

STORMWATER MANAGEMENT, GROUNDWATER RECHARGE AND WATER QUALITY ANALYSIS

For

Bloomfield Broad Associates Urban Renewal, LLC

**11-13 Broad Street
Block 241, Lots 5, 6, 7, 21, 23, 37, 39, 41, 42, 44, 45, & 46
Township of Bloomfield
Essex County, NJ**

Prepared by:



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A handwritten signature in black ink, appearing to read 'Jack Giordano', is written over a thin horizontal line.

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1. Site Description & Project Overview

The subject site is located with frontage on Franklin Street and Broad Street in the Township of Bloomfield, Essex County, New Jersey. The site is identified as Block 241, Lots 5, 6, 7, 21, 23, 37, 39, 41, 42, 44, 45, & 46 on the Township of Bloomfield Tax Map Sheet #11. The subject site is currently developed, consisting of a variety of commercial buildings. The property is bounded to the north by a Bloomfield College test center building with commercial uses and Bloomfield College buildings beyond, to the east by Franklin Street with Bloomfield College buildings, churches and residential uses beyond, to the south by Washington Street and commercial uses beyond, and to the west by Broad Street with commercial uses.

The proposed project consists of the development of a six-story mixed-use building with 125 residential units, 6,500 SF of retail, and multi-level parking garage with a basement level. The proposed mixed-use building will have a footprint of approximately 42,028 SF, 1.08 acres of impervious surface, 1.27 acres of land disturbance, and a reduction of 0.38 acres of motor vehicle surface. The proposed project will also include all associated site improvements including parking areas within the building, landscaping, lighting, and utilities.

2. Design Methodology

This report has been prepared to define and analyze the stormwater drainage conditions that would occur as a result of the development of the subject site. Based upon the fact that the proposed development will result in more than one (1) acre of land disturbance, this project is classified as a “major development” as defined in NJAC 7:8. Therefore, the proposed development has been designed to meet the stormwater runoff quantity, quality, and groundwater recharge standards, as set forth by the Township of Bloomfield Land Use Ordinance and NJAC 7:8.

The following documents and data were used in the support of the design of the project:

- Boundary and Topographic Survey, prepared by Engineering & Land Planning Associates, Inc., dated April 22, 2022
- Preliminary and Final Site Plan & Subdivision, prepared by our office, dated January 5, 2023
- Field Reconnaissance on October 23, 2023
- NRCS Soil Survey
- NJDEP Stormwater Management Best Management Practices Manual

The hydrology for the site was calculated using the NRCS Runoff Equation and Dimensionless Unit Hydrograph as noted in Part 630, Hydrology National Engineering Handbook. The following particular references were used:

- Curve Numbers were established via Chapter 9 – Hydrologic Soil-Cover Complexes
- Time of Concentrations were calculated in accordance with Chapter 15
- Rainfall Distributions are based on NOAA Type D rainfall distribution

- The Standard Unit Hydrograph was utilized
- The rainfall depths are based on Essex County NOAA Atlas 14 Data and adjusted per Table 5-5 and 5-6 as noted below:

NOAA Atlas 14 Rainfall & Adjusted Rainfall Data (Table 2-1)

Return Period	NOAA Atlas 14 Rainfall Depth (inches)	Current Adjusted Rainfall Depth (inches)	Projected Adjusted Rainfall Depth (inches)
2 Year Storm	3.44	3.47	4.09
10 Year Storm	5.22	5.38	6.37
100 Year Storm	8.66	9.18	11.52

Based upon the Essex County Soil Survey, the soil types native to the site are classified as urban land with no assigned hydrologic soil group. An assumed hydrological soil group classification D was assumed for the stormwater management analysis.

NRCS Soil Classification (Table 2-2)

Soil Type	Soil Type Name	Hydrologic Soil Group
URDUNB	Urban Land, Dunellen substratum, 0 to 8 percent slopes	N/A

Based on the methodology and data noted above a hydrologic evaluation of the NJDEP Water Quality, 2, 10, and 100-year storm events was prepared.

This report will address compliance with the following standards:

- Groundwater Recharge Standards (NJAC 7:8-5.4)
- Stormwater Runoff Quality Standards (NJAC 7:8-5.5)
- Stormwater Runoff Quantity Standards (NJAC 7:8-5.6)
- Calculation of Stormwater Runoff (NJAC 7:8-5.7)

3. Existing Drainage Conditions

The area to be analyzed consists of approximately 1.32 acres and is comprised of commercial buildings and a parking lot. Currently, stormwater runoff generated by the existing site drains to existing infrastructure within Broad Street and Franklin Street. The subject site has been evaluated with the following drainage sub-watershed areas as depicted on the Existing Drainage Area Map included in the Appendix of this report.

Point of Analysis #1

Study Area Broad: This area consists of 0.47 acres in the western portion of the site which includes existing rooftop areas. Stormwater runoff generated by this area is collected by roof drains and

discharged to the existing stormwater infrastructure within Broad Street and ultimately tributary to the Second River.

Study Area Franklin: This area consists of 0.85 acres which includes rooftop areas, impervious parking areas and pervious parking islands. Under existing conditions, stormwater runoff generated by this area is collected via existing onsite inlets and roof drains and conveyed toward the existing stormwater infrastructure within Franklin Street and ultimately to the Second River.

Existing Conditions Input Summary (Table 3-1)

Drainage Area Name	Drainage Area (acres)	Time of Concentration (minutes)	Curve Number (CN)
DA Broad - Impervious	0.47	3.4	98
DA Franklin - Impervious	0.81	3.4	98
DA Franklin - Pervious	0.04	3.4	80

Existing Conditions Flow Summary (Table 3-2)

Drainage Area Name	Current Adjusted Rainfall Conditions			Projected Adjusted Rainfall Conditions		
	Q₂ (CFS)	Q₁₀ (CFS)	Q₁₀₀ (CFS)	Q₂ (CFS)	Q₁₀ (CFS)	Q₁₀₀ (CFS)
Broad	1.65	2.57	4.41	1.95	3.05	5.53
Franklin	2.93	4.60	7.92	3.47	5.46	9.96
POA 1	4.58	7.17	12.32	5.42	8.52	15.49

4. Proposed Drainage Conditions

The proposed development was designed to reduce the overall impervious coverage onsite. The proposed site conditions have been evaluated using the following drainage sub-watershed areas as depicted on the Proposed Drainage Area Map included in the Appendix of this report.

Point of Analysis #1 – Second River

Study Area Broad: This area consists of 0.01 acres in the western portion of the site which includes sidewalk pavement areas. Under proposed conditions, stormwater runoff generated by this area flows west toward Broad Street and is collected by existing stormwater infrastructure within Broad Street and ultimately tributary to the Second River.

Study Area Franklin: This area consists of 1.31 acres in the eastern portion of the site which includes impervious parking areas, roof areas, and the proposed landscaping areas. Under proposed conditions, stormwater runoff generated by this area is collected by roof drains and inlets and conveyed toward the existing stormwater infrastructure within Franklin Street and ultimately tributary to the Second River.

Proposed Conditions Input Summary (Table 4-1)

Drainage Area Name	Drainage Area (acres)	Time of Concentration (minutes)	Curve Number (CN)
DA-Broad - Impervious	0.01	3.4	98
DA-Franklin - Impervious	1.27	3.4	98
DA-Franklin - Pervious	0.04	3.4	80

Proposed Conditions Flow Summary Table (Table 4-2)

Drainage Area Name	Current Adjusted Rainfall Conditions			Projected Adjusted Rainfall Conditions		
	Q ₂ (CFS)	Q ₁₀ (CFS)	Q ₁₀₀ (CFS)	Q ₂ (CFS)	Q ₁₀ (CFS)	Q ₁₀₀ (CFS)
Broad	0.04	0.05	0.09	0.04	0.06	0.12
Franklin	4.54	7.12	12.23	5.38	8.45	15.37
POA 1	4.58	7.17	12.32	5.42	8.52	15.49

5. Water Quantity Control Compliance

The site has been designed to meet the stormwater runoff quantity standards as noted in NJAC 7:8-5.6(b)1 by demonstrating that the post-construction runoff hydrograph for the 2, 10, & 100 year current and projected storm events do not exceed, at any point in time, the pre-construction runoff hydrographs for the same storm events. The point of analysis has been identified on the Drainage Area Maps as the Second River.

In existing conditions, the majority of the site consists of roof and motor vehicle impervious surfaces. The stormwater from these areas conveyed to the roof drains and inlets and tributary to the existing drainage infrastructure along Broad Street and Franklin Street and ultimately to the Second River. In proposed conditions, landscaping area is proposed to that will reduce the overall volume of runoff and satisfy the water quantity aspect of the Township of Bloomfield Land Use Ordinance and NJAC 7:8.

Pre-development and Post Development Peak Runoff Results*

Point of Analysis #1 – Second River (Table 5-1)

Storm Event	Existing Peak Flow Rate (cfs)	Proposed Peak Flow Rate (cfs)	Existing Runoff Volume (ac-ft)	Proposed Runoff Volume (ac-ft)
Current 2-year	4.58	4.58	0.351	0.351
Current 10-year	7.17	7.17	0.559	0.559
Current 100-year	12.32	12.32	0.976	0.976
Projected 2-year	5.42	5.42	0.418	0.418
Projected 10-year	8.52	8.52	0.668	0.668
Projected 100-year	15.49	15.49	1.233	1.233

*Please see the comparative hydrographs within the appendix for compliance with NJAC 7:8-5.6(b)1

6. Water Quality Compliance

In accordance with NJAC 7:8-5.5, stormwater quality standards are applicable when a major development results in an increase of one-quarter acre or more of regulated motor vehicle surface. The proposed development will increase the overall roof area and decrease the overall regulated motor vehicle surface compared to existing conditions.

Water Quality Compliance – Motor Vehicle Area Comparison (Table 6-1)

Motor Vehicle Area Comparison (Acres)***		
Existing Area	Proposed Area	Net Change
0.81 Ac	0.43 Ac	- 0.38 Ac

***Motor vehicle areas calculated for both proposed lots A and B.

As such, no additional water quality treatment is required per the Township of Bloomfield Land Use Ordinance and NJAC 7:8.

7. Groundwater Recharge Compliance

The project is located on a previously developed site within the Metropolitan Planning area (PA-1) and per NJAC 7:8, is exempt from the groundwater recharge requirements as the project is considered an Urban Redevelopment Area.

8. Soil Erosion and Sediment Control Compliance

The project has been designed to comply with the Standards for Soil Erosion and Sediment Control in New Jersey. Soil erosion control measures such as a stabilized construction entrance, inlet protection and silt fence are shown on the plans. Onsite drainage is to be connected to existing stormwater conveyance infrastructure. Finally, this project has been designed to satisfy the off-site stability standards set forth in the Standards for Soil Erosion and Sediment Control in New Jersey as onsite drainage is to be connected to existing stormwater conveyance infrastructure. As noted previously, the post-development peak flow rates meet or are reduced compared to the pre-development peak flow rates at all points in time, thereby achieving off-site stability.

9. Conclusion

The proposed development has been designed with provisions for the safe and efficient control of stormwater runoff in a manner that will not adversely impact the existing drainage patterns, adjacent roadways, or adjacent parcels. In addition, the proposed development satisfies the runoff quantity, quality and groundwater recharge requirements set forth by the Township of Bloomfield Land Use Ordinance and NJAC 7:8 reducing motor vehicle surface area and reducing impervious coverage onsite. With this stated, it is evident that the proposed development will not have a negative impact on the existing drainage conditions, water quality or groundwater recharge on-site or within the vicinity of the subject site.

APPENDIX

NRCS WEB SOIL SURVEY



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Essex County, New Jersey



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

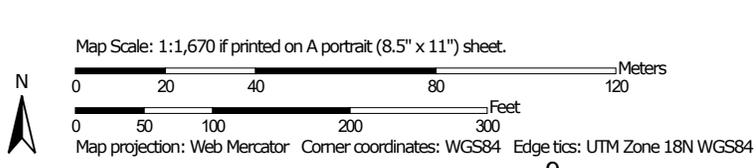
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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

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: Essex County, New Jersey
 Survey Area Data: Version 19, Aug 29, 2023

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

Date(s) aerial images were photographed: Oct 10, 2022—Oct 16, 2022

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

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
URDUNB	Urban land, Dunellen substratum, 0 to 8 percent slopes	5.0	100.0%
Totals for Area of Interest		5.0	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

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onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Essex County, New Jersey

URDUNB—Urban land, Dunellen substratum, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: w9d5
Elevation: 50 to 150 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land, dunellen substratum: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land, Dunellen Substratum

Setting

Landform: Outwash plains
Landform position (three-dimensional): Lower third of mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Surface covered by pavement, concrete, buildings, and other structures underlain by disturbed and natural soil material

Typical profile

H1 - 0 to 12 inches: material
H2 - 12 to 31 inches: sandy loam
2C - 31 to 42 inches: sandy loam
3C - 42 to 70 inches: loamy sand

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8s
Hydric soil rating: Unranked

Minor Components

Dunellen

Percent of map unit: 5 percent
Landform: Outwash plains
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Udorthents, dunellen substratum

Percent of map unit: 5 percent
Landform: Outwash plains
Landform position (three-dimensional): Lower third of mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Custom Soil Resource Report

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

AASHTO Group Index

The AASHTO Group Index is a refinement to the seven major groups of the AASHTO soil classification system. According to

this system, soil is classified into seven major groups: A-1 through A-7. Soils classified into groups A-1, A-2, and A-3 are granular materials of which 35% or less of the particles pass through the No. 200 sieve. Soils of which more than 35% pass through the No. 200 sieve are classified into groups A-4, A-5, A-6, and A-7. These soils are mostly silt and clay-type materials.

The classifications system is based on the following criteria:

1. Grain size

a. Gravel ; fraction passing the 75-mm(3-in.) sieve and retained on the No. 10 (2-mm) U.S. sieve

b. sand: fraction passing the No. 10 (2-mm) U.S. sieve and retained on the No.200 (0.075-mm) U.S. sieve

Custom Soil Resource Report

c. Silt and clay: fraction passing the No. 200 U.S. sieve

2. Plasticity The term silty is applied when the fine fractions of the soil have a plasticity index of 10 or less. The term clayey is applied when the fine fractions have a plasticity index of 11 or more.

3. If cobbles and boulders (size larger than 75 mm) are encountered, they are excluded from the portion of the soil sample from which classification is made.

To evaluate the quality of a soil as a highway subgrade material, one must also incorporate a number called the group index (GI) with the groups and subgroups of the soil. This index is written in parentheses after the group or subgroup designation.

The group index is given by the equation:

$$GI = (F_{200}-35)[0.2 + 0.005(LL - 40)] + 0.01(F_{200}-15)(PI - 10)$$

where:

F₂₀₀ = percentage passing through the No. 200 sieve

LL — liquid limit

PI : plasticity index

The group index is used typically to refine an AASHTO class but in the soil survey database is often used as a standalone soil attribute.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Custom Soil Resource Report Map—AASHTO Group Index



Map Scale: 1:1,670 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 = 0

 Not rated or not available

Soil Rating Lines

 = 0

 Not rated or not available

Soil Rating Points

 = 0

 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

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: Essex County, New Jersey
Survey Area Data: Version 19, Aug 29, 2023

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

Date(s) aerial images were photographed: Oct 10, 2022—Oct 16, 2022

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.

Table—AASHTO Group Index

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
URDUNB	Urban land, Dunellen substratum, 0 to 8 percent slopes	0	5.0	100.0%
Totals for Area of Interest			5.0	100.0%

Rating Options—AASHTO Group Index

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): All Layers (Weighted Average)

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**HYDROGRAPH SUMMARY REPORTS – EXISTING &
PROPOSED CONDITIONS 2, 10, & 100-YEAR**



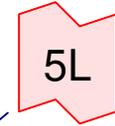
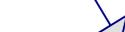
BROAD - IMP



BROAD



FRANKLIN - IMP



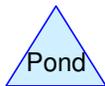
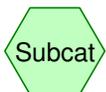
FRANKLIN



FRANKLIN - PERV



POA 1



Routing Diagram for 2024-02 Existing Hydrology
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2024-02 Existing Hydrology

Prepared by Dynamic Engineering

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Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.040	80	>75% Grass cover, Good, HSG D (4S)
0.680	98	Paved parking, HSG D (3S)
0.600	98	Unconnected roofs, HSG D (1S, 3S)
1.320	97	TOTAL AREA

2024-02 Existing Hydrology

Prepared by Dynamic Engineering

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NOAA 24-hr D 2-Year-Current Rainfall=3.47"

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Page 3

Summary for Subcatchment 1S: BROAD - IMP

Runoff = 1.65 cfs @ 12.09 hrs, Volume= 0.127 af, Depth= 3.24"
 Routed to Link 2L : BROAD

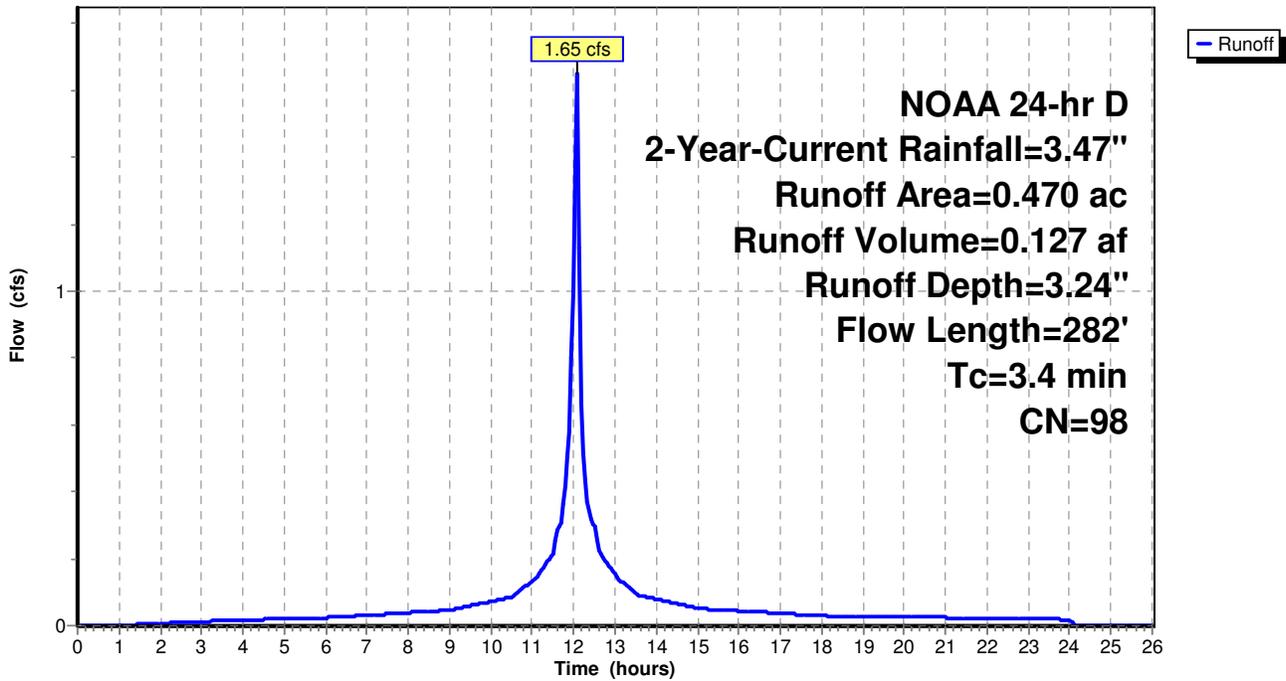
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 2-Year-Current Rainfall=3.47"

Area (ac)	CN	Description
0.470	98	Unconnected roofs, HSG D
0.470		100.00% Impervious Area
0.470		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	182	0.0060	1.57		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	282	Total			

Subcatchment 1S: BROAD - IMP

Hydrograph



2024-02 Existing Hydrology

NOAA 24-hr D 2-Year-Current Rainfall=3.47"

Prepared by Dynamic Engineering

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Summary for Subcatchment 3S: FRANKLIN - IMP

Runoff = 2.84 cfs @ 12.09 hrs, Volume= 0.218 af, Depth= 3.24"
 Routed to Link 5L : FRANKLIN

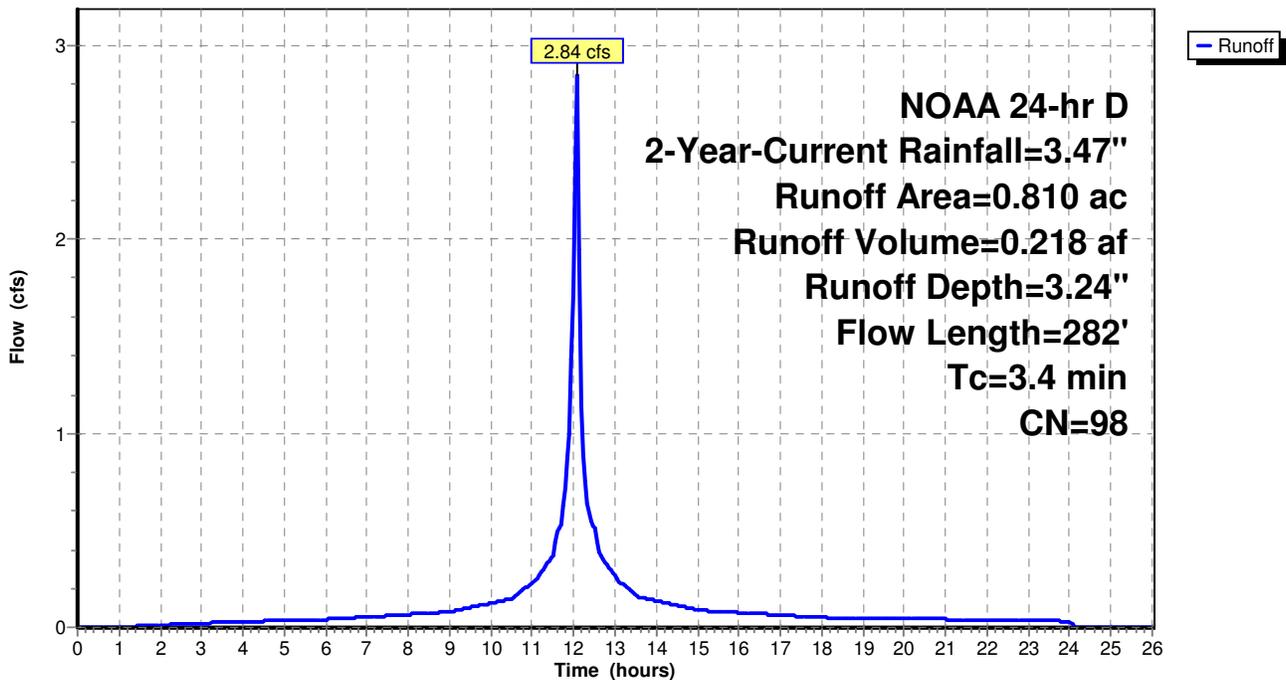
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 2-Year-Current Rainfall=3.47"

Area (ac)	CN	Description
0.130	98	Unconnected roofs, HSG D
0.680	98	Paved parking, HSG D
0.810	98	Weighted Average
0.810		100.00% Impervious Area
0.130		16.05% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	182	0.0060	1.57		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	282	Total			

Subcatchment 3S: FRANKLIN - IMP

Hydrograph



2024-02 Existing Hydrology

NOAA 24-hr D 2-Year-Current Rainfall=3.47"

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Summary for Subcatchment 4S: FRANKLIN - PERV

Runoff = 0.08 cfs @ 12.10 hrs, Volume= 0.005 af, Depth= 1.61"
 Routed to Link 5L : FRANKLIN

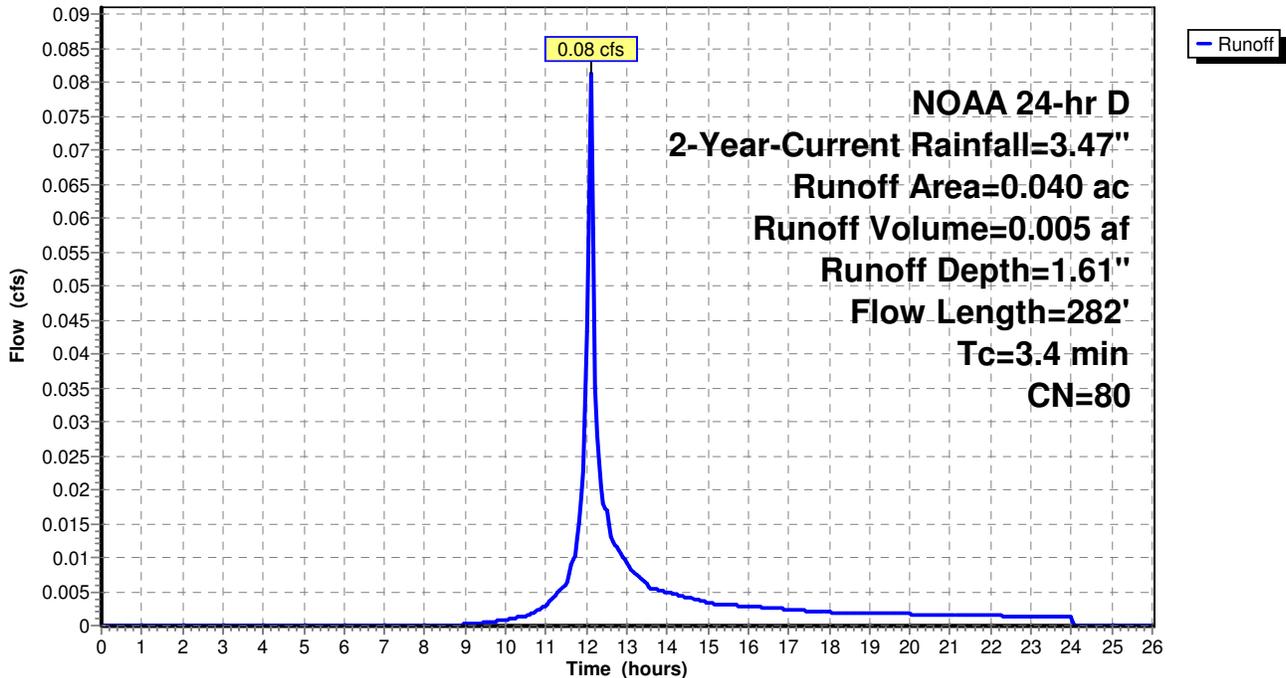
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 2-Year-Current Rainfall=3.47"

Area (ac)	CN	Description
0.040	80	>75% Grass cover, Good, HSG D
0.040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	182	0.0060	1.57		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	282	Total			

Subcatchment 4S: FRANKLIN - PERV

Hydrograph



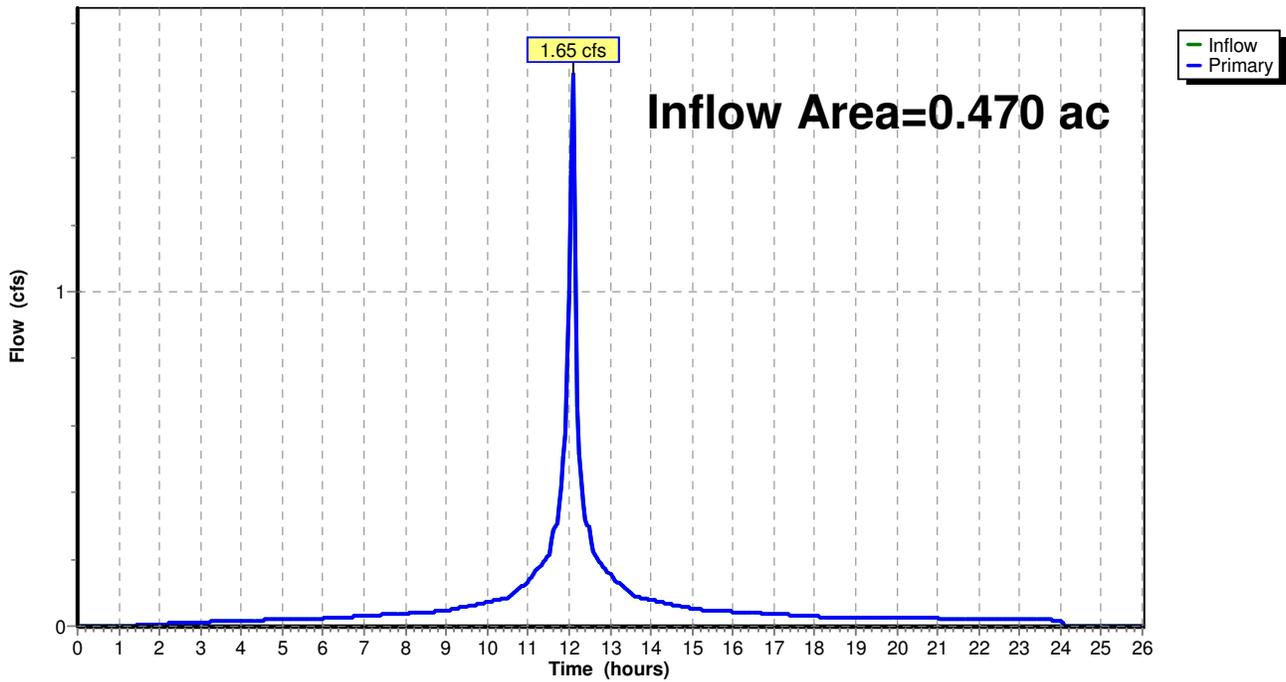
Summary for Link 2L: BROAD

Inflow Area = 0.470 ac, 100.00% Impervious, Inflow Depth = 3.24" for 2-Year-Current event
Inflow = 1.65 cfs @ 12.09 hrs, Volume= 0.127 af
Primary = 1.65 cfs @ 12.09 hrs, Volume= 0.127 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 2L: BROAD

Hydrograph



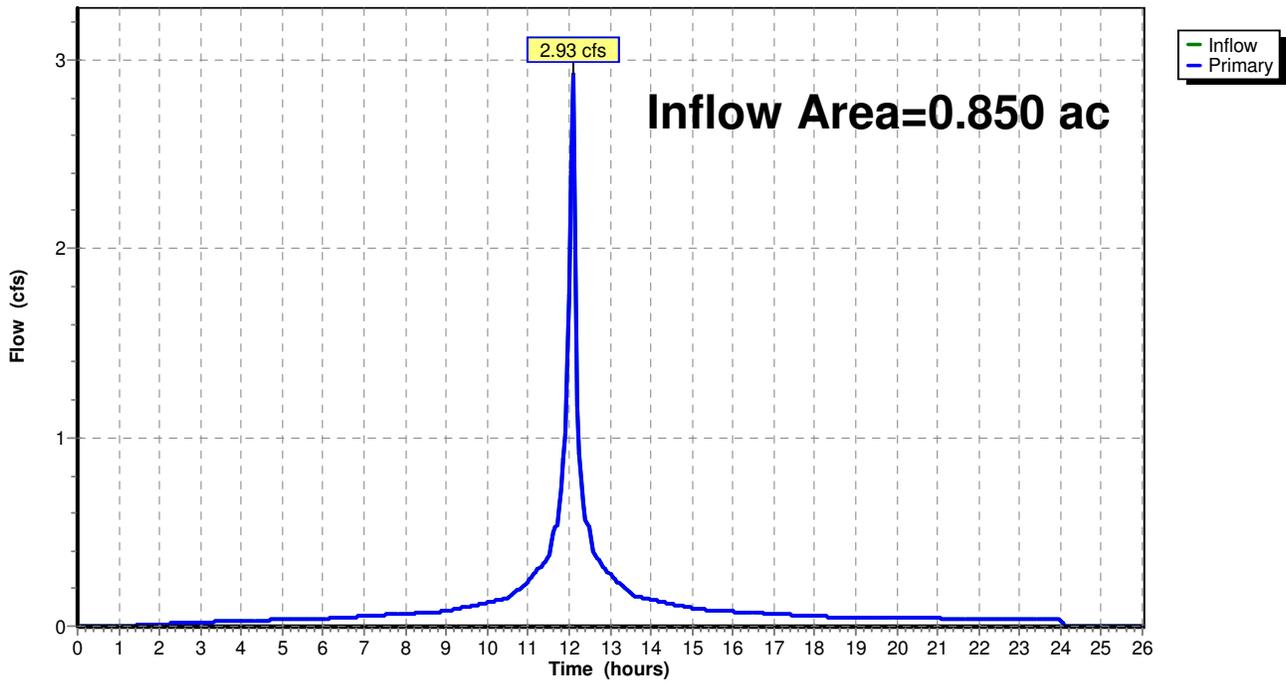
Summary for Link 5L: FRANKLIN

Inflow Area = 0.850 ac, 95.29% Impervious, Inflow Depth = 3.16" for 2-Year-Current event
Inflow = 2.93 cfs @ 12.09 hrs, Volume= 0.224 af
Primary = 2.93 cfs @ 12.09 hrs, Volume= 0.224 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 5L: FRANKLIN

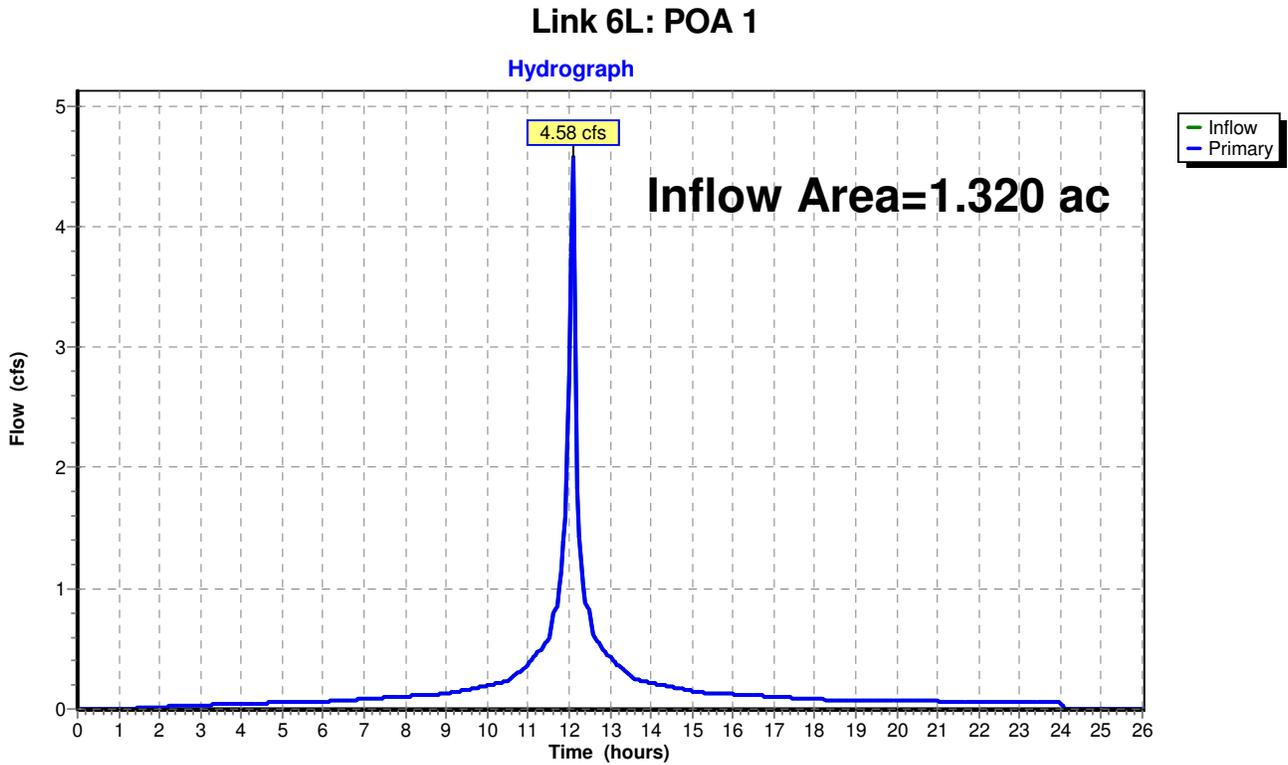
Hydrograph



Summary for Link 6L: POA 1

Inflow Area = 1.320 ac, 96.97% Impervious, Inflow Depth = 3.19" for 2-Year-Current event
Inflow = 4.58 cfs @ 12.09 hrs, Volume= 0.351 af
Primary = 4.58 cfs @ 12.09 hrs, Volume= 0.351 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs



2024-02 Existing Hydrology

NOAA 24-hr D 2-Year-Projected Rainfall=4.09"

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Summary for Subcatchment 1S: BROAD - IMP

Runoff = 1.95 cfs @ 12.09 hrs, Volume= 0.151 af, Depth= 3.85"
 Routed to Link 2L : BROAD

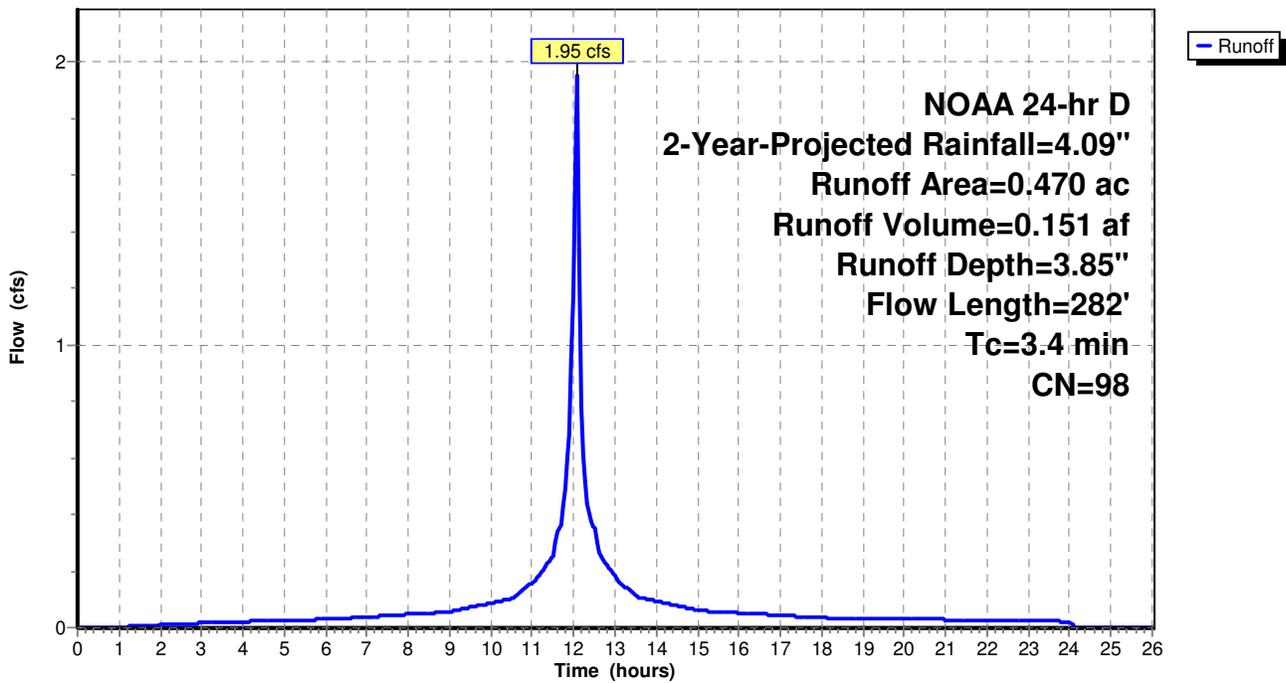
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 2-Year-Projected Rainfall=4.09"

Area (ac)	CN	Description
0.470	98	Unconnected roofs, HSG D
0.470		100.00% Impervious Area
0.470		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	182	0.0060	1.57		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	282	Total			

Subcatchment 1S: BROAD - IMP

Hydrograph



2024-02 Existing Hydrology

NOAA 24-hr D 2-Year-Projected Rainfall=4.09"

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Summary for Subcatchment 3S: FRANKLIN - IMP

Runoff = 3.36 cfs @ 12.09 hrs, Volume= 0.260 af, Depth= 3.85"
 Routed to Link 5L : FRANKLIN

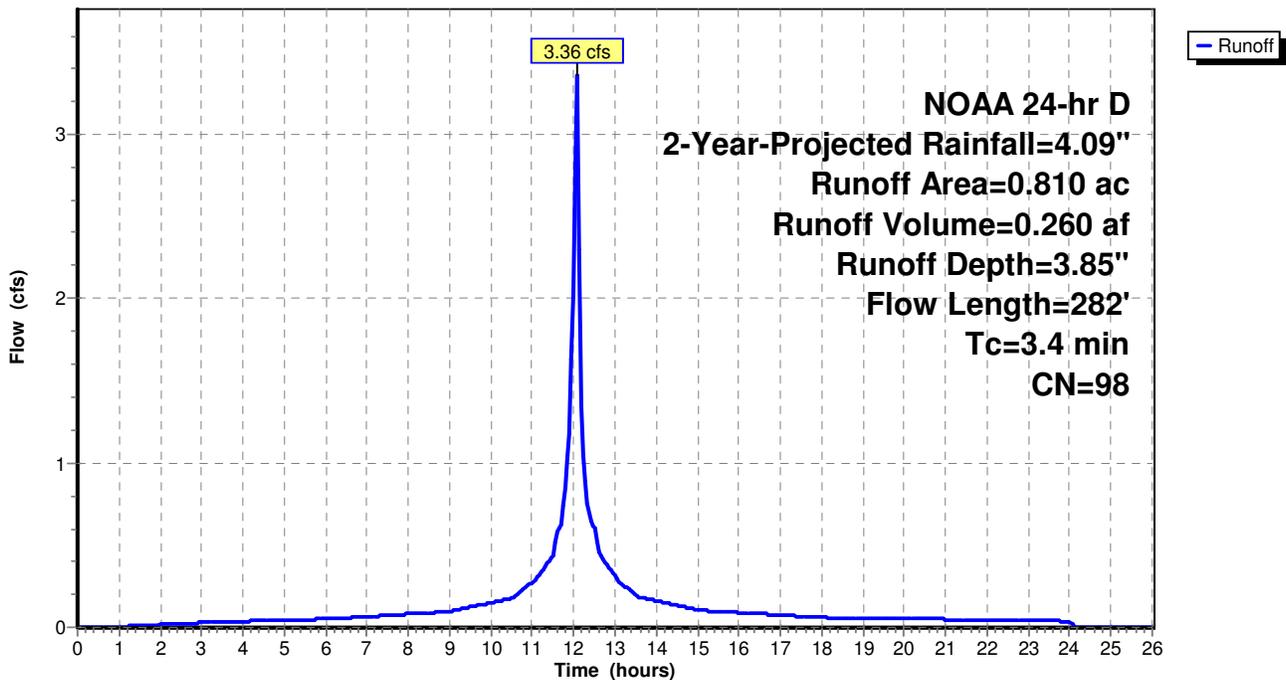
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 2-Year-Projected Rainfall=4.09"

Area (ac)	CN	Description
0.130	98	Unconnected roofs, HSG D
0.680	98	Paved parking, HSG D
0.810	98	Weighted Average
0.810		100.00% Impervious Area
0.130		16.05% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	182	0.0060	1.57		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	282	Total			

Subcatchment 3S: FRANKLIN - IMP

Hydrograph



2024-02 Existing Hydrology

NOAA 24-hr D 2-Year-Projected Rainfall=4.09"

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Summary for Subcatchment 4S: FRANKLIN - PERV

Runoff = 0.11 cfs @ 12.10 hrs, Volume= 0.007 af, Depth= 2.12"
 Routed to Link 5L : FRANKLIN

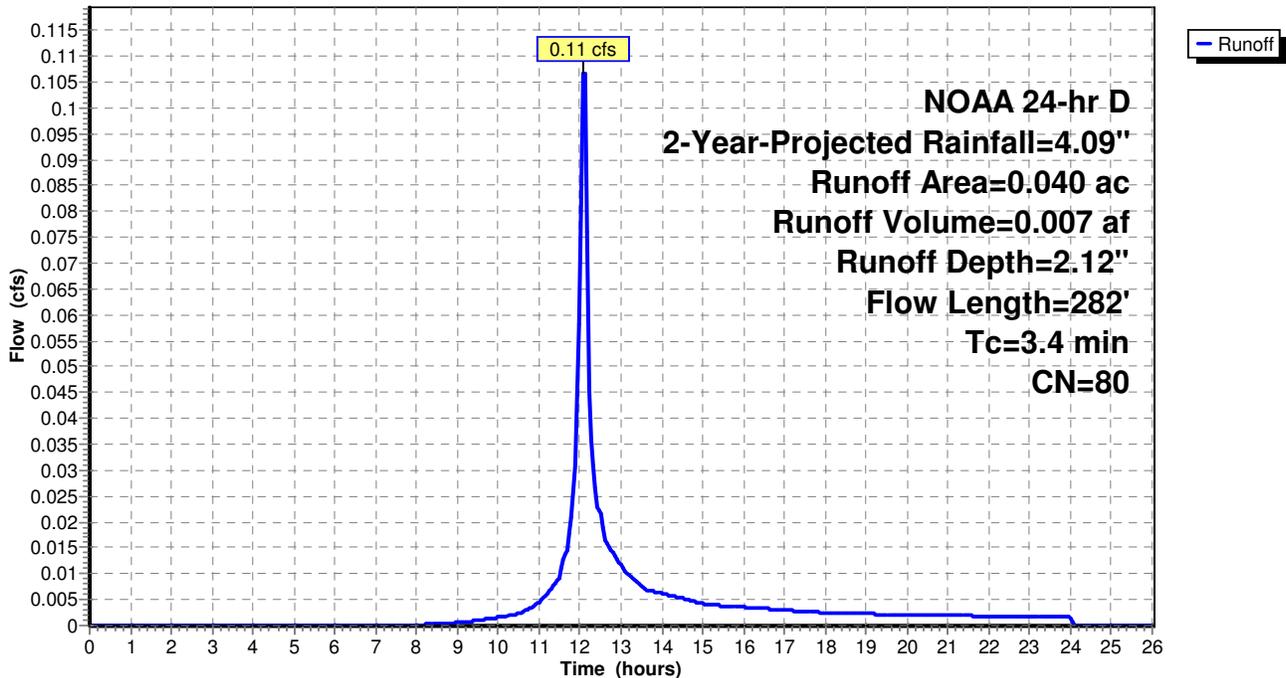
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 2-Year-Projected Rainfall=4.09"

Area (ac)	CN	Description
0.040	80	>75% Grass cover, Good, HSG D
0.040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	182	0.0060	1.57		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	282	Total			

Subcatchment 4S: FRANKLIN - PERV

Hydrograph



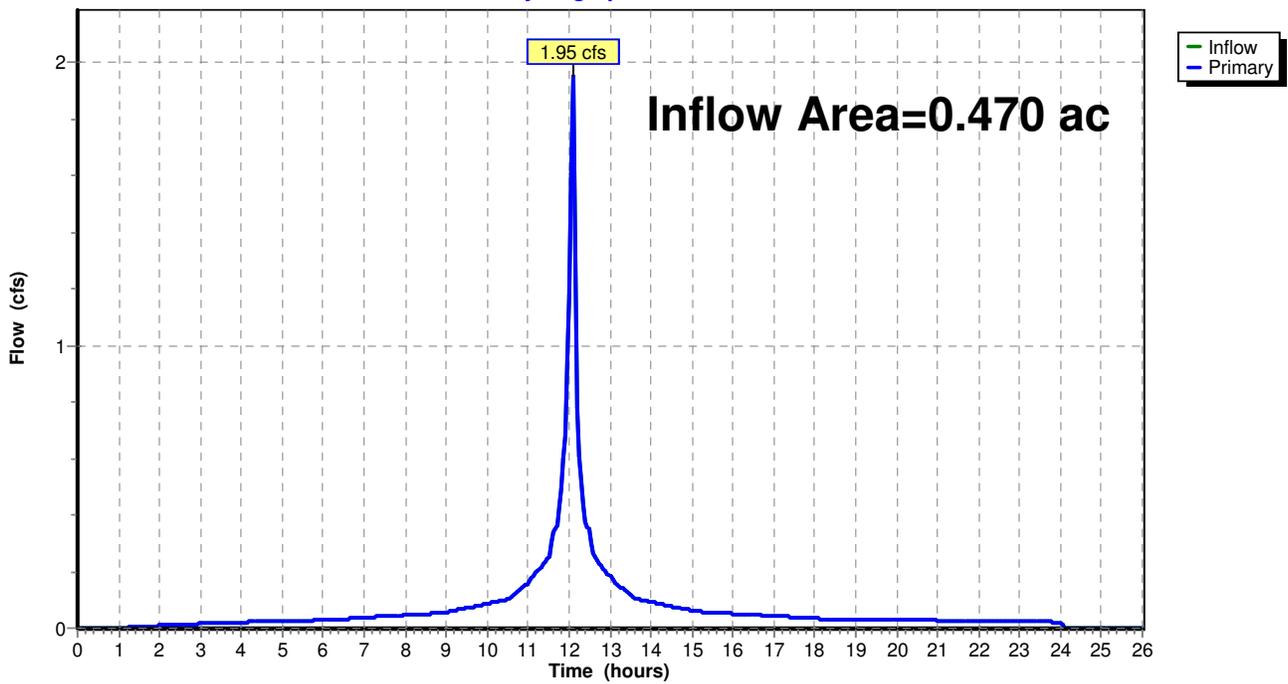
Summary for Link 2L: BROAD

Inflow Area = 0.470 ac, 100.00% Impervious, Inflow Depth = 3.85" for 2-Year-Projected event
Inflow = 1.95 cfs @ 12.09 hrs, Volume= 0.151 af
Primary = 1.95 cfs @ 12.09 hrs, Volume= 0.151 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 2L: BROAD

Hydrograph



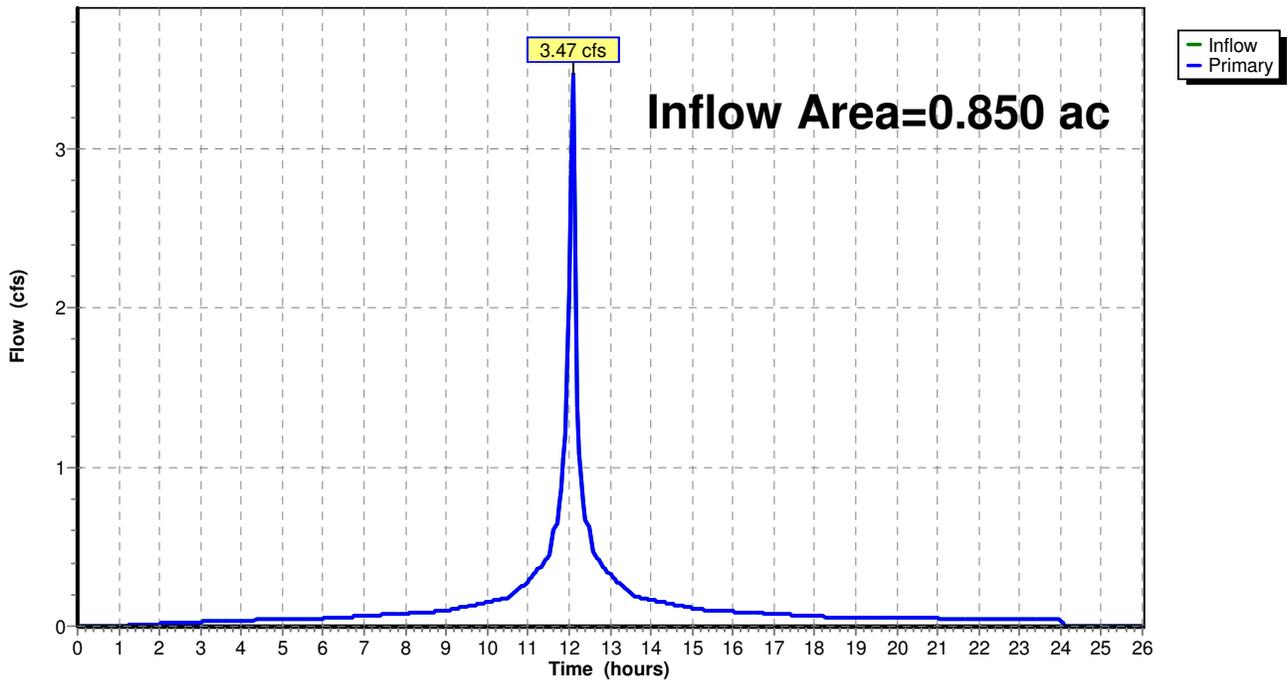
Summary for Link 5L: FRANKLIN

Inflow Area = 0.850 ac, 95.29% Impervious, Inflow Depth = 3.77" for 2-Year-Projected event
Inflow = 3.47 cfs @ 12.09 hrs, Volume= 0.267 af
Primary = 3.47 cfs @ 12.09 hrs, Volume= 0.267 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 5L: FRANKLIN

Hydrograph



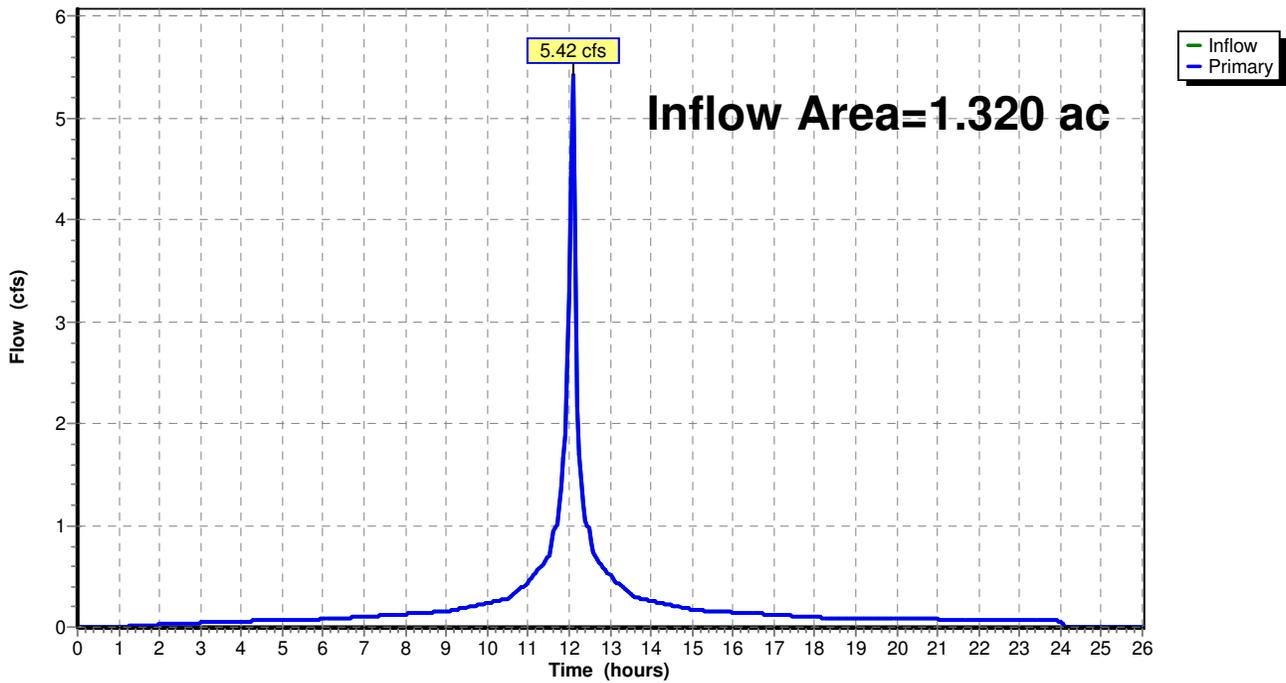
Summary for Link 6L: POA 1

Inflow Area = 1.320 ac, 96.97% Impervious, Inflow Depth = 3.80" for 2-Year-Projected event
Inflow = 5.42 cfs @ 12.09 hrs, Volume= 0.418 af
Primary = 5.42 cfs @ 12.09 hrs, Volume= 0.418 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 6L: POA 1

Hydrograph



2024-02 Existing Hydrology

NOAA 24-hr D 10-Year-Current Rainfall=5.38"

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Summary for Subcatchment 1S: BROAD - IMP

Runoff = 2.57 cfs @ 12.09 hrs, Volume= 0.201 af, Depth= 5.14"
 Routed to Link 2L : BROAD

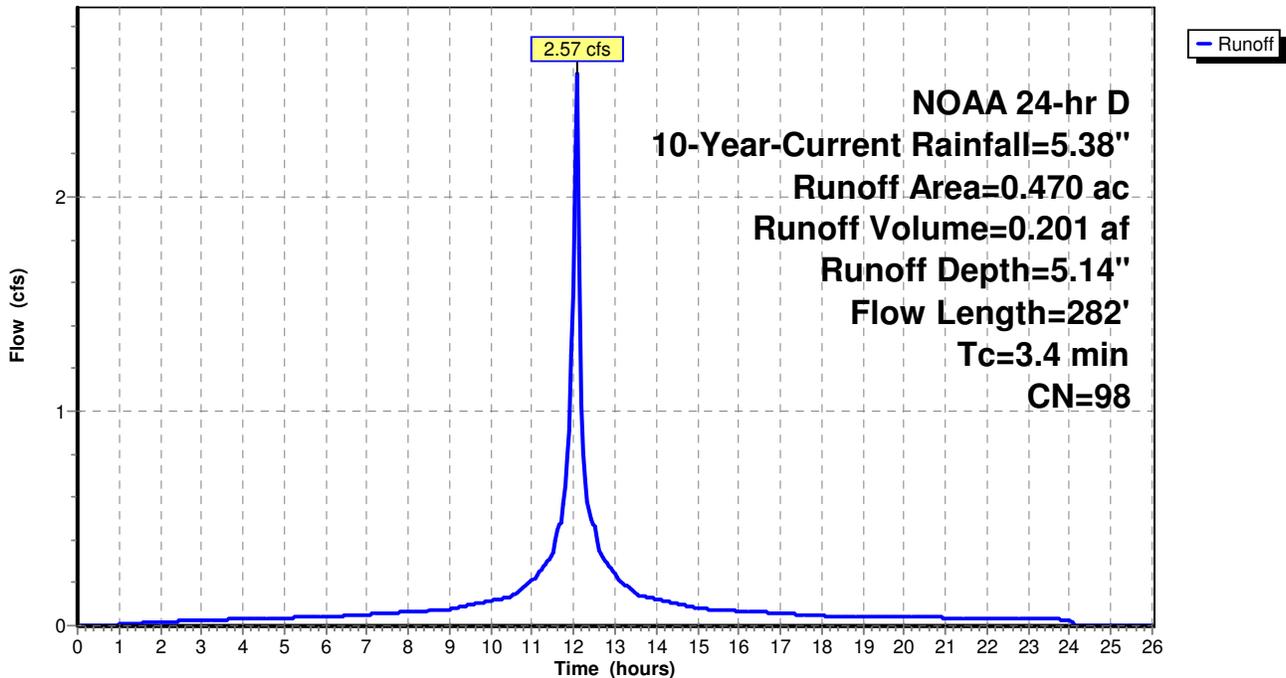
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 10-Year-Current Rainfall=5.38"

Area (ac)	CN	Description
0.470	98	Unconnected roofs, HSG D
0.470		100.00% Impervious Area
0.470		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	182	0.0060	1.57		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	282	Total			

Subcatchment 1S: BROAD - IMP

Hydrograph



Summary for Subcatchment 3S: FRANKLIN - IMP

Runoff = 4.44 cfs @ 12.09 hrs, Volume= 0.347 af, Depth= 5.14"
 Routed to Link 5L : FRANKLIN

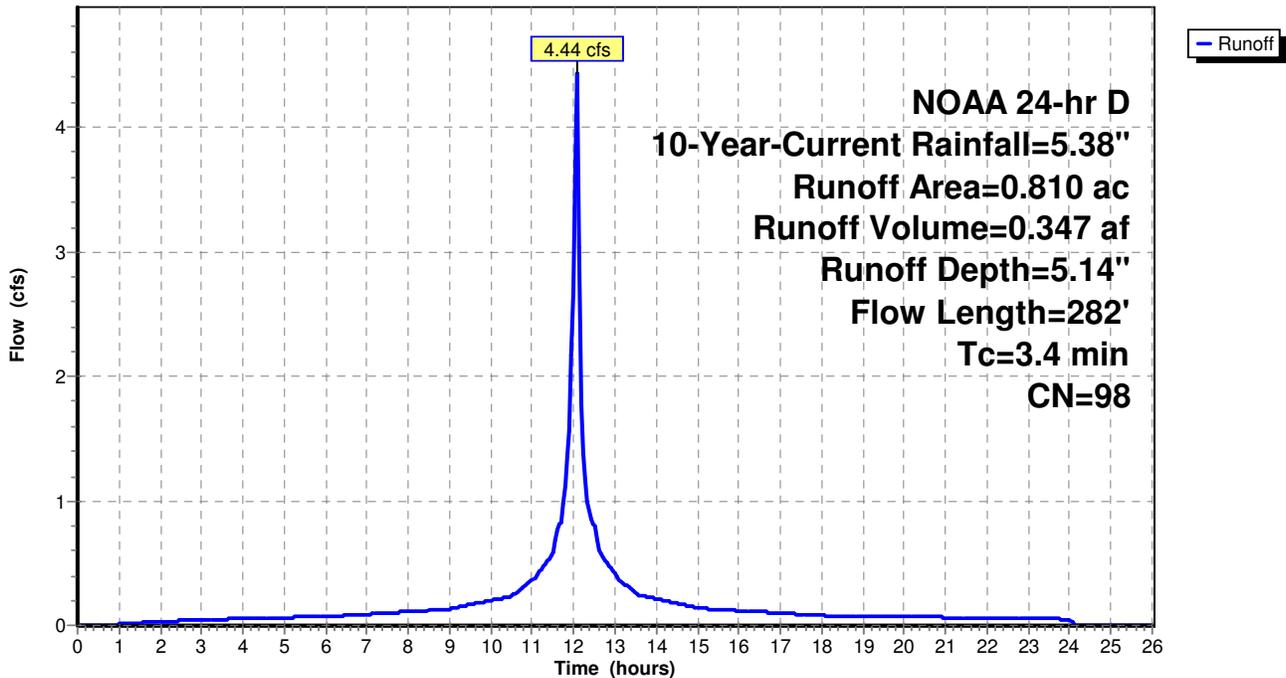
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 10-Year-Current Rainfall=5.38"

Area (ac)	CN	Description
0.130	98	Unconnected roofs, HSG D
0.680	98	Paved parking, HSG D
0.810	98	Weighted Average
0.810		100.00% Impervious Area
0.130		16.05% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	182	0.0060	1.57		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	282	Total			

Subcatchment 3S: FRANKLIN - IMP

Hydrograph



2024-02 Existing Hydrology

NOAA 24-hr D 10-Year-Current Rainfall=5.38"

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Summary for Subcatchment 4S: FRANKLIN - PERV

Runoff = 0.16 cfs @ 12.10 hrs, Volume= 0.011 af, Depth= 3.23"
 Routed to Link 5L : FRANKLIN

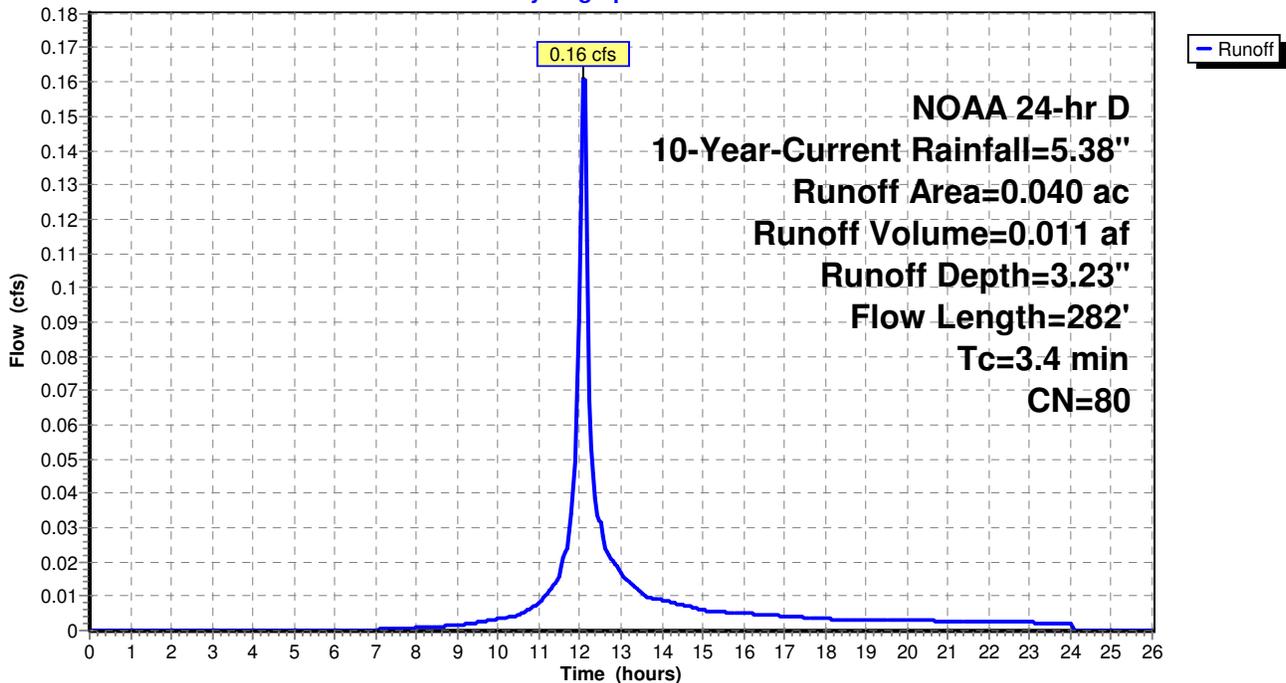
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 10-Year-Current Rainfall=5.38"

Area (ac)	CN	Description
0.040	80	>75% Grass cover, Good, HSG D
0.040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	182	0.0060	1.57		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	282	Total			

Subcatchment 4S: FRANKLIN - PERV

Hydrograph



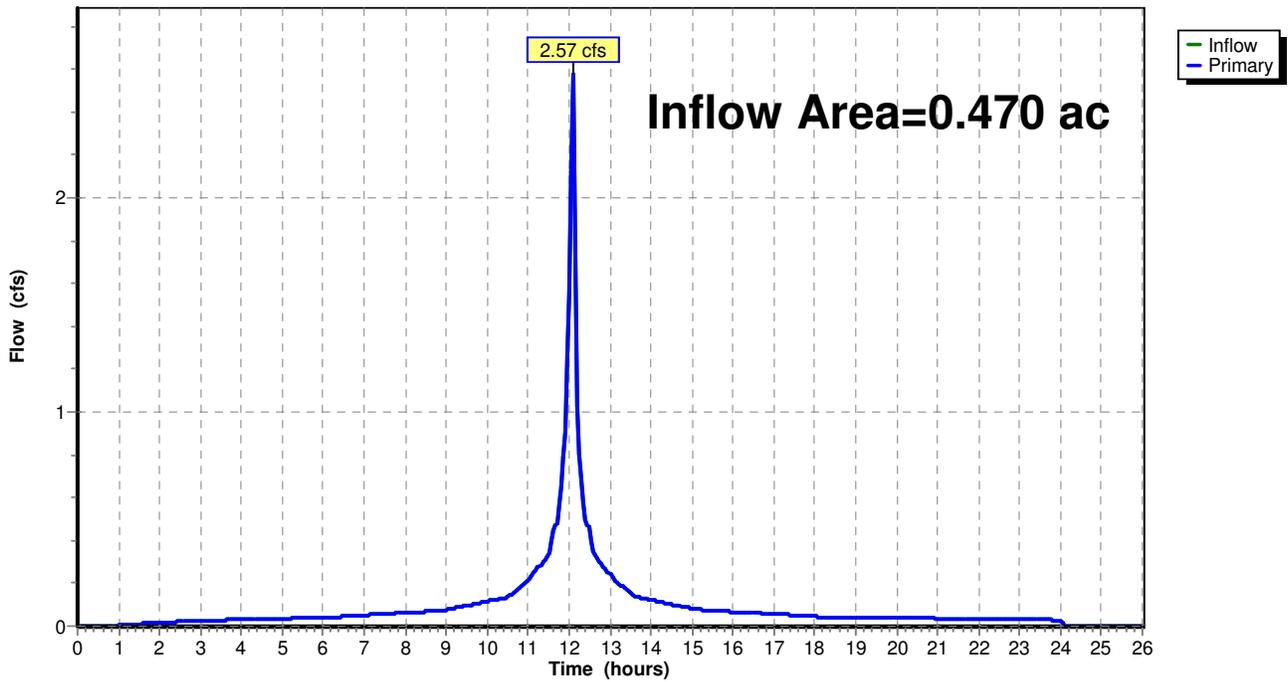
Summary for Link 2L: BROAD

Inflow Area = 0.470 ac, 100.00% Impervious, Inflow Depth = 5.14" for 10-Year-Current event
Inflow = 2.57 cfs @ 12.09 hrs, Volume= 0.201 af
Primary = 2.57 cfs @ 12.09 hrs, Volume= 0.201 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 2L: BROAD

Hydrograph



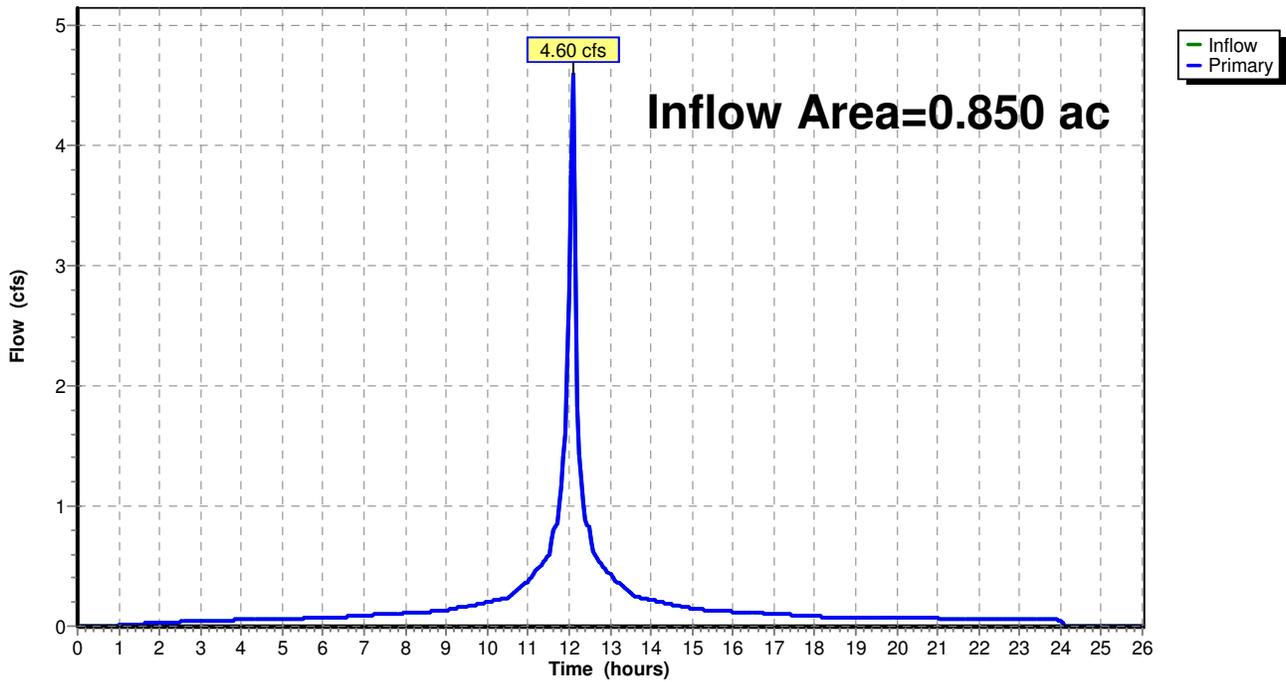
Summary for Link 5L: FRANKLIN

Inflow Area = 0.850 ac, 95.29% Impervious, Inflow Depth = 5.05" for 10-Year-Current event
Inflow = 4.60 cfs @ 12.09 hrs, Volume= 0.358 af
Primary = 4.60 cfs @ 12.09 hrs, Volume= 0.358 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 5L: FRANKLIN

Hydrograph



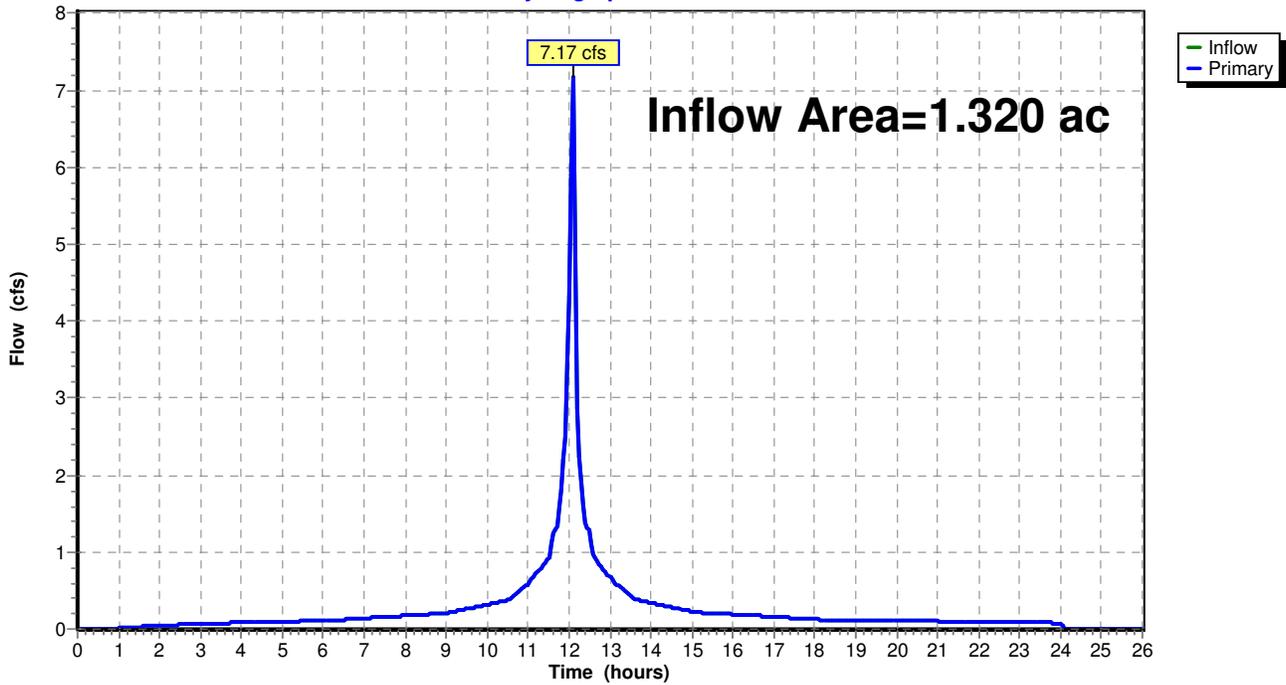
Summary for Link 6L: POA 1

Inflow Area = 1.320 ac, 96.97% Impervious, Inflow Depth = 5.08" for 10-Year-Current event
Inflow = 7.17 cfs @ 12.09 hrs, Volume= 0.559 af
Primary = 7.17 cfs @ 12.09 hrs, Volume= 0.559 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 6L: POA 1

Hydrograph



2024-02 Existing Hydrology

NOAA 24-hr D 10-Year-Projected Rainfall=6.37"

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Summary for Subcatchment 1S: BROAD - IMP

Runoff = 3.05 cfs @ 12.09 hrs, Volume= 0.240 af, Depth= 6.13"
 Routed to Link 2L : BROAD

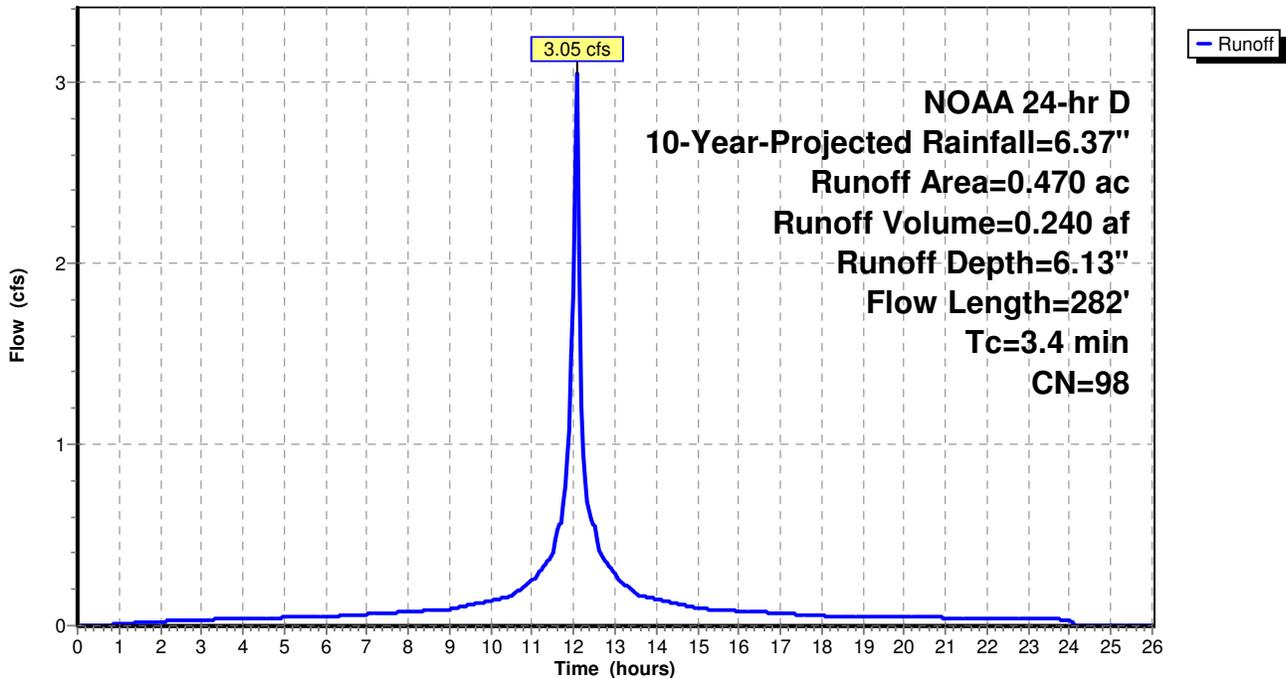
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 10-Year-Projected Rainfall=6.37"

Area (ac)	CN	Description
0.470	98	Unconnected roofs, HSG D
0.470		100.00% Impervious Area
0.470		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	182	0.0060	1.57		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	282	Total			

Subcatchment 1S: BROAD - IMP

Hydrograph



2024-02 Existing Hydrology

NOAA 24-hr D 10-Year-Projected Rainfall=6.37"

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Summary for Subcatchment 3S: FRANKLIN - IMP

Runoff = 5.26 cfs @ 12.09 hrs, Volume= 0.414 af, Depth= 6.13"
 Routed to Link 5L : FRANKLIN

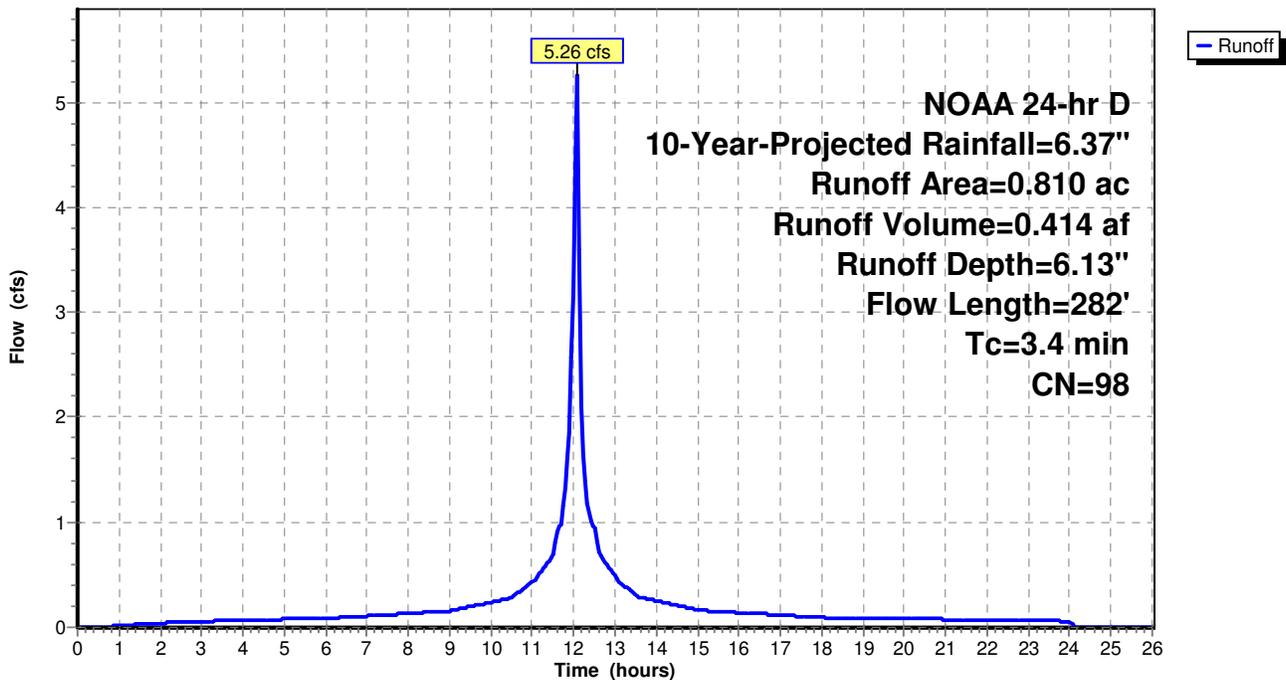
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 10-Year-Projected Rainfall=6.37"

Area (ac)	CN	Description
0.130	98	Unconnected roofs, HSG D
0.680	98	Paved parking, HSG D
0.810	98	Weighted Average
0.810		100.00% Impervious Area
0.130		16.05% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	182	0.0060	1.57		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	282	Total			

Subcatchment 3S: FRANKLIN - IMP

Hydrograph



2024-02 Existing Hydrology

NOAA 24-hr D 10-Year-Projected Rainfall=6.37"

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Summary for Subcatchment 4S: FRANKLIN - PERV

Runoff = 0.20 cfs @ 12.09 hrs, Volume= 0.014 af, Depth= 4.12"
 Routed to Link 5L : FRANKLIN

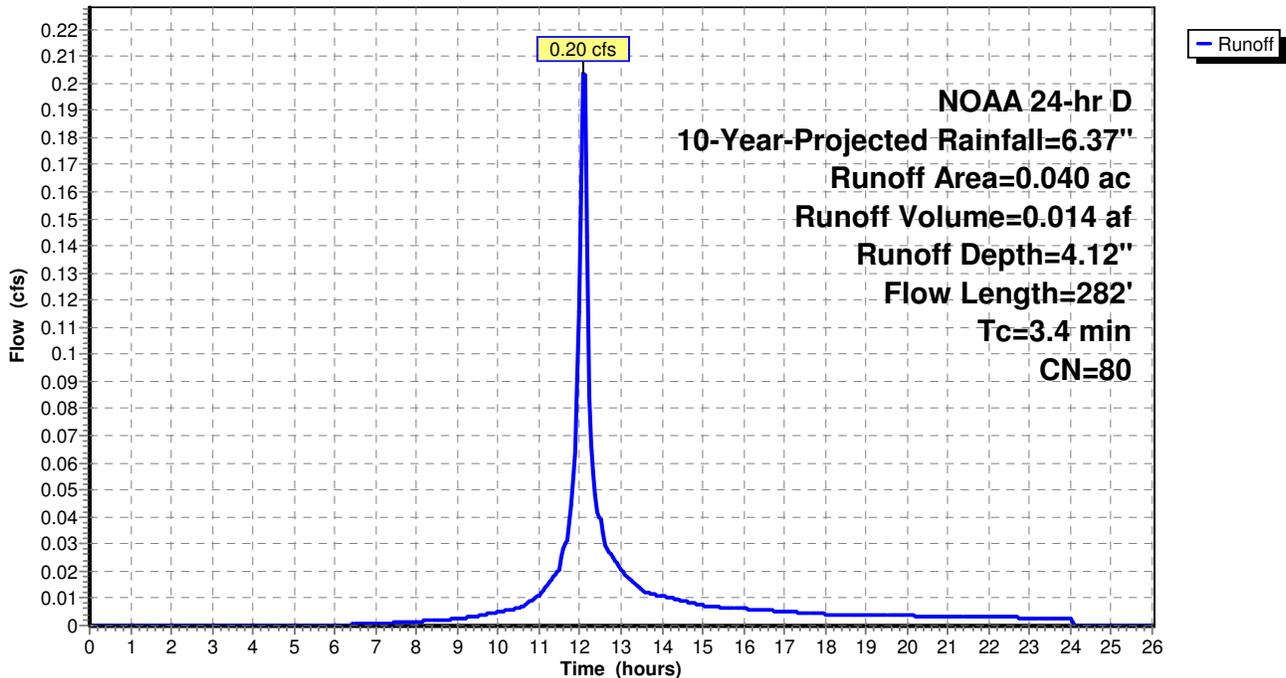
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 10-Year-Projected Rainfall=6.37"

Area (ac)	CN	Description
0.040	80	>75% Grass cover, Good, HSG D
0.040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	182	0.0060	1.57		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	282	Total			

Subcatchment 4S: FRANKLIN - PERV

Hydrograph



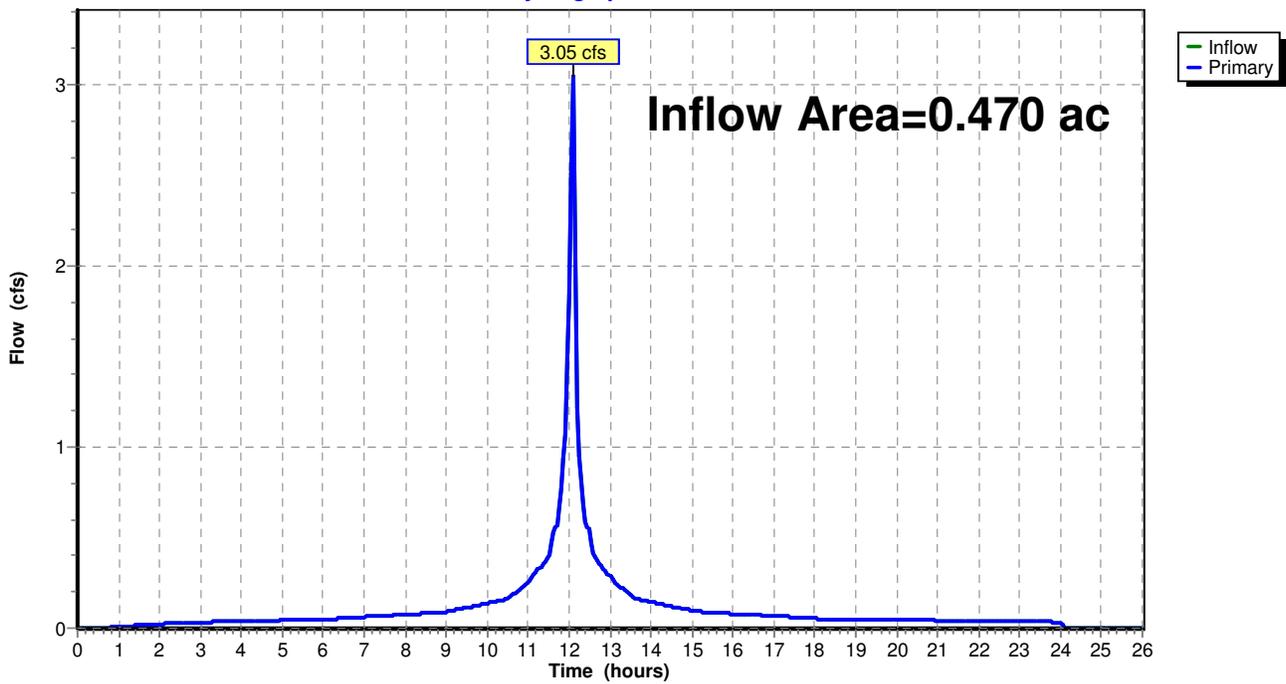
Summary for Link 2L: BROAD

Inflow Area = 0.470 ac, 100.00% Impervious, Inflow Depth = 6.13" for 10-Year-Projected event
Inflow = 3.05 cfs @ 12.09 hrs, Volume= 0.240 af
Primary = 3.05 cfs @ 12.09 hrs, Volume= 0.240 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 2L: BROAD

Hydrograph



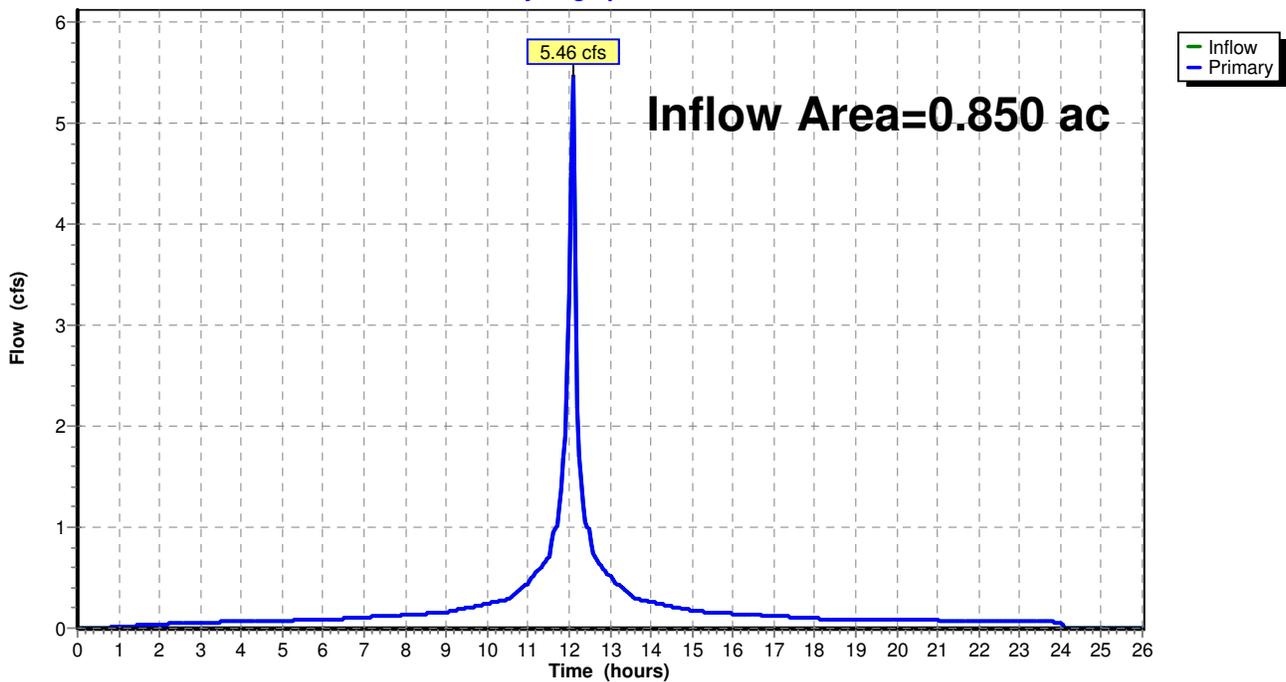
Summary for Link 5L: FRANKLIN

Inflow Area = 0.850 ac, 95.29% Impervious, Inflow Depth = 6.04" for 10-Year-Projected event
Inflow = 5.46 cfs @ 12.09 hrs, Volume= 0.428 af
Primary = 5.46 cfs @ 12.09 hrs, Volume= 0.428 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 5L: FRANKLIN

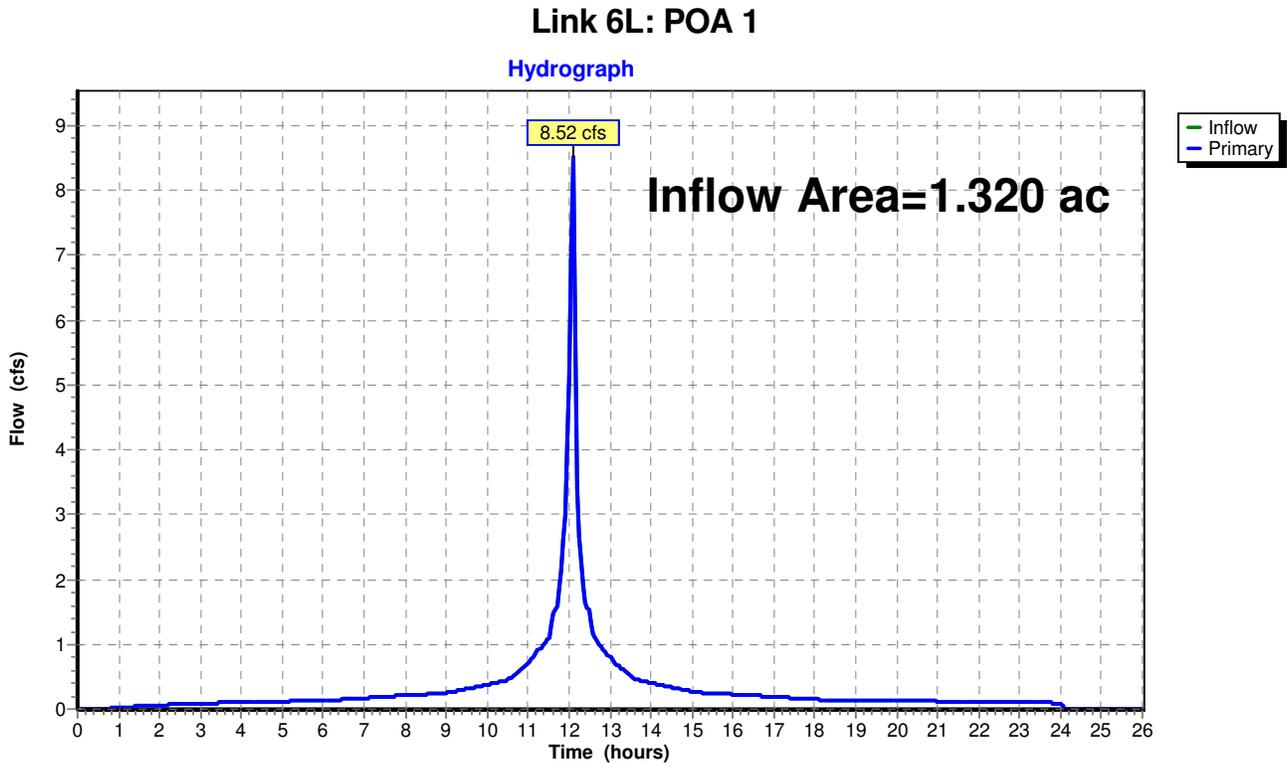
Hydrograph



Summary for Link 6L: POA 1

Inflow Area = 1.320 ac, 96.97% Impervious, Inflow Depth = 6.07" for 10-Year-Projected event
Inflow = 8.52 cfs @ 12.09 hrs, Volume= 0.668 af
Primary = 8.52 cfs @ 12.09 hrs, Volume= 0.668 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs



2024-02 Existing Hydrology

NOAA 24-hr D 100-Year-Current Rainfall=9.18"

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Summary for Subcatchment 1S: BROAD - IMP

Runoff = 4.41 cfs @ 12.09 hrs, Volume= 0.350 af, Depth= 8.94"
 Routed to Link 2L : BROAD

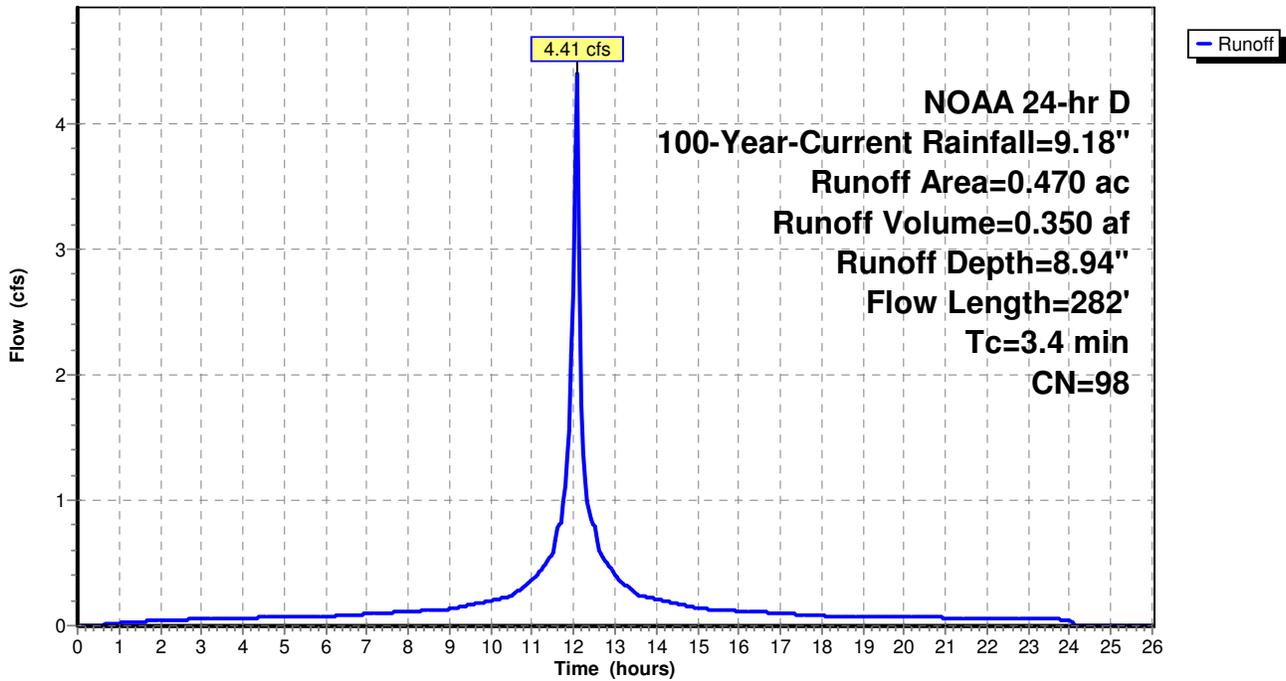
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 100-Year-Current Rainfall=9.18"

Area (ac)	CN	Description
0.470	98	Unconnected roofs, HSG D
0.470		100.00% Impervious Area
0.470		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	182	0.0060	1.57		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	282	Total			

Subcatchment 1S: BROAD - IMP

Hydrograph



2024-02 Existing Hydrology

NOAA 24-hr D 100-Year-Current Rainfall=9.18"

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Summary for Subcatchment 3S: FRANKLIN - IMP

Runoff = 7.59 cfs @ 12.09 hrs, Volume= 0.603 af, Depth= 8.94"
 Routed to Link 5L : FRANKLIN

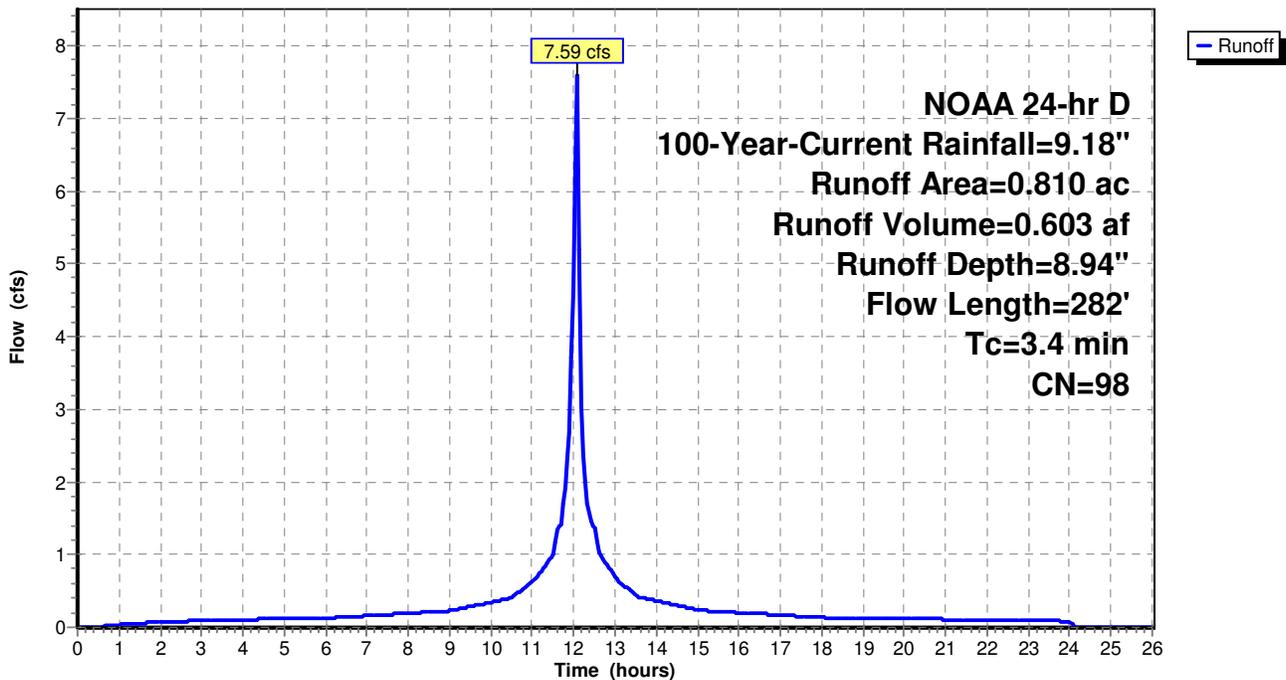
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 100-Year-Current Rainfall=9.18"

Area (ac)	CN	Description
0.130	98	Unconnected roofs, HSG D
0.680	98	Paved parking, HSG D
0.810	98	Weighted Average
0.810		100.00% Impervious Area
0.130		16.05% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	182	0.0060	1.57		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	282	Total			

Subcatchment 3S: FRANKLIN - IMP

Hydrograph



2024-02 Existing Hydrology

NOAA 24-hr D 100-Year-Current Rainfall=9.18"

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Summary for Subcatchment 4S: FRANKLIN - PERV

Runoff = 0.33 cfs @ 12.09 hrs, Volume= 0.022 af, Depth= 6.74"
 Routed to Link 5L : FRANKLIN

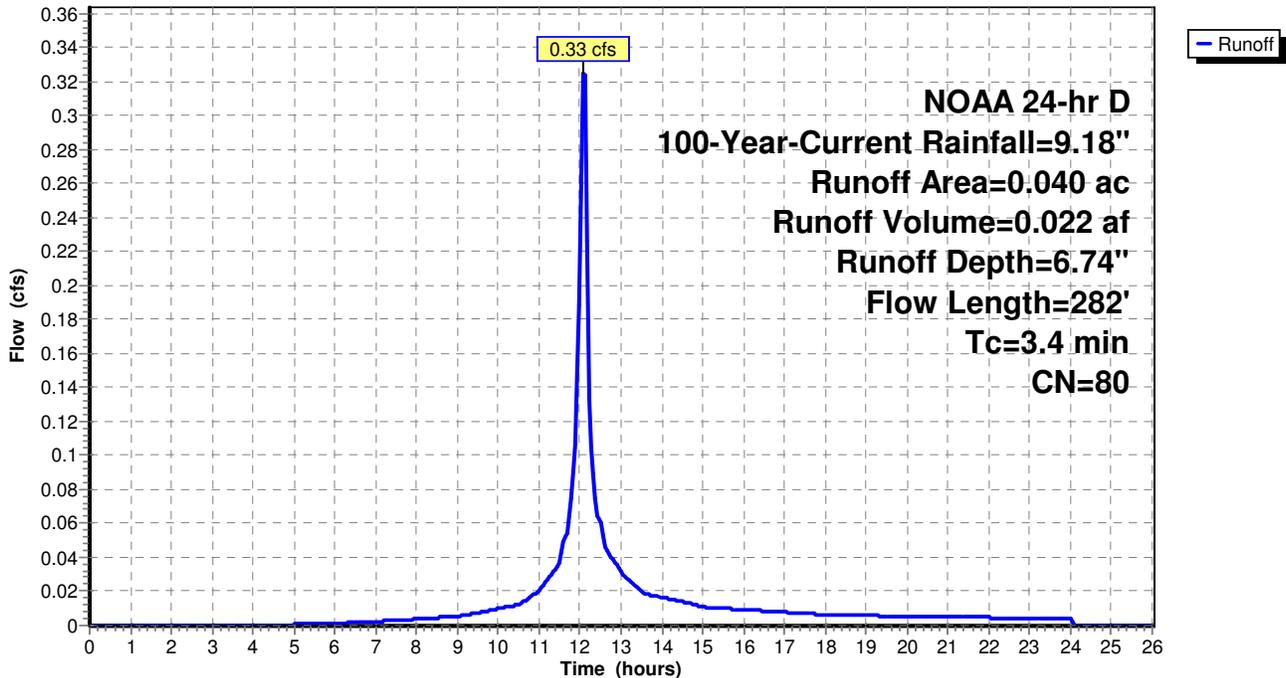
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 100-Year-Current Rainfall=9.18"

Area (ac)	CN	Description
0.040	80	>75% Grass cover, Good, HSG D
0.040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	182	0.0060	1.57		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	282	Total			

Subcatchment 4S: FRANKLIN - PERV

Hydrograph



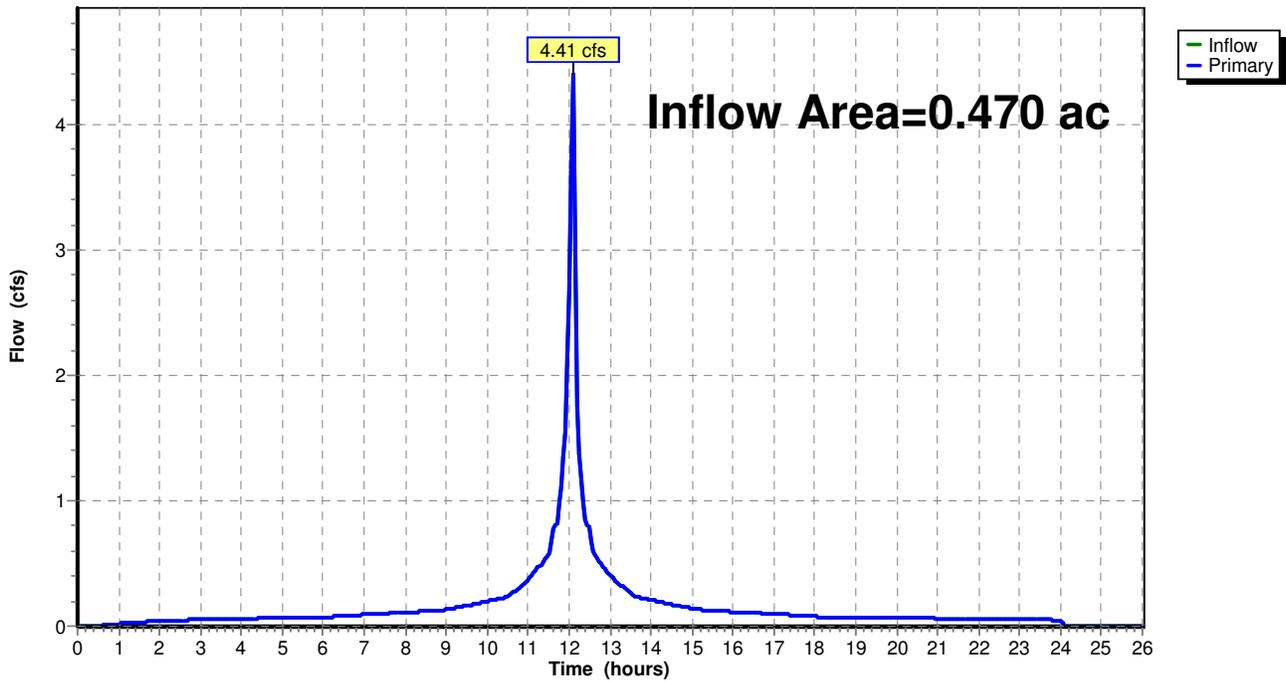
Summary for Link 2L: BROAD

Inflow Area = 0.470 ac, 100.00% Impervious, Inflow Depth = 8.94" for 100-Year-Current event
Inflow = 4.41 cfs @ 12.09 hrs, Volume= 0.350 af
Primary = 4.41 cfs @ 12.09 hrs, Volume= 0.350 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 2L: BROAD

Hydrograph



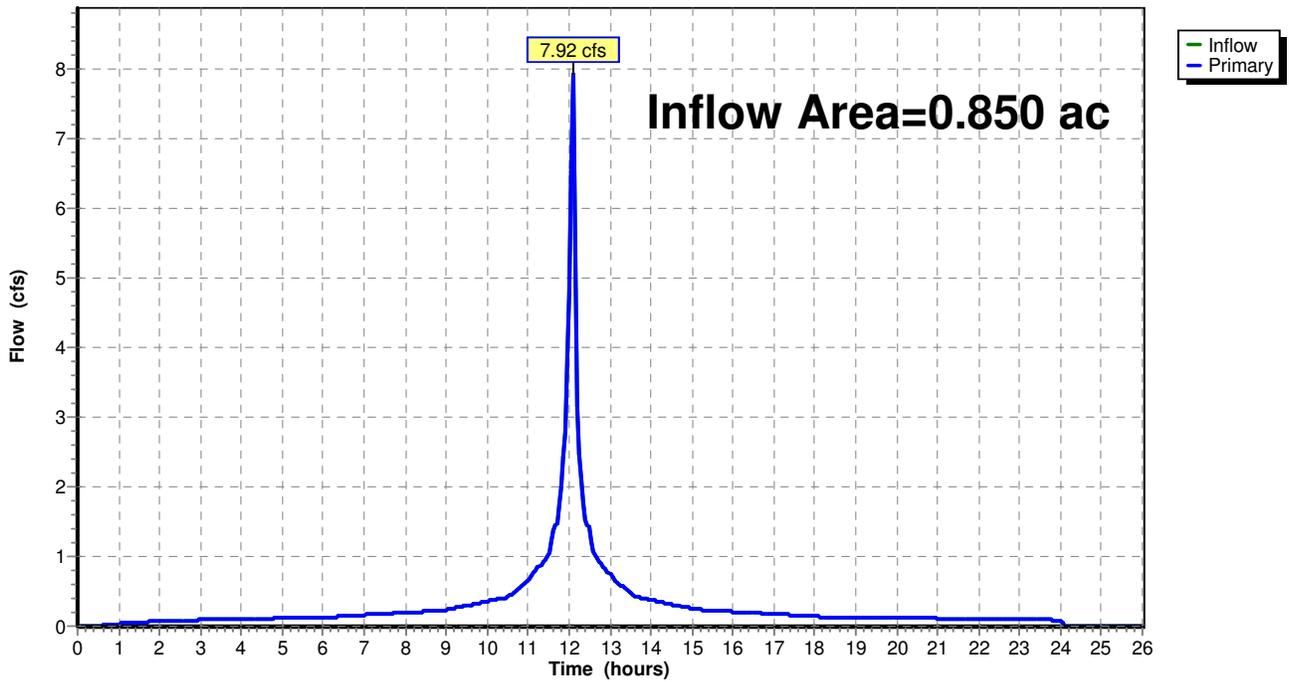
Summary for Link 5L: FRANKLIN

Inflow Area = 0.850 ac, 95.29% Impervious, Inflow Depth = 8.84" for 100-Year-Current event
Inflow = 7.92 cfs @ 12.09 hrs, Volume= 0.626 af
Primary = 7.92 cfs @ 12.09 hrs, Volume= 0.626 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 5L: FRANKLIN

Hydrograph



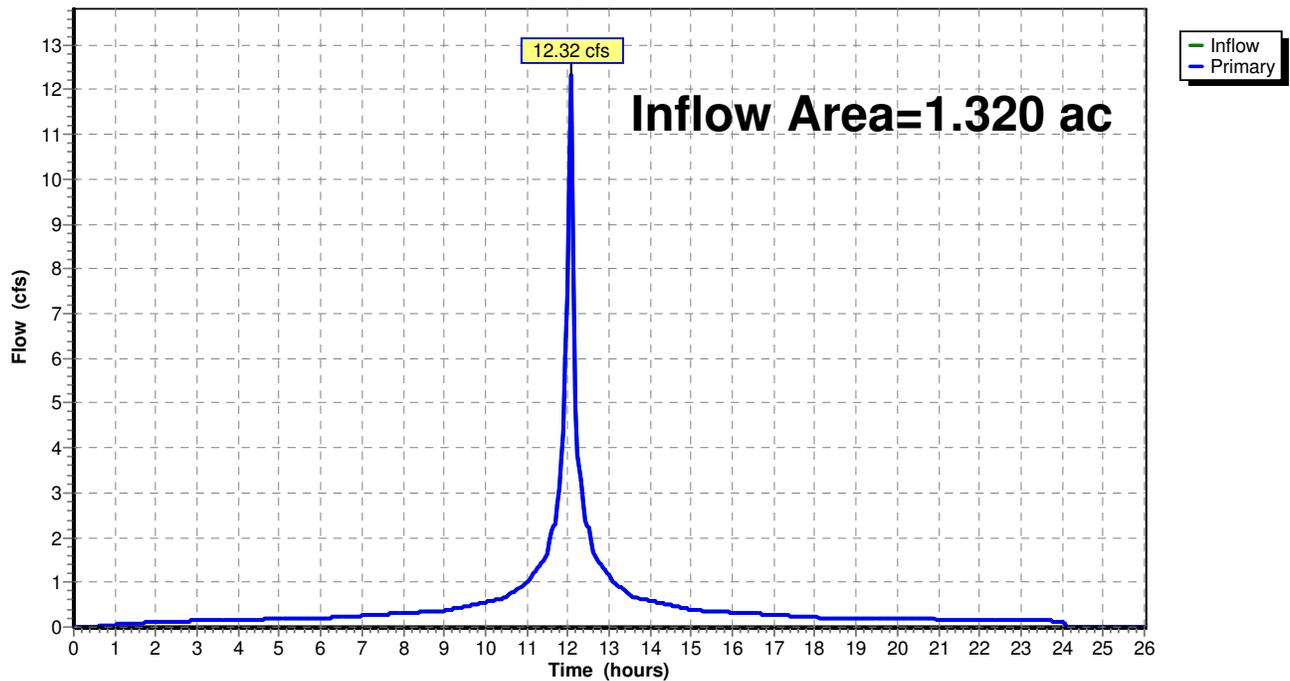
Summary for Link 6L: POA 1

Inflow Area = 1.320 ac, 96.97% Impervious, Inflow Depth = 8.87" for 100-Year-Current event
Inflow = 12.32 cfs @ 12.09 hrs, Volume= 0.976 af
Primary = 12.32 cfs @ 12.09 hrs, Volume= 0.976 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 6L: POA 1

Hydrograph



2024-02 Existing Hydrology

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NOAA 24-hr D 100-Year-Projected Rainfall=11.52"

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Summary for Subcatchment 1S: BROAD - IMP

Runoff = 5.53 cfs @ 12.09 hrs, Volume= 0.442 af, Depth=11.28"
Routed to Link 2L : BROAD

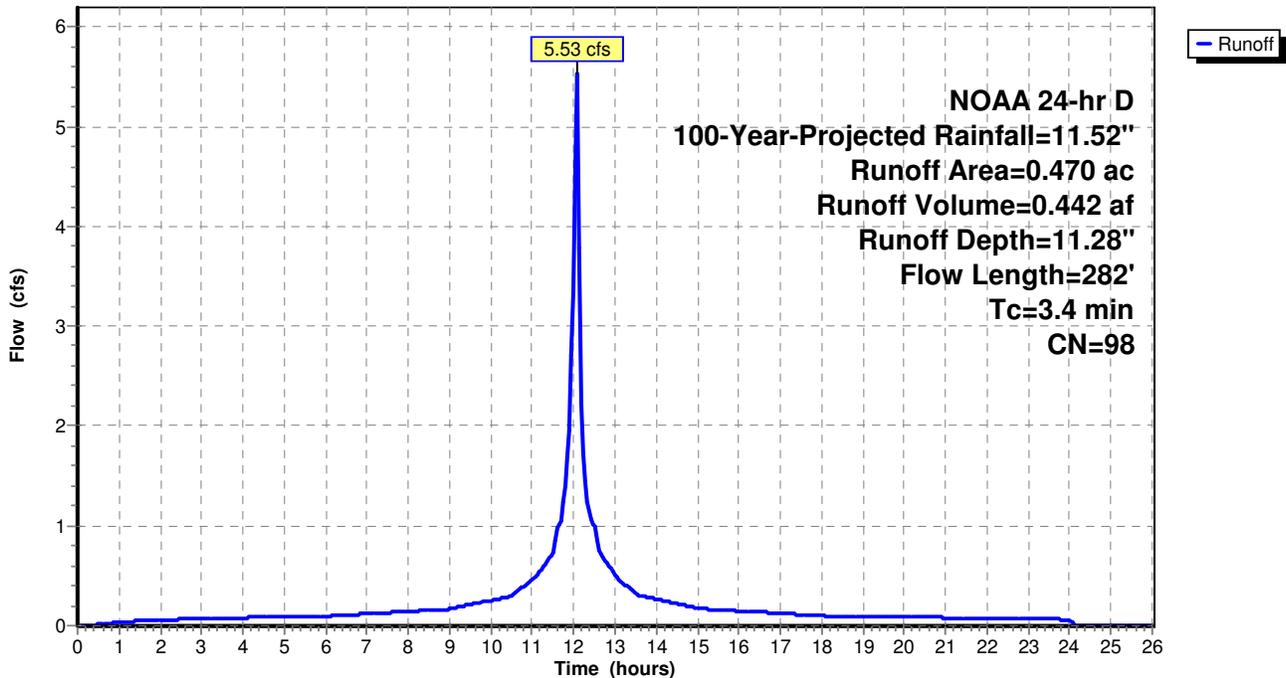
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
NOAA 24-hr D 100-Year-Projected Rainfall=11.52"

Area (ac)	CN	Description
0.470	98	Unconnected roofs, HSG D
0.470		100.00% Impervious Area
0.470		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	182	0.0060	1.57		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	282	Total			

Subcatchment 1S: BROAD - IMP

Hydrograph



2024-02 Existing Hydrology

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NOAA 24-hr D 100-Year-Projected Rainfall=11.52"

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Summary for Subcatchment 3S: FRANKLIN - IMP

Runoff = 9.53 cfs @ 12.09 hrs, Volume= 0.761 af, Depth=11.28"
 Routed to Link 5L : FRANKLIN

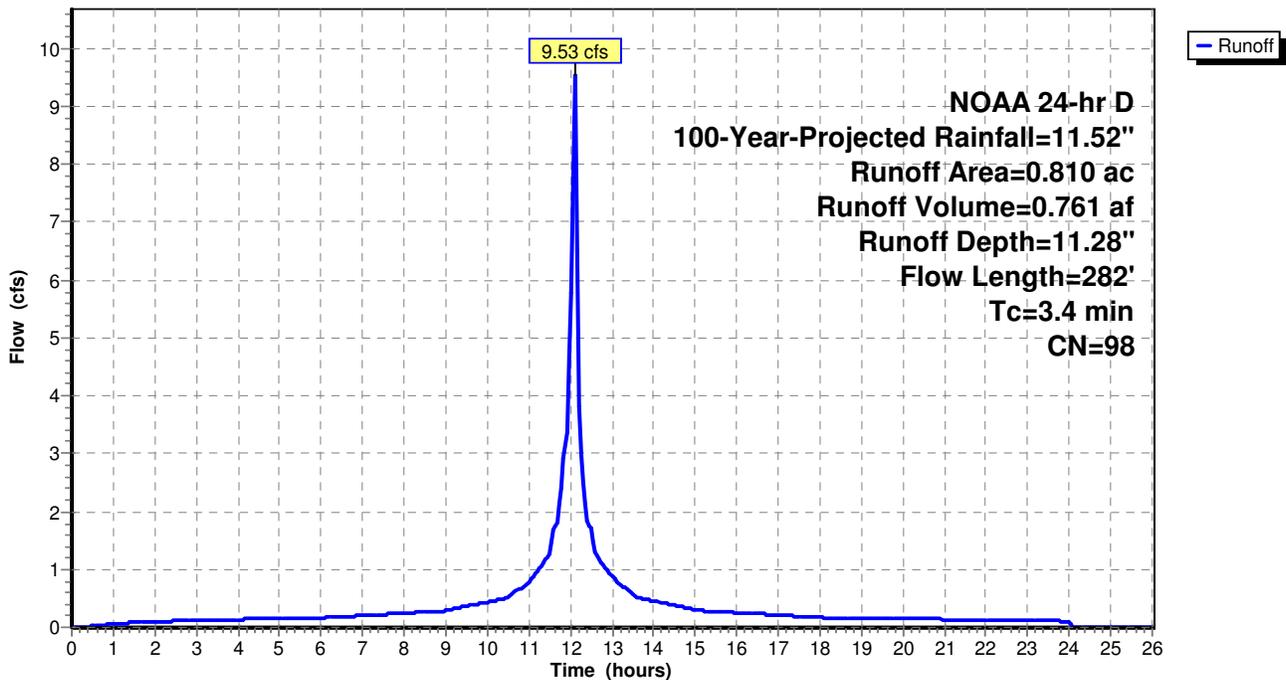
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 100-Year-Projected Rainfall=11.52"

Area (ac)	CN	Description
0.130	98	Unconnected roofs, HSG D
0.680	98	Paved parking, HSG D
0.810	98	Weighted Average
0.810		100.00% Impervious Area
0.130		16.05% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	182	0.0060	1.57		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	282	Total			

Subcatchment 3S: FRANKLIN - IMP

Hydrograph



2024-02 Existing Hydrology

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NOAA 24-hr D 100-Year-Projected Rainfall=11.52"

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Summary for Subcatchment 4S: FRANKLIN - PERV

Runoff = 0.43 cfs @ 12.09 hrs, Volume= 0.030 af, Depth= 8.98"
 Routed to Link 5L : FRANKLIN

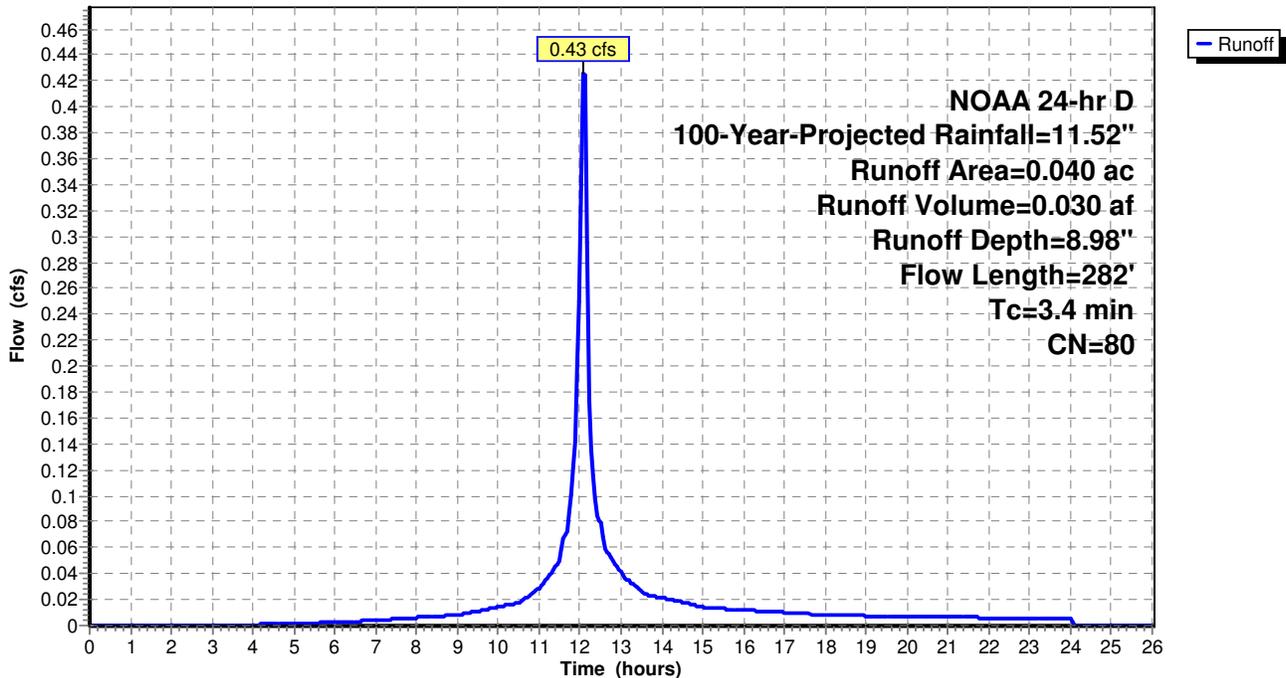
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 100-Year-Projected Rainfall=11.52"

Area (ac)	CN	Description
0.040	80	>75% Grass cover, Good, HSG D
0.040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	182	0.0060	1.57		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	282	Total			

Subcatchment 4S: FRANKLIN - PERV

Hydrograph



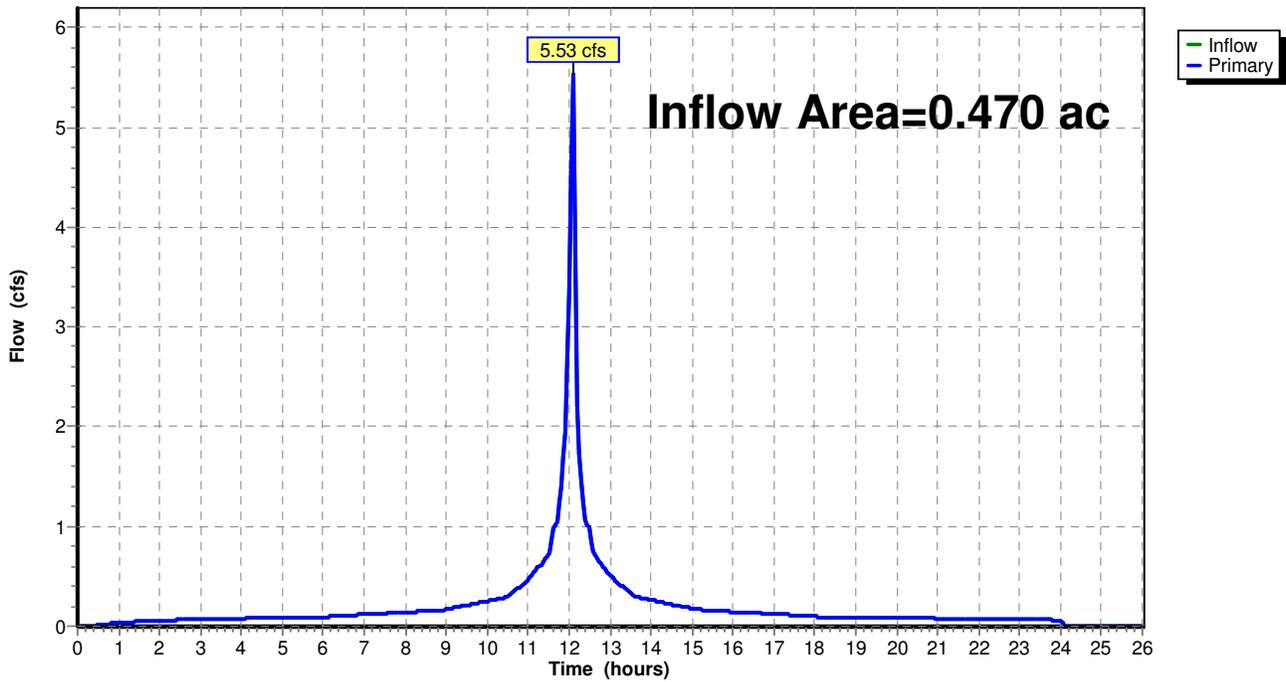
Summary for Link 2L: BROAD

Inflow Area = 0.470 ac, 100.00% Impervious, Inflow Depth = 11.28" for 100-Year-Projected event
Inflow = 5.53 cfs @ 12.09 hrs, Volume= 0.442 af
Primary = 5.53 cfs @ 12.09 hrs, Volume= 0.442 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 2L: BROAD

Hydrograph



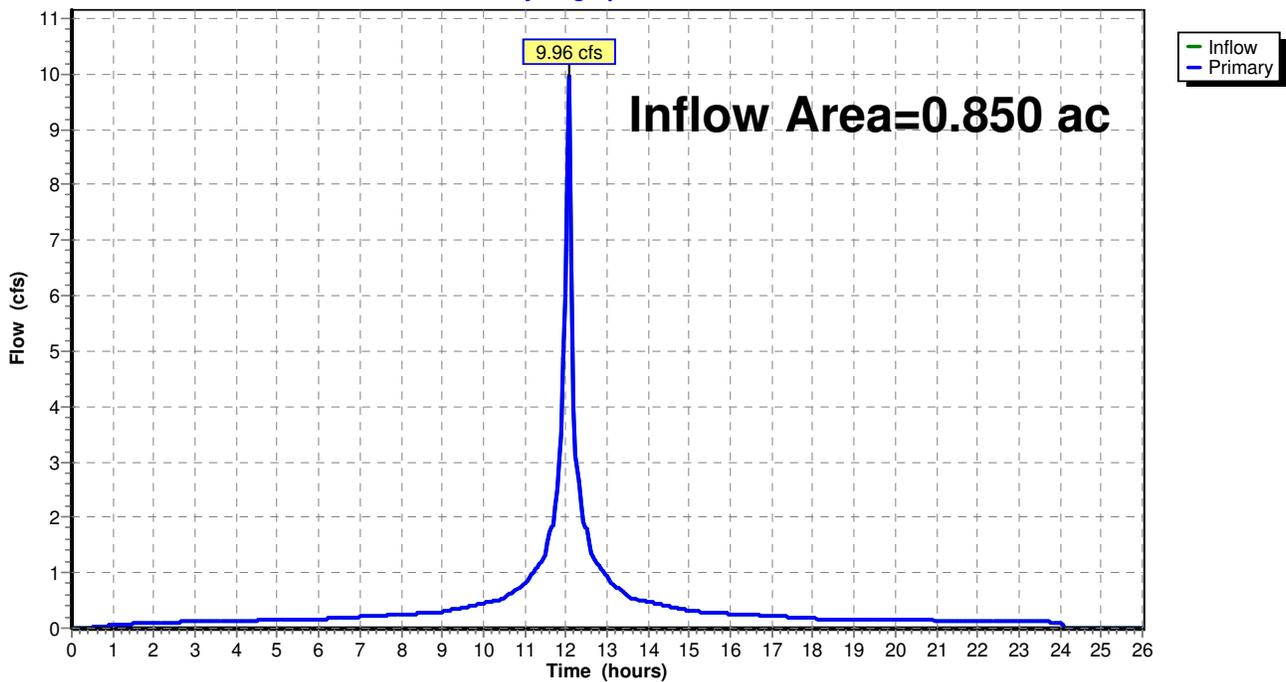
Summary for Link 5L: FRANKLIN

Inflow Area = 0.850 ac, 95.29% Impervious, Inflow Depth = 11.17" for 100-Year-Projected event
Inflow = 9.96 cfs @ 12.09 hrs, Volume= 0.791 af
Primary = 9.96 cfs @ 12.09 hrs, Volume= 0.791 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 5L: FRANKLIN

Hydrograph



Summary for Link 6L: POA 1

Inflow Area = 1.320 ac, 96.97% Impervious, Inflow Depth = 11.21" for 100-Year-Projected event
Inflow = 15.49 cfs @ 12.09 hrs, Volume= 1.233 af
Primary = 15.49 cfs @ 12.09 hrs, Volume= 1.233 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 6L: POA 1

Hydrograph

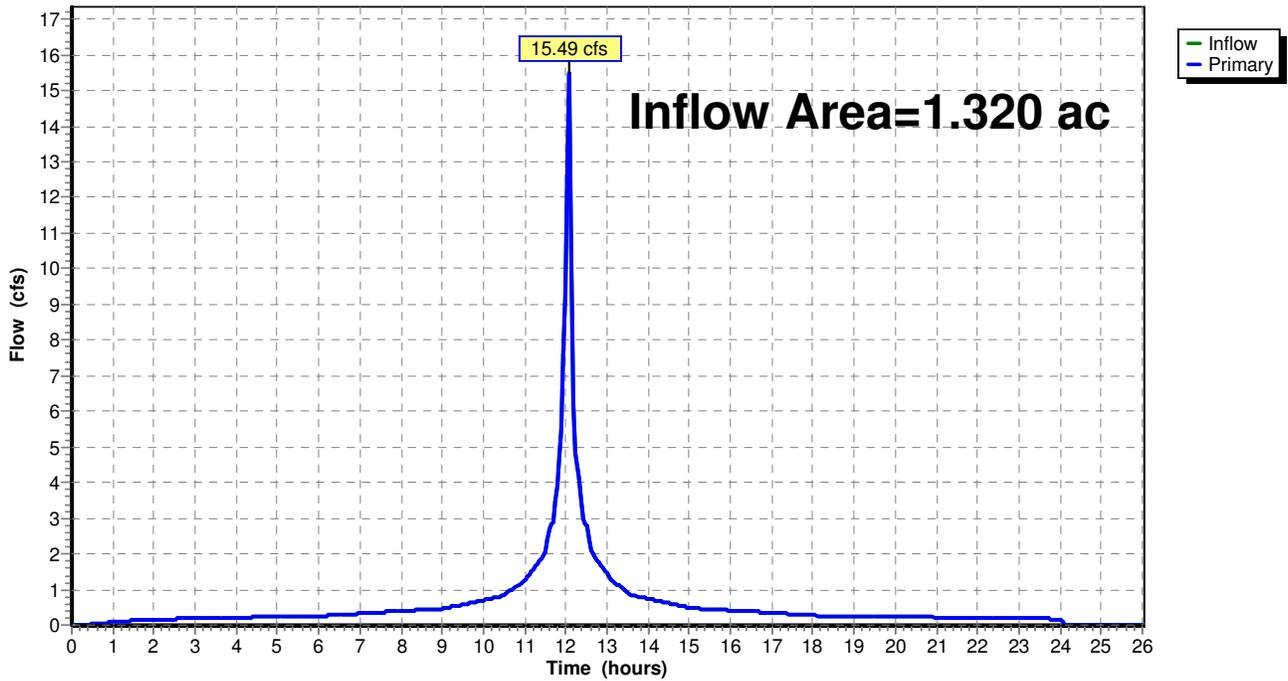


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- 6 Link 2L: BROAD
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- 9 Subcat 1S: BROAD - IMP
- 10 Subcat 3S: FRANKLIN - IMP
- 11 Subcat 4S: FRANKLIN - PERV
- 12 Link 2L: BROAD
- 13 Link 5L: FRANKLIN
- 14 Link 6L: POA 1

10-Year-Current Event

- 15 Subcat 1S: BROAD - IMP
- 16 Subcat 3S: FRANKLIN - IMP
- 17 Subcat 4S: FRANKLIN - PERV
- 18 Link 2L: BROAD
- 19 Link 5L: FRANKLIN
- 20 Link 6L: POA 1

10-Year-Projected Event

- 21 Subcat 1S: BROAD - IMP
- 22 Subcat 3S: FRANKLIN - IMP
- 23 Subcat 4S: FRANKLIN - PERV
- 24 Link 2L: BROAD
- 25 Link 5L: FRANKLIN
- 26 Link 6L: POA 1

100-Year-Current Event

- 27 Subcat 1S: BROAD - IMP
- 28 Subcat 3S: FRANKLIN - IMP
- 29 Subcat 4S: FRANKLIN - PERV
- 30 Link 2L: BROAD
- 31 Link 5L: FRANKLIN
- 32 Link 6L: POA 1

100-Year-Projected Event

- 33 Subcat 1S: BROAD - IMP

2024-02 Existing Hydrology

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- 35 Subcat 4S: FRANKLIN - PERV
- 36 Link 2L: BROAD
- 37 Link 5L: FRANKLIN
- 38 Link 6L: POA 1



BROAD - IMP



BROAD



FRANKLIN - IMP



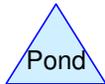
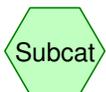
FRANKLIN



FRANKLIN - PERV



POA 1



Routing Diagram for 2024-01 Proposed Hydrology
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2024-01 Proposed Hydrology

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Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.040	80	>75% Grass cover, Good, HSG D (4S)
0.320	98	Paved parking, HSG D (1S, 3S)
0.960	98	Unconnected roofs, HSG D (3S)
1.320	97	TOTAL AREA

2024-01 Proposed Hydrology

NOAA 24-hr D 2-Year-Current Rainfall=3.47"

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Summary for Subcatchment 1S: BROAD - IMP

Runoff = 0.04 cfs @ 12.09 hrs, Volume= 0.003 af, Depth= 3.24"
 Routed to Link 2L : BROAD

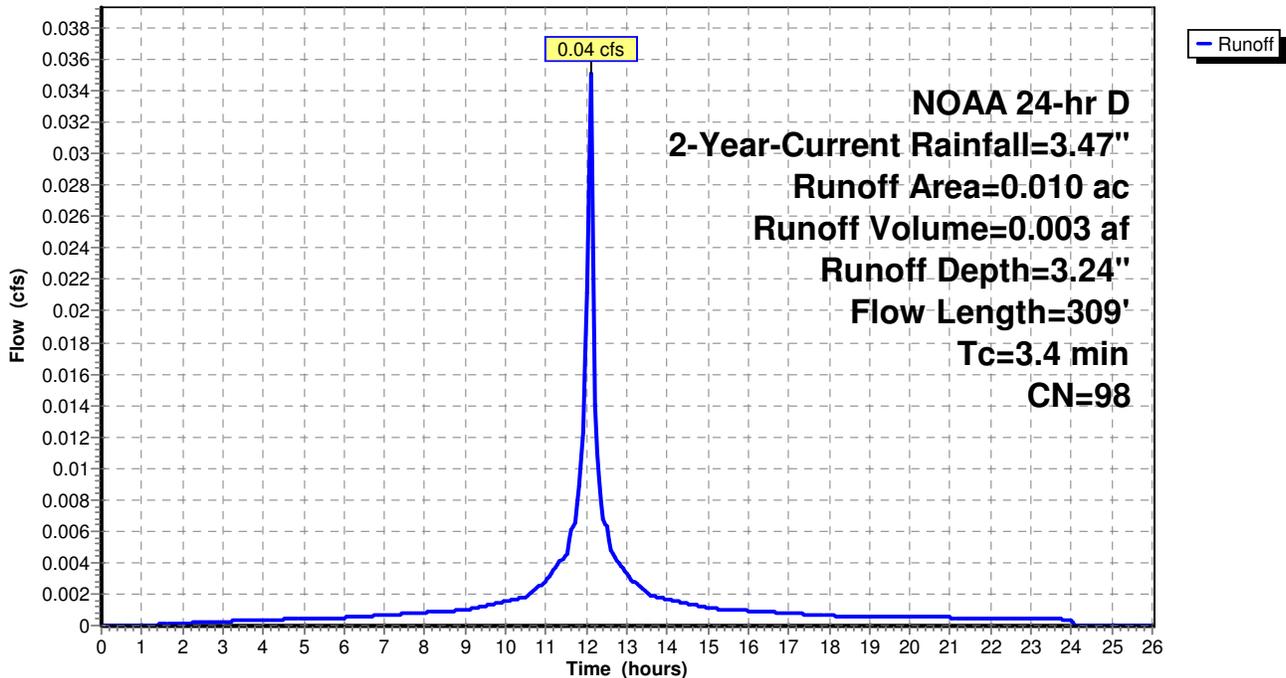
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 2-Year-Current Rainfall=3.47"

Area (ac)	CN	Description
0.010	98	Paved parking, HSG D
0.010		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	209	0.0080	1.82		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	309	Total			

Subcatchment 1S: BROAD - IMP

Hydrograph



2024-01 Proposed Hydrology

NOAA 24-hr D 2-Year-Current Rainfall=3.47"

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Summary for Subcatchment 3S: FRANKLIN - IMP

Runoff = 4.46 cfs @ 12.09 hrs, Volume= 0.343 af, Depth= 3.24"
Routed to Link 5L : FRANKLIN

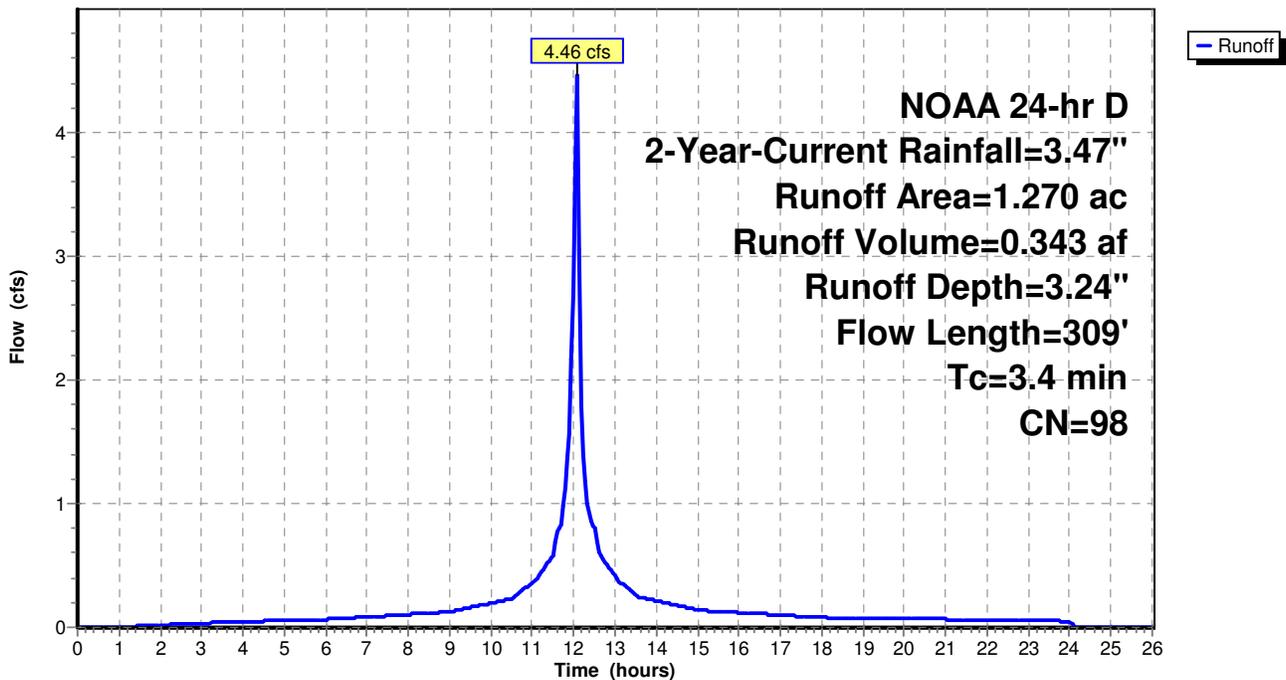
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
NOAA 24-hr D 2-Year-Current Rainfall=3.47"

Area (ac)	CN	Description
0.960	98	Unconnected roofs, HSG D
0.310	98	Paved parking, HSG D
1.270	98	Weighted Average
1.270		100.00% Impervious Area
0.960		75.59% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	209	0.0080	1.82		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	309	Total			

Subcatchment 3S: FRANKLIN - IMP

Hydrograph



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NOAA 24-hr D 2-Year-Current Rainfall=3.47"

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Summary for Subcatchment 4S: FRANKLIN - PERV

Runoff = 0.08 cfs @ 12.10 hrs, Volume= 0.005 af, Depth= 1.61"
Routed to Link 5L : FRANKLIN

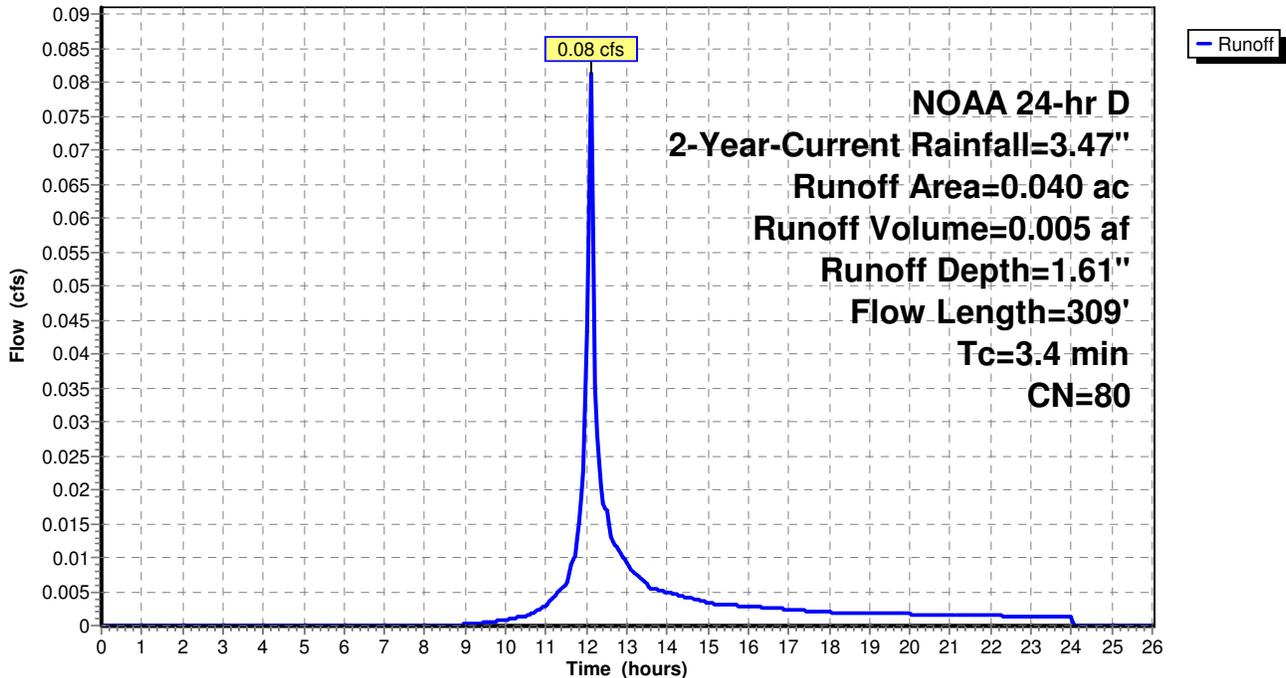
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
NOAA 24-hr D 2-Year-Current Rainfall=3.47"

Area (ac)	CN	Description
0.040	80	>75% Grass cover, Good, HSG D
0.040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	209	0.0080	1.82		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	309	Total			

Subcatchment 4S: FRANKLIN - PERV

Hydrograph



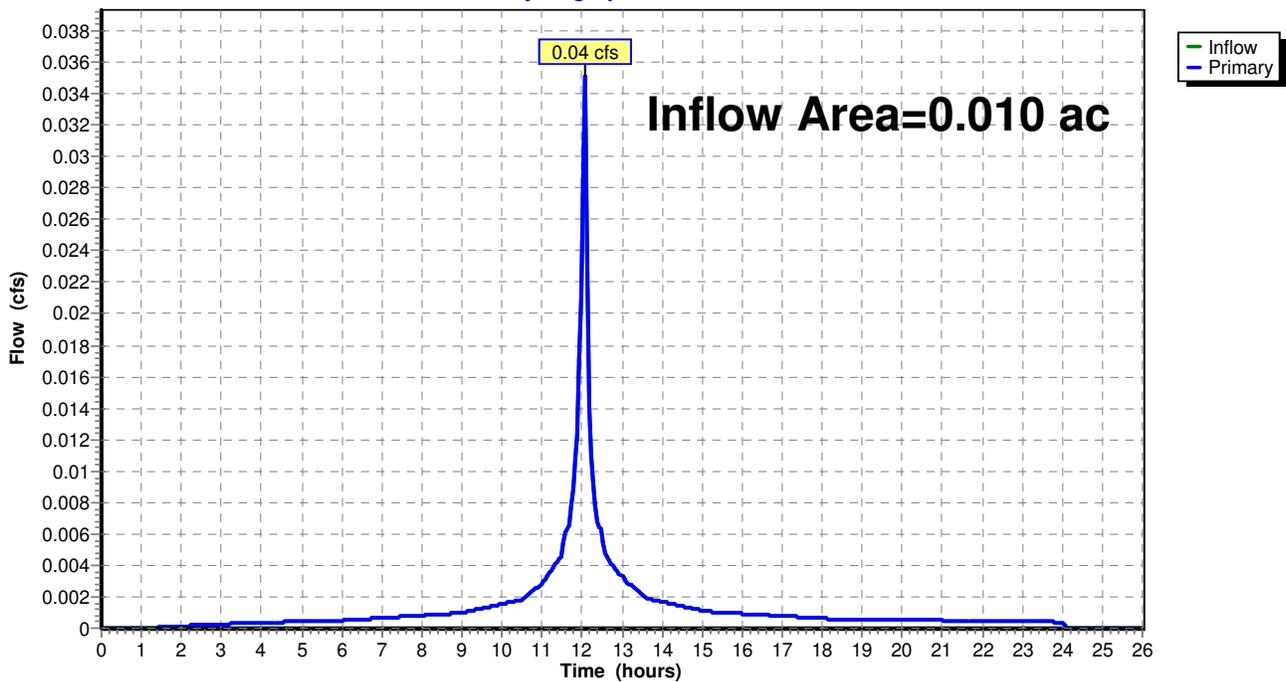
Summary for Link 2L: BROAD

Inflow Area = 0.010 ac, 100.00% Impervious, Inflow Depth = 3.24" for 2-Year-Current event
Inflow = 0.04 cfs @ 12.09 hrs, Volume= 0.003 af
Primary = 0.04 cfs @ 12.09 hrs, Volume= 0.003 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 2L: BROAD

Hydrograph



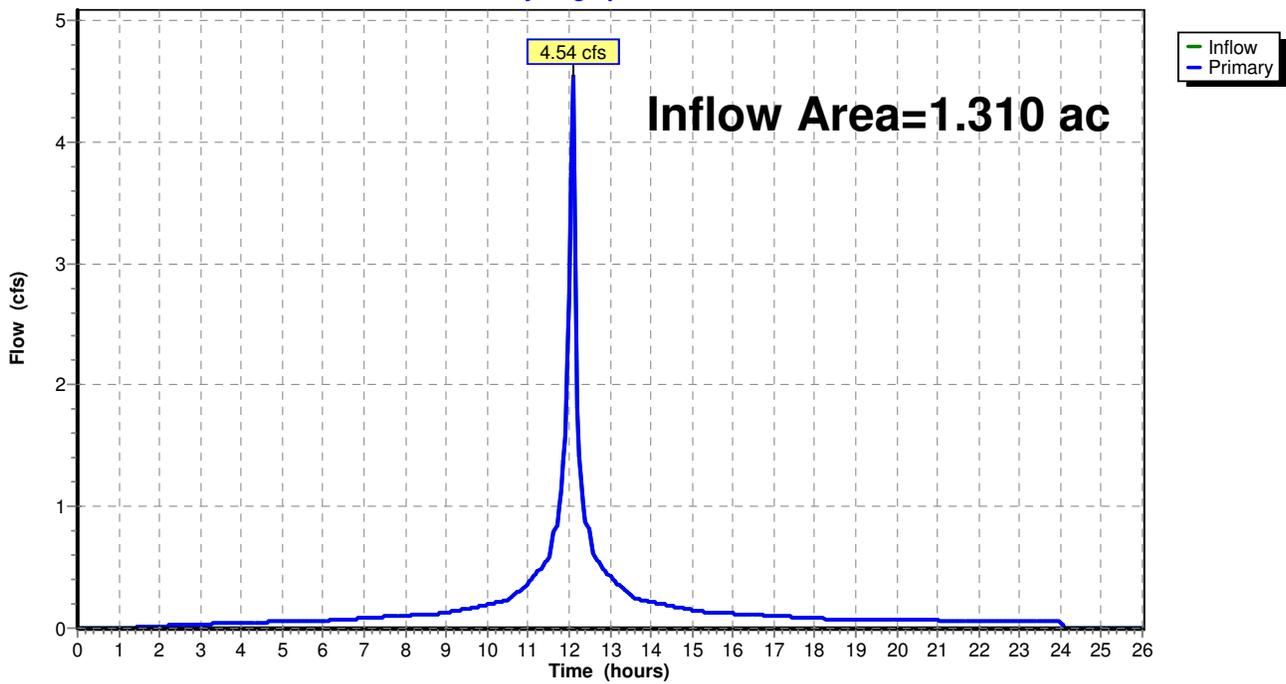
Summary for Link 5L: FRANKLIN

Inflow Area = 1.310 ac, 96.95% Impervious, Inflow Depth = 3.19" for 2-Year-Current event
Inflow = 4.54 cfs @ 12.09 hrs, Volume= 0.348 af
Primary = 4.54 cfs @ 12.09 hrs, Volume= 0.348 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 5L: FRANKLIN

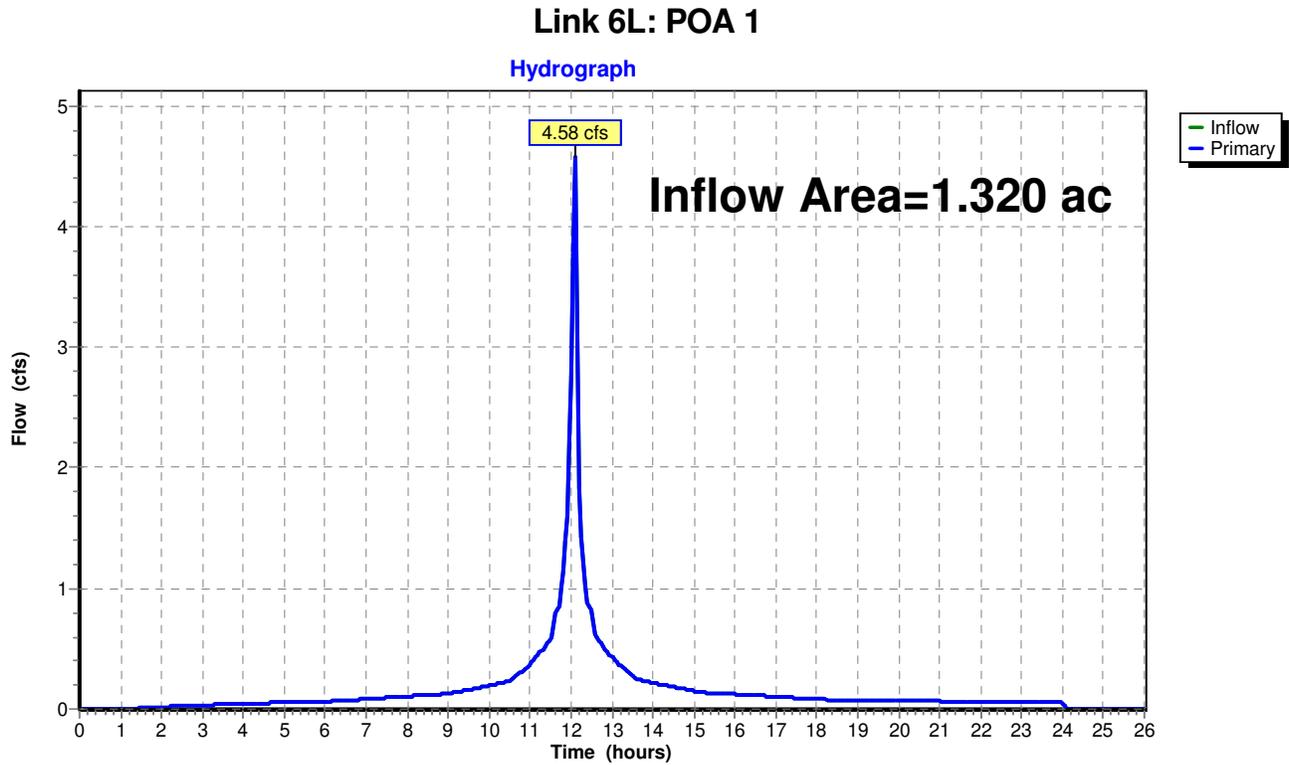
Hydrograph



Summary for Link 6L: POA 1

Inflow Area = 1.320 ac, 96.97% Impervious, Inflow Depth = 3.19" for 2-Year-Current event
Inflow = 4.58 cfs @ 12.09 hrs, Volume= 0.351 af
Primary = 4.58 cfs @ 12.09 hrs, Volume= 0.351 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs



2024-01 Proposed Hydrology

NOAA 24-hr D 2-Year-Projected Rainfall=4.09"

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Summary for Subcatchment 1S: BROAD - IMP

Runoff = 0.04 cfs @ 12.09 hrs, Volume= 0.003 af, Depth= 3.85"
 Routed to Link 2L : BROAD

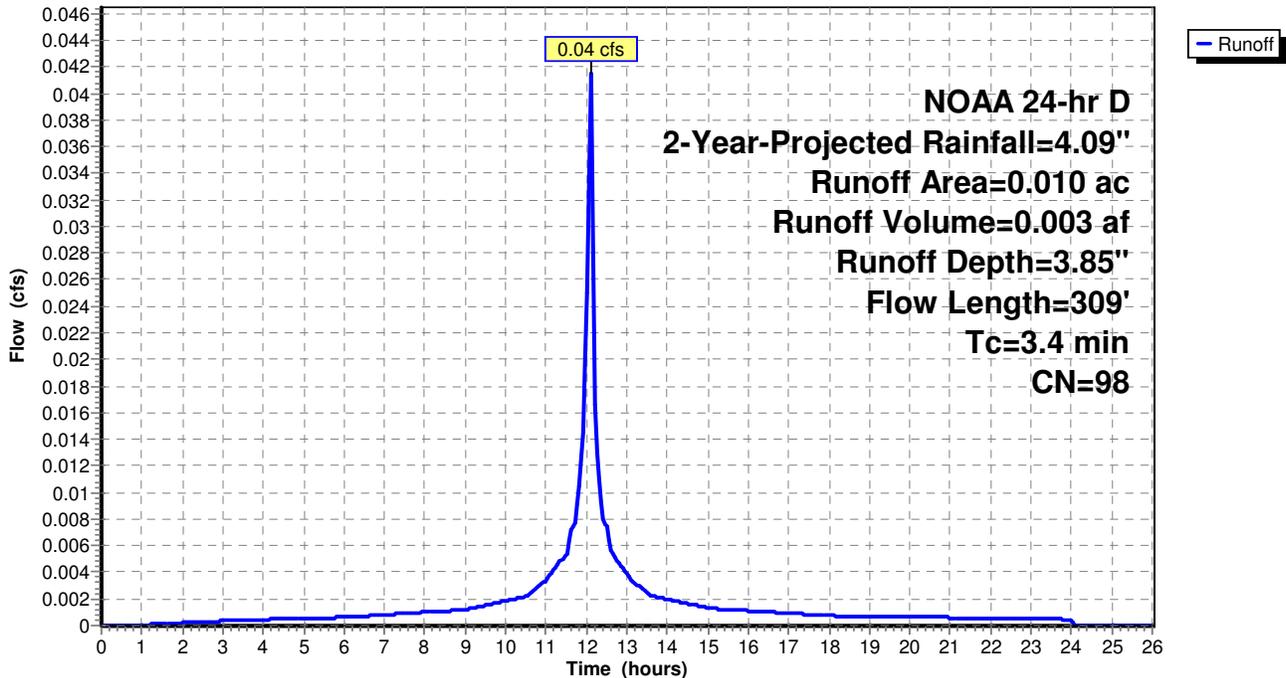
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 2-Year-Projected Rainfall=4.09"

Area (ac)	CN	Description
0.010	98	Paved parking, HSG D
0.010		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	209	0.0080	1.82		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	309	Total			

Subcatchment 1S: BROAD - IMP

Hydrograph



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NOAA 24-hr D 2-Year-Projected Rainfall=4.09"

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Summary for Subcatchment 3S: FRANKLIN - IMP

Runoff = 5.27 cfs @ 12.09 hrs, Volume= 0.408 af, Depth= 3.85"
 Routed to Link 5L : FRANKLIN

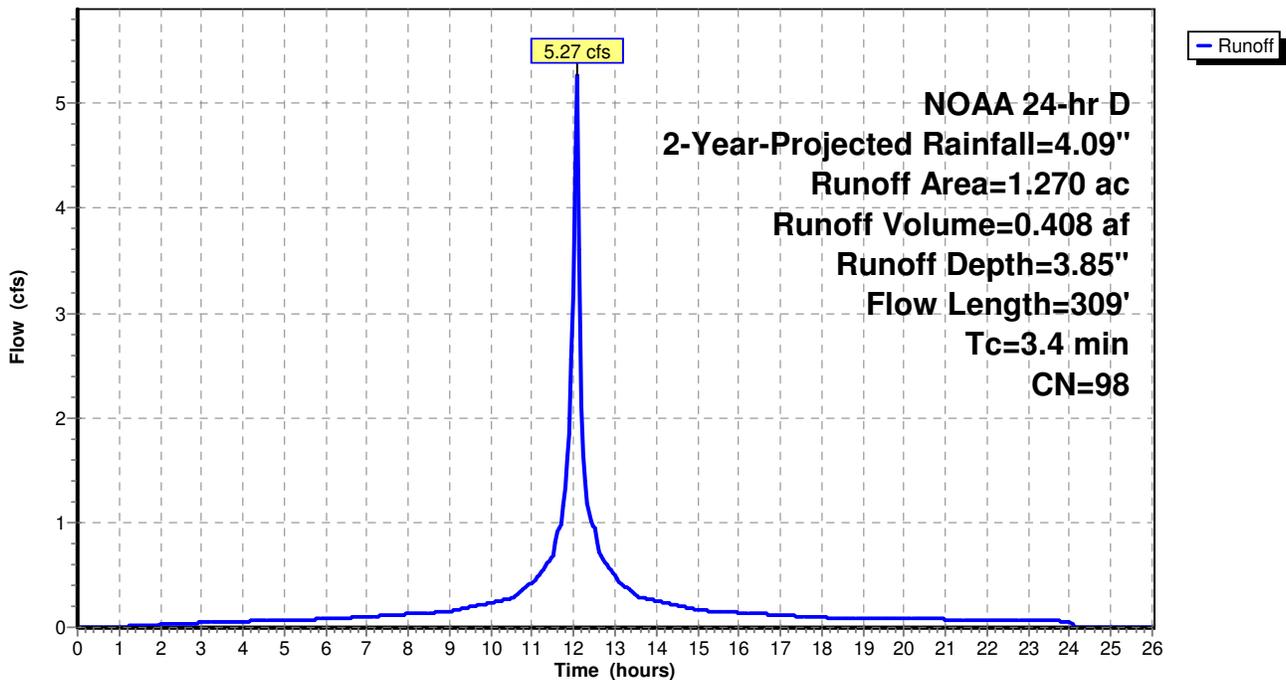
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 2-Year-Projected Rainfall=4.09"

Area (ac)	CN	Description
0.960	98	Unconnected roofs, HSG D
0.310	98	Paved parking, HSG D
1.270	98	Weighted Average
1.270		100.00% Impervious Area
0.960		75.59% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	209	0.0080	1.82		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	309	Total			

Subcatchment 3S: FRANKLIN - IMP

Hydrograph



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NOAA 24-hr D 2-Year-Projected Rainfall=4.09"

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Summary for Subcatchment 4S: FRANKLIN - PERV

Runoff = 0.11 cfs @ 12.10 hrs, Volume= 0.007 af, Depth= 2.12"
 Routed to Link 5L : FRANKLIN

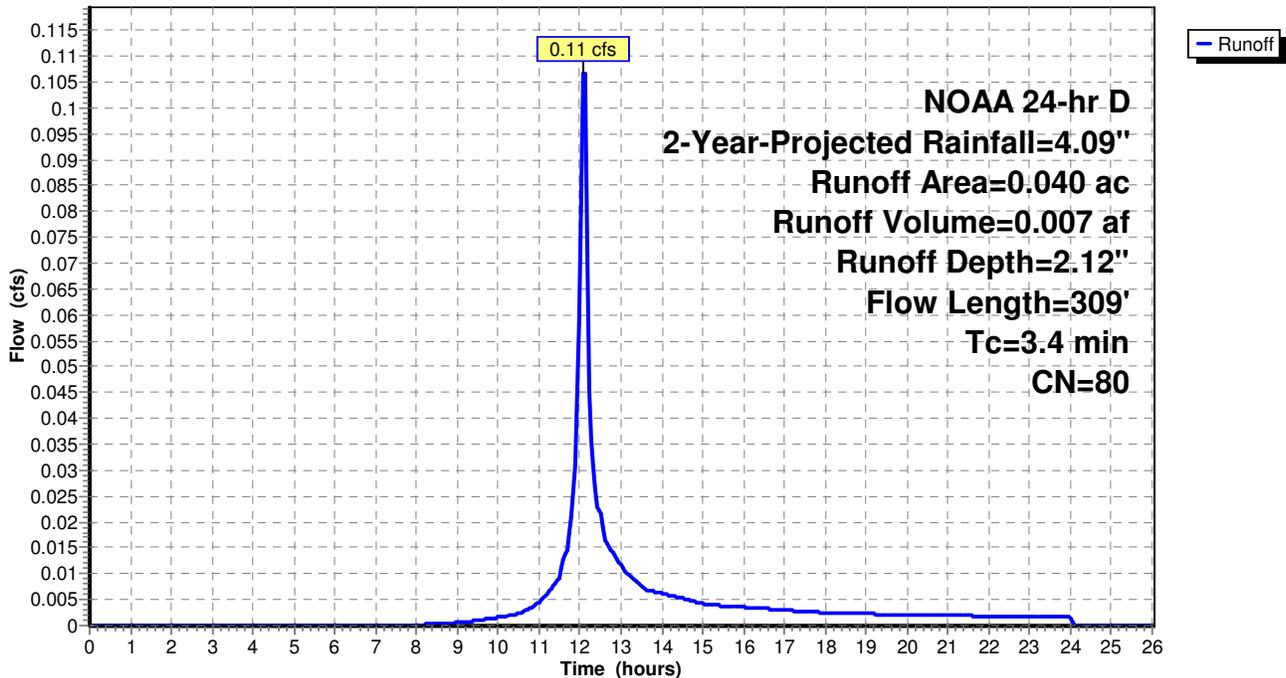
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 2-Year-Projected Rainfall=4.09"

Area (ac)	CN	Description
0.040	80	>75% Grass cover, Good, HSG D
0.040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	209	0.0080	1.82		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	309	Total			

Subcatchment 4S: FRANKLIN - PERV

Hydrograph



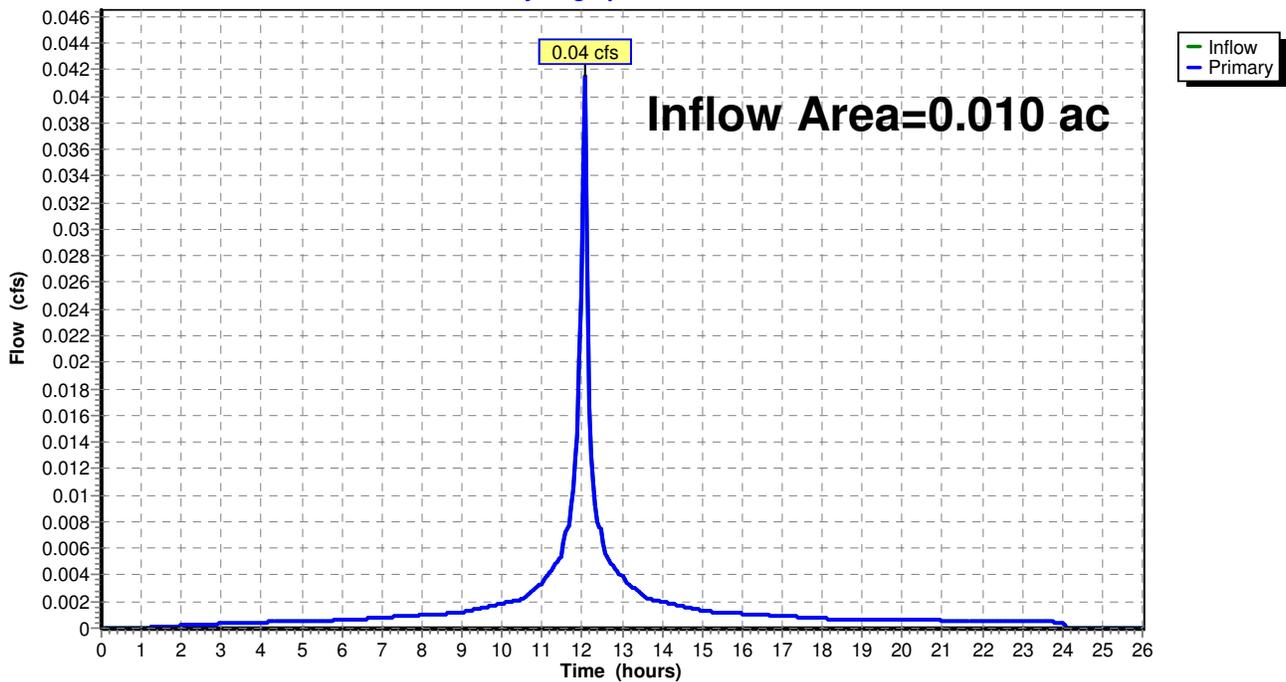
Summary for Link 2L: BROAD

Inflow Area = 0.010 ac, 100.00% Impervious, Inflow Depth = 3.85" for 2-Year-Projected event
Inflow = 0.04 cfs @ 12.09 hrs, Volume= 0.003 af
Primary = 0.04 cfs @ 12.09 hrs, Volume= 0.003 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 2L: BROAD

Hydrograph



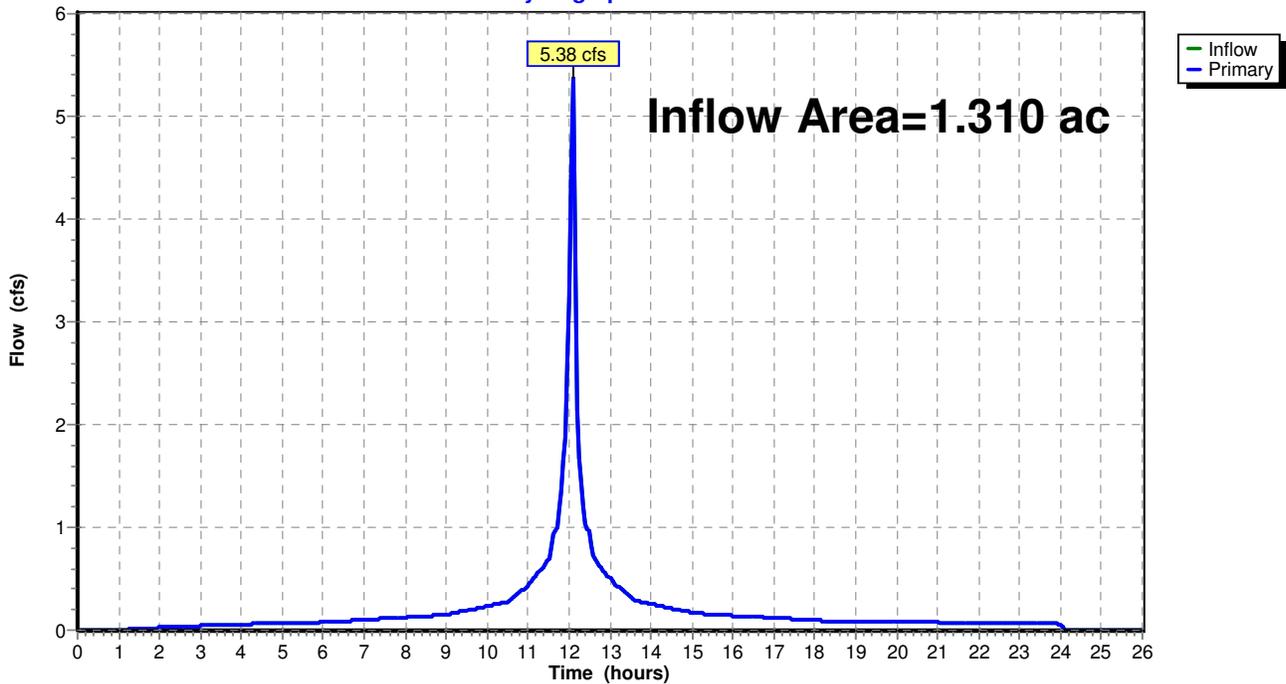
Summary for Link 5L: FRANKLIN

Inflow Area = 1.310 ac, 96.95% Impervious, Inflow Depth = 3.80" for 2-Year-Projected event
Inflow = 5.38 cfs @ 12.09 hrs, Volume= 0.415 af
Primary = 5.38 cfs @ 12.09 hrs, Volume= 0.415 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 5L: FRANKLIN

Hydrograph



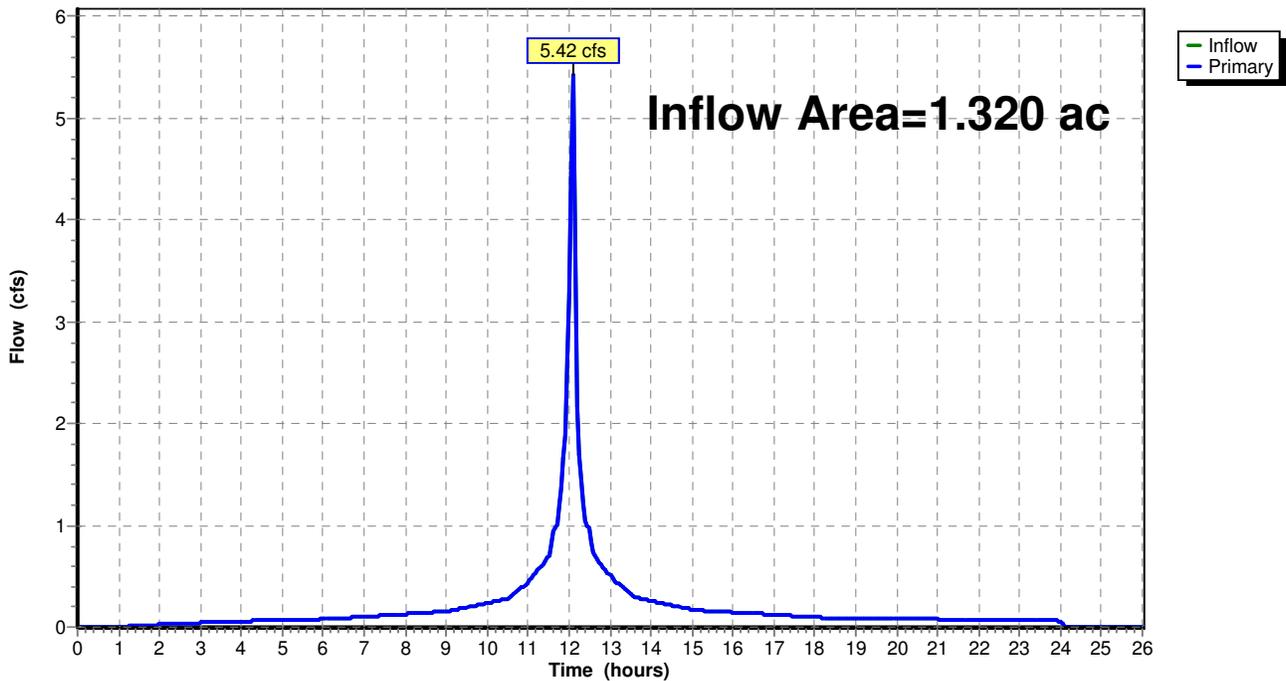
Summary for Link 6L: POA 1

Inflow Area = 1.320 ac, 96.97% Impervious, Inflow Depth = 3.80" for 2-Year-Projected event
Inflow = 5.42 cfs @ 12.09 hrs, Volume= 0.418 af
Primary = 5.42 cfs @ 12.09 hrs, Volume= 0.418 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 6L: POA 1

Hydrograph



2024-01 Proposed Hydrology

NOAA 24-hr D 10-Year-Current Rainfall=5.38"

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Summary for Subcatchment 1S: BROAD - IMP

Runoff = 0.05 cfs @ 12.09 hrs, Volume= 0.004 af, Depth= 5.14"
 Routed to Link 2L : BROAD

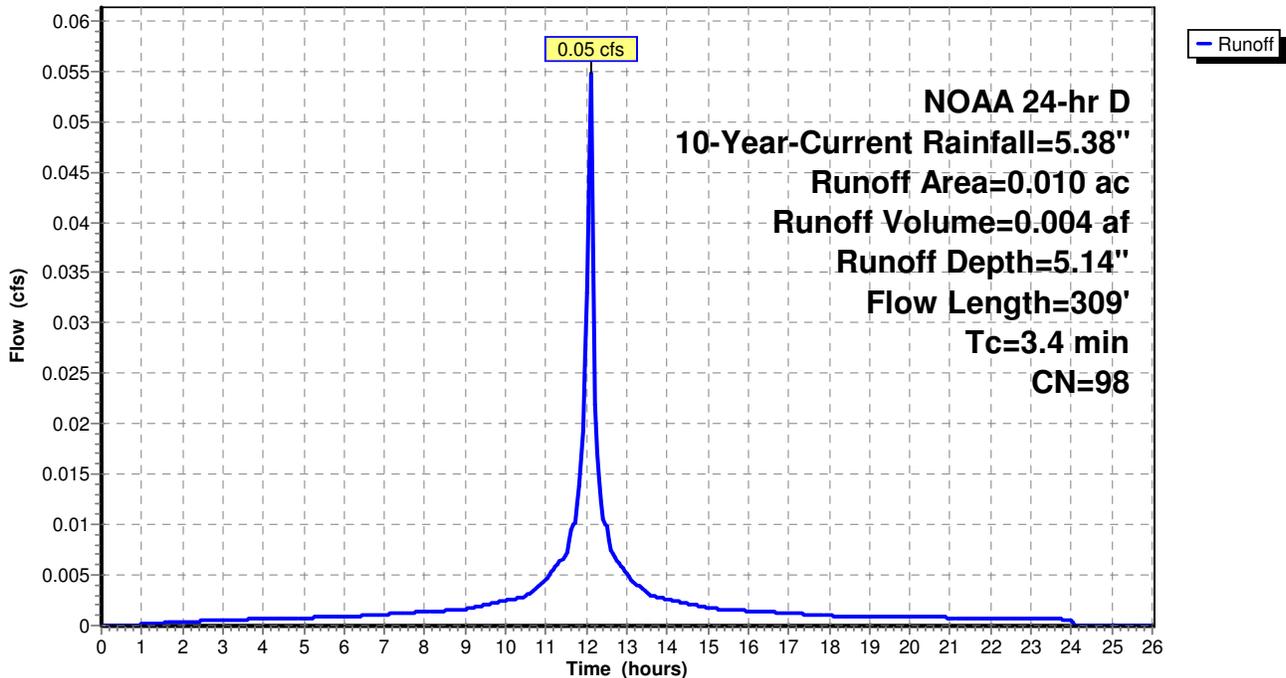
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 10-Year-Current Rainfall=5.38"

Area (ac)	CN	Description
0.010	98	Paved parking, HSG D
0.010		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	209	0.0080	1.82		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	309	Total			

Subcatchment 1S: BROAD - IMP

Hydrograph



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NOAA 24-hr D 10-Year-Current Rainfall=5.38"

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Summary for Subcatchment 3S: FRANKLIN - IMP

Runoff = 6.96 cfs @ 12.09 hrs, Volume= 0.544 af, Depth= 5.14"
Routed to Link 5L : FRANKLIN

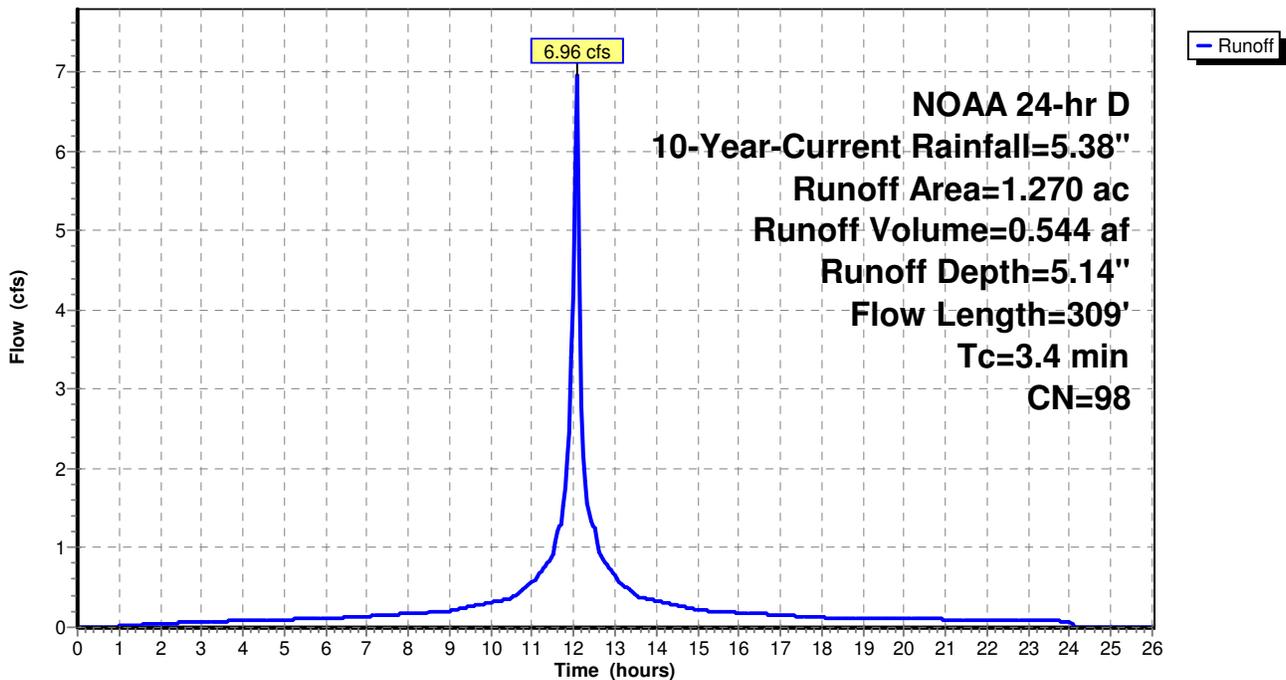
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
NOAA 24-hr D 10-Year-Current Rainfall=5.38"

Area (ac)	CN	Description
0.960	98	Unconnected roofs, HSG D
0.310	98	Paved parking, HSG D
1.270	98	Weighted Average
1.270		100.00% Impervious Area
0.960		75.59% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	209	0.0080	1.82		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	309	Total			

Subcatchment 3S: FRANKLIN - IMP

Hydrograph



2024-01 Proposed Hydrology

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NOAA 24-hr D 10-Year-Current Rainfall=5.38"

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Summary for Subcatchment 4S: FRANKLIN - PERV

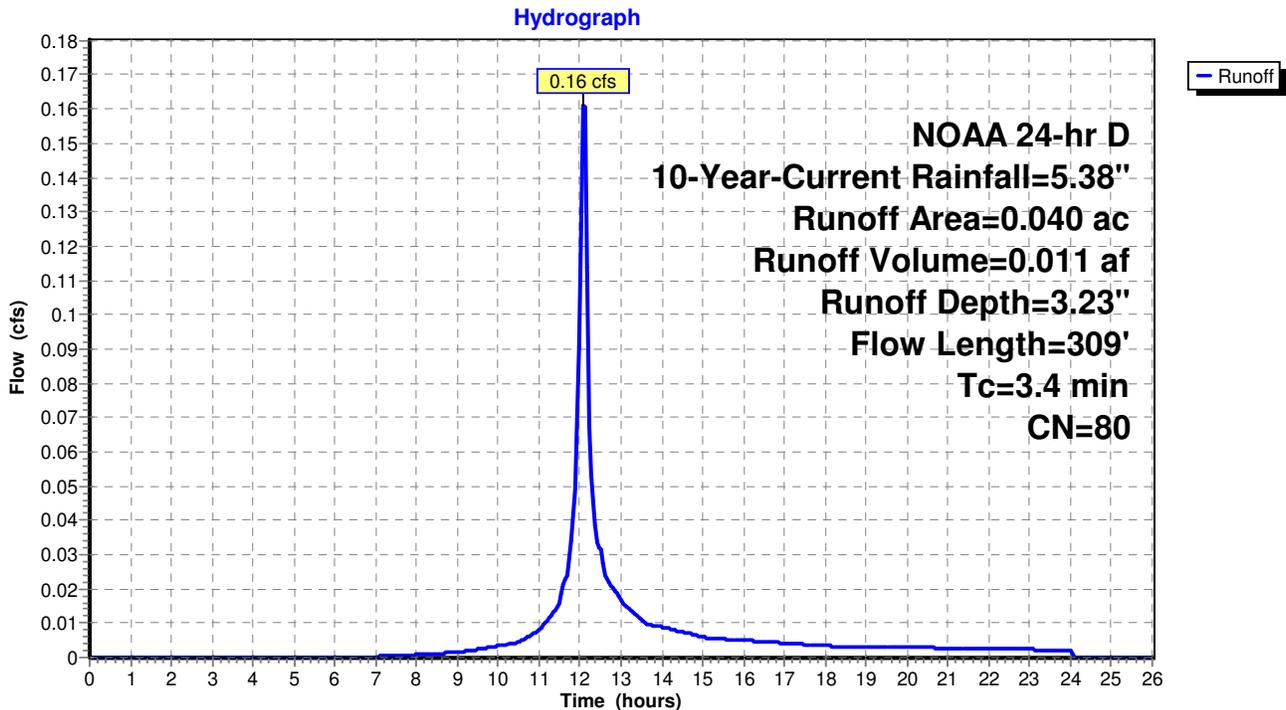
Runoff = 0.16 cfs @ 12.10 hrs, Volume= 0.011 af, Depth= 3.23"
Routed to Link 5L : FRANKLIN

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
NOAA 24-hr D 10-Year-Current Rainfall=5.38"

Area (ac)	CN	Description
0.040	80	>75% Grass cover, Good, HSG D
0.040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	209	0.0080	1.82		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	309	Total			

Subcatchment 4S: FRANKLIN - PERV



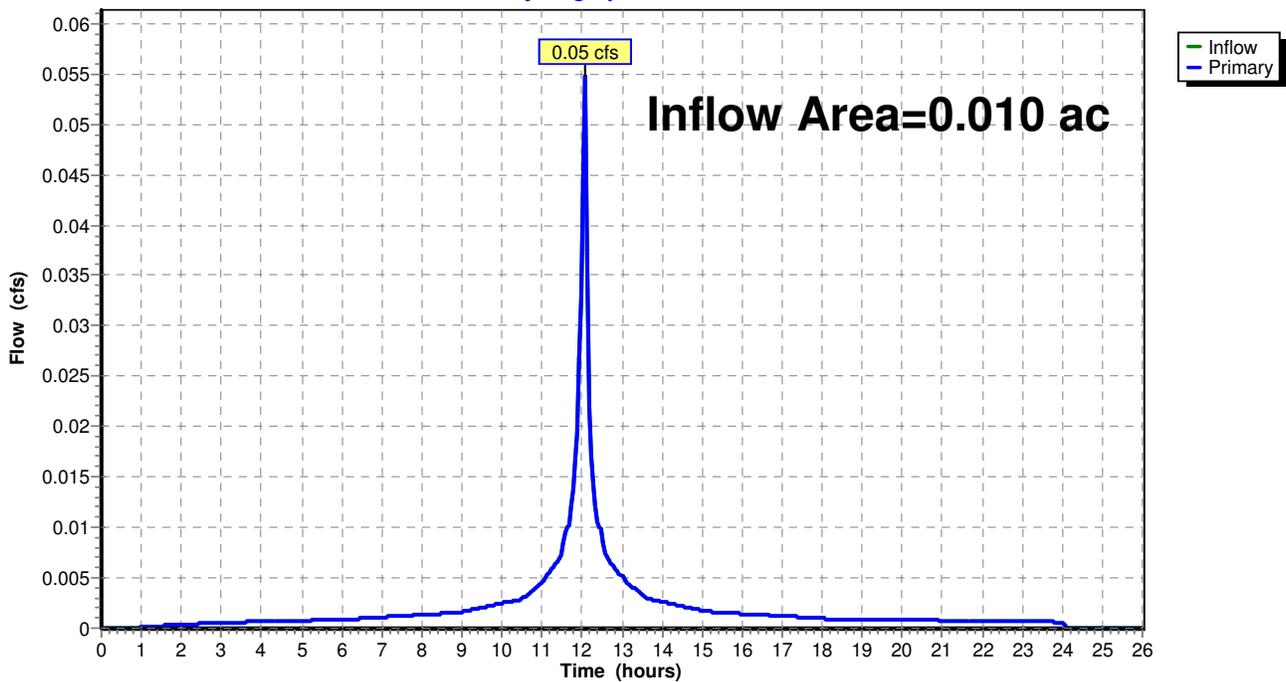
Summary for Link 2L: BROAD

Inflow Area = 0.010 ac, 100.00% Impervious, Inflow Depth = 5.14" for 10-Year-Current event
Inflow = 0.05 cfs @ 12.09 hrs, Volume= 0.004 af
Primary = 0.05 cfs @ 12.09 hrs, Volume= 0.004 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 2L: BROAD

Hydrograph



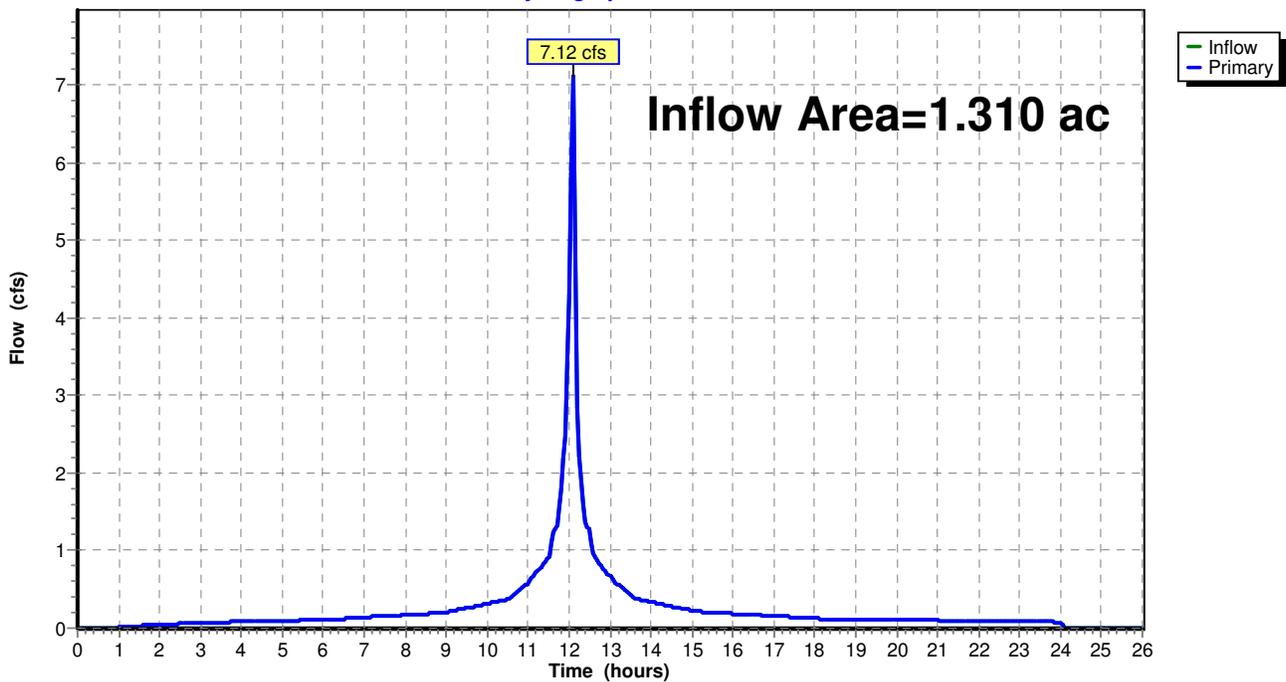
Summary for Link 5L: FRANKLIN

Inflow Area = 1.310 ac, 96.95% Impervious, Inflow Depth = 5.08" for 10-Year-Current event
Inflow = 7.12 cfs @ 12.09 hrs, Volume= 0.555 af
Primary = 7.12 cfs @ 12.09 hrs, Volume= 0.555 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 5L: FRANKLIN

Hydrograph

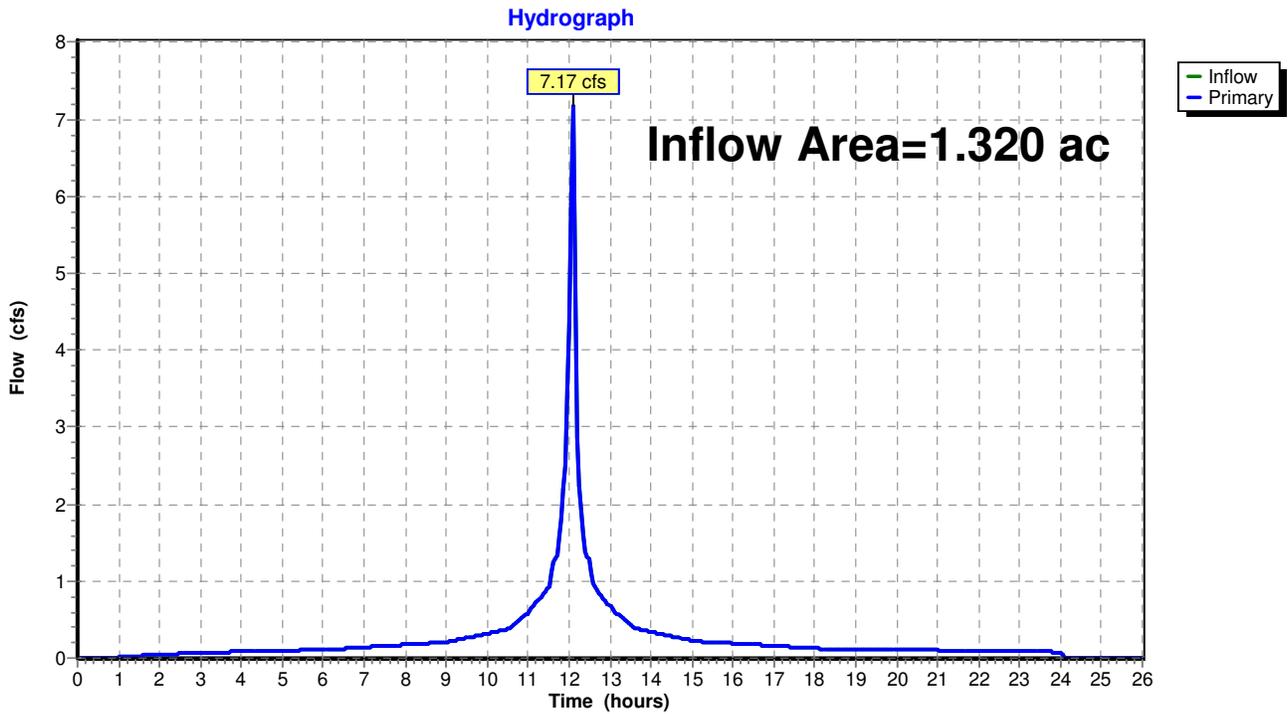


Summary for Link 6L: POA 1

Inflow Area = 1.320 ac, 96.97% Impervious, Inflow Depth = 5.08" for 10-Year-Current event
Inflow = 7.17 cfs @ 12.09 hrs, Volume= 0.559 af
Primary = 7.17 cfs @ 12.09 hrs, Volume= 0.559 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 6L: POA 1



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NOAA 24-hr D 10-Year-Projected Rainfall=6.37"

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Summary for Subcatchment 1S: BROAD - IMP

Runoff = 0.06 cfs @ 12.09 hrs, Volume= 0.005 af, Depth= 6.13"
 Routed to Link 2L : BROAD

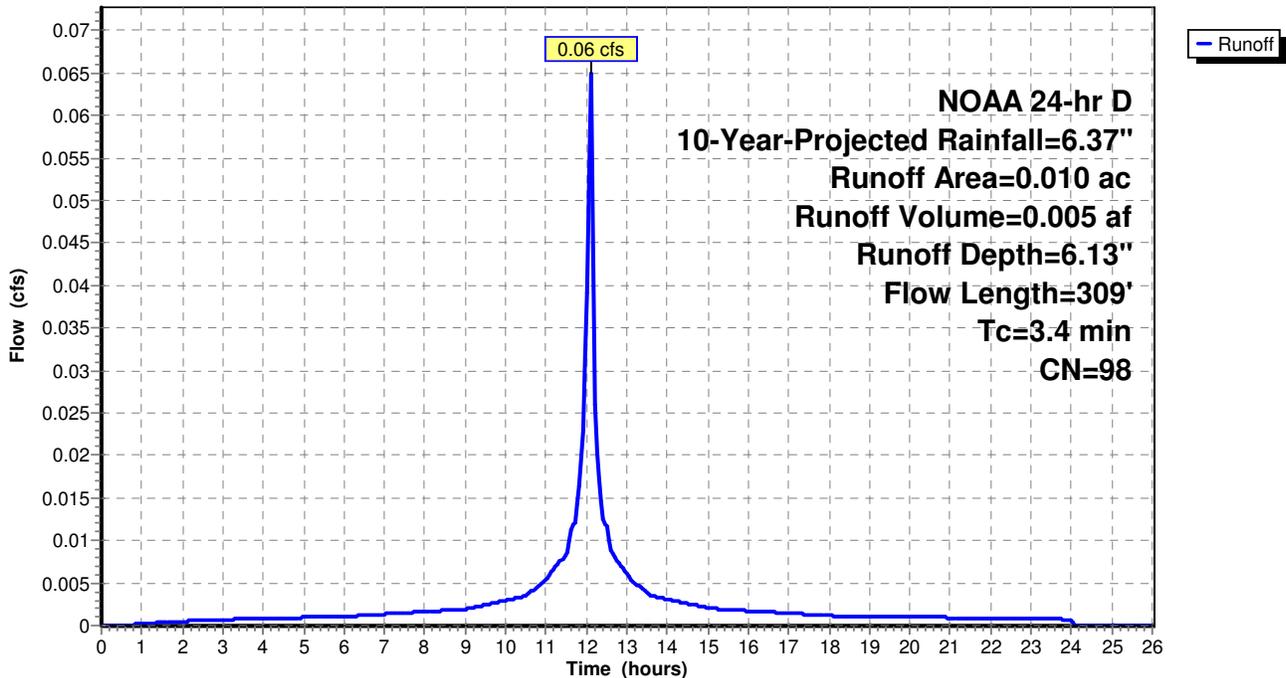
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 10-Year-Projected Rainfall=6.37"

Area (ac)	CN	Description
0.010	98	Paved parking, HSG D
0.010		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	209	0.0080	1.82		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	309	Total			

Subcatchment 1S: BROAD - IMP

Hydrograph



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NOAA 24-hr D 10-Year-Projected Rainfall=6.37"

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Summary for Subcatchment 3S: FRANKLIN - IMP

Runoff = 8.25 cfs @ 12.09 hrs, Volume= 0.649 af, Depth= 6.13"
 Routed to Link 5L : FRANKLIN

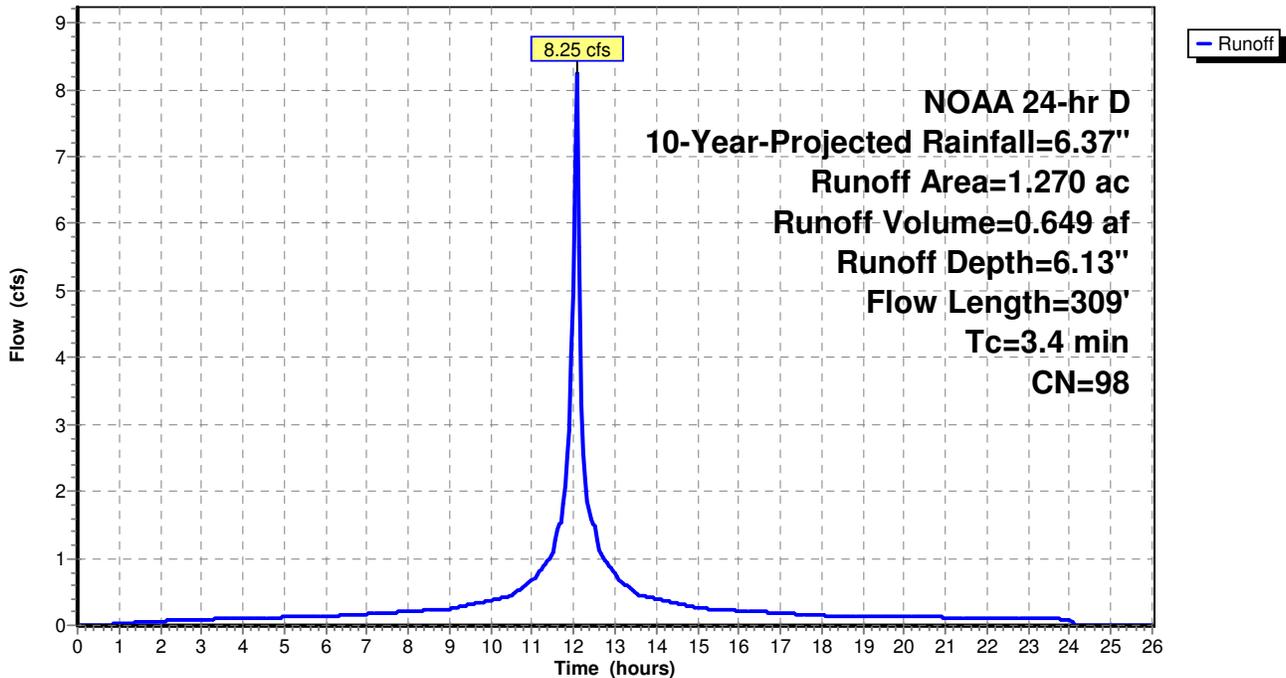
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 10-Year-Projected Rainfall=6.37"

Area (ac)	CN	Description
0.960	98	Unconnected roofs, HSG D
0.310	98	Paved parking, HSG D
1.270	98	Weighted Average
1.270		100.00% Impervious Area
0.960		75.59% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	209	0.0080	1.82		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	309	Total			

Subcatchment 3S: FRANKLIN - IMP

Hydrograph



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NOAA 24-hr D 10-Year-Projected Rainfall=6.37"

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Summary for Subcatchment 4S: FRANKLIN - PERV

Runoff = 0.20 cfs @ 12.09 hrs, Volume= 0.014 af, Depth= 4.12"
 Routed to Link 5L : FRANKLIN

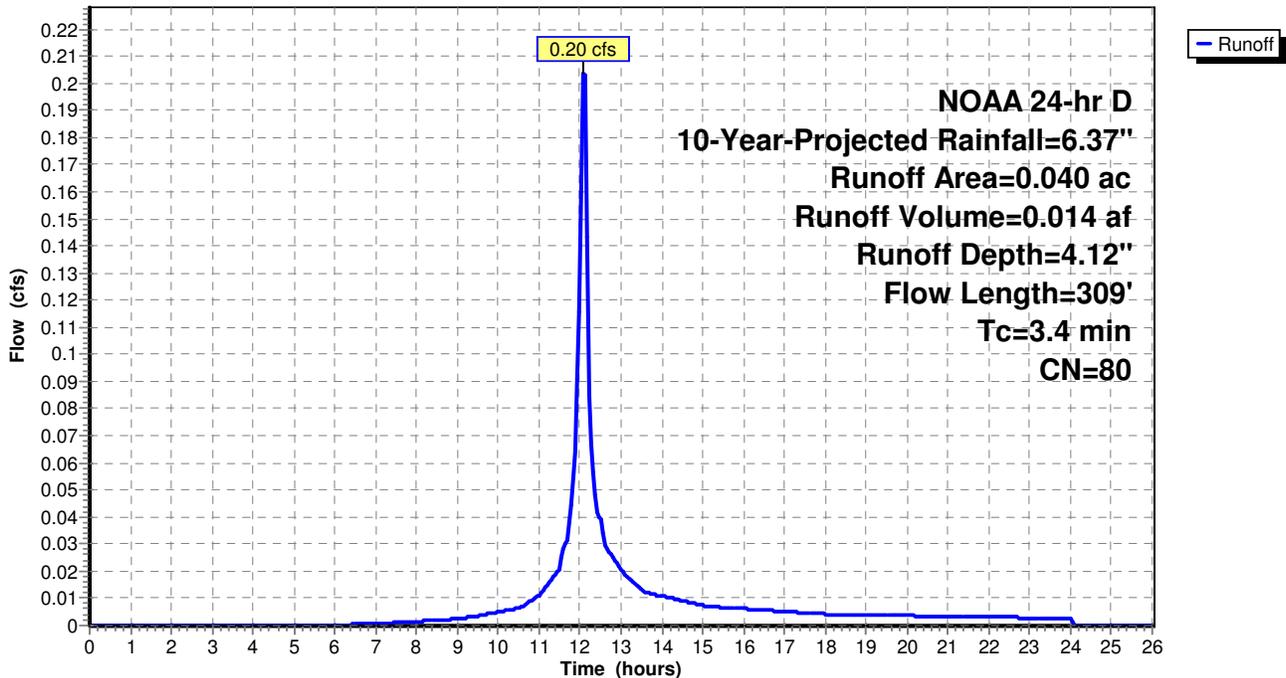
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 10-Year-Projected Rainfall=6.37"

Area (ac)	CN	Description
0.040	80	>75% Grass cover, Good, HSG D
0.040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	209	0.0080	1.82		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	309	Total			

Subcatchment 4S: FRANKLIN - PERV

Hydrograph



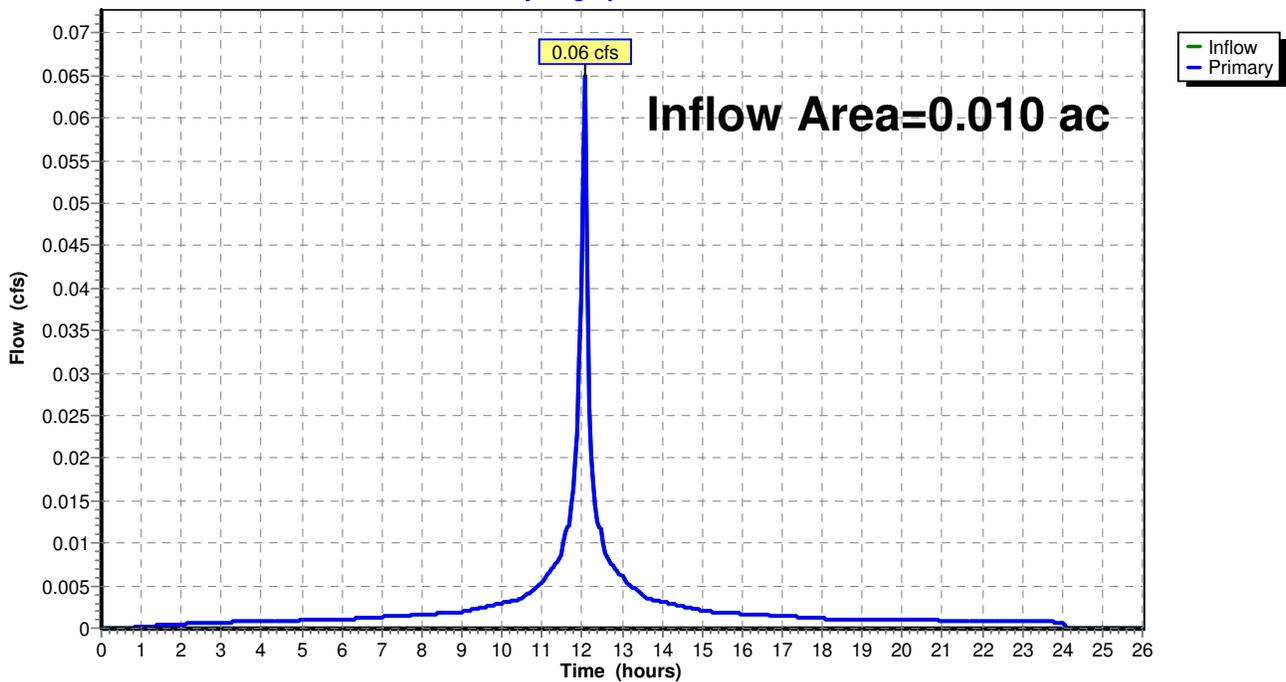
Summary for Link 2L: BROAD

Inflow Area = 0.010 ac, 100.00% Impervious, Inflow Depth = 6.13" for 10-Year-Projected event
Inflow = 0.06 cfs @ 12.09 hrs, Volume= 0.005 af
Primary = 0.06 cfs @ 12.09 hrs, Volume= 0.005 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 2L: BROAD

Hydrograph



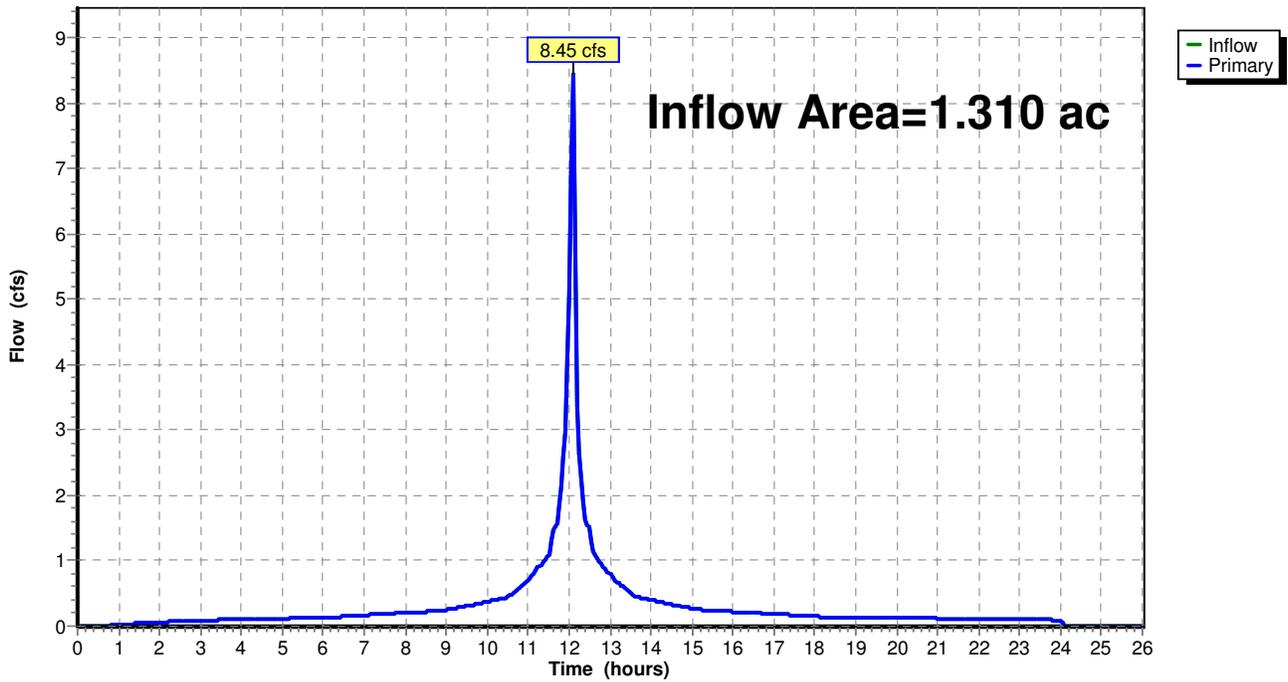
Summary for Link 5L: FRANKLIN

Inflow Area = 1.310 ac, 96.95% Impervious, Inflow Depth = 6.07" for 10-Year-Projected event
Inflow = 8.45 cfs @ 12.09 hrs, Volume= 0.663 af
Primary = 8.45 cfs @ 12.09 hrs, Volume= 0.663 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 5L: FRANKLIN

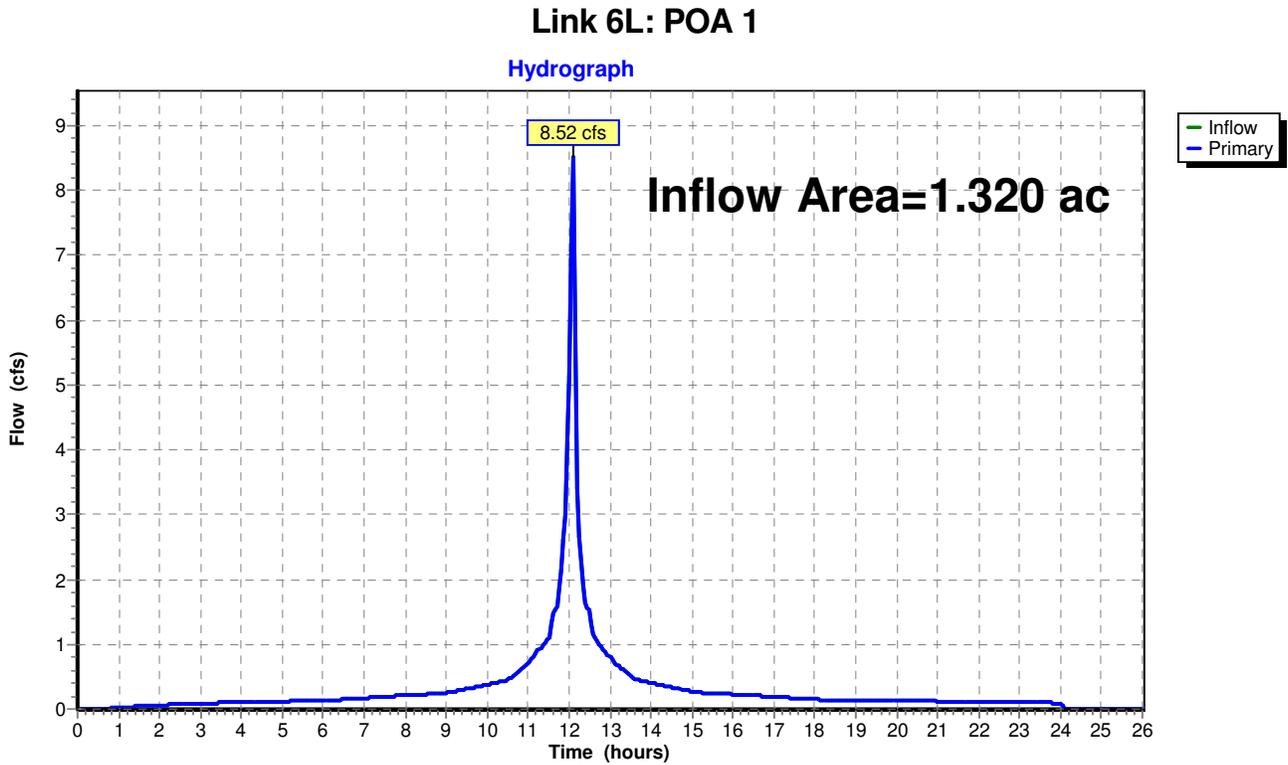
Hydrograph



Summary for Link 6L: POA 1

Inflow Area = 1.320 ac, 96.97% Impervious, Inflow Depth = 6.07" for 10-Year-Projected event
Inflow = 8.52 cfs @ 12.09 hrs, Volume= 0.668 af
Primary = 8.52 cfs @ 12.09 hrs, Volume= 0.668 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs



2024-01 Proposed Hydrology

NOAA 24-hr D 100-Year-Current Rainfall=9.18"

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Summary for Subcatchment 1S: BROAD - IMP

Runoff = 0.09 cfs @ 12.09 hrs, Volume= 0.007 af, Depth= 8.94"
 Routed to Link 2L : BROAD

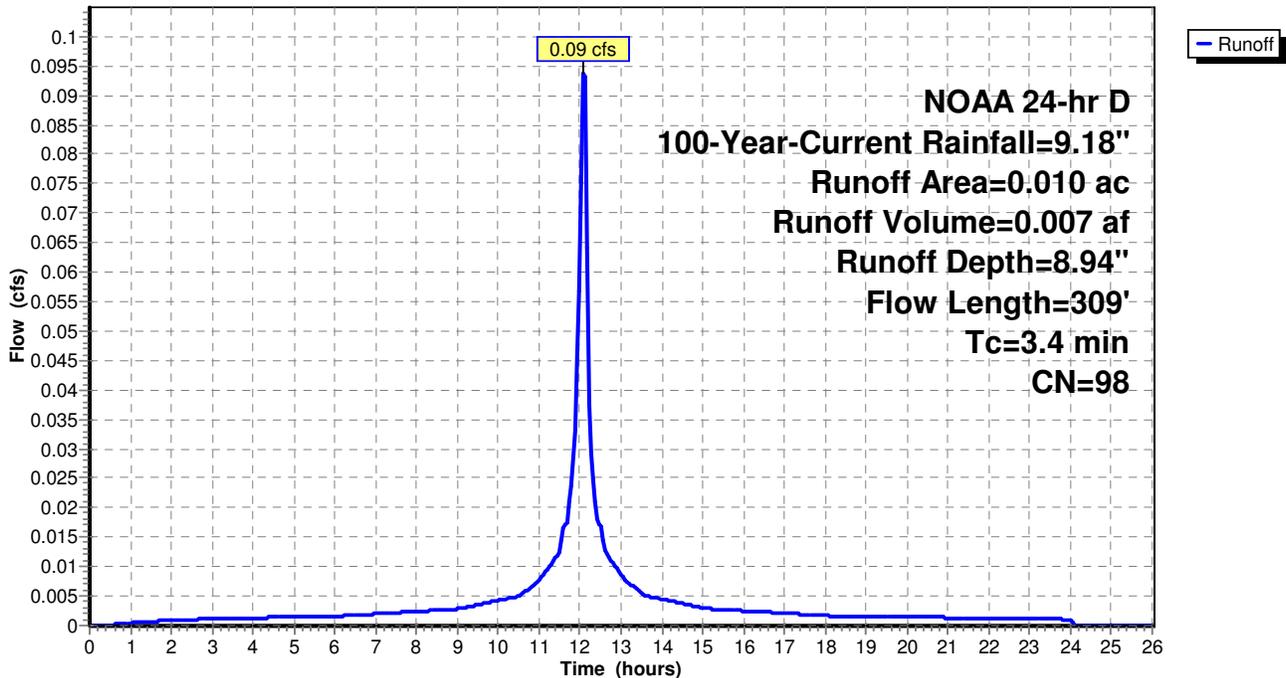
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 100-Year-Current Rainfall=9.18"

Area (ac)	CN	Description
0.010	98	Paved parking, HSG D
0.010		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	209	0.0080	1.82		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	309	Total			

Subcatchment 1S: BROAD - IMP

Hydrograph



2024-01 Proposed Hydrology

NOAA 24-hr D 100-Year-Current Rainfall=9.18"

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Summary for Subcatchment 3S: FRANKLIN - IMP

Runoff = 11.91 cfs @ 12.09 hrs, Volume= 0.946 af, Depth= 8.94"
 Routed to Link 5L : FRANKLIN

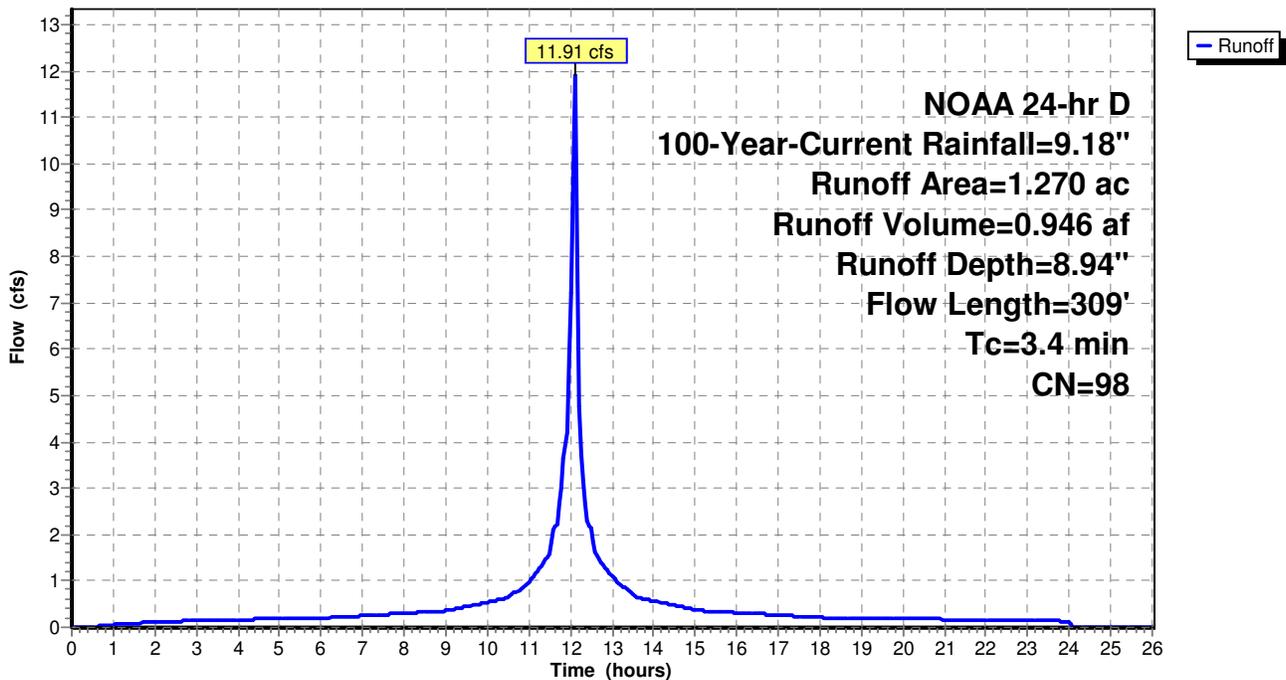
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 100-Year-Current Rainfall=9.18"

Area (ac)	CN	Description
0.960	98	Unconnected roofs, HSG D
0.310	98	Paved parking, HSG D
1.270	98	Weighted Average
1.270		100.00% Impervious Area
0.960		75.59% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	209	0.0080	1.82		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	309	Total			

Subcatchment 3S: FRANKLIN - IMP

Hydrograph



2024-01 Proposed Hydrology

NOAA 24-hr D 100-Year-Current Rainfall=9.18"

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Summary for Subcatchment 4S: FRANKLIN - PERV

Runoff = 0.33 cfs @ 12.09 hrs, Volume= 0.022 af, Depth= 6.74"
 Routed to Link 5L : FRANKLIN

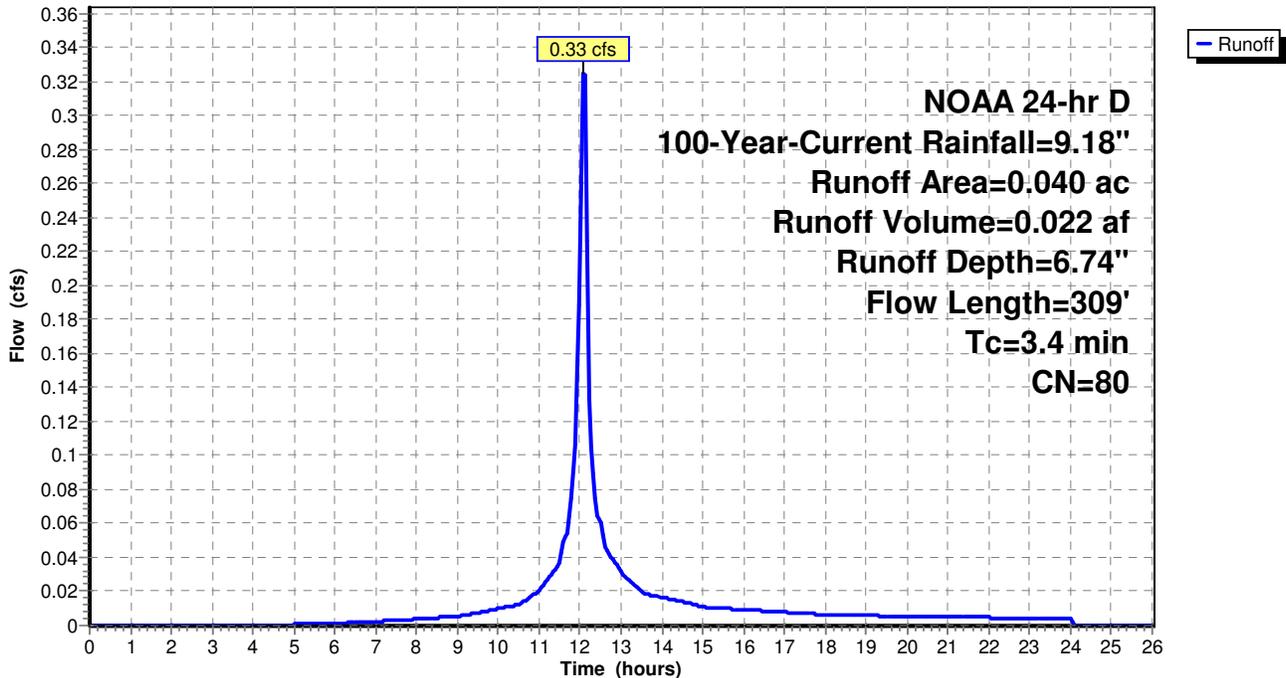
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 100-Year-Current Rainfall=9.18"

Area (ac)	CN	Description
0.040	80	>75% Grass cover, Good, HSG D
0.040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	209	0.0080	1.82		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	309	Total			

Subcatchment 4S: FRANKLIN - PERV

Hydrograph



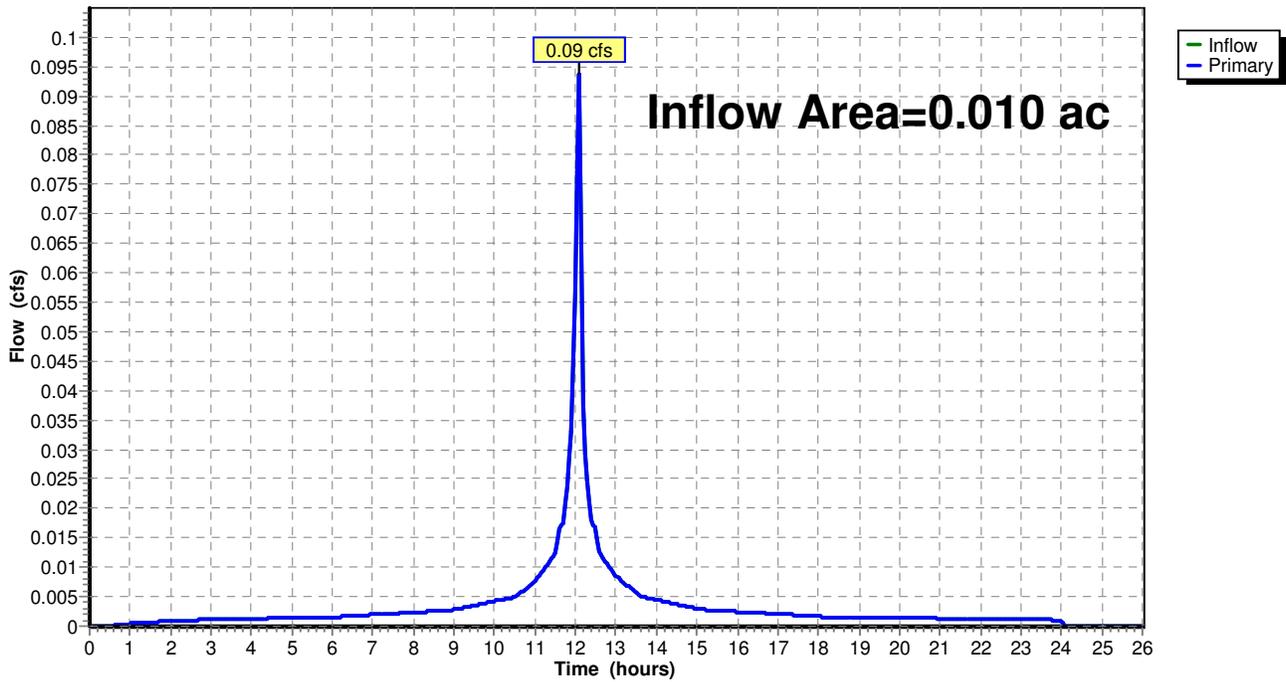
Summary for Link 2L: BROAD

Inflow Area = 0.010 ac, 100.00% Impervious, Inflow Depth = 8.94" for 100-Year-Current event
Inflow = 0.09 cfs @ 12.09 hrs, Volume= 0.007 af
Primary = 0.09 cfs @ 12.09 hrs, Volume= 0.007 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 2L: BROAD

Hydrograph



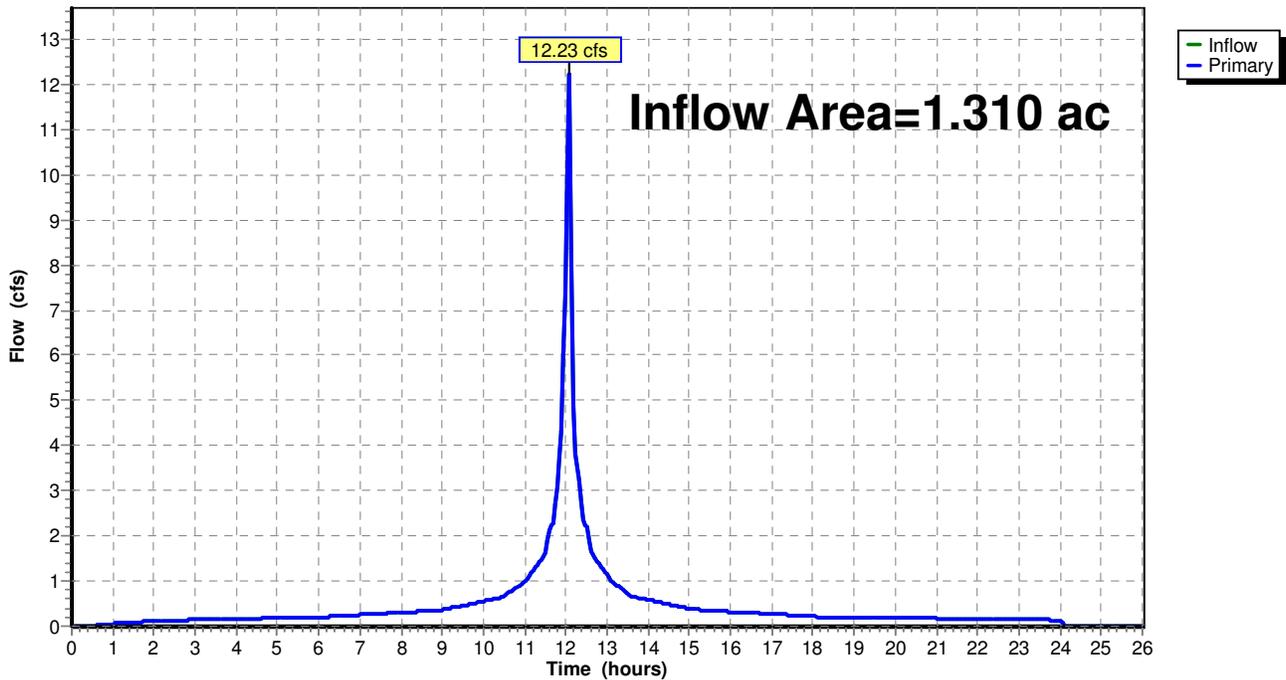
Summary for Link 5L: FRANKLIN

Inflow Area = 1.310 ac, 96.95% Impervious, Inflow Depth = 8.87" for 100-Year-Current event
Inflow = 12.23 cfs @ 12.09 hrs, Volume= 0.969 af
Primary = 12.23 cfs @ 12.09 hrs, Volume= 0.969 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 5L: FRANKLIN

Hydrograph



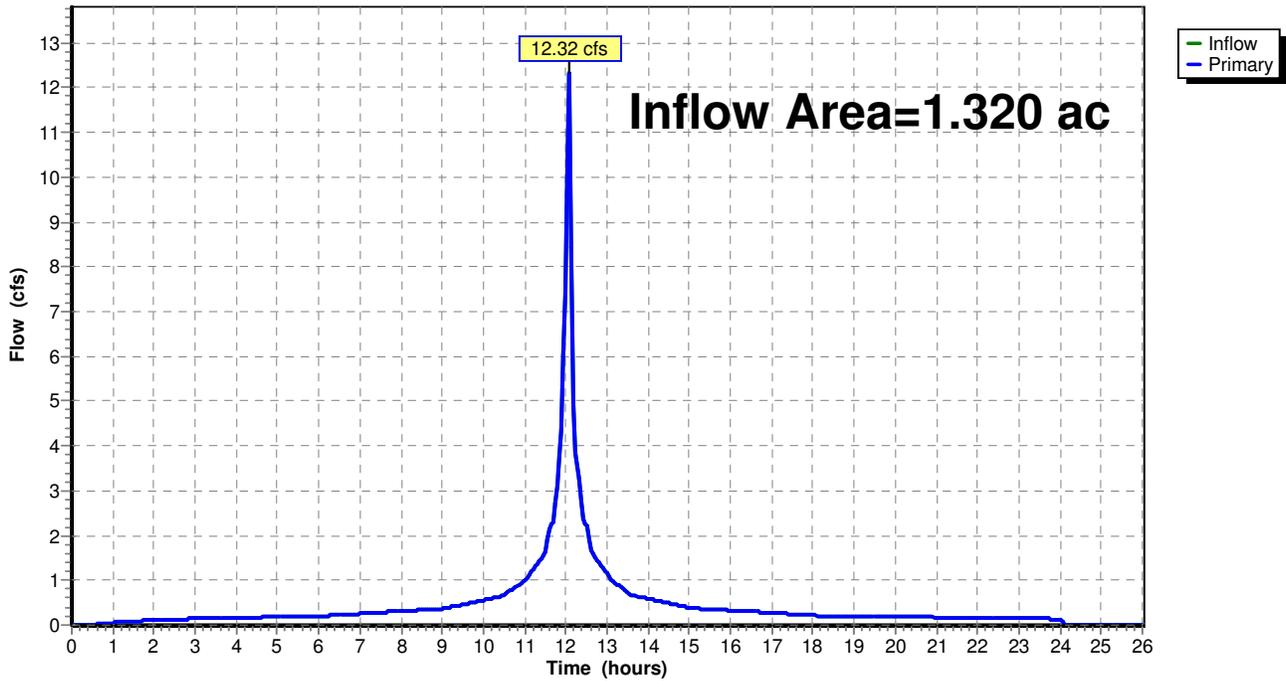
Summary for Link 6L: POA 1

Inflow Area = 1.320 ac, 96.97% Impervious, Inflow Depth = 8.87" for 100-Year-Current event
Inflow = 12.32 cfs @ 12.09 hrs, Volume= 0.976 af
Primary = 12.32 cfs @ 12.09 hrs, Volume= 0.976 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 6L: POA 1

Hydrograph



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NOAA 24-hr D 100-Year-Projected Rainfall=11.52"

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Summary for Subcatchment 1S: BROAD - IMP

Runoff = 0.12 cfs @ 12.09 hrs, Volume= 0.009 af, Depth=11.28"
 Routed to Link 2L : BROAD

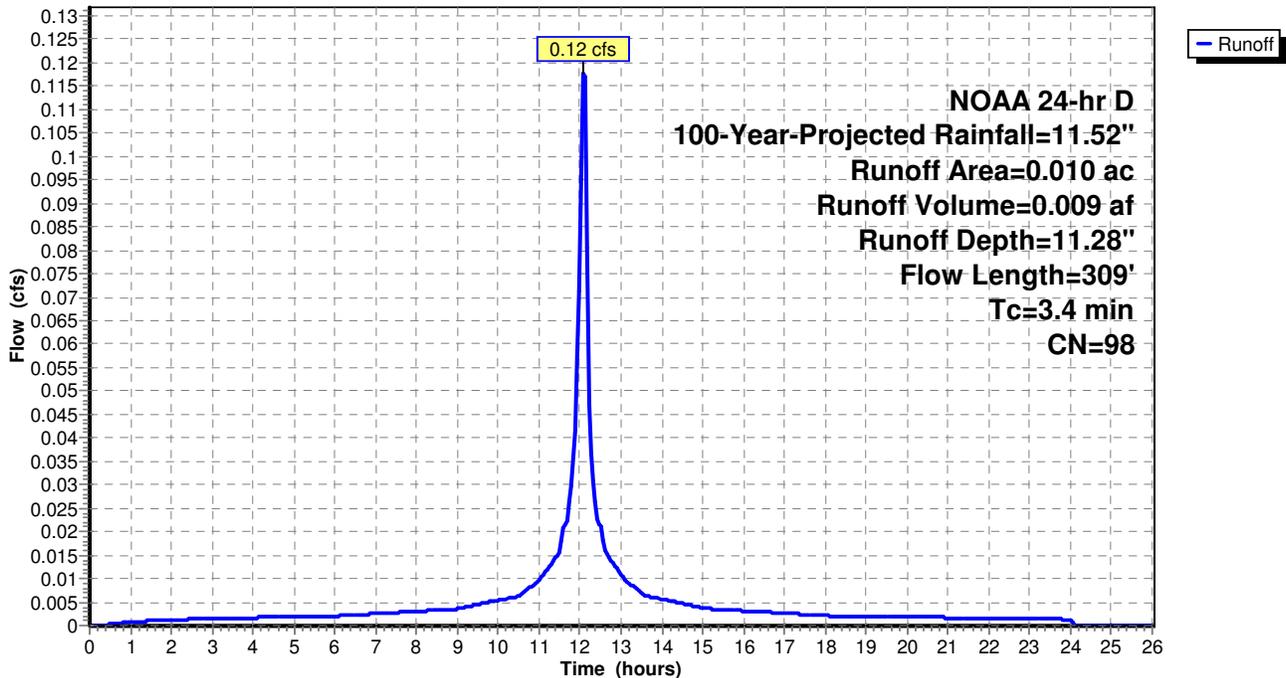
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 100-Year-Projected Rainfall=11.52"

Area (ac)	CN	Description
0.010	98	Paved parking, HSG D
0.010		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	209	0.0080	1.82		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	309	Total			

Subcatchment 1S: BROAD - IMP

Hydrograph



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NOAA 24-hr D 100-Year-Projected Rainfall=11.52"

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Summary for Subcatchment 3S: FRANKLIN - IMP

Runoff = 14.95 cfs @ 12.09 hrs, Volume= 1.194 af, Depth=11.28"
 Routed to Link 5L : FRANKLIN

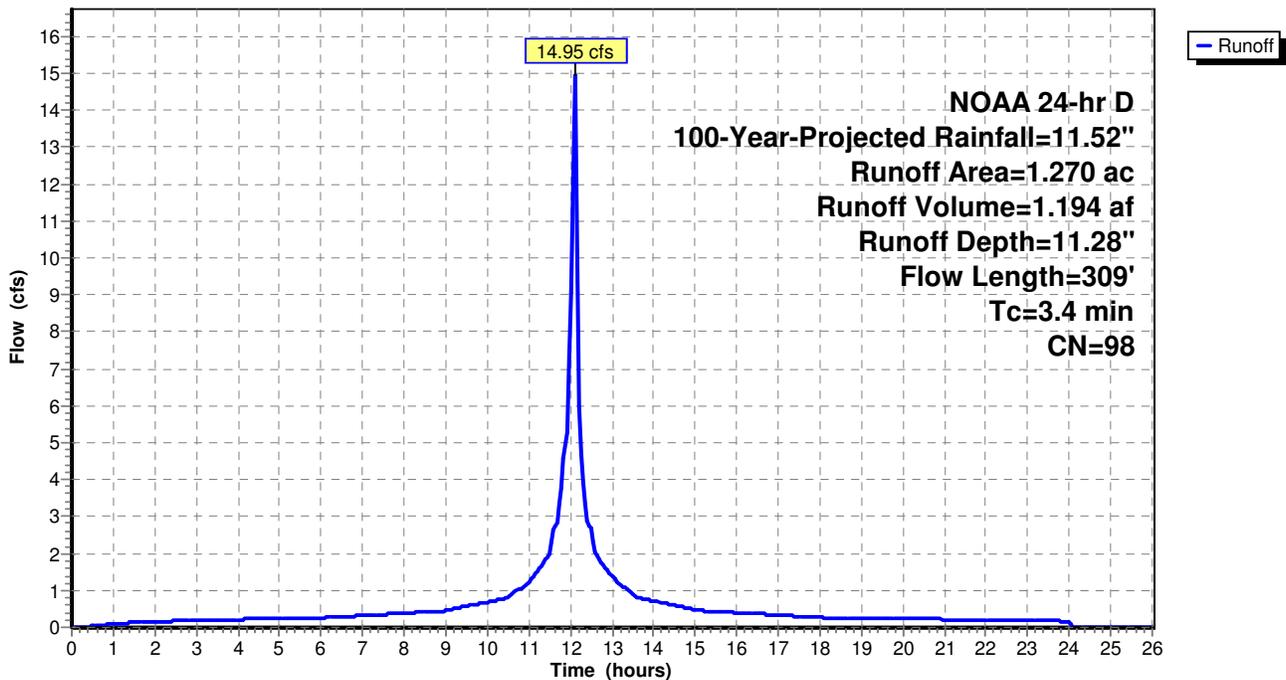
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 100-Year-Projected Rainfall=11.52"

Area (ac)	CN	Description
0.960	98	Unconnected roofs, HSG D
0.310	98	Paved parking, HSG D
1.270	98	Weighted Average
1.270		100.00% Impervious Area
0.960		75.59% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	209	0.0080	1.82		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	309	Total			

Subcatchment 3S: FRANKLIN - IMP

Hydrograph



2024-01 Proposed Hydrology

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NOAA 24-hr D 100-Year-Projected Rainfall=11.52"

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Summary for Subcatchment 4S: FRANKLIN - PERV

Runoff = 0.43 cfs @ 12.09 hrs, Volume= 0.030 af, Depth= 8.98"
 Routed to Link 5L : FRANKLIN

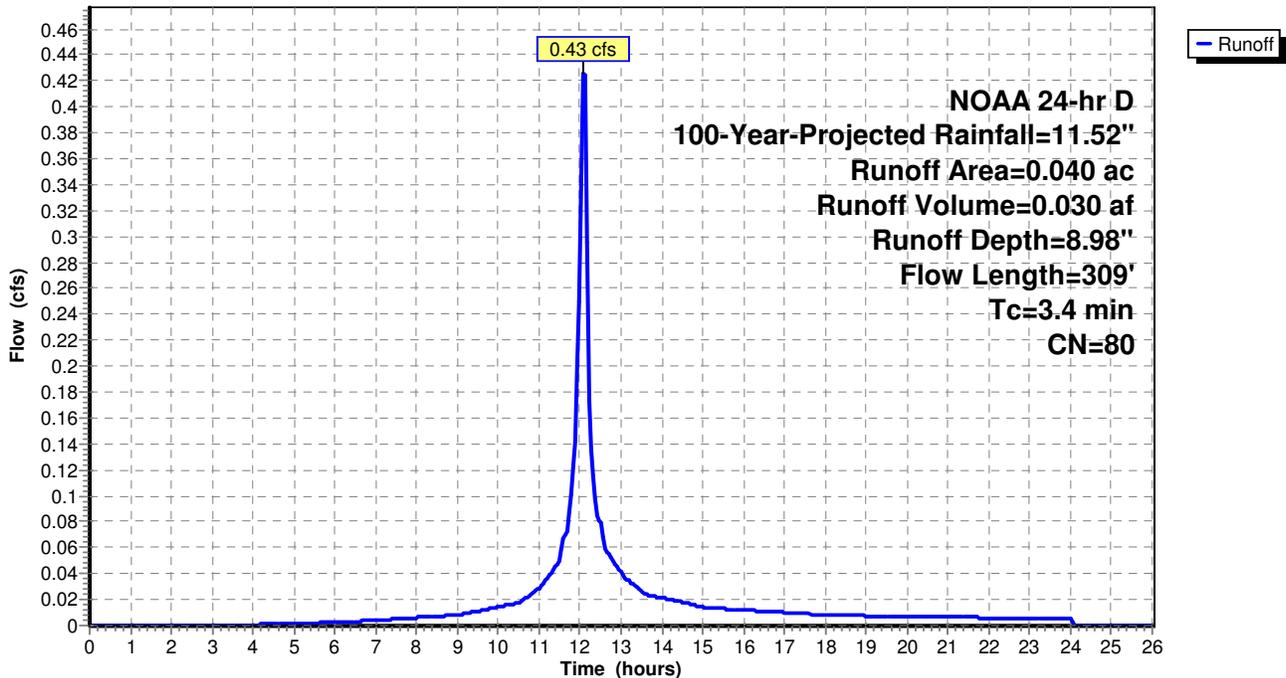
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs
 NOAA 24-hr D 100-Year-Projected Rainfall=11.52"

Area (ac)	CN	Description
0.040	80	>75% Grass cover, Good, HSG D
0.040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	100	0.0100	1.09		Sheet Flow, A-B (PAVED) Smooth surfaces n= 0.011 P2= 3.47"
1.9	209	0.0080	1.82		Shallow Concentrated Flow, B-C (PAVED) Paved Kv= 20.3 fps
3.4	309	Total			

Subcatchment 4S: FRANKLIN - PERV

Hydrograph



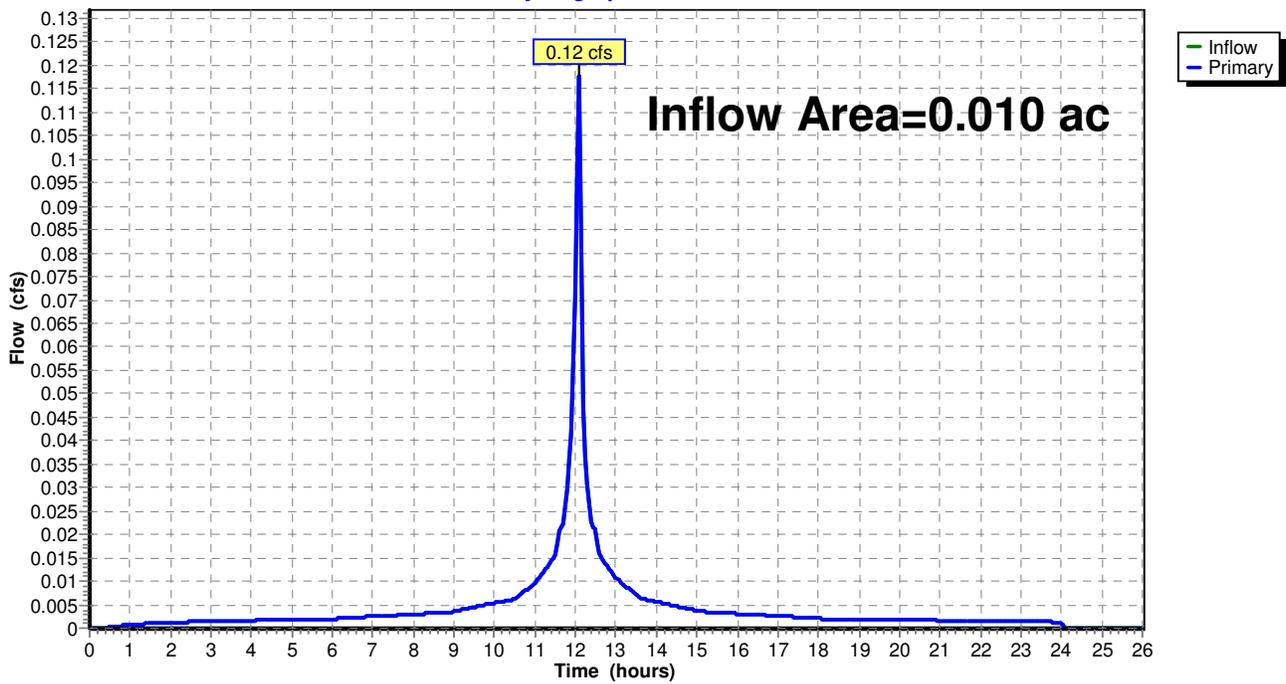
Summary for Link 2L: BROAD

Inflow Area = 0.010 ac, 100.00% Impervious, Inflow Depth = 11.28" for 100-Year-Projected event
Inflow = 0.12 cfs @ 12.09 hrs, Volume= 0.009 af
Primary = 0.12 cfs @ 12.09 hrs, Volume= 0.009 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 2L: BROAD

Hydrograph



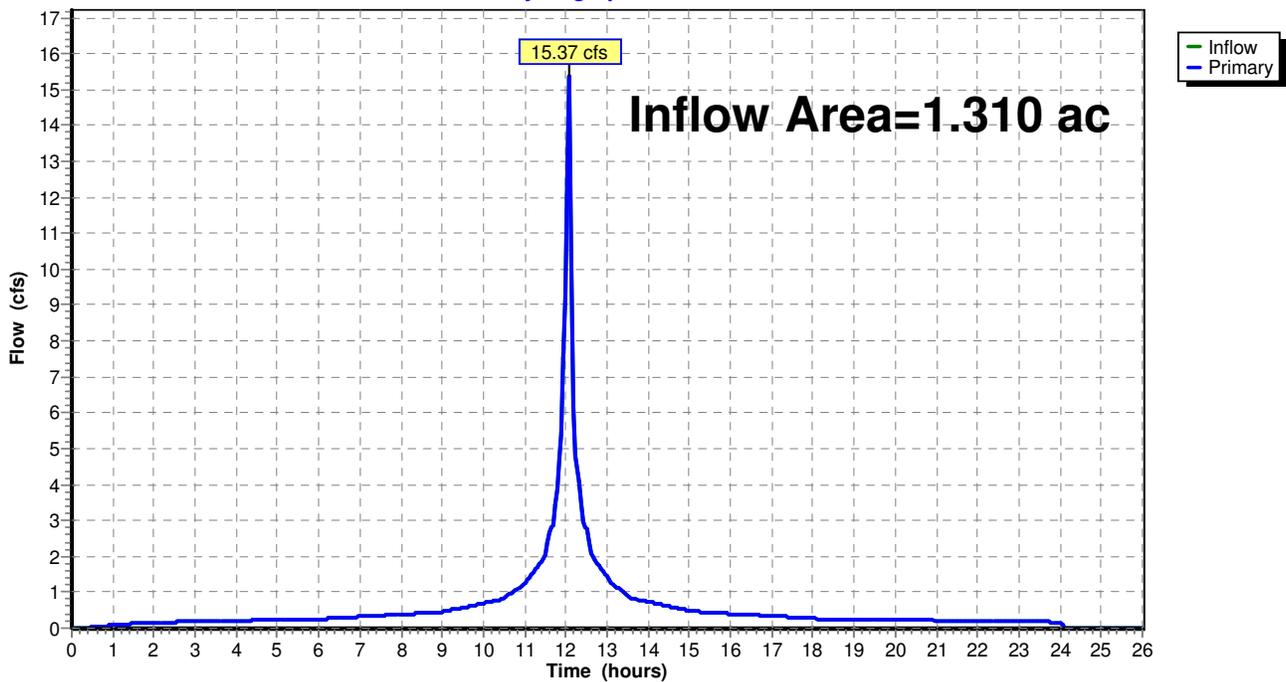
Summary for Link 5L: FRANKLIN

Inflow Area = 1.310 ac, 96.95% Impervious, Inflow Depth = 11.21" for 100-Year-Projected event
Inflow = 15.37 cfs @ 12.09 hrs, Volume= 1.224 af
Primary = 15.37 cfs @ 12.09 hrs, Volume= 1.224 af, Atten= 0%, Lag= 0.0 min
Routed to Link 6L : POA 1

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 5L: FRANKLIN

Hydrograph



Summary for Link 6L: POA 1

Inflow Area = 1.320 ac, 96.97% Impervious, Inflow Depth = 11.21" for 100-Year-Projected event
Inflow = 15.49 cfs @ 12.09 hrs, Volume= 1.233 af
Primary = 15.49 cfs @ 12.09 hrs, Volume= 1.233 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.05 hrs

Link 6L: POA 1

Hydrograph

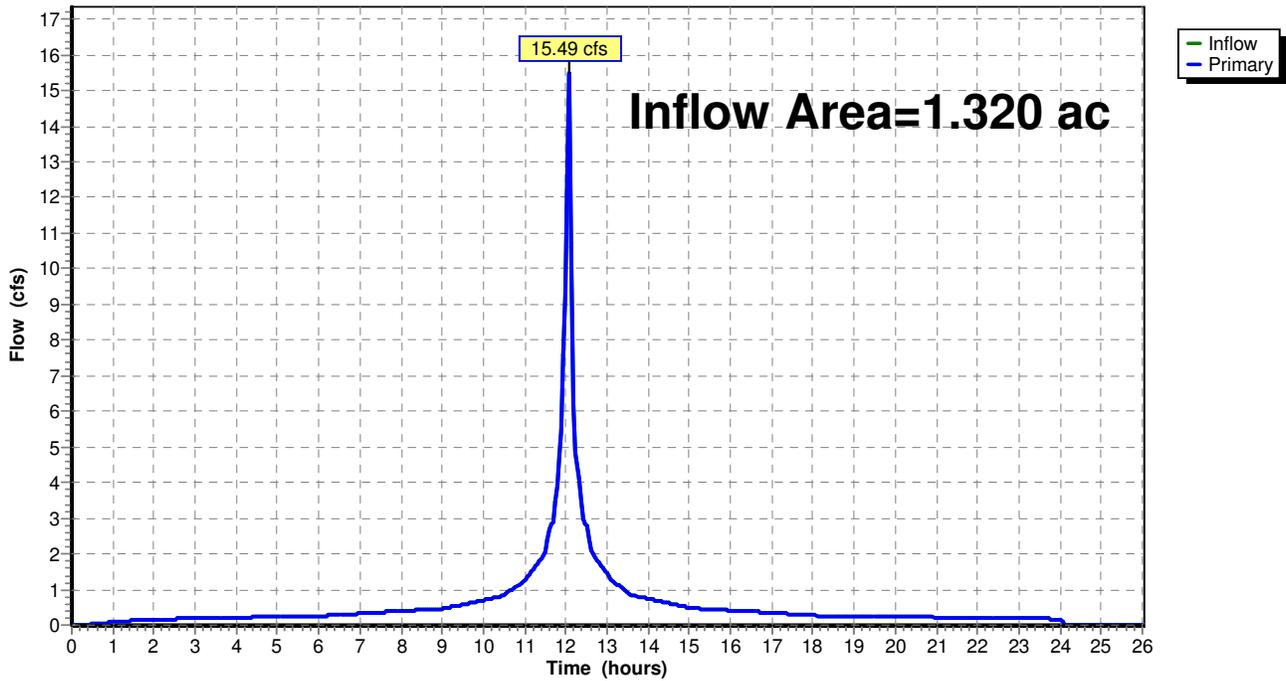


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COMPARATIVE HYDROGRAPHS – POA 1

Hydrograph Comparison - 2-Year Current			
	Existing 2-Year Current	Proposed 2-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
0	0	0	0
0.05	0	0	0
0.1	0	0	0
0.15	0	0	0
0.2	0	0	0
0.25	0	0	0
0.3	0	0	0
0.35	0	0	0
0.4	0	0	0
0.45	0	0	0
0.5	0	0	0
0.55	0	0	0
0.6	0	0	0
0.65	0	0	0
0.7	0	0	0
0.75	0	0	0
0.8	0	0	0
0.85	0	0	0
0.9	0	0	0
0.95	0	0	0
1	0	0	0
1.05	0	0	0
1.1	0	0	0
1.15	0	0	0
1.2	0	0	0
1.25	0	0	0
1.3	0	0	0
1.35	0.01	0.01	0
1.4	0.01	0.01	0
1.45	0.01	0.01	0
1.5	0.01	0.01	0
1.55	0.01	0.01	0
1.6	0.01	0.01	0
1.65	0.01	0.01	0
1.7	0.01	0.01	0
1.75	0.01	0.01	0
1.8	0.01	0.01	0
1.85	0.02	0.02	0
1.9	0.02	0.02	0
1.95	0.02	0.02	0
2	0.02	0.02	0

Hydrograph Comparison - 2-Year Current			
	Existing 2-Year Current	Proposed 2-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
2.05	0.02	0.02	0
2.1	0.02	0.02	0
2.15	0.02	0.02	0
2.2	0.02	0.02	0
2.25	0.02	0.02	0
2.3	0.02	0.02	0
2.35	0.02	0.02	0
2.4	0.02	0.02	0
2.45	0.02	0.02	0
2.5	0.03	0.03	0
2.55	0.03	0.03	0
2.6	0.03	0.03	0
2.65	0.03	0.03	0
2.7	0.03	0.03	0
2.75	0.03	0.03	0
2.8	0.03	0.03	0
2.85	0.03	0.03	0
2.9	0.03	0.03	0
2.95	0.03	0.03	0
3	0.03	0.03	0
3.05	0.03	0.03	0
3.1	0.03	0.03	0
3.15	0.03	0.03	0
3.2	0.03	0.03	0
3.25	0.04	0.04	0
3.3	0.04	0.04	0
3.35	0.04	0.04	0
3.4	0.04	0.04	0
3.45	0.04	0.04	0
3.5	0.04	0.04	0
3.55	0.04	0.04	0
3.6	0.04	0.04	0
3.65	0.04	0.04	0
3.7	0.04	0.04	0
3.75	0.04	0.04	0
3.8	0.04	0.04	0
3.85	0.04	0.04	0
3.9	0.04	0.04	0
3.95	0.04	0.04	0
4	0.04	0.04	0
4.05	0.04	0.04	0

Hydrograph Comparison - 2-Year Current			
	Existing 2-Year Current	Proposed 2-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
4.1	0.05	0.05	0
4.15	0.05	0.05	0
4.2	0.05	0.05	0
4.25	0.05	0.05	0
4.3	0.05	0.05	0
4.35	0.05	0.05	0
4.4	0.05	0.05	0
4.45	0.05	0.05	0
4.5	0.05	0.05	0
4.55	0.05	0.05	0
4.6	0.05	0.05	0
4.65	0.05	0.05	0
4.7	0.05	0.05	0
4.75	0.05	0.05	0
4.8	0.05	0.05	0
4.85	0.05	0.05	0
4.9	0.05	0.05	0
4.95	0.05	0.05	0
5	0.05	0.05	0
5.05	0.05	0.05	0
5.1	0.05	0.05	0
5.15	0.06	0.06	0
5.2	0.06	0.06	0
5.25	0.06	0.06	0
5.3	0.06	0.06	0
5.35	0.06	0.06	0
5.4	0.06	0.06	0
5.45	0.06	0.06	0
5.5	0.06	0.06	0
5.55	0.06	0.06	0
5.6	0.06	0.06	0
5.65	0.06	0.06	0
5.7	0.06	0.06	0
5.75	0.06	0.06	0
5.8	0.06	0.06	0
5.85	0.06	0.06	0
5.9	0.06	0.06	0
5.95	0.06	0.06	0
6	0.06	0.06	0
6.05	0.06	0.06	0
6.1	0.06	0.06	0

Hydrograph Comparison - 2-Year Current			
	Existing 2-Year Current	Proposed 2-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
6.15	0.07	0.07	0
6.2	0.07	0.07	0
6.25	0.07	0.07	0
6.3	0.07	0.07	0
6.35	0.07	0.07	0
6.4	0.07	0.07	0
6.45	0.07	0.07	0
6.5	0.07	0.07	0
6.55	0.07	0.07	0
6.6	0.08	0.08	0
6.65	0.08	0.08	0
6.7	0.08	0.08	0
6.75	0.08	0.08	0
6.8	0.08	0.08	0
6.85	0.08	0.08	0
6.9	0.08	0.08	0
6.95	0.08	0.08	0
7	0.08	0.08	0
7.05	0.08	0.08	0
7.1	0.09	0.09	0
7.15	0.09	0.09	0
7.2	0.09	0.09	0
7.25	0.09	0.09	0
7.3	0.09	0.09	0
7.35	0.09	0.09	0
7.4	0.09	0.09	0
7.45	0.09	0.09	0
7.5	0.09	0.09	0
7.55	0.1	0.1	0
7.6	0.1	0.1	0
7.65	0.1	0.1	0
7.7	0.1	0.1	0
7.75	0.1	0.1	0
7.8	0.1	0.1	0
7.85	0.1	0.1	0
7.9	0.1	0.1	0
7.95	0.1	0.1	0
8	0.11	0.11	0
8.05	0.11	0.11	0
8.1	0.11	0.11	0
8.15	0.11	0.11	0

Hydrograph Comparison - 2-Year Current			
	Existing 2-Year Current	Proposed 2-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
8.2	0.11	0.11	0
8.25	0.11	0.11	0
8.3	0.11	0.11	0
8.35	0.11	0.11	0
8.4	0.11	0.11	0
8.45	0.11	0.11	0
8.5	0.12	0.12	0
8.55	0.12	0.12	0
8.6	0.12	0.12	0
8.65	0.12	0.12	0
8.7	0.12	0.12	0
8.75	0.12	0.12	0
8.8	0.12	0.12	0
8.85	0.12	0.12	0
8.9	0.12	0.12	0
8.95	0.13	0.13	0
9	0.13	0.13	0
9.05	0.13	0.13	0
9.1	0.13	0.13	0
9.15	0.14	0.14	0
9.2	0.14	0.14	0
9.25	0.14	0.14	0
9.3	0.15	0.15	0
9.35	0.15	0.15	0
9.4	0.15	0.15	0
9.45	0.16	0.16	0
9.5	0.16	0.16	0
9.55	0.17	0.17	0
9.6	0.17	0.17	0
9.65	0.17	0.17	0
9.7	0.18	0.18	0
9.75	0.18	0.18	0
9.8	0.18	0.18	0
9.85	0.19	0.19	0
9.9	0.19	0.19	0
9.95	0.19	0.19	0
10	0.2	0.2	0
10.05	0.2	0.2	0
10.1	0.2	0.2	0
10.15	0.21	0.21	0
10.2	0.21	0.21	0

Hydrograph Comparison - 2-Year Current			
	Existing 2-Year Current	Proposed 2-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
10.25	0.22	0.22	0
10.3	0.22	0.22	0
10.35	0.22	0.22	0
10.4	0.23	0.23	0
10.45	0.23	0.23	0
10.5	0.23	0.23	0
10.55	0.25	0.25	0
10.6	0.26	0.26	0
10.65	0.27	0.27	0
10.7	0.28	0.28	0
10.75	0.3	0.3	0
10.8	0.31	0.31	0
10.85	0.32	0.32	0
10.9	0.34	0.34	0
10.95	0.35	0.35	0
11	0.36	0.36	0
11.05	0.39	0.39	0
11.1	0.41	0.41	0
11.15	0.43	0.43	0
11.2	0.45	0.45	0
11.25	0.48	0.48	0
11.3	0.5	0.5	0
11.35	0.52	0.52	0
11.4	0.54	0.54	0
11.45	0.57	0.57	0
11.5	0.59	0.59	0
11.55	0.7	0.7	0
11.6	0.79	0.79	0
11.65	0.82	0.82	0
11.7	0.85	0.85	0
11.75	1	1	0
11.8	1.15	1.15	0
11.85	1.39	1.39	0
11.9	1.6	1.6	0
11.95	2.22	2.22	0
12	2.75	2.75	0
12.05	3.76	3.76	0
12.1	4.55	4.55	0
12.15	3.14	3.14	0
12.2	1.83	1.83	0
12.25	1.43	1.43	0

Hydrograph Comparison - 2-Year Current			
	Existing 2-Year Current	Proposed 2-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
12.3	1.21	1.21	0
12.35	1.03	1.03	0
12.4	0.88	0.88	0
12.45	0.85	0.85	0
12.5	0.82	0.82	0
12.55	0.72	0.72	0
12.6	0.62	0.62	0
12.65	0.59	0.59	0
12.7	0.57	0.57	0
12.75	0.54	0.54	0
12.8	0.52	0.52	0
12.85	0.5	0.5	0
12.9	0.48	0.48	0
12.95	0.45	0.45	0
13	0.43	0.43	0
13.05	0.4	0.4	0
13.1	0.38	0.38	0
13.15	0.37	0.37	0
13.2	0.36	0.36	0
13.25	0.34	0.34	0
13.3	0.33	0.33	0
13.35	0.31	0.31	0
13.4	0.3	0.3	0
13.45	0.29	0.29	0
13.5	0.28	0.28	0
13.55	0.26	0.26	0
13.6	0.25	0.25	0
13.65	0.25	0.25	0
13.7	0.24	0.24	0
13.75	0.24	0.24	0
13.8	0.24	0.24	0
13.85	0.23	0.23	0
13.9	0.23	0.23	0
13.95	0.22	0.22	0
14	0.22	0.22	0
14.05	0.22	0.22	0
14.1	0.21	0.21	0
14.15	0.21	0.21	0
14.2	0.21	0.21	0
14.25	0.2	0.2	0
14.3	0.2	0.2	0

Hydrograph Comparison - 2-Year Current			
	Existing 2-Year Current	Proposed 2-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
14.35	0.19	0.19	0
14.4	0.19	0.19	0
14.45	0.19	0.19	0
14.5	0.18	0.18	0
14.55	0.18	0.18	0
14.6	0.18	0.18	0
14.65	0.17	0.17	0
14.7	0.17	0.17	0
14.75	0.17	0.17	0
14.8	0.16	0.16	0
14.85	0.16	0.16	0
14.9	0.16	0.16	0
14.95	0.15	0.15	0
15	0.15	0.15	0
15.05	0.14	0.14	0
15.1	0.14	0.14	0
15.15	0.14	0.14	0
15.2	0.14	0.14	0
15.25	0.14	0.14	0
15.3	0.14	0.14	0
15.35	0.14	0.14	0
15.4	0.14	0.14	0
15.45	0.13	0.13	0
15.5	0.13	0.13	0
15.55	0.13	0.13	0
15.6	0.13	0.13	0
15.65	0.13	0.13	0
15.7	0.13	0.13	0
15.75	0.13	0.13	0
15.8	0.13	0.13	0
15.85	0.13	0.13	0
15.9	0.12	0.12	0
15.95	0.12	0.12	0
16	0.12	0.12	0
16.05	0.12	0.12	0
16.1	0.12	0.12	0
16.15	0.12	0.12	0
16.2	0.12	0.12	0
16.25	0.12	0.12	0
16.3	0.12	0.12	0
16.35	0.12	0.12	0

Hydrograph Comparison - 2-Year Current			
	Existing 2-Year Current	Proposed 2-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
16.4	0.11	0.11	0
16.45	0.11	0.11	0
16.5	0.11	0.11	0
16.55	0.11	0.11	0
16.6	0.11	0.11	0
16.65	0.11	0.11	0
16.7	0.11	0.11	0
16.75	0.11	0.11	0
16.8	0.11	0.11	0
16.85	0.11	0.11	0
16.9	0.1	0.1	0
16.95	0.1	0.1	0
17	0.1	0.1	0
17.05	0.1	0.1	0
17.1	0.1	0.1	0
17.15	0.1	0.1	0
17.2	0.1	0.1	0
17.25	0.1	0.1	0
17.3	0.1	0.1	0
17.35	0.1	0.1	0
17.4	0.09	0.09	0
17.45	0.09	0.09	0
17.5	0.09	0.09	0
17.55	0.09	0.09	0
17.6	0.09	0.09	0
17.65	0.09	0.09	0
17.7	0.09	0.09	0
17.75	0.09	0.09	0
17.8	0.09	0.09	0
17.85	0.09	0.09	0
17.9	0.08	0.08	0
17.95	0.08	0.08	0
18	0.08	0.08	0
18.05	0.08	0.08	0
18.1	0.08	0.08	0
18.15	0.08	0.08	0
18.2	0.08	0.08	0
18.25	0.08	0.08	0
18.3	0.08	0.08	0
18.35	0.08	0.08	0
18.4	0.08	0.08	0

Hydrograph Comparison - 2-Year Current			
	Existing 2-Year Current	Proposed 2-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
18.45	0.08	0.08	0
18.5	0.08	0.08	0
18.55	0.08	0.08	0
18.6	0.08	0.08	0
18.65	0.08	0.08	0
18.7	0.08	0.08	0
18.75	0.08	0.08	0
18.8	0.08	0.08	0
18.85	0.08	0.08	0
18.9	0.08	0.08	0
18.95	0.08	0.08	0
19	0.08	0.08	0
19.05	0.08	0.08	0
19.1	0.07	0.07	0
19.15	0.07	0.07	0
19.2	0.07	0.07	0
19.25	0.07	0.07	0
19.3	0.07	0.07	0
19.35	0.07	0.07	0
19.4	0.07	0.07	0
19.45	0.07	0.07	0
19.5	0.07	0.07	0
19.55	0.07	0.07	0
19.6	0.07	0.07	0
19.65	0.07	0.07	0
19.7	0.07	0.07	0
19.75	0.07	0.07	0
19.8	0.07	0.07	0
19.85	0.07	0.07	0
19.9	0.07	0.07	0
19.95	0.07	0.07	0
20	0.07	0.07	0
20.05	0.07	0.07	0
20.1	0.07	0.07	0
20.15	0.07	0.07	0
20.2	0.07	0.07	0
20.25	0.07	0.07	0
20.3	0.07	0.07	0
20.35	0.07	0.07	0
20.4	0.07	0.07	0
20.45	0.07	0.07	0

Hydrograph Comparison - 2-Year Current			
	Existing 2-Year Current	Proposed 2-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
20.5	0.07	0.07	0
20.55	0.07	0.07	0
20.6	0.07	0.07	0
20.65	0.07	0.07	0
20.7	0.07	0.07	0
20.75	0.07	0.07	0
20.8	0.07	0.07	0
20.85	0.07	0.07	0
20.9	0.07	0.07	0
20.95	0.07	0.07	0
21	0.07	0.07	0
21.05	0.06	0.06	0
21.1	0.06	0.06	0
21.15	0.06	0.06	0
21.2	0.06	0.06	0
21.25	0.06	0.06	0
21.3	0.06	0.06	0
21.35	0.06	0.06	0
21.4	0.06	0.06	0
21.45	0.06	0.06	0
21.5	0.06	0.06	0
21.55	0.06	0.06	0
21.6	0.06	0.06	0
21.65	0.06	0.06	0
21.7	0.06	0.06	0
21.75	0.06	0.06	0
21.8	0.06	0.06	0
21.85	0.06	0.06	0
21.9	0.06	0.06	0
21.95	0.06	0.06	0
22	0.06	0.06	0
22.05	0.06	0.06	0
22.1	0.06	0.06	0
22.15	0.06	0.06	0
22.2	0.06	0.06	0
22.25	0.06	0.06	0
22.3	0.06	0.06	0
22.35	0.06	0.06	0
22.4	0.06	0.06	0
22.45	0.06	0.06	0
22.5	0.06	0.06	0

Hydrograph Comparison - 2-Year Current			
	Existing 2-Year Current	Proposed 2-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
22.55	0.06	0.06	0
22.6	0.06	0.06	0
22.65	0.06	0.06	0
22.7	0.06	0.06	0
22.75	0.06	0.06	0
22.8	0.06	0.06	0
22.85	0.06	0.06	0
22.9	0.06	0.06	0
22.95	0.06	0.06	0
23	0.05	0.05	0
23.05	0.05	0.05	0
23.1	0.05	0.05	0
23.15	0.05	0.05	0
23.2	0.05	0.05	0
23.25	0.05	0.05	0
23.3	0.05	0.05	0
23.35	0.05	0.05	0
23.4	0.05	0.05	0
23.45	0.05	0.05	0
23.5	0.05	0.05	0
23.55	0.05	0.05	0
23.6	0.05	0.05	0
23.65	0.05	0.05	0
23.7	0.05	0.05	0
23.75	0.05	0.05	0
23.8	0.05	0.05	0
23.85	0.05	0.05	0
23.9	0.05	0.05	0
23.95	0.05	0.05	0
24	0.05	0.05	0
24.05	0.02	0.02	0
24.1	0	0	0
24.15	0	0	0
24.2	0	0	0
24.25	0	0	0
24.3	0	0	0
24.35	0	0	0
24.4	0	0	0
24.45	0	0	0
24.5	0	0	0
24.55	0	0	0

Hydrograph Comparison - 2-Year Current			
	Existing 2-Year Current	Proposed 2-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
24.6	0	0	0
24.65	0	0	0
24.7	0	0	0
24.75	0	0	0
24.8	0	0	0
24.85	0	0	0
24.9	0	0	0
24.95	0	0	0
25	0	0	0
25.05	0	0	0
25.1	0	0	0
25.15	0	0	0
25.2	0	0	0
25.25	0	0	0
25.3	0	0	0
25.35	0	0	0
25.4	0	0	0
25.45	0	0	0
25.5	0	0	0
25.55	0	0	0
25.6	0	0	0
25.65	0	0	0
25.7	0	0	0
25.75	0	0	0
25.8	0	0	0
25.85	0	0	0
25.9	0	0	0
25.95	0	0	0
26	0	0	0

Hydrograph Comparison - 2-Year Projected			
	Existing 2-Year Projected	Proposed 2-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
0	0	0	0
0.05	0	0	0
0.1	0	0	0
0.15	0	0	0
0.2	0	0	0
0.25	0	0	0
0.3	0	0	0
0.35	0	0	0
0.4	0	0	0
0.45	0	0	0
0.5	0	0	0
0.55	0	0	0
0.6	0	0	0
0.65	0	0	0
0.7	0	0	0
0.75	0	0	0
0.8	0	0	0
0.85	0	0	0
0.9	0	0	0
0.95	0	0	0
1	0	0	0
1.05	0	0	0
1.1	0	0	0
1.15	0.01	0.01	0
1.2	0.01	0.01	0
1.25	0.01	0.01	0
1.3	0.01	0.01	0
1.35	0.01	0.01	0
1.4	0.01	0.01	0
1.45	0.01	0.01	0
1.5	0.02	0.02	0
1.55	0.02	0.02	0
1.6	0.02	0.02	0
1.65	0.02	0.02	0
1.7	0.02	0.02	0
1.75	0.02	0.02	0
1.8	0.02	0.02	0
1.85	0.02	0.02	0
1.9	0.02	0.02	0
1.95	0.02	0.02	0
2	0.03	0.03	0

Hydrograph Comparison - 2-Year Projected			
	Existing 2-Year Projected	Proposed 2-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
2.05	0.03	0.03	0
2.1	0.03	0.03	0
2.15	0.03	0.03	0
2.2	0.03	0.03	0
2.25	0.03	0.03	0
2.3	0.03	0.03	0
2.35	0.03	0.03	0
2.4	0.03	0.03	0
2.45	0.03	0.03	0
2.5	0.04	0.04	0
2.55	0.04	0.04	0
2.6	0.04	0.04	0
2.65	0.04	0.04	0
2.7	0.04	0.04	0
2.75	0.04	0.04	0
2.8	0.04	0.04	0
2.85	0.04	0.04	0
2.9	0.04	0.04	0
2.95	0.04	0.04	0
3	0.04	0.04	0
3.05	0.04	0.04	0
3.1	0.04	0.04	0
3.15	0.05	0.05	0
3.2	0.05	0.05	0
3.25	0.05	0.05	0
3.3	0.05	0.05	0
3.35	0.05	0.05	0
3.4	0.05	0.05	0
3.45	0.05	0.05	0
3.5	0.05	0.05	0
3.55	0.05	0.05	0
3.6	0.05	0.05	0
3.65	0.05	0.05	0
3.7	0.05	0.05	0
3.75	0.05	0.05	0
3.8	0.05	0.05	0
3.85	0.05	0.05	0
3.9	0.06	0.06	0
3.95	0.06	0.06	0
4	0.06	0.06	0
4.05	0.06	0.06	0

Hydrograph Comparison - 2-Year Projected			
	Existing 2-Year Projected	Proposed 2-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
4.1	0.06	0.06	0
4.15	0.06	0.06	0
4.2	0.06	0.06	0
4.25	0.06	0.06	0
4.3	0.06	0.06	0
4.35	0.06	0.06	0
4.4	0.06	0.06	0
4.45	0.06	0.06	0
4.5	0.06	0.06	0
4.55	0.06	0.06	0
4.6	0.06	0.06	0
4.65	0.06	0.06	0
4.7	0.06	0.06	0
4.75	0.07	0.07	0
4.8	0.07	0.07	0
4.85	0.07	0.07	0
4.9	0.07	0.07	0
4.95	0.07	0.07	0
5	0.07	0.07	0
5.05	0.07	0.07	0
5.1	0.07	0.07	0
5.15	0.07	0.07	0
5.2	0.07	0.07	0
5.25	0.07	0.07	0
5.3	0.07	0.07	0
5.35	0.07	0.07	0
5.4	0.07	0.07	0
5.45	0.07	0.07	0
5.5	0.07	0.07	0
5.55	0.07	0.07	0
5.6	0.07	0.07	0
5.65	0.07	0.07	0
5.7	0.07	0.07	0
5.75	0.08	0.08	0
5.8	0.08	0.08	0
5.85	0.08	0.08	0
5.9	0.08	0.08	0
5.95	0.08	0.08	0
6	0.08	0.08	0
6.05	0.08	0.08	0
6.1	0.08	0.08	0

Hydrograph Comparison - 2-Year Projected			
	Existing 2-Year Projected	Proposed 2-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
6.15	0.08	0.08	0
6.2	0.08	0.08	0
6.25	0.08	0.08	0
6.3	0.08	0.08	0
6.35	0.09	0.09	0
6.4	0.09	0.09	0
6.45	0.09	0.09	0
6.5	0.09	0.09	0
6.55	0.09	0.09	0
6.6	0.09	0.09	0
6.65	0.09	0.09	0
6.7	0.09	0.09	0
6.75	0.1	0.1	0
6.8	0.1	0.1	0
6.85	0.1	0.1	0
6.9	0.1	0.1	0
6.95	0.1	0.1	0
7	0.1	0.1	0
7.05	0.1	0.1	0
7.1	0.1	0.1	0
7.15	0.11	0.11	0
7.2	0.11	0.11	0
7.25	0.11	0.11	0
7.3	0.11	0.11	0
7.35	0.11	0.11	0
7.4	0.11	0.11	0
7.45	0.11	0.11	0
7.5	0.11	0.11	0
7.55	0.12	0.12	0
7.6	0.12	0.12	0
7.65	0.12	0.12	0
7.7	0.12	0.12	0
7.75	0.12	0.12	0
7.8	0.12	0.12	0
7.85	0.12	0.12	0
7.9	0.12	0.12	0
7.95	0.13	0.13	0
8	0.13	0.13	0
8.05	0.13	0.13	0
8.1	0.13	0.13	0
8.15	0.13	0.13	0

Hydrograph Comparison - 2-Year Projected			
	Existing 2-Year Projected	Proposed 2-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
8.2	0.13	0.13	0
8.25	0.13	0.13	0
8.3	0.13	0.13	0
8.35	0.14	0.14	0
8.4	0.14	0.14	0
8.45	0.14	0.14	0
8.5	0.14	0.14	0
8.55	0.14	0.14	0
8.6	0.14	0.14	0
8.65	0.14	0.14	0
8.7	0.15	0.15	0
8.75	0.15	0.15	0
8.8	0.15	0.15	0
8.85	0.15	0.15	0
8.9	0.15	0.15	0
8.95	0.15	0.15	0
9	0.15	0.15	0
9.05	0.16	0.16	0
9.1	0.16	0.16	0
9.15	0.17	0.17	0
9.2	0.17	0.17	0
9.25	0.17	0.17	0
9.3	0.18	0.18	0
9.35	0.18	0.18	0
9.4	0.19	0.19	0
9.45	0.19	0.19	0
9.5	0.19	0.19	0
9.55	0.2	0.2	0
9.6	0.2	0.2	0
9.65	0.21	0.21	0
9.7	0.21	0.21	0
9.75	0.22	0.22	0
9.8	0.22	0.22	0
9.85	0.22	0.22	0
9.9	0.23	0.23	0
9.95	0.23	0.23	0
10	0.24	0.24	0
10.05	0.24	0.24	0
10.1	0.25	0.25	0
10.15	0.25	0.25	0
10.2	0.25	0.25	0

Hydrograph Comparison - 2-Year Projected			
	Existing 2-Year Projected	Proposed 2-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
10.25	0.26	0.26	0
10.3	0.26	0.26	0
10.35	0.27	0.27	0
10.4	0.27	0.27	0
10.45	0.28	0.28	0
10.5	0.28	0.28	0
10.55	0.3	0.3	0
10.6	0.31	0.31	0
10.65	0.33	0.33	0
10.7	0.34	0.34	0
10.75	0.36	0.36	0
10.8	0.37	0.37	0
10.85	0.39	0.39	0
10.9	0.4	0.4	0
10.95	0.42	0.42	0
11	0.43	0.43	0
11.05	0.46	0.46	0
11.1	0.48	0.48	0
11.15	0.51	0.51	0
11.2	0.54	0.54	0
11.25	0.57	0.57	0
11.3	0.59	0.59	0
11.35	0.62	0.62	0
11.4	0.65	0.65	0
11.45	0.68	0.68	0
11.5	0.7	0.7	0
11.55	0.83	0.83	0
11.6	0.94	0.94	0
11.65	0.98	0.98	0
11.7	1	1	0
11.75	1.19	1.19	0
11.8	1.36	1.36	0
11.85	1.65	1.65	0
11.9	1.9	1.9	0
11.95	2.63	2.63	0
12	3.26	3.26	0
12.05	4.46	4.46	0
12.1	5.39	5.39	0
12.15	3.72	3.72	0
12.2	2.17	2.17	0
12.25	1.69	1.69	0

Hydrograph Comparison - 2-Year Projected			
	Existing 2-Year Projected	Proposed 2-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
12.3	1.43	1.43	0
12.35	1.21	1.21	0
12.4	1.05	1.05	0
12.45	1	1	0
12.5	0.97	0.97	0
12.55	0.85	0.85	0
12.6	0.74	0.74	0
12.65	0.7	0.7	0
12.7	0.67	0.67	0
12.75	0.64	0.64	0
12.8	0.62	0.62	0
12.85	0.59	0.59	0
12.9	0.56	0.56	0
12.95	0.53	0.53	0
13	0.51	0.51	0
13.05	0.48	0.48	0
13.1	0.45	0.45	0
13.15	0.43	0.43	0
13.2	0.42	0.42	0
13.25	0.4	0.4	0
13.3	0.39	0.39	0
13.35	0.37	0.37	0
13.4	0.36	0.36	0
13.45	0.34	0.34	0
13.5	0.33	0.33	0
13.55	0.31	0.31	0
13.6	0.3	0.3	0
13.65	0.29	0.29	0
13.7	0.29	0.29	0
13.75	0.28	0.28	0
13.8	0.28	0.28	0
13.85	0.27	0.27	0
13.9	0.27	0.27	0
13.95	0.26	0.26	0
14	0.26	0.26	0
14.05	0.26	0.26	0
14.1	0.25	0.25	0
14.15	0.25	0.25	0
14.2	0.24	0.24	0
14.25	0.24	0.24	0
14.3	0.24	0.24	0

Hydrograph Comparison - 2-Year Projected			
	Existing 2-Year Projected	Proposed 2-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
14.35	0.23	0.23	0
14.4	0.23	0.23	0
14.45	0.22	0.22	0
14.5	0.22	0.22	0
14.55	0.21	0.21	0
14.6	0.21	0.21	0
14.65	0.2	0.2	0
14.7	0.2	0.2	0
14.75	0.2	0.2	0
14.8	0.19	0.19	0
14.85	0.19	0.19	0
14.9	0.18	0.18	0
14.95	0.18	0.18	0
15	0.18	0.18	0
15.05	0.17	0.17	0
15.1	0.17	0.17	0
15.15	0.17	0.17	0
15.2	0.16	0.16	0
15.25	0.16	0.16	0
15.3	0.16	0.16	0
15.35	0.16	0.16	0
15.4	0.16	0.16	0
15.45	0.16	0.16	0
15.5	0.16	0.16	0
15.55	0.16	0.16	0
15.6	0.15	0.15	0
15.65	0.15	0.15	0
15.7	0.15	0.15	0
15.75	0.15	0.15	0
15.8	0.15	0.15	0
15.85	0.15	0.15	0
15.9	0.15	0.15	0
15.95	0.15	0.15	0
16	0.15	0.15	0
16.05	0.14	0.14	0
16.1	0.14	0.14	0
16.15	0.14	0.14	0
16.2	0.14	0.14	0
16.25	0.14	0.14	0
16.3	0.14	0.14	0
16.35	0.14	0.14	0

Hydrograph Comparison - 2-Year Projected			
	Existing 2-Year Projected	Proposed 2-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
16.4	0.14	0.14	0
16.45	0.13	0.13	0
16.5	0.13	0.13	0
16.55	0.13	0.13	0
16.6	0.13	0.13	0
16.65	0.13	0.13	0
16.7	0.13	0.13	0
16.75	0.13	0.13	0
16.8	0.13	0.13	0
16.85	0.12	0.12	0
16.9	0.12	0.12	0
16.95	0.12	0.12	0
17	0.12	0.12	0
17.05	0.12	0.12	0
17.1	0.12	0.12	0
17.15	0.12	0.12	0
17.2	0.12	0.12	0
17.25	0.11	0.11	0
17.3	0.11	0.11	0
17.35	0.11	0.11	0
17.4	0.11	0.11	0
17.45	0.11	0.11	0
17.5	0.11	0.11	0
17.55	0.11	0.11	0
17.6	0.11	0.11	0
17.65	0.11	0.11	0
17.7	0.1	0.1	0
17.75	0.1	0.1	0
17.8	0.1	0.1	0
17.85	0.1	0.1	0
17.9	0.1	0.1	0
17.95	0.1	0.1	0
18	0.1	0.1	0
18.05	0.1	0.1	0
18.1	0.09	0.09	0
18.15	0.09	0.09	0
18.2	0.09	0.09	0
18.25	0.09	0.09	0
18.3	0.09	0.09	0
18.35	0.09	0.09	0
18.4	0.09	0.09	0

Hydrograph Comparison - 2-Year Projected			
	Existing 2-Year Projected	Proposed 2-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
18.45	0.09	0.09	0
18.5	0.09	0.09	0
18.55	0.09	0.09	0
18.6	0.09	0.09	0
18.65	0.09	0.09	0
18.7	0.09	0.09	0
18.75	0.09	0.09	0
18.8	0.09	0.09	0
18.85	0.09	0.09	0
18.9	0.09	0.09	0
18.95	0.09	0.09	0
19	0.09	0.09	0
19.05	0.09	0.09	0
19.1	0.09	0.09	0
19.15	0.09	0.09	0
19.2	0.09	0.09	0
19.25	0.09	0.09	0
19.3	0.09	0.09	0
19.35	0.09	0.09	0
19.4	0.09	0.09	0
19.45	0.09	0.09	0
19.5	0.09	0.09	0
19.55	0.09	0.09	0
19.6	0.09	0.09	0
19.65	0.09	0.09	0
19.7	0.09	0.09	0
19.75	0.08	0.08	0
19.8	0.08	0.08	0
19.85	0.08	0.08	0
19.9	0.08	0.08	0
19.95	0.08	0.08	0
20	0.08	0.08	0
20.05	0.08	0.08	0
20.1	0.08	0.08	0
20.15	0.08	0.08	0
20.2	0.08	0.08	0
20.25	0.08	0.08	0
20.3	0.08	0.08	0
20.35	0.08	0.08	0
20.4	0.08	0.08	0
20.45	0.08	0.08	0

Hydrograph Comparison - 2-Year Projected			
	Existing 2-Year Projected	Proposed 2-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
20.5	0.08	0.08	0
20.55	0.08	0.08	0
20.6	0.08	0.08	0
20.65	0.08	0.08	0
20.7	0.08	0.08	0
20.75	0.08	0.08	0
20.8	0.08	0.08	0
20.85	0.08	0.08	0
20.9	0.08	0.08	0
20.95	0.08	0.08	0
21	0.08	0.08	0
21.05	0.08	0.08	0
21.1	0.08	0.08	0
21.15	0.08	0.08	0
21.2	0.08	0.08	0
21.25	0.08	0.08	0
21.3	0.08	0.08	0
21.35	0.08	0.08	0
21.4	0.08	0.08	0
21.45	0.07	0.07	0
21.5	0.07	0.07	0
21.55	0.07	0.07	0
21.6	0.07	0.07	0
21.65	0.07	0.07	0
21.7	0.07	0.07	0
21.75	0.07	0.07	0
21.8	0.07	0.07	0
21.85	0.07	0.07	0
21.9	0.07	0.07	0
21.95	0.07	0.07	0
22	0.07	0.07	0
22.05	0.07	0.07	0
22.1	0.07	0.07	0
22.15	0.07	0.07	0
22.2	0.07	0.07	0
22.25	0.07	0.07	0
22.3	0.07	0.07	0
22.35	0.07	0.07	0
22.4	0.07	0.07	0
22.45	0.07	0.07	0
22.5	0.07	0.07	0

Hydrograph Comparison - 2-Year Projected			
	Existing 2-Year Projected	Proposed 2-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
22.55	0.07	0.07	0
22.6	0.07	0.07	0
22.65	0.07	0.07	0
22.7	0.07	0.07	0
22.75	0.07	0.07	0
22.8	0.07	0.07	0
22.85	0.07	0.07	0
22.9	0.07	0.07	0
22.95	0.07	0.07	0
23	0.06	0.06	0
23.05	0.06	0.06	0
23.1	0.06	0.06	0
23.15	0.06	0.06	0
23.2	0.06	0.06	0
23.25	0.06	0.06	0
23.3	0.06	0.06	0
23.35	0.06	0.06	0
23.4	0.06	0.06	0
23.45	0.06	0.06	0
23.5	0.06	0.06	0
23.55	0.06	0.06	0
23.6	0.06	0.06	0
23.65	0.06	0.06	0
23.7	0.06	0.06	0
23.75	0.06	0.06	0
23.8	0.06	0.06	0
23.85	0.06	0.06	0
23.9	0.06	0.06	0
23.95	0.06	0.06	0
24	0.06	0.06	0
24.05	0.03	0.03	0
24.1	0	0	0
24.15	0	0	0
24.2	0	0	0
24.25	0	0	0
24.3	0	0	0
24.35	0	0	0
24.4	0	0	0
24.45	0	0	0
24.5	0	0	0
24.55	0	0	0

Hydrograph Comparison - 2-Year Projected			
	Existing 2-Year Projected	Proposed 2-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
24.6	0	0	0
24.65	0	0	0
24.7	0	0	0
24.75	0	0	0
24.8	0	0	0
24.85	0	0	0
24.9	0	0	0
24.95	0	0	0
25	0	0	0
25.05	0	0	0
25.1	0	0	0
25.15	0	0	0
25.2	0	0	0
25.25	0	0	0
25.3	0	0	0
25.35	0	0	0
25.4	0	0	0
25.45	0	0	0
25.5	0	0	0
25.55	0	0	0
25.6	0	0	0
25.65	0	0	0
25.7	0	0	0
25.75	0	0	0
25.8	0	0	0
25.85	0	0	0
25.9	0	0	0
25.95	0	0	0
26	0	0	0

Hydrograph Comparison - 10-Year Current			
	Existing 10-Year Current	Proposed 10-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
0	0	0	0
0.05	0	0	0
0.1	0	0	0
0.15	0	0	0
0.2	0	0	0
0.25	0	0	0
0.3	0	0	0
0.35	0	0	0
0.4	0	0	0
0.45	0	0	0
0.5	0	0	0
0.55	0	0	0
0.6	0	0	0
0.65	0	0	0
0.7	0	0	0
0.75	0	0	0
0.8	0	0	0
0.85	0.01	0.01	0
0.9	0.01	0.01	0
0.95	0.01	0.01	0
1	0.01	0.01	0
1.05	0.01	0.01	0
1.1	0.02	0.02	0
1.15	0.02	0.02	0
1.2	0.02	0.02	0
1.25	0.02	0.02	0
1.3	0.02	0.02	0
1.35	0.03	0.03	0
1.4	0.03	0.03	0
1.45	0.03	0.03	0
1.5	0.03	0.03	0
1.55	0.03	0.03	0
1.6	0.03	0.03	0
1.65	0.04	0.04	0
1.7	0.04	0.04	0
1.75	0.04	0.04	0
1.8	0.04	0.04	0
1.85	0.04	0.04	0
1.9	0.04	0.04	0
1.95	0.04	0.04	0
2	0.05	0.05	0

Hydrograph Comparison - 10-Year Current			
	Existing 10-Year Current	Proposed 10-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
2.05	0.05	0.05	0
2.1	0.05	0.05	0
2.15	0.05	0.05	0
2.2	0.05	0.05	0
2.25	0.05	0.05	0
2.3	0.05	0.05	0
2.35	0.05	0.05	0
2.4	0.05	0.05	0
2.45	0.06	0.06	0
2.5	0.06	0.06	0
2.55	0.06	0.06	0
2.6	0.06	0.06	0
2.65	0.06	0.06	0
2.7	0.06	0.06	0
2.75	0.06	0.06	0
2.8	0.06	0.06	0
2.85	0.06	0.06	0
2.9	0.07	0.07	0
2.95	0.07	0.07	0
3	0.07	0.07	0
3.05	0.07	0.07	0
3.1	0.07	0.07	0
3.15	0.07	0.07	0
3.2	0.07	0.07	0
3.25	0.07	0.07	0
3.3	0.07	0.07	0
3.35	0.07	0.07	0
3.4	0.07	0.07	0
3.45	0.08	0.08	0
3.5	0.08	0.08	0
3.55	0.08	0.08	0
3.6	0.08	0.08	0
3.65	0.08	0.08	0
3.7	0.08	0.08	0
3.75	0.08	0.08	0
3.8	0.08	0.08	0
3.85	0.08	0.08	0
3.9	0.08	0.08	0
3.95	0.08	0.08	0
4	0.08	0.08	0
4.05	0.08	0.08	0

Hydrograph Comparison - 10-Year Current			
	Existing 10-Year Current	Proposed 10-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
4.1	0.08	0.08	0
4.15	0.09	0.09	0
4.2	0.09	0.09	0
4.25	0.09	0.09	0
4.3	0.09	0.09	0
4.35	0.09	0.09	0
4.4	0.09	0.09	0
4.45	0.09	0.09	0
4.5	0.09	0.09	0
4.55	0.09	0.09	0
4.6	0.09	0.09	0
4.65	0.09	0.09	0
4.7	0.09	0.09	0
4.75	0.09	0.09	0
4.8	0.09	0.09	0
4.85	0.09	0.09	0
4.9	0.1	0.1	0
4.95	0.1	0.1	0
5	0.1	0.1	0
5.05	0.1	0.1	0
5.1	0.1	0.1	0
5.15	0.1	0.1	0
5.2	0.1	0.1	0
5.25	0.1	0.1	0
5.3	0.1	0.1	0
5.35	0.1	0.1	0
5.4	0.1	0.1	0
5.45	0.1	0.1	0
5.5	0.1	0.1	0
5.55	0.1	0.1	0
5.6	0.1	0.1	0
5.65	0.1	0.1	0
5.7	0.11	0.11	0
5.75	0.11	0.11	0
5.8	0.11	0.11	0
5.85	0.11	0.11	0
5.9	0.11	0.11	0
5.95	0.11	0.11	0
6	0.11	0.11	0
6.05	0.11	0.11	0
6.1	0.11	0.11	0

Hydrograph Comparison - 10-Year Current			
	Existing 10-Year Current	Proposed 10-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
6.15	0.11	0.11	0
6.2	0.11	0.11	0
6.25	0.12	0.12	0
6.3	0.12	0.12	0
6.35	0.12	0.12	0
6.4	0.12	0.12	0
6.45	0.12	0.12	0
6.5	0.12	0.12	0
6.55	0.13	0.13	0
6.6	0.13	0.13	0
6.65	0.13	0.13	0
6.7	0.13	0.13	0
6.75	0.13	0.13	0
6.8	0.13	0.13	0
6.85	0.14	0.14	0
6.9	0.14	0.14	0
6.95	0.14	0.14	0
7	0.14	0.14	0
7.05	0.14	0.14	0
7.1	0.14	0.14	0
7.15	0.15	0.15	0
7.2	0.15	0.15	0
7.25	0.15	0.15	0
7.3	0.15	0.15	0
7.35	0.15	0.15	0
7.4	0.15	0.15	0
7.45	0.16	0.16	0
7.5	0.16	0.16	0
7.55	0.16	0.16	0
7.6	0.16	0.16	0
7.65	0.16	0.16	0
7.7	0.16	0.16	0
7.75	0.17	0.17	0
7.8	0.17	0.17	0
7.85	0.17	0.17	0
7.9	0.17	0.17	0
7.95	0.17	0.17	0
8	0.17	0.17	0
8.05	0.18	0.18	0
8.1	0.18	0.18	0
8.15	0.18	0.18	0

Hydrograph Comparison - 10-Year Current			
	Existing 10-Year Current	Proposed 10-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
8.2	0.18	0.18	0
8.25	0.18	0.18	0
8.3	0.18	0.18	0
8.35	0.19	0.19	0
8.4	0.19	0.19	0
8.45	0.19	0.19	0
8.5	0.19	0.19	0
8.55	0.19	0.19	0
8.6	0.19	0.19	0
8.65	0.2	0.2	0
8.7	0.2	0.2	0
8.75	0.2	0.2	0
8.8	0.2	0.2	0
8.85	0.2	0.2	0
8.9	0.2	0.2	0
8.95	0.21	0.21	0
9	0.21	0.21	0
9.05	0.21	0.21	0
9.1	0.22	0.22	0
9.15	0.22	0.22	0
9.2	0.23	0.23	0
9.25	0.23	0.23	0
9.3	0.24	0.24	0
9.35	0.25	0.25	0
9.4	0.25	0.25	0
9.45	0.26	0.26	0
9.5	0.26	0.26	0
9.55	0.27	0.27	0
9.6	0.27	0.27	0
9.65	0.28	0.28	0
9.7	0.28	0.28	0
9.75	0.29	0.29	0
9.8	0.3	0.3	0
9.85	0.3	0.3	0
9.9	0.31	0.31	0
9.95	0.31	0.31	0
10	0.32	0.32	0
10.05	0.32	0.32	0
10.1	0.33	0.33	0
10.15	0.34	0.34	0
10.2	0.34	0.34	0

Hydrograph Comparison - 10-Year Current			
	Existing 10-Year Current	Proposed 10-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
10.25	0.35	0.35	0
10.3	0.35	0.35	0
10.35	0.36	0.36	0
10.4	0.36	0.36	0
10.45	0.37	0.37	0
10.5	0.37	0.37	0
10.55	0.4	0.4	0
10.6	0.41	0.41	0
10.65	0.44	0.44	0
10.7	0.45	0.45	0
10.75	0.48	0.48	0
10.8	0.49	0.49	0
10.85	0.52	0.52	0
10.9	0.54	0.54	0
10.95	0.56	0.56	0
11	0.58	0.58	0
11.05	0.61	0.61	0
11.1	0.65	0.65	0
11.15	0.69	0.69	0
11.2	0.72	0.72	0
11.25	0.76	0.76	0
11.3	0.79	0.79	0
11.35	0.83	0.83	0
11.4	0.86	0.86	0
11.45	0.9	0.9	0
11.5	0.94	0.94	0
11.55	1.1	1.1	0
11.6	1.24	1.24	0
11.65	1.3	1.3	0
11.7	1.33	1.33	0
11.75	1.59	1.59	0
11.8	1.81	1.81	0
11.85	2.19	2.19	0
11.9	2.52	2.52	0
11.95	3.49	3.49	0
12	4.32	4.32	0
12.05	5.9	5.9	0
12.1	7.14	7.14	0
12.15	4.92	4.92	0
12.2	2.87	2.87	0
12.25	2.24	2.24	0

Hydrograph Comparison - 10-Year Current			
	Existing 10-Year Current	Proposed 10-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
12.3	1.89	1.89	0
12.35	1.6	1.6	0
12.4	1.38	1.38	0
12.45	1.32	1.32	0
12.5	1.29	1.29	0
12.55	1.12	1.12	0
12.6	0.97	0.97	0
12.65	0.92	0.92	0
12.7	0.89	0.89	0
12.75	0.85	0.85	0
12.8	0.81	0.81	0
12.85	0.77	0.77	0
12.9	0.74	0.74	0
12.95	0.7	0.7	0
13	0.67	0.67	0
13.05	0.63	0.63	0
13.1	0.6	0.6	0
13.15	0.57	0.57	0
13.2	0.56	0.56	0
13.25	0.53	0.53	0
13.3	0.51	0.51	0
13.35	0.49	0.49	0
13.4	0.47	0.47	0
13.45	0.45	0.45	0
13.5	0.43	0.43	0
13.55	0.41	0.41	0
13.6	0.39	0.39	0
13.65	0.38	0.38	0
13.7	0.38	0.38	0
13.75	0.37	0.37	0
13.8	0.37	0.37	0
13.85	0.36	0.36	0
13.9	0.35	0.35	0
13.95	0.35	0.35	0
14	0.34	0.34	0
14.05	0.34	0.34	0
14.1	0.33	0.33	0
14.15	0.33	0.33	0
14.2	0.32	0.32	0
14.25	0.32	0.32	0
14.3	0.31	0.31	0

Hydrograph Comparison - 10-Year Current			
	Existing 10-Year Current	Proposed 10-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
14.35	0.3	0.3	0
14.4	0.3	0.3	0
14.45	0.29	0.29	0
14.5	0.29	0.29	0
14.55	0.28	0.28	0
14.6	0.28	0.28	0
14.65	0.27	0.27	0
14.7	0.27	0.27	0
14.75	0.26	0.26	0
14.8	0.25	0.25	0
14.85	0.25	0.25	0
14.9	0.24	0.24	0
14.95	0.24	0.24	0
15	0.23	0.23	0
15.05	0.23	0.23	0
15.1	0.22	0.22	0
15.15	0.22	0.22	0
15.2	0.22	0.22	0
15.25	0.21	0.21	0
15.3	0.21	0.21	0
15.35	0.21	0.21	0
15.4	0.21	0.21	0
15.45	0.21	0.21	0
15.5	0.21	0.21	0
15.55	0.21	0.21	0
15.6	0.2	0.2	0
15.65	0.2	0.2	0
15.7	0.2	0.2	0
15.75	0.2	0.2	0
15.8	0.2	0.2	0
15.85	0.2	0.2	0
15.9	0.19	0.19	0
15.95	0.19	0.19	0
16	0.19	0.19	0
16.05	0.19	0.19	0
16.1	0.19	0.19	0
16.15	0.19	0.19	0
16.2	0.18	0.18	0
16.25	0.18	0.18	0
16.3	0.18	0.18	0
16.35	0.18	0.18	0

Hydrograph Comparison - 10-Year Current			
	Existing 10-Year Current	Proposed 10-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
16.4	0.18	0.18	0
16.45	0.18	0.18	0
16.5	0.18	0.18	0
16.55	0.17	0.17	0
16.6	0.17	0.17	0
16.65	0.17	0.17	0
16.7	0.17	0.17	0
16.75	0.17	0.17	0
16.8	0.17	0.17	0
16.85	0.16	0.16	0
16.9	0.16	0.16	0
16.95	0.16	0.16	0
17	0.16	0.16	0
17.05	0.16	0.16	0
17.1	0.16	0.16	0
17.15	0.15	0.15	0
17.2	0.15	0.15	0
17.25	0.15	0.15	0
17.3	0.15	0.15	0
17.35	0.15	0.15	0
17.4	0.15	0.15	0
17.45	0.15	0.15	0
17.5	0.14	0.14	0
17.55	0.14	0.14	0
17.6	0.14	0.14	0
17.65	0.14	0.14	0
17.7	0.14	0.14	0
17.75	0.14	0.14	0
17.8	0.13	0.13	0
17.85	0.13	0.13	0
17.9	0.13	0.13	0
17.95	0.13	0.13	0
18	0.13	0.13	0
18.05	0.13	0.13	0
18.1	0.12	0.12	0
18.15	0.12	0.12	0
18.2	0.12	0.12	0
18.25	0.12	0.12	0
18.3	0.12	0.12	0
18.35	0.12	0.12	0
18.4	0.12	0.12	0

Hydrograph Comparison - 10-Year Current			
	Existing 10-Year Current	Proposed 10-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
18.45	0.12	0.12	0
18.5	0.12	0.12	0
18.55	0.12	0.12	0
18.6	0.12	0.12	0
18.65	0.12	0.12	0
18.7	0.12	0.12	0
18.75	0.12	0.12	0
18.8	0.12	0.12	0
18.85	0.12	0.12	0
18.9	0.12	0.12	0
18.95	0.12	0.12	0
19	0.12	0.12	0
19.05	0.12	0.12	0
19.1	0.12	0.12	0
19.15	0.12	0.12	0
19.2	0.12	0.12	0
19.25	0.12	0.12	0
19.3	0.12	0.12	0
19.35	0.11	0.11	0
19.4	0.11	0.11	0
19.45	0.11	0.11	0
19.5	0.11	0.11	0
19.55	0.11	0.11	0
19.6	0.11	0.11	0
19.65	0.11	0.11	0
19.7	0.11	0.11	0
19.75	0.11	0.11	0
19.8	0.11	0.11	0
19.85	0.11	0.11	0
19.9	0.11	0.11	0
19.95	0.11	0.11	0
20	0.11	0.11	0
20.05	0.11	0.11	0
20.1	0.11	0.11	0
20.15	0.11	0.11	0
20.2	0.11	0.11	0
20.25	0.11	0.11	0
20.3	0.11	0.11	0
20.35	0.11	0.11	0
20.4	0.11	0.11	0
20.45	0.11	0.11	0

Hydrograph Comparison - 10-Year Current			
	Existing 10-Year Current	Proposed 10-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
20.5	0.11	0.11	0
20.55	0.11	0.11	0
20.6	0.11	0.11	0
20.65	0.1	0.1	0
20.7	0.1	0.1	0
20.75	0.1	0.1	0
20.8	0.1	0.1	0
20.85	0.1	0.1	0
20.9	0.1	0.1	0
20.95	0.1	0.1	0
21	0.1	0.1	0
21.05	0.1	0.1	0
21.1	0.1	0.1	0
21.15	0.1	0.1	0
21.2	0.1	0.1	0
21.25	0.1	0.1	0
21.3	0.1	0.1	0
21.35	0.1	0.1	0
21.4	0.1	0.1	0
21.45	0.1	0.1	0
21.5	0.1	0.1	0
21.55	0.1	0.1	0
21.6	0.1	0.1	0
21.65	0.1	0.1	0
21.7	0.1	0.1	0
21.75	0.1	0.1	0
21.8	0.1	0.1	0
21.85	0.1	0.1	0
21.9	0.09	0.09	0
21.95	0.09	0.09	0
22	0.09	0.09	0
22.05	0.09	0.09	0
22.1	0.09	0.09	0
22.15	0.09	0.09	0
22.2	0.09	0.09	0
22.25	0.09	0.09	0
22.3	0.09	0.09	0
22.35	0.09	0.09	0
22.4	0.09	0.09	0
22.45	0.09	0.09	0
22.5	0.09	0.09	0

Hydrograph Comparison - 10-Year Current			
	Existing 10-Year Current	Proposed 10-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
22.55	0.09	0.09	0
22.6	0.09	0.09	0
22.65	0.09	0.09	0
22.7	0.09	0.09	0
22.75	0.09	0.09	0
22.8	0.09	0.09	0
22.85	0.09	0.09	0
22.9	0.09	0.09	0
22.95	0.09	0.09	0
23	0.09	0.09	0
23.05	0.09	0.09	0
23.1	0.09	0.09	0
23.15	0.08	0.08	0
23.2	0.08	0.08	0
23.25	0.08	0.08	0
23.3	0.08	0.08	0
23.35	0.08	0.08	0
23.4	0.08	0.08	0
23.45	0.08	0.08	0
23.5	0.08	0.08	0
23.55	0.08	0.08	0
23.6	0.08	0.08	0
23.65	0.08	0.08	0
23.7	0.08	0.08	0
23.75	0.08	0.08	0
23.8	0.08	0.08	0
23.85	0.08	0.08	0
23.9	0.08	0.08	0
23.95	0.08	0.08	0
24	0.08	0.08	0
24.05	0.04	0.04	0
24.1	0.01	0.01	0
24.15	0	0	0
24.2	0	0	0
24.25	0	0	0
24.3	0	0	0
24.35	0	0	0
24.4	0	0	0
24.45	0	0	0
24.5	0	0	0
24.55	0	0	0

Hydrograph Comparison - 10-Year Current			
	Existing 10-Year Current	Proposed 10-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
24.6	0	0	0
24.65	0	0	0
24.7	0	0	0
24.75	0	0	0
24.8	0	0	0
24.85	0	0	0
24.9	0	0	0
24.95	0	0	0
25	0	0	0
25.05	0	0	0
25.1	0	0	0
25.15	0	0	0
25.2	0	0	0
25.25	0	0	0
25.3	0	0	0
25.35	0	0	0
25.4	0	0	0
25.45	0	0	0
25.5	0	0	0
25.55	0	0	0
25.6	0	0	0
25.65	0	0	0
25.7	0	0	0
25.75	0	0	0
25.8	0	0	0
25.85	0	0	0
25.9	0	0	0
25.95	0	0	0
26	0	0	0

Hydrograph Comparison - 10-Year Projected			
	Existing 10-Year Projected	Proposed 10-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
0	0	0	0
0.05	0	0	0
0.1	0	0	0
0.15	0	0	0
0.2	0	0	0
0.25	0	0	0
0.3	0	0	0
0.35	0	0	0
0.4	0	0	0
0.45	0	0	0
0.5	0	0	0
0.55	0	0	0
0.6	0	0	0
0.65	0	0	0
0.7	0.01	0.01	0
0.75	0.01	0.01	0
0.8	0.01	0.01	0
0.85	0.01	0.01	0
0.9	0.02	0.02	0
0.95	0.02	0.02	0
1	0.02	0.02	0
1.05	0.02	0.02	0
1.1	0.03	0.03	0
1.15	0.03	0.03	0
1.2	0.03	0.03	0
1.25	0.03	0.03	0
1.3	0.04	0.04	0
1.35	0.04	0.04	0
1.4	0.04	0.04	0
1.45	0.04	0.04	0
1.5	0.04	0.04	0
1.55	0.05	0.05	0
1.6	0.05	0.05	0
1.65	0.05	0.05	0
1.7	0.05	0.05	0
1.75	0.05	0.05	0
1.8	0.05	0.05	0
1.85	0.06	0.06	0
1.9	0.06	0.06	0
1.95	0.06	0.06	0
2	0.06	0.06	0

Hydrograph Comparison - 10-Year Projected			
	Existing 10-Year Projected	Proposed 10-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
2.05	0.06	0.06	0
2.1	0.06	0.06	0
2.15	0.07	0.07	0
2.2	0.07	0.07	0
2.25	0.07	0.07	0
2.3	0.07	0.07	0
2.35	0.07	0.07	0
2.4	0.07	0.07	0
2.45	0.07	0.07	0
2.5	0.07	0.07	0
2.55	0.08	0.08	0
2.6	0.08	0.08	0
2.65	0.08	0.08	0
2.7	0.08	0.08	0
2.75	0.08	0.08	0
2.8	0.08	0.08	0
2.85	0.08	0.08	0
2.9	0.08	0.08	0
2.95	0.08	0.08	0
3	0.09	0.09	0
3.05	0.09	0.09	0
3.1	0.09	0.09	0
3.15	0.09	0.09	0
3.2	0.09	0.09	0
3.25	0.09	0.09	0
3.3	0.09	0.09	0
3.35	0.09	0.09	0
3.4	0.09	0.09	0
3.45	0.09	0.09	0
3.5	0.1	0.1	0
3.55	0.1	0.1	0
3.6	0.1	0.1	0
3.65	0.1	0.1	0
3.7	0.1	0.1	0
3.75	0.1	0.1	0
3.8	0.1	0.1	0
3.85	0.1	0.1	0
3.9	0.1	0.1	0
3.95	0.1	0.1	0
4	0.1	0.1	0
4.05	0.1	0.1	0

Hydrograph Comparison - 10-Year Projected			
	Existing 10-Year Projected	Proposed 10-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
4.1	0.11	0.11	0
4.15	0.11	0.11	0
4.2	0.11	0.11	0
4.25	0.11	0.11	0
4.3	0.11	0.11	0
4.35	0.11	0.11	0
4.4	0.11	0.11	0
4.45	0.11	0.11	0
4.5	0.11	0.11	0
4.55	0.11	0.11	0
4.6	0.11	0.11	0
4.65	0.11	0.11	0
4.7	0.11	0.11	0
4.75	0.12	0.12	0
4.8	0.12	0.12	0
4.85	0.12	0.12	0
4.9	0.12	0.12	0
4.95	0.12	0.12	0
5	0.12	0.12	0
5.05	0.12	0.12	0
5.1	0.12	0.12	0
5.15	0.12	0.12	0
5.2	0.12	0.12	0
5.25	0.12	0.12	0
5.3	0.12	0.12	0
5.35	0.12	0.12	0
5.4	0.12	0.12	0
5.45	0.12	0.12	0
5.5	0.13	0.13	0
5.55	0.13	0.13	0
5.6	0.13	0.13	0
5.65	0.13	0.13	0
5.7	0.13	0.13	0
5.75	0.13	0.13	0
5.8	0.13	0.13	0
5.85	0.13	0.13	0
5.9	0.13	0.13	0
5.95	0.13	0.13	0
6	0.13	0.13	0
6.05	0.13	0.13	0
6.1	0.14	0.14	0

Hydrograph Comparison - 10-Year Projected			
	Existing 10-Year Projected	Proposed 10-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
6.15	0.14	0.14	0
6.2	0.14	0.14	0
6.25	0.14	0.14	0
6.3	0.14	0.14	0
6.35	0.15	0.15	0
6.4	0.15	0.15	0
6.45	0.15	0.15	0
6.5	0.15	0.15	0
6.55	0.15	0.15	0
6.6	0.15	0.15	0
6.65	0.16	0.16	0
6.7	0.16	0.16	0
6.75	0.16	0.16	0
6.8	0.16	0.16	0
6.85	0.16	0.16	0
6.9	0.17	0.17	0
6.95	0.17	0.17	0
7	0.17	0.17	0
7.05	0.17	0.17	0
7.1	0.17	0.17	0
7.15	0.18	0.18	0
7.2	0.18	0.18	0
7.25	0.18	0.18	0
7.3	0.18	0.18	0
7.35	0.18	0.18	0
7.4	0.19	0.19	0
7.45	0.19	0.19	0
7.5	0.19	0.19	0
7.55	0.19	0.19	0
7.6	0.19	0.19	0
7.65	0.2	0.2	0
7.7	0.2	0.2	0
7.75	0.2	0.2	0
7.8	0.2	0.2	0
7.85	0.2	0.2	0
7.9	0.2	0.2	0
7.95	0.21	0.21	0
8	0.21	0.21	0
8.05	0.21	0.21	0
8.1	0.21	0.21	0
8.15	0.22	0.22	0

Hydrograph Comparison - 10-Year Projected			
	Existing 10-Year Projected	Proposed 10-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
8.2	0.22	0.22	0
8.25	0.22	0.22	0
8.3	0.22	0.22	0
8.35	0.22	0.22	0
8.4	0.23	0.23	0
8.45	0.23	0.23	0
8.5	0.23	0.23	0
8.55	0.23	0.23	0
8.6	0.23	0.23	0
8.65	0.24	0.24	0
8.7	0.24	0.24	0
8.75	0.24	0.24	0
8.8	0.24	0.24	0
8.85	0.24	0.24	0
8.9	0.24	0.24	0
8.95	0.25	0.25	0
9	0.25	0.25	0
9.05	0.26	0.26	0
9.1	0.26	0.26	0
9.15	0.27	0.27	0
9.2	0.27	0.27	0
9.25	0.28	0.28	0
9.3	0.29	0.29	0
9.35	0.29	0.29	0
9.4	0.3	0.3	0
9.45	0.31	0.31	0
9.5	0.31	0.31	0
9.55	0.32	0.32	0
9.6	0.33	0.33	0
9.65	0.33	0.33	0
9.7	0.34	0.34	0
9.75	0.35	0.35	0
9.8	0.35	0.35	0
9.85	0.36	0.36	0
9.9	0.37	0.37	0
9.95	0.37	0.37	0
10	0.38	0.38	0
10.05	0.39	0.39	0
10.1	0.39	0.39	0
10.15	0.4	0.4	0
10.2	0.41	0.41	0

Hydrograph Comparison - 10-Year Projected			
	Existing 10-Year Projected	Proposed 10-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
10.25	0.41	0.41	0
10.3	0.42	0.42	0
10.35	0.43	0.43	0
10.4	0.43	0.43	0
10.45	0.44	0.44	0
10.5	0.45	0.45	0
10.55	0.47	0.47	0
10.6	0.49	0.49	0
10.65	0.52	0.52	0
10.7	0.54	0.54	0
10.75	0.57	0.57	0
10.8	0.59	0.59	0
10.85	0.62	0.62	0
10.9	0.64	0.64	0
10.95	0.67	0.67	0
11	0.69	0.69	0
11.05	0.73	0.73	0
11.1	0.77	0.77	0
11.15	0.82	0.82	0
11.2	0.85	0.85	0
11.25	0.9	0.9	0
11.3	0.94	0.94	0
11.35	0.99	0.99	0
11.4	1.03	1.03	0
11.45	1.07	1.07	0
11.5	1.11	1.11	0
11.55	1.31	1.31	0
11.6	1.48	1.48	0
11.65	1.54	1.54	0
11.7	1.59	1.59	0
11.75	1.89	1.89	0
11.8	2.15	2.15	0
11.85	2.61	2.61	0
11.9	3	3	0
11.95	4.15	4.15	0
12	5.14	5.14	0
12.05	7.01	7.01	0
12.1	8.47	8.47	0
12.15	5.84	5.84	0
12.2	3.41	3.41	0
12.25	2.65	2.65	0

Hydrograph Comparison - 10-Year Projected			
	Existing 10-Year Projected	Proposed 10-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
12.3	2.25	2.25	0
12.35	1.9	1.9	0
12.4	1.64	1.64	0
12.45	1.57	1.57	0
12.5	1.52	1.52	0
12.55	1.33	1.33	0
12.6	1.16	1.16	0
12.65	1.09	1.09	0
12.7	1.05	1.05	0
12.75	1	1	0
12.8	0.97	0.97	0
12.85	0.92	0.92	0
12.9	0.88	0.88	0
12.95	0.83	0.83	0
13	0.8	0.8	0
13.05	0.75	0.75	0
13.1	0.71	0.71	0
13.15	0.68	0.68	0
13.2	0.66	0.66	0
13.25	0.63	0.63	0
13.3	0.61	0.61	0
13.35	0.58	0.58	0
13.4	0.56	0.56	0
13.45	0.53	0.53	0
13.5	0.51	0.51	0
13.55	0.48	0.48	0
13.6	0.46	0.46	0
13.65	0.45	0.45	0
13.7	0.45	0.45	0
13.75	0.44	0.44	0
13.8	0.43	0.43	0
13.85	0.43	0.43	0
13.9	0.42	0.42	0
13.95	0.41	0.41	0
14	0.41	0.41	0
14.05	0.4	0.4	0
14.1	0.39	0.39	0
14.15	0.39	0.39	0
14.2	0.38	0.38	0
14.25	0.37	0.37	0
14.3	0.37	0.37	0

Hydrograph Comparison - 10-Year Projected			
	Existing 10-Year Projected	Proposed 10-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
14.35	0.36	0.36	0
14.4	0.35	0.35	0
14.45	0.35	0.35	0
14.5	0.34	0.34	0
14.55	0.33	0.33	0
14.6	0.33	0.33	0
14.65	0.32	0.32	0
14.7	0.31	0.31	0
14.75	0.31	0.31	0
14.8	0.3	0.3	0
14.85	0.29	0.29	0
14.9	0.29	0.29	0
14.95	0.28	0.28	0
15	0.27	0.27	0
15.05	0.27	0.27	0
15.1	0.26	0.26	0
15.15	0.26	0.26	0
15.2	0.26	0.26	0
15.25	0.25	0.25	0
15.3	0.25	0.25	0
15.35	0.25	0.25	0
15.4	0.25	0.25	0
15.45	0.25	0.25	0
15.5	0.25	0.25	0
15.55	0.24	0.24	0
15.6	0.24	0.24	0
15.65	0.24	0.24	0
15.7	0.24	0.24	0
15.75	0.24	0.24	0
15.8	0.23	0.23	0
15.85	0.23	0.23	0
15.9	0.23	0.23	0
15.95	0.23	0.23	0
16	0.23	0.23	0
16.05	0.23	0.23	0
16.1	0.22	0.22	0
16.15	0.22	0.22	0
16.2	0.22	0.22	0
16.25	0.22	0.22	0
16.3	0.22	0.22	0
16.35	0.21	0.21	0

Hydrograph Comparison - 10-Year Projected			
	Existing 10-Year Projected	Proposed 10-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
16.4	0.21	0.21	0
16.45	0.21	0.21	0
16.5	0.21	0.21	0
16.55	0.21	0.21	0
16.6	0.2	0.2	0
16.65	0.2	0.2	0
16.7	0.2	0.2	0
16.75	0.2	0.2	0
16.8	0.2	0.2	0
16.85	0.19	0.19	0
16.9	0.19	0.19	0
16.95	0.19	0.19	0
17	0.19	0.19	0
17.05	0.19	0.19	0
17.1	0.19	0.19	0
17.15	0.18	0.18	0
17.2	0.18	0.18	0
17.25	0.18	0.18	0
17.3	0.18	0.18	0
17.35	0.18	0.18	0
17.4	0.17	0.17	0
17.45	0.17	0.17	0
17.5	0.17	0.17	0
17.55	0.17	0.17	0
17.6	0.17	0.17	0
17.65	0.16	0.16	0
17.7	0.16	0.16	0
17.75	0.16	0.16	0
17.8	0.16	0.16	0
17.85	0.16	0.16	0
17.9	0.16	0.16	0
17.95	0.15	0.15	0
18	0.15	0.15	0
18.05	0.15	0.15	0
18.1	0.15	0.15	0
18.15	0.15	0.15	0
18.2	0.15	0.15	0
18.25	0.15	0.15	0
18.3	0.15	0.15	0
18.35	0.15	0.15	0
18.4	0.15	0.15	0

Hydrograph Comparison - 10-Year Projected			
	Existing 10-Year Projected	Proposed 10-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
18.45	0.14	0.14	0
18.5	0.14	0.14	0
18.55	0.14	0.14	0
18.6	0.14	0.14	0
18.65	0.14	0.14	0
18.7	0.14	0.14	0
18.75	0.14	0.14	0
18.8	0.14	0.14	0
18.85	0.14	0.14	0
18.9	0.14	0.14	0
18.95	0.14	0.14	0
19	0.14	0.14	0
19.05	0.14	0.14	0
19.1	0.14	0.14	0
19.15	0.14	0.14	0
19.2	0.14	0.14	0
19.25	0.14	0.14	0
19.3	0.14	0.14	0
19.35	0.14	0.14	0
19.4	0.14	0.14	0
19.45	0.14	0.14	0
19.5	0.14	0.14	0
19.55	0.13	0.13	0
19.6	0.13	0.13	0
19.65	0.13	0.13	0
19.7	0.13	0.13	0
19.75	0.13	0.13	0
19.8	0.13	0.13	0
19.85	0.13	0.13	0
19.9	0.13	0.13	0
19.95	0.13	0.13	0
20	0.13	0.13	0
20.05	0.13	0.13	0
20.1	0.13	0.13	0
20.15	0.13	0.13	0
20.2	0.13	0.13	0
20.25	0.13	0.13	0
20.3	0.13	0.13	0
20.35	0.13	0.13	0
20.4	0.13	0.13	0
20.45	0.13	0.13	0

Hydrograph Comparison - 10-Year Projected			
	Existing 10-Year Projected	Proposed 10-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
20.5	0.13	0.13	0
20.55	0.12	0.12	0
20.6	0.12	0.12	0
20.65	0.12	0.12	0
20.7	0.12	0.12	0
20.75	0.12	0.12	0
20.8	0.12	0.12	0
20.85	0.12	0.12	0
20.9	0.12	0.12	0
20.95	0.12	0.12	0
21	0.12	0.12	0
21.05	0.12	0.12	0
21.1	0.12	0.12	0
21.15	0.12	0.12	0
21.2	0.12	0.12	0
21.25	0.12	0.12	0
21.3	0.12	0.12	0
21.35	0.12	0.12	0
21.4	0.12	0.12	0
21.45	0.12	0.12	0
21.5	0.12	0.12	0
21.55	0.12	0.12	0
21.6	0.11	0.11	0
21.65	0.11	0.11	0
21.7	0.11	0.11	0
21.75	0.11	0.11	0
21.8	0.11	0.11	0
21.85	0.11	0.11	0
21.9	0.11	0.11	0
21.95	0.11	0.11	0
22	0.11	0.11	0
22.05	0.11	0.11	0
22.1	0.11	0.11	0
22.15	0.11	0.11	0
22.2	0.11	0.11	0
22.25	0.11	0.11	0
22.3	0.11	0.11	0
22.35	0.11	0.11	0
22.4	0.11	0.11	0
22.45	0.11	0.11	0
22.5	0.11	0.11	0

Hydrograph Comparison - 10-Year Projected			
	Existing 10-Year Projected	Proposed 10-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
22.55	0.11	0.11	0
22.6	0.11	0.11	0
22.65	0.11	0.11	0
22.7	0.1	0.1	0
22.75	0.1	0.1	0
22.8	0.1	0.1	0
22.85	0.1	0.1	0
22.9	0.1	0.1	0
22.95	0.1	0.1	0
23	0.1	0.1	0
23.05	0.1	0.1	0
23.1	0.1	0.1	0
23.15	0.1	0.1	0
23.2	0.1	0.1	0
23.25	0.1	0.1	0
23.3	0.1	0.1	0
23.35	0.1	0.1	0
23.4	0.1	0.1	0
23.45	0.1	0.1	0
23.5	0.1	0.1	0
23.55	0.1	0.1	0
23.6	0.1	0.1	0
23.65	0.1	0.1	0
23.7	0.1	0.1	0
23.75	0.09	0.09	0
23.8	0.09	0.09	0
23.85	0.09	0.09	0
23.9	0.09	0.09	0
23.95	0.09	0.09	0
24	0.09	0.09	0
24.05	0.05	0.05	0
24.1	0.01	0.01	0
24.15	0	0	0
24.2	0	0	0
24.25	0	0	0
24.3	0	0	0
24.35	0	0	0
24.4	0	0	0
24.45	0	0	0
24.5	0	0	0
24.55	0	0	0

Hydrograph Comparison - 10-Year Projected			
	Existing 10-Year Projected	Proposed 10-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
24.6	0	0	0
24.65	0	0	0
24.7	0	0	0
24.75	0	0	0
24.8	0	0	0
24.85	0	0	0
24.9	0	0	0
24.95	0	0	0
25	0	0	0
25.05	0	0	0
25.1	0	0	0
25.15	0	0	0
25.2	0	0	0
25.25	0	0	0
25.3	0	0	0
25.35	0	0	0
25.4	0	0	0
25.45	0	0	0
25.5	0	0	0
25.55	0	0	0
25.6	0	0	0
25.65	0	0	0
25.7	0	0	0
25.75	0	0	0
25.8	0	0	0
25.85	0	0	0
25.9	0	0	0
25.95	0	0	0
26	0	0	0

Hydrograph Comparison - 100-Year Current			
	Existing 100-Year Current	Proposed 100-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
0	0	0	0
0.05	0	0	0
0.1	0	0	0
0.15	0	0	0
0.2	0	0	0
0.25	0	0	0
0.3	0	0	0
0.35	0	0	0
0.4	0	0	0
0.45	0	0	0
0.5	0.01	0.01	0
0.55	0.01	0.01	0
0.6	0.02	0.02	0
0.65	0.02	0.02	0
0.7	0.03	0.03	0
0.75	0.03	0.03	0
0.8	0.04	0.04	0
0.85	0.04	0.04	0
0.9	0.05	0.05	0
0.95	0.05	0.05	0
1	0.06	0.06	0
1.05	0.06	0.06	0
1.1	0.06	0.06	0
1.15	0.07	0.07	0
1.2	0.07	0.07	0
1.25	0.07	0.07	0
1.3	0.08	0.08	0
1.35	0.08	0.08	0
1.4	0.08	0.08	0
1.45	0.08	0.08	0
1.5	0.09	0.09	0
1.55	0.09	0.09	0
1.6	0.09	0.09	0
1.65	0.09	0.09	0
1.7	0.1	0.1	0
1.75	0.1	0.1	0
1.8	0.1	0.1	0
1.85	0.1	0.1	0
1.9	0.11	0.11	0
1.95	0.11	0.11	0
2	0.11	0.11	0

Hydrograph Comparison - 100-Year Current			
	Existing 100-Year Current	Proposed 100-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
2.05	0.11	0.11	0
2.1	0.11	0.11	0
2.15	0.12	0.12	0
2.2	0.12	0.12	0
2.25	0.12	0.12	0
2.3	0.12	0.12	0
2.35	0.12	0.12	0
2.4	0.12	0.12	0
2.45	0.12	0.12	0
2.5	0.13	0.13	0
2.55	0.13	0.13	0
2.6	0.13	0.13	0
2.65	0.13	0.13	0
2.7	0.13	0.13	0
2.75	0.13	0.13	0
2.8	0.13	0.13	0
2.85	0.14	0.14	0
2.9	0.14	0.14	0
2.95	0.14	0.14	0
3	0.14	0.14	0
3.05	0.14	0.14	0
3.1	0.14	0.14	0
3.15	0.14	0.14	0
3.2	0.15	0.15	0
3.25	0.15	0.15	0
3.3	0.15	0.15	0
3.35	0.15	0.15	0
3.4	0.15	0.15	0
3.45	0.15	0.15	0
3.5	0.15	0.15	0
3.55	0.15	0.15	0
3.6	0.15	0.15	0
3.65	0.16	0.16	0
3.7	0.16	0.16	0
3.75	0.16	0.16	0
3.8	0.16	0.16	0
3.85	0.16	0.16	0
3.9	0.16	0.16	0
3.95	0.16	0.16	0
4	0.16	0.16	0
4.05	0.16	0.16	0

Hydrograph Comparison - 100-Year Current			
	Existing 100-Year Current	Proposed 100-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
4.1	0.16	0.16	0
4.15	0.17	0.17	0
4.2	0.17	0.17	0
4.25	0.17	0.17	0
4.3	0.17	0.17	0
4.35	0.17	0.17	0
4.4	0.17	0.17	0
4.45	0.17	0.17	0
4.5	0.17	0.17	0
4.55	0.17	0.17	0
4.6	0.17	0.17	0
4.65	0.18	0.18	0
4.7	0.18	0.18	0
4.75	0.18	0.18	0
4.8	0.18	0.18	0
4.85	0.18	0.18	0
4.9	0.18	0.18	0
4.95	0.18	0.18	0
5	0.18	0.18	0
5.05	0.18	0.18	0
5.1	0.18	0.18	0
5.15	0.18	0.18	0
5.2	0.18	0.18	0
5.25	0.19	0.19	0
5.3	0.19	0.19	0
5.35	0.19	0.19	0
5.4	0.19	0.19	0
5.45	0.19	0.19	0
5.5	0.19	0.19	0
5.55	0.19	0.19	0
5.6	0.19	0.19	0
5.65	0.19	0.19	0
5.7	0.19	0.19	0
5.75	0.19	0.19	0
5.8	0.2	0.2	0
5.85	0.2	0.2	0
5.9	0.2	0.2	0
5.95	0.2	0.2	0
6	0.2	0.2	0
6.05	0.2	0.2	0
6.1	0.2	0.2	0

Hydrograph Comparison - 100-Year Current			
	Existing 100-Year Current	Proposed 100-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
6.15	0.21	0.21	0
6.2	0.21	0.21	0
6.25	0.21	0.21	0
6.3	0.22	0.22	0
6.35	0.22	0.22	0
6.4	0.22	0.22	0
6.45	0.22	0.22	0
6.5	0.23	0.23	0
6.55	0.23	0.23	0
6.6	0.23	0.23	0
6.65	0.23	0.23	0
6.7	0.24	0.24	0
6.75	0.24	0.24	0
6.8	0.24	0.24	0
6.85	0.25	0.25	0
6.9	0.25	0.25	0
6.95	0.25	0.25	0
7	0.25	0.25	0
7.05	0.26	0.26	0
7.1	0.26	0.26	0
7.15	0.26	0.26	0
7.2	0.27	0.27	0
7.25	0.27	0.27	0
7.3	0.27	0.27	0
7.35	0.27	0.27	0
7.4	0.28	0.28	0
7.45	0.28	0.28	0
7.5	0.28	0.28	0
7.55	0.28	0.28	0
7.6	0.29	0.29	0
7.65	0.29	0.29	0
7.7	0.29	0.29	0
7.75	0.3	0.3	0
7.8	0.3	0.3	0
7.85	0.3	0.3	0
7.9	0.3	0.3	0
7.95	0.31	0.31	0
8	0.31	0.31	0
8.05	0.31	0.31	0
8.1	0.32	0.32	0
8.15	0.32	0.32	0

Hydrograph Comparison - 100-Year Current			
	Existing 100-Year Current	Proposed 100-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
8.2	0.32	0.32	0
8.25	0.32	0.32	0
8.3	0.33	0.33	0
8.35	0.33	0.33	0
8.4	0.33	0.33	0
8.45	0.33	0.33	0
8.5	0.34	0.34	0
8.55	0.34	0.34	0
8.6	0.34	0.34	0
8.65	0.35	0.35	0
8.7	0.35	0.35	0
8.75	0.35	0.35	0
8.8	0.35	0.35	0
8.85	0.36	0.36	0
8.9	0.36	0.36	0
8.95	0.36	0.36	0
9	0.37	0.37	0
9.05	0.38	0.38	0
9.1	0.38	0.38	0
9.15	0.39	0.39	0
9.2	0.4	0.4	0
9.25	0.41	0.41	0
9.3	0.42	0.42	0
9.35	0.43	0.43	0
9.4	0.44	0.44	0
9.45	0.45	0.45	0
9.5	0.46	0.46	0
9.55	0.47	0.47	0
9.6	0.48	0.48	0
9.65	0.49	0.49	0
9.7	0.5	0.5	0
9.75	0.51	0.51	0
9.8	0.52	0.52	0
9.85	0.53	0.53	0
9.9	0.54	0.54	0
9.95	0.55	0.55	0
10	0.56	0.56	0
10.05	0.57	0.57	0
10.1	0.58	0.58	0
10.15	0.59	0.59	0
10.2	0.59	0.59	0

Hydrograph Comparison - 100-Year Current			
	Existing 100-Year Current	Proposed 100-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
10.25	0.61	0.61	0
10.3	0.61	0.61	0
10.35	0.62	0.62	0
10.4	0.63	0.63	0
10.45	0.64	0.64	0
10.5	0.65	0.65	0
10.55	0.69	0.69	0
10.6	0.72	0.72	0
10.65	0.76	0.76	0
10.7	0.79	0.79	0
10.75	0.83	0.83	0
10.8	0.86	0.86	0
10.85	0.9	0.9	0
10.9	0.93	0.93	0
10.95	0.97	0.97	0
11	1	1	0
11.05	1.07	1.07	0
11.1	1.12	1.12	0
11.15	1.19	1.19	0
11.2	1.24	1.24	0
11.25	1.31	1.31	0
11.3	1.37	1.37	0
11.35	1.44	1.44	0
11.4	1.49	1.49	0
11.45	1.56	1.56	0
11.5	1.62	1.62	0
11.55	1.91	1.91	0
11.6	2.15	2.15	0
11.65	2.24	2.24	0
11.7	2.31	2.31	0
11.75	2.74	2.74	0
11.8	3.12	3.12	0
11.85	3.78	3.78	0
11.9	4.34	4.34	0
11.95	6.01	6.01	0
12	7.44	7.44	0
12.05	10.15	10.15	0
12.1	12.26	12.26	0
12.15	8.45	8.45	0
12.2	4.93	4.93	0
12.25	3.84	3.84	0

Hydrograph Comparison - 100-Year Current			
	Existing 100-Year Current	Proposed 100-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
12.3	3.25	3.25	0
12.35	2.75	2.75	0
12.4	2.37	2.37	0
12.45	2.27	2.27	0
12.5	2.2	2.2	0
12.55	1.92	1.92	0
12.6	1.67	1.67	0
12.65	1.58	1.58	0
12.7	1.52	1.52	0
12.75	1.45	1.45	0
12.8	1.4	1.4	0
12.85	1.33	1.33	0
12.9	1.27	1.27	0
12.95	1.2	1.2	0
13	1.15	1.15	0
13.05	1.08	1.08	0
13.1	1.02	1.02	0
13.15	0.98	0.98	0
13.2	0.95	0.95	0
13.25	0.91	0.91	0
13.3	0.88	0.88	0
13.35	0.84	0.84	0
13.4	0.81	0.81	0
13.45	0.77	0.77	0
13.5	0.74	0.74	0
13.55	0.7	0.7	0
13.6	0.67	0.67	0
13.65	0.66	0.66	0
13.7	0.65	0.65	0
13.75	0.64	0.64	0
13.8	0.63	0.63	0
13.85	0.62	0.62	0
13.9	0.61	0.61	0
13.95	0.6	0.6	0
14	0.59	0.59	0
14.05	0.58	0.58	0
14.1	0.57	0.57	0
14.15	0.56	0.56	0
14.2	0.55	0.55	0
14.25	0.54	0.54	0
14.3	0.53	0.53	0

Hydrograph Comparison - 100-Year Current			
	Existing 100-Year Current	Proposed 100-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
14.35	0.52	0.52	0
14.4	0.51	0.51	0
14.45	0.5	0.5	0
14.5	0.49	0.49	0
14.55	0.48	0.48	0
14.6	0.47	0.47	0
14.65	0.46	0.46	0
14.7	0.45	0.45	0
14.75	0.44	0.44	0
14.8	0.44	0.44	0
14.85	0.42	0.42	0
14.9	0.42	0.42	0
14.95	0.41	0.41	0
15	0.4	0.4	0
15.05	0.39	0.39	0
15.1	0.38	0.38	0
15.15	0.37	0.37	0
15.2	0.37	0.37	0
15.25	0.37	0.37	0
15.3	0.37	0.37	0
15.35	0.36	0.36	0
15.4	0.36	0.36	0
15.45	0.36	0.36	0
15.5	0.35	0.35	0
15.55	0.35	0.35	0
15.6	0.35	0.35	0
15.65	0.35	0.35	0
15.7	0.35	0.35	0
15.75	0.34	0.34	0
15.8	0.34	0.34	0
15.85	0.34	0.34	0
15.9	0.33	0.33	0
15.95	0.33	0.33	0
16	0.33	0.33	0
16.05	0.33	0.33	0
16.1	0.32	0.32	0
16.15	0.32	0.32	0
16.2	0.32	0.32	0
16.25	0.31	0.31	0
16.3	0.31	0.31	0
16.35	0.31	0.31	0

Hydrograph Comparison - 100-Year Current			
	Existing 100-Year Current	Proposed 100-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
16.4	0.31	0.31	0
16.45	0.3	0.3	0
16.5	0.3	0.3	0
16.55	0.3	0.3	0
16.6	0.3	0.3	0
16.65	0.29	0.29	0
16.7	0.29	0.29	0
16.75	0.29	0.29	0
16.8	0.28	0.28	0
16.85	0.28	0.28	0
16.9	0.28	0.28	0
16.95	0.28	0.28	0
17	0.27	0.27	0
17.05	0.27	0.27	0
17.1	0.27	0.27	0
17.15	0.27	0.27	0
17.2	0.26	0.26	0
17.25	0.26	0.26	0
17.3	0.26	0.26	0
17.35	0.25	0.25	0
17.4	0.25	0.25	0
17.45	0.25	0.25	0
17.5	0.25	0.25	0
17.55	0.24	0.24	0
17.6	0.24	0.24	0
17.65	0.24	0.24	0
17.7	0.24	0.24	0
17.75	0.23	0.23	0
17.8	0.23	0.23	0
17.85	0.23	0.23	0
17.9	0.22	0.22	0
17.95	0.22	0.22	0
18	0.22	0.22	0
18.05	0.22	0.22	0
18.1	0.21	0.21	0
18.15	0.21	0.21	0
18.2	0.21	0.21	0
18.25	0.21	0.21	0
18.3	0.21	0.21	0
18.35	0.21	0.21	0
18.4	0.21	0.21	0

Hydrograph Comparison - 100-Year Current			
	Existing 100-Year Current	Proposed 100-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
18.45	0.21	0.21	0
18.5	0.21	0.21	0
18.55	0.21	0.21	0
18.6	0.21	0.21	0
18.65	0.21	0.21	0
18.7	0.2	0.2	0
18.75	0.2	0.2	0
18.8	0.2	0.2	0
18.85	0.2	0.2	0
18.9	0.2	0.2	0
18.95	0.2	0.2	0
19	0.2	0.2	0
19.05	0.2	0.2	0
19.1	0.2	0.2	0
19.15	0.2	0.2	0
19.2	0.2	0.2	0
19.25	0.2	0.2	0
19.3	0.2	0.2	0
19.35	0.2	0.2	0
19.4	0.2	0.2	0
19.45	0.2	0.2	0
19.5	0.2	0.2	0
19.55	0.19	0.19	0
19.6	0.19	0.19	0
19.65	0.19	0.19	0
19.7	0.19	0.19	0
19.75	0.19	0.19	0
19.8	0.19	0.19	0
19.85	0.19	0.19	0
19.9	0.19	0.19	0
19.95	0.19	0.19	0
20	0.19	0.19	0
20.05	0.19	0.19	0
20.1	0.19	0.19	0
20.15	0.19	0.19	0
20.2	0.19	0.19	0
20.25	0.18	0.18	0
20.3	0.18	0.18	0
20.35	0.18	0.18	0
20.4	0.18	0.18	0
20.45	0.18	0.18	0

Hydrograph Comparison - 100-Year Current			
	Existing 100-Year Current	Proposed 100-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
20.5	0.18	0.18	0
20.55	0.18	0.18	0
20.6	0.18	0.18	0
20.65	0.18	0.18	0
20.7	0.18	0.18	0
20.75	0.18	0.18	0
20.8	0.18	0.18	0
20.85	0.18	0.18	0
20.9	0.18	0.18	0
20.95	0.17	0.17	0
21	0.17	0.17	0
21.05	0.17	0.17	0
21.1	0.17	0.17	0
21.15	0.17	0.17	0
21.2	0.17	0.17	0
21.25	0.17	0.17	0
21.3	0.17	0.17	0
21.35	0.17	0.17	0
21.4	0.17	0.17	0
21.45	0.17	0.17	0
21.5	0.17	0.17	0
21.55	0.17	0.17	0
21.6	0.17	0.17	0
21.65	0.17	0.17	0
21.7	0.16	0.16	0
21.75	0.16	0.16	0
21.8	0.16	0.16	0
21.85	0.16	0.16	0
21.9	0.16	0.16	0
21.95	0.16	0.16	0
22	0.16	0.16	0
22.05	0.16	0.16	0
22.1	0.16	0.16	0
22.15	0.16	0.16	0
22.2	0.16	0.16	0
22.25	0.16	0.16	0
22.3	0.16	0.16	0
22.35	0.16	0.16	0
22.4	0.15	0.15	0
22.45	0.15	0.15	0
22.5	0.15	0.15	0

Hydrograph Comparison - 100-Year Current			
	Existing 100-Year Current	Proposed 100-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
22.55	0.15	0.15	0
22.6	0.15	0.15	0
22.65	0.15	0.15	0
22.7	0.15	0.15	0
22.75	0.15	0.15	0
22.8	0.15	0.15	0
22.85	0.15	0.15	0
22.9	0.15	0.15	0
22.95	0.15	0.15	0
23	0.15	0.15	0
23.05	0.15	0.15	0
23.1	0.15	0.15	0
23.15	0.15	0.15	0
23.2	0.14	0.14	0
23.25	0.14	0.14	0
23.3	0.14	0.14	0
23.35	0.14	0.14	0
23.4	0.14	0.14	0
23.45	0.14	0.14	0
23.5	0.14	0.14	0
23.55	0.14	0.14	0
23.6	0.14	0.14	0
23.65	0.14	0.14	0
23.7	0.14	0.14	0
23.75	0.14	0.14	0
23.8	0.14	0.14	0
23.85	0.14	0.14	0
23.9	0.14	0.14	0
23.95	0.13	0.13	0
24	0.13	0.13	0
24.05	0.07	0.07	0
24.1	0.01	0.01	0
24.15	0	0	0
24.2	0	0	0
24.25	0	0	0
24.3	0	0	0
24.35	0	0	0
24.4	0	0	0
24.45	0	0	0
24.5	0	0	0
24.55	0	0	0

Hydrograph Comparison - 100-Year Current			
	Existing 100-Year Current	Proposed 100-Year Current	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
24.6	0	0	0
24.65	0	0	0
24.7	0	0	0
24.75	0	0	0
24.8	0	0	0
24.85	0	0	0
24.9	0	0	0
24.95	0	0	0
25	0	0	0
25.05	0	0	0
25.1	0	0	0
25.15	0	0	0
25.2	0	0	0
25.25	0	0	0
25.3	0	0	0
25.35	0	0	0
25.4	0	0	0
25.45	0	0	0
25.5	0	0	0
25.55	0	0	0
25.6	0	0	0
25.65	0	0	0
25.7	0	0	0
25.75	0	0	0
25.8	0	0	0
25.85	0	0	0
25.9	0	0	0
25.95	0	0	0
26	0	0	0

Hydrograph Comparison - 100-Year Projected			
	Existing 100-Year Projected	Proposed 100-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
0	0	0	0
0.05	0	0	0
0.1	0	0	0
0.15	0	0	0
0.2	0	0	0
0.25	0	0	0
0.3	0	0	0
0.35	0	0	0
0.4	0.01	0.01	0
0.45	0.02	0.02	0
0.5	0.02	0.02	0
0.55	0.03	0.03	0
0.6	0.04	0.04	0
0.65	0.05	0.05	0
0.7	0.05	0.05	0
0.75	0.06	0.06	0
0.8	0.07	0.07	0
0.85	0.07	0.07	0
0.9	0.08	0.08	0
0.95	0.08	0.08	0
1	0.09	0.09	0
1.05	0.09	0.09	0
1.1	0.1	0.1	0
1.15	0.1	0.1	0
1.2	0.11	0.11	0
1.25	0.11	0.11	0
1.3	0.11	0.11	0
1.35	0.12	0.12	0
1.4	0.12	0.12	0
1.45	0.12	0.12	0
1.5	0.13	0.13	0
1.55	0.13	0.13	0
1.6	0.13	0.13	0
1.65	0.13	0.13	0
1.7	0.14	0.14	0
1.75	0.14	0.14	0
1.8	0.14	0.14	0
1.85	0.14	0.14	0
1.9	0.15	0.15	0
1.95	0.15	0.15	0
2	0.15	0.15	0

Hydrograph Comparison - 100-Year Projected			
	Existing 100-Year Projected	Proposed 100-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
2.05	0.15	0.15	0
2.1	0.16	0.16	0
2.15	0.16	0.16	0
2.2	0.16	0.16	0
2.25	0.16	0.16	0
2.3	0.16	0.16	0
2.35	0.16	0.16	0
2.4	0.17	0.17	0
2.45	0.17	0.17	0
2.5	0.17	0.17	0
2.55	0.17	0.17	0
2.6	0.17	0.17	0
2.65	0.18	0.18	0
2.7	0.18	0.18	0
2.75	0.18	0.18	0
2.8	0.18	0.18	0
2.85	0.18	0.18	0
2.9	0.18	0.18	0
2.95	0.18	0.18	0
3	0.18	0.18	0
3.05	0.19	0.19	0
3.1	0.19	0.19	0
3.15	0.19	0.19	0
3.2	0.19	0.19	0
3.25	0.19	0.19	0
3.3	0.19	0.19	0
3.35	0.19	0.19	0
3.4	0.2	0.2	0
3.45	0.2	0.2	0
3.5	0.2	0.2	0
3.55	0.2	0.2	0
3.6	0.2	0.2	0
3.65	0.2	0.2	0
3.7	0.2	0.2	0
3.75	0.21	0.21	0
3.8	0.21	0.21	0
3.85	0.21	0.21	0
3.9	0.21	0.21	0
3.95	0.21	0.21	0
4	0.21	0.21	0
4.05	0.21	0.21	0

Hydrograph Comparison - 100-Year Projected			
	Existing 100-Year Projected	Proposed 100-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
4.1	0.21	0.21	0
4.15	0.21	0.21	0
4.2	0.22	0.22	0
4.25	0.22	0.22	0
4.3	0.22	0.22	0
4.35	0.22	0.22	0
4.4	0.22	0.22	0
4.45	0.22	0.22	0
4.5	0.22	0.22	0
4.55	0.22	0.22	0
4.6	0.23	0.23	0
4.65	0.23	0.23	0
4.7	0.23	0.23	0
4.75	0.23	0.23	0
4.8	0.23	0.23	0
4.85	0.23	0.23	0
4.9	0.23	0.23	0
4.95	0.23	0.23	0
5	0.23	0.23	0
5.05	0.23	0.23	0
5.1	0.24	0.24	0
5.15	0.24	0.24	0
5.2	0.24	0.24	0
5.25	0.24	0.24	0
5.3	0.24	0.24	0
5.35	0.24	0.24	0
5.4	0.24	0.24	0
5.45	0.24	0.24	0
5.5	0.24	0.24	0
5.55	0.25	0.25	0
5.6	0.25	0.25	0
5.65	0.25	0.25	0
5.7	0.25	0.25	0
5.75	0.25	0.25	0
5.8	0.25	0.25	0
5.85	0.25	0.25	0
5.9	0.25	0.25	0
5.95	0.25	0.25	0
6	0.25	0.25	0
6.05	0.26	0.26	0
6.1	0.26	0.26	0

Hydrograph Comparison - 100-Year Projected			
	Existing 100-Year Projected	Proposed 100-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
6.15	0.26	0.26	0
6.2	0.27	0.27	0
6.25	0.27	0.27	0
6.3	0.28	0.28	0
6.35	0.28	0.28	0
6.4	0.28	0.28	0
6.45	0.29	0.29	0
6.5	0.29	0.29	0
6.55	0.29	0.29	0
6.6	0.3	0.3	0
6.65	0.3	0.3	0
6.7	0.3	0.3	0
6.75	0.31	0.31	0
6.8	0.31	0.31	0
6.85	0.31	0.31	0
6.9	0.32	0.32	0
6.95	0.32	0.32	0
7	0.32	0.32	0
7.05	0.33	0.33	0
7.1	0.33	0.33	0
7.15	0.33	0.33	0
7.2	0.34	0.34	0
7.25	0.34	0.34	0
7.3	0.34	0.34	0
7.35	0.35	0.35	0
7.4	0.35	0.35	0
7.45	0.35	0.35	0
7.5	0.36	0.36	0
7.55	0.36	0.36	0
7.6	0.36	0.36	0
7.65	0.37	0.37	0
7.7	0.37	0.37	0
7.75	0.38	0.38	0
7.8	0.38	0.38	0
7.85	0.38	0.38	0
7.9	0.38	0.38	0
7.95	0.39	0.39	0
8	0.39	0.39	0
8.05	0.4	0.4	0
8.1	0.4	0.4	0
8.15	0.4	0.4	0

Hydrograph Comparison - 100-Year Projected			
	Existing 100-Year Projected	Proposed 100-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
8.2	0.41	0.41	0
8.25	0.41	0.41	0
8.3	0.41	0.41	0
8.35	0.42	0.42	0
8.4	0.42	0.42	0
8.45	0.42	0.42	0
8.5	0.43	0.43	0
8.55	0.43	0.43	0
8.6	0.43	0.43	0
8.65	0.44	0.44	0
8.7	0.44	0.44	0
8.75	0.45	0.45	0
8.8	0.45	0.45	0
8.85	0.45	0.45	0
8.9	0.45	0.45	0
8.95	0.46	0.46	0
9	0.46	0.46	0
9.05	0.47	0.47	0
9.1	0.49	0.49	0
9.15	0.5	0.5	0
9.2	0.51	0.51	0
9.25	0.52	0.52	0
9.3	0.53	0.53	0
9.35	0.55	0.55	0
9.4	0.56	0.56	0
9.45	0.57	0.57	0
9.5	0.58	0.58	0
9.55	0.6	0.6	0
9.6	0.61	0.61	0
9.65	0.62	0.62	0
9.7	0.63	0.63	0
9.75	0.64	0.64	0
9.8	0.65	0.65	0
9.85	0.67	0.67	0
9.9	0.68	0.68	0
9.95	0.69	0.69	0
10	0.7	0.7	0
10.05	0.72	0.72	0
10.1	0.73	0.73	0
10.15	0.74	0.74	0
10.2	0.75	0.75	0

Hydrograph Comparison - 100-Year Projected			
	Existing 100-Year Projected	Proposed 100-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
10.25	0.76	0.76	0
10.3	0.78	0.78	0
10.35	0.79	0.79	0
10.4	0.8	0.8	0
10.45	0.81	0.81	0
10.5	0.82	0.82	0
10.55	0.87	0.87	0
10.6	0.91	0.91	0
10.65	0.96	0.96	0
10.7	1	1	0
10.75	1.05	1.05	0
10.8	1.09	1.09	0
10.85	1.13	1.13	0
10.9	1.17	1.17	0
10.95	1.22	1.22	0
11	1.26	1.26	0
11.05	1.34	1.34	0
11.1	1.41	1.41	0
11.15	1.5	1.5	0
11.2	1.57	1.57	0
11.25	1.65	1.65	0
11.3	1.72	1.72	0
11.35	1.81	1.81	0
11.4	1.88	1.88	0
11.45	1.97	1.97	0
11.5	2.04	2.04	0
11.55	2.4	2.4	0
11.6	2.71	2.71	0
11.65	2.82	2.82	0
11.7	2.9	2.9	0
11.75	3.45	3.45	0
11.8	3.93	3.93	0
11.85	4.76	4.76	0
11.9	5.47	5.47	0
11.95	7.56	7.56	0
12	9.36	9.36	0
12.05	12.77	12.77	0
12.1	15.41	15.41	0
12.15	10.62	10.62	0
12.2	6.19	6.19	0
12.25	4.82	4.82	0

Hydrograph Comparison - 100-Year Projected			
	Existing 100-Year Projected	Proposed 100-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
12.3	4.08	4.08	0
12.35	3.45	3.45	0
12.4	2.98	2.98	0
12.45	2.85	2.85	0
12.5	2.77	2.77	0
12.55	2.41	2.41	0
12.6	2.1	2.1	0
12.65	1.98	1.98	0
12.7	1.91	1.91	0
12.75	1.82	1.82	0
12.8	1.75	1.75	0
12.85	1.67	1.67	0
12.9	1.6	1.6	0
12.95	1.51	1.51	0
13	1.44	1.44	0
13.05	1.36	1.36	0
13.1	1.29	1.29	0
13.15	1.23	1.23	0
13.2	1.19	1.19	0
13.25	1.15	1.15	0
13.3	1.11	1.11	0
13.35	1.06	1.06	0
13.4	1.02	1.02	0
13.45	0.97	0.97	0
13.5	0.93	0.93	0
13.55	0.88	0.88	0
13.6	0.84	0.84	0
13.65	0.82	0.82	0
13.7	0.81	0.81	0
13.75	0.8	0.8	0
13.8	0.79	0.79	0
13.85	0.77	0.77	0
13.9	0.76	0.76	0
13.95	0.75	0.75	0
14	0.74	0.74	0
14.05	0.73	0.73	0
14.1	0.72	0.72	0
14.15	0.7	0.7	0
14.2	0.69	0.69	0
14.25	0.68	0.68	0
14.3	0.67	0.67	0

Hydrograph Comparison - 100-Year Projected			
	Existing 100-Year Projected	Proposed 100-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
14.35	0.65	0.65	0
14.4	0.64	0.64	0
14.45	0.63	0.63	0
14.5	0.62	0.62	0
14.55	0.61	0.61	0
14.6	0.6	0.6	0
14.65	0.58	0.58	0
14.7	0.57	0.57	0
14.75	0.56	0.56	0
14.8	0.55	0.55	0
14.85	0.53	0.53	0
14.9	0.52	0.52	0
14.95	0.51	0.51	0
15	0.5	0.5	0
15.05	0.49	0.49	0
15.1	0.47	0.47	0
15.15	0.47	0.47	0
15.2	0.47	0.47	0
15.25	0.46	0.46	0
15.3	0.46	0.46	0
15.35	0.46	0.46	0
15.4	0.45	0.45	0
15.45	0.45	0.45	0
15.5	0.45	0.45	0
15.55	0.44	0.44	0
15.6	0.44	0.44	0
15.65	0.44	0.44	0
15.7	0.43	0.43	0
15.75	0.43	0.43	0
15.8	0.42	0.42	0
15.85	0.42	0.42	0
15.9	0.42	0.42	0
15.95	0.41	0.41	0
16	0.41	0.41	0
16.05	0.41	0.41	0
16.1	0.41	0.41	0
16.15	0.4	0.4	0
16.2	0.4	0.4	0
16.25	0.39	0.39	0
16.3	0.39	0.39	0
16.35	0.39	0.39	0

Hydrograph Comparison - 100-Year Projected			
	Existing 100-Year Projected	Proposed 100-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
16.4	0.38	0.38	0
16.45	0.38	0.38	0
16.5	0.38	0.38	0
16.55	0.37	0.37	0
16.6	0.37	0.37	0
16.65	0.37	0.37	0
16.7	0.36	0.36	0
16.75	0.36	0.36	0
16.8	0.36	0.36	0
16.85	0.35	0.35	0
16.9	0.35	0.35	0
16.95	0.35	0.35	0
17	0.34	0.34	0
17.05	0.34	0.34	0
17.1	0.34	0.34	0
17.15	0.33	0.33	0
17.2	0.33	0.33	0
17.25	0.33	0.33	0
17.3	0.32	0.32	0
17.35	0.32	0.32	0
17.4	0.32	0.32	0
17.45	0.31	0.31	0
17.5	0.31	0.31	0
17.55	0.31	0.31	0
17.6	0.3	0.3	0
17.65	0.3	0.3	0
17.7	0.3	0.3	0
17.75	0.29	0.29	0
17.8	0.29	0.29	0
17.85	0.29	0.29	0
17.9	0.28	0.28	0
17.95	0.28	0.28	0
18	0.28	0.28	0
18.05	0.27	0.27	0
18.1	0.27	0.27	0
18.15	0.27	0.27	0
18.2	0.27	0.27	0
18.25	0.27	0.27	0
18.3	0.26	0.26	0
18.35	0.26	0.26	0
18.4	0.26	0.26	0

Hydrograph Comparison - 100-Year Projected			
	Existing 100-Year Projected	Proposed 100-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
18.45	0.26	0.26	0
18.5	0.26	0.26	0
18.55	0.26	0.26	0
18.6	0.26	0.26	0
18.65	0.26	0.26	0
18.7	0.26	0.26	0
18.75	0.26	0.26	0
18.8	0.26	0.26	0
18.85	0.26	0.26	0
18.9	0.25	0.25	0
18.95	0.25	0.25	0
19	0.25	0.25	0
19.05	0.25	0.25	0
19.1	0.25	0.25	0
19.15	0.25	0.25	0
19.2	0.25	0.25	0
19.25	0.25	0.25	0
19.3	0.25	0.25	0
19.35	0.25	0.25	0
19.4	0.25	0.25	0
19.45	0.24	0.24	0
19.5	0.24	0.24	0
19.55	0.24	0.24	0
19.6	0.24	0.24	0
19.65	0.24	0.24	0
19.7	0.24	0.24	0
19.75	0.24	0.24	0
19.8	0.24	0.24	0
19.85	0.24	0.24	0
19.9	0.24	0.24	0
19.95	0.24	0.24	0
20	0.24	0.24	0
20.05	0.24	0.24	0
20.1	0.23	0.23	0
20.15	0.23	0.23	0
20.2	0.23	0.23	0
20.25	0.23	0.23	0
20.3	0.23	0.23	0
20.35	0.23	0.23	0
20.4	0.23	0.23	0
20.45	0.23	0.23	0

Hydrograph Comparison - 100-Year Projected			
	Existing 100-Year Projected	Proposed 100-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
20.5	0.23	0.23	0
20.55	0.23	0.23	0
20.6	0.23	0.23	0
20.65	0.23	0.23	0
20.7	0.22	0.22	0
20.75	0.22	0.22	0
20.8	0.22	0.22	0
20.85	0.22	0.22	0
20.9	0.22	0.22	0
20.95	0.22	0.22	0
21	0.22	0.22	0
21.05	0.22	0.22	0
21.1	0.22	0.22	0
21.15	0.22	0.22	0
21.2	0.22	0.22	0
21.25	0.21	0.21	0
21.3	0.21	0.21	0
21.35	0.21	0.21	0
21.4	0.21	0.21	0
21.45	0.21	0.21	0
21.5	0.21	0.21	0
21.55	0.21	0.21	0
21.6	0.21	0.21	0
21.65	0.21	0.21	0
21.7	0.21	0.21	0
21.75	0.21	0.21	0
21.8	0.21	0.21	0
21.85	0.2	0.2	0
21.9	0.2	0.2	0
21.95	0.2	0.2	0
22	0.2	0.2	0
22.05	0.2	0.2	0
22.1	0.2	0.2	0
22.15	0.2	0.2	0
22.2	0.2	0.2	0
22.25	0.2	0.2	0
22.3	0.2	0.2	0
22.35	0.2	0.2	0
22.4	0.19	0.19	0
22.45	0.19	0.19	0
22.5	0.19	0.19	0

Hydrograph Comparison - 100-Year Projected			
	Existing 100-Year Projected	Proposed 100-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
22.55	0.19	0.19	0
22.6	0.19	0.19	0
22.65	0.19	0.19	0
22.7	0.19	0.19	0
22.75	0.19	0.19	0
22.8	0.19	0.19	0
22.85	0.19	0.19	0
22.9	0.19	0.19	0
22.95	0.19	0.19	0
23	0.18	0.18	0
23.05	0.18	0.18	0
23.1	0.18	0.18	0
23.15	0.18	0.18	0
23.2	0.18	0.18	0
23.25	0.18	0.18	0
23.3	0.18	0.18	0
23.35	0.18	0.18	0
23.4	0.18	0.18	0
23.45	0.18	0.18	0
23.5	0.18	0.18	0
23.55	0.18	0.18	0
23.6	0.17	0.17	0
23.65	0.17	0.17	0
23.7	0.17	0.17	0
23.75	0.17	0.17	0
23.8	0.17	0.17	0
23.85	0.17	0.17	0
23.9	0.17	0.17	0
23.95	0.17	0.17	0
24	0.17	0.17	0
24.05	0.08	0.08	0
24.1	0.01	0.01	0
24.15	0	0	0
24.2	0	0	0
24.25	0	0	0
24.3	0	0	0
24.35	0	0	0
24.4	0	0	0
24.45	0	0	0
24.5	0	0	0
24.55	0	0	0

Hydrograph Comparison - 100-Year Projected			
	Existing 100-Year Projected	Proposed 100-Year Projected	Difference (Proposed - Existing)
Time (hours)	Primary (cfs)	Primary (cfs)	Primary (cfs)
24.6	0	0	0
24.65	0	0	0
24.7	0	0	0
24.75	0	0	0
24.8	0	0	0
24.85	0	0	0
24.9	0	0	0
24.95	0	0	0
25	0	0	0
25.05	0	0	0
25.1	0	0	0
25.15	0	0	0
25.2	0	0	0
25.25	0	0	0
25.3	0	0	0
25.35	0	0	0
25.4	0	0	0
25.45	0	0	0
25.5	0	0	0
25.55	0	0	0
25.6	0	0	0
25.65	0	0	0
25.7	0	0	0
25.75	0	0	0
25.8	0	0	0
25.85	0	0	0
25.9	0	0	0
25.95	0	0	0
26	0	0	0

DRAINAGE AREA MAPS