs Surf.Area= 16,795 sf Storage= 78,725 cf (28,261 cf above start)

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

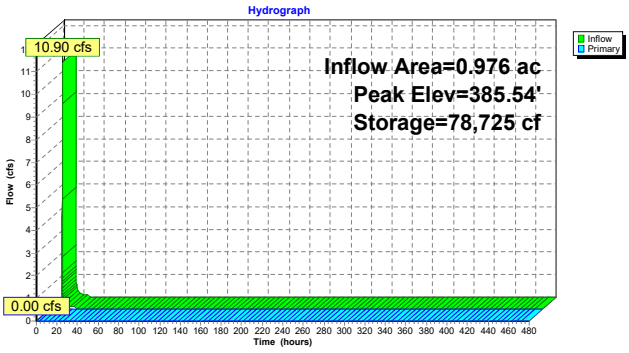
Volume	Invert	Avail.Storage	Storage Description
#1	379.00'	105,031 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
379.00	5,028	0	0
379.50	8,606	3,409	3,409
380.00	9,181	4,447	7,855
380.50	9,775	4,739	12,594
381.00	10,388	5,041	17,635
381.50	11,019	5,352	22,987
382.00	11,669	5,672	28,659
382.50	12,338	6,002	34,661
383.00	13,024	6,341	41,001
383.50	13,730	6,689	47,690
384.00	14,453	7,046	54,735
384.50	15,195	7,412	62,147
385.00	15,956	7,788	69,935
385.50	16,736	8,173	78,108
386.00	17,534	8,568	86,676
386.50	18,350	8,971	95,647
387.00	19,186	9,384	105,031

Device	Routing	Invert	Outlet Devices
#1	Primary	386.50'	**20.0' long x 10.0' breadth Divider Overtop** 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

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=383.70' (Free Discharge)
└**1=Divider Overtop** (Controls 0.00 cfs)

Pond 64P: Southwest Pond_Cell 3_CW



Summary for Pond 96P: North Pond_Cell 1_SW

Inflow Area = 22.869 ac, 11.25% Impervious, Inflow Depth = 7.18" for 100-year event
Inflow = 252.62 cfs @ 11.95 hrs, Volume= 13.692 af
Outflow = 26.75 cfs @ 12.30 hrs, Volume= 13.692 af, Atten= 89%, Lag= 20.9 min
Primary = 26.75 cfs @ 12.30 hrs, Volume= 13.692 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 393.72' @ 12.30 hrs Surf.Area= 76,327 sf Storage= 353,526 cf

Plug-Flow detention time= 1,218.6 min calculated for 13.690 af (100% of inflow)
Center-of-Mass det. time= 1,219.0 min (1,969.5 - 750.6)

Volume	Invert	Avail.Storage	Storage Description
#1	387.70'	809,695 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
387.70	0	0	0
388.00	10,899	1,635	1,635
388.50	35,646	11,636	13,271
389.00	52,176	21,956	35,227
389.50	61,323	28,375	63,601
390.00	63,042	31,091	94,693
390.50	64,777	31,955	126,647
391.00	66,528	32,826	159,474
391.50	68,295	33,706	193,179
392.00	70,077	34,593	227,772
392.50	71,876	35,488	263,261
393.00	73,690	36,392	299,652
393.50	75,521	37,303	336,955
394.00	77,367	38,222	375,177
394.50	79,229	39,149	414,326
395.00	81,107	40,084	454,410
395.50	83,001	41,027	495,437
396.00	84,910	41,978	537,415
396.50	86,836	42,937	580,351
397.00	88,778	43,904	624,255
397.50	90,735	44,878	669,133
398.00	92,708	45,861	714,994
398.50	94,697	46,851	761,845
399.00	96,702	47,850	809,695

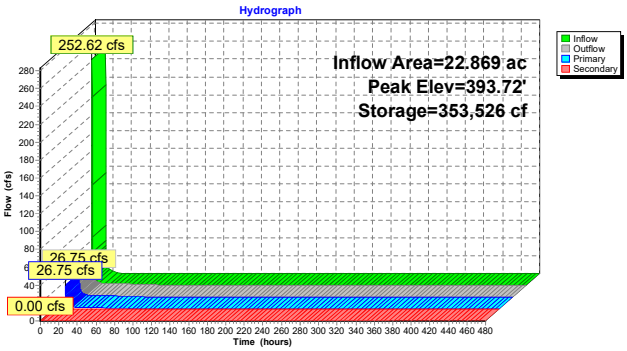
Device	Routing	Invert	Outlet Devices
#1	Primary	387.70'	**24.0" Round Culvert** L= 93.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 387.70' / 385.40' S= 0.0247 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#2	Device 1	387.70'	**6.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	393.20'	**60.0" x 60.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

#4 Secondary 398.50' **40.0' long x 20.0' 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) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=26.67 cfs @ 12.30 hrs HW=393.72' (Free Discharge)
└**1=Culvert** (Passes 26.67 cfs of 33.89 cfs potential flow)
└**2=Orifice/Grate** (Orifice Controls 2.27 cfs @ 11.56 fps)
└**3=Orifice/Grate** (Weir Controls 24.40 cfs @ 2.35 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=387.70' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 96P: North Pond_Cell 1_SW



Summary for Pond 97P: North Pond_Cells 1-3_CW

Inflow Area = 30.353 ac, 18.63% Impervious, Inflow Depth = 7.17" for 100-year event
Inflow = 334.52 cfs @ 11.95 hrs, Volume= 18.146 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 394.41' @ 24.35 hrs Surf.Area= 162,504 sf Storage= 790,420 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

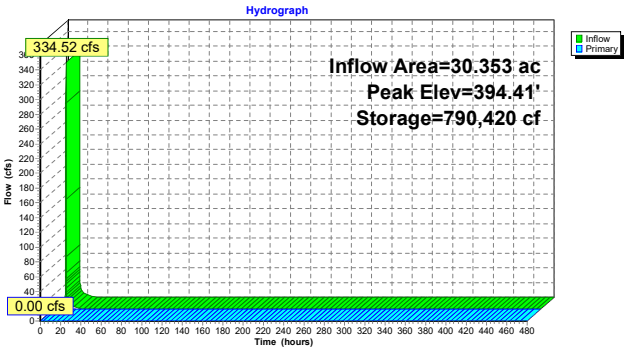
Volume	Invert	Avail.Storage	Storage Description
#1	387.70'	1,629,758 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
387.70	0	0	0
388.00	10,899	1,635	1,635
388.50	37,180	12,020	13,655
389.00	80,872	29,513	43,168
389.50	117,682	49,639	92,806
390.00	126,855	61,134	153,940
390.50	130,702	64,389	218,330
391.00	134,592	66,324	284,653
391.50	138,535	68,282	352,935
392.00	142,529	70,266	423,201
392.50	146,575	72,276	495,477
393.00	150,673	74,312	569,789
393.50	154,822	76,374	646,163
394.00	159,023	78,461	724,624
394.50	163,276	80,575	805,199
395.00	167,581	82,714	887,913
395.50	171,937	84,880	972,792
396.00	176,345	87,071	1,059,863
396.50	180,805	89,288	1,149,150
397.00	185,318	91,531	1,240,681
397.50	189,883	93,800	1,334,481
398.00	194,499	96,096	1,430,577
398.50	199,168	98,417	1,528,994
399.00	203,888	100,764	1,629,758

Device	Routing	Invert	Outlet Devices
#1	Primary	398.50'	**40.0' long x 4.5' breadth Emergency Spillway** 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) 2.36 2.52 2.70 2.68 2.67 2.67 2.65 2.66 2.66 2.67 2.70 2.70 2.72 2.75 2.81 2.93 3.10

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=387.70' (Free Discharge)
└**1=Emergency Spillway** (Controls 0.00 cfs)

Pond 97P: North Pond_Cells 1-3_CW



Summary for Pond 99P: North Pond_Cells 2-3_CW

Inflow Area = 24.973 ac, 12.33% Impervious, Inflow Depth = 7.10" for 100-year event
Inflow = 274.56 cfs @ 11.95 hrs, Volume= 14.785 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 397.29' @ 24.35 hrs Surf.Area= 98,039 sf Storage= 644,011 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

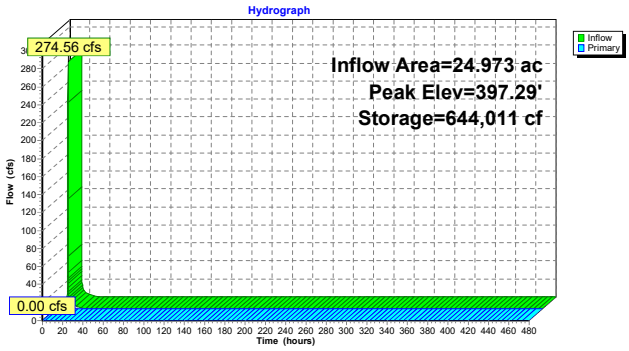
Volume	Invert	Avail.Storage	Storage Description
#1	388.50'	819,680 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
388.50	1,533	0	0
389.00	28,696	7,557	7,557
389.50	56,359	21,264	28,821
390.00	63,813	30,043	58,864
390.50	65,925	32,435	91,299
391.00	68,065	33,498	124,796
391.50	70,240	34,576	159,372
392.00	72,452	35,673	195,045
392.50	74,699	36,788	231,833
393.00	76,983	37,921	269,754
393.50	79,302	39,071	308,825
394.00	81,657	40,240	349,065
394.50	84,047	41,426	390,491
395.00	86,474	42,630	433,121
395.50	88,936	43,853	476,973
396.00	91,435	45,093	522,066
396.50	93,969	46,351	568,417
397.00	96,540	47,627	616,044
397.50	99,148	48,922	664,966
398.00	101,791	50,235	715,201
398.50	104,470	51,565	766,766
399.00	107,185	52,914	819,680

Device	Routing	Invert	Outlet Devices
#1	Primary	398.50'	**20.0' long x 10.0' breadth Divider overtop** 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

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=388.50' (Free Discharge)
└**1=Divider overtop** (Controls 0.00 cfs)

Pond 99P: North Pond_Cells 2-3_CW



Summary for Pond 101P: North Pond_Cells 1-2_SW

Inflow Area = 49.303 ac, 10.14% Impervious, Inflow Depth = 7.18" for 100-year event
Inflow = 544.49 cfs @ 11.95 hrs, Volume= 29.489 af
Outflow = 37.07 cfs @ 12.54 hrs, Volume= 29.489 af, Atten= 93%, Lag= 35.2 min
Primary = 37.07 cfs @ 12.54 hrs, Volume= 29.489 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Peak Elev= 394.71' @ 12.54 hrs Surf.Area= 155,002 sf Storage= 802,820 cf

Plug-Flow detention time= 1,653.5 min calculated for 29.489 af (100% of inflow)
Center-of-Mass det. time= 1,653.4 min (2,404.3 - 750.9)

Volume	Invert	Avail.Storage	Storage Description
#1	387.70'	1,538,079 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
387.70	0	0	0
388.00	10,899	1,635	1,635
388.50	37,180	12,020	13,655
389.00	80,872	29,513	43,168
389.50	117,682	49,639	92,806
390.00	121,746	59,857	152,663
390.50	125,135	61,720	214,383
391.00	128,558	63,423	277,807
391.50	132,015	65,143	342,950
392.00	135,506	66,880	409,830
392.50	139,032	68,635	478,465
393.00	142,591	70,406	548,870
393.50	146,184	72,194	621,064
394.00	149,811	73,999	695,063
394.50	153,472	75,821	770,884
395.00	157,167	77,660	848,543
395.50	160,896	79,516	928,059
396.00	164,660	81,389	1,009,448
396.50	168,457	83,279	1,092,727
397.00	172,290	85,187	1,177,914
397.50	176,156	87,112	1,265,026
398.00	180,057	89,053	1,354,079
398.50	183,992	91,012	1,445,091
399.00	187,961	92,988	1,538,079

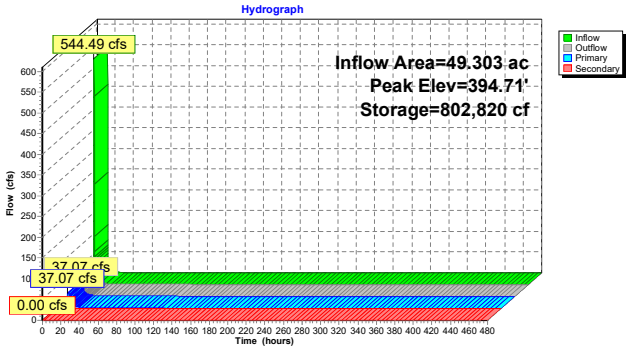
Device	Routing	Invert	Outlet Devices
#1	Primary	387.70'	**24.0" Round Culvert** L= 93.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 387.70' / 385.40' S= 0.0247 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#2	Device 1	387.70'	**6.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	393.20'	**60.0" x 60.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

#4	Secondary	398.50'	**40.0' long x 20.0' 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) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=37.07 cfs @ 12.54 hrs HW=394.71' (Free Discharge)
↑**1=Culvert** (Inlet Controls 37.07 cfs @ 11.80 fps)
↑**2=Orifice/Grate** (Passes < 2.46 cfs potential flow)
↑**3=Orifice/Grate** (Passes < 120.95 cfs potential flow)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=387.70' (Free Discharge)
↑**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 101P: North Pond_Cells 1-2_SW



Summary for Pond 102P: North Pond_Cell 3_CW

Inflow Area = 0.655 ac,100.00% Impervious, Inflow Depth = 8.22" for 100-year event
Inflow = 7.32 cfs @ 11.95 hrs, Volume= 0.448 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs
Starting Elev= 395.30' Surf.Area= 10,790 sf Storage= 41,274 cf
Peak Elev= 396.95' @ 24.35 hrs Surf.Area= 12,956 sf Storage= 60,805 cf (19,531 cf above start)

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

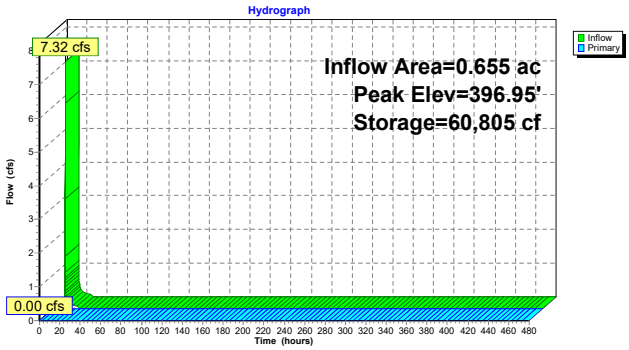
Volume	Invert	Avail.Storage	Storage Description
#1	390.00'	90,402 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
390.00	5,109	0	0
390.50	5,567	2,669	2,669
391.00	6,034	2,900	5,569
391.50	6,520	3,139	8,708
392.00	7,023	3,386	12,094
392.50	7,544	3,642	15,735
393.00	8,082	3,907	19,642
393.50	8,639	4,180	23,822
394.00	9,212	4,463	28,285
394.50	9,804	4,754	33,039
395.00	10,414	5,055	38,093
395.50	11,041	5,364	43,457
396.00	11,686	5,682	49,139
396.50	12,348	6,009	55,147
397.00	13,028	6,344	61,491
397.50	13,726	6,689	68,180
398.00	14,442	7,042	75,222
398.50	15,175	7,404	82,626
399.00	15,927	7,776	90,402

Device	Routing	Invert	Outlet Devices
#1	Primary	398.50'	**20.0' long x 10.0' breadth Divider overtop** 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

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=395.30' (Free Discharge)
↑**1=Divider overtop** (Controls 0.00 cfs)

Pond 102P: North Pond_Cell 3_CW



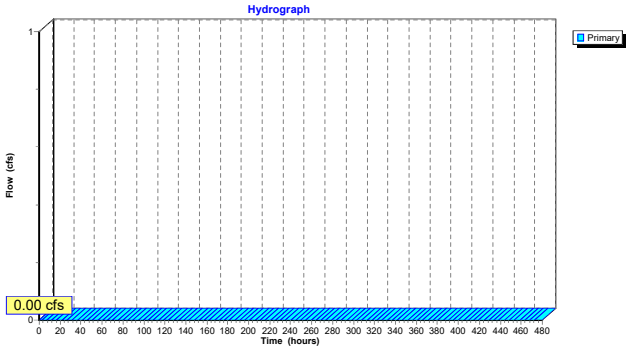
Summary for Link 52L: CW_Overflow

[43] Hint: Has no inflow (Outflow=Zero)

Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

Link 52L: CW_Overflow

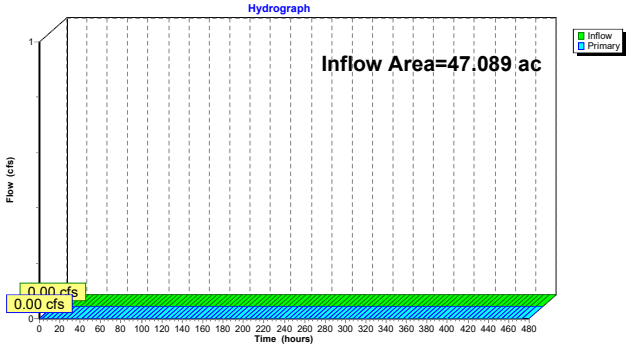


Summary for Link 53L: CW_Overflow

Inflow Area = 47.089 ac, 14.23% Impervious, Inflow Depth = 0.00" for 100-year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

Link 53L: CW_Overflow

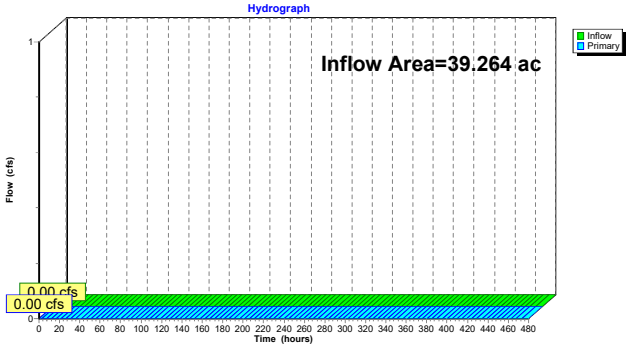


Summary for Link 57L: CW_Overflow

Inflow Area = 39.264 ac, 9.59% Impervious, Inflow Depth = 0.00" for 100-year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

Link 57L: CW_Overflow



Summary for Link 58L: Leachate

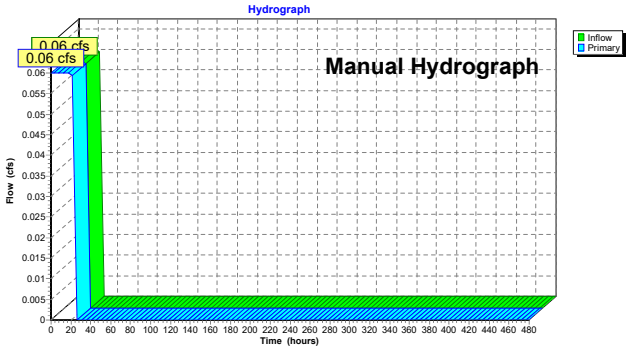
Inflow = 0.06 cfs @ 0.00 hrs, Volume= 0.119 af
Primary = 0.06 cfs @ 0.00 hrs, Volume= 0.119 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

25 Point manual hydrograph, To= 0.00 hrs, dt= 1.00 hrs, cfs =

0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
0.06	0.06	0.06	0.06	0.06					

Link 58L: Leachate



Summary for Link 60L: Leachate

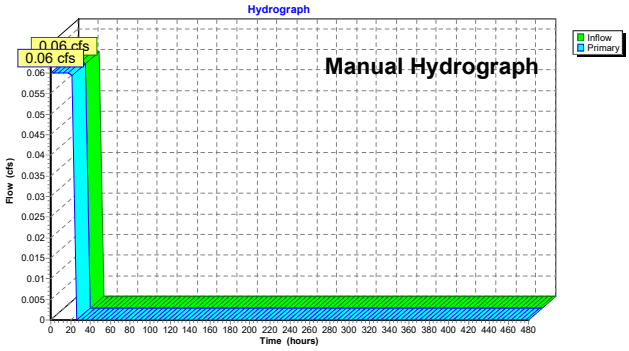
Inflow = 0.06 cfs @ 0.00 hrs, Volume= 0.119 af
Primary = 0.06 cfs @ 0.00 hrs, Volume= 0.119 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

25 Point manual hydrograph, To= 0.00 hrs, dt= 1.00 hrs, cfs =

0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
0.06	0.06	0.06	0.06	0.06					

Link 60L: Leachate



Summary for Link 62L: Leachate

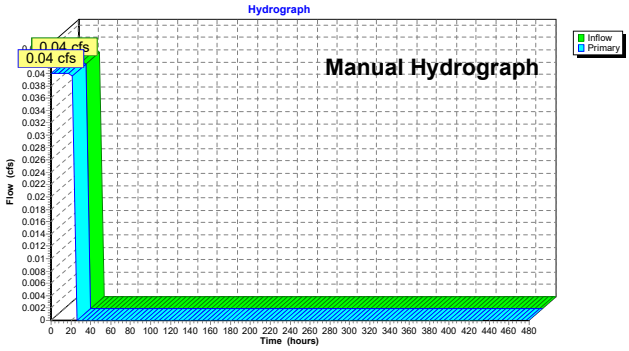
Inflow = 0.04 cfs @ 0.00 hrs, Volume= 0.080 af
Primary = 0.04 cfs @ 0.00 hrs, Volume= 0.080 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

25 Point manual hydrograph, To= 0.00 hrs, dt= 1.00 hrs, cfs =

0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04					

Link 62L: Leachate



Summary for Link 95L: Leachate

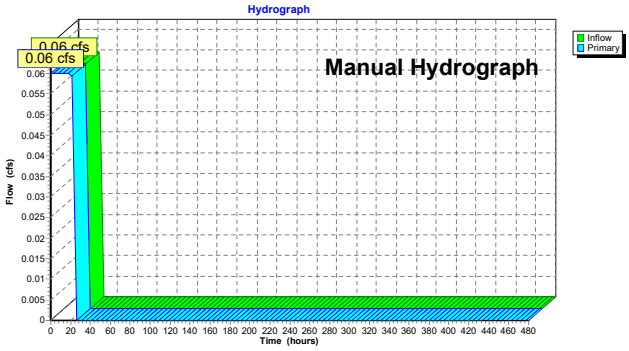
Inflow = 0.06 cfs @ 0.00 hrs, Volume= 0.119 af
Primary = 0.06 cfs @ 0.00 hrs, Volume= 0.119 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

25 Point manual hydrograph, To= 0.00 hrs, dt= 1.00 hrs, cfs =

0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
0.06	0.06	0.06	0.06	0.06					

Link 95L: Leachate



Summary for Link 98L: Leachate

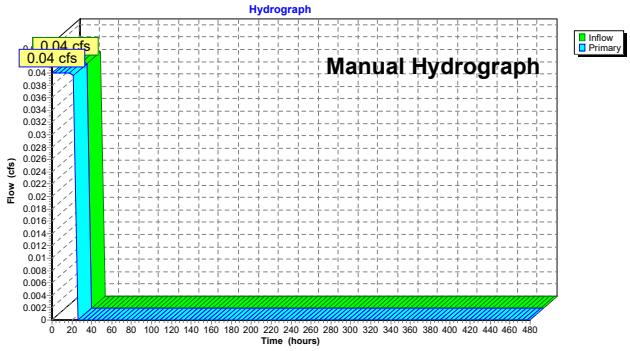
Inflow = 0.04 cfs @ 0.00 hrs, Volume= 0.080 af
Primary = 0.04 cfs @ 0.00 hrs, Volume= 0.080 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

25 Point manual hydrograph, To= 0.00 hrs, dt= 1.00 hrs, cfs =

0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.04					

Link 98L: Leachate



Summary for Link 100L: Leachate

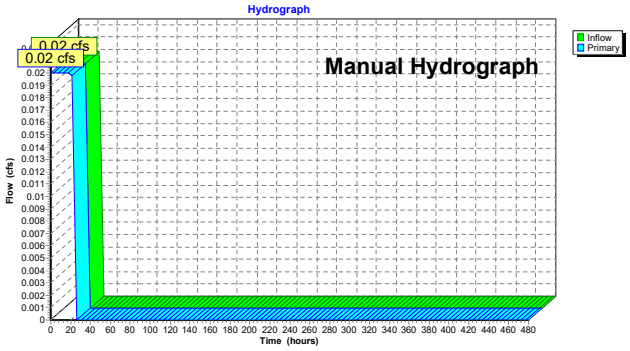
Inflow = 0.02 cfs @ 0.00 hrs, Volume= 0.040 af
Primary = 0.02 cfs @ 0.00 hrs, Volume= 0.040 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

25 Point manual hydrograph, To= 0.00 hrs, dt= 1.00 hrs, cfs =

0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02					

Link 100L: Leachate

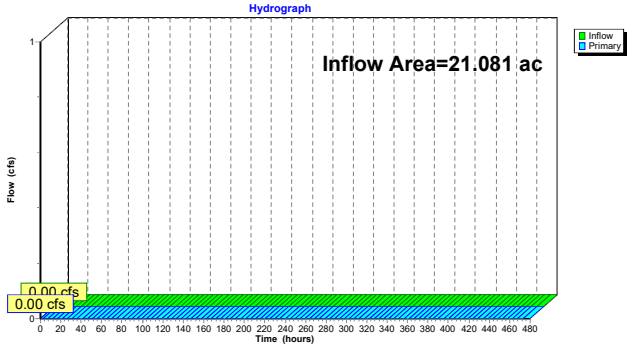


Summary for Link 104L: CW_Overflow

Inflow Area = 21.081 ac, 26.82% Impervious, Inflow Depth = 0.00" for 100-year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

Link 104L: CW_Overflow

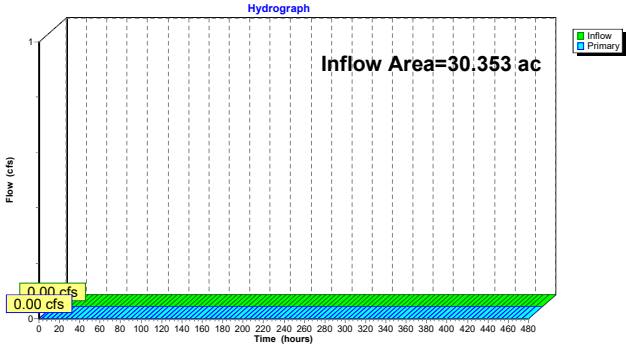


Summary for Link 105L: CW_Overflow

Inflow Area = 30.353 ac, 18.63% Impervious, Inflow Depth = 0.00" for 100-year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

Link 105L: CW_Overflow

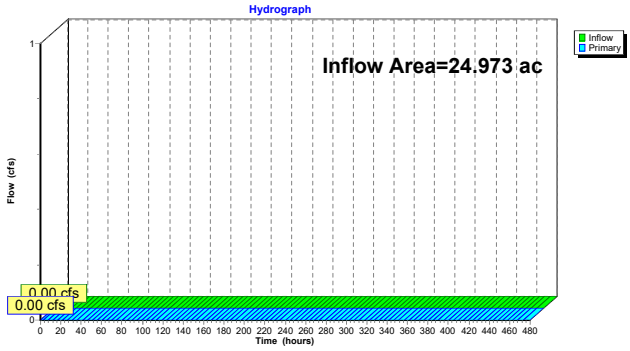


Summary for Link 106L: CW_Overflow

Inflow Area = 24.973 ac, 12.33% Impervious, Inflow Depth = 0.00" for 100-year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

Link 106L: CW_Overflow

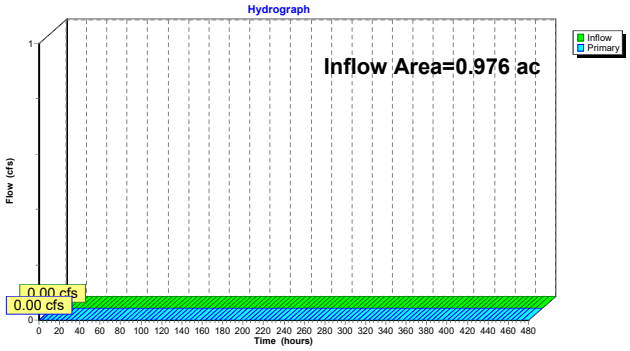


Summary for Link 107L: CW_Overflow

Inflow Area = 0.976 ac,100.00% Impervious, Inflow Depth = 0.00" for 100-year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

Link 107L: CW_Overflow

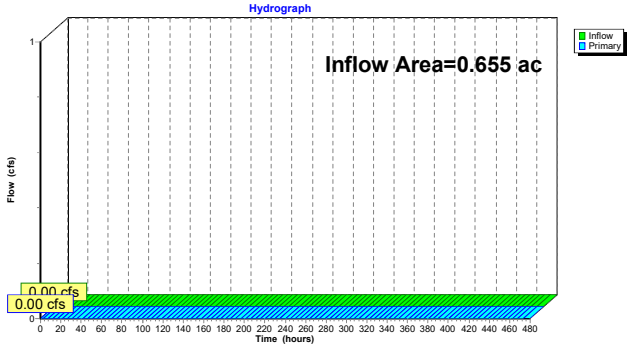


Summary for Link 108L: CW_Overflow

Inflow Area = 0.655 ac,100.00% Impervious, Inflow Depth = 0.00" for 100-year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

Link 108L: CW_Overflow

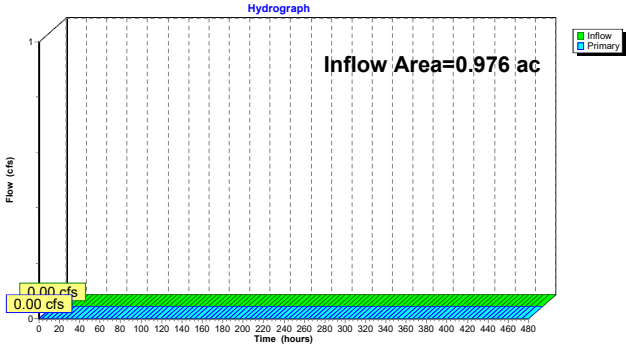


Summary for Link 109L: CW_Overflow

Inflow Area = 0.976 ac,100.00% Impervious, Inflow Depth = 0.00" for 100-year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

Link 109L: CW_Overflow



Summary for Link 110L: Leachate

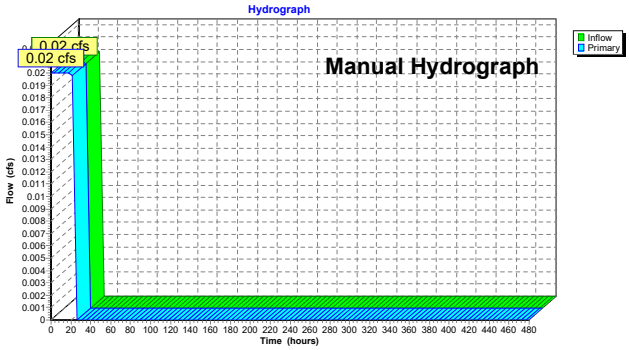
Inflow = 0.02 cfs @ 0.00 hrs, Volume= 0.040 af
Primary = 0.02 cfs @ 0.00 hrs, Volume= 0.040 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

25 Point manual hydrograph, To= 0.00 hrs, dt= 1.00 hrs, cfs =

0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02					

Link 110L: Leachate



Summary for Link 111L: Leachate

Inflow = 0.02 cfs @ 0.00 hrs, Volume= 0.040 af
Primary = 0.02 cfs @ 0.00 hrs, Volume= 0.040 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-480.00 hrs, dt= 0.05 hrs

25 Point manual hydrograph, To= 0.00 hrs, dt= 1.00 hrs, cfs =

0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02					

Link 111L: Leachate