

Appendix C-2

Stormwater Pollution Prevention Plan,
Conventional Plan



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Town of Bedford
Westchester County
New York

STORMWATER POLLUTION PREVENTION PLAN

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I Rudolph C. Petruccelli, PE certifies that this Drainage Analysis has been prepared in accordance with NYSDEC rules and regulations and in accordance with the Town of Bedford Code Section 103.

TRIPi SUBDIVISION
TOWN OF BEDFORD
WESTCHESTER COUNTY, NEW YORK
Drainage Analysis Report

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1. GENERAL

A. Introduction

This Stormwater Pollution Prevention Plan has been prepared pursuant to the Phase II regulations under General Permit (GP) 0-08-001 as required by the New York State Department of Environmental Conservation (NYSDEC).

The proposal is for 19 lot subdivision on a 25.59 acre site in the Town of Bedford, Westchester County, New York. Site construction for this project consists of new roadways, one of which is a through road and the remainder which are interior roads. There are a total of (18) eighteen new residence with individual driveways and septic systems and (1) one existing residence. The stormwater runoff from the new and existing impervious surfaces will be directed to new stormwater management basins and subsurface exfiltration chambers which have been designed in accordance with the New York State Stormwater (NYSDEC) Design Manual and the New York City Department of Environmental Conservation (NYCDEP) regulations.

B. Existing Site Description

The site is located off of Harris Road and New Street in the Town of Bedford, Westchester County, New York in the Muscoot Watershed which is within the East of Hudson. There area several principal structures and an assortment of accessory structures located on the parcel; in addition there is a through driveway which connects New Street to Harris Road. The principal structures are serviced by town water and septic system. The remainder of the site is mainly wooded with some areas of lawn near the existing residences and other accessory structures. Also, the site consists of approximately 6.3 acres of slopes in excess of 25%.

The site runoff is directed to (5) five distinct locations each with a different discharge points, this can be seen on the pre-development drainage map these points have been selected due to their significance based on the topography available on the survey. Based on the USGS maps the receiving water is the Stone Hill River and the stormwater interactive map provided on the NYSDEC website illustrates that the site is in a TMDL watershed but does not contain and is not adjacent to any 303d listed streams.

The stormwater runoff from the site is conveyed via overland flow to the discharge points illustrated on the Pre-Development Map.

C. Project Description

The proposal is for 19 lot subdivision on a 25.59 acre site in the Town of Bedford, Westchester County, New York. Site construction for this project consists of (4) four roadways. One through road which is approximately 1,700 feet in length, a 310 foot roadway off of the through road approximately 300 feet and (2) cul-de-sac roads

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each approximately 250 feet in length. There is a total of (18) eighteen new residence with individual driveways and septic systems and (1) one existing residence. There will also be the construction of new roadways and stormwater management facilities. The total land disturbance associated with this construction is approximately 16.75 acres or approximately 65% of the site.

C.I - Soils

The soil in the project area is mapped as CsD and CrC, Charlton-Chatfield and Chatfield-Charlton Complex, hilly, very rocky, respectively. These soils are classified as 'B' soil". These soils are considered to have moderate runoff potential and are moderately drained.

C.II - Grading and Drainage

The grading and drainage plan has been designed to capture and treat the stormwater runoff from the new and existing impervious surfaces and disturbed areas at each improvement location. Stormwater will be collected through catch basins and underground pipes and discharged into stormwater basins and/or subsurface exfiltration chambers that have been designed in accordance with the NYS Stormwater Management Design Manual, NYCDEP criteria, and the Phosphorus Removal Section of the SWM. These basin designs have been included in this application and are designated as NYSDEC I-2 Infiltration Basins and the exfiltration chamber are designed as NYSDEC I-4 basins.

The ponds have been designed for Water Quality and Flood Control, mitigating the post-development rate of stormwater runoff to the pre-development rate.

Storm water runoff rates for the 1 (NYSDEC Stream Channel Protection and water quality volume), 2 year storm event, 10 (NYSDEC Overbank Protection), and 100-year (NYSDEC Extreme Flood) storm events have been analyzed and routed in the pre-development and post-development condition utilizing computer software "Hydrocad", the design assumptions are provided in the appendix of this report.

It is expected that the project will take approximately 24 months to construct from the time of ground breaking to final completion, with work commencing shortly after the receipt of all necessary approvals. Throughout the construction process strict adherence to the Erosion Control Plans and Specifications will be maintained to ensure all sediment is contained within the improvement areas.

Storm water management is also provided for water quality treatment such that the project areas will not represent a negative impact or degradation in water quality to any reservoir, stream, wetlands or watercourses.

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D. Storm Water Management Methodology

Storm water quality and quantity has been analyzed in accordance with the guidelines set forth in the New York State General Permit for Storm Water Discharge, GP 0-08-001. The water quality volume was computed from the runoff produced by the 1 year 24 hour event. Water Quality volume and invert elevations of the low flow orifices have been calculated for each of the drainage areas and are included in the Appendix. The low flow orifices in each basin have been sized to release the water quality volume over a 24 hour period. Additional control devices are included in the outlet structures to control the rate of runoff from the 1, 2, 10, and 100 year 24 hour storm events to the pre-construction runoff rate. Velocity dissipators are specified at each inlet and outlet and shall be a riprap pad per "New York Guidelines for Urban Erosion & Sediment Control".

The proposed ponds are designed as Infiltration basins (NYSDEC I-2) and include hydrodynamic pre-treatment separators at each basin that can accommodate the 1 year storm event.

The Pre and Post-Construction Drainage Divide Maps are included in the Appendix of this report. The Times of Concentration, coverage types, and hydrograph/stormwater calculations for the pre and post construction conditions are provided in the stormwater routings also provided in the Appendix.

Storm water quality and quantity computations are based upon the following publications.

- Soil Conservation Service (SCS) - TR-20
- Urban Hydrology for Small Watersheds - TR-55
- NYSDEC 'New York State Stormwater Management Design Manual', latest edition
- Controlling Urban Runoff: A practical Manual for Planning and Designing Urban BMP'S, by the Metropolitan Washington Council of Governments.
- Computer software Hydrocad has been utilized for the stormwater analysis. This program is on USDA Soil Conservation Service (SCS) Technical Release 55 (TR 55)

Compliance with Better Site Design (BSD):

Chapter 10" Enhance Phosphorus Removal Standards" section 10.3.4 of the NYS Stormwater Manual indicates (4) four goals to meet treatment performance based on a BSD. The goals and project compliance are as follows:

Goal 1: Reduce Runoff Volumes:

The project has been designed to reduce the total amount of impervious surfaces and to promote overland flow through vegetated areas. The subdivision layout, unlike standard subdivisions of today incorporates some tuck-under garages and minimal driveway back up areas adjacent to the garages. Additionally the driveways are not proposed to have curbing so that run off from these impervious

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surfaces can shed into open lawn areas to promote infiltration rather than convey these flows via pipe to stormwater basins.

Goal 2: Effective Bypass Treatment:

The projects infiltration basins and chambers have been designed to completely infiltrate the 1year storm for the contributing watersheds. The goal is to achieve less than 15% effective treatment bypass of which the project is in substantial compliance since the 1 year storm event has been completely infiltrated.

Goal 3: Achieving Effluent Concentrations for Particulate Phosphorus:

By implementing the stormwater practices listed in section 10.4 of the NYS stormwater manual this goal is achieved. Additionally hydrodynamic separators that are equipped with an internal bypass have been incorporated into the design as pre-treatment devices. These chambers are allowed under the NYSDEC regulations and have been sized based on the 1 year storm event.

Goal 4: Achieving Effluent Concentrations for Dissolved Phosphorus:

By implement those stormwater practices listed in section 10.4 of the NYS stormwater manual this goal is achieved. Considering that infiltration basins and hydrodynamic separators have been utilized for the proposed drainage areas the concentration dissolved phosphorous will be reduced by allowing the stormwater to come in contact with the substrate soils. Additionally by limiting the installation of curbing and extensive drainage systems on the site, the stormwater will be conveyed overland through lawns and landscape areas providing additional treatment of the runoff.

D.I - STANDARDS

- Peak flow rates have been controlled to ensure that the post-development rate of runoff from the site will not exceed pre-development rates for 1, 10, and 100 year 24 hour storm events.
- Pollutant loading is controlled by means of detaining the runoff generated from the water quality storm event for longer than 24 hours.
- The proposed structures will be constructed above the 100-year floodplain.

D.II - Summary of Results

The results of the hydrographs from the contributing watersheds were compared under pre and post development conditions. The analysis consists of (5) five design points each noted on the pre

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and post development drainage maps. The results are summarized in the following table:

Pre-Development & Post-Development Peak Flow Summary

Table 1. Summary of Flows DP-1

Design Storm (yr)	Pre-Development Peak runoff (cfs)	Post-Development Peak runoff (cfs)	Post-Development % Reduction w/ Mitigation
1	66.19	42.94	35
2	119.42	78.87	34
10	253.89	170.60	33
100	509.35	346.47	32

Table 2. Summary of Flows DP-2

Design Storm (yr)	Pre-Development Peak runoff (cfs)	Post-Development Peak runoff (cfs)	Post-Development % Reduction w/ Mitigation
1	55.98	33.87	39
2	101.08	61.13	39
10	214.85	133.94	38
100	430.67	271.15	37

Table 3. Summary of Flows DP-3

Design Storm (yr)	Pre-Development Peak runoff (cfs)	Post-Development Peak runoff (cfs)	Post-Development % Reduction w/ Mitigation
1	59.35	44.54	25
2	95.90	72.86	24
10	183.56	141.07	23
100	342.11	264.85	23

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Table 4. Summary of Flows DP-4

Design Storm (yr)	Pre-Development Peak runoff (cfs)	Post-Development Peak runoff (cfs)	Post-Development % Reduction w/ Mitigation
1	4.91	2.91	41
2	7.89	4.76	40
10	15.02	10.67	29
100	27.87	21.92	4.5

Table 5. Summary of Flows DP-5

Design Storm (yr)	Pre-Development Peak runoff (cfs)	Post-Development Peak runoff (cfs)	Post-Development % Reduction w/ Mitigation
1	18.50	13.00	30
2	29.81	21.27	29
10	56.87	41.23	28
100	105.75	77.49	27

2. CONSTRUCTION AND MAINTENANCE DESCRIPTION

A. Erosion and Sediment Control Plan

I. Temporary Structural Measures:

The temporary soil erosion and sediment control devices include protective earthmoving procedures and grading practices, vegetated cover, hay bales, silt fencing, stabilized construction entrance, dust control, construction road stabilization, silt traps, inlet protections and sediment basins. The methodology of the plan is to control erosion & sedimentation, and to re-establish vegetation as soon as possible. These temporary controls will be installed prior to commencement of earthmoving activities where possible.

All proposed erosion and sediment controls and details as well as the stormwater management facilities are shown on various plans prepared by Petruccelli Engineering. All proposed soil erosion and sediment control practices are designed in accordance with the following publications:

- New York State Guidelines for Urban Erosion and Sediment Control, latest edition
- New York State General Permit for Stormwater Discharges, GPO-08-001 (General Permit)
- “Reducing the Impacts of Stormwater Runoff from New Development”, as published by the New

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York State Department of Environmental Conservation (NYSDEC), second edition, April 1993.

II. Permanent Structural Measures:

The temporary sediment traps will be installed to prevent sediments from entering the infiltration basins. Once the disturbance areas have been stabilized these sediment traps will be removed. In addition, rock outlet protections will be installed at the inflow of stormwater facilities. All other temporary devices such as silt fencing, hay bales and diversions will be removed during the course of construction.

III. Pollution Prevention Measures and Materials Storage/Disposal:

The construction materials and vehicles expected to be present during construction include but are not limited to drainage pipe, pre-cast concrete drainage structures, earth moving equipment, concrete trucks, asphalt trucks, pavement marking machinery, and worker vehicles.

All construction related debris will be collected and removed from the area on a regular basis. Concrete wash out areas will be provided where necessary and existing and or excess asphalt material will be removed from the site and disposed of in the proper manner.

Sediment spoils will be disposed in an approved off-site location along with temporary erosion control devices.

B. Narrative Report

The primary goal of the soil erosion and sediment control measures is to reduce soil erosion from areas stripped of vegetation during and after construction, and to prevent discharge of silt offsite. Erosion control barriers shall be placed around exposed areas during construction. The barriers shall consist of staked haybales or silt fence. Temporary sediment basins or traps will be used at stormwater collection points to allow sediment removal prior to releasing the stormwater offsite.

Any areas stripped of vegetation during construction will be left bare for the shortest time possible. Any topsoil removed during construction will be temporarily stockpiled for future use in grading and landscaping. A stockpile location has been provided on the Erosion Control Plan and shall be contained within a silt fence barrier.

Temporary vegetation will be established to protect exposed soil areas during construction. If growing conditions are not suitable for the temporary vegetation, mulch will be used. Materials that may be used for mulching include; straw, hay, salt hay, wood fiber, synthetic soil stabilizers, mulch netting, and sod. A permanent vegetative cover will be established upon completion of construction of those areas that have been brought to finish grade and to remain undisturbed.

A temporary stabilized construction entrance comprised of three inches clean stone will be constructed at

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the entrances to the site. The purpose of a stabilized entrance is to remove soil from the construction vehicle tires prior to exiting the site and traveling on the existing roadways. During construction, inlet protection will be installed at each storm sewer inlet to minimize the conveyance of silt and sediment through the storm sewer system.

C. Construction Sequencing

Refer to SWPPP

D. Storm Water Management Facilities Maintenance Program

The following maintenance program is proposed in order to maintain the proper function of all drainage and erosion and sediment control facilities:

- Mow the side slopes and bottom of the basin as necessary to maintain their appearance but not less than twice a year. Inspect basin and if necessary remove invasive woody vegetation to prevent it from becoming established within the basin.
- During mowing operations, litter and debris will be removed from vegetated swale, extended detention basin and the outlet control structures.
- During the construction of the project, the site erosion and sediment control measures as well as basin embankments and outlet structure will be inspected by the project superintendent once a week and/or immediately following a rainstorm. Any repairs required will be performed in a timely manner. All sediment removal and/or repairs will be followed immediately by re-vegetation.
- All disturbed areas will be stabilized and the sediment build up (50% of sediment basin) in the basins removed before the basin is fined graded and landscaped. After the construction is completed, any areas disturbed will be stabilized immediately after the required work is completed.
- The Owner will inspect the facilities once a month, and once a year by a Professional Engineer. A report by the Professional Engineer will be submitted to the Owner in the event deficiencies are found. In addition, the Owner will inspect the system after each major storm event to ensure the small orifices and inlets remain open. Specific attention will be paid to the following:
 - Evidence of clogging of outlet control device.
 - Erosion of the flow path through the detention facility.
 - Subsidence, erosion, cracking or tree growth on the embankments.
 - Accumulation of sediment.
- Clean catch basins and other drainage structures from silt regularly, but not less than twice a

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year. Remove sediment build up in the basin as required, but a minimum of every five years. A rubber-tired backhoe with a minimum reach of 25' will be used to remove silt accumulation. Laborers with shovel and wheelbarrows will be used to maintain the embankment slopes, to repair minor erosion problems and remove minor accumulation of silt. The use of hand labor will also minimize the disturbance of stabilized areas and the established vegetation. A rubber-tired backhoe has the reach and maneuverability to maintain these basins from the adjacent areas.

- Tree growth on the downstream face of the detention ponds will also be monitored regularly. Trees that develop shall be removed during routine maintenance of the basin.
- The owner will take all necessary measures to have seeps, leaks, and/or settlements on the embankment of detention pond repaired. If seeps, leaks, and/or settlement are discovered the owner will be obligated to contract a licensed engineer to assess the problem and offer solutions to repair.
- Restore and re-seed any eroded areas and gullies as soon as possible.
- The Stormwater Management facilities Maintenance Program will be managed by:
A Home Owners Association which will be formalized upon approval of the project.

E. Conclusions

The incorporation of the Best Management Practices will significantly reduce the pollutant loadings in the post-construction condition by capturing and treating the runoff from the new and existing impervious surfaces and disturbed areas to the greatest extent possible, this plan meets the requirements of the NYSDEC & NYCDEP for Water Quality and Quantity, providing minimal impact to downstream waters.

APPENDIX A

- POLLUTANT LOADING ANALYSIS

POLLUTANT LOADING ANALYSIS

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PRE-DEVELOPMENT CONDITIONS AND QUALITY IMPACTS												
SUB-AREA	LAND USE	AREA (ACRES)	HYDROLOGIC SOIL GROUP	ANNUAL LOADING RATES (LB/AC/YR)				ANNUAL LOADS (LB/YR)				
				BOD	TSS	TP	TN	BOD	TSS	TP	TN	
1	Meadow	76.587	B	7	214	0.32	3.85	536.1	16351.3	24.1	294.9	
	Developed	23.313	B	53.9	522.9	1.68	9.1	1256.6	12190.4	39.2	212.1	
2	Meadow	52.857	B	7	214	0.32	3.85	370.0	11285.0	16.6	203.5	
	Developed	13.133	B	53.9	522.9	1.68	9.1	707.9	6867.2	22.1	119.5	
3	Meadow	34.162	B	7	214	0.32	3.85	239.1	7293.6	10.8	131.5	
	Developed	20.939	B	53.9	522.9	1.68	9.1	1128.6	10949.0	35.2	190.5	
4	Meadow	2.480	B	7	214	0.32	3.85	17.4	529.5	0.8	9.5	
	Developed	1.520	B	53.9	522.9	1.68	9.1	81.9	794.8	2.6	13.8	
5	Meadow	10.168	B	7	214	0.32	3.85	71.2	2170.9	3.2	39.1	
	Developed	6.232	B	53.9	522.9	1.68	9.1	335.9	3258.7	10.5	56.7	
		241.4						TOTALS	4744.7	71690.4	165.0	1271.3

POST-DEVELOPMENT CONDITIONS AND QUALITY IMPACTS											
SUB-AREA	LAND USE	AREA (ACRES)	HYDROLOGIC SOIL GROUP	ANNUAL LOADING RATES				ANNUAL LOADS (LB/YR)			
				BOD	TSS	TP	TN	BOD	TSS	TP	TN
1	Meadow	71.925	B	7	214	0.32	3.85	503.5	15356.0	22.7	276.9
	Developed	23.975	B	53.9	522.9	1.68	9.1	1292.3	12536.5	40.3	218.2
2A	Meadow	0.940	B	7	214	0.32	3.85	6.6	200.7	0.3	3.6
	Grass	0.894	B	7	214	0.32	3.85	6.3	191.0	0.3	3.4
	Developed	0.276	B	53.9	522.9	1.68	9.1	14.8	144.1	0.5	2.5
2B	Meadow	3.089	B	7	214	0.32	3.85	21.6	659.5	1.0	11.9
	Developed	1.110	B	53.9	522.9	1.68	9.1	59.8	580.5	1.9	10.1
2C	Meadow	0.054	B	7	214	0.32	3.85	0.4	11.5	0.0	0.2
	Grass	0.482	B	7	214	0.32	3.85	3.4	102.9	0.2	1.9
	Developed	0.223	B	53.9	522.9	1.68	9.1	12.0	116.8	0.4	2.0
2C1	Meadow	0.603	B	7	214	0.32	3.85	4.2	128.7	0.2	2.3
	Grass	0.472	B	7	214	0.32	3.85	3.3	100.8	0.1	1.8
	Developed	0.205	B	53.9	522.9	1.68	9.1	11.0	106.9	0.3	1.9
2E	Meadow	0.539	B	7	214	0.32	3.85	3.8	115.0	0.2	2.1
	Grass	0.961	B	7	214	0.32	3.85	6.7	205.2	0.3	3.7
	Developed	0.285	B	53.9	522.9	1.68	9.1	15.4	149.0	0.5	2.6
2F	Meadow	45.010	B	7	214	0.32	3.85	315.1	9609.6	14.2	173.3
	Developed	15.000	B	53.9	522.9	1.68	9.1	808.5	7843.5	25.2	136.5
3	Meadow	32.854	B	7	214	0.32	3.85	230.0	7014.3	10.3	126.5
	Developed	20.136	B	53.9	522.9	1.68	9.1	1085.3	10529.2	33.8	183.2
4A	Meadow	0.443	B	7	214	0.32	3.85	3.1	94.7	0.1	1.7
	Grass	2.032	B	7	214	0.32	3.85	14.2	433.8	0.6	7.8
	Developed	0.514	B	53.9	522.9	1.68	9.1	27.7	268.8	0.9	4.7
4B	Meadow	1.990	B	7	214	0.32	3.85	13.9	424.9	0.6	7.7
	Developed	1.220	B	53.9	522.9	1.68	9.1	65.7	637.8	2.0	11.1
5	Meadow	10.032	B	7	214	0.32	3.85	70.2	2141.7	3.2	38.6
	Developed	6.148	B	53.9	522.9	1.68	9.1	331.4	3215.0	10.3	56.0
241.4				TOTALS				4930.3	72918.5	170.4	1292.2

TREATED LOADS									
SUB-AREA	BEST MANAGEMENT PRACTICE	REMOVAL RATE (%)				ANNUAL REMOVED LOADS (LB/YR) W/ TREATMENT			
		BOD	TSS	TP	TN	BOD	TSS	TP	TN
1	NONE	0	0	0	0	0.0	0.0	0.0	0.0
2A	INFILTRATION BASIN	60	80	40	40	16.6	428.6	0.4	3.8
2B	INFILTRATION BASIN	60	80	40	40	48.9	992.1	1.1	8.8
2C	INFILTRATION BASIN	60	80	40	40	9.5	185.0	0.2	1.6
2C1	INFILTRATION BASIN	60	80	40	40	11.1	269.2	0.3	2.4
2E	INFILTRATION BASIN	60	80	40	40	15.5	375.3	0.4	3.3
2F	NONE	0	0	0	0	0.0	0.0	0.0	0.0
3	NONE	0	0	0	0	0.0	0.0	0.0	0.0
4A	INFILTRATION BASIN	60	80	40	40	27.0	637.8	0.7	5.7
4B	NONE	0	0	0	0	0.0	0.0	0.0	0.0
5	NONE	0	0	0	0	0.0	0.0	0.0	0.0
TOTALS						128.6	2887.9	3.1	25.7

SUMMARY TABLE	BOD (LB/YR)	TSS (LB/YR)	TP (LB/YR)	TN (LB/YR)
PREDEVELOPMENT	4744.7	71690.4	165.0	1271.3
POST DEVELOPMENT WITHOUT TRATMENT	4930.3	72918.5	170.4	1292.2
REMOVED LOADS (LB/YR) W/ TREATMENT	128.6	2887.9	3.1	25.7
POST DEVELOPMENT WITH TRATMENT	4801.7	70030.6	167.3	1266.5
% CHANGE OF PRE-DEVELOPMENT RATES WITH	-1.2%	2.3%	-1.4%	0.4%

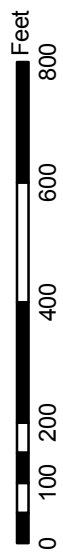
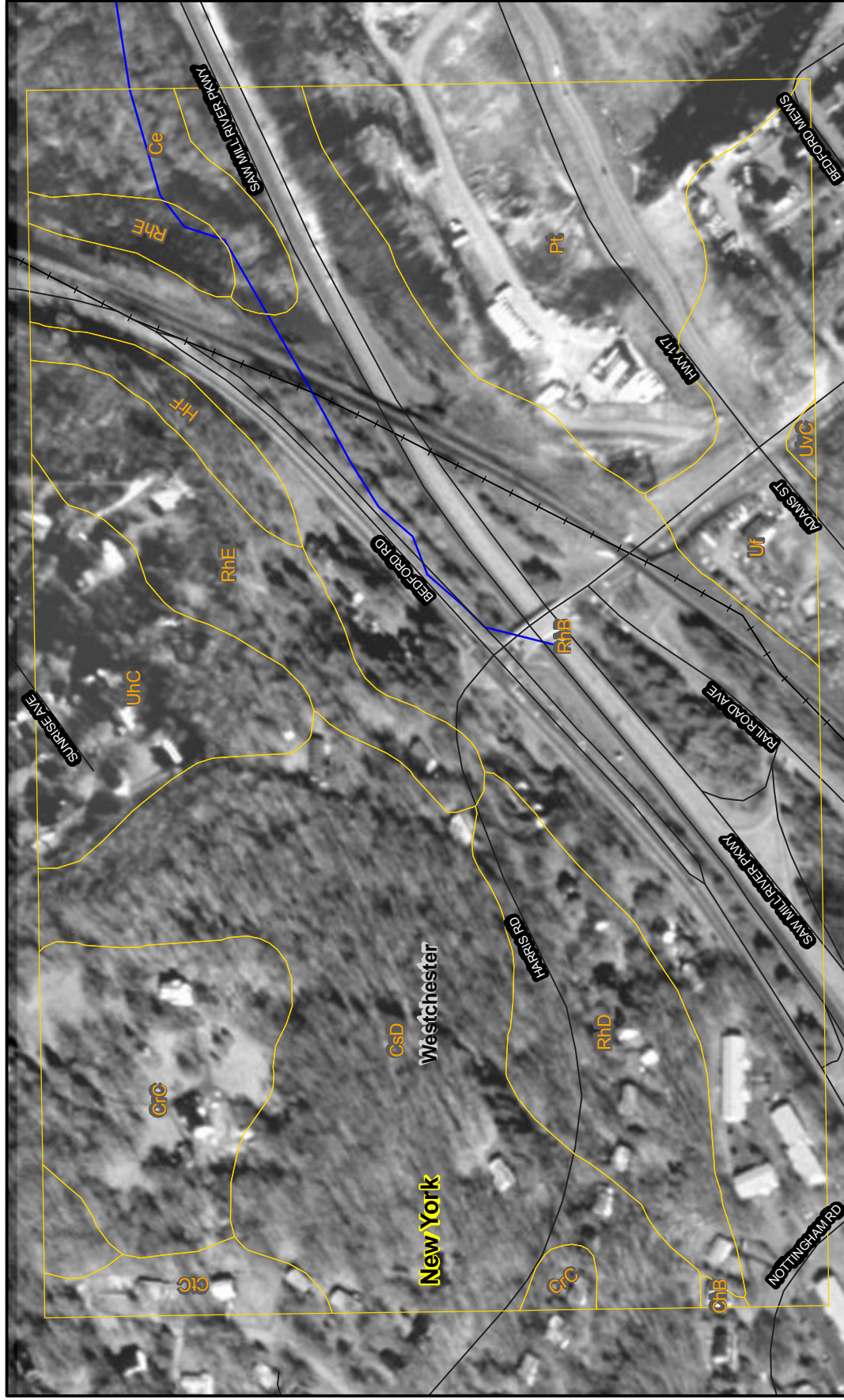
Note: Each area infiltration basin is proposed with a hydrodynamic seperator which will remove BOD, TSS, TP, &TN rates beyond those shown above.

APPENDIX B

- ***SOILS INFORMATION***
- ***FEMA MAP***
- ***PHASING PLAN***

SOIL SURVEY OF WESTCHESTER COUNTY, NEW YORK



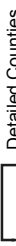
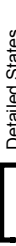
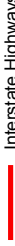
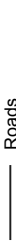

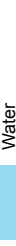

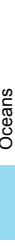

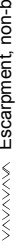

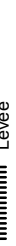




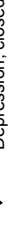











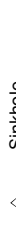
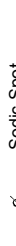



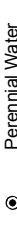
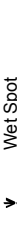

Tripi Soils Map



SOIL SURVEY OF WESTCHESTER COUNTY, NEW YORK

Tripoli Soils Map

MAP LEGEND

-  Soil Map Units
-  Cities
-  Detailed Counties
-  Detailed States
-  Interstate Highways
-  Roads
-  Rails
-  Water
-  Hydrography
-  Oceans
-  Escarpment, bedrock
-  Escarpment, non-bedrock
-  Gully
-  Levee
-  Slope
-  Blowout
-  Borrow Pit
-  Clay Spot
-  Depression, closed
-  Eroded Spot
-  Gravel Pit
-  Gravelly Spot
-  Gully
-  Lava Flow
-  Landfill
-  Marsh or Swamp
-  Miscellaneous Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Slide or Slip
-  Sinkhole
-  Sodic Spot
-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Perennial Water
-  Wet Spot

MAP INFORMATION

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>

Coordinate System: UTM Zone 18

Soil Survey Area: Westchester County, New York
 Spatial Version of Data: 1
 Soil Map Compilation Scale: 1:12000

Map comprised of aerial images photographed on these dates:
 4/12/1991

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

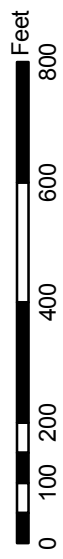
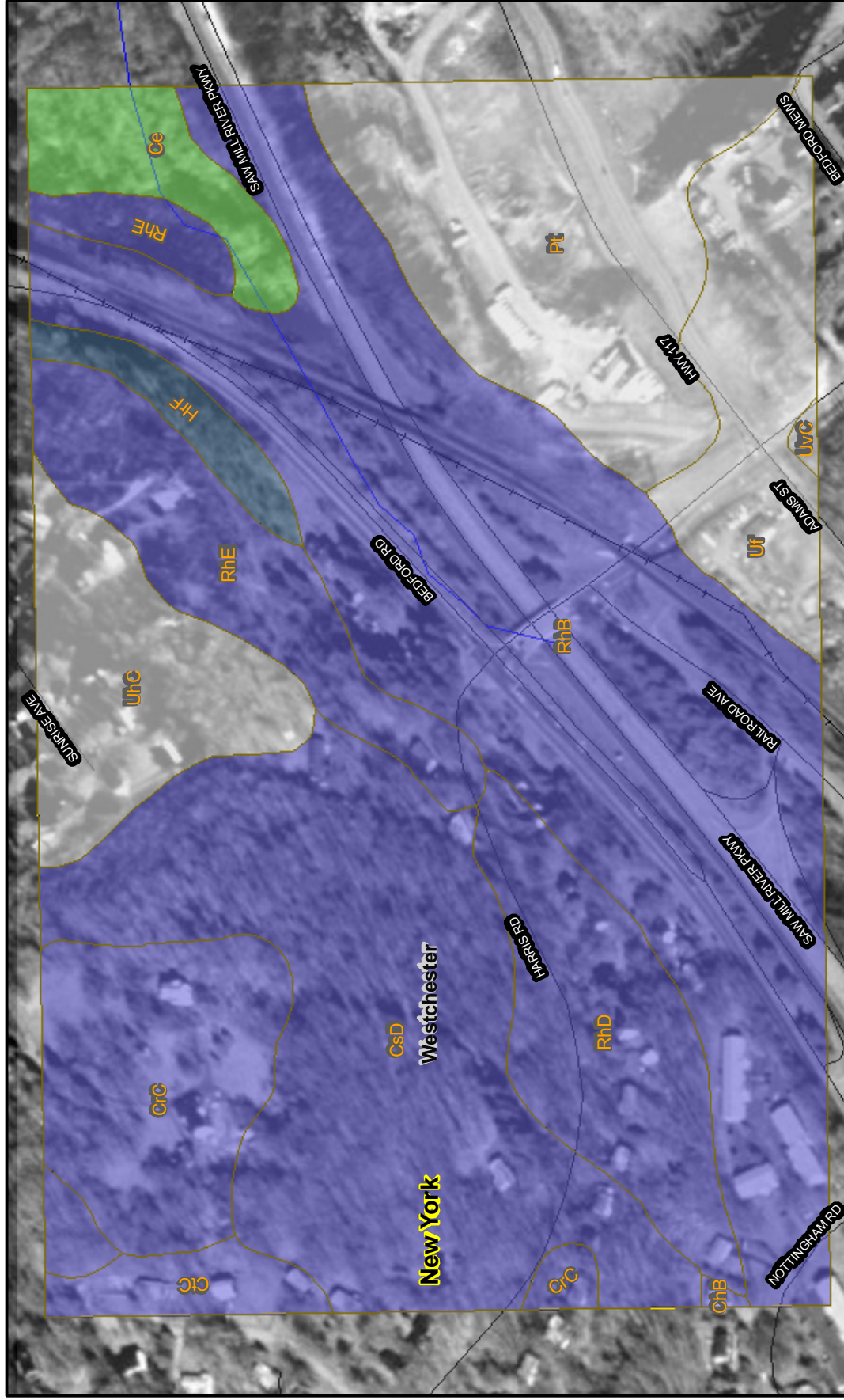
Map Unit Legend Summary

Westchester County, New York

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ce	Carlisle muck	2.7	2.7
ChB	Charlton loam, 2 to 8 percent slopes	0.1	0.1
CrC	Charlton-Chatfield complex, rolling, very rocky	6.9	7.1
CsD	Chatfield-Charlton complex, hilly, very rocky	18.9	19.4
CtC	Chatfield-Hollis-Rock outcrop complex, rolling	1.6	1.6
HrF	Hollis-Rock outcrop complex, very steep	1.5	1.5
Pt	Pits, gravel	11.6	11.8
RhB	Riverhead loam, 3 to 8 percent slopes	29.6	30.3
RhD	Riverhead loam, 15 to 25 percent slopes	6.3	6.5
RhE	Riverhead loam, 25 to 50 percent slopes	6.7	6.8
Uf	Urban land	6.0	6.1
UhC	Urban land-Charlton complex, 8 to 15 percent slopes	5.8	6.0
UvC	Urban land-Riverhead complex, 8 to 15 percent slopes	0.1	0.1

HYDROLOGIC GROUP RATING FOR WESTCHESTER COUNTY, NEW YORK

Tripi Soil Group



HYDROLOGIC GROUP RATING FOR WESTCHESTER COUNTY, NEW YORK

Tripi Soil Group

MAP LEGEND

Hydrologic Group

{Dominant Condition, ⁢}

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available
- Soil Map Units
- Cities
- Detailed Counties
- Detailed States
- Interstate Highways
- Roads
- Rails
- Water
- Hydrography
- Oceans

MAP INFORMATION

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>

Coordinate System: UTM Zone 18

Soil Survey Area: Westchester County, New York
Spatial Version of Data: 1
Soil Map Compilation Scale: 1:12000

Map comprised of aerial images photographed on these dates:
4/12/1991

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

Tables - Hydrologic Group

Summary by Map Unit - Westchester County, New York

Soil Survey Area Map Unit Symbol	Map Unit Name	Rating	Total Acres in AOI	Percent of AOI
Ce	Carlisle muck	A/D	2.7	2.7
ChB	Charlton loam, 2 to 8 percent slopes	B	0.1	0.1
CrC	Charlton-Chatfield complex, rolling, very rocky	B	6.9	7.1
CsD	Chatfield-Charlton complex, hilly, very rocky	B	18.9	19.4
CtC	Chatfield-Hollis-Rock outcrop complex, rolling	B	1.6	1.6
HrF	Hollis-Rock outcrop complex, very steep	C/D	1.5	1.5
Pt	Pits, gravel	Null	11.6	11.8
RhB	Riverhead loam, 3 to 8 percent slopes	B	29.6	30.3
RhD	Riverhead loam, 15 to 25 percent slopes	B	6.3	6.5
RhE	Riverhead loam, 25 to 50 percent slopes	B	6.7	6.8
Uf	Urban land	Null	6.0	6.1
UhC	Urban land-Charlton complex, 8 to 15 percent slopes	Null	5.8	6.0
UvC	Urban land-Riverhead complex, 8 to 15 percent slopes	Null	0.1	0.1

Description - Hydrologic Group

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

The soils in the United States are placed into four groups A, B, C, and D, and three dual classes, A/D, B/D, and C/D. Definitions of the classes are as follows:

The four hydrologic soil groups are:

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

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

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

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

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

Parameter Summary - Hydrologic Group

Aggregation Method: Dominant Condition

Component Percent Cutoff:

Tie-break Rule: Lower

KEY TO MAP

500 Year Flood Boundary
 100 Year Flood Boundary
 Zone Designation
 100 Year Flood Boundary
 500 Year Flood Boundary
 Base Flood Elevation
 Where Unknown White Zone*

Reference to the National Flood Insurance Program
 Effective Date
 12/23/74

RM7-A
 MI 5

100 Year Flood Boundary
 500 Year Flood Boundary
 Base Flood Elevation
 Where Unknown White Zone*

Reference to the National Flood Insurance Program
 Effective Date
 12/23/74

EXPLANATION OF ZONE DESIGNATIONS

Zone A
 Areas of 100-year flood hazard. Areas of 100-year flood hazard are shown in the light gray color on the map. Areas of 500-year flood hazard are shown in the dark gray color on the map. Areas of flood hazard are shown in the light gray color on the map. Areas of flood hazard are shown in the dark gray color on the map.

Zone B
 Areas of 100-year flood hazard. Areas of 100-year flood hazard are shown in the light gray color on the map. Areas of 500-year flood hazard are shown in the dark gray color on the map. Areas of flood hazard are shown in the light gray color on the map. Areas of flood hazard are shown in the dark gray color on the map.

Zone C
 Areas of 100-year flood hazard. Areas of 100-year flood hazard are shown in the light gray color on the map. Areas of 500-year flood hazard are shown in the dark gray color on the map. Areas of flood hazard are shown in the light gray color on the map. Areas of flood hazard are shown in the dark gray color on the map.

Zone A3
 Areas of 100-year flood hazard. Areas of 100-year flood hazard are shown in the light gray color on the map. Areas of 500-year flood hazard are shown in the dark gray color on the map. Areas of flood hazard are shown in the light gray color on the map. Areas of flood hazard are shown in the dark gray color on the map.

Zone A3
 Areas of 100-year flood hazard. Areas of 100-year flood hazard are shown in the light gray color on the map. Areas of 500-year flood hazard are shown in the dark gray color on the map. Areas of flood hazard are shown in the light gray color on the map. Areas of flood hazard are shown in the dark gray color on the map.

Zone A3
 Areas of 100-year flood hazard. Areas of 100-year flood hazard are shown in the light gray color on the map. Areas of 500-year flood hazard are shown in the dark gray color on the map. Areas of flood hazard are shown in the light gray color on the map. Areas of flood hazard are shown in the dark gray color on the map.

NOTES TO USER

1. This map is for flood insurance purposes only. It does not constitute a warranty or a statement of fact for any other purpose.

2. For additional map panels, see separate printed notes to map.

3. For information on flood insurance, see Form 28000 (02/03).

4. This map is for flood insurance purposes only. It does not constitute a warranty or a statement of fact for any other purpose.

5. For additional map panels, see separate printed notes to map.

6. For information on flood insurance, see Form 28000 (02/03).

FLOOD INSURANCE RATE MAP EFFECTIVE
 FLOOD INSURANCE RATE MAP REVISIONS

INITIAL PUBLICATION DATE: MAY 31, 1974

FLOOD INSURANCE RATE MAP REVISIONS:
 JUNE 3, 1979

APPROXIMATE SCALE
 1000 0 1000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

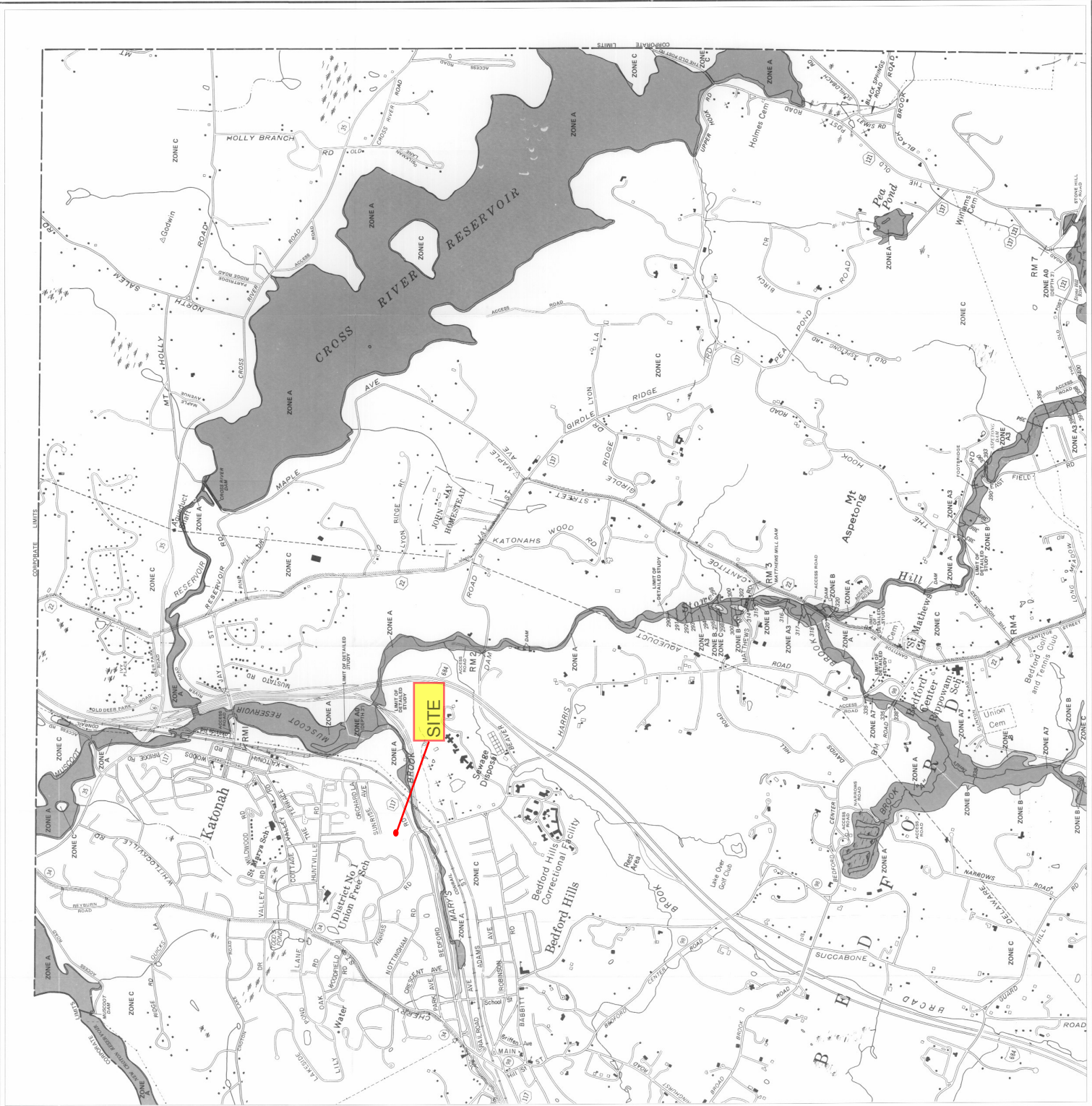
FIRM FLOOD INSURANCE RATE MAP

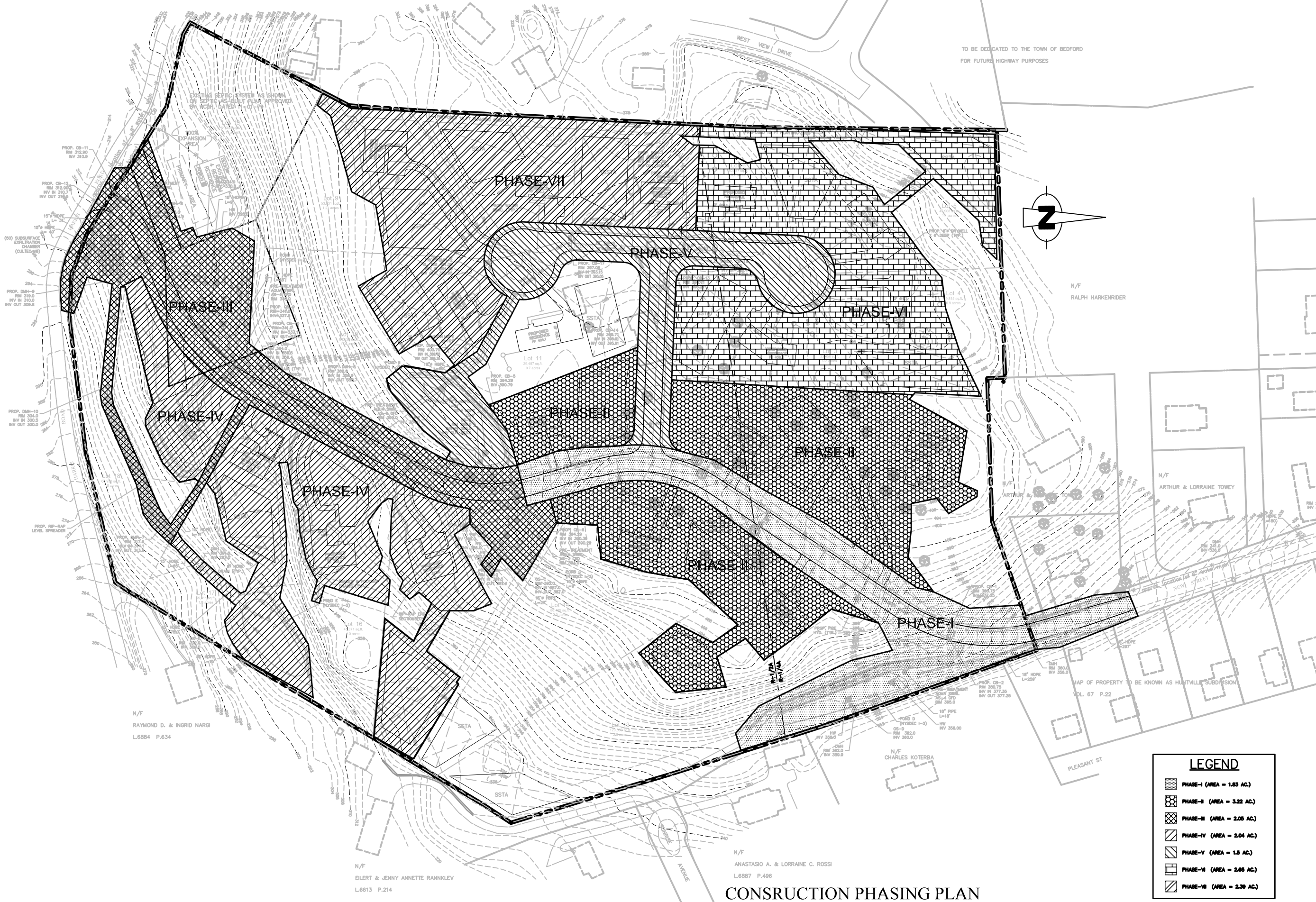
TOWN OF BEDFORD, NEW YORK
 WESTCHESTER COUNTY

PANEL 10 OF 20

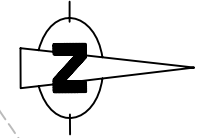
COMMUNITY PANEL NUMBER 360515 0010 C
 EFFECTIVE DATE: DECEMBER 4, 1979

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
 FEDERAL INSURANCE ADMINISTRATION





TO BE DEDICATED TO THE TOWN OF BEDFORD FOR FUTURE HIGHWAY PURPOSES



LEGEND

	PHASE-I (AREA = 1.83 AC.)
	PHASE-II (AREA = 3.22 AC.)
	PHASE-III (AREA = 2.05 AC.)
	PHASE-IV (AREA = 2.04 AC.)
	PHASE-V (AREA = 1.5 AC.)
	PHASE-VI (AREA = 2.85 AC.)
	PHASE-VII (AREA = 2.39 AC.)

CONSTRUCTION PHASING PLAN
SCALE: 1"=60'-0"

NOTE: UNAUTHORIZED ALTERATIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209-2 OF THE NEW YORK STATE EDUCATION LAW.

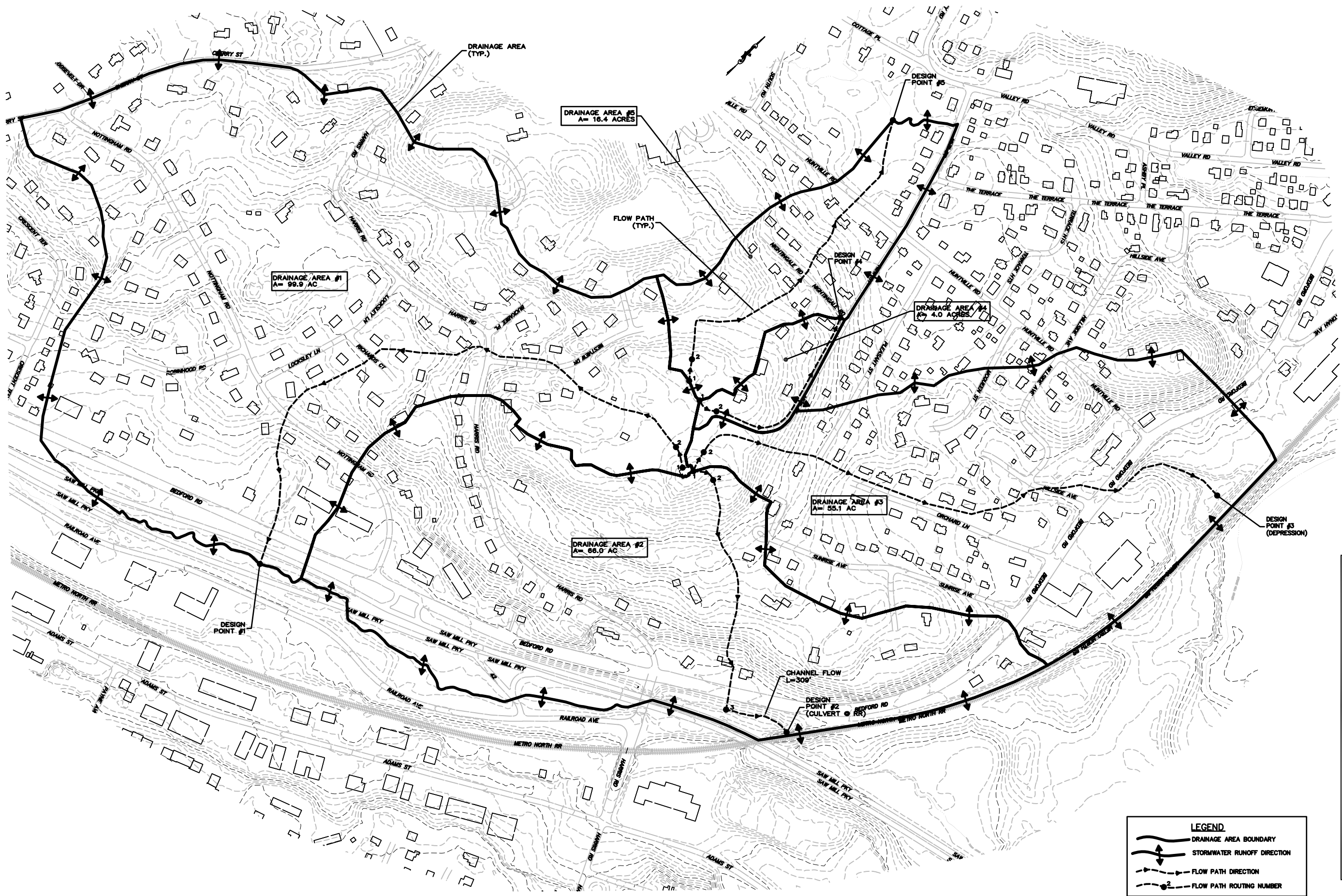
NOTE: THIS PLAN IS NULL AND VOID UNLESS IT BEARS THE ORIGINAL SEAL AND SIGNATURE OF THE ENGINEER.

CONSTRUCTION PHASING PLAN	PROPOSED SUBDIVISION	FOR COSIMO TRIPPI AND JAMES P. MURPHY AND ADELAIDE V. MURPHY HARRIS ROAD BEDFORD NEW YORK	 PETRUCCIELLI ENGINEERING 392 COLUMBUS AVENUE VALHALLA, NEW YORK 10595 9 1 4 . 9 4 8 . 3 6 2 9 RUDOLPH C. PETRUCCIELLI, P.E.	SHEET NO. <div style="font-size: 2em; font-weight: bold; text-align: center;">1</div>
REVISIONS	JOB NO. 2001-27	DATE: 06.27.05	SCALE: 1"=60'	CHECKED BY: R.C.P.
01-18-07 08-26-09			DRAWN BY: SP	

APPENDIX C

- ***STORMWATER MANAGEMENT REPORT***
 - A. PRE-DEVELOPMENT DRAINAGE MAP AND ROUTINGS***

 - B. POST-DEVELOPMENT DRAINAGE MAP AND ROUTINGS***



LEGEND

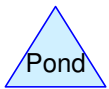
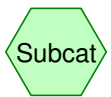
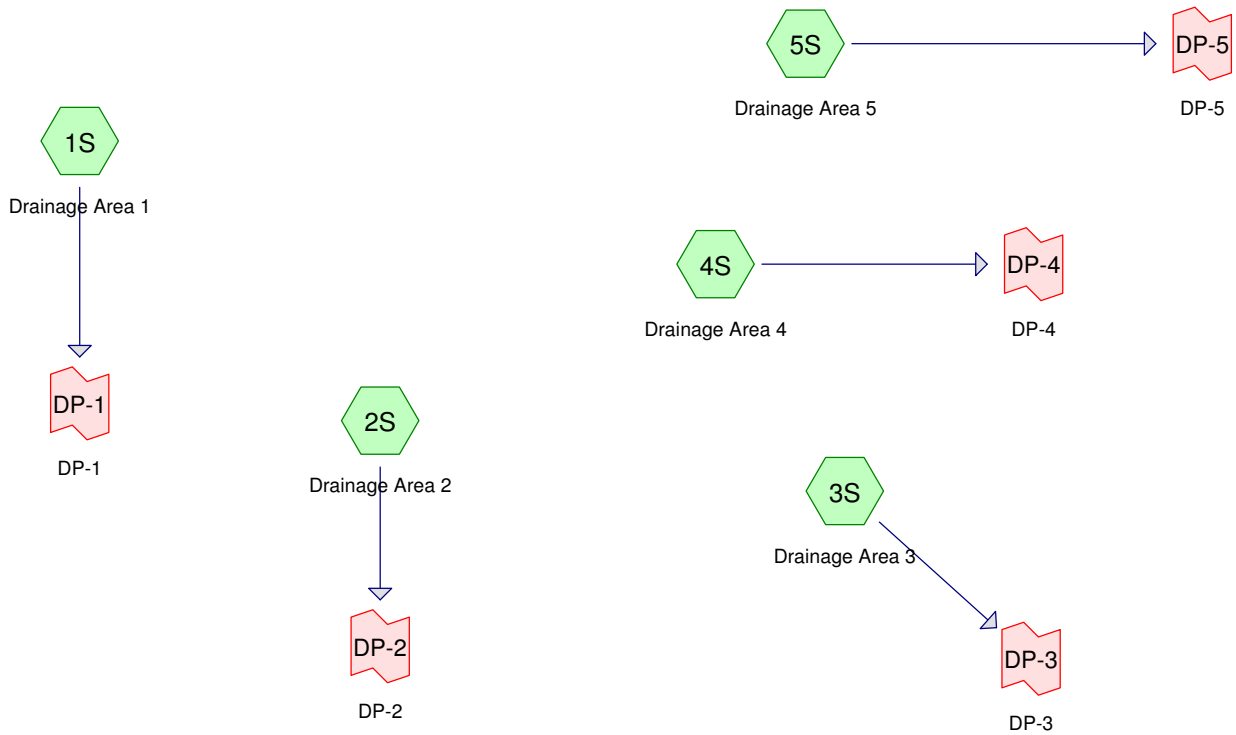
- DRAINAGE AREA BOUNDARY
- STORMWATER RUNOFF DIRECTION
- FLOW PATH DIRECTION
- FLOW PATH ROUTING NUMBER

PRE-DEVELOPMENT PLAN
SCALE: 1" = 200'-0"

NOTE: UNAUTHORIZED ALTERATIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209-2 OF THE NEW YORK STATE EDUCATION LAW.

NOTE: THIS PLAN IS NULL AND VOID UNLESS IT BEARS THE ORIGINAL SEAL AND SIGNATURE OF THE ENGINEER.

<p>REVISIONS</p> <p>01-18-07 08-26-09</p>	<p>JOB NO. 2001-27</p> <p>DATE: 06.27.05</p> <p>SCALE: 1"=200'</p> <p>DRAWN BY: SP</p> <p>CHECKED BY: R.C.P.</p>	<p>392 COLUMBUS AVENUE VALHALLA, NEW YORK 10595 9 1 4 . 9 4 8 . 3 6 2 9</p> <p>PETRUCCELLI ENGINEERING</p> <p>RUDOLPH C. PETRUCCELLI, P.E.</p>
<p>PRE-DEVELOPMENT PLAN</p> <p>PROPOSED SUBDIVISION</p> <p>FOR COSIMO TRIFI AND JAMES P. MURPHY AND ADELAIDE V. MURPHY HARRIS ROAD NEW YORK BEDFORD</p>		
<p>SHEET NO.</p> <p style="font-size: 2em; font-weight: bold;">1 / 2</p>		



Drainage Diagram for Pre-Development Entire
 Prepared by Petrucelli Engineering, Printed 8/26/2009
 HydroCAD® 8.50 s/n 005751 © 2007 HydroCAD Software Solutions LLC

Pre-Development Entire

Prepared by Petruccelli Engineering

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Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
20.120	65	Woods/grass comb., Fair, HSG B (1S,2S)
145.780	70	1/2 acre lots, 25% imp, HSG B (1S,2S)
75.500	75	1/4 acre lots, 38% imp, HSG B (3S,4S,5S)
241.400		TOTAL AREA

Pre-Development Entire

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Page 3

Soil Listing (all nodes)

Area (acres)	Soil Goup	Subcatchment Numbers
0.000	HSG A	
241.400	HSG B	1S, 2S, 3S, 4S, 5S
0.000	HSG C	
0.000	HSG D	
0.000	Other	
241.400		TOTAL AREA

Pre-Development Entire

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Type II 24-hr 1 Year Rainfall=2.80"

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Page 4

Time span=5.00-120.00 hrs, dt=0.05 hrs, 2301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Drainage Area 1 Runoff Area=99.900 ac 23.34% Impervious Runoff Depth=0.61"
Flow Length=2,888' Tc=15.5 min CN=70 Runoff=66.19 cfs 5.045 af

Subcatchment 2S: Drainage Area 2 Runoff Area=66.000 ac 19.90% Impervious Runoff Depth=0.57"
Flow Length=1,524' Tc=7.5 min CN=69 Runoff=55.98 cfs 3.110 af

Subcatchment 3S: Drainage Area 3 Runoff Area=55.100 ac 38.00% Impervious Runoff Depth=0.83"
Flow Length=2,695' Tc=13.3 min CN=75 Runoff=59.35 cfs 3.823 af

Subcatchment 4S: Drainage Area 4 Runoff Area=4.000 ac 38.00% Impervious Runoff Depth=0.83"
Flow Length=975' Tc=9.7 min CN=75 Runoff=4.91 cfs 0.278 af

Subcatchment 5S: Drainage Area 5 Runoff Area=16.400 ac 38.00% Impervious Runoff Depth=0.83"
Flow Length=1,704' Tc=12.1 min CN=75 Runoff=18.50 cfs 1.138 af

Link DP-1: DP-1 Inflow=66.19 cfs 5.045 af
Primary=66.19 cfs 5.045 af

Link DP-2: DP-2 Inflow=55.98 cfs 3.110 af
Primary=55.98 cfs 3.110 af

Link DP-3: DP-3 Inflow=59.35 cfs 3.823 af
Primary=59.35 cfs 3.823 af

Link DP-4: DP-4 Inflow=4.91 cfs 0.278 af
Primary=4.91 cfs 0.278 af

Link DP-5: DP-5 Inflow=18.50 cfs 1.138 af
Primary=18.50 cfs 1.138 af

Total Runoff Area = 241.400 ac Runoff Volume = 13.393 af Average Runoff Depth = 0.67"
73.02% Pervious = 176.265 ac 26.98% Impervious = 65.135 ac

Pre-Development Entire

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Type II 24-hr 1 Year Rainfall=2.80"

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Page 5

Summary for Subcatchment 1S: Drainage Area 1

Runoff = 66.19 cfs @ 12.10 hrs, Volume= 5.045 af, Depth= 0.61"

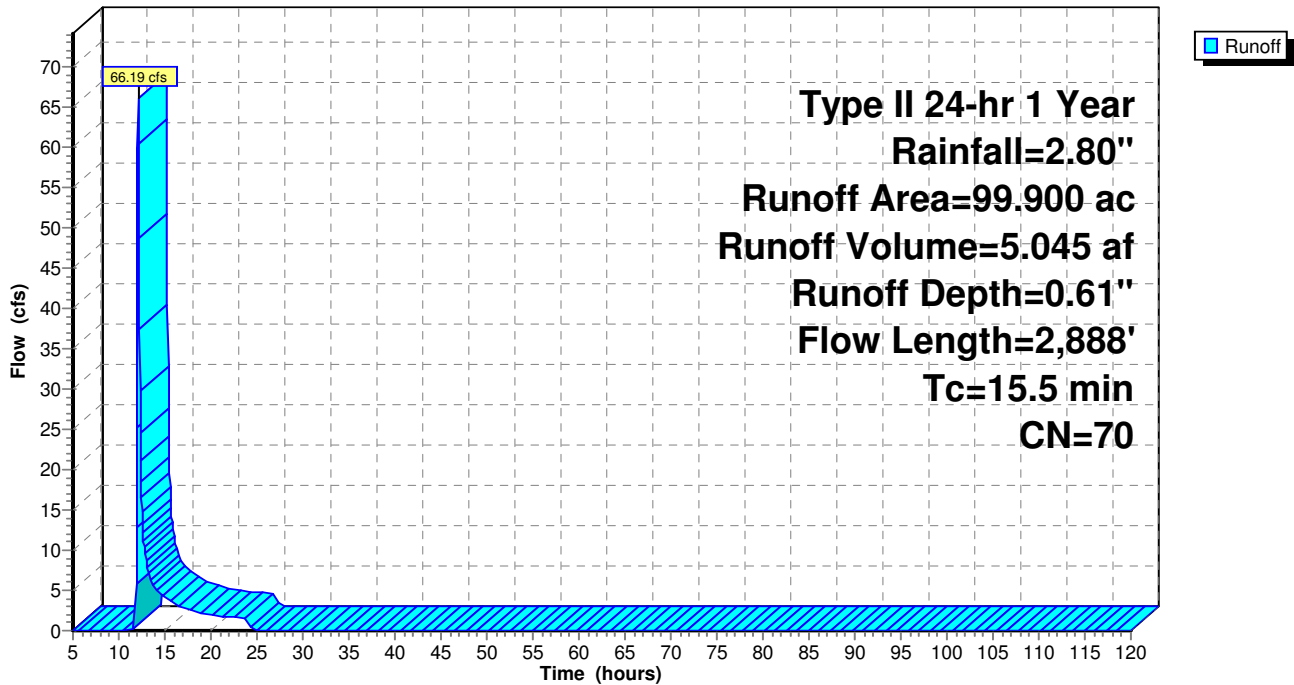
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs
Type II 24-hr 1 Year Rainfall=2.80"

Area (ac)	CN	Description
93.250	70	1/2 acre lots, 25% imp, HSG B
6.650	65	Woods/grass comb., Fair, HSG B
99.900	70	Weighted Average
76.587		Pervious Area
23.312		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	100	0.1200	0.36		Sheet Flow, 1 to 2
10.9	2,788	0.0700	4.26		Grass: Short n= 0.150 P2= 3.50" Shallow Concentrated Flow, 2 to DP-1
15.5	2,888	Total			

Subcatchment 1S: Drainage Area 1

Hydrograph



Pre-Development Entire

Prepared by Petruccelli Engineering

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Type II 24-hr 1 Year Rainfall=2.80"

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Page 6

Hydrograph for Subcatchment 1S: Drainage Area 1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.18	0.00	0.00
7.50	0.31	0.00	0.00
10.00	0.51	0.00	0.00
12.50	2.06	0.26	16.48
15.00	2.39	0.40	4.05
17.50	2.55	0.48	2.71
20.00	2.67	0.54	1.93
22.50	2.75	0.58	1.73
25.00	2.80	0.61	0.00
27.50	2.80	0.61	0.00
30.00	2.80	0.61	0.00
32.50	2.80	0.61	0.00
35.00	2.80	0.61	0.00
37.50	2.80	0.61	0.00
40.00	2.80	0.61	0.00
42.50	2.80	0.61	0.00
45.00	2.80	0.61	0.00
47.50	2.80	0.61	0.00
50.00	2.80	0.61	0.00
52.50	2.80	0.61	0.00
55.00	2.80	0.61	0.00
57.50	2.80	0.61	0.00
60.00	2.80	0.61	0.00
62.50	2.80	0.61	0.00
65.00	2.80	0.61	0.00
67.50	2.80	0.61	0.00
70.00	2.80	0.61	0.00
72.50	2.80	0.61	0.00
75.00	2.80	0.61	0.00
77.50	2.80	0.61	0.00
80.00	2.80	0.61	0.00
82.50	2.80	0.61	0.00
85.00	2.80	0.61	0.00
87.50	2.80	0.61	0.00
90.00	2.80	0.61	0.00
92.50	2.80	0.61	0.00
95.00	2.80	0.61	0.00
97.50	2.80	0.61	0.00
100.00	2.80	0.61	0.00
102.50	2.80	0.61	0.00
105.00	2.80	0.61	0.00
107.50	2.80	0.61	0.00
110.00	2.80	0.61	0.00
112.50	2.80	0.61	0.00
115.00	2.80	0.61	0.00
117.50	2.80	0.61	0.00
120.00	2.80	0.61	0.00

Pre-Development Entire

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Type II 24-hr 1 Year Rainfall=2.80"

Printed 8/26/2009

Page 7

Summary for Subcatchment 2S: Drainage Area 2

Runoff = 55.98 cfs @ 12.01 hrs, Volume= 3.110 af, Depth= 0.57"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs
Type II 24-hr 1 Year Rainfall=2.80"

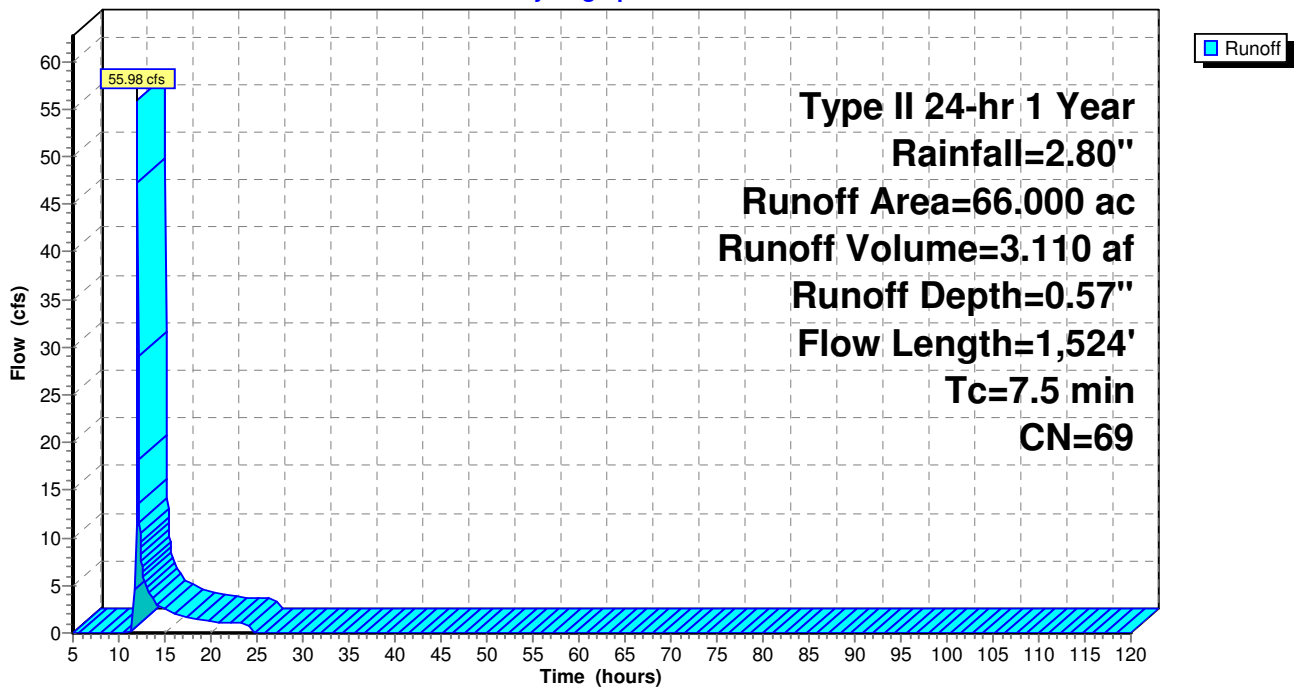
Area (ac)	CN	Description
52.530	70	1/2 acre lots, 25% imp, HSG B
13.470	65	Woods/grass comb., Fair, HSG B
66.000	69	Weighted Average
52.867		Pervious Area
13.132		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.7	100	0.2000	0.45		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
2.7	1,115	0.1800	6.83		Shallow Concentrated Flow, 2 to DP-2 Unpaved Kv= 16.1 fps
1.1	309	0.0100	4.56	68.35	Channel Flow, 3 to dp-2 Area= 15.0 sf Perim= 17.0' r= 0.88' n= 0.030 Stream, clean & straight

7.5 1,524 Total

Subcatchment 2S: Drainage Area 2

Hydrograph



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Type II 24-hr 1 Year Rainfall=2.80"

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Hydrograph for Subcatchment 2S: Drainage Area 2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.18	0.00	0.00
7.50	0.31	0.00	0.00
10.00	0.51	0.00	0.00
12.50	2.06	0.24	7.61
15.00	2.39	0.37	2.49
17.50	2.55	0.45	1.69
20.00	2.67	0.50	1.20
22.50	2.75	0.54	1.10
25.00	2.80	0.57	0.00
27.50	2.80	0.57	0.00
30.00	2.80	0.57	0.00
32.50	2.80	0.57	0.00
35.00	2.80	0.57	0.00
37.50	2.80	0.57	0.00
40.00	2.80	0.57	0.00
42.50	2.80	0.57	0.00
45.00	2.80	0.57	0.00
47.50	2.80	0.57	0.00
50.00	2.80	0.57	0.00
52.50	2.80	0.57	0.00
55.00	2.80	0.57	0.00
57.50	2.80	0.57	0.00
60.00	2.80	0.57	0.00
62.50	2.80	0.57	0.00
65.00	2.80	0.57	0.00
67.50	2.80	0.57	0.00
70.00	2.80	0.57	0.00
72.50	2.80	0.57	0.00
75.00	2.80	0.57	0.00
77.50	2.80	0.57	0.00
80.00	2.80	0.57	0.00
82.50	2.80	0.57	0.00
85.00	2.80	0.57	0.00
87.50	2.80	0.57	0.00
90.00	2.80	0.57	0.00
92.50	2.80	0.57	0.00
95.00	2.80	0.57	0.00
97.50	2.80	0.57	0.00
100.00	2.80	0.57	0.00
102.50	2.80	0.57	0.00
105.00	2.80	0.57	0.00
107.50	2.80	0.57	0.00
110.00	2.80	0.57	0.00
112.50	2.80	0.57	0.00
115.00	2.80	0.57	0.00
117.50	2.80	0.57	0.00
120.00	2.80	0.57	0.00

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Type II 24-hr 1 Year Rainfall=2.80"

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Summary for Subcatchment 3S: Drainage Area 3

Runoff = 59.35 cfs @ 12.06 hrs, Volume= 3.823 af, Depth= 0.83"

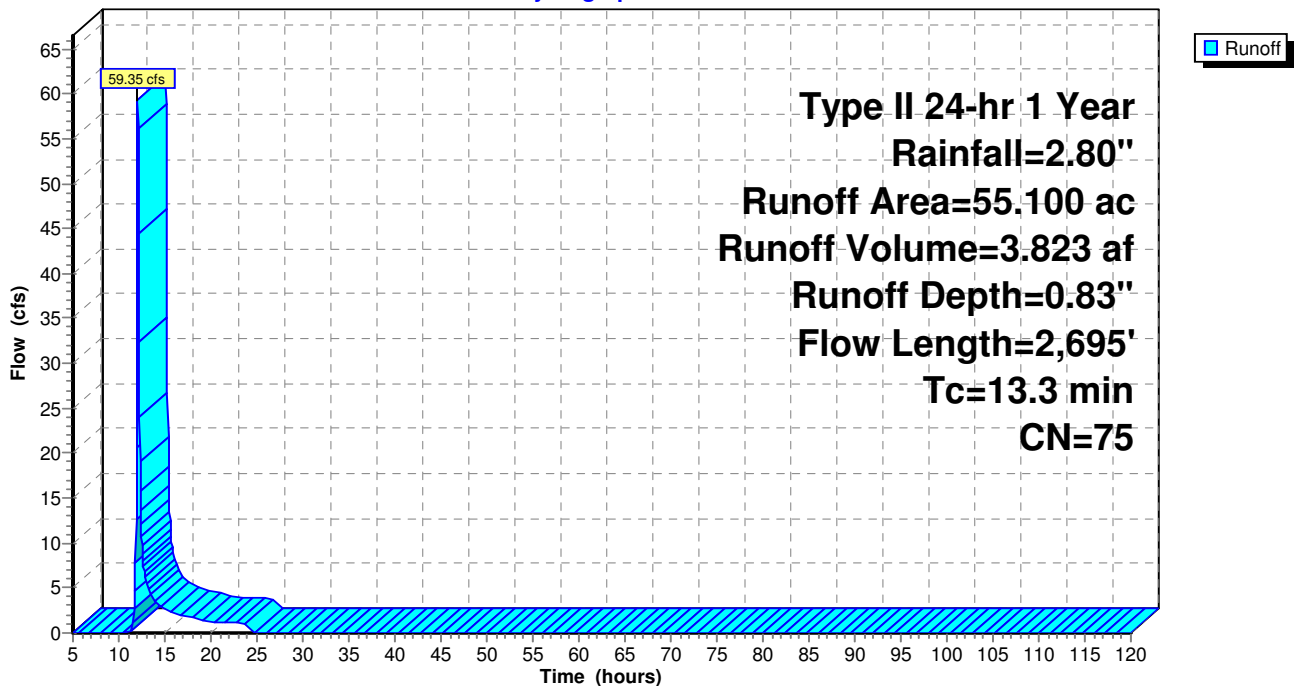
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs
Type II 24-hr 1 Year Rainfall=2.80"

Area (ac)	CN	Description
55.100	75	1/4 acre lots, 38% imp, HSG B
34.162		Pervious Area
20.938		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	100	0.1800	0.43		Sheet Flow, 1 to 2
9.4	2,595	0.0810	4.58		Shallow Concentrated Flow, 2 to DP-3
13.3	2,695	Total			Unpaved Kv= 16.1 fps

Subcatchment 3S: Drainage Area 3

Hydrograph



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Type II 24-hr 1 Year Rainfall=2.80"

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Hydrograph for Subcatchment 3S: Drainage Area 3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.18	0.00	0.00
7.50	0.31	0.00	0.00
10.00	0.51	0.00	0.00
12.50	2.06	0.41	10.79
15.00	2.39	0.59	2.75
17.50	2.55	0.68	1.82
20.00	2.67	0.75	1.28
22.50	2.75	0.80	1.14
25.00	2.80	0.83	0.00
27.50	2.80	0.83	0.00
30.00	2.80	0.83	0.00
32.50	2.80	0.83	0.00
35.00	2.80	0.83	0.00
37.50	2.80	0.83	0.00
40.00	2.80	0.83	0.00
42.50	2.80	0.83	0.00
45.00	2.80	0.83	0.00
47.50	2.80	0.83	0.00
50.00	2.80	0.83	0.00
52.50	2.80	0.83	0.00
55.00	2.80	0.83	0.00
57.50	2.80	0.83	0.00
60.00	2.80	0.83	0.00
62.50	2.80	0.83	0.00
65.00	2.80	0.83	0.00
67.50	2.80	0.83	0.00
70.00	2.80	0.83	0.00
72.50	2.80	0.83	0.00
75.00	2.80	0.83	0.00
77.50	2.80	0.83	0.00
80.00	2.80	0.83	0.00
82.50	2.80	0.83	0.00
85.00	2.80	0.83	0.00
87.50	2.80	0.83	0.00
90.00	2.80	0.83	0.00
92.50	2.80	0.83	0.00
95.00	2.80	0.83	0.00
97.50	2.80	0.83	0.00
100.00	2.80	0.83	0.00
102.50	2.80	0.83	0.00
105.00	2.80	0.83	0.00
107.50	2.80	0.83	0.00
110.00	2.80	0.83	0.00
112.50	2.80	0.83	0.00
115.00	2.80	0.83	0.00
117.50	2.80	0.83	0.00
120.00	2.80	0.83	0.00

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Type II 24-hr 1 Year Rainfall=2.80"

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Summary for Subcatchment 4S: Drainage Area 4

Runoff = 4.91 cfs @ 12.02 hrs, Volume= 0.278 af, Depth= 0.83"

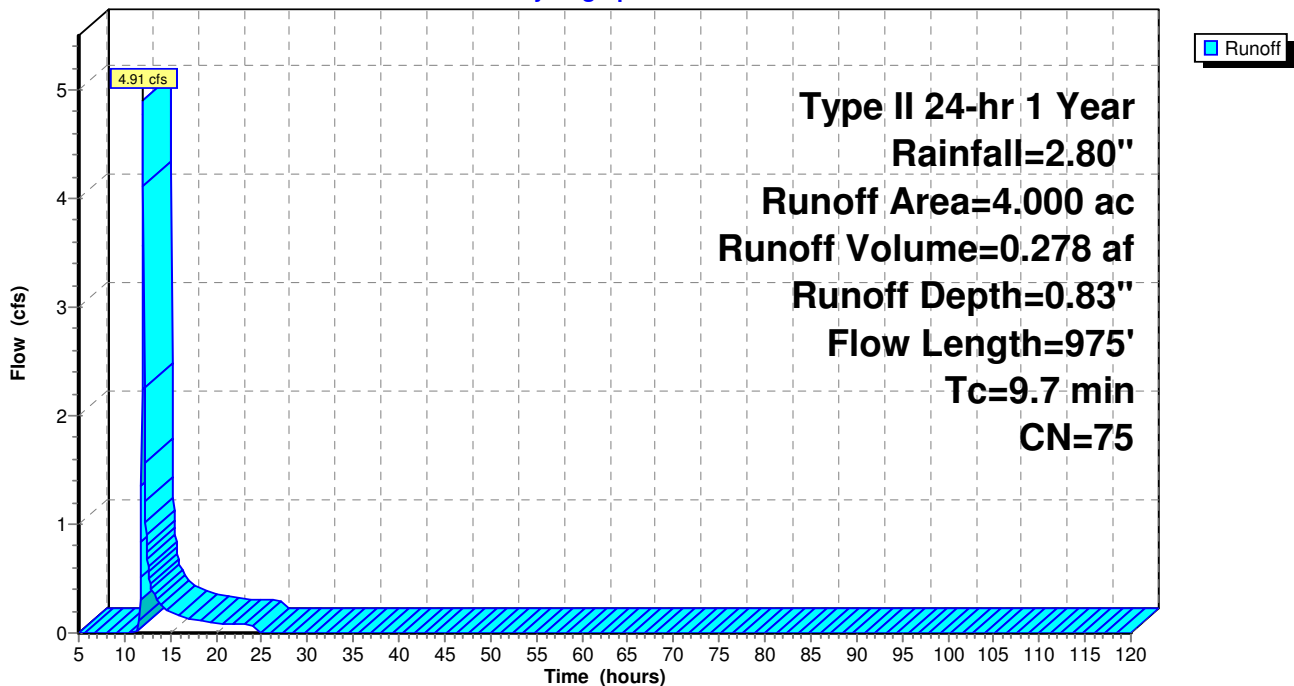
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs
Type II 24-hr 1 Year Rainfall=2.80"

Area (ac)	CN	Description
4.000	75	1/4 acre lots, 38% imp, HSG B
2.480		Pervious Area
1.520		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0500	0.26		Sheet Flow, 1 to 2
3.2	875	0.0910	4.52		Shallow Concentrated Flow, 2 to DP-4
					Grassed Waterway Kv= 15.0 fps
9.7	975	Total			

Subcatchment 4S: Drainage Area 4

Hydrograph



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Hydrograph for Subcatchment 4S: Drainage Area 4

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.18	0.00	0.00
7.50	0.31	0.00	0.00
10.00	0.51	0.00	0.00
12.50	2.06	0.41	0.67
15.00	2.39	0.59	0.20
17.50	2.55	0.68	0.13
20.00	2.67	0.75	0.09
22.50	2.75	0.80	0.08
25.00	2.80	0.83	0.00
27.50	2.80	0.83	0.00
30.00	2.80	0.83	0.00
32.50	2.80	0.83	0.00
35.00	2.80	0.83	0.00
37.50	2.80	0.83	0.00
40.00	2.80	0.83	0.00
42.50	2.80	0.83	0.00
45.00	2.80	0.83	0.00
47.50	2.80	0.83	0.00
50.00	2.80	0.83	0.00
52.50	2.80	0.83	0.00
55.00	2.80	0.83	0.00
57.50	2.80	0.83	0.00
60.00	2.80	0.83	0.00
62.50	2.80	0.83	0.00
65.00	2.80	0.83	0.00
67.50	2.80	0.83	0.00
70.00	2.80	0.83	0.00
72.50	2.80	0.83	0.00
75.00	2.80	0.83	0.00
77.50	2.80	0.83	0.00
80.00	2.80	0.83	0.00
82.50	2.80	0.83	0.00
85.00	2.80	0.83	0.00
87.50	2.80	0.83	0.00
90.00	2.80	0.83	0.00
92.50	2.80	0.83	0.00
95.00	2.80	0.83	0.00
97.50	2.80	0.83	0.00
100.00	2.80	0.83	0.00
102.50	2.80	0.83	0.00
105.00	2.80	0.83	0.00
107.50	2.80	0.83	0.00
110.00	2.80	0.83	0.00
112.50	2.80	0.83	0.00
115.00	2.80	0.83	0.00
117.50	2.80	0.83	0.00
120.00	2.80	0.83	0.00

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Summary for Subcatchment 5S: Drainage Area 5

Runoff = 18.50 cfs @ 12.05 hrs, Volume= 1.138 af, Depth= 0.83"

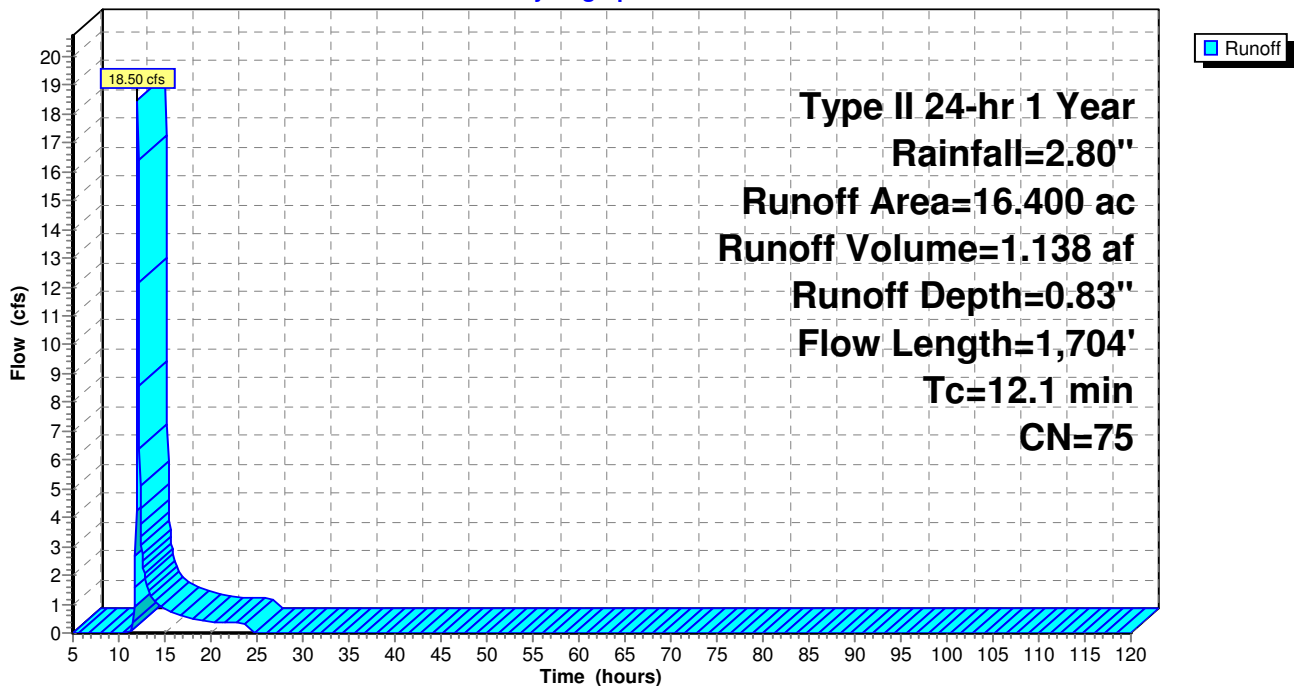
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs
Type II 24-hr 1 Year Rainfall=2.80"

Area (ac)	CN	Description
16.400	75	1/4 acre lots, 38% imp, HSG B
10.168		Pervious Area
6.232		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0500	0.26		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
5.6	1,604	0.0870	4.75		Shallow Concentrated Flow, 2 to DP-5 Unpaved Kv= 16.1 fps
12.1	1,704	Total			

Subcatchment 5S: Drainage Area 5

Hydrograph



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Hydrograph for Subcatchment 5S: Drainage Area 5

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.18	0.00	0.00
7.50	0.31	0.00	0.00
10.00	0.51	0.00	0.00
12.50	2.06	0.41	3.04
15.00	2.39	0.59	0.82
17.50	2.55	0.68	0.54
20.00	2.67	0.75	0.38
22.50	2.75	0.80	0.34
25.00	2.80	0.83	0.00
27.50	2.80	0.83	0.00
30.00	2.80	0.83	0.00
32.50	2.80	0.83	0.00
35.00	2.80	0.83	0.00
37.50	2.80	0.83	0.00
40.00	2.80	0.83	0.00
42.50	2.80	0.83	0.00
45.00	2.80	0.83	0.00
47.50	2.80	0.83	0.00
50.00	2.80	0.83	0.00
52.50	2.80	0.83	0.00
55.00	2.80	0.83	0.00
57.50	2.80	0.83	0.00
60.00	2.80	0.83	0.00
62.50	2.80	0.83	0.00
65.00	2.80	0.83	0.00
67.50	2.80	0.83	0.00
70.00	2.80	0.83	0.00
72.50	2.80	0.83	0.00
75.00	2.80	0.83	0.00
77.50	2.80	0.83	0.00
80.00	2.80	0.83	0.00
82.50	2.80	0.83	0.00
85.00	2.80	0.83	0.00
87.50	2.80	0.83	0.00
90.00	2.80	0.83	0.00
92.50	2.80	0.83	0.00
95.00	2.80	0.83	0.00
97.50	2.80	0.83	0.00
100.00	2.80	0.83	0.00
102.50	2.80	0.83	0.00
105.00	2.80	0.83	0.00
107.50	2.80	0.83	0.00
110.00	2.80	0.83	0.00
112.50	2.80	0.83	0.00
115.00	2.80	0.83	0.00
117.50	2.80	0.83	0.00
120.00	2.80	0.83	0.00

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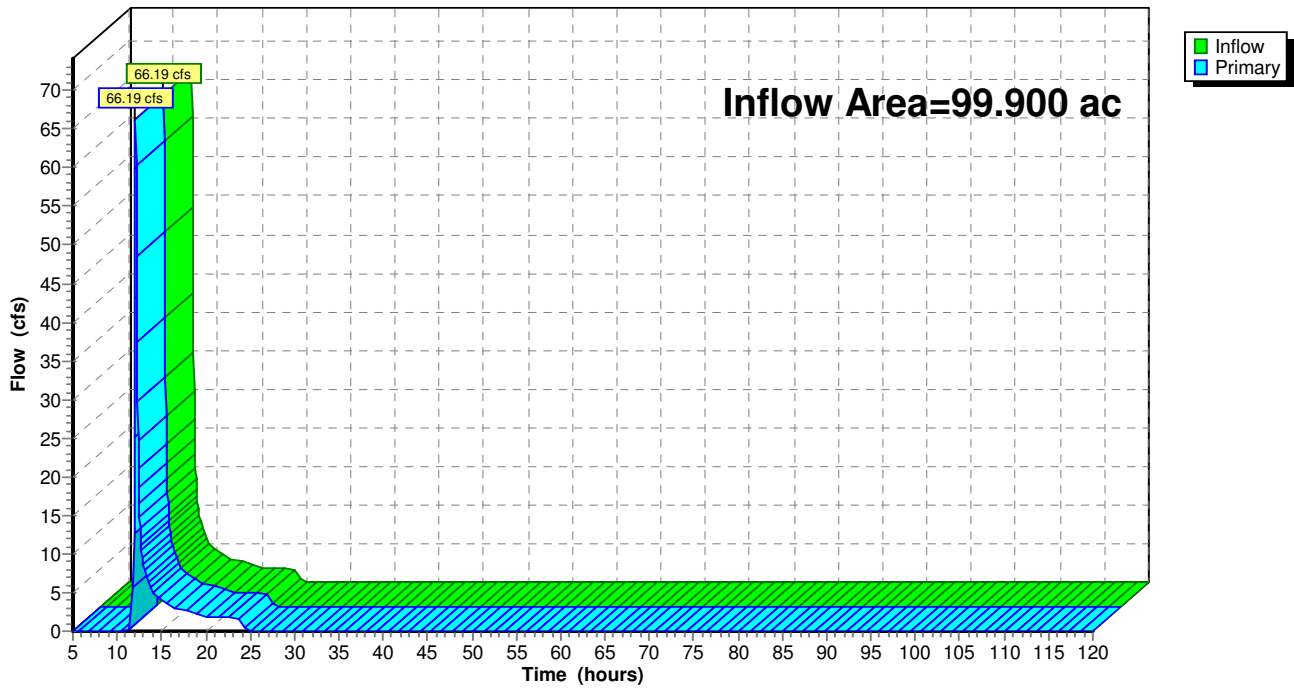
Summary for Link DP-1: DP-1

Inflow Area = 99.900 ac, 23.34% Impervious, Inflow Depth = 0.61" for 1 Year event
Inflow = 66.19 cfs @ 12.10 hrs, Volume= 5.045 af
Primary = 66.19 cfs @ 12.10 hrs, Volume= 5.045 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs

Link DP-1: DP-1

Hydrograph



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Hydrograph for Link DP-1: DP-1

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00
12.50	16.48	0.00	16.48
15.00	4.05	0.00	4.05
17.50	2.71	0.00	2.71
20.00	1.93	0.00	1.93
22.50	1.73	0.00	1.73
25.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00
30.00	0.00	0.00	0.00
32.50	0.00	0.00	0.00
35.00	0.00	0.00	0.00
37.50	0.00	0.00	0.00
40.00	0.00	0.00	0.00
42.50	0.00	0.00	0.00
45.00	0.00	0.00	0.00
47.50	0.00	0.00	0.00
50.00	0.00	0.00	0.00
52.50	0.00	0.00	0.00
55.00	0.00	0.00	0.00
57.50	0.00	0.00	0.00
60.00	0.00	0.00	0.00
62.50	0.00	0.00	0.00
65.00	0.00	0.00	0.00
67.50	0.00	0.00	0.00
70.00	0.00	0.00	0.00
72.50	0.00	0.00	0.00
75.00	0.00	0.00	0.00
77.50	0.00	0.00	0.00
80.00	0.00	0.00	0.00
82.50	0.00	0.00	0.00
85.00	0.00	0.00	0.00
87.50	0.00	0.00	0.00
90.00	0.00	0.00	0.00
92.50	0.00	0.00	0.00
95.00	0.00	0.00	0.00
97.50	0.00	0.00	0.00
100.00	0.00	0.00	0.00
102.50	0.00	0.00	0.00
105.00	0.00	0.00	0.00
107.50	0.00	0.00	0.00
110.00	0.00	0.00	0.00
112.50	0.00	0.00	0.00
115.00	0.00	0.00	0.00
117.50	0.00	0.00	0.00
120.00	0.00	0.00	0.00

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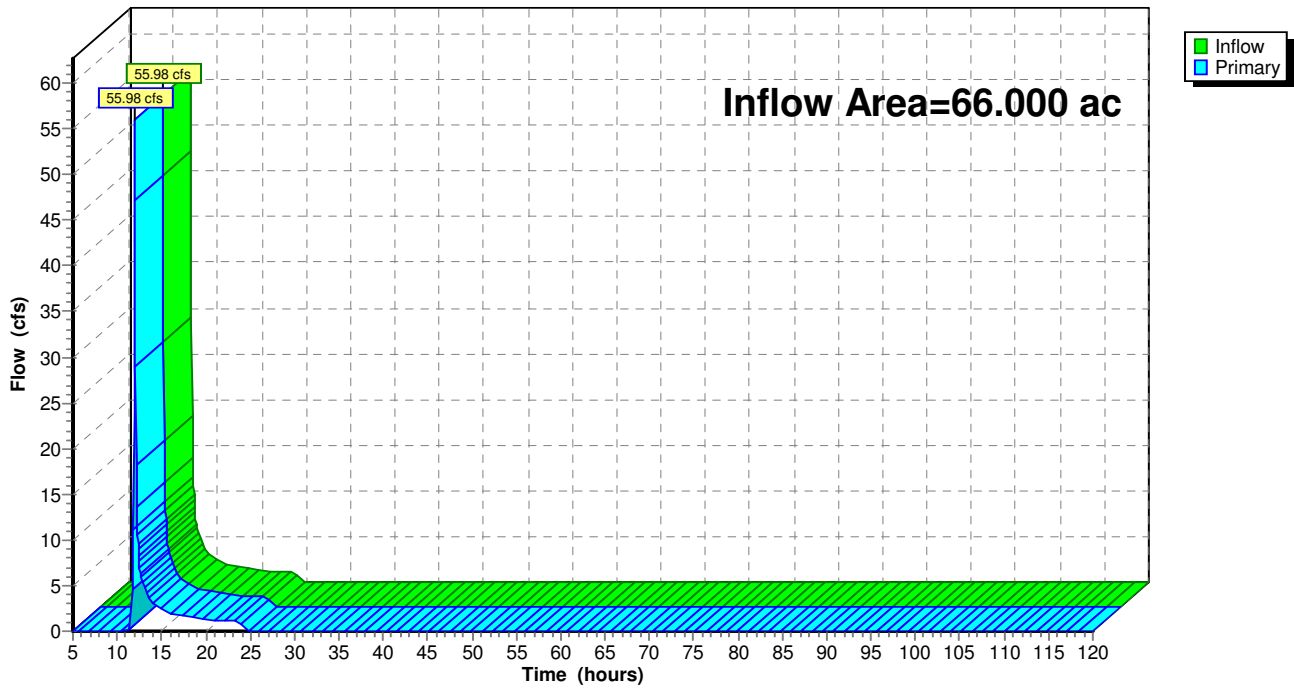
Summary for Link DP-2: DP-2

Inflow Area = 66.000 ac, 19.90% Impervious, Inflow Depth = 0.57" for 1 Year event
Inflow = 55.98 cfs @ 12.01 hrs, Volume= 3.110 af
Primary = 55.98 cfs @ 12.01 hrs, Volume= 3.110 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs

Link DP-2: DP-2

Hydrograph



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Hydrograph for Link DP-2: DP-2

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00
12.50	7.61	0.00	7.61
15.00	2.49	0.00	2.49
17.50	1.69	0.00	1.69
20.00	1.20	0.00	1.20
22.50	1.10	0.00	1.10
25.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00
30.00	0.00	0.00	0.00
32.50	0.00	0.00	0.00
35.00	0.00	0.00	0.00
37.50	0.00	0.00	0.00
40.00	0.00	0.00	0.00
42.50	0.00	0.00	0.00
45.00	0.00	0.00	0.00
47.50	0.00	0.00	0.00
50.00	0.00	0.00	0.00
52.50	0.00	0.00	0.00
55.00	0.00	0.00	0.00
57.50	0.00	0.00	0.00
60.00	0.00	0.00	0.00
62.50	0.00	0.00	0.00
65.00	0.00	0.00	0.00
67.50	0.00	0.00	0.00
70.00	0.00	0.00	0.00
72.50	0.00	0.00	0.00
75.00	0.00	0.00	0.00
77.50	0.00	0.00	0.00
80.00	0.00	0.00	0.00
82.50	0.00	0.00	0.00
85.00	0.00	0.00	0.00
87.50	0.00	0.00	0.00
90.00	0.00	0.00	0.00
92.50	0.00	0.00	0.00
95.00	0.00	0.00	0.00
97.50	0.00	0.00	0.00
100.00	0.00	0.00	0.00
102.50	0.00	0.00	0.00
105.00	0.00	0.00	0.00
107.50	0.00	0.00	0.00
110.00	0.00	0.00	0.00
112.50	0.00	0.00	0.00
115.00	0.00	0.00	0.00
117.50	0.00	0.00	0.00
120.00	0.00	0.00	0.00

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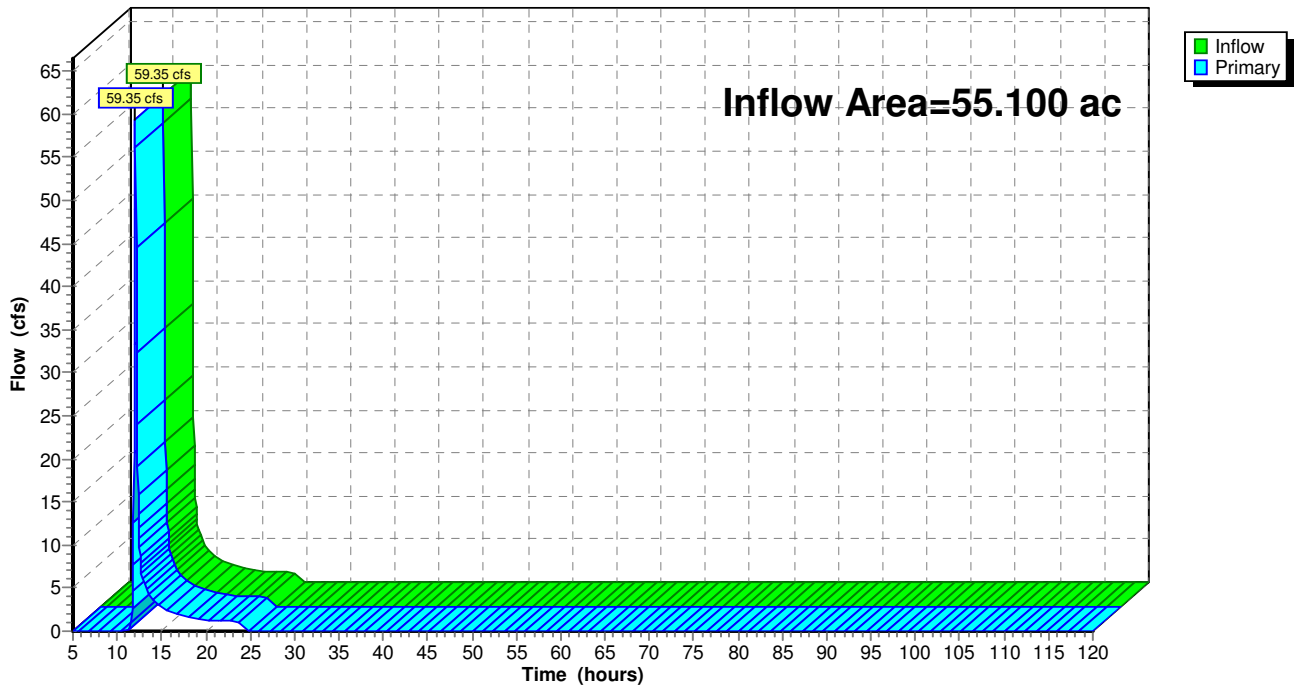
Summary for Link DP-3: DP-3

Inflow Area = 55.100 ac, 38.00% Impervious, Inflow Depth = 0.83" for 1 Year event
Inflow = 59.35 cfs @ 12.06 hrs, Volume= 3.823 af
Primary = 59.35 cfs @ 12.06 hrs, Volume= 3.823 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs

Link DP-3: DP-3

Hydrograph



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Hydrograph for Link DP-3: DP-3

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00
12.50	10.79	0.00	10.79
15.00	2.75	0.00	2.75
17.50	1.82	0.00	1.82
20.00	1.28	0.00	1.28
22.50	1.14	0.00	1.14
25.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00
30.00	0.00	0.00	0.00
32.50	0.00	0.00	0.00
35.00	0.00	0.00	0.00
37.50	0.00	0.00	0.00
40.00	0.00	0.00	0.00
42.50	0.00	0.00	0.00
45.00	0.00	0.00	0.00
47.50	0.00	0.00	0.00
50.00	0.00	0.00	0.00
52.50	0.00	0.00	0.00
55.00	0.00	0.00	0.00
57.50	0.00	0.00	0.00
60.00	0.00	0.00	0.00
62.50	0.00	0.00	0.00
65.00	0.00	0.00	0.00
67.50	0.00	0.00	0.00
70.00	0.00	0.00	0.00
72.50	0.00	0.00	0.00
75.00	0.00	0.00	0.00
77.50	0.00	0.00	0.00
80.00	0.00	0.00	0.00
82.50	0.00	0.00	0.00
85.00	0.00	0.00	0.00
87.50	0.00	0.00	0.00
90.00	0.00	0.00	0.00
92.50	0.00	0.00	0.00
95.00	0.00	0.00	0.00
97.50	0.00	0.00	0.00
100.00	0.00	0.00	0.00
102.50	0.00	0.00	0.00
105.00	0.00	0.00	0.00
107.50	0.00	0.00	0.00
110.00	0.00	0.00	0.00
112.50	0.00	0.00	0.00
115.00	0.00	0.00	0.00
117.50	0.00	0.00	0.00
120.00	0.00	0.00	0.00

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Type II 24-hr 1 Year Rainfall=2.80"

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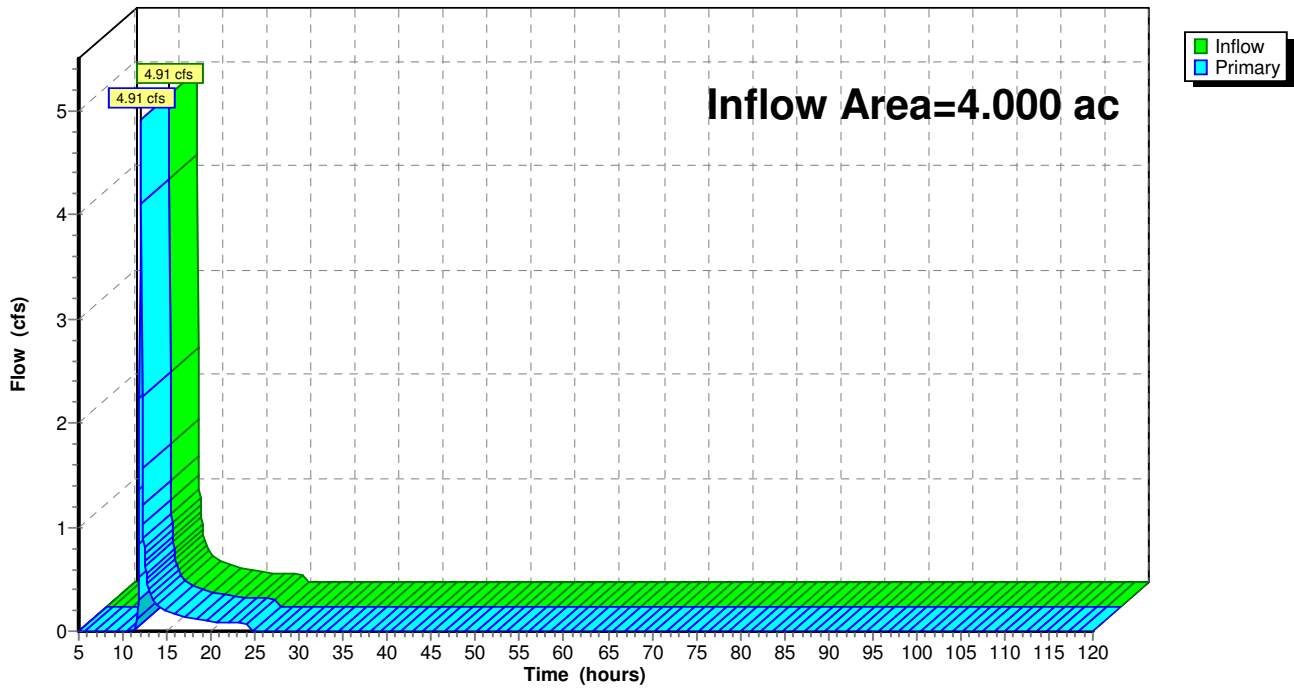
Summary for Link DP-4: DP-4

Inflow Area = 4.000 ac, 38.00% Impervious, Inflow Depth = 0.83" for 1 Year event
Inflow = 4.91 cfs @ 12.02 hrs, Volume= 0.278 af
Primary = 4.91 cfs @ 12.02 hrs, Volume= 0.278 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs

Link DP-4: DP-4

Hydrograph



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Hydrograph for Link DP-4: DP-4

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00
12.50	0.67	0.00	0.67
15.00	0.20	0.00	0.20
17.50	0.13	0.00	0.13
20.00	0.09	0.00	0.09
22.50	0.08	0.00	0.08
25.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00
30.00	0.00	0.00	0.00
32.50	0.00	0.00	0.00
35.00	0.00	0.00	0.00
37.50	0.00	0.00	0.00
40.00	0.00	0.00	0.00
42.50	0.00	0.00	0.00
45.00	0.00	0.00	0.00
47.50	0.00	0.00	0.00
50.00	0.00	0.00	0.00
52.50	0.00	0.00	0.00
55.00	0.00	0.00	0.00
57.50	0.00	0.00	0.00
60.00	0.00	0.00	0.00
62.50	0.00	0.00	0.00
65.00	0.00	0.00	0.00
67.50	0.00	0.00	0.00
70.00	0.00	0.00	0.00
72.50	0.00	0.00	0.00
75.00	0.00	0.00	0.00
77.50	0.00	0.00	0.00
80.00	0.00	0.00	0.00
82.50	0.00	0.00	0.00
85.00	0.00	0.00	0.00
87.50	0.00	0.00	0.00
90.00	0.00	0.00	0.00
92.50	0.00	0.00	0.00
95.00	0.00	0.00	0.00
97.50	0.00	0.00	0.00
100.00	0.00	0.00	0.00
102.50	0.00	0.00	0.00
105.00	0.00	0.00	0.00
107.50	0.00	0.00	0.00
110.00	0.00	0.00	0.00
112.50	0.00	0.00	0.00
115.00	0.00	0.00	0.00
117.50	0.00	0.00	0.00
120.00	0.00	0.00	0.00

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Type II 24-hr 1 Year Rainfall=2.80"

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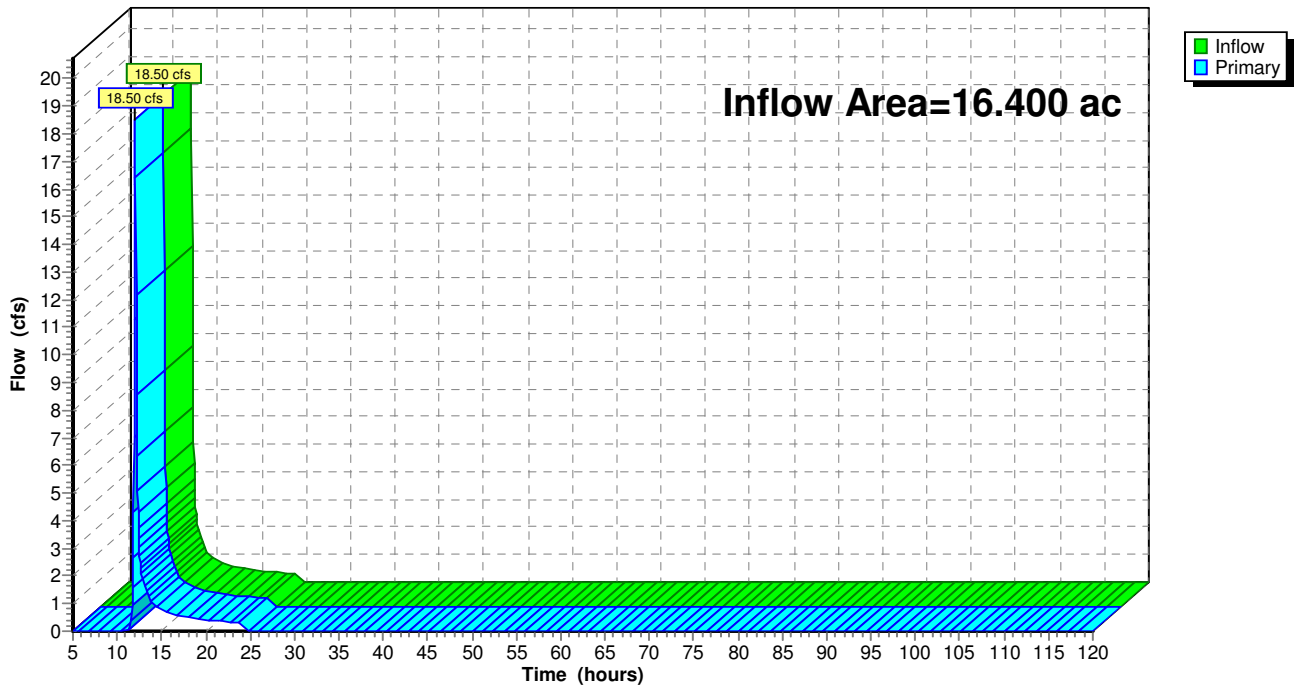
Summary for Link DP-5: DP-5

Inflow Area = 16.400 ac, 38.00% Impervious, Inflow Depth = 0.83" for 1 Year event
Inflow = 18.50 cfs @ 12.05 hrs, Volume= 1.138 af
Primary = 18.50 cfs @ 12.05 hrs, Volume= 1.138 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs

Link DP-5: DP-5

Hydrograph



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Hydrograph for Link DP-5: DP-5

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00
12.50	3.04	0.00	3.04
15.00	0.82	0.00	0.82
17.50	0.54	0.00	0.54
20.00	0.38	0.00	0.38
22.50	0.34	0.00	0.34
25.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00
30.00	0.00	0.00	0.00
32.50	0.00	0.00	0.00
35.00	0.00	0.00	0.00
37.50	0.00	0.00	0.00
40.00	0.00	0.00	0.00
42.50	0.00	0.00	0.00
45.00	0.00	0.00	0.00
47.50	0.00	0.00	0.00
50.00	0.00	0.00	0.00
52.50	0.00	0.00	0.00
55.00	0.00	0.00	0.00
57.50	0.00	0.00	0.00
60.00	0.00	0.00	0.00
62.50	0.00	0.00	0.00
65.00	0.00	0.00	0.00
67.50	0.00	0.00	0.00
70.00	0.00	0.00	0.00
72.50	0.00	0.00	0.00
75.00	0.00	0.00	0.00
77.50	0.00	0.00	0.00
80.00	0.00	0.00	0.00
82.50	0.00	0.00	0.00
85.00	0.00	0.00	0.00
87.50	0.00	0.00	0.00
90.00	0.00	0.00	0.00
92.50	0.00	0.00	0.00
95.00	0.00	0.00	0.00
97.50	0.00	0.00	0.00
100.00	0.00	0.00	0.00
102.50	0.00	0.00	0.00
105.00	0.00	0.00	0.00
107.50	0.00	0.00	0.00
110.00	0.00	0.00	0.00
112.50	0.00	0.00	0.00
115.00	0.00	0.00	0.00
117.50	0.00	0.00	0.00
120.00	0.00	0.00	0.00

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Type II 24-hr 2 Year Rainfall=3.50"

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Time span=5.00-120.00 hrs, dt=0.05 hrs, 2301 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Drainage Area 1 Runoff Area=99.900 ac 23.34% Impervious Runoff Depth=1.01"
Flow Length=2,888' Tc=15.5 min CN=70 Runoff=119.42 cfs 8.392 af

Subcatchment 2S: Drainage Area 2 Runoff Area=66.000 ac 19.90% Impervious Runoff Depth=0.95"
Flow Length=1,524' Tc=7.5 min CN=69 Runoff=101.08 cfs 5.247 af

Subcatchment 3S: Drainage Area 3 Runoff Area=55.100 ac 38.00% Impervious Runoff Depth=1.30"
Flow Length=2,695' Tc=13.3 min CN=75 Runoff=95.90 cfs 5.977 af

Subcatchment 4S: Drainage Area 4 Runoff Area=4.000 ac 38.00% Impervious Runoff Depth=1.30"
Flow Length=975' Tc=9.7 min CN=75 Runoff=7.89 cfs 0.434 af

Subcatchment 5S: Drainage Area 5 Runoff Area=16.400 ac 38.00% Impervious Runoff Depth=1.30"
Flow Length=1,704' Tc=12.1 min CN=75 Runoff=29.81 cfs 1.779 af

Link DP-1: DP-1 Inflow=119.42 cfs 8.392 af
Primary=119.42 cfs 8.392 af

Link DP-2: DP-2 Inflow=101.08 cfs 5.247 af
Primary=101.08 cfs 5.247 af

Link DP-3: DP-3 Inflow=95.90 cfs 5.977 af
Primary=95.90 cfs 5.977 af

Link DP-4: DP-4 Inflow=7.89 cfs 0.434 af
Primary=7.89 cfs 0.434 af

Link DP-5: DP-5 Inflow=29.81 cfs 1.779 af
Primary=29.81 cfs 1.779 af

Total Runoff Area = 241.400 ac Runoff Volume = 21.830 af Average Runoff Depth = 1.09"
73.02% Pervious = 176.265 ac 26.98% Impervious = 65.135 ac

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Type II 24-hr 2 Year Rainfall=3.50"

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Summary for Subcatchment 1S: Drainage Area 1

Runoff = 119.42 cfs @ 12.09 hrs, Volume= 8.392 af, Depth= 1.01"

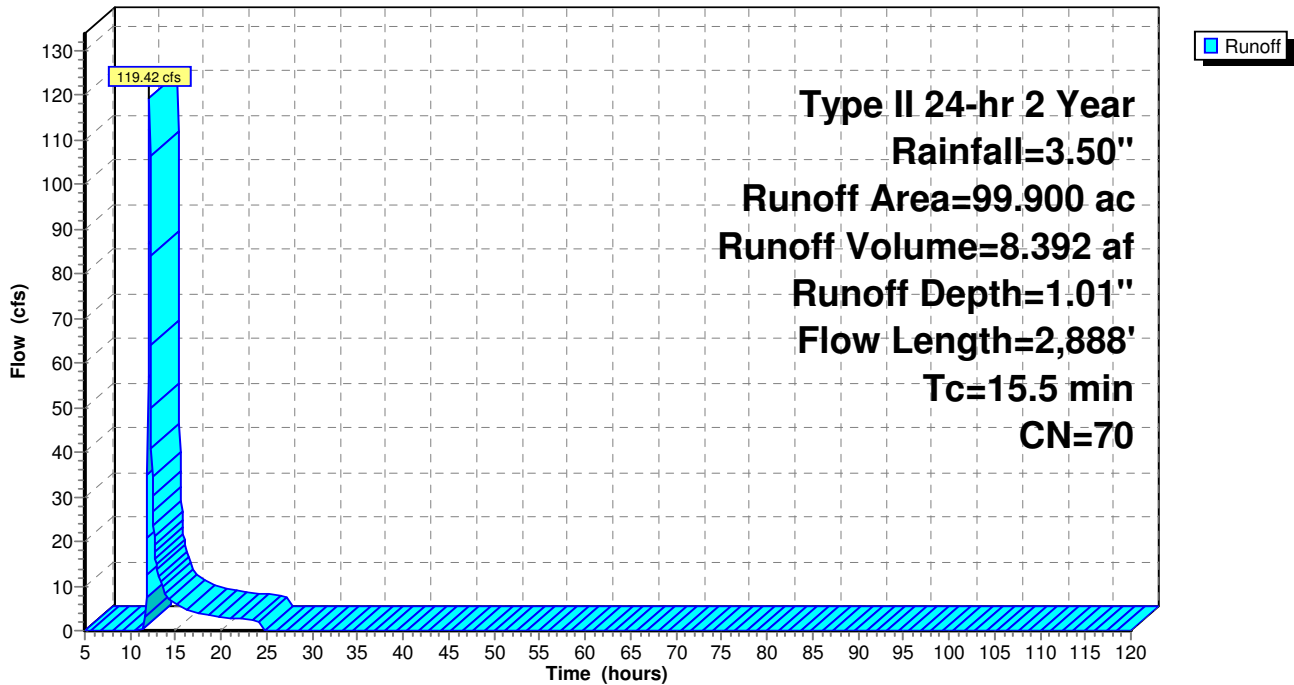
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs
Type II 24-hr 2 Year Rainfall=3.50"

Area (ac)	CN	Description
93.250	70	1/2 acre lots, 25% imp, HSG B
6.650	65	Woods/grass comb., Fair, HSG B
99.900	70	Weighted Average
76.587		Pervious Area
23.312		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	100	0.1200	0.36		Sheet Flow, 1 to 2
10.9	2,788	0.0700	4.26		Grass: Short n= 0.150 P2= 3.50" Shallow Concentrated Flow, 2 to DP-1
15.5	2,888	Total			Unpaved Kv= 16.1 fps

Subcatchment 1S: Drainage Area 1

Hydrograph



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Hydrograph for Subcatchment 1S: Drainage Area 1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00
7.50	0.38	0.00	0.00
10.00	0.63	0.00	0.00
12.50	2.57	0.49	26.58
15.00	2.99	0.71	6.14
17.50	3.19	0.82	4.05
20.00	3.33	0.91	2.86
22.50	3.44	0.97	2.55
25.00	3.50	1.01	0.00
27.50	3.50	1.01	0.00
30.00	3.50	1.01	0.00
32.50	3.50	1.01	0.00
35.00	3.50	1.01	0.00
37.50	3.50	1.01	0.00
40.00	3.50	1.01	0.00
42.50	3.50	1.01	0.00
45.00	3.50	1.01	0.00
47.50	3.50	1.01	0.00
50.00	3.50	1.01	0.00
52.50	3.50	1.01	0.00
55.00	3.50	1.01	0.00
57.50	3.50	1.01	0.00
60.00	3.50	1.01	0.00
62.50	3.50	1.01	0.00
65.00	3.50	1.01	0.00
67.50	3.50	1.01	0.00
70.00	3.50	1.01	0.00
72.50	3.50	1.01	0.00
75.00	3.50	1.01	0.00
77.50	3.50	1.01	0.00
80.00	3.50	1.01	0.00
82.50	3.50	1.01	0.00
85.00	3.50	1.01	0.00
87.50	3.50	1.01	0.00
90.00	3.50	1.01	0.00
92.50	3.50	1.01	0.00
95.00	3.50	1.01	0.00
97.50	3.50	1.01	0.00
100.00	3.50	1.01	0.00
102.50	3.50	1.01	0.00
105.00	3.50	1.01	0.00
107.50	3.50	1.01	0.00
110.00	3.50	1.01	0.00
112.50	3.50	1.01	0.00
115.00	3.50	1.01	0.00
117.50	3.50	1.01	0.00
120.00	3.50	1.01	0.00

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Type II 24-hr 2 Year Rainfall=3.50"

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Summary for Subcatchment 2S: Drainage Area 2

Runoff = 101.08 cfs @ 12.00 hrs, Volume= 5.247 af, Depth= 0.95"

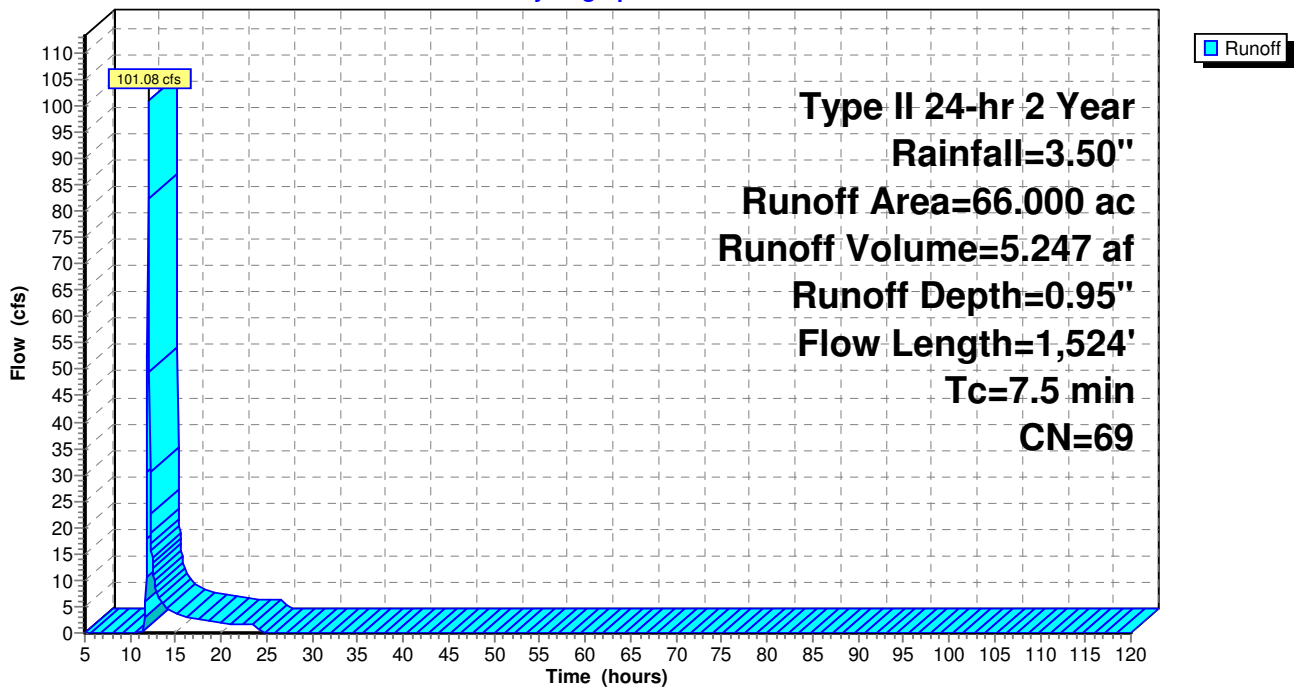
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs
Type II 24-hr 2 Year Rainfall=3.50"

Area (ac)	CN	Description
52.530	70	1/2 acre lots, 25% imp, HSG B
13.470	65	Woods/grass comb., Fair, HSG B
66.000	69	Weighted Average
52.867		Pervious Area
13.132		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.7	100	0.2000	0.45		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
2.7	1,115	0.1800	6.83		Shallow Concentrated Flow, 2 to DP-2 Unpaved Kv= 16.1 fps
1.1	309	0.0100	4.56	68.35	Channel Flow, 3 to dp-2 Area= 15.0 sf Perim= 17.0' r= 0.88' n= 0.030 Stream, clean & straight
7.5	1,524	Total			

Subcatchment 2S: Drainage Area 2

Hydrograph



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Hydrograph for Subcatchment 2S: Drainage Area 2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00
7.50	0.38	0.00	0.00
10.00	0.63	0.00	0.00
12.50	2.57	0.45	12.19
15.00	2.99	0.66	3.82
17.50	3.19	0.77	2.55
20.00	3.33	0.85	1.79
22.50	3.44	0.92	1.63
25.00	3.50	0.95	0.00
27.50	3.50	0.95	0.00
30.00	3.50	0.95	0.00
32.50	3.50	0.95	0.00
35.00	3.50	0.95	0.00
37.50	3.50	0.95	0.00
40.00	3.50	0.95	0.00
42.50	3.50	0.95	0.00
45.00	3.50	0.95	0.00
47.50	3.50	0.95	0.00
50.00	3.50	0.95	0.00
52.50	3.50	0.95	0.00
55.00	3.50	0.95	0.00
57.50	3.50	0.95	0.00
60.00	3.50	0.95	0.00
62.50	3.50	0.95	0.00
65.00	3.50	0.95	0.00
67.50	3.50	0.95	0.00
70.00	3.50	0.95	0.00
72.50	3.50	0.95	0.00
75.00	3.50	0.95	0.00
77.50	3.50	0.95	0.00
80.00	3.50	0.95	0.00
82.50	3.50	0.95	0.00
85.00	3.50	0.95	0.00
87.50	3.50	0.95	0.00
90.00	3.50	0.95	0.00
92.50	3.50	0.95	0.00
95.00	3.50	0.95	0.00
97.50	3.50	0.95	0.00
100.00	3.50	0.95	0.00
102.50	3.50	0.95	0.00
105.00	3.50	0.95	0.00
107.50	3.50	0.95	0.00
110.00	3.50	0.95	0.00
112.50	3.50	0.95	0.00
115.00	3.50	0.95	0.00
117.50	3.50	0.95	0.00
120.00	3.50	0.95	0.00

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Summary for Subcatchment 3S: Drainage Area 3

Runoff = 95.90 cfs @ 12.06 hrs, Volume= 5.977 af, Depth= 1.30"

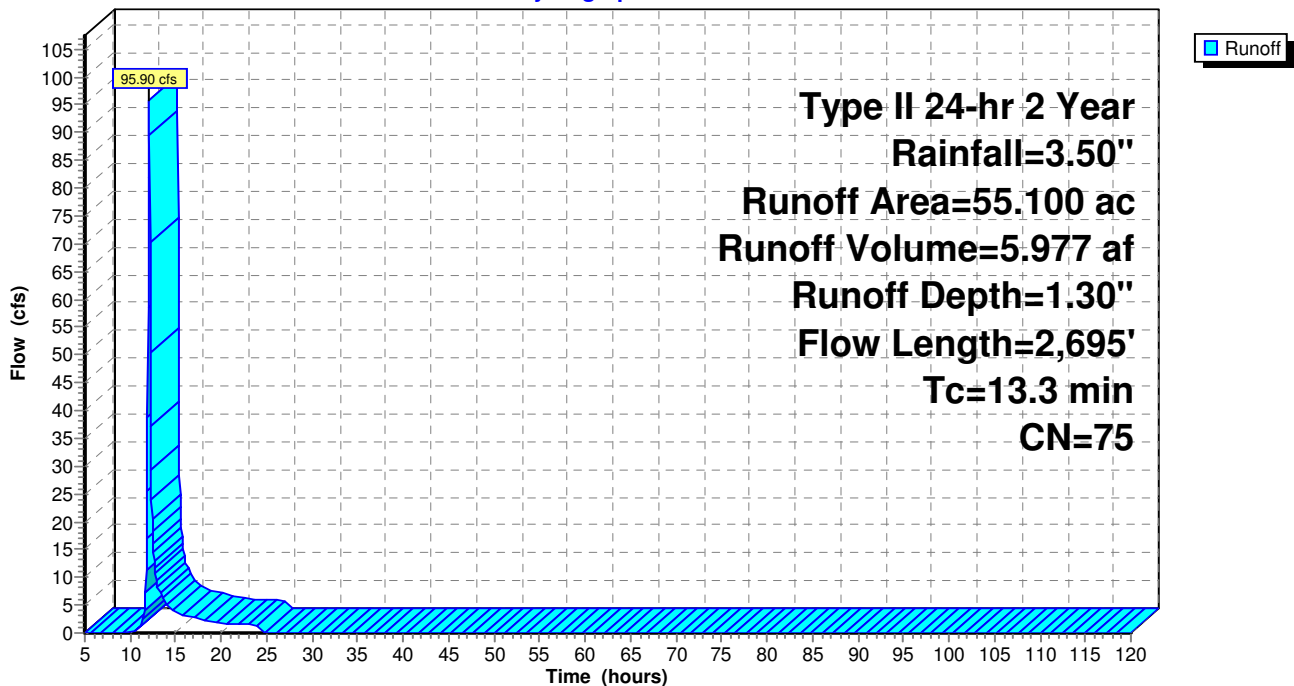
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs
 Type II 24-hr 2 Year Rainfall=3.50"

Area (ac)	CN	Description
55.100	75	1/4 acre lots, 38% imp, HSG B
34.162		Pervious Area
20.938		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	100	0.1800	0.43		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
9.4	2,595	0.0810	4.58		Shallow Concentrated Flow, 2 to DP-3 Unpaved Kv= 16.1 fps
13.3	2,695	Total			

Subcatchment 3S: Drainage Area 3

Hydrograph



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Type II 24-hr 2 Year Rainfall=3.50"

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Hydrograph for Subcatchment 3S: Drainage Area 3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00
7.50	0.38	0.00	0.00
10.00	0.63	0.00	0.00
12.50	2.57	0.69	16.16
15.00	2.99	0.95	3.97
17.50	3.19	1.09	2.59
20.00	3.33	1.18	1.81
22.50	3.44	1.26	1.62
25.00	3.50	1.30	0.00
27.50	3.50	1.30	0.00
30.00	3.50	1.30	0.00
32.50	3.50	1.30	0.00
35.00	3.50	1.30	0.00
37.50	3.50	1.30	0.00
40.00	3.50	1.30	0.00
42.50	3.50	1.30	0.00
45.00	3.50	1.30	0.00
47.50	3.50	1.30	0.00
50.00	3.50	1.30	0.00
52.50	3.50	1.30	0.00
55.00	3.50	1.30	0.00
57.50	3.50	1.30	0.00
60.00	3.50	1.30	0.00
62.50	3.50	1.30	0.00
65.00	3.50	1.30	0.00
67.50	3.50	1.30	0.00
70.00	3.50	1.30	0.00
72.50	3.50	1.30	0.00
75.00	3.50	1.30	0.00
77.50	3.50	1.30	0.00
80.00	3.50	1.30	0.00
82.50	3.50	1.30	0.00
85.00	3.50	1.30	0.00
87.50	3.50	1.30	0.00
90.00	3.50	1.30	0.00
92.50	3.50	1.30	0.00
95.00	3.50	1.30	0.00
97.50	3.50	1.30	0.00
100.00	3.50	1.30	0.00
102.50	3.50	1.30	0.00
105.00	3.50	1.30	0.00
107.50	3.50	1.30	0.00
110.00	3.50	1.30	0.00
112.50	3.50	1.30	0.00
115.00	3.50	1.30	0.00
117.50	3.50	1.30	0.00
120.00	3.50	1.30	0.00

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Summary for Subcatchment 4S: Drainage Area 4

Runoff = 7.89 cfs @ 12.02 hrs, Volume= 0.434 af, Depth= 1.30"

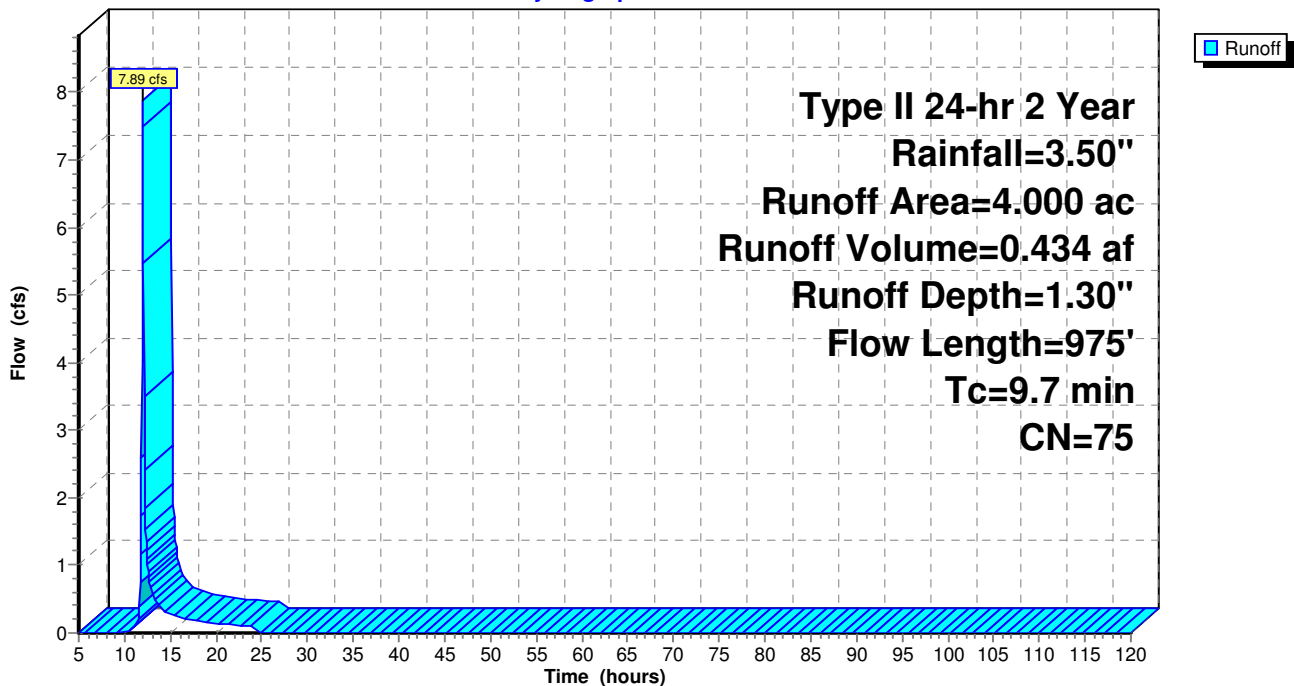
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs
Type II 24-hr 2 Year Rainfall=3.50"

Area (ac)	CN	Description
4.000	75	1/4 acre lots, 38% imp, HSG B
2.480		Pervious Area
1.520		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0500	0.26		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
3.2	875	0.0910	4.52		Shallow Concentrated Flow, 2 to DP-4 Grassed Waterway Kv= 15.0 fps
9.7	975	Total			

Subcatchment 4S: Drainage Area 4

Hydrograph



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Type II 24-hr 2 Year Rainfall=3.50"

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Hydrograph for Subcatchment 4S: Drainage Area 4

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00
7.50	0.38	0.00	0.00
10.00	0.63	0.00	0.00
12.50	2.57	0.69	1.00
15.00	2.99	0.95	0.29
17.50	3.19	1.09	0.19
20.00	3.33	1.18	0.13
22.50	3.44	1.26	0.12
25.00	3.50	1.30	0.00
27.50	3.50	1.30	0.00
30.00	3.50	1.30	0.00
32.50	3.50	1.30	0.00
35.00	3.50	1.30	0.00
37.50	3.50	1.30	0.00
40.00	3.50	1.30	0.00
42.50	3.50	1.30	0.00
45.00	3.50	1.30	0.00
47.50	3.50	1.30	0.00
50.00	3.50	1.30	0.00
52.50	3.50	1.30	0.00
55.00	3.50	1.30	0.00
57.50	3.50	1.30	0.00
60.00	3.50	1.30	0.00
62.50	3.50	1.30	0.00
65.00	3.50	1.30	0.00
67.50	3.50	1.30	0.00
70.00	3.50	1.30	0.00
72.50	3.50	1.30	0.00
75.00	3.50	1.30	0.00
77.50	3.50	1.30	0.00
80.00	3.50	1.30	0.00
82.50	3.50	1.30	0.00
85.00	3.50	1.30	0.00
87.50	3.50	1.30	0.00
90.00	3.50	1.30	0.00
92.50	3.50	1.30	0.00
95.00	3.50	1.30	0.00
97.50	3.50	1.30	0.00
100.00	3.50	1.30	0.00
102.50	3.50	1.30	0.00
105.00	3.50	1.30	0.00
107.50	3.50	1.30	0.00
110.00	3.50	1.30	0.00
112.50	3.50	1.30	0.00
115.00	3.50	1.30	0.00
117.50	3.50	1.30	0.00
120.00	3.50	1.30	0.00

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Type II 24-hr 2 Year Rainfall=3.50"

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Summary for Subcatchment 5S: Drainage Area 5

Runoff = 29.81 cfs @ 12.05 hrs, Volume= 1.779 af, Depth= 1.30"

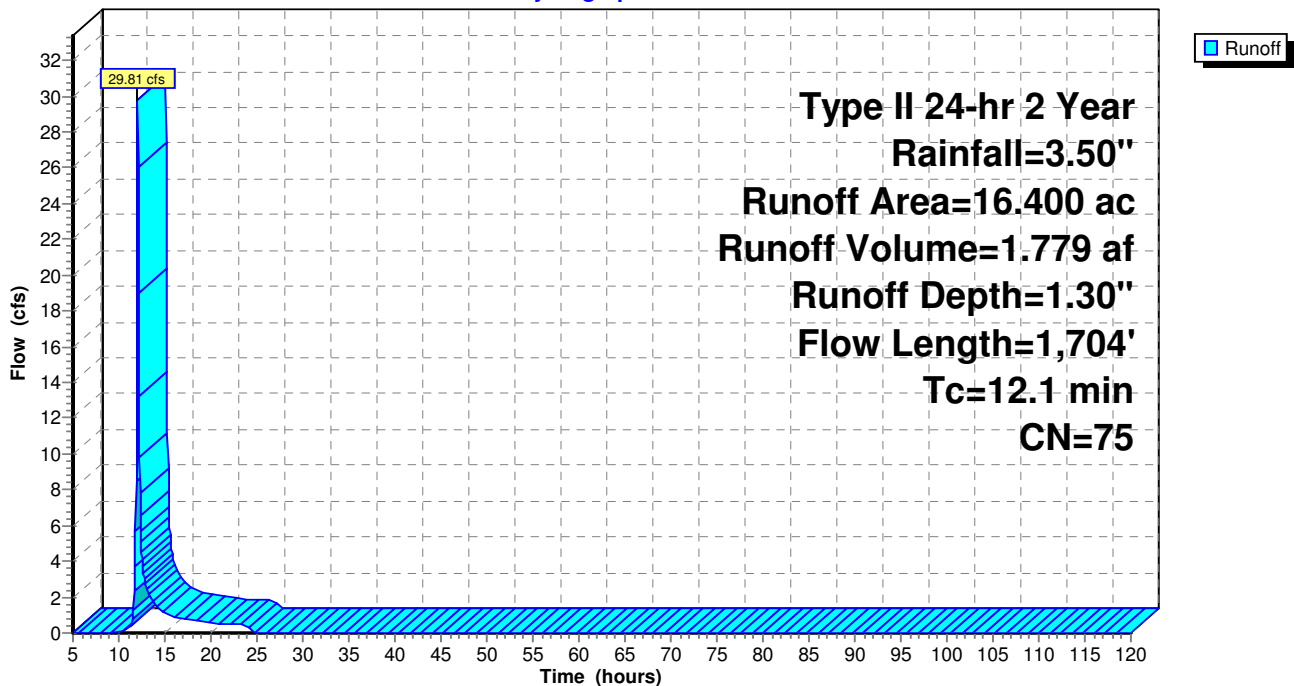
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs
Type II 24-hr 2 Year Rainfall=3.50"

Area (ac)	CN	Description
16.400	75	1/4 acre lots, 38% imp, HSG B
10.168		Pervious Area
6.232		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0500	0.26		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
5.6	1,604	0.0870	4.75		Shallow Concentrated Flow, 2 to DP-5 Unpaved Kv= 16.1 fps
12.1	1,704	Total			

Subcatchment 5S: Drainage Area 5

Hydrograph



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Hydrograph for Subcatchment 5S: Drainage Area 5

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00
7.50	0.38	0.00	0.00
10.00	0.63	0.00	0.00
12.50	2.57	0.69	4.54
15.00	2.99	0.95	1.18
17.50	3.19	1.09	0.77
20.00	3.33	1.18	0.54
22.50	3.44	1.26	0.48
25.00	3.50	1.30	0.00
27.50	3.50	1.30	0.00
30.00	3.50	1.30	0.00
32.50	3.50	1.30	0.00
35.00	3.50	1.30	0.00
37.50	3.50	1.30	0.00
40.00	3.50	1.30	0.00
42.50	3.50	1.30	0.00
45.00	3.50	1.30	0.00
47.50	3.50	1.30	0.00
50.00	3.50	1.30	0.00
52.50	3.50	1.30	0.00
55.00	3.50	1.30	0.00
57.50	3.50	1.30	0.00
60.00	3.50	1.30	0.00
62.50	3.50	1.30	0.00
65.00	3.50	1.30	0.00
67.50	3.50	1.30	0.00
70.00	3.50	1.30	0.00
72.50	3.50	1.30	0.00
75.00	3.50	1.30	0.00
77.50	3.50	1.30	0.00
80.00	3.50	1.30	0.00
82.50	3.50	1.30	0.00
85.00	3.50	1.30	0.00
87.50	3.50	1.30	0.00
90.00	3.50	1.30	0.00
92.50	3.50	1.30	0.00
95.00	3.50	1.30	0.00
97.50	3.50	1.30	0.00
100.00	3.50	1.30	0.00
102.50	3.50	1.30	0.00
105.00	3.50	1.30	0.00
107.50	3.50	1.30	0.00
110.00	3.50	1.30	0.00
112.50	3.50	1.30	0.00
115.00	3.50	1.30	0.00
117.50	3.50	1.30	0.00
120.00	3.50	1.30	0.00

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Type II 24-hr 2 Year Rainfall=3.50"

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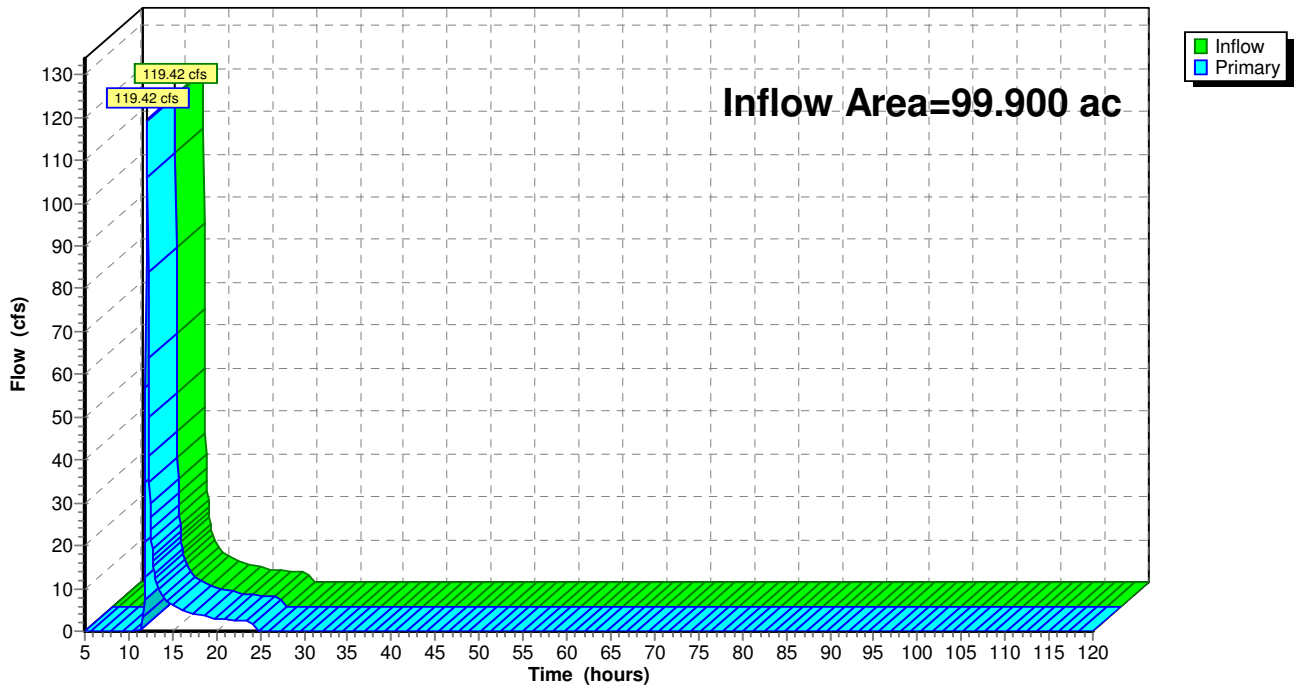
Summary for Link DP-1: DP-1

Inflow Area = 99.900 ac, 23.34% Impervious, Inflow Depth = 1.01" for 2 Year event
Inflow = 119.42 cfs @ 12.09 hrs, Volume= 8.392 af
Primary = 119.42 cfs @ 12.09 hrs, Volume= 8.392 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs

Link DP-1: DP-1

Hydrograph



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Hydrograph for Link DP-1: DP-1

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00
12.50	26.58	0.00	26.58
15.00	6.14	0.00	6.14
17.50	4.05	0.00	4.05
20.00	2.86	0.00	2.86
22.50	2.55	0.00	2.55
25.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00
30.00	0.00	0.00	0.00
32.50	0.00	0.00	0.00
35.00	0.00	0.00	0.00
37.50	0.00	0.00	0.00
40.00	0.00	0.00	0.00
42.50	0.00	0.00	0.00
45.00	0.00	0.00	0.00
47.50	0.00	0.00	0.00
50.00	0.00	0.00	0.00
52.50	0.00	0.00	0.00
55.00	0.00	0.00	0.00
57.50	0.00	0.00	0.00
60.00	0.00	0.00	0.00
62.50	0.00	0.00	0.00
65.00	0.00	0.00	0.00
67.50	0.00	0.00	0.00
70.00	0.00	0.00	0.00
72.50	0.00	0.00	0.00
75.00	0.00	0.00	0.00
77.50	0.00	0.00	0.00
80.00	0.00	0.00	0.00
82.50	0.00	0.00	0.00
85.00	0.00	0.00	0.00
87.50	0.00	0.00	0.00
90.00	0.00	0.00	0.00
92.50	0.00	0.00	0.00
95.00	0.00	0.00	0.00
97.50	0.00	0.00	0.00
100.00	0.00	0.00	0.00
102.50	0.00	0.00	0.00
105.00	0.00	0.00	0.00
107.50	0.00	0.00	0.00
110.00	0.00	0.00	0.00
112.50	0.00	0.00	0.00
115.00	0.00	0.00	0.00
117.50	0.00	0.00	0.00
120.00	0.00	0.00	0.00

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Type II 24-hr 2 Year Rainfall=3.50"

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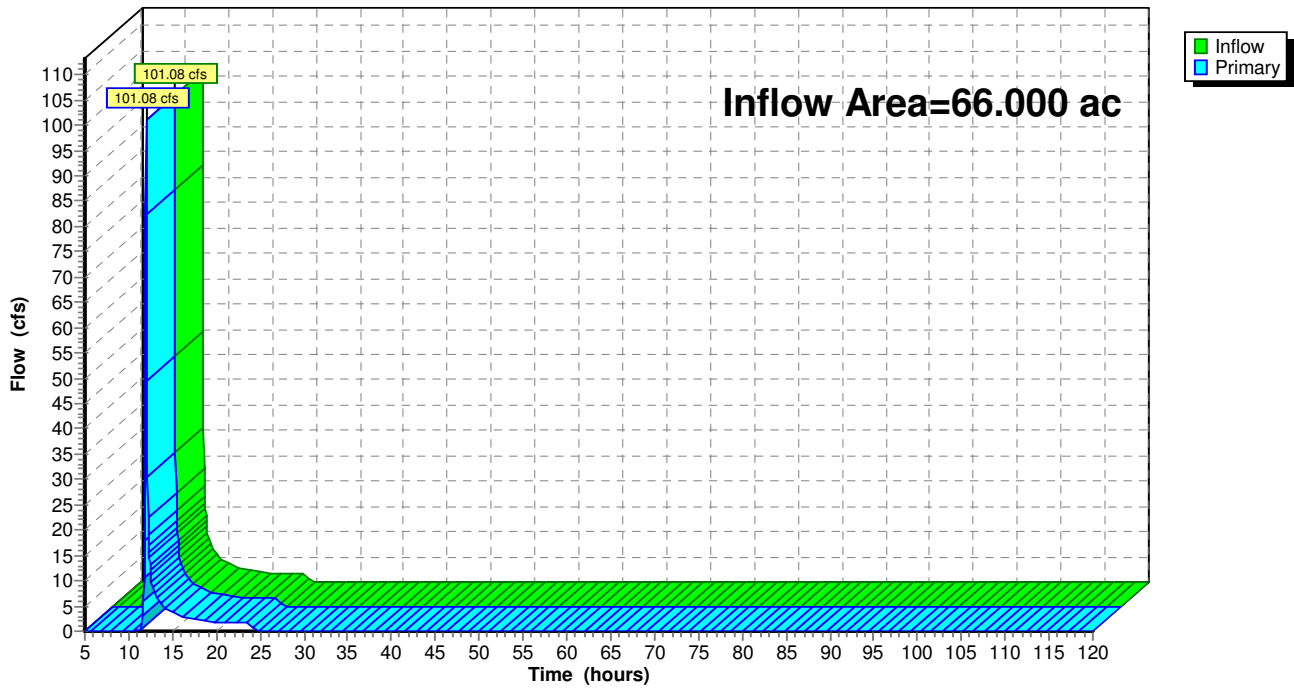
Summary for Link DP-2: DP-2

Inflow Area = 66.000 ac, 19.90% Impervious, Inflow Depth = 0.95" for 2 Year event
Inflow = 101.08 cfs @ 12.00 hrs, Volume= 5.247 af
Primary = 101.08 cfs @ 12.00 hrs, Volume= 5.247 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs

Link DP-2: DP-2

Hydrograph



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Hydrograph for Link DP-2: DP-2

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00
12.50	12.19	0.00	12.19
15.00	3.82	0.00	3.82
17.50	2.55	0.00	2.55
20.00	1.79	0.00	1.79
22.50	1.63	0.00	1.63
25.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00
30.00	0.00	0.00	0.00
32.50	0.00	0.00	0.00
35.00	0.00	0.00	0.00
37.50	0.00	0.00	0.00
40.00	0.00	0.00	0.00
42.50	0.00	0.00	0.00
45.00	0.00	0.00	0.00
47.50	0.00	0.00	0.00
50.00	0.00	0.00	0.00
52.50	0.00	0.00	0.00
55.00	0.00	0.00	0.00
57.50	0.00	0.00	0.00
60.00	0.00	0.00	0.00
62.50	0.00	0.00	0.00
65.00	0.00	0.00	0.00
67.50	0.00	0.00	0.00
70.00	0.00	0.00	0.00
72.50	0.00	0.00	0.00
75.00	0.00	0.00	0.00
77.50	0.00	0.00	0.00
80.00	0.00	0.00	0.00
82.50	0.00	0.00	0.00
85.00	0.00	0.00	0.00
87.50	0.00	0.00	0.00
90.00	0.00	0.00	0.00
92.50	0.00	0.00	0.00
95.00	0.00	0.00	0.00
97.50	0.00	0.00	0.00
100.00	0.00	0.00	0.00
102.50	0.00	0.00	0.00
105.00	0.00	0.00	0.00
107.50	0.00	0.00	0.00
110.00	0.00	0.00	0.00
112.50	0.00	0.00	0.00
115.00	0.00	0.00	0.00
117.50	0.00	0.00	0.00
120.00	0.00	0.00	0.00

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Type II 24-hr 2 Year Rainfall=3.50"

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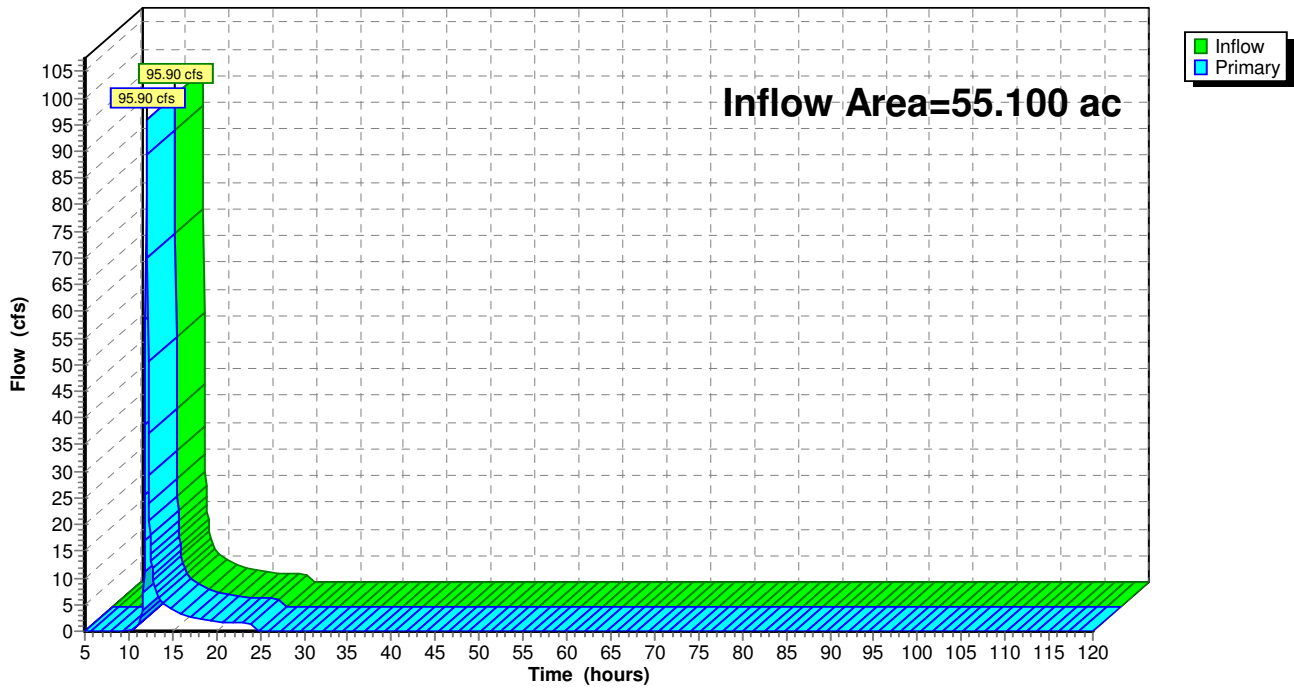
Summary for Link DP-3: DP-3

Inflow Area = 55.100 ac, 38.00% Impervious, Inflow Depth = 1.30" for 2 Year event
Inflow = 95.90 cfs @ 12.06 hrs, Volume= 5.977 af
Primary = 95.90 cfs @ 12.06 hrs, Volume= 5.977 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs

Link DP-3: DP-3

Hydrograph



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Hydrograph for Link DP-3: DP-3

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00
12.50	16.16	0.00	16.16
15.00	3.97	0.00	3.97
17.50	2.59	0.00	2.59
20.00	1.81	0.00	1.81
22.50	1.62	0.00	1.62
25.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00
30.00	0.00	0.00	0.00
32.50	0.00	0.00	0.00
35.00	0.00	0.00	0.00
37.50	0.00	0.00	0.00
40.00	0.00	0.00	0.00
42.50	0.00	0.00	0.00
45.00	0.00	0.00	0.00
47.50	0.00	0.00	0.00
50.00	0.00	0.00	0.00
52.50	0.00	0.00	0.00
55.00	0.00	0.00	0.00
57.50	0.00	0.00	0.00
60.00	0.00	0.00	0.00
62.50	0.00	0.00	0.00
65.00	0.00	0.00	0.00
67.50	0.00	0.00	0.00
70.00	0.00	0.00	0.00
72.50	0.00	0.00	0.00
75.00	0.00	0.00	0.00
77.50	0.00	0.00	0.00
80.00	0.00	0.00	0.00
82.50	0.00	0.00	0.00
85.00	0.00	0.00	0.00
87.50	0.00	0.00	0.00
90.00	0.00	0.00	0.00
92.50	0.00	0.00	0.00
95.00	0.00	0.00	0.00
97.50	0.00	0.00	0.00
100.00	0.00	0.00	0.00
102.50	0.00	0.00	0.00
105.00	0.00	0.00	0.00
107.50	0.00	0.00	0.00
110.00	0.00	0.00	0.00
112.50	0.00	0.00	0.00
115.00	0.00	0.00	0.00
117.50	0.00	0.00	0.00
120.00	0.00	0.00	0.00

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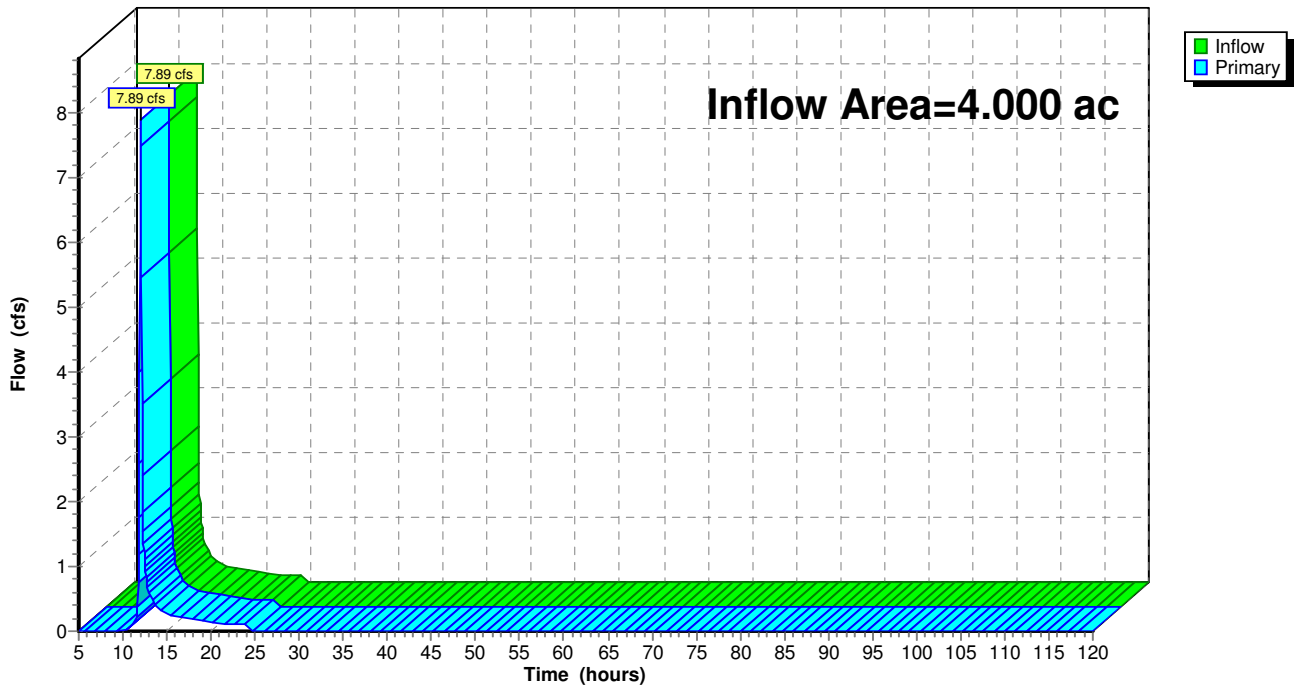
Summary for Link DP-4: DP-4

Inflow Area = 4.000 ac, 38.00% Impervious, Inflow Depth = 1.30" for 2 Year event
Inflow = 7.89 cfs @ 12.02 hrs, Volume= 0.434 af
Primary = 7.89 cfs @ 12.02 hrs, Volume= 0.434 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs

Link DP-4: DP-4

Hydrograph



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Hydrograph for Link DP-4: DP-4

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00
12.50	1.00	0.00	1.00
15.00	0.29	0.00	0.29
17.50	0.19	0.00	0.19
20.00	0.13	0.00	0.13
22.50	0.12	0.00	0.12
25.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00
30.00	0.00	0.00	0.00
32.50	0.00	0.00	0.00
35.00	0.00	0.00	0.00
37.50	0.00	0.00	0.00
40.00	0.00	0.00	0.00
42.50	0.00	0.00	0.00
45.00	0.00	0.00	0.00
47.50	0.00	0.00	0.00
50.00	0.00	0.00	0.00
52.50	0.00	0.00	0.00
55.00	0.00	0.00	0.00
57.50	0.00	0.00	0.00
60.00	0.00	0.00	0.00
62.50	0.00	0.00	0.00
65.00	0.00	0.00	0.00
67.50	0.00	0.00	0.00
70.00	0.00	0.00	0.00
72.50	0.00	0.00	0.00
75.00	0.00	0.00	0.00
77.50	0.00	0.00	0.00
80.00	0.00	0.00	0.00
82.50	0.00	0.00	0.00
85.00	0.00	0.00	0.00
87.50	0.00	0.00	0.00
90.00	0.00	0.00	0.00
92.50	0.00	0.00	0.00
95.00	0.00	0.00	0.00
97.50	0.00	0.00	0.00
100.00	0.00	0.00	0.00
102.50	0.00	0.00	0.00
105.00	0.00	0.00	0.00
107.50	0.00	0.00	0.00
110.00	0.00	0.00	0.00
112.50	0.00	0.00	0.00
115.00	0.00	0.00	0.00
117.50	0.00	0.00	0.00
120.00	0.00	0.00	0.00

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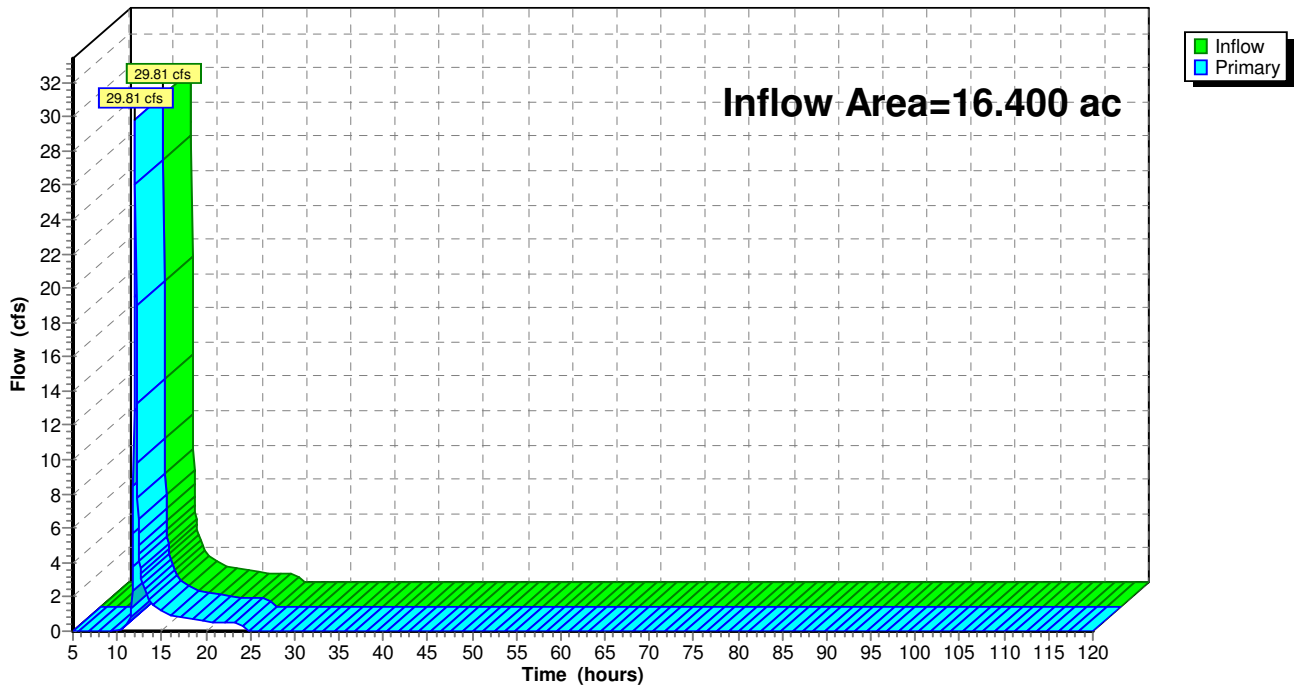
Summary for Link DP-5: DP-5

Inflow Area = 16.400 ac, 38.00% Impervious, Inflow Depth = 1.30" for 2 Year event
Inflow = 29.81 cfs @ 12.05 hrs, Volume= 1.779 af
Primary = 29.81 cfs @ 12.05 hrs, Volume= 1.779 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs

Link DP-5: DP-5

Hydrograph



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Hydrograph for Link DP-5: DP-5

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00
12.50	4.54	0.00	4.54
15.00	1.18	0.00	1.18
17.50	0.77	0.00	0.77
20.00	0.54	0.00	0.54
22.50	0.48	0.00	0.48
25.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00
30.00	0.00	0.00	0.00
32.50	0.00	0.00	0.00
35.00	0.00	0.00	0.00
37.50	0.00	0.00	0.00
40.00	0.00	0.00	0.00
42.50	0.00	0.00	0.00
45.00	0.00	0.00	0.00
47.50	0.00	0.00	0.00
50.00	0.00	0.00	0.00
52.50	0.00	0.00	0.00
55.00	0.00	0.00	0.00
57.50	0.00	0.00	0.00
60.00	0.00	0.00	0.00
62.50	0.00	0.00	0.00
65.00	0.00	0.00	0.00
67.50	0.00	0.00	0.00
70.00	0.00	0.00	0.00
72.50	0.00	0.00	0.00
75.00	0.00	0.00	0.00
77.50	0.00	0.00	0.00
80.00	0.00	0.00	0.00
82.50	0.00	0.00	0.00
85.00	0.00	0.00	0.00
87.50	0.00	0.00	0.00
90.00	0.00	0.00	0.00
92.50	0.00	0.00	0.00
95.00	0.00	0.00	0.00
97.50	0.00	0.00	0.00
100.00	0.00	0.00	0.00
102.50	0.00	0.00	0.00
105.00	0.00	0.00	0.00
107.50	0.00	0.00	0.00
110.00	0.00	0.00	0.00
112.50	0.00	0.00	0.00
115.00	0.00	0.00	0.00
117.50	0.00	0.00	0.00
120.00	0.00	0.00	0.00

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Time span=5.00-120.00 hrs, dt=0.05 hrs, 2301 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Drainage Area 1 Runoff Area=99.900 ac 23.34% Impervious Runoff Depth=2.04"
Flow Length=2,888' Tc=15.5 min CN=70 Runoff=253.89 cfs 16.952 af

Subcatchment 2S: Drainage Area 2 Runoff Area=66.000 ac 19.90% Impervious Runoff Depth=1.96"
Flow Length=1,524' Tc=7.5 min CN=69 Runoff=214.85 cfs 10.765 af

Subcatchment 3S: Drainage Area 3 Runoff Area=55.100 ac 38.00% Impervious Runoff Depth=2.45"
Flow Length=2,695' Tc=13.3 min CN=75 Runoff=183.56 cfs 11.246 af

Subcatchment 4S: Drainage Area 4 Runoff Area=4.000 ac 38.00% Impervious Runoff Depth=2.45"
Flow Length=975' Tc=9.7 min CN=75 Runoff=15.02 cfs 0.816 af

Subcatchment 5S: Drainage Area 5 Runoff Area=16.400 ac 38.00% Impervious Runoff Depth=2.45"
Flow Length=1,704' Tc=12.1 min CN=75 Runoff=56.87 cfs 3.347 af

Link DP-1: DP-1 Inflow=253.89 cfs 16.952 af
Primary=253.89 cfs 16.952 af

Link DP-2: DP-2 Inflow=214.85 cfs 10.765 af
Primary=214.85 cfs 10.765 af

Link DP-3: DP-3 Inflow=183.56 cfs 11.246 af
Primary=183.56 cfs 11.246 af

Link DP-4: DP-4 Inflow=15.02 cfs 0.816 af
Primary=15.02 cfs 0.816 af

Link DP-5: DP-5 Inflow=56.87 cfs 3.347 af
Primary=56.87 cfs 3.347 af

Total Runoff Area = 241.400 ac Runoff Volume = 43.128 af Average Runoff Depth = 2.14"
73.02% Pervious = 176.265 ac 26.98% Impervious = 65.135 ac

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Summary for Subcatchment 1S: Drainage Area 1

Runoff = 253.89 cfs @ 12.08 hrs, Volume= 16.952 af, Depth= 2.04"

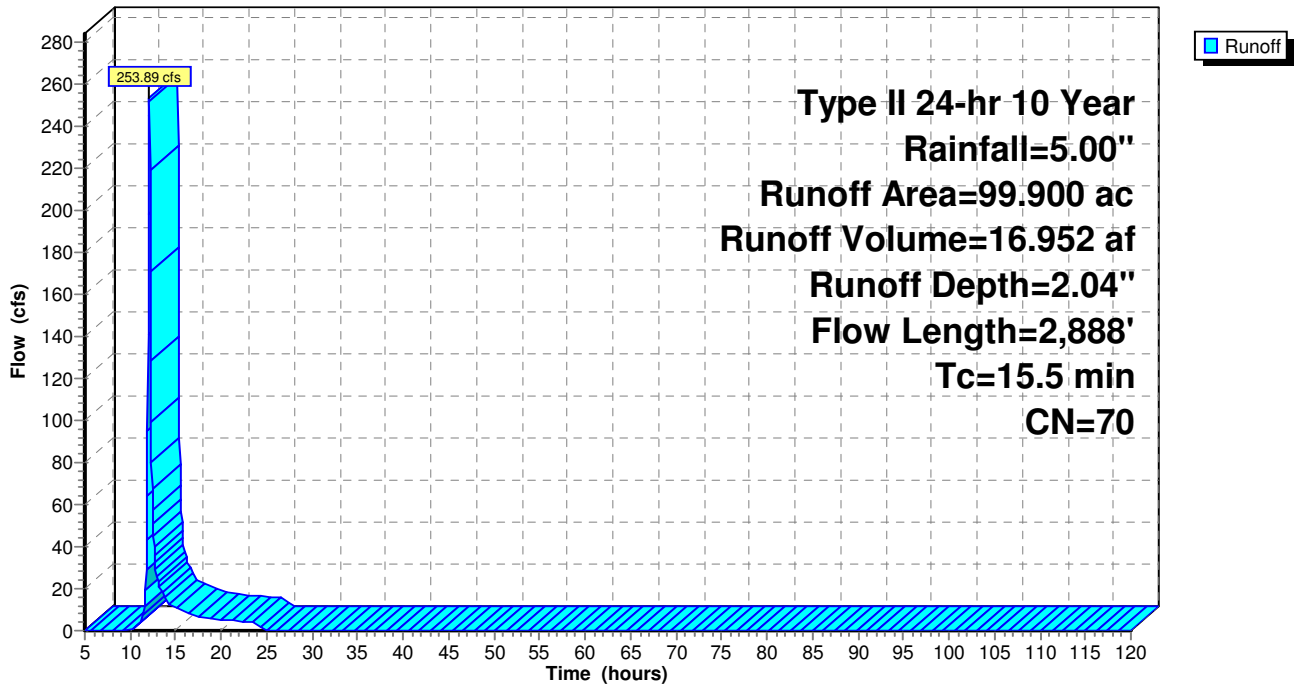
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs
Type II 24-hr 10 Year Rainfall=5.00"

Area (ac)	CN	Description
93.250	70	1/2 acre lots, 25% imp, HSG B
6.650	65	Woods/grass comb., Fair, HSG B
99.900	70	Weighted Average
76.587		Pervious Area
23.312		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	100	0.1200	0.36		Sheet Flow, 1 to 2
10.9	2,788	0.0700	4.26		Grass: Short n= 0.150 P2= 3.50" Shallow Concentrated Flow, 2 to DP-1
15.5	2,888	Total			Unpaved Kv= 16.1 fps

Subcatchment 1S: Drainage Area 1

Hydrograph



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Hydrograph for Subcatchment 1S: Drainage Area 1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.32	0.00	0.00
7.50	0.55	0.00	0.00
10.00	0.91	0.00	0.08
12.50	3.67	1.12	50.64
15.00	4.27	1.51	10.96
17.50	4.56	1.72	7.10
20.00	4.76	1.86	4.97
22.50	4.91	1.97	4.40
25.00	5.00	2.04	0.00
27.50	5.00	2.04	0.00
30.00	5.00	2.04	0.00
32.50	5.00	2.04	0.00
35.00	5.00	2.04	0.00
37.50	5.00	2.04	0.00
40.00	5.00	2.04	0.00
42.50	5.00	2.04	0.00
45.00	5.00	2.04	0.00
47.50	5.00	2.04	0.00
50.00	5.00	2.04	0.00
52.50	5.00	2.04	0.00
55.00	5.00	2.04	0.00
57.50	5.00	2.04	0.00
60.00	5.00	2.04	0.00
62.50	5.00	2.04	0.00
65.00	5.00	2.04	0.00
67.50	5.00	2.04	0.00
70.00	5.00	2.04	0.00
72.50	5.00	2.04	0.00
75.00	5.00	2.04	0.00
77.50	5.00	2.04	0.00
80.00	5.00	2.04	0.00
82.50	5.00	2.04	0.00
85.00	5.00	2.04	0.00
87.50	5.00	2.04	0.00
90.00	5.00	2.04	0.00
92.50	5.00	2.04	0.00
95.00	5.00	2.04	0.00
97.50	5.00	2.04	0.00
100.00	5.00	2.04	0.00
102.50	5.00	2.04	0.00
105.00	5.00	2.04	0.00
107.50	5.00	2.04	0.00
110.00	5.00	2.04	0.00
112.50	5.00	2.04	0.00
115.00	5.00	2.04	0.00
117.50	5.00	2.04	0.00
120.00	5.00	2.04	0.00

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Summary for Subcatchment 2S: Drainage Area 2

Runoff = 214.85 cfs @ 11.99 hrs, Volume= 10.765 af, Depth= 1.96"

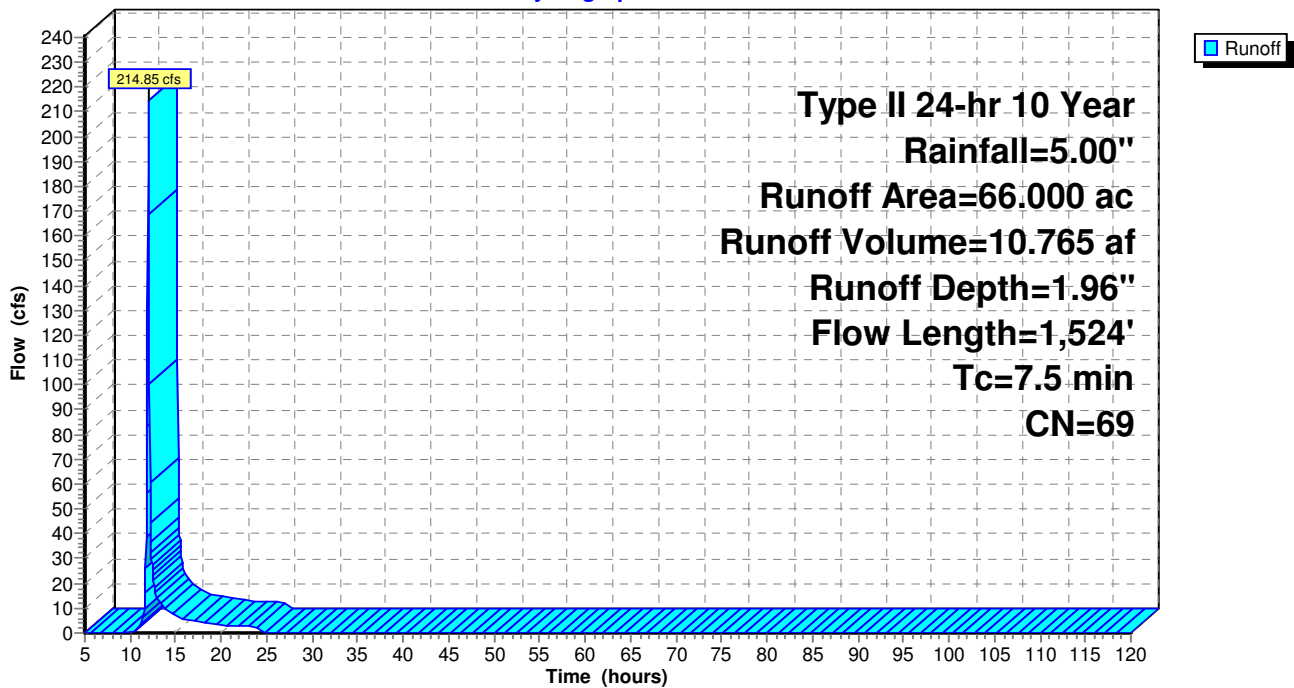
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs
Type II 24-hr 10 Year Rainfall=5.00"

Area (ac)	CN	Description
52.530	70	1/2 acre lots, 25% imp, HSG B
13.470	65	Woods/grass comb., Fair, HSG B
66.000	69	Weighted Average
52.867		Pervious Area
13.132		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.7	100	0.2000	0.45		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
2.7	1,115	0.1800	6.83		Shallow Concentrated Flow, 2 to DP-2 Unpaved Kv= 16.1 fps
1.1	309	0.0100	4.56	68.35	Channel Flow, 3 to dp-2 Area= 15.0 sf Perim= 17.0' r= 0.88' n= 0.030 Stream, clean & straight
7.5	1,524	Total			

Subcatchment 2S: Drainage Area 2

Hydrograph



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Hydrograph for Subcatchment 2S: Drainage Area 2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.32	0.00	0.00
7.50	0.55	0.00	0.00
10.00	0.91	0.00	0.00
12.50	3.67	1.06	23.07
15.00	4.27	1.44	6.89
17.50	4.56	1.64	4.52
20.00	4.76	1.78	3.14
22.50	4.91	1.90	2.83
25.00	5.00	1.96	0.00
27.50	5.00	1.96	0.00
30.00	5.00	1.96	0.00
32.50	5.00	1.96	0.00
35.00	5.00	1.96	0.00
37.50	5.00	1.96	0.00
40.00	5.00	1.96	0.00
42.50	5.00	1.96	0.00
45.00	5.00	1.96	0.00
47.50	5.00	1.96	0.00
50.00	5.00	1.96	0.00
52.50	5.00	1.96	0.00
55.00	5.00	1.96	0.00
57.50	5.00	1.96	0.00
60.00	5.00	1.96	0.00
62.50	5.00	1.96	0.00
65.00	5.00	1.96	0.00
67.50	5.00	1.96	0.00
70.00	5.00	1.96	0.00
72.50	5.00	1.96	0.00
75.00	5.00	1.96	0.00
77.50	5.00	1.96	0.00
80.00	5.00	1.96	0.00
82.50	5.00	1.96	0.00
85.00	5.00	1.96	0.00
87.50	5.00	1.96	0.00
90.00	5.00	1.96	0.00
92.50	5.00	1.96	0.00
95.00	5.00	1.96	0.00
97.50	5.00	1.96	0.00
100.00	5.00	1.96	0.00
102.50	5.00	1.96	0.00
105.00	5.00	1.96	0.00
107.50	5.00	1.96	0.00
110.00	5.00	1.96	0.00
112.50	5.00	1.96	0.00
115.00	5.00	1.96	0.00
117.50	5.00	1.96	0.00
120.00	5.00	1.96	0.00

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Summary for Subcatchment 3S: Drainage Area 3

Runoff = 183.56 cfs @ 12.05 hrs, Volume= 11.246 af, Depth= 2.45"

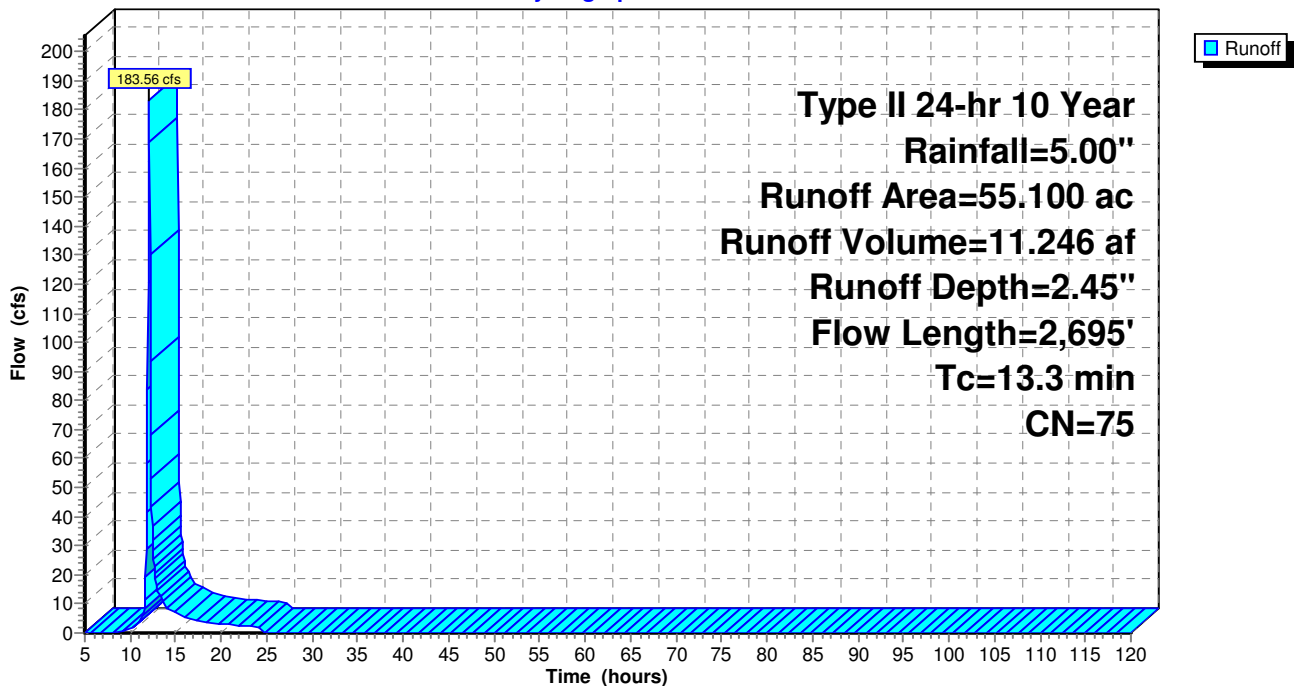
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs
Type II 24-hr 10 Year Rainfall=5.00"

Area (ac)	CN	Description
55.100	75	1/4 acre lots, 38% imp, HSG B
34.162		Pervious Area
20.938		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	100	0.1800	0.43		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
9.4	2,595	0.0810	4.58		Shallow Concentrated Flow, 2 to DP-3 Unpaved Kv= 16.1 fps
13.3	2,695	Total			

Subcatchment 3S: Drainage Area 3

Hydrograph



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Hydrograph for Subcatchment 3S: Drainage Area 3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.32	0.00	0.00
7.50	0.55	0.00	0.00
10.00	0.91	0.02	1.12
12.50	3.67	1.43	28.44
15.00	4.27	1.87	6.70
17.50	4.56	2.10	4.32
20.00	4.76	2.26	2.99
22.50	4.91	2.38	2.65
25.00	5.00	2.45	0.00
27.50	5.00	2.45	0.00
30.00	5.00	2.45	0.00
32.50	5.00	2.45	0.00
35.00	5.00	2.45	0.00
37.50	5.00	2.45	0.00
40.00	5.00	2.45	0.00
42.50	5.00	2.45	0.00
45.00	5.00	2.45	0.00
47.50	5.00	2.45	0.00
50.00	5.00	2.45	0.00
52.50	5.00	2.45	0.00
55.00	5.00	2.45	0.00
57.50	5.00	2.45	0.00
60.00	5.00	2.45	0.00
62.50	5.00	2.45	0.00
65.00	5.00	2.45	0.00
67.50	5.00	2.45	0.00
70.00	5.00	2.45	0.00
72.50	5.00	2.45	0.00
75.00	5.00	2.45	0.00
77.50	5.00	2.45	0.00
80.00	5.00	2.45	0.00
82.50	5.00	2.45	0.00
85.00	5.00	2.45	0.00
87.50	5.00	2.45	0.00
90.00	5.00	2.45	0.00
92.50	5.00	2.45	0.00
95.00	5.00	2.45	0.00
97.50	5.00	2.45	0.00
100.00	5.00	2.45	0.00
102.50	5.00	2.45	0.00
105.00	5.00	2.45	0.00
107.50	5.00	2.45	0.00
110.00	5.00	2.45	0.00
112.50	5.00	2.45	0.00
115.00	5.00	2.45	0.00
117.50	5.00	2.45	0.00
120.00	5.00	2.45	0.00

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Summary for Subcatchment 4S: Drainage Area 4

Runoff = 15.02 cfs @ 12.01 hrs, Volume= 0.816 af, Depth= 2.45"

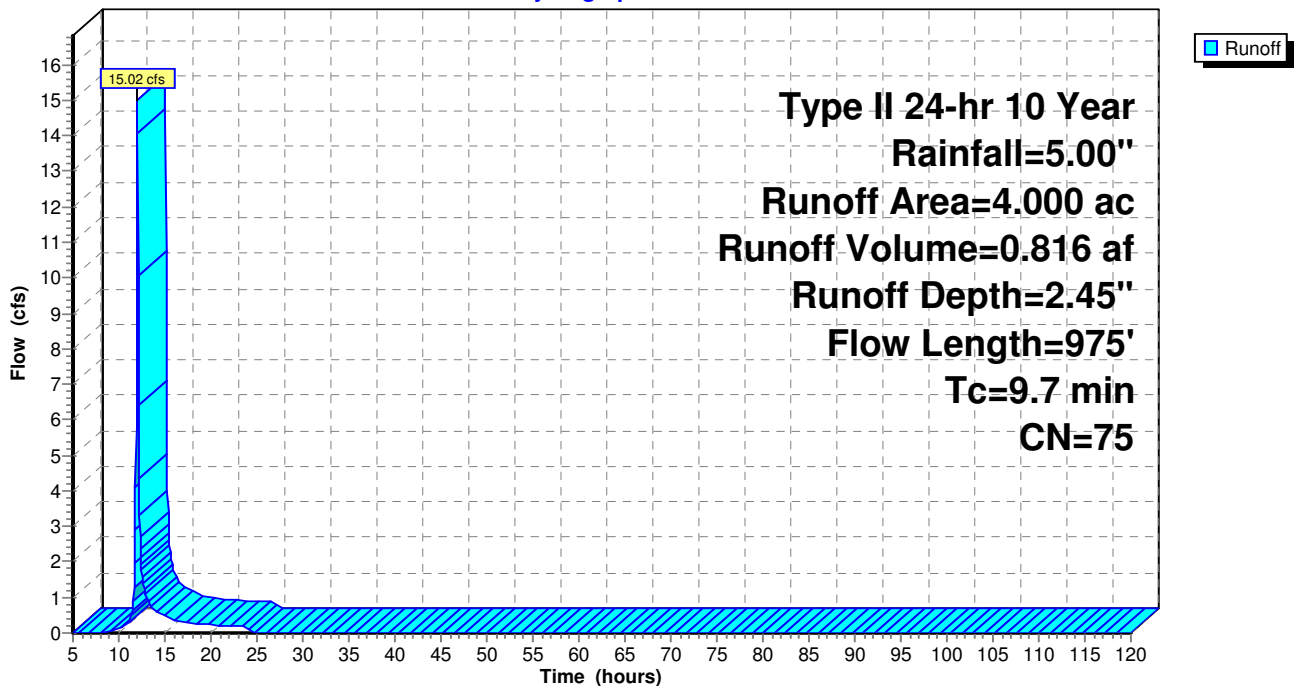
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs
Type II 24-hr 10 Year Rainfall=5.00"

Area (ac)	CN	Description
4.000	75	1/4 acre lots, 38% imp, HSG B
2.480		Pervious Area
1.520		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0500	0.26		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
3.2	875	0.0910	4.52		Shallow Concentrated Flow, 2 to DP-4 Grassed Waterway Kv= 15.0 fps
9.7	975	Total			

Subcatchment 4S: Drainage Area 4

Hydrograph



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Hydrograph for Subcatchment 4S: Drainage Area 4

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.32	0.00	0.00
7.50	0.55	0.00	0.00
10.00	0.91	0.02	0.09
12.50	3.67	1.43	1.75
15.00	4.27	1.87	0.48
17.50	4.56	2.10	0.31
20.00	4.76	2.26	0.22
22.50	4.91	2.38	0.19
25.00	5.00	2.45	0.00
27.50	5.00	2.45	0.00
30.00	5.00	2.45	0.00
32.50	5.00	2.45	0.00
35.00	5.00	2.45	0.00
37.50	5.00	2.45	0.00
40.00	5.00	2.45	0.00
42.50	5.00	2.45	0.00
45.00	5.00	2.45	0.00
47.50	5.00	2.45	0.00
50.00	5.00	2.45	0.00
52.50	5.00	2.45	0.00
55.00	5.00	2.45	0.00
57.50	5.00	2.45	0.00
60.00	5.00	2.45	0.00
62.50	5.00	2.45	0.00
65.00	5.00	2.45	0.00
67.50	5.00	2.45	0.00
70.00	5.00	2.45	0.00
72.50	5.00	2.45	0.00
75.00	5.00	2.45	0.00
77.50	5.00	2.45	0.00
80.00	5.00	2.45	0.00
82.50	5.00	2.45	0.00
85.00	5.00	2.45	0.00
87.50	5.00	2.45	0.00
90.00	5.00	2.45	0.00
92.50	5.00	2.45	0.00
95.00	5.00	2.45	0.00
97.50	5.00	2.45	0.00
100.00	5.00	2.45	0.00
102.50	5.00	2.45	0.00
105.00	5.00	2.45	0.00
107.50	5.00	2.45	0.00
110.00	5.00	2.45	0.00
112.50	5.00	2.45	0.00
115.00	5.00	2.45	0.00
117.50	5.00	2.45	0.00
120.00	5.00	2.45	0.00

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Summary for Subcatchment 5S: Drainage Area 5

Runoff = 56.87 cfs @ 12.04 hrs, Volume= 3.347 af, Depth= 2.45"

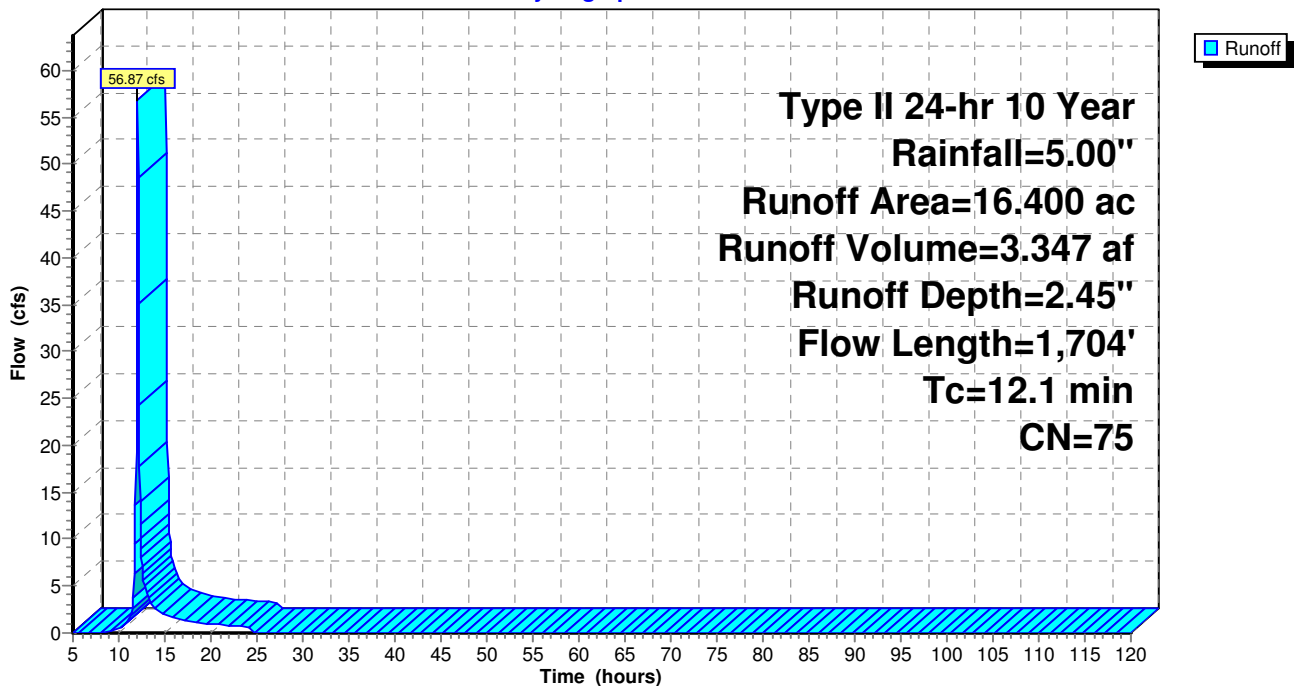
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs
Type II 24-hr 10 Year Rainfall=5.00"

Area (ac)	CN	Description
16.400	75	1/4 acre lots, 38% imp, HSG B
10.168		Pervious Area
6.232		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0500	0.26		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
5.6	1,604	0.0870	4.75		Shallow Concentrated Flow, 2 to DP-5 Unpaved Kv= 16.1 fps
12.1	1,704	Total			

Subcatchment 5S: Drainage Area 5

Hydrograph



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Hydrograph for Subcatchment 5S: Drainage Area 5

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.32	0.00	0.00
7.50	0.55	0.00	0.00
10.00	0.91	0.02	0.34
12.50	3.67	1.43	7.96
15.00	4.27	1.87	1.99
17.50	4.56	2.10	1.28
20.00	4.76	2.26	0.89
22.50	4.91	2.38	0.79
25.00	5.00	2.45	0.00
27.50	5.00	2.45	0.00
30.00	5.00	2.45	0.00
32.50	5.00	2.45	0.00
35.00	5.00	2.45	0.00
37.50	5.00	2.45	0.00
40.00	5.00	2.45	0.00
42.50	5.00	2.45	0.00
45.00	5.00	2.45	0.00
47.50	5.00	2.45	0.00
50.00	5.00	2.45	0.00
52.50	5.00	2.45	0.00
55.00	5.00	2.45	0.00
57.50	5.00	2.45	0.00
60.00	5.00	2.45	0.00
62.50	5.00	2.45	0.00
65.00	5.00	2.45	0.00
67.50	5.00	2.45	0.00
70.00	5.00	2.45	0.00
72.50	5.00	2.45	0.00
75.00	5.00	2.45	0.00
77.50	5.00	2.45	0.00
80.00	5.00	2.45	0.00
82.50	5.00	2.45	0.00
85.00	5.00	2.45	0.00
87.50	5.00	2.45	0.00
90.00	5.00	2.45	0.00
92.50	5.00	2.45	0.00
95.00	5.00	2.45	0.00
97.50	5.00	2.45	0.00
100.00	5.00	2.45	0.00
102.50	5.00	2.45	0.00
105.00	5.00	2.45	0.00
107.50	5.00	2.45	0.00
110.00	5.00	2.45	0.00
112.50	5.00	2.45	0.00
115.00	5.00	2.45	0.00
117.50	5.00	2.45	0.00
120.00	5.00	2.45	0.00

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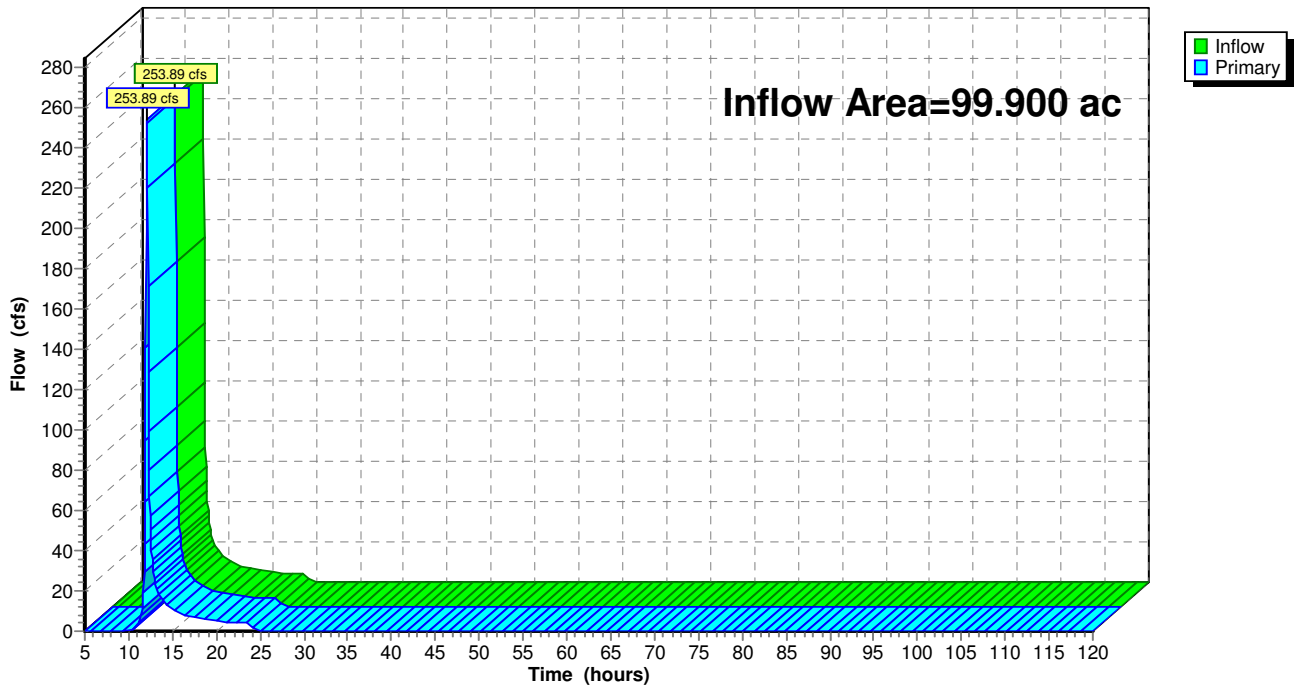
Summary for Link DP-1: DP-1

Inflow Area = 99.900 ac, 23.34% Impervious, Inflow Depth = 2.04" for 10 Year event
Inflow = 253.89 cfs @ 12.08 hrs, Volume= 16.952 af
Primary = 253.89 cfs @ 12.08 hrs, Volume= 16.952 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs

Link DP-1: DP-1

Hydrograph



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Type II 24-hr 10 Year Rainfall=5.00"

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Hydrograph for Link DP-1: DP-1

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00
10.00	0.08	0.00	0.08
12.50	50.64	0.00	50.64
15.00	10.96	0.00	10.96
17.50	7.10	0.00	7.10
20.00	4.97	0.00	4.97
22.50	4.40	0.00	4.40
25.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00
30.00	0.00	0.00	0.00
32.50	0.00	0.00	0.00
35.00	0.00	0.00	0.00
37.50	0.00	0.00	0.00
40.00	0.00	0.00	0.00
42.50	0.00	0.00	0.00
45.00	0.00	0.00	0.00
47.50	0.00	0.00	0.00
50.00	0.00	0.00	0.00
52.50	0.00	0.00	0.00
55.00	0.00	0.00	0.00
57.50	0.00	0.00	0.00
60.00	0.00	0.00	0.00
62.50	0.00	0.00	0.00
65.00	0.00	0.00	0.00
67.50	0.00	0.00	0.00
70.00	0.00	0.00	0.00
72.50	0.00	0.00	0.00
75.00	0.00	0.00	0.00
77.50	0.00	0.00	0.00
80.00	0.00	0.00	0.00
82.50	0.00	0.00	0.00
85.00	0.00	0.00	0.00
87.50	0.00	0.00	0.00
90.00	0.00	0.00	0.00
92.50	0.00	0.00	0.00
95.00	0.00	0.00	0.00
97.50	0.00	0.00	0.00
100.00	0.00	0.00	0.00
102.50	0.00	0.00	0.00
105.00	0.00	0.00	0.00
107.50	0.00	0.00	0.00
110.00	0.00	0.00	0.00
112.50	0.00	0.00	0.00
115.00	0.00	0.00	0.00
117.50	0.00	0.00	0.00
120.00	0.00	0.00	0.00

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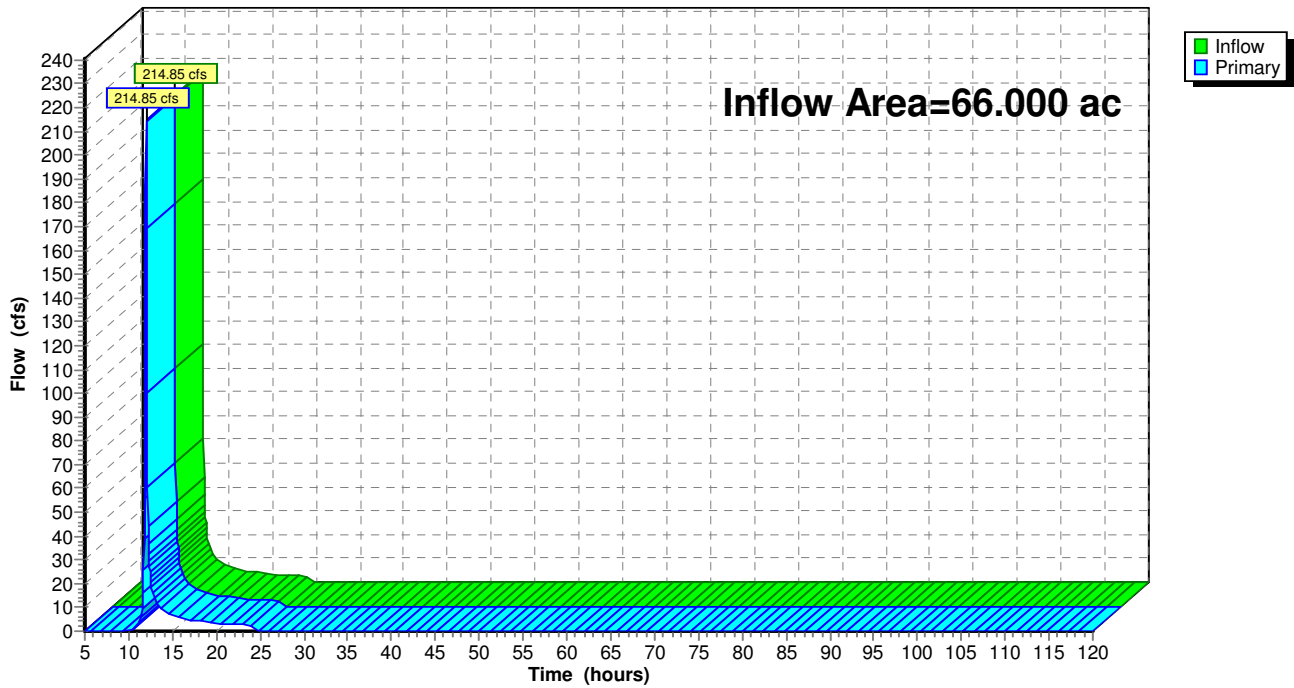
Summary for Link DP-2: DP-2

Inflow Area = 66.000 ac, 19.90% Impervious, Inflow Depth = 1.96" for 10 Year event
Inflow = 214.85 cfs @ 11.99 hrs, Volume= 10.765 af
Primary = 214.85 cfs @ 11.99 hrs, Volume= 10.765 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs

Link DP-2: DP-2

Hydrograph



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Hydrograph for Link DP-2: DP-2

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00
12.50	23.07	0.00	23.07
15.00	6.89	0.00	6.89
17.50	4.52	0.00	4.52
20.00	3.14	0.00	3.14
22.50	2.83	0.00	2.83
25.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00
30.00	0.00	0.00	0.00
32.50	0.00	0.00	0.00
35.00	0.00	0.00	0.00
37.50	0.00	0.00	0.00
40.00	0.00	0.00	0.00
42.50	0.00	0.00	0.00
45.00	0.00	0.00	0.00
47.50	0.00	0.00	0.00
50.00	0.00	0.00	0.00
52.50	0.00	0.00	0.00
55.00	0.00	0.00	0.00
57.50	0.00	0.00	0.00
60.00	0.00	0.00	0.00
62.50	0.00	0.00	0.00
65.00	0.00	0.00	0.00
67.50	0.00	0.00	0.00
70.00	0.00	0.00	0.00
72.50	0.00	0.00	0.00
75.00	0.00	0.00	0.00
77.50	0.00	0.00	0.00
80.00	0.00	0.00	0.00
82.50	0.00	0.00	0.00
85.00	0.00	0.00	0.00
87.50	0.00	0.00	0.00
90.00	0.00	0.00	0.00
92.50	0.00	0.00	0.00
95.00	0.00	0.00	0.00
97.50	0.00	0.00	0.00
100.00	0.00	0.00	0.00
102.50	0.00	0.00	0.00
105.00	0.00	0.00	0.00
107.50	0.00	0.00	0.00
110.00	0.00	0.00	0.00
112.50	0.00	0.00	0.00
115.00	0.00	0.00	0.00
117.50	0.00	0.00	0.00
120.00	0.00	0.00	0.00

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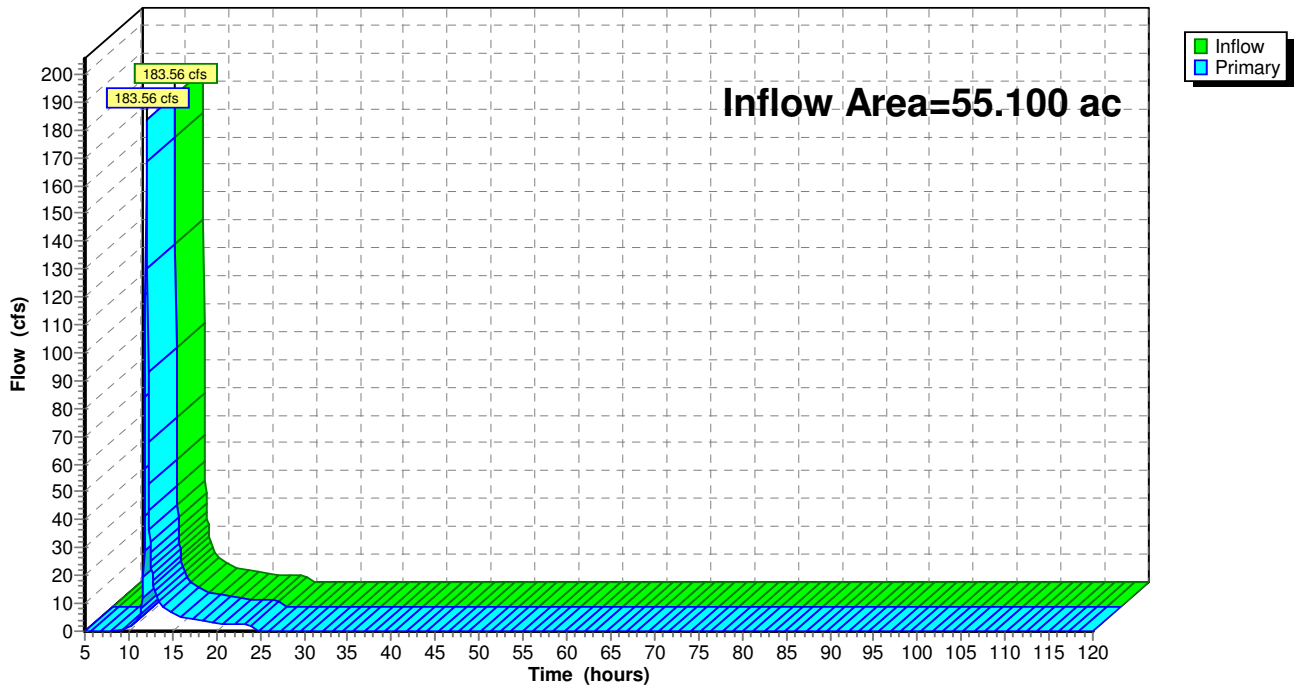
Summary for Link DP-3: DP-3

Inflow Area = 55.100 ac, 38.00% Impervious, Inflow Depth = 2.45" for 10 Year event
Inflow = 183.56 cfs @ 12.05 hrs, Volume= 11.246 af
Primary = 183.56 cfs @ 12.05 hrs, Volume= 11.246 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs

Link DP-3: DP-3

Hydrograph



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Hydrograph for Link DP-3: DP-3

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00
10.00	1.12	0.00	1.12
12.50	28.44	0.00	28.44
15.00	6.70	0.00	6.70
17.50	4.32	0.00	4.32
20.00	2.99	0.00	2.99
22.50	2.65	0.00	2.65
25.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00
30.00	0.00	0.00	0.00
32.50	0.00	0.00	0.00
35.00	0.00	0.00	0.00
37.50	0.00	0.00	0.00
40.00	0.00	0.00	0.00
42.50	0.00	0.00	0.00
45.00	0.00	0.00	0.00
47.50	0.00	0.00	0.00
50.00	0.00	0.00	0.00
52.50	0.00	0.00	0.00
55.00	0.00	0.00	0.00
57.50	0.00	0.00	0.00
60.00	0.00	0.00	0.00
62.50	0.00	0.00	0.00
65.00	0.00	0.00	0.00
67.50	0.00	0.00	0.00
70.00	0.00	0.00	0.00
72.50	0.00	0.00	0.00
75.00	0.00	0.00	0.00
77.50	0.00	0.00	0.00
80.00	0.00	0.00	0.00
82.50	0.00	0.00	0.00
85.00	0.00	0.00	0.00
87.50	0.00	0.00	0.00
90.00	0.00	0.00	0.00
92.50	0.00	0.00	0.00
95.00	0.00	0.00	0.00
97.50	0.00	0.00	0.00
100.00	0.00	0.00	0.00
102.50	0.00	0.00	0.00
105.00	0.00	0.00	0.00
107.50	0.00	0.00	0.00
110.00	0.00	0.00	0.00
112.50	0.00	0.00	0.00
115.00	0.00	0.00	0.00
117.50	0.00	0.00	0.00
120.00	0.00	0.00	0.00

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Type II 24-hr 10 Year Rainfall=5.00"

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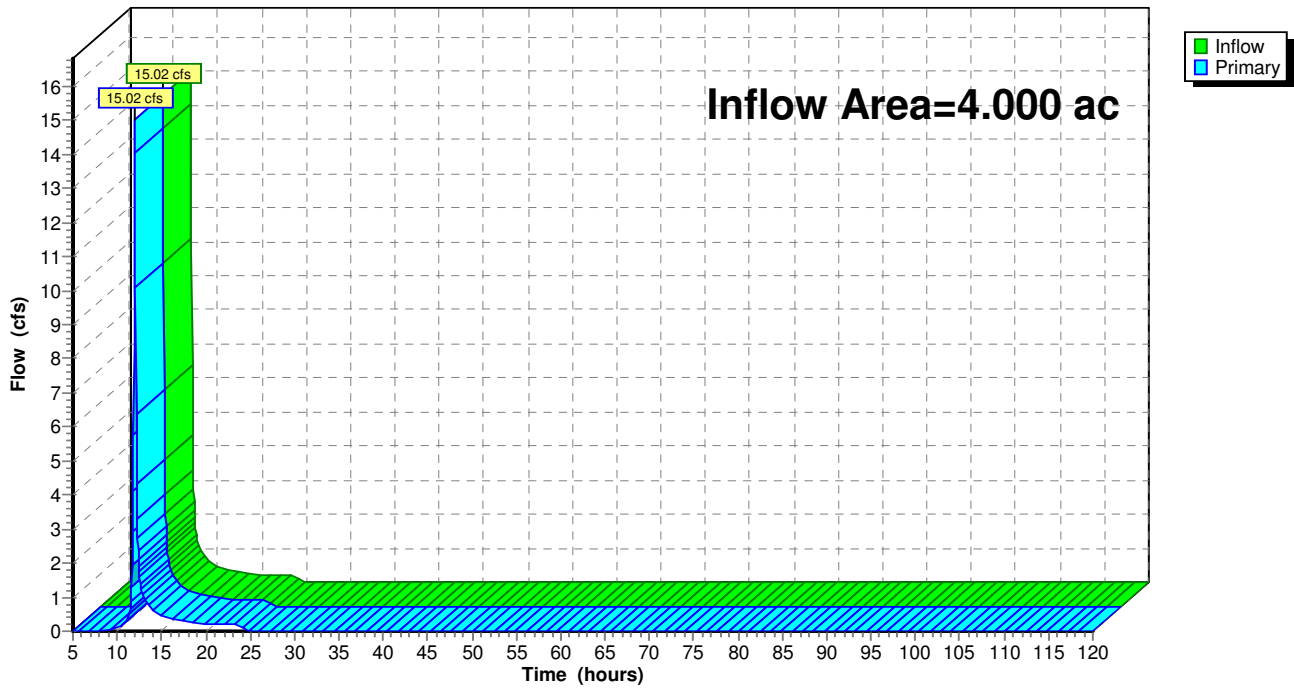
Summary for Link DP-4: DP-4

Inflow Area = 4.000 ac, 38.00% Impervious, Inflow Depth = 2.45" for 10 Year event
Inflow = 15.02 cfs @ 12.01 hrs, Volume= 0.816 af
Primary = 15.02 cfs @ 12.01 hrs, Volume= 0.816 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs

Link DP-4: DP-4

Hydrograph



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Hydrograph for Link DP-4: DP-4

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00
10.00	0.09	0.00	0.09
12.50	1.75	0.00	1.75
15.00	0.48	0.00	0.48
17.50	0.31	0.00	0.31
20.00	0.22	0.00	0.22
22.50	0.19	0.00	0.19
25.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00
30.00	0.00	0.00	0.00
32.50	0.00	0.00	0.00
35.00	0.00	0.00	0.00
37.50	0.00	0.00	0.00
40.00	0.00	0.00	0.00
42.50	0.00	0.00	0.00
45.00	0.00	0.00	0.00
47.50	0.00	0.00	0.00
50.00	0.00	0.00	0.00
52.50	0.00	0.00	0.00
55.00	0.00	0.00	0.00
57.50	0.00	0.00	0.00
60.00	0.00	0.00	0.00
62.50	0.00	0.00	0.00
65.00	0.00	0.00	0.00
67.50	0.00	0.00	0.00
70.00	0.00	0.00	0.00
72.50	0.00	0.00	0.00
75.00	0.00	0.00	0.00
77.50	0.00	0.00	0.00
80.00	0.00	0.00	0.00
82.50	0.00	0.00	0.00
85.00	0.00	0.00	0.00
87.50	0.00	0.00	0.00
90.00	0.00	0.00	0.00
92.50	0.00	0.00	0.00
95.00	0.00	0.00	0.00
97.50	0.00	0.00	0.00
100.00	0.00	0.00	0.00
102.50	0.00	0.00	0.00
105.00	0.00	0.00	0.00
107.50	0.00	0.00	0.00
110.00	0.00	0.00	0.00
112.50	0.00	0.00	0.00
115.00	0.00	0.00	0.00
117.50	0.00	0.00	0.00
120.00	0.00	0.00	0.00

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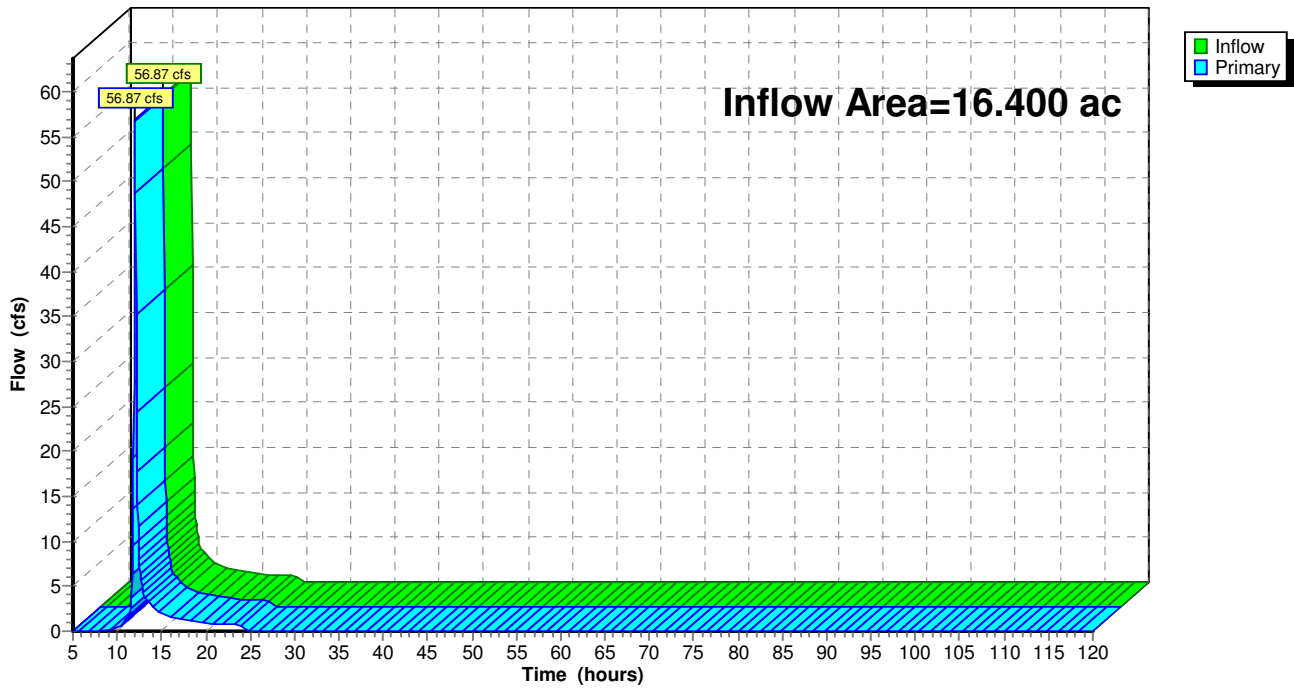
Summary for Link DP-5: DP-5

Inflow Area = 16.400 ac, 38.00% Impervious, Inflow Depth = 2.45" for 10 Year event
Inflow = 56.87 cfs @ 12.04 hrs, Volume= 3.347 af
Primary = 56.87 cfs @ 12.04 hrs, Volume= 3.347 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs

Link DP-5: DP-5

Hydrograph



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Hydrograph for Link DP-5: DP-5

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00
10.00	0.34	0.00	0.34
12.50	7.96	0.00	7.96
15.00	1.99	0.00	1.99
17.50	1.28	0.00	1.28
20.00	0.89	0.00	0.89
22.50	0.79	0.00	0.79
25.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00
30.00	0.00	0.00	0.00
32.50	0.00	0.00	0.00
35.00	0.00	0.00	0.00
37.50	0.00	0.00	0.00
40.00	0.00	0.00	0.00
42.50	0.00	0.00	0.00
45.00	0.00	0.00	0.00
47.50	0.00	0.00	0.00
50.00	0.00	0.00	0.00
52.50	0.00	0.00	0.00
55.00	0.00	0.00	0.00
57.50	0.00	0.00	0.00
60.00	0.00	0.00	0.00
62.50	0.00	0.00	0.00
65.00	0.00	0.00	0.00
67.50	0.00	0.00	0.00
70.00	0.00	0.00	0.00
72.50	0.00	0.00	0.00
75.00	0.00	0.00	0.00
77.50	0.00	0.00	0.00
80.00	0.00	0.00	0.00
82.50	0.00	0.00	0.00
85.00	0.00	0.00	0.00
87.50	0.00	0.00	0.00
90.00	0.00	0.00	0.00
92.50	0.00	0.00	0.00
95.00	0.00	0.00	0.00
97.50	0.00	0.00	0.00
100.00	0.00	0.00	0.00
102.50	0.00	0.00	0.00
105.00	0.00	0.00	0.00
107.50	0.00	0.00	0.00
110.00	0.00	0.00	0.00
112.50	0.00	0.00	0.00
115.00	0.00	0.00	0.00
117.50	0.00	0.00	0.00
120.00	0.00	0.00	0.00

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Type II 24-hr 100 Year Rainfall=7.50"

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Time span=5.00-120.00 hrs, dt=0.05 hrs, 2301 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Drainage Area 1 Runoff Area=99.900 ac 23.34% Impervious Runoff Depth=4.04"
Flow Length=2,888' Tc=15.5 min CN=70 Runoff=509.35 cfs 33.615 af

Subcatchment 2S: Drainage Area 2 Runoff Area=66.000 ac 19.90% Impervious Runoff Depth=3.93"
Flow Length=1,524' Tc=7.5 min CN=69 Runoff=430.67 cfs 21.605 af

Subcatchment 3S: Drainage Area 3 Runoff Area=55.100 ac 38.00% Impervious Runoff Depth=4.59"
Flow Length=2,695' Tc=13.3 min CN=75 Runoff=342.11 cfs 21.089 af

Subcatchment 4S: Drainage Area 4 Runoff Area=4.000 ac 38.00% Impervious Runoff Depth=4.59"
Flow Length=975' Tc=9.7 min CN=75 Runoff=27.87 cfs 1.531 af

Subcatchment 5S: Drainage Area 5 Runoff Area=16.400 ac 38.00% Impervious Runoff Depth=4.59"
Flow Length=1,704' Tc=12.1 min CN=75 Runoff=105.75 cfs 6.277 af

Link DP-1: DP-1 Inflow=509.35 cfs 33.615 af
Primary=509.35 cfs 33.615 af

Link DP-2: DP-2 Inflow=430.67 cfs 21.605 af
Primary=430.67 cfs 21.605 af

Link DP-3: DP-3 Inflow=342.11 cfs 21.089 af
Primary=342.11 cfs 21.089 af

Link DP-4: DP-4 Inflow=27.87 cfs 1.531 af
Primary=27.87 cfs 1.531 af

Link DP-5: DP-5 Inflow=105.75 cfs 6.277 af
Primary=105.75 cfs 6.277 af

Total Runoff Area = 241.400 ac Runoff Volume = 84.116 af Average Runoff Depth = 4.18"
73.02% Pervious = 176.265 ac 26.98% Impervious = 65.135 ac

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Summary for Subcatchment 1S: Drainage Area 1

Runoff = 509.35 cfs @ 12.08 hrs, Volume= 33.615 af, Depth= 4.04"

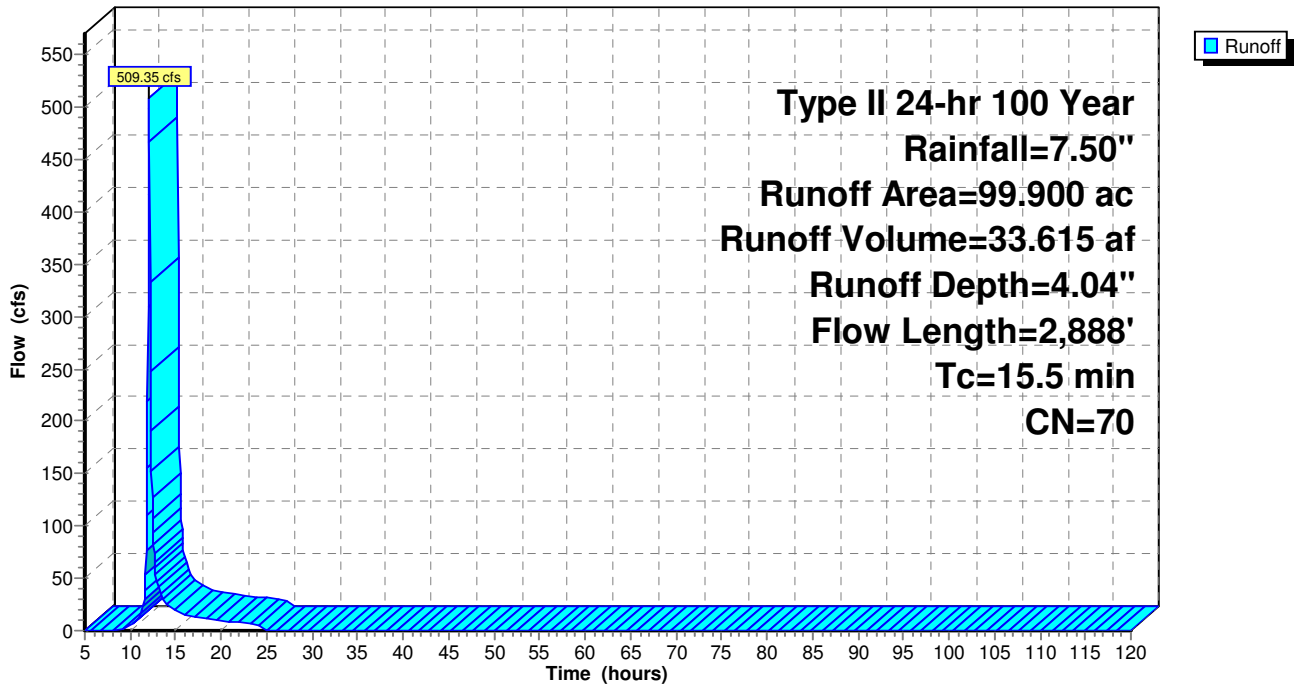
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs
Type II 24-hr 100 Year Rainfall=7.50"

Area (ac)	CN	Description
93.250	70	1/2 acre lots, 25% imp, HSG B
6.650	65	Woods/grass comb., Fair, HSG B
99.900	70	Weighted Average
76.587		Pervious Area
23.312		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	100	0.1200	0.36		Sheet Flow, 1 to 2
10.9	2,788	0.0700	4.26		Grass: Short n= 0.150 P2= 3.50" Shallow Concentrated Flow, 2 to DP-1
15.5	2,888	Total			Unpaved Kv= 16.1 fps

Subcatchment 1S: Drainage Area 1

Hydrograph



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Hydrograph for Subcatchment 1S: Drainage Area 1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.47	0.00	0.00
7.50	0.82	0.00	0.00
10.00	1.36	0.05	4.80
12.50	5.51	2.42	93.92
15.00	6.40	3.13	19.33
17.50	6.84	3.48	12.37
20.00	7.14	3.74	8.58
22.50	7.37	3.93	7.55
25.00	7.50	4.04	0.00
27.50	7.50	4.04	0.00
30.00	7.50	4.04	0.00
32.50	7.50	4.04	0.00
35.00	7.50	4.04	0.00
37.50	7.50	4.04	0.00
40.00	7.50	4.04	0.00
42.50	7.50	4.04	0.00
45.00	7.50	4.04	0.00
47.50	7.50	4.04	0.00
50.00	7.50	4.04	0.00
52.50	7.50	4.04	0.00
55.00	7.50	4.04	0.00
57.50	7.50	4.04	0.00
60.00	7.50	4.04	0.00
62.50	7.50	4.04	0.00
65.00	7.50	4.04	0.00
67.50	7.50	4.04	0.00
70.00	7.50	4.04	0.00
72.50	7.50	4.04	0.00
75.00	7.50	4.04	0.00
77.50	7.50	4.04	0.00
80.00	7.50	4.04	0.00
82.50	7.50	4.04	0.00
85.00	7.50	4.04	0.00
87.50	7.50	4.04	0.00
90.00	7.50	4.04	0.00
92.50	7.50	4.04	0.00
95.00	7.50	4.04	0.00
97.50	7.50	4.04	0.00
100.00	7.50	4.04	0.00
102.50	7.50	4.04	0.00
105.00	7.50	4.04	0.00
107.50	7.50	4.04	0.00
110.00	7.50	4.04	0.00
112.50	7.50	4.04	0.00
115.00	7.50	4.04	0.00
117.50	7.50	4.04	0.00
120.00	7.50	4.04	0.00

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Summary for Subcatchment 2S: Drainage Area 2

Runoff = 430.67 cfs @ 11.99 hrs, Volume= 21.605 af, Depth= 3.93"

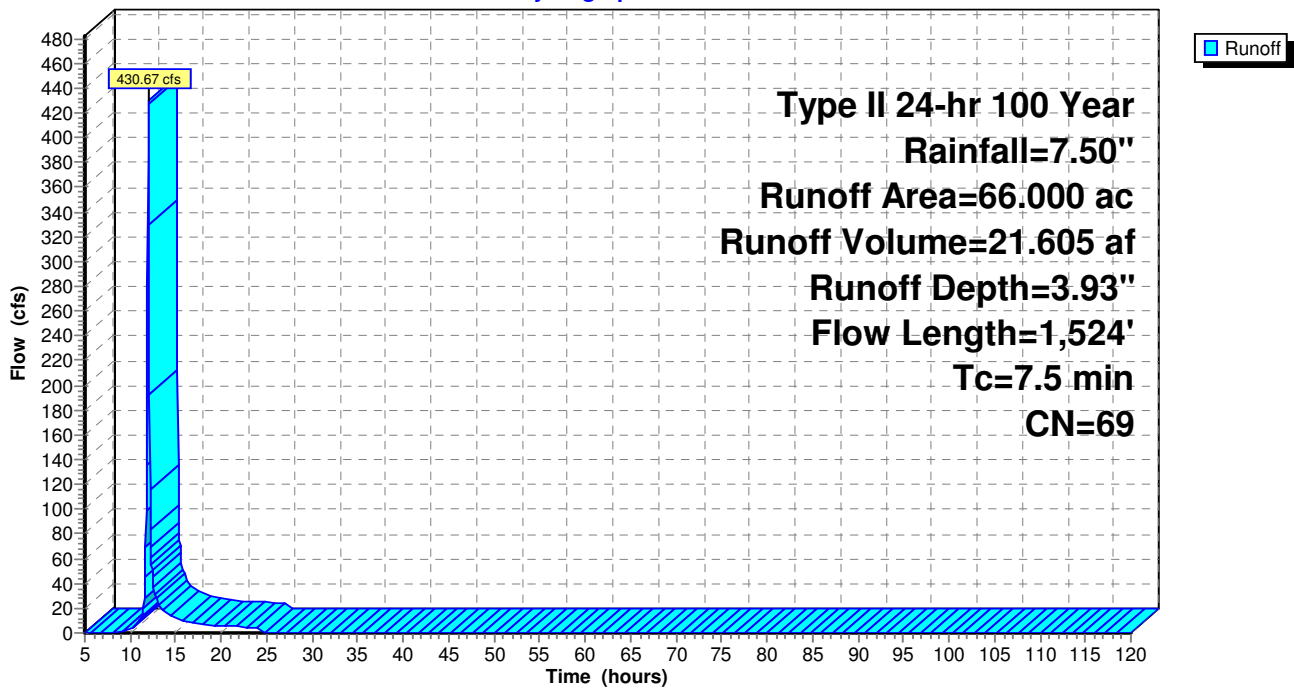
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs
Type II 24-hr 100 Year Rainfall=7.50"

Area (ac)	CN	Description
52.530	70	1/2 acre lots, 25% imp, HSG B
13.470	65	Woods/grass comb., Fair, HSG B
66.000	69	Weighted Average
52.867		Pervious Area
13.132		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.7	100	0.2000	0.45		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
2.7	1,115	0.1800	6.83		Shallow Concentrated Flow, 2 to DP-2 Unpaved Kv= 16.1 fps
1.1	309	0.0100	4.56	68.35	Channel Flow, 3 to dp-2 Area= 15.0 sf Perim= 17.0' r= 0.88' n= 0.030 Stream, clean & straight
7.5	1,524	Total			

Subcatchment 2S: Drainage Area 2

Hydrograph



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Type II 24-hr 100 Year Rainfall=7.50"

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Hydrograph for Subcatchment 2S: Drainage Area 2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.47	0.00	0.00
7.50	0.82	0.00	0.00
10.00	1.36	0.04	3.15
12.50	5.51	2.34	42.54
15.00	6.40	3.03	12.26
17.50	6.84	3.38	7.94
20.00	7.14	3.63	5.47
22.50	7.37	3.82	4.90
25.00	7.50	3.93	0.00
27.50	7.50	3.93	0.00
30.00	7.50	3.93	0.00
32.50	7.50	3.93	0.00
35.00	7.50	3.93	0.00
37.50	7.50	3.93	0.00
40.00	7.50	3.93	0.00
42.50	7.50	3.93	0.00
45.00	7.50	3.93	0.00
47.50	7.50	3.93	0.00
50.00	7.50	3.93	0.00
52.50	7.50	3.93	0.00
55.00	7.50	3.93	0.00
57.50	7.50	3.93	0.00
60.00	7.50	3.93	0.00
62.50	7.50	3.93	0.00
65.00	7.50	3.93	0.00
67.50	7.50	3.93	0.00
70.00	7.50	3.93	0.00
72.50	7.50	3.93	0.00
75.00	7.50	3.93	0.00
77.50	7.50	3.93	0.00
80.00	7.50	3.93	0.00
82.50	7.50	3.93	0.00
85.00	7.50	3.93	0.00
87.50	7.50	3.93	0.00
90.00	7.50	3.93	0.00
92.50	7.50	3.93	0.00
95.00	7.50	3.93	0.00
97.50	7.50	3.93	0.00
100.00	7.50	3.93	0.00
102.50	7.50	3.93	0.00
105.00	7.50	3.93	0.00
107.50	7.50	3.93	0.00
110.00	7.50	3.93	0.00
112.50	7.50	3.93	0.00
115.00	7.50	3.93	0.00
117.50	7.50	3.93	0.00
120.00	7.50	3.93	0.00

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Type II 24-hr 100 Year Rainfall=7.50"

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Summary for Subcatchment 3S: Drainage Area 3

Runoff = 342.11 cfs @ 12.05 hrs, Volume= 21.089 af, Depth= 4.59"

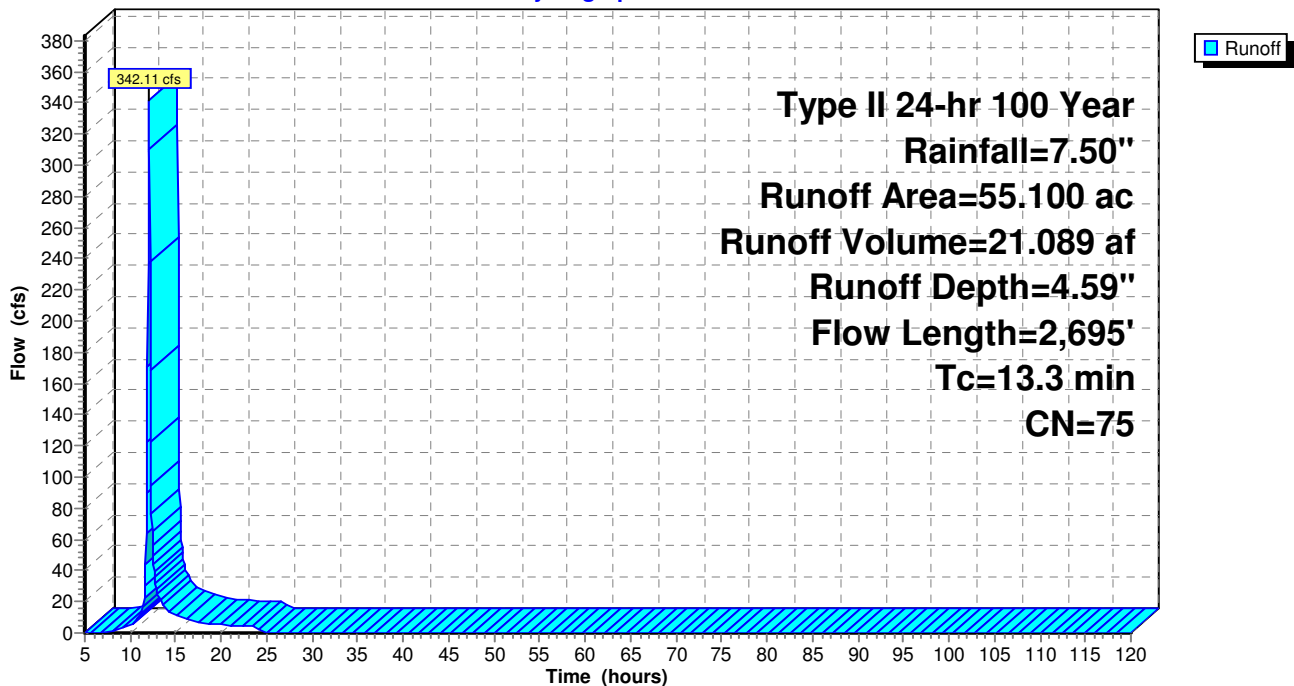
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs
Type II 24-hr 100 Year Rainfall=7.50"

Area (ac)	CN	Description
55.100	75	1/4 acre lots, 38% imp, HSG B
34.162		Pervious Area
20.938		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	100	0.1800	0.43		Sheet Flow, 1 to 2
9.4	2,595	0.0810	4.58		Shallow Concentrated Flow, 2 to DP-3
13.3	2,695	Total			Unpaved Kv= 16.1 fps

Subcatchment 3S: Drainage Area 3

Hydrograph



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Type II 24-hr 100 Year Rainfall=7.50"

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Hydrograph for Subcatchment 3S: Drainage Area 3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.47	0.00	0.00
7.50	0.82	0.01	0.59
10.00	1.36	0.12	4.50
12.50	5.51	2.87	49.66
15.00	6.40	3.63	11.31
17.50	6.84	4.01	7.22
20.00	7.14	4.27	4.98
22.50	7.37	4.48	4.39
25.00	7.50	4.59	0.00
27.50	7.50	4.59	0.00
30.00	7.50	4.59	0.00
32.50	7.50	4.59	0.00
35.00	7.50	4.59	0.00
37.50	7.50	4.59	0.00
40.00	7.50	4.59	0.00
42.50	7.50	4.59	0.00
45.00	7.50	4.59	0.00
47.50	7.50	4.59	0.00
50.00	7.50	4.59	0.00
52.50	7.50	4.59	0.00
55.00	7.50	4.59	0.00
57.50	7.50	4.59	0.00
60.00	7.50	4.59	0.00
62.50	7.50	4.59	0.00
65.00	7.50	4.59	0.00
67.50	7.50	4.59	0.00
70.00	7.50	4.59	0.00
72.50	7.50	4.59	0.00
75.00	7.50	4.59	0.00
77.50	7.50	4.59	0.00
80.00	7.50	4.59	0.00
82.50	7.50	4.59	0.00
85.00	7.50	4.59	0.00
87.50	7.50	4.59	0.00
90.00	7.50	4.59	0.00
92.50	7.50	4.59	0.00
95.00	7.50	4.59	0.00
97.50	7.50	4.59	0.00
100.00	7.50	4.59	0.00
102.50	7.50	4.59	0.00
105.00	7.50	4.59	0.00
107.50	7.50	4.59	0.00
110.00	7.50	4.59	0.00
112.50	7.50	4.59	0.00
115.00	7.50	4.59	0.00
117.50	7.50	4.59	0.00
120.00	7.50	4.59	0.00

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Type II 24-hr 100 Year Rainfall=7.50"

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Summary for Subcatchment 4S: Drainage Area 4

Runoff = 27.87 cfs @ 12.01 hrs, Volume= 1.531 af, Depth= 4.59"

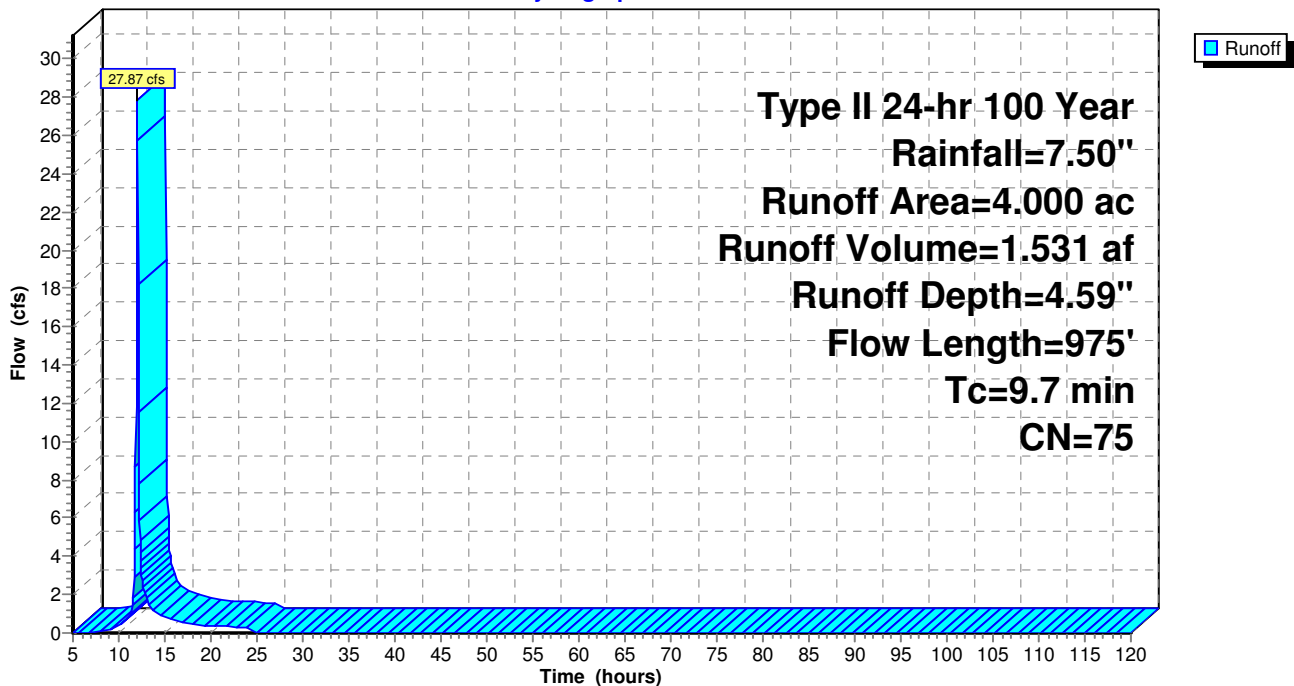
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs
Type II 24-hr 100 Year Rainfall=7.50"

Area (ac)	CN	Description
4.000	75	1/4 acre lots, 38% imp, HSG B
2.480		Pervious Area
1.520		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0500	0.26		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
3.2	875	0.0910	4.52		Shallow Concentrated Flow, 2 to DP-4 Grassed Waterway Kv= 15.0 fps
9.7	975	Total			

Subcatchment 4S: Drainage Area 4

Hydrograph



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Hydrograph for Subcatchment 4S: Drainage Area 4

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.47	0.00	0.00
7.50	0.82	0.01	0.05
10.00	1.36	0.12	0.34
12.50	5.51	2.87	3.04
15.00	6.40	3.63	0.81
17.50	6.84	4.01	0.52
20.00	7.14	4.27	0.36
22.50	7.37	4.48	0.32
25.00	7.50	4.59	0.00
27.50	7.50	4.59	0.00
30.00	7.50	4.59	0.00
32.50	7.50	4.59	0.00
35.00	7.50	4.59	0.00
37.50	7.50	4.59	0.00
40.00	7.50	4.59	0.00
42.50	7.50	4.59	0.00
45.00	7.50	4.59	0.00
47.50	7.50	4.59	0.00
50.00	7.50	4.59	0.00
52.50	7.50	4.59	0.00
55.00	7.50	4.59	0.00
57.50	7.50	4.59	0.00
60.00	7.50	4.59	0.00
62.50	7.50	4.59	0.00
65.00	7.50	4.59	0.00
67.50	7.50	4.59	0.00
70.00	7.50	4.59	0.00
72.50	7.50	4.59	0.00
75.00	7.50	4.59	0.00
77.50	7.50	4.59	0.00
80.00	7.50	4.59	0.00
82.50	7.50	4.59	0.00
85.00	7.50	4.59	0.00
87.50	7.50	4.59	0.00
90.00	7.50	4.59	0.00
92.50	7.50	4.59	0.00
95.00	7.50	4.59	0.00
97.50	7.50	4.59	0.00
100.00	7.50	4.59	0.00
102.50	7.50	4.59	0.00
105.00	7.50	4.59	0.00
107.50	7.50	4.59	0.00
110.00	7.50	4.59	0.00
112.50	7.50	4.59	0.00
115.00	7.50	4.59	0.00
117.50	7.50	4.59	0.00
120.00	7.50	4.59	0.00

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Summary for Subcatchment 5S: Drainage Area 5

Runoff = 105.75 cfs @ 12.04 hrs, Volume= 6.277 af, Depth= 4.59"

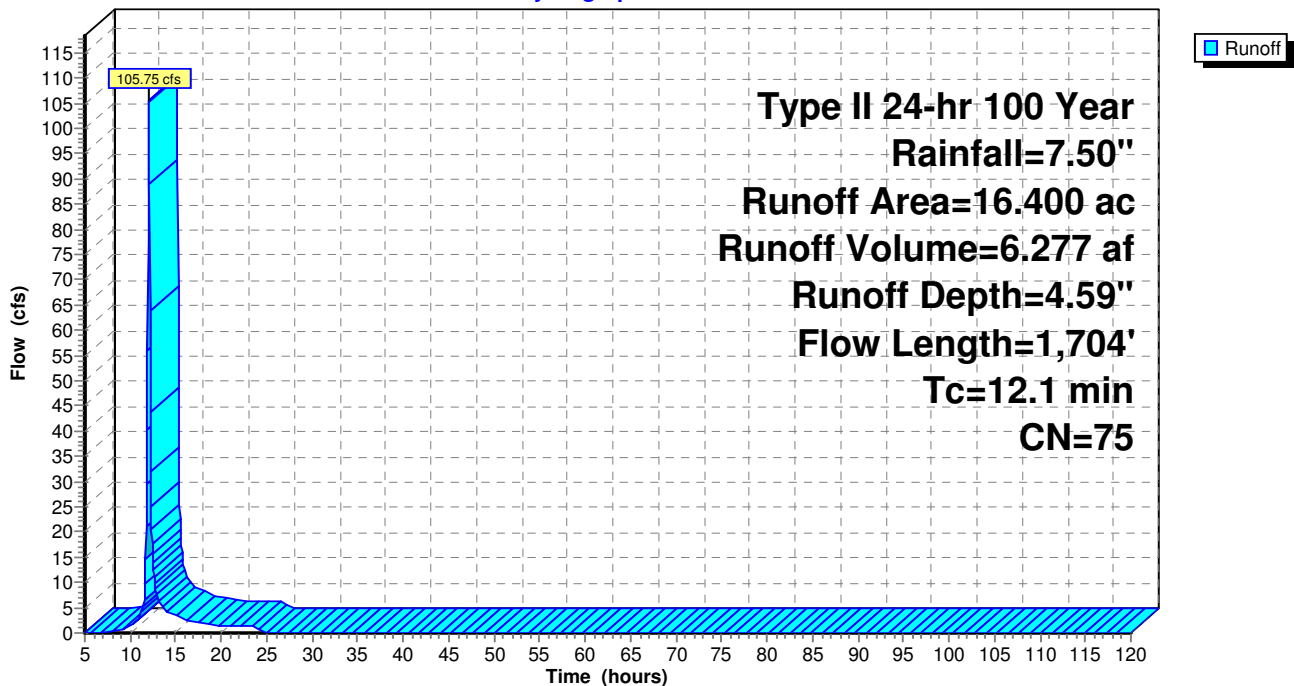
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs
Type II 24-hr 100 Year Rainfall=7.50"

Area (ac)	CN	Description
16.400	75	1/4 acre lots, 38% imp, HSG B
10.168		Pervious Area
6.232		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.5	100	0.0500	0.26		Sheet Flow, 1 to 2
5.6	1,604	0.0870	4.75		Shallow Concentrated Flow, 2 to DP-5
					Unpaved Kv= 16.1 fps
12.1	1,704	Total			

Subcatchment 5S: Drainage Area 5

Hydrograph



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Hydrograph for Subcatchment 5S: Drainage Area 5

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.47	0.00	0.00
7.50	0.82	0.01	0.18
10.00	1.36	0.12	1.36
12.50	5.51	2.87	13.86
15.00	6.40	3.63	3.35
17.50	6.84	4.01	2.14
20.00	7.14	4.27	1.48
22.50	7.37	4.48	1.31
25.00	7.50	4.59	0.00
27.50	7.50	4.59	0.00
30.00	7.50	4.59	0.00
32.50	7.50	4.59	0.00
35.00	7.50	4.59	0.00
37.50	7.50	4.59	0.00
40.00	7.50	4.59	0.00
42.50	7.50	4.59	0.00
45.00	7.50	4.59	0.00
47.50	7.50	4.59	0.00
50.00	7.50	4.59	0.00
52.50	7.50	4.59	0.00
55.00	7.50	4.59	0.00
57.50	7.50	4.59	0.00
60.00	7.50	4.59	0.00
62.50	7.50	4.59	0.00
65.00	7.50	4.59	0.00
67.50	7.50	4.59	0.00
70.00	7.50	4.59	0.00
72.50	7.50	4.59	0.00
75.00	7.50	4.59	0.00
77.50	7.50	4.59	0.00
80.00	7.50	4.59	0.00
82.50	7.50	4.59	0.00
85.00	7.50	4.59	0.00
87.50	7.50	4.59	0.00
90.00	7.50	4.59	0.00
92.50	7.50	4.59	0.00
95.00	7.50	4.59	0.00
97.50	7.50	4.59	0.00
100.00	7.50	4.59	0.00
102.50	7.50	4.59	0.00
105.00	7.50	4.59	0.00
107.50	7.50	4.59	0.00
110.00	7.50	4.59	0.00
112.50	7.50	4.59	0.00
115.00	7.50	4.59	0.00
117.50	7.50	4.59	0.00
120.00	7.50	4.59	0.00

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Type II 24-hr 100 Year Rainfall=7.50"

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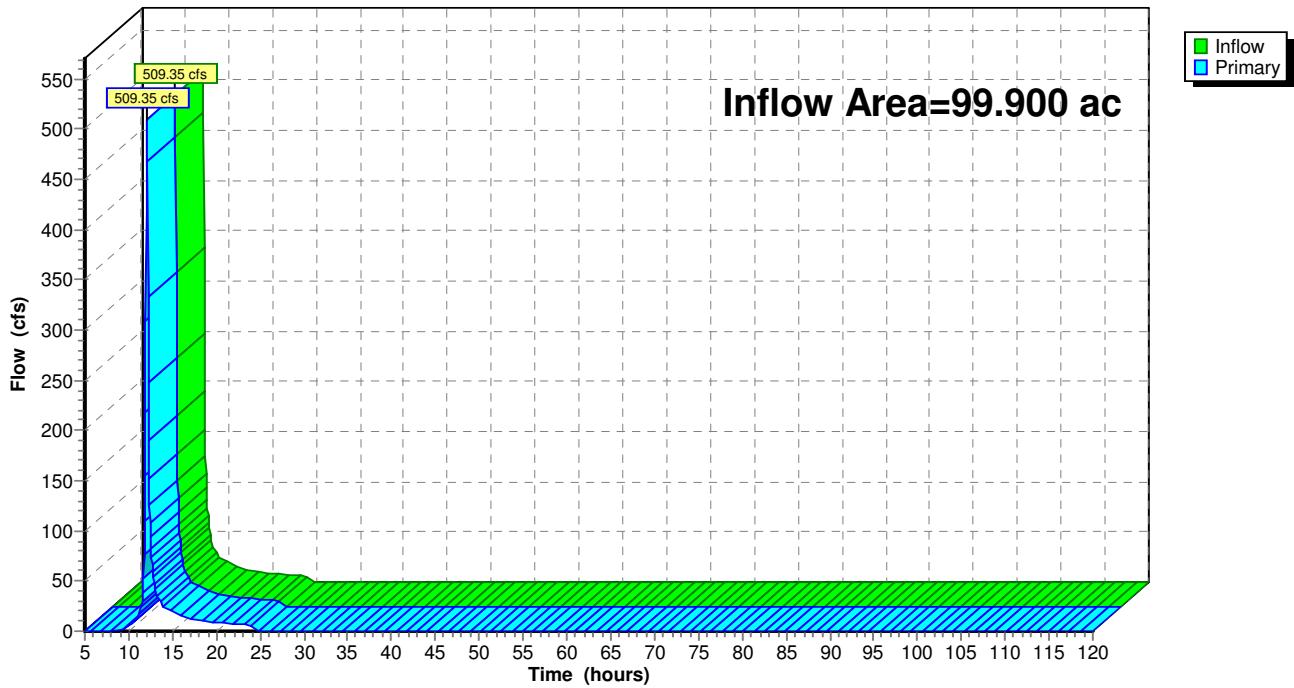
Summary for Link DP-1: DP-1

Inflow Area = 99.900 ac, 23.34% Impervious, Inflow Depth = 4.04" for 100 Year event
Inflow = 509.35 cfs @ 12.08 hrs, Volume= 33.615 af
Primary = 509.35 cfs @ 12.08 hrs, Volume= 33.615 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs

Link DP-1: DP-1

Hydrograph



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Hydrograph for Link DP-1: DP-1

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00
10.00	4.80	0.00	4.80
12.50	93.92	0.00	93.92
15.00	19.33	0.00	19.33
17.50	12.37	0.00	12.37
20.00	8.58	0.00	8.58
22.50	7.55	0.00	7.55
25.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00
30.00	0.00	0.00	0.00
32.50	0.00	0.00	0.00
35.00	0.00	0.00	0.00
37.50	0.00	0.00	0.00
40.00	0.00	0.00	0.00
42.50	0.00	0.00	0.00
45.00	0.00	0.00	0.00
47.50	0.00	0.00	0.00
50.00	0.00	0.00	0.00
52.50	0.00	0.00	0.00
55.00	0.00	0.00	0.00
57.50	0.00	0.00	0.00
60.00	0.00	0.00	0.00
62.50	0.00	0.00	0.00
65.00	0.00	0.00	0.00
67.50	0.00	0.00	0.00
70.00	0.00	0.00	0.00
72.50	0.00	0.00	0.00
75.00	0.00	0.00	0.00
77.50	0.00	0.00	0.00
80.00	0.00	0.00	0.00
82.50	0.00	0.00	0.00
85.00	0.00	0.00	0.00
87.50	0.00	0.00	0.00
90.00	0.00	0.00	0.00
92.50	0.00	0.00	0.00
95.00	0.00	0.00	0.00
97.50	0.00	0.00	0.00
100.00	0.00	0.00	0.00
102.50	0.00	0.00	0.00
105.00	0.00	0.00	0.00
107.50	0.00	0.00	0.00
110.00	0.00	0.00	0.00
112.50	0.00	0.00	0.00
115.00	0.00	0.00	0.00
117.50	0.00	0.00	0.00
120.00	0.00	0.00	0.00

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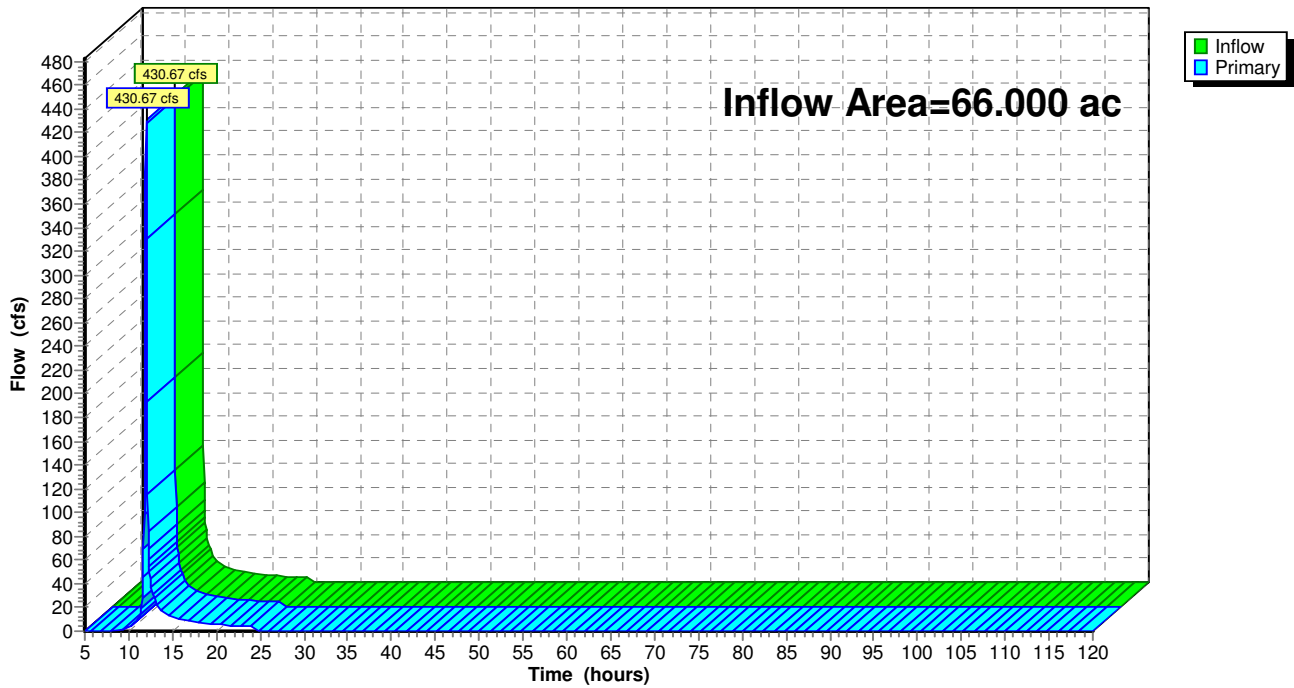
Summary for Link DP-2: DP-2

Inflow Area = 66.000 ac, 19.90% Impervious, Inflow Depth = 3.93" for 100 Year event
Inflow = 430.67 cfs @ 11.99 hrs, Volume= 21.605 af
Primary = 430.67 cfs @ 11.99 hrs, Volume= 21.605 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs

Link DP-2: DP-2

Hydrograph



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Hydrograph for Link DP-2: DP-2

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00
10.00	3.15	0.00	3.15
12.50	42.54	0.00	42.54
15.00	12.26	0.00	12.26
17.50	7.94	0.00	7.94
20.00	5.47	0.00	5.47
22.50	4.90	0.00	4.90
25.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00
30.00	0.00	0.00	0.00
32.50	0.00	0.00	0.00
35.00	0.00	0.00	0.00
37.50	0.00	0.00	0.00
40.00	0.00	0.00	0.00
42.50	0.00	0.00	0.00
45.00	0.00	0.00	0.00
47.50	0.00	0.00	0.00
50.00	0.00	0.00	0.00
52.50	0.00	0.00	0.00
55.00	0.00	0.00	0.00
57.50	0.00	0.00	0.00
60.00	0.00	0.00	0.00
62.50	0.00	0.00	0.00
65.00	0.00	0.00	0.00
67.50	0.00	0.00	0.00
70.00	0.00	0.00	0.00
72.50	0.00	0.00	0.00
75.00	0.00	0.00	0.00
77.50	0.00	0.00	0.00
80.00	0.00	0.00	0.00
82.50	0.00	0.00	0.00
85.00	0.00	0.00	0.00
87.50	0.00	0.00	0.00
90.00	0.00	0.00	0.00
92.50	0.00	0.00	0.00
95.00	0.00	0.00	0.00
97.50	0.00	0.00	0.00
100.00	0.00	0.00	0.00
102.50	0.00	0.00	0.00
105.00	0.00	0.00	0.00
107.50	0.00	0.00	0.00
110.00	0.00	0.00	0.00
112.50	0.00	0.00	0.00
115.00	0.00	0.00	0.00
117.50	0.00	0.00	0.00
120.00	0.00	0.00	0.00

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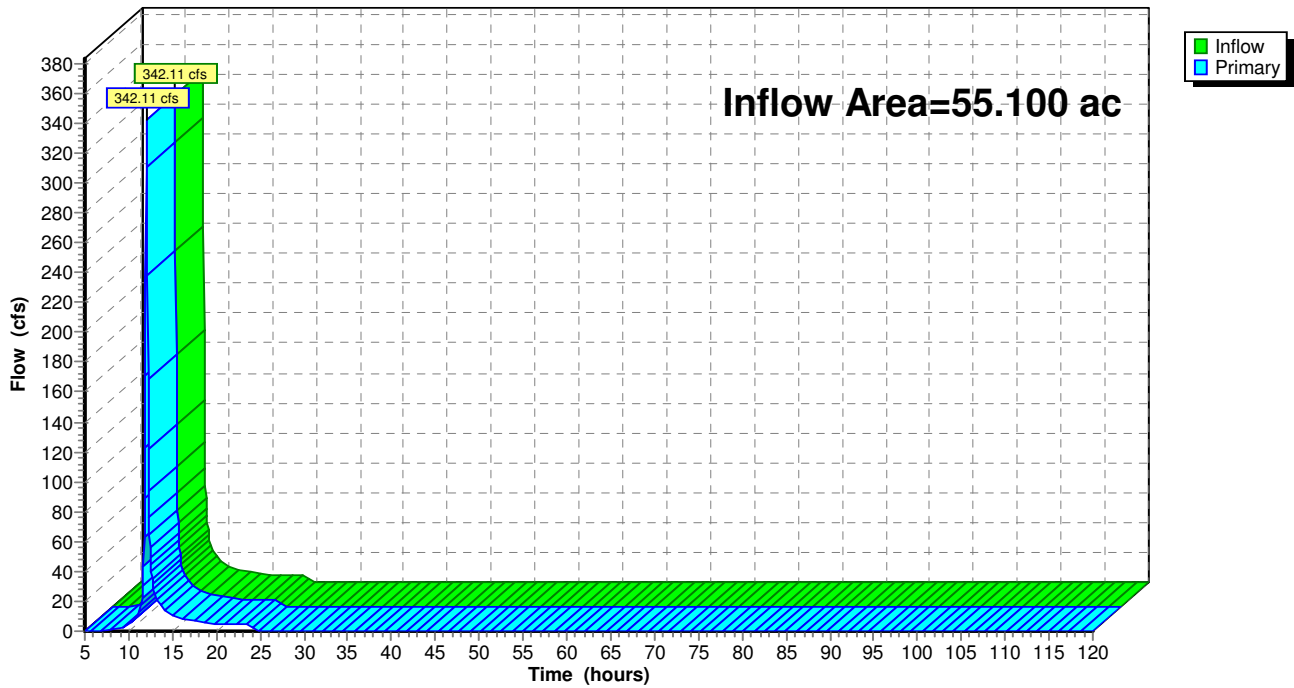
Summary for Link DP-3: DP-3

Inflow Area = 55.100 ac, 38.00% Impervious, Inflow Depth = 4.59" for 100 Year event
Inflow = 342.11 cfs @ 12.05 hrs, Volume= 21.089 af
Primary = 342.11 cfs @ 12.05 hrs, Volume= 21.089 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs

Link DP-3: DP-3

Hydrograph



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Hydrograph for Link DP-3: DP-3

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	0.00	0.00
7.50	0.59	0.00	0.59
10.00	4.50	0.00	4.50
12.50	49.66	0.00	49.66
15.00	11.31	0.00	11.31
17.50	7.22	0.00	7.22
20.00	4.98	0.00	4.98
22.50	4.39	0.00	4.39
25.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00
30.00	0.00	0.00	0.00
32.50	0.00	0.00	0.00
35.00	0.00	0.00	0.00
37.50	0.00	0.00	0.00
40.00	0.00	0.00	0.00
42.50	0.00	0.00	0.00
45.00	0.00	0.00	0.00
47.50	0.00	0.00	0.00
50.00	0.00	0.00	0.00
52.50	0.00	0.00	0.00
55.00	0.00	0.00	0.00
57.50	0.00	0.00	0.00
60.00	0.00	0.00	0.00
62.50	0.00	0.00	0.00
65.00	0.00	0.00	0.00
67.50	0.00	0.00	0.00
70.00	0.00	0.00	0.00
72.50	0.00	0.00	0.00
75.00	0.00	0.00	0.00
77.50	0.00	0.00	0.00
80.00	0.00	0.00	0.00
82.50	0.00	0.00	0.00
85.00	0.00	0.00	0.00
87.50	0.00	0.00	0.00
90.00	0.00	0.00	0.00
92.50	0.00	0.00	0.00
95.00	0.00	0.00	0.00
97.50	0.00	0.00	0.00
100.00	0.00	0.00	0.00
102.50	0.00	0.00	0.00
105.00	0.00	0.00	0.00
107.50	0.00	0.00	0.00
110.00	0.00	0.00	0.00
112.50	0.00	0.00	0.00
115.00	0.00	0.00	0.00
117.50	0.00	0.00	0.00
120.00	0.00	0.00	0.00

Pre-Development Entire

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Type II 24-hr 100 Year Rainfall=7.50"

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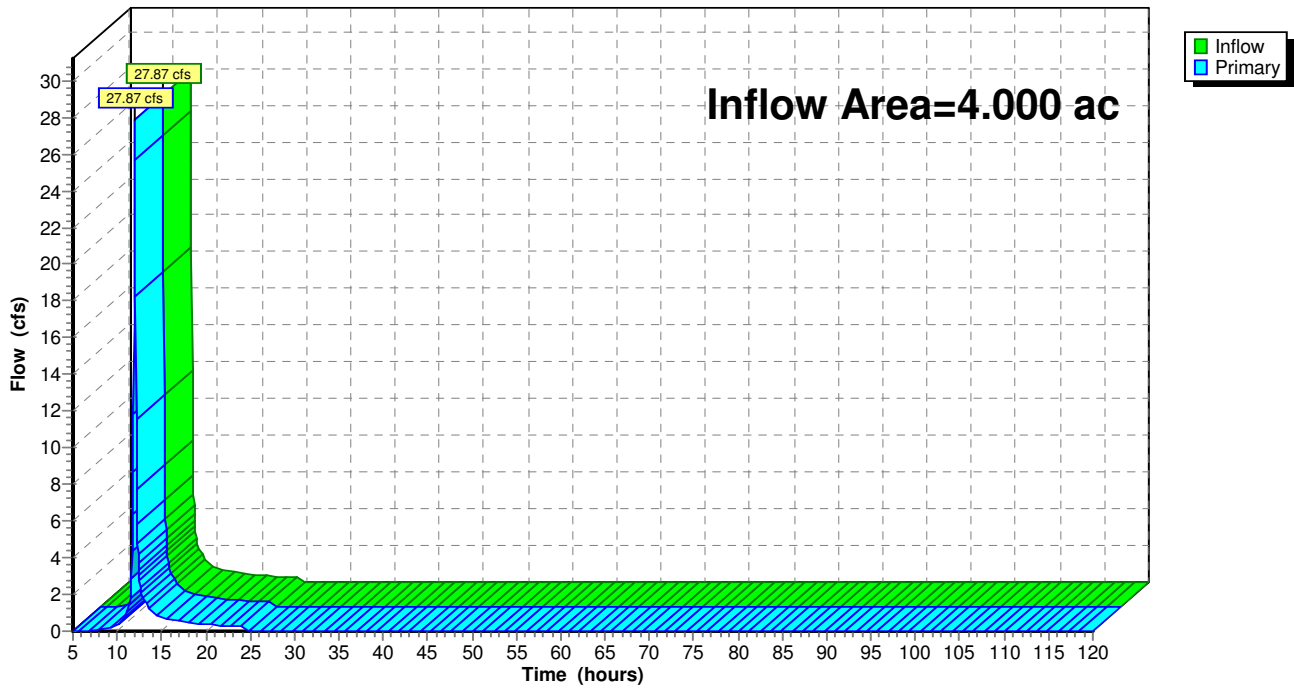
Summary for Link DP-4: DP-4

Inflow Area = 4.000 ac, 38.00% Impervious, Inflow Depth = 4.59" for 100 Year event
Inflow = 27.87 cfs @ 12.01 hrs, Volume= 1.531 af
Primary = 27.87 cfs @ 12.01 hrs, Volume= 1.531 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs

Link DP-4: DP-4

Hydrograph



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Type II 24-hr 100 Year Rainfall=7.50"

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Hydrograph for Link DP-4: DP-4

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	0.00	0.00
7.50	0.05	0.00	0.05
10.00	0.34	0.00	0.34
12.50	3.04	0.00	3.04
15.00	0.81	0.00	0.81
17.50	0.52	0.00	0.52
20.00	0.36	0.00	0.36
22.50	0.32	0.00	0.32
25.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00
30.00	0.00	0.00	0.00
32.50	0.00	0.00	0.00
35.00	0.00	0.00	0.00
37.50	0.00	0.00	0.00
40.00	0.00	0.00	0.00
42.50	0.00	0.00	0.00
45.00	0.00	0.00	0.00
47.50	0.00	0.00	0.00
50.00	0.00	0.00	0.00
52.50	0.00	0.00	0.00
55.00	0.00	0.00	0.00
57.50	0.00	0.00	0.00
60.00	0.00	0.00	0.00
62.50	0.00	0.00	0.00
65.00	0.00	0.00	0.00
67.50	0.00	0.00	0.00
70.00	0.00	0.00	0.00
72.50	0.00	0.00	0.00
75.00	0.00	0.00	0.00
77.50	0.00	0.00	0.00
80.00	0.00	0.00	0.00
82.50	0.00	0.00	0.00
85.00	0.00	0.00	0.00
87.50	0.00	0.00	0.00
90.00	0.00	0.00	0.00
92.50	0.00	0.00	0.00
95.00	0.00	0.00	0.00
97.50	0.00	0.00	0.00
100.00	0.00	0.00	0.00
102.50	0.00	0.00	0.00
105.00	0.00	0.00	0.00
107.50	0.00	0.00	0.00
110.00	0.00	0.00	0.00
112.50	0.00	0.00	0.00
115.00	0.00	0.00	0.00
117.50	0.00	0.00	0.00
120.00	0.00	0.00	0.00

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Type II 24-hr 100 Year Rainfall=7.50"

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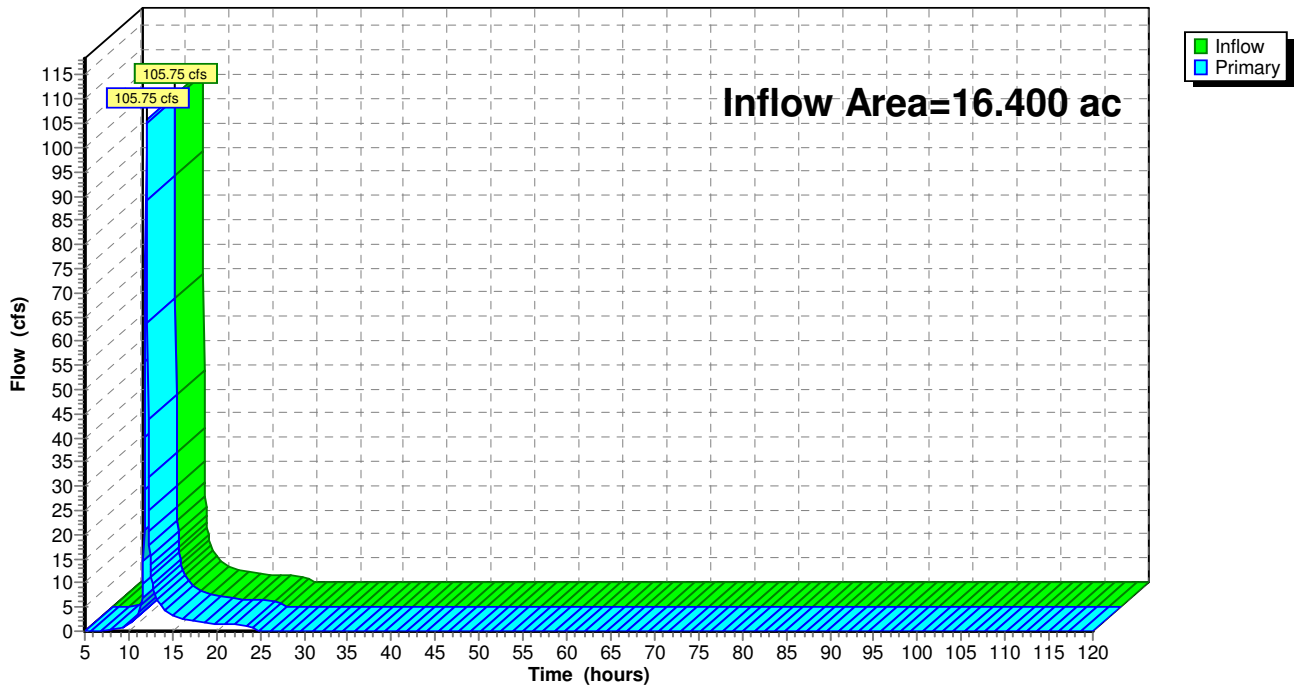
Summary for Link DP-5: DP-5

Inflow Area = 16.400 ac, 38.00% Impervious, Inflow Depth = 4.59" for 100 Year event
Inflow = 105.75 cfs @ 12.04 hrs, Volume= 6.277 af
Primary = 105.75 cfs @ 12.04 hrs, Volume= 6.277 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-120.00 hrs, dt= 0.05 hrs

Link DP-5: DP-5

Hydrograph



Pre-Development Entire

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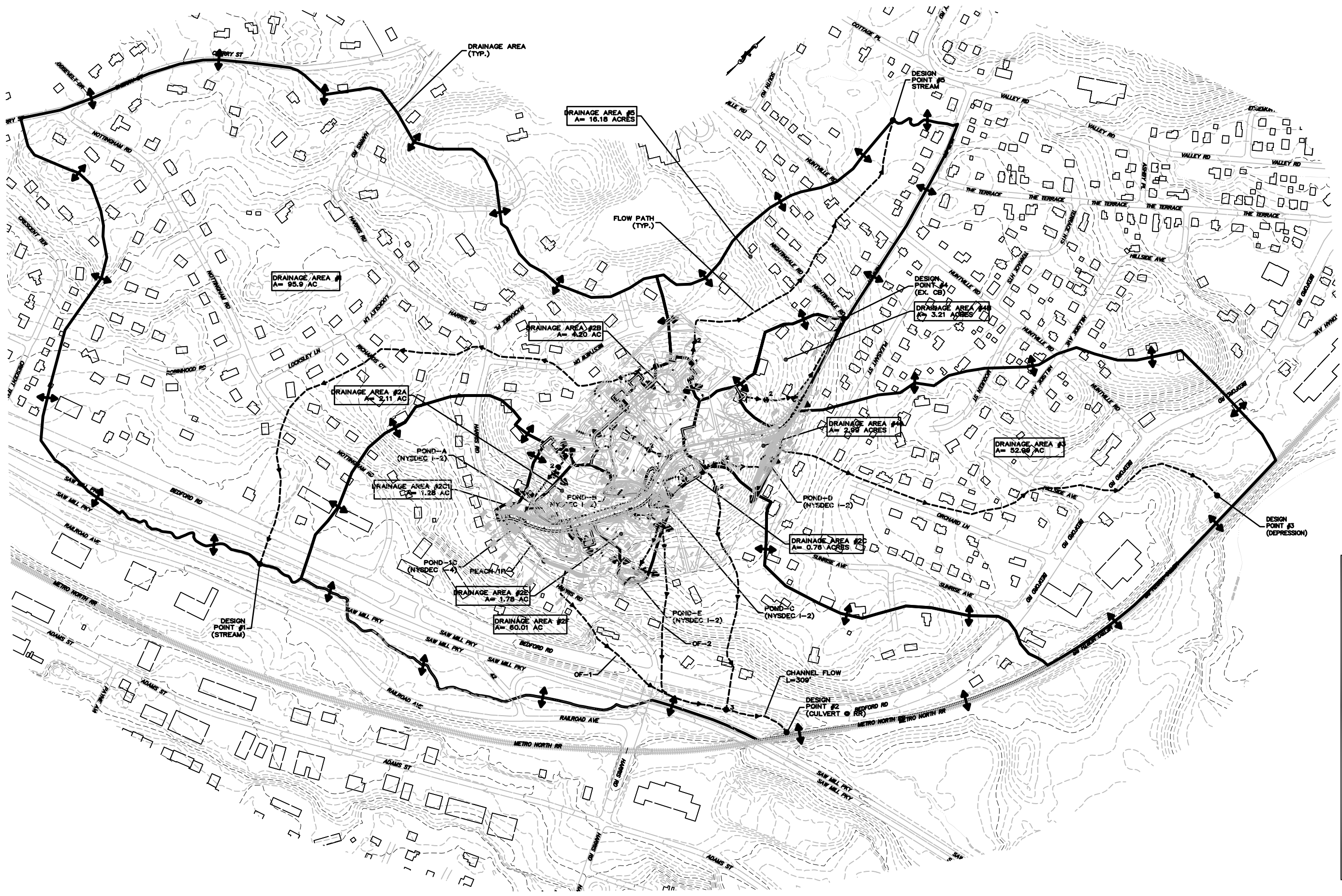
Type II 24-hr 100 Year Rainfall=7.50"

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Hydrograph for Link DP-5: DP-5

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	0.00	0.00
7.50	0.18	0.00	0.18
10.00	1.36	0.00	1.36
12.50	13.86	0.00	13.86
15.00	3.35	0.00	3.35
17.50	2.14	0.00	2.14
20.00	1.48	0.00	1.48
22.50	1.31	0.00	1.31
25.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00
30.00	0.00	0.00	0.00
32.50	0.00	0.00	0.00
35.00	0.00	0.00	0.00
37.50	0.00	0.00	0.00
40.00	0.00	0.00	0.00
42.50	0.00	0.00	0.00
45.00	0.00	0.00	0.00
47.50	0.00	0.00	0.00
50.00	0.00	0.00	0.00
52.50	0.00	0.00	0.00
55.00	0.00	0.00	0.00
57.50	0.00	0.00	0.00
60.00	0.00	0.00	0.00
62.50	0.00	0.00	0.00
65.00	0.00	0.00	0.00
67.50	0.00	0.00	0.00
70.00	0.00	0.00	0.00
72.50	0.00	0.00	0.00
75.00	0.00	0.00	0.00
77.50	0.00	0.00	0.00
80.00	0.00	0.00	0.00
82.50	0.00	0.00	0.00
85.00	0.00	0.00	0.00
87.50	0.00	0.00	0.00
90.00	0.00	0.00	0.00
92.50	0.00	0.00	0.00
95.00	0.00	0.00	0.00
97.50	0.00	0.00	0.00
100.00	0.00	0.00	0.00
102.50	0.00	0.00	0.00
105.00	0.00	0.00	0.00
107.50	0.00	0.00	0.00
110.00	0.00	0.00	0.00
112.50	0.00	0.00	0.00
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120.00	0.00	0.00	0.00



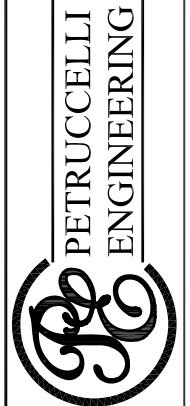
POST-DEVELOPMENT PLAN
SCALE: 1" = 200'-0"

NOTE: UNAUTHORIZED ALTERATIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209-2 OF THE NEW YORK STATE EDUCATION LAW.

NOTE: THIS PLAN IS NULL AND VOID UNLESS IT BEARS THE ORIGINAL SEAL AND SIGNATURE OF THE ENGINEER.

REVISIONS	01-18-07 08-26-09
JOB NO.	2001-27
DATE	06.27.05
SCALE	1"=200'
DRAWN BY:	SP
CHECKED BY:	R.C.P.

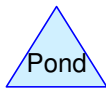
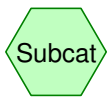
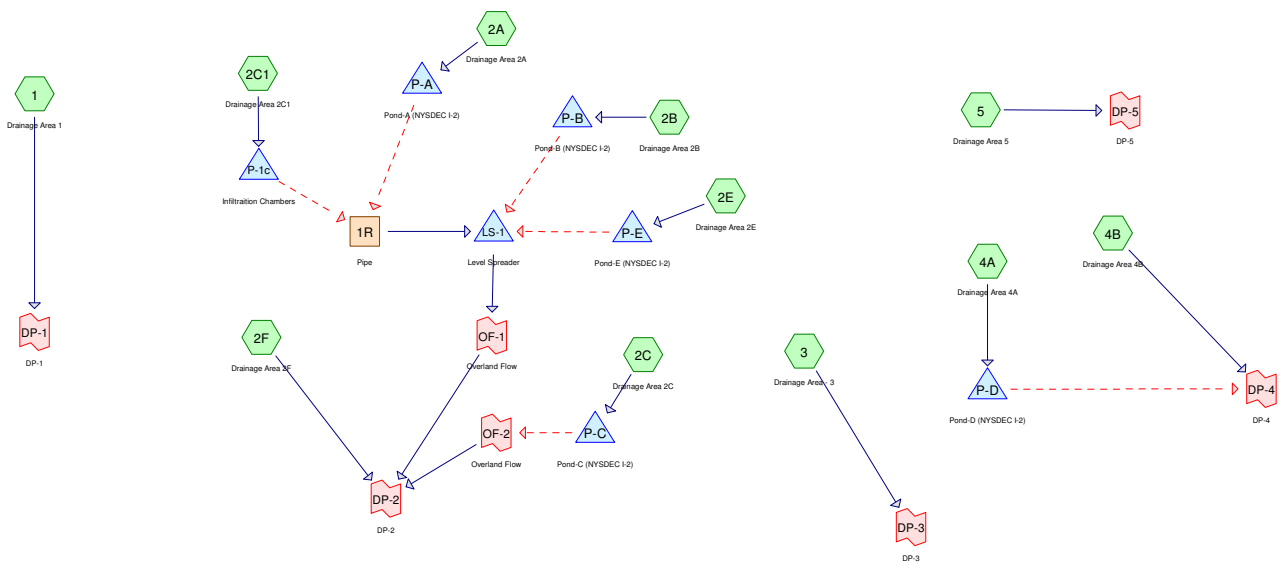
392 COLUMBUS AVENUE
VALHALLA, NEW YORK 10595
9 1 4 . 9 4 8 . 3 6 2 9
RUDOLPH C. PETRUCCELLI, P.E.



POST-DEVELOPMENT PLAN
PROPOSED SUBDIVISION

FOR
COSIMO TRIPPI
AND
JAMES P. MURPHY AND ADELAIDE V. MURPHY
HARRIS ROAD
NEW YORK

SHEET NO.	2
	2



Drainage Diagram for Post-Development Entire
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Post-Development Entire

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
155.910	70	1/2 acre lots, 25% imp, HSG B (1,2F)
0.054	72	Woods/grass comb., Good, HSG C (2C)
0.539	73	Woods, Fair, HSG C (2E)
7.450	74	>75% Grass cover, Good, HSG C (2A,2B,2C1,2E,4A)
72.380	75	1/4 acre lots, 38% imp, HSG B (3,4B,5)
1.987	76	Woods/grass comb., Fair, HSG C (2A,2C1,4A)
0.482	79	50-75% Grass cover, Fair, HSG C (2C)
0.719	98	Paved parking & roofs (2C1,4A)
1.894	98	Paved roads w/curbs & sewers (2A,2B,2C,2E)
241.414		TOTAL AREA

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Soil Listing (all nodes)

Area (acres)	Soil Goup	Subcatchment Numbers
0.000	HSG A	
228.290	HSG B	1, 2F, 3, 4B, 5
10.511	HSG C	2A, 2B, 2C, 2C1, 2E, 4A
0.000	HSG D	
2.613	Other	2A, 2B, 2C, 2C1, 2E, 4A
241.414		TOTAL AREA

Post-Development Entire

Type III 24-hr 1 Year Rainfall=2.80"

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Time span=0.00-120.00 hrs, dt=0.01 hrs, 12001 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1: Drainage Area 1	Runoff Area=95.900 ac 25.00% Impervious Runoff Depth=0.61" Flow Length=2,615' Tc=14.7 min CN=70 Runoff=42.94 cfs 4.843 af
Subcatchment 2A: Drainage Area 2A	Runoff Area=91,912 sf 13.06% Impervious Runoff Depth=0.99" Flow Length=579' Tc=7.8 min CN=78 Runoff=2.21 cfs 0.174 af
Subcatchment 2B: Drainage Area 2B	Runoff Area=182,926 sf 26.44% Impervious Runoff Depth=1.10" Flow Length=749' Tc=15.1 min CN=80 Runoff=3.98 cfs 0.386 af
Subcatchment 2C: Drainage Area 2C	Runoff Area=33,079 sf 29.42% Impervious Runoff Depth=1.35" Flow Length=149' Tc=9.6 min CN=84 Runoff=1.06 cfs 0.086 af
Subcatchment 2C1: Drainage Area 2C1	Runoff Area=55,757 sf 15.98% Impervious Runoff Depth=1.04" Flow Length=529' Tc=9.4 min CN=79 Runoff=1.35 cfs 0.111 af
Subcatchment 2E: Drainage Area 2E	Runoff Area=77,746 sf 15.96% Impervious Runoff Depth=0.99" Flow Length=415' Tc=7.8 min CN=78 Runoff=1.87 cfs 0.147 af
Subcatchment 2F: Drainage Area 2F	Runoff Area=60.010 ac 25.00% Impervious Runoff Depth=0.61" Flow Length=1,484' Tc=7.4 min CN=70 Runoff=33.87 cfs 3.031 af
Subcatchment 3: Drainage Area - 3	Runoff Area=52.990 ac 38.00% Impervious Runoff Depth=0.83" Flow Length=481' Tc=8.1 min CN=75 Runoff=44.54 cfs 3.676 af
Subcatchment 4A: Drainage Area 4A	Runoff Area=130,244 sf 17.19% Impervious Runoff Depth=0.99" Flow Length=303' Tc=6.9 min CN=78 Runoff=3.23 cfs 0.246 af
Subcatchment 4B: Drainage Area 4B	Runoff Area=3.210 ac 38.00% Impervious Runoff Depth=0.83" Flow Length=678' Tc=6.0 min CN=75 Runoff=2.91 cfs 0.223 af
Subcatchment 5: Drainage Area 5	Runoff Area=16.180 ac 38.00% Impervious Runoff Depth=0.83" Flow Length=1,619' Tc=9.4 min CN=75 Runoff=13.00 cfs 1.123 af
Reach 1R: Pipe	Avg. Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af D=18.0" n=0.013 L=188.0' S=0.0649 '/' Capacity=26.76 cfs Outflow=0.00 cfs 0.000 af
Pond LS-1: Level Spreader	Peak Elev=296.00' Storage=0 cf Inflow=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af
Pond P-1c: Infiltration Chambers	Peak Elev=309.80' Storage=1,229 cf Inflow=1.35 cfs 0.111 af Primary=0.29 cfs 0.111 af Secondary=0.00 cfs 0.000 af Outflow=0.29 cfs 0.111 af
Pond P-A: Pond-A (NYSDEC I-2)	Peak Elev=329.81' Storage=2,583 cf Inflow=2.21 cfs 0.174 af Primary=0.33 cfs 0.174 af Secondary=0.00 cfs 0.000 af Outflow=0.33 cfs 0.174 af
Pond P-B: Pond-B (NYSDEC I-2)	Peak Elev=384.56' Storage=6,523 cf Inflow=3.98 cfs 0.386 af Primary=0.56 cfs 0.386 af Secondary=0.00 cfs 0.000 af Outflow=0.56 cfs 0.386 af

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Type III 24-hr 1 Year Rainfall=2.80"

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Pond P-C: Pond-C (NYSDEC I-2) Peak Elev=388.07' Storage=1,407 cf Inflow=1.06 cfs 0.086 af
Primary=0.15 cfs 0.086 af Secondary=0.00 cfs 0.000 af Outflow=0.15 cfs 0.086 af

Pond P-D: Pond-D (NYSDEC I-2) Peak Elev=360.09' Storage=3,761 cf Inflow=3.23 cfs 0.246 af
Primary=0.48 cfs 0.246 af Secondary=0.00 cfs 0.000 af Outflow=0.48 cfs 0.246 af

Pond P-E: Pond-E (NYSDEC I-2) Peak Elev=309.43' Storage=2,341 cf Inflow=1.87 cfs 0.147 af
Primary=0.22 cfs 0.147 af Secondary=0.00 cfs 0.000 af Outflow=0.22 cfs 0.147 af

Link DP-1: DP-1 Inflow=42.94 cfs 4.843 af
Primary=42.94 cfs 4.843 af

Link DP-2: DP-2 Inflow=33.87 cfs 3.031 af
Primary=33.87 cfs 3.031 af

Link DP-3: DP-3 Inflow=44.54 cfs 3.676 af
Primary=44.54 cfs 3.676 af

Link DP-4: DP-4 Inflow=2.91 cfs 0.223 af
Primary=2.91 cfs 0.223 af

Link DP-5: DP-5 Inflow=13.00 cfs 1.123 af
Primary=13.00 cfs 1.123 af

Link OF-1: Overland Flow delayed by 2.0 min Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link OF-2: Overland Flow delayed by 2.0 min Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Total Runoff Area = 241.414 ac Runoff Volume = 14.045 af Average Runoff Depth = 0.70"
71.38% Pervious = 172.319 ac 28.62% Impervious = 69.095 ac

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Type III 24-hr 1 Year Rainfall=2.80"

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Summary for Subcatchment 1: Drainage Area 1

Runoff = 42.94 cfs @ 12.23 hrs, Volume= 4.843 af, Depth= 0.61"

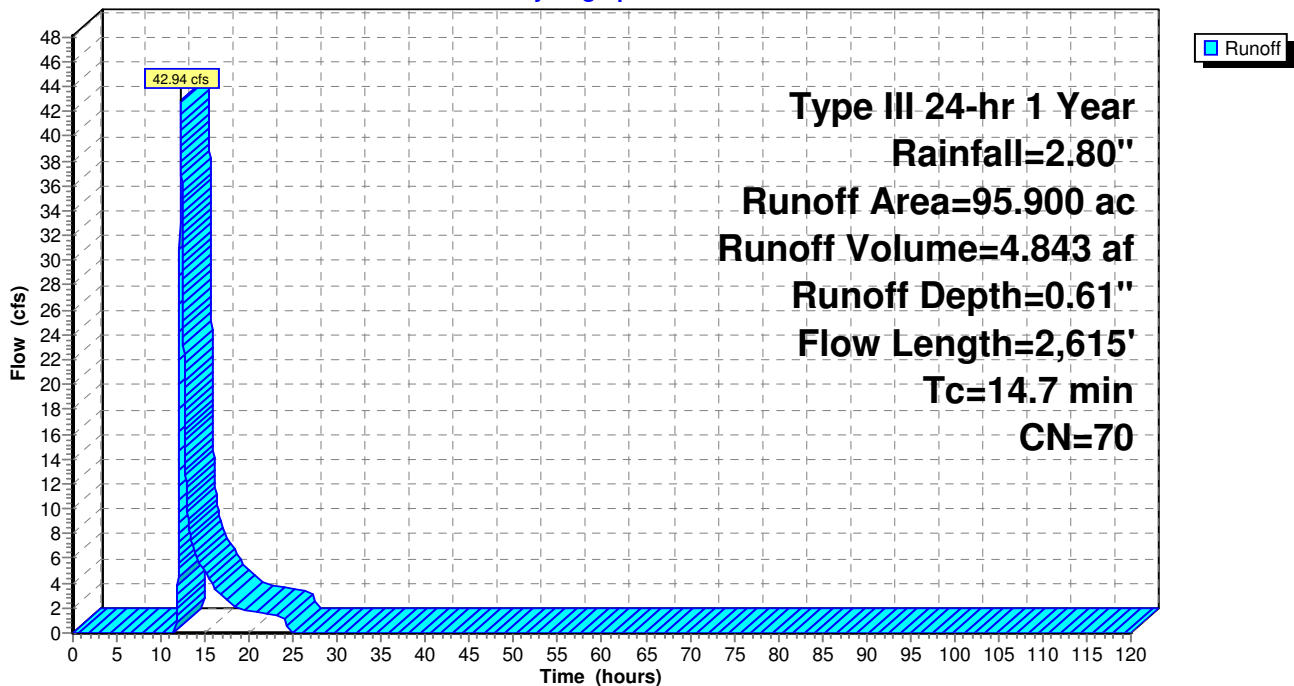
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 1 Year Rainfall=2.80"

Area (ac)	CN	Description
95.900	70	1/2 acre lots, 25% imp, HSG B
71.925		Pervious Area
23.975		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.1	100	0.0900	0.32		Sheet Flow, 1 to 2
9.6	2,515	0.0740	4.38		Grass: Short n= 0.150 P2= 3.50" Shallow Concentrated Flow, 2 to 3
14.7	2,615	Total			Unpaved Kv= 16.1 fps

Subcatchment 1: Drainage Area 1

Hydrograph



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Type III 24-hr 1 Year Rainfall=2.80"

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Hydrograph for Subcatchment 1: Drainage Area 1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	2.80	0.61	0.00
2.00	0.06	0.00	0.00	106.00	2.80	0.61	0.00
4.00	0.12	0.00	0.00	108.00	2.80	0.61	0.00
6.00	0.20	0.00	0.00	110.00	2.80	0.61	0.00
8.00	0.32	0.00	0.00	112.00	2.80	0.61	0.00
10.00	0.53	0.00	0.00	114.00	2.80	0.61	0.00
12.00	1.40	0.06	8.84	116.00	2.80	0.61	0.00
14.00	2.27	0.35	6.31	118.00	2.80	0.61	0.00
16.00	2.48	0.45	3.65	120.00	2.80	0.61	0.00
18.00	2.60	0.50	2.28				
20.00	2.68	0.54	1.83				
22.00	2.75	0.58	1.54				
24.00	2.80	0.61	1.25				
26.00	2.80	0.61	0.00				
28.00	2.80	0.61	0.00				
30.00	2.80	0.61	0.00				
32.00	2.80	0.61	0.00				
34.00	2.80	0.61	0.00				
36.00	2.80	0.61	0.00				
38.00	2.80	0.61	0.00				
40.00	2.80	0.61	0.00				
42.00	2.80	0.61	0.00				
44.00	2.80	0.61	0.00				
46.00	2.80	0.61	0.00				
48.00	2.80	0.61	0.00				
50.00	2.80	0.61	0.00				
52.00	2.80	0.61	0.00				
54.00	2.80	0.61	0.00				
56.00	2.80	0.61	0.00				
58.00	2.80	0.61	0.00				
60.00	2.80	0.61	0.00				
62.00	2.80	0.61	0.00				
64.00	2.80	0.61	0.00				
66.00	2.80	0.61	0.00				
68.00	2.80	0.61	0.00				
70.00	2.80	0.61	0.00				
72.00	2.80	0.61	0.00				
74.00	2.80	0.61	0.00				
76.00	2.80	0.61	0.00				
78.00	2.80	0.61	0.00				
80.00	2.80	0.61	0.00				
82.00	2.80	0.61	0.00				
84.00	2.80	0.61	0.00				
86.00	2.80	0.61	0.00				
88.00	2.80	0.61	0.00				
90.00	2.80	0.61	0.00				
92.00	2.80	0.61	0.00				
94.00	2.80	0.61	0.00				
96.00	2.80	0.61	0.00				
98.00	2.80	0.61	0.00				
100.00	2.80	0.61	0.00				
102.00	2.80	0.61	0.00				

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Type III 24-hr 1 Year Rainfall=2.80"

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Summary for Subcatchment 2A: Drainage Area 2A

Runoff = 2.21 cfs @ 12.12 hrs, Volume= 0.174 af, Depth= 0.99"

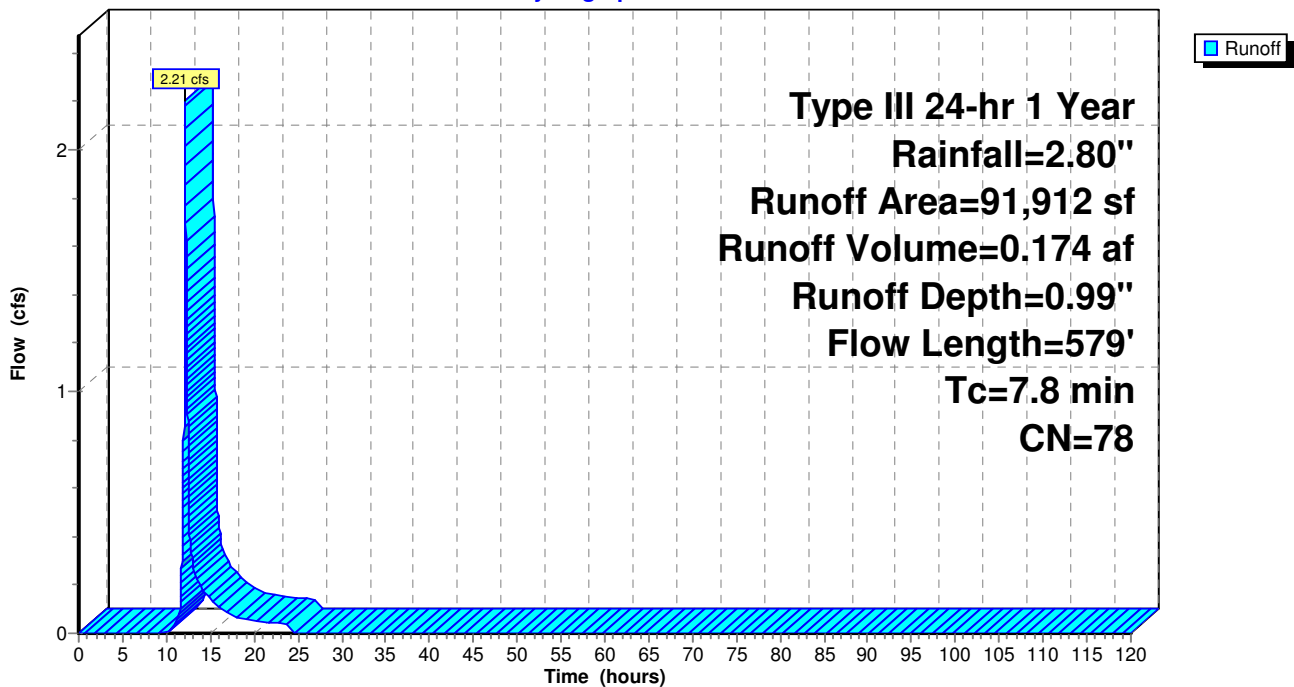
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 1 Year Rainfall=2.80"

Area (sf)	CN	Description
40,948	76	Woods/grass comb., Fair, HSG C
38,963	74	>75% Grass cover, Good, HSG C
12,001	98	Paved roads w/curbs & sewers
91,912	78	Weighted Average
79,911		Pervious Area
12,001		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	100	0.1200	0.36		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
3.2	479	0.1300	2.52		Shallow Concentrated Flow, 2 to 3 Short Grass Pasture Kv= 7.0 fps
7.8	579	Total			

Subcatchment 2A: Drainage Area 2A

Hydrograph



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Type III 24-hr 1 Year Rainfall=2.80"

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Hydrograph for Subcatchment 2A: Drainage Area 2A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	2.80	0.99	0.00
2.00	0.06	0.00	0.00	106.00	2.80	0.99	0.00
4.00	0.12	0.00	0.00	108.00	2.80	0.99	0.00
6.00	0.20	0.00	0.00	110.00	2.80	0.99	0.00
8.00	0.32	0.00	0.00	112.00	2.80	0.99	0.00
10.00	0.53	0.00	0.00	114.00	2.80	0.99	0.00
12.00	1.40	0.19	1.01	116.00	2.80	0.99	0.00
14.00	2.27	0.64	0.19	118.00	2.80	0.99	0.00
16.00	2.48	0.78	0.11	120.00	2.80	0.99	0.00
18.00	2.60	0.85	0.07				
20.00	2.68	0.91	0.05				
22.00	2.75	0.95	0.04				
24.00	2.80	0.99	0.04				
26.00	2.80	0.99	0.00				
28.00	2.80	0.99	0.00				
30.00	2.80	0.99	0.00				
32.00	2.80	0.99	0.00				
34.00	2.80	0.99	0.00				
36.00	2.80	0.99	0.00				
38.00	2.80	0.99	0.00				
40.00	2.80	0.99	0.00				
42.00	2.80	0.99	0.00				
44.00	2.80	0.99	0.00				
46.00	2.80	0.99	0.00				
48.00	2.80	0.99	0.00				
50.00	2.80	0.99	0.00				
52.00	2.80	0.99	0.00				
54.00	2.80	0.99	0.00				
56.00	2.80	0.99	0.00				
58.00	2.80	0.99	0.00				
60.00	2.80	0.99	0.00				
62.00	2.80	0.99	0.00				
64.00	2.80	0.99	0.00				
66.00	2.80	0.99	0.00				
68.00	2.80	0.99	0.00				
70.00	2.80	0.99	0.00				
72.00	2.80	0.99	0.00				
74.00	2.80	0.99	0.00				
76.00	2.80	0.99	0.00				
78.00	2.80	0.99	0.00				
80.00	2.80	0.99	0.00				
82.00	2.80	0.99	0.00				
84.00	2.80	0.99	0.00				
86.00	2.80	0.99	0.00				
88.00	2.80	0.99	0.00				
90.00	2.80	0.99	0.00				
92.00	2.80	0.99	0.00				
94.00	2.80	0.99	0.00				
96.00	2.80	0.99	0.00				
98.00	2.80	0.99	0.00				
100.00	2.80	0.99	0.00				
102.00	2.80	0.99	0.00				

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Type III 24-hr 1 Year Rainfall=2.80"

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Summary for Subcatchment 2B: Drainage Area 2B

Runoff = 3.98 cfs @ 12.22 hrs, Volume= 0.386 af, Depth= 1.10"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 1 Year Rainfall=2.80"

Area (sf)	CN	Description
48,361	98	Paved roads w/curbs & sewers
134,565	74	>75% Grass cover, Good, HSG C
182,926	80	Weighted Average
134,565		Pervious Area
48,361		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0	100	0.0300	0.21		Sheet Flow, 1 to 2
					Grass: Short n= 0.150 P2= 3.50"
6.6	276	0.0100	0.70		Shallow Concentrated Flow, 2 to 3
					Short Grass Pasture Kv= 7.0 fps
0.0	20	0.0250	10.82	13.28	Circular Channel (pipe), 3 to 4
					Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
0.0	57	0.1500	26.50	32.52	Circular Channel (pipe), 5 to 5
					Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
0.1	87	0.0260	11.03	13.54	Circular Channel (pipe), 5 to 6
					Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
0.2	102	0.0200	10.93	19.31	Circular Channel (pipe), 6 to 7
					Diam= 18.0" Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.010
0.2	107	0.0140	8.10	9.94	Circular Channel (pipe), 7 to 8
					Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
15.1	749	Total			

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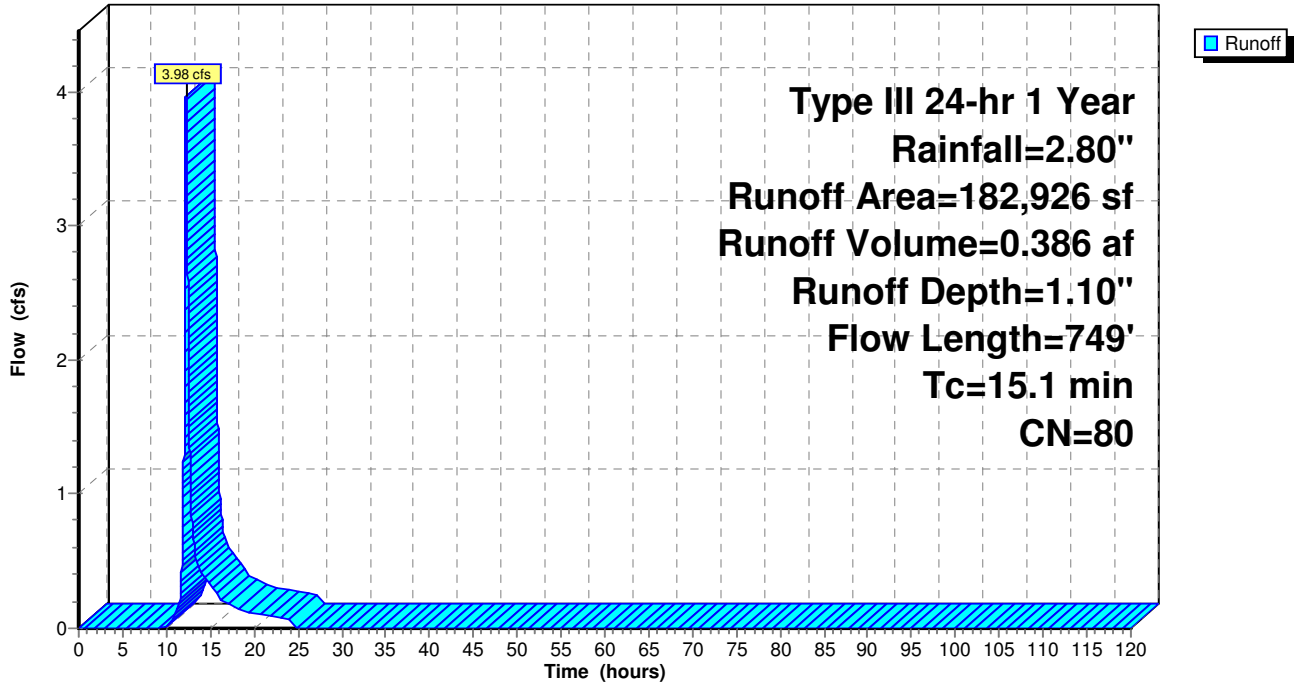
Type III 24-hr 1 Year Rainfall=2.80"

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Subcatchment 2B: Drainage Area 2B

Hydrograph



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Hydrograph for Subcatchment 2B: Drainage Area 2B

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	2.80	1.10	0.00
2.00	0.06	0.00	0.00	106.00	2.80	1.10	0.00
4.00	0.12	0.00	0.00	108.00	2.80	1.10	0.00
6.00	0.20	0.00	0.00	110.00	2.80	1.10	0.00
8.00	0.32	0.00	0.00	112.00	2.80	1.10	0.00
10.00	0.53	0.00	0.00	114.00	2.80	1.10	0.00
12.00	1.40	0.24	1.43	116.00	2.80	1.10	0.00
14.00	2.27	0.73	0.42	118.00	2.80	1.10	0.00
16.00	2.48	0.88	0.23	120.00	2.80	1.10	0.00
18.00	2.60	0.96	0.14				
20.00	2.68	1.02	0.11				
22.00	2.75	1.06	0.09				
24.00	2.80	1.10	0.08				
26.00	2.80	1.10	0.00				
28.00	2.80	1.10	0.00				
30.00	2.80	1.10	0.00				
32.00	2.80	1.10	0.00				
34.00	2.80	1.10	0.00				
36.00	2.80	1.10	0.00				
38.00	2.80	1.10	0.00				
40.00	2.80	1.10	0.00				
42.00	2.80	1.10	0.00				
44.00	2.80	1.10	0.00				
46.00	2.80	1.10	0.00				
48.00	2.80	1.10	0.00				
50.00	2.80	1.10	0.00				
52.00	2.80	1.10	0.00				
54.00	2.80	1.10	0.00				
56.00	2.80	1.10	0.00				
58.00	2.80	1.10	0.00				
60.00	2.80	1.10	0.00				
62.00	2.80	1.10	0.00				
64.00	2.80	1.10	0.00				
66.00	2.80	1.10	0.00				
68.00	2.80	1.10	0.00				
70.00	2.80	1.10	0.00				
72.00	2.80	1.10	0.00				
74.00	2.80	1.10	0.00				
76.00	2.80	1.10	0.00				
78.00	2.80	1.10	0.00				
80.00	2.80	1.10	0.00				
82.00	2.80	1.10	0.00				
84.00	2.80	1.10	0.00				
86.00	2.80	1.10	0.00				
88.00	2.80	1.10	0.00				
90.00	2.80	1.10	0.00				
92.00	2.80	1.10	0.00				
94.00	2.80	1.10	0.00				
96.00	2.80	1.10	0.00				
98.00	2.80	1.10	0.00				
100.00	2.80	1.10	0.00				
102.00	2.80	1.10	0.00				

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Type III 24-hr 1 Year Rainfall=2.80"

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Summary for Subcatchment 2C: Drainage Area 2C

Runoff = 1.06 cfs @ 12.14 hrs, Volume= 0.086 af, Depth= 1.35"

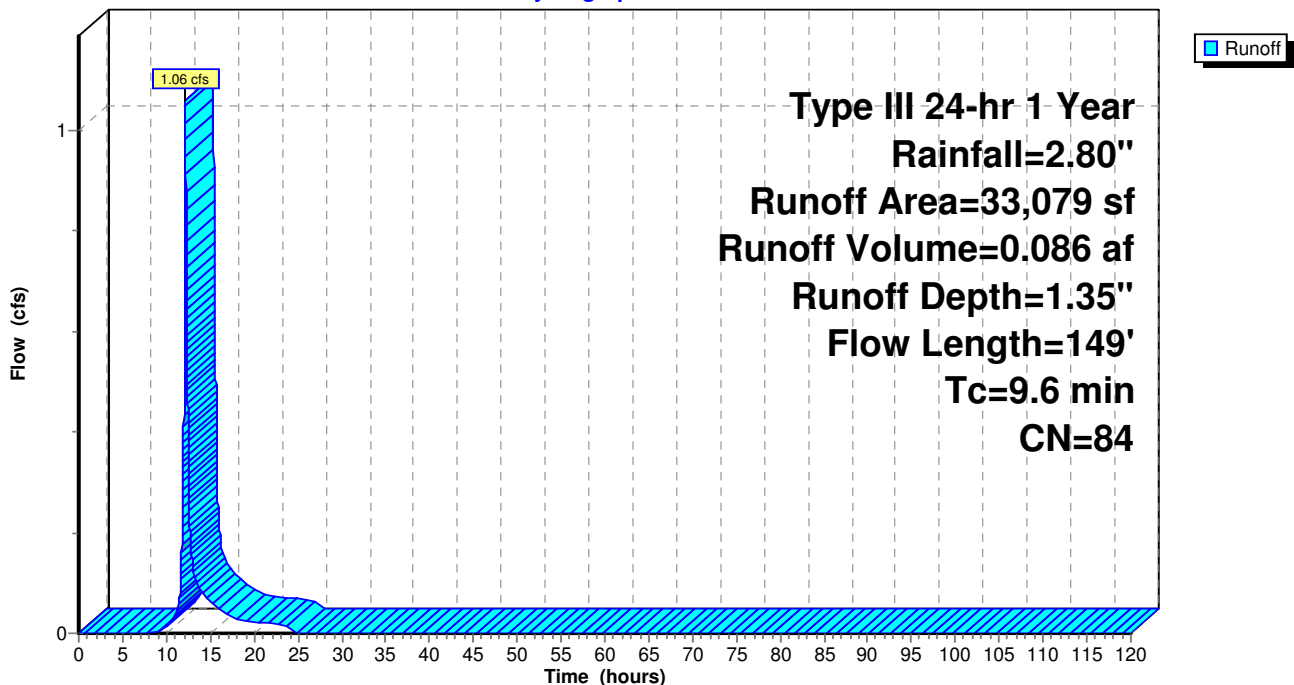
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 1 Year Rainfall=2.80"

Area (sf)	CN	Description
2,346	72	Woods/grass comb., Good, HSG C
21,001	79	50-75% Grass cover, Fair, HSG C
9,732	98	Paved roads w/curbs & sewers
33,079	84	Weighted Average
23,347		Pervious Area
9,732		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	100	0.1400	0.18		Sheet Flow, 1 to 2 Woods: Light underbrush n= 0.400 P2= 3.50"
0.2	49	0.5000	4.95		Shallow Concentrated Flow, 2 to 3 Short Grass Pasture Kv= 7.0 fps
9.6	149	Total			

Subcatchment 2C: Drainage Area 2C

Hydrograph



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Hydrograph for Subcatchment 2C: Drainage Area 2C

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	2.80	1.35	0.00
2.00	0.06	0.00	0.00	106.00	2.80	1.35	0.00
4.00	0.12	0.00	0.00	108.00	2.80	1.35	0.00
6.00	0.20	0.00	0.00	110.00	2.80	1.35	0.00
8.00	0.32	0.00	0.00	112.00	2.80	1.35	0.00
10.00	0.53	0.01	0.01	114.00	2.80	1.35	0.00
12.00	1.40	0.36	0.49	116.00	2.80	1.35	0.00
14.00	2.27	0.94	0.08	118.00	2.80	1.35	0.00
16.00	2.48	1.10	0.05	120.00	2.80	1.35	0.00
18.00	2.60	1.19	0.03				
20.00	2.68	1.26	0.02				
22.00	2.75	1.31	0.02				
24.00	2.80	1.35	0.01				
26.00	2.80	1.35	0.00				
28.00	2.80	1.35	0.00				
30.00	2.80	1.35	0.00				
32.00	2.80	1.35	0.00				
34.00	2.80	1.35	0.00				
36.00	2.80	1.35	0.00				
38.00	2.80	1.35	0.00				
40.00	2.80	1.35	0.00				
42.00	2.80	1.35	0.00				
44.00	2.80	1.35	0.00				
46.00	2.80	1.35	0.00				
48.00	2.80	1.35	0.00				
50.00	2.80	1.35	0.00				
52.00	2.80	1.35	0.00				
54.00	2.80	1.35	0.00				
56.00	2.80	1.35	0.00				
58.00	2.80	1.35	0.00				
60.00	2.80	1.35	0.00				
62.00	2.80	1.35	0.00				
64.00	2.80	1.35	0.00				
66.00	2.80	1.35	0.00				
68.00	2.80	1.35	0.00				
70.00	2.80	1.35	0.00				
72.00	2.80	1.35	0.00				
74.00	2.80	1.35	0.00				
76.00	2.80	1.35	0.00				
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82.00	2.80	1.35	0.00				
84.00	2.80	1.35	0.00				
86.00	2.80	1.35	0.00				
88.00	2.80	1.35	0.00				
90.00	2.80	1.35	0.00				
92.00	2.80	1.35	0.00				
94.00	2.80	1.35	0.00				
96.00	2.80	1.35	0.00				
98.00	2.80	1.35	0.00				
100.00	2.80	1.35	0.00				
102.00	2.80	1.35	0.00				

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Summary for Subcatchment 2C1: Drainage Area 2C1

Runoff = 1.35 cfs @ 12.14 hrs, Volume= 0.111 af, Depth= 1.04"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 1 Year Rainfall=2.80"

Area (sf)	CN	Description
26,272	76	Woods/grass comb., Fair, HSG C
20,575	74	>75% Grass cover, Good, HSG C
8,910	98	Paved parking & roofs
55,757	79	Weighted Average
46,847		Pervious Area
8,910		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.2	100	0.1000	0.23		Sheet Flow, 1 to 2 Grass: Dense n= 0.240 P2= 3.50"
1.8	287	0.2700	2.60		Shallow Concentrated Flow, 2 to 3 Woodland Kv= 5.0 fps
0.3	85	0.0540	4.72		Shallow Concentrated Flow, 3 to 4 Paved Kv= 20.3 fps
0.0	20	0.0200	9.68	11.88	Circular Channel (pipe), 4 to 5 Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
0.1	37	0.0200	9.68	11.88	Circular Channel (pipe), 5 to 6 Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
9.4	529	Total			

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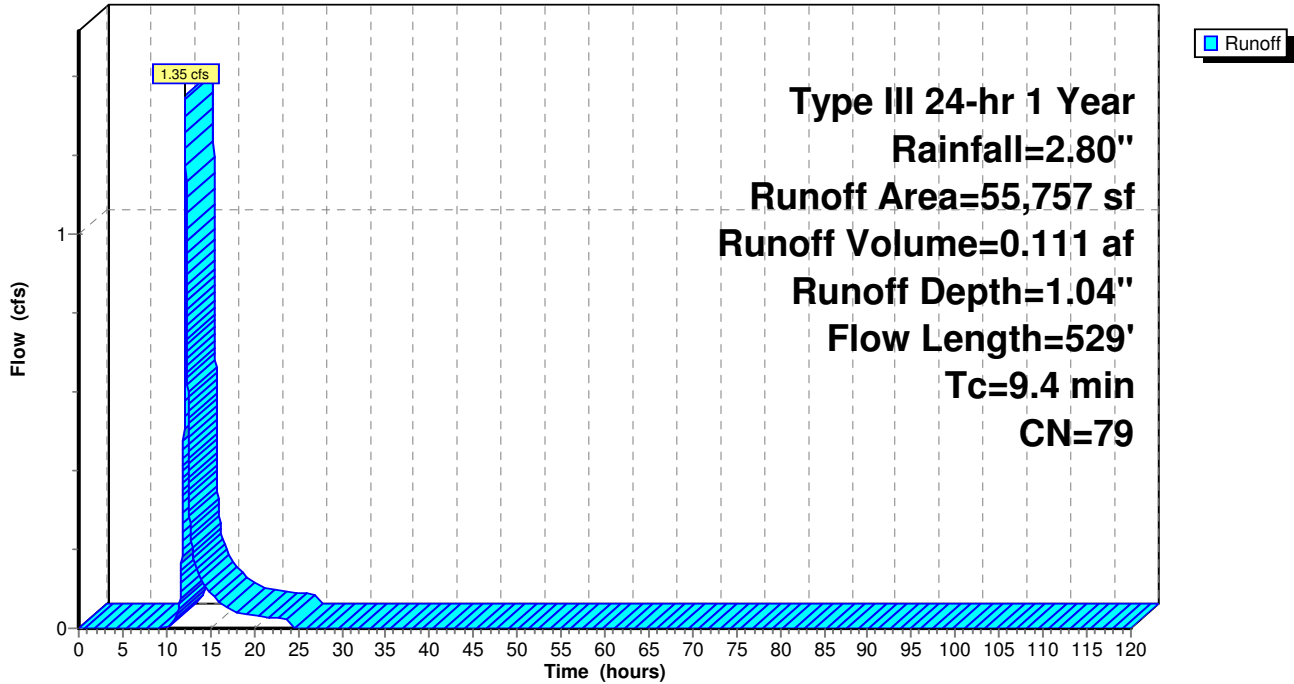
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Subcatchment 2C1: Drainage Area 2C1

Hydrograph



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Hydrograph for Subcatchment 2C1: Drainage Area 2C1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	2.80	1.04	0.00
2.00	0.06	0.00	0.00	106.00	2.80	1.04	0.00
4.00	0.12	0.00	0.00	108.00	2.80	1.04	0.00
6.00	0.20	0.00	0.00	110.00	2.80	1.04	0.00
8.00	0.32	0.00	0.00	112.00	2.80	1.04	0.00
10.00	0.53	0.00	0.00	114.00	2.80	1.04	0.00
12.00	1.40	0.21	0.58	116.00	2.80	1.04	0.00
14.00	2.27	0.69	0.12	118.00	2.80	1.04	0.00
16.00	2.48	0.82	0.07	120.00	2.80	1.04	0.00
18.00	2.60	0.90	0.04				
20.00	2.68	0.96	0.03				
22.00	2.75	1.01	0.03				
24.00	2.80	1.04	0.02				
26.00	2.80	1.04	0.00				
28.00	2.80	1.04	0.00				
30.00	2.80	1.04	0.00				
32.00	2.80	1.04	0.00				
34.00	2.80	1.04	0.00				
36.00	2.80	1.04	0.00				
38.00	2.80	1.04	0.00				
40.00	2.80	1.04	0.00				
42.00	2.80	1.04	0.00				
44.00	2.80	1.04	0.00				
46.00	2.80	1.04	0.00				
48.00	2.80	1.04	0.00				
50.00	2.80	1.04	0.00				
52.00	2.80	1.04	0.00				
54.00	2.80	1.04	0.00				
56.00	2.80	1.04	0.00				
58.00	2.80	1.04	0.00				
60.00	2.80	1.04	0.00				
62.00	2.80	1.04	0.00				
64.00	2.80	1.04	0.00				
66.00	2.80	1.04	0.00				
68.00	2.80	1.04	0.00				
70.00	2.80	1.04	0.00				
72.00	2.80	1.04	0.00				
74.00	2.80	1.04	0.00				
76.00	2.80	1.04	0.00				
78.00	2.80	1.04	0.00				
80.00	2.80	1.04	0.00				
82.00	2.80	1.04	0.00				
84.00	2.80	1.04	0.00				
86.00	2.80	1.04	0.00				
88.00	2.80	1.04	0.00				
90.00	2.80	1.04	0.00				
92.00	2.80	1.04	0.00				
94.00	2.80	1.04	0.00				
96.00	2.80	1.04	0.00				
98.00	2.80	1.04	0.00				
100.00	2.80	1.04	0.00				
102.00	2.80	1.04	0.00				

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Summary for Subcatchment 2E: Drainage Area 2E

Runoff = 1.87 cfs @ 12.12 hrs, Volume= 0.147 af, Depth= 0.99"

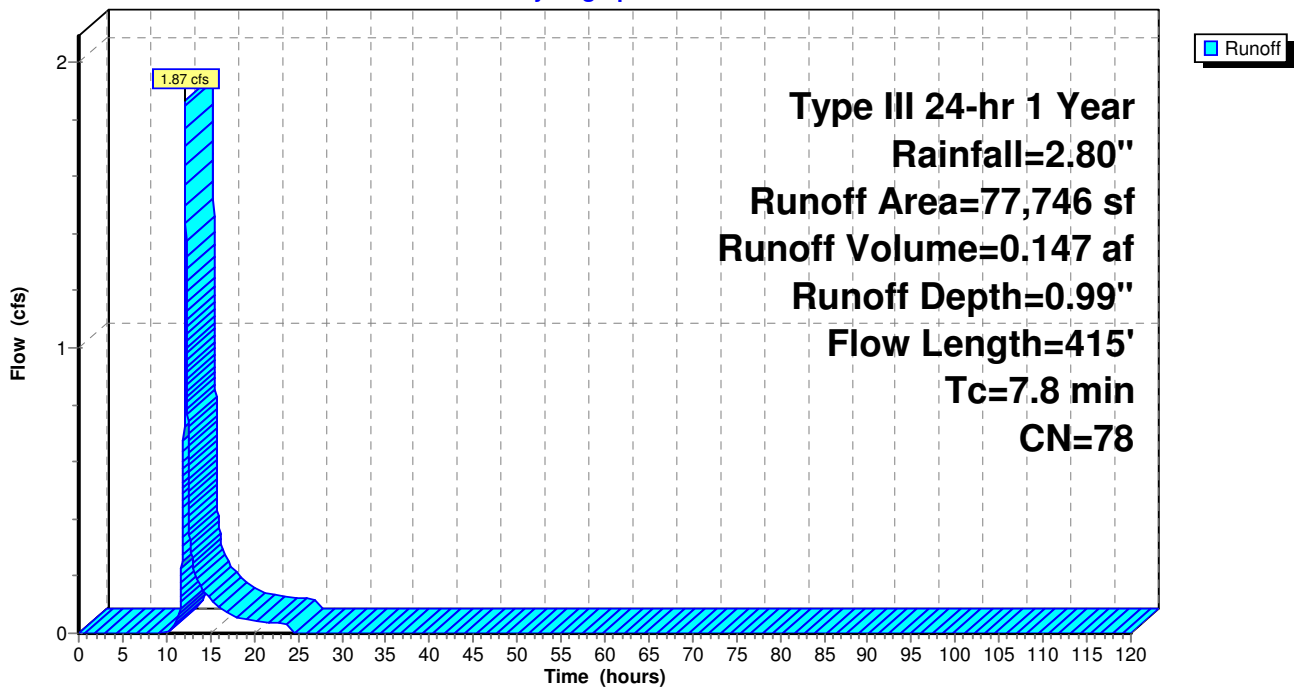
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Type III 24-hr 1 Year Rainfall=2.80"

Area (sf)	CN	Description
23,466	73	Woods, Fair, HSG C
41,869	74	>75% Grass cover, Good, HSG C
12,411	98	Paved roads w/curbs & sewers
77,746	78	Weighted Average
65,335		Pervious Area
12,411		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.4	100	0.0800	0.31		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
2.4	315	0.1900	2.18		Shallow Concentrated Flow, 2 to P-E Woodland Kv= 5.0 fps
7.8	415	Total			

Subcatchment 2E: Drainage Area 2E

Hydrograph



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Hydrograph for Subcatchment 2E: Drainage Area 2E

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	2.80	0.99	0.00
2.00	0.06	0.00	0.00	106.00	2.80	0.99	0.00
4.00	0.12	0.00	0.00	108.00	2.80	0.99	0.00
6.00	0.20	0.00	0.00	110.00	2.80	0.99	0.00
8.00	0.32	0.00	0.00	112.00	2.80	0.99	0.00
10.00	0.53	0.00	0.00	114.00	2.80	0.99	0.00
12.00	1.40	0.19	0.85	116.00	2.80	0.99	0.00
14.00	2.27	0.64	0.16	118.00	2.80	0.99	0.00
16.00	2.48	0.78	0.09	120.00	2.80	0.99	0.00
18.00	2.60	0.85	0.06				
20.00	2.68	0.91	0.04				
22.00	2.75	0.95	0.04				
24.00	2.80	0.99	0.03				
26.00	2.80	0.99	0.00				
28.00	2.80	0.99	0.00				
30.00	2.80	0.99	0.00				
32.00	2.80	0.99	0.00				
34.00	2.80	0.99	0.00				
36.00	2.80	0.99	0.00				
38.00	2.80	0.99	0.00				
40.00	2.80	0.99	0.00				
42.00	2.80	0.99	0.00				
44.00	2.80	0.99	0.00				
46.00	2.80	0.99	0.00				
48.00	2.80	0.99	0.00				
50.00	2.80	0.99	0.00				
52.00	2.80	0.99	0.00				
54.00	2.80	0.99	0.00				
56.00	2.80	0.99	0.00				
58.00	2.80	0.99	0.00				
60.00	2.80	0.99	0.00				
62.00	2.80	0.99	0.00				
64.00	2.80	0.99	0.00				
66.00	2.80	0.99	0.00				
68.00	2.80	0.99	0.00				
70.00	2.80	0.99	0.00				
72.00	2.80	0.99	0.00				
74.00	2.80	0.99	0.00				
76.00	2.80	0.99	0.00				
78.00	2.80	0.99	0.00				
80.00	2.80	0.99	0.00				
82.00	2.80	0.99	0.00				
84.00	2.80	0.99	0.00				
86.00	2.80	0.99	0.00				
88.00	2.80	0.99	0.00				
90.00	2.80	0.99	0.00				
92.00	2.80	0.99	0.00				
94.00	2.80	0.99	0.00				
96.00	2.80	0.99	0.00				
98.00	2.80	0.99	0.00				
100.00	2.80	0.99	0.00				
102.00	2.80	0.99	0.00				

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Type III 24-hr 1 Year Rainfall=2.80"

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Summary for Subcatchment 2F: Drainage Area 2F

Runoff = 33.87 cfs @ 12.12 hrs, Volume= 3.031 af, Depth= 0.61"

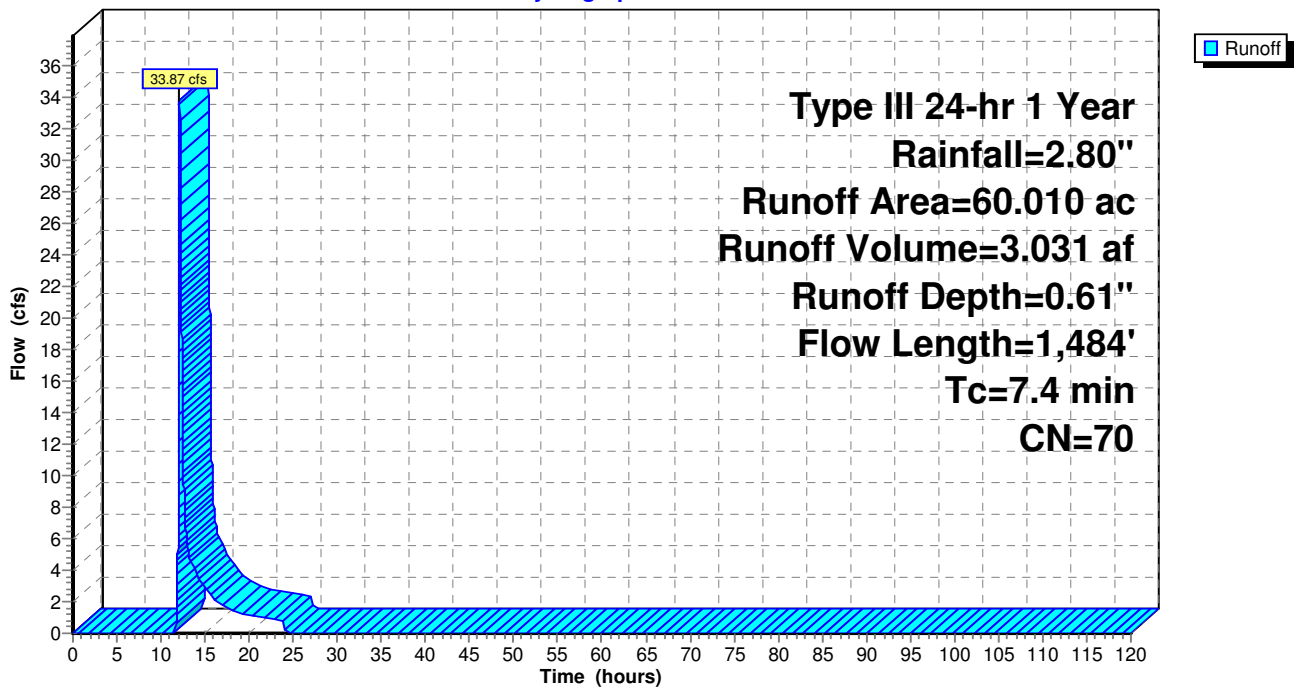
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 1 Year Rainfall=2.80"

Area (ac)	CN	Description
60.010	70	1/2 acre lots, 25% imp, HSG B
45.008		Pervious Area
15.002		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.7	100	0.2000	0.45		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
2.6	1,075	0.1800	6.83		Shallow Concentrated Flow, 2 to 3 Unpaved Kv= 16.1 fps
1.1	309	0.0100	4.56	68.35	Channel Flow, 3 to DP-2 Area= 15.0 sf Perim= 17.0' r= 0.88' n= 0.030 Stream, clean & straight
7.4	1,484	Total			

Subcatchment 2F: Drainage Area 2F

Hydrograph



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Hydrograph for Subcatchment 2F: Drainage Area 2F

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	2.80	0.61	0.00
2.00	0.06	0.00	0.00	106.00	2.80	0.61	0.00
4.00	0.12	0.00	0.00	108.00	2.80	0.61	0.00
6.00	0.20	0.00	0.00	110.00	2.80	0.61	0.00
8.00	0.32	0.00	0.00	112.00	2.80	0.61	0.00
10.00	0.53	0.00	0.00	114.00	2.80	0.61	0.00
12.00	1.40	0.06	12.23	116.00	2.80	0.61	0.00
14.00	2.27	0.35	3.78	118.00	2.80	0.61	0.00
16.00	2.48	0.45	2.19	120.00	2.80	0.61	0.00
18.00	2.60	0.50	1.39				
20.00	2.68	0.54	1.13				
22.00	2.75	0.58	0.95				
24.00	2.80	0.61	0.77				
26.00	2.80	0.61	0.00				
28.00	2.80	0.61	0.00				
30.00	2.80	0.61	0.00				
32.00	2.80	0.61	0.00				
34.00	2.80	0.61	0.00				
36.00	2.80	0.61	0.00				
38.00	2.80	0.61	0.00				
40.00	2.80	0.61	0.00				
42.00	2.80	0.61	0.00				
44.00	2.80	0.61	0.00				
46.00	2.80	0.61	0.00				
48.00	2.80	0.61	0.00				
50.00	2.80	0.61	0.00				
52.00	2.80	0.61	0.00				
54.00	2.80	0.61	0.00				
56.00	2.80	0.61	0.00				
58.00	2.80	0.61	0.00				
60.00	2.80	0.61	0.00				
62.00	2.80	0.61	0.00				
64.00	2.80	0.61	0.00				
66.00	2.80	0.61	0.00				
68.00	2.80	0.61	0.00				
70.00	2.80	0.61	0.00				
72.00	2.80	0.61	0.00				
74.00	2.80	0.61	0.00				
76.00	2.80	0.61	0.00				
78.00	2.80	0.61	0.00				
80.00	2.80	0.61	0.00				
82.00	2.80	0.61	0.00				
84.00	2.80	0.61	0.00				
86.00	2.80	0.61	0.00				
88.00	2.80	0.61	0.00				
90.00	2.80	0.61	0.00				
92.00	2.80	0.61	0.00				
94.00	2.80	0.61	0.00				
96.00	2.80	0.61	0.00				
98.00	2.80	0.61	0.00				
100.00	2.80	0.61	0.00				
102.00	2.80	0.61	0.00				

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Summary for Subcatchment 3: Drainage Area - 3

Runoff = 44.54 cfs @ 12.13 hrs, Volume= 3.676 af, Depth= 0.83"

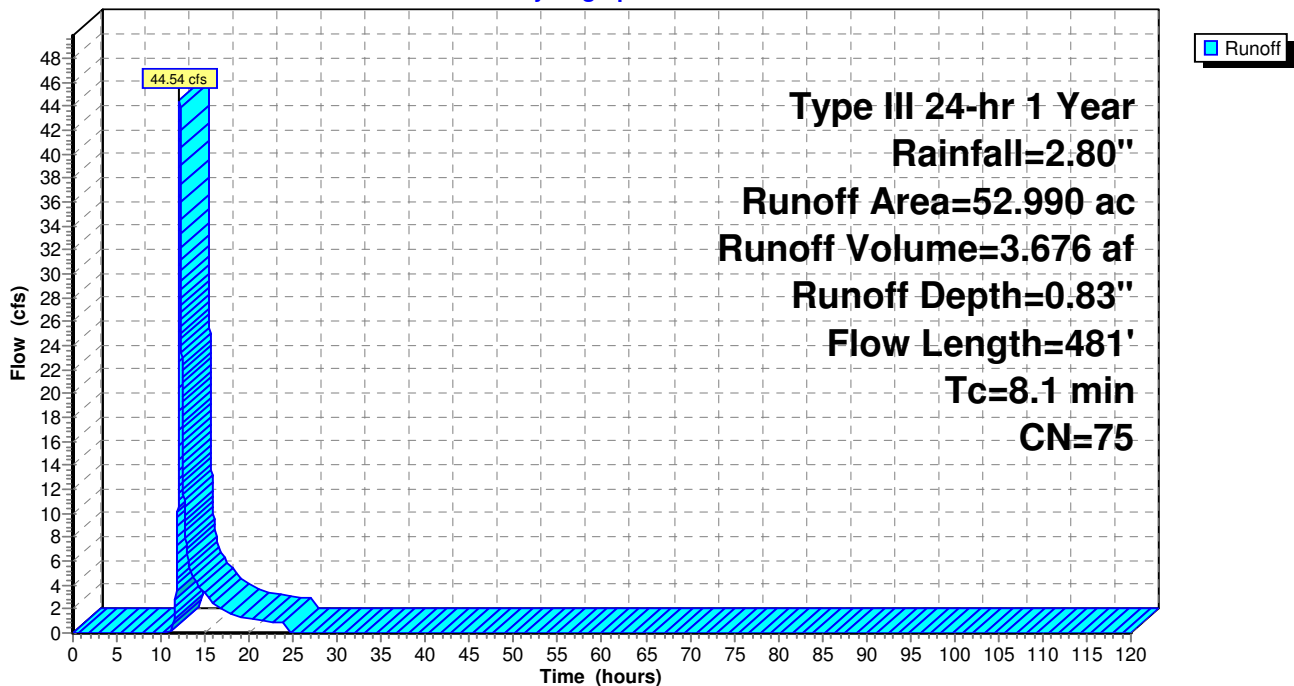
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 1 Year Rainfall=2.80"

Area (ac)	CN	Description
52.990	75	1/4 acre lots, 38% imp, HSG B
32.854		Pervious Area
20.136		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.7	100	0.1150	0.36		Sheet Flow, 1 to 2
3.4	381	0.0700	1.85		Grass: Short n= 0.150 P2= 3.50" Shallow Concentrated Flow, 2 to 3
8.1	481	Total			Short Grass Pasture Kv= 7.0 fps

Subcatchment 3: Drainage Area - 3

Hydrograph



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Hydrograph for Subcatchment 3: Drainage Area - 3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	2.80	0.83	0.00
2.00	0.06	0.00	0.00	106.00	2.80	0.83	0.00
4.00	0.12	0.00	0.00	108.00	2.80	0.83	0.00
6.00	0.20	0.00	0.00	110.00	2.80	0.83	0.00
8.00	0.32	0.00	0.00	112.00	2.80	0.83	0.00
10.00	0.53	0.00	0.00	114.00	2.80	0.83	0.00
12.00	1.40	0.13	18.62	116.00	2.80	0.83	0.00
14.00	2.27	0.52	4.21	118.00	2.80	0.83	0.00
16.00	2.48	0.64	2.38	120.00	2.80	0.83	0.00
18.00	2.60	0.71	1.49				
20.00	2.68	0.76	1.20				
22.00	2.75	0.80	1.01				
24.00	2.80	0.83	0.81				
26.00	2.80	0.83	0.00				
28.00	2.80	0.83	0.00				
30.00	2.80	0.83	0.00				
32.00	2.80	0.83	0.00				
34.00	2.80	0.83	0.00				
36.00	2.80	0.83	0.00				
38.00	2.80	0.83	0.00				
40.00	2.80	0.83	0.00				
42.00	2.80	0.83	0.00				
44.00	2.80	0.83	0.00				
46.00	2.80	0.83	0.00				
48.00	2.80	0.83	0.00				
50.00	2.80	0.83	0.00				
52.00	2.80	0.83	0.00				
54.00	2.80	0.83	0.00				
56.00	2.80	0.83	0.00				
58.00	2.80	0.83	0.00				
60.00	2.80	0.83	0.00				
62.00	2.80	0.83	0.00				
64.00	2.80	0.83	0.00				
66.00	2.80	0.83	0.00				
68.00	2.80	0.83	0.00				
70.00	2.80	0.83	0.00				
72.00	2.80	0.83	0.00				
74.00	2.80	0.83	0.00				
76.00	2.80	0.83	0.00				
78.00	2.80	0.83	0.00				
80.00	2.80	0.83	0.00				
82.00	2.80	0.83	0.00				
84.00	2.80	0.83	0.00				
86.00	2.80	0.83	0.00				
88.00	2.80	0.83	0.00				
90.00	2.80	0.83	0.00				
92.00	2.80	0.83	0.00				
94.00	2.80	0.83	0.00				
96.00	2.80	0.83	0.00				
98.00	2.80	0.83	0.00				
100.00	2.80	0.83	0.00				
102.00	2.80	0.83	0.00				

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Type III 24-hr 1 Year Rainfall=2.80"

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Summary for Subcatchment 4A: Drainage Area 4A

Runoff = 3.23 cfs @ 12.11 hrs, Volume= 0.246 af, Depth= 0.99"

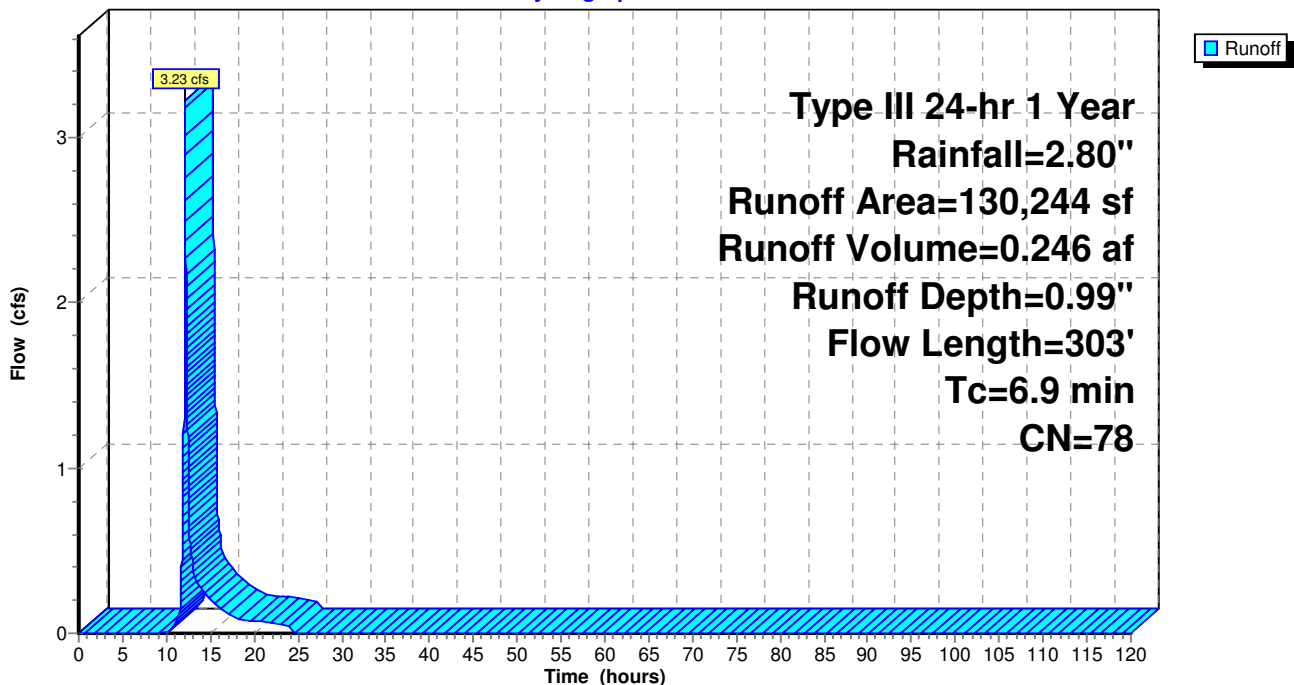
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Type III 24-hr 1 Year Rainfall=2.80"

Area (sf)	CN	Description
19,319	76	Woods/grass comb., Fair, HSG C
88,531	74	>75% Grass cover, Good, HSG C
22,394	98	Paved parking & roofs
130,244	78	Weighted Average
107,850		Pervious Area
22,394		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	100	0.0600	0.28		Sheet Flow, 1 to 2
					Grass: Short n= 0.150 P2= 3.50"
0.9	203	0.2700	3.64		Shallow Concentrated Flow, 2 to 3
					Short Grass Pasture Kv= 7.0 fps
6.9	303	Total			

Subcatchment 4A: Drainage Area 4A

Hydrograph



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Hydrograph for Subcatchment 4A: Drainage Area 4A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	2.80	0.99	0.00
2.00	0.06	0.00	0.00	106.00	2.80	0.99	0.00
4.00	0.12	0.00	0.00	108.00	2.80	0.99	0.00
6.00	0.20	0.00	0.00	110.00	2.80	0.99	0.00
8.00	0.32	0.00	0.00	112.00	2.80	0.99	0.00
10.00	0.53	0.00	0.00	114.00	2.80	0.99	0.00
12.00	1.40	0.19	1.57	116.00	2.80	0.99	0.00
14.00	2.27	0.64	0.27	118.00	2.80	0.99	0.00
16.00	2.48	0.78	0.15	120.00	2.80	0.99	0.00
18.00	2.60	0.85	0.09				
20.00	2.68	0.91	0.07				
22.00	2.75	0.95	0.06				
24.00	2.80	0.99	0.05				
26.00	2.80	0.99	0.00				
28.00	2.80	0.99	0.00				
30.00	2.80	0.99	0.00				
32.00	2.80	0.99	0.00				
34.00	2.80	0.99	0.00				
36.00	2.80	0.99	0.00				
38.00	2.80	0.99	0.00				
40.00	2.80	0.99	0.00				
42.00	2.80	0.99	0.00				
44.00	2.80	0.99	0.00				
46.00	2.80	0.99	0.00				
48.00	2.80	0.99	0.00				
50.00	2.80	0.99	0.00				
52.00	2.80	0.99	0.00				
54.00	2.80	0.99	0.00				
56.00	2.80	0.99	0.00				
58.00	2.80	0.99	0.00				
60.00	2.80	0.99	0.00				
62.00	2.80	0.99	0.00				
64.00	2.80	0.99	0.00				
66.00	2.80	0.99	0.00				
68.00	2.80	0.99	0.00				
70.00	2.80	0.99	0.00				
72.00	2.80	0.99	0.00				
74.00	2.80	0.99	0.00				
76.00	2.80	0.99	0.00				
78.00	2.80	0.99	0.00				
80.00	2.80	0.99	0.00				
82.00	2.80	0.99	0.00				
84.00	2.80	0.99	0.00				
86.00	2.80	0.99	0.00				
88.00	2.80	0.99	0.00				
90.00	2.80	0.99	0.00				
92.00	2.80	0.99	0.00				
94.00	2.80	0.99	0.00				
96.00	2.80	0.99	0.00				
98.00	2.80	0.99	0.00				
100.00	2.80	0.99	0.00				
102.00	2.80	0.99	0.00				

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Summary for Subcatchment 4B: Drainage Area 4B

Runoff = 2.91 cfs @ 12.10 hrs, Volume= 0.223 af, Depth= 0.83"

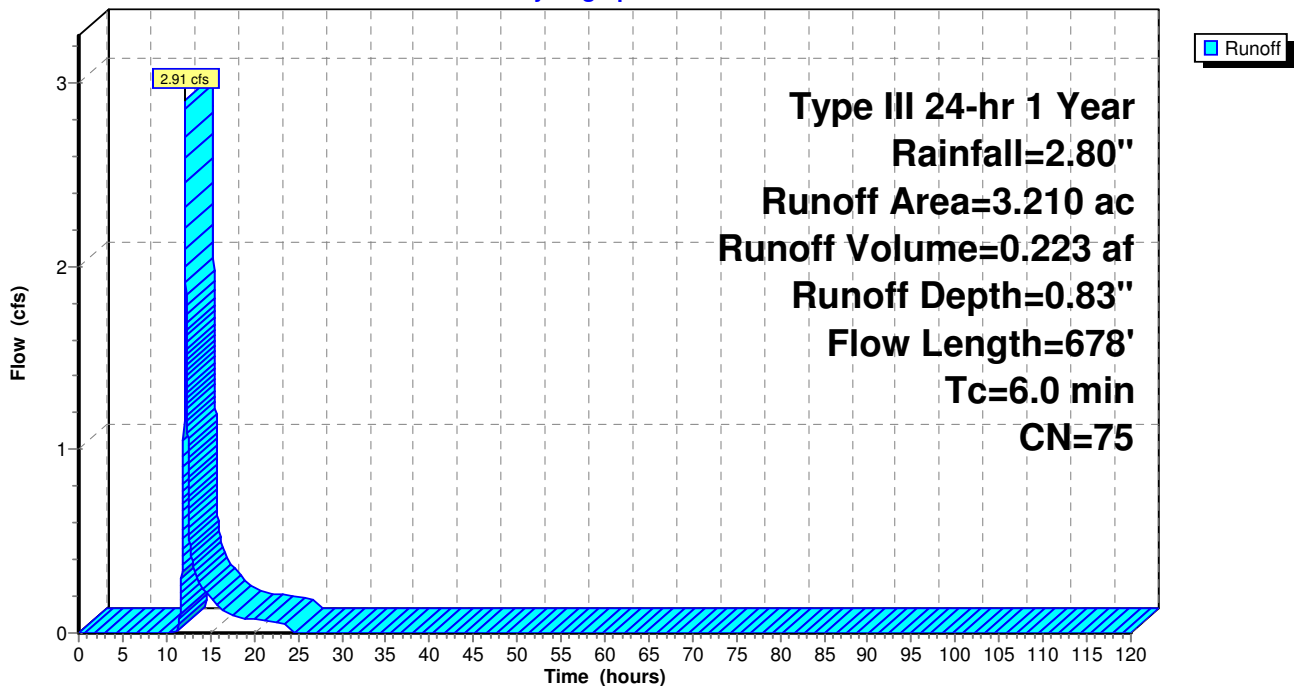
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 1 Year Rainfall=2.80"

Area (ac)	CN	Description
3.210	75	1/4 acre lots, 38% imp, HSG B
1.990		Pervious Area
1.220		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.1	100	0.1600	0.41		Sheet Flow, 1 to 2
1.9	578	0.1200	5.20		Shallow Concentrated Flow, 2 to DP-5
					Grassed Waterway Kv= 15.0 fps
6.0	678	Total			

Subcatchment 4B: Drainage Area 4B

Hydrograph



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Hydrograph for Subcatchment 4B: Drainage Area 4B

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	2.80	0.83	0.00
2.00	0.06	0.00	0.00	106.00	2.80	0.83	0.00
4.00	0.12	0.00	0.00	108.00	2.80	0.83	0.00
6.00	0.20	0.00	0.00	110.00	2.80	0.83	0.00
8.00	0.32	0.00	0.00	112.00	2.80	0.83	0.00
10.00	0.53	0.00	0.00	114.00	2.80	0.83	0.00
12.00	1.40	0.13	1.44	116.00	2.80	0.83	0.00
14.00	2.27	0.52	0.25	118.00	2.80	0.83	0.00
16.00	2.48	0.64	0.14	120.00	2.80	0.83	0.00
18.00	2.60	0.71	0.09				
20.00	2.68	0.76	0.07				
22.00	2.75	0.80	0.06				
24.00	2.80	0.83	0.05				
26.00	2.80	0.83	0.00				
28.00	2.80	0.83	0.00				
30.00	2.80	0.83	0.00				
32.00	2.80	0.83	0.00				
34.00	2.80	0.83	0.00				
36.00	2.80	0.83	0.00				
38.00	2.80	0.83	0.00				
40.00	2.80	0.83	0.00				
42.00	2.80	0.83	0.00				
44.00	2.80	0.83	0.00				
46.00	2.80	0.83	0.00				
48.00	2.80	0.83	0.00				
50.00	2.80	0.83	0.00				
52.00	2.80	0.83	0.00				
54.00	2.80	0.83	0.00				
56.00	2.80	0.83	0.00				
58.00	2.80	0.83	0.00				
60.00	2.80	0.83	0.00				
62.00	2.80	0.83	0.00				
64.00	2.80	0.83	0.00				
66.00	2.80	0.83	0.00				
68.00	2.80	0.83	0.00				
70.00	2.80	0.83	0.00				
72.00	2.80	0.83	0.00				
74.00	2.80	0.83	0.00				
76.00	2.80	0.83	0.00				
78.00	2.80	0.83	0.00				
80.00	2.80	0.83	0.00				
82.00	2.80	0.83	0.00				
84.00	2.80	0.83	0.00				
86.00	2.80	0.83	0.00				
88.00	2.80	0.83	0.00				
90.00	2.80	0.83	0.00				
92.00	2.80	0.83	0.00				
94.00	2.80	0.83	0.00				
96.00	2.80	0.83	0.00				
98.00	2.80	0.83	0.00				
100.00	2.80	0.83	0.00				
102.00	2.80	0.83	0.00				

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Summary for Subcatchment 5: Drainage Area 5

Runoff = 13.00 cfs @ 12.14 hrs, Volume= 1.123 af, Depth= 0.83"

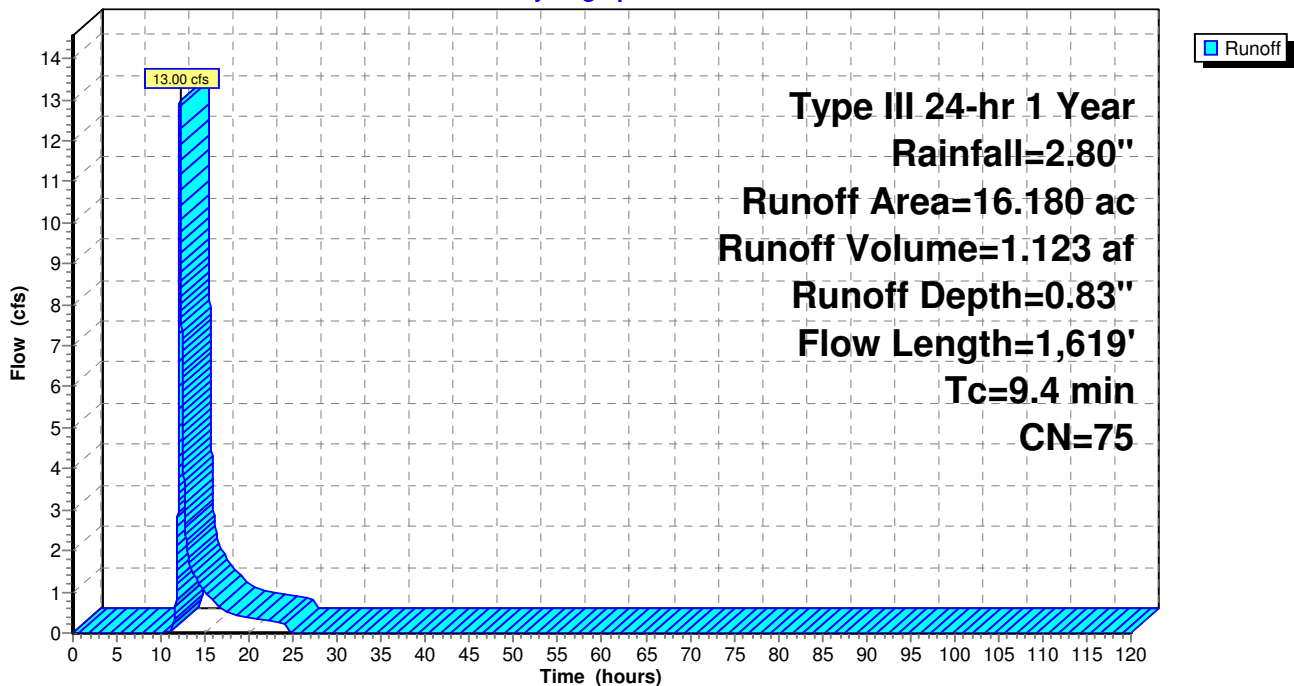
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 1 Year Rainfall=2.80"

Area (ac)	CN	Description
16.180	75	1/4 acre lots, 38% imp, HSG B
10.032		Pervious Area
6.148		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	100	0.1800	0.43		Sheet Flow, 1 to 2
5.5	1,519	0.0810	4.58		Shallow Concentrated Flow, 2 to DP-4
					Unpaved Kv= 16.1 fps
9.4	1,619	Total			

Subcatchment 5: Drainage Area 5

Hydrograph



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Hydrograph for Subcatchment 5: Drainage Area 5

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	2.80	0.83	0.00
2.00	0.06	0.00	0.00	106.00	2.80	0.83	0.00
4.00	0.12	0.00	0.00	108.00	2.80	0.83	0.00
6.00	0.20	0.00	0.00	110.00	2.80	0.83	0.00
8.00	0.32	0.00	0.00	112.00	2.80	0.83	0.00
10.00	0.53	0.00	0.00	114.00	2.80	0.83	0.00
12.00	1.40	0.13	5.03	116.00	2.80	0.83	0.00
14.00	2.27	0.52	1.30	118.00	2.80	0.83	0.00
16.00	2.48	0.64	0.73	120.00	2.80	0.83	0.00
18.00	2.60	0.71	0.46				
20.00	2.68	0.76	0.37				
22.00	2.75	0.80	0.31				
24.00	2.80	0.83	0.25				
26.00	2.80	0.83	0.00				
28.00	2.80	0.83	0.00				
30.00	2.80	0.83	0.00				
32.00	2.80	0.83	0.00				
34.00	2.80	0.83	0.00				
36.00	2.80	0.83	0.00				
38.00	2.80	0.83	0.00				
40.00	2.80	0.83	0.00				
42.00	2.80	0.83	0.00				
44.00	2.80	0.83	0.00				
46.00	2.80	0.83	0.00				
48.00	2.80	0.83	0.00				
50.00	2.80	0.83	0.00				
52.00	2.80	0.83	0.00				
54.00	2.80	0.83	0.00				
56.00	2.80	0.83	0.00				
58.00	2.80	0.83	0.00				
60.00	2.80	0.83	0.00				
62.00	2.80	0.83	0.00				
64.00	2.80	0.83	0.00				
66.00	2.80	0.83	0.00				
68.00	2.80	0.83	0.00				
70.00	2.80	0.83	0.00				
72.00	2.80	0.83	0.00				
74.00	2.80	0.83	0.00				
76.00	2.80	0.83	0.00				
78.00	2.80	0.83	0.00				
80.00	2.80	0.83	0.00				
82.00	2.80	0.83	0.00				
84.00	2.80	0.83	0.00				
86.00	2.80	0.83	0.00				
88.00	2.80	0.83	0.00				
90.00	2.80	0.83	0.00				
92.00	2.80	0.83	0.00				
94.00	2.80	0.83	0.00				
96.00	2.80	0.83	0.00				
98.00	2.80	0.83	0.00				
100.00	2.80	0.83	0.00				
102.00	2.80	0.83	0.00				

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Type III 24-hr 1 Year Rainfall=2.80"

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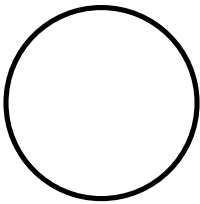
Summary for Reach 1R: Pipe

Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

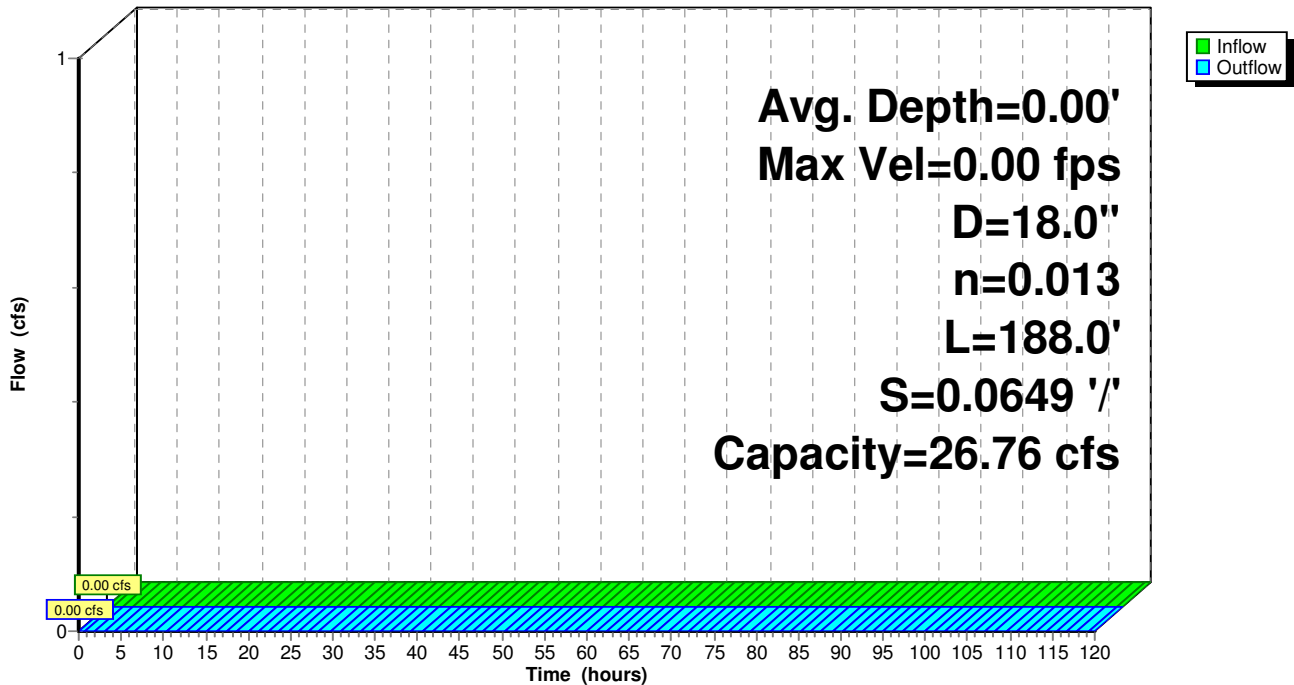
Peak Storage= 0 cf @ 0.00 hrs, Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 1.50', Capacity at Bank-Full= 26.76 cfs

18.0" Diameter Pipe, n= 0.013 Corrugated PE, smooth interior
Length= 188.0' Slope= 0.0649 1/100
Inlet Invert= 310.20', Outlet Invert= 298.00'



Reach 1R: Pipe

Hydrograph



Post-Development Entire

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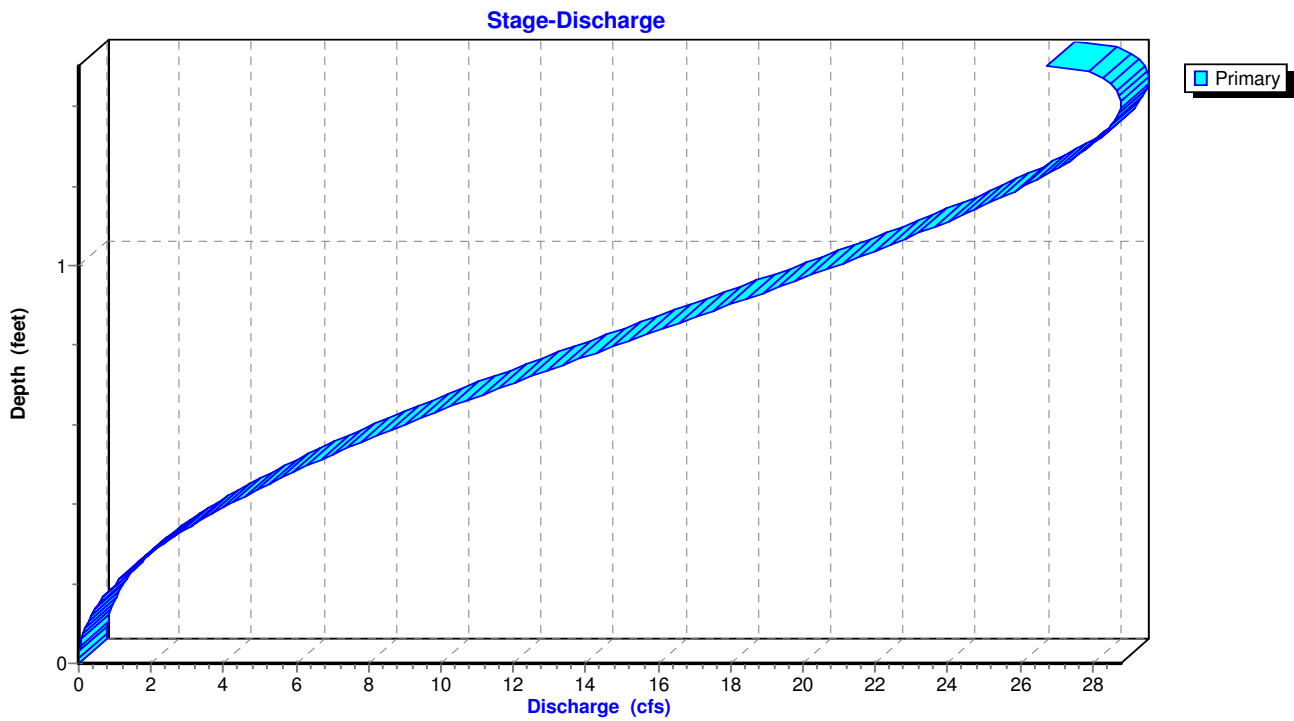
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Type III 24-hr 1 Year Rainfall=2.80"

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Reach 1R: Pipe



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Hydrograph for Reach 1R: Pipe

Time (hours)	Inflow (cfs)	Elevation (feet)	Outflow (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Outflow (cfs)
0.00	0.00	310.20	0.00	104.00	0.00	310.20	0.00
2.00	0.00	310.20	0.00	106.00	0.00	310.20	0.00
4.00	0.00	310.20	0.00	108.00	0.00	310.20	0.00
6.00	0.00	310.20	0.00	110.00	0.00	310.20	0.00
8.00	0.00	310.20	0.00	112.00	0.00	310.20	0.00
10.00	0.00	310.20	0.00	114.00	0.00	310.20	0.00
12.00	0.00	310.20	0.00	116.00	0.00	310.20	0.00
14.00	0.00	310.20	0.00	118.00	0.00	310.20	0.00
16.00	0.00	310.20	0.00	120.00	0.00	310.20	0.00
18.00	0.00	310.20	0.00				
20.00	0.00	310.20	0.00				
22.00	0.00	310.20	0.00				
24.00	0.00	310.20	0.00				
26.00	0.00	310.20	0.00				
28.00	0.00	310.20	0.00				
30.00	0.00	310.20	0.00				
32.00	0.00	310.20	0.00				
34.00	0.00	310.20	0.00				
36.00	0.00	310.20	0.00				
38.00	0.00	310.20	0.00				
40.00	0.00	310.20	0.00				
42.00	0.00	310.20	0.00				
44.00	0.00	310.20	0.00				
46.00	0.00	310.20	0.00				
48.00	0.00	310.20	0.00				
50.00	0.00	310.20	0.00				
52.00	0.00	310.20	0.00				
54.00	0.00	310.20	0.00				
56.00	0.00	310.20	0.00				
58.00	0.00	310.20	0.00				
60.00	0.00	310.20	0.00				
62.00	0.00	310.20	0.00				
64.00	0.00	310.20	0.00				
66.00	0.00	310.20	0.00				
68.00	0.00	310.20	0.00				
70.00	0.00	310.20	0.00				
72.00	0.00	310.20	0.00				
74.00	0.00	310.20	0.00				
76.00	0.00	310.20	0.00				
78.00	0.00	310.20	0.00				
80.00	0.00	310.20	0.00				
82.00	0.00	310.20	0.00				
84.00	0.00	310.20	0.00				
86.00	0.00	310.20	0.00				
88.00	0.00	310.20	0.00				
90.00	0.00	310.20	0.00				
92.00	0.00	310.20	0.00				
94.00	0.00	310.20	0.00				
96.00	0.00	310.20	0.00				
98.00	0.00	310.20	0.00				
100.00	0.00	310.20	0.00				
102.00	0.00	310.20	0.00				

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Stage-Discharge for Reach 1R: Pipe

Elevation (feet)	Velocity (ft/sec)	Discharge (cfs)	Elevation (feet)	Velocity (ft/sec)	Discharge (cfs)	Elevation (feet)	Velocity (ft/sec)	Discharge (cfs)
310.20	0.00	0.00	310.72	12.70	6.91	311.24	16.92	22.12
310.21	0.90	0.00	310.73	12.83	7.16	311.25	16.96	22.40
310.22	1.61	0.01	310.74	12.95	7.42	311.26	16.99	22.68
310.23	2.13	0.02	310.75	13.08	7.68	311.27	17.02	22.95
310.24	2.57	0.03	310.76	13.20	7.94	311.28	17.05	23.23
310.25	2.98	0.06	310.77	13.32	8.20	311.29	17.08	23.49
310.26	3.36	0.08	310.78	13.43	8.47	311.30	17.11	23.76
310.27	3.71	0.11	310.79	13.55	8.74	311.31	17.13	24.02
310.28	4.05	0.15	310.80	13.66	9.02	311.32	17.15	24.27
310.29	4.38	0.19	310.81	13.77	9.29	311.33	17.17	24.53
310.30	4.68	0.24	310.82	13.88	9.57	311.34	17.19	24.77
310.31	4.98	0.29	310.83	13.99	9.85	311.35	17.21	25.02
310.32	5.27	0.35	310.84	14.09	10.14	311.36	17.22	25.25
310.33	5.54	0.41	310.85	14.20	10.42	311.37	17.23	25.49
310.34	5.81	0.48	310.86	14.30	10.71	311.38	17.24	25.72
310.35	6.07	0.56	310.87	14.40	11.00	311.39	17.25	25.94
310.36	6.33	0.64	310.88	14.50	11.29	311.40	17.26	26.16
310.37	6.57	0.73	310.89	14.60	11.59	311.41	17.26	26.37
310.38	6.81	0.82	310.90	14.69	11.88	311.42	17.26	26.57
310.39	7.05	0.92	310.91	14.79	12.18	311.43	17.26	26.77
310.40	7.27	1.02	310.92	14.88	12.48	311.44	17.26	26.96
310.41	7.50	1.13	310.93	14.97	12.78	311.45	17.25	27.14
310.42	7.72	1.24	310.94	15.06	13.08	311.46	17.24	27.32
310.43	7.93	1.36	310.95	15.14	13.38	311.47	17.23	27.49
310.44	8.14	1.49	310.96	15.23	13.68	311.48	17.22	27.65
310.45	8.35	1.62	310.97	15.31	13.99	311.49	17.20	27.81
310.46	8.55	1.75	310.98	15.39	14.29	311.50	17.18	27.95
310.47	8.74	1.89	310.99	15.47	14.60	311.51	17.15	28.08
310.48	8.94	2.04	311.00	15.55	14.90	311.52	17.13	28.21
310.49	9.13	2.19	311.01	15.63	15.21	311.53	17.10	28.32
310.50	9.31	2.34	311.02	15.70	15.52	311.54	17.06	28.42
310.51	9.50	2.51	311.03	15.77	15.83	311.55	17.02	28.52
310.52	9.68	2.67	311.04	15.85	16.13	311.56	16.98	28.60
310.53	9.85	2.84	311.05	15.91	16.44	311.57	16.94	28.66
310.54	10.03	3.02	311.06	15.98	16.75	311.58	16.88	28.72
310.55	10.20	3.20	311.07	16.05	17.06	311.59	16.83	28.75
310.56	10.36	3.38	311.08	16.11	17.36	311.60	16.76	28.78
310.57	10.53	3.57	311.09	16.18	17.67	311.61	16.70	28.78
310.58	10.69	3.76	311.10	16.24	17.98	311.62	16.62	28.76
310.59	10.85	3.96	311.11	16.30	18.28	311.63	16.54	28.72
310.60	11.01	4.16	311.12	16.36	18.59	311.64	16.44	28.67
310.61	11.16	4.37	311.13	16.41	18.89	311.65	16.33	28.57
310.62	11.31	4.58	311.14	16.47	19.19	311.66	16.21	28.44
310.63	11.46	4.80	311.15	16.52	19.49	311.67	16.08	28.28
310.64	11.61	5.02	311.16	16.57	19.79	311.68	15.90	28.01
310.65	11.75	5.24	311.17	16.62	20.09	311.69	15.58	27.51
310.66	11.89	5.47	311.18	16.67	20.39	311.70	15.14	26.76
310.67	12.03	5.70	311.19	16.72	20.68			
310.68	12.17	5.93	311.20	16.76	20.98			
310.69	12.31	6.17	311.21	16.80	21.27			
310.70	12.44	6.42	311.22	16.84	21.55			
310.71	12.57	6.66	311.23	16.88	21.84			

Post-Development Entire

Type III 24-hr 1 Year Rainfall=2.80"

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Summary for Pond LS-1: Level Spreader

Inflow = 0.00 cfs @ 13.24 hrs, Volume= 0.000 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 Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 296.00' @ 13.42 hrs Surf.Area= 505 sf Storage= 0 cf

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

Volume #1	Invert	Avail.Storage	Storage Description			
	296.00'	5,288 cf	Custom Stage Data (Irregular) Listed below			
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
296.00	505	363.0	0	0	505	
298.00	1,320	413.0	1,761	1,761	3,689	
300.00	2,248	436.0	3,527	5,288	5,459	

Device #1	Routing	Invert	Outlet Devices												
	Primary	299.95'	210.0' long x 4.0' breadth Broad-Crested Rectangular Weir												
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00												
			2.50 3.00 3.50 4.00 4.50 5.00 5.50												
			Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66												
			2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32												

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=296.00' TW=0.00' (Dynamic Tailwater)

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

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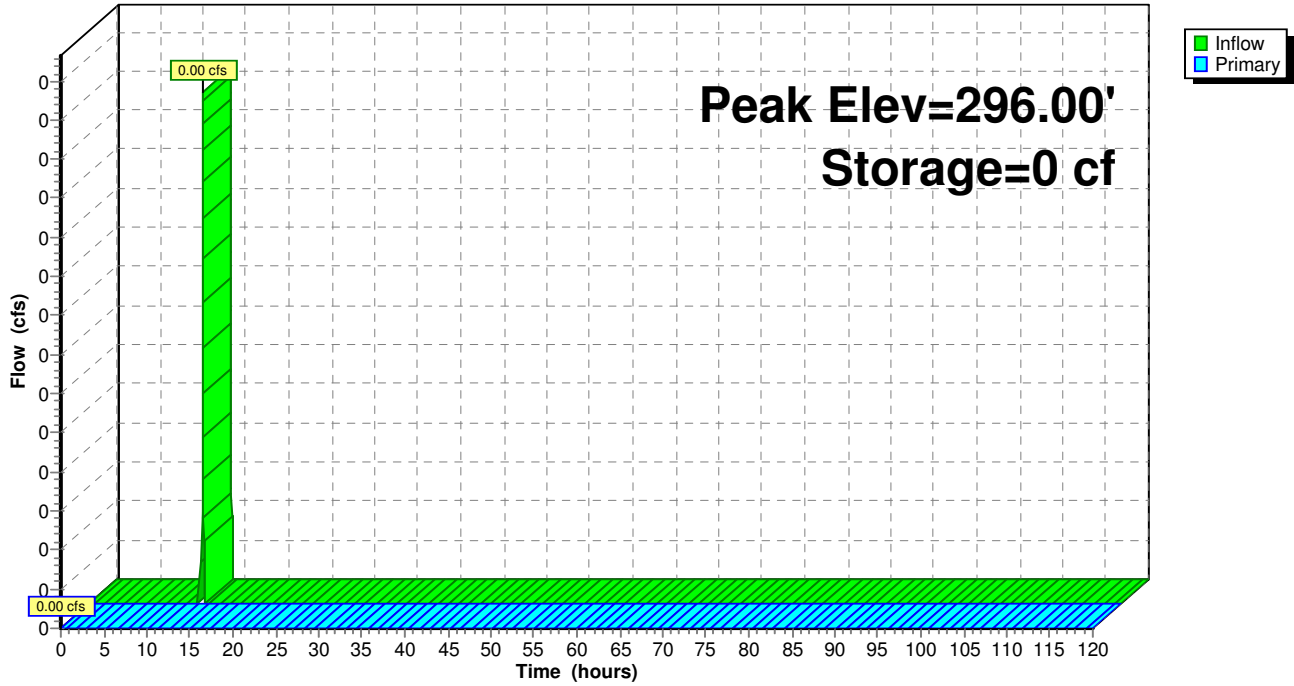
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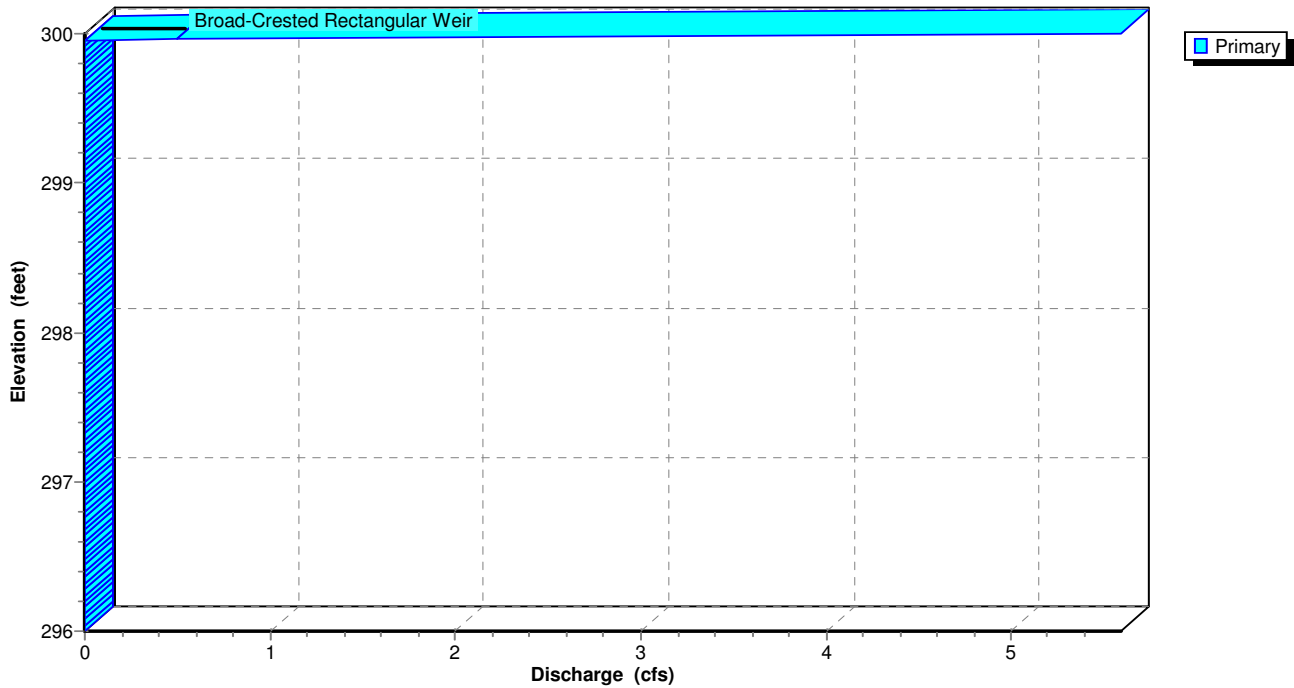
Pond LS-1: Level Spreader

Hydrograph



Pond LS-1: Level Spreader

Stage-Discharge



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Hydrograph for Pond LS-1: Level Spreader

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
0.00	0.00	0	296.00	0.00
5.00	0.00	0	296.00	0.00
10.00	0.00	0	296.00	0.00
15.00	0.00	0	296.00	0.00
20.00	0.00	0	296.00	0.00
25.00	0.00	0	296.00	0.00
30.00	0.00	0	296.00	0.00
35.00	0.00	0	296.00	0.00
40.00	0.00	0	296.00	0.00
45.00	0.00	0	296.00	0.00
50.00	0.00	0	296.00	0.00
55.00	0.00	0	296.00	0.00
60.00	0.00	0	296.00	0.00
65.00	0.00	0	296.00	0.00
70.00	0.00	0	296.00	0.00
75.00	0.00	0	296.00	0.00
80.00	0.00	0	296.00	0.00
85.00	0.00	0	296.00	0.00
90.00	0.00	0	296.00	0.00
95.00	0.00	0	296.00	0.00
100.00	0.00	0	296.00	0.00
105.00	0.00	0	296.00	0.00
110.00	0.00	0	296.00	0.00
115.00	0.00	0	296.00	0.00
120.00	0.00	0	296.00	0.00

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Stage-Discharge for Pond LS-1: Level Spreader

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
296.00	0.00	297.04	0.00	298.08	0.00	299.12	0.00
296.02	0.00	297.06	0.00	298.10	0.00	299.14	0.00
296.04	0.00	297.08	0.00	298.12	0.00	299.16	0.00
296.06	0.00	297.10	0.00	298.14	0.00	299.18	0.00
296.08	0.00	297.12	0.00	298.16	0.00	299.20	0.00
296.10	0.00	297.14	0.00	298.18	0.00	299.22	0.00
296.12	0.00	297.16	0.00	298.20	0.00	299.24	0.00
296.14	0.00	297.18	0.00	298.22	0.00	299.26	0.00
296.16	0.00	297.20	0.00	298.24	0.00	299.28	0.00
296.18	0.00	297.22	0.00	298.26	0.00	299.30	0.00
296.20	0.00	297.24	0.00	298.28	0.00	299.32	0.00
296.22	0.00	297.26	0.00	298.30	0.00	299.34	0.00
296.24	0.00	297.28	0.00	298.32	0.00	299.36	0.00
296.26	0.00	297.30	0.00	298.34	0.00	299.38	0.00
296.28	0.00	297.32	0.00	298.36	0.00	299.40	0.00
296.30	0.00	297.34	0.00	298.38	0.00	299.42	0.00
296.32	0.00	297.36	0.00	298.40	0.00	299.44	0.00
296.34	0.00	297.38	0.00	298.42	0.00	299.46	0.00
296.36	0.00	297.40	0.00	298.44	0.00	299.48	0.00
296.38	0.00	297.42	0.00	298.46	0.00	299.50	0.00
296.40	0.00	297.44	0.00	298.48	0.00	299.52	0.00
296.42	0.00	297.46	0.00	298.50	0.00	299.54	0.00
296.44	0.00	297.48	0.00	298.52	0.00	299.56	0.00
296.46	0.00	297.50	0.00	298.54	0.00	299.58	0.00
296.48	0.00	297.52	0.00	298.56	0.00	299.60	0.00
296.50	0.00	297.54	0.00	298.58	0.00	299.62	0.00
296.52	0.00	297.56	0.00	298.60	0.00	299.64	0.00
296.54	0.00	297.58	0.00	298.62	0.00	299.66	0.00
296.56	0.00	297.60	0.00	298.64	0.00	299.68	0.00
296.58	0.00	297.62	0.00	298.66	0.00	299.70	0.00
296.60	0.00	297.64	0.00	298.68	0.00	299.72	0.00
296.62	0.00	297.66	0.00	298.70	0.00	299.74	0.00
296.64	0.00	297.68	0.00	298.72	0.00	299.76	0.00
296.66	0.00	297.70	0.00	298.74	0.00	299.78	0.00
296.68	0.00	297.72	0.00	298.76	0.00	299.80	0.00
296.70	0.00	297.74	0.00	298.78	0.00	299.82	0.00
296.72	0.00	297.76	0.00	298.80	0.00	299.84	0.00
296.74	0.00	297.78	0.00	298.82	0.00	299.86	0.00
296.76	0.00	297.80	0.00	298.84	0.00	299.88	0.00
296.78	0.00	297.82	0.00	298.86	0.00	299.90	0.00
296.80	0.00	297.84	0.00	298.88	0.00	299.92	0.00
296.82	0.00	297.86	0.00	298.90	0.00	299.94	0.00
296.84	0.00	297.88	0.00	298.92	0.00	299.96	0.50
296.86	0.00	297.90	0.00	298.94	0.00	299.98	2.60
296.88	0.00	297.92	0.00	298.96	0.00	300.00	5.59
296.90	0.00	297.94	0.00	298.98	0.00		
296.92	0.00	297.96	0.00	299.00	0.00		
296.94	0.00	297.98	0.00	299.02	0.00		
296.96	0.00	298.00	0.00	299.04	0.00		
296.98	0.00	298.02	0.00	299.06	0.00		
297.00	0.00	298.04	0.00	299.08	0.00		
297.02	0.00	298.06	0.00	299.10	0.00		

Post-Development Entire

Type III 24-hr 1 Year Rainfall=2.80"

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Summary for Pond P-1c: Infiltration Chambers

Inflow Area = 1.280 ac, 15.98% Impervious, Inflow Depth = 1.04" for 1 Year event
 Inflow = 1.35 cfs @ 12.14 hrs, Volume= 0.111 af
 Outflow = 0.29 cfs @ 11.99 hrs, Volume= 0.111 af, Atten= 79%, Lag= 0.0 min
 Primary = 0.29 cfs @ 11.99 hrs, Volume= 0.111 af
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 309.80' @ 12.65 hrs Surf.Area= 1,477 sf Storage= 1,229 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 27.4 min (883.8 - 856.5)

Volume	Invert	Avail.Storage	Storage Description
#1	309.00'	3,349 cf	52.6"W x 34.0"H x 7.50'L Cultec R-V8 x 50

Device	Routing	Invert	Outlet Devices
#1	Primary	309.00'	7.500 in/hr Exfiltration over Horizontal area
#2	Secondary	310.33'	18.0" x 20.0' long Culvert CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 300.00' S= 0.5165 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior

Primary OutFlow Max=0.29 cfs @ 11.99 hrs HW=309.03' (Free Discharge)
 ↳ **1=Exfiltration** (Exfiltration Controls 0.29 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=309.00' TW=310.20' (Dynamic Tailwater)
 ↳ **2=Culvert** (Controls 0.00 cfs)

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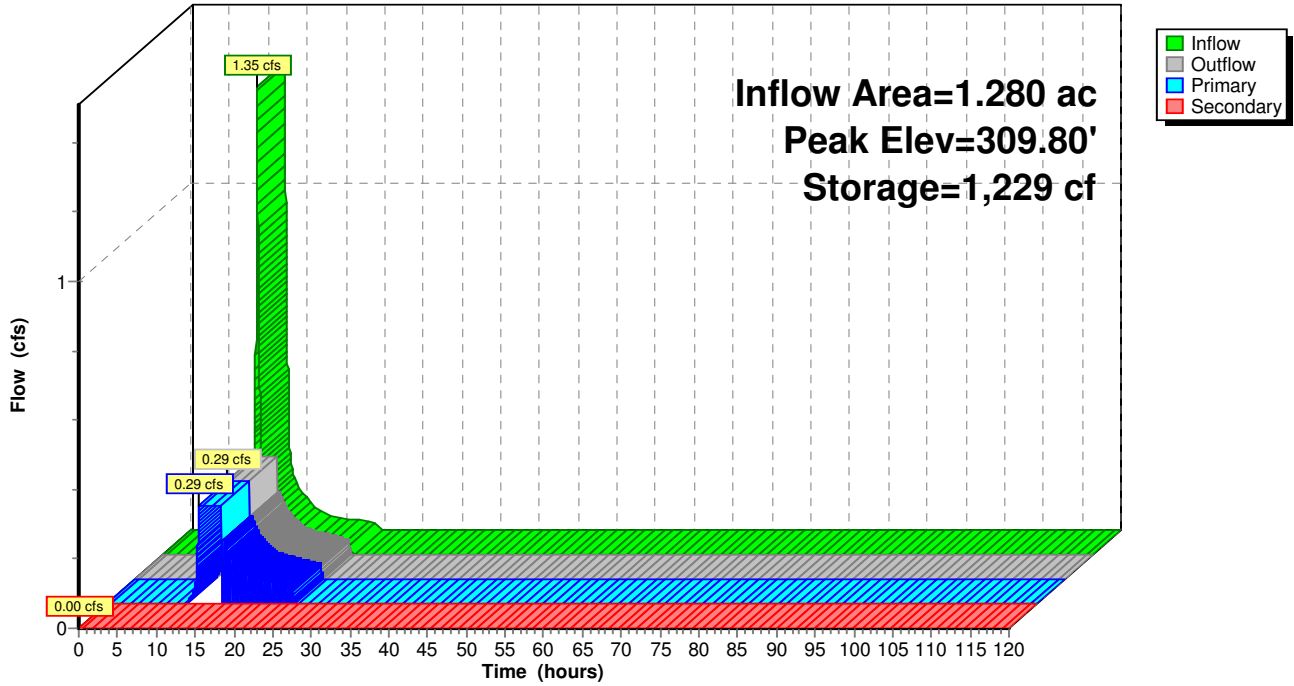
Type III 24-hr 1 Year Rainfall=2.80"

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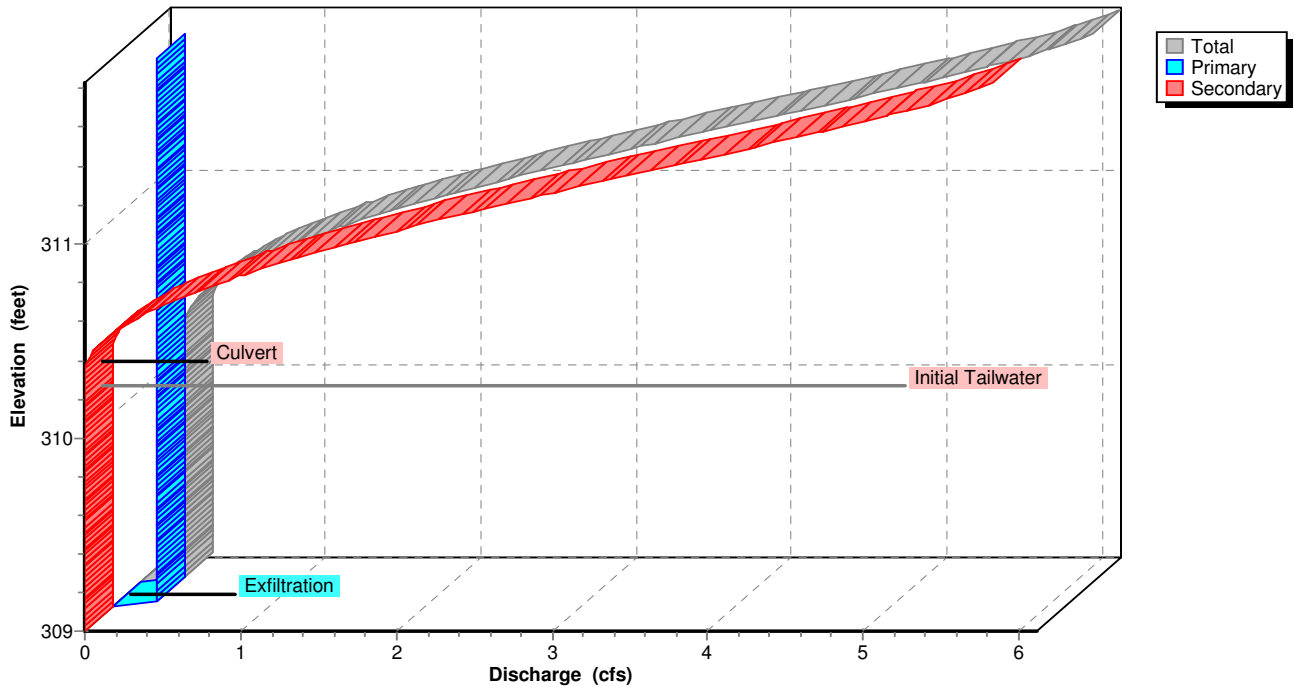
Pond P-1c: Infiltration Chambers

Hydrograph



Pond P-1c: Infiltration Chambers

Stage-Discharge



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Hydrograph for Pond P-1c: Infiltration Chambers

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	309.00	0.00	0.00	0.00
5.00	0.00	0	309.00	0.00	0.00	0.00
10.00	0.00	0	309.00	0.00	0.00	0.00
15.00	0.09	0	309.00	0.19	0.19	0.00
20.00	0.03	0	309.00	0.07	0.07	0.00
25.00	0.00	0	309.00	0.00	0.00	0.00
30.00	0.00	0	309.00	0.00	0.00	0.00
35.00	0.00	0	309.00	0.00	0.00	0.00
40.00	0.00	0	309.00	0.00	0.00	0.00
45.00	0.00	0	309.00	0.00	0.00	0.00
50.00	0.00	0	309.00	0.00	0.00	0.00
55.00	0.00	0	309.00	0.00	0.00	0.00
60.00	0.00	0	309.00	0.00	0.00	0.00
65.00	0.00	0	309.00	0.00	0.00	0.00
70.00	0.00	0	309.00	0.00	0.00	0.00
75.00	0.00	0	309.00	0.00	0.00	0.00
80.00	0.00	0	309.00	0.00	0.00	0.00
85.00	0.00	0	309.00	0.00	0.00	0.00
90.00	0.00	0	309.00	0.00	0.00	0.00
95.00	0.00	0	309.00	0.00	0.00	0.00
100.00	0.00	0	309.00	0.00	0.00	0.00
105.00	0.00	0	309.00	0.00	0.00	0.00
110.00	0.00	0	309.00	0.00	0.00	0.00
115.00	0.00	0	309.00	0.00	0.00	0.00
120.00	0.00	0	309.00	0.00	0.00	0.00

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Stage-Discharge for Pond P-1c: Infiltration Chambers

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
309.00	0.00	0.00	0.00	311.60	5.12	0.29	4.83
309.05	0.29	0.29	0.00	311.65	5.37	0.29	5.09
309.10	0.29	0.29	0.00	311.70	5.61	0.29	5.33
309.15	0.29	0.29	0.00	311.75	5.83	0.29	5.54
309.20	0.29	0.29	0.00	311.80	6.02	0.29	5.73
309.25	0.29	0.29	0.00				
309.30	0.29	0.29	0.00				
309.35	0.29	0.29	0.00				
309.40	0.29	0.29	0.00				
309.45	0.29	0.29	0.00				
309.50	0.29	0.29	0.00				
309.55	0.29	0.29	0.00				
309.60	0.29	0.29	0.00				
309.65	0.29	0.29	0.00				
309.70	0.29	0.29	0.00				
309.75	0.29	0.29	0.00				
309.80	0.29	0.29	0.00				
309.85	0.29	0.29	0.00				
309.90	0.29	0.29	0.00				
309.95	0.29	0.29	0.00				
310.00	0.29	0.29	0.00				
310.05	0.29	0.29	0.00				
310.10	0.29	0.29	0.00				
310.15	0.29	0.29	0.00				
310.20	0.29	0.29	0.00				
310.25	0.29	0.29	0.00				
310.30	0.29	0.29	0.00				
310.35	0.29	0.29	0.00				
310.40	0.31	0.29	0.02				
310.45	0.35	0.29	0.06				
310.50	0.41	0.29	0.12				
310.55	0.49	0.29	0.20				
310.60	0.59	0.29	0.30				
310.65	0.70	0.29	0.42				
310.70	0.84	0.29	0.55				
310.75	0.99	0.29	0.71				
310.80	1.16	0.29	0.87				
310.85	1.34	0.29	1.05				
310.90	1.54	0.29	1.25				
310.95	1.74	0.29	1.46				
311.00	1.97	0.29	1.68				
311.05	2.20	0.29	1.91				
311.10	2.44	0.29	2.15				
311.15	2.69	0.29	2.41				
311.20	2.95	0.29	2.66				
311.25	3.21	0.29	2.93				
311.30	3.49	0.29	3.20				
311.35	3.76	0.29	3.47				
311.40	4.03	0.29	3.75				
311.45	4.31	0.29	4.03				
311.50	4.58	0.29	4.30				
311.55	4.86	0.29	4.57				

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Summary for Pond P-A: Pond-A (NYSDEC I-2)

Inflow Area = 2.110 ac, 13.06% Impervious, Inflow Depth = 0.99" for 1 Year event
 Inflow = 2.21 cfs @ 12.12 hrs, Volume= 0.174 af
 Outflow = 0.33 cfs @ 12.84 hrs, Volume= 0.174 af, Atten= 85%, Lag= 43.2 min
 Primary = 0.33 cfs @ 12.84 hrs, Volume= 0.174 af
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 329.81' @ 12.84 hrs Surf.Area= 1,927 sf Storage= 2,583 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 79.7 min (938.2 - 858.5)

Volume	Invert	Avail.Storage	Storage Description
#1	328.00'	17,310 cf	Custom Stage Data (Prismatic) Listed below
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
328.00	813	0	0
330.00	2,047	2,860	2,860
332.00	3,559	5,606	8,466
334.00	5,285	8,844	17,310

Device	Routing	Invert	Outlet Devices
#1	Primary	328.00'	7.500 in/hr Exfiltration over Horizontal area
#2	Secondary	330.00'	2.0" Vert. Orifice/Grate C= 0.600
#3	Secondary	332.00'	2.10' W x 0.50' H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.33 cfs @ 12.84 hrs HW=329.81' (Free Discharge)
 ↑1=Exfiltration (Exfiltration Controls 0.33 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=328.00' TW=310.20' (Dynamic Tailwater)
 ↑2=Orifice/Grate (Controls 0.00 cfs)
 ↑3=Orifice/Grate (Controls 0.00 cfs)

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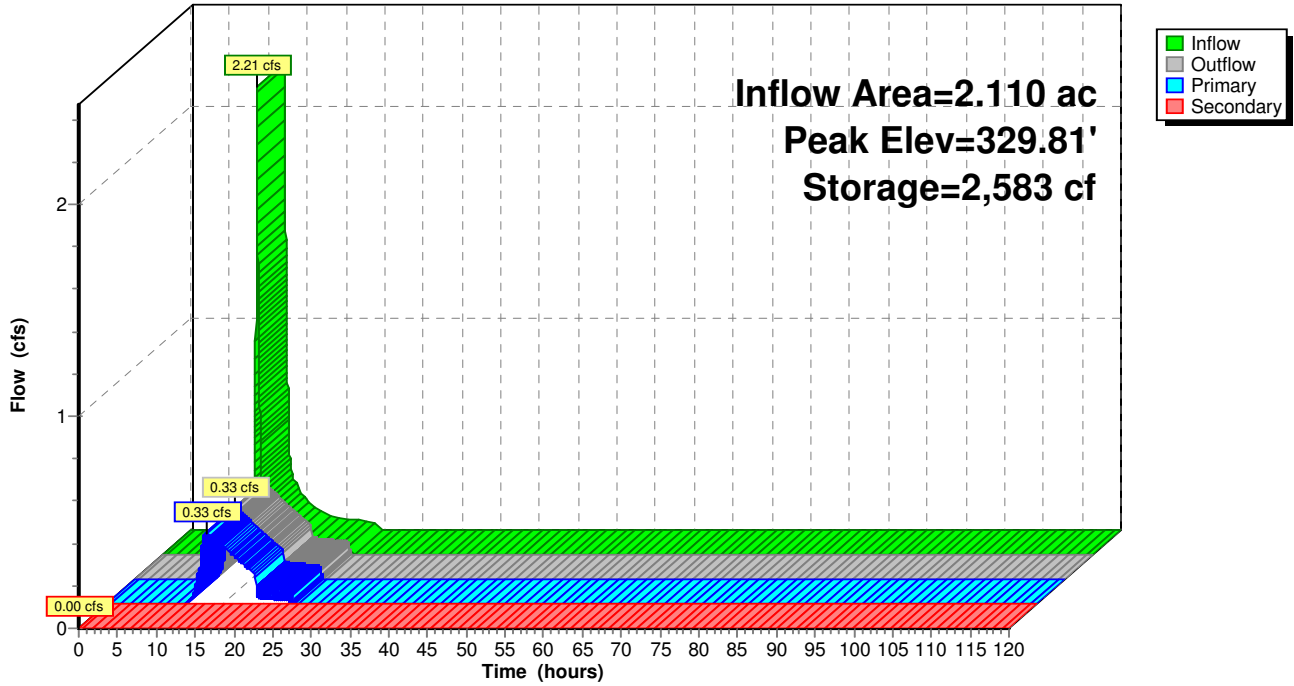
Type III 24-hr 1 Year Rainfall=2.80"

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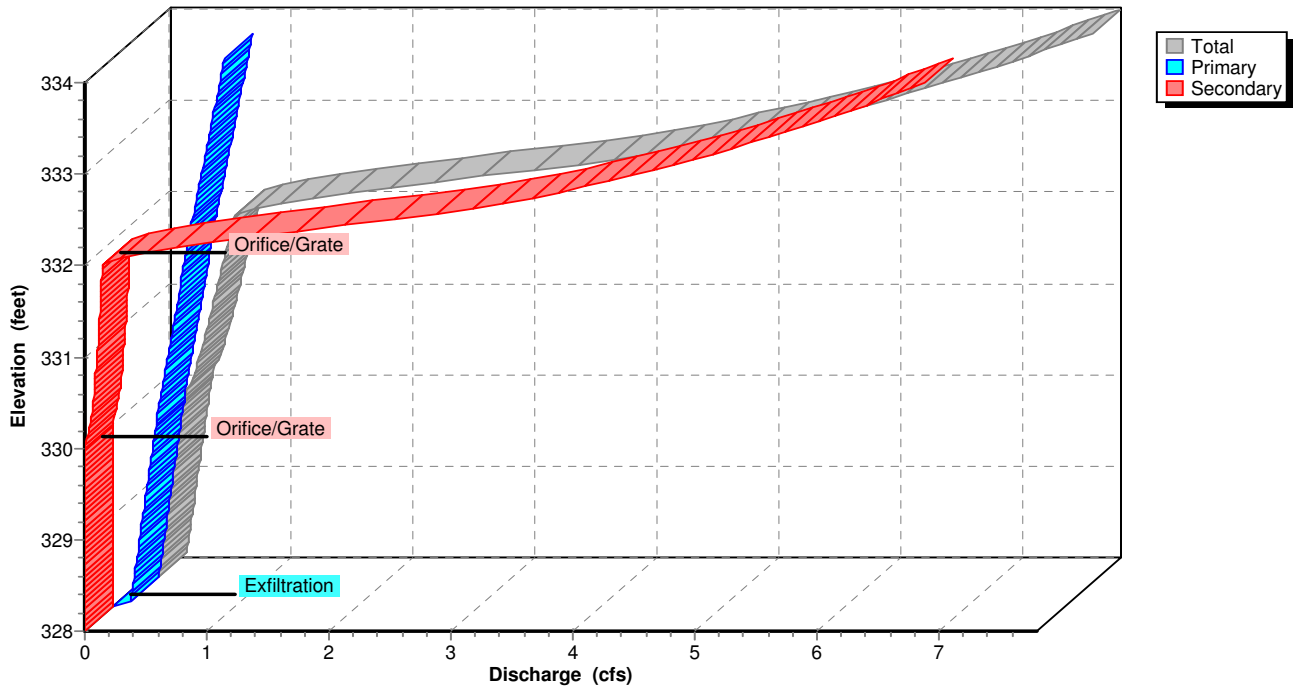
Pond P-A: Pond-A (NYSDEC I-2)

Hydrograph



Pond P-A: Pond-A (NYSDEC I-2)

Stage-Discharge



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Type III 24-hr 1 Year Rainfall=2.80"

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Hydrograph for Pond P-A: Pond-A (NYSDEC I-2)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	328.00	0.00	0.00	0.00
5.00	0.00	0	328.00	0.00	0.00	0.00
10.00	0.00	0	328.00	0.00	0.00	0.00
15.00	0.15	1,775	329.24	0.27	0.27	0.00
20.00	0.05	0	328.00	0.03	0.03	0.00
25.00	0.00	0	328.00	0.00	0.00	0.00
30.00	0.00	0	328.00	0.00	0.00	0.00
35.00	0.00	0	328.00	0.00	0.00	0.00
40.00	0.00	0	328.00	0.00	0.00	0.00
45.00	0.00	0	328.00	0.00	0.00	0.00
50.00	0.00	0	328.00	0.00	0.00	0.00
55.00	0.00	0	328.00	0.00	0.00	0.00
60.00	0.00	0	328.00	0.00	0.00	0.00
65.00	0.00	0	328.00	0.00	0.00	0.00
70.00	0.00	0	328.00	0.00	0.00	0.00
75.00	0.00	0	328.00	0.00	0.00	0.00
80.00	0.00	0	328.00	0.00	0.00	0.00
85.00	0.00	0	328.00	0.00	0.00	0.00
90.00	0.00	0	328.00	0.00	0.00	0.00
95.00	0.00	0	328.00	0.00	0.00	0.00
100.00	0.00	0	328.00	0.00	0.00	0.00
105.00	0.00	0	328.00	0.00	0.00	0.00
110.00	0.00	0	328.00	0.00	0.00	0.00
115.00	0.00	0	328.00	0.00	0.00	0.00
120.00	0.00	0	328.00	0.00	0.00	0.00

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Type III 24-hr 1 Year Rainfall=2.80"

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Stage-Discharge for Pond P-A: Pond-A (NYSDEC I-2)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
328.00	0.00	0.00	0.00	333.20	5.90	0.80	5.10
328.10	0.15	0.15	0.00	333.30	6.17	0.81	5.36
328.20	0.16	0.16	0.00	333.40	6.43	0.83	5.60
328.30	0.17	0.17	0.00	333.50	6.68	0.84	5.84
328.40	0.18	0.18	0.00	333.60	6.92	0.86	6.06
328.50	0.19	0.19	0.00	333.70	7.15	0.87	6.28
328.60	0.21	0.21	0.00	333.80	7.38	0.89	6.49
328.70	0.22	0.22	0.00	333.90	7.60	0.90	6.69
328.80	0.23	0.23	0.00	334.00	7.81	0.92	6.89
328.90	0.24	0.24	0.00				
329.00	0.25	0.25	0.00				
329.10	0.26	0.26	0.00				
329.20	0.27	0.27	0.00				
329.30	0.28	0.28	0.00				
329.40	0.29	0.29	0.00				
329.50	0.30	0.30	0.00				
329.60	0.31	0.31	0.00				
329.70	0.32	0.32	0.00				
329.80	0.33	0.33	0.00				
329.90	0.34	0.34	0.00				
330.00	0.36	0.36	0.00				
330.10	0.38	0.37	0.01				
330.20	0.42	0.38	0.04				
330.30	0.44	0.39	0.05				
330.40	0.47	0.41	0.06				
330.50	0.49	0.42	0.07				
330.60	0.51	0.43	0.08				
330.70	0.53	0.45	0.08				
330.80	0.55	0.46	0.09				
330.90	0.57	0.47	0.09				
331.00	0.59	0.49	0.10				
331.10	0.61	0.50	0.11				
331.20	0.62	0.51	0.11				
331.30	0.64	0.53	0.12				
331.40	0.66	0.54	0.12				
331.50	0.68	0.55	0.13				
331.60	0.69	0.57	0.13				
331.70	0.71	0.58	0.13				
331.80	0.73	0.59	0.14				
331.90	0.75	0.60	0.14				
332.00	0.76	0.62	0.15				
332.10	1.00	0.63	0.36				
332.20	1.40	0.65	0.76				
332.30	1.93	0.66	1.26				
332.40	2.54	0.68	1.87				
332.50	3.24	0.69	2.55				
332.60	3.79	0.71	3.09				
332.70	4.24	0.72	3.51				
332.80	4.63	0.74	3.89				
332.90	4.98	0.75	4.23				
333.00	5.30	0.77	4.54				
333.10	5.61	0.78	4.83				

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Summary for Pond P-B: Pond-B (NYSDEC I-2)

Inflow Area = 4.199 ac, 26.44% Impervious, Inflow Depth = 1.10" for 1 Year event
 Inflow = 3.98 cfs @ 12.22 hrs, Volume= 0.386 af
 Outflow = 0.56 cfs @ 13.24 hrs, Volume= 0.386 af, Atten= 86%, Lag= 61.6 min
 Primary = 0.56 cfs @ 13.24 hrs, Volume= 0.386 af
 Secondary = 0.00 cfs @ 13.24 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 384.56' @ 13.24 hrs Surf.Area= 3,675 sf Storage= 6,523 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 126.8 min (985.2 - 858.3)

Volume	Invert	Avail.Storage	Storage Description
#1	382.00'	25,197 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
382.00	1,476	0	0
384.00	3,129	4,605	4,605
386.00	5,067	8,196	12,801
388.00	7,329	12,396	25,197

Device	Routing	Invert	Outlet Devices
#1	Primary	382.00'	6.600 in/hr Exfiltration over Horizontal area
#2	Device 5	384.56'	2.0" Vert. Orifice/Grate C= 0.600
#3	Device 4	385.50'	4.00' W x 1.00' H Vert. Orifice/Grate C= 0.600
#4	Device 5	383.50'	15.0" x 65.0' long 15" Culvert CPP, square edge headwall, Ke= 0.500 Outlet Invert= 381.50' S= 0.0308 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior
#5	Secondary	381.40'	15.0" x 196.0' long 15" Culvert CPP, square edge headwall, Ke= 0.500 Outlet Invert= 358.50' S= 0.1168 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior

Primary OutFlow Max=0.56 cfs @ 13.24 hrs HW=384.56' (Free Discharge)
 ↑1=Exfiltration (Exfiltration Controls 0.56 cfs)

Secondary OutFlow Max=0.00 cfs @ 13.24 hrs HW=384.56' TW=296.00' (Dynamic Tailwater)
 ↑5=15" Culvert (Passes 0.00 cfs of 9.41 cfs potential flow)
 ↑2=Orifice/Grate (Orifice Controls 0.00 cfs @ 0.21 fps)
 ↑4=15" Culvert (Passes 0.00 cfs of 3.91 cfs potential flow)
 ↑3=Orifice/Grate (Controls 0.00 cfs)

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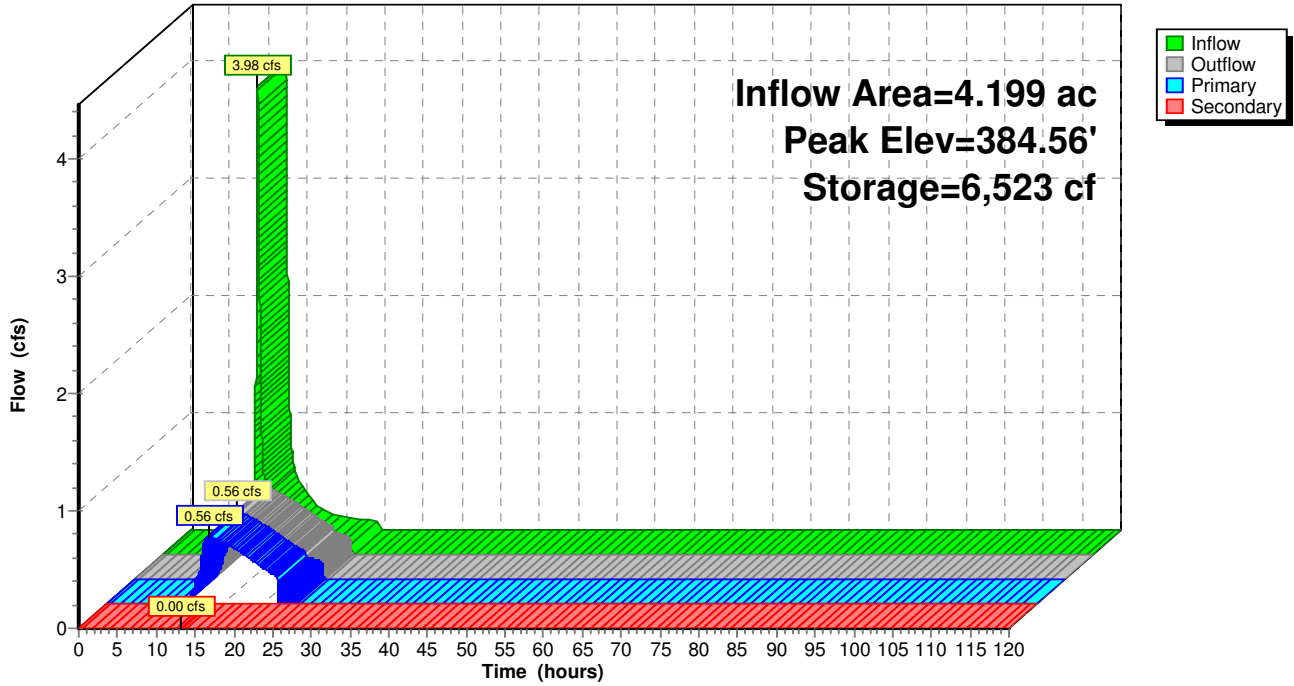
Type III 24-hr 1 Year Rainfall=2.80"

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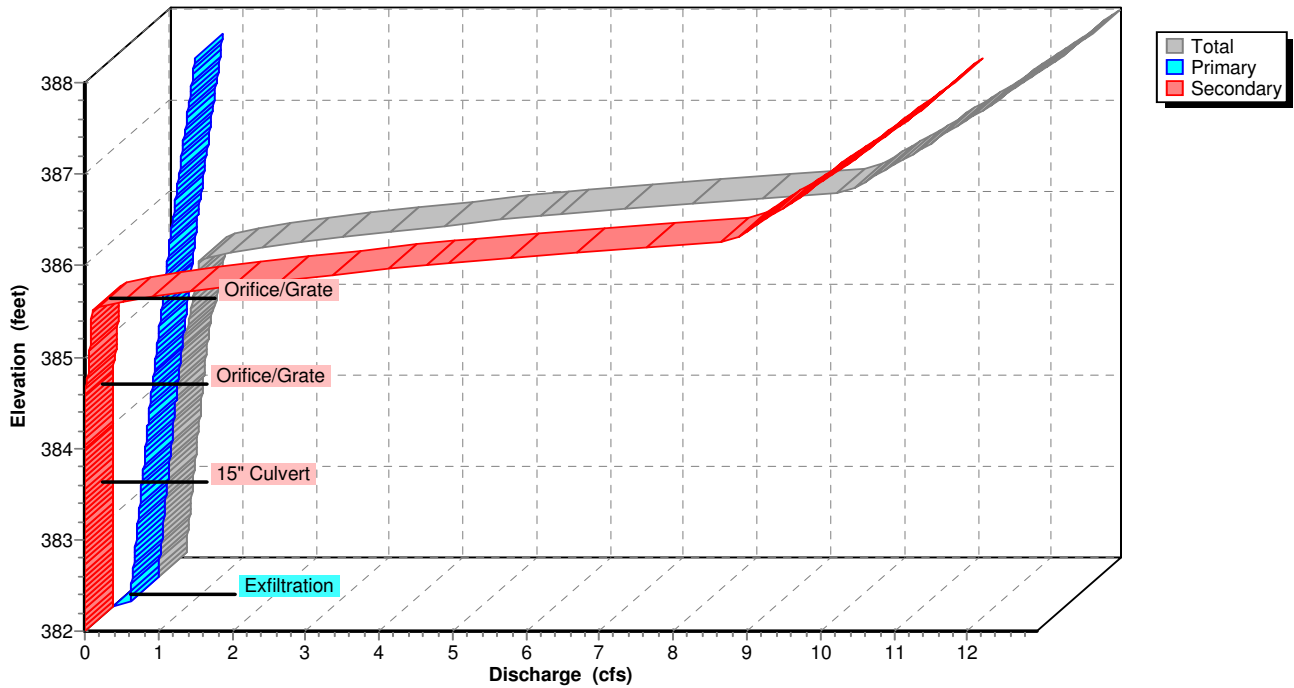
Pond P-B: Pond-B (NYSDEC I-2)

Hydrograph



Pond P-B: Pond-B (NYSDEC I-2)

Stage-Discharge



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Hydrograph for Pond P-B: Pond-B (NYSDEC I-2)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	382.00	0.00	0.00	0.00
5.00	0.00	0	382.00	0.00	0.00	0.00
10.00	0.00	0	382.00	0.00	0.00	0.00
15.00	0.32	5,687	384.33	0.53	0.53	0.00
20.00	0.11	1,255	382.71	0.32	0.32	0.00
25.00	0.00	0	382.00	0.00	0.00	0.00
30.00	0.00	0	382.00	0.00	0.00	0.00
35.00	0.00	0	382.00	0.00	0.00	0.00
40.00	0.00	0	382.00	0.00	0.00	0.00
45.00	0.00	0	382.00	0.00	0.00	0.00
50.00	0.00	0	382.00	0.00	0.00	0.00
55.00	0.00	0	382.00	0.00	0.00	0.00
60.00	0.00	0	382.00	0.00	0.00	0.00
65.00	0.00	0	382.00	0.00	0.00	0.00
70.00	0.00	0	382.00	0.00	0.00	0.00
75.00	0.00	0	382.00	0.00	0.00	0.00
80.00	0.00	0	382.00	0.00	0.00	0.00
85.00	0.00	0	382.00	0.00	0.00	0.00
90.00	0.00	0	382.00	0.00	0.00	0.00
95.00	0.00	0	382.00	0.00	0.00	0.00
100.00	0.00	0	382.00	0.00	0.00	0.00
105.00	0.00	0	382.00	0.00	0.00	0.00
110.00	0.00	0	382.00	0.00	0.00	0.00
115.00	0.00	0	382.00	0.00	0.00	0.00
120.00	0.00	0	382.00	0.00	0.00	0.00

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Stage-Discharge for Pond P-B: Pond-B (NYSDEC I-2)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
382.00	0.00	0.00	0.00	387.20	11.51	0.98	10.53
382.10	0.24	0.24	0.00	387.30	11.70	1.00	10.70
382.20	0.25	0.25	0.00	387.40	11.88	1.02	10.87
382.30	0.26	0.26	0.00	387.50	12.07	1.03	11.03
382.40	0.28	0.28	0.00	387.60	12.25	1.05	11.20
382.50	0.29	0.29	0.00	387.70	12.42	1.07	11.36
382.60	0.30	0.30	0.00	387.80	12.60	1.09	11.51
382.70	0.31	0.31	0.00	387.90	12.77	1.10	11.67
382.80	0.33	0.33	0.00	388.00	12.94	1.12	11.82
382.90	0.34	0.34	0.00				
383.00	0.35	0.35	0.00				
383.10	0.36	0.36	0.00				
383.20	0.38	0.38	0.00				
383.30	0.39	0.39	0.00				
383.40	0.40	0.40	0.00				
383.50	0.41	0.41	0.00				
383.60	0.43	0.43	0.00				
383.70	0.44	0.44	0.00				
383.80	0.45	0.45	0.00				
383.90	0.47	0.47	0.00				
384.00	0.48	0.48	0.00				
384.10	0.49	0.49	0.00				
384.20	0.51	0.51	0.00				
384.30	0.52	0.52	0.00				
384.40	0.54	0.54	0.00				
384.50	0.55	0.55	0.00				
384.60	0.57	0.57	0.00				
384.70	0.61	0.58	0.02				
384.80	0.64	0.60	0.04				
384.90	0.66	0.61	0.05				
385.00	0.69	0.63	0.06				
385.10	0.71	0.64	0.07				
385.20	0.73	0.66	0.08				
385.30	0.76	0.67	0.09				
385.40	0.78	0.69	0.09				
385.50	0.80	0.70	0.10				
385.60	1.22	0.71	0.51				
385.70	1.99	0.73	1.26				
385.80	2.97	0.74	2.22				
385.90	4.13	0.76	3.37				
386.00	5.44	0.77	4.66				
386.10	6.89	0.79	6.09				
386.20	8.46	0.81	7.65				
386.30	9.68	0.83	8.85				
386.40	9.89	0.84	9.05				
386.50	10.11	0.86	9.25				
386.60	10.32	0.88	9.44				
386.70	10.53	0.90	9.63				
386.80	10.73	0.91	9.82				
386.90	10.93	0.93	10.00				
387.00	11.13	0.95	10.18				
387.10	11.32	0.96	10.36				

Post-Development Entire

Type III 24-hr 1 Year Rainfall=2.80"

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Summary for Pond P-C: Pond-C (NYSDEC I-2)

Inflow Area = 0.759 ac, 29.42% Impervious, Inflow Depth = 1.35" for 1 Year event
 Inflow = 1.06 cfs @ 12.14 hrs, Volume= 0.086 af
 Outflow = 0.15 cfs @ 12.90 hrs, Volume= 0.086 af, Atten= 86%, Lag= 45.9 min
 Primary = 0.15 cfs @ 12.90 hrs, Volume= 0.086 af
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 388.07' @ 12.90 hrs Surf.Area= 963 sf Storage= 1,407 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 99.6 min (938.8 - 839.2)

Volume	Invert	Avail.Storage	Storage Description
#1	386.00'	9,794 cf	Custom Stage Data (Prismatic) Listed below
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
386.00	380	0	0
388.00	937	1,317	1,317
390.00	1,683	2,620	3,937
392.00	2,714	4,397	8,334
392.50	3,126	1,460	9,794

Device	Routing	Invert	Outlet Devices
#1	Primary	386.00'	6.600 in/hr Exfiltration over Horizontal area
#2	Secondary	388.30'	0.50' W x 0.20' H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.15 cfs @ 12.90 hrs HW=388.07' (Free Discharge)
 ↑1=Exfiltration (Exfiltration Controls 0.15 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=386.00' TW=0.00' (Dynamic Tailwater)
 ↑2=Orifice/Grate (Controls 0.00 cfs)

Post-Development Entire

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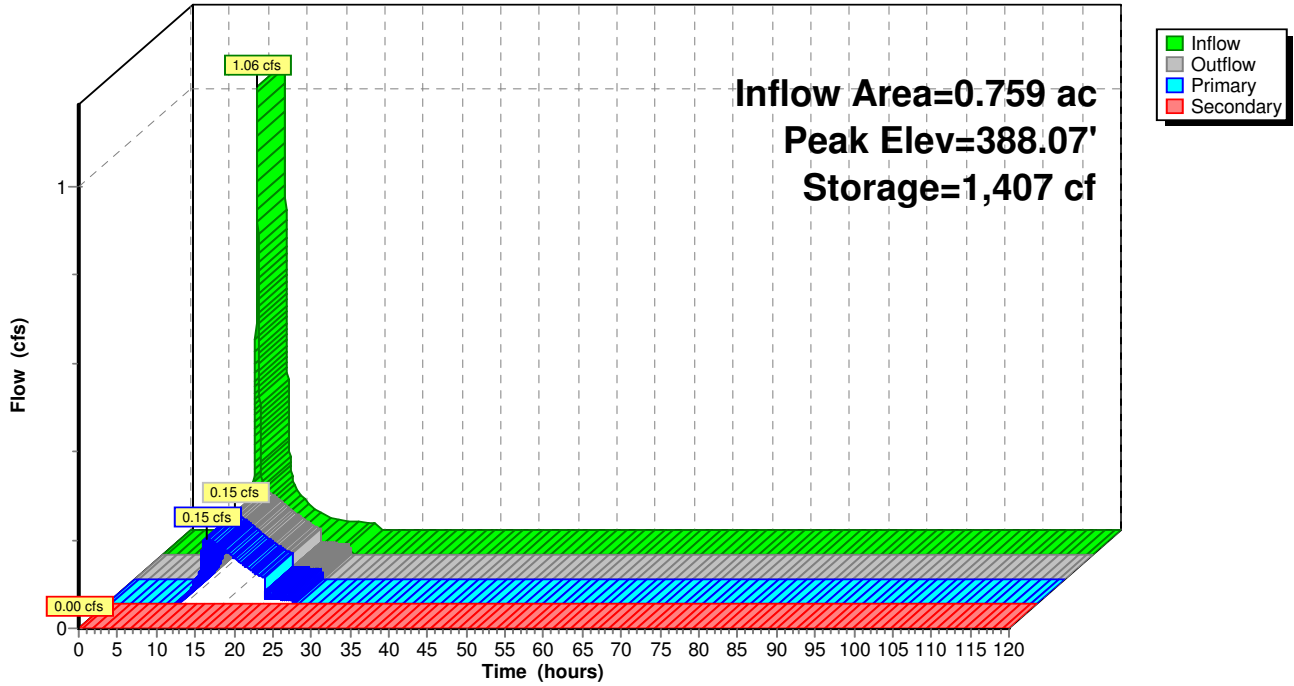
Type III 24-hr 1 Year Rainfall=2.80"

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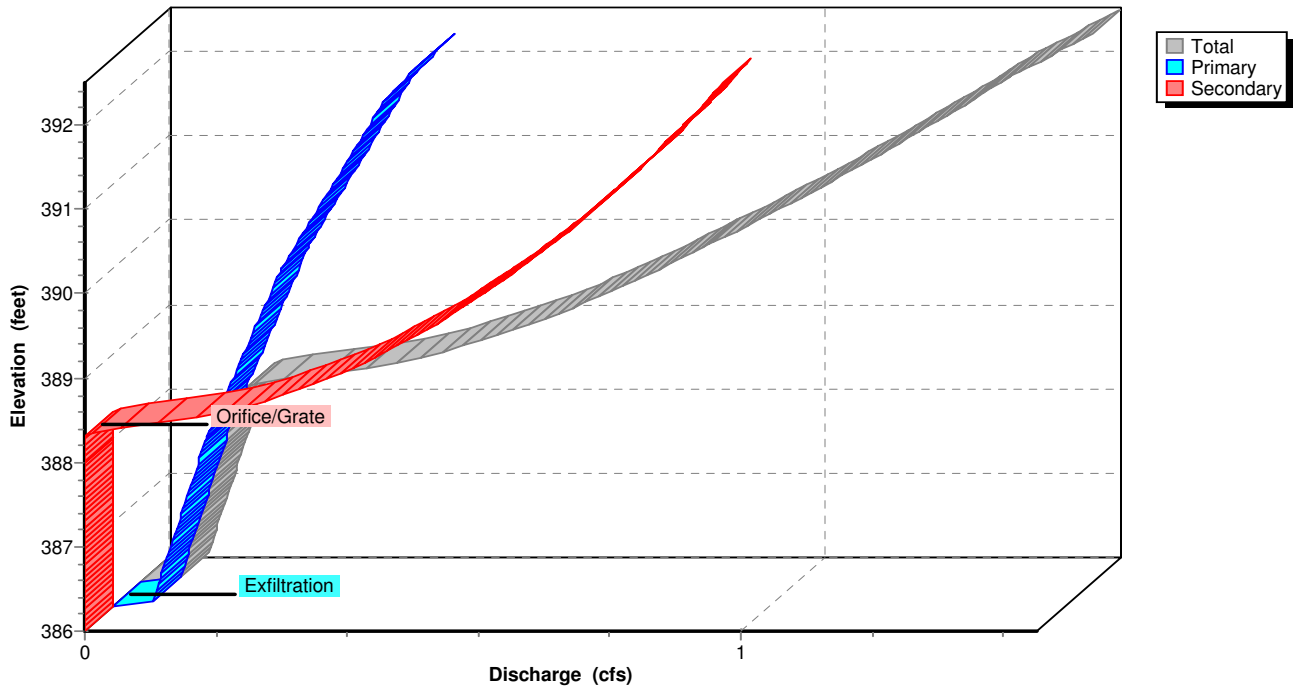
Pond P-C: Pond-C (NYSDEC I-2)

Hydrograph



Pond P-C: Pond-C (NYSDEC I-2)

Stage-Discharge



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Hydrograph for Pond P-C: Pond-C (NYSDEC I-2)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	386.00	0.00	0.00	0.00
5.00	0.00	0	386.00	0.00	0.00	0.00
10.00	0.01	0	386.00	0.01	0.01	0.00
15.00	0.06	1,042	387.58	0.13	0.13	0.00
20.00	0.02	49	386.07	0.06	0.06	0.00
25.00	0.00	0	386.00	0.00	0.00	0.00
30.00	0.00	0	386.00	0.00	0.00	0.00
35.00	0.00	0	386.00	0.00	0.00	0.00
40.00	0.00	0	386.00	0.00	0.00	0.00
45.00	0.00	0	386.00	0.00	0.00	0.00
50.00	0.00	0	386.00	0.00	0.00	0.00
55.00	0.00	0	386.00	0.00	0.00	0.00
60.00	0.00	0	386.00	0.00	0.00	0.00
65.00	0.00	0	386.00	0.00	0.00	0.00
70.00	0.00	0	386.00	0.00	0.00	0.00
75.00	0.00	0	386.00	0.00	0.00	0.00
80.00	0.00	0	386.00	0.00	0.00	0.00
85.00	0.00	0	386.00	0.00	0.00	0.00
90.00	0.00	0	386.00	0.00	0.00	0.00
95.00	0.00	0	386.00	0.00	0.00	0.00
100.00	0.00	0	386.00	0.00	0.00	0.00
105.00	0.00	0	386.00	0.00	0.00	0.00
110.00	0.00	0	386.00	0.00	0.00	0.00
115.00	0.00	0	386.00	0.00	0.00	0.00
120.00	0.00	0	386.00	0.00	0.00	0.00

Post-Development Entire

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Type III 24-hr 1 Year Rainfall=2.80"

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Stage-Discharge for Pond P-C: Pond-C (NYSDEC I-2)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
386.00	0.00	0.00	0.00	391.20	1.16	0.35	0.81
386.10	0.06	0.06	0.00	391.30	1.18	0.36	0.82
386.20	0.07	0.07	0.00	391.40	1.20	0.37	0.83
386.30	0.07	0.07	0.00	391.50	1.22	0.38	0.85
386.40	0.08	0.08	0.00	391.60	1.24	0.38	0.86
386.50	0.08	0.08	0.00	391.70	1.27	0.39	0.87
386.60	0.08	0.08	0.00	391.80	1.29	0.40	0.89
386.70	0.09	0.09	0.00	391.90	1.31	0.41	0.90
386.80	0.09	0.09	0.00	392.00	1.33	0.41	0.91
386.90	0.10	0.10	0.00	392.10	1.35	0.43	0.93
387.00	0.10	0.10	0.00	392.20	1.38	0.44	0.94
387.10	0.10	0.10	0.00	392.30	1.40	0.45	0.95
387.20	0.11	0.11	0.00	392.40	1.43	0.46	0.96
387.30	0.11	0.11	0.00	392.50	1.45	0.48	0.97
387.40	0.12	0.12	0.00				
387.50	0.12	0.12	0.00				
387.60	0.13	0.13	0.00				
387.70	0.13	0.13	0.00				
387.80	0.13	0.13	0.00				
387.90	0.14	0.14	0.00				
388.00	0.14	0.14	0.00				
388.10	0.15	0.15	0.00				
388.20	0.15	0.15	0.00				
388.30	0.16	0.16	0.00				
388.40	0.22	0.17	0.05				
388.50	0.32	0.17	0.14				
388.60	0.39	0.18	0.21				
388.70	0.45	0.18	0.26				
388.80	0.49	0.19	0.30				
388.90	0.53	0.19	0.34				
389.00	0.57	0.20	0.37				
389.10	0.61	0.21	0.40				
389.20	0.64	0.21	0.43				
389.30	0.67	0.22	0.46				
389.40	0.70	0.22	0.48				
389.50	0.73	0.23	0.50				
389.60	0.76	0.23	0.53				
389.70	0.79	0.24	0.55				
389.80	0.82	0.25	0.57				
389.90	0.84	0.25	0.59				
390.00	0.87	0.26	0.61				
390.10	0.89	0.27	0.63				
390.20	0.92	0.27	0.65				
390.30	0.94	0.28	0.66				
390.40	0.97	0.29	0.68				
390.50	0.99	0.30	0.70				
390.60	1.02	0.30	0.71				
390.70	1.04	0.31	0.73				
390.80	1.07	0.32	0.75				
390.90	1.09	0.33	0.76				
391.00	1.11	0.34	0.78				
391.10	1.13	0.34	0.79				

Post-Development Entire

Type III 24-hr 1 Year Rainfall=2.80"

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Summary for Pond P-D: Pond-D (NYSDEC I-2)

Inflow Area = 2.990 ac, 17.19% Impervious, Inflow Depth = 0.99" for 1 Year event
 Inflow = 3.23 cfs @ 12.11 hrs, Volume= 0.246 af
 Outflow = 0.48 cfs @ 12.82 hrs, Volume= 0.246 af, Atten= 85%, Lag= 42.8 min
 Primary = 0.48 cfs @ 12.82 hrs, Volume= 0.246 af
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 360.09' @ 12.82 hrs Surf.Area= 2,741 sf Storage= 3,761 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 88.0 min (945.6 - 857.6)

Volume	Invert	Avail.Storage	Storage Description
#1	358.00'	15,916 cf	Custom Stage Data (Prismatic) Listed below
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
358.00	781	0	0
360.00	2,650	3,431	3,431
362.00	4,654	7,304	10,735
363.00	5,707	5,181	15,916

Device	Routing	Invert	Outlet Devices
#1	Primary	358.00'	7.500 in/hr Exfiltration over Horizontal area
#2	Secondary	360.50'	2.50' W x 0.33' H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.48 cfs @ 12.82 hrs HW=360.09' (Free Discharge)

↑1=Exfiltration (Exfiltration Controls 0.48 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=358.00' TW=0.00' (Dynamic Tailwater)

↑2=Orifice/Grate (Controls 0.00 cfs)

Post-Development Entire

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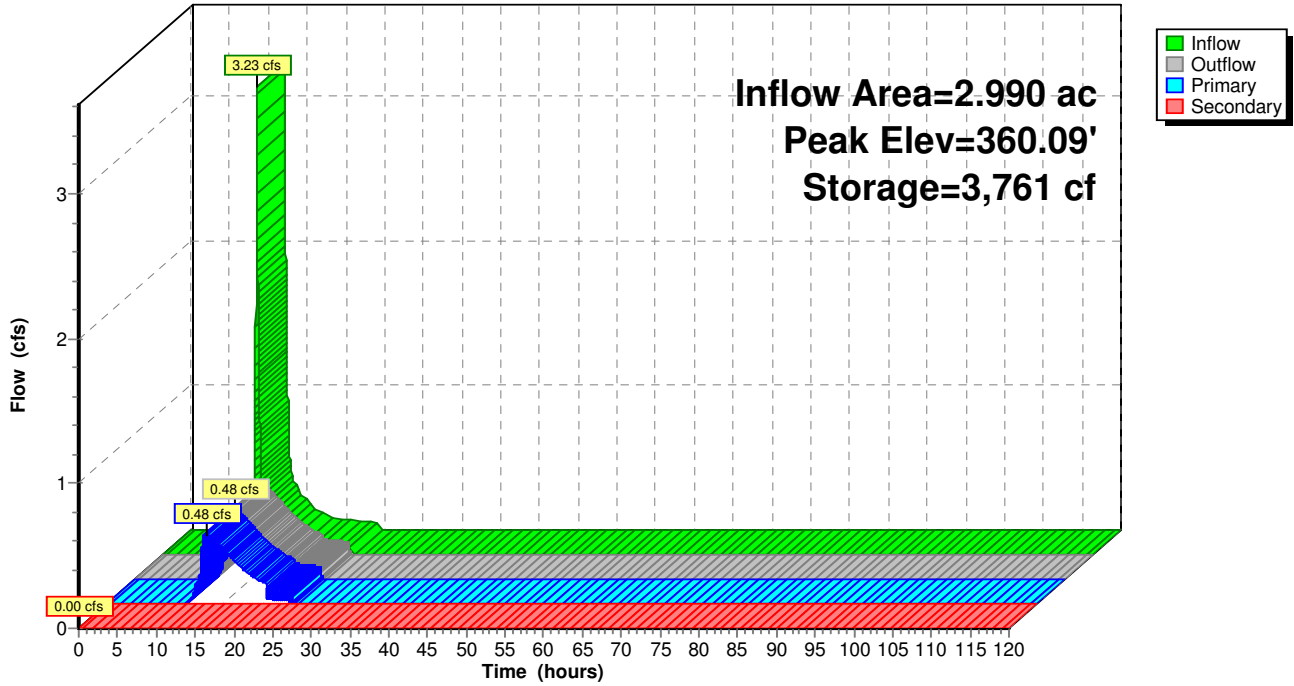
Type III 24-hr 1 Year Rainfall=2.80"

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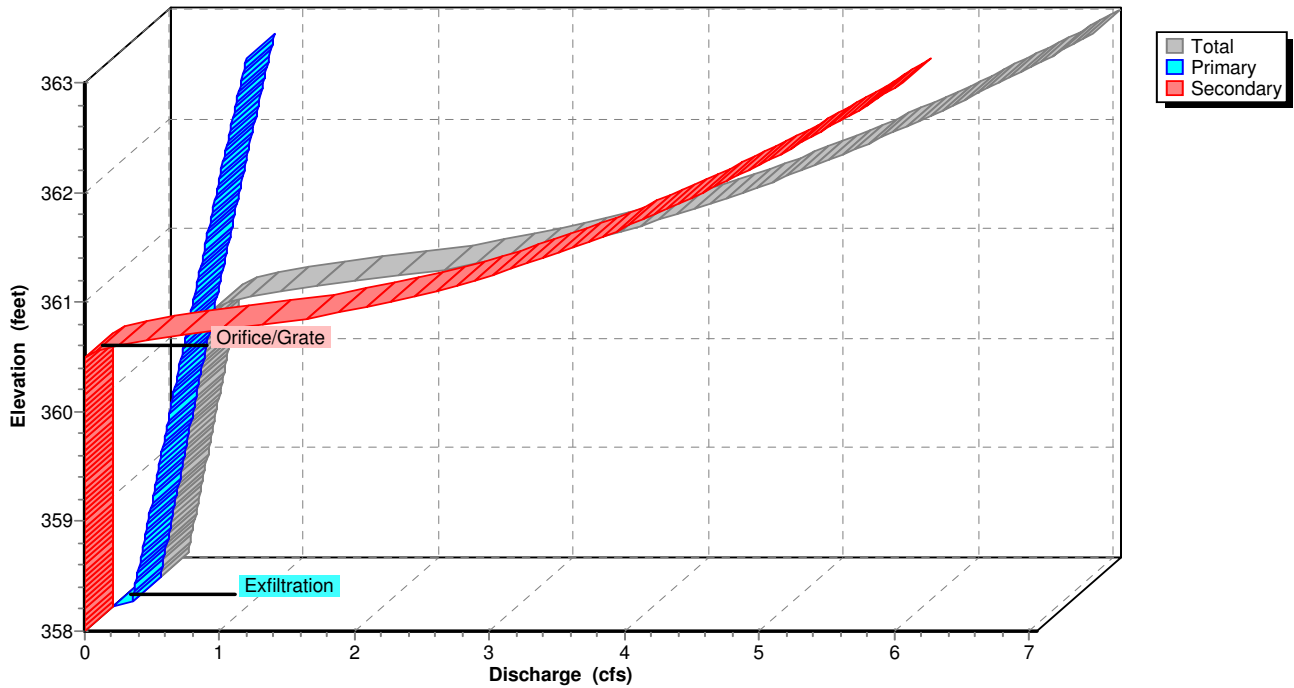
Pond P-D: Pond-D (NYSDEC I-2)

Hydrograph



Pond P-D: Pond-D (NYSDEC I-2)

Stage-Discharge



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Type III 24-hr 1 Year Rainfall=2.80"

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Hydrograph for Pond P-D: Pond-D (NYSDEC I-2)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	358.00	0.00	0.00	0.00
5.00	0.00	0	358.00	0.00	0.00	0.00
10.00	0.00	0	358.00	0.00	0.00	0.00
15.00	0.21	2,590	359.51	0.38	0.38	0.00
20.00	0.07	170	358.10	0.15	0.15	0.00
25.00	0.00	0	358.00	0.00	0.00	0.00
30.00	0.00	0	358.00	0.00	0.00	0.00
35.00	0.00	0	358.00	0.00	0.00	0.00
40.00	0.00	0	358.00	0.00	0.00	0.00
45.00	0.00	0	358.00	0.00	0.00	0.00
50.00	0.00	0	358.00	0.00	0.00	0.00
55.00	0.00	0	358.00	0.00	0.00	0.00
60.00	0.00	0	358.00	0.00	0.00	0.00
65.00	0.00	0	358.00	0.00	0.00	0.00
70.00	0.00	0	358.00	0.00	0.00	0.00
75.00	0.00	0	358.00	0.00	0.00	0.00
80.00	0.00	0	358.00	0.00	0.00	0.00
85.00	0.00	0	358.00	0.00	0.00	0.00
90.00	0.00	0	358.00	0.00	0.00	0.00
95.00	0.00	0	358.00	0.00	0.00	0.00
100.00	0.00	0	358.00	0.00	0.00	0.00
105.00	0.00	0	358.00	0.00	0.00	0.00
110.00	0.00	0	358.00	0.00	0.00	0.00
115.00	0.00	0	358.00	0.00	0.00	0.00
120.00	0.00	0	358.00	0.00	0.00	0.00

Post-Development Entire

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Stage-Discharge for Pond P-D: Pond-D (NYSDEC I-2)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
358.00	0.00	0.00	0.00	360.60	0.82	0.56	0.25
358.05	0.14	0.14	0.00	360.65	1.04	0.57	0.47
358.10	0.15	0.15	0.00	360.70	1.30	0.58	0.72
358.15	0.16	0.16	0.00	360.75	1.59	0.59	1.00
358.20	0.17	0.17	0.00	360.80	1.92	0.60	1.32
358.25	0.18	0.18	0.00	360.85	2.25	0.61	1.64
358.30	0.18	0.18	0.00	360.90	2.50	0.62	1.88
358.35	0.19	0.19	0.00	360.95	2.71	0.63	2.09
358.40	0.20	0.20	0.00	361.00	2.91	0.63	2.27
358.45	0.21	0.21	0.00	361.05	3.09	0.64	2.45
358.50	0.22	0.22	0.00	361.10	3.26	0.65	2.60
358.55	0.22	0.22	0.00	361.15	3.41	0.66	2.75
358.60	0.23	0.23	0.00	361.20	3.56	0.67	2.89
358.65	0.24	0.24	0.00	361.25	3.71	0.68	3.03
358.70	0.25	0.25	0.00	361.30	3.84	0.69	3.16
358.75	0.26	0.26	0.00	361.35	3.97	0.69	3.28
358.80	0.27	0.27	0.00	361.40	4.10	0.70	3.40
358.85	0.27	0.27	0.00	361.45	4.23	0.71	3.51
358.90	0.28	0.28	0.00	361.50	4.34	0.72	3.62
358.95	0.29	0.29	0.00	361.55	4.46	0.73	3.73
359.00	0.30	0.30	0.00	361.60	4.57	0.74	3.84
359.05	0.31	0.31	0.00	361.65	4.68	0.75	3.94
359.10	0.31	0.31	0.00	361.70	4.79	0.76	4.04
359.15	0.32	0.32	0.00	361.75	4.90	0.76	4.13
359.20	0.33	0.33	0.00	361.80	5.00	0.77	4.23
359.25	0.34	0.34	0.00	361.85	5.10	0.78	4.32
359.30	0.35	0.35	0.00	361.90	5.20	0.79	4.41
359.35	0.35	0.35	0.00	361.95	5.30	0.80	4.50
359.40	0.36	0.36	0.00	362.00	5.39	0.81	4.59
359.45	0.37	0.37	0.00	362.05	5.49	0.82	4.67
359.50	0.38	0.38	0.00	362.10	5.58	0.83	4.76
359.55	0.39	0.39	0.00	362.15	5.67	0.84	4.84
359.60	0.40	0.40	0.00	362.20	5.76	0.84	4.92
359.65	0.40	0.40	0.00	362.25	5.85	0.85	5.00
359.70	0.41	0.41	0.00	362.30	5.94	0.86	5.08
359.75	0.42	0.42	0.00	362.35	6.03	0.87	5.15
359.80	0.43	0.43	0.00	362.40	6.11	0.88	5.23
359.85	0.44	0.44	0.00	362.45	6.20	0.89	5.31
359.90	0.44	0.44	0.00	362.50	6.28	0.90	5.38
359.95	0.45	0.45	0.00	362.55	6.36	0.91	5.45
360.00	0.46	0.46	0.00	362.60	6.44	0.92	5.52
360.05	0.47	0.47	0.00	362.65	6.52	0.93	5.60
360.10	0.48	0.48	0.00	362.70	6.60	0.94	5.67
360.15	0.49	0.49	0.00	362.75	6.68	0.95	5.73
360.20	0.49	0.49	0.00	362.80	6.76	0.95	5.80
360.25	0.50	0.50	0.00	362.85	6.83	0.96	5.87
360.30	0.51	0.51	0.00	362.90	6.91	0.97	5.94
360.35	0.52	0.52	0.00	362.95	6.99	0.98	6.00
360.40	0.53	0.53	0.00	363.00	7.06	0.99	6.07
360.45	0.54	0.54	0.00				
360.50	0.55	0.55	0.00				
360.55	0.65	0.56	0.09				

Post-Development Entire

Type III 24-hr 1 Year Rainfall=2.80"

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Summary for Pond P-E: Pond-E (NYSDEC I-2)

Inflow Area = 1.785 ac, 15.96% Impervious, Inflow Depth = 0.99" for 1 Year event
 Inflow = 1.87 cfs @ 12.12 hrs, Volume= 0.147 af
 Outflow = 0.22 cfs @ 13.09 hrs, Volume= 0.147 af, Atten= 88%, Lag= 58.0 min
 Primary = 0.22 cfs @ 13.09 hrs, Volume= 0.147 af
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 309.43' @ 13.09 hrs Surf.Area= 2,102 sf Storage= 2,341 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 106.3 min (964.8 - 858.5)

Volume	Invert	Avail.Storage	Storage Description
#1	308.00'	10,114 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
308.00	1,167	0	0
310.00	2,472	3,639	3,639
312.00	4,003	6,475	10,114

Device	Routing	Invert	Outlet Devices
#1	Primary	308.00'	4.600 in/hr Exfiltration over Horizontal area
#2	Secondary	310.01'	3.00' W x 0.50' H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.22 cfs @ 13.09 hrs HW=309.43' (Free Discharge)
 ↑1=Exfiltration (Exfiltration Controls 0.22 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=308.00' TW=296.00' (Dynamic Tailwater)
 ↑2=Orifice/Grate (Controls 0.00 cfs)

Post-Development Entire

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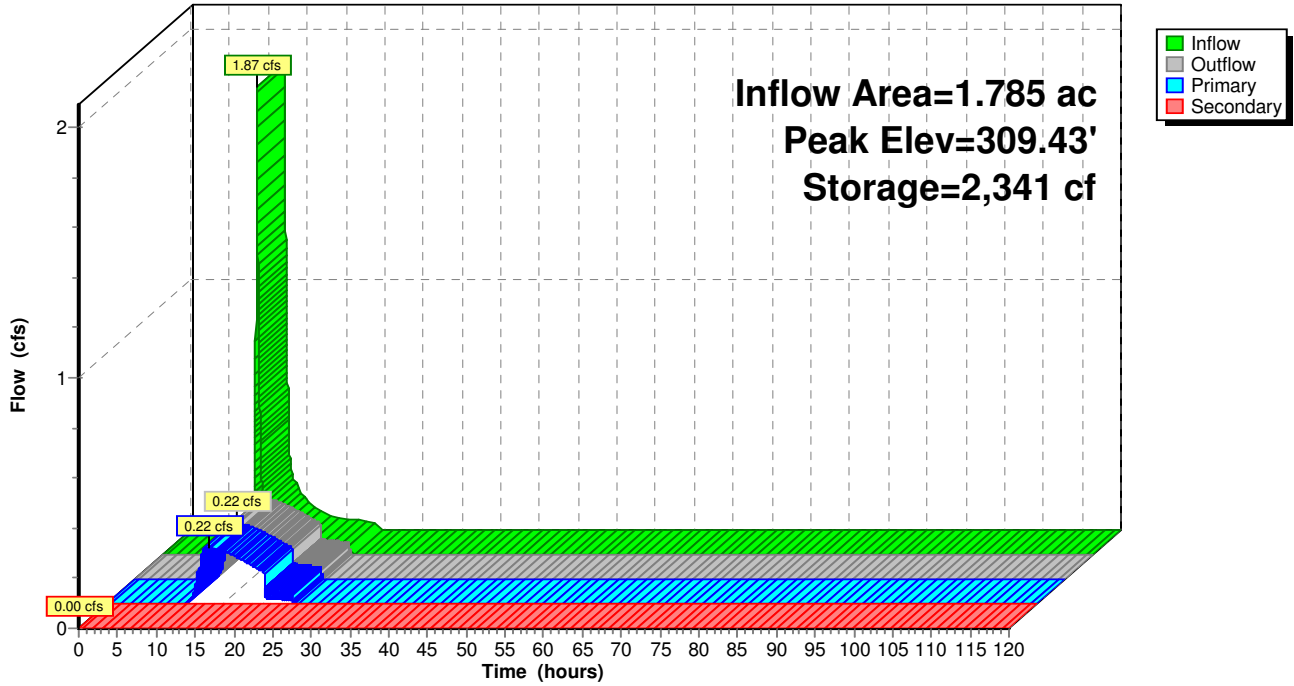
Type III 24-hr 1 Year Rainfall=2.80"

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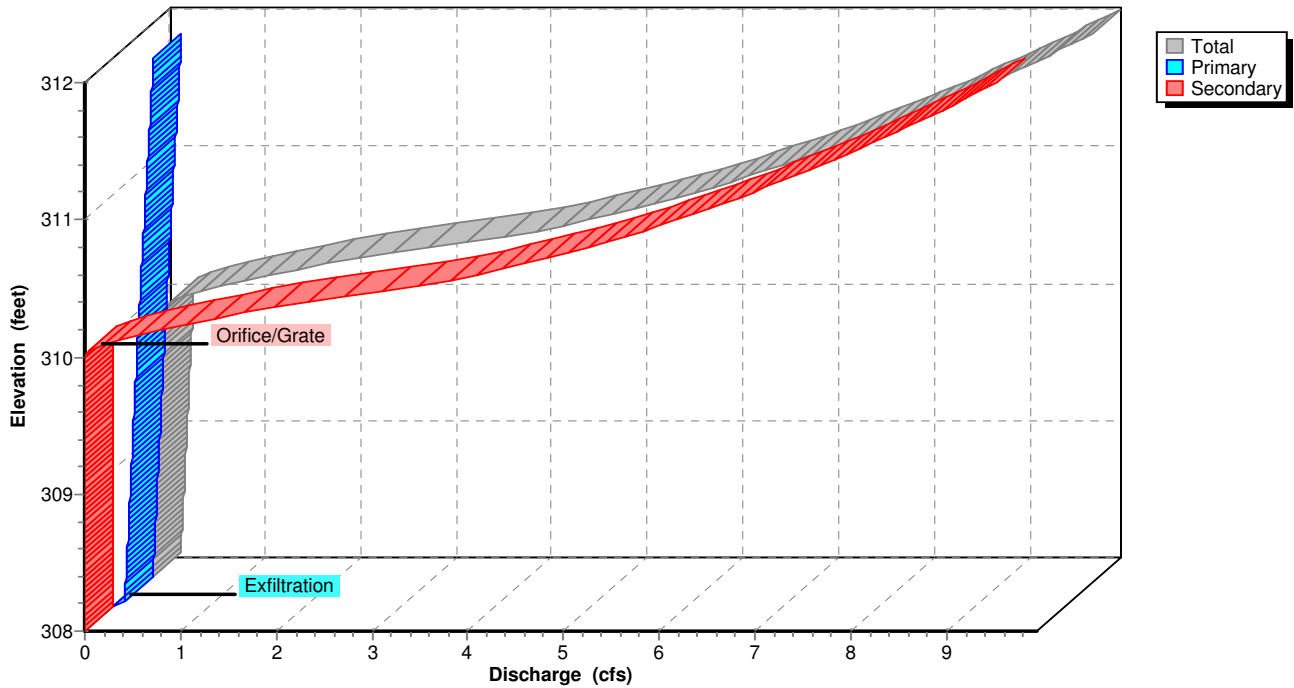
Pond P-E: Pond-E (NYSDEC I-2)

Hydrograph



Pond P-E: Pond-E (NYSDEC I-2)

Stage-Discharge



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Hydrograph for Pond P-E: Pond-E (NYSDEC I-2)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	308.00	0.00	0.00	0.00
5.00	0.00	0	308.00	0.00	0.00	0.00
10.00	0.00	0	308.00	0.00	0.00	0.00
15.00	0.12	1,956	309.24	0.21	0.21	0.00
20.00	0.04	98	308.08	0.13	0.13	0.00
25.00	0.00	0	308.00	0.00	0.00	0.00
30.00	0.00	0	308.00	0.00	0.00	0.00
35.00	0.00	0	308.00	0.00	0.00	0.00
40.00	0.00	0	308.00	0.00	0.00	0.00
45.00	0.00	0	308.00	0.00	0.00	0.00
50.00	0.00	0	308.00	0.00	0.00	0.00
55.00	0.00	0	308.00	0.00	0.00	0.00
60.00	0.00	0	308.00	0.00	0.00	0.00
65.00	0.00	0	308.00	0.00	0.00	0.00
70.00	0.00	0	308.00	0.00	0.00	0.00
75.00	0.00	0	308.00	0.00	0.00	0.00
80.00	0.00	0	308.00	0.00	0.00	0.00
85.00	0.00	0	308.00	0.00	0.00	0.00
90.00	0.00	0	308.00	0.00	0.00	0.00
95.00	0.00	0	308.00	0.00	0.00	0.00
100.00	0.00	0	308.00	0.00	0.00	0.00
105.00	0.00	0	308.00	0.00	0.00	0.00
110.00	0.00	0	308.00	0.00	0.00	0.00
115.00	0.00	0	308.00	0.00	0.00	0.00
120.00	0.00	0	308.00	0.00	0.00	0.00

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Stage-Discharge for Pond P-E: Pond-E (NYSDEC I-2)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
308.00	0.00	0.00	0.00	310.60	4.42	0.31	4.10
308.05	0.13	0.13	0.00	310.65	4.74	0.32	4.43
308.10	0.13	0.13	0.00	310.70	5.04	0.32	4.72
308.15	0.13	0.13	0.00	310.75	5.32	0.32	5.00
308.20	0.14	0.14	0.00	310.80	5.59	0.33	5.26
308.25	0.14	0.14	0.00	310.85	5.84	0.33	5.50
308.30	0.15	0.15	0.00	310.90	6.08	0.34	5.74
308.35	0.15	0.15	0.00	310.95	6.31	0.34	5.97
308.40	0.15	0.15	0.00	311.00	6.53	0.34	6.18
308.45	0.16	0.16	0.00	311.05	6.74	0.35	6.39
308.50	0.16	0.16	0.00	311.10	6.95	0.35	6.59
308.55	0.16	0.16	0.00	311.15	7.15	0.36	6.79
308.60	0.17	0.17	0.00	311.20	7.34	0.36	6.98
308.65	0.17	0.17	0.00	311.25	7.53	0.37	7.17
308.70	0.17	0.17	0.00	311.30	7.72	0.37	7.35
308.75	0.18	0.18	0.00	311.35	7.90	0.37	7.52
308.80	0.18	0.18	0.00	311.40	8.07	0.38	7.70
308.85	0.18	0.18	0.00	311.45	8.25	0.38	7.86
308.90	0.19	0.19	0.00	311.50	8.41	0.39	8.03
308.95	0.19	0.19	0.00	311.55	8.58	0.39	8.19
309.00	0.19	0.19	0.00	311.60	8.74	0.39	8.35
309.05	0.20	0.20	0.00	311.65	8.90	0.40	8.50
309.10	0.20	0.20	0.00	311.70	9.06	0.40	8.66
309.15	0.20	0.20	0.00	311.75	9.21	0.41	8.81
309.20	0.21	0.21	0.00	311.80	9.36	0.41	8.95
309.25	0.21	0.21	0.00	311.85	9.51	0.41	9.10
309.30	0.21	0.21	0.00	311.90	9.66	0.42	9.24
309.35	0.22	0.22	0.00	311.95	9.80	0.42	9.38
309.40	0.22	0.22	0.00	312.00	9.95	0.43	9.52
309.45	0.23	0.23	0.00				
309.50	0.23	0.23	0.00				
309.55	0.23	0.23	0.00				
309.60	0.24	0.24	0.00				
309.65	0.24	0.24	0.00				
309.70	0.24	0.24	0.00				
309.75	0.25	0.25	0.00				
309.80	0.25	0.25	0.00				
309.85	0.25	0.25	0.00				
309.90	0.26	0.26	0.00				
309.95	0.26	0.26	0.00				
310.00	0.26	0.26	0.00				
310.05	0.34	0.27	0.08				
310.10	0.53	0.27	0.26				
310.15	0.78	0.28	0.50				
310.20	1.08	0.28	0.80				
310.25	1.42	0.28	1.13				
310.30	1.79	0.29	1.50				
310.35	2.20	0.29	1.91				
310.40	2.64	0.30	2.35				
310.45	3.11	0.30	2.81				
310.50	3.61	0.30	3.30				
310.55	4.05	0.31	3.74				

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Type III 24-hr 1 Year Rainfall=2.80"

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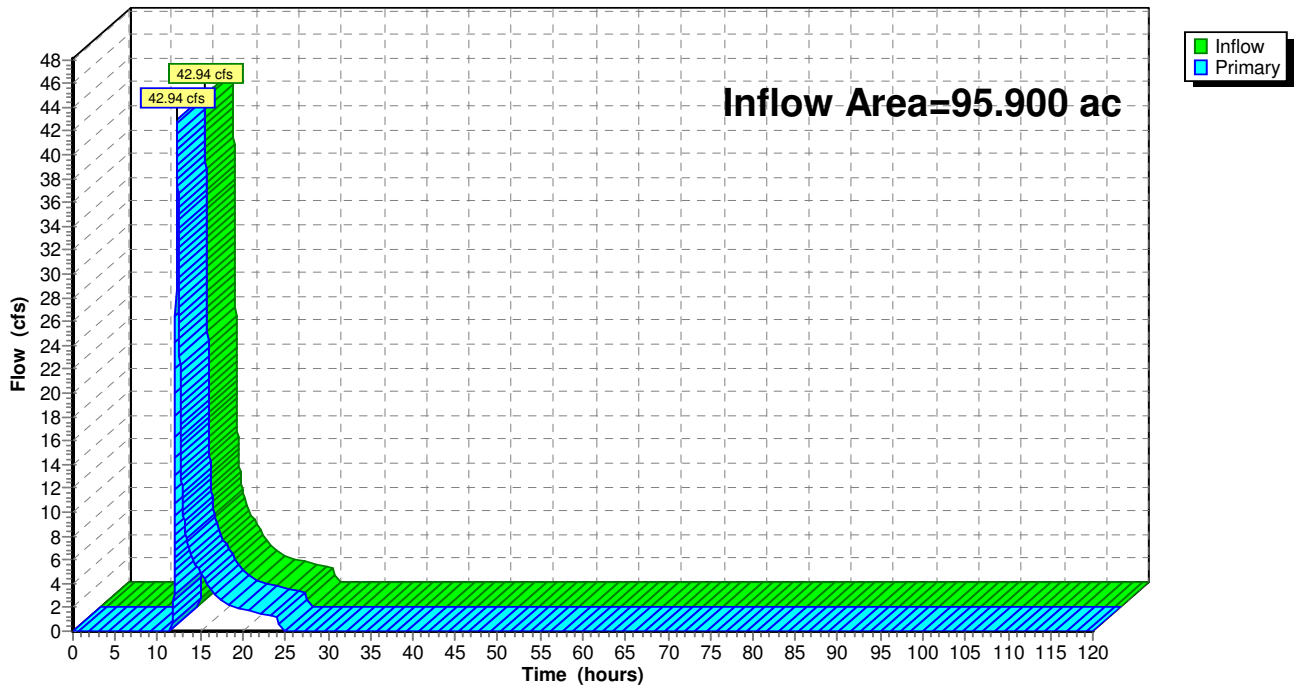
Summary for Link DP-1: DP-1

Inflow Area = 95.900 ac, 25.00% Impervious, Inflow Depth = 0.61" for 1 Year event
Inflow = 42.94 cfs @ 12.23 hrs, Volume= 4.843 af
Primary = 42.94 cfs @ 12.23 hrs, Volume= 4.843 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link DP-1: DP-1

Hydrograph



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Type III 24-hr 1 Year Rainfall=2.80"

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Hydrograph for Link DP-1: DP-1

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	114.00	0.00	0.00	0.00
12.00	8.84	0.00	8.84	116.00	0.00	0.00	0.00
14.00	6.31	0.00	6.31	118.00	0.00	0.00	0.00
16.00	3.65	0.00	3.65	120.00	0.00	0.00	0.00
18.00	2.28	0.00	2.28				
20.00	1.83	0.00	1.83				
22.00	1.54	0.00	1.54				
24.00	1.25	0.00	1.25				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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Type III 24-hr 1 Year Rainfall=2.80"

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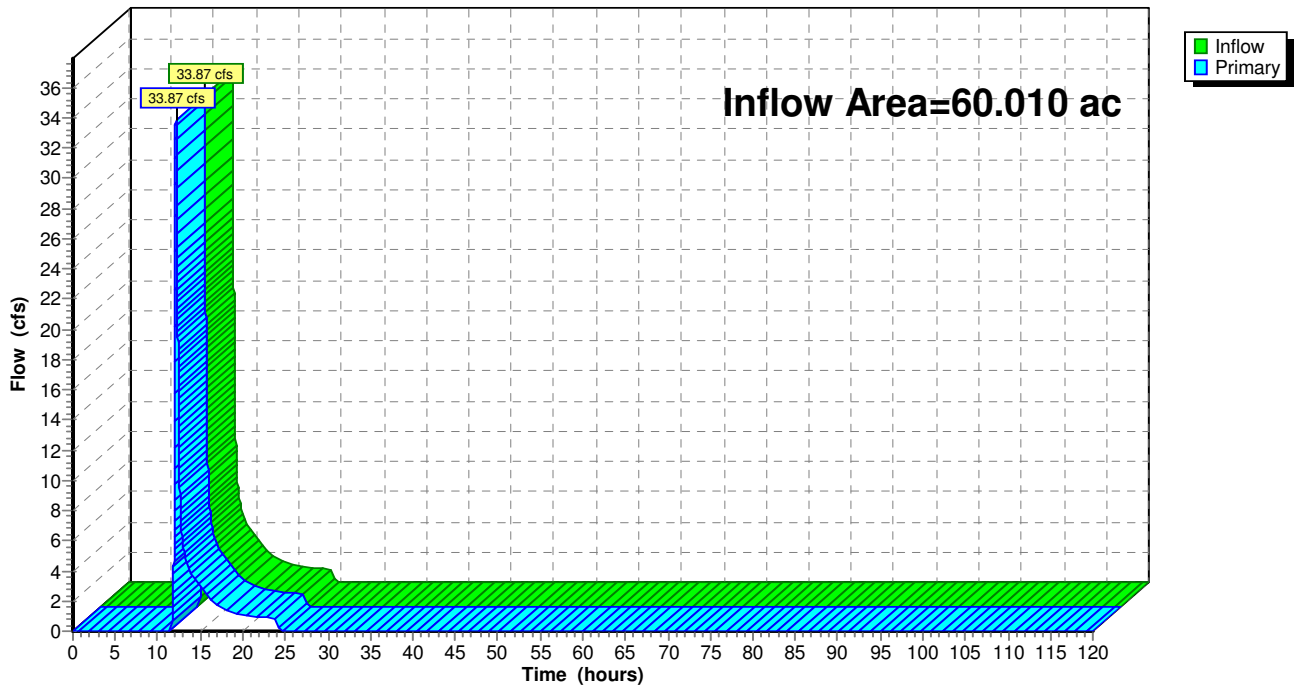
Summary for Link DP-2: DP-2

Inflow Area = 60.010 ac, 25.00% Impervious, Inflow Depth = 0.61" for 1 Year event
Inflow = 33.87 cfs @ 12.12 hrs, Volume= 3.031 af
Primary = 33.87 cfs @ 12.12 hrs, Volume= 3.031 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link DP-2: DP-2

Hydrograph



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Hydrograph for Link DP-2: DP-2

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	114.00	0.00	0.00	0.00
12.00	12.23	0.00	12.23	116.00	0.00	0.00	0.00
14.00	3.78	0.00	3.78	118.00	0.00	0.00	0.00
16.00	2.19	0.00	2.19	120.00	0.00	0.00	0.00
18.00	1.39	0.00	1.39				
20.00	1.13	0.00	1.13				
22.00	0.95	0.00	0.95				
24.00	0.77	0.00	0.77				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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Type III 24-hr 1 Year Rainfall=2.80"

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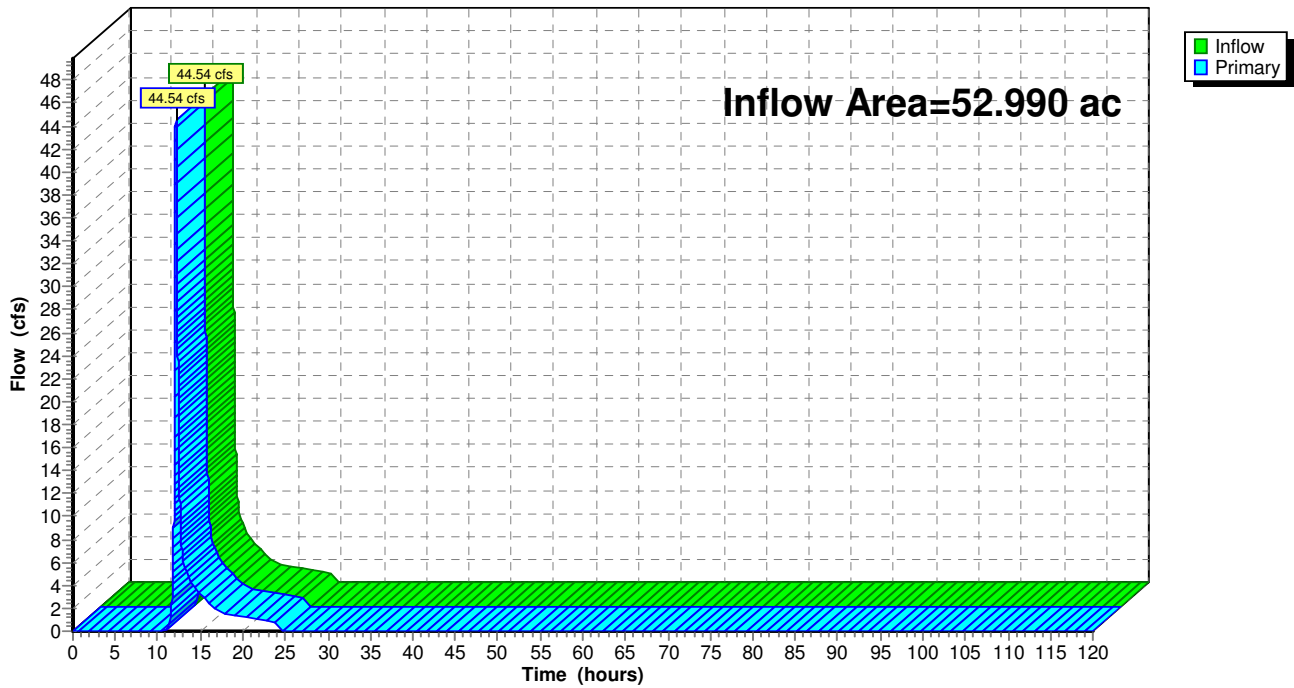
Summary for Link DP-3: DP-3

Inflow Area = 52.990 ac, 38.00% Impervious, Inflow Depth = 0.83" for 1 Year event
Inflow = 44.54 cfs @ 12.13 hrs, Volume= 3.676 af
Primary = 44.54 cfs @ 12.13 hrs, Volume= 3.676 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link DP-3: DP-3

Hydrograph



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Hydrograph for Link DP-3: DP-3

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	114.00	0.00	0.00	0.00
12.00	18.62	0.00	18.62	116.00	0.00	0.00	0.00
14.00	4.21	0.00	4.21	118.00	0.00	0.00	0.00
16.00	2.38	0.00	2.38	120.00	0.00	0.00	0.00
18.00	1.49	0.00	1.49				
20.00	1.20	0.00	1.20				
22.00	1.01	0.00	1.01				
24.00	0.81	0.00	0.81				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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Type III 24-hr 1 Year Rainfall=2.80"

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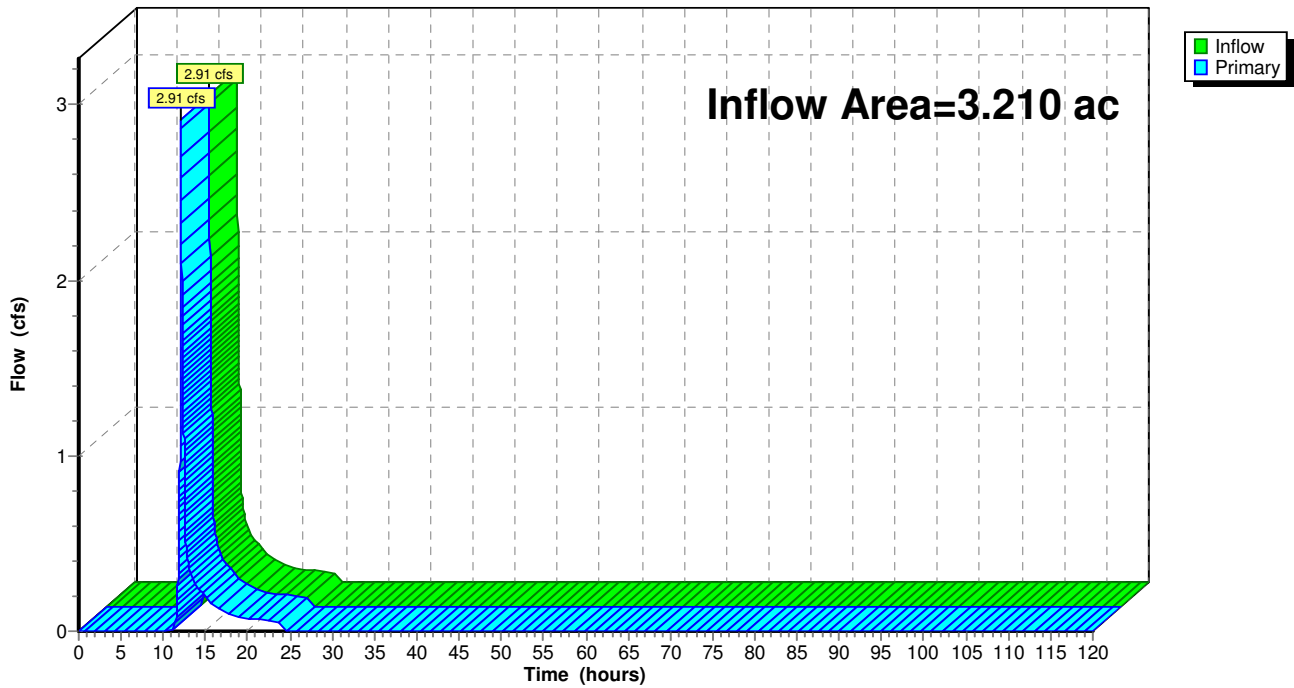
Summary for Link DP-4: DP-4

Inflow Area = 3.210 ac, 38.00% Impervious, Inflow Depth = 0.83" for 1 Year event
Inflow = 2.91 cfs @ 12.10 hrs, Volume= 0.223 af
Primary = 2.91 cfs @ 12.10 hrs, Volume= 0.223 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link DP-4: DP-4

Hydrograph



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Hydrograph for Link DP-4: DP-4

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	114.00	0.00	0.00	0.00
12.00	1.44	0.00	1.44	116.00	0.00	0.00	0.00
14.00	0.25	0.00	0.25	118.00	0.00	0.00	0.00
16.00	0.14	0.00	0.14	120.00	0.00	0.00	0.00
18.00	0.09	0.00	0.09				
20.00	0.07	0.00	0.07				
22.00	0.06	0.00	0.06				
24.00	0.05	0.00	0.05				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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Type III 24-hr 1 Year Rainfall=2.80"

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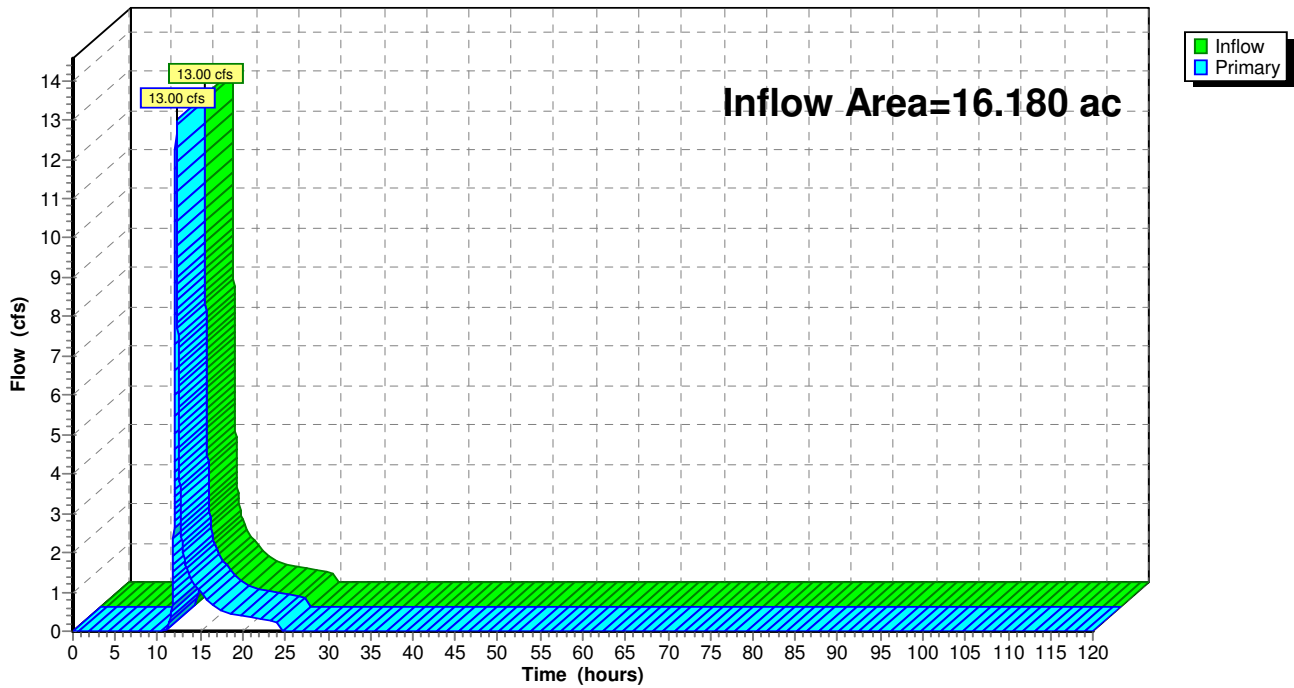
Summary for Link DP-5: DP-5

Inflow Area = 16.180 ac, 38.00% Impervious, Inflow Depth = 0.83" for 1 Year event
Inflow = 13.00 cfs @ 12.14 hrs, Volume= 1.123 af
Primary = 13.00 cfs @ 12.14 hrs, Volume= 1.123 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link DP-5: DP-5

Hydrograph



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Hydrograph for Link DP-5: DP-5

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	114.00	0.00	0.00	0.00
12.00	5.03	0.00	5.03	116.00	0.00	0.00	0.00
14.00	1.30	0.00	1.30	118.00	0.00	0.00	0.00
16.00	0.73	0.00	0.73	120.00	0.00	0.00	0.00
18.00	0.46	0.00	0.46				
20.00	0.37	0.00	0.37				
22.00	0.31	0.00	0.31				
24.00	0.25	0.00	0.25				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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Type III 24-hr 1 Year Rainfall=2.80"

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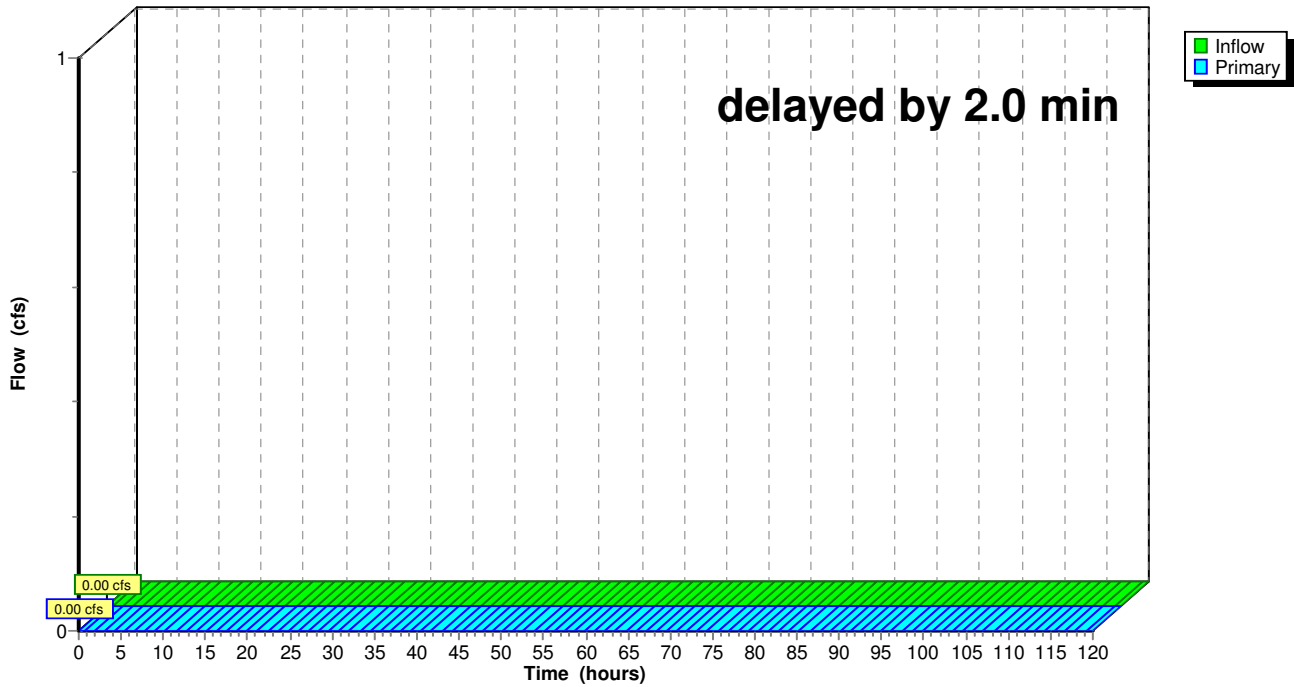
Summary for Link OF-1: Overland Flow

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 delayed by 2.0 min, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link OF-1: Overland Flow

Hydrograph



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Hydrograph for Link OF-1: Overland Flow

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	114.00	0.00	0.00	0.00
12.00	0.00	0.00	0.00	116.00	0.00	0.00	0.00
14.00	0.00	0.00	0.00	118.00	0.00	0.00	0.00
16.00	0.00	0.00	0.00	120.00	0.00	0.00	0.00
18.00	0.00	0.00	0.00				
20.00	0.00	0.00	0.00				
22.00	0.00	0.00	0.00				
24.00	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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Type III 24-hr 1 Year Rainfall=2.80"

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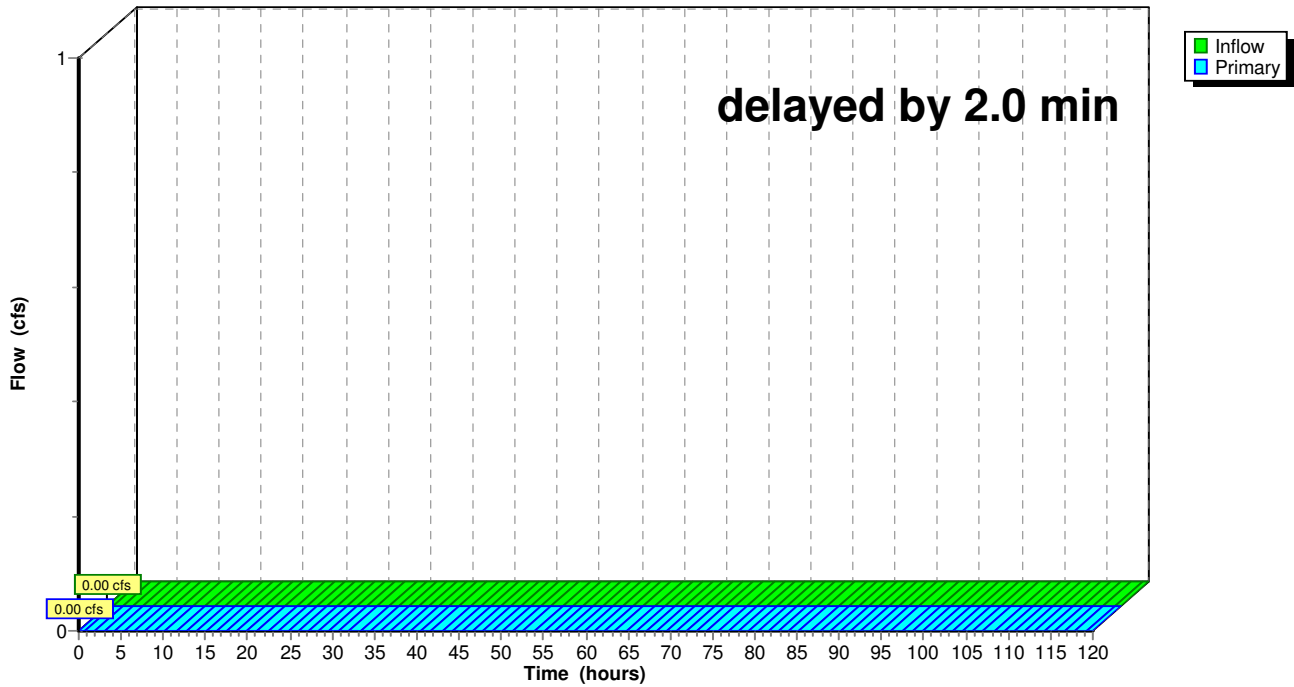
Summary for Link OF-2: Overland Flow

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 delayed by 2.0 min, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link OF-2: Overland Flow

Hydrograph



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Type III 24-hr 1 Year Rainfall=2.80"

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Hydrograph for Link OF-2: Overland Flow

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	114.00	0.00	0.00	0.00
12.00	0.00	0.00	0.00	116.00	0.00	0.00	0.00
14.00	0.00	0.00	0.00	118.00	0.00	0.00	0.00
16.00	0.00	0.00	0.00	120.00	0.00	0.00	0.00
18.00	0.00	0.00	0.00				
20.00	0.00	0.00	0.00				
22.00	0.00	0.00	0.00				
24.00	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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Type III 24-hr 2 Year Rainfall=3.50"

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Time span=0.00-120.00 hrs, dt=0.01 hrs, 12001 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1: Drainage Area 1	Runoff Area=95.900 ac 25.00% Impervious Runoff Depth=1.01" Flow Length=2,615' Tc=14.7 min CN=70 Runoff=78.87 cfs 8.056 af
Subcatchment 2A: Drainage Area 2A	Runoff Area=91,912 sf 13.06% Impervious Runoff Depth=1.50" Flow Length=579' Tc=7.8 min CN=78 Runoff=3.43 cfs 0.263 af
Subcatchment 2B: Drainage Area 2B	Runoff Area=182,926 sf 26.44% Impervious Runoff Depth=1.64" Flow Length=749' Tc=15.1 min CN=80 Runoff=6.03 cfs 0.573 af
Subcatchment 2C: Drainage Area 2C	Runoff Area=33,079 sf 29.42% Impervious Runoff Depth=1.94" Flow Length=149' Tc=9.6 min CN=84 Runoff=1.53 cfs 0.123 af
Subcatchment 2C1: Drainage Area 2C1	Runoff Area=55,757 sf 15.98% Impervious Runoff Depth=1.57" Flow Length=529' Tc=9.4 min CN=79 Runoff=2.07 cfs 0.167 af
Subcatchment 2E: Drainage Area 2E	Runoff Area=77,746 sf 15.96% Impervious Runoff Depth=1.50" Flow Length=415' Tc=7.8 min CN=78 Runoff=2.90 cfs 0.223 af
Subcatchment 2F: Drainage Area 2F	Runoff Area=60.010 ac 25.00% Impervious Runoff Depth=1.01" Flow Length=1,484' Tc=7.4 min CN=70 Runoff=62.13 cfs 5.041 af
Subcatchment 3: Drainage Area - 3	Runoff Area=52.990 ac 38.00% Impervious Runoff Depth=1.30" Flow Length=481' Tc=8.1 min CN=75 Runoff=72.86 cfs 5.749 af
Subcatchment 4A: Drainage Area 4A	Runoff Area=130,244 sf 17.19% Impervious Runoff Depth=1.50" Flow Length=303' Tc=6.9 min CN=78 Runoff=5.02 cfs 0.373 af
Subcatchment 4B: Drainage Area 4B	Runoff Area=3.210 ac 38.00% Impervious Runoff Depth=1.30" Flow Length=678' Tc=6.0 min CN=75 Runoff=4.76 cfs 0.348 af
Subcatchment 5: Drainage Area 5	Runoff Area=16.180 ac 38.00% Impervious Runoff Depth=1.30" Flow Length=1,619' Tc=9.4 min CN=75 Runoff=21.27 cfs 1.755 af
Reach 1R: Pipe	Avg. Depth=0.10' Max Vel=4.68 fps Inflow=0.23 cfs 0.018 af D=18.0" n=0.013 L=188.0' S=0.0649 '/' Capacity=26.76 cfs Outflow=0.23 cfs 0.018 af
Pond LS-1: Level Spreader	Peak Elev=298.36' Storage=2,404 cf Inflow=0.45 cfs 0.055 af Outflow=0.00 cfs 0.000 af
Pond P-1c: Infiltration Chambers	Peak Elev=310.53' Storage=2,253 cf Inflow=2.07 cfs 0.167 af Primary=0.29 cfs 0.161 af Secondary=0.17 cfs 0.006 af Outflow=0.45 cfs 0.167 af
Pond P-A: Pond-A (NYSDEC I-2)	Peak Elev=330.51' Storage=4,277 cf Inflow=3.43 cfs 0.263 af Primary=0.42 cfs 0.252 af Secondary=0.07 cfs 0.012 af Outflow=0.49 cfs 0.263 af
Pond P-B: Pond-B (NYSDEC I-2)	Peak Elev=385.51' Storage=10,441 cf Inflow=6.03 cfs 0.573 af Primary=0.70 cfs 0.544 af Secondary=0.11 cfs 0.029 af Outflow=0.82 cfs 0.573 af

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Type III 24-hr 2 Year Rainfall=3.50"

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Pond P-C: Pond-C (NYSDEC I-2) Peak Elev=388.53' Storage=2,015 cf Inflow=1.53 cfs 0.123 af
Primary=0.17 cfs 0.113 af Secondary=0.17 cfs 0.010 af Outflow=0.34 cfs 0.123 af

Pond P-D: Pond-D (NYSDEC I-2) Peak Elev=360.67' Storage=5,895 cf Inflow=5.02 cfs 0.373 af
Primary=0.58 cfs 0.349 af Secondary=0.59 cfs 0.024 af Outflow=1.16 cfs 0.373 af

Pond P-E: Pond-E (NYSDEC I-2) Peak Elev=310.07' Storage=3,820 cf Inflow=2.90 cfs 0.223 af
Primary=0.27 cfs 0.214 af Secondary=0.15 cfs 0.008 af Outflow=0.42 cfs 0.223 af

Link DP-1: DP-1 Inflow=78.87 cfs 8.056 af
Primary=78.87 cfs 8.056 af

Link DP-2: DP-2 Inflow=62.13 cfs 5.051 af
Primary=62.13 cfs 5.051 af

Link DP-3: DP-3 Inflow=72.86 cfs 5.749 af
Primary=72.86 cfs 5.749 af

Link DP-4: DP-4 Inflow=4.76 cfs 0.372 af
Primary=4.76 cfs 0.372 af

Link DP-5: DP-5 Inflow=21.27 cfs 1.755 af
Primary=21.27 cfs 1.755 af

Link OF-1: Overland Flow delayed by 2.0 min Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link OF-2: Overland Flow delayed by 2.0 min Inflow=0.17 cfs 0.010 af
Primary=0.17 cfs 0.010 af

Total Runoff Area = 241.414 ac Runoff Volume = 22.671 af Average Runoff Depth = 1.13"
71.38% Pervious = 172.319 ac 28.62% Impervious = 69.095 ac

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Type III 24-hr 2 Year Rainfall=3.50"

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Summary for Subcatchment 1: Drainage Area 1

Runoff = 78.87 cfs @ 12.22 hrs, Volume= 8.056 af, Depth= 1.01"

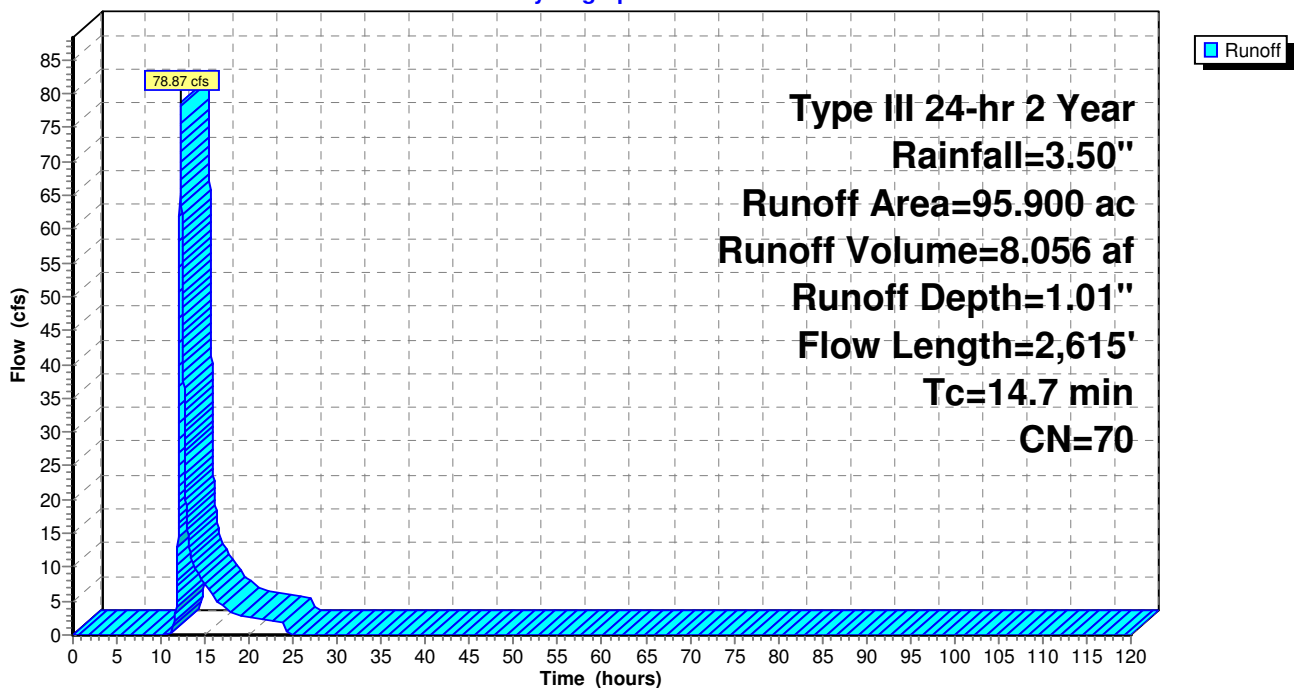
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 Year Rainfall=3.50"

Area (ac)	CN	Description
95.900	70	1/2 acre lots, 25% imp, HSG B
71.925		Pervious Area
23.975		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.1	100	0.0900	0.32		Sheet Flow, 1 to 2
9.6	2,515	0.0740	4.38		Grass: Short n= 0.150 P2= 3.50" Shallow Concentrated Flow, 2 to 3
14.7	2,615	Total			Unpaved Kv= 16.1 fps

Subcatchment 1: Drainage Area 1

Hydrograph



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Type III 24-hr 2 Year Rainfall=3.50"

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Hydrograph for Subcatchment 1: Drainage Area 1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	3.50	1.01	0.00
2.00	0.07	0.00	0.00	106.00	3.50	1.01	0.00
4.00	0.15	0.00	0.00	108.00	3.50	1.01	0.00
6.00	0.25	0.00	0.00	110.00	3.50	1.01	0.00
8.00	0.40	0.00	0.00	112.00	3.50	1.01	0.00
10.00	0.66	0.00	0.00	114.00	3.50	1.01	0.00
12.00	1.75	0.15	23.43	116.00	3.50	1.01	0.00
14.00	2.84	0.63	9.70	118.00	3.50	1.01	0.00
16.00	3.10	0.77	5.48	120.00	3.50	1.01	0.00
18.00	3.25	0.86	3.40				
20.00	3.35	0.92	2.70				
22.00	3.43	0.97	2.27				
24.00	3.50	1.01	1.83				
26.00	3.50	1.01	0.00				
28.00	3.50	1.01	0.00				
30.00	3.50	1.01	0.00				
32.00	3.50	1.01	0.00				
34.00	3.50	1.01	0.00				
36.00	3.50	1.01	0.00				
38.00	3.50	1.01	0.00				
40.00	3.50	1.01	0.00				
42.00	3.50	1.01	0.00				
44.00	3.50	1.01	0.00				
46.00	3.50	1.01	0.00				
48.00	3.50	1.01	0.00				
50.00	3.50	1.01	0.00				
52.00	3.50	1.01	0.00				
54.00	3.50	1.01	0.00				
56.00	3.50	1.01	0.00				
58.00	3.50	1.01	0.00				
60.00	3.50	1.01	0.00				
62.00	3.50	1.01	0.00				
64.00	3.50	1.01	0.00				
66.00	3.50	1.01	0.00				
68.00	3.50	1.01	0.00				
70.00	3.50	1.01	0.00				
72.00	3.50	1.01	0.00				
74.00	3.50	1.01	0.00				
76.00	3.50	1.01	0.00				
78.00	3.50	1.01	0.00				
80.00	3.50	1.01	0.00				
82.00	3.50	1.01	0.00				
84.00	3.50	1.01	0.00				
86.00	3.50	1.01	0.00				
88.00	3.50	1.01	0.00				
90.00	3.50	1.01	0.00				
92.00	3.50	1.01	0.00				
94.00	3.50	1.01	0.00				
96.00	3.50	1.01	0.00				
98.00	3.50	1.01	0.00				
100.00	3.50	1.01	0.00				
102.00	3.50	1.01	0.00				

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Type III 24-hr 2 Year Rainfall=3.50"

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Summary for Subcatchment 2A: Drainage Area 2A

Runoff = 3.43 cfs @ 12.12 hrs, Volume= 0.263 af, Depth= 1.50"

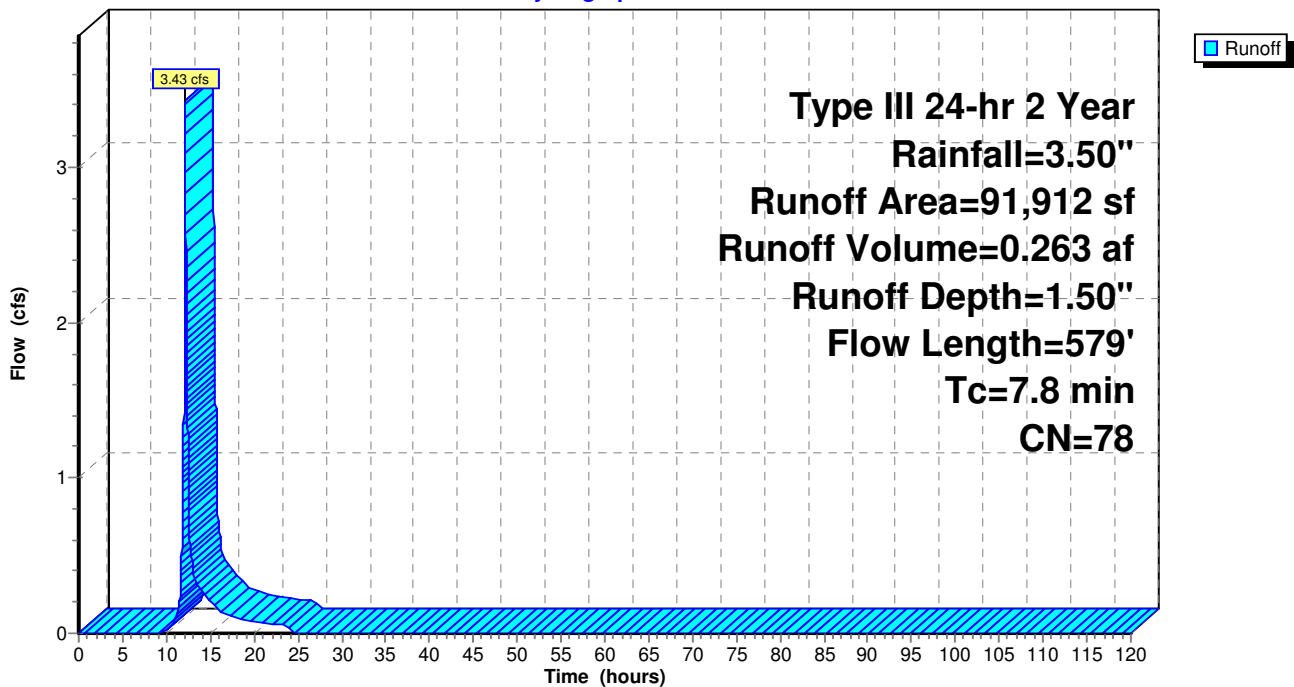
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Type III 24-hr 2 Year Rainfall=3.50"

Area (sf)	CN	Description
40,948	76	Woods/grass comb., Fair, HSG C
38,963	74	>75% Grass cover, Good, HSG C
12,001	98	Paved roads w/curbs & sewers
91,912	78	Weighted Average
79,911		Pervious Area
12,001		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	100	0.1200	0.36		Sheet Flow, 1 to 2
					Grass: Short n= 0.150 P2= 3.50"
3.2	479	0.1300	2.52		Shallow Concentrated Flow, 2 to 3
					Short Grass Pasture Kv= 7.0 fps
7.8	579	Total			

Subcatchment 2A: Drainage Area 2A

Hydrograph



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Type III 24-hr 2 Year Rainfall=3.50"

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Hydrograph for Subcatchment 2A: Drainage Area 2A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	3.50	1.50	0.00
2.00	0.07	0.00	0.00	106.00	3.50	1.50	0.00
4.00	0.15	0.00	0.00	108.00	3.50	1.50	0.00
6.00	0.25	0.00	0.00	110.00	3.50	1.50	0.00
8.00	0.40	0.00	0.00	112.00	3.50	1.50	0.00
10.00	0.66	0.00	0.02	114.00	3.50	1.50	0.00
12.00	1.75	0.35	1.66	116.00	3.50	1.50	0.00
14.00	2.84	1.02	0.27	118.00	3.50	1.50	0.00
16.00	3.10	1.20	0.15	120.00	3.50	1.50	0.00
18.00	3.25	1.31	0.09				
20.00	3.35	1.38	0.07				
22.00	3.43	1.45	0.06				
24.00	3.50	1.50	0.05				
26.00	3.50	1.50	0.00				
28.00	3.50	1.50	0.00				
30.00	3.50	1.50	0.00				
32.00	3.50	1.50	0.00				
34.00	3.50	1.50	0.00				
36.00	3.50	1.50	0.00				
38.00	3.50	1.50	0.00				
40.00	3.50	1.50	0.00				
42.00	3.50	1.50	0.00				
44.00	3.50	1.50	0.00				
46.00	3.50	1.50	0.00				
48.00	3.50	1.50	0.00				
50.00	3.50	1.50	0.00				
52.00	3.50	1.50	0.00				
54.00	3.50	1.50	0.00				
56.00	3.50	1.50	0.00				
58.00	3.50	1.50	0.00				
60.00	3.50	1.50	0.00				
62.00	3.50	1.50	0.00				
64.00	3.50	1.50	0.00				
66.00	3.50	1.50	0.00				
68.00	3.50	1.50	0.00				
70.00	3.50	1.50	0.00				
72.00	3.50	1.50	0.00				
74.00	3.50	1.50	0.00				
76.00	3.50	1.50	0.00				
78.00	3.50	1.50	0.00				
80.00	3.50	1.50	0.00				
82.00	3.50	1.50	0.00				
84.00	3.50	1.50	0.00				
86.00	3.50	1.50	0.00				
88.00	3.50	1.50	0.00				
90.00	3.50	1.50	0.00				
92.00	3.50	1.50	0.00				
94.00	3.50	1.50	0.00				
96.00	3.50	1.50	0.00				
98.00	3.50	1.50	0.00				
100.00	3.50	1.50	0.00				
102.00	3.50	1.50	0.00				

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Type III 24-hr 2 Year Rainfall=3.50"

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Summary for Subcatchment 2B: Drainage Area 2B

Runoff = 6.03 cfs @ 12.21 hrs, Volume= 0.573 af, Depth= 1.64"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 Year Rainfall=3.50"

Area (sf)	CN	Description
48,361	98	Paved roads w/curbs & sewers
134,565	74	>75% Grass cover, Good, HSG C
182,926	80	Weighted Average
134,565		Pervious Area
48,361		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0	100	0.0300	0.21		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
6.6	276	0.0100	0.70		Shallow Concentrated Flow, 2 to 3 Short Grass Pasture Kv= 7.0 fps
0.0	20	0.0250	10.82	13.28	Circular Channel (pipe), 3 to 4 Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
0.0	57	0.1500	26.50	32.52	Circular Channel (pipe), 5 to 5 Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
0.1	87	0.0260	11.03	13.54	Circular Channel (pipe), 5 to 6 Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
0.2	102	0.0200	10.93	19.31	Circular Channel (pipe), 6 to 7 Diam= 18.0" Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.010
0.2	107	0.0140	8.10	9.94	Circular Channel (pipe), 7 to 8 Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
15.1	749	Total			

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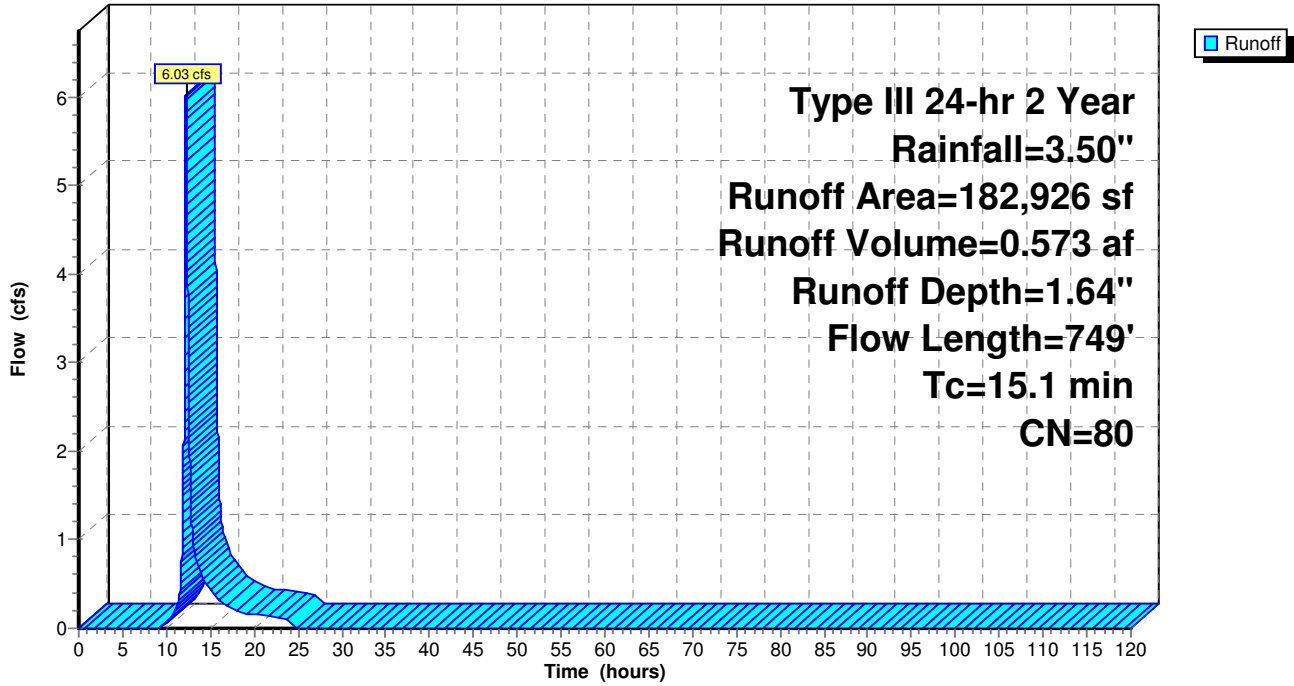
Type III 24-hr 2 Year Rainfall=3.50"

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Subcatchment 2B: Drainage Area 2B

Hydrograph



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Hydrograph for Subcatchment 2B: Drainage Area 2B

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	3.50	1.64	0.00
2.00	0.07	0.00	0.00	106.00	3.50	1.64	0.00
4.00	0.15	0.00	0.00	108.00	3.50	1.64	0.00
6.00	0.25	0.00	0.00	110.00	3.50	1.64	0.00
8.00	0.40	0.00	0.00	112.00	3.50	1.64	0.00
10.00	0.66	0.01	0.06	114.00	3.50	1.64	0.00
12.00	1.75	0.42	2.34	116.00	3.50	1.64	0.00
14.00	2.84	1.13	0.59	118.00	3.50	1.64	0.00
16.00	3.10	1.33	0.32	120.00	3.50	1.64	0.00
18.00	3.25	1.44	0.20				
20.00	3.35	1.52	0.15				
22.00	3.43	1.58	0.13				
24.00	3.50	1.64	0.10				
26.00	3.50	1.64	0.00				
28.00	3.50	1.64	0.00				
30.00	3.50	1.64	0.00				
32.00	3.50	1.64	0.00				
34.00	3.50	1.64	0.00				
36.00	3.50	1.64	0.00				
38.00	3.50	1.64	0.00				
40.00	3.50	1.64	0.00				
42.00	3.50	1.64	0.00				
44.00	3.50	1.64	0.00				
46.00	3.50	1.64	0.00				
48.00	3.50	1.64	0.00				
50.00	3.50	1.64	0.00				
52.00	3.50	1.64	0.00				
54.00	3.50	1.64	0.00				
56.00	3.50	1.64	0.00				
58.00	3.50	1.64	0.00				
60.00	3.50	1.64	0.00				
62.00	3.50	1.64	0.00				
64.00	3.50	1.64	0.00				
66.00	3.50	1.64	0.00				
68.00	3.50	1.64	0.00				
70.00	3.50	1.64	0.00				
72.00	3.50	1.64	0.00				
74.00	3.50	1.64	0.00				
76.00	3.50	1.64	0.00				
78.00	3.50	1.64	0.00				
80.00	3.50	1.64	0.00				
82.00	3.50	1.64	0.00				
84.00	3.50	1.64	0.00				
86.00	3.50	1.64	0.00				
88.00	3.50	1.64	0.00				
90.00	3.50	1.64	0.00				
92.00	3.50	1.64	0.00				
94.00	3.50	1.64	0.00				
96.00	3.50	1.64	0.00				
98.00	3.50	1.64	0.00				
100.00	3.50	1.64	0.00				
102.00	3.50	1.64	0.00				

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Type III 24-hr 2 Year Rainfall=3.50"

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Summary for Subcatchment 2C: Drainage Area 2C

Runoff = 1.53 cfs @ 12.13 hrs, Volume= 0.123 af, Depth= 1.94"

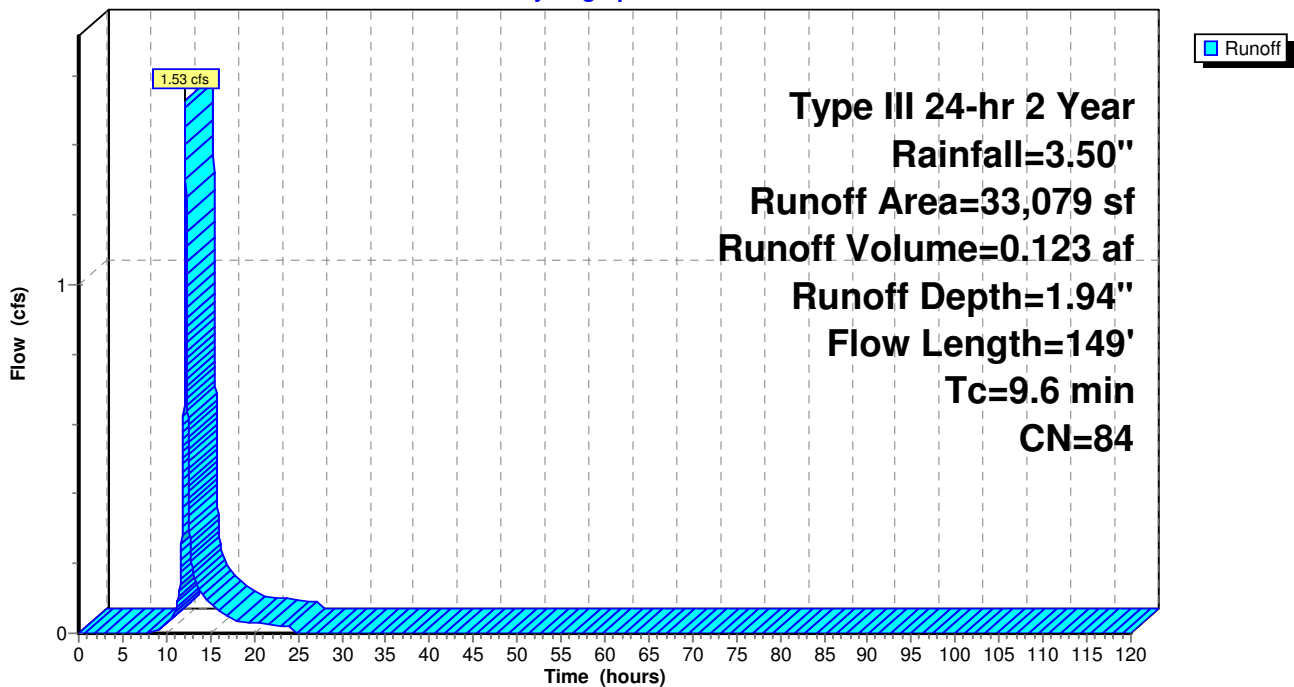
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 Year Rainfall=3.50"

Area (sf)	CN	Description
2,346	72	Woods/grass comb., Good, HSG C
21,001	79	50-75% Grass cover, Fair, HSG C
9,732	98	Paved roads w/curbs & sewers
33,079	84	Weighted Average
23,347		Pervious Area
9,732		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	100	0.1400	0.18		Sheet Flow, 1 to 2 Woods: Light underbrush n= 0.400 P2= 3.50"
0.2	49	0.5000	4.95		Shallow Concentrated Flow, 2 to 3 Short Grass Pasture Kv= 7.0 fps
9.6	149	Total			

Subcatchment 2C: Drainage Area 2C

Hydrograph



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Hydrograph for Subcatchment 2C: Drainage Area 2C

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	3.50	1.94	0.00
2.00	0.07	0.00	0.00	106.00	3.50	1.94	0.00
4.00	0.15	0.00	0.00	108.00	3.50	1.94	0.00
6.00	0.25	0.00	0.00	110.00	3.50	1.94	0.00
8.00	0.40	0.00	0.00	112.00	3.50	1.94	0.00
10.00	0.66	0.04	0.03	114.00	3.50	1.94	0.00
12.00	1.75	0.57	0.73	116.00	3.50	1.94	0.00
14.00	2.84	1.38	0.11	118.00	3.50	1.94	0.00
16.00	3.10	1.60	0.06	120.00	3.50	1.94	0.00
18.00	3.25	1.72	0.04				
20.00	3.35	1.81	0.03				
22.00	3.43	1.88	0.02				
24.00	3.50	1.94	0.02				
26.00	3.50	1.94	0.00				
28.00	3.50	1.94	0.00				
30.00	3.50	1.94	0.00				
32.00	3.50	1.94	0.00				
34.00	3.50	1.94	0.00				
36.00	3.50	1.94	0.00				
38.00	3.50	1.94	0.00				
40.00	3.50	1.94	0.00				
42.00	3.50	1.94	0.00				
44.00	3.50	1.94	0.00				
46.00	3.50	1.94	0.00				
48.00	3.50	1.94	0.00				
50.00	3.50	1.94	0.00				
52.00	3.50	1.94	0.00				
54.00	3.50	1.94	0.00				
56.00	3.50	1.94	0.00				
58.00	3.50	1.94	0.00				
60.00	3.50	1.94	0.00				
62.00	3.50	1.94	0.00				
64.00	3.50	1.94	0.00				
66.00	3.50	1.94	0.00				
68.00	3.50	1.94	0.00				
70.00	3.50	1.94	0.00				
72.00	3.50	1.94	0.00				
74.00	3.50	1.94	0.00				
76.00	3.50	1.94	0.00				
78.00	3.50	1.94	0.00				
80.00	3.50	1.94	0.00				
82.00	3.50	1.94	0.00				
84.00	3.50	1.94	0.00				
86.00	3.50	1.94	0.00				
88.00	3.50	1.94	0.00				
90.00	3.50	1.94	0.00				
92.00	3.50	1.94	0.00				
94.00	3.50	1.94	0.00				
96.00	3.50	1.94	0.00				
98.00	3.50	1.94	0.00				
100.00	3.50	1.94	0.00				
102.00	3.50	1.94	0.00				

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Type III 24-hr 2 Year Rainfall=3.50"

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Summary for Subcatchment 2C1: Drainage Area 2C1

Runoff = 2.07 cfs @ 12.14 hrs, Volume= 0.167 af, Depth= 1.57"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 Year Rainfall=3.50"

Area (sf)	CN	Description
26,272	76	Woods/grass comb., Fair, HSG C
20,575	74	>75% Grass cover, Good, HSG C
8,910	98	Paved parking & roofs
55,757	79	Weighted Average
46,847		Pervious Area
8,910		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.2	100	0.1000	0.23		Sheet Flow, 1 to 2 Grass: Dense n= 0.240 P2= 3.50"
1.8	287	0.2700	2.60		Shallow Concentrated Flow, 2 to 3 Woodland Kv= 5.0 fps
0.3	85	0.0540	4.72		Shallow Concentrated Flow, 3 to 4 Paved Kv= 20.3 fps
0.0	20	0.0200	9.68	11.88	Circular Channel (pipe), 4 to 5 Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
0.1	37	0.0200	9.68	11.88	Circular Channel (pipe), 5 to 6 Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
9.4	529	Total			

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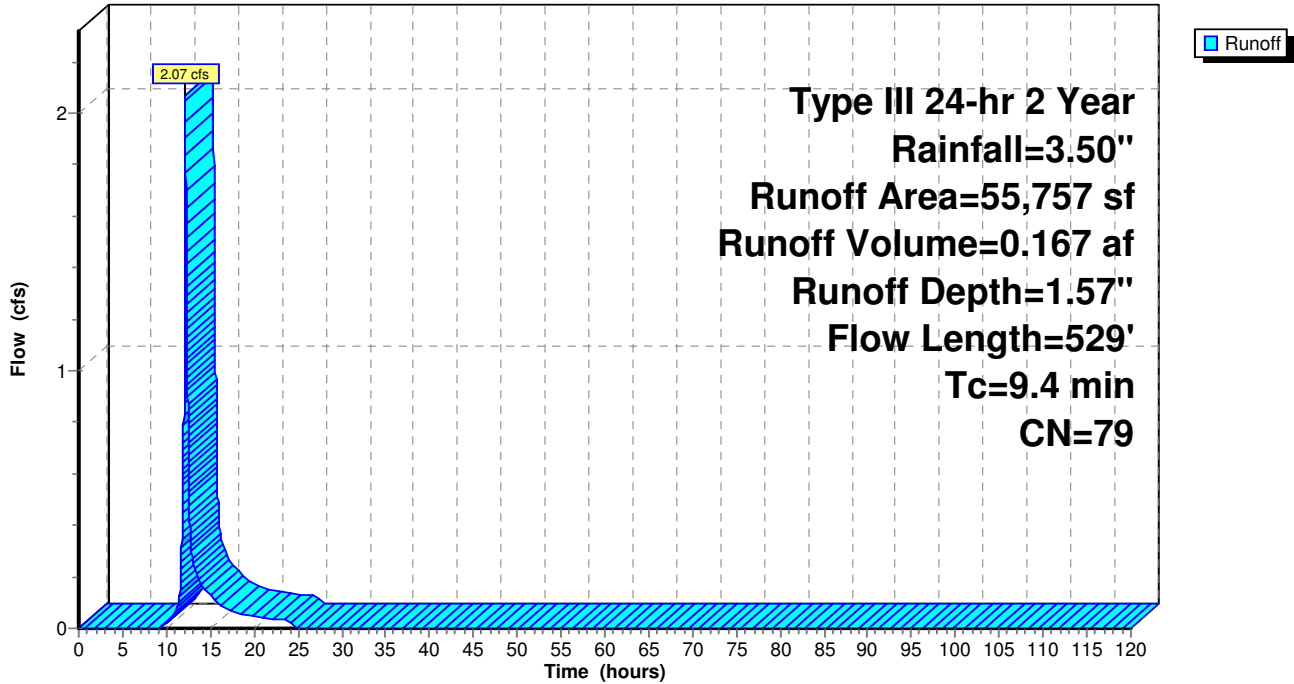
Type III 24-hr 2 Year Rainfall=3.50"

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Subcatchment 2C1: Drainage Area 2C1

Hydrograph



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Type III 24-hr 2 Year Rainfall=3.50"

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Hydrograph for Subcatchment 2C1: Drainage Area 2C1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	3.50	1.57	0.00
2.00	0.07	0.00	0.00	106.00	3.50	1.57	0.00
4.00	0.15	0.00	0.00	108.00	3.50	1.57	0.00
6.00	0.25	0.00	0.00	110.00	3.50	1.57	0.00
8.00	0.40	0.00	0.00	112.00	3.50	1.57	0.00
10.00	0.66	0.01	0.02	114.00	3.50	1.57	0.00
12.00	1.75	0.38	0.94	116.00	3.50	1.57	0.00
14.00	2.84	1.07	0.17	118.00	3.50	1.57	0.00
16.00	3.10	1.26	0.09	120.00	3.50	1.57	0.00
18.00	3.25	1.37	0.06				
20.00	3.35	1.45	0.05				
22.00	3.43	1.51	0.04				
24.00	3.50	1.57	0.03				
26.00	3.50	1.57	0.00				
28.00	3.50	1.57	0.00				
30.00	3.50	1.57	0.00				
32.00	3.50	1.57	0.00				
34.00	3.50	1.57	0.00				
36.00	3.50	1.57	0.00				
38.00	3.50	1.57	0.00				
40.00	3.50	1.57	0.00				
42.00	3.50	1.57	0.00				
44.00	3.50	1.57	0.00				
46.00	3.50	1.57	0.00				
48.00	3.50	1.57	0.00				
50.00	3.50	1.57	0.00				
52.00	3.50	1.57	0.00				
54.00	3.50	1.57	0.00				
56.00	3.50	1.57	0.00				
58.00	3.50	1.57	0.00				
60.00	3.50	1.57	0.00				
62.00	3.50	1.57	0.00				
64.00	3.50	1.57	0.00				
66.00	3.50	1.57	0.00				
68.00	3.50	1.57	0.00				
70.00	3.50	1.57	0.00				
72.00	3.50	1.57	0.00				
74.00	3.50	1.57	0.00				
76.00	3.50	1.57	0.00				
78.00	3.50	1.57	0.00				
80.00	3.50	1.57	0.00				
82.00	3.50	1.57	0.00				
84.00	3.50	1.57	0.00				
86.00	3.50	1.57	0.00				
88.00	3.50	1.57	0.00				
90.00	3.50	1.57	0.00				
92.00	3.50	1.57	0.00				
94.00	3.50	1.57	0.00				
96.00	3.50	1.57	0.00				
98.00	3.50	1.57	0.00				
100.00	3.50	1.57	0.00				
102.00	3.50	1.57	0.00				

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Type III 24-hr 2 Year Rainfall=3.50"

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Summary for Subcatchment 2E: Drainage Area 2E

Runoff = 2.90 cfs @ 12.12 hrs, Volume= 0.223 af, Depth= 1.50"

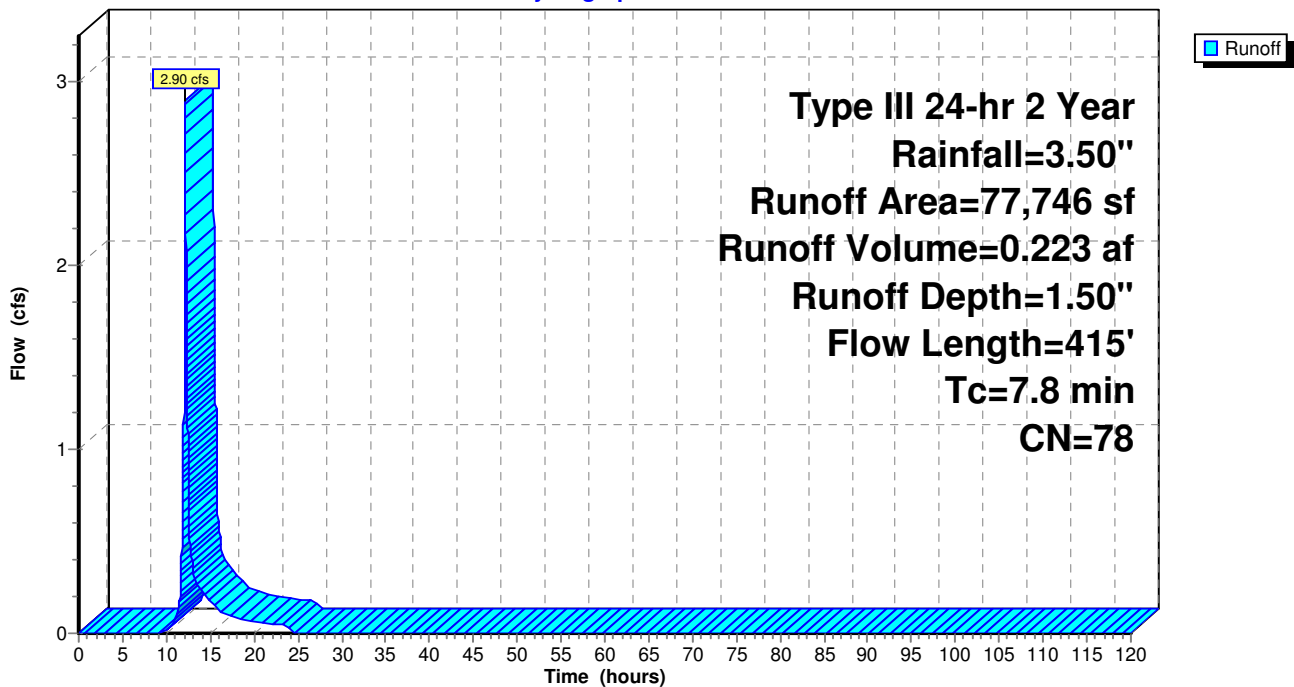
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 Year Rainfall=3.50"

Area (sf)	CN	Description
23,466	73	Woods, Fair, HSG C
41,869	74	>75% Grass cover, Good, HSG C
12,411	98	Paved roads w/curbs & sewers
77,746	78	Weighted Average
65,335		Pervious Area
12,411		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.4	100	0.0800	0.31		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
2.4	315	0.1900	2.18		Shallow Concentrated Flow, 2 to P-E Woodland Kv= 5.0 fps
7.8	415	Total			

Subcatchment 2E: Drainage Area 2E

Hydrograph



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Hydrograph for Subcatchment 2E: Drainage Area 2E

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	3.50	1.50	0.00
2.00	0.07	0.00	0.00	106.00	3.50	1.50	0.00
4.00	0.15	0.00	0.00	108.00	3.50	1.50	0.00
6.00	0.25	0.00	0.00	110.00	3.50	1.50	0.00
8.00	0.40	0.00	0.00	112.00	3.50	1.50	0.00
10.00	0.66	0.00	0.02	114.00	3.50	1.50	0.00
12.00	1.75	0.35	1.41	116.00	3.50	1.50	0.00
14.00	2.84	1.02	0.23	118.00	3.50	1.50	0.00
16.00	3.10	1.20	0.12	120.00	3.50	1.50	0.00
18.00	3.25	1.31	0.08				
20.00	3.35	1.38	0.06				
22.00	3.43	1.45	0.05				
24.00	3.50	1.50	0.04				
26.00	3.50	1.50	0.00				
28.00	3.50	1.50	0.00				
30.00	3.50	1.50	0.00				
32.00	3.50	1.50	0.00				
34.00	3.50	1.50	0.00				
36.00	3.50	1.50	0.00				
38.00	3.50	1.50	0.00				
40.00	3.50	1.50	0.00				
42.00	3.50	1.50	0.00				
44.00	3.50	1.50	0.00				
46.00	3.50	1.50	0.00				
48.00	3.50	1.50	0.00				
50.00	3.50	1.50	0.00				
52.00	3.50	1.50	0.00				
54.00	3.50	1.50	0.00				
56.00	3.50	1.50	0.00				
58.00	3.50	1.50	0.00				
60.00	3.50	1.50	0.00				
62.00	3.50	1.50	0.00				
64.00	3.50	1.50	0.00				
66.00	3.50	1.50	0.00				
68.00	3.50	1.50	0.00				
70.00	3.50	1.50	0.00				
72.00	3.50	1.50	0.00				
74.00	3.50	1.50	0.00				
76.00	3.50	1.50	0.00				
78.00	3.50	1.50	0.00				
80.00	3.50	1.50	0.00				
82.00	3.50	1.50	0.00				
84.00	3.50	1.50	0.00				
86.00	3.50	1.50	0.00				
88.00	3.50	1.50	0.00				
90.00	3.50	1.50	0.00				
92.00	3.50	1.50	0.00				
94.00	3.50	1.50	0.00				
96.00	3.50	1.50	0.00				
98.00	3.50	1.50	0.00				
100.00	3.50	1.50	0.00				
102.00	3.50	1.50	0.00				

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Type III 24-hr 2 Year Rainfall=3.50"

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Summary for Subcatchment 2F: Drainage Area 2F

Runoff = 62.13 cfs @ 12.12 hrs, Volume= 5.041 af, Depth= 1.01"

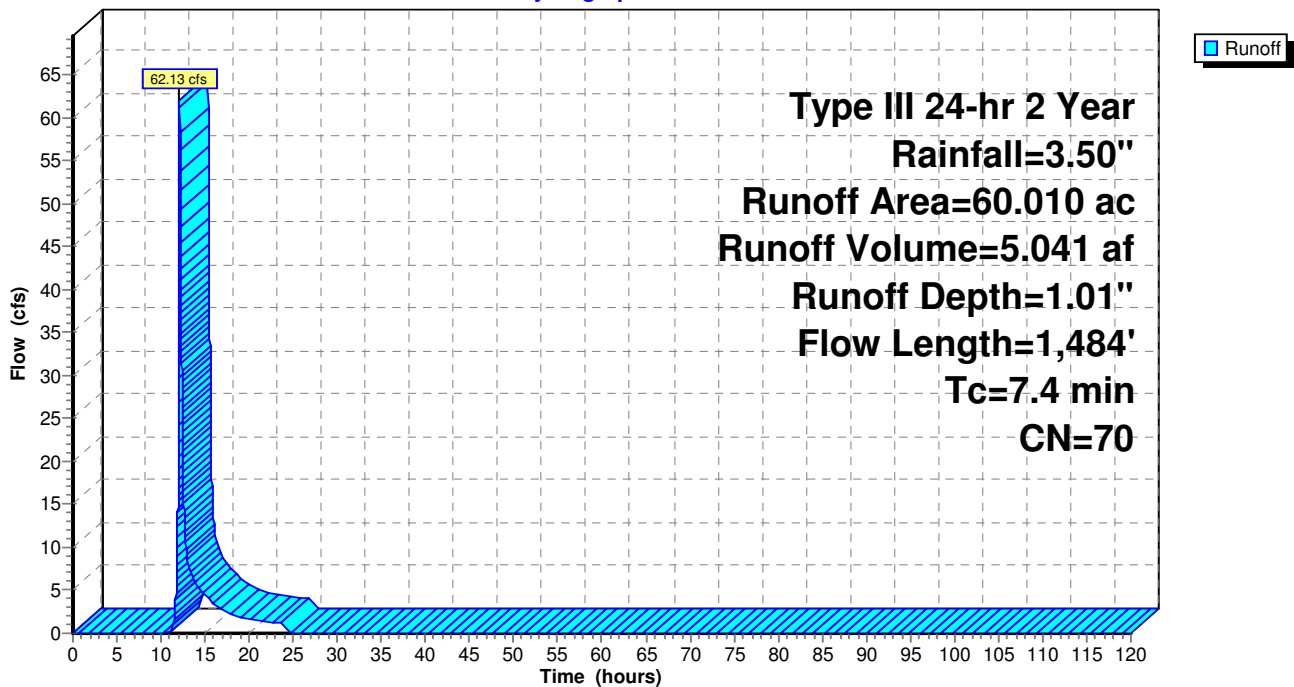
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 Year Rainfall=3.50"

Area (ac)	CN	Description
60.010	70	1/2 acre lots, 25% imp, HSG B
45.008		Pervious Area
15.002		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.7	100	0.2000	0.45		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
2.6	1,075	0.1800	6.83		Shallow Concentrated Flow, 2 to 3 Unpaved Kv= 16.1 fps
1.1	309	0.0100	4.56	68.35	Channel Flow, 3 to DP-2 Area= 15.0 sf Perim= 17.0' r= 0.88' n= 0.030 Stream, clean & straight
7.4	1,484	Total			

Subcatchment 2F: Drainage Area 2F

Hydrograph



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Hydrograph for Subcatchment 2F: Drainage Area 2F

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	3.50	1.01	0.00
2.00	0.07	0.00	0.00	106.00	3.50	1.01	0.00
4.00	0.15	0.00	0.00	108.00	3.50	1.01	0.00
6.00	0.25	0.00	0.00	110.00	3.50	1.01	0.00
8.00	0.40	0.00	0.00	112.00	3.50	1.01	0.00
10.00	0.66	0.00	0.00	114.00	3.50	1.01	0.00
12.00	1.75	0.15	26.89	116.00	3.50	1.01	0.00
14.00	2.84	0.63	5.80	118.00	3.50	1.01	0.00
16.00	3.10	0.77	3.28	120.00	3.50	1.01	0.00
18.00	3.25	0.86	2.06				
20.00	3.35	0.92	1.67				
22.00	3.43	0.97	1.40				
24.00	3.50	1.01	1.13				
26.00	3.50	1.01	0.00				
28.00	3.50	1.01	0.00				
30.00	3.50	1.01	0.00				
32.00	3.50	1.01	0.00				
34.00	3.50	1.01	0.00				
36.00	3.50	1.01	0.00				
38.00	3.50	1.01	0.00				
40.00	3.50	1.01	0.00				
42.00	3.50	1.01	0.00				
44.00	3.50	1.01	0.00				
46.00	3.50	1.01	0.00				
48.00	3.50	1.01	0.00				
50.00	3.50	1.01	0.00				
52.00	3.50	1.01	0.00				
54.00	3.50	1.01	0.00				
56.00	3.50	1.01	0.00				
58.00	3.50	1.01	0.00				
60.00	3.50	1.01	0.00				
62.00	3.50	1.01	0.00				
64.00	3.50	1.01	0.00				
66.00	3.50	1.01	0.00				
68.00	3.50	1.01	0.00				
70.00	3.50	1.01	0.00				
72.00	3.50	1.01	0.00				
74.00	3.50	1.01	0.00				
76.00	3.50	1.01	0.00				
78.00	3.50	1.01	0.00				
80.00	3.50	1.01	0.00				
82.00	3.50	1.01	0.00				
84.00	3.50	1.01	0.00				
86.00	3.50	1.01	0.00				
88.00	3.50	1.01	0.00				
90.00	3.50	1.01	0.00				
92.00	3.50	1.01	0.00				
94.00	3.50	1.01	0.00				
96.00	3.50	1.01	0.00				
98.00	3.50	1.01	0.00				
100.00	3.50	1.01	0.00				
102.00	3.50	1.01	0.00				

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Summary for Subcatchment 3: Drainage Area - 3

Runoff = 72.86 cfs @ 12.12 hrs, Volume= 5.749 af, Depth= 1.30"

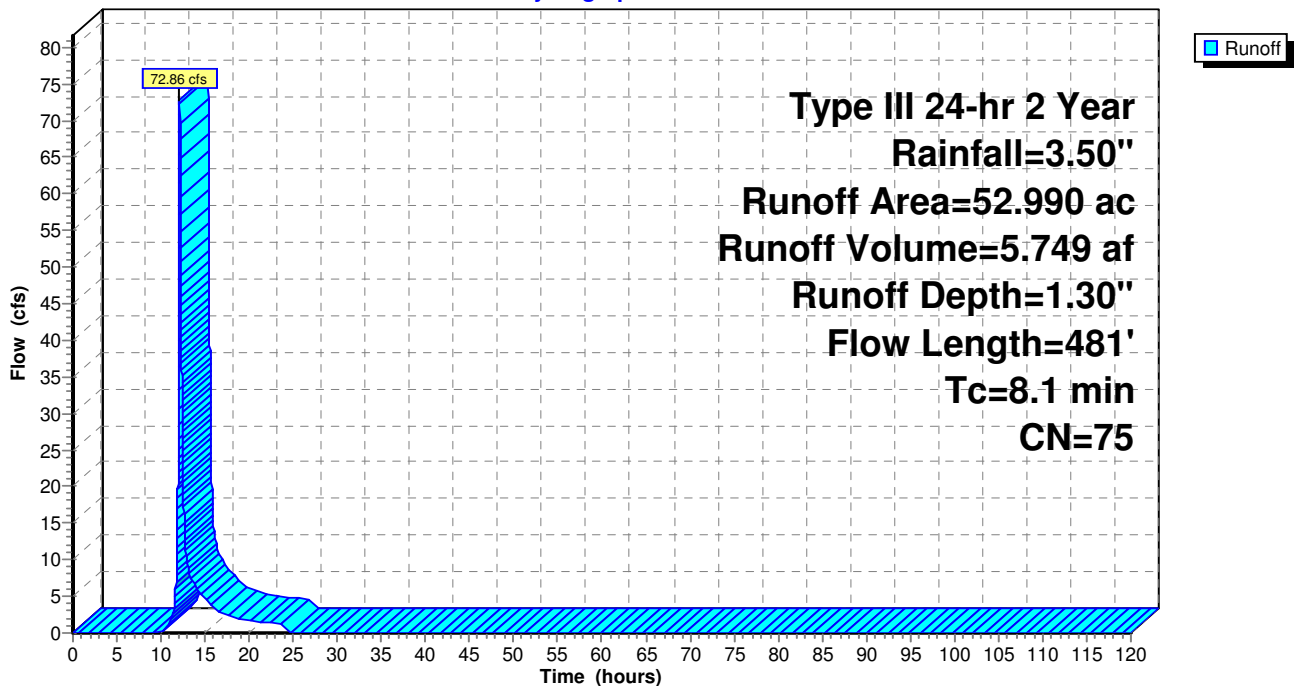
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 Year Rainfall=3.50"

Area (ac)	CN	Description
52.990	75	1/4 acre lots, 38% imp, HSG B
32.854		Pervious Area
20.136		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.7	100	0.1150	0.36		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
3.4	381	0.0700	1.85		Shallow Concentrated Flow, 2 to 3 Short Grass Pasture Kv= 7.0 fps
8.1	481	Total			

Subcatchment 3: Drainage Area - 3

Hydrograph



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Hydrograph for Subcatchment 3: Drainage Area - 3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	3.50	1.30	0.00
2.00	0.07	0.00	0.00	106.00	3.50	1.30	0.00
4.00	0.15	0.00	0.00	108.00	3.50	1.30	0.00
6.00	0.25	0.00	0.00	110.00	3.50	1.30	0.00
8.00	0.40	0.00	0.00	112.00	3.50	1.30	0.00
10.00	0.66	0.00	0.00	114.00	3.50	1.30	0.00
12.00	1.75	0.27	33.23	116.00	3.50	1.30	0.00
14.00	2.84	0.86	6.13	118.00	3.50	1.30	0.00
16.00	3.10	1.03	3.41	120.00	3.50	1.30	0.00
18.00	3.25	1.13	2.12				
20.00	3.35	1.20	1.71				
22.00	3.43	1.25	1.43				
24.00	3.50	1.30	1.14				
26.00	3.50	1.30	0.00				
28.00	3.50	1.30	0.00				
30.00	3.50	1.30	0.00				
32.00	3.50	1.30	0.00				
34.00	3.50	1.30	0.00				
36.00	3.50	1.30	0.00				
38.00	3.50	1.30	0.00				
40.00	3.50	1.30	0.00				
42.00	3.50	1.30	0.00				
44.00	3.50	1.30	0.00				
46.00	3.50	1.30	0.00				
48.00	3.50	1.30	0.00				
50.00	3.50	1.30	0.00				
52.00	3.50	1.30	0.00				
54.00	3.50	1.30	0.00				
56.00	3.50	1.30	0.00				
58.00	3.50	1.30	0.00				
60.00	3.50	1.30	0.00				
62.00	3.50	1.30	0.00				
64.00	3.50	1.30	0.00				
66.00	3.50	1.30	0.00				
68.00	3.50	1.30	0.00				
70.00	3.50	1.30	0.00				
72.00	3.50	1.30	0.00				
74.00	3.50	1.30	0.00				
76.00	3.50	1.30	0.00				
78.00	3.50	1.30	0.00				
80.00	3.50	1.30	0.00				
82.00	3.50	1.30	0.00				
84.00	3.50	1.30	0.00				
86.00	3.50	1.30	0.00				
88.00	3.50	1.30	0.00				
90.00	3.50	1.30	0.00				
92.00	3.50	1.30	0.00				
94.00	3.50	1.30	0.00				
96.00	3.50	1.30	0.00				
98.00	3.50	1.30	0.00				
100.00	3.50	1.30	0.00				
102.00	3.50	1.30	0.00				

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Summary for Subcatchment 4A: Drainage Area 4A

Runoff = 5.02 cfs @ 12.10 hrs, Volume= 0.373 af, Depth= 1.50"

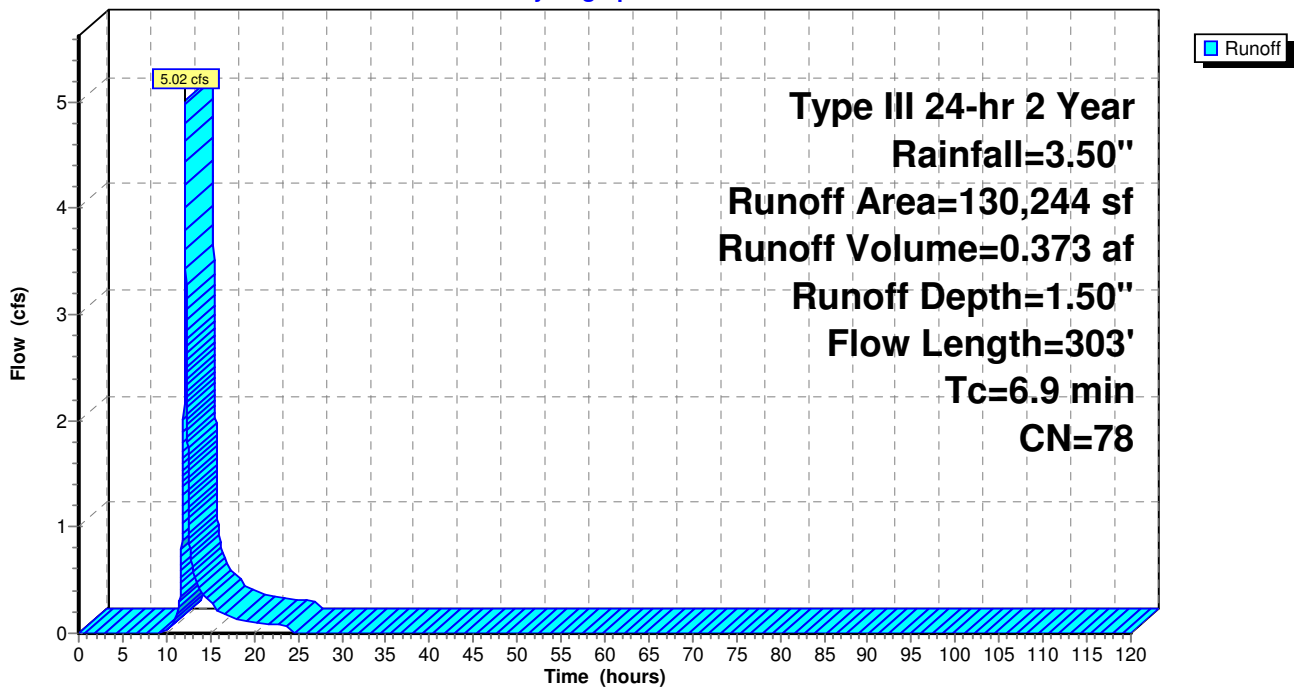
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 Year Rainfall=3.50"

Area (sf)	CN	Description
19,319	76	Woods/grass comb., Fair, HSG C
88,531	74	>75% Grass cover, Good, HSG C
22,394	98	Paved parking & roofs
130,244	78	Weighted Average
107,850		Pervious Area
22,394		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	100	0.0600	0.28		Sheet Flow, 1 to 2
					Grass: Short n= 0.150 P2= 3.50"
0.9	203	0.2700	3.64		Shallow Concentrated Flow, 2 to 3
					Short Grass Pasture Kv= 7.0 fps
6.9	303	Total			

Subcatchment 4A: Drainage Area 4A

Hydrograph



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Hydrograph for Subcatchment 4A: Drainage Area 4A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	3.50	1.50	0.00
2.00	0.07	0.00	0.00	106.00	3.50	1.50	0.00
4.00	0.15	0.00	0.00	108.00	3.50	1.50	0.00
6.00	0.25	0.00	0.00	110.00	3.50	1.50	0.00
8.00	0.40	0.00	0.00	112.00	3.50	1.50	0.00
10.00	0.66	0.00	0.03	114.00	3.50	1.50	0.00
12.00	1.75	0.35	2.57	116.00	3.50	1.50	0.00
14.00	2.84	1.02	0.38	118.00	3.50	1.50	0.00
16.00	3.10	1.20	0.21	120.00	3.50	1.50	0.00
18.00	3.25	1.31	0.13				
20.00	3.35	1.38	0.10				
22.00	3.43	1.45	0.09				
24.00	3.50	1.50	0.07				
26.00	3.50	1.50	0.00				
28.00	3.50	1.50	0.00				
30.00	3.50	1.50	0.00				
32.00	3.50	1.50	0.00				
34.00	3.50	1.50	0.00				
36.00	3.50	1.50	0.00				
38.00	3.50	1.50	0.00				
40.00	3.50	1.50	0.00				
42.00	3.50	1.50	0.00				
44.00	3.50	1.50	0.00				
46.00	3.50	1.50	0.00				
48.00	3.50	1.50	0.00				
50.00	3.50	1.50	0.00				
52.00	3.50	1.50	0.00				
54.00	3.50	1.50	0.00				
56.00	3.50	1.50	0.00				
58.00	3.50	1.50	0.00				
60.00	3.50	1.50	0.00				
62.00	3.50	1.50	0.00				
64.00	3.50	1.50	0.00				
66.00	3.50	1.50	0.00				
68.00	3.50	1.50	0.00				
70.00	3.50	1.50	0.00				
72.00	3.50	1.50	0.00				
74.00	3.50	1.50	0.00				
76.00	3.50	1.50	0.00				
78.00	3.50	1.50	0.00				
80.00	3.50	1.50	0.00				
82.00	3.50	1.50	0.00				
84.00	3.50	1.50	0.00				
86.00	3.50	1.50	0.00				
88.00	3.50	1.50	0.00				
90.00	3.50	1.50	0.00				
92.00	3.50	1.50	0.00				
94.00	3.50	1.50	0.00				
96.00	3.50	1.50	0.00				
98.00	3.50	1.50	0.00				
100.00	3.50	1.50	0.00				
102.00	3.50	1.50	0.00				

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Summary for Subcatchment 4B: Drainage Area 4B

Runoff = 4.76 cfs @ 12.09 hrs, Volume= 0.348 af, Depth= 1.30"

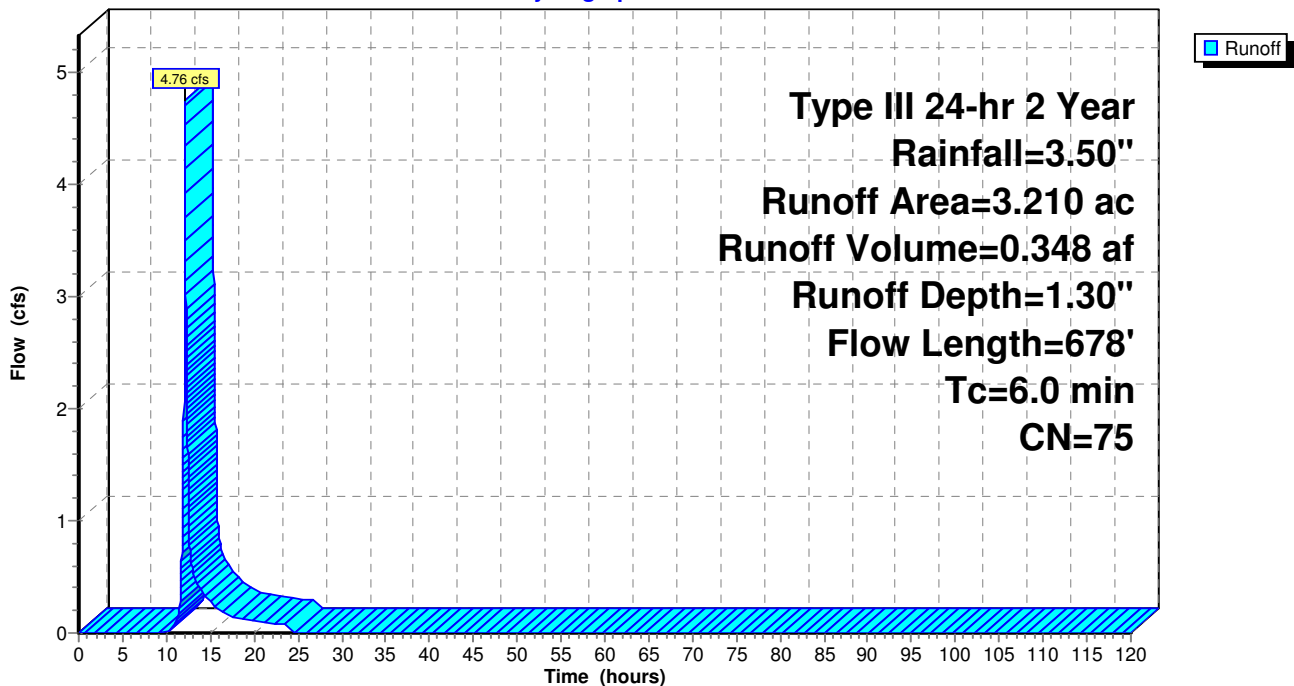
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 Year Rainfall=3.50"

Area (ac)	CN	Description
3.210	75	1/4 acre lots, 38% imp, HSG B
1.990		Pervious Area
1.220		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.1	100	0.1600	0.41		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
1.9	578	0.1200	5.20		Shallow Concentrated Flow, 2 to DP-5 Grassed Waterway Kv= 15.0 fps
6.0	678	Total			

Subcatchment 4B: Drainage Area 4B

Hydrograph



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Hydrograph for Subcatchment 4B: Drainage Area 4B

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	3.50	1.30	0.00
2.00	0.07	0.00	0.00	106.00	3.50	1.30	0.00
4.00	0.15	0.00	0.00	108.00	3.50	1.30	0.00
6.00	0.25	0.00	0.00	110.00	3.50	1.30	0.00
8.00	0.40	0.00	0.00	112.00	3.50	1.30	0.00
10.00	0.66	0.00	0.00	114.00	3.50	1.30	0.00
12.00	1.75	0.27	2.52	116.00	3.50	1.30	0.00
14.00	2.84	0.86	0.37	118.00	3.50	1.30	0.00
16.00	3.10	1.03	0.20	120.00	3.50	1.30	0.00
18.00	3.25	1.13	0.13				
20.00	3.35	1.20	0.10				
22.00	3.43	1.25	0.09				
24.00	3.50	1.30	0.07				
26.00	3.50	1.30	0.00				
28.00	3.50	1.30	0.00				
30.00	3.50	1.30	0.00				
32.00	3.50	1.30	0.00				
34.00	3.50	1.30	0.00				
36.00	3.50	1.30	0.00				
38.00	3.50	1.30	0.00				
40.00	3.50	1.30	0.00				
42.00	3.50	1.30	0.00				
44.00	3.50	1.30	0.00				
46.00	3.50	1.30	0.00				
48.00	3.50	1.30	0.00				
50.00	3.50	1.30	0.00				
52.00	3.50	1.30	0.00				
54.00	3.50	1.30	0.00				
56.00	3.50	1.30	0.00				
58.00	3.50	1.30	0.00				
60.00	3.50	1.30	0.00				
62.00	3.50	1.30	0.00				
64.00	3.50	1.30	0.00				
66.00	3.50	1.30	0.00				
68.00	3.50	1.30	0.00				
70.00	3.50	1.30	0.00				
72.00	3.50	1.30	0.00				
74.00	3.50	1.30	0.00				
76.00	3.50	1.30	0.00				
78.00	3.50	1.30	0.00				
80.00	3.50	1.30	0.00				
82.00	3.50	1.30	0.00				
84.00	3.50	1.30	0.00				
86.00	3.50	1.30	0.00				
88.00	3.50	1.30	0.00				
90.00	3.50	1.30	0.00				
92.00	3.50	1.30	0.00				
94.00	3.50	1.30	0.00				
96.00	3.50	1.30	0.00				
98.00	3.50	1.30	0.00				
100.00	3.50	1.30	0.00				
102.00	3.50	1.30	0.00				

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Summary for Subcatchment 5: Drainage Area 5

Runoff = 21.27 cfs @ 12.14 hrs, Volume= 1.755 af, Depth= 1.30"

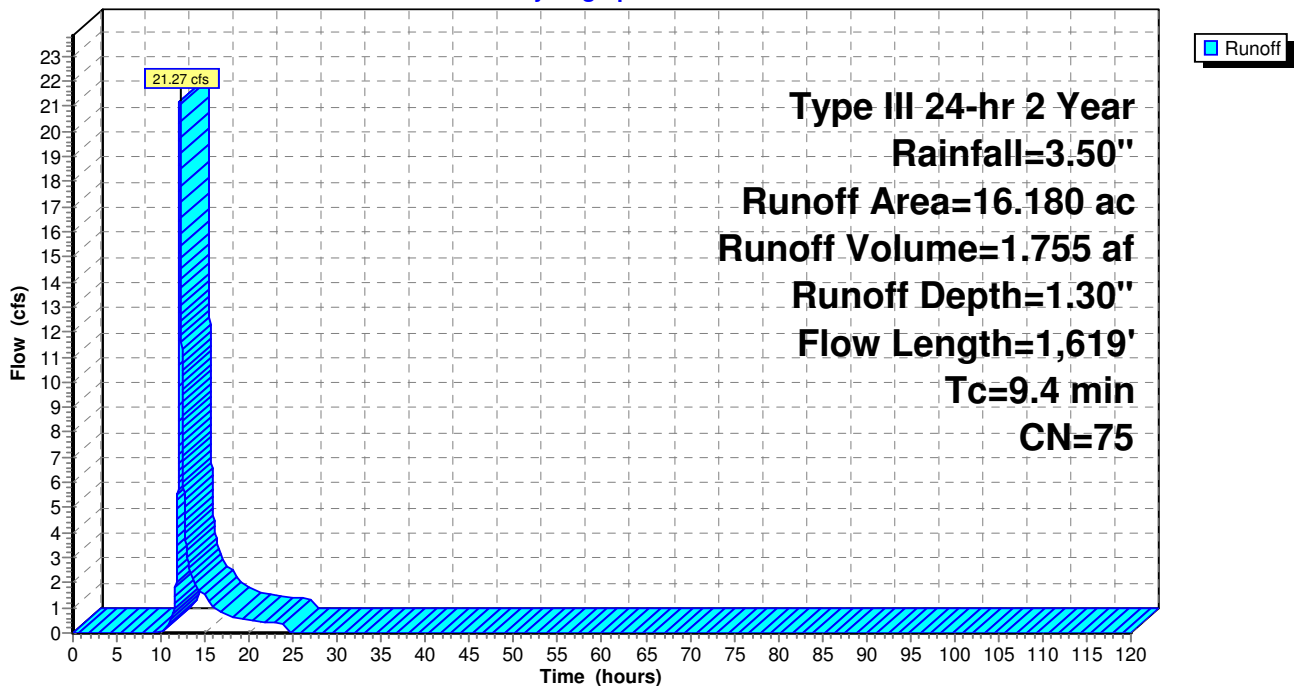
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 Year Rainfall=3.50"

Area (ac)	CN	Description
16.180	75	1/4 acre lots, 38% imp, HSG B
10.032		Pervious Area
6.148		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	100	0.1800	0.43		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
5.5	1,519	0.0810	4.58		Shallow Concentrated Flow, 2 to DP-4 Unpaved Kv= 16.1 fps
9.4	1,619	Total			

Subcatchment 5: Drainage Area 5

Hydrograph



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Type III 24-hr 2 Year Rainfall=3.50"

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Hydrograph for Subcatchment 5: Drainage Area 5

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	3.50	1.30	0.00
2.00	0.07	0.00	0.00	106.00	3.50	1.30	0.00
4.00	0.15	0.00	0.00	108.00	3.50	1.30	0.00
6.00	0.25	0.00	0.00	110.00	3.50	1.30	0.00
8.00	0.40	0.00	0.00	112.00	3.50	1.30	0.00
10.00	0.66	0.00	0.00	114.00	3.50	1.30	0.00
12.00	1.75	0.27	9.08	116.00	3.50	1.30	0.00
14.00	2.84	0.86	1.89	118.00	3.50	1.30	0.00
16.00	3.10	1.03	1.05	120.00	3.50	1.30	0.00
18.00	3.25	1.13	0.65				
20.00	3.35	1.20	0.52				
22.00	3.43	1.25	0.44				
24.00	3.50	1.30	0.35				
26.00	3.50	1.30	0.00				
28.00	3.50	1.30	0.00				
30.00	3.50	1.30	0.00				
32.00	3.50	1.30	0.00				
34.00	3.50	1.30	0.00				
36.00	3.50	1.30	0.00				
38.00	3.50	1.30	0.00				
40.00	3.50	1.30	0.00				
42.00	3.50	1.30	0.00				
44.00	3.50	1.30	0.00				
46.00	3.50	1.30	0.00				
48.00	3.50	1.30	0.00				
50.00	3.50	1.30	0.00				
52.00	3.50	1.30	0.00				
54.00	3.50	1.30	0.00				
56.00	3.50	1.30	0.00				
58.00	3.50	1.30	0.00				
60.00	3.50	1.30	0.00				
62.00	3.50	1.30	0.00				
64.00	3.50	1.30	0.00				
66.00	3.50	1.30	0.00				
68.00	3.50	1.30	0.00				
70.00	3.50	1.30	0.00				
72.00	3.50	1.30	0.00				
74.00	3.50	1.30	0.00				
76.00	3.50	1.30	0.00				
78.00	3.50	1.30	0.00				
80.00	3.50	1.30	0.00				
82.00	3.50	1.30	0.00				
84.00	3.50	1.30	0.00				
86.00	3.50	1.30	0.00				
88.00	3.50	1.30	0.00				
90.00	3.50	1.30	0.00				
92.00	3.50	1.30	0.00				
94.00	3.50	1.30	0.00				
96.00	3.50	1.30	0.00				
98.00	3.50	1.30	0.00				
100.00	3.50	1.30	0.00				
102.00	3.50	1.30	0.00				

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Type III 24-hr 2 Year Rainfall=3.50"

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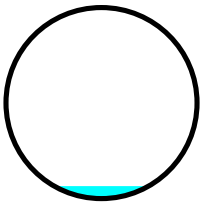
Summary for Reach 1R: Pipe

Inflow = 0.23 cfs @ 12.62 hrs, Volume= 0.018 af
Outflow = 0.23 cfs @ 12.63 hrs, Volume= 0.018 af, Atten= 0%, Lag= 0.5 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.68 fps, Min. Travel Time= 0.7 min
Avg. Velocity = 2.96 fps, Avg. Travel Time= 1.1 min

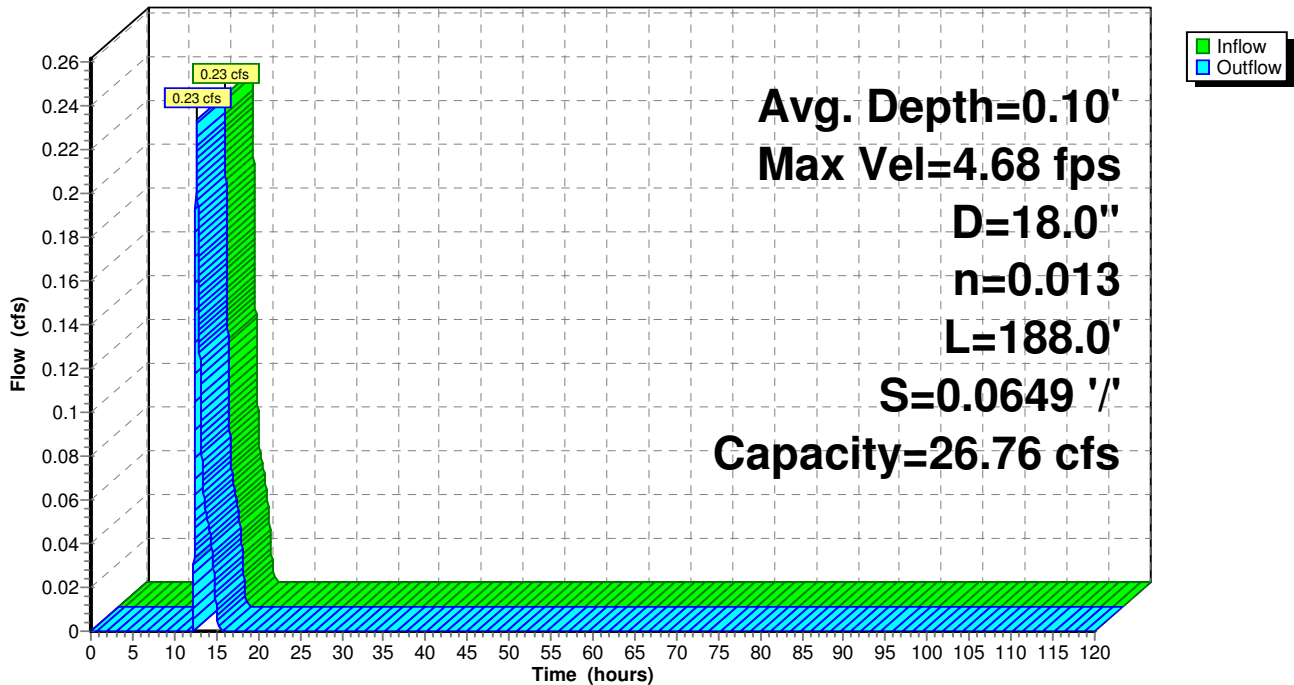
Peak Storage= 9 cf @ 12.63 hrs, Average Depth at Peak Storage= 0.10'
Bank-Full Depth= 1.50', Capacity at Bank-Full= 26.76 cfs

18.0" Diameter Pipe, n= 0.013 Corrugated PE, smooth interior
Length= 188.0' Slope= 0.0649 '/'
Inlet Invert= 310.20', Outlet Invert= 298.00'



Reach 1R: Pipe

Hydrograph



Post-Development Entire

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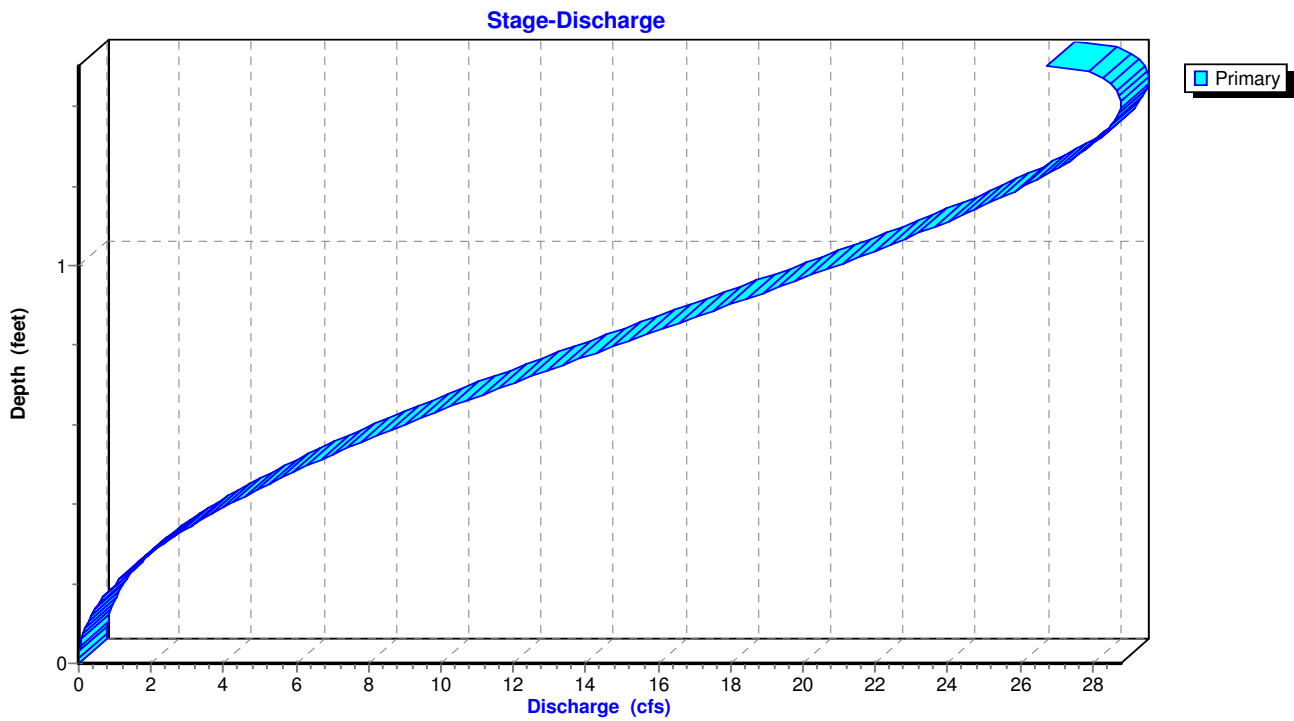
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Type III 24-hr 2 Year Rainfall=3.50"

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Reach 1R: Pipe



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Hydrograph for Reach 1R: Pipe

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)
0.00	0.00	0	310.20	0.00
5.00	0.00	0	310.20	0.00
10.00	0.00	0	310.20	0.00
15.00	0.01	1	310.22	0.01
20.00	0.00	0	310.20	0.00
25.00	0.00	0	310.20	0.00
30.00	0.00	0	310.20	0.00
35.00	0.00	0	310.20	0.00
40.00	0.00	0	310.20	0.00
45.00	0.00	0	310.20	0.00
50.00	0.00	0	310.20	0.00
55.00	0.00	0	310.20	0.00
60.00	0.00	0	310.20	0.00
65.00	0.00	0	310.20	0.00
70.00	0.00	0	310.20	0.00
75.00	0.00	0	310.20	0.00
80.00	0.00	0	310.20	0.00
85.00	0.00	0	310.20	0.00
90.00	0.00	0	310.20	0.00
95.00	0.00	0	310.20	0.00
100.00	0.00	0	310.20	0.00
105.00	0.00	0	310.20	0.00
110.00	0.00	0	310.20	0.00
115.00	0.00	0	310.20	0.00
120.00	0.00	0	310.20	0.00

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Type III 24-hr 2 Year Rainfall=3.50"

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Stage-Discharge for Reach 1R: Pipe

Elevation (feet)	Velocity (ft/sec)	Discharge (cfs)	Elevation (feet)	Velocity (ft/sec)	Discharge (cfs)	Elevation (feet)	Velocity (ft/sec)	Discharge (cfs)
310.20	0.00	0.00	310.72	12.70	6.91	311.24	16.92	22.12
310.21	0.90	0.00	310.73	12.83	7.16	311.25	16.96	22.40
310.22	1.61	0.01	310.74	12.95	7.42	311.26	16.99	22.68
310.23	2.13	0.02	310.75	13.08	7.68	311.27	17.02	22.95
310.24	2.57	0.03	310.76	13.20	7.94	311.28	17.05	23.23
310.25	2.98	0.06	310.77	13.32	8.20	311.29	17.08	23.49
310.26	3.36	0.08	310.78	13.43	8.47	311.30	17.11	23.76
310.27	3.71	0.11	310.79	13.55	8.74	311.31	17.13	24.02
310.28	4.05	0.15	310.80	13.66	9.02	311.32	17.15	24.27
310.29	4.38	0.19	310.81	13.77	9.29	311.33	17.17	24.53
310.30	4.68	0.24	310.82	13.88	9.57	311.34	17.19	24.77
310.31	4.98	0.29	310.83	13.99	9.85	311.35	17.21	25.02
310.32	5.27	0.35	310.84	14.09	10.14	311.36	17.22	25.25
310.33	5.54	0.41	310.85	14.20	10.42	311.37	17.23	25.49
310.34	5.81	0.48	310.86	14.30	10.71	311.38	17.24	25.72
310.35	6.07	0.56	310.87	14.40	11.00	311.39	17.25	25.94
310.36	6.33	0.64	310.88	14.50	11.29	311.40	17.26	26.16
310.37	6.57	0.73	310.89	14.60	11.59	311.41	17.26	26.37
310.38	6.81	0.82	310.90	14.69	11.88	311.42	17.26	26.57
310.39	7.05	0.92	310.91	14.79	12.18	311.43	17.26	26.77
310.40	7.27	1.02	310.92	14.88	12.48	311.44	17.26	26.96
310.41	7.50	1.13	310.93	14.97	12.78	311.45	17.25	27.14
310.42	7.72	1.24	310.94	15.06	13.08	311.46	17.24	27.32
310.43	7.93	1.36	310.95	15.14	13.38	311.47	17.23	27.49
310.44	8.14	1.49	310.96	15.23	13.68	311.48	17.22	27.65
310.45	8.35	1.62	310.97	15.31	13.99	311.49	17.20	27.81
310.46	8.55	1.75	310.98	15.39	14.29	311.50	17.18	27.95
310.47	8.74	1.89	310.99	15.47	14.60	311.51	17.15	28.08
310.48	8.94	2.04	311.00	15.55	14.90	311.52	17.13	28.21
310.49	9.13	2.19	311.01	15.63	15.21	311.53	17.10	28.32
310.50	9.31	2.34	311.02	15.70	15.52	311.54	17.06	28.42
310.51	9.50	2.51	311.03	15.77	15.83	311.55	17.02	28.52
310.52	9.68	2.67	311.04	15.85	16.13	311.56	16.98	28.60
310.53	9.85	2.84	311.05	15.91	16.44	311.57	16.94	28.66
310.54	10.03	3.02	311.06	15.98	16.75	311.58	16.88	28.72
310.55	10.20	3.20	311.07	16.05	17.06	311.59	16.83	28.75
310.56	10.36	3.38	311.08	16.11	17.36	311.60	16.76	28.78
310.57	10.53	3.57	311.09	16.18	17.67	311.61	16.70	28.78
310.58	10.69	3.76	311.10	16.24	17.98	311.62	16.62	28.76
310.59	10.85	3.96	311.11	16.30	18.28	311.63	16.54	28.72
310.60	11.01	4.16	311.12	16.36	18.59	311.64	16.44	28.67
310.61	11.16	4.37	311.13	16.41	18.89	311.65	16.33	28.57
310.62	11.31	4.58	311.14	16.47	19.19	311.66	16.21	28.44
310.63	11.46	4.80	311.15	16.52	19.49	311.67	16.08	28.28
310.64	11.61	5.02	311.16	16.57	19.79	311.68	15.90	28.01
310.65	11.75	5.24	311.17	16.62	20.09	311.69	15.58	27.51
310.66	11.89	5.47	311.18	16.67	20.39	311.70	15.14	26.76
310.67	12.03	5.70	311.19	16.72	20.68			
310.68	12.17	5.93	311.20	16.76	20.98			
310.69	12.31	6.17	311.21	16.80	21.27			
310.70	12.44	6.42	311.22	16.84	21.55			
310.71	12.57	6.66	311.23	16.88	21.84			

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Summary for Pond LS-1: Level Spreader

Inflow = 0.45 cfs @ 12.72 hrs, Volume= 0.055 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 Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 298.36' @ 17.21 hrs Surf.Area= 1,489 sf Storage= 2,404 cf

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

Volume #1	Invert	Avail.Storage	Storage Description			
	296.00'	5,288 cf	Custom Stage Data (Irregular) Listed below			
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
296.00	505	363.0	0	0	505	
298.00	1,320	413.0	1,761	1,761	3,689	
300.00	2,248	436.0	3,527	5,288	5,459	

Device #1	Routing	Invert	Outlet Devices												
	Primary	299.95'	210.0' long x 4.0' breadth Broad-Crested Rectangular Weir												
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00												
			2.50 3.00 3.50 4.00 4.50 5.00 5.50												
			Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66												
			2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32												

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=296.00' TW=0.00' (Dynamic Tailwater)

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

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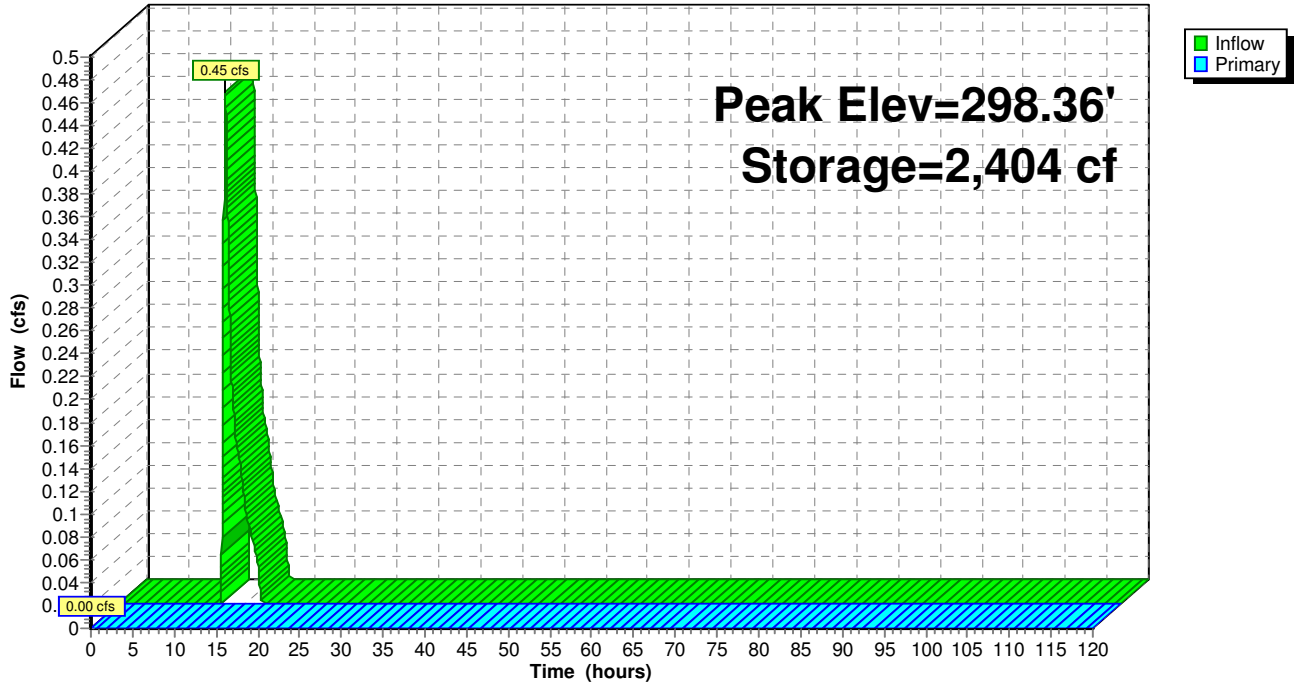
Type III 24-hr 2 Year Rainfall=3.50"

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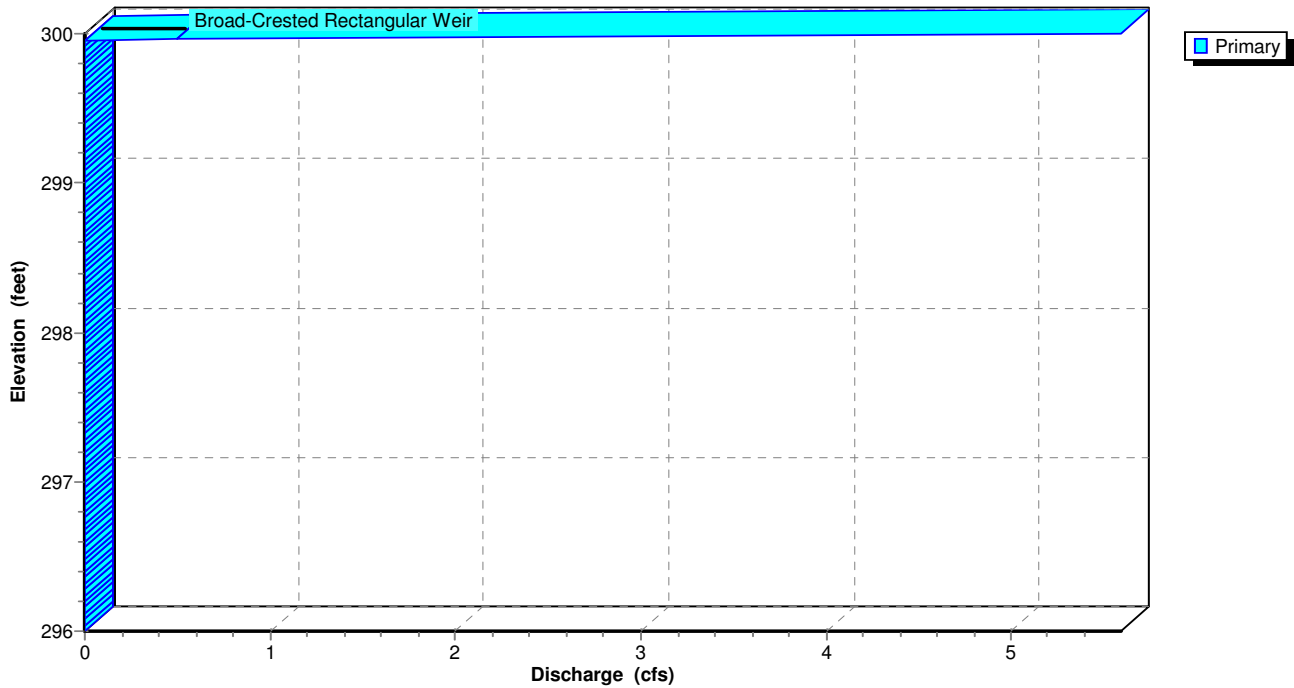
Pond LS-1: Level Spreader

Hydrograph



Pond LS-1: Level Spreader

Stage-Discharge



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Hydrograph for Pond LS-1: Level Spreader

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
0.00	0.00	0	296.00	0.00
5.00	0.00	0	296.00	0.00
10.00	0.00	0	296.00	0.00
15.00	0.09	2,009	298.14	0.00
20.00	0.00	2,404	298.36	0.00
25.00	0.00	2,404	298.36	0.00
30.00	0.00	2,404	298.36	0.00
35.00	0.00	2,404	298.36	0.00
40.00	0.00	2,404	298.36	0.00
45.00	0.00	2,404	298.36	0.00
50.00	0.00	2,404	298.36	0.00
55.00	0.00	2,404	298.36	0.00
60.00	0.00	2,404	298.36	0.00
65.00	0.00	2,404	298.36	0.00
70.00	0.00	2,404	298.36	0.00
75.00	0.00	2,404	298.36	0.00
80.00	0.00	2,404	298.36	0.00
85.00	0.00	2,404	298.36	0.00
90.00	0.00	2,404	298.36	0.00
95.00	0.00	2,404	298.36	0.00
100.00	0.00	2,404	298.36	0.00
105.00	0.00	2,404	298.36	0.00
110.00	0.00	2,404	298.36	0.00
115.00	0.00	2,404	298.36	0.00
120.00	0.00	2,404	298.36	0.00

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Stage-Discharge for Pond LS-1: Level Spreader

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
296.00	0.00	297.04	0.00	298.08	0.00	299.12	0.00
296.02	0.00	297.06	0.00	298.10	0.00	299.14	0.00
296.04	0.00	297.08	0.00	298.12	0.00	299.16	0.00
296.06	0.00	297.10	0.00	298.14	0.00	299.18	0.00
296.08	0.00	297.12	0.00	298.16	0.00	299.20	0.00
296.10	0.00	297.14	0.00	298.18	0.00	299.22	0.00
296.12	0.00	297.16	0.00	298.20	0.00	299.24	0.00
296.14	0.00	297.18	0.00	298.22	0.00	299.26	0.00
296.16	0.00	297.20	0.00	298.24	0.00	299.28	0.00
296.18	0.00	297.22	0.00	298.26	0.00	299.30	0.00
296.20	0.00	297.24	0.00	298.28	0.00	299.32	0.00
296.22	0.00	297.26	0.00	298.30	0.00	299.34	0.00
296.24	0.00	297.28	0.00	298.32	0.00	299.36	0.00
296.26	0.00	297.30	0.00	298.34	0.00	299.38	0.00
296.28	0.00	297.32	0.00	298.36	0.00	299.40	0.00
296.30	0.00	297.34	0.00	298.38	0.00	299.42	0.00
296.32	0.00	297.36	0.00	298.40	0.00	299.44	0.00
296.34	0.00	297.38	0.00	298.42	0.00	299.46	0.00
296.36	0.00	297.40	0.00	298.44	0.00	299.48	0.00
296.38	0.00	297.42	0.00	298.46	0.00	299.50	0.00
296.40	0.00	297.44	0.00	298.48	0.00	299.52	0.00
296.42	0.00	297.46	0.00	298.50	0.00	299.54	0.00
296.44	0.00	297.48	0.00	298.52	0.00	299.56	0.00
296.46	0.00	297.50	0.00	298.54	0.00	299.58	0.00
296.48	0.00	297.52	0.00	298.56	0.00	299.60	0.00
296.50	0.00	297.54	0.00	298.58	0.00	299.62	0.00
296.52	0.00	297.56	0.00	298.60	0.00	299.64	0.00
296.54	0.00	297.58	0.00	298.62	0.00	299.66	0.00
296.56	0.00	297.60	0.00	298.64	0.00	299.68	0.00
296.58	0.00	297.62	0.00	298.66	0.00	299.70	0.00
296.60	0.00	297.64	0.00	298.68	0.00	299.72	0.00
296.62	0.00	297.66	0.00	298.70	0.00	299.74	0.00
296.64	0.00	297.68	0.00	298.72	0.00	299.76	0.00
296.66	0.00	297.70	0.00	298.74	0.00	299.78	0.00
296.68	0.00	297.72	0.00	298.76	0.00	299.80	0.00
296.70	0.00	297.74	0.00	298.78	0.00	299.82	0.00
296.72	0.00	297.76	0.00	298.80	0.00	299.84	0.00
296.74	0.00	297.78	0.00	298.82	0.00	299.86	0.00
296.76	0.00	297.80	0.00	298.84	0.00	299.88	0.00
296.78	0.00	297.82	0.00	298.86	0.00	299.90	0.00
296.80	0.00	297.84	0.00	298.88	0.00	299.92	0.00
296.82	0.00	297.86	0.00	298.90	0.00	299.94	0.00
296.84	0.00	297.88	0.00	298.92	0.00	299.96	0.50
296.86	0.00	297.90	0.00	298.94	0.00	299.98	2.60
296.88	0.00	297.92	0.00	298.96	0.00	300.00	5.59
296.90	0.00	297.94	0.00	298.98	0.00		
296.92	0.00	297.96	0.00	299.00	0.00		
296.94	0.00	297.98	0.00	299.02	0.00		
296.96	0.00	298.00	0.00	299.04	0.00		
296.98	0.00	298.02	0.00	299.06	0.00		
297.00	0.00	298.04	0.00	299.08	0.00		
297.02	0.00	298.06	0.00	299.10	0.00		

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Type III 24-hr 2 Year Rainfall=3.50"

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Summary for Pond P-1c: Infiltration Chambers

Inflow Area = 1.280 ac, 15.98% Impervious, Inflow Depth = 1.57" for 2 Year event
Inflow = 2.07 cfs @ 12.14 hrs, Volume= 0.167 af
Outflow = 0.45 cfs @ 12.62 hrs, Volume= 0.167 af, Atten= 78%, Lag= 29.1 min
Primary = 0.29 cfs @ 11.86 hrs, Volume= 0.161 af
Secondary = 0.17 cfs @ 12.62 hrs, Volume= 0.006 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Peak Elev= 310.53' @ 12.62 hrs Surf.Area= 1,317 sf Storage= 2,253 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 55.9 min (900.4 - 844.5)

Volume	Invert	Avail.Storage	Storage Description
#1	309.00'	3,349 cf	52.6"W x 34.0"H x 7.50'L Cultec R-V8 x 50

Device	Routing	Invert	Outlet Devices
#1	Primary	309.00'	7.500 in/hr Exfiltration over Horizontal area
#2	Secondary	310.33'	18.0" x 20.0' long Culvert CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 300.00' S= 0.5165 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior

Primary OutFlow Max=0.29 cfs @ 11.86 hrs HW=309.03' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.29 cfs)

Secondary OutFlow Max=0.17 cfs @ 12.62 hrs HW=310.53' TW=310.30' (Dynamic Tailwater)
↑**2=Culvert** (Inlet Controls 0.17 cfs @ 1.20 fps)

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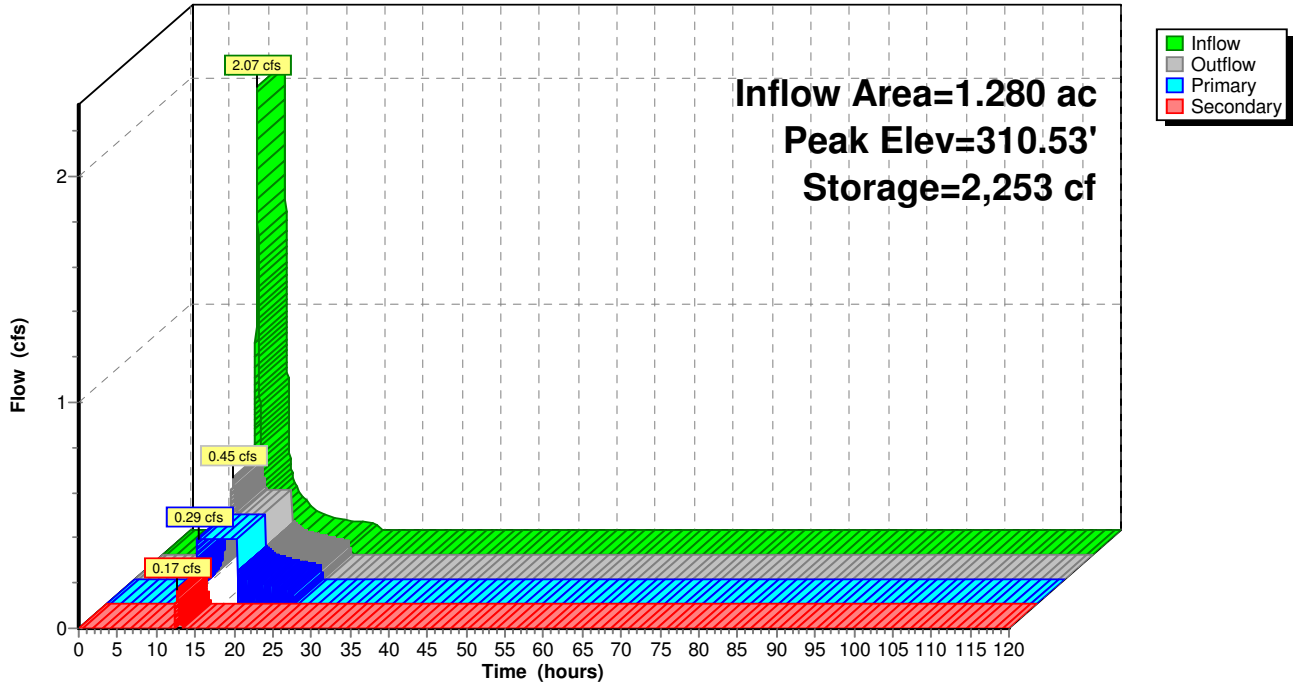
Type III 24-hr 2 Year Rainfall=3.50"

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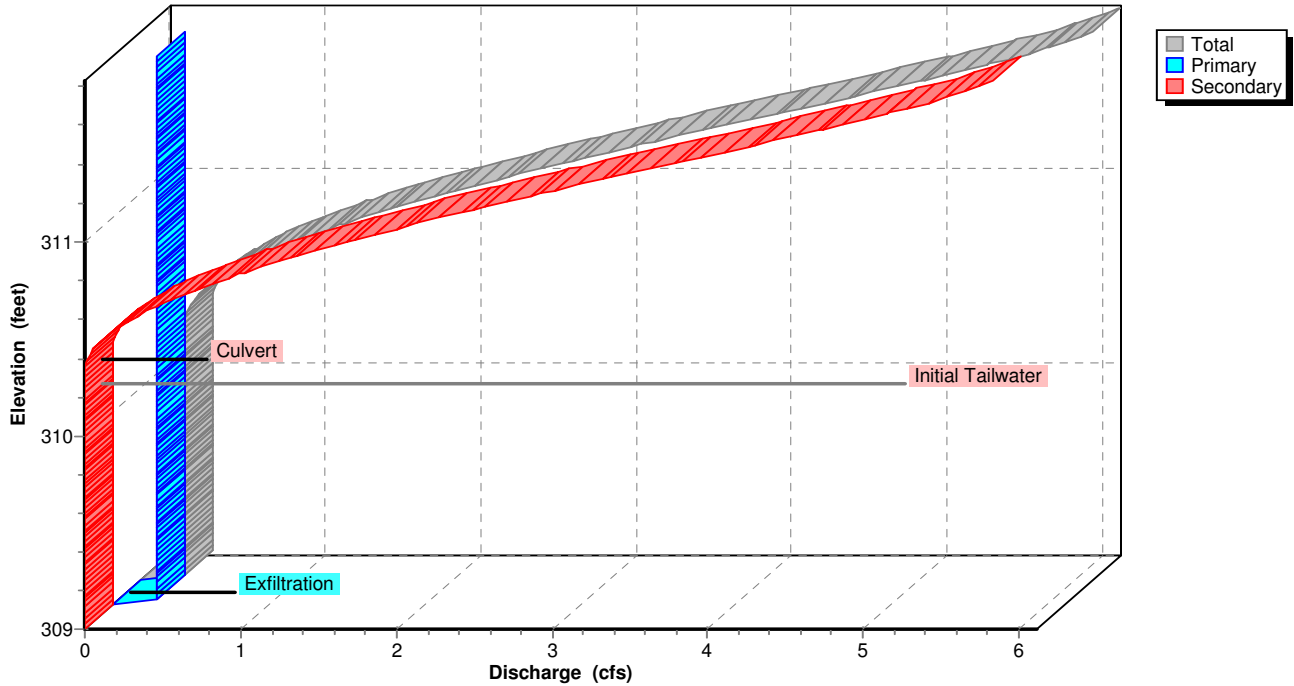
Pond P-1c: Infiltration Chambers

Hydrograph



Pond P-1c: Infiltration Chambers

Stage-Discharge



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Hydrograph for Pond P-1c: Infiltration Chambers

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	309.00	0.00	0.00	0.00
5.00	0.00	0	309.00	0.00	0.00	0.00
10.00	0.02	0	309.00	0.02	0.02	0.00
15.00	0.13	1,329	309.86	0.29	0.29	0.00
20.00	0.05	0	309.00	0.09	0.09	0.00
25.00	0.00	0	309.00	0.00	0.00	0.00
30.00	0.00	0	309.00	0.00	0.00	0.00
35.00	0.00	0	309.00	0.00	0.00	0.00
40.00	0.00	0	309.00	0.00	0.00	0.00
45.00	0.00	0	309.00	0.00	0.00	0.00
50.00	0.00	0	309.00	0.00	0.00	0.00
55.00	0.00	0	309.00	0.00	0.00	0.00
60.00	0.00	0	309.00	0.00	0.00	0.00
65.00	0.00	0	309.00	0.00	0.00	0.00
70.00	0.00	0	309.00	0.00	0.00	0.00
75.00	0.00	0	309.00	0.00	0.00	0.00
80.00	0.00	0	309.00	0.00	0.00	0.00
85.00	0.00	0	309.00	0.00	0.00	0.00
90.00	0.00	0	309.00	0.00	0.00	0.00
95.00	0.00	0	309.00	0.00	0.00	0.00
100.00	0.00	0	309.00	0.00	0.00	0.00
105.00	0.00	0	309.00	0.00	0.00	0.00
110.00	0.00	0	309.00	0.00	0.00	0.00
115.00	0.00	0	309.00	0.00	0.00	0.00
120.00	0.00	0	309.00	0.00	0.00	0.00

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Stage-Discharge for Pond P-1c: Infiltration Chambers

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
309.00	0.00	0.00	0.00	311.60	5.12	0.29	4.83
309.05	0.29	0.29	0.00	311.65	5.37	0.29	5.09
309.10	0.29	0.29	0.00	311.70	5.61	0.29	5.33
309.15	0.29	0.29	0.00	311.75	5.83	0.29	5.54
309.20	0.29	0.29	0.00	311.80	6.02	0.29	5.73
309.25	0.29	0.29	0.00				
309.30	0.29	0.29	0.00				
309.35	0.29	0.29	0.00				
309.40	0.29	0.29	0.00				
309.45	0.29	0.29	0.00				
309.50	0.29	0.29	0.00				
309.55	0.29	0.29	0.00				
309.60	0.29	0.29	0.00				
309.65	0.29	0.29	0.00				
309.70	0.29	0.29	0.00				
309.75	0.29	0.29	0.00				
309.80	0.29	0.29	0.00				
309.85	0.29	0.29	0.00				
309.90	0.29	0.29	0.00				
309.95	0.29	0.29	0.00				
310.00	0.29	0.29	0.00				
310.05	0.29	0.29	0.00				
310.10	0.29	0.29	0.00				
310.15	0.29	0.29	0.00				
310.20	0.29	0.29	0.00				
310.25	0.29	0.29	0.00				
310.30	0.29	0.29	0.00				
310.35	0.29	0.29	0.00				
310.40	0.31	0.29	0.02				
310.45	0.35	0.29	0.06				
310.50	0.41	0.29	0.12				
310.55	0.49	0.29	0.20				
310.60	0.59	0.29	0.30				
310.65	0.70	0.29	0.42				
310.70	0.84	0.29	0.55				
310.75	0.99	0.29	0.71				
310.80	1.16	0.29	0.87				
310.85	1.34	0.29	1.05				
310.90	1.54	0.29	1.25				
310.95	1.74	0.29	1.46				
311.00	1.97	0.29	1.68				
311.05	2.20	0.29	1.91				
311.10	2.44	0.29	2.15				
311.15	2.69	0.29	2.41				
311.20	2.95	0.29	2.66				
311.25	3.21	0.29	2.93				
311.30	3.49	0.29	3.20				
311.35	3.76	0.29	3.47				
311.40	4.03	0.29	3.75				
311.45	4.31	0.29	4.03				
311.50	4.58	0.29	4.30				
311.55	4.86	0.29	4.57				

Post-Development Entire

Type III 24-hr 2 Year Rainfall=3.50"

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Summary for Pond P-A: Pond-A (NYSDEC I-2)

Inflow Area = 2.110 ac, 13.06% Impervious, Inflow Depth = 1.50" for 2 Year event
 Inflow = 3.43 cfs @ 12.12 hrs, Volume= 0.263 af
 Outflow = 0.49 cfs @ 12.82 hrs, Volume= 0.263 af, Atten= 86%, Lag= 42.4 min
 Primary = 0.42 cfs @ 12.82 hrs, Volume= 0.252 af
 Secondary = 0.07 cfs @ 12.82 hrs, Volume= 0.012 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 330.51' @ 12.82 hrs Surf.Area= 2,429 sf Storage= 4,277 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 101.9 min (947.9 - 846.0)

Volume	Invert	Avail.Storage	Storage Description
#1	328.00'	17,310 cf	Custom Stage Data (Prismatic) Listed below
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
328.00	813	0	0
330.00	2,047	2,860	2,860
332.00	3,559	5,606	8,466
334.00	5,285	8,844	17,310

Device	Routing	Invert	Outlet Devices
#1	Primary	328.00'	7.500 in/hr Exfiltration over Horizontal area
#2	Secondary	330.00'	2.0" Vert. Orifice/Grate C= 0.600
#3	Secondary	332.00'	2.10' W x 0.50' H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.42 cfs @ 12.82 hrs HW=330.51' (Free Discharge)
 ↑1=Exfiltration (Exfiltration Controls 0.42 cfs)

Secondary OutFlow Max=0.07 cfs @ 12.82 hrs HW=330.51' TW=310.29' (Dynamic Tailwater)
 ↑2=Orifice/Grate (Orifice Controls 0.07 cfs @ 3.13 fps)
 ↑3=Orifice/Grate (Controls 0.00 cfs)

Post-Development Entire

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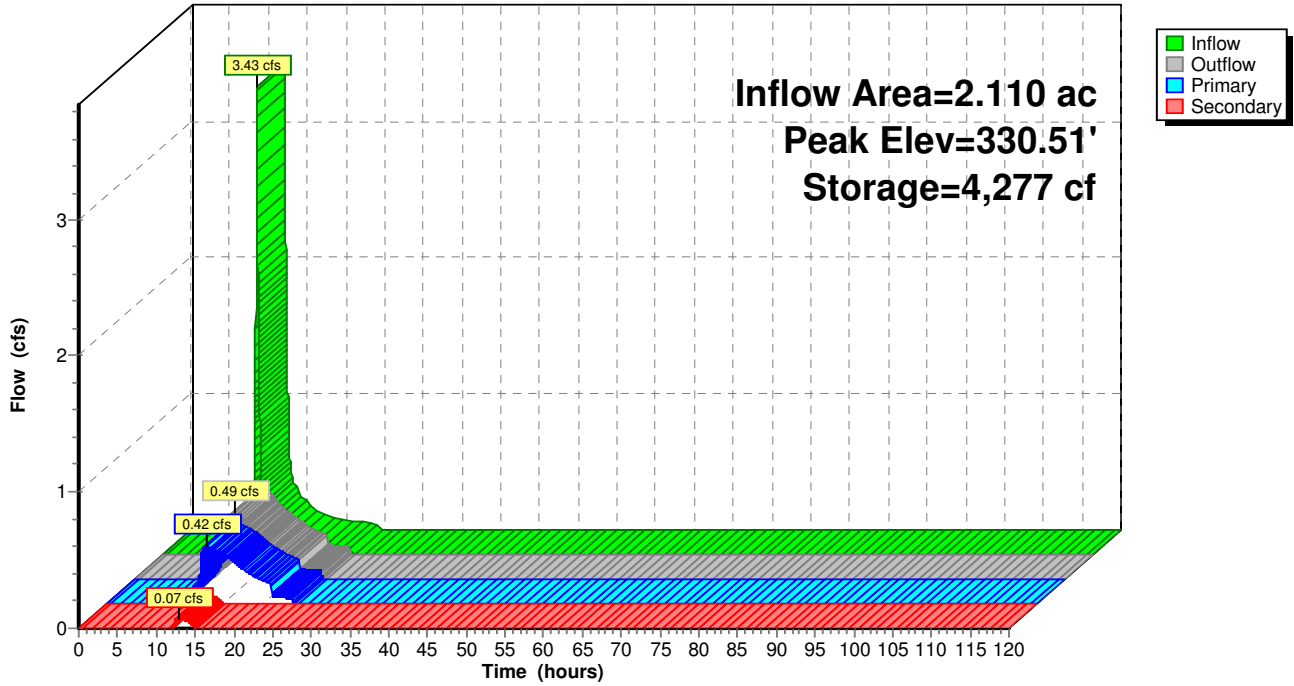
Type III 24-hr 2 Year Rainfall=3.50"

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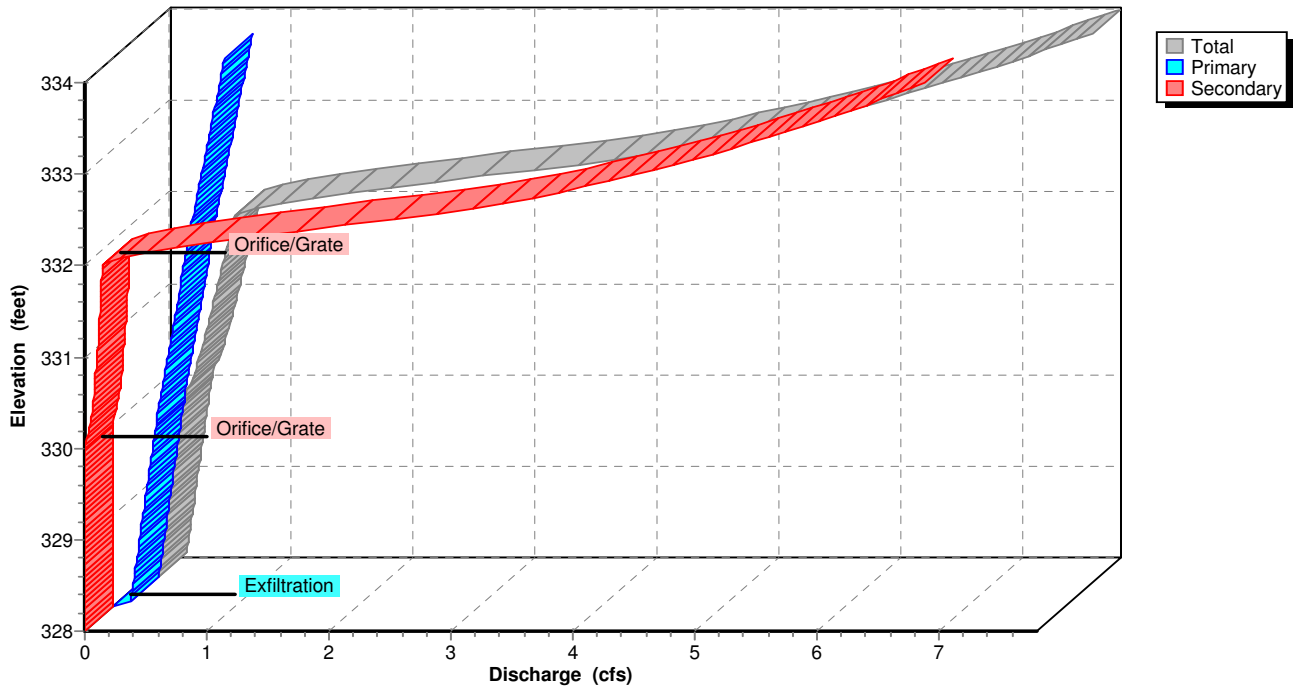
Pond P-A: Pond-A (NYSDEC I-2)

Hydrograph



Pond P-A: Pond-A (NYSDEC I-2)

Stage-Discharge



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Type III 24-hr 2 Year Rainfall=3.50"

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Hydrograph for Pond P-A: Pond-A (NYSDEC I-2)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	328.00	0.00	0.00	0.00
5.00	0.00	0	328.00	0.00	0.00	0.00
10.00	0.02	0	328.00	0.02	0.02	0.00
15.00	0.21	3,082	330.08	0.38	0.37	0.01
20.00	0.07	415	328.29	0.17	0.17	0.00
25.00	0.00	0	328.00	0.00	0.00	0.00
30.00	0.00	0	328.00	0.00	0.00	0.00
35.00	0.00	0	328.00	0.00	0.00	0.00
40.00	0.00	0	328.00	0.00	0.00	0.00
45.00	0.00	0	328.00	0.00	0.00	0.00
50.00	0.00	0	328.00	0.00	0.00	0.00
55.00	0.00	0	328.00	0.00	0.00	0.00
60.00	0.00	0	328.00	0.00	0.00	0.00
65.00	0.00	0	328.00	0.00	0.00	0.00
70.00	0.00	0	328.00	0.00	0.00	0.00
75.00	0.00	0	328.00	0.00	0.00	0.00
80.00	0.00	0	328.00	0.00	0.00	0.00
85.00	0.00	0	328.00	0.00	0.00	0.00
90.00	0.00	0	328.00	0.00	0.00	0.00
95.00	0.00	0	328.00	0.00	0.00	0.00
100.00	0.00	0	328.00	0.00	0.00	0.00
105.00	0.00	0	328.00	0.00	0.00	0.00
110.00	0.00	0	328.00	0.00	0.00	0.00
115.00	0.00	0	328.00	0.00	0.00	0.00
120.00	0.00	0	328.00	0.00	0.00	0.00

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Type III 24-hr 2 Year Rainfall=3.50"

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Stage-Discharge for Pond P-A: Pond-A (NYSDEC I-2)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
328.00	0.00	0.00	0.00	333.20	5.90	0.80	5.10
328.10	0.15	0.15	0.00	333.30	6.17	0.81	5.36
328.20	0.16	0.16	0.00	333.40	6.43	0.83	5.60
328.30	0.17	0.17	0.00	333.50	6.68	0.84	5.84
328.40	0.18	0.18	0.00	333.60	6.92	0.86	6.06
328.50	0.19	0.19	0.00	333.70	7.15	0.87	6.28
328.60	0.21	0.21	0.00	333.80	7.38	0.89	6.49
328.70	0.22	0.22	0.00	333.90	7.60	0.90	6.69
328.80	0.23	0.23	0.00	334.00	7.81	0.92	6.89
328.90	0.24	0.24	0.00				
329.00	0.25	0.25	0.00				
329.10	0.26	0.26	0.00				
329.20	0.27	0.27	0.00				
329.30	0.28	0.28	0.00				
329.40	0.29	0.29	0.00				
329.50	0.30	0.30	0.00				
329.60	0.31	0.31	0.00				
329.70	0.32	0.32	0.00				
329.80	0.33	0.33	0.00				
329.90	0.34	0.34	0.00				
330.00	0.36	0.36	0.00				
330.10	0.38	0.37	0.01				
330.20	0.42	0.38	0.04				
330.30	0.44	0.39	0.05				
330.40	0.47	0.41	0.06				
330.50	0.49	0.42	0.07				
330.60	0.51	0.43	0.08				
330.70	0.53	0.45	0.08				
330.80	0.55	0.46	0.09				
330.90	0.57	0.47	0.09				
331.00	0.59	0.49	0.10				
331.10	0.61	0.50	0.11				
331.20	0.62	0.51	0.11				
331.30	0.64	0.53	0.12				
331.40	0.66	0.54	0.12				
331.50	0.68	0.55	0.13				
331.60	0.69	0.57	0.13				
331.70	0.71	0.58	0.13				
331.80	0.73	0.59	0.14				
331.90	0.75	0.60	0.14				
332.00	0.76	0.62	0.15				
332.10	1.00	0.63	0.36				
332.20	1.40	0.65	0.76				
332.30	1.93	0.66	1.26				
332.40	2.54	0.68	1.87				
332.50	3.24	0.69	2.55				
332.60	3.79	0.71	3.09				
332.70	4.24	0.72	3.51				
332.80	4.63	0.74	3.89				
332.90	4.98	0.75	4.23				
333.00	5.30	0.77	4.54				
333.10	5.61	0.78	4.83				

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Type III 24-hr 2 Year Rainfall=3.50"

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Summary for Pond P-B: Pond-B (NYSDEC I-2)

Inflow Area = 4.199 ac, 26.44% Impervious, Inflow Depth = 1.64" for 2 Year event
 Inflow = 6.03 cfs @ 12.21 hrs, Volume= 0.573 af
 Outflow = 0.82 cfs @ 13.20 hrs, Volume= 0.573 af, Atten= 86%, Lag= 59.4 min
 Primary = 0.70 cfs @ 13.20 hrs, Volume= 0.544 af
 Secondary = 0.11 cfs @ 13.20 hrs, Volume= 0.029 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 385.51' @ 13.20 hrs Surf.Area= 4,594 sf Storage= 10,441 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 158.8 min (1,005.4 - 846.7)

Volume	Invert	Avail.Storage	Storage Description
#1	382.00'	25,197 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
382.00	1,476	0	0
384.00	3,129	4,605	4,605
386.00	5,067	8,196	12,801
388.00	7,329	12,396	25,197

Device	Routing	Invert	Outlet Devices
#1	Primary	382.00'	6.600 in/hr Exfiltration over Horizontal area
#2	Device 5	384.56'	2.0" Vert. Orifice/Grate C= 0.600
#3	Device 4	385.50'	4.00' W x 1.00' H Vert. Orifice/Grate C= 0.600
#4	Device 5	383.50'	15.0" x 65.0' long 15" Culvert CPP, square edge headwall, Ke= 0.500 Outlet Invert= 381.50' S= 0.0308 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior
#5	Secondary	381.40'	15.0" x 196.0' long 15" Culvert CPP, square edge headwall, Ke= 0.500 Outlet Invert= 358.50' S= 0.1168 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior

Primary OutFlow Max=0.70 cfs @ 13.20 hrs HW=385.51' (Free Discharge)
 ↑1=Exfiltration (Exfiltration Controls 0.70 cfs)

Secondary OutFlow Max=0.11 cfs @ 13.20 hrs HW=385.51' TW=297.15' (Dynamic Tailwater)
 ↑5=15" Culvert (Passes 0.11 cfs of 11.03 cfs potential flow)
 ↑2=Orifice/Grate (Orifice Controls 0.10 cfs @ 4.49 fps)
 ↑4=15" Culvert (Passes 0.02 cfs of 6.96 cfs potential flow)
 ↑3=Orifice/Grate (Orifice Controls 0.02 cfs @ 0.34 fps)

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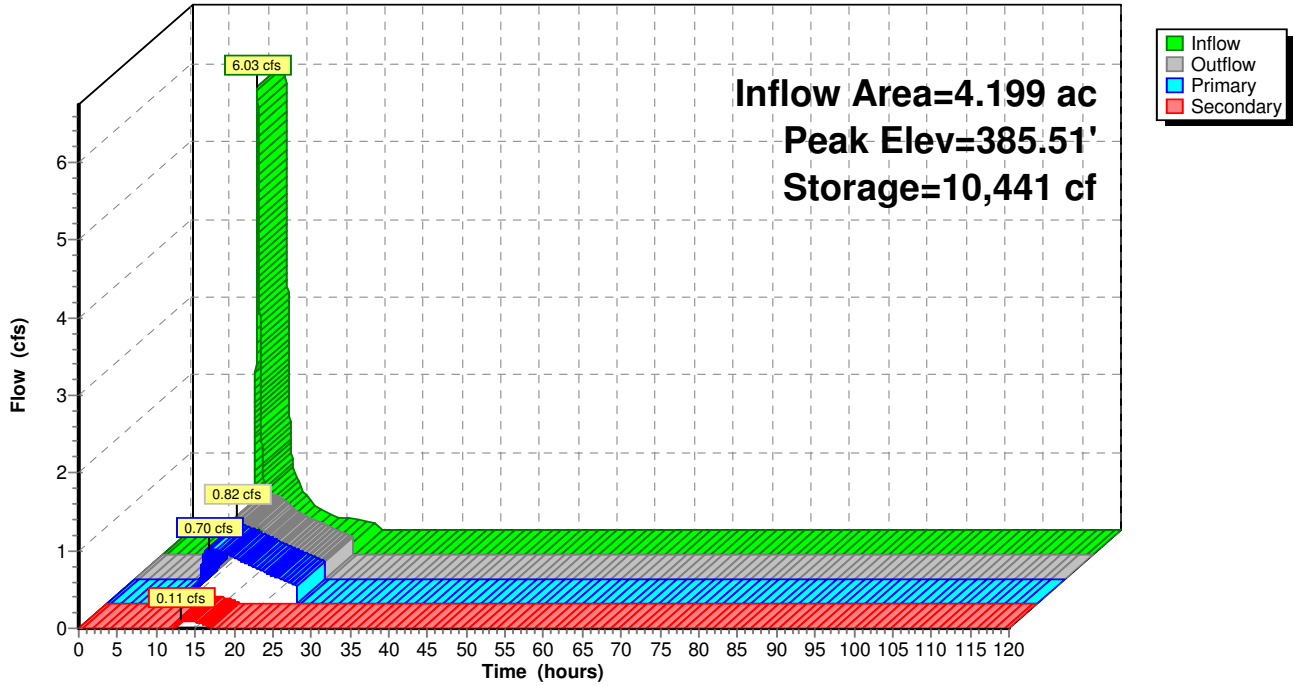
Type III 24-hr 2 Year Rainfall=3.50"

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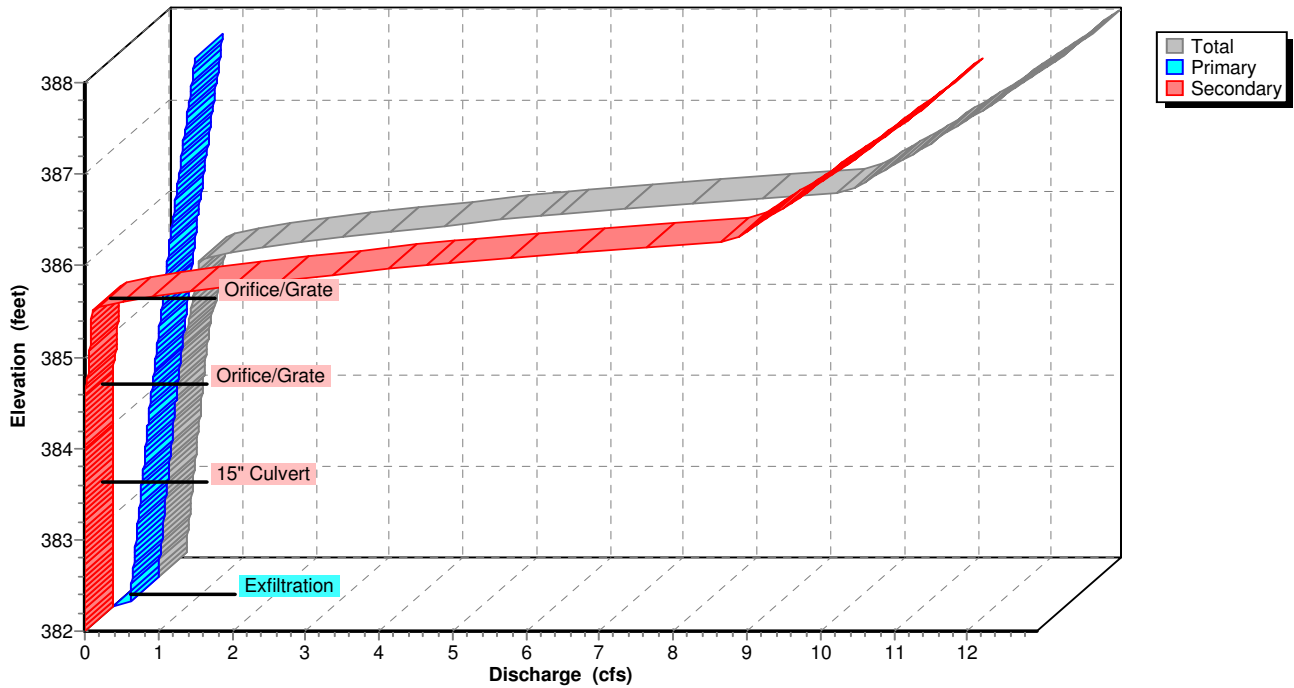
Pond P-B: Pond-B (NYSDEC I-2)

Hydrograph



Pond P-B: Pond-B (NYSDEC I-2)

Stage-Discharge



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Hydrograph for Pond P-B: Pond-B (NYSDEC I-2)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	382.00	0.00	0.00	0.00
5.00	0.00	0	382.00	0.00	0.00	0.00
10.00	0.06	0	382.00	0.06	0.06	0.00
15.00	0.44	9,195	385.23	0.74	0.66	0.08
20.00	0.15	3,417	383.60	0.43	0.43	0.00
25.00	0.00	0	382.00	0.00	0.00	0.00
30.00	0.00	0	382.00	0.00	0.00	0.00
35.00	0.00	0	382.00	0.00	0.00	0.00
40.00	0.00	0	382.00	0.00	0.00	0.00
45.00	0.00	0	382.00	0.00	0.00	0.00
50.00	0.00	0	382.00	0.00	0.00	0.00
55.00	0.00	0	382.00	0.00	0.00	0.00
60.00	0.00	0	382.00	0.00	0.00	0.00
65.00	0.00	0	382.00	0.00	0.00	0.00
70.00	0.00	0	382.00	0.00	0.00	0.00
75.00	0.00	0	382.00	0.00	0.00	0.00
80.00	0.00	0	382.00	0.00	0.00	0.00
85.00	0.00	0	382.00	0.00	0.00	0.00
90.00	0.00	0	382.00	0.00	0.00	0.00
95.00	0.00	0	382.00	0.00	0.00	0.00
100.00	0.00	0	382.00	0.00	0.00	0.00
105.00	0.00	0	382.00	0.00	0.00	0.00
110.00	0.00	0	382.00	0.00	0.00	0.00
115.00	0.00	0	382.00	0.00	0.00	0.00
120.00	0.00	0	382.00	0.00	0.00	0.00

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Type III 24-hr 2 Year Rainfall=3.50"

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Stage-Discharge for Pond P-B: Pond-B (NYSDEC I-2)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
382.00	0.00	0.00	0.00	387.20	11.51	0.98	10.53
382.10	0.24	0.24	0.00	387.30	11.70	1.00	10.70
382.20	0.25	0.25	0.00	387.40	11.88	1.02	10.87
382.30	0.26	0.26	0.00	387.50	12.07	1.03	11.03
382.40	0.28	0.28	0.00	387.60	12.25	1.05	11.20
382.50	0.29	0.29	0.00	387.70	12.42	1.07	11.36
382.60	0.30	0.30	0.00	387.80	12.60	1.09	11.51
382.70	0.31	0.31	0.00	387.90	12.77	1.10	11.67
382.80	0.33	0.33	0.00	388.00	12.94	1.12	11.82
382.90	0.34	0.34	0.00				
383.00	0.35	0.35	0.00				
383.10	0.36	0.36	0.00				
383.20	0.38	0.38	0.00				
383.30	0.39	0.39	0.00				
383.40	0.40	0.40	0.00				
383.50	0.41	0.41	0.00				
383.60	0.43	0.43	0.00				
383.70	0.44	0.44	0.00				
383.80	0.45	0.45	0.00				
383.90	0.47	0.47	0.00				
384.00	0.48	0.48	0.00				
384.10	0.49	0.49	0.00				
384.20	0.51	0.51	0.00				
384.30	0.52	0.52	0.00				
384.40	0.54	0.54	0.00				
384.50	0.55	0.55	0.00				
384.60	0.57	0.57	0.00				
384.70	0.61	0.58	0.02				
384.80	0.64	0.60	0.04				
384.90	0.66	0.61	0.05				
385.00	0.69	0.63	0.06				
385.10	0.71	0.64	0.07				
385.20	0.73	0.66	0.08				
385.30	0.76	0.67	0.09				
385.40	0.78	0.69	0.09				
385.50	0.80	0.70	0.10				
385.60	1.22	0.71	0.51				
385.70	1.99	0.73	1.26				
385.80	2.97	0.74	2.22				
385.90	4.13	0.76	3.37				
386.00	5.44	0.77	4.66				
386.10	6.89	0.79	6.09				
386.20	8.46	0.81	7.65				
386.30	9.68	0.83	8.85				
386.40	9.89	0.84	9.05				
386.50	10.11	0.86	9.25				
386.60	10.32	0.88	9.44				
386.70	10.53	0.90	9.63				
386.80	10.73	0.91	9.82				
386.90	10.93	0.93	10.00				
387.00	11.13	0.95	10.18				
387.10	11.32	0.96	10.36				

Post-Development Entire

Type III 24-hr 2 Year Rainfall=3.50"

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Summary for Pond P-C: Pond-C (NYSDEC I-2)

Inflow Area = 0.759 ac, 29.42% Impervious, Inflow Depth = 1.94" for 2 Year event
 Inflow = 1.53 cfs @ 12.13 hrs, Volume= 0.123 af
 Outflow = 0.34 cfs @ 12.60 hrs, Volume= 0.123 af, Atten= 77%, Lag= 27.9 min
 Primary = 0.17 cfs @ 12.60 hrs, Volume= 0.113 af
 Secondary = 0.17 cfs @ 12.60 hrs, Volume= 0.010 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 388.53' @ 12.60 hrs Surf.Area= 1,136 sf Storage= 2,015 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 110.6 min (939.5 - 828.8)

Volume	Invert	Avail.Storage	Storage Description
#1	386.00'	9,794 cf	Custom Stage Data (Prismatic) Listed below
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
386.00	380	0	0
388.00	937	1,317	1,317
390.00	1,683	2,620	3,937
392.00	2,714	4,397	8,334
392.50	3,126	1,460	9,794

Device	Routing	Invert	Outlet Devices
#1	Primary	386.00'	6.600 in/hr Exfiltration over Horizontal area
#2	Secondary	388.30'	0.50' W x 0.20' H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.17 cfs @ 12.60 hrs HW=388.53' (Free Discharge)
 ↑1=Exfiltration (Exfiltration Controls 0.17 cfs)

Secondary OutFlow Max=0.17 cfs @ 12.60 hrs HW=388.53' TW=0.00' (Dynamic Tailwater)
 ↑2=Orifice/Grate (Orifice Controls 0.17 cfs @ 1.71 fps)

Post-Development Entire

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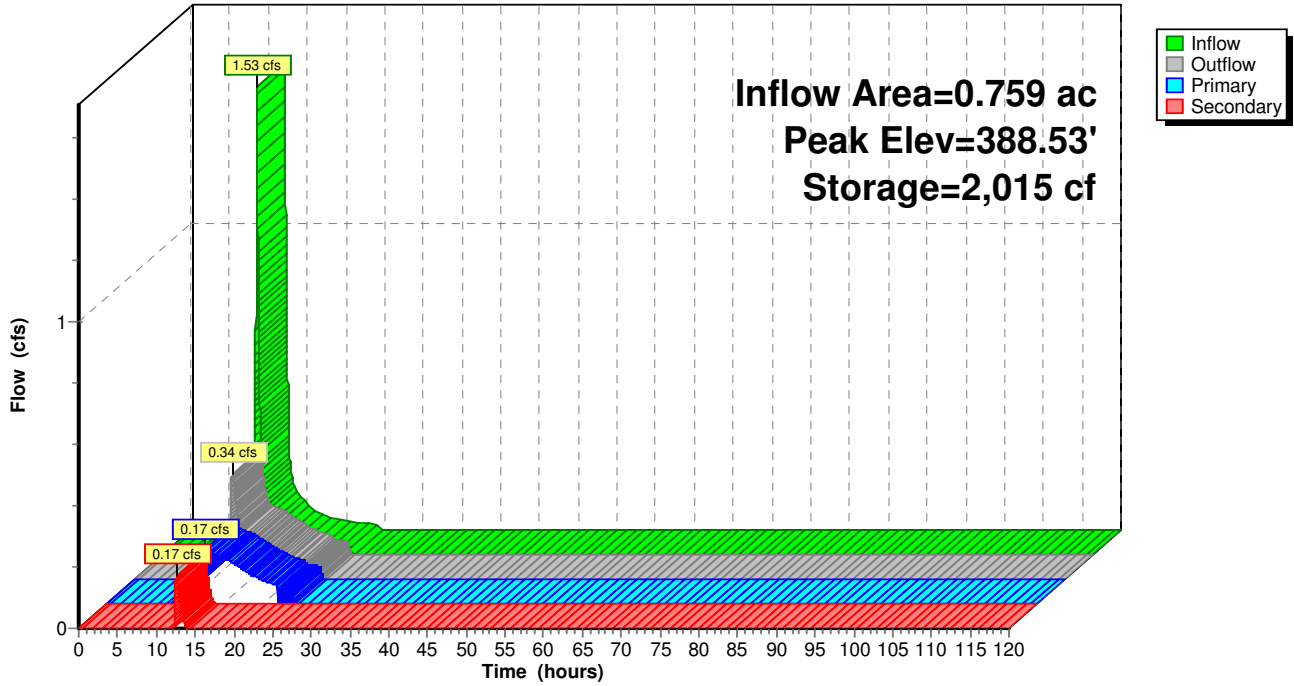
Type III 24-hr 2 Year Rainfall=3.50"

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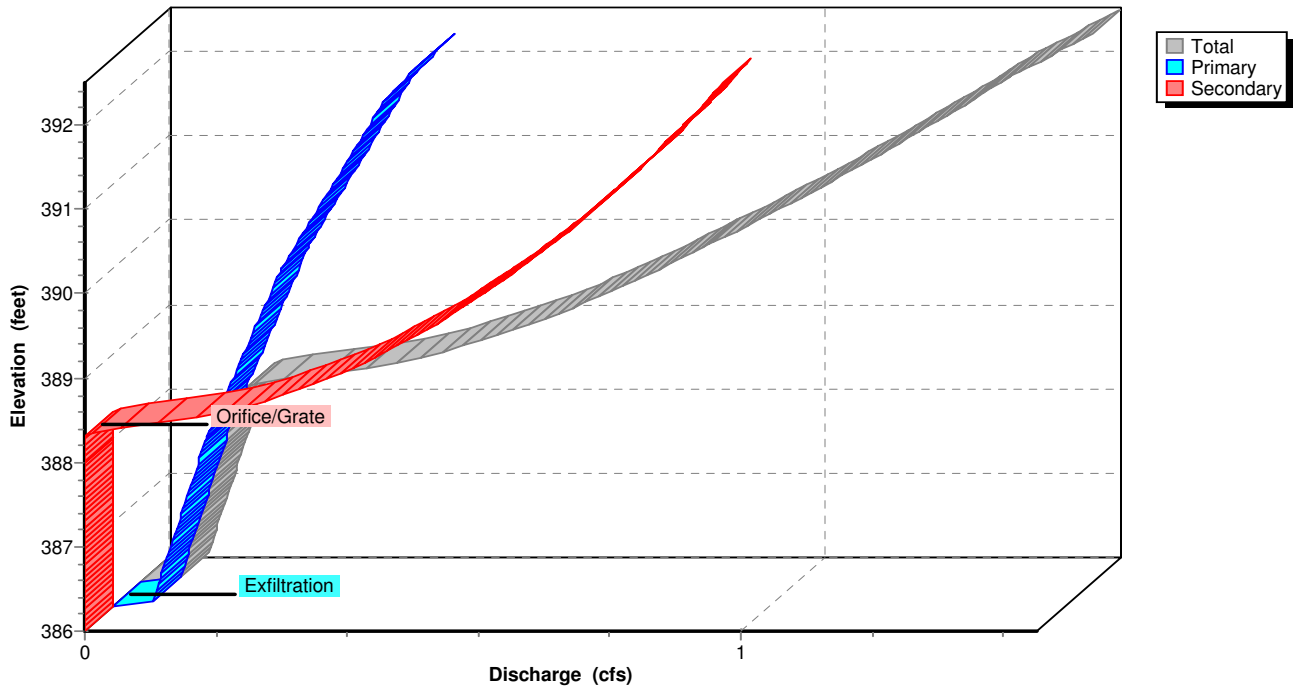
Pond P-C: Pond-C (NYSDEC I-2)

Hydrograph



Pond P-C: Pond-C (NYSDEC I-2)

Stage-Discharge



Post-Development Entire*Type III 24-hr 2 Year Rainfall=3.50"*

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Hydrograph for Pond P-C: Pond-C (NYSDEC I-2)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	386.00	0.00	0.00	0.00
5.00	0.00	0	386.00	0.00	0.00	0.00
10.00	0.03	0	386.00	0.03	0.03	0.00
15.00	0.09	1,501	388.14	0.15	0.15	0.00
20.00	0.03	310	386.47	0.08	0.08	0.00
25.00	0.00	0	386.00	0.00	0.00	0.00
30.00	0.00	0	386.00	0.00	0.00	0.00
35.00	0.00	0	386.00	0.00	0.00	0.00
40.00	0.00	0	386.00	0.00	0.00	0.00
45.00	0.00	0	386.00	0.00	0.00	0.00
50.00	0.00	0	386.00	0.00	0.00	0.00
55.00	0.00	0	386.00	0.00	0.00	0.00
60.00	0.00	0	386.00	0.00	0.00	0.00
65.00	0.00	0	386.00	0.00	0.00	0.00
70.00	0.00	0	386.00	0.00	0.00	0.00
75.00	0.00	0	386.00	0.00	0.00	0.00
80.00	0.00	0	386.00	0.00	0.00	0.00
85.00	0.00	0	386.00	0.00	0.00	0.00
90.00	0.00	0	386.00	0.00	0.00	0.00
95.00	0.00	0	386.00	0.00	0.00	0.00
100.00	0.00	0	386.00	0.00	0.00	0.00
105.00	0.00	0	386.00	0.00	0.00	0.00
110.00	0.00	0	386.00	0.00	0.00	0.00
115.00	0.00	0	386.00	0.00	0.00	0.00
120.00	0.00	0	386.00	0.00	0.00	0.00

Post-Development Entire

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Type III 24-hr 2 Year Rainfall=3.50"

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Stage-Discharge for Pond P-C: Pond-C (NYSDEC I-2)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
386.00	0.00	0.00	0.00	391.20	1.16	0.35	0.81
386.10	0.06	0.06	0.00	391.30	1.18	0.36	0.82
386.20	0.07	0.07	0.00	391.40	1.20	0.37	0.83
386.30	0.07	0.07	0.00	391.50	1.22	0.38	0.85
386.40	0.08	0.08	0.00	391.60	1.24	0.38	0.86
386.50	0.08	0.08	0.00	391.70	1.27	0.39	0.87
386.60	0.08	0.08	0.00	391.80	1.29	0.40	0.89
386.70	0.09	0.09	0.00	391.90	1.31	0.41	0.90
386.80	0.09	0.09	0.00	392.00	1.33	0.41	0.91
386.90	0.10	0.10	0.00	392.10	1.35	0.43	0.93
387.00	0.10	0.10	0.00	392.20	1.38	0.44	0.94
387.10	0.10	0.10	0.00	392.30	1.40	0.45	0.95
387.20	0.11	0.11	0.00	392.40	1.43	0.46	0.96
387.30	0.11	0.11	0.00	392.50	1.45	0.48	0.97
387.40	0.12	0.12	0.00				
387.50	0.12	0.12	0.00				
387.60	0.13	0.13	0.00				
387.70	0.13	0.13	0.00				
387.80	0.13	0.13	0.00				
387.90	0.14	0.14	0.00				
388.00	0.14	0.14	0.00				
388.10	0.15	0.15	0.00				
388.20	0.15	0.15	0.00				
388.30	0.16	0.16	0.00				
388.40	0.22	0.17	0.05				
388.50	0.32	0.17	0.14				
388.60	0.39	0.18	0.21				
388.70	0.45	0.18	0.26				
388.80	0.49	0.19	0.30				
388.90	0.53	0.19	0.34				
389.00	0.57	0.20	0.37				
389.10	0.61	0.21	0.40				
389.20	0.64	0.21	0.43				
389.30	0.67	0.22	0.46				
389.40	0.70	0.22	0.48				
389.50	0.73	0.23	0.50				
389.60	0.76	0.23	0.53				
389.70	0.79	0.24	0.55				
389.80	0.82	0.25	0.57				
389.90	0.84	0.25	0.59				
390.00	0.87	0.26	0.61				
390.10	0.89	0.27	0.63				
390.20	0.92	0.27	0.65				
390.30	0.94	0.28	0.66				
390.40	0.97	0.29	0.68				
390.50	0.99	0.30	0.70				
390.60	1.02	0.30	0.71				
390.70	1.04	0.31	0.73				
390.80	1.07	0.32	0.75				
390.90	1.09	0.33	0.76				
391.00	1.11	0.34	0.78				
391.10	1.13	0.34	0.79				

Post-Development Entire

Type III 24-hr 2 Year Rainfall=3.50"

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Summary for Pond P-D: Pond-D (NYSDEC I-2)

Inflow Area = 2.990 ac, 17.19% Impervious, Inflow Depth = 1.50" for 2 Year event
 Inflow = 5.02 cfs @ 12.10 hrs, Volume= 0.373 af
 Outflow = 1.16 cfs @ 12.55 hrs, Volume= 0.373 af, Atten= 77%, Lag= 26.5 min
 Primary = 0.58 cfs @ 12.55 hrs, Volume= 0.349 af
 Secondary = 0.59 cfs @ 12.55 hrs, Volume= 0.024 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 360.67' @ 12.55 hrs Surf.Area= 3,326 sf Storage= 5,895 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 105.2 min (950.4 - 845.2)

Volume	Invert	Avail.Storage	Storage Description
#1	358.00'	15,916 cf	Custom Stage Data (Prismatic) Listed below

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
358.00	781	0	0
360.00	2,650	3,431	3,431
362.00	4,654	7,304	10,735
363.00	5,707	5,181	15,916

Device	Routing	Invert	Outlet Devices
#1	Primary	358.00'	7.500 in/hr Exfiltration over Horizontal area
#2	Secondary	360.50'	2.50' W x 0.33' H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.58 cfs @ 12.55 hrs HW=360.67' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.58 cfs)

Secondary OutFlow Max=0.59 cfs @ 12.55 hrs HW=360.67' TW=0.00' (Dynamic Tailwater)

↑**2=Orifice/Grate** (Orifice Controls 0.59 cfs @ 1.34 fps)

Post-Development Entire

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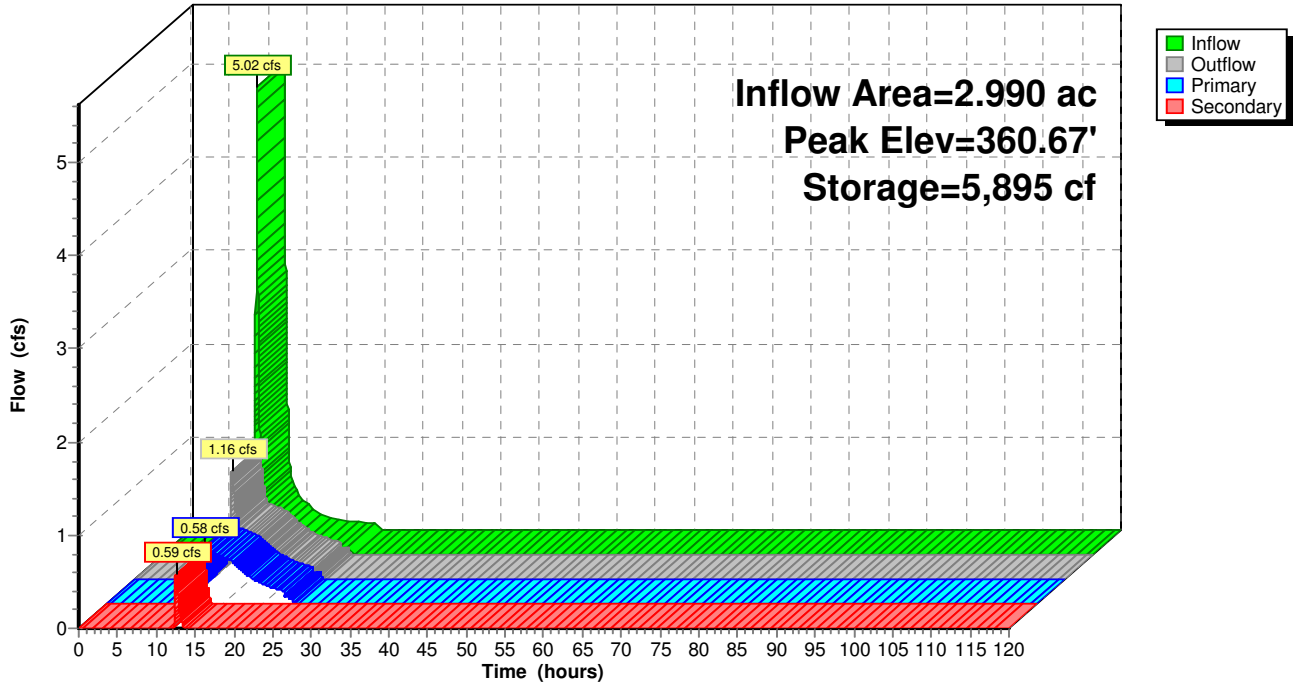
Type III 24-hr 2 Year Rainfall=3.50"

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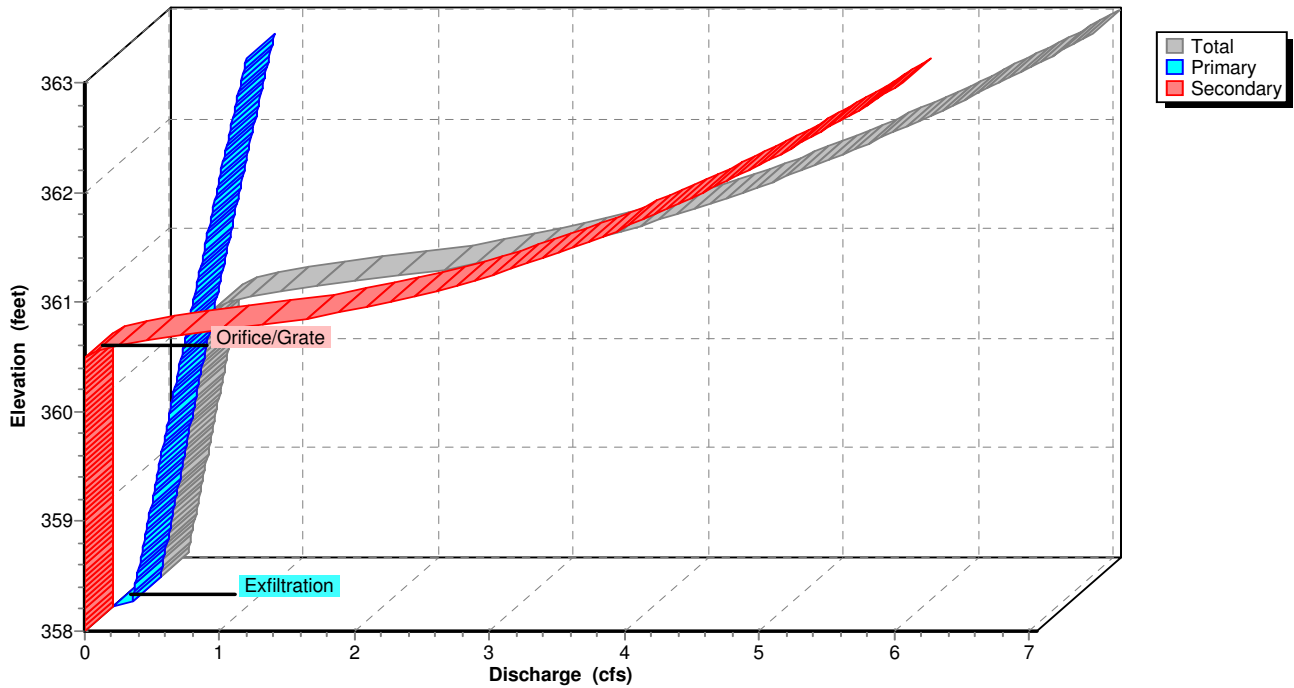
Pond P-D: Pond-D (NYSDEC I-2)

Hydrograph



Pond P-D: Pond-D (NYSDEC I-2)

Stage-Discharge



Post-Development Entire*Type III 24-hr 2 Year Rainfall=3.50"*

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Hydrograph for Pond P-D: Pond-D (NYSDEC I-2)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	358.00	0.00	0.00	0.00
5.00	0.00	0	358.00	0.00	0.00	0.00
10.00	0.03	0	358.00	0.03	0.03	0.00
15.00	0.29	4,381	360.26	0.51	0.51	0.00
20.00	0.10	858	358.50	0.22	0.22	0.00
25.00	0.00	0	358.00	0.00	0.00	0.00
30.00	0.00	0	358.00	0.00	0.00	0.00
35.00	0.00	0	358.00	0.00	0.00	0.00
40.00	0.00	0	358.00	0.00	0.00	0.00
45.00	0.00	0	358.00	0.00	0.00	0.00
50.00	0.00	0	358.00	0.00	0.00	0.00
55.00	0.00	0	358.00	0.00	0.00	0.00
60.00	0.00	0	358.00	0.00	0.00	0.00
65.00	0.00	0	358.00	0.00	0.00	0.00
70.00	0.00	0	358.00	0.00	0.00	0.00
75.00	0.00	0	358.00	0.00	0.00	0.00
80.00	0.00	0	358.00	0.00	0.00	0.00
85.00	0.00	0	358.00	0.00	0.00	0.00
90.00	0.00	0	358.00	0.00	0.00	0.00
95.00	0.00	0	358.00	0.00	0.00	0.00
100.00	0.00	0	358.00	0.00	0.00	0.00
105.00	0.00	0	358.00	0.00	0.00	0.00
110.00	0.00	0	358.00	0.00	0.00	0.00
115.00	0.00	0	358.00	0.00	0.00	0.00
120.00	0.00	0	358.00	0.00	0.00	0.00

Post-Development Entire

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Type III 24-hr 2 Year Rainfall=3.50"

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Stage-Discharge for Pond P-D: Pond-D (NYSDEC I-2)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
358.00	0.00	0.00	0.00	360.60	0.82	0.56	0.25
358.05	0.14	0.14	0.00	360.65	1.04	0.57	0.47
358.10	0.15	0.15	0.00	360.70	1.30	0.58	0.72
358.15	0.16	0.16	0.00	360.75	1.59	0.59	1.00
358.20	0.17	0.17	0.00	360.80	1.92	0.60	1.32
358.25	0.18	0.18	0.00	360.85	2.25	0.61	1.64
358.30	0.18	0.18	0.00	360.90	2.50	0.62	1.88
358.35	0.19	0.19	0.00	360.95	2.71	0.63	2.09
358.40	0.20	0.20	0.00	361.00	2.91	0.63	2.27
358.45	0.21	0.21	0.00	361.05	3.09	0.64	2.45
358.50	0.22	0.22	0.00	361.10	3.26	0.65	2.60
358.55	0.22	0.22	0.00	361.15	3.41	0.66	2.75
358.60	0.23	0.23	0.00	361.20	3.56	0.67	2.89
358.65	0.24	0.24	0.00	361.25	3.71	0.68	3.03
358.70	0.25	0.25	0.00	361.30	3.84	0.69	3.16
358.75	0.26	0.26	0.00	361.35	3.97	0.69	3.28
358.80	0.27	0.27	0.00	361.40	4.10	0.70	3.40
358.85	0.27	0.27	0.00	361.45	4.23	0.71	3.51
358.90	0.28	0.28	0.00	361.50	4.34	0.72	3.62
358.95	0.29	0.29	0.00	361.55	4.46	0.73	3.73
359.00	0.30	0.30	0.00	361.60	4.57	0.74	3.84
359.05	0.31	0.31	0.00	361.65	4.68	0.75	3.94
359.10	0.31	0.31	0.00	361.70	4.79	0.76	4.04
359.15	0.32	0.32	0.00	361.75	4.90	0.76	4.13
359.20	0.33	0.33	0.00	361.80	5.00	0.77	4.23
359.25	0.34	0.34	0.00	361.85	5.10	0.78	4.32
359.30	0.35	0.35	0.00	361.90	5.20	0.79	4.41
359.35	0.35	0.35	0.00	361.95	5.30	0.80	4.50
359.40	0.36	0.36	0.00	362.00	5.39	0.81	4.59
359.45	0.37	0.37	0.00	362.05	5.49	0.82	4.67
359.50	0.38	0.38	0.00	362.10	5.58	0.83	4.76
359.55	0.39	0.39	0.00	362.15	5.67	0.84	4.84
359.60	0.40	0.40	0.00	362.20	5.76	0.84	4.92
359.65	0.40	0.40	0.00	362.25	5.85	0.85	5.00
359.70	0.41	0.41	0.00	362.30	5.94	0.86	5.08
359.75	0.42	0.42	0.00	362.35	6.03	0.87	5.15
359.80	0.43	0.43	0.00	362.40	6.11	0.88	5.23
359.85	0.44	0.44	0.00	362.45	6.20	0.89	5.31
359.90	0.44	0.44	0.00	362.50	6.28	0.90	5.38
359.95	0.45	0.45	0.00	362.55	6.36	0.91	5.45
360.00	0.46	0.46	0.00	362.60	6.44	0.92	5.52
360.05	0.47	0.47	0.00	362.65	6.52	0.93	5.60
360.10	0.48	0.48	0.00	362.70	6.60	0.94	5.67
360.15	0.49	0.49	0.00	362.75	6.68	0.95	5.73
360.20	0.49	0.49	0.00	362.80	6.76	0.95	5.80
360.25	0.50	0.50	0.00	362.85	6.83	0.96	5.87
360.30	0.51	0.51	0.00	362.90	6.91	0.97	5.94
360.35	0.52	0.52	0.00	362.95	6.99	0.98	6.00
360.40	0.53	0.53	0.00	363.00	7.06	0.99	6.07
360.45	0.54	0.54	0.00				
360.50	0.55	0.55	0.00				
360.55	0.65	0.56	0.09				

Post-Development Entire

Type III 24-hr 2 Year Rainfall=3.50"

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Summary for Pond P-E: Pond-E (NYSDEC I-2)

Inflow Area = 1.785 ac, 15.96% Impervious, Inflow Depth = 1.50" for 2 Year event
 Inflow = 2.90 cfs @ 12.12 hrs, Volume= 0.223 af
 Outflow = 0.42 cfs @ 12.81 hrs, Volume= 0.223 af, Atten= 86%, Lag= 41.7 min
 Primary = 0.27 cfs @ 12.81 hrs, Volume= 0.214 af
 Secondary = 0.15 cfs @ 12.81 hrs, Volume= 0.008 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 310.07' @ 12.81 hrs Surf.Area= 2,527 sf Storage= 3,820 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 148.7 min (994.7 - 846.0)

Volume	Invert	Avail.Storage	Storage Description
#1	308.00'	10,114 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
308.00	1,167	0	0
310.00	2,472	3,639	3,639
312.00	4,003	6,475	10,114

Device	Routing	Invert	Outlet Devices
#1	Primary	308.00'	4.600 in/hr Exfiltration over Horizontal area
#2	Secondary	310.01'	3.00' W x 0.50' H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.27 cfs @ 12.81 hrs HW=310.07' (Free Discharge)
 ↑1=Exfiltration (Exfiltration Controls 0.27 cfs)

Secondary OutFlow Max=0.15 cfs @ 12.81 hrs HW=310.07' TW=296.58' (Dynamic Tailwater)
 ↑2=Orifice/Grate (Orifice Controls 0.15 cfs @ 0.80 fps)

Post-Development Entire

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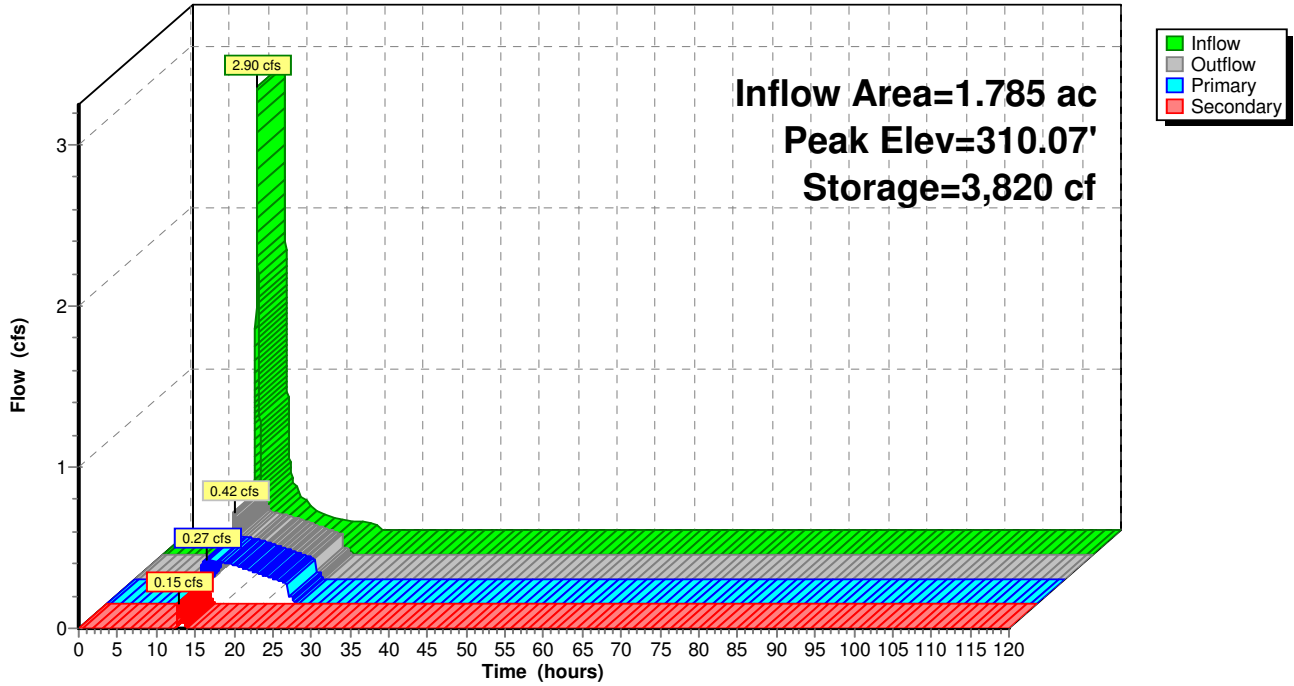
Type III 24-hr 2 Year Rainfall=3.50"

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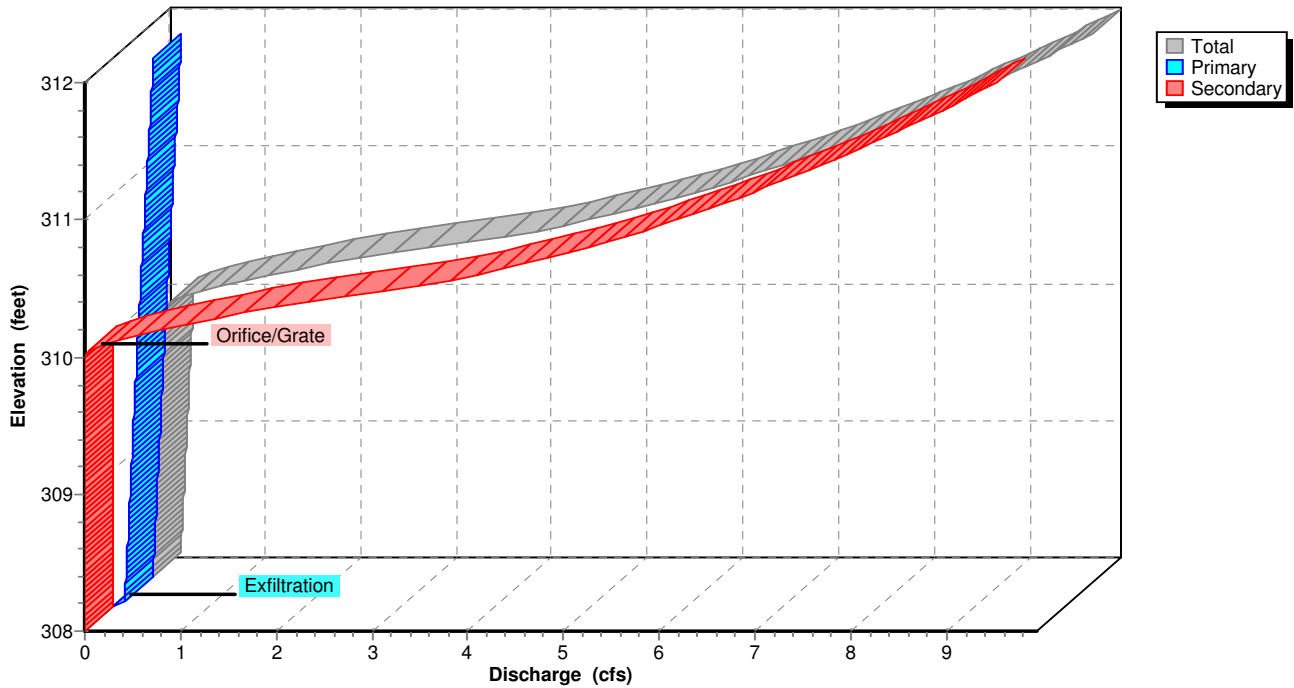
Pond P-E: Pond-E (NYSDEC I-2)

Hydrograph



Pond P-E: Pond-E (NYSDEC I-2)

Stage-Discharge



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Hydrograph for Pond P-E: Pond-E (NYSDEC I-2)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	308.00	0.00	0.00	0.00
5.00	0.00	0	308.00	0.00	0.00	0.00
10.00	0.02	0	308.00	0.02	0.02	0.00
15.00	0.17	3,438	309.92	0.26	0.26	0.00
20.00	0.06	1,176	308.82	0.18	0.18	0.00
25.00	0.00	0	308.00	0.00	0.00	0.00
30.00	0.00	0	308.00	0.00	0.00	0.00
35.00	0.00	0	308.00	0.00	0.00	0.00
40.00	0.00	0	308.00	0.00	0.00	0.00
45.00	0.00	0	308.00	0.00	0.00	0.00
50.00	0.00	0	308.00	0.00	0.00	0.00
55.00	0.00	0	308.00	0.00	0.00	0.00
60.00	0.00	0	308.00	0.00	0.00	0.00
65.00	0.00	0	308.00	0.00	0.00	0.00
70.00	0.00	0	308.00	0.00	0.00	0.00
75.00	0.00	0	308.00	0.00	0.00	0.00
80.00	0.00	0	308.00	0.00	0.00	0.00
85.00	0.00	0	308.00	0.00	0.00	0.00
90.00	0.00	0	308.00	0.00	0.00	0.00
95.00	0.00	0	308.00	0.00	0.00	0.00
100.00	0.00	0	308.00	0.00	0.00	0.00
105.00	0.00	0	308.00	0.00	0.00	0.00
110.00	0.00	0	308.00	0.00	0.00	0.00
115.00	0.00	0	308.00	0.00	0.00	0.00
120.00	0.00	0	308.00	0.00	0.00	0.00

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Stage-Discharge for Pond P-E: Pond-E (NYSDEC I-2)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
308.00	0.00	0.00	0.00	310.60	4.42	0.31	4.10
308.05	0.13	0.13	0.00	310.65	4.74	0.32	4.43
308.10	0.13	0.13	0.00	310.70	5.04	0.32	4.72
308.15	0.13	0.13	0.00	310.75	5.32	0.32	5.00
308.20	0.14	0.14	0.00	310.80	5.59	0.33	5.26
308.25	0.14	0.14	0.00	310.85	5.84	0.33	5.50
308.30	0.15	0.15	0.00	310.90	6.08	0.34	5.74
308.35	0.15	0.15	0.00	310.95	6.31	0.34	5.97
308.40	0.15	0.15	0.00	311.00	6.53	0.34	6.18
308.45	0.16	0.16	0.00	311.05	6.74	0.35	6.39
308.50	0.16	0.16	0.00	311.10	6.95	0.35	6.59
308.55	0.16	0.16	0.00	311.15	7.15	0.36	6.79
308.60	0.17	0.17	0.00	311.20	7.34	0.36	6.98
308.65	0.17	0.17	0.00	311.25	7.53	0.37	7.17
308.70	0.17	0.17	0.00	311.30	7.72	0.37	7.35
308.75	0.18	0.18	0.00	311.35	7.90	0.37	7.52
308.80	0.18	0.18	0.00	311.40	8.07	0.38	7.70
308.85	0.18	0.18	0.00	311.45	8.25	0.38	7.86
308.90	0.19	0.19	0.00	311.50	8.41	0.39	8.03
308.95	0.19	0.19	0.00	311.55	8.58	0.39	8.19
309.00	0.19	0.19	0.00	311.60	8.74	0.39	8.35
309.05	0.20	0.20	0.00	311.65	8.90	0.40	8.50
309.10	0.20	0.20	0.00	311.70	9.06	0.40	8.66
309.15	0.20	0.20	0.00	311.75	9.21	0.41	8.81
309.20	0.21	0.21	0.00	311.80	9.36	0.41	8.95
309.25	0.21	0.21	0.00	311.85	9.51	0.41	9.10
309.30	0.21	0.21	0.00	311.90	9.66	0.42	9.24
309.35	0.22	0.22	0.00	311.95	9.80	0.42	9.38
309.40	0.22	0.22	0.00	312.00	9.95	0.43	9.52
309.45	0.23	0.23	0.00				
309.50	0.23	0.23	0.00				
309.55	0.23	0.23	0.00				
309.60	0.24	0.24	0.00				
309.65	0.24	0.24	0.00				
309.70	0.24	0.24	0.00				
309.75	0.25	0.25	0.00				
309.80	0.25	0.25	0.00				
309.85	0.25	0.25	0.00				
309.90	0.26	0.26	0.00				
309.95	0.26	0.26	0.00				
310.00	0.26	0.26	0.00				
310.05	0.34	0.27	0.08				
310.10	0.53	0.27	0.26				
310.15	0.78	0.28	0.50				
310.20	1.08	0.28	0.80				
310.25	1.42	0.28	1.13				
310.30	1.79	0.29	1.50				
310.35	2.20	0.29	1.91				
310.40	2.64	0.30	2.35				
310.45	3.11	0.30	2.81				
310.50	3.61	0.30	3.30				
310.55	4.05	0.31	3.74				

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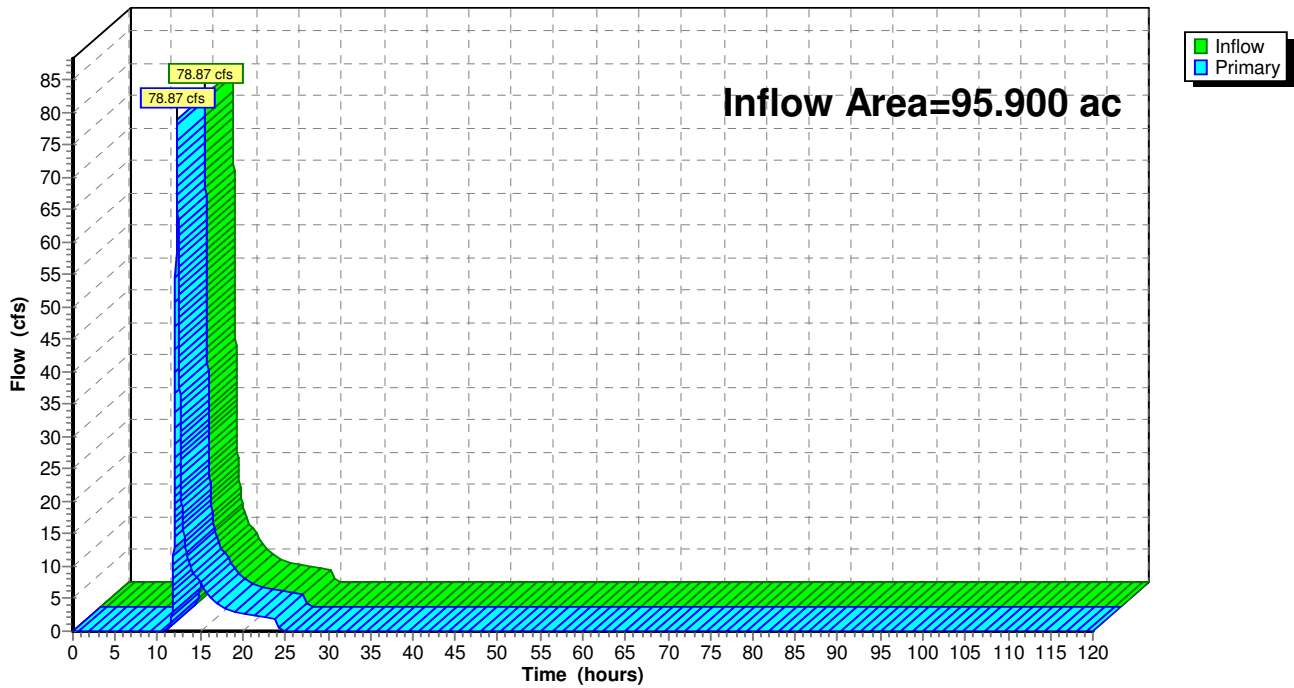
Summary for Link DP-1: DP-1

Inflow Area = 95.900 ac, 25.00% Impervious, Inflow Depth = 1.01" for 2 Year event
Inflow = 78.87 cfs @ 12.22 hrs, Volume= 8.056 af
Primary = 78.87 cfs @ 12.22 hrs, Volume= 8.056 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link DP-1: DP-1

Hydrograph



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Hydrograph for Link DP-1: DP-1

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	114.00	0.00	0.00	0.00
12.00	23.43	0.00	23.43	116.00	0.00	0.00	0.00
14.00	9.70	0.00	9.70	118.00	0.00	0.00	0.00
16.00	5.48	0.00	5.48	120.00	0.00	0.00	0.00
18.00	3.40	0.00	3.40				
20.00	2.70	0.00	2.70				
22.00	2.27	0.00	2.27				
24.00	1.83	0.00	1.83				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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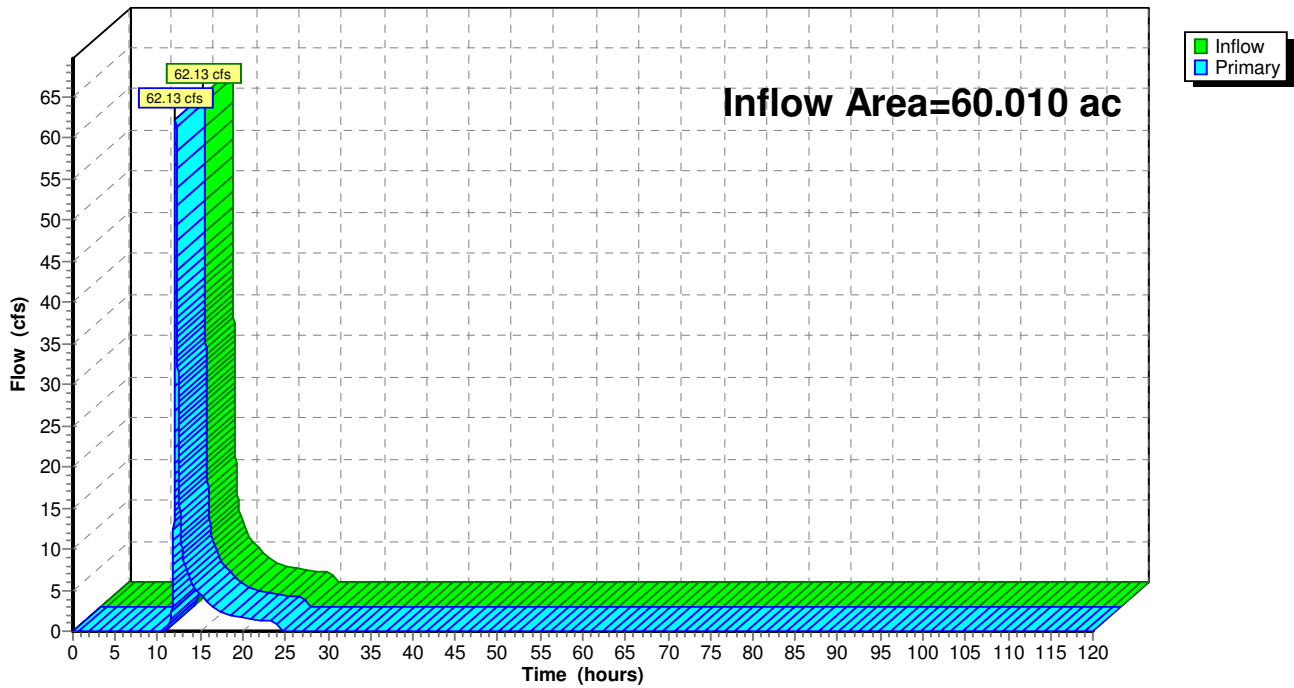
Summary for Link DP-2: DP-2

Inflow Area = 60.010 ac, 25.00% Impervious, Inflow Depth = 1.01" for 2 Year event
Inflow = 62.13 cfs @ 12.12 hrs, Volume= 5.051 af
Primary = 62.13 cfs @ 12.12 hrs, Volume= 5.051 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link DP-2: DP-2

Hydrograph



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Hydrograph for Link DP-2: DP-2

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	114.00	0.00	0.00	0.00
12.00	26.89	0.00	26.89	116.00	0.00	0.00	0.00
14.00	5.80	0.00	5.80	118.00	0.00	0.00	0.00
16.00	3.28	0.00	3.28	120.00	0.00	0.00	0.00
18.00	2.06	0.00	2.06				
20.00	1.67	0.00	1.67				
22.00	1.40	0.00	1.40				
24.00	1.13	0.00	1.13				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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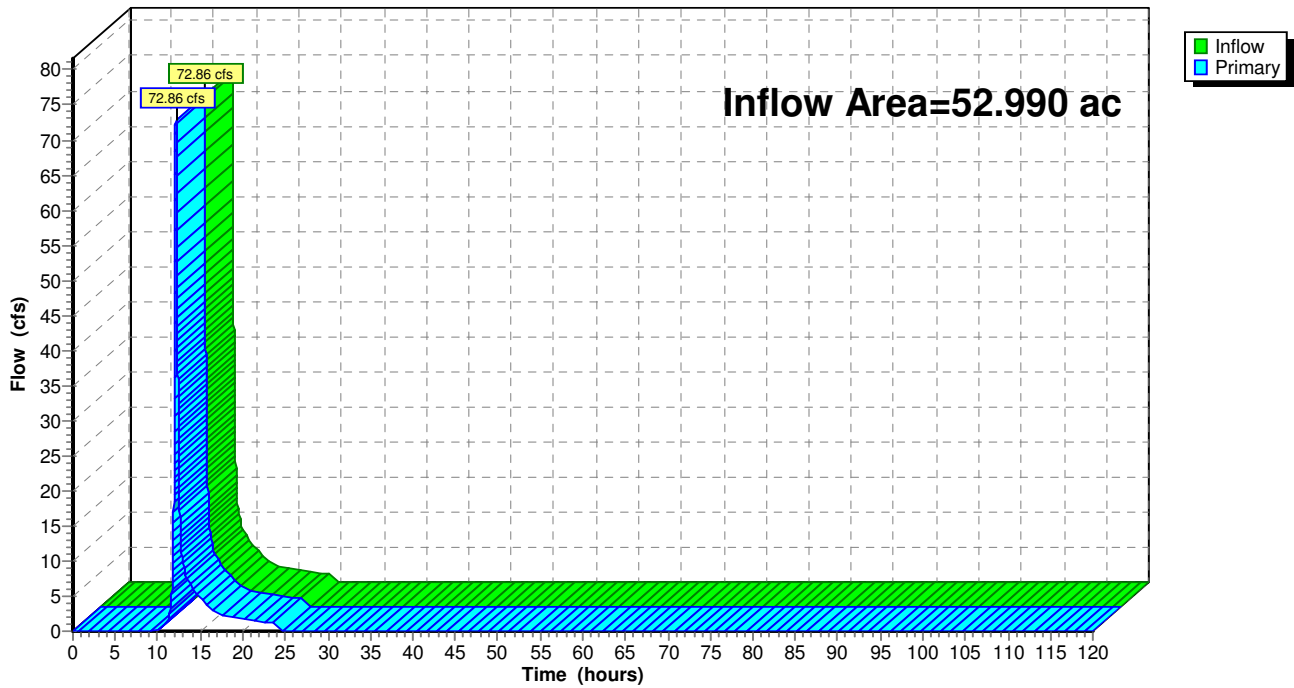
Summary for Link DP-3: DP-3

Inflow Area = 52.990 ac, 38.00% Impervious, Inflow Depth = 1.30" for 2 Year event
Inflow = 72.86 cfs @ 12.12 hrs, Volume= 5.749 af
Primary = 72.86 cfs @ 12.12 hrs, Volume= 5.749 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link DP-3: DP-3

Hydrograph



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Hydrograph for Link DP-3: DP-3

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	114.00	0.00	0.00	0.00
12.00	33.23	0.00	33.23	116.00	0.00	0.00	0.00
14.00	6.13	0.00	6.13	118.00	0.00	0.00	0.00
16.00	3.41	0.00	3.41	120.00	0.00	0.00	0.00
18.00	2.12	0.00	2.12				
20.00	1.71	0.00	1.71				
22.00	1.43	0.00	1.43				
24.00	1.14	0.00	1.14				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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Type III 24-hr 2 Year Rainfall=3.50"

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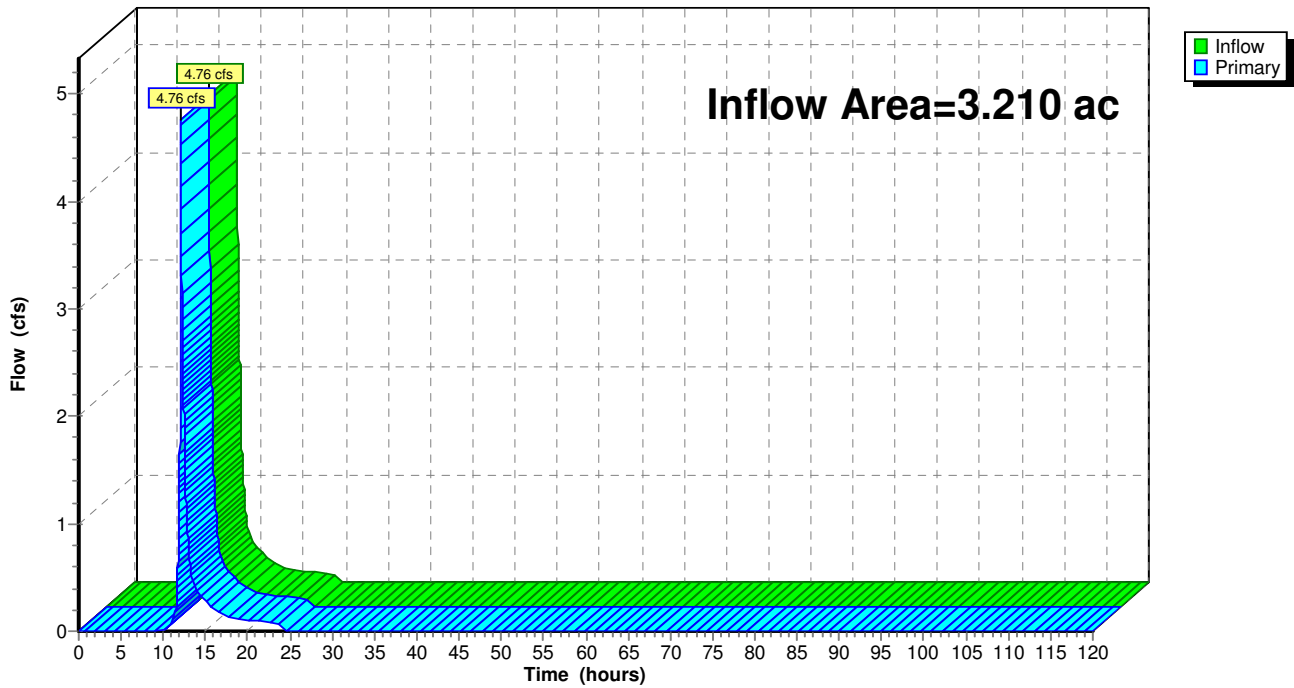
Summary for Link DP-4: DP-4

Inflow Area = 3.210 ac, 38.00% Impervious, Inflow Depth = 1.39" for 2 Year event
Inflow = 4.76 cfs @ 12.09 hrs, Volume= 0.372 af
Primary = 4.76 cfs @ 12.09 hrs, Volume= 0.372 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link DP-4: DP-4

Hydrograph



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Hydrograph for Link DP-4: DP-4

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	114.00	0.00	0.00	0.00
12.00	2.52	0.00	2.52	116.00	0.00	0.00	0.00
14.00	0.37	0.00	0.37	118.00	0.00	0.00	0.00
16.00	0.20	0.00	0.20	120.00	0.00	0.00	0.00
18.00	0.13	0.00	0.13				
20.00	0.10	0.00	0.10				
22.00	0.09	0.00	0.09				
24.00	0.07	0.00	0.07				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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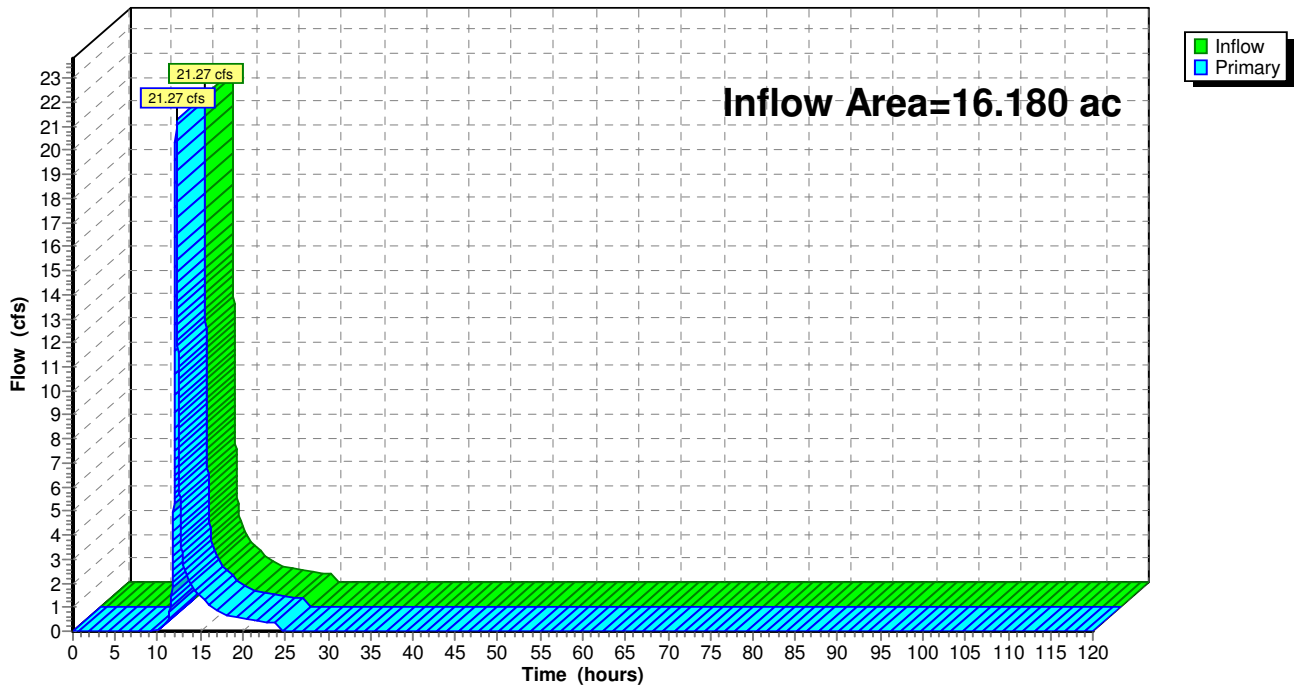
Summary for Link DP-5: DP-5

Inflow Area = 16.180 ac, 38.00% Impervious, Inflow Depth = 1.30" for 2 Year event
Inflow = 21.27 cfs @ 12.14 hrs, Volume= 1.755 af
Primary = 21.27 cfs @ 12.14 hrs, Volume= 1.755 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link DP-5: DP-5

Hydrograph



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Hydrograph for Link DP-5: DP-5

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	114.00	0.00	0.00	0.00
12.00	9.08	0.00	9.08	116.00	0.00	0.00	0.00
14.00	1.89	0.00	1.89	118.00	0.00	0.00	0.00
16.00	1.05	0.00	1.05	120.00	0.00	0.00	0.00
18.00	0.65	0.00	0.65				
20.00	0.52	0.00	0.52				
22.00	0.44	0.00	0.44				
24.00	0.35	0.00	0.35				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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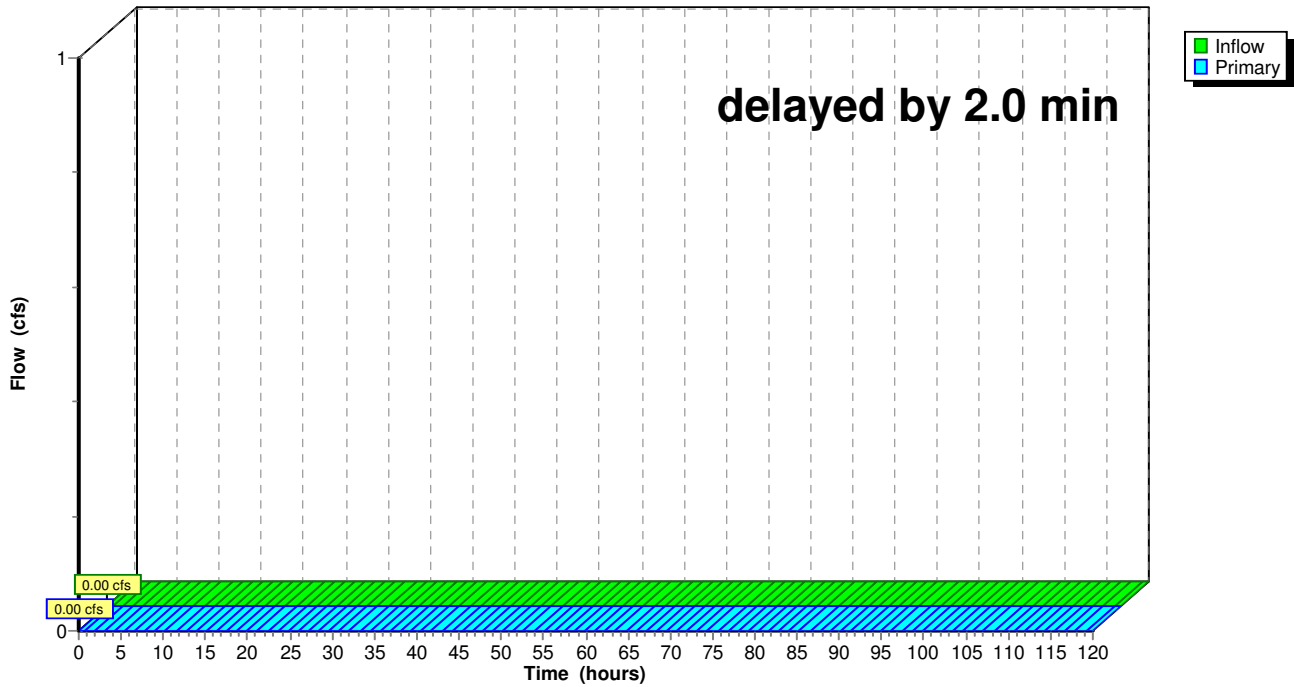
Summary for Link OF-1: Overland Flow

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 delayed by 2.0 min, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link OF-1: Overland Flow

Hydrograph



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Hydrograph for Link OF-1: Overland Flow

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	114.00	0.00	0.00	0.00
12.00	0.00	0.00	0.00	116.00	0.00	0.00	0.00
14.00	0.00	0.00	0.00	118.00	0.00	0.00	0.00
16.00	0.00	0.00	0.00	120.00	0.00	0.00	0.00
18.00	0.00	0.00	0.00				
20.00	0.00	0.00	0.00				
22.00	0.00	0.00	0.00				
24.00	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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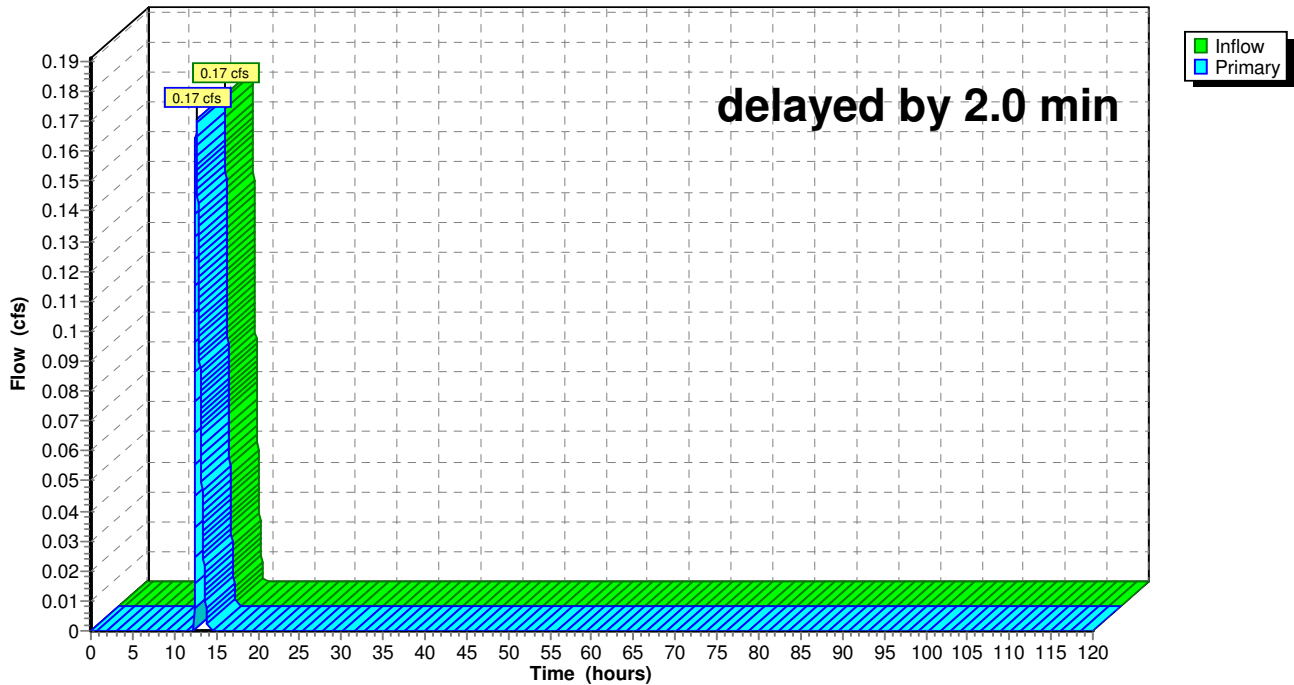
Summary for Link OF-2: Overland Flow

Inflow = 0.17 cfs @ 12.60 hrs, Volume= 0.010 af
Primary = 0.17 cfs @ 12.63 hrs, Volume= 0.010 af, Atten= 0%, Lag= 2.0 min

Primary outflow = Inflow delayed by 2.0 min, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link OF-2: Overland Flow

Hydrograph



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Hydrograph for Link OF-2: Overland Flow

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	114.00	0.00	0.00	0.00
12.00	0.00	0.00	0.00	116.00	0.00	0.00	0.00
14.00	0.00	0.00	0.00	118.00	0.00	0.00	0.00
16.00	0.00	0.00	0.00	120.00	0.00	0.00	0.00
18.00	0.00	0.00	0.00				
20.00	0.00	0.00	0.00				
22.00	0.00	0.00	0.00				
24.00	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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Time span=0.00-120.00 hrs, dt=0.01 hrs, 12001 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1: Drainage Area 1	Runoff Area=95.900 ac 25.00% Impervious Runoff Depth=2.04" Flow Length=2,615' Tc=14.7 min CN=70 Runoff=170.60 cfs 16.274 af
Subcatchment 2A: Drainage Area 2A	Runoff Area=91,912 sf 13.06% Impervious Runoff Depth=2.71" Flow Length=579' Tc=7.8 min CN=78 Runoff=6.31 cfs 0.477 af
Subcatchment 2B: Drainage Area 2B	Runoff Area=182,926 sf 26.44% Impervious Runoff Depth=2.89" Flow Length=749' Tc=15.1 min CN=80 Runoff=10.76 cfs 1.012 af
Subcatchment 2C: Drainage Area 2C	Runoff Area=33,079 sf 29.42% Impervious Runoff Depth=3.27" Flow Length=149' Tc=9.6 min CN=84 Runoff=2.56 cfs 0.207 af
Subcatchment 2C1: Drainage Area 2C1	Runoff Area=55,757 sf 15.98% Impervious Runoff Depth=2.80" Flow Length=529' Tc=9.4 min CN=79 Runoff=3.75 cfs 0.299 af
Subcatchment 2E: Drainage Area 2E	Runoff Area=77,746 sf 15.96% Impervious Runoff Depth=2.71" Flow Length=415' Tc=7.8 min CN=78 Runoff=5.33 cfs 0.403 af
Subcatchment 2F: Drainage Area 2F	Runoff Area=60.010 ac 25.00% Impervious Runoff Depth=2.04" Flow Length=1,484' Tc=7.4 min CN=70 Runoff=133.94 cfs 10.183 af
Subcatchment 3: Drainage Area - 3	Runoff Area=52.990 ac 38.00% Impervious Runoff Depth=2.45" Flow Length=481' Tc=8.1 min CN=75 Runoff=141.07 cfs 10.816 af
Subcatchment 4A: Drainage Area 4A	Runoff Area=130,244 sf 17.19% Impervious Runoff Depth=2.71" Flow Length=303' Tc=6.9 min CN=78 Runoff=9.21 cfs 0.676 af
Subcatchment 4B: Drainage Area 4B	Runoff Area=3.210 ac 38.00% Impervious Runoff Depth=2.45" Flow Length=678' Tc=6.0 min CN=75 Runoff=9.20 cfs 0.655 af
Subcatchment 5: Drainage Area 5	Runoff Area=16.180 ac 38.00% Impervious Runoff Depth=2.45" Flow Length=1,619' Tc=9.4 min CN=75 Runoff=41.23 cfs 3.302 af
Reach 1R: Pipe	Avg. Depth=0.29' Max Vel=9.12 fps Inflow=2.18 cfs 0.137 af D=18.0" n=0.013 L=188.0' S=0.0649 '/' Capacity=26.76 cfs Outflow=2.18 cfs 0.137 af
Pond LS-1: Level Spreader	Peak Elev=300.03' Storage=5,288 cf Inflow=9.93 cfs 0.587 af Outflow=11.47 cfs 0.468 af
Pond P-1c: Infiltration Chambers	Peak Elev=311.08' Storage=2,913 cf Inflow=3.75 cfs 0.299 af Primary=0.29 cfs 0.218 af Secondary=2.06 cfs 0.081 af Outflow=2.34 cfs 0.299 af
Pond P-A: Pond-A (NYSDEC I-2)	Peak Elev=332.05' Storage=8,666 cf Inflow=6.31 cfs 0.477 af Primary=0.62 cfs 0.421 af Secondary=0.21 cfs 0.056 af Outflow=0.84 cfs 0.477 af
Pond P-B: Pond-B (NYSDEC I-2)	Peak Elev=386.09' Storage=13,247 cf Inflow=10.76 cfs 1.012 af Primary=0.79 cfs 0.692 af Secondary=5.90 cfs 0.320 af Outflow=6.69 cfs 1.012 af

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Pond P-C: Pond-C (NYSDEC I-2) Peak Elev=389.48' Storage=3,255 cf Inflow=2.56 cfs 0.207 af
Primary=0.23 cfs 0.149 af Secondary=0.50 cfs 0.058 af Outflow=0.73 cfs 0.207 af

Pond P-D: Pond-D (NYSDEC I-2) Peak Elev=361.38' Storage=8,481 cf Inflow=9.21 cfs 0.676 af
Primary=0.70 cfs 0.464 af Secondary=3.36 cfs 0.212 af Outflow=4.06 cfs 0.676 af

Pond P-E: Pond-E (NYSDEC I-2) Peak Elev=310.44' Storage=4,812 cf Inflow=5.33 cfs 0.403 af
Primary=0.30 cfs 0.274 af Secondary=2.75 cfs 0.130 af Outflow=3.05 cfs 0.403 af

Link DP-1: DP-1 Inflow=170.60 cfs 16.274 af
Primary=170.60 cfs 16.274 af

Link DP-2: DP-2 Inflow=133.94 cfs 10.709 af
Primary=133.94 cfs 10.709 af

Link DP-3: DP-3 Inflow=141.07 cfs 10.816 af
Primary=141.07 cfs 10.816 af

Link DP-4: DP-4 Inflow=10.67 cfs 0.867 af
Primary=10.67 cfs 0.867 af

Link DP-5: DP-5 Inflow=41.23 cfs 3.302 af
Primary=41.23 cfs 3.302 af

Link OF-1: Overland Flow delayed by 2.0 min Inflow=11.47 cfs 0.468 af
Primary=10.42 cfs 0.468 af

Link OF-2: Overland Flow delayed by 2.0 min Inflow=0.50 cfs 0.058 af
Primary=0.50 cfs 0.058 af

Total Runoff Area = 241.414 ac Runoff Volume = 44.304 af Average Runoff Depth = 2.20"
71.38% Pervious = 172.319 ac 28.62% Impervious = 69.095 ac

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Summary for Subcatchment 1: Drainage Area 1

Runoff = 170.60 cfs @ 12.21 hrs, Volume= 16.274 af, Depth= 2.04"

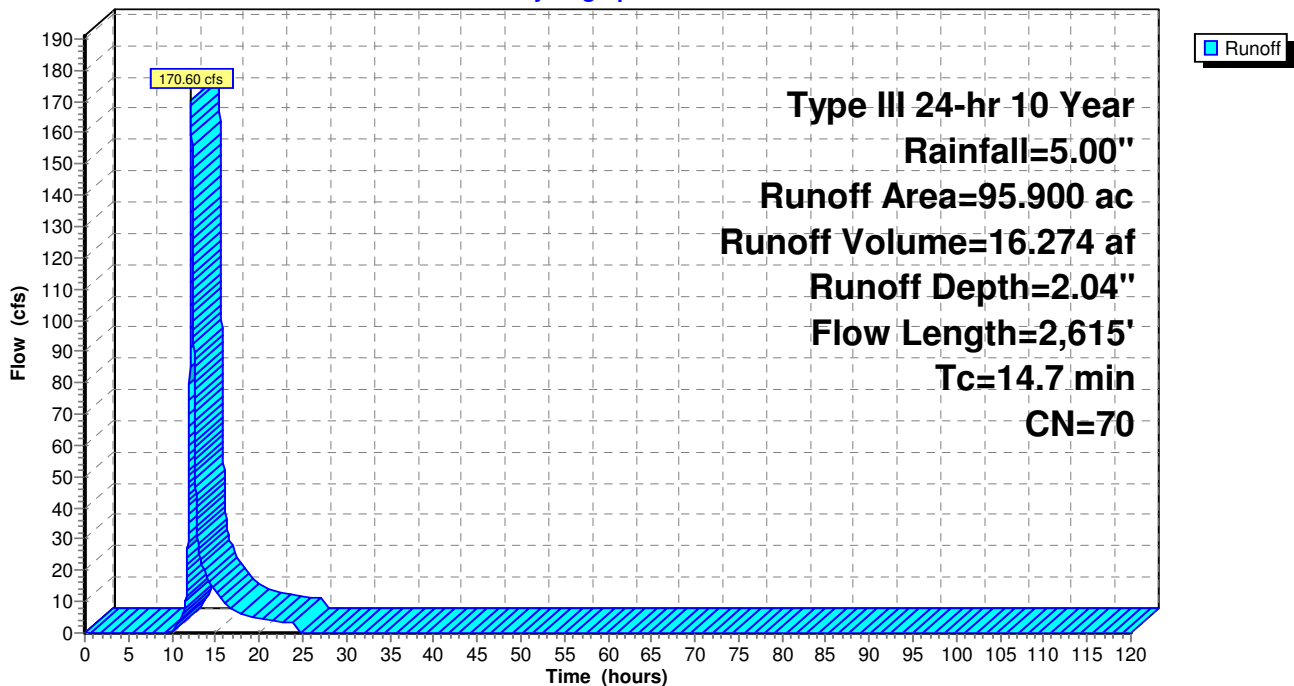
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.00"

Area (ac)	CN	Description
95.900	70	1/2 acre lots, 25% imp, HSG B
71.925		Pervious Area
23.975		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.1	100	0.0900	0.32		Sheet Flow, 1 to 2
9.6	2,515	0.0740	4.38		Grass: Short n= 0.150 P2= 3.50" Shallow Concentrated Flow, 2 to 3
14.7	2,615	Total			Unpaved Kv= 16.1 fps

Subcatchment 1: Drainage Area 1

Hydrograph



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Hydrograph for Subcatchment 1: Drainage Area 1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	5.00	2.04	0.00
2.00	0.10	0.00	0.00	106.00	5.00	2.04	0.00
4.00	0.22	0.00	0.00	108.00	5.00	2.04	0.00
6.00	0.36	0.00	0.00	110.00	5.00	2.04	0.00
8.00	0.57	0.00	0.00	112.00	5.00	2.04	0.00
10.00	0.95	0.00	0.38	114.00	5.00	2.04	0.00
12.00	2.50	0.46	62.94	116.00	5.00	2.04	0.00
14.00	4.06	1.37	17.56	118.00	5.00	2.04	0.00
16.00	4.43	1.62	9.68	120.00	5.00	2.04	0.00
18.00	4.64	1.77	5.93				
20.00	4.79	1.88	4.69				
22.00	4.90	1.97	3.91				
24.00	5.00	2.04	3.14				
26.00	5.00	2.04	0.00				
28.00	5.00	2.04	0.00				
30.00	5.00	2.04	0.00				
32.00	5.00	2.04	0.00				
34.00	5.00	2.04	0.00				
36.00	5.00	2.04	0.00				
38.00	5.00	2.04	0.00				
40.00	5.00	2.04	0.00				
42.00	5.00	2.04	0.00				
44.00	5.00	2.04	0.00				
46.00	5.00	2.04	0.00				
48.00	5.00	2.04	0.00				
50.00	5.00	2.04	0.00				
52.00	5.00	2.04	0.00				
54.00	5.00	2.04	0.00				
56.00	5.00	2.04	0.00				
58.00	5.00	2.04	0.00				
60.00	5.00	2.04	0.00				
62.00	5.00	2.04	0.00				
64.00	5.00	2.04	0.00				
66.00	5.00	2.04	0.00				
68.00	5.00	2.04	0.00				
70.00	5.00	2.04	0.00				
72.00	5.00	2.04	0.00				
74.00	5.00	2.04	0.00				
76.00	5.00	2.04	0.00				
78.00	5.00	2.04	0.00				
80.00	5.00	2.04	0.00				
82.00	5.00	2.04	0.00				
84.00	5.00	2.04	0.00				
86.00	5.00	2.04	0.00				
88.00	5.00	2.04	0.00				
90.00	5.00	2.04	0.00				
92.00	5.00	2.04	0.00				
94.00	5.00	2.04	0.00				
96.00	5.00	2.04	0.00				
98.00	5.00	2.04	0.00				
100.00	5.00	2.04	0.00				
102.00	5.00	2.04	0.00				

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Type III 24-hr 10 Year Rainfall=5.00"

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Summary for Subcatchment 2A: Drainage Area 2A

Runoff = 6.31 cfs @ 12.11 hrs, Volume= 0.477 af, Depth= 2.71"

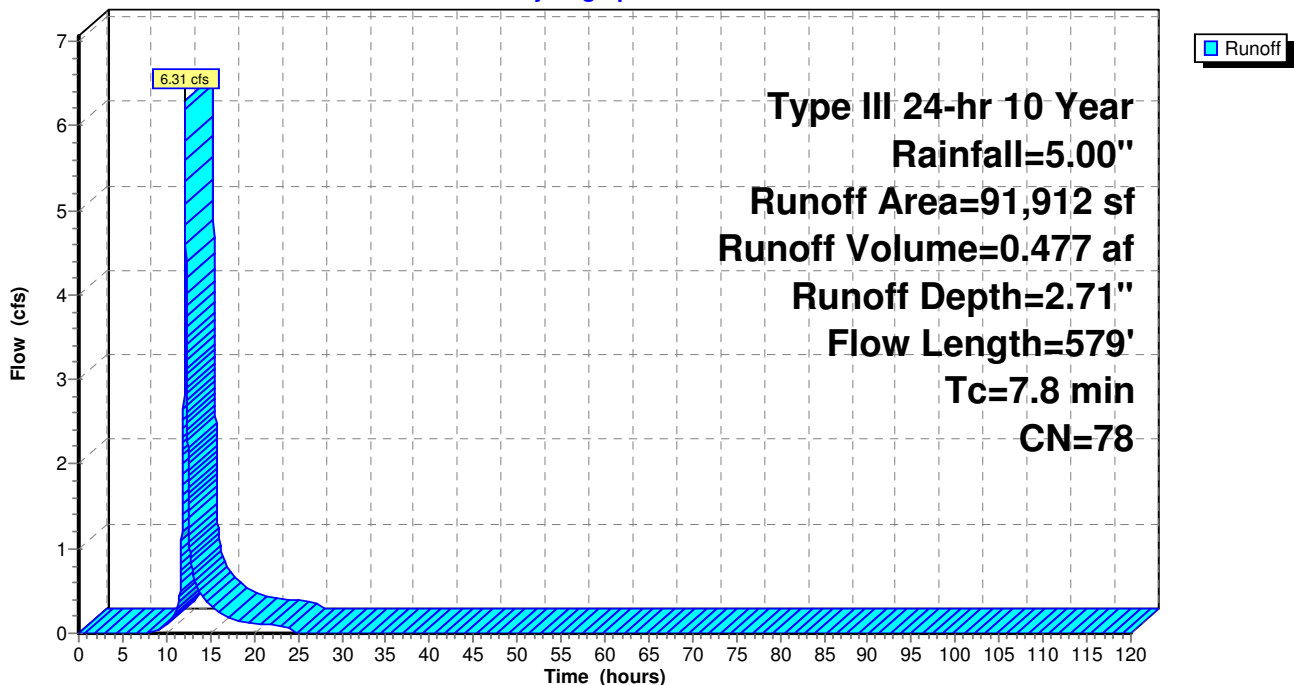
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.00"

Area (sf)	CN	Description
40,948	76	Woods/grass comb., Fair, HSG C
38,963	74	>75% Grass cover, Good, HSG C
12,001	98	Paved roads w/curbs & sewers
91,912	78	Weighted Average
79,911		Pervious Area
12,001		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	100	0.1200	0.36		Sheet Flow, 1 to 2
					Grass: Short n= 0.150 P2= 3.50"
3.2	479	0.1300	2.52		Shallow Concentrated Flow, 2 to 3
					Short Grass Pasture Kv= 7.0 fps
7.8	579	Total			

Subcatchment 2A: Drainage Area 2A

Hydrograph



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Type III 24-hr 10 Year Rainfall=5.00"

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Hydrograph for Subcatchment 2A: Drainage Area 2A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	5.00	2.71	0.00
2.00	0.10	0.00	0.00	106.00	5.00	2.71	0.00
4.00	0.22	0.00	0.00	108.00	5.00	2.71	0.00
6.00	0.36	0.00	0.00	110.00	5.00	2.71	0.00
8.00	0.57	0.00	0.00	112.00	5.00	2.71	0.00
10.00	0.95	0.05	0.11	114.00	5.00	2.71	0.00
12.00	2.50	0.79	3.24	116.00	5.00	2.71	0.00
14.00	4.06	1.93	0.44	118.00	5.00	2.71	0.00
16.00	4.43	2.24	0.24	120.00	5.00	2.71	0.00
18.00	4.64	2.41	0.15				
20.00	4.79	2.53	0.12				
22.00	4.90	2.63	0.10				
24.00	5.00	2.71	0.08				
26.00	5.00	2.71	0.00				
28.00	5.00	2.71	0.00				
30.00	5.00	2.71	0.00				
32.00	5.00	2.71	0.00				
34.00	5.00	2.71	0.00				
36.00	5.00	2.71	0.00				
38.00	5.00	2.71	0.00				
40.00	5.00	2.71	0.00				
42.00	5.00	2.71	0.00				
44.00	5.00	2.71	0.00				
46.00	5.00	2.71	0.00				
48.00	5.00	2.71	0.00				
50.00	5.00	2.71	0.00				
52.00	5.00	2.71	0.00				
54.00	5.00	2.71	0.00				
56.00	5.00	2.71	0.00				
58.00	5.00	2.71	0.00				
60.00	5.00	2.71	0.00				
62.00	5.00	2.71	0.00				
64.00	5.00	2.71	0.00				
66.00	5.00	2.71	0.00				
68.00	5.00	2.71	0.00				
70.00	5.00	2.71	0.00				
72.00	5.00	2.71	0.00				
74.00	5.00	2.71	0.00				
76.00	5.00	2.71	0.00				
78.00	5.00	2.71	0.00				
80.00	5.00	2.71	0.00				
82.00	5.00	2.71	0.00				
84.00	5.00	2.71	0.00				
86.00	5.00	2.71	0.00				
88.00	5.00	2.71	0.00				
90.00	5.00	2.71	0.00				
92.00	5.00	2.71	0.00				
94.00	5.00	2.71	0.00				
96.00	5.00	2.71	0.00				
98.00	5.00	2.71	0.00				
100.00	5.00	2.71	0.00				
102.00	5.00	2.71	0.00				

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Type III 24-hr 10 Year Rainfall=5.00"

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Summary for Subcatchment 2B: Drainage Area 2B

Runoff = 10.76 cfs @ 12.20 hrs, Volume= 1.012 af, Depth= 2.89"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.00"

Area (sf)	CN	Description
48,361	98	Paved roads w/curbs & sewers
134,565	74	>75% Grass cover, Good, HSG C
182,926	80	Weighted Average
134,565		Pervious Area
48,361		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0	100	0.0300	0.21		Sheet Flow, 1 to 2
					Grass: Short n= 0.150 P2= 3.50"
6.6	276	0.0100	0.70		Shallow Concentrated Flow, 2 to 3
					Short Grass Pasture Kv= 7.0 fps
0.0	20	0.0250	10.82	13.28	Circular Channel (pipe), 3 to 4
					Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
0.0	57	0.1500	26.50	32.52	Circular Channel (pipe), 5 to 5
					Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
0.1	87	0.0260	11.03	13.54	Circular Channel (pipe), 5 to 6
					Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
0.2	102	0.0200	10.93	19.31	Circular Channel (pipe), 6 to 7
					Diam= 18.0" Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.010
0.2	107	0.0140	8.10	9.94	Circular Channel (pipe), 7 to 8
					Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
15.1	749	Total			

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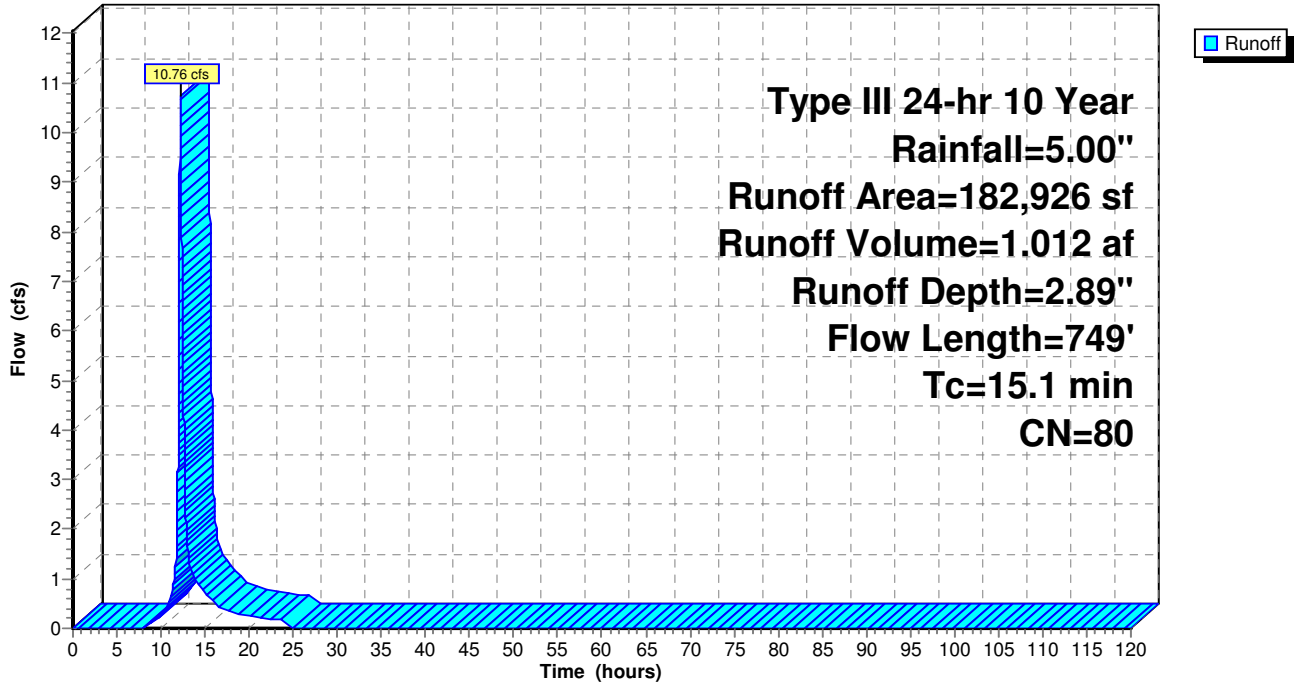
Type III 24-hr 10 Year Rainfall=5.00"

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Subcatchment 2B: Drainage Area 2B

Hydrograph



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Hydrograph for Subcatchment 2B: Drainage Area 2B

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	5.00	2.89	0.00
2.00	0.10	0.00	0.00	106.00	5.00	2.89	0.00
4.00	0.22	0.00	0.00	108.00	5.00	2.89	0.00
6.00	0.36	0.00	0.00	110.00	5.00	2.89	0.00
8.00	0.57	0.00	0.02	112.00	5.00	2.89	0.00
10.00	0.95	0.07	0.25	114.00	5.00	2.89	0.00
12.00	2.50	0.89	4.52	116.00	5.00	2.89	0.00
14.00	4.06	2.09	0.95	118.00	5.00	2.89	0.00
16.00	4.43	2.40	0.51	120.00	5.00	2.89	0.00
18.00	4.64	2.58	0.31				
20.00	4.79	2.71	0.24				
22.00	4.90	2.81	0.20				
24.00	5.00	2.89	0.16				
26.00	5.00	2.89	0.00				
28.00	5.00	2.89	0.00				
30.00	5.00	2.89	0.00				
32.00	5.00	2.89	0.00				
34.00	5.00	2.89	0.00				
36.00	5.00	2.89	0.00				
38.00	5.00	2.89	0.00				
40.00	5.00	2.89	0.00				
42.00	5.00	2.89	0.00				
44.00	5.00	2.89	0.00				
46.00	5.00	2.89	0.00				
48.00	5.00	2.89	0.00				
50.00	5.00	2.89	0.00				
52.00	5.00	2.89	0.00				
54.00	5.00	2.89	0.00				
56.00	5.00	2.89	0.00				
58.00	5.00	2.89	0.00				
60.00	5.00	2.89	0.00				
62.00	5.00	2.89	0.00				
64.00	5.00	2.89	0.00				
66.00	5.00	2.89	0.00				
68.00	5.00	2.89	0.00				
70.00	5.00	2.89	0.00				
72.00	5.00	2.89	0.00				
74.00	5.00	2.89	0.00				
76.00	5.00	2.89	0.00				
78.00	5.00	2.89	0.00				
80.00	5.00	2.89	0.00				
82.00	5.00	2.89	0.00				
84.00	5.00	2.89	0.00				
86.00	5.00	2.89	0.00				
88.00	5.00	2.89	0.00				
90.00	5.00	2.89	0.00				
92.00	5.00	2.89	0.00				
94.00	5.00	2.89	0.00				
96.00	5.00	2.89	0.00				
98.00	5.00	2.89	0.00				
100.00	5.00	2.89	0.00				
102.00	5.00	2.89	0.00				

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Type III 24-hr 10 Year Rainfall=5.00"

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Summary for Subcatchment 2C: Drainage Area 2C

Runoff = 2.56 cfs @ 12.13 hrs, Volume= 0.207 af, Depth= 3.27"

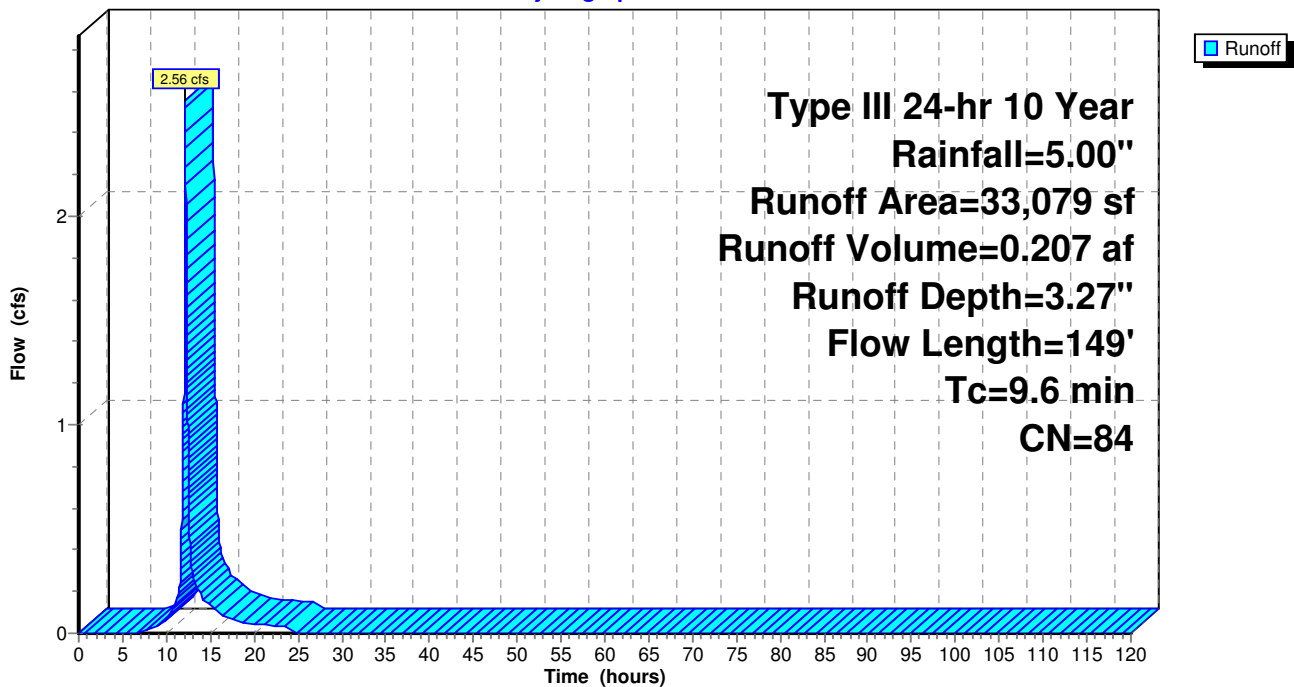
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.00"

Area (sf)	CN	Description
2,346	72	Woods/grass comb., Good, HSG C
21,001	79	50-75% Grass cover, Fair, HSG C
9,732	98	Paved roads w/curbs & sewers
33,079	84	Weighted Average
23,347		Pervious Area
9,732		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	100	0.1400	0.18		Sheet Flow, 1 to 2 Woods: Light underbrush n= 0.400 P2= 3.50"
0.2	49	0.5000	4.95		Shallow Concentrated Flow, 2 to 3 Short Grass Pasture Kv= 7.0 fps
9.6	149	Total			

Subcatchment 2C: Drainage Area 2C

Hydrograph



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Hydrograph for Subcatchment 2C: Drainage Area 2C

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	5.00	3.27	0.00
2.00	0.10	0.00	0.00	106.00	5.00	3.27	0.00
4.00	0.22	0.00	0.00	108.00	5.00	3.27	0.00
6.00	0.36	0.00	0.00	110.00	5.00	3.27	0.00
8.00	0.57	0.02	0.02	112.00	5.00	3.27	0.00
10.00	0.95	0.13	0.07	114.00	5.00	3.27	0.00
12.00	2.50	1.12	1.28	116.00	5.00	3.27	0.00
14.00	4.06	2.42	0.18	118.00	5.00	3.27	0.00
16.00	4.43	2.75	0.10	120.00	5.00	3.27	0.00
18.00	4.64	2.94	0.06				
20.00	4.79	3.07	0.05				
22.00	4.90	3.18	0.04				
24.00	5.00	3.27	0.03				
26.00	5.00	3.27	0.00				
28.00	5.00	3.27	0.00				
30.00	5.00	3.27	0.00				
32.00	5.00	3.27	0.00				
34.00	5.00	3.27	0.00				
36.00	5.00	3.27	0.00				
38.00	5.00	3.27	0.00				
40.00	5.00	3.27	0.00				
42.00	5.00	3.27	0.00				
44.00	5.00	3.27	0.00				
46.00	5.00	3.27	0.00				
48.00	5.00	3.27	0.00				
50.00	5.00	3.27	0.00				
52.00	5.00	3.27	0.00				
54.00	5.00	3.27	0.00				
56.00	5.00	3.27	0.00				
58.00	5.00	3.27	0.00				
60.00	5.00	3.27	0.00				
62.00	5.00	3.27	0.00				
64.00	5.00	3.27	0.00				
66.00	5.00	3.27	0.00				
68.00	5.00	3.27	0.00				
70.00	5.00	3.27	0.00				
72.00	5.00	3.27	0.00				
74.00	5.00	3.27	0.00				
76.00	5.00	3.27	0.00				
78.00	5.00	3.27	0.00				
80.00	5.00	3.27	0.00				
82.00	5.00	3.27	0.00				
84.00	5.00	3.27	0.00				
86.00	5.00	3.27	0.00				
88.00	5.00	3.27	0.00				
90.00	5.00	3.27	0.00				
92.00	5.00	3.27	0.00				
94.00	5.00	3.27	0.00				
96.00	5.00	3.27	0.00				
98.00	5.00	3.27	0.00				
100.00	5.00	3.27	0.00				
102.00	5.00	3.27	0.00				

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Summary for Subcatchment 2C1: Drainage Area 2C1

Runoff = 3.75 cfs @ 12.13 hrs, Volume= 0.299 af, Depth= 2.80"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.00"

Area (sf)	CN	Description
26,272	76	Woods/grass comb., Fair, HSG C
20,575	74	>75% Grass cover, Good, HSG C
8,910	98	Paved parking & roofs
55,757	79	Weighted Average
46,847		Pervious Area
8,910		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.2	100	0.1000	0.23		Sheet Flow, 1 to 2 Grass: Dense n= 0.240 P2= 3.50"
1.8	287	0.2700	2.60		Shallow Concentrated Flow, 2 to 3 Woodland Kv= 5.0 fps
0.3	85	0.0540	4.72		Shallow Concentrated Flow, 3 to 4 Paved Kv= 20.3 fps
0.0	20	0.0200	9.68	11.88	Circular Channel (pipe), 4 to 5 Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
0.1	37	0.0200	9.68	11.88	Circular Channel (pipe), 5 to 6 Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
9.4	529	Total			

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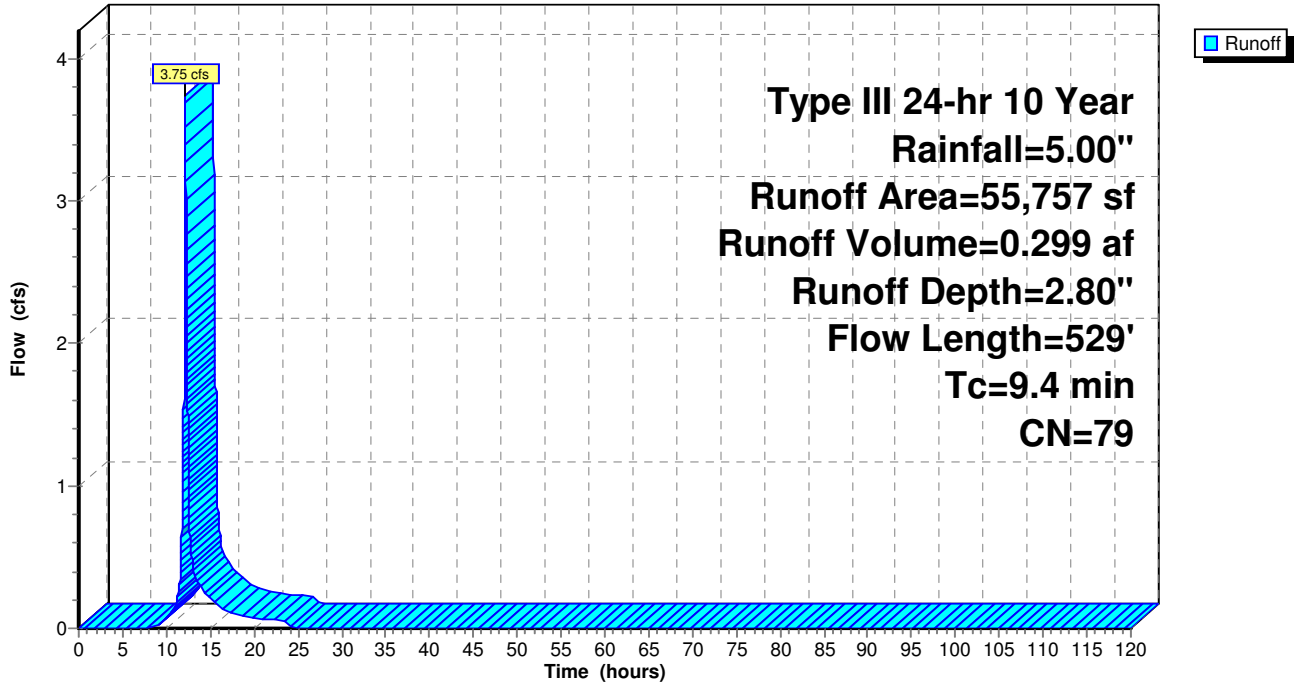
Type III 24-hr 10 Year Rainfall=5.00"

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Subcatchment 2C1: Drainage Area 2C1

Hydrograph



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Type III 24-hr 10 Year Rainfall=5.00"

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Hydrograph for Subcatchment 2C1: Drainage Area 2C1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	5.00	2.80	0.00
2.00	0.10	0.00	0.00	106.00	5.00	2.80	0.00
4.00	0.22	0.00	0.00	108.00	5.00	2.80	0.00
6.00	0.36	0.00	0.00	110.00	5.00	2.80	0.00
8.00	0.57	0.00	0.00	112.00	5.00	2.80	0.00
10.00	0.95	0.06	0.07	114.00	5.00	2.80	0.00
12.00	2.50	0.84	1.81	116.00	5.00	2.80	0.00
14.00	4.06	2.01	0.28	118.00	5.00	2.80	0.00
16.00	4.43	2.32	0.15	120.00	5.00	2.80	0.00
18.00	4.64	2.49	0.09				
20.00	4.79	2.62	0.07				
22.00	4.90	2.72	0.06				
24.00	5.00	2.80	0.05				
26.00	5.00	2.80	0.00				
28.00	5.00	2.80	0.00				
30.00	5.00	2.80	0.00				
32.00	5.00	2.80	0.00				
34.00	5.00	2.80	0.00				
36.00	5.00	2.80	0.00				
38.00	5.00	2.80	0.00				
40.00	5.00	2.80	0.00				
42.00	5.00	2.80	0.00				
44.00	5.00	2.80	0.00				
46.00	5.00	2.80	0.00				
48.00	5.00	2.80	0.00				
50.00	5.00	2.80	0.00				
52.00	5.00	2.80	0.00				
54.00	5.00	2.80	0.00				
56.00	5.00	2.80	0.00				
58.00	5.00	2.80	0.00				
60.00	5.00	2.80	0.00				
62.00	5.00	2.80	0.00				
64.00	5.00	2.80	0.00				
66.00	5.00	2.80	0.00				
68.00	5.00	2.80	0.00				
70.00	5.00	2.80	0.00				
72.00	5.00	2.80	0.00				
74.00	5.00	2.80	0.00				
76.00	5.00	2.80	0.00				
78.00	5.00	2.80	0.00				
80.00	5.00	2.80	0.00				
82.00	5.00	2.80	0.00				
84.00	5.00	2.80	0.00				
86.00	5.00	2.80	0.00				
88.00	5.00	2.80	0.00				
90.00	5.00	2.80	0.00				
92.00	5.00	2.80	0.00				
94.00	5.00	2.80	0.00				
96.00	5.00	2.80	0.00				
98.00	5.00	2.80	0.00				
100.00	5.00	2.80	0.00				
102.00	5.00	2.80	0.00				

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Type III 24-hr 10 Year Rainfall=5.00"

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Summary for Subcatchment 2E: Drainage Area 2E

Runoff = 5.33 cfs @ 12.11 hrs, Volume= 0.403 af, Depth= 2.71"

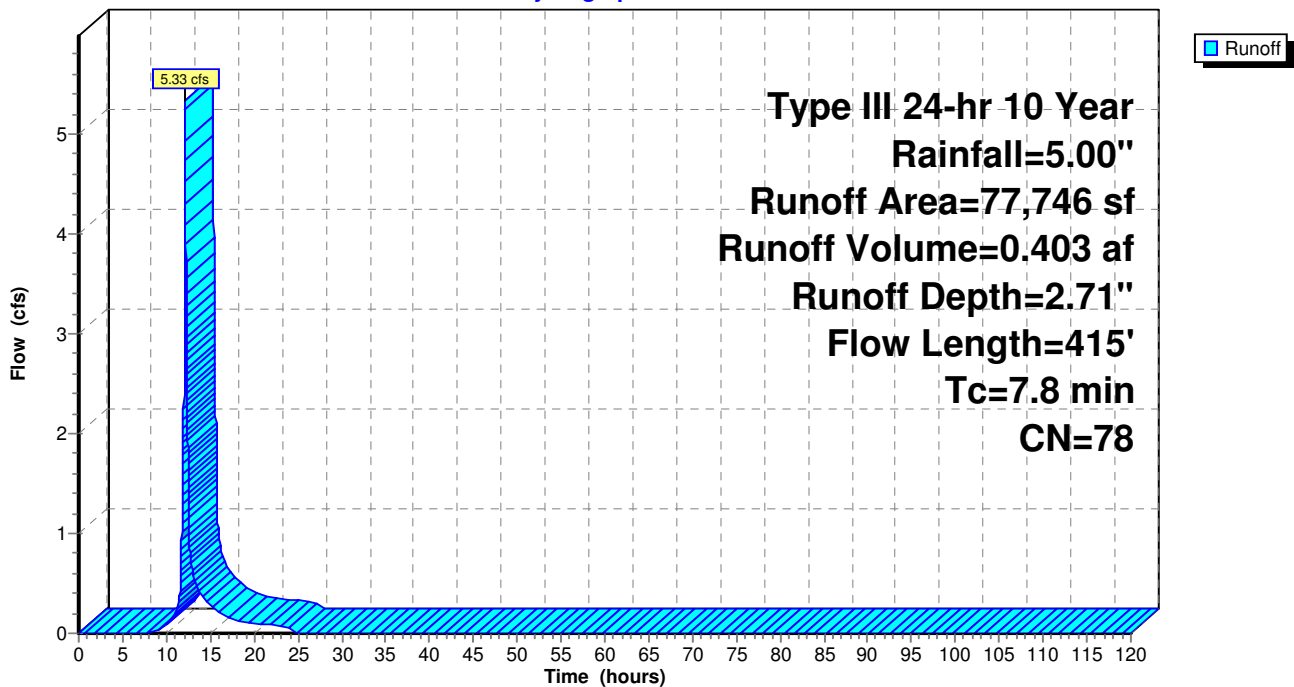
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.00"

Area (sf)	CN	Description
23,466	73	Woods, Fair, HSG C
41,869	74	>75% Grass cover, Good, HSG C
12,411	98	Paved roads w/curbs & sewers
77,746	78	Weighted Average
65,335		Pervious Area
12,411		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.4	100	0.0800	0.31		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
2.4	315	0.1900	2.18		Shallow Concentrated Flow, 2 to P-E Woodland Kv= 5.0 fps
7.8	415	Total			

Subcatchment 2E: Drainage Area 2E

Hydrograph



Post-Development Entire

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Hydrograph for Subcatchment 2E: Drainage Area 2E

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	5.00	2.71	0.00
2.00	0.10	0.00	0.00	106.00	5.00	2.71	0.00
4.00	0.22	0.00	0.00	108.00	5.00	2.71	0.00
6.00	0.36	0.00	0.00	110.00	5.00	2.71	0.00
8.00	0.57	0.00	0.00	112.00	5.00	2.71	0.00
10.00	0.95	0.05	0.09	114.00	5.00	2.71	0.00
12.00	2.50	0.79	2.74	116.00	5.00	2.71	0.00
14.00	4.06	1.93	0.37	118.00	5.00	2.71	0.00
16.00	4.43	2.24	0.20	120.00	5.00	2.71	0.00
18.00	4.64	2.41	0.12				
20.00	4.79	2.53	0.10				
22.00	4.90	2.63	0.08				
24.00	5.00	2.71	0.07				
26.00	5.00	2.71	0.00				
28.00	5.00	2.71	0.00				
30.00	5.00	2.71	0.00				
32.00	5.00	2.71	0.00				
34.00	5.00	2.71	0.00				
36.00	5.00	2.71	0.00				
38.00	5.00	2.71	0.00				
40.00	5.00	2.71	0.00				
42.00	5.00	2.71	0.00				
44.00	5.00	2.71	0.00				
46.00	5.00	2.71	0.00				
48.00	5.00	2.71	0.00				
50.00	5.00	2.71	0.00				
52.00	5.00	2.71	0.00				
54.00	5.00	2.71	0.00				
56.00	5.00	2.71	0.00				
58.00	5.00	2.71	0.00				
60.00	5.00	2.71	0.00				
62.00	5.00	2.71	0.00				
64.00	5.00	2.71	0.00				
66.00	5.00	2.71	0.00				
68.00	5.00	2.71	0.00				
70.00	5.00	2.71	0.00				
72.00	5.00	2.71	0.00				
74.00	5.00	2.71	0.00				
76.00	5.00	2.71	0.00				
78.00	5.00	2.71	0.00				
80.00	5.00	2.71	0.00				
82.00	5.00	2.71	0.00				
84.00	5.00	2.71	0.00				
86.00	5.00	2.71	0.00				
88.00	5.00	2.71	0.00				
90.00	5.00	2.71	0.00				
92.00	5.00	2.71	0.00				
94.00	5.00	2.71	0.00				
96.00	5.00	2.71	0.00				
98.00	5.00	2.71	0.00				
100.00	5.00	2.71	0.00				
102.00	5.00	2.71	0.00				

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Type III 24-hr 10 Year Rainfall=5.00"

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Summary for Subcatchment 2F: Drainage Area 2F

Runoff = 133.94 cfs @ 12.11 hrs, Volume= 10.183 af, Depth= 2.04"

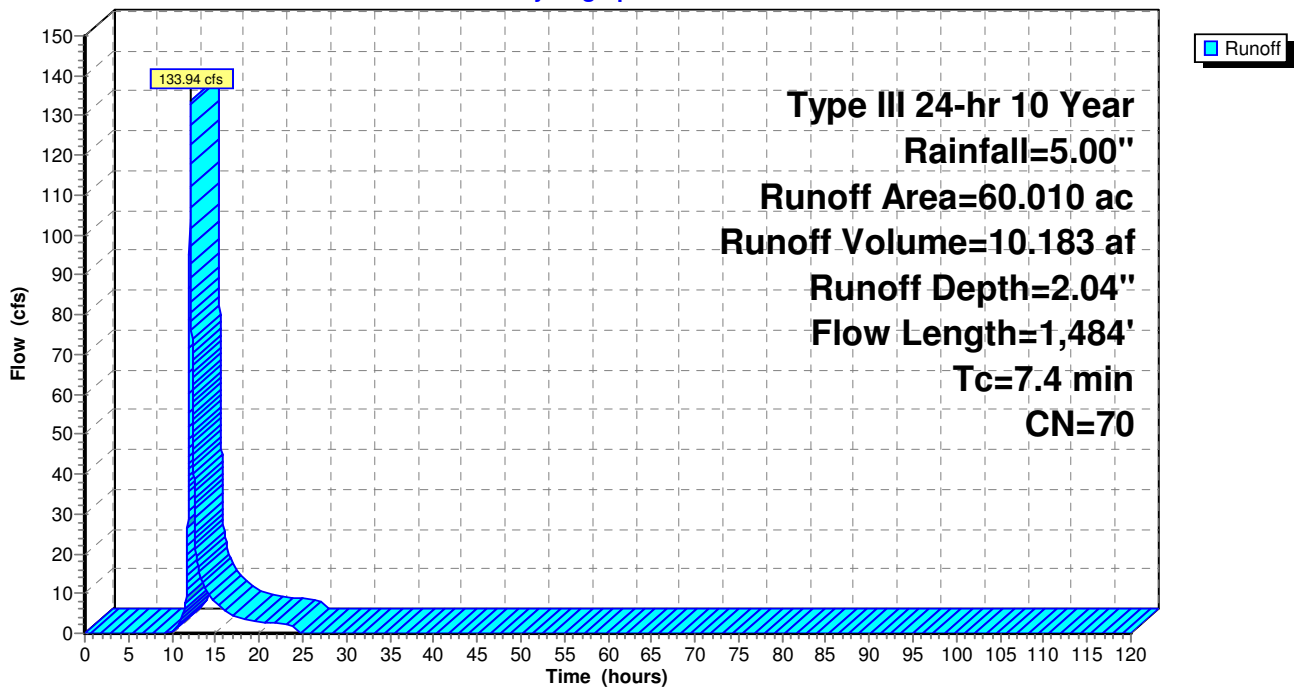
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.00"

Area (ac)	CN	Description
60.010	70	1/2 acre lots, 25% imp, HSG B
45.008		Pervious Area
15.002		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.7	100	0.2000	0.45		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
2.6	1,075	0.1800	6.83		Shallow Concentrated Flow, 2 to 3 Unpaved Kv= 16.1 fps
1.1	309	0.0100	4.56	68.35	Channel Flow, 3 to DP-2 Area= 15.0 sf Perim= 17.0' r= 0.88' n= 0.030 Stream, clean & straight
7.4	1,484	Total			

Subcatchment 2F: Drainage Area 2F

Hydrograph



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Hydrograph for Subcatchment 2F: Drainage Area 2F

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	5.00	2.04	0.00
2.00	0.10	0.00	0.00	106.00	5.00	2.04	0.00
4.00	0.22	0.00	0.00	108.00	5.00	2.04	0.00
6.00	0.36	0.00	0.00	110.00	5.00	2.04	0.00
8.00	0.57	0.00	0.00	112.00	5.00	2.04	0.00
10.00	0.95	0.00	0.40	114.00	5.00	2.04	0.00
12.00	2.50	0.46	65.46	116.00	5.00	2.04	0.00
14.00	4.06	1.37	10.48	118.00	5.00	2.04	0.00
16.00	4.43	1.62	5.79	120.00	5.00	2.04	0.00
18.00	4.64	1.77	3.60				
20.00	4.79	1.88	2.90				
22.00	4.90	1.97	2.42				
24.00	5.00	2.04	1.94				
26.00	5.00	2.04	0.00				
28.00	5.00	2.04	0.00				
30.00	5.00	2.04	0.00				
32.00	5.00	2.04	0.00				
34.00	5.00	2.04	0.00				
36.00	5.00	2.04	0.00				
38.00	5.00	2.04	0.00				
40.00	5.00	2.04	0.00				
42.00	5.00	2.04	0.00				
44.00	5.00	2.04	0.00				
46.00	5.00	2.04	0.00				
48.00	5.00	2.04	0.00				
50.00	5.00	2.04	0.00				
52.00	5.00	2.04	0.00				
54.00	5.00	2.04	0.00				
56.00	5.00	2.04	0.00				
58.00	5.00	2.04	0.00				
60.00	5.00	2.04	0.00				
62.00	5.00	2.04	0.00				
64.00	5.00	2.04	0.00				
66.00	5.00	2.04	0.00				
68.00	5.00	2.04	0.00				
70.00	5.00	2.04	0.00				
72.00	5.00	2.04	0.00				
74.00	5.00	2.04	0.00				
76.00	5.00	2.04	0.00				
78.00	5.00	2.04	0.00				
80.00	5.00	2.04	0.00				
82.00	5.00	2.04	0.00				
84.00	5.00	2.04	0.00				
86.00	5.00	2.04	0.00				
88.00	5.00	2.04	0.00				
90.00	5.00	2.04	0.00				
92.00	5.00	2.04	0.00				
94.00	5.00	2.04	0.00				
96.00	5.00	2.04	0.00				
98.00	5.00	2.04	0.00				
100.00	5.00	2.04	0.00				
102.00	5.00	2.04	0.00				

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Type III 24-hr 10 Year Rainfall=5.00"

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Summary for Subcatchment 3: Drainage Area - 3

Runoff = 141.07 cfs @ 12.12 hrs, Volume= 10.816 af, Depth= 2.45"

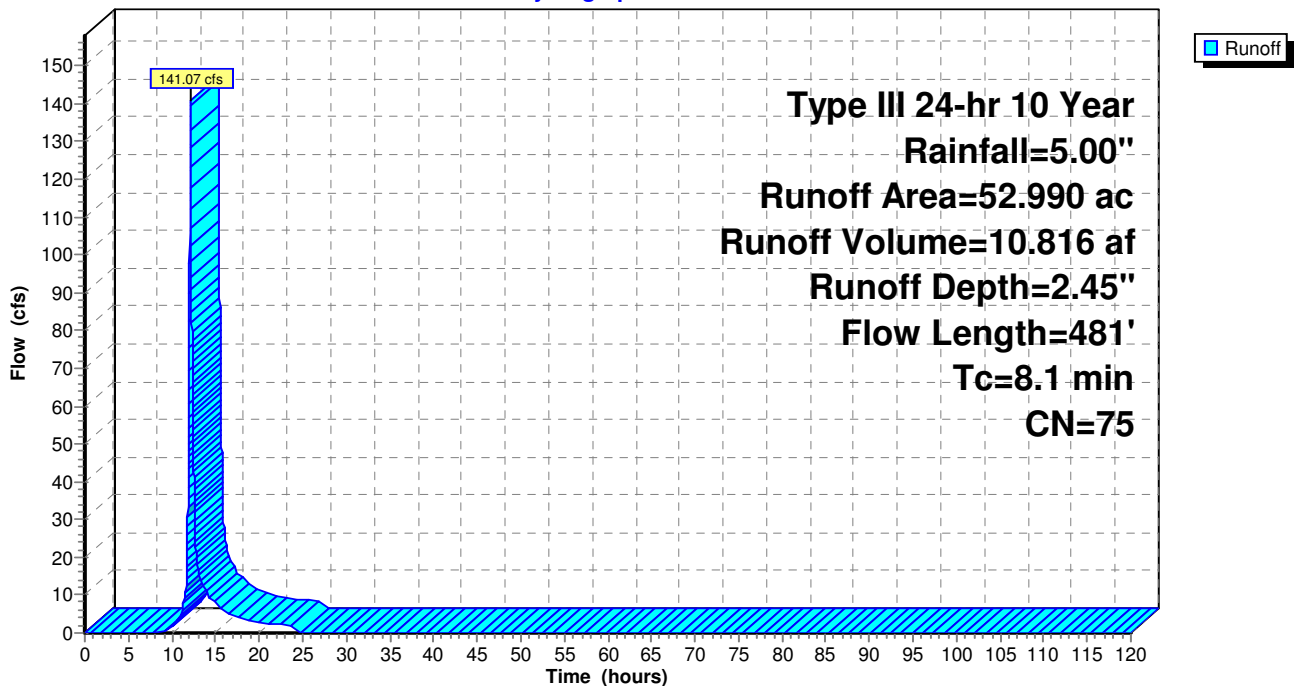
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.00"

Area (ac)	CN	Description
52.990	75	1/4 acre lots, 38% imp, HSG B
32.854		Pervious Area
20.136		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.7	100	0.1150	0.36		Sheet Flow, 1 to 2
3.4	381	0.0700	1.85		Grass: Short n= 0.150 P2= 3.50" Shallow Concentrated Flow, 2 to 3
8.1	481	Total			Short Grass Pasture Kv= 7.0 fps

Subcatchment 3: Drainage Area - 3

Hydrograph



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Type III 24-hr 10 Year Rainfall=5.00"

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Hydrograph for Subcatchment 3: Drainage Area - 3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	5.00	2.45	0.00
2.00	0.10	0.00	0.00	106.00	5.00	2.45	0.00
4.00	0.22	0.00	0.00	108.00	5.00	2.45	0.00
6.00	0.36	0.00	0.00	110.00	5.00	2.45	0.00
8.00	0.57	0.00	0.00	112.00	5.00	2.45	0.00
10.00	0.95	0.02	1.70	114.00	5.00	2.45	0.00
12.00	2.50	0.65	69.64	116.00	5.00	2.45	0.00
14.00	4.06	1.71	10.44	118.00	5.00	2.45	0.00
16.00	4.43	2.00	5.70	120.00	5.00	2.45	0.00
18.00	4.64	2.16	3.51				
20.00	4.79	2.28	2.82				
22.00	4.90	2.37	2.34				
24.00	5.00	2.45	1.87				
26.00	5.00	2.45	0.00				
28.00	5.00	2.45	0.00				
30.00	5.00	2.45	0.00				
32.00	5.00	2.45	0.00				
34.00	5.00	2.45	0.00				
36.00	5.00	2.45	0.00				
38.00	5.00	2.45	0.00				
40.00	5.00	2.45	0.00				
42.00	5.00	2.45	0.00				
44.00	5.00	2.45	0.00				
46.00	5.00	2.45	0.00				
48.00	5.00	2.45	0.00				
50.00	5.00	2.45	0.00				
52.00	5.00	2.45	0.00				
54.00	5.00	2.45	0.00				
56.00	5.00	2.45	0.00				
58.00	5.00	2.45	0.00				
60.00	5.00	2.45	0.00				
62.00	5.00	2.45	0.00				
64.00	5.00	2.45	0.00				
66.00	5.00	2.45	0.00				
68.00	5.00	2.45	0.00				
70.00	5.00	2.45	0.00				
72.00	5.00	2.45	0.00				
74.00	5.00	2.45	0.00				
76.00	5.00	2.45	0.00				
78.00	5.00	2.45	0.00				
80.00	5.00	2.45	0.00				
82.00	5.00	2.45	0.00				
84.00	5.00	2.45	0.00				
86.00	5.00	2.45	0.00				
88.00	5.00	2.45	0.00				
90.00	5.00	2.45	0.00				
92.00	5.00	2.45	0.00				
94.00	5.00	2.45	0.00				
96.00	5.00	2.45	0.00				
98.00	5.00	2.45	0.00				
100.00	5.00	2.45	0.00				
102.00	5.00	2.45	0.00				

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Summary for Subcatchment 4A: Drainage Area 4A

Runoff = 9.21 cfs @ 12.10 hrs, Volume= 0.676 af, Depth= 2.71"

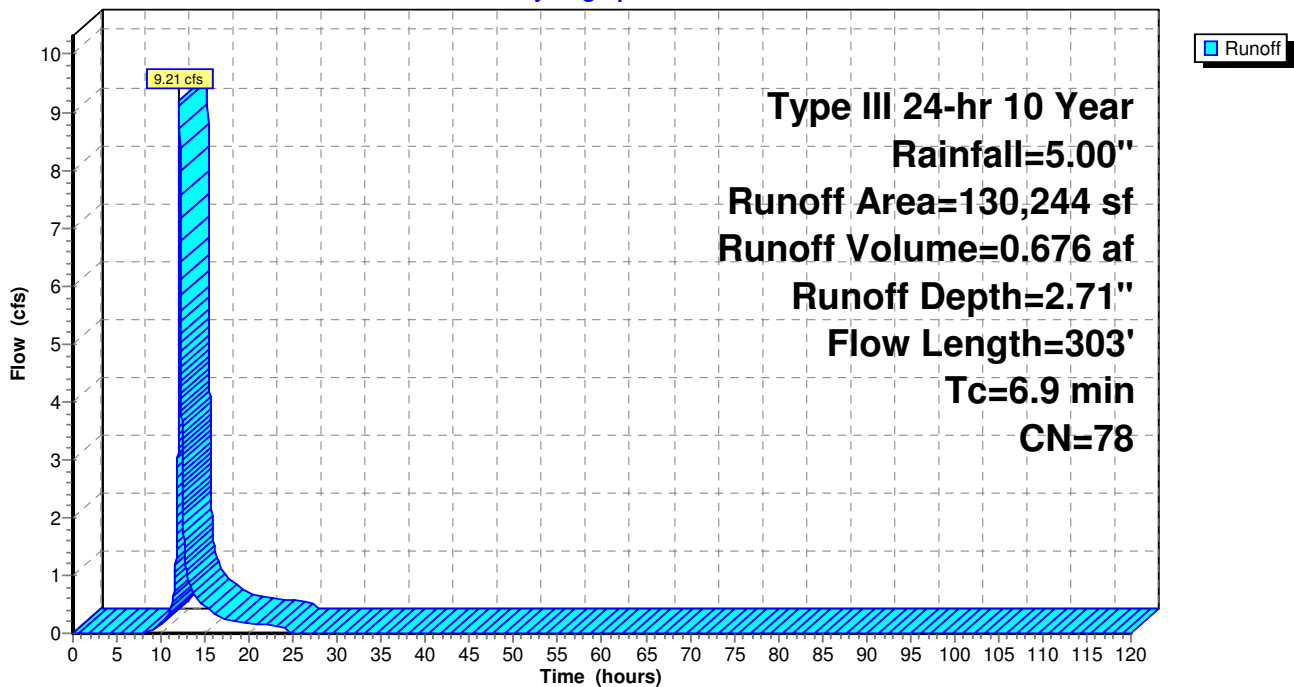
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.00"

Area (sf)	CN	Description
19,319	76	Woods/grass comb., Fair, HSG C
88,531	74	>75% Grass cover, Good, HSG C
22,394	98	Paved parking & roofs
130,244	78	Weighted Average
107,850		Pervious Area
22,394		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	100	0.0600	0.28		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
0.9	203	0.2700	3.64		Shallow Concentrated Flow, 2 to 3 Short Grass Pasture Kv= 7.0 fps
6.9	303	Total			

Subcatchment 4A: Drainage Area 4A

Hydrograph



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Hydrograph for Subcatchment 4A: Drainage Area 4A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	5.00	2.71	0.00
2.00	0.10	0.00	0.00	106.00	5.00	2.71	0.00
4.00	0.22	0.00	0.00	108.00	5.00	2.71	0.00
6.00	0.36	0.00	0.00	110.00	5.00	2.71	0.00
8.00	0.57	0.00	0.00	112.00	5.00	2.71	0.00
10.00	0.95	0.05	0.15	114.00	5.00	2.71	0.00
12.00	2.50	0.79	4.98	116.00	5.00	2.71	0.00
14.00	4.06	1.93	0.62	118.00	5.00	2.71	0.00
16.00	4.43	2.24	0.34	120.00	5.00	2.71	0.00
18.00	4.64	2.41	0.21				
20.00	4.79	2.53	0.17				
22.00	4.90	2.63	0.14				
24.00	5.00	2.71	0.11				
26.00	5.00	2.71	0.00				
28.00	5.00	2.71	0.00				
30.00	5.00	2.71	0.00				
32.00	5.00	2.71	0.00				
34.00	5.00	2.71	0.00				
36.00	5.00	2.71	0.00				
38.00	5.00	2.71	0.00				
40.00	5.00	2.71	0.00				
42.00	5.00	2.71	0.00				
44.00	5.00	2.71	0.00				
46.00	5.00	2.71	0.00				
48.00	5.00	2.71	0.00				
50.00	5.00	2.71	0.00				
52.00	5.00	2.71	0.00				
54.00	5.00	2.71	0.00				
56.00	5.00	2.71	0.00				
58.00	5.00	2.71	0.00				
60.00	5.00	2.71	0.00				
62.00	5.00	2.71	0.00				
64.00	5.00	2.71	0.00				
66.00	5.00	2.71	0.00				
68.00	5.00	2.71	0.00				
70.00	5.00	2.71	0.00				
72.00	5.00	2.71	0.00				
74.00	5.00	2.71	0.00				
76.00	5.00	2.71	0.00				
78.00	5.00	2.71	0.00				
80.00	5.00	2.71	0.00				
82.00	5.00	2.71	0.00				
84.00	5.00	2.71	0.00				
86.00	5.00	2.71	0.00				
88.00	5.00	2.71	0.00				
90.00	5.00	2.71	0.00				
92.00	5.00	2.71	0.00				
94.00	5.00	2.71	0.00				
96.00	5.00	2.71	0.00				
98.00	5.00	2.71	0.00				
100.00	5.00	2.71	0.00				
102.00	5.00	2.71	0.00				

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Type III 24-hr 10 Year Rainfall=5.00"

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Summary for Subcatchment 4B: Drainage Area 4B

Runoff = 9.20 cfs @ 12.09 hrs, Volume= 0.655 af, Depth= 2.45"

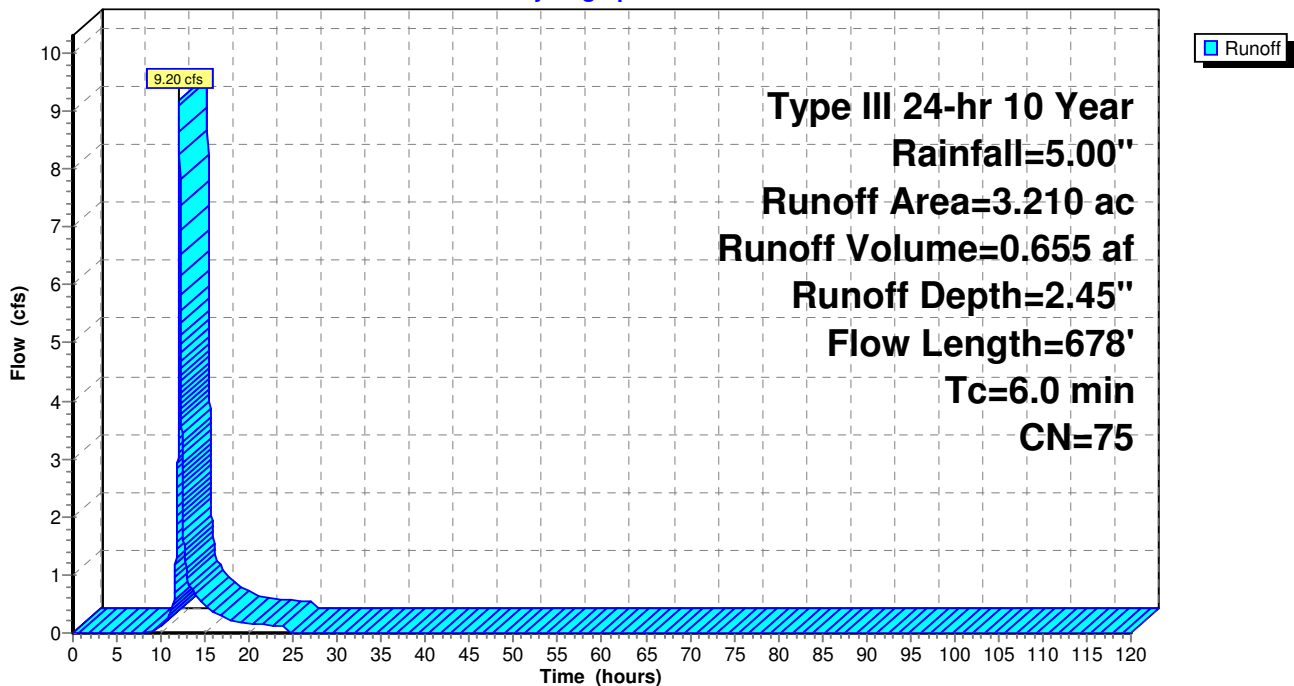
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.00"

Area (ac)	CN	Description
3.210	75	1/4 acre lots, 38% imp, HSG B
1.990		Pervious Area
1.220		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.1	100	0.1600	0.41		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
1.9	578	0.1200	5.20		Shallow Concentrated Flow, 2 to DP-5 Grassed Waterway Kv= 15.0 fps
6.0	678	Total			

Subcatchment 4B: Drainage Area 4B

Hydrograph



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Type III 24-hr 10 Year Rainfall=5.00"

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Hydrograph for Subcatchment 4B: Drainage Area 4B

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	5.00	2.45	0.00
2.00	0.10	0.00	0.00	106.00	5.00	2.45	0.00
4.00	0.22	0.00	0.00	108.00	5.00	2.45	0.00
6.00	0.36	0.00	0.00	110.00	5.00	2.45	0.00
8.00	0.57	0.00	0.00	112.00	5.00	2.45	0.00
10.00	0.95	0.02	0.11	114.00	5.00	2.45	0.00
12.00	2.50	0.65	5.18	116.00	5.00	2.45	0.00
14.00	4.06	1.71	0.62	118.00	5.00	2.45	0.00
16.00	4.43	2.00	0.34	120.00	5.00	2.45	0.00
18.00	4.64	2.16	0.21				
20.00	4.79	2.28	0.17				
22.00	4.90	2.37	0.14				
24.00	5.00	2.45	0.11				
26.00	5.00	2.45	0.00				
28.00	5.00	2.45	0.00				
30.00	5.00	2.45	0.00				
32.00	5.00	2.45	0.00				
34.00	5.00	2.45	0.00				
36.00	5.00	2.45	0.00				
38.00	5.00	2.45	0.00				
40.00	5.00	2.45	0.00				
42.00	5.00	2.45	0.00				
44.00	5.00	2.45	0.00				
46.00	5.00	2.45	0.00				
48.00	5.00	2.45	0.00				
50.00	5.00	2.45	0.00				
52.00	5.00	2.45	0.00				
54.00	5.00	2.45	0.00				
56.00	5.00	2.45	0.00				
58.00	5.00	2.45	0.00				
60.00	5.00	2.45	0.00				
62.00	5.00	2.45	0.00				
64.00	5.00	2.45	0.00				
66.00	5.00	2.45	0.00				
68.00	5.00	2.45	0.00				
70.00	5.00	2.45	0.00				
72.00	5.00	2.45	0.00				
74.00	5.00	2.45	0.00				
76.00	5.00	2.45	0.00				
78.00	5.00	2.45	0.00				
80.00	5.00	2.45	0.00				
82.00	5.00	2.45	0.00				
84.00	5.00	2.45	0.00				
86.00	5.00	2.45	0.00				
88.00	5.00	2.45	0.00				
90.00	5.00	2.45	0.00				
92.00	5.00	2.45	0.00				
94.00	5.00	2.45	0.00				
96.00	5.00	2.45	0.00				
98.00	5.00	2.45	0.00				
100.00	5.00	2.45	0.00				
102.00	5.00	2.45	0.00				

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Type III 24-hr 10 Year Rainfall=5.00"

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Summary for Subcatchment 5: Drainage Area 5

Runoff = 41.23 cfs @ 12.13 hrs, Volume= 3.302 af, Depth= 2.45"

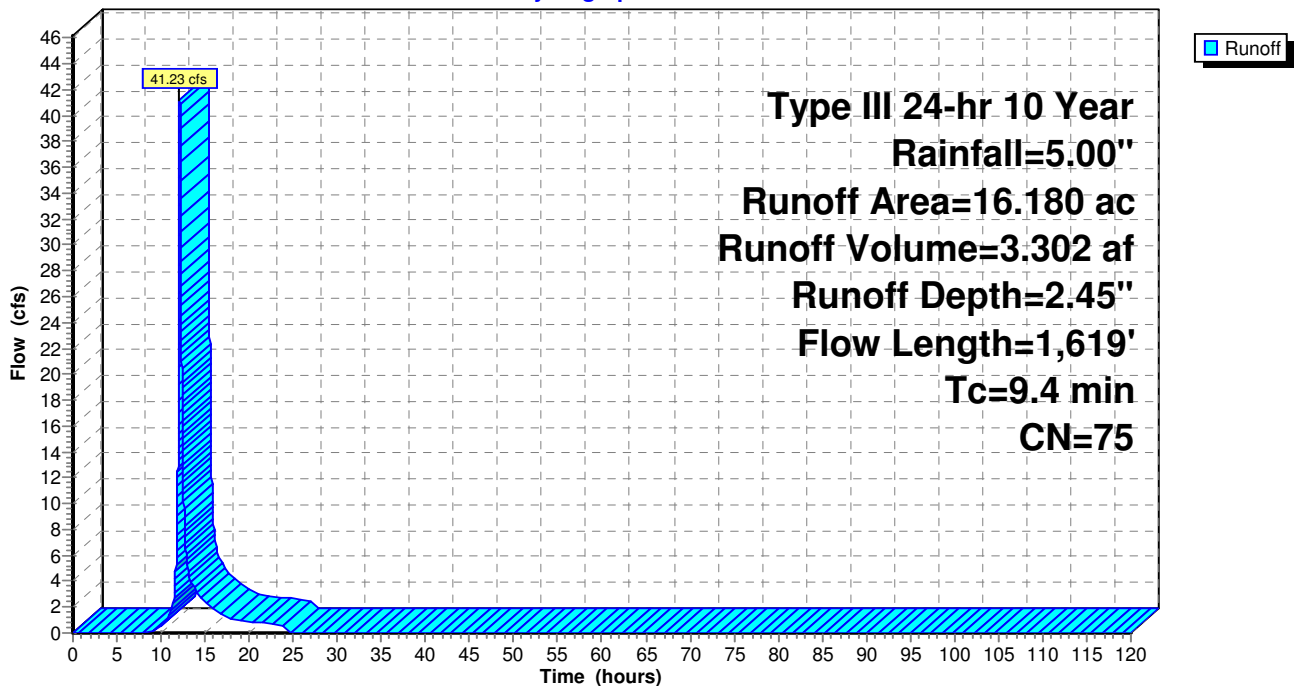
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.00"

Area (ac)	CN	Description
16.180	75	1/4 acre lots, 38% imp, HSG B
10.032		Pervious Area
6.148		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	100	0.1800	0.43		Sheet Flow, 1 to 2
5.5	1,519	0.0810	4.58		Shallow Concentrated Flow, 2 to DP-4
					Unpaved Kv= 16.1 fps
9.4	1,619	Total			

Subcatchment 5: Drainage Area 5

Hydrograph



Post-Development Entire

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Type III 24-hr 10 Year Rainfall=5.00"

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Hydrograph for Subcatchment 5: Drainage Area 5

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	5.00	2.45	0.00
2.00	0.10	0.00	0.00	106.00	5.00	2.45	0.00
4.00	0.22	0.00	0.00	108.00	5.00	2.45	0.00
6.00	0.36	0.00	0.00	110.00	5.00	2.45	0.00
8.00	0.57	0.00	0.00	112.00	5.00	2.45	0.00
10.00	0.95	0.02	0.51	114.00	5.00	2.45	0.00
12.00	2.50	0.65	19.23	116.00	5.00	2.45	0.00
14.00	4.06	1.71	3.22	118.00	5.00	2.45	0.00
16.00	4.43	2.00	1.76	120.00	5.00	2.45	0.00
18.00	4.64	2.16	1.08				
20.00	4.79	2.28	0.86				
22.00	4.90	2.37	0.72				
24.00	5.00	2.45	0.57				
26.00	5.00	2.45	0.00				
28.00	5.00	2.45	0.00				
30.00	5.00	2.45	0.00				
32.00	5.00	2.45	0.00				
34.00	5.00	2.45	0.00				
36.00	5.00	2.45	0.00				
38.00	5.00	2.45	0.00				
40.00	5.00	2.45	0.00				
42.00	5.00	2.45	0.00				
44.00	5.00	2.45	0.00				
46.00	5.00	2.45	0.00				
48.00	5.00	2.45	0.00				
50.00	5.00	2.45	0.00				
52.00	5.00	2.45	0.00				
54.00	5.00	2.45	0.00				
56.00	5.00	2.45	0.00				
58.00	5.00	2.45	0.00				
60.00	5.00	2.45	0.00				
62.00	5.00	2.45	0.00				
64.00	5.00	2.45	0.00				
66.00	5.00	2.45	0.00				
68.00	5.00	2.45	0.00				
70.00	5.00	2.45	0.00				
72.00	5.00	2.45	0.00				
74.00	5.00	2.45	0.00				
76.00	5.00	2.45	0.00				
78.00	5.00	2.45	0.00				
80.00	5.00	2.45	0.00				
82.00	5.00	2.45	0.00				
84.00	5.00	2.45	0.00				
86.00	5.00	2.45	0.00				
88.00	5.00	2.45	0.00				
90.00	5.00	2.45	0.00				
92.00	5.00	2.45	0.00				
94.00	5.00	2.45	0.00				
96.00	5.00	2.45	0.00				
98.00	5.00	2.45	0.00				
100.00	5.00	2.45	0.00				
102.00	5.00	2.45	0.00				

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Type III 24-hr 10 Year Rainfall=5.00"

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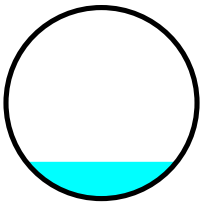
Summary for Reach 1R: Pipe

Inflow = 2.18 cfs @ 12.28 hrs, Volume= 0.137 af
Outflow = 2.18 cfs @ 12.28 hrs, Volume= 0.137 af, Atten= 0%, Lag= 0.3 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Max. Velocity= 9.12 fps, Min. Travel Time= 0.3 min
Avg. Velocity = 4.05 fps, Avg. Travel Time= 0.8 min

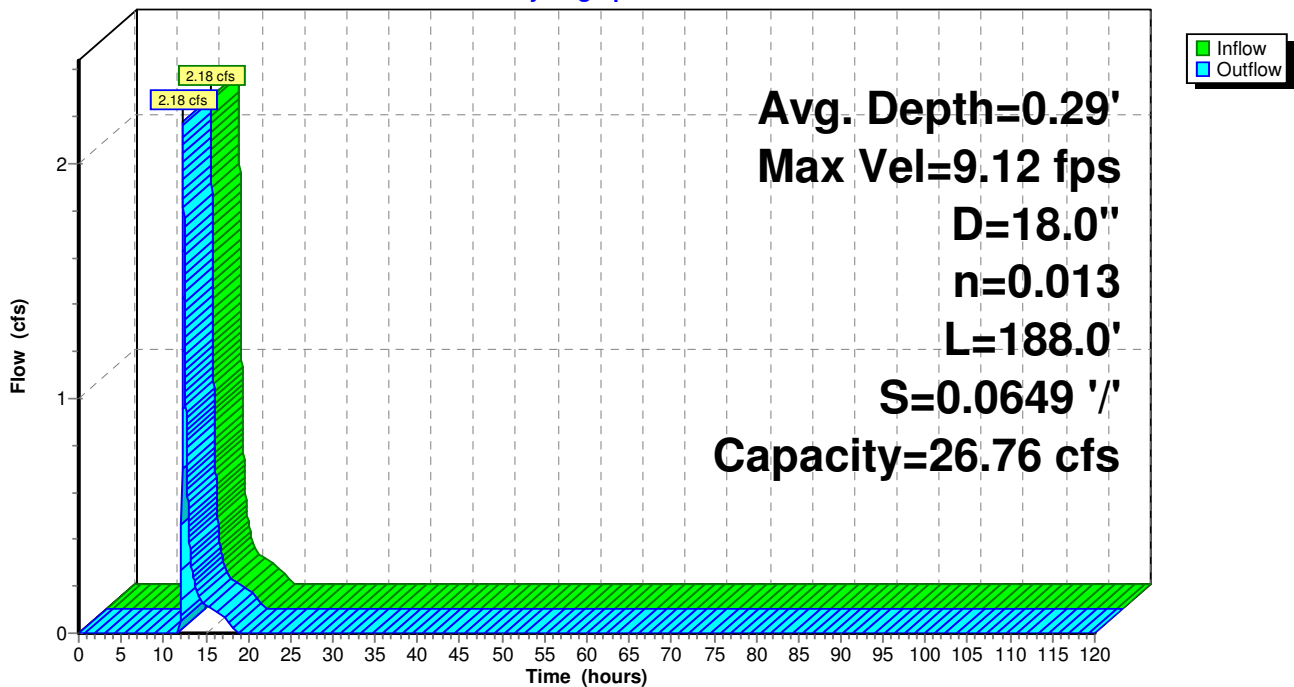
Peak Storage= 45 cf @ 12.28 hrs, Average Depth at Peak Storage= 0.29'
Bank-Full Depth= 1.50', Capacity at Bank-Full= 26.76 cfs

18.0" Diameter Pipe, n= 0.013 Corrugated PE, smooth interior
Length= 188.0' Slope= 0.0649 '/'
Inlet Invert= 310.20', Outlet Invert= 298.00'



Reach 1R: Pipe

Hydrograph



Post-Development Entire

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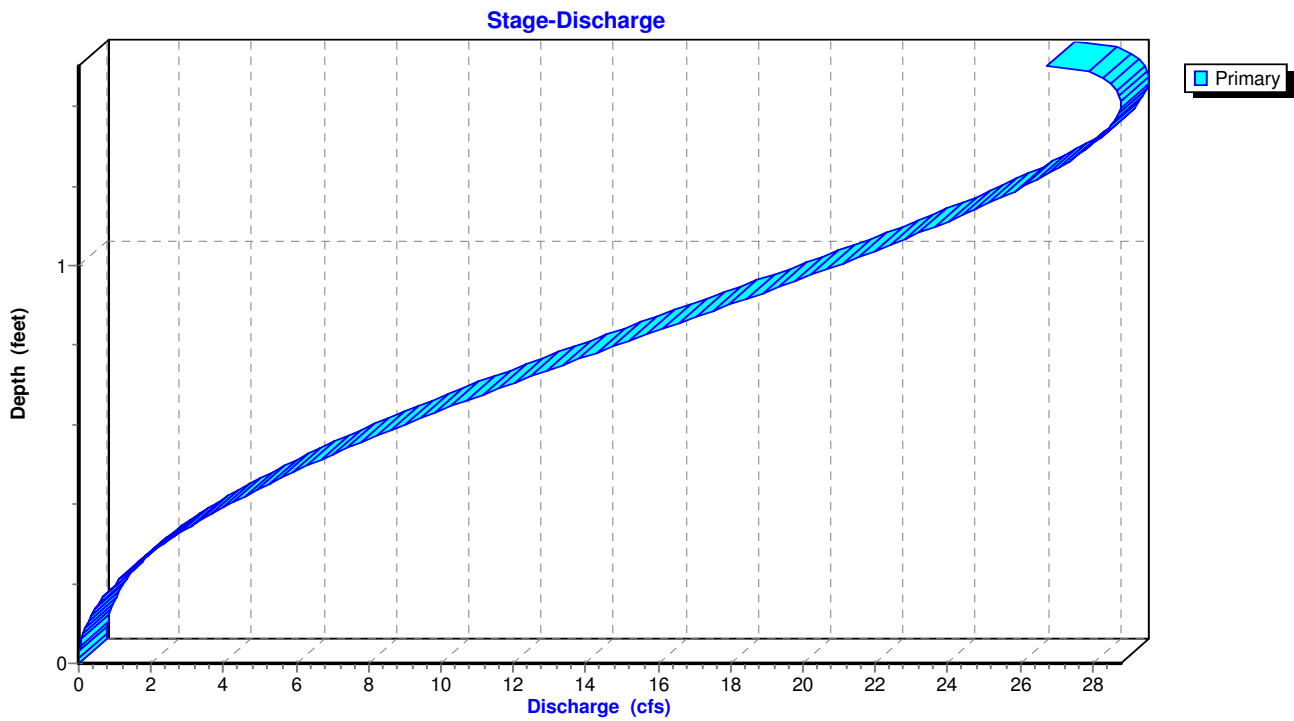
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Type III 24-hr 10 Year Rainfall=5.00"

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Reach 1R: Pipe



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Hydrograph for Reach 1R: Pipe

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)
0.00	0.00	0	310.20	0.00
5.00	0.00	0	310.20	0.00
10.00	0.00	0	310.20	0.00
15.00	0.12	6	310.27	0.12
20.00	0.00	0	310.20	0.00
25.00	0.00	0	310.20	0.00
30.00	0.00	0	310.20	0.00
35.00	0.00	0	310.20	0.00
40.00	0.00	0	310.20	0.00
45.00	0.00	0	310.20	0.00
50.00	0.00	0	310.20	0.00
55.00	0.00	0	310.20	0.00
60.00	0.00	0	310.20	0.00
65.00	0.00	0	310.20	0.00
70.00	0.00	0	310.20	0.00
75.00	0.00	0	310.20	0.00
80.00	0.00	0	310.20	0.00
85.00	0.00	0	310.20	0.00
90.00	0.00	0	310.20	0.00
95.00	0.00	0	310.20	0.00
100.00	0.00	0	310.20	0.00
105.00	0.00	0	310.20	0.00
110.00	0.00	0	310.20	0.00
115.00	0.00	0	310.20	0.00
120.00	0.00	0	310.20	0.00

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Type III 24-hr 10 Year Rainfall=5.00"

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Stage-Discharge for Reach 1R: Pipe

Elevation (feet)	Velocity (ft/sec)	Discharge (cfs)	Elevation (feet)	Velocity (ft/sec)	Discharge (cfs)	Elevation (feet)	Velocity (ft/sec)	Discharge (cfs)
310.20	0.00	0.00	310.72	12.70	6.91	311.24	16.92	22.12
310.21	0.90	0.00	310.73	12.83	7.16	311.25	16.96	22.40
310.22	1.61	0.01	310.74	12.95	7.42	311.26	16.99	22.68
310.23	2.13	0.02	310.75	13.08	7.68	311.27	17.02	22.95
310.24	2.57	0.03	310.76	13.20	7.94	311.28	17.05	23.23
310.25	2.98	0.06	310.77	13.32	8.20	311.29	17.08	23.49
310.26	3.36	0.08	310.78	13.43	8.47	311.30	17.11	23.76
310.27	3.71	0.11	310.79	13.55	8.74	311.31	17.13	24.02
310.28	4.05	0.15	310.80	13.66	9.02	311.32	17.15	24.27
310.29	4.38	0.19	310.81	13.77	9.29	311.33	17.17	24.53
310.30	4.68	0.24	310.82	13.88	9.57	311.34	17.19	24.77
310.31	4.98	0.29	310.83	13.99	9.85	311.35	17.21	25.02
310.32	5.27	0.35	310.84	14.09	10.14	311.36	17.22	25.25
310.33	5.54	0.41	310.85	14.20	10.42	311.37	17.23	25.49
310.34	5.81	0.48	310.86	14.30	10.71	311.38	17.24	25.72
310.35	6.07	0.56	310.87	14.40	11.00	311.39	17.25	25.94
310.36	6.33	0.64	310.88	14.50	11.29	311.40	17.26	26.16
310.37	6.57	0.73	310.89	14.60	11.59	311.41	17.26	26.37
310.38	6.81	0.82	310.90	14.69	11.88	311.42	17.26	26.57
310.39	7.05	0.92	310.91	14.79	12.18	311.43	17.26	26.77
310.40	7.27	1.02	310.92	14.88	12.48	311.44	17.26	26.96
310.41	7.50	1.13	310.93	14.97	12.78	311.45	17.25	27.14
310.42	7.72	1.24	310.94	15.06	13.08	311.46	17.24	27.32
310.43	7.93	1.36	310.95	15.14	13.38	311.47	17.23	27.49
310.44	8.14	1.49	310.96	15.23	13.68	311.48	17.22	27.65
310.45	8.35	1.62	310.97	15.31	13.99	311.49	17.20	27.81
310.46	8.55	1.75	310.98	15.39	14.29	311.50	17.18	27.95
310.47	8.74	1.89	310.99	15.47	14.60	311.51	17.15	28.08
310.48	8.94	2.04	311.00	15.55	14.90	311.52	17.13	28.21
310.49	9.13	2.19	311.01	15.63	15.21	311.53	17.10	28.32
310.50	9.31	2.34	311.02	15.70	15.52	311.54	17.06	28.42
310.51	9.50	2.51	311.03	15.77	15.83	311.55	17.02	28.52
310.52	9.68	2.67	311.04	15.85	16.13	311.56	16.98	28.60
310.53	9.85	2.84	311.05	15.91	16.44	311.57	16.94	28.66
310.54	10.03	3.02	311.06	15.98	16.75	311.58	16.88	28.72
310.55	10.20	3.20	311.07	16.05	17.06	311.59	16.83	28.75
310.56	10.36	3.38	311.08	16.11	17.36	311.60	16.76	28.78
310.57	10.53	3.57	311.09	16.18	17.67	311.61	16.70	28.78
310.58	10.69	3.76	311.10	16.24	17.98	311.62	16.62	28.76
310.59	10.85	3.96	311.11	16.30	18.28	311.63	16.54	28.72
310.60	11.01	4.16	311.12	16.36	18.59	311.64	16.44	28.67
310.61	11.16	4.37	311.13	16.41	18.89	311.65	16.33	28.57
310.62	11.31	4.58	311.14	16.47	19.19	311.66	16.21	28.44
310.63	11.46	4.80	311.15	16.52	19.49	311.67	16.08	28.28
310.64	11.61	5.02	311.16	16.57	19.79	311.68	15.90	28.01
310.65	11.75	5.24	311.17	16.62	20.09	311.69	15.58	27.51
310.66	11.89	5.47	311.18	16.67	20.39	311.70	15.14	26.76
310.67	12.03	5.70	311.19	16.72	20.68			
310.68	12.17	5.93	311.20	16.76	20.98			
310.69	12.31	6.17	311.21	16.80	21.27			
310.70	12.44	6.42	311.22	16.84	21.55			
310.71	12.57	6.66	311.23	16.88	21.84			

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Summary for Pond LS-1: Level Spreader

Inflow = 9.93 cfs @ 12.38 hrs, Volume= 0.587 af
 Outflow = 11.47 cfs @ 12.38 hrs, Volume= 0.468 af, Atten= 0%, Lag= 0.0 min
 Primary = 11.47 cfs @ 12.38 hrs, Volume= 0.468 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 300.03' @ 12.38 hrs Surf.Area= 2,248 sf Storage= 5,288 cf

Plug-Flow detention time= 40.0 min calculated for 0.468 af (80% of inflow)
 Center-of-Mass det. time= 12.1 min (795.2 - 783.1)

Volume	Invert	Avail.Storage	Storage Description
#1	296.00'	5,288 cf	Custom Stage Data (Irregular) Listed below

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
296.00	505	363.0	0	0	505
298.00	1,320	413.0	1,761	1,761	3,689
300.00	2,248	436.0	3,527	5,288	5,459

Device	Routing	Invert	Outlet Devices
#1	Primary	299.95'	210.0' long x 4.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Primary OutFlow Max=11.47 cfs @ 12.38 hrs HW=300.03' TW=0.00' (Dynamic Tailwater)

↑1=**Broad-Crested Rectangular Weir** (Weir Controls 11.47 cfs @ 0.68 fps)

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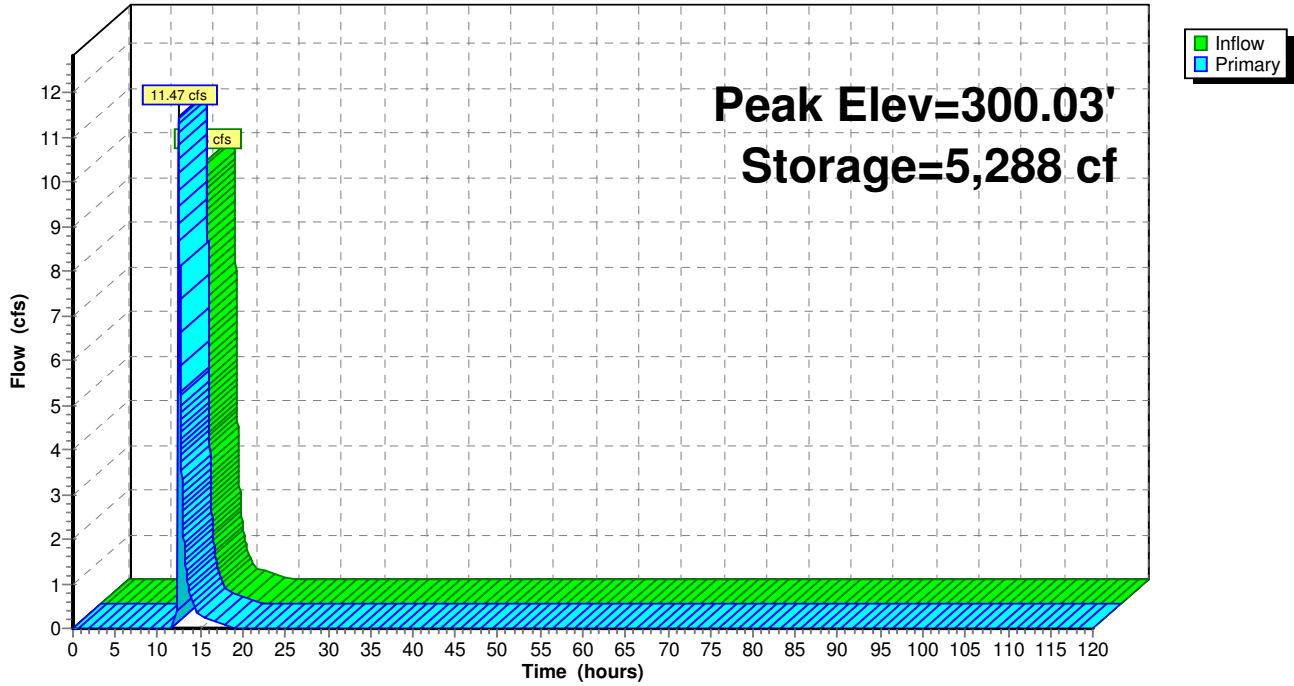
Type III 24-hr 10 Year Rainfall=5.00"

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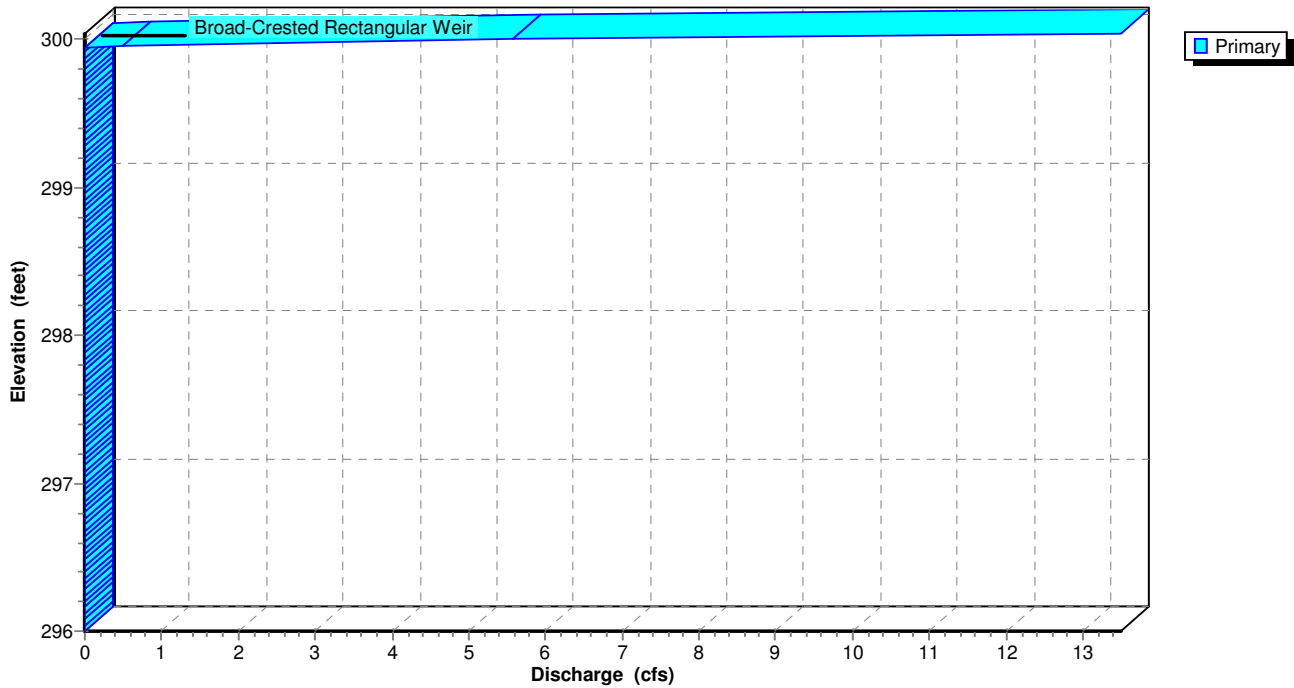
Pond LS-1: Level Spreader

Hydrograph



Pond LS-1: Level Spreader

Stage-Discharge



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Hydrograph for Pond LS-1: Level Spreader

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
0.00	0.00	0	296.00	0.00
5.00	0.00	0	296.00	0.00
10.00	0.00	0	296.00	0.00
15.00	0.26	5,211	299.96	0.26
20.00	0.00	5,200	299.95	0.00
25.00	0.00	5,200	299.95	0.00
30.00	0.00	5,200	299.95	0.00
35.00	0.00	5,200	299.95	0.00
40.00	0.00	5,200	299.95	0.00
45.00	0.00	5,200	299.95	0.00
50.00	0.00	5,200	299.95	0.00
55.00	0.00	5,200	299.95	0.00
60.00	0.00	5,200	299.95	0.00
65.00	0.00	5,200	299.95	0.00
70.00	0.00	5,200	299.95	0.00
75.00	0.00	5,200	299.95	0.00
80.00	0.00	5,200	299.95	0.00
85.00	0.00	5,200	299.95	0.00
90.00	0.00	5,200	299.95	0.00
95.00	0.00	5,200	299.95	0.00
100.00	0.00	5,200	299.95	0.00
105.00	0.00	5,200	299.95	0.00
110.00	0.00	5,200	299.95	0.00
115.00	0.00	5,200	299.95	0.00
120.00	0.00	5,200	299.95	0.00

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Stage-Discharge for Pond LS-1: Level Spreader

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
296.00	0.00	297.04	0.00	298.08	0.00	299.12	0.00
296.02	0.00	297.06	0.00	298.10	0.00	299.14	0.00
296.04	0.00	297.08	0.00	298.12	0.00	299.16	0.00
296.06	0.00	297.10	0.00	298.14	0.00	299.18	0.00
296.08	0.00	297.12	0.00	298.16	0.00	299.20	0.00
296.10	0.00	297.14	0.00	298.18	0.00	299.22	0.00
296.12	0.00	297.16	0.00	298.20	0.00	299.24	0.00
296.14	0.00	297.18	0.00	298.22	0.00	299.26	0.00
296.16	0.00	297.20	0.00	298.24	0.00	299.28	0.00
296.18	0.00	297.22	0.00	298.26	0.00	299.30	0.00
296.20	0.00	297.24	0.00	298.28	0.00	299.32	0.00
296.22	0.00	297.26	0.00	298.30	0.00	299.34	0.00
296.24	0.00	297.28	0.00	298.32	0.00	299.36	0.00
296.26	0.00	297.30	0.00	298.34	0.00	299.38	0.00
296.28	0.00	297.32	0.00	298.36	0.00	299.40	0.00
296.30	0.00	297.34	0.00	298.38	0.00	299.42	0.00
296.32	0.00	297.36	0.00	298.40	0.00	299.44	0.00
296.34	0.00	297.38	0.00	298.42	0.00	299.46	0.00
296.36	0.00	297.40	0.00	298.44	0.00	299.48	0.00
296.38	0.00	297.42	0.00	298.46	0.00	299.50	0.00
296.40	0.00	297.44	0.00	298.48	0.00	299.52	0.00
296.42	0.00	297.46	0.00	298.50	0.00	299.54	0.00
296.44	0.00	297.48	0.00	298.52	0.00	299.56	0.00
296.46	0.00	297.50	0.00	298.54	0.00	299.58	0.00
296.48	0.00	297.52	0.00	298.56	0.00	299.60	0.00
296.50	0.00	297.54	0.00	298.58	0.00	299.62	0.00
296.52	0.00	297.56	0.00	298.60	0.00	299.64	0.00
296.54	0.00	297.58	0.00	298.62	0.00	299.66	0.00
296.56	0.00	297.60	0.00	298.64	0.00	299.68	0.00
296.58	0.00	297.62	0.00	298.66	0.00	299.70	0.00
296.60	0.00	297.64	0.00	298.68	0.00	299.72	0.00
296.62	0.00	297.66	0.00	298.70	0.00	299.74	0.00
296.64	0.00	297.68	0.00	298.72	0.00	299.76	0.00
296.66	0.00	297.70	0.00	298.74	0.00	299.78	0.00
296.68	0.00	297.72	0.00	298.76	0.00	299.80	0.00
296.70	0.00	297.74	0.00	298.78	0.00	299.82	0.00
296.72	0.00	297.76	0.00	298.80	0.00	299.84	0.00
296.74	0.00	297.78	0.00	298.82	0.00	299.86	0.00
296.76	0.00	297.80	0.00	298.84	0.00	299.88	0.00
296.78	0.00	297.82	0.00	298.86	0.00	299.90	0.00
296.80	0.00	297.84	0.00	298.88	0.00	299.92	0.00
296.82	0.00	297.86	0.00	298.90	0.00	299.94	0.00
296.84	0.00	297.88	0.00	298.92	0.00	299.96	0.50
296.86	0.00	297.90	0.00	298.94	0.00	299.98	2.60
296.88	0.00	297.92	0.00	298.96	0.00	300.00	5.59
296.90	0.00	297.94	0.00	298.98	0.00	300.02	9.26
296.92	0.00	297.96	0.00	299.00	0.00	300.04	13.49
296.94	0.00	297.98	0.00	299.02	0.00		
296.96	0.00	298.00	0.00	299.04	0.00		
296.98	0.00	298.02	0.00	299.06	0.00		
297.00	0.00	298.04	0.00	299.08	0.00		
297.02	0.00	298.06	0.00	299.10	0.00		

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Type III 24-hr 10 Year Rainfall=5.00"

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Summary for Pond P-1c: Infiltration Chambers

Inflow Area = 1.280 ac, 15.98% Impervious, Inflow Depth = 2.80" for 10 Year event
Inflow = 3.75 cfs @ 12.13 hrs, Volume= 0.299 af
Outflow = 2.34 cfs @ 12.28 hrs, Volume= 0.299 af, Atten= 37%, Lag= 8.7 min
Primary = 0.29 cfs @ 11.68 hrs, Volume= 0.218 af
Secondary = 2.06 cfs @ 12.28 hrs, Volume= 0.081 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Peak Elev= 311.08' @ 12.28 hrs Surf.Area= 1,044 sf Storage= 2,913 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 48.7 min (876.3 - 827.6)

Volume	Invert	Avail.Storage	Storage Description
#1	309.00'	3,349 cf	52.6"W x 34.0"H x 7.50'L Cultec R-V8 x 50

Device	Routing	Invert	Outlet Devices
#1	Primary	309.00'	7.500 in/hr Exfiltration over Horizontal area
#2	Secondary	310.33'	18.0" x 20.0' long Culvert CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 300.00' S= 0.5165 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior

Primary OutFlow Max=0.29 cfs @ 11.68 hrs HW=309.03' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.29 cfs)

Secondary OutFlow Max=2.06 cfs @ 12.28 hrs HW=311.08' TW=310.49' (Dynamic Tailwater)
↑**2=Culvert** (Inlet Controls 2.06 cfs @ 2.33 fps)

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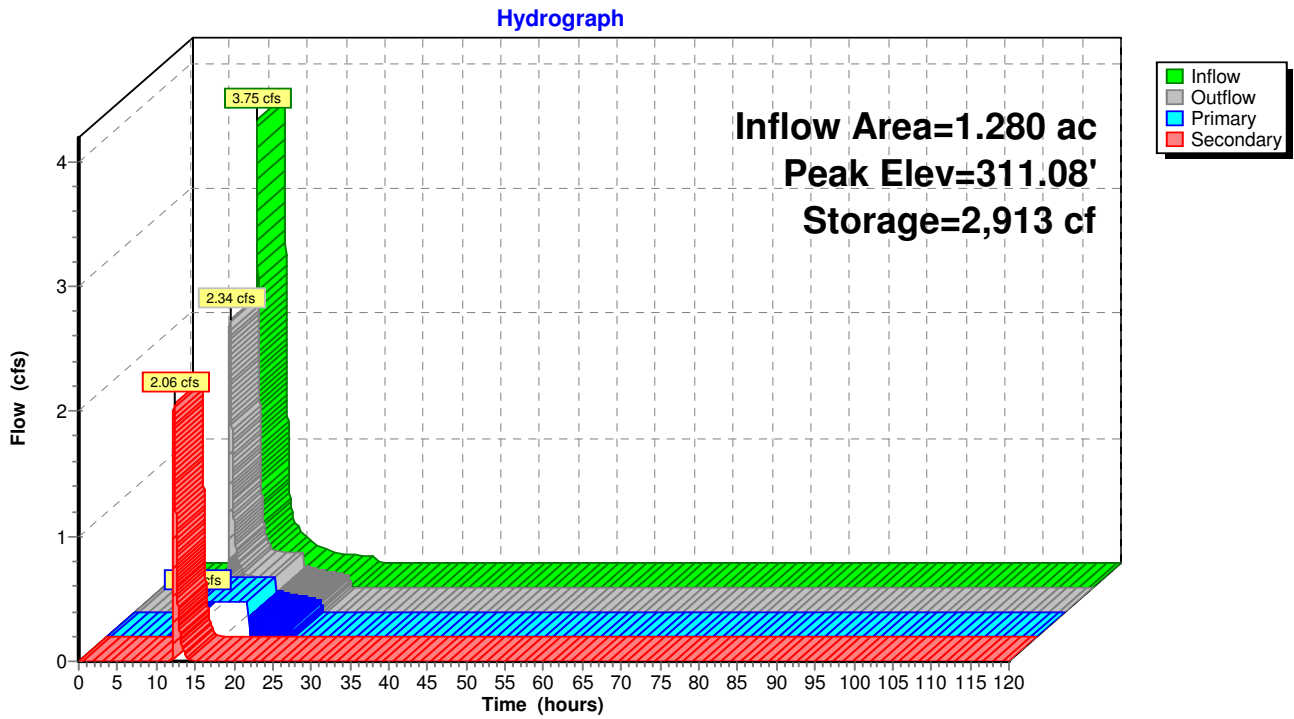
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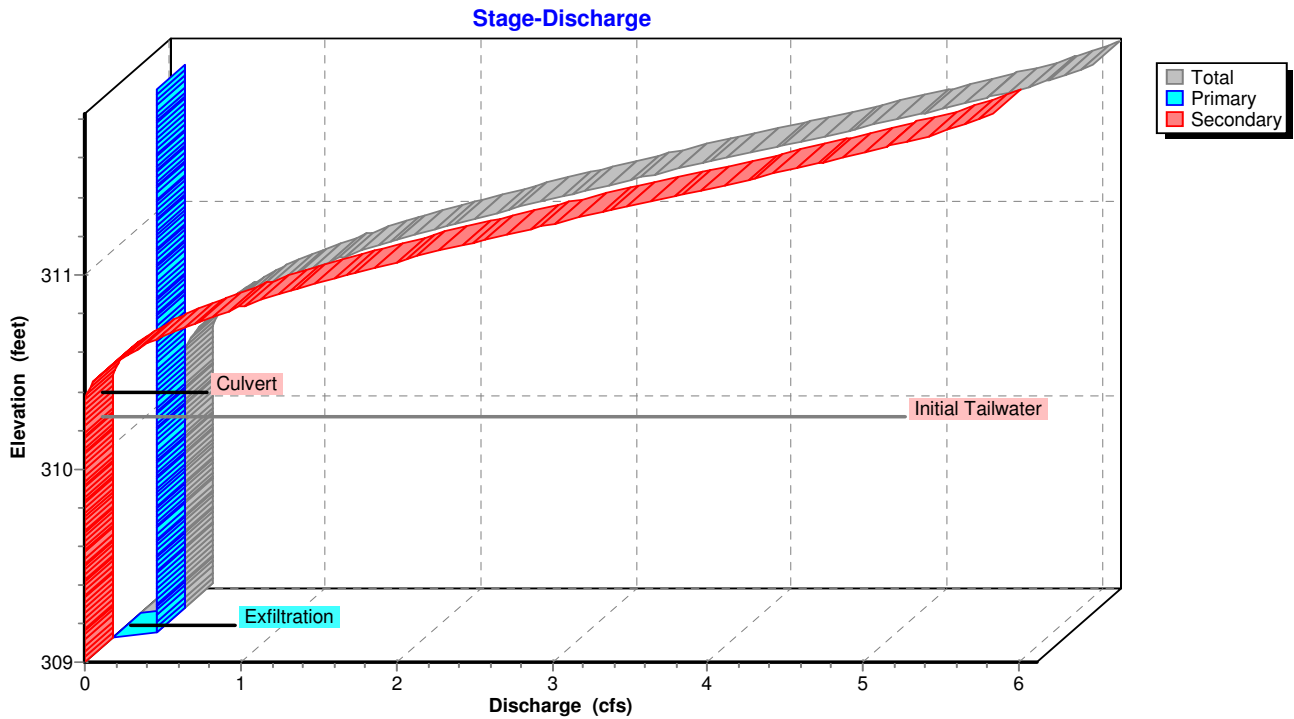
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Pond P-1c: Infiltration Chambers



Pond P-1c: Infiltration Chambers



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Hydrograph for Pond P-1c: Infiltration Chambers

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	309.00	0.00	0.00	0.00
5.00	0.00	0	309.00	0.00	0.00	0.00
10.00	0.07	0	309.00	0.07	0.07	0.00
15.00	0.21	1,919	310.28	0.29	0.29	0.00
20.00	0.07	0	309.00	0.00	0.00	0.00
25.00	0.00	0	309.00	0.00	0.00	0.00
30.00	0.00	0	309.00	0.00	0.00	0.00
35.00	0.00	0	309.00	0.00	0.00	0.00
40.00	0.00	0	309.00	0.00	0.00	0.00
45.00	0.00	0	309.00	0.00	0.00	0.00
50.00	0.00	0	309.00	0.00	0.00	0.00
55.00	0.00	0	309.00	0.00	0.00	0.00
60.00	0.00	0	309.00	0.00	0.00	0.00
65.00	0.00	0	309.00	0.00	0.00	0.00
70.00	0.00	0	309.00	0.00	0.00	0.00
75.00	0.00	0	309.00	0.00	0.00	0.00
80.00	0.00	0	309.00	0.00	0.00	0.00
85.00	0.00	0	309.00	0.00	0.00	0.00
90.00	0.00	0	309.00	0.00	0.00	0.00
95.00	0.00	0	309.00	0.00	0.00	0.00
100.00	0.00	0	309.00	0.00	0.00	0.00
105.00	0.00	0	309.00	0.00	0.00	0.00
110.00	0.00	0	309.00	0.00	0.00	0.00
115.00	0.00	0	309.00	0.00	0.00	0.00
120.00	0.00	0	309.00	0.00	0.00	0.00

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Stage-Discharge for Pond P-1c: Infiltration Chambers

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
309.00	0.00	0.00	0.00	311.60	5.12	0.29	4.83
309.05	0.29	0.29	0.00	311.65	5.37	0.29	5.09
309.10	0.29	0.29	0.00	311.70	5.61	0.29	5.33
309.15	0.29	0.29	0.00	311.75	5.83	0.29	5.54
309.20	0.29	0.29	0.00	311.80	6.02	0.29	5.73
309.25	0.29	0.29	0.00				
309.30	0.29	0.29	0.00				
309.35	0.29	0.29	0.00				
309.40	0.29	0.29	0.00				
309.45	0.29	0.29	0.00				
309.50	0.29	0.29	0.00				
309.55	0.29	0.29	0.00				
309.60	0.29	0.29	0.00				
309.65	0.29	0.29	0.00				
309.70	0.29	0.29	0.00				
309.75	0.29	0.29	0.00				
309.80	0.29	0.29	0.00				
309.85	0.29	0.29	0.00				
309.90	0.29	0.29	0.00				
309.95	0.29	0.29	0.00				
310.00	0.29	0.29	0.00				
310.05	0.29	0.29	0.00				
310.10	0.29	0.29	0.00				
310.15	0.29	0.29	0.00				
310.20	0.29	0.29	0.00				
310.25	0.29	0.29	0.00				
310.30	0.29	0.29	0.00				
310.35	0.29	0.29	0.00				
310.40	0.31	0.29	0.02				
310.45	0.35	0.29	0.06				
310.50	0.41	0.29	0.12				
310.55	0.49	0.29	0.20				
310.60	0.59	0.29	0.30				
310.65	0.70	0.29	0.42				
310.70	0.84	0.29	0.55				
310.75	0.99	0.29	0.71				
310.80	1.16	0.29	0.87				
310.85	1.34	0.29	1.05				
310.90	1.54	0.29	1.25				
310.95	1.74	0.29	1.46				
311.00	1.97	0.29	1.68				
311.05	2.20	0.29	1.91				
311.10	2.44	0.29	2.15				
311.15	2.69	0.29	2.41				
311.20	2.95	0.29	2.66				
311.25	3.21	0.29	2.93				
311.30	3.49	0.29	3.20				
311.35	3.76	0.29	3.47				
311.40	4.03	0.29	3.75				
311.45	4.31	0.29	4.03				
311.50	4.58	0.29	4.30				
311.55	4.86	0.29	4.57				

Post-Development Entire

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Summary for Pond P-A: Pond-A (NYSDEC I-2)

Inflow Area = 2.110 ac, 13.06% Impervious, Inflow Depth = 2.71" for 10 Year event
 Inflow = 6.31 cfs @ 12.11 hrs, Volume= 0.477 af
 Outflow = 0.84 cfs @ 12.81 hrs, Volume= 0.477 af, Atten= 87%, Lag= 41.6 min
 Primary = 0.62 cfs @ 12.81 hrs, Volume= 0.421 af
 Secondary = 0.21 cfs @ 12.81 hrs, Volume= 0.056 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 332.05' @ 12.81 hrs Surf.Area= 3,598 sf Storage= 8,666 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 137.3 min (966.0 - 828.8)

Volume	Invert	Avail.Storage	Storage Description
#1	328.00'	17,310 cf	Custom Stage Data (Prismatic) Listed below
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
328.00	813	0	0
330.00	2,047	2,860	2,860
332.00	3,559	5,606	8,466
334.00	5,285	8,844	17,310

Device	Routing	Invert	Outlet Devices
#1	Primary	328.00'	7.500 in/hr Exfiltration over Horizontal area
#2	Secondary	330.00'	2.0" Vert. Orifice/Grate C= 0.600
#3	Secondary	332.00'	2.10' W x 0.50' H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.62 cfs @ 12.81 hrs HW=332.05' (Free Discharge)
 ↑1=Exfiltration (Exfiltration Controls 0.62 cfs)

Secondary OutFlow Max=0.21 cfs @ 12.81 hrs HW=332.05' TW=310.36' (Dynamic Tailwater)
 ↑2=Orifice/Grate (Orifice Controls 0.15 cfs @ 6.74 fps)
 ↑3=Orifice/Grate (Orifice Controls 0.06 cfs @ 0.68 fps)

Post-Development Entire

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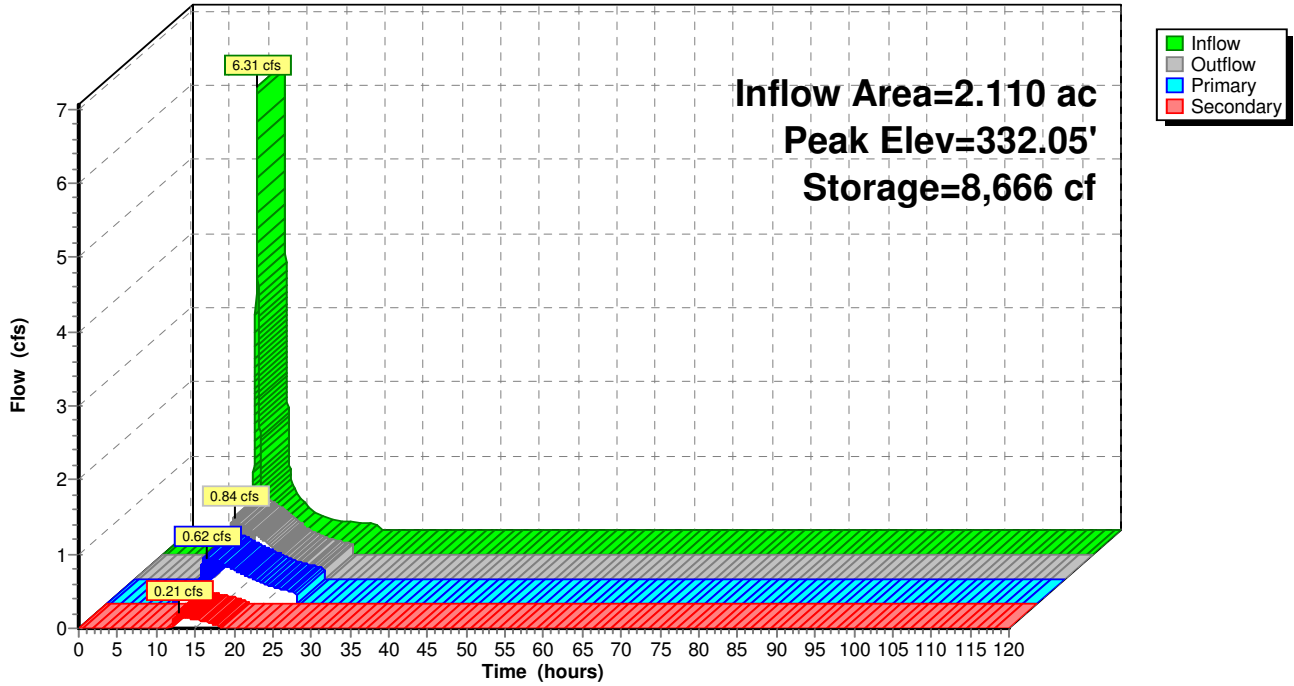
Type III 24-hr 10 Year Rainfall=5.00"

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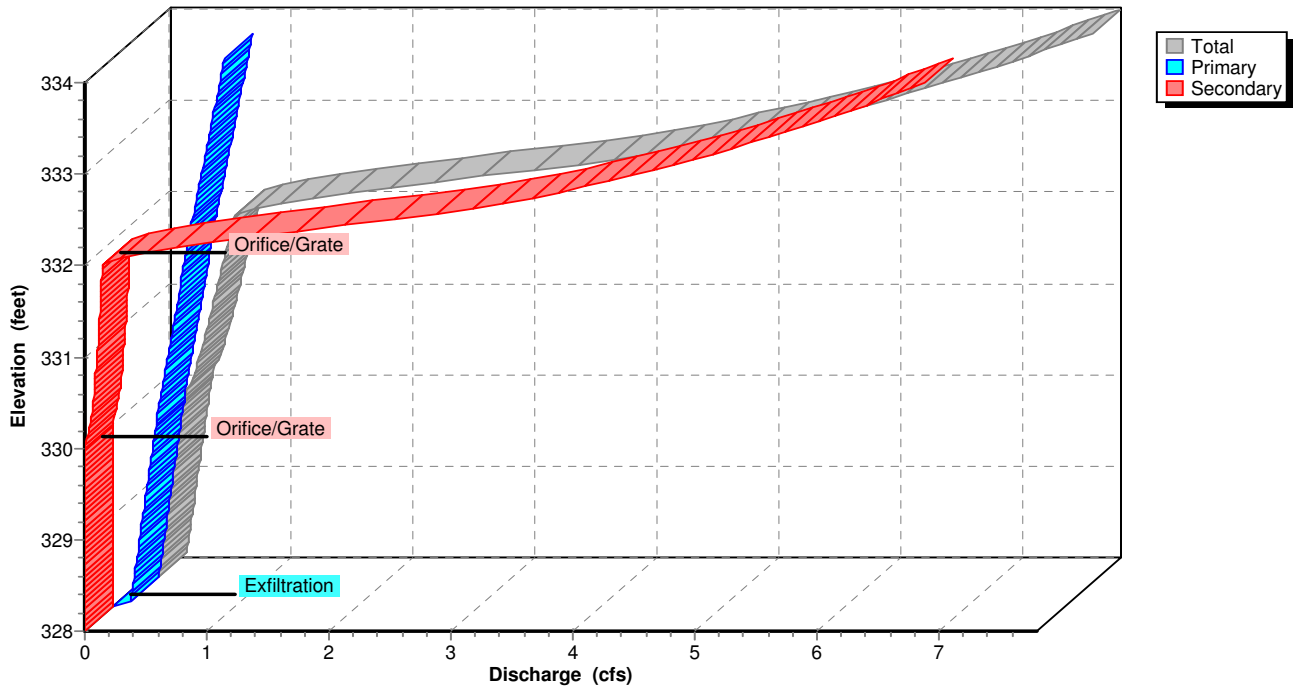
Pond P-A: Pond-A (NYSDEC I-2)

Hydrograph



Pond P-A: Pond-A (NYSDEC I-2)

Stage-Discharge



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Hydrograph for Pond P-A: Pond-A (NYSDEC I-2)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	328.00	0.00	0.00	0.00
5.00	0.00	0	328.00	0.00	0.00	0.00
10.00	0.11	0	328.00	0.11	0.11	0.00
15.00	0.34	6,733	331.38	0.66	0.54	0.12
20.00	0.12	1,876	329.31	0.28	0.28	0.00
25.00	0.00	0	328.00	0.00	0.00	0.00
30.00	0.00	0	328.00	0.00	0.00	0.00
35.00	0.00	0	328.00	0.00	0.00	0.00
40.00	0.00	0	328.00	0.00	0.00	0.00
45.00	0.00	0	328.00	0.00	0.00	0.00
50.00	0.00	0	328.00	0.00	0.00	0.00
55.00	0.00	0	328.00	0.00	0.00	0.00
60.00	0.00	0	328.00	0.00	0.00	0.00
65.00	0.00	0	328.00	0.00	0.00	0.00
70.00	0.00	0	328.00	0.00	0.00	0.00
75.00	0.00	0	328.00	0.00	0.00	0.00
80.00	0.00	0	328.00	0.00	0.00	0.00
85.00	0.00	0	328.00	0.00	0.00	0.00
90.00	0.00	0	328.00	0.00	0.00	0.00
95.00	0.00	0	328.00	0.00	0.00	0.00
100.00	0.00	0	328.00	0.00	0.00	0.00
105.00	0.00	0	328.00	0.00	0.00	0.00
110.00	0.00	0	328.00	0.00	0.00	0.00
115.00	0.00	0	328.00	0.00	0.00	0.00
120.00	0.00	0	328.00	0.00	0.00	0.00

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Stage-Discharge for Pond P-A: Pond-A (NYSDEC I-2)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
328.00	0.00	0.00	0.00	333.20	5.90	0.80	5.10
328.10	0.15	0.15	0.00	333.30	6.17	0.81	5.36
328.20	0.16	0.16	0.00	333.40	6.43	0.83	5.60
328.30	0.17	0.17	0.00	333.50	6.68	0.84	5.84
328.40	0.18	0.18	0.00	333.60	6.92	0.86	6.06
328.50	0.19	0.19	0.00	333.70	7.15	0.87	6.28
328.60	0.21	0.21	0.00	333.80	7.38	0.89	6.49
328.70	0.22	0.22	0.00	333.90	7.60	0.90	6.69
328.80	0.23	0.23	0.00	334.00	7.81	0.92	6.89
328.90	0.24	0.24	0.00				
329.00	0.25	0.25	0.00				
329.10	0.26	0.26	0.00				
329.20	0.27	0.27	0.00				
329.30	0.28	0.28	0.00				
329.40	0.29	0.29	0.00				
329.50	0.30	0.30	0.00				
329.60	0.31	0.31	0.00				
329.70	0.32	0.32	0.00				
329.80	0.33	0.33	0.00				
329.90	0.34	0.34	0.00				
330.00	0.36	0.36	0.00				
330.10	0.38	0.37	0.01				
330.20	0.42	0.38	0.04				
330.30	0.44	0.39	0.05				
330.40	0.47	0.41	0.06				
330.50	0.49	0.42	0.07				
330.60	0.51	0.43	0.08				
330.70	0.53	0.45	0.08				
330.80	0.55	0.46	0.09				
330.90	0.57	0.47	0.09				
331.00	0.59	0.49	0.10				
331.10	0.61	0.50	0.11				
331.20	0.62	0.51	0.11				
331.30	0.64	0.53	0.12				
331.40	0.66	0.54	0.12				
331.50	0.68	0.55	0.13				
331.60	0.69	0.57	0.13				
331.70	0.71	0.58	0.13				
331.80	0.73	0.59	0.14				
331.90	0.75	0.60	0.14				
332.00	0.76	0.62	0.15				
332.10	1.00	0.63	0.36				
332.20	1.40	0.65	0.76				
332.30	1.93	0.66	1.26				
332.40	2.54	0.68	1.87				
332.50	3.24	0.69	2.55				
332.60	3.79	0.71	3.09				
332.70	4.24	0.72	3.51				
332.80	4.63	0.74	3.89				
332.90	4.98	0.75	4.23				
333.00	5.30	0.77	4.54				
333.10	5.61	0.78	4.83				

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Summary for Pond P-B: Pond-B (NYSDEC I-2)

Inflow Area = 4.199 ac, 26.44% Impervious, Inflow Depth = 2.89" for 10 Year event
 Inflow = 10.76 cfs @ 12.20 hrs, Volume= 1.012 af
 Outflow = 6.69 cfs @ 12.42 hrs, Volume= 1.012 af, Atten= 38%, Lag= 13.2 min
 Primary = 0.79 cfs @ 12.42 hrs, Volume= 0.692 af
 Secondary = 5.90 cfs @ 12.42 hrs, Volume= 0.320 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 386.09' @ 12.42 hrs Surf.Area= 5,166 sf Storage= 13,247 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 124.3 min (954.6 - 830.2)

Volume	Invert	Avail.Storage	Storage Description
#1	382.00'	25,197 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
382.00	1,476	0	0
384.00	3,129	4,605	4,605
386.00	5,067	8,196	12,801
388.00	7,329	12,396	25,197

Device	Routing	Invert	Outlet Devices
#1	Primary	382.00'	6.600 in/hr Exfiltration over Horizontal area
#2	Device 5	384.56'	2.0" Vert. Orifice/Grate C= 0.600
#3	Device 4	385.50'	4.00' W x 1.00' H Vert. Orifice/Grate C= 0.600
#4	Device 5	383.50'	15.0" x 65.0' long 15" Culvert CPP, square edge headwall, Ke= 0.500 Outlet Invert= 381.50' S= 0.0308 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior
#5	Secondary	381.40'	15.0" x 196.0' long 15" Culvert CPP, square edge headwall, Ke= 0.500 Outlet Invert= 358.50' S= 0.1168 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior

Primary OutFlow Max=0.79 cfs @ 12.42 hrs HW=386.09' (Free Discharge)
 ↑1=Exfiltration (Exfiltration Controls 0.79 cfs)

Secondary OutFlow Max=5.90 cfs @ 12.42 hrs HW=386.09' TW=300.02' (Dynamic Tailwater)
 ↑5=15" Culvert (Passes 5.90 cfs of 11.91 cfs potential flow)
 ↑2=Orifice/Grate (Orifice Controls 0.13 cfs @ 5.79 fps)
 ↑4=15" Culvert (Passes 5.77 cfs of 8.28 cfs potential flow)
 ↑3=Orifice/Grate (Orifice Controls 5.77 cfs @ 2.46 fps)

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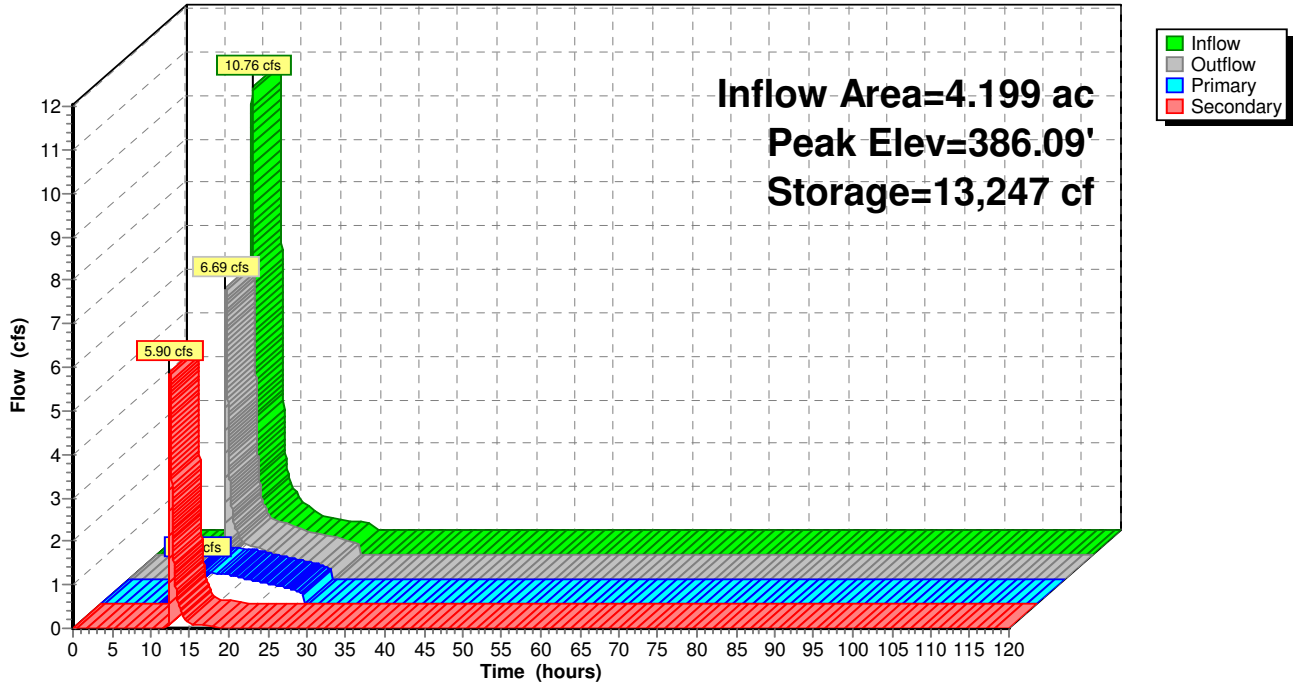
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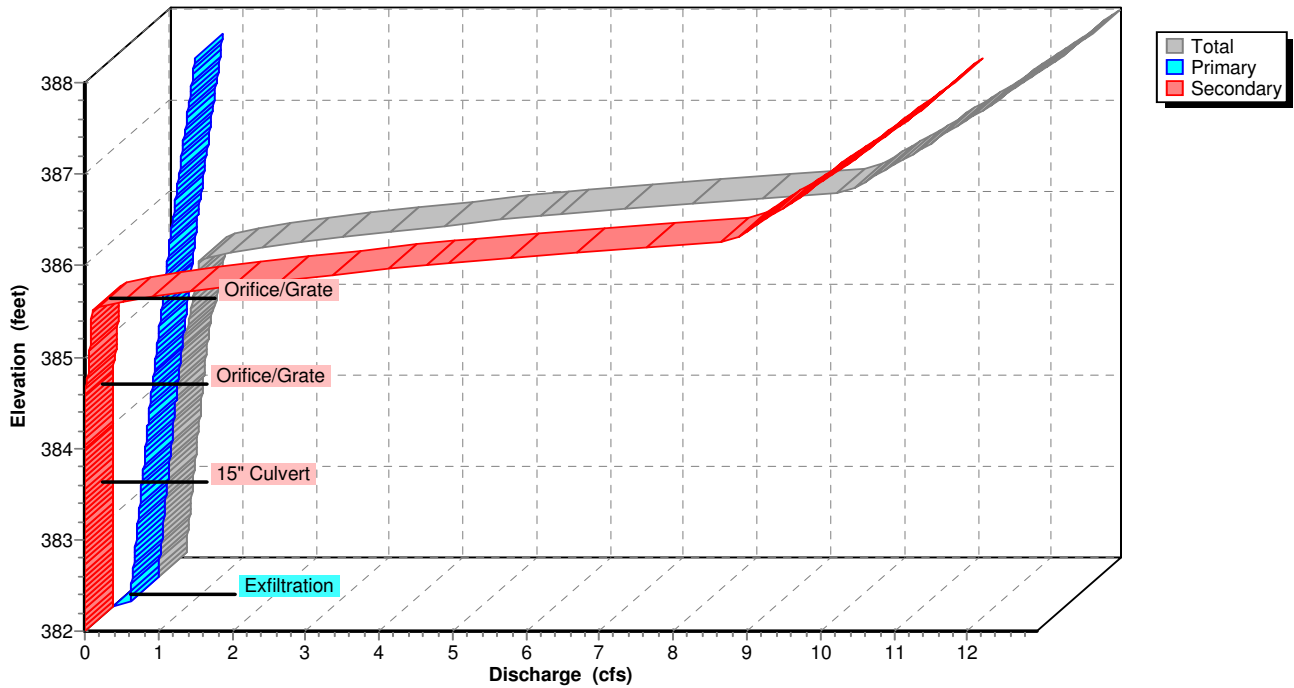
Pond P-B: Pond-B (NYSDEC I-2)

Hydrograph



Pond P-B: Pond-B (NYSDEC I-2)

Stage-Discharge



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Hydrograph for Pond P-B: Pond-B (NYSDEC I-2)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	382.00	0.00	0.00	0.00
5.00	0.00	0	382.00	0.00	0.00	0.00
10.00	0.25	5	382.00	0.23	0.23	0.00
15.00	0.71	10,409	385.50	0.80	0.70	0.10
20.00	0.24	5,413	384.25	0.51	0.51	0.00
25.00	0.00	988	382.58	0.30	0.30	0.00
30.00	0.00	0	382.00	0.00	0.00	0.00
35.00	0.00	0	382.00	0.00	0.00	0.00
40.00	0.00	0	382.00	0.00	0.00	0.00
45.00	0.00	0	382.00	0.00	0.00	0.00
50.00	0.00	0	382.00	0.00	0.00	0.00
55.00	0.00	0	382.00	0.00	0.00	0.00
60.00	0.00	0	382.00	0.00	0.00	0.00
65.00	0.00	0	382.00	0.00	0.00	0.00
70.00	0.00	0	382.00	0.00	0.00	0.00
75.00	0.00	0	382.00	0.00	0.00	0.00
80.00	0.00	0	382.00	0.00	0.00	0.00
85.00	0.00	0	382.00	0.00	0.00	0.00
90.00	0.00	0	382.00	0.00	0.00	0.00
95.00	0.00	0	382.00	0.00	0.00	0.00
100.00	0.00	0	382.00	0.00	0.00	0.00
105.00	0.00	0	382.00	0.00	0.00	0.00
110.00	0.00	0	382.00	0.00	0.00	0.00
115.00	0.00	0	382.00	0.00	0.00	0.00
120.00	0.00	0	382.00	0.00	0.00	0.00

Post-Development Entire

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Stage-Discharge for Pond P-B: Pond-B (NYSDEC I-2)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
382.00	0.00	0.00	0.00	387.20	11.51	0.98	10.53
382.10	0.24	0.24	0.00	387.30	11.70	1.00	10.70
382.20	0.25	0.25	0.00	387.40	11.88	1.02	10.87
382.30	0.26	0.26	0.00	387.50	12.07	1.03	11.03
382.40	0.28	0.28	0.00	387.60	12.25	1.05	11.20
382.50	0.29	0.29	0.00	387.70	12.42	1.07	11.36
382.60	0.30	0.30	0.00	387.80	12.60	1.09	11.51
382.70	0.31	0.31	0.00	387.90	12.77	1.10	11.67
382.80	0.33	0.33	0.00	388.00	12.94	1.12	11.82
382.90	0.34	0.34	0.00				
383.00	0.35	0.35	0.00				
383.10	0.36	0.36	0.00				
383.20	0.38	0.38	0.00				
383.30	0.39	0.39	0.00				
383.40	0.40	0.40	0.00				
383.50	0.41	0.41	0.00				
383.60	0.43	0.43	0.00				
383.70	0.44	0.44	0.00				
383.80	0.45	0.45	0.00				
383.90	0.47	0.47	0.00				
384.00	0.48	0.48	0.00				
384.10	0.49	0.49	0.00				
384.20	0.51	0.51	0.00				
384.30	0.52	0.52	0.00				
384.40	0.54	0.54	0.00				
384.50	0.55	0.55	0.00				
384.60	0.57	0.57	0.00				
384.70	0.61	0.58	0.02				
384.80	0.64	0.60	0.04				
384.90	0.66	0.61	0.05				
385.00	0.69	0.63	0.06				
385.10	0.71	0.64	0.07				
385.20	0.73	0.66	0.08				
385.30	0.76	0.67	0.09				
385.40	0.78	0.69	0.09				
385.50	0.80	0.70	0.10				
385.60	1.22	0.71	0.51				
385.70	1.99	0.73	1.26				
385.80	2.97	0.74	2.22				
385.90	4.13	0.76	3.37				
386.00	5.44	0.77	4.66				
386.10	6.89	0.79	6.09				
386.20	8.46	0.81	7.65				
386.30	9.68	0.83	8.85				
386.40	9.89	0.84	9.05				
386.50	10.11	0.86	9.25				
386.60	10.32	0.88	9.44				
386.70	10.53	0.90	9.63				
386.80	10.73	0.91	9.82				
386.90	10.93	0.93	10.00				
387.00	11.13	0.95	10.18				
387.10	11.32	0.96	10.36				

Post-Development Entire

Type III 24-hr 10 Year Rainfall=5.00"

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Summary for Pond P-C: Pond-C (NYSDEC I-2)

Inflow Area = 0.759 ac, 29.42% Impervious, Inflow Depth = 3.27" for 10 Year event
 Inflow = 2.56 cfs @ 12.13 hrs, Volume= 0.207 af
 Outflow = 0.73 cfs @ 12.53 hrs, Volume= 0.207 af, Atten= 72%, Lag= 23.9 min
 Primary = 0.23 cfs @ 12.53 hrs, Volume= 0.149 af
 Secondary = 0.50 cfs @ 12.53 hrs, Volume= 0.058 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 389.48' @ 12.53 hrs Surf.Area= 1,489 sf Storage= 3,255 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 98.4 min (912.2 - 813.9)

Volume	Invert	Avail.Storage	Storage Description
#1	386.00'	9,794 cf	Custom Stage Data (Prismatic) Listed below

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
386.00	380	0	0
388.00	937	1,317	1,317
390.00	1,683	2,620	3,937
392.00	2,714	4,397	8,334
392.50	3,126	1,460	9,794

Device	Routing	Invert	Outlet Devices
#1	Primary	386.00'	6.600 in/hr Exfiltration over Horizontal area
#2	Secondary	388.30'	0.50' W x 0.20' H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.23 cfs @ 12.53 hrs HW=389.48' (Free Discharge)
 ↑1=Exfiltration (Exfiltration Controls 0.23 cfs)

Secondary OutFlow Max=0.50 cfs @ 12.53 hrs HW=389.48' TW=0.00' (Dynamic Tailwater)
 ↑2=Orifice/Grate (Orifice Controls 0.50 cfs @ 5.00 fps)

Post-Development Entire

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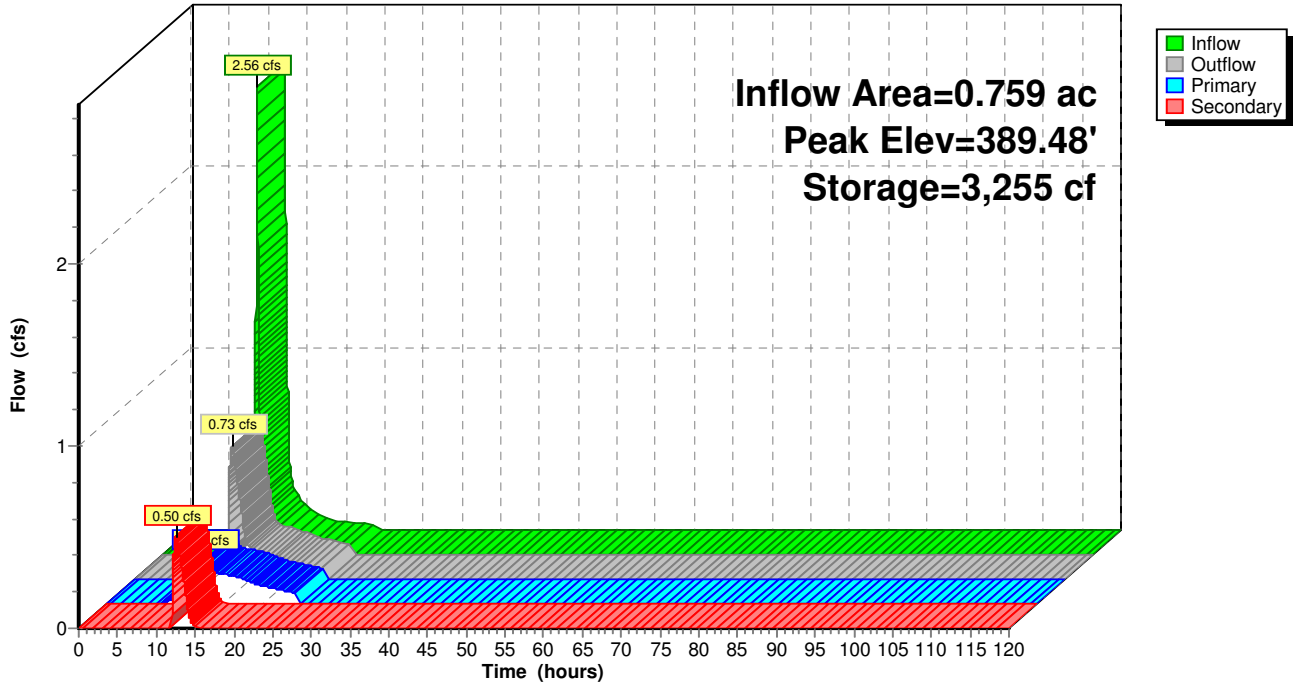
Type III 24-hr 10 Year Rainfall=5.00"

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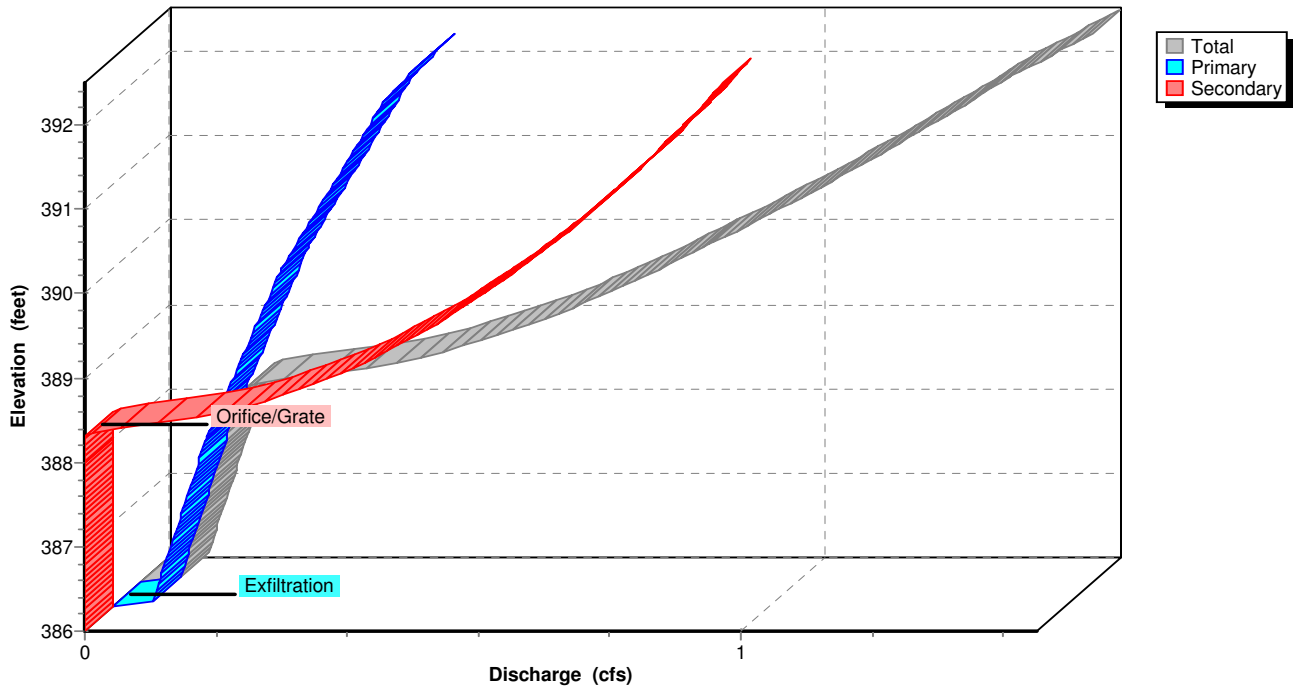
Pond P-C: Pond-C (NYSDEC I-2)

Hydrograph



Pond P-C: Pond-C (NYSDEC I-2)

Stage-Discharge



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Hydrograph for Pond P-C: Pond-C (NYSDEC I-2)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	386.00	0.00	0.00	0.00
5.00	0.00	0	386.00	0.00	0.00	0.00
10.00	0.07	7	386.01	0.06	0.06	0.00
15.00	0.13	1,743	388.32	0.17	0.16	0.01
20.00	0.05	644	386.98	0.10	0.10	0.00
25.00	0.00	0	386.00	0.00	0.00	0.00
30.00	0.00	0	386.00	0.00	0.00	0.00
35.00	0.00	0	386.00	0.00	0.00	0.00
40.00	0.00	0	386.00	0.00	0.00	0.00
45.00	0.00	0	386.00	0.00	0.00	0.00
50.00	0.00	0	386.00	0.00	0.00	0.00
55.00	0.00	0	386.00	0.00	0.00	0.00
60.00	0.00	0	386.00	0.00	0.00	0.00
65.00	0.00	0	386.00	0.00	0.00	0.00
70.00	0.00	0	386.00	0.00	0.00	0.00
75.00	0.00	0	386.00	0.00	0.00	0.00
80.00	0.00	0	386.00	0.00	0.00	0.00
85.00	0.00	0	386.00	0.00	0.00	0.00
90.00	0.00	0	386.00	0.00	0.00	0.00
95.00	0.00	0	386.00	0.00	0.00	0.00
100.00	0.00	0	386.00	0.00	0.00	0.00
105.00	0.00	0	386.00	0.00	0.00	0.00
110.00	0.00	0	386.00	0.00	0.00	0.00
115.00	0.00	0	386.00	0.00	0.00	0.00
120.00	0.00	0	386.00	0.00	0.00	0.00

Post-Development Entire

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Type III 24-hr 10 Year Rainfall=5.00"

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Stage-Discharge for Pond P-C: Pond-C (NYSDEC I-2)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
386.00	0.00	0.00	0.00	391.20	1.16	0.35	0.81
386.10	0.06	0.06	0.00	391.30	1.18	0.36	0.82
386.20	0.07	0.07	0.00	391.40	1.20	0.37	0.83
386.30	0.07	0.07	0.00	391.50	1.22	0.38	0.85
386.40	0.08	0.08	0.00	391.60	1.24	0.38	0.86
386.50	0.08	0.08	0.00	391.70	1.27	0.39	0.87
386.60	0.08	0.08	0.00	391.80	1.29	0.40	0.89
386.70	0.09	0.09	0.00	391.90	1.31	0.41	0.90
386.80	0.09	0.09	0.00	392.00	1.33	0.41	0.91
386.90	0.10	0.10	0.00	392.10	1.35	0.43	0.93
387.00	0.10	0.10	0.00	392.20	1.38	0.44	0.94
387.10	0.10	0.10	0.00	392.30	1.40	0.45	0.95
387.20	0.11	0.11	0.00	392.40	1.43	0.46	0.96
387.30	0.11	0.11	0.00	392.50	1.45	0.48	0.97
387.40	0.12	0.12	0.00				
387.50	0.12	0.12	0.00				
387.60	0.13	0.13	0.00				
387.70	0.13	0.13	0.00				
387.80	0.13	0.13	0.00				
387.90	0.14	0.14	0.00				
388.00	0.14	0.14	0.00				
388.10	0.15	0.15	0.00				
388.20	0.15	0.15	0.00				
388.30	0.16	0.16	0.00				
388.40	0.22	0.17	0.05				
388.50	0.32	0.17	0.14				
388.60	0.39	0.18	0.21				
388.70	0.45	0.18	0.26				
388.80	0.49	0.19	0.30				
388.90	0.53	0.19	0.34				
389.00	0.57	0.20	0.37				
389.10	0.61	0.21	0.40				
389.20	0.64	0.21	0.43				
389.30	0.67	0.22	0.46				
389.40	0.70	0.22	0.48				
389.50	0.73	0.23	0.50				
389.60	0.76	0.23	0.53				
389.70	0.79	0.24	0.55				
389.80	0.82	0.25	0.57				
389.90	0.84	0.25	0.59				
390.00	0.87	0.26	0.61				
390.10	0.89	0.27	0.63				
390.20	0.92	0.27	0.65				
390.30	0.94	0.28	0.66				
390.40	0.97	0.29	0.68				
390.50	0.99	0.30	0.70				
390.60	1.02	0.30	0.71				
390.70	1.04	0.31	0.73				
390.80	1.07	0.32	0.75				
390.90	1.09	0.33	0.76				
391.00	1.11	0.34	0.78				
391.10	1.13	0.34	0.79				

Post-Development Entire

Type III 24-hr 10 Year Rainfall=5.00"

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Summary for Pond P-D: Pond-D (NYSDEC I-2)

Inflow Area = 2.990 ac, 17.19% Impervious, Inflow Depth = 2.71" for 10 Year event
 Inflow = 9.21 cfs @ 12.10 hrs, Volume= 0.676 af
 Outflow = 4.06 cfs @ 12.33 hrs, Volume= 0.676 af, Atten= 56%, Lag= 13.7 min
 Primary = 0.70 cfs @ 12.33 hrs, Volume= 0.464 af
 Secondary = 3.36 cfs @ 12.33 hrs, Volume= 0.212 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 361.38' @ 12.33 hrs Surf.Area= 4,035 sf Storage= 8,481 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 86.0 min (913.9 - 827.9)

Volume	Invert	Avail.Storage	Storage Description
#1	358.00'	15,916 cf	Custom Stage Data (Prismatic) Listed below
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
358.00	781	0	0
360.00	2,650	3,431	3,431
362.00	4,654	7,304	10,735
363.00	5,707	5,181	15,916

Device	Routing	Invert	Outlet Devices
#1	Primary	358.00'	7.500 in/hr Exfiltration over Horizontal area
#2	Secondary	360.50'	2.50' W x 0.33' H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.70 cfs @ 12.33 hrs HW=361.38' (Free Discharge)

↑1=Exfiltration (Exfiltration Controls 0.70 cfs)

Secondary OutFlow Max=3.36 cfs @ 12.33 hrs HW=361.38' TW=0.00' (Dynamic Tailwater)

↑2=Orifice/Grate (Orifice Controls 3.36 cfs @ 4.07 fps)

Post-Development Entire

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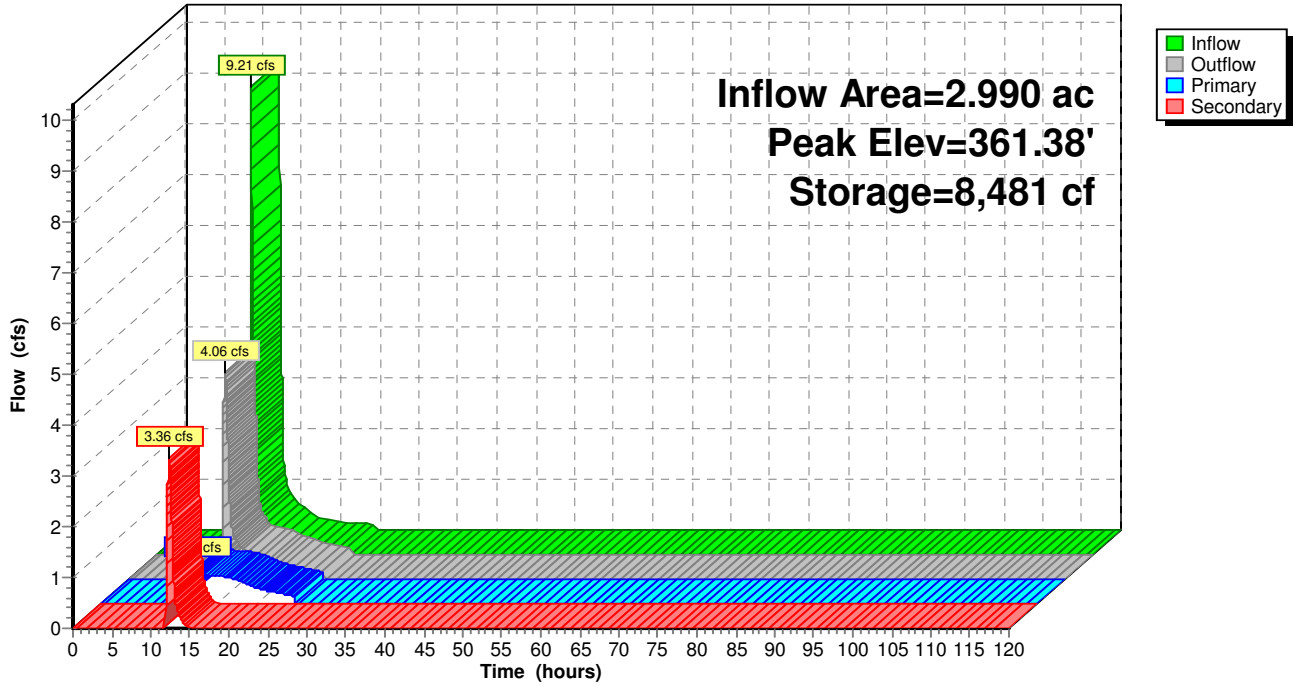
Type III 24-hr 10 Year Rainfall=5.00"

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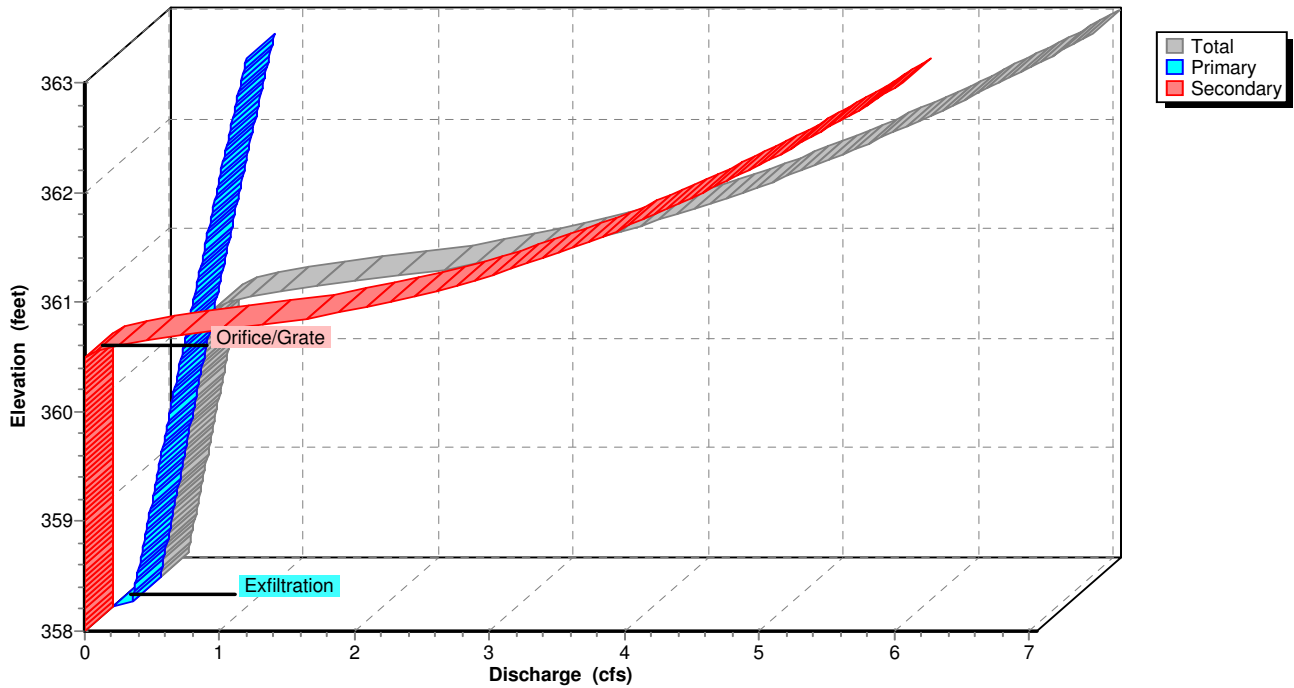
Pond P-D: Pond-D (NYSDEC I-2)

Hydrograph



Pond P-D: Pond-D (NYSDEC I-2)

Stage-Discharge



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Type III 24-hr 10 Year Rainfall=5.00"

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Hydrograph for Pond P-D: Pond-D (NYSDEC I-2)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	358.00	0.00	0.00	0.00
5.00	0.00	0	358.00	0.00	0.00	0.00
10.00	0.15	4	358.00	0.14	0.14	0.00
15.00	0.47	5,263	360.50	0.55	0.55	0.00
20.00	0.17	1,872	359.09	0.31	0.31	0.00
25.00	0.00	0	358.00	0.00	0.00	0.00
30.00	0.00	0	358.00	0.00	0.00	0.00
35.00	0.00	0	358.00	0.00	0.00	0.00
40.00	0.00	0	358.00	0.00	0.00	0.00
45.00	0.00	0	358.00	0.00	0.00	0.00
50.00	0.00	0	358.00	0.00	0.00	0.00
55.00	0.00	0	358.00	0.00	0.00	0.00
60.00	0.00	0	358.00	0.00	0.00	0.00
65.00	0.00	0	358.00	0.00	0.00	0.00
70.00	0.00	0	358.00	0.00	0.00	0.00
75.00	0.00	0	358.00	0.00	0.00	0.00
80.00	0.00	0	358.00	0.00	0.00	0.00
85.00	0.00	0	358.00	0.00	0.00	0.00
90.00	0.00	0	358.00	0.00	0.00	0.00
95.00	0.00	0	358.00	0.00	0.00	0.00
100.00	0.00	0	358.00	0.00	0.00	0.00
105.00	0.00	0	358.00	0.00	0.00	0.00
110.00	0.00	0	358.00	0.00	0.00	0.00
115.00	0.00	0	358.00	0.00	0.00	0.00
120.00	0.00	0	358.00	0.00	0.00	0.00

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Stage-Discharge for Pond P-D: Pond-D (NYSDEC I-2)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
358.00	0.00	0.00	0.00	360.60	0.82	0.56	0.25
358.05	0.14	0.14	0.00	360.65	1.04	0.57	0.47
358.10	0.15	0.15	0.00	360.70	1.30	0.58	0.72
358.15	0.16	0.16	0.00	360.75	1.59	0.59	1.00
358.20	0.17	0.17	0.00	360.80	1.92	0.60	1.32
358.25	0.18	0.18	0.00	360.85	2.25	0.61	1.64
358.30	0.18	0.18	0.00	360.90	2.50	0.62	1.88
358.35	0.19	0.19	0.00	360.95	2.71	0.63	2.09
358.40	0.20	0.20	0.00	361.00	2.91	0.63	2.27
358.45	0.21	0.21	0.00	361.05	3.09	0.64	2.45
358.50	0.22	0.22	0.00	361.10	3.26	0.65	2.60
358.55	0.22	0.22	0.00	361.15	3.41	0.66	2.75
358.60	0.23	0.23	0.00	361.20	3.56	0.67	2.89
358.65	0.24	0.24	0.00	361.25	3.71	0.68	3.03
358.70	0.25	0.25	0.00	361.30	3.84	0.69	3.16
358.75	0.26	0.26	0.00	361.35	3.97	0.69	3.28
358.80	0.27	0.27	0.00	361.40	4.10	0.70	3.40
358.85	0.27	0.27	0.00	361.45	4.23	0.71	3.51
358.90	0.28	0.28	0.00	361.50	4.34	0.72	3.62
358.95	0.29	0.29	0.00	361.55	4.46	0.73	3.73
359.00	0.30	0.30	0.00	361.60	4.57	0.74	3.84
359.05	0.31	0.31	0.00	361.65	4.68	0.75	3.94
359.10	0.31	0.31	0.00	361.70	4.79	0.76	4.04
359.15	0.32	0.32	0.00	361.75	4.90	0.76	4.13
359.20	0.33	0.33	0.00	361.80	5.00	0.77	4.23
359.25	0.34	0.34	0.00	361.85	5.10	0.78	4.32
359.30	0.35	0.35	0.00	361.90	5.20	0.79	4.41
359.35	0.35	0.35	0.00	361.95	5.30	0.80	4.50
359.40	0.36	0.36	0.00	362.00	5.39	0.81	4.59
359.45	0.37	0.37	0.00	362.05	5.49	0.82	4.67
359.50	0.38	0.38	0.00	362.10	5.58	0.83	4.76
359.55	0.39	0.39	0.00	362.15	5.67	0.84	4.84
359.60	0.40	0.40	0.00	362.20	5.76	0.84	4.92
359.65	0.40	0.40	0.00	362.25	5.85	0.85	5.00
359.70	0.41	0.41	0.00	362.30	5.94	0.86	5.08
359.75	0.42	0.42	0.00	362.35	6.03	0.87	5.15
359.80	0.43	0.43	0.00	362.40	6.11	0.88	5.23
359.85	0.44	0.44	0.00	362.45	6.20	0.89	5.31
359.90	0.44	0.44	0.00	362.50	6.28	0.90	5.38
359.95	0.45	0.45	0.00	362.55	6.36	0.91	5.45
360.00	0.46	0.46	0.00	362.60	6.44	0.92	5.52
360.05	0.47	0.47	0.00	362.65	6.52	0.93	5.60
360.10	0.48	0.48	0.00	362.70	6.60	0.94	5.67
360.15	0.49	0.49	0.00	362.75	6.68	0.95	5.73
360.20	0.49	0.49	0.00	362.80	6.76	0.95	5.80
360.25	0.50	0.50	0.00	362.85	6.83	0.96	5.87
360.30	0.51	0.51	0.00	362.90	6.91	0.97	5.94
360.35	0.52	0.52	0.00	362.95	6.99	0.98	6.00
360.40	0.53	0.53	0.00	363.00	7.06	0.99	6.07
360.45	0.54	0.54	0.00				
360.50	0.55	0.55	0.00				
360.55	0.65	0.56	0.09				

Post-Development Entire

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Type III 24-hr 10 Year Rainfall=5.00"

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Summary for Pond P-E: Pond-E (NYSDEC I-2)

Inflow Area = 1.785 ac, 15.96% Impervious, Inflow Depth = 2.71" for 10 Year event
 Inflow = 5.33 cfs @ 12.11 hrs, Volume= 0.403 af
 Outflow = 3.05 cfs @ 12.26 hrs, Volume= 0.403 af, Atten= 43%, Lag= 8.9 min
 Primary = 0.30 cfs @ 12.26 hrs, Volume= 0.274 af
 Secondary = 2.75 cfs @ 12.26 hrs, Volume= 0.130 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 310.44' @ 12.26 hrs Surf.Area= 2,812 sf Storage= 4,812 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 113.9 min (942.7 - 828.8)

Volume	Invert	Avail.Storage	Storage Description
#1	308.00'	10,114 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
308.00	1,167	0	0
310.00	2,472	3,639	3,639
312.00	4,003	6,475	10,114

Device	Routing	Invert	Outlet Devices
#1	Primary	308.00'	4.600 in/hr Exfiltration over Horizontal area
#2	Secondary	310.01'	3.00' W x 0.50' H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.30 cfs @ 12.26 hrs HW=310.44' (Free Discharge)
 ↑1=Exfiltration (Exfiltration Controls 0.30 cfs)

Secondary OutFlow Max=2.75 cfs @ 12.26 hrs HW=310.44' TW=297.94' (Dynamic Tailwater)
 ↑2=Orifice/Grate (Orifice Controls 2.75 cfs @ 2.11 fps)

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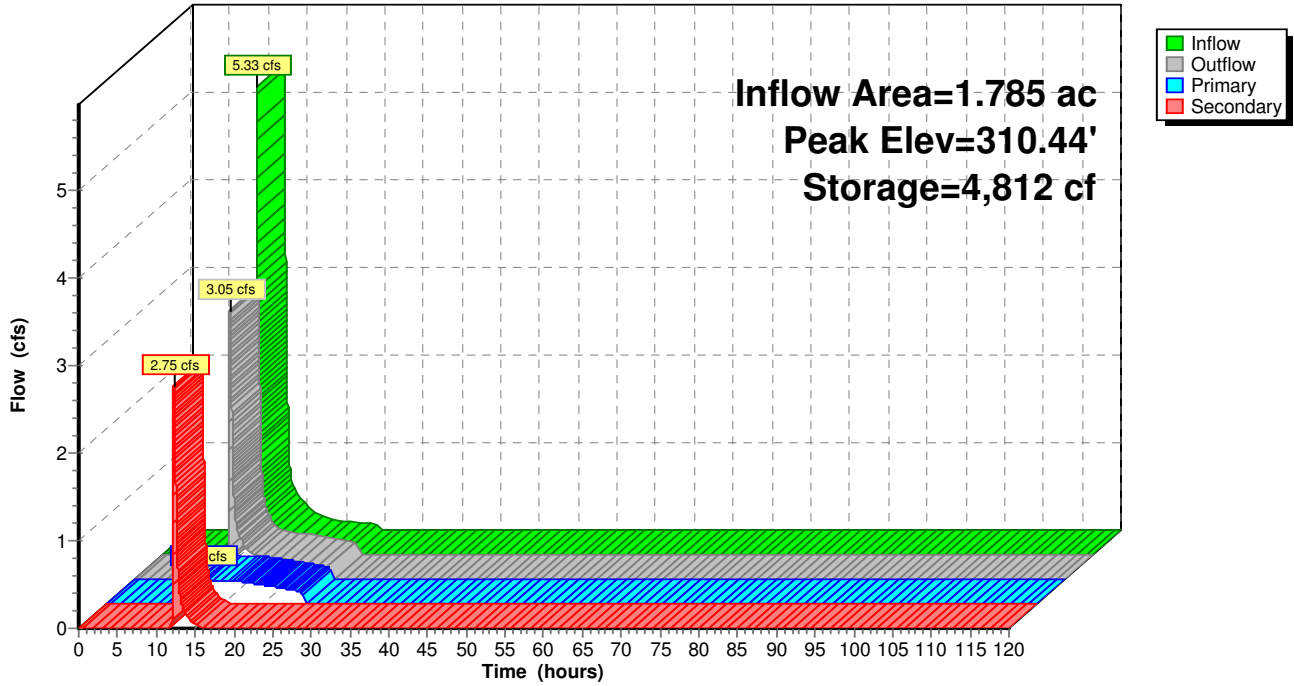
Type III 24-hr 10 Year Rainfall=5.00"

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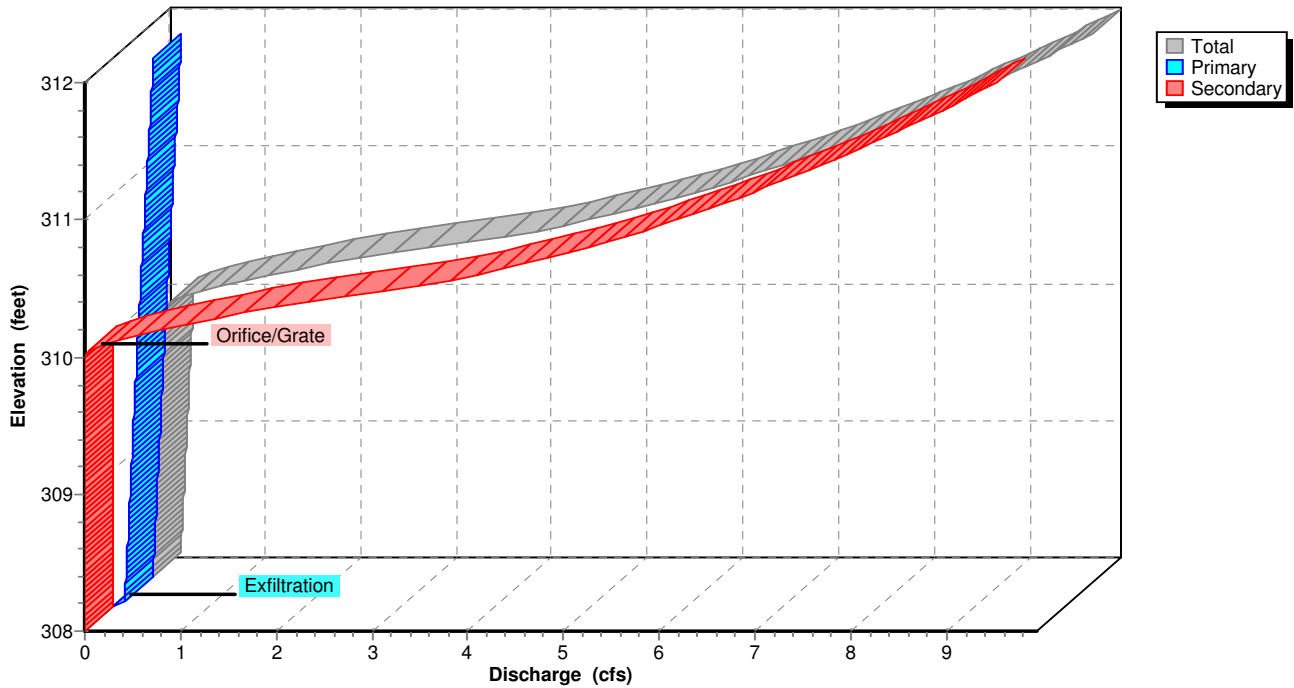
Pond P-E: Pond-E (NYSDEC I-2)

Hydrograph



Pond P-E: Pond-E (NYSDEC I-2)

Stage-Discharge



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Hydrograph for Pond P-E: Pond-E (NYSDEC I-2)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	308.00	0.00	0.00	0.00
5.00	0.00	0	308.00	0.00	0.00	0.00
10.00	0.09	0	308.00	0.09	0.09	0.00
15.00	0.28	3,727	310.04	0.31	0.27	0.04
20.00	0.10	2,087	309.31	0.22	0.22	0.00
25.00	0.00	111	308.09	0.13	0.13	0.00
30.00	0.00	0	308.00	0.00	0.00	0.00
35.00	0.00	0	308.00	0.00	0.00	0.00
40.00	0.00	0	308.00	0.00	0.00	0.00
45.00	0.00	0	308.00	0.00	0.00	0.00
50.00	0.00	0	308.00	0.00	0.00	0.00
55.00	0.00	0	308.00	0.00	0.00	0.00
60.00	0.00	0	308.00	0.00	0.00	0.00
65.00	0.00	0	308.00	0.00	0.00	0.00
70.00	0.00	0	308.00	0.00	0.00	0.00
75.00	0.00	0	308.00	0.00	0.00	0.00
80.00	0.00	0	308.00	0.00	0.00	0.00
85.00	0.00	0	308.00	0.00	0.00	0.00
90.00	0.00	0	308.00	0.00	0.00	0.00
95.00	0.00	0	308.00	0.00	0.00	0.00
100.00	0.00	0	308.00	0.00	0.00	0.00
105.00	0.00	0	308.00	0.00	0.00	0.00
110.00	0.00	0	308.00	0.00	0.00	0.00
115.00	0.00	0	308.00	0.00	0.00	0.00
120.00	0.00	0	308.00	0.00	0.00	0.00

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Stage-Discharge for Pond P-E: Pond-E (NYSDEC I-2)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
308.00	0.00	0.00	0.00	310.60	4.42	0.31	4.10
308.05	0.13	0.13	0.00	310.65	4.74	0.32	4.43
308.10	0.13	0.13	0.00	310.70	5.04	0.32	4.72
308.15	0.13	0.13	0.00	310.75	5.32	0.32	5.00
308.20	0.14	0.14	0.00	310.80	5.59	0.33	5.26
308.25	0.14	0.14	0.00	310.85	5.84	0.33	5.50
308.30	0.15	0.15	0.00	310.90	6.08	0.34	5.74
308.35	0.15	0.15	0.00	310.95	6.31	0.34	5.97
308.40	0.15	0.15	0.00	311.00	6.53	0.34	6.18
308.45	0.16	0.16	0.00	311.05	6.74	0.35	6.39
308.50	0.16	0.16	0.00	311.10	6.95	0.35	6.59
308.55	0.16	0.16	0.00	311.15	7.15	0.36	6.79
308.60	0.17	0.17	0.00	311.20	7.34	0.36	6.98
308.65	0.17	0.17	0.00	311.25	7.53	0.37	7.17
308.70	0.17	0.17	0.00	311.30	7.72	0.37	7.35
308.75	0.18	0.18	0.00	311.35	7.90	0.37	7.52
308.80	0.18	0.18	0.00	311.40	8.07	0.38	7.70
308.85	0.18	0.18	0.00	311.45	8.25	0.38	7.86
308.90	0.19	0.19	0.00	311.50	8.41	0.39	8.03
308.95	0.19	0.19	0.00	311.55	8.58	0.39	8.19
309.00	0.19	0.19	0.00	311.60	8.74	0.39	8.35
309.05	0.20	0.20	0.00	311.65	8.90	0.40	8.50
309.10	0.20	0.20	0.00	311.70	9.06	0.40	8.66
309.15	0.20	0.20	0.00	311.75	9.21	0.41	8.81
309.20	0.21	0.21	0.00	311.80	9.36	0.41	8.95
309.25	0.21	0.21	0.00	311.85	9.51	0.41	9.10
309.30	0.21	0.21	0.00	311.90	9.66	0.42	9.24
309.35	0.22	0.22	0.00	311.95	9.80	0.42	9.38
309.40	0.22	0.22	0.00	312.00	9.95	0.43	9.52
309.45	0.23	0.23	0.00				
309.50	0.23	0.23	0.00				
309.55	0.23	0.23	0.00				
309.60	0.24	0.24	0.00				
309.65	0.24	0.24	0.00				
309.70	0.24	0.24	0.00				
309.75	0.25	0.25	0.00				
309.80	0.25	0.25	0.00				
309.85	0.25	0.25	0.00				
309.90	0.26	0.26	0.00				
309.95	0.26	0.26	0.00				
310.00	0.26	0.26	0.00				
310.05	0.34	0.27	0.08				
310.10	0.53	0.27	0.26				
310.15	0.78	0.28	0.50				
310.20	1.08	0.28	0.80				
310.25	1.42	0.28	1.13				
310.30	1.79	0.29	1.50				
310.35	2.20	0.29	1.91				
310.40	2.64	0.30	2.35				
310.45	3.11	0.30	2.81				
310.50	3.61	0.30	3.30				
310.55	4.05	0.31	3.74				

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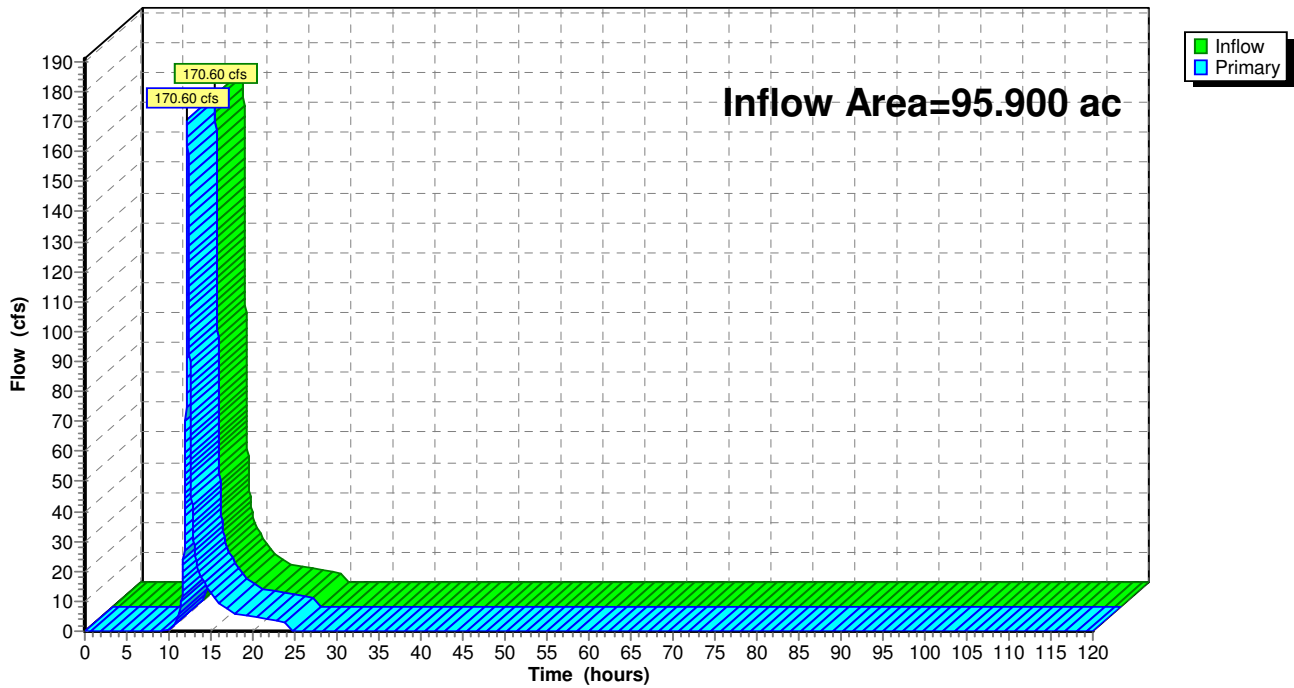
Summary for Link DP-1: DP-1

Inflow Area = 95.900 ac, 25.00% Impervious, Inflow Depth = 2.04" for 10 Year event
Inflow = 170.60 cfs @ 12.21 hrs, Volume= 16.274 af
Primary = 170.60 cfs @ 12.21 hrs, Volume= 16.274 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link DP-1: DP-1

Hydrograph



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Hydrograph for Link DP-1: DP-1

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.38	0.00	0.38	114.00	0.00	0.00	0.00
12.00	62.94	0.00	62.94	116.00	0.00	0.00	0.00
14.00	17.56	0.00	17.56	118.00	0.00	0.00	0.00
16.00	9.68	0.00	9.68	120.00	0.00	0.00	0.00
18.00	5.93	0.00	5.93				
20.00	4.69	0.00	4.69				
22.00	3.91	0.00	3.91				
24.00	3.14	0.00	3.14				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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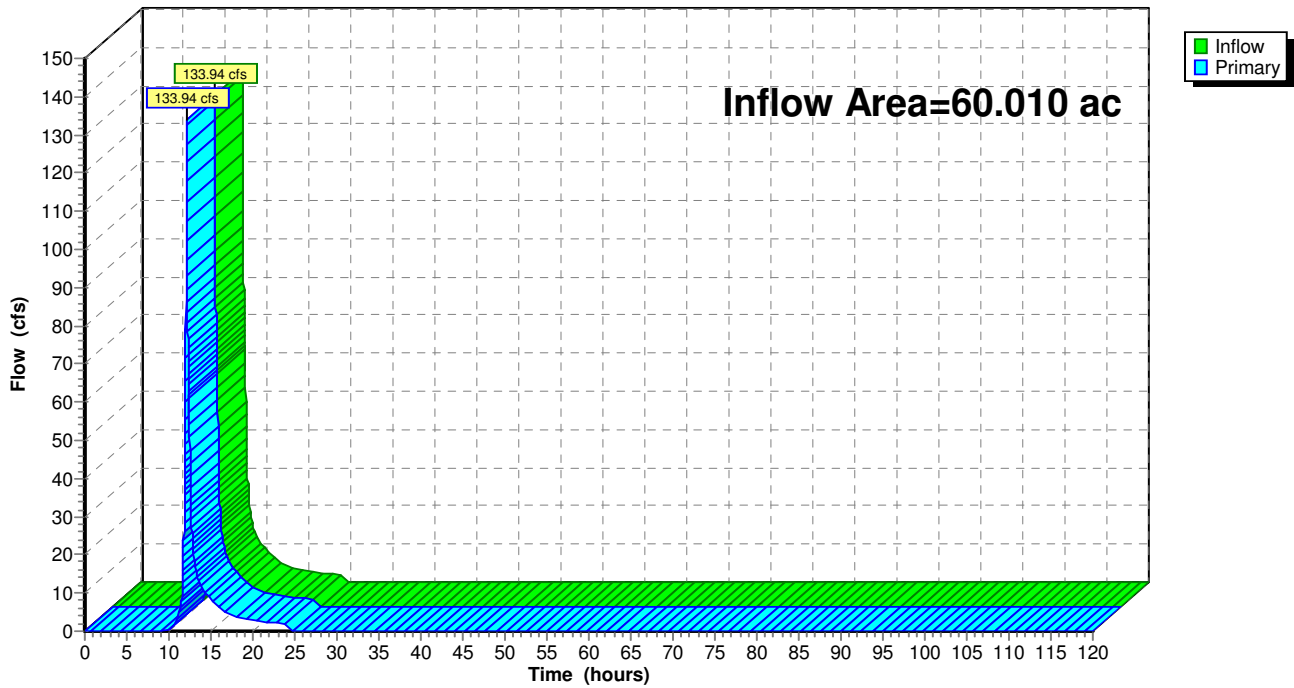
Summary for Link DP-2: DP-2

Inflow Area = 60.010 ac, 25.00% Impervious, Inflow Depth = 2.14" for 10 Year event
Inflow = 133.94 cfs @ 12.11 hrs, Volume= 10.709 af
Primary = 133.94 cfs @ 12.11 hrs, Volume= 10.709 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link DP-2: DP-2

Hydrograph



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Hydrograph for Link DP-2: DP-2

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.40	0.00	0.40	114.00	0.00	0.00	0.00
12.00	65.46	0.00	65.46	116.00	0.00	0.00	0.00
14.00	11.28	0.00	11.28	118.00	0.00	0.00	0.00
16.00	5.98	0.00	5.98	120.00	0.00	0.00	0.00
18.00	3.68	0.00	3.68				
20.00	2.90	0.00	2.90				
22.00	2.42	0.00	2.42				
24.00	1.94	0.00	1.94				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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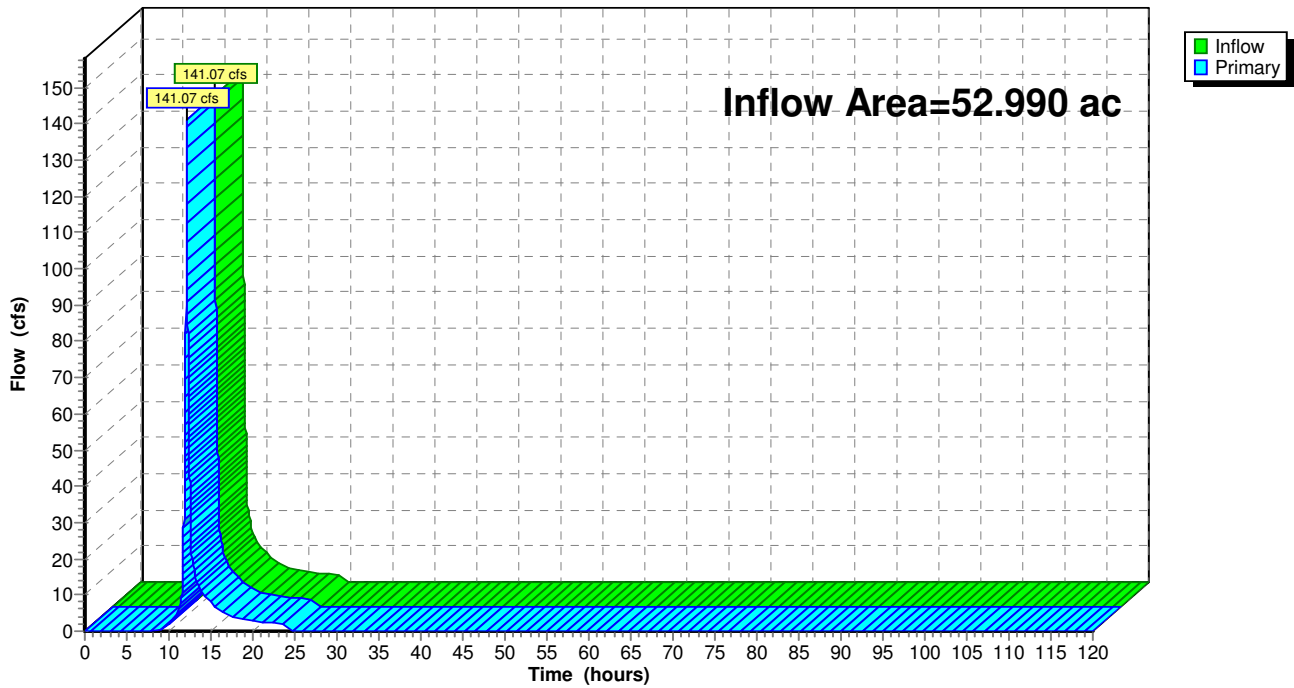
Summary for Link DP-3: DP-3

Inflow Area = 52.990 ac, 38.00% Impervious, Inflow Depth = 2.45" for 10 Year event
Inflow = 141.07 cfs @ 12.12 hrs, Volume= 10.816 af
Primary = 141.07 cfs @ 12.12 hrs, Volume= 10.816 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link DP-3: DP-3

Hydrograph



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Hydrograph for Link DP-3: DP-3

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	1.70	0.00	1.70	114.00	0.00	0.00	0.00
12.00	69.64	0.00	69.64	116.00	0.00	0.00	0.00
14.00	10.44	0.00	10.44	118.00	0.00	0.00	0.00
16.00	5.70	0.00	5.70	120.00	0.00	0.00	0.00
18.00	3.51	0.00	3.51				
20.00	2.82	0.00	2.82				
22.00	2.34	0.00	2.34				
24.00	1.87	0.00	1.87				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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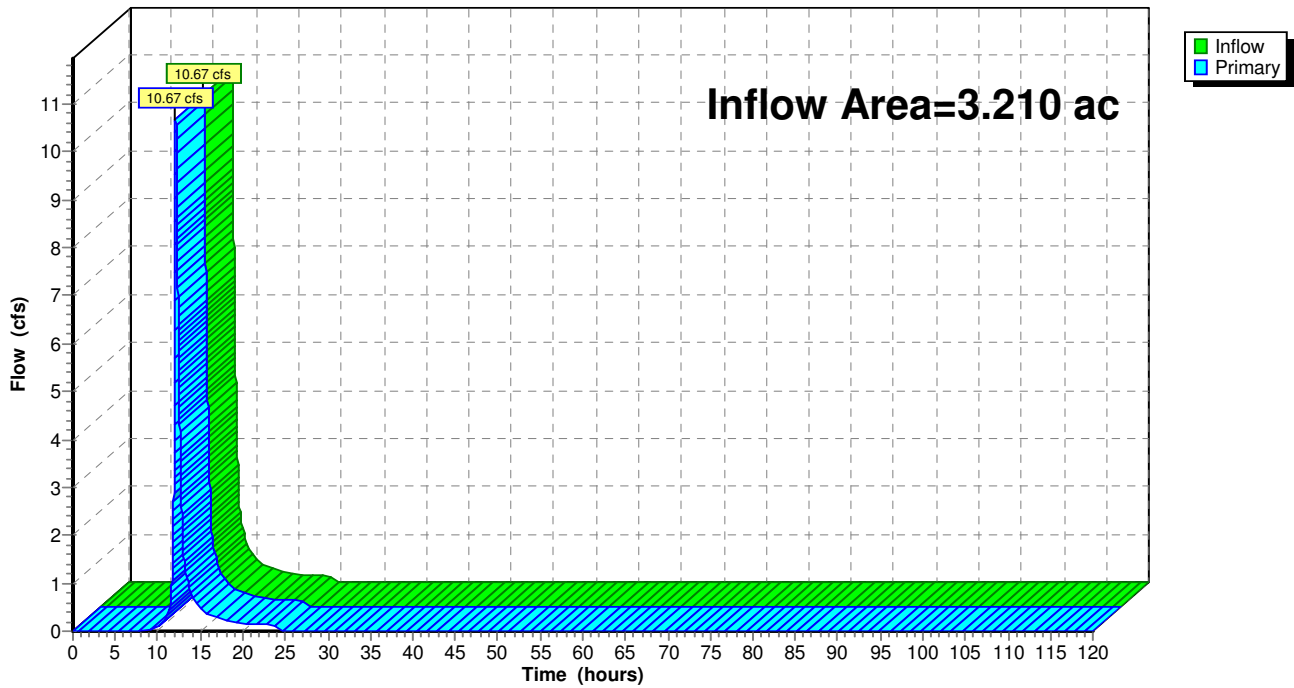
Summary for Link DP-4: DP-4

Inflow Area = 3.210 ac, 38.00% Impervious, Inflow Depth = 3.24" for 10 Year event
Inflow = 10.67 cfs @ 12.11 hrs, Volume= 0.867 af
Primary = 10.67 cfs @ 12.11 hrs, Volume= 0.867 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link DP-4: DP-4

Hydrograph



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Hydrograph for Link DP-4: DP-4

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.11	0.00	0.11	114.00	0.00	0.00	0.00
12.00	5.18	0.00	5.18	116.00	0.00	0.00	0.00
14.00	0.77	0.00	0.77	118.00	0.00	0.00	0.00
16.00	0.34	0.00	0.34	120.00	0.00	0.00	0.00
18.00	0.21	0.00	0.21				
20.00	0.17	0.00	0.17				
22.00	0.14	0.00	0.14				
24.00	0.11	0.00	0.11				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

Post-Development Entire

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Type III 24-hr 10 Year Rainfall=5.00"

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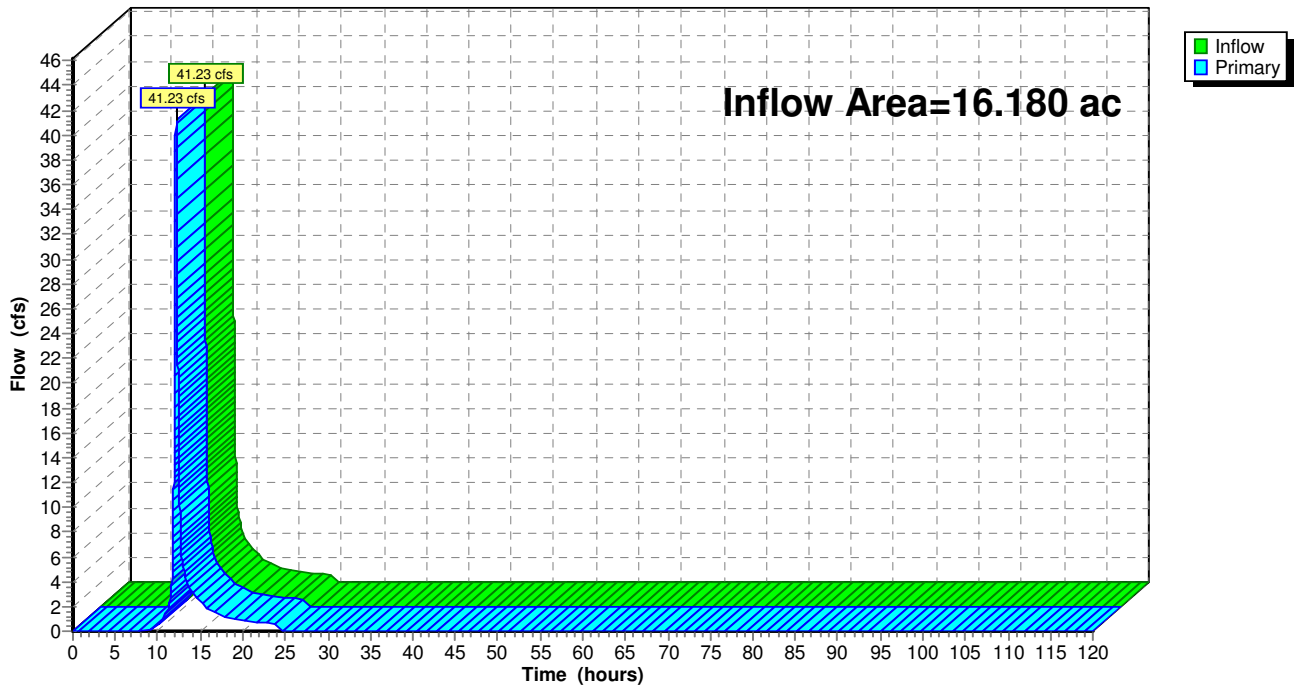
Summary for Link DP-5: DP-5

Inflow Area = 16.180 ac, 38.00% Impervious, Inflow Depth = 2.45" for 10 Year event
Inflow = 41.23 cfs @ 12.13 hrs, Volume= 3.302 af
Primary = 41.23 cfs @ 12.13 hrs, Volume= 3.302 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link DP-5: DP-5

Hydrograph



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Hydrograph for Link DP-5: DP-5

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.51	0.00	0.51	114.00	0.00	0.00	0.00
12.00	19.23	0.00	19.23	116.00	0.00	0.00	0.00
14.00	3.22	0.00	3.22	118.00	0.00	0.00	0.00
16.00	1.76	0.00	1.76	120.00	0.00	0.00	0.00
18.00	1.08	0.00	1.08				
20.00	0.86	0.00	0.86				
22.00	0.72	0.00	0.72				
24.00	0.57	0.00	0.57				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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Type III 24-hr 10 Year Rainfall=5.00"

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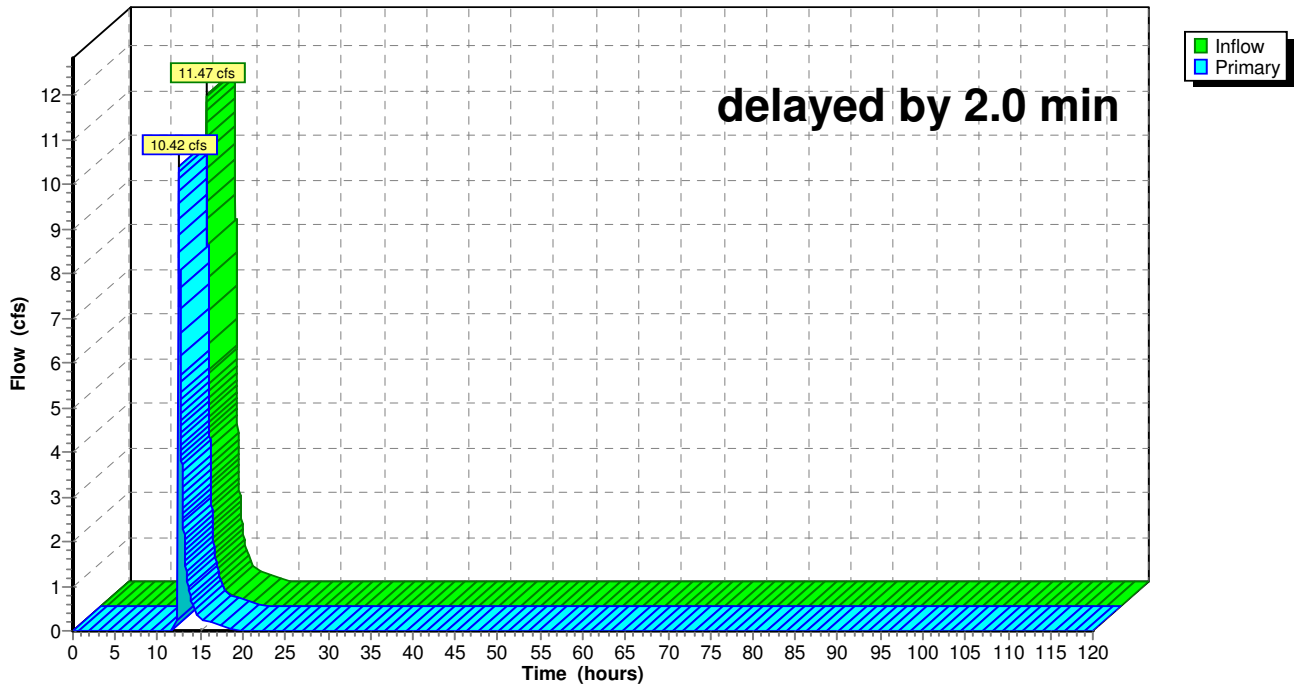
Summary for Link OF-1: Overland Flow

Inflow = 11.47 cfs @ 12.38 hrs, Volume= 0.468 af
Primary = 10.42 cfs @ 12.43 hrs, Volume= 0.468 af, Atten= 9%, Lag= 3.0 min

Primary outflow = Inflow delayed by 2.0 min, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link OF-1: Overland Flow

Hydrograph



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Hydrograph for Link OF-1: Overland Flow

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	114.00	0.00	0.00	0.00
12.00	0.00	0.00	0.00	116.00	0.00	0.00	0.00
14.00	0.65	0.00	0.67	118.00	0.00	0.00	0.00
16.00	0.19	0.00	0.19	120.00	0.00	0.00	0.00
18.00	0.08	0.00	0.08				
20.00	0.00	0.00	0.00				
22.00	0.00	0.00	0.00				
24.00	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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Type III 24-hr 10 Year Rainfall=5.00"

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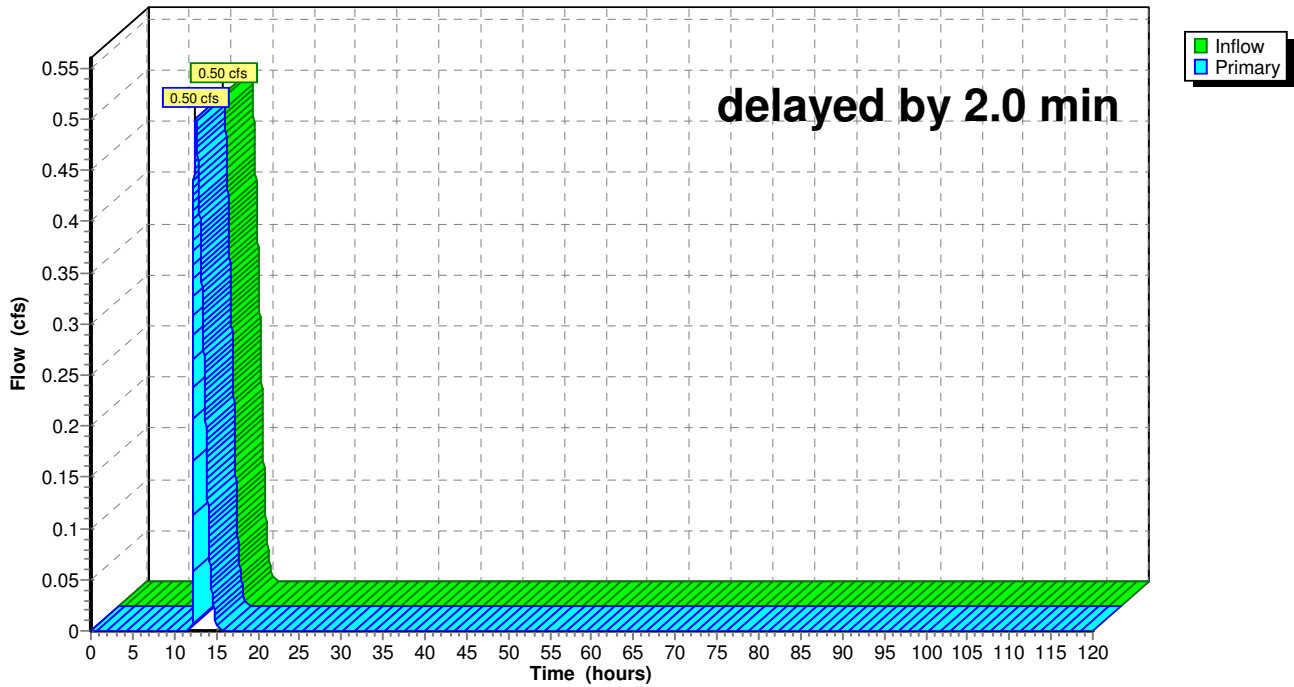
Summary for Link OF-2: Overland Flow

Inflow = 0.50 cfs @ 12.53 hrs, Volume= 0.058 af
Primary = 0.50 cfs @ 12.56 hrs, Volume= 0.058 af, Atten= 0%, Lag= 2.0 min

Primary outflow = Inflow delayed by 2.0 min, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link OF-2: Overland Flow

Hydrograph



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Hydrograph for Link OF-2: Overland Flow

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	114.00	0.00	0.00	0.00
12.00	0.00	0.00	0.00	116.00	0.00	0.00	0.00
14.00	0.12	0.00	0.13	118.00	0.00	0.00	0.00
16.00	0.00	0.00	0.00	120.00	0.00	0.00	0.00
18.00	0.00	0.00	0.00				
20.00	0.00	0.00	0.00				
22.00	0.00	0.00	0.00				
24.00	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

Post-Development Entire

Type III 24-hr 100 Year Rainfall=7.50"

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Time span=0.00-120.00 hrs, dt=0.01 hrs, 12001 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1: Drainage Area 1	Runoff Area=95.900 ac 25.00% Impervious Runoff Depth=4.04" Flow Length=2,615' Tc=14.7 min CN=70 Runoff=346.47 cfs 32.269 af
Subcatchment 2A: Drainage Area 2A	Runoff Area=91,912 sf 13.06% Impervious Runoff Depth=4.93" Flow Length=579' Tc=7.8 min CN=78 Runoff=11.38 cfs 0.867 af
Subcatchment 2B: Drainage Area 2B	Runoff Area=182,926 sf 26.44% Impervious Runoff Depth=5.16" Flow Length=749' Tc=15.1 min CN=80 Runoff=19.01 cfs 1.805 af
Subcatchment 2C: Drainage Area 2C	Runoff Area=33,079 sf 29.42% Impervious Runoff Depth=5.62" Flow Length=149' Tc=9.6 min CN=84 Runoff=4.32 cfs 0.355 af
Subcatchment 2C1: Drainage Area 2C1	Runoff Area=55,757 sf 15.98% Impervious Runoff Depth=5.04" Flow Length=529' Tc=9.4 min CN=79 Runoff=6.69 cfs 0.538 af
Subcatchment 2E: Drainage Area 2E	Runoff Area=77,746 sf 15.96% Impervious Runoff Depth=4.93" Flow Length=415' Tc=7.8 min CN=78 Runoff=9.63 cfs 0.733 af
Subcatchment 2F: Drainage Area 2F	Runoff Area=60.010 ac 25.00% Impervious Runoff Depth=4.04" Flow Length=1,484' Tc=7.4 min CN=70 Runoff=270.67 cfs 20.192 af
Subcatchment 3: Drainage Area - 3	Runoff Area=52.990 ac 38.00% Impervious Runoff Depth=4.59" Flow Length=481' Tc=8.1 min CN=75 Runoff=264.85 cfs 20.281 af
Subcatchment 4A: Drainage Area 4A	Runoff Area=130,244 sf 17.19% Impervious Runoff Depth=4.93" Flow Length=303' Tc=6.9 min CN=78 Runoff=16.62 cfs 1.229 af
Subcatchment 4B: Drainage Area 4B	Runoff Area=3.210 ac 38.00% Impervious Runoff Depth=4.59" Flow Length=678' Tc=6.0 min CN=75 Runoff=17.25 cfs 1.229 af
Subcatchment 5: Drainage Area 5	Runoff Area=16.180 ac 38.00% Impervious Runoff Depth=4.59" Flow Length=1,619' Tc=9.4 min CN=75 Runoff=77.49 cfs 6.193 af
Reach 1R: Pipe	Avg. Depth=0.60' Max Vel=13.70 fps Inflow=9.43 cfs 0.555 af D=18.0" n=0.013 L=188.0' S=0.0649 '/' Capacity=26.76 cfs Outflow=9.11 cfs 0.555 af
Pond LS-1: Level Spreader	Peak Elev=300.09' Storage=5,288 cf Inflow=24.97 cfs 1.870 af Outflow=25.51 cfs 1.751 af
Pond P-1c: Infiltration Chambers	Peak Elev=312.12' Storage=3,349 cf Inflow=6.69 cfs 0.538 af Primary=0.29 cfs 0.294 af Secondary=6.85 cfs 0.244 af Outflow=7.14 cfs 0.538 af
Pond P-A: Pond-A (NYSDEC I-2)	Peak Elev=332.89' Storage=12,393 cf Inflow=11.38 cfs 0.867 af Primary=0.75 cfs 0.556 af Secondary=4.19 cfs 0.311 af Outflow=4.94 cfs 0.867 af
Pond P-B: Pond-B (NYSDEC I-2)	Peak Elev=387.20' Storage=19,719 cf Inflow=19.01 cfs 1.805 af Primary=0.98 cfs 0.877 af Secondary=10.54 cfs 0.928 af Outflow=11.52 cfs 1.805 af

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Type III 24-hr 100 Year Rainfall=7.50"

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Pond P-C: Pond-C (NYSDEC I-2) Peak Elev=390.88' Storage=5,881 cf Inflow=4.32 cfs 0.355 af
Primary=0.33 cfs 0.205 af Secondary=0.76 cfs 0.150 af Outflow=1.09 cfs 0.355 af

Pond P-D: Pond-D (NYSDEC I-2) Peak Elev=362.83' Storage=15,039 cf Inflow=16.62 cfs 1.229 af
Primary=0.96 cfs 0.625 af Secondary=5.84 cfs 0.604 af Outflow=6.80 cfs 1.229 af

Pond P-E: Pond-E (NYSDEC I-2) Peak Elev=311.07' Storage=6,713 cf Inflow=9.63 cfs 0.733 af
Primary=0.35 cfs 0.346 af Secondary=6.46 cfs 0.387 af Outflow=6.81 cfs 0.733 af

Link DP-1: DP-1 Inflow=346.47 cfs 32.269 af
Primary=346.47 cfs 32.269 af

Link DP-2: DP-2 Inflow=271.15 cfs 22.094 af
Primary=271.15 cfs 22.094 af

Link DP-3: DP-3 Inflow=264.85 cfs 20.281 af
Primary=264.85 cfs 20.281 af

Link DP-4: DP-4 Inflow=21.92 cfs 1.832 af
Primary=21.92 cfs 1.832 af

Link DP-5: DP-5 Inflow=77.49 cfs 6.193 af
Primary=77.49 cfs 6.193 af

Link OF-1: Overland Flow delayed by 2.0 min Inflow=25.51 cfs 1.751 af
Primary=25.12 cfs 1.751 af

Link OF-2: Overland Flow delayed by 2.0 min Inflow=0.76 cfs 0.150 af
Primary=0.76 cfs 0.150 af

Total Runoff Area = 241.414 ac Runoff Volume = 85.692 af Average Runoff Depth = 4.26"
71.38% Pervious = 172.319 ac 28.62% Impervious = 69.095 ac

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Summary for Subcatchment 1: Drainage Area 1

Runoff = 346.47 cfs @ 12.20 hrs, Volume= 32.269 af, Depth= 4.04"

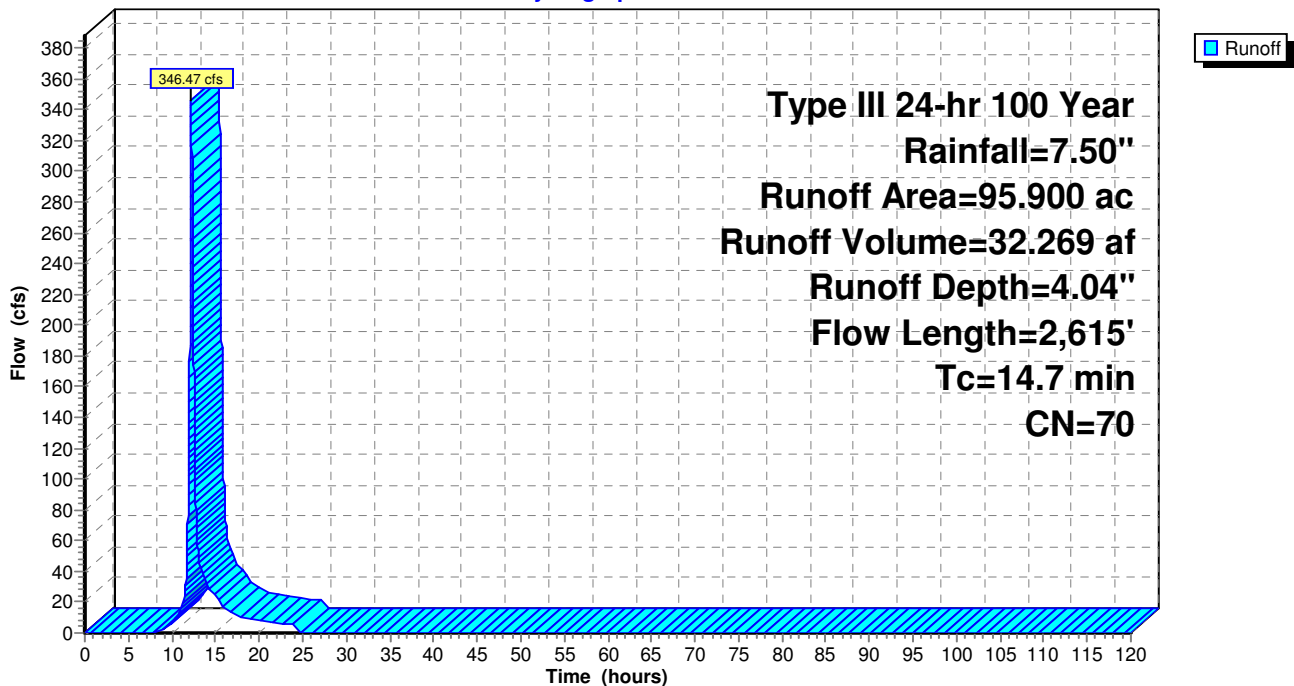
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=7.50"

Area (ac)	CN	Description
95.900	70	1/2 acre lots, 25% imp, HSG B
71.925		Pervious Area
23.975		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.1	100	0.0900	0.32		Sheet Flow, 1 to 2
9.6	2,515	0.0740	4.38		Shallow Concentrated Flow, 2 to 3
14.7	2,615	Total			

Subcatchment 1: Drainage Area 1

Hydrograph



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Hydrograph for Subcatchment 1: Drainage Area 1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	7.50	4.04	0.00
2.00	0.15	0.00	0.00	106.00	7.50	4.04	0.00
4.00	0.32	0.00	0.00	108.00	7.50	4.04	0.00
6.00	0.54	0.00	0.00	110.00	7.50	4.04	0.00
8.00	0.86	0.00	0.00	112.00	7.50	4.04	0.00
10.00	1.42	0.06	6.44	114.00	7.50	4.04	0.00
12.00	3.75	1.17	143.19	116.00	7.50	4.04	0.00
14.00	6.08	2.87	31.33	118.00	7.50	4.04	0.00
16.00	6.64	3.33	16.96	120.00	7.50	4.04	0.00
18.00	6.96	3.59	10.29				
20.00	7.18	3.77	8.09				
22.00	7.36	3.92	6.72				
24.00	7.50	4.04	5.37				
26.00	7.50	4.04	0.00				
28.00	7.50	4.04	0.00				
30.00	7.50	4.04	0.00				
32.00	7.50	4.04	0.00				
34.00	7.50	4.04	0.00				
36.00	7.50	4.04	0.00				
38.00	7.50	4.04	0.00				
40.00	7.50	4.04	0.00				
42.00	7.50	4.04	0.00				
44.00	7.50	4.04	0.00				
46.00	7.50	4.04	0.00				
48.00	7.50	4.04	0.00				
50.00	7.50	4.04	0.00				
52.00	7.50	4.04	0.00				
54.00	7.50	4.04	0.00				
56.00	7.50	4.04	0.00				
58.00	7.50	4.04	0.00				
60.00	7.50	4.04	0.00				
62.00	7.50	4.04	0.00				
64.00	7.50	4.04	0.00				
66.00	7.50	4.04	0.00				
68.00	7.50	4.04	0.00				
70.00	7.50	4.04	0.00				
72.00	7.50	4.04	0.00				
74.00	7.50	4.04	0.00				
76.00	7.50	4.04	0.00				
78.00	7.50	4.04	0.00				
80.00	7.50	4.04	0.00				
82.00	7.50	4.04	0.00				
84.00	7.50	4.04	0.00				
86.00	7.50	4.04	0.00				
88.00	7.50	4.04	0.00				
90.00	7.50	4.04	0.00				
92.00	7.50	4.04	0.00				
94.00	7.50	4.04	0.00				
96.00	7.50	4.04	0.00				
98.00	7.50	4.04	0.00				
100.00	7.50	4.04	0.00				
102.00	7.50	4.04	0.00				

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Type III 24-hr 100 Year Rainfall=7.50"

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Summary for Subcatchment 2A: Drainage Area 2A

Runoff = 11.38 cfs @ 12.11 hrs, Volume= 0.867 af, Depth= 4.93"

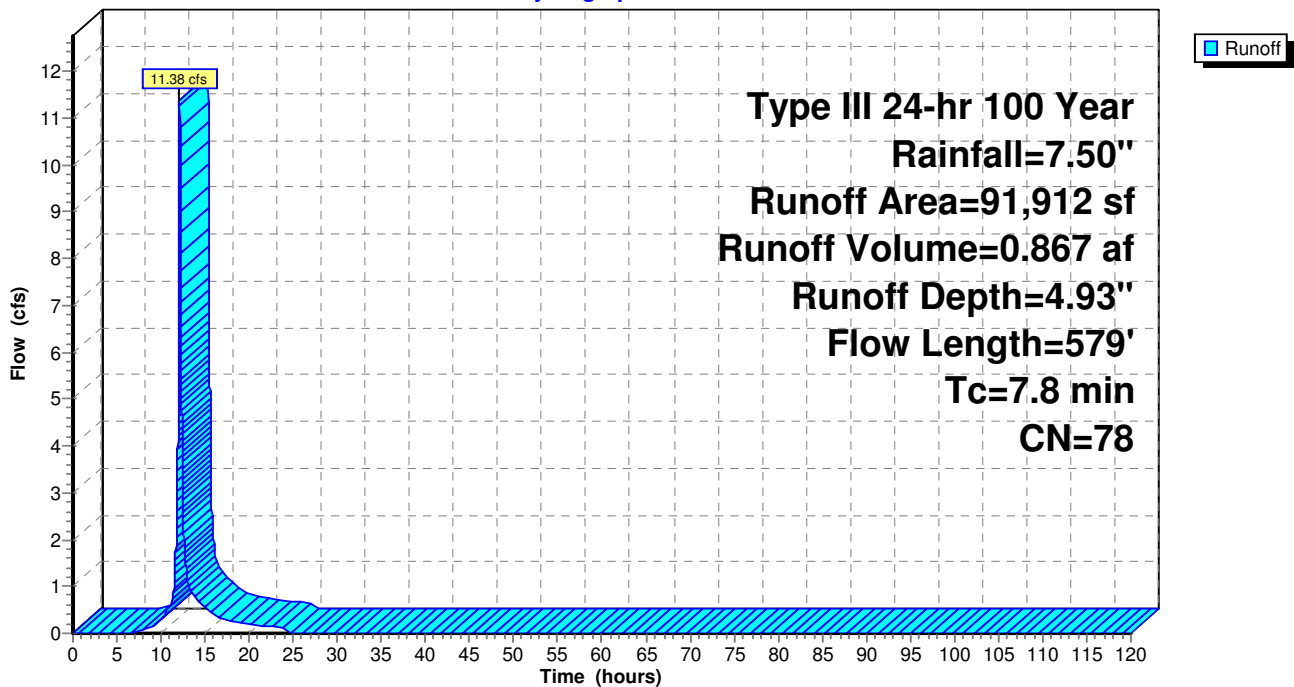
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=7.50"

Area (sf)	CN	Description
40,948	76	Woods/grass comb., Fair, HSG C
38,963	74	>75% Grass cover, Good, HSG C
12,001	98	Paved roads w/curbs & sewers
91,912	78	Weighted Average
79,911		Pervious Area
12,001		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	100	0.1200	0.36		Sheet Flow, 1 to 2
					Grass: Short n= 0.150 P2= 3.50"
3.2	479	0.1300	2.52		Shallow Concentrated Flow, 2 to 3
					Short Grass Pasture Kv= 7.0 fps
7.8	579	Total			

Subcatchment 2A: Drainage Area 2A

Hydrograph



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Hydrograph for Subcatchment 2A: Drainage Area 2A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	7.50	4.93	0.00
2.00	0.15	0.00	0.00	106.00	7.50	4.93	0.00
4.00	0.32	0.00	0.00	108.00	7.50	4.93	0.00
6.00	0.54	0.00	0.00	110.00	7.50	4.93	0.00
8.00	0.86	0.03	0.07	112.00	7.50	4.93	0.00
10.00	1.42	0.20	0.30	114.00	7.50	4.93	0.00
12.00	3.75	1.69	6.10	116.00	7.50	4.93	0.00
14.00	6.08	3.65	0.73	118.00	7.50	4.93	0.00
16.00	6.64	4.15	0.39	120.00	7.50	4.93	0.00
18.00	6.96	4.44	0.24				
20.00	7.18	4.64	0.19				
22.00	7.36	4.80	0.16				
24.00	7.50	4.93	0.13				
26.00	7.50	4.93	0.00				
28.00	7.50	4.93	0.00				
30.00	7.50	4.93	0.00				
32.00	7.50	4.93	0.00				
34.00	7.50	4.93	0.00				
36.00	7.50	4.93	0.00				
38.00	7.50	4.93	0.00				
40.00	7.50	4.93	0.00				
42.00	7.50	4.93	0.00				
44.00	7.50	4.93	0.00				
46.00	7.50	4.93	0.00				
48.00	7.50	4.93	0.00				
50.00	7.50	4.93	0.00				
52.00	7.50	4.93	0.00				
54.00	7.50	4.93	0.00				
56.00	7.50	4.93	0.00				
58.00	7.50	4.93	0.00				
60.00	7.50	4.93	0.00				
62.00	7.50	4.93	0.00				
64.00	7.50	4.93	0.00				
66.00	7.50	4.93	0.00				
68.00	7.50	4.93	0.00				
70.00	7.50	4.93	0.00				
72.00	7.50	4.93	0.00				
74.00	7.50	4.93	0.00				
76.00	7.50	4.93	0.00				
78.00	7.50	4.93	0.00				
80.00	7.50	4.93	0.00				
82.00	7.50	4.93	0.00				
84.00	7.50	4.93	0.00				
86.00	7.50	4.93	0.00				
88.00	7.50	4.93	0.00				
90.00	7.50	4.93	0.00				
92.00	7.50	4.93	0.00				
94.00	7.50	4.93	0.00				
96.00	7.50	4.93	0.00				
98.00	7.50	4.93	0.00				
100.00	7.50	4.93	0.00				
102.00	7.50	4.93	0.00				

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Type III 24-hr 100 Year Rainfall=7.50"

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Summary for Subcatchment 2B: Drainage Area 2B

Runoff = 19.01 cfs @ 12.20 hrs, Volume= 1.805 af, Depth= 5.16"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=7.50"

Area (sf)	CN	Description
48,361	98	Paved roads w/curbs & sewers
134,565	74	>75% Grass cover, Good, HSG C
182,926	80	Weighted Average
134,565		Pervious Area
48,361		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0	100	0.0300	0.21		Sheet Flow, 1 to 2
					Grass: Short n= 0.150 P2= 3.50"
6.6	276	0.0100	0.70		Shallow Concentrated Flow, 2 to 3
					Short Grass Pasture Kv= 7.0 fps
0.0	20	0.0250	10.82	13.28	Circular Channel (pipe), 3 to 4
					Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
0.0	57	0.1500	26.50	32.52	Circular Channel (pipe), 5 to 5
					Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
0.1	87	0.0260	11.03	13.54	Circular Channel (pipe), 5 to 6
					Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
0.2	102	0.0200	10.93	19.31	Circular Channel (pipe), 6 to 7
					Diam= 18.0" Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.010
0.2	107	0.0140	8.10	9.94	Circular Channel (pipe), 7 to 8
					Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
15.1	749	Total			

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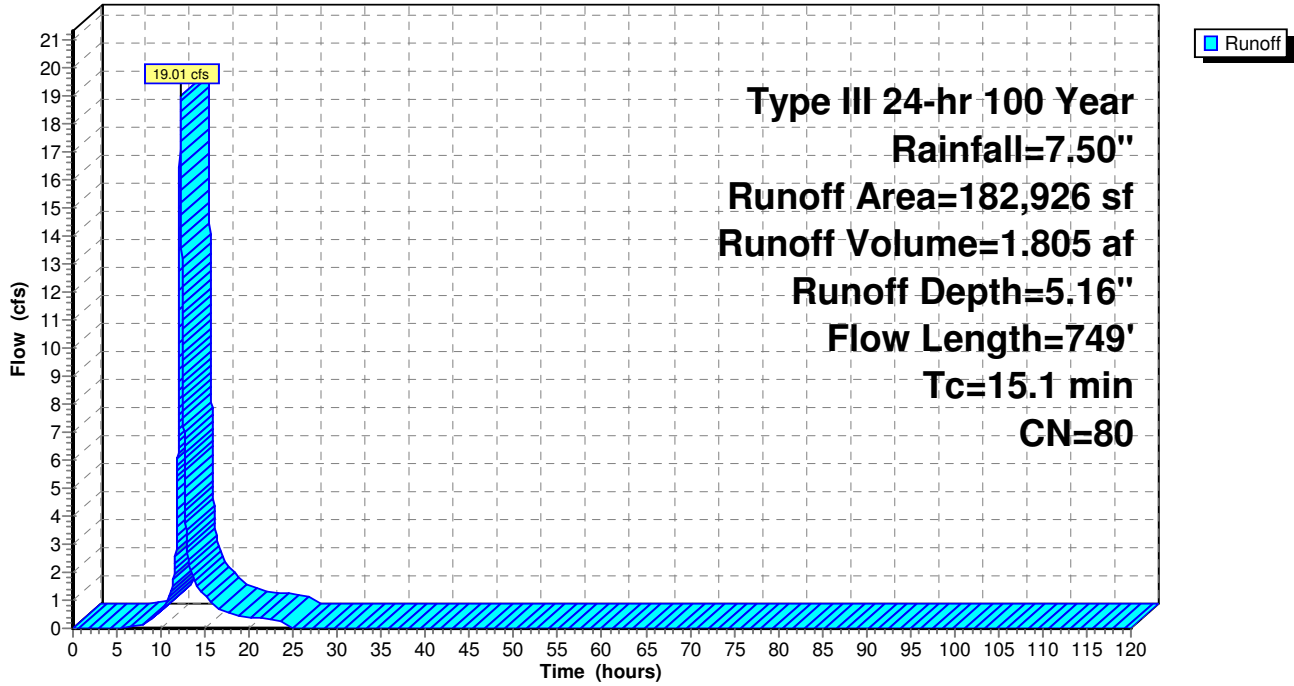
Type III 24-hr 100 Year Rainfall=7.50"

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Subcatchment 2B: Drainage Area 2B

Hydrograph



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Hydrograph for Subcatchment 2B: Drainage Area 2B

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	7.50	5.16	0.00
2.00	0.15	0.00	0.00	106.00	7.50	5.16	0.00
4.00	0.32	0.00	0.00	108.00	7.50	5.16	0.00
6.00	0.54	0.00	0.01	110.00	7.50	5.16	0.00
8.00	0.86	0.04	0.16	112.00	7.50	5.16	0.00
10.00	1.42	0.25	0.64	114.00	7.50	5.16	0.00
12.00	3.75	1.84	8.48	116.00	7.50	5.16	0.00
14.00	6.08	3.86	1.56	118.00	7.50	5.16	0.00
16.00	6.64	4.37	0.83	120.00	7.50	5.16	0.00
18.00	6.96	4.66	0.50				
20.00	7.18	4.86	0.39				
22.00	7.36	5.02	0.32				
24.00	7.50	5.16	0.26				
26.00	7.50	5.16	0.00				
28.00	7.50	5.16	0.00				
30.00	7.50	5.16	0.00				
32.00	7.50	5.16	0.00				
34.00	7.50	5.16	0.00				
36.00	7.50	5.16	0.00				
38.00	7.50	5.16	0.00				
40.00	7.50	5.16	0.00				
42.00	7.50	5.16	0.00				
44.00	7.50	5.16	0.00				
46.00	7.50	5.16	0.00				
48.00	7.50	5.16	0.00				
50.00	7.50	5.16	0.00				
52.00	7.50	5.16	0.00				
54.00	7.50	5.16	0.00				
56.00	7.50	5.16	0.00				
58.00	7.50	5.16	0.00				
60.00	7.50	5.16	0.00				
62.00	7.50	5.16	0.00				
64.00	7.50	5.16	0.00				
66.00	7.50	5.16	0.00				
68.00	7.50	5.16	0.00				
70.00	7.50	5.16	0.00				
72.00	7.50	5.16	0.00				
74.00	7.50	5.16	0.00				
76.00	7.50	5.16	0.00				
78.00	7.50	5.16	0.00				
80.00	7.50	5.16	0.00				
82.00	7.50	5.16	0.00				
84.00	7.50	5.16	0.00				
86.00	7.50	5.16	0.00				
88.00	7.50	5.16	0.00				
90.00	7.50	5.16	0.00				
92.00	7.50	5.16	0.00				
94.00	7.50	5.16	0.00				
96.00	7.50	5.16	0.00				
98.00	7.50	5.16	0.00				
100.00	7.50	5.16	0.00				
102.00	7.50	5.16	0.00				

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Type III 24-hr 100 Year Rainfall=7.50"

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Summary for Subcatchment 2C: Drainage Area 2C

Runoff = 4.32 cfs @ 12.13 hrs, Volume= 0.355 af, Depth= 5.62"

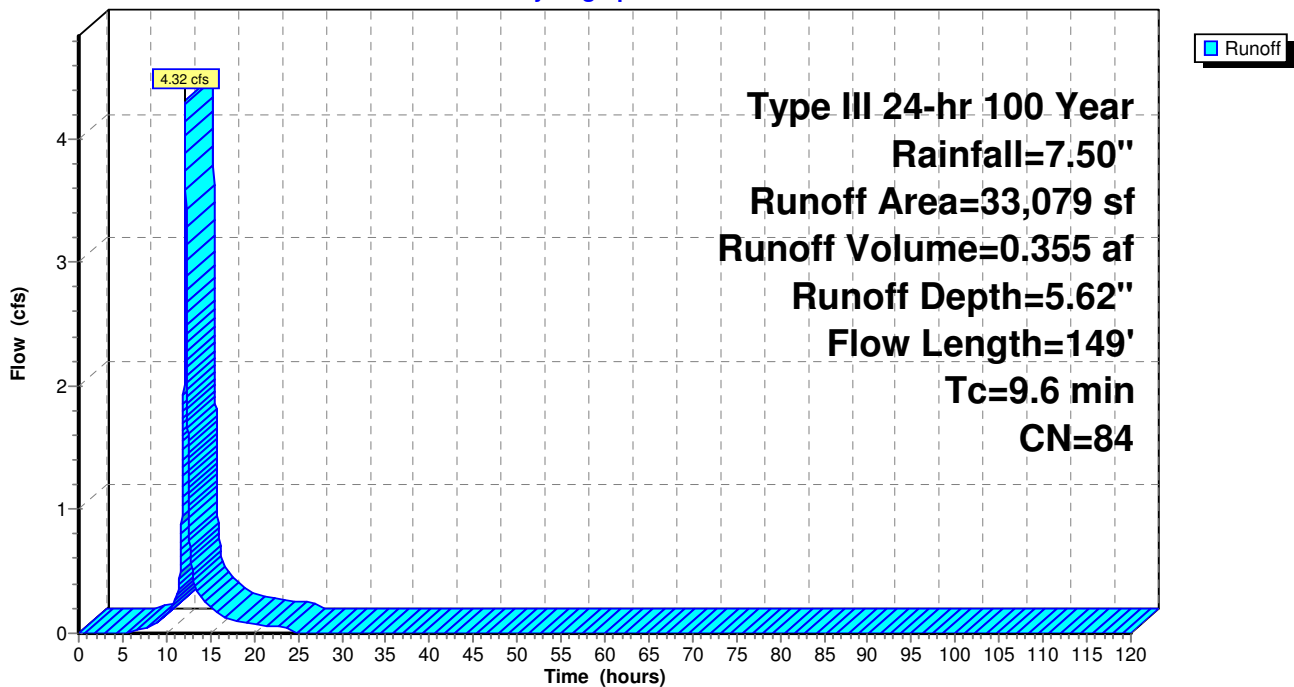
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=7.50"

Area (sf)	CN	Description
2,346	72	Woods/grass comb., Good, HSG C
21,001	79	50-75% Grass cover, Fair, HSG C
9,732	98	Paved roads w/curbs & sewers
33,079	84	Weighted Average
23,347		Pervious Area
9,732		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4	100	0.1400	0.18		Sheet Flow, 1 to 2
					Woods: Light underbrush n= 0.400 P2= 3.50"
0.2	49	0.5000	4.95		Shallow Concentrated Flow, 2 to 3
					Short Grass Pasture Kv= 7.0 fps
9.6	149	Total			

Subcatchment 2C: Drainage Area 2C

Hydrograph



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Hydrograph for Subcatchment 2C: Drainage Area 2C

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	7.50	5.62	0.00
2.00	0.15	0.00	0.00	106.00	7.50	5.62	0.00
4.00	0.32	0.00	0.00	108.00	7.50	5.62	0.00
6.00	0.54	0.01	0.01	110.00	7.50	5.62	0.00
8.00	0.86	0.09	0.05	112.00	7.50	5.62	0.00
10.00	1.42	0.37	0.15	114.00	7.50	5.62	0.00
12.00	3.75	2.15	2.23	116.00	7.50	5.62	0.00
14.00	6.08	4.27	0.28	118.00	7.50	5.62	0.00
16.00	6.64	4.80	0.15	120.00	7.50	5.62	0.00
18.00	6.96	5.10	0.09				
20.00	7.18	5.31	0.07				
22.00	7.36	5.48	0.06				
24.00	7.50	5.62	0.05				
26.00	7.50	5.62	0.00				
28.00	7.50	5.62	0.00				
30.00	7.50	5.62	0.00				
32.00	7.50	5.62	0.00				
34.00	7.50	5.62	0.00				
36.00	7.50	5.62	0.00				
38.00	7.50	5.62	0.00				
40.00	7.50	5.62	0.00				
42.00	7.50	5.62	0.00				
44.00	7.50	5.62	0.00				
46.00	7.50	5.62	0.00				
48.00	7.50	5.62	0.00				
50.00	7.50	5.62	0.00				
52.00	7.50	5.62	0.00				
54.00	7.50	5.62	0.00				
56.00	7.50	5.62	0.00				
58.00	7.50	5.62	0.00				
60.00	7.50	5.62	0.00				
62.00	7.50	5.62	0.00				
64.00	7.50	5.62	0.00				
66.00	7.50	5.62	0.00				
68.00	7.50	5.62	0.00				
70.00	7.50	5.62	0.00				
72.00	7.50	5.62	0.00				
74.00	7.50	5.62	0.00				
76.00	7.50	5.62	0.00				
78.00	7.50	5.62	0.00				
80.00	7.50	5.62	0.00				
82.00	7.50	5.62	0.00				
84.00	7.50	5.62	0.00				
86.00	7.50	5.62	0.00				
88.00	7.50	5.62	0.00				
90.00	7.50	5.62	0.00				
92.00	7.50	5.62	0.00				
94.00	7.50	5.62	0.00				
96.00	7.50	5.62	0.00				
98.00	7.50	5.62	0.00				
100.00	7.50	5.62	0.00				
102.00	7.50	5.62	0.00				

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Summary for Subcatchment 2C1: Drainage Area 2C1

Runoff = 6.69 cfs @ 12.13 hrs, Volume= 0.538 af, Depth= 5.04"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=7.50"

Area (sf)	CN	Description
26,272	76	Woods/grass comb., Fair, HSG C
20,575	74	>75% Grass cover, Good, HSG C
8,910	98	Paved parking & roofs
55,757	79	Weighted Average
46,847		Pervious Area
8,910		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.2	100	0.1000	0.23		Sheet Flow, 1 to 2 Grass: Dense n= 0.240 P2= 3.50"
1.8	287	0.2700	2.60		Shallow Concentrated Flow, 2 to 3 Woodland Kv= 5.0 fps
0.3	85	0.0540	4.72		Shallow Concentrated Flow, 3 to 4 Paved Kv= 20.3 fps
0.0	20	0.0200	9.68	11.88	Circular Channel (pipe), 4 to 5 Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
0.1	37	0.0200	9.68	11.88	Circular Channel (pipe), 5 to 6 Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.010
9.4	529	Total			

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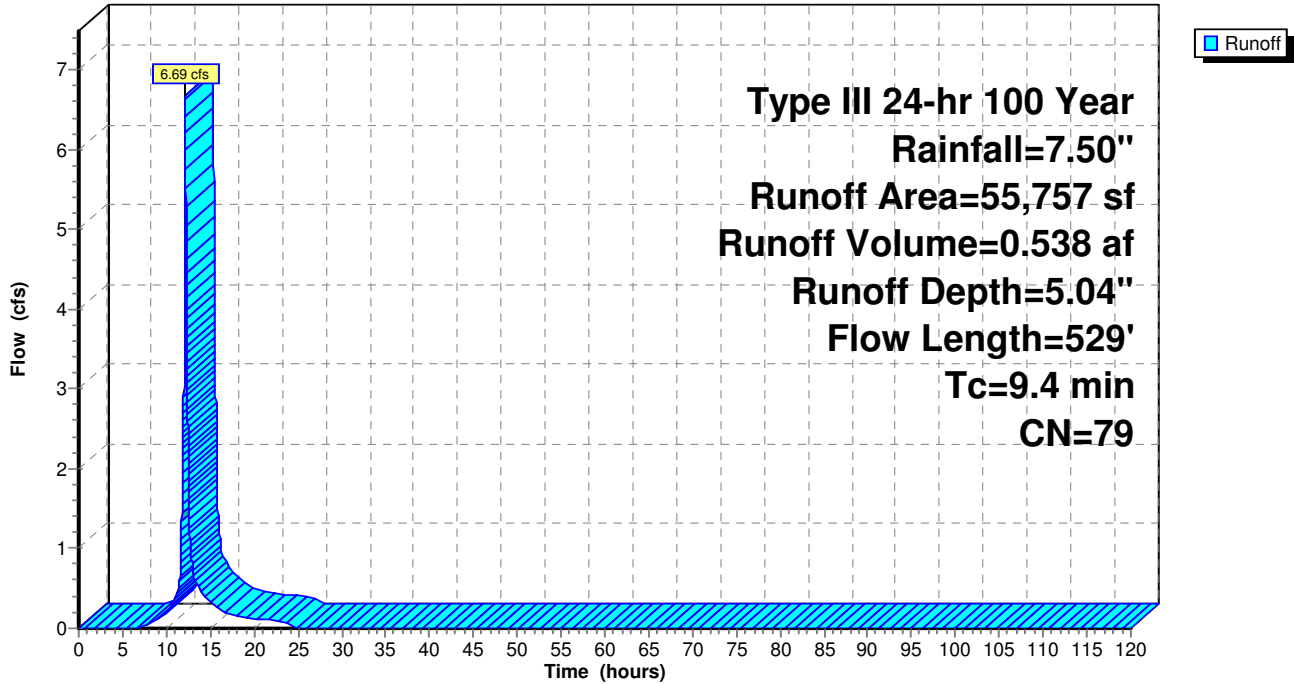
Type III 24-hr 100 Year Rainfall=7.50"

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Subcatchment 2C1: Drainage Area 2C1

Hydrograph



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Hydrograph for Subcatchment 2C1: Drainage Area 2C1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	7.50	5.04	0.00
2.00	0.15	0.00	0.00	106.00	7.50	5.04	0.00
4.00	0.32	0.00	0.00	108.00	7.50	5.04	0.00
6.00	0.54	0.00	0.00	110.00	7.50	5.04	0.00
8.00	0.86	0.04	0.05	112.00	7.50	5.04	0.00
10.00	1.42	0.22	0.19	114.00	7.50	5.04	0.00
12.00	3.75	1.76	3.39	116.00	7.50	5.04	0.00
14.00	6.08	3.75	0.45	118.00	7.50	5.04	0.00
16.00	6.64	4.26	0.24	120.00	7.50	5.04	0.00
18.00	6.96	4.55	0.15				
20.00	7.18	4.75	0.12				
22.00	7.36	4.91	0.10				
24.00	7.50	5.04	0.08				
26.00	7.50	5.04	0.00				
28.00	7.50	5.04	0.00				
30.00	7.50	5.04	0.00				
32.00	7.50	5.04	0.00				
34.00	7.50	5.04	0.00				
36.00	7.50	5.04	0.00				
38.00	7.50	5.04	0.00				
40.00	7.50	5.04	0.00				
42.00	7.50	5.04	0.00				
44.00	7.50	5.04	0.00				
46.00	7.50	5.04	0.00				
48.00	7.50	5.04	0.00				
50.00	7.50	5.04	0.00				
52.00	7.50	5.04	0.00				
54.00	7.50	5.04	0.00				
56.00	7.50	5.04	0.00				
58.00	7.50	5.04	0.00				
60.00	7.50	5.04	0.00				
62.00	7.50	5.04	0.00				
64.00	7.50	5.04	0.00				
66.00	7.50	5.04	0.00				
68.00	7.50	5.04	0.00				
70.00	7.50	5.04	0.00				
72.00	7.50	5.04	0.00				
74.00	7.50	5.04	0.00				
76.00	7.50	5.04	0.00				
78.00	7.50	5.04	0.00				
80.00	7.50	5.04	0.00				
82.00	7.50	5.04	0.00				
84.00	7.50	5.04	0.00				
86.00	7.50	5.04	0.00				
88.00	7.50	5.04	0.00				
90.00	7.50	5.04	0.00				
92.00	7.50	5.04	0.00				
94.00	7.50	5.04	0.00				
96.00	7.50	5.04	0.00				
98.00	7.50	5.04	0.00				
100.00	7.50	5.04	0.00				
102.00	7.50	5.04	0.00				

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Type III 24-hr 100 Year Rainfall=7.50"

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Summary for Subcatchment 2E: Drainage Area 2E

Runoff = 9.63 cfs @ 12.11 hrs, Volume= 0.733 af, Depth= 4.93"

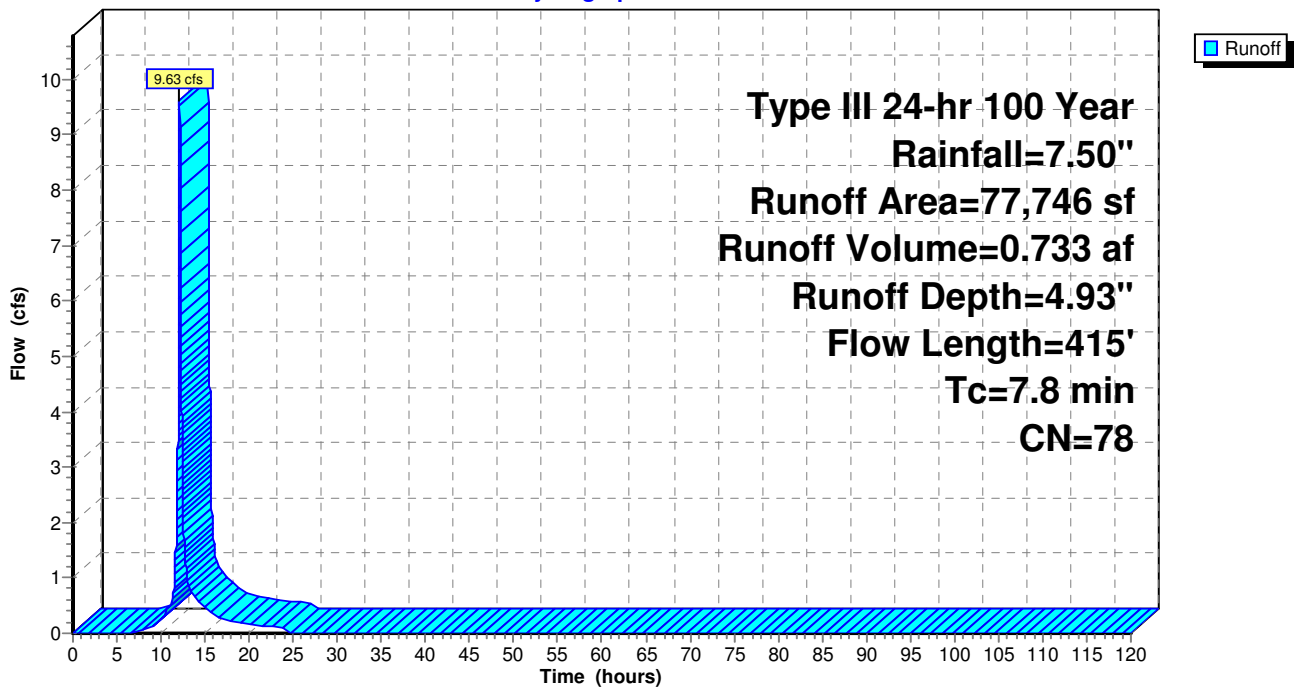
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=7.50"

Area (sf)	CN	Description
23,466	73	Woods, Fair, HSG C
41,869	74	>75% Grass cover, Good, HSG C
12,411	98	Paved roads w/curbs & sewers
77,746	78	Weighted Average
65,335		Pervious Area
12,411		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.4	100	0.0800	0.31		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
2.4	315	0.1900	2.18		Shallow Concentrated Flow, 2 to P-E Woodland Kv= 5.0 fps
7.8	415	Total			

Subcatchment 2E: Drainage Area 2E

Hydrograph



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Hydrograph for Subcatchment 2E: Drainage Area 2E

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	7.50	4.93	0.00
2.00	0.15	0.00	0.00	106.00	7.50	4.93	0.00
4.00	0.32	0.00	0.00	108.00	7.50	4.93	0.00
6.00	0.54	0.00	0.00	110.00	7.50	4.93	0.00
8.00	0.86	0.03	0.06	112.00	7.50	4.93	0.00
10.00	1.42	0.20	0.25	114.00	7.50	4.93	0.00
12.00	3.75	1.69	5.16	116.00	7.50	4.93	0.00
14.00	6.08	3.65	0.62	118.00	7.50	4.93	0.00
16.00	6.64	4.15	0.33	120.00	7.50	4.93	0.00
18.00	6.96	4.44	0.20				
20.00	7.18	4.64	0.16				
22.00	7.36	4.80	0.13				
24.00	7.50	4.93	0.11				
26.00	7.50	4.93	0.00				
28.00	7.50	4.93	0.00				
30.00	7.50	4.93	0.00				
32.00	7.50	4.93	0.00				
34.00	7.50	4.93	0.00				
36.00	7.50	4.93	0.00				
38.00	7.50	4.93	0.00				
40.00	7.50	4.93	0.00				
42.00	7.50	4.93	0.00				
44.00	7.50	4.93	0.00				
46.00	7.50	4.93	0.00				
48.00	7.50	4.93	0.00				
50.00	7.50	4.93	0.00				
52.00	7.50	4.93	0.00				
54.00	7.50	4.93	0.00				
56.00	7.50	4.93	0.00				
58.00	7.50	4.93	0.00				
60.00	7.50	4.93	0.00				
62.00	7.50	4.93	0.00				
64.00	7.50	4.93	0.00				
66.00	7.50	4.93	0.00				
68.00	7.50	4.93	0.00				
70.00	7.50	4.93	0.00				
72.00	7.50	4.93	0.00				
74.00	7.50	4.93	0.00				
76.00	7.50	4.93	0.00				
78.00	7.50	4.93	0.00				
80.00	7.50	4.93	0.00				
82.00	7.50	4.93	0.00				
84.00	7.50	4.93	0.00				
86.00	7.50	4.93	0.00				
88.00	7.50	4.93	0.00				
90.00	7.50	4.93	0.00				
92.00	7.50	4.93	0.00				
94.00	7.50	4.93	0.00				
96.00	7.50	4.93	0.00				
98.00	7.50	4.93	0.00				
100.00	7.50	4.93	0.00				
102.00	7.50	4.93	0.00				

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Summary for Subcatchment 2F: Drainage Area 2F

Runoff = 270.67 cfs @ 12.11 hrs, Volume= 20.192 af, Depth= 4.04"

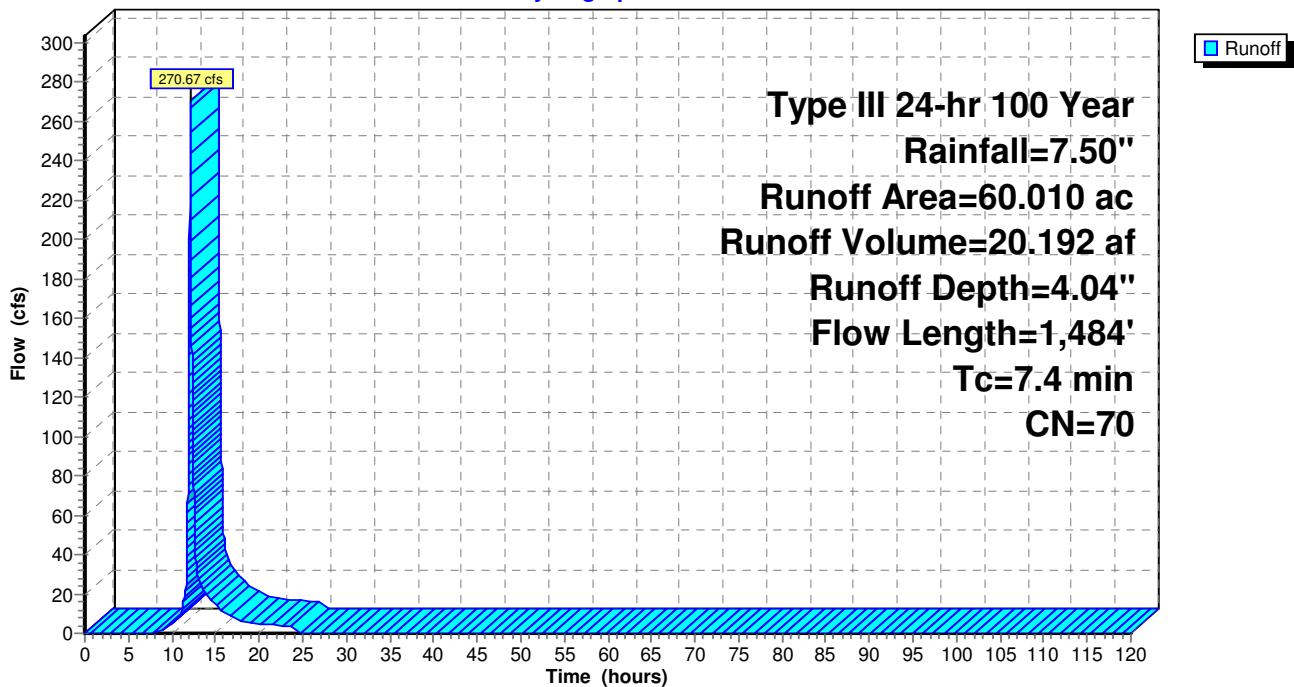
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=7.50"

Area (ac)	CN	Description
60.010	70	1/2 acre lots, 25% imp, HSG B
45.008		Pervious Area
15.002		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.7	100	0.2000	0.45		Sheet Flow, 1 to 2 Grass: Short n= 0.150 P2= 3.50"
2.6	1,075	0.1800	6.83		Shallow Concentrated Flow, 2 to 3 Unpaved Kv= 16.1 fps
1.1	309	0.0100	4.56	68.35	Channel Flow, 3 to DP-2 Area= 15.0 sf Perim= 17.0' r= 0.88' n= 0.030 Stream, clean & straight
7.4	1,484	Total			

Subcatchment 2F: Drainage Area 2F

Hydrograph



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Hydrograph for Subcatchment 2F: Drainage Area 2F

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	7.50	4.04	0.00
2.00	0.15	0.00	0.00	106.00	7.50	4.04	0.00
4.00	0.32	0.00	0.00	108.00	7.50	4.04	0.00
6.00	0.54	0.00	0.00	110.00	7.50	4.04	0.00
8.00	0.86	0.00	0.00	112.00	7.50	4.04	0.00
10.00	1.42	0.06	4.42	114.00	7.50	4.04	0.00
12.00	3.75	1.17	141.76	116.00	7.50	4.04	0.00
14.00	6.08	2.87	18.67	118.00	7.50	4.04	0.00
16.00	6.64	3.33	10.14	120.00	7.50	4.04	0.00
18.00	6.96	3.59	6.24				
20.00	7.18	3.77	5.00				
22.00	7.36	3.92	4.16				
24.00	7.50	4.04	3.31				
26.00	7.50	4.04	0.00				
28.00	7.50	4.04	0.00				
30.00	7.50	4.04	0.00				
32.00	7.50	4.04	0.00				
34.00	7.50	4.04	0.00				
36.00	7.50	4.04	0.00				
38.00	7.50	4.04	0.00				
40.00	7.50	4.04	0.00				
42.00	7.50	4.04	0.00				
44.00	7.50	4.04	0.00				
46.00	7.50	4.04	0.00				
48.00	7.50	4.04	0.00				
50.00	7.50	4.04	0.00				
52.00	7.50	4.04	0.00				
54.00	7.50	4.04	0.00				
56.00	7.50	4.04	0.00				
58.00	7.50	4.04	0.00				
60.00	7.50	4.04	0.00				
62.00	7.50	4.04	0.00				
64.00	7.50	4.04	0.00				
66.00	7.50	4.04	0.00				
68.00	7.50	4.04	0.00				
70.00	7.50	4.04	0.00				
72.00	7.50	4.04	0.00				
74.00	7.50	4.04	0.00				
76.00	7.50	4.04	0.00				
78.00	7.50	4.04	0.00				
80.00	7.50	4.04	0.00				
82.00	7.50	4.04	0.00				
84.00	7.50	4.04	0.00				
86.00	7.50	4.04	0.00				
88.00	7.50	4.04	0.00				
90.00	7.50	4.04	0.00				
92.00	7.50	4.04	0.00				
94.00	7.50	4.04	0.00				
96.00	7.50	4.04	0.00				
98.00	7.50	4.04	0.00				
100.00	7.50	4.04	0.00				
102.00	7.50	4.04	0.00				

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Type III 24-hr 100 Year Rainfall=7.50"

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Summary for Subcatchment 3: Drainage Area - 3

Runoff = 264.85 cfs @ 12.11 hrs, Volume= 20.281 af, Depth= 4.59"

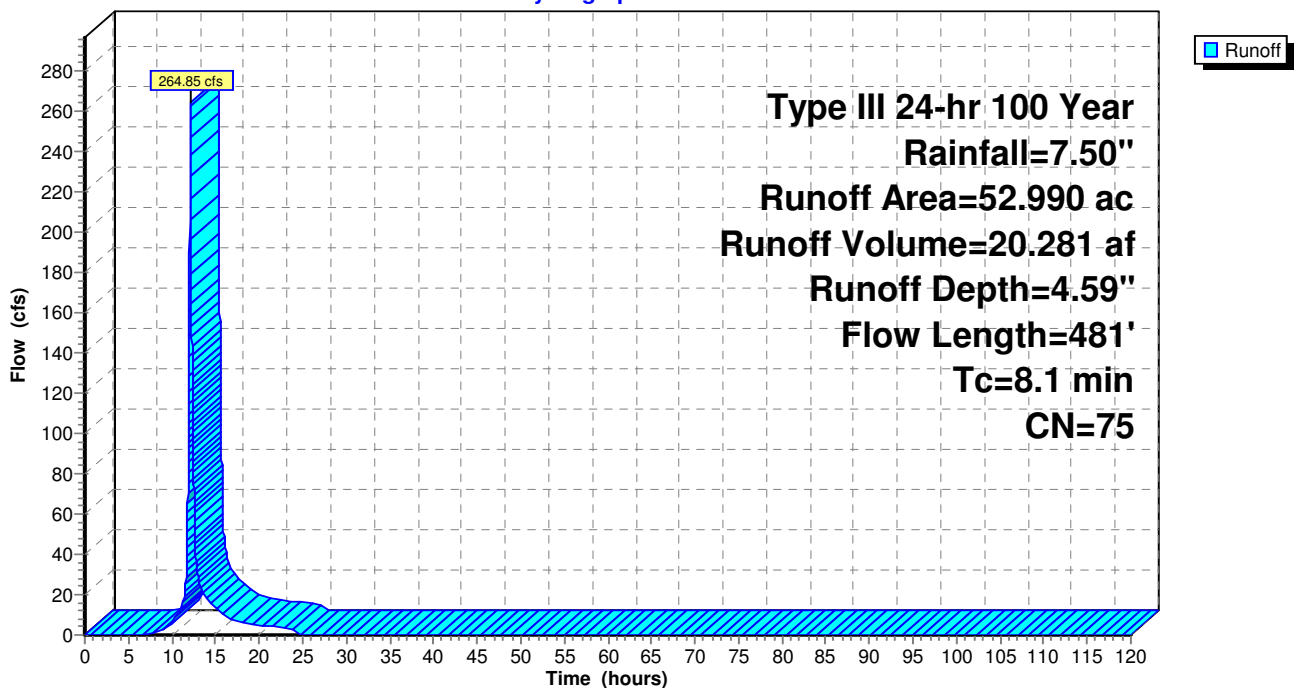
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=7.50"

Area (ac)	CN	Description
52.990	75	1/4 acre lots, 38% imp, HSG B
32.854		Pervious Area
20.136		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.7	100	0.1150	0.36		Sheet Flow, 1 to 2
3.4	381	0.0700	1.85		Grass: Short n= 0.150 P2= 3.50" Shallow Concentrated Flow, 2 to 3
8.1	481	Total			Short Grass Pasture Kv= 7.0 fps

Subcatchment 3: Drainage Area - 3

Hydrograph



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Hydrograph for Subcatchment 3: Drainage Area - 3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	7.50	4.59	0.00
2.00	0.15	0.00	0.00	106.00	7.50	4.59	0.00
4.00	0.32	0.00	0.00	108.00	7.50	4.59	0.00
6.00	0.54	0.00	0.00	110.00	7.50	4.59	0.00
8.00	0.86	0.01	0.93	112.00	7.50	4.59	0.00
10.00	1.42	0.14	6.08	114.00	7.50	4.59	0.00
12.00	3.75	1.48	137.91	116.00	7.50	4.59	0.00
14.00	6.08	3.35	17.78	118.00	7.50	4.59	0.00
16.00	6.64	3.84	9.58	120.00	7.50	4.59	0.00
18.00	6.96	4.11	5.86				
20.00	7.18	4.31	4.68				
22.00	7.36	4.46	3.88				
24.00	7.50	4.59	3.09				
26.00	7.50	4.59	0.00				
28.00	7.50	4.59	0.00				
30.00	7.50	4.59	0.00				
32.00	7.50	4.59	0.00				
34.00	7.50	4.59	0.00				
36.00	7.50	4.59	0.00				
38.00	7.50	4.59	0.00				
40.00	7.50	4.59	0.00				
42.00	7.50	4.59	0.00				
44.00	7.50	4.59	0.00				
46.00	7.50	4.59	0.00				
48.00	7.50	4.59	0.00				
50.00	7.50	4.59	0.00				
52.00	7.50	4.59	0.00				
54.00	7.50	4.59	0.00				
56.00	7.50	4.59	0.00				
58.00	7.50	4.59	0.00				
60.00	7.50	4.59	0.00				
62.00	7.50	4.59	0.00				
64.00	7.50	4.59	0.00				
66.00	7.50	4.59	0.00				
68.00	7.50	4.59	0.00				
70.00	7.50	4.59	0.00				
72.00	7.50	4.59	0.00				
74.00	7.50	4.59	0.00				
76.00	7.50	4.59	0.00				
78.00	7.50	4.59	0.00				
80.00	7.50	4.59	0.00				
82.00	7.50	4.59	0.00				
84.00	7.50	4.59	0.00				
86.00	7.50	4.59	0.00				
88.00	7.50	4.59	0.00				
90.00	7.50	4.59	0.00				
92.00	7.50	4.59	0.00				
94.00	7.50	4.59	0.00				
96.00	7.50	4.59	0.00				
98.00	7.50	4.59	0.00				
100.00	7.50	4.59	0.00				
102.00	7.50	4.59	0.00				

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Summary for Subcatchment 4A: Drainage Area 4A

Runoff = 16.62 cfs @ 12.10 hrs, Volume= 1.229 af, Depth= 4.93"

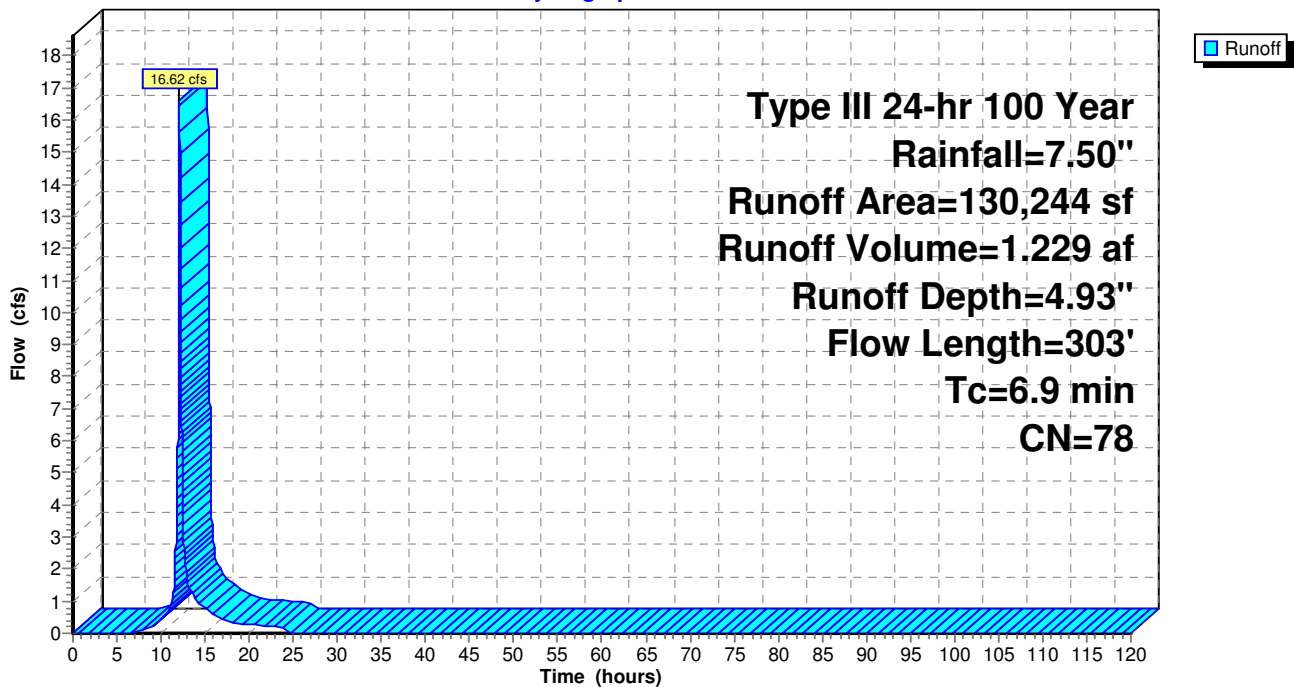
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=7.50"

Area (sf)	CN	Description
19,319	76	Woods/grass comb., Fair, HSG C
88,531	74	>75% Grass cover, Good, HSG C
22,394	98	Paved parking & roofs
130,244	78	Weighted Average
107,850		Pervious Area
22,394		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	100	0.0600	0.28		Sheet Flow, 1 to 2
					Grass: Short n= 0.150 P2= 3.50"
0.9	203	0.2700	3.64		Shallow Concentrated Flow, 2 to 3
					Short Grass Pasture Kv= 7.0 fps
6.9	303	Total			

Subcatchment 4A: Drainage Area 4A

Hydrograph



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Hydrograph for Subcatchment 4A: Drainage Area 4A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	7.50	4.93	0.00
2.00	0.15	0.00	0.00	106.00	7.50	4.93	0.00
4.00	0.32	0.00	0.00	108.00	7.50	4.93	0.00
6.00	0.54	0.00	0.00	110.00	7.50	4.93	0.00
8.00	0.86	0.03	0.10	112.00	7.50	4.93	0.00
10.00	1.42	0.20	0.43	114.00	7.50	4.93	0.00
12.00	3.75	1.69	9.35	116.00	7.50	4.93	0.00
14.00	6.08	3.65	1.03	118.00	7.50	4.93	0.00
16.00	6.64	4.15	0.55	120.00	7.50	4.93	0.00
18.00	6.96	4.44	0.34				
20.00	7.18	4.64	0.27				
22.00	7.36	4.80	0.22				
24.00	7.50	4.93	0.18				
26.00	7.50	4.93	0.00				
28.00	7.50	4.93	0.00				
30.00	7.50	4.93	0.00				
32.00	7.50	4.93	0.00				
34.00	7.50	4.93	0.00				
36.00	7.50	4.93	0.00				
38.00	7.50	4.93	0.00				
40.00	7.50	4.93	0.00				
42.00	7.50	4.93	0.00				
44.00	7.50	4.93	0.00				
46.00	7.50	4.93	0.00				
48.00	7.50	4.93	0.00				
50.00	7.50	4.93	0.00				
52.00	7.50	4.93	0.00				
54.00	7.50	4.93	0.00				
56.00	7.50	4.93	0.00				
58.00	7.50	4.93	0.00				
60.00	7.50	4.93	0.00				
62.00	7.50	4.93	0.00				
64.00	7.50	4.93	0.00				
66.00	7.50	4.93	0.00				
68.00	7.50	4.93	0.00				
70.00	7.50	4.93	0.00				
72.00	7.50	4.93	0.00				
74.00	7.50	4.93	0.00				
76.00	7.50	4.93	0.00				
78.00	7.50	4.93	0.00				
80.00	7.50	4.93	0.00				
82.00	7.50	4.93	0.00				
84.00	7.50	4.93	0.00				
86.00	7.50	4.93	0.00				
88.00	7.50	4.93	0.00				
90.00	7.50	4.93	0.00				
92.00	7.50	4.93	0.00				
94.00	7.50	4.93	0.00				
96.00	7.50	4.93	0.00				
98.00	7.50	4.93	0.00				
100.00	7.50	4.93	0.00				
102.00	7.50	4.93	0.00				

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Summary for Subcatchment 4B: Drainage Area 4B

Runoff = 17.25 cfs @ 12.09 hrs, Volume= 1.229 af, Depth= 4.59"

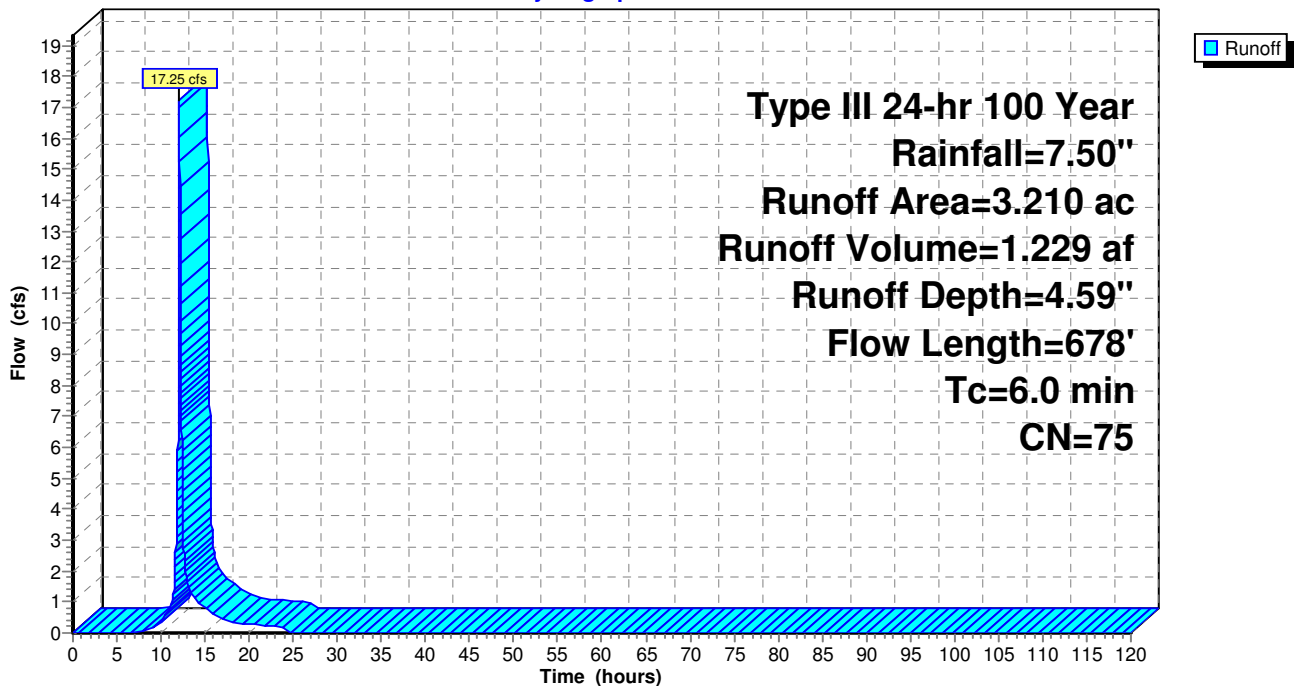
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=7.50"

Area (ac)	CN	Description
3.210	75	1/4 acre lots, 38% imp, HSG B
1.990		Pervious Area
1.220		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.1	100	0.1600	0.41		Sheet Flow, 1 to 2
1.9	578	0.1200	5.20		Shallow Concentrated Flow, 2 to DP-5
					Grassed Waterway Kv= 15.0 fps
6.0	678	Total			

Subcatchment 4B: Drainage Area 4B

Hydrograph



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Hydrograph for Subcatchment 4B: Drainage Area 4B

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	7.50	4.59	0.00
2.00	0.15	0.00	0.00	106.00	7.50	4.59	0.00
4.00	0.32	0.00	0.00	108.00	7.50	4.59	0.00
6.00	0.54	0.00	0.00	110.00	7.50	4.59	0.00
8.00	0.86	0.01	0.06	112.00	7.50	4.59	0.00
10.00	1.42	0.14	0.38	114.00	7.50	4.59	0.00
12.00	3.75	1.48	10.15	116.00	7.50	4.59	0.00
14.00	6.08	3.35	1.06	118.00	7.50	4.59	0.00
16.00	6.64	3.84	0.57	120.00	7.50	4.59	0.00
18.00	6.96	4.11	0.35				
20.00	7.18	4.31	0.28				
22.00	7.36	4.46	0.23				
24.00	7.50	4.59	0.19				
26.00	7.50	4.59	0.00				
28.00	7.50	4.59	0.00				
30.00	7.50	4.59	0.00				
32.00	7.50	4.59	0.00				
34.00	7.50	4.59	0.00				
36.00	7.50	4.59	0.00				
38.00	7.50	4.59	0.00				
40.00	7.50	4.59	0.00				
42.00	7.50	4.59	0.00				
44.00	7.50	4.59	0.00				
46.00	7.50	4.59	0.00				
48.00	7.50	4.59	0.00				
50.00	7.50	4.59	0.00				
52.00	7.50	4.59	0.00				
54.00	7.50	4.59	0.00				
56.00	7.50	4.59	0.00				
58.00	7.50	4.59	0.00				
60.00	7.50	4.59	0.00				
62.00	7.50	4.59	0.00				
64.00	7.50	4.59	0.00				
66.00	7.50	4.59	0.00				
68.00	7.50	4.59	0.00				
70.00	7.50	4.59	0.00				
72.00	7.50	4.59	0.00				
74.00	7.50	4.59	0.00				
76.00	7.50	4.59	0.00				
78.00	7.50	4.59	0.00				
80.00	7.50	4.59	0.00				
82.00	7.50	4.59	0.00				
84.00	7.50	4.59	0.00				
86.00	7.50	4.59	0.00				
88.00	7.50	4.59	0.00				
90.00	7.50	4.59	0.00				
92.00	7.50	4.59	0.00				
94.00	7.50	4.59	0.00				
96.00	7.50	4.59	0.00				
98.00	7.50	4.59	0.00				
100.00	7.50	4.59	0.00				
102.00	7.50	4.59	0.00				

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Type III 24-hr 100 Year Rainfall=7.50"

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Summary for Subcatchment 5: Drainage Area 5

Runoff = 77.49 cfs @ 12.13 hrs, Volume= 6.193 af, Depth= 4.59"

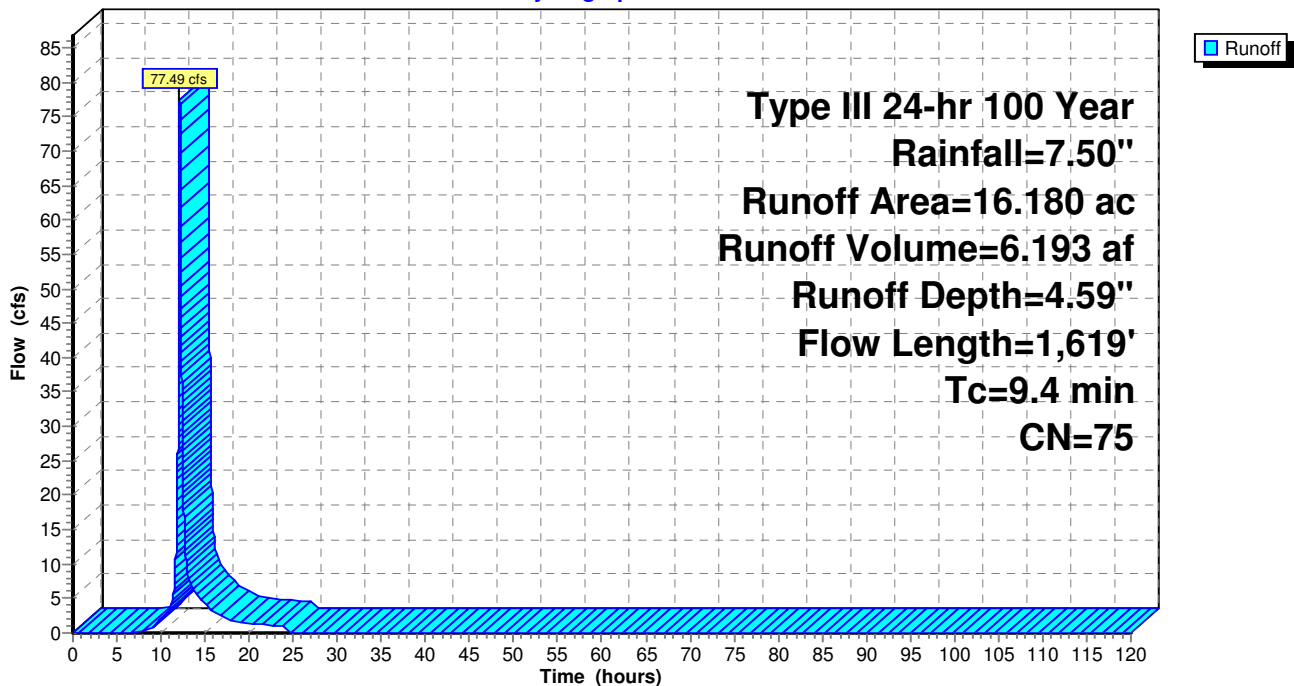
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=7.50"

Area (ac)	CN	Description
16.180	75	1/4 acre lots, 38% imp, HSG B
10.032		Pervious Area
6.148		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	100	0.1800	0.43		Sheet Flow, 1 to 2
5.5	1,519	0.0810	4.58		Grass: Short n= 0.150 P2= 3.50" Shallow Concentrated Flow, 2 to DP-4
9.4	1,619	Total			Unpaved Kv= 16.1 fps

Subcatchment 5: Drainage Area 5

Hydrograph



Post-Development Entire

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Hydrograph for Subcatchment 5: Drainage Area 5

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	104.00	7.50	4.59	0.00
2.00	0.15	0.00	0.00	106.00	7.50	4.59	0.00
4.00	0.32	0.00	0.00	108.00	7.50	4.59	0.00
6.00	0.54	0.00	0.00	110.00	7.50	4.59	0.00
8.00	0.86	0.01	0.28	112.00	7.50	4.59	0.00
10.00	1.42	0.14	1.83	114.00	7.50	4.59	0.00
12.00	3.75	1.48	38.34	116.00	7.50	4.59	0.00
14.00	6.08	3.35	5.48	118.00	7.50	4.59	0.00
16.00	6.64	3.84	2.95	120.00	7.50	4.59	0.00
18.00	6.96	4.11	1.80				
20.00	7.18	4.31	1.43				
22.00	7.36	4.46	1.19				
24.00	7.50	4.59	0.95				
26.00	7.50	4.59	0.00				
28.00	7.50	4.59	0.00				
30.00	7.50	4.59	0.00				
32.00	7.50	4.59	0.00				
34.00	7.50	4.59	0.00				
36.00	7.50	4.59	0.00				
38.00	7.50	4.59	0.00				
40.00	7.50	4.59	0.00				
42.00	7.50	4.59	0.00				
44.00	7.50	4.59	0.00				
46.00	7.50	4.59	0.00				
48.00	7.50	4.59	0.00				
50.00	7.50	4.59	0.00				
52.00	7.50	4.59	0.00				
54.00	7.50	4.59	0.00				
56.00	7.50	4.59	0.00				
58.00	7.50	4.59	0.00				
60.00	7.50	4.59	0.00				
62.00	7.50	4.59	0.00				
64.00	7.50	4.59	0.00				
66.00	7.50	4.59	0.00				
68.00	7.50	4.59	0.00				
70.00	7.50	4.59	0.00				
72.00	7.50	4.59	0.00				
74.00	7.50	4.59	0.00				
76.00	7.50	4.59	0.00				
78.00	7.50	4.59	0.00				
80.00	7.50	4.59	0.00				
82.00	7.50	4.59	0.00				
84.00	7.50	4.59	0.00				
86.00	7.50	4.59	0.00				
88.00	7.50	4.59	0.00				
90.00	7.50	4.59	0.00				
92.00	7.50	4.59	0.00				
94.00	7.50	4.59	0.00				
96.00	7.50	4.59	0.00				
98.00	7.50	4.59	0.00				
100.00	7.50	4.59	0.00				
102.00	7.50	4.59	0.00				

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Type III 24-hr 100 Year Rainfall=7.50"

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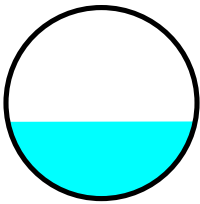
Summary for Reach 1R: Pipe

Inflow = 9.43 cfs @ 12.16 hrs, Volume= 0.555 af
Outflow = 9.11 cfs @ 12.19 hrs, Volume= 0.555 af, Atten= 3%, Lag= 1.7 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Max. Velocity= 13.70 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 4.84 fps, Avg. Travel Time= 0.6 min

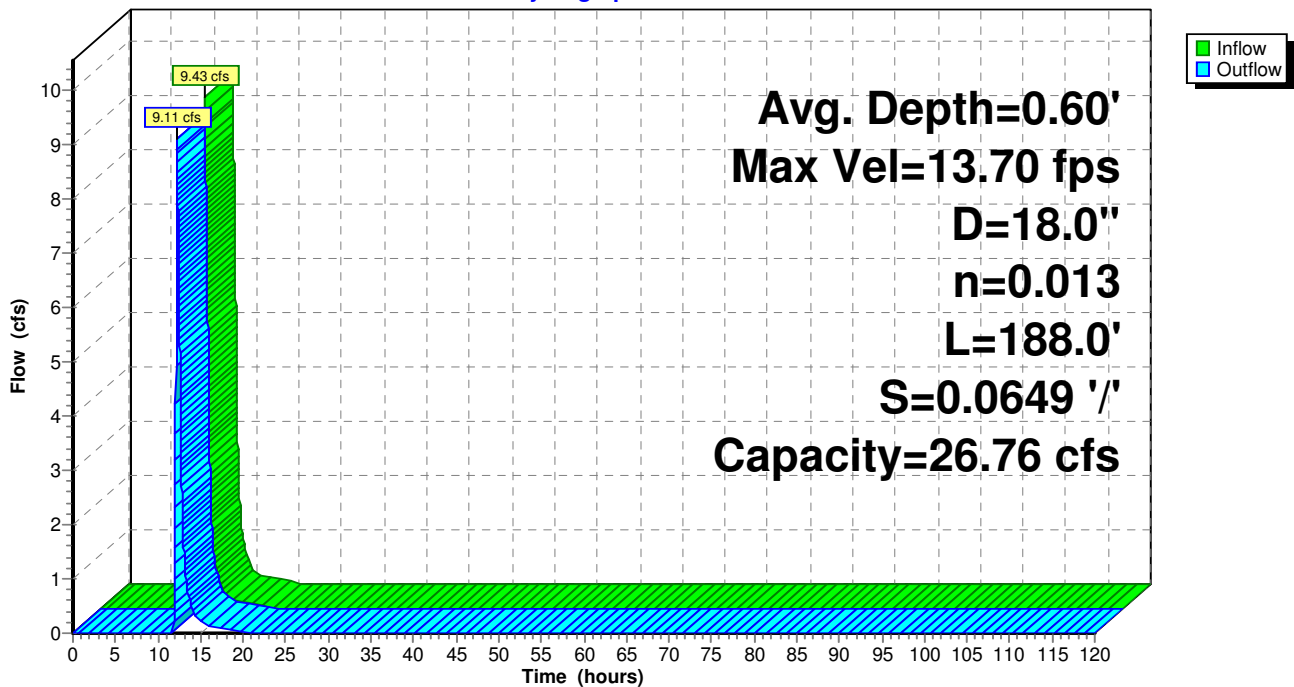
Peak Storage= 125 cf @ 12.19 hrs, Average Depth at Peak Storage= 0.60'
Bank-Full Depth= 1.50', Capacity at Bank-Full= 26.76 cfs

18.0" Diameter Pipe, n= 0.013 Corrugated PE, smooth interior
Length= 188.0' Slope= 0.0649 '/'
Inlet Invert= 310.20', Outlet Invert= 298.00'



Reach 1R: Pipe

Hydrograph



Post-Development Entire

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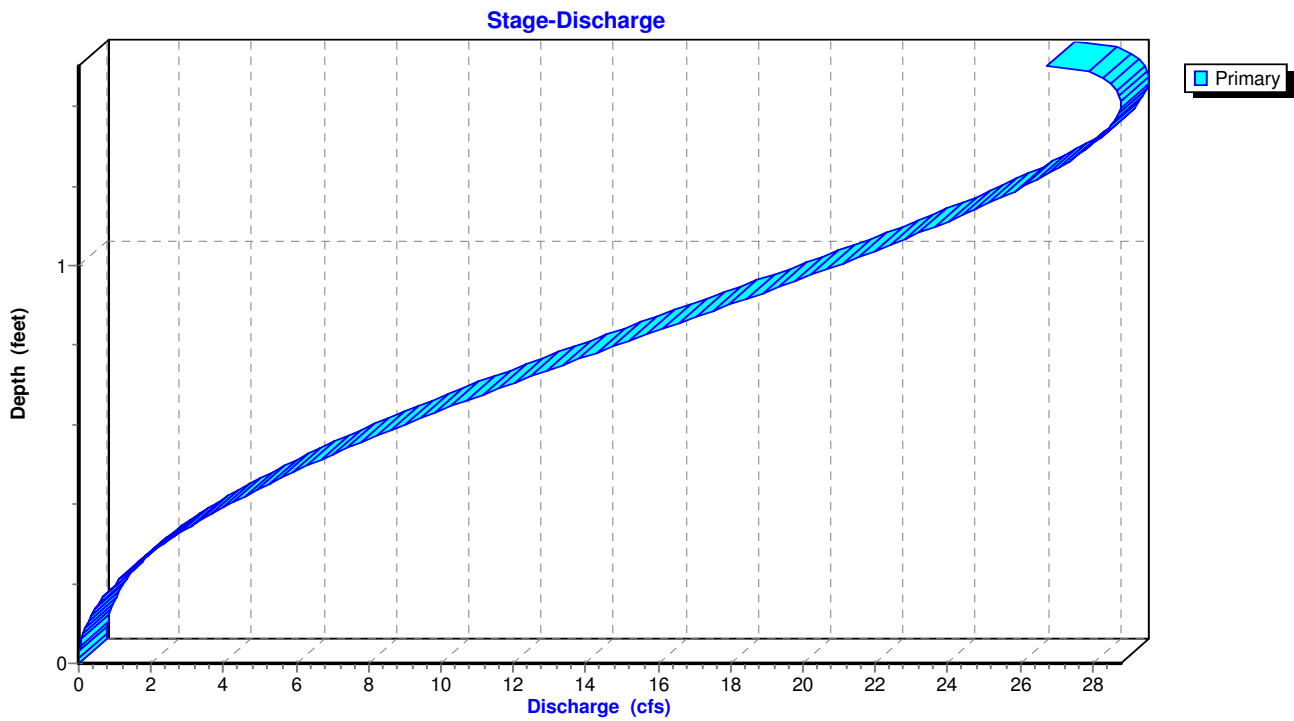
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Type III 24-hr 100 Year Rainfall=7.50"

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Reach 1R: Pipe



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Hydrograph for Reach 1R: Pipe

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)
0.00	0.00	0	310.20	0.00
5.00	0.00	0	310.20	0.00
10.00	0.00	0	310.20	0.00
15.00	0.22	9	310.30	0.23
20.00	0.02	2	310.23	0.02
25.00	0.00	0	310.20	0.00
30.00	0.00	0	310.20	0.00
35.00	0.00	0	310.20	0.00
40.00	0.00	0	310.20	0.00
45.00	0.00	0	310.20	0.00
50.00	0.00	0	310.20	0.00
55.00	0.00	0	310.20	0.00
60.00	0.00	0	310.20	0.00
65.00	0.00	0	310.20	0.00
70.00	0.00	0	310.20	0.00
75.00	0.00	0	310.20	0.00
80.00	0.00	0	310.20	0.00
85.00	0.00	0	310.20	0.00
90.00	0.00	0	310.20	0.00
95.00	0.00	0	310.20	0.00
100.00	0.00	0	310.20	0.00
105.00	0.00	0	310.20	0.00
110.00	0.00	0	310.20	0.00
115.00	0.00	0	310.20	0.00
120.00	0.00	0	310.20	0.00

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Stage-Discharge for Reach 1R: Pipe

Elevation (feet)	Velocity (ft/sec)	Discharge (cfs)	Elevation (feet)	Velocity (ft/sec)	Discharge (cfs)	Elevation (feet)	Velocity (ft/sec)	Discharge (cfs)
310.20	0.00	0.00	310.72	12.70	6.91	311.24	16.92	22.12
310.21	0.90	0.00	310.73	12.83	7.16	311.25	16.96	22.40
310.22	1.61	0.01	310.74	12.95	7.42	311.26	16.99	22.68
310.23	2.13	0.02	310.75	13.08	7.68	311.27	17.02	22.95
310.24	2.57	0.03	310.76	13.20	7.94	311.28	17.05	23.23
310.25	2.98	0.06	310.77	13.32	8.20	311.29	17.08	23.49
310.26	3.36	0.08	310.78	13.43	8.47	311.30	17.11	23.76
310.27	3.71	0.11	310.79	13.55	8.74	311.31	17.13	24.02
310.28	4.05	0.15	310.80	13.66	9.02	311.32	17.15	24.27
310.29	4.38	0.19	310.81	13.77	9.29	311.33	17.17	24.53
310.30	4.68	0.24	310.82	13.88	9.57	311.34	17.19	24.77
310.31	4.98	0.29	310.83	13.99	9.85	311.35	17.21	25.02
310.32	5.27	0.35	310.84	14.09	10.14	311.36	17.22	25.25
310.33	5.54	0.41	310.85	14.20	10.42	311.37	17.23	25.49
310.34	5.81	0.48	310.86	14.30	10.71	311.38	17.24	25.72
310.35	6.07	0.56	310.87	14.40	11.00	311.39	17.25	25.94
310.36	6.33	0.64	310.88	14.50	11.29	311.40	17.26	26.16
310.37	6.57	0.73	310.89	14.60	11.59	311.41	17.26	26.37
310.38	6.81	0.82	310.90	14.69	11.88	311.42	17.26	26.57
310.39	7.05	0.92	310.91	14.79	12.18	311.43	17.26	26.77
310.40	7.27	1.02	310.92	14.88	12.48	311.44	17.26	26.96
310.41	7.50	1.13	310.93	14.97	12.78	311.45	17.25	27.14
310.42	7.72	1.24	310.94	15.06	13.08	311.46	17.24	27.32
310.43	7.93	1.36	310.95	15.14	13.38	311.47	17.23	27.49
310.44	8.14	1.49	310.96	15.23	13.68	311.48	17.22	27.65
310.45	8.35	1.62	310.97	15.31	13.99	311.49	17.20	27.81
310.46	8.55	1.75	310.98	15.39	14.29	311.50	17.18	27.95
310.47	8.74	1.89	310.99	15.47	14.60	311.51	17.15	28.08
310.48	8.94	2.04	311.00	15.55	14.90	311.52	17.13	28.21
310.49	9.13	2.19	311.01	15.63	15.21	311.53	17.10	28.32
310.50	9.31	2.34	311.02	15.70	15.52	311.54	17.06	28.42
310.51	9.50	2.51	311.03	15.77	15.83	311.55	17.02	28.52
310.52	9.68	2.67	311.04	15.85	16.13	311.56	16.98	28.60
310.53	9.85	2.84	311.05	15.91	16.44	311.57	16.94	28.66
310.54	10.03	3.02	311.06	15.98	16.75	311.58	16.88	28.72
310.55	10.20	3.20	311.07	16.05	17.06	311.59	16.83	28.75
310.56	10.36	3.38	311.08	16.11	17.36	311.60	16.76	28.78
310.57	10.53	3.57	311.09	16.18	17.67	311.61	16.70	28.78
310.58	10.69	3.76	311.10	16.24	17.98	311.62	16.62	28.76
310.59	10.85	3.96	311.11	16.30	18.28	311.63	16.54	28.72
310.60	11.01	4.16	311.12	16.36	18.59	311.64	16.44	28.67
310.61	11.16	4.37	311.13	16.41	18.89	311.65	16.33	28.57
310.62	11.31	4.58	311.14	16.47	19.19	311.66	16.21	28.44
310.63	11.46	4.80	311.15	16.52	19.49	311.67	16.08	28.28
310.64	11.61	5.02	311.16	16.57	19.79	311.68	15.90	28.01
310.65	11.75	5.24	311.17	16.62	20.09	311.69	15.58	27.51
310.66	11.89	5.47	311.18	16.67	20.39	311.70	15.14	26.76
310.67	12.03	5.70	311.19	16.72	20.68			
310.68	12.17	5.93	311.20	16.76	20.98			
310.69	12.31	6.17	311.21	16.80	21.27			
310.70	12.44	6.42	311.22	16.84	21.55			
310.71	12.57	6.66	311.23	16.88	21.84			

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Type III 24-hr 100 Year Rainfall=7.50"

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Summary for Pond LS-1: Level Spreader

Inflow = 24.97 cfs @ 12.21 hrs, Volume= 1.870 af
 Outflow = 25.51 cfs @ 12.21 hrs, Volume= 1.751 af, Atten= 0%, Lag= 0.0 min
 Primary = 25.51 cfs @ 12.21 hrs, Volume= 1.751 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 300.09' @ 12.21 hrs Surf.Area= 2,248 sf Storage= 5,288 cf

Plug-Flow detention time= 18.9 min calculated for 1.751 af (94% of inflow)
 Center-of-Mass det. time= 3.8 min (780.7 - 776.8)

Volume	Invert	Avail.Storage	Storage Description
#1	296.00'	5,288 cf	Custom Stage Data (Irregular) Listed below

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
296.00	505	363.0	0	0	505
298.00	1,320	413.0	1,761	1,761	3,689
300.00	2,248	436.0	3,527	5,288	5,459

Device	Routing	Invert	Outlet Devices
#1	Primary	299.95'	210.0' long x 4.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Primary OutFlow Max=25.49 cfs @ 12.21 hrs HW=300.09' TW=0.00' (Dynamic Tailwater)

↑1=**Broad-Crested Rectangular Weir** (Weir Controls 25.49 cfs @ 0.88 fps)

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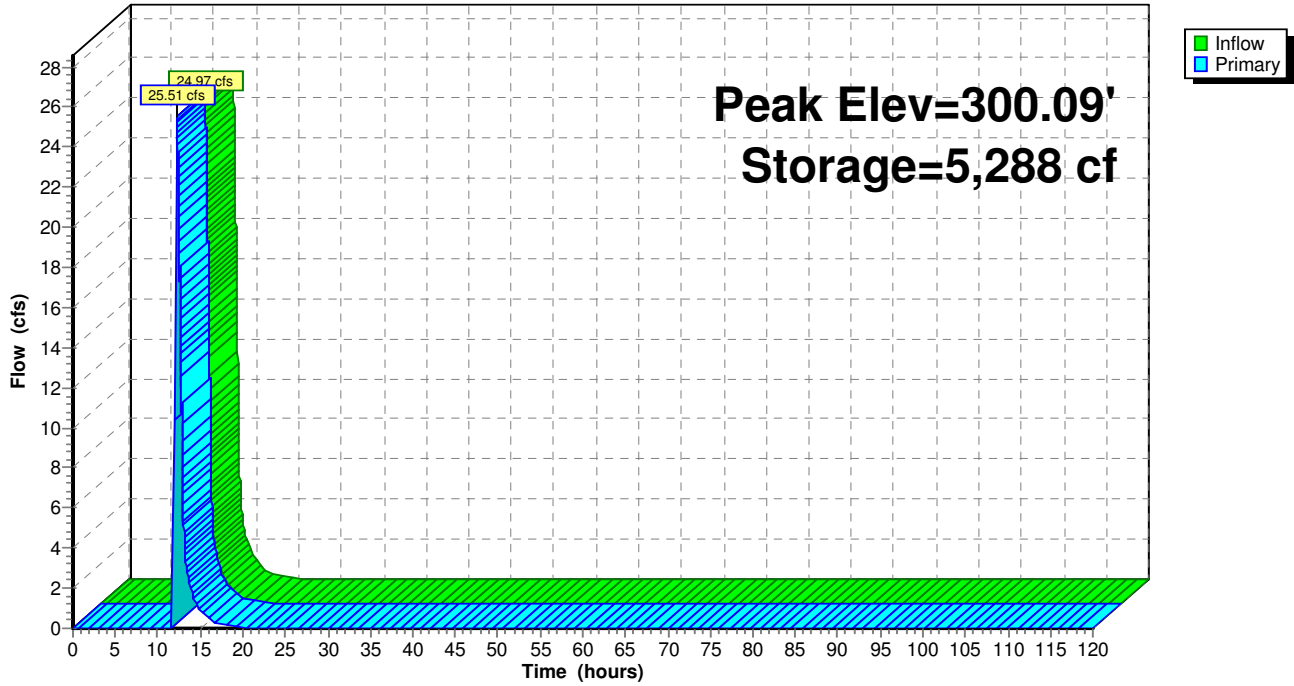
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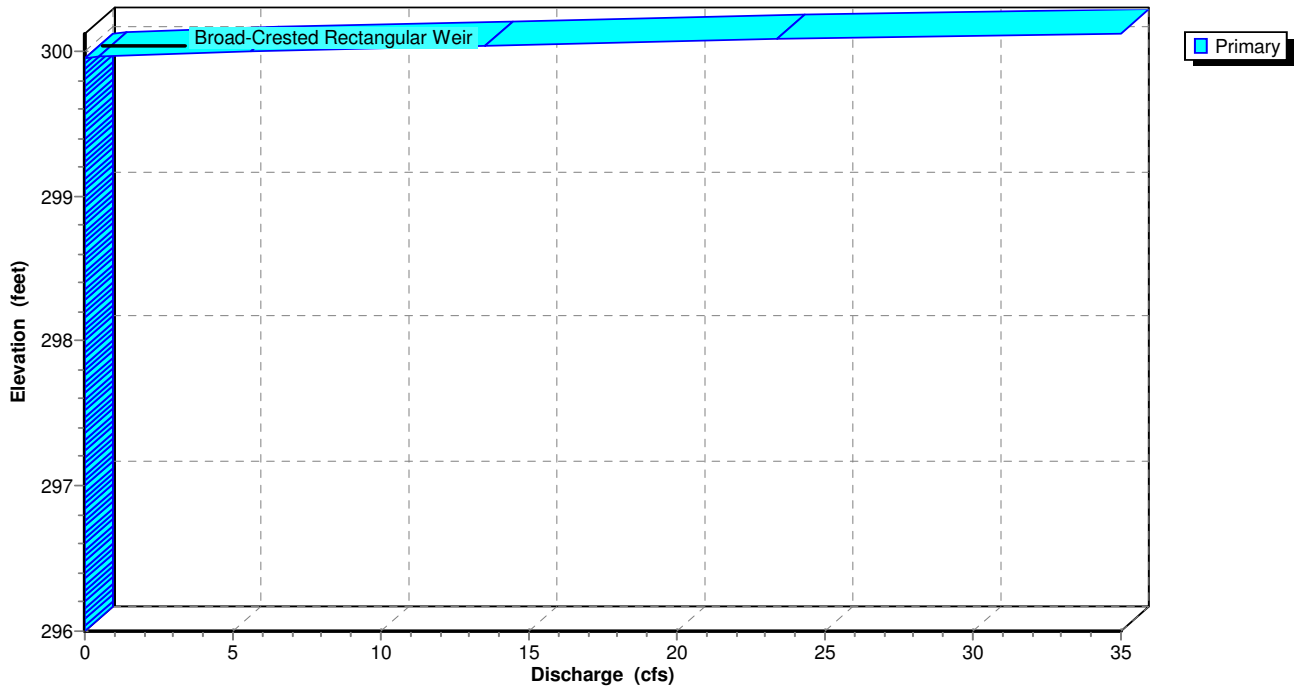
Pond LS-1: Level Spreader

Hydrograph



Pond LS-1: Level Spreader

Stage-Discharge



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Hydrograph for Pond LS-1: Level Spreader

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Primary (cfs)
0.00	0.00	0	296.00	0.00
5.00	0.00	0	296.00	0.00
10.00	0.00	0	296.00	0.00
15.00	0.96	5,227	299.97	0.96
20.00	0.07	5,205	299.95	0.07
25.00	0.00	5,200	299.95	0.00
30.00	0.00	5,200	299.95	0.00
35.00	0.00	5,200	299.95	0.00
40.00	0.00	5,200	299.95	0.00
45.00	0.00	5,200	299.95	0.00
50.00	0.00	5,200	299.95	0.00
55.00	0.00	5,200	299.95	0.00
60.00	0.00	5,200	299.95	0.00
65.00	0.00	5,200	299.95	0.00
70.00	0.00	5,200	299.95	0.00
75.00	0.00	5,200	299.95	0.00
80.00	0.00	5,200	299.95	0.00
85.00	0.00	5,200	299.95	0.00
90.00	0.00	5,200	299.95	0.00
95.00	0.00	5,200	299.95	0.00
100.00	0.00	5,200	299.95	0.00
105.00	0.00	5,200	299.95	0.00
110.00	0.00	5,200	299.95	0.00
115.00	0.00	5,200	299.95	0.00
120.00	0.00	5,200	299.95	0.00

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Stage-Discharge for Pond LS-1: Level Spreader

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
296.00	0.00	297.04	0.00	298.08	0.00	299.12	0.00
296.02	0.00	297.06	0.00	298.10	0.00	299.14	0.00
296.04	0.00	297.08	0.00	298.12	0.00	299.16	0.00
296.06	0.00	297.10	0.00	298.14	0.00	299.18	0.00
296.08	0.00	297.12	0.00	298.16	0.00	299.20	0.00
296.10	0.00	297.14	0.00	298.18	0.00	299.22	0.00
296.12	0.00	297.16	0.00	298.20	0.00	299.24	0.00
296.14	0.00	297.18	0.00	298.22	0.00	299.26	0.00
296.16	0.00	297.20	0.00	298.24	0.00	299.28	0.00
296.18	0.00	297.22	0.00	298.26	0.00	299.30	0.00
296.20	0.00	297.24	0.00	298.28	0.00	299.32	0.00
296.22	0.00	297.26	0.00	298.30	0.00	299.34	0.00
296.24	0.00	297.28	0.00	298.32	0.00	299.36	0.00
296.26	0.00	297.30	0.00	298.34	0.00	299.38	0.00
296.28	0.00	297.32	0.00	298.36	0.00	299.40	0.00
296.30	0.00	297.34	0.00	298.38	0.00	299.42	0.00
296.32	0.00	297.36	0.00	298.40	0.00	299.44	0.00
296.34	0.00	297.38	0.00	298.42	0.00	299.46	0.00
296.36	0.00	297.40	0.00	298.44	0.00	299.48	0.00
296.38	0.00	297.42	0.00	298.46	0.00	299.50	0.00
296.40	0.00	297.44	0.00	298.48	0.00	299.52	0.00
296.42	0.00	297.46	0.00	298.50	0.00	299.54	0.00
296.44	0.00	297.48	0.00	298.52	0.00	299.56	0.00
296.46	0.00	297.50	0.00	298.54	0.00	299.58	0.00
296.48	0.00	297.52	0.00	298.56	0.00	299.60	0.00
296.50	0.00	297.54	0.00	298.58	0.00	299.62	0.00
296.52	0.00	297.56	0.00	298.60	0.00	299.64	0.00
296.54	0.00	297.58	0.00	298.62	0.00	299.66	0.00
296.56	0.00	297.60	0.00	298.64	0.00	299.68	0.00
296.58	0.00	297.62	0.00	298.66	0.00	299.70	0.00
296.60	0.00	297.64	0.00	298.68	0.00	299.72	0.00
296.62	0.00	297.66	0.00	298.70	0.00	299.74	0.00
296.64	0.00	297.68	0.00	298.72	0.00	299.76	0.00
296.66	0.00	297.70	0.00	298.74	0.00	299.78	0.00
296.68	0.00	297.72	0.00	298.76	0.00	299.80	0.00
296.70	0.00	297.74	0.00	298.78	0.00	299.82	0.00
296.72	0.00	297.76	0.00	298.80	0.00	299.84	0.00
296.74	0.00	297.78	0.00	298.82	0.00	299.86	0.00
296.76	0.00	297.80	0.00	298.84	0.00	299.88	0.00
296.78	0.00	297.82	0.00	298.86	0.00	299.90	0.00
296.80	0.00	297.84	0.00	298.88	0.00	299.92	0.00
296.82	0.00	297.86	0.00	298.90	0.00	299.94	0.00
296.84	0.00	297.88	0.00	298.92	0.00	299.96	0.50
296.86	0.00	297.90	0.00	298.94	0.00	299.98	2.60
296.88	0.00	297.92	0.00	298.96	0.00	300.00	5.59
296.90	0.00	297.94	0.00	298.98	0.00	300.02	9.26
296.92	0.00	297.96	0.00	299.00	0.00	300.04	13.49
296.94	0.00	297.98	0.00	299.02	0.00	300.06	18.23
296.96	0.00	298.00	0.00	299.04	0.00	300.08	23.43
296.98	0.00	298.02	0.00	299.06	0.00	300.10	29.04
297.00	0.00	298.04	0.00	299.08	0.00	300.12	35.03
297.02	0.00	298.06	0.00	299.10	0.00		

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Type III 24-hr 100 Year Rainfall=7.50"

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Summary for Pond P-1c: Infiltration Chambers

Inflow Area = 1.280 ac, 15.98% Impervious, Inflow Depth = 5.04" for 100 Year event
Inflow = 6.69 cfs @ 12.13 hrs, Volume= 0.538 af
Outflow = 7.14 cfs @ 12.12 hrs, Volume= 0.538 af, Atten= 0%, Lag= 0.0 min
Primary = 0.29 cfs @ 10.97 hrs, Volume= 0.294 af
Secondary = 6.85 cfs @ 12.12 hrs, Volume= 0.244 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
Peak Elev= 312.12' @ 12.12 hrs Surf.Area= 22 sf Storage= 3,349 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 39.9 min (850.7 - 810.8)

Volume	Invert	Avail.Storage	Storage Description
#1	309.00'	3,349 cf	52.6"W x 34.0"H x 7.50'L Cultec R-V8 x 50

Device	Routing	Invert	Outlet Devices
#1	Primary	309.00'	7.500 in/hr Exfiltration over Horizontal area
#2	Secondary	310.33'	18.0" x 20.0' long Culvert CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 300.00' S= 0.5165 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior

Primary OutFlow Max=0.29 cfs @ 10.97 hrs HW=309.03' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.29 cfs)

Secondary OutFlow Max=6.85 cfs @ 12.12 hrs HW=312.12' TW=310.75' (Dynamic Tailwater)
↑**2=Culvert** (Inlet Controls 6.85 cfs @ 3.88 fps)

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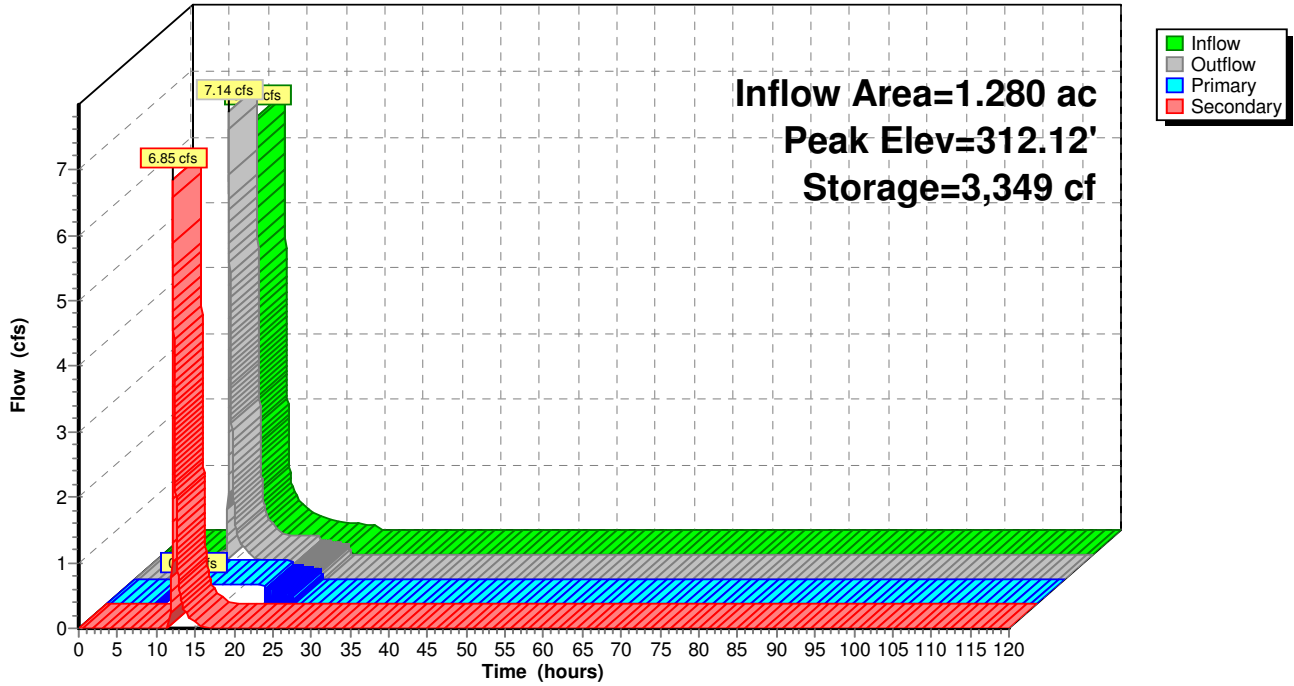
Type III 24-hr 100 Year Rainfall=7.50"

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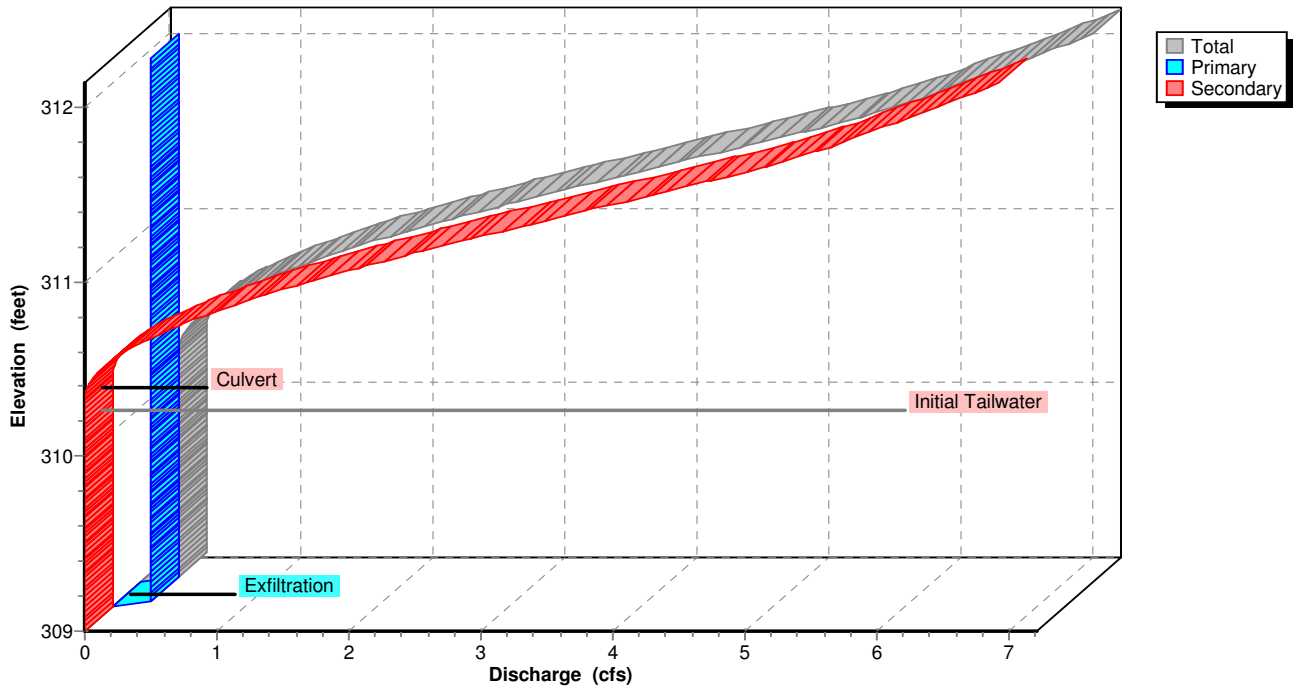
Pond P-1c: Infiltration Chambers

Hydrograph



Pond P-1c: Infiltration Chambers

Stage-Discharge



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Hydrograph for Pond P-1c: Infiltration Chambers

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	309.00	0.00	0.00	0.00
5.00	0.00	0	309.00	0.00	0.00	0.00
10.00	0.19	0	309.00	0.19	0.19	0.00
15.00	0.34	2,181	310.47	0.37	0.29	0.08
20.00	0.12	268	309.17	0.29	0.29	0.00
25.00	0.00	0	309.00	0.00	0.00	0.00
30.00	0.00	0	309.00	0.00	0.00	0.00
35.00	0.00	0	309.00	0.00	0.00	0.00
40.00	0.00	0	309.00	0.00	0.00	0.00
45.00	0.00	0	309.00	0.00	0.00	0.00
50.00	0.00	0	309.00	0.00	0.00	0.00
55.00	0.00	0	309.00	0.00	0.00	0.00
60.00	0.00	0	309.00	0.00	0.00	0.00
65.00	0.00	0	309.00	0.00	0.00	0.00
70.00	0.00	0	309.00	0.00	0.00	0.00
75.00	0.00	0	309.00	0.00	0.00	0.00
80.00	0.00	0	309.00	0.00	0.00	0.00
85.00	0.00	0	309.00	0.00	0.00	0.00
90.00	0.00	0	309.00	0.00	0.00	0.00
95.00	0.00	0	309.00	0.00	0.00	0.00
100.00	0.00	0	309.00	0.00	0.00	0.00
105.00	0.00	0	309.00	0.00	0.00	0.00
110.00	0.00	0	309.00	0.00	0.00	0.00
115.00	0.00	0	309.00	0.00	0.00	0.00
120.00	0.00	0	309.00	0.00	0.00	0.00

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Stage-Discharge for Pond P-1c: Infiltration Chambers

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
309.00	0.00	0.00	0.00	311.60	5.12	0.29	4.83
309.05	0.29	0.29	0.00	311.65	5.37	0.29	5.09
309.10	0.29	0.29	0.00	311.70	5.61	0.29	5.33
309.15	0.29	0.29	0.00	311.75	5.83	0.29	5.54
309.20	0.29	0.29	0.00	311.80	6.02	0.29	5.73
309.25	0.29	0.29	0.00	311.85	6.18	0.29	5.89
309.30	0.29	0.29	0.00	311.90	6.37	0.29	6.08
309.35	0.29	0.29	0.00	311.95	6.55	0.29	6.27
309.40	0.29	0.29	0.00	312.00	6.73	0.29	6.44
309.45	0.29	0.29	0.00	312.05	6.90	0.29	6.62
309.50	0.29	0.29	0.00	312.10	7.07	0.29	6.78
309.55	0.29	0.29	0.00				
309.60	0.29	0.29	0.00				
309.65	0.29	0.29	0.00				
309.70	0.29	0.29	0.00				
309.75	0.29	0.29	0.00				
309.80	0.29	0.29	0.00				
309.85	0.29	0.29	0.00				
309.90	0.29	0.29	0.00				
309.95	0.29	0.29	0.00				
310.00	0.29	0.29	0.00				
310.05	0.29	0.29	0.00				
310.10	0.29	0.29	0.00				
310.15	0.29	0.29	0.00				
310.20	0.29	0.29	0.00				
310.25	0.29	0.29	0.00				
310.30	0.29	0.29	0.00				
310.35	0.29	0.29	0.00				
310.40	0.31	0.29	0.02				
310.45	0.35	0.29	0.06				
310.50	0.41	0.29	0.12				
310.55	0.49	0.29	0.20				
310.60	0.59	0.29	0.30				
310.65	0.70	0.29	0.42				
310.70	0.84	0.29	0.55				
310.75	0.99	0.29	0.71				
310.80	1.16	0.29	0.87				
310.85	1.34	0.29	1.05				
310.90	1.54	0.29	1.25				
310.95	1.74	0.29	1.46				
311.00	1.97	0.29	1.68				
311.05	2.20	0.29	1.91				
311.10	2.44	0.29	2.15				
311.15	2.69	0.29	2.41				
311.20	2.95	0.29	2.66				
311.25	3.21	0.29	2.93				
311.30	3.49	0.29	3.20				
311.35	3.76	0.29	3.47				
311.40	4.03	0.29	3.75				
311.45	4.31	0.29	4.03				
311.50	4.58	0.29	4.30				
311.55	4.86	0.29	4.57				

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Summary for Pond P-A: Pond-A (NYSDEC I-2)

Inflow Area = 2.110 ac, 13.06% Impervious, Inflow Depth = 4.93" for 100 Year event
 Inflow = 11.38 cfs @ 12.11 hrs, Volume= 0.867 af
 Outflow = 4.94 cfs @ 12.35 hrs, Volume= 0.867 af, Atten= 57%, Lag= 14.1 min
 Primary = 0.75 cfs @ 12.35 hrs, Volume= 0.556 af
 Secondary = 4.19 cfs @ 12.35 hrs, Volume= 0.311 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 332.89' @ 12.35 hrs Surf.Area= 4,325 sf Storage= 12,393 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 110.1 min (921.8 - 811.7)

Volume	Invert	Avail.Storage	Storage Description
#1	328.00'	17,310 cf	Custom Stage Data (Prismatic) Listed below
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
328.00	813	0	0
330.00	2,047	2,860	2,860
332.00	3,559	5,606	8,466
334.00	5,285	8,844	17,310

Device	Routing	Invert	Outlet Devices
#1	Primary	328.00'	7.500 in/hr Exfiltration over Horizontal area
#2	Secondary	330.00'	2.0" Vert. Orifice/Grate C= 0.600
#3	Secondary	332.00'	2.10' W x 0.50' H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.75 cfs @ 12.35 hrs HW=332.89' (Free Discharge)
 ↑1=Exfiltration (Exfiltration Controls 0.75 cfs)

Secondary OutFlow Max=4.19 cfs @ 12.35 hrs HW=332.89' TW=310.75' (Dynamic Tailwater)
 ↑2=Orifice/Grate (Orifice Controls 0.18 cfs @ 8.06 fps)
 ↑3=Orifice/Grate (Orifice Controls 4.01 cfs @ 3.82 fps)

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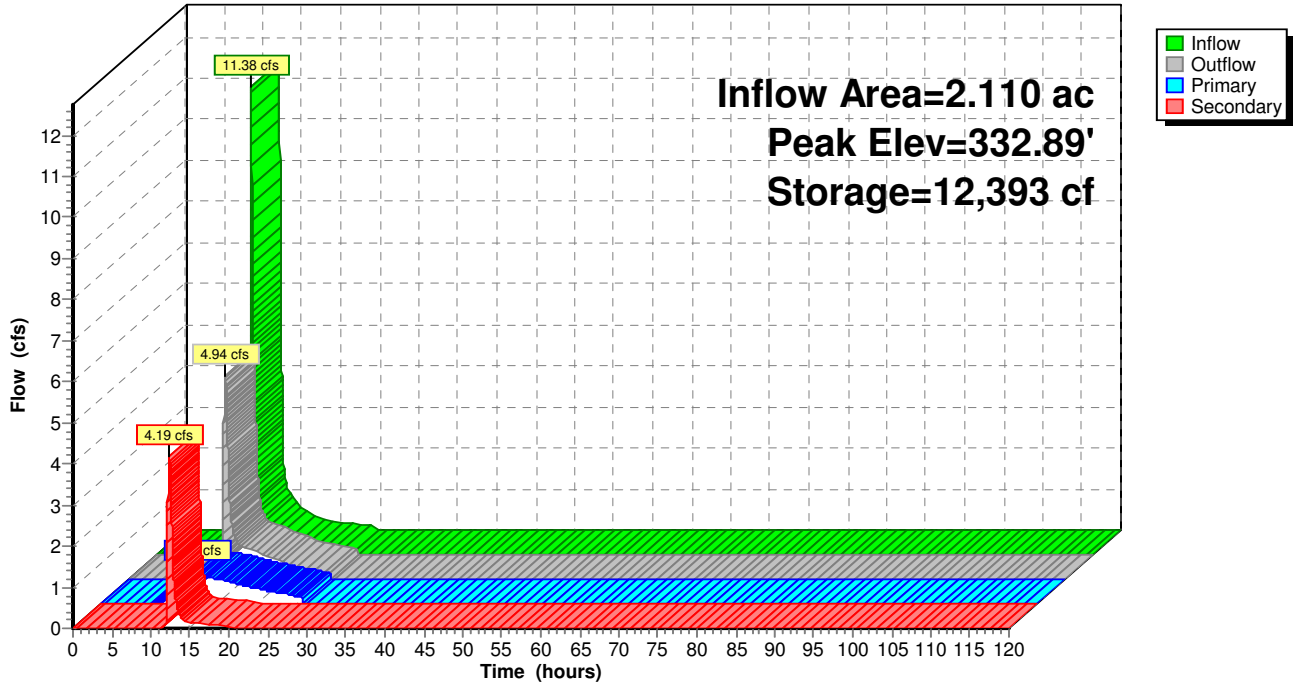
Type III 24-hr 100 Year Rainfall=7.50"

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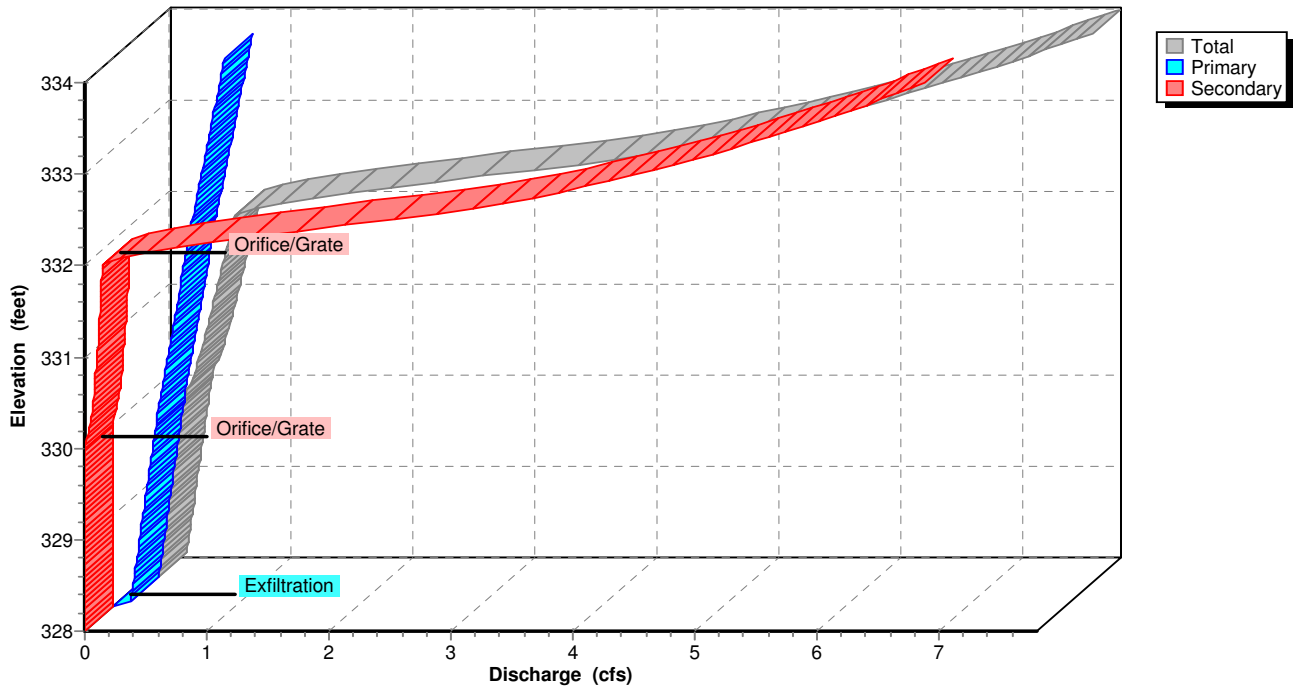
Pond P-A: Pond-A (NYSDEC I-2)

Hydrograph



Pond P-A: Pond-A (NYSDEC I-2)

Stage-Discharge



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Type III 24-hr 100 Year Rainfall=7.50"

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Hydrograph for Pond P-A: Pond-A (NYSDEC I-2)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	328.00	0.00	0.00	0.00
5.00	0.00	0	328.00	0.00	0.00	0.00
10.00	0.30	284	328.20	0.16	0.16	0.00
15.00	0.55	8,197	331.90	0.75	0.61	0.14
20.00	0.19	3,211	330.13	0.39	0.37	0.02
25.00	0.00	509	328.36	0.18	0.18	0.00
30.00	0.00	0	328.00	0.00	0.00	0.00
35.00	0.00	0	328.00	0.00	0.00	0.00
40.00	0.00	0	328.00	0.00	0.00	0.00
45.00	0.00	0	328.00	0.00	0.00	0.00
50.00	0.00	0	328.00	0.00	0.00	0.00
55.00	0.00	0	328.00	0.00	0.00	0.00
60.00	0.00	0	328.00	0.00	0.00	0.00
65.00	0.00	0	328.00	0.00	0.00	0.00
70.00	0.00	0	328.00	0.00	0.00	0.00
75.00	0.00	0	328.00	0.00	0.00	0.00
80.00	0.00	0	328.00	0.00	0.00	0.00
85.00	0.00	0	328.00	0.00	0.00	0.00
90.00	0.00	0	328.00	0.00	0.00	0.00
95.00	0.00	0	328.00	0.00	0.00	0.00
100.00	0.00	0	328.00	0.00	0.00	0.00
105.00	0.00	0	328.00	0.00	0.00	0.00
110.00	0.00	0	328.00	0.00	0.00	0.00
115.00	0.00	0	328.00	0.00	0.00	0.00
120.00	0.00	0	328.00	0.00	0.00	0.00

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Stage-Discharge for Pond P-A: Pond-A (NYSDEC I-2)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
328.00	0.00	0.00	0.00	333.20	5.90	0.80	5.10
328.10	0.15	0.15	0.00	333.30	6.17	0.81	5.36
328.20	0.16	0.16	0.00	333.40	6.43	0.83	5.60
328.30	0.17	0.17	0.00	333.50	6.68	0.84	5.84
328.40	0.18	0.18	0.00	333.60	6.92	0.86	6.06
328.50	0.19	0.19	0.00	333.70	7.15	0.87	6.28
328.60	0.21	0.21	0.00	333.80	7.38	0.89	6.49
328.70	0.22	0.22	0.00	333.90	7.60	0.90	6.69
328.80	0.23	0.23	0.00	334.00	7.81	0.92	6.89
328.90	0.24	0.24	0.00				
329.00	0.25	0.25	0.00				
329.10	0.26	0.26	0.00				
329.20	0.27	0.27	0.00				
329.30	0.28	0.28	0.00				
329.40	0.29	0.29	0.00				
329.50	0.30	0.30	0.00				
329.60	0.31	0.31	0.00				
329.70	0.32	0.32	0.00				
329.80	0.33	0.33	0.00				
329.90	0.34	0.34	0.00				
330.00	0.36	0.36	0.00				
330.10	0.38	0.37	0.01				
330.20	0.42	0.38	0.04				
330.30	0.44	0.39	0.05				
330.40	0.47	0.41	0.06				
330.50	0.49	0.42	0.07				
330.60	0.51	0.43	0.08				
330.70	0.53	0.45	0.08				
330.80	0.55	0.46	0.09				
330.90	0.57	0.47	0.09				
331.00	0.59	0.49	0.10				
331.10	0.61	0.50	0.11				
331.20	0.62	0.51	0.11				
331.30	0.64	0.53	0.12				
331.40	0.66	0.54	0.12				
331.50	0.68	0.55	0.13				
331.60	0.69	0.57	0.13				
331.70	0.71	0.58	0.13				
331.80	0.73	0.59	0.14				
331.90	0.75	0.60	0.14				
332.00	0.76	0.62	0.15				
332.10	1.00	0.63	0.36				
332.20	1.40	0.65	0.76				
332.30	1.93	0.66	1.26				
332.40	2.54	0.68	1.87				
332.50	3.24	0.69	2.55				
332.60	3.79	0.71	3.09				
332.70	4.24	0.72	3.51				
332.80	4.63	0.74	3.89				
332.90	4.98	0.75	4.23				
333.00	5.30	0.77	4.54				
333.10	5.61	0.78	4.83				

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Summary for Pond P-B: Pond-B (NYSDEC I-2)

Inflow Area = 4.199 ac, 26.44% Impervious, Inflow Depth = 5.16" for 100 Year event
 Inflow = 19.01 cfs @ 12.20 hrs, Volume= 1.805 af
 Outflow = 11.52 cfs @ 12.42 hrs, Volume= 1.805 af, Atten= 39%, Lag= 13.2 min
 Primary = 0.98 cfs @ 12.42 hrs, Volume= 0.877 af
 Secondary = 10.54 cfs @ 12.42 hrs, Volume= 0.928 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 387.20' @ 12.42 hrs Surf.Area= 6,428 sf Storage= 19,719 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 95.8 min (909.6 - 813.8)

Volume	Invert	Avail.Storage	Storage Description
#1	382.00'	25,197 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
382.00	1,476	0	0
384.00	3,129	4,605	4,605
386.00	5,067	8,196	12,801
388.00	7,329	12,396	25,197

Device	Routing	Invert	Outlet Devices
#1	Primary	382.00'	6.600 in/hr Exfiltration over Horizontal area
#2	Device 5	384.56'	2.0" Vert. Orifice/Grate C= 0.600
#3	Device 4	385.50'	4.00' W x 1.00' H Vert. Orifice/Grate C= 0.600
#4	Device 5	383.50'	15.0" x 65.0' long 15" Culvert CPP, square edge headwall, Ke= 0.500 Outlet Invert= 381.50' S= 0.0308 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior
#5	Secondary	381.40'	15.0" x 196.0' long 15" Culvert CPP, square edge headwall, Ke= 0.500 Outlet Invert= 358.50' S= 0.1168 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior

Primary OutFlow Max=0.98 cfs @ 12.42 hrs HW=387.20' (Free Discharge)
 ↑1=Exfiltration (Exfiltration Controls 0.98 cfs)

Secondary OutFlow Max=10.54 cfs @ 12.42 hrs HW=387.20' TW=300.07' (Dynamic Tailwater)
 ↑5=15" Culvert (Passes 10.54 cfs of 13.45 cfs potential flow)
 ↑2=Orifice/Grate (Orifice Controls 0.17 cfs @ 7.70 fps)
 ↑4=15" Culvert (Inlet Controls 10.37 cfs @ 8.45 fps)
 ↑3=Orifice/Grate (Passes 10.37 cfs of 20.97 cfs potential flow)

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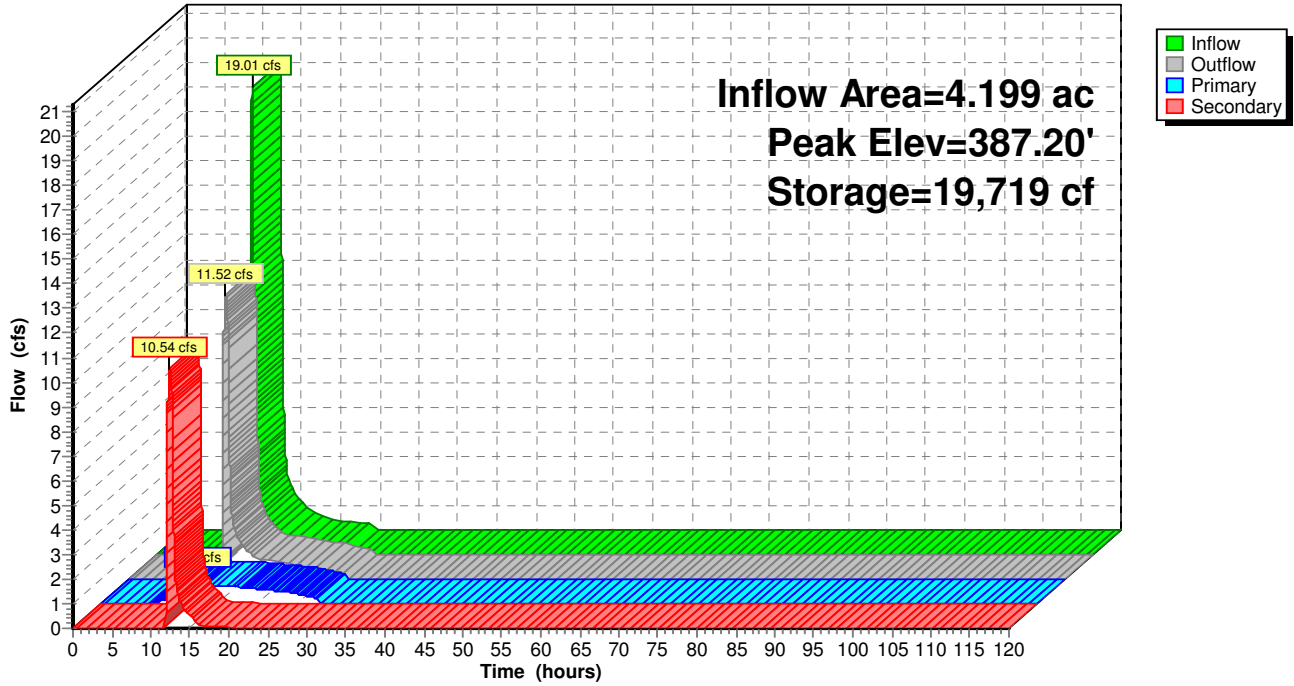
Type III 24-hr 100 Year Rainfall=7.50"

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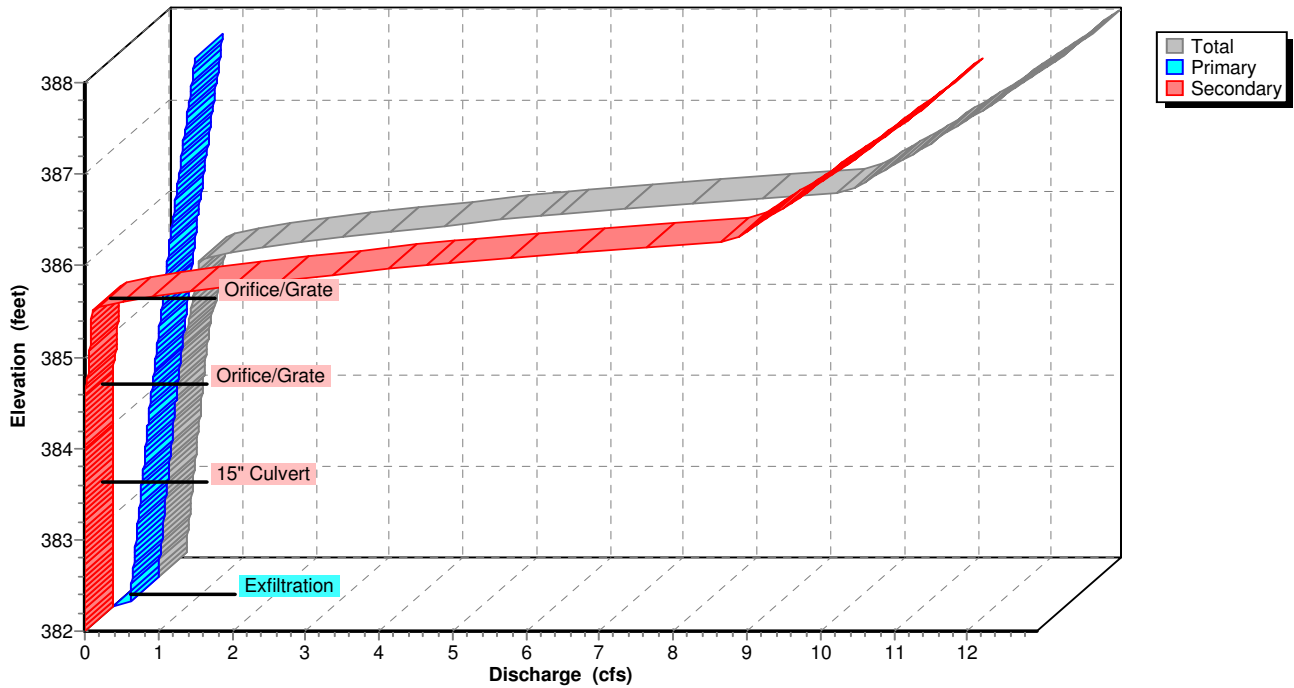
Pond P-B: Pond-B (NYSDEC I-2)

Hydrograph



Pond P-B: Pond-B (NYSDEC I-2)

Stage-Discharge



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Hydrograph for Pond P-B: Pond-B (NYSDEC I-2)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	382.00	0.00	0.00	0.00
5.00	0.00	0	382.00	0.00	0.00	0.00
10.00	0.64	950	382.56	0.30	0.30	0.00
15.00	1.16	10,854	385.60	1.23	0.71	0.51
20.00	0.39	7,574	384.84	0.65	0.60	0.05
25.00	0.00	3,036	383.46	0.41	0.41	0.00
30.00	0.00	0	382.00	0.00	0.00	0.00
35.00	0.00	0	382.00	0.00	0.00	0.00
40.00	0.00	0	382.00	0.00	0.00	0.00
45.00	0.00	0	382.00	0.00	0.00	0.00
50.00	0.00	0	382.00	0.00	0.00	0.00
55.00	0.00	0	382.00	0.00	0.00	0.00
60.00	0.00	0	382.00	0.00	0.00	0.00
65.00	0.00	0	382.00	0.00	0.00	0.00
70.00	0.00	0	382.00	0.00	0.00	0.00
75.00	0.00	0	382.00	0.00	0.00	0.00
80.00	0.00	0	382.00	0.00	0.00	0.00
85.00	0.00	0	382.00	0.00	0.00	0.00
90.00	0.00	0	382.00	0.00	0.00	0.00
95.00	0.00	0	382.00	0.00	0.00	0.00
100.00	0.00	0	382.00	0.00	0.00	0.00
105.00	0.00	0	382.00	0.00	0.00	0.00
110.00	0.00	0	382.00	0.00	0.00	0.00
115.00	0.00	0	382.00	0.00	0.00	0.00
120.00	0.00	0	382.00	0.00	0.00	0.00

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Type III 24-hr 100 Year Rainfall=7.50"

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Stage-Discharge for Pond P-B: Pond-B (NYSDEC I-2)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
382.00	0.00	0.00	0.00	387.20	11.51	0.98	10.53
382.10	0.24	0.24	0.00	387.30	11.70	1.00	10.70
382.20	0.25	0.25	0.00	387.40	11.88	1.02	10.87
382.30	0.26	0.26	0.00	387.50	12.07	1.03	11.03
382.40	0.28	0.28	0.00	387.60	12.25	1.05	11.20
382.50	0.29	0.29	0.00	387.70	12.42	1.07	11.36
382.60	0.30	0.30	0.00	387.80	12.60	1.09	11.51
382.70	0.31	0.31	0.00	387.90	12.77	1.10	11.67
382.80	0.33	0.33	0.00	388.00	12.94	1.12	11.82
382.90	0.34	0.34	0.00				
383.00	0.35	0.35	0.00				
383.10	0.36	0.36	0.00				
383.20	0.38	0.38	0.00				
383.30	0.39	0.39	0.00				
383.40	0.40	0.40	0.00				
383.50	0.41	0.41	0.00				
383.60	0.43	0.43	0.00				
383.70	0.44	0.44	0.00				
383.80	0.45	0.45	0.00				
383.90	0.47	0.47	0.00				
384.00	0.48	0.48	0.00				
384.10	0.49	0.49	0.00				
384.20	0.51	0.51	0.00				
384.30	0.52	0.52	0.00				
384.40	0.54	0.54	0.00				
384.50	0.55	0.55	0.00				
384.60	0.57	0.57	0.00				
384.70	0.61	0.58	0.02				
384.80	0.64	0.60	0.04				
384.90	0.66	0.61	0.05				
385.00	0.69	0.63	0.06				
385.10	0.71	0.64	0.07				
385.20	0.73	0.66	0.08				
385.30	0.76	0.67	0.09				
385.40	0.78	0.69	0.09				
385.50	0.80	0.70	0.10				
385.60	1.22	0.71	0.51				
385.70	1.99	0.73	1.26				
385.80	2.97	0.74	2.22				
385.90	4.13	0.76	3.37				
386.00	5.44	0.77	4.66				
386.10	6.89	0.79	6.09				
386.20	8.46	0.81	7.65				
386.30	9.68	0.83	8.85				
386.40	9.89	0.84	9.05				
386.50	10.11	0.86	9.25				
386.60	10.32	0.88	9.44				
386.70	10.53	0.90	9.63				
386.80	10.73	0.91	9.82				
386.90	10.93	0.93	10.00				
387.00	11.13	0.95	10.18				
387.10	11.32	0.96	10.36				

Post-Development Entire

Type III 24-hr 100 Year Rainfall=7.50"

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Summary for Pond P-C: Pond-C (NYSDEC I-2)

Inflow Area = 0.759 ac, 29.42% Impervious, Inflow Depth = 5.62" for 100 Year event
 Inflow = 4.32 cfs @ 12.13 hrs, Volume= 0.355 af
 Outflow = 1.09 cfs @ 12.55 hrs, Volume= 0.355 af, Atten= 75%, Lag= 25.2 min
 Primary = 0.33 cfs @ 12.55 hrs, Volume= 0.205 af
 Secondary = 0.76 cfs @ 12.55 hrs, Volume= 0.150 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 390.88' @ 12.55 hrs Surf.Area= 2,139 sf Storage= 5,881 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 96.1 min (894.8 - 798.7)

Volume	Invert	Avail.Storage	Storage Description
#1	386.00'	9,794 cf	Custom Stage Data (Prismatic) Listed below

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
386.00	380	0	0
388.00	937	1,317	1,317
390.00	1,683	2,620	3,937
392.00	2,714	4,397	8,334
392.50	3,126	1,460	9,794

Device	Routing	Invert	Outlet Devices
#1	Primary	386.00'	6.600 in/hr Exfiltration over Horizontal area
#2	Secondary	388.30'	0.50' W x 0.20' H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.33 cfs @ 12.55 hrs HW=390.88' (Free Discharge)
 ↑1=Exfiltration (Exfiltration Controls 0.33 cfs)

Secondary OutFlow Max=0.76 cfs @ 12.55 hrs HW=390.88' TW=0.00' (Dynamic Tailwater)
 ↑2=Orifice/Grate (Orifice Controls 0.76 cfs @ 7.59 fps)

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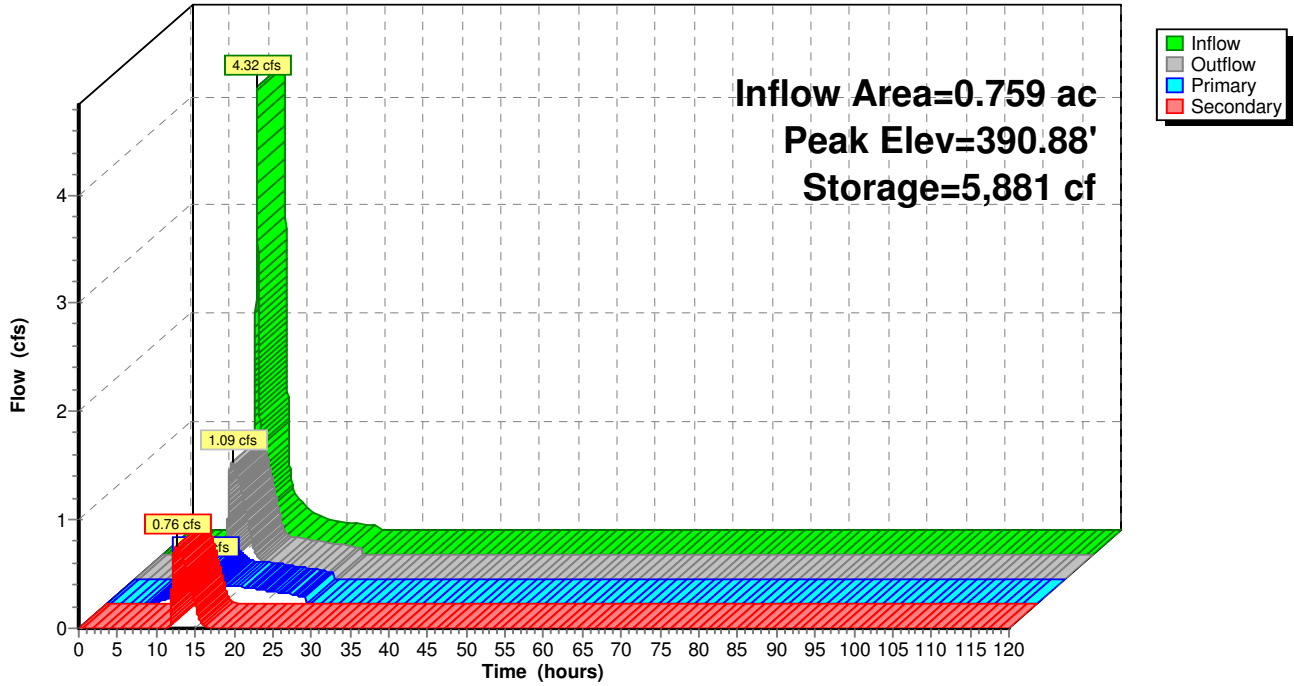
Type III 24-hr 100 Year Rainfall=7.50"

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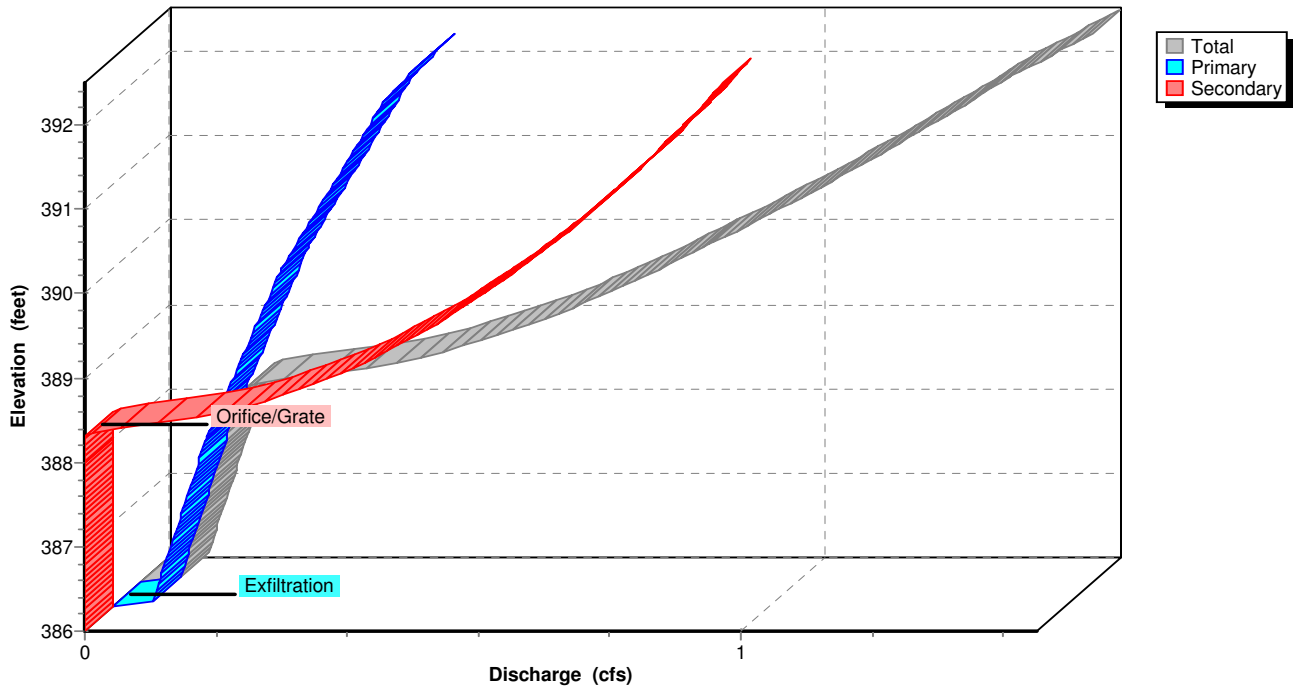
Pond P-C: Pond-C (NYSDEC I-2)

Hydrograph



Pond P-C: Pond-C (NYSDEC I-2)

Stage-Discharge



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Type III 24-hr 100 Year Rainfall=7.50"

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Hydrograph for Pond P-C: Pond-C (NYSDEC I-2)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	386.00	0.00	0.00	0.00
5.00	0.00	0	386.00	0.00	0.00	0.00
10.00	0.15	244	386.37	0.07	0.07	0.00
15.00	0.21	2,127	388.62	0.40	0.18	0.22
20.00	0.07	1,064	387.62	0.13	0.13	0.00
25.00	0.00	165	386.25	0.07	0.07	0.00
30.00	0.00	0	386.00	0.00	0.00	0.00
35.00	0.00	0	386.00	0.00	0.00	0.00
40.00	0.00	0	386.00	0.00	0.00	0.00
45.00	0.00	0	386.00	0.00	0.00	0.00
50.00	0.00	0	386.00	0.00	0.00	0.00
55.00	0.00	0	386.00	0.00	0.00	0.00
60.00	0.00	0	386.00	0.00	0.00	0.00
65.00	0.00	0	386.00	0.00	0.00	0.00
70.00	0.00	0	386.00	0.00	0.00	0.00
75.00	0.00	0	386.00	0.00	0.00	0.00
80.00	0.00	0	386.00	0.00	0.00	0.00
85.00	0.00	0	386.00	0.00	0.00	0.00
90.00	0.00	0	386.00	0.00	0.00	0.00
95.00	0.00	0	386.00	0.00	0.00	0.00
100.00	0.00	0	386.00	0.00	0.00	0.00
105.00	0.00	0	386.00	0.00	0.00	0.00
110.00	0.00	0	386.00	0.00	0.00	0.00
115.00	0.00	0	386.00	0.00	0.00	0.00
120.00	0.00	0	386.00	0.00	0.00	0.00

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Stage-Discharge for Pond P-C: Pond-C (NYSDEC I-2)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
386.00	0.00	0.00	0.00	391.20	1.16	0.35	0.81
386.10	0.06	0.06	0.00	391.30	1.18	0.36	0.82
386.20	0.07	0.07	0.00	391.40	1.20	0.37	0.83
386.30	0.07	0.07	0.00	391.50	1.22	0.38	0.85
386.40	0.08	0.08	0.00	391.60	1.24	0.38	0.86
386.50	0.08	0.08	0.00	391.70	1.27	0.39	0.87
386.60	0.08	0.08	0.00	391.80	1.29	0.40	0.89
386.70	0.09	0.09	0.00	391.90	1.31	0.41	0.90
386.80	0.09	0.09	0.00	392.00	1.33	0.41	0.91
386.90	0.10	0.10	0.00	392.10	1.35	0.43	0.93
387.00	0.10	0.10	0.00	392.20	1.38	0.44	0.94
387.10	0.10	0.10	0.00	392.30	1.40	0.45	0.95
387.20	0.11	0.11	0.00	392.40	1.43	0.46	0.96
387.30	0.11	0.11	0.00	392.50	1.45	0.48	0.97
387.40	0.12	0.12	0.00				
387.50	0.12	0.12	0.00				
387.60	0.13	0.13	0.00				
387.70	0.13	0.13	0.00				
387.80	0.13	0.13	0.00				
387.90	0.14	0.14	0.00				
388.00	0.14	0.14	0.00				
388.10	0.15	0.15	0.00				
388.20	0.15	0.15	0.00				
388.30	0.16	0.16	0.00				
388.40	0.22	0.17	0.05				
388.50	0.32	0.17	0.14				
388.60	0.39	0.18	0.21				
388.70	0.45	0.18	0.26				
388.80	0.49	0.19	0.30				
388.90	0.53	0.19	0.34				
389.00	0.57	0.20	0.37				
389.10	0.61	0.21	0.40				
389.20	0.64	0.21	0.43				
389.30	0.67	0.22	0.46				
389.40	0.70	0.22	0.48				
389.50	0.73	0.23	0.50				
389.60	0.76	0.23	0.53				
389.70	0.79	0.24	0.55				
389.80	0.82	0.25	0.57				
389.90	0.84	0.25	0.59				
390.00	0.87	0.26	0.61				
390.10	0.89	0.27	0.63				
390.20	0.92	0.27	0.65				
390.30	0.94	0.28	0.66				
390.40	0.97	0.29	0.68				
390.50	0.99	0.30	0.70				
390.60	1.02	0.30	0.71				
390.70	1.04	0.31	0.73				
390.80	1.07	0.32	0.75				
390.90	1.09	0.33	0.76				
391.00	1.11	0.34	0.78				
391.10	1.13	0.34	0.79				

Post-Development Entire

Type III 24-hr 100 Year Rainfall=7.50"

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Summary for Pond P-D: Pond-D (NYSDEC I-2)

Inflow Area = 2.990 ac, 17.19% Impervious, Inflow Depth = 4.93" for 100 Year event
 Inflow = 16.62 cfs @ 12.10 hrs, Volume= 1.229 af
 Outflow = 6.80 cfs @ 12.34 hrs, Volume= 1.229 af, Atten= 59%, Lag= 14.5 min
 Primary = 0.96 cfs @ 12.34 hrs, Volume= 0.625 af
 Secondary = 5.84 cfs @ 12.34 hrs, Volume= 0.604 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 362.83' @ 12.34 hrs Surf.Area= 5,529 sf Storage= 15,039 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 72.1 min (882.9 - 810.9)

Volume	Invert	Avail.Storage	Storage Description
#1	358.00'	15,916 cf	Custom Stage Data (Prismatic) Listed below
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
358.00	781	0	0
360.00	2,650	3,431	3,431
362.00	4,654	7,304	10,735
363.00	5,707	5,181	15,916

Device	Routing	Invert	Outlet Devices
#1	Primary	358.00'	7.500 in/hr Exfiltration over Horizontal area
#2	Secondary	360.50'	2.50' W x 0.33' H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.96 cfs @ 12.34 hrs HW=362.83' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.96 cfs)

Secondary OutFlow Max=5.84 cfs @ 12.34 hrs HW=362.83' TW=0.00' (Dynamic Tailwater)

↑**2=Orifice/Grate** (Orifice Controls 5.84 cfs @ 7.08 fps)

Post-Development Entire

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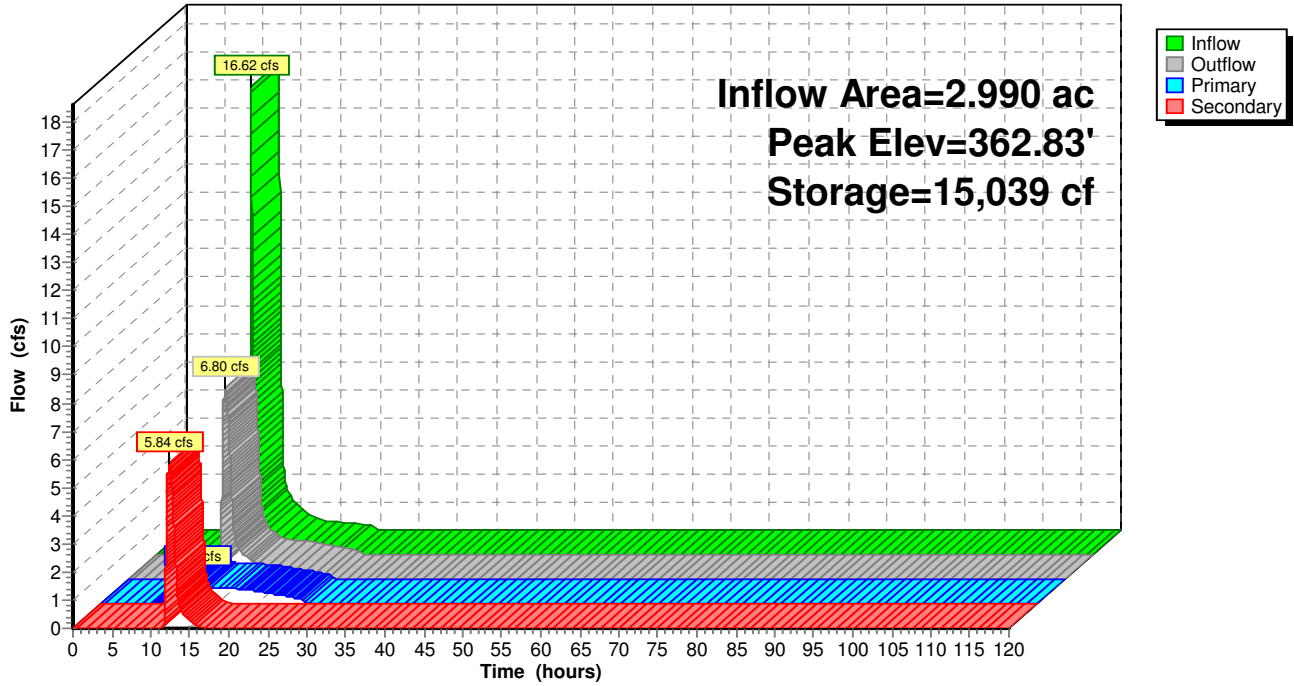
Type III 24-hr 100 Year Rainfall=7.50"

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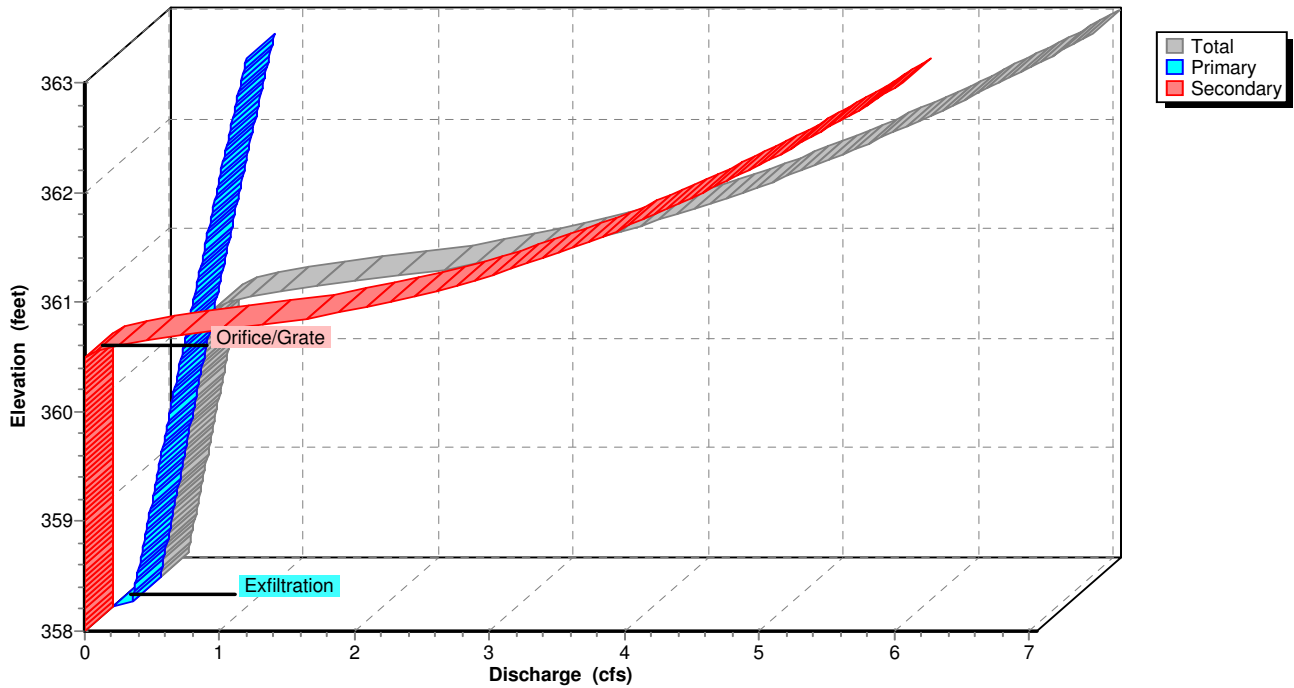
Pond P-D: Pond-D (NYSDEC I-2)

Hydrograph



Pond P-D: Pond-D (NYSDEC I-2)

Stage-Discharge



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Hydrograph for Pond P-D: Pond-D (NYSDEC I-2)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	358.00	0.00	0.00	0.00
5.00	0.00	0	358.00	0.00	0.00	0.00
10.00	0.43	659	358.38	0.20	0.20	0.00
15.00	0.78	5,639	360.60	0.84	0.57	0.27
20.00	0.27	3,309	359.93	0.45	0.45	0.00
25.00	0.00	680	358.40	0.20	0.20	0.00
30.00	0.00	0	358.00	0.00	0.00	0.00
35.00	0.00	0	358.00	0.00	0.00	0.00
40.00	0.00	0	358.00	0.00	0.00	0.00
45.00	0.00	0	358.00	0.00	0.00	0.00
50.00	0.00	0	358.00	0.00	0.00	0.00
55.00	0.00	0	358.00	0.00	0.00	0.00
60.00	0.00	0	358.00	0.00	0.00	0.00
65.00	0.00	0	358.00	0.00	0.00	0.00
70.00	0.00	0	358.00	0.00	0.00	0.00
75.00	0.00	0	358.00	0.00	0.00	0.00
80.00	0.00	0	358.00	0.00	0.00	0.00
85.00	0.00	0	358.00	0.00	0.00	0.00
90.00	0.00	0	358.00	0.00	0.00	0.00
95.00	0.00	0	358.00	0.00	0.00	0.00
100.00	0.00	0	358.00	0.00	0.00	0.00
105.00	0.00	0	358.00	0.00	0.00	0.00
110.00	0.00	0	358.00	0.00	0.00	0.00
115.00	0.00	0	358.00	0.00	0.00	0.00
120.00	0.00	0	358.00	0.00	0.00	0.00

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Stage-Discharge for Pond P-D: Pond-D (NYSDEC I-2)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
358.00	0.00	0.00	0.00	360.60	0.82	0.56	0.25
358.05	0.14	0.14	0.00	360.65	1.04	0.57	0.47
358.10	0.15	0.15	0.00	360.70	1.30	0.58	0.72
358.15	0.16	0.16	0.00	360.75	1.59	0.59	1.00
358.20	0.17	0.17	0.00	360.80	1.92	0.60	1.32
358.25	0.18	0.18	0.00	360.85	2.25	0.61	1.64
358.30	0.18	0.18	0.00	360.90	2.50	0.62	1.88
358.35	0.19	0.19	0.00	360.95	2.71	0.63	2.09
358.40	0.20	0.20	0.00	361.00	2.91	0.63	2.27
358.45	0.21	0.21	0.00	361.05	3.09	0.64	2.45
358.50	0.22	0.22	0.00	361.10	3.26	0.65	2.60
358.55	0.22	0.22	0.00	361.15	3.41	0.66	2.75
358.60	0.23	0.23	0.00	361.20	3.56	0.67	2.89
358.65	0.24	0.24	0.00	361.25	3.71	0.68	3.03
358.70	0.25	0.25	0.00	361.30	3.84	0.69	3.16
358.75	0.26	0.26	0.00	361.35	3.97	0.69	3.28
358.80	0.27	0.27	0.00	361.40	4.10	0.70	3.40
358.85	0.27	0.27	0.00	361.45	4.23	0.71	3.51
358.90	0.28	0.28	0.00	361.50	4.34	0.72	3.62
358.95	0.29	0.29	0.00	361.55	4.46	0.73	3.73
359.00	0.30	0.30	0.00	361.60	4.57	0.74	3.84
359.05	0.31	0.31	0.00	361.65	4.68	0.75	3.94
359.10	0.31	0.31	0.00	361.70	4.79	0.76	4.04
359.15	0.32	0.32	0.00	361.75	4.90	0.76	4.13
359.20	0.33	0.33	0.00	361.80	5.00	0.77	4.23
359.25	0.34	0.34	0.00	361.85	5.10	0.78	4.32
359.30	0.35	0.35	0.00	361.90	5.20	0.79	4.41
359.35	0.35	0.35	0.00	361.95	5.30	0.80	4.50
359.40	0.36	0.36	0.00	362.00	5.39	0.81	4.59
359.45	0.37	0.37	0.00	362.05	5.49	0.82	4.67
359.50	0.38	0.38	0.00	362.10	5.58	0.83	4.76
359.55	0.39	0.39	0.00	362.15	5.67	0.84	4.84
359.60	0.40	0.40	0.00	362.20	5.76	0.84	4.92
359.65	0.40	0.40	0.00	362.25	5.85	0.85	5.00
359.70	0.41	0.41	0.00	362.30	5.94	0.86	5.08
359.75	0.42	0.42	0.00	362.35	6.03	0.87	5.15
359.80	0.43	0.43	0.00	362.40	6.11	0.88	5.23
359.85	0.44	0.44	0.00	362.45	6.20	0.89	5.31
359.90	0.44	0.44	0.00	362.50	6.28	0.90	5.38
359.95	0.45	0.45	0.00	362.55	6.36	0.91	5.45
360.00	0.46	0.46	0.00	362.60	6.44	0.92	5.52
360.05	0.47	0.47	0.00	362.65	6.52	0.93	5.60
360.10	0.48	0.48	0.00	362.70	6.60	0.94	5.67
360.15	0.49	0.49	0.00	362.75	6.68	0.95	5.73
360.20	0.49	0.49	0.00	362.80	6.76	0.95	5.80
360.25	0.50	0.50	0.00	362.85	6.83	0.96	5.87
360.30	0.51	0.51	0.00	362.90	6.91	0.97	5.94
360.35	0.52	0.52	0.00	362.95	6.99	0.98	6.00
360.40	0.53	0.53	0.00	363.00	7.06	0.99	6.07
360.45	0.54	0.54	0.00				
360.50	0.55	0.55	0.00				
360.55	0.65	0.56	0.09				

Post-Development Entire

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Summary for Pond P-E: Pond-E (NYSDEC I-2)

Inflow Area = 1.785 ac, 15.96% Impervious, Inflow Depth = 4.93" for 100 Year event
 Inflow = 9.63 cfs @ 12.11 hrs, Volume= 0.733 af
 Outflow = 6.81 cfs @ 12.20 hrs, Volume= 0.733 af, Atten= 29%, Lag= 5.5 min
 Primary = 0.35 cfs @ 12.20 hrs, Volume= 0.346 af
 Secondary = 6.46 cfs @ 12.20 hrs, Volume= 0.387 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs
 Peak Elev= 311.07' @ 12.20 hrs Surf.Area= 3,289 sf Storage= 6,713 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 86.1 min (897.8 - 811.7)

Volume	Invert	Avail.Storage	Storage Description
#1	308.00'	10,114 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
308.00	1,167	0	0
310.00	2,472	3,639	3,639
312.00	4,003	6,475	10,114

Device	Routing	Invert	Outlet Devices
#1	Primary	308.00'	4.600 in/hr Exfiltration over Horizontal area
#2	Secondary	310.01'	3.00' W x 0.50' H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.35 cfs @ 12.20 hrs HW=311.07' (Free Discharge)
 ↑1=Exfiltration (Exfiltration Controls 0.35 cfs)

Secondary OutFlow Max=6.46 cfs @ 12.20 hrs HW=311.07' TW=300.08' (Dynamic Tailwater)
 ↑2=Orifice/Grate (Orifice Controls 6.46 cfs @ 4.31 fps)

Post-Development Entire

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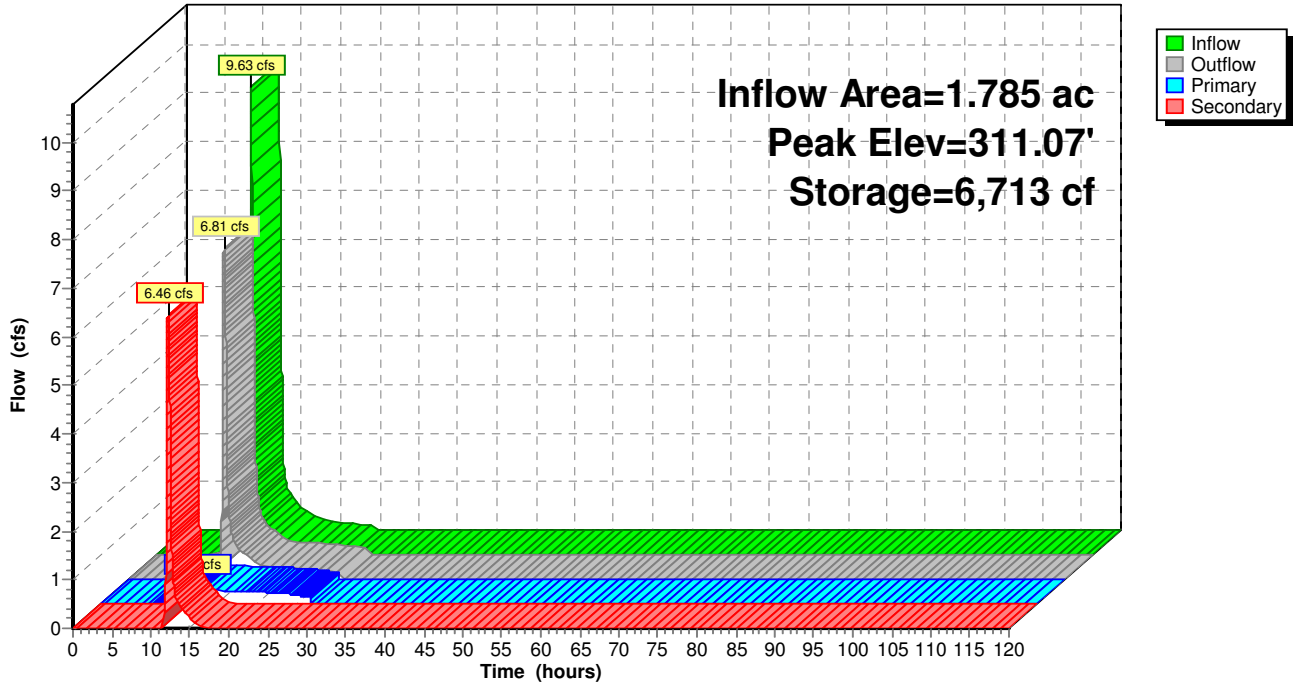
Type III 24-hr 100 Year Rainfall=7.50"

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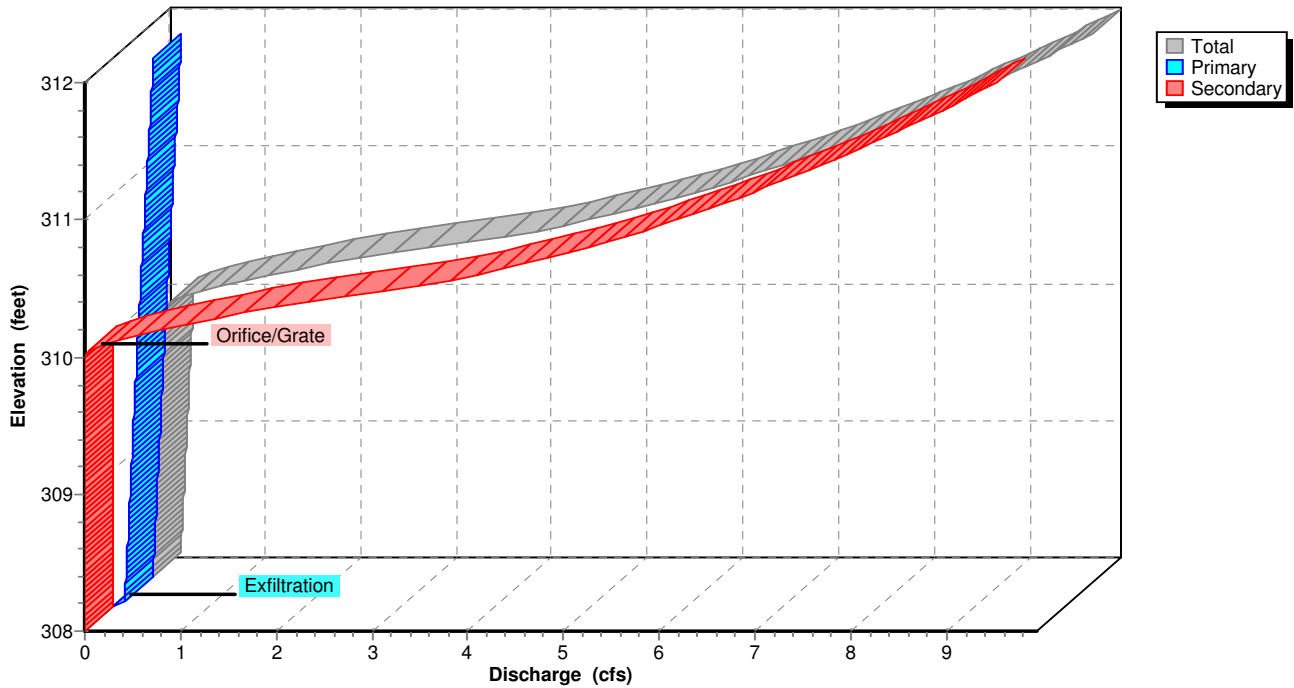
Pond P-E: Pond-E (NYSDEC I-2)

Hydrograph



Pond P-E: Pond-E (NYSDEC I-2)

Stage-Discharge



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Hydrograph for Pond P-E: Pond-E (NYSDEC I-2)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	308.00	0.00	0.00	0.00
5.00	0.00	0	308.00	0.00	0.00	0.00
10.00	0.25	228	308.19	0.14	0.14	0.00
15.00	0.47	3,866	310.09	0.49	0.27	0.22
20.00	0.16	3,046	309.75	0.25	0.25	0.00
25.00	0.00	1,091	308.77	0.18	0.18	0.00
30.00	0.00	0	308.00	0.00	0.00	0.00
35.00	0.00	0	308.00	0.00	0.00	0.00
40.00	0.00	0	308.00	0.00	0.00	0.00
45.00	0.00	0	308.00	0.00	0.00	0.00
50.00	0.00	0	308.00	0.00	0.00	0.00
55.00	0.00	0	308.00	0.00	0.00	0.00
60.00	0.00	0	308.00	0.00	0.00	0.00
65.00	0.00	0	308.00	0.00	0.00	0.00
70.00	0.00	0	308.00	0.00	0.00	0.00
75.00	0.00	0	308.00	0.00	0.00	0.00
80.00	0.00	0	308.00	0.00	0.00	0.00
85.00	0.00	0	308.00	0.00	0.00	0.00
90.00	0.00	0	308.00	0.00	0.00	0.00
95.00	0.00	0	308.00	0.00	0.00	0.00
100.00	0.00	0	308.00	0.00	0.00	0.00
105.00	0.00	0	308.00	0.00	0.00	0.00
110.00	0.00	0	308.00	0.00	0.00	0.00
115.00	0.00	0	308.00	0.00	0.00	0.00
120.00	0.00	0	308.00	0.00	0.00	0.00

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Stage-Discharge for Pond P-E: Pond-E (NYSDEC I-2)

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
308.00	0.00	0.00	0.00	310.60	4.42	0.31	4.10
308.05	0.13	0.13	0.00	310.65	4.74	0.32	4.43
308.10	0.13	0.13	0.00	310.70	5.04	0.32	4.72
308.15	0.13	0.13	0.00	310.75	5.32	0.32	5.00
308.20	0.14	0.14	0.00	310.80	5.59	0.33	5.26
308.25	0.14	0.14	0.00	310.85	5.84	0.33	5.50
308.30	0.15	0.15	0.00	310.90	6.08	0.34	5.74
308.35	0.15	0.15	0.00	310.95	6.31	0.34	5.97
308.40	0.15	0.15	0.00	311.00	6.53	0.34	6.18
308.45	0.16	0.16	0.00	311.05	6.74	0.35	6.39
308.50	0.16	0.16	0.00	311.10	6.95	0.35	6.59
308.55	0.16	0.16	0.00	311.15	7.15	0.36	6.79
308.60	0.17	0.17	0.00	311.20	7.34	0.36	6.98
308.65	0.17	0.17	0.00	311.25	7.53	0.37	7.17
308.70	0.17	0.17	0.00	311.30	7.72	0.37	7.35
308.75	0.18	0.18	0.00	311.35	7.90	0.37	7.52
308.80	0.18	0.18	0.00	311.40	8.07	0.38	7.70
308.85	0.18	0.18	0.00	311.45	8.25	0.38	7.86
308.90	0.19	0.19	0.00	311.50	8.41	0.39	8.03
308.95	0.19	0.19	0.00	311.55	8.58	0.39	8.19
309.00	0.19	0.19	0.00	311.60	8.74	0.39	8.35
309.05	0.20	0.20	0.00	311.65	8.90	0.40	8.50
309.10	0.20	0.20	0.00	311.70	9.06	0.40	8.66
309.15	0.20	0.20	0.00	311.75	9.21	0.41	8.81
309.20	0.21	0.21	0.00	311.80	9.36	0.41	8.95
309.25	0.21	0.21	0.00	311.85	9.51	0.41	9.10
309.30	0.21	0.21	0.00	311.90	9.66	0.42	9.24
309.35	0.22	0.22	0.00	311.95	9.80	0.42	9.38
309.40	0.22	0.22	0.00	312.00	9.95	0.43	9.52
309.45	0.23	0.23	0.00				
309.50	0.23	0.23	0.00				
309.55	0.23	0.23	0.00				
309.60	0.24	0.24	0.00				
309.65	0.24	0.24	0.00				
309.70	0.24	0.24	0.00				
309.75	0.25	0.25	0.00				
309.80	0.25	0.25	0.00				
309.85	0.25	0.25	0.00				
309.90	0.26	0.26	0.00				
309.95	0.26	0.26	0.00				
310.00	0.26	0.26	0.00				
310.05	0.34	0.27	0.08				
310.10	0.53	0.27	0.26				
310.15	0.78	0.28	0.50				
310.20	1.08	0.28	0.80				
310.25	1.42	0.28	1.13				
310.30	1.79	0.29	1.50				
310.35	2.20	0.29	1.91				
310.40	2.64	0.30	2.35				
310.45	3.11	0.30	2.81				
310.50	3.61	0.30	3.30				
310.55	4.05	0.31	3.74				

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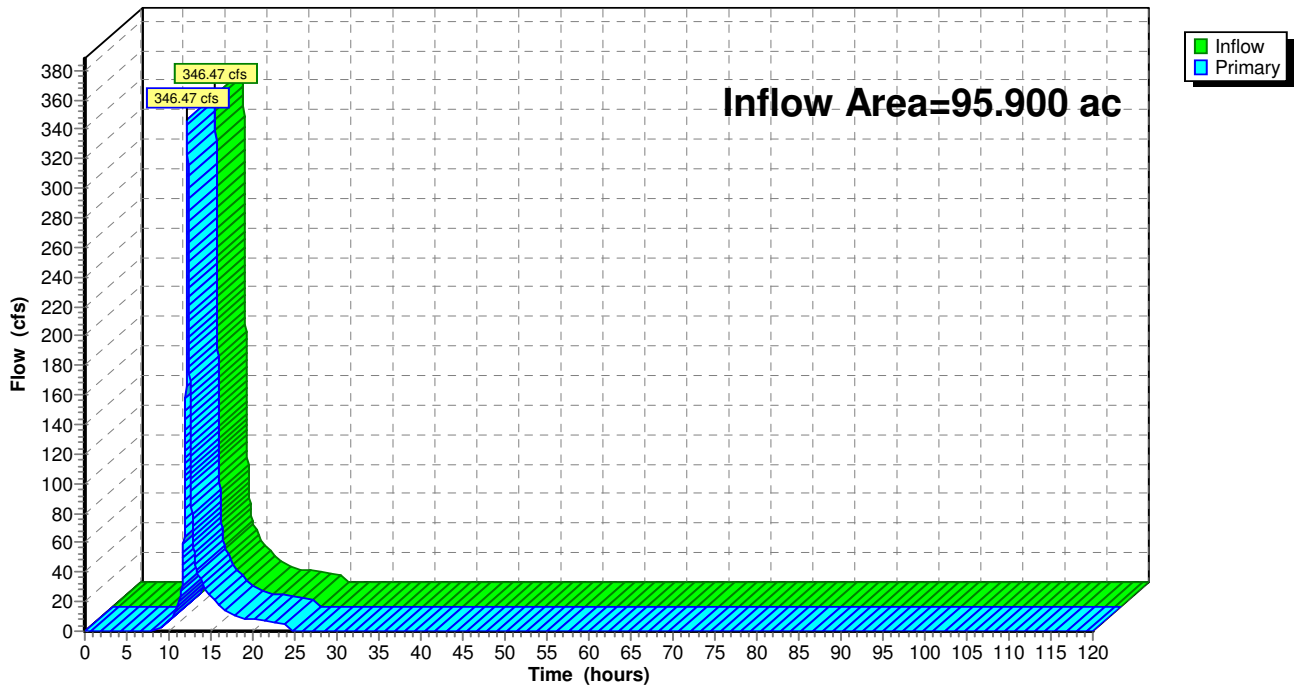
Summary for Link DP-1: DP-1

Inflow Area = 95.900 ac, 25.00% Impervious, Inflow Depth = 4.04" for 100 Year event
Inflow = 346.47 cfs @ 12.20 hrs, Volume= 32.269 af
Primary = 346.47 cfs @ 12.20 hrs, Volume= 32.269 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link DP-1: DP-1

Hydrograph



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Hydrograph for Link DP-1: DP-1

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	6.44	0.00	6.44	114.00	0.00	0.00	0.00
12.00	143.19	0.00	143.19	116.00	0.00	0.00	0.00
14.00	31.33	0.00	31.33	118.00	0.00	0.00	0.00
16.00	16.96	0.00	16.96	120.00	0.00	0.00	0.00
18.00	10.29	0.00	10.29				
20.00	8.09	0.00	8.09				
22.00	6.72	0.00	6.72				
24.00	5.37	0.00	5.37				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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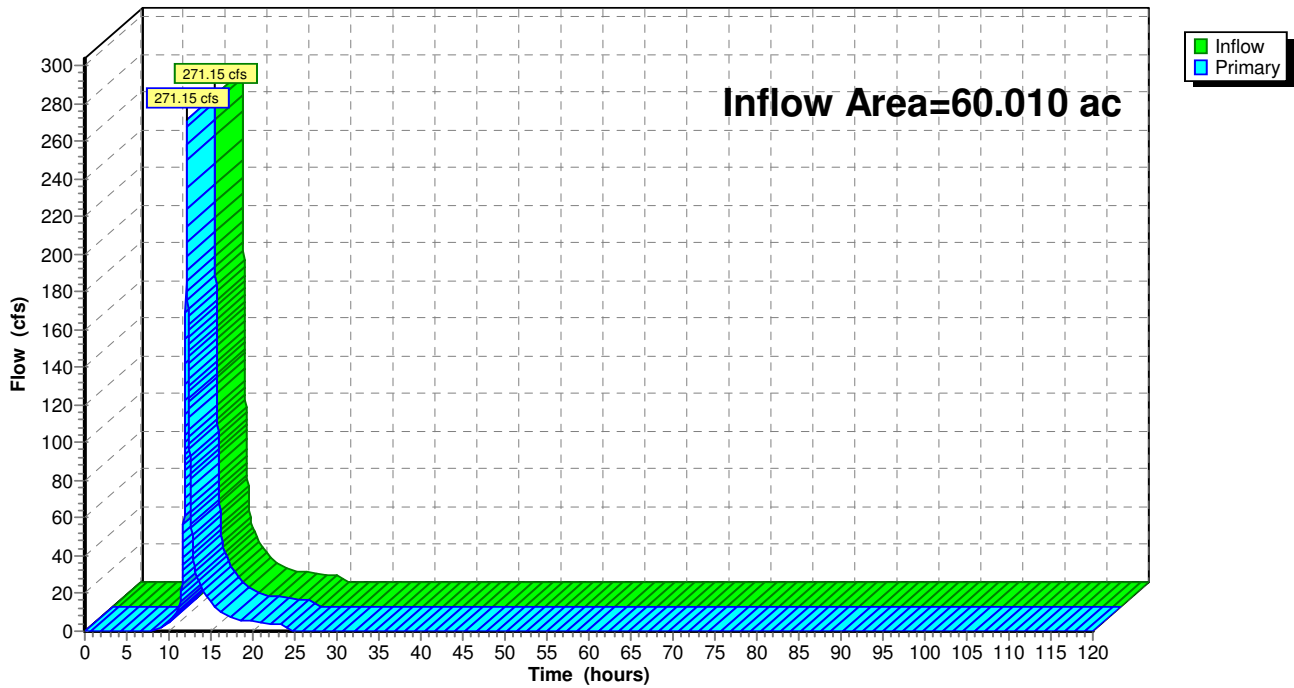
Summary for Link DP-2: DP-2

Inflow Area = 60.010 ac, 25.00% Impervious, Inflow Depth = 4.42" for 100 Year event
Inflow = 271.15 cfs @ 12.11 hrs, Volume= 22.094 af
Primary = 271.15 cfs @ 12.11 hrs, Volume= 22.094 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link DP-2: DP-2

Hydrograph



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Hydrograph for Link DP-2: DP-2

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	4.42	0.00	4.42	114.00	0.00	0.00	0.00
12.00	142.06	0.00	142.06	116.00	0.00	0.00	0.00
14.00	21.04	0.00	21.04	118.00	0.00	0.00	0.00
16.00	10.63	0.00	10.63	120.00	0.00	0.00	0.00
18.00	6.41	0.00	6.41				
20.00	5.07	0.00	5.07				
22.00	4.16	0.00	4.16				
24.00	3.31	0.00	3.31				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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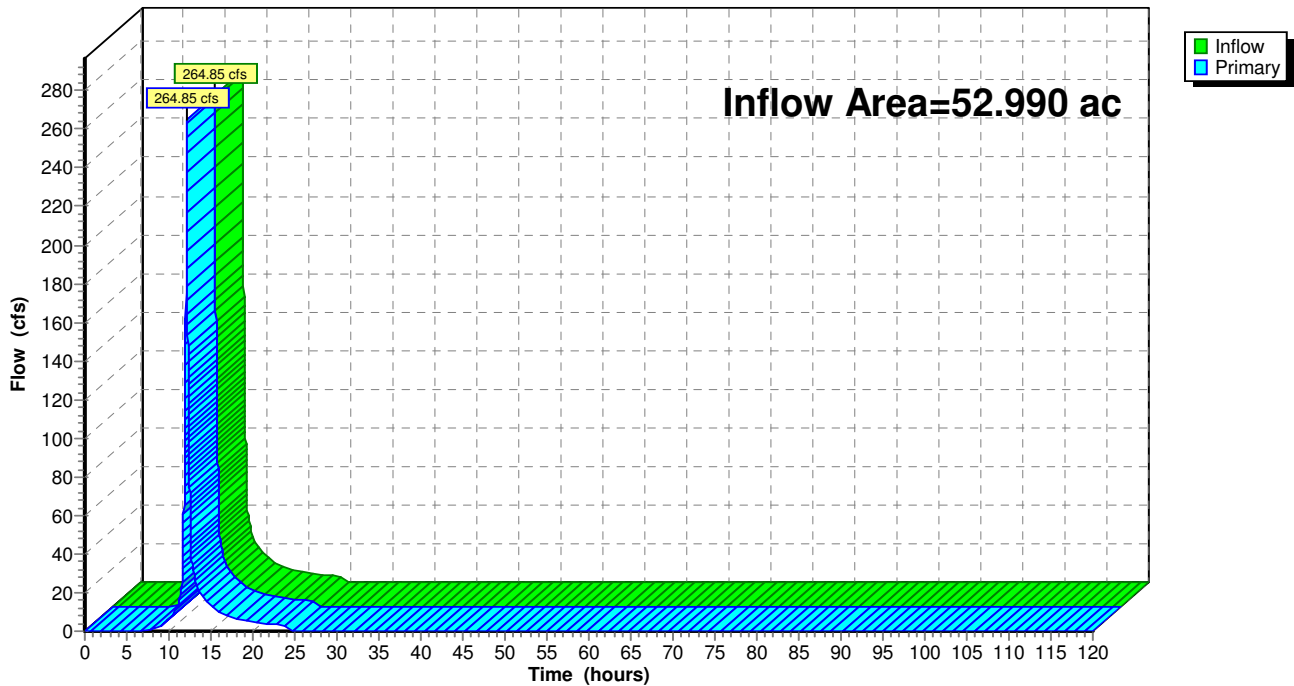
Summary for Link DP-3: DP-3

Inflow Area = 52.990 ac, 38.00% Impervious, Inflow Depth = 4.59" for 100 Year event
Inflow = 264.85 cfs @ 12.11 hrs, Volume= 20.281 af
Primary = 264.85 cfs @ 12.11 hrs, Volume= 20.281 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link DP-3: DP-3

Hydrograph



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Hydrograph for Link DP-3: DP-3

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.93	0.00	0.93	112.00	0.00	0.00	0.00
10.00	6.08	0.00	6.08	114.00	0.00	0.00	0.00
12.00	137.91	0.00	137.91	116.00	0.00	0.00	0.00
14.00	17.78	0.00	17.78	118.00	0.00	0.00	0.00
16.00	9.58	0.00	9.58	120.00	0.00	0.00	0.00
18.00	5.86	0.00	5.86				
20.00	4.68	0.00	4.68				
22.00	3.88	0.00	3.88				
24.00	3.09	0.00	3.09				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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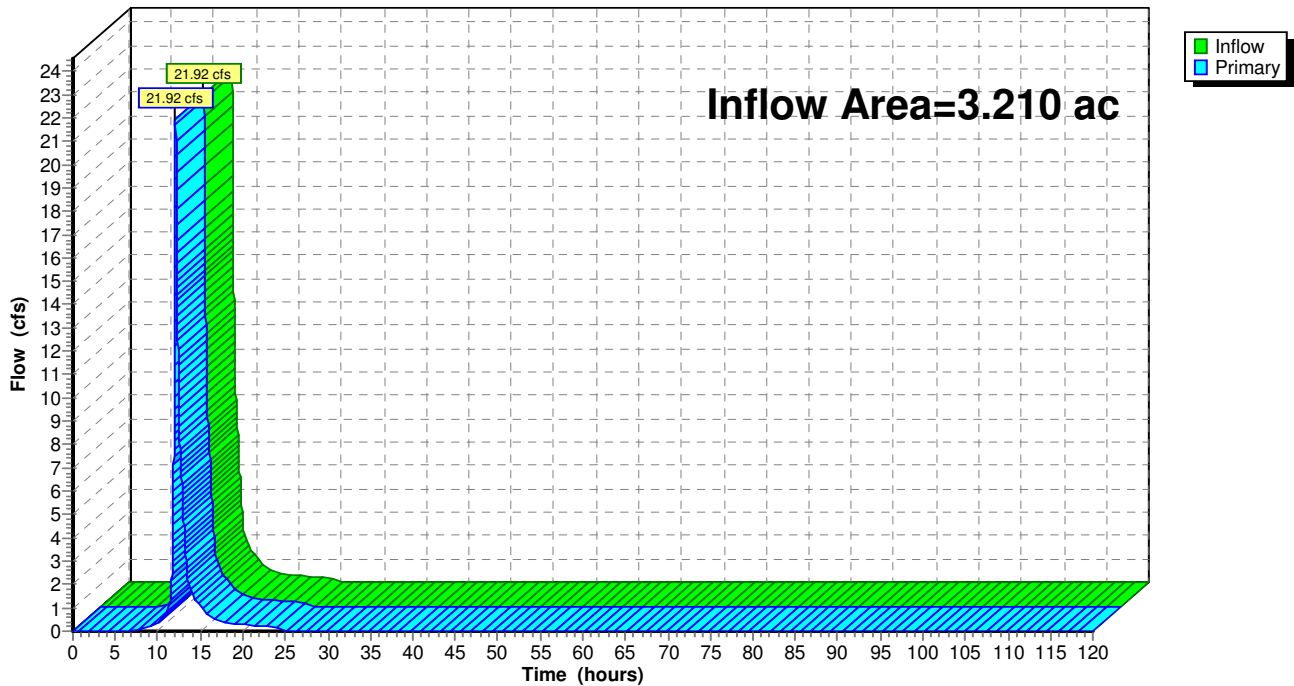
Summary for Link DP-4: DP-4

Inflow Area = 3.210 ac, 38.00% Impervious, Inflow Depth = 6.85" for 100 Year event
Inflow = 21.92 cfs @ 12.09 hrs, Volume= 1.832 af
Primary = 21.92 cfs @ 12.09 hrs, Volume= 1.832 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link DP-4: DP-4

Hydrograph



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Hydrograph for Link DP-4: DP-4

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.06	0.00	0.06	112.00	0.00	0.00	0.00
10.00	0.38	0.00	0.38	114.00	0.00	0.00	0.00
12.00	13.27	0.00	13.27	116.00	0.00	0.00	0.00
14.00	1.62	0.00	1.62	118.00	0.00	0.00	0.00
16.00	0.65	0.00	0.65	120.00	0.00	0.00	0.00
18.00	0.35	0.00	0.35				
20.00	0.28	0.00	0.28				
22.00	0.23	0.00	0.23				
24.00	0.19	0.00	0.19				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

Post-Development Entire

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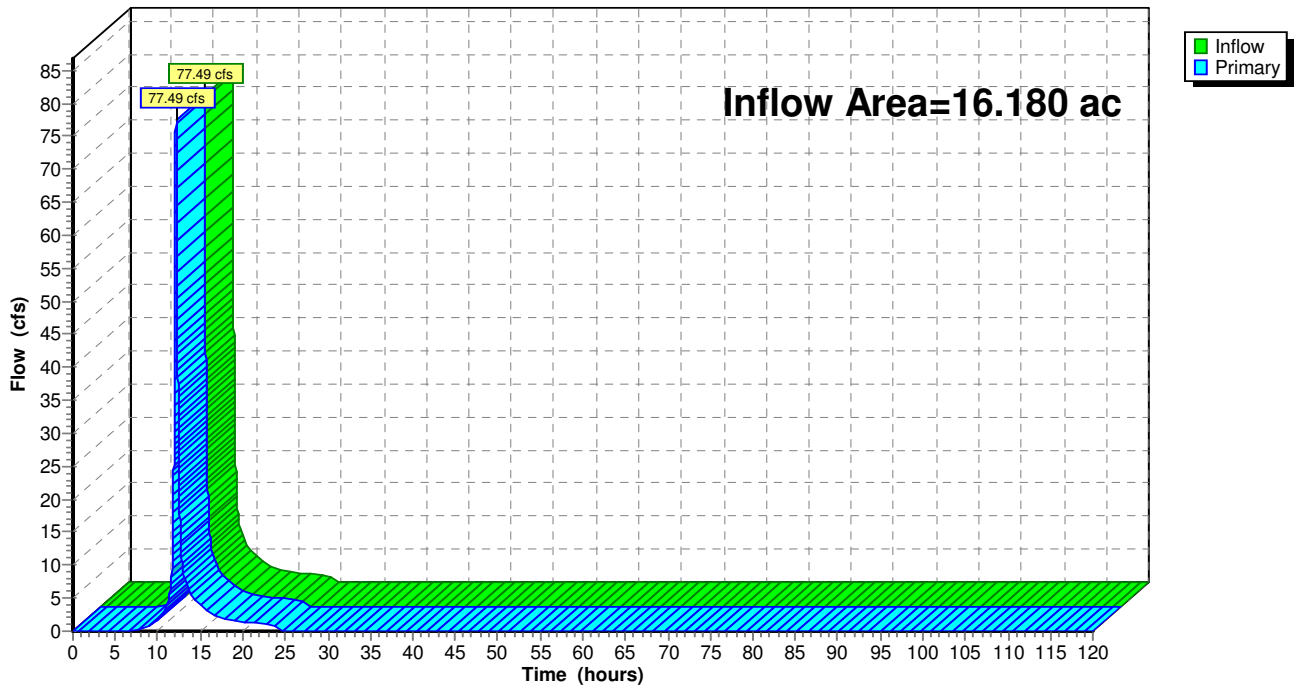
Summary for Link DP-5: DP-5

Inflow Area = 16.180 ac, 38.00% Impervious, Inflow Depth = 4.59" for 100 Year event
Inflow = 77.49 cfs @ 12.13 hrs, Volume= 6.193 af
Primary = 77.49 cfs @ 12.13 hrs, Volume= 6.193 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link DP-5: DP-5

Hydrograph



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Hydrograph for Link DP-5: DP-5

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.28	0.00	0.28	112.00	0.00	0.00	0.00
10.00	1.83	0.00	1.83	114.00	0.00	0.00	0.00
12.00	38.34	0.00	38.34	116.00	0.00	0.00	0.00
14.00	5.48	0.00	5.48	118.00	0.00	0.00	0.00
16.00	2.95	0.00	2.95	120.00	0.00	0.00	0.00
18.00	1.80	0.00	1.80				
20.00	1.43	0.00	1.43				
22.00	1.19	0.00	1.19				
24.00	0.95	0.00	0.95				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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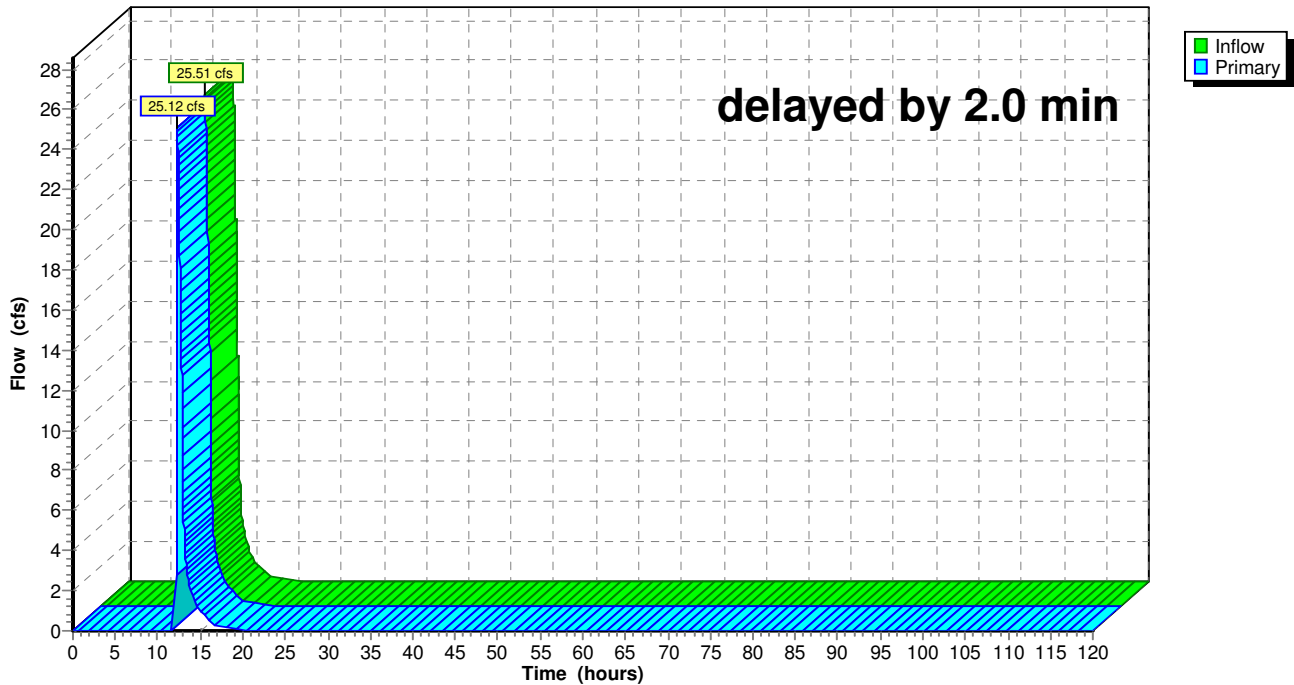
Summary for Link OF-1: Overland Flow

Inflow = 25.51 cfs @ 12.21 hrs, Volume= 1.751 af
Primary = 25.12 cfs @ 12.26 hrs, Volume= 1.751 af, Atten= 2%, Lag= 3.0 min

Primary outflow = Inflow delayed by 2.0 min, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link OF-1: Overland Flow

Hydrograph



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Hydrograph for Link OF-1: Overland Flow

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	114.00	0.00	0.00	0.00
12.00	0.00	0.00	0.00	116.00	0.00	0.00	0.00
14.00	1.80	0.00	1.85	118.00	0.00	0.00	0.00
16.00	0.45	0.00	0.46	120.00	0.00	0.00	0.00
18.00	0.17	0.00	0.18				
20.00	0.07	0.00	0.07				
22.00	0.00	0.00	0.00				
24.00	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

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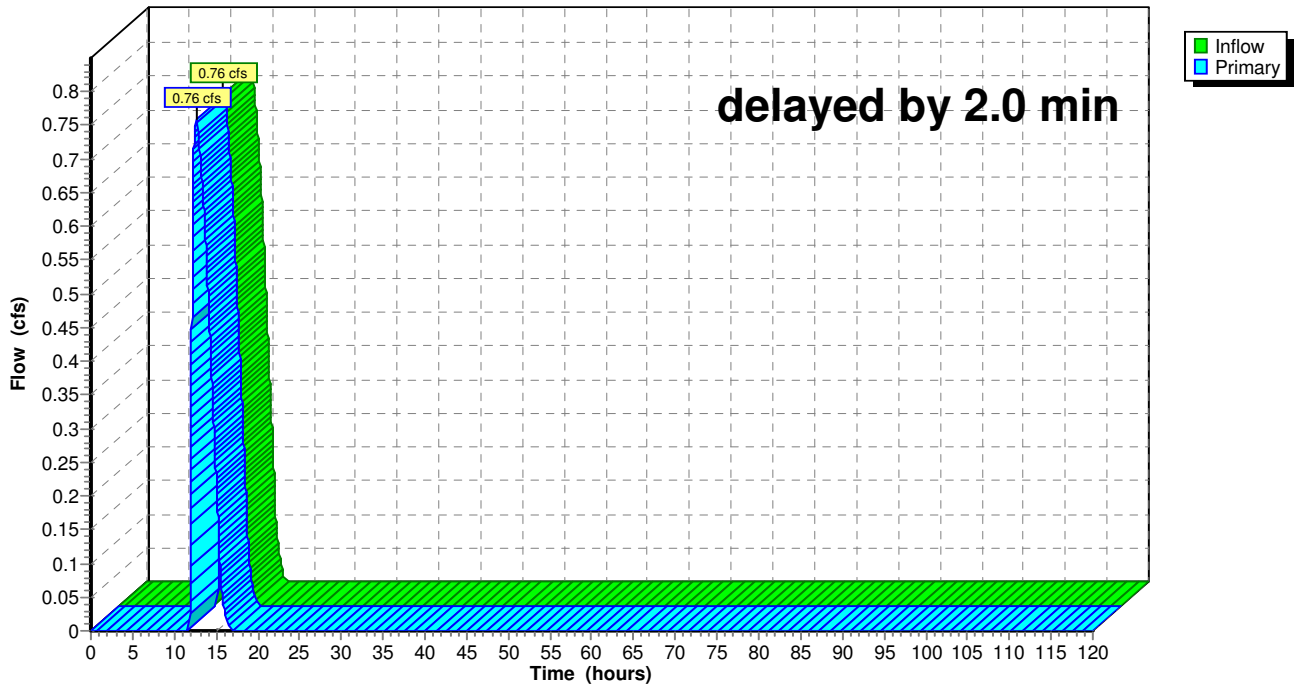
Summary for Link OF-2: Overland Flow

Inflow = 0.76 cfs @ 12.55 hrs, Volume= 0.150 af
Primary = 0.76 cfs @ 12.58 hrs, Volume= 0.150 af, Atten= 0%, Lag= 2.0 min

Primary outflow = Inflow delayed by 2.0 min, Time Span= 0.00-120.00 hrs, dt= 0.01 hrs

Link OF-2: Overland Flow

Hydrograph



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Hydrograph for Link OF-2: Overland Flow

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	104.00	0.00	0.00	0.00
2.00	0.00	0.00	0.00	106.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	108.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	110.00	0.00	0.00	0.00
8.00	0.00	0.00	0.00	112.00	0.00	0.00	0.00
10.00	0.00	0.00	0.00	114.00	0.00	0.00	0.00
12.00	0.35	0.00	0.30	116.00	0.00	0.00	0.00
14.00	0.50	0.00	0.51	118.00	0.00	0.00	0.00
16.00	0.03	0.00	0.03	120.00	0.00	0.00	0.00
18.00	0.00	0.00	0.00				
20.00	0.00	0.00	0.00				
22.00	0.00	0.00	0.00				
24.00	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				
28.00	0.00	0.00	0.00				
30.00	0.00	0.00	0.00				
32.00	0.00	0.00	0.00				
34.00	0.00	0.00	0.00				
36.00	0.00	0.00	0.00				
38.00	0.00	0.00	0.00				
40.00	0.00	0.00	0.00				
42.00	0.00	0.00	0.00				
44.00	0.00	0.00	0.00				
46.00	0.00	0.00	0.00				
48.00	0.00	0.00	0.00				
50.00	0.00	0.00	0.00				
52.00	0.00	0.00	0.00				
54.00	0.00	0.00	0.00				
56.00	0.00	0.00	0.00				
58.00	0.00	0.00	0.00				
60.00	0.00	0.00	0.00				
62.00	0.00	0.00	0.00				
64.00	0.00	0.00	0.00				
66.00	0.00	0.00	0.00				
68.00	0.00	0.00	0.00				
70.00	0.00	0.00	0.00				
72.00	0.00	0.00	0.00				
74.00	0.00	0.00	0.00				
76.00	0.00	0.00	0.00				
78.00	0.00	0.00	0.00				
80.00	0.00	0.00	0.00				
82.00	0.00	0.00	0.00				
84.00	0.00	0.00	0.00				
86.00	0.00	0.00	0.00				
88.00	0.00	0.00	0.00				
90.00	0.00	0.00	0.00				
92.00	0.00	0.00	0.00				
94.00	0.00	0.00	0.00				
96.00	0.00	0.00	0.00				
98.00	0.00	0.00	0.00				
100.00	0.00	0.00	0.00				
102.00	0.00	0.00	0.00				

APPENDIX D

- ***OPERATOR AND CONTRACTOR
CERTIFICATIONS***

TRIPi SUBDIVISION
TOWN OF BEDFORD
WESTCHESTER COUNTY, NEW YORK

OPERATOR CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that false statements made herein are punishable as a class A misdemeanor pursuant to sections 210.45 of the Penal Law.

Operator

Signature

Print Name

Title

Date

Address

Telephone Number

APPENDIX E

- ***MAINTENANCE AND INSPECTION
REPORTS AND CONSTRUCTION CHECK
LIST***

Stormwater/Wetland Pond Construction Inspection Checklist

Project:
 Location:
 Site Status:

Date:

Time:

Inspector:

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
Pre-Construction/Materials and Equipment		
Pre-construction meeting		
Pipe and appurtenances on-site prior to construction and dimensions checked		
1. Material (including protective coating, if specified)		
2. Diameter		
3. Dimensions of metal riser or pre-cast concrete outlet structure		
4. Required dimensions between water control structures (orifices, weirs, etc.) are in accordance with approved plans		
5. Barrel stub for prefabricated pipe structures at proper angle for design barrel slope		
6. Number and dimensions of prefabricated anti-seep collars		
7. Watertight connectors and gaskets		
8. Outlet drain valve		
Project benchmark near pond site		
Equipment for temporary de-watering		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
2. Subgrade Preparation		
Area beneath embankment stripped of all vegetation, topsoil, and organic matter		
3. Pipe Spillway Installation		
Method of installation detailed on plans		
A. Bed preparation		
Installation trench excavated with specified side slopes		
Stable, uniform, dry subgrade of relatively impervious material (If subgrade is wet, contractor shall have defined steps before proceeding with installation)		
Invert at proper elevation and grade		
B. Pipe placement		
Metal / plastic pipe		
1. Watertight connectors and gaskets properly installed		
2. Anti-seep collars properly spaced and having watertight connections to pipe		
3. Backfill placed and tamped by hand under “haunches” of pipe		
4. Remaining backfill placed in max. 8 inch lifts using small power tamping equipment until 2 feet cover over pipe is reached		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
3. Pipe Spillway Installation		
Concrete pipe		
1. Pipe set on blocks or concrete slab for pouring of low cradle		
2. Pipe installed with rubber gasket joints with no spalling in gasket interface area		
3. Excavation for lower half of anti-seep collar(s) with reinforcing steel set		
4. Entire area where anti-seep collar(s) will come in contact with pipe coated with mastic or other approved waterproof sealant		
5. Low cradle and bottom half of anti-seep collar installed as monolithic pour and of an approved mix		
6. Upper half of anti-seep collar(s) formed with reinforcing steel set		
7. Concrete for collar of an approved mix and vibrated into place (protected from freezing while curing, if necessary)		
8. Forms stripped and collar inspected for honeycomb prior to backfilling. Parge if necessary.		
C. Backfilling		
Fill placed in maximum 8 inch lifts		
Backfill taken minimum 2 feet above top of anti-seep collar elevation before traversing with heavy equipment		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
4. Riser / Outlet Structure Installation		
Riser located within embankment		
A. Metal riser		
Riser base excavated or formed on stable subgrade to design dimensions		
Set on blocks to design elevations and plumbed		
Reinforcing bars placed at right angles and projecting into sides of riser		
Concrete poured so as to fill inside of riser to invert of barrel		
B. Pre-cast concrete structure		
Dry and stable subgrade		
Riser base set to design elevation		
If more than one section, no spalling in gasket interface area; gasket or approved caulking material placed securely		
Watertight and structurally sound collar or gasket joint where structure connects to pipe spillway		
C. Poured concrete structure		
Footing excavated or formed on stable subgrade, to design dimensions with reinforcing steel set		
Structure formed to design dimensions, with reinforcing steel set as per plan		
Concrete of an approved mix and vibrated into place (protected from freezing while curing, if necessary)		
Forms stripped & inspected for “honeycomb” prior to backfilling; pare if necessary		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
5. Embankment Construction		
Fill material		
Compaction		
Embankment		
1. Fill placed in specified lifts and compacted with appropriate equipment		
2. Constructed to design cross-section, side slopes and top width		
3. Constructed to design elevation plus allowance for settlement		
6. Impounded Area Construction		
Excavated / graded to design contours and side slopes		
Inlet pipes have adequate outfall protection		
Forebay(s)		
Pond benches		
7. Earth Emergency Spillway Construction		
Spillway located in cut or structurally stabilized with riprap, gabions, concrete, etc.		
Excavated to proper cross-section, side slopes and bottom width		
Entrance channel, crest, and exit channel constructed to design grades and elevations		

CONSTRUCTION SEQUENCE	SATISFACTORY / UNSATISFACTORY	COMMENTS
8. Outlet Protection		
A. End section		
Securely in place and properly backfilled		
B. Endwall		
Footing excavated or formed on stable subgrade, to design dimensions and reinforcing steel set, if specified		
Endwall formed to design dimensions with reinforcing steel set as per plan		
Concrete of an approved mix and vibrated into place (protected from freezing, if necessary)		
Forms stripped and structure inspected for “honeycomb” prior to backfilling; parge if necessary		
C. Riprap apron / channel		
Apron / channel excavated to design cross-section with proper transition to existing ground		
Filter fabric in place		
Stone sized as per plan and uniformly place at the thickness specified		
9. Vegetative Stabilization		
Approved seed mixture or sod		
Proper surface preparation and required soil amendments		
Excelsior mat or other stabilization, as per plan		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
10. Miscellaneous		
Drain for ponds having a permanent pool		
Trash rack / anti-vortex device secured to outlet structure		
Trash protection for low flow pipes, orifices, etc.		
Fencing (when required)		
Access road		
Set aside for clean-out maintenance		
11. Stormwater Wetlands		
Adequate water balance		
Variety of depth zones present		
Approved pondscaping plan in place Reinforcement budget for additional plantings		
Plants and materials ordered 6 months prior to construction		
Construction planned to allow for adequate planting and establishment of plant community (April-June planting window)		
Wetland buffer area preserved to maximum extent possible		

Comments:

Actions to be Taken:

Stormwater Pond/Wetland Operation, Maintenance and Management Inspection Checklist

Project _____

Location: _____

Site Status: _____

Date: _____

Time: _____

Inspector: _____

Maintenance Item	Satisfactory/ Unsatisfactory	Comments
1. Embankment and emergency spillway (Annual, After Major Storms)		
1. Vegetation and ground cover adequate		
2. Embankment erosion		
3. Animal burrows		
4. Unauthorized planting		
5. Cracking, bulging, or sliding of dam		
a. Upstream face		
b. Downstream face		
c. At or beyond toe		
downstream		
upstream		
d. Emergency spillway		
6. Pond, toe & chimney drains clear and functioning		
7. Seeps/leaks on downstream face		
8. Slope protection or riprap failure		
9. Vertical/horizontal alignment of top of dam "As-Built"		

Maintenance Item	Satisfactory/ Unsatisfactory	Comments
10. Emergency spillway clear of obstructions and debris		
11. Other (specify)		
2. Riser and principal spillway (Annual)		
Type: Reinforced concrete _____ Corrugated pipe _____ Masonry _____		
1. Low flow orifice obstructed		
2. Low flow trash rack. a. Debris removal necessary		
b. Corrosion control		
3. Weir trash rack maintenance a. Debris removal necessary		
b. corrosion control		
4. Excessive sediment accumulation insider riser		
5. Concrete/masonry condition riser and barrels a. cracks or displacement		
b. Minor spalling (<1")		
c. Major spalling (rebars exposed)		
d. Joint failures		
e. Water tightness		
6. Metal pipe condition		
7. Control valve a. Operational/exercised		
b. Chained and locked		
8. Pond drain valve a. Operational/exercised		
b. Chained and locked		
9. Outfall channels functioning		
10. Other (specify)		

Maintenance Item	Satisfactory/ Unsatisfactory	Comments
3. Permanent Pool (Wet Ponds) (monthly)		
1. Undesirable vegetative growth		
2. Floating or floatable debris removal required		
3. Visible pollution		
4. Shoreline problem		
5. Other (specify)		
4. Sediment Forebays		
1. Sedimentation noted		
2. Sediment cleanout when depth < 50% design depth		
5. Dry Pond Areas		
1. Vegetation adequate		
2. Undesirable vegetative growth		
3. Undesirable woody vegetation		
4. Low flow channels clear of obstructions		
5. Standing water or wet spots		
6. Sediment and / or trash accumulation		
7. Other (specify)		
6. Condition of Outfalls (Annual , After Major Storms)		
1. Riprap failures		
2. Slope erosion		
3. Storm drain pipes		
4. Endwalls / Headwalls		
5. Other (specify)		
7. Other (Monthly)		
1. Encroachment on pond, wetland or easement area		

Maintenance Item	Satisfactory/ Unsatisfactory	Comments
2. Complaints from residents		
3. Aesthetics a. Grass growing required		
b. Graffiti removal needed		
c. Other (specify)		
4. Conditions of maintenance access routes.		
5. Signs of hydrocarbon build-up		
6. Any public hazards (specify)		
8. Wetland Vegetation (Annual)		
1. Vegetation healthy and growing Wetland maintaining 50% surface area coverage of wetland plants after the second growing season. (If unsatisfactory, reinforcement plantings needed)		
2. Dominant wetland plants: Survival of desired wetland plant species Distribution according to landscaping plan?		
3. Evidence of invasive species		
4. Maintenance of adequate water depths for desired wetland plant species		
5. Harvesting of emergent plantings needed		
6. Have sediment accumulations reduced pool volume significantly or are plants “choked” with sediment		
7. Eutrophication level of the wetland.		
8. Other (specify)		

Comments:

Actions to be Taken:

Infiltration Trench Operation, Maintenance, and Management Inspection Checklist

Project:
 Location:
 Site Status:

Date:

Time:

Inspector:

MAINTENANCE ITEM	SATISFACTORY / UNSATISFACTORY	COMMENTS
1. Debris Cleanout (Monthly)		
Trench surface clear of debris		
Inflow pipes clear of debris		
Overflow spillway clear of debris		
Inlet area clear of debris		
2. Sediment Traps or Forebays (Annual)		
Obviously trapping sediment		
Greater than 50% of storage volume remaining		
3. Dewatering (Monthly)		
Trench dewaterers between storms		
4. Sediment Cleanout of Trench (Annual)		
No evidence of sedimentation in trench		
Sediment accumulation doesn't yet require cleanout		
5. Inlets (Annual)		