

Date: January 4, 2022

To: Isaac Frye Holdings, LLC
586 Turnpike Road
New Ipswich, NH 03071

From: Rokeh Consulting, LLC, c/o Jon Rokeh
89 King Road Chichester, NH 03058

Re: **Stormwater Management Calculations**
Residential use for a Manufactured home
Tax map F Lot 3-2
Isaac Frye Highway
Wilton, NH

Please find attached the stormwater calculations for the proposed home site to be constructed on the above referenced property. This information is provided in accordance with the Town of Wilton Stormwater Management Ordinance. The following narrative provides the design parameters and findings of the analysis:

Summary:

The subject property is approximately 8.86 acres in size. The new construction area of the site is currently improved with a gravel driveway entrance and a gravel area for the proposed manufactured home and has been previously cleared of vegetation as needed. The drainage design for the residential structure, parking area and appurtenances meet all town requirements and will have a minimum stormwater impact. A SWPPP permit will be not required as the total is under the requirement threshold for EPA of 1 acre. The overall disturbance is approximately 40,250 sf. No other permits are required about surface drainage. The soils on the site are very suitable for this proposal as they are Colton gravelly sandy loam series with a Hydrologic Soil Rating of Class A.

The drainage calculations have been prepared to determine whether stormwater management practices are sufficient.

There are no proposed drainage structures, ponds or treatment swales needed or proposed.

Methodology:

The drainage analysis was completed using HydroCad Version 10.00-22, a stormwater modeling program utilizing TR-20 and TR-55 methodology. This program performs both the hydrologic computations for determination of runoff flows, and the hydraulic calculations for pipe, ditch, or pond design. Calculations were performed for the 2, 10, 25 and 50-year frequency storms in accordance with Town and State of NH regulations. The following design parameters were used and the results are as follows:

Rainfall distribution:	Type III
2 yr event	2.98"
10 yr event	4.44"
25 yr event	5.57"
50 yr event	6.63"

	POA1	POA2	POA3
2 year storm event	0.01 / 0.01	0.03 / 0.03	0.12 / 0.05
10 year storm event	0.06 / 0.09	0.23 / 0.23	0.53 / 0.34
25 year storm event	0.16 / 0.19	0.47 / 0.47	0.92 / 0.68
50 year storm event	0.26 / 0.30	0.73 / 0.73	1.32 / 1.05

Findings:

The final calculations show that the existing stormwater management practices are sufficient to handle the stormwater runoff rate and volume for all storm events up to and including a 50 year frequency including any grass swales and the pad site for the proposed manufactured home. The impact of the overall design has a minimal impact (if any) for the site.

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Smoothing	Y _{es}
State	New Hampshire
Location	
Longitude	71.735 degrees West
Latitude	42.843 degrees North
Elevation	0 feet
Date/Time	Fri, 07 Jan 2022 06:02:45 -0500

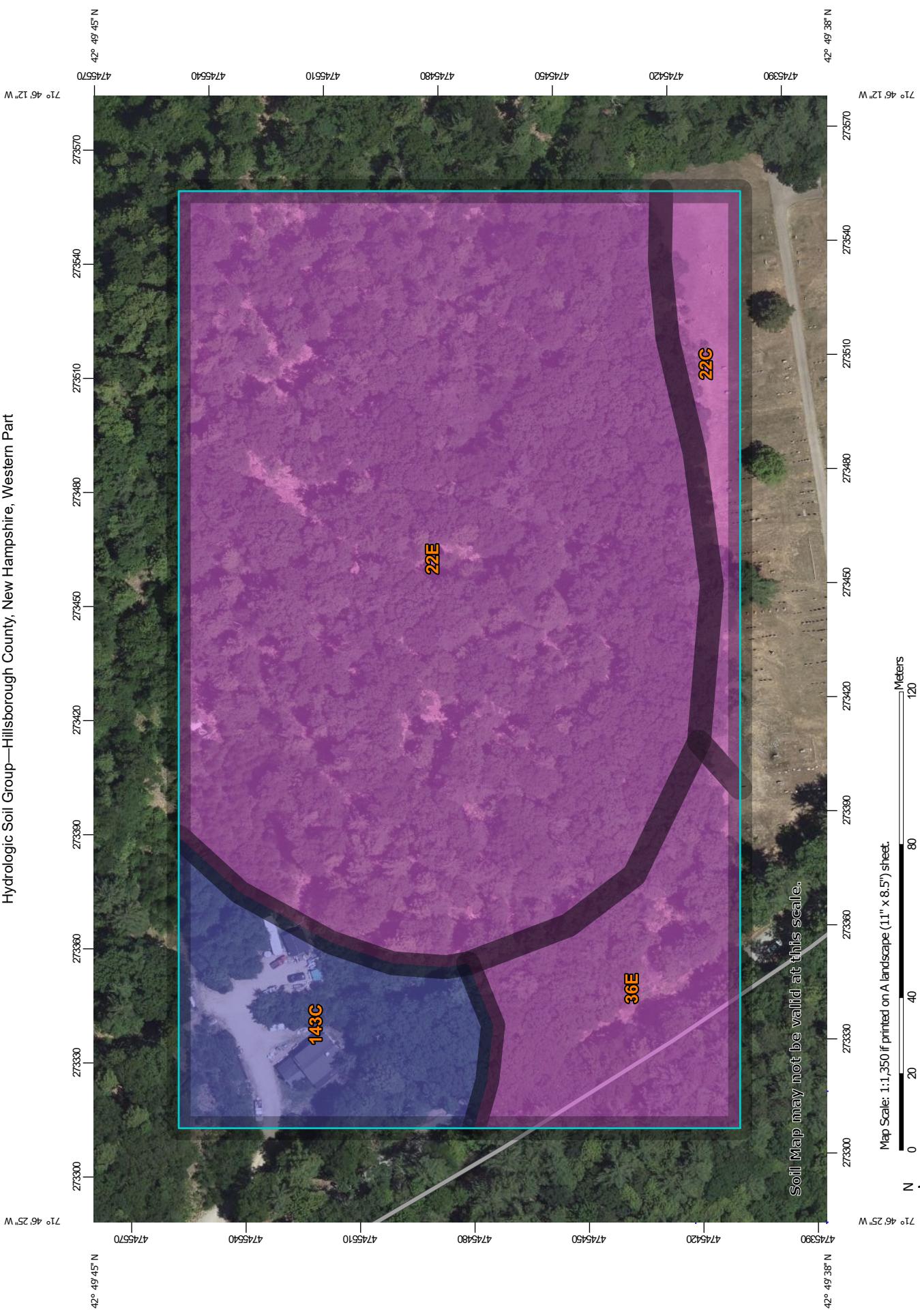
Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min	1hr	2hr	3hr	6hr	12hr	24hr	48hr	1day	2day	4day	7day	10day			
1yr	0.28	0.43	0.53	0.69	0.86	1.09	1yr	0.75	1.01	1.25	1.57	1.97	2.48	2.75	1yr	2.19	2.64	3.03	3.81	4.37	1yr
2yr	0.33	0.51	0.64	0.84	1.06	1.33	2yr	0.91	1.21	1.54	1.92	2.39	2.98	3.34	2yr	2.63	3.21	3.73	4.46	5.07	2yr
5yr	0.39	0.61	0.77	1.03	1.32	1.67	5yr	1.14	1.51	1.94	2.42	3.01	3.74	4.26	5yr	3.31	4.10	4.73	5.59	6.24	5yr
10yr	0.44	0.70	0.88	1.20	1.56	1.99	10yr	1.34	1.79	2.31	2.90	3.59	4.44	5.13	10yr	3.93	4.93	5.67	6.63	7.30	10yr
25yr	0.53	0.83	1.06	1.46	1.94	2.50	25yr	1.67	2.24	2.92	3.66	4.54	5.57	6.56	25yr	4.93	6.31	7.21	8.31	8.99	25yr
50yr	0.59	0.94	1.21	1.70	2.30	2.99	50yr	1.98	2.65	3.50	4.39	5.42	6.63	7.91	50yr	5.87	7.61	8.66	9.87	10.53	50yr
100yr	0.68	1.09	1.41	2.00	2.72	3.56	100yr	2.35	3.14	4.17	5.23	6.46	7.89	9.55	100yr	6.98	9.18	10.39	11.73	12.35	100yr
200yr	0.77	1.25	1.62	2.33	3.22	4.25	200yr	2.78	3.73	4.99	6.26	7.71	9.39	11.54	200yr	8.31	11.10	12.47	13.95	14.48	200yr
500yr	0.92	1.52	1.98	2.88	4.04	5.35	500yr	3.48	4.68	6.30	7.91	9.74	11.83	14.83	500yr	10.47	14.26	15.89	17.55	17.89	500yr

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min	1hr	2hr	3hr	6hr	12hr	24hr	48hr	1day	2day	4day	7day	10day			
1yr	0.20	0.31	0.38	0.51	0.63	0.78	1yr	0.55	0.76	1.02	1.35	1.68	2.19	2.42	1yr	1.94	2.33	2.51	3.47	3.90	1yr
2yr	0.32	0.49	0.61	0.82	1.01	1.19	2yr	0.87	1.17	1.35	1.74	2.24	2.88	3.24	2yr	2.55	3.12	3.60	4.32	4.93	2yr
5yr	0.36	0.55	0.68	0.93	1.19	1.40	5yr	1.02	1.36	1.62	2.09	2.67	3.44	3.95	5yr	3.05	3.80	4.34	5.16	5.82	5yr
10yr	0.39	0.60	0.74	1.04	1.34	1.56	10yr	1.16	1.53	1.76	2.38	3.02	3.97	4.60	10yr	3.51	4.42	5.01	5.88	6.60	10yr
25yr	0.44	0.67	0.83	1.19	1.56	1.81	25yr	1.35	1.77	2.04	2.83	3.54	4.70	5.65	25yr	4.16	5.44	6.06	7.00	7.79	25yr
50yr	0.47	0.72	0.90	1.29	1.73	2.04	50yr	1.50	2.00	2.29	3.23	3.99	5.38	6.63	50yr	4.76	6.38	6.99	7.98	8.83	50yr
100yr	0.51	0.76	0.96	1.38	1.90	2.30	100yr	1.64	2.25	2.57	3.22	4.52	6.16	7.80	100yr	5.45	7.50	8.09	9.10	10.02	100yr
200yr	0.55	0.82	1.04	1.50	2.10	2.58	200yr	1.81	2.53	2.87	3.59	5.14	7.06	9.19	200yr	6.25	8.84	9.36	10.36	11.37	200yr
500yr	0.60	0.90	1.16	1.68	2.39	3.04	500yr	2.06	2.97	3.36	4.15	6.12	8.48	11.48	500yr	7.50	11.04	11.37	12.31	13.44	500yr

Hydrologic Soil Group—Hillsborough County, New Hampshire, Western Part



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

1/7/2022
Page 1 of 4

MAP LEGEND

Area of Interest (AOI)		Area of Interest (AOI)		C		C/D
Soils				D		
Soil Rating Polygons		A		Not rated or not available		
		A/D				
		B				
		B/D				
		C		Rails		Interstate Highways
		C/D		US Routes		Major Roads
		D		Local Roads		
		Not rated or not available				
Soil Rating Lines						
		A		Aerial Photography		
		B				
		B/D				
		C				
		C/D				
		D				
		Not rated or not available				
Soil Rating Points						
		A				
		A/D				
		B				
		B/D				

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

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

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

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

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Hillsborough County, New Hampshire,
Western Part
Survey Area Date: Version 23, Aug 31, 2021

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

Date(s) aerial images were photographed: Jun 18, 2020—Aug 11, 2020

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

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
22C	Colton gravelly sandy loam, 8 to 15 percent slopes	A	0.5	5.6%
22E	Colton gravelly sandy loam, 15 to 60 percent slopes	A	6.3	70.1%
36E	Adams loamy sand, 15 to 60 percent slopes	A	1.1	12.6%
143C	Monadnock fine sandy loam, 8 to 15 percent slopes, very stony	B	1.0	11.6%
Totals for Area of Interest			9.0	100.0%

Description

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

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

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

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

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

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

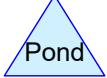
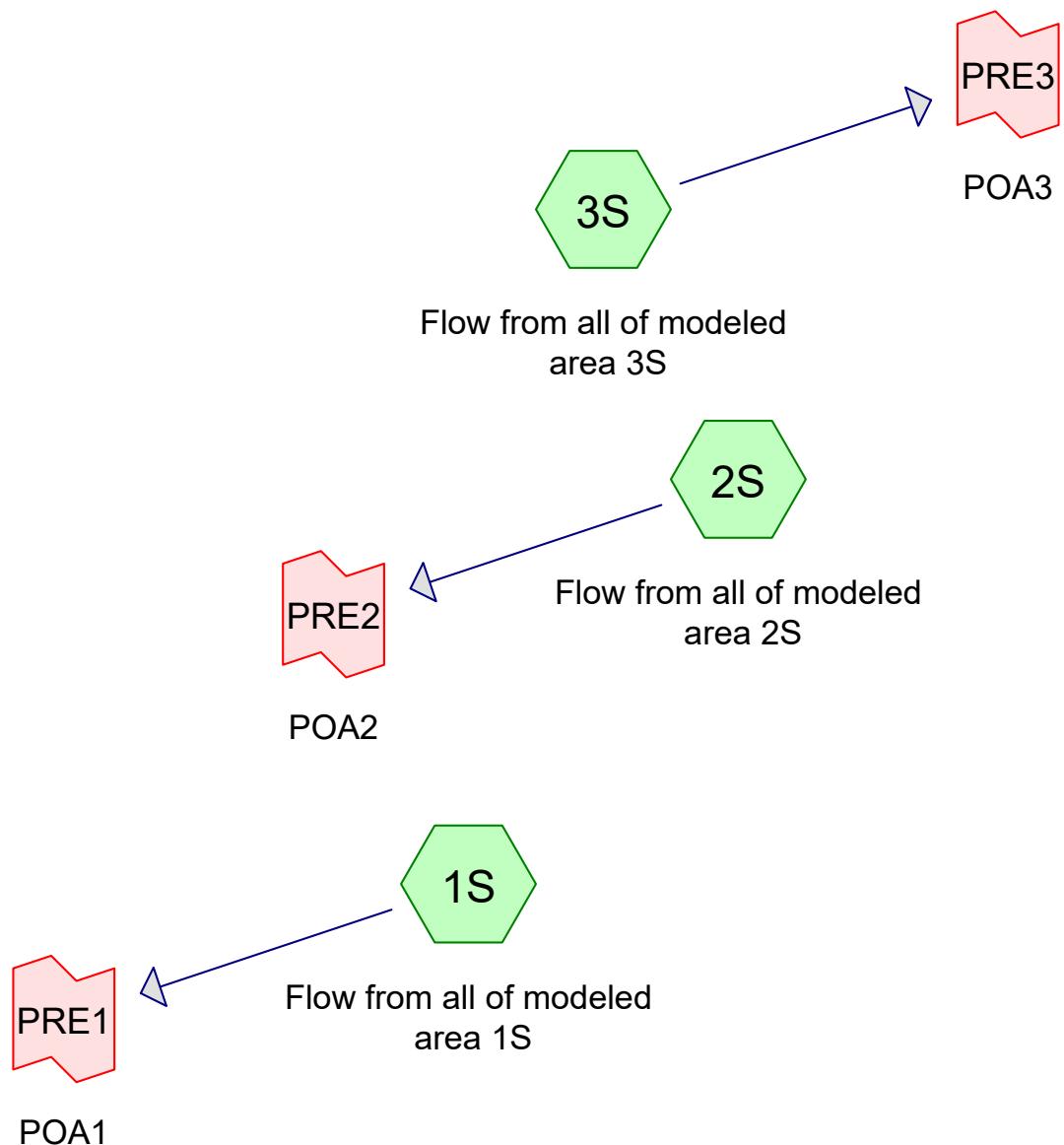
If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher



Routing Diagram for ROKEH WILTON SITE PRE 1-04-22
 Prepared by Rokeh Consulting LLC, Printed 1/7/2022
 HydroCAD® 10.00-22 s/n 01787 © 2018 HydroCAD Software Solutions LLC

ROKEH WILTON SITE PRE 1-04-22

Prepared by Rokeh Consulting LLC

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.454	39	>75% Grass cover, Good, HSG A (1S, 2S, 3S)
0.378	96	Gravel surface, HSG A (1S, 2S, 3S)
0.199	30	Woods, Good, HSG A (1S, 2S, 3S)
1.031	58	TOTAL AREA

ROKEH WILTON SITE PRE 1-04-22

Prepared by Rokeh Consulting LLC

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
1.031	HSG A	1S, 2S, 3S
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
1.031		TOTAL AREA

Time span=1.00-24.00 hrs, dt=0.05 hrs, 461 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Flow from all of modeled Runoff Area=0.147 ac 0.00% Impervious Runoff Depth>0.14"
Tc=6.0 min CN=53 Runoff=0.01 cfs 0.002 af

Subcatchment2S: Flow from all of modeled Runoff Area=0.419 ac 0.00% Impervious Runoff Depth>0.21"
Tc=12.0 min CN=56 Runoff=0.03 cfs 0.007 af

Subcatchment3S: Flow from all of modeled Runoff Area=0.465 ac 0.00% Impervious Runoff Depth>0.39"
Tc=6.0 min CN=62 Runoff=0.12 cfs 0.015 af

Link PRE1: POA1 Inflow=0.01 cfs 0.002 af
Primary=0.01 cfs 0.002 af

Link PRE2: POA2 Inflow=0.03 cfs 0.007 af
Primary=0.03 cfs 0.007 af

Link PRE3: POA3 Inflow=0.12 cfs 0.015 af
Primary=0.12 cfs 0.015 af

Total Runoff Area = 1.031 ac Runoff Volume = 0.024 af Average Runoff Depth = 0.28"
100.00% Pervious = 1.031 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: Flow from all of modeled area 1S

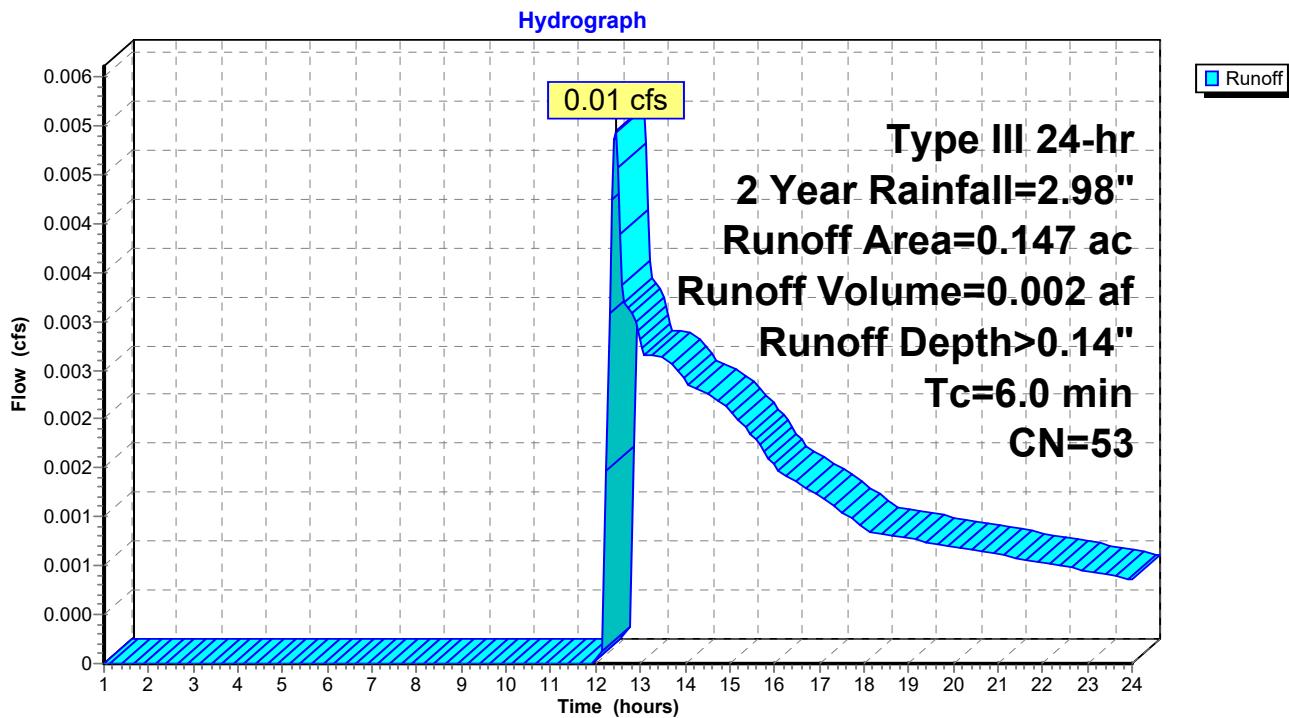
Runoff = 0.01 cfs @ 12.43 hrs, Volume= 0.002 af, Depth> 0.14"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=2.98"

Area (ac)	CN	Description
0.048	96	Gravel surface, HSG A
0.028	39	>75% Grass cover, Good, HSG A
0.071	30	Woods, Good, HSG A
0.147	53	Weighted Average
0.147		100.00% Pervious Area

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

Subcatchment 1S: Flow from all of modeled area 1S



Summary for Subcatchment 2S: Flow from all of modeled area 2S

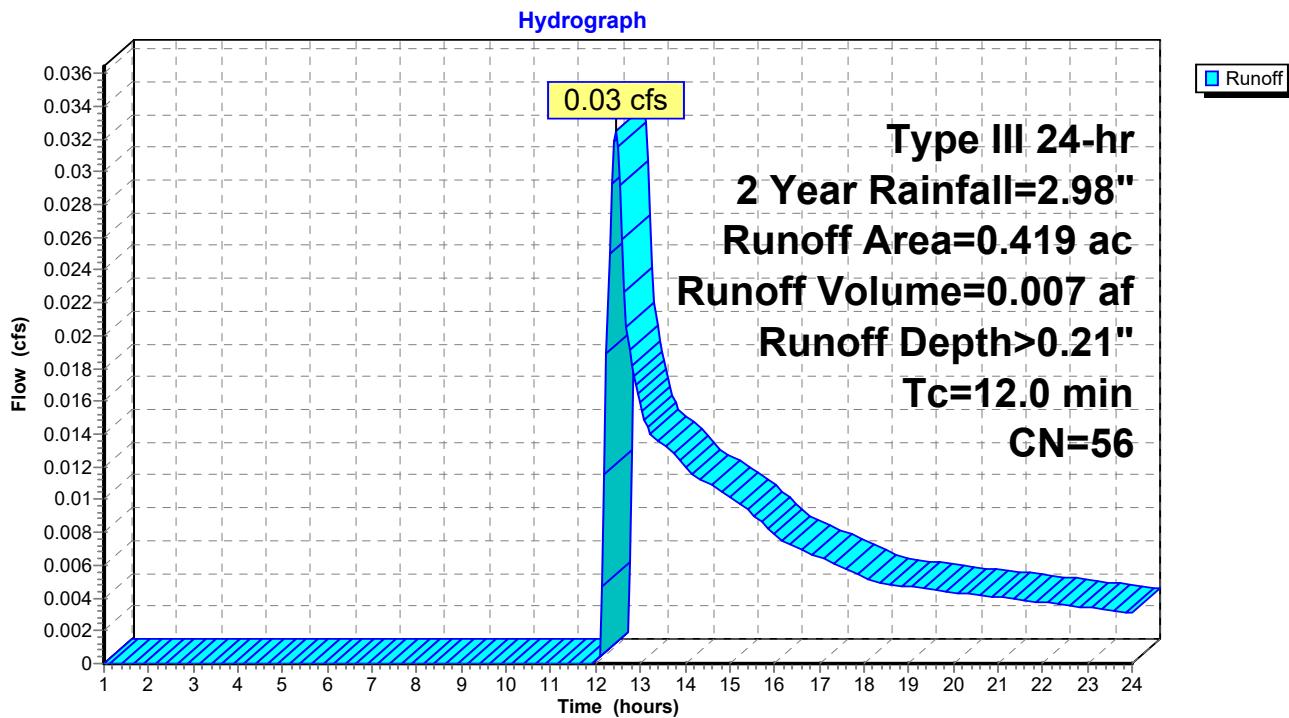
Runoff = 0.03 cfs @ 12.45 hrs, Volume= 0.007 af, Depth> 0.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=2.98"

Area (ac)	CN	Description
0.136	96	Gravel surface, HSG A
0.208	39	>75% Grass cover, Good, HSG A
0.075	30	Woods, Good, HSG A
0.419	56	Weighted Average
0.419		100.00% Pervious Area

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

Subcatchment 2S: Flow from all of modeled area 2S



Summary for Subcatchment 3S: Flow from all of modeled area 3S

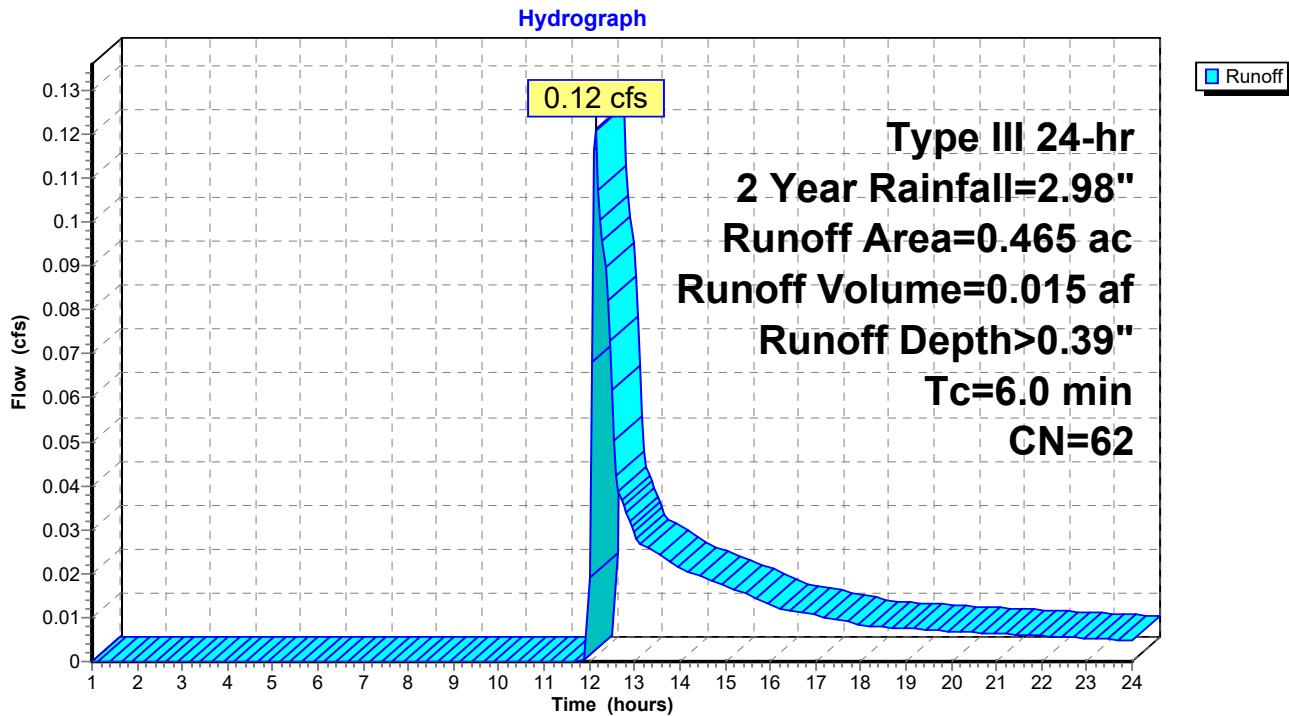
Runoff = 0.12 cfs @ 12.14 hrs, Volume= 0.015 af, Depth> 0.39"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2 Year Rainfall=2.98"

Area (ac)	CN	Description
0.194	96	Gravel surface, HSG A
0.218	39	>75% Grass cover, Good, HSG A
0.053	30	Woods, Good, HSG A
0.465	62	Weighted Average
0.465		100.00% Pervious Area

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

Subcatchment 3S: Flow from all of modeled area 3S



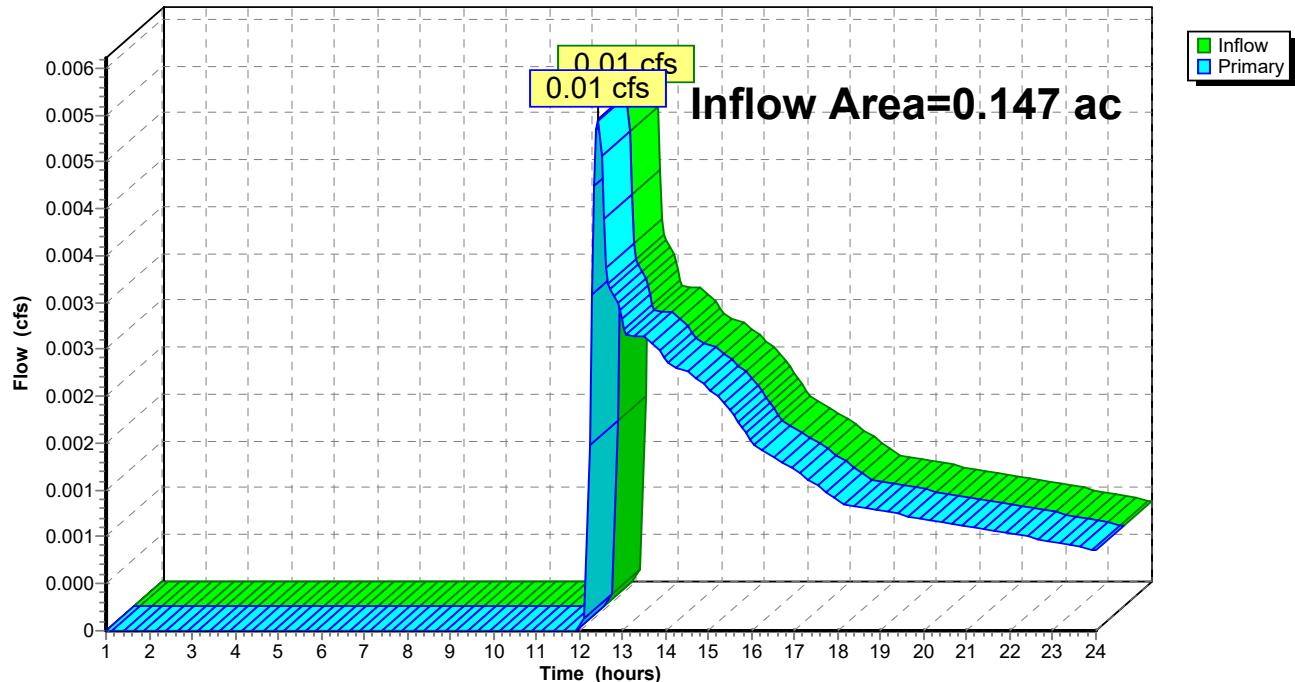
Summary for Link PRE1: POA1

Inflow Area = 0.147 ac, 0.00% Impervious, Inflow Depth > 0.14" for 2 Year event
 Inflow = 0.01 cfs @ 12.43 hrs, Volume= 0.002 af
 Primary = 0.01 cfs @ 12.43 hrs, Volume= 0.002 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link PRE1: POA1

Hydrograph



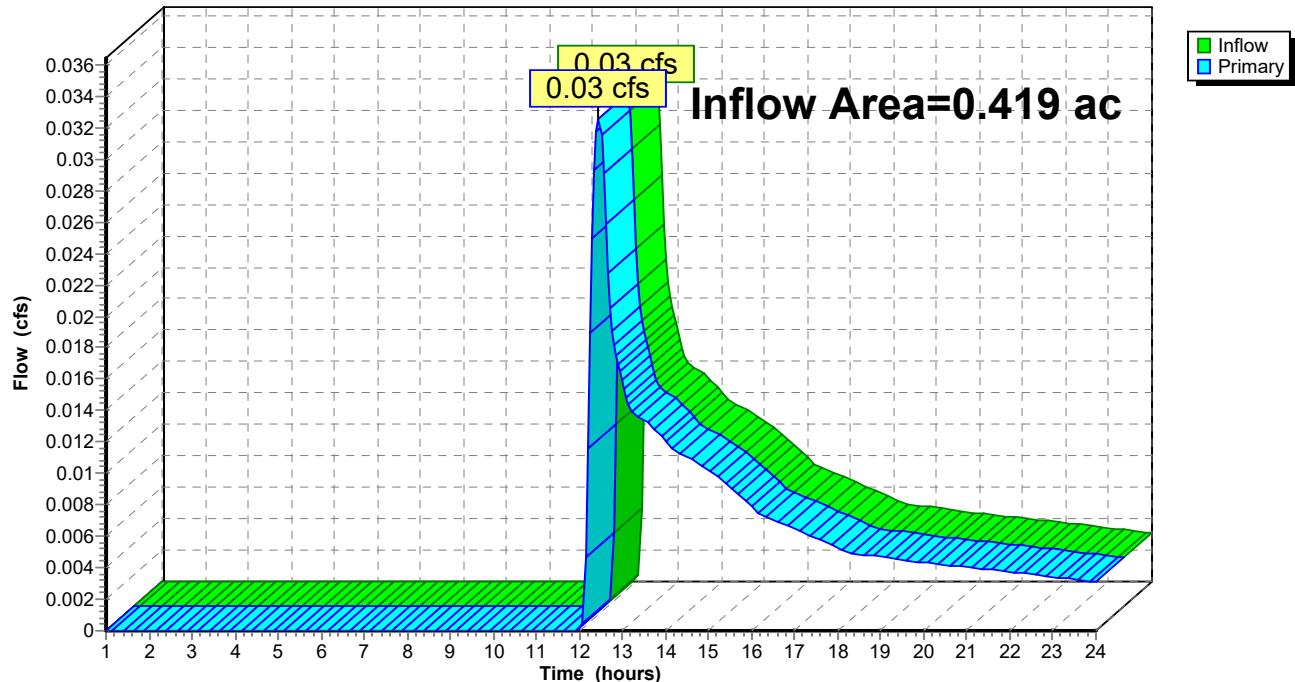
Summary for Link PRE2: POA2

Inflow Area = 0.419 ac, 0.00% Impervious, Inflow Depth > 0.21" for 2 Year event
 Inflow = 0.03 cfs @ 12.45 hrs, Volume= 0.007 af
 Primary = 0.03 cfs @ 12.45 hrs, Volume= 0.007 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link PRE2: POA2

Hydrograph



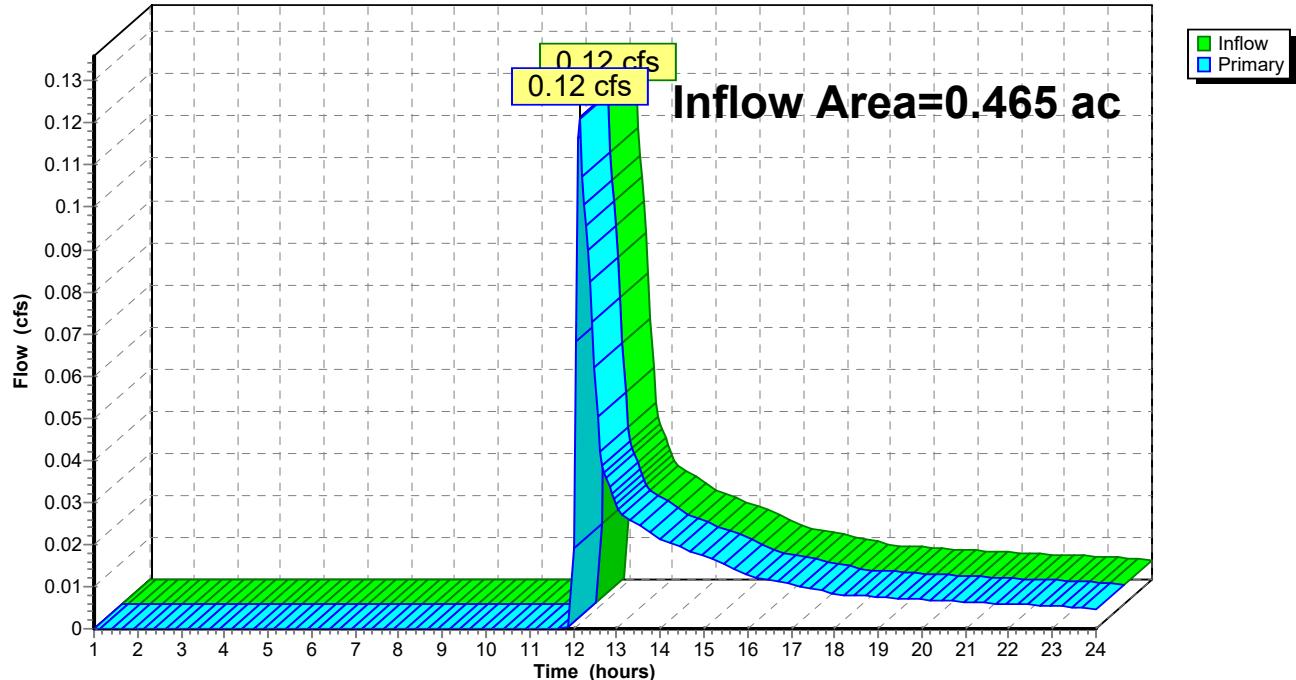
Summary for Link PRE3: POA3

Inflow Area = 0.465 ac, 0.00% Impervious, Inflow Depth > 0.39" for 2 Year event
 Inflow = 0.12 cfs @ 12.14 hrs, Volume= 0.015 af
 Primary = 0.12 cfs @ 12.14 hrs, Volume= 0.015 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link PRE3: POA3

Hydrograph



ROKEH WILTON SITE PRE 1-04-22

Prepared by Rokeh Consulting LLC

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Type III 24-hr 10 year Rainfall=4.44"

Printed 1/7/2022

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Time span=1.00-24.00 hrs, dt=0.05 hrs, 461 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Flow from all of modeled Runoff Area=0.147 ac 0.00% Impervious Runoff Depth>0.62"
Tc=6.0 min CN=53 Runoff=0.06 cfs 0.008 af

Subcatchment2S: Flow from all of modeled Runoff Area=0.419 ac 0.00% Impervious Runoff Depth>0.76"
Tc=12.0 min CN=56 Runoff=0.23 cfs 0.027 af

Subcatchment3S: Flow from all of modeled Runoff Area=0.465 ac 0.00% Impervious Runoff Depth>1.10"
Tc=6.0 min CN=62 Runoff=0.53 cfs 0.043 af

Link PRE1: POA1 Inflow=0.06 cfs 0.008 af
Primary=0.06 cfs 0.008 af

Link PRE2: POA2 Inflow=0.23 cfs 0.027 af
Primary=0.23 cfs 0.027 af

Link PRE3: POA3 Inflow=0.53 cfs 0.043 af
Primary=0.53 cfs 0.043 af

Total Runoff Area = 1.031 ac Runoff Volume = 0.077 af Average Runoff Depth = 0.90"
100.00% Pervious = 1.031 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: Flow from all of modeled area 1S

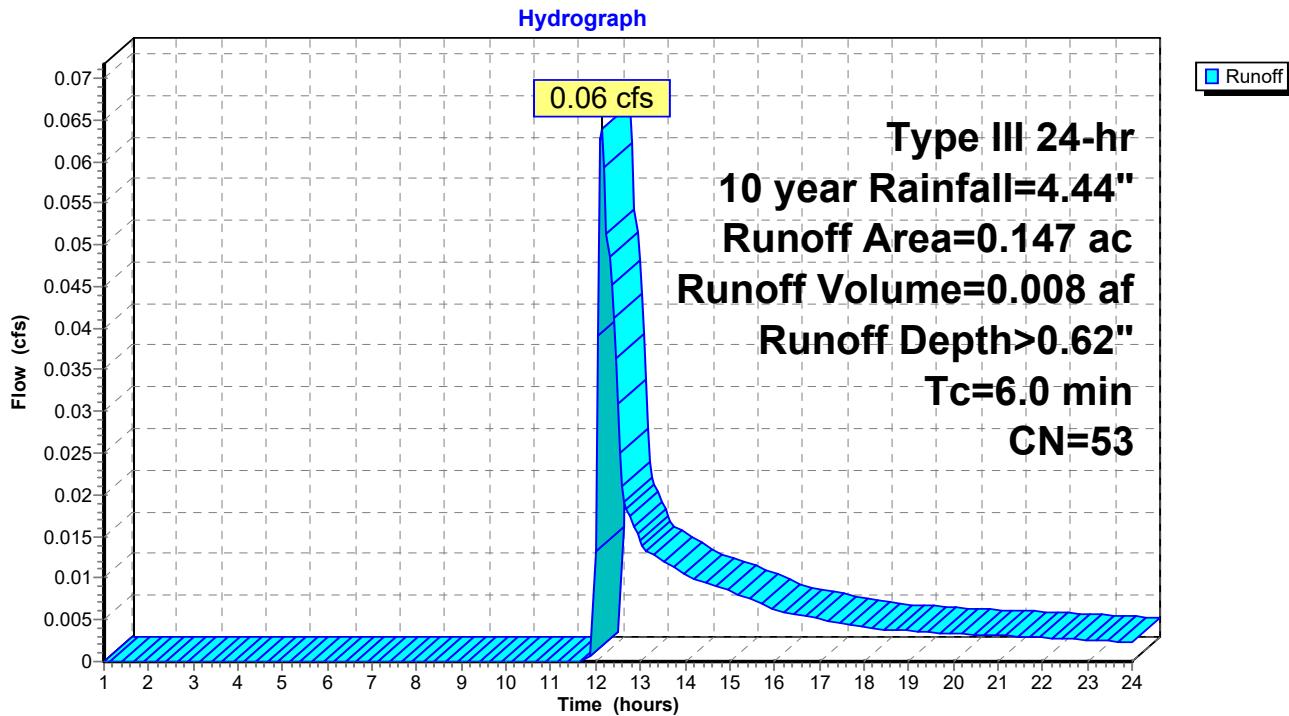
Runoff = 0.06 cfs @ 12.13 hrs, Volume= 0.008 af, Depth> 0.62"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10 year Rainfall=4.44"

Area (ac)	CN	Description
0.048	96	Gravel surface, HSG A
0.028	39	>75% Grass cover, Good, HSG A
0.071	30	Woods, Good, HSG A
0.147	53	Weighted Average
0.147		100.00% Pervious Area

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

Subcatchment 1S: Flow from all of modeled area 1S



Summary for Subcatchment 2S: Flow from all of modeled area 2S

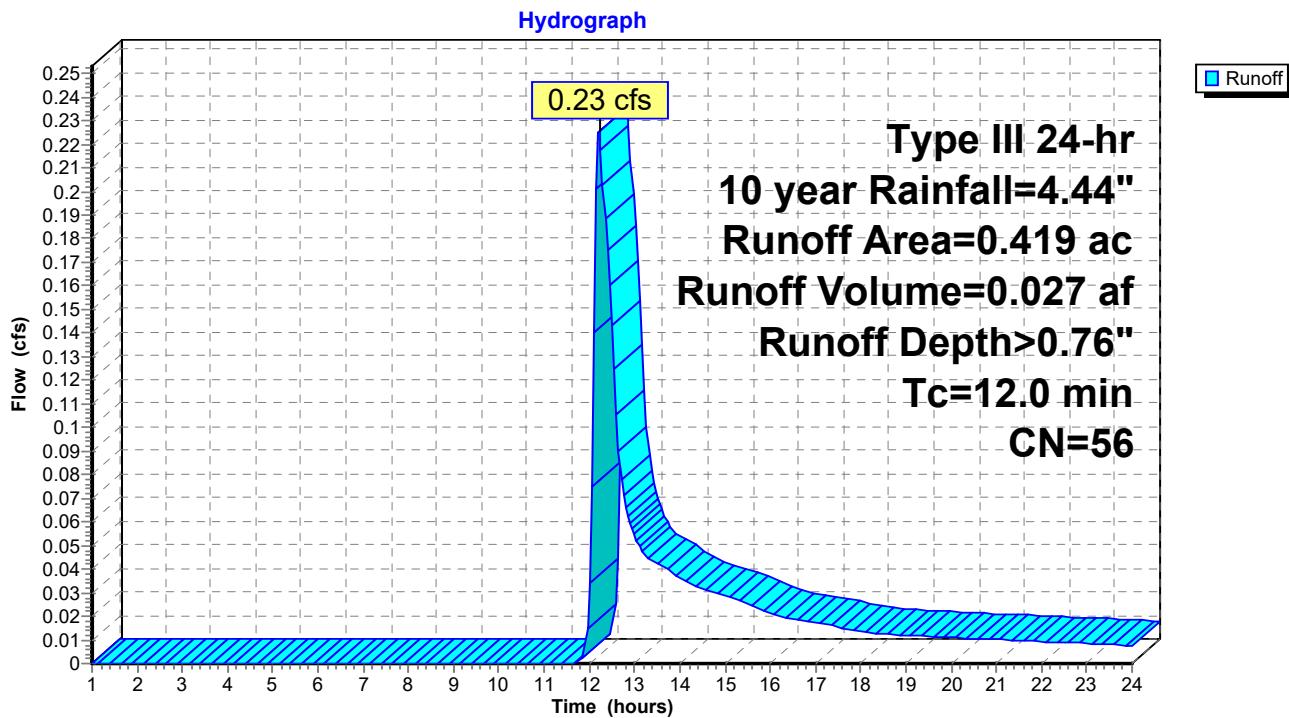
Runoff = 0.23 cfs @ 12.21 hrs, Volume= 0.027 af, Depth> 0.76"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 year Rainfall=4.44"

Area (ac)	CN	Description
0.136	96	Gravel surface, HSG A
0.208	39	>75% Grass cover, Good, HSG A
0.075	30	Woods, Good, HSG A
0.419	56	Weighted Average
0.419		100.00% Pervious Area

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

Subcatchment 2S: Flow from all of modeled area 2S



Summary for Subcatchment 3S: Flow from all of modeled area 3S

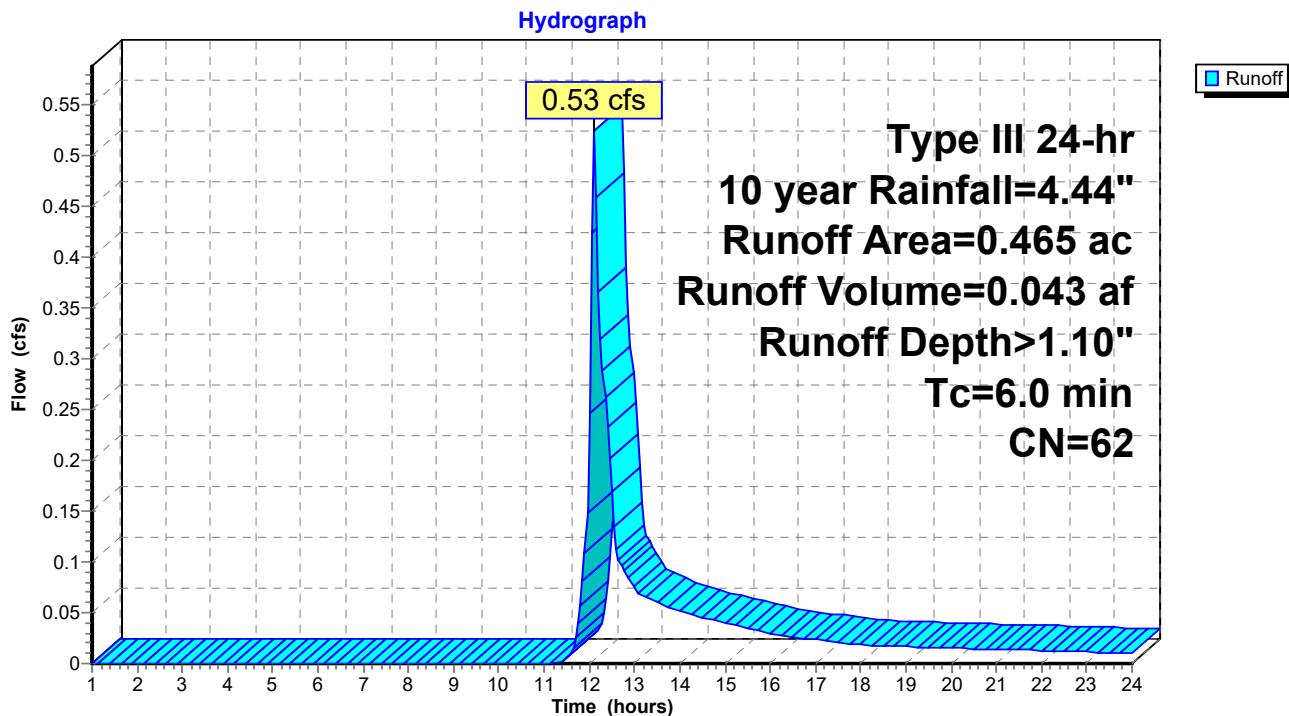
Runoff = 0.53 cfs @ 12.11 hrs, Volume= 0.043 af, Depth> 1.10"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10 year Rainfall=4.44"

Area (ac)	CN	Description
0.194	96	Gravel surface, HSG A
0.218	39	>75% Grass cover, Good, HSG A
0.053	30	Woods, Good, HSG A
0.465	62	Weighted Average
0.465		100.00% Pervious Area

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

Subcatchment 3S: Flow from all of modeled area 3S



Summary for Link PRE1: POA1

Inflow Area = 0.147 ac, 0.00% Impervious, Inflow Depth > 0.62" for 10 year event

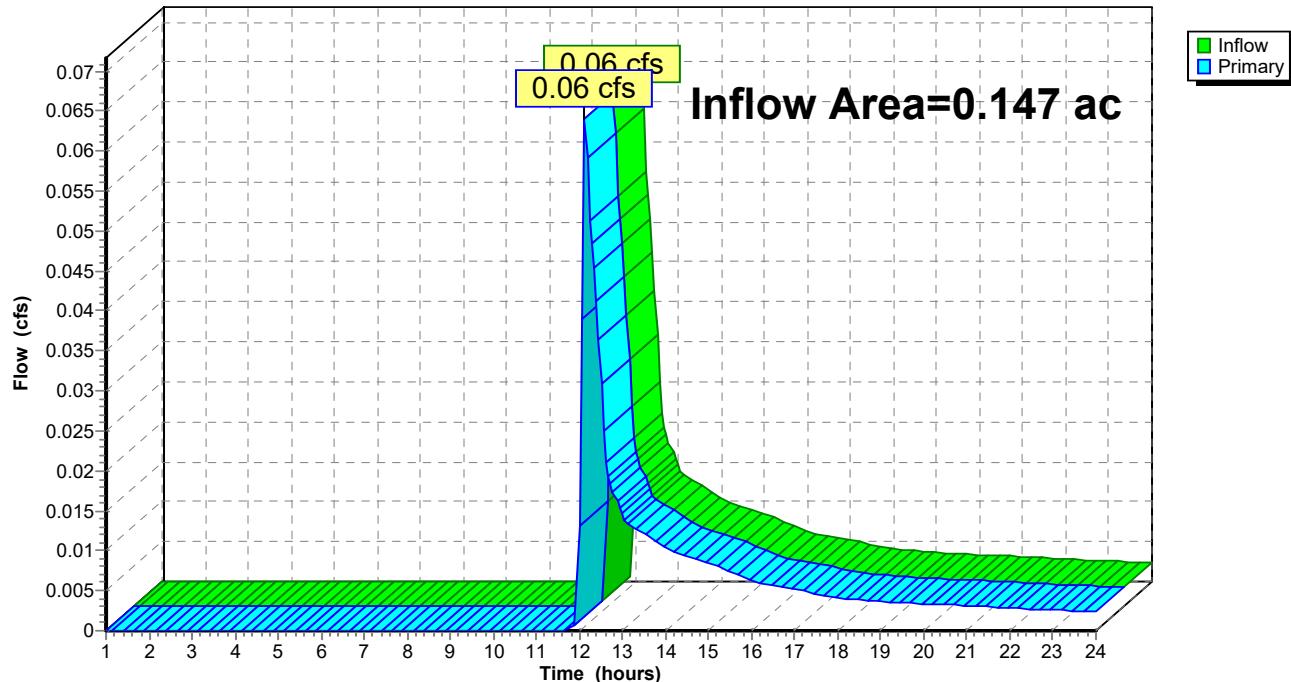
Inflow = 0.06 cfs @ 12.13 hrs, Volume= 0.008 af

Primary = 0.06 cfs @ 12.13 hrs, Volume= 0.008 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link PRE1: POA1

Hydrograph



Summary for Link PRE2: POA2

Inflow Area = 0.419 ac, 0.00% Impervious, Inflow Depth > 0.76" for 10 year event

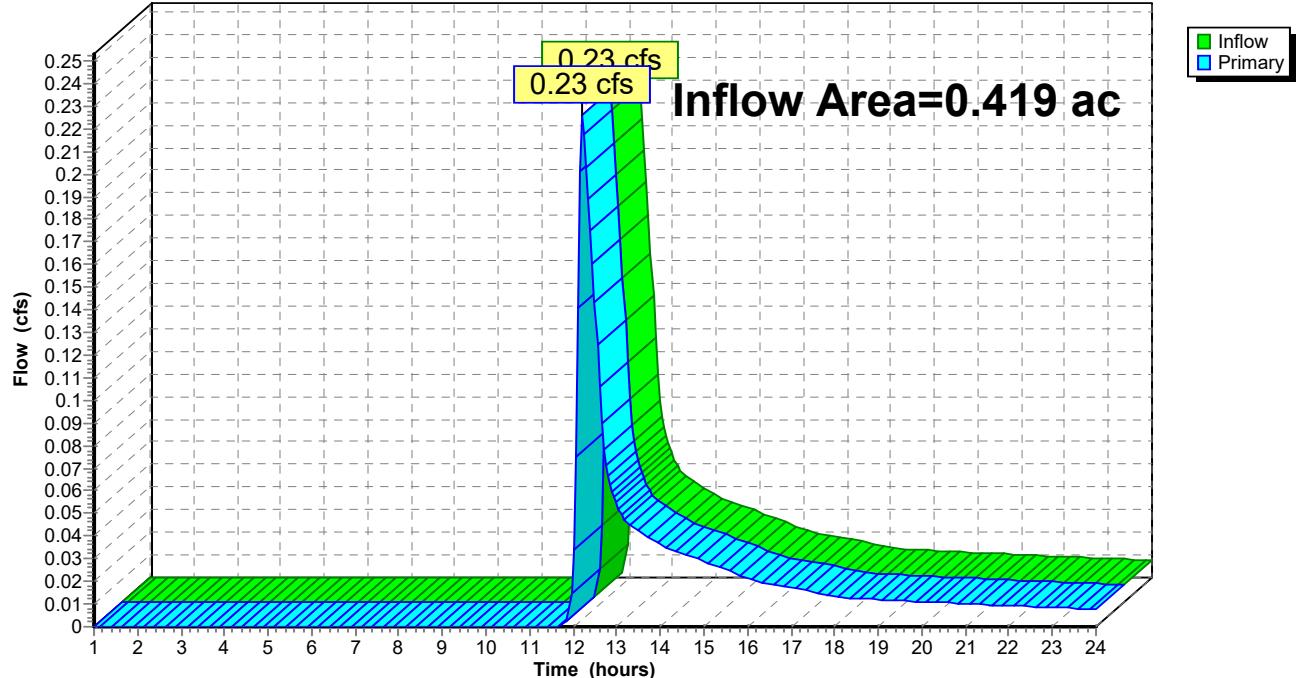
Inflow = 0.23 cfs @ 12.21 hrs, Volume= 0.027 af

Primary = 0.23 cfs @ 12.21 hrs, Volume= 0.027 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link PRE2: POA2

Hydrograph



Summary for Link PRE3: POA3

Inflow Area = 0.465 ac, 0.00% Impervious, Inflow Depth > 1.10" for 10 year event

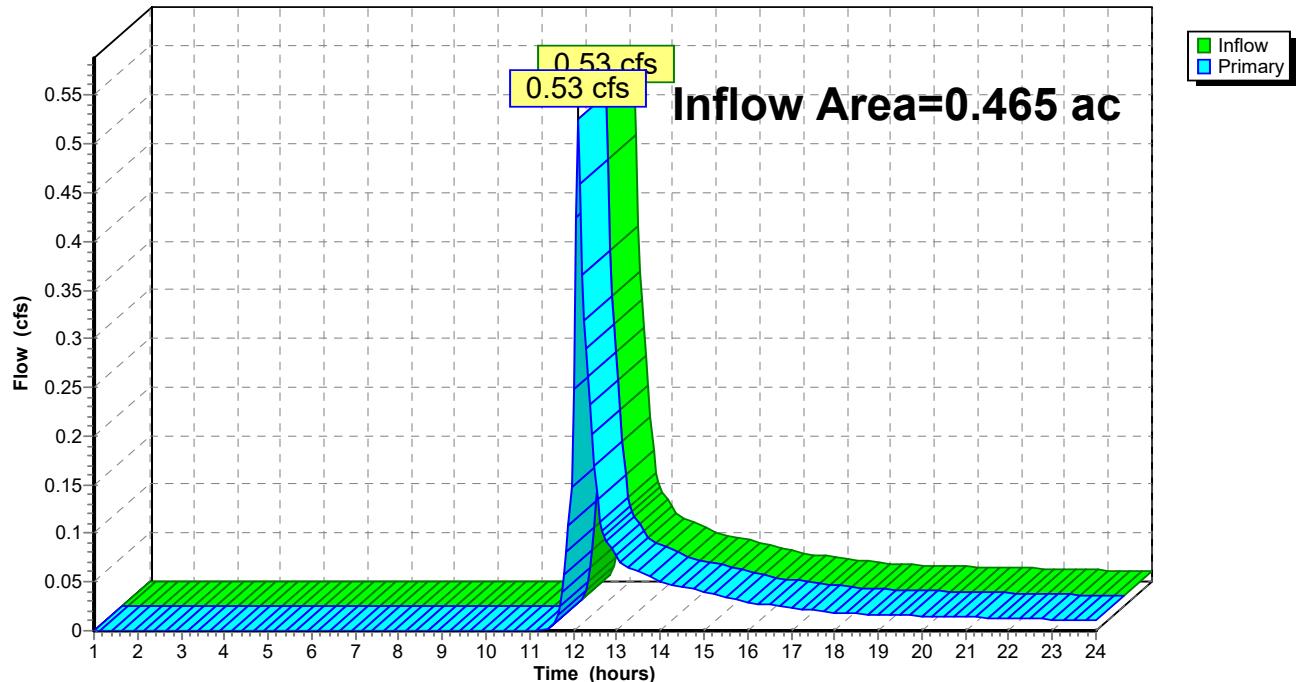
Inflow = 0.53 cfs @ 12.11 hrs, Volume= 0.043 af

Primary = 0.53 cfs @ 12.11 hrs, Volume= 0.043 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link PRE3: POA3

Hydrograph



ROKEH WILTON SITE PRE 1-04-22

Prepared by Rokeh Consulting LLC

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Type III 24-hr 25 year Rainfall=5.57"

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Time span=1.00-24.00 hrs, dt=0.05 hrs, 461 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Flow from all of modeled Runoff Area=0.147 ac 0.00% Impervious Runoff Depth>1.14"
Tc=6.0 min CN=53 Runoff=0.16 cfs 0.014 af

Subcatchment2S: Flow from all of modeled Runoff Area=0.419 ac 0.00% Impervious Runoff Depth>1.34"
Tc=12.0 min CN=56 Runoff=0.47 cfs 0.047 af

Subcatchment3S: Flow from all of modeled Runoff Area=0.465 ac 0.00% Impervious Runoff Depth>1.80"
Tc=6.0 min CN=62 Runoff=0.92 cfs 0.070 af

Link PRE1: POA1 Inflow=0.16 cfs 0.014 af
Primary=0.16 cfs 0.014 af

Link PRE2: POA2 Inflow=0.47 cfs 0.047 af
Primary=0.47 cfs 0.047 af

Link PRE3: POA3 Inflow=0.92 cfs 0.070 af
Primary=0.92 cfs 0.070 af

Total Runoff Area = 1.031 ac Runoff Volume = 0.131 af Average Runoff Depth = 1.52"
100.00% Pervious = 1.031 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: Flow from all of modeled area 1S

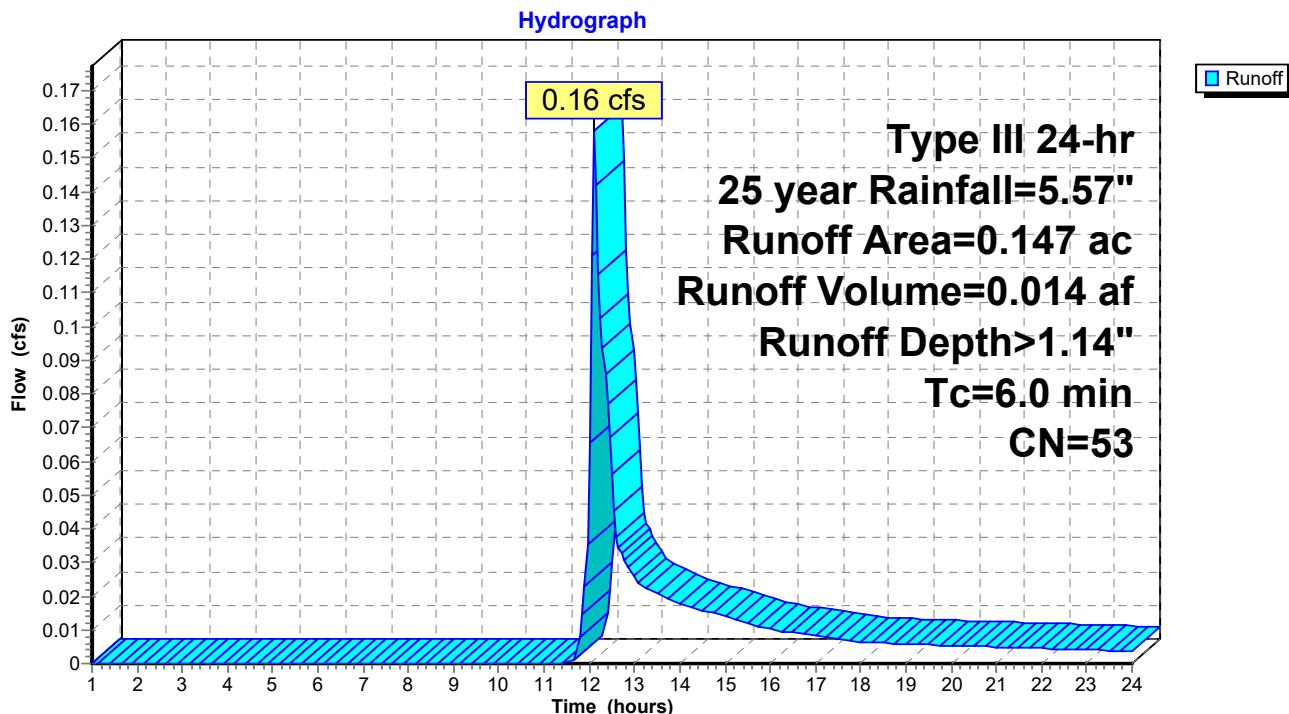
Runoff = 0.16 cfs @ 12.11 hrs, Volume= 0.014 af, Depth> 1.14"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25 year Rainfall=5.57"

Area (ac)	CN	Description
0.048	96	Gravel surface, HSG A
0.028	39	>75% Grass cover, Good, HSG A
0.071	30	Woods, Good, HSG A
0.147	53	Weighted Average
0.147		100.00% Pervious Area

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

Subcatchment 1S: Flow from all of modeled area 1S



Summary for Subcatchment 2S: Flow from all of modeled area 2S

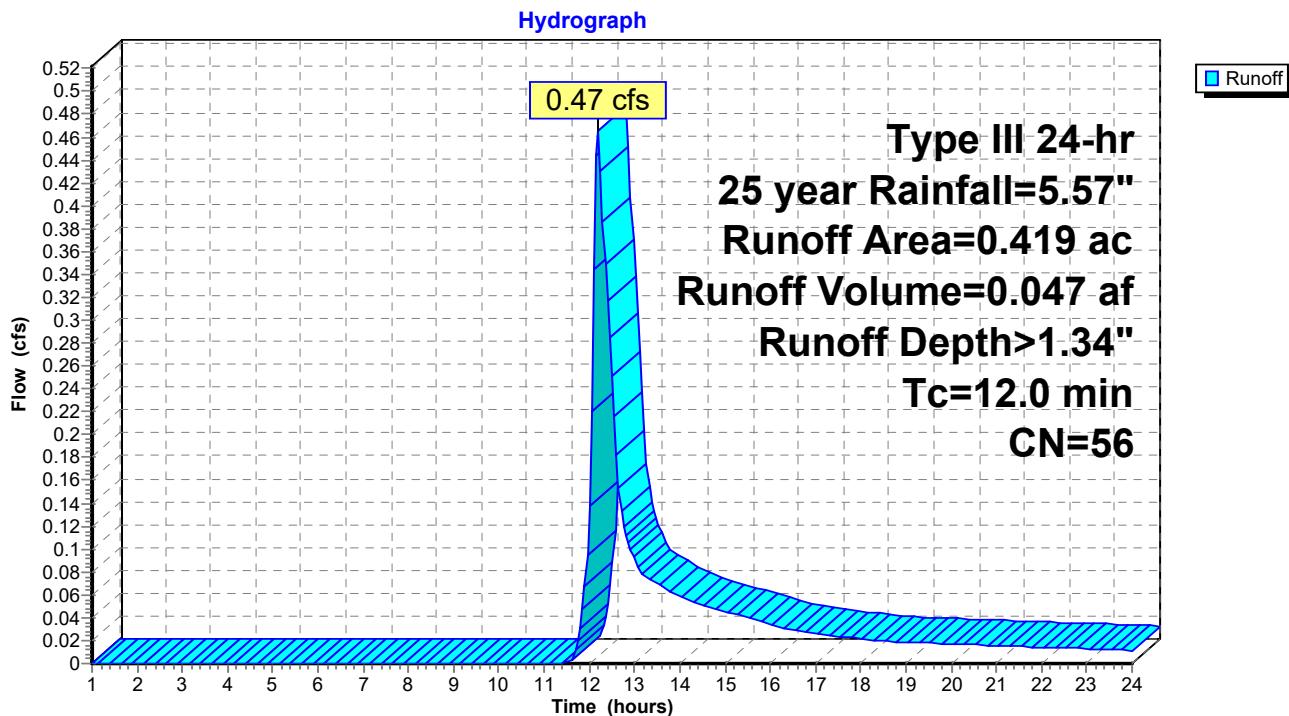
Runoff = 0.47 cfs @ 12.19 hrs, Volume= 0.047 af, Depth> 1.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25 year Rainfall=5.57"

Area (ac)	CN	Description
0.136	96	Gravel surface, HSG A
0.208	39	>75% Grass cover, Good, HSG A
0.075	30	Woods, Good, HSG A
0.419	56	Weighted Average
0.419		100.00% Pervious Area

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

Subcatchment 2S: Flow from all of modeled area 2S



Summary for Subcatchment 3S: Flow from all of modeled area 3S

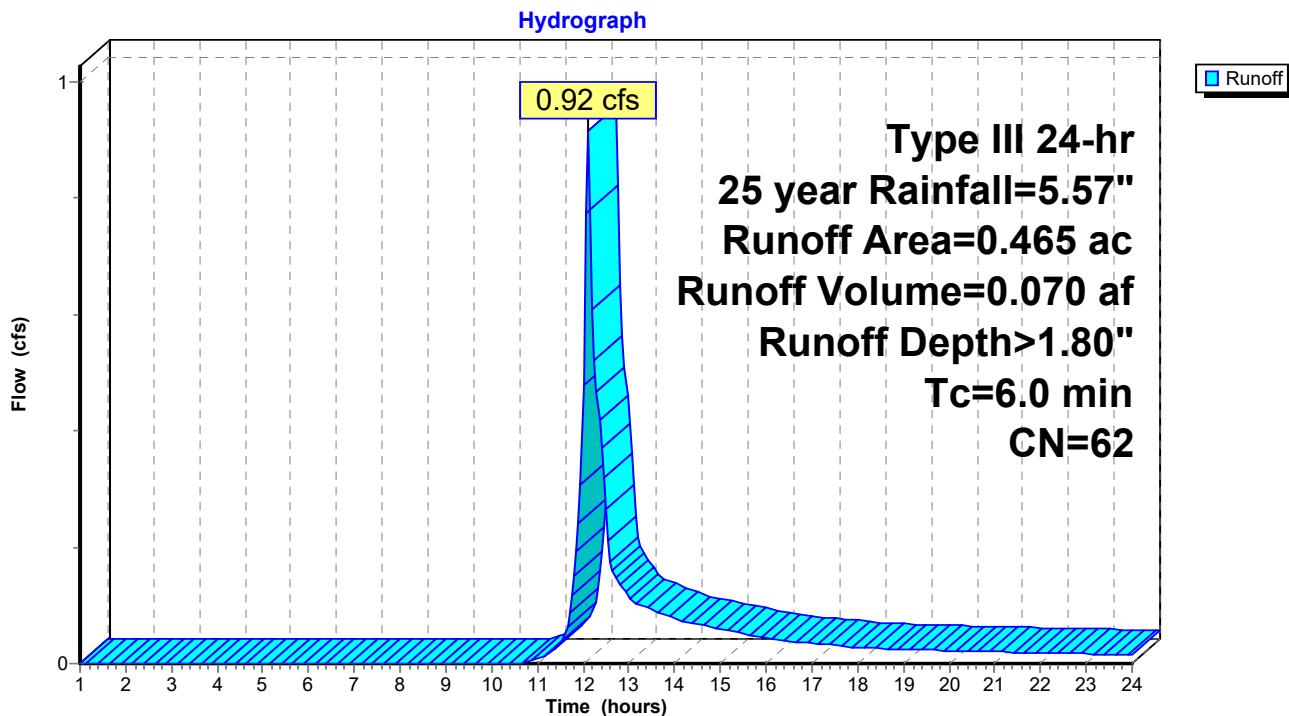
Runoff = 0.92 cfs @ 12.10 hrs, Volume= 0.070 af, Depth> 1.80"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=5.57"

Area (ac)	CN	Description
0.194	96	Gravel surface, HSG A
0.218	39	>75% Grass cover, Good, HSG A
0.053	30	Woods, Good, HSG A
0.465	62	Weighted Average
0.465		100.00% Pervious Area

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

Subcatchment 3S: Flow from all of modeled area 3S



Summary for Link PRE1: POA1

Inflow Area = 0.147 ac, 0.00% Impervious, Inflow Depth > 1.14" for 25 year event

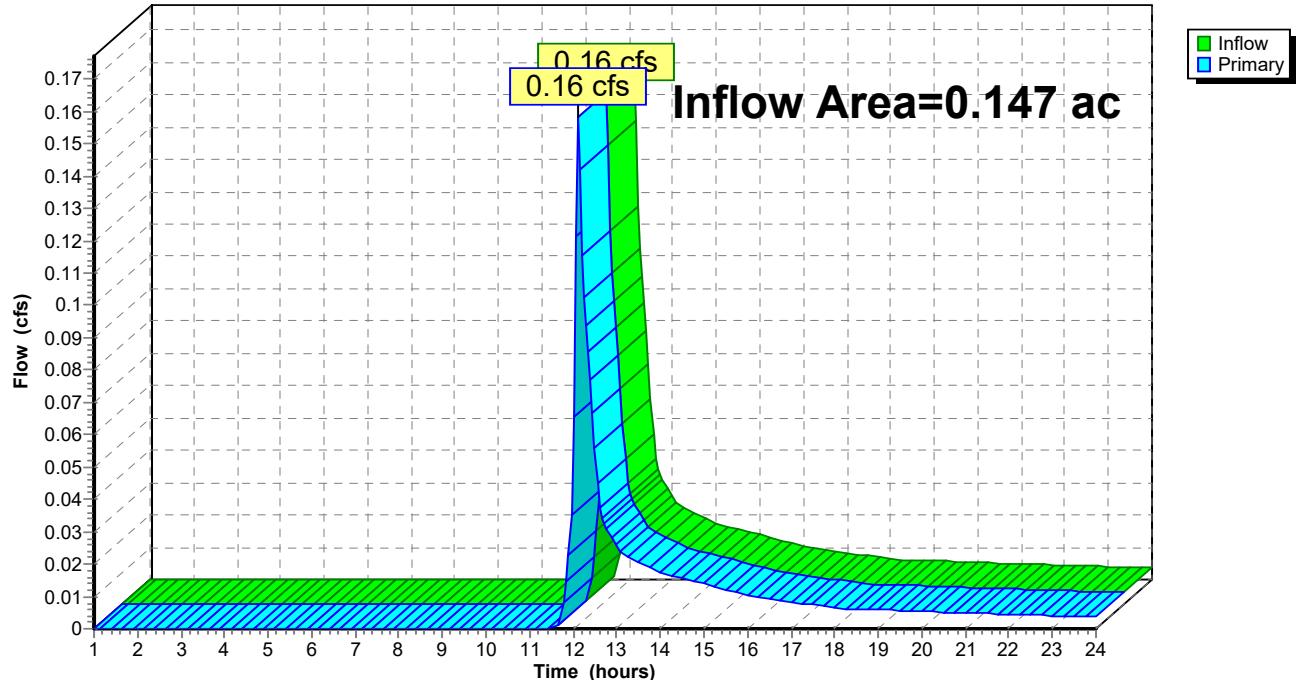
Inflow = 0.16 cfs @ 12.11 hrs, Volume= 0.014 af

Primary = 0.16 cfs @ 12.11 hrs, Volume= 0.014 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link PRE1: POA1

Hydrograph



Summary for Link PRE2: POA2

Inflow Area = 0.419 ac, 0.00% Impervious, Inflow Depth > 1.34" for 25 year event

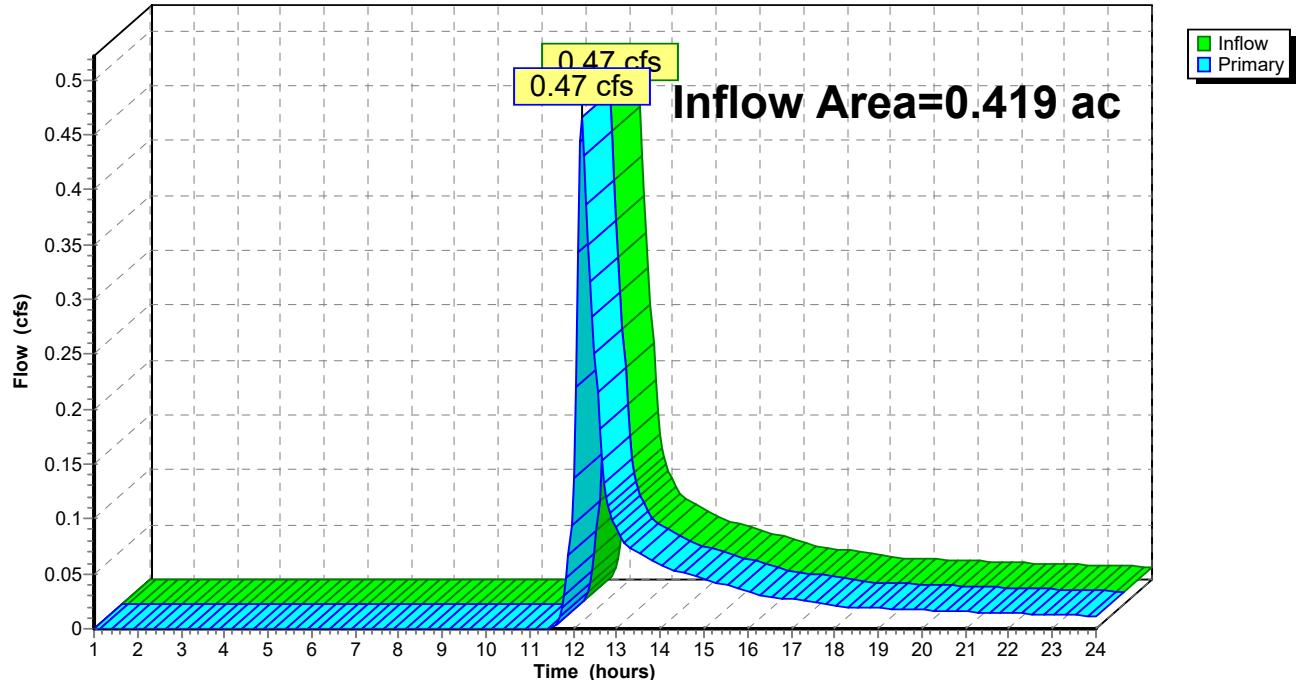
Inflow = 0.47 cfs @ 12.19 hrs, Volume= 0.047 af

Primary = 0.47 cfs @ 12.19 hrs, Volume= 0.047 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link PRE2: POA2

Hydrograph



Summary for Link PRE3: POA3

Inflow Area = 0.465 ac, 0.00% Impervious, Inflow Depth > 1.80" for 25 year event

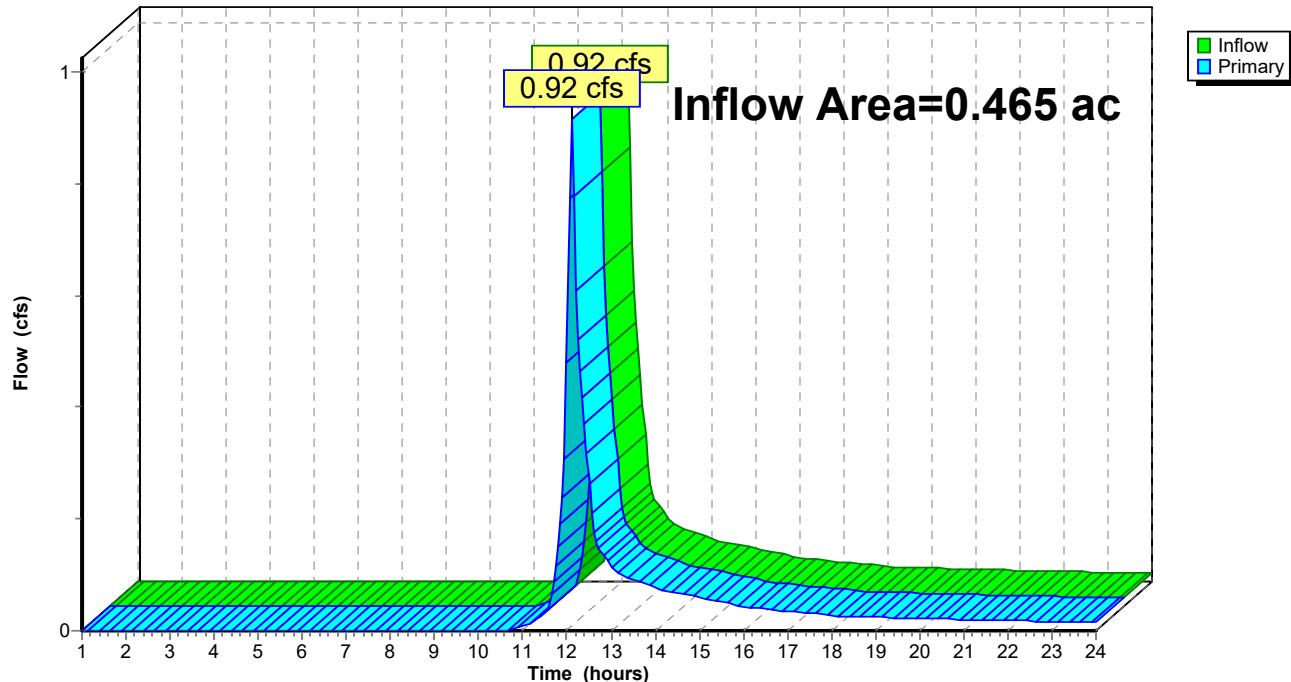
Inflow = 0.92 cfs @ 12.10 hrs, Volume= 0.070 af

Primary = 0.92 cfs @ 12.10 hrs, Volume= 0.070 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link PRE3: POA3

Hydrograph



ROKEH WILTON SITE PRE 1-04-22

Prepared by Rokeh Consulting LLC

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Type III 24-hr 50 year Rainfall=6.63"

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Time span=1.00-24.00 hrs, dt=0.05 hrs, 461 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Flow from all of modeled Runoff Area=0.147 ac 0.00% Impervious Runoff Depth>1.72"
Tc=6.0 min CN=53 Runoff=0.26 cfs 0.021 af

Subcatchment2S: Flow from all of modeled Runoff Area=0.419 ac 0.00% Impervious Runoff Depth>1.98"
Tc=12.0 min CN=56 Runoff=0.73 cfs 0.069 af

Subcatchment3S: Flow from all of modeled Runoff Area=0.465 ac 0.00% Impervious Runoff Depth>2.53"
Tc=6.0 min CN=62 Runoff=1.32 cfs 0.098 af

Link PRE1: POA1 Inflow=0.26 cfs 0.021 af
Primary=0.26 cfs 0.021 af

Link PRE2: POA2 Inflow=0.73 cfs 0.069 af
Primary=0.73 cfs 0.069 af

Link PRE3: POA3 Inflow=1.32 cfs 0.098 af
Primary=1.32 cfs 0.098 af

Total Runoff Area = 1.031 ac Runoff Volume = 0.188 af Average Runoff Depth = 2.19"
100.00% Pervious = 1.031 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: Flow from all of modeled area 1S

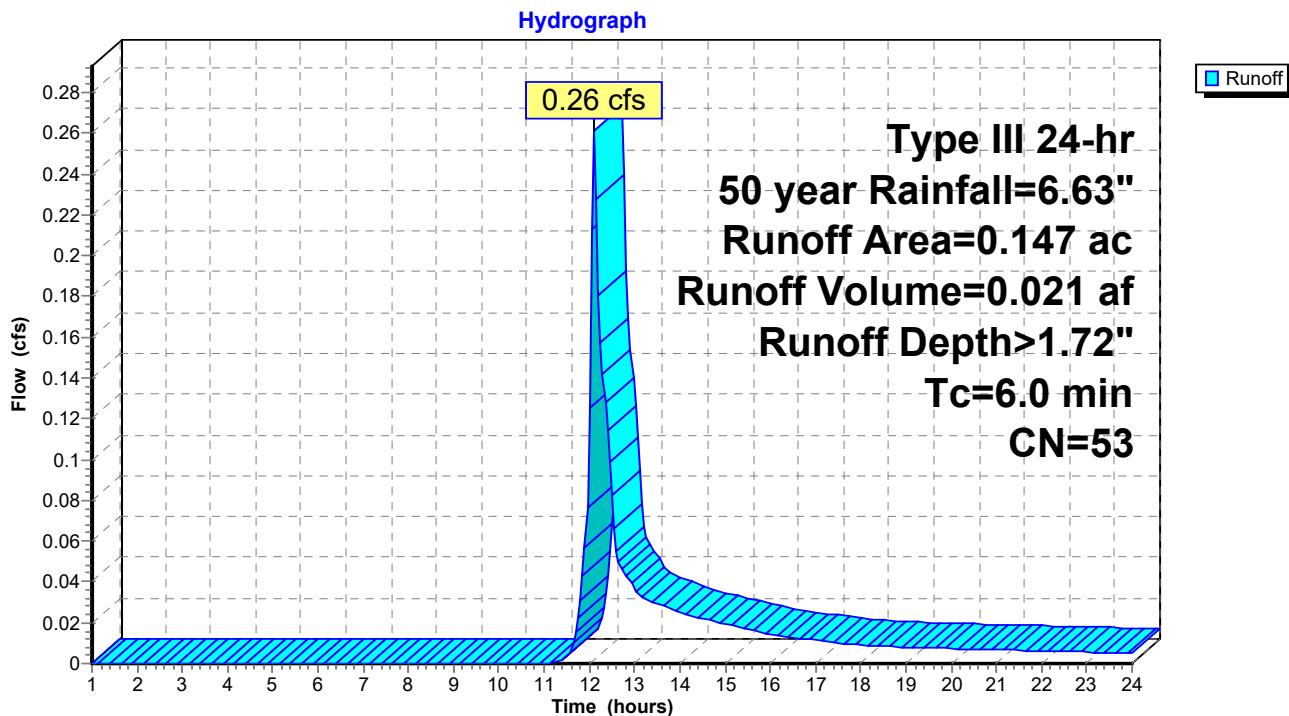
Runoff = 0.26 cfs @ 12.10 hrs, Volume= 0.021 af, Depth> 1.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 50 year Rainfall=6.63"

Area (ac)	CN	Description
0.048	96	Gravel surface, HSG A
0.028	39	>75% Grass cover, Good, HSG A
0.071	30	Woods, Good, HSG A
0.147	53	Weighted Average
0.147		100.00% Pervious Area

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

Subcatchment 1S: Flow from all of modeled area 1S



Summary for Subcatchment 2S: Flow from all of modeled area 2S

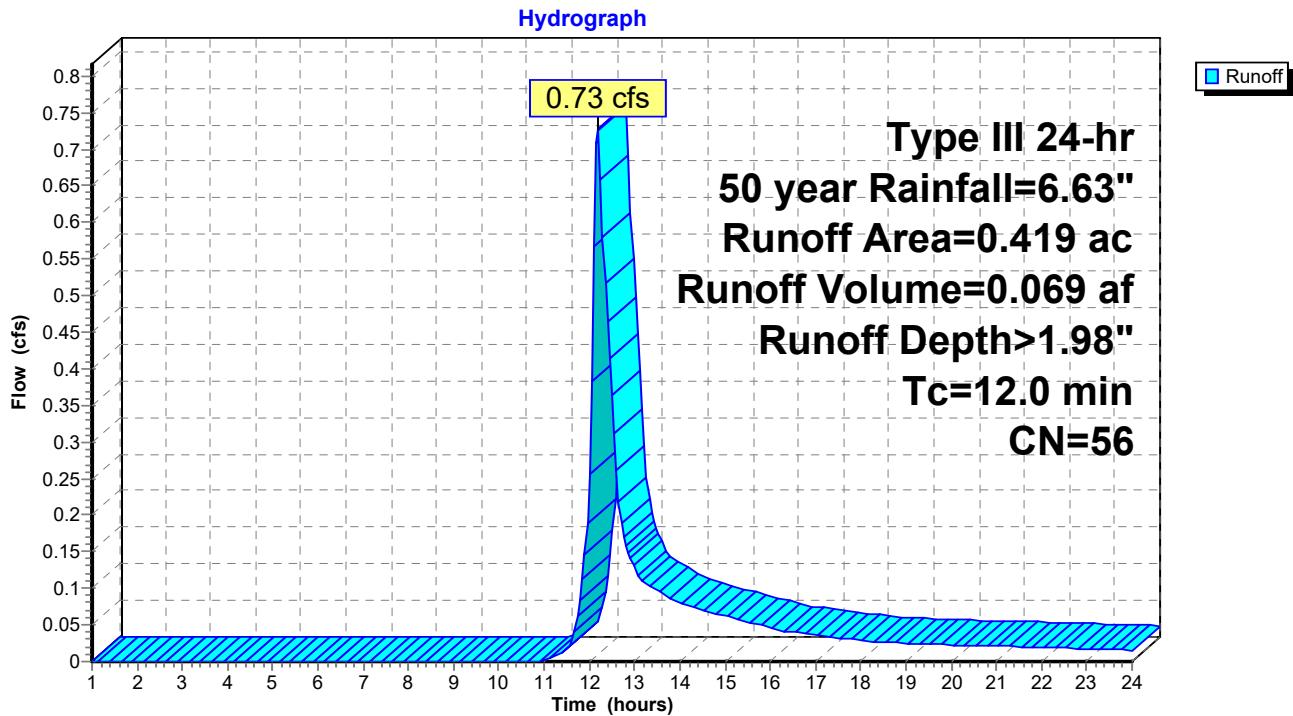
Runoff = 0.73 cfs @ 12.18 hrs, Volume= 0.069 af, Depth> 1.98"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 50 year Rainfall=6.63"

Area (ac)	CN	Description
0.136	96	Gravel surface, HSG A
0.208	39	>75% Grass cover, Good, HSG A
0.075	30	Woods, Good, HSG A
0.419	56	Weighted Average
0.419		100.00% Pervious Area

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

Subcatchment 2S: Flow from all of modeled area 2S



Summary for Subcatchment 3S: Flow from all of modeled area 3S

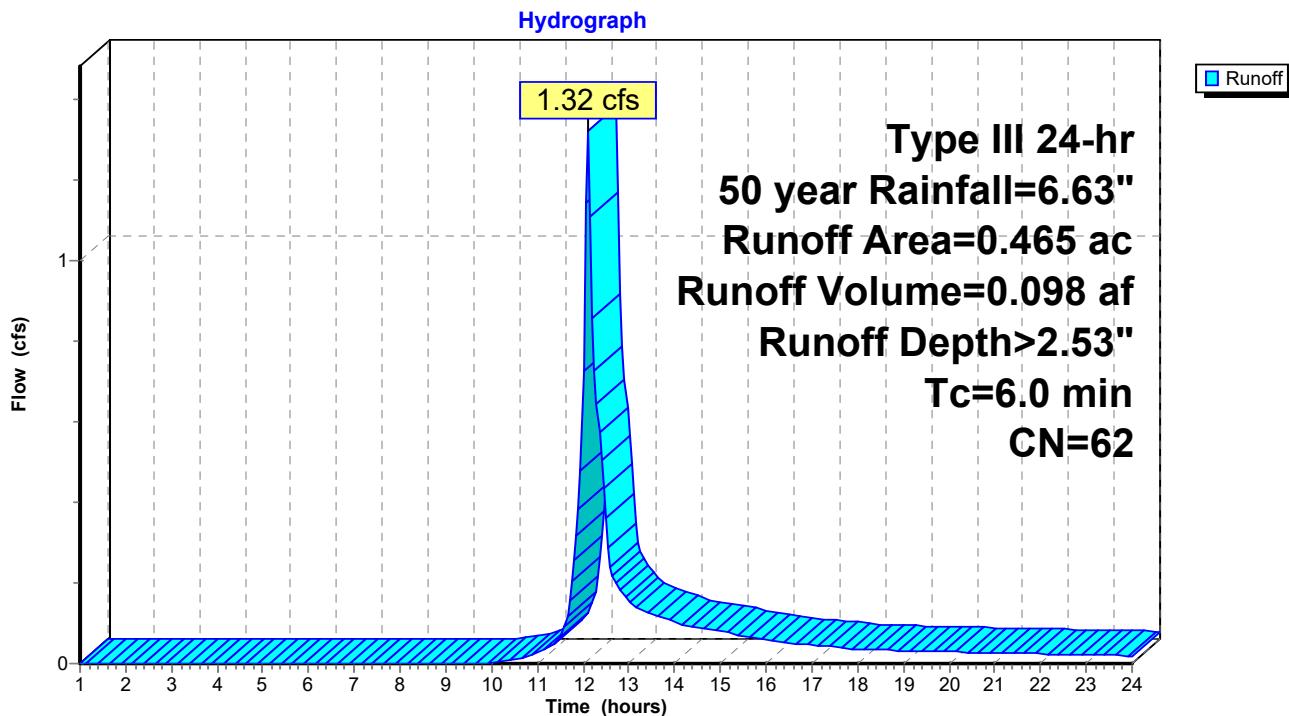
Runoff = 1.32 cfs @ 12.10 hrs, Volume= 0.098 af, Depth> 2.53"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 year Rainfall=6.63"

Area (ac)	CN	Description
0.194	96	Gravel surface, HSG A
0.218	39	>75% Grass cover, Good, HSG A
0.053	30	Woods, Good, HSG A
0.465	62	Weighted Average
0.465		100.00% Pervious Area

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

Subcatchment 3S: Flow from all of modeled area 3S



Summary for Link PRE1: POA1

Inflow Area = 0.147 ac, 0.00% Impervious, Inflow Depth > 1.72" for 50 year event

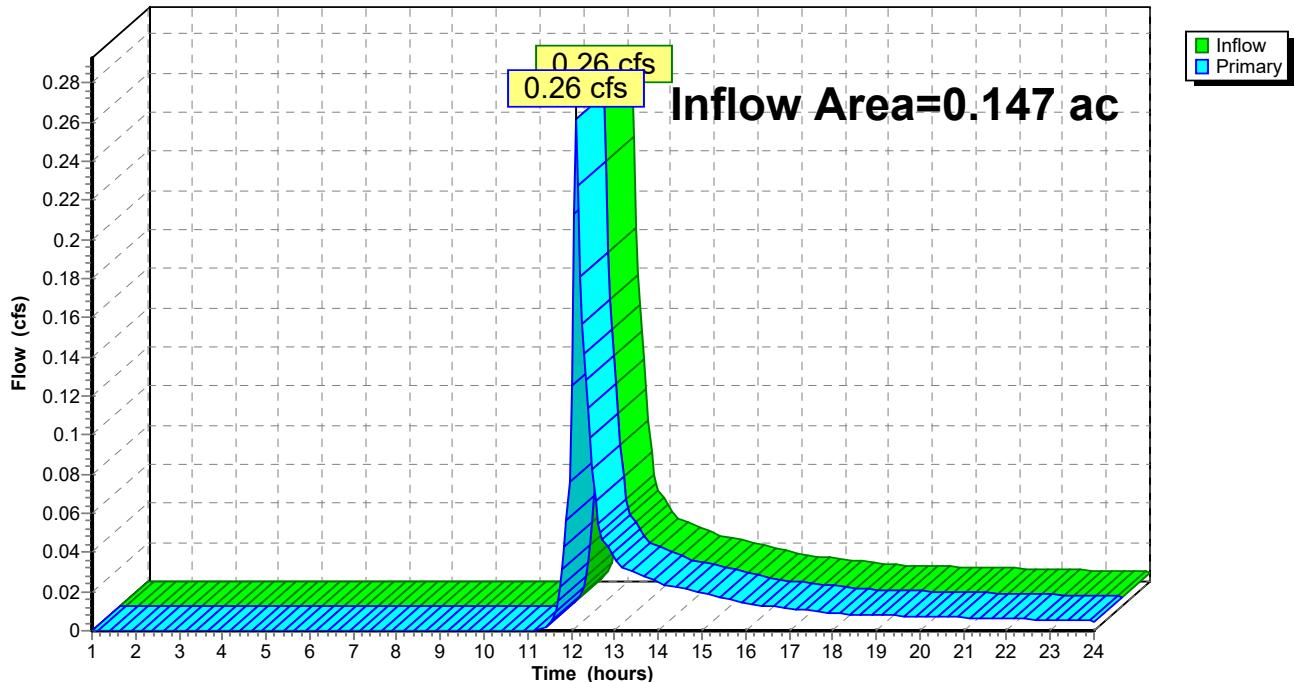
Inflow = 0.26 cfs @ 12.10 hrs, Volume= 0.021 af

Primary = 0.26 cfs @ 12.10 hrs, Volume= 0.021 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link PRE1: POA1

Hydrograph



Summary for Link PRE2: POA2

Inflow Area = 0.419 ac, 0.00% Impervious, Inflow Depth > 1.98" for 50 year event

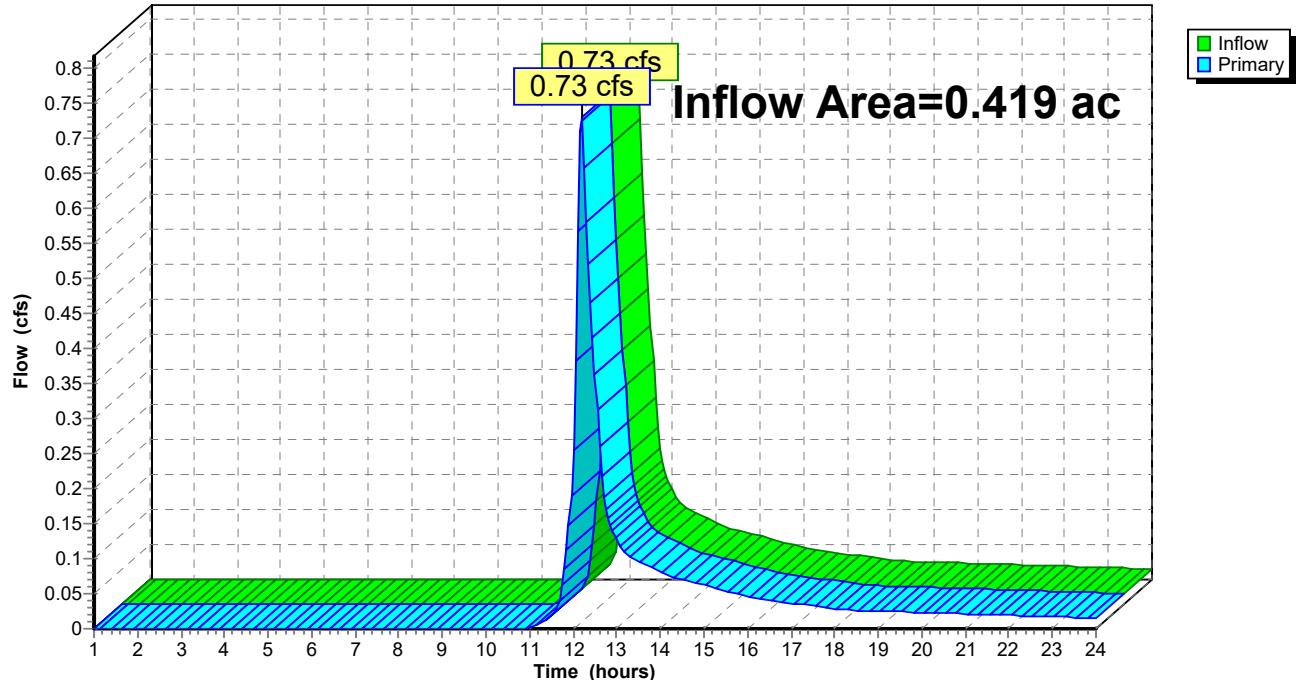
Inflow = 0.73 cfs @ 12.18 hrs, Volume= 0.069 af

Primary = 0.73 cfs @ 12.18 hrs, Volume= 0.069 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link PRE2: POA2

Hydrograph



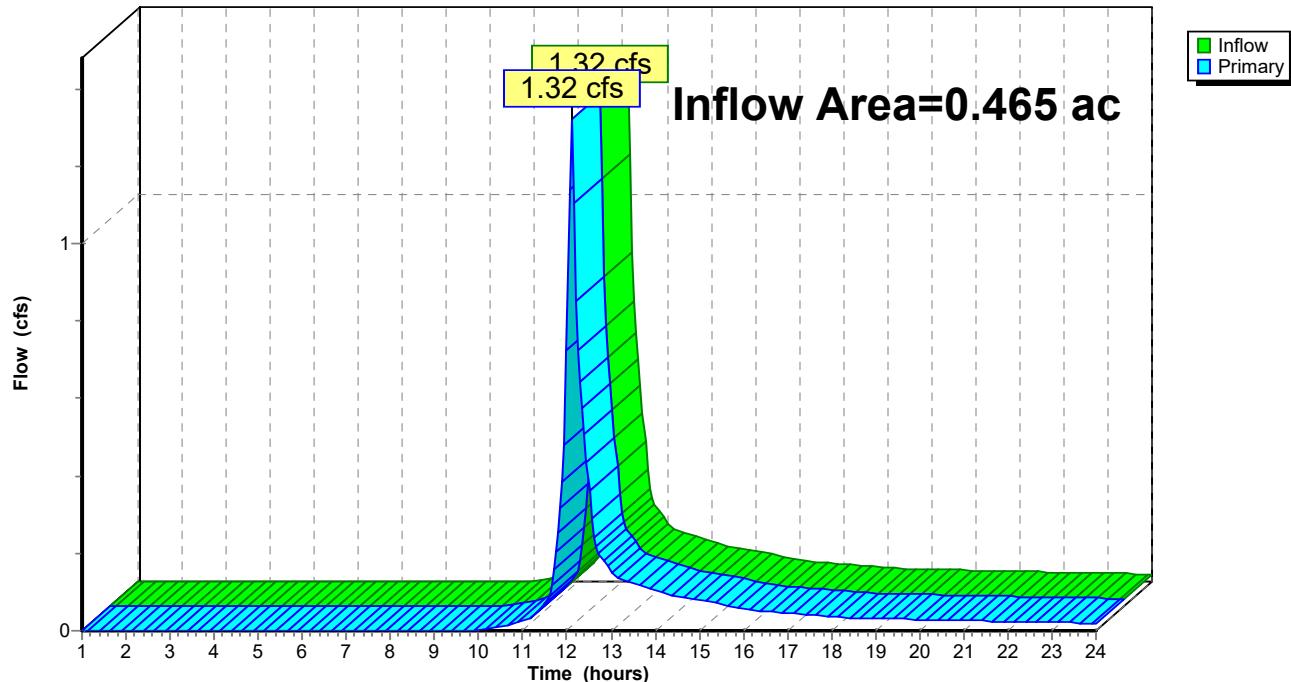
Summary for Link PRE3: POA3

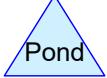
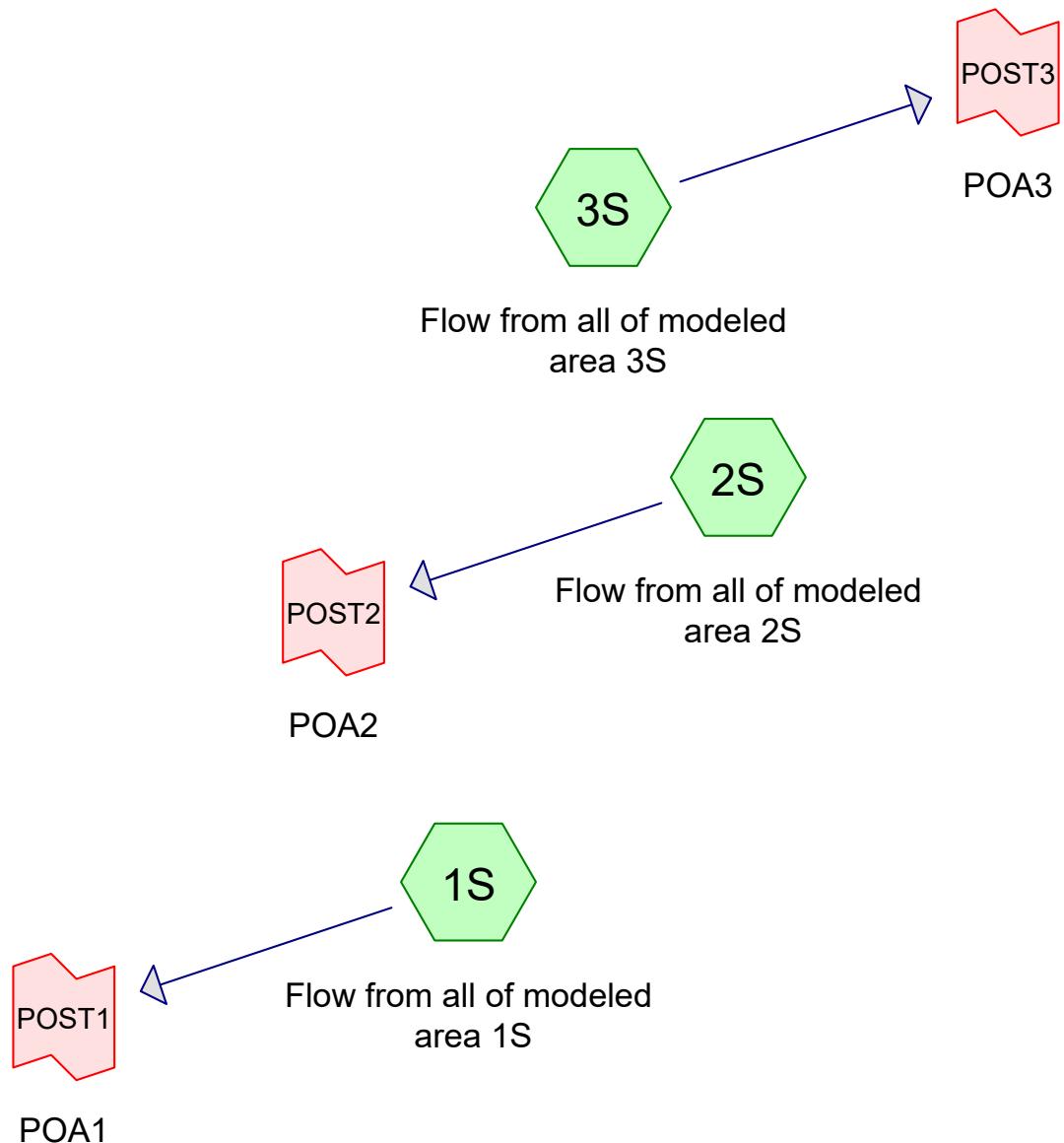
Inflow Area = 0.465 ac, 0.00% Impervious, Inflow Depth > 2.53" for 50 year event
 Inflow = 1.32 cfs @ 12.10 hrs, Volume= 0.098 af
 Primary = 1.32 cfs @ 12.10 hrs, Volume= 0.098 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link PRE3: POA3

Hydrograph





Routing Diagram for ROKEH WILTON SITE POST 1-04-22
 Prepared by Rokeh Consulting LLC, Printed 1/7/2022
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ROKEH WILTON SITE POST 1-04-22

Prepared by Rokeh Consulting LLC

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.535	39	>75% Grass cover, Good, HSG A (1S, 2S, 3S)
0.311	96	Gravel surface, HSG A (1S, 2S, 3S)
0.030	98	Roofs, HSG A (3S)
0.155	30	Woods, Good, HSG A (1S, 2S, 3S)
1.031	57	TOTAL AREA

ROKEH WILTON SITE POST 1-04-22

Prepared by Rokeh Consulting LLC

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
1.031	HSG A	1S, 2S, 3S
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
1.031		TOTAL AREA

ROKEH WILTON SITE POST 1-04-22

Prepared by Rokeh Consulting LLC

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Type III 24-hr 2 Year Rainfall=2.98"

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Time span=1.00-24.00 hrs, dt=0.05 hrs, 461 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Flow from all of modeled Runoff Area=0.147 ac 0.00% Impervious Runoff Depth>0.19"
Tc=6.0 min CN=55 Runoff=0.01 cfs 0.002 af

Subcatchment2S: Flow from all of modeled Runoff Area=0.419 ac 0.00% Impervious Runoff Depth>0.21"
Tc=12.0 min CN=56 Runoff=0.03 cfs 0.007 af

Subcatchment3S: Flow from all of modeled Runoff Area=0.465 ac 6.45% Impervious Runoff Depth>0.24"
Tc=6.0 min CN=57 Runoff=0.05 cfs 0.009 af

Link POST1: POA1 Inflow=0.01 cfs 0.002 af
Primary=0.01 cfs 0.002 af

Link POST2: POA2 Inflow=0.03 cfs 0.007 af
Primary=0.03 cfs 0.007 af

Link POST3: POA3 Inflow=0.05 cfs 0.009 af
Primary=0.05 cfs 0.009 af

Total Runoff Area = 1.031 ac Runoff Volume = 0.019 af Average Runoff Depth = 0.22"
97.09% Pervious = 1.001 ac 2.91% Impervious = 0.030 ac

Summary for Subcatchment 1S: Flow from all of modeled area 1S

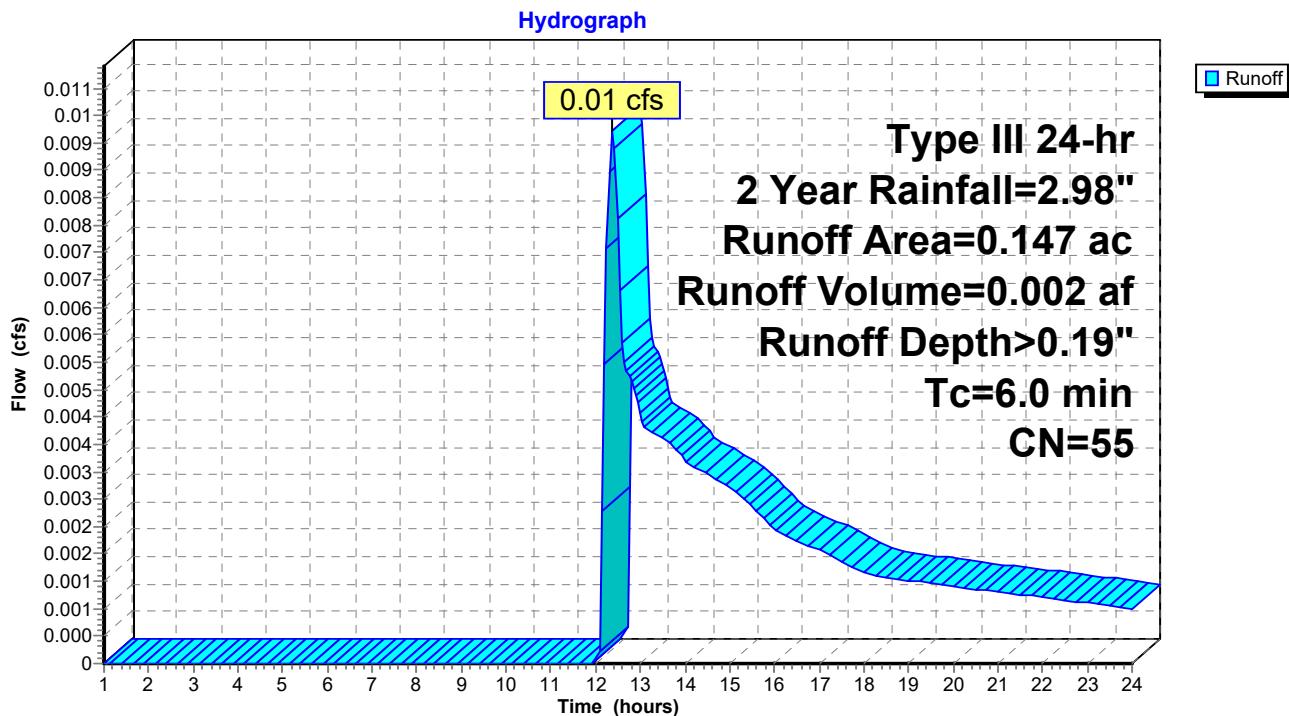
Runoff = 0.01 cfs @ 12.38 hrs, Volume= 0.002 af, Depth> 0.19"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=2.98"

Area (ac)	CN	Description
0.048	96	Gravel surface, HSG A
0.059	39	>75% Grass cover, Good, HSG A
0.040	30	Woods, Good, HSG A
0.147	55	Weighted Average
0.147		100.00% Pervious Area

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

Subcatchment 1S: Flow from all of modeled area 1S



Summary for Subcatchment 2S: Flow from all of modeled area 2S

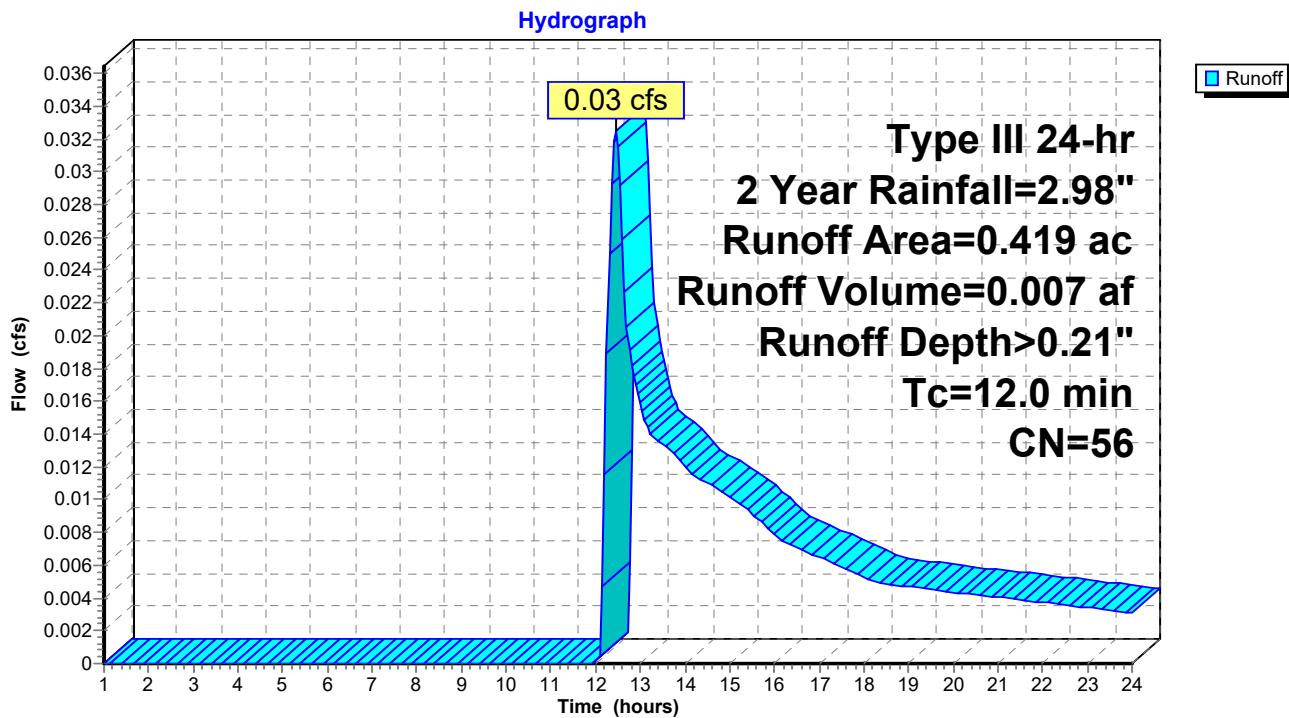
Runoff = 0.03 cfs @ 12.45 hrs, Volume= 0.007 af, Depth> 0.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2 Year Rainfall=2.98"

Area (ac)	CN	Description
0.136	96	Gravel surface, HSG A
0.221	39	>75% Grass cover, Good, HSG A
0.062	30	Woods, Good, HSG A
0.419	56	Weighted Average
0.419		100.00% Pervious Area

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

Subcatchment 2S: Flow from all of modeled area 2S



Summary for Subcatchment 3S: Flow from all of modeled area 3S

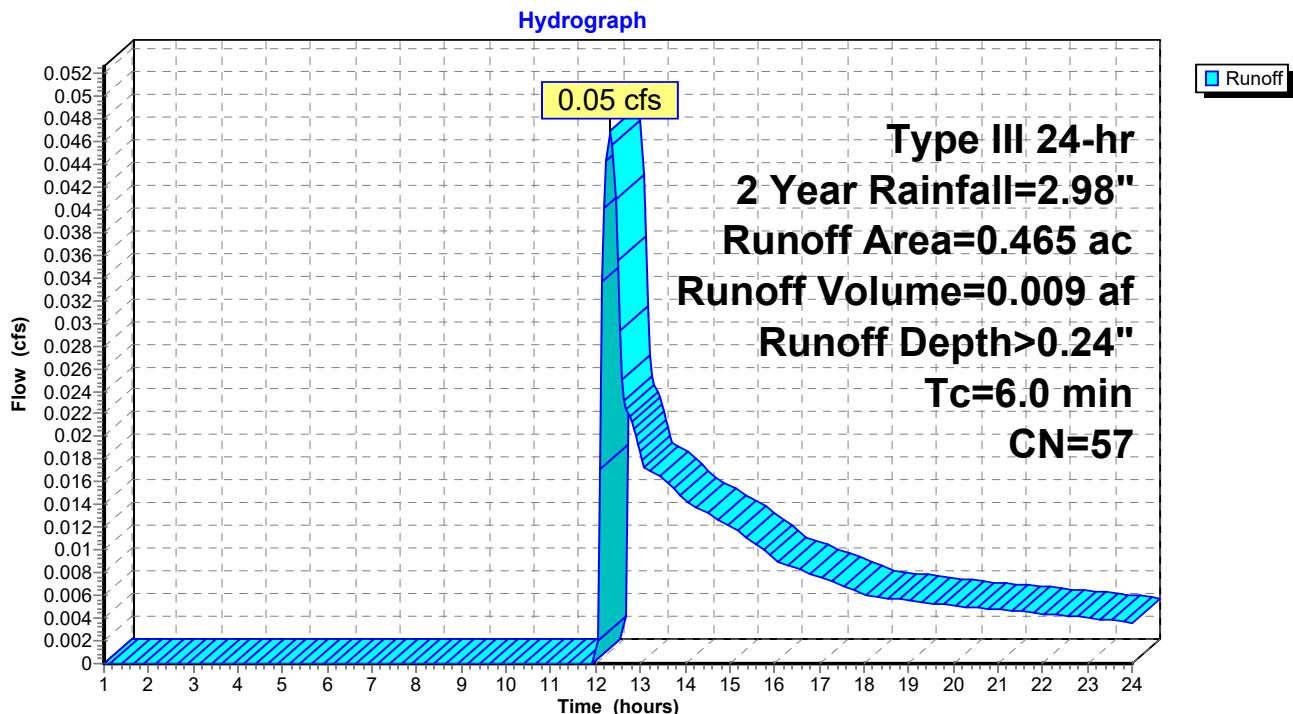
Runoff = 0.05 cfs @ 12.33 hrs, Volume= 0.009 af, Depth> 0.24"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2 Year Rainfall=2.98"

Area (ac)	CN	Description
0.030	98	Roofs, HSG A
0.127	96	Gravel surface, HSG A
0.255	39	>75% Grass cover, Good, HSG A
0.053	30	Woods, Good, HSG A
0.465	57	Weighted Average
0.435		93.55% Pervious Area
0.030		6.45% Impervious Area

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

Subcatchment 3S: Flow from all of modeled area 3S



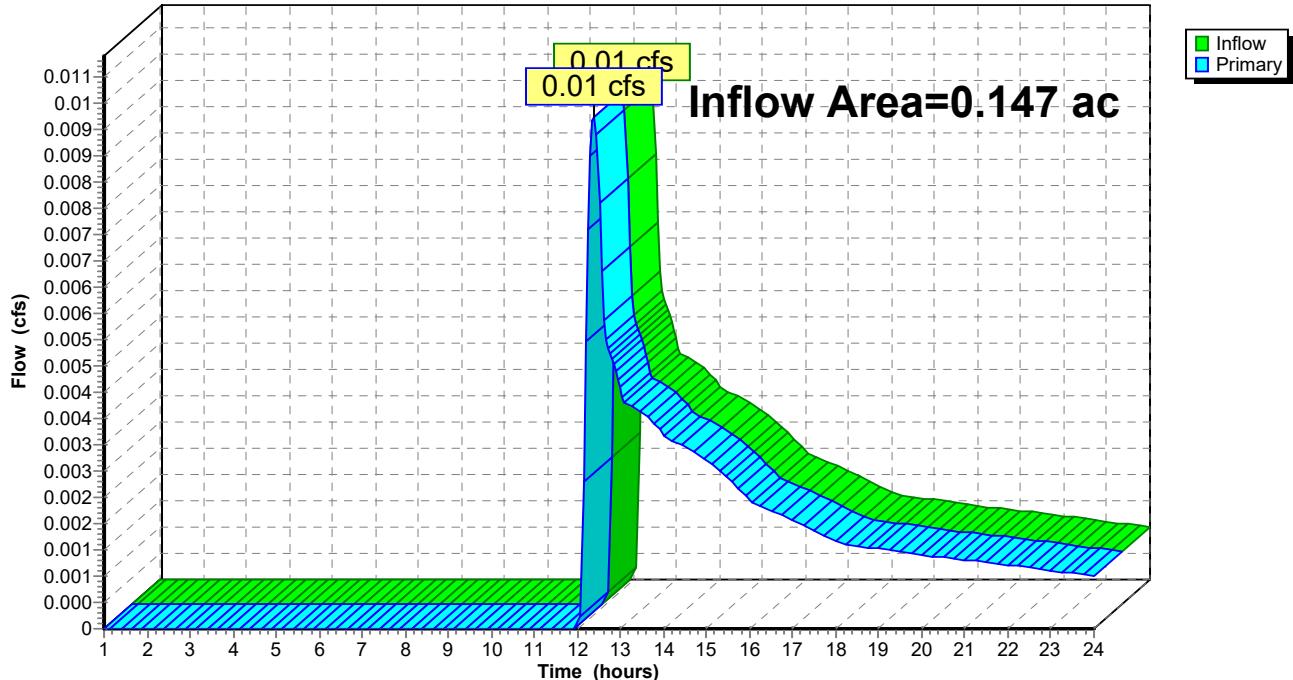
Summary for Link POST1: POA1

Inflow Area = 0.147 ac, 0.00% Impervious, Inflow Depth > 0.19" for 2 Year event
 Inflow = 0.01 cfs @ 12.38 hrs, Volume= 0.002 af
 Primary = 0.01 cfs @ 12.38 hrs, Volume= 0.002 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link POST1: POA1

Hydrograph



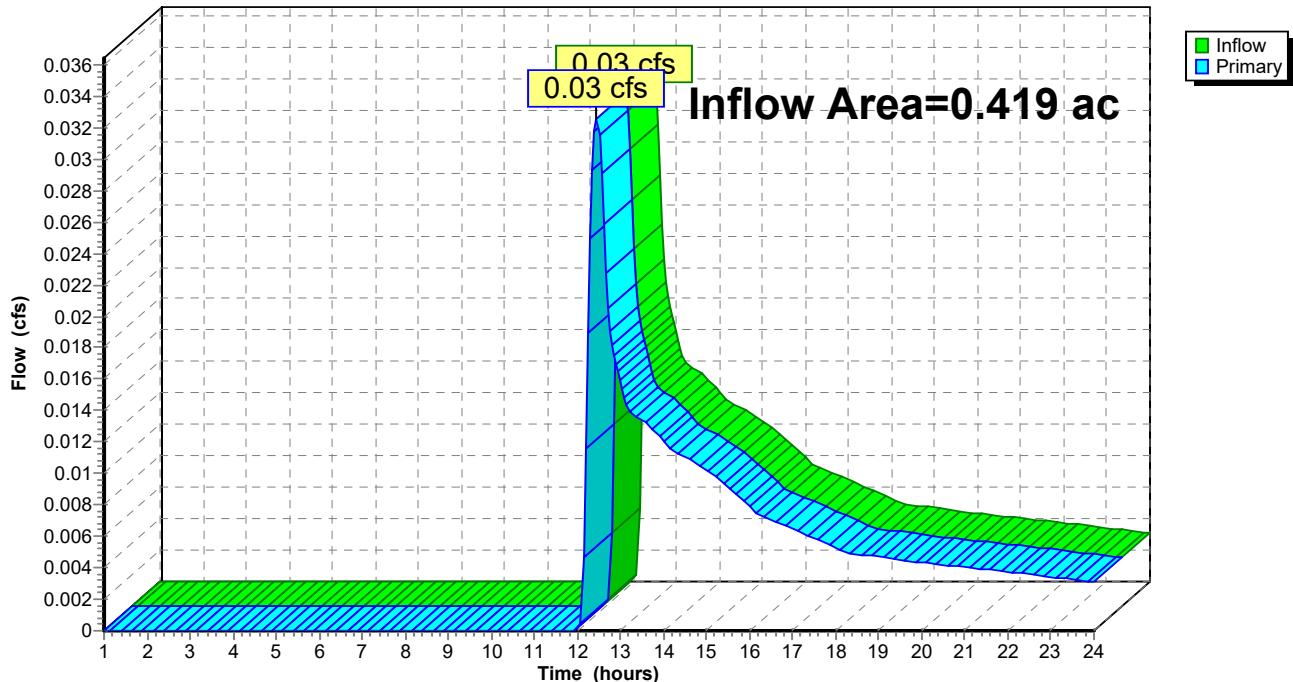
Summary for Link POST2: POA2

Inflow Area = 0.419 ac, 0.00% Impervious, Inflow Depth > 0.21" for 2 Year event
 Inflow = 0.03 cfs @ 12.45 hrs, Volume= 0.007 af
 Primary = 0.03 cfs @ 12.45 hrs, Volume= 0.007 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link POST2: POA2

Hydrograph



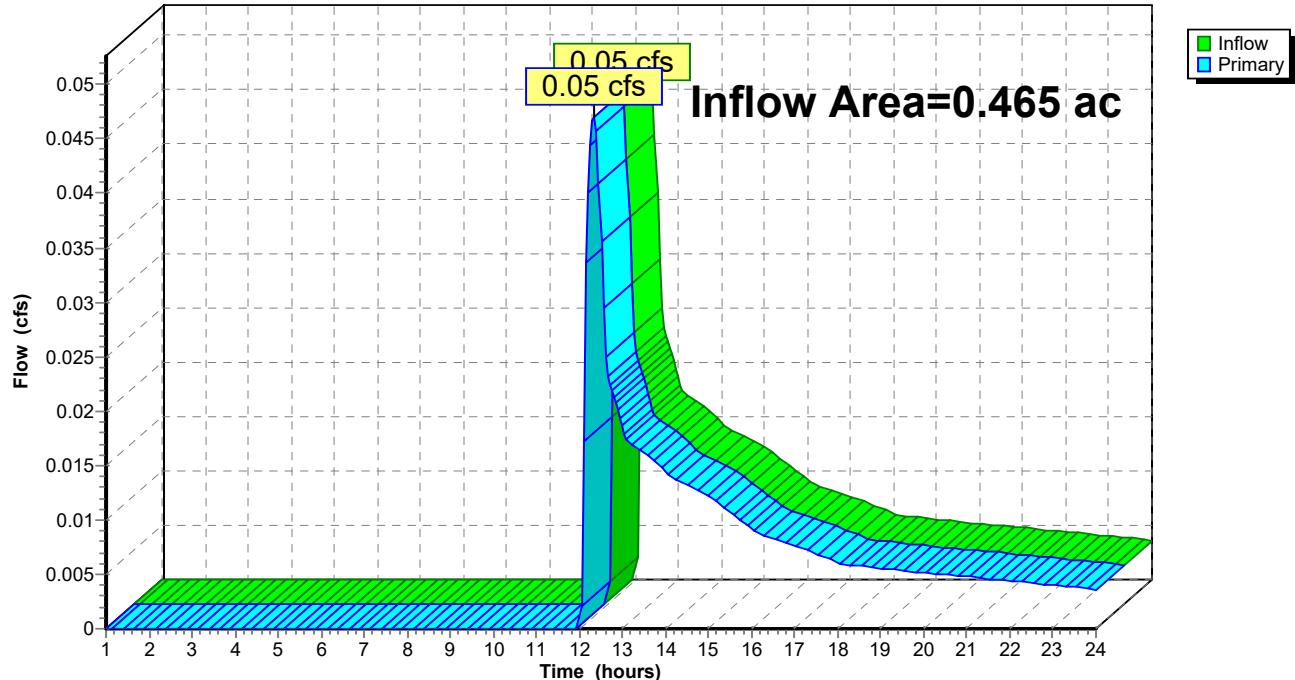
Summary for Link POST3: POA3

Inflow Area = 0.465 ac, 6.45% Impervious, Inflow Depth > 0.24" for 2 Year event
 Inflow = 0.05 cfs @ 12.33 hrs, Volume= 0.009 af
 Primary = 0.05 cfs @ 12.33 hrs, Volume= 0.009 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link POST3: POA3

Hydrograph



ROKEH WILTON SITE POST 1-04-22

Prepared by Rokeh Consulting LLC

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Type III 24-hr 10 year Rainfall=4.44"

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Time span=1.00-24.00 hrs, dt=0.05 hrs, 461 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Flow from all of modeled Runoff Area=0.147 ac 0.00% Impervious Runoff Depth>0.71"
Tc=6.0 min CN=55 Runoff=0.09 cfs 0.009 af

Subcatchment2S: Flow from all of modeled Runoff Area=0.419 ac 0.00% Impervious Runoff Depth>0.76"
Tc=12.0 min CN=56 Runoff=0.23 cfs 0.027 af

Subcatchment3S: Flow from all of modeled Runoff Area=0.465 ac 6.45% Impervious Runoff Depth>0.82"
Tc=6.0 min CN=57 Runoff=0.34 cfs 0.032 af

Link POST1: POA1 Inflow=0.09 cfs 0.009 af
Primary=0.09 cfs 0.009 af

Link POST2: POA2 Inflow=0.23 cfs 0.027 af
Primary=0.23 cfs 0.027 af

Link POST3: POA3 Inflow=0.34 cfs 0.032 af
Primary=0.34 cfs 0.032 af

Total Runoff Area = 1.031 ac Runoff Volume = 0.067 af Average Runoff Depth = 0.78"
97.09% Pervious = 1.001 ac 2.91% Impervious = 0.030 ac

Summary for Subcatchment 1S: Flow from all of modeled area 1S

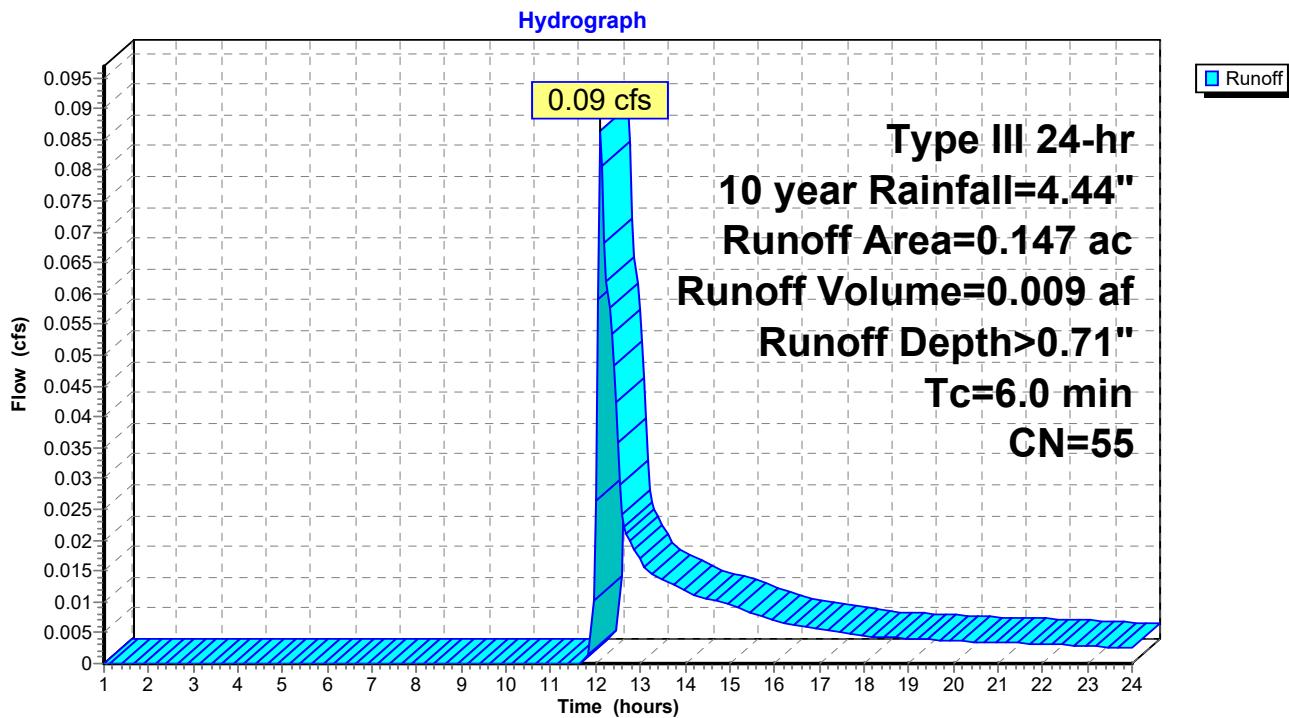
Runoff = 0.09 cfs @ 12.12 hrs, Volume= 0.009 af, Depth> 0.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10 year Rainfall=4.44"

Area (ac)	CN	Description
0.048	96	Gravel surface, HSG A
0.059	39	>75% Grass cover, Good, HSG A
0.040	30	Woods, Good, HSG A
0.147	55	Weighted Average
0.147		100.00% Pervious Area

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

Subcatchment 1S: Flow from all of modeled area 1S



Summary for Subcatchment 2S: Flow from all of modeled area 2S

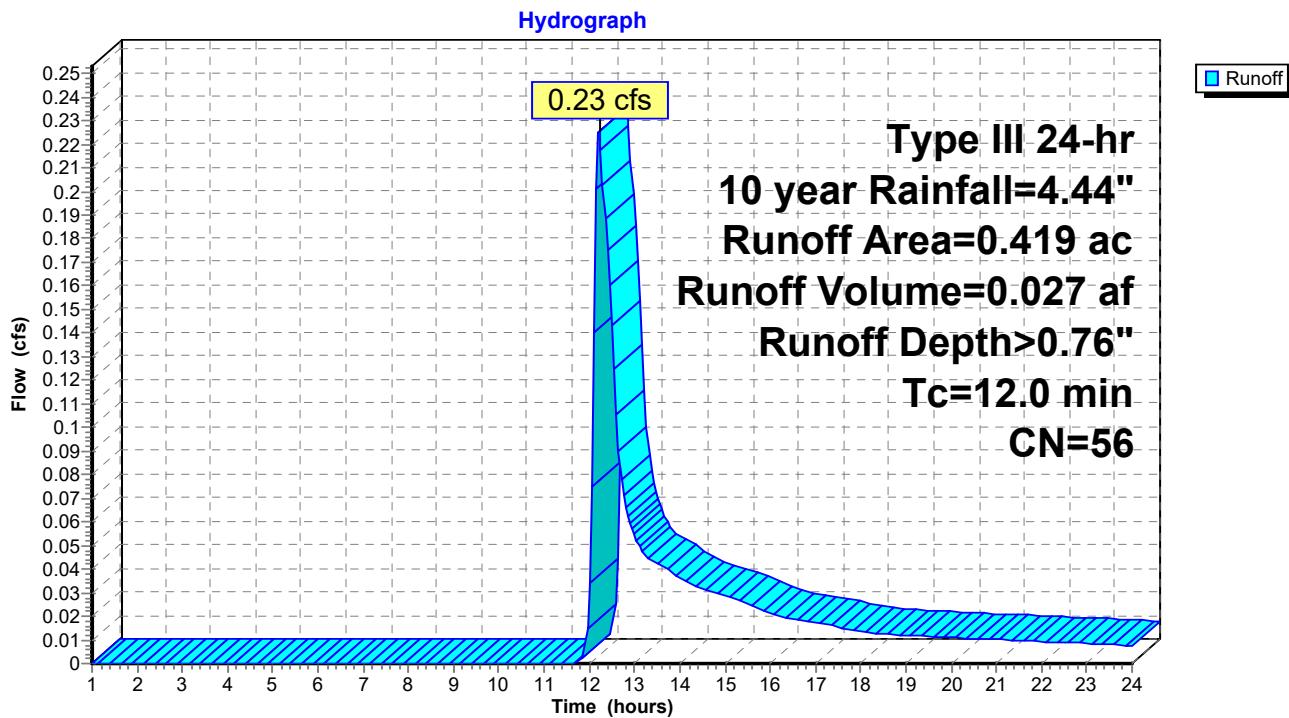
Runoff = 0.23 cfs @ 12.21 hrs, Volume= 0.027 af, Depth> 0.76"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10 year Rainfall=4.44"

Area (ac)	CN	Description
0.136	96	Gravel surface, HSG A
0.221	39	>75% Grass cover, Good, HSG A
0.062	30	Woods, Good, HSG A
0.419	56	Weighted Average
0.419		100.00% Pervious Area

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

Subcatchment 2S: Flow from all of modeled area 2S



Summary for Subcatchment 3S: Flow from all of modeled area 3S

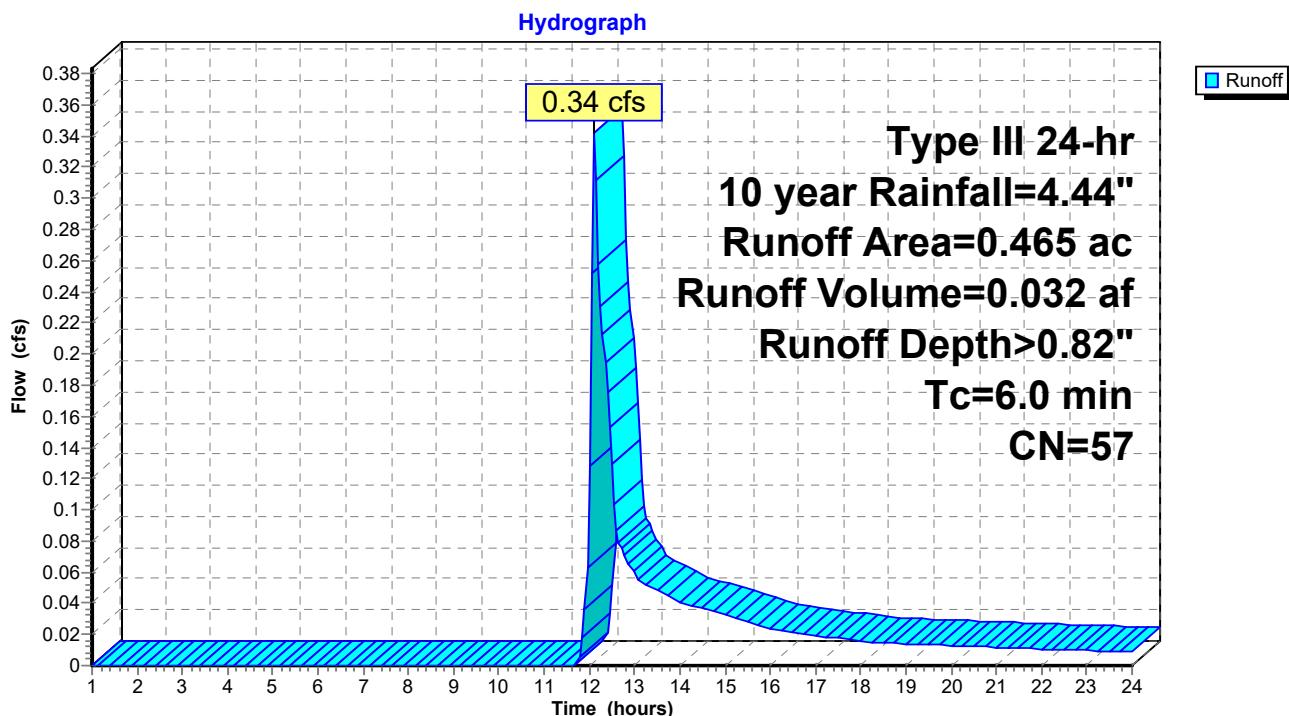
Runoff = 0.34 cfs @ 12.11 hrs, Volume= 0.032 af, Depth> 0.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 year Rainfall=4.44"

Area (ac)	CN	Description
0.030	98	Roofs, HSG A
0.127	96	Gravel surface, HSG A
0.255	39	>75% Grass cover, Good, HSG A
0.053	30	Woods, Good, HSG A
0.465	57	Weighted Average
0.435		93.55% Pervious Area
0.030		6.45% Impervious Area

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

Subcatchment 3S: Flow from all of modeled area 3S



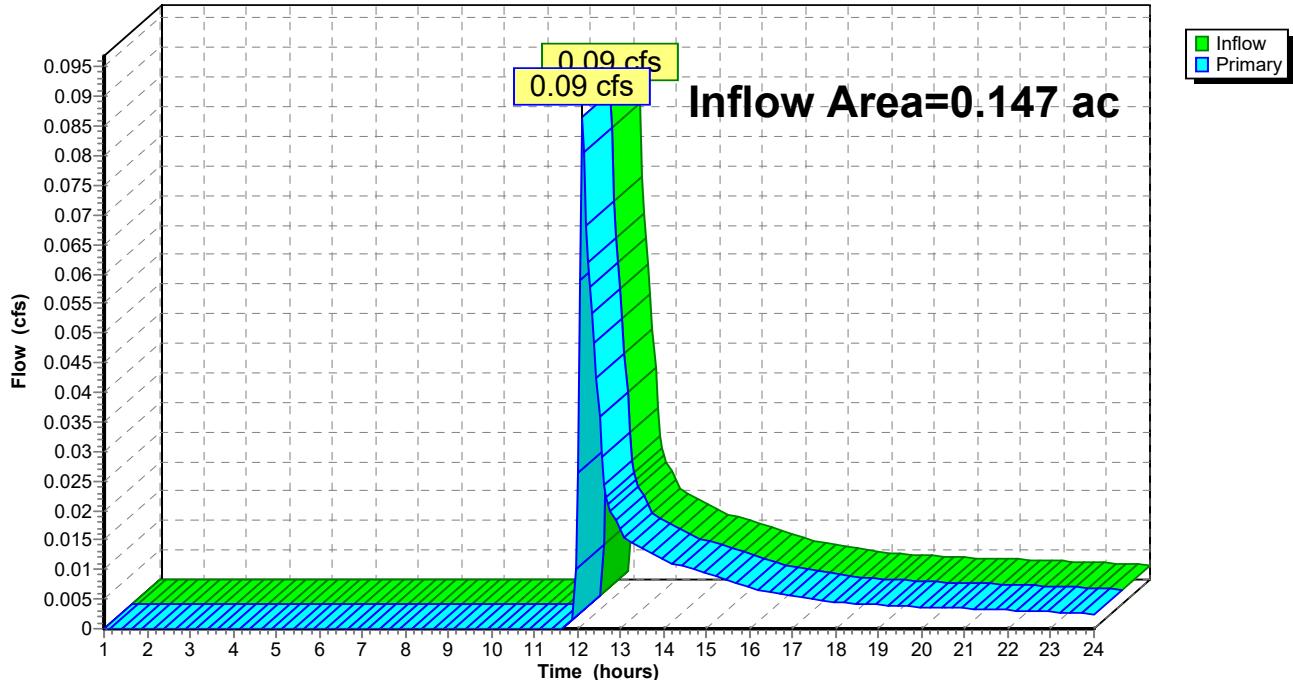
Summary for Link POST1: POA1

Inflow Area = 0.147 ac, 0.00% Impervious, Inflow Depth > 0.71" for 10 year event
 Inflow = 0.09 cfs @ 12.12 hrs, Volume= 0.009 af
 Primary = 0.09 cfs @ 12.12 hrs, Volume= 0.009 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link POST1: POA1

Hydrograph



Summary for Link POST2: POA2

Inflow Area = 0.419 ac, 0.00% Impervious, Inflow Depth > 0.76" for 10 year event

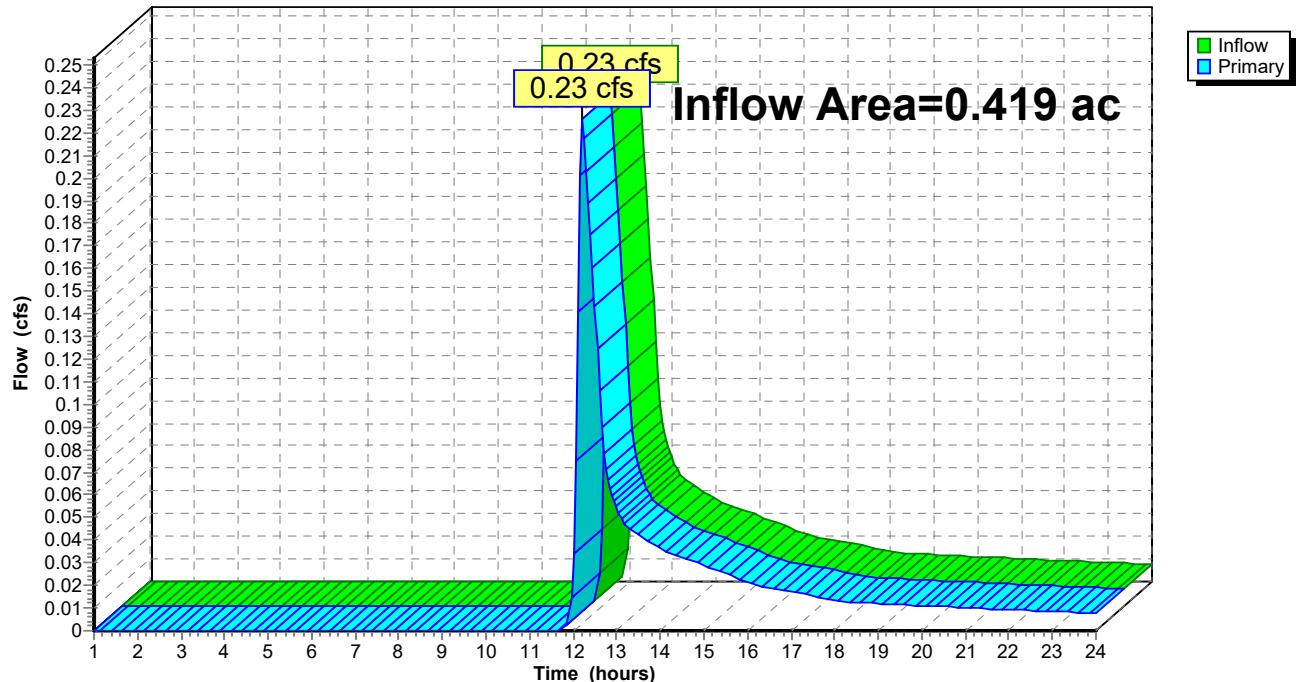
Inflow = 0.23 cfs @ 12.21 hrs, Volume= 0.027 af

Primary = 0.23 cfs @ 12.21 hrs, Volume= 0.027 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link POST2: POA2

Hydrograph



Summary for Link POST3: POA3

Inflow Area = 0.465 ac, 6.45% Impervious, Inflow Depth > 0.82" for 10 year event

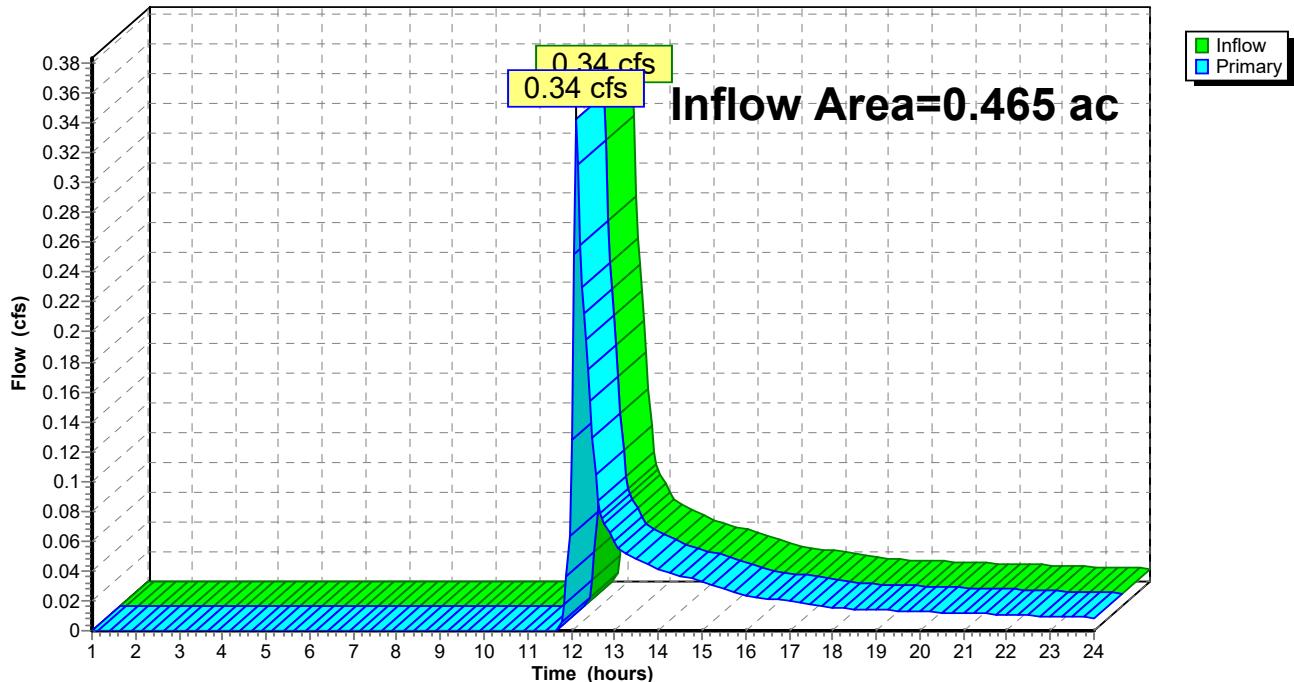
Inflow = 0.34 cfs @ 12.11 hrs, Volume= 0.032 af

Primary = 0.34 cfs @ 12.11 hrs, Volume= 0.032 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link POST3: POA3

Hydrograph



ROKEH WILTON SITE POST 1-04-22

Prepared by Rokeh Consulting LLC

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Type III 24-hr 25 year Rainfall=5.57"

Printed 1/7/2022

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Time span=1.00-24.00 hrs, dt=0.05 hrs, 461 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Flow from all of modeled Runoff Area=0.147 ac 0.00% Impervious Runoff Depth>1.28"
Tc=6.0 min CN=55 Runoff=0.19 cfs 0.016 af

Subcatchment2S: Flow from all of modeled Runoff Area=0.419 ac 0.00% Impervious Runoff Depth>1.34"
Tc=12.0 min CN=56 Runoff=0.47 cfs 0.047 af

Subcatchment3S: Flow from all of modeled Runoff Area=0.465 ac 6.45% Impervious Runoff Depth>1.42"
Tc=6.0 min CN=57 Runoff=0.68 cfs 0.055 af

Link POST1: POA1 Inflow=0.19 cfs 0.016 af
Primary=0.19 cfs 0.016 af

Link POST2: POA2 Inflow=0.47 cfs 0.047 af
Primary=0.47 cfs 0.047 af

Link POST3: POA3 Inflow=0.68 cfs 0.055 af
Primary=0.68 cfs 0.055 af

Total Runoff Area = 1.031 ac Runoff Volume = 0.118 af Average Runoff Depth = 1.37"
97.09% Pervious = 1.001 ac 2.91% Impervious = 0.030 ac

Summary for Subcatchment 1S: Flow from all of modeled area 1S

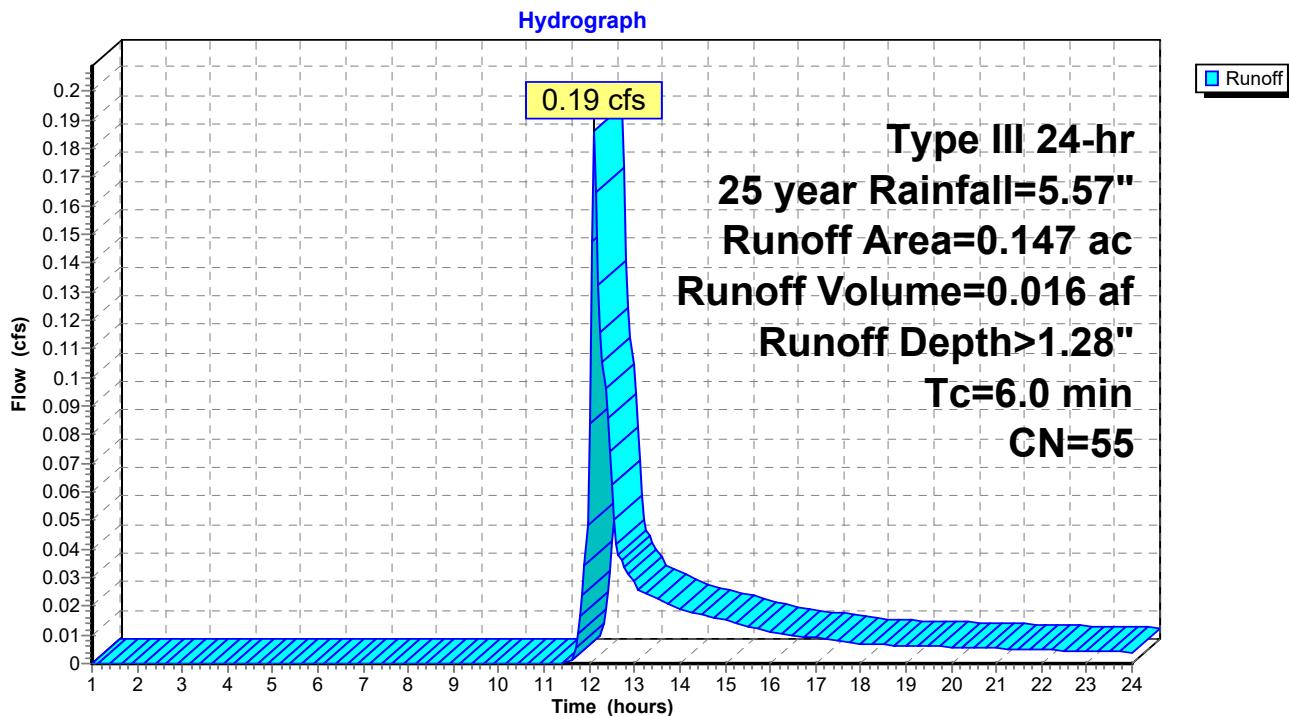
Runoff = 0.19 cfs @ 12.11 hrs, Volume= 0.016 af, Depth> 1.28"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 year Rainfall=5.57"

Area (ac)	CN	Description
0.048	96	Gravel surface, HSG A
0.059	39	>75% Grass cover, Good, HSG A
0.040	30	Woods, Good, HSG A
0.147	55	Weighted Average
0.147		100.00% Pervious Area

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

Subcatchment 1S: Flow from all of modeled area 1S



Summary for Subcatchment 2S: Flow from all of modeled area 2S

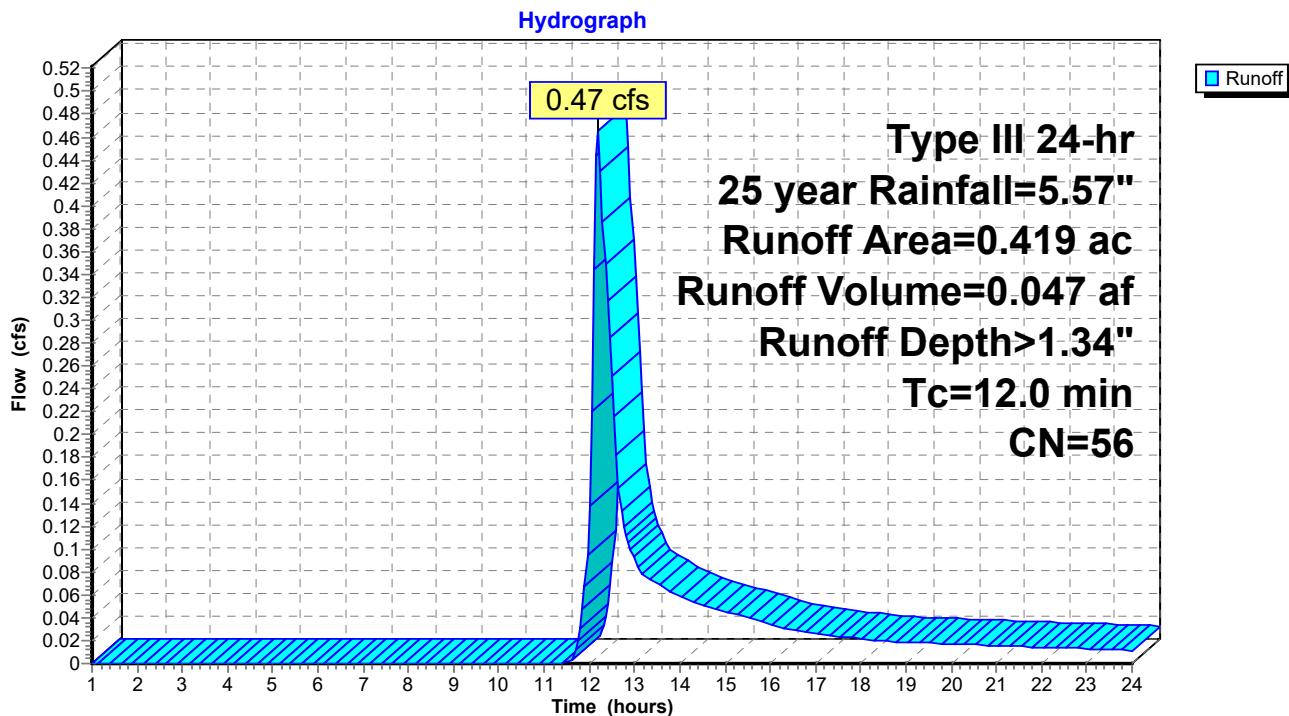
Runoff = 0.47 cfs @ 12.19 hrs, Volume= 0.047 af, Depth> 1.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25 year Rainfall=5.57"

Area (ac)	CN	Description
0.136	96	Gravel surface, HSG A
0.221	39	>75% Grass cover, Good, HSG A
0.062	30	Woods, Good, HSG A
0.419	56	Weighted Average
0.419		100.00% Pervious Area

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

Subcatchment 2S: Flow from all of modeled area 2S



Summary for Subcatchment 3S: Flow from all of modeled area 3S

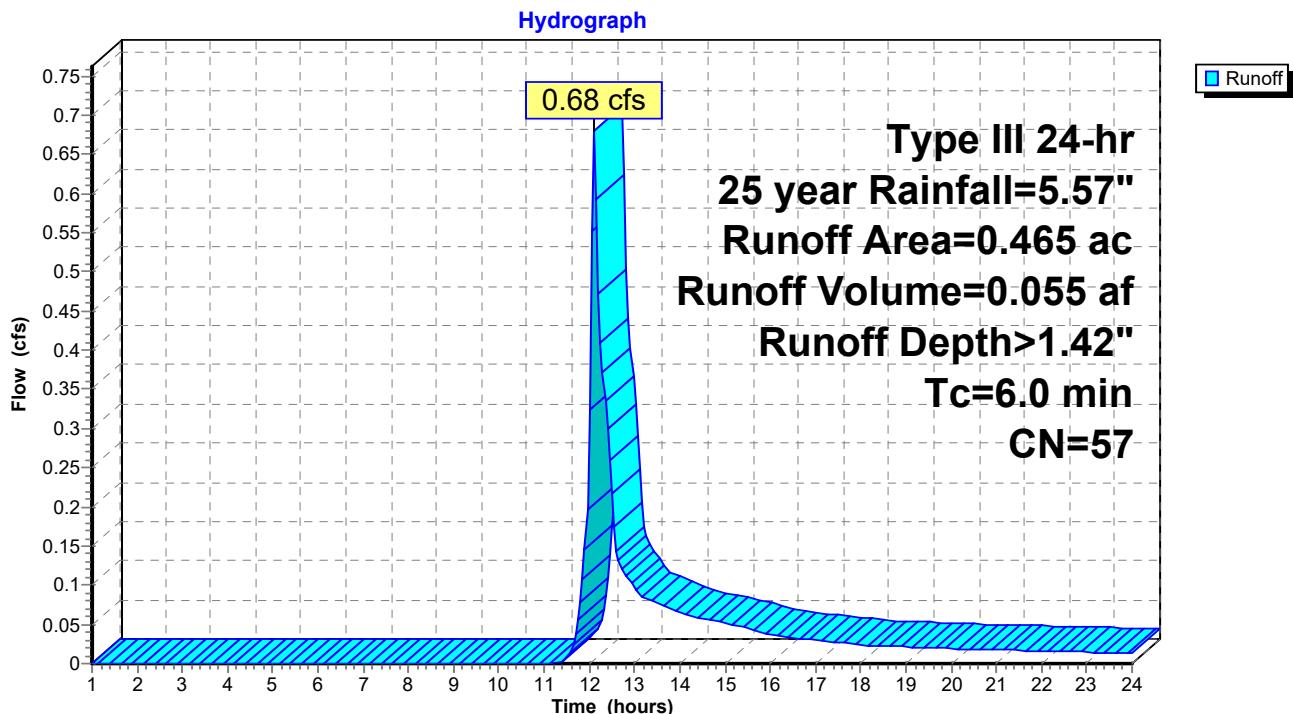
Runoff = 0.68 cfs @ 12.10 hrs, Volume= 0.055 af, Depth> 1.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25 year Rainfall=5.57"

Area (ac)	CN	Description
0.030	98	Roofs, HSG A
0.127	96	Gravel surface, HSG A
0.255	39	>75% Grass cover, Good, HSG A
0.053	30	Woods, Good, HSG A
0.465	57	Weighted Average
0.435		93.55% Pervious Area
0.030		6.45% Impervious Area

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

Subcatchment 3S: Flow from all of modeled area 3S



Summary for Link POST1: POA1

Inflow Area = 0.147 ac, 0.00% Impervious, Inflow Depth > 1.28" for 25 year event

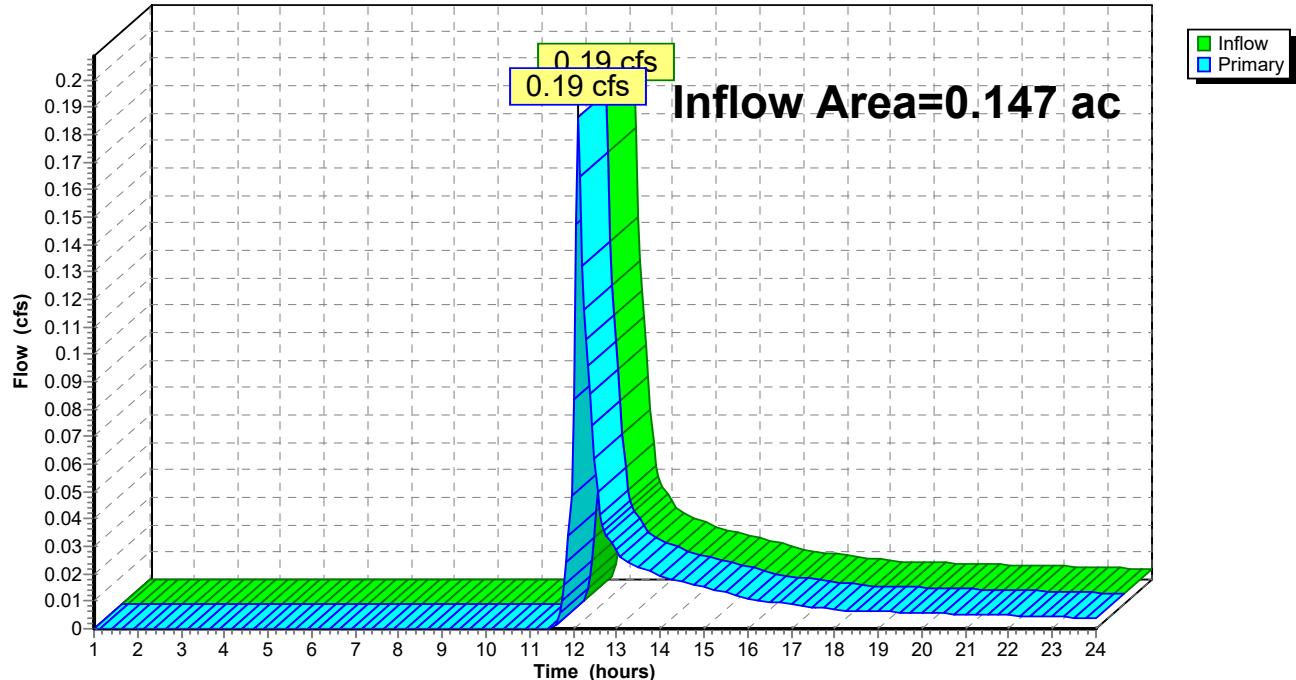
Inflow = 0.19 cfs @ 12.11 hrs, Volume= 0.016 af

Primary = 0.19 cfs @ 12.11 hrs, Volume= 0.016 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link POST1: POA1

Hydrograph



Summary for Link POST2: POA2

Inflow Area = 0.419 ac, 0.00% Impervious, Inflow Depth > 1.34" for 25 year event

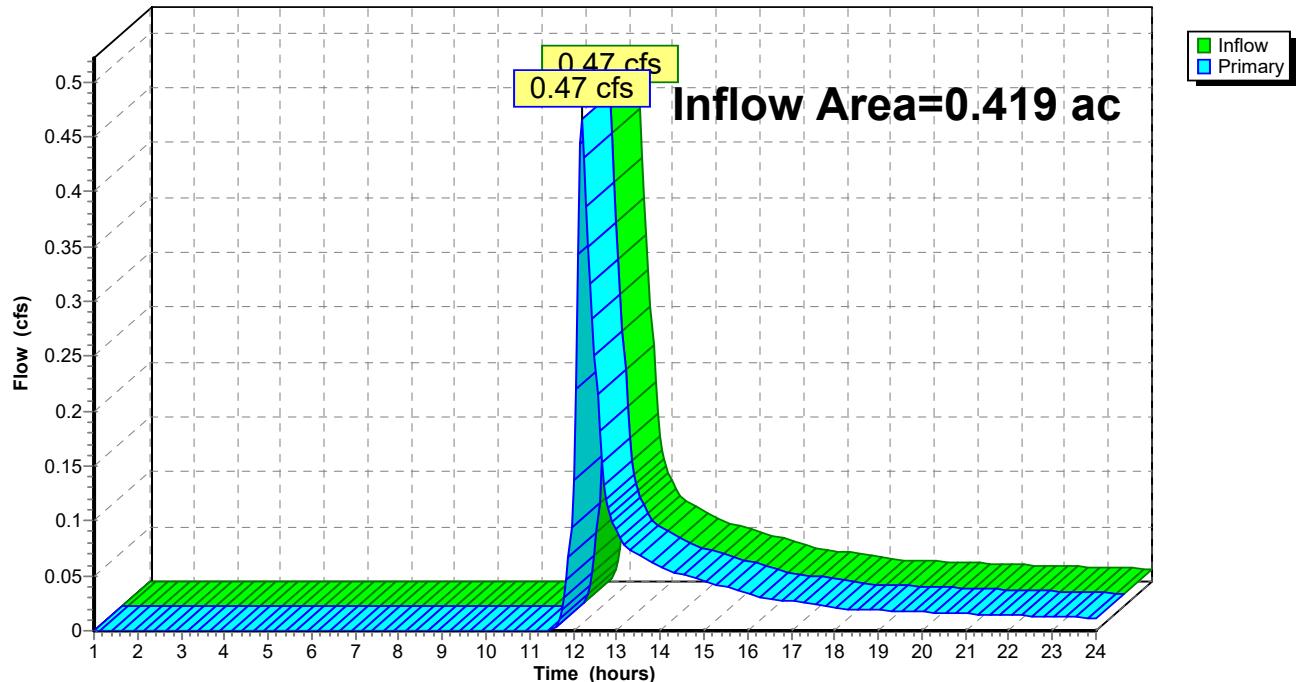
Inflow = 0.47 cfs @ 12.19 hrs, Volume= 0.047 af

Primary = 0.47 cfs @ 12.19 hrs, Volume= 0.047 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link POST2: POA2

Hydrograph



Summary for Link POST3: POA3

Inflow Area = 0.465 ac, 6.45% Impervious, Inflow Depth > 1.42" for 25 year event

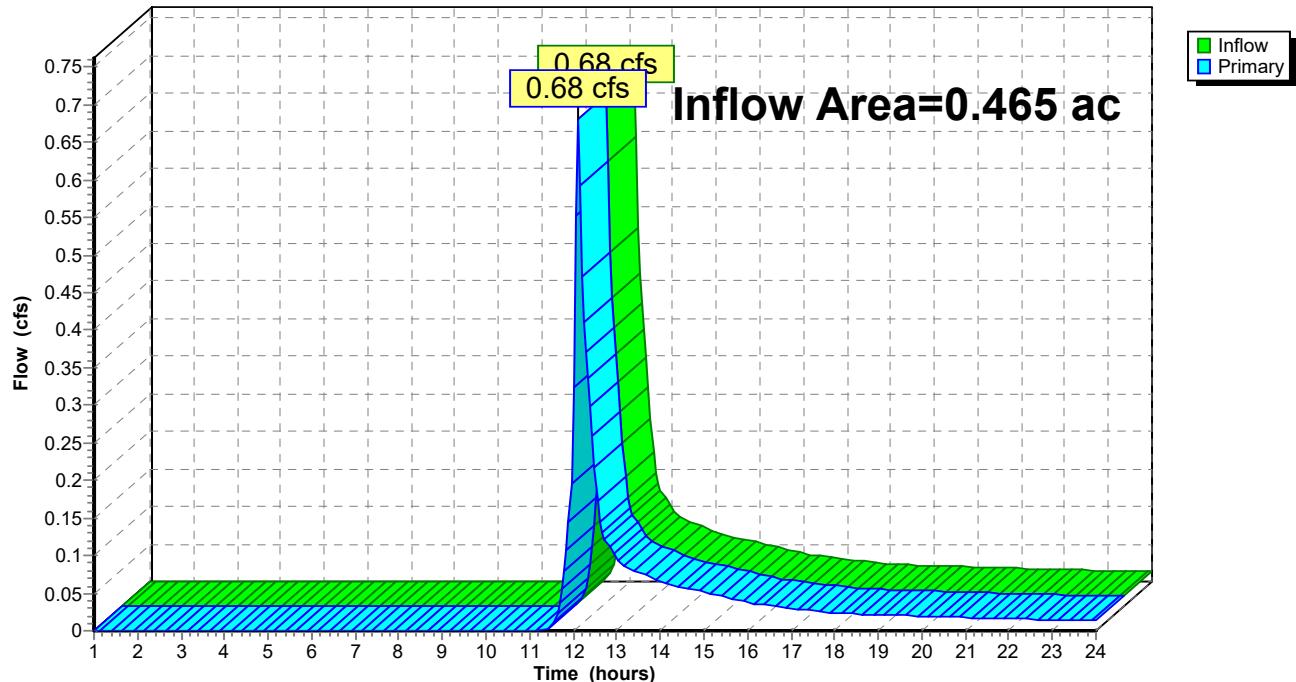
Inflow = 0.68 cfs @ 12.10 hrs, Volume= 0.055 af

Primary = 0.68 cfs @ 12.10 hrs, Volume= 0.055 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link POST3: POA3

Hydrograph



ROKEH WILTON SITE POST 1-04-22

Prepared by Rokeh Consulting LLC

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Type III 24-hr 50 year Rainfall=6.63"

Printed 1/7/2022

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Time span=1.00-24.00 hrs, dt=0.05 hrs, 461 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Flow from all of modeled Runoff Area=0.147 ac 0.00% Impervious Runoff Depth>1.89"
Tc=6.0 min CN=55 Runoff=0.30 cfs 0.023 af

Subcatchment2S: Flow from all of modeled Runoff Area=0.419 ac 0.00% Impervious Runoff Depth>1.98"
Tc=12.0 min CN=56 Runoff=0.73 cfs 0.069 af

Subcatchment3S: Flow from all of modeled Runoff Area=0.465 ac 6.45% Impervious Runoff Depth>2.07"
Tc=6.0 min CN=57 Runoff=1.05 cfs 0.080 af

Link POST1: POA1 Inflow=0.30 cfs 0.023 af
Primary=0.30 cfs 0.023 af

Link POST2: POA2 Inflow=0.73 cfs 0.069 af
Primary=0.73 cfs 0.069 af

Link POST3: POA3 Inflow=1.05 cfs 0.080 af
Primary=1.05 cfs 0.080 af

Total Runoff Area = 1.031 ac Runoff Volume = 0.172 af Average Runoff Depth = 2.01"
97.09% Pervious = 1.001 ac 2.91% Impervious = 0.030 ac

Summary for Subcatchment 1S: Flow from all of modeled area 1S

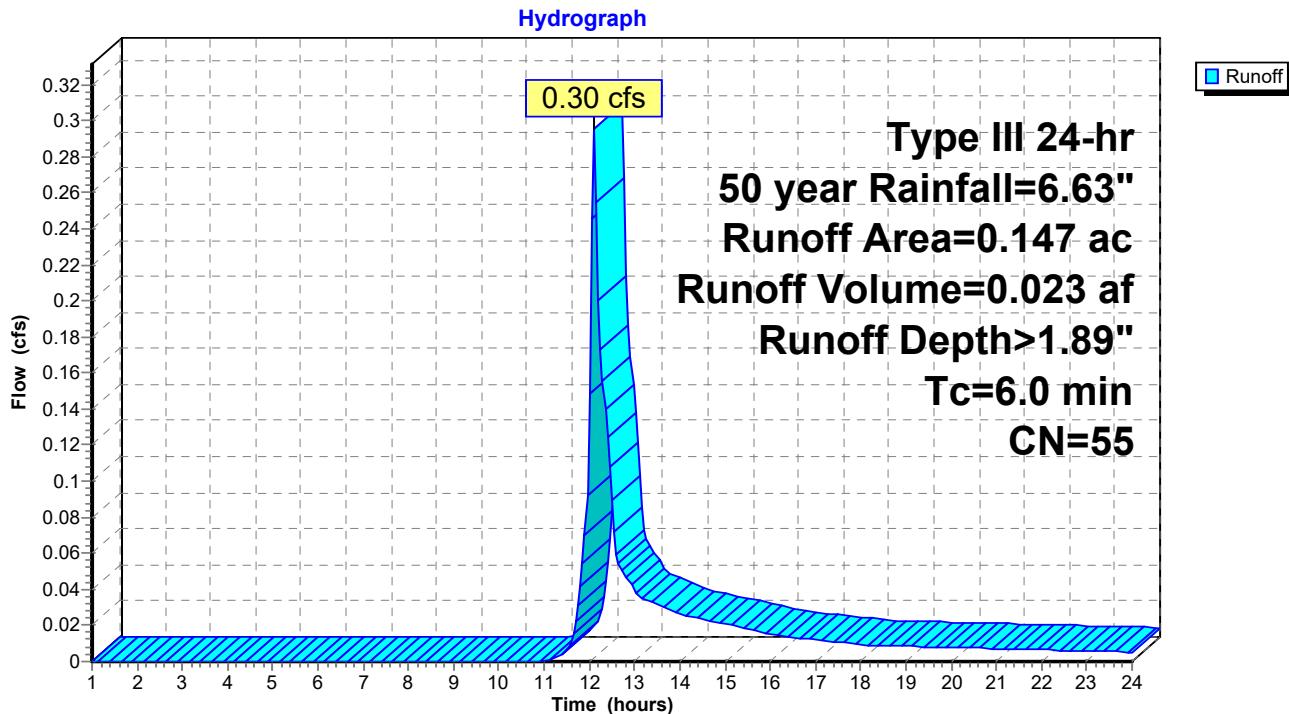
Runoff = 0.30 cfs @ 12.10 hrs, Volume= 0.023 af, Depth> 1.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 50 year Rainfall=6.63"

Area (ac)	CN	Description
0.048	96	Gravel surface, HSG A
0.059	39	>75% Grass cover, Good, HSG A
0.040	30	Woods, Good, HSG A
0.147	55	Weighted Average
0.147		100.00% Pervious Area

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

Subcatchment 1S: Flow from all of modeled area 1S



Summary for Subcatchment 2S: Flow from all of modeled area 2S

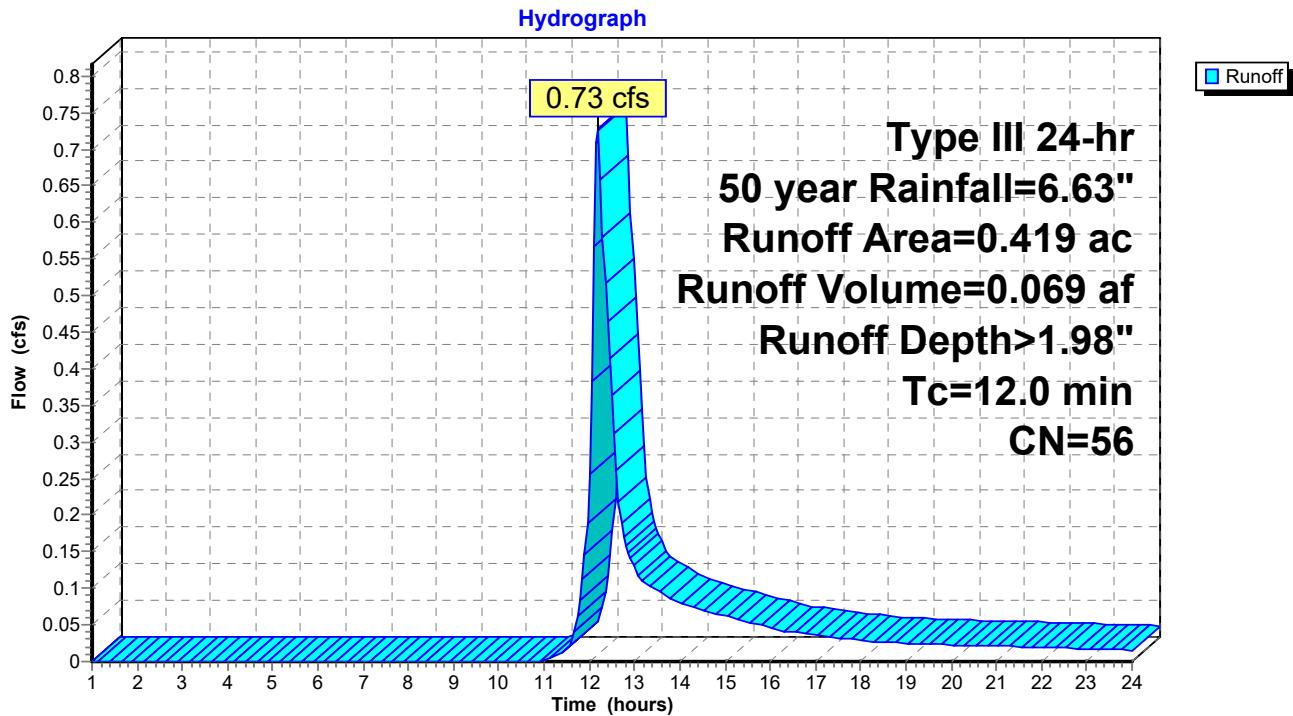
Runoff = 0.73 cfs @ 12.18 hrs, Volume= 0.069 af, Depth> 1.98"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
 Type III 24-hr 50 year Rainfall=6.63"

Area (ac)	CN	Description
0.136	96	Gravel surface, HSG A
0.221	39	>75% Grass cover, Good, HSG A
0.062	30	Woods, Good, HSG A
0.419	56	Weighted Average
0.419		100.00% Pervious Area

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

Subcatchment 2S: Flow from all of modeled area 2S



Summary for Subcatchment 3S: Flow from all of modeled area 3S

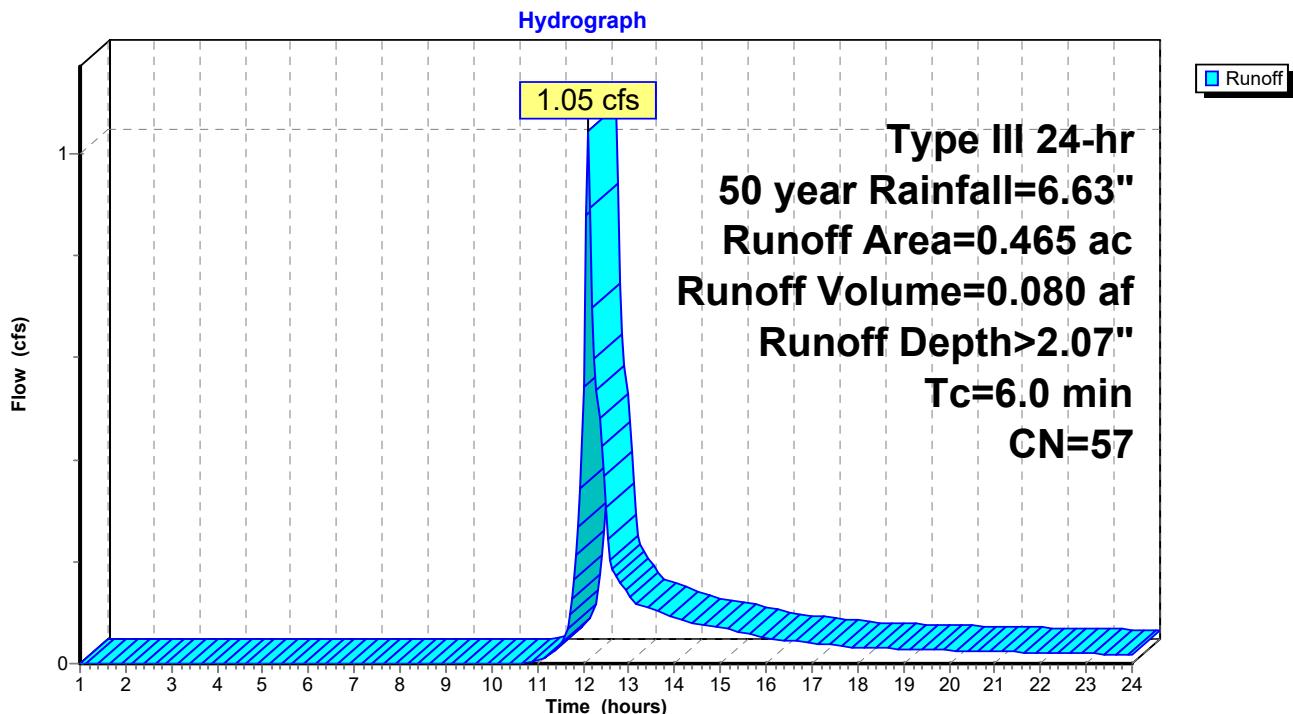
Runoff = 1.05 cfs @ 12.10 hrs, Volume= 0.080 af, Depth> 2.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 year Rainfall=6.63"

Area (ac)	CN	Description
0.030	98	Roofs, HSG A
0.127	96	Gravel surface, HSG A
0.255	39	>75% Grass cover, Good, HSG A
0.053	30	Woods, Good, HSG A
0.465	57	Weighted Average
0.435		93.55% Pervious Area
0.030		6.45% Impervious Area

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

Subcatchment 3S: Flow from all of modeled area 3S



Summary for Link POST1: POA1

Inflow Area = 0.147 ac, 0.00% Impervious, Inflow Depth > 1.89" for 50 year event

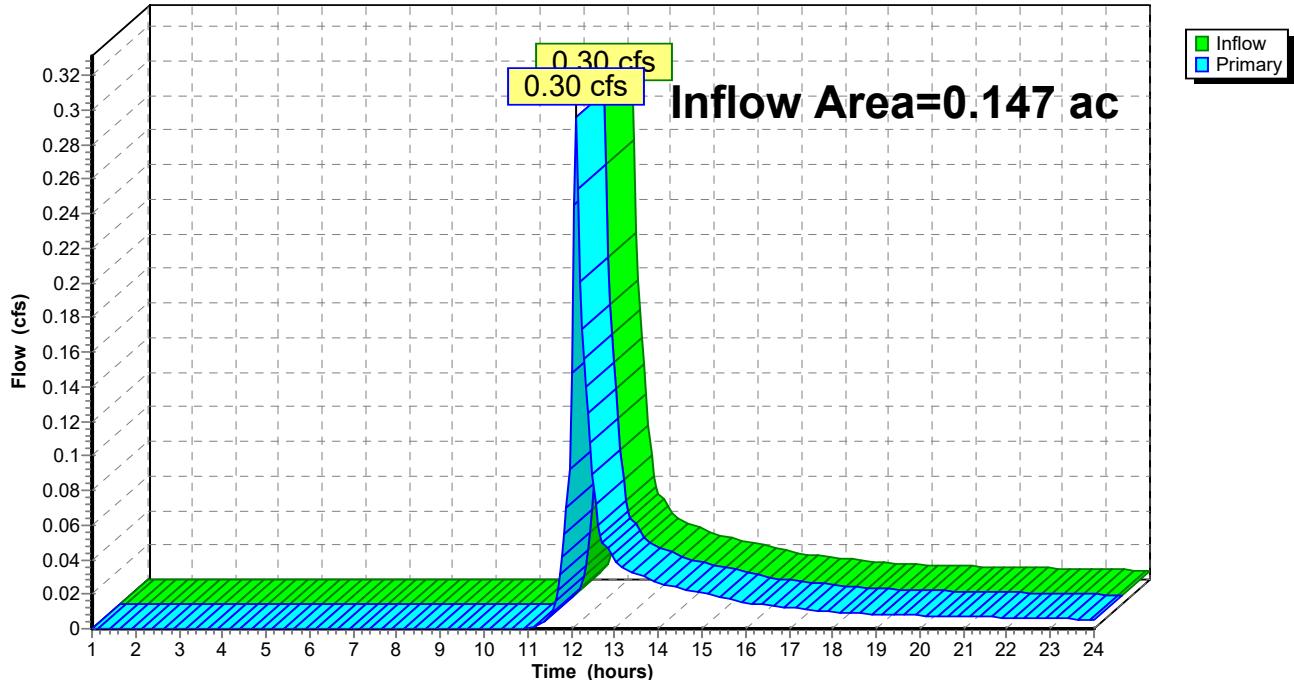
Inflow = 0.30 cfs @ 12.10 hrs, Volume= 0.023 af

Primary = 0.30 cfs @ 12.10 hrs, Volume= 0.023 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link POST1: POA1

Hydrograph



Summary for Link POST2: POA2

Inflow Area = 0.419 ac, 0.00% Impervious, Inflow Depth > 1.98" for 50 year event

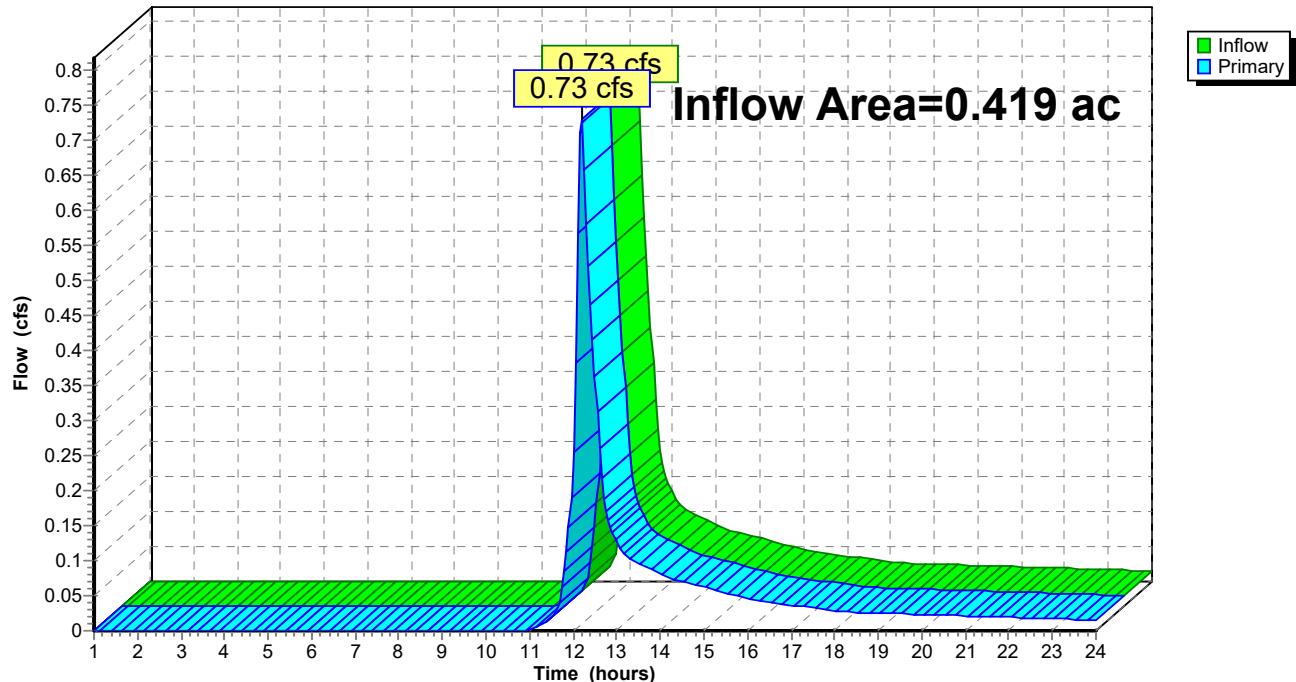
Inflow = 0.73 cfs @ 12.18 hrs, Volume= 0.069 af

Primary = 0.73 cfs @ 12.18 hrs, Volume= 0.069 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link POST2: POA2

Hydrograph



Summary for Link POST3: POA3

Inflow Area = 0.465 ac, 6.45% Impervious, Inflow Depth > 2.07" for 50 year event
Inflow = 1.05 cfs @ 12.10 hrs, Volume= 0.080 af
Primary = 1.05 cfs @ 12.10 hrs, Volume= 0.080 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link POST3: POA3

Hydrograph

