City of La Crosse, Wisconsin

City Hall
400 La Crosse Street
La Crosse, WI 54601

Meeting Agenda

City Plan Commission

Monday, March 30, 2026 | **4:00 PM** | **Council Chambers**

The meeting is open for in-person attendance and will also be conducted through video conferencing. To join the meeting click this link (or typing the URL in your web browser address bar):

https://cityoflacrosse-org.zoom.us/j/85193167933?pwd=KZZGuG4wS5jHgSbhOII9Q6QQ5REeIK.1
Meeting ID: 851 9316 7933
Passcode: CPC26
Call in: 1-305-224-1968.

The meeting can be viewed by visiting the Legislative Information Center (https://cityoflacrosse.legistar.com/Calendar.aspx) and clicking on the "In Progress" video link to the far right in the meeting list.

If you wish to speak on an agenda item, arrive early to sign up before the meeting begins. If attending virtually and you wish to speak, contact the Department of Planning, Development and Assessment at the email or phone number below so we can provide you with the necessary information to join in. Members of the public who would like to provide written comments on any agenda may do so by emailing tranea@cityoflacrosse.org, using a drop box outside of City Hall or mailing the Department of Planning, Development and Assessment, 400 La Crosse Street, La Crosse WI 54601. Questions, call 608-789-7512

Call to Order

Roll Call

Approval of Minutes

1. Approval of the March 2, 2026 Meeting Minutes.

Agenda Items:

2. 26-0144 Certified Survey Map - Lot 1, Certified Survey Map Number 67, Volume 19, Document Number 1761262, Located in the Northwest Quarter of the Northeast Quarter of Section 9, Township 15 North, Range 7 West, City of La Crosse, La Crosse County, Wisconsin and request for dedication of right-of-way and waiver of platting requirements.

Attachments: Certified Survey Map & Submittal Checklist - 2.16.2026
Waiver Request
Letter Re CSM Meetings 2.17.2026
Building & Inspections Comments - 2.17.2026

CPC.Staff Report.26-0144

City Planning Commission Recommendation 3.2.2026

CPC.StaffReport.03302026.26-0144.TA

3. 26-0204 Resolution dedicating City property, Lot 42 of Sexauer's Addition, to the public for right-of-way purposes and approving request from Badger Corrugating Company to vacate a portion thereof.

Attachments: Resolution

Legislative Staff Report

Exhibit A Description

Exhibit A Map

Exhibit B Description

Exhibit B Map

300-foot Property Owner Buffer List for Area to be Vacated

300-foot Buffer Map for Area to be Vacated

Lis Pendens - Recorded 2.24.2026

Notice of Hearing Re Street Vacation

Letter to Wis DOT 2.25.2026

Letter to Police Dept. Re Personal Service

Affidavit of Publication - Notice of Hearing

CPC.StaffReport.03302026.26-0204.TA

4. 26-0254 Preliminary Plat of Featherstone Rise - Part of the Northwest 1/4 & Northeast 1/4 of the Northwest 1/4 of Section 7 and Part of the Southwest 1/4 & Southeast 1/4 of the Southwest 1/4 of Section 6, all in Township 15 North, Range 6 West, Town of Shelby, La Crosse County, Wisconsin.

Attachments: Checklist

Preliminary Plat

Subdivision Plans

Stormwater & Erosion Control Calculations

Declaration of Restrictions

La Crosse County Approval

Town of Shelby Approval

Assessor Approval - 3.11.2026

Building & Inspections Approval - 3.11.2026

CPC.StaffReport.03302026.26-0254.TA

5. 25-0143 Update on the zoning/subdivision code project.

Attachments: Forward La Crosse _ Zoning Promotion 08.01.2025.pdf

Zoning Code Update Project Update 5.29.2025.pdf

Built Form Study_Districts.042825.pdf

Built Form Study_Neighborhoods.042825.pdf

Character Areas Defined.042825.pdf

Downtown Character Areas.042825.pdf

Zoning 101_23Apr_compressed.042825.pdf

Built Form Study_Corridors.042825.pdf

Zoning Code Update Memo V2 3-31-2025

DRAFT Zoning Code Update Survey #1 3-31-2025

DRAFT Zoning 101 Presentation 3-31-2025

DRAFT Form Plate George St 3-31-2025

Zoning Code Update Memo V1 3-3-2025

Summary of Residential Lot Standards 3-3-2025

1950 Zoning Map 3-3-2025

Study Guide for City Plan Commission_30Jun2025.pdf

Forward La Crosse CPC.pdf

Memo from Friends of the Marsh - 9.15.2025

Adjournment

Notice is further given that members of other governmental bodies may be present at the above scheduled meeting to gather information about a subject over which they have decision-making responsibility.

NOTICE TO PERSONS WITH A DISABILITY
Requests from persons with a disability who need assistance to participate in this meeting should call the City Clerk's office at (608) 789-7510 or send an email to ADAcityclerk@cityoflacrosse.org, with as much advance notice as possible.

City Plan Commission
Mayor Shaundel Washington-Spivey, Elaine Yager, Jacob Sciammas, James Cherf, Jennifer Trost, Matt Gallager, Olivia Stine, Aron Newberry and James Szymalak.

City of La Crosse, Wisconsin

City Hall
400 La Crosse Street
La Crosse, WI 54601

Text File

File Number: 26-0144

Agenda Date: 3/31/2026 **Version:** 1 **Status:** Referred

In Control: Judiciary & Administration Committee **File Type:** Plat/Certified Survey Map

Agenda Number: 2.

CITY OF LA CROSSE, WISCONSIN
CERTIFIED SURVEY MAP SUBMITTAL & REVIEW CHECK LIST

Rev. 1/2021

X CSM located in Extra-Territorial Jurisdiction (Council Approval Required) with request for Right-of-Way designation + Waiver of Plat. Requirements

_____ CSM located in the City (Department Review Only)

Extra-Territorial Review: BEFORE FILING WITH THE CITY, you must have both Town and County approvals. The Plan Commission may not consider any land division which did not have prior approval by the approving authorities for both the Town(s) and La Crosse County.

Town Board Approved: _____ (date) La Crosse County Approved: _____ (date)

To be completed by property owner/surveyor with submittal (*incomplete checklist may cause a delay in the review):

Current Tax Parcel Number(s): 17-50298-32

Map ID / Location: 2415 State Road

Surveyor: ISG Phone No. 608-789-2034

Property Owner: MKB Copper Rocks, LLC Phone No. 608-782-7368

***circle who should be called when CSM is ready for pick up.*

I am the property owner of record, and I approve of this CSM: _____
(property owner signature)

**In lieu of owner's signature on this submittal checklist, you may provide written communication from property owner.*

Purpose of CSM and intended outcome (or attach a letter explaining): _____

As part of the redevelopment, the existing site will be subdivided into four separate parcels. MKB Copper Rocks, LLC and Three Sixty are requesting that the requirement for a subdivision plat per ~~section 113-9 of the City of La Crosse Municipal Code of Ordinances be waived allowing for the use~~ of a Certified Survey Map (CSM) to divide the existing lot as part of the PDD process.

Have you worked with any other Department/staff person with regard to this CSM? If so, who?

~~Previously worked with planning staff on the site rezoning and CSM.~~

Have you received any other decision with regard to this CSM from any City board, commission or committee?

If so, which one and when? _____

It was approved 4 years ago by Plan Commission, J & A and city council when the property was rezoned for PDD in 2022.

To be completed by City Clerk at time of filing:

2/9/2026 Original Document for Signature. *(Clerk will make a photocopy which is distributed for review.)*

2/16/2026 Review Fee *(cash, check payable to City Treasurer or credit card with convenience fee)*

$300 ~~$200.00~~ – First Application

$150 ~~$100.00~~ – Reapplication of the same CSM

_____ Internal Review Routing & Email to County Surveyor. *(Initiated by Clerk with complete filing.)*

_____ Original CSM Issued. *(Upon approval, the original will be signed and available for pick up.)*

To be completed by each Reviewing Department before the City Clerk will sign.

BUILDING AND INSPECTIONS APPROVAL

This Certified Survey Map is hereby approved by the Chief Inspector.

Dated this _____ day of _____, 20___.

_____ Chief Inspector

Comments: _____

CITY UTILITIES (WATER – STORM – SEWER) APPROVAL

This Certified Survey Map is hereby approved by the City Utilities Office.

Dated this _____ day of _____, 20___.

Water ☐ Storm ☐ Sewer ☐

_____ Utilities Office

Comments: _____

ASSESSOR APPROVAL

This Certified Survey Map is hereby approved by the Assessor.

Dated this _____ day of _____, 20___.

_____ Assessor

Comments: _____

ENGINEERING DEPARTMENT APPROVAL

This Certified Survey Map is hereby approved by the City Surveyor.

Dated this _____ day of _____, 20__.

_____ Engineering/Surveyor

Comments: _____

PLANNING DEPARTMENT APPROVAL

This Certified Survey Map is hereby approved by the Planning Department.

Dated this _____ day of _____, 20__.

_____ Planner

Comments: _____

COMMON COUNCIL APPROVAL, if required

Resolved that this Certified Survey Map is hereby approved by the Common Council of the City of La Crosse.

Dated this _____ day of _____, 20__.

_____

Mayor *(required only if signing off prior to expiration of veto period)*

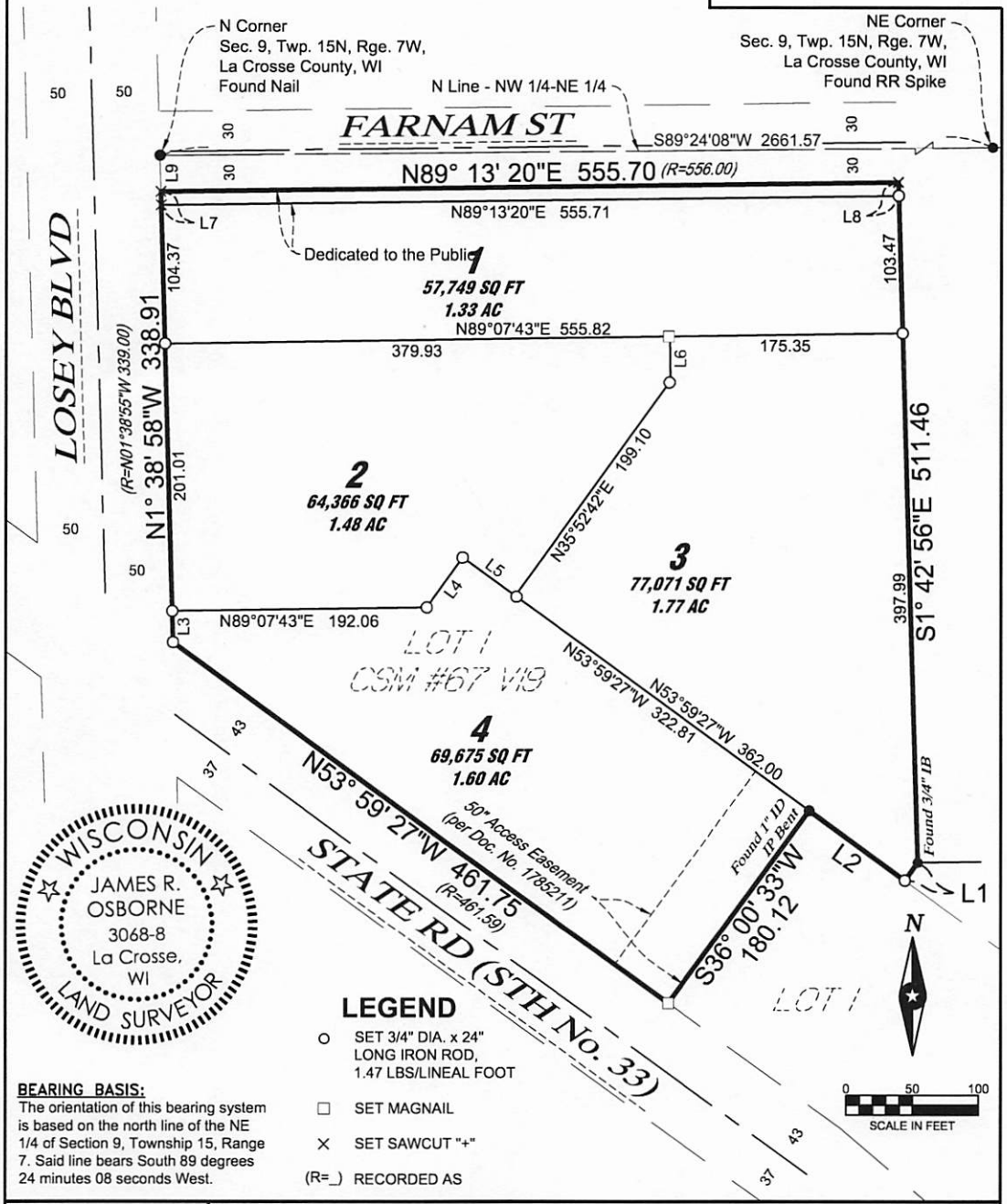
I hereby certify that the foregoing is a copy of a resolution adopted by the Common Council of the City of La Crosse.

Dated this _____ day of _____, 20__.

_____ City Clerk

CERTIFIED SURVEY MAP

LOT 1, CERTIFIED SURVEY MAP NUMBER 67, VOLUME 19, DOCUMENT NUMBER 1761262, LOCATED IN THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 9 , TOWNSHIP 15 NORTH, RANGE 7 WEST, CITY OF LA CROSSE, LA CROSSE COUNTY, WISCONSIN.



WISCONSIN
JAMES R. OSBORNE
3068-8
La Crosse, WI
LAND SURVEYOR

LEGEND

- ○ SET 3/4" DIA. x 24" LONG IRON ROD, 1.47 LBS/LINEAL FOOT
- □ SET MAGNAIL
- × SET SAWCUT "+"
- (R=_) RECORDED AS

BEARING BASIS:
The orientation of this bearing system is based on the north line of the NE 1/4 of Section 9, Township 15, Range 7. Said line bears South 89 degrees 24 minutes 08 seconds West.

ISG

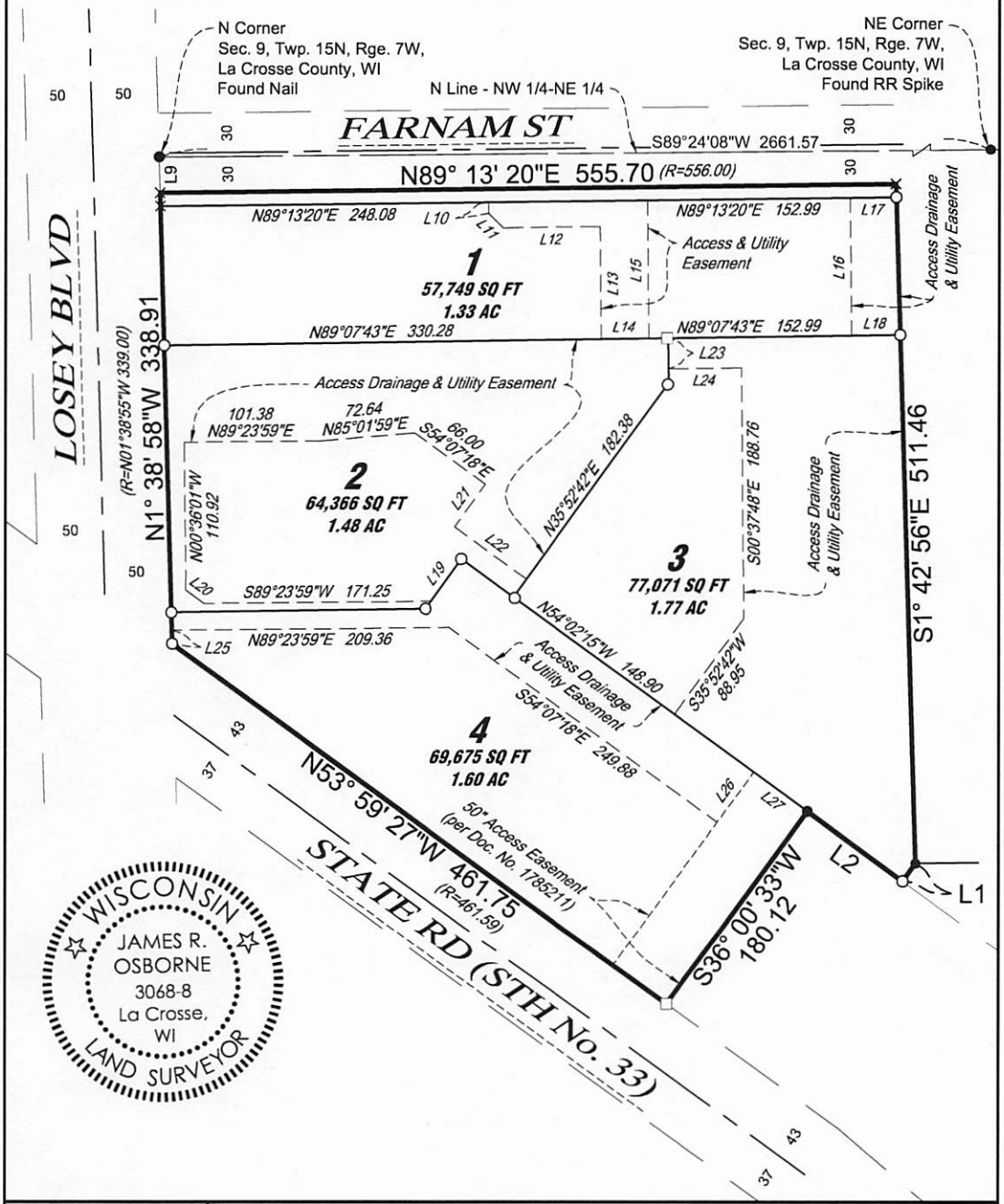
CERTIFIED SURVEY MAP

PROJECT NO.:	21-25290
FILE NAME:	25290 CSM
DRAWN BY:	JRO
REVISED:	

SHEET 1 OF 3 SHEETS

CERTIFIED SURVEY MAP

LOT 1, CERTIFIED SURVEY MAP NUMBER 67, VOLUME 19, DOCUMENT NUMBER 1761262, LOCATED IN THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 9 , TOWNSHIP 15 NORTH, RANGE 7 WEST, CITY OF LA CROSSE, LA CROSSE COUNTY, WISCONSIN.



WISCONSIN
JAMES R. OSBORNE
3068-8
La Crosse, WI
LAND SURVEYOR

ISG

CERTIFIED SURVEY MAP

PROJECT NO.:	21-25290
FILE NAME:	25290 CSM
DRAWN BY:	JRO
REVISED:	

SHEET 2 OF 3 SHEETS

CERTIFIED SURVEY MAP

LOT 1, CERTIFIED SURVEY MAP NUMBER 67, VOLUME 19, DOCUMENT NUMBER 1761262, LOCATED IN THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 9 , TOWNSHIP 15 NORTH, RANGE 7 WEST, CITY OF LA CROSSE, LA CROSSE COUNTY, WISCONSIN.

LAND DESCRIPTION:

Lot 1 of Certified Survey Map Number 67, Volume 19, Document Number 1761262 located in the Northwest Quarter of the Northeast Quarter of Section 9, Township 15 North, Range 7 West, City of La Crosse, La Crosse County, Wisconsin.

CERTIFICATION:

I, James R. Osborne, Professional Land Surveyor, hereby certify that I have surveyed and mapped the lands described hereon, and that this map is a representation thereof, to the best of my knowledge and that I have complied with Chapter 236.34 of the Wisconsin State Statutes as per agreement with MKB Copper Rocks LLC who has requested such survey.

CITY OF LA CROSSE APPROVAL CERTIFICATE

Resolved that this Certified Survey Map is hereby approved by the City of La Crosse.

Dated this_____day of _____, 20__.

_____
City Clerk

OWNERS CERTIFICATE

As owner, I hereby certify that I caused the land described herein to be surveyed, divided, mapped and dedicated as represented on the Certified Survey Map. I also certify that this Certified Survey Map is required to be submitted to the following for approval, the City of La Crosse.

Dated this_____day of _____, 20__.

_____
Name Title

State of Wisconsin)
County of _____) SS
Personally came before me this _____ day of _____, 20__, the above named Owner to me known to be the same person who executed the foregoing instrument and acknowledged the same.

(Notary Seal)_____ Notary Public, _____ County, Wisconsin
My commission expires:_____

NOTE: Field work was completed on February 21, 2022.

WISCONSIN
JAMES R. OSBORNE
3068-8
La Crosse, WI
LAND SURVEYOR

LINE TABLE

LINE #	LENGTH	DIRECTION
L1	16.41	S36°00'33"W
L2	89.18	N53°59'27"W
L3	23.52	N1°38'58"W
L4	46.23	N35°36'26"E
L5	48.83	S53°59'27"E
L6	33.59	N0°52'17"W
L7	10.00	N1°38'58"W
L8	10.00	S1°42'56"E
L9	26.95	S1°38'58"E
L10	8.26	S0°36'01"E
L11	15.36	S45°36'01"E
L12	73.25	N89°23'59"E
L13	84.45	S0°36'01"E
L14	35.75	N89°07'43"E
L15	103.76	N0°36'01"W
L16	103.51	N0°36'01"W
L17	34.77	N89°13'20"E
L18	36.79	N89°07'43"E
L19	39.17	S35°36'26"W
L20	17.18	N54°07'18"W
L21	39.36	S35°52'42"W
L22	67.01	S54°07'18"E
L23	22.80	S0°52'17"E
L24	55.00	N89°23'59"E
L25	10.13	N1°38'58"W
L26	46.68	N36°00'33"E
L27	50.00	S53°59'27"E

ISG

CERTIFIED SURVEY MAP

PROJECT NO.:	21-25290
FILE NAME:	25290 CSM
DRAWN BY:	JRO
REVISED:	

SHEET 3 OF 3 SHEETS

Memorandum

Copper Rocks Waiver Request

To:	City of La Crosse Common Council
Date:	February 6, 2026
Subject:	Copper Rocks Waiver Request

MKB Copper Rocks, LLC (MKB) and Three Sixty Real Estate Solutions, LLC (Three Sixty) are working on a joint venture agreement to develop the former "Kmart" Site located at 2415 State Road, La Crosse. The proposed "Copper Rocks" project will consist of two townhome buildings and three mixed-use buildings. As part of the project, the existing lot will be subdivided into 4 separate parcels and a rezoning request to Planned Development District (PDD) will be made. MKB and Three Sixty are requesting a waiver of the requirement of a subdivision plat per 113-09, Waiver of Requirements, and request to use a Certified Survey Map in its place.

Office of City Clerk

February 17, 2026

MKB COPPER ROCKS LLC
C/O KIRK STOA
3800 EMERALD DR E
ONALASKA WI 54650

JAMES OSBORNE, SURVEYOR
201 MAIN ST, STE 1020
LA CROSSE WI 54601

Re: Certified Survey Map

We are in receipt of the *Certified Survey Map - Lot 1, Certified Survey Map Number 67, Volume 19, Document Number 1761262, Located in the Northwest Quarter of the Northeast Quarter of Section 9, Township 15 North, Range 7 West, City of La Crosse, La Crosse County, Wisconsin and request for dedication of right-of-way and waiver of platting requirements.*

The CSM will be considered at the following meetings:

City Plan Commission	**Monday, March 2, 2026 at 4:00 p.m.** **Council Chambers, City Hall – first floor**
Judiciary & Administration Committee	**Tuesday, March 3, 2026, at 6:00 p.m.** **Council Chambers, City Hall – first floor**
Common Council	**Thursday, March 12, 2026 at 6:00 p.m.** **Council Chambers, City Hall – first floor**

We recommend someone attend the CPC and J&A meetings where public hearing is allowed; there may be questions or comments from a committee or council member or another citizen. Public hearing is not allowed at the Council meeting, although you are welcome to attend. The CSM will appear on the agendas as file 26-0144 (the associated rezoning petition is file 26-0143 and is also scheduled for the meetings above).

Attendance at the meetings is allowed either in person or virtually. I will also be sending an email with the links to the agenda and Zoom meeting. If you have any questions, comments, or concerns; do not hesitate to contact me.

Sincerely,

Sondra Craig

Sondra Craig, Deputy City Clerk
(608) 789-7549
craigs@cityoflacrosse.org

Craig, Sondra

From: Reinhart, David
Sent: Tuesday, February 17, 2026 10:18 AM
To: Craig, Sondra
Subject: RE: For Review: CSM - 2415 State Road (Copper Rocks)

Sondra,

B&I cannot approve until the existing building is removed and the zoning approved.

Thanks,

David Reinhart
Chief Building Inspector
Building & Inspections
400 La Crosse St., La Crosse, WI 54601
Office: 608-789-7564

From: Craig, Sondra <craigs@cityoflacrosse.org>
Sent: Tuesday, February 17, 2026 9:35 AM
To: Hewitt, Dale <DHewitt@lacrossecounty.org>; Meyer, Bryan <bmeyer@lacrossecounty.org>; Acklin, Tim <Acklint@cityoflacrosse.org>; Asp, Brian <aspb@cityoflacrosse.org>; Coman, Kyle <comank@cityoflacrosse.org>; Crandall, Jay <CrandallJ@cityoflacrosse.org>; Erickson, Tina <ericksont@cityoflacrosse.org>; Gallager, Matthew <gallagerm@cityoflacrosse.org>; Holland, Michelle <hollandm@cityoflacrosse.org>; Neumann, Shannon <Neumanns@cityoflacrosse.org>; Reinhart, David <Reinhartd@cityoflacrosse.org>; Trane, Andrea <tranea@cityoflacrosse.org>
Subject: For Review: CSM - 2415 State Road (Copper Rocks)

Good morning,

Attached for your review is a CSM for 2415 State Road. They are requesting a waiver of City platting requirements and dedicating public right-of-way, so this will be routed through Council for approval as well as your review (March meetings). Waiver request is attached just for additional information, if needed for some of you.

Please let me know if you approve or have any comments that I can pass on to the owner/surveyor.

Thank you,

SONDRA CRAIG, WCMC (she/her)
Deputy City Clerk
City Clerk's Office
City of La Crosse
400 La Crosse Street
La Crosse WI 54601

craigs@cityoflacrosse.org

Direct: 608.789.7549 | Office: 608.789.7510
Visit the City Clerk webpage: https://www.cityoflacrosse.org/your-government/departments/city-clerk

City Clerk's Office hours:
8:00 a.m. to 4:30 p.m., Monday through Thursday
8:00 a.m. to 2:00 p.m., Friday
Public Service (walk in) hours 8:00 a.m. to 4:00 p.m. Monday through Thursday & 8:00 a.m. to 12:00 p.m. on Friday in the City Hall Lobby

Agenda Item 26-0144 (Tim Acklin)

Certified Survey Map - Lot 1, Certified Survey Map Number 67, Volume 19, Document Number 1761262, Located in the Northwest Quarter of the Northeast Quarter of Section 9, Township 15 North, Range 7 West, City of La Crosse, La Crosse County, Wisconsin and request for dedication of right-of-way and waiver of platting requirements.

General Location

Council District 17 in the Bluffside Neighborhood Association. Located at the NE corner of the intersection of State Rd and Losey Blvd as depicted on attached Map PC26-0144. The property was the former K-Mart site. The property is surrounded by residential to the north and east, and commercial uses to the west and south.

Background Information

This item is also related to agenda item #26-0143.

The subject CSM is part of the Copper Rocks Development. The applicant it requesting to subdivide the existing lot the former KMart building was located on into four separate parcels as part of the proposed, new development. The new development consists of five buildings that include three multi-story, mixed-use buildings and two townhome buildings. The townhome buildings are proposed to be located on one of the lots and each of the other three buildings will each be located on the other three.

Subdividing the parcel in this way will likely require drainage, utility and access agreements as part of the final approval of the CSM.

Recommendation of Other Boards and Commissions N/A

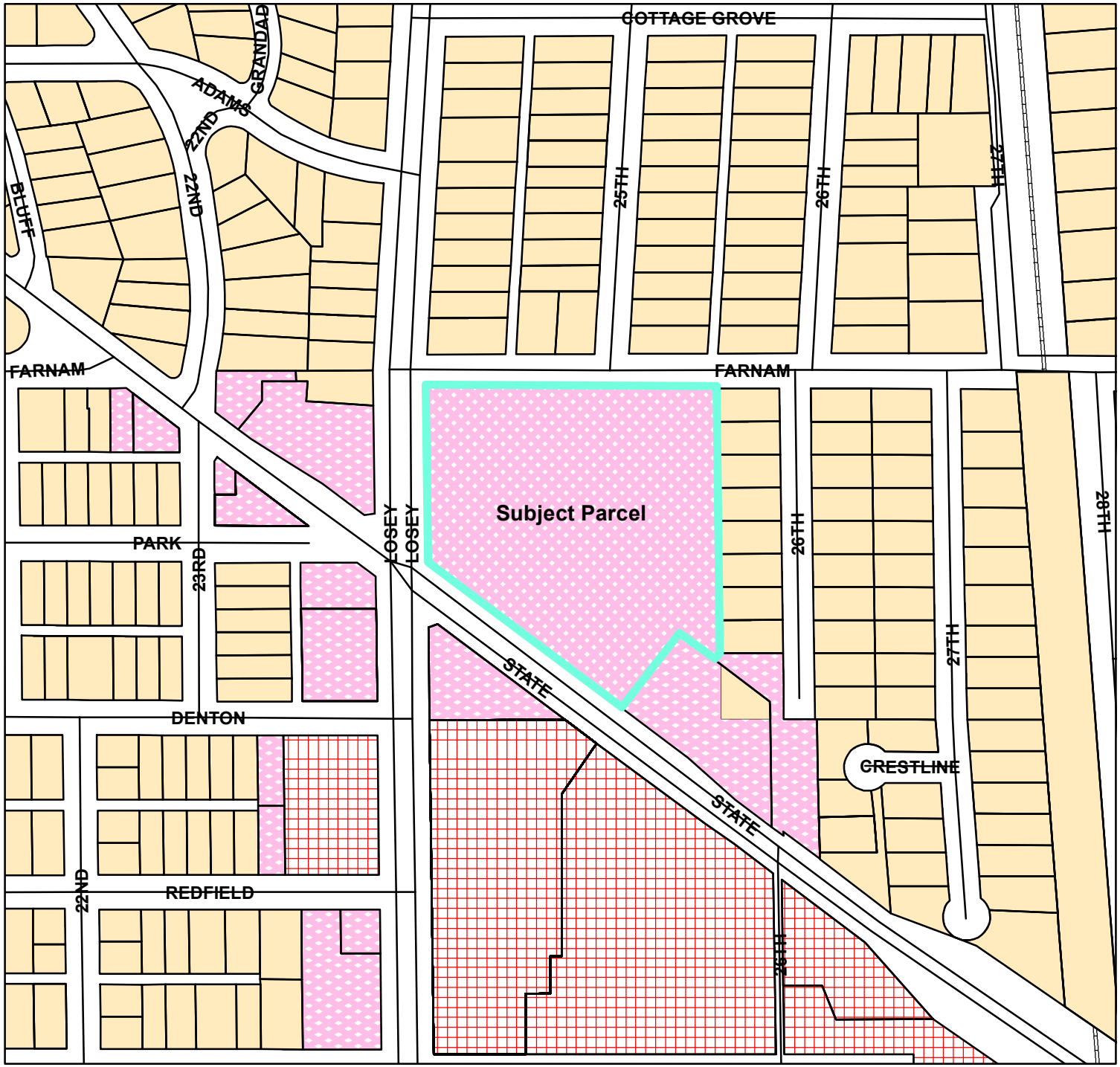
Consistency with Adopted Comprehensive Plan

This item is part of the Copper Rocks Development. The subject property is located within the State Road Corridor (C-5) in the Land Use component of the Comprehensive Plan. The plan states that future land uses within the State Road corridor should focus on developing a mix of medium-high density residential and commercial uses that are accessible via multiple modes of transportation. The proposed development could be considered both High Density Residential and Low-Intensity Mixed-Use which are both “Desirable” land uses in this corridor making it consistent with the Comprehensive Plan.

Staff Recommendation

Since submittal of this item staff have been made aware by the applicant’s design team that the submitted CSM was not the current version. As of February 25, 2026, an updated CSM had not been submitted to staff for review. **Until staff has the correct information to review this item is recommended for referral to the April cycle.**

Routing J&A 3.03.26



BASIC ZONING DISTRICTS

- R1 - SINGLE FAMILY
- R2 - RESIDENCE
- WR - WASHBURN RES
- R3 - SPECIAL RESIDENCE
- R4 - LOW DENSITY MULTI
- R5 - MULTIPLE DWELLING
- R6 - SPECIAL MULTIPLE
- PD- PLANNED DEVELOP
- TND - TRAD NEIGH DEV.
- C1 - LOCAL BUSINESS
- C2 - COMMERCIAL
- C3 - COMMUNITY BUSINESS
- M1 - LIGHT INDUSTRIAL
- M2 - HEAVY INDUSTRIAL
- PS - PUBLIC & SEMI-PUBLIC
- PL - PARKING LOT
- UT - PUBLIC UTILITY
- CON - CONSERVANCY
- FW - FLOODWAY
- A1 - AGRICULTURAL
- EA - EXCLUSIVE AG
- City Limits
- SUBJECT PROPERTY

0 130 260 520 Feet

City of La Crosse Planning Department - 2026

PC 26-0143
PC 26-0144

BASIC ZONING DISTRICTS

- R1 - SINGLE FAMILY
- R2 - RESIDENCE
- WR - WASHBURN RES
- R3 - SPECIAL RESIDENCE
- R4 - LOW DENSITY MULTI
- R5 - MULTIPLE DWELLING
- R6 - SPECIAL MULTIPLE
- PD- PLANNED DEVELOP
- TND - TRAD NEIGH DEV.
- C1 - LOCAL BUSINESS
- C2 - COMMERCIAL
- C3 - COMMUNITY BUSINESS
- M1 - LIGHT INDUSTRIAL
- M2 - HEAVY INDUSTRIAL
- PS - PUBLIC & SEMI-PUBLIC
- PL - PARKING LOT
- UT - PUBLIC UTILITY
- CON - CONSERVANCY
- FW - FLOODWAY
- A1 - AGRICULTURAL
- EA - EXCLUSIVE AG
- City Limits
- SUBJECT PROPERTY

0 130 260 520 Feet

City of La Crosse Planning Department - 2026

PC 26-0143
PC 26-0144

26-0144
CERTIFIED COPY OF RESOLUTION ADOPTED AT A REGULAR MEETING OF THE *CITY PLAN COMMISSION* OF THE CITY OF LA CROSSE, WISCONSIN

STATE OF WISCONSIN)
) ss.
County of La Crosse, City of La Crosse)

I HEREBY CERTIFY that I am the duly appointed, qualified secretary of the City Plan Commission of the City of La Crosse and State of Wisconsin; that the following is a true and correct copy of a Resolution adopted at the regular meeting of the City Plan Commission of the City of La Crosse, State of Wisconsin, held on the second day of March 2026 at four o'clock, p.m., in the Council Chambers at La Crosse City Hall, 400 La Crosse Street, in said City; and that the same has been duly recorded in the minutes of said Commission and has never been rescinded or revoked.

BE IT RESOLVED: Certified Survey Map - Lot 1, Certified Survey Map Number 67, Volume 19, Document Number 1761262, Located in the Northwest Quarter of the Northeast Quarter of Section 9, Township 15 North, Range 7 West, City of La Crosse, La Crosse County, Wisconsin and request for dedication of right-of-way and waiver of platting requirements be referred for 30 days.

IN WITNESS WHEREOF, I have hereunto signed my name at La Crosse, Wisconsin, the second day of March 2026.

Carly Kessler, Planning & Development Administrative Specialist
Recording Secretary, City Plan Commission
City of La Crosse, Wisconsin

Agenda Item 26-0144 (Tim Acklin)

Certified Survey Map - Lot 1, Certified Survey Map Number 67, Volume 19, Document Number 1761262, Located in the Northwest Quarter of the Northeast Quarter of Section 9, Township 15 North, Range 7 West, City of La Crosse, La Crosse County, Wisconsin and request for dedication of right-of-way and waiver of platting requirements.

General Location

Council District 17 in the Bluffside Neighborhood Association. Located at the NE corner of the intersection of State Rd and Losey Blvd as depicted on attached Map PC26-0144. The property was the former K-Mart site. The property is surrounded by residential to the north and east, and commercial uses to the west and south.

Background Information

The subject CSM is part of the Copper Rocks Development. The applicant is requesting to subdivide the existing lot the former KMart building was located on into four separate parcels as part of the proposed, new development. The new development consists of five buildings that include three multi-story, mixed-use buildings and two townhome buildings. The townhome buildings are proposed to be located on one of the lots and each of the other three buildings will each be located on the other three.

Subdividing the parcel in this way will likely require drainage, utility and access agreements as part of the final approval of the CSM.

Recommendation of Other Boards and Commissions

This item was referred to the April 2026 legislative cycle by the Common Council at their March 2026 meeting.

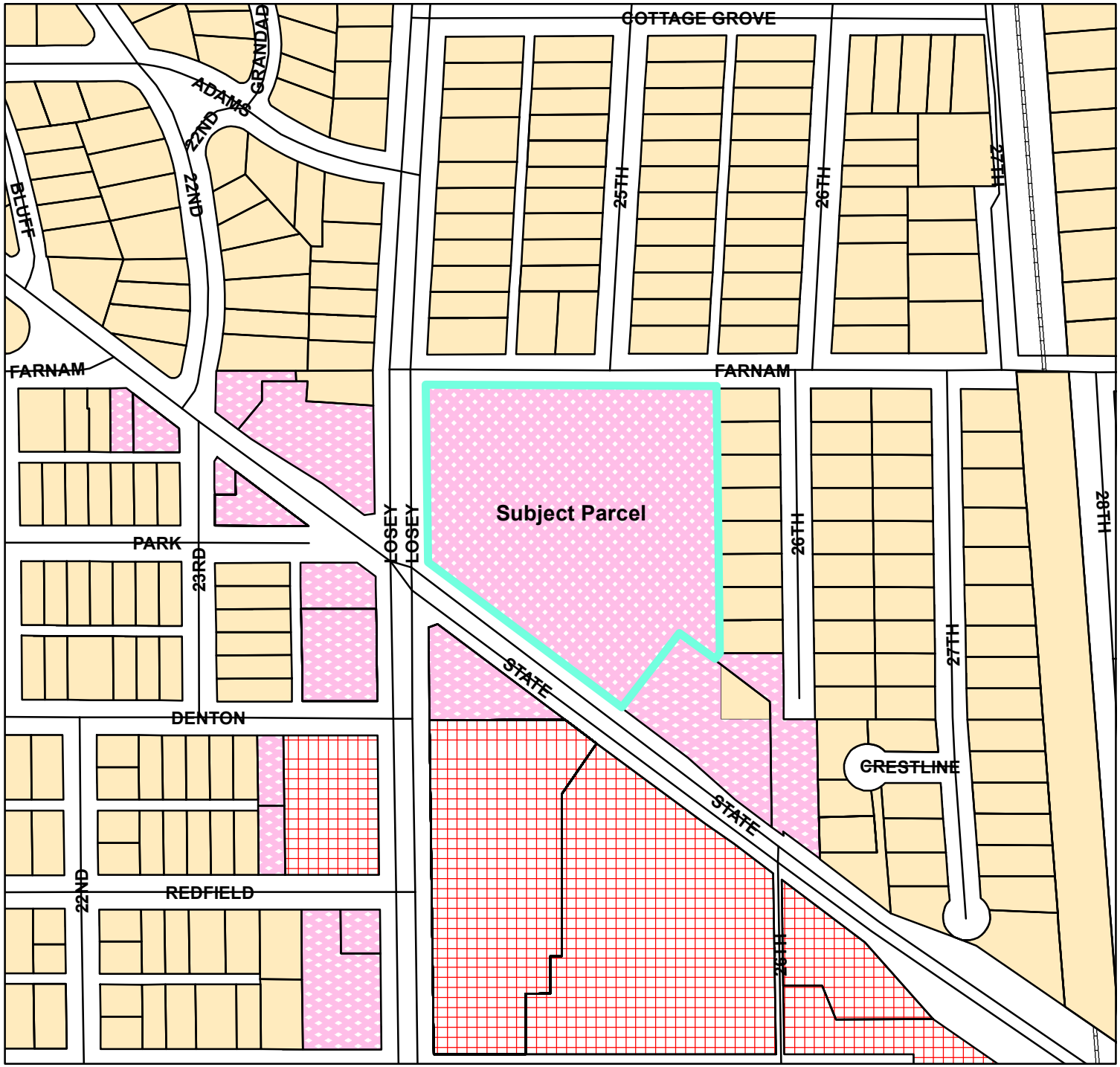
Consistency with Adopted Comprehensive Plan

This item is part of the Copper Rocks Development. The subject property is located within the State Road Corridor (C-5) in the Land Use component of the Comprehensive Plan. The plan states that future land uses within the State Road corridor should focus on developing a mix of medium-high density residential and commercial uses that are accessible via multiple modes of transportation. The proposed development could be considered both High Density Residential and Low-Intensity Mixed-Use which are both “Desirable” land uses in this corridor making it consistent with the Comprehensive Plan.

Staff Recommendation

A final CSM still has not been submitted to staff for review as the applicant is currently working with staff on its finalization. It is anticipated that it will be completed and ready for the May 2026 legislative cycle. **This item is recommended for referral to the May cycle.**

Routing J&A 3.03.26



BASIC ZONING DISTRICTS

- R1 - SINGLE FAMILY
- R2 - RESIDENCE
- WR - WASHBURN RES
- R3 - SPECIAL RESIDENCE
- R4 - LOW DENSITY MULTI
- R5 - MULTIPLE DWELLING
- R6 - SPECIAL MULTIPLE
- PD- PLANNED DEVELOP
- TND - TRAD NEIGH DEV.
- C1 - LOCAL BUSINESS
- C2 - COMMERCIAL
- C3 - COMMUNITY BUSINESS
- M1 - LIGHT INDUSTRIAL
- M2 - HEAVY INDUSTRIAL
- PS - PUBLIC & SEMI-PUBLIC
- PL - PARKING LOT
- UT - PUBLIC UTILITY
- CON - CONSERVANCY
- FW - FLOODWAY
- A1 - AGRICULTURAL
- EA - EXCLUSIVE AG
- City Limits
- SUBJECT PROPERTY

0 130 260 520 Feet

City of La Crosse Planning Department - 2026

PC 26-0144

BASIC ZONING DISTRICTS

- R1 - SINGLE FAMILY
- R2 - RESIDENCE
- WR - WASHBURN RES
- R3 - SPECIAL RESIDENCE
- R4 - LOW DENSITY MULTI
- R5 - MULTIPLE DWELLING
- R6 - SPECIAL MULTIPLE
- PD- PLANNED DEVELOP
- TND - TRAD NEIGH DEV.
- C1 - LOCAL BUSINESS
- C2 - COMMERCIAL
- C3 - COMMUNITY BUSINESS
- M1 - LIGHT INDUSTRIAL
- M2 - HEAVY INDUSTRIAL
- PS - PUBLIC & SEMI-PUBLIC
- PL - PARKING LOT
- UT - PUBLIC UTILITY
- CON - CONSERVANCY
- FW - FLOODWAY
- A1 - AGRICULTURAL
- EA - EXCLUSIVE AG
- City Limits
- SUBJECT PROPERTY

0 130 260 520 Feet

City of La Crosse Planning Department - 2026

PC 26-0144 20

City of La Crosse, Wisconsin

City Hall
400 La Crosse Street
La Crosse, WI 54601

Text File

File Number: 26-0204

Agenda Date: 4/2/2026 **Version:** 1 **Status:** New Business

In Control: Finance & Personnel Committee **File Type:** Resolution

Agenda Number: 3.

Resolution dedicating City property, Lot 42 of Sexauer's Addition, to the public for right-of-way purposes and approving request from Badger Corrugating Company to vacate a portion thereof.

RESOLUTION

WHEREAS, the statutory dedication of Lot 42 to the public for right-of-way purposes has not occurred; and

WHEREAS, the City of La Crosse acquired ownership of Lot 42 in 1940 and soon thereafter the public made use of said lot as a street; and

WHEREAS, the City of La Crosse constructed street improvements on Lot 42 in 1978 and continues to maintain those improvements; and

WHEREAS, Badger Corrugating Company had requested the City of La Crosse vacate a nine (9) foot wide strip along the west side of the 1800 block of 13th Street South, the intent being for said strip to extend North through Lot 42; and

WHEREAS, the Common Council of the City of La Crosse approved said vacation request in Resolution 2025-12-018 and it is in the interest of public convenience, health, safety, and general welfare, to extend said vacation North to complete the intent of the original request; and

WHEREAS, the public interest requires the dedication and partial vacation of certain streets within the corporate limits of the City of La Crosse and such dedication and partial vacation should be done as expeditiously as possible.

NOW, THEREFORE, BE IT RESOLVED, by the Common Council, City of La Crosse that it hereby declares that the public interest requires Lot 42 of Sexauer's Addition be dedicated to the public for right-of-way purposes as described by the legal description and map attached as Exhibit "A."

BE IT FURTHER RESOLVED that a portion of the land dedicated as described above is hereby ordered vacated per the request of Badger Corrugating Company and as described by the legal description and map attached as Exhibit "B", subject, however, to any and all reservations for any and all public and private utilities.

BE IT FURTHER RESOLVED the Board of Public Works and staff are authorized to take all steps necessary to effectuate this resolution.

Abutting Properties (of area to be vacated):

Tax Parcel	Owner Name	Property Address	Mailing Address	City State Zip
17-50003-100	CITY OF LACROSSE	1301 HYDE AVE	400 LA CROSSE ST	LA CROSSE WI 54601
17-50266-10	BADGER CORRUGATING CORP	1211 & 1219 TRAVIS ST 1801, 1809, 1811 WEST AVE S	1801 WEST AVE S	LA CROSSE WI 54601-6239

CITY OF LA CROSSE

400 La Crosse Street
La Crosse, Wisconsin 54601
(608) 789-CITY
www.cityoflacrosse.org

LEGISLATION STAFF REPORT FOR COUNCIL

File ID 26-0204

Caption Resolution dedicating City property, Lot 42 of Sexauer's Addition, to the public for right-of-way purposes and approving request from Badger Corrugating Company to vacate a portion thereof.

Staff/Department Responsible for Legislation

City Surveyor/Engineering

Requestor of Legislation

City Surveyor & Badger Corrugating Company

Location, if applicable

13th Street South, north of Hyde Avenue (Lot 42)

Summary/Purpose

The purpose of this legislation is to formerly dedicate City owned land, historically used as a street, to the public. It is also the purpose of this legislation to vacate a portion thereof, extending/completing the intent of the Council approved request from Badger Corrugating Company to partially vacate 13th Street South (Resolution 2025-12-018).

Background

The City acquired Lot 42 of Sexauer's Addition in 1940 with the lot being used as a street soon thereafter. The City constructed curb and pavement in the late 1970's on the lot and has continued to maintain those improvements. However, the lot was never officially dedicated to the public for right-of-way purposes.

Badger Corrugating Company requested and the Council approved the partial vacation of 13th Street South in December, 2025. The intent of this request was for the partial vacation to extend northerly through Lot 42 but, was not accomplished as Lot 42 was not public right-of-way.

Fiscal Impact

Nominal increase in tax revenue.

Staff Recommendation

Approval.

Exhibit "A"

Legal Description

for

Dedication of 13th Street Right-of-Way

Lot 42 of Sexauer's Addition to the City of La Crosse located in the Southwest Quarter of the Northeast Quarter, Section 8, Township 15 North, Range 7 West, La Crosse County, Wisconsin.

See attached map.

Drafted by: KJC, 02/2026

Checked by: JMC, 02/2026

EXHIBIT "A" MAP

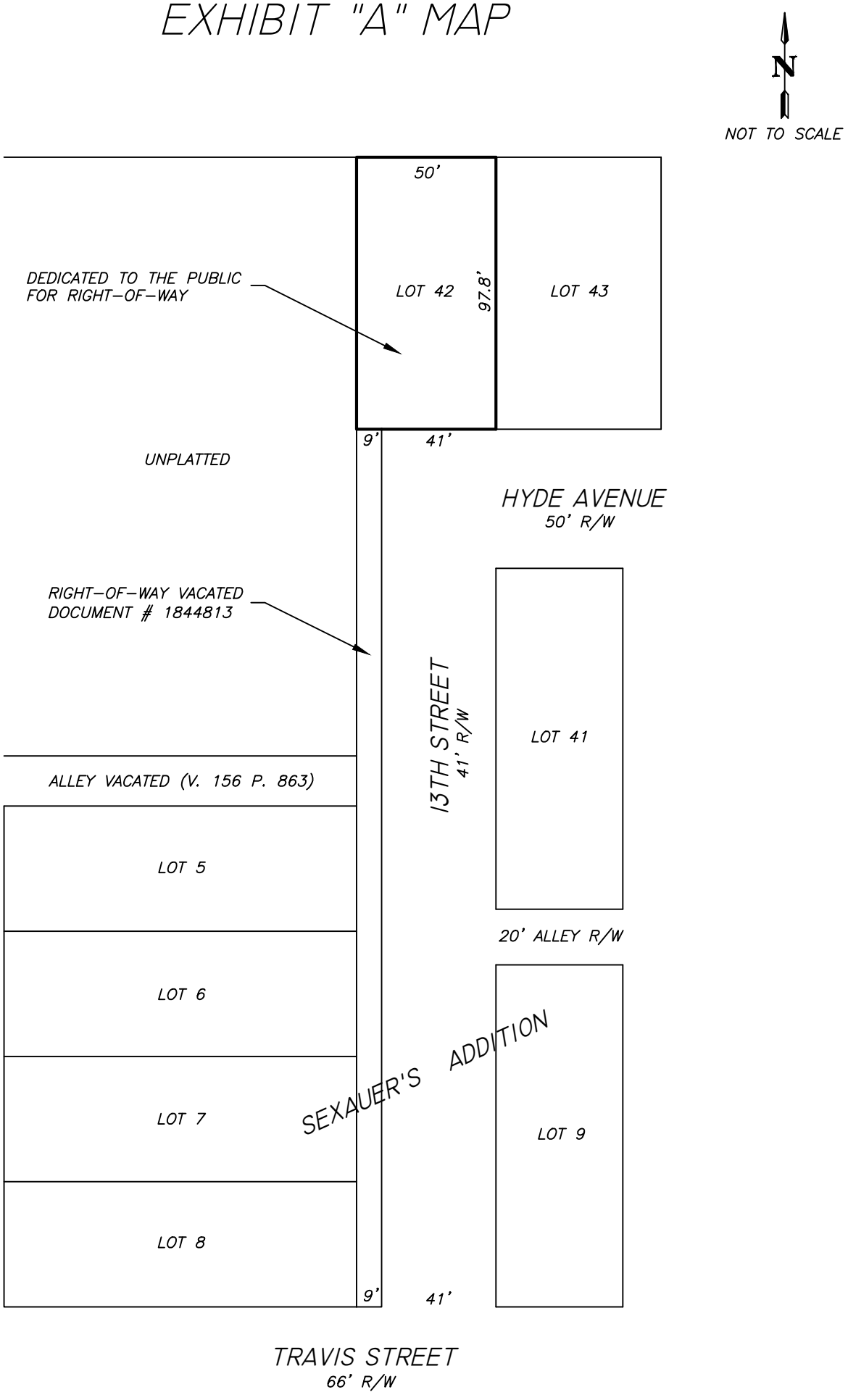


Exhibit "B"

Legal Description

for

Partial Vacation of 13th Street

That part of Sexauer's Addition to the City of La Crosse located in the Southwest Quarter of the Northeast Quarter, Section 8, Township 15 North, Range 7 West, La Crosse County, Wisconsin described as follows:

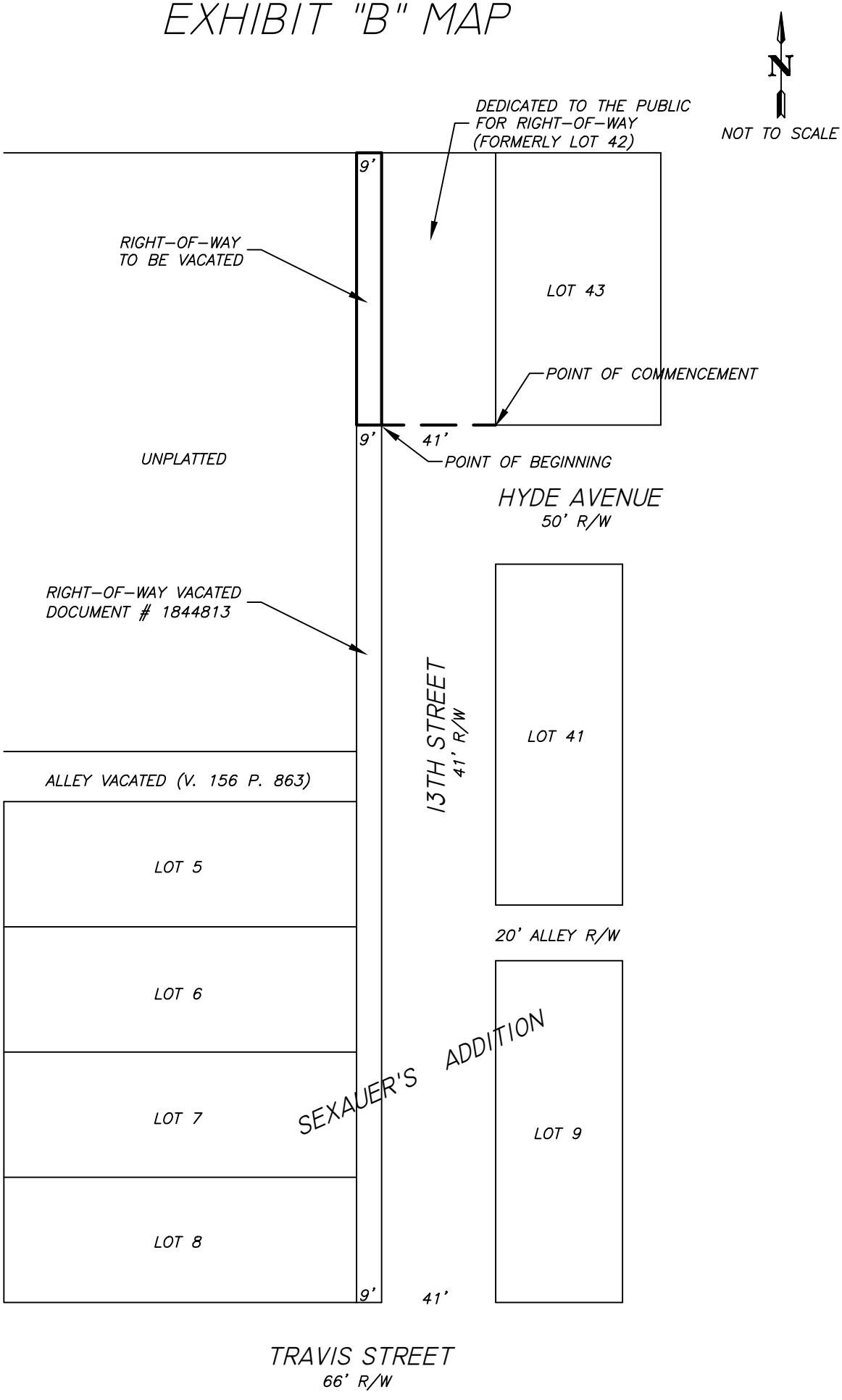
Commencing at the southwest corner of Lot 43 of Sexauer's Addition; thence westerly along the north right-of-way line of Hyde Avenue a distance of 41.00 feet to the northeast corner of that part of 13th Street vacated in Document Number 1844813 and the point of beginning; thence westerly continuing along said north right-of-way line a distance of 9.00 feet to the northwest corner of that part of 13th Street vacated in said document and the west line of Sexauer's Addition; thence northerly along said west line to the north line of Sexauer's Addition; thence easterly along said north line a distance of 9.00 feet; thence southerly parallel with the east right-of-way line of 13th Street to the point of beginning.

See attached map.

Drafted by: KJC, 02/2026

Checked by: JMC, 02/2026

EXHIBIT "B" MAP



Tax Parcel	OwnerName	Property Address	Mailing Address	MailCityStateZip	Parcel Abutting Area to be vacated Needs Service	Notice Mailed for Non-abutting property
		1211 & 1219 TRAVIS ST				
17-50266-10	BADGER CORRUGATING CORP	1801, 1809, 1811 WEST AVE S	1801 WEST AVE S	LA CROSSE WI 54601-6239	Abutting - service required	X
17-50003-80	BRIAN L PETERSON	1306 HYDE AVE	1306 HYDE AVE	LA CROSSE WI 54601	Not abutting	YES
17-50003-100	CITY OF LACROSSE	1301 HYDE AVE	400 LA CROSSE ST	LA CROSSE WI 54601	Abutting - service on self not required	X
17-50003-90	DANIEL A GABEL, SARAH A GABEL	1302 HYDE AVE	1302 HYDE AVE	LA CROSSE WI 54601-6363	Not abutting	YES
17-50003-60	DAVID D CHRISTIANSON, BARBARA A CHRISTIANSON	1316 HYDE AVE	1316 HYDE AVE	LA CROSSE WI 54601-6363	Not abutting	YES
17-50003-140	DORI L WALSH (LE), DORI L WALSH LIVING TRUST	1319 HYDE AVE	1319 HYDE AVE	LA CROSSE WI 54601	Not abutting	YES
17-30041-40	ELIZABETH BRAGUE	1235 GREEN BAY ST	1235 GREEN BAY ST	LA CROSSE WI 54601-6265	Not abutting	YES
17-50003-110	ELLEN S BERG	1303 HYDE AVE	1303 HYDE AVE	LA CROSSE WI 54601-6347	Not abutting	YES
17-50265-60	GREEN BAY STREET PROPERTIES LLC	1300 GREEN BAY ST	1801 WEST AVE S	LA CROSSE WI 54601	Not abutting	YES
17-50004-10	GREGORY J PRETASKY	1325 HYDE AVE	1325 HYDE AVE	LA CROSSE WI 54601-6347	Not abutting	YES
17-30041-30	J&L REAL ESTATE LLC	1231 & 1233 GREEN BAY ST	PO BOX 355	COON VALLEY WI 54623	Not abutting	YES
17-50003-40	JADE A MILLER, MITCHELL G THIES	1324 HYDE AVE	1324 HYDE AVE	LA CROSSE WI 54601-6363	Not abutting	YES
17-50003-130	JENNY JOLLY	1311 HYDE AVE	1311 HYDE AVE	LA CROSSE WI 54601-6347	Not abutting	YES
	LANOGA CORPORATION					
17-50600-10	C/O 1701 WEST LLC	1701 WEST AVE S	PO BOX 1621	LA CROSSE WI 54602-1621	Not abutting	YES
17-50003-50	LEE H GROSSKREUTZ, ROSEMARY I GROSSKREUTZ	1320 HYDE AVE	1320 HYDE AVE	LA CROSSE WI 54601-6363	Not abutting	YES
17-50001-70	LINDA J BIRKLE	1311 TRAVIS ST	1311 TRAVIS ST	LA CROSSE WI 54601	Not abutting	YES
17-50001-80	MADELINE M BERGER, DREW D BERGER	1315 TRAVIS ST	1315 TRAVIS ST	LA CROSSE WI 54601-6343	Not abutting	YES
17-50003-120	MATTHEW WILTGEN, KYLIE WILTGEN	1307 HYDE AVE	1307 HYDE AVE	LA CROSSE WI 54601-6347	Not abutting	YES
17-50001-90	MICHAEL J CADE	1319 TRAVIS ST	1319 TRAVIS ST	LA CROSSE WI 54601	Not abutting	YES
17-30041-10	MICHAEL T MYSLIWIEC	1223 GREEN BAY ST	1223 GREEN BAY ST	LA CROSSE WI 54601-6265	Not abutting	YES
17-30040-140	PAULA J OCONNOR	1215 GREEN BAY ST	1215 GREEN BAY ST	LA CROSSE WI 54601-6265	Not abutting	YES
17-30041-50	PAULO PIRES	1241 & 1243 GREEN BAY ST	411 FALLS RD STE 100	GRAFTON WI 53024	Not abutting	YES
17-30041-20	PREFERRED PROPERTIES LLC	1225 & 1227 GREEN BAY ST	1400 PINE ST	LA CROSSE WI 54601	Not abutting	YES
17-50001-50	ROBERT P DAYTON	1301 TRAVIS ST	1301 TRAVIS ST	LA CROSSE WI 54601	Not abutting	YES
17-50001-10	SCOTT M MCLEES, JAN L MCLEES	1833 WEST AVE S	1833 WEST AVE S	LA CROSSE WI 54601-6239	Not abutting	YES
17-50001-60	TYLER J DERKS	1307 TRAVIS ST	1307 TRAVIS ST	LA CROSSE WI 54601	Not abutting	YES
17-30041-60	VANG HOUA THAO, SENGYA YANG	1245 GREEN BAY ST	1245 GREEN BAY ST	LA CROSSE WI 54601-6265	Not abutting	YES
17-50003-70	VITOMIR DROBNJAKOVIC, DANIELLE D MCBRIDE	1310 HYDE AVE	1310 HYDE AVE	LA CROSSE WI 54601-6363	Not abutting	YES

Properties above are within 300 feet of area to be vacated on 13th Street.

Area requested to be vacated shown as

DocId:8545950
Tx:4216180

1845349
LACROSSE COUNTY
REGISTER OF DEEDS
ROBIN L. KADRMAS

RECORDED ON
02/24/2026 10:25 AM
PAGE COUNT: 6
EXEMPT #:
RECORDING FEE 30.00

This space is reserved for recording data

Return to

City Clerk
400 La Crosse St
La Crosse WI 54601

Parcel Identification Number/Tax Key Number

In the Matter of the Resolution dedicating City property, Lot 42 of Sexauer's Addition, to the public for right-of-way purposes and approving request from Badger Corrugating Company to vacate a portion thereof.

LIS PENDENS

NOTICE IS HERBY GIVEN that a resolution has been introduced to the Common Council to be acted upon by such Common Council, which said action has been taken at the initiative of the Common Council of the City of La Crosse, wherein the following property, to-wit:

LEGAL DESCRIPTION ATTACHED

and shown on the maps attached hereto as Exhibit "A" and Exhibit "B" showing the location thereof, is sought to be vacated.

Dated this 24th day of February 2026.

CITY OF LA CROSSE

By: Stephen F. Matty
Stephen F. Matty
City Attorney

Drafted by:

City Attorney's Office
400 La Crosse Street
La Crosse WI 54601
(608) 789-7511

Resolution dedicating City property, Lot 42 of Sexauer's Addition, to the public for right-of-way purposes and approving request from Badger Corrugating Company to vacate a portion thereof.

RESOLUTION

WHEREAS, the statutory dedication of Lot 42 to the public for right-of-way purposes has not occurred; and

WHEREAS, the City of La Crosse acquired ownership of Lot 42 in 1940 and soon thereafter the public made use of said lot as a street; and

WHEREAS, the City of La Crosse constructed street improvements on Lot 42 in 1978 and continues to maintain those improvements; and

WHEREAS, Badger Corrugating Company had requested the City of La Crosse vacate a nine (9) foot wide strip along the west side of the 1800 block of 13th Street South, the intent being for said strip to extend North through Lot 42; and

WHEREAS, the Common Council of the City of La Crosse approved said vacation request in Resolution 2025-12-018 and it is in the interest of public convenience, health, safety, and general welfare, to extend said vacation North to complete the intent of the original request; and

WHEREAS, the public interest requires the dedication and partial vacation of certain streets within the corporate limits of the City of La Crosse and such dedication and partial vacation should be done as expeditiously as possible.

NOW, THEREFORE, BE IT RESOLVED, by the Common Council, City of La Crosse that it hereby declares that the public interest requires Lot 42 of Sexauer's Addition be dedicated to the public for right-of-way purposes as described by the legal description and map attached as Exhibit "A."

BE IT FURTHER RESOLVED that a portion of the land dedicated as described above is hereby ordered vacated per the request of Badger Corrugating Company and as described by the legal description and map attached as Exhibit "B", subject, however, to any and all reservations for any and all public and private utilities.

BE IT FURTHER RESOLVED the Board of Public Works and staff are authorized to take all steps necessary to effectuate this resolution.

Abutting Properties:

Tax Parcel	Owner Name	Property Address	Mailing Address	City State Zip
17-50003-100	CITY OF LACROSSE	1301 HYDE AVE	400 LA CROSSE ST	LA CROSSE WI 54601
17-50266-10	BADGER CORRUGATING CORP	1211 & 1219 TRAVIS ST 1801, 1809, 1811 WEST AVE S	1801 WEST AVE S	LA CROSSE WI 54601-6239

EXHIBIT "A" MAP

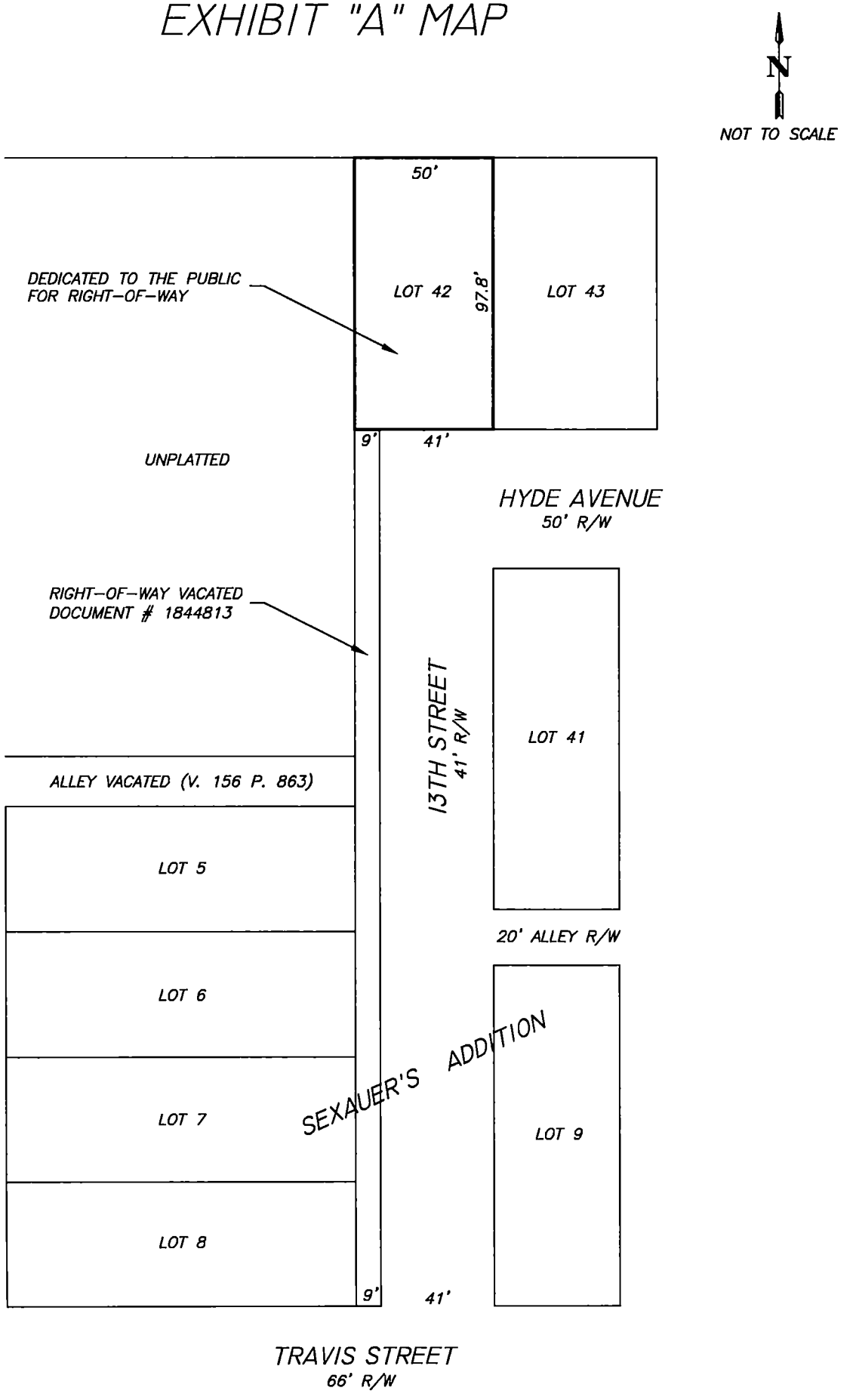


Exhibit "A"

Legal Description

for

Dedication of 13th Street Right-of-Way

Lot 42 of Sexauer's Addition to the City of La Crosse located in the Southwest Quarter of the Northeast Quarter, Section 8, Township 15 North, Range 7 West, La Crosse County, Wisconsin.

See attached map.

Drafted by: KJC, 02/2026

Checked by: JMC, 02/2026

Exhibit "B"

Legal Description

for

Partial Vacation of 13th Street

That part of Sexauer's Addition to the City of La Crosse located in the Southwest Quarter of the Northeast Quarter, Section 8, Township 15 North, Range 7 West, La Crosse County, Wisconsin described as follows:

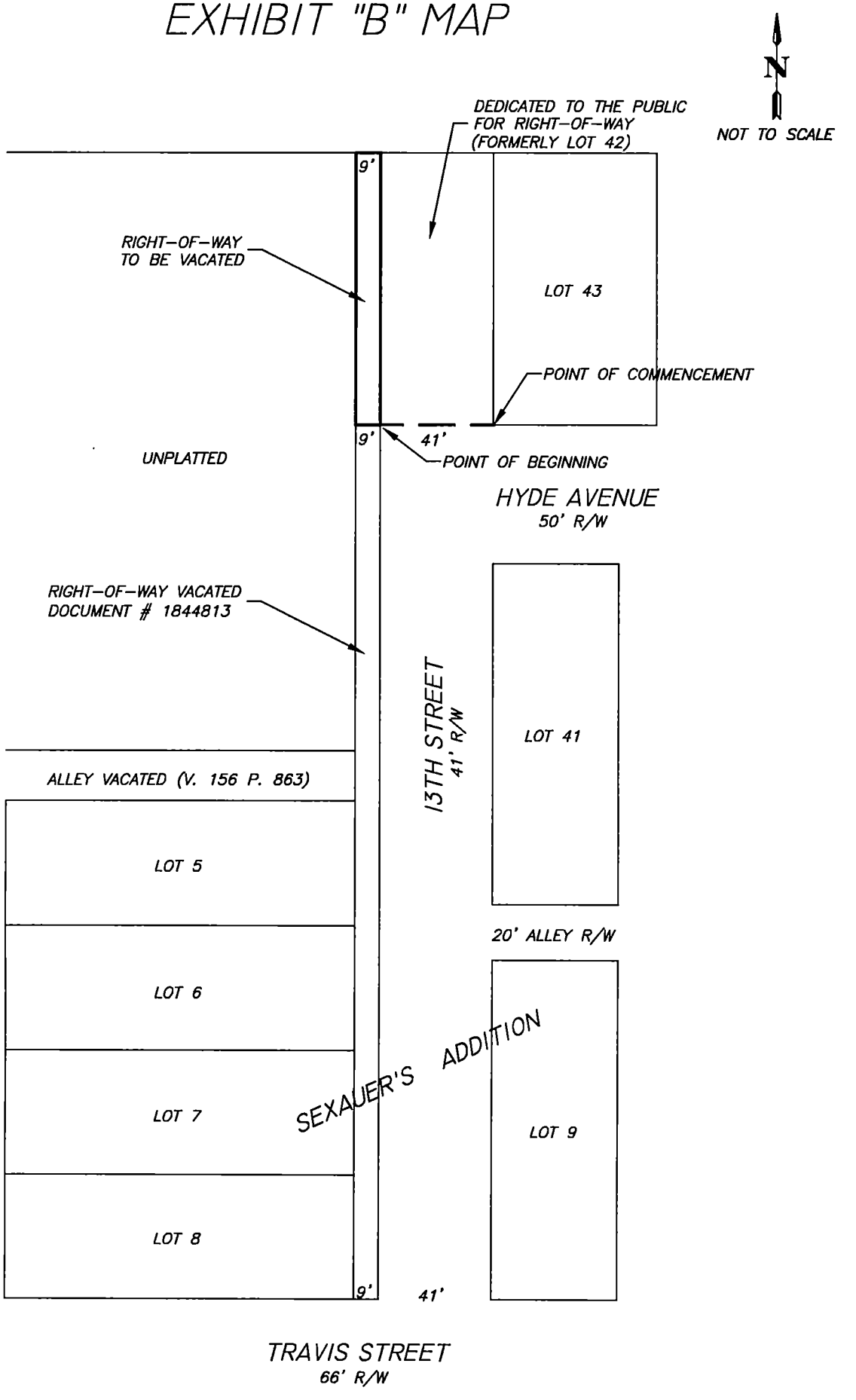
Commencing at the southwest corner of Lot 43 of Sexauer's Addition; thence westerly along the north right-of-way line of Hyde Avenue a distance of 41.00 feet to the northeast corner of that part of 13th Street vacated in Document Number 1844813 and the point of beginning; thence westerly continuing along said north right-of-way line a distance of 9.00 feet to the northwest corner of that part of 13th Street vacated in said document and the west line of Sexauer's Addition; thence northerly along said west line to the north line of Sexauer's Addition; thence easterly along said north line a distance of 9.00 feet; thence southerly parallel with the east right-of-way line of 13th Street to the point of beginning.

See attached map.

Drafted by: KJC, 02/2026

Checked by: JMC, 02/2026

EXHIBIT "B" MAP



NOTICE OF HEARING TO VACATE A PORTION OF STREET

YOU ARE HEREBY NOTIFIED that a Resolution is pending before the Common Council of the City of La Crosse, that includes the partial vacation of the following described portion of street, to-wit:

That part of Sexauer's Addition to the City of La Crosse located in the Southwest Quarter of the Northeast Quarter, Section 8, Township 15 North, Range 7 West, La Crosse County, Wisconsin described as follows:

Commencing at the southwest corner of Lot 43 of Sexauer's Addition; thence westerly along the north right-of-way line of Hyde Avenue a distance of 41.00 feet to the northeast corner of that part of 13th Street vacated in Document Number 1844813 and the point of beginning; thence westerly continuing along said north right-of-way line a distance of 9.00 feet to the northwest corner of that part of 13th Street vacated in said document and the west line of Sexauer's Addition; thence northerly along said west line to the north line of Sexauer's Addition; thence easterly along said north line a distance of 9.00 feet; thence southerly parallel with the east right-of-way line of 13th Street to the point of beginning.

YOU ARE FURTHER NOTIFIED THAT a public hearing thereon will be held before the Finance and Personnel Committee of the Common Council on April 2, 2026 at 6:00 p.m. in the Council Chambers of City Hall, 400 La Crosse St. La Crosse St., at which time any and all may be heard for or against the vacation of said street.

Such matter will also be acted upon by the City Plan Commission at 4:00 p.m. on March 30, 2026 (public speaking is allowed), and by the Common Council on April 9, 2026 at 6:00 p.m., both meetings will take place in the Council Chambers at City Hall, 400 La Crosse St.

If you wish to attend any of the above meetings through video conferencing, please contact the City Clerk's Office at 608-789-7510 or email cityclerk@cityoflacrosse.org for more information.

The above referenced Resolution and relevant attachments may be examined in the Legislative Information Center which can be accessed from the City website at www.cityoflacrosse.org (search for file 26-0204).

Dated this 25th day of February, 2026.

Per Order of the Common Council
Nikki Elsen
City Clerk of the City of
La Crosse, Wisconsin

- -

Published in the La Crosse Tribune on March 12, 19, & 26, 2026
One (1) Affidavit

February 25, 2026

OFFICE OF THE SECRETARY
WISCONSIN DEPARTMENT OF TRANSPORTATION
PO BOX 7910
MADISON, WI 53707-7910

Re: Resolution dedicating City property, Lot 42 of Sexauer's Addition, to the public for right-of-way purposes and approving request from Badger Corrugating Company to vacate a portion thereof.

Enclosed herewith is a copy of the above resolution and notice of hearing when and where the resolution will be acted upon.

This notice is provided pursuant to Wis. Stat., sec. 66.1003(8), since the public way or alley that is the subject of the resolution is located within one-quarter mile of a state trunk highway or connecting highway.

Sincerely,

Sondra Craig

Sondra Craig, Deputy Clerk
craigs@cityoflacrosse.org
608-789-7549

Enclosures

Office of City Clerk

February 25, 2026

La Crosse Police Department
Attn: Civil Process
City Hall
400 La Crosse St
La Crosse WI 54601

Re: Resolution dedicating City property, Lot 42 of Sexauer's Addition, to the public for right-of-way purposes and approving request from Badger Corrugating Company to vacate a portion thereof.

- See attached Exhibit A for legal descriptions and map of area to be dedicated as right-of-way.
- See attached Exhibit B for legal descriptions and map of area to be vacated.

Shift Commander:

Enclosed you will find copies of a Notice of Hearing to Vacate a Portion of Street for service upon the following:

OwnerName	Address	City State Zip
BADGER CORRUGATING CORP	1801 WEST AVE S	LA CROSSE WI 54601-6239

Please be advised that service needs to be made no later than Tuesday, March 3, 2026.

The extra copy is for the officer serving the notice to return with the Affidavit of Personal Service. One affidavit needs to be filled out for each notice served. The affidavits **must be signed by the officer in front of a notary.**

Please let me know if you have any questions.

Regards,

Sondra Craig

Sondra Craig, Deputy Clerk
craigs@cityoflacrosse.org
608-789-7549

LA CROSSE Tribune

AFFIDAVIT OF PUBLICATION

Lacrosse Tribune
1407 St. Andrew St., La Crosse, WI 54603
(866) 735-5631

Retain this portion for your records. Please do not remit payment until you receive your advertising invoice.

State of Florida, County of Broward, ss:

Anjana Bhadoriya, being first duly sworn, deposes and says: That (s)he is a duly authorized signatory of Column Software, PBC and duly authorized agent of Lee Enterprises, publishers of Lacrosse Tribune, a newspaper at, La Crosse, for county of La Crosse, in the state of Wisconsin, and that an advertisement of which the annexed is a true copy, taken from said paper, was published, therein on the dates listed below.

PUBLICATION DATES:
March. 12 2026, March. 19 2026, March. 26 2026

NOTICE ID: z4AifRx3Ci3xCOCwc6zn
PUBLISHER ID: COL-WI-102075
NOTICE NAME: 13th St. - ROW Dedication & Partial Vacation
Publication Fee: $243.54

Section: Legals
Category: 0001 Wisconsin Legals

Anjana Bhadoriya

(Signed)_____

VERIFICATION

State of Florida
County of Broward

SHERI SMITH
Notary Public - State of Florida
Commission # HH269383
Expires on May 31, 2026

Subscribed in my presence and sworn to before me on this: 03/26/2026

S Smith

Notary Public
Notarized remotely online using communication technology via Proof.

NOTICE OF HEARING TO VACATE A PORTION OF STREET

YOU ARE HEREBY NOTIFIED that a Resolution is pending before the Common Council of the City of La Crosse, that includes the partial vacation of the following described portion of street, to-wit:

That part of Sexauer's Addition to the City of La Crosse located in the Southwest Quarter of the Northeast Quarter, Section 8, Township 15 North, Range 7 West, La Crosse County, Wisconsin described as follows:

Commencing at the southwest corner of Lot 43 of Sexauer's Addition; thence westerly along the north right-of-way line of Hyde Avenue a distance of 41.00 feet to the northeast corner of that part of 13th Street vacated in Document Number 1844813 and the point of beginning; thence westerly continuing along said north right-of-way line a distance of 9.00 feet to the northwest corner of that part of 13th Street vacated in said document and the west line of Sexauer's Addition; thence northerly along said west line to the north line of Sexauer's Addition; thence easterly along said north line a distance of 9.00 feet; thence southerly parallel with the east right-of-way line of 13th Street to the point of beginning.

YOU ARE FURTHER NOTIFIED THAT a public hearing thereon will be held before the Finance and Personnel Committee of the Common Council on April 2, 2026 at 6:00 p.m. in the Council Chambers of City Hall, 400 La Crosse St. La Crosse St., at which time any and all may be heard for or against the vacation of said street.

Such matter will also be acted upon by the City Plan Commission at 4:00 p.m. on March 30, 2026 (public speaking is allowed), and by the Common Council on April 9, 2026 at 6:00 p.m., both meetings will take place in the Council Chambers at City Hall, 400 La Crosse St.

If you wish to attend any of the above meetings through video conferencing, please contact the City Clerk's Office at 608-789-7510 or email cityclerk@cityoflacrosse.org for more information .

The above referenced Resolution and relevant attachments may be examined in the Legislative Information Center which can be accessed from the City website at www.cityoflacrosse.org (search for file 26-0204) .

Dated this 25th day of February, 2026.

Per Order of the Common Council
Nikki Elsen
City Clerk of the City of
La Crosse, Wisconsin
3/12, 3/19, 3/26 LAC
COL-WI-102075 WNAXLP

Agenda Item 26-0204 (Tim Acklin)

Resolution dedicating City property, Lot 42 of Sexauer's Addition, to the public for right-of-way purposes and approving request from Badger Corrugating Company to vacate a portion thereof.

General Location

Council District 10, located along the western portion of 13th Street S between Hyde Ave and Travis Street as depicted on attached MAP 26-0204. Adjacent uses include single-family homes to the east, single-family homes and light industrial to the south, Badger Corrugating to the west and north.

Background Information

As part of the redevelopment of their campus Badger Corrugating requested to vacate the western 9ft of 13th Street S between Hyde Ave and Travis Street, which was approved by the Common Council at their December 2025 meeting. The applicant had a Street Privilege Permit to use this portion of the street for approximately 25 employee parking spaces but wanted to have it vacated so it could be permanently incorporated into their parcel.

This subject Resolution is administrative in nature. It finalizes the portion of the vacation that was city owned land by identifying what will be vacated and formerly dedicating City owned land as public right -of-way (street) as it had not been done prior.

See attached plans and information for more information.

Recommendation of Other Boards and Commissions

The Common Council approved the vacation at their December 2025 meeting.

It will be reviewed by the Board of Public Works at their March 30, 2026, meeting.

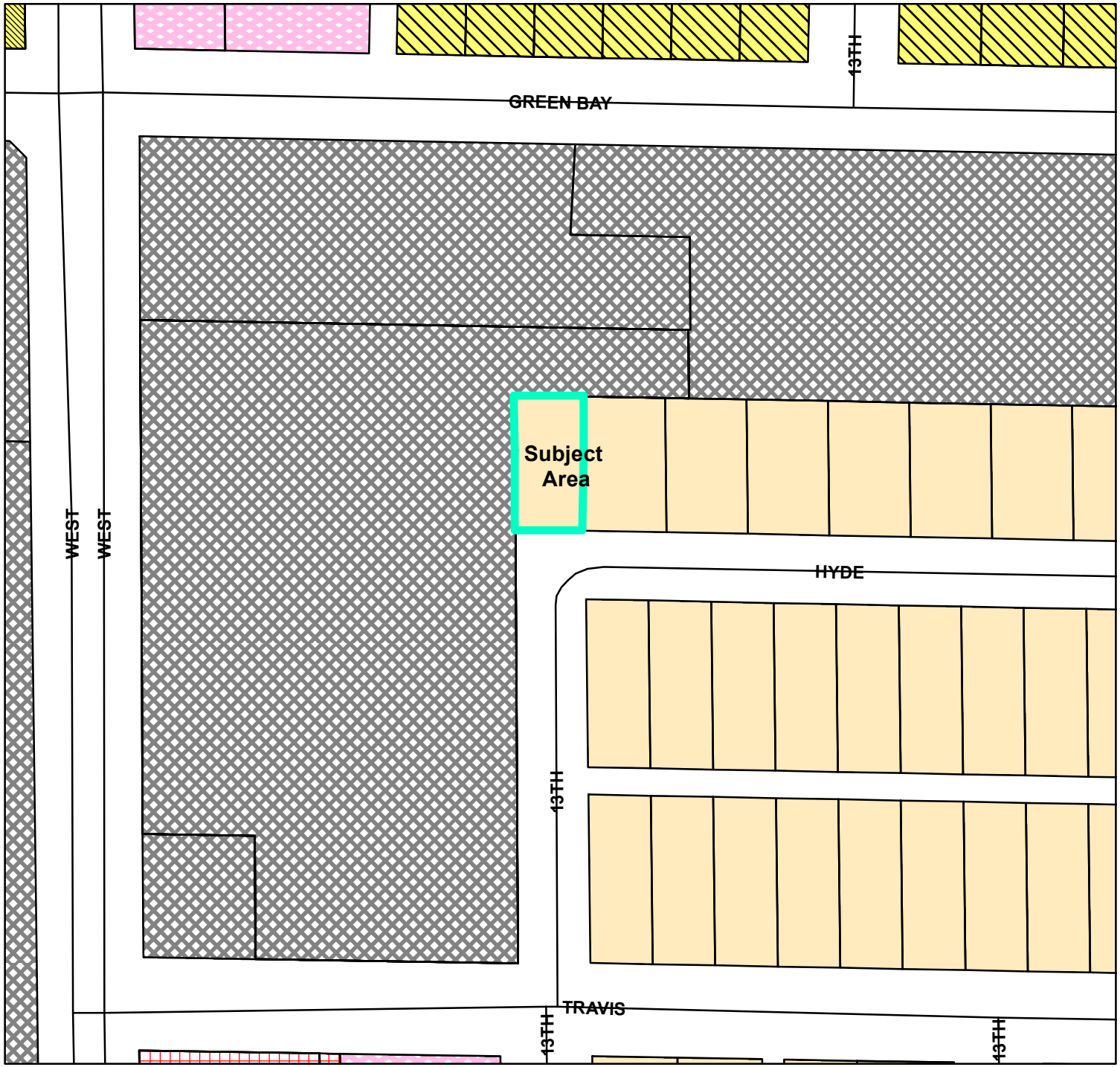
Consistency with Adopted Comprehensive Plan

The Comprehensive Plan does not specifically address ROW vacations. However, improving opportunities and pathways for our employers to operate and grow is a major goal in the Comprehensive Plan.

Staff Recommendation

This item is recommended for approval.

Routing F&P 4.02.26



BASIC ZONING DISTRICTS

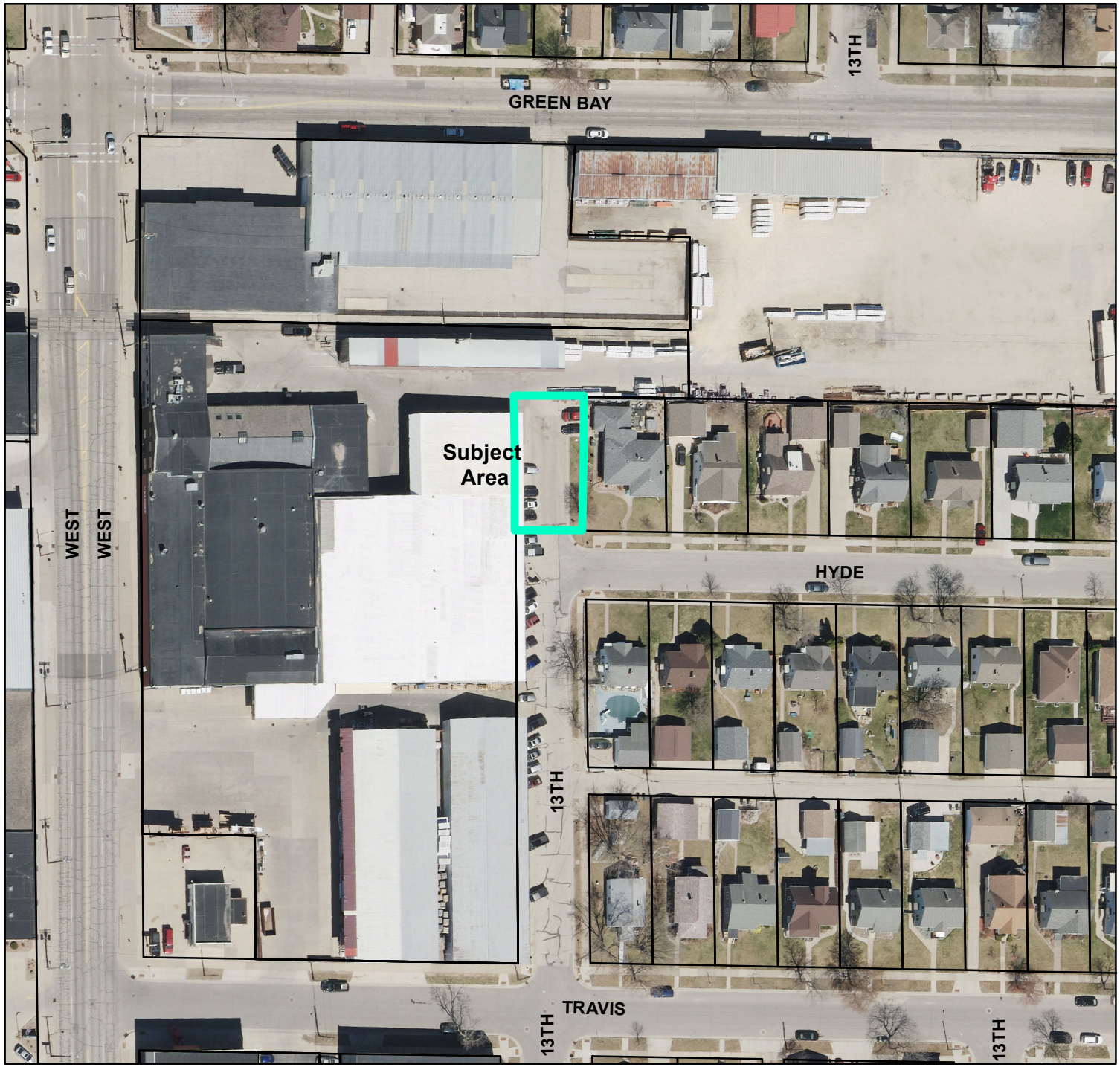
- R1 - SINGLE FAMILY
- R2 - RESIDENCE
- WR - WASHBURN RES
- R3 - SPECIAL RESIDENCE
- R4 - LOW DENSITY MULTI
- R5 - MULTIPLE DWELLING
- R6 - SPECIAL MULTIPLE
- PD- PLANNED DEVELOP
- TND - TRAD NEIGH DEV.
- C1 - LOCAL BUSINESS
- C2 - COMMERCIAL
- C3 - COMMUNITY BUSINESS
- M1 - LIGHT INDUSTRIAL
- M2 - HEAVY INDUSTRIAL
- PS - PUBLIC & SEMI-PUBLIC
- PL - PARKING LOT
- UT - PUBLIC UTILITY
- CON - CONSERVANCY
- FW - FLOODWAY
- A1 - AGRICULTURAL
- EA - EXCLUSIVE AG
- City Limits
- SUBJECT PROPERTY

N W E S

0 50 100 200 Feet

City of La Crosse Planning Department - 2026

PC 26-0204 41



BASIC ZONING DISTRICTS

- R1 - SINGLE FAMILY
- R2 - RESIDENCE
- WR - WASHBURN RES
- R3 - SPECIAL RESIDENCE
- R4 - LOW DENSITY MULTI
- R5 - MULTIPLE DWELLING
- R6 - SPECIAL MULTIPLE
- PD- PLANNED DEVELOP
- TND - TRAD NEIGH DEV.
- C1 - LOCAL BUSINESS
- C2 - COMMERCIAL
- C3 - COMMUNITY BUSINESS
- M1 - LIGHT INDUSTRIAL
- M2 - HEAVY INDUSTRIAL
- PS - PUBLIC & SEMI-PUBLIC
- PL - PARKING LOT
- UT - PUBLIC UTILITY
- CON - CONSERVANCY
- FW - FLOODWAY
- A1 - AGRICULTURAL
- EA - EXCLUSIVE AG
- City Limits
- SUBJECT PROPERTY

0 50 100 200 Feet

City of La Crosse Planning Department - 2026

City of La Crosse, Wisconsin

City Hall
400 La Crosse Street
La Crosse, WI 54601

Text File

File Number: 26-0254

Agenda Date: 3/31/2026 **Version:** 1 **Status:** New Business

In Control: Judiciary & Administration Committee **File Type:** Plat/Certified Survey Map

Agenda Number: 4.

OFFICE OF
CITY ENGINEER
CITY HALL
400 LA CROSSE ST
LA CROSSE WI 54601-3396
(608) 789-7505

FEATHERSTONE RISE
PRE-PLAT SUBMITTALS
EXTRA-TERRITOCIAL

(PRELIMINARY AND FINAL) PLAT SUBMITTAL CHECK LIST

To be completed by Engineering before filing with the City Clerk

(Note: More than one checklist item may be on a sheet of paper)

1. ✓ Preliminary Plat (Face Plat)
2. ✓ Survey Plat (Existing Conditions)
3. ✓ Site Plan (Tree, Lighting, Parks)
4. ✓ Grading Plan (Proposed Grades)
5. ✓ Erosion Control Plan
   a. Silt fence
   b. Mats
   c. Tracking Pads
   d. 30 % Slopes (If Necessary)
   e. Rip-Rap
   f. Grades (Proposed/Existing)
6. ✓ Hydrology (Pre/Post), Soils, and Calculations book
   a. Storm water Narrative
7. ✓ Utility Plan
   a. Sanitary
   b. Water
   c. Storm
8. ✓ Plan and Profile
   a. Street
   b. Utility
9. ✓ Structure Details
   a. Erosion Protection
   b. Street
   c. Utilities (If Necessary)
10. ✓ Covenants and Restrictions

KL 3/4/26

To be completed by City Clerk at time of filing:

11. 3/10/2026 Twelve (12) sets; five (5) of those full sets (i.e. site plan, grading plan, erosion control, etc.)
12. n/a Public Site Fee (Due at Final Plat Submittal - $100/lot in lieu of public lands dedication)
    (Applies to all residential projects, including condos; does not apply to commercial plats or commercial condos.)
13. 3/10/2026 Reviewing Fees
    Preliminary $500.00
    Final $200.00
    Reapplication $100.00
    (If filing prelim and final simultaneously, $700.00 is due at filing.)

BEFORE FILING WITH THE CITY, you must have both Town and County approvals. The Plan Commission may not consider any subdivision or land division which did not have prior approval by the approving authorities for both the Town(s) and La Crosse County.

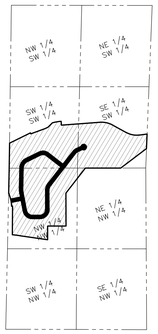
Town Board Approved: 2/17/2026 (Date) La Crosse County Approved: 3/2/2026 (Date)

Rev. 12/2015

PRELIMINARY PLAT OF
FEATHERSTONE RISE

PART OF THE NORTHWEST 1/4 & NORTHEAST 1/4
OF THE NORTHWEST 1/4 OF SECTION 7 AND
PART OF THE SOUTHWEST 1/4 & SOUTHEAST 1/4
OF THE SOUTHWEST 1/4 OF SECTION 6,
ALL IN TOWNSHIP 15 NORTH, RANGE 6 WEST,
TOWN OF SHELBY, LA CROSSE COUNTY, WISCONSIN.

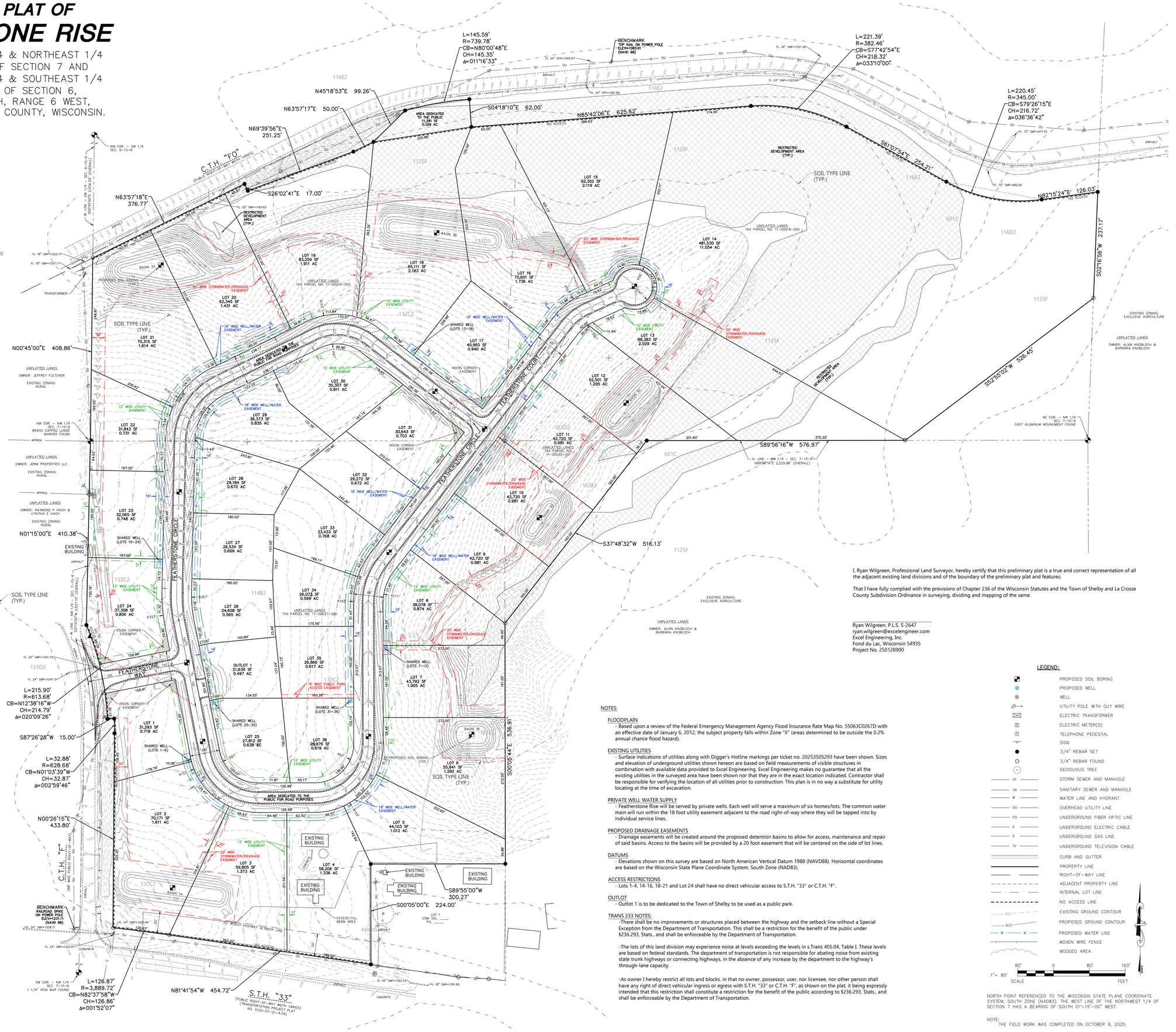
VICINITY MAP
SW 1/4, SECTION 6-15-6
SCALE 1"=1000'



VICINITY MAP
NW 1/4, SECTION 7-15-6
SCALE 1"=1000'

= FEATHERSTONE RISE SUBDIVISION

TOTAL AREA
54.886 ACRES
2,390,834 SQ. FT.



OWNER/DEVELOPER/SUBDIVIDER:
FEATHERSTONE RISE LLC
232 3RD STREET N., SUITE 202
LA CROSSE, WI 54601

ENGINEER & SURVEYOR:
EXCEL ENGINEERING, INC.
100 CAMELOT DRIVE
FOND DU LAC, WI 54935

NOTES:

FLOODPLAIN
- Based upon a review of the Federal Emergency Management Agency Flood Insurance Rate Map No. 55063C0267D with an effective date of January 6, 2012, the subject property falls within Zone "X" (areas determined to be outside the 0.2% annual chance flood hazard).

EXISTING UTILITIES
- Surface indications of utilities along with Digger's Hotline markings per ticket no. 20253505293 have been shown. Sizes and elevation of underground utilities shown hereon are based on field measurements of visible structures in combination with available data provided to Excel Engineering. Excel Engineering makes no guarantee that all the existing utilities in the surveyed area have been shown nor that they are in the exact location indicated. Contractor shall be responsible for verifying the location of all utilities prior to construction. This plan is in no way a substitute for utility locating at the time of excavation.

PRIVATE WELL WATER SUPPLY
- Featherstone Rise will be served by private wells. Each well will serve a maximum of six homes/lots. The common water main will run within the 18 foot utility easement adjacent to the road right-of-way where they will be tapped into by individual service lines.

PROPOSED DRAINAGE EASEMENTS
- Drainage easements will be created around the proposed detention basins to allow for access, maintenance and repair of said basins. Access to the basins will be provided by a 20 foot easement that will be centered on the side of lot lines.

DATUMS
- Elevations shown on this survey are based on North American Vertical Datum 1988 (NAVD88). Horizontal coordinates are based on the Wisconsin State Plane Coordinate System, South Zone (NAD83).

ACCESS RESTRICTIONS
- Lots 1-4, 14-16, 18-21 and Lot 24 shall have no direct vehicular access to S.T.H. "33" or C.T.H. "F".

OUTLOT
- Outlot 1 is to be dedicated to the Town of Shelby to be used as a public park.

TRANS 233 NOTES:
-There shall be no improvements or structures placed between the highway and the setback line without a Special Exception from the Department of Transportation. This shall be a restriction for the benefit of the public under §236.293, Stats., and shall be enforceable by the Department of Transportation.

-The lots of this land division may experience noise at levels exceeding the levels in s.Trans 405.04, Table I. These levels are based on federal standards. The department of transportation is not responsible for abating noise from existing state trunk highways or connecting highways, in the absence of any increase by the department to the highway's through-lane capacity.

-As owner I hereby restrict all lots and blocks, in that no owner, possessor, user, nor licensee, nor other person shall have any right of direct vehicular ingress or egress with S.T.H. "33" or C.T.H. "F", as shown on the plat; it being expressly intended that this restriction shall constitute a restriction for the benefit of the public according to §236.293, Stats., and shall be enforceable by the Department of Transportation.

I, Ryan Wilgreen, Professional Land Surveyor, hereby certify that this preliminary plat is a true and correct representation of all the adjacent existing land divisions and of the boundary of the preliminary plat and features.

That I have fully complied with the provisions of Chapter 236 of the Wisconsin Statutes and the Town of Shelby and La Crosse County Subdivision Ordinance in surveying, dividing and mapping of the same.

Ryan Wilgreen, P.L.S. S-2647
ryan.wilgreen@excelengineer.com
Excel Engineering, Inc.
Fond du Lac, Wisconsin 54935
Project No. 250128900

LEGEND:

- PROPOSED SOIL BORING
- PROPOSED WELL
- WELL
- UTILITY POLE WITH GUY WIRE
- ELECTRIC TRANSFORMER
- ELECTRIC METER(S)
- TELEPHONE PEDESTAL
- SIGN
- 3/4" REBAR SET
- 3/4" REBAR FOUND
- DECIDUOUS TREE
- ST — STORM SEWER AND MANHOLE
- SA — SANITARY SEWER AND MANHOLE
- W — WATER LINE AND HYDRANT
- OU — OVERHEAD UTILITY LINE
- FO — UNDERGROUND FIBER OPTIC LINE
- E — UNDERGROUND ELECTRIC CABLE
- G — UNDERGROUND GAS LINE
- TV — UNDERGROUND TELEVISION CABLE
- CURB AND GUTTER
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- ADJACENT PROPERTY LINE
- INTERNAL LOT LINE
- NO ACCESS LINE
- 800 — EXISTING GROUND CONTOUR
- 800 — PROPOSED GROUND CONTOUR
- W — W — PROPOSED WATER LINE
- WOVEN WIRE FENCE
- WOODED AREA

1" = 80'
80' 0 80' 160'
SCALE FEET

NORTH POINT REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE (NAD83). THE WEST LINE OF THE NORTHWEST 1/4 OF SECTION 7 HAS A BEARING OF SOUTH 01°-15'-00" WEST.

NOTE:
THE FIELD WORK WAS COMPLETED ON OCTOBER 9, 2025.

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PRELIMINARY PLAT
FEATHERSTONE RISE
S.T.H. "33" • LA CROSSE, WI 54601

PROFESSIONAL SEAL

PRELIMINARY DATES
JAN. 9, 2026
JAN. 21, 2026
FEB. 23, 2026

NOT FOR CONSTRUCTION

JOB NUMBER
250128900

SHEET NUMBER
PP

PROPOSED RESIDENTIAL SUBDIVISION

FEATHERSTONE RISE

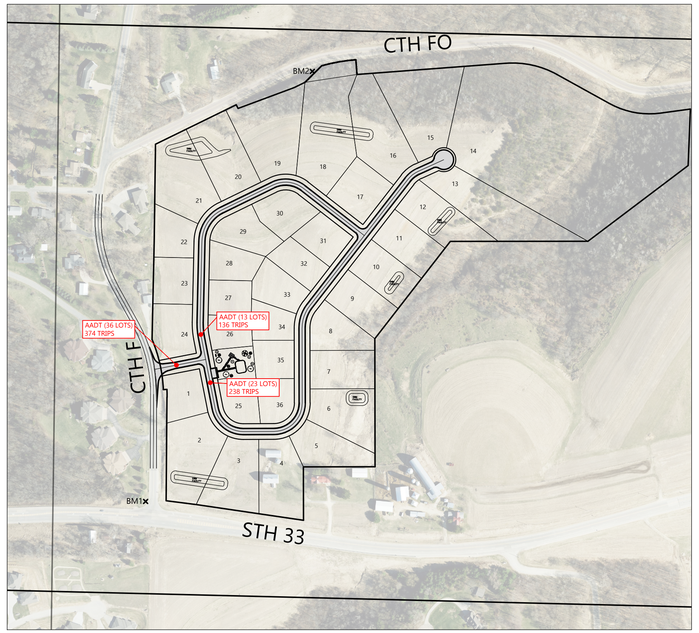
LA CROSSE, WI

SHEET INDEX

SHEETS BELOW INTENDED TO BE PRINTED IN: COLOR. REFER TO DIGITAL FORMAT DRAWINGS IF PRINTED GRAYSCALE TO ENSURE SCOPE CLARITY.

NUMBER	SHEET NAME/DESCRIPTION	PRELIMINARY	ISSUED FOR APPROVAL	ISSUED FOR CONSTRUCTION
	DATE:	JAN. 9, 2025	FEB. 23, 2025	
TITLE SHEET, SPECIFICATIONS, AND DETAILS				
C1.0	CIVIL COVER SHEET	PRELIM	PRELIM	
C2.0	DETAILS	PRELIM	PRELIM	
C2.1	BIOFILTRATION DETAILS	PRELIM	PRELIM	
C2.2	BIOFILTRATION DETAILS	PRELIM	PRELIM	
C2.3	BIOFILTRATION DETAILS	PRELIM	PRELIM	
EXISTING CONDITIONS AND DEMOLITION PLAN				
C3.0	EXISTING SITE AND DEMOLITION PLAN	PRELIM	PRELIM	
MASS GRADING AND EROSION CONTROL				
C4.0	OVERALL MASTER GRADING AND EROSION CONTROL PLAN	PRELIM	PRELIM	
C4.1	SOUTH MASTER GRADING AND EROSION CONTROL PLAN	PRELIM	PRELIM	
C4.2	NORTHWEST MASTER GRADING AND EROSION CONTROL PLAN	PRELIM	PRELIM	
C4.3	NORTHEAST MASTER GRADING AND EROSION CONTROL PLAN	PRELIM	PRELIM	
UTILITY SYSTEM PLAN				
C5.0	SYSTEM PLAN	PRELIM	PRELIM	
C5.1	SOUTH SYSTEM PLAN	PRELIM	PRELIM	
C5.2	NORTHWEST SYSTEM PLAN	PRELIM	PRELIM	
C5.3	NORTHEAST SYSTEM PLAN	PRELIM	PRELIM	
ROAD AND STORM PLAN AND PROFILE				
C6.0	FEATHERSTONE WAY	PRELIM	PRELIM	
C6.1	FEATHERSTONE CIRCLE	PRELIM	PRELIM	
C6.2	FEATHERSTONE CIRCLE	PRELIM	PRELIM	
C6.3	FEATHERSTONE CIRCLE	PRELIM	PRELIM	
C6.4	FEATHERSTONE CIRCLE	PRELIM	PRELIM	
C6.5	FEATHERSTONE COURT	PRELIM	PRELIM	
PARK LAYOUT EXHIBIT				
C7.0	PARK LAYOUT EXHIBIT	PRELIM	PRELIM	

SHEET INDEX LEGEND:
PRELIMINARY SHEET = PRELIM
ISSUED FOR APPROVAL = IFA
ISSUED FOR CONSTRUCTION = ●



NORTH

SUBDIVISION LAYOUT OVERVIEW

SCALE: 1"= 300'

300' 0 300' 600'

LEGEND

NOTE: ALL SYMBOLS SHOWN MAY NOT APPEAR ON DRAWINGS.

SYM.	IDENTIFICATION	SYM.	IDENTIFICATION
SPOT ELEVATIONS			
888.30	PROPOSED SPOT ELEVATIONS	877.37	PROPOSED SPOT ELEVATIONS - INTERSECTION PLANS (FLOW LINE OF CURB UNLESS OTHERWISE SPECIFIED)
893.0 EG	EXISTING GRADE SPOT ELEVATIONS	876.3	INTERMEDIATE GRADE SPOT ELEVATIONS
EXISTING SITE SYMBOLS			
	EXISTING SIGN		EXISTING UTILITY POLE
	EXISTING WATER VALVE IN BOX		EXISTING UTILITY POLE WITH GUY WIRE
	EXISTING WATER VALVE IN MANHOLE		EXISTING STREET LIGHT
	EXISTING WATER SERVICE VALVE	T	EXISTING TELEPHONE PEDESTAL
	EXISTING WELL	E	EXISTING ELECTRIC PEDESTAL
	EXISTING STORM CATCH BASIN		EXISTING ELECTRIC BOX
	EXISTING STORM CURB INLET		EXISTING FLOOD LIGHT
	EXISTING SQUARE CATCH BASIN	T	EXISTING TELEPHONE MANHOLE
	EXISTING END SECTION	C	EXISTING CABLE TV PEDESTAL
	EXISTING LIGHT POLE		EXISTING GAS VALVE
	1-1/4" REBAR SET WEIGHING 4.30 LB/FT.		EXISTING HEDGE
	3/4" REBAR SET WEIGHING 1.50 LB/FT.		EXISTING WOODED AREA
	1-1/4" REBAR FOUND		EXISTING MARSH AREA
	3/4" REBAR FOUND		EXISTING DECIDUOUS TREE WITH TRUNK DIAMETER
	2" IRON PIPE FOUND		EXISTING CONIFEROUS TREE
	1" IRON PIPE FOUND		EXISTING SHRUB
	SECTION CORNER		EXISTING STUMP
PROPOSED SITE SYMBOLS			
	PROPOSED SIGN		PROPOSED DRAINAGE FLOW
	PROPOSED WATER VALVE IN BOX		INTERMEDIATE DRAINAGE FLOW
	PROPOSED WATER SERVICE VALVE (CURB STOP)		SOIL BORING
	PROPOSED STORM FIELD INLET - ST FI	CO	PROPOSED CLEANOUT
	PROPOSED STORM CURB INLET - ST CI		PROPOSED BALE DITCH CHECK
	PROPOSED STORM END SECTION		PROPOSED SILT LOG
		IP	PROPOSED TYPE B INLET PROTECTION
EXISTING LINETYPES			
	EXISTING CHAINLINK FENCE	800	EXISTING GROUND CONTOUR
	EXISTING WOOD FENCE	FO	EXISTING UNDERGROUND FIBER OPTIC LINE
	EXISTING BARBED WIRE FENCE	E	EXISTING UNDERGROUND ELECTRIC CABLE
	EXISTING CURB AND GUTTER	T	EXISTING UNDERGROUND TELEPHONE CABLE
	EXISTING GUARD RAIL	G	EXISTING UNDERGROUND GAS LINE
ST	EXISTING STORM SEWER AND MANHOLE	OU	EXISTING OVERHEAD UTILITY LINE
SA	EXISTING SANITARY SEWER AND MANHOLE		EXISTING RAILROAD TRACKS
2"W	EXISTING WATER LINE AND HYDRANT		EXISTING RIGHT-OF-WAY LINE
PROPOSED LINETYPES			
	PROPOSED SILT FENCE	ST	PROPOSED STORM SEWER AND MANHOLE - ST MH
	PROPOSED CURB AND GUTTER	SA	PROPOSED SANITARY SEWER AND MANHOLE - SAN MH
800	PROPOSED GROUND CONTOUR	2"W	PROPOSED WATER LINE AND HYDRANT
760	INTERMEDIATE GROUND CONTOUR		PHASE LIMITS
	PROPOSED PROPERTY LINE		

PROJECT CONTACTS

OWNER INFORMATION:
FEATHERSTONE RISE
NICK WEBER
129 VINE STREET
LA CROSSE, WI 54601
Phone: (608)385-9393
Email: nick@lacrossedistilling.co

CIVIL:
EXCEL ENGINEERING
GRANT DUCHAC, P.E.
100 CAMELOT DRIVE
FOND DU LAC, WI 54935
Phone: (920) 322-1681
E-mail: grant.d@excelengineer.com

TOWN ADMINISTRATOR:
CHRISTINA PETERSON
Phone: (608)788-1032
E-mail: cpeterson@townofshelbywi.gov

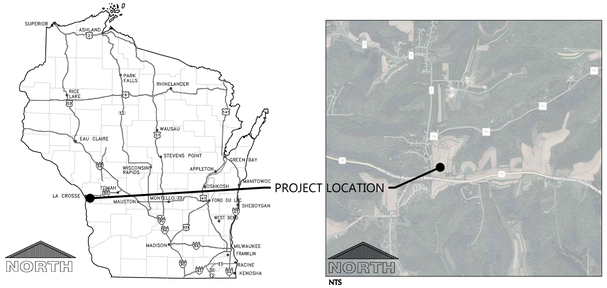
COUNTY PLANNER:
DILLON CONSTANT
Phone: (608)789-7806
E-mail: dconstant@lacrossecounty.org

TOWN FIRE CHIEF:
TOWN OF SHELBY
TONY HOLINKA
Phone: (608) 788-1032 x7
E-mail: shelbyfirechief@townofshelbywi.gov

TOWN BUILDING INSPECTOR:
GENERAL ENGINEERING COMPANY
BOB ALSENS
Phone: (608) 742-2169
E-mail: balsens@generalengineering.net

TOWN DIRECTIOR OF PUBLIC WORKS:
TOWN OF SHELBY
TERRY WRIGHT
Phone: (608) 788-1032 x7
E-mail: twright@townofshelbywi.gov

LOCATION MAP



NTS

PROJECT NOTES

GENERAL PROJECT NOTES

1. CONSTRUCTION STAKING SHALL BE COMPLETED BY EXCEL ENGINEERING AS REQUESTED BY THE CONTRACTOR AT THE DEVELOPER'S EXPENSE. CAD DRAWING FILES AND SURVEY CONTROL WILL NOT BE PROVIDED FOR STAKING PURPOSES.
2. THE ENGINEER WILL OBTAIN COUNTY ACCESS AND WORK IN ROW PERMITS.
3. CONTRACTOR SHALL REFER TO THE LA CROSSE COUNTY STANDARD SPECIFICATIONS FOR LAND DEVELOPMENT, WATER SPECIFICATIONS, WISDOT, AND STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN.

STORMWATER BASIN ASBUILT NOTE

CONTRACTOR TO CONTACT EXCEL ENGINEERING TO COMPLETE AN AS-BUILT SURVEY FOLLOWING COMPLETION OF THE CONSTRUCTION OF THE STORMWATER BASIN. CONTRACTOR SHALL GIVE EXCEL ENGINEERING A MINIMUM OF A 3 DAY NOTICE. PLEASE NOTE THAT THE HORIZONTAL TOLERANCE FOR POND CONSTRUCTION IS 0.50' AND THE VERTICAL TOLERANCE FOR POND, OUTLET, AND SPILLWAY CONSTRUCTION IS 0.10'. ANY ADDITIONAL WORK REQUIRED TO SURVEY A POND FULL OF WATER OR FOR SURVEYING FOLLOWING REWORK SHALL BE AT THE CONTRACTOR'S EXPENSE. ENSURE SEDIMENT IS REMOVED AND STORM WATER MANAGEMENT BASINS ARE AT FINAL COMPLETION PRIOR TO SURVEY. A PRE-ASBUILT CHECK CAN BE PROVIDED AT THE CONTRACTOR'S EXPENSE.

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN
CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE TELEFAX (414) 259-0947
TDD (FOR THE HEARING IMPAIRED)
1-800 542-2289
WISCONSIN STATUTE 182.0175 (1974) REQUIRES MINIMUM OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

BENCHMARK INFORMATION

BENCHMARK NUMBER	BENCHMARK DESCRIPTION (NAVD 88)	ELEVATION
BM1	RAILROAD SPIKE ON POWER POLE AT THE NORTHWEST CORNER OF CTH F AND STH 33 INTERSECTION	1231.11
BM2	RAILROAD SPIKE ON POWER POLE APPROXIMATELY 1,050' EAST OF CTH F AND CTH FO INTERSECTION	1113.31

CIVIL COVER SHEET

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION
FEATHERSTONE RISE
CTH F & STH 33 • LA CROSSE, WI 54601

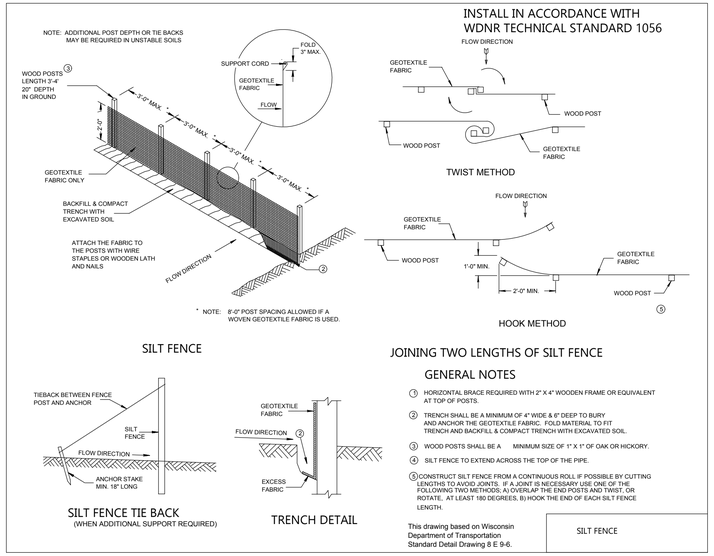
PROFESSIONAL SEAL
WISCONSIN PROFESSIONAL ENGINEER
GRANT DUCHAC
42768-6
FOND DU LAC
WISCONSIN
02/23/26

PRELIMINARY DATES
JAN. 9, 2026
FEB. 23, 2026

NOT FOR CONSTRUCTION

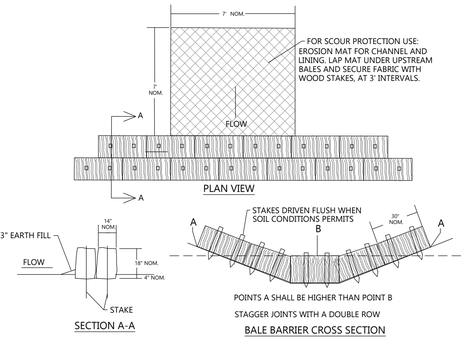
JOB NUMBER
250128900

SHEET NUMBER
C1.0



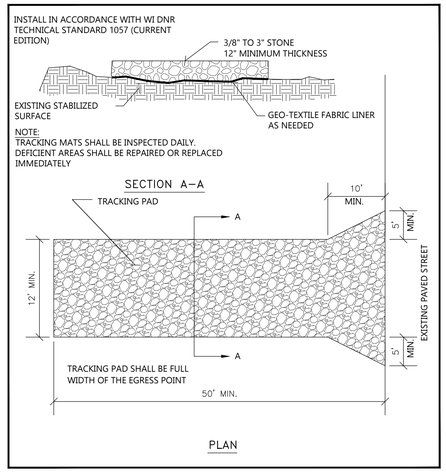
SILT FENCE - INSTALLATION DETAIL

NO SCALE



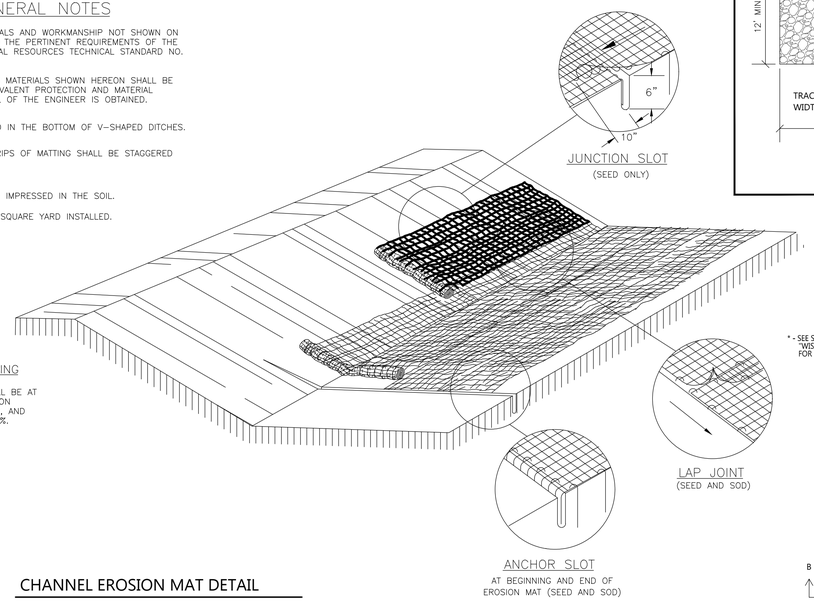
HAY OR STRAW BALE DITCH CHECK

NO SCALE



TRACKING PAD DETAILS

NO SCALE



GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARD NO. 1053 (CHANNEL EROSION MAT).

VARIATIONS IN THE DIMENSIONS OR MATERIALS SHOWN HEREON SHALL BE PERMITTED IF THEY PROVIDE EQUIVALENT PROTECTION AND MATERIAL STRENGTH AND IF PRIOR APPROVAL OF THE ENGINEER IS OBTAINED.

LAP JOINTS SHALL NOT BE PLACED IN THE BOTTOM OF V-SHAPED DITCHES.

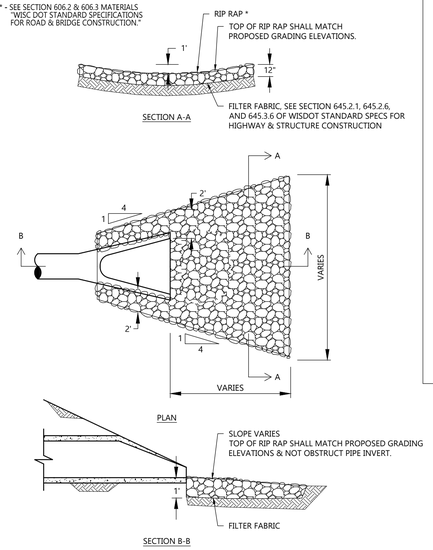
JUNCTION SLOTS ON ADJACENT STRIPS OF MATTING SHALL BE STAGGERED A MINIMUM OF 4 FEET APART.

EDGES OF EROSION MAT SHALL BE IMPRESSED IN THE SOIL.

EROSION MAT SHALL PAID BY THE SQUARE YARD INSTALLED.

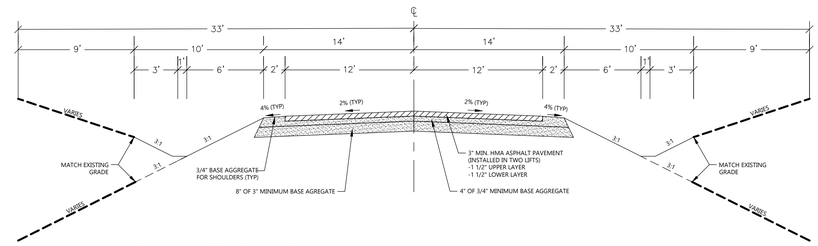
CHANNEL EROSION MAT DETAIL

NOT TO SCALE



RIP RAP AT APRON DETAIL

NOT TO SCALE



TYPICAL STREET SECTION

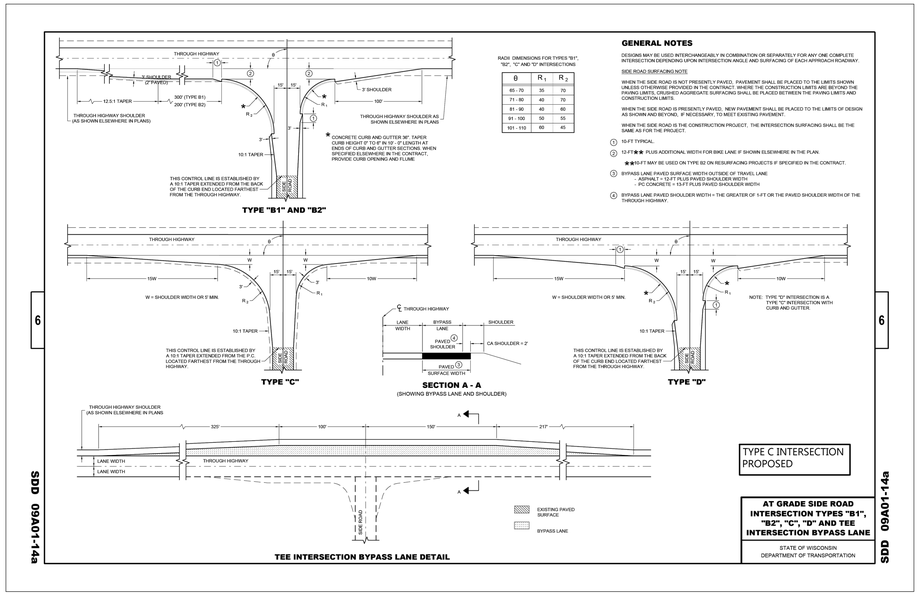
NO SCALE

CONSTRUCTION SEQUENCE

START CONSTRUCTION: 05-01-2026
END CONSTRUCTION: 10-30-2026

PHASE		TYPE OF ACTION
1.	PRE-CONSTRUCTION ACTION	1. CONTRACTOR TO CALL DIGGERS HOTLINE AT A MINIMUM OF 3 DAYS PRIOR TO CLEARING & GRUBBING/CONSTRUCTION.
		2. CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF ALL UTILITIES WITHIN THE PROJECT AREA PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF DISCREPANCIES.
		3. PLACE ALL SILT FENCE AND INLET PROTECTION.
		4. CONSTRUCT TRACKING STONE ENTRANCES AND ANY TEMPORARY CONSTRUCTION ROADWAYS AS NEEDED.
		5. STABILIZE ALL TEMPORARY AND PERMANENT EROSION CONTROL AND STORMWATER CONVEYANCE SYSTEMS BEFORE TOPSOIL CAN BE STRIPPED.
2.	CONSTRUCTION ACTION	1. SITE DEMOLITION AS REQUIRED.
		2. STRIP AND RELOCATE TOPSOIL TO THE DESIGNATED TOPSOIL STOCKPILE. LOCATION BY OWNER. FINAL LOCATION BY CONTRACTOR. PROVIDE PERIMETER SILT FENCE UNTIL STABILIZED.
		3. BEGIN MASS EARTH WORK.
		4. CONSTRUCT ANY REMAINING STORMWATER CONVEYANCE SYSTEMS, AND INSTALL ALL OTHER UTILITIES ON SITE.
		5. PLACE GRAVEL FOR ALL PROPOSED PAVEMENT AREAS.
		6. TOPSOIL, SEED, AND MULCH ALL DISTURBED AREAS OUTSIDE THE PROPOSED PAVEMENT AREAS.
		7. PAVE AND POUR ALL ROADWAY AREAS/SIDEWALK/PATHS.
		8. TOPSOIL, SEED, AND MULCH ALL OTHER DISTURBED AREAS. PLACE EROSION MATTING AND RIP RAP.
3.	POST CONSTRUCTION ACTION	1. CONTRACTOR TO REMOVE TEMPORARY EROSION CONTROL MEASURES UPON SITE STABILIZATION.
		2. SEE THE POST CONSTRUCTION MAINTENANCE PLAN FOR PERMANENT STORMWATER MANAGEMENT SYSTEMS.

CONTRACTOR TO FOLLOW THE EROSION CONTROL SPECIFICATIONS FOR CONSTRUCTION EROSION CONTROL INSPECTION AND MAINTENANCE.
CONTRACTOR TO FOLLOW ALL LA CROSSE COUNTY SPECIFCATIONS FOR LAND DEVELOPMENT.



DETAILS

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION
FEATHERSTONE RISE
CTH F & STH 33 • LA CROSSE, WI 54601

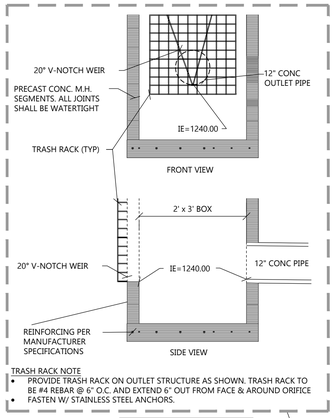
PROFESSIONAL SEAL

PRELIMINARY DATES
JAN. 9, 2026
FEB. 23, 2026

NOT FOR CONSTRUCTION

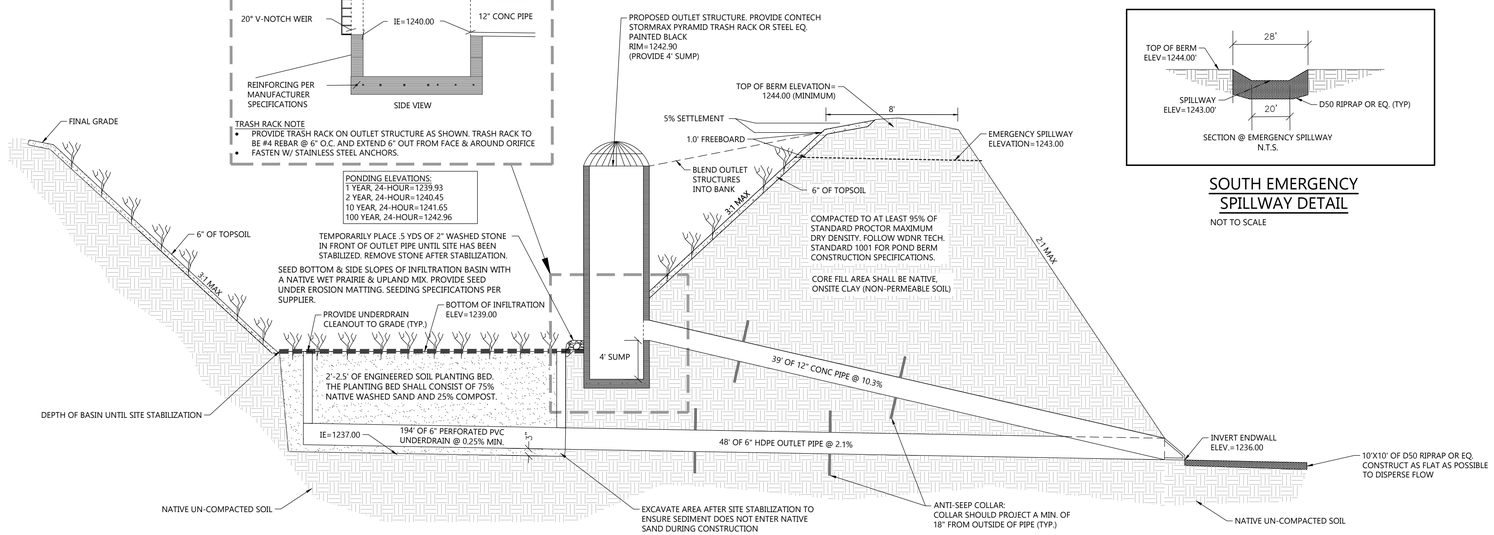
JOB NUMBER
250128900

SHEET NUMBER
C2.0



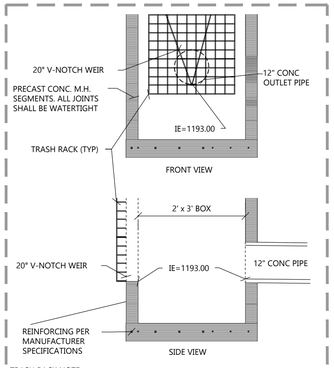
TRASH RACK NOTE
- PROVIDE TRASH RACK ON OUTLET STRUCTURE AS SHOWN. TRASH RACK TO BE #4 REBAR @ 6" O.C. AND EXTEND 6" OUT FROM FACE & AROUND ORIFICE
- FASTEN W/ STAINLESS STEEL ANCHORS.

NOTES:
- THE NATIVE SAND SHALL BE WASHED USDA SAND, 0.02 TO 0.04 INCHES IN DIAMETER. THE COMPOST COMPONENT SHALL MEET THE REQUIREMENTS OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES SPECIFICATION S100. ENGINEERED SOIL MIX SHALL HAVE A PH BETWEEN 5.5 AND 6.5.
- AT END OF SITE CONSTRUCTION, BASIN DEPTH SHALL BE CHECKED FOR SEDIMENTATION AND DREDGED, IF NECESSARY, TO THE DESIGN DEPTH ORIGINALLY PROPOSED.
- CONTRACTOR SHALL PROVIDE EROSION MATTING AS REQUIRED PER LA CROSSE COUNTY SPECIFICATIONS.
- CONTRACTOR TO CONTACT EXCEL ENGINEERING TO COMPLETE AN AS-BUILT SURVEY FOLLOWING COMPLETION OF THE CONSTRUCTION OF THE STORMWATER BASIN. CONTRACTOR SHALL GIVE EXCEL ENGINEERING A MINIMUM OF A 3 DAY NOTICE. PLEASE NOTE THAT THE HORIZONTAL TOLERANCE FOR POND CONSTRUCTION IS 0.50' AND THE VERTICAL TOLERANCE FOR POND, OUTLET, AND SPILLWAY CONSTRUCTION IS 0.10'. ANY ADDITIONAL WORK REQUIRED TO SURVEY A POND FULL OF WATER OR FOR SURVEYING FOLLOWING REWORK SHALL BE AT THE CONTRACTOR'S EXPENSE. ENSURE SEDIMENT IS REMOVED AND STORM WATER MANAGEMENT BASINS ARE AT FINAL COMPLETION PRIOR TO SURVEY. A PRE-ASBUILT CHECK CAN BE PROVIDED AT THE CONTRACTOR'S EXPENSE.



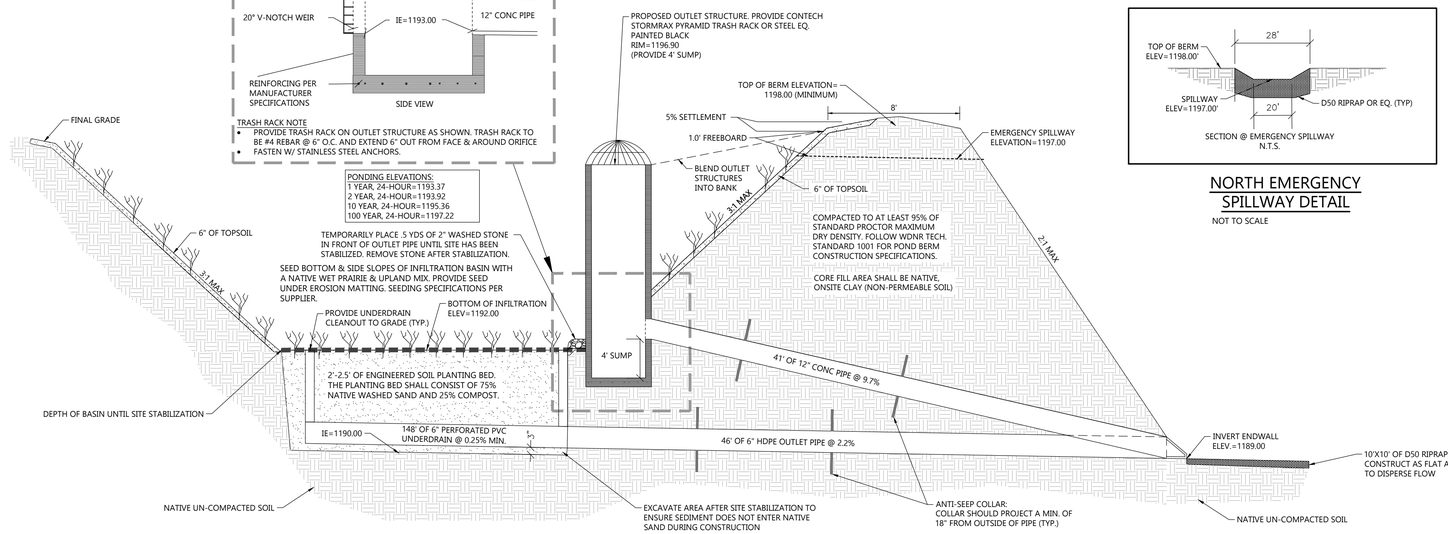
PROPOSED BIOFILTRATION BASIN 1A
NOT TO SCALE

SOUTH EMERGENCY SPILLWAY DETAIL
NOT TO SCALE



TRASH RACK NOTE
- PROVIDE TRASH RACK ON OUTLET STRUCTURE AS SHOWN. TRASH RACK TO BE #4 REBAR @ 6" O.C. AND EXTEND 6" OUT FROM FACE & AROUND ORIFICE
- FASTEN W/ STAINLESS STEEL ANCHORS.

NOTES:
- THE NATIVE SAND SHALL BE WASHED USDA SAND, 0.02 TO 0.04 INCHES IN DIAMETER. THE COMPOST COMPONENT SHALL MEET THE REQUIREMENTS OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES SPECIFICATION S100. ENGINEERED SOIL MIX SHALL HAVE A PH BETWEEN 5.5 AND 6.5.
- AT END OF SITE CONSTRUCTION, BASIN DEPTH SHALL BE CHECKED FOR SEDIMENTATION AND DREDGED, IF NECESSARY, TO THE DESIGN DEPTH ORIGINALLY PROPOSED.
- CONTRACTOR SHALL PROVIDE EROSION MATTING AS REQUIRED PER LA CROSSE COUNTY SPECIFICATIONS.
- CONTRACTOR TO CONTACT EXCEL ENGINEERING TO COMPLETE AN AS-BUILT SURVEY FOLLOWING COMPLETION OF THE CONSTRUCTION OF THE STORMWATER BASIN. CONTRACTOR SHALL GIVE EXCEL ENGINEERING A MINIMUM OF A 3 DAY NOTICE. PLEASE NOTE THAT THE HORIZONTAL TOLERANCE FOR POND CONSTRUCTION IS 0.50' AND THE VERTICAL TOLERANCE FOR POND, OUTLET, AND SPILLWAY CONSTRUCTION IS 0.10'. ANY ADDITIONAL WORK REQUIRED TO SURVEY A POND FULL OF WATER OR FOR SURVEYING FOLLOWING REWORK SHALL BE AT THE CONTRACTOR'S EXPENSE. ENSURE SEDIMENT IS REMOVED AND STORM WATER MANAGEMENT BASINS ARE AT FINAL COMPLETION PRIOR TO SURVEY. A PRE-ASBUILT CHECK CAN BE PROVIDED AT THE CONTRACTOR'S EXPENSE.



PROPOSED BIOFILTRATION BASIN 3A
NOT TO SCALE

NORTH EMERGENCY SPILLWAY DETAIL
NOT TO SCALE

BIOFILTRATION DETAILS

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION
FEATHERSTONE RISE
CTH F & STH 33 • LA CROSSE, WI 54601

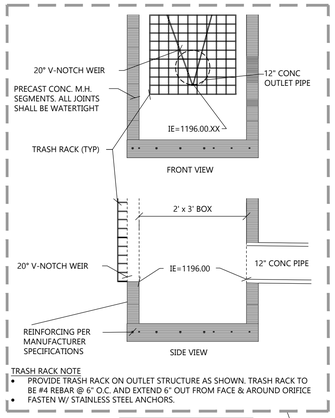
PROFESSIONAL SEAL

PRELIMINARY DATES
JAN. 9, 2026
FEB. 23, 2026

NOT FOR CONSTRUCTION

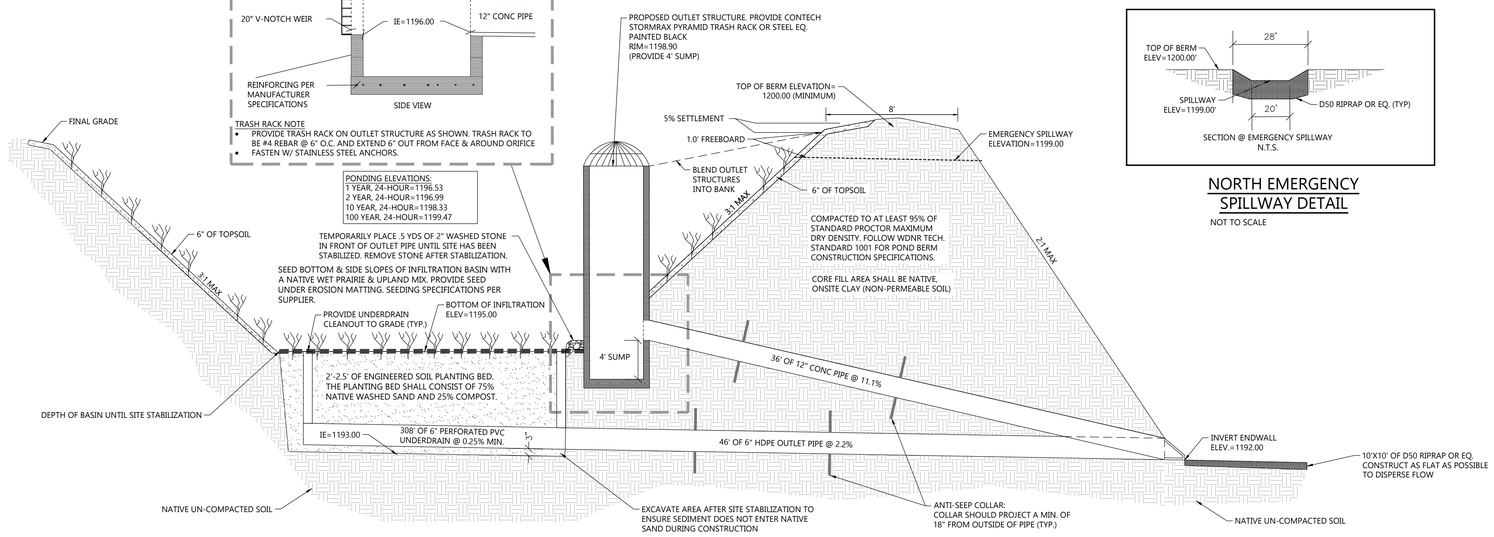
JOB NUMBER
250128900

SHEET NUMBER
C2.1



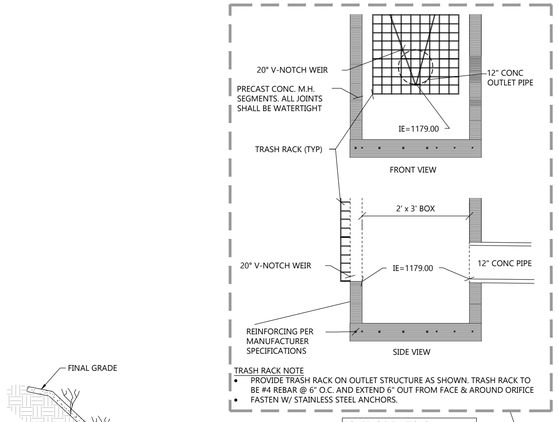
TRASH RACK NOTE
- PROVIDE TRASH RACK ON OUTLET STRUCTURE AS SHOWN. TRASH RACK TO BE #4 REBAR @ 6" O.C. AND EXTEND 6" OUT FROM FACE & AROUND ORIFICE
- FASTEN W/ STAINLESS STEEL ANCHORS.

NOTES:
- THE NATIVE SAND SHALL BE WASHED USDA SAND, 0.02 TO 0.04 INCHES IN DIAMETER. THE COMPOST COMPONENT SHALL MEET THE REQUIREMENTS OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES SPECIFICATION S100. ENGINEERED SOIL MIX SHALL HAVE A PH BETWEEN 5.5 AND 6.5.
- AT END OF SITE CONSTRUCTION, BASIN DEPTH SHALL BE CHECKED FOR SEDIMENTATION AND DREDGED, IF NECESSARY, TO THE DESIGN DEPTH ORIGINALLY PROPOSED.
- CONTRACTOR SHALL PROVIDE EROSION MATTING AS REQUIRED PER LA CROSSE COUNTY SPECIFICATIONS.
- CONTRACTOR TO CONTACT EXCEL ENGINEERING TO COMPLETE AN AS-BUILT SURVEY FOLLOWING COMPLETION OF THE CONSTRUCTION OF THE STORMWATER BASIN. CONTRACTOR SHALL GIVE EXCEL ENGINEERING A MINIMUM OF A 3 DAY NOTICE. PLEASE NOTE THAT THE HORIZONTAL TOLERANCE FOR POND CONSTRUCTION IS 0.50' AND THE VERTICAL TOLERANCE FOR POND, OUTLET, AND SPILLWAY CONSTRUCTION IS 0.10'. ANY ADDITIONAL WORK REQUIRED TO SURVEY A POND FULL OF WATER OR FOR SURVEYING FOLLOWING REWORK SHALL BE AT THE CONTRACTOR'S EXPENSE. ENSURE SEDIMENT IS REMOVED AND STORM WATER MANAGEMENT BASINS ARE AT FINAL COMPLETION PRIOR TO SURVEY. A PRE-ASBUILT CHECK CAN BE PROVIDED AT THE CONTRACTOR'S EXPENSE.



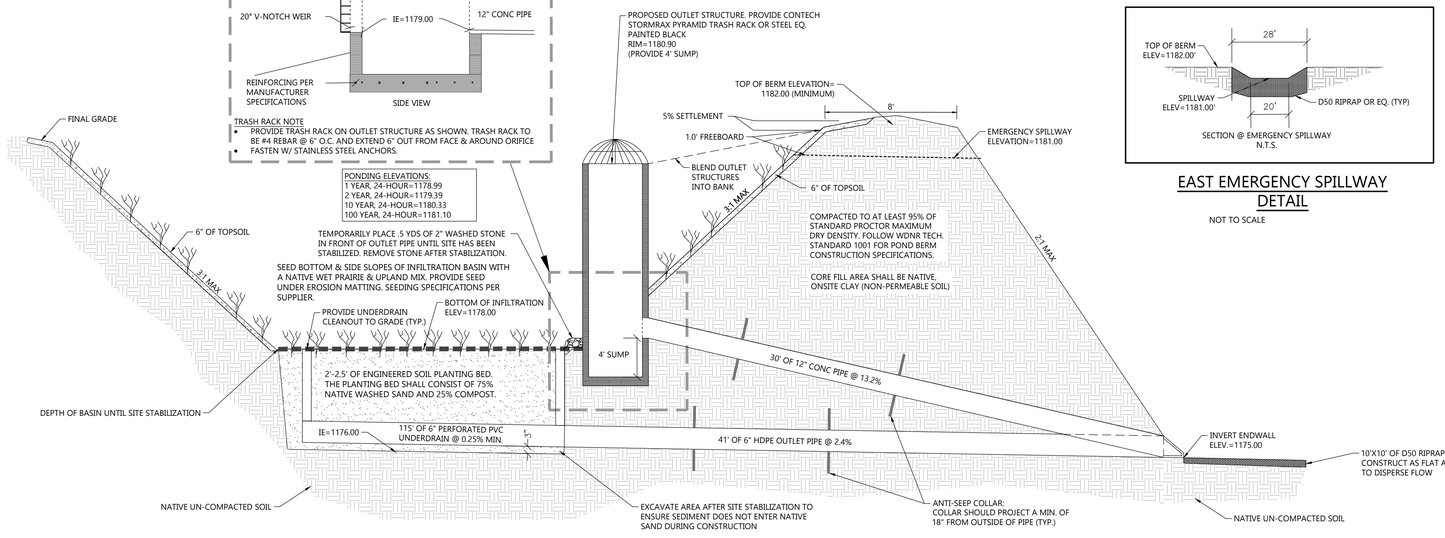
PROPOSED BIOFILTRATION BASIN 3B
NOT TO SCALE

NORTH EMERGENCY SPILLWAY DETAIL
NOT TO SCALE



TRASH RACK NOTE
- PROVIDE TRASH RACK ON OUTLET STRUCTURE AS SHOWN. TRASH RACK TO BE #4 REBAR @ 6" O.C. AND EXTEND 6" OUT FROM FACE & AROUND ORIFICE
- FASTEN W/ STAINLESS STEEL ANCHORS.

NOTES:
- THE NATIVE SAND SHALL BE WASHED USDA SAND, 0.02 TO 0.04 INCHES IN DIAMETER. THE COMPOST COMPONENT SHALL MEET THE REQUIREMENTS OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES SPECIFICATION S100. ENGINEERED SOIL MIX SHALL HAVE A PH BETWEEN 5.5 AND 6.5.
- AT END OF SITE CONSTRUCTION, BASIN DEPTH SHALL BE CHECKED FOR SEDIMENTATION AND DREDGED, IF NECESSARY, TO THE DESIGN DEPTH ORIGINALLY PROPOSED.
- CONTRACTOR SHALL PROVIDE EROSION MATTING AS REQUIRED PER LA CROSSE COUNTY SPECIFICATIONS.
- CONTRACTOR TO CONTACT EXCEL ENGINEERING TO COMPLETE AN AS-BUILT SURVEY FOLLOWING COMPLETION OF THE CONSTRUCTION OF THE STORMWATER BASIN. CONTRACTOR SHALL GIVE EXCEL ENGINEERING A MINIMUM OF A 3 DAY NOTICE. PLEASE NOTE THAT THE HORIZONTAL TOLERANCE FOR POND CONSTRUCTION IS 0.50' AND THE VERTICAL TOLERANCE FOR POND, OUTLET, AND SPILLWAY CONSTRUCTION IS 0.10'. ANY ADDITIONAL WORK REQUIRED TO SURVEY A POND FULL OF WATER OR FOR SURVEYING FOLLOWING REWORK SHALL BE AT THE CONTRACTOR'S EXPENSE. ENSURE SEDIMENT IS REMOVED AND STORM WATER MANAGEMENT BASINS ARE AT FINAL COMPLETION PRIOR TO SURVEY. A PRE-ASBUILT CHECK CAN BE PROVIDED AT THE CONTRACTOR'S EXPENSE.



PROPOSED BIOFILTRATION BASIN 3C
NOT TO SCALE

EAST EMERGENCY SPILLWAY DETAIL
NOT TO SCALE

BIOFILTRATION DETAILS

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION
FEATHERSTONE RISE
CTH F & STH 33 • LA CROSSE, WI 54601

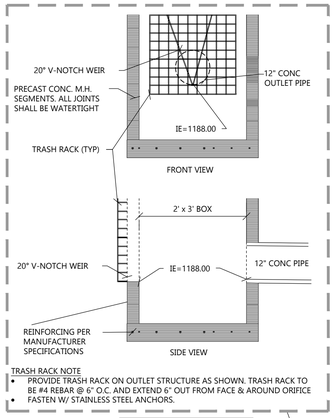
PROFESSIONAL SEAL

PRELIMINARY DATES
JAN. 9, 2026
FEB. 23, 2026

NOT FOR CONSTRUCTION

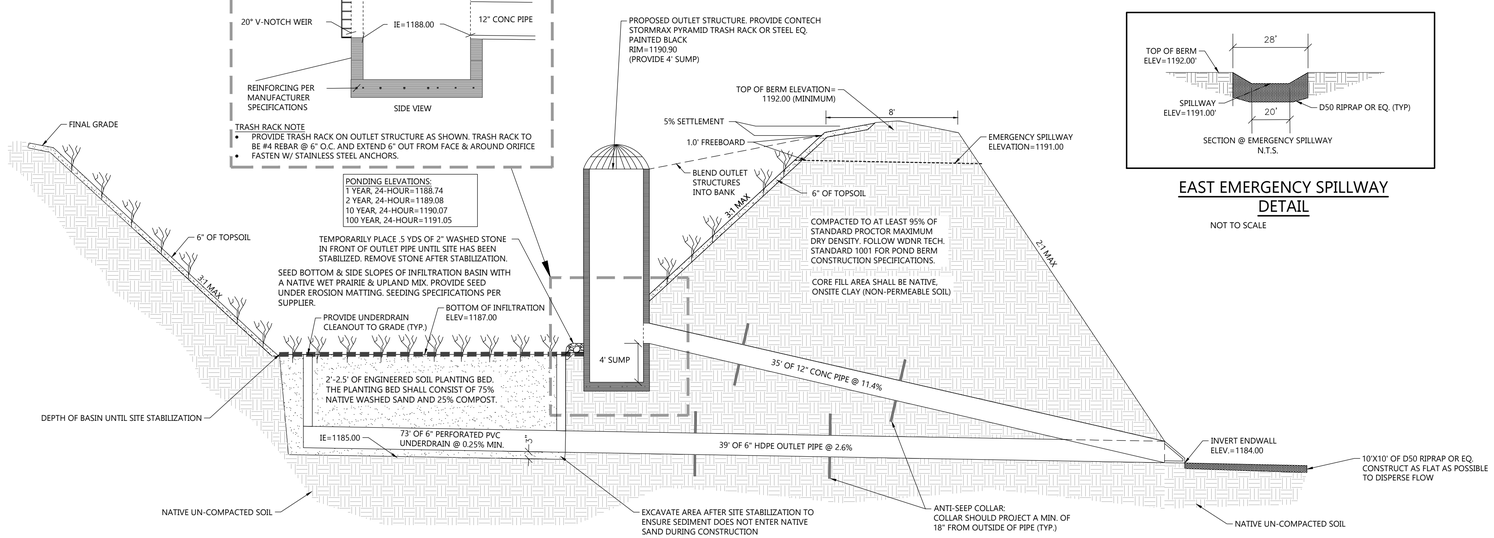
JOB NUMBER
250128900

SHEET NUMBER
C2.2



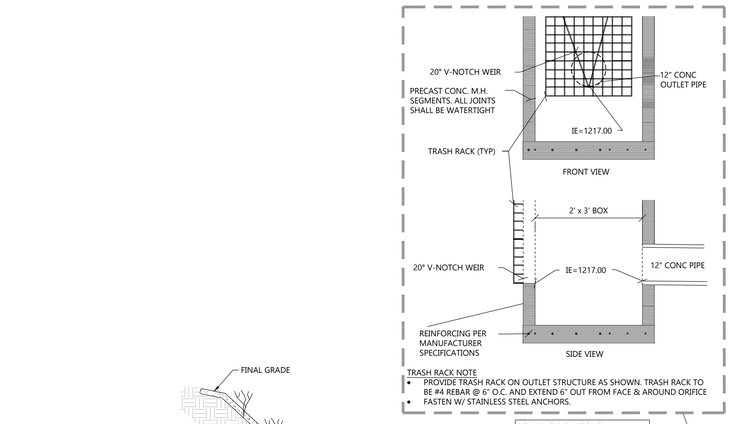
TRASH RACK NOTE
- PROVIDE TRASH RACK ON OUTLET STRUCTURE AS SHOWN. TRASH RACK TO BE #4 REBAR @ 6" O.C. AND EXTEND 6" OUT FROM FACE & AROUND ORIFICE
- FASTEN W/ STAINLESS STEEL ANCHORS.

NOTES:
- THE NATIVE SAND SHALL BE WASHED USDA SAND, 0.02 TO 0.04 INCHES IN DIAMETER. THE COMPOST COMPONENT SHALL MEET THE REQUIREMENTS OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES SPECIFICATION S100. ENGINEERED SOIL MIX SHALL HAVE A PH BETWEEN 5.5 AND 6.5.
- AT END OF SITE CONSTRUCTION, BASIN DEPTH SHALL BE CHECKED FOR SEDIMENTATION AND DREDGED, IF NECESSARY, TO THE DESIGN DEPTH ORIGINALLY PROPOSED.
- CONTRACTOR SHALL PROVIDE EROSION MATTING AS REQUIRED PER LA CROSSE COUNTY SPECIFICATIONS.
- CONTRACTOR TO CONTACT EXCEL ENGINEERING TO COMPLETE AN AS-BUILT SURVEY FOLLOWING COMPLETION OF THE CONSTRUCTION OF THE STORMWATER BASIN. CONTRACTOR SHALL GIVE EXCEL ENGINEERING A MINIMUM OF A 3 DAY NOTICE. PLEASE NOTE THAT THE HORIZONTAL TOLERANCE FOR POND CONSTRUCTION IS 0.50' AND THE VERTICAL TOLERANCE FOR POND, OUTLET, AND SPILLWAY CONSTRUCTION IS 0.10'. ANY ADDITIONAL WORK REQUIRED TO SURVEY A POND FULL OF WATER OR FOR SURVEYING FOLLOWING REWORK SHALL BE AT THE CONTRACTOR'S EXPENSE. ENSURE SEDIMENT IS REMOVED AND STORM WATER MANAGEMENT BASINS ARE AT FINAL COMPLETION PRIOR TO SURVEY. A PRE-ASBUILT CHECK CAN BE PROVIDED AT THE CONTRACTOR'S EXPENSE.



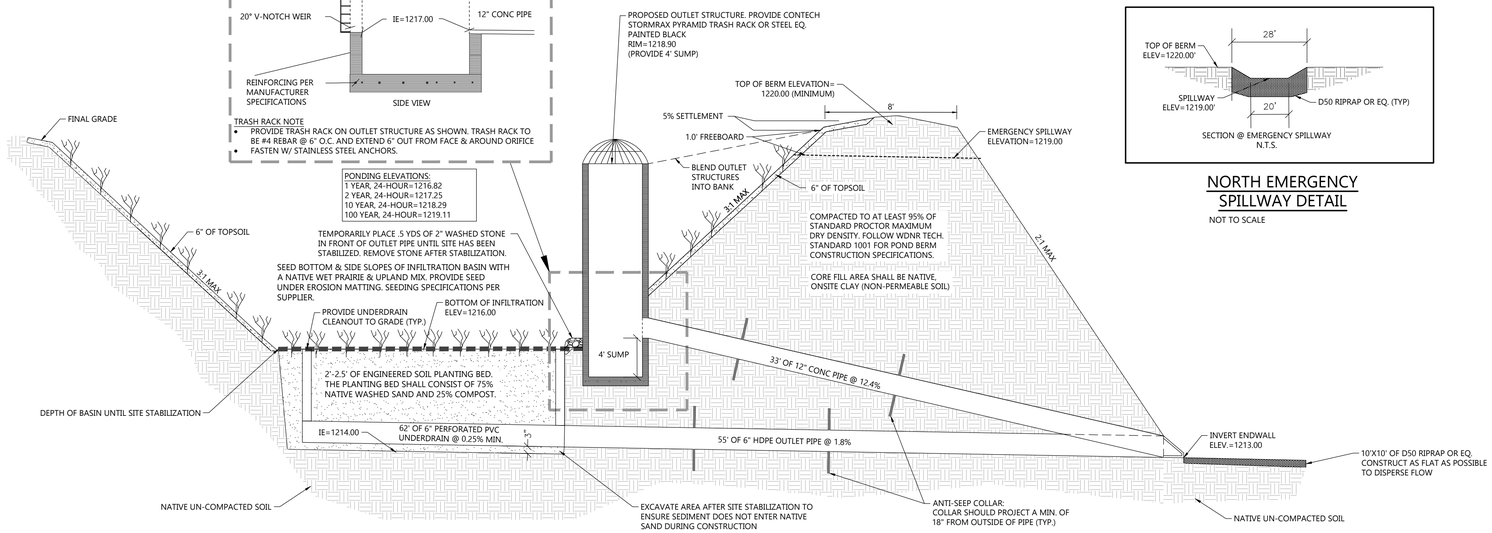
PROPOSED BIOFILTRATION BASIN 3D
NOT TO SCALE

EAST EMERGENCY SPILLWAY DETAIL
NOT TO SCALE



TRASH RACK NOTE
- PROVIDE TRASH RACK ON OUTLET STRUCTURE AS SHOWN. TRASH RACK TO BE #4 REBAR @ 6" O.C. AND EXTEND 6" OUT FROM FACE & AROUND ORIFICE
- FASTEN W/ STAINLESS STEEL ANCHORS.

NOTES:
- THE NATIVE SAND SHALL BE WASHED USDA SAND, 0.02 TO 0.04 INCHES IN DIAMETER. THE COMPOST COMPONENT SHALL MEET THE REQUIREMENTS OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES SPECIFICATION S100. ENGINEERED SOIL MIX SHALL HAVE A PH BETWEEN 5.5 AND 6.5.
- AT END OF SITE CONSTRUCTION, BASIN DEPTH SHALL BE CHECKED FOR SEDIMENTATION AND DREDGED, IF NECESSARY, TO THE DESIGN DEPTH ORIGINALLY PROPOSED.
- CONTRACTOR SHALL PROVIDE EROSION MATTING AS REQUIRED PER LA CROSSE COUNTY SPECIFICATIONS.
- CONTRACTOR TO CONTACT EXCEL ENGINEERING TO COMPLETE AN AS-BUILT SURVEY FOLLOWING COMPLETION OF THE CONSTRUCTION OF THE STORMWATER BASIN. CONTRACTOR SHALL GIVE EXCEL ENGINEERING A MINIMUM OF A 3 DAY NOTICE. PLEASE NOTE THAT THE HORIZONTAL TOLERANCE FOR POND CONSTRUCTION IS 0.50' AND THE VERTICAL TOLERANCE FOR POND, OUTLET, AND SPILLWAY CONSTRUCTION IS 0.10'. ANY ADDITIONAL WORK REQUIRED TO SURVEY A POND FULL OF WATER OR FOR SURVEYING FOLLOWING REWORK SHALL BE AT THE CONTRACTOR'S EXPENSE. ENSURE SEDIMENT IS REMOVED AND STORM WATER MANAGEMENT BASINS ARE AT FINAL COMPLETION PRIOR TO SURVEY. A PRE-ASBUILT CHECK CAN BE PROVIDED AT THE CONTRACTOR'S EXPENSE.



PROPOSED BIOFILTRATION BASIN 3E
NOT TO SCALE

NORTH EMERGENCY SPILLWAY DETAIL
NOT TO SCALE

BIOFILTRATION DETAILS

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION
FEATHERSTONE RISE
CTH F & STH 33 • LA CROSSE, WI 54601

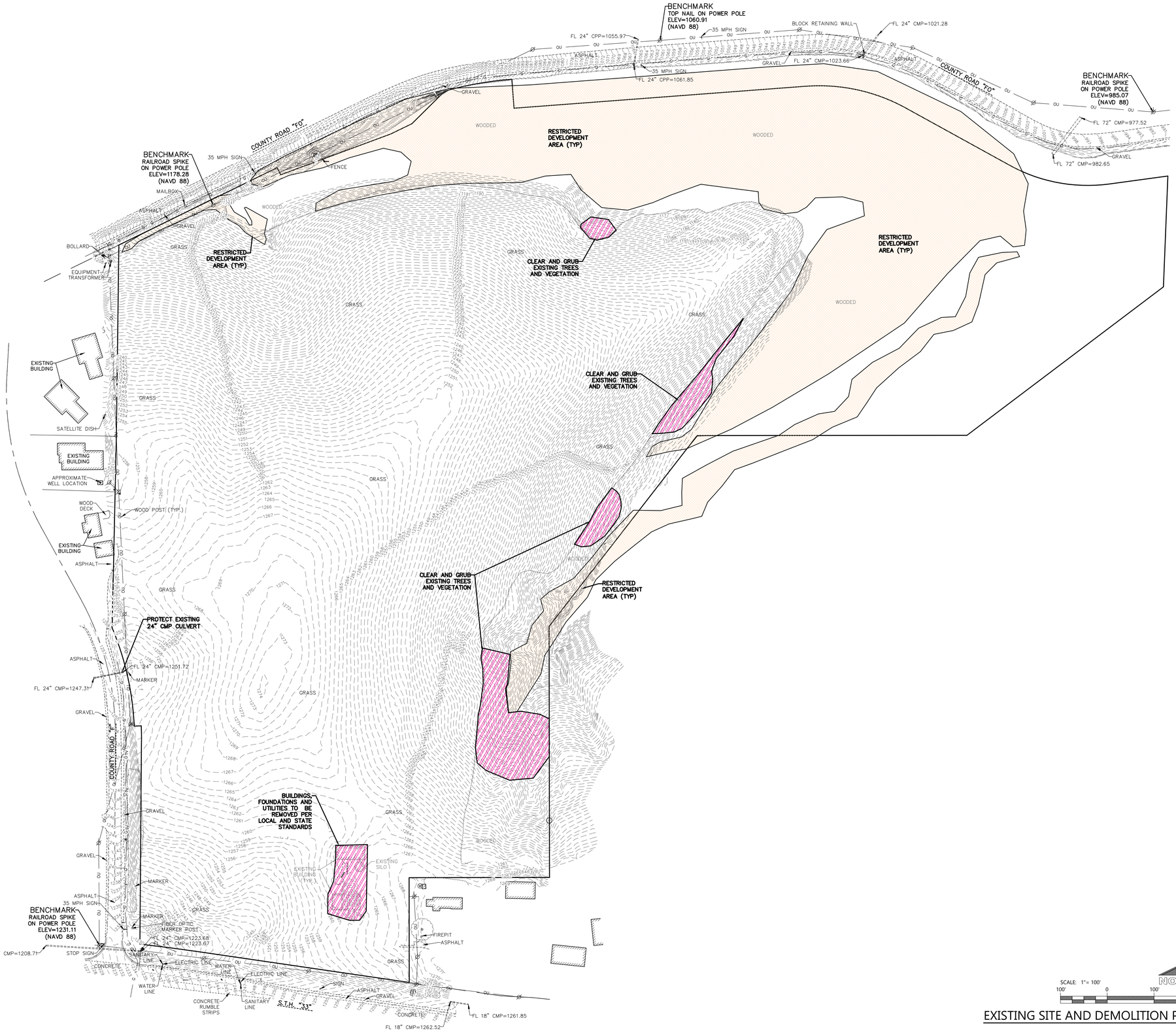
PROFESSIONAL SEAL

PRELIMINARY DATES
JAN. 9, 2026
FEB. 23, 2026

NOT FOR CONSTRUCTION

JOB NUMBER
250128900

SHEET NUMBER
C2.3



SCALE: 1"= 100'
100' 0 100' 200'
NORTH

EXISTING SITE AND DEMOLITION PLAN

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION
FEATHERSTONE RISE
CTH F & STH 33 • LA CROSSE, WI 54601

PROFESSIONAL SEAL

PRELIMINARY DATES
JAN. 9, 2026
FEB. 23, 2026

NOT FOR CONSTRUCTION

JOB NUMBER
250128900

SHEET NUMBER
C3.0

GENERAL GRADING AND EC NOTES:

- ALL GRADING AND EROSION CONTROL MEASURES SHALL FOLLOW THE LA CROSSE COUNTY SPECIFICATIONS.
- SEE SHEET C2.0 FOR CONSTRUCTION SCHEDULE, SEQUENCING OF EROSION CONTROL PRACTICES, AND PROVISIONS FOR MAINTENANCE FOR THE EROSION CONTROL.
- SEEDED LAWN MAINTENANCE: CONTRACTOR TO PROVIDE MAINTENANCE OF ALL LANDSCAPING FOR A PERIOD OF 90 DAYS FROM THE DATE OF INSTALLATION. AT THE END OF THE MAINTENANCE PERIOD, A HEALTHY, UNIFORM, CLOSE STAND OF GRASS SHOULD BE ESTABLISHED FREE OF WEEDS AND SURFACE IRREGULARITIES. LAWN COVERAGE SHOULD EXCEED 90% AND BARE SPOTS SHOULD NOT EXCEED 5"X5". CONTRACTOR SHOULD REESTABLISH LAWNS THAT DO NOT COMPLY WITH THESE REQUIREMENTS AND CONTINUE MAINTENANCE UNTIL LAWNS ARE SATISFACTORY.
- EROSION MATTING: CONTRACTOR TO PROVIDE EROSION CONTROL MATTING (NORTH AMERICAN GREEN S150) OR EQUIVALENT ON ALL SLOPES THAT ARE 4:1 AND GREATER OUTSIDE OF STORMWATER CONVEYANCE SWALES AND STORMWATER MANAGEMENT BASIN BOTTOMS.
- EROSION MATTING: CONTRACTOR TO PROVIDE EROSION MATTING (NORTH AMERICAN GREEN C125) OR EQUIVALENT IN ALL SWALE BOTTOMS AND SIDE SLOPES AS WELL AS STORMWATER MANAGEMENT BASIN BOTTOMS AND SIDE SLOPES AS REQUIRED.

SCALE: 1" = 100'
100' 0 100' 200'
NORTH

OVERALL MASTER GRADING AND EROSION CONTROL PLAN

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION
FEATHERSTONE RISE
CTH F & STH 33 • LA CROSSE, WI 54601

PROFESSIONAL SEAL

PRELIMINARY DATES
JAN. 9, 2026
FEB. 23, 2026

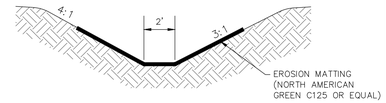
NOT FOR CONSTRUCTION

JOB NUMBER
250128900

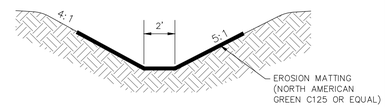
SHEET NUMBER
C4.0

LEGEND:

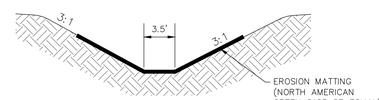
	EROSION MATTING (NAG S150) OVER SEEDED LAWN (> OR = 4:1 SLOPES OUTSIDE OF SWM)
	EROSION MATTING (NAG C125) OVER SEEDED LAWN - 6.67' WIDTH TYP. SWALE BOTTOMS & SWM



SECTION B–B
TYPICAL DITCH X–SECTION
NO SCALE



SECTION C–C
TYPICAL DITCH X–SECTION
NO SCALE



SECTION D–D
TYPICAL DITCH X–SECTION
NO SCALE

NOTES:

- FINAL HOME AND SEPTIC LOCATIONS TO BE DESIGNED BY OTHERS. GRADING CONTRACTOR SHALL NOT WORK OUTSIDE OF DISTURBANCE LIMITS TO PROTECT ALL POSSIBLE SEPTIC LOCATIONS.

SCALE: 1"= 40'
40' 0 40' 80'
NORTH

SOUTH MASTER GRADING AND EROSION CONTROL PLAN

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION
FEATHERSTONE RISE
CTH F & STH 33 • LA CROSSE, WI 54601

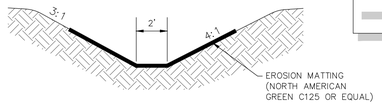
PROFESSIONAL SEAL

PRELIMINARY DATES
JAN. 9, 2026
FEB. 23, 2026

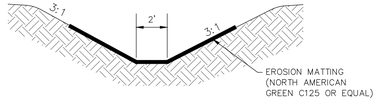
NOT FOR CONSTRUCTION

JOB NUMBER
250128900

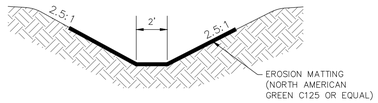
SHEET NUMBER
C4.1



SECTION A–A
TYPICAL DITCH X–SECTION
NO SCALE



SECTION J–J
TYPICAL DITCH X–SECTION
NO SCALE



SECTION K–K
TYPICAL DITCH X–SECTION
NO SCALE

LEGEND:

	EROSION MATTING (NAG S150) OVER SEEDED LAWN (> OR = 4:1 SLOPES OUTSIDE OF SWM)
	EROSION MATTING (NAG C125) OVER SEEDED LAWN - 6.67 WIDTH TYP. SWALE BOTTOMS & SWM

NOTES:

- FINAL HOME AND SEPTIC LOCATIONS TO BE DESIGNED BY OTHERS. GRADING CONTRACTOR SHALL NOT WORK OUTSIDE OF DISTURBANCE LIMITS TO PROTECT ALL POSSIBLE SEPTIC LOCATIONS.

SCALE: 1"= 40'
40' 0 40' 80'
NORTH

NORTHWEST MASTER GRADING AND EROSION CONTROL PLAN

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION
FEATHERSTONE RISE
CTH F & STH 33 • LA CROSSE, WI 54601

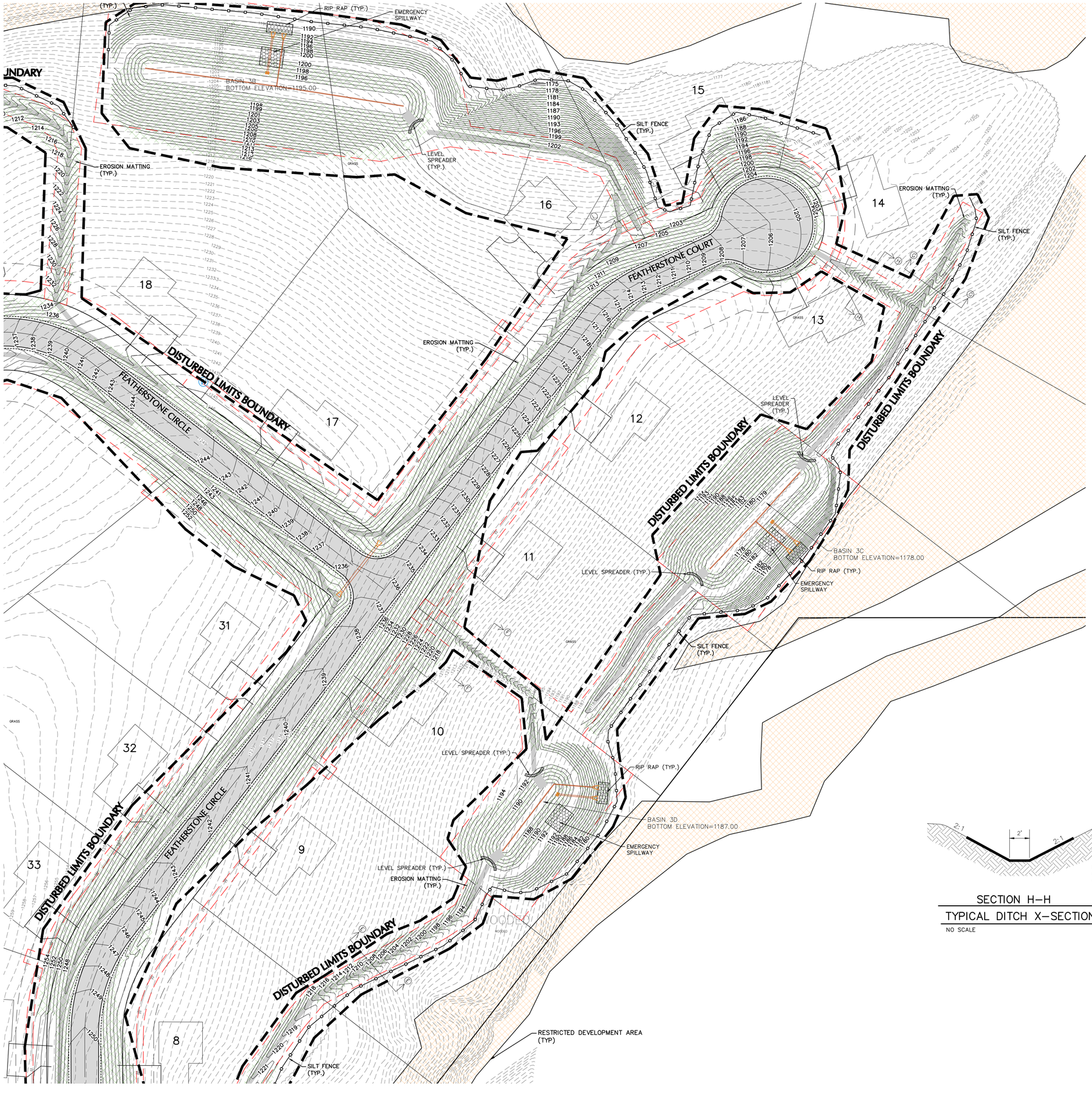
PROFESSIONAL SEAL

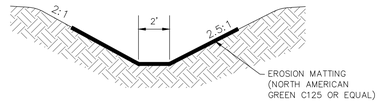
PRELIMINARY DATES
JAN. 9, 2026
FEB. 23, 2026

NOT FOR CONSTRUCTION

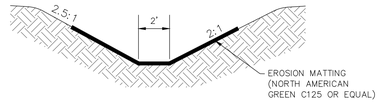
JOB NUMBER
250128900

SHEET NUMBER
C4.2

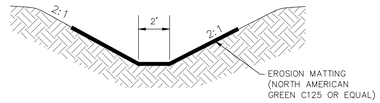




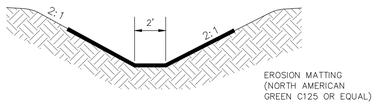
SECTION E–E
TYPICAL DITCH X–SECTION
NO SCALE



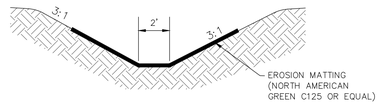
SECTION F–F
TYPICAL DITCH X–SECTION
NO SCALE



SECTION G–G
TYPICAL DITCH X–SECTION
NO SCALE



SECTION H–H
TYPICAL DITCH X–SECTION
NO SCALE



SECTION I–I
TYPICAL DITCH X–SECTION
NO SCALE

LEGEND:

	EROSION MATTING (NAG S150) OVER SEEDED LAWN (> OR = 4:1 SLOPES OUTSIDE OF SWM)
	EROSION MATTING (NAG C125) OVER SEEDED LAWN - 6.67' WIDTH TYP. SWALE BOTTOMS & SWM

NOTES:

- FINAL HOME AND SEPTIC LOCATIONS TO BE DESIGNED BY OTHERS. GRADING CONTRACTOR SHALL NOT WORK OUTSIDE OF DISTURBANCE LIMITS TO PROTECT ALL POSSIBLE SEPTIC LOCATIONS.

SCALE: 1"= 40'
40' 0 40' 80'
NORTH

NORTHEAST MASTER GRADING AND EROSION CONTROL PLAN

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION
FEATHERSTONE RISE
CTH F & STH 33 • LA CROSSE, WI 54601

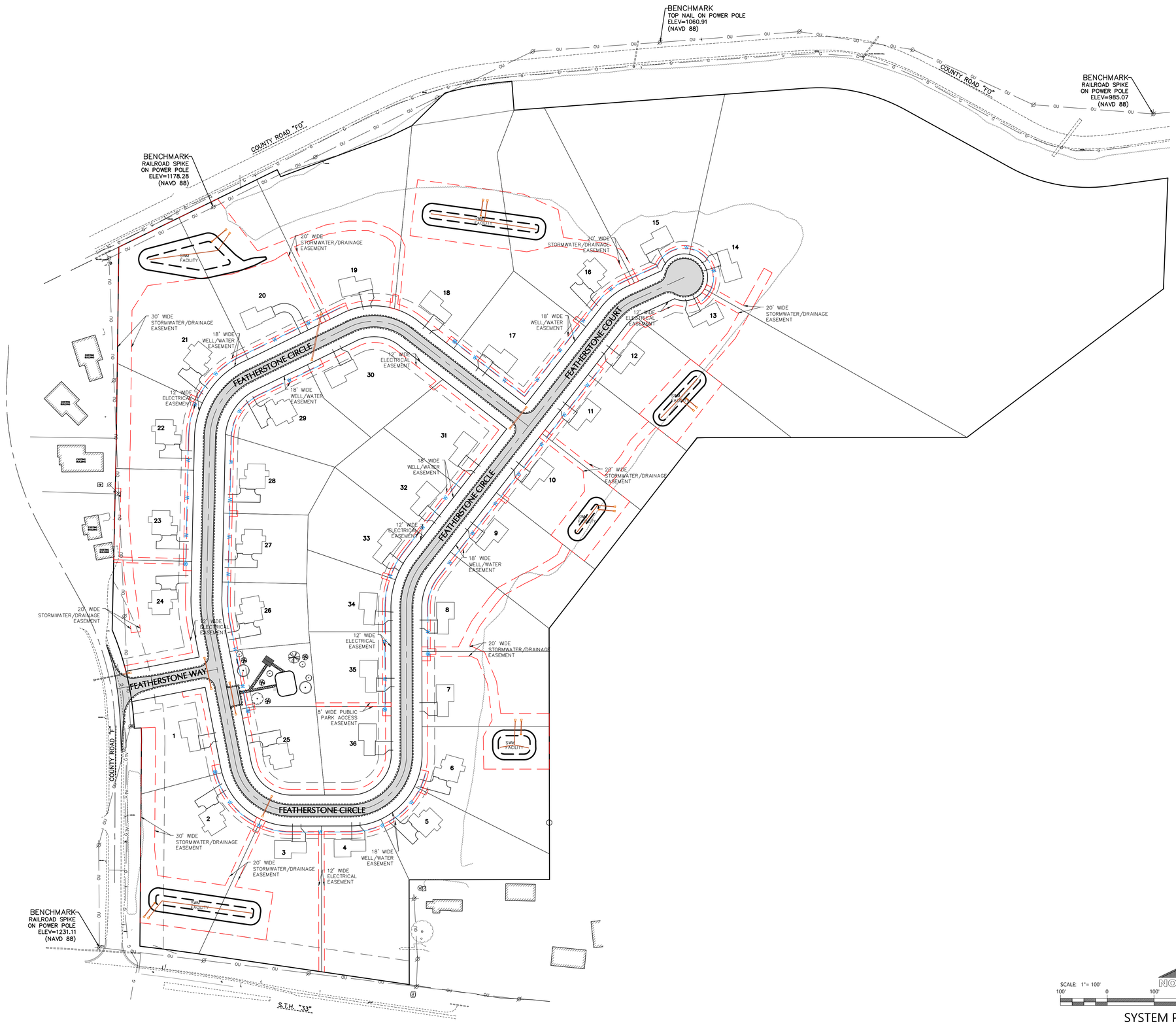
PROFESSIONAL SEAL

PRELIMINARY DATES
JAN. 9, 2026
FEB. 23, 2026

NOT FOR CONSTRUCTION

JOB NUMBER
250128900

SHEET NUMBER
C4.3



SCALE: 1" = 100'
100' 0 100' 200'
NORTH

SYSTEM PLAN

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION
FEATHERSTONE RISE
CTH F & STH 33 • LA CROSSE, WI 54601

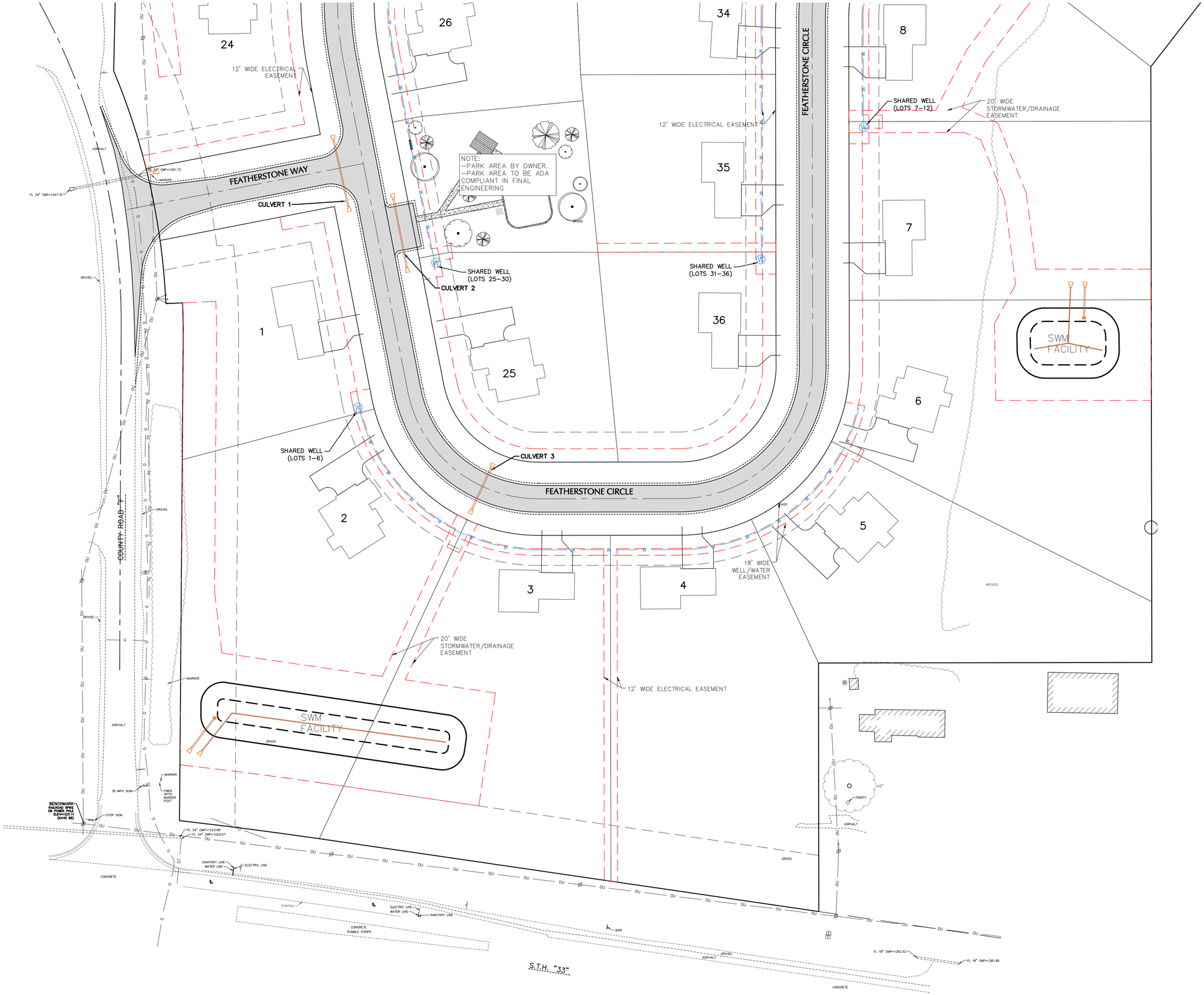
PROFESSIONAL SEAL

PRELIMINARY DATES
JAN. 9, 2026
FEB. 23, 2026

NOT FOR CONSTRUCTION

JOB NUMBER
250128900

SHEET NUMBER
C5.0



SCALE: 1"= 40'

NORTH

40' 0 40' 80'

SOUTH SYSTEM PLAN

EXCEL

Always a Better Plan

100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION

FEATHERSTONE RISE

CTH F & STH 33 • LA CROSSE, WI 54601

PROFESSIONAL SEAL

PRELIMINARY DATES

JAN. 9, 2026
FEB. 23, 2026

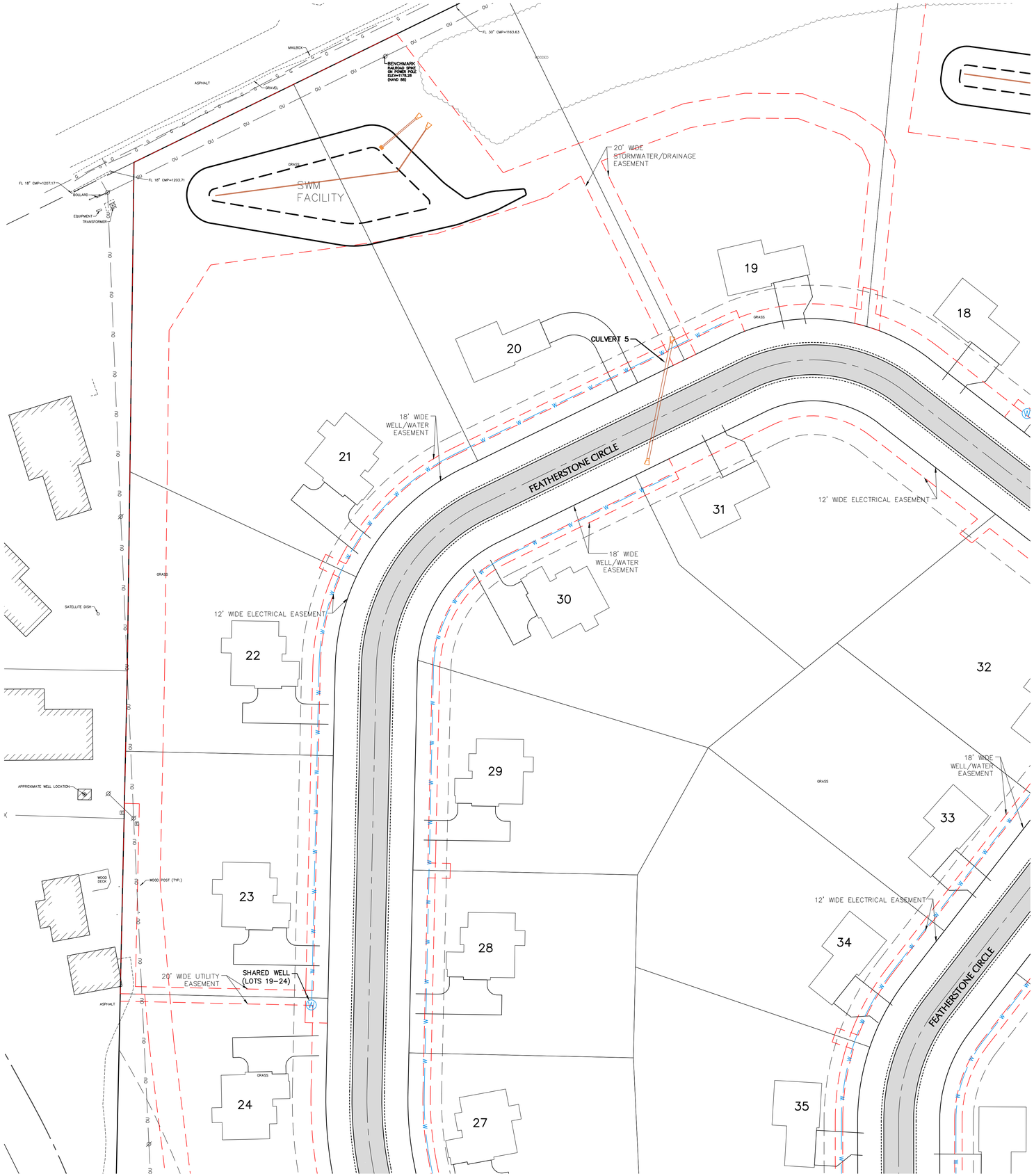
NOT FOR CONSTRUCTION

JOB NUMBER

250128900

SHEET NUMBER

C5.1



SCALE: 1"= 40'
40' 0 40' 80'
NORTH

NORTHWEST SYSTEM PLAN

EXCEL

Always a Better Plan

100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION

FEATHERSTONE RISE

CTH F & STH 33 • LA CROSSE, WI 54601

PROFESSIONAL SEAL

PRELIMINARY DATES

JAN. 9, 2026
FEB. 23, 2026

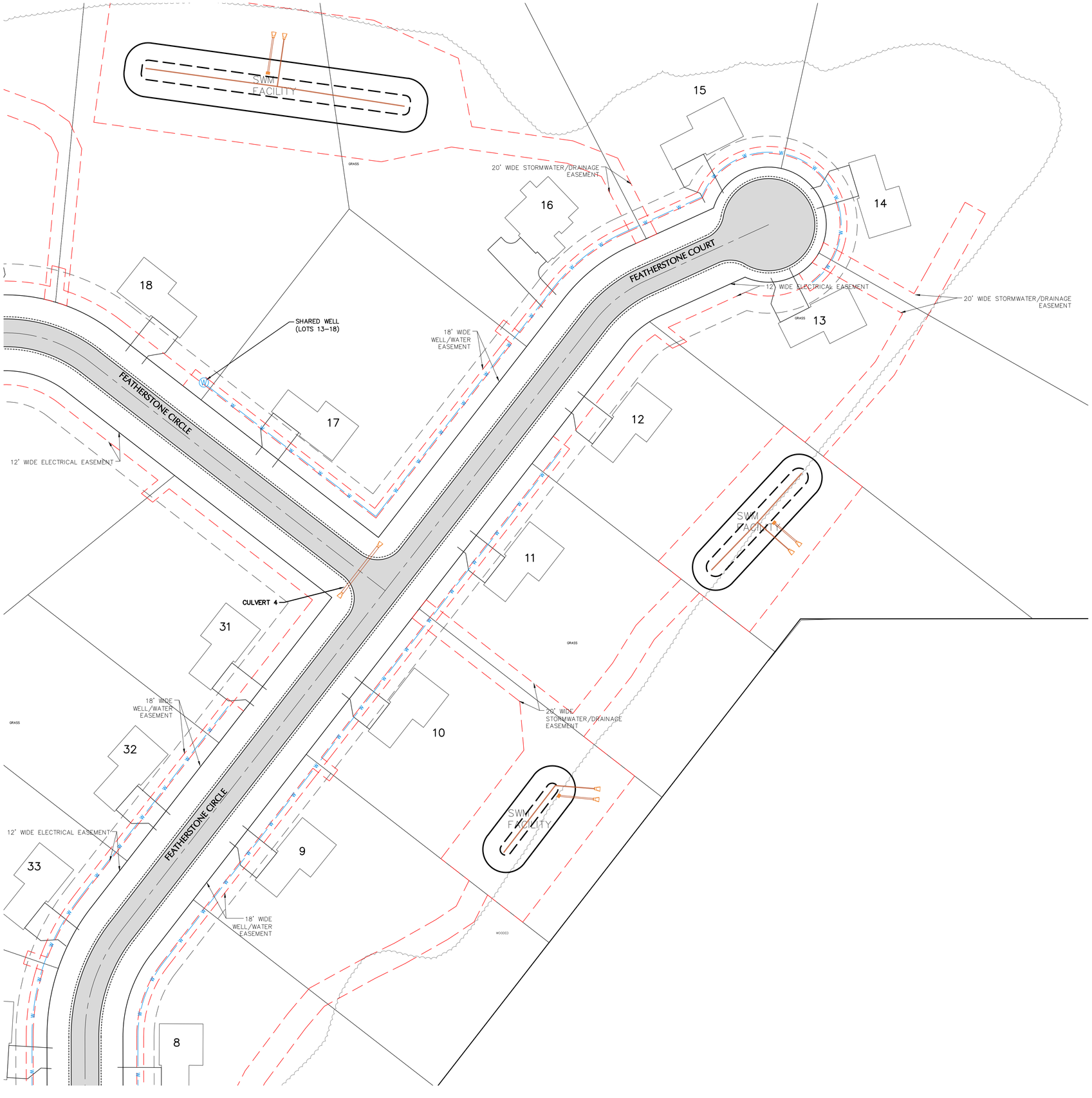
NOT FOR CONSTRUCTION

JOB NUMBER

250128900

SHEET NUMBER

C5.2



SCALE: 1" = 40'
40' 0 40' 80'
NORTH

NORTHEAST SYSTEM PLAN

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION
FEATHERSTONE RISE
CTH F & STH 33 • LA CROSSE, WI 54601

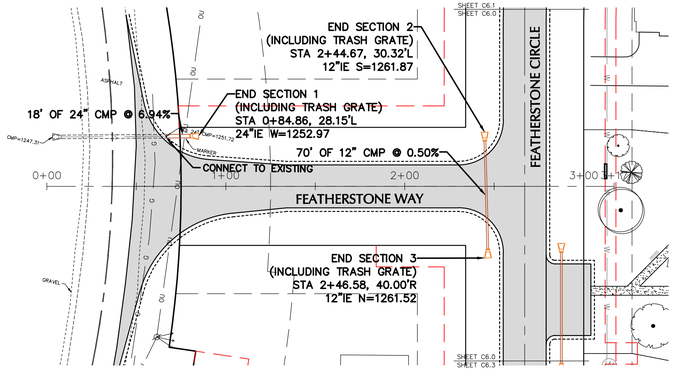
PROFESSIONAL SEAL

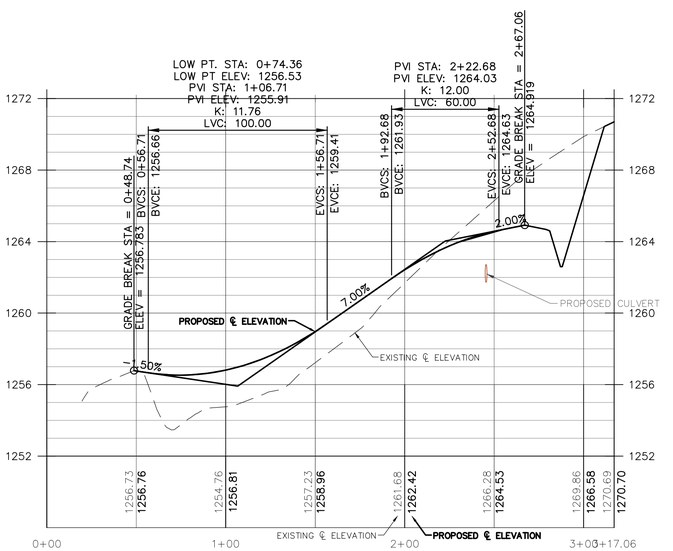
PRELIMINARY DATES
JAN. 9, 2026
FEB. 23, 2026

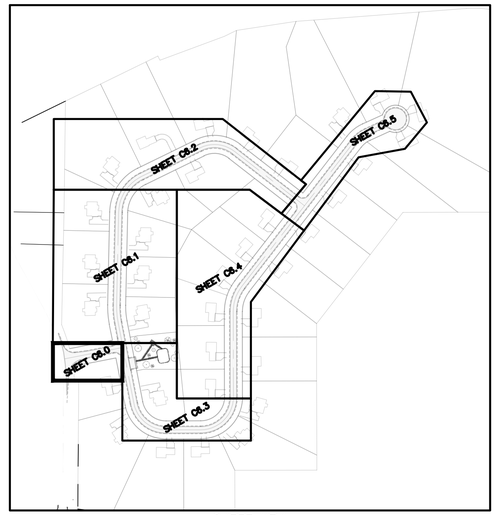
NOT FOR CONSTRUCTION

JOB NUMBER
250128900

SHEET NUMBER
C5.3







SHEET KEY

SCALE: 1"= 4' VERTICAL
SCALE: 1"= 40' HORIZONTAL
40' 0 40' 80'
NORTH

FEATHERSTONE WAY - ROAD AND STORM

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION
FEATHERSTONE RISE
CTH F & STH 33 • LA CROSSE, WI 54601

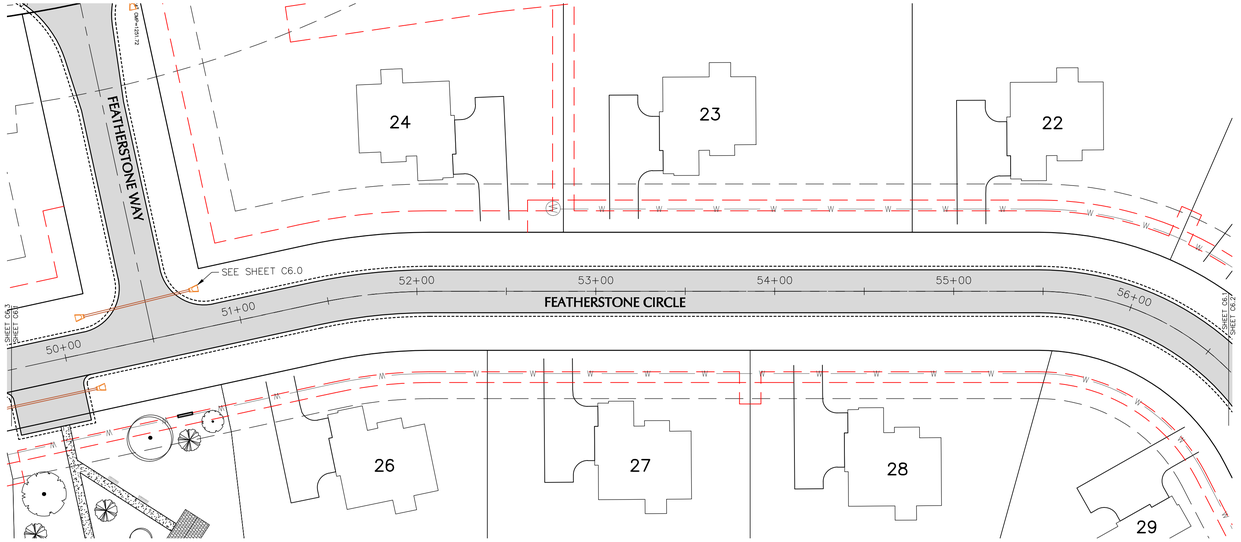
PROFESSIONAL SEAL

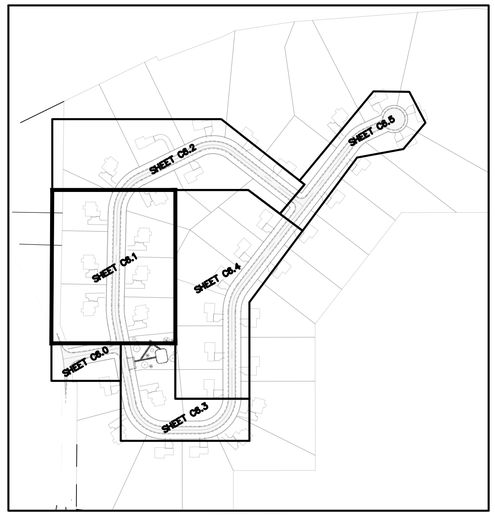
PRELIMINARY DATES
JAN. 9, 2026
FEB. 23, 2026

NOT FOR CONSTRUCTION

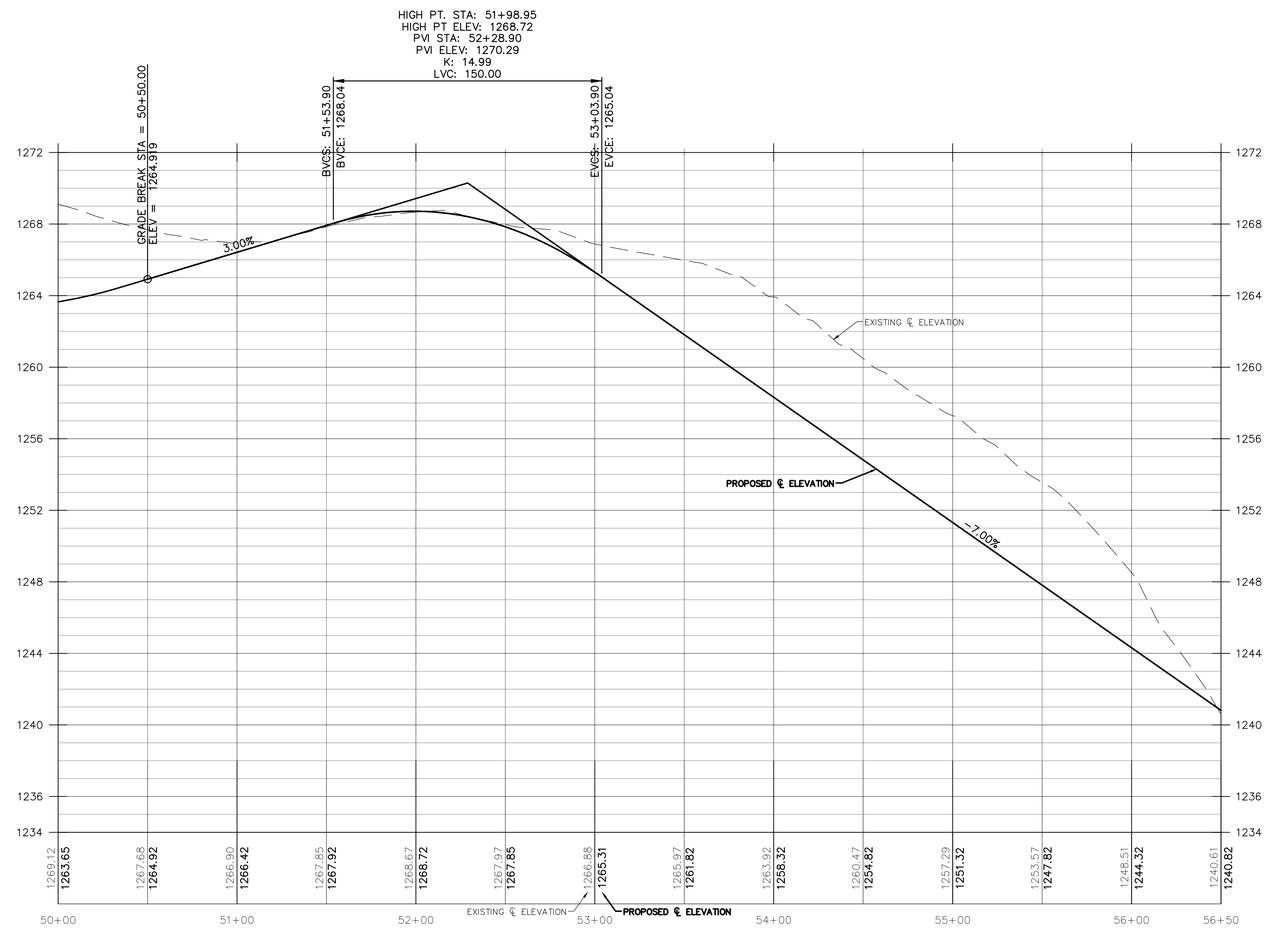
JOB NUMBER
250128900

SHEET NUMBER
C6.0





SHEET KEY



FEATHERSTONE CIRCLE - ROAD AND STORM

SCALE: 1"= 4' VERTICAL
SCALE: 1"= 40' HORIZONTAL
40' 0 40' 80'

NORTH

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION
FEATHERSTONE RISE
CTH F & STH 33 • LA CROSSE, WI 54601

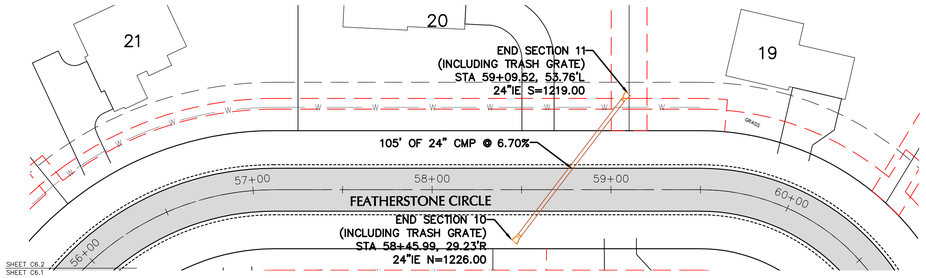
PROFESSIONAL SEAL

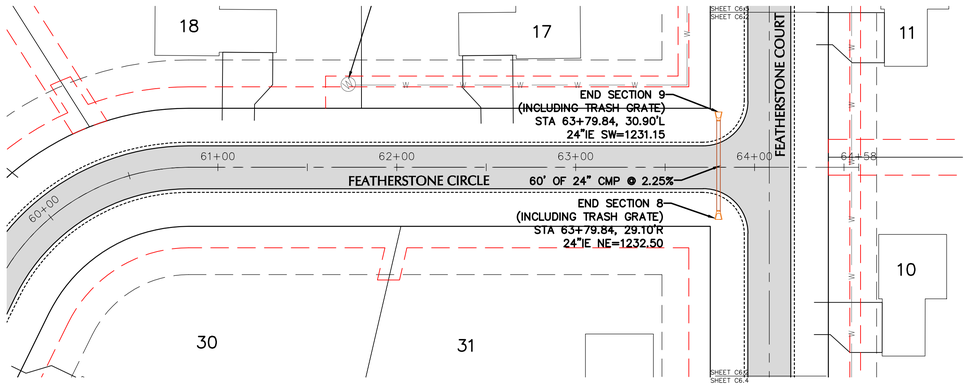
PRELIMINARY DATES
JAN. 9, 2026
FEB. 23, 2026

NOT FOR CONSTRUCTION

JOB NUMBER
250128900

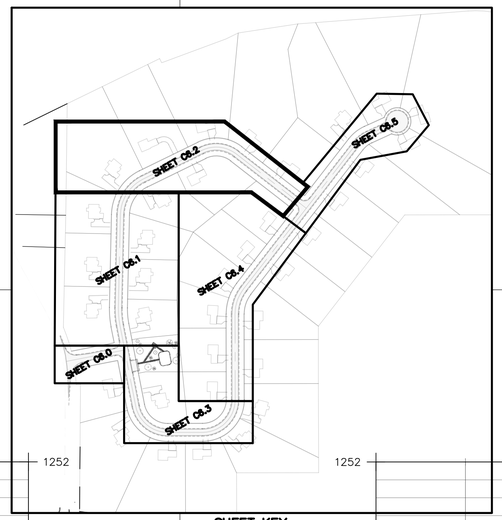
SHEET NUMBER
C6.1



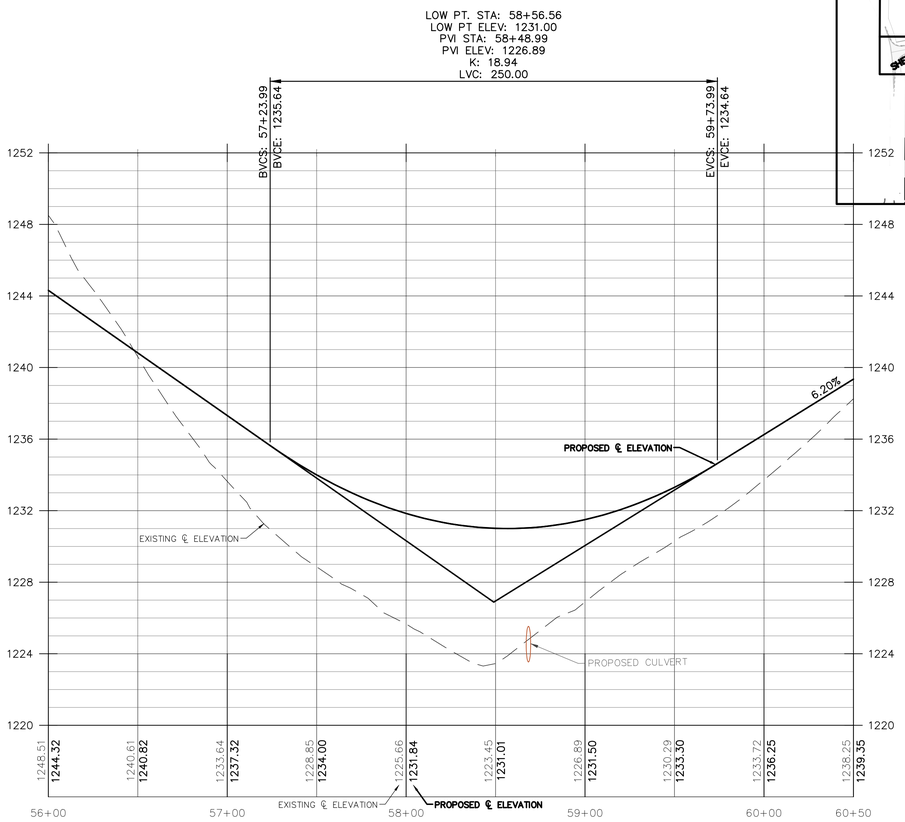


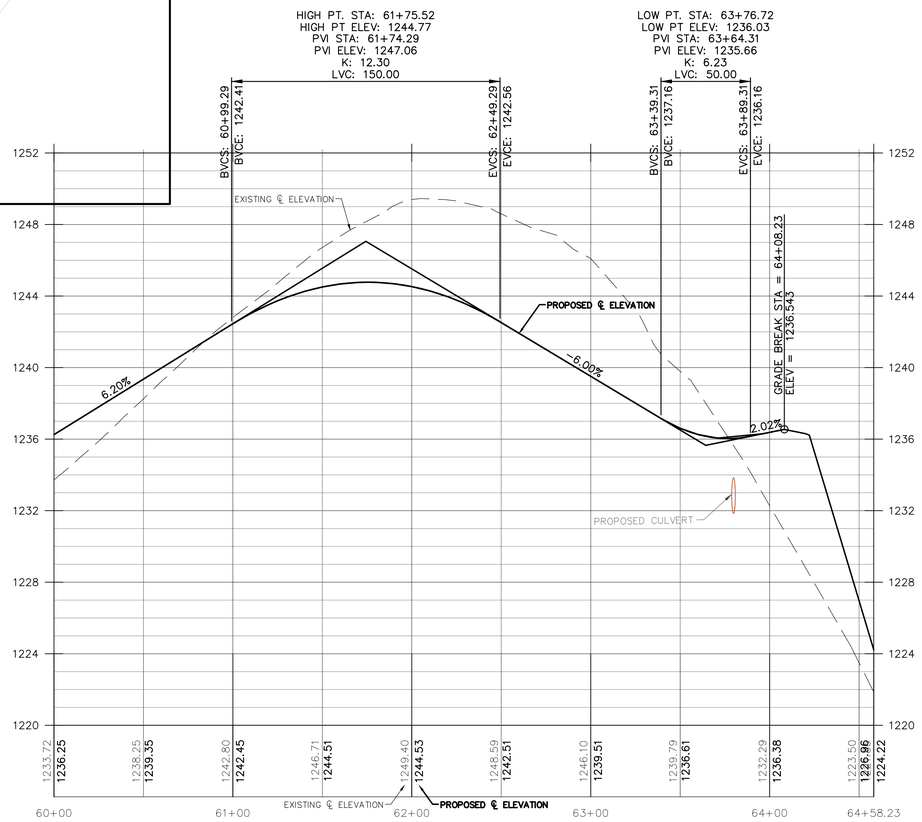
NORTH

NORTH



SHEET KEY





SCALE: 1"= 4' VERTICAL
SCALE: 1"= 40' HORIZONTAL
40' 0 40' 80'

FEATHERSTONE CIRCLE - ROAD AND STORM

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION
FEATHERSTONE RISE
CTH F & STH 33 • LA CROSSE, WI 54601

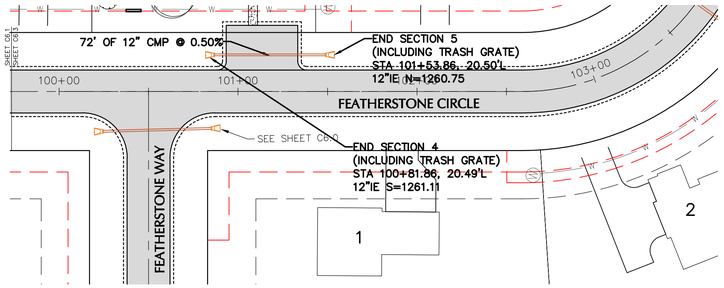
PROFESSIONAL SEAL

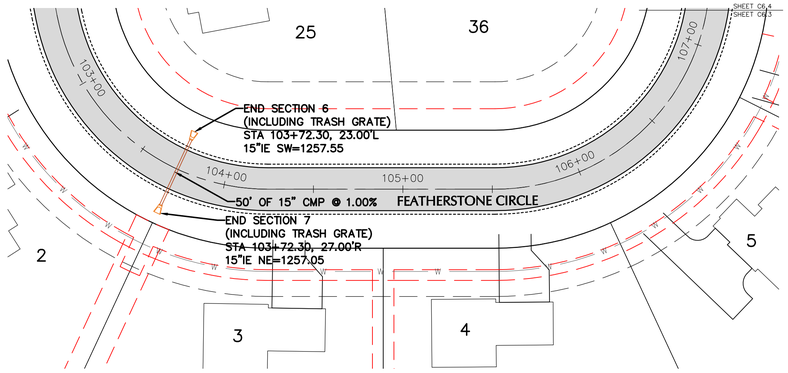
PRELIMINARY DATES
JAN. 9, 2026
FEB. 23, 2026

NOT FOR CONSTRUCTION

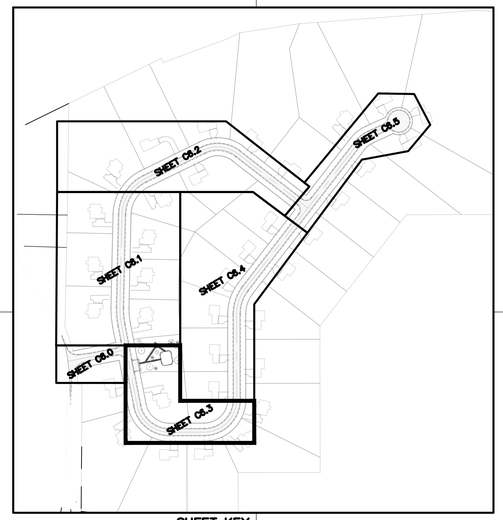
JOB NUMBER
250128900

SHEET NUMBER
C6.2



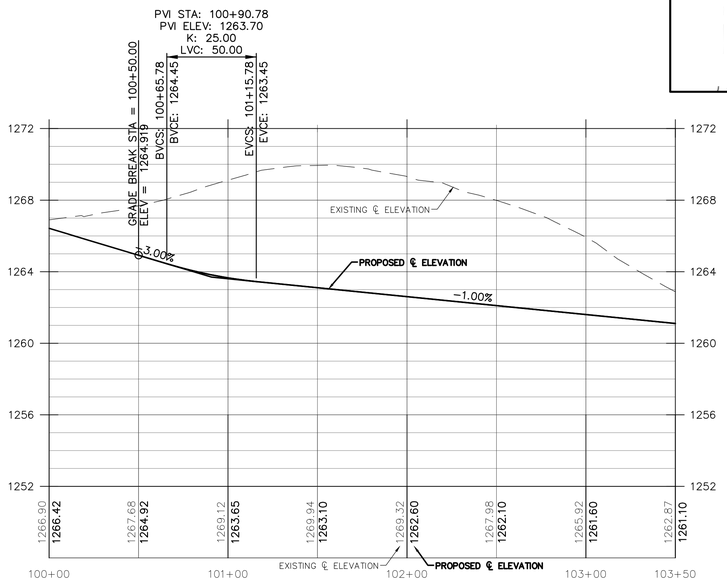


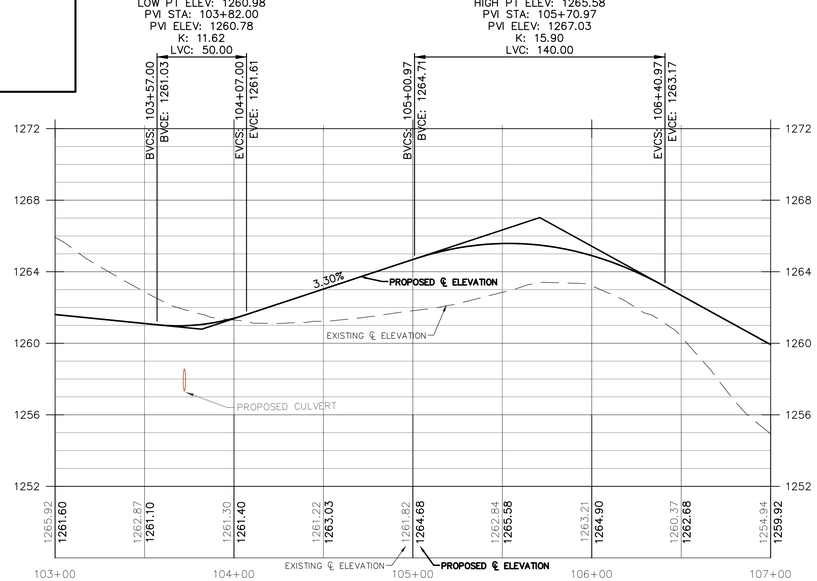
NORTH



SHEET KEY

NORTH





SCALE: 1"= 4' VERTICAL
SCALE: 1"= 40' HORIZONTAL
40' 0 40' 80'

FEATHERSTONE CIRCLE - ROAD AND STORM

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION
FEATHERSTONE RISE
CTH F & STH 33 • LA CROSSE, WI 54601

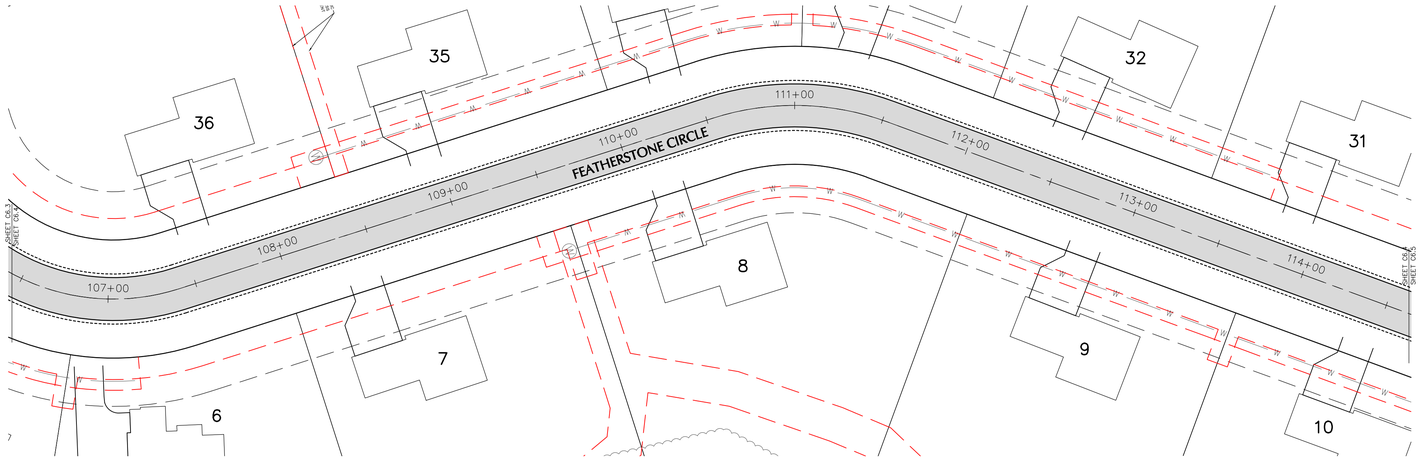
PROFESSIONAL SEAL

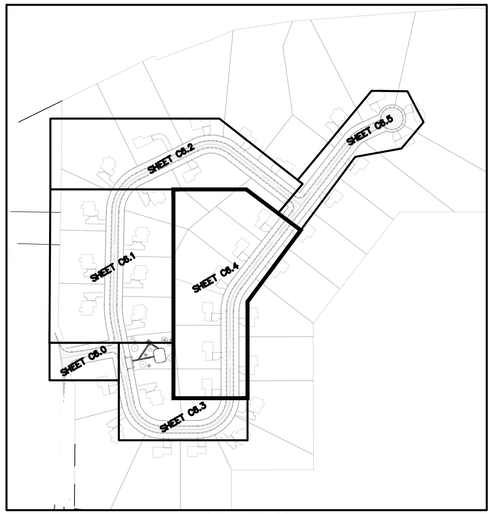
PRELIMINARY DATES
JAN. 9, 2026
FEB. 23, 2026

NOT FOR CONSTRUCTION

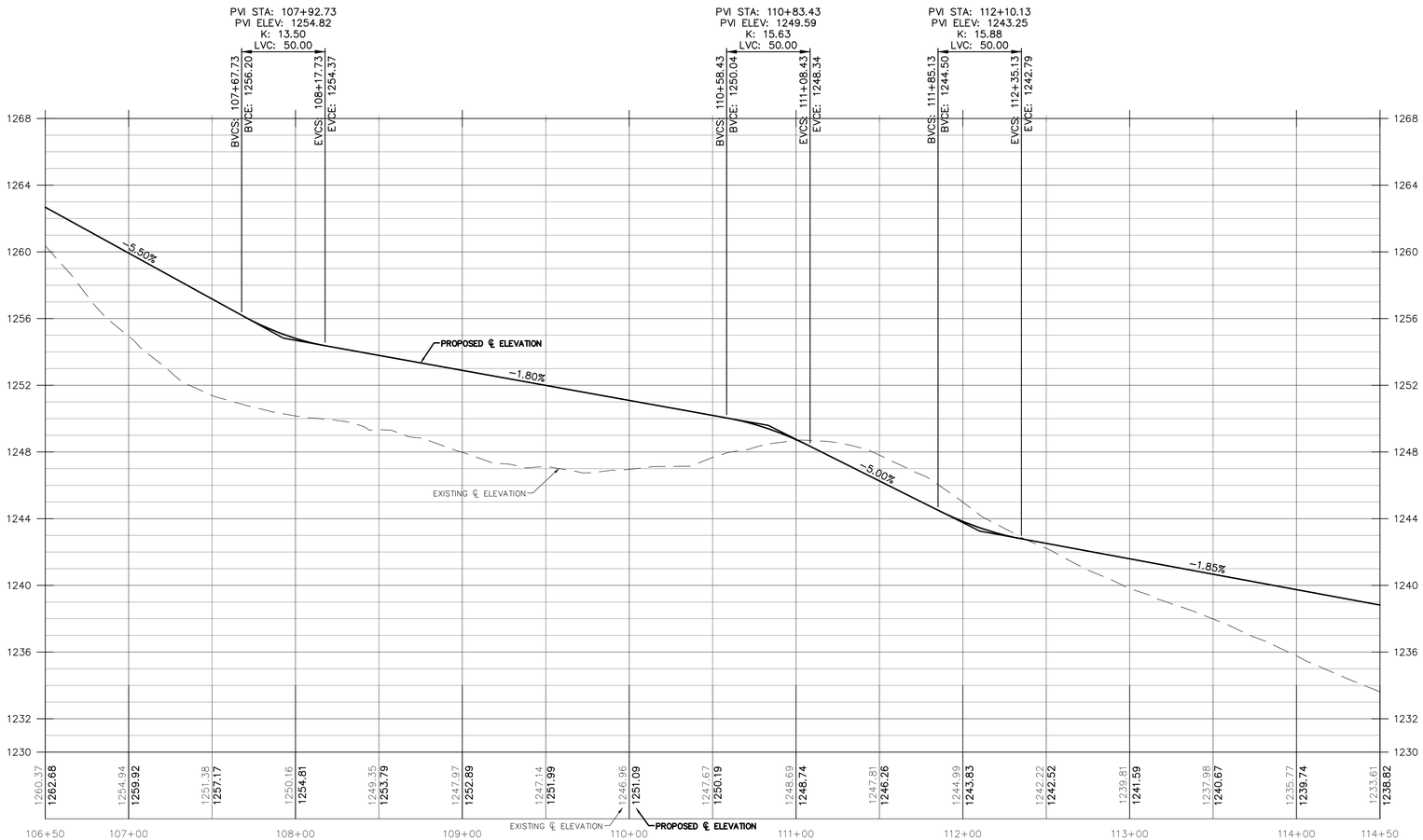
JOB NUMBER
250128900

SHEET NUMBER
C6.3





SHEET KEY



FEATHERSTONE CIRCLE - ROAD AND STORM

SCALE: 1"= 4' VERTICAL
SCALE: 1"= 40' HORIZONTAL
40' 0 40' 80'

NORTH

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION
FEATHERSTONE RISE
CTH F & STH 33 • LA CROSSE, WI 54601

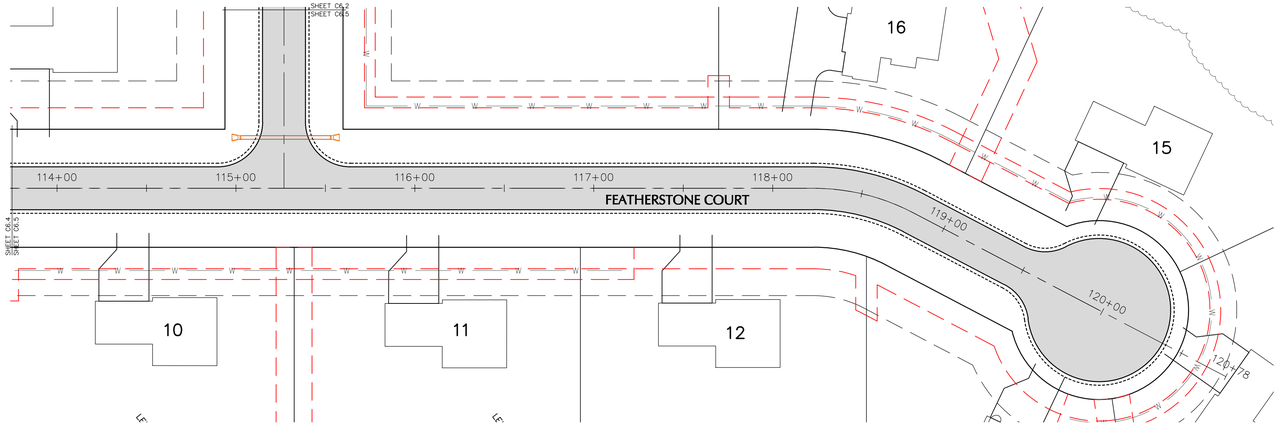
PROFESSIONAL SEAL

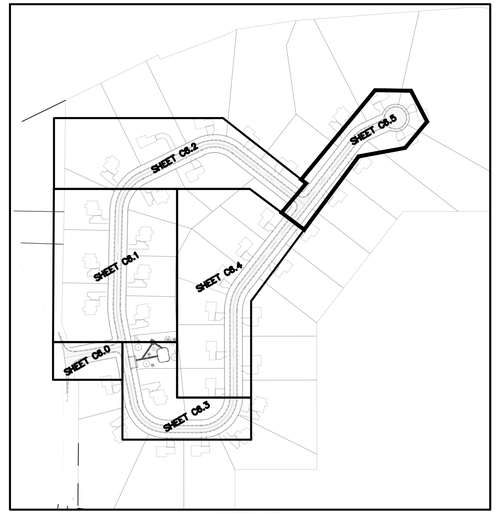
PRELIMINARY DATES
JAN. 9, 2026
FEB. 23, 2026

NOT FOR CONSTRUCTION

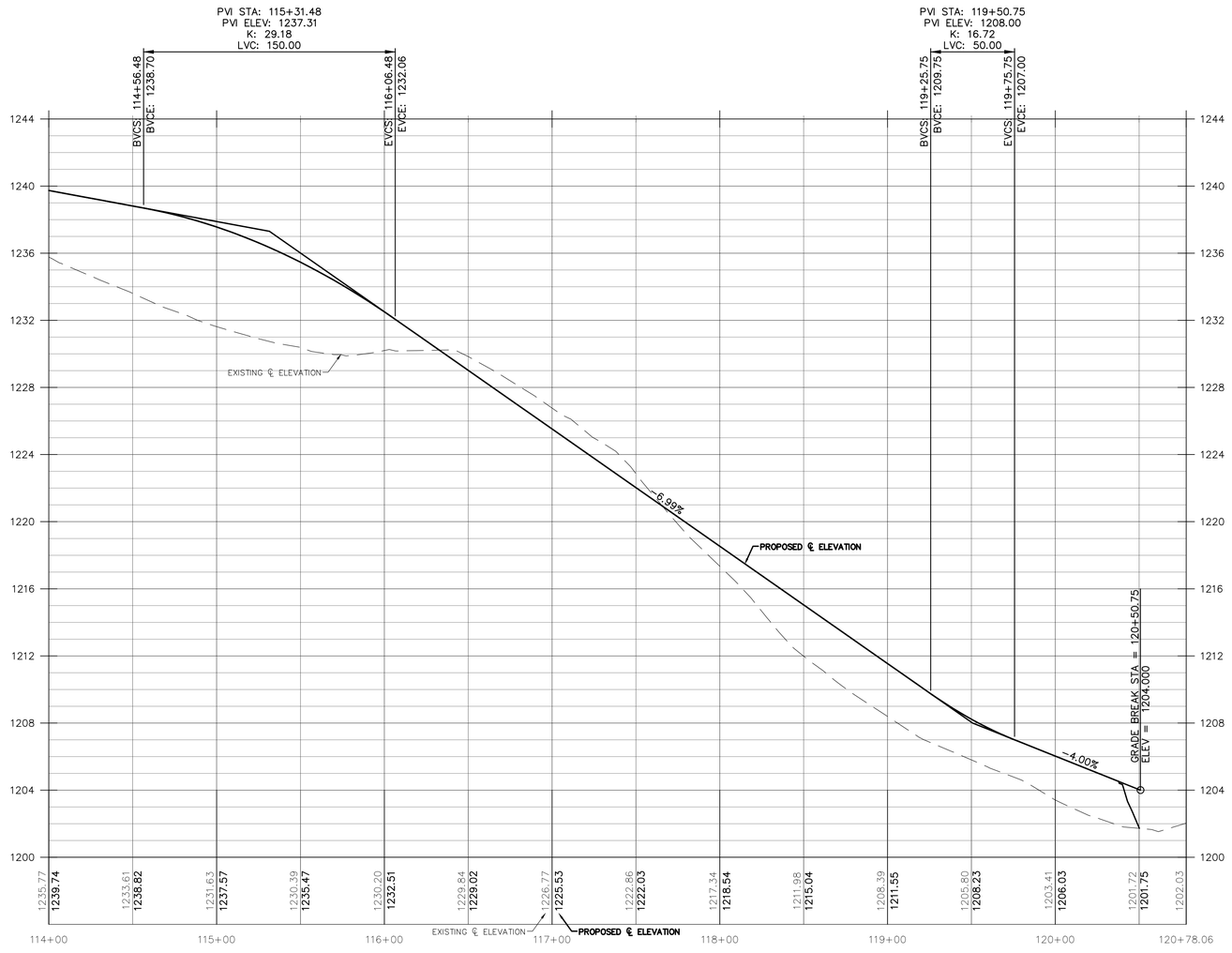
JOB NUMBER
250128900

SHEET NUMBER
C6.4





SHEET KEY



NORTH

SCALE: 1"= 4' VERTICAL
SCALE: 1"= 40' HORIZONTAL
40' 0 40' 80'

FEATHERSTONE COURT - ROAD AND STORM

EXCEL
Always a Better Plan
100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION
FEATHERSTONE RISE
CTH F & STH 33 • LA CROSSE, WI 54601

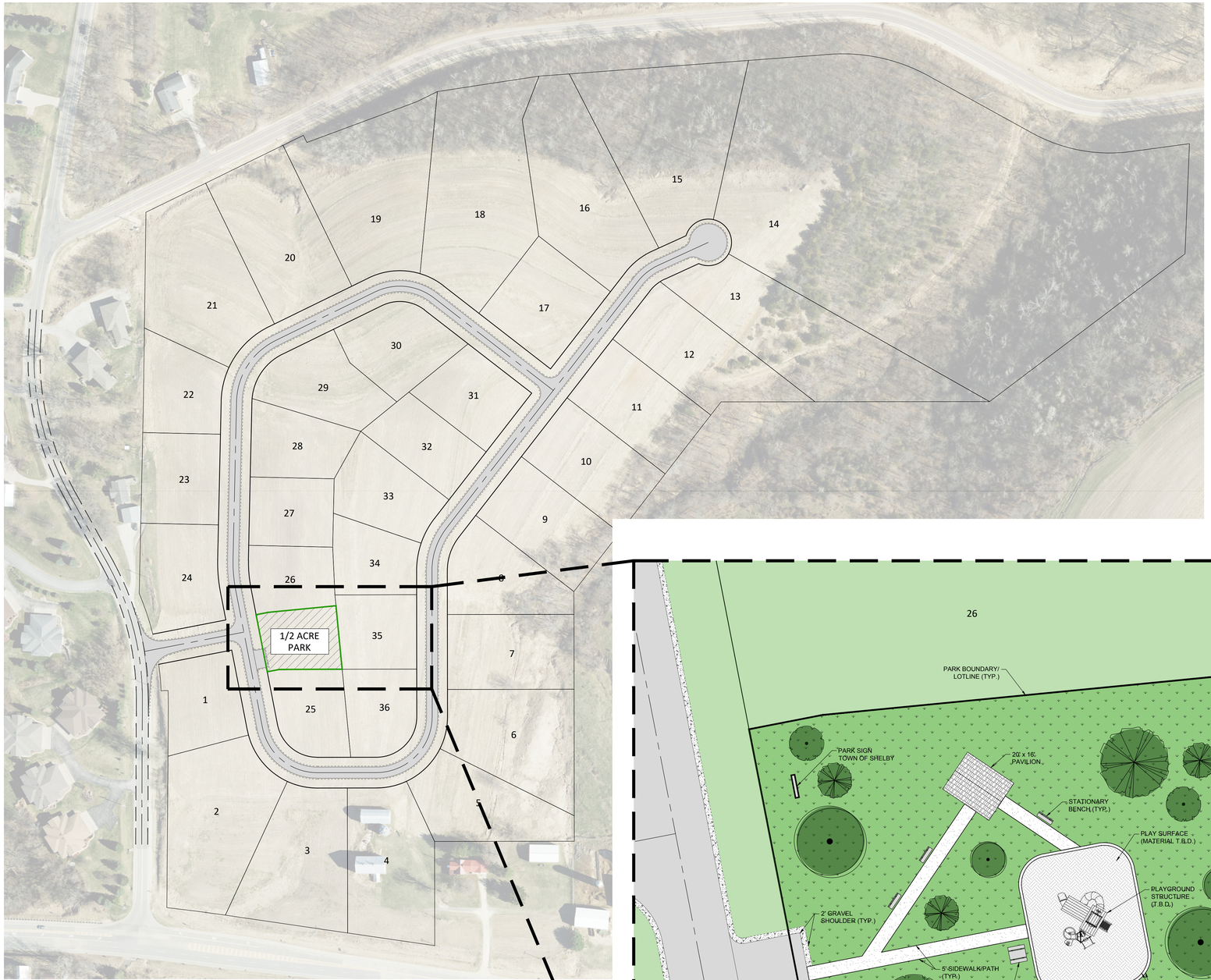
PROFESSIONAL SEAL

PRELIMINARY DATES
JAN. 9, 2026
FEB. 23, 2026

NOT FOR CONSTRUCTION

JOB NUMBER
250128900

SHEET NUMBER
C6.5



SUBDIVISION LAYOUT

SCALE: 1"=120'

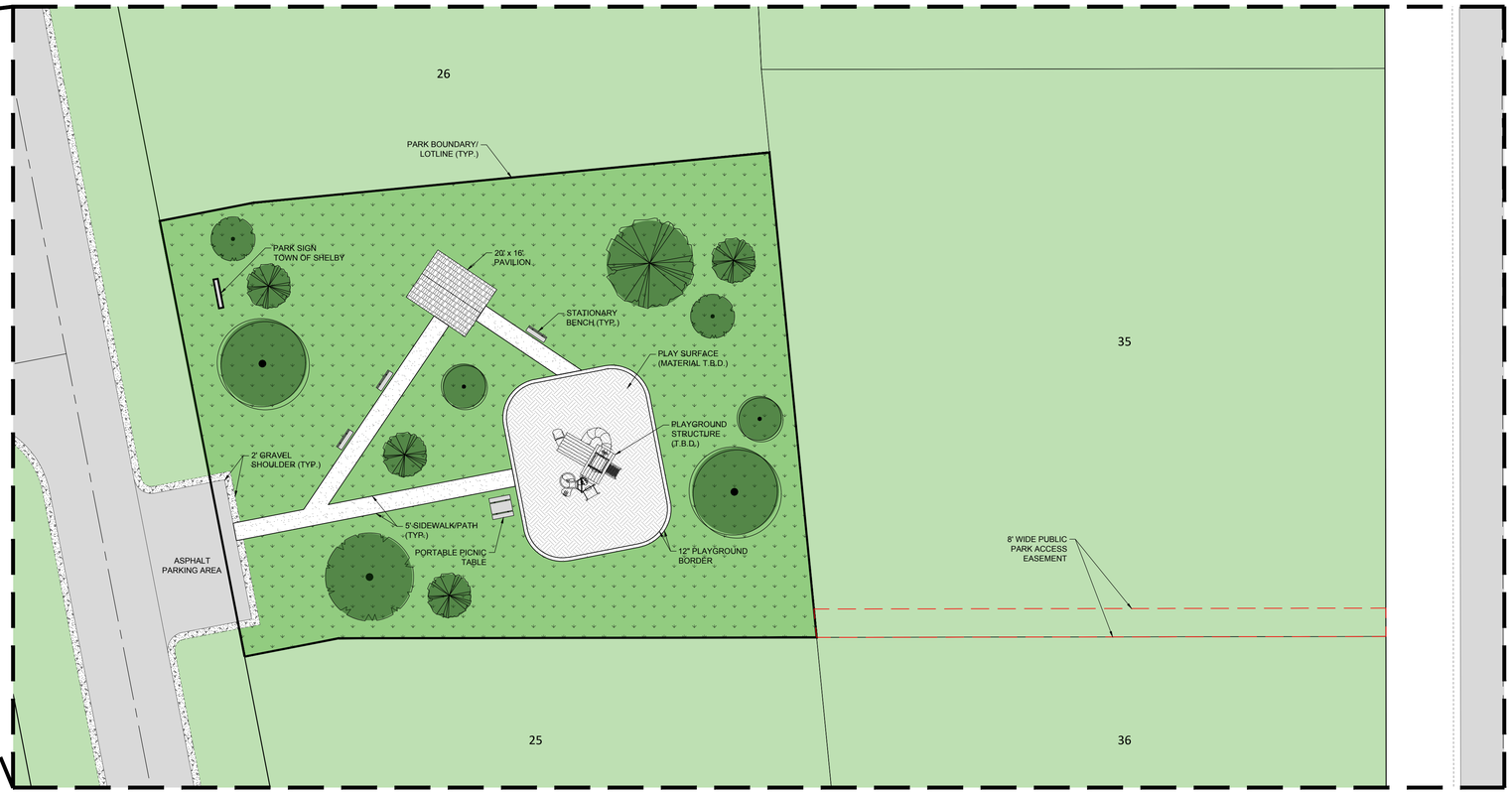
PLAYGROUND #1

PLAYGROUND #2

PLAYGROUND #3

20' x 16' PAVILION

NOTE: IMAGES ARE FOR CONCEPTUAL USE AND INSPIRATION ONLY.



SCHEMATIC PARK PLAN

SCALE: 1"=20'

NORTH

PARK LAYOUT EXHIBIT

EXCEL

Always a Better Plan

100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

PROJECT INFORMATION

PROPOSED RESIDENTIAL SUBDIVISION

FEATHERSTONE RISE

CTH F & STH 33 • LA CROSSE, WI 54601

PROFESSIONAL SEAL

PRELIMINARY DATES

JAN. 9, 2026
FEB. 10, 2026
FEB. 23, 2026

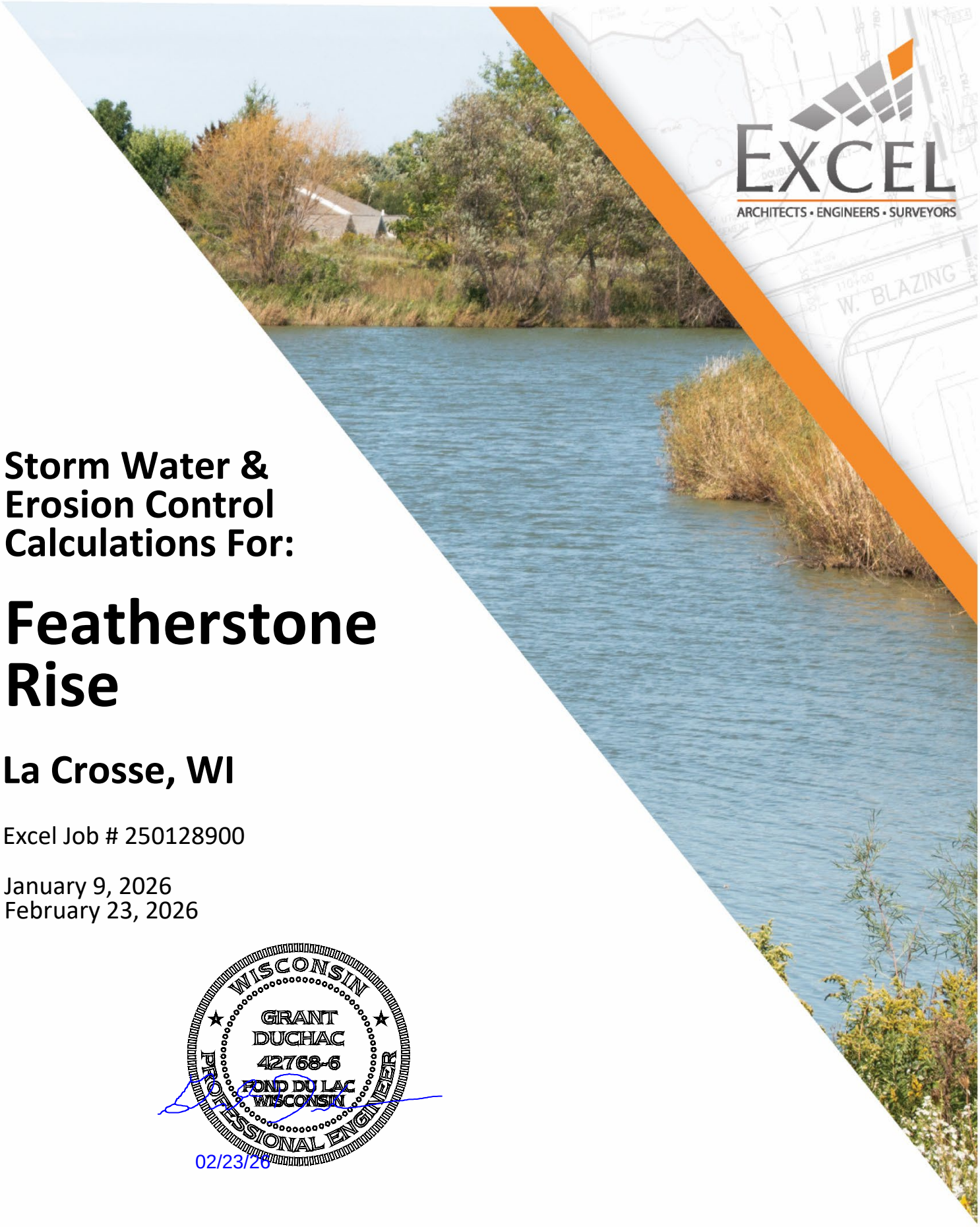
NOT FOR CONSTRUCTION

JOB NUMBER

250128900

SHEET NUMBER

C7.0



Storm Water & Erosion Control Calculations For:

Featherstone Rise

La Crosse, WI

Excel Job # 250128900

January 9, 2026
February 23, 2026

WISCONSIN
GRANT
DUCHAC
42768-6
FOND DU LAC
WISCONSIN
PROFESSIONAL ENGINEER
02/23/26

Prepared by Grant Duchac, P.E.
100 Camelot Drive • Fond du Lac, WI 54935
920-926-9800 • www.excelengineer.com

Table of Contents

Appendices

0.0 Introduction

0.1 Existing Conditions

The proposed development is located on the north side of State Highway 33 in the Town of Shelby, Wisconsin. The project site is bound by County Road F and three residential properties to the west, County Road FO to the north, and wooded and agriculture land to the east. The existing site consists of agricultural fields with wooded areas and contains two barns. The southwest corner of the site drains toward STH 33. A small westerly portion drains west through a 24" culvert beneath County Rd. F. While most of the site drains to the north along County Road FO. No wetlands are present within the site; however, portions of the property contain steep slopes. The existing site can be seen in Appendix A.

- Property Area: 54.89 acres

0.2 Proposed Project Overview

The proposed project will include 36 single-family residential lots. Stormwater runoff from the development will be conveyed through a network of swales and culverts to six stormwater management biofiltration basins located around the perimeter of the site. These basins are designed to promote infiltration, reduce peak discharge rates, and provide stormwater treatment in compliance with local and state stormwater quantity, quality, and infiltration requirements.
The proposed site can be seen in Appendix B.

- Drainage/Ultimate Development Area: 35.03 acres
- Disturbed Area: 12.14 acres

1.0 Design Criteria

1.1 Soils

Soil characteristics were determined using the web soil survey. See Table 1 for a summary of the soils and hydrologic ratings indicated by the web soil survey and Appendix D for web soil survey map.

Table 1: Web Soil Survey

MAP SYMBOL	SOIL TYPE	HYDROLOGIC RATING
114B2	Mt. Carroll Silt Loam	B
132C2	Brinkman Silt Loam	B
133D2	Valton Silt Loam	C
163E2	Elbaville Silt Loam	C
601C	Beavercreek Cobbly Fine Sandy Loam	A
1125F	Doreton	B

Soil borings are to be completed for the project site in the future.

1.2 Rainfall Data

NOAA Atlas 14, La Crosse County rainfall depths with a MSE 4 distribution was used for stormwater calculations.

Table 2: NOAA Atlas 14 24-hour Rainfall Depth

DESIGN STORM	RAINFALL DEPTH (INCHES)
1-YEAR	2.50
2-YEAR	2.90
5-YEAR	3.70
10-YEAR	4.30
25-YEAR	4.90
100-YEAR	6.10

2.0 Stormwater Management Requirements

2.1 Peak Discharge

La Crosse County- Maintain or reduce the 1-yr, 2-yr, 5-yr, 10-yr, and 25-yr, 24 hour post development peak runoff discharge rates to the 1-yr, 2-yr, 5-yr, 10-yr, and 25-yr, 24 hour pre development peak runoff discharge rates respectively, or to the maximum extent practicable. All designed stormwater facilities shall safely pass the 100-yr storm event.

Wisconsin Department of Natural Resources (DNR)- Maintain or reduce the 1-yr and 2-yr 24 hour post development peak runoff discharge rates to the 1-yr and 2-yr 24 hour pre development peak runoff discharge rates respectively, or to the maximum extent practicable.

Wisconsin Department of Transportation (DOT)- Maintain or reduce the 1-yr, 2-yr, 10-yr, 25-yr, 50-yr and 100-yr 24 hour post development peak runoff discharge rates to the 1-yr, 2-yr, 10-yr, 25-yr, 50-yr and 100-yr, 24 hour pre development peak runoff discharge rates respectively, or to the maximum extent practicable drainage to the STH 33.

The Pre Development runoff curve numbers used were based on La Crosse County Post Construction Storm Water Management 29.09(1)(c). Per discussions with La Crosse County Conservation Department, post development curve numbers represent the actual post construction state as development disturbance will be limited.

Table 3: Runoff Curve Numbers

SOIL GROUP	PRE DEVELOPMENT	POST DEVELOPMENT
HYDROLOGIC GROUP B	55	61
HYDROLOGIC GROUP C	70	74

A combination of biofiltration basins will be used to reduce peak flows to be below the predevelopment flows throughout the subdivision. Some low sediment runoff residential lot areas will drain directly offsite without treatment through a stormwater facility. The runoff from the treated areas will overcompensate for the untreated areas.

Table 4: 100yr-24hr storm biofiltration summary

BIOFILTER	EMERGENCY SPILLWAY ELEVATION (FT)	CALCULATED POND ELEVATION (FT)	BASIN DISCHARGE (CFS)	DISCHARGE EXIT POINT
1A	1243.00	1242.96	6.62	STH 33 ROW
3A	1197.00	1197.22	13.73	CTH FO ROW
3B	1199.00	1199.47	24.52	CTH FO ROW
3C	1181.00	1181.10	6.79	CTH FO ROW
3D	1191.00	1191.05	6.89	CTH FO ROW
3E	1219.00	1219.11	7.12	CTH FO ROW

Table 5: Pond Summary – Basin 1A

DESIGN STORM	POND RELEASE RATE (CFS)	STORAGE VOLUME (C.F.)	MAXIMUM ELEVATION (FT)
1 YR – 24 HR	0.32	2,951	1239.93
2 YR – 24 HR	0.45	5,132	1240.45
5 YR – 24 HR	1.17	8,802	1241.17
10 YR – 24 HR	2.19	11,696	1241.65
25 YR – 24 HR	3.60	14,669	1242.10
100 YR – 24 HR	6.62	21,220	1242.96

Table 6: Pond Summary – Basin 3A

DESIGN STORM	POND RELEASE RATE (CFS)	STORAGE VOLUME (C.F.)	MAXIMUM ELEVATION (FT)
1 YR – 24 HR	0.56	7,129	1193.37
2 YR – 24 HR	0.97	10,734	1193.92
5 YR – 24 HR	2.63	17,153	1194.76
10 YR – 24 HR	4.83	22,437	1195.36
25 YR – 24 HR	6.79	28,352	1195.98
100 YR – 24 HR	13.73	42,103	1197.22

Table 7: Pond Summary – Basin 3B

DESIGN STORM	POND RELEASE RATE (CFS)	STORAGE VOLUME (C.F.)	MAXIMUM ELEVATION (FT)
1 YR – 24 HR	0.53	6,156	1196.53
2 YR – 24 HR	0.96	8,793	1196.99
5 YR – 24 HR	2.61	13,957	1197.78
10 YR – 24 HR	4.59	18,152	1198.33
25 YR – 24 HR	6.56	22,719	1198.86
100 YR – 24 HR	24.52	28,439	1199.47

Table 8: Pond Summary – Basin 3C

DESIGN STORM	POND RELEASE RATE (CFS)	STORAGE VOLUME (C.F.)	MAXIMUM ELEVATION (FT)
1 YR – 24 HR	0.23	2,322	1178.99
2 YR – 24 HR	0.31	3,509	1179.39
5 YR – 24 HR	0.73	5,454	1179.96
10 YR – 24 HR	1.13	6,905	1180.33
25 YR – 24 HR	2.08	8,327	1180.67
100 YR – 24 HR	6.79	10,244	1181.10

Table 9: Pond Summary – Basin 3D

DESIGN STORM	POND RELEASE RATE (CFS)	STORAGE VOLUME (C.F.)	MAXIMUM ELEVATION (FT)
1 YR – 24 HR	0.37	2,240	1188.74
2 YR – 24 HR	0.74	2,906	1189.08
5 YR – 24 HR	1.92	4,243	1189.67
10 YR – 24 HR	3.16	5,269	1190.07
25 YR – 24 HR	4.56	6,232	1190.42
100 YR – 24 HR	6.89	8,209	1191.05

Table 10: Pond Summary – Basin 3E

DESIGN STORM	POND RELEASE RATE (CFS)	STORAGE VOLUME (C.F.)	MAXIMUM ELEVATION (FT)
1 YR – 24 HR	0.26	2,290	1216.82
2 YR – 24 HR	0.30	3,688	1217.25
5 YR – 24 HR	0.67	5,965	1217.88
10 YR – 24 HR	1.23	7,552	1218.29
25 YR – 24 HR	2.04	9,113	1218.66
100 YR – 24 HR	7.12	11,171	1219.11

Table 11: Overall Peak Discharge Release Summary

DESIGN STORM	PREDEVELOPMENT (CFS) (1L)	POST DEVELOPMENT (CFS) (2L)
1 YR- 24 HR	2.17	2.11
2 YR- 24 HR	6.15	3.04
5YR- 24 HR	20.61	7.52
10 YR- 24 HR	34.45	15.10
25 YR- 24 HR	50.10	24.04
100 YR- 24 HR	85.40	41.84

Table 11 shows that post development release rates for the entire development will be less than predevelopment release rates for all design storms.

Table 12: Drainage to WisDOT STH 33 right-of-way

	PREDEVELOPMENT	POST DEVELOPMENT			
DESIGN STORM	**Peak Discharge (cfs)** (1)	**To Biofilter (cfs)** (1A)	**Basin Discharge (cfs)** (P1A)	**Offsite (cfs)** (1B)	**Peak Discharge (To Biofilter + Offsite) (cfs)** (3L)
1YR-24 HR	**0.09**	2.93	0.32	0.14	**0.14**
2YR-24 HR	**0.31**	4.83	0.45	0.26	**0.26**
5YR-24HR	**1.62**	9.27	1.17	0.55	**0.77**
10YR-24HR	**3.23**	13.00	2.19	0.80	**1.81**
25YR-24HR	**5.15**	16.99	3.02	1.08	**3.27**
100YR-24HR	**9.61**	25.52	5.93	1.67	**6.55**

Table 12 shows that post development release rates to WisDOT STH 33 will be less than pre development release rates for the 2-yr, 5-yr, 10-yr, 25-yr and 100-yr 24 hour storms. Due to the conservative pre (meadow condition) and post runoff curve numbers listed in Table 3, the 1-yr 24 hour storm draining to STH 33 has been reduced to the maximum extent practicable.

See sheets C2.1-C2.3 and C4.0-C4.3 of the construction plans for pond design and Appendix C for peak discharge calculations.

Therefore, peak discharge requirements are met.

2.2 Stormwater Quality

La Crosse County- The site is considered a new development project and will be required to remove 80% of total suspended solids (TSS) from site runoff.

Wisconsin DNR- The site is considered a new development project and will be required to remove 80% of total suspended solids (TSS) from site runoff.

The site will treat stormwater using a combination of biofiltration with storage. SLAMM analysis was used to determine the quantity of suspended solids that will be removed by the proposed biofiltration basins. The proposed site will create 5,780 lbs of TSS and the proposed biofiltration basins will reduce TSS to 1150 lbs, which results in an 80.10% reduction in TSS release.

Since the proposed biofiltration basins remove 80.10% of suspended solids which is greater than the required 80%.

Therefore, stormwater quality requirements have been met.

2.3 Infiltration

La Crosse County- Infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 90% of the pre-development infiltration volume, based on an average annual rainfall. However, no more than 1% of the post-construction site is required as an effective infiltration area.

Wisconsin DNR- Infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 90% of the pre-development infiltration volume, based on an average annual rainfall. However, no more than 1% of the post-construction site is required as an effective infiltration area.

The proposed development will be 1,525,922 sf, which means that a maximum of 15,260 sf of area will be required for infiltration onsite. The six proposed biofiltration basins have an area of 19,614 sf of infiltration area.
This meets the 1% maximum requirement (19,614 sf / 1,525,922 sf = 1.3%).

Therefore, Infiltration requirements are met.

3.0 Storm Sewer Design

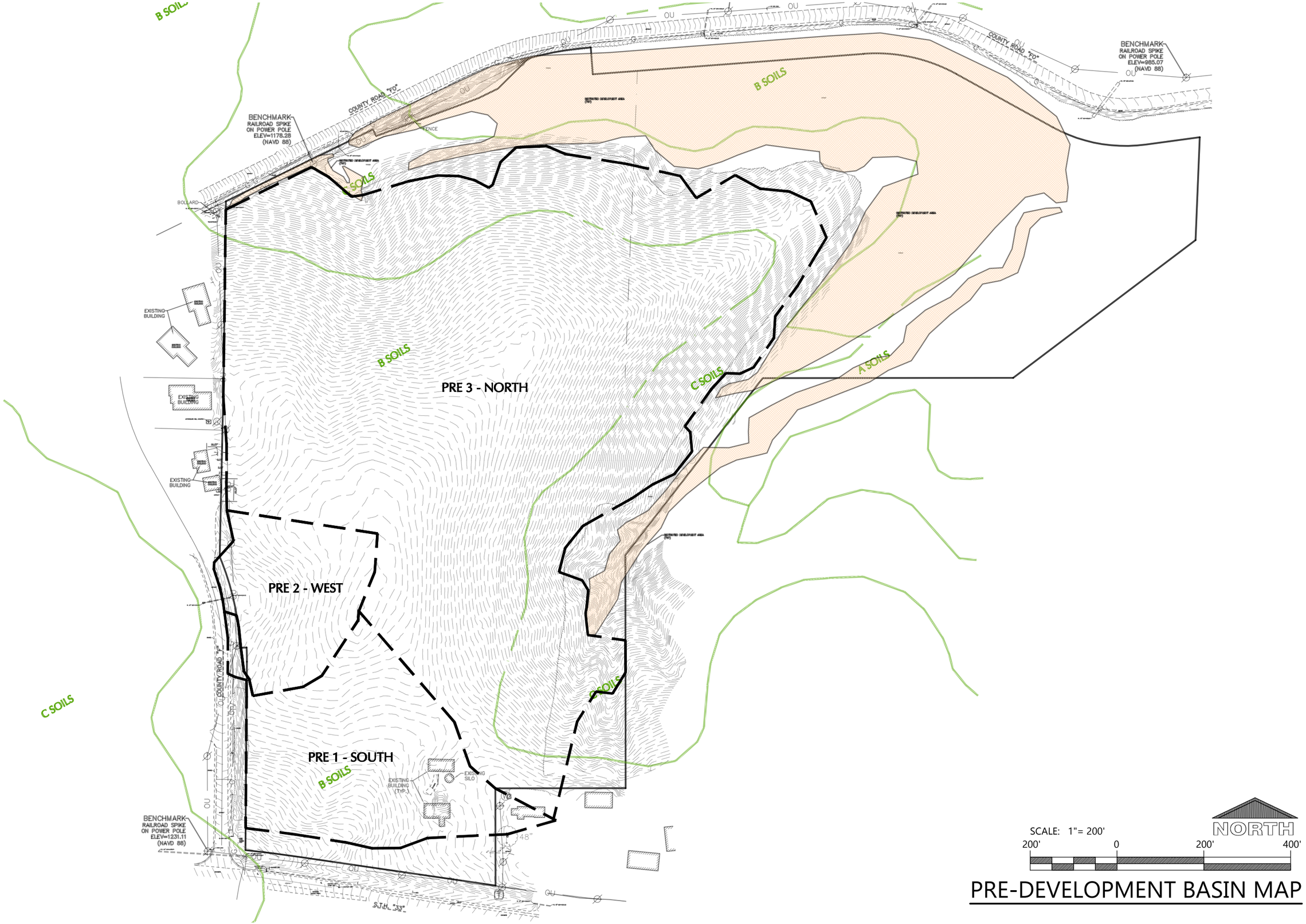
All storm sewers have been designed to convey the 25-year 24-hour post development storm.

See Appendix E and Appendix F for pipe drainage areas and pipe sizing calculations.

4.0 Erosion Control

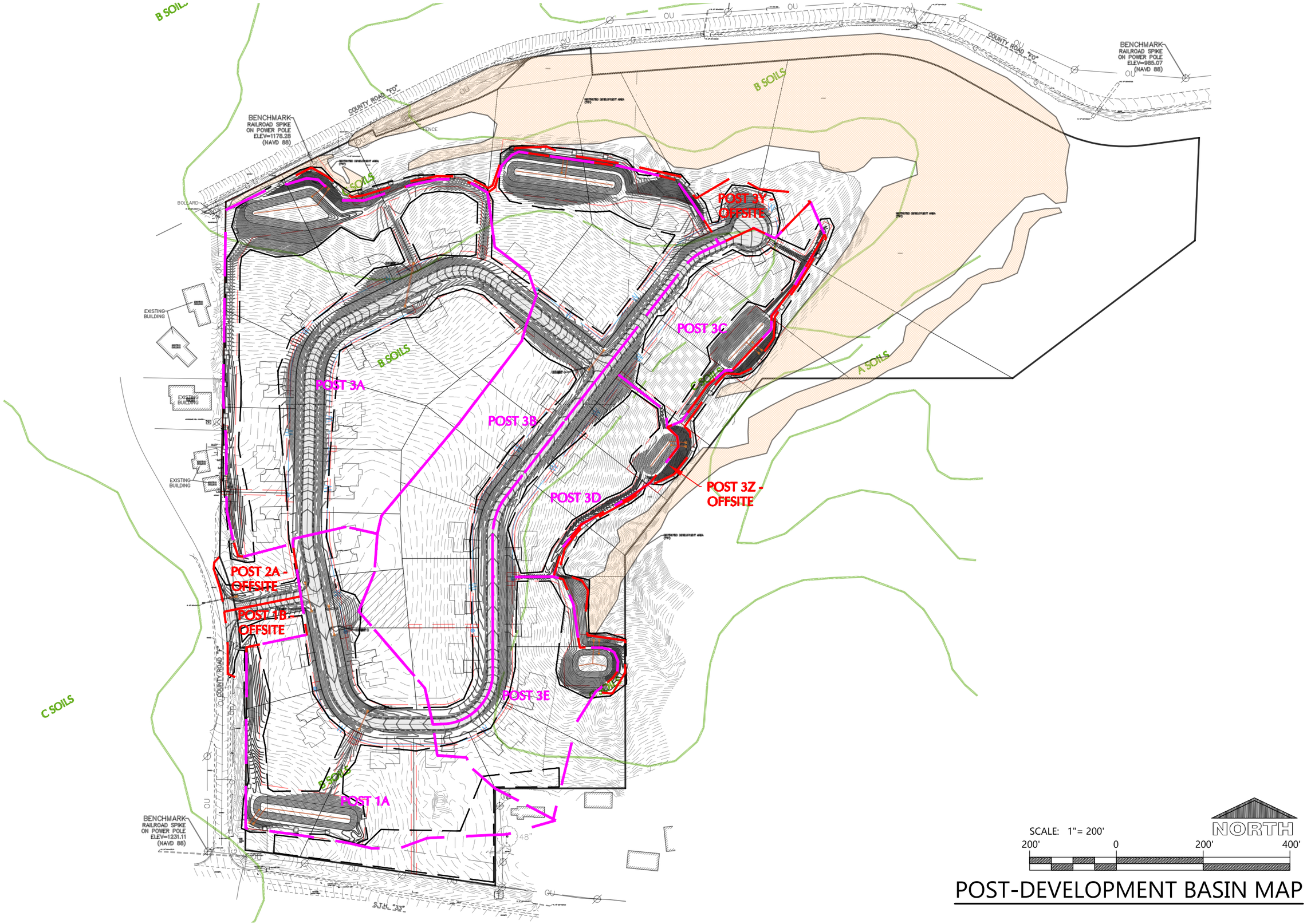
The erosion control measures shall follow La Crosse County specifications. The construction sequence, erosion matting and erosion control notes are shown in the construction plan set.

Appendix A: Pre-Development Basin Area(s)



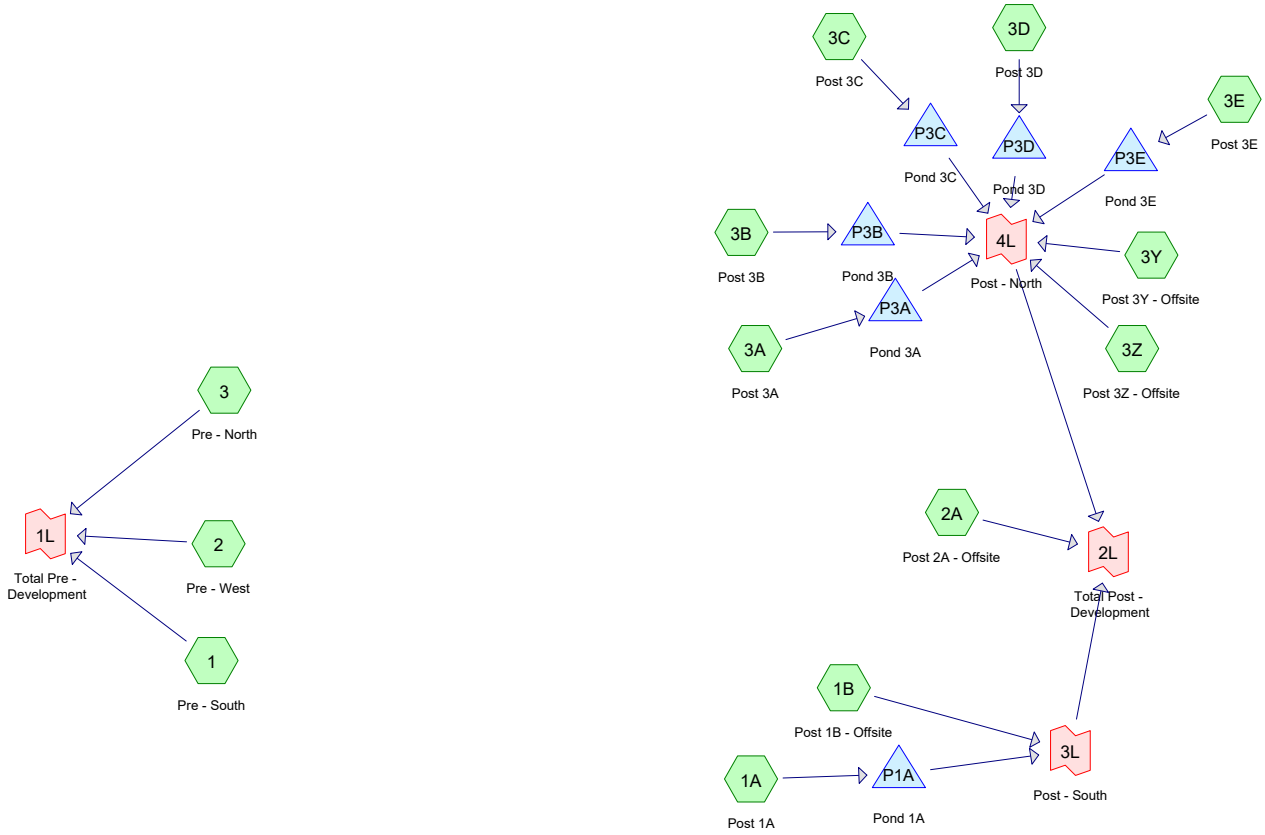
PRE-DEVELOPMENT BASIN MAP

Appendix B: Post Development Basin Area(s)



POST-DEVELOPMENT BASIN MAP

Appendix C: Peak Discharge Calculations



Routing Diagram for 250128900_swm
Prepared by Excel Engineering, Printed 2/23/2026
HydroCAD® 10.20-6a s/n 01178 © 2024 HydroCAD Software Solutions LLC

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1 YR	MSE 24-hr	4	Default	24.00	1	2.50	2
2	2 YR	MSE 24-hr	4	Default	24.00	1	2.90	2
3	5 YR	MSE 24-hr	4	Default	24.00	1	3.70	2
4	10 YR	MSE 24-hr	4	Default	24.00	1	4.30	2
5	25 YR	MSE 24-hr	4	Default	24.00	1	4.90	2
6	100 YR	MSE 24-hr	4	Default	24.00	1	6.10	2

Time span=5.00-500.00 hrs, dt=0.05 hrs, 9901 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1: Pre - South Runoff Area=4.910 ac 0.00% Impervious Runoff Depth=0.08"
Tc=10.0 min CN=55 Runoff=0.09 cfs 0.034 af

Subcatchment1A: Post 1A Runoff Area=6.030 ac 19.24% Impervious Runoff Depth=0.39"
Tc=6.0 min CN=68 Runoff=2.93 cfs 0.195 af

Subcatchment1B: Post 1B - Offsite Runoff Area=0.440 ac 11.36% Impervious Runoff Depth=0.30"
Tc=6.0 min CN=65 Runoff=0.14 cfs 0.011 af

Subcatchment2: Pre - West Runoff Area=2.540 ac 0.00% Impervious Runoff Depth=0.08"
Tc=6.0 min CN=55 Runoff=0.04 cfs 0.017 af

Subcatchment2A: Post 2A - Offsite Runoff Area=0.530 ac 11.32% Impervious Runoff Depth=0.30"
Tc=6.0 min CN=65 Runoff=0.16 cfs 0.013 af

Subcatchment3: Pre - North Runoff Area=27.590 ac 0.00% Impervious Runoff Depth=0.17"
Tc=10.0 min CN=60 Runoff=2.12 cfs 0.400 af

Subcatchment3A: Post 3A Runoff Area=10.600 ac 18.58% Impervious Runoff Depth=0.46"
Tc=6.0 min CN=70 Runoff=6.50 cfs 0.402 af

Subcatchment3B: Post 3B Runoff Area=8.450 ac 19.88% Impervious Runoff Depth=0.49"
Tc=6.0 min CN=71 Runoff=5.75 cfs 0.346 af

Subcatchment3C: Post 3C Runoff Area=2.490 ac 22.89% Impervious Runoff Depth=0.65"
Tc=6.0 min CN=75 Runoff=2.42 cfs 0.135 af

Subcatchment3D: Post 3D Runoff Area=2.380 ac 23.95% Impervious Runoff Depth=0.69"
Tc=6.0 min CN=76 Runoff=2.49 cfs 0.138 af

Subcatchment3E: Post 3E Runoff Area=2.780 ac 19.06% Impervious Runoff Depth=0.61"
Tc=6.0 min CN=74 Runoff=2.49 cfs 0.141 af

Subcatchment3Y: Post 3Y - Offsite Runoff Area=0.820 ac 36.59% Impervious Runoff Depth=1.06"
Tc=6.0 min CN=83 Runoff=1.36 cfs 0.072 af

Subcatchment3Z: Post 3Z - Offsite Runoff Area=0.520 ac 0.00% Impervious Runoff Depth=0.61"
Tc=6.0 min CN=74 Runoff=0.47 cfs 0.026 af

Subcatchment5S: Culvert 1 Runoff Area=4,797 sf 48.61% Impervious Runoff Depth=0.84"
Tc=6.0 min CN=79 Runoff=0.14 cfs 0.008 af

Subcatchment6S: Culvert 2 Runoff Area=24,708 sf 36.87% Impervious Runoff Depth=0.65"
Tc=6.0 min CN=75 Runoff=0.55 cfs 0.031 af

Subcatchment7S: Culvert 3 Runoff Area=41,517 sf 32.00% Impervious Runoff Depth=0.57"
Tc=6.0 min CN=73 Runoff=0.78 cfs 0.045 af

Subcatchment8S: Culvert 4 Runoff Area=209,603 sf 25.18% Impervious Runoff Depth=0.46"
Tc=6.0 min CN=70 Runoff=2.95 cfs 0.183 af

Subcatchment9S: Culvert 5 Runoff Area=188,836 sf 19.96% Impervious Runoff Depth=0.39"
Tc=6.0 min CN=68 Runoff=2.10 cfs 0.140 af

Pond P1A: Pond 1A Peak Elev=1,239.93' Storage=2,951 cf Inflow=2.93 cfs 0.195 af
Primary=0.00 cfs 0.000 af Secondary=0.32 cfs 0.195 af Tertiary=0.00 cfs 0.000 af Outflow=0.32 cfs 0.195 af

Pond P3A: Pond 3A Peak Elev=1,193.37' Storage=7,129 cf Inflow=6.50 cfs 0.402 af
Primary=0.04 cfs 0.006 af Secondary=0.52 cfs 0.396 af Tertiary=0.00 cfs 0.000 af Outflow=0.56 cfs 0.402 af

Pond P3B: Pond 3B Peak Elev=1,196.53' Storage=6,156 cf Inflow=5.75 cfs 0.346 af
Primary=0.10 cfs 0.017 af Secondary=0.44 cfs 0.329 af Tertiary=0.00 cfs 0.000 af Outflow=0.53 cfs 0.346 af

Pond P3C: Pond 3C Peak Elev=1,178.99' Storage=2,322 cf Inflow=2.42 cfs 0.135 af
Primary=0.00 cfs 0.000 af Secondary=0.23 cfs 0.135 af Tertiary=0.00 cfs 0.000 af Outflow=0.23 cfs 0.135 af

Pond P3D: Pond 3D Peak Elev=1,188.74' Storage=2,240 cf Inflow=2.49 cfs 0.138 af
Primary=0.22 cfs 0.031 af Secondary=0.15 cfs 0.107 af Tertiary=0.00 cfs 0.000 af Outflow=0.37 cfs 0.138 af

Pond P3E: Pond 3E Peak Elev=1,216.82' Storage=2,290 cf Inflow=2.49 cfs 0.141 af
Primary=0.00 cfs 0.000 af Secondary=0.26 cfs 0.141 af Tertiary=0.00 cfs 0.000 af Outflow=0.26 cfs 0.141 af

Link 1L: Total Pre - Development Inflow=2.17 cfs 0.451 af
Primary=2.17 cfs 0.451 af

Link 2L: Total Post - Development Inflow=2.11 cfs 0.177 af
Primary=2.11 cfs 0.177 af

Link 3L: Post - South Inflow=0.14 cfs 0.011 af
Primary=0.14 cfs 0.011 af

Link 4L: Post - North Inflow=1.82 cfs 0.153 af
Primary=1.82 cfs 0.153 af

Total Runoff Area = 80.857 ac Runoff Volume = 2.336 af Average Runoff Depth = 0.35"
88.21% Pervious = 71.323 ac 11.79% Impervious = 9.534 ac

Summary for Subcatchment 1: Pre - South

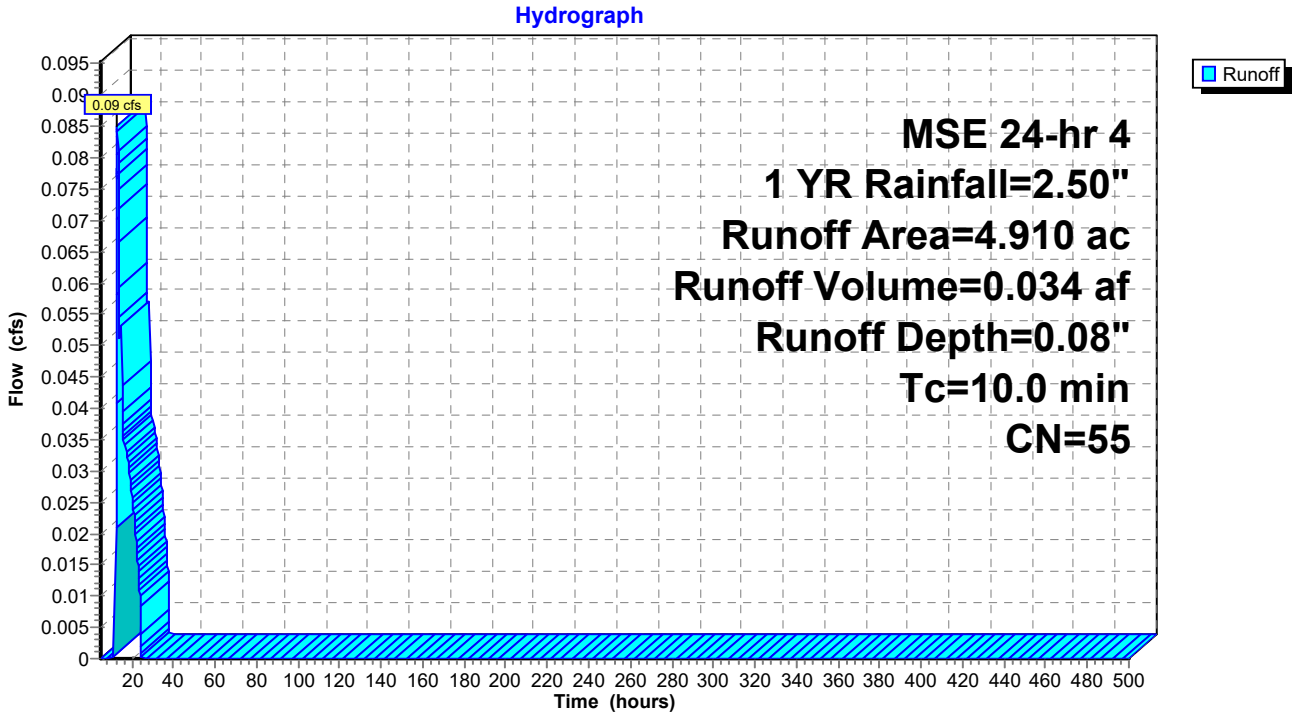
Runoff = 0.09 cfs @ 13.10 hrs, Volume= 0.034 af, Depth= 0.08"
Routed to Link 1L : Total Pre - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1 YR Rainfall=2.50"

	Area (ac)	CN	Description
*	4.910	55	Pre Dev - B Soils
	4.910		100.00% Pervious Area

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

Subcatchment 1: Pre - South



Hydrograph for Subcatchment 1: Pre - South

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.11	0.00	0.00
10.00	0.40	0.00	**0.00**
15.00	2.20	0.04	**0.05**
20.00	**2.42**	**0.07**	0.03
25.00	**2.50**	**0.08**	0.00
30.00	2.50	0.08	0.00
35.00	2.50	0.08	0.00
40.00	2.50	0.08	0.00
45.00	2.50	0.08	0.00
50.00	2.50	0.08	0.00
55.00	2.50	0.08	0.00
60.00	2.50	0.08	0.00
65.00	2.50	0.08	0.00
70.00	2.50	0.08	0.00
75.00	2.50	0.08	0.00
80.00	2.50	0.08	0.00
85.00	2.50	0.08	0.00
90.00	2.50	0.08	0.00
95.00	2.50	0.08	0.00
100.00	2.50	0.08	0.00
105.00	2.50	0.08	0.00
110.00	2.50	0.08	0.00
115.00	2.50	0.08	0.00
120.00	2.50	0.08	0.00
125.00	2.50	0.08	0.00
130.00	2.50	0.08	0.00
135.00	2.50	0.08	0.00
140.00	2.50	0.08	0.00
145.00	2.50	0.08	0.00
150.00	2.50	0.08	0.00
155.00	2.50	0.08	0.00
160.00	2.50	0.08	0.00
165.00	2.50	0.08	0.00
170.00	2.50	0.08	0.00
175.00	2.50	0.08	0.00
180.00	2.50	0.08	0.00
185.00	2.50	0.08	0.00
190.00	2.50	0.08	0.00
195.00	2.50	0.08	0.00
200.00	2.50	0.08	0.00
205.00	2.50	0.08	0.00
210.00	2.50	0.08	0.00
215.00	2.50	0.08	0.00
220.00	2.50	0.08	0.00
225.00	2.50	0.08	0.00
230.00	2.50	0.08	0.00
235.00	2.50	0.08	0.00
240.00	2.50	0.08	0.00
245.00	2.50	0.08	0.00
250.00	2.50	0.08	0.00
255.00	2.50	0.08	0.00
260.00	2.50	0.08	0.00
265.00	2.50	0.08	0.00
270.00	2.50	0.08	0.00
275.00	2.50	0.08	0.00
280.00	2.50	0.08	0.00
285.00	2.50	0.08	0.00
290.00	2.50	0.08	0.00
295.00	2.50	0.08	0.00
300.00	2.50	0.08	0.00
305.00	2.50	0.08	0.00
310.00	2.50	0.08	0.00
315.00	2.50	0.08	0.00
320.00	2.50	0.08	0.00
325.00	2.50	0.08	0.00
330.00	2.50	0.08	0.00
335.00	2.50	0.08	0.00
340.00	2.50	0.08	0.00
345.00	2.50	0.08	0.00
350.00	2.50	0.08	0.00
355.00	2.50	0.08	0.00
360.00	2.50	0.08	0.00
365.00	2.50	0.08	0.00
370.00	2.50	0.08	0.00
375.00	2.50	0.08	0.00
380.00	2.50	0.08	0.00
385.00	2.50	0.08	0.00
390.00	2.50	0.08	0.00
395.00	2.50	0.08	0.00
400.00	2.50	0.08	0.00
405.00	2.50	0.08	0.00
410.00	2.50	0.08	0.00
415.00	2.50	0.08	0.00
420.00	2.50	0.08	0.00
425.00	2.50	0.08	0.00
430.00	2.50	0.08	0.00
435.00	2.50	0.08	0.00
440.00	2.50	0.08	0.00
445.00	2.50	0.08	0.00
450.00	2.50	0.08	0.00
455.00	2.50	0.08	0.00
460.00	2.50	0.08	0.00
465.00	2.50	0.08	0.00
470.00	2.50	0.08	0.00
475.00	2.50	0.08	0.00
480.00	2.50	0.08	0.00
485.00	2.50	0.08	0.00
490.00	2.50	0.08	0.00
495.00	2.50	0.08	0.00
500.00	2.50	0.08	0.00

Summary for Subcatchment 1A: Post 1A

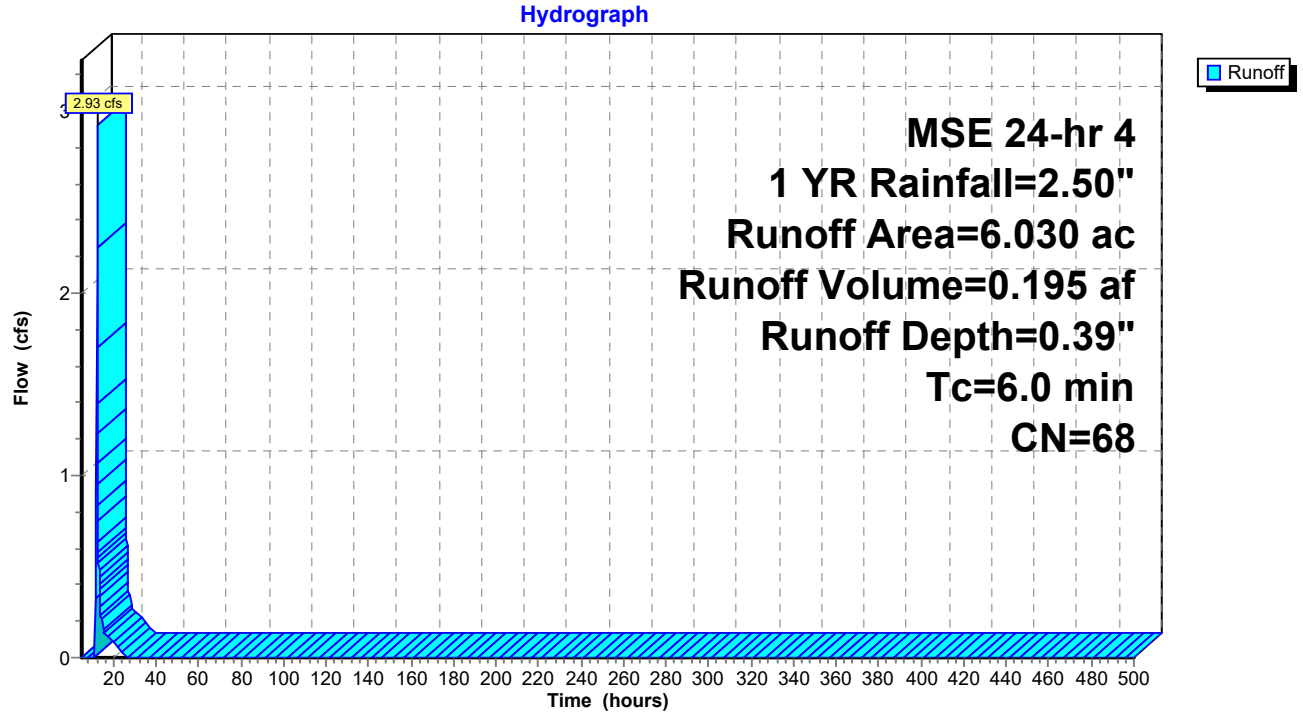
Runoff = 2.93 cfs @ 12.15 hrs, Volume= 0.195 af, Depth= 0.39"
Routed to Pond P1A : Pond 1A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1 YR Rainfall=2.50"

	Area (ac)	CN	Description
*	1.160	98	Impervious
*	4.870	61	Post - B Soils
*	0.000	74	Post - C Soils
	6.030	68	Weighted Average
	4.870		80.76% Pervious Area
	1.160		19.24% Impervious Area

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

Subcatchment 1A: Post 1A



Hydrograph for Subcatchment 1A: Post 1A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.11	0.00	0.00
10.00	0.40	0.00	**0.00**
15.00	2.20	0.26	**0.20**
20.00	**2.42**	**0.35**	0.08
25.00	**2.50**	**0.39**	0.00
30.00	2.50	0.39	0.00
35.00	2.50	0.39	0.00
40.00	2.50	0.39	0.00
45.00	2.50	0.39	0.00
50.00	2.50	0.39	0.00
55.00	2.50	0.39	0.00
60.00	2.50	0.39	0.00
65.00	2.50	0.39	0.00
70.00	2.50	0.39	0.00
75.00	2.50	0.39	0.00
80.00	2.50	0.39	0.00
85.00	2.50	0.39	0.00
90.00	2.50	0.39	0.00
95.00	2.50	0.39	0.00
100.00	2.50	0.39	0.00
105.00	2.50	0.39	0.00
110.00	2.50	0.39	0.00
115.00	2.50	0.39	0.00
120.00	2.50	0.39	0.00
125.00	2.50	0.39	0.00
130.00	2.50	0.39	0.00
135.00	2.50	0.39	0.00
140.00	2.50	0.39	0.00
145.00	2.50	0.39	0.00
150.00	2.50	0.39	0.00
155.00	2.50	0.39	0.00
160.00	2.50	0.39	0.00
165.00	2.50	0.39	0.00
170.00	2.50	0.39	0.00
175.00	2.50	0.39	0.00
180.00	2.50	0.39	0.00
185.00	2.50	0.39	0.00
190.00	2.50	0.39	0.00
195.00	2.50	0.39	0.00
200.00	2.50	0.39	0.00
205.00	2.50	0.39	0.00
210.00	2.50	0.39	0.00
215.00	2.50	0.39	0.00
220.00	2.50	0.39	0.00
225.00	2.50	0.39	0.00
230.00	2.50	0.39	0.00
235.00	2.50	0.39	0.00
240.00	2.50	0.39	0.00
245.00	2.50	0.39	0.00
250.00	2.50	0.39	0.00
255.00	2.50	0.39	0.00
260.00	2.50	0.39	0.00
265.00	2.50	0.39	0.00
270.00	2.50	0.39	0.00
275.00	2.50	0.39	0.00
280.00	2.50	0.39	0.00
285.00	2.50	0.39	0.00
290.00	2.50	0.39	0.00
295.00	2.50	0.39	0.00
300.00	2.50	0.39	0.00
305.00	2.50	0.39	0.00
310.00	2.50	0.39	0.00
315.00	2.50	0.39	0.00
320.00	2.50	0.39	0.00
325.00	2.50	0.39	0.00
330.00	2.50	0.39	0.00
335.00	2.50	0.39	0.00
340.00	2.50	0.39	0.00
345.00	2.50	0.39	0.00
350.00	2.50	0.39	0.00
355.00	2.50	0.39	0.00
360.00	2.50	0.39	0.00
365.00	2.50	0.39	0.00
370.00	2.50	0.39	0.00
375.00	2.50	0.39	0.00
380.00	2.50	0.39	0.00
385.00	2.50	0.39	0.00
390.00	2.50	0.39	0.00
395.00	2.50	0.39	0.00
400.00	2.50	0.39	0.00
405.00	2.50	0.39	0.00
410.00	2.50	0.39	0.00
415.00	2.50	0.39	0.00
420.00	2.50	0.39	0.00
425.00	2.50	0.39	0.00
430.00	2.50	0.39	0.00
435.00	2.50	0.39	0.00
440.00	2.50	0.39	0.00
445.00	2.50	0.39	0.00
450.00	2.50	0.39	0.00
455.00	2.50	0.39	0.00
460.00	2.50	0.39	0.00
465.00	2.50	0.39	0.00
470.00	2.50	0.39	0.00
475.00	2.50	0.39	0.00
480.00	2.50	0.39	0.00
485.00	2.50	0.39	0.00
490.00	2.50	0.39	0.00
495.00	2.50	0.39	0.00
500.00	2.50	0.39	0.00

Summary for Subcatchment 1B: Post 1B - Offsite

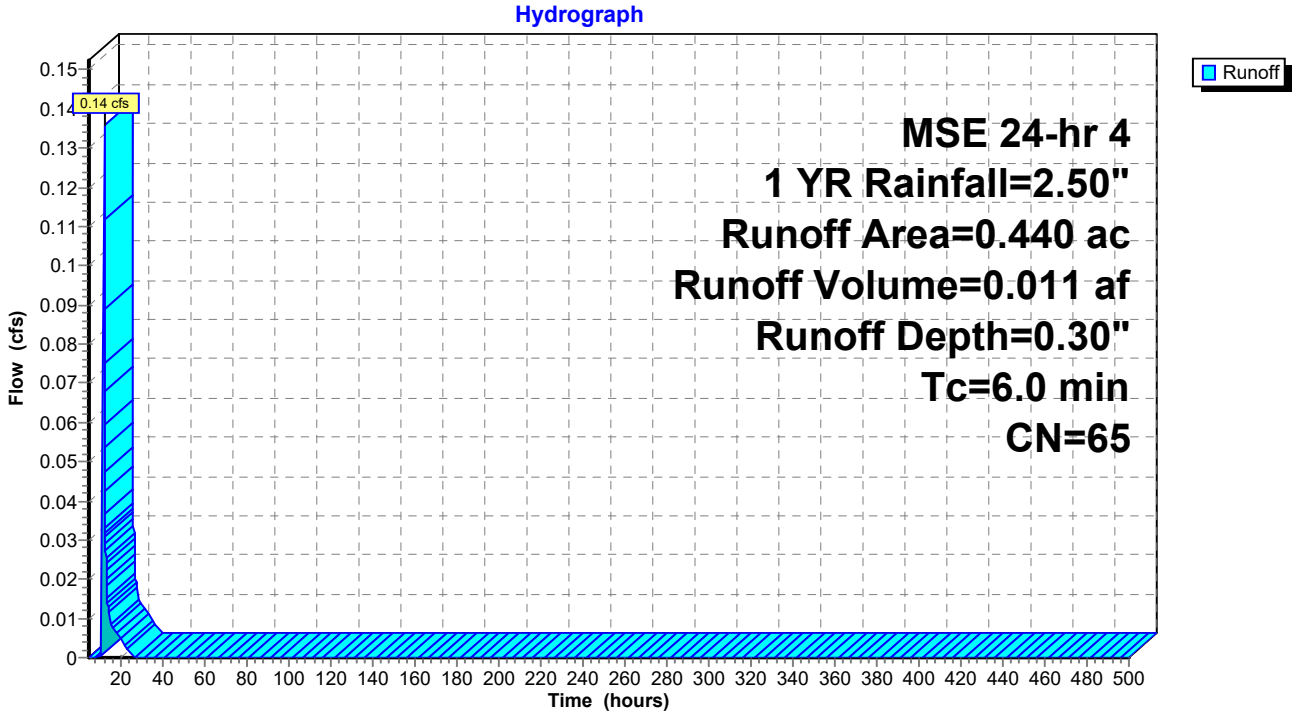
Runoff = 0.14 cfs @ 12.16 hrs, Volume= 0.011 af, Depth= 0.30"
Routed to Link 3L : Post - South

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1 YR Rainfall=2.50"

	Area (ac)	CN	Description
*	0.050	98	Impervious
*	0.390	61	Post - B Soils
*	0.000	74	Post - C Soils
	0.440	65	Weighted Average
	0.390		88.64% Pervious Area
	0.050		11.36% Impervious Area

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

Subcatchment 1B: Post 1B - Offsite



Hydrograph for Subcatchment 1B: Post 1B - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.11	0.00	0.00
10.00	0.40	0.00	**0.00**
15.00	2.20	0.19	**0.01**
20.00	**2.42**	**0.27**	0.01
25.00	**2.50**	**0.30**	0.00
30.00	2.50	0.30	0.00
35.00	2.50	0.30	0.00
40.00	2.50	0.30	0.00
45.00	2.50	0.30	0.00
50.00	2.50	0.30	0.00
55.00	2.50	0.30	0.00
60.00	2.50	0.30	0.00
65.00	2.50	0.30	0.00
70.00	2.50	0.30	0.00
75.00	2.50	0.30	0.00
80.00	2.50	0.30	0.00
85.00	2.50	0.30	0.00
90.00	2.50	0.30	0.00
95.00	2.50	0.30	0.00
100.00	2.50	0.30	0.00
105.00	2.50	0.30	0.00
110.00	2.50	0.30	0.00
115.00	2.50	0.30	0.00
120.00	2.50	0.30	0.00
125.00	2.50	0.30	0.00
130.00	2.50	0.30	0.00
135.00	2.50	0.30	0.00
140.00	2.50	0.30	0.00
145.00	2.50	0.30	0.00
150.00	2.50	0.30	0.00
155.00	2.50	0.30	0.00
160.00	2.50	0.30	0.00
165.00	2.50	0.30	0.00
170.00	2.50	0.30	0.00
175.00	2.50	0.30	0.00
180.00	2.50	0.30	0.00
185.00	2.50	0.30	0.00
190.00	2.50	0.30	0.00
195.00	2.50	0.30	0.00
200.00	2.50	0.30	0.00
205.00	2.50	0.30	0.00
210.00	2.50	0.30	0.00
215.00	2.50	0.30	0.00
220.00	2.50	0.30	0.00
225.00	2.50	0.30	0.00
230.00	2.50	0.30	0.00
235.00	2.50	0.30	0.00
240.00	2.50	0.30	0.00
245.00	2.50	0.30	0.00
250.00	2.50	0.30	0.00
255.00	2.50	0.30	0.00
260.00	2.50	0.30	0.00
265.00	2.50	0.30	0.00
270.00	2.50	0.30	0.00
275.00	2.50	0.30	0.00
280.00	2.50	0.30	0.00
285.00	2.50	0.30	0.00
290.00	2.50	0.30	0.00
295.00	2.50	0.30	0.00
300.00	2.50	0.30	0.00
305.00	2.50	0.30	0.00
310.00	2.50	0.30	0.00
315.00	2.50	0.30	0.00
320.00	2.50	0.30	0.00
325.00	2.50	0.30	0.00
330.00	2.50	0.30	0.00
335.00	2.50	0.30	0.00
340.00	2.50	0.30	0.00
345.00	2.50	0.30	0.00
350.00	2.50	0.30	0.00
355.00	2.50	0.30	0.00
360.00	2.50	0.30	0.00
365.00	2.50	0.30	0.00
370.00	2.50	0.30	0.00
375.00	2.50	0.30	0.00
380.00	2.50	0.30	0.00
385.00	2.50	0.30	0.00
390.00	2.50	0.30	0.00
395.00	2.50	0.30	0.00
400.00	2.50	0.30	0.00
405.00	2.50	0.30	0.00
410.00	2.50	0.30	0.00
415.00	2.50	0.30	0.00
420.00	2.50	0.30	0.00
425.00	2.50	0.30	0.00
430.00	2.50	0.30	0.00
435.00	2.50	0.30	0.00
440.00	2.50	0.30	0.00
445.00	2.50	0.30	0.00
450.00	2.50	0.30	0.00
455.00	2.50	0.30	0.00
460.00	2.50	0.30	0.00
465.00	2.50	0.30	0.00
470.00	2.50	0.30	0.00
475.00	2.50	0.30	0.00
480.00	2.50	0.30	0.00
485.00	2.50	0.30	0.00
490.00	2.50	0.30	0.00
495.00	2.50	0.30	0.00
500.00	2.50	0.30	0.00

Summary for Subcatchment 2: Pre - West

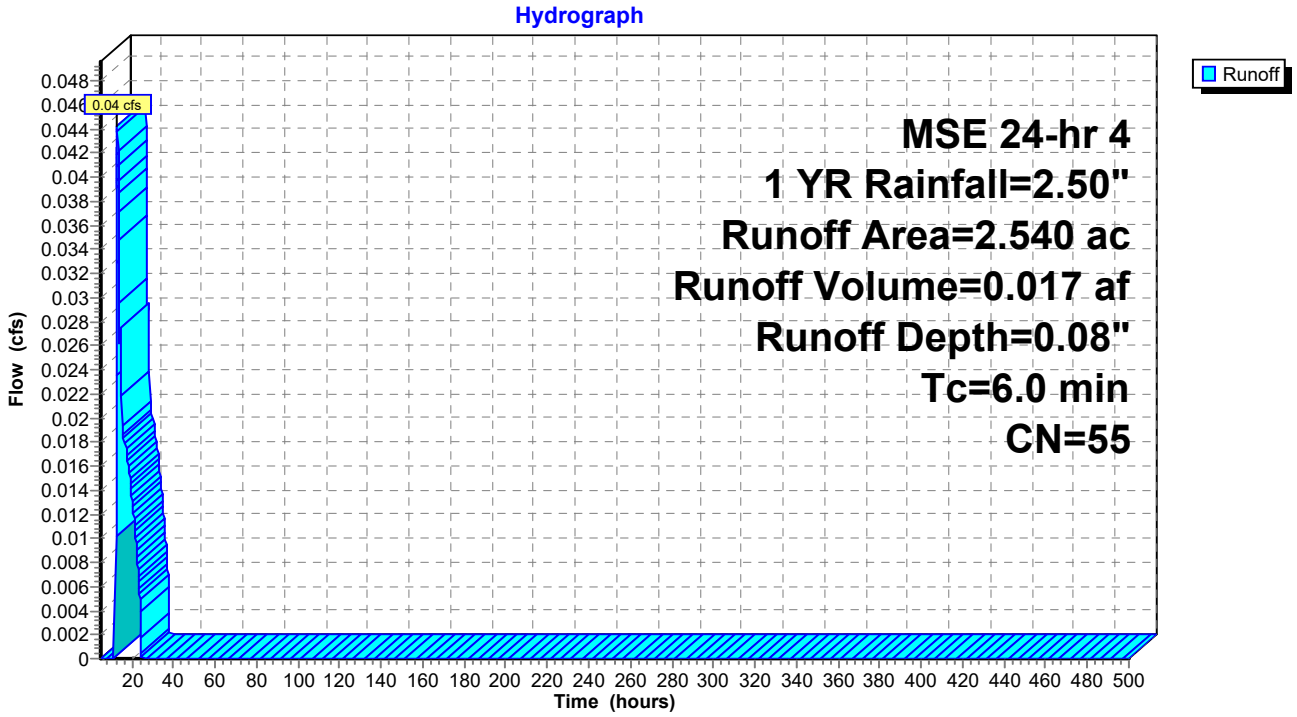
Runoff = 0.04 cfs @ 13.05 hrs, Volume= 0.017 af, Depth= 0.08"
Routed to Link 1L : Total Pre - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1 YR Rainfall=2.50"

	Area (ac)	CN	Description
*	2.540	55	Pre Dev - B Soils
	2.540		100.00% Pervious Area

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

Subcatchment 2: Pre - West



Hydrograph for Subcatchment 2: Pre - West

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.11	0.00	0.00	260.00	2.50	0.08	0.00
10.00	0.40	0.00	**0.00**	265.00	2.50	0.08	0.00
15.00	2.20	0.04	**0.03**	270.00	2.50	0.08	0.00
20.00	**2.42**	**0.07**	0.01	275.00	2.50	0.08	0.00
25.00	**2.50**	**0.08**	0.00	280.00	2.50	0.08	0.00
30.00	2.50	0.08	0.00	285.00	2.50	0.08	0.00
35.00	2.50	0.08	0.00	290.00	2.50	0.08	0.00
40.00	2.50	0.08	0.00	295.00	2.50	0.08	0.00
45.00	2.50	0.08	0.00	300.00	2.50	0.08	0.00
50.00	2.50	0.08	0.00	305.00	2.50	0.08	0.00
55.00	2.50	0.08	0.00	310.00	2.50	0.08	0.00
60.00	2.50	0.08	0.00	315.00	2.50	0.08	0.00
65.00	2.50	0.08	0.00	320.00	2.50	0.08	0.00
70.00	2.50	0.08	0.00	325.00	2.50	0.08	0.00
75.00	2.50	0.08	0.00	330.00	2.50	0.08	0.00
80.00	2.50	0.08	0.00	335.00	2.50	0.08	0.00
85.00	2.50	0.08	0.00	340.00	2.50	0.08	0.00
90.00	2.50	0.08	0.00	345.00	2.50	0.08	0.00
95.00	2.50	0.08	0.00	350.00	2.50	0.08	0.00
100.00	2.50	0.08	0.00	355.00	2.50	0.08	0.00
105.00	2.50	0.08	0.00	360.00	2.50	0.08	0.00
110.00	2.50	0.08	0.00	365.00	2.50	0.08	0.00
115.00	2.50	0.08	0.00	370.00	2.50	0.08	0.00
120.00	2.50	0.08	0.00	375.00	2.50	0.08	0.00
125.00	2.50	0.08	0.00	380.00	2.50	0.08	0.00
130.00	2.50	0.08	0.00	385.00	2.50	0.08	0.00
135.00	2.50	0.08	0.00	390.00	2.50	0.08	0.00
140.00	2.50	0.08	0.00	395.00	2.50	0.08	0.00
145.00	2.50	0.08	0.00	400.00	2.50	0.08	0.00
150.00	2.50	0.08	0.00	405.00	2.50	0.08	0.00
155.00	2.50	0.08	0.00	410.00	2.50	0.08	0.00
160.00	2.50	0.08	0.00	415.00	2.50	0.08	0.00
165.00	2.50	0.08	0.00	420.00	2.50	0.08	0.00
170.00	2.50	0.08	0.00	425.00	2.50	0.08	0.00
175.00	2.50	0.08	0.00	430.00	2.50	0.08	0.00
180.00	2.50	0.08	0.00	435.00	2.50	0.08	0.00
185.00	2.50	0.08	0.00	440.00	2.50	0.08	0.00
190.00	2.50	0.08	0.00	445.00	2.50	0.08	0.00
195.00	2.50	0.08	0.00	450.00	2.50	0.08	0.00
200.00	2.50	0.08	0.00	455.00	2.50	0.08	0.00
205.00	2.50	0.08	0.00	460.00	2.50	0.08	0.00
210.00	2.50	0.08	0.00	465.00	2.50	0.08	0.00
215.00	2.50	0.08	0.00	470.00	2.50	0.08	0.00
220.00	2.50	0.08	0.00	475.00	2.50	0.08	0.00
225.00	2.50	0.08	0.00	480.00	2.50	0.08	0.00
230.00	2.50	0.08	0.00	485.00	2.50	0.08	0.00
235.00	2.50	0.08	0.00	490.00	2.50	0.08	0.00
240.00	2.50	0.08	0.00	495.00	2.50	0.08	0.00
245.00	2.50	0.08	0.00	500.00	2.50	0.08	0.00
250.00	2.50	0.08	0.00				
255.00	2.50	0.08	0.00				

Summary for Subcatchment 2A: Post 2A - Offsite

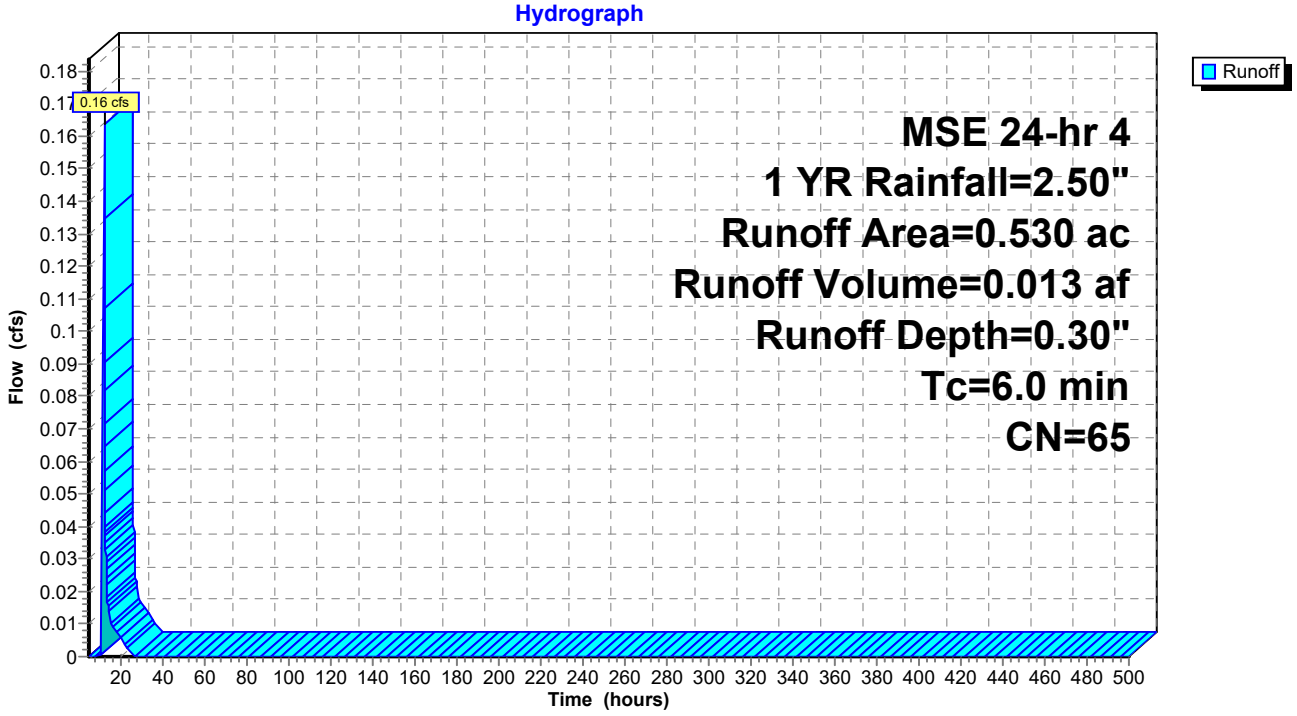
Runoff = 0.16 cfs @ 12.16 hrs, Volume= 0.013 af, Depth= 0.30"
Routed to Link 2L : Total Post - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1 YR Rainfall=2.50"

	Area (ac)	CN	Description
*	0.060	98	Impervious
*	0.470	61	Post - B Soils
*	0.000	74	Post - C Soils
	0.530	65	Weighted Average
	0.470		88.68% Pervious Area
	0.060		11.32% Impervious Area

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

Subcatchment 2A: Post 2A - Offsite



Hydrograph for Subcatchment 2A: Post 2A - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.11	0.00	0.00
10.00	0.40	0.00	**0.00**
15.00	2.20	0.19	**0.01**
20.00	**2.42**	**0.27**	0.01
25.00	**2.50**	**0.30**	0.00
30.00	2.50	0.30	0.00
35.00	2.50	0.30	0.00
40.00	2.50	0.30	0.00
45.00	2.50	0.30	0.00
50.00	2.50	0.30	0.00
55.00	2.50	0.30	0.00
60.00	2.50	0.30	0.00
65.00	2.50	0.30	0.00
70.00	2.50	0.30	0.00
75.00	2.50	0.30	0.00
80.00	2.50	0.30	0.00
85.00	2.50	0.30	0.00
90.00	2.50	0.30	0.00
95.00	2.50	0.30	0.00
100.00	2.50	0.30	0.00
105.00	2.50	0.30	0.00
110.00	2.50	0.30	0.00
115.00	2.50	0.30	0.00
120.00	2.50	0.30	0.00
125.00	2.50	0.30	0.00
130.00	2.50	0.30	0.00
135.00	2.50	0.30	0.00
140.00	2.50	0.30	0.00
145.00	2.50	0.30	0.00
150.00	2.50	0.30	0.00
155.00	2.50	0.30	0.00
160.00	2.50	0.30	0.00
165.00	2.50	0.30	0.00
170.00	2.50	0.30	0.00
175.00	2.50	0.30	0.00
180.00	2.50	0.30	0.00
185.00	2.50	0.30	0.00
190.00	2.50	0.30	0.00
195.00	2.50	0.30	0.00
200.00	2.50	0.30	0.00
205.00	2.50	0.30	0.00
210.00	2.50	0.30	0.00
215.00	2.50	0.30	0.00
220.00	2.50	0.30	0.00
225.00	2.50	0.30	0.00
230.00	2.50	0.30	0.00
235.00	2.50	0.30	0.00
240.00	2.50	0.30	0.00
245.00	2.50	0.30	0.00
250.00	2.50	0.30	0.00
255.00	2.50	0.30	0.00
260.00	2.50	0.30	0.00
265.00	2.50	0.30	0.00
270.00	2.50	0.30	0.00
275.00	2.50	0.30	0.00
280.00	2.50	0.30	0.00
285.00	2.50	0.30	0.00
290.00	2.50	0.30	0.00
295.00	2.50	0.30	0.00
300.00	2.50	0.30	0.00
305.00	2.50	0.30	0.00
310.00	2.50	0.30	0.00
315.00	2.50	0.30	0.00
320.00	2.50	0.30	0.00
325.00	2.50	0.30	0.00
330.00	2.50	0.30	0.00
335.00	2.50	0.30	0.00
340.00	2.50	0.30	0.00
345.00	2.50	0.30	0.00
350.00	2.50	0.30	0.00
355.00	2.50	0.30	0.00
360.00	2.50	0.30	0.00
365.00	2.50	0.30	0.00
370.00	2.50	0.30	0.00
375.00	2.50	0.30	0.00
380.00	2.50	0.30	0.00
385.00	2.50	0.30	0.00
390.00	2.50	0.30	0.00
395.00	2.50	0.30	0.00
400.00	2.50	0.30	0.00
405.00	2.50	0.30	0.00
410.00	2.50	0.30	0.00
415.00	2.50	0.30	0.00
420.00	2.50	0.30	0.00
425.00	2.50	0.30	0.00
430.00	2.50	0.30	0.00
435.00	2.50	0.30	0.00
440.00	2.50	0.30	0.00
445.00	2.50	0.30	0.00
450.00	2.50	0.30	0.00
455.00	2.50	0.30	0.00
460.00	2.50	0.30	0.00
465.00	2.50	0.30	0.00
470.00	2.50	0.30	0.00
475.00	2.50	0.30	0.00
480.00	2.50	0.30	0.00
485.00	2.50	0.30	0.00
490.00	2.50	0.30	0.00
495.00	2.50	0.30	0.00
500.00	2.50	0.30	0.00

Summary for Subcatchment 3: Pre - North

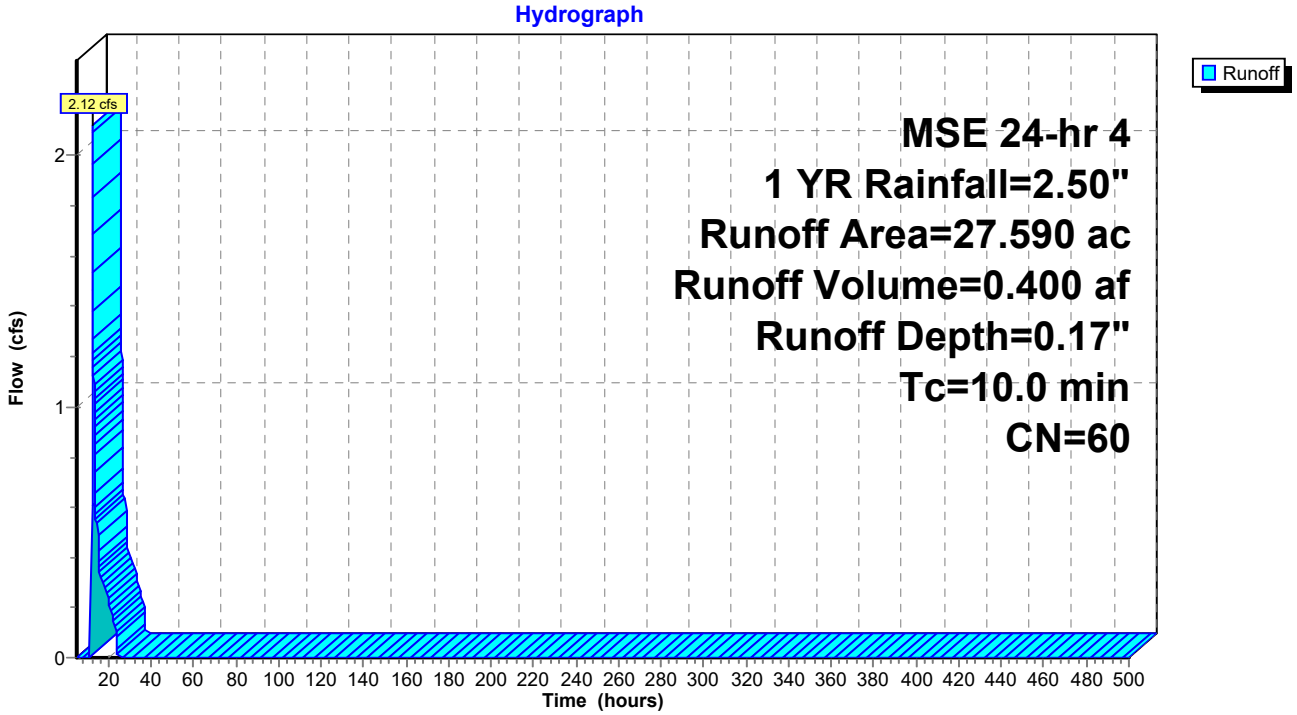
Runoff = 2.12 cfs @ 12.34 hrs, Volume= 0.400 af, Depth= 0.17"
Routed to Link 1L : Total Pre - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1 YR Rainfall=2.50"

	Area (ac)	CN	Description
*	18.190	55	Pre Dev - B Soils
*	9.400	70	Pre Dev - C Soils
	27.590	60	Weighted Average
	27.590		100.00% Pervious Area

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

Subcatchment 3: Pre - North



Hydrograph for Subcatchment 3: Pre - North

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.11	0.00	0.00
10.00	0.40	0.00	**0.00**
15.00	2.20	0.10	**0.53**
20.00	**2.42**	**0.15**	0.23
25.00	**2.50**	**0.17**	0.00
30.00	2.50	0.17	0.00
35.00	2.50	0.17	0.00
40.00	2.50	0.17	0.00
45.00	2.50	0.17	0.00
50.00	2.50	0.17	0.00
55.00	2.50	0.17	0.00
60.00	2.50	0.17	0.00
65.00	2.50	0.17	0.00
70.00	2.50	0.17	0.00
75.00	2.50	0.17	0.00
80.00	2.50	0.17	0.00
85.00	2.50	0.17	0.00
90.00	2.50	0.17	0.00
95.00	2.50	0.17	0.00
100.00	2.50	0.17	0.00
105.00	2.50	0.17	0.00
110.00	2.50	0.17	0.00
115.00	2.50	0.17	0.00
120.00	2.50	0.17	0.00
125.00	2.50	0.17	0.00
130.00	2.50	0.17	0.00
135.00	2.50	0.17	0.00
140.00	2.50	0.17	0.00
145.00	2.50	0.17	0.00
150.00	2.50	0.17	0.00
155.00	2.50	0.17	0.00
160.00	2.50	0.17	0.00
165.00	2.50	0.17	0.00
170.00	2.50	0.17	0.00
175.00	2.50	0.17	0.00
180.00	2.50	0.17	0.00
185.00	2.50	0.17	0.00
190.00	2.50	0.17	0.00
195.00	2.50	0.17	0.00
200.00	2.50	0.17	0.00
205.00	2.50	0.17	0.00
210.00	2.50	0.17	0.00
215.00	2.50	0.17	0.00
220.00	2.50	0.17	0.00
225.00	2.50	0.17	0.00
230.00	2.50	0.17	0.00
235.00	2.50	0.17	0.00
240.00	2.50	0.17	0.00
245.00	2.50	0.17	0.00
250.00	2.50	0.17	0.00
255.00	2.50	0.17	0.00
260.00	2.50	0.17	0.00
265.00	2.50	0.17	0.00
270.00	2.50	0.17	0.00
275.00	2.50	0.17	0.00
280.00	2.50	0.17	0.00
285.00	2.50	0.17	0.00
290.00	2.50	0.17	0.00
295.00	2.50	0.17	0.00
300.00	2.50	0.17	0.00
305.00	2.50	0.17	0.00
310.00	2.50	0.17	0.00
315.00	2.50	0.17	0.00
320.00	2.50	0.17	0.00
325.00	2.50	0.17	0.00
330.00	2.50	0.17	0.00
335.00	2.50	0.17	0.00
340.00	2.50	0.17	0.00
345.00	2.50	0.17	0.00
350.00	2.50	0.17	0.00
355.00	2.50	0.17	0.00
360.00	2.50	0.17	0.00
365.00	2.50	0.17	0.00
370.00	2.50	0.17	0.00
375.00	2.50	0.17	0.00
380.00	2.50	0.17	0.00
385.00	2.50	0.17	0.00
390.00	2.50	0.17	0.00
395.00	2.50	0.17	0.00
400.00	2.50	0.17	0.00
405.00	2.50	0.17	0.00
410.00	2.50	0.17	0.00
415.00	2.50	0.17	0.00
420.00	2.50	0.17	0.00
425.00	2.50	0.17	0.00
430.00	2.50	0.17	0.00
435.00	2.50	0.17	0.00
440.00	2.50	0.17	0.00
445.00	2.50	0.17	0.00
450.00	2.50	0.17	0.00
455.00	2.50	0.17	0.00
460.00	2.50	0.17	0.00
465.00	2.50	0.17	0.00
470.00	2.50	0.17	0.00
475.00	2.50	0.17	0.00
480.00	2.50	0.17	0.00
485.00	2.50	0.17	0.00
490.00	2.50	0.17	0.00
495.00	2.50	0.17	0.00
500.00	2.50	0.17	0.00

Summary for Subcatchment 3A: Post 3A

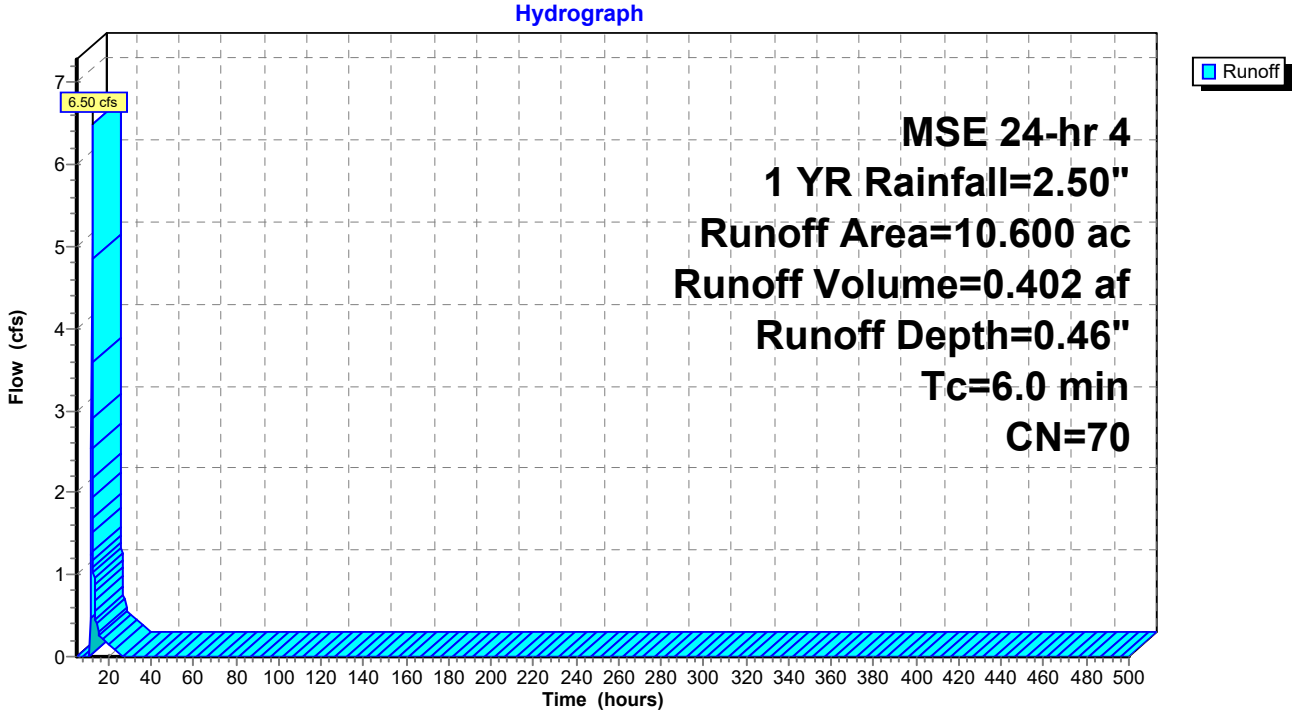
Runoff = 6.50 cfs @ 12.15 hrs, Volume= 0.402 af, Depth= 0.46"
Routed to Pond P3A : Pond 3A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1 YR Rainfall=2.50"

	Area (ac)	CN	Description
*	1.970	98	Impervious
*	6.570	61	Post - B Soils
*	2.060	74	Post - C Soils
	10.600	70	Weighted Average
	8.630		81.42% Pervious Area
	1.970		18.58% Impervious Area

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

Subcatchment 3A: Post 3A



Hydrograph for Subcatchment 3A: Post 3A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.11	0.00	0.00
10.00	0.40	0.00	**0.00**
15.00	2.20	0.32	**0.40**
20.00	**2.42**	**0.42**	0.16
25.00	**2.50**	**0.46**	0.00
30.00	2.50	0.46	0.00
35.00	2.50	0.46	0.00
40.00	2.50	0.46	0.00
45.00	2.50	0.46	0.00
50.00	2.50	0.46	0.00
55.00	2.50	0.46	0.00
60.00	2.50	0.46	0.00
65.00	2.50	0.46	0.00
70.00	2.50	0.46	0.00
75.00	2.50	0.46	0.00
80.00	2.50	0.46	0.00
85.00	2.50	0.46	0.00
90.00	2.50	0.46	0.00
95.00	2.50	0.46	0.00
100.00	2.50	0.46	0.00
105.00	2.50	0.46	0.00
110.00	2.50	0.46	0.00
115.00	2.50	0.46	0.00
120.00	2.50	0.46	0.00
125.00	2.50	0.46	0.00
130.00	2.50	0.46	0.00
135.00	2.50	0.46	0.00
140.00	2.50	0.46	0.00
145.00	2.50	0.46	0.00
150.00	2.50	0.46	0.00
155.00	2.50	0.46	0.00
160.00	2.50	0.46	0.00
165.00	2.50	0.46	0.00
170.00	2.50	0.46	0.00
175.00	2.50	0.46	0.00
180.00	2.50	0.46	0.00
185.00	2.50	0.46	0.00
190.00	2.50	0.46	0.00
195.00	2.50	0.46	0.00
200.00	2.50	0.46	0.00
205.00	2.50	0.46	0.00
210.00	2.50	0.46	0.00
215.00	2.50	0.46	0.00
220.00	2.50	0.46	0.00
225.00	2.50	0.46	0.00
230.00	2.50	0.46	0.00
235.00	2.50	0.46	0.00
240.00	2.50	0.46	0.00
245.00	2.50	0.46	0.00
250.00	2.50	0.46	0.00
255.00	2.50	0.46	0.00
260.00	2.50	0.46	0.00
265.00	2.50	0.46	0.00
270.00	2.50	0.46	0.00
275.00	2.50	0.46	0.00
280.00	2.50	0.46	0.00
285.00	2.50	0.46	0.00
290.00	2.50	0.46	0.00
295.00	2.50	0.46	0.00
300.00	2.50	0.46	0.00
305.00	2.50	0.46	0.00
310.00	2.50	0.46	0.00
315.00	2.50	0.46	0.00
320.00	2.50	0.46	0.00
325.00	2.50	0.46	0.00
330.00	2.50	0.46	0.00
335.00	2.50	0.46	0.00
340.00	2.50	0.46	0.00
345.00	2.50	0.46	0.00
350.00	2.50	0.46	0.00
355.00	2.50	0.46	0.00
360.00	2.50	0.46	0.00
365.00	2.50	0.46	0.00
370.00	2.50	0.46	0.00
375.00	2.50	0.46	0.00
380.00	2.50	0.46	0.00
385.00	2.50	0.46	0.00
390.00	2.50	0.46	0.00
395.00	2.50	0.46	0.00
400.00	2.50	0.46	0.00
405.00	2.50	0.46	0.00
410.00	2.50	0.46	0.00
415.00	2.50	0.46	0.00
420.00	2.50	0.46	0.00
425.00	2.50	0.46	0.00
430.00	2.50	0.46	0.00
435.00	2.50	0.46	0.00
440.00	2.50	0.46	0.00
445.00	2.50	0.46	0.00
450.00	2.50	0.46	0.00
455.00	2.50	0.46	0.00
460.00	2.50	0.46	0.00
465.00	2.50	0.46	0.00
470.00	2.50	0.46	0.00
475.00	2.50	0.46	0.00
480.00	2.50	0.46	0.00
485.00	2.50	0.46	0.00
490.00	2.50	0.46	0.00
495.00	2.50	0.46	0.00
500.00	2.50	0.46	0.00

Summary for Subcatchment 3B: Post 3B

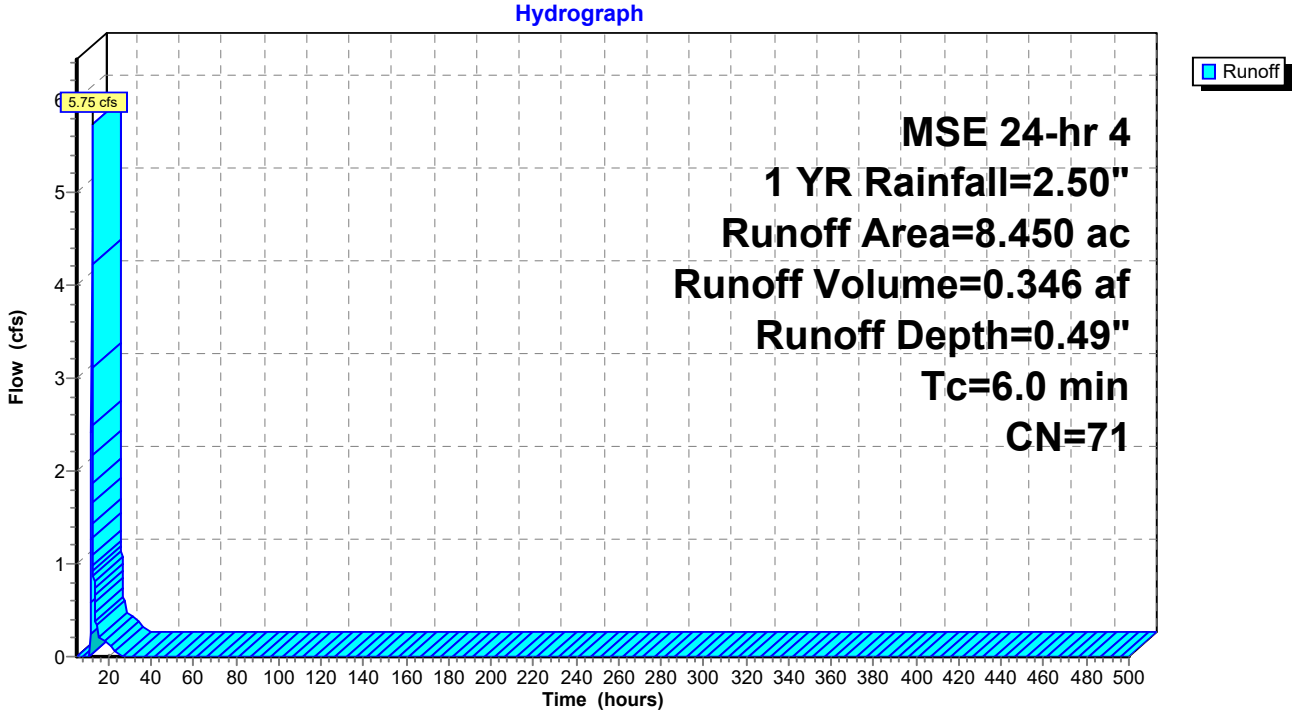
Runoff = 5.75 cfs @ 12.15 hrs, Volume= 0.346 af, Depth= 0.49"
Routed to Pond P3B : Pond 3B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1 YR Rainfall=2.50"

	Area (ac)	CN	Description
*	1.680	98	Impervious
*	5.290	61	Post - B Soils
*	1.480	74	Post - C Soils
	8.450	71	Weighted Average
	6.770		80.12% Pervious Area
	1.680		19.88% Impervious Area

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

Subcatchment 3B: Post 3B



Hydrograph for Subcatchment 3B: Post 3B

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.11	0.00	0.00
10.00	0.40	0.00	**0.00**
15.00	2.20	0.35	**0.33**
20.00	**2.42**	**0.45**	0.13
25.00	**2.50**	**0.49**	0.00
30.00	2.50	0.49	0.00
35.00	2.50	0.49	0.00
40.00	2.50	0.49	0.00
45.00	2.50	0.49	0.00
50.00	2.50	0.49	0.00
55.00	2.50	0.49	0.00
60.00	2.50	0.49	0.00
65.00	2.50	0.49	0.00
70.00	2.50	0.49	0.00
75.00	2.50	0.49	0.00
80.00	2.50	0.49	0.00
85.00	2.50	0.49	0.00
90.00	2.50	0.49	0.00
95.00	2.50	0.49	0.00
100.00	2.50	0.49	0.00
105.00	2.50	0.49	0.00
110.00	2.50	0.49	0.00
115.00	2.50	0.49	0.00
120.00	2.50	0.49	0.00
125.00	2.50	0.49	0.00
130.00	2.50	0.49	0.00
135.00	2.50	0.49	0.00
140.00	2.50	0.49	0.00
145.00	2.50	0.49	0.00
150.00	2.50	0.49	0.00
155.00	2.50	0.49	0.00
160.00	2.50	0.49	0.00
165.00	2.50	0.49	0.00
170.00	2.50	0.49	0.00
175.00	2.50	0.49	0.00
180.00	2.50	0.49	0.00
185.00	2.50	0.49	0.00
190.00	2.50	0.49	0.00
195.00	2.50	0.49	0.00
200.00	2.50	0.49	0.00
205.00	2.50	0.49	0.00
210.00	2.50	0.49	0.00
215.00	2.50	0.49	0.00
220.00	2.50	0.49	0.00
225.00	2.50	0.49	0.00
230.00	2.50	0.49	0.00
235.00	2.50	0.49	0.00
240.00	2.50	0.49	0.00
245.00	2.50	0.49	0.00
250.00	2.50	0.49	0.00
255.00	2.50	0.49	0.00
260.00	2.50	0.49	0.00
265.00	2.50	0.49	0.00
270.00	2.50	0.49	0.00
275.00	2.50	0.49	0.00
280.00	2.50	0.49	0.00
285.00	2.50	0.49	0.00
290.00	2.50	0.49	0.00
295.00	2.50	0.49	0.00
300.00	2.50	0.49	0.00
305.00	2.50	0.49	0.00
310.00	2.50	0.49	0.00
315.00	2.50	0.49	0.00
320.00	2.50	0.49	0.00
325.00	2.50	0.49	0.00
330.00	2.50	0.49	0.00
335.00	2.50	0.49	0.00
340.00	2.50	0.49	0.00
345.00	2.50	0.49	0.00
350.00	2.50	0.49	0.00
355.00	2.50	0.49	0.00
360.00	2.50	0.49	0.00
365.00	2.50	0.49	0.00
370.00	2.50	0.49	0.00
375.00	2.50	0.49	0.00
380.00	2.50	0.49	0.00
385.00	2.50	0.49	0.00
390.00	2.50	0.49	0.00
395.00	2.50	0.49	0.00
400.00	2.50	0.49	0.00
405.00	2.50	0.49	0.00
410.00	2.50	0.49	0.00
415.00	2.50	0.49	0.00
420.00	2.50	0.49	0.00
425.00	2.50	0.49	0.00
430.00	2.50	0.49	0.00
435.00	2.50	0.49	0.00
440.00	2.50	0.49	0.00
445.00	2.50	0.49	0.00
450.00	2.50	0.49	0.00
455.00	2.50	0.49	0.00
460.00	2.50	0.49	0.00
465.00	2.50	0.49	0.00
470.00	2.50	0.49	0.00
475.00	2.50	0.49	0.00
480.00	2.50	0.49	0.00
485.00	2.50	0.49	0.00
490.00	2.50	0.49	0.00
495.00	2.50	0.49	0.00
500.00	2.50	0.49	0.00

Summary for Subcatchment 3C: Post 3C

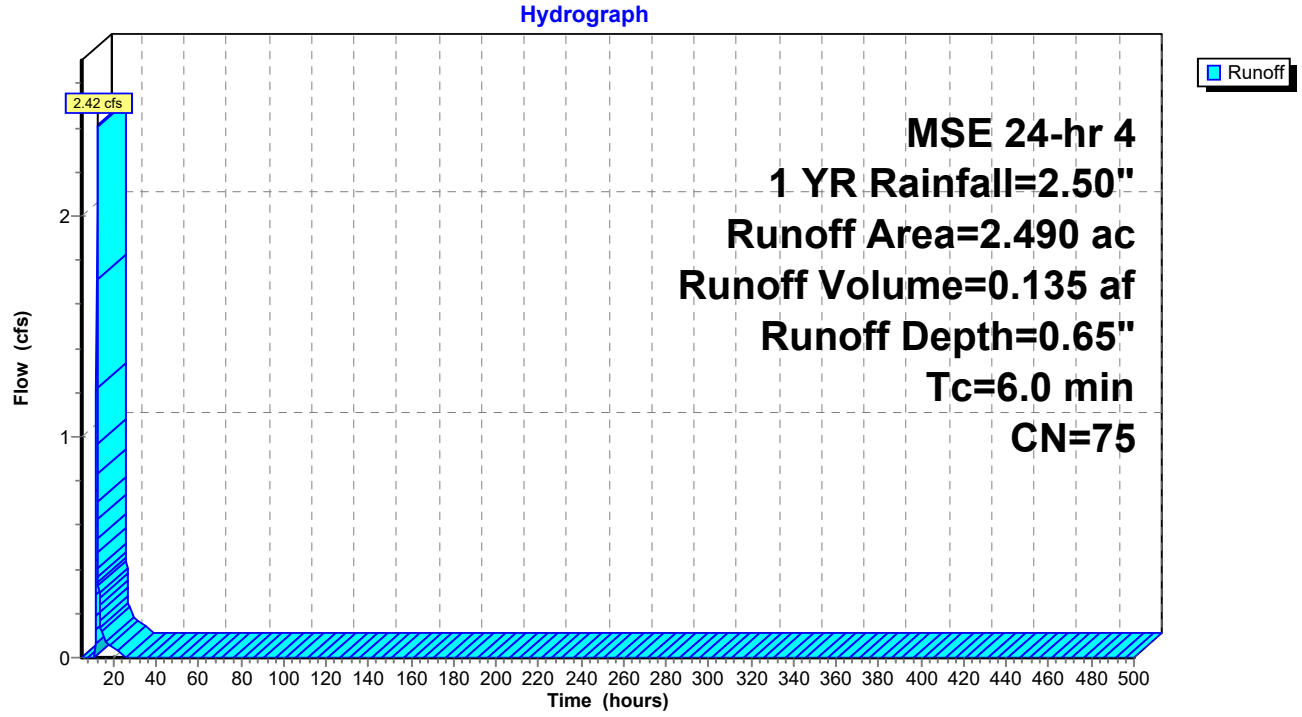
Runoff = 2.42 cfs @ 12.14 hrs, Volume= 0.135 af, Depth= 0.65"
Routed to Pond P3C : Pond 3C

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1 YR Rainfall=2.50"

	Area (ac)	CN	Description
*	0.570	98	Impervious
*	0.800	61	Post - B Soils
*	1.120	74	Post - C Soils
	2.490	75	Weighted Average
	1.920		77.11% Pervious Area
	0.570		22.89% Impervious Area

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

Subcatchment 3C: Post 3C



Hydrograph for Subcatchment 3C: Post 3C

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.11	0.00	0.00
10.00	0.40	0.00	**0.00**
15.00	2.20	0.48	**0.12**
20.00	**2.42**	**0.60**	0.05
25.00	**2.50**	**0.65**	0.00
30.00	2.50	0.65	0.00
35.00	2.50	0.65	0.00
40.00	2.50	0.65	0.00
45.00	2.50	0.65	0.00
50.00	2.50	0.65	0.00
55.00	2.50	0.65	0.00
60.00	2.50	0.65	0.00
65.00	2.50	0.65	0.00
70.00	2.50	0.65	0.00
75.00	2.50	0.65	0.00
80.00	2.50	0.65	0.00
85.00	2.50	0.65	0.00
90.00	2.50	0.65	0.00
95.00	2.50	0.65	0.00
100.00	2.50	0.65	0.00
105.00	2.50	0.65	0.00
110.00	2.50	0.65	0.00
115.00	2.50	0.65	0.00
120.00	2.50	0.65	0.00
125.00	2.50	0.65	0.00
130.00	2.50	0.65	0.00
135.00	2.50	0.65	0.00
140.00	2.50	0.65	0.00
145.00	2.50	0.65	0.00
150.00	2.50	0.65	0.00
155.00	2.50	0.65	0.00
160.00	2.50	0.65	0.00
165.00	2.50	0.65	0.00
170.00	2.50	0.65	0.00
175.00	2.50	0.65	0.00
180.00	2.50	0.65	0.00
185.00	2.50	0.65	0.00
190.00	2.50	0.65	0.00
195.00	2.50	0.65	0.00
200.00	2.50	0.65	0.00
205.00	2.50	0.65	0.00
210.00	2.50	0.65	0.00
215.00	2.50	0.65	0.00
220.00	2.50	0.65	0.00
225.00	2.50	0.65	0.00
230.00	2.50	0.65	0.00
235.00	2.50	0.65	0.00
240.00	2.50	0.65	0.00
245.00	2.50	0.65	0.00
250.00	2.50	0.65	0.00
255.00	2.50	0.65	0.00
260.00	2.50	0.65	0.00
265.00	2.50	0.65	0.00
270.00	2.50	0.65	0.00
275.00	2.50	0.65	0.00
280.00	2.50	0.65	0.00
285.00	2.50	0.65	0.00
290.00	2.50	0.65	0.00
295.00	2.50	0.65	0.00
300.00	2.50	0.65	0.00
305.00	2.50	0.65	0.00
310.00	2.50	0.65	0.00
315.00	2.50	0.65	0.00
320.00	2.50	0.65	0.00
325.00	2.50	0.65	0.00
330.00	2.50	0.65	0.00
335.00	2.50	0.65	0.00
340.00	2.50	0.65	0.00
345.00	2.50	0.65	0.00
350.00	2.50	0.65	0.00
355.00	2.50	0.65	0.00
360.00	2.50	0.65	0.00
365.00	2.50	0.65	0.00
370.00	2.50	0.65	0.00
375.00	2.50	0.65	0.00
380.00	2.50	0.65	0.00
385.00	2.50	0.65	0.00
390.00	2.50	0.65	0.00
395.00	2.50	0.65	0.00
400.00	2.50	0.65	0.00
405.00	2.50	0.65	0.00
410.00	2.50	0.65	0.00
415.00	2.50	0.65	0.00
420.00	2.50	0.65	0.00
425.00	2.50	0.65	0.00
430.00	2.50	0.65	0.00
435.00	2.50	0.65	0.00
440.00	2.50	0.65	0.00
445.00	2.50	0.65	0.00
450.00	2.50	0.65	0.00
455.00	2.50	0.65	0.00
460.00	2.50	0.65	0.00
465.00	2.50	0.65	0.00
470.00	2.50	0.65	0.00
475.00	2.50	0.65	0.00
480.00	2.50	0.65	0.00
485.00	2.50	0.65	0.00
490.00	2.50	0.65	0.00
495.00	2.50	0.65	0.00
500.00	2.50	0.65	0.00

Summary for Subcatchment 3D: Post 3D

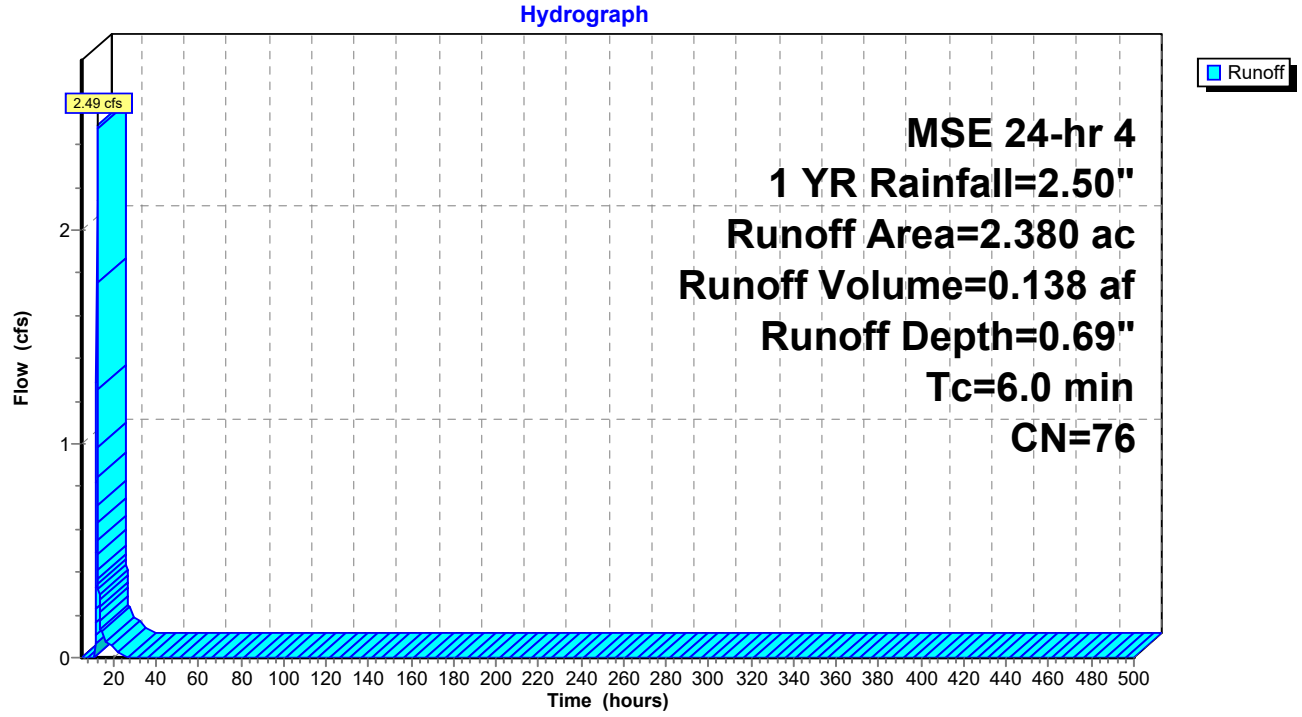
Runoff = 2.49 cfs @ 12.14 hrs, Volume= 0.138 af, Depth= 0.69"
Routed to Pond P3D : Pond 3D

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1 YR Rainfall=2.50"

	Area (ac)	CN	Description
*	0.570	98	Impervious
*	0.610	61	Post - B Soils
*	1.200	74	Post - C Soils
	2.380	76	Weighted Average
	1.810		76.05% Pervious Area
	0.570		23.95% Impervious Area

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

Subcatchment 3D: Post 3D



Hydrograph for Subcatchment 3D: Post 3D

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.11	0.00	0.00
10.00	0.40	0.00	**0.00**
15.00	2.20	0.52	**0.12**
20.00	**2.42**	**0.65**	0.04
25.00	**2.50**	**0.69**	0.00
30.00	2.50	0.69	0.00
35.00	2.50	0.69	0.00
40.00	2.50	0.69	0.00
45.00	2.50	0.69	0.00
50.00	2.50	0.69	0.00
55.00	2.50	0.69	0.00
60.00	2.50	0.69	0.00
65.00	2.50	0.69	0.00
70.00	2.50	0.69	0.00
75.00	2.50	0.69	0.00
80.00	2.50	0.69	0.00
85.00	2.50	0.69	0.00
90.00	2.50	0.69	0.00
95.00	2.50	0.69	0.00
100.00	2.50	0.69	0.00
105.00	2.50	0.69	0.00
110.00	2.50	0.69	0.00
115.00	2.50	0.69	0.00
120.00	2.50	0.69	0.00
125.00	2.50	0.69	0.00
130.00	2.50	0.69	0.00
135.00	2.50	0.69	0.00
140.00	2.50	0.69	0.00
145.00	2.50	0.69	0.00
150.00	2.50	0.69	0.00
155.00	2.50	0.69	0.00
160.00	2.50	0.69	0.00
165.00	2.50	0.69	0.00
170.00	2.50	0.69	0.00
175.00	2.50	0.69	0.00
180.00	2.50	0.69	0.00
185.00	2.50	0.69	0.00
190.00	2.50	0.69	0.00
195.00	2.50	0.69	0.00
200.00	2.50	0.69	0.00
205.00	2.50	0.69	0.00
210.00	2.50	0.69	0.00
215.00	2.50	0.69	0.00
220.00	2.50	0.69	0.00
225.00	2.50	0.69	0.00
230.00	2.50	0.69	0.00
235.00	2.50	0.69	0.00
240.00	2.50	0.69	0.00
245.00	2.50	0.69	0.00
250.00	2.50	0.69	0.00
255.00	2.50	0.69	0.00
260.00	2.50	0.69	0.00
265.00	2.50	0.69	0.00
270.00	2.50	0.69	0.00
275.00	2.50	0.69	0.00
280.00	2.50	0.69	0.00
285.00	2.50	0.69	0.00
290.00	2.50	0.69	0.00
295.00	2.50	0.69	0.00
300.00	2.50	0.69	0.00
305.00	2.50	0.69	0.00
310.00	2.50	0.69	0.00
315.00	2.50	0.69	0.00
320.00	2.50	0.69	0.00
325.00	2.50	0.69	0.00
330.00	2.50	0.69	0.00
335.00	2.50	0.69	0.00
340.00	2.50	0.69	0.00
345.00	2.50	0.69	0.00
350.00	2.50	0.69	0.00
355.00	2.50	0.69	0.00
360.00	2.50	0.69	0.00
365.00	2.50	0.69	0.00
370.00	2.50	0.69	0.00
375.00	2.50	0.69	0.00
380.00	2.50	0.69	0.00
385.00	2.50	0.69	0.00
390.00	2.50	0.69	0.00
395.00	2.50	0.69	0.00
400.00	2.50	0.69	0.00
405.00	2.50	0.69	0.00
410.00	2.50	0.69	0.00
415.00	2.50	0.69	0.00
420.00	2.50	0.69	0.00
425.00	2.50	0.69	0.00
430.00	2.50	0.69	0.00
435.00	2.50	0.69	0.00
440.00	2.50	0.69	0.00
445.00	2.50	0.69	0.00
450.00	2.50	0.69	0.00
455.00	2.50	0.69	0.00
460.00	2.50	0.69	0.00
465.00	2.50	0.69	0.00
470.00	2.50	0.69	0.00
475.00	2.50	0.69	0.00
480.00	2.50	0.69	0.00
485.00	2.50	0.69	0.00
490.00	2.50	0.69	0.00
495.00	2.50	0.69	0.00
500.00	2.50	0.69	0.00

Summary for Subcatchment 3E: Post 3E

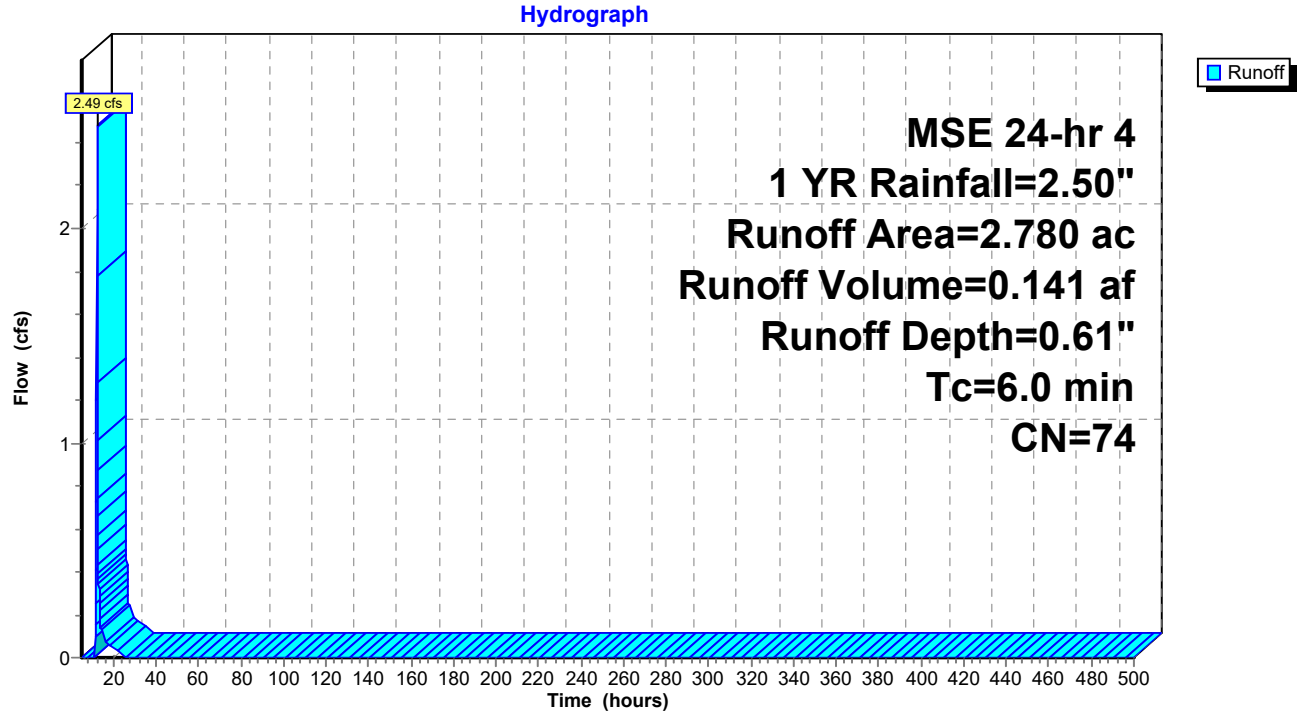
Runoff = 2.49 cfs @ 12.14 hrs, Volume= 0.141 af, Depth= 0.61"
Routed to Pond P3E : Pond 3E

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1 YR Rainfall=2.50"

	Area (ac)	CN	Description
*	0.530	98	Impervious
*	0.920	61	Post - B Soils
*	1.330	74	Post - C Soils
	2.780	74	Weighted Average
	2.250		80.94% Pervious Area
	0.530		19.06% Impervious Area

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

Subcatchment 3E: Post 3E



Hydrograph for Subcatchment 3E: Post 3E

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.11	0.00	0.00	260.00	2.50	0.61	0.00
10.00	0.40	0.00	**0.00**	265.00	2.50	0.61	0.00
15.00	2.20	0.45	**0.13**	270.00	2.50	0.61	0.00
20.00	**2.42**	**0.56**	0.05	275.00	2.50	0.61	0.00
25.00	**2.50**	**0.61**	0.00	280.00	2.50	0.61	0.00
30.00	2.50	0.61	0.00	285.00	2.50	0.61	0.00
35.00	2.50	0.61	0.00	290.00	2.50	0.61	0.00
40.00	2.50	0.61	0.00	295.00	2.50	0.61	0.00
45.00	2.50	0.61	0.00	300.00	2.50	0.61	0.00
50.00	2.50	0.61	0.00	305.00	2.50	0.61	0.00
55.00	2.50	0.61	0.00	310.00	2.50	0.61	0.00
60.00	2.50	0.61	0.00	315.00	2.50	0.61	0.00
65.00	2.50	0.61	0.00	320.00	2.50	0.61	0.00
70.00	2.50	0.61	0.00	325.00	2.50	0.61	0.00
75.00	2.50	0.61	0.00	330.00	2.50	0.61	0.00
80.00	2.50	0.61	0.00	335.00	2.50	0.61	0.00
85.00	2.50	0.61	0.00	340.00	2.50	0.61	0.00
90.00	2.50	0.61	0.00	345.00	2.50	0.61	0.00
95.00	2.50	0.61	0.00	350.00	2.50	0.61	0.00
100.00	2.50	0.61	0.00	355.00	2.50	0.61	0.00
105.00	2.50	0.61	0.00	360.00	2.50	0.61	0.00
110.00	2.50	0.61	0.00	365.00	2.50	0.61	0.00
115.00	2.50	0.61	0.00	370.00	2.50	0.61	0.00
120.00	2.50	0.61	0.00	375.00	2.50	0.61	0.00
125.00	2.50	0.61	0.00	380.00	2.50	0.61	0.00
130.00	2.50	0.61	0.00	385.00	2.50	0.61	0.00
135.00	2.50	0.61	0.00	390.00	2.50	0.61	0.00
140.00	2.50	0.61	0.00	395.00	2.50	0.61	0.00
145.00	2.50	0.61	0.00	400.00	2.50	0.61	0.00
150.00	2.50	0.61	0.00	405.00	2.50	0.61	0.00
155.00	2.50	0.61	0.00	410.00	2.50	0.61	0.00
160.00	2.50	0.61	0.00	415.00	2.50	0.61	0.00
165.00	2.50	0.61	0.00	420.00	2.50	0.61	0.00
170.00	2.50	0.61	0.00	425.00	2.50	0.61	0.00
175.00	2.50	0.61	0.00	430.00	2.50	0.61	0.00
180.00	2.50	0.61	0.00	435.00	2.50	0.61	0.00
185.00	2.50	0.61	0.00	440.00	2.50	0.61	0.00
190.00	2.50	0.61	0.00	445.00	2.50	0.61	0.00
195.00	2.50	0.61	0.00	450.00	2.50	0.61	0.00
200.00	2.50	0.61	0.00	455.00	2.50	0.61	0.00
205.00	2.50	0.61	0.00	460.00	2.50	0.61	0.00
210.00	2.50	0.61	0.00	465.00	2.50	0.61	0.00
215.00	2.50	0.61	0.00	470.00	2.50	0.61	0.00
220.00	2.50	0.61	0.00	475.00	2.50	0.61	0.00
225.00	2.50	0.61	0.00	480.00	2.50	0.61	0.00
230.00	2.50	0.61	0.00	485.00	2.50	0.61	0.00
235.00	2.50	0.61	0.00	490.00	2.50	0.61	0.00
240.00	2.50	0.61	0.00	495.00	2.50	0.61	0.00
245.00	2.50	0.61	0.00	500.00	2.50	0.61	0.00
250.00	2.50	0.61	0.00				
255.00	2.50	0.61	0.00				

Summary for Subcatchment 3Y: Post 3Y - Offsite

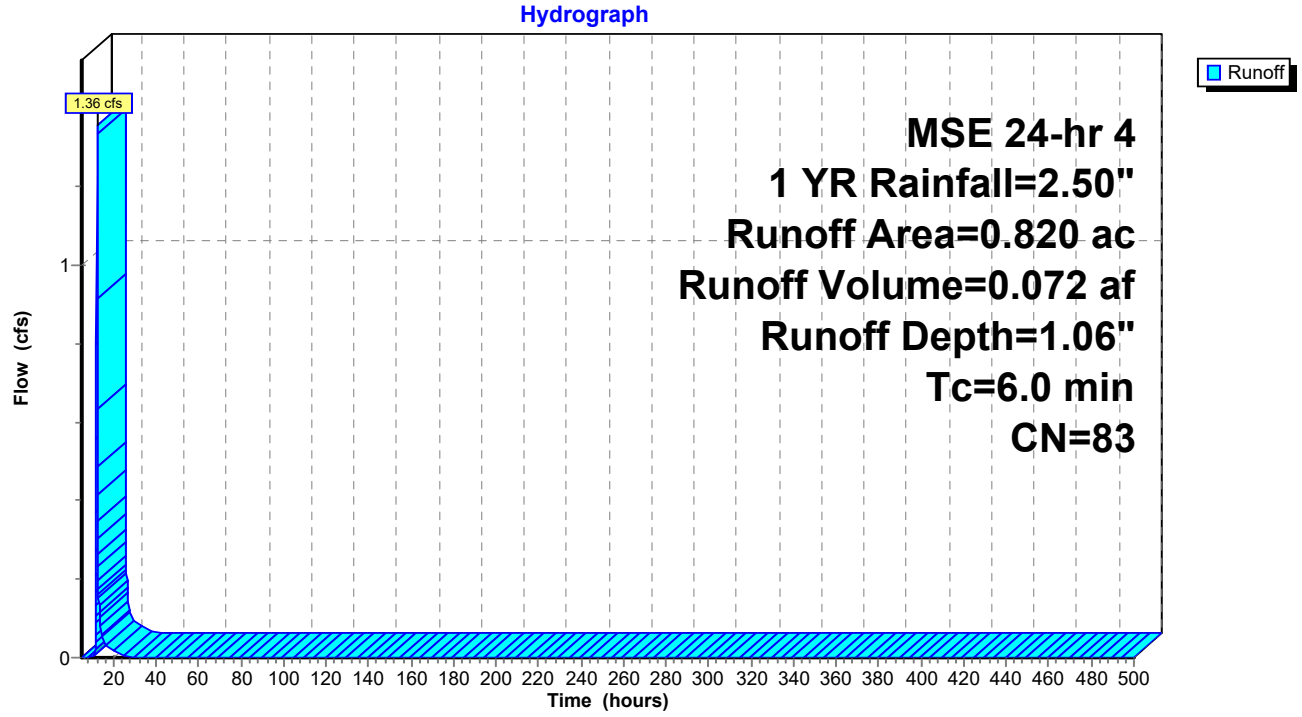
Runoff = 1.36 cfs @ 12.14 hrs, Volume= 0.072 af, Depth= 1.06"
Routed to Link 4L : Post - North

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1 YR Rainfall=2.50"

	Area (ac)	CN	Description
*	0.300	98	Impervious
*	0.000	61	Post - B Soils
*	0.520	74	Post - C Soils
	0.820	83	Weighted Average
	0.520		63.41% Pervious Area
	0.300		36.59% Impervious Area

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

Subcatchment 3Y: Post 3Y - Offsite



Hydrograph for Subcatchment 3Y: Post 3Y - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.11	0.00	0.00	260.00	2.50	1.06	0.00
10.00	0.40	0.00	**0.00**	265.00	2.50	1.06	0.00
15.00	2.20	0.83	**0.05**	270.00	2.50	1.06	0.00
20.00	**2.42**	**0.99**	0.02	275.00	2.50	1.06	0.00
25.00	**2.50**	**1.06**	0.00	280.00	2.50	1.06	0.00
30.00	2.50	1.06	0.00	285.00	2.50	1.06	0.00
35.00	2.50	1.06	0.00	290.00	2.50	1.06	0.00
40.00	2.50	1.06	0.00	295.00	2.50	1.06	0.00
45.00	2.50	1.06	0.00	300.00	2.50	1.06	0.00
50.00	2.50	1.06	0.00	305.00	2.50	1.06	0.00
55.00	2.50	1.06	0.00	310.00	2.50	1.06	0.00
60.00	2.50	1.06	0.00	315.00	2.50	1.06	0.00
65.00	2.50	1.06	0.00	320.00	2.50	1.06	0.00
70.00	2.50	1.06	0.00	325.00	2.50	1.06	0.00
75.00	2.50	1.06	0.00	330.00	2.50	1.06	0.00
80.00	2.50	1.06	0.00	335.00	2.50	1.06	0.00
85.00	2.50	1.06	0.00	340.00	2.50	1.06	0.00
90.00	2.50	1.06	0.00	345.00	2.50	1.06	0.00
95.00	2.50	1.06	0.00	350.00	2.50	1.06	0.00
100.00	2.50	1.06	0.00	355.00	2.50	1.06	0.00
105.00	2.50	1.06	0.00	360.00	2.50	1.06	0.00
110.00	2.50	1.06	0.00	365.00	2.50	1.06	0.00
115.00	2.50	1.06	0.00	370.00	2.50	1.06	0.00
120.00	2.50	1.06	0.00	375.00	2.50	1.06	0.00
125.00	2.50	1.06	0.00	380.00	2.50	1.06	0.00
130.00	2.50	1.06	0.00	385.00	2.50	1.06	0.00
135.00	2.50	1.06	0.00	390.00	2.50	1.06	0.00
140.00	2.50	1.06	0.00	395.00	2.50	1.06	0.00
145.00	2.50	1.06	0.00	400.00	2.50	1.06	0.00
150.00	2.50	1.06	0.00	405.00	2.50	1.06	0.00
155.00	2.50	1.06	0.00	410.00	2.50	1.06	0.00
160.00	2.50	1.06	0.00	415.00	2.50	1.06	0.00
165.00	2.50	1.06	0.00	420.00	2.50	1.06	0.00
170.00	2.50	1.06	0.00	425.00	2.50	1.06	0.00
175.00	2.50	1.06	0.00	430.00	2.50	1.06	0.00
180.00	2.50	1.06	0.00	435.00	2.50	1.06	0.00
185.00	2.50	1.06	0.00	440.00	2.50	1.06	0.00
190.00	2.50	1.06	0.00	445.00	2.50	1.06	0.00
195.00	2.50	1.06	0.00	450.00	2.50	1.06	0.00
200.00	2.50	1.06	0.00	455.00	2.50	1.06	0.00
205.00	2.50	1.06	0.00	460.00	2.50	1.06	0.00
210.00	2.50	1.06	0.00	465.00	2.50	1.06	0.00
215.00	2.50	1.06	0.00	470.00	2.50	1.06	0.00
220.00	2.50	1.06	0.00	475.00	2.50	1.06	0.00
225.00	2.50	1.06	0.00	480.00	2.50	1.06	0.00
230.00	2.50	1.06	0.00	485.00	2.50	1.06	0.00
235.00	2.50	1.06	0.00	490.00	2.50	1.06	0.00
240.00	2.50	1.06	0.00	495.00	2.50	1.06	0.00
245.00	2.50	1.06	0.00	500.00	2.50	1.06	0.00
250.00	2.50	1.06	0.00				
255.00	2.50	1.06	0.00				

Summary for Subcatchment 3Z: Post 3Z - Offsite

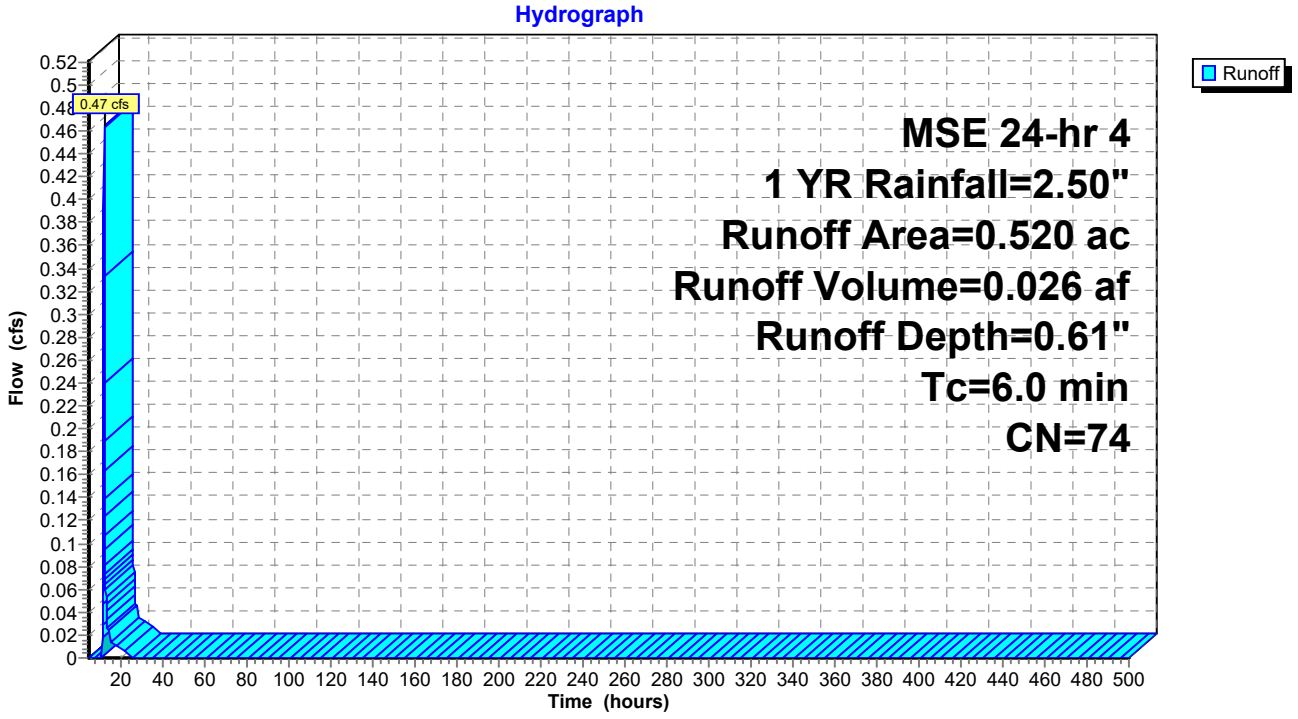
Runoff = 0.47 cfs @ 12.14 hrs, Volume= 0.026 af, Depth= 0.61"
Routed to Link 4L : Post - North

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1 YR Rainfall=2.50"

	Area (ac)	CN	Description
*	0.000	98	Impervious
*	0.000	61	Post - B Soils
*	0.520	74	Post - C Soils
	0.520	74	Weighted Average
	0.520		100.00% Pervious Area

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

Subcatchment 3Z: Post 3Z - Offsite



Hydrograph for Subcatchment 3Z: Post 3Z - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.11	0.00	0.00	260.00	2.50	0.61	0.00
10.00	0.40	0.00	**0.00**	265.00	2.50	0.61	0.00
15.00	2.20	0.45	**0.02**	270.00	2.50	0.61	0.00
20.00	**2.42**	**0.56**	0.01	275.00	2.50	0.61	0.00
25.00	**2.50**	**0.61**	0.00	280.00	2.50	0.61	0.00
30.00	2.50	0.61	0.00	285.00	2.50	0.61	0.00
35.00	2.50	0.61	0.00	290.00	2.50	0.61	0.00
40.00	2.50	0.61	0.00	295.00	2.50	0.61	0.00
45.00	2.50	0.61	0.00	300.00	2.50	0.61	0.00
50.00	2.50	0.61	0.00	305.00	2.50	0.61	0.00
55.00	2.50	0.61	0.00	310.00	2.50	0.61	0.00
60.00	2.50	0.61	0.00	315.00	2.50	0.61	0.00
65.00	2.50	0.61	0.00	320.00	2.50	0.61	0.00
70.00	2.50	0.61	0.00	325.00	2.50	0.61	0.00
75.00	2.50	0.61	0.00	330.00	2.50	0.61	0.00
80.00	2.50	0.61	0.00	335.00	2.50	0.61	0.00
85.00	2.50	0.61	0.00	340.00	2.50	0.61	0.00
90.00	2.50	0.61	0.00	345.00	2.50	0.61	0.00
95.00	2.50	0.61	0.00	350.00	2.50	0.61	0.00
100.00	2.50	0.61	0.00	355.00	2.50	0.61	0.00
105.00	2.50	0.61	0.00	360.00	2.50	0.61	0.00
110.00	2.50	0.61	0.00	365.00	2.50	0.61	0.00
115.00	2.50	0.61	0.00	370.00	2.50	0.61	0.00
120.00	2.50	0.61	0.00	375.00	2.50	0.61	0.00
125.00	2.50	0.61	0.00	380.00	2.50	0.61	0.00
130.00	2.50	0.61	0.00	385.00	2.50	0.61	0.00
135.00	2.50	0.61	0.00	390.00	2.50	0.61	0.00
140.00	2.50	0.61	0.00	395.00	2.50	0.61	0.00
145.00	2.50	0.61	0.00	400.00	2.50	0.61	0.00
150.00	2.50	0.61	0.00	405.00	2.50	0.61	0.00
155.00	2.50	0.61	0.00	410.00	2.50	0.61	0.00
160.00	2.50	0.61	0.00	415.00	2.50	0.61	0.00
165.00	2.50	0.61	0.00	420.00	2.50	0.61	0.00
170.00	2.50	0.61	0.00	425.00	2.50	0.61	0.00
175.00	2.50	0.61	0.00	430.00	2.50	0.61	0.00
180.00	2.50	0.61	0.00	435.00	2.50	0.61	0.00
185.00	2.50	0.61	0.00	440.00	2.50	0.61	0.00
190.00	2.50	0.61	0.00	445.00	2.50	0.61	0.00
195.00	2.50	0.61	0.00	450.00	2.50	0.61	0.00
200.00	2.50	0.61	0.00	455.00	2.50	0.61	0.00
205.00	2.50	0.61	0.00	460.00	2.50	0.61	0.00
210.00	2.50	0.61	0.00	465.00	2.50	0.61	0.00
215.00	2.50	0.61	0.00	470.00	2.50	0.61	0.00
220.00	2.50	0.61	0.00	475.00	2.50	0.61	0.00
225.00	2.50	0.61	0.00	480.00	2.50	0.61	0.00
230.00	2.50	0.61	0.00	485.00	2.50	0.61	0.00
235.00	2.50	0.61	0.00	490.00	2.50	0.61	0.00
240.00	2.50	0.61	0.00	495.00	2.50	0.61	0.00
245.00	2.50	0.61	0.00	500.00	2.50	0.61	0.00
250.00	2.50	0.61	0.00				
255.00	2.50	0.61	0.00				

Summary for Subcatchment 5S: Culvert 1

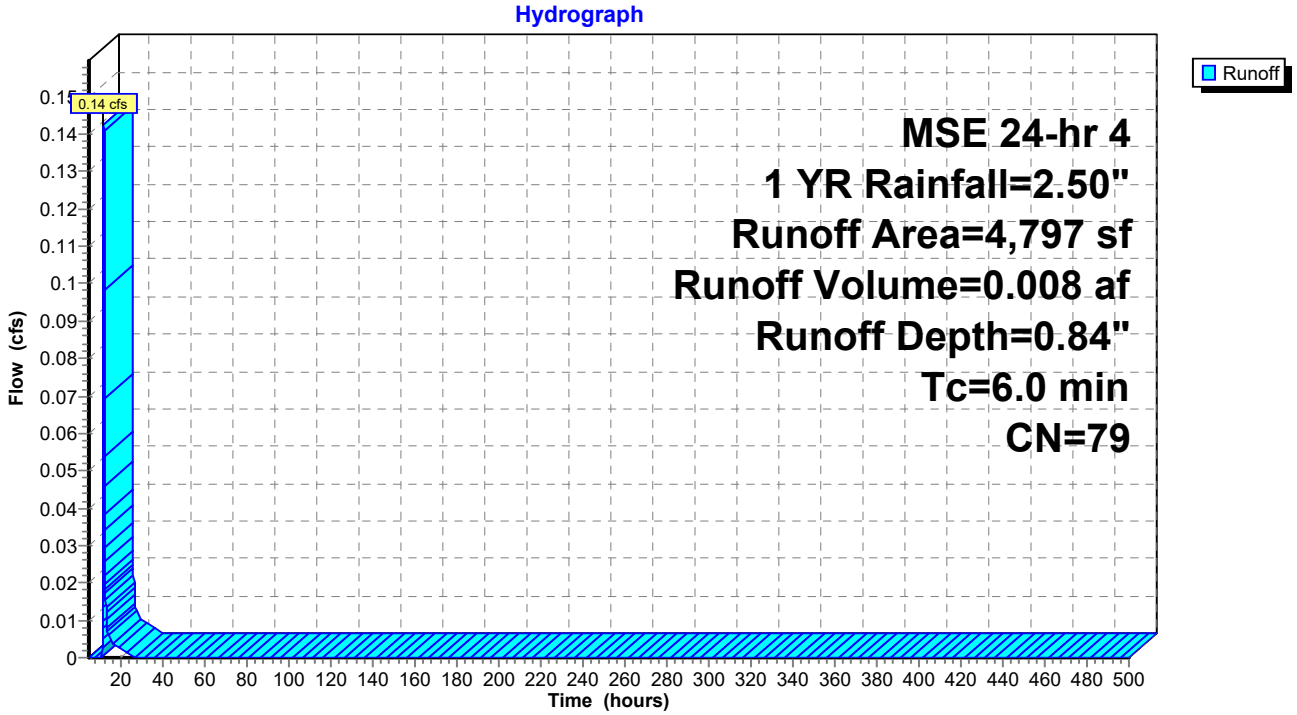
Runoff = 0.14 cfs @ 12.14 hrs, Volume= 0.008 af, Depth= 0.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1 YR Rainfall=2.50"

	Area (sf)	CN	Description
*	2,465	61	Post - B Soils
*	2,332	98	Impervious
	4,797	79	Weighted Average
	2,465		51.39% Pervious Area
	2,332		48.61% Impervious Area

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

Subcatchment 5S: Culvert 1



Hydrograph for Subcatchment 5S: Culvert 1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.11	0.00	0.00	260.00	2.50	0.84	0.00
10.00	0.40	0.00	**0.00**	265.00	2.50	0.84	0.00
15.00	2.20	0.64	**0.01**	270.00	2.50	0.84	0.00
20.00	**2.42**	**0.78**	0.00	275.00	2.50	0.84	0.00
25.00	**2.50**	**0.84**	0.00	280.00	2.50	0.84	0.00
30.00	2.50	0.84	0.00	285.00	2.50	0.84	0.00
35.00	2.50	0.84	0.00	290.00	2.50	0.84	0.00
40.00	2.50	0.84	0.00	295.00	2.50	0.84	0.00
45.00	2.50	0.84	0.00	300.00	2.50	0.84	0.00
50.00	2.50	0.84	0.00	305.00	2.50	0.84	0.00
55.00	2.50	0.84	0.00	310.00	2.50	0.84	0.00
60.00	2.50	0.84	0.00	315.00	2.50	0.84	0.00
65.00	2.50	0.84	0.00	320.00	2.50	0.84	0.00
70.00	2.50	0.84	0.00	325.00	2.50	0.84	0.00
75.00	2.50	0.84	0.00	330.00	2.50	0.84	0.00
80.00	2.50	0.84	0.00	335.00	2.50	0.84	0.00
85.00	2.50	0.84	0.00	340.00	2.50	0.84	0.00
90.00	2.50	0.84	0.00	345.00	2.50	0.84	0.00
95.00	2.50	0.84	0.00	350.00	2.50	0.84	0.00
100.00	2.50	0.84	0.00	355.00	2.50	0.84	0.00
105.00	2.50	0.84	0.00	360.00	2.50	0.84	0.00
110.00	2.50	0.84	0.00	365.00	2.50	0.84	0.00
115.00	2.50	0.84	0.00	370.00	2.50	0.84	0.00
120.00	2.50	0.84	0.00	375.00	2.50	0.84	0.00
125.00	2.50	0.84	0.00	380.00	2.50	0.84	0.00
130.00	2.50	0.84	0.00	385.00	2.50	0.84	0.00
135.00	2.50	0.84	0.00	390.00	2.50	0.84	0.00
140.00	2.50	0.84	0.00	395.00	2.50	0.84	0.00
145.00	2.50	0.84	0.00	400.00	2.50	0.84	0.00
150.00	2.50	0.84	0.00	405.00	2.50	0.84	0.00
155.00	2.50	0.84	0.00	410.00	2.50	0.84	0.00
160.00	2.50	0.84	0.00	415.00	2.50	0.84	0.00
165.00	2.50	0.84	0.00	420.00	2.50	0.84	0.00
170.00	2.50	0.84	0.00	425.00	2.50	0.84	0.00
175.00	2.50	0.84	0.00	430.00	2.50	0.84	0.00
180.00	2.50	0.84	0.00	435.00	2.50	0.84	0.00
185.00	2.50	0.84	0.00	440.00	2.50	0.84	0.00
190.00	2.50	0.84	0.00	445.00	2.50	0.84	0.00
195.00	2.50	0.84	0.00	450.00	2.50	0.84	0.00
200.00	2.50	0.84	0.00	455.00	2.50	0.84	0.00
205.00	2.50	0.84	0.00	460.00	2.50	0.84	0.00
210.00	2.50	0.84	0.00	465.00	2.50	0.84	0.00
215.00	2.50	0.84	0.00	470.00	2.50	0.84	0.00
220.00	2.50	0.84	0.00	475.00	2.50	0.84	0.00
225.00	2.50	0.84	0.00	480.00	2.50	0.84	0.00
230.00	2.50	0.84	0.00	485.00	2.50	0.84	0.00
235.00	2.50	0.84	0.00	490.00	2.50	0.84	0.00
240.00	2.50	0.84	0.00	495.00	2.50	0.84	0.00
245.00	2.50	0.84	0.00	500.00	2.50	0.84	0.00
250.00	2.50	0.84	0.00				
255.00	2.50	0.84	0.00				

Summary for Subcatchment 6S: Culvert 2

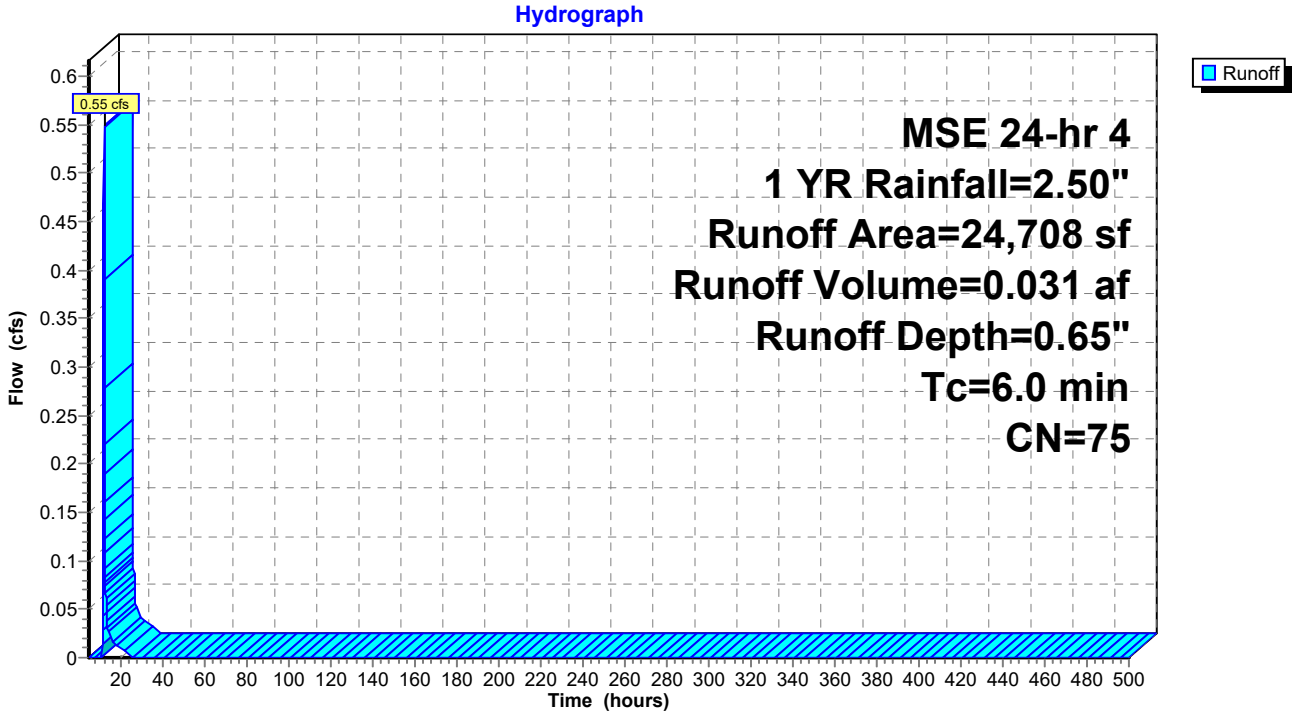
Runoff = 0.55 cfs @ 12.14 hrs, Volume= 0.031 af, Depth= 0.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1 YR Rainfall=2.50"

	Area (sf)	CN	Description
*	15,597	61	Post - B Soils
*	9,111	98	Impervious
	24,708	75	Weighted Average
	15,597		63.13% Pervious Area
	9,111		36.87% Impervious Area

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

Subcatchment 6S: Culvert 2



Hydrograph for Subcatchment 6S: Culvert 2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.11	0.00	0.00
10.00	0.40	0.00	**0.00**
15.00	2.20	0.48	**0.03**
20.00	**2.42**	**0.60**	0.01
25.00	**2.50**	**0.65**	0.00
30.00	2.50	0.65	0.00
35.00	2.50	0.65	0.00
40.00	2.50	0.65	0.00
45.00	2.50	0.65	0.00
50.00	2.50	0.65	0.00
55.00	2.50	0.65	0.00
60.00	2.50	0.65	0.00
65.00	2.50	0.65	0.00
70.00	2.50	0.65	0.00
75.00	2.50	0.65	0.00
80.00	2.50	0.65	0.00
85.00	2.50	0.65	0.00
90.00	2.50	0.65	0.00
95.00	2.50	0.65	0.00
100.00	2.50	0.65	0.00
105.00	2.50	0.65	0.00
110.00	2.50	0.65	0.00
115.00	2.50	0.65	0.00
120.00	2.50	0.65	0.00
125.00	2.50	0.65	0.00
130.00	2.50	0.65	0.00
135.00	2.50	0.65	0.00
140.00	2.50	0.65	0.00
145.00	2.50	0.65	0.00
150.00	2.50	0.65	0.00
155.00	2.50	0.65	0.00
160.00	2.50	0.65	0.00
165.00	2.50	0.65	0.00
170.00	2.50	0.65	0.00
175.00	2.50	0.65	0.00
180.00	2.50	0.65	0.00
185.00	2.50	0.65	0.00
190.00	2.50	0.65	0.00
195.00	2.50	0.65	0.00
200.00	2.50	0.65	0.00
205.00	2.50	0.65	0.00
210.00	2.50	0.65	0.00
215.00	2.50	0.65	0.00
220.00	2.50	0.65	0.00
225.00	2.50	0.65	0.00
230.00	2.50	0.65	0.00
235.00	2.50	0.65	0.00
240.00	2.50	0.65	0.00
245.00	2.50	0.65	0.00
250.00	2.50	0.65	0.00
255.00	2.50	0.65	0.00
260.00	2.50	0.65	0.00
265.00	2.50	0.65	0.00
270.00	2.50	0.65	0.00
275.00	2.50	0.65	0.00
280.00	2.50	0.65	0.00
285.00	2.50	0.65	0.00
290.00	2.50	0.65	0.00
295.00	2.50	0.65	0.00
300.00	2.50	0.65	0.00
305.00	2.50	0.65	0.00
310.00	2.50	0.65	0.00
315.00	2.50	0.65	0.00
320.00	2.50	0.65	0.00
325.00	2.50	0.65	0.00
330.00	2.50	0.65	0.00
335.00	2.50	0.65	0.00
340.00	2.50	0.65	0.00
345.00	2.50	0.65	0.00
350.00	2.50	0.65	0.00
355.00	2.50	0.65	0.00
360.00	2.50	0.65	0.00
365.00	2.50	0.65	0.00
370.00	2.50	0.65	0.00
375.00	2.50	0.65	0.00
380.00	2.50	0.65	0.00
385.00	2.50	0.65	0.00
390.00	2.50	0.65	0.00
395.00	2.50	0.65	0.00
400.00	2.50	0.65	0.00
405.00	2.50	0.65	0.00
410.00	2.50	0.65	0.00
415.00	2.50	0.65	0.00
420.00	2.50	0.65	0.00
425.00	2.50	0.65	0.00
430.00	2.50	0.65	0.00
435.00	2.50	0.65	0.00
440.00	2.50	0.65	0.00
445.00	2.50	0.65	0.00
450.00	2.50	0.65	0.00
455.00	2.50	0.65	0.00
460.00	2.50	0.65	0.00
465.00	2.50	0.65	0.00
470.00	2.50	0.65	0.00
475.00	2.50	0.65	0.00
480.00	2.50	0.65	0.00
485.00	2.50	0.65	0.00
490.00	2.50	0.65	0.00
495.00	2.50	0.65	0.00
500.00	2.50	0.65	0.00

Summary for Subcatchment 7S: Culvert 3

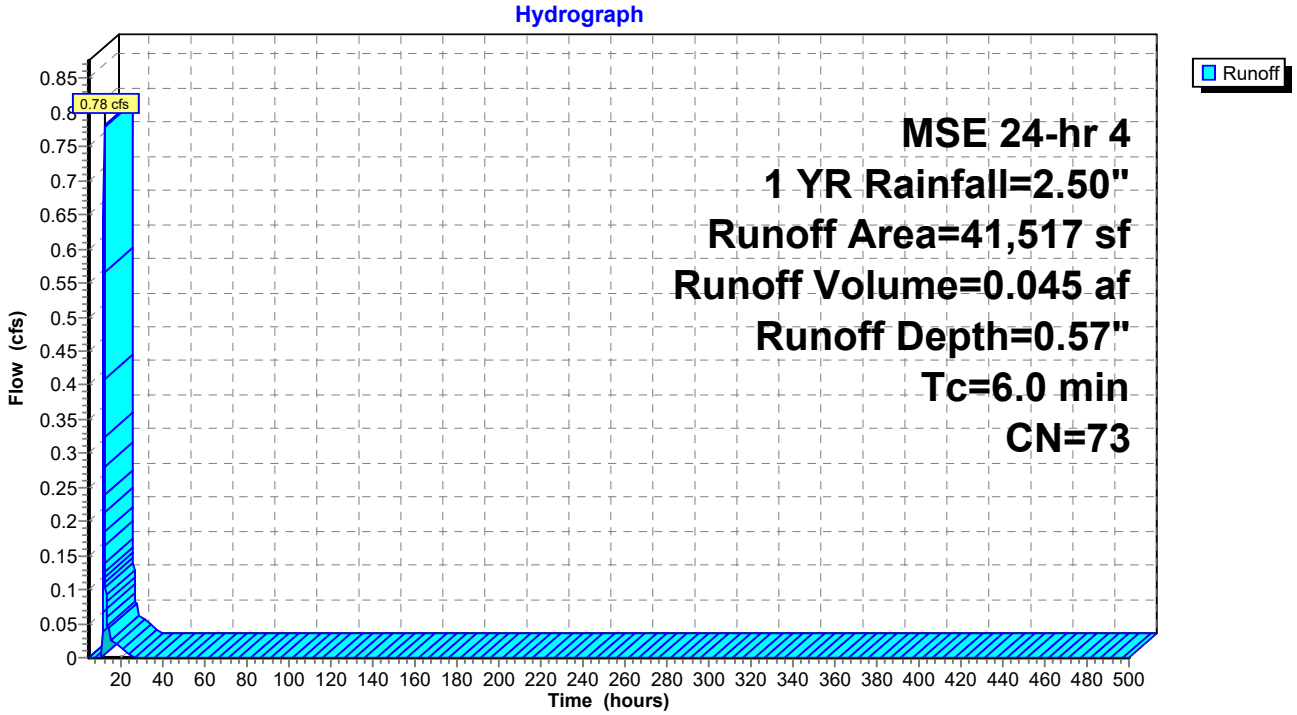
Runoff = 0.78 cfs @ 12.14 hrs, Volume= 0.045 af, Depth= 0.57"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1 YR Rainfall=2.50"

	Area (sf)	CN	Description
*	28,233	61	Post - B Soils
*	13,284	98	Impervious
	41,517	73	Weighted Average
	28,233		68.00% Pervious Area
	13,284		32.00% Impervious Area

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

Subcatchment 7S: Culvert 3



Hydrograph for Subcatchment 7S: Culvert 3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.11	0.00	0.00	260.00	2.50	0.57	0.00
10.00	0.40	0.00	**0.00**	265.00	2.50	0.57	0.00
15.00	2.20	0.41	**0.04**	270.00	2.50	0.57	0.00
20.00	**2.42**	**0.52**	0.02	275.00	2.50	0.57	0.00
25.00	**2.50**	**0.57**	0.00	280.00	2.50	0.57	0.00
30.00	2.50	0.57	0.00	285.00	2.50	0.57	0.00
35.00	2.50	0.57	0.00	290.00	2.50	0.57	0.00
40.00	2.50	0.57	0.00	295.00	2.50	0.57	0.00
45.00	2.50	0.57	0.00	300.00	2.50	0.57	0.00
50.00	2.50	0.57	0.00	305.00	2.50	0.57	0.00
55.00	2.50	0.57	0.00	310.00	2.50	0.57	0.00
60.00	2.50	0.57	0.00	315.00	2.50	0.57	0.00
65.00	2.50	0.57	0.00	320.00	2.50	0.57	0.00
70.00	2.50	0.57	0.00	325.00	2.50	0.57	0.00
75.00	2.50	0.57	0.00	330.00	2.50	0.57	0.00
80.00	2.50	0.57	0.00	335.00	2.50	0.57	0.00
85.00	2.50	0.57	0.00	340.00	2.50	0.57	0.00
90.00	2.50	0.57	0.00	345.00	2.50	0.57	0.00
95.00	2.50	0.57	0.00	350.00	2.50	0.57	0.00
100.00	2.50	0.57	0.00	355.00	2.50	0.57	0.00
105.00	2.50	0.57	0.00	360.00	2.50	0.57	0.00
110.00	2.50	0.57	0.00	365.00	2.50	0.57	0.00
115.00	2.50	0.57	0.00	370.00	2.50	0.57	0.00
120.00	2.50	0.57	0.00	375.00	2.50	0.57	0.00
125.00	2.50	0.57	0.00	380.00	2.50	0.57	0.00
130.00	2.50	0.57	0.00	385.00	2.50	0.57	0.00
135.00	2.50	0.57	0.00	390.00	2.50	0.57	0.00
140.00	2.50	0.57	0.00	395.00	2.50	0.57	0.00
145.00	2.50	0.57	0.00	400.00	2.50	0.57	0.00
150.00	2.50	0.57	0.00	405.00	2.50	0.57	0.00
155.00	2.50	0.57	0.00	410.00	2.50	0.57	0.00
160.00	2.50	0.57	0.00	415.00	2.50	0.57	0.00
165.00	2.50	0.57	0.00	420.00	2.50	0.57	0.00
170.00	2.50	0.57	0.00	425.00	2.50	0.57	0.00
175.00	2.50	0.57	0.00	430.00	2.50	0.57	0.00
180.00	2.50	0.57	0.00	435.00	2.50	0.57	0.00
185.00	2.50	0.57	0.00	440.00	2.50	0.57	0.00
190.00	2.50	0.57	0.00	445.00	2.50	0.57	0.00
195.00	2.50	0.57	0.00	450.00	2.50	0.57	0.00
200.00	2.50	0.57	0.00	455.00	2.50	0.57	0.00
205.00	2.50	0.57	0.00	460.00	2.50	0.57	0.00
210.00	2.50	0.57	0.00	465.00	2.50	0.57	0.00
215.00	2.50	0.57	0.00	470.00	2.50	0.57	0.00
220.00	2.50	0.57	0.00	475.00	2.50	0.57	0.00
225.00	2.50	0.57	0.00	480.00	2.50	0.57	0.00
230.00	2.50	0.57	0.00	485.00	2.50	0.57	0.00
235.00	2.50	0.57	0.00	490.00	2.50	0.57	0.00
240.00	2.50	0.57	0.00	495.00	2.50	0.57	0.00
245.00	2.50	0.57	0.00	500.00	2.50	0.57	0.00
250.00	2.50	0.57	0.00				
255.00	2.50	0.57	0.00				

Summary for Subcatchment 8S: Culvert 4

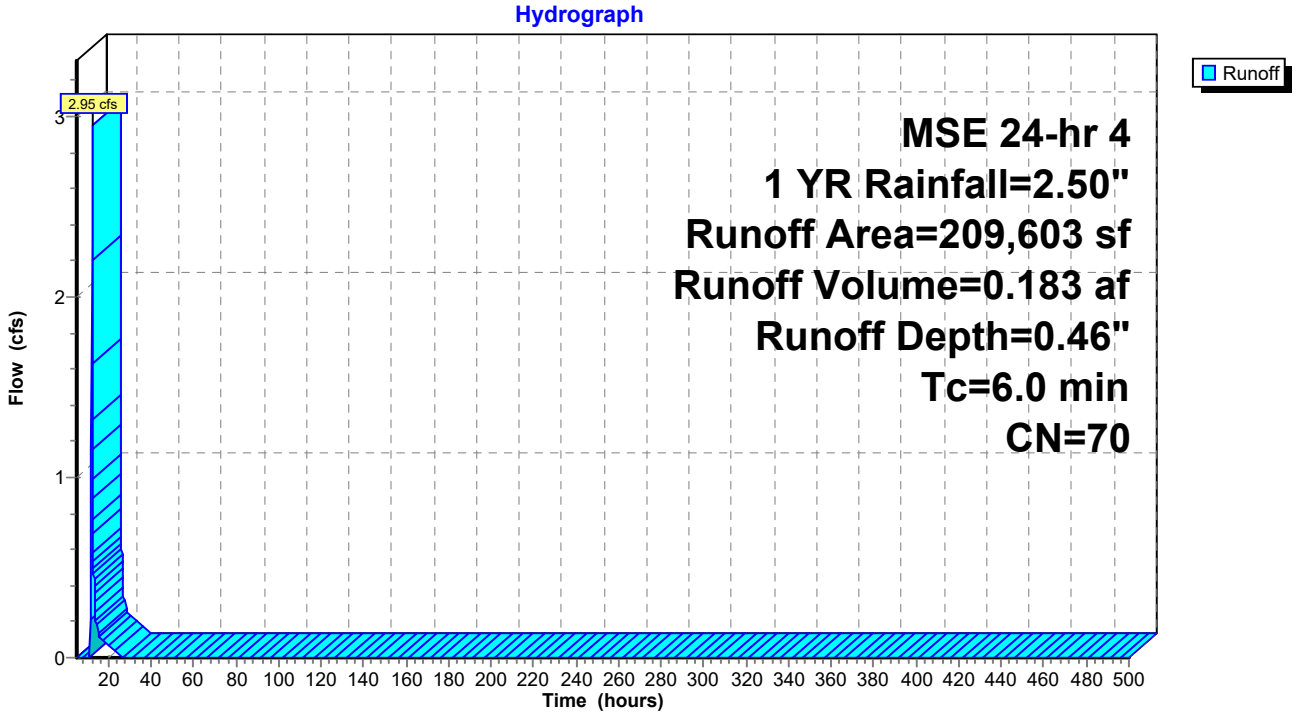
Runoff = 2.95 cfs @ 12.15 hrs, Volume= 0.183 af, Depth= 0.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1 YR Rainfall=2.50"

	Area (sf)	CN	Description
*	156,823	61	Post - B Soils
*	52,780	98	Impervious
	209,603	70	Weighted Average
	156,823		74.82% Pervious Area
	52,780		25.18% Impervious Area

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

Subcatchment 8S: Culvert 4



Hydrograph for Subcatchment 8S: Culvert 4

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.11	0.00	0.00	260.00	2.50	0.46	0.00
10.00	0.40	0.00	**0.00**	265.00	2.50	0.46	0.00
15.00	2.20	0.32	**0.18**	270.00	2.50	0.46	0.00
20.00	**2.42**	**0.42**	0.07	275.00	2.50	0.46	0.00
25.00	**2.50**	**0.46**	0.00	280.00	2.50	0.46	0.00
30.00	2.50	0.46	0.00	285.00	2.50	0.46	0.00
35.00	2.50	0.46	0.00	290.00	2.50	0.46	0.00
40.00	2.50	0.46	0.00	295.00	2.50	0.46	0.00
45.00	2.50	0.46	0.00	300.00	2.50	0.46	0.00
50.00	2.50	0.46	0.00	305.00	2.50	0.46	0.00
55.00	2.50	0.46	0.00	310.00	2.50	0.46	0.00
60.00	2.50	0.46	0.00	315.00	2.50	0.46	0.00
65.00	2.50	0.46	0.00	320.00	2.50	0.46	0.00
70.00	2.50	0.46	0.00	325.00	2.50	0.46	0.00
75.00	2.50	0.46	0.00	330.00	2.50	0.46	0.00
80.00	2.50	0.46	0.00	335.00	2.50	0.46	0.00
85.00	2.50	0.46	0.00	340.00	2.50	0.46	0.00
90.00	2.50	0.46	0.00	345.00	2.50	0.46	0.00
95.00	2.50	0.46	0.00	350.00	2.50	0.46	0.00
100.00	2.50	0.46	0.00	355.00	2.50	0.46	0.00
105.00	2.50	0.46	0.00	360.00	2.50	0.46	0.00
110.00	2.50	0.46	0.00	365.00	2.50	0.46	0.00
115.00	2.50	0.46	0.00	370.00	2.50	0.46	0.00
120.00	2.50	0.46	0.00	375.00	2.50	0.46	0.00
125.00	2.50	0.46	0.00	380.00	2.50	0.46	0.00
130.00	2.50	0.46	0.00	385.00	2.50	0.46	0.00
135.00	2.50	0.46	0.00	390.00	2.50	0.46	0.00
140.00	2.50	0.46	0.00	395.00	2.50	0.46	0.00
145.00	2.50	0.46	0.00	400.00	2.50	0.46	0.00
150.00	2.50	0.46	0.00	405.00	2.50	0.46	0.00
155.00	2.50	0.46	0.00	410.00	2.50	0.46	0.00
160.00	2.50	0.46	0.00	415.00	2.50	0.46	0.00
165.00	2.50	0.46	0.00	420.00	2.50	0.46	0.00
170.00	2.50	0.46	0.00	425.00	2.50	0.46	0.00
175.00	2.50	0.46	0.00	430.00	2.50	0.46	0.00
180.00	2.50	0.46	0.00	435.00	2.50	0.46	0.00
185.00	2.50	0.46	0.00	440.00	2.50	0.46	0.00
190.00	2.50	0.46	0.00	445.00	2.50	0.46	0.00
195.00	2.50	0.46	0.00	450.00	2.50	0.46	0.00
200.00	2.50	0.46	0.00	455.00	2.50	0.46	0.00
205.00	2.50	0.46	0.00	460.00	2.50	0.46	0.00
210.00	2.50	0.46	0.00	465.00	2.50	0.46	0.00
215.00	2.50	0.46	0.00	470.00	2.50	0.46	0.00
220.00	2.50	0.46	0.00	475.00	2.50	0.46	0.00
225.00	2.50	0.46	0.00	480.00	2.50	0.46	0.00
230.00	2.50	0.46	0.00	485.00	2.50	0.46	0.00
235.00	2.50	0.46	0.00	490.00	2.50	0.46	0.00
240.00	2.50	0.46	0.00	495.00	2.50	0.46	0.00
245.00	2.50	0.46	0.00	500.00	2.50	0.46	0.00
250.00	2.50	0.46	0.00				
255.00	2.50	0.46	0.00				

Summary for Subcatchment 9S: Culvert 5

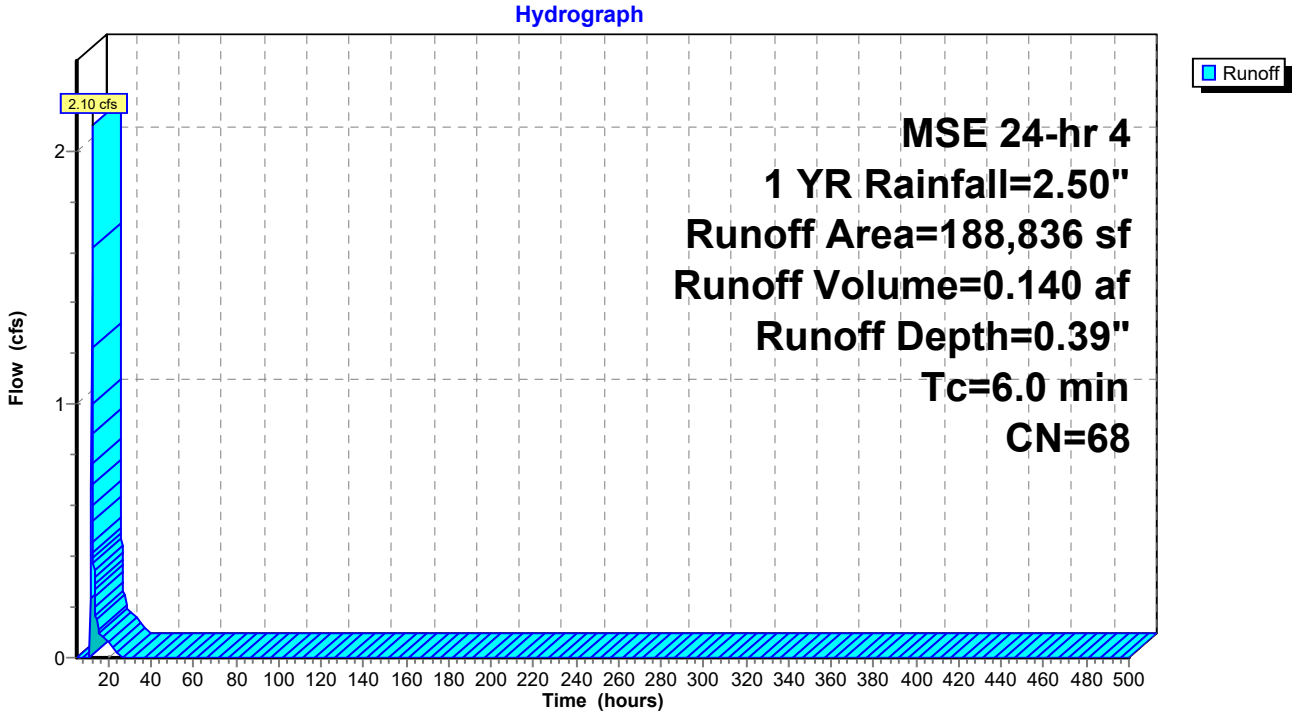
Runoff = 2.10 cfs @ 12.15 hrs, Volume= 0.140 af, Depth= 0.39"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1 YR Rainfall=2.50"

	Area (sf)	CN	Description
*	151,149	61	Post - B Soils
*	37,687	98	Impervious
	188,836	68	Weighted Average
	151,149		80.04% Pervious Area
	37,687		19.96% Impervious Area

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

Subcatchment 9S: Culvert 5



Hydrograph for Subcatchment 9S: Culvert 5

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.11	0.00	0.00
10.00	0.40	0.00	**0.00**
15.00	2.20	0.26	**0.15**
20.00	**2.42**	**0.35**	0.06
25.00	**2.50**	**0.39**	0.00
30.00	2.50	0.39	0.00
35.00	2.50	0.39	0.00
40.00	2.50	0.39	0.00
45.00	2.50	0.39	0.00
50.00	2.50	0.39	0.00
55.00	2.50	0.39	0.00
60.00	2.50	0.39	0.00
65.00	2.50	0.39	0.00
70.00	2.50	0.39	0.00
75.00	2.50	0.39	0.00
80.00	2.50	0.39	0.00
85.00	2.50	0.39	0.00
90.00	2.50	0.39	0.00
95.00	2.50	0.39	0.00
100.00	2.50	0.39	0.00
105.00	2.50	0.39	0.00
110.00	2.50	0.39	0.00
115.00	2.50	0.39	0.00
120.00	2.50	0.39	0.00
125.00	2.50	0.39	0.00
130.00	2.50	0.39	0.00
135.00	2.50	0.39	0.00
140.00	2.50	0.39	0.00
145.00	2.50	0.39	0.00
150.00	2.50	0.39	0.00
155.00	2.50	0.39	0.00
160.00	2.50	0.39	0.00
165.00	2.50	0.39	0.00
170.00	2.50	0.39	0.00
175.00	2.50	0.39	0.00
180.00	2.50	0.39	0.00
185.00	2.50	0.39	0.00
190.00	2.50	0.39	0.00
195.00	2.50	0.39	0.00
200.00	2.50	0.39	0.00
205.00	2.50	0.39	0.00
210.00	2.50	0.39	0.00
215.00	2.50	0.39	0.00
220.00	2.50	0.39	0.00
225.00	2.50	0.39	0.00
230.00	2.50	0.39	0.00
235.00	2.50	0.39	0.00
240.00	2.50	0.39	0.00
245.00	2.50	0.39	0.00
250.00	2.50	0.39	0.00
255.00	2.50	0.39	0.00
260.00	2.50	0.39	0.00
265.00	2.50	0.39	0.00
270.00	2.50	0.39	0.00
275.00	2.50	0.39	0.00
280.00	2.50	0.39	0.00
285.00	2.50	0.39	0.00
290.00	2.50	0.39	0.00
295.00	2.50	0.39	0.00
300.00	2.50	0.39	0.00
305.00	2.50	0.39	0.00
310.00	2.50	0.39	0.00
315.00	2.50	0.39	0.00
320.00	2.50	0.39	0.00
325.00	2.50	0.39	0.00
330.00	2.50	0.39	0.00
335.00	2.50	0.39	0.00
340.00	2.50	0.39	0.00
345.00	2.50	0.39	0.00
350.00	2.50	0.39	0.00
355.00	2.50	0.39	0.00
360.00	2.50	0.39	0.00
365.00	2.50	0.39	0.00
370.00	2.50	0.39	0.00
375.00	2.50	0.39	0.00
380.00	2.50	0.39	0.00
385.00	2.50	0.39	0.00
390.00	2.50	0.39	0.00
395.00	2.50	0.39	0.00
400.00	2.50	0.39	0.00
405.00	2.50	0.39	0.00
410.00	2.50	0.39	0.00
415.00	2.50	0.39	0.00
420.00	2.50	0.39	0.00
425.00	2.50	0.39	0.00
430.00	2.50	0.39	0.00
435.00	2.50	0.39	0.00
440.00	2.50	0.39	0.00
445.00	2.50	0.39	0.00
450.00	2.50	0.39	0.00
455.00	2.50	0.39	0.00
460.00	2.50	0.39	0.00
465.00	2.50	0.39	0.00
470.00	2.50	0.39	0.00
475.00	2.50	0.39	0.00
480.00	2.50	0.39	0.00
485.00	2.50	0.39	0.00
490.00	2.50	0.39	0.00
495.00	2.50	0.39	0.00
500.00	2.50	0.39	0.00

Summary for Pond P1A: Pond 1A

Inflow Area = 6.030 ac, 19.24% Impervious, Inflow Depth = 0.39" for 1 YR event
Inflow = 2.93 cfs @ 12.15 hrs, Volume= 0.195 af
Outflow = 0.32 cfs @ 13.52 hrs, Volume= 0.195 af, Atten= 89%, Lag= 82.1 min
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Routed to Link 3L : Post - South
Secondary = 0.32 cfs @ 13.52 hrs, Volume= 0.195 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,239.93' @ 13.52 hrs Surf.Area= 3,843 sf Storage= 2,951 cf

Plug-Flow detention time= 92.6 min calculated for 0.195 af (100% of inflow)
Center-of-Mass det. time= 92.6 min (974.9 - 882.3)

Volume	Invert	Avail.Storage	Storage Description
#1	1,239.00'	30,563 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

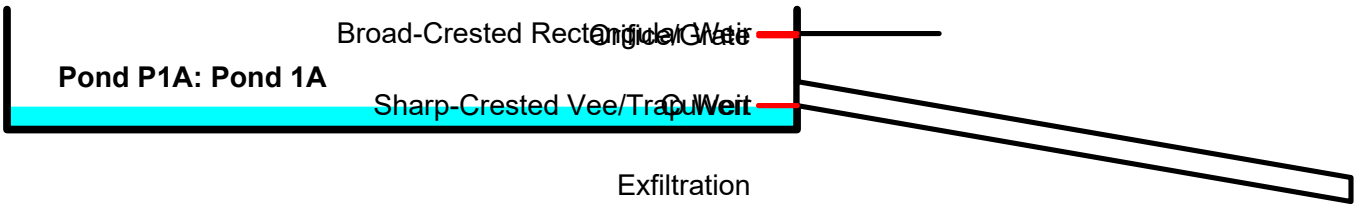
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,239.00	2,496	0	0
1,244.00	9,729	30,563	30,563

Device	Routing	Invert	Outlet Devices
#1	Primary	1,240.00'	**12.0" Round Culvert** L= 39.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,240.00' / 1,236.00' S= 0.1026 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,240.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,242.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,239.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,243.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

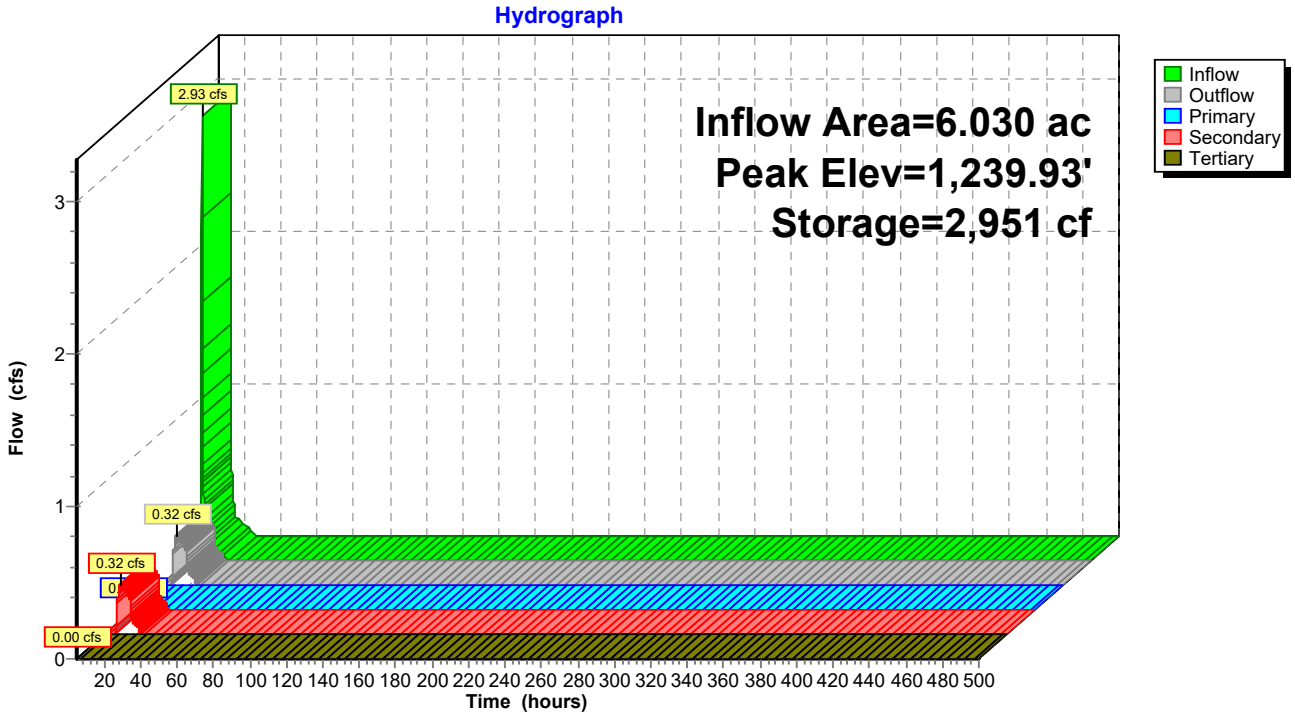
Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,239.00' (Free Discharge)
└**1=Culvert** (Controls 0.00 cfs)
└**2=Sharp-Crested Vee/Trap Weir** (Controls 0.00 cfs)
└**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.32 cfs @ 13.52 hrs HW=1,239.93' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.32 cfs)

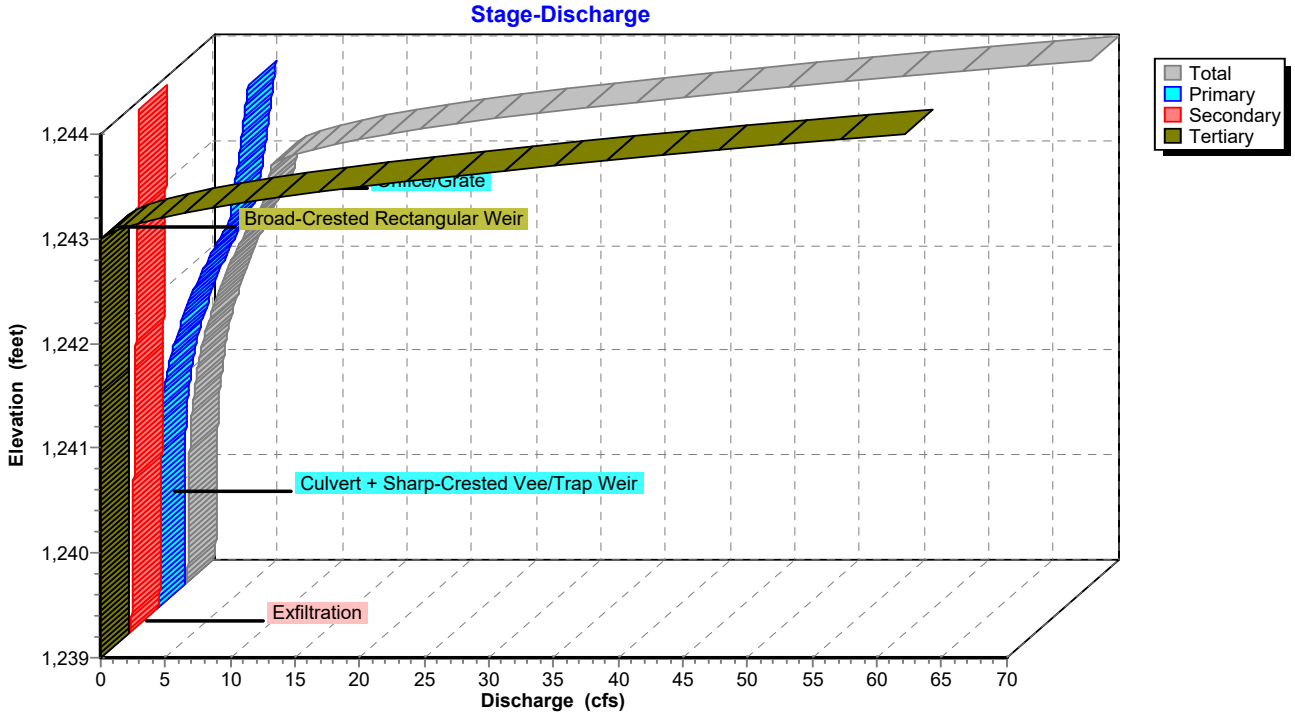
Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,239.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



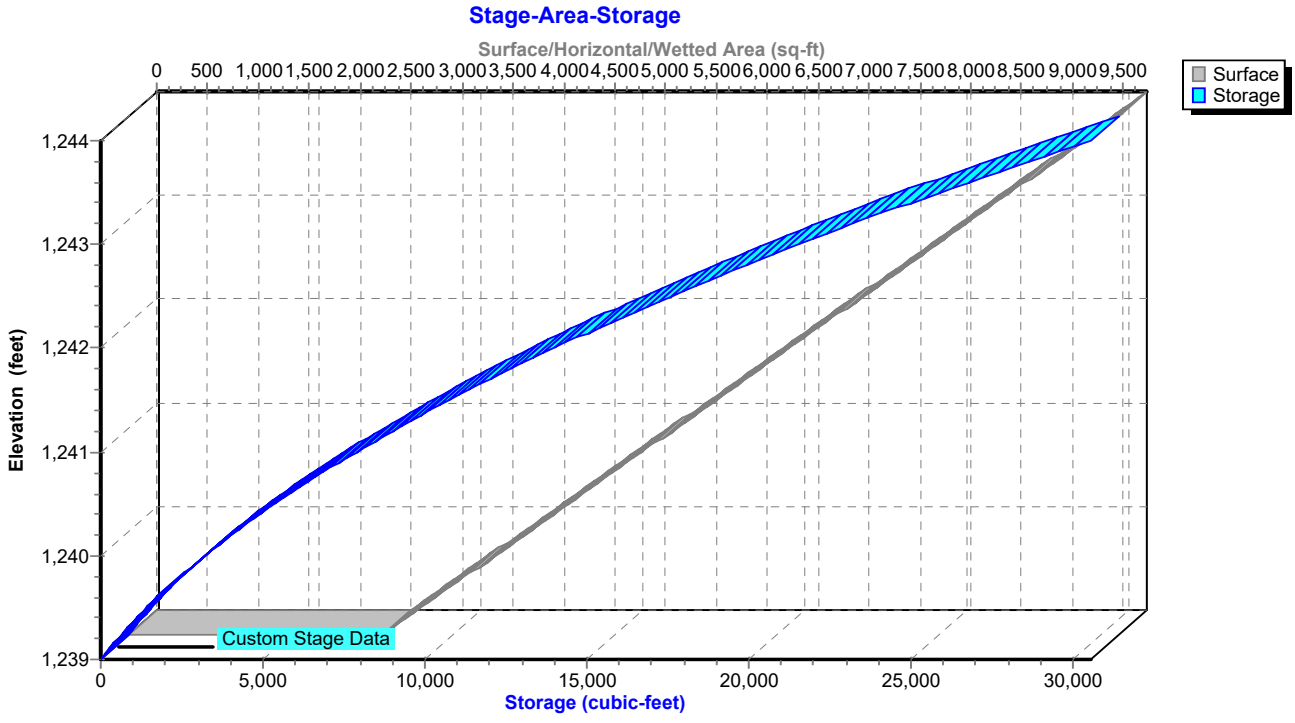
Pond P1A: Pond 1A



Pond P1A: Pond 1A



Pond P1A: Pond 1A



Hydrograph for Pond P1A: Pond 1A

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,239.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.20**	**2,447**	**1,239.80**	**0.30**	0.00	**0.30**	0.00
25.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
35.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P1A: Pond 1A

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,239.00	0.00	0.00	0.00	0.00
1,239.10	0.22	0.00	0.22	0.00
1,239.20	0.23	0.00	0.23	0.00
1,239.30	0.24	0.00	0.24	0.00
1,239.40	0.26	0.00	0.26	0.00
1,239.50	0.27	0.00	0.27	0.00
1,239.60	0.28	0.00	0.28	0.00
1,239.70	0.29	0.00	0.29	0.00
1,239.80	0.30	0.00	0.30	0.00
1,239.90	0.32	0.00	0.32	0.00
1,240.00	0.33	0.00	0.33	0.00
1,240.10	0.34	0.00	0.34	0.00
1,240.20	0.36	0.01	0.35	0.00
1,240.30	0.39	0.02	0.36	0.00
1,240.40	0.42	0.05	0.38	0.00
1,240.50	0.47	0.08	0.39	0.00
1,240.60	0.53	0.13	0.40	0.00
1,240.70	0.61	0.19	0.41	0.00
1,240.80	0.70	0.27	0.42	0.00
1,240.90	0.80	0.36	0.44	0.00
1,241.00	0.92	0.47	0.45	0.00
1,241.10	1.06	0.60	0.46	0.00
1,241.20	1.22	0.75	0.47	0.00
1,241.30	1.40	0.91	0.49	0.00
1,241.40	1.60	1.10	0.50	0.00
1,241.50	1.82	1.31	0.51	0.00
1,241.60	2.06	1.54	0.52	0.00
1,241.70	2.32	1.79	0.53	0.00
1,241.80	2.61	2.06	0.55	0.00
1,241.90	2.92	2.36	0.56	0.00
1,242.00	3.25	2.68	0.57	0.00
1,242.10	3.61	3.03	0.58	0.00
1,242.20	4.00	3.41	0.59	0.00
1,242.30	4.41	3.81	0.61	0.00
1,242.40	4.85	4.23	0.62	0.00
1,242.50	5.32	4.69	0.63	0.00
1,242.60	5.81	5.17	0.64	0.00
1,242.70	6.26	5.61	0.65	0.00
1,242.80	6.40	5.74	0.67	0.00
1,242.90	6.54	5.86	0.68	0.00
1,243.00	6.67	5.98	0.69	0.00
1,243.10	8.40	6.10	0.70	1.60
1,243.20	11.53	6.21	0.71	4.60
1,243.30	15.75	6.33	0.73	8.70
1,243.40	20.96	6.44	0.74	13.78
1,243.50	27.39	6.55	0.75	20.08
1,243.60	34.93	6.66	0.76	27.51
1,243.70	42.64	6.76	0.77	35.10
1,243.80	51.08	6.87	0.79	43.42
1,243.90	60.22	6.97	0.80	52.45
1,244.00	**70.06**	**7.07**	**0.81**	**62.18**

Stage-Area-Storage for Pond P1A: Pond 1A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,239.00	2,496	0	1,241.55	6,185	11,068
1,239.05	2,568	127	1,241.60	6,257	11,379
1,239.10	2,641	257	1,241.65	6,329	11,694
1,239.15	2,713	391	1,241.70	6,402	12,012
1,239.20	2,785	528	1,241.75	6,474	12,334
1,239.25	2,858	669	1,241.80	6,546	12,659
1,239.30	2,930	814	1,241.85	6,619	12,989
1,239.35	3,002	962	1,241.90	6,691	13,321
1,239.40	3,075	1,114	1,241.95	6,763	13,658
1,239.45	3,147	1,270	1,242.00	6,836	13,998
1,239.50	3,219	1,429	1,242.05	6,908	14,341
1,239.55	3,292	1,592	1,242.10	6,980	14,689
1,239.60	3,364	1,758	1,242.15	7,053	15,039
1,239.65	3,436	1,928	1,242.20	7,125	15,394
1,239.70	3,509	2,102	1,242.25	7,197	15,752
1,239.75	3,581	2,279	1,242.30	7,270	16,114
1,239.80	3,653	2,460	1,242.35	7,342	16,479
1,239.85	3,726	2,644	1,242.40	7,414	16,848
1,239.90	3,798	2,832	1,242.45	7,487	17,220
1,239.95	3,870	3,024	1,242.50	7,559	17,596
1,240.00	3,943	3,219	1,242.55	7,631	17,976
1,240.05	4,015	3,418	1,242.60	7,704	18,360
1,240.10	4,087	3,621	1,242.65	7,776	18,747
1,240.15	4,160	3,827	1,242.70	7,848	19,137
1,240.20	4,232	4,037	1,242.75	7,921	19,531
1,240.25	4,304	4,250	1,242.80	7,993	19,929
1,240.30	4,377	4,467	1,242.85	8,065	20,331
1,240.35	4,449	4,688	1,242.90	8,138	20,736
1,240.40	4,521	4,912	1,242.95	8,210	21,144
1,240.45	4,594	5,140	1,243.00	8,282	21,557
1,240.50	4,666	5,371	1,243.05	8,355	21,973
1,240.55	4,738	5,607	1,243.10	8,427	22,392
1,240.60	4,811	5,845	1,243.15	8,499	22,815
1,240.65	4,883	6,088	1,243.20	8,572	23,242
1,240.70	4,955	6,334	1,243.25	8,644	23,673
1,240.75	5,028	6,583	1,243.30	8,716	24,107
1,240.80	5,100	6,836	1,243.35	8,789	24,544
1,240.85	5,172	7,093	1,243.40	8,861	24,985
1,240.90	5,245	7,354	1,243.45	8,933	25,430
1,240.95	5,317	7,618	1,243.50	9,006	25,879
1,241.00	5,389	7,885	1,243.55	9,078	26,331
1,241.05	5,462	8,156	1,243.60	9,150	26,787
1,241.10	5,534	8,431	1,243.65	9,223	27,246
1,241.15	5,606	8,710	1,243.70	9,295	27,709
1,241.20	5,679	8,992	1,243.75	9,367	28,175
1,241.25	5,751	9,278	1,243.80	9,440	28,646
1,241.30	5,823	9,567	1,243.85	9,512	29,119
1,241.35	5,896	9,860	1,243.90	9,584	29,597
1,241.40	5,968	10,157	1,243.95	9,657	30,078
1,241.45	6,040	10,457	1,244.00	**9,729**	**30,563**
1,241.50	6,113	10,761			

Summary for Pond P3A: Pond 3A

Inflow Area = 10.600 ac, 18.58% Impervious, Inflow Depth = 0.46" for 1 YR event
Inflow = 6.50 cfs @ 12.15 hrs, Volume= 0.402 af
Outflow = 0.56 cfs @ 13.57 hrs, Volume= 0.402 af, Atten= 91%, Lag= 85.5 min
Primary = 0.04 cfs @ 13.57 hrs, Volume= 0.006 af
Routed to Link 4L : Post - North
Secondary = 0.52 cfs @ 13.57 hrs, Volume= 0.396 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,193.37' @ 13.57 hrs Surf.Area= 6,214 sf Storage= 7,129 cf

Plug-Flow detention time= 145.8 min calculated for 0.402 af (100% of inflow)
Center-of-Mass det. time= 145.8 min (1,019.2 - 873.4)

Volume	Invert	Avail.Storage	Storage Description
#1	1,192.00'	51,846 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

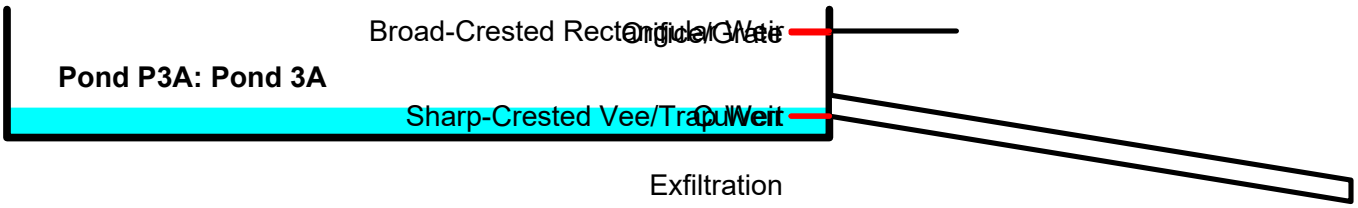
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,192.00	4,165	0	0
1,198.00	13,117	51,846	51,846

Device	Routing	Invert	Outlet Devices
#1	Primary	1,193.00'	**12.0" Round Culvert** L= 41.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,193.00' / 1,189.00' S= 0.0976 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,193.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,196.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,192.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,197.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

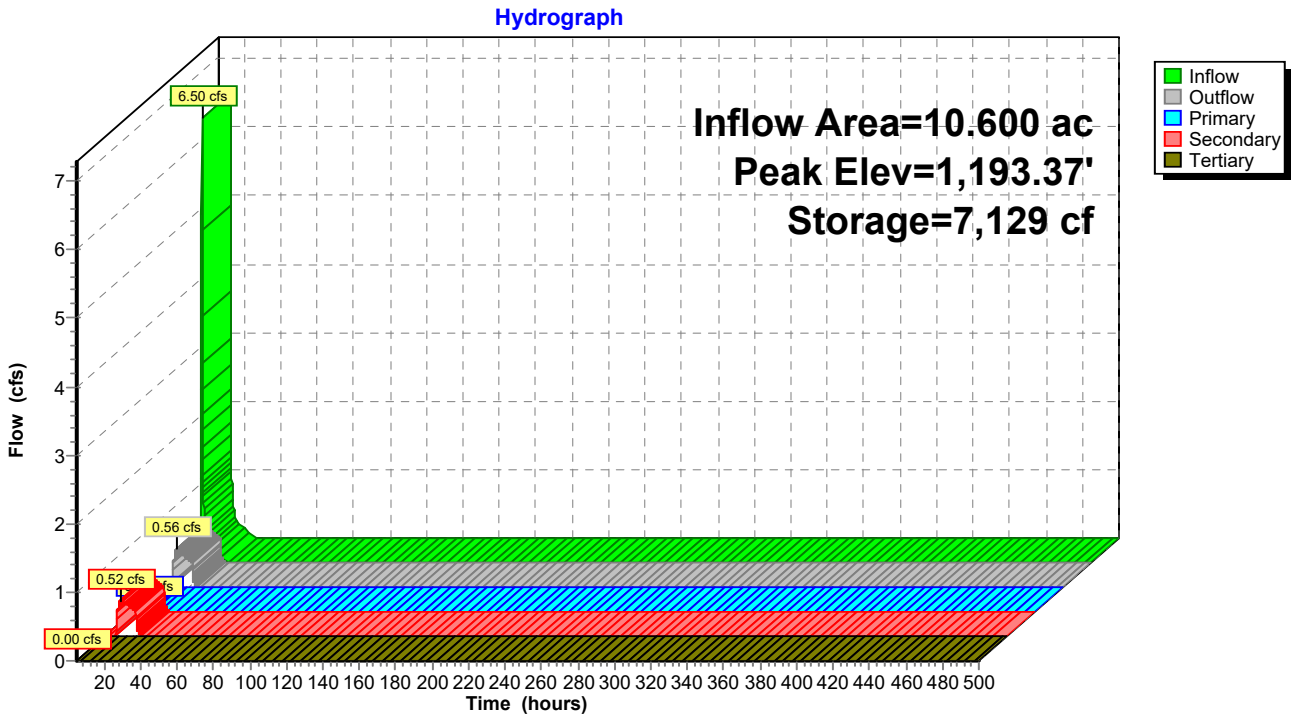
Primary OutFlow Max=0.04 cfs @ 13.57 hrs HW=1,193.37' (Free Discharge)
└**1=Culvert** (Passes 0.04 cfs of 0.56 cfs potential flow)
├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 0.04 cfs @ 1.64 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.52 cfs @ 13.57 hrs HW=1,193.37' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.52 cfs)

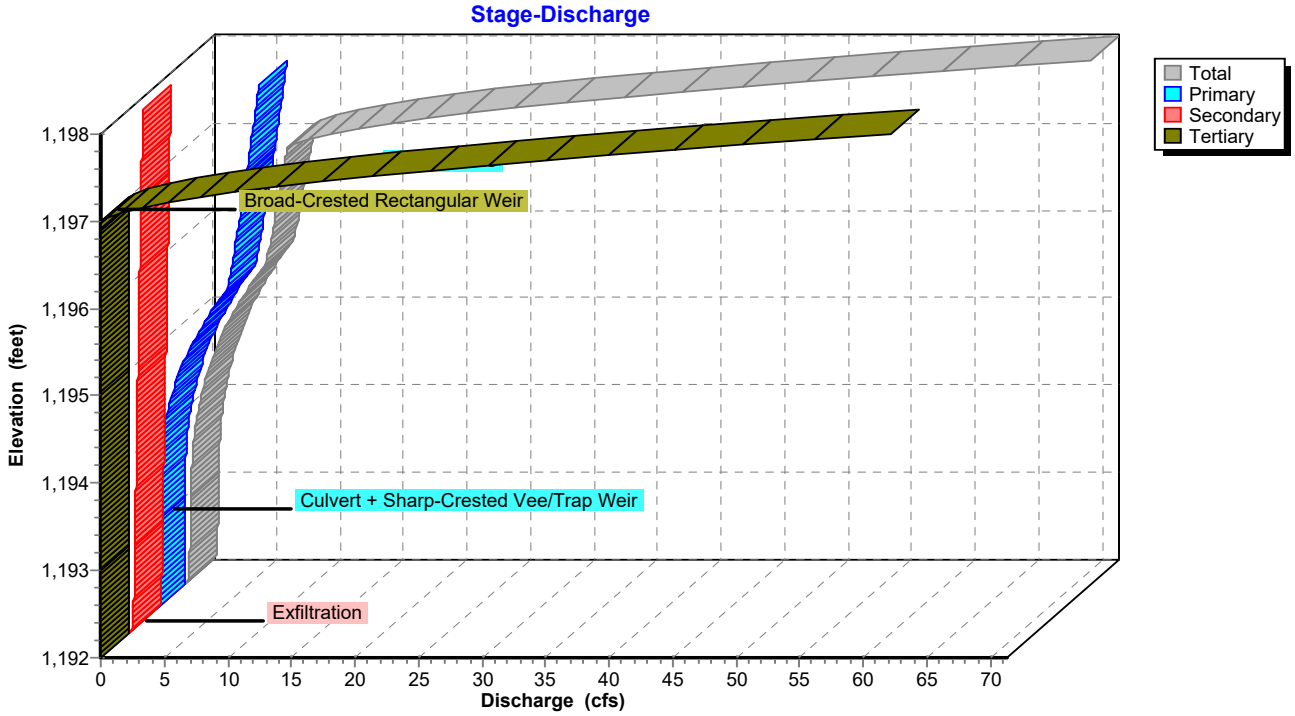
Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,192.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



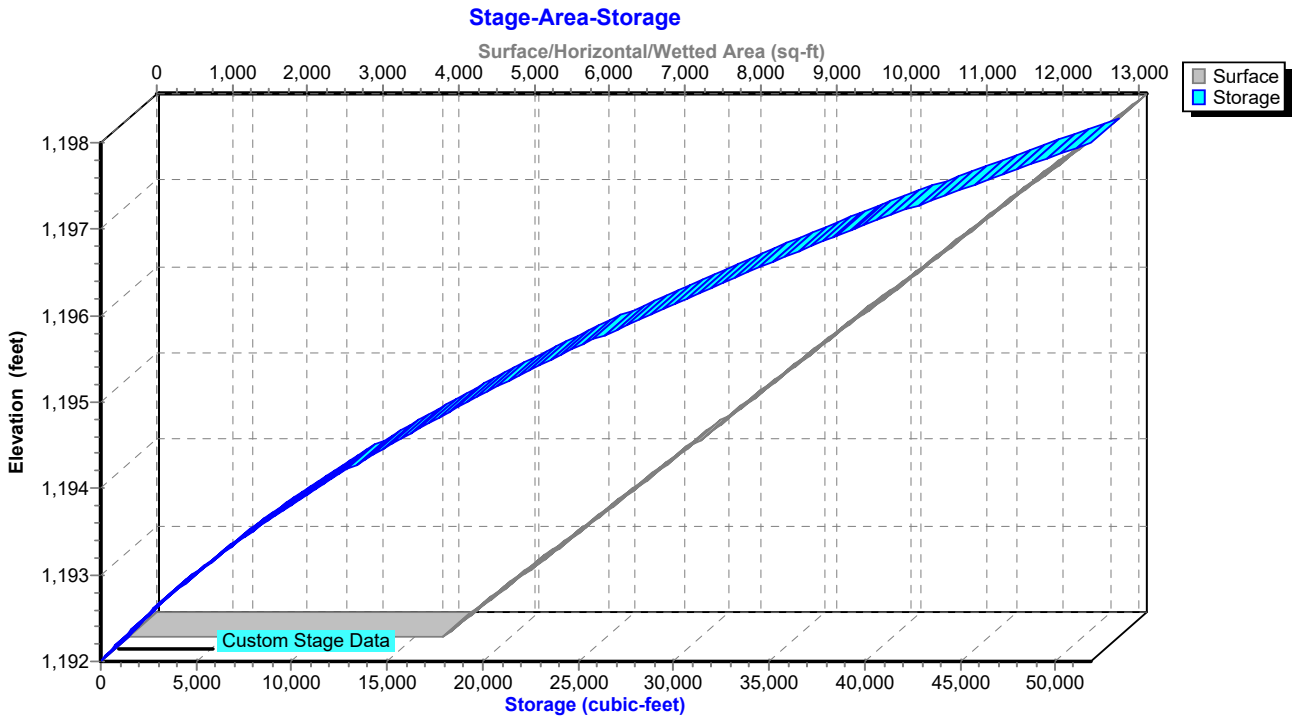
Pond P3A: Pond 3A



Pond P3A: Pond 3A



Pond P3A: Pond 3A



Hydrograph for Pond P3A: Pond 3A

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,192.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.40**	**6,518**	**1,193.27**	**0.52**	**0.02**	**0.51**	0.00
25.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
35.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3A: Pond 3A

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,192.00	0.00	0.00	0.00	0.00
1,192.20	0.37	0.00	0.37	0.00
1,192.40	0.40	0.00	0.40	0.00
1,192.60	0.42	0.00	0.42	0.00
1,192.80	0.45	0.00	0.45	0.00
1,193.00	0.47	0.00	0.47	0.00
1,193.20	0.50	0.01	0.50	0.00
1,193.40	0.57	0.05	0.52	0.00
1,193.60	0.68	0.13	0.55	0.00
1,193.80	0.84	0.27	0.57	0.00
1,194.00	1.07	0.47	0.60	0.00
1,194.20	1.37	0.75	0.62	0.00
1,194.40	1.75	1.10	0.65	0.00
1,194.60	2.21	1.54	0.67	0.00
1,194.80	2.76	2.06	0.70	0.00
1,195.00	3.40	2.68	0.72	0.00
1,195.20	4.15	3.41	0.74	0.00
1,195.40	5.00	4.23	0.77	0.00
1,195.60	5.96	5.17	0.79	0.00
1,195.80	6.55	5.74	0.82	0.00
1,196.00	6.82	5.98	0.84	0.00
1,196.20	7.08	6.21	0.87	0.00
1,196.40	7.33	6.44	0.89	0.00
1,196.60	7.58	6.66	0.92	0.00
1,196.80	7.81	6.87	0.94	0.00
1,197.00	8.04	7.07	0.97	0.00
1,197.20	12.86	7.27	0.99	4.60
1,197.40	22.27	7.47	1.02	13.78
1,197.60	36.21	7.66	1.04	27.51
1,197.80	52.33	7.84	1.07	43.42
1,198.00	**71.29**	**8.02**	**1.09**	**62.18**

Stage-Area-Storage for Pond P3A: Pond 3A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,192.00	4,165	0
1,192.10	4,314	424
1,192.20	4,463	863
1,192.30	4,613	1,317
1,192.40	4,762	1,785
1,192.50	4,911	2,269
1,192.60	5,060	2,768
1,192.70	5,209	3,281
1,192.80	5,359	3,809
1,192.90	5,508	4,353
1,193.00	5,657	4,911
1,193.10	5,806	5,484
1,193.20	5,955	6,072
1,193.30	6,105	6,675
1,193.40	6,254	7,293
1,193.50	6,403	7,926
1,193.60	6,552	8,574
1,193.70	6,701	9,236
1,193.80	6,851	9,914
1,193.90	7,000	10,607
1,194.00	7,149	11,314
1,194.10	7,298	12,036
1,194.20	7,447	12,774
1,194.30	7,597	13,526
1,194.40	7,746	14,293
1,194.50	7,895	15,075
1,194.60	8,044	15,872
1,194.70	8,193	16,684
1,194.80	8,343	17,511
1,194.90	8,492	18,352
1,195.00	8,641	19,209
1,195.10	8,790	20,081
1,195.20	8,939	20,967
1,195.30	9,089	21,868
1,195.40	9,238	22,785
1,195.50	9,387	23,716
1,195.60	9,536	24,662
1,195.70	9,685	25,623
1,195.80	9,835	26,599
1,195.90	9,984	27,590
1,196.00	10,133	28,596
1,196.10	10,282	29,617
1,196.20	10,431	30,652
1,196.30	10,581	31,703
1,196.40	10,730	32,769
1,196.50	10,879	33,849
1,196.60	11,028	34,944
1,196.70	11,177	36,055
1,196.80	11,327	37,180
1,196.90	11,476	38,320
1,197.00	11,625	39,475
1,197.10	11,774	40,645
1,197.20	11,923	41,830
1,197.30	12,073	43,030
1,197.40	12,222	44,244
1,197.50	12,371	45,474
1,197.60	12,520	46,719
1,197.70	12,669	47,978
1,197.80	12,819	49,252
1,197.90	12,968	50,542
1,198.00	**13,117**	**51,846**

Summary for Pond P3B: Pond 3B

Inflow Area = 8.450 ac, 19.88% Impervious, Inflow Depth = 0.49" for 1 YR event
Inflow = 5.75 cfs @ 12.15 hrs, Volume= 0.346 af
Outflow = 0.53 cfs @ 13.52 hrs, Volume= 0.346 af, Atten= 91%, Lag= 82.3 min
Primary = 0.10 cfs @ 13.52 hrs, Volume= 0.017 af
Routed to Link 4L : Post - North
Secondary = 0.44 cfs @ 13.52 hrs, Volume= 0.329 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,196.53' @ 13.52 hrs Surf.Area= 5,245 sf Storage= 6,156 cf

Plug-Flow detention time= 147.6 min calculated for 0.346 af (100% of inflow)
Center-of-Mass det. time= 147.6 min (1,016.9 - 869.3)

Volume	Invert	Avail.Storage	Storage Description
#1	1,195.00'	33,965 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

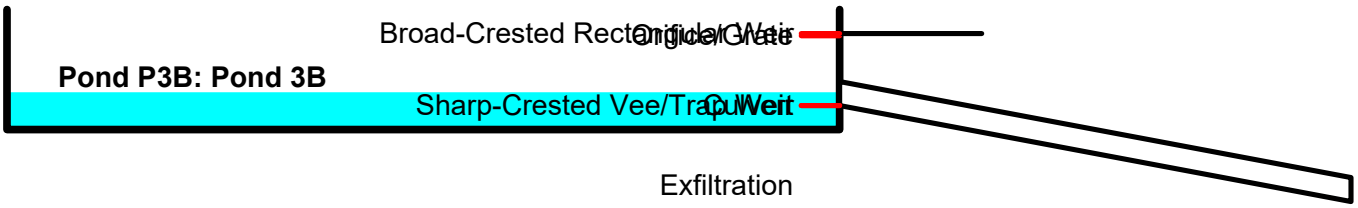
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,195.00	2,799	0	0
1,200.00	10,787	33,965	33,965

Device	Routing	Invert	Outlet Devices
#1	Primary	1,196.00'	**12.0" Round Culvert** L= 36.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,196.00' / 1,192.00' S= 0.1111 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,196.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,198.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,195.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,199.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.10 cfs @ 13.52 hrs HW=1,196.53' (Free Discharge)
└**1=Culvert** (Passes 0.10 cfs of 1.05 cfs potential flow)
├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 0.10 cfs @ 1.96 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

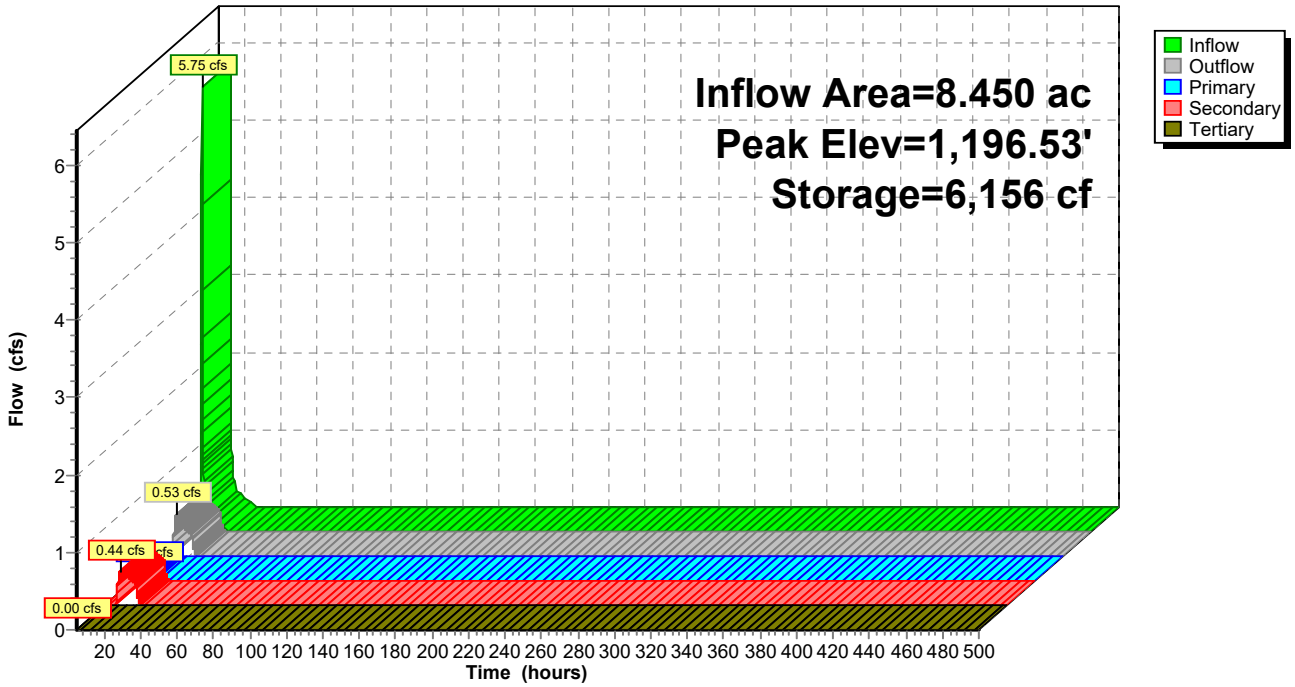
Secondary OutFlow Max=0.44 cfs @ 13.52 hrs HW=1,196.53' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.44 cfs)

Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,195.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

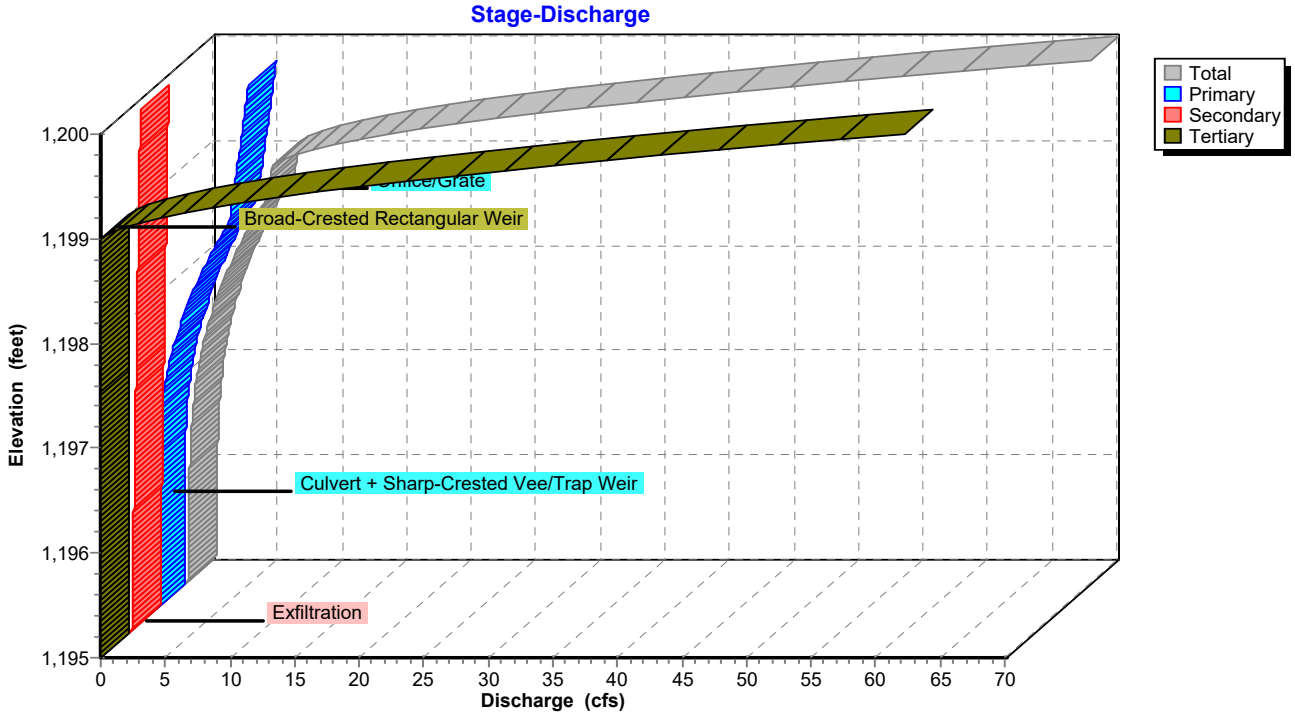


Pond P3B: Pond 3B

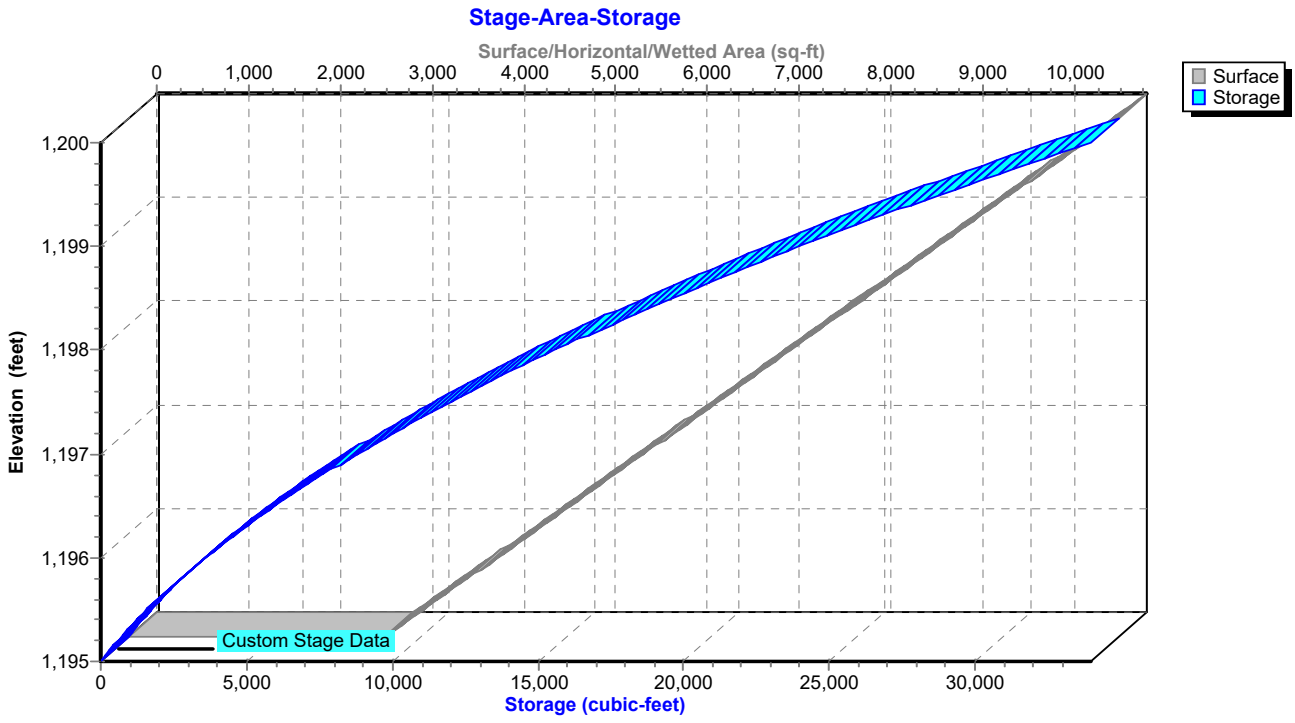
Hydrograph



Pond P3B: Pond 3B



Pond P3B: Pond 3B



Hydrograph for Pond P3B: Pond 3B

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,195.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.33**	**5,427**	**1,196.39**	**0.46**	**0.04**	**0.42**	0.00
25.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
35.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3B: Pond 3B

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,195.00	0.00	0.00	0.00	0.00
1,195.10	0.25	0.00	0.25	0.00
1,195.20	0.26	0.00	0.26	0.00
1,195.30	0.27	0.00	0.27	0.00
1,195.40	0.29	0.00	0.29	0.00
1,195.50	0.30	0.00	0.30	0.00
1,195.60	0.31	0.00	0.31	0.00
1,195.70	0.33	0.00	0.33	0.00
1,195.80	0.34	0.00	0.34	0.00
1,195.90	0.35	0.00	0.35	0.00
1,196.00	0.37	0.00	0.37	0.00
1,196.10	0.38	0.00	0.38	0.00
1,196.20	0.40	0.01	0.39	0.00
1,196.30	0.43	0.02	0.41	0.00
1,196.40	0.47	0.05	0.42	0.00
1,196.50	0.52	0.08	0.43	0.00
1,196.60	0.58	0.13	0.45	0.00
1,196.70	0.65	0.19	0.46	0.00
1,196.80	0.74	0.27	0.47	0.00
1,196.90	0.85	0.36	0.49	0.00
1,197.00	0.97	0.47	0.50	0.00
1,197.10	1.11	0.60	0.51	0.00
1,197.20	1.27	0.75	0.53	0.00
1,197.30	1.45	0.91	0.54	0.00
1,197.40	1.65	1.10	0.55	0.00
1,197.50	1.87	1.31	0.57	0.00
1,197.60	2.12	1.54	0.58	0.00
1,197.70	2.38	1.79	0.59	0.00
1,197.80	2.67	2.06	0.61	0.00
1,197.90	2.98	2.36	0.62	0.00
1,198.00	3.32	2.68	0.63	0.00
1,198.10	3.68	3.03	0.65	0.00
1,198.20	4.06	3.41	0.66	0.00
1,198.30	4.48	3.81	0.67	0.00
1,198.40	4.92	4.23	0.69	0.00
1,198.50	5.39	4.69	0.70	0.00
1,198.60	5.88	5.17	0.71	0.00
1,198.70	6.33	5.61	0.73	0.00
1,198.80	6.47	5.74	0.74	0.00
1,198.90	6.61	5.86	0.75	0.00
1,199.00	6.75	5.98	0.77	0.00
1,199.10	8.48	6.10	0.78	1.60
1,199.20	11.60	6.21	0.79	4.60
1,199.30	15.83	6.33	0.81	8.70
1,199.40	21.04	6.44	0.82	13.78
1,199.50	27.47	6.55	0.83	20.08
1,199.60	35.01	6.66	0.85	27.51
1,199.70	42.73	6.76	0.86	35.10
1,199.80	51.17	6.87	0.87	43.42
1,199.90	60.31	6.97	0.89	52.45
1,200.00	**70.15**	**7.07**	**0.90**	**62.18**

Stage-Area-Storage for Pond P3B: Pond 3B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,195.00	2,799	0
1,195.05	2,879	142
1,195.10	2,959	288
1,195.15	3,039	438
1,195.20	3,119	592
1,195.25	3,198	750
1,195.30	3,278	912
1,195.35	3,358	1,078
1,195.40	3,438	1,247
1,195.45	3,518	1,421
1,195.50	3,598	1,599
1,195.55	3,678	1,781
1,195.60	3,758	1,967
1,195.65	3,837	2,157
1,195.70	3,917	2,351
1,195.75	3,997	2,549
1,195.80	4,077	2,750
1,195.85	4,157	2,956
1,195.90	4,237	3,166
1,195.95	4,317	3,380
1,196.00	4,397	3,598
1,196.05	4,476	3,820
1,196.10	4,556	4,045
1,196.15	4,636	4,275
1,196.20	4,716	4,509
1,196.25	4,796	4,747
1,196.30	4,876	4,989
1,196.35	4,956	5,234
1,196.40	5,036	5,484
1,196.45	5,116	5,738
1,196.50	5,195	5,996
1,196.55	5,275	6,258
1,196.60	5,355	6,523
1,196.65	5,435	6,793
1,196.70	5,515	7,067
1,196.75	5,595	7,345
1,196.80	5,675	7,626
1,196.85	5,755	7,912
1,196.90	5,834	8,202
1,196.95	5,914	8,495
1,197.00	5,994	8,793
1,197.05	6,074	9,095
1,197.10	6,154	9,401
1,197.15	6,234	9,710
1,197.20	6,314	10,024
1,197.25	6,394	10,342
1,197.30	6,473	10,663
1,197.35	6,553	10,989
1,197.40	6,633	11,319
1,197.45	6,713	11,652
1,197.50	6,793	11,990
1,197.55	6,873	12,332
1,197.60	6,953	12,677
1,197.65	7,033	13,027
1,197.70	7,113	13,381
1,197.75	7,192	13,738
1,197.80	7,272	14,100
1,197.85	7,352	14,465
1,197.90	7,432	14,835
1,197.95	7,512	15,209
1,198.00	7,592	15,586
1,198.05	7,672	15,968
1,198.10	7,752	16,353
1,198.15	7,831	16,743
1,198.20	7,911	17,137
1,198.25	7,991	17,534
1,198.30	8,071	17,936
1,198.35	8,151	18,341
1,198.40	8,231	18,751
1,198.45	8,311	19,164
1,198.50	8,391	19,582
1,198.55	8,470	20,003
1,198.60	8,550	20,429
1,198.65	8,630	20,858
1,198.70	8,710	21,292
1,198.75	8,790	21,729
1,198.80	8,870	22,171
1,198.85	8,950	22,616
1,198.90	9,030	23,066
1,198.95	9,110	23,519
1,199.00	9,189	23,977
1,199.05	9,269	24,438
1,199.10	9,349	24,904
1,199.15	9,429	25,373
1,199.20	9,509	25,847
1,199.25	9,589	26,324
1,199.30	9,669	26,806
1,199.35	9,749	27,291
1,199.40	9,828	27,780
1,199.45	9,908	28,274
1,199.50	9,988	28,771
1,199.55	10,068	29,273
1,199.60	10,148	29,778
1,199.65	10,228	30,287
1,199.70	10,308	30,801
1,199.75	10,388	31,318
1,199.80	10,467	31,840
1,199.85	10,547	32,365
1,199.90	10,627	32,894
1,199.95	10,707	33,428
1,200.00	**10,787**	**33,965**

Summary for Pond P3C: Pond 3C

Inflow Area = 2.490 ac, 22.89% Impervious, Inflow Depth = 0.65" for 1 YR event
Inflow = 2.42 cfs @ 12.14 hrs, Volume= 0.135 af
Outflow = 0.23 cfs @ 13.33 hrs, Volume= 0.135 af, Atten= 90%, Lag= 71.5 min
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Routed to Link 4L : Post - North
Secondary = 0.23 cfs @ 13.33 hrs, Volume= 0.135 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,178.99' @ 13.33 hrs Surf.Area= 2,797 sf Storage= 2,322 cf

Plug-Flow detention time= 97.9 min calculated for 0.135 af (100% of inflow)
Center-of-Mass det. time= 97.9 min (952.3 - 854.5)

Volume	Invert	Avail.Storage	Storage Description
#1	1,178.00'	14,846 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

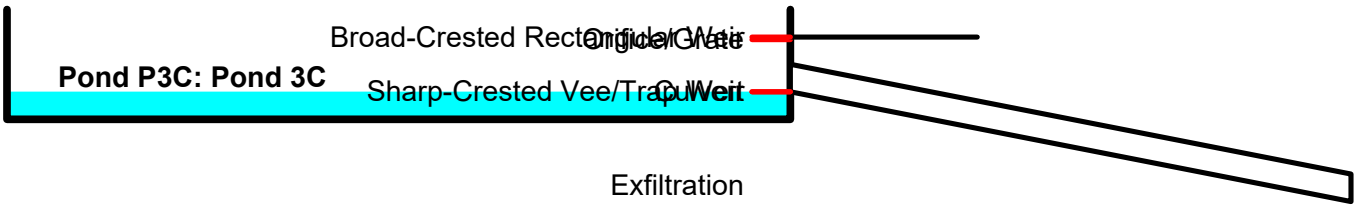
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,178.00	1,905	0	0
1,182.00	5,518	14,846	14,846

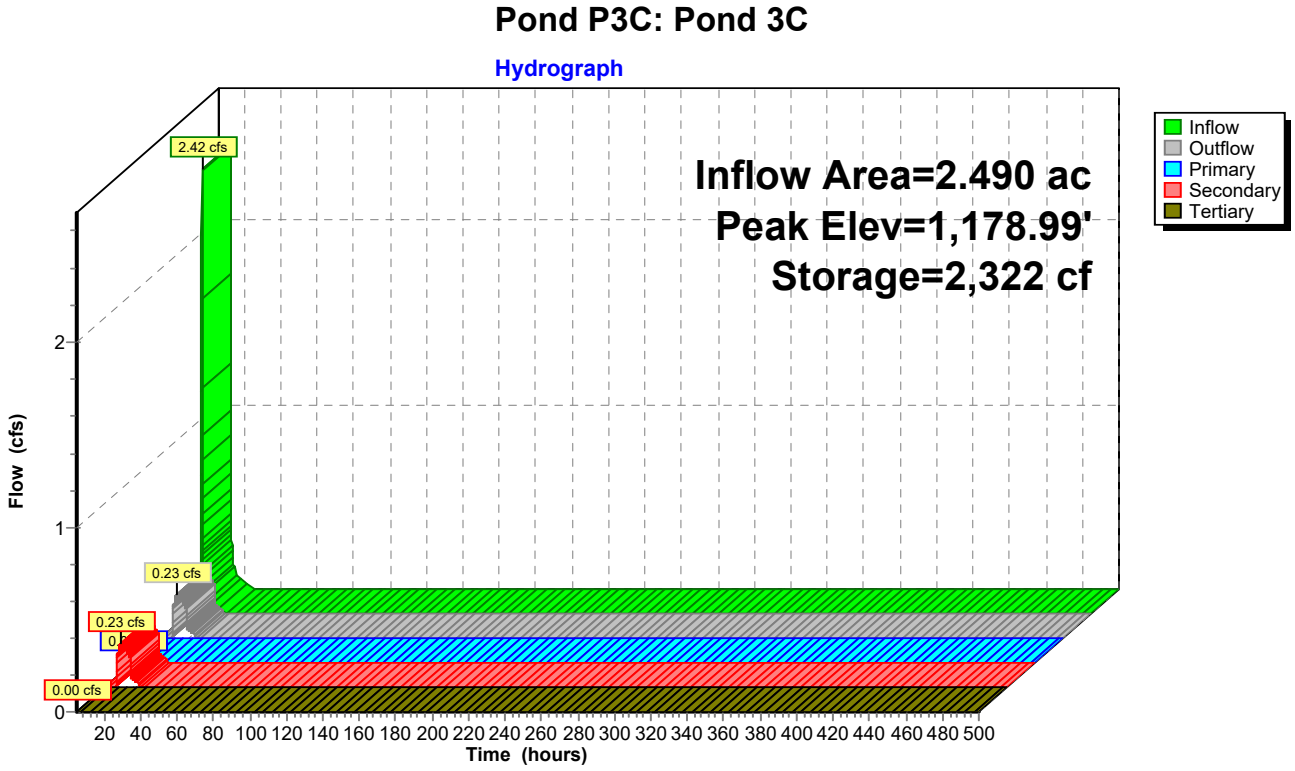
Device	Routing	Invert	Outlet Devices
#1	Primary	1,179.00'	**12.0" Round Culvert** L= 30.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,179.00' / 1,175.00' S= 0.1333 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,179.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,180.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,178.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,181.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,178.00' (Free Discharge)
└**1=Culvert** (Controls 0.00 cfs)
└**2=Sharp-Crested Vee/Trap Weir** (Controls 0.00 cfs)
└**3=Orifice/Grate** (Controls 0.00 cfs)

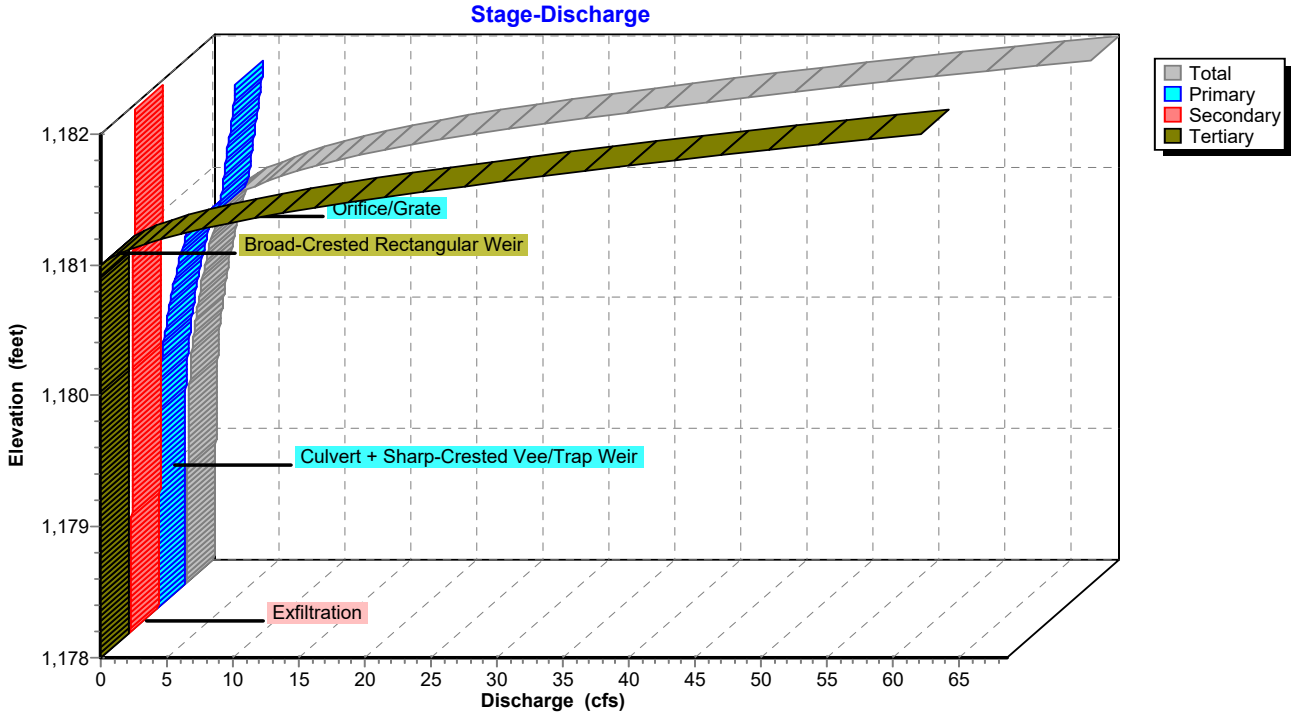
Secondary OutFlow Max=0.23 cfs @ 13.33 hrs HW=1,178.99' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.23 cfs)

Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,178.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

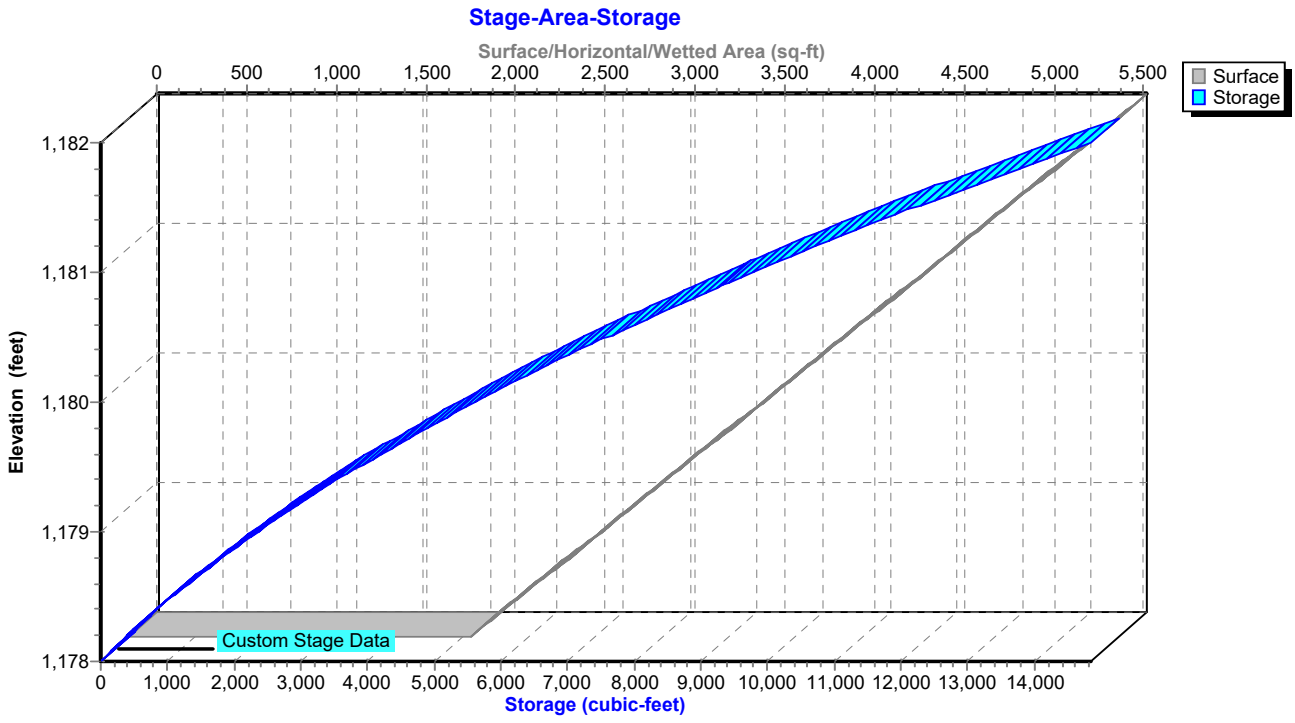

Pond P3C: Pond 3C
Broad-Crested Rectangular Weir
Orifice/Grate
Sharp-Crested Vee/Trap Weir
Culvert
Exfiltration


Pond P3C: Pond 3C
Hydrograph
Inflow Area=2.490 ac
Peak Elev=1,178.99'
Storage=2,322 cf
Inflow
Outflow
Primary
Secondary
Tertiary
2.42 cfs
0.23 cfs
0.23 cfs
0.00 cfs
Flow (cfs)
0
1
2
20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500
Time (hours)

Pond P3C: Pond 3C



Pond P3C: Pond 3C



Hydrograph for Pond P3C: Pond 3C

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,178.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.12**	**1,792**	**1,178.79**	**0.22**	0.00	**0.22**	0.00
25.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
35.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3C: Pond 3C

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,178.00	0.00	0.00	0.00	0.00
1,178.10	0.17	0.00	0.17	0.00
1,178.20	0.17	0.00	0.17	0.00
1,178.30	0.18	0.00	0.18	0.00
1,178.40	0.19	0.00	0.19	0.00
1,178.50	0.20	0.00	0.20	0.00
1,178.60	0.20	0.00	0.20	0.00
1,178.70	0.21	0.00	0.21	0.00
1,178.80	0.22	0.00	0.22	0.00
1,178.90	0.23	0.00	0.23	0.00
1,179.00	0.23	0.00	0.23	0.00
1,179.10	0.24	0.00	0.24	0.00
1,179.20	0.26	0.01	0.25	0.00
1,179.30	0.28	0.02	0.26	0.00
1,179.40	0.31	0.05	0.26	0.00
1,179.50	0.36	0.08	0.27	0.00
1,179.60	0.41	0.13	0.28	0.00
1,179.70	0.48	0.19	0.29	0.00
1,179.80	0.57	0.27	0.29	0.00
1,179.90	0.67	0.36	0.30	0.00
1,180.00	0.78	0.47	0.31	0.00
1,180.10	0.92	0.60	0.32	0.00
1,180.20	1.07	0.75	0.32	0.00
1,180.30	1.25	0.91	0.33	0.00
1,180.40	1.44	1.10	0.34	0.00
1,180.50	1.65	1.31	0.35	0.00
1,180.60	1.89	1.54	0.35	0.00
1,180.70	2.15	1.79	0.36	0.00
1,180.80	2.43	2.06	0.37	0.00
1,180.90	2.74	2.36	0.38	0.00
1,181.00	4.10	3.72	0.38	0.00
1,181.10	6.78	4.78	0.39	1.60
1,181.20	9.93	4.93	0.40	4.60
1,181.30	14.18	5.07	0.41	8.70
1,181.40	19.41	5.21	0.41	13.78
1,181.50	25.85	5.35	0.42	20.08
1,181.60	33.42	5.48	0.43	27.51
1,181.70	41.15	5.61	0.44	35.10
1,181.80	49.60	5.74	0.44	43.42
1,181.90	58.76	5.86	0.45	52.45
1,182.00	**68.62**	**5.98**	**0.46**	**62.18**

Stage-Area-Storage for Pond P3C: Pond 3C

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,178.00	1,905	0
1,178.05	1,950	96
1,178.10	1,995	195
1,178.15	2,040	296
1,178.20	2,086	399
1,178.25	2,131	504
1,178.30	2,176	612
1,178.35	2,221	722
1,178.40	2,266	834
1,178.45	2,311	949
1,178.50	2,357	1,065
1,178.55	2,402	1,184
1,178.60	2,447	1,306
1,178.65	2,492	1,429
1,178.70	2,537	1,555
1,178.75	2,582	1,683
1,178.80	2,628	1,813
1,178.85	2,673	1,946
1,178.90	2,718	2,080
1,178.95	2,763	2,217
1,179.00	2,808	2,357
1,179.05	2,853	2,498
1,179.10	2,899	2,642
1,179.15	2,944	2,788
1,179.20	2,989	2,936
1,179.25	3,034	3,087
1,179.30	3,079	3,240
1,179.35	3,124	3,395
1,179.40	3,170	3,552
1,179.45	3,215	3,712
1,179.50	3,260	3,874
1,179.55	3,305	4,038
1,179.60	3,350	4,204
1,179.65	3,395	4,373
1,179.70	3,441	4,544
1,179.75	3,486	4,717
1,179.80	3,531	4,892
1,179.85	3,576	5,070
1,179.90	3,621	5,250
1,179.95	3,666	5,432
1,180.00	3,712	5,617
1,180.05	3,757	5,803
1,180.10	3,802	5,992
1,180.15	3,847	6,183
1,180.20	3,892	6,377
1,180.25	3,937	6,573
1,180.30	3,982	6,771
1,180.35	4,028	6,971
1,180.40	4,073	7,173
1,180.45	4,118	7,378
1,180.50	4,163	7,585
1,180.55	4,208	7,794
1,180.60	4,253	8,006
1,180.65	4,299	8,220
1,180.70	4,344	8,436
1,180.75	4,389	8,654
1,180.80	4,434	8,875
1,180.85	4,479	9,098
1,180.90	4,524	9,323
1,180.95	4,570	9,550
1,181.00	4,615	9,780
1,181.05	4,660	10,011
1,181.10	4,705	10,246
1,181.15	4,750	10,482
1,181.20	4,795	10,721
1,181.25	4,841	10,962
1,181.30	4,886	11,205
1,181.35	4,931	11,450
1,181.40	4,976	11,698
1,181.45	5,021	11,948
1,181.50	5,066	12,200
1,181.55	5,112	12,454
1,181.60	5,157	12,711
1,181.65	5,202	12,970
1,181.70	5,247	13,231
1,181.75	5,292	13,495
1,181.80	5,337	13,760
1,181.85	5,383	14,028
1,181.90	5,428	14,299
1,181.95	5,473	14,571
1,182.00	**5,518**	**14,846**

Summary for Pond P3D: Pond 3D

Inflow Area = 2.380 ac, 23.95% Impervious, Inflow Depth = 0.69" for 1 YR event
Inflow = 2.49 cfs @ 12.14 hrs, Volume= 0.138 af
Outflow = 0.37 cfs @ 12.65 hrs, Volume= 0.138 af, Atten= 85%, Lag= 30.7 min
Primary = 0.22 cfs @ 12.65 hrs, Volume= 0.031 af
Routed to Link 4L : Post - North
Secondary = 0.15 cfs @ 12.65 hrs, Volume= 0.107 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,188.74' @ 12.65 hrs Surf.Area= 1,840 sf Storage= 2,240 cf

Plug-Flow detention time= 118.3 min calculated for 0.138 af (100% of inflow)
Center-of-Mass det. time= 118.3 min (969.4 - 851.1)

Volume	Invert	Avail.Storage	Storage Description
#1	1,187.00'	11,620 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

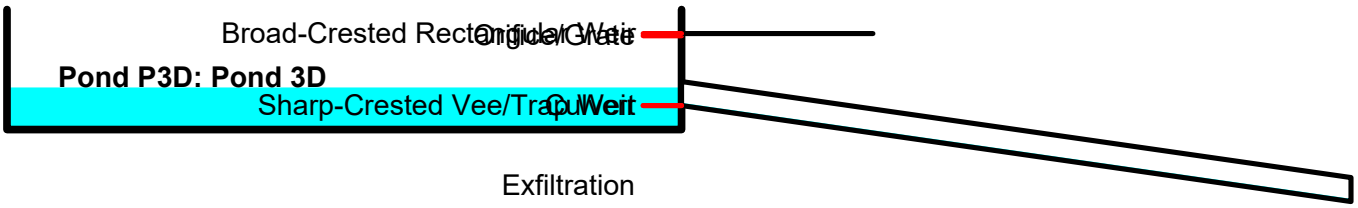
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,187.00	741	0	0
1,192.00	3,907	11,620	11,620

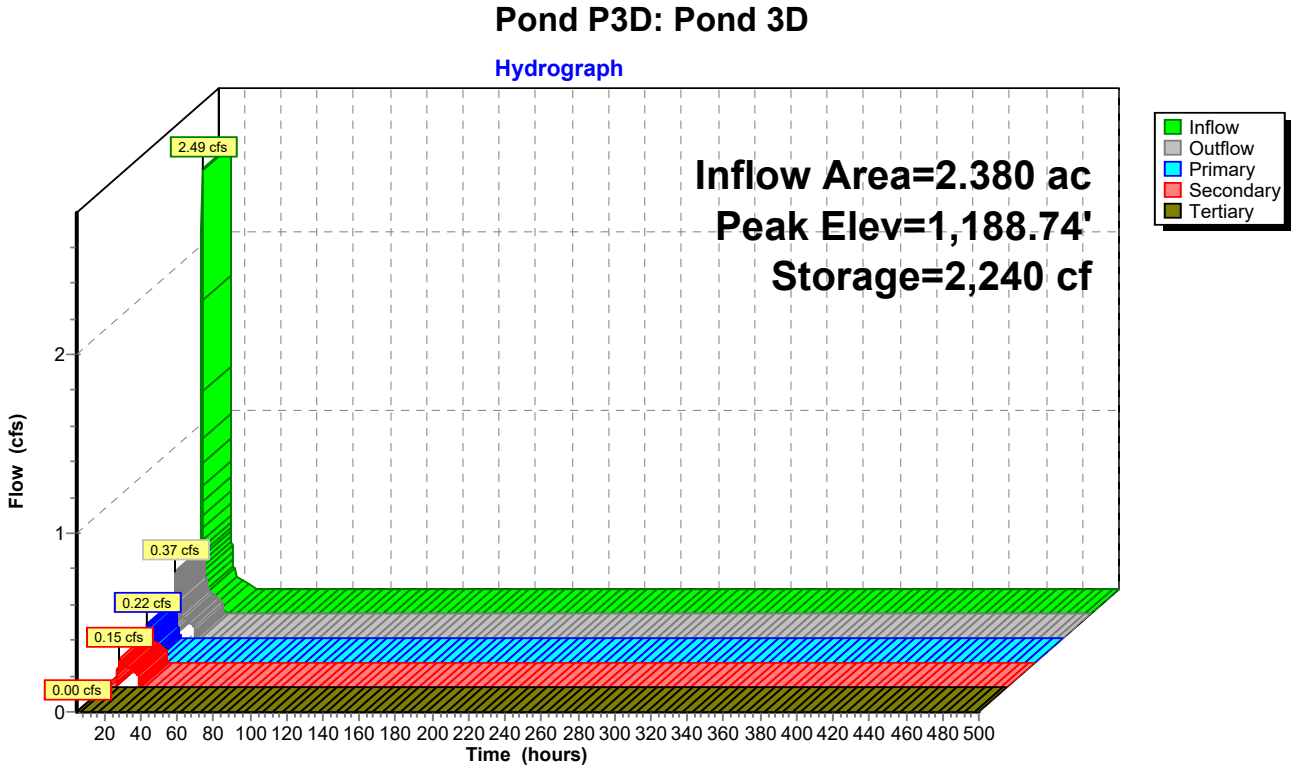
Device	Routing	Invert	Outlet Devices
#1	Primary	1,188.00'	**12.0" Round Culvert** L= 35.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,188.00' / 1,184.00' S= 0.1143 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,188.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,190.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600
#4	Secondary	1,187.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,191.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.22 cfs @ 12.65 hrs HW=1,188.74' (Free Discharge)
└**1=Culvert** (Passes 0.22 cfs of 1.81 cfs potential flow)
└**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 0.22 cfs @ 2.31 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

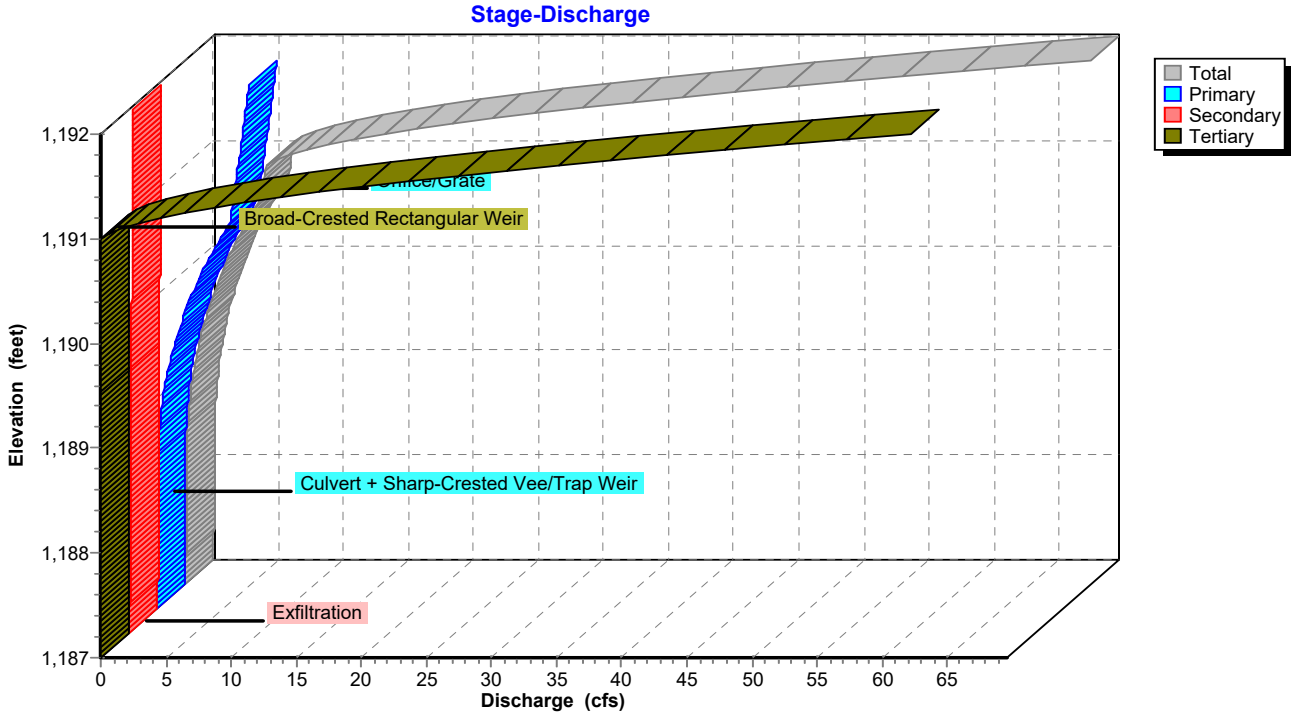
Secondary OutFlow Max=0.15 cfs @ 12.65 hrs HW=1,188.74' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.15 cfs)

Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,187.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

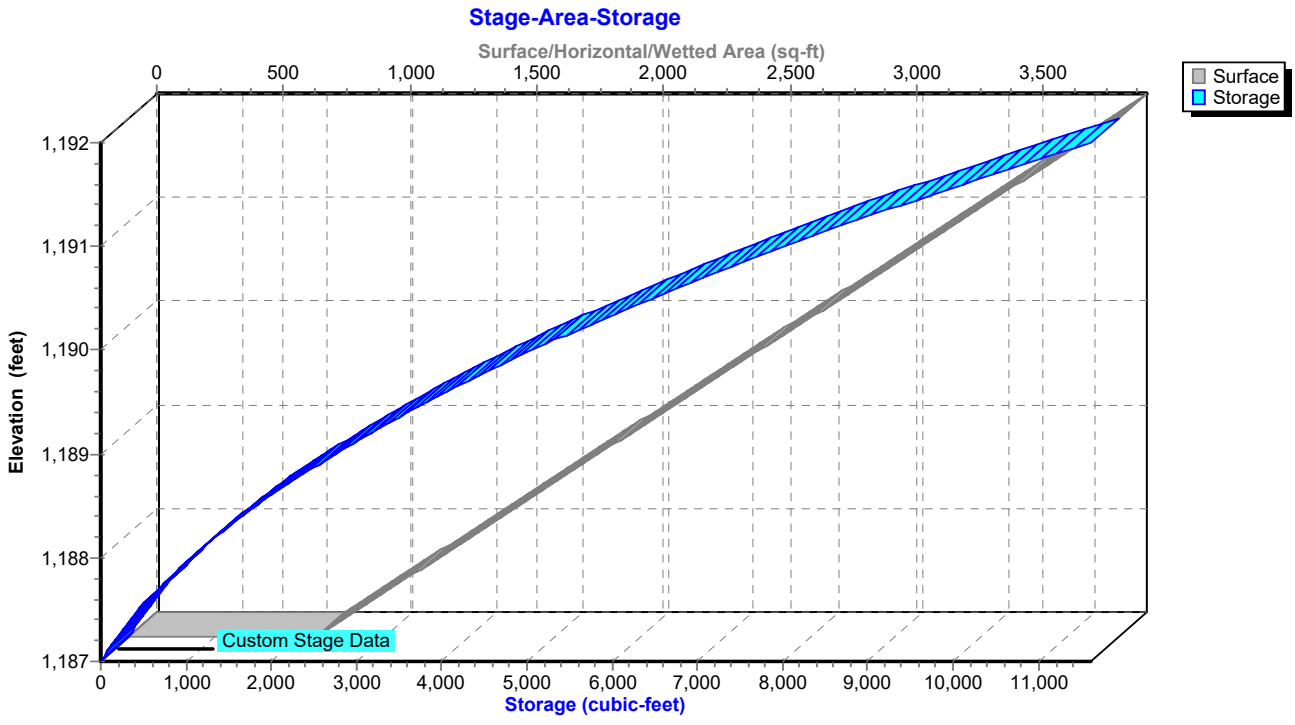

Broad-Crested Rectangular Weir
Orifice/Grate
Pond P3D: Pond 3D
Sharp-Crested Vee/Trap Weir
Exfiltration


Pond P3D: Pond 3D
Hydrograph
Inflow Area=2.380 ac
Peak Elev=1,188.74'
Storage=2,240 cf
Inflow
Outflow
Primary
Secondary
Tertiary
2.49 cfs
0.37 cfs
0.22 cfs
0.15 cfs
0.00 cfs
Flow (cfs)
0
1
2
20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500
Time (hours)

Pond P3D: Pond 3D



Pond P3D: Pond 3D



Hydrograph for Pond P3D: Pond 3D

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,187.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.12**	**1,584**	**1,188.35**	**0.17**	**0.04**	**0.13**	0.00
25.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
35.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3D: Pond 3D

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,187.00	0.00	0.00	0.00	0.00
1,187.10	0.07	0.00	0.07	0.00
1,187.20	0.07	0.00	0.07	0.00
1,187.30	0.08	0.00	0.08	0.00
1,187.40	0.08	0.00	0.08	0.00
1,187.50	0.09	0.00	0.09	0.00
1,187.60	0.09	0.00	0.09	0.00
1,187.70	0.10	0.00	0.10	0.00
1,187.80	0.10	0.00	0.10	0.00
1,187.90	0.11	0.00	0.11	0.00
1,188.00	0.11	0.00	0.11	0.00
1,188.10	0.12	0.00	0.12	0.00
1,188.20	0.13	0.01	0.13	0.00
1,188.30	0.15	0.02	0.13	0.00
1,188.40	0.18	0.05	0.14	0.00
1,188.50	0.22	0.08	0.14	0.00
1,188.60	0.28	0.13	0.15	0.00
1,188.70	0.35	0.19	0.15	0.00
1,188.80	0.43	0.27	0.16	0.00
1,188.90	0.53	0.36	0.16	0.00
1,189.00	0.64	0.47	0.17	0.00
1,189.10	0.77	0.60	0.17	0.00
1,189.20	0.93	0.75	0.18	0.00
1,189.30	1.10	0.91	0.18	0.00
1,189.40	1.29	1.10	0.19	0.00
1,189.50	1.50	1.31	0.19	0.00
1,189.60	1.73	1.54	0.20	0.00
1,189.70	1.99	1.79	0.20	0.00
1,189.80	2.27	2.06	0.21	0.00
1,189.90	2.58	2.36	0.21	0.00
1,190.00	2.90	2.68	0.22	0.00
1,190.10	3.26	3.03	0.23	0.00
1,190.20	3.64	3.41	0.23	0.00
1,190.30	4.04	3.81	0.24	0.00
1,190.40	4.47	4.23	0.24	0.00
1,190.50	4.93	4.69	0.25	0.00
1,190.60	5.42	5.17	0.25	0.00
1,190.70	5.87	5.61	0.26	0.00
1,190.80	6.00	5.74	0.26	0.00
1,190.90	6.13	5.86	0.27	0.00
1,191.00	6.25	5.98	0.27	0.00
1,191.10	7.98	6.10	0.28	1.60
1,191.20	11.09	6.21	0.28	4.60
1,191.30	15.31	6.33	0.29	8.70
1,191.40	20.52	6.44	0.29	13.78
1,191.50	26.93	6.55	0.30	20.08
1,191.60	34.47	6.66	0.30	27.51
1,191.70	42.18	6.76	0.31	35.10
1,191.80	50.61	6.87	0.32	43.42
1,191.90	59.75	6.97	0.32	52.45
1,192.00	**69.58**	**7.07**	**0.33**	**62.18**

Stage-Area-Storage for Pond P3D: Pond 3D

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,187.00	741	0
1,187.05	773	38
1,187.10	804	77
1,187.15	836	118
1,187.20	868	161
1,187.25	899	205
1,187.30	931	251
1,187.35	963	298
1,187.40	994	347
1,187.45	1,026	398
1,187.50	1,058	450
1,187.55	1,089	503
1,187.60	1,121	559
1,187.65	1,153	615
1,187.70	1,184	674
1,187.75	1,216	734
1,187.80	1,248	795
1,187.85	1,279	859
1,187.90	1,311	923
1,187.95	1,343	990
1,188.00	1,374	1,058
1,188.05	1,406	1,127
1,188.10	1,438	1,198
1,188.15	1,469	1,271
1,188.20	1,501	1,345
1,188.25	1,533	1,421
1,188.30	1,564	1,498
1,188.35	1,596	1,577
1,188.40	1,627	1,658
1,188.45	1,659	1,740
1,188.50	1,691	1,824
1,188.55	1,722	1,909
1,188.60	1,754	1,996
1,188.65	1,786	2,085
1,188.70	1,817	2,175
1,188.75	1,849	2,266
1,188.80	1,881	2,360
1,188.85	1,912	2,454
1,188.90	1,944	2,551
1,188.95	1,976	2,649
1,189.00	2,007	2,748
1,189.05	2,039	2,850
1,189.10	2,071	2,952
1,189.15	2,102	3,057
1,189.20	2,134	3,163
1,189.25	2,166	3,270
1,189.30	2,197	3,379
1,189.35	2,229	3,490
1,189.40	2,261	3,602
1,189.45	2,292	3,716
1,189.50	2,324	3,831
1,189.55	2,356	3,948
1,189.60	2,387	4,067
1,189.65	2,419	4,187
1,189.70	2,451	4,309
1,189.75	2,482	4,432
1,189.80	2,514	4,557
1,189.85	2,546	4,683
1,189.90	2,577	4,812
1,189.95	2,609	4,941
1,190.00	2,641	5,072
1,190.05	2,672	5,205
1,190.10	2,704	5,340
1,190.15	2,736	5,476
1,190.20	2,767	5,613
1,190.25	2,799	5,752
1,190.30	2,831	5,893
1,190.35	2,862	6,035
1,190.40	2,894	6,179
1,190.45	2,926	6,325
1,190.50	2,957	6,472
1,190.55	2,989	6,621
1,190.60	3,021	6,771
1,190.65	3,052	6,923
1,190.70	3,084	7,076
1,190.75	3,116	7,231
1,190.80	3,147	7,388
1,190.85	3,179	7,546
1,190.90	3,210	7,705
1,190.95	3,242	7,867
1,191.00	3,274	8,030
1,191.05	3,305	8,194
1,191.10	3,337	8,360
1,191.15	3,369	8,528
1,191.20	3,400	8,697
1,191.25	3,432	8,868
1,191.30	3,464	9,040
1,191.35	3,495	9,214
1,191.40	3,527	9,390
1,191.45	3,559	9,567
1,191.50	3,590	9,746
1,191.55	3,622	9,926
1,191.60	3,654	10,108
1,191.65	3,685	10,291
1,191.70	3,717	10,476
1,191.75	3,749	10,663
1,191.80	3,780	10,851
1,191.85	3,812	11,041
1,191.90	3,844	11,232
1,191.95	3,875	11,425
1,192.00	**3,907**	**11,620**

Summary for Pond P3E: Pond 3E

Inflow Area = 2.780 ac, 19.06% Impervious, Inflow Depth = 0.61" for 1 YR event
Inflow = 2.49 cfs @ 12.14 hrs, Volume= 0.141 af
Outflow = 0.26 cfs @ 13.29 hrs, Volume= 0.141 af, Atten= 90%, Lag= 69.0 min
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Routed to Link 4L : Post - North
Secondary = 0.26 cfs @ 13.29 hrs, Volume= 0.141 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,216.82' @ 13.29 hrs Surf.Area= 3,080 sf Storage= 2,290 cf

Plug-Flow detention time= 82.8 min calculated for 0.141 af (100% of inflow)
Center-of-Mass det. time= 82.8 min (940.8 - 858.0)

Volume	Invert	Avail.Storage	Storage Description
#1	1,216.00'	15,578 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

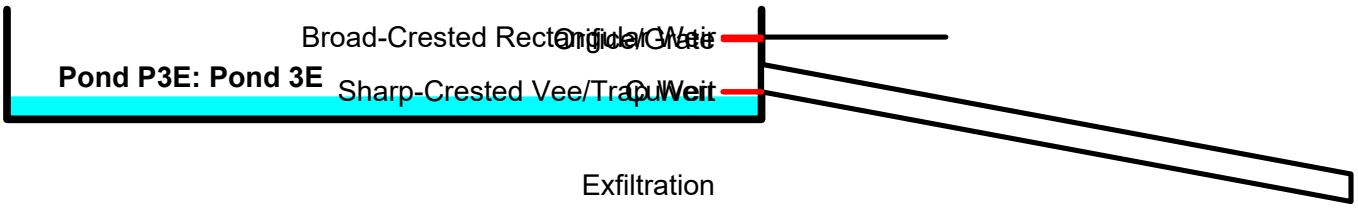
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,216.00	2,517	0	0
1,220.00	5,272	15,578	15,578

Device	Routing	Invert	Outlet Devices
#1	Primary	1,217.00'	**12.0" Round Culvert** L= 32.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,217.00' / 1,213.00' S= 0.1250 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,217.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,218.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600
#4	Secondary	1,216.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,219.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,216.00' (Free Discharge)
└**1=Culvert** (Controls 0.00 cfs)
└**2=Sharp-Crested Vee/Trap Weir** (Controls 0.00 cfs)
└**3=Orifice/Grate** (Controls 0.00 cfs)

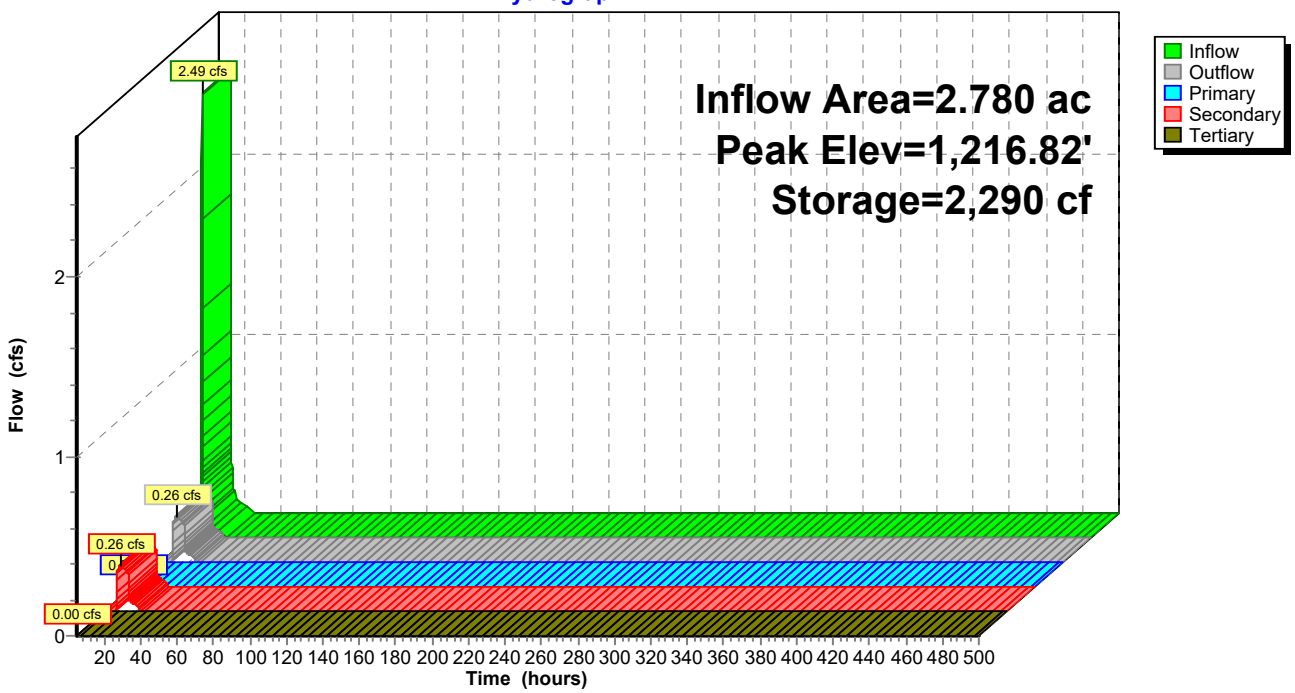
Secondary OutFlow Max=0.26 cfs @ 13.29 hrs HW=1,216.82' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.26 cfs)

Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,216.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

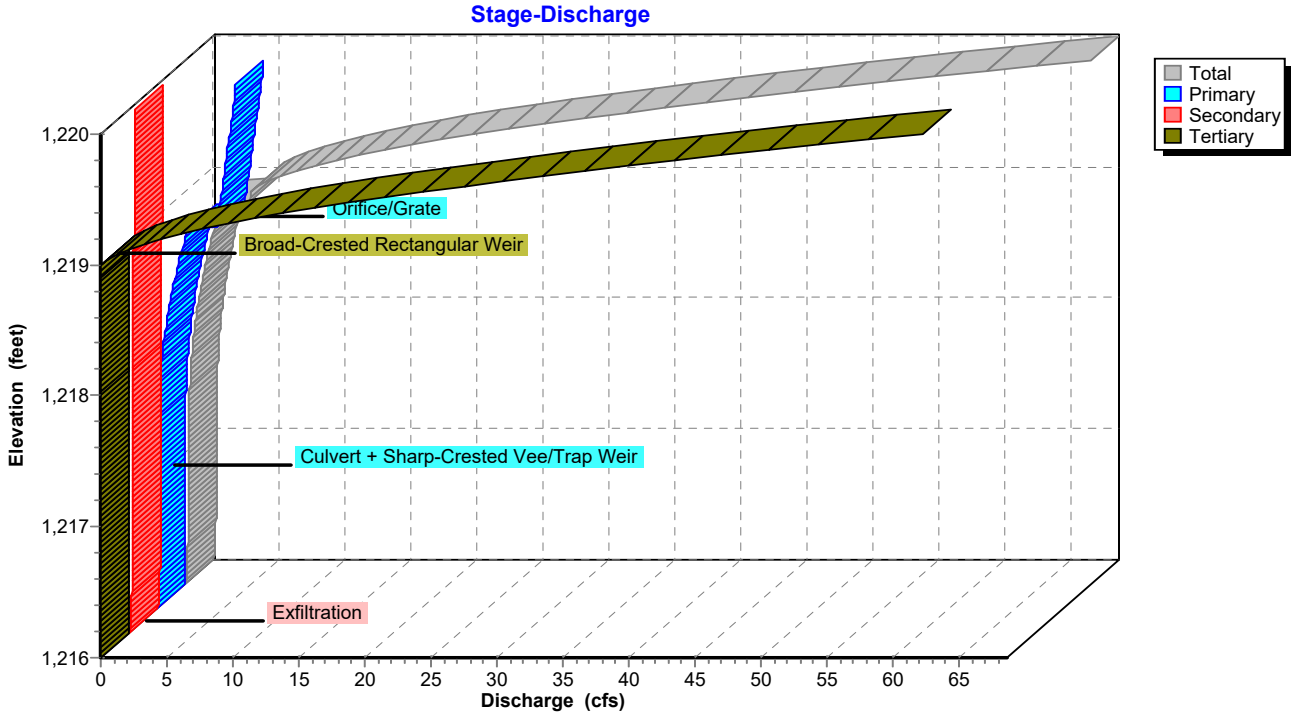


Pond P3E: Pond 3E

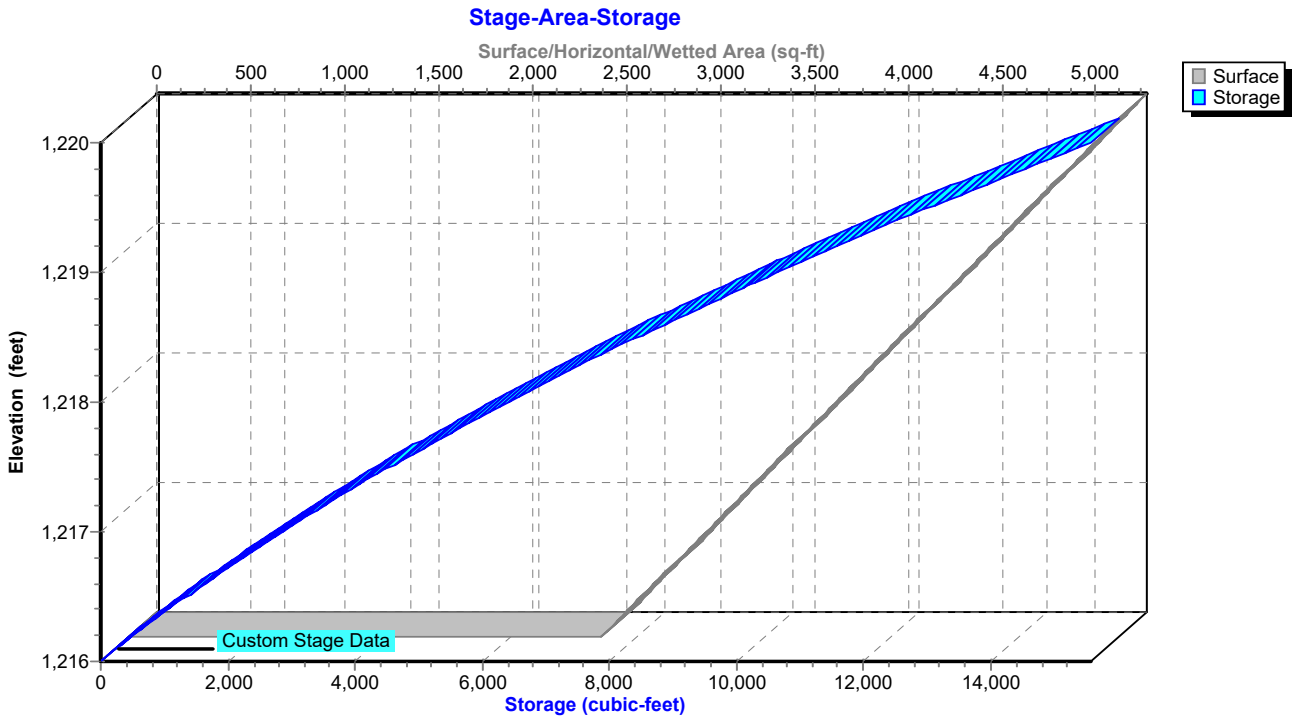
Hydrograph



Pond P3E: Pond 3E



Pond P3E: Pond 3E



Hydrograph for Pond P3E: Pond 3E

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,216.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.13**	**1,665**	**1,216.61**	**0.24**	0.00	**0.24**	0.00
25.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
35.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3E: Pond 3E

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,216.00	0.00	0.00	0.00	0.00
1,216.10	0.22	0.00	0.22	0.00
1,216.20	0.22	0.00	0.22	0.00
1,216.30	0.23	0.00	0.23	0.00
1,216.40	0.23	0.00	0.23	0.00
1,216.50	0.24	0.00	0.24	0.00
1,216.60	0.24	0.00	0.24	0.00
1,216.70	0.25	0.00	0.25	0.00
1,216.80	0.26	0.00	0.26	0.00
1,216.90	0.26	0.00	0.26	0.00
1,217.00	0.27	0.00	0.27	0.00
1,217.10	0.27	0.00	0.27	0.00
1,217.20	0.29	0.01	0.28	0.00
1,217.30	0.31	0.02	0.28	0.00
1,217.40	0.34	0.05	0.29	0.00
1,217.50	0.38	0.08	0.30	0.00
1,217.60	0.43	0.13	0.30	0.00
1,217.70	0.50	0.19	0.31	0.00
1,217.80	0.58	0.27	0.31	0.00
1,217.90	0.68	0.36	0.32	0.00
1,218.00	0.80	0.47	0.32	0.00
1,218.10	0.93	0.60	0.33	0.00
1,218.20	1.08	0.75	0.34	0.00
1,218.30	1.26	0.91	0.34	0.00
1,218.40	1.45	1.10	0.35	0.00
1,218.50	1.66	1.31	0.35	0.00
1,218.60	1.89	1.54	0.36	0.00
1,218.70	2.15	1.79	0.36	0.00
1,218.80	2.43	2.06	0.37	0.00
1,218.90	2.74	2.36	0.38	0.00
1,219.00	5.01	4.63	0.38	0.00
1,219.10	6.77	4.78	0.39	1.60
1,219.20	9.92	4.93	0.39	4.60
1,219.30	14.17	5.07	0.40	8.70
1,219.40	19.40	5.21	0.40	13.78
1,219.50	25.84	5.35	0.41	20.08
1,219.60	33.40	5.48	0.42	27.51
1,219.70	41.13	5.61	0.42	35.10
1,219.80	49.59	5.74	0.43	43.42
1,219.90	58.74	5.86	0.43	52.45
1,220.00	**68.59**	**5.98**	**0.44**	**62.18**

Stage-Area-Storage for Pond P3E: Pond 3E

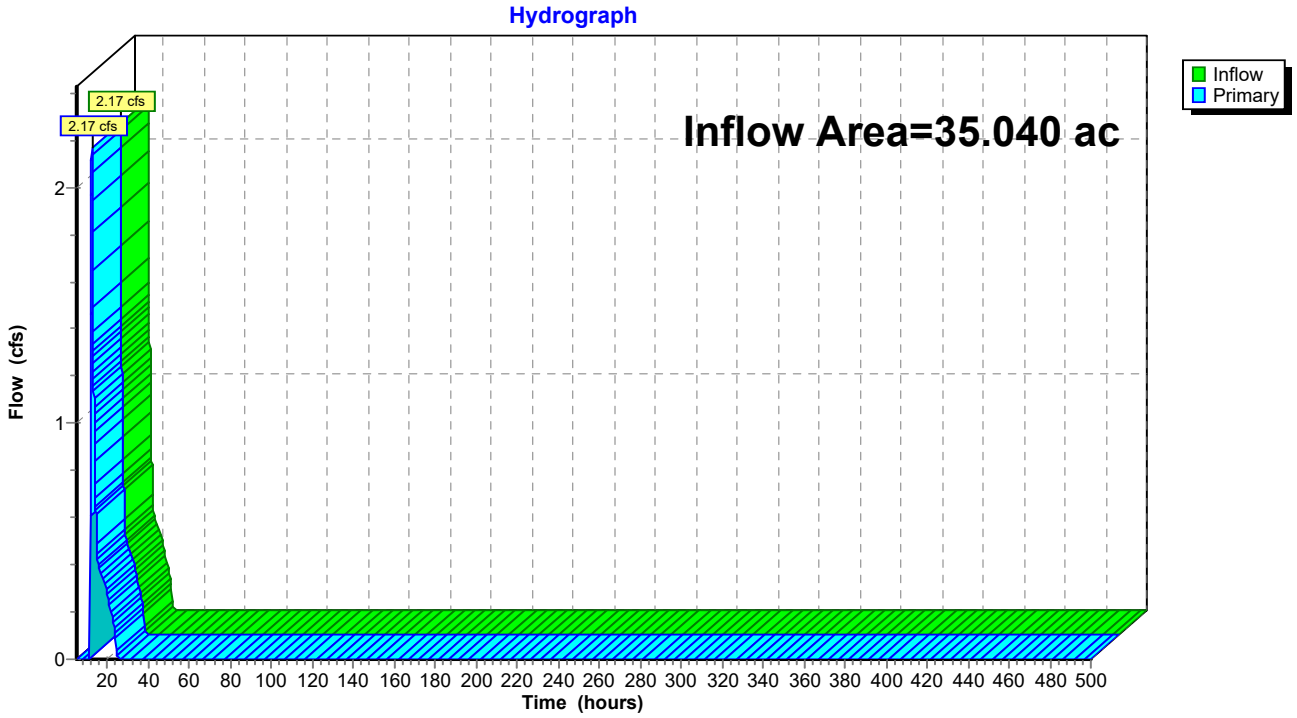
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,216.00	2,517	0
1,216.05	2,551	127
1,216.10	2,586	255
1,216.15	2,620	385
1,216.20	2,655	517
1,216.25	2,689	651
1,216.30	2,724	786
1,216.35	2,758	923
1,216.40	2,793	1,062
1,216.45	2,827	1,202
1,216.50	2,861	1,345
1,216.55	2,896	1,489
1,216.60	2,930	1,634
1,216.65	2,965	1,782
1,216.70	2,999	1,931
1,216.75	3,034	2,081
1,216.80	3,068	2,234
1,216.85	3,102	2,388
1,216.90	3,137	2,544
1,216.95	3,171	2,702
1,217.00	3,206	2,861
1,217.05	3,240	3,023
1,217.10	3,275	3,185
1,217.15	3,309	3,350
1,217.20	3,344	3,516
1,217.25	3,378	3,684
1,217.30	3,412	3,854
1,217.35	3,447	4,026
1,217.40	3,481	4,199
1,217.45	3,516	4,374
1,217.50	3,550	4,550
1,217.55	3,585	4,729
1,217.60	3,619	4,909
1,217.65	3,653	5,091
1,217.70	3,688	5,274
1,217.75	3,722	5,459
1,217.80	3,757	5,646
1,217.85	3,791	5,835
1,217.90	3,826	6,025
1,217.95	3,860	6,218
1,218.00	3,895	6,412
1,218.05	3,929	6,607
1,218.10	3,963	6,804
1,218.15	3,998	7,003
1,218.20	4,032	7,204
1,218.25	4,067	7,407
1,218.30	4,101	7,611
1,218.35	4,136	7,817
1,218.40	4,170	8,024
1,218.45	4,204	8,234
1,218.50	4,239	8,445
1,218.55	4,273	8,658
1,218.60	4,308	8,872
1,218.65	4,342	9,088
1,218.70	4,377	9,306
1,218.75	4,411	9,526
1,218.80	4,445	9,747
1,218.85	4,480	9,971
1,218.90	4,514	10,195
1,218.95	4,549	10,422
1,219.00	4,583	10,650
1,219.05	4,618	10,880
1,219.10	4,652	11,112
1,219.15	4,687	11,346
1,219.20	4,721	11,581
1,219.25	4,755	11,818
1,219.30	4,790	12,056
1,219.35	4,824	12,297
1,219.40	4,859	12,539
1,219.45	4,893	12,783
1,219.50	4,928	13,028
1,219.55	4,962	13,275
1,219.60	4,996	13,524
1,219.65	5,031	13,775
1,219.70	5,065	14,027
1,219.75	5,100	14,282
1,219.80	5,134	14,537
1,219.85	5,169	14,795
1,219.90	5,203	15,054
1,219.95	5,238	15,315
1,220.00	**5,272**	**15,578**

Summary for Link 1L: Total Pre - Development

Inflow Area = 35.040 ac, 0.00% Impervious, Inflow Depth = 0.15" for 1 YR event
Inflow = 2.17 cfs @ 12.36 hrs, Volume= 0.451 af
Primary = 2.17 cfs @ 12.36 hrs, Volume= 0.451 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 1L: Total Pre - Development



Hydrograph for Link 1L: Total Pre - Development

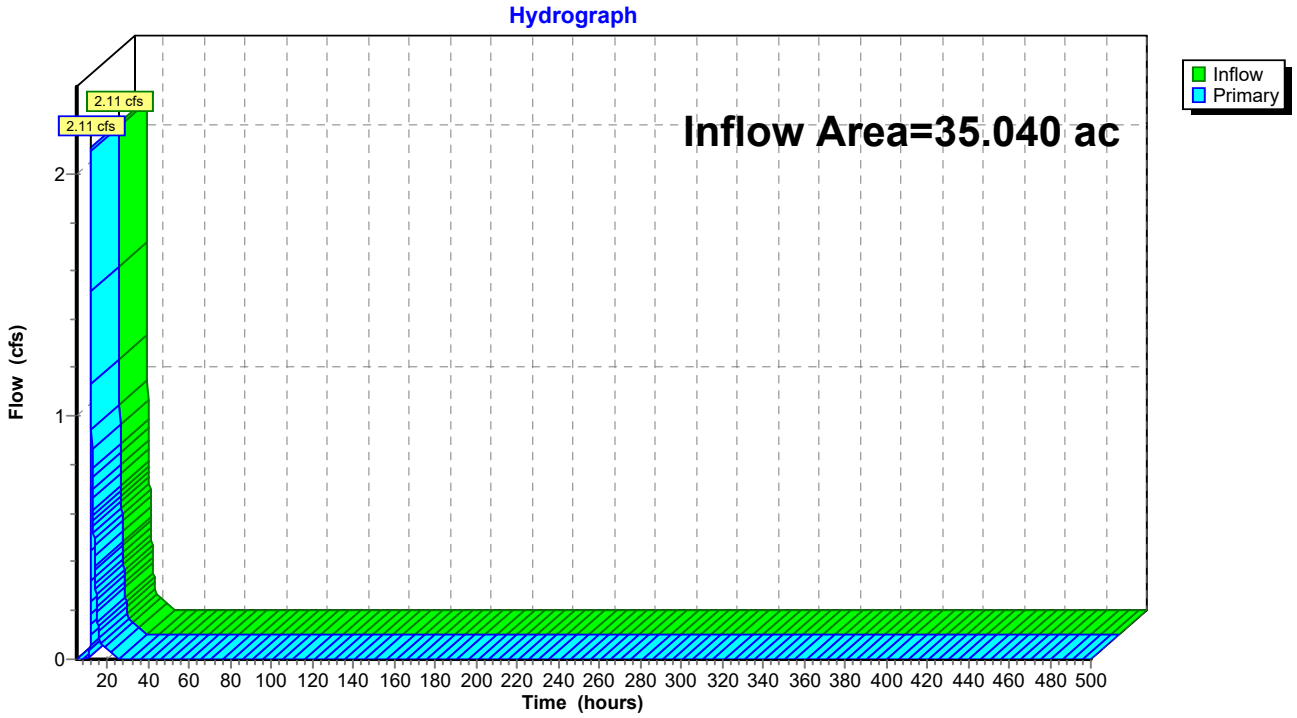
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.00**	0.00	**0.00**	265.00	0.00	0.00	0.00
15.00	**0.61**	0.00	**0.61**	270.00	0.00	0.00	0.00
20.00	0.27	0.00	0.27	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Summary for Link 2L: Total Post - Development

Inflow Area = 35.040 ac, 19.66% Impervious, Inflow Depth = 0.06" for 1 YR event
Inflow = 2.11 cfs @ 12.14 hrs, Volume= 0.177 af
Primary = 2.11 cfs @ 12.14 hrs, Volume= 0.177 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 2L: Total Post - Development



Hydrograph for Link 2L: Total Post - Development

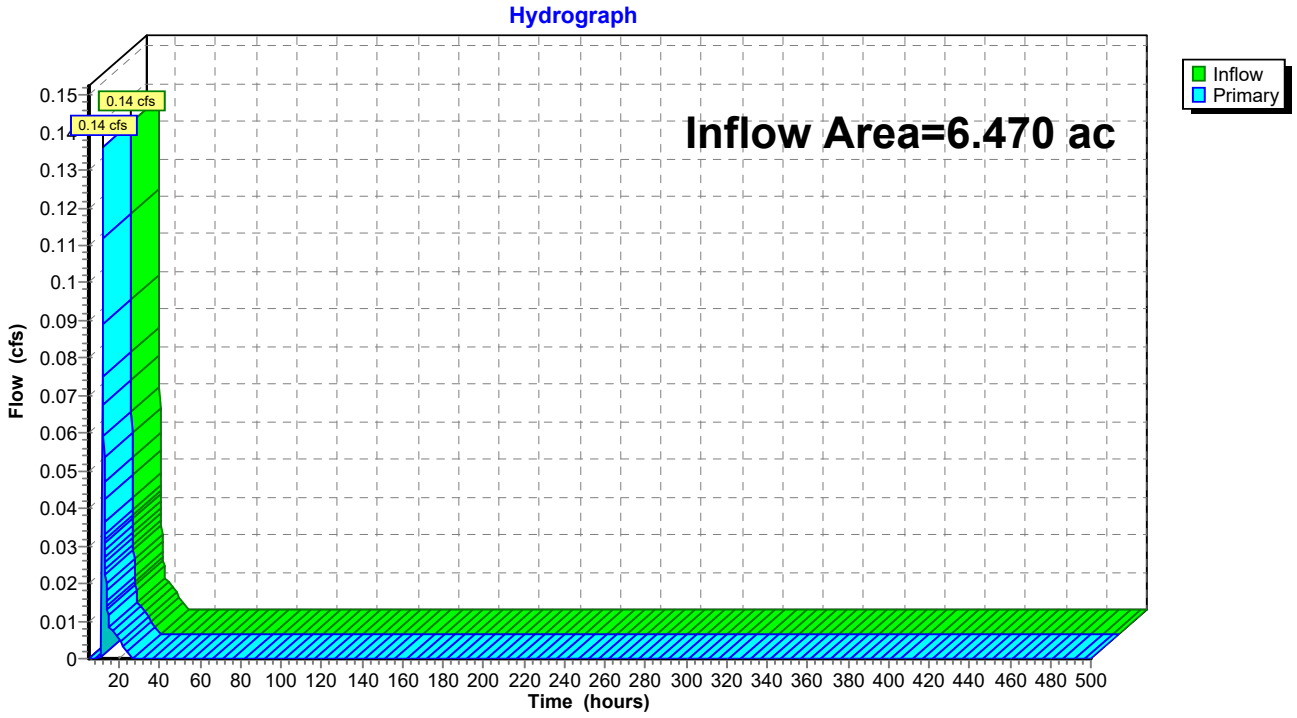
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.00**	0.00	**0.00**	265.00	0.00	0.00	0.00
15.00	**0.20**	0.00	**0.20**	270.00	0.00	0.00	0.00
20.00	0.04	0.00	0.04	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Summary for Link 3L: Post - South

Inflow Area = 6.470 ac, 18.70% Impervious, Inflow Depth = 0.02" for 1 YR event
Inflow = 0.14 cfs @ 12.16 hrs, Volume= 0.011 af
Primary = 0.14 cfs @ 12.16 hrs, Volume= 0.011 af, Atten= 0%, Lag= 0.0 min
Routed to Link 2L : Total Post - Development

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 3L: Post - South



Hydrograph for Link 3L: Post - South

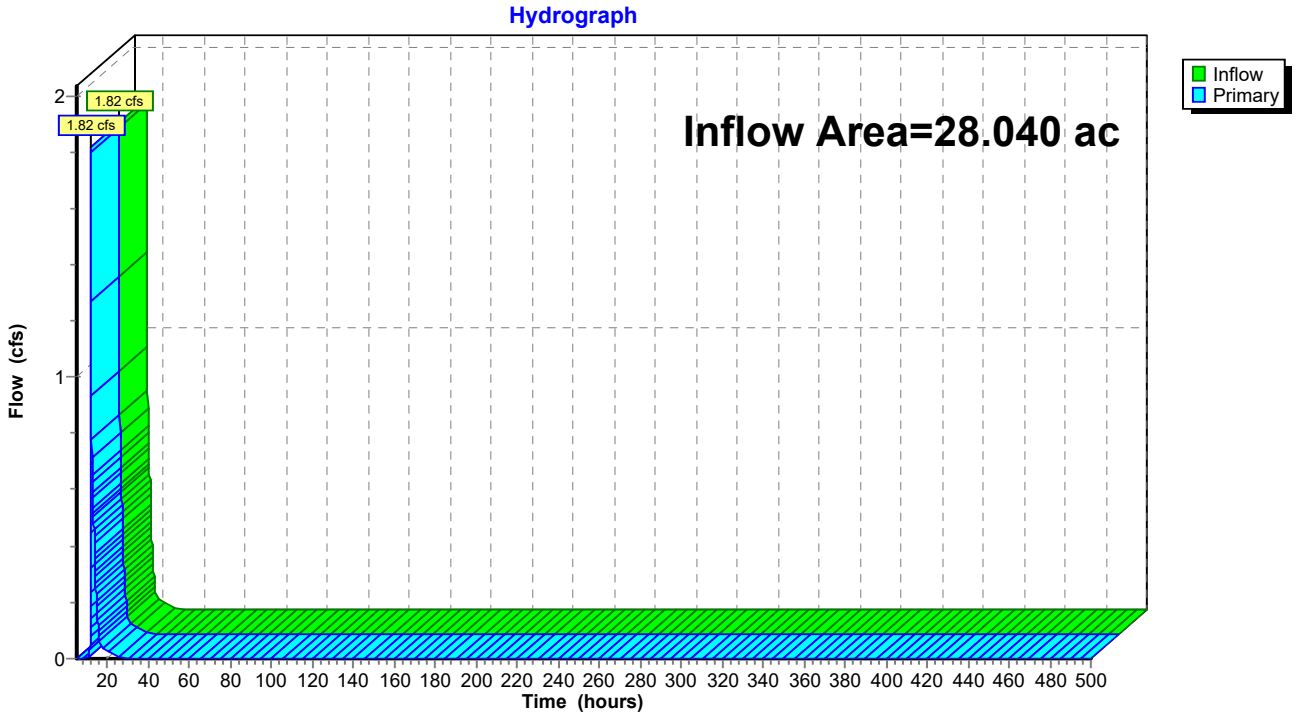
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.00**	0.00	**0.00**	265.00	0.00	0.00	0.00
15.00	**0.01**	0.00	**0.01**	270.00	0.00	0.00	0.00
20.00	0.01	0.00	0.01	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Summary for Link 4L: Post - North

Inflow Area = 28.040 ac, 20.04% Impervious, Inflow Depth = 0.07" for 1 YR event
Inflow = 1.82 cfs @ 12.14 hrs, Volume= 0.153 af
Primary = 1.82 cfs @ 12.14 hrs, Volume= 0.153 af, Atten= 0%, Lag= 0.0 min
Routed to Link 2L : Total Post - Development

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 4L: Post - North



Hydrograph for Link 4L: Post - North

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.00**	0.00	**0.00**	265.00	0.00	0.00	0.00
15.00	**0.17**	0.00	**0.17**	270.00	0.00	0.00	0.00
20.00	0.03	0.00	0.03	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Time span=5.00-500.00 hrs, dt=0.05 hrs, 9901 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1: Pre - South Runoff Area=4.910 ac 0.00% Impervious Runoff Depth=0.17"
Tc=10.0 min CN=55 Runoff=0.31 cfs 0.069 af

Subcatchment1A: Post 1A Runoff Area=6.030 ac 19.24% Impervious Runoff Depth=0.58"
Tc=6.0 min CN=68 Runoff=4.83 cfs 0.289 af

Subcatchment1B: Post 1B - Offsite Runoff Area=0.440 ac 11.36% Impervious Runoff Depth=0.46"
Tc=6.0 min CN=65 Runoff=0.26 cfs 0.017 af

Subcatchment2: Pre - West Runoff Area=2.540 ac 0.00% Impervious Runoff Depth=0.17"
Tc=6.0 min CN=55 Runoff=0.17 cfs 0.036 af

Subcatchment2A: Post 2A - Offsite Runoff Area=0.530 ac 11.32% Impervious Runoff Depth=0.46"
Tc=6.0 min CN=65 Runoff=0.31 cfs 0.020 af

Subcatchment3: Pre - North Runoff Area=27.590 ac 0.00% Impervious Runoff Depth=0.30"
Tc=10.0 min CN=60 Runoff=5.79 cfs 0.685 af

Subcatchment3A: Post 3A Runoff Area=10.600 ac 18.58% Impervious Runoff Depth=0.66"
Tc=6.0 min CN=70 Runoff=10.12 cfs 0.582 af

Subcatchment3B: Post 3B Runoff Area=8.450 ac 19.88% Impervious Runoff Depth=0.70"
Tc=6.0 min CN=71 Runoff=8.74 cfs 0.495 af

Subcatchment3C: Post 3C Runoff Area=2.490 ac 22.89% Impervious Runoff Depth=0.90"
Tc=6.0 min CN=75 Runoff=3.42 cfs 0.186 af

Subcatchment3D: Post 3D Runoff Area=2.380 ac 23.95% Impervious Runoff Depth=0.95"
Tc=6.0 min CN=76 Runoff=3.48 cfs 0.188 af

Subcatchment3E: Post 3E Runoff Area=2.780 ac 19.06% Impervious Runoff Depth=0.85"
Tc=6.0 min CN=74 Runoff=3.57 cfs 0.196 af

Subcatchment3Y: Post 3Y - Offsite Runoff Area=0.820 ac 36.59% Impervious Runoff Depth=1.37"
Tc=6.0 min CN=83 Runoff=1.76 cfs 0.093 af

Subcatchment3Z: Post 3Z - Offsite Runoff Area=0.520 ac 0.00% Impervious Runoff Depth=0.85"
Tc=6.0 min CN=74 Runoff=0.67 cfs 0.037 af

Subcatchment5S: Culvert 1 Runoff Area=4,797 sf 48.61% Impervious Runoff Depth=1.12"
Tc=6.0 min CN=79 Runoff=0.19 cfs 0.010 af

Subcatchment6S: Culvert 2 Runoff Area=24,708 sf 36.87% Impervious Runoff Depth=0.90"
Tc=6.0 min CN=75 Runoff=0.78 cfs 0.042 af

Subcatchment7S: Culvert 3 Runoff Area=41,517 sf 32.00% Impervious Runoff Depth=0.80"
Tc=6.0 min CN=73 Runoff=1.14 cfs 0.063 af

Subcatchment8S: Culvert 4 Runoff Area=209,603 sf 25.18% Impervious Runoff Depth=0.66"
Tc=6.0 min CN=70 Runoff=4.59 cfs 0.264 af

Subcatchment9S: Culvert 5 Runoff Area=188,836 sf 19.96% Impervious Runoff Depth=0.58"
Tc=6.0 min CN=68 Runoff=3.47 cfs 0.208 af

Pond P1A: Pond 1A Peak Elev=1,240.45' Storage=5,132 cf Inflow=4.83 cfs 0.289 af
Primary=0.06 cfs 0.010 af Secondary=0.38 cfs 0.279 af Tertiary=0.00 cfs 0.000 af Outflow=0.45 cfs 0.289 af

Pond P3A: Pond 3A Peak Elev=1,193.92' Storage=10,734 cf Inflow=10.12 cfs 0.582 af
Primary=0.38 cfs 0.083 af Secondary=0.59 cfs 0.500 af Tertiary=0.00 cfs 0.000 af Outflow=0.97 cfs 0.582 af

Pond P3B: Pond 3B Peak Elev=1,196.99' Storage=8,739 cf Inflow=8.74 cfs 0.495 af
Primary=0.46 cfs 0.095 af Secondary=0.50 cfs 0.400 af Tertiary=0.00 cfs 0.000 af Outflow=0.96 cfs 0.495 af

Pond P3C: Pond 3C Peak Elev=1,179.39' Storage=3,509 cf Inflow=3.42 cfs 0.186 af
Primary=0.04 cfs 0.006 af Secondary=0.26 cfs 0.180 af Tertiary=0.00 cfs 0.000 af Outflow=0.31 cfs 0.186 af

Pond P3D: Pond 3D Peak Elev=1,189.08' Storage=2,906 cf Inflow=3.48 cfs 0.188 af
Primary=0.57 cfs 0.066 af Secondary=0.17 cfs 0.122 af Tertiary=0.00 cfs 0.000 af Outflow=0.74 cfs 0.188 af

Pond P3E: Pond 3E Peak Elev=1,217.25' Storage=3,688 cf Inflow=3.57 cfs 0.196 af
Primary=0.02 cfs 0.002 af Secondary=0.28 cfs 0.194 af Tertiary=0.00 cfs 0.000 af Outflow=0.30 cfs 0.196 af

Link 1L: Total Pre - Development Inflow=6.15 cfs 0.790 af
Primary=6.15 cfs 0.790 af

Link 2L: Total Post - Development Inflow=3.04 cfs 0.429 af
Primary=3.04 cfs 0.429 af

Link 3L: Post - South Inflow=0.26 cfs 0.027 af
Primary=0.26 cfs 0.027 af

Link 4L: Post - North Inflow=2.47 cfs 0.382 af
Primary=2.47 cfs 0.382 af

Total Runoff Area = 80.857 ac Runoff Volume = 3.483 af Average Runoff Depth = 0.52"
88.21% Pervious = 71.323 ac 11.79% Impervious = 9.534 ac

Summary for Subcatchment 1: Pre - South

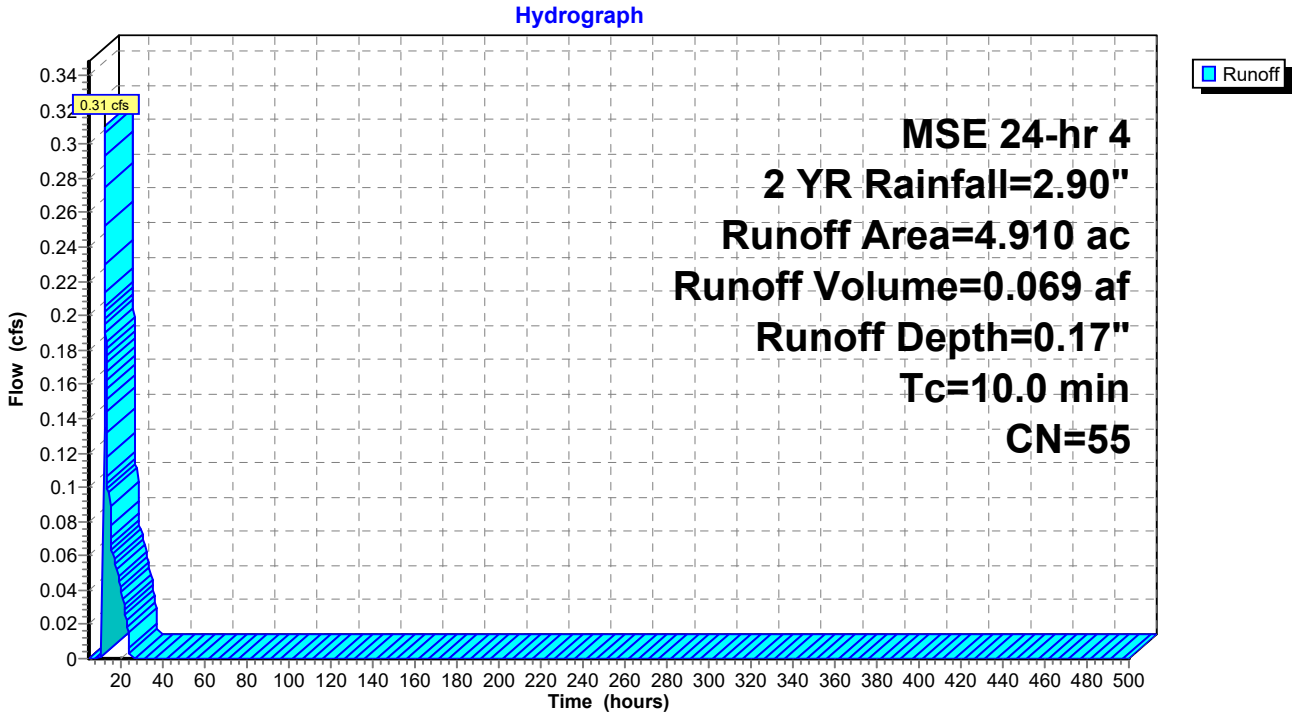
Runoff = 0.31 cfs @ 12.41 hrs, Volume= 0.069 af, Depth= 0.17"
Routed to Link 1L : Total Pre - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 2 YR Rainfall=2.90"

	Area (ac)	CN	Description
*	4.910	55	Pre Dev - B Soils
	4.910		100.00% Pervious Area

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

Subcatchment 1: Pre - South



Hydrograph for Subcatchment 1: Pre - South

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.13	0.00	0.00	260.00	2.90	0.17	0.00
10.00	0.46	0.00	**0.00**	265.00	2.90	0.17	0.00
15.00	2.55	0.09	**0.10**	270.00	2.90	0.17	0.00
20.00	**2.81**	**0.15**	0.04	275.00	2.90	0.17	0.00
25.00	**2.90**	**0.17**	0.00	280.00	2.90	0.17	0.00
30.00	2.90	0.17	0.00	285.00	2.90	0.17	0.00
35.00	2.90	0.17	0.00	290.00	2.90	0.17	0.00
40.00	2.90	0.17	0.00	295.00	2.90	0.17	0.00
45.00	2.90	0.17	0.00	300.00	2.90	0.17	0.00
50.00	2.90	0.17	0.00	305.00	2.90	0.17	0.00
55.00	2.90	0.17	0.00	310.00	2.90	0.17	0.00
60.00	2.90	0.17	0.00	315.00	2.90	0.17	0.00
65.00	2.90	0.17	0.00	320.00	2.90	0.17	0.00
70.00	2.90	0.17	0.00	325.00	2.90	0.17	0.00
75.00	2.90	0.17	0.00	330.00	2.90	0.17	0.00
80.00	2.90	0.17	0.00	335.00	2.90	0.17	0.00
85.00	2.90	0.17	0.00	340.00	2.90	0.17	0.00
90.00	2.90	0.17	0.00	345.00	2.90	0.17	0.00
95.00	2.90	0.17	0.00	350.00	2.90	0.17	0.00
100.00	2.90	0.17	0.00	355.00	2.90	0.17	0.00
105.00	2.90	0.17	0.00	360.00	2.90	0.17	0.00
110.00	2.90	0.17	0.00	365.00	2.90	0.17	0.00
115.00	2.90	0.17	0.00	370.00	2.90	0.17	0.00
120.00	2.90	0.17	0.00	375.00	2.90	0.17	0.00
125.00	2.90	0.17	0.00	380.00	2.90	0.17	0.00
130.00	2.90	0.17	0.00	385.00	2.90	0.17	0.00
135.00	2.90	0.17	0.00	390.00	2.90	0.17	0.00
140.00	2.90	0.17	0.00	395.00	2.90	0.17	0.00
145.00	2.90	0.17	0.00	400.00	2.90	0.17	0.00
150.00	2.90	0.17	0.00	405.00	2.90	0.17	0.00
155.00	2.90	0.17	0.00	410.00	2.90	0.17	0.00
160.00	2.90	0.17	0.00	415.00	2.90	0.17	0.00
165.00	2.90	0.17	0.00	420.00	2.90	0.17	0.00
170.00	2.90	0.17	0.00	425.00	2.90	0.17	0.00
175.00	2.90	0.17	0.00	430.00	2.90	0.17	0.00
180.00	2.90	0.17	0.00	435.00	2.90	0.17	0.00
185.00	2.90	0.17	0.00	440.00	2.90	0.17	0.00
190.00	2.90	0.17	0.00	445.00	2.90	0.17	0.00
195.00	2.90	0.17	0.00	450.00	2.90	0.17	0.00
200.00	2.90	0.17	0.00	455.00	2.90	0.17	0.00
205.00	2.90	0.17	0.00	460.00	2.90	0.17	0.00
210.00	2.90	0.17	0.00	465.00	2.90	0.17	0.00
215.00	2.90	0.17	0.00	470.00	2.90	0.17	0.00
220.00	2.90	0.17	0.00	475.00	2.90	0.17	0.00
225.00	2.90	0.17	0.00	480.00	2.90	0.17	0.00
230.00	2.90	0.17	0.00	485.00	2.90	0.17	0.00
235.00	2.90	0.17	0.00	490.00	2.90	0.17	0.00
240.00	2.90	0.17	0.00	495.00	2.90	0.17	0.00
245.00	2.90	0.17	0.00	500.00	2.90	0.17	0.00
250.00	2.90	0.17	0.00				
255.00	2.90	0.17	0.00				

Summary for Subcatchment 1A: Post 1A

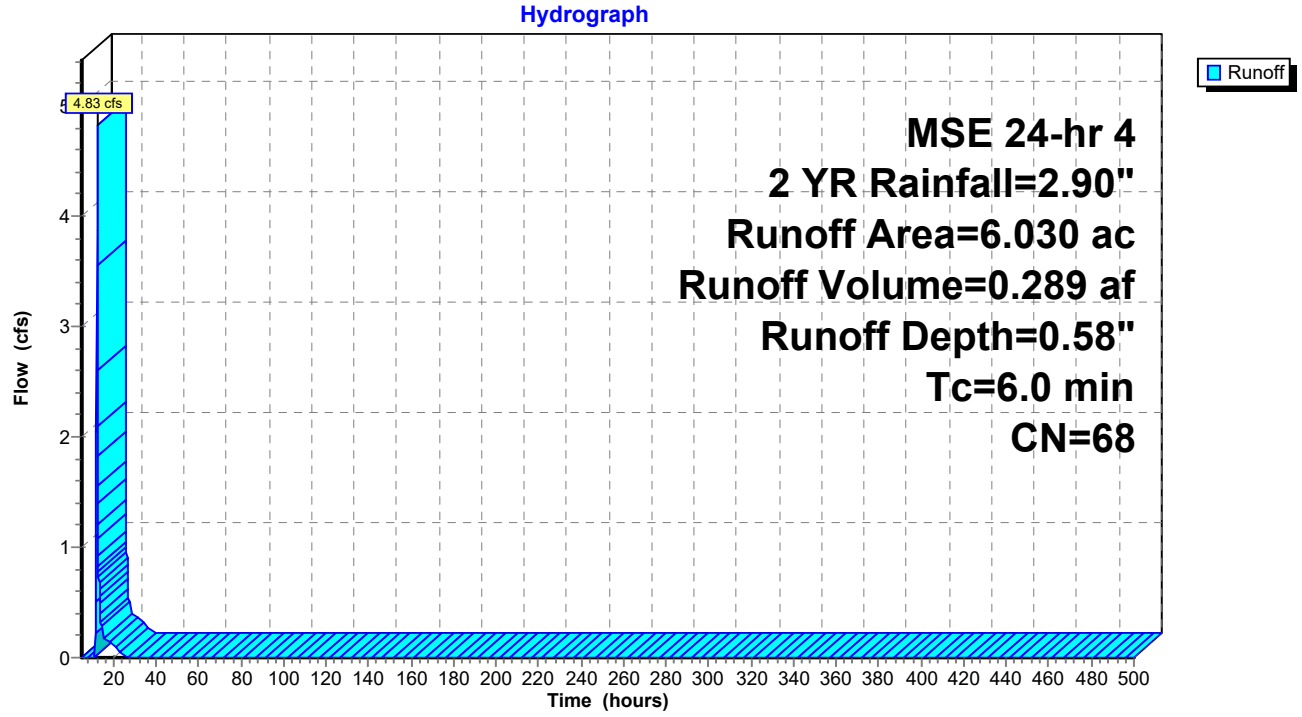
Runoff = 4.83 cfs @ 12.15 hrs, Volume= 0.289 af, Depth= 0.58"
Routed to Pond P1A : Pond 1A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 2 YR Rainfall=2.90"

	Area (ac)	CN	Description
*	1.160	98	Impervious
*	4.870	61	Post - B Soils
*	0.000	74	Post - C Soils
	6.030	68	Weighted Average
	4.870		80.76% Pervious Area
	1.160		19.24% Impervious Area

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

Subcatchment 1A: Post 1A



Hydrograph for Subcatchment 1A: Post 1A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.13	0.00	0.00
10.00	0.46	0.00	**0.00**
15.00	2.55	0.41	**0.28**
20.00	**2.81**	**0.53**	0.11
25.00	**2.90**	**0.58**	0.00
30.00	2.90	0.58	0.00
35.00	2.90	0.58	0.00
40.00	2.90	0.58	0.00
45.00	2.90	0.58	0.00
50.00	2.90	0.58	0.00
55.00	2.90	0.58	0.00
60.00	2.90	0.58	0.00
65.00	2.90	0.58	0.00
70.00	2.90	0.58	0.00
75.00	2.90	0.58	0.00
80.00	2.90	0.58	0.00
85.00	2.90	0.58	0.00
90.00	2.90	0.58	0.00
95.00	2.90	0.58	0.00
100.00	2.90	0.58	0.00
105.00	2.90	0.58	0.00
110.00	2.90	0.58	0.00
115.00	2.90	0.58	0.00
120.00	2.90	0.58	0.00
125.00	2.90	0.58	0.00
130.00	2.90	0.58	0.00
135.00	2.90	0.58	0.00
140.00	2.90	0.58	0.00
145.00	2.90	0.58	0.00
150.00	2.90	0.58	0.00
155.00	2.90	0.58	0.00
160.00	2.90	0.58	0.00
165.00	2.90	0.58	0.00
170.00	2.90	0.58	0.00
175.00	2.90	0.58	0.00
180.00	2.90	0.58	0.00
185.00	2.90	0.58	0.00
190.00	2.90	0.58	0.00
195.00	2.90	0.58	0.00
200.00	2.90	0.58	0.00
205.00	2.90	0.58	0.00
210.00	2.90	0.58	0.00
215.00	2.90	0.58	0.00
220.00	2.90	0.58	0.00
225.00	2.90	0.58	0.00
230.00	2.90	0.58	0.00
235.00	2.90	0.58	0.00
240.00	2.90	0.58	0.00
245.00	2.90	0.58	0.00
250.00	2.90	0.58	0.00
255.00	2.90	0.58	0.00
260.00	2.90	0.58	0.00
265.00	2.90	0.58	0.00
270.00	2.90	0.58	0.00
275.00	2.90	0.58	0.00
280.00	2.90	0.58	0.00
285.00	2.90	0.58	0.00
290.00	2.90	0.58	0.00
295.00	2.90	0.58	0.00
300.00	2.90	0.58	0.00
305.00	2.90	0.58	0.00
310.00	2.90	0.58	0.00
315.00	2.90	0.58	0.00
320.00	2.90	0.58	0.00
325.00	2.90	0.58	0.00
330.00	2.90	0.58	0.00
335.00	2.90	0.58	0.00
340.00	2.90	0.58	0.00
345.00	2.90	0.58	0.00
350.00	2.90	0.58	0.00
355.00	2.90	0.58	0.00
360.00	2.90	0.58	0.00
365.00	2.90	0.58	0.00
370.00	2.90	0.58	0.00
375.00	2.90	0.58	0.00
380.00	2.90	0.58	0.00
385.00	2.90	0.58	0.00
390.00	2.90	0.58	0.00
395.00	2.90	0.58	0.00
400.00	2.90	0.58	0.00
405.00	2.90	0.58	0.00
410.00	2.90	0.58	0.00
415.00	2.90	0.58	0.00
420.00	2.90	0.58	0.00
425.00	2.90	0.58	0.00
430.00	2.90	0.58	0.00
435.00	2.90	0.58	0.00
440.00	2.90	0.58	0.00
445.00	2.90	0.58	0.00
450.00	2.90	0.58	0.00
455.00	2.90	0.58	0.00
460.00	2.90	0.58	0.00
465.00	2.90	0.58	0.00
470.00	2.90	0.58	0.00
475.00	2.90	0.58	0.00
480.00	2.90	0.58	0.00
485.00	2.90	0.58	0.00
490.00	2.90	0.58	0.00
495.00	2.90	0.58	0.00
500.00	2.90	0.58	0.00

Summary for Subcatchment 1B: Post 1B - Offsite

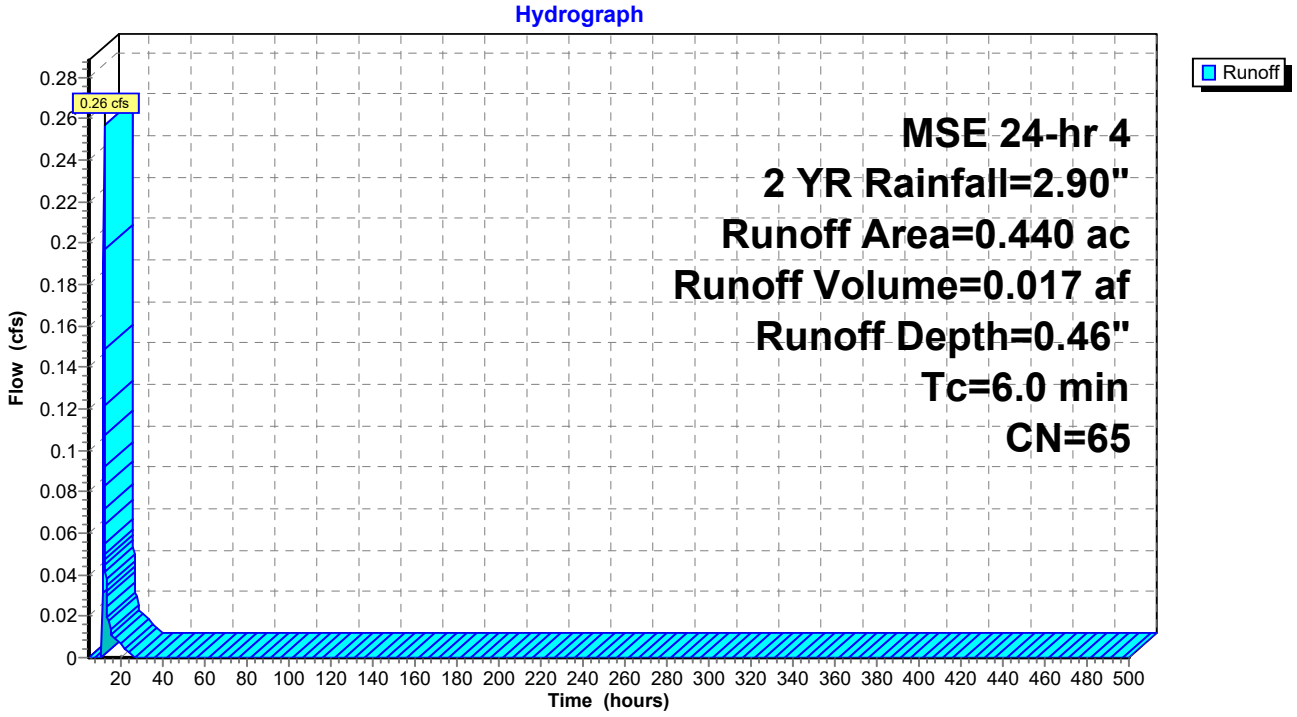
Runoff = 0.26 cfs @ 12.15 hrs, Volume= 0.017 af, Depth= 0.46"
Routed to Link 3L : Post - South

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 2 YR Rainfall=2.90"

	Area (ac)	CN	Description
*	0.050	98	Impervious
*	0.390	61	Post - B Soils
*	0.000	74	Post - C Soils
	0.440	65	Weighted Average
	0.390		88.64% Pervious Area
	0.050		11.36% Impervious Area

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

Subcatchment 1B: Post 1B - Offsite



Hydrograph for Subcatchment 1B: Post 1B - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.13	0.00	0.00
10.00	0.46	0.00	**0.00**
15.00	2.55	0.32	**0.02**
20.00	**2.81**	**0.42**	0.01
25.00	**2.90**	**0.46**	0.00
30.00	2.90	0.46	0.00
35.00	2.90	0.46	0.00
40.00	2.90	0.46	0.00
45.00	2.90	0.46	0.00
50.00	2.90	0.46	0.00
55.00	2.90	0.46	0.00
60.00	2.90	0.46	0.00
65.00	2.90	0.46	0.00
70.00	2.90	0.46	0.00
75.00	2.90	0.46	0.00
80.00	2.90	0.46	0.00
85.00	2.90	0.46	0.00
90.00	2.90	0.46	0.00
95.00	2.90	0.46	0.00
100.00	2.90	0.46	0.00
105.00	2.90	0.46	0.00
110.00	2.90	0.46	0.00
115.00	2.90	0.46	0.00
120.00	2.90	0.46	0.00
125.00	2.90	0.46	0.00
130.00	2.90	0.46	0.00
135.00	2.90	0.46	0.00
140.00	2.90	0.46	0.00
145.00	2.90	0.46	0.00
150.00	2.90	0.46	0.00
155.00	2.90	0.46	0.00
160.00	2.90	0.46	0.00
165.00	2.90	0.46	0.00
170.00	2.90	0.46	0.00
175.00	2.90	0.46	0.00
180.00	2.90	0.46	0.00
185.00	2.90	0.46	0.00
190.00	2.90	0.46	0.00
195.00	2.90	0.46	0.00
200.00	2.90	0.46	0.00
205.00	2.90	0.46	0.00
210.00	2.90	0.46	0.00
215.00	2.90	0.46	0.00
220.00	2.90	0.46	0.00
225.00	2.90	0.46	0.00
230.00	2.90	0.46	0.00
235.00	2.90	0.46	0.00
240.00	2.90	0.46	0.00
245.00	2.90	0.46	0.00
250.00	2.90	0.46	0.00
255.00	2.90	0.46	0.00
260.00	2.90	0.46	0.00
265.00	2.90	0.46	0.00
270.00	2.90	0.46	0.00
275.00	2.90	0.46	0.00
280.00	2.90	0.46	0.00
285.00	2.90	0.46	0.00
290.00	2.90	0.46	0.00
295.00	2.90	0.46	0.00
300.00	2.90	0.46	0.00
305.00	2.90	0.46	0.00
310.00	2.90	0.46	0.00
315.00	2.90	0.46	0.00
320.00	2.90	0.46	0.00
325.00	2.90	0.46	0.00
330.00	2.90	0.46	0.00
335.00	2.90	0.46	0.00
340.00	2.90	0.46	0.00
345.00	2.90	0.46	0.00
350.00	2.90	0.46	0.00
355.00	2.90	0.46	0.00
360.00	2.90	0.46	0.00
365.00	2.90	0.46	0.00
370.00	2.90	0.46	0.00
375.00	2.90	0.46	0.00
380.00	2.90	0.46	0.00
385.00	2.90	0.46	0.00
390.00	2.90	0.46	0.00
395.00	2.90	0.46	0.00
400.00	2.90	0.46	0.00
405.00	2.90	0.46	0.00
410.00	2.90	0.46	0.00
415.00	2.90	0.46	0.00
420.00	2.90	0.46	0.00
425.00	2.90	0.46	0.00
430.00	2.90	0.46	0.00
435.00	2.90	0.46	0.00
440.00	2.90	0.46	0.00
445.00	2.90	0.46	0.00
450.00	2.90	0.46	0.00
455.00	2.90	0.46	0.00
460.00	2.90	0.46	0.00
465.00	2.90	0.46	0.00
470.00	2.90	0.46	0.00
475.00	2.90	0.46	0.00
480.00	2.90	0.46	0.00
485.00	2.90	0.46	0.00
490.00	2.90	0.46	0.00
495.00	2.90	0.46	0.00
500.00	2.90	0.46	0.00

Summary for Subcatchment 2: Pre - West

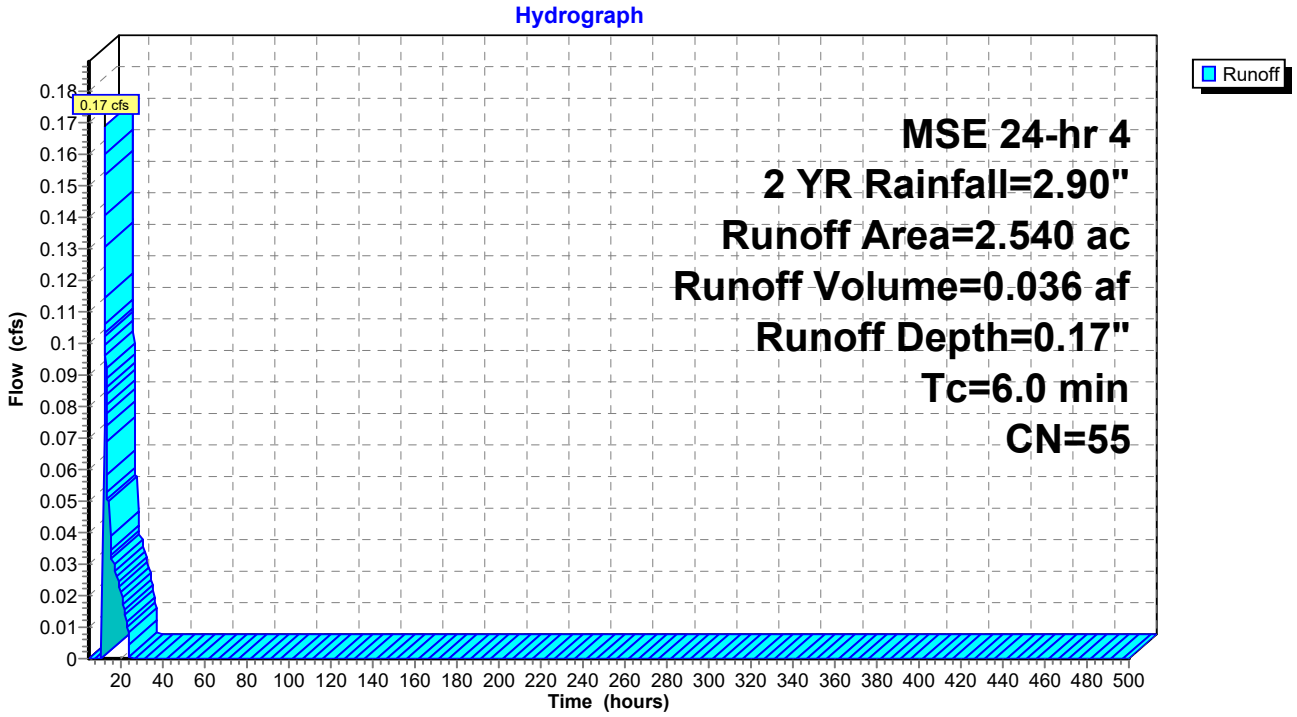
Runoff = 0.17 cfs @ 12.34 hrs, Volume= 0.036 af, Depth= 0.17"
Routed to Link 1L : Total Pre - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 2 YR Rainfall=2.90"

	Area (ac)	CN	Description
*	2.540	55	Pre Dev - B Soils
	2.540		100.00% Pervious Area

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

Subcatchment 2: Pre - West



Hydrograph for Subcatchment 2: Pre - West

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.13	0.00	0.00	260.00	2.90	0.17	0.00
10.00	0.46	0.00	**0.00**	265.00	2.90	0.17	0.00
15.00	2.55	0.09	**0.05**	270.00	2.90	0.17	0.00
20.00	**2.81**	**0.15**	0.02	275.00	2.90	0.17	0.00
25.00	**2.90**	**0.17**	0.00	280.00	2.90	0.17	0.00
30.00	2.90	0.17	0.00	285.00	2.90	0.17	0.00
35.00	2.90	0.17	0.00	290.00	2.90	0.17	0.00
40.00	2.90	0.17	0.00	295.00	2.90	0.17	0.00
45.00	2.90	0.17	0.00	300.00	2.90	0.17	0.00
50.00	2.90	0.17	0.00	305.00	2.90	0.17	0.00
55.00	2.90	0.17	0.00	310.00	2.90	0.17	0.00
60.00	2.90	0.17	0.00	315.00	2.90	0.17	0.00
65.00	2.90	0.17	0.00	320.00	2.90	0.17	0.00
70.00	2.90	0.17	0.00	325.00	2.90	0.17	0.00
75.00	2.90	0.17	0.00	330.00	2.90	0.17	0.00
80.00	2.90	0.17	0.00	335.00	2.90	0.17	0.00
85.00	2.90	0.17	0.00	340.00	2.90	0.17	0.00
90.00	2.90	0.17	0.00	345.00	2.90	0.17	0.00
95.00	2.90	0.17	0.00	350.00	2.90	0.17	0.00
100.00	2.90	0.17	0.00	355.00	2.90	0.17	0.00
105.00	2.90	0.17	0.00	360.00	2.90	0.17	0.00
110.00	2.90	0.17	0.00	365.00	2.90	0.17	0.00
115.00	2.90	0.17	0.00	370.00	2.90	0.17	0.00
120.00	2.90	0.17	0.00	375.00	2.90	0.17	0.00
125.00	2.90	0.17	0.00	380.00	2.90	0.17	0.00
130.00	2.90	0.17	0.00	385.00	2.90	0.17	0.00
135.00	2.90	0.17	0.00	390.00	2.90	0.17	0.00
140.00	2.90	0.17	0.00	395.00	2.90	0.17	0.00
145.00	2.90	0.17	0.00	400.00	2.90	0.17	0.00
150.00	2.90	0.17	0.00	405.00	2.90	0.17	0.00
155.00	2.90	0.17	0.00	410.00	2.90	0.17	0.00
160.00	2.90	0.17	0.00	415.00	2.90	0.17	0.00
165.00	2.90	0.17	0.00	420.00	2.90	0.17	0.00
170.00	2.90	0.17	0.00	425.00	2.90	0.17	0.00
175.00	2.90	0.17	0.00	430.00	2.90	0.17	0.00
180.00	2.90	0.17	0.00	435.00	2.90	0.17	0.00
185.00	2.90	0.17	0.00	440.00	2.90	0.17	0.00
190.00	2.90	0.17	0.00	445.00	2.90	0.17	0.00
195.00	2.90	0.17	0.00	450.00	2.90	0.17	0.00
200.00	2.90	0.17	0.00	455.00	2.90	0.17	0.00
205.00	2.90	0.17	0.00	460.00	2.90	0.17	0.00
210.00	2.90	0.17	0.00	465.00	2.90	0.17	0.00
215.00	2.90	0.17	0.00	470.00	2.90	0.17	0.00
220.00	2.90	0.17	0.00	475.00	2.90	0.17	0.00
225.00	2.90	0.17	0.00	480.00	2.90	0.17	0.00
230.00	2.90	0.17	0.00	485.00	2.90	0.17	0.00
235.00	2.90	0.17	0.00	490.00	2.90	0.17	0.00
240.00	2.90	0.17	0.00	495.00	2.90	0.17	0.00
245.00	2.90	0.17	0.00	500.00	2.90	0.17	0.00
250.00	2.90	0.17	0.00				
255.00	2.90	0.17	0.00				

Summary for Subcatchment 2A: Post 2A - Offsite

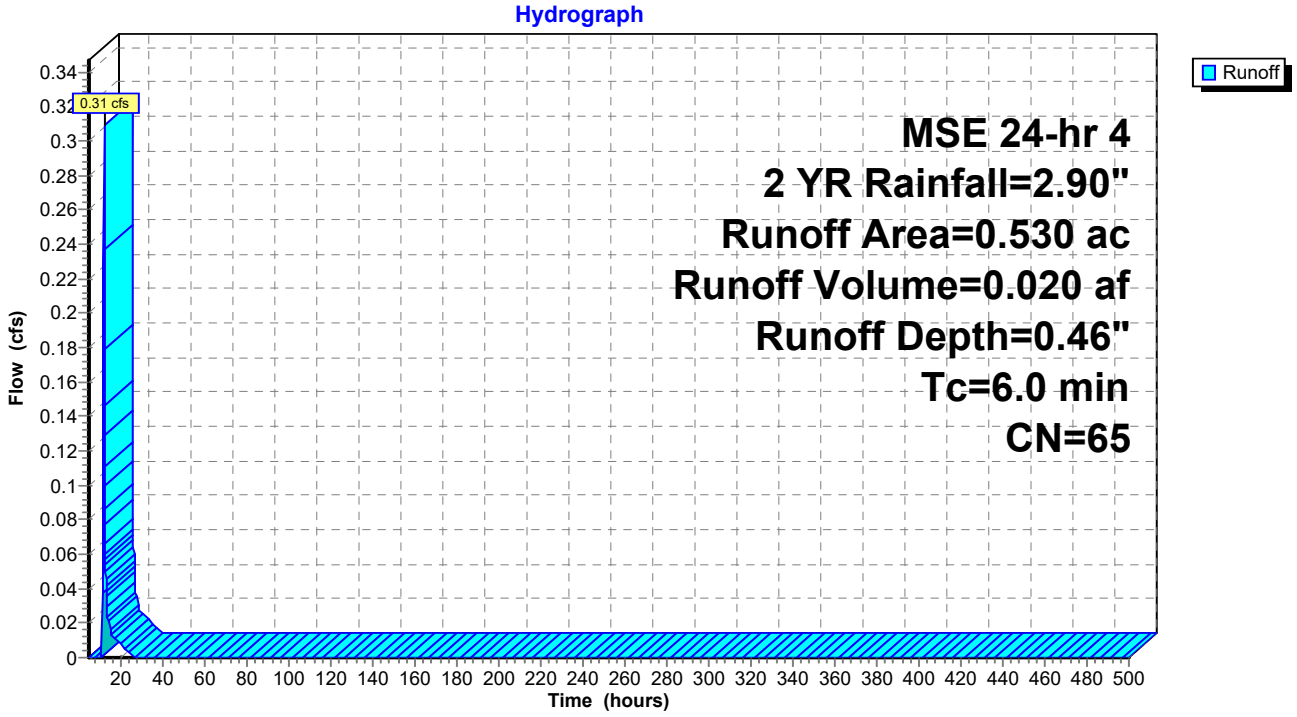
Runoff = 0.31 cfs @ 12.15 hrs, Volume= 0.020 af, Depth= 0.46"
Routed to Link 2L : Total Post - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 2 YR Rainfall=2.90"

	Area (ac)	CN	Description
*	0.060	98	Impervious
*	0.470	61	Post - B Soils
*	0.000	74	Post - C Soils
	0.530	65	Weighted Average
	0.470		88.68% Pervious Area
	0.060		11.32% Impervious Area

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

Subcatchment 2A: Post 2A - Offsite



Hydrograph for Subcatchment 2A: Post 2A - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.13	0.00	0.00
10.00	0.46	0.00	**0.00**
15.00	2.55	0.32	**0.02**
20.00	**2.81**	**0.42**	0.01
25.00	**2.90**	**0.46**	0.00
30.00	2.90	0.46	0.00
35.00	2.90	0.46	0.00
40.00	2.90	0.46	0.00
45.00	2.90	0.46	0.00
50.00	2.90	0.46	0.00
55.00	2.90	0.46	0.00
60.00	2.90	0.46	0.00
65.00	2.90	0.46	0.00
70.00	2.90	0.46	0.00
75.00	2.90	0.46	0.00
80.00	2.90	0.46	0.00
85.00	2.90	0.46	0.00
90.00	2.90	0.46	0.00
95.00	2.90	0.46	0.00
100.00	2.90	0.46	0.00
105.00	2.90	0.46	0.00
110.00	2.90	0.46	0.00
115.00	2.90	0.46	0.00
120.00	2.90	0.46	0.00
125.00	2.90	0.46	0.00
130.00	2.90	0.46	0.00
135.00	2.90	0.46	0.00
140.00	2.90	0.46	0.00
145.00	2.90	0.46	0.00
150.00	2.90	0.46	0.00
155.00	2.90	0.46	0.00
160.00	2.90	0.46	0.00
165.00	2.90	0.46	0.00
170.00	2.90	0.46	0.00
175.00	2.90	0.46	0.00
180.00	2.90	0.46	0.00
185.00	2.90	0.46	0.00
190.00	2.90	0.46	0.00
195.00	2.90	0.46	0.00
200.00	2.90	0.46	0.00
205.00	2.90	0.46	0.00
210.00	2.90	0.46	0.00
215.00	2.90	0.46	0.00
220.00	2.90	0.46	0.00
225.00	2.90	0.46	0.00
230.00	2.90	0.46	0.00
235.00	2.90	0.46	0.00
240.00	2.90	0.46	0.00
245.00	2.90	0.46	0.00
250.00	2.90	0.46	0.00
255.00	2.90	0.46	0.00
260.00	2.90	0.46	0.00
265.00	2.90	0.46	0.00
270.00	2.90	0.46	0.00
275.00	2.90	0.46	0.00
280.00	2.90	0.46	0.00
285.00	2.90	0.46	0.00
290.00	2.90	0.46	0.00
295.00	2.90	0.46	0.00
300.00	2.90	0.46	0.00
305.00	2.90	0.46	0.00
310.00	2.90	0.46	0.00
315.00	2.90	0.46	0.00
320.00	2.90	0.46	0.00
325.00	2.90	0.46	0.00
330.00	2.90	0.46	0.00
335.00	2.90	0.46	0.00
340.00	2.90	0.46	0.00
345.00	2.90	0.46	0.00
350.00	2.90	0.46	0.00
355.00	2.90	0.46	0.00
360.00	2.90	0.46	0.00
365.00	2.90	0.46	0.00
370.00	2.90	0.46	0.00
375.00	2.90	0.46	0.00
380.00	2.90	0.46	0.00
385.00	2.90	0.46	0.00
390.00	2.90	0.46	0.00
395.00	2.90	0.46	0.00
400.00	2.90	0.46	0.00
405.00	2.90	0.46	0.00
410.00	2.90	0.46	0.00
415.00	2.90	0.46	0.00
420.00	2.90	0.46	0.00
425.00	2.90	0.46	0.00
430.00	2.90	0.46	0.00
435.00	2.90	0.46	0.00
440.00	2.90	0.46	0.00
445.00	2.90	0.46	0.00
450.00	2.90	0.46	0.00
455.00	2.90	0.46	0.00
460.00	2.90	0.46	0.00
465.00	2.90	0.46	0.00
470.00	2.90	0.46	0.00
475.00	2.90	0.46	0.00
480.00	2.90	0.46	0.00
485.00	2.90	0.46	0.00
490.00	2.90	0.46	0.00
495.00	2.90	0.46	0.00
500.00	2.90	0.46	0.00

Summary for Subcatchment 3: Pre - North

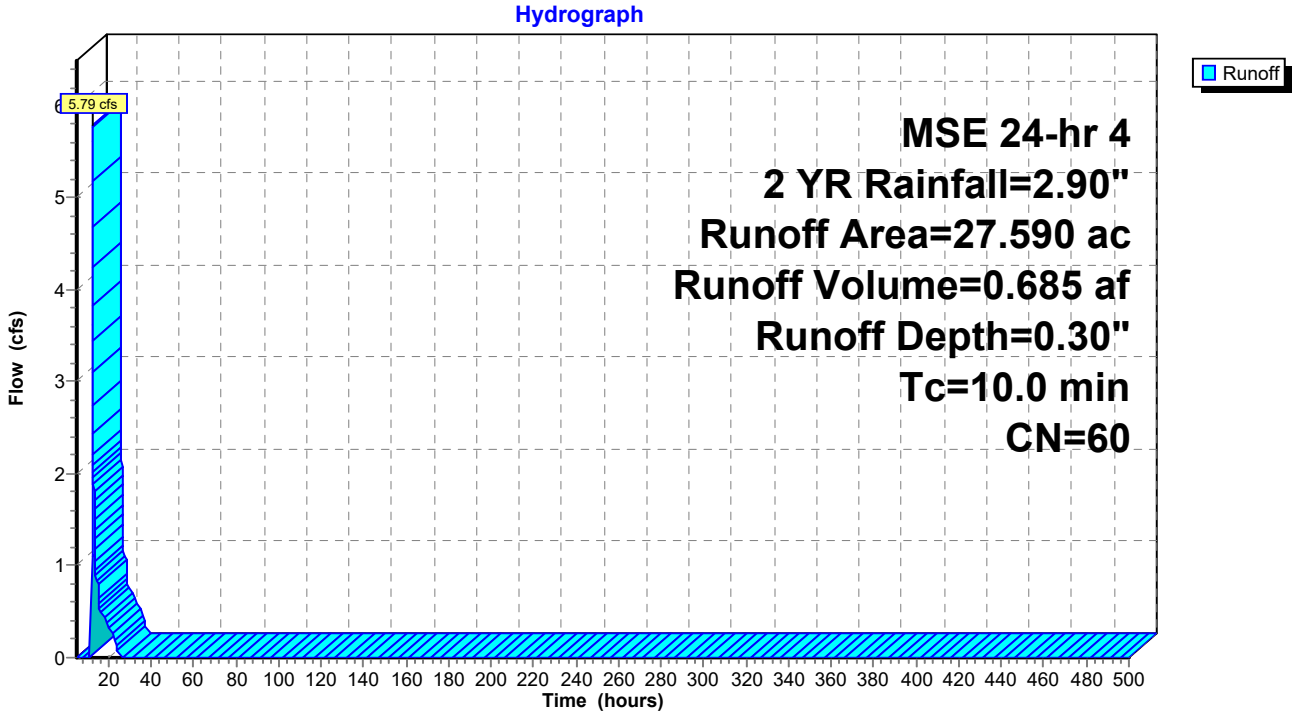
Runoff = 5.79 cfs @ 12.24 hrs, Volume= 0.685 af, Depth= 0.30"
Routed to Link 1L : Total Pre - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 2 YR Rainfall=2.90"

	Area (ac)	CN	Description
*	18.190	55	Pre Dev - B Soils
*	9.400	70	Pre Dev - C Soils
	27.590	60	Weighted Average
	27.590		100.00% Pervious Area

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

Subcatchment 3: Pre - North



Hydrograph for Subcatchment 3: Pre - North

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.13	0.00	0.00
10.00	0.46	0.00	**0.00**
15.00	2.55	0.19	**0.81**
20.00	**2.81**	**0.27**	0.34
25.00	**2.90**	**0.30**	0.00
30.00	2.90	0.30	0.00
35.00	2.90	0.30	0.00
40.00	2.90	0.30	0.00
45.00	2.90	0.30	0.00
50.00	2.90	0.30	0.00
55.00	2.90	0.30	0.00
60.00	2.90	0.30	0.00
65.00	2.90	0.30	0.00
70.00	2.90	0.30	0.00
75.00	2.90	0.30	0.00
80.00	2.90	0.30	0.00
85.00	2.90	0.30	0.00
90.00	2.90	0.30	0.00
95.00	2.90	0.30	0.00
100.00	2.90	0.30	0.00
105.00	2.90	0.30	0.00
110.00	2.90	0.30	0.00
115.00	2.90	0.30	0.00
120.00	2.90	0.30	0.00
125.00	2.90	0.30	0.00
130.00	2.90	0.30	0.00
135.00	2.90	0.30	0.00
140.00	2.90	0.30	0.00
145.00	2.90	0.30	0.00
150.00	2.90	0.30	0.00
155.00	2.90	0.30	0.00
160.00	2.90	0.30	0.00
165.00	2.90	0.30	0.00
170.00	2.90	0.30	0.00
175.00	2.90	0.30	0.00
180.00	2.90	0.30	0.00
185.00	2.90	0.30	0.00
190.00	2.90	0.30	0.00
195.00	2.90	0.30	0.00
200.00	2.90	0.30	0.00
205.00	2.90	0.30	0.00
210.00	2.90	0.30	0.00
215.00	2.90	0.30	0.00
220.00	2.90	0.30	0.00
225.00	2.90	0.30	0.00
230.00	2.90	0.30	0.00
235.00	2.90	0.30	0.00
240.00	2.90	0.30	0.00
245.00	2.90	0.30	0.00
250.00	2.90	0.30	0.00
255.00	2.90	0.30	0.00
260.00	2.90	0.30	0.00
265.00	2.90	0.30	0.00
270.00	2.90	0.30	0.00
275.00	2.90	0.30	0.00
280.00	2.90	0.30	0.00
285.00	2.90	0.30	0.00
290.00	2.90	0.30	0.00
295.00	2.90	0.30	0.00
300.00	2.90	0.30	0.00
305.00	2.90	0.30	0.00
310.00	2.90	0.30	0.00
315.00	2.90	0.30	0.00
320.00	2.90	0.30	0.00
325.00	2.90	0.30	0.00
330.00	2.90	0.30	0.00
335.00	2.90	0.30	0.00
340.00	2.90	0.30	0.00
345.00	2.90	0.30	0.00
350.00	2.90	0.30	0.00
355.00	2.90	0.30	0.00
360.00	2.90	0.30	0.00
365.00	2.90	0.30	0.00
370.00	2.90	0.30	0.00
375.00	2.90	0.30	0.00
380.00	2.90	0.30	0.00
385.00	2.90	0.30	0.00
390.00	2.90	0.30	0.00
395.00	2.90	0.30	0.00
400.00	2.90	0.30	0.00
405.00	2.90	0.30	0.00
410.00	2.90	0.30	0.00
415.00	2.90	0.30	0.00
420.00	2.90	0.30	0.00
425.00	2.90	0.30	0.00
430.00	2.90	0.30	0.00
435.00	2.90	0.30	0.00
440.00	2.90	0.30	0.00
445.00	2.90	0.30	0.00
450.00	2.90	0.30	0.00
455.00	2.90	0.30	0.00
460.00	2.90	0.30	0.00
465.00	2.90	0.30	0.00
470.00	2.90	0.30	0.00
475.00	2.90	0.30	0.00
480.00	2.90	0.30	0.00
485.00	2.90	0.30	0.00
490.00	2.90	0.30	0.00
495.00	2.90	0.30	0.00
500.00	2.90	0.30	0.00

Summary for Subcatchment 3A: Post 3A

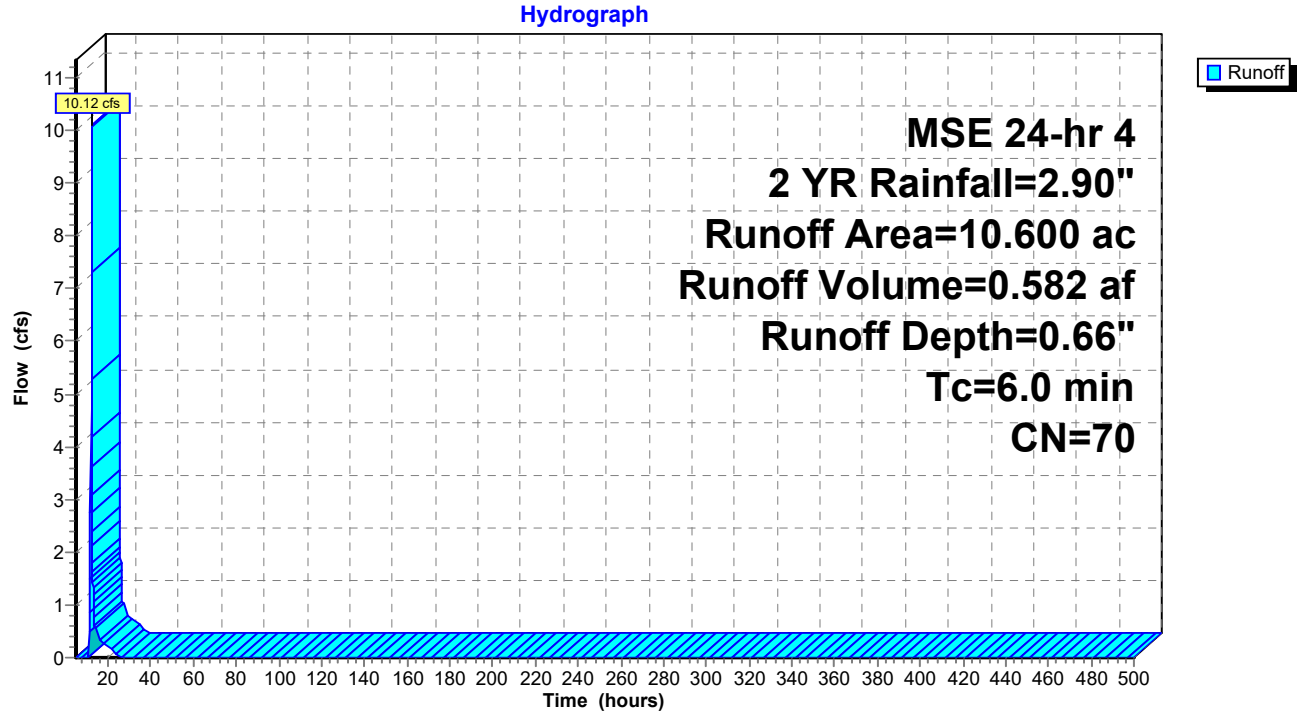
Runoff = 10.12 cfs @ 12.14 hrs, Volume= 0.582 af, Depth= 0.66"
Routed to Pond P3A : Pond 3A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 2 YR Rainfall=2.90"

	Area (ac)	CN	Description
*	1.970	98	Impervious
*	6.570	61	Post - B Soils
*	2.060	74	Post - C Soils
	10.600	70	Weighted Average
	8.630		81.42% Pervious Area
	1.970		18.58% Impervious Area

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

Subcatchment 3A: Post 3A



Hydrograph for Subcatchment 3A: Post 3A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.13	0.00	0.00
10.00	0.46	0.00	**0.00**
15.00	2.55	0.48	**0.53**
20.00	**2.81**	**0.61**	0.21
25.00	**2.90**	**0.66**	0.00
30.00	2.90	0.66	0.00
35.00	2.90	0.66	0.00
40.00	2.90	0.66	0.00
45.00	2.90	0.66	0.00
50.00	2.90	0.66	0.00
55.00	2.90	0.66	0.00
60.00	2.90	0.66	0.00
65.00	2.90	0.66	0.00
70.00	2.90	0.66	0.00
75.00	2.90	0.66	0.00
80.00	2.90	0.66	0.00
85.00	2.90	0.66	0.00
90.00	2.90	0.66	0.00
95.00	2.90	0.66	0.00
100.00	2.90	0.66	0.00
105.00	2.90	0.66	0.00
110.00	2.90	0.66	0.00
115.00	2.90	0.66	0.00
120.00	2.90	0.66	0.00
125.00	2.90	0.66	0.00
130.00	2.90	0.66	0.00
135.00	2.90	0.66	0.00
140.00	2.90	0.66	0.00
145.00	2.90	0.66	0.00
150.00	2.90	0.66	0.00
155.00	2.90	0.66	0.00
160.00	2.90	0.66	0.00
165.00	2.90	0.66	0.00
170.00	2.90	0.66	0.00
175.00	2.90	0.66	0.00
180.00	2.90	0.66	0.00
185.00	2.90	0.66	0.00
190.00	2.90	0.66	0.00
195.00	2.90	0.66	0.00
200.00	2.90	0.66	0.00
205.00	2.90	0.66	0.00
210.00	2.90	0.66	0.00
215.00	2.90	0.66	0.00
220.00	2.90	0.66	0.00
225.00	2.90	0.66	0.00
230.00	2.90	0.66	0.00
235.00	2.90	0.66	0.00
240.00	2.90	0.66	0.00
245.00	2.90	0.66	0.00
250.00	2.90	0.66	0.00
255.00	2.90	0.66	0.00
260.00	2.90	0.66	0.00
265.00	2.90	0.66	0.00
270.00	2.90	0.66	0.00
275.00	2.90	0.66	0.00
280.00	2.90	0.66	0.00
285.00	2.90	0.66	0.00
290.00	2.90	0.66	0.00
295.00	2.90	0.66	0.00
300.00	2.90	0.66	0.00
305.00	2.90	0.66	0.00
310.00	2.90	0.66	0.00
315.00	2.90	0.66	0.00
320.00	2.90	0.66	0.00
325.00	2.90	0.66	0.00
330.00	2.90	0.66	0.00
335.00	2.90	0.66	0.00
340.00	2.90	0.66	0.00
345.00	2.90	0.66	0.00
350.00	2.90	0.66	0.00
355.00	2.90	0.66	0.00
360.00	2.90	0.66	0.00
365.00	2.90	0.66	0.00
370.00	2.90	0.66	0.00
375.00	2.90	0.66	0.00
380.00	2.90	0.66	0.00
385.00	2.90	0.66	0.00
390.00	2.90	0.66	0.00
395.00	2.90	0.66	0.00
400.00	2.90	0.66	0.00
405.00	2.90	0.66	0.00
410.00	2.90	0.66	0.00
415.00	2.90	0.66	0.00
420.00	2.90	0.66	0.00
425.00	2.90	0.66	0.00
430.00	2.90	0.66	0.00
435.00	2.90	0.66	0.00
440.00	2.90	0.66	0.00
445.00	2.90	0.66	0.00
450.00	2.90	0.66	0.00
455.00	2.90	0.66	0.00
460.00	2.90	0.66	0.00
465.00	2.90	0.66	0.00
470.00	2.90	0.66	0.00
475.00	2.90	0.66	0.00
480.00	2.90	0.66	0.00
485.00	2.90	0.66	0.00
490.00	2.90	0.66	0.00
495.00	2.90	0.66	0.00
500.00	2.90	0.66	0.00

Summary for Subcatchment 3B: Post 3B

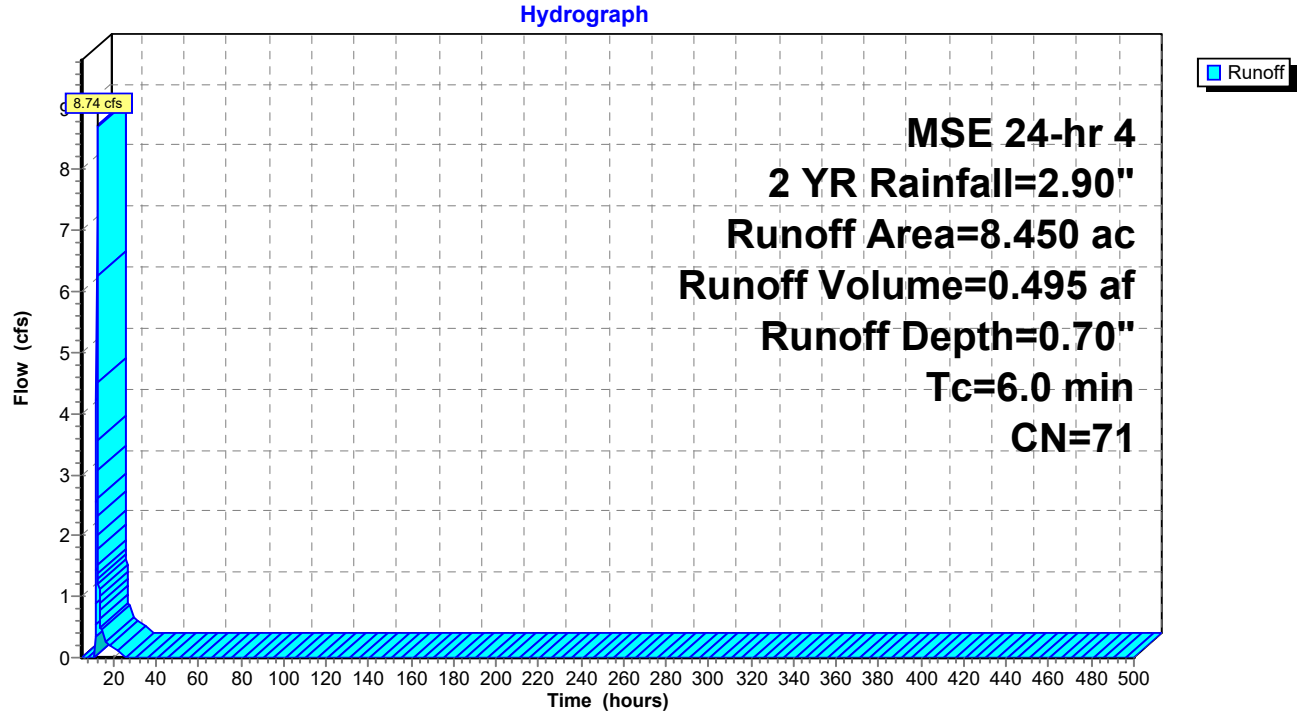
Runoff = 8.74 cfs @ 12.14 hrs, Volume= 0.495 af, Depth= 0.70"
Routed to Pond P3B : Pond 3B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 2 YR Rainfall=2.90"

	Area (ac)	CN	Description
*	1.680	98	Impervious
*	5.290	61	Post - B Soils
*	1.480	74	Post - C Soils
	8.450	71	Weighted Average
	6.770		80.12% Pervious Area
	1.680		19.88% Impervious Area

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

Subcatchment 3B: Post 3B



Hydrograph for Subcatchment 3B: Post 3B

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.13	0.00	0.00	260.00	2.90	0.70	0.00
10.00	0.46	0.00	**0.00**	265.00	2.90	0.70	0.00
15.00	2.55	0.52	**0.44**	270.00	2.90	0.70	0.00
20.00	**2.81**	**0.65**	0.17	275.00	2.90	0.70	0.00
25.00	**2.90**	**0.70**	0.00	280.00	2.90	0.70	0.00
30.00	2.90	0.70	0.00	285.00	2.90	0.70	0.00
35.00	2.90	0.70	0.00	290.00	2.90	0.70	0.00
40.00	2.90	0.70	0.00	295.00	2.90	0.70	0.00
45.00	2.90	0.70	0.00	300.00	2.90	0.70	0.00
50.00	2.90	0.70	0.00	305.00	2.90	0.70	0.00
55.00	2.90	0.70	0.00	310.00	2.90	0.70	0.00
60.00	2.90	0.70	0.00	315.00	2.90	0.70	0.00
65.00	2.90	0.70	0.00	320.00	2.90	0.70	0.00
70.00	2.90	0.70	0.00	325.00	2.90	0.70	0.00
75.00	2.90	0.70	0.00	330.00	2.90	0.70	0.00
80.00	2.90	0.70	0.00	335.00	2.90	0.70	0.00
85.00	2.90	0.70	0.00	340.00	2.90	0.70	0.00
90.00	2.90	0.70	0.00	345.00	2.90	0.70	0.00
95.00	2.90	0.70	0.00	350.00	2.90	0.70	0.00
100.00	2.90	0.70	0.00	355.00	2.90	0.70	0.00
105.00	2.90	0.70	0.00	360.00	2.90	0.70	0.00
110.00	2.90	0.70	0.00	365.00	2.90	0.70	0.00
115.00	2.90	0.70	0.00	370.00	2.90	0.70	0.00
120.00	2.90	0.70	0.00	375.00	2.90	0.70	0.00
125.00	2.90	0.70	0.00	380.00	2.90	0.70	0.00
130.00	2.90	0.70	0.00	385.00	2.90	0.70	0.00
135.00	2.90	0.70	0.00	390.00	2.90	0.70	0.00
140.00	2.90	0.70	0.00	395.00	2.90	0.70	0.00
145.00	2.90	0.70	0.00	400.00	2.90	0.70	0.00
150.00	2.90	0.70	0.00	405.00	2.90	0.70	0.00
155.00	2.90	0.70	0.00	410.00	2.90	0.70	0.00
160.00	2.90	0.70	0.00	415.00	2.90	0.70	0.00
165.00	2.90	0.70	0.00	420.00	2.90	0.70	0.00
170.00	2.90	0.70	0.00	425.00	2.90	0.70	0.00
175.00	2.90	0.70	0.00	430.00	2.90	0.70	0.00
180.00	2.90	0.70	0.00	435.00	2.90	0.70	0.00
185.00	2.90	0.70	0.00	440.00	2.90	0.70	0.00
190.00	2.90	0.70	0.00	445.00	2.90	0.70	0.00
195.00	2.90	0.70	0.00	450.00	2.90	0.70	0.00
200.00	2.90	0.70	0.00	455.00	2.90	0.70	0.00
205.00	2.90	0.70	0.00	460.00	2.90	0.70	0.00
210.00	2.90	0.70	0.00	465.00	2.90	0.70	0.00
215.00	2.90	0.70	0.00	470.00	2.90	0.70	0.00
220.00	2.90	0.70	0.00	475.00	2.90	0.70	0.00
225.00	2.90	0.70	0.00	480.00	2.90	0.70	0.00
230.00	2.90	0.70	0.00	485.00	2.90	0.70	0.00
235.00	2.90	0.70	0.00	490.00	2.90	0.70	0.00
240.00	2.90	0.70	0.00	495.00	2.90	0.70	0.00
245.00	2.90	0.70	0.00	500.00	2.90	0.70	0.00
250.00	2.90	0.70	0.00				
255.00	2.90	0.70	0.00				

Summary for Subcatchment 3C: Post 3C

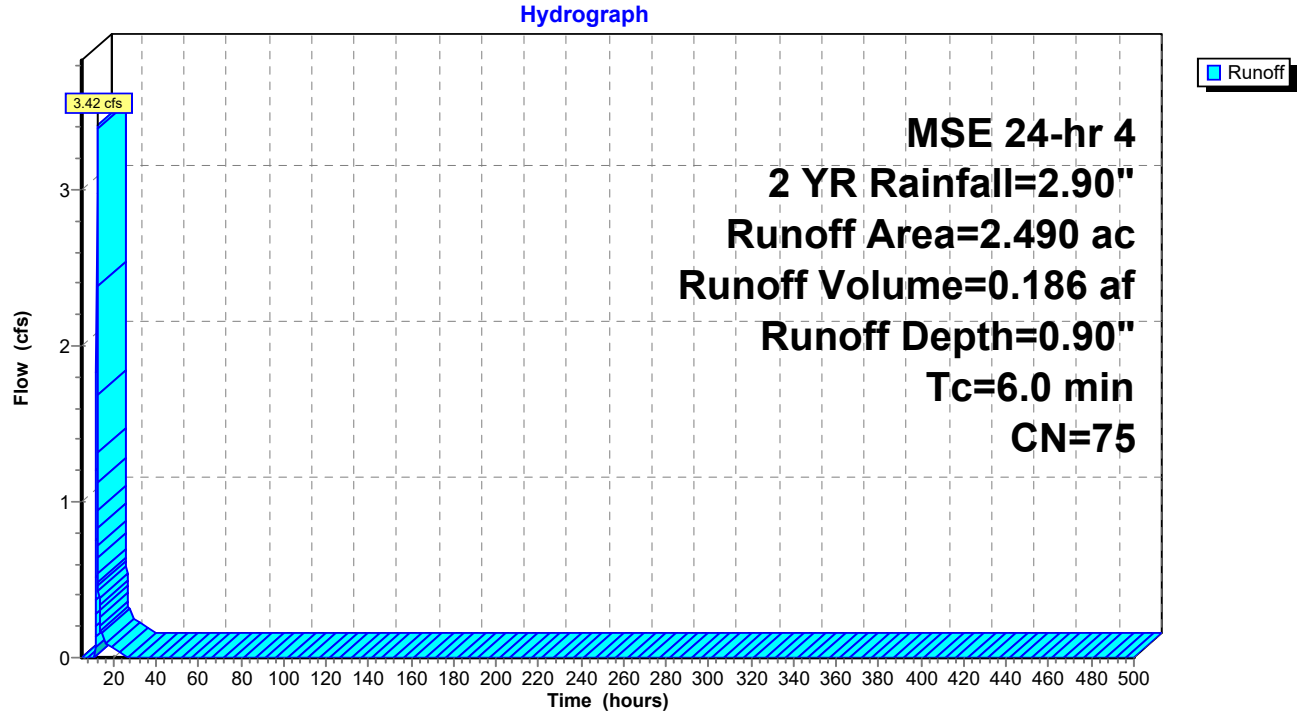
Runoff = 3.42 cfs @ 12.14 hrs, Volume= 0.186 af, Depth= 0.90"
Routed to Pond P3C : Pond 3C

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 2 YR Rainfall=2.90"

	Area (ac)	CN	Description
*	0.570	98	Impervious
*	0.800	61	Post - B Soils
*	1.120	74	Post - C Soils
	2.490	75	Weighted Average
	1.920		77.11% Pervious Area
	0.570		22.89% Impervious Area

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

Subcatchment 3C: Post 3C



Hydrograph for Subcatchment 3C: Post 3C

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.13	0.00	0.00	260.00	2.90	0.90	0.00
10.00	0.46	0.00	**0.00**	265.00	2.90	0.90	0.00
15.00	2.55	0.68	**0.15**	270.00	2.90	0.90	0.00
20.00	**2.81**	**0.84**	0.06	275.00	2.90	0.90	0.00
25.00	**2.90**	**0.90**	0.00	280.00	2.90	0.90	0.00
30.00	2.90	0.90	0.00	285.00	2.90	0.90	0.00
35.00	2.90	0.90	0.00	290.00	2.90	0.90	0.00
40.00	2.90	0.90	0.00	295.00	2.90	0.90	0.00
45.00	2.90	0.90	0.00	300.00	2.90	0.90	0.00
50.00	2.90	0.90	0.00	305.00	2.90	0.90	0.00
55.00	2.90	0.90	0.00	310.00	2.90	0.90	0.00
60.00	2.90	0.90	0.00	315.00	2.90	0.90	0.00
65.00	2.90	0.90	0.00	320.00	2.90	0.90	0.00
70.00	2.90	0.90	0.00	325.00	2.90	0.90	0.00
75.00	2.90	0.90	0.00	330.00	2.90	0.90	0.00
80.00	2.90	0.90	0.00	335.00	2.90	0.90	0.00
85.00	2.90	0.90	0.00	340.00	2.90	0.90	0.00
90.00	2.90	0.90	0.00	345.00	2.90	0.90	0.00
95.00	2.90	0.90	0.00	350.00	2.90	0.90	0.00
100.00	2.90	0.90	0.00	355.00	2.90	0.90	0.00
105.00	2.90	0.90	0.00	360.00	2.90	0.90	0.00
110.00	2.90	0.90	0.00	365.00	2.90	0.90	0.00
115.00	2.90	0.90	0.00	370.00	2.90	0.90	0.00
120.00	2.90	0.90	0.00	375.00	2.90	0.90	0.00
125.00	2.90	0.90	0.00	380.00	2.90	0.90	0.00
130.00	2.90	0.90	0.00	385.00	2.90	0.90	0.00
135.00	2.90	0.90	0.00	390.00	2.90	0.90	0.00
140.00	2.90	0.90	0.00	395.00	2.90	0.90	0.00
145.00	2.90	0.90	0.00	400.00	2.90	0.90	0.00
150.00	2.90	0.90	0.00	405.00	2.90	0.90	0.00
155.00	2.90	0.90	0.00	410.00	2.90	0.90	0.00
160.00	2.90	0.90	0.00	415.00	2.90	0.90	0.00
165.00	2.90	0.90	0.00	420.00	2.90	0.90	0.00
170.00	2.90	0.90	0.00	425.00	2.90	0.90	0.00
175.00	2.90	0.90	0.00	430.00	2.90	0.90	0.00
180.00	2.90	0.90	0.00	435.00	2.90	0.90	0.00
185.00	2.90	0.90	0.00	440.00	2.90	0.90	0.00
190.00	2.90	0.90	0.00	445.00	2.90	0.90	0.00
195.00	2.90	0.90	0.00	450.00	2.90	0.90	0.00
200.00	2.90	0.90	0.00	455.00	2.90	0.90	0.00
205.00	2.90	0.90	0.00	460.00	2.90	0.90	0.00
210.00	2.90	0.90	0.00	465.00	2.90	0.90	0.00
215.00	2.90	0.90	0.00	470.00	2.90	0.90	0.00
220.00	2.90	0.90	0.00	475.00	2.90	0.90	0.00
225.00	2.90	0.90	0.00	480.00	2.90	0.90	0.00
230.00	2.90	0.90	0.00	485.00	2.90	0.90	0.00
235.00	2.90	0.90	0.00	490.00	2.90	0.90	0.00
240.00	2.90	0.90	0.00	495.00	2.90	0.90	0.00
245.00	2.90	0.90	0.00	500.00	2.90	0.90	0.00
250.00	2.90	0.90	0.00				
255.00	2.90	0.90	0.00				

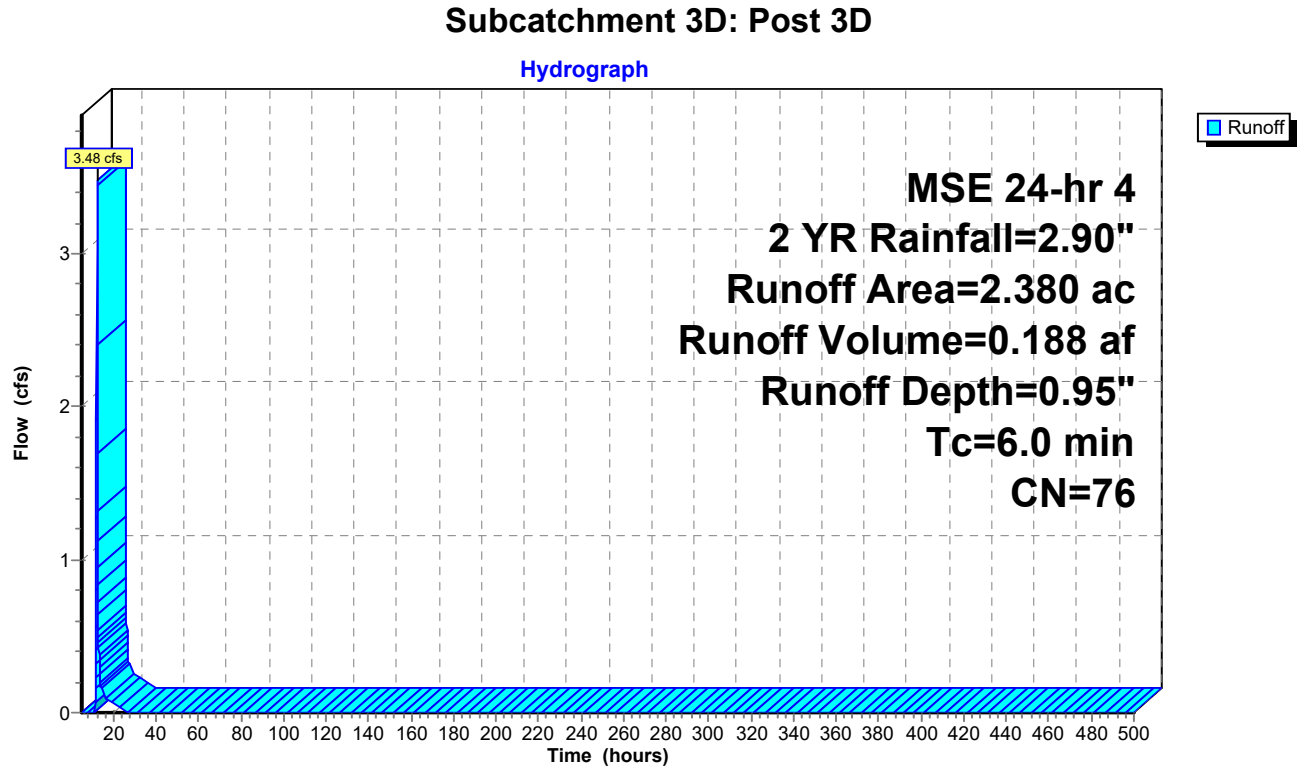
Summary for Subcatchment 3D: Post 3D

Runoff = 3.48 cfs @ 12.14 hrs, Volume= 0.188 af, Depth= 0.95"
Routed to Pond P3D : Pond 3D

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 2 YR Rainfall=2.90"

	Area (ac)	CN	Description
*	0.570	98	Impervious
*	0.610	61	Post - B Soils
*	1.200	74	Post - C Soils
	2.380	76	Weighted Average
	1.810		76.05% Pervious Area
	0.570		23.95% Impervious Area

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



Hydrograph for Subcatchment 3D: Post 3D

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.13	0.00	0.00	260.00	2.90	0.95	0.00
10.00	0.46	0.00	**0.00**	265.00	2.90	0.95	0.00
15.00	2.55	0.72	**0.15**	270.00	2.90	0.95	0.00
20.00	**2.81**	**0.89**	0.06	275.00	2.90	0.95	0.00
25.00	**2.90**	**0.95**	0.00	280.00	2.90	0.95	0.00
30.00	2.90	0.95	0.00	285.00	2.90	0.95	0.00
35.00	2.90	0.95	0.00	290.00	2.90	0.95	0.00
40.00	2.90	0.95	0.00	295.00	2.90	0.95	0.00
45.00	2.90	0.95	0.00	300.00	2.90	0.95	0.00
50.00	2.90	0.95	0.00	305.00	2.90	0.95	0.00
55.00	2.90	0.95	0.00	310.00	2.90	0.95	0.00
60.00	2.90	0.95	0.00	315.00	2.90	0.95	0.00
65.00	2.90	0.95	0.00	320.00	2.90	0.95	0.00
70.00	2.90	0.95	0.00	325.00	2.90	0.95	0.00
75.00	2.90	0.95	0.00	330.00	2.90	0.95	0.00
80.00	2.90	0.95	0.00	335.00	2.90	0.95	0.00
85.00	2.90	0.95	0.00	340.00	2.90	0.95	0.00
90.00	2.90	0.95	0.00	345.00	2.90	0.95	0.00
95.00	2.90	0.95	0.00	350.00	2.90	0.95	0.00
100.00	2.90	0.95	0.00	355.00	2.90	0.95	0.00
105.00	2.90	0.95	0.00	360.00	2.90	0.95	0.00
110.00	2.90	0.95	0.00	365.00	2.90	0.95	0.00
115.00	2.90	0.95	0.00	370.00	2.90	0.95	0.00
120.00	2.90	0.95	0.00	375.00	2.90	0.95	0.00
125.00	2.90	0.95	0.00	380.00	2.90	0.95	0.00
130.00	2.90	0.95	0.00	385.00	2.90	0.95	0.00
135.00	2.90	0.95	0.00	390.00	2.90	0.95	0.00
140.00	2.90	0.95	0.00	395.00	2.90	0.95	0.00
145.00	2.90	0.95	0.00	400.00	2.90	0.95	0.00
150.00	2.90	0.95	0.00	405.00	2.90	0.95	0.00
155.00	2.90	0.95	0.00	410.00	2.90	0.95	0.00
160.00	2.90	0.95	0.00	415.00	2.90	0.95	0.00
165.00	2.90	0.95	0.00	420.00	2.90	0.95	0.00
170.00	2.90	0.95	0.00	425.00	2.90	0.95	0.00
175.00	2.90	0.95	0.00	430.00	2.90	0.95	0.00
180.00	2.90	0.95	0.00	435.00	2.90	0.95	0.00
185.00	2.90	0.95	0.00	440.00	2.90	0.95	0.00
190.00	2.90	0.95	0.00	445.00	2.90	0.95	0.00
195.00	2.90	0.95	0.00	450.00	2.90	0.95	0.00
200.00	2.90	0.95	0.00	455.00	2.90	0.95	0.00
205.00	2.90	0.95	0.00	460.00	2.90	0.95	0.00
210.00	2.90	0.95	0.00	465.00	2.90	0.95	0.00
215.00	2.90	0.95	0.00	470.00	2.90	0.95	0.00
220.00	2.90	0.95	0.00	475.00	2.90	0.95	0.00
225.00	2.90	0.95	0.00	480.00	2.90	0.95	0.00
230.00	2.90	0.95	0.00	485.00	2.90	0.95	0.00
235.00	2.90	0.95	0.00	490.00	2.90	0.95	0.00
240.00	2.90	0.95	0.00	495.00	2.90	0.95	0.00
245.00	2.90	0.95	0.00	500.00	2.90	0.95	0.00
250.00	2.90	0.95	0.00				
255.00	2.90	0.95	0.00				

Summary for Subcatchment 3E: Post 3E

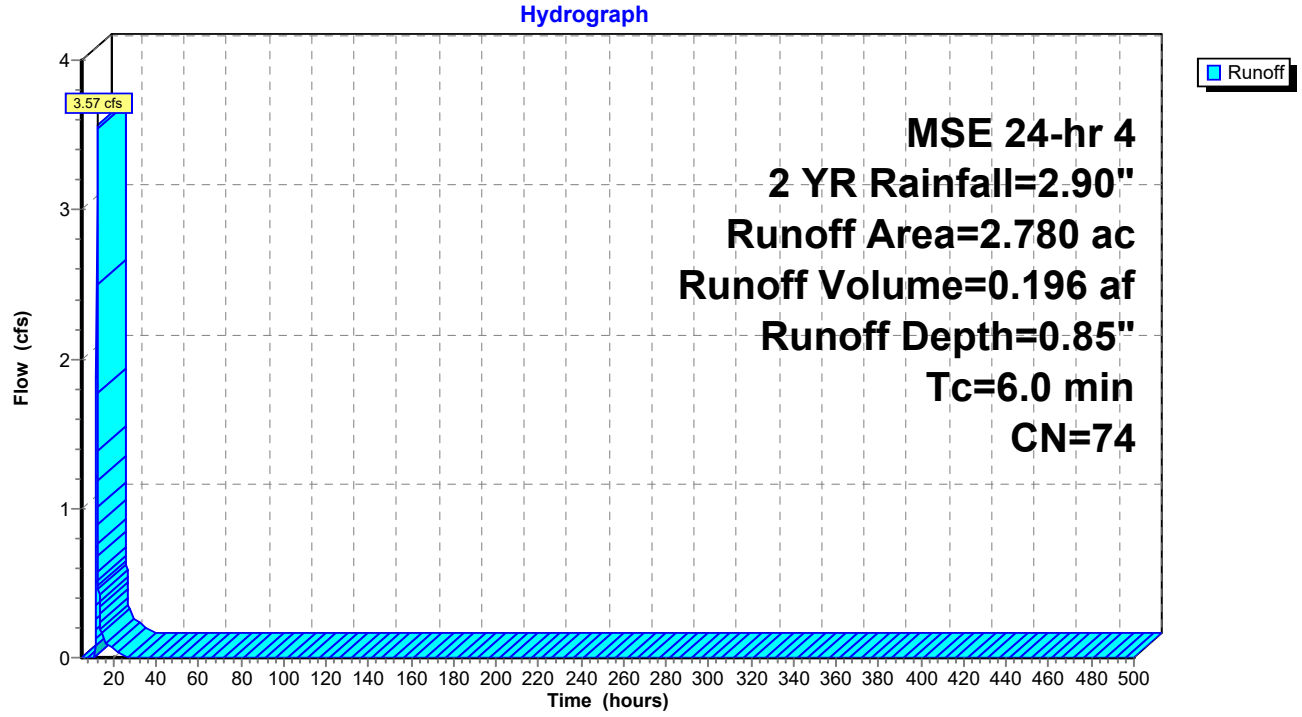
Runoff = 3.57 cfs @ 12.14 hrs, Volume= 0.196 af, Depth= 0.85"
Routed to Pond P3E : Pond 3E

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 2 YR Rainfall=2.90"

	Area (ac)	CN	Description
*	0.530	98	Impervious
*	0.920	61	Post - B Soils
*	1.330	74	Post - C Soils
	2.780	74	Weighted Average
	2.250		80.94% Pervious Area
	0.530		19.06% Impervious Area

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

Subcatchment 3E: Post 3E



Hydrograph for Subcatchment 3E: Post 3E

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.13	0.00	0.00	260.00	2.90	0.85	0.00
10.00	0.46	0.00	**0.00**	265.00	2.90	0.85	0.00
15.00	2.55	0.64	**0.16**	270.00	2.90	0.85	0.00
20.00	**2.81**	**0.79**	0.06	275.00	2.90	0.85	0.00
25.00	**2.90**	**0.85**	0.00	280.00	2.90	0.85	0.00
30.00	2.90	0.85	0.00	285.00	2.90	0.85	0.00
35.00	2.90	0.85	0.00	290.00	2.90	0.85	0.00
40.00	2.90	0.85	0.00	295.00	2.90	0.85	0.00
45.00	2.90	0.85	0.00	300.00	2.90	0.85	0.00
50.00	2.90	0.85	0.00	305.00	2.90	0.85	0.00
55.00	2.90	0.85	0.00	310.00	2.90	0.85	0.00
60.00	2.90	0.85	0.00	315.00	2.90	0.85	0.00
65.00	2.90	0.85	0.00	320.00	2.90	0.85	0.00
70.00	2.90	0.85	0.00	325.00	2.90	0.85	0.00
75.00	2.90	0.85	0.00	330.00	2.90	0.85	0.00
80.00	2.90	0.85	0.00	335.00	2.90	0.85	0.00
85.00	2.90	0.85	0.00	340.00	2.90	0.85	0.00
90.00	2.90	0.85	0.00	345.00	2.90	0.85	0.00
95.00	2.90	0.85	0.00	350.00	2.90	0.85	0.00
100.00	2.90	0.85	0.00	355.00	2.90	0.85	0.00
105.00	2.90	0.85	0.00	360.00	2.90	0.85	0.00
110.00	2.90	0.85	0.00	365.00	2.90	0.85	0.00
115.00	2.90	0.85	0.00	370.00	2.90	0.85	0.00
120.00	2.90	0.85	0.00	375.00	2.90	0.85	0.00
125.00	2.90	0.85	0.00	380.00	2.90	0.85	0.00
130.00	2.90	0.85	0.00	385.00	2.90	0.85	0.00
135.00	2.90	0.85	0.00	390.00	2.90	0.85	0.00
140.00	2.90	0.85	0.00	395.00	2.90	0.85	0.00
145.00	2.90	0.85	0.00	400.00	2.90	0.85	0.00
150.00	2.90	0.85	0.00	405.00	2.90	0.85	0.00
155.00	2.90	0.85	0.00	410.00	2.90	0.85	0.00
160.00	2.90	0.85	0.00	415.00	2.90	0.85	0.00
165.00	2.90	0.85	0.00	420.00	2.90	0.85	0.00
170.00	2.90	0.85	0.00	425.00	2.90	0.85	0.00
175.00	2.90	0.85	0.00	430.00	2.90	0.85	0.00
180.00	2.90	0.85	0.00	435.00	2.90	0.85	0.00
185.00	2.90	0.85	0.00	440.00	2.90	0.85	0.00
190.00	2.90	0.85	0.00	445.00	2.90	0.85	0.00
195.00	2.90	0.85	0.00	450.00	2.90	0.85	0.00
200.00	2.90	0.85	0.00	455.00	2.90	0.85	0.00
205.00	2.90	0.85	0.00	460.00	2.90	0.85	0.00
210.00	2.90	0.85	0.00	465.00	2.90	0.85	0.00
215.00	2.90	0.85	0.00	470.00	2.90	0.85	0.00
220.00	2.90	0.85	0.00	475.00	2.90	0.85	0.00
225.00	2.90	0.85	0.00	480.00	2.90	0.85	0.00
230.00	2.90	0.85	0.00	485.00	2.90	0.85	0.00
235.00	2.90	0.85	0.00	490.00	2.90	0.85	0.00
240.00	2.90	0.85	0.00	495.00	2.90	0.85	0.00
245.00	2.90	0.85	0.00	500.00	2.90	0.85	0.00
250.00	2.90	0.85	0.00				
255.00	2.90	0.85	0.00				

Summary for Subcatchment 3Y: Post 3Y - Offsite

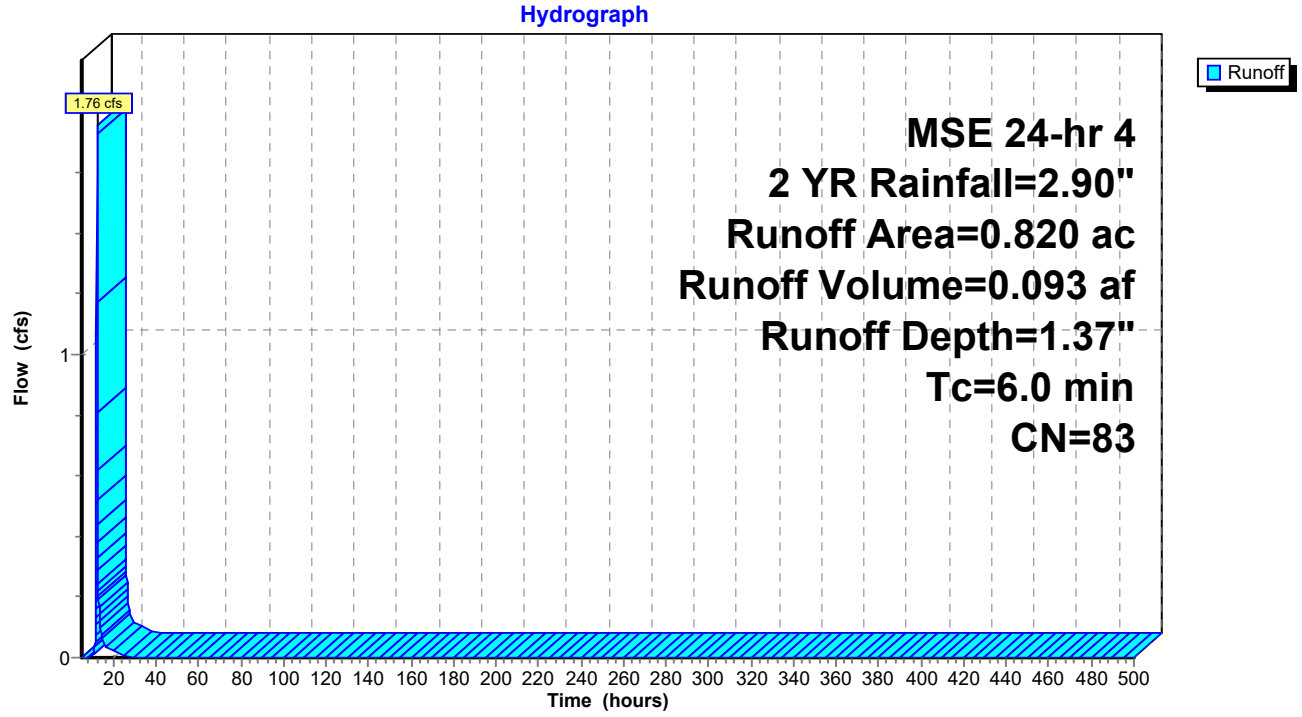
Runoff = 1.76 cfs @ 12.13 hrs, Volume= 0.093 af, Depth= 1.37"
Routed to Link 4L : Post - North

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 2 YR Rainfall=2.90"

	Area (ac)	CN	Description
*	0.300	98	Impervious
*	0.000	61	Post - B Soils
*	0.520	74	Post - C Soils
	0.820	83	Weighted Average
	0.520		63.41% Pervious Area
	0.300		36.59% Impervious Area

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

Subcatchment 3Y: Post 3Y - Offsite



Hydrograph for Subcatchment 3Y: Post 3Y - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.13	0.00	0.00	260.00	2.90	1.37	0.00
10.00	0.46	0.00	**0.00**	265.00	2.90	1.37	0.00
15.00	2.55	1.09	**0.06**	270.00	2.90	1.37	0.00
20.00	**2.81**	**1.29**	0.02	275.00	2.90	1.37	0.00
25.00	**2.90**	**1.37**	0.00	280.00	2.90	1.37	0.00
30.00	2.90	1.37	0.00	285.00	2.90	1.37	0.00
35.00	2.90	1.37	0.00	290.00	2.90	1.37	0.00
40.00	2.90	1.37	0.00	295.00	2.90	1.37	0.00
45.00	2.90	1.37	0.00	300.00	2.90	1.37	0.00
50.00	2.90	1.37	0.00	305.00	2.90	1.37	0.00
55.00	2.90	1.37	0.00	310.00	2.90	1.37	0.00
60.00	2.90	1.37	0.00	315.00	2.90	1.37	0.00
65.00	2.90	1.37	0.00	320.00	2.90	1.37	0.00
70.00	2.90	1.37	0.00	325.00	2.90	1.37	0.00
75.00	2.90	1.37	0.00	330.00	2.90	1.37	0.00
80.00	2.90	1.37	0.00	335.00	2.90	1.37	0.00
85.00	2.90	1.37	0.00	340.00	2.90	1.37	0.00
90.00	2.90	1.37	0.00	345.00	2.90	1.37	0.00
95.00	2.90	1.37	0.00	350.00	2.90	1.37	0.00
100.00	2.90	1.37	0.00	355.00	2.90	1.37	0.00
105.00	2.90	1.37	0.00	360.00	2.90	1.37	0.00
110.00	2.90	1.37	0.00	365.00	2.90	1.37	0.00
115.00	2.90	1.37	0.00	370.00	2.90	1.37	0.00
120.00	2.90	1.37	0.00	375.00	2.90	1.37	0.00
125.00	2.90	1.37	0.00	380.00	2.90	1.37	0.00
130.00	2.90	1.37	0.00	385.00	2.90	1.37	0.00
135.00	2.90	1.37	0.00	390.00	2.90	1.37	0.00
140.00	2.90	1.37	0.00	395.00	2.90	1.37	0.00
145.00	2.90	1.37	0.00	400.00	2.90	1.37	0.00
150.00	2.90	1.37	0.00	405.00	2.90	1.37	0.00
155.00	2.90	1.37	0.00	410.00	2.90	1.37	0.00
160.00	2.90	1.37	0.00	415.00	2.90	1.37	0.00
165.00	2.90	1.37	0.00	420.00	2.90	1.37	0.00
170.00	2.90	1.37	0.00	425.00	2.90	1.37	0.00
175.00	2.90	1.37	0.00	430.00	2.90	1.37	0.00
180.00	2.90	1.37	0.00	435.00	2.90	1.37	0.00
185.00	2.90	1.37	0.00	440.00	2.90	1.37	0.00
190.00	2.90	1.37	0.00	445.00	2.90	1.37	0.00
195.00	2.90	1.37	0.00	450.00	2.90	1.37	0.00
200.00	2.90	1.37	0.00	455.00	2.90	1.37	0.00
205.00	2.90	1.37	0.00	460.00	2.90	1.37	0.00
210.00	2.90	1.37	0.00	465.00	2.90	1.37	0.00
215.00	2.90	1.37	0.00	470.00	2.90	1.37	0.00
220.00	2.90	1.37	0.00	475.00	2.90	1.37	0.00
225.00	2.90	1.37	0.00	480.00	2.90	1.37	0.00
230.00	2.90	1.37	0.00	485.00	2.90	1.37	0.00
235.00	2.90	1.37	0.00	490.00	2.90	1.37	0.00
240.00	2.90	1.37	0.00	495.00	2.90	1.37	0.00
245.00	2.90	1.37	0.00	500.00	2.90	1.37	0.00
250.00	2.90	1.37	0.00				
255.00	2.90	1.37	0.00				

Summary for Subcatchment 3Z: Post 3Z - Offsite

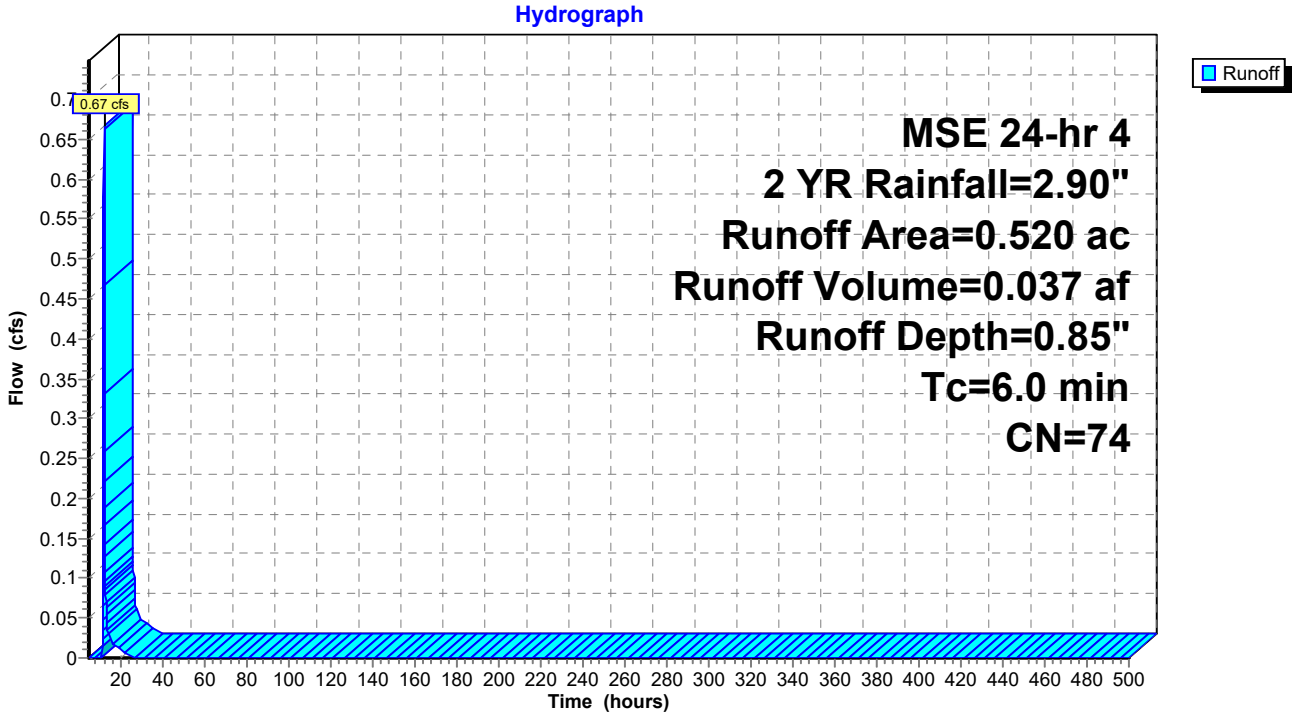
Runoff = 0.67 cfs @ 12.14 hrs, Volume= 0.037 af, Depth= 0.85"
Routed to Link 4L : Post - North

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 2 YR Rainfall=2.90"

	Area (ac)	CN	Description
*	0.000	98	Impervious
*	0.000	61	Post - B Soils
*	0.520	74	Post - C Soils
	0.520	74	Weighted Average
	0.520		100.00% Pervious Area

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

Subcatchment 3Z: Post 3Z - Offsite



Hydrograph for Subcatchment 3Z: Post 3Z - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.13	0.00	0.00
10.00	0.46	0.00	**0.00**
15.00	2.55	0.64	**0.03**
20.00	**2.81**	**0.79**	0.01
25.00	**2.90**	**0.85**	0.00
30.00	2.90	0.85	0.00
35.00	2.90	0.85	0.00
40.00	2.90	0.85	0.00
45.00	2.90	0.85	0.00
50.00	2.90	0.85	0.00
55.00	2.90	0.85	0.00
60.00	2.90	0.85	0.00
65.00	2.90	0.85	0.00
70.00	2.90	0.85	0.00
75.00	2.90	0.85	0.00
80.00	2.90	0.85	0.00
85.00	2.90	0.85	0.00
90.00	2.90	0.85	0.00
95.00	2.90	0.85	0.00
100.00	2.90	0.85	0.00
105.00	2.90	0.85	0.00
110.00	2.90	0.85	0.00
115.00	2.90	0.85	0.00
120.00	2.90	0.85	0.00
125.00	2.90	0.85	0.00
130.00	2.90	0.85	0.00
135.00	2.90	0.85	0.00
140.00	2.90	0.85	0.00
145.00	2.90	0.85	0.00
150.00	2.90	0.85	0.00
155.00	2.90	0.85	0.00
160.00	2.90	0.85	0.00
165.00	2.90	0.85	0.00
170.00	2.90	0.85	0.00
175.00	2.90	0.85	0.00
180.00	2.90	0.85	0.00
185.00	2.90	0.85	0.00
190.00	2.90	0.85	0.00
195.00	2.90	0.85	0.00
200.00	2.90	0.85	0.00
205.00	2.90	0.85	0.00
210.00	2.90	0.85	0.00
215.00	2.90	0.85	0.00
220.00	2.90	0.85	0.00
225.00	2.90	0.85	0.00
230.00	2.90	0.85	0.00
235.00	2.90	0.85	0.00
240.00	2.90	0.85	0.00
245.00	2.90	0.85	0.00
250.00	2.90	0.85	0.00
255.00	2.90	0.85	0.00
260.00	2.90	0.85	0.00
265.00	2.90	0.85	0.00
270.00	2.90	0.85	0.00
275.00	2.90	0.85	0.00
280.00	2.90	0.85	0.00
285.00	2.90	0.85	0.00
290.00	2.90	0.85	0.00
295.00	2.90	0.85	0.00
300.00	2.90	0.85	0.00
305.00	2.90	0.85	0.00
310.00	2.90	0.85	0.00
315.00	2.90	0.85	0.00
320.00	2.90	0.85	0.00
325.00	2.90	0.85	0.00
330.00	2.90	0.85	0.00
335.00	2.90	0.85	0.00
340.00	2.90	0.85	0.00
345.00	2.90	0.85	0.00
350.00	2.90	0.85	0.00
355.00	2.90	0.85	0.00
360.00	2.90	0.85	0.00
365.00	2.90	0.85	0.00
370.00	2.90	0.85	0.00
375.00	2.90	0.85	0.00
380.00	2.90	0.85	0.00
385.00	2.90	0.85	0.00
390.00	2.90	0.85	0.00
395.00	2.90	0.85	0.00
400.00	2.90	0.85	0.00
405.00	2.90	0.85	0.00
410.00	2.90	0.85	0.00
415.00	2.90	0.85	0.00
420.00	2.90	0.85	0.00
425.00	2.90	0.85	0.00
430.00	2.90	0.85	0.00
435.00	2.90	0.85	0.00
440.00	2.90	0.85	0.00
445.00	2.90	0.85	0.00
450.00	2.90	0.85	0.00
455.00	2.90	0.85	0.00
460.00	2.90	0.85	0.00
465.00	2.90	0.85	0.00
470.00	2.90	0.85	0.00
475.00	2.90	0.85	0.00
480.00	2.90	0.85	0.00
485.00	2.90	0.85	0.00
490.00	2.90	0.85	0.00
495.00	2.90	0.85	0.00
500.00	2.90	0.85	0.00

Summary for Subcatchment 5S: Culvert 1

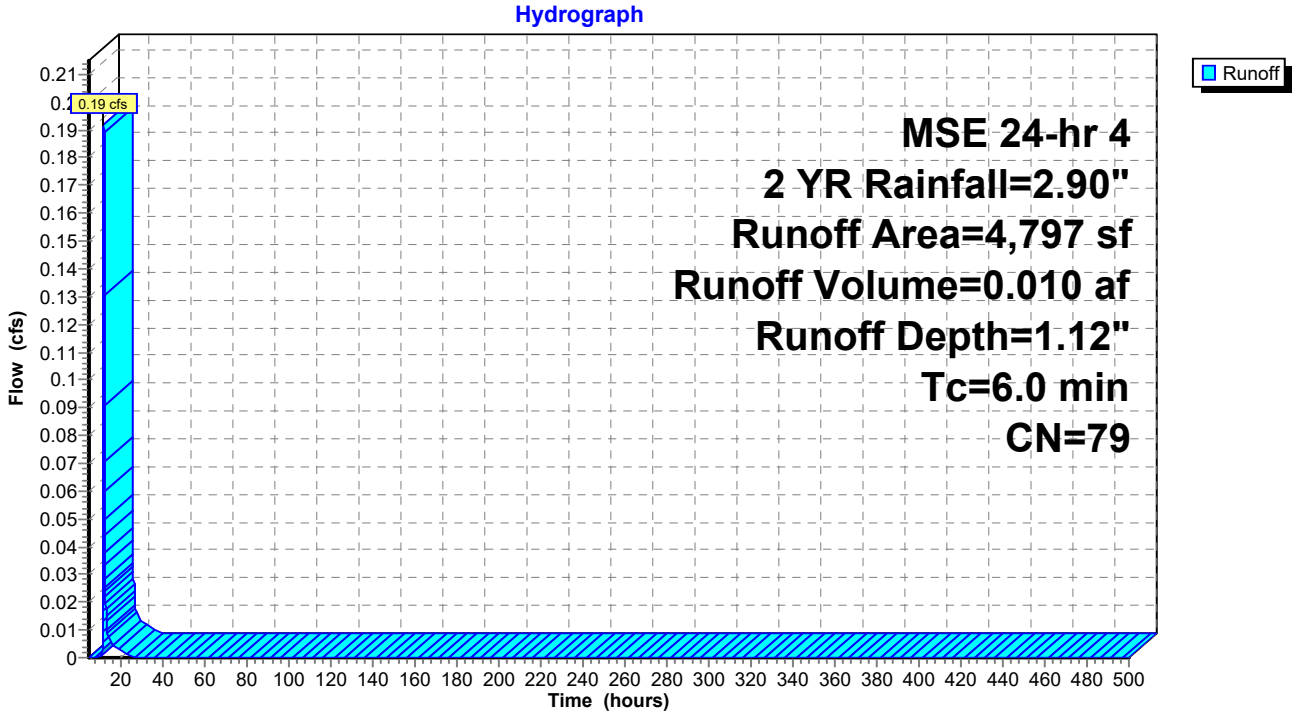
Runoff = 0.19 cfs @ 12.14 hrs, Volume= 0.010 af, Depth= 1.12"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 2 YR Rainfall=2.90"

	Area (sf)	CN	Description
*	2,465	61	Post - B Soils
*	2,332	98	Impervious
	4,797	79	Weighted Average
	2,465		51.39% Pervious Area
	2,332		48.61% Impervious Area

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

Subcatchment 5S: Culvert 1



Hydrograph for Subcatchment 5S: Culvert 1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.13	0.00	0.00	260.00	2.90	1.12	0.00
10.00	0.46	0.00	**0.00**	265.00	2.90	1.12	0.00
15.00	2.55	0.87	**0.01**	270.00	2.90	1.12	0.00
20.00	**2.81**	**1.05**	0.00	275.00	2.90	1.12	0.00
25.00	**2.90**	**1.12**	0.00	280.00	2.90	1.12	0.00
30.00	2.90	1.12	0.00	285.00	2.90	1.12	0.00
35.00	2.90	1.12	0.00	290.00	2.90	1.12	0.00
40.00	2.90	1.12	0.00	295.00	2.90	1.12	0.00
45.00	2.90	1.12	0.00	300.00	2.90	1.12	0.00
50.00	2.90	1.12	0.00	305.00	2.90	1.12	0.00
55.00	2.90	1.12	0.00	310.00	2.90	1.12	0.00
60.00	2.90	1.12	0.00	315.00	2.90	1.12	0.00
65.00	2.90	1.12	0.00	320.00	2.90	1.12	0.00
70.00	2.90	1.12	0.00	325.00	2.90	1.12	0.00
75.00	2.90	1.12	0.00	330.00	2.90	1.12	0.00
80.00	2.90	1.12	0.00	335.00	2.90	1.12	0.00
85.00	2.90	1.12	0.00	340.00	2.90	1.12	0.00
90.00	2.90	1.12	0.00	345.00	2.90	1.12	0.00
95.00	2.90	1.12	0.00	350.00	2.90	1.12	0.00
100.00	2.90	1.12	0.00	355.00	2.90	1.12	0.00
105.00	2.90	1.12	0.00	360.00	2.90	1.12	0.00
110.00	2.90	1.12	0.00	365.00	2.90	1.12	0.00
115.00	2.90	1.12	0.00	370.00	2.90	1.12	0.00
120.00	2.90	1.12	0.00	375.00	2.90	1.12	0.00
125.00	2.90	1.12	0.00	380.00	2.90	1.12	0.00
130.00	2.90	1.12	0.00	385.00	2.90	1.12	0.00
135.00	2.90	1.12	0.00	390.00	2.90	1.12	0.00
140.00	2.90	1.12	0.00	395.00	2.90	1.12	0.00
145.00	2.90	1.12	0.00	400.00	2.90	1.12	0.00
150.00	2.90	1.12	0.00	405.00	2.90	1.12	0.00
155.00	2.90	1.12	0.00	410.00	2.90	1.12	0.00
160.00	2.90	1.12	0.00	415.00	2.90	1.12	0.00
165.00	2.90	1.12	0.00	420.00	2.90	1.12	0.00
170.00	2.90	1.12	0.00	425.00	2.90	1.12	0.00
175.00	2.90	1.12	0.00	430.00	2.90	1.12	0.00
180.00	2.90	1.12	0.00	435.00	2.90	1.12	0.00
185.00	2.90	1.12	0.00	440.00	2.90	1.12	0.00
190.00	2.90	1.12	0.00	445.00	2.90	1.12	0.00
195.00	2.90	1.12	0.00	450.00	2.90	1.12	0.00
200.00	2.90	1.12	0.00	455.00	2.90	1.12	0.00
205.00	2.90	1.12	0.00	460.00	2.90	1.12	0.00
210.00	2.90	1.12	0.00	465.00	2.90	1.12	0.00
215.00	2.90	1.12	0.00	470.00	2.90	1.12	0.00
220.00	2.90	1.12	0.00	475.00	2.90	1.12	0.00
225.00	2.90	1.12	0.00	480.00	2.90	1.12	0.00
230.00	2.90	1.12	0.00	485.00	2.90	1.12	0.00
235.00	2.90	1.12	0.00	490.00	2.90	1.12	0.00
240.00	2.90	1.12	0.00	495.00	2.90	1.12	0.00
245.00	2.90	1.12	0.00	500.00	2.90	1.12	0.00
250.00	2.90	1.12	0.00				
255.00	2.90	1.12	0.00				

Summary for Subcatchment 6S: Culvert 2

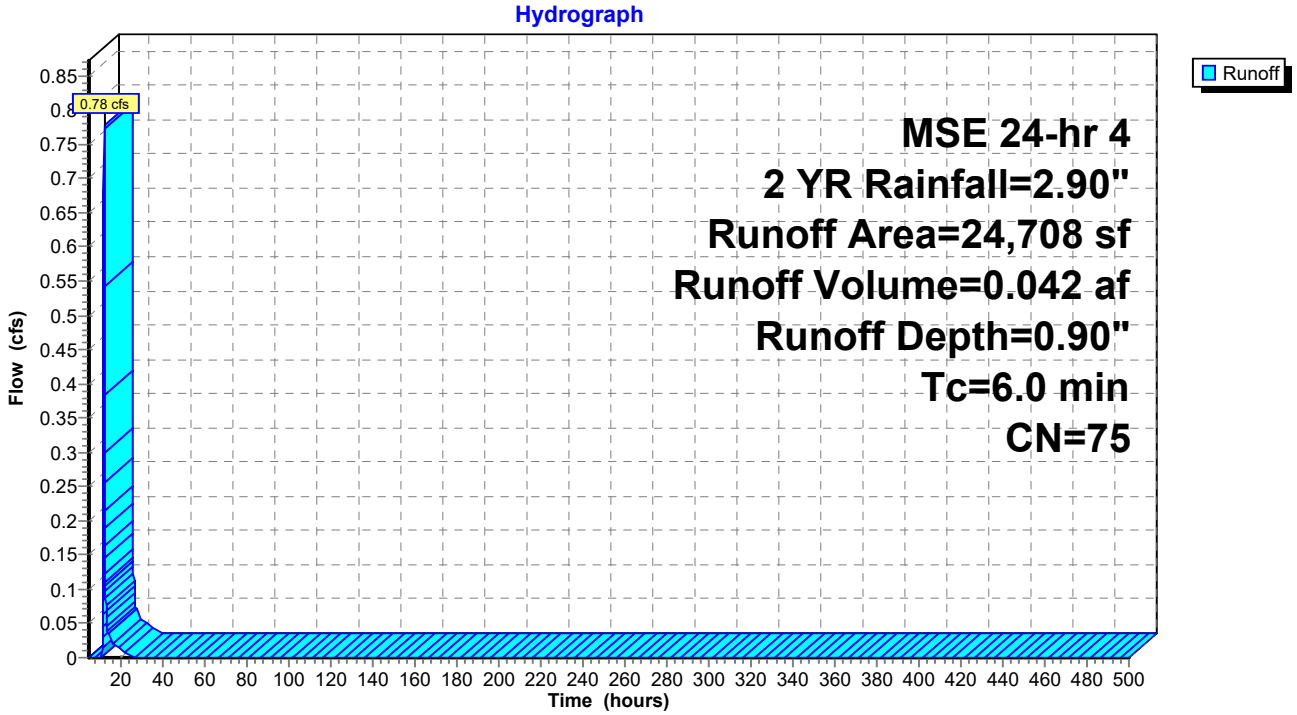
Runoff = 0.78 cfs @ 12.14 hrs, Volume= 0.042 af, Depth= 0.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 2 YR Rainfall=2.90"

	Area (sf)	CN	Description
*	15,597	61	Post - B Soils
*	9,111	98	Impervious
	24,708	75	Weighted Average
	15,597		63.13% Pervious Area
	9,111		36.87% Impervious Area

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

Subcatchment 6S: Culvert 2



Hydrograph for Subcatchment 6S: Culvert 2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.13	0.00	0.00
10.00	0.46	0.00	**0.00**
15.00	2.55	0.68	**0.03**
20.00	**2.81**	**0.84**	0.01
25.00	**2.90**	**0.90**	0.00
30.00	2.90	0.90	0.00
35.00	2.90	0.90	0.00
40.00	2.90	0.90	0.00
45.00	2.90	0.90	0.00
50.00	2.90	0.90	0.00
55.00	2.90	0.90	0.00
60.00	2.90	0.90	0.00
65.00	2.90	0.90	0.00
70.00	2.90	0.90	0.00
75.00	2.90	0.90	0.00
80.00	2.90	0.90	0.00
85.00	2.90	0.90	0.00
90.00	2.90	0.90	0.00
95.00	2.90	0.90	0.00
100.00	2.90	0.90	0.00
105.00	2.90	0.90	0.00
110.00	2.90	0.90	0.00
115.00	2.90	0.90	0.00
120.00	2.90	0.90	0.00
125.00	2.90	0.90	0.00
130.00	2.90	0.90	0.00
135.00	2.90	0.90	0.00
140.00	2.90	0.90	0.00
145.00	2.90	0.90	0.00
150.00	2.90	0.90	0.00
155.00	2.90	0.90	0.00
160.00	2.90	0.90	0.00
165.00	2.90	0.90	0.00
170.00	2.90	0.90	0.00
175.00	2.90	0.90	0.00
180.00	2.90	0.90	0.00
185.00	2.90	0.90	0.00
190.00	2.90	0.90	0.00
195.00	2.90	0.90	0.00
200.00	2.90	0.90	0.00
205.00	2.90	0.90	0.00
210.00	2.90	0.90	0.00
215.00	2.90	0.90	0.00
220.00	2.90	0.90	0.00
225.00	2.90	0.90	0.00
230.00	2.90	0.90	0.00
235.00	2.90	0.90	0.00
240.00	2.90	0.90	0.00
245.00	2.90	0.90	0.00
250.00	2.90	0.90	0.00
255.00	2.90	0.90	0.00
260.00	2.90	0.90	0.00
265.00	2.90	0.90	0.00
270.00	2.90	0.90	0.00
275.00	2.90	0.90	0.00
280.00	2.90	0.90	0.00
285.00	2.90	0.90	0.00
290.00	2.90	0.90	0.00
295.00	2.90	0.90	0.00
300.00	2.90	0.90	0.00
305.00	2.90	0.90	0.00
310.00	2.90	0.90	0.00
315.00	2.90	0.90	0.00
320.00	2.90	0.90	0.00
325.00	2.90	0.90	0.00
330.00	2.90	0.90	0.00
335.00	2.90	0.90	0.00
340.00	2.90	0.90	0.00
345.00	2.90	0.90	0.00
350.00	2.90	0.90	0.00
355.00	2.90	0.90	0.00
360.00	2.90	0.90	0.00
365.00	2.90	0.90	0.00
370.00	2.90	0.90	0.00
375.00	2.90	0.90	0.00
380.00	2.90	0.90	0.00
385.00	2.90	0.90	0.00
390.00	2.90	0.90	0.00
395.00	2.90	0.90	0.00
400.00	2.90	0.90	0.00
405.00	2.90	0.90	0.00
410.00	2.90	0.90	0.00
415.00	2.90	0.90	0.00
420.00	2.90	0.90	0.00
425.00	2.90	0.90	0.00
430.00	2.90	0.90	0.00
435.00	2.90	0.90	0.00
440.00	2.90	0.90	0.00
445.00	2.90	0.90	0.00
450.00	2.90	0.90	0.00
455.00	2.90	0.90	0.00
460.00	2.90	0.90	0.00
465.00	2.90	0.90	0.00
470.00	2.90	0.90	0.00
475.00	2.90	0.90	0.00
480.00	2.90	0.90	0.00
485.00	2.90	0.90	0.00
490.00	2.90	0.90	0.00
495.00	2.90	0.90	0.00
500.00	2.90	0.90	0.00

Summary for Subcatchment 7S: Culvert 3

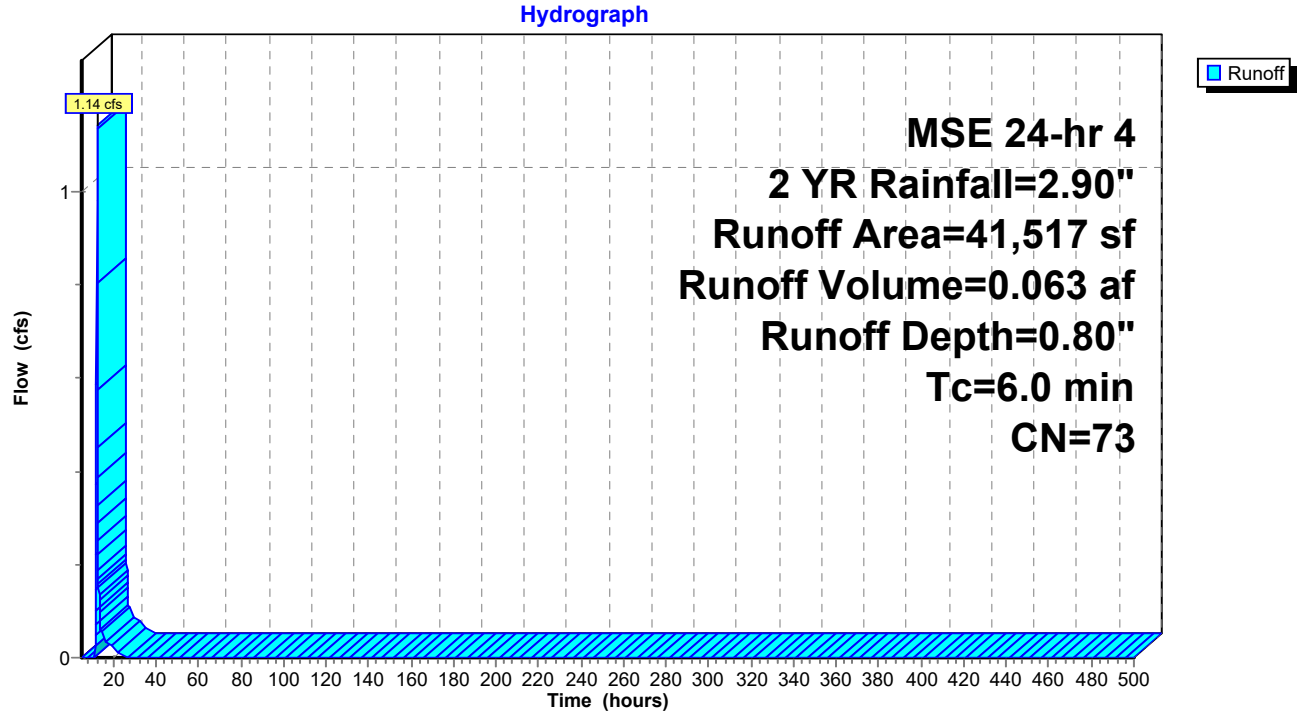
Runoff = 1.14 cfs @ 12.14 hrs, Volume= 0.063 af, Depth= 0.80"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 2 YR Rainfall=2.90"

	Area (sf)	CN	Description
*	28,233	61	Post - B Soils
*	13,284	98	Impervious
	41,517	73	Weighted Average
	28,233		68.00% Pervious Area
	13,284		32.00% Impervious Area

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

Subcatchment 7S: Culvert 3



Hydrograph for Subcatchment 7S: Culvert 3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.13	0.00	0.00	260.00	2.90	0.80	0.00
10.00	0.46	0.00	**0.00**	265.00	2.90	0.80	0.00
15.00	2.55	0.59	**0.05**	270.00	2.90	0.80	0.00
20.00	**2.81**	**0.74**	0.02	275.00	2.90	0.80	0.00
25.00	**2.90**	**0.80**	0.00	280.00	2.90	0.80	0.00
30.00	2.90	0.80	0.00	285.00	2.90	0.80	0.00
35.00	2.90	0.80	0.00	290.00	2.90	0.80	0.00
40.00	2.90	0.80	0.00	295.00	2.90	0.80	0.00
45.00	2.90	0.80	0.00	300.00	2.90	0.80	0.00
50.00	2.90	0.80	0.00	305.00	2.90	0.80	0.00
55.00	2.90	0.80	0.00	310.00	2.90	0.80	0.00
60.00	2.90	0.80	0.00	315.00	2.90	0.80	0.00
65.00	2.90	0.80	0.00	320.00	2.90	0.80	0.00
70.00	2.90	0.80	0.00	325.00	2.90	0.80	0.00
75.00	2.90	0.80	0.00	330.00	2.90	0.80	0.00
80.00	2.90	0.80	0.00	335.00	2.90	0.80	0.00
85.00	2.90	0.80	0.00	340.00	2.90	0.80	0.00
90.00	2.90	0.80	0.00	345.00	2.90	0.80	0.00
95.00	2.90	0.80	0.00	350.00	2.90	0.80	0.00
100.00	2.90	0.80	0.00	355.00	2.90	0.80	0.00
105.00	2.90	0.80	0.00	360.00	2.90	0.80	0.00
110.00	2.90	0.80	0.00	365.00	2.90	0.80	0.00
115.00	2.90	0.80	0.00	370.00	2.90	0.80	0.00
120.00	2.90	0.80	0.00	375.00	2.90	0.80	0.00
125.00	2.90	0.80	0.00	380.00	2.90	0.80	0.00
130.00	2.90	0.80	0.00	385.00	2.90	0.80	0.00
135.00	2.90	0.80	0.00	390.00	2.90	0.80	0.00
140.00	2.90	0.80	0.00	395.00	2.90	0.80	0.00
145.00	2.90	0.80	0.00	400.00	2.90	0.80	0.00
150.00	2.90	0.80	0.00	405.00	2.90	0.80	0.00
155.00	2.90	0.80	0.00	410.00	2.90	0.80	0.00
160.00	2.90	0.80	0.00	415.00	2.90	0.80	0.00
165.00	2.90	0.80	0.00	420.00	2.90	0.80	0.00
170.00	2.90	0.80	0.00	425.00	2.90	0.80	0.00
175.00	2.90	0.80	0.00	430.00	2.90	0.80	0.00
180.00	2.90	0.80	0.00	435.00	2.90	0.80	0.00
185.00	2.90	0.80	0.00	440.00	2.90	0.80	0.00
190.00	2.90	0.80	0.00	445.00	2.90	0.80	0.00
195.00	2.90	0.80	0.00	450.00	2.90	0.80	0.00
200.00	2.90	0.80	0.00	455.00	2.90	0.80	0.00
205.00	2.90	0.80	0.00	460.00	2.90	0.80	0.00
210.00	2.90	0.80	0.00	465.00	2.90	0.80	0.00
215.00	2.90	0.80	0.00	470.00	2.90	0.80	0.00
220.00	2.90	0.80	0.00	475.00	2.90	0.80	0.00
225.00	2.90	0.80	0.00	480.00	2.90	0.80	0.00
230.00	2.90	0.80	0.00	485.00	2.90	0.80	0.00
235.00	2.90	0.80	0.00	490.00	2.90	0.80	0.00
240.00	2.90	0.80	0.00	495.00	2.90	0.80	0.00
245.00	2.90	0.80	0.00	500.00	2.90	0.80	0.00
250.00	2.90	0.80	0.00				
255.00	2.90	0.80	0.00				

Summary for Subcatchment 8S: Culvert 4

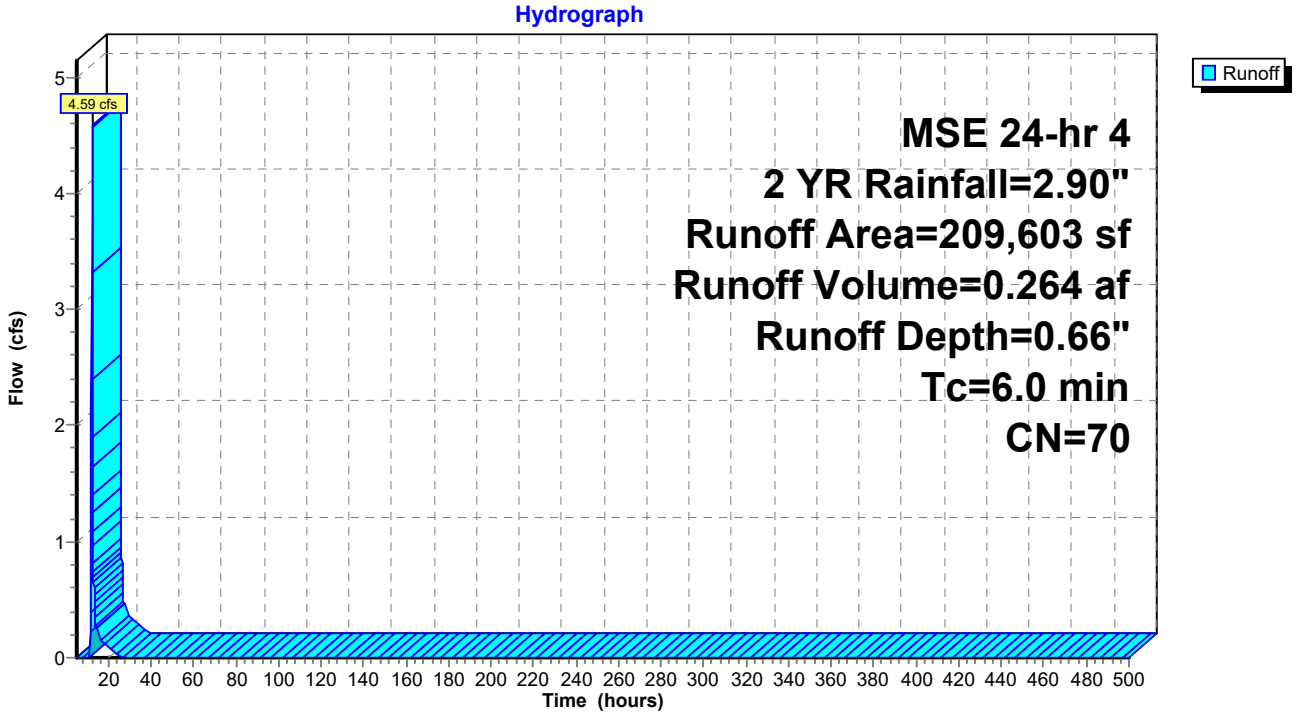
Runoff = 4.59 cfs @ 12.14 hrs, Volume= 0.264 af, Depth= 0.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 2 YR Rainfall=2.90"

	Area (sf)	CN	Description
*	156,823	61	Post - B Soils
*	52,780	98	Impervious
	209,603	70	Weighted Average
	156,823		74.82% Pervious Area
	52,780		25.18% Impervious Area

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

Subcatchment 8S: Culvert 4



Hydrograph for Subcatchment 8S: Culvert 4

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.13	0.00	0.00
10.00	0.46	0.00	**0.00**
15.00	2.55	0.48	**0.24**
20.00	**2.81**	**0.61**	0.09
25.00	**2.90**	**0.66**	0.00
30.00	2.90	0.66	0.00
35.00	2.90	0.66	0.00
40.00	2.90	0.66	0.00
45.00	2.90	0.66	0.00
50.00	2.90	0.66	0.00
55.00	2.90	0.66	0.00
60.00	2.90	0.66	0.00
65.00	2.90	0.66	0.00
70.00	2.90	0.66	0.00
75.00	2.90	0.66	0.00
80.00	2.90	0.66	0.00
85.00	2.90	0.66	0.00
90.00	2.90	0.66	0.00
95.00	2.90	0.66	0.00
100.00	2.90	0.66	0.00
105.00	2.90	0.66	0.00
110.00	2.90	0.66	0.00
115.00	2.90	0.66	0.00
120.00	2.90	0.66	0.00
125.00	2.90	0.66	0.00
130.00	2.90	0.66	0.00
135.00	2.90	0.66	0.00
140.00	2.90	0.66	0.00
145.00	2.90	0.66	0.00
150.00	2.90	0.66	0.00
155.00	2.90	0.66	0.00
160.00	2.90	0.66	0.00
165.00	2.90	0.66	0.00
170.00	2.90	0.66	0.00
175.00	2.90	0.66	0.00
180.00	2.90	0.66	0.00
185.00	2.90	0.66	0.00
190.00	2.90	0.66	0.00
195.00	2.90	0.66	0.00
200.00	2.90	0.66	0.00
205.00	2.90	0.66	0.00
210.00	2.90	0.66	0.00
215.00	2.90	0.66	0.00
220.00	2.90	0.66	0.00
225.00	2.90	0.66	0.00
230.00	2.90	0.66	0.00
235.00	2.90	0.66	0.00
240.00	2.90	0.66	0.00
245.00	2.90	0.66	0.00
250.00	2.90	0.66	0.00
255.00	2.90	0.66	0.00
260.00	2.90	0.66	0.00
265.00	2.90	0.66	0.00
270.00	2.90	0.66	0.00
275.00	2.90	0.66	0.00
280.00	2.90	0.66	0.00
285.00	2.90	0.66	0.00
290.00	2.90	0.66	0.00
295.00	2.90	0.66	0.00
300.00	2.90	0.66	0.00
305.00	2.90	0.66	0.00
310.00	2.90	0.66	0.00
315.00	2.90	0.66	0.00
320.00	2.90	0.66	0.00
325.00	2.90	0.66	0.00
330.00	2.90	0.66	0.00
335.00	2.90	0.66	0.00
340.00	2.90	0.66	0.00
345.00	2.90	0.66	0.00
350.00	2.90	0.66	0.00
355.00	2.90	0.66	0.00
360.00	2.90	0.66	0.00
365.00	2.90	0.66	0.00
370.00	2.90	0.66	0.00
375.00	2.90	0.66	0.00
380.00	2.90	0.66	0.00
385.00	2.90	0.66	0.00
390.00	2.90	0.66	0.00
395.00	2.90	0.66	0.00
400.00	2.90	0.66	0.00
405.00	2.90	0.66	0.00
410.00	2.90	0.66	0.00
415.00	2.90	0.66	0.00
420.00	2.90	0.66	0.00
425.00	2.90	0.66	0.00
430.00	2.90	0.66	0.00
435.00	2.90	0.66	0.00
440.00	2.90	0.66	0.00
445.00	2.90	0.66	0.00
450.00	2.90	0.66	0.00
455.00	2.90	0.66	0.00
460.00	2.90	0.66	0.00
465.00	2.90	0.66	0.00
470.00	2.90	0.66	0.00
475.00	2.90	0.66	0.00
480.00	2.90	0.66	0.00
485.00	2.90	0.66	0.00
490.00	2.90	0.66	0.00
495.00	2.90	0.66	0.00
500.00	2.90	0.66	0.00

Summary for Subcatchment 9S: Culvert 5

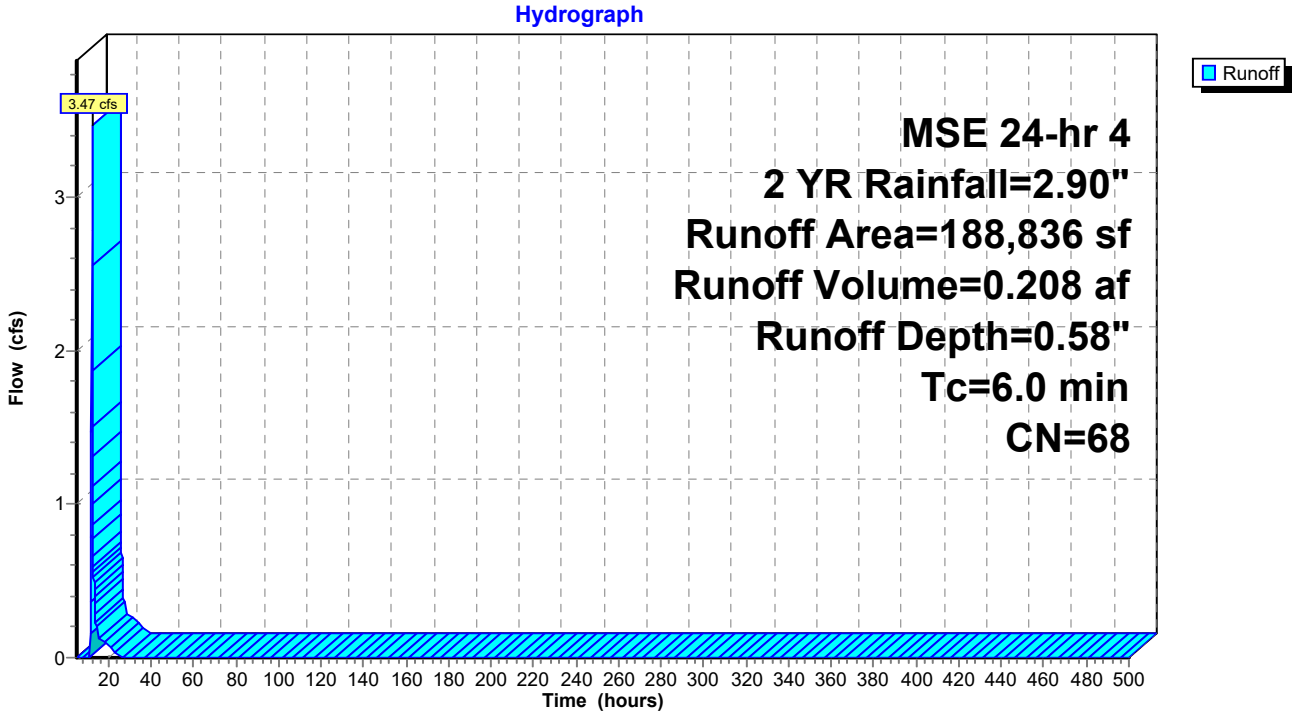
Runoff = 3.47 cfs @ 12.15 hrs, Volume= 0.208 af, Depth= 0.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 2 YR Rainfall=2.90"

	Area (sf)	CN	Description
*	151,149	61	Post - B Soils
*	37,687	98	Impervious
	188,836	68	Weighted Average
	151,149		80.04% Pervious Area
	37,687		19.96% Impervious Area

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

Subcatchment 9S: Culvert 5



Hydrograph for Subcatchment 9S: Culvert 5

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.13	0.00	0.00
10.00	0.46	0.00	**0.00**
15.00	2.55	0.41	**0.20**
20.00	**2.81**	**0.53**	0.08
25.00	**2.90**	**0.58**	0.00
30.00	2.90	0.58	0.00
35.00	2.90	0.58	0.00
40.00	2.90	0.58	0.00
45.00	2.90	0.58	0.00
50.00	2.90	0.58	0.00
55.00	2.90	0.58	0.00
60.00	2.90	0.58	0.00
65.00	2.90	0.58	0.00
70.00	2.90	0.58	0.00
75.00	2.90	0.58	0.00
80.00	2.90	0.58	0.00
85.00	2.90	0.58	0.00
90.00	2.90	0.58	0.00
95.00	2.90	0.58	0.00
100.00	2.90	0.58	0.00
105.00	2.90	0.58	0.00
110.00	2.90	0.58	0.00
115.00	2.90	0.58	0.00
120.00	2.90	0.58	0.00
125.00	2.90	0.58	0.00
130.00	2.90	0.58	0.00
135.00	2.90	0.58	0.00
140.00	2.90	0.58	0.00
145.00	2.90	0.58	0.00
150.00	2.90	0.58	0.00
155.00	2.90	0.58	0.00
160.00	2.90	0.58	0.00
165.00	2.90	0.58	0.00
170.00	2.90	0.58	0.00
175.00	2.90	0.58	0.00
180.00	2.90	0.58	0.00
185.00	2.90	0.58	0.00
190.00	2.90	0.58	0.00
195.00	2.90	0.58	0.00
200.00	2.90	0.58	0.00
205.00	2.90	0.58	0.00
210.00	2.90	0.58	0.00
215.00	2.90	0.58	0.00
220.00	2.90	0.58	0.00
225.00	2.90	0.58	0.00
230.00	2.90	0.58	0.00
235.00	2.90	0.58	0.00
240.00	2.90	0.58	0.00
245.00	2.90	0.58	0.00
250.00	2.90	0.58	0.00
255.00	2.90	0.58	0.00
260.00	2.90	0.58	0.00
265.00	2.90	0.58	0.00
270.00	2.90	0.58	0.00
275.00	2.90	0.58	0.00
280.00	2.90	0.58	0.00
285.00	2.90	0.58	0.00
290.00	2.90	0.58	0.00
295.00	2.90	0.58	0.00
300.00	2.90	0.58	0.00
305.00	2.90	0.58	0.00
310.00	2.90	0.58	0.00
315.00	2.90	0.58	0.00
320.00	2.90	0.58	0.00
325.00	2.90	0.58	0.00
330.00	2.90	0.58	0.00
335.00	2.90	0.58	0.00
340.00	2.90	0.58	0.00
345.00	2.90	0.58	0.00
350.00	2.90	0.58	0.00
355.00	2.90	0.58	0.00
360.00	2.90	0.58	0.00
365.00	2.90	0.58	0.00
370.00	2.90	0.58	0.00
375.00	2.90	0.58	0.00
380.00	2.90	0.58	0.00
385.00	2.90	0.58	0.00
390.00	2.90	0.58	0.00
395.00	2.90	0.58	0.00
400.00	2.90	0.58	0.00
405.00	2.90	0.58	0.00
410.00	2.90	0.58	0.00
415.00	2.90	0.58	0.00
420.00	2.90	0.58	0.00
425.00	2.90	0.58	0.00
430.00	2.90	0.58	0.00
435.00	2.90	0.58	0.00
440.00	2.90	0.58	0.00
445.00	2.90	0.58	0.00
450.00	2.90	0.58	0.00
455.00	2.90	0.58	0.00
460.00	2.90	0.58	0.00
465.00	2.90	0.58	0.00
470.00	2.90	0.58	0.00
475.00	2.90	0.58	0.00
480.00	2.90	0.58	0.00
485.00	2.90	0.58	0.00
490.00	2.90	0.58	0.00
495.00	2.90	0.58	0.00
500.00	2.90	0.58	0.00

Summary for Pond P1A: Pond 1A

Inflow Area = 6.030 ac, 19.24% Impervious, Inflow Depth = 0.58" for 2 YR event
Inflow = 4.83 cfs @ 12.15 hrs, Volume= 0.289 af
Outflow = 0.45 cfs @ 13.52 hrs, Volume= 0.289 af, Atten= 91%, Lag= 82.3 min
Primary = 0.06 cfs @ 13.52 hrs, Volume= 0.010 af
Routed to Link 3L : Post - South
Secondary = 0.38 cfs @ 13.52 hrs, Volume= 0.279 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,240.45' @ 13.52 hrs Surf.Area= 4,591 sf Storage= 5,132 cf

Plug-Flow detention time= 141.5 min calculated for 0.289 af (100% of inflow)
Center-of-Mass det. time= 141.5 min (1,010.2 - 868.7)

Volume	Invert	Avail.Storage	Storage Description
#1	1,239.00'	30,563 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

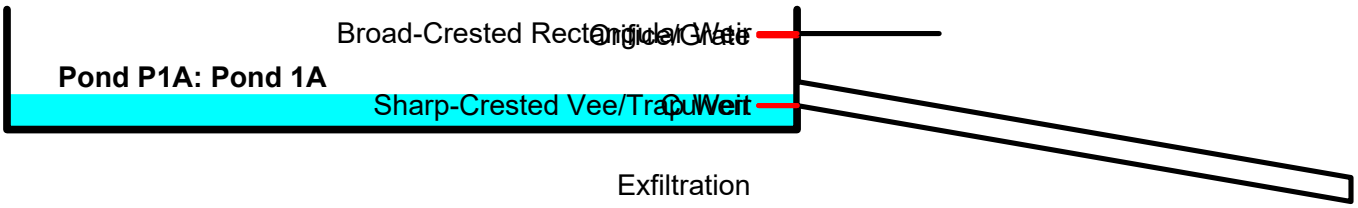
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,239.00	2,496	0	0
1,244.00	9,729	30,563	30,563

Device	Routing	Invert	Outlet Devices
#1	Primary	1,240.00'	**12.0" Round Culvert** L= 39.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,240.00' / 1,236.00' S= 0.1026 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,240.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,242.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,239.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,243.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

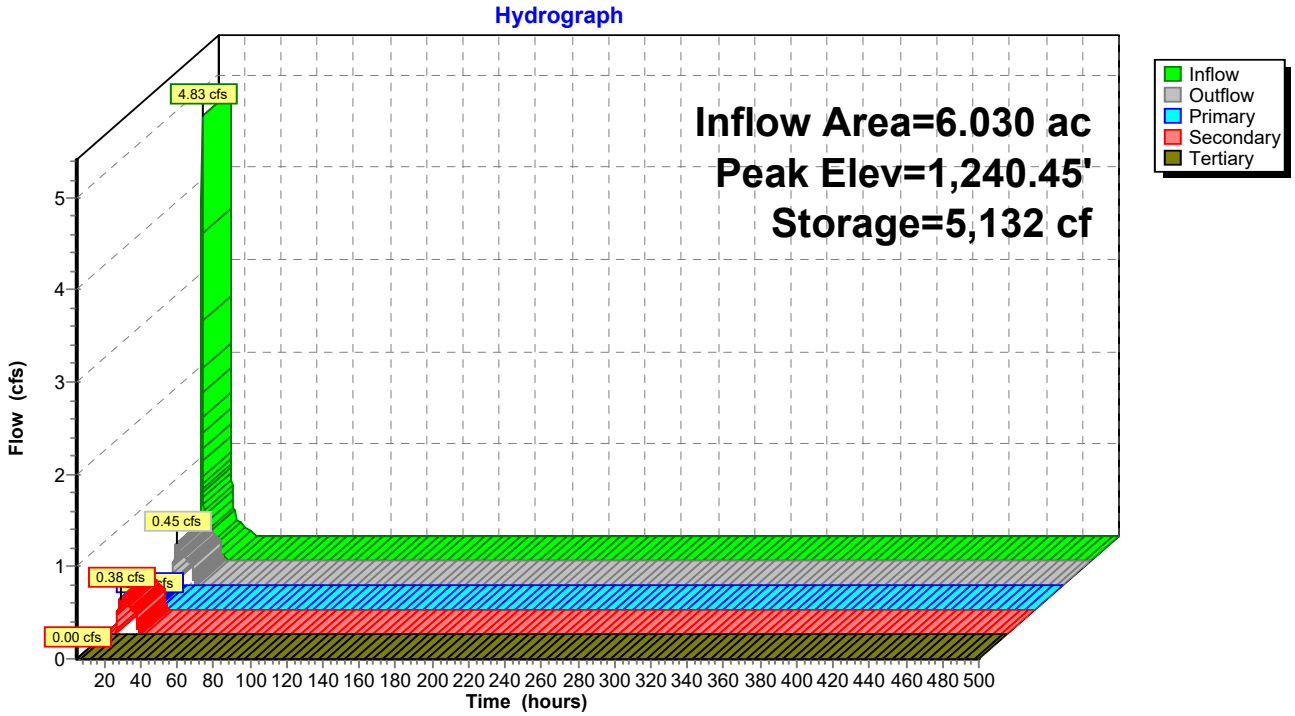
Primary OutFlow Max=0.06 cfs @ 13.52 hrs HW=1,240.45' (Free Discharge)
└**1=Culvert** (Passes 0.06 cfs of 0.78 cfs potential flow)
├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 0.06 cfs @ 1.80 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.38 cfs @ 13.52 hrs HW=1,240.45' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.38 cfs)

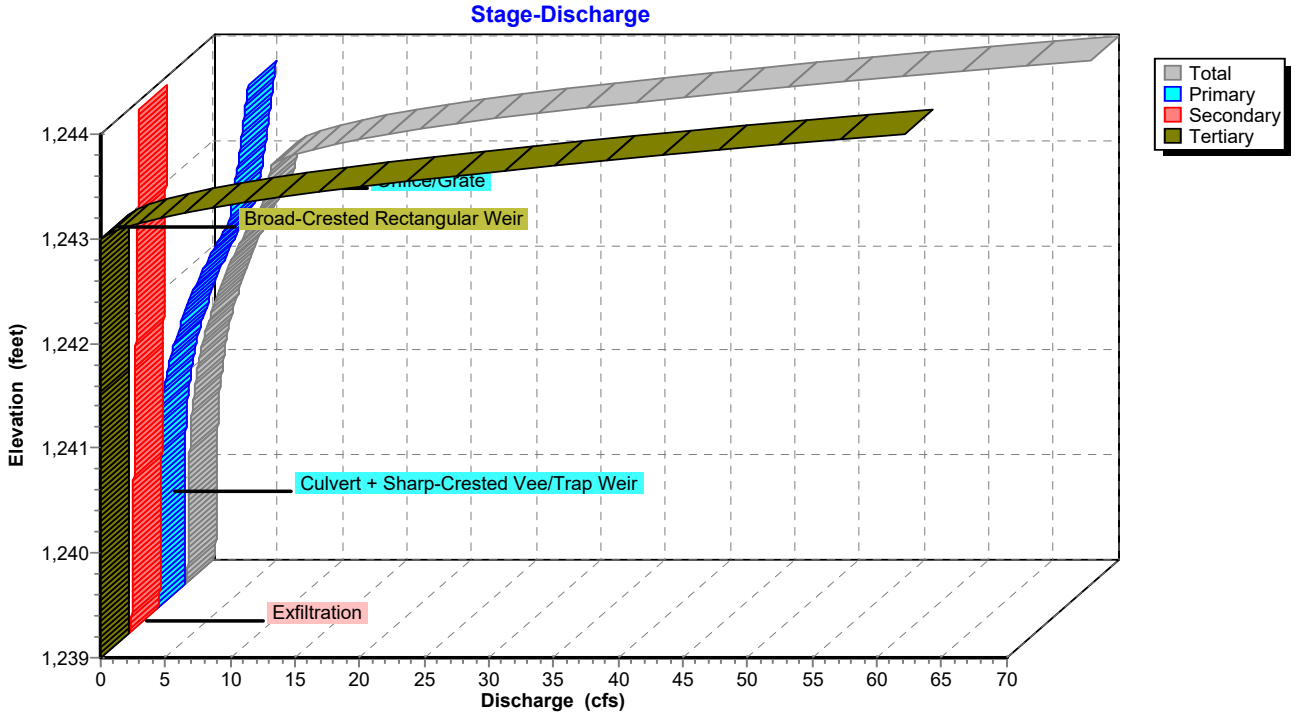
Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,239.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



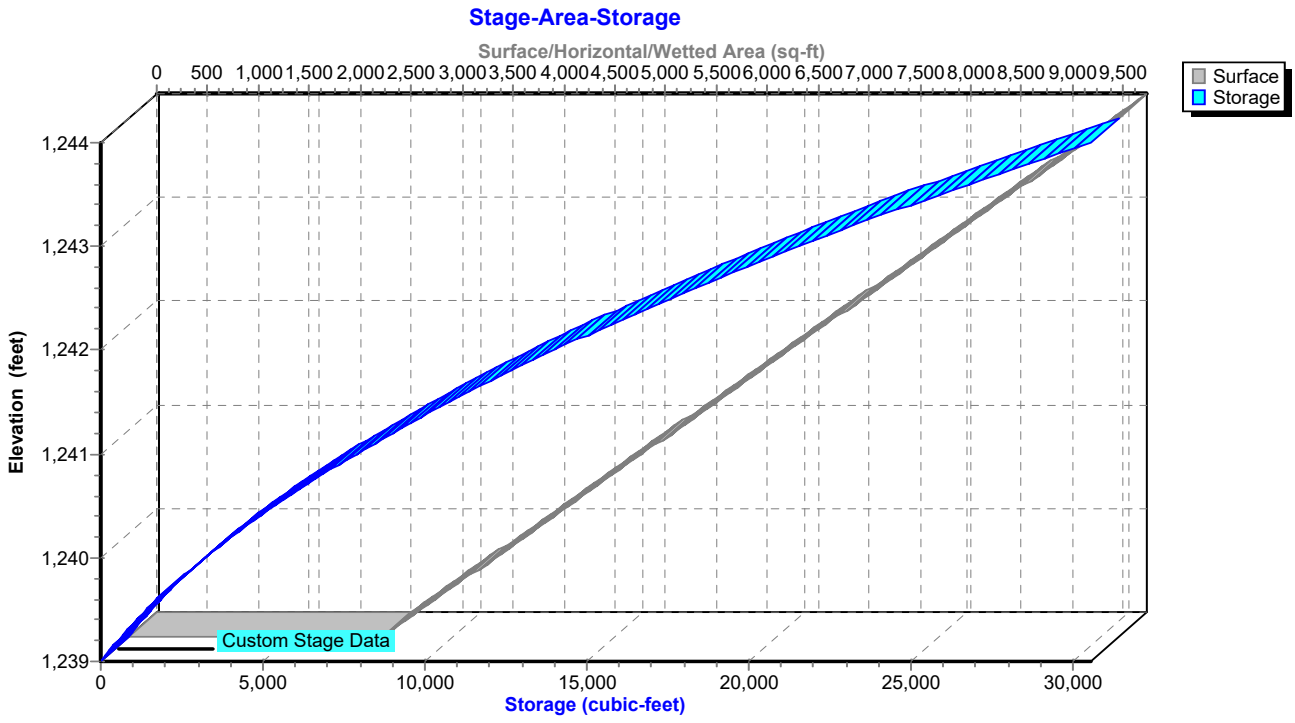
Pond P1A: Pond 1A



Pond P1A: Pond 1A



Pond P1A: Pond 1A



Hydrograph for Pond P1A: Pond 1A

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,239.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.28**	**4,507**	**1,240.31**	**0.39**	**0.03**	**0.37**	0.00
25.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
35.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P1A: Pond 1A

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,239.00	0.00	0.00	0.00	0.00
1,239.10	0.22	0.00	0.22	0.00
1,239.20	0.23	0.00	0.23	0.00
1,239.30	0.24	0.00	0.24	0.00
1,239.40	0.26	0.00	0.26	0.00
1,239.50	0.27	0.00	0.27	0.00
1,239.60	0.28	0.00	0.28	0.00
1,239.70	0.29	0.00	0.29	0.00
1,239.80	0.30	0.00	0.30	0.00
1,239.90	0.32	0.00	0.32	0.00
1,240.00	0.33	0.00	0.33	0.00
1,240.10	0.34	0.00	0.34	0.00
1,240.20	0.36	0.01	0.35	0.00
1,240.30	0.39	0.02	0.36	0.00
1,240.40	0.42	0.05	0.38	0.00
1,240.50	0.47	0.08	0.39	0.00
1,240.60	0.53	0.13	0.40	0.00
1,240.70	0.61	0.19	0.41	0.00
1,240.80	0.70	0.27	0.42	0.00
1,240.90	0.80	0.36	0.44	0.00
1,241.00	0.92	0.47	0.45	0.00
1,241.10	1.06	0.60	0.46	0.00
1,241.20	1.22	0.75	0.47	0.00
1,241.30	1.40	0.91	0.49	0.00
1,241.40	1.60	1.10	0.50	0.00
1,241.50	1.82	1.31	0.51	0.00
1,241.60	2.06	1.54	0.52	0.00
1,241.70	2.32	1.79	0.53	0.00
1,241.80	2.61	2.06	0.55	0.00
1,241.90	2.92	2.36	0.56	0.00
1,242.00	3.25	2.68	0.57	0.00
1,242.10	3.61	3.03	0.58	0.00
1,242.20	4.00	3.41	0.59	0.00
1,242.30	4.41	3.81	0.61	0.00
1,242.40	4.85	4.23	0.62	0.00
1,242.50	5.32	4.69	0.63	0.00
1,242.60	5.81	5.17	0.64	0.00
1,242.70	6.26	5.61	0.65	0.00
1,242.80	6.40	5.74	0.67	0.00
1,242.90	6.54	5.86	0.68	0.00
1,243.00	6.67	5.98	0.69	0.00
1,243.10	8.40	6.10	0.70	1.60
1,243.20	11.53	6.21	0.71	4.60
1,243.30	15.75	6.33	0.73	8.70
1,243.40	20.96	6.44	0.74	13.78
1,243.50	27.39	6.55	0.75	20.08
1,243.60	34.93	6.66	0.76	27.51
1,243.70	42.64	6.76	0.77	35.10
1,243.80	51.08	6.87	0.79	43.42
1,243.90	60.22	6.97	0.80	52.45
1,244.00	**70.06**	**7.07**	**0.81**	**62.18**

Stage-Area-Storage for Pond P1A: Pond 1A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,239.00	2,496	0
1,239.05	2,568	127
1,239.10	2,641	257
1,239.15	2,713	391
1,239.20	2,785	528
1,239.25	2,858	669
1,239.30	2,930	814
1,239.35	3,002	962
1,239.40	3,075	1,114
1,239.45	3,147	1,270
1,239.50	3,219	1,429
1,239.55	3,292	1,592
1,239.60	3,364	1,758
1,239.65	3,436	1,928
1,239.70	3,509	2,102
1,239.75	3,581	2,279
1,239.80	3,653	2,460
1,239.85	3,726	2,644
1,239.90	3,798	2,832
1,239.95	3,870	3,024
1,240.00	3,943	3,219
1,240.05	4,015	3,418
1,240.10	4,087	3,621
1,240.15	4,160	3,827
1,240.20	4,232	4,037
1,240.25	4,304	4,250
1,240.30	4,377	4,467
1,240.35	4,449	4,688
1,240.40	4,521	4,912
1,240.45	4,594	5,140
1,240.50	4,666	5,371
1,240.55	4,738	5,607
1,240.60	4,811	5,845
1,240.65	4,883	6,088
1,240.70	4,955	6,334
1,240.75	5,028	6,583
1,240.80	5,100	6,836
1,240.85	5,172	7,093
1,240.90	5,245	7,354
1,240.95	5,317	7,618
1,241.00	5,389	7,885
1,241.05	5,462	8,156
1,241.10	5,534	8,431
1,241.15	5,606	8,710
1,241.20	5,679	8,992
1,241.25	5,751	9,278
1,241.30	5,823	9,567
1,241.35	5,896	9,860
1,241.40	5,968	10,157
1,241.45	6,040	10,457
1,241.50	6,113	10,761
1,241.55	6,185	11,068
1,241.60	6,257	11,379
1,241.65	6,329	11,694
1,241.70	6,402	12,012
1,241.75	6,474	12,334
1,241.80	6,546	12,659
1,241.85	6,619	12,989
1,241.90	6,691	13,321
1,241.95	6,763	13,658
1,242.00	6,836	13,998
1,242.05	6,908	14,341
1,242.10	6,980	14,689
1,242.15	7,053	15,039
1,242.20	7,125	15,394
1,242.25	7,197	15,752
1,242.30	7,270	16,114
1,242.35	7,342	16,479
1,242.40	7,414	16,848
1,242.45	7,487	17,220
1,242.50	7,559	17,596
1,242.55	7,631	17,976
1,242.60	7,704	18,360
1,242.65	7,776	18,747
1,242.70	7,848	19,137
1,242.75	7,921	19,531
1,242.80	7,993	19,929
1,242.85	8,065	20,331
1,242.90	8,138	20,736
1,242.95	8,210	21,144
1,243.00	8,282	21,557
1,243.05	8,355	21,973
1,243.10	8,427	22,392
1,243.15	8,499	22,815
1,243.20	8,572	23,242
1,243.25	8,644	23,673
1,243.30	8,716	24,107
1,243.35	8,789	24,544
1,243.40	8,861	24,985
1,243.45	8,933	25,430
1,243.50	9,006	25,879
1,243.55	9,078	26,331
1,243.60	9,150	26,787
1,243.65	9,223	27,246
1,243.70	9,295	27,709
1,243.75	9,367	28,175
1,243.80	9,440	28,646
1,243.85	9,512	29,119
1,243.90	9,584	29,597
1,243.95	9,657	30,078
1,244.00	**9,729**	**30,563**

Summary for Pond P3A: Pond 3A

Inflow Area = 10.600 ac, 18.58% Impervious, Inflow Depth = 0.66" for 2 YR event
Inflow = 10.12 cfs @ 12.14 hrs, Volume= 0.582 af
Outflow = 0.97 cfs @ 13.42 hrs, Volume= 0.582 af, Atten= 90%, Lag= 76.5 min
Primary = 0.38 cfs @ 13.42 hrs, Volume= 0.083 af
Routed to Link 4L : Post - North
Secondary = 0.59 cfs @ 13.42 hrs, Volume= 0.500 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,193.92' @ 13.42 hrs Surf.Area= 7,027 sf Storage= 10,734 cf

Plug-Flow detention time= 169.1 min calculated for 0.582 af (100% of inflow)
Center-of-Mass det. time= 169.1 min (1,030.6 - 861.5)

Volume	Invert	Avail.Storage	Storage Description
#1	1,192.00'	51,846 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

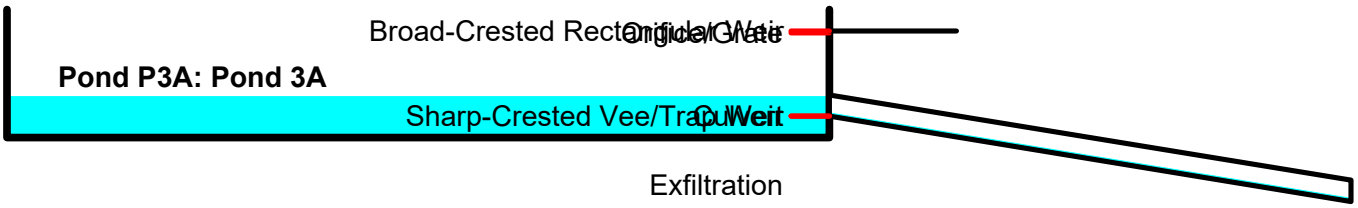
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,192.00	4,165	0	0
1,198.00	13,117	51,846	51,846

Device	Routing	Invert	Outlet Devices
#1	Primary	1,193.00'	**12.0" Round Culvert** L= 41.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,193.00' / 1,189.00' S= 0.0976 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,193.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,196.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,192.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,197.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

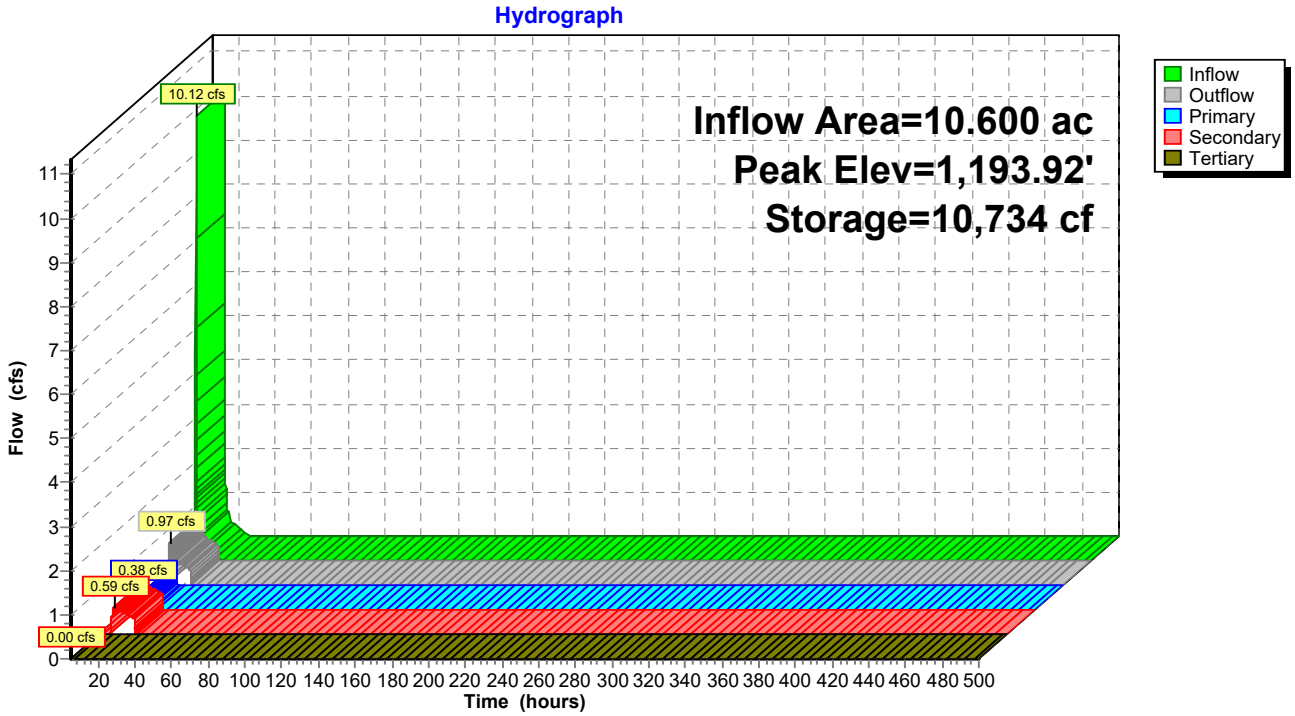
Primary OutFlow Max=0.38 cfs @ 13.42 hrs HW=1,193.92' (Free Discharge)
└**1=Culvert** (Passes 0.38 cfs of 2.46 cfs potential flow)
├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 0.38 cfs @ 2.58 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.59 cfs @ 13.42 hrs HW=1,193.92' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.59 cfs)

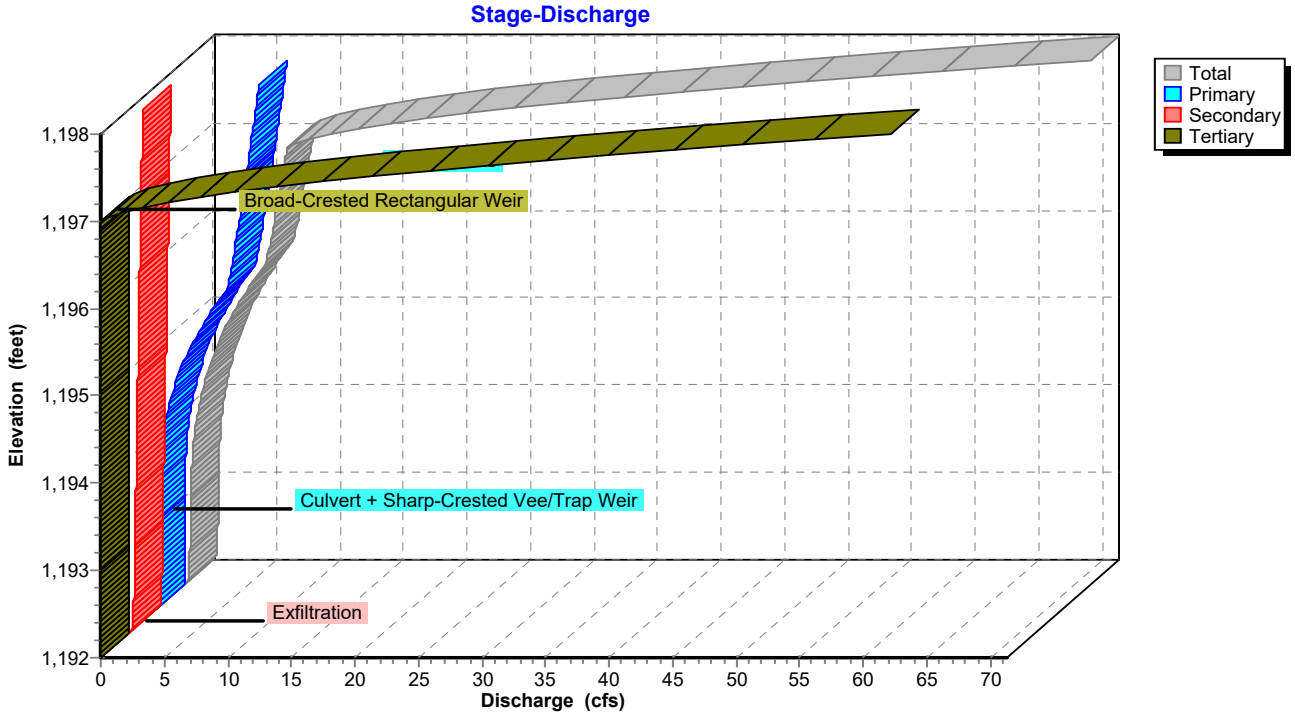
Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,192.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



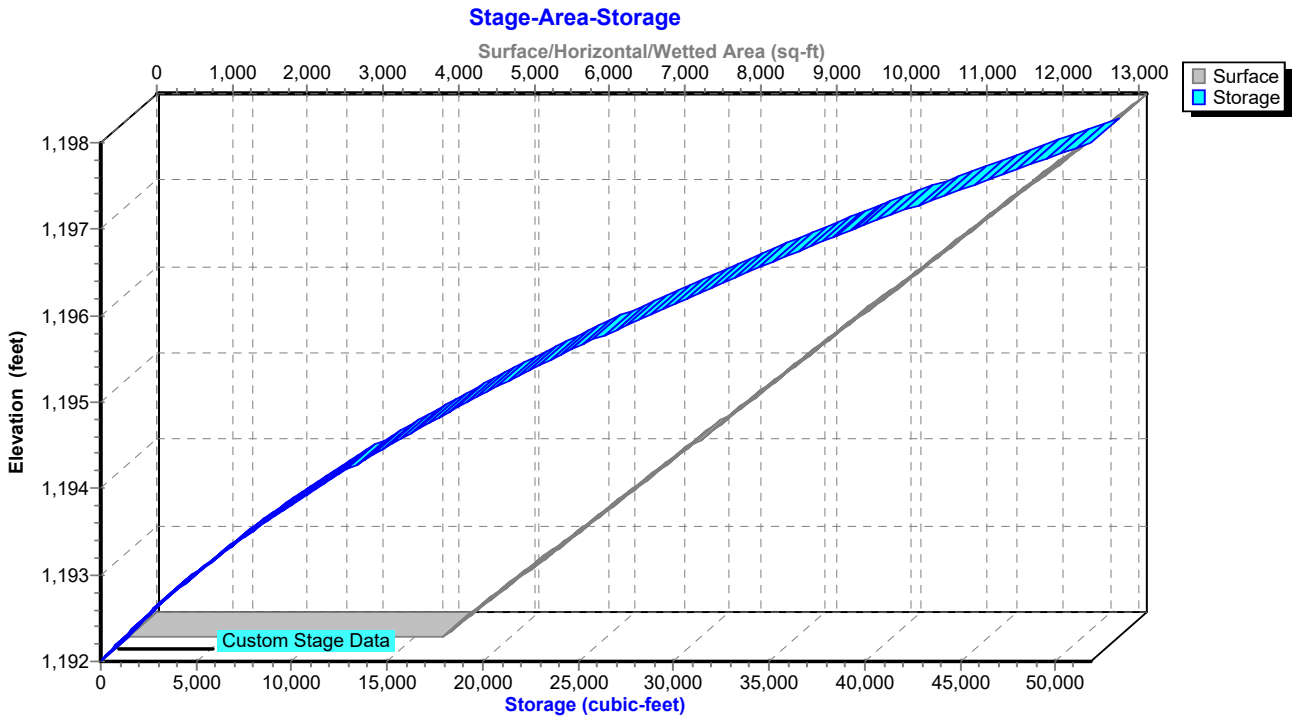
Pond P3A: Pond 3A



Pond P3A: Pond 3A



Pond P3A: Pond 3A



Hydrograph for Pond P3A: Pond 3A

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,192.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.53**	**9,268**	**1,193.70**	**0.76**	**0.20**	**0.56**	0.00
25.00	0.00	4	1,192.00	0.01	0.00	0.01	0.00
35.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3A: Pond 3A

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,192.00	0.00	0.00	0.00	0.00
1,192.20	0.37	0.00	0.37	0.00
1,192.40	0.40	0.00	0.40	0.00
1,192.60	0.42	0.00	0.42	0.00
1,192.80	0.45	0.00	0.45	0.00
1,193.00	0.47	0.00	0.47	0.00
1,193.20	0.50	0.01	0.50	0.00
1,193.40	0.57	0.05	0.52	0.00
1,193.60	0.68	0.13	0.55	0.00
1,193.80	0.84	0.27	0.57	0.00
1,194.00	1.07	0.47	0.60	0.00
1,194.20	1.37	0.75	0.62	0.00
1,194.40	1.75	1.10	0.65	0.00
1,194.60	2.21	1.54	0.67	0.00
1,194.80	2.76	2.06	0.70	0.00
1,195.00	3.40	2.68	0.72	0.00
1,195.20	4.15	3.41	0.74	0.00
1,195.40	5.00	4.23	0.77	0.00
1,195.60	5.96	5.17	0.79	0.00
1,195.80	6.55	5.74	0.82	0.00
1,196.00	6.82	5.98	0.84	0.00
1,196.20	7.08	6.21	0.87	0.00
1,196.40	7.33	6.44	0.89	0.00
1,196.60	7.58	6.66	0.92	0.00
1,196.80	7.81	6.87	0.94	0.00
1,197.00	8.04	7.07	0.97	0.00
1,197.20	12.86	7.27	0.99	4.60
1,197.40	22.27	7.47	1.02	13.78
1,197.60	36.21	7.66	1.04	27.51
1,197.80	52.33	7.84	1.07	43.42
1,198.00	**71.29**	**8.02**	**1.09**	**62.18**

Stage-Area-Storage for Pond P3A: Pond 3A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,192.00	4,165	0
1,192.10	4,314	424
1,192.20	4,463	863
1,192.30	4,613	1,317
1,192.40	4,762	1,785
1,192.50	4,911	2,269
1,192.60	5,060	2,768
1,192.70	5,209	3,281
1,192.80	5,359	3,809
1,192.90	5,508	4,353
1,193.00	5,657	4,911
1,193.10	5,806	5,484
1,193.20	5,955	6,072
1,193.30	6,105	6,675
1,193.40	6,254	7,293
1,193.50	6,403	7,926
1,193.60	6,552	8,574
1,193.70	6,701	9,236
1,193.80	6,851	9,914
1,193.90	7,000	10,607
1,194.00	7,149	11,314
1,194.10	7,298	12,036
1,194.20	7,447	12,774
1,194.30	7,597	13,526
1,194.40	7,746	14,293
1,194.50	7,895	15,075
1,194.60	8,044	15,872
1,194.70	8,193	16,684
1,194.80	8,343	17,511
1,194.90	8,492	18,352
1,195.00	8,641	19,209
1,195.10	8,790	20,081
1,195.20	8,939	20,967
1,195.30	9,089	21,868
1,195.40	9,238	22,785
1,195.50	9,387	23,716
1,195.60	9,536	24,662
1,195.70	9,685	25,623
1,195.80	9,835	26,599
1,195.90	9,984	27,590
1,196.00	10,133	28,596
1,196.10	10,282	29,617
1,196.20	10,431	30,652
1,196.30	10,581	31,703
1,196.40	10,730	32,769
1,196.50	10,879	33,849
1,196.60	11,028	34,944
1,196.70	11,177	36,055
1,196.80	11,327	37,180
1,196.90	11,476	38,320
1,197.00	11,625	39,475
1,197.10	11,774	40,645
1,197.20	11,923	41,830
1,197.30	12,073	43,030
1,197.40	12,222	44,244
1,197.50	12,371	45,474
1,197.60	12,520	46,719
1,197.70	12,669	47,978
1,197.80	12,819	49,252
1,197.90	12,968	50,542
1,198.00	**13,117**	**51,846**

Summary for Pond P3B: Pond 3B

Inflow Area = 8.450 ac, 19.88% Impervious, Inflow Depth = 0.70" for 2 YR event
Inflow = 8.74 cfs @ 12.14 hrs, Volume= 0.495 af
Outflow = 0.96 cfs @ 13.21 hrs, Volume= 0.495 af, Atten= 89%, Lag= 64.1 min
Primary = 0.46 cfs @ 13.21 hrs, Volume= 0.095 af
Routed to Link 4L : Post - North
Secondary = 0.50 cfs @ 13.21 hrs, Volume= 0.400 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,196.99' @ 13.21 hrs Surf.Area= 5,980 sf Storage= 8,739 cf

Plug-Flow detention time= 153.6 min calculated for 0.495 af (100% of inflow)
Center-of-Mass det. time= 153.6 min (1,011.7 - 858.1)

Volume	Invert	Avail.Storage	Storage Description
#1	1,195.00'	33,965 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

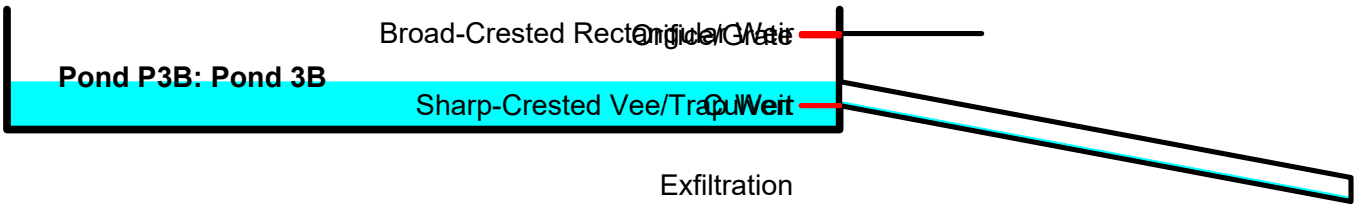
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,195.00	2,799	0	0
1,200.00	10,787	33,965	33,965

Device	Routing	Invert	Outlet Devices
#1	Primary	1,196.00'	**12.0" Round Culvert** L= 36.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,196.00' / 1,192.00' S= 0.1111 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,196.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,198.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,195.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,199.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.46 cfs @ 13.21 hrs HW=1,196.99' (Free Discharge)
└**1=Culvert** (Passes 0.46 cfs of 2.66 cfs potential flow)
├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 0.46 cfs @ 2.68 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

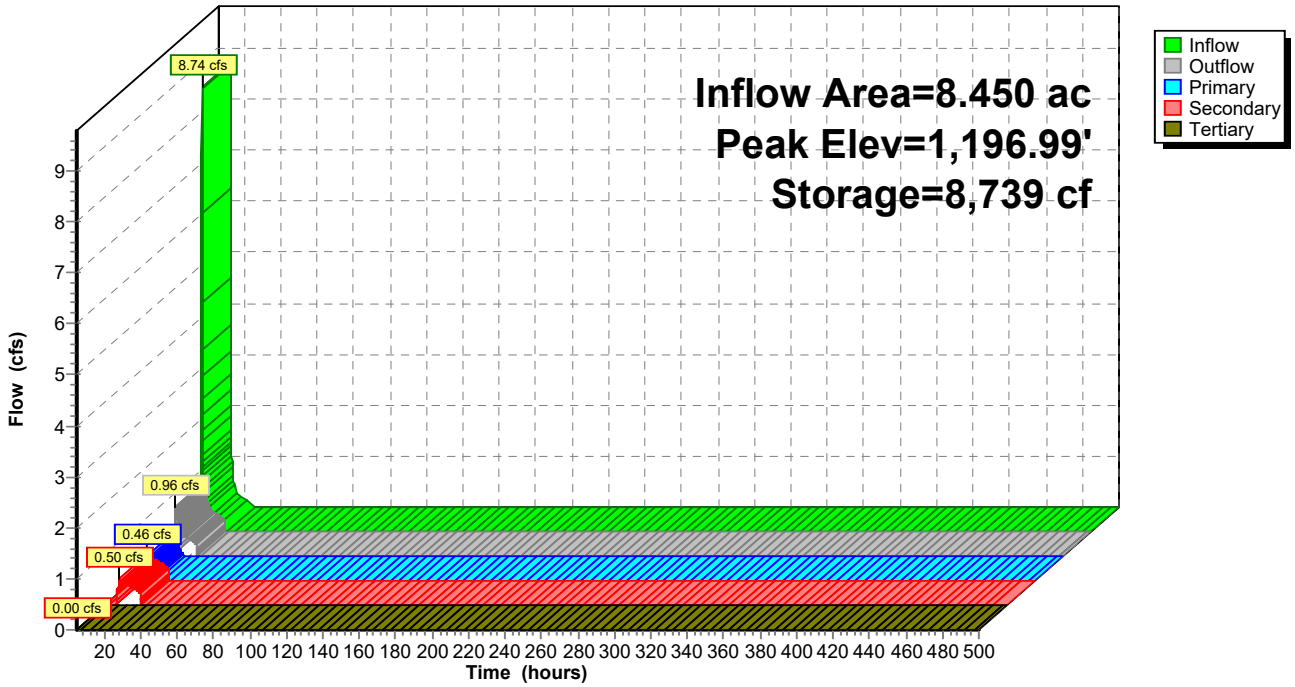
Secondary OutFlow Max=0.50 cfs @ 13.21 hrs HW=1,196.99' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.50 cfs)

Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,195.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

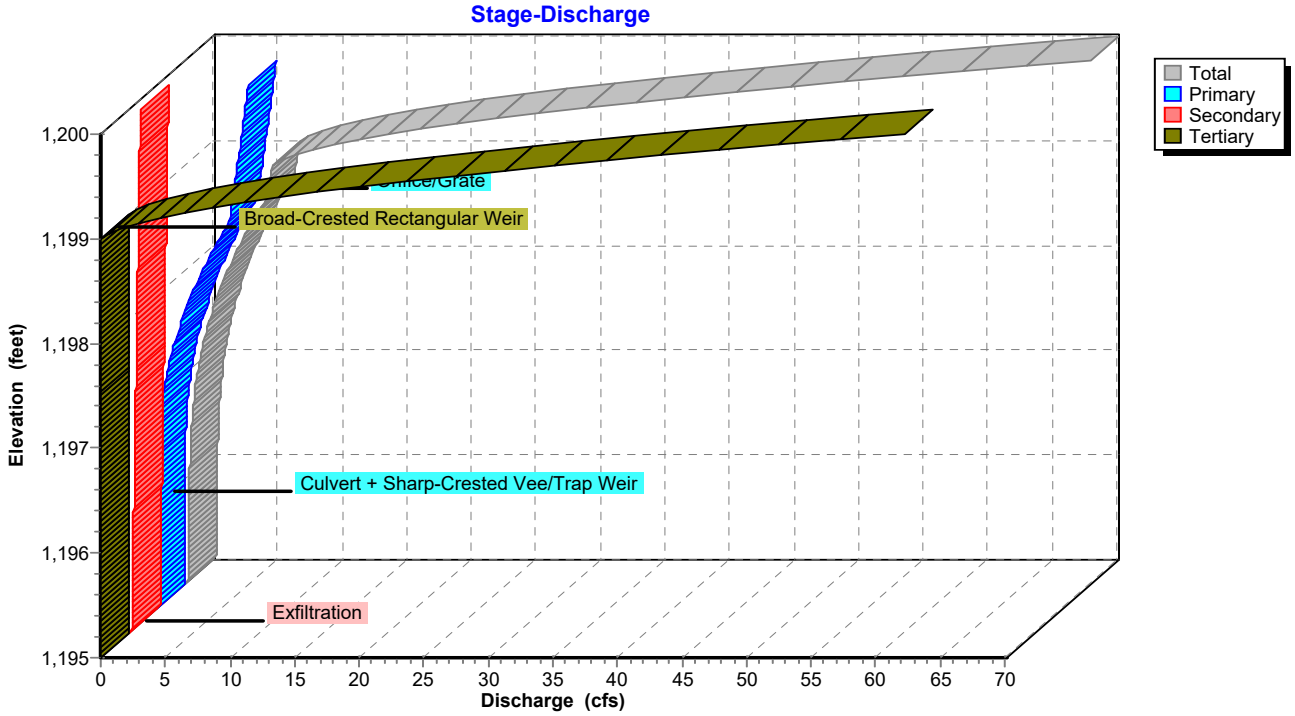


Pond P3B: Pond 3B

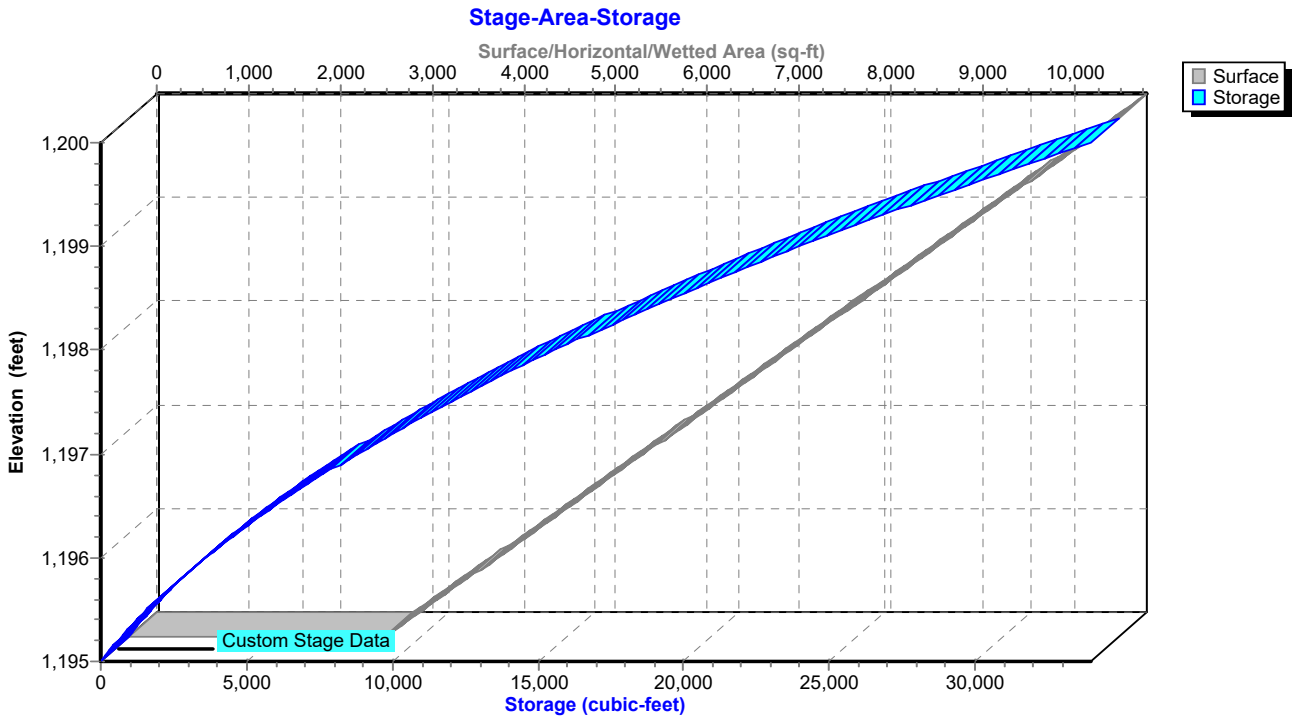
Hydrograph



Pond P3B: Pond 3B



Pond P3B: Pond 3B



Hydrograph for Pond P3B: Pond 3B

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,195.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.44**	**7,069**	**1,196.70**	**0.65**	**0.19**	**0.46**	0.00
25.00	0.00	3	1,195.00	0.01	0.00	0.01	0.00
35.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3B: Pond 3B

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,195.00	0.00	0.00	0.00	0.00
1,195.10	0.25	0.00	0.25	0.00
1,195.20	0.26	0.00	0.26	0.00
1,195.30	0.27	0.00	0.27	0.00
1,195.40	0.29	0.00	0.29	0.00
1,195.50	0.30	0.00	0.30	0.00
1,195.60	0.31	0.00	0.31	0.00
1,195.70	0.33	0.00	0.33	0.00
1,195.80	0.34	0.00	0.34	0.00
1,195.90	0.35	0.00	0.35	0.00
1,196.00	0.37	0.00	0.37	0.00
1,196.10	0.38	0.00	0.38	0.00
1,196.20	0.40	0.01	0.39	0.00
1,196.30	0.43	0.02	0.41	0.00
1,196.40	0.47	0.05	0.42	0.00
1,196.50	0.52	0.08	0.43	0.00
1,196.60	0.58	0.13	0.45	0.00
1,196.70	0.65	0.19	0.46	0.00
1,196.80	0.74	0.27	0.47	0.00
1,196.90	0.85	0.36	0.49	0.00
1,197.00	0.97	0.47	0.50	0.00
1,197.10	1.11	0.60	0.51	0.00
1,197.20	1.27	0.75	0.53	0.00
1,197.30	1.45	0.91	0.54	0.00
1,197.40	1.65	1.10	0.55	0.00
1,197.50	1.87	1.31	0.57	0.00
1,197.60	2.12	1.54	0.58	0.00
1,197.70	2.38	1.79	0.59	0.00
1,197.80	2.67	2.06	0.61	0.00
1,197.90	2.98	2.36	0.62	0.00
1,198.00	3.32	2.68	0.63	0.00
1,198.10	3.68	3.03	0.65	0.00
1,198.20	4.06	3.41	0.66	0.00
1,198.30	4.48	3.81	0.67	0.00
1,198.40	4.92	4.23	0.69	0.00
1,198.50	5.39	4.69	0.70	0.00
1,198.60	5.88	5.17	0.71	0.00
1,198.70	6.33	5.61	0.73	0.00
1,198.80	6.47	5.74	0.74	0.00
1,198.90	6.61	5.86	0.75	0.00
1,199.00	6.75	5.98	0.77	0.00
1,199.10	8.48	6.10	0.78	1.60
1,199.20	11.60	6.21	0.79	4.60
1,199.30	15.83	6.33	0.81	8.70
1,199.40	21.04	6.44	0.82	13.78
1,199.50	27.47	6.55	0.83	20.08
1,199.60	35.01	6.66	0.85	27.51
1,199.70	42.73	6.76	0.86	35.10
1,199.80	51.17	6.87	0.87	43.42
1,199.90	60.31	6.97	0.89	52.45
1,200.00	**70.15**	**7.07**	**0.90**	**62.18**

Stage-Area-Storage for Pond P3B: Pond 3B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,195.00	2,799	0
1,195.05	2,879	142
1,195.10	2,959	288
1,195.15	3,039	438
1,195.20	3,119	592
1,195.25	3,198	750
1,195.30	3,278	912
1,195.35	3,358	1,078
1,195.40	3,438	1,247
1,195.45	3,518	1,421
1,195.50	3,598	1,599
1,195.55	3,678	1,781
1,195.60	3,758	1,967
1,195.65	3,837	2,157
1,195.70	3,917	2,351
1,195.75	3,997	2,549
1,195.80	4,077	2,750
1,195.85	4,157	2,956
1,195.90	4,237	3,166
1,195.95	4,317	3,380
1,196.00	4,397	3,598
1,196.05	4,476	3,820
1,196.10	4,556	4,045
1,196.15	4,636	4,275
1,196.20	4,716	4,509
1,196.25	4,796	4,747
1,196.30	4,876	4,989
1,196.35	4,956	5,234
1,196.40	5,036	5,484
1,196.45	5,116	5,738
1,196.50	5,195	5,996
1,196.55	5,275	6,258
1,196.60	5,355	6,523
1,196.65	5,435	6,793
1,196.70	5,515	7,067
1,196.75	5,595	7,345
1,196.80	5,675	7,626
1,196.85	5,755	7,912
1,196.90	5,834	8,202
1,196.95	5,914	8,495
1,197.00	5,994	8,793
1,197.05	6,074	9,095
1,197.10	6,154	9,401
1,197.15	6,234	9,710
1,197.20	6,314	10,024
1,197.25	6,394	10,342
1,197.30	6,473	10,663
1,197.35	6,553	10,989
1,197.40	6,633	11,319
1,197.45	6,713	11,652
1,197.50	6,793	11,990
1,197.55	6,873	12,332
1,197.60	6,953	12,677
1,197.65	7,033	13,027
1,197.70	7,113	13,381
1,197.75	7,192	13,738
1,197.80	7,272	14,100
1,197.85	7,352	14,465
1,197.90	7,432	14,835
1,197.95	7,512	15,209
1,198.00	7,592	15,586
1,198.05	7,672	15,968
1,198.10	7,752	16,353
1,198.15	7,831	16,743
1,198.20	7,911	17,137
1,198.25	7,991	17,534
1,198.30	8,071	17,936
1,198.35	8,151	18,341
1,198.40	8,231	18,751
1,198.45	8,311	19,164
1,198.50	8,391	19,582
1,198.55	8,470	20,003
1,198.60	8,550	20,429
1,198.65	8,630	20,858
1,198.70	8,710	21,292
1,198.75	8,790	21,729
1,198.80	8,870	22,171
1,198.85	8,950	22,616
1,198.90	9,030	23,066
1,198.95	9,110	23,519
1,199.00	9,189	23,977
1,199.05	9,269	24,438
1,199.10	9,349	24,904
1,199.15	9,429	25,373
1,199.20	9,509	25,847
1,199.25	9,589	26,324
1,199.30	9,669	26,806
1,199.35	9,749	27,291
1,199.40	9,828	27,780
1,199.45	9,908	28,274
1,199.50	9,988	28,771
1,199.55	10,068	29,273
1,199.60	10,148	29,778
1,199.65	10,228	30,287
1,199.70	10,308	30,801
1,199.75	10,388	31,318
1,199.80	10,467	31,840
1,199.85	10,547	32,365
1,199.90	10,627	32,894
1,199.95	10,707	33,428
1,200.00	**10,787**	**33,965**

Summary for Pond P3C: Pond 3C

Inflow Area = 2.490 ac, 22.89% Impervious, Inflow Depth = 0.90" for 2 YR event
Inflow = 3.42 cfs @ 12.14 hrs, Volume= 0.186 af
Outflow = 0.31 cfs @ 13.33 hrs, Volume= 0.186 af, Atten= 91%, Lag= 71.2 min
Primary = 0.04 cfs @ 13.33 hrs, Volume= 0.006 af
Routed to Link 4L : Post - North
Secondary = 0.26 cfs @ 13.33 hrs, Volume= 0.180 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,179.39' @ 13.33 hrs Surf.Area= 3,157 sf Storage= 3,509 cf

Plug-Flow detention time= 133.0 min calculated for 0.186 af (100% of inflow)
Center-of-Mass det. time= 133.0 min (978.5 - 845.6)

Volume	Invert	Avail.Storage	Storage Description
#1	1,178.00'	14,846 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

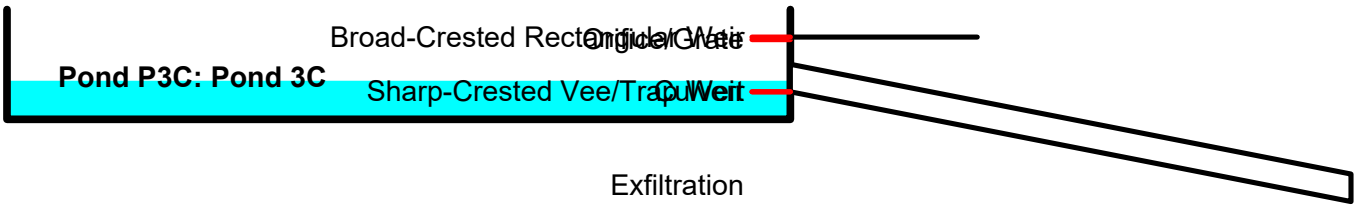
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,178.00	1,905	0	0
1,182.00	5,518	14,846	14,846

Device	Routing	Invert	Outlet Devices
#1	Primary	1,179.00'	**12.0" Round Culvert** L= 30.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,179.00' / 1,175.00' S= 0.1333 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,179.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,180.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,178.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,181.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.04 cfs @ 13.33 hrs HW=1,179.39' (Free Discharge)
└**1=Culvert** (Passes 0.04 cfs of 0.59 cfs potential flow)
├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 0.04 cfs @ 1.67 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

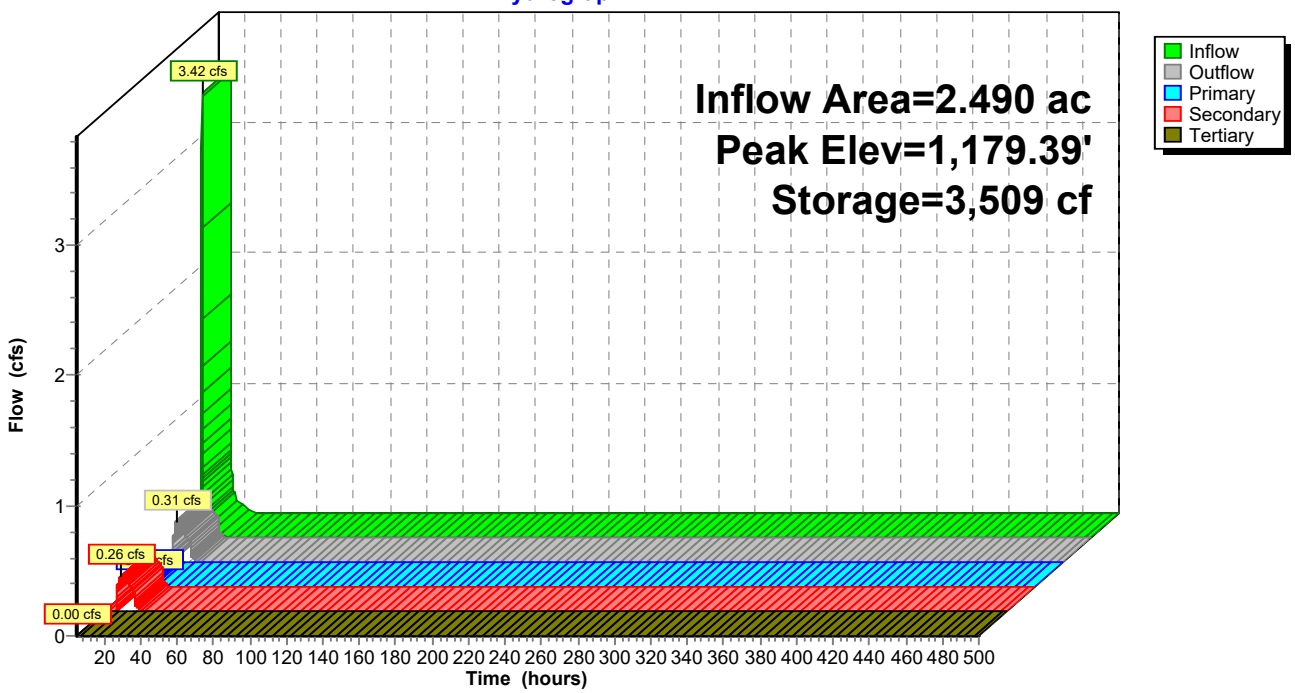
Secondary OutFlow Max=0.26 cfs @ 13.33 hrs HW=1,179.39' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.26 cfs)

Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,178.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

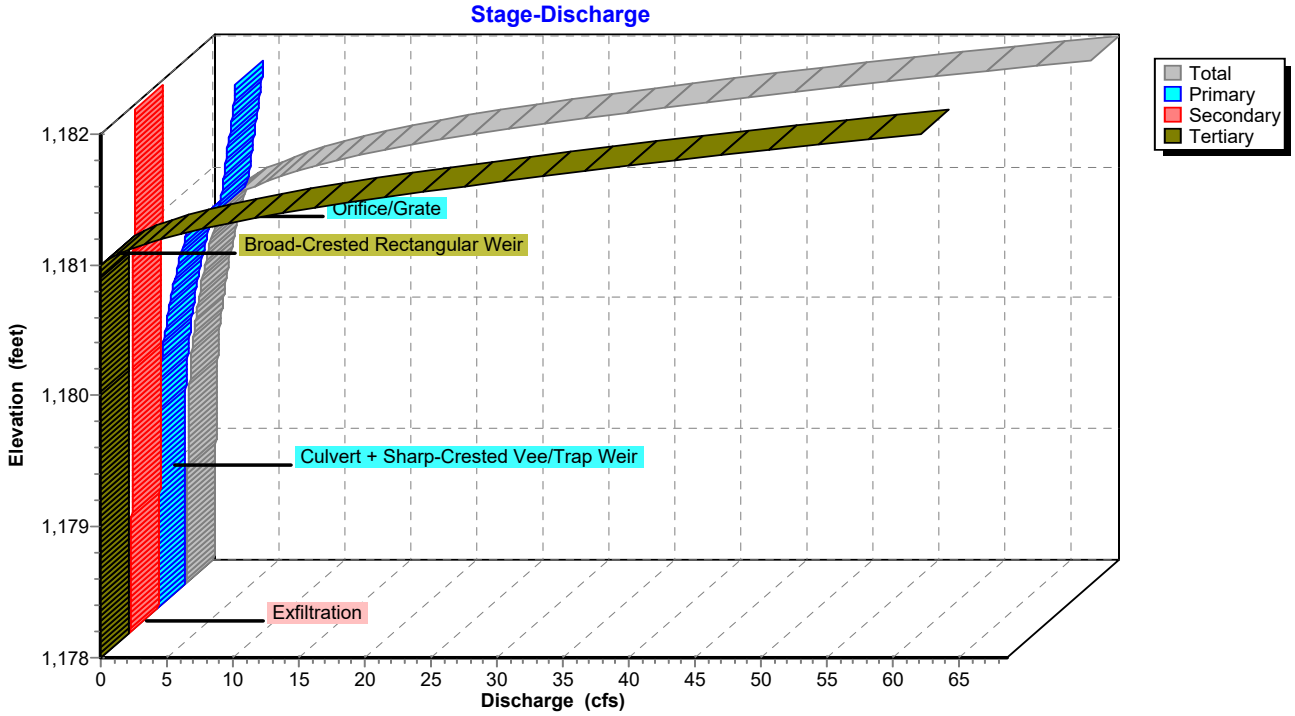


Pond P3C: Pond 3C

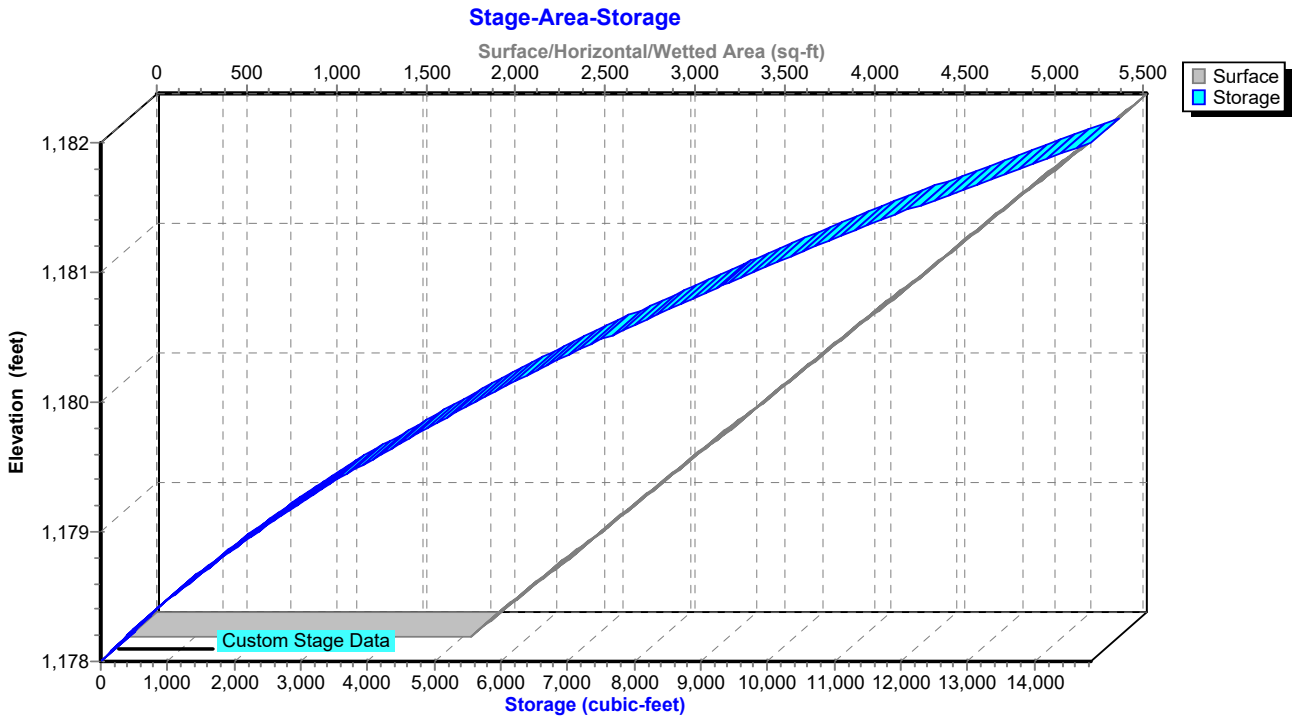
Hydrograph



Pond P3C: Pond 3C



Pond P3C: Pond 3C



Hydrograph for Pond P3C: Pond 3C

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,178.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.15**	**2,904**	**1,179.19**	**0.26**	**0.01**	**0.25**	0.00
25.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
35.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3C: Pond 3C

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,178.00	0.00	0.00	0.00	0.00
1,178.10	0.17	0.00	0.17	0.00
1,178.20	0.17	0.00	0.17	0.00
1,178.30	0.18	0.00	0.18	0.00
1,178.40	0.19	0.00	0.19	0.00
1,178.50	0.20	0.00	0.20	0.00
1,178.60	0.20	0.00	0.20	0.00
1,178.70	0.21	0.00	0.21	0.00
1,178.80	0.22	0.00	0.22	0.00
1,178.90	0.23	0.00	0.23	0.00
1,179.00	0.23	0.00	0.23	0.00
1,179.10	0.24	0.00	0.24	0.00
1,179.20	0.26	0.01	0.25	0.00
1,179.30	0.28	0.02	0.26	0.00
1,179.40	0.31	0.05	0.26	0.00
1,179.50	0.36	0.08	0.27	0.00
1,179.60	0.41	0.13	0.28	0.00
1,179.70	0.48	0.19	0.29	0.00
1,179.80	0.57	0.27	0.29	0.00
1,179.90	0.67	0.36	0.30	0.00
1,180.00	0.78	0.47	0.31	0.00
1,180.10	0.92	0.60	0.32	0.00
1,180.20	1.07	0.75	0.32	0.00
1,180.30	1.25	0.91	0.33	0.00
1,180.40	1.44	1.10	0.34	0.00
1,180.50	1.65	1.31	0.35	0.00
1,180.60	1.89	1.54	0.35	0.00
1,180.70	2.15	1.79	0.36	0.00
1,180.80	2.43	2.06	0.37	0.00
1,180.90	2.74	2.36	0.38	0.00
1,181.00	4.10	3.72	0.38	0.00
1,181.10	6.78	4.78	0.39	1.60
1,181.20	9.93	4.93	0.40	4.60
1,181.30	14.18	5.07	0.41	8.70
1,181.40	19.41	5.21	0.41	13.78
1,181.50	25.85	5.35	0.42	20.08
1,181.60	33.42	5.48	0.43	27.51
1,181.70	41.15	5.61	0.44	35.10
1,181.80	49.60	5.74	0.44	43.42
1,181.90	58.76	5.86	0.45	52.45
1,182.00	**68.62**	**5.98**	**0.46**	**62.18**

Stage-Area-Storage for Pond P3C: Pond 3C

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,178.00	1,905	0
1,178.05	1,950	96
1,178.10	1,995	195
1,178.15	2,040	296
1,178.20	2,086	399
1,178.25	2,131	504
1,178.30	2,176	612
1,178.35	2,221	722
1,178.40	2,266	834
1,178.45	2,311	949
1,178.50	2,357	1,065
1,178.55	2,402	1,184
1,178.60	2,447	1,306
1,178.65	2,492	1,429
1,178.70	2,537	1,555
1,178.75	2,582	1,683
1,178.80	2,628	1,813
1,178.85	2,673	1,946
1,178.90	2,718	2,080
1,178.95	2,763	2,217
1,179.00	2,808	2,357
1,179.05	2,853	2,498
1,179.10	2,899	2,642
1,179.15	2,944	2,788
1,179.20	2,989	2,936
1,179.25	3,034	3,087
1,179.30	3,079	3,240
1,179.35	3,124	3,395
1,179.40	3,170	3,552
1,179.45	3,215	3,712
1,179.50	3,260	3,874
1,179.55	3,305	4,038
1,179.60	3,350	4,204
1,179.65	3,395	4,373
1,179.70	3,441	4,544
1,179.75	3,486	4,717
1,179.80	3,531	4,892
1,179.85	3,576	5,070
1,179.90	3,621	5,250
1,179.95	3,666	5,432
1,180.00	3,712	5,617
1,180.05	3,757	5,803
1,180.10	3,802	5,992
1,180.15	3,847	6,183
1,180.20	3,892	6,377
1,180.25	3,937	6,573
1,180.30	3,982	6,771
1,180.35	4,028	6,971
1,180.40	4,073	7,173
1,180.45	4,118	7,378
1,180.50	4,163	7,585
1,180.55	4,208	7,794
1,180.60	4,253	8,006
1,180.65	4,299	8,220
1,180.70	4,344	8,436
1,180.75	4,389	8,654
1,180.80	4,434	8,875
1,180.85	4,479	9,098
1,180.90	4,524	9,323
1,180.95	4,570	9,550
1,181.00	4,615	9,780
1,181.05	4,660	10,011
1,181.10	4,705	10,246
1,181.15	4,750	10,482
1,181.20	4,795	10,721
1,181.25	4,841	10,962
1,181.30	4,886	11,205
1,181.35	4,931	11,450
1,181.40	4,976	11,698
1,181.45	5,021	11,948
1,181.50	5,066	12,200
1,181.55	5,112	12,454
1,181.60	5,157	12,711
1,181.65	5,202	12,970
1,181.70	5,247	13,231
1,181.75	5,292	13,495
1,181.80	5,337	13,760
1,181.85	5,383	14,028
1,181.90	5,428	14,299
1,181.95	5,473	14,571
1,182.00	**5,518**	**14,846**

Summary for Pond P3D: Pond 3D

Inflow Area = 2.380 ac, 23.95% Impervious, Inflow Depth = 0.95" for 2 YR event
Inflow = 3.48 cfs @ 12.14 hrs, Volume= 0.188 af
Outflow = 0.74 cfs @ 12.49 hrs, Volume= 0.188 af, Atten= 79%, Lag= 21.3 min
Primary = 0.57 cfs @ 12.49 hrs, Volume= 0.066 af
Routed to Link 4L : Post - North
Secondary = 0.17 cfs @ 12.49 hrs, Volume= 0.122 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,189.08' @ 12.49 hrs Surf.Area= 2,057 sf Storage= 2,906 cf

Plug-Flow detention time= 107.7 min calculated for 0.188 af (100% of inflow)
Center-of-Mass det. time= 107.7 min (950.3 - 842.6)

Volume	Invert	Avail.Storage	Storage Description
#1	1,187.00'	11,620 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

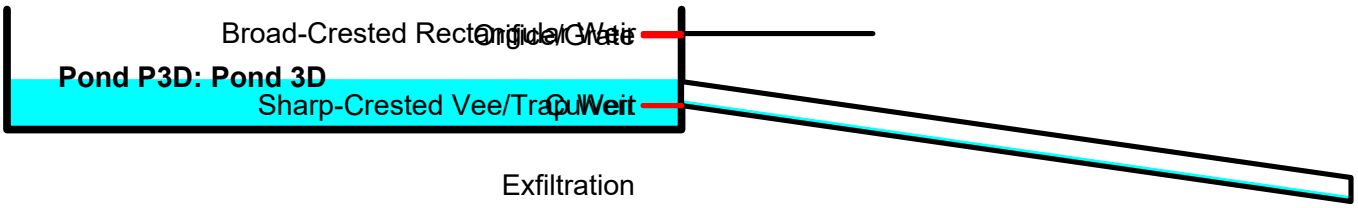
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,187.00	741	0	0
1,192.00	3,907	11,620	11,620

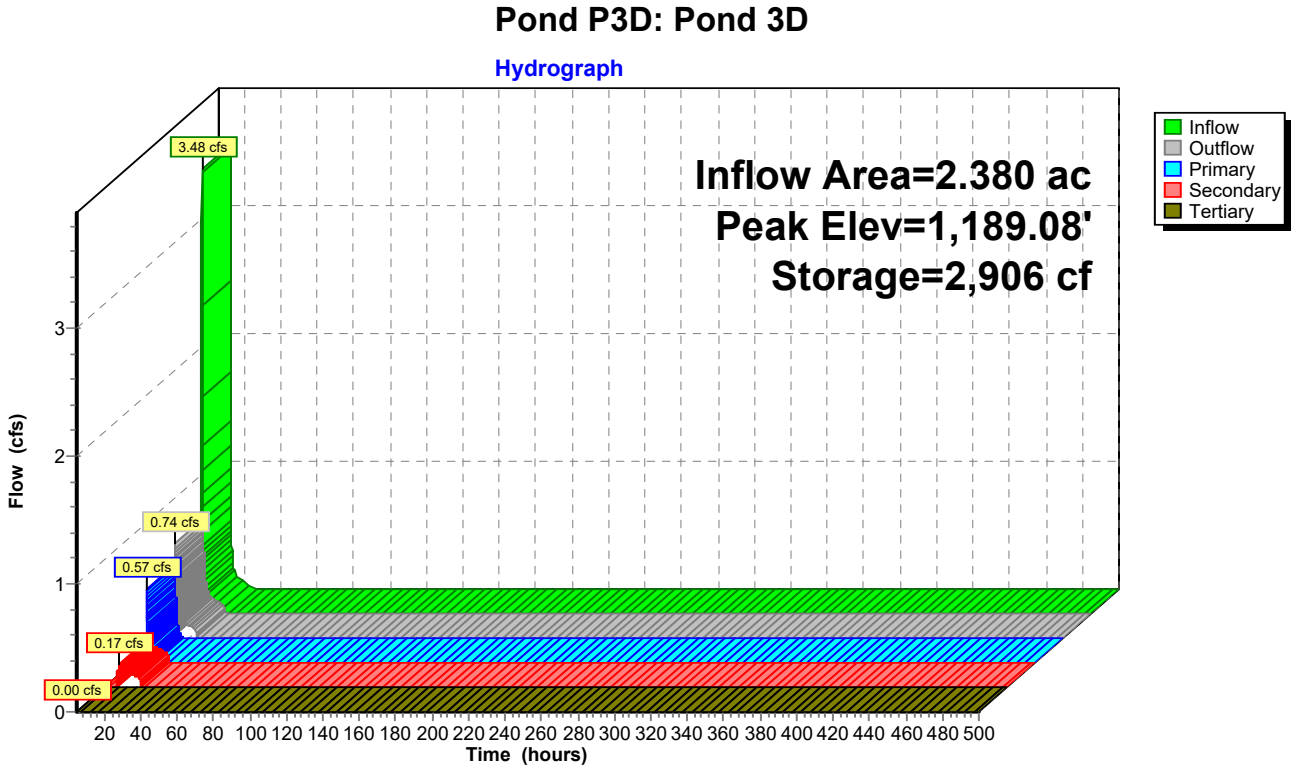
Device	Routing	Invert	Outlet Devices
#1	Primary	1,188.00'	**12.0" Round Culvert** L= 35.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,188.00' / 1,184.00' S= 0.1143 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,188.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,190.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600
#4	Secondary	1,187.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,191.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.57 cfs @ 12.49 hrs HW=1,189.08' (Free Discharge)
└**1=Culvert** (Passes 0.57 cfs of 2.87 cfs potential flow)
└**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 0.57 cfs @ 2.79 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

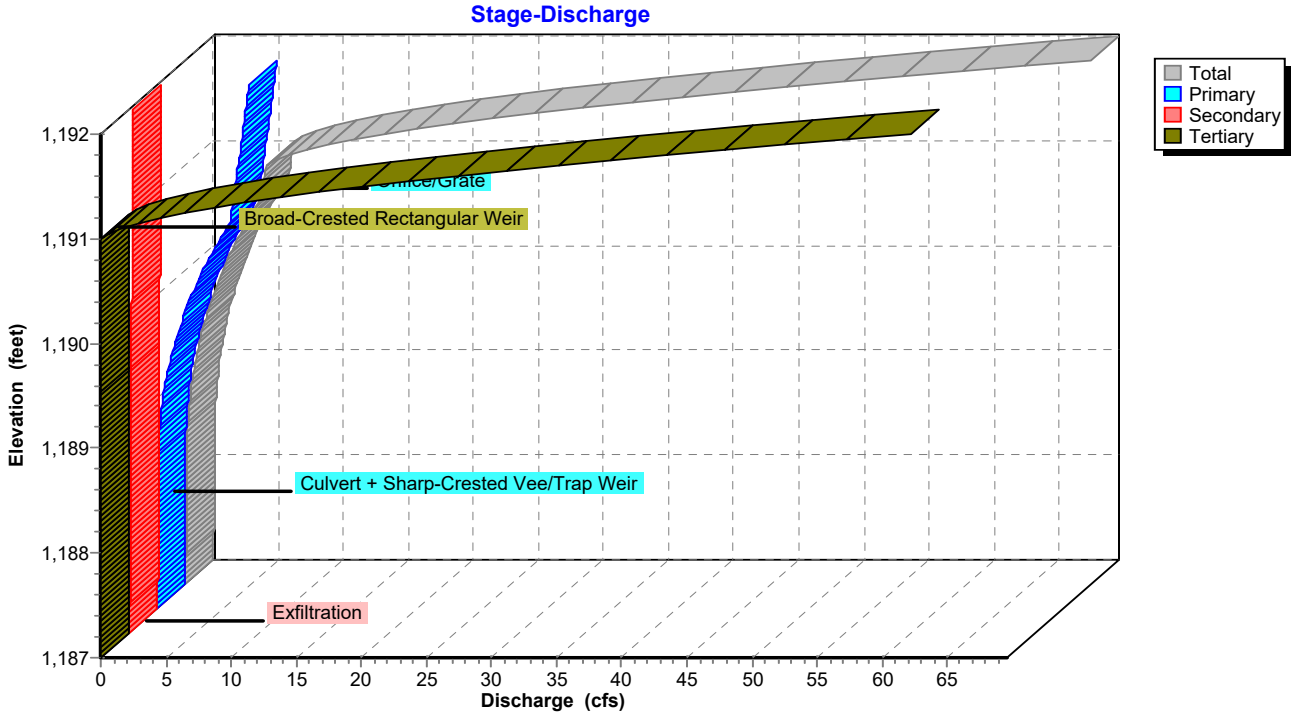
Secondary OutFlow Max=0.17 cfs @ 12.49 hrs HW=1,189.08' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.17 cfs)

Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,187.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

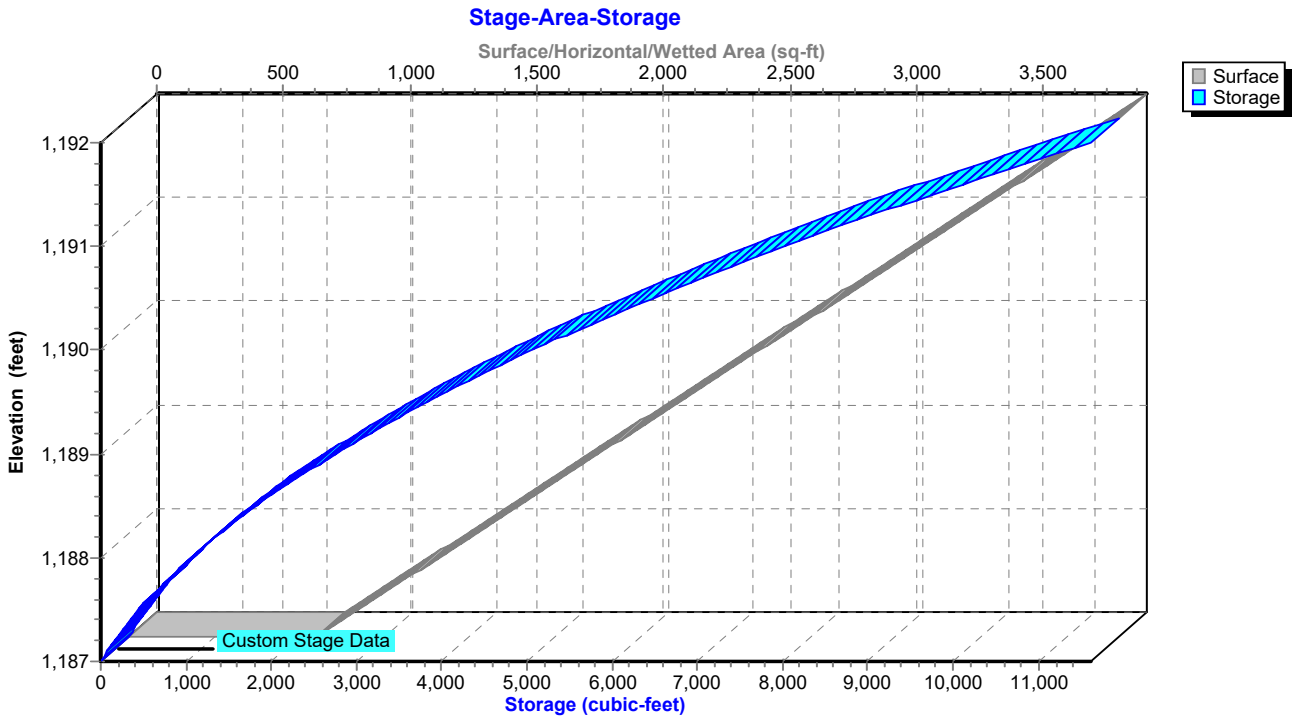

Broad-Crested Rectangular Weir
Orifice/Grate
Pond P3D: Pond 3D
Sharp-Crested Vee/Trap Weir
Exfiltration


Pond P3D: Pond 3D
Hydrograph
Inflow Area=2.380 ac
Peak Elev=1,189.08'
Storage=2,906 cf
Inflow
Outflow
Primary
Secondary
Tertiary
3.48 cfs
0.74 cfs
0.57 cfs
0.17 cfs
0.00 cfs
Flow (cfs)
0
1
2
3
20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500
Time (hours)

Pond P3D: Pond 3D



Pond P3D: Pond 3D



Hydrograph for Pond P3D: Pond 3D

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,187.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.15**	**1,743**	**1,188.45**	**0.20**	**0.07**	**0.14**	0.00
25.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
35.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3D: Pond 3D

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,187.00	0.00	0.00	0.00	0.00
1,187.10	0.07	0.00	0.07	0.00
1,187.20	0.07	0.00	0.07	0.00
1,187.30	0.08	0.00	0.08	0.00
1,187.40	0.08	0.00	0.08	0.00
1,187.50	0.09	0.00	0.09	0.00
1,187.60	0.09	0.00	0.09	0.00
1,187.70	0.10	0.00	0.10	0.00
1,187.80	0.10	0.00	0.10	0.00
1,187.90	0.11	0.00	0.11	0.00
1,188.00	0.11	0.00	0.11	0.00
1,188.10	0.12	0.00	0.12	0.00
1,188.20	0.13	0.01	0.13	0.00
1,188.30	0.15	0.02	0.13	0.00
1,188.40	0.18	0.05	0.14	0.00
1,188.50	0.22	0.08	0.14	0.00
1,188.60	0.28	0.13	0.15	0.00
1,188.70	0.35	0.19	0.15	0.00
1,188.80	0.43	0.27	0.16	0.00
1,188.90	0.53	0.36	0.16	0.00
1,189.00	0.64	0.47	0.17	0.00
1,189.10	0.77	0.60	0.17	0.00
1,189.20	0.93	0.75	0.18	0.00
1,189.30	1.10	0.91	0.18	0.00
1,189.40	1.29	1.10	0.19	0.00
1,189.50	1.50	1.31	0.19	0.00
1,189.60	1.73	1.54	0.20	0.00
1,189.70	1.99	1.79	0.20	0.00
1,189.80	2.27	2.06	0.21	0.00
1,189.90	2.58	2.36	0.21	0.00
1,190.00	2.90	2.68	0.22	0.00
1,190.10	3.26	3.03	0.23	0.00
1,190.20	3.64	3.41	0.23	0.00
1,190.30	4.04	3.81	0.24	0.00
1,190.40	4.47	4.23	0.24	0.00
1,190.50	4.93	4.69	0.25	0.00
1,190.60	5.42	5.17	0.25	0.00
1,190.70	5.87	5.61	0.26	0.00
1,190.80	6.00	5.74	0.26	0.00
1,190.90	6.13	5.86	0.27	0.00
1,191.00	6.25	5.98	0.27	0.00
1,191.10	7.98	6.10	0.28	1.60
1,191.20	11.09	6.21	0.28	4.60
1,191.30	15.31	6.33	0.29	8.70
1,191.40	20.52	6.44	0.29	13.78
1,191.50	26.93	6.55	0.30	20.08
1,191.60	34.47	6.66	0.30	27.51
1,191.70	42.18	6.76	0.31	35.10
1,191.80	50.61	6.87	0.32	43.42
1,191.90	59.75	6.97	0.32	52.45
1,192.00	**69.58**	**7.07**	**0.33**	**62.18**

Stage-Area-Storage for Pond P3D: Pond 3D

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,187.00	741	0
1,187.05	773	38
1,187.10	804	77
1,187.15	836	118
1,187.20	868	161
1,187.25	899	205
1,187.30	931	251
1,187.35	963	298
1,187.40	994	347
1,187.45	1,026	398
1,187.50	1,058	450
1,187.55	1,089	503
1,187.60	1,121	559
1,187.65	1,153	615
1,187.70	1,184	674
1,187.75	1,216	734
1,187.80	1,248	795
1,187.85	1,279	859
1,187.90	1,311	923
1,187.95	1,343	990
1,188.00	1,374	1,058
1,188.05	1,406	1,127
1,188.10	1,438	1,198
1,188.15	1,469	1,271
1,188.20	1,501	1,345
1,188.25	1,533	1,421
1,188.30	1,564	1,498
1,188.35	1,596	1,577
1,188.40	1,627	1,658
1,188.45	1,659	1,740
1,188.50	1,691	1,824
1,188.55	1,722	1,909
1,188.60	1,754	1,996
1,188.65	1,786	2,085
1,188.70	1,817	2,175
1,188.75	1,849	2,266
1,188.80	1,881	2,360
1,188.85	1,912	2,454
1,188.90	1,944	2,551
1,188.95	1,976	2,649
1,189.00	2,007	2,748
1,189.05	2,039	2,850
1,189.10	2,071	2,952
1,189.15	2,102	3,057
1,189.20	2,134	3,163
1,189.25	2,166	3,270
1,189.30	2,197	3,379
1,189.35	2,229	3,490
1,189.40	2,261	3,602
1,189.45	2,292	3,716
1,189.50	2,324	3,831
1,189.55	2,356	3,948
1,189.60	2,387	4,067
1,189.65	2,419	4,187
1,189.70	2,451	4,309
1,189.75	2,482	4,432
1,189.80	2,514	4,557
1,189.85	2,546	4,683
1,189.90	2,577	4,812
1,189.95	2,609	4,941
1,190.00	2,641	5,072
1,190.05	2,672	5,205
1,190.10	2,704	5,340
1,190.15	2,736	5,476
1,190.20	2,767	5,613
1,190.25	2,799	5,752
1,190.30	2,831	5,893
1,190.35	2,862	6,035
1,190.40	2,894	6,179
1,190.45	2,926	6,325
1,190.50	2,957	6,472
1,190.55	2,989	6,621
1,190.60	3,021	6,771
1,190.65	3,052	6,923
1,190.70	3,084	7,076
1,190.75	3,116	7,231
1,190.80	3,147	7,388
1,190.85	3,179	7,546
1,190.90	3,210	7,705
1,190.95	3,242	7,867
1,191.00	3,274	8,030
1,191.05	3,305	8,194
1,191.10	3,337	8,360
1,191.15	3,369	8,528
1,191.20	3,400	8,697
1,191.25	3,432	8,868
1,191.30	3,464	9,040
1,191.35	3,495	9,214
1,191.40	3,527	9,390
1,191.45	3,559	9,567
1,191.50	3,590	9,746
1,191.55	3,622	9,926
1,191.60	3,654	10,108
1,191.65	3,685	10,291
1,191.70	3,717	10,476
1,191.75	3,749	10,663
1,191.80	3,780	10,851
1,191.85	3,812	11,041
1,191.90	3,844	11,232
1,191.95	3,875	11,425
1,192.00	**3,907**	**11,620**

Summary for Pond P3E: Pond 3E

Inflow Area = 2.780 ac, 19.06% Impervious, Inflow Depth = 0.85" for 2 YR event
Inflow = 3.57 cfs @ 12.14 hrs, Volume= 0.196 af
Outflow = 0.30 cfs @ 13.44 hrs, Volume= 0.196 af, Atten= 92%, Lag= 78.0 min
Primary = 0.02 cfs @ 13.44 hrs, Volume= 0.002 af
Routed to Link 4L : Post - North
Secondary = 0.28 cfs @ 13.44 hrs, Volume= 0.194 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,217.25' @ 13.44 hrs Surf.Area= 3,379 sf Storage= 3,688 cf

Plug-Flow detention time= 129.4 min calculated for 0.196 af (100% of inflow)
Center-of-Mass det. time= 129.4 min (978.0 - 848.6)

Volume	Invert	Avail.Storage	Storage Description
#1	1,216.00'	15,578 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

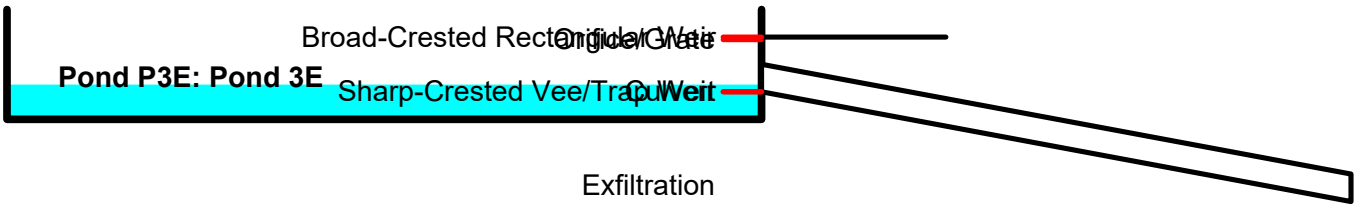
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,216.00	2,517	0	0
1,220.00	5,272	15,578	15,578

Device	Routing	Invert	Outlet Devices
#1	Primary	1,217.00'	**12.0" Round Culvert** L= 32.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,217.00' / 1,213.00' S= 0.1250 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,217.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,218.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600
#4	Secondary	1,216.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,219.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

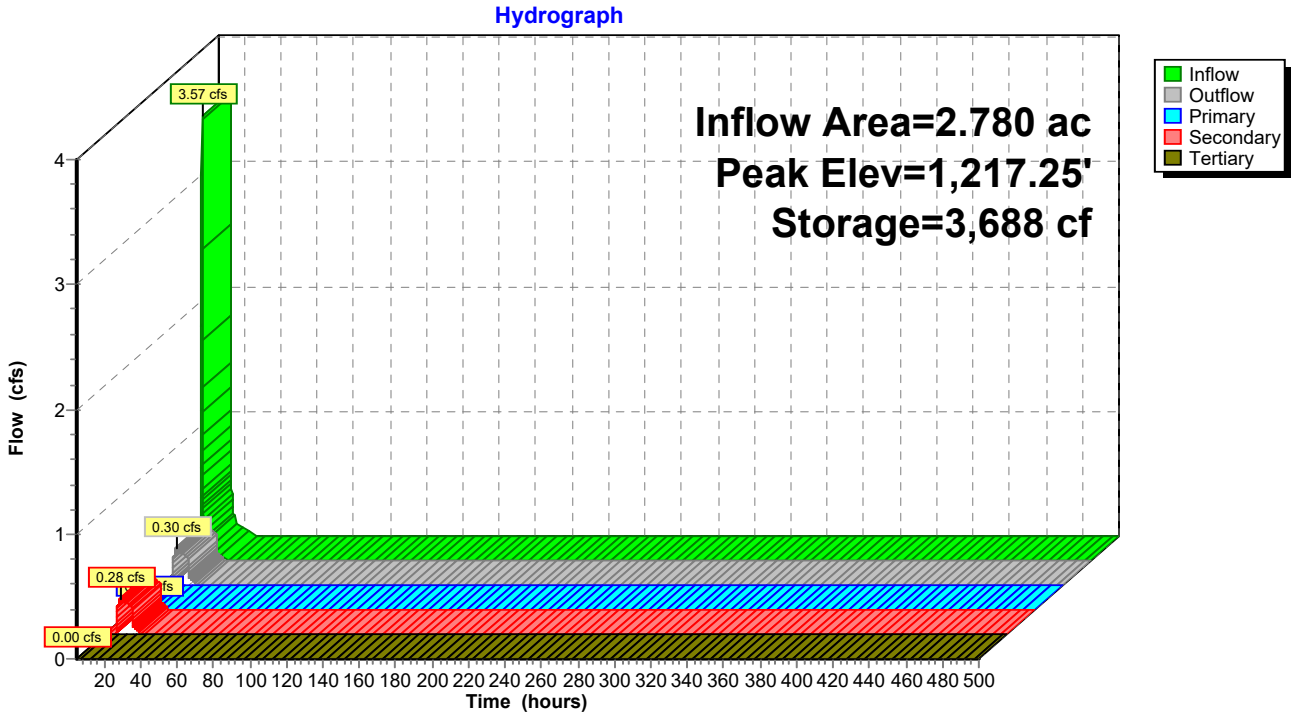
Primary OutFlow Max=0.01 cfs @ 13.44 hrs HW=1,217.25' (Free Discharge)
└**1=Culvert** (Passes 0.01 cfs of 0.26 cfs potential flow)
└**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 0.01 cfs @ 1.35 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.28 cfs @ 13.44 hrs HW=1,217.25' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.28 cfs)

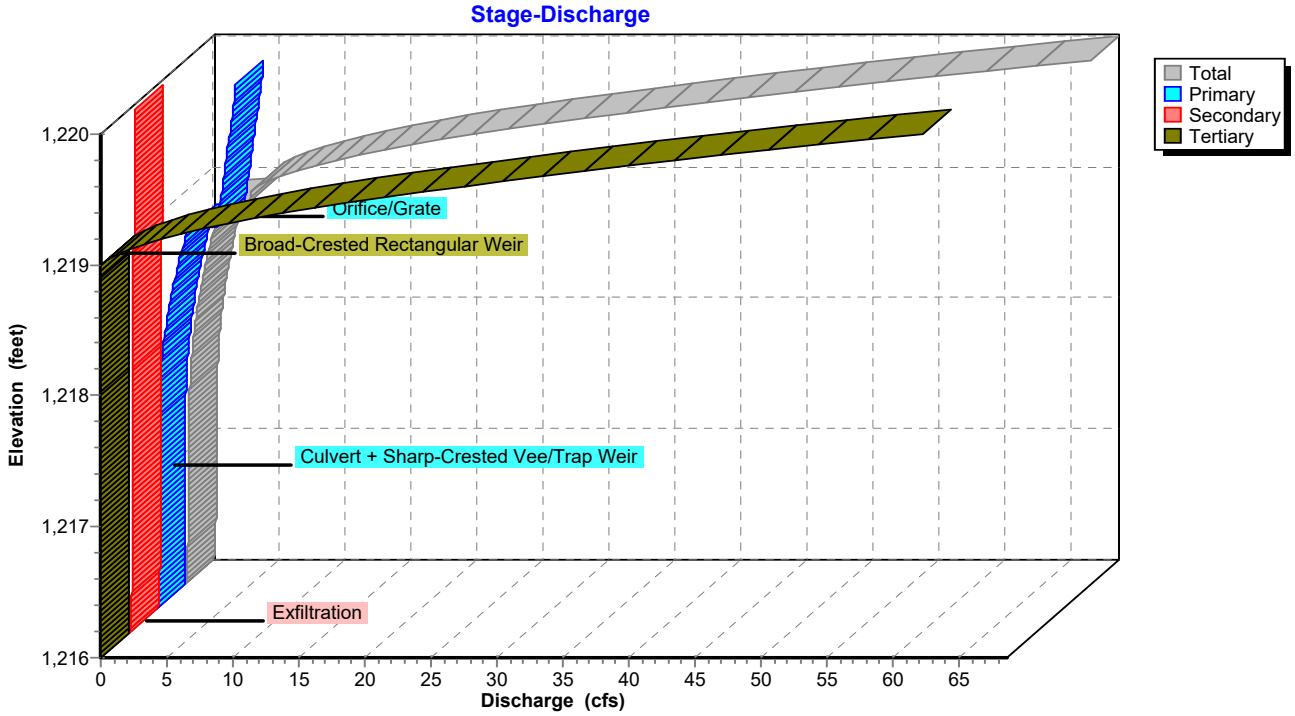
Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,216.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



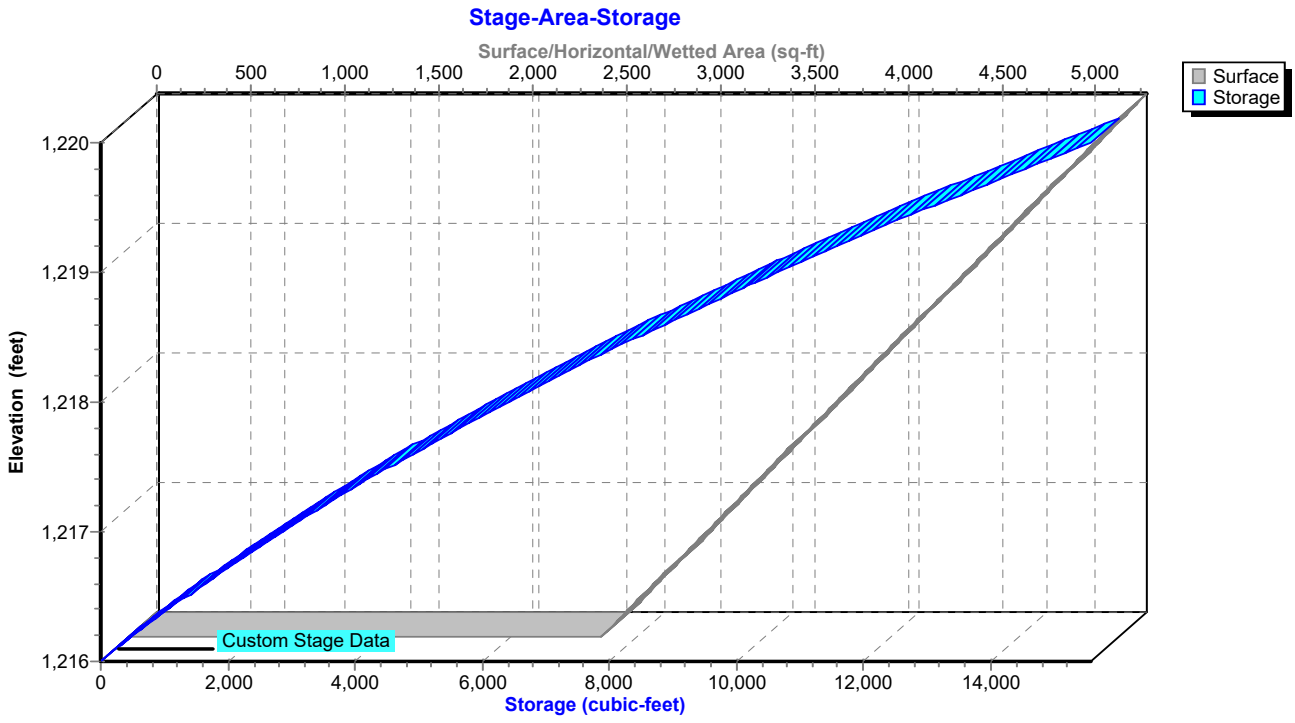
Pond P3E: Pond 3E



Pond P3E: Pond 3E



Pond P3E: Pond 3E



Hydrograph for Pond P3E: Pond 3E

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,216.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.16**	**3,132**	**1,217.08**	**0.27**	**0.00**	**0.27**	0.00
25.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
35.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3E: Pond 3E

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,216.00	0.00	0.00	0.00	0.00
1,216.10	0.22	0.00	0.22	0.00
1,216.20	0.22	0.00	0.22	0.00
1,216.30	0.23	0.00	0.23	0.00
1,216.40	0.23	0.00	0.23	0.00
1,216.50	0.24	0.00	0.24	0.00
1,216.60	0.24	0.00	0.24	0.00
1,216.70	0.25	0.00	0.25	0.00
1,216.80	0.26	0.00	0.26	0.00
1,216.90	0.26	0.00	0.26	0.00
1,217.00	0.27	0.00	0.27	0.00
1,217.10	0.27	0.00	0.27	0.00
1,217.20	0.29	0.01	0.28	0.00
1,217.30	0.31	0.02	0.28	0.00
1,217.40	0.34	0.05	0.29	0.00
1,217.50	0.38	0.08	0.30	0.00
1,217.60	0.43	0.13	0.30	0.00
1,217.70	0.50	0.19	0.31	0.00
1,217.80	0.58	0.27	0.31	0.00
1,217.90	0.68	0.36	0.32	0.00
1,218.00	0.80	0.47	0.32	0.00
1,218.10	0.93	0.60	0.33	0.00
1,218.20	1.08	0.75	0.34	0.00
1,218.30	1.26	0.91	0.34	0.00
1,218.40	1.45	1.10	0.35	0.00
1,218.50	1.66	1.31	0.35	0.00
1,218.60	1.89	1.54	0.36	0.00
1,218.70	2.15	1.79	0.36	0.00
1,218.80	2.43	2.06	0.37	0.00
1,218.90	2.74	2.36	0.38	0.00
1,219.00	5.01	4.63	0.38	0.00
1,219.10	6.77	4.78	0.39	1.60
1,219.20	9.92	4.93	0.39	4.60
1,219.30	14.17	5.07	0.40	8.70
1,219.40	19.40	5.21	0.40	13.78
1,219.50	25.84	5.35	0.41	20.08
1,219.60	33.40	5.48	0.42	27.51
1,219.70	41.13	5.61	0.42	35.10
1,219.80	49.59	5.74	0.43	43.42
1,219.90	58.74	5.86	0.43	52.45
1,220.00	**68.59**	**5.98**	**0.44**	**62.18**

Stage-Area-Storage for Pond P3E: Pond 3E

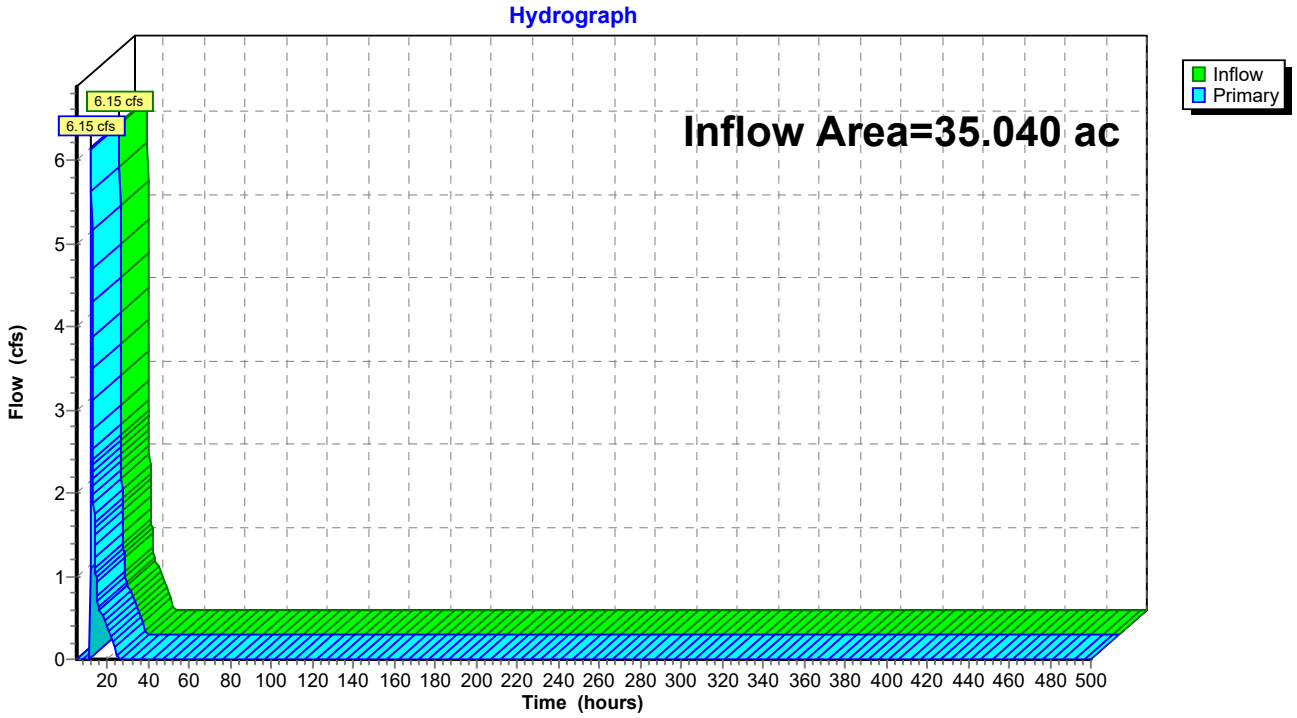
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,216.00	2,517	0
1,216.05	2,551	127
1,216.10	2,586	255
1,216.15	2,620	385
1,216.20	2,655	517
1,216.25	2,689	651
1,216.30	2,724	786
1,216.35	2,758	923
1,216.40	2,793	1,062
1,216.45	2,827	1,202
1,216.50	2,861	1,345
1,216.55	2,896	1,489
1,216.60	2,930	1,634
1,216.65	2,965	1,782
1,216.70	2,999	1,931
1,216.75	3,034	2,081
1,216.80	3,068	2,234
1,216.85	3,102	2,388
1,216.90	3,137	2,544
1,216.95	3,171	2,702
1,217.00	3,206	2,861
1,217.05	3,240	3,023
1,217.10	3,275	3,185
1,217.15	3,309	3,350
1,217.20	3,344	3,516
1,217.25	3,378	3,684
1,217.30	3,412	3,854
1,217.35	3,447	4,026
1,217.40	3,481	4,199
1,217.45	3,516	4,374
1,217.50	3,550	4,550
1,217.55	3,585	4,729
1,217.60	3,619	4,909
1,217.65	3,653	5,091
1,217.70	3,688	5,274
1,217.75	3,722	5,459
1,217.80	3,757	5,646
1,217.85	3,791	5,835
1,217.90	3,826	6,025
1,217.95	3,860	6,218
1,218.00	3,895	6,412
1,218.05	3,929	6,607
1,218.10	3,963	6,804
1,218.15	3,998	7,003
1,218.20	4,032	7,204
1,218.25	4,067	7,407
1,218.30	4,101	7,611
1,218.35	4,136	7,817
1,218.40	4,170	8,024
1,218.45	4,204	8,234
1,218.50	4,239	8,445
1,218.55	4,273	8,658
1,218.60	4,308	8,872
1,218.65	4,342	9,088
1,218.70	4,377	9,306
1,218.75	4,411	9,526
1,218.80	4,445	9,747
1,218.85	4,480	9,971
1,218.90	4,514	10,195
1,218.95	4,549	10,422
1,219.00	4,583	10,650
1,219.05	4,618	10,880
1,219.10	4,652	11,112
1,219.15	4,687	11,346
1,219.20	4,721	11,581
1,219.25	4,755	11,818
1,219.30	4,790	12,056
1,219.35	4,824	12,297
1,219.40	4,859	12,539
1,219.45	4,893	12,783
1,219.50	4,928	13,028
1,219.55	4,962	13,275
1,219.60	4,996	13,524
1,219.65	5,031	13,775
1,219.70	5,065	14,027
1,219.75	5,100	14,282
1,219.80	5,134	14,537
1,219.85	5,169	14,795
1,219.90	5,203	15,054
1,219.95	5,238	15,315
1,220.00	**5,272**	**15,578**

Summary for Link 1L: Total Pre - Development

Inflow Area = 35.040 ac, 0.00% Impervious, Inflow Depth = 0.27" for 2 YR event
Inflow = 6.15 cfs @ 12.24 hrs, Volume= 0.790 af
Primary = 6.15 cfs @ 12.24 hrs, Volume= 0.790 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 1L: Total Pre - Development



Hydrograph for Link 1L: Total Pre - Development

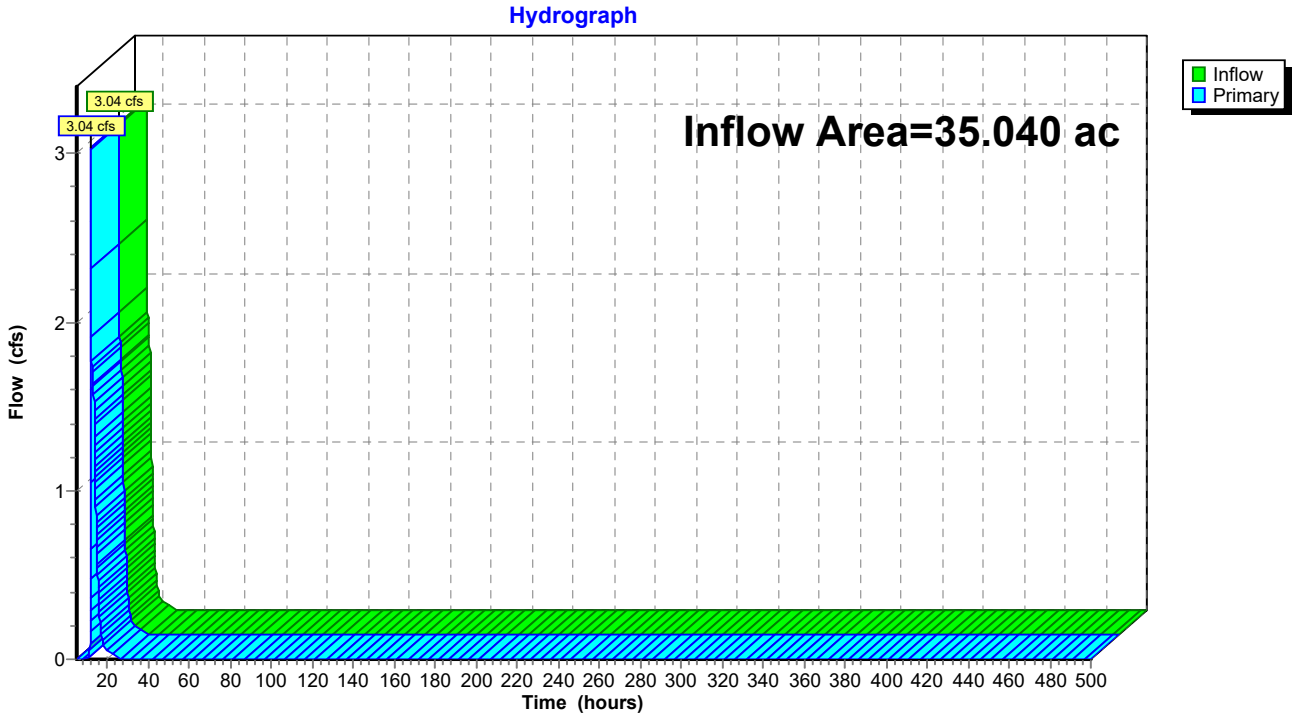
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.00**	0.00	**0.00**	265.00	0.00	0.00	0.00
15.00	**0.96**	0.00	**0.96**	270.00	0.00	0.00	0.00
20.00	0.40	0.00	0.40	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Summary for Link 2L: Total Post - Development

Inflow Area = 35.040 ac, 19.66% Impervious, Inflow Depth = 0.15" for 2 YR event
Inflow = 3.04 cfs @ 12.14 hrs, Volume= 0.429 af
Primary = 3.04 cfs @ 12.14 hrs, Volume= 0.429 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 2L: Total Post - Development



Hydrograph for Link 2L: Total Post - Development

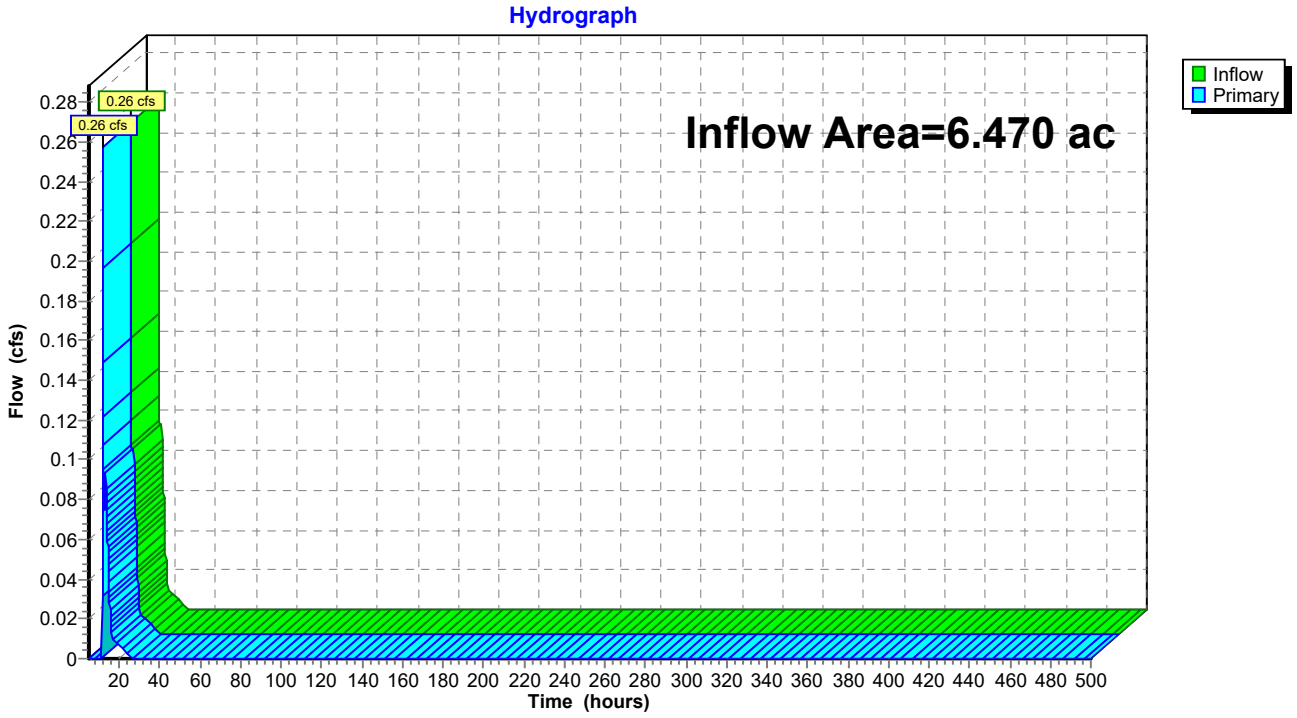
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.00**	0.00	**0.00**	265.00	0.00	0.00	0.00
15.00	**0.63**	0.00	**0.63**	270.00	0.00	0.00	0.00
20.00	0.05	0.00	0.05	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Summary for Link 3L: Post - South

Inflow Area = 6.470 ac, 18.70% Impervious, Inflow Depth = 0.05" for 2 YR event
Inflow = 0.26 cfs @ 12.15 hrs, Volume= 0.027 af
Primary = 0.26 cfs @ 12.15 hrs, Volume= 0.027 af, Atten= 0%, Lag= 0.0 min
Routed to Link 2L : Total Post - Development

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 3L: Post - South



Hydrograph for Link 3L: Post - South

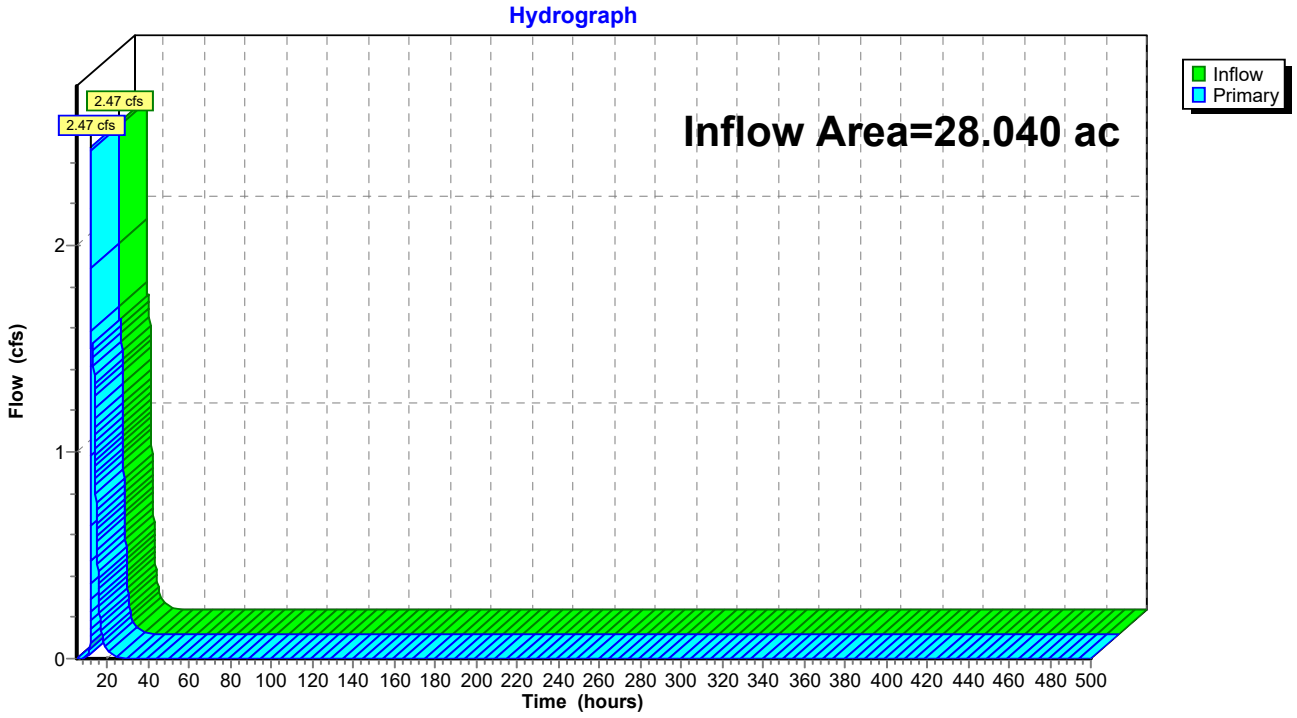
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.00**	0.00	**0.00**	265.00	0.00	0.00	0.00
15.00	**0.04**	0.00	**0.04**	270.00	0.00	0.00	0.00
20.00	0.01	0.00	0.01	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Summary for Link 4L: Post - North

Inflow Area = 28.040 ac, 20.04% Impervious, Inflow Depth = 0.16" for 2 YR event
Inflow = 2.47 cfs @ 12.14 hrs, Volume= 0.382 af
Primary = 2.47 cfs @ 12.14 hrs, Volume= 0.382 af, Atten= 0%, Lag= 0.0 min
Routed to Link 2L : Total Post - Development

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 4L: Post - North



Hydrograph for Link 4L: Post - North

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.00**	0.00	**0.00**	265.00	0.00	0.00	0.00
15.00	**0.56**	0.00	**0.56**	270.00	0.00	0.00	0.00
20.00	0.04	0.00	0.04	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Time span=5.00-500.00 hrs, dt=0.05 hrs, 9901 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1: Pre - South Runoff Area=4.910 ac 0.00% Impervious Runoff Depth=0.42"
Tc=10.0 min CN=55 Runoff=1.62 cfs 0.170 af

Subcatchment1A: Post 1A Runoff Area=6.030 ac 19.24% Impervious Runoff Depth=1.02"
Tc=6.0 min CN=68 Runoff=9.27 cfs 0.512 af

Subcatchment1B: Post 1B - Offsite Runoff Area=0.440 ac 11.36% Impervious Runoff Depth=0.86"
Tc=6.0 min CN=65 Runoff=0.55 cfs 0.032 af

Subcatchment2: Pre - West Runoff Area=2.540 ac 0.00% Impervious Runoff Depth=0.42"
Tc=6.0 min CN=55 Runoff=1.04 cfs 0.088 af

Subcatchment2A: Post 2A - Offsite Runoff Area=0.530 ac 11.32% Impervious Runoff Depth=0.86"
Tc=6.0 min CN=65 Runoff=0.66 cfs 0.038 af

Subcatchment3: Pre - North Runoff Area=27.590 ac 0.00% Impervious Runoff Depth=0.62"
Tc=10.0 min CN=60 Runoff=18.17 cfs 1.426 af

Subcatchment3A: Post 3A Runoff Area=10.600 ac 18.58% Impervious Runoff Depth=1.13"
Tc=6.0 min CN=70 Runoff=18.39 cfs 1.001 af

Subcatchment3B: Post 3B Runoff Area=8.450 ac 19.88% Impervious Runoff Depth=1.19"
Tc=6.0 min CN=71 Runoff=15.52 cfs 0.840 af

Subcatchment3C: Post 3C Runoff Area=2.490 ac 22.89% Impervious Runoff Depth=1.45"
Tc=6.0 min CN=75 Runoff=5.62 cfs 0.300 af

Subcatchment3D: Post 3D Runoff Area=2.380 ac 23.95% Impervious Runoff Depth=1.51"
Tc=6.0 min CN=76 Runoff=5.64 cfs 0.300 af

Subcatchment3E: Post 3E Runoff Area=2.780 ac 19.06% Impervious Runoff Depth=1.38"
Tc=6.0 min CN=74 Runoff=5.98 cfs 0.320 af

Subcatchment3Y: Post 3Y - Offsite Runoff Area=0.820 ac 36.59% Impervious Runoff Depth=2.03"
Tc=6.0 min CN=83 Runoff=2.59 cfs 0.139 af

Subcatchment3Z: Post 3Z - Offsite Runoff Area=0.520 ac 0.00% Impervious Runoff Depth=1.38"
Tc=6.0 min CN=74 Runoff=1.12 cfs 0.060 af

Subcatchment5S: Culvert 1 Runoff Area=4,797 sf 48.61% Impervious Runoff Depth=1.72"
Tc=6.0 min CN=79 Runoff=0.30 cfs 0.016 af

Subcatchment6S: Culvert 2 Runoff Area=24,708 sf 36.87% Impervious Runoff Depth=1.45"
Tc=6.0 min CN=75 Runoff=1.28 cfs 0.068 af

Subcatchment7S: Culvert 3 Runoff Area=41,517 sf 32.00% Impervious Runoff Depth=1.32"
Tc=6.0 min CN=73 Runoff=1.95 cfs 0.105 af

Subcatchment8S: Culvert 4 Runoff Area=209,603 sf 25.18% Impervious Runoff Depth=1.13"
Tc=6.0 min CN=70 Runoff=8.35 cfs 0.455 af

Subcatchment9S: Culvert 5 Runoff Area=188,836 sf 19.96% Impervious Runoff Depth=1.02"
Tc=6.0 min CN=68 Runoff=6.66 cfs 0.368 af

Pond P1A: Pond 1A Peak Elev=1,241.17' Storage=8,802 cf Inflow=9.27 cfs 0.512 af
Primary=0.70 cfs 0.135 af Secondary=0.47 cfs 0.377 af Tertiary=0.00 cfs 0.000 af Outflow=1.17 cfs 0.512 af

Pond P3A: Pond 3A Peak Elev=1,194.76' Storage=17,153 cf Inflow=18.39 cfs 1.001 af
Primary=1.94 cfs 0.381 af Secondary=0.69 cfs 0.621 af Tertiary=0.00 cfs 0.000 af Outflow=2.63 cfs 1.001 af

Pond P3B: Pond 3B Peak Elev=1,197.78' Storage=13,957 cf Inflow=15.52 cfs 0.840 af
Primary=2.01 cfs 0.345 af Secondary=0.60 cfs 0.495 af Tertiary=0.00 cfs 0.000 af Outflow=2.61 cfs 0.840 af

Pond P3C: Pond 3C Peak Elev=1,179.96' Storage=5,454 cf Inflow=5.62 cfs 0.300 af
Primary=0.42 cfs 0.067 af Secondary=0.31 cfs 0.233 af Tertiary=0.00 cfs 0.000 af Outflow=0.73 cfs 0.300 af

Pond P3D: Pond 3D Peak Elev=1,189.67' Storage=4,243 cf Inflow=5.64 cfs 0.300 af
Primary=1.72 cfs 0.153 af Secondary=0.20 cfs 0.147 af Tertiary=0.00 cfs 0.000 af Outflow=1.92 cfs 0.300 af

Pond P3E: Pond 3E Peak Elev=1,217.88' Storage=5,965 cf Inflow=5.98 cfs 0.320 af
Primary=0.35 cfs 0.060 af Secondary=0.32 cfs 0.260 af Tertiary=0.00 cfs 0.000 af Outflow=0.67 cfs 0.320 af

Link 1L: Total Pre - Development Inflow=20.61 cfs 1.684 af
Primary=20.61 cfs 1.684 af

Link 2L: Total Post - Development Inflow=7.52 cfs 1.408 af
Primary=7.52 cfs 1.408 af

Link 3L: Post - South Inflow=0.77 cfs 0.167 af
Primary=0.77 cfs 0.167 af

Link 4L: Post - North Inflow=6.64 cfs 1.203 af
Primary=6.64 cfs 1.203 af

Total Runoff Area = 80.857 ac Runoff Volume = 6.236 af Average Runoff Depth = 0.93"
88.21% Pervious = 71.323 ac 11.79% Impervious = 9.534 ac

Summary for Subcatchment 1: Pre - South

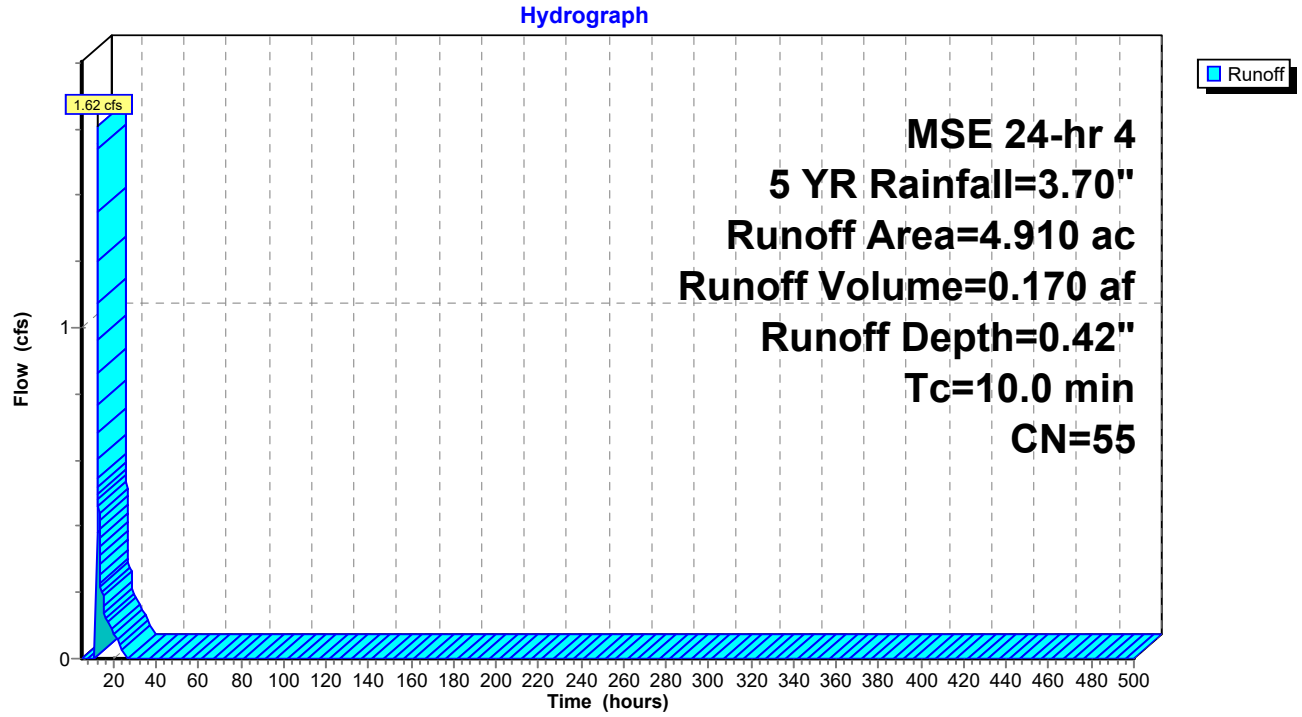
Runoff = 1.62 cfs @ 12.22 hrs, Volume= 0.170 af, Depth= 0.42"
Routed to Link 1L : Total Pre - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 5 YR Rainfall=3.70"

	Area (ac)	CN	Description
*	4.910	55	Pre Dev - B Soils
	4.910		100.00% Pervious Area

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

Subcatchment 1: Pre - South



Hydrograph for Subcatchment 1: Pre - South

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.17	0.00	0.00	260.00	3.70	0.42	0.00
10.00	0.59	0.00	**0.00**	265.00	3.70	0.42	0.00
15.00	3.25	0.27	**0.20**	270.00	3.70	0.42	0.00
20.00	**3.58**	**0.37**	0.08	275.00	3.70	0.42	0.00
25.00	**3.70**	**0.42**	0.00	280.00	3.70	0.42	0.00
30.00	3.70	0.42	0.00	285.00	3.70	0.42	0.00
35.00	3.70	0.42	0.00	290.00	3.70	0.42	0.00
40.00	3.70	0.42	0.00	295.00	3.70	0.42	0.00
45.00	3.70	0.42	0.00	300.00	3.70	0.42	0.00
50.00	3.70	0.42	0.00	305.00	3.70	0.42	0.00
55.00	3.70	0.42	0.00	310.00	3.70	0.42	0.00
60.00	3.70	0.42	0.00	315.00	3.70	0.42	0.00
65.00	3.70	0.42	0.00	320.00	3.70	0.42	0.00
70.00	3.70	0.42	0.00	325.00	3.70	0.42	0.00
75.00	3.70	0.42	0.00	330.00	3.70	0.42	0.00
80.00	3.70	0.42	0.00	335.00	3.70	0.42	0.00
85.00	3.70	0.42	0.00	340.00	3.70	0.42	0.00
90.00	3.70	0.42	0.00	345.00	3.70	0.42	0.00
95.00	3.70	0.42	0.00	350.00	3.70	0.42	0.00
100.00	3.70	0.42	0.00	355.00	3.70	0.42	0.00
105.00	3.70	0.42	0.00	360.00	3.70	0.42	0.00
110.00	3.70	0.42	0.00	365.00	3.70	0.42	0.00
115.00	3.70	0.42	0.00	370.00	3.70	0.42	0.00
120.00	3.70	0.42	0.00	375.00	3.70	0.42	0.00
125.00	3.70	0.42	0.00	380.00	3.70	0.42	0.00
130.00	3.70	0.42	0.00	385.00	3.70	0.42	0.00
135.00	3.70	0.42	0.00	390.00	3.70	0.42	0.00
140.00	3.70	0.42	0.00	395.00	3.70	0.42	0.00
145.00	3.70	0.42	0.00	400.00	3.70	0.42	0.00
150.00	3.70	0.42	0.00	405.00	3.70	0.42	0.00
155.00	3.70	0.42	0.00	410.00	3.70	0.42	0.00
160.00	3.70	0.42	0.00	415.00	3.70	0.42	0.00
165.00	3.70	0.42	0.00	420.00	3.70	0.42	0.00
170.00	3.70	0.42	0.00	425.00	3.70	0.42	0.00
175.00	3.70	0.42	0.00	430.00	3.70	0.42	0.00
180.00	3.70	0.42	0.00	435.00	3.70	0.42	0.00
185.00	3.70	0.42	0.00	440.00	3.70	0.42	0.00
190.00	3.70	0.42	0.00	445.00	3.70	0.42	0.00
195.00	3.70	0.42	0.00	450.00	3.70	0.42	0.00
200.00	3.70	0.42	0.00	455.00	3.70	0.42	0.00
205.00	3.70	0.42	0.00	460.00	3.70	0.42	0.00
210.00	3.70	0.42	0.00	465.00	3.70	0.42	0.00
215.00	3.70	0.42	0.00	470.00	3.70	0.42	0.00
220.00	3.70	0.42	0.00	475.00	3.70	0.42	0.00
225.00	3.70	0.42	0.00	480.00	3.70	0.42	0.00
230.00	3.70	0.42	0.00	485.00	3.70	0.42	0.00
235.00	3.70	0.42	0.00	490.00	3.70	0.42	0.00
240.00	3.70	0.42	0.00	495.00	3.70	0.42	0.00
245.00	3.70	0.42	0.00	500.00	3.70	0.42	0.00
250.00	3.70	0.42	0.00				
255.00	3.70	0.42	0.00				

Summary for Subcatchment 1A: Post 1A

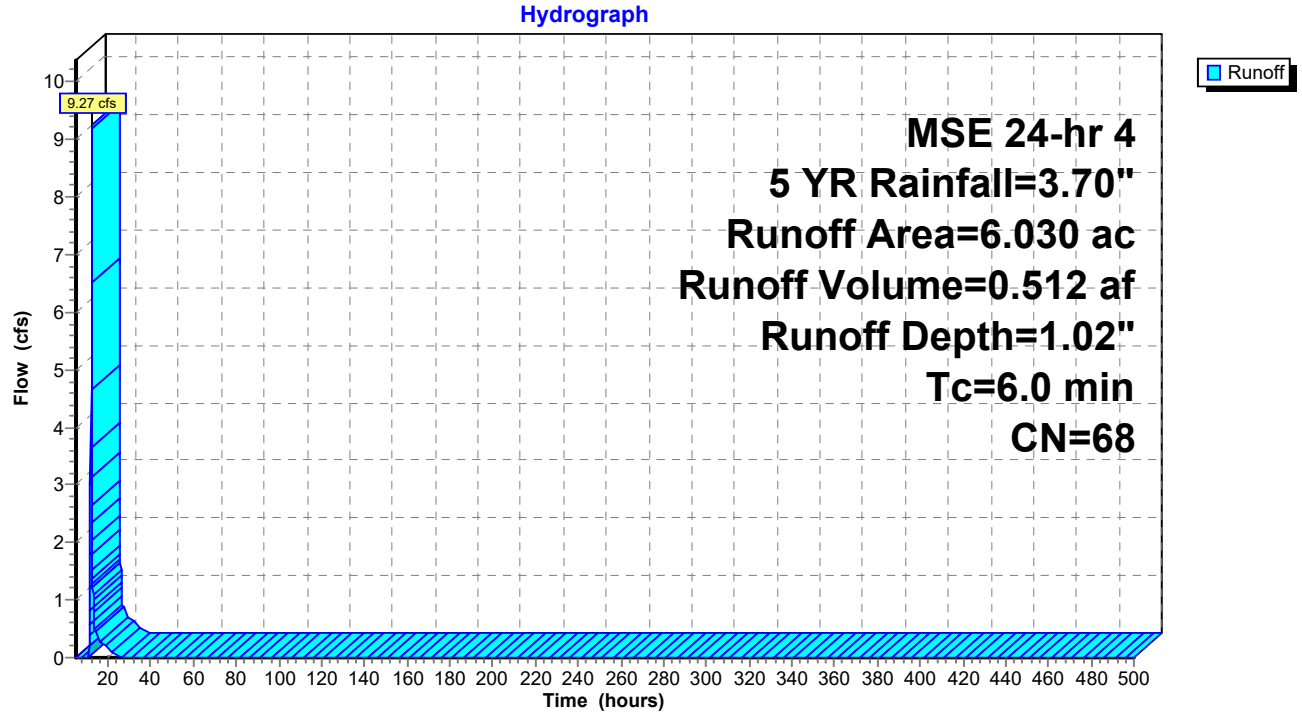
Runoff = 9.27 cfs @ 12.14 hrs, Volume= 0.512 af, Depth= 1.02"
Routed to Pond P1A : Pond 1A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 5 YR Rainfall=3.70"

	Area (ac)	CN	Description
*	1.160	98	Impervious
*	4.870	61	Post - B Soils
*	0.000	74	Post - C Soils
	6.030	68	Weighted Average
	4.870		80.76% Pervious Area
	1.160		19.24% Impervious Area

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

Subcatchment 1A: Post 1A



Hydrograph for Subcatchment 1A: Post 1A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.17	0.00	0.00
10.00	0.59	0.00	**0.00**
15.00	3.25	0.76	**0.44**
20.00	**3.58**	**0.95**	0.17
25.00	**3.70**	**1.02**	0.00
30.00	3.70	1.02	0.00
35.00	3.70	1.02	0.00
40.00	3.70	1.02	0.00
45.00	3.70	1.02	0.00
50.00	3.70	1.02	0.00
55.00	3.70	1.02	0.00
60.00	3.70	1.02	0.00
65.00	3.70	1.02	0.00
70.00	3.70	1.02	0.00
75.00	3.70	1.02	0.00
80.00	3.70	1.02	0.00
85.00	3.70	1.02	0.00
90.00	3.70	1.02	0.00
95.00	3.70	1.02	0.00
100.00	3.70	1.02	0.00
105.00	3.70	1.02	0.00
110.00	3.70	1.02	0.00
115.00	3.70	1.02	0.00
120.00	3.70	1.02	0.00
125.00	3.70	1.02	0.00
130.00	3.70	1.02	0.00
135.00	3.70	1.02	0.00
140.00	3.70	1.02	0.00
145.00	3.70	1.02	0.00
150.00	3.70	1.02	0.00
155.00	3.70	1.02	0.00
160.00	3.70	1.02	0.00
165.00	3.70	1.02	0.00
170.00	3.70	1.02	0.00
175.00	3.70	1.02	0.00
180.00	3.70	1.02	0.00
185.00	3.70	1.02	0.00
190.00	3.70	1.02	0.00
195.00	3.70	1.02	0.00
200.00	3.70	1.02	0.00
205.00	3.70	1.02	0.00
210.00	3.70	1.02	0.00
215.00	3.70	1.02	0.00
220.00	3.70	1.02	0.00
225.00	3.70	1.02	0.00
230.00	3.70	1.02	0.00
235.00	3.70	1.02	0.00
240.00	3.70	1.02	0.00
245.00	3.70	1.02	0.00
250.00	3.70	1.02	0.00
255.00	3.70	1.02	0.00
260.00	3.70	1.02	0.00
265.00	3.70	1.02	0.00
270.00	3.70	1.02	0.00
275.00	3.70	1.02	0.00
280.00	3.70	1.02	0.00
285.00	3.70	1.02	0.00
290.00	3.70	1.02	0.00
295.00	3.70	1.02	0.00
300.00	3.70	1.02	0.00
305.00	3.70	1.02	0.00
310.00	3.70	1.02	0.00
315.00	3.70	1.02	0.00
320.00	3.70	1.02	0.00
325.00	3.70	1.02	0.00
330.00	3.70	1.02	0.00
335.00	3.70	1.02	0.00
340.00	3.70	1.02	0.00
345.00	3.70	1.02	0.00
350.00	3.70	1.02	0.00
355.00	3.70	1.02	0.00
360.00	3.70	1.02	0.00
365.00	3.70	1.02	0.00
370.00	3.70	1.02	0.00
375.00	3.70	1.02	0.00
380.00	3.70	1.02	0.00
385.00	3.70	1.02	0.00
390.00	3.70	1.02	0.00
395.00	3.70	1.02	0.00
400.00	3.70	1.02	0.00
405.00	3.70	1.02	0.00
410.00	3.70	1.02	0.00
415.00	3.70	1.02	0.00
420.00	3.70	1.02	0.00
425.00	3.70	1.02	0.00
430.00	3.70	1.02	0.00
435.00	3.70	1.02	0.00
440.00	3.70	1.02	0.00
445.00	3.70	1.02	0.00
450.00	3.70	1.02	0.00
455.00	3.70	1.02	0.00
460.00	3.70	1.02	0.00
465.00	3.70	1.02	0.00
470.00	3.70	1.02	0.00
475.00	3.70	1.02	0.00
480.00	3.70	1.02	0.00
485.00	3.70	1.02	0.00
490.00	3.70	1.02	0.00
495.00	3.70	1.02	0.00
500.00	3.70	1.02	0.00

Summary for Subcatchment 1B: Post 1B - Offsite

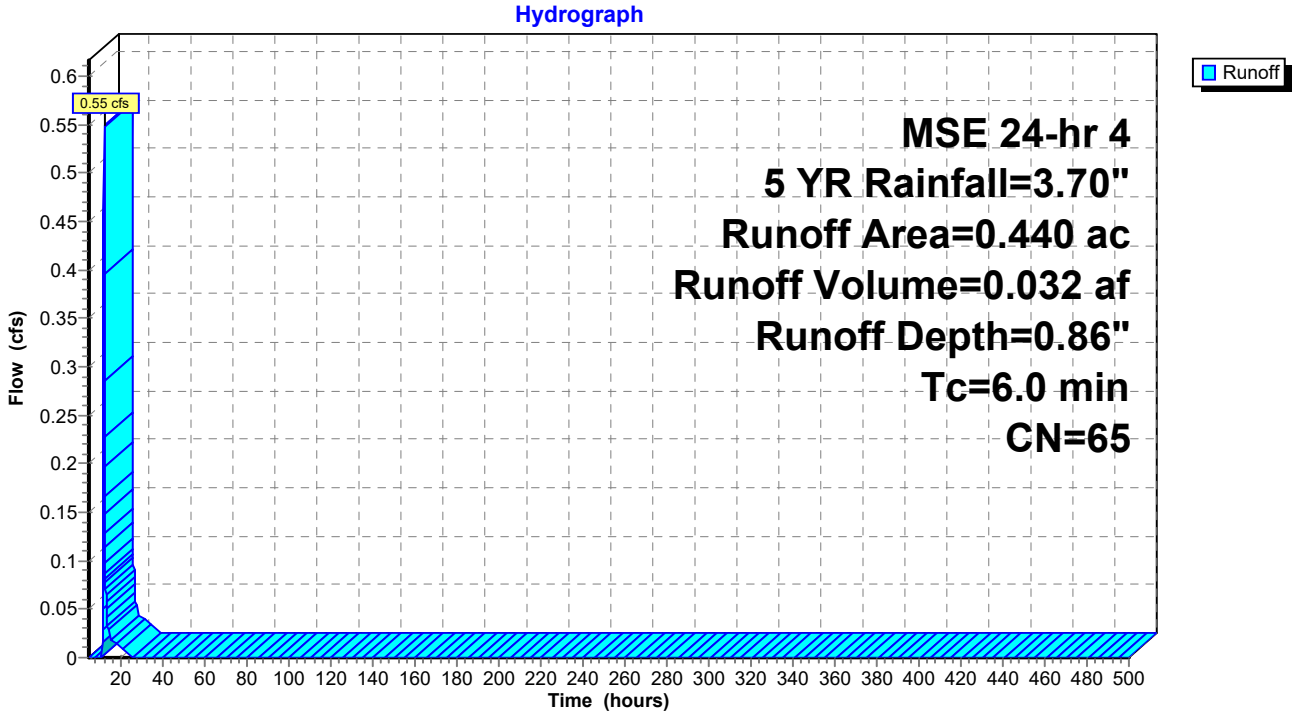
Runoff = 0.55 cfs @ 12.14 hrs, Volume= 0.032 af, Depth= 0.86"
Routed to Link 3L : Post - South

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 5 YR Rainfall=3.70"

	Area (ac)	CN	Description
*	0.050	98	Impervious
*	0.390	61	Post - B Soils
*	0.000	74	Post - C Soils
	0.440	65	Weighted Average
	0.390		88.64% Pervious Area
	0.050		11.36% Impervious Area

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

Subcatchment 1B: Post 1B - Offsite



Hydrograph for Subcatchment 1B: Post 1B - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.17	0.00	0.00
10.00	0.59	0.00	**0.00**
15.00	3.25	0.63	**0.03**
20.00	**3.58**	**0.79**	0.01
25.00	**3.70**	**0.86**	0.00
30.00	3.70	0.86	0.00
35.00	3.70	0.86	0.00
40.00	3.70	0.86	0.00
45.00	3.70	0.86	0.00
50.00	3.70	0.86	0.00
55.00	3.70	0.86	0.00
60.00	3.70	0.86	0.00
65.00	3.70	0.86	0.00
70.00	3.70	0.86	0.00
75.00	3.70	0.86	0.00
80.00	3.70	0.86	0.00
85.00	3.70	0.86	0.00
90.00	3.70	0.86	0.00
95.00	3.70	0.86	0.00
100.00	3.70	0.86	0.00
105.00	3.70	0.86	0.00
110.00	3.70	0.86	0.00
115.00	3.70	0.86	0.00
120.00	3.70	0.86	0.00
125.00	3.70	0.86	0.00
130.00	3.70	0.86	0.00
135.00	3.70	0.86	0.00
140.00	3.70	0.86	0.00
145.00	3.70	0.86	0.00
150.00	3.70	0.86	0.00
155.00	3.70	0.86	0.00
160.00	3.70	0.86	0.00
165.00	3.70	0.86	0.00
170.00	3.70	0.86	0.00
175.00	3.70	0.86	0.00
180.00	3.70	0.86	0.00
185.00	3.70	0.86	0.00
190.00	3.70	0.86	0.00
195.00	3.70	0.86	0.00
200.00	3.70	0.86	0.00
205.00	3.70	0.86	0.00
210.00	3.70	0.86	0.00
215.00	3.70	0.86	0.00
220.00	3.70	0.86	0.00
225.00	3.70	0.86	0.00
230.00	3.70	0.86	0.00
235.00	3.70	0.86	0.00
240.00	3.70	0.86	0.00
245.00	3.70	0.86	0.00
250.00	3.70	0.86	0.00
255.00	3.70	0.86	0.00
260.00	3.70	0.86	0.00
265.00	3.70	0.86	0.00
270.00	3.70	0.86	0.00
275.00	3.70	0.86	0.00
280.00	3.70	0.86	0.00
285.00	3.70	0.86	0.00
290.00	3.70	0.86	0.00
295.00	3.70	0.86	0.00
300.00	3.70	0.86	0.00
305.00	3.70	0.86	0.00
310.00	3.70	0.86	0.00
315.00	3.70	0.86	0.00
320.00	3.70	0.86	0.00
325.00	3.70	0.86	0.00
330.00	3.70	0.86	0.00
335.00	3.70	0.86	0.00
340.00	3.70	0.86	0.00
345.00	3.70	0.86	0.00
350.00	3.70	0.86	0.00
355.00	3.70	0.86	0.00
360.00	3.70	0.86	0.00
365.00	3.70	0.86	0.00
370.00	3.70	0.86	0.00
375.00	3.70	0.86	0.00
380.00	3.70	0.86	0.00
385.00	3.70	0.86	0.00
390.00	3.70	0.86	0.00
395.00	3.70	0.86	0.00
400.00	3.70	0.86	0.00
405.00	3.70	0.86	0.00
410.00	3.70	0.86	0.00
415.00	3.70	0.86	0.00
420.00	3.70	0.86	0.00
425.00	3.70	0.86	0.00
430.00	3.70	0.86	0.00
435.00	3.70	0.86	0.00
440.00	3.70	0.86	0.00
445.00	3.70	0.86	0.00
450.00	3.70	0.86	0.00
455.00	3.70	0.86	0.00
460.00	3.70	0.86	0.00
465.00	3.70	0.86	0.00
470.00	3.70	0.86	0.00
475.00	3.70	0.86	0.00
480.00	3.70	0.86	0.00
485.00	3.70	0.86	0.00
490.00	3.70	0.86	0.00
495.00	3.70	0.86	0.00
500.00	3.70	0.86	0.00

Summary for Subcatchment 2: Pre - West

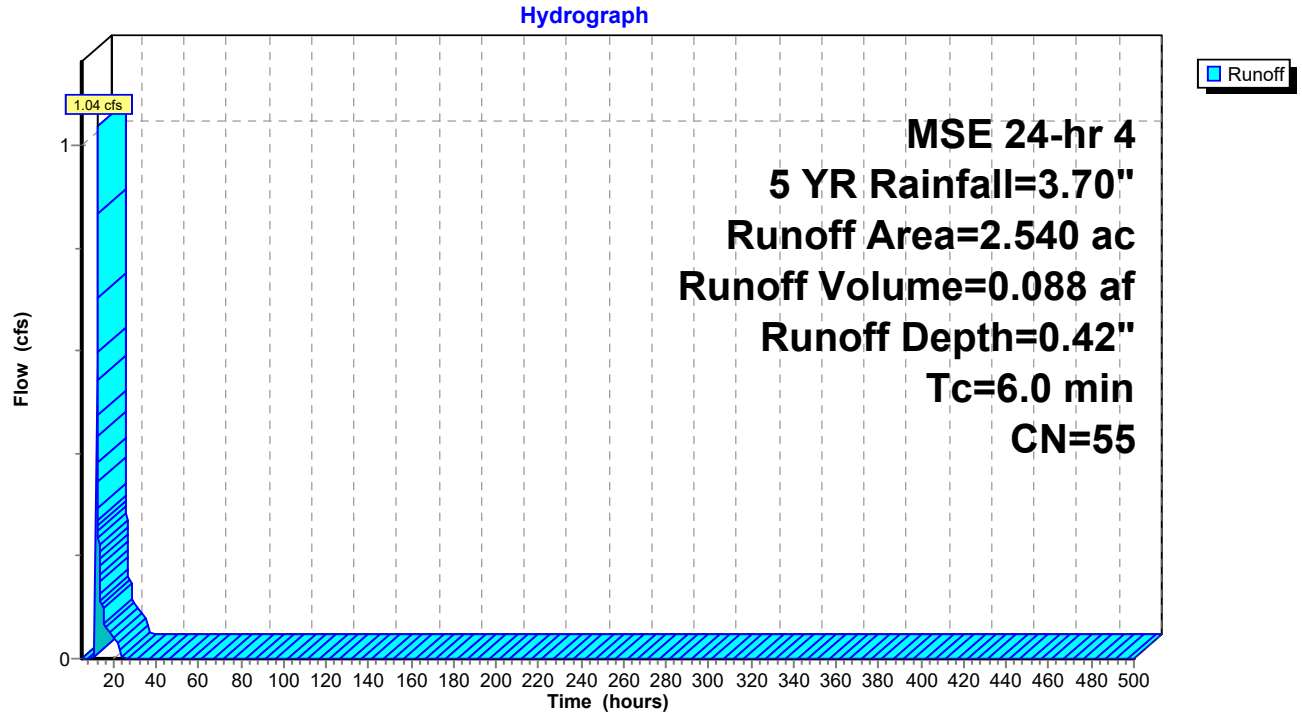
Runoff = 1.04 cfs @ 12.16 hrs, Volume= 0.088 af, Depth= 0.42"
Routed to Link 1L : Total Pre - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 5 YR Rainfall=3.70"

	Area (ac)	CN	Description
*	2.540	55	Pre Dev - B Soils
	2.540		100.00% Pervious Area

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

Subcatchment 2: Pre - West



Hydrograph for Subcatchment 2: Pre - West

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.17	0.00	0.00	260.00	3.70	0.42	0.00
10.00	0.59	0.00	**0.00**	265.00	3.70	0.42	0.00
15.00	3.25	0.27	**0.10**	270.00	3.70	0.42	0.00
20.00	**3.58**	**0.37**	0.04	275.00	3.70	0.42	0.00
25.00	**3.70**	**0.42**	0.00	280.00	3.70	0.42	0.00
30.00	3.70	0.42	0.00	285.00	3.70	0.42	0.00
35.00	3.70	0.42	0.00	290.00	3.70	0.42	0.00
40.00	3.70	0.42	0.00	295.00	3.70	0.42	0.00
45.00	3.70	0.42	0.00	300.00	3.70	0.42	0.00
50.00	3.70	0.42	0.00	305.00	3.70	0.42	0.00
55.00	3.70	0.42	0.00	310.00	3.70	0.42	0.00
60.00	3.70	0.42	0.00	315.00	3.70	0.42	0.00
65.00	3.70	0.42	0.00	320.00	3.70	0.42	0.00
70.00	3.70	0.42	0.00	325.00	3.70	0.42	0.00
75.00	3.70	0.42	0.00	330.00	3.70	0.42	0.00
80.00	3.70	0.42	0.00	335.00	3.70	0.42	0.00
85.00	3.70	0.42	0.00	340.00	3.70	0.42	0.00
90.00	3.70	0.42	0.00	345.00	3.70	0.42	0.00
95.00	3.70	0.42	0.00	350.00	3.70	0.42	0.00
100.00	3.70	0.42	0.00	355.00	3.70	0.42	0.00
105.00	3.70	0.42	0.00	360.00	3.70	0.42	0.00
110.00	3.70	0.42	0.00	365.00	3.70	0.42	0.00
115.00	3.70	0.42	0.00	370.00	3.70	0.42	0.00
120.00	3.70	0.42	0.00	375.00	3.70	0.42	0.00
125.00	3.70	0.42	0.00	380.00	3.70	0.42	0.00
130.00	3.70	0.42	0.00	385.00	3.70	0.42	0.00
135.00	3.70	0.42	0.00	390.00	3.70	0.42	0.00
140.00	3.70	0.42	0.00	395.00	3.70	0.42	0.00
145.00	3.70	0.42	0.00	400.00	3.70	0.42	0.00
150.00	3.70	0.42	0.00	405.00	3.70	0.42	0.00
155.00	3.70	0.42	0.00	410.00	3.70	0.42	0.00
160.00	3.70	0.42	0.00	415.00	3.70	0.42	0.00
165.00	3.70	0.42	0.00	420.00	3.70	0.42	0.00
170.00	3.70	0.42	0.00	425.00	3.70	0.42	0.00
175.00	3.70	0.42	0.00	430.00	3.70	0.42	0.00
180.00	3.70	0.42	0.00	435.00	3.70	0.42	0.00
185.00	3.70	0.42	0.00	440.00	3.70	0.42	0.00
190.00	3.70	0.42	0.00	445.00	3.70	0.42	0.00
195.00	3.70	0.42	0.00	450.00	3.70	0.42	0.00
200.00	3.70	0.42	0.00	455.00	3.70	0.42	0.00
205.00	3.70	0.42	0.00	460.00	3.70	0.42	0.00
210.00	3.70	0.42	0.00	465.00	3.70	0.42	0.00
215.00	3.70	0.42	0.00	470.00	3.70	0.42	0.00
220.00	3.70	0.42	0.00	475.00	3.70	0.42	0.00
225.00	3.70	0.42	0.00	480.00	3.70	0.42	0.00
230.00	3.70	0.42	0.00	485.00	3.70	0.42	0.00
235.00	3.70	0.42	0.00	490.00	3.70	0.42	0.00
240.00	3.70	0.42	0.00	495.00	3.70	0.42	0.00
245.00	3.70	0.42	0.00	500.00	3.70	0.42	0.00
250.00	3.70	0.42	0.00				
255.00	3.70	0.42	0.00				

Summary for Subcatchment 2A: Post 2A - Offsite

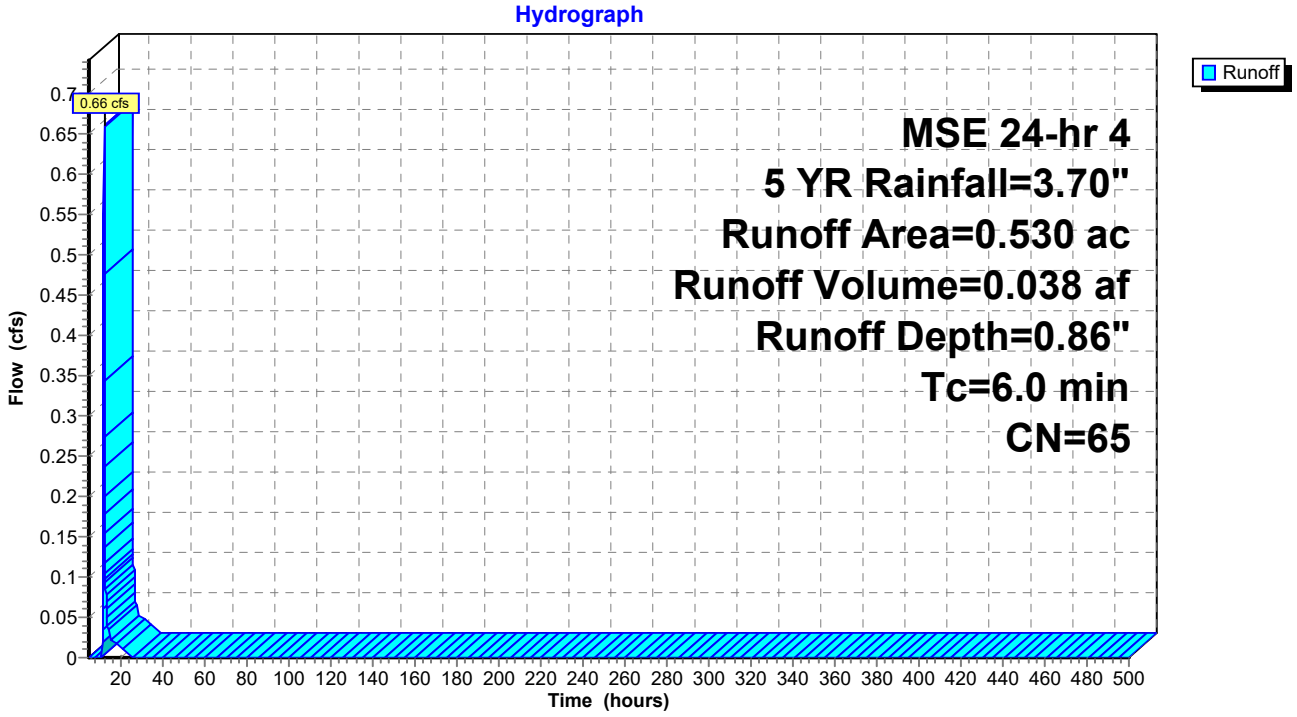
Runoff = 0.66 cfs @ 12.14 hrs, Volume= 0.038 af, Depth= 0.86"
Routed to Link 2L : Total Post - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 5 YR Rainfall=3.70"

	Area (ac)	CN	Description
*	0.060	98	Impervious
*	0.470	61	Post - B Soils
*	0.000	74	Post - C Soils
	0.530	65	Weighted Average
	0.470		88.68% Pervious Area
	0.060		11.32% Impervious Area

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

Subcatchment 2A: Post 2A - Offsite



Hydrograph for Subcatchment 2A: Post 2A - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.17	0.00	0.00
10.00	0.59	0.00	**0.00**
15.00	3.25	0.63	**0.03**
20.00	**3.58**	**0.79**	0.01
25.00	**3.70**	**0.86**	0.00
30.00	3.70	0.86	0.00
35.00	3.70	0.86	0.00
40.00	3.70	0.86	0.00
45.00	3.70	0.86	0.00
50.00	3.70	0.86	0.00
55.00	3.70	0.86	0.00
60.00	3.70	0.86	0.00
65.00	3.70	0.86	0.00
70.00	3.70	0.86	0.00
75.00	3.70	0.86	0.00
80.00	3.70	0.86	0.00
85.00	3.70	0.86	0.00
90.00	3.70	0.86	0.00
95.00	3.70	0.86	0.00
100.00	3.70	0.86	0.00
105.00	3.70	0.86	0.00
110.00	3.70	0.86	0.00
115.00	3.70	0.86	0.00
120.00	3.70	0.86	0.00
125.00	3.70	0.86	0.00
130.00	3.70	0.86	0.00
135.00	3.70	0.86	0.00
140.00	3.70	0.86	0.00
145.00	3.70	0.86	0.00
150.00	3.70	0.86	0.00
155.00	3.70	0.86	0.00
160.00	3.70	0.86	0.00
165.00	3.70	0.86	0.00
170.00	3.70	0.86	0.00
175.00	3.70	0.86	0.00
180.00	3.70	0.86	0.00
185.00	3.70	0.86	0.00
190.00	3.70	0.86	0.00
195.00	3.70	0.86	0.00
200.00	3.70	0.86	0.00
205.00	3.70	0.86	0.00
210.00	3.70	0.86	0.00
215.00	3.70	0.86	0.00
220.00	3.70	0.86	0.00
225.00	3.70	0.86	0.00
230.00	3.70	0.86	0.00
235.00	3.70	0.86	0.00
240.00	3.70	0.86	0.00
245.00	3.70	0.86	0.00
250.00	3.70	0.86	0.00
255.00	3.70	0.86	0.00
260.00	3.70	0.86	0.00
265.00	3.70	0.86	0.00
270.00	3.70	0.86	0.00
275.00	3.70	0.86	0.00
280.00	3.70	0.86	0.00
285.00	3.70	0.86	0.00
290.00	3.70	0.86	0.00
295.00	3.70	0.86	0.00
300.00	3.70	0.86	0.00
305.00	3.70	0.86	0.00
310.00	3.70	0.86	0.00
315.00	3.70	0.86	0.00
320.00	3.70	0.86	0.00
325.00	3.70	0.86	0.00
330.00	3.70	0.86	0.00
335.00	3.70	0.86	0.00
340.00	3.70	0.86	0.00
345.00	3.70	0.86	0.00
350.00	3.70	0.86	0.00
355.00	3.70	0.86	0.00
360.00	3.70	0.86	0.00
365.00	3.70	0.86	0.00
370.00	3.70	0.86	0.00
375.00	3.70	0.86	0.00
380.00	3.70	0.86	0.00
385.00	3.70	0.86	0.00
390.00	3.70	0.86	0.00
395.00	3.70	0.86	0.00
400.00	3.70	0.86	0.00
405.00	3.70	0.86	0.00
410.00	3.70	0.86	0.00
415.00	3.70	0.86	0.00
420.00	3.70	0.86	0.00
425.00	3.70	0.86	0.00
430.00	3.70	0.86	0.00
435.00	3.70	0.86	0.00
440.00	3.70	0.86	0.00
445.00	3.70	0.86	0.00
450.00	3.70	0.86	0.00
455.00	3.70	0.86	0.00
460.00	3.70	0.86	0.00
465.00	3.70	0.86	0.00
470.00	3.70	0.86	0.00
475.00	3.70	0.86	0.00
480.00	3.70	0.86	0.00
485.00	3.70	0.86	0.00
490.00	3.70	0.86	0.00
495.00	3.70	0.86	0.00
500.00	3.70	0.86	0.00

Summary for Subcatchment 3: Pre - North

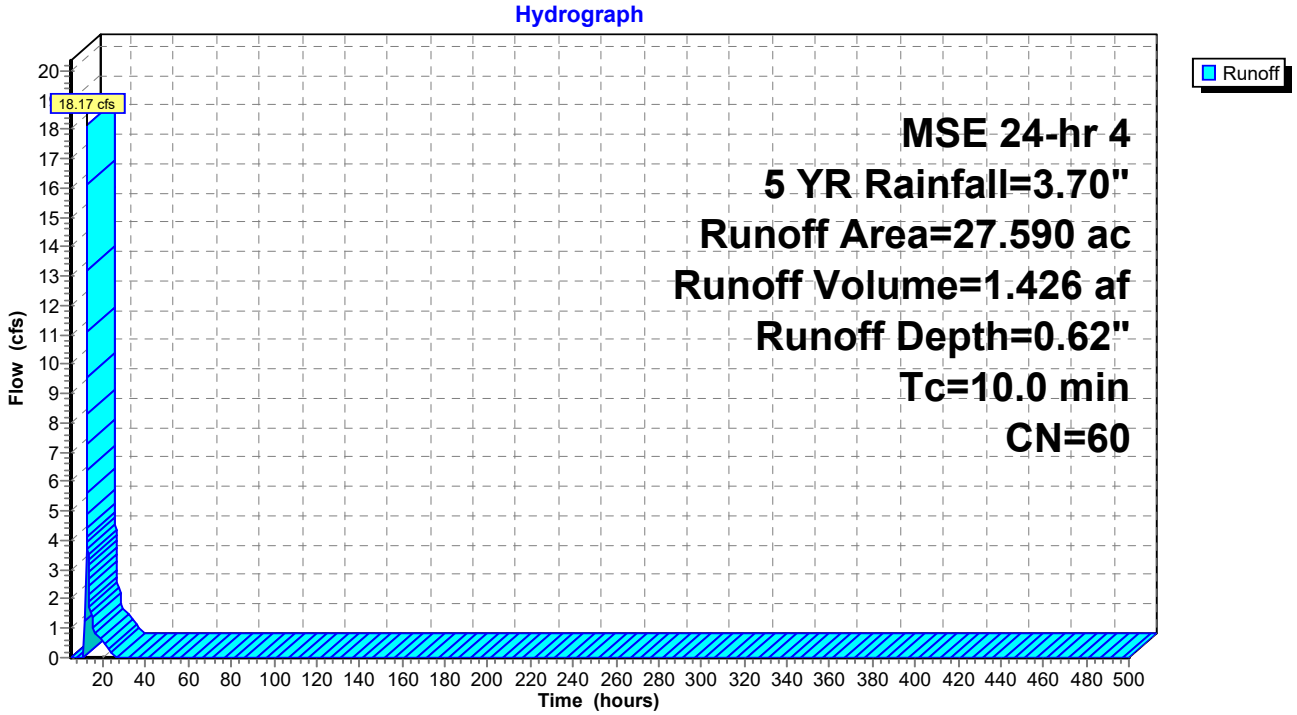
Runoff = 18.17 cfs @ 12.20 hrs, Volume= 1.426 af, Depth= 0.62"
Routed to Link 1L : Total Pre - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 5 YR Rainfall=3.70"

	Area (ac)	CN	Description
*	18.190	55	Pre Dev - B Soils
*	9.400	70	Pre Dev - C Soils
	27.590	60	Weighted Average
	27.590		100.00% Pervious Area

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

Subcatchment 3: Pre - North



Hydrograph for Subcatchment 3: Pre - North

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.17	0.00	0.00
10.00	0.59	0.00	**0.00**
15.00	3.25	0.43	**1.45**
20.00	**3.58**	**0.57**	0.58
25.00	**3.70**	**0.62**	0.00
30.00	3.70	0.62	0.00
35.00	3.70	0.62	0.00
40.00	3.70	0.62	0.00
45.00	3.70	0.62	0.00
50.00	3.70	0.62	0.00
55.00	3.70	0.62	0.00
60.00	3.70	0.62	0.00
65.00	3.70	0.62	0.00
70.00	3.70	0.62	0.00
75.00	3.70	0.62	0.00
80.00	3.70	0.62	0.00
85.00	3.70	0.62	0.00
90.00	3.70	0.62	0.00
95.00	3.70	0.62	0.00
100.00	3.70	0.62	0.00
105.00	3.70	0.62	0.00
110.00	3.70	0.62	0.00
115.00	3.70	0.62	0.00
120.00	3.70	0.62	0.00
125.00	3.70	0.62	0.00
130.00	3.70	0.62	0.00
135.00	3.70	0.62	0.00
140.00	3.70	0.62	0.00
145.00	3.70	0.62	0.00
150.00	3.70	0.62	0.00
155.00	3.70	0.62	0.00
160.00	3.70	0.62	0.00
165.00	3.70	0.62	0.00
170.00	3.70	0.62	0.00
175.00	3.70	0.62	0.00
180.00	3.70	0.62	0.00
185.00	3.70	0.62	0.00
190.00	3.70	0.62	0.00
195.00	3.70	0.62	0.00
200.00	3.70	0.62	0.00
205.00	3.70	0.62	0.00
210.00	3.70	0.62	0.00
215.00	3.70	0.62	0.00
220.00	3.70	0.62	0.00
225.00	3.70	0.62	0.00
230.00	3.70	0.62	0.00
235.00	3.70	0.62	0.00
240.00	3.70	0.62	0.00
245.00	3.70	0.62	0.00
250.00	3.70	0.62	0.00
255.00	3.70	0.62	0.00
260.00	3.70	0.62	0.00
265.00	3.70	0.62	0.00
270.00	3.70	0.62	0.00
275.00	3.70	0.62	0.00
280.00	3.70	0.62	0.00
285.00	3.70	0.62	0.00
290.00	3.70	0.62	0.00
295.00	3.70	0.62	0.00
300.00	3.70	0.62	0.00
305.00	3.70	0.62	0.00
310.00	3.70	0.62	0.00
315.00	3.70	0.62	0.00
320.00	3.70	0.62	0.00
325.00	3.70	0.62	0.00
330.00	3.70	0.62	0.00
335.00	3.70	0.62	0.00
340.00	3.70	0.62	0.00
345.00	3.70	0.62	0.00
350.00	3.70	0.62	0.00
355.00	3.70	0.62	0.00
360.00	3.70	0.62	0.00
365.00	3.70	0.62	0.00
370.00	3.70	0.62	0.00
375.00	3.70	0.62	0.00
380.00	3.70	0.62	0.00
385.00	3.70	0.62	0.00
390.00	3.70	0.62	0.00
395.00	3.70	0.62	0.00
400.00	3.70	0.62	0.00
405.00	3.70	0.62	0.00
410.00	3.70	0.62	0.00
415.00	3.70	0.62	0.00
420.00	3.70	0.62	0.00
425.00	3.70	0.62	0.00
430.00	3.70	0.62	0.00
435.00	3.70	0.62	0.00
440.00	3.70	0.62	0.00
445.00	3.70	0.62	0.00
450.00	3.70	0.62	0.00
455.00	3.70	0.62	0.00
460.00	3.70	0.62	0.00
465.00	3.70	0.62	0.00
470.00	3.70	0.62	0.00
475.00	3.70	0.62	0.00
480.00	3.70	0.62	0.00
485.00	3.70	0.62	0.00
490.00	3.70	0.62	0.00
495.00	3.70	0.62	0.00
500.00	3.70	0.62	0.00

Summary for Subcatchment 3A: Post 3A

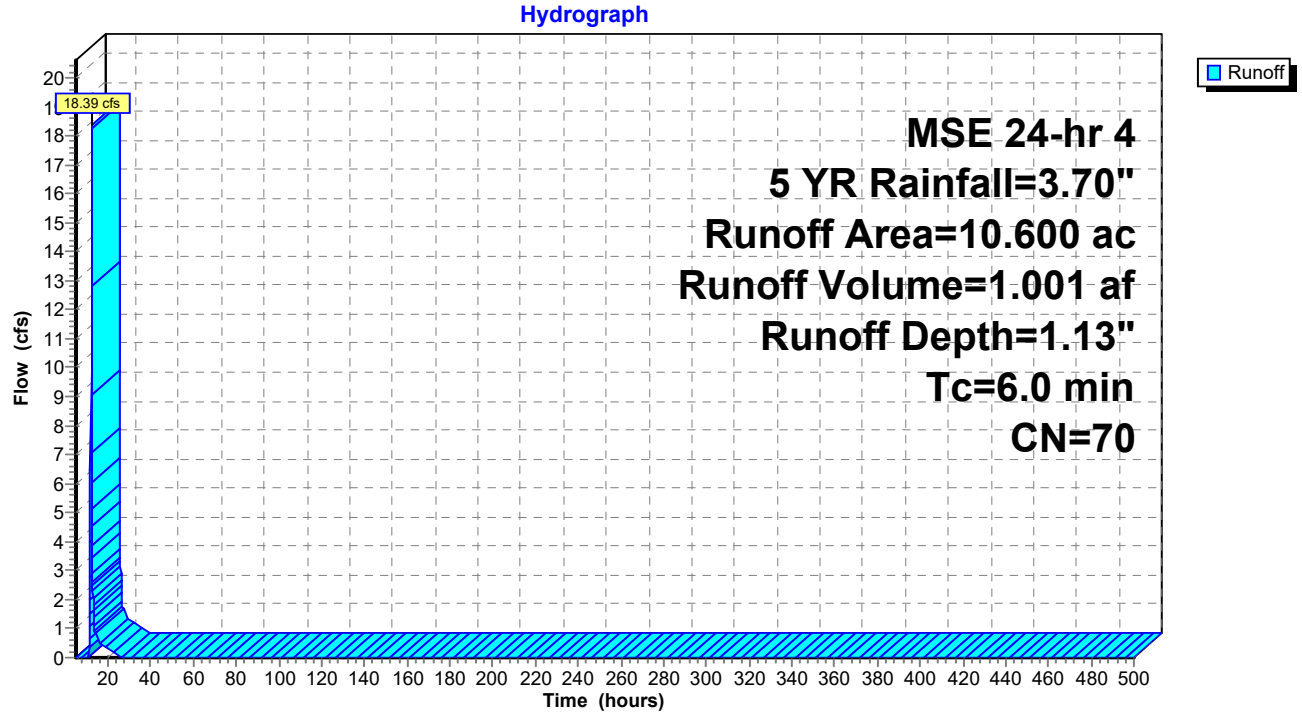
Runoff = 18.39 cfs @ 12.14 hrs, Volume= 1.001 af, Depth= 1.13"
Routed to Pond P3A : Pond 3A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 5 YR Rainfall=3.70"

	Area (ac)	CN	Description
*	1.970	98	Impervious
*	6.570	61	Post - B Soils
*	2.060	74	Post - C Soils
	10.600	70	Weighted Average
	8.630		81.42% Pervious Area
	1.970		18.58% Impervious Area

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

Subcatchment 3A: Post 3A



Hydrograph for Subcatchment 3A: Post 3A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.17	0.00	0.00	260.00	3.70	1.13	0.00
10.00	0.59	0.00	**0.00**	265.00	3.70	1.13	0.00
15.00	3.25	0.86	**0.82**	270.00	3.70	1.13	0.00
20.00	**3.58**	**1.06**	0.31	275.00	3.70	1.13	0.00
25.00	**3.70**	**1.13**	0.00	280.00	3.70	1.13	0.00
30.00	3.70	1.13	0.00	285.00	3.70	1.13	0.00
35.00	3.70	1.13	0.00	290.00	3.70	1.13	0.00
40.00	3.70	1.13	0.00	295.00	3.70	1.13	0.00
45.00	3.70	1.13	0.00	300.00	3.70	1.13	0.00
50.00	3.70	1.13	0.00	305.00	3.70	1.13	0.00
55.00	3.70	1.13	0.00	310.00	3.70	1.13	0.00
60.00	3.70	1.13	0.00	315.00	3.70	1.13	0.00
65.00	3.70	1.13	0.00	320.00	3.70	1.13	0.00
70.00	3.70	1.13	0.00	325.00	3.70	1.13	0.00
75.00	3.70	1.13	0.00	330.00	3.70	1.13	0.00
80.00	3.70	1.13	0.00	335.00	3.70	1.13	0.00
85.00	3.70	1.13	0.00	340.00	3.70	1.13	0.00
90.00	3.70	1.13	0.00	345.00	3.70	1.13	0.00
95.00	3.70	1.13	0.00	350.00	3.70	1.13	0.00
100.00	3.70	1.13	0.00	355.00	3.70	1.13	0.00
105.00	3.70	1.13	0.00	360.00	3.70	1.13	0.00
110.00	3.70	1.13	0.00	365.00	3.70	1.13	0.00
115.00	3.70	1.13	0.00	370.00	3.70	1.13	0.00
120.00	3.70	1.13	0.00	375.00	3.70	1.13	0.00
125.00	3.70	1.13	0.00	380.00	3.70	1.13	0.00
130.00	3.70	1.13	0.00	385.00	3.70	1.13	0.00
135.00	3.70	1.13	0.00	390.00	3.70	1.13	0.00
140.00	3.70	1.13	0.00	395.00	3.70	1.13	0.00
145.00	3.70	1.13	0.00	400.00	3.70	1.13	0.00
150.00	3.70	1.13	0.00	405.00	3.70	1.13	0.00
155.00	3.70	1.13	0.00	410.00	3.70	1.13	0.00
160.00	3.70	1.13	0.00	415.00	3.70	1.13	0.00
165.00	3.70	1.13	0.00	420.00	3.70	1.13	0.00
170.00	3.70	1.13	0.00	425.00	3.70	1.13	0.00
175.00	3.70	1.13	0.00	430.00	3.70	1.13	0.00
180.00	3.70	1.13	0.00	435.00	3.70	1.13	0.00
185.00	3.70	1.13	0.00	440.00	3.70	1.13	0.00
190.00	3.70	1.13	0.00	445.00	3.70	1.13	0.00
195.00	3.70	1.13	0.00	450.00	3.70	1.13	0.00
200.00	3.70	1.13	0.00	455.00	3.70	1.13	0.00
205.00	3.70	1.13	0.00	460.00	3.70	1.13	0.00
210.00	3.70	1.13	0.00	465.00	3.70	1.13	0.00
215.00	3.70	1.13	0.00	470.00	3.70	1.13	0.00
220.00	3.70	1.13	0.00	475.00	3.70	1.13	0.00
225.00	3.70	1.13	0.00	480.00	3.70	1.13	0.00
230.00	3.70	1.13	0.00	485.00	3.70	1.13	0.00
235.00	3.70	1.13	0.00	490.00	3.70	1.13	0.00
240.00	3.70	1.13	0.00	495.00	3.70	1.13	0.00
245.00	3.70	1.13	0.00	500.00	3.70	1.13	0.00
250.00	3.70	1.13	0.00				
255.00	3.70	1.13	0.00				

Summary for Subcatchment 3B: Post 3B

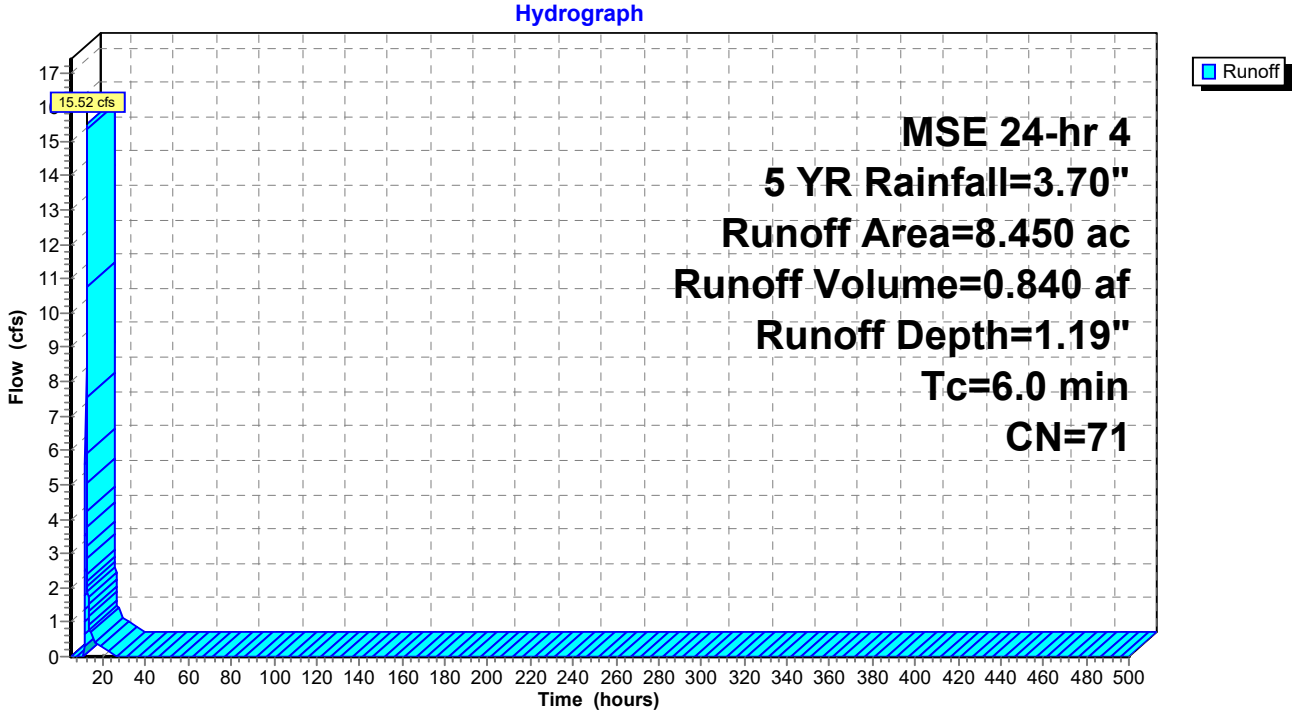
Runoff = 15.52 cfs @ 12.14 hrs, Volume= 0.840 af, Depth= 1.19"
Routed to Pond P3B : Pond 3B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 5 YR Rainfall=3.70"

	Area (ac)	CN	Description
*	1.680	98	Impervious
*	5.290	61	Post - B Soils
*	1.480	74	Post - C Soils
	8.450	71	Weighted Average
	6.770		80.12% Pervious Area
	1.680		19.88% Impervious Area

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

Subcatchment 3B: Post 3B



Hydrograph for Subcatchment 3B: Post 3B

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.17	0.00	0.00
10.00	0.59	0.00	**0.00**
15.00	3.25	0.91	**0.68**
20.00	**3.58**	**1.11**	0.26
25.00	**3.70**	**1.19**	0.00
30.00	3.70	1.19	0.00
35.00	3.70	1.19	0.00
40.00	3.70	1.19	0.00
45.00	3.70	1.19	0.00
50.00	3.70	1.19	0.00
55.00	3.70	1.19	0.00
60.00	3.70	1.19	0.00
65.00	3.70	1.19	0.00
70.00	3.70	1.19	0.00
75.00	3.70	1.19	0.00
80.00	3.70	1.19	0.00
85.00	3.70	1.19	0.00
90.00	3.70	1.19	0.00
95.00	3.70	1.19	0.00
100.00	3.70	1.19	0.00
105.00	3.70	1.19	0.00
110.00	3.70	1.19	0.00
115.00	3.70	1.19	0.00
120.00	3.70	1.19	0.00
125.00	3.70	1.19	0.00
130.00	3.70	1.19	0.00
135.00	3.70	1.19	0.00
140.00	3.70	1.19	0.00
145.00	3.70	1.19	0.00
150.00	3.70	1.19	0.00
155.00	3.70	1.19	0.00
160.00	3.70	1.19	0.00
165.00	3.70	1.19	0.00
170.00	3.70	1.19	0.00
175.00	3.70	1.19	0.00
180.00	3.70	1.19	0.00
185.00	3.70	1.19	0.00
190.00	3.70	1.19	0.00
195.00	3.70	1.19	0.00
200.00	3.70	1.19	0.00
205.00	3.70	1.19	0.00
210.00	3.70	1.19	0.00
215.00	3.70	1.19	0.00
220.00	3.70	1.19	0.00
225.00	3.70	1.19	0.00
230.00	3.70	1.19	0.00
235.00	3.70	1.19	0.00
240.00	3.70	1.19	0.00
245.00	3.70	1.19	0.00
250.00	3.70	1.19	0.00
255.00	3.70	1.19	0.00
260.00	3.70	1.19	0.00
265.00	3.70	1.19	0.00
270.00	3.70	1.19	0.00
275.00	3.70	1.19	0.00
280.00	3.70	1.19	0.00
285.00	3.70	1.19	0.00
290.00	3.70	1.19	0.00
295.00	3.70	1.19	0.00
300.00	3.70	1.19	0.00
305.00	3.70	1.19	0.00
310.00	3.70	1.19	0.00
315.00	3.70	1.19	0.00
320.00	3.70	1.19	0.00
325.00	3.70	1.19	0.00
330.00	3.70	1.19	0.00
335.00	3.70	1.19	0.00
340.00	3.70	1.19	0.00
345.00	3.70	1.19	0.00
350.00	3.70	1.19	0.00
355.00	3.70	1.19	0.00
360.00	3.70	1.19	0.00
365.00	3.70	1.19	0.00
370.00	3.70	1.19	0.00
375.00	3.70	1.19	0.00
380.00	3.70	1.19	0.00
385.00	3.70	1.19	0.00
390.00	3.70	1.19	0.00
395.00	3.70	1.19	0.00
400.00	3.70	1.19	0.00
405.00	3.70	1.19	0.00
410.00	3.70	1.19	0.00
415.00	3.70	1.19	0.00
420.00	3.70	1.19	0.00
425.00	3.70	1.19	0.00
430.00	3.70	1.19	0.00
435.00	3.70	1.19	0.00
440.00	3.70	1.19	0.00
445.00	3.70	1.19	0.00
450.00	3.70	1.19	0.00
455.00	3.70	1.19	0.00
460.00	3.70	1.19	0.00
465.00	3.70	1.19	0.00
470.00	3.70	1.19	0.00
475.00	3.70	1.19	0.00
480.00	3.70	1.19	0.00
485.00	3.70	1.19	0.00
490.00	3.70	1.19	0.00
495.00	3.70	1.19	0.00
500.00	3.70	1.19	0.00

Summary for Subcatchment 3C: Post 3C

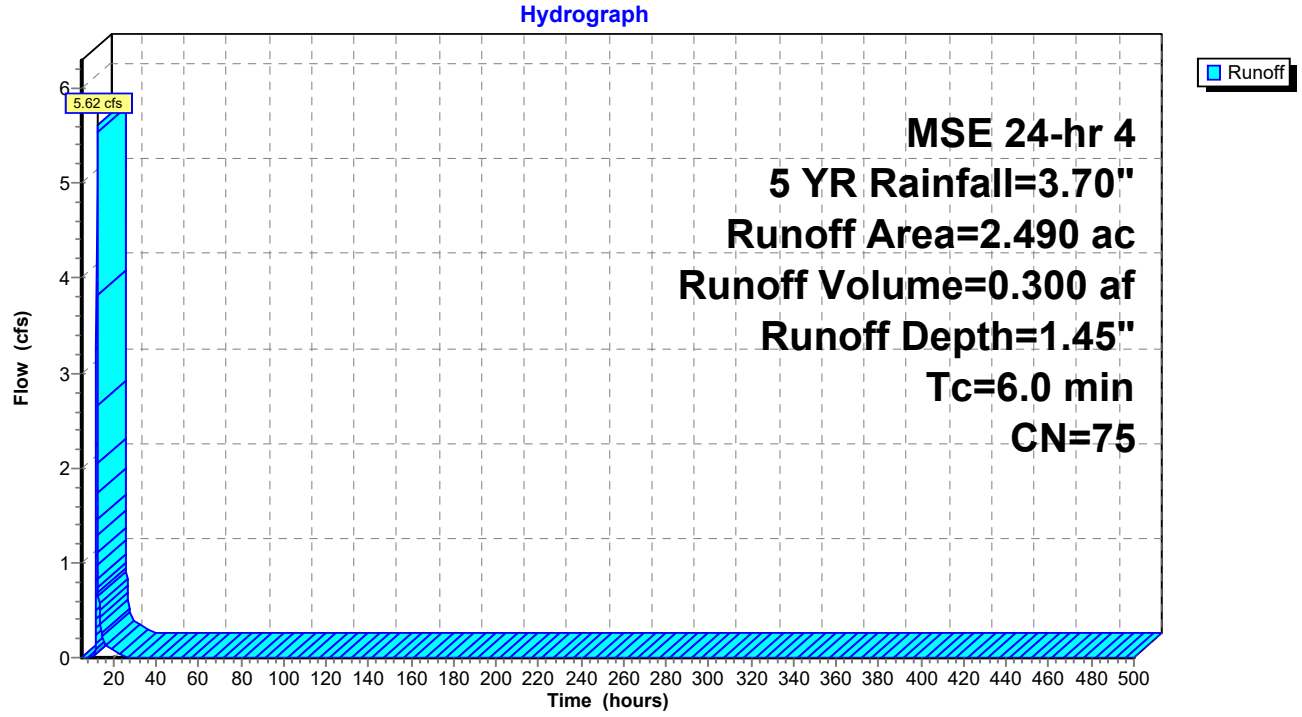
Runoff = 5.62 cfs @ 12.14 hrs, Volume= 0.300 af, Depth= 1.45"
Routed to Pond P3C : Pond 3C

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 5 YR Rainfall=3.70"

	Area (ac)	CN	Description
*	0.570	98	Impervious
*	0.800	61	Post - B Soils
*	1.120	74	Post - C Soils
	2.490	75	Weighted Average
	1.920		77.11% Pervious Area
	0.570		22.89% Impervious Area

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

Subcatchment 3C: Post 3C



Hydrograph for Subcatchment 3C: Post 3C

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.17	0.00	0.00
10.00	0.59	0.00	**0.00**
15.00	3.25	1.13	**0.22**
20.00	**3.58**	**1.36**	0.08
25.00	**3.70**	**1.45**	0.00
30.00	3.70	1.45	0.00
35.00	3.70	1.45	0.00
40.00	3.70	1.45	0.00
45.00	3.70	1.45	0.00
50.00	3.70	1.45	0.00
55.00	3.70	1.45	0.00
60.00	3.70	1.45	0.00
65.00	3.70	1.45	0.00
70.00	3.70	1.45	0.00
75.00	3.70	1.45	0.00
80.00	3.70	1.45	0.00
85.00	3.70	1.45	0.00
90.00	3.70	1.45	0.00
95.00	3.70	1.45	0.00
100.00	3.70	1.45	0.00
105.00	3.70	1.45	0.00
110.00	3.70	1.45	0.00
115.00	3.70	1.45	0.00
120.00	3.70	1.45	0.00
125.00	3.70	1.45	0.00
130.00	3.70	1.45	0.00
135.00	3.70	1.45	0.00
140.00	3.70	1.45	0.00
145.00	3.70	1.45	0.00
150.00	3.70	1.45	0.00
155.00	3.70	1.45	0.00
160.00	3.70	1.45	0.00
165.00	3.70	1.45	0.00
170.00	3.70	1.45	0.00
175.00	3.70	1.45	0.00
180.00	3.70	1.45	0.00
185.00	3.70	1.45	0.00
190.00	3.70	1.45	0.00
195.00	3.70	1.45	0.00
200.00	3.70	1.45	0.00
205.00	3.70	1.45	0.00
210.00	3.70	1.45	0.00
215.00	3.70	1.45	0.00
220.00	3.70	1.45	0.00
225.00	3.70	1.45	0.00
230.00	3.70	1.45	0.00
235.00	3.70	1.45	0.00
240.00	3.70	1.45	0.00
245.00	3.70	1.45	0.00
250.00	3.70	1.45	0.00
255.00	3.70	1.45	0.00
260.00	3.70	1.45	0.00
265.00	3.70	1.45	0.00
270.00	3.70	1.45	0.00
275.00	3.70	1.45	0.00
280.00	3.70	1.45	0.00
285.00	3.70	1.45	0.00
290.00	3.70	1.45	0.00
295.00	3.70	1.45	0.00
300.00	3.70	1.45	0.00
305.00	3.70	1.45	0.00
310.00	3.70	1.45	0.00
315.00	3.70	1.45	0.00
320.00	3.70	1.45	0.00
325.00	3.70	1.45	0.00
330.00	3.70	1.45	0.00
335.00	3.70	1.45	0.00
340.00	3.70	1.45	0.00
345.00	3.70	1.45	0.00
350.00	3.70	1.45	0.00
355.00	3.70	1.45	0.00
360.00	3.70	1.45	0.00
365.00	3.70	1.45	0.00
370.00	3.70	1.45	0.00
375.00	3.70	1.45	0.00
380.00	3.70	1.45	0.00
385.00	3.70	1.45	0.00
390.00	3.70	1.45	0.00
395.00	3.70	1.45	0.00
400.00	3.70	1.45	0.00
405.00	3.70	1.45	0.00
410.00	3.70	1.45	0.00
415.00	3.70	1.45	0.00
420.00	3.70	1.45	0.00
425.00	3.70	1.45	0.00
430.00	3.70	1.45	0.00
435.00	3.70	1.45	0.00
440.00	3.70	1.45	0.00
445.00	3.70	1.45	0.00
450.00	3.70	1.45	0.00
455.00	3.70	1.45	0.00
460.00	3.70	1.45	0.00
465.00	3.70	1.45	0.00
470.00	3.70	1.45	0.00
475.00	3.70	1.45	0.00
480.00	3.70	1.45	0.00
485.00	3.70	1.45	0.00
490.00	3.70	1.45	0.00
495.00	3.70	1.45	0.00
500.00	3.70	1.45	0.00

Summary for Subcatchment 3D: Post 3D

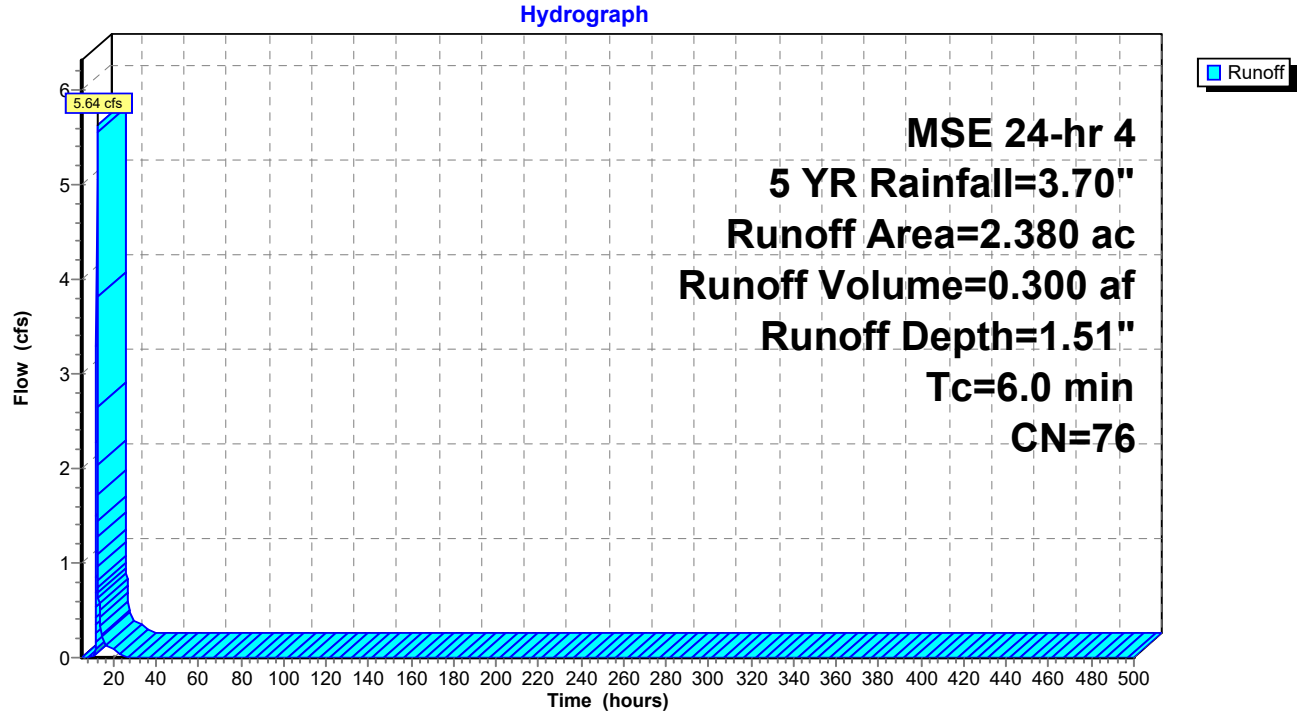
Runoff = 5.64 cfs @ 12.14 hrs, Volume= 0.300 af, Depth= 1.51"
Routed to Pond P3D : Pond 3D

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 5 YR Rainfall=3.70"

	Area (ac)	CN	Description
*	0.570	98	Impervious
*	0.610	61	Post - B Soils
*	1.200	74	Post - C Soils
	2.380	76	Weighted Average
	1.810		76.05% Pervious Area
	0.570		23.95% Impervious Area

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

Subcatchment 3D: Post 3D



Hydrograph for Subcatchment 3D: Post 3D

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.17	0.00	0.00
10.00	0.59	0.00	**0.00**
15.00	3.25	1.19	**0.22**
20.00	**3.58**	**1.42**	0.08
25.00	**3.70**	**1.51**	0.00
30.00	3.70	1.51	0.00
35.00	3.70	1.51	0.00
40.00	3.70	1.51	0.00
45.00	3.70	1.51	0.00
50.00	3.70	1.51	0.00
55.00	3.70	1.51	0.00
60.00	3.70	1.51	0.00
65.00	3.70	1.51	0.00
70.00	3.70	1.51	0.00
75.00	3.70	1.51	0.00
80.00	3.70	1.51	0.00
85.00	3.70	1.51	0.00
90.00	3.70	1.51	0.00
95.00	3.70	1.51	0.00
100.00	3.70	1.51	0.00
105.00	3.70	1.51	0.00
110.00	3.70	1.51	0.00
115.00	3.70	1.51	0.00
120.00	3.70	1.51	0.00
125.00	3.70	1.51	0.00
130.00	3.70	1.51	0.00
135.00	3.70	1.51	0.00
140.00	3.70	1.51	0.00
145.00	3.70	1.51	0.00
150.00	3.70	1.51	0.00
155.00	3.70	1.51	0.00
160.00	3.70	1.51	0.00
165.00	3.70	1.51	0.00
170.00	3.70	1.51	0.00
175.00	3.70	1.51	0.00
180.00	3.70	1.51	0.00
185.00	3.70	1.51	0.00
190.00	3.70	1.51	0.00
195.00	3.70	1.51	0.00
200.00	3.70	1.51	0.00
205.00	3.70	1.51	0.00
210.00	3.70	1.51	0.00
215.00	3.70	1.51	0.00
220.00	3.70	1.51	0.00
225.00	3.70	1.51	0.00
230.00	3.70	1.51	0.00
235.00	3.70	1.51	0.00
240.00	3.70	1.51	0.00
245.00	3.70	1.51	0.00
250.00	3.70	1.51	0.00
255.00	3.70	1.51	0.00
260.00	3.70	1.51	0.00
265.00	3.70	1.51	0.00
270.00	3.70	1.51	0.00
275.00	3.70	1.51	0.00
280.00	3.70	1.51	0.00
285.00	3.70	1.51	0.00
290.00	3.70	1.51	0.00
295.00	3.70	1.51	0.00
300.00	3.70	1.51	0.00
305.00	3.70	1.51	0.00
310.00	3.70	1.51	0.00
315.00	3.70	1.51	0.00
320.00	3.70	1.51	0.00
325.00	3.70	1.51	0.00
330.00	3.70	1.51	0.00
335.00	3.70	1.51	0.00
340.00	3.70	1.51	0.00
345.00	3.70	1.51	0.00
350.00	3.70	1.51	0.00
355.00	3.70	1.51	0.00
360.00	3.70	1.51	0.00
365.00	3.70	1.51	0.00
370.00	3.70	1.51	0.00
375.00	3.70	1.51	0.00
380.00	3.70	1.51	0.00
385.00	3.70	1.51	0.00
390.00	3.70	1.51	0.00
395.00	3.70	1.51	0.00
400.00	3.70	1.51	0.00
405.00	3.70	1.51	0.00
410.00	3.70	1.51	0.00
415.00	3.70	1.51	0.00
420.00	3.70	1.51	0.00
425.00	3.70	1.51	0.00
430.00	3.70	1.51	0.00
435.00	3.70	1.51	0.00
440.00	3.70	1.51	0.00
445.00	3.70	1.51	0.00
450.00	3.70	1.51	0.00
455.00	3.70	1.51	0.00
460.00	3.70	1.51	0.00
465.00	3.70	1.51	0.00
470.00	3.70	1.51	0.00
475.00	3.70	1.51	0.00
480.00	3.70	1.51	0.00
485.00	3.70	1.51	0.00
490.00	3.70	1.51	0.00
495.00	3.70	1.51	0.00
500.00	3.70	1.51	0.00

Summary for Subcatchment 3E: Post 3E

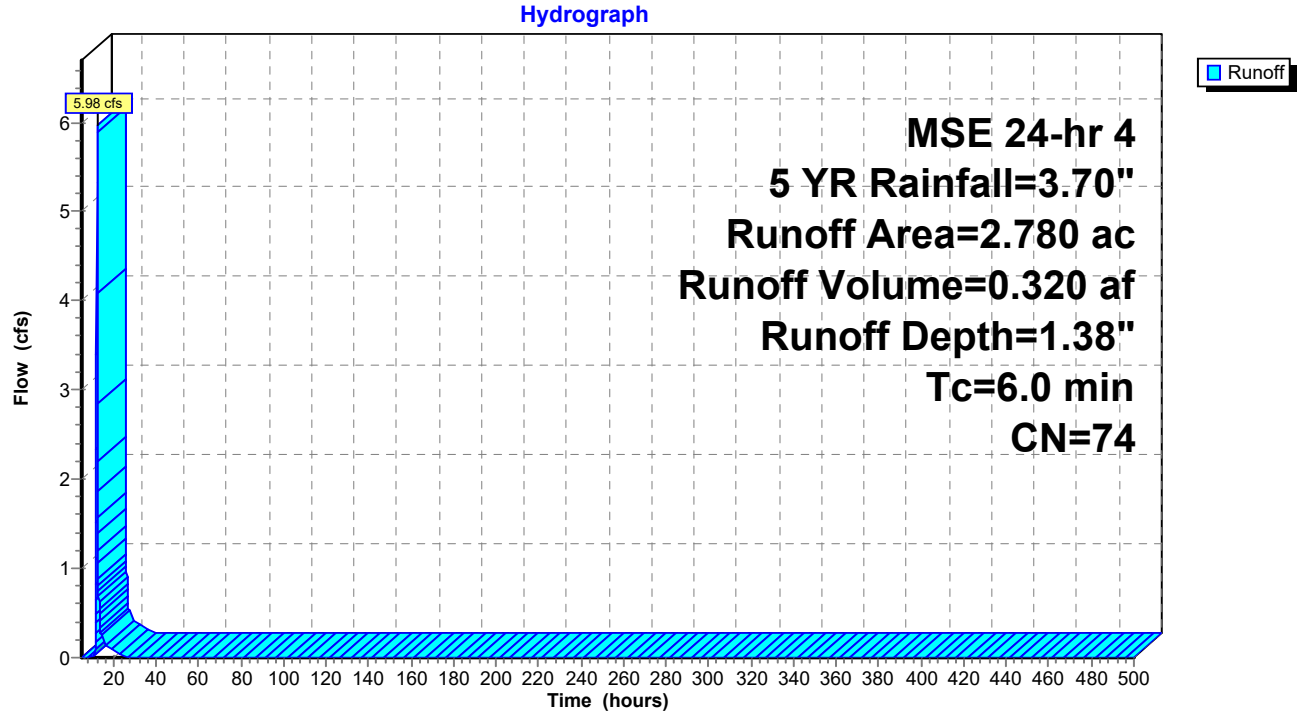
Runoff = 5.98 cfs @ 12.14 hrs, Volume= 0.320 af, Depth= 1.38"
Routed to Pond P3E : Pond 3E

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 5 YR Rainfall=3.70"

	Area (ac)	CN	Description
*	0.530	98	Impervious
*	0.920	61	Post - B Soils
*	1.330	74	Post - C Soils
	2.780	74	Weighted Average
	2.250		80.94% Pervious Area
	0.530		19.06% Impervious Area

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

Subcatchment 3E: Post 3E



Hydrograph for Subcatchment 3E: Post 3E

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.17	0.00	0.00	260.00	3.70	1.38	0.00
10.00	0.59	0.00	**0.00**	265.00	3.70	1.38	0.00
15.00	3.25	1.07	**0.24**	270.00	3.70	1.38	0.00
20.00	**3.58**	**1.30**	0.09	275.00	3.70	1.38	0.00
25.00	**3.70**	**1.38**	0.00	280.00	3.70	1.38	0.00
30.00	3.70	1.38	0.00	285.00	3.70	1.38	0.00
35.00	3.70	1.38	0.00	290.00	3.70	1.38	0.00
40.00	3.70	1.38	0.00	295.00	3.70	1.38	0.00
45.00	3.70	1.38	0.00	300.00	3.70	1.38	0.00
50.00	3.70	1.38	0.00	305.00	3.70	1.38	0.00
55.00	3.70	1.38	0.00	310.00	3.70	1.38	0.00
60.00	3.70	1.38	0.00	315.00	3.70	1.38	0.00
65.00	3.70	1.38	0.00	320.00	3.70	1.38	0.00
70.00	3.70	1.38	0.00	325.00	3.70	1.38	0.00
75.00	3.70	1.38	0.00	330.00	3.70	1.38	0.00
80.00	3.70	1.38	0.00	335.00	3.70	1.38	0.00
85.00	3.70	1.38	0.00	340.00	3.70	1.38	0.00
90.00	3.70	1.38	0.00	345.00	3.70	1.38	0.00
95.00	3.70	1.38	0.00	350.00	3.70	1.38	0.00
100.00	3.70	1.38	0.00	355.00	3.70	1.38	0.00
105.00	3.70	1.38	0.00	360.00	3.70	1.38	0.00
110.00	3.70	1.38	0.00	365.00	3.70	1.38	0.00
115.00	3.70	1.38	0.00	370.00	3.70	1.38	0.00
120.00	3.70	1.38	0.00	375.00	3.70	1.38	0.00
125.00	3.70	1.38	0.00	380.00	3.70	1.38	0.00
130.00	3.70	1.38	0.00	385.00	3.70	1.38	0.00
135.00	3.70	1.38	0.00	390.00	3.70	1.38	0.00
140.00	3.70	1.38	0.00	395.00	3.70	1.38	0.00
145.00	3.70	1.38	0.00	400.00	3.70	1.38	0.00
150.00	3.70	1.38	0.00	405.00	3.70	1.38	0.00
155.00	3.70	1.38	0.00	410.00	3.70	1.38	0.00
160.00	3.70	1.38	0.00	415.00	3.70	1.38	0.00
165.00	3.70	1.38	0.00	420.00	3.70	1.38	0.00
170.00	3.70	1.38	0.00	425.00	3.70	1.38	0.00
175.00	3.70	1.38	0.00	430.00	3.70	1.38	0.00
180.00	3.70	1.38	0.00	435.00	3.70	1.38	0.00
185.00	3.70	1.38	0.00	440.00	3.70	1.38	0.00
190.00	3.70	1.38	0.00	445.00	3.70	1.38	0.00
195.00	3.70	1.38	0.00	450.00	3.70	1.38	0.00
200.00	3.70	1.38	0.00	455.00	3.70	1.38	0.00
205.00	3.70	1.38	0.00	460.00	3.70	1.38	0.00
210.00	3.70	1.38	0.00	465.00	3.70	1.38	0.00
215.00	3.70	1.38	0.00	470.00	3.70	1.38	0.00
220.00	3.70	1.38	0.00	475.00	3.70	1.38	0.00
225.00	3.70	1.38	0.00	480.00	3.70	1.38	0.00
230.00	3.70	1.38	0.00	485.00	3.70	1.38	0.00
235.00	3.70	1.38	0.00	490.00	3.70	1.38	0.00
240.00	3.70	1.38	0.00	495.00	3.70	1.38	0.00
245.00	3.70	1.38	0.00	500.00	3.70	1.38	0.00
250.00	3.70	1.38	0.00				
255.00	3.70	1.38	0.00				

Summary for Subcatchment 3Y: Post 3Y - Offsite

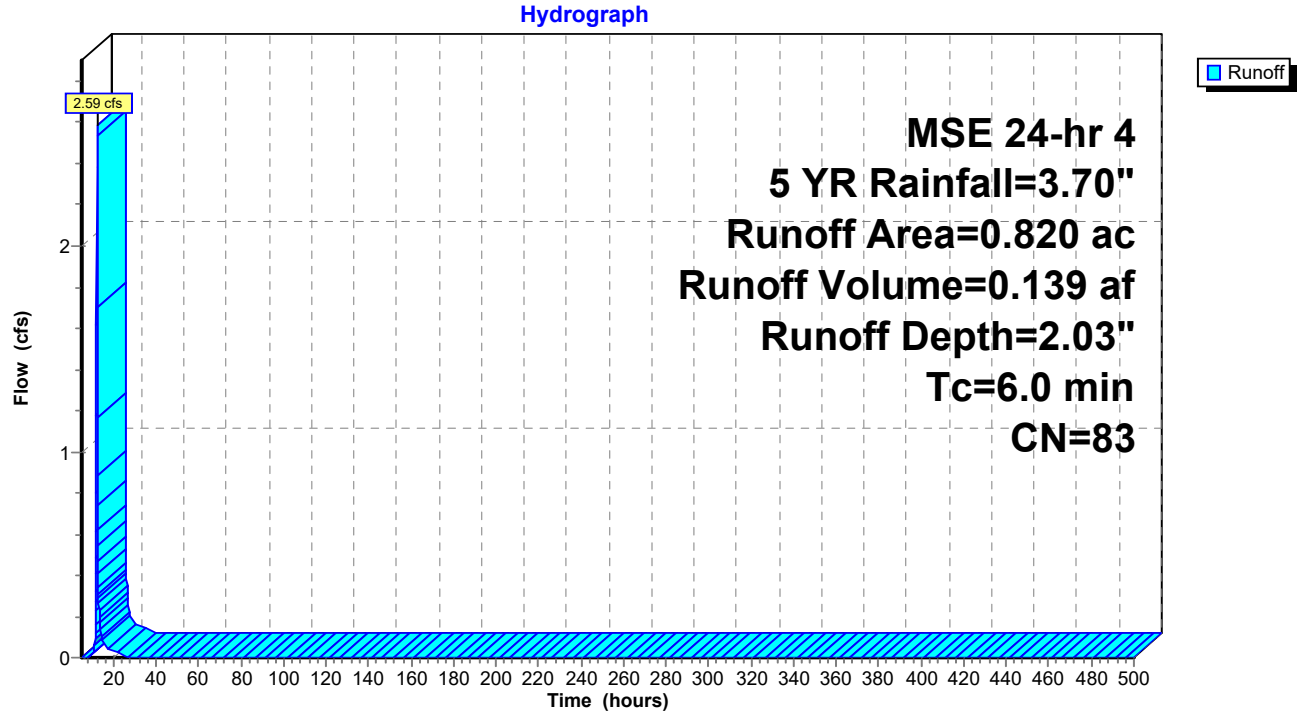
Runoff = 2.59 cfs @ 12.13 hrs, Volume= 0.139 af, Depth= 2.03"
Routed to Link 4L : Post - North

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 5 YR Rainfall=3.70"

	Area (ac)	CN	Description
*	0.300	98	Impervious
*	0.000	61	Post - B Soils
*	0.520	74	Post - C Soils
	0.820	83	Weighted Average
	0.520		63.41% Pervious Area
	0.300		36.59% Impervious Area

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

Subcatchment 3Y: Post 3Y - Offsite



Hydrograph for Subcatchment 3Y: Post 3Y - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.17	0.00	0.00
10.00	0.59	0.01	**0.02**
15.00	3.25	1.65	**0.09**
20.00	**3.58**	**1.93**	0.03
25.00	**3.70**	**2.03**	0.00
30.00	3.70	2.03	0.00
35.00	3.70	2.03	0.00
40.00	3.70	2.03	0.00
45.00	3.70	2.03	0.00
50.00	3.70	2.03	0.00
55.00	3.70	2.03	0.00
60.00	3.70	2.03	0.00
65.00	3.70	2.03	0.00
70.00	3.70	2.03	0.00
75.00	3.70	2.03	0.00
80.00	3.70	2.03	0.00
85.00	3.70	2.03	0.00
90.00	3.70	2.03	0.00
95.00	3.70	2.03	0.00
100.00	3.70	2.03	0.00
105.00	3.70	2.03	0.00
110.00	3.70	2.03	0.00
115.00	3.70	2.03	0.00
120.00	3.70	2.03	0.00
125.00	3.70	2.03	0.00
130.00	3.70	2.03	0.00
135.00	3.70	2.03	0.00
140.00	3.70	2.03	0.00
145.00	3.70	2.03	0.00
150.00	3.70	2.03	0.00
155.00	3.70	2.03	0.00
160.00	3.70	2.03	0.00
165.00	3.70	2.03	0.00
170.00	3.70	2.03	0.00
175.00	3.70	2.03	0.00
180.00	3.70	2.03	0.00
185.00	3.70	2.03	0.00
190.00	3.70	2.03	0.00
195.00	3.70	2.03	0.00
200.00	3.70	2.03	0.00
205.00	3.70	2.03	0.00
210.00	3.70	2.03	0.00
215.00	3.70	2.03	0.00
220.00	3.70	2.03	0.00
225.00	3.70	2.03	0.00
230.00	3.70	2.03	0.00
235.00	3.70	2.03	0.00
240.00	3.70	2.03	0.00
245.00	3.70	2.03	0.00
250.00	3.70	2.03	0.00
255.00	3.70	2.03	0.00
260.00	3.70	2.03	0.00
265.00	3.70	2.03	0.00
270.00	3.70	2.03	0.00
275.00	3.70	2.03	0.00
280.00	3.70	2.03	0.00
285.00	3.70	2.03	0.00
290.00	3.70	2.03	0.00
295.00	3.70	2.03	0.00
300.00	3.70	2.03	0.00
305.00	3.70	2.03	0.00
310.00	3.70	2.03	0.00
315.00	3.70	2.03	0.00
320.00	3.70	2.03	0.00
325.00	3.70	2.03	0.00
330.00	3.70	2.03	0.00
335.00	3.70	2.03	0.00
340.00	3.70	2.03	0.00
345.00	3.70	2.03	0.00
350.00	3.70	2.03	0.00
355.00	3.70	2.03	0.00
360.00	3.70	2.03	0.00
365.00	3.70	2.03	0.00
370.00	3.70	2.03	0.00
375.00	3.70	2.03	0.00
380.00	3.70	2.03	0.00
385.00	3.70	2.03	0.00
390.00	3.70	2.03	0.00
395.00	3.70	2.03	0.00
400.00	3.70	2.03	0.00
405.00	3.70	2.03	0.00
410.00	3.70	2.03	0.00
415.00	3.70	2.03	0.00
420.00	3.70	2.03	0.00
425.00	3.70	2.03	0.00
430.00	3.70	2.03	0.00
435.00	3.70	2.03	0.00
440.00	3.70	2.03	0.00
445.00	3.70	2.03	0.00
450.00	3.70	2.03	0.00
455.00	3.70	2.03	0.00
460.00	3.70	2.03	0.00
465.00	3.70	2.03	0.00
470.00	3.70	2.03	0.00
475.00	3.70	2.03	0.00
480.00	3.70	2.03	0.00
485.00	3.70	2.03	0.00
490.00	3.70	2.03	0.00
495.00	3.70	2.03	0.00
500.00	3.70	2.03	0.00

Summary for Subcatchment 3Z: Post 3Z - Offsite

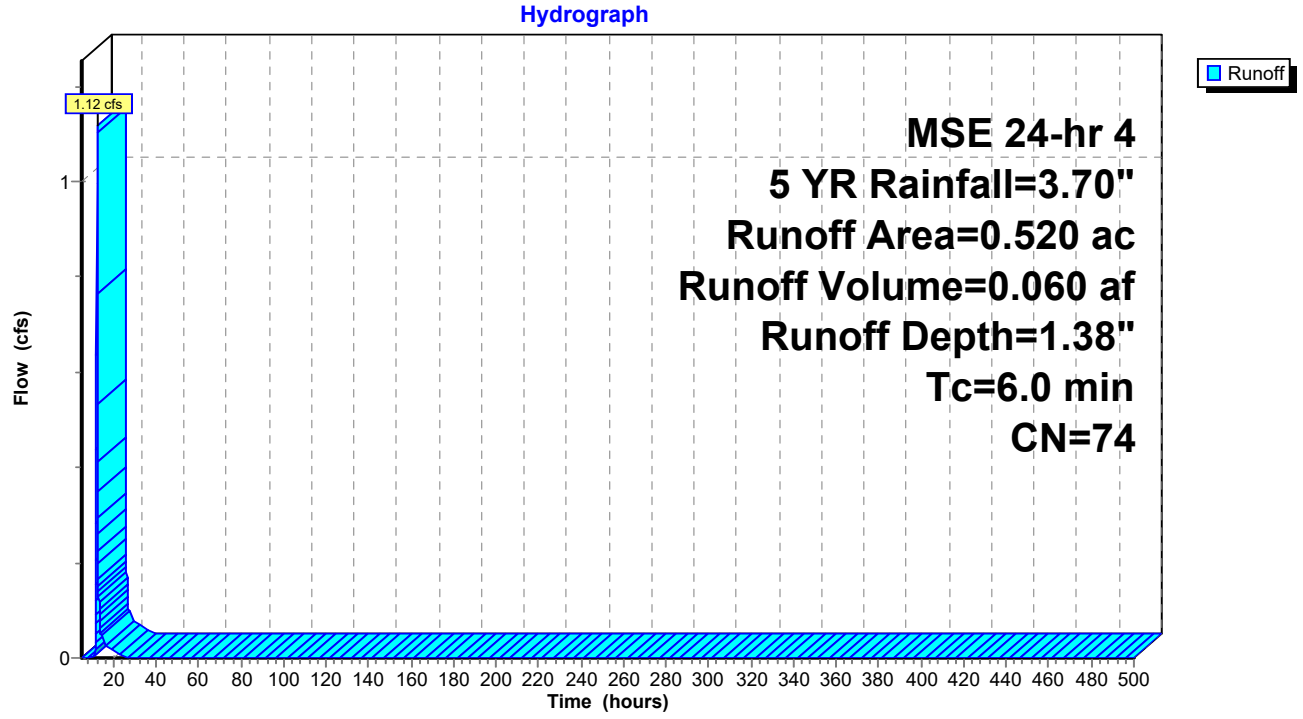
Runoff = 1.12 cfs @ 12.14 hrs, Volume= 0.060 af, Depth= 1.38"
Routed to Link 4L : Post - North

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 5 YR Rainfall=3.70"

	Area (ac)	CN	Description
*	0.000	98	Impervious
*	0.000	61	Post - B Soils
*	0.520	74	Post - C Soils
	0.520	74	Weighted Average
	0.520		100.00% Pervious Area

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

Subcatchment 3Z: Post 3Z - Offsite



Hydrograph for Subcatchment 3Z: Post 3Z - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.17	0.00	0.00
10.00	0.59	0.00	**0.00**
15.00	3.25	1.07	**0.05**
20.00	**3.58**	**1.30**	0.02
25.00	**3.70**	**1.38**	0.00
30.00	3.70	1.38	0.00
35.00	3.70	1.38	0.00
40.00	3.70	1.38	0.00
45.00	3.70	1.38	0.00
50.00	3.70	1.38	0.00
55.00	3.70	1.38	0.00
60.00	3.70	1.38	0.00
65.00	3.70	1.38	0.00
70.00	3.70	1.38	0.00
75.00	3.70	1.38	0.00
80.00	3.70	1.38	0.00
85.00	3.70	1.38	0.00
90.00	3.70	1.38	0.00
95.00	3.70	1.38	0.00
100.00	3.70	1.38	0.00
105.00	3.70	1.38	0.00
110.00	3.70	1.38	0.00
115.00	3.70	1.38	0.00
120.00	3.70	1.38	0.00
125.00	3.70	1.38	0.00
130.00	3.70	1.38	0.00
135.00	3.70	1.38	0.00
140.00	3.70	1.38	0.00
145.00	3.70	1.38	0.00
150.00	3.70	1.38	0.00
155.00	3.70	1.38	0.00
160.00	3.70	1.38	0.00
165.00	3.70	1.38	0.00
170.00	3.70	1.38	0.00
175.00	3.70	1.38	0.00
180.00	3.70	1.38	0.00
185.00	3.70	1.38	0.00
190.00	3.70	1.38	0.00
195.00	3.70	1.38	0.00
200.00	3.70	1.38	0.00
205.00	3.70	1.38	0.00
210.00	3.70	1.38	0.00
215.00	3.70	1.38	0.00
220.00	3.70	1.38	0.00
225.00	3.70	1.38	0.00
230.00	3.70	1.38	0.00
235.00	3.70	1.38	0.00
240.00	3.70	1.38	0.00
245.00	3.70	1.38	0.00
250.00	3.70	1.38	0.00
255.00	3.70	1.38	0.00
260.00	3.70	1.38	0.00
265.00	3.70	1.38	0.00
270.00	3.70	1.38	0.00
275.00	3.70	1.38	0.00
280.00	3.70	1.38	0.00
285.00	3.70	1.38	0.00
290.00	3.70	1.38	0.00
295.00	3.70	1.38	0.00
300.00	3.70	1.38	0.00
305.00	3.70	1.38	0.00
310.00	3.70	1.38	0.00
315.00	3.70	1.38	0.00
320.00	3.70	1.38	0.00
325.00	3.70	1.38	0.00
330.00	3.70	1.38	0.00
335.00	3.70	1.38	0.00
340.00	3.70	1.38	0.00
345.00	3.70	1.38	0.00
350.00	3.70	1.38	0.00
355.00	3.70	1.38	0.00
360.00	3.70	1.38	0.00
365.00	3.70	1.38	0.00
370.00	3.70	1.38	0.00
375.00	3.70	1.38	0.00
380.00	3.70	1.38	0.00
385.00	3.70	1.38	0.00
390.00	3.70	1.38	0.00
395.00	3.70	1.38	0.00
400.00	3.70	1.38	0.00
405.00	3.70	1.38	0.00
410.00	3.70	1.38	0.00
415.00	3.70	1.38	0.00
420.00	3.70	1.38	0.00
425.00	3.70	1.38	0.00
430.00	3.70	1.38	0.00
435.00	3.70	1.38	0.00
440.00	3.70	1.38	0.00
445.00	3.70	1.38	0.00
450.00	3.70	1.38	0.00
455.00	3.70	1.38	0.00
460.00	3.70	1.38	0.00
465.00	3.70	1.38	0.00
470.00	3.70	1.38	0.00
475.00	3.70	1.38	0.00
480.00	3.70	1.38	0.00
485.00	3.70	1.38	0.00
490.00	3.70	1.38	0.00
495.00	3.70	1.38	0.00
500.00	3.70	1.38	0.00

Summary for Subcatchment 5S: Culvert 1

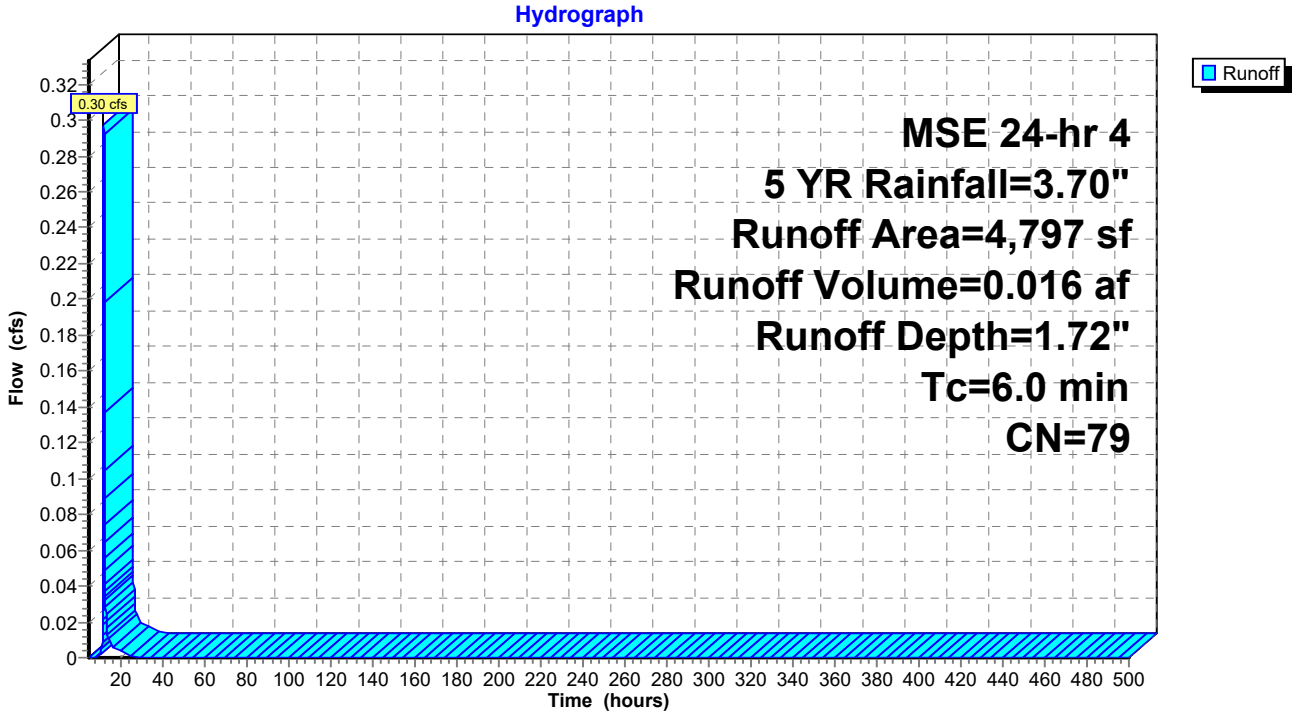
Runoff = 0.30 cfs @ 12.13 hrs, Volume= 0.016 af, Depth= 1.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 5 YR Rainfall=3.70"

	Area (sf)	CN	Description
*	2,465	61	Post - B Soils
*	2,332	98	Impervious
	4,797	79	Weighted Average
	2,465		51.39% Pervious Area
	2,332		48.61% Impervious Area

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

Subcatchment 5S: Culvert 1



Hydrograph for Subcatchment 5S: Culvert 1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.17	0.00	0.00
10.00	0.59	0.00	**0.00**
15.00	3.25	1.38	**0.01**
20.00	**3.58**	**1.63**	0.00
25.00	**3.70**	**1.72**	0.00
30.00	3.70	1.72	0.00
35.00	3.70	1.72	0.00
40.00	3.70	1.72	0.00
45.00	3.70	1.72	0.00
50.00	3.70	1.72	0.00
55.00	3.70	1.72	0.00
60.00	3.70	1.72	0.00
65.00	3.70	1.72	0.00
70.00	3.70	1.72	0.00
75.00	3.70	1.72	0.00
80.00	3.70	1.72	0.00
85.00	3.70	1.72	0.00
90.00	3.70	1.72	0.00
95.00	3.70	1.72	0.00
100.00	3.70	1.72	0.00
105.00	3.70	1.72	0.00
110.00	3.70	1.72	0.00
115.00	3.70	1.72	0.00
120.00	3.70	1.72	0.00
125.00	3.70	1.72	0.00
130.00	3.70	1.72	0.00
135.00	3.70	1.72	0.00
140.00	3.70	1.72	0.00
145.00	3.70	1.72	0.00
150.00	3.70	1.72	0.00
155.00	3.70	1.72	0.00
160.00	3.70	1.72	0.00
165.00	3.70	1.72	0.00
170.00	3.70	1.72	0.00
175.00	3.70	1.72	0.00
180.00	3.70	1.72	0.00
185.00	3.70	1.72	0.00
190.00	3.70	1.72	0.00
195.00	3.70	1.72	0.00
200.00	3.70	1.72	0.00
205.00	3.70	1.72	0.00
210.00	3.70	1.72	0.00
215.00	3.70	1.72	0.00
220.00	3.70	1.72	0.00
225.00	3.70	1.72	0.00
230.00	3.70	1.72	0.00
235.00	3.70	1.72	0.00
240.00	3.70	1.72	0.00
245.00	3.70	1.72	0.00
250.00	3.70	1.72	0.00
255.00	3.70	1.72	0.00
260.00	3.70	1.72	0.00
265.00	3.70	1.72	0.00
270.00	3.70	1.72	0.00
275.00	3.70	1.72	0.00
280.00	3.70	1.72	0.00
285.00	3.70	1.72	0.00
290.00	3.70	1.72	0.00
295.00	3.70	1.72	0.00
300.00	3.70	1.72	0.00
305.00	3.70	1.72	0.00
310.00	3.70	1.72	0.00
315.00	3.70	1.72	0.00
320.00	3.70	1.72	0.00
325.00	3.70	1.72	0.00
330.00	3.70	1.72	0.00
335.00	3.70	1.72	0.00
340.00	3.70	1.72	0.00
345.00	3.70	1.72	0.00
350.00	3.70	1.72	0.00
355.00	3.70	1.72	0.00
360.00	3.70	1.72	0.00
365.00	3.70	1.72	0.00
370.00	3.70	1.72	0.00
375.00	3.70	1.72	0.00
380.00	3.70	1.72	0.00
385.00	3.70	1.72	0.00
390.00	3.70	1.72	0.00
395.00	3.70	1.72	0.00
400.00	3.70	1.72	0.00
405.00	3.70	1.72	0.00
410.00	3.70	1.72	0.00
415.00	3.70	1.72	0.00
420.00	3.70	1.72	0.00
425.00	3.70	1.72	0.00
430.00	3.70	1.72	0.00
435.00	3.70	1.72	0.00
440.00	3.70	1.72	0.00
445.00	3.70	1.72	0.00
450.00	3.70	1.72	0.00
455.00	3.70	1.72	0.00
460.00	3.70	1.72	0.00
465.00	3.70	1.72	0.00
470.00	3.70	1.72	0.00
475.00	3.70	1.72	0.00
480.00	3.70	1.72	0.00
485.00	3.70	1.72	0.00
490.00	3.70	1.72	0.00
495.00	3.70	1.72	0.00
500.00	3.70	1.72	0.00

Summary for Subcatchment 6S: Culvert 2

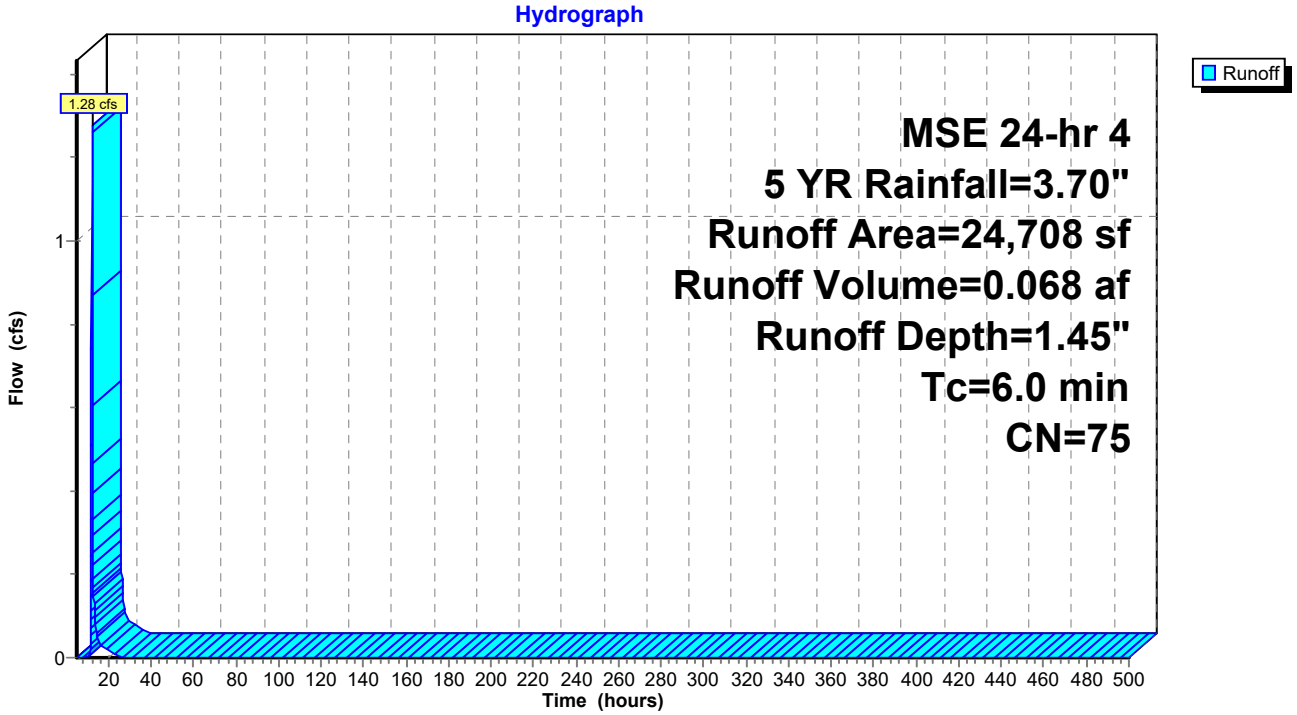
Runoff = 1.28 cfs @ 12.14 hrs, Volume= 0.068 af, Depth= 1.45"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 5 YR Rainfall=3.70"

	Area (sf)	CN	Description
*	15,597	61	Post - B Soils
*	9,111	98	Impervious
	24,708	75	Weighted Average
	15,597		63.13% Pervious Area
	9,111		36.87% Impervious Area

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

Subcatchment 6S: Culvert 2



Hydrograph for Subcatchment 6S: Culvert 2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.17	0.00	0.00	260.00	3.70	1.45	0.00
10.00	0.59	0.00	**0.00**	265.00	3.70	1.45	0.00
15.00	3.25	1.13	**0.05**	270.00	3.70	1.45	0.00
20.00	**3.58**	**1.36**	0.02	275.00	3.70	1.45	0.00
25.00	**3.70**	**1.45**	0.00	280.00	3.70	1.45	0.00
30.00	3.70	1.45	0.00	285.00	3.70	1.45	0.00
35.00	3.70	1.45	0.00	290.00	3.70	1.45	0.00
40.00	3.70	1.45	0.00	295.00	3.70	1.45	0.00
45.00	3.70	1.45	0.00	300.00	3.70	1.45	0.00
50.00	3.70	1.45	0.00	305.00	3.70	1.45	0.00
55.00	3.70	1.45	0.00	310.00	3.70	1.45	0.00
60.00	3.70	1.45	0.00	315.00	3.70	1.45	0.00
65.00	3.70	1.45	0.00	320.00	3.70	1.45	0.00
70.00	3.70	1.45	0.00	325.00	3.70	1.45	0.00
75.00	3.70	1.45	0.00	330.00	3.70	1.45	0.00
80.00	3.70	1.45	0.00	335.00	3.70	1.45	0.00
85.00	3.70	1.45	0.00	340.00	3.70	1.45	0.00
90.00	3.70	1.45	0.00	345.00	3.70	1.45	0.00
95.00	3.70	1.45	0.00	350.00	3.70	1.45	0.00
100.00	3.70	1.45	0.00	355.00	3.70	1.45	0.00
105.00	3.70	1.45	0.00	360.00	3.70	1.45	0.00
110.00	3.70	1.45	0.00	365.00	3.70	1.45	0.00
115.00	3.70	1.45	0.00	370.00	3.70	1.45	0.00
120.00	3.70	1.45	0.00	375.00	3.70	1.45	0.00
125.00	3.70	1.45	0.00	380.00	3.70	1.45	0.00
130.00	3.70	1.45	0.00	385.00	3.70	1.45	0.00
135.00	3.70	1.45	0.00	390.00	3.70	1.45	0.00
140.00	3.70	1.45	0.00	395.00	3.70	1.45	0.00
145.00	3.70	1.45	0.00	400.00	3.70	1.45	0.00
150.00	3.70	1.45	0.00	405.00	3.70	1.45	0.00
155.00	3.70	1.45	0.00	410.00	3.70	1.45	0.00
160.00	3.70	1.45	0.00	415.00	3.70	1.45	0.00
165.00	3.70	1.45	0.00	420.00	3.70	1.45	0.00
170.00	3.70	1.45	0.00	425.00	3.70	1.45	0.00
175.00	3.70	1.45	0.00	430.00	3.70	1.45	0.00
180.00	3.70	1.45	0.00	435.00	3.70	1.45	0.00
185.00	3.70	1.45	0.00	440.00	3.70	1.45	0.00
190.00	3.70	1.45	0.00	445.00	3.70	1.45	0.00
195.00	3.70	1.45	0.00	450.00	3.70	1.45	0.00
200.00	3.70	1.45	0.00	455.00	3.70	1.45	0.00
205.00	3.70	1.45	0.00	460.00	3.70	1.45	0.00
210.00	3.70	1.45	0.00	465.00	3.70	1.45	0.00
215.00	3.70	1.45	0.00	470.00	3.70	1.45	0.00
220.00	3.70	1.45	0.00	475.00	3.70	1.45	0.00
225.00	3.70	1.45	0.00	480.00	3.70	1.45	0.00
230.00	3.70	1.45	0.00	485.00	3.70	1.45	0.00
235.00	3.70	1.45	0.00	490.00	3.70	1.45	0.00
240.00	3.70	1.45	0.00	495.00	3.70	1.45	0.00
245.00	3.70	1.45	0.00	500.00	3.70	1.45	0.00
250.00	3.70	1.45	0.00				
255.00	3.70	1.45	0.00				

Summary for Subcatchment 7S: Culvert 3

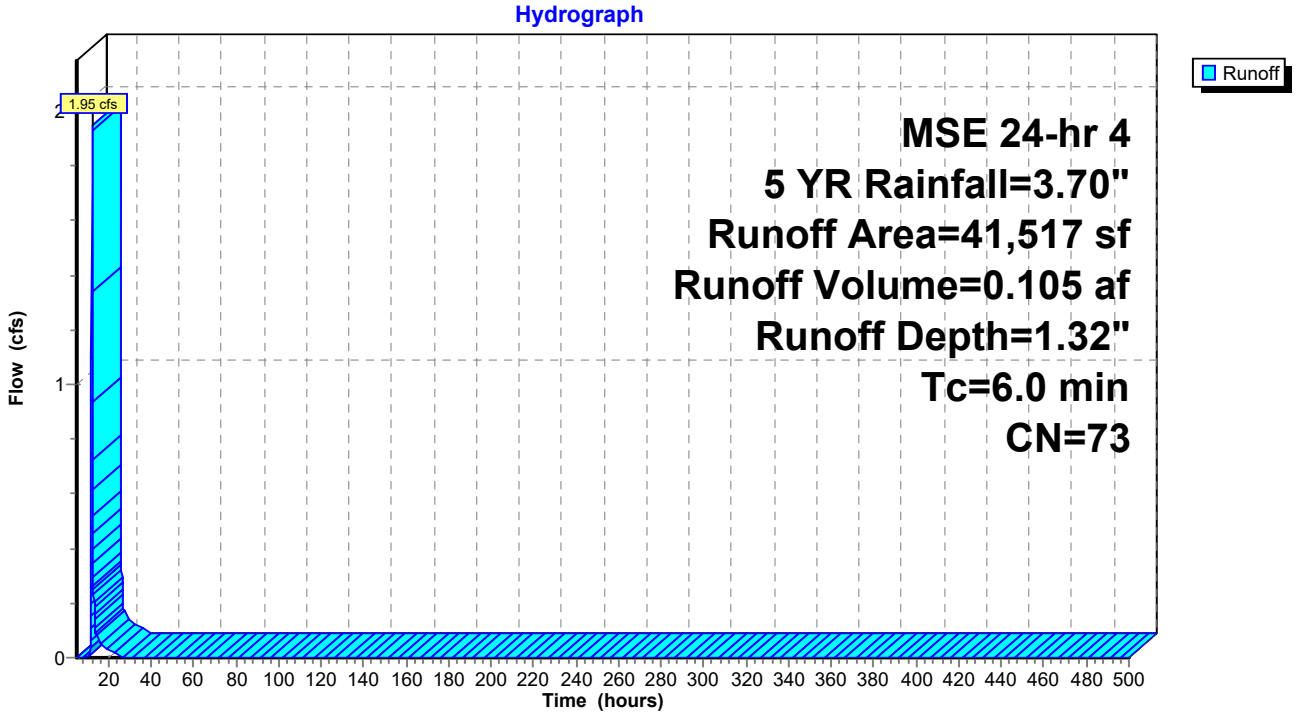
Runoff = 1.95 cfs @ 12.14 hrs, Volume= 0.105 af, Depth= 1.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 5 YR Rainfall=3.70"

	Area (sf)	CN	Description
*	28,233	61	Post - B Soils
*	13,284	98	Impervious
	41,517	73	Weighted Average
	28,233		68.00% Pervious Area
	13,284		32.00% Impervious Area

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

Subcatchment 7S: Culvert 3



Hydrograph for Subcatchment 7S: Culvert 3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.17	0.00	0.00	260.00	3.70	1.32	0.00
10.00	0.59	0.00	**0.00**	265.00	3.70	1.32	0.00
15.00	3.25	1.02	**0.08**	270.00	3.70	1.32	0.00
20.00	**3.58**	**1.23**	0.03	275.00	3.70	1.32	0.00
25.00	**3.70**	**1.32**	0.00	280.00	3.70	1.32	0.00
30.00	3.70	1.32	0.00	285.00	3.70	1.32	0.00
35.00	3.70	1.32	0.00	290.00	3.70	1.32	0.00
40.00	3.70	1.32	0.00	295.00	3.70	1.32	0.00
45.00	3.70	1.32	0.00	300.00	3.70	1.32	0.00
50.00	3.70	1.32	0.00	305.00	3.70	1.32	0.00
55.00	3.70	1.32	0.00	310.00	3.70	1.32	0.00
60.00	3.70	1.32	0.00	315.00	3.70	1.32	0.00
65.00	3.70	1.32	0.00	320.00	3.70	1.32	0.00
70.00	3.70	1.32	0.00	325.00	3.70	1.32	0.00
75.00	3.70	1.32	0.00	330.00	3.70	1.32	0.00
80.00	3.70	1.32	0.00	335.00	3.70	1.32	0.00
85.00	3.70	1.32	0.00	340.00	3.70	1.32	0.00
90.00	3.70	1.32	0.00	345.00	3.70	1.32	0.00
95.00	3.70	1.32	0.00	350.00	3.70	1.32	0.00
100.00	3.70	1.32	0.00	355.00	3.70	1.32	0.00
105.00	3.70	1.32	0.00	360.00	3.70	1.32	0.00
110.00	3.70	1.32	0.00	365.00	3.70	1.32	0.00
115.00	3.70	1.32	0.00	370.00	3.70	1.32	0.00
120.00	3.70	1.32	0.00	375.00	3.70	1.32	0.00
125.00	3.70	1.32	0.00	380.00	3.70	1.32	0.00
130.00	3.70	1.32	0.00	385.00	3.70	1.32	0.00
135.00	3.70	1.32	0.00	390.00	3.70	1.32	0.00
140.00	3.70	1.32	0.00	395.00	3.70	1.32	0.00
145.00	3.70	1.32	0.00	400.00	3.70	1.32	0.00
150.00	3.70	1.32	0.00	405.00	3.70	1.32	0.00
155.00	3.70	1.32	0.00	410.00	3.70	1.32	0.00
160.00	3.70	1.32	0.00	415.00	3.70	1.32	0.00
165.00	3.70	1.32	0.00	420.00	3.70	1.32	0.00
170.00	3.70	1.32	0.00	425.00	3.70	1.32	0.00
175.00	3.70	1.32	0.00	430.00	3.70	1.32	0.00
180.00	3.70	1.32	0.00	435.00	3.70	1.32	0.00
185.00	3.70	1.32	0.00	440.00	3.70	1.32	0.00
190.00	3.70	1.32	0.00	445.00	3.70	1.32	0.00
195.00	3.70	1.32	0.00	450.00	3.70	1.32	0.00
200.00	3.70	1.32	0.00	455.00	3.70	1.32	0.00
205.00	3.70	1.32	0.00	460.00	3.70	1.32	0.00
210.00	3.70	1.32	0.00	465.00	3.70	1.32	0.00
215.00	3.70	1.32	0.00	470.00	3.70	1.32	0.00
220.00	3.70	1.32	0.00	475.00	3.70	1.32	0.00
225.00	3.70	1.32	0.00	480.00	3.70	1.32	0.00
230.00	3.70	1.32	0.00	485.00	3.70	1.32	0.00
235.00	3.70	1.32	0.00	490.00	3.70	1.32	0.00
240.00	3.70	1.32	0.00	495.00	3.70	1.32	0.00
245.00	3.70	1.32	0.00	500.00	3.70	1.32	0.00
250.00	3.70	1.32	0.00				
255.00	3.70	1.32	0.00				

Summary for Subcatchment 8S: Culvert 4

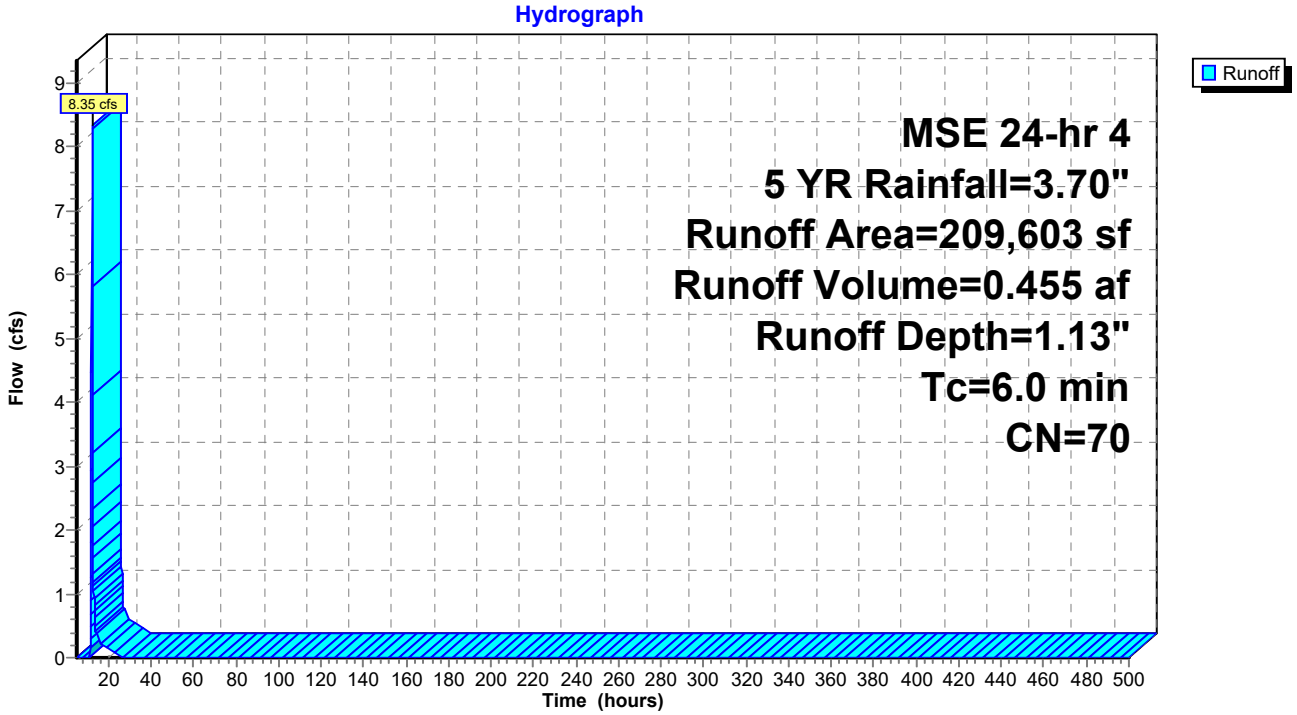
Runoff = 8.35 cfs @ 12.14 hrs, Volume= 0.455 af, Depth= 1.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 5 YR Rainfall=3.70"

	Area (sf)	CN	Description
*	156,823	61	Post - B Soils
*	52,780	98	Impervious
	209,603	70	Weighted Average
	156,823		74.82% Pervious Area
	52,780		25.18% Impervious Area

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

Subcatchment 8S: Culvert 4



Hydrograph for Subcatchment 8S: Culvert 4

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.17	0.00	0.00	260.00	3.70	1.13	0.00
10.00	0.59	0.00	**0.00**	265.00	3.70	1.13	0.00
15.00	3.25	0.86	**0.37**	270.00	3.70	1.13	0.00
20.00	**3.58**	**1.06**	0.14	275.00	3.70	1.13	0.00
25.00	**3.70**	**1.13**	0.00	280.00	3.70	1.13	0.00
30.00	3.70	1.13	0.00	285.00	3.70	1.13	0.00
35.00	3.70	1.13	0.00	290.00	3.70	1.13	0.00
40.00	3.70	1.13	0.00	295.00	3.70	1.13	0.00
45.00	3.70	1.13	0.00	300.00	3.70	1.13	0.00
50.00	3.70	1.13	0.00	305.00	3.70	1.13	0.00
55.00	3.70	1.13	0.00	310.00	3.70	1.13	0.00
60.00	3.70	1.13	0.00	315.00	3.70	1.13	0.00
65.00	3.70	1.13	0.00	320.00	3.70	1.13	0.00
70.00	3.70	1.13	0.00	325.00	3.70	1.13	0.00
75.00	3.70	1.13	0.00	330.00	3.70	1.13	0.00
80.00	3.70	1.13	0.00	335.00	3.70	1.13	0.00
85.00	3.70	1.13	0.00	340.00	3.70	1.13	0.00
90.00	3.70	1.13	0.00	345.00	3.70	1.13	0.00
95.00	3.70	1.13	0.00	350.00	3.70	1.13	0.00
100.00	3.70	1.13	0.00	355.00	3.70	1.13	0.00
105.00	3.70	1.13	0.00	360.00	3.70	1.13	0.00
110.00	3.70	1.13	0.00	365.00	3.70	1.13	0.00
115.00	3.70	1.13	0.00	370.00	3.70	1.13	0.00
120.00	3.70	1.13	0.00	375.00	3.70	1.13	0.00
125.00	3.70	1.13	0.00	380.00	3.70	1.13	0.00
130.00	3.70	1.13	0.00	385.00	3.70	1.13	0.00
135.00	3.70	1.13	0.00	390.00	3.70	1.13	0.00
140.00	3.70	1.13	0.00	395.00	3.70	1.13	0.00
145.00	3.70	1.13	0.00	400.00	3.70	1.13	0.00
150.00	3.70	1.13	0.00	405.00	3.70	1.13	0.00
155.00	3.70	1.13	0.00	410.00	3.70	1.13	0.00
160.00	3.70	1.13	0.00	415.00	3.70	1.13	0.00
165.00	3.70	1.13	0.00	420.00	3.70	1.13	0.00
170.00	3.70	1.13	0.00	425.00	3.70	1.13	0.00
175.00	3.70	1.13	0.00	430.00	3.70	1.13	0.00
180.00	3.70	1.13	0.00	435.00	3.70	1.13	0.00
185.00	3.70	1.13	0.00	440.00	3.70	1.13	0.00
190.00	3.70	1.13	0.00	445.00	3.70	1.13	0.00
195.00	3.70	1.13	0.00	450.00	3.70	1.13	0.00
200.00	3.70	1.13	0.00	455.00	3.70	1.13	0.00
205.00	3.70	1.13	0.00	460.00	3.70	1.13	0.00
210.00	3.70	1.13	0.00	465.00	3.70	1.13	0.00
215.00	3.70	1.13	0.00	470.00	3.70	1.13	0.00
220.00	3.70	1.13	0.00	475.00	3.70	1.13	0.00
225.00	3.70	1.13	0.00	480.00	3.70	1.13	0.00
230.00	3.70	1.13	0.00	485.00	3.70	1.13	0.00
235.00	3.70	1.13	0.00	490.00	3.70	1.13	0.00
240.00	3.70	1.13	0.00	495.00	3.70	1.13	0.00
245.00	3.70	1.13	0.00	500.00	3.70	1.13	0.00
250.00	3.70	1.13	0.00				
255.00	3.70	1.13	0.00				

Summary for Subcatchment 9S: Culvert 5

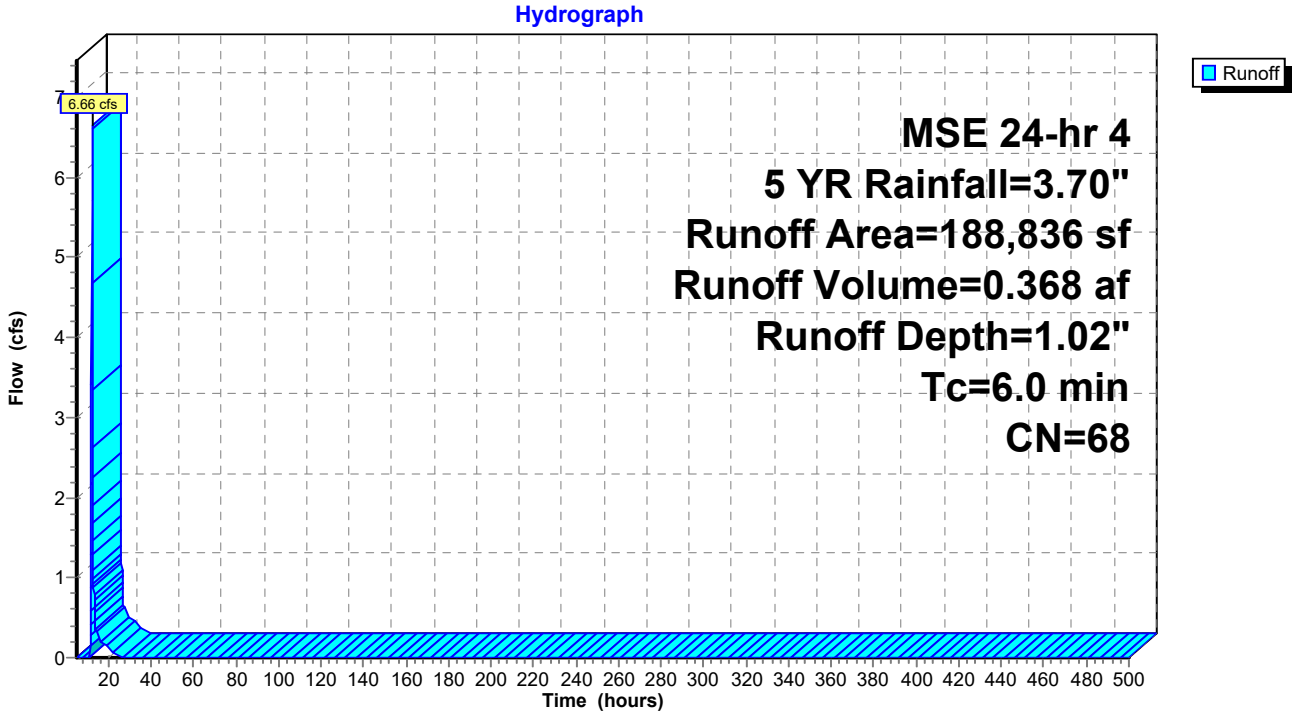
Runoff = 6.66 cfs @ 12.14 hrs, Volume= 0.368 af, Depth= 1.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 5 YR Rainfall=3.70"

	Area (sf)	CN	Description
*	151,149	61	Post - B Soils
*	37,687	98	Impervious
	188,836	68	Weighted Average
	151,149		80.04% Pervious Area
	37,687		19.96% Impervious Area

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

Subcatchment 9S: Culvert 5



Hydrograph for Subcatchment 9S: Culvert 5

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.17	0.00	0.00
10.00	0.59	0.00	**0.00**
15.00	3.25	0.76	**0.31**
20.00	**3.58**	**0.95**	0.12
25.00	**3.70**	**1.02**	0.00
30.00	3.70	1.02	0.00
35.00	3.70	1.02	0.00
40.00	3.70	1.02	0.00
45.00	3.70	1.02	0.00
50.00	3.70	1.02	0.00
55.00	3.70	1.02	0.00
60.00	3.70	1.02	0.00
65.00	3.70	1.02	0.00
70.00	3.70	1.02	0.00
75.00	3.70	1.02	0.00
80.00	3.70	1.02	0.00
85.00	3.70	1.02	0.00
90.00	3.70	1.02	0.00
95.00	3.70	1.02	0.00
100.00	3.70	1.02	0.00
105.00	3.70	1.02	0.00
110.00	3.70	1.02	0.00
115.00	3.70	1.02	0.00
120.00	3.70	1.02	0.00
125.00	3.70	1.02	0.00
130.00	3.70	1.02	0.00
135.00	3.70	1.02	0.00
140.00	3.70	1.02	0.00
145.00	3.70	1.02	0.00
150.00	3.70	1.02	0.00
155.00	3.70	1.02	0.00
160.00	3.70	1.02	0.00
165.00	3.70	1.02	0.00
170.00	3.70	1.02	0.00
175.00	3.70	1.02	0.00
180.00	3.70	1.02	0.00
185.00	3.70	1.02	0.00
190.00	3.70	1.02	0.00
195.00	3.70	1.02	0.00
200.00	3.70	1.02	0.00
205.00	3.70	1.02	0.00
210.00	3.70	1.02	0.00
215.00	3.70	1.02	0.00
220.00	3.70	1.02	0.00
225.00	3.70	1.02	0.00
230.00	3.70	1.02	0.00
235.00	3.70	1.02	0.00
240.00	3.70	1.02	0.00
245.00	3.70	1.02	0.00
250.00	3.70	1.02	0.00
255.00	3.70	1.02	0.00
260.00	3.70	1.02	0.00
265.00	3.70	1.02	0.00
270.00	3.70	1.02	0.00
275.00	3.70	1.02	0.00
280.00	3.70	1.02	0.00
285.00	3.70	1.02	0.00
290.00	3.70	1.02	0.00
295.00	3.70	1.02	0.00
300.00	3.70	1.02	0.00
305.00	3.70	1.02	0.00
310.00	3.70	1.02	0.00
315.00	3.70	1.02	0.00
320.00	3.70	1.02	0.00
325.00	3.70	1.02	0.00
330.00	3.70	1.02	0.00
335.00	3.70	1.02	0.00
340.00	3.70	1.02	0.00
345.00	3.70	1.02	0.00
350.00	3.70	1.02	0.00
355.00	3.70	1.02	0.00
360.00	3.70	1.02	0.00
365.00	3.70	1.02	0.00
370.00	3.70	1.02	0.00
375.00	3.70	1.02	0.00
380.00	3.70	1.02	0.00
385.00	3.70	1.02	0.00
390.00	3.70	1.02	0.00
395.00	3.70	1.02	0.00
400.00	3.70	1.02	0.00
405.00	3.70	1.02	0.00
410.00	3.70	1.02	0.00
415.00	3.70	1.02	0.00
420.00	3.70	1.02	0.00
425.00	3.70	1.02	0.00
430.00	3.70	1.02	0.00
435.00	3.70	1.02	0.00
440.00	3.70	1.02	0.00
445.00	3.70	1.02	0.00
450.00	3.70	1.02	0.00
455.00	3.70	1.02	0.00
460.00	3.70	1.02	0.00
465.00	3.70	1.02	0.00
470.00	3.70	1.02	0.00
475.00	3.70	1.02	0.00
480.00	3.70	1.02	0.00
485.00	3.70	1.02	0.00
490.00	3.70	1.02	0.00
495.00	3.70	1.02	0.00
500.00	3.70	1.02	0.00

Summary for Pond P1A: Pond 1A

Inflow Area = 6.030 ac, 19.24% Impervious, Inflow Depth = 1.02" for 5 YR event
Inflow = 9.27 cfs @ 12.14 hrs, Volume= 0.512 af
Outflow = 1.17 cfs @ 12.91 hrs, Volume= 0.512 af, Atten= 87%, Lag= 46.2 min
Primary = 0.70 cfs @ 12.91 hrs, Volume= 0.135 af
Routed to Link 3L : Post - South
Secondary = 0.47 cfs @ 12.91 hrs, Volume= 0.377 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,241.17' @ 12.91 hrs Surf.Area= 5,630 sf Storage= 8,802 cf

Plug-Flow detention time= 145.4 min calculated for 0.512 af (100% of inflow)
Center-of-Mass det. time= 145.3 min (996.8 - 851.5)

Volume	Invert	Avail.Storage	Storage Description
#1	1,239.00'	30,563 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

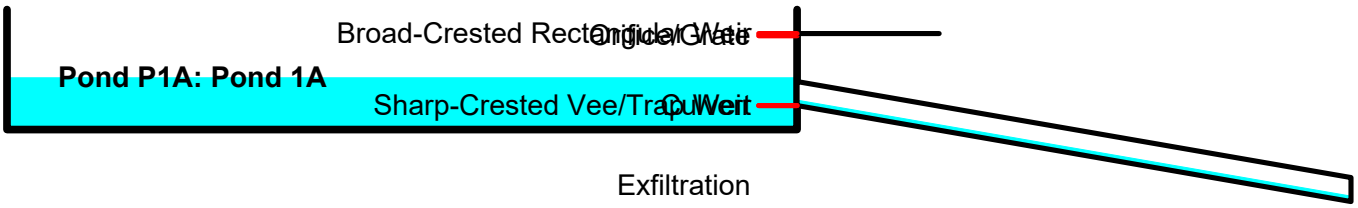
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,239.00	2,496	0	0
1,244.00	9,729	30,563	30,563

Device	Routing	Invert	Outlet Devices
#1	Primary	1,240.00'	**12.0" Round Culvert** L= 39.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,240.00' / 1,236.00' S= 0.1026 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,240.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,242.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,239.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,243.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

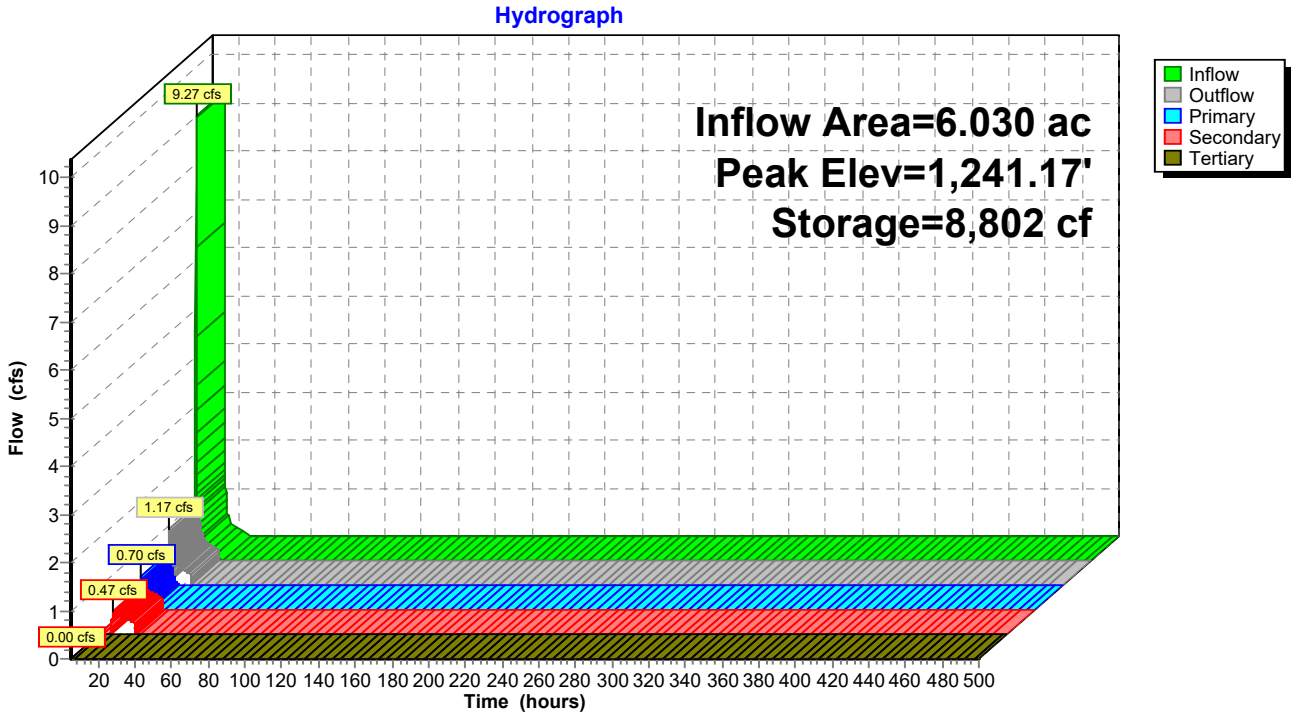
Primary OutFlow Max=0.70 cfs @ 12.91 hrs HW=1,241.17' (Free Discharge)
└**1=Culvert** (Passes 0.70 cfs of 3.09 cfs potential flow)
├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 0.70 cfs @ 2.91 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.47 cfs @ 12.91 hrs HW=1,241.17' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.47 cfs)

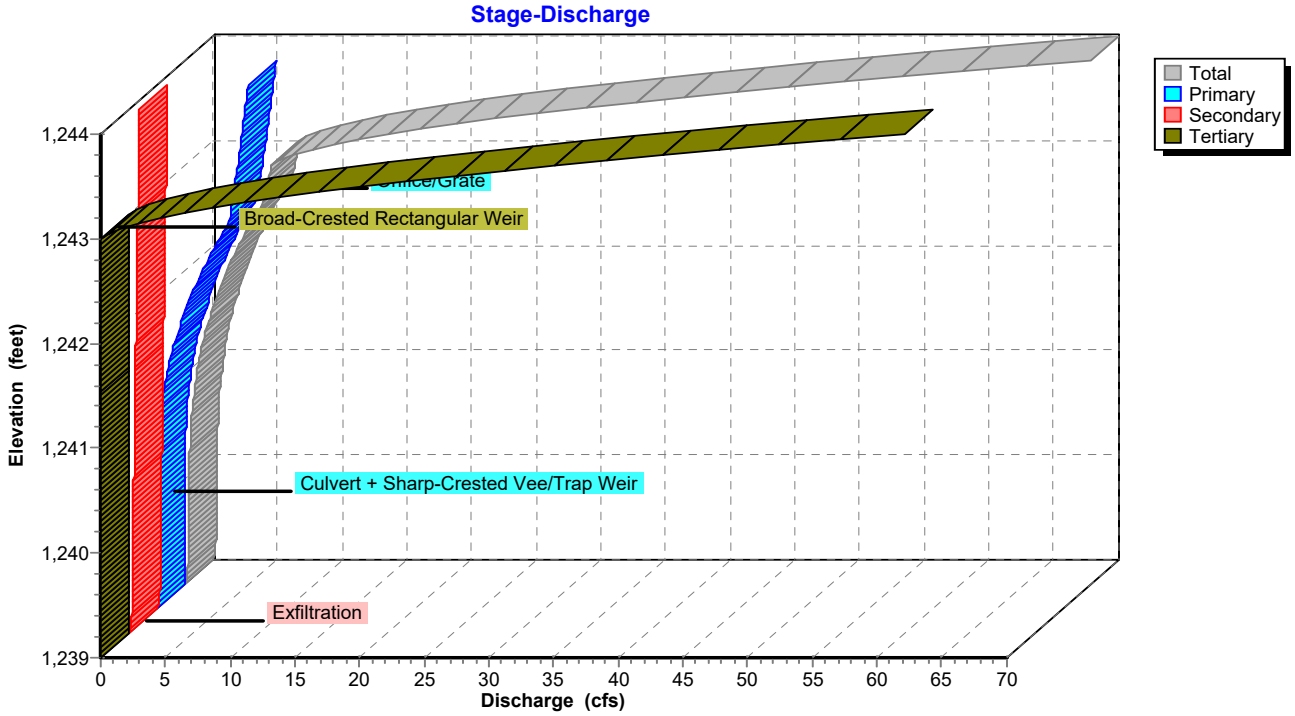
Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,239.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



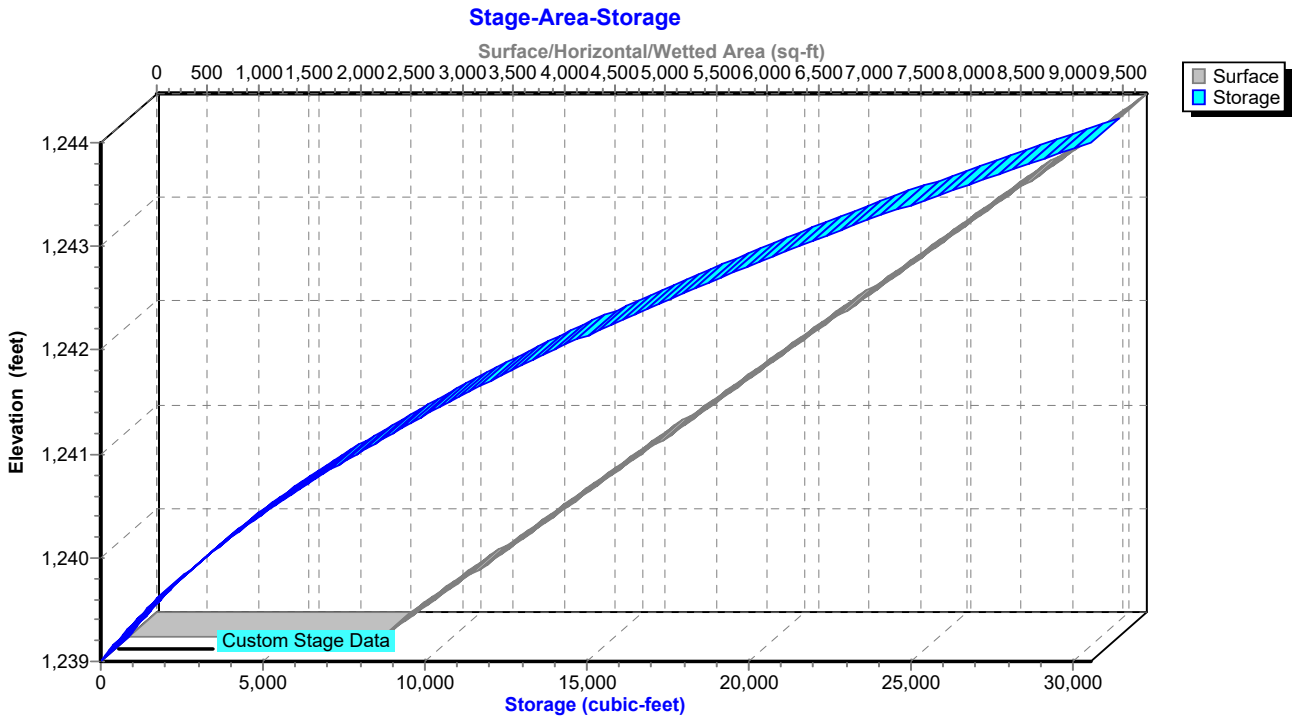
Pond P1A: Pond 1A



Pond P1A: Pond 1A



Pond P1A: Pond 1A



Hydrograph for Pond P1A: Pond 1A

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,239.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.44**	**6,616**	**1,240.76**	**0.66**	**0.24**	**0.42**	0.00
25.00	0.00	17	1,239.01	0.03	0.00	0.03	0.00
35.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P1A: Pond 1A

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,239.00	0.00	0.00	0.00	0.00
1,239.10	0.22	0.00	0.22	0.00
1,239.20	0.23	0.00	0.23	0.00
1,239.30	0.24	0.00	0.24	0.00
1,239.40	0.26	0.00	0.26	0.00
1,239.50	0.27	0.00	0.27	0.00
1,239.60	0.28	0.00	0.28	0.00
1,239.70	0.29	0.00	0.29	0.00
1,239.80	0.30	0.00	0.30	0.00
1,239.90	0.32	0.00	0.32	0.00
1,240.00	0.33	0.00	0.33	0.00
1,240.10	0.34	0.00	0.34	0.00
1,240.20	0.36	0.01	0.35	0.00
1,240.30	0.39	0.02	0.36	0.00
1,240.40	0.42	0.05	0.38	0.00
1,240.50	0.47	0.08	0.39	0.00
1,240.60	0.53	0.13	0.40	0.00
1,240.70	0.61	0.19	0.41	0.00
1,240.80	0.70	0.27	0.42	0.00
1,240.90	0.80	0.36	0.44	0.00
1,241.00	0.92	0.47	0.45	0.00
1,241.10	1.06	0.60	0.46	0.00
1,241.20	1.22	0.75	0.47	0.00
1,241.30	1.40	0.91	0.49	0.00
1,241.40	1.60	1.10	0.50	0.00
1,241.50	1.82	1.31	0.51	0.00
1,241.60	2.06	1.54	0.52	0.00
1,241.70	2.32	1.79	0.53	0.00
1,241.80	2.61	2.06	0.55	0.00
1,241.90	2.92	2.36	0.56	0.00
1,242.00	3.25	2.68	0.57	0.00
1,242.10	3.61	3.03	0.58	0.00
1,242.20	4.00	3.41	0.59	0.00
1,242.30	4.41	3.81	0.61	0.00
1,242.40	4.85	4.23	0.62	0.00
1,242.50	5.32	4.69	0.63	0.00
1,242.60	5.81	5.17	0.64	0.00
1,242.70	6.26	5.61	0.65	0.00
1,242.80	6.40	5.74	0.67	0.00
1,242.90	6.54	5.86	0.68	0.00
1,243.00	6.67	5.98	0.69	0.00
1,243.10	8.40	6.10	0.70	1.60
1,243.20	11.53	6.21	0.71	4.60
1,243.30	15.75	6.33	0.73	8.70
1,243.40	20.96	6.44	0.74	13.78
1,243.50	27.39	6.55	0.75	20.08
1,243.60	34.93	6.66	0.76	27.51
1,243.70	42.64	6.76	0.77	35.10
1,243.80	51.08	6.87	0.79	43.42
1,243.90	60.22	6.97	0.80	52.45
1,244.00	**70.06**	**7.07**	**0.81**	**62.18**

Stage-Area-Storage for Pond P1A: Pond 1A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,239.00	2,496	0
1,239.05	2,568	127
1,239.10	2,641	257
1,239.15	2,713	391
1,239.20	2,785	528
1,239.25	2,858	669
1,239.30	2,930	814
1,239.35	3,002	962
1,239.40	3,075	1,114
1,239.45	3,147	1,270
1,239.50	3,219	1,429
1,239.55	3,292	1,592
1,239.60	3,364	1,758
1,239.65	3,436	1,928
1,239.70	3,509	2,102
1,239.75	3,581	2,279
1,239.80	3,653	2,460
1,239.85	3,726	2,644
1,239.90	3,798	2,832
1,239.95	3,870	3,024
1,240.00	3,943	3,219
1,240.05	4,015	3,418
1,240.10	4,087	3,621
1,240.15	4,160	3,827
1,240.20	4,232	4,037
1,240.25	4,304	4,250
1,240.30	4,377	4,467
1,240.35	4,449	4,688
1,240.40	4,521	4,912
1,240.45	4,594	5,140
1,240.50	4,666	5,371
1,240.55	4,738	5,607
1,240.60	4,811	5,845
1,240.65	4,883	6,088
1,240.70	4,955	6,334
1,240.75	5,028	6,583
1,240.80	5,100	6,836
1,240.85	5,172	7,093
1,240.90	5,245	7,354
1,240.95	5,317	7,618
1,241.00	5,389	7,885
1,241.05	5,462	8,156
1,241.10	5,534	8,431
1,241.15	5,606	8,710
1,241.20	5,679	8,992
1,241.25	5,751	9,278
1,241.30	5,823	9,567
1,241.35	5,896	9,860
1,241.40	5,968	10,157
1,241.45	6,040	10,457
1,241.50	6,113	10,761
1,241.55	6,185	11,068
1,241.60	6,257	11,379
1,241.65	6,329	11,694
1,241.70	6,402	12,012
1,241.75	6,474	12,334
1,241.80	6,546	12,659
1,241.85	6,619	12,989
1,241.90	6,691	13,321
1,241.95	6,763	13,658
1,242.00	6,836	13,998
1,242.05	6,908	14,341
1,242.10	6,980	14,689
1,242.15	7,053	15,039
1,242.20	7,125	15,394
1,242.25	7,197	15,752
1,242.30	7,270	16,114
1,242.35	7,342	16,479
1,242.40	7,414	16,848
1,242.45	7,487	17,220
1,242.50	7,559	17,596
1,242.55	7,631	17,976
1,242.60	7,704	18,360
1,242.65	7,776	18,747
1,242.70	7,848	19,137
1,242.75	7,921	19,531
1,242.80	7,993	19,929
1,242.85	8,065	20,331
1,242.90	8,138	20,736
1,242.95	8,210	21,144
1,243.00	8,282	21,557
1,243.05	8,355	21,973
1,243.10	8,427	22,392
1,243.15	8,499	22,815
1,243.20	8,572	23,242
1,243.25	8,644	23,673
1,243.30	8,716	24,107
1,243.35	8,789	24,544
1,243.40	8,861	24,985
1,243.45	8,933	25,430
1,243.50	9,006	25,879
1,243.55	9,078	26,331
1,243.60	9,150	26,787
1,243.65	9,223	27,246
1,243.70	9,295	27,709
1,243.75	9,367	28,175
1,243.80	9,440	28,646
1,243.85	9,512	29,119
1,243.90	9,584	29,597
1,243.95	9,657	30,078
1,244.00	**9,729**	**30,563**

Summary for Pond P3A: Pond 3A

Inflow Area = 10.600 ac, 18.58% Impervious, Inflow Depth = 1.13" for 5 YR event
Inflow = 18.39 cfs @ 12.14 hrs, Volume= 1.001 af
Outflow = 2.63 cfs @ 12.66 hrs, Volume= 1.001 af, Atten= 86%, Lag= 31.2 min
Primary = 1.94 cfs @ 12.66 hrs, Volume= 0.381 af
Routed to Link 4L : Post - North
Secondary = 0.69 cfs @ 12.66 hrs, Volume= 0.621 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,194.76' @ 12.66 hrs Surf.Area= 8,278 sf Storage= 17,153 cf

Plug-Flow detention time= 150.9 min calculated for 1.001 af (100% of inflow)
Center-of-Mass det. time= 150.9 min (996.9 - 846.0)

Volume	Invert	Avail.Storage	Storage Description
#1	1,192.00'	51,846 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

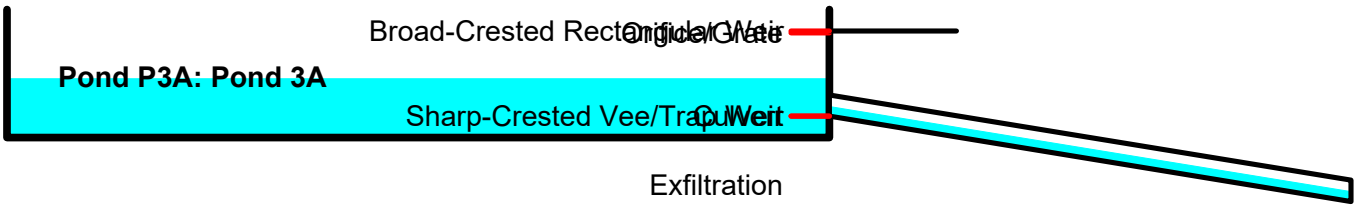
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,192.00	4,165	0	0
1,198.00	13,117	51,846	51,846

Device	Routing	Invert	Outlet Devices
#1	Primary	1,193.00'	**12.0" Round Culvert** L= 41.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,193.00' / 1,189.00' S= 0.0976 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,193.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,196.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,192.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,197.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

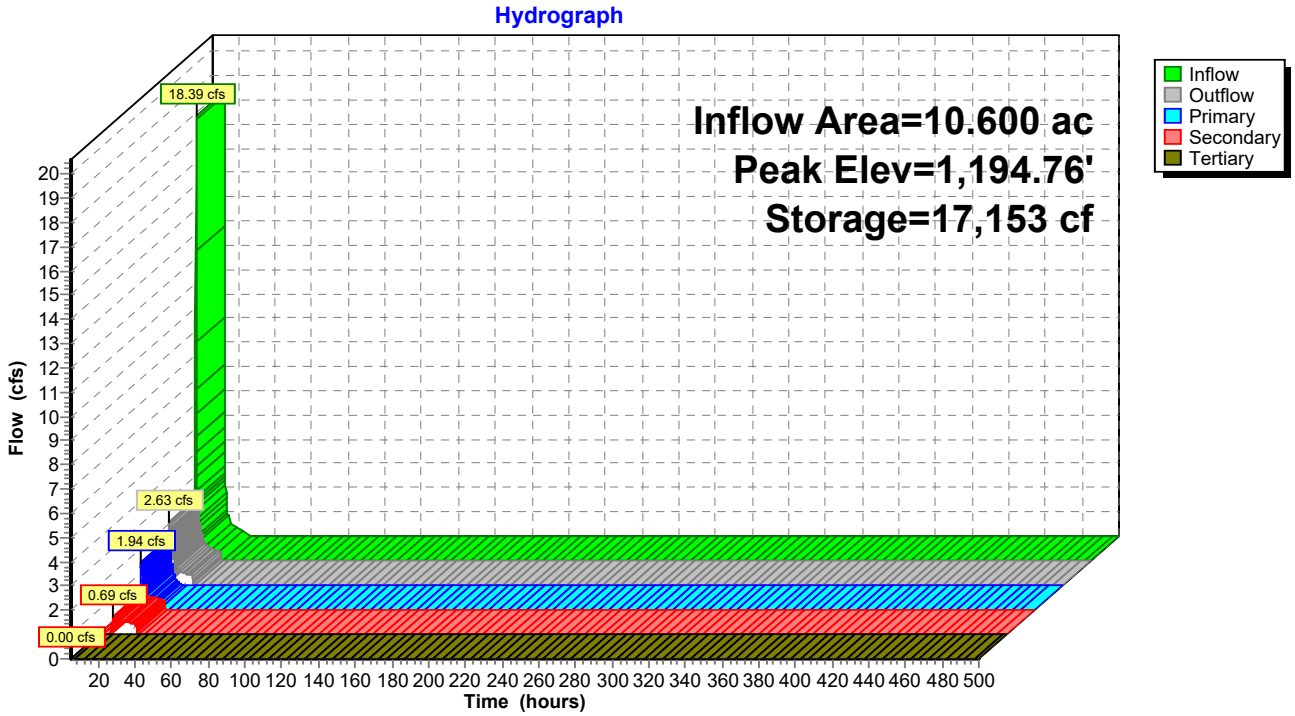
Primary OutFlow Max=1.94 cfs @ 12.66 hrs HW=1,194.76' (Free Discharge)
└**1=Culvert** (Passes 1.94 cfs of 4.24 cfs potential flow)
├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 1.94 cfs @ 3.57 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.69 cfs @ 12.66 hrs HW=1,194.76' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.69 cfs)

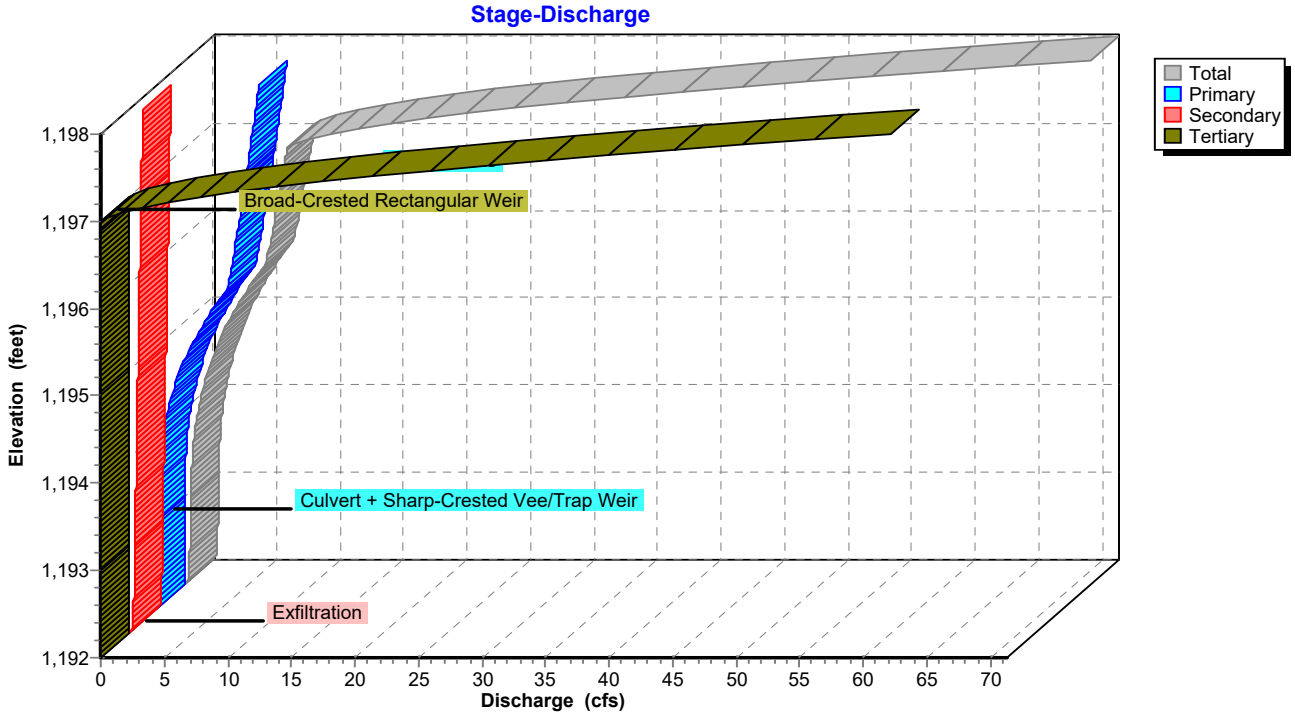
Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,192.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



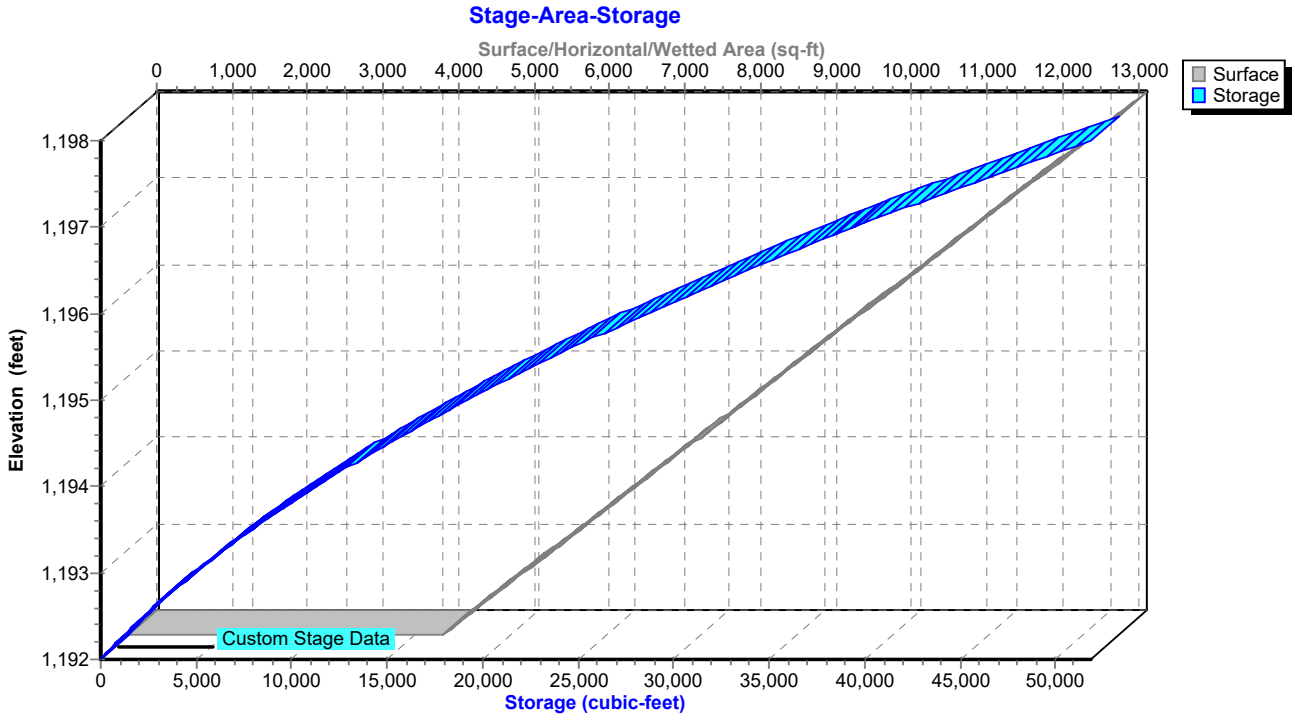
Pond P3A: Pond 3A



Pond P3A: Pond 3A



Pond P3A: Pond 3A



Hydrograph for Pond P3A: Pond 3A

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,192.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.82**	**12,093**	**1,194.11**	**1.22**	**0.61**	**0.61**	0.00
25.00	0.00	1,378	1,192.31	0.39	0.00	0.39	0.00
35.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3A: Pond 3A

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,192.00	0.00	0.00	0.00	0.00
1,192.20	0.37	0.00	0.37	0.00
1,192.40	0.40	0.00	0.40	0.00
1,192.60	0.42	0.00	0.42	0.00
1,192.80	0.45	0.00	0.45	0.00
1,193.00	0.47	0.00	0.47	0.00
1,193.20	0.50	0.01	0.50	0.00
1,193.40	0.57	0.05	0.52	0.00
1,193.60	0.68	0.13	0.55	0.00
1,193.80	0.84	0.27	0.57	0.00
1,194.00	1.07	0.47	0.60	0.00
1,194.20	1.37	0.75	0.62	0.00
1,194.40	1.75	1.10	0.65	0.00
1,194.60	2.21	1.54	0.67	0.00
1,194.80	2.76	2.06	0.70	0.00
1,195.00	3.40	2.68	0.72	0.00
1,195.20	4.15	3.41	0.74	0.00
1,195.40	5.00	4.23	0.77	0.00
1,195.60	5.96	5.17	0.79	0.00
1,195.80	6.55	5.74	0.82	0.00
1,196.00	6.82	5.98	0.84	0.00
1,196.20	7.08	6.21	0.87	0.00
1,196.40	7.33	6.44	0.89	0.00
1,196.60	7.58	6.66	0.92	0.00
1,196.80	7.81	6.87	0.94	0.00
1,197.00	8.04	7.07	0.97	0.00
1,197.20	12.86	7.27	0.99	4.60
1,197.40	22.27	7.47	1.02	13.78
1,197.60	36.21	7.66	1.04	27.51
1,197.80	52.33	7.84	1.07	43.42
1,198.00	**71.29**	**8.02**	**1.09**	**62.18**

Stage-Area-Storage for Pond P3A: Pond 3A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,192.00	4,165	0
1,192.10	4,314	424
1,192.20	4,463	863
1,192.30	4,613	1,317
1,192.40	4,762	1,785
1,192.50	4,911	2,269
1,192.60	5,060	2,768
1,192.70	5,209	3,281
1,192.80	5,359	3,809
1,192.90	5,508	4,353
1,193.00	5,657	4,911
1,193.10	5,806	5,484
1,193.20	5,955	6,072
1,193.30	6,105	6,675
1,193.40	6,254	7,293
1,193.50	6,403	7,926
1,193.60	6,552	8,574
1,193.70	6,701	9,236
1,193.80	6,851	9,914
1,193.90	7,000	10,607
1,194.00	7,149	11,314
1,194.10	7,298	12,036
1,194.20	7,447	12,774
1,194.30	7,597	13,526
1,194.40	7,746	14,293
1,194.50	7,895	15,075
1,194.60	8,044	15,872
1,194.70	8,193	16,684
1,194.80	8,343	17,511
1,194.90	8,492	18,352
1,195.00	8,641	19,209
1,195.10	8,790	20,081
1,195.20	8,939	20,967
1,195.30	9,089	21,868
1,195.40	9,238	22,785
1,195.50	9,387	23,716
1,195.60	9,536	24,662
1,195.70	9,685	25,623
1,195.80	9,835	26,599
1,195.90	9,984	27,590
1,196.00	10,133	28,596
1,196.10	10,282	29,617
1,196.20	10,431	30,652
1,196.30	10,581	31,703
1,196.40	10,730	32,769
1,196.50	10,879	33,849
1,196.60	11,028	34,944
1,196.70	11,177	36,055
1,196.80	11,327	37,180
1,196.90	11,476	38,320
1,197.00	11,625	39,475
1,197.10	11,774	40,645
1,197.20	11,923	41,830
1,197.30	12,073	43,030
1,197.40	12,222	44,244
1,197.50	12,371	45,474
1,197.60	12,520	46,719
1,197.70	12,669	47,978
1,197.80	12,819	49,252
1,197.90	12,968	50,542
1,198.00	**13,117**	**51,846**

Summary for Pond P3B: Pond 3B

Inflow Area = 8.450 ac, 19.88% Impervious, Inflow Depth = 1.19" for 5 YR event
Inflow = 15.52 cfs @ 12.14 hrs, Volume= 0.840 af
Outflow = 2.61 cfs @ 12.58 hrs, Volume= 0.840 af, Atten= 83%, Lag= 26.5 min
Primary = 2.01 cfs @ 12.58 hrs, Volume= 0.345 af
Routed to Link 4L : Post - North
Secondary = 0.60 cfs @ 12.58 hrs, Volume= 0.495 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,197.78' @ 12.58 hrs Surf.Area= 7,241 sf Storage= 13,957 cf

Plug-Flow detention time= 133.6 min calculated for 0.840 af (100% of inflow)
Center-of-Mass det. time= 133.6 min (976.9 - 843.3)

Volume	Invert	Avail.Storage	Storage Description
#1	1,195.00'	33,965 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

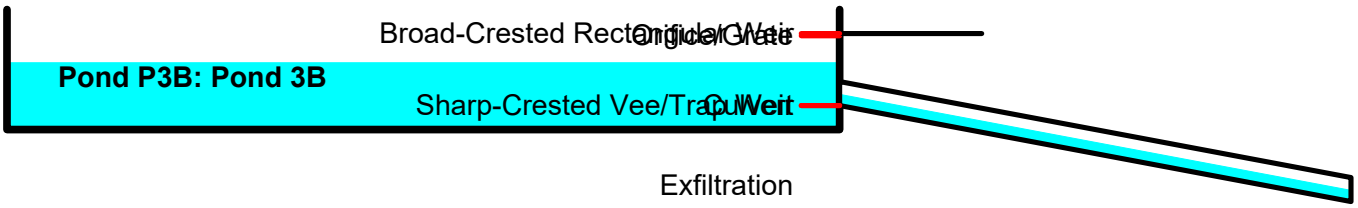
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,195.00	2,799	0	0
1,200.00	10,787	33,965	33,965

Device	Routing	Invert	Outlet Devices
#1	Primary	1,196.00'	**12.0" Round Culvert** L= 36.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,196.00' / 1,192.00' S= 0.1111 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,196.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,198.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,195.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,199.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

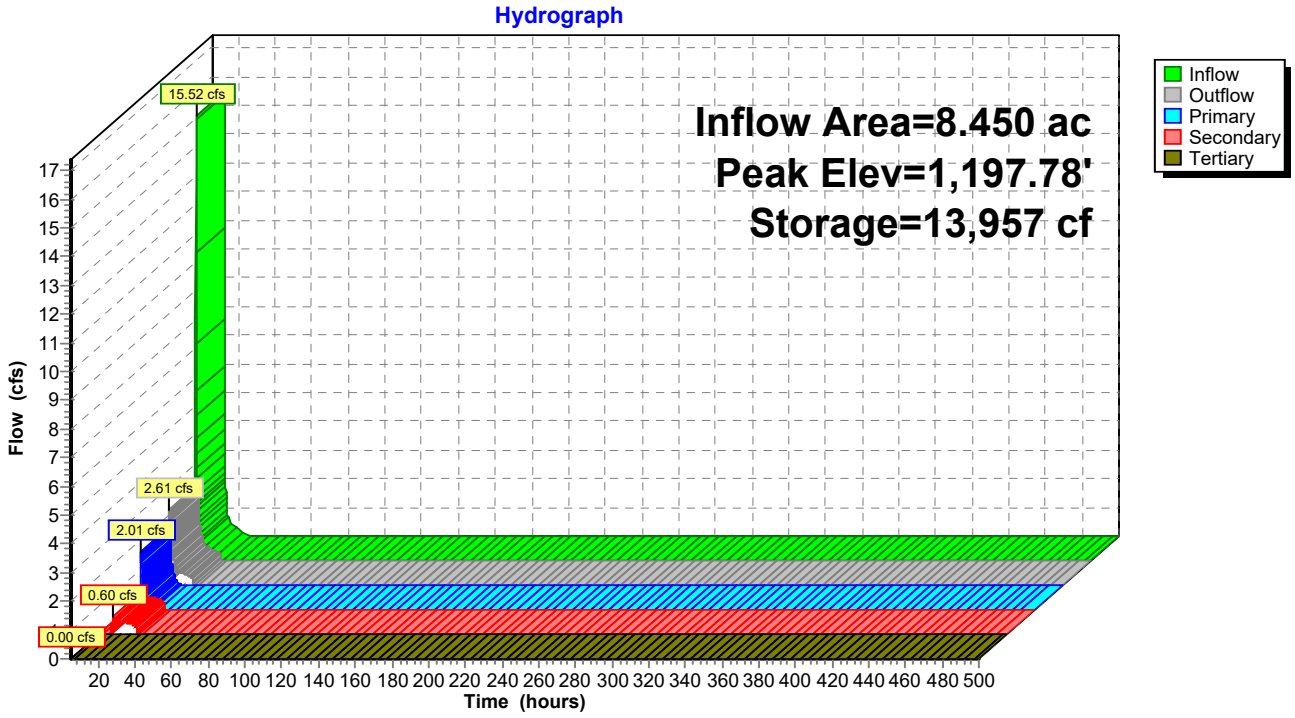
Primary OutFlow Max=2.00 cfs @ 12.58 hrs HW=1,197.78' (Free Discharge)
└**1=Culvert** (Passes 2.00 cfs of 4.28 cfs potential flow)
├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 2.00 cfs @ 3.59 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.60 cfs @ 12.58 hrs HW=1,197.78' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.60 cfs)

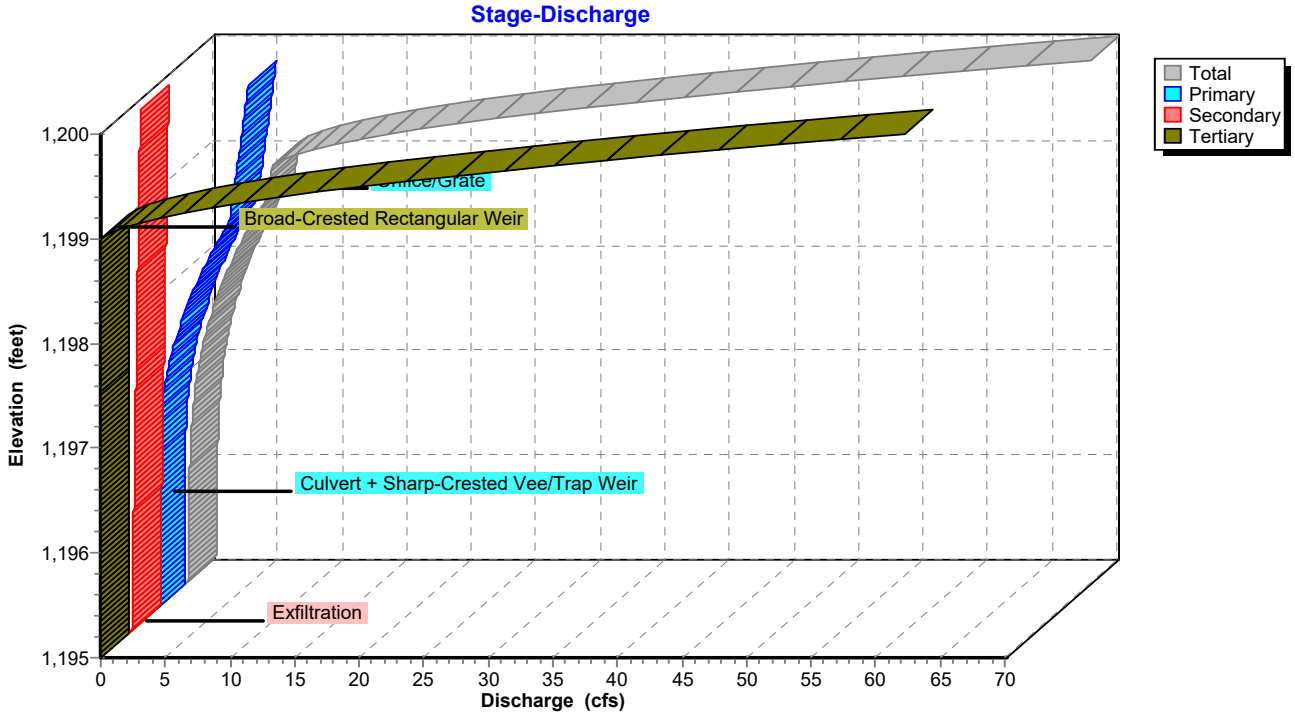
Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,195.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



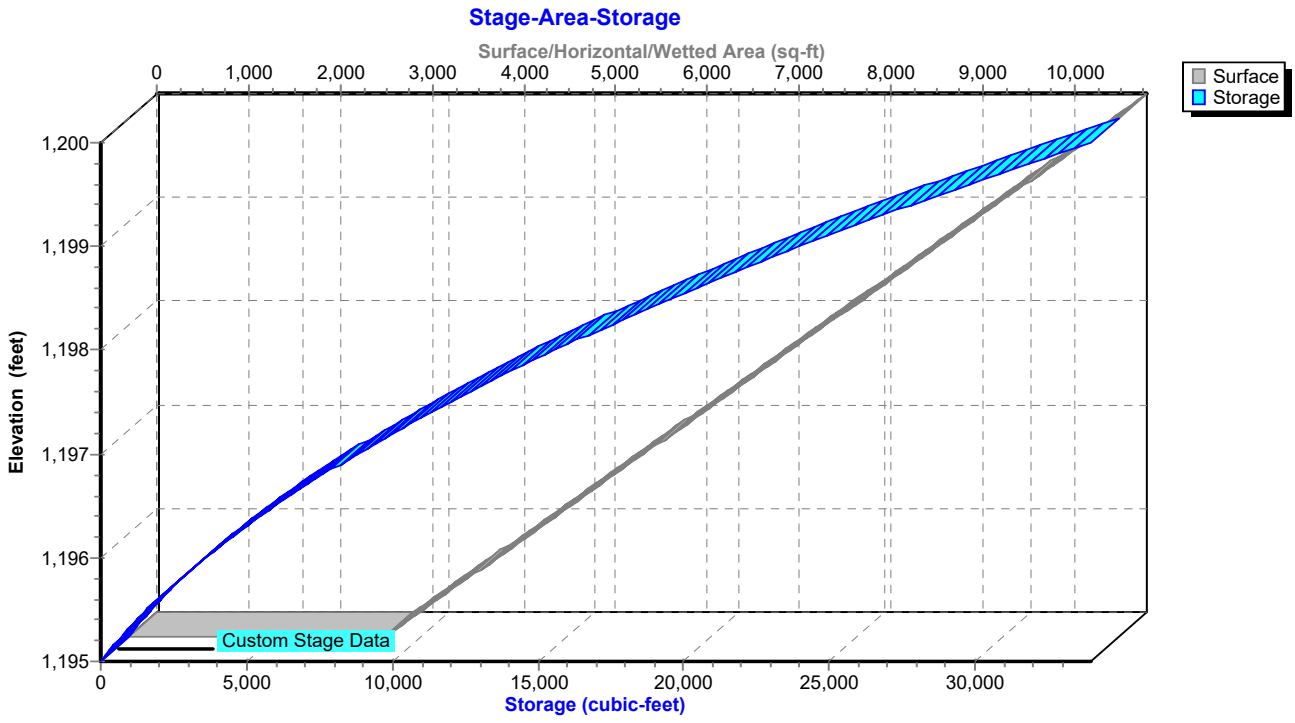
Pond P3B: Pond 3B



Pond P3B: Pond 3B



Pond P3B: Pond 3B



Hydrograph for Pond P3B: Pond 3B

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,195.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.68**	**8,900**	**1,197.02**	**1.00**	**0.50**	**0.50**	0.00
25.00	0.00	936	1,195.31	0.27	0.00	0.27	0.00
35.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3B: Pond 3B

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,195.00	0.00	0.00	0.00	0.00
1,195.10	0.25	0.00	0.25	0.00
1,195.20	0.26	0.00	0.26	0.00
1,195.30	0.27	0.00	0.27	0.00
1,195.40	0.29	0.00	0.29	0.00
1,195.50	0.30	0.00	0.30	0.00
1,195.60	0.31	0.00	0.31	0.00
1,195.70	0.33	0.00	0.33	0.00
1,195.80	0.34	0.00	0.34	0.00
1,195.90	0.35	0.00	0.35	0.00
1,196.00	0.37	0.00	0.37	0.00
1,196.10	0.38	0.00	0.38	0.00
1,196.20	0.40	0.01	0.39	0.00
1,196.30	0.43	0.02	0.41	0.00
1,196.40	0.47	0.05	0.42	0.00
1,196.50	0.52	0.08	0.43	0.00
1,196.60	0.58	0.13	0.45	0.00
1,196.70	0.65	0.19	0.46	0.00
1,196.80	0.74	0.27	0.47	0.00
1,196.90	0.85	0.36	0.49	0.00
1,197.00	0.97	0.47	0.50	0.00
1,197.10	1.11	0.60	0.51	0.00
1,197.20	1.27	0.75	0.53	0.00
1,197.30	1.45	0.91	0.54	0.00
1,197.40	1.65	1.10	0.55	0.00
1,197.50	1.87	1.31	0.57	0.00
1,197.60	2.12	1.54	0.58	0.00
1,197.70	2.38	1.79	0.59	0.00
1,197.80	2.67	2.06	0.61	0.00
1,197.90	2.98	2.36	0.62	0.00
1,198.00	3.32	2.68	0.63	0.00
1,198.10	3.68	3.03	0.65	0.00
1,198.20	4.06	3.41	0.66	0.00
1,198.30	4.48	3.81	0.67	0.00
1,198.40	4.92	4.23	0.69	0.00
1,198.50	5.39	4.69	0.70	0.00
1,198.60	5.88	5.17	0.71	0.00
1,198.70	6.33	5.61	0.73	0.00
1,198.80	6.47	5.74	0.74	0.00
1,198.90	6.61	5.86	0.75	0.00
1,199.00	6.75	5.98	0.77	0.00
1,199.10	8.48	6.10	0.78	1.60
1,199.20	11.60	6.21	0.79	4.60
1,199.30	15.83	6.33	0.81	8.70
1,199.40	21.04	6.44	0.82	13.78
1,199.50	27.47	6.55	0.83	20.08
1,199.60	35.01	6.66	0.85	27.51
1,199.70	42.73	6.76	0.86	35.10
1,199.80	51.17	6.87	0.87	43.42
1,199.90	60.31	6.97	0.89	52.45
1,200.00	**70.15**	**7.07**	**0.90**	**62.18**

Stage-Area-Storage for Pond P3B: Pond 3B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,195.00	2,799	0
1,195.05	2,879	142
1,195.10	2,959	288
1,195.15	3,039	438
1,195.20	3,119	592
1,195.25	3,198	750
1,195.30	3,278	912
1,195.35	3,358	1,078
1,195.40	3,438	1,247
1,195.45	3,518	1,421
1,195.50	3,598	1,599
1,195.55	3,678	1,781
1,195.60	3,758	1,967
1,195.65	3,837	2,157
1,195.70	3,917	2,351
1,195.75	3,997	2,549
1,195.80	4,077	2,750
1,195.85	4,157	2,956
1,195.90	4,237	3,166
1,195.95	4,317	3,380
1,196.00	4,397	3,598
1,196.05	4,476	3,820
1,196.10	4,556	4,045
1,196.15	4,636	4,275
1,196.20	4,716	4,509
1,196.25	4,796	4,747
1,196.30	4,876	4,989
1,196.35	4,956	5,234
1,196.40	5,036	5,484
1,196.45	5,116	5,738
1,196.50	5,195	5,996
1,196.55	5,275	6,258
1,196.60	5,355	6,523
1,196.65	5,435	6,793
1,196.70	5,515	7,067
1,196.75	5,595	7,345
1,196.80	5,675	7,626
1,196.85	5,755	7,912
1,196.90	5,834	8,202
1,196.95	5,914	8,495
1,197.00	5,994	8,793
1,197.05	6,074	9,095
1,197.10	6,154	9,401
1,197.15	6,234	9,710
1,197.20	6,314	10,024
1,197.25	6,394	10,342
1,197.30	6,473	10,663
1,197.35	6,553	10,989
1,197.40	6,633	11,319
1,197.45	6,713	11,652
1,197.50	6,793	11,990
1,197.55	6,873	12,332
1,197.60	6,953	12,677
1,197.65	7,033	13,027
1,197.70	7,113	13,381
1,197.75	7,192	13,738
1,197.80	7,272	14,100
1,197.85	7,352	14,465
1,197.90	7,432	14,835
1,197.95	7,512	15,209
1,198.00	7,592	15,586
1,198.05	7,672	15,968
1,198.10	7,752	16,353
1,198.15	7,831	16,743
1,198.20	7,911	17,137
1,198.25	7,991	17,534
1,198.30	8,071	17,936
1,198.35	8,151	18,341
1,198.40	8,231	18,751
1,198.45	8,311	19,164
1,198.50	8,391	19,582
1,198.55	8,470	20,003
1,198.60	8,550	20,429
1,198.65	8,630	20,858
1,198.70	8,710	21,292
1,198.75	8,790	21,729
1,198.80	8,870	22,171
1,198.85	8,950	22,616
1,198.90	9,030	23,066
1,198.95	9,110	23,519
1,199.00	9,189	23,977
1,199.05	9,269	24,438
1,199.10	9,349	24,904
1,199.15	9,429	25,373
1,199.20	9,509	25,847
1,199.25	9,589	26,324
1,199.30	9,669	26,806
1,199.35	9,749	27,291
1,199.40	9,828	27,780
1,199.45	9,908	28,274
1,199.50	9,988	28,771
1,199.55	10,068	29,273
1,199.60	10,148	29,778
1,199.65	10,228	30,287
1,199.70	10,308	30,801
1,199.75	10,388	31,318
1,199.80	10,467	31,840
1,199.85	10,547	32,365
1,199.90	10,627	32,894
1,199.95	10,707	33,428
1,200.00	**10,787**	**33,965**

Summary for Pond P3C: Pond 3C

Inflow Area = 2.490 ac, 22.89% Impervious, Inflow Depth = 1.45" for 5 YR event
Inflow = 5.62 cfs @ 12.14 hrs, Volume= 0.300 af
Outflow = 0.73 cfs @ 12.67 hrs, Volume= 0.300 af, Atten= 87%, Lag= 31.9 min
Primary = 0.42 cfs @ 12.67 hrs, Volume= 0.067 af
Routed to Link 4L : Post - North
Secondary = 0.31 cfs @ 12.67 hrs, Volume= 0.233 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,179.96' @ 12.67 hrs Surf.Area= 3,672 sf Storage= 5,454 cf

Plug-Flow detention time= 135.6 min calculated for 0.300 af (100% of inflow)
Center-of-Mass det. time= 135.6 min (968.8 - 833.2)

Volume	Invert	Avail.Storage	Storage Description
#1	1,178.00'	14,846 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

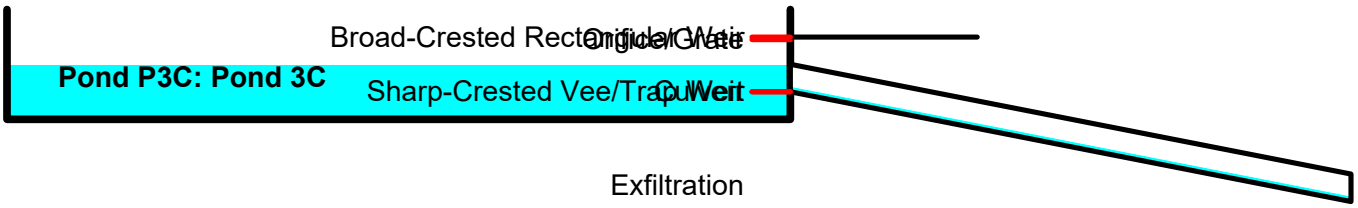
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,178.00	1,905	0	0
1,182.00	5,518	14,846	14,846

Device	Routing	Invert	Outlet Devices
#1	Primary	1,179.00'	**12.0" Round Culvert** L= 30.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,179.00' / 1,175.00' S= 0.1333 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,179.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,180.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,178.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,181.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

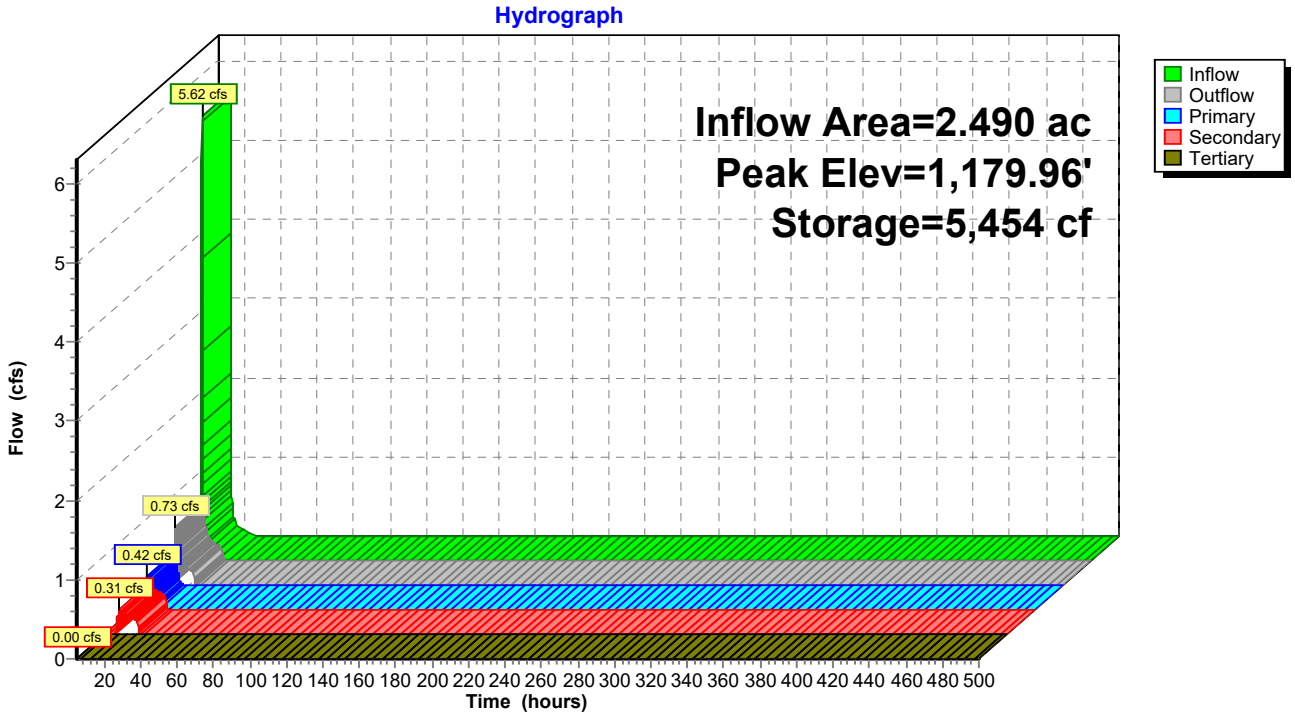
Primary OutFlow Max=0.42 cfs @ 12.67 hrs HW=1,179.96' (Free Discharge)
└**1=Culvert** (Passes 0.42 cfs of 2.57 cfs potential flow)
├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 0.42 cfs @ 2.63 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.31 cfs @ 12.67 hrs HW=1,179.96' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.31 cfs)

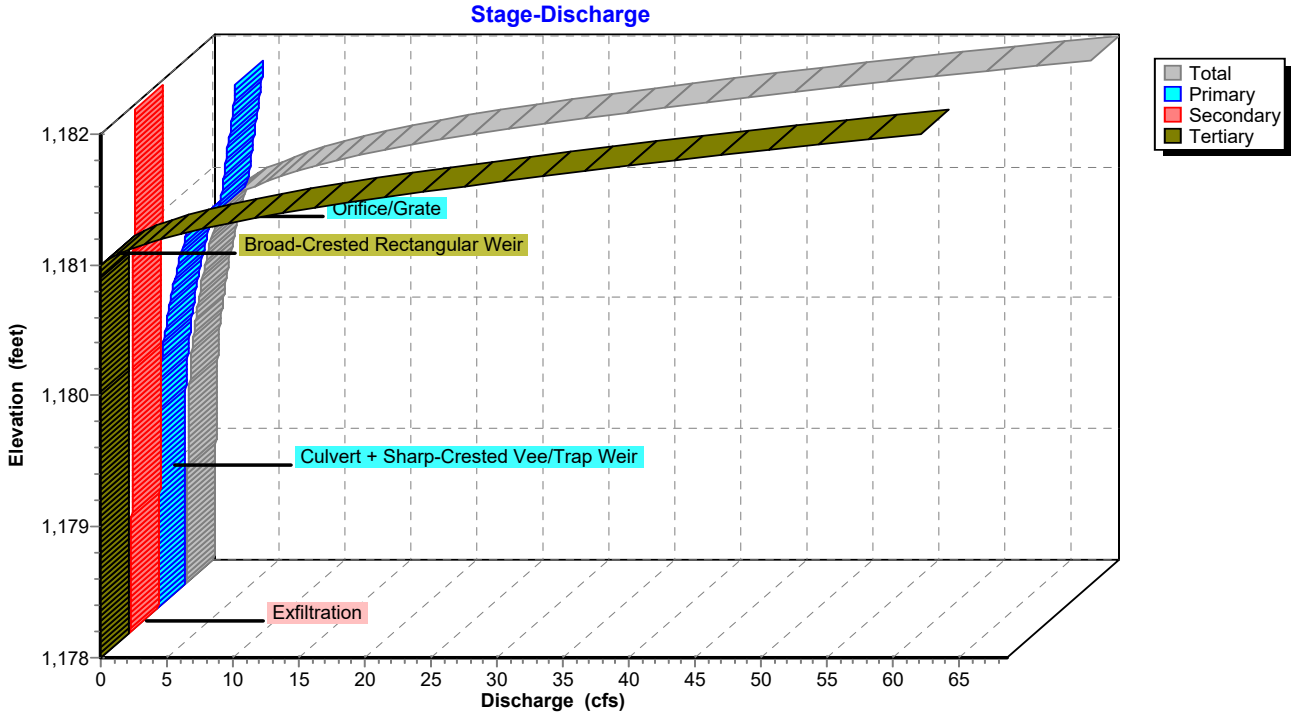
Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,178.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



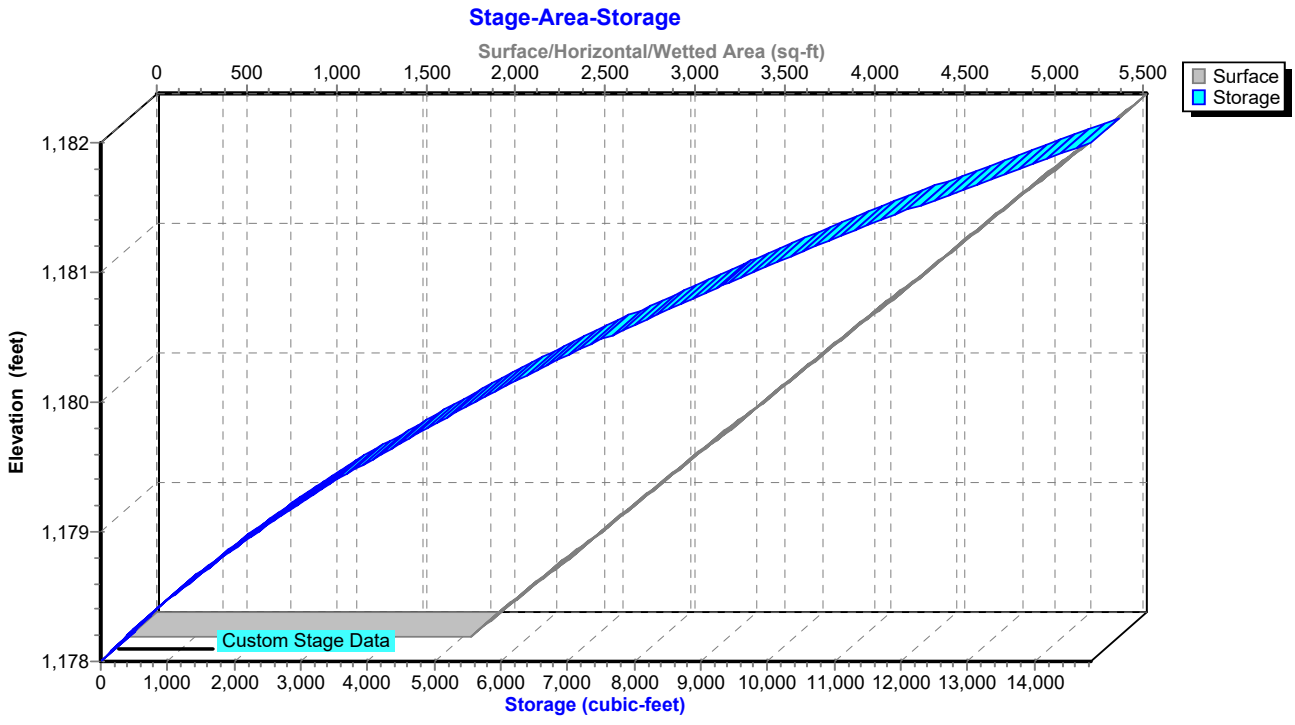
Pond P3C: Pond 3C



Pond P3C: Pond 3C



Pond P3C: Pond 3C



Hydrograph for Pond P3C: Pond 3C

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,178.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.22**	**3,926**	**1,179.52**	**0.36**	**0.09**	**0.27**	0.00
25.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
35.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3C: Pond 3C

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,178.00	0.00	0.00	0.00	0.00
1,178.10	0.17	0.00	0.17	0.00
1,178.20	0.17	0.00	0.17	0.00
1,178.30	0.18	0.00	0.18	0.00
1,178.40	0.19	0.00	0.19	0.00
1,178.50	0.20	0.00	0.20	0.00
1,178.60	0.20	0.00	0.20	0.00
1,178.70	0.21	0.00	0.21	0.00
1,178.80	0.22	0.00	0.22	0.00
1,178.90	0.23	0.00	0.23	0.00
1,179.00	0.23	0.00	0.23	0.00
1,179.10	0.24	0.00	0.24	0.00
1,179.20	0.26	0.01	0.25	0.00
1,179.30	0.28	0.02	0.26	0.00
1,179.40	0.31	0.05	0.26	0.00
1,179.50	0.36	0.08	0.27	0.00
1,179.60	0.41	0.13	0.28	0.00
1,179.70	0.48	0.19	0.29	0.00
1,179.80	0.57	0.27	0.29	0.00
1,179.90	0.67	0.36	0.30	0.00
1,180.00	0.78	0.47	0.31	0.00
1,180.10	0.92	0.60	0.32	0.00
1,180.20	1.07	0.75	0.32	0.00
1,180.30	1.25	0.91	0.33	0.00
1,180.40	1.44	1.10	0.34	0.00
1,180.50	1.65	1.31	0.35	0.00
1,180.60	1.89	1.54	0.35	0.00
1,180.70	2.15	1.79	0.36	0.00
1,180.80	2.43	2.06	0.37	0.00
1,180.90	2.74	2.36	0.38	0.00
1,181.00	4.10	3.72	0.38	0.00
1,181.10	6.78	4.78	0.39	1.60
1,181.20	9.93	4.93	0.40	4.60
1,181.30	14.18	5.07	0.41	8.70
1,181.40	19.41	5.21	0.41	13.78
1,181.50	25.85	5.35	0.42	20.08
1,181.60	33.42	5.48	0.43	27.51
1,181.70	41.15	5.61	0.44	35.10
1,181.80	49.60	5.74	0.44	43.42
1,181.90	58.76	5.86	0.45	52.45
1,182.00	**68.62**	**5.98**	**0.46**	**62.18**

Stage-Area-Storage for Pond P3C: Pond 3C

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,178.00	1,905	0
1,178.05	1,950	96
1,178.10	1,995	195
1,178.15	2,040	296
1,178.20	2,086	399
1,178.25	2,131	504
1,178.30	2,176	612
1,178.35	2,221	722
1,178.40	2,266	834
1,178.45	2,311	949
1,178.50	2,357	1,065
1,178.55	2,402	1,184
1,178.60	2,447	1,306
1,178.65	2,492	1,429
1,178.70	2,537	1,555
1,178.75	2,582	1,683
1,178.80	2,628	1,813
1,178.85	2,673	1,946
1,178.90	2,718	2,080
1,178.95	2,763	2,217
1,179.00	2,808	2,357
1,179.05	2,853	2,498
1,179.10	2,899	2,642
1,179.15	2,944	2,788
1,179.20	2,989	2,936
1,179.25	3,034	3,087
1,179.30	3,079	3,240
1,179.35	3,124	3,395
1,179.40	3,170	3,552
1,179.45	3,215	3,712
1,179.50	3,260	3,874
1,179.55	3,305	4,038
1,179.60	3,350	4,204
1,179.65	3,395	4,373
1,179.70	3,441	4,544
1,179.75	3,486	4,717
1,179.80	3,531	4,892
1,179.85	3,576	5,070
1,179.90	3,621	5,250
1,179.95	3,666	5,432
1,180.00	3,712	5,617
1,180.05	3,757	5,803
1,180.10	3,802	5,992
1,180.15	3,847	6,183
1,180.20	3,892	6,377
1,180.25	3,937	6,573
1,180.30	3,982	6,771
1,180.35	4,028	6,971
1,180.40	4,073	7,173
1,180.45	4,118	7,378
1,180.50	4,163	7,585
1,180.55	4,208	7,794
1,180.60	4,253	8,006
1,180.65	4,299	8,220
1,180.70	4,344	8,436
1,180.75	4,389	8,654
1,180.80	4,434	8,875
1,180.85	4,479	9,098
1,180.90	4,524	9,323
1,180.95	4,570	9,550
1,181.00	4,615	9,780
1,181.05	4,660	10,011
1,181.10	4,705	10,246
1,181.15	4,750	10,482
1,181.20	4,795	10,721
1,181.25	4,841	10,962
1,181.30	4,886	11,205
1,181.35	4,931	11,450
1,181.40	4,976	11,698
1,181.45	5,021	11,948
1,181.50	5,066	12,200
1,181.55	5,112	12,454
1,181.60	5,157	12,711
1,181.65	5,202	12,970
1,181.70	5,247	13,231
1,181.75	5,292	13,495
1,181.80	5,337	13,760
1,181.85	5,383	14,028
1,181.90	5,428	14,299
1,181.95	5,473	14,571
1,182.00	**5,518**	**14,846**

Summary for Pond P3D: Pond 3D

Inflow Area = 2.380 ac, 23.95% Impervious, Inflow Depth = 1.51" for 5 YR event
Inflow = 5.64 cfs @ 12.14 hrs, Volume= 0.300 af
Outflow = 1.92 cfs @ 12.32 hrs, Volume= 0.300 af, Atten= 66%, Lag= 11.2 min
Primary = 1.72 cfs @ 12.32 hrs, Volume= 0.153 af
Routed to Link 4L : Post - North
Secondary = 0.20 cfs @ 12.32 hrs, Volume= 0.147 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,189.67' @ 12.32 hrs Surf.Area= 2,434 sf Storage= 4,243 cf

Plug-Flow detention time= 90.2 min calculated for 0.300 af (100% of inflow)
Center-of-Mass det. time= 90.2 min (920.9 - 830.7)

Volume	Invert	Avail.Storage	Storage Description
#1	1,187.00'	11,620 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

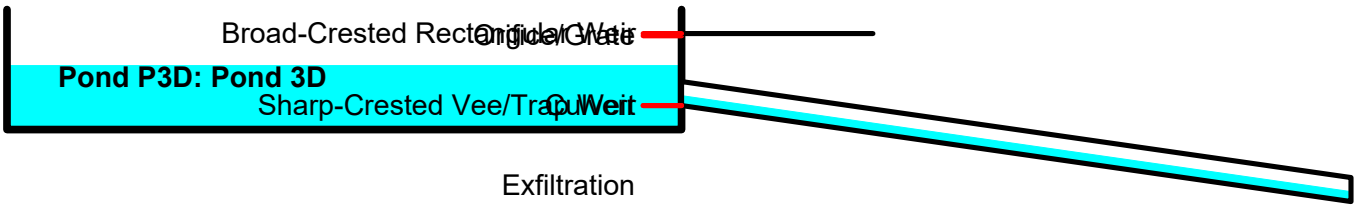
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,187.00	741	0	0
1,192.00	3,907	11,620	11,620

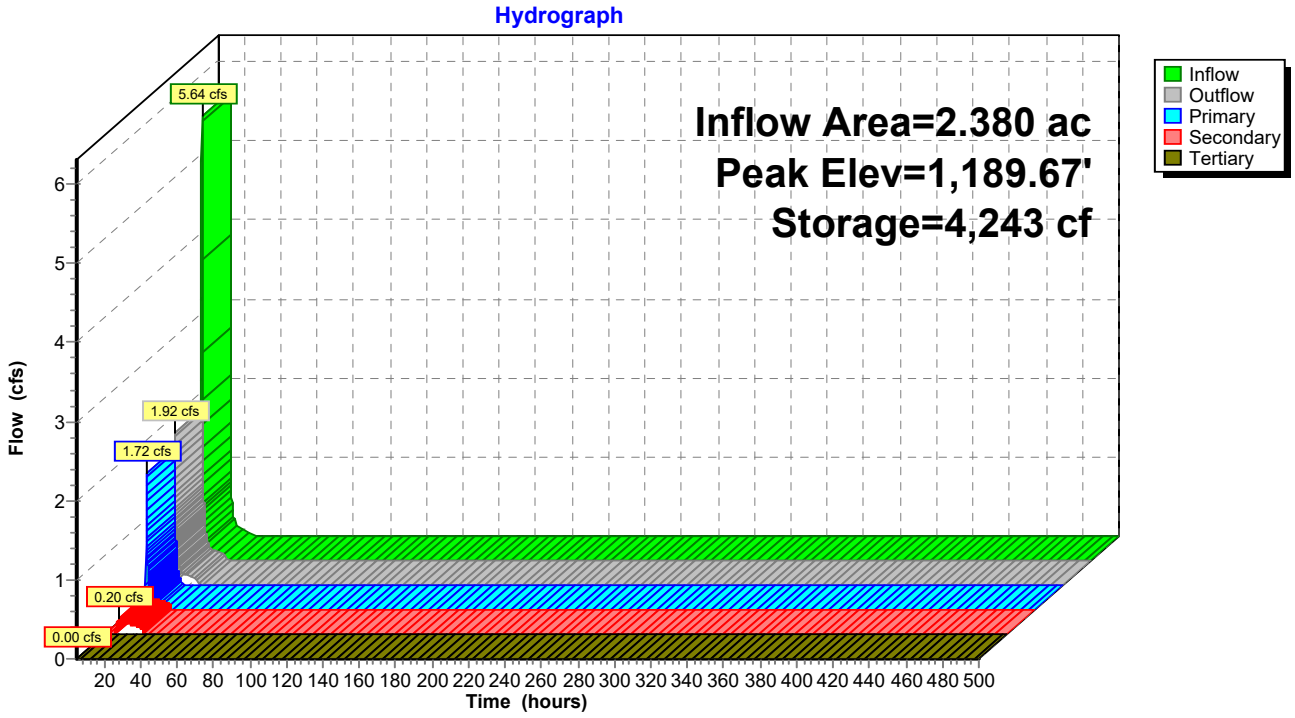
Device	Routing	Invert	Outlet Devices
#1	Primary	1,188.00'	**12.0" Round Culvert** L= 35.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,188.00' / 1,184.00' S= 0.1143 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,188.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,190.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600
#4	Secondary	1,187.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,191.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=1.71 cfs @ 12.32 hrs HW=1,189.67' (Free Discharge)
└**1=Culvert** (Passes 1.71 cfs of 4.09 cfs potential flow)
└**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 1.71 cfs @ 3.47 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

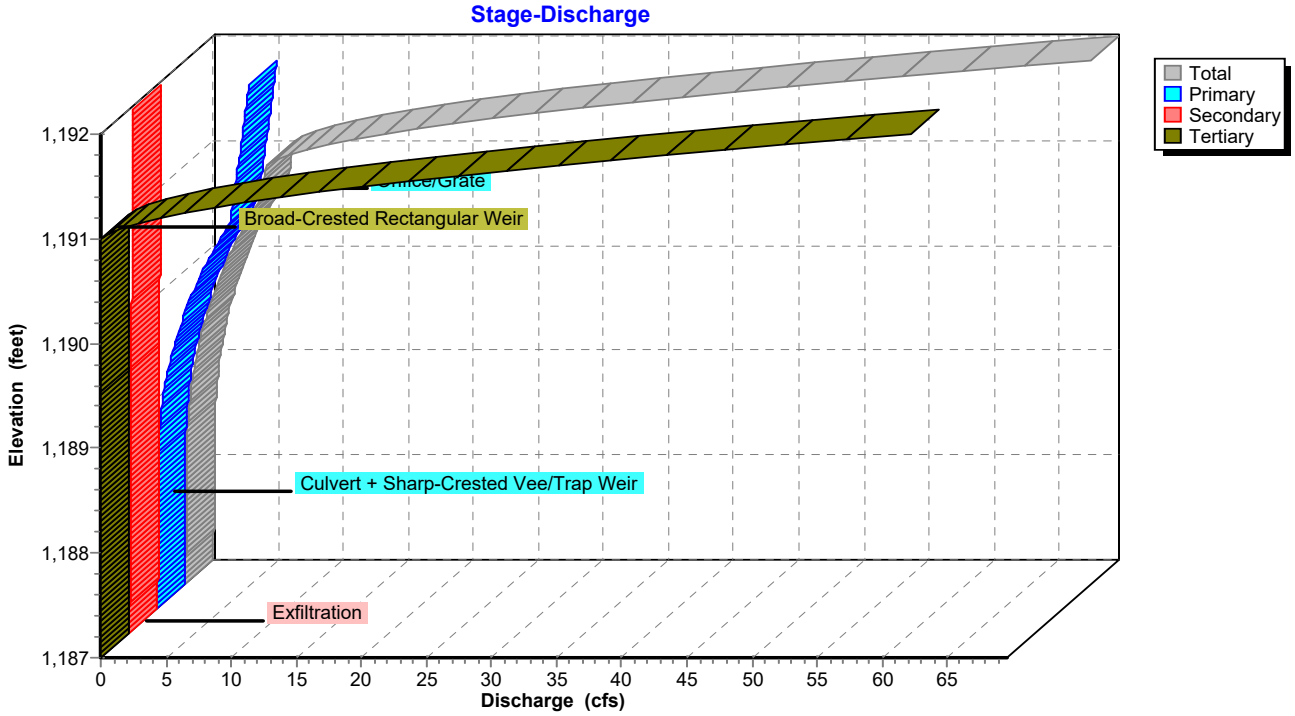
Secondary OutFlow Max=0.20 cfs @ 12.32 hrs HW=1,189.67' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.20 cfs)

Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,187.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

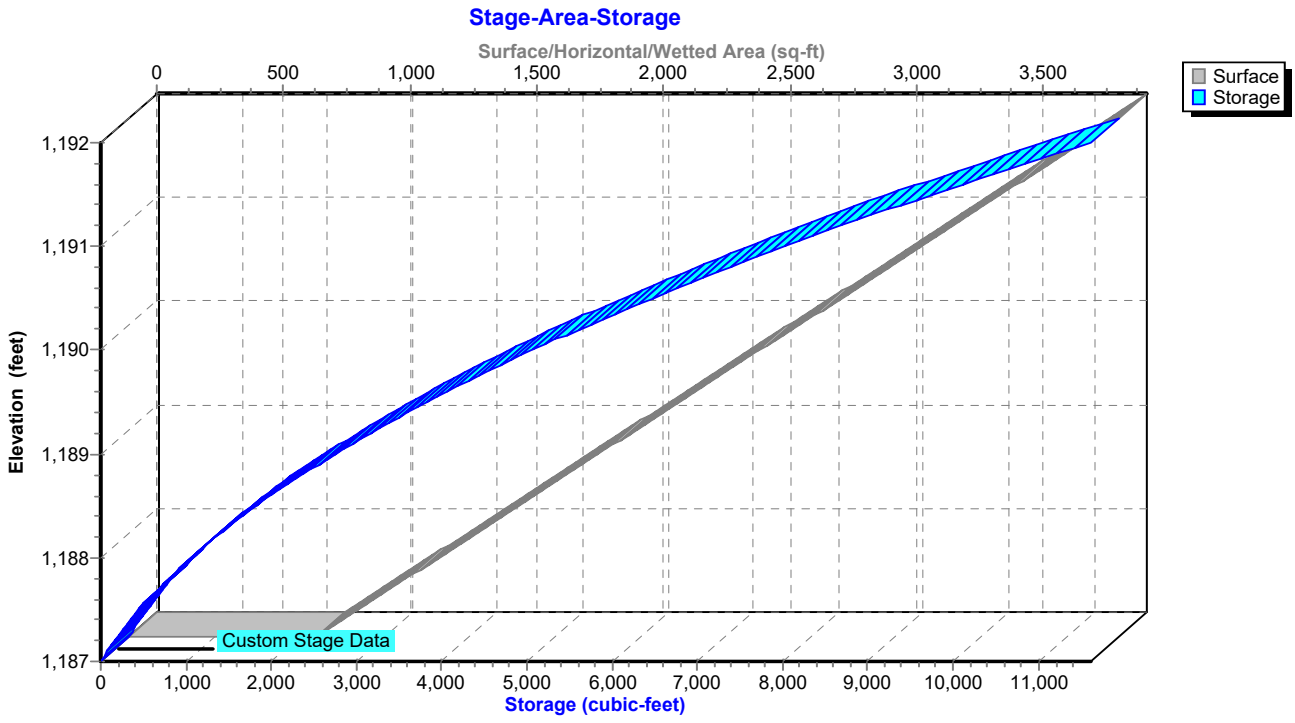

Broad-Crested Rectangular Weir
Orifice/Grate
Pond P3D: Pond 3D
Sharp-Crested Vee/Trap Weir
Culvert
Exfiltration


Pond P3D: Pond 3D
Hydrograph
Inflow Area=2.380 ac
Peak Elev=1,189.67'
Storage=4,243 cf
Inflow
Outflow
Primary
Secondary
Tertiary
5.64 cfs
1.92 cfs
1.72 cfs
0.20 cfs
0.00 cfs
Flow (cfs)
0
1
2
3
4
5
6
20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500
Time (hours)

Pond P3D: Pond 3D



Pond P3D: Pond 3D



Hydrograph for Pond P3D: Pond 3D

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,187.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.22**	**1,976**	**1,188.59**	**0.27**	**0.13**	**0.15**	0.00
25.00	0.00	155	1,187.19	0.07	0.00	0.07	0.00
35.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3D: Pond 3D

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,187.00	0.00	0.00	0.00	0.00
1,187.10	0.07	0.00	0.07	0.00
1,187.20	0.07	0.00	0.07	0.00
1,187.30	0.08	0.00	0.08	0.00
1,187.40	0.08	0.00	0.08	0.00
1,187.50	0.09	0.00	0.09	0.00
1,187.60	0.09	0.00	0.09	0.00
1,187.70	0.10	0.00	0.10	0.00
1,187.80	0.10	0.00	0.10	0.00
1,187.90	0.11	0.00	0.11	0.00
1,188.00	0.11	0.00	0.11	0.00
1,188.10	0.12	0.00	0.12	0.00
1,188.20	0.13	0.01	0.13	0.00
1,188.30	0.15	0.02	0.13	0.00
1,188.40	0.18	0.05	0.14	0.00
1,188.50	0.22	0.08	0.14	0.00
1,188.60	0.28	0.13	0.15	0.00
1,188.70	0.35	0.19	0.15	0.00
1,188.80	0.43	0.27	0.16	0.00
1,188.90	0.53	0.36	0.16	0.00
1,189.00	0.64	0.47	0.17	0.00
1,189.10	0.77	0.60	0.17	0.00
1,189.20	0.93	0.75	0.18	0.00
1,189.30	1.10	0.91	0.18	0.00
1,189.40	1.29	1.10	0.19	0.00
1,189.50	1.50	1.31	0.19	0.00
1,189.60	1.73	1.54	0.20	0.00
1,189.70	1.99	1.79	0.20	0.00
1,189.80	2.27	2.06	0.21	0.00
1,189.90	2.58	2.36	0.21	0.00
1,190.00	2.90	2.68	0.22	0.00
1,190.10	3.26	3.03	0.23	0.00
1,190.20	3.64	3.41	0.23	0.00
1,190.30	4.04	3.81	0.24	0.00
1,190.40	4.47	4.23	0.24	0.00
1,190.50	4.93	4.69	0.25	0.00
1,190.60	5.42	5.17	0.25	0.00
1,190.70	5.87	5.61	0.26	0.00
1,190.80	6.00	5.74	0.26	0.00
1,190.90	6.13	5.86	0.27	0.00
1,191.00	6.25	5.98	0.27	0.00
1,191.10	7.98	6.10	0.28	1.60
1,191.20	11.09	6.21	0.28	4.60
1,191.30	15.31	6.33	0.29	8.70
1,191.40	20.52	6.44	0.29	13.78
1,191.50	26.93	6.55	0.30	20.08
1,191.60	34.47	6.66	0.30	27.51
1,191.70	42.18	6.76	0.31	35.10
1,191.80	50.61	6.87	0.32	43.42
1,191.90	59.75	6.97	0.32	52.45
1,192.00	**69.58**	**7.07**	**0.33**	**62.18**

Stage-Area-Storage for Pond P3D: Pond 3D

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,187.00	741	0	1,189.55	2,356	3,948
1,187.05	773	38	1,189.60	2,387	4,067
1,187.10	804	77	1,189.65	2,419	4,187
1,187.15	836	118	1,189.70	2,451	4,309
1,187.20	868	161	1,189.75	2,482	4,432
1,187.25	899	205	1,189.80	2,514	4,557
1,187.30	931	251	1,189.85	2,546	4,683
1,187.35	963	298	1,189.90	2,577	4,812
1,187.40	994	347	1,189.95	2,609	4,941
1,187.45	1,026	398	1,190.00	2,641	5,072
1,187.50	1,058	450	1,190.05	2,672	5,205
1,187.55	1,089	503	1,190.10	2,704	5,340
1,187.60	1,121	559	1,190.15	2,736	5,476
1,187.65	1,153	615	1,190.20	2,767	5,613
1,187.70	1,184	674	1,190.25	2,799	5,752
1,187.75	1,216	734	1,190.30	2,831	5,893
1,187.80	1,248	795	1,190.35	2,862	6,035
1,187.85	1,279	859	1,190.40	2,894	6,179
1,187.90	1,311	923	1,190.45	2,926	6,325
1,187.95	1,343	990	1,190.50	2,957	6,472
1,188.00	1,374	1,058	1,190.55	2,989	6,621
1,188.05	1,406	1,127	1,190.60	3,021	6,771
1,188.10	1,438	1,198	1,190.65	3,052	6,923
1,188.15	1,469	1,271	1,190.70	3,084	7,076
1,188.20	1,501	1,345	1,190.75	3,116	7,231
1,188.25	1,533	1,421	1,190.80	3,147	7,388
1,188.30	1,564	1,498	1,190.85	3,179	7,546
1,188.35	1,596	1,577	1,190.90	3,210	7,705
1,188.40	1,627	1,658	1,190.95	3,242	7,867
1,188.45	1,659	1,740	1,191.00	3,274	8,030
1,188.50	1,691	1,824	1,191.05	3,305	8,194
1,188.55	1,722	1,909	1,191.10	3,337	8,360
1,188.60	1,754	1,996	1,191.15	3,369	8,528
1,188.65	1,786	2,085	1,191.20	3,400	8,697
1,188.70	1,817	2,175	1,191.25	3,432	8,868
1,188.75	1,849	2,266	1,191.30	3,464	9,040
1,188.80	1,881	2,360	1,191.35	3,495	9,214
1,188.85	1,912	2,454	1,191.40	3,527	9,390
1,188.90	1,944	2,551	1,191.45	3,559	9,567
1,188.95	1,976	2,649	1,191.50	3,590	9,746
1,189.00	2,007	2,748	1,191.55	3,622	9,926
1,189.05	2,039	2,850	1,191.60	3,654	10,108
1,189.10	2,071	2,952	1,191.65	3,685	10,291
1,189.15	2,102	3,057	1,191.70	3,717	10,476
1,189.20	2,134	3,163	1,191.75	3,749	10,663
1,189.25	2,166	3,270	1,191.80	3,780	10,851
1,189.30	2,197	3,379	1,191.85	3,812	11,041
1,189.35	2,229	3,490	1,191.90	3,844	11,232
1,189.40	2,261	3,602	1,191.95	3,875	11,425
1,189.45	2,292	3,716	1,192.00	**3,907**	**11,620**
1,189.50	2,324	3,831			

Summary for Pond P3E: Pond 3E

Inflow Area = 2.780 ac, 19.06% Impervious, Inflow Depth = 1.38" for 5 YR event
Inflow = 5.98 cfs @ 12.14 hrs, Volume= 0.320 af
Outflow = 0.67 cfs @ 12.92 hrs, Volume= 0.320 af, Atten= 89%, Lag= 47.0 min
Primary = 0.35 cfs @ 12.92 hrs, Volume= 0.060 af
Routed to Link 4L : Post - North
Secondary = 0.32 cfs @ 12.92 hrs, Volume= 0.260 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,217.88' @ 12.92 hrs Surf.Area= 3,815 sf Storage= 5,965 cf

Plug-Flow detention time= 147.5 min calculated for 0.320 af (100% of inflow)
Center-of-Mass det. time= 147.5 min (983.2 - 835.7)

Volume	Invert	Avail.Storage	Storage Description
#1	1,216.00'	15,578 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

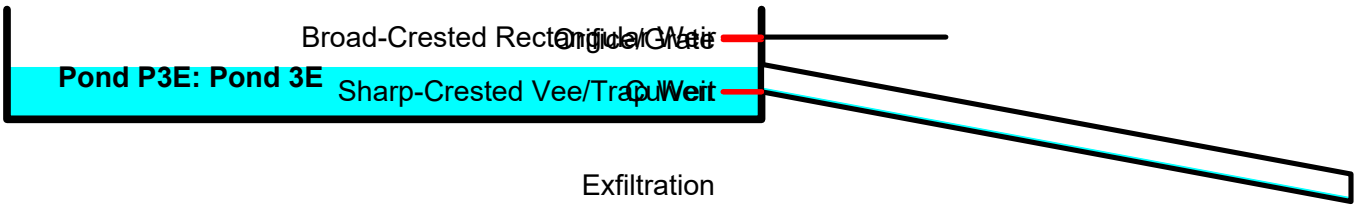
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,216.00	2,517	0	0
1,220.00	5,272	15,578	15,578

Device	Routing	Invert	Outlet Devices
#1	Primary	1,217.00'	**12.0" Round Culvert** L= 32.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,217.00' / 1,213.00' S= 0.1250 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,217.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,218.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600
#4	Secondary	1,216.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,219.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

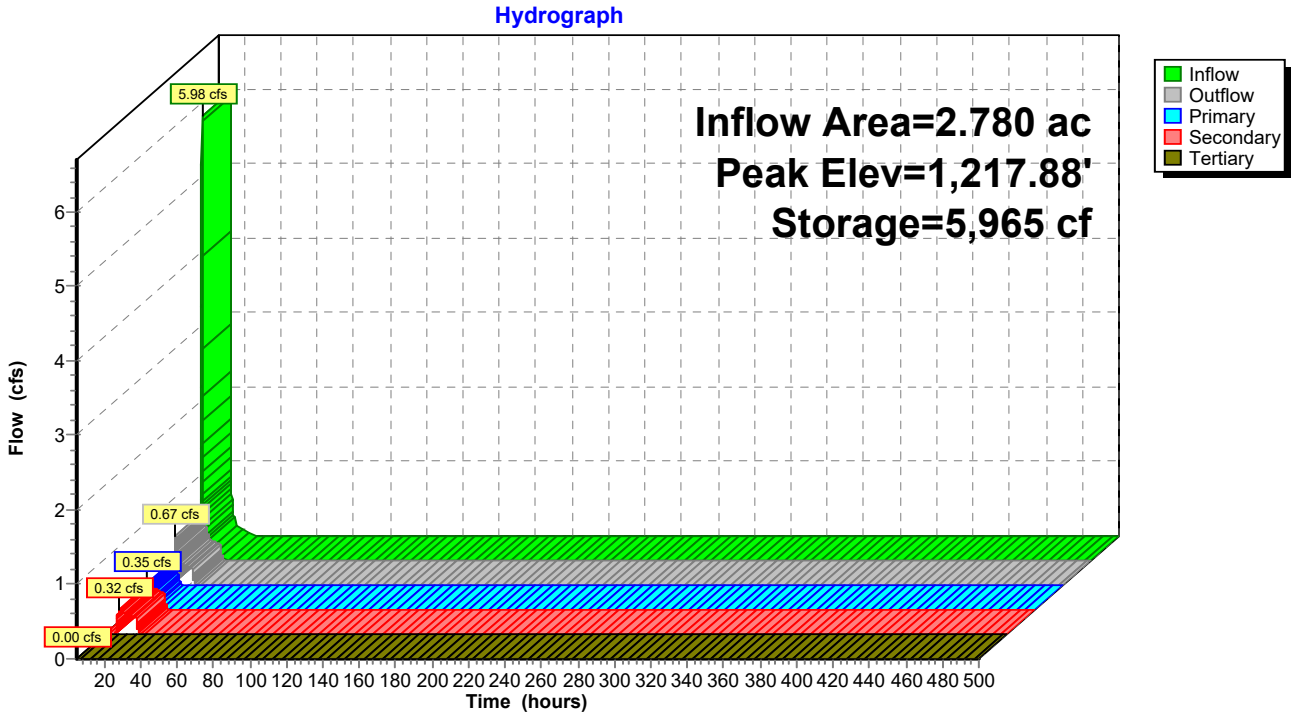
Primary OutFlow Max=0.35 cfs @ 12.92 hrs HW=1,217.88' (Free Discharge)
└**1=Culvert** (Passes 0.35 cfs of 2.35 cfs potential flow)
└**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 0.35 cfs @ 2.53 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.32 cfs @ 12.92 hrs HW=1,217.88' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.32 cfs)

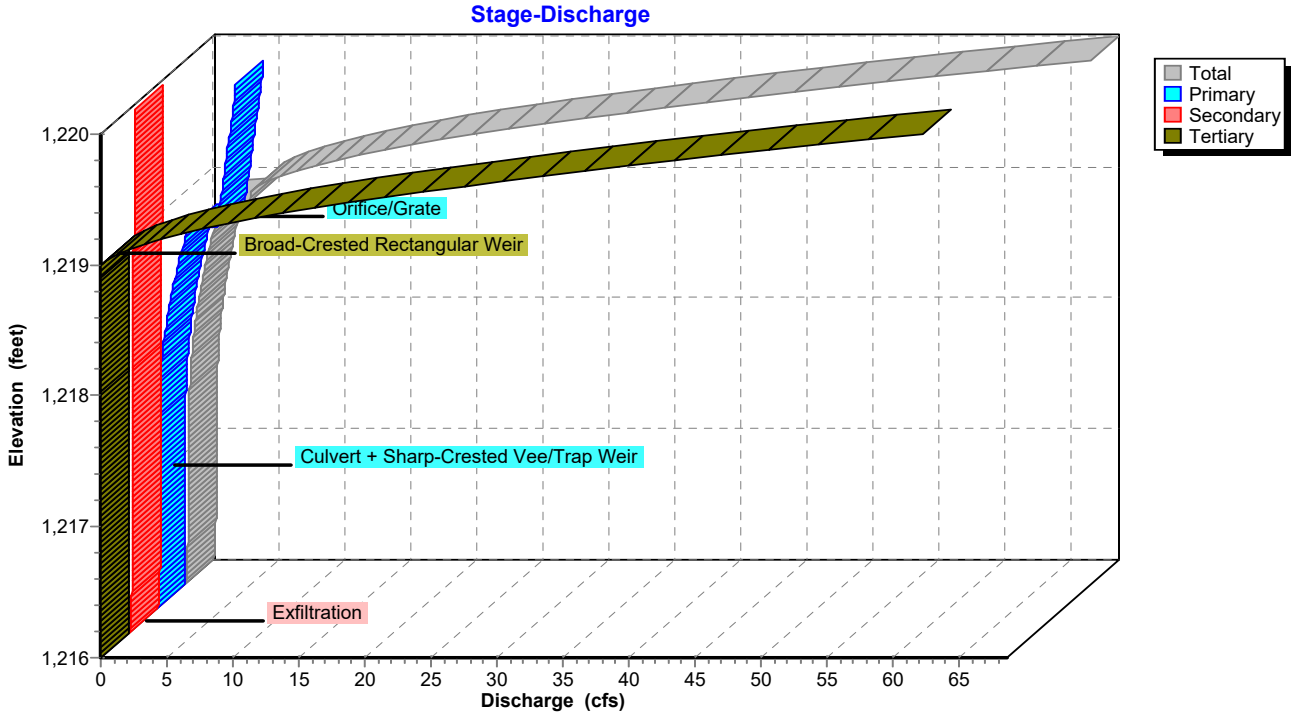
Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,216.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



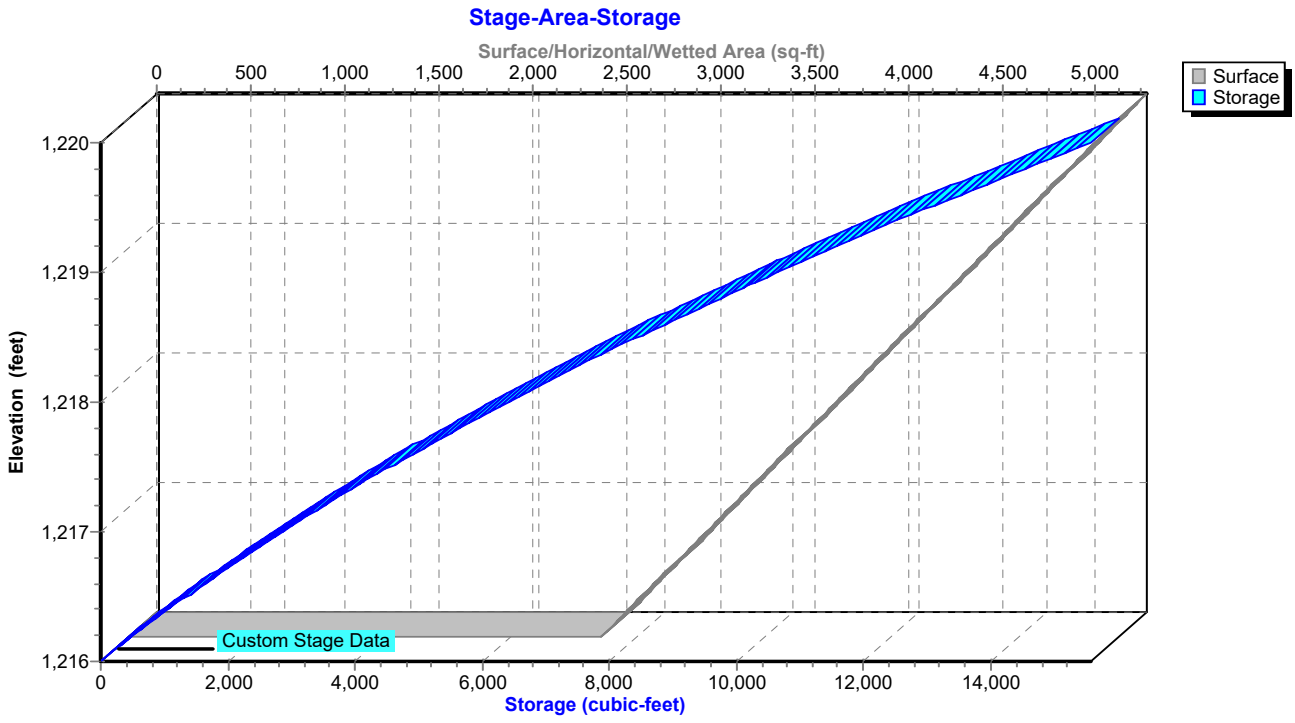
Pond P3E: Pond 3E



Pond P3E: Pond 3E



Pond P3E: Pond 3E



Hydrograph for Pond P3E: Pond 3E

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,216.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.24**	**4,630**	**1,217.52**	**0.39**	**0.09**	**0.30**	0.00
25.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
35.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3E: Pond 3E

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,216.00	0.00	0.00	0.00	0.00
1,216.10	0.22	0.00	0.22	0.00
1,216.20	0.22	0.00	0.22	0.00
1,216.30	0.23	0.00	0.23	0.00
1,216.40	0.23	0.00	0.23	0.00
1,216.50	0.24	0.00	0.24	0.00
1,216.60	0.24	0.00	0.24	0.00
1,216.70	0.25	0.00	0.25	0.00
1,216.80	0.26	0.00	0.26	0.00
1,216.90	0.26	0.00	0.26	0.00
1,217.00	0.27	0.00	0.27	0.00
1,217.10	0.27	0.00	0.27	0.00
1,217.20	0.29	0.01	0.28	0.00
1,217.30	0.31	0.02	0.28	0.00
1,217.40	0.34	0.05	0.29	0.00
1,217.50	0.38	0.08	0.30	0.00
1,217.60	0.43	0.13	0.30	0.00
1,217.70	0.50	0.19	0.31	0.00
1,217.80	0.58	0.27	0.31	0.00
1,217.90	0.68	0.36	0.32	0.00
1,218.00	0.80	0.47	0.32	0.00
1,218.10	0.93	0.60	0.33	0.00
1,218.20	1.08	0.75	0.34	0.00
1,218.30	1.26	0.91	0.34	0.00
1,218.40	1.45	1.10	0.35	0.00
1,218.50	1.66	1.31	0.35	0.00
1,218.60	1.89	1.54	0.36	0.00
1,218.70	2.15	1.79	0.36	0.00
1,218.80	2.43	2.06	0.37	0.00
1,218.90	2.74	2.36	0.38	0.00
1,219.00	5.01	4.63	0.38	0.00
1,219.10	6.77	4.78	0.39	1.60
1,219.20	9.92	4.93	0.39	4.60
1,219.30	14.17	5.07	0.40	8.70
1,219.40	19.40	5.21	0.40	13.78
1,219.50	25.84	5.35	0.41	20.08
1,219.60	33.40	5.48	0.42	27.51
1,219.70	41.13	5.61	0.42	35.10
1,219.80	49.59	5.74	0.43	43.42
1,219.90	58.74	5.86	0.43	52.45
1,220.00	**68.59**	**5.98**	**0.44**	**62.18**

Stage-Area-Storage for Pond P3E: Pond 3E

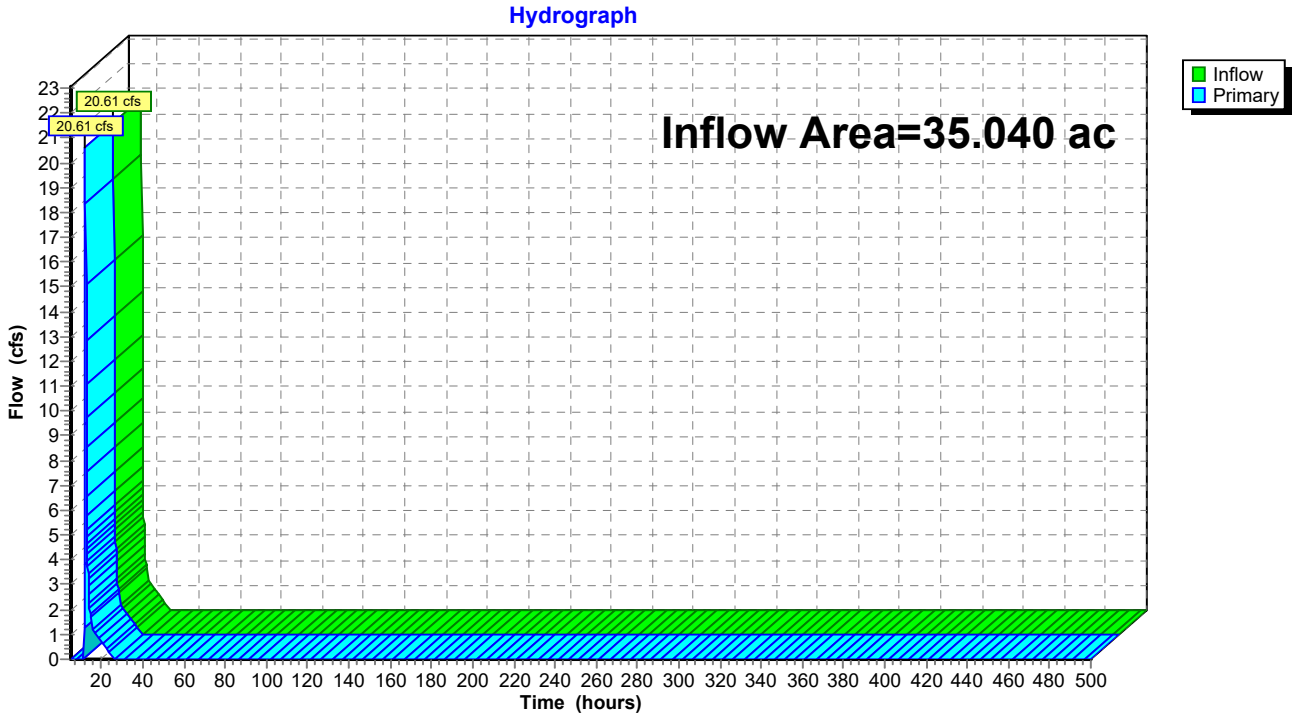
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,216.00	2,517	0
1,216.05	2,551	127
1,216.10	2,586	255
1,216.15	2,620	385
1,216.20	2,655	517
1,216.25	2,689	651
1,216.30	2,724	786
1,216.35	2,758	923
1,216.40	2,793	1,062
1,216.45	2,827	1,202
1,216.50	2,861	1,345
1,216.55	2,896	1,489
1,216.60	2,930	1,634
1,216.65	2,965	1,782
1,216.70	2,999	1,931
1,216.75	3,034	2,081
1,216.80	3,068	2,234
1,216.85	3,102	2,388
1,216.90	3,137	2,544
1,216.95	3,171	2,702
1,217.00	3,206	2,861
1,217.05	3,240	3,023
1,217.10	3,275	3,185
1,217.15	3,309	3,350
1,217.20	3,344	3,516
1,217.25	3,378	3,684
1,217.30	3,412	3,854
1,217.35	3,447	4,026
1,217.40	3,481	4,199
1,217.45	3,516	4,374
1,217.50	3,550	4,550
1,217.55	3,585	4,729
1,217.60	3,619	4,909
1,217.65	3,653	5,091
1,217.70	3,688	5,274
1,217.75	3,722	5,459
1,217.80	3,757	5,646
1,217.85	3,791	5,835
1,217.90	3,826	6,025
1,217.95	3,860	6,218
1,218.00	3,895	6,412
1,218.05	3,929	6,607
1,218.10	3,963	6,804
1,218.15	3,998	7,003
1,218.20	4,032	7,204
1,218.25	4,067	7,407
1,218.30	4,101	7,611
1,218.35	4,136	7,817
1,218.40	4,170	8,024
1,218.45	4,204	8,234
1,218.50	4,239	8,445
1,218.55	4,273	8,658
1,218.60	4,308	8,872
1,218.65	4,342	9,088
1,218.70	4,377	9,306
1,218.75	4,411	9,526
1,218.80	4,445	9,747
1,218.85	4,480	9,971
1,218.90	4,514	10,195
1,218.95	4,549	10,422
1,219.00	4,583	10,650
1,219.05	4,618	10,880
1,219.10	4,652	11,112
1,219.15	4,687	11,346
1,219.20	4,721	11,581
1,219.25	4,755	11,818
1,219.30	4,790	12,056
1,219.35	4,824	12,297
1,219.40	4,859	12,539
1,219.45	4,893	12,783
1,219.50	4,928	13,028
1,219.55	4,962	13,275
1,219.60	4,996	13,524
1,219.65	5,031	13,775
1,219.70	5,065	14,027
1,219.75	5,100	14,282
1,219.80	5,134	14,537
1,219.85	5,169	14,795
1,219.90	5,203	15,054
1,219.95	5,238	15,315
1,220.00	**5,272**	**15,578**

Summary for Link 1L: Total Pre - Development

Inflow Area = 35.040 ac, 0.00% Impervious, Inflow Depth = 0.58" for 5 YR event
Inflow = 20.61 cfs @ 12.20 hrs, Volume= 1.684 af
Primary = 20.61 cfs @ 12.20 hrs, Volume= 1.684 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 1L: Total Pre - Development



Hydrograph for Link 1L: Total Pre - Development

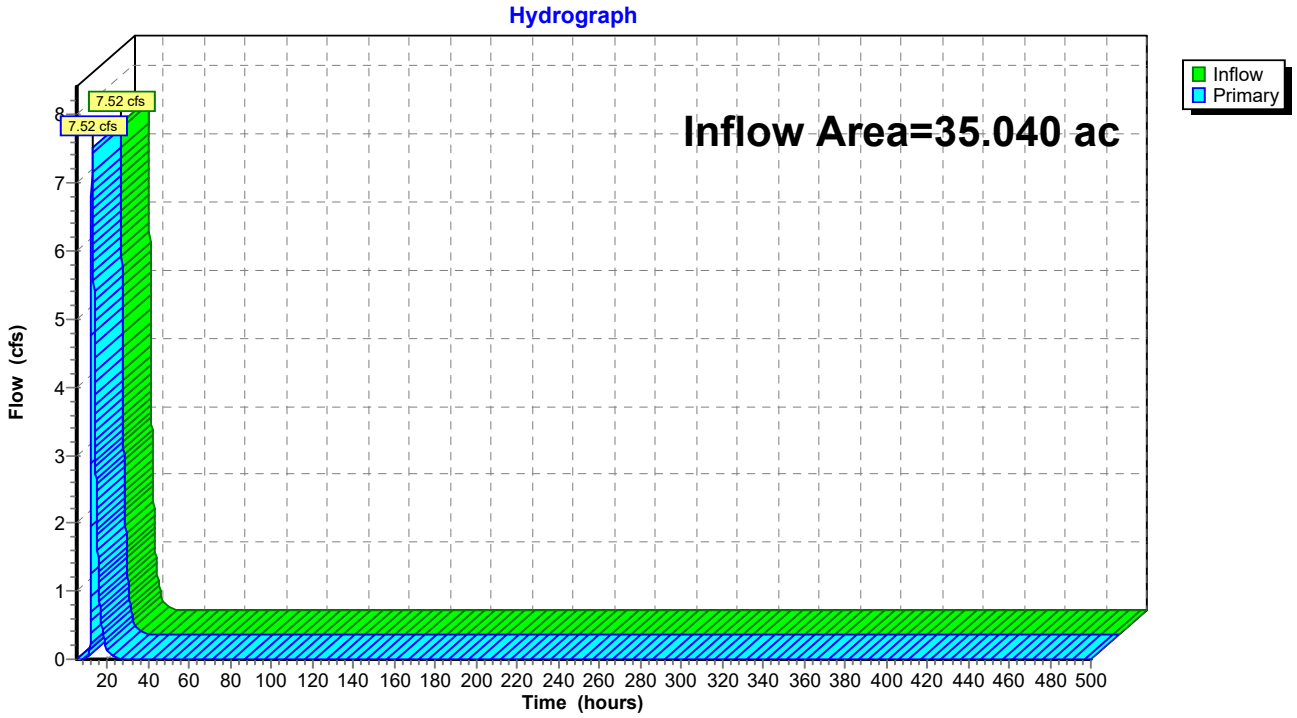
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.00**	0.00	**0.00**	265.00	0.00	0.00	0.00
15.00	**1.75**	0.00	**1.75**	270.00	0.00	0.00	0.00
20.00	0.70	0.00	0.70	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Summary for Link 2L: Total Post - Development

Inflow Area = 35.040 ac, 19.66% Impervious, Inflow Depth = 0.48" for 5 YR event
Inflow = 7.52 cfs @ 12.49 hrs, Volume= 1.408 af
Primary = 7.52 cfs @ 12.49 hrs, Volume= 1.408 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 2L: Total Post - Development



Hydrograph for Link 2L: Total Post - Development

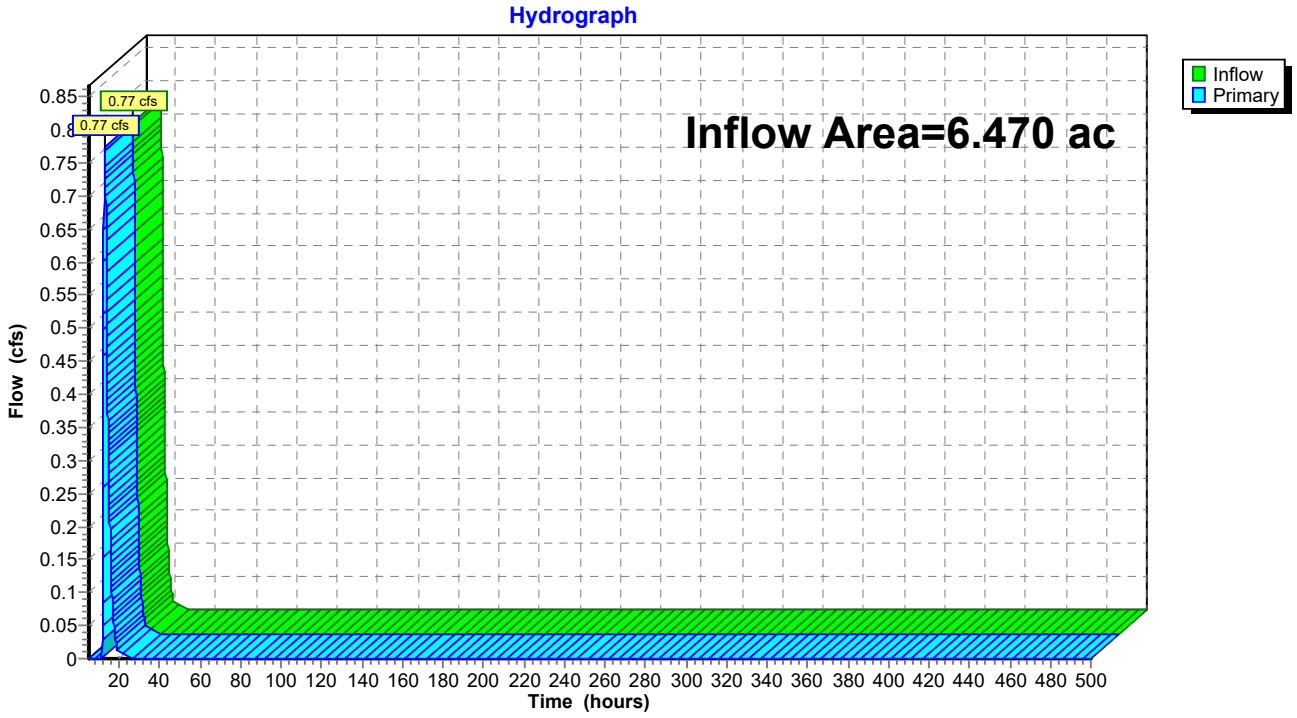
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.02**	0.00	**0.02**	265.00	0.00	0.00	0.00
15.00	**1.85**	0.00	**1.85**	270.00	0.00	0.00	0.00
20.00	0.11	0.00	0.11	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Summary for Link 3L: Post - South

Inflow Area = 6.470 ac, 18.70% Impervious, Inflow Depth = 0.31" for 5 YR event
Inflow = 0.77 cfs @ 12.85 hrs, Volume= 0.167 af
Primary = 0.77 cfs @ 12.85 hrs, Volume= 0.167 af, Atten= 0%, Lag= 0.0 min
Routed to Link 2L : Total Post - Development

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 3L: Post - South



Hydrograph for Link 3L: Post - South

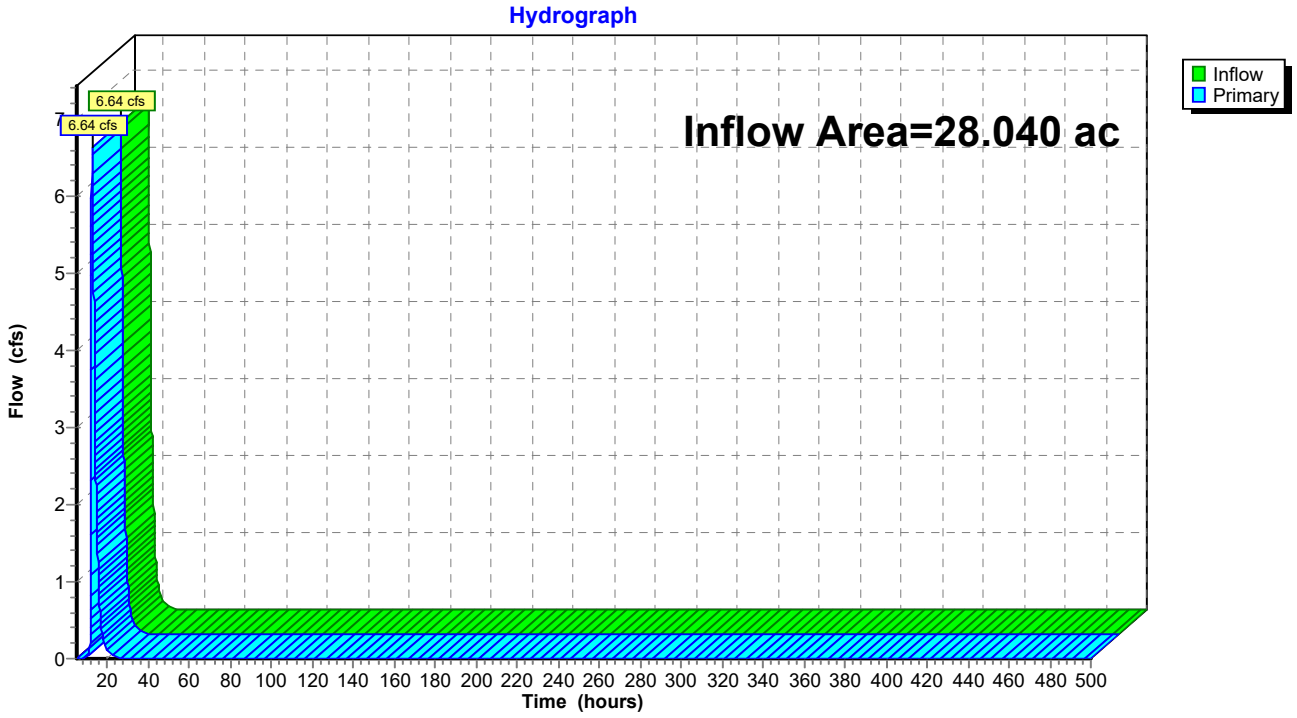
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.00**	0.00	**0.00**	265.00	0.00	0.00	0.00
15.00	**0.26**	0.00	**0.26**	270.00	0.00	0.00	0.00
20.00	0.01	0.00	0.01	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Summary for Link 4L: Post - North

Inflow Area = 28.040 ac, 20.04% Impervious, Inflow Depth = 0.51" for 5 YR event
Inflow = 6.64 cfs @ 12.48 hrs, Volume= 1.203 af
Primary = 6.64 cfs @ 12.48 hrs, Volume= 1.203 af, Atten= 0%, Lag= 0.0 min
Routed to Link 2L : Total Post - Development

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 4L: Post - North



Hydrograph for Link 4L: Post - North

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.02**	0.00	**0.02**	265.00	0.00	0.00	0.00
15.00	**1.55**	0.00	**1.55**	270.00	0.00	0.00	0.00
20.00	0.09	0.00	0.09	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Time span=5.00-500.00 hrs, dt=0.05 hrs, 9901 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1: Pre - South Runoff Area=4.910 ac 0.00% Impervious Runoff Depth=0.65"
Tc=10.0 min CN=55 Runoff=3.23 cfs 0.268 af

Subcatchment1A: Post 1A Runoff Area=6.030 ac 19.24% Impervious Runoff Depth=1.40"
Tc=6.0 min CN=68 Runoff=13.00 cfs 0.703 af

Subcatchment1B: Post 1B - Offsite Runoff Area=0.440 ac 11.36% Impervious Runoff Depth=1.21"
Tc=6.0 min CN=65 Runoff=0.80 cfs 0.044 af

Subcatchment2: Pre - West Runoff Area=2.540 ac 0.00% Impervious Runoff Depth=0.65"
Tc=6.0 min CN=55 Runoff=2.06 cfs 0.138 af

Subcatchment2A: Post 2A - Offsite Runoff Area=0.530 ac 11.32% Impervious Runoff Depth=1.21"
Tc=6.0 min CN=65 Runoff=0.97 cfs 0.053 af

Subcatchment3: Pre - North Runoff Area=27.590 ac 0.00% Impervious Runoff Depth=0.91"
Tc=10.0 min CN=60 Runoff=29.63 cfs 2.101 af

Subcatchment3A: Post 3A Runoff Area=10.600 ac 18.58% Impervious Runoff Depth=1.53"
Tc=6.0 min CN=70 Runoff=25.27 cfs 1.355 af

Subcatchment3B: Post 3B Runoff Area=8.450 ac 19.88% Impervious Runoff Depth=1.60"
Tc=6.0 min CN=71 Runoff=21.12 cfs 1.129 af

Subcatchment3C: Post 3C Runoff Area=2.490 ac 22.89% Impervious Runoff Depth=1.89"
Tc=6.0 min CN=75 Runoff=7.40 cfs 0.393 af

Subcatchment3D: Post 3D Runoff Area=2.380 ac 23.95% Impervious Runoff Depth=1.97"
Tc=6.0 min CN=76 Runoff=7.36 cfs 0.391 af

Subcatchment3E: Post 3E Runoff Area=2.780 ac 19.06% Impervious Runoff Depth=1.82"
Tc=6.0 min CN=74 Runoff=7.93 cfs 0.422 af

Subcatchment3Y: Post 3Y - Offsite Runoff Area=0.820 ac 36.59% Impervious Runoff Depth=2.55"
Tc=6.0 min CN=83 Runoff=3.24 cfs 0.174 af

Subcatchment3Z: Post 3Z - Offsite Runoff Area=0.520 ac 0.00% Impervious Runoff Depth=1.82"
Tc=6.0 min CN=74 Runoff=1.48 cfs 0.079 af

Subcatchment5S: Culvert 1 Runoff Area=4,797 sf 48.61% Impervious Runoff Depth=2.21"
Tc=6.0 min CN=79 Runoff=0.38 cfs 0.020 af

Subcatchment6S: Culvert 2 Runoff Area=24,708 sf 36.87% Impervious Runoff Depth=1.89"
Tc=6.0 min CN=75 Runoff=1.69 cfs 0.090 af

Subcatchment7S: Culvert 3 Runoff Area=41,517 sf 32.00% Impervious Runoff Depth=1.75"
Tc=6.0 min CN=73 Runoff=2.61 cfs 0.139 af

Subcatchment8S: Culvert 4 Runoff Area=209,603 sf 25.18% Impervious Runoff Depth=1.53"
Tc=6.0 min CN=70 Runoff=11.47 cfs 0.615 af

Subcatchment9S: Culvert 5 Runoff Area=188,836 sf 19.96% Impervious Runoff Depth=1.40"
Tc=6.0 min CN=68 Runoff=9.35 cfs 0.505 af

Pond P1A: Pond 1A Peak Elev=1,241.65' Storage=11,696 cf Inflow=13.00 cfs 0.703 af
Primary=1.66 cfs 0.276 af Secondary=0.53 cfs 0.427 af Tertiary=0.00 cfs 0.000 af Outflow=2.19 cfs 0.703 af

Pond P3A: Pond 3A Peak Elev=1,195.36' Storage=22,437 cf Inflow=25.27 cfs 1.355 af
Primary=4.07 cfs 0.668 af Secondary=0.77 cfs 0.687 af Tertiary=0.00 cfs 0.000 af Outflow=4.83 cfs 1.355 af

Pond P3B: Pond 3B Peak Elev=1,198.33' Storage=18,152 cf Inflow=21.12 cfs 1.129 af
Primary=3.92 cfs 0.579 af Secondary=0.68 cfs 0.550 af Tertiary=0.00 cfs 0.000 af Outflow=4.59 cfs 1.129 af

Pond P3C: Pond 3C Peak Elev=1,180.33' Storage=6,905 cf Inflow=7.40 cfs 0.393 af
Primary=0.97 cfs 0.132 af Secondary=0.33 cfs 0.262 af Tertiary=0.00 cfs 0.000 af Outflow=1.31 cfs 0.393 af

Pond P3D: Pond 3D Peak Elev=1,190.07' Storage=5,269 cf Inflow=7.36 cfs 0.391 af
Primary=2.94 cfs 0.230 af Secondary=0.22 cfs 0.161 af Tertiary=0.00 cfs 0.000 af Outflow=3.16 cfs 0.391 af

Pond P3E: Pond 3E Peak Elev=1,218.29' Storage=7,552 cf Inflow=7.93 cfs 0.422 af
Primary=0.89 cfs 0.130 af Secondary=0.34 cfs 0.291 af Tertiary=0.00 cfs 0.000 af Outflow=1.23 cfs 0.422 af

Link 1L: Total Pre - Development Inflow=34.45 cfs 2.507 af
Primary=34.45 cfs 2.507 af

Link 2L: Total Post - Development Inflow=15.10 cfs 2.364 af
Primary=15.10 cfs 2.364 af

Link 3L: Post - South Inflow=1.81 cfs 0.320 af
Primary=1.81 cfs 0.320 af

Link 4L: Post - North Inflow=13.10 cfs 1.991 af
Primary=13.10 cfs 1.991 af

Total Runoff Area = 80.857 ac Runoff Volume = 8.619 af Average Runoff Depth = 1.28"
88.21% Pervious = 71.323 ac 11.79% Impervious = 9.534 ac

Summary for Subcatchment 1: Pre - South

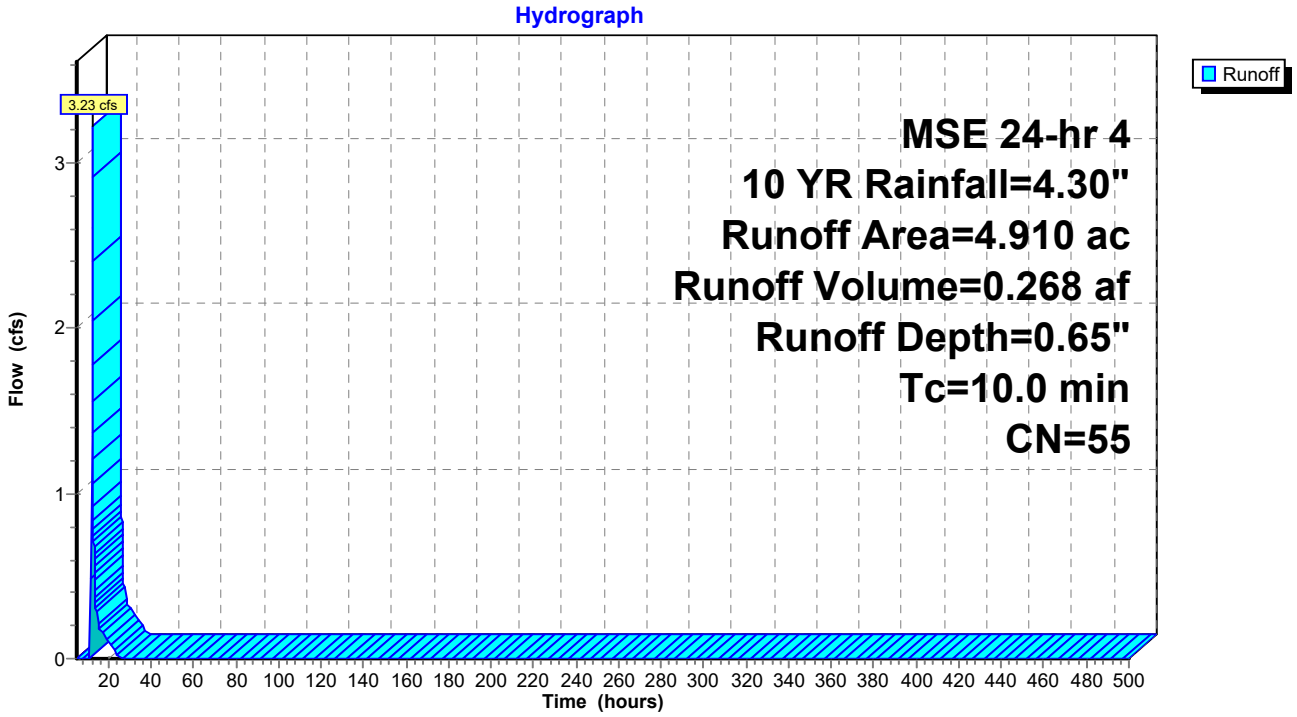
Runoff = 3.23 cfs @ 12.21 hrs, Volume= 0.268 af, Depth= 0.65"
Routed to Link 1L : Total Pre - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 10 YR Rainfall=4.30"

	Area (ac)	CN	Description
*	4.910	55	Pre Dev - B Soils
	4.910		100.00% Pervious Area

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

Subcatchment 1: Pre - South



Hydrograph for Subcatchment 1: Pre - South

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.20	0.00	0.00
10.00	0.68	0.00	**0.00**
15.00	3.78	0.44	**0.28**
20.00	**4.16**	**0.60**	0.11
25.00	**4.30**	**0.65**	0.00
30.00	4.30	0.65	0.00
35.00	4.30	0.65	0.00
40.00	4.30	0.65	0.00
45.00	4.30	0.65	0.00
50.00	4.30	0.65	0.00
55.00	4.30	0.65	0.00
60.00	4.30	0.65	0.00
65.00	4.30	0.65	0.00
70.00	4.30	0.65	0.00
75.00	4.30	0.65	0.00
80.00	4.30	0.65	0.00
85.00	4.30	0.65	0.00
90.00	4.30	0.65	0.00
95.00	4.30	0.65	0.00
100.00	4.30	0.65	0.00
105.00	4.30	0.65	0.00
110.00	4.30	0.65	0.00
115.00	4.30	0.65	0.00
120.00	4.30	0.65	0.00
125.00	4.30	0.65	0.00
130.00	4.30	0.65	0.00
135.00	4.30	0.65	0.00
140.00	4.30	0.65	0.00
145.00	4.30	0.65	0.00
150.00	4.30	0.65	0.00
155.00	4.30	0.65	0.00
160.00	4.30	0.65	0.00
165.00	4.30	0.65	0.00
170.00	4.30	0.65	0.00
175.00	4.30	0.65	0.00
180.00	4.30	0.65	0.00
185.00	4.30	0.65	0.00
190.00	4.30	0.65	0.00
195.00	4.30	0.65	0.00
200.00	4.30	0.65	0.00
205.00	4.30	0.65	0.00
210.00	4.30	0.65	0.00
215.00	4.30	0.65	0.00
220.00	4.30	0.65	0.00
225.00	4.30	0.65	0.00
230.00	4.30	0.65	0.00
235.00	4.30	0.65	0.00
240.00	4.30	0.65	0.00
245.00	4.30	0.65	0.00
250.00	4.30	0.65	0.00
255.00	4.30	0.65	0.00
260.00	4.30	0.65	0.00
265.00	4.30	0.65	0.00
270.00	4.30	0.65	0.00
275.00	4.30	0.65	0.00
280.00	4.30	0.65	0.00
285.00	4.30	0.65	0.00
290.00	4.30	0.65	0.00
295.00	4.30	0.65	0.00
300.00	4.30	0.65	0.00
305.00	4.30	0.65	0.00
310.00	4.30	0.65	0.00
315.00	4.30	0.65	0.00
320.00	4.30	0.65	0.00
325.00	4.30	0.65	0.00
330.00	4.30	0.65	0.00
335.00	4.30	0.65	0.00
340.00	4.30	0.65	0.00
345.00	4.30	0.65	0.00
350.00	4.30	0.65	0.00
355.00	4.30	0.65	0.00
360.00	4.30	0.65	0.00
365.00	4.30	0.65	0.00
370.00	4.30	0.65	0.00
375.00	4.30	0.65	0.00
380.00	4.30	0.65	0.00
385.00	4.30	0.65	0.00
390.00	4.30	0.65	0.00
395.00	4.30	0.65	0.00
400.00	4.30	0.65	0.00
405.00	4.30	0.65	0.00
410.00	4.30	0.65	0.00
415.00	4.30	0.65	0.00
420.00	4.30	0.65	0.00
425.00	4.30	0.65	0.00
430.00	4.30	0.65	0.00
435.00	4.30	0.65	0.00
440.00	4.30	0.65	0.00
445.00	4.30	0.65	0.00
450.00	4.30	0.65	0.00
455.00	4.30	0.65	0.00
460.00	4.30	0.65	0.00
465.00	4.30	0.65	0.00
470.00	4.30	0.65	0.00
475.00	4.30	0.65	0.00
480.00	4.30	0.65	0.00
485.00	4.30	0.65	0.00
490.00	4.30	0.65	0.00
495.00	4.30	0.65	0.00
500.00	4.30	0.65	0.00

Summary for Subcatchment 1A: Post 1A

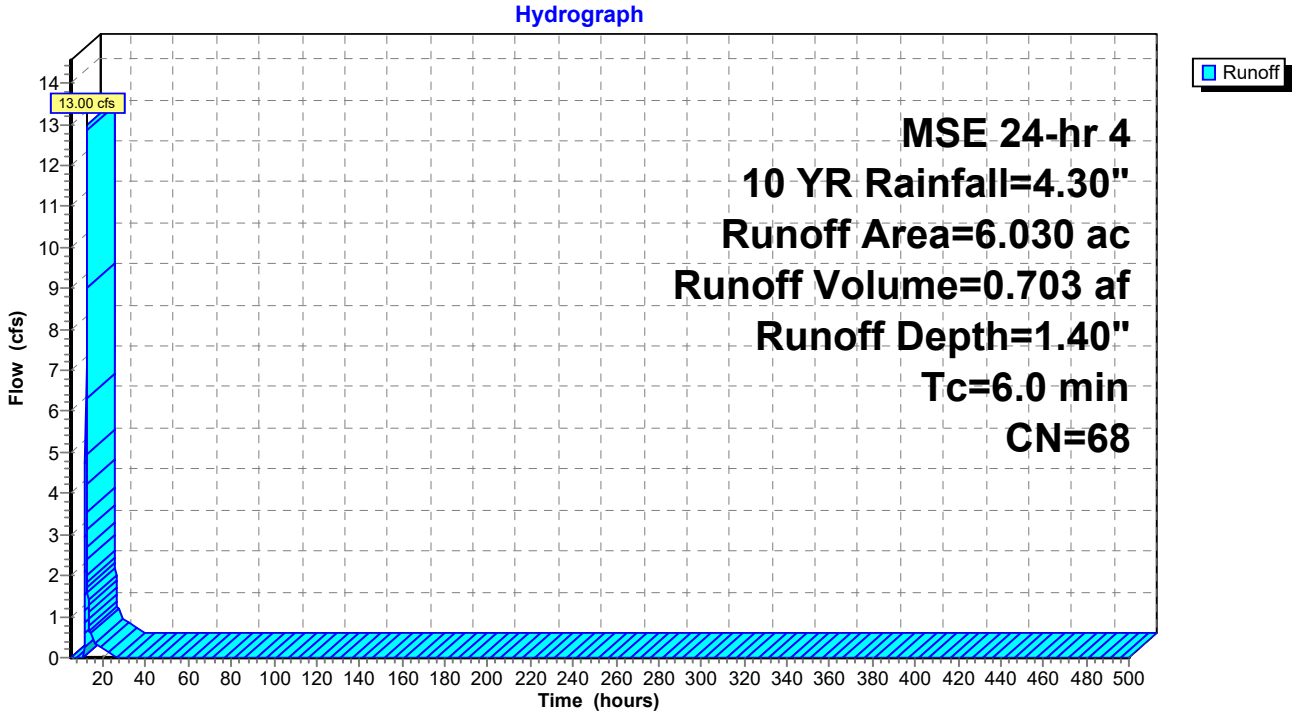
Runoff = 13.00 cfs @ 12.14 hrs, Volume= 0.703 af, Depth= 1.40"
Routed to Pond P1A : Pond 1A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 10 YR Rainfall=4.30"

	Area (ac)	CN	Description
*	1.160	98	Impervious
*	4.870	61	Post - B Soils
*	0.000	74	Post - C Soils
	6.030	68	Weighted Average
	4.870		80.76% Pervious Area
	1.160		19.24% Impervious Area

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

Subcatchment 1A: Post 1A



Hydrograph for Subcatchment 1A: Post 1A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.20	0.00	0.00	260.00	4.30	1.40	0.00
10.00	0.68	0.00	**0.00**	265.00	4.30	1.40	0.00
15.00	3.78	1.07	**0.56**	270.00	4.30	1.40	0.00
20.00	**4.16**	**1.31**	0.21	275.00	4.30	1.40	0.00
25.00	**4.30**	**1.40**	0.00	280.00	4.30	1.40	0.00
30.00	4.30	1.40	0.00	285.00	4.30	1.40	0.00
35.00	4.30	1.40	0.00	290.00	4.30	1.40	0.00
40.00	4.30	1.40	0.00	295.00	4.30	1.40	0.00
45.00	4.30	1.40	0.00	300.00	4.30	1.40	0.00
50.00	4.30	1.40	0.00	305.00	4.30	1.40	0.00
55.00	4.30	1.40	0.00	310.00	4.30	1.40	0.00
60.00	4.30	1.40	0.00	315.00	4.30	1.40	0.00
65.00	4.30	1.40	0.00	320.00	4.30	1.40	0.00
70.00	4.30	1.40	0.00	325.00	4.30	1.40	0.00
75.00	4.30	1.40	0.00	330.00	4.30	1.40	0.00
80.00	4.30	1.40	0.00	335.00	4.30	1.40	0.00
85.00	4.30	1.40	0.00	340.00	4.30	1.40	0.00
90.00	4.30	1.40	0.00	345.00	4.30	1.40	0.00
95.00	4.30	1.40	0.00	350.00	4.30	1.40	0.00
100.00	4.30	1.40	0.00	355.00	4.30	1.40	0.00
105.00	4.30	1.40	0.00	360.00	4.30	1.40	0.00
110.00	4.30	1.40	0.00	365.00	4.30	1.40	0.00
115.00	4.30	1.40	0.00	370.00	4.30	1.40	0.00
120.00	4.30	1.40	0.00	375.00	4.30	1.40	0.00
125.00	4.30	1.40	0.00	380.00	4.30	1.40	0.00
130.00	4.30	1.40	0.00	385.00	4.30	1.40	0.00
135.00	4.30	1.40	0.00	390.00	4.30	1.40	0.00
140.00	4.30	1.40	0.00	395.00	4.30	1.40	0.00
145.00	4.30	1.40	0.00	400.00	4.30	1.40	0.00
150.00	4.30	1.40	0.00	405.00	4.30	1.40	0.00
155.00	4.30	1.40	0.00	410.00	4.30	1.40	0.00
160.00	4.30	1.40	0.00	415.00	4.30	1.40	0.00
165.00	4.30	1.40	0.00	420.00	4.30	1.40	0.00
170.00	4.30	1.40	0.00	425.00	4.30	1.40	0.00
175.00	4.30	1.40	0.00	430.00	4.30	1.40	0.00
180.00	4.30	1.40	0.00	435.00	4.30	1.40	0.00
185.00	4.30	1.40	0.00	440.00	4.30	1.40	0.00
190.00	4.30	1.40	0.00	445.00	4.30	1.40	0.00
195.00	4.30	1.40	0.00	450.00	4.30	1.40	0.00
200.00	4.30	1.40	0.00	455.00	4.30	1.40	0.00
205.00	4.30	1.40	0.00	460.00	4.30	1.40	0.00
210.00	4.30	1.40	0.00	465.00	4.30	1.40	0.00
215.00	4.30	1.40	0.00	470.00	4.30	1.40	0.00
220.00	4.30	1.40	0.00	475.00	4.30	1.40	0.00
225.00	4.30	1.40	0.00	480.00	4.30	1.40	0.00
230.00	4.30	1.40	0.00	485.00	4.30	1.40	0.00
235.00	4.30	1.40	0.00	490.00	4.30	1.40	0.00
240.00	4.30	1.40	0.00	495.00	4.30	1.40	0.00
245.00	4.30	1.40	0.00	500.00	4.30	1.40	0.00
250.00	4.30	1.40	0.00				
255.00	4.30	1.40	0.00				

Summary for Subcatchment 1B: Post 1B - Offsite

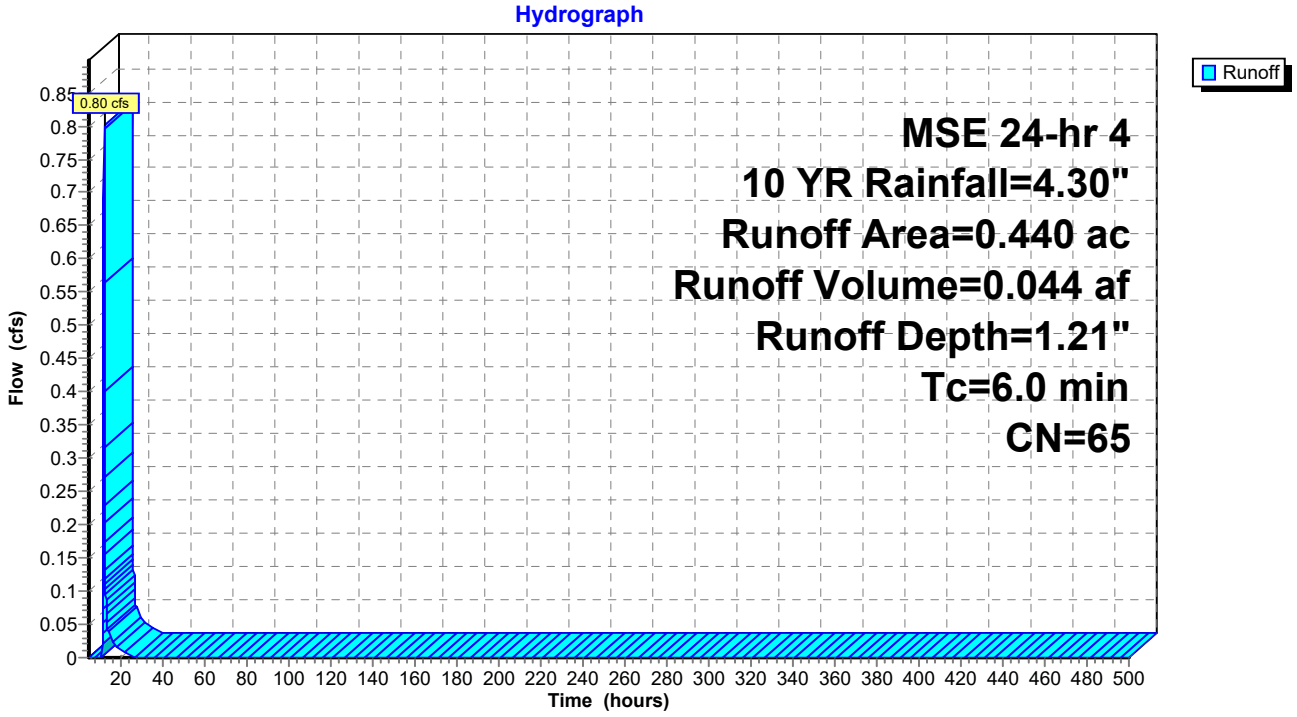
Runoff = 0.80 cfs @ 12.14 hrs, Volume= 0.044 af, Depth= 1.21"
Routed to Link 3L : Post - South

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 10 YR Rainfall=4.30"

	Area (ac)	CN	Description
*	0.050	98	Impervious
*	0.390	61	Post - B Soils
*	0.000	74	Post - C Soils
	0.440	65	Weighted Average
	0.390		88.64% Pervious Area
	0.050		11.36% Impervious Area

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

Subcatchment 1B: Post 1B - Offsite



Hydrograph for Subcatchment 1B: Post 1B - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.20	0.00	0.00
10.00	0.68	0.00	**0.00**
15.00	3.78	0.90	**0.04**
20.00	**4.16**	**1.12**	0.01
25.00	**4.30**	**1.21**	0.00
30.00	4.30	1.21	0.00
35.00	4.30	1.21	0.00
40.00	4.30	1.21	0.00
45.00	4.30	1.21	0.00
50.00	4.30	1.21	0.00
55.00	4.30	1.21	0.00
60.00	4.30	1.21	0.00
65.00	4.30	1.21	0.00
70.00	4.30	1.21	0.00
75.00	4.30	1.21	0.00
80.00	4.30	1.21	0.00
85.00	4.30	1.21	0.00
90.00	4.30	1.21	0.00
95.00	4.30	1.21	0.00
100.00	4.30	1.21	0.00
105.00	4.30	1.21	0.00
110.00	4.30	1.21	0.00
115.00	4.30	1.21	0.00
120.00	4.30	1.21	0.00
125.00	4.30	1.21	0.00
130.00	4.30	1.21	0.00
135.00	4.30	1.21	0.00
140.00	4.30	1.21	0.00
145.00	4.30	1.21	0.00
150.00	4.30	1.21	0.00
155.00	4.30	1.21	0.00
160.00	4.30	1.21	0.00
165.00	4.30	1.21	0.00
170.00	4.30	1.21	0.00
175.00	4.30	1.21	0.00
180.00	4.30	1.21	0.00
185.00	4.30	1.21	0.00
190.00	4.30	1.21	0.00
195.00	4.30	1.21	0.00
200.00	4.30	1.21	0.00
205.00	4.30	1.21	0.00
210.00	4.30	1.21	0.00
215.00	4.30	1.21	0.00
220.00	4.30	1.21	0.00
225.00	4.30	1.21	0.00
230.00	4.30	1.21	0.00
235.00	4.30	1.21	0.00
240.00	4.30	1.21	0.00
245.00	4.30	1.21	0.00
250.00	4.30	1.21	0.00
255.00	4.30	1.21	0.00
260.00	4.30	1.21	0.00
265.00	4.30	1.21	0.00
270.00	4.30	1.21	0.00
275.00	4.30	1.21	0.00
280.00	4.30	1.21	0.00
285.00	4.30	1.21	0.00
290.00	4.30	1.21	0.00
295.00	4.30	1.21	0.00
300.00	4.30	1.21	0.00
305.00	4.30	1.21	0.00
310.00	4.30	1.21	0.00
315.00	4.30	1.21	0.00
320.00	4.30	1.21	0.00
325.00	4.30	1.21	0.00
330.00	4.30	1.21	0.00
335.00	4.30	1.21	0.00
340.00	4.30	1.21	0.00
345.00	4.30	1.21	0.00
350.00	4.30	1.21	0.00
355.00	4.30	1.21	0.00
360.00	4.30	1.21	0.00
365.00	4.30	1.21	0.00
370.00	4.30	1.21	0.00
375.00	4.30	1.21	0.00
380.00	4.30	1.21	0.00
385.00	4.30	1.21	0.00
390.00	4.30	1.21	0.00
395.00	4.30	1.21	0.00
400.00	4.30	1.21	0.00
405.00	4.30	1.21	0.00
410.00	4.30	1.21	0.00
415.00	4.30	1.21	0.00
420.00	4.30	1.21	0.00
425.00	4.30	1.21	0.00
430.00	4.30	1.21	0.00
435.00	4.30	1.21	0.00
440.00	4.30	1.21	0.00
445.00	4.30	1.21	0.00
450.00	4.30	1.21	0.00
455.00	4.30	1.21	0.00
460.00	4.30	1.21	0.00
465.00	4.30	1.21	0.00
470.00	4.30	1.21	0.00
475.00	4.30	1.21	0.00
480.00	4.30	1.21	0.00
485.00	4.30	1.21	0.00
490.00	4.30	1.21	0.00
495.00	4.30	1.21	0.00
500.00	4.30	1.21	0.00

Summary for Subcatchment 2: Pre - West

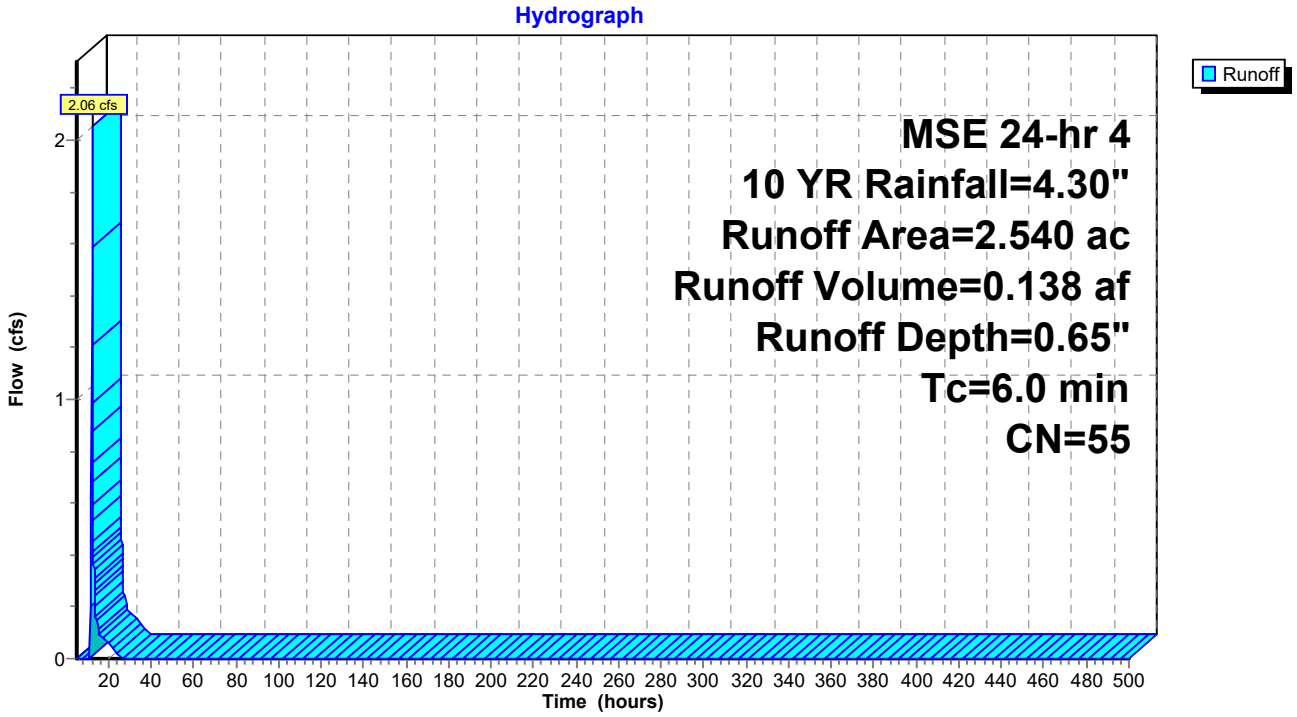
Runoff = 2.06 cfs @ 12.15 hrs, Volume= 0.138 af, Depth= 0.65"
Routed to Link 1L : Total Pre - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 10 YR Rainfall=4.30"

	Area (ac)	CN	Description
*	2.540	55	Pre Dev - B Soils
	2.540		100.00% Pervious Area

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

Subcatchment 2: Pre - West



Hydrograph for Subcatchment 2: Pre - West

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.20	0.00	0.00
10.00	0.68	0.00	**0.00**
15.00	3.78	0.44	**0.14**
20.00	**4.16**	**0.60**	0.06
25.00	**4.30**	**0.65**	0.00
30.00	4.30	0.65	0.00
35.00	4.30	0.65	0.00
40.00	4.30	0.65	0.00
45.00	4.30	0.65	0.00
50.00	4.30	0.65	0.00
55.00	4.30	0.65	0.00
60.00	4.30	0.65	0.00
65.00	4.30	0.65	0.00
70.00	4.30	0.65	0.00
75.00	4.30	0.65	0.00
80.00	4.30	0.65	0.00
85.00	4.30	0.65	0.00
90.00	4.30	0.65	0.00
95.00	4.30	0.65	0.00
100.00	4.30	0.65	0.00
105.00	4.30	0.65	0.00
110.00	4.30	0.65	0.00
115.00	4.30	0.65	0.00
120.00	4.30	0.65	0.00
125.00	4.30	0.65	0.00
130.00	4.30	0.65	0.00
135.00	4.30	0.65	0.00
140.00	4.30	0.65	0.00
145.00	4.30	0.65	0.00
150.00	4.30	0.65	0.00
155.00	4.30	0.65	0.00
160.00	4.30	0.65	0.00
165.00	4.30	0.65	0.00
170.00	4.30	0.65	0.00
175.00	4.30	0.65	0.00
180.00	4.30	0.65	0.00
185.00	4.30	0.65	0.00
190.00	4.30	0.65	0.00
195.00	4.30	0.65	0.00
200.00	4.30	0.65	0.00
205.00	4.30	0.65	0.00
210.00	4.30	0.65	0.00
215.00	4.30	0.65	0.00
220.00	4.30	0.65	0.00
225.00	4.30	0.65	0.00
230.00	4.30	0.65	0.00
235.00	4.30	0.65	0.00
240.00	4.30	0.65	0.00
245.00	4.30	0.65	0.00
250.00	4.30	0.65	0.00
255.00	4.30	0.65	0.00
260.00	4.30	0.65	0.00
265.00	4.30	0.65	0.00
270.00	4.30	0.65	0.00
275.00	4.30	0.65	0.00
280.00	4.30	0.65	0.00
285.00	4.30	0.65	0.00
290.00	4.30	0.65	0.00
295.00	4.30	0.65	0.00
300.00	4.30	0.65	0.00
305.00	4.30	0.65	0.00
310.00	4.30	0.65	0.00
315.00	4.30	0.65	0.00
320.00	4.30	0.65	0.00
325.00	4.30	0.65	0.00
330.00	4.30	0.65	0.00
335.00	4.30	0.65	0.00
340.00	4.30	0.65	0.00
345.00	4.30	0.65	0.00
350.00	4.30	0.65	0.00
355.00	4.30	0.65	0.00
360.00	4.30	0.65	0.00
365.00	4.30	0.65	0.00
370.00	4.30	0.65	0.00
375.00	4.30	0.65	0.00
380.00	4.30	0.65	0.00
385.00	4.30	0.65	0.00
390.00	4.30	0.65	0.00
395.00	4.30	0.65	0.00
400.00	4.30	0.65	0.00
405.00	4.30	0.65	0.00
410.00	4.30	0.65	0.00
415.00	4.30	0.65	0.00
420.00	4.30	0.65	0.00
425.00	4.30	0.65	0.00
430.00	4.30	0.65	0.00
435.00	4.30	0.65	0.00
440.00	4.30	0.65	0.00
445.00	4.30	0.65	0.00
450.00	4.30	0.65	0.00
455.00	4.30	0.65	0.00
460.00	4.30	0.65	0.00
465.00	4.30	0.65	0.00
470.00	4.30	0.65	0.00
475.00	4.30	0.65	0.00
480.00	4.30	0.65	0.00
485.00	4.30	0.65	0.00
490.00	4.30	0.65	0.00
495.00	4.30	0.65	0.00
500.00	4.30	0.65	0.00

Summary for Subcatchment 2A: Post 2A - Offsite

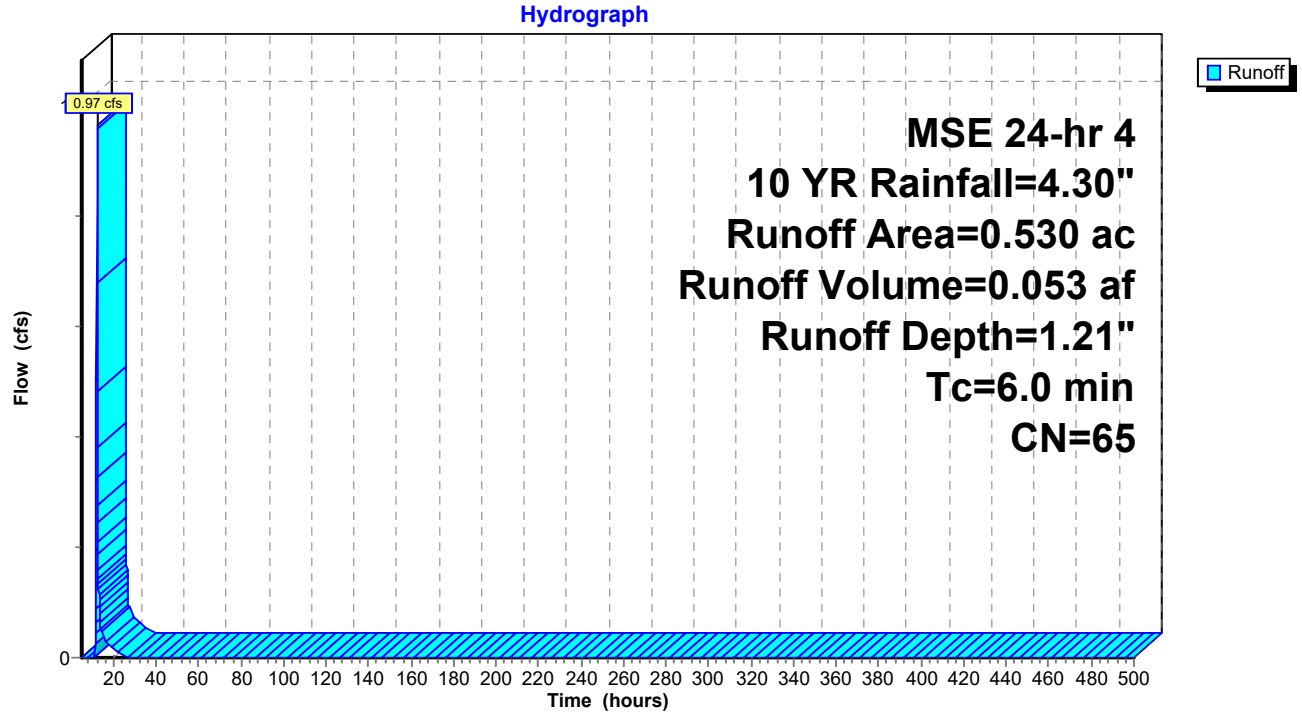
Runoff = 0.97 cfs @ 12.14 hrs, Volume= 0.053 af, Depth= 1.21"
Routed to Link 2L : Total Post - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 10 YR Rainfall=4.30"

	Area (ac)	CN	Description
*	0.060	98	Impervious
*	0.470	61	Post - B Soils
*	0.000	74	Post - C Soils
	0.530	65	Weighted Average
	0.470		88.68% Pervious Area
	0.060		11.32% Impervious Area

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

Subcatchment 2A: Post 2A - Offsite



Hydrograph for Subcatchment 2A: Post 2A - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.20	0.00	0.00	260.00	4.30	1.21	0.00
10.00	0.68	0.00	**0.00**	265.00	4.30	1.21	0.00
15.00	3.78	0.90	**0.05**	270.00	4.30	1.21	0.00
20.00	**4.16**	**1.12**	0.02	275.00	4.30	1.21	0.00
25.00	**4.30**	**1.21**	0.00	280.00	4.30	1.21	0.00
30.00	4.30	1.21	0.00	285.00	4.30	1.21	0.00
35.00	4.30	1.21	0.00	290.00	4.30	1.21	0.00
40.00	4.30	1.21	0.00	295.00	4.30	1.21	0.00
45.00	4.30	1.21	0.00	300.00	4.30	1.21	0.00
50.00	4.30	1.21	0.00	305.00	4.30	1.21	0.00
55.00	4.30	1.21	0.00	310.00	4.30	1.21	0.00
60.00	4.30	1.21	0.00	315.00	4.30	1.21	0.00
65.00	4.30	1.21	0.00	320.00	4.30	1.21	0.00
70.00	4.30	1.21	0.00	325.00	4.30	1.21	0.00
75.00	4.30	1.21	0.00	330.00	4.30	1.21	0.00
80.00	4.30	1.21	0.00	335.00	4.30	1.21	0.00
85.00	4.30	1.21	0.00	340.00	4.30	1.21	0.00
90.00	4.30	1.21	0.00	345.00	4.30	1.21	0.00
95.00	4.30	1.21	0.00	350.00	4.30	1.21	0.00
100.00	4.30	1.21	0.00	355.00	4.30	1.21	0.00
105.00	4.30	1.21	0.00	360.00	4.30	1.21	0.00
110.00	4.30	1.21	0.00	365.00	4.30	1.21	0.00
115.00	4.30	1.21	0.00	370.00	4.30	1.21	0.00
120.00	4.30	1.21	0.00	375.00	4.30	1.21	0.00
125.00	4.30	1.21	0.00	380.00	4.30	1.21	0.00
130.00	4.30	1.21	0.00	385.00	4.30	1.21	0.00
135.00	4.30	1.21	0.00	390.00	4.30	1.21	0.00
140.00	4.30	1.21	0.00	395.00	4.30	1.21	0.00
145.00	4.30	1.21	0.00	400.00	4.30	1.21	0.00
150.00	4.30	1.21	0.00	405.00	4.30	1.21	0.00
155.00	4.30	1.21	0.00	410.00	4.30	1.21	0.00
160.00	4.30	1.21	0.00	415.00	4.30	1.21	0.00
165.00	4.30	1.21	0.00	420.00	4.30	1.21	0.00
170.00	4.30	1.21	0.00	425.00	4.30	1.21	0.00
175.00	4.30	1.21	0.00	430.00	4.30	1.21	0.00
180.00	4.30	1.21	0.00	435.00	4.30	1.21	0.00
185.00	4.30	1.21	0.00	440.00	4.30	1.21	0.00
190.00	4.30	1.21	0.00	445.00	4.30	1.21	0.00
195.00	4.30	1.21	0.00	450.00	4.30	1.21	0.00
200.00	4.30	1.21	0.00	455.00	4.30	1.21	0.00
205.00	4.30	1.21	0.00	460.00	4.30	1.21	0.00
210.00	4.30	1.21	0.00	465.00	4.30	1.21	0.00
215.00	4.30	1.21	0.00	470.00	4.30	1.21	0.00
220.00	4.30	1.21	0.00	475.00	4.30	1.21	0.00
225.00	4.30	1.21	0.00	480.00	4.30	1.21	0.00
230.00	4.30	1.21	0.00	485.00	4.30	1.21	0.00
235.00	4.30	1.21	0.00	490.00	4.30	1.21	0.00
240.00	4.30	1.21	0.00	495.00	4.30	1.21	0.00
245.00	4.30	1.21	0.00	500.00	4.30	1.21	0.00
250.00	4.30	1.21	0.00				
255.00	4.30	1.21	0.00				

Summary for Subcatchment 3: Pre - North

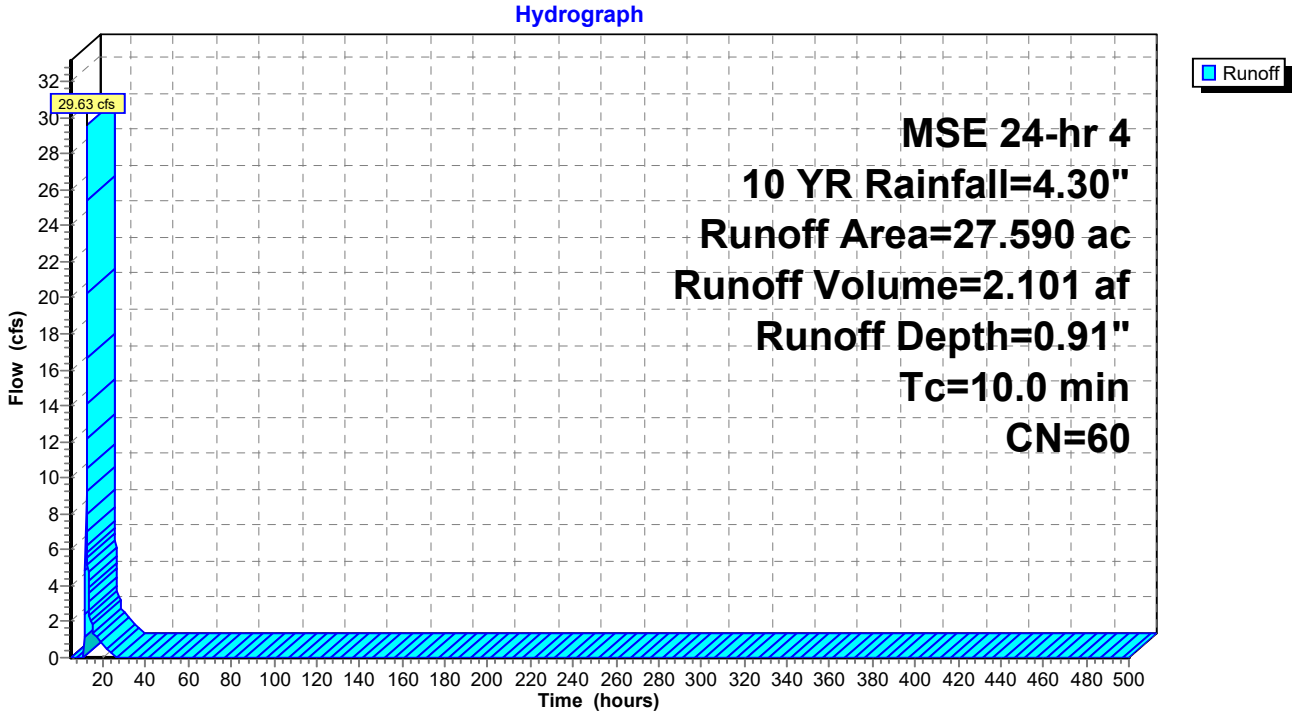
Runoff = 29.63 cfs @ 12.20 hrs, Volume= 2.101 af, Depth= 0.91"
Routed to Link 1L : Total Pre - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 10 YR Rainfall=4.30"

	Area (ac)	CN	Description
*	18.190	55	Pre Dev - B Soils
*	9.400	70	Pre Dev - C Soils
	27.590	60	Weighted Average
	27.590		100.00% Pervious Area

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

Subcatchment 3: Pre - North



Hydrograph for Subcatchment 3: Pre - North

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.20	0.00	0.00
10.00	0.68	0.00	**0.00**
15.00	3.78	0.66	**1.97**
20.00	**4.16**	**0.84**	0.77
25.00	**4.30**	**0.91**	0.00
30.00	4.30	0.91	0.00
35.00	4.30	0.91	0.00
40.00	4.30	0.91	0.00
45.00	4.30	0.91	0.00
50.00	4.30	0.91	0.00
55.00	4.30	0.91	0.00
60.00	4.30	0.91	0.00
65.00	4.30	0.91	0.00
70.00	4.30	0.91	0.00
75.00	4.30	0.91	0.00
80.00	4.30	0.91	0.00
85.00	4.30	0.91	0.00
90.00	4.30	0.91	0.00
95.00	4.30	0.91	0.00
100.00	4.30	0.91	0.00
105.00	4.30	0.91	0.00
110.00	4.30	0.91	0.00
115.00	4.30	0.91	0.00
120.00	4.30	0.91	0.00
125.00	4.30	0.91	0.00
130.00	4.30	0.91	0.00
135.00	4.30	0.91	0.00
140.00	4.30	0.91	0.00
145.00	4.30	0.91	0.00
150.00	4.30	0.91	0.00
155.00	4.30	0.91	0.00
160.00	4.30	0.91	0.00
165.00	4.30	0.91	0.00
170.00	4.30	0.91	0.00
175.00	4.30	0.91	0.00
180.00	4.30	0.91	0.00
185.00	4.30	0.91	0.00
190.00	4.30	0.91	0.00
195.00	4.30	0.91	0.00
200.00	4.30	0.91	0.00
205.00	4.30	0.91	0.00
210.00	4.30	0.91	0.00
215.00	4.30	0.91	0.00
220.00	4.30	0.91	0.00
225.00	4.30	0.91	0.00
230.00	4.30	0.91	0.00
235.00	4.30	0.91	0.00
240.00	4.30	0.91	0.00
245.00	4.30	0.91	0.00
250.00	4.30	0.91	0.00
255.00	4.30	0.91	0.00
260.00	4.30	0.91	0.00
265.00	4.30	0.91	0.00
270.00	4.30	0.91	0.00
275.00	4.30	0.91	0.00
280.00	4.30	0.91	0.00
285.00	4.30	0.91	0.00
290.00	4.30	0.91	0.00
295.00	4.30	0.91	0.00
300.00	4.30	0.91	0.00
305.00	4.30	0.91	0.00
310.00	4.30	0.91	0.00
315.00	4.30	0.91	0.00
320.00	4.30	0.91	0.00
325.00	4.30	0.91	0.00
330.00	4.30	0.91	0.00
335.00	4.30	0.91	0.00
340.00	4.30	0.91	0.00
345.00	4.30	0.91	0.00
350.00	4.30	0.91	0.00
355.00	4.30	0.91	0.00
360.00	4.30	0.91	0.00
365.00	4.30	0.91	0.00
370.00	4.30	0.91	0.00
375.00	4.30	0.91	0.00
380.00	4.30	0.91	0.00
385.00	4.30	0.91	0.00
390.00	4.30	0.91	0.00
395.00	4.30	0.91	0.00
400.00	4.30	0.91	0.00
405.00	4.30	0.91	0.00
410.00	4.30	0.91	0.00
415.00	4.30	0.91	0.00
420.00	4.30	0.91	0.00
425.00	4.30	0.91	0.00
430.00	4.30	0.91	0.00
435.00	4.30	0.91	0.00
440.00	4.30	0.91	0.00
445.00	4.30	0.91	0.00
450.00	4.30	0.91	0.00
455.00	4.30	0.91	0.00
460.00	4.30	0.91	0.00
465.00	4.30	0.91	0.00
470.00	4.30	0.91	0.00
475.00	4.30	0.91	0.00
480.00	4.30	0.91	0.00
485.00	4.30	0.91	0.00
490.00	4.30	0.91	0.00
495.00	4.30	0.91	0.00
500.00	4.30	0.91	0.00

Summary for Subcatchment 3A: Post 3A

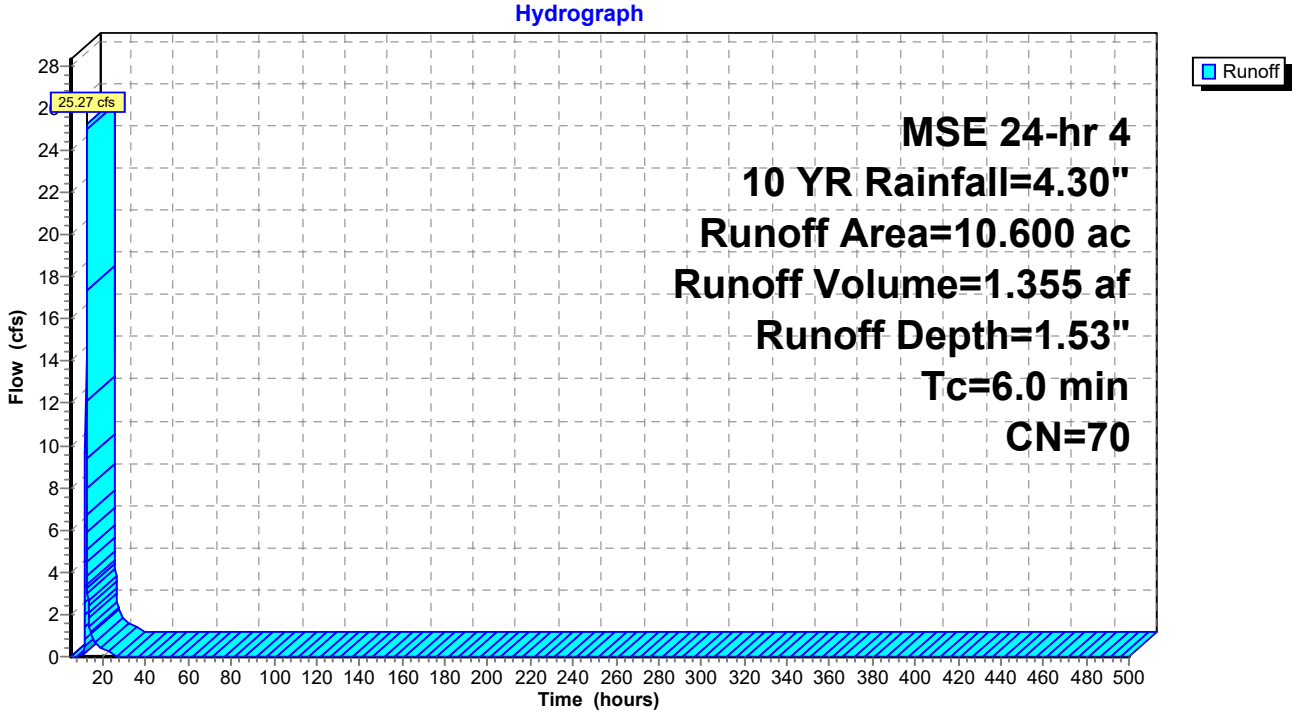
Runoff = 25.27 cfs @ 12.14 hrs, Volume= 1.355 af, Depth= 1.53"
Routed to Pond P3A : Pond 3A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 10 YR Rainfall=4.30"

	Area (ac)	CN	Description
*	1.970	98	Impervious
*	6.570	61	Post - B Soils
*	2.060	74	Post - C Soils
	10.600	70	Weighted Average
	8.630		81.42% Pervious Area
	1.970		18.58% Impervious Area

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

Subcatchment 3A: Post 3A



Hydrograph for Subcatchment 3A: Post 3A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.20	0.00	0.00
10.00	0.68	0.00	**0.00**
15.00	3.78	1.18	**1.05**
20.00	**4.16**	**1.44**	0.39
25.00	**4.30**	**1.53**	0.00
30.00	4.30	1.53	0.00
35.00	4.30	1.53	0.00
40.00	4.30	1.53	0.00
45.00	4.30	1.53	0.00
50.00	4.30	1.53	0.00
55.00	4.30	1.53	0.00
60.00	4.30	1.53	0.00
65.00	4.30	1.53	0.00
70.00	4.30	1.53	0.00
75.00	4.30	1.53	0.00
80.00	4.30	1.53	0.00
85.00	4.30	1.53	0.00
90.00	4.30	1.53	0.00
95.00	4.30	1.53	0.00
100.00	4.30	1.53	0.00
105.00	4.30	1.53	0.00
110.00	4.30	1.53	0.00
115.00	4.30	1.53	0.00
120.00	4.30	1.53	0.00
125.00	4.30	1.53	0.00
130.00	4.30	1.53	0.00
135.00	4.30	1.53	0.00
140.00	4.30	1.53	0.00
145.00	4.30	1.53	0.00
150.00	4.30	1.53	0.00
155.00	4.30	1.53	0.00
160.00	4.30	1.53	0.00
165.00	4.30	1.53	0.00
170.00	4.30	1.53	0.00
175.00	4.30	1.53	0.00
180.00	4.30	1.53	0.00
185.00	4.30	1.53	0.00
190.00	4.30	1.53	0.00
195.00	4.30	1.53	0.00
200.00	4.30	1.53	0.00
205.00	4.30	1.53	0.00
210.00	4.30	1.53	0.00
215.00	4.30	1.53	0.00
220.00	4.30	1.53	0.00
225.00	4.30	1.53	0.00
230.00	4.30	1.53	0.00
235.00	4.30	1.53	0.00
240.00	4.30	1.53	0.00
245.00	4.30	1.53	0.00
250.00	4.30	1.53	0.00
255.00	4.30	1.53	0.00
260.00	4.30	1.53	0.00
265.00	4.30	1.53	0.00
270.00	4.30	1.53	0.00
275.00	4.30	1.53	0.00
280.00	4.30	1.53	0.00
285.00	4.30	1.53	0.00
290.00	4.30	1.53	0.00
295.00	4.30	1.53	0.00
300.00	4.30	1.53	0.00
305.00	4.30	1.53	0.00
310.00	4.30	1.53	0.00
315.00	4.30	1.53	0.00
320.00	4.30	1.53	0.00
325.00	4.30	1.53	0.00
330.00	4.30	1.53	0.00
335.00	4.30	1.53	0.00
340.00	4.30	1.53	0.00
345.00	4.30	1.53	0.00
350.00	4.30	1.53	0.00
355.00	4.30	1.53	0.00
360.00	4.30	1.53	0.00
365.00	4.30	1.53	0.00
370.00	4.30	1.53	0.00
375.00	4.30	1.53	0.00
380.00	4.30	1.53	0.00
385.00	4.30	1.53	0.00
390.00	4.30	1.53	0.00
395.00	4.30	1.53	0.00
400.00	4.30	1.53	0.00
405.00	4.30	1.53	0.00
410.00	4.30	1.53	0.00
415.00	4.30	1.53	0.00
420.00	4.30	1.53	0.00
425.00	4.30	1.53	0.00
430.00	4.30	1.53	0.00
435.00	4.30	1.53	0.00
440.00	4.30	1.53	0.00
445.00	4.30	1.53	0.00
450.00	4.30	1.53	0.00
455.00	4.30	1.53	0.00
460.00	4.30	1.53	0.00
465.00	4.30	1.53	0.00
470.00	4.30	1.53	0.00
475.00	4.30	1.53	0.00
480.00	4.30	1.53	0.00
485.00	4.30	1.53	0.00
490.00	4.30	1.53	0.00
495.00	4.30	1.53	0.00
500.00	4.30	1.53	0.00

Summary for Subcatchment 3B: Post 3B

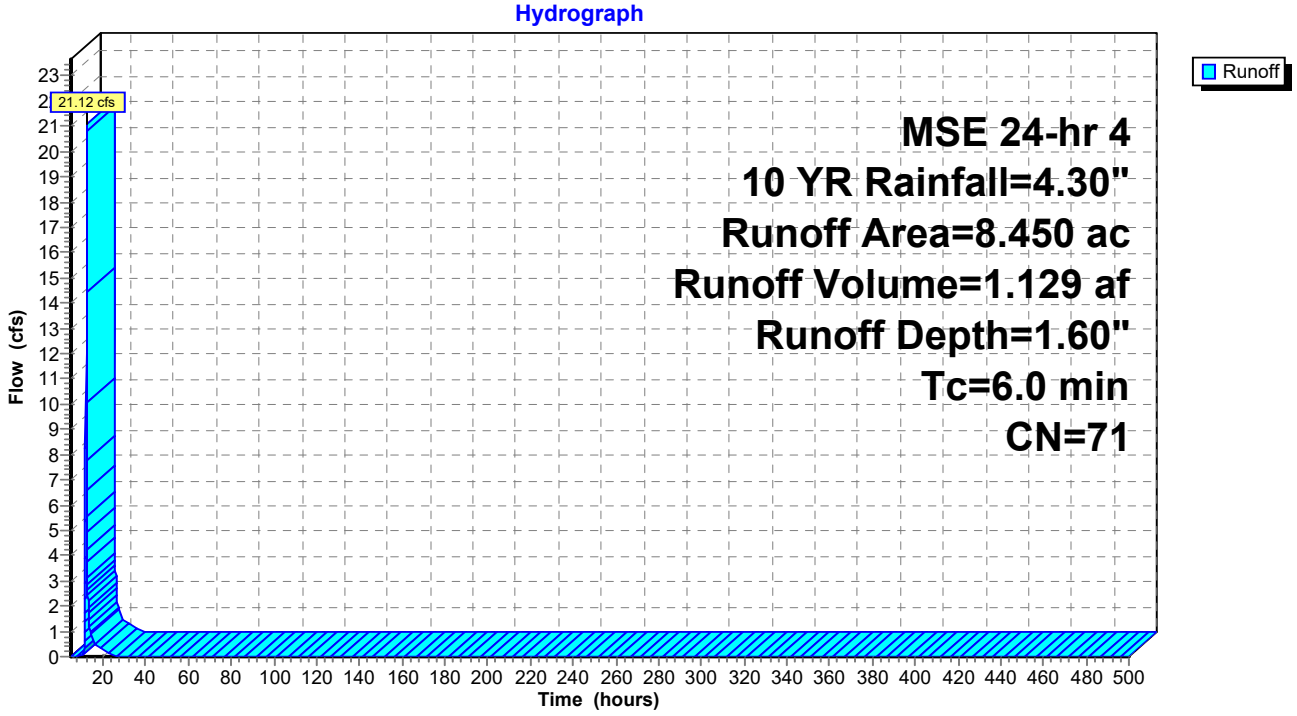
Runoff = 21.12 cfs @ 12.14 hrs, Volume= 1.129 af, Depth= 1.60"
Routed to Pond P3B : Pond 3B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 10 YR Rainfall=4.30"

	Area (ac)	CN	Description
*	1.680	98	Impervious
*	5.290	61	Post - B Soils
*	1.480	74	Post - C Soils
	8.450	71	Weighted Average
	6.770		80.12% Pervious Area
	1.680		19.88% Impervious Area

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

Subcatchment 3B: Post 3B



Hydrograph for Subcatchment 3B: Post 3B

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.20	0.00	0.00
10.00	0.68	0.00	**0.00**
15.00	3.78	1.25	**0.86**
20.00	**4.16**	**1.51**	0.32
25.00	**4.30**	**1.60**	0.00
30.00	4.30	1.60	0.00
35.00	4.30	1.60	0.00
40.00	4.30	1.60	0.00
45.00	4.30	1.60	0.00
50.00	4.30	1.60	0.00
55.00	4.30	1.60	0.00
60.00	4.30	1.60	0.00
65.00	4.30	1.60	0.00
70.00	4.30	1.60	0.00
75.00	4.30	1.60	0.00
80.00	4.30	1.60	0.00
85.00	4.30	1.60	0.00
90.00	4.30	1.60	0.00
95.00	4.30	1.60	0.00
100.00	4.30	1.60	0.00
105.00	4.30	1.60	0.00
110.00	4.30	1.60	0.00
115.00	4.30	1.60	0.00
120.00	4.30	1.60	0.00
125.00	4.30	1.60	0.00
130.00	4.30	1.60	0.00
135.00	4.30	1.60	0.00
140.00	4.30	1.60	0.00
145.00	4.30	1.60	0.00
150.00	4.30	1.60	0.00
155.00	4.30	1.60	0.00
160.00	4.30	1.60	0.00
165.00	4.30	1.60	0.00
170.00	4.30	1.60	0.00
175.00	4.30	1.60	0.00
180.00	4.30	1.60	0.00
185.00	4.30	1.60	0.00
190.00	4.30	1.60	0.00
195.00	4.30	1.60	0.00
200.00	4.30	1.60	0.00
205.00	4.30	1.60	0.00
210.00	4.30	1.60	0.00
215.00	4.30	1.60	0.00
220.00	4.30	1.60	0.00
225.00	4.30	1.60	0.00
230.00	4.30	1.60	0.00
235.00	4.30	1.60	0.00
240.00	4.30	1.60	0.00
245.00	4.30	1.60	0.00
250.00	4.30	1.60	0.00
255.00	4.30	1.60	0.00
260.00	4.30	1.60	0.00
265.00	4.30	1.60	0.00
270.00	4.30	1.60	0.00
275.00	4.30	1.60	0.00
280.00	4.30	1.60	0.00
285.00	4.30	1.60	0.00
290.00	4.30	1.60	0.00
295.00	4.30	1.60	0.00
300.00	4.30	1.60	0.00
305.00	4.30	1.60	0.00
310.00	4.30	1.60	0.00
315.00	4.30	1.60	0.00
320.00	4.30	1.60	0.00
325.00	4.30	1.60	0.00
330.00	4.30	1.60	0.00
335.00	4.30	1.60	0.00
340.00	4.30	1.60	0.00
345.00	4.30	1.60	0.00
350.00	4.30	1.60	0.00
355.00	4.30	1.60	0.00
360.00	4.30	1.60	0.00
365.00	4.30	1.60	0.00
370.00	4.30	1.60	0.00
375.00	4.30	1.60	0.00
380.00	4.30	1.60	0.00
385.00	4.30	1.60	0.00
390.00	4.30	1.60	0.00
395.00	4.30	1.60	0.00
400.00	4.30	1.60	0.00
405.00	4.30	1.60	0.00
410.00	4.30	1.60	0.00
415.00	4.30	1.60	0.00
420.00	4.30	1.60	0.00
425.00	4.30	1.60	0.00
430.00	4.30	1.60	0.00
435.00	4.30	1.60	0.00
440.00	4.30	1.60	0.00
445.00	4.30	1.60	0.00
450.00	4.30	1.60	0.00
455.00	4.30	1.60	0.00
460.00	4.30	1.60	0.00
465.00	4.30	1.60	0.00
470.00	4.30	1.60	0.00
475.00	4.30	1.60	0.00
480.00	4.30	1.60	0.00
485.00	4.30	1.60	0.00
490.00	4.30	1.60	0.00
495.00	4.30	1.60	0.00
500.00	4.30	1.60	0.00

Summary for Subcatchment 3C: Post 3C

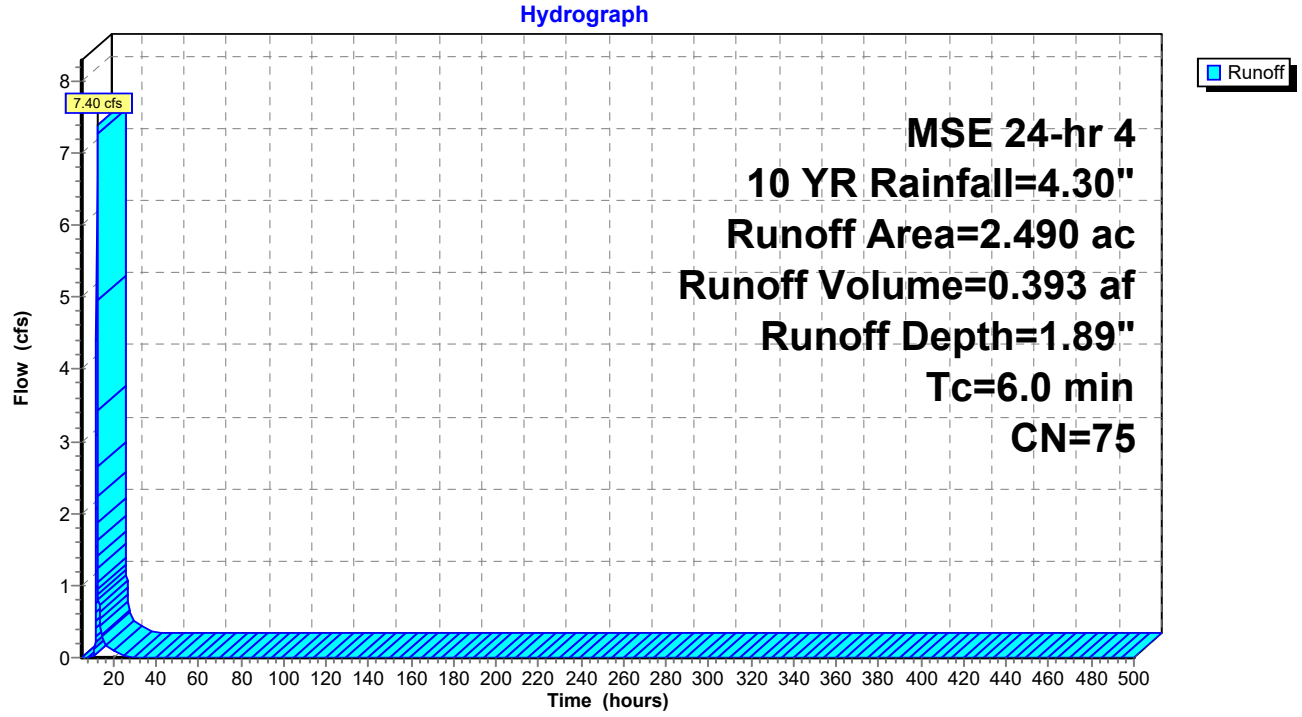
Runoff = 7.40 cfs @ 12.14 hrs, Volume= 0.393 af, Depth= 1.89"
Routed to Pond P3C : Pond 3C

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 10 YR Rainfall=4.30"

	Area (ac)	CN	Description
*	0.570	98	Impervious
*	0.800	61	Post - B Soils
*	1.120	74	Post - C Soils
	2.490	75	Weighted Average
	1.920		77.11% Pervious Area
	0.570		22.89% Impervious Area

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

Subcatchment 3C: Post 3C



Hydrograph for Subcatchment 3C: Post 3C

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.20	0.00	0.00
10.00	0.68	0.00	**0.00**
15.00	3.78	1.50	**0.28**
20.00	**4.16**	**1.79**	0.10
25.00	**4.30**	**1.89**	0.00
30.00	4.30	1.89	0.00
35.00	4.30	1.89	0.00
40.00	4.30	1.89	0.00
45.00	4.30	1.89	0.00
50.00	4.30	1.89	0.00
55.00	4.30	1.89	0.00
60.00	4.30	1.89	0.00
65.00	4.30	1.89	0.00
70.00	4.30	1.89	0.00
75.00	4.30	1.89	0.00
80.00	4.30	1.89	0.00
85.00	4.30	1.89	0.00
90.00	4.30	1.89	0.00
95.00	4.30	1.89	0.00
100.00	4.30	1.89	0.00
105.00	4.30	1.89	0.00
110.00	4.30	1.89	0.00
115.00	4.30	1.89	0.00
120.00	4.30	1.89	0.00
125.00	4.30	1.89	0.00
130.00	4.30	1.89	0.00
135.00	4.30	1.89	0.00
140.00	4.30	1.89	0.00
145.00	4.30	1.89	0.00
150.00	4.30	1.89	0.00
155.00	4.30	1.89	0.00
160.00	4.30	1.89	0.00
165.00	4.30	1.89	0.00
170.00	4.30	1.89	0.00
175.00	4.30	1.89	0.00
180.00	4.30	1.89	0.00
185.00	4.30	1.89	0.00
190.00	4.30	1.89	0.00
195.00	4.30	1.89	0.00
200.00	4.30	1.89	0.00
205.00	4.30	1.89	0.00
210.00	4.30	1.89	0.00
215.00	4.30	1.89	0.00
220.00	4.30	1.89	0.00
225.00	4.30	1.89	0.00
230.00	4.30	1.89	0.00
235.00	4.30	1.89	0.00
240.00	4.30	1.89	0.00
245.00	4.30	1.89	0.00
250.00	4.30	1.89	0.00
255.00	4.30	1.89	0.00
260.00	4.30	1.89	0.00
265.00	4.30	1.89	0.00
270.00	4.30	1.89	0.00
275.00	4.30	1.89	0.00
280.00	4.30	1.89	0.00
285.00	4.30	1.89	0.00
290.00	4.30	1.89	0.00
295.00	4.30	1.89	0.00
300.00	4.30	1.89	0.00
305.00	4.30	1.89	0.00
310.00	4.30	1.89	0.00
315.00	4.30	1.89	0.00
320.00	4.30	1.89	0.00
325.00	4.30	1.89	0.00
330.00	4.30	1.89	0.00
335.00	4.30	1.89	0.00
340.00	4.30	1.89	0.00
345.00	4.30	1.89	0.00
350.00	4.30	1.89	0.00
355.00	4.30	1.89	0.00
360.00	4.30	1.89	0.00
365.00	4.30	1.89	0.00
370.00	4.30	1.89	0.00
375.00	4.30	1.89	0.00
380.00	4.30	1.89	0.00
385.00	4.30	1.89	0.00
390.00	4.30	1.89	0.00
395.00	4.30	1.89	0.00
400.00	4.30	1.89	0.00
405.00	4.30	1.89	0.00
410.00	4.30	1.89	0.00
415.00	4.30	1.89	0.00
420.00	4.30	1.89	0.00
425.00	4.30	1.89	0.00
430.00	4.30	1.89	0.00
435.00	4.30	1.89	0.00
440.00	4.30	1.89	0.00
445.00	4.30	1.89	0.00
450.00	4.30	1.89	0.00
455.00	4.30	1.89	0.00
460.00	4.30	1.89	0.00
465.00	4.30	1.89	0.00
470.00	4.30	1.89	0.00
475.00	4.30	1.89	0.00
480.00	4.30	1.89	0.00
485.00	4.30	1.89	0.00
490.00	4.30	1.89	0.00
495.00	4.30	1.89	0.00
500.00	4.30	1.89	0.00

Summary for Subcatchment 3D: Post 3D

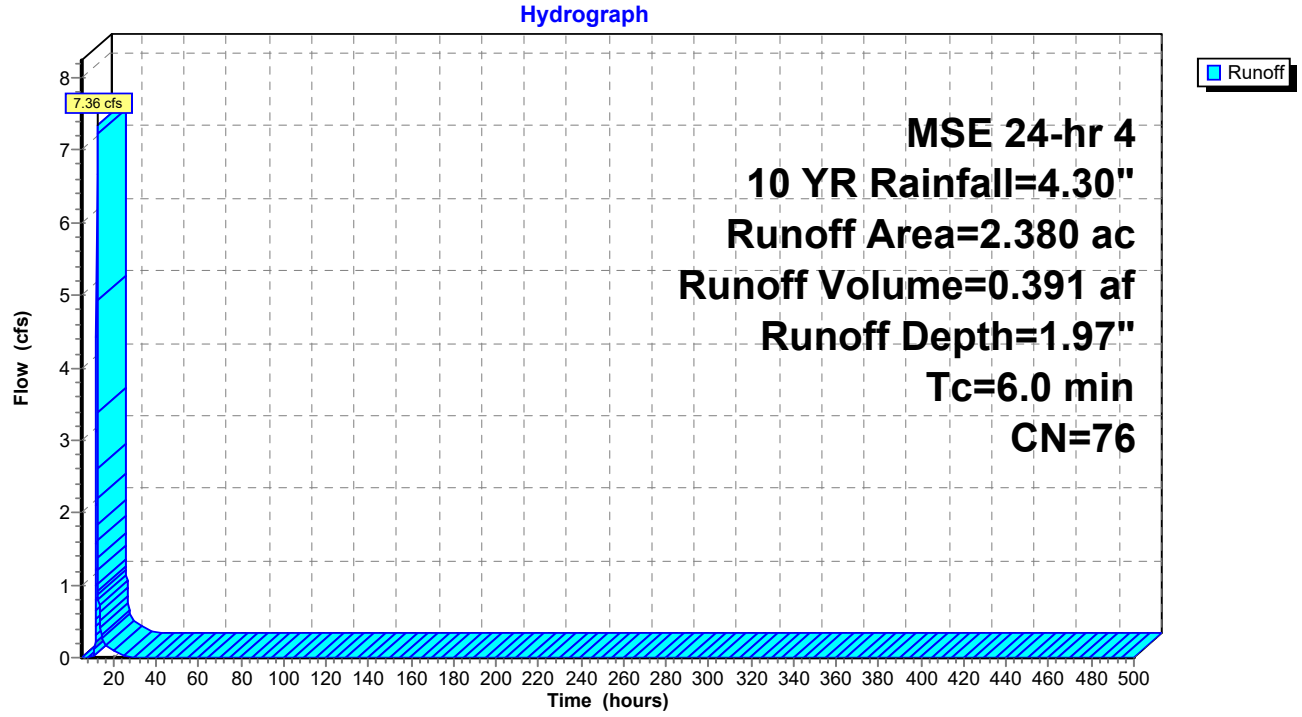
Runoff = 7.36 cfs @ 12.13 hrs, Volume= 0.391 af, Depth= 1.97"
Routed to Pond P3D : Pond 3D

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 10 YR Rainfall=4.30"

	Area (ac)	CN	Description
*	0.570	98	Impervious
*	0.610	61	Post - B Soils
*	1.200	74	Post - C Soils
	2.380	76	Weighted Average
	1.810		76.05% Pervious Area
	0.570		23.95% Impervious Area

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

Subcatchment 3D: Post 3D



Hydrograph for Subcatchment 3D: Post 3D

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.20	0.00	0.00	260.00	4.30	1.97	0.00
10.00	0.68	0.00	**0.01**	265.00	4.30	1.97	0.00
15.00	3.78	1.57	**0.27**	270.00	4.30	1.97	0.00
20.00	**4.16**	**1.86**	0.10	275.00	4.30	1.97	0.00
25.00	**4.30**	**1.97**	0.00	280.00	4.30	1.97	0.00
30.00	4.30	1.97	0.00	285.00	4.30	1.97	0.00
35.00	4.30	1.97	0.00	290.00	4.30	1.97	0.00
40.00	4.30	1.97	0.00	295.00	4.30	1.97	0.00
45.00	4.30	1.97	0.00	300.00	4.30	1.97	0.00
50.00	4.30	1.97	0.00	305.00	4.30	1.97	0.00
55.00	4.30	1.97	0.00	310.00	4.30	1.97	0.00
60.00	4.30	1.97	0.00	315.00	4.30	1.97	0.00
65.00	4.30	1.97	0.00	320.00	4.30	1.97	0.00
70.00	4.30	1.97	0.00	325.00	4.30	1.97	0.00
75.00	4.30	1.97	0.00	330.00	4.30	1.97	0.00
80.00	4.30	1.97	0.00	335.00	4.30	1.97	0.00
85.00	4.30	1.97	0.00	340.00	4.30	1.97	0.00
90.00	4.30	1.97	0.00	345.00	4.30	1.97	0.00
95.00	4.30	1.97	0.00	350.00	4.30	1.97	0.00
100.00	4.30	1.97	0.00	355.00	4.30	1.97	0.00
105.00	4.30	1.97	0.00	360.00	4.30	1.97	0.00
110.00	4.30	1.97	0.00	365.00	4.30	1.97	0.00
115.00	4.30	1.97	0.00	370.00	4.30	1.97	0.00
120.00	4.30	1.97	0.00	375.00	4.30	1.97	0.00
125.00	4.30	1.97	0.00	380.00	4.30	1.97	0.00
130.00	4.30	1.97	0.00	385.00	4.30	1.97	0.00
135.00	4.30	1.97	0.00	390.00	4.30	1.97	0.00
140.00	4.30	1.97	0.00	395.00	4.30	1.97	0.00
145.00	4.30	1.97	0.00	400.00	4.30	1.97	0.00
150.00	4.30	1.97	0.00	405.00	4.30	1.97	0.00
155.00	4.30	1.97	0.00	410.00	4.30	1.97	0.00
160.00	4.30	1.97	0.00	415.00	4.30	1.97	0.00
165.00	4.30	1.97	0.00	420.00	4.30	1.97	0.00
170.00	4.30	1.97	0.00	425.00	4.30	1.97	0.00
175.00	4.30	1.97	0.00	430.00	4.30	1.97	0.00
180.00	4.30	1.97	0.00	435.00	4.30	1.97	0.00
185.00	4.30	1.97	0.00	440.00	4.30	1.97	0.00
190.00	4.30	1.97	0.00	445.00	4.30	1.97	0.00
195.00	4.30	1.97	0.00	450.00	4.30	1.97	0.00
200.00	4.30	1.97	0.00	455.00	4.30	1.97	0.00
205.00	4.30	1.97	0.00	460.00	4.30	1.97	0.00
210.00	4.30	1.97	0.00	465.00	4.30	1.97	0.00
215.00	4.30	1.97	0.00	470.00	4.30	1.97	0.00
220.00	4.30	1.97	0.00	475.00	4.30	1.97	0.00
225.00	4.30	1.97	0.00	480.00	4.30	1.97	0.00
230.00	4.30	1.97	0.00	485.00	4.30	1.97	0.00
235.00	4.30	1.97	0.00	490.00	4.30	1.97	0.00
240.00	4.30	1.97	0.00	495.00	4.30	1.97	0.00
245.00	4.30	1.97	0.00	500.00	4.30	1.97	0.00
250.00	4.30	1.97	0.00				
255.00	4.30	1.97	0.00				

Summary for Subcatchment 3E: Post 3E

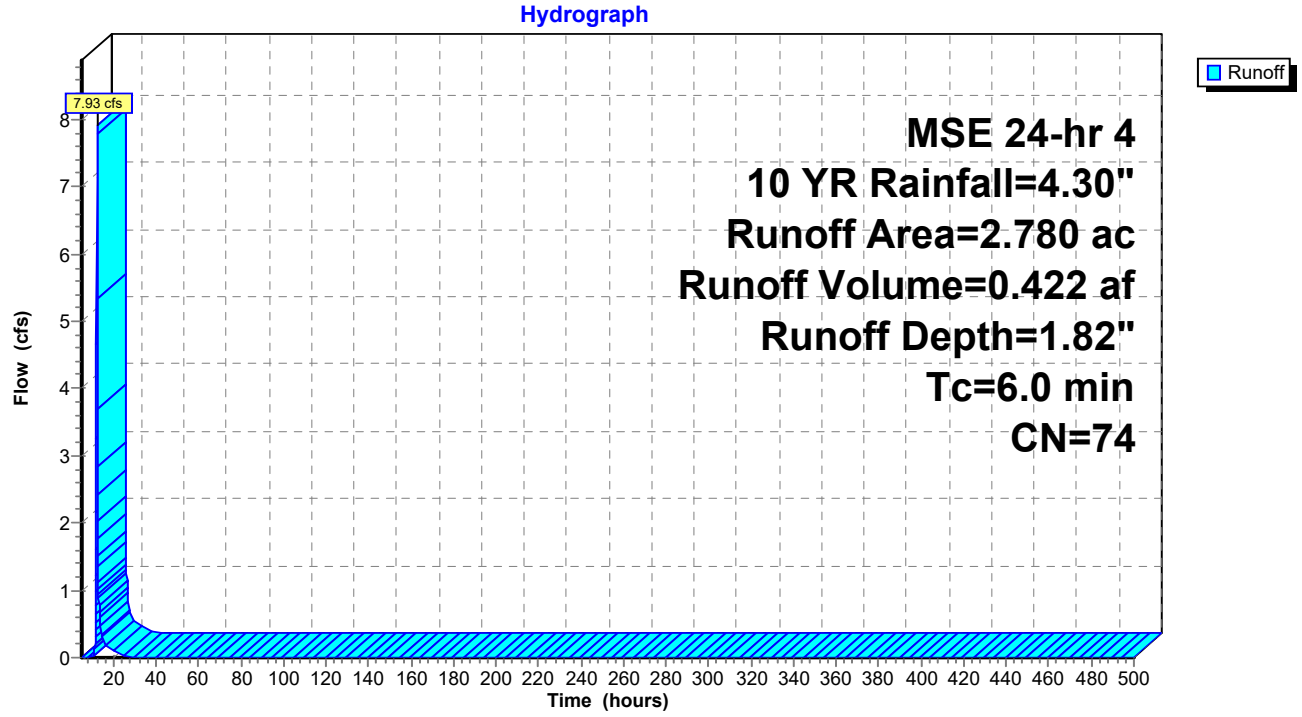
Runoff = 7.93 cfs @ 12.14 hrs, Volume= 0.422 af, Depth= 1.82"
Routed to Pond P3E : Pond 3E

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 10 YR Rainfall=4.30"

	Area (ac)	CN	Description
*	0.530	98	Impervious
*	0.920	61	Post - B Soils
*	1.330	74	Post - C Soils
	2.780	74	Weighted Average
	2.250		80.94% Pervious Area
	0.530		19.06% Impervious Area

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

Subcatchment 3E: Post 3E



Hydrograph for Subcatchment 3E: Post 3E

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.20	0.00	0.00
10.00	0.68	0.00	**0.00**
15.00	3.78	1.44	**0.30**
20.00	**4.16**	**1.72**	0.11
25.00	**4.30**	**1.82**	0.00
30.00	4.30	1.82	0.00
35.00	4.30	1.82	0.00
40.00	4.30	1.82	0.00
45.00	4.30	1.82	0.00
50.00	4.30	1.82	0.00
55.00	4.30	1.82	0.00
60.00	4.30	1.82	0.00
65.00	4.30	1.82	0.00
70.00	4.30	1.82	0.00
75.00	4.30	1.82	0.00
80.00	4.30	1.82	0.00
85.00	4.30	1.82	0.00
90.00	4.30	1.82	0.00
95.00	4.30	1.82	0.00
100.00	4.30	1.82	0.00
105.00	4.30	1.82	0.00
110.00	4.30	1.82	0.00
115.00	4.30	1.82	0.00
120.00	4.30	1.82	0.00
125.00	4.30	1.82	0.00
130.00	4.30	1.82	0.00
135.00	4.30	1.82	0.00
140.00	4.30	1.82	0.00
145.00	4.30	1.82	0.00
150.00	4.30	1.82	0.00
155.00	4.30	1.82	0.00
160.00	4.30	1.82	0.00
165.00	4.30	1.82	0.00
170.00	4.30	1.82	0.00
175.00	4.30	1.82	0.00
180.00	4.30	1.82	0.00
185.00	4.30	1.82	0.00
190.00	4.30	1.82	0.00
195.00	4.30	1.82	0.00
200.00	4.30	1.82	0.00
205.00	4.30	1.82	0.00
210.00	4.30	1.82	0.00
215.00	4.30	1.82	0.00
220.00	4.30	1.82	0.00
225.00	4.30	1.82	0.00
230.00	4.30	1.82	0.00
235.00	4.30	1.82	0.00
240.00	4.30	1.82	0.00
245.00	4.30	1.82	0.00
250.00	4.30	1.82	0.00
255.00	4.30	1.82	0.00
260.00	4.30	1.82	0.00
265.00	4.30	1.82	0.00
270.00	4.30	1.82	0.00
275.00	4.30	1.82	0.00
280.00	4.30	1.82	0.00
285.00	4.30	1.82	0.00
290.00	4.30	1.82	0.00
295.00	4.30	1.82	0.00
300.00	4.30	1.82	0.00
305.00	4.30	1.82	0.00
310.00	4.30	1.82	0.00
315.00	4.30	1.82	0.00
320.00	4.30	1.82	0.00
325.00	4.30	1.82	0.00
330.00	4.30	1.82	0.00
335.00	4.30	1.82	0.00
340.00	4.30	1.82	0.00
345.00	4.30	1.82	0.00
350.00	4.30	1.82	0.00
355.00	4.30	1.82	0.00
360.00	4.30	1.82	0.00
365.00	4.30	1.82	0.00
370.00	4.30	1.82	0.00
375.00	4.30	1.82	0.00
380.00	4.30	1.82	0.00
385.00	4.30	1.82	0.00
390.00	4.30	1.82	0.00
395.00	4.30	1.82	0.00
400.00	4.30	1.82	0.00
405.00	4.30	1.82	0.00
410.00	4.30	1.82	0.00
415.00	4.30	1.82	0.00
420.00	4.30	1.82	0.00
425.00	4.30	1.82	0.00
430.00	4.30	1.82	0.00
435.00	4.30	1.82	0.00
440.00	4.30	1.82	0.00
445.00	4.30	1.82	0.00
450.00	4.30	1.82	0.00
455.00	4.30	1.82	0.00
460.00	4.30	1.82	0.00
465.00	4.30	1.82	0.00
470.00	4.30	1.82	0.00
475.00	4.30	1.82	0.00
480.00	4.30	1.82	0.00
485.00	4.30	1.82	0.00
490.00	4.30	1.82	0.00
495.00	4.30	1.82	0.00
500.00	4.30	1.82	0.00

Summary for Subcatchment 3Y: Post 3Y - Offsite

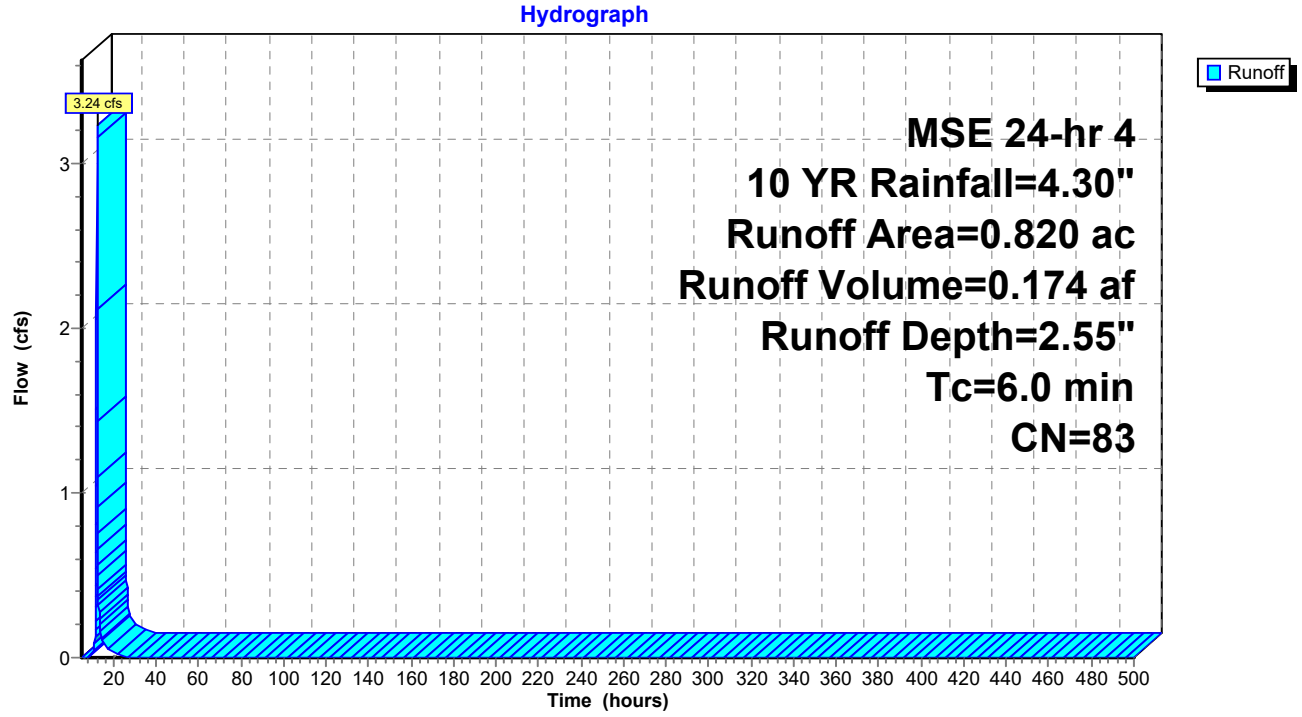
Runoff = 3.24 cfs @ 12.13 hrs, Volume= 0.174 af, Depth= 2.55"
Routed to Link 4L : Post - North

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 10 YR Rainfall=4.30"

	Area (ac)	CN	Description
*	0.300	98	Impervious
*	0.000	61	Post - B Soils
*	0.520	74	Post - C Soils
	0.820	83	Weighted Average
	0.520		63.41% Pervious Area
	0.300		36.59% Impervious Area

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

Subcatchment 3Y: Post 3Y - Offsite



Hydrograph for Subcatchment 3Y: Post 3Y - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.20	0.00	0.00	260.00	4.30	2.55	0.00
10.00	0.68	0.03	**0.03**	265.00	4.30	2.55	0.00
15.00	3.78	2.10	**0.11**	270.00	4.30	2.55	0.00
20.00	**4.16**	**2.43**	0.04	275.00	4.30	2.55	0.00
25.00	**4.30**	**2.55**	0.00	280.00	4.30	2.55	0.00
30.00	4.30	2.55	0.00	285.00	4.30	2.55	0.00
35.00	4.30	2.55	0.00	290.00	4.30	2.55	0.00
40.00	4.30	2.55	0.00	295.00	4.30	2.55	0.00
45.00	4.30	2.55	0.00	300.00	4.30	2.55	0.00
50.00	4.30	2.55	0.00	305.00	4.30	2.55	0.00
55.00	4.30	2.55	0.00	310.00	4.30	2.55	0.00
60.00	4.30	2.55	0.00	315.00	4.30	2.55	0.00
65.00	4.30	2.55	0.00	320.00	4.30	2.55	0.00
70.00	4.30	2.55	0.00	325.00	4.30	2.55	0.00
75.00	4.30	2.55	0.00	330.00	4.30	2.55	0.00
80.00	4.30	2.55	0.00	335.00	4.30	2.55	0.00
85.00	4.30	2.55	0.00	340.00	4.30	2.55	0.00
90.00	4.30	2.55	0.00	345.00	4.30	2.55	0.00
95.00	4.30	2.55	0.00	350.00	4.30	2.55	0.00
100.00	4.30	2.55	0.00	355.00	4.30	2.55	0.00
105.00	4.30	2.55	0.00	360.00	4.30	2.55	0.00
110.00	4.30	2.55	0.00	365.00	4.30	2.55	0.00
115.00	4.30	2.55	0.00	370.00	4.30	2.55	0.00
120.00	4.30	2.55	0.00	375.00	4.30	2.55	0.00
125.00	4.30	2.55	0.00	380.00	4.30	2.55	0.00
130.00	4.30	2.55	0.00	385.00	4.30	2.55	0.00
135.00	4.30	2.55	0.00	390.00	4.30	2.55	0.00
140.00	4.30	2.55	0.00	395.00	4.30	2.55	0.00
145.00	4.30	2.55	0.00	400.00	4.30	2.55	0.00
150.00	4.30	2.55	0.00	405.00	4.30	2.55	0.00
155.00	4.30	2.55	0.00	410.00	4.30	2.55	0.00
160.00	4.30	2.55	0.00	415.00	4.30	2.55	0.00
165.00	4.30	2.55	0.00	420.00	4.30	2.55	0.00
170.00	4.30	2.55	0.00	425.00	4.30	2.55	0.00
175.00	4.30	2.55	0.00	430.00	4.30	2.55	0.00
180.00	4.30	2.55	0.00	435.00	4.30	2.55	0.00
185.00	4.30	2.55	0.00	440.00	4.30	2.55	0.00
190.00	4.30	2.55	0.00	445.00	4.30	2.55	0.00
195.00	4.30	2.55	0.00	450.00	4.30	2.55	0.00
200.00	4.30	2.55	0.00	455.00	4.30	2.55	0.00
205.00	4.30	2.55	0.00	460.00	4.30	2.55	0.00
210.00	4.30	2.55	0.00	465.00	4.30	2.55	0.00
215.00	4.30	2.55	0.00	470.00	4.30	2.55	0.00
220.00	4.30	2.55	0.00	475.00	4.30	2.55	0.00
225.00	4.30	2.55	0.00	480.00	4.30	2.55	0.00
230.00	4.30	2.55	0.00	485.00	4.30	2.55	0.00
235.00	4.30	2.55	0.00	490.00	4.30	2.55	0.00
240.00	4.30	2.55	0.00	495.00	4.30	2.55	0.00
245.00	4.30	2.55	0.00	500.00	4.30	2.55	0.00
250.00	4.30	2.55	0.00				
255.00	4.30	2.55	0.00				

Summary for Subcatchment 3Z: Post 3Z - Offsite

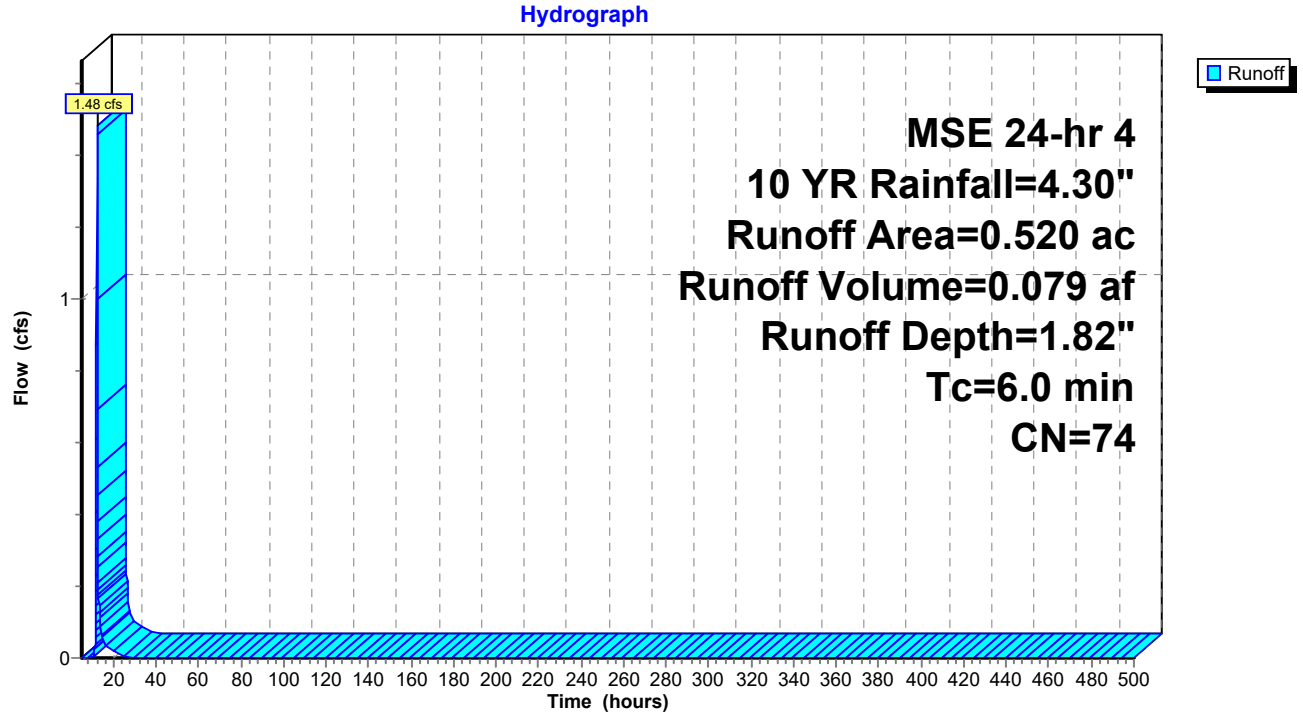
Runoff = 1.48 cfs @ 12.14 hrs, Volume= 0.079 af, Depth= 1.82"
Routed to Link 4L : Post - North

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 10 YR Rainfall=4.30"

	Area (ac)	CN	Description
*	0.000	98	Impervious
*	0.000	61	Post - B Soils
*	0.520	74	Post - C Soils
	0.520	74	Weighted Average
	0.520		100.00% Pervious Area

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

Subcatchment 3Z: Post 3Z - Offsite



Hydrograph for Subcatchment 3Z: Post 3Z - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.20	0.00	0.00	260.00	4.30	1.82	0.00
10.00	0.68	0.00	**0.00**	265.00	4.30	1.82	0.00
15.00	3.78	1.44	**0.06**	270.00	4.30	1.82	0.00
20.00	**4.16**	**1.72**	0.02	275.00	4.30	1.82	0.00
25.00	**4.30**	**1.82**	0.00	280.00	4.30	1.82	0.00
30.00	4.30	1.82	0.00	285.00	4.30	1.82	0.00
35.00	4.30	1.82	0.00	290.00	4.30	1.82	0.00
40.00	4.30	1.82	0.00	295.00	4.30	1.82	0.00
45.00	4.30	1.82	0.00	300.00	4.30	1.82	0.00
50.00	4.30	1.82	0.00	305.00	4.30	1.82	0.00
55.00	4.30	1.82	0.00	310.00	4.30	1.82	0.00
60.00	4.30	1.82	0.00	315.00	4.30	1.82	0.00
65.00	4.30	1.82	0.00	320.00	4.30	1.82	0.00
70.00	4.30	1.82	0.00	325.00	4.30	1.82	0.00
75.00	4.30	1.82	0.00	330.00	4.30	1.82	0.00
80.00	4.30	1.82	0.00	335.00	4.30	1.82	0.00
85.00	4.30	1.82	0.00	340.00	4.30	1.82	0.00
90.00	4.30	1.82	0.00	345.00	4.30	1.82	0.00
95.00	4.30	1.82	0.00	350.00	4.30	1.82	0.00
100.00	4.30	1.82	0.00	355.00	4.30	1.82	0.00
105.00	4.30	1.82	0.00	360.00	4.30	1.82	0.00
110.00	4.30	1.82	0.00	365.00	4.30	1.82	0.00
115.00	4.30	1.82	0.00	370.00	4.30	1.82	0.00
120.00	4.30	1.82	0.00	375.00	4.30	1.82	0.00
125.00	4.30	1.82	0.00	380.00	4.30	1.82	0.00
130.00	4.30	1.82	0.00	385.00	4.30	1.82	0.00
135.00	4.30	1.82	0.00	390.00	4.30	1.82	0.00
140.00	4.30	1.82	0.00	395.00	4.30	1.82	0.00
145.00	4.30	1.82	0.00	400.00	4.30	1.82	0.00
150.00	4.30	1.82	0.00	405.00	4.30	1.82	0.00
155.00	4.30	1.82	0.00	410.00	4.30	1.82	0.00
160.00	4.30	1.82	0.00	415.00	4.30	1.82	0.00
165.00	4.30	1.82	0.00	420.00	4.30	1.82	0.00
170.00	4.30	1.82	0.00	425.00	4.30	1.82	0.00
175.00	4.30	1.82	0.00	430.00	4.30	1.82	0.00
180.00	4.30	1.82	0.00	435.00	4.30	1.82	0.00
185.00	4.30	1.82	0.00	440.00	4.30	1.82	0.00
190.00	4.30	1.82	0.00	445.00	4.30	1.82	0.00
195.00	4.30	1.82	0.00	450.00	4.30	1.82	0.00
200.00	4.30	1.82	0.00	455.00	4.30	1.82	0.00
205.00	4.30	1.82	0.00	460.00	4.30	1.82	0.00
210.00	4.30	1.82	0.00	465.00	4.30	1.82	0.00
215.00	4.30	1.82	0.00	470.00	4.30	1.82	0.00
220.00	4.30	1.82	0.00	475.00	4.30	1.82	0.00
225.00	4.30	1.82	0.00	480.00	4.30	1.82	0.00
230.00	4.30	1.82	0.00	485.00	4.30	1.82	0.00
235.00	4.30	1.82	0.00	490.00	4.30	1.82	0.00
240.00	4.30	1.82	0.00	495.00	4.30	1.82	0.00
245.00	4.30	1.82	0.00	500.00	4.30	1.82	0.00
250.00	4.30	1.82	0.00				
255.00	4.30	1.82	0.00				

Summary for Subcatchment 5S: Culvert 1

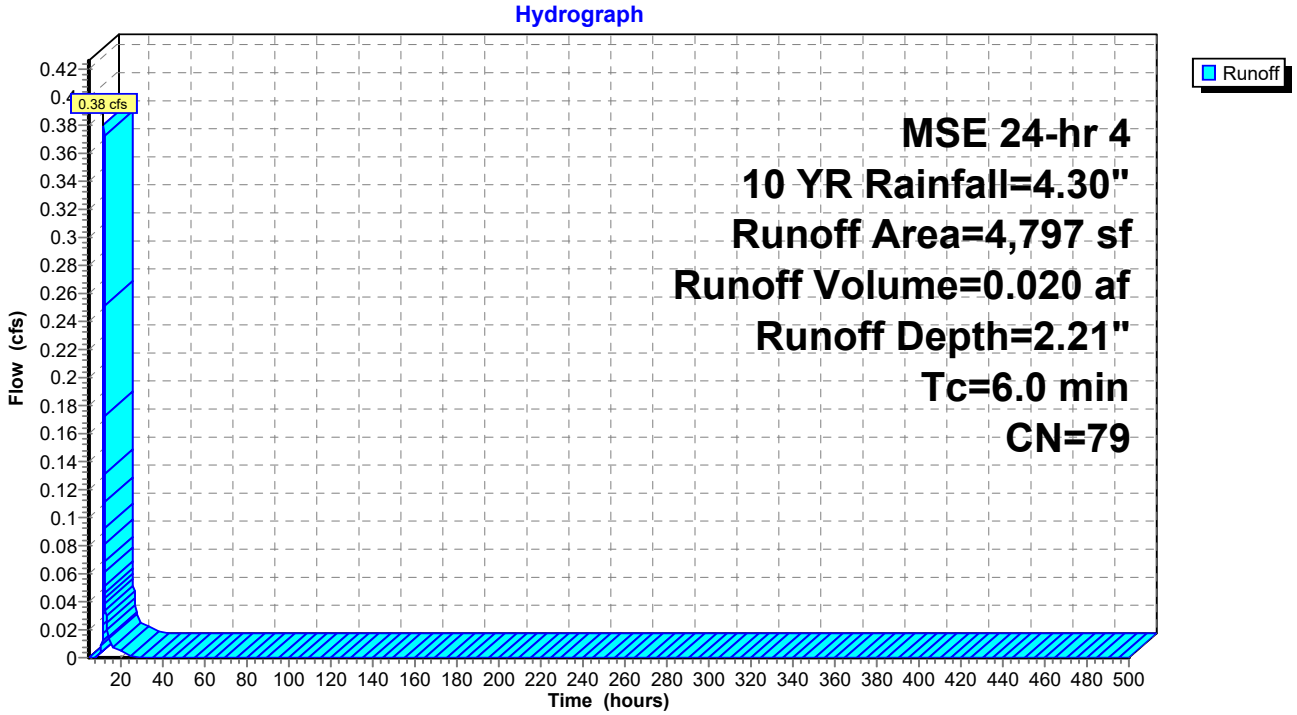
Runoff = 0.38 cfs @ 12.13 hrs, Volume= 0.020 af, Depth= 2.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 10 YR Rainfall=4.30"

	Area (sf)	CN	Description
*	2,465	61	Post - B Soils
*	2,332	98	Impervious
	4,797	79	Weighted Average
	2,465		51.39% Pervious Area
	2,332		48.61% Impervious Area

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

Subcatchment 5S: Culvert 1



Hydrograph for Subcatchment 5S: Culvert 1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.20	0.00	0.00
10.00	0.68	0.01	**0.00**
15.00	3.78	1.79	**0.01**
20.00	**4.16**	**2.09**	0.00
25.00	**4.30**	**2.21**	0.00
30.00	4.30	2.21	0.00
35.00	4.30	2.21	0.00
40.00	4.30	2.21	0.00
45.00	4.30	2.21	0.00
50.00	4.30	2.21	0.00
55.00	4.30	2.21	0.00
60.00	4.30	2.21	0.00
65.00	4.30	2.21	0.00
70.00	4.30	2.21	0.00
75.00	4.30	2.21	0.00
80.00	4.30	2.21	0.00
85.00	4.30	2.21	0.00
90.00	4.30	2.21	0.00
95.00	4.30	2.21	0.00
100.00	4.30	2.21	0.00
105.00	4.30	2.21	0.00
110.00	4.30	2.21	0.00
115.00	4.30	2.21	0.00
120.00	4.30	2.21	0.00
125.00	4.30	2.21	0.00
130.00	4.30	2.21	0.00
135.00	4.30	2.21	0.00
140.00	4.30	2.21	0.00
145.00	4.30	2.21	0.00
150.00	4.30	2.21	0.00
155.00	4.30	2.21	0.00
160.00	4.30	2.21	0.00
165.00	4.30	2.21	0.00
170.00	4.30	2.21	0.00
175.00	4.30	2.21	0.00
180.00	4.30	2.21	0.00
185.00	4.30	2.21	0.00
190.00	4.30	2.21	0.00
195.00	4.30	2.21	0.00
200.00	4.30	2.21	0.00
205.00	4.30	2.21	0.00
210.00	4.30	2.21	0.00
215.00	4.30	2.21	0.00
220.00	4.30	2.21	0.00
225.00	4.30	2.21	0.00
230.00	4.30	2.21	0.00
235.00	4.30	2.21	0.00
240.00	4.30	2.21	0.00
245.00	4.30	2.21	0.00
250.00	4.30	2.21	0.00
255.00	4.30	2.21	0.00
260.00	4.30	2.21	0.00
265.00	4.30	2.21	0.00
270.00	4.30	2.21	0.00
275.00	4.30	2.21	0.00
280.00	4.30	2.21	0.00
285.00	4.30	2.21	0.00
290.00	4.30	2.21	0.00
295.00	4.30	2.21	0.00
300.00	4.30	2.21	0.00
305.00	4.30	2.21	0.00
310.00	4.30	2.21	0.00
315.00	4.30	2.21	0.00
320.00	4.30	2.21	0.00
325.00	4.30	2.21	0.00
330.00	4.30	2.21	0.00
335.00	4.30	2.21	0.00
340.00	4.30	2.21	0.00
345.00	4.30	2.21	0.00
350.00	4.30	2.21	0.00
355.00	4.30	2.21	0.00
360.00	4.30	2.21	0.00
365.00	4.30	2.21	0.00
370.00	4.30	2.21	0.00
375.00	4.30	2.21	0.00
380.00	4.30	2.21	0.00
385.00	4.30	2.21	0.00
390.00	4.30	2.21	0.00
395.00	4.30	2.21	0.00
400.00	4.30	2.21	0.00
405.00	4.30	2.21	0.00
410.00	4.30	2.21	0.00
415.00	4.30	2.21	0.00
420.00	4.30	2.21	0.00
425.00	4.30	2.21	0.00
430.00	4.30	2.21	0.00
435.00	4.30	2.21	0.00
440.00	4.30	2.21	0.00
445.00	4.30	2.21	0.00
450.00	4.30	2.21	0.00
455.00	4.30	2.21	0.00
460.00	4.30	2.21	0.00
465.00	4.30	2.21	0.00
470.00	4.30	2.21	0.00
475.00	4.30	2.21	0.00
480.00	4.30	2.21	0.00
485.00	4.30	2.21	0.00
490.00	4.30	2.21	0.00
495.00	4.30	2.21	0.00
500.00	4.30	2.21	0.00

Summary for Subcatchment 6S: Culvert 2

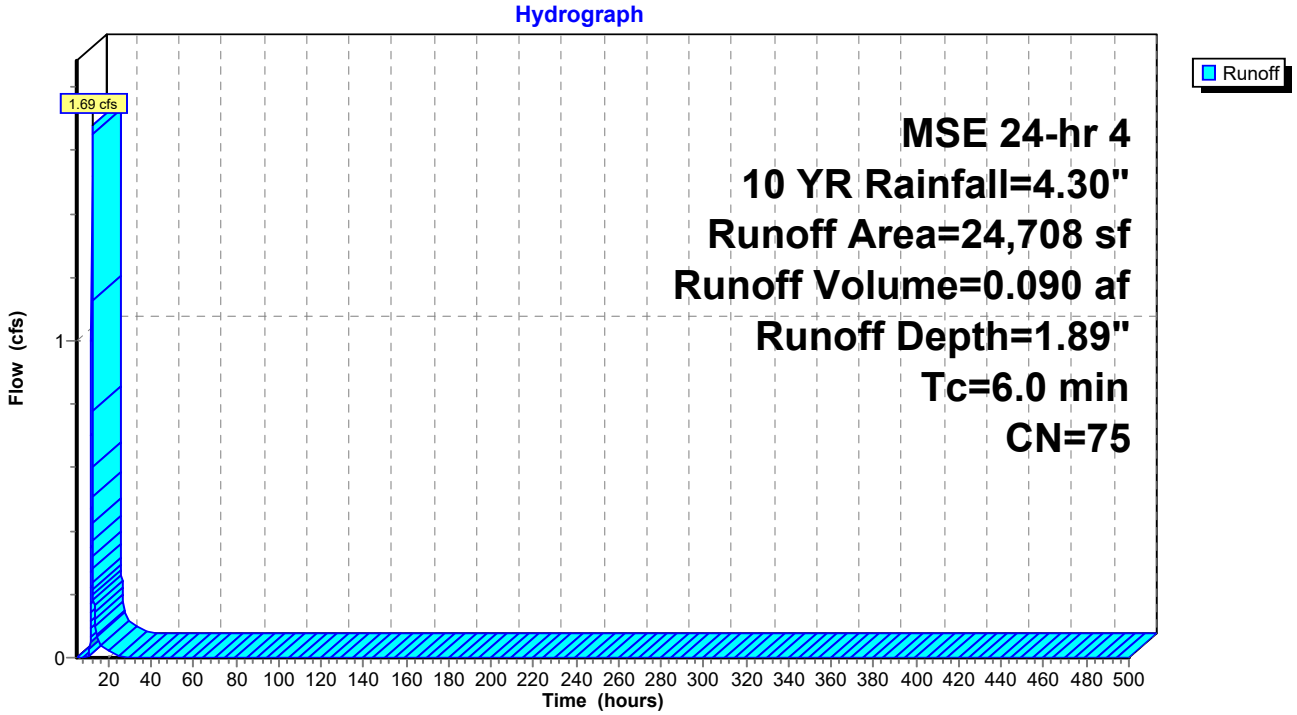
Runoff = 1.69 cfs @ 12.14 hrs, Volume= 0.090 af, Depth= 1.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 10 YR Rainfall=4.30"

	Area (sf)	CN	Description
*	15,597	61	Post - B Soils
*	9,111	98	Impervious
	24,708	75	Weighted Average
	15,597		63.13% Pervious Area
	9,111		36.87% Impervious Area

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

Subcatchment 6S: Culvert 2



Hydrograph for Subcatchment 6S: Culvert 2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.20	0.00	0.00	260.00	4.30	1.89	0.00
10.00	0.68	0.00	**0.00**	265.00	4.30	1.89	0.00
15.00	3.78	1.50	**0.06**	270.00	4.30	1.89	0.00
20.00	**4.16**	**1.79**	0.02	275.00	4.30	1.89	0.00
25.00	**4.30**	**1.89**	0.00	280.00	4.30	1.89	0.00
30.00	4.30	1.89	0.00	285.00	4.30	1.89	0.00
35.00	4.30	1.89	0.00	290.00	4.30	1.89	0.00
40.00	4.30	1.89	0.00	295.00	4.30	1.89	0.00
45.00	4.30	1.89	0.00	300.00	4.30	1.89	0.00
50.00	4.30	1.89	0.00	305.00	4.30	1.89	0.00
55.00	4.30	1.89	0.00	310.00	4.30	1.89	0.00
60.00	4.30	1.89	0.00	315.00	4.30	1.89	0.00
65.00	4.30	1.89	0.00	320.00	4.30	1.89	0.00
70.00	4.30	1.89	0.00	325.00	4.30	1.89	0.00
75.00	4.30	1.89	0.00	330.00	4.30	1.89	0.00
80.00	4.30	1.89	0.00	335.00	4.30	1.89	0.00
85.00	4.30	1.89	0.00	340.00	4.30	1.89	0.00
90.00	4.30	1.89	0.00	345.00	4.30	1.89	0.00
95.00	4.30	1.89	0.00	350.00	4.30	1.89	0.00
100.00	4.30	1.89	0.00	355.00	4.30	1.89	0.00
105.00	4.30	1.89	0.00	360.00	4.30	1.89	0.00
110.00	4.30	1.89	0.00	365.00	4.30	1.89	0.00
115.00	4.30	1.89	0.00	370.00	4.30	1.89	0.00
120.00	4.30	1.89	0.00	375.00	4.30	1.89	0.00
125.00	4.30	1.89	0.00	380.00	4.30	1.89	0.00
130.00	4.30	1.89	0.00	385.00	4.30	1.89	0.00
135.00	4.30	1.89	0.00	390.00	4.30	1.89	0.00
140.00	4.30	1.89	0.00	395.00	4.30	1.89	0.00
145.00	4.30	1.89	0.00	400.00	4.30	1.89	0.00
150.00	4.30	1.89	0.00	405.00	4.30	1.89	0.00
155.00	4.30	1.89	0.00	410.00	4.30	1.89	0.00
160.00	4.30	1.89	0.00	415.00	4.30	1.89	0.00
165.00	4.30	1.89	0.00	420.00	4.30	1.89	0.00
170.00	4.30	1.89	0.00	425.00	4.30	1.89	0.00
175.00	4.30	1.89	0.00	430.00	4.30	1.89	0.00
180.00	4.30	1.89	0.00	435.00	4.30	1.89	0.00
185.00	4.30	1.89	0.00	440.00	4.30	1.89	0.00
190.00	4.30	1.89	0.00	445.00	4.30	1.89	0.00
195.00	4.30	1.89	0.00	450.00	4.30	1.89	0.00
200.00	4.30	1.89	0.00	455.00	4.30	1.89	0.00
205.00	4.30	1.89	0.00	460.00	4.30	1.89	0.00
210.00	4.30	1.89	0.00	465.00	4.30	1.89	0.00
215.00	4.30	1.89	0.00	470.00	4.30	1.89	0.00
220.00	4.30	1.89	0.00	475.00	4.30	1.89	0.00
225.00	4.30	1.89	0.00	480.00	4.30	1.89	0.00
230.00	4.30	1.89	0.00	485.00	4.30	1.89	0.00
235.00	4.30	1.89	0.00	490.00	4.30	1.89	0.00
240.00	4.30	1.89	0.00	495.00	4.30	1.89	0.00
245.00	4.30	1.89	0.00	500.00	4.30	1.89	0.00
250.00	4.30	1.89	0.00				
255.00	4.30	1.89	0.00				

Summary for Subcatchment 7S: Culvert 3

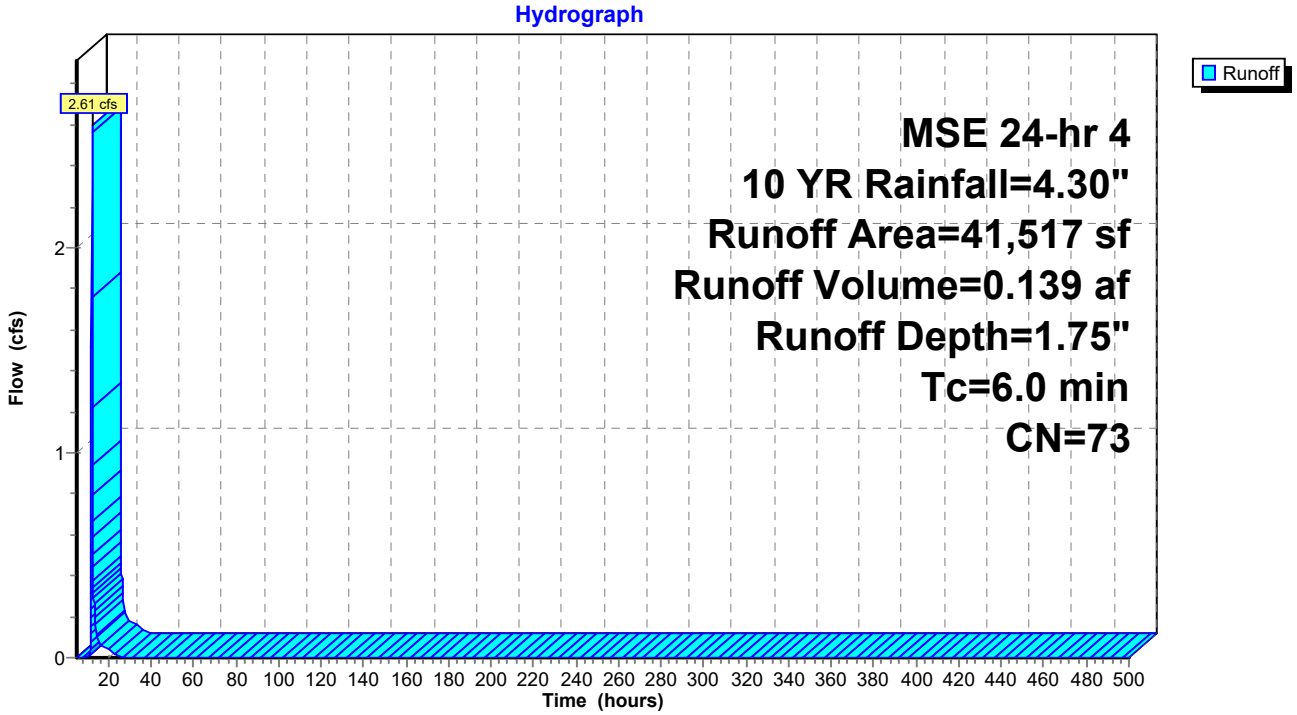
Runoff = 2.61 cfs @ 12.14 hrs, Volume= 0.139 af, Depth= 1.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 10 YR Rainfall=4.30"

	Area (sf)	CN	Description
*	28,233	61	Post - B Soils
*	13,284	98	Impervious
	41,517	73	Weighted Average
	28,233		68.00% Pervious Area
	13,284		32.00% Impervious Area

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

Subcatchment 7S: Culvert 3



Hydrograph for Subcatchment 7S: Culvert 3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.20	0.00	0.00	260.00	4.30	1.75	0.00
10.00	0.68	0.00	**0.00**	265.00	4.30	1.75	0.00
15.00	3.78	1.37	**0.10**	270.00	4.30	1.75	0.00
20.00	**4.16**	**1.64**	0.04	275.00	4.30	1.75	0.00
25.00	**4.30**	**1.75**	0.00	280.00	4.30	1.75	0.00
30.00	4.30	1.75	0.00	285.00	4.30	1.75	0.00
35.00	4.30	1.75	0.00	290.00	4.30	1.75	0.00
40.00	4.30	1.75	0.00	295.00	4.30	1.75	0.00
45.00	4.30	1.75	0.00	300.00	4.30	1.75	0.00
50.00	4.30	1.75	0.00	305.00	4.30	1.75	0.00
55.00	4.30	1.75	0.00	310.00	4.30	1.75	0.00
60.00	4.30	1.75	0.00	315.00	4.30	1.75	0.00
65.00	4.30	1.75	0.00	320.00	4.30	1.75	0.00
70.00	4.30	1.75	0.00	325.00	4.30	1.75	0.00
75.00	4.30	1.75	0.00	330.00	4.30	1.75	0.00
80.00	4.30	1.75	0.00	335.00	4.30	1.75	0.00
85.00	4.30	1.75	0.00	340.00	4.30	1.75	0.00
90.00	4.30	1.75	0.00	345.00	4.30	1.75	0.00
95.00	4.30	1.75	0.00	350.00	4.30	1.75	0.00
100.00	4.30	1.75	0.00	355.00	4.30	1.75	0.00
105.00	4.30	1.75	0.00	360.00	4.30	1.75	0.00
110.00	4.30	1.75	0.00	365.00	4.30	1.75	0.00
115.00	4.30	1.75	0.00	370.00	4.30	1.75	0.00
120.00	4.30	1.75	0.00	375.00	4.30	1.75	0.00
125.00	4.30	1.75	0.00	380.00	4.30	1.75	0.00
130.00	4.30	1.75	0.00	385.00	4.30	1.75	0.00
135.00	4.30	1.75	0.00	390.00	4.30	1.75	0.00
140.00	4.30	1.75	0.00	395.00	4.30	1.75	0.00
145.00	4.30	1.75	0.00	400.00	4.30	1.75	0.00
150.00	4.30	1.75	0.00	405.00	4.30	1.75	0.00
155.00	4.30	1.75	0.00	410.00	4.30	1.75	0.00
160.00	4.30	1.75	0.00	415.00	4.30	1.75	0.00
165.00	4.30	1.75	0.00	420.00	4.30	1.75	0.00
170.00	4.30	1.75	0.00	425.00	4.30	1.75	0.00
175.00	4.30	1.75	0.00	430.00	4.30	1.75	0.00
180.00	4.30	1.75	0.00	435.00	4.30	1.75	0.00
185.00	4.30	1.75	0.00	440.00	4.30	1.75	0.00
190.00	4.30	1.75	0.00	445.00	4.30	1.75	0.00
195.00	4.30	1.75	0.00	450.00	4.30	1.75	0.00
200.00	4.30	1.75	0.00	455.00	4.30	1.75	0.00
205.00	4.30	1.75	0.00	460.00	4.30	1.75	0.00
210.00	4.30	1.75	0.00	465.00	4.30	1.75	0.00
215.00	4.30	1.75	0.00	470.00	4.30	1.75	0.00
220.00	4.30	1.75	0.00	475.00	4.30	1.75	0.00
225.00	4.30	1.75	0.00	480.00	4.30	1.75	0.00
230.00	4.30	1.75	0.00	485.00	4.30	1.75	0.00
235.00	4.30	1.75	0.00	490.00	4.30	1.75	0.00
240.00	4.30	1.75	0.00	495.00	4.30	1.75	0.00
245.00	4.30	1.75	0.00	500.00	4.30	1.75	0.00
250.00	4.30	1.75	0.00				
255.00	4.30	1.75	0.00				

Summary for Subcatchment 8S: Culvert 4

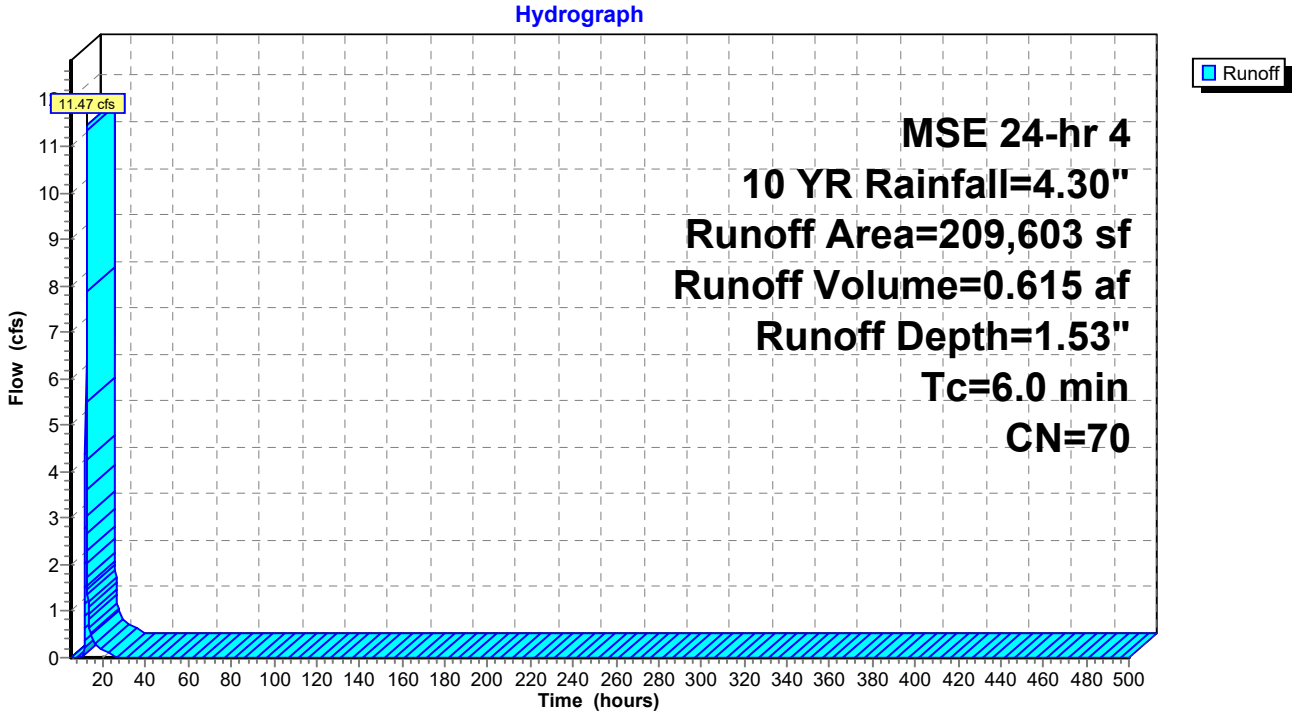
Runoff = 11.47 cfs @ 12.14 hrs, Volume= 0.615 af, Depth= 1.53"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 10 YR Rainfall=4.30"

	Area (sf)	CN	Description
*	156,823	61	Post - B Soils
*	52,780	98	Impervious
	209,603	70	Weighted Average
	156,823		74.82% Pervious Area
	52,780		25.18% Impervious Area

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

Subcatchment 8S: Culvert 4



Hydrograph for Subcatchment 8S: Culvert 4

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.20	0.00	0.00	260.00	4.30	1.53	0.00
10.00	0.68	0.00	**0.00**	265.00	4.30	1.53	0.00
15.00	3.78	1.18	**0.48**	270.00	4.30	1.53	0.00
20.00	**4.16**	**1.44**	0.18	275.00	4.30	1.53	0.00
25.00	**4.30**	**1.53**	0.00	280.00	4.30	1.53	0.00
30.00	4.30	1.53	0.00	285.00	4.30	1.53	0.00
35.00	4.30	1.53	0.00	290.00	4.30	1.53	0.00
40.00	4.30	1.53	0.00	295.00	4.30	1.53	0.00
45.00	4.30	1.53	0.00	300.00	4.30	1.53	0.00
50.00	4.30	1.53	0.00	305.00	4.30	1.53	0.00
55.00	4.30	1.53	0.00	310.00	4.30	1.53	0.00
60.00	4.30	1.53	0.00	315.00	4.30	1.53	0.00
65.00	4.30	1.53	0.00	320.00	4.30	1.53	0.00
70.00	4.30	1.53	0.00	325.00	4.30	1.53	0.00
75.00	4.30	1.53	0.00	330.00	4.30	1.53	0.00
80.00	4.30	1.53	0.00	335.00	4.30	1.53	0.00
85.00	4.30	1.53	0.00	340.00	4.30	1.53	0.00
90.00	4.30	1.53	0.00	345.00	4.30	1.53	0.00
95.00	4.30	1.53	0.00	350.00	4.30	1.53	0.00
100.00	4.30	1.53	0.00	355.00	4.30	1.53	0.00
105.00	4.30	1.53	0.00	360.00	4.30	1.53	0.00
110.00	4.30	1.53	0.00	365.00	4.30	1.53	0.00
115.00	4.30	1.53	0.00	370.00	4.30	1.53	0.00
120.00	4.30	1.53	0.00	375.00	4.30	1.53	0.00
125.00	4.30	1.53	0.00	380.00	4.30	1.53	0.00
130.00	4.30	1.53	0.00	385.00	4.30	1.53	0.00
135.00	4.30	1.53	0.00	390.00	4.30	1.53	0.00
140.00	4.30	1.53	0.00	395.00	4.30	1.53	0.00
145.00	4.30	1.53	0.00	400.00	4.30	1.53	0.00
150.00	4.30	1.53	0.00	405.00	4.30	1.53	0.00
155.00	4.30	1.53	0.00	410.00	4.30	1.53	0.00
160.00	4.30	1.53	0.00	415.00	4.30	1.53	0.00
165.00	4.30	1.53	0.00	420.00	4.30	1.53	0.00
170.00	4.30	1.53	0.00	425.00	4.30	1.53	0.00
175.00	4.30	1.53	0.00	430.00	4.30	1.53	0.00
180.00	4.30	1.53	0.00	435.00	4.30	1.53	0.00
185.00	4.30	1.53	0.00	440.00	4.30	1.53	0.00
190.00	4.30	1.53	0.00	445.00	4.30	1.53	0.00
195.00	4.30	1.53	0.00	450.00	4.30	1.53	0.00
200.00	4.30	1.53	0.00	455.00	4.30	1.53	0.00
205.00	4.30	1.53	0.00	460.00	4.30	1.53	0.00
210.00	4.30	1.53	0.00	465.00	4.30	1.53	0.00
215.00	4.30	1.53	0.00	470.00	4.30	1.53	0.00
220.00	4.30	1.53	0.00	475.00	4.30	1.53	0.00
225.00	4.30	1.53	0.00	480.00	4.30	1.53	0.00
230.00	4.30	1.53	0.00	485.00	4.30	1.53	0.00
235.00	4.30	1.53	0.00	490.00	4.30	1.53	0.00
240.00	4.30	1.53	0.00	495.00	4.30	1.53	0.00
245.00	4.30	1.53	0.00	500.00	4.30	1.53	0.00
250.00	4.30	1.53	0.00				
255.00	4.30	1.53	0.00				

Summary for Subcatchment 9S: Culvert 5

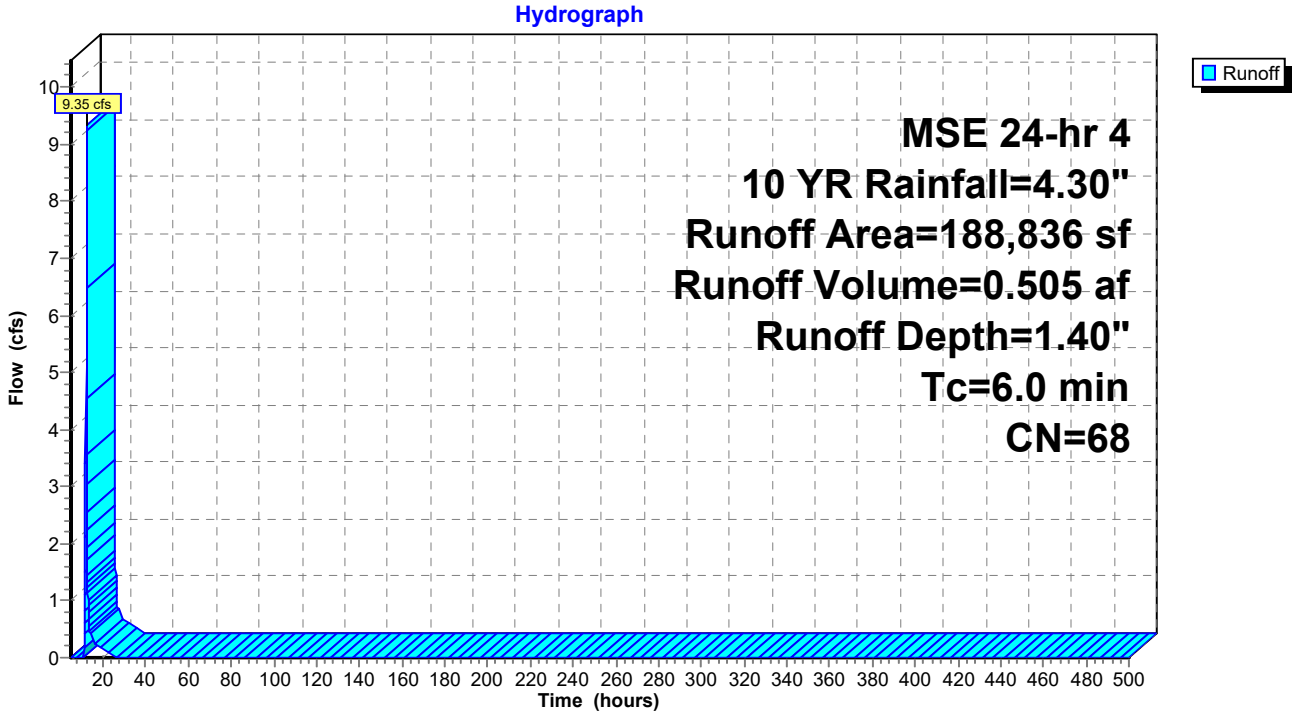
Runoff = 9.35 cfs @ 12.14 hrs, Volume= 0.505 af, Depth= 1.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 10 YR Rainfall=4.30"

	Area (sf)	CN	Description
*	151,149	61	Post - B Soils
*	37,687	98	Impervious
	188,836	68	Weighted Average
	151,149		80.04% Pervious Area
	37,687		19.96% Impervious Area

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

Subcatchment 9S: Culvert 5



Hydrograph for Subcatchment 9S: Culvert 5

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.20	0.00	0.00
10.00	0.68	0.00	**0.00**
15.00	3.78	1.07	**0.41**
20.00	**4.16**	**1.31**	0.15
25.00	**4.30**	**1.40**	0.00
30.00	4.30	1.40	0.00
35.00	4.30	1.40	0.00
40.00	4.30	1.40	0.00
45.00	4.30	1.40	0.00
50.00	4.30	1.40	0.00
55.00	4.30	1.40	0.00
60.00	4.30	1.40	0.00
65.00	4.30	1.40	0.00
70.00	4.30	1.40	0.00
75.00	4.30	1.40	0.00
80.00	4.30	1.40	0.00
85.00	4.30	1.40	0.00
90.00	4.30	1.40	0.00
95.00	4.30	1.40	0.00
100.00	4.30	1.40	0.00
105.00	4.30	1.40	0.00
110.00	4.30	1.40	0.00
115.00	4.30	1.40	0.00
120.00	4.30	1.40	0.00
125.00	4.30	1.40	0.00
130.00	4.30	1.40	0.00
135.00	4.30	1.40	0.00
140.00	4.30	1.40	0.00
145.00	4.30	1.40	0.00
150.00	4.30	1.40	0.00
155.00	4.30	1.40	0.00
160.00	4.30	1.40	0.00
165.00	4.30	1.40	0.00
170.00	4.30	1.40	0.00
175.00	4.30	1.40	0.00
180.00	4.30	1.40	0.00
185.00	4.30	1.40	0.00
190.00	4.30	1.40	0.00
195.00	4.30	1.40	0.00
200.00	4.30	1.40	0.00
205.00	4.30	1.40	0.00
210.00	4.30	1.40	0.00
215.00	4.30	1.40	0.00
220.00	4.30	1.40	0.00
225.00	4.30	1.40	0.00
230.00	4.30	1.40	0.00
235.00	4.30	1.40	0.00
240.00	4.30	1.40	0.00
245.00	4.30	1.40	0.00
250.00	4.30	1.40	0.00
255.00	4.30	1.40	0.00
260.00	4.30	1.40	0.00
265.00	4.30	1.40	0.00
270.00	4.30	1.40	0.00
275.00	4.30	1.40	0.00
280.00	4.30	1.40	0.00
285.00	4.30	1.40	0.00
290.00	4.30	1.40	0.00
295.00	4.30	1.40	0.00
300.00	4.30	1.40	0.00
305.00	4.30	1.40	0.00
310.00	4.30	1.40	0.00
315.00	4.30	1.40	0.00
320.00	4.30	1.40	0.00
325.00	4.30	1.40	0.00
330.00	4.30	1.40	0.00
335.00	4.30	1.40	0.00
340.00	4.30	1.40	0.00
345.00	4.30	1.40	0.00
350.00	4.30	1.40	0.00
355.00	4.30	1.40	0.00
360.00	4.30	1.40	0.00
365.00	4.30	1.40	0.00
370.00	4.30	1.40	0.00
375.00	4.30	1.40	0.00
380.00	4.30	1.40	0.00
385.00	4.30	1.40	0.00
390.00	4.30	1.40	0.00
395.00	4.30	1.40	0.00
400.00	4.30	1.40	0.00
405.00	4.30	1.40	0.00
410.00	4.30	1.40	0.00
415.00	4.30	1.40	0.00
420.00	4.30	1.40	0.00
425.00	4.30	1.40	0.00
430.00	4.30	1.40	0.00
435.00	4.30	1.40	0.00
440.00	4.30	1.40	0.00
445.00	4.30	1.40	0.00
450.00	4.30	1.40	0.00
455.00	4.30	1.40	0.00
460.00	4.30	1.40	0.00
465.00	4.30	1.40	0.00
470.00	4.30	1.40	0.00
475.00	4.30	1.40	0.00
480.00	4.30	1.40	0.00
485.00	4.30	1.40	0.00
490.00	4.30	1.40	0.00
495.00	4.30	1.40	0.00
500.00	4.30	1.40	0.00

Summary for Pond P1A: Pond 1A

Inflow Area = 6.030 ac, 19.24% Impervious, Inflow Depth = 1.40" for 10 YR event
Inflow = 13.00 cfs @ 12.14 hrs, Volume= 0.703 af
Outflow = 2.19 cfs @ 12.58 hrs, Volume= 0.703 af, Atten= 83%, Lag= 26.4 min
Primary = 1.66 cfs @ 12.58 hrs, Volume= 0.276 af
Routed to Link 3L : Post - South
Secondary = 0.53 cfs @ 12.58 hrs, Volume= 0.427 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,241.65' @ 12.58 hrs Surf.Area= 6,330 sf Storage= 11,696 cf

Plug-Flow detention time= 132.1 min calculated for 0.703 af (100% of inflow)
Center-of-Mass det. time= 132.1 min (975.0 - 842.9)

Volume	Invert	Avail.Storage	Storage Description
#1	1,239.00'	30,563 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

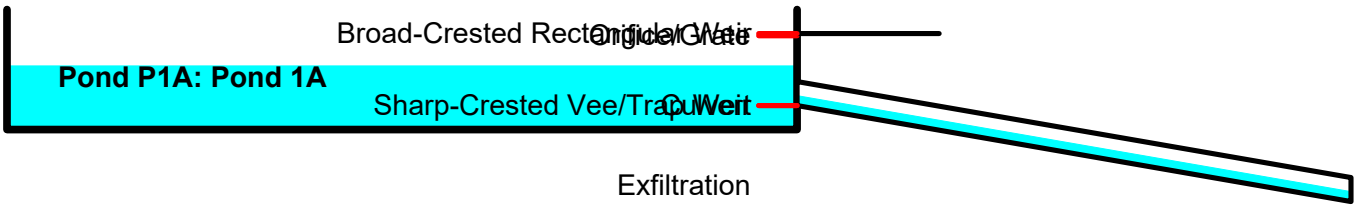
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,239.00	2,496	0	0
1,244.00	9,729	30,563	30,563

Device	Routing	Invert	Outlet Devices
#1	Primary	1,240.00'	**12.0" Round Culvert** L= 39.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,240.00' / 1,236.00' S= 0.1026 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,240.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,242.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,239.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,243.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

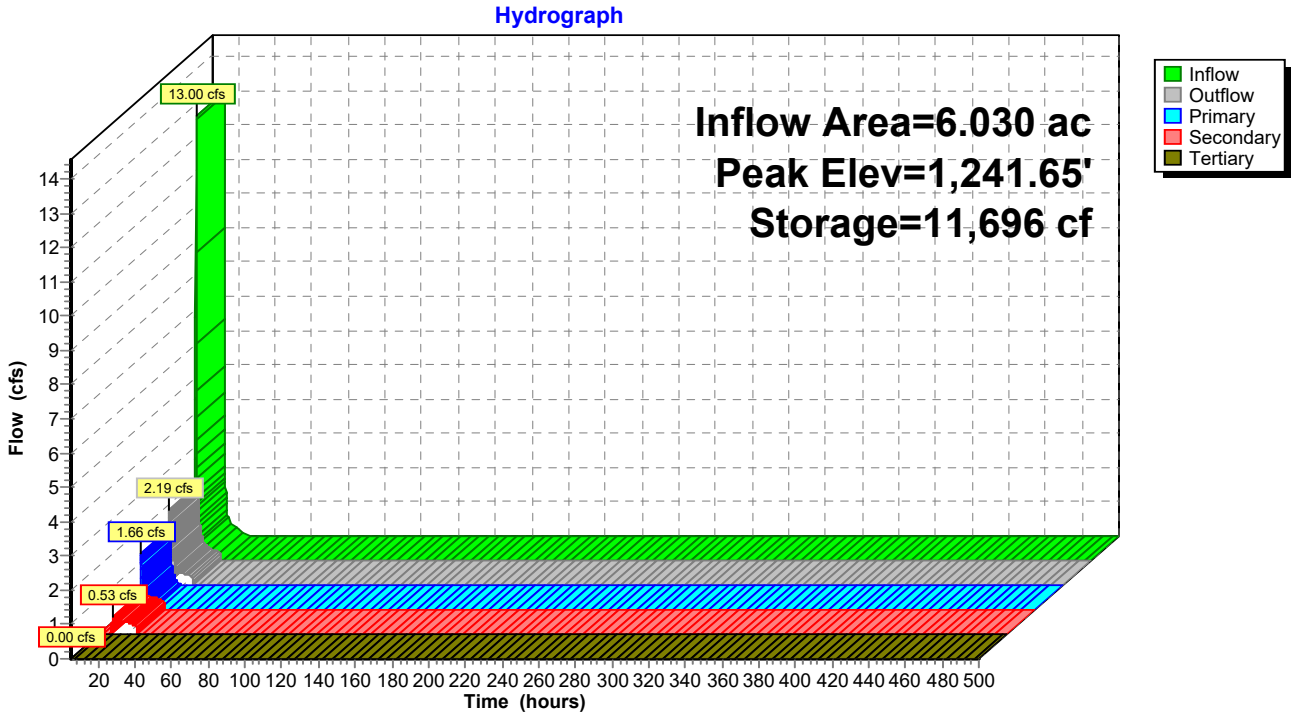
Primary OutFlow Max=1.66 cfs @ 12.58 hrs HW=1,241.65' (Free Discharge)
└**1=Culvert** (Passes 1.66 cfs of 4.05 cfs potential flow)
├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 1.66 cfs @ 3.45 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.53 cfs @ 12.58 hrs HW=1,241.65' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.53 cfs)

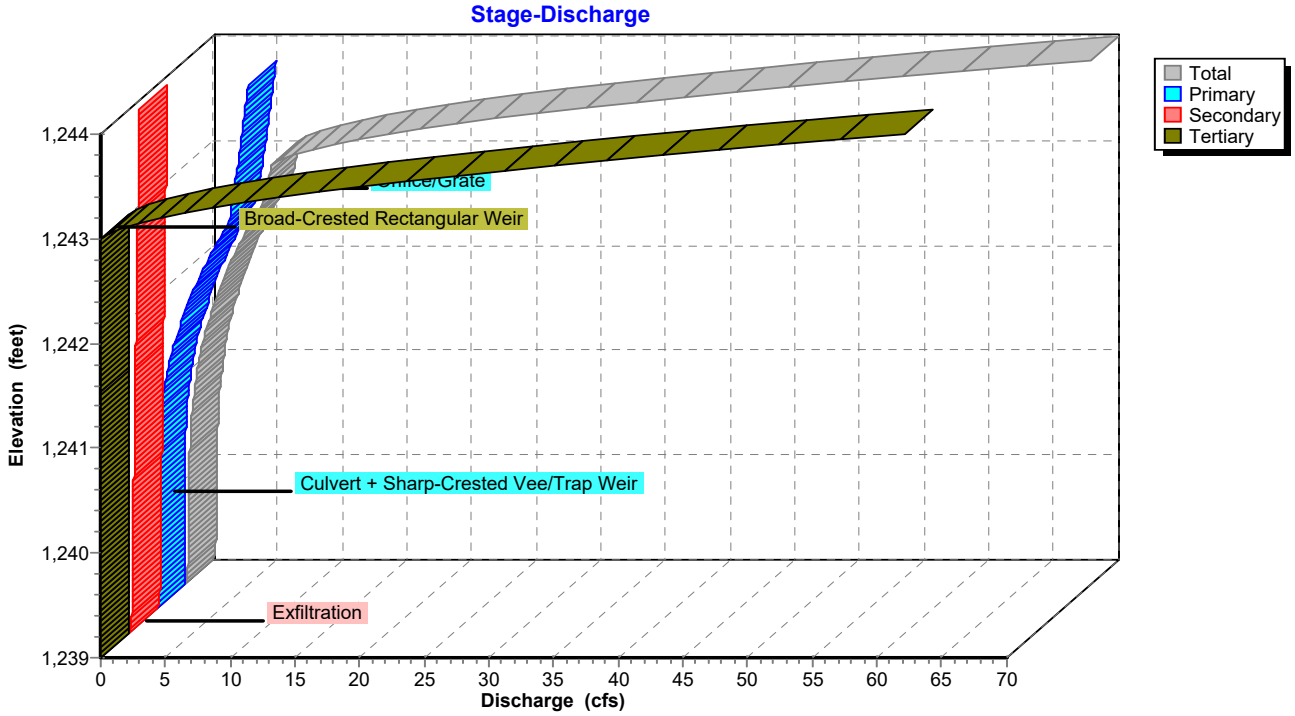
Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,239.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



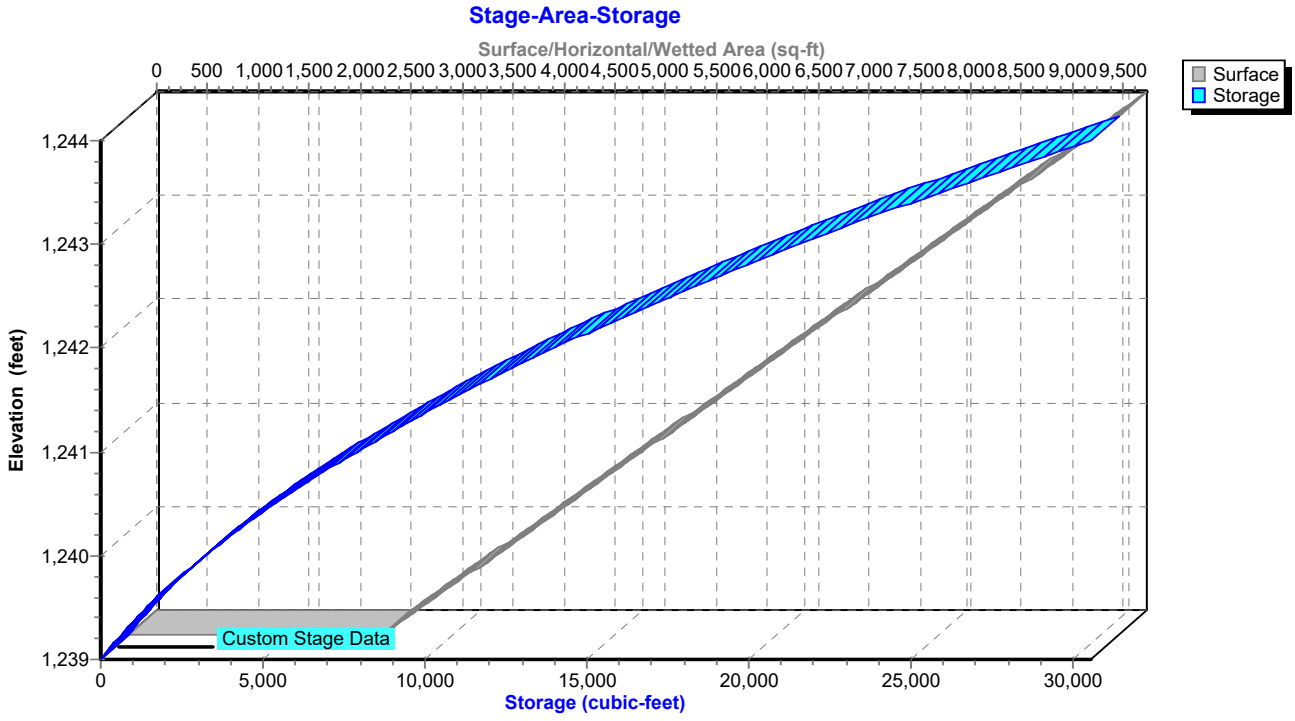
Pond P1A: Pond 1A



Pond P1A: Pond 1A



Pond P1A: Pond 1A



Hydrograph for Pond P1A: Pond 1A

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,239.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.56**	**7,487**	**1,240.93**	**0.83**	**0.39**	**0.44**	0.00
25.00	0.00	568	1,239.21	0.23	0.00	0.23	0.00
35.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P1A: Pond 1A

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,239.00	0.00	0.00	0.00	0.00
1,239.10	0.22	0.00	0.22	0.00
1,239.20	0.23	0.00	0.23	0.00
1,239.30	0.24	0.00	0.24	0.00
1,239.40	0.26	0.00	0.26	0.00
1,239.50	0.27	0.00	0.27	0.00
1,239.60	0.28	0.00	0.28	0.00
1,239.70	0.29	0.00	0.29	0.00
1,239.80	0.30	0.00	0.30	0.00
1,239.90	0.32	0.00	0.32	0.00
1,240.00	0.33	0.00	0.33	0.00
1,240.10	0.34	0.00	0.34	0.00
1,240.20	0.36	0.01	0.35	0.00
1,240.30	0.39	0.02	0.36	0.00
1,240.40	0.42	0.05	0.38	0.00
1,240.50	0.47	0.08	0.39	0.00
1,240.60	0.53	0.13	0.40	0.00
1,240.70	0.61	0.19	0.41	0.00
1,240.80	0.70	0.27	0.42	0.00
1,240.90	0.80	0.36	0.44	0.00
1,241.00	0.92	0.47	0.45	0.00
1,241.10	1.06	0.60	0.46	0.00
1,241.20	1.22	0.75	0.47	0.00
1,241.30	1.40	0.91	0.49	0.00
1,241.40	1.60	1.10	0.50	0.00
1,241.50	1.82	1.31	0.51	0.00
1,241.60	2.06	1.54	0.52	0.00
1,241.70	2.32	1.79	0.53	0.00
1,241.80	2.61	2.06	0.55	0.00
1,241.90	2.92	2.36	0.56	0.00
1,242.00	3.25	2.68	0.57	0.00
1,242.10	3.61	3.03	0.58	0.00
1,242.20	4.00	3.41	0.59	0.00
1,242.30	4.41	3.81	0.61	0.00
1,242.40	4.85	4.23	0.62	0.00
1,242.50	5.32	4.69	0.63	0.00
1,242.60	5.81	5.17	0.64	0.00
1,242.70	6.26	5.61	0.65	0.00
1,242.80	6.40	5.74	0.67	0.00
1,242.90	6.54	5.86	0.68	0.00
1,243.00	6.67	5.98	0.69	0.00
1,243.10	8.40	6.10	0.70	1.60
1,243.20	11.53	6.21	0.71	4.60
1,243.30	15.75	6.33	0.73	8.70
1,243.40	20.96	6.44	0.74	13.78
1,243.50	27.39	6.55	0.75	20.08
1,243.60	34.93	6.66	0.76	27.51
1,243.70	42.64	6.76	0.77	35.10
1,243.80	51.08	6.87	0.79	43.42
1,243.90	60.22	6.97	0.80	52.45
1,244.00	**70.06**	**7.07**	**0.81**	**62.18**

Stage-Area-Storage for Pond P1A: Pond 1A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,239.00	2,496	0
1,239.05	2,568	127
1,239.10	2,641	257
1,239.15	2,713	391
1,239.20	2,785	528
1,239.25	2,858	669
1,239.30	2,930	814
1,239.35	3,002	962
1,239.40	3,075	1,114
1,239.45	3,147	1,270
1,239.50	3,219	1,429
1,239.55	3,292	1,592
1,239.60	3,364	1,758
1,239.65	3,436	1,928
1,239.70	3,509	2,102
1,239.75	3,581	2,279
1,239.80	3,653	2,460
1,239.85	3,726	2,644
1,239.90	3,798	2,832
1,239.95	3,870	3,024
1,240.00	3,943	3,219
1,240.05	4,015	3,418
1,240.10	4,087	3,621
1,240.15	4,160	3,827
1,240.20	4,232	4,037
1,240.25	4,304	4,250
1,240.30	4,377	4,467
1,240.35	4,449	4,688
1,240.40	4,521	4,912
1,240.45	4,594	5,140
1,240.50	4,666	5,371
1,240.55	4,738	5,607
1,240.60	4,811	5,845
1,240.65	4,883	6,088
1,240.70	4,955	6,334
1,240.75	5,028	6,583
1,240.80	5,100	6,836
1,240.85	5,172	7,093
1,240.90	5,245	7,354
1,240.95	5,317	7,618
1,241.00	5,389	7,885
1,241.05	5,462	8,156
1,241.10	5,534	8,431
1,241.15	5,606	8,710
1,241.20	5,679	8,992
1,241.25	5,751	9,278
1,241.30	5,823	9,567
1,241.35	5,896	9,860
1,241.40	5,968	10,157
1,241.45	6,040	10,457
1,241.50	6,113	10,761
1,241.55	6,185	11,068
1,241.60	6,257	11,379
1,241.65	6,329	11,694
1,241.70	6,402	12,012
1,241.75	6,474	12,334
1,241.80	6,546	12,659
1,241.85	6,619	12,989
1,241.90	6,691	13,321
1,241.95	6,763	13,658
1,242.00	6,836	13,998
1,242.05	6,908	14,341
1,242.10	6,980	14,689
1,242.15	7,053	15,039
1,242.20	7,125	15,394
1,242.25	7,197	15,752
1,242.30	7,270	16,114
1,242.35	7,342	16,479
1,242.40	7,414	16,848
1,242.45	7,487	17,220
1,242.50	7,559	17,596
1,242.55	7,631	17,976
1,242.60	7,704	18,360
1,242.65	7,776	18,747
1,242.70	7,848	19,137
1,242.75	7,921	19,531
1,242.80	7,993	19,929
1,242.85	8,065	20,331
1,242.90	8,138	20,736
1,242.95	8,210	21,144
1,243.00	8,282	21,557
1,243.05	8,355	21,973
1,243.10	8,427	22,392
1,243.15	8,499	22,815
1,243.20	8,572	23,242
1,243.25	8,644	23,673
1,243.30	8,716	24,107
1,243.35	8,789	24,544
1,243.40	8,861	24,985
1,243.45	8,933	25,430
1,243.50	9,006	25,879
1,243.55	9,078	26,331
1,243.60	9,150	26,787
1,243.65	9,223	27,246
1,243.70	9,295	27,709
1,243.75	9,367	28,175
1,243.80	9,440	28,646
1,243.85	9,512	29,119
1,243.90	9,584	29,597
1,243.95	9,657	30,078
1,244.00	**9,729**	**30,563**

Summary for Pond P3A: Pond 3A

Inflow Area = 10.600 ac, 18.58% Impervious, Inflow Depth = 1.53" for 10 YR event
Inflow = 25.27 cfs @ 12.14 hrs, Volume= 1.355 af
Outflow = 4.83 cfs @ 12.52 hrs, Volume= 1.355 af, Atten= 81%, Lag= 23.2 min
Primary = 4.07 cfs @ 12.52 hrs, Volume= 0.668 af
Routed to Link 4L : Post - North
Secondary = 0.77 cfs @ 12.52 hrs, Volume= 0.687 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,195.36' @ 12.52 hrs Surf.Area= 9,182 sf Storage= 22,437 cf

Plug-Flow detention time= 133.9 min calculated for 1.355 af (100% of inflow)
Center-of-Mass det. time= 133.9 min (972.0 - 838.0)

Volume	Invert	Avail.Storage	Storage Description
#1	1,192.00'	51,846 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

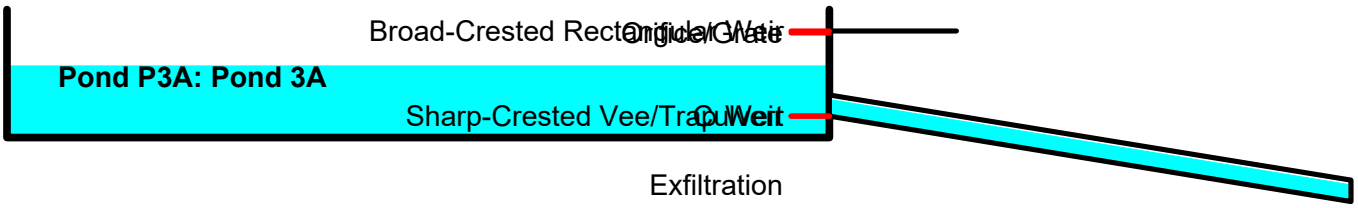
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,192.00	4,165	0	0
1,198.00	13,117	51,846	51,846

Device	Routing	Invert	Outlet Devices
#1	Primary	1,193.00'	**12.0" Round Culvert** L= 41.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,193.00' / 1,189.00' S= 0.0976 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,193.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,196.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,192.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,197.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

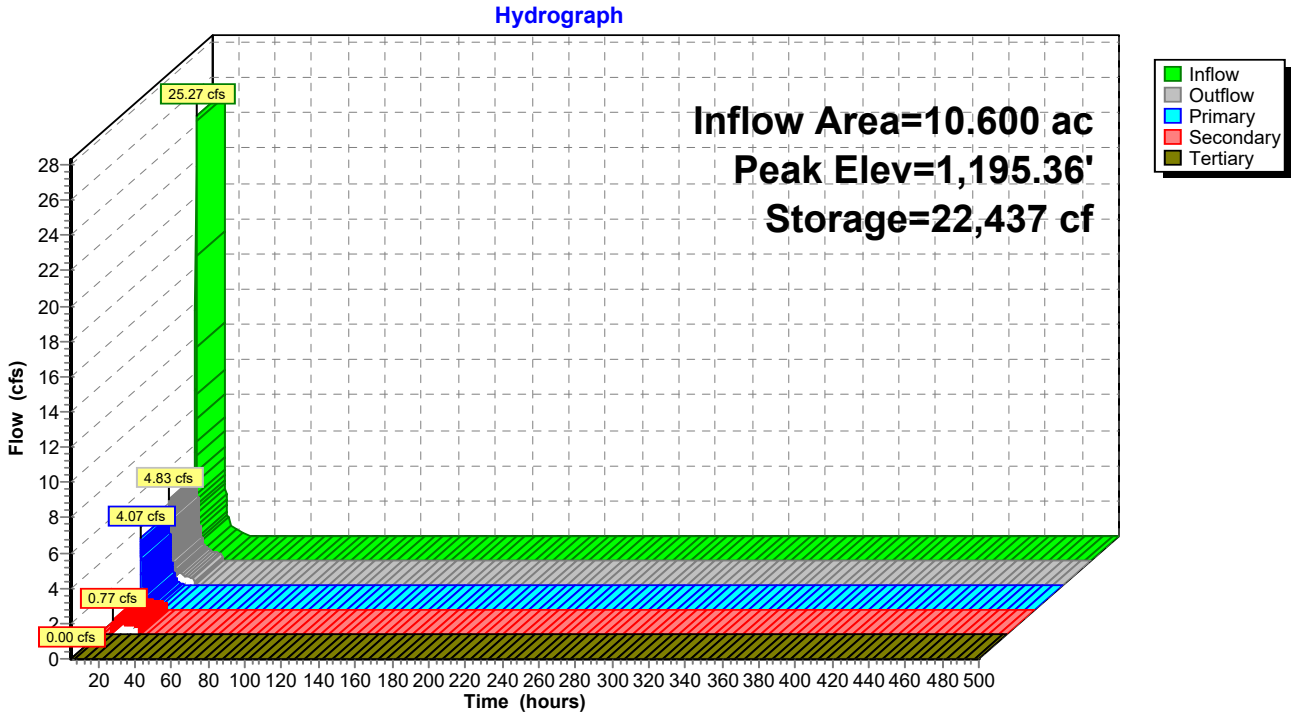
Primary OutFlow Max=4.06 cfs @ 12.52 hrs HW=1,195.36' (Free Discharge)
└**1=Culvert** (Passes 4.06 cfs of 5.16 cfs potential flow)
├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 4.06 cfs @ 4.13 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.76 cfs @ 12.52 hrs HW=1,195.36' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.76 cfs)

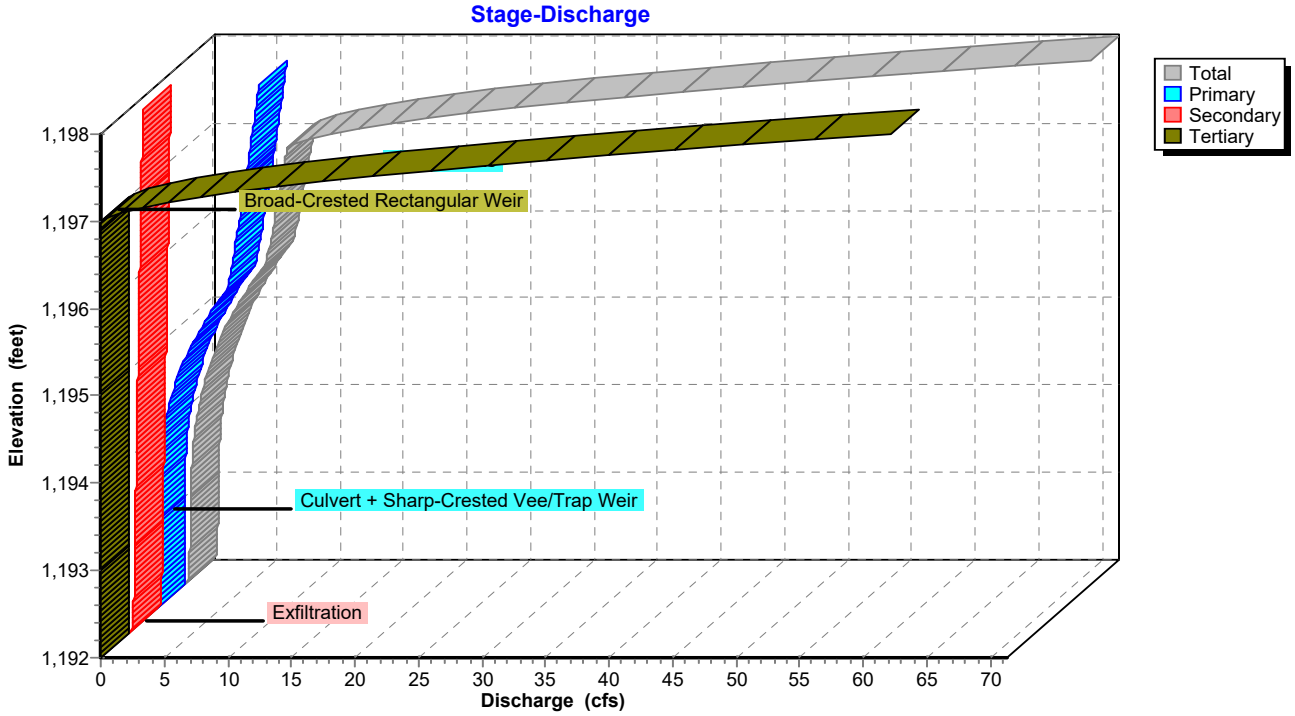
Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,192.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



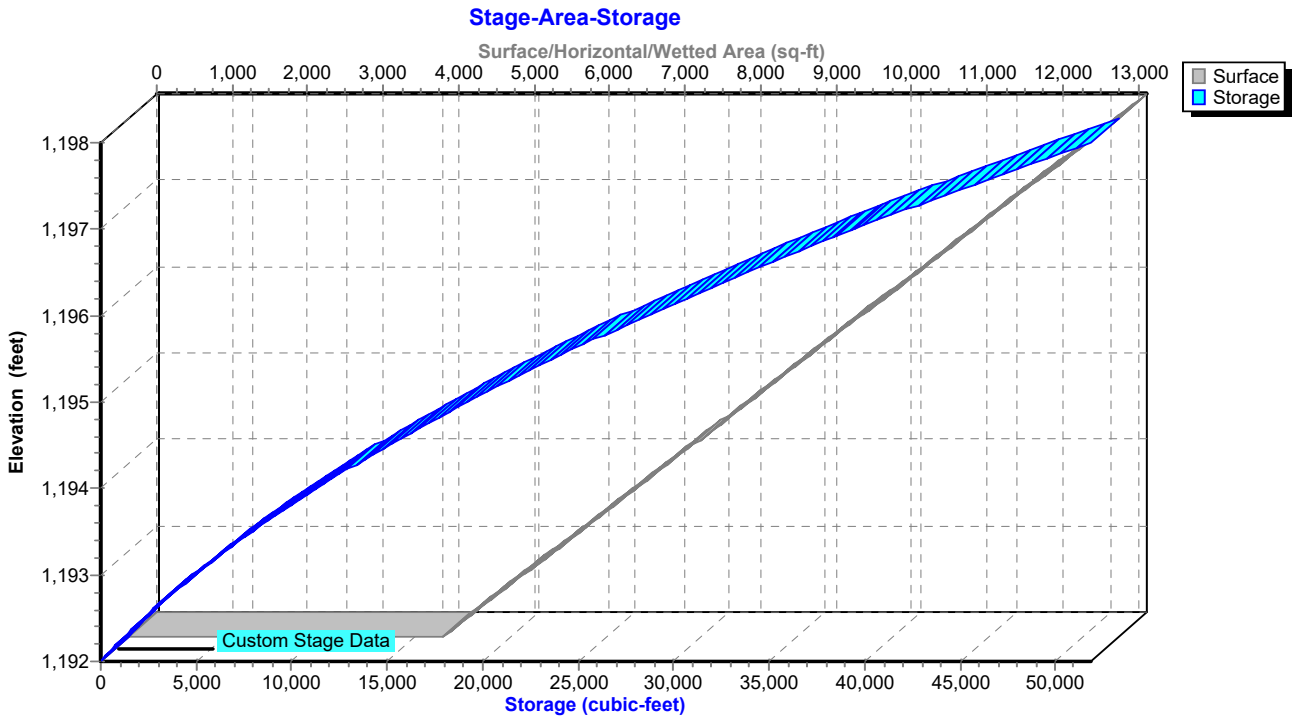
Pond P3A: Pond 3A



Pond P3A: Pond 3A



Pond P3A: Pond 3A



Hydrograph for Pond P3A: Pond 3A

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,192.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**1.05**	**13,406**	**1,194.28**	**1.52**	**0.89**	**0.63**	0.00
25.00	0.00	2,541	1,192.55	0.42	0.00	0.42	0.00
35.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3A: Pond 3A

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,192.00	0.00	0.00	0.00	0.00
1,192.20	0.37	0.00	0.37	0.00
1,192.40	0.40	0.00	0.40	0.00
1,192.60	0.42	0.00	0.42	0.00
1,192.80	0.45	0.00	0.45	0.00
1,193.00	0.47	0.00	0.47	0.00
1,193.20	0.50	0.01	0.50	0.00
1,193.40	0.57	0.05	0.52	0.00
1,193.60	0.68	0.13	0.55	0.00
1,193.80	0.84	0.27	0.57	0.00
1,194.00	1.07	0.47	0.60	0.00
1,194.20	1.37	0.75	0.62	0.00
1,194.40	1.75	1.10	0.65	0.00
1,194.60	2.21	1.54	0.67	0.00
1,194.80	2.76	2.06	0.70	0.00
1,195.00	3.40	2.68	0.72	0.00
1,195.20	4.15	3.41	0.74	0.00
1,195.40	5.00	4.23	0.77	0.00
1,195.60	5.96	5.17	0.79	0.00
1,195.80	6.55	5.74	0.82	0.00
1,196.00	6.82	5.98	0.84	0.00
1,196.20	7.08	6.21	0.87	0.00
1,196.40	7.33	6.44	0.89	0.00
1,196.60	7.58	6.66	0.92	0.00
1,196.80	7.81	6.87	0.94	0.00
1,197.00	8.04	7.07	0.97	0.00
1,197.20	12.86	7.27	0.99	4.60
1,197.40	22.27	7.47	1.02	13.78
1,197.60	36.21	7.66	1.04	27.51
1,197.80	52.33	7.84	1.07	43.42
1,198.00	**71.29**	**8.02**	**1.09**	**62.18**

Stage-Area-Storage for Pond P3A: Pond 3A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,192.00	4,165	0
1,192.10	4,314	424
1,192.20	4,463	863
1,192.30	4,613	1,317
1,192.40	4,762	1,785
1,192.50	4,911	2,269
1,192.60	5,060	2,768
1,192.70	5,209	3,281
1,192.80	5,359	3,809
1,192.90	5,508	4,353
1,193.00	5,657	4,911
1,193.10	5,806	5,484
1,193.20	5,955	6,072
1,193.30	6,105	6,675
1,193.40	6,254	7,293
1,193.50	6,403	7,926
1,193.60	6,552	8,574
1,193.70	6,701	9,236
1,193.80	6,851	9,914
1,193.90	7,000	10,607
1,194.00	7,149	11,314
1,194.10	7,298	12,036
1,194.20	7,447	12,774
1,194.30	7,597	13,526
1,194.40	7,746	14,293
1,194.50	7,895	15,075
1,194.60	8,044	15,872
1,194.70	8,193	16,684
1,194.80	8,343	17,511
1,194.90	8,492	18,352
1,195.00	8,641	19,209
1,195.10	8,790	20,081
1,195.20	8,939	20,967
1,195.30	9,089	21,868
1,195.40	9,238	22,785
1,195.50	9,387	23,716
1,195.60	9,536	24,662
1,195.70	9,685	25,623
1,195.80	9,835	26,599
1,195.90	9,984	27,590
1,196.00	10,133	28,596
1,196.10	10,282	29,617
1,196.20	10,431	30,652
1,196.30	10,581	31,703
1,196.40	10,730	32,769
1,196.50	10,879	33,849
1,196.60	11,028	34,944
1,196.70	11,177	36,055
1,196.80	11,327	37,180
1,196.90	11,476	38,320
1,197.00	11,625	39,475
1,197.10	11,774	40,645
1,197.20	11,923	41,830
1,197.30	12,073	43,030
1,197.40	12,222	44,244
1,197.50	12,371	45,474
1,197.60	12,520	46,719
1,197.70	12,669	47,978
1,197.80	12,819	49,252
1,197.90	12,968	50,542
1,198.00	**13,117**	**51,846**

Summary for Pond P3B: Pond 3B

Inflow Area = 8.450 ac, 19.88% Impervious, Inflow Depth = 1.60" for 10 YR event
Inflow = 21.12 cfs @ 12.14 hrs, Volume= 1.129 af
Outflow = 4.59 cfs @ 12.47 hrs, Volume= 1.129 af, Atten= 78%, Lag= 20.1 min
Primary = 3.92 cfs @ 12.47 hrs, Volume= 0.579 af
Routed to Link 4L : Post - North
Secondary = 0.68 cfs @ 12.47 hrs, Volume= 0.550 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,198.33' @ 12.47 hrs Surf.Area= 8,114 sf Storage= 18,152 cf

Plug-Flow detention time= 118.9 min calculated for 1.129 af (100% of inflow)
Center-of-Mass det. time= 118.9 min (954.6 - 835.7)

Volume	Invert	Avail.Storage	Storage Description
#1	1,195.00'	33,965 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

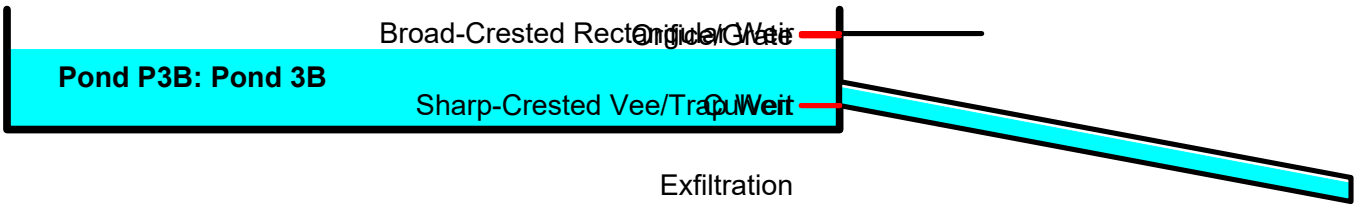
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,195.00	2,799	0	0
1,200.00	10,787	33,965	33,965

Device	Routing	Invert	Outlet Devices
#1	Primary	1,196.00'	**12.0" Round Culvert** L= 36.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,196.00' / 1,192.00' S= 0.1111 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,196.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,198.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,195.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,199.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=3.91 cfs @ 12.47 hrs HW=1,198.32' (Free Discharge)
└**1=Culvert** (Passes 3.91 cfs of 5.11 cfs potential flow)
├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 3.91 cfs @ 4.10 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

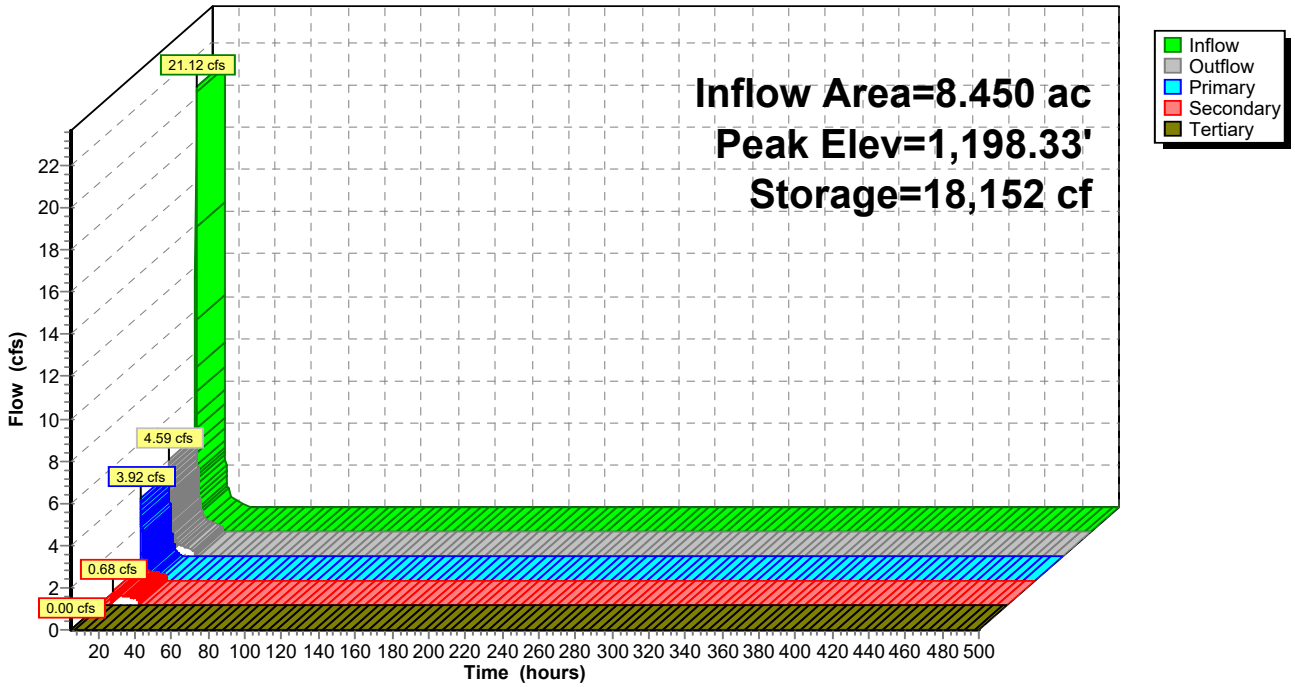
Secondary OutFlow Max=0.68 cfs @ 12.47 hrs HW=1,198.32' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.68 cfs)

Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,195.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

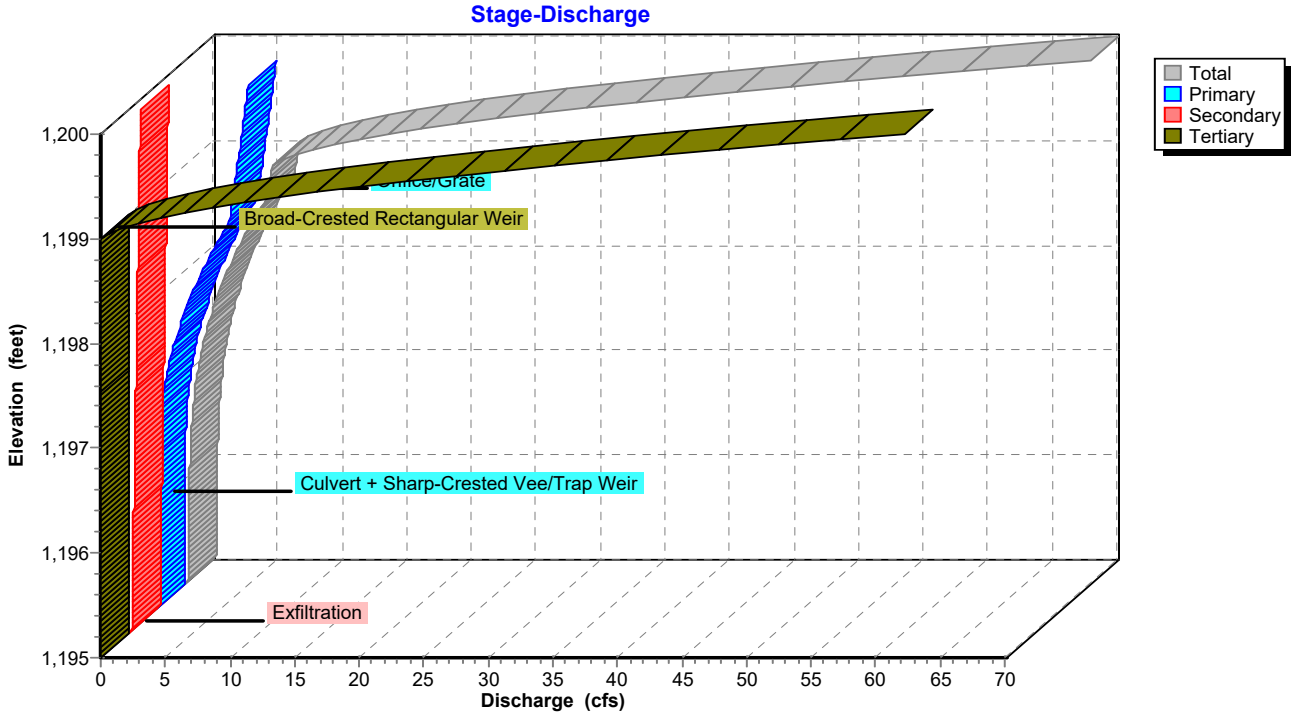


Pond P3B: Pond 3B

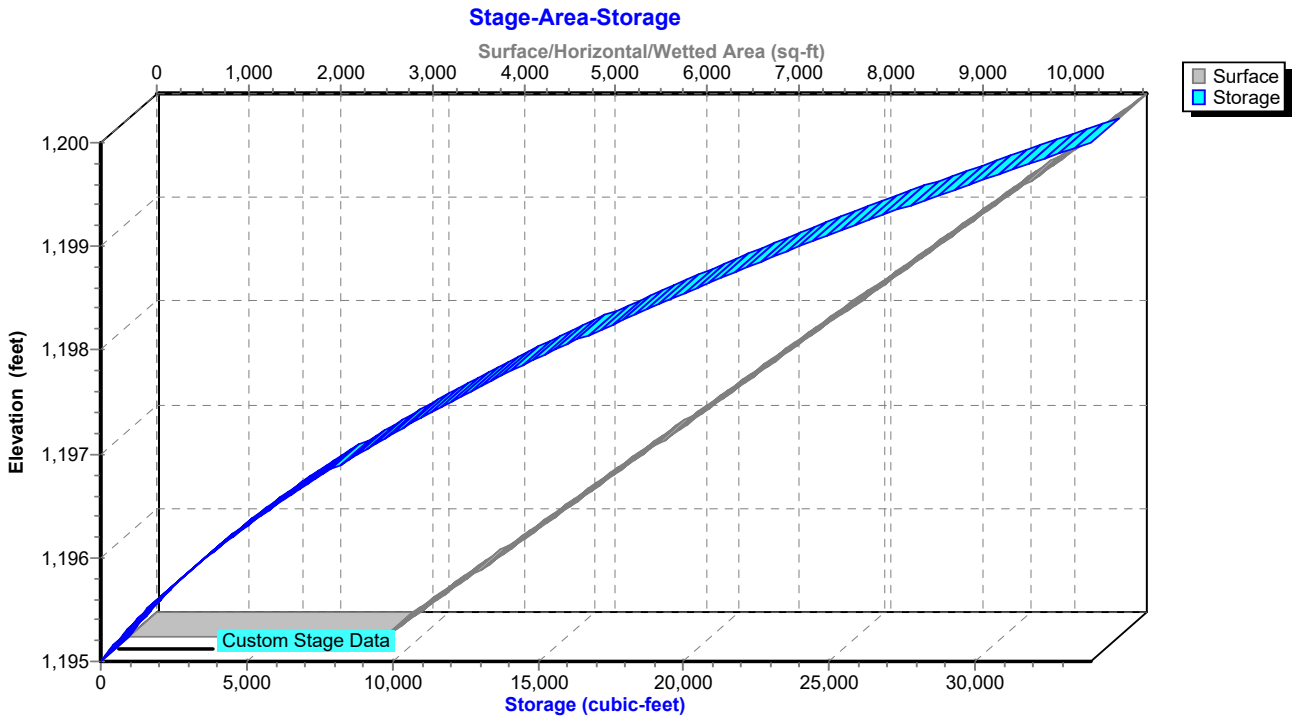
Hydrograph



Pond P3B: Pond 3B



Pond P3B: Pond 3B



Hydrograph for Pond P3B: Pond 3B

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,195.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.86**	**9,831**	**1,197.17**	**1.22**	**0.70**	**0.52**	0.00
25.00	0.00	1,719	1,195.53	0.30	0.00	0.30	0.00
35.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3B: Pond 3B

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,195.00	0.00	0.00	0.00	0.00
1,195.10	0.25	0.00	0.25	0.00
1,195.20	0.26	0.00	0.26	0.00
1,195.30	0.27	0.00	0.27	0.00
1,195.40	0.29	0.00	0.29	0.00
1,195.50	0.30	0.00	0.30	0.00
1,195.60	0.31	0.00	0.31	0.00
1,195.70	0.33	0.00	0.33	0.00
1,195.80	0.34	0.00	0.34	0.00
1,195.90	0.35	0.00	0.35	0.00
1,196.00	0.37	0.00	0.37	0.00
1,196.10	0.38	0.00	0.38	0.00
1,196.20	0.40	0.01	0.39	0.00
1,196.30	0.43	0.02	0.41	0.00
1,196.40	0.47	0.05	0.42	0.00
1,196.50	0.52	0.08	0.43	0.00
1,196.60	0.58	0.13	0.45	0.00
1,196.70	0.65	0.19	0.46	0.00
1,196.80	0.74	0.27	0.47	0.00
1,196.90	0.85	0.36	0.49	0.00
1,197.00	0.97	0.47	0.50	0.00
1,197.10	1.11	0.60	0.51	0.00
1,197.20	1.27	0.75	0.53	0.00
1,197.30	1.45	0.91	0.54	0.00
1,197.40	1.65	1.10	0.55	0.00
1,197.50	1.87	1.31	0.57	0.00
1,197.60	2.12	1.54	0.58	0.00
1,197.70	2.38	1.79	0.59	0.00
1,197.80	2.67	2.06	0.61	0.00
1,197.90	2.98	2.36	0.62	0.00
1,198.00	3.32	2.68	0.63	0.00
1,198.10	3.68	3.03	0.65	0.00
1,198.20	4.06	3.41	0.66	0.00
1,198.30	4.48	3.81	0.67	0.00
1,198.40	4.92	4.23	0.69	0.00
1,198.50	5.39	4.69	0.70	0.00
1,198.60	5.88	5.17	0.71	0.00
1,198.70	6.33	5.61	0.73	0.00
1,198.80	6.47	5.74	0.74	0.00
1,198.90	6.61	5.86	0.75	0.00
1,199.00	6.75	5.98	0.77	0.00
1,199.10	8.48	6.10	0.78	1.60
1,199.20	11.60	6.21	0.79	4.60
1,199.30	15.83	6.33	0.81	8.70
1,199.40	21.04	6.44	0.82	13.78
1,199.50	27.47	6.55	0.83	20.08
1,199.60	35.01	6.66	0.85	27.51
1,199.70	42.73	6.76	0.86	35.10
1,199.80	51.17	6.87	0.87	43.42
1,199.90	60.31	6.97	0.89	52.45
1,200.00	**70.15**	**7.07**	**0.90**	**62.18**

Stage-Area-Storage for Pond P3B: Pond 3B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,195.00	2,799	0
1,195.05	2,879	142
1,195.10	2,959	288
1,195.15	3,039	438
1,195.20	3,119	592
1,195.25	3,198	750
1,195.30	3,278	912
1,195.35	3,358	1,078
1,195.40	3,438	1,247
1,195.45	3,518	1,421
1,195.50	3,598	1,599
1,195.55	3,678	1,781
1,195.60	3,758	1,967
1,195.65	3,837	2,157
1,195.70	3,917	2,351
1,195.75	3,997	2,549
1,195.80	4,077	2,750
1,195.85	4,157	2,956
1,195.90	4,237	3,166
1,195.95	4,317	3,380
1,196.00	4,397	3,598
1,196.05	4,476	3,820
1,196.10	4,556	4,045
1,196.15	4,636	4,275
1,196.20	4,716	4,509
1,196.25	4,796	4,747
1,196.30	4,876	4,989
1,196.35	4,956	5,234
1,196.40	5,036	5,484
1,196.45	5,116	5,738
1,196.50	5,195	5,996
1,196.55	5,275	6,258
1,196.60	5,355	6,523
1,196.65	5,435	6,793
1,196.70	5,515	7,067
1,196.75	5,595	7,345
1,196.80	5,675	7,626
1,196.85	5,755	7,912
1,196.90	5,834	8,202
1,196.95	5,914	8,495
1,197.00	5,994	8,793
1,197.05	6,074	9,095
1,197.10	6,154	9,401
1,197.15	6,234	9,710
1,197.20	6,314	10,024
1,197.25	6,394	10,342
1,197.30	6,473	10,663
1,197.35	6,553	10,989
1,197.40	6,633	11,319
1,197.45	6,713	11,652
1,197.50	6,793	11,990
1,197.55	6,873	12,332
1,197.60	6,953	12,677
1,197.65	7,033	13,027
1,197.70	7,113	13,381
1,197.75	7,192	13,738
1,197.80	7,272	14,100
1,197.85	7,352	14,465
1,197.90	7,432	14,835
1,197.95	7,512	15,209
1,198.00	7,592	15,586
1,198.05	7,672	15,968
1,198.10	7,752	16,353
1,198.15	7,831	16,743
1,198.20	7,911	17,137
1,198.25	7,991	17,534
1,198.30	8,071	17,936
1,198.35	8,151	18,341
1,198.40	8,231	18,751
1,198.45	8,311	19,164
1,198.50	8,391	19,582
1,198.55	8,470	20,003
1,198.60	8,550	20,429
1,198.65	8,630	20,858
1,198.70	8,710	21,292
1,198.75	8,790	21,729
1,198.80	8,870	22,171
1,198.85	8,950	22,616
1,198.90	9,030	23,066
1,198.95	9,110	23,519
1,199.00	9,189	23,977
1,199.05	9,269	24,438
1,199.10	9,349	24,904
1,199.15	9,429	25,373
1,199.20	9,509	25,847
1,199.25	9,589	26,324
1,199.30	9,669	26,806
1,199.35	9,749	27,291
1,199.40	9,828	27,780
1,199.45	9,908	28,274
1,199.50	9,988	28,771
1,199.55	10,068	29,273
1,199.60	10,148	29,778
1,199.65	10,228	30,287
1,199.70	10,308	30,801
1,199.75	10,388	31,318
1,199.80	10,467	31,840
1,199.85	10,547	32,365
1,199.90	10,627	32,894
1,199.95	10,707	33,428
1,200.00	**10,787**	**33,965**

Summary for Pond P3C: Pond 3C

Inflow Area = 2.490 ac, 22.89% Impervious, Inflow Depth = 1.89" for 10 YR event
Inflow = 7.40 cfs @ 12.14 hrs, Volume= 0.393 af
Outflow = 1.31 cfs @ 12.53 hrs, Volume= 0.393 af, Atten= 82%, Lag= 23.7 min
Primary = 0.97 cfs @ 12.53 hrs, Volume= 0.132 af
Routed to Link 4L : Post - North
Secondary = 0.33 cfs @ 12.53 hrs, Volume= 0.262 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,180.33' @ 12.53 hrs Surf.Area= 4,013 sf Storage= 6,905 cf

Plug-Flow detention time= 125.7 min calculated for 0.393 af (100% of inflow)
Center-of-Mass det. time= 125.7 min (952.1 - 826.5)

Volume	Invert	Avail.Storage	Storage Description
#1	1,178.00'	14,846 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

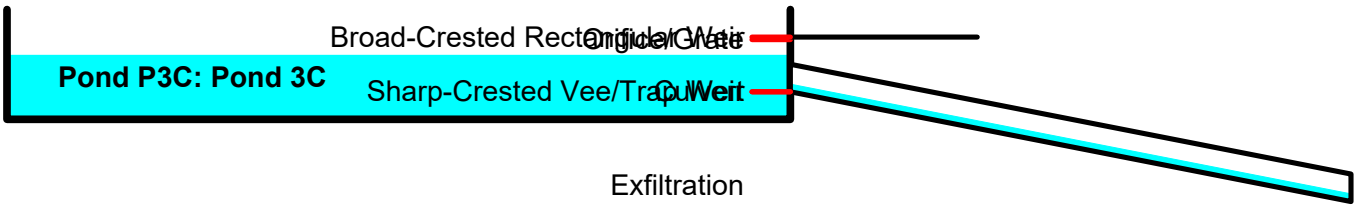
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,178.00	1,905	0	0
1,182.00	5,518	14,846	14,846

Device	Routing	Invert	Outlet Devices
#1	Primary	1,179.00'	**12.0" Round Culvert** L= 30.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,179.00' / 1,175.00' S= 0.1333 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,179.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,180.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,178.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,181.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.97 cfs @ 12.53 hrs HW=1,180.33' (Free Discharge)
└**1=Culvert** (Passes 0.97 cfs of 3.45 cfs potential flow)
├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 0.97 cfs @ 3.11 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

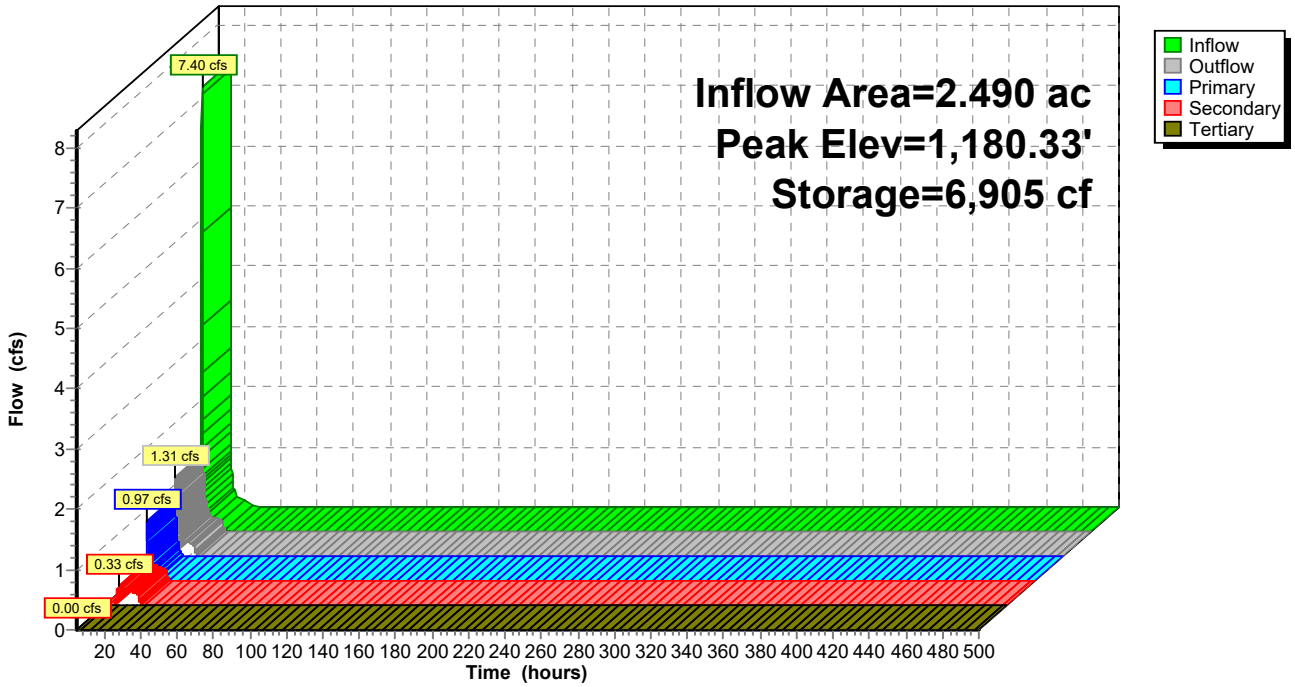
Secondary OutFlow Max=0.33 cfs @ 12.53 hrs HW=1,180.33' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.33 cfs)

Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,178.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

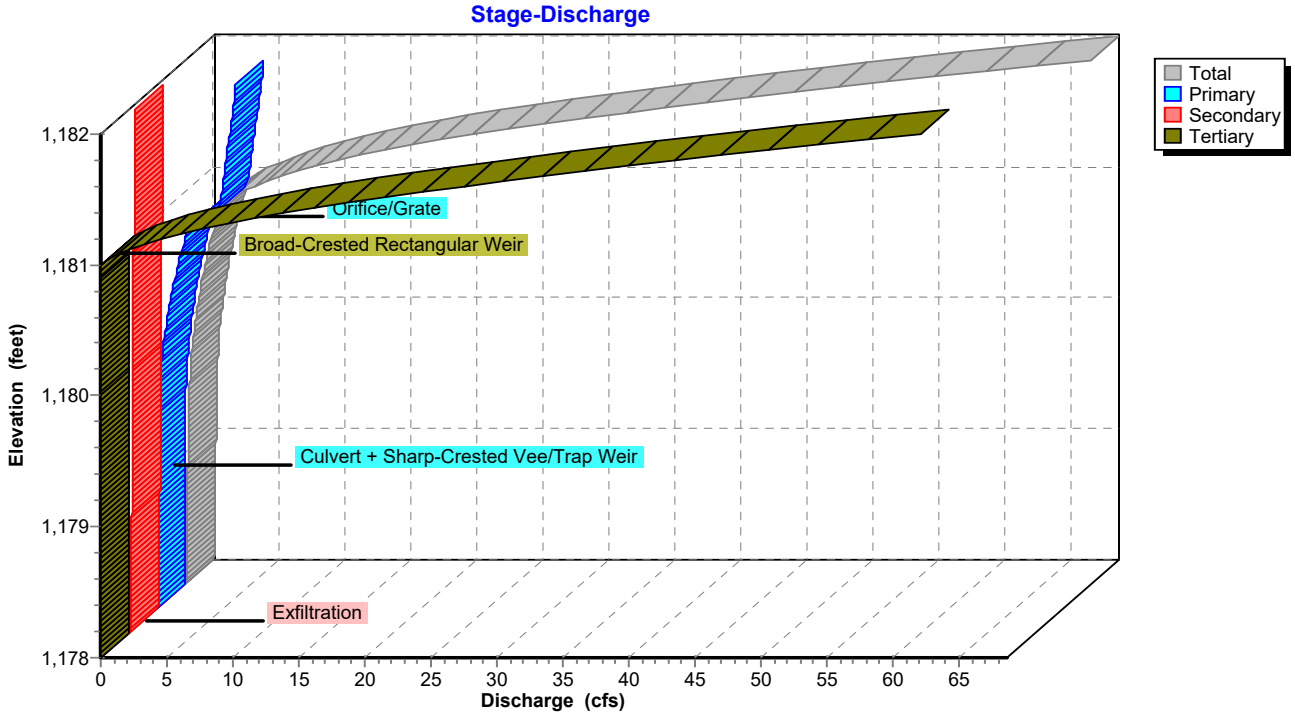


Pond P3C: Pond 3C

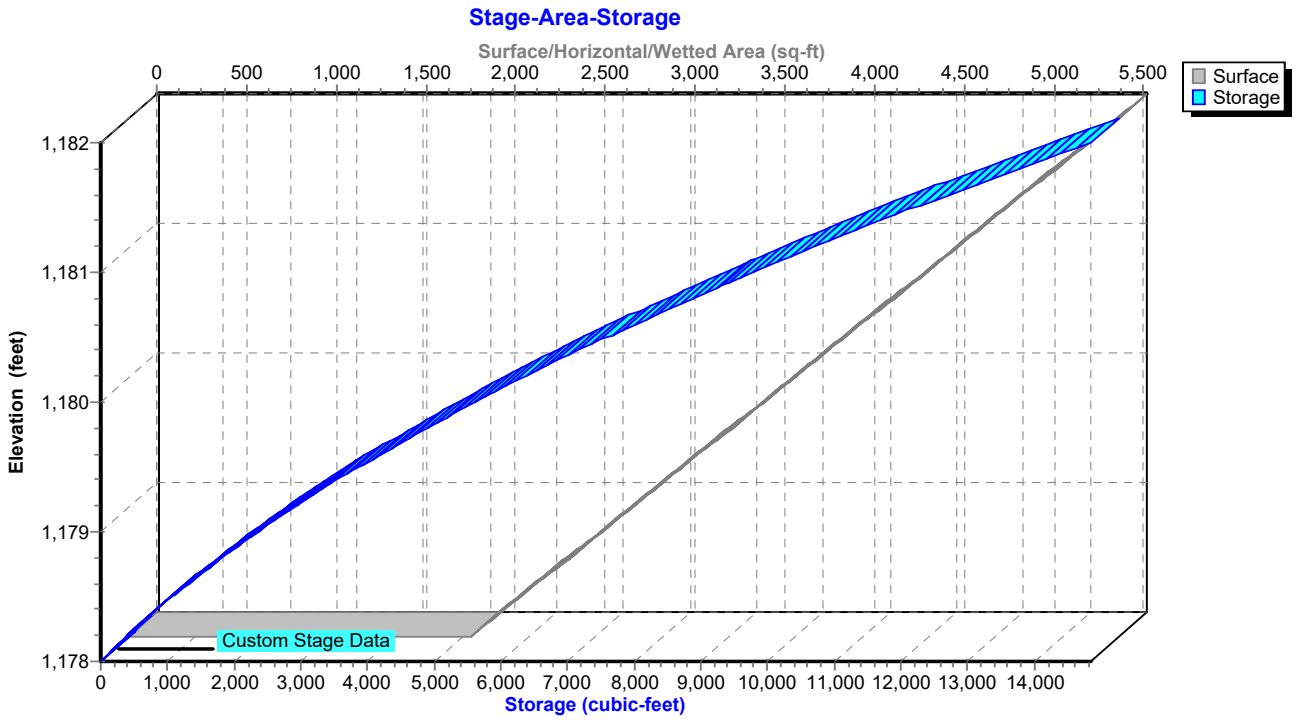
Hydrograph



Pond P3C: Pond 3C



Pond P3C: Pond 3C



Hydrograph for Pond P3C: Pond 3C

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,178.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.28**	**4,320**	**1,179.63**	**0.43**	**0.15**	**0.28**	0.00
25.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
35.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3C: Pond 3C

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,178.00	0.00	0.00	0.00	0.00
1,178.10	0.17	0.00	0.17	0.00
1,178.20	0.17	0.00	0.17	0.00
1,178.30	0.18	0.00	0.18	0.00
1,178.40	0.19	0.00	0.19	0.00
1,178.50	0.20	0.00	0.20	0.00
1,178.60	0.20	0.00	0.20	0.00
1,178.70	0.21	0.00	0.21	0.00
1,178.80	0.22	0.00	0.22	0.00
1,178.90	0.23	0.00	0.23	0.00
1,179.00	0.23	0.00	0.23	0.00
1,179.10	0.24	0.00	0.24	0.00
1,179.20	0.26	0.01	0.25	0.00
1,179.30	0.28	0.02	0.26	0.00
1,179.40	0.31	0.05	0.26	0.00
1,179.50	0.36	0.08	0.27	0.00
1,179.60	0.41	0.13	0.28	0.00
1,179.70	0.48	0.19	0.29	0.00
1,179.80	0.57	0.27	0.29	0.00
1,179.90	0.67	0.36	0.30	0.00
1,180.00	0.78	0.47	0.31	0.00
1,180.10	0.92	0.60	0.32	0.00
1,180.20	1.07	0.75	0.32	0.00
1,180.30	1.25	0.91	0.33	0.00
1,180.40	1.44	1.10	0.34	0.00
1,180.50	1.65	1.31	0.35	0.00
1,180.60	1.89	1.54	0.35	0.00
1,180.70	2.15	1.79	0.36	0.00
1,180.80	2.43	2.06	0.37	0.00
1,180.90	2.74	2.36	0.38	0.00
1,181.00	4.10	3.72	0.38	0.00
1,181.10	6.78	4.78	0.39	1.60
1,181.20	9.93	4.93	0.40	4.60
1,181.30	14.18	5.07	0.41	8.70
1,181.40	19.41	5.21	0.41	13.78
1,181.50	25.85	5.35	0.42	20.08
1,181.60	33.42	5.48	0.43	27.51
1,181.70	41.15	5.61	0.44	35.10
1,181.80	49.60	5.74	0.44	43.42
1,181.90	58.76	5.86	0.45	52.45
1,182.00	**68.62**	**5.98**	**0.46**	**62.18**

Stage-Area-Storage for Pond P3C: Pond 3C

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,178.00	1,905	0
1,178.05	1,950	96
1,178.10	1,995	195
1,178.15	2,040	296
1,178.20	2,086	399
1,178.25	2,131	504
1,178.30	2,176	612
1,178.35	2,221	722
1,178.40	2,266	834
1,178.45	2,311	949
1,178.50	2,357	1,065
1,178.55	2,402	1,184
1,178.60	2,447	1,306
1,178.65	2,492	1,429
1,178.70	2,537	1,555
1,178.75	2,582	1,683
1,178.80	2,628	1,813
1,178.85	2,673	1,946
1,178.90	2,718	2,080
1,178.95	2,763	2,217
1,179.00	2,808	2,357
1,179.05	2,853	2,498
1,179.10	2,899	2,642
1,179.15	2,944	2,788
1,179.20	2,989	2,936
1,179.25	3,034	3,087
1,179.30	3,079	3,240
1,179.35	3,124	3,395
1,179.40	3,170	3,552
1,179.45	3,215	3,712
1,179.50	3,260	3,874
1,179.55	3,305	4,038
1,179.60	3,350	4,204
1,179.65	3,395	4,373
1,179.70	3,441	4,544
1,179.75	3,486	4,717
1,179.80	3,531	4,892
1,179.85	3,576	5,070
1,179.90	3,621	5,250
1,179.95	3,666	5,432
1,180.00	3,712	5,617
1,180.05	3,757	5,803
1,180.10	3,802	5,992
1,180.15	3,847	6,183
1,180.20	3,892	6,377
1,180.25	3,937	6,573
1,180.30	3,982	6,771
1,180.35	4,028	6,971
1,180.40	4,073	7,173
1,180.45	4,118	7,378
1,180.50	4,163	7,585
1,180.55	4,208	7,794
1,180.60	4,253	8,006
1,180.65	4,299	8,220
1,180.70	4,344	8,436
1,180.75	4,389	8,654
1,180.80	4,434	8,875
1,180.85	4,479	9,098
1,180.90	4,524	9,323
1,180.95	4,570	9,550
1,181.00	4,615	9,780
1,181.05	4,660	10,011
1,181.10	4,705	10,246
1,181.15	4,750	10,482
1,181.20	4,795	10,721
1,181.25	4,841	10,962
1,181.30	4,886	11,205
1,181.35	4,931	11,450
1,181.40	4,976	11,698
1,181.45	5,021	11,948
1,181.50	5,066	12,200
1,181.55	5,112	12,454
1,181.60	5,157	12,711
1,181.65	5,202	12,970
1,181.70	5,247	13,231
1,181.75	5,292	13,495
1,181.80	5,337	13,760
1,181.85	5,383	14,028
1,181.90	5,428	14,299
1,181.95	5,473	14,571
1,182.00	**5,518**	**14,846**

Summary for Pond P3D: Pond 3D

Inflow Area = 2.380 ac, 23.95% Impervious, Inflow Depth = 1.97" for 10 YR event
Inflow = 7.36 cfs @ 12.13 hrs, Volume= 0.391 af
Outflow = 3.16 cfs @ 12.27 hrs, Volume= 0.391 af, Atten= 57%, Lag= 8.1 min
Primary = 2.94 cfs @ 12.27 hrs, Volume= 0.230 af
Routed to Link 4L : Post - North
Secondary = 0.22 cfs @ 12.27 hrs, Volume= 0.161 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,190.07' @ 12.27 hrs Surf.Area= 2,687 sf Storage= 5,269 cf

Plug-Flow detention time= 80.4 min calculated for 0.391 af (100% of inflow)
Center-of-Mass det. time= 80.4 min (904.6 - 824.2)

Volume	Invert	Avail.Storage	Storage Description
#1	1,187.00'	11,620 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

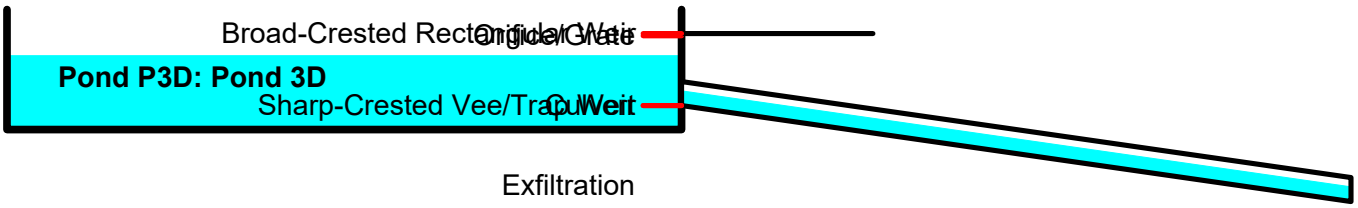
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,187.00	741	0	0
1,192.00	3,907	11,620	11,620

Device	Routing	Invert	Outlet Devices
#1	Primary	1,188.00'	**12.0" Round Culvert** L= 35.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,188.00' / 1,184.00' S= 0.1143 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,188.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,190.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600
#4	Secondary	1,187.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,191.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=2.90 cfs @ 12.27 hrs HW=1,190.06' (Free Discharge)
└**1=Culvert** (Passes 2.90 cfs of 4.73 cfs potential flow)
└**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 2.90 cfs @ 3.86 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

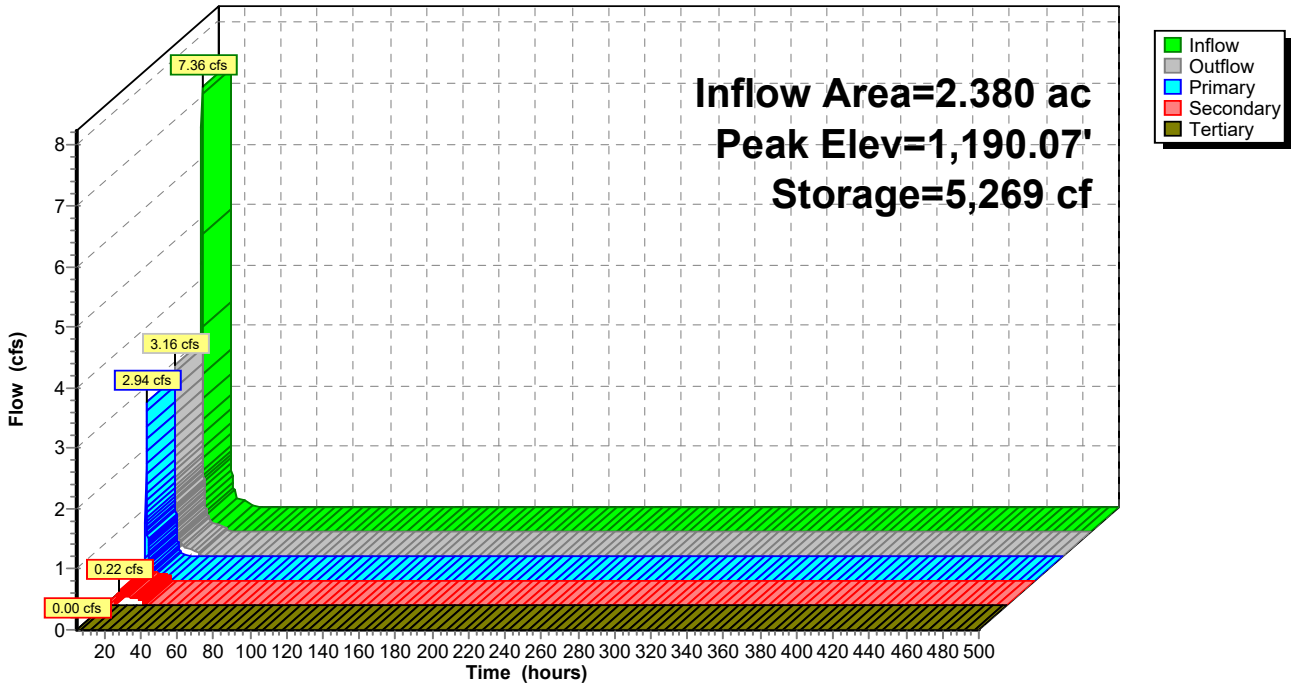
Secondary OutFlow Max=0.22 cfs @ 12.27 hrs HW=1,190.06' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.22 cfs)

Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,187.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

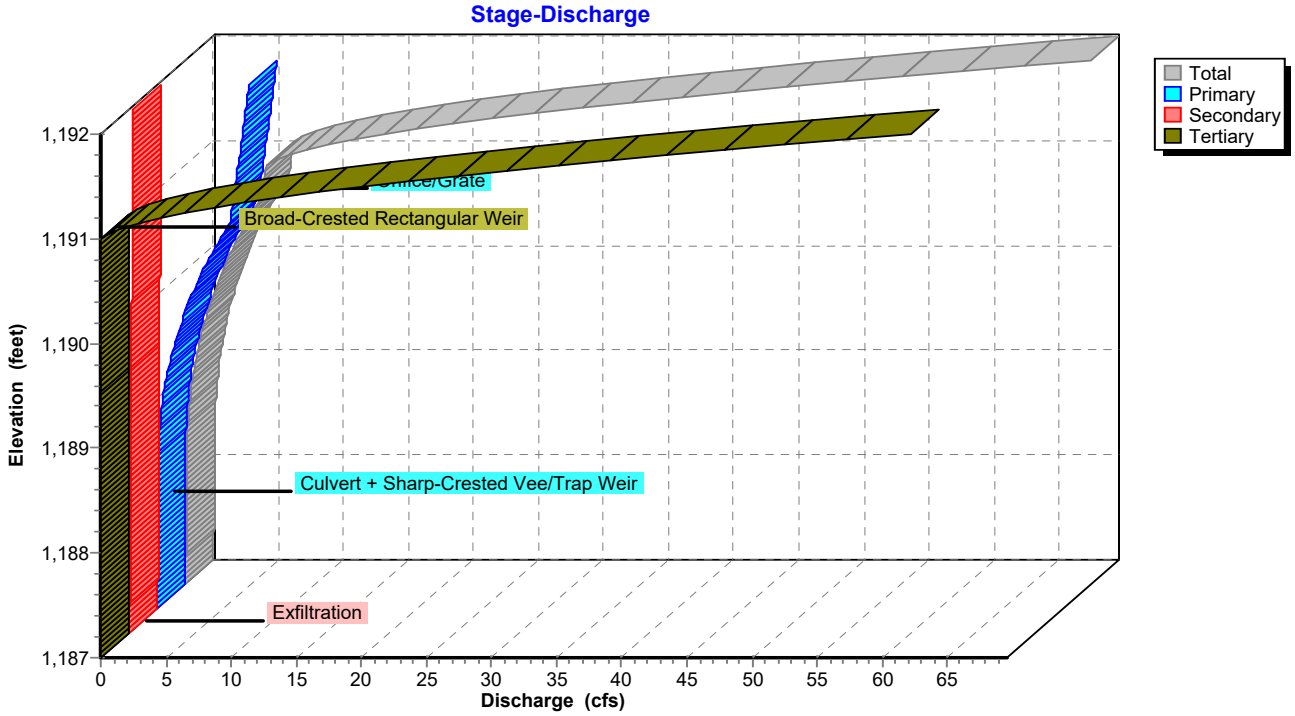


Pond P3D: Pond 3D

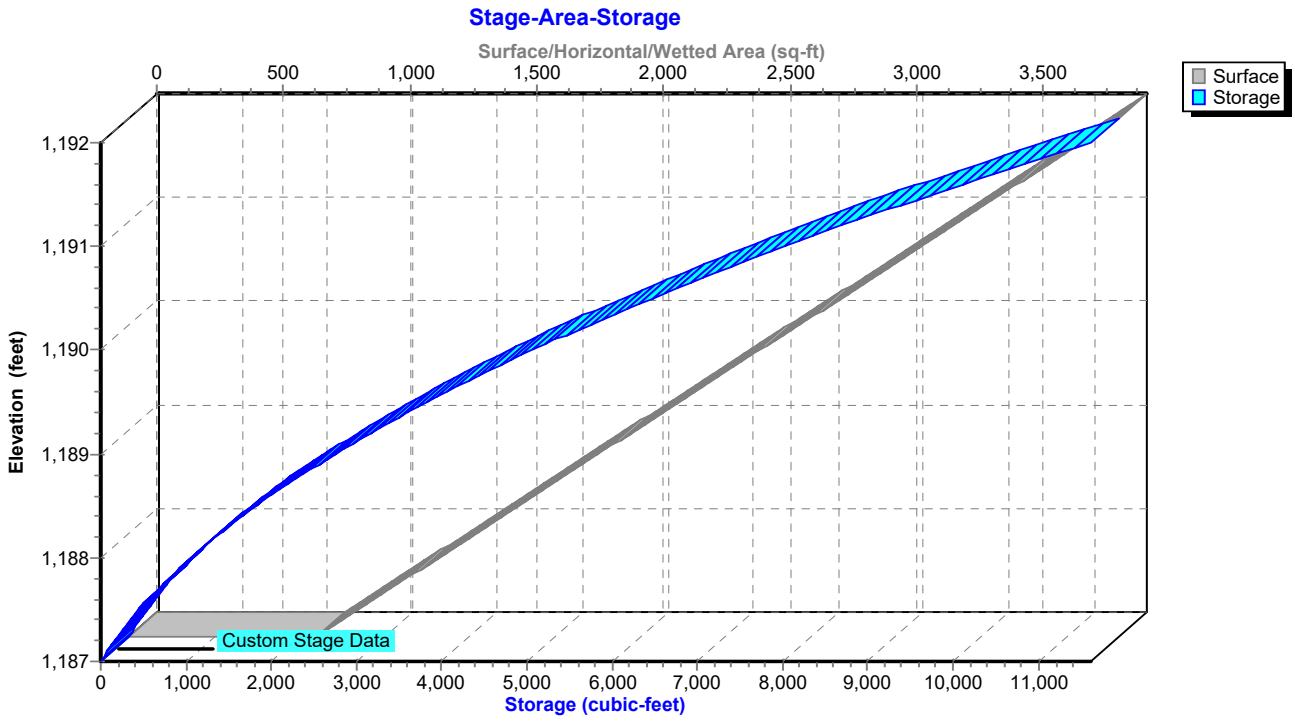
Hydrograph



Pond P3D: Pond 3D



Pond P3D: Pond 3D



Hydrograph for Pond P3D: Pond 3D

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,187.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.27**	**2,118**	**1,188.67**	**0.32**	**0.17**	**0.15**	0.00
25.00	0.00	336	1,187.39	0.08	0.00	0.08	0.00
35.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3D: Pond 3D

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,187.00	0.00	0.00	0.00	0.00
1,187.10	0.07	0.00	0.07	0.00
1,187.20	0.07	0.00	0.07	0.00
1,187.30	0.08	0.00	0.08	0.00
1,187.40	0.08	0.00	0.08	0.00
1,187.50	0.09	0.00	0.09	0.00
1,187.60	0.09	0.00	0.09	0.00
1,187.70	0.10	0.00	0.10	0.00
1,187.80	0.10	0.00	0.10	0.00
1,187.90	0.11	0.00	0.11	0.00
1,188.00	0.11	0.00	0.11	0.00
1,188.10	0.12	0.00	0.12	0.00
1,188.20	0.13	0.01	0.13	0.00
1,188.30	0.15	0.02	0.13	0.00
1,188.40	0.18	0.05	0.14	0.00
1,188.50	0.22	0.08	0.14	0.00
1,188.60	0.28	0.13	0.15	0.00
1,188.70	0.35	0.19	0.15	0.00
1,188.80	0.43	0.27	0.16	0.00
1,188.90	0.53	0.36	0.16	0.00
1,189.00	0.64	0.47	0.17	0.00
1,189.10	0.77	0.60	0.17	0.00
1,189.20	0.93	0.75	0.18	0.00
1,189.30	1.10	0.91	0.18	0.00
1,189.40	1.29	1.10	0.19	0.00
1,189.50	1.50	1.31	0.19	0.00
1,189.60	1.73	1.54	0.20	0.00
1,189.70	1.99	1.79	0.20	0.00
1,189.80	2.27	2.06	0.21	0.00
1,189.90	2.58	2.36	0.21	0.00
1,190.00	2.90	2.68	0.22	0.00
1,190.10	3.26	3.03	0.23	0.00
1,190.20	3.64	3.41	0.23	0.00
1,190.30	4.04	3.81	0.24	0.00
1,190.40	4.47	4.23	0.24	0.00
1,190.50	4.93	4.69	0.25	0.00
1,190.60	5.42	5.17	0.25	0.00
1,190.70	5.87	5.61	0.26	0.00
1,190.80	6.00	5.74	0.26	0.00
1,190.90	6.13	5.86	0.27	0.00
1,191.00	6.25	5.98	0.27	0.00
1,191.10	7.98	6.10	0.28	1.60
1,191.20	11.09	6.21	0.28	4.60
1,191.30	15.31	6.33	0.29	8.70
1,191.40	20.52	6.44	0.29	13.78
1,191.50	26.93	6.55	0.30	20.08
1,191.60	34.47	6.66	0.30	27.51
1,191.70	42.18	6.76	0.31	35.10
1,191.80	50.61	6.87	0.32	43.42
1,191.90	59.75	6.97	0.32	52.45
1,192.00	**69.58**	**7.07**	**0.33**	**62.18**

Stage-Area-Storage for Pond P3D: Pond 3D

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,187.00	741	0
1,187.05	773	38
1,187.10	804	77
1,187.15	836	118
1,187.20	868	161
1,187.25	899	205
1,187.30	931	251
1,187.35	963	298
1,187.40	994	347
1,187.45	1,026	398
1,187.50	1,058	450
1,187.55	1,089	503
1,187.60	1,121	559
1,187.65	1,153	615
1,187.70	1,184	674
1,187.75	1,216	734
1,187.80	1,248	795
1,187.85	1,279	859
1,187.90	1,311	923
1,187.95	1,343	990
1,188.00	1,374	1,058
1,188.05	1,406	1,127
1,188.10	1,438	1,198
1,188.15	1,469	1,271
1,188.20	1,501	1,345
1,188.25	1,533	1,421
1,188.30	1,564	1,498
1,188.35	1,596	1,577
1,188.40	1,627	1,658
1,188.45	1,659	1,740
1,188.50	1,691	1,824
1,188.55	1,722	1,909
1,188.60	1,754	1,996
1,188.65	1,786	2,085
1,188.70	1,817	2,175
1,188.75	1,849	2,266
1,188.80	1,881	2,360
1,188.85	1,912	2,454
1,188.90	1,944	2,551
1,188.95	1,976	2,649
1,189.00	2,007	2,748
1,189.05	2,039	2,850
1,189.10	2,071	2,952
1,189.15	2,102	3,057
1,189.20	2,134	3,163
1,189.25	2,166	3,270
1,189.30	2,197	3,379
1,189.35	2,229	3,490
1,189.40	2,261	3,602
1,189.45	2,292	3,716
1,189.50	2,324	3,831
1,189.55	2,356	3,948
1,189.60	2,387	4,067
1,189.65	2,419	4,187
1,189.70	2,451	4,309
1,189.75	2,482	4,432
1,189.80	2,514	4,557
1,189.85	2,546	4,683
1,189.90	2,577	4,812
1,189.95	2,609	4,941
1,190.00	2,641	5,072
1,190.05	2,672	5,205
1,190.10	2,704	5,340
1,190.15	2,736	5,476
1,190.20	2,767	5,613
1,190.25	2,799	5,752
1,190.30	2,831	5,893
1,190.35	2,862	6,035
1,190.40	2,894	6,179
1,190.45	2,926	6,325
1,190.50	2,957	6,472
1,190.55	2,989	6,621
1,190.60	3,021	6,771
1,190.65	3,052	6,923
1,190.70	3,084	7,076
1,190.75	3,116	7,231
1,190.80	3,147	7,388
1,190.85	3,179	7,546
1,190.90	3,210	7,705
1,190.95	3,242	7,867
1,191.00	3,274	8,030
1,191.05	3,305	8,194
1,191.10	3,337	8,360
1,191.15	3,369	8,528
1,191.20	3,400	8,697
1,191.25	3,432	8,868
1,191.30	3,464	9,040
1,191.35	3,495	9,214
1,191.40	3,527	9,390
1,191.45	3,559	9,567
1,191.50	3,590	9,746
1,191.55	3,622	9,926
1,191.60	3,654	10,108
1,191.65	3,685	10,291
1,191.70	3,717	10,476
1,191.75	3,749	10,663
1,191.80	3,780	10,851
1,191.85	3,812	11,041
1,191.90	3,844	11,232
1,191.95	3,875	11,425
1,192.00	**3,907**	**11,620**

Summary for Pond P3E: Pond 3E

Inflow Area = 2.780 ac, 19.06% Impervious, Inflow Depth = 1.82" for 10 YR event
Inflow = 7.93 cfs @ 12.14 hrs, Volume= 0.422 af
Outflow = 1.23 cfs @ 12.58 hrs, Volume= 0.422 af, Atten= 84%, Lag= 26.6 min
Primary = 0.89 cfs @ 12.58 hrs, Volume= 0.130 af
Routed to Link 4L : Post - North
Secondary = 0.34 cfs @ 12.58 hrs, Volume= 0.291 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,218.29' @ 12.58 hrs Surf.Area= 4,091 sf Storage= 7,552 cf

Plug-Flow detention time= 137.2 min calculated for 0.422 af (100% of inflow)
Center-of-Mass det. time= 137.2 min (966.0 - 828.8)

Volume	Invert	Avail.Storage	Storage Description
#1	1,216.00'	15,578 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

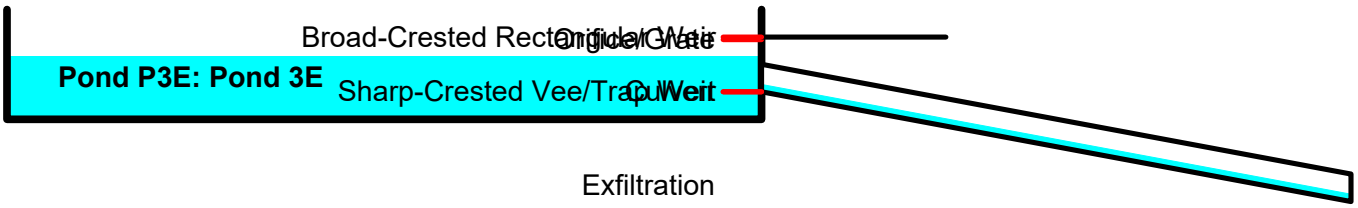
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,216.00	2,517	0	0
1,220.00	5,272	15,578	15,578

Device	Routing	Invert	Outlet Devices
#1	Primary	1,217.00'	**12.0" Round Culvert** L= 32.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,217.00' / 1,213.00' S= 0.1250 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,217.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,218.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600
#4	Secondary	1,216.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,219.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

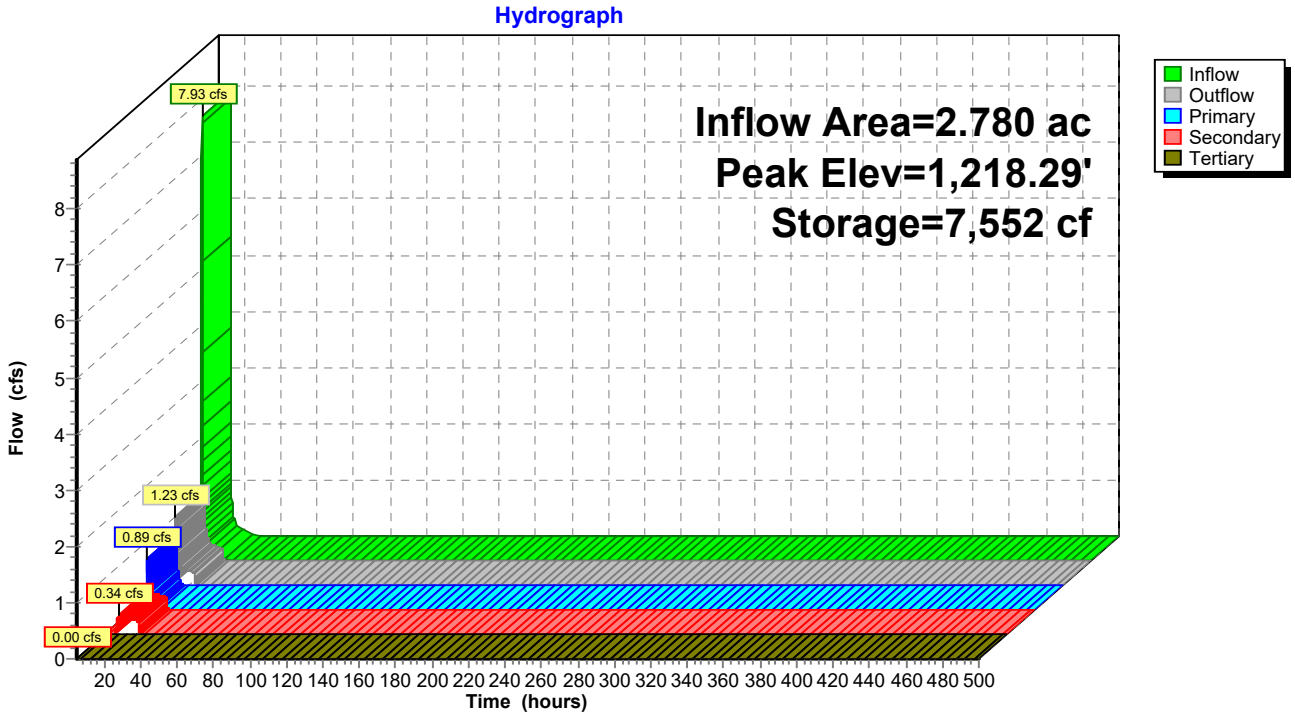
Primary OutFlow Max=0.89 cfs @ 12.58 hrs HW=1,218.28' (Free Discharge)
└**1=Culvert** (Passes 0.89 cfs of 3.35 cfs potential flow)
  ├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 0.89 cfs @ 3.05 fps)
  └**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.34 cfs @ 12.58 hrs HW=1,218.28' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.34 cfs)

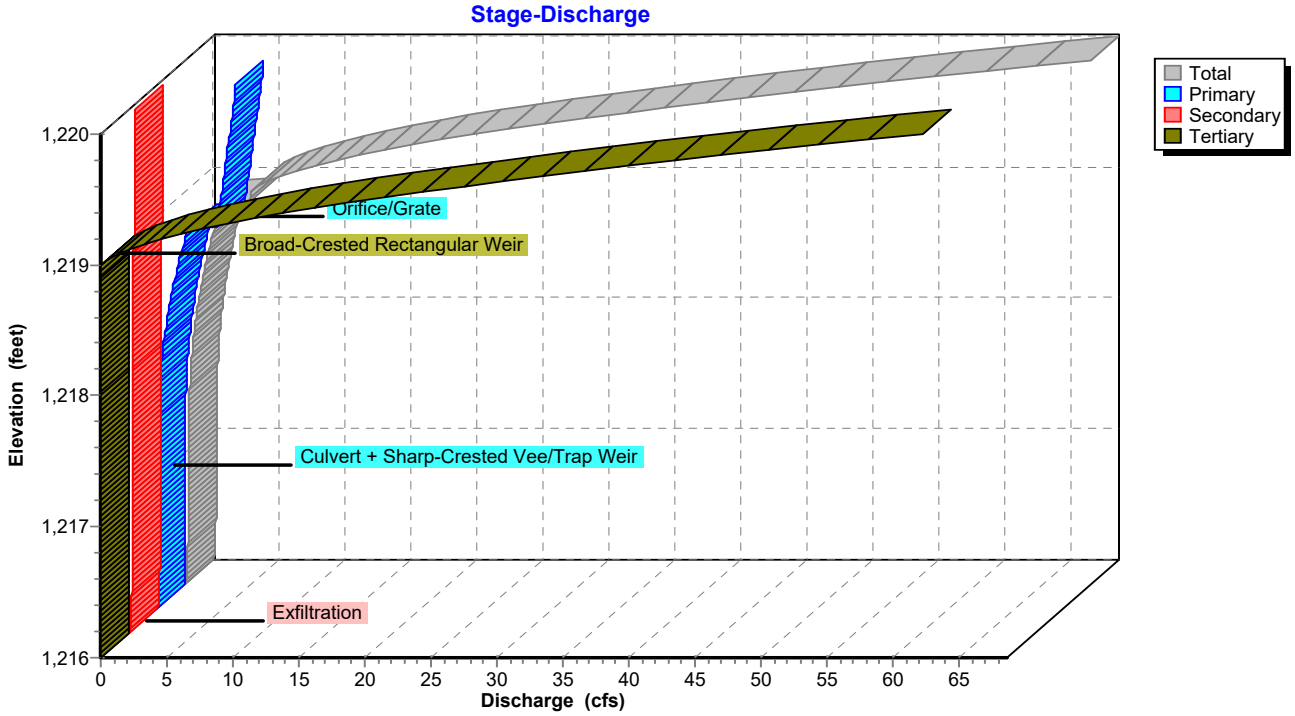
Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,216.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



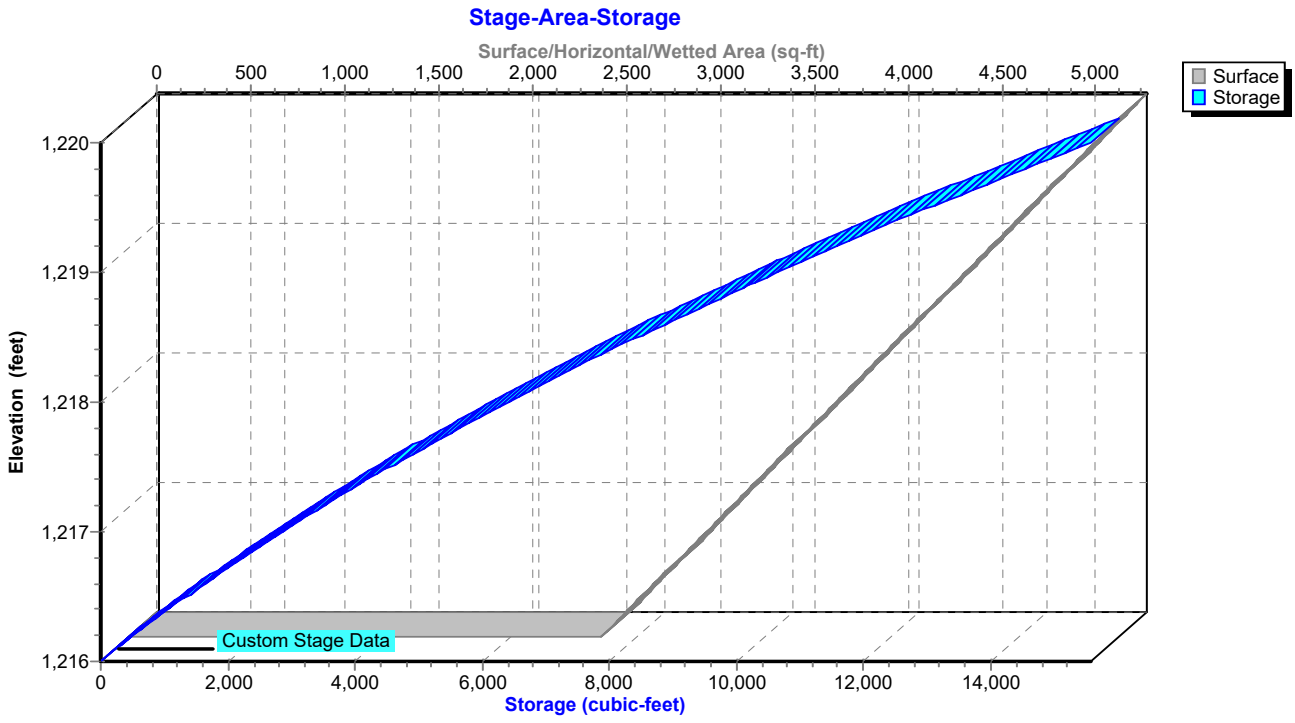
Pond P3E: Pond 3E



Pond P3E: Pond 3E



Pond P3E: Pond 3E



Hydrograph for Pond P3E: Pond 3E

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,216.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.30**	**5,124**	**1,217.66**	**0.47**	**0.17**	**0.30**	0.00
25.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
35.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3E: Pond 3E

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,216.00	0.00	0.00	0.00	0.00
1,216.10	0.22	0.00	0.22	0.00
1,216.20	0.22	0.00	0.22	0.00
1,216.30	0.23	0.00	0.23	0.00
1,216.40	0.23	0.00	0.23	0.00
1,216.50	0.24	0.00	0.24	0.00
1,216.60	0.24	0.00	0.24	0.00
1,216.70	0.25	0.00	0.25	0.00
1,216.80	0.26	0.00	0.26	0.00
1,216.90	0.26	0.00	0.26	0.00
1,217.00	0.27	0.00	0.27	0.00
1,217.10	0.27	0.00	0.27	0.00
1,217.20	0.29	0.01	0.28	0.00
1,217.30	0.31	0.02	0.28	0.00
1,217.40	0.34	0.05	0.29	0.00
1,217.50	0.38	0.08	0.30	0.00
1,217.60	0.43	0.13	0.30	0.00
1,217.70	0.50	0.19	0.31	0.00
1,217.80	0.58	0.27	0.31	0.00
1,217.90	0.68	0.36	0.32	0.00
1,218.00	0.80	0.47	0.32	0.00
1,218.10	0.93	0.60	0.33	0.00
1,218.20	1.08	0.75	0.34	0.00
1,218.30	1.26	0.91	0.34	0.00
1,218.40	1.45	1.10	0.35	0.00
1,218.50	1.66	1.31	0.35	0.00
1,218.60	1.89	1.54	0.36	0.00
1,218.70	2.15	1.79	0.36	0.00
1,218.80	2.43	2.06	0.37	0.00
1,218.90	2.74	2.36	0.38	0.00
1,219.00	5.01	4.63	0.38	0.00
1,219.10	6.77	4.78	0.39	1.60
1,219.20	9.92	4.93	0.39	4.60
1,219.30	14.17	5.07	0.40	8.70
1,219.40	19.40	5.21	0.40	13.78
1,219.50	25.84	5.35	0.41	20.08
1,219.60	33.40	5.48	0.42	27.51
1,219.70	41.13	5.61	0.42	35.10
1,219.80	49.59	5.74	0.43	43.42
1,219.90	58.74	5.86	0.43	52.45
1,220.00	**68.59**	**5.98**	**0.44**	**62.18**

Stage-Area-Storage for Pond P3E: Pond 3E

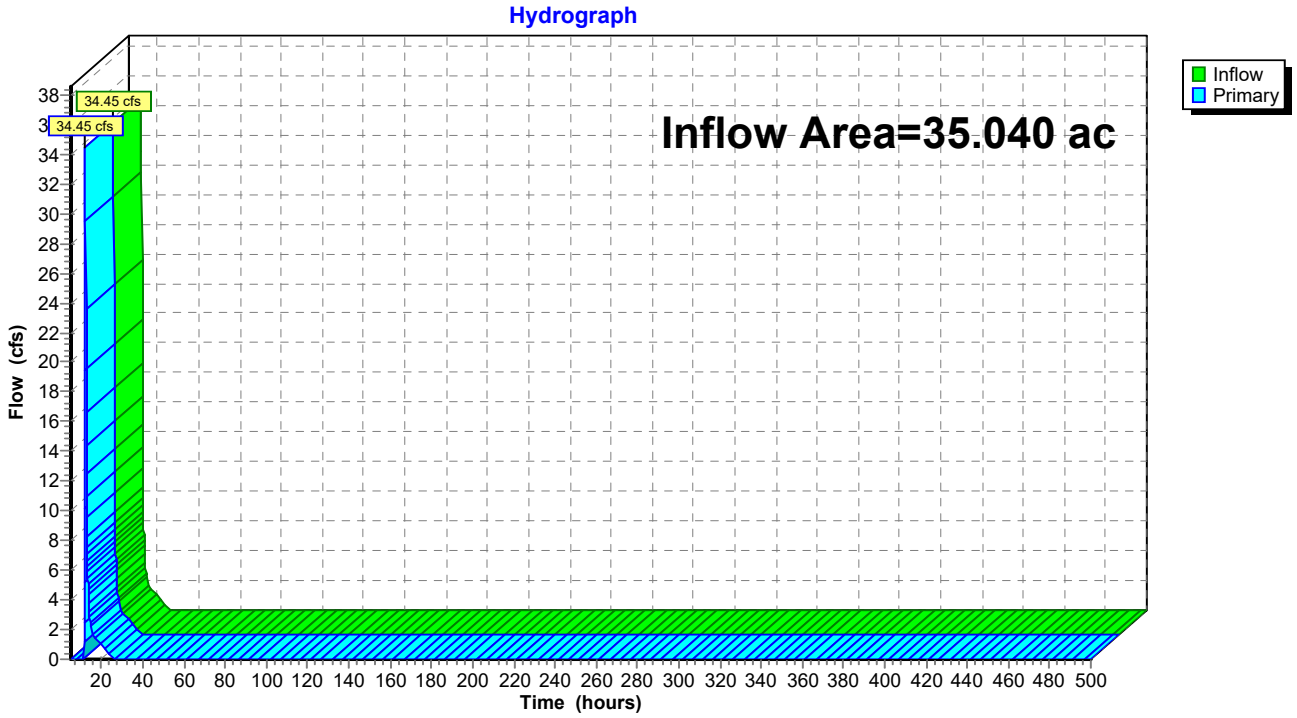
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,216.00	2,517	0
1,216.05	2,551	127
1,216.10	2,586	255
1,216.15	2,620	385
1,216.20	2,655	517
1,216.25	2,689	651
1,216.30	2,724	786
1,216.35	2,758	923
1,216.40	2,793	1,062
1,216.45	2,827	1,202
1,216.50	2,861	1,345
1,216.55	2,896	1,489
1,216.60	2,930	1,634
1,216.65	2,965	1,782
1,216.70	2,999	1,931
1,216.75	3,034	2,081
1,216.80	3,068	2,234
1,216.85	3,102	2,388
1,216.90	3,137	2,544
1,216.95	3,171	2,702
1,217.00	3,206	2,861
1,217.05	3,240	3,023
1,217.10	3,275	3,185
1,217.15	3,309	3,350
1,217.20	3,344	3,516
1,217.25	3,378	3,684
1,217.30	3,412	3,854
1,217.35	3,447	4,026
1,217.40	3,481	4,199
1,217.45	3,516	4,374
1,217.50	3,550	4,550
1,217.55	3,585	4,729
1,217.60	3,619	4,909
1,217.65	3,653	5,091
1,217.70	3,688	5,274
1,217.75	3,722	5,459
1,217.80	3,757	5,646
1,217.85	3,791	5,835
1,217.90	3,826	6,025
1,217.95	3,860	6,218
1,218.00	3,895	6,412
1,218.05	3,929	6,607
1,218.10	3,963	6,804
1,218.15	3,998	7,003
1,218.20	4,032	7,204
1,218.25	4,067	7,407
1,218.30	4,101	7,611
1,218.35	4,136	7,817
1,218.40	4,170	8,024
1,218.45	4,204	8,234
1,218.50	4,239	8,445
1,218.55	4,273	8,658
1,218.60	4,308	8,872
1,218.65	4,342	9,088
1,218.70	4,377	9,306
1,218.75	4,411	9,526
1,218.80	4,445	9,747
1,218.85	4,480	9,971
1,218.90	4,514	10,195
1,218.95	4,549	10,422
1,219.00	4,583	10,650
1,219.05	4,618	10,880
1,219.10	4,652	11,112
1,219.15	4,687	11,346
1,219.20	4,721	11,581
1,219.25	4,755	11,818
1,219.30	4,790	12,056
1,219.35	4,824	12,297
1,219.40	4,859	12,539
1,219.45	4,893	12,783
1,219.50	4,928	13,028
1,219.55	4,962	13,275
1,219.60	4,996	13,524
1,219.65	5,031	13,775
1,219.70	5,065	14,027
1,219.75	5,100	14,282
1,219.80	5,134	14,537
1,219.85	5,169	14,795
1,219.90	5,203	15,054
1,219.95	5,238	15,315
1,220.00	**5,272**	**15,578**

Summary for Link 1L: Total Pre - Development

Inflow Area = 35.040 ac, 0.00% Impervious, Inflow Depth = 0.86" for 10 YR event
Inflow = 34.45 cfs @ 12.20 hrs, Volume= 2.507 af
Primary = 34.45 cfs @ 12.20 hrs, Volume= 2.507 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 1L: Total Pre - Development



Hydrograph for Link 1L: Total Pre - Development

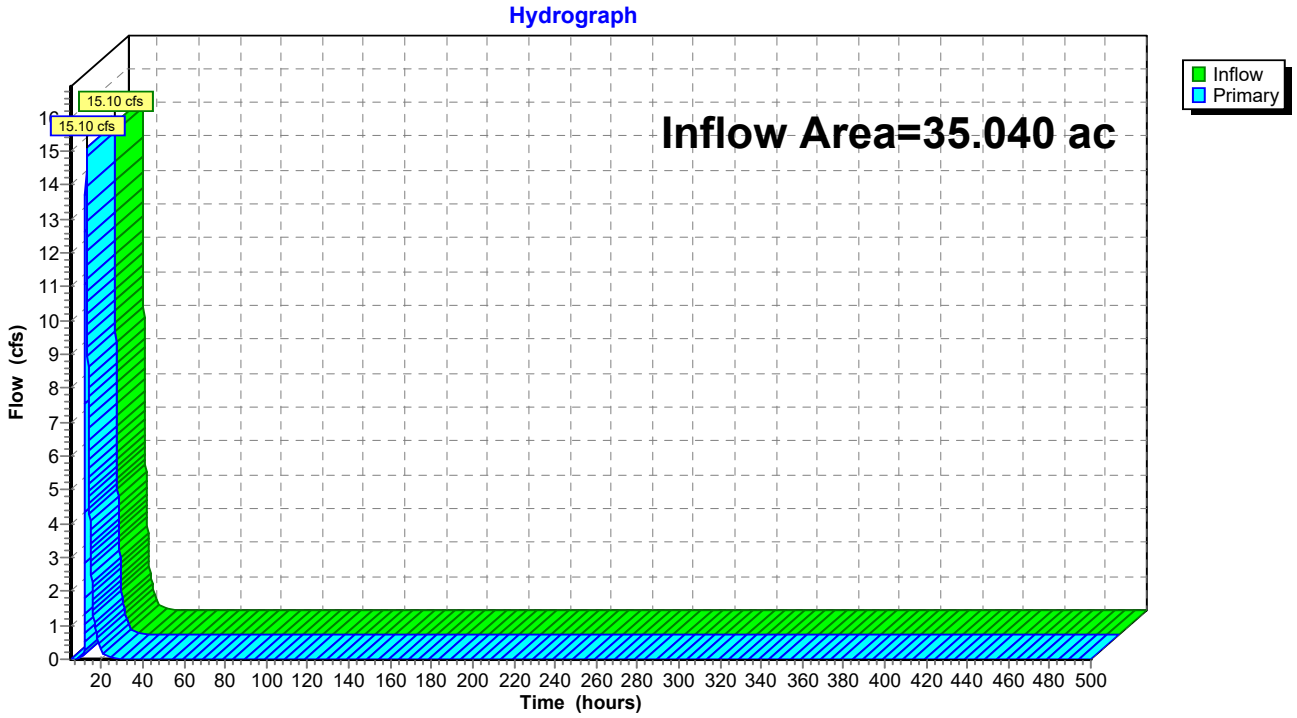
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.00**	0.00	**0.00**	265.00	0.00	0.00	0.00
15.00	**2.40**	0.00	**2.40**	270.00	0.00	0.00	0.00
20.00	0.94	0.00	0.94	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Summary for Link 2L: Total Post - Development

Inflow Area = 35.040 ac, 19.66% Impervious, Inflow Depth = 0.81" for 10 YR event
Inflow = 15.10 cfs @ 12.42 hrs, Volume= 2.364 af
Primary = 15.10 cfs @ 12.42 hrs, Volume= 2.364 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 2L: Total Post - Development



Hydrograph for Link 2L: Total Post - Development

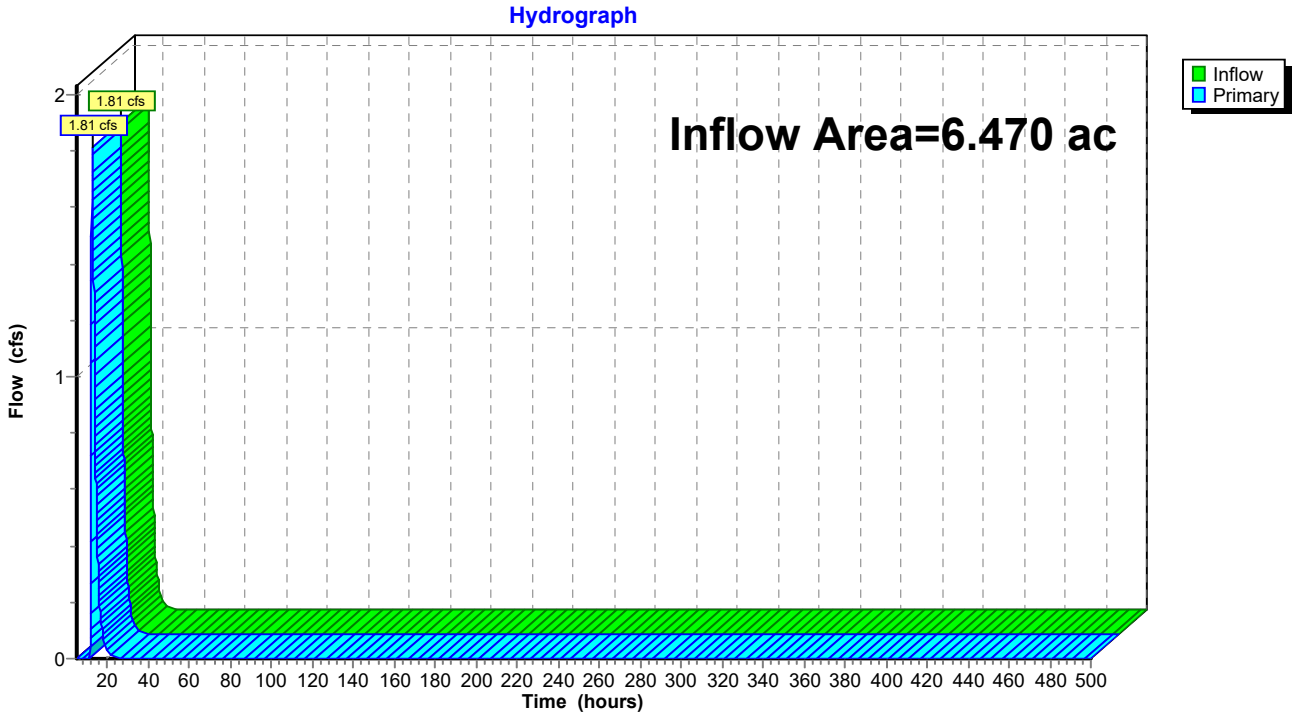
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.03**	0.00	**0.03**	265.00	0.00	0.00	0.00
15.00	**2.72**	0.00	**2.72**	270.00	0.00	0.00	0.00
20.00	0.22	0.00	0.22	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Summary for Link 3L: Post - South

Inflow Area = 6.470 ac, 18.70% Impervious, Inflow Depth = 0.59" for 10 YR event
Inflow = 1.81 cfs @ 12.54 hrs, Volume= 0.320 af
Primary = 1.81 cfs @ 12.54 hrs, Volume= 0.320 af, Atten= 0%, Lag= 0.0 min
Routed to Link 2L : Total Post - Development

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 3L: Post - South



Hydrograph for Link 3L: Post - South

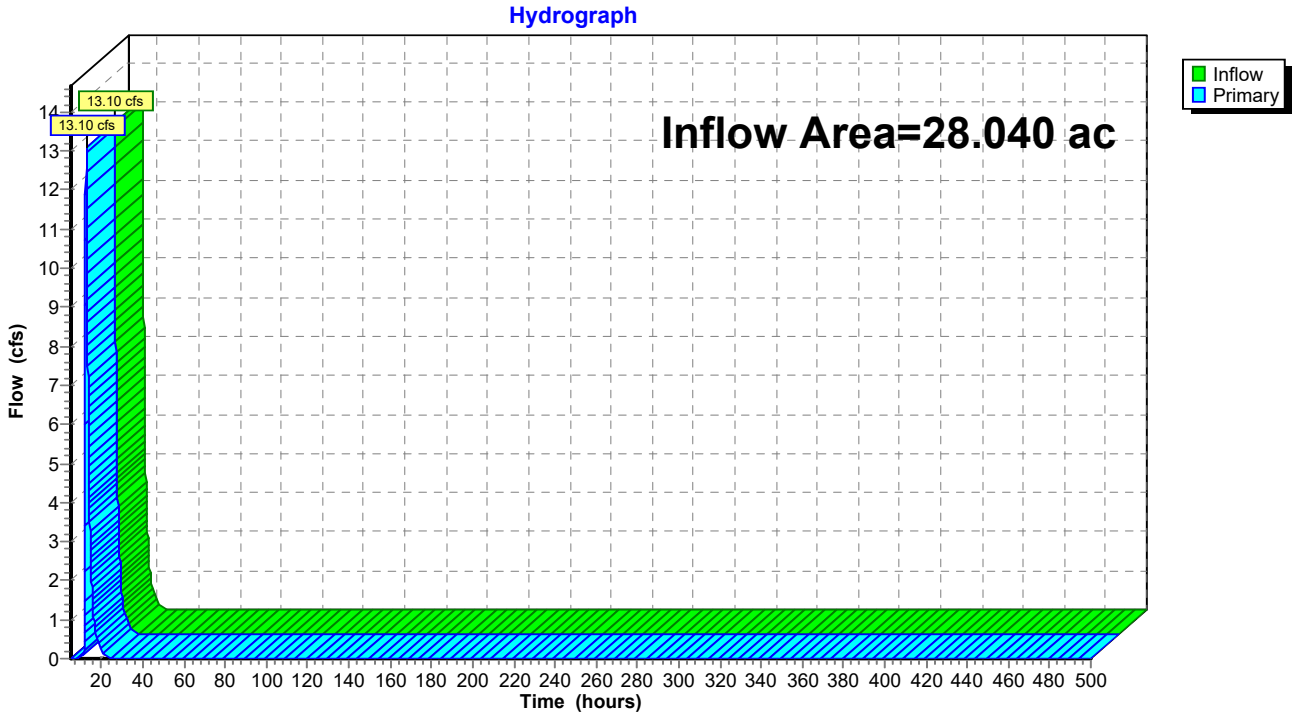
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.00**	0.00	**0.00**	265.00	0.00	0.00	0.00
15.00	**0.43**	0.00	**0.43**	270.00	0.00	0.00	0.00
20.00	0.02	0.00	0.02	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Summary for Link 4L: Post - North

Inflow Area = 28.040 ac, 20.04% Impervious, Inflow Depth = 0.85" for 10 YR event
Inflow = 13.10 cfs @ 12.41 hrs, Volume= 1.991 af
Primary = 13.10 cfs @ 12.41 hrs, Volume= 1.991 af, Atten= 0%, Lag= 0.0 min
Routed to Link 2L : Total Post - Development

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 4L: Post - North



Hydrograph for Link 4L: Post - North

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.03**	0.00	**0.03**	265.00	0.00	0.00	0.00
15.00	**2.25**	0.00	**2.25**	270.00	0.00	0.00	0.00
20.00	0.19	0.00	0.19	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Time span=5.00-500.00 hrs, dt=0.05 hrs, 9901 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1: Pre - South Runoff Area=4.910 ac 0.00% Impervious Runoff Depth=0.93"
Tc=10.0 min CN=55 Runoff=5.15 cfs 0.381 af

Subcatchment1A: Post 1A Runoff Area=6.030 ac 19.24% Impervious Runoff Depth=1.81"
Tc=6.0 min CN=68 Runoff=16.99 cfs 0.909 af

Subcatchment1B: Post 1B - Offsite Runoff Area=0.440 ac 11.36% Impervious Runoff Depth=1.59"
Tc=6.0 min CN=65 Runoff=1.08 cfs 0.058 af

Subcatchment2: Pre - West Runoff Area=2.540 ac 0.00% Impervious Runoff Depth=0.93"
Tc=6.0 min CN=55 Runoff=3.24 cfs 0.197 af

Subcatchment2A: Post 2A - Offsite Runoff Area=0.530 ac 11.32% Impervious Runoff Depth=1.59"
Tc=6.0 min CN=65 Runoff=1.30 cfs 0.070 af

Subcatchment3: Pre - North Runoff Area=27.590 ac 0.00% Impervious Runoff Depth=1.24"
Tc=10.0 min CN=60 Runoff=42.44 cfs 2.858 af

Subcatchment3A: Post 3A Runoff Area=10.600 ac 18.58% Impervious Runoff Depth=1.96"
Tc=6.0 min CN=70 Runoff=32.55 cfs 1.734 af

Subcatchment3B: Post 3B Runoff Area=8.450 ac 19.88% Impervious Runoff Depth=2.04"
Tc=6.0 min CN=71 Runoff=27.03 cfs 1.437 af

Subcatchment3C: Post 3C Runoff Area=2.490 ac 22.89% Impervious Runoff Depth=2.37"
Tc=6.0 min CN=75 Runoff=9.25 cfs 0.491 af

Subcatchment3D: Post 3D Runoff Area=2.380 ac 23.95% Impervious Runoff Depth=2.45"
Tc=6.0 min CN=76 Runoff=9.15 cfs 0.487 af

Subcatchment3E: Post 3E Runoff Area=2.780 ac 19.06% Impervious Runoff Depth=2.28"
Tc=6.0 min CN=74 Runoff=9.96 cfs 0.529 af

Subcatchment3Y: Post 3Y - Offsite Runoff Area=0.820 ac 36.59% Impervious Runoff Depth=3.08"
Tc=6.0 min CN=83 Runoff=3.89 cfs 0.211 af

Subcatchment3Z: Post 3Z - Offsite Runoff Area=0.520 ac 0.00% Impervious Runoff Depth=2.28"
Tc=6.0 min CN=74 Runoff=1.86 cfs 0.099 af

Subcatchment5S: Culvert 1 Runoff Area=4,797 sf 48.61% Impervious Runoff Depth=2.72"
Tc=6.0 min CN=79 Runoff=0.47 cfs 0.025 af

Subcatchment6S: Culvert 2 Runoff Area=24,708 sf 36.87% Impervious Runoff Depth=2.37"
Tc=6.0 min CN=75 Runoff=2.11 cfs 0.112 af

Subcatchment7S: Culvert 3 Runoff Area=41,517 sf 32.00% Impervious Runoff Depth=2.20"
Tc=6.0 min CN=73 Runoff=3.29 cfs 0.175 af

Subcatchment8S: Culvert 4 Runoff Area=209,603 sf 25.18% Impervious Runoff Depth=1.96"
Tc=6.0 min CN=70 Runoff=14.78 cfs 0.787 af

Subcatchment9S: Culvert 5 Runoff Area=188,836 sf 19.96% Impervious Runoff Depth=1.81"
Tc=6.0 min CN=68 Runoff=12.22 cfs 0.653 af

Pond P1A: Pond 1A Peak Elev=1,242.10' Storage=14,669 cf Inflow=16.99 cfs 0.909 af
Primary=3.02 cfs 0.440 af Secondary=0.58 cfs 0.469 af Tertiary=0.00 cfs 0.000 af Outflow=3.60 cfs 0.909 af

Pond P3A: Pond 3A Peak Elev=1,195.98' Storage=28,352 cf Inflow=32.55 cfs 1.734 af
Primary=5.95 cfs 0.991 af Secondary=0.84 cfs 0.743 af Tertiary=0.00 cfs 0.000 af Outflow=6.79 cfs 1.734 af

Pond P3B: Pond 3B Peak Elev=1,198.86' Storage=22,719 cf Inflow=27.03 cfs 1.437 af
Primary=5.81 cfs 0.841 af Secondary=0.75 cfs 0.596 af Tertiary=0.00 cfs 0.000 af Outflow=6.56 cfs 1.437 af

Pond P3C: Pond 3C Peak Elev=1,180.67' Storage=8,327 cf Inflow=9.25 cfs 0.491 af
Primary=1.72 cfs 0.206 af Secondary=0.36 cfs 0.286 af Tertiary=0.00 cfs 0.000 af Outflow=2.08 cfs 0.491 af

Pond P3D: Pond 3D Peak Elev=1,190.42' Storage=6,232 cf Inflow=9.15 cfs 0.487 af
Primary=4.31 cfs 0.312 af Secondary=0.24 cfs 0.174 af Tertiary=0.00 cfs 0.000 af Outflow=4.56 cfs 0.487 af

Pond P3E: Pond 3E Peak Elev=1,218.66' Storage=9,113 cf Inflow=9.96 cfs 0.529 af
Primary=1.67 cfs 0.212 af Secondary=0.36 cfs 0.318 af Tertiary=0.00 cfs 0.000 af Outflow=2.04 cfs 0.529 af

Link 1L: Total Pre - Development Inflow=50.10 cfs 3.436 af
Primary=50.10 cfs 3.436 af

Link 2L: Total Post - Development Inflow=24.04 cfs 3.439 af
Primary=24.04 cfs 3.439 af

Link 3L: Post - South Inflow=3.27 cfs 0.498 af
Primary=3.27 cfs 0.498 af

Link 4L: Post - North Inflow=20.79 cfs 2.871 af
Primary=20.79 cfs 2.871 af

Total Runoff Area = 80.857 ac Runoff Volume = 11.213 af Average Runoff Depth = 1.66"
88.21% Pervious = 71.323 ac 11.79% Impervious = 9.534 ac

Summary for Subcatchment 1: Pre - South

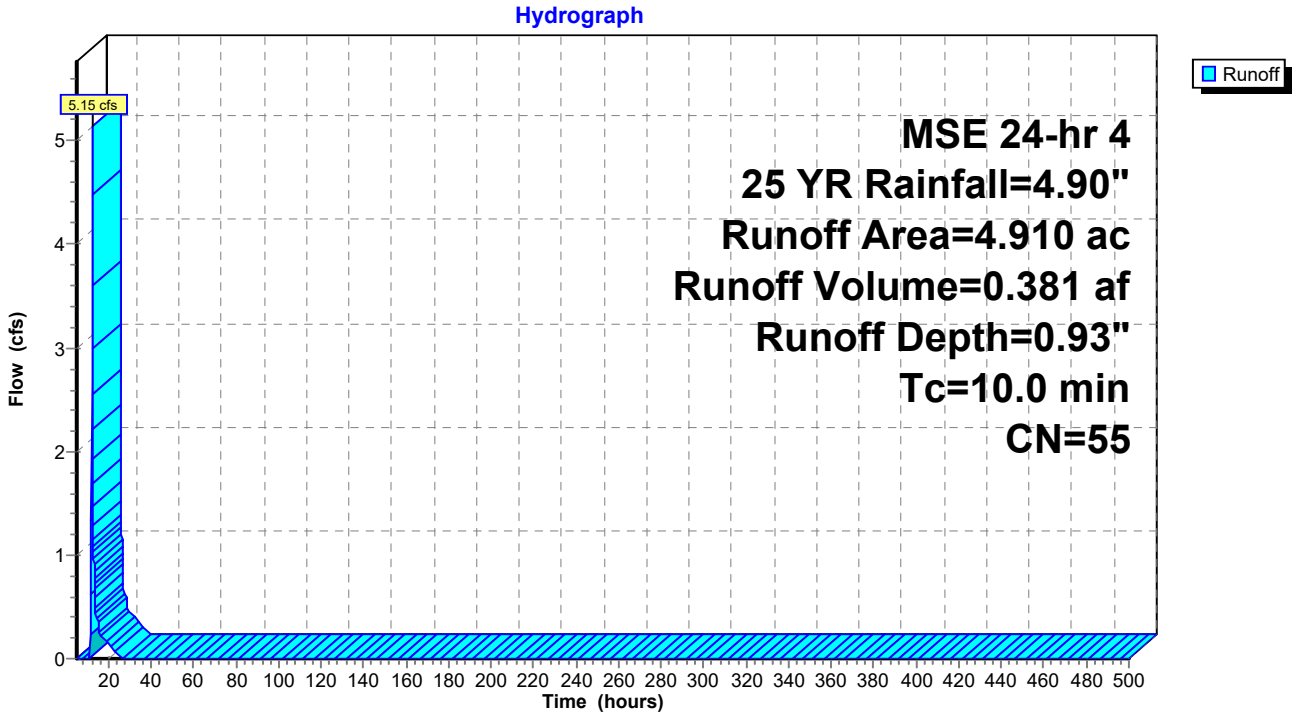
Runoff = 5.15 cfs @ 12.20 hrs, Volume= 0.381 af, Depth= 0.93"
Routed to Link 1L : Total Pre - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 25 YR Rainfall=4.90"

	Area (ac)	CN	Description
*	4.910	55	Pre Dev - B Soils
	4.910		100.00% Pervious Area

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

Subcatchment 1: Pre - South



Hydrograph for Subcatchment 1: Pre - South

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00	260.00	4.90	0.93	0.00
10.00	0.78	0.00	**0.00**	265.00	4.90	0.93	0.00
15.00	4.31	0.66	**0.37**	270.00	4.90	0.93	0.00
20.00	**4.74**	**0.85**	0.15	275.00	4.90	0.93	0.00
25.00	**4.90**	**0.93**	0.00	280.00	4.90	0.93	0.00
30.00	4.90	0.93	0.00	285.00	4.90	0.93	0.00
35.00	4.90	0.93	0.00	290.00	4.90	0.93	0.00
40.00	4.90	0.93	0.00	295.00	4.90	0.93	0.00
45.00	4.90	0.93	0.00	300.00	4.90	0.93	0.00
50.00	4.90	0.93	0.00	305.00	4.90	0.93	0.00
55.00	4.90	0.93	0.00	310.00	4.90	0.93	0.00
60.00	4.90	0.93	0.00	315.00	4.90	0.93	0.00
65.00	4.90	0.93	0.00	320.00	4.90	0.93	0.00
70.00	4.90	0.93	0.00	325.00	4.90	0.93	0.00
75.00	4.90	0.93	0.00	330.00	4.90	0.93	0.00
80.00	4.90	0.93	0.00	335.00	4.90	0.93	0.00
85.00	4.90	0.93	0.00	340.00	4.90	0.93	0.00
90.00	4.90	0.93	0.00	345.00	4.90	0.93	0.00
95.00	4.90	0.93	0.00	350.00	4.90	0.93	0.00
100.00	4.90	0.93	0.00	355.00	4.90	0.93	0.00
105.00	4.90	0.93	0.00	360.00	4.90	0.93	0.00
110.00	4.90	0.93	0.00	365.00	4.90	0.93	0.00
115.00	4.90	0.93	0.00	370.00	4.90	0.93	0.00
120.00	4.90	0.93	0.00	375.00	4.90	0.93	0.00
125.00	4.90	0.93	0.00	380.00	4.90	0.93	0.00
130.00	4.90	0.93	0.00	385.00	4.90	0.93	0.00
135.00	4.90	0.93	0.00	390.00	4.90	0.93	0.00
140.00	4.90	0.93	0.00	395.00	4.90	0.93	0.00
145.00	4.90	0.93	0.00	400.00	4.90	0.93	0.00
150.00	4.90	0.93	0.00	405.00	4.90	0.93	0.00
155.00	4.90	0.93	0.00	410.00	4.90	0.93	0.00
160.00	4.90	0.93	0.00	415.00	4.90	0.93	0.00
165.00	4.90	0.93	0.00	420.00	4.90	0.93	0.00
170.00	4.90	0.93	0.00	425.00	4.90	0.93	0.00
175.00	4.90	0.93	0.00	430.00	4.90	0.93	0.00
180.00	4.90	0.93	0.00	435.00	4.90	0.93	0.00
185.00	4.90	0.93	0.00	440.00	4.90	0.93	0.00
190.00	4.90	0.93	0.00	445.00	4.90	0.93	0.00
195.00	4.90	0.93	0.00	450.00	4.90	0.93	0.00
200.00	4.90	0.93	0.00	455.00	4.90	0.93	0.00
205.00	4.90	0.93	0.00	460.00	4.90	0.93	0.00
210.00	4.90	0.93	0.00	465.00	4.90	0.93	0.00
215.00	4.90	0.93	0.00	470.00	4.90	0.93	0.00
220.00	4.90	0.93	0.00	475.00	4.90	0.93	0.00
225.00	4.90	0.93	0.00	480.00	4.90	0.93	0.00
230.00	4.90	0.93	0.00	485.00	4.90	0.93	0.00
235.00	4.90	0.93	0.00	490.00	4.90	0.93	0.00
240.00	4.90	0.93	0.00	495.00	4.90	0.93	0.00
245.00	4.90	0.93	0.00	500.00	4.90	0.93	0.00
250.00	4.90	0.93	0.00				
255.00	4.90	0.93	0.00				

Summary for Subcatchment 1A: Post 1A

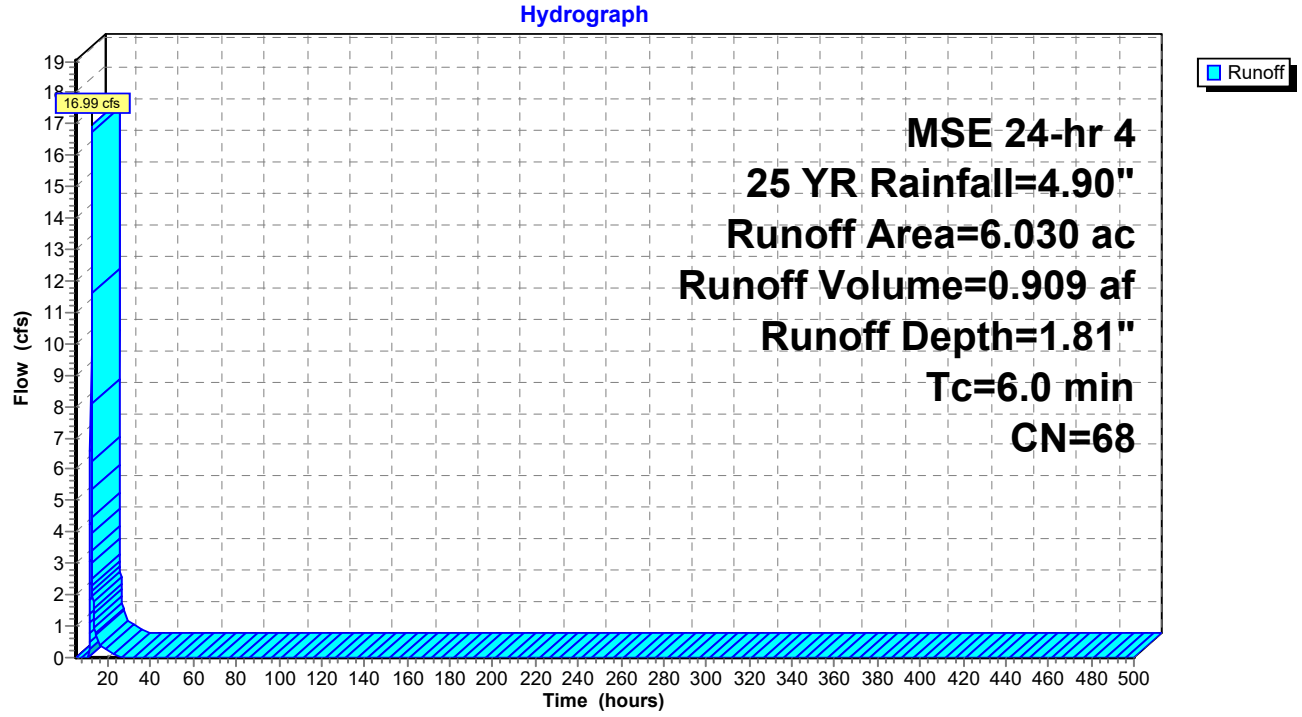
Runoff = 16.99 cfs @ 12.14 hrs, Volume= 0.909 af, Depth= 1.81"
Routed to Pond P1A : Pond 1A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 25 YR Rainfall=4.90"

	Area (ac)	CN	Description
*	1.160	98	Impervious
*	4.870	61	Post - B Soils
*	0.000	74	Post - C Soils
	6.030	68	Weighted Average
	4.870		80.76% Pervious Area
	1.160		19.24% Impervious Area

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

Subcatchment 1A: Post 1A



Hydrograph for Subcatchment 1A: Post 1A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00
10.00	0.78	0.00	**0.00**
15.00	4.31	1.40	**0.69**
20.00	**4.74**	**1.70**	0.26
25.00	**4.90**	**1.81**	0.00
30.00	4.90	1.81	0.00
35.00	4.90	1.81	0.00
40.00	4.90	1.81	0.00
45.00	4.90	1.81	0.00
50.00	4.90	1.81	0.00
55.00	4.90	1.81	0.00
60.00	4.90	1.81	0.00
65.00	4.90	1.81	0.00
70.00	4.90	1.81	0.00
75.00	4.90	1.81	0.00
80.00	4.90	1.81	0.00
85.00	4.90	1.81	0.00
90.00	4.90	1.81	0.00
95.00	4.90	1.81	0.00
100.00	4.90	1.81	0.00
105.00	4.90	1.81	0.00
110.00	4.90	1.81	0.00
115.00	4.90	1.81	0.00
120.00	4.90	1.81	0.00
125.00	4.90	1.81	0.00
130.00	4.90	1.81	0.00
135.00	4.90	1.81	0.00
140.00	4.90	1.81	0.00
145.00	4.90	1.81	0.00
150.00	4.90	1.81	0.00
155.00	4.90	1.81	0.00
160.00	4.90	1.81	0.00
165.00	4.90	1.81	0.00
170.00	4.90	1.81	0.00
175.00	4.90	1.81	0.00
180.00	4.90	1.81	0.00
185.00	4.90	1.81	0.00
190.00	4.90	1.81	0.00
195.00	4.90	1.81	0.00
200.00	4.90	1.81	0.00
205.00	4.90	1.81	0.00
210.00	4.90	1.81	0.00
215.00	4.90	1.81	0.00
220.00	4.90	1.81	0.00
225.00	4.90	1.81	0.00
230.00	4.90	1.81	0.00
235.00	4.90	1.81	0.00
240.00	4.90	1.81	0.00
245.00	4.90	1.81	0.00
250.00	4.90	1.81	0.00
255.00	4.90	1.81	0.00
260.00	4.90	1.81	0.00
265.00	4.90	1.81	0.00
270.00	4.90	1.81	0.00
275.00	4.90	1.81	0.00
280.00	4.90	1.81	0.00
285.00	4.90	1.81	0.00
290.00	4.90	1.81	0.00
295.00	4.90	1.81	0.00
300.00	4.90	1.81	0.00
305.00	4.90	1.81	0.00
310.00	4.90	1.81	0.00
315.00	4.90	1.81	0.00
320.00	4.90	1.81	0.00
325.00	4.90	1.81	0.00
330.00	4.90	1.81	0.00
335.00	4.90	1.81	0.00
340.00	4.90	1.81	0.00
345.00	4.90	1.81	0.00
350.00	4.90	1.81	0.00
355.00	4.90	1.81	0.00
360.00	4.90	1.81	0.00
365.00	4.90	1.81	0.00
370.00	4.90	1.81	0.00
375.00	4.90	1.81	0.00
380.00	4.90	1.81	0.00
385.00	4.90	1.81	0.00
390.00	4.90	1.81	0.00
395.00	4.90	1.81	0.00
400.00	4.90	1.81	0.00
405.00	4.90	1.81	0.00
410.00	4.90	1.81	0.00
415.00	4.90	1.81	0.00
420.00	4.90	1.81	0.00
425.00	4.90	1.81	0.00
430.00	4.90	1.81	0.00
435.00	4.90	1.81	0.00
440.00	4.90	1.81	0.00
445.00	4.90	1.81	0.00
450.00	4.90	1.81	0.00
455.00	4.90	1.81	0.00
460.00	4.90	1.81	0.00
465.00	4.90	1.81	0.00
470.00	4.90	1.81	0.00
475.00	4.90	1.81	0.00
480.00	4.90	1.81	0.00
485.00	4.90	1.81	0.00
490.00	4.90	1.81	0.00
495.00	4.90	1.81	0.00
500.00	4.90	1.81	0.00

Summary for Subcatchment 1B: Post 1B - Offsite

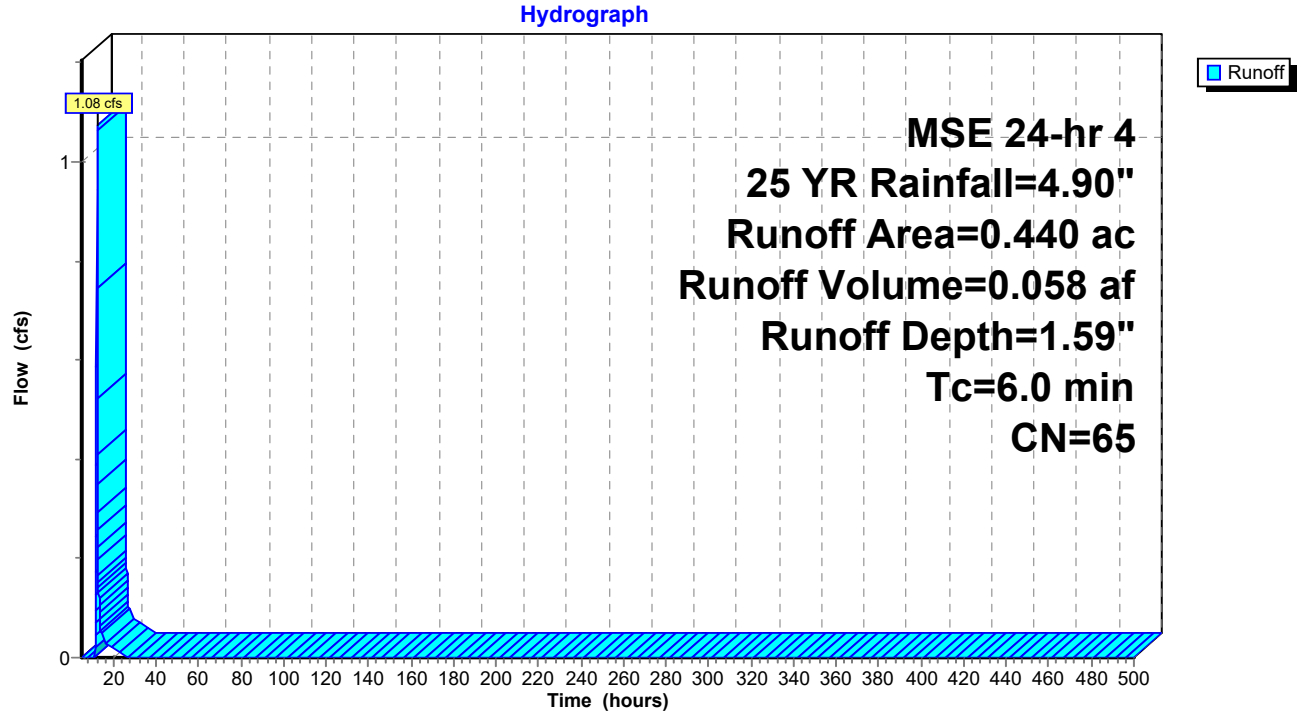
Runoff = 1.08 cfs @ 12.14 hrs, Volume= 0.058 af, Depth= 1.59"
Routed to Link 3L : Post - South

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 25 YR Rainfall=4.90"

	Area (ac)	CN	Description
*	0.050	98	Impervious
*	0.390	61	Post - B Soils
*	0.000	74	Post - C Soils
	0.440	65	Weighted Average
	0.390		88.64% Pervious Area
	0.050		11.36% Impervious Area

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

Subcatchment 1B: Post 1B - Offsite



Hydrograph for Subcatchment 1B: Post 1B - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00
10.00	0.78	0.00	**0.00**
15.00	4.31	1.21	**0.05**
20.00	**4.74**	**1.48**	0.02
25.00	**4.90**	**1.59**	0.00
30.00	4.90	1.59	0.00
35.00	4.90	1.59	0.00
40.00	4.90	1.59	0.00
45.00	4.90	1.59	0.00
50.00	4.90	1.59	0.00
55.00	4.90	1.59	0.00
60.00	4.90	1.59	0.00
65.00	4.90	1.59	0.00
70.00	4.90	1.59	0.00
75.00	4.90	1.59	0.00
80.00	4.90	1.59	0.00
85.00	4.90	1.59	0.00
90.00	4.90	1.59	0.00
95.00	4.90	1.59	0.00
100.00	4.90	1.59	0.00
105.00	4.90	1.59	0.00
110.00	4.90	1.59	0.00
115.00	4.90	1.59	0.00
120.00	4.90	1.59	0.00
125.00	4.90	1.59	0.00
130.00	4.90	1.59	0.00
135.00	4.90	1.59	0.00
140.00	4.90	1.59	0.00
145.00	4.90	1.59	0.00
150.00	4.90	1.59	0.00
155.00	4.90	1.59	0.00
160.00	4.90	1.59	0.00
165.00	4.90	1.59	0.00
170.00	4.90	1.59	0.00
175.00	4.90	1.59	0.00
180.00	4.90	1.59	0.00
185.00	4.90	1.59	0.00
190.00	4.90	1.59	0.00
195.00	4.90	1.59	0.00
200.00	4.90	1.59	0.00
205.00	4.90	1.59	0.00
210.00	4.90	1.59	0.00
215.00	4.90	1.59	0.00
220.00	4.90	1.59	0.00
225.00	4.90	1.59	0.00
230.00	4.90	1.59	0.00
235.00	4.90	1.59	0.00
240.00	4.90	1.59	0.00
245.00	4.90	1.59	0.00
250.00	4.90	1.59	0.00
255.00	4.90	1.59	0.00
260.00	4.90	1.59	0.00
265.00	4.90	1.59	0.00
270.00	4.90	1.59	0.00
275.00	4.90	1.59	0.00
280.00	4.90	1.59	0.00
285.00	4.90	1.59	0.00
290.00	4.90	1.59	0.00
295.00	4.90	1.59	0.00
300.00	4.90	1.59	0.00
305.00	4.90	1.59	0.00
310.00	4.90	1.59	0.00
315.00	4.90	1.59	0.00
320.00	4.90	1.59	0.00
325.00	4.90	1.59	0.00
330.00	4.90	1.59	0.00
335.00	4.90	1.59	0.00
340.00	4.90	1.59	0.00
345.00	4.90	1.59	0.00
350.00	4.90	1.59	0.00
355.00	4.90	1.59	0.00
360.00	4.90	1.59	0.00
365.00	4.90	1.59	0.00
370.00	4.90	1.59	0.00
375.00	4.90	1.59	0.00
380.00	4.90	1.59	0.00
385.00	4.90	1.59	0.00
390.00	4.90	1.59	0.00
395.00	4.90	1.59	0.00
400.00	4.90	1.59	0.00
405.00	4.90	1.59	0.00
410.00	4.90	1.59	0.00
415.00	4.90	1.59	0.00
420.00	4.90	1.59	0.00
425.00	4.90	1.59	0.00
430.00	4.90	1.59	0.00
435.00	4.90	1.59	0.00
440.00	4.90	1.59	0.00
445.00	4.90	1.59	0.00
450.00	4.90	1.59	0.00
455.00	4.90	1.59	0.00
460.00	4.90	1.59	0.00
465.00	4.90	1.59	0.00
470.00	4.90	1.59	0.00
475.00	4.90	1.59	0.00
480.00	4.90	1.59	0.00
485.00	4.90	1.59	0.00
490.00	4.90	1.59	0.00
495.00	4.90	1.59	0.00
500.00	4.90	1.59	0.00

Summary for Subcatchment 2: Pre - West

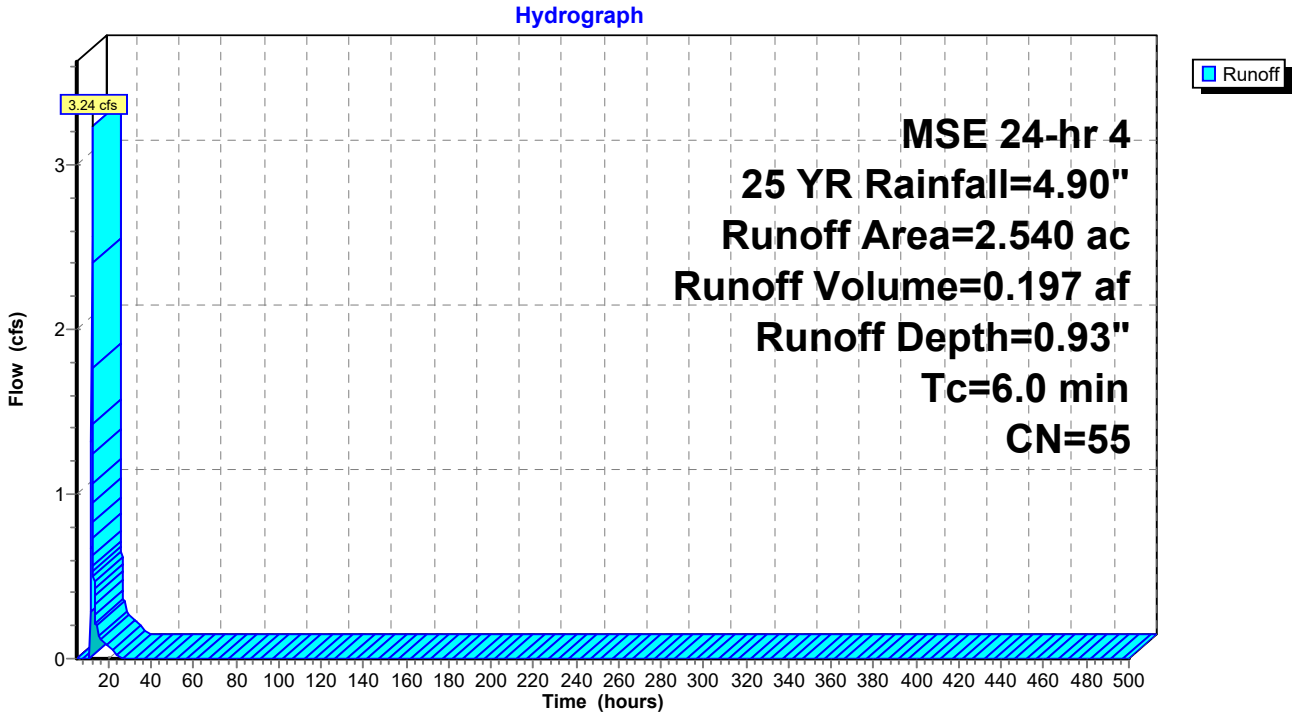
Runoff = 3.24 cfs @ 12.15 hrs, Volume= 0.197 af, Depth= 0.93"
Routed to Link 1L : Total Pre - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 25 YR Rainfall=4.90"

	Area (ac)	CN	Description
*	2.540	55	Pre Dev - B Soils
	2.540		100.00% Pervious Area

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

Subcatchment 2: Pre - West



Hydrograph for Subcatchment 2: Pre - West

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00	260.00	4.90	0.93	0.00
10.00	0.78	0.00	**0.00**	265.00	4.90	0.93	0.00
15.00	4.31	0.66	**0.19**	270.00	4.90	0.93	0.00
20.00	**4.74**	**0.85**	0.07	275.00	4.90	0.93	0.00
25.00	**4.90**	**0.93**	0.00	280.00	4.90	0.93	0.00
30.00	4.90	0.93	0.00	285.00	4.90	0.93	0.00
35.00	4.90	0.93	0.00	290.00	4.90	0.93	0.00
40.00	4.90	0.93	0.00	295.00	4.90	0.93	0.00
45.00	4.90	0.93	0.00	300.00	4.90	0.93	0.00
50.00	4.90	0.93	0.00	305.00	4.90	0.93	0.00
55.00	4.90	0.93	0.00	310.00	4.90	0.93	0.00
60.00	4.90	0.93	0.00	315.00	4.90	0.93	0.00
65.00	4.90	0.93	0.00	320.00	4.90	0.93	0.00
70.00	4.90	0.93	0.00	325.00	4.90	0.93	0.00
75.00	4.90	0.93	0.00	330.00	4.90	0.93	0.00
80.00	4.90	0.93	0.00	335.00	4.90	0.93	0.00
85.00	4.90	0.93	0.00	340.00	4.90	0.93	0.00
90.00	4.90	0.93	0.00	345.00	4.90	0.93	0.00
95.00	4.90	0.93	0.00	350.00	4.90	0.93	0.00
100.00	4.90	0.93	0.00	355.00	4.90	0.93	0.00
105.00	4.90	0.93	0.00	360.00	4.90	0.93	0.00
110.00	4.90	0.93	0.00	365.00	4.90	0.93	0.00
115.00	4.90	0.93	0.00	370.00	4.90	0.93	0.00
120.00	4.90	0.93	0.00	375.00	4.90	0.93	0.00
125.00	4.90	0.93	0.00	380.00	4.90	0.93	0.00
130.00	4.90	0.93	0.00	385.00	4.90	0.93	0.00
135.00	4.90	0.93	0.00	390.00	4.90	0.93	0.00
140.00	4.90	0.93	0.00	395.00	4.90	0.93	0.00
145.00	4.90	0.93	0.00	400.00	4.90	0.93	0.00
150.00	4.90	0.93	0.00	405.00	4.90	0.93	0.00
155.00	4.90	0.93	0.00	410.00	4.90	0.93	0.00
160.00	4.90	0.93	0.00	415.00	4.90	0.93	0.00
165.00	4.90	0.93	0.00	420.00	4.90	0.93	0.00
170.00	4.90	0.93	0.00	425.00	4.90	0.93	0.00
175.00	4.90	0.93	0.00	430.00	4.90	0.93	0.00
180.00	4.90	0.93	0.00	435.00	4.90	0.93	0.00
185.00	4.90	0.93	0.00	440.00	4.90	0.93	0.00
190.00	4.90	0.93	0.00	445.00	4.90	0.93	0.00
195.00	4.90	0.93	0.00	450.00	4.90	0.93	0.00
200.00	4.90	0.93	0.00	455.00	4.90	0.93	0.00
205.00	4.90	0.93	0.00	460.00	4.90	0.93	0.00
210.00	4.90	0.93	0.00	465.00	4.90	0.93	0.00
215.00	4.90	0.93	0.00	470.00	4.90	0.93	0.00
220.00	4.90	0.93	0.00	475.00	4.90	0.93	0.00
225.00	4.90	0.93	0.00	480.00	4.90	0.93	0.00
230.00	4.90	0.93	0.00	485.00	4.90	0.93	0.00
235.00	4.90	0.93	0.00	490.00	4.90	0.93	0.00
240.00	4.90	0.93	0.00	495.00	4.90	0.93	0.00
245.00	4.90	0.93	0.00	500.00	4.90	0.93	0.00
250.00	4.90	0.93	0.00				
255.00	4.90	0.93	0.00				

Summary for Subcatchment 2A: Post 2A - Offsite

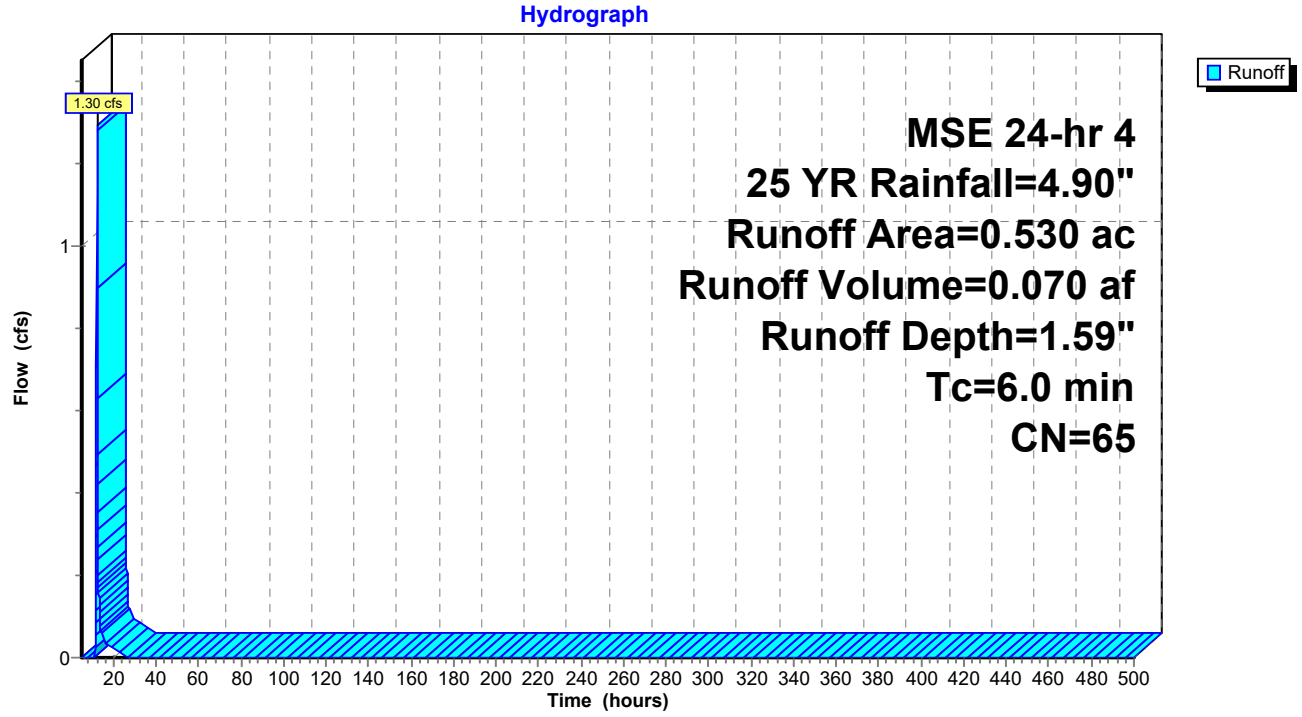
Runoff = 1.30 cfs @ 12.14 hrs, Volume= 0.070 af, Depth= 1.59"
Routed to Link 2L : Total Post - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 25 YR Rainfall=4.90"

	Area (ac)	CN	Description
*	0.060	98	Impervious
*	0.470	61	Post - B Soils
*	0.000	74	Post - C Soils
	0.530	65	Weighted Average
	0.470		88.68% Pervious Area
	0.060		11.32% Impervious Area

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

Subcatchment 2A: Post 2A - Offsite



Hydrograph for Subcatchment 2A: Post 2A - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00
10.00	0.78	0.00	**0.00**
15.00	4.31	1.21	**0.06**
20.00	**4.74**	**1.48**	0.02
25.00	**4.90**	**1.59**	0.00
30.00	4.90	1.59	0.00
35.00	4.90	1.59	0.00
40.00	4.90	1.59	0.00
45.00	4.90	1.59	0.00
50.00	4.90	1.59	0.00
55.00	4.90	1.59	0.00
60.00	4.90	1.59	0.00
65.00	4.90	1.59	0.00
70.00	4.90	1.59	0.00
75.00	4.90	1.59	0.00
80.00	4.90	1.59	0.00
85.00	4.90	1.59	0.00
90.00	4.90	1.59	0.00
95.00	4.90	1.59	0.00
100.00	4.90	1.59	0.00
105.00	4.90	1.59	0.00
110.00	4.90	1.59	0.00
115.00	4.90	1.59	0.00
120.00	4.90	1.59	0.00
125.00	4.90	1.59	0.00
130.00	4.90	1.59	0.00
135.00	4.90	1.59	0.00
140.00	4.90	1.59	0.00
145.00	4.90	1.59	0.00
150.00	4.90	1.59	0.00
155.00	4.90	1.59	0.00
160.00	4.90	1.59	0.00
165.00	4.90	1.59	0.00
170.00	4.90	1.59	0.00
175.00	4.90	1.59	0.00
180.00	4.90	1.59	0.00
185.00	4.90	1.59	0.00
190.00	4.90	1.59	0.00
195.00	4.90	1.59	0.00
200.00	4.90	1.59	0.00
205.00	4.90	1.59	0.00
210.00	4.90	1.59	0.00
215.00	4.90	1.59	0.00
220.00	4.90	1.59	0.00
225.00	4.90	1.59	0.00
230.00	4.90	1.59	0.00
235.00	4.90	1.59	0.00
240.00	4.90	1.59	0.00
245.00	4.90	1.59	0.00
250.00	4.90	1.59	0.00
255.00	4.90	1.59	0.00
260.00	4.90	1.59	0.00
265.00	4.90	1.59	0.00
270.00	4.90	1.59	0.00
275.00	4.90	1.59	0.00
280.00	4.90	1.59	0.00
285.00	4.90	1.59	0.00
290.00	4.90	1.59	0.00
295.00	4.90	1.59	0.00
300.00	4.90	1.59	0.00
305.00	4.90	1.59	0.00
310.00	4.90	1.59	0.00
315.00	4.90	1.59	0.00
320.00	4.90	1.59	0.00
325.00	4.90	1.59	0.00
330.00	4.90	1.59	0.00
335.00	4.90	1.59	0.00
340.00	4.90	1.59	0.00
345.00	4.90	1.59	0.00
350.00	4.90	1.59	0.00
355.00	4.90	1.59	0.00
360.00	4.90	1.59	0.00
365.00	4.90	1.59	0.00
370.00	4.90	1.59	0.00
375.00	4.90	1.59	0.00
380.00	4.90	1.59	0.00
385.00	4.90	1.59	0.00
390.00	4.90	1.59	0.00
395.00	4.90	1.59	0.00
400.00	4.90	1.59	0.00
405.00	4.90	1.59	0.00
410.00	4.90	1.59	0.00
415.00	4.90	1.59	0.00
420.00	4.90	1.59	0.00
425.00	4.90	1.59	0.00
430.00	4.90	1.59	0.00
435.00	4.90	1.59	0.00
440.00	4.90	1.59	0.00
445.00	4.90	1.59	0.00
450.00	4.90	1.59	0.00
455.00	4.90	1.59	0.00
460.00	4.90	1.59	0.00
465.00	4.90	1.59	0.00
470.00	4.90	1.59	0.00
475.00	4.90	1.59	0.00
480.00	4.90	1.59	0.00
485.00	4.90	1.59	0.00
490.00	4.90	1.59	0.00
495.00	4.90	1.59	0.00
500.00	4.90	1.59	0.00

Summary for Subcatchment 3: Pre - North

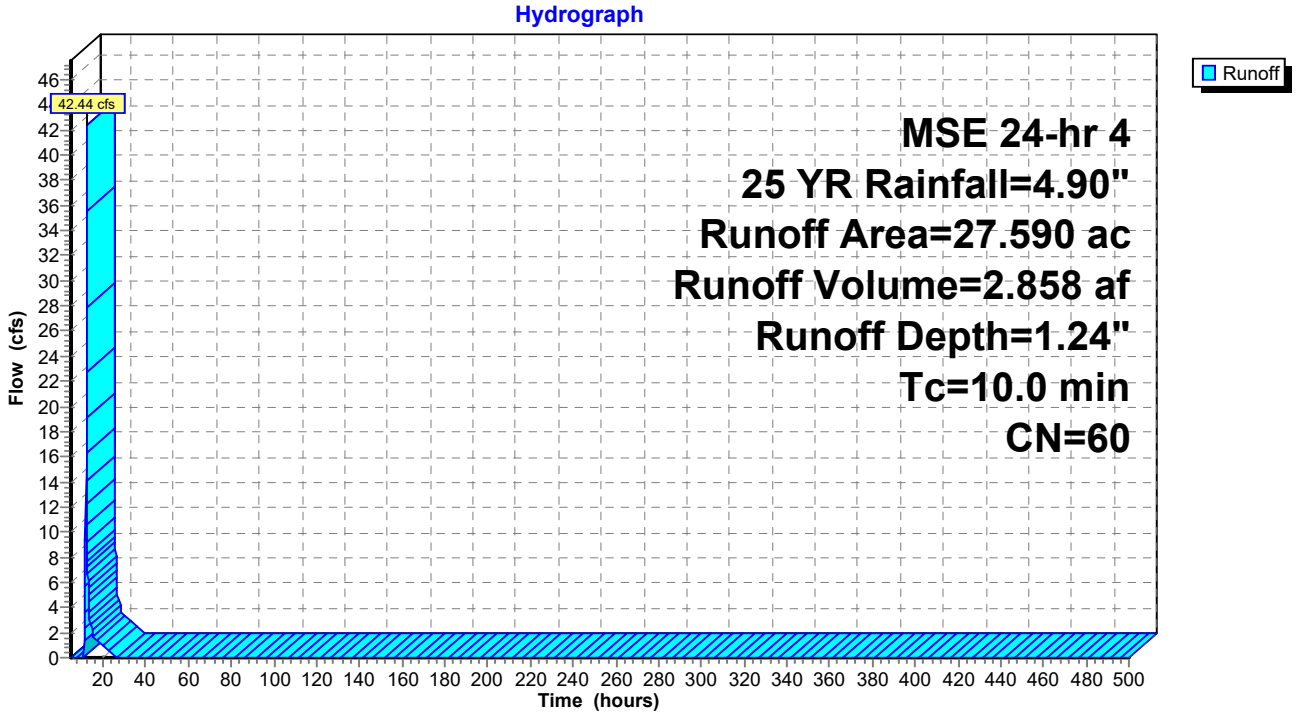
Runoff = 42.44 cfs @ 12.19 hrs, Volume= 2.858 af, Depth= 1.24"
Routed to Link 1L : Total Pre - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 25 YR Rainfall=4.90"

	Area (ac)	CN	Description
*	18.190	55	Pre Dev - B Soils
*	9.400	70	Pre Dev - C Soils
	27.590	60	Weighted Average
	27.590		100.00% Pervious Area

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

Subcatchment 3: Pre - North



Hydrograph for Subcatchment 3: Pre - North

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00	260.00	4.90	1.24	0.00
10.00	0.78	0.00	**0.00**	265.00	4.90	1.24	0.00
15.00	4.31	0.92	**2.53**	270.00	4.90	1.24	0.00
20.00	**4.74**	**1.15**	0.97	275.00	4.90	1.24	0.00
25.00	**4.90**	**1.24**	0.00	280.00	4.90	1.24	0.00
30.00	4.90	1.24	0.00	285.00	4.90	1.24	0.00
35.00	4.90	1.24	0.00	290.00	4.90	1.24	0.00
40.00	4.90	1.24	0.00	295.00	4.90	1.24	0.00
45.00	4.90	1.24	0.00	300.00	4.90	1.24	0.00
50.00	4.90	1.24	0.00	305.00	4.90	1.24	0.00
55.00	4.90	1.24	0.00	310.00	4.90	1.24	0.00
60.00	4.90	1.24	0.00	315.00	4.90	1.24	0.00
65.00	4.90	1.24	0.00	320.00	4.90	1.24	0.00
70.00	4.90	1.24	0.00	325.00	4.90	1.24	0.00
75.00	4.90	1.24	0.00	330.00	4.90	1.24	0.00
80.00	4.90	1.24	0.00	335.00	4.90	1.24	0.00
85.00	4.90	1.24	0.00	340.00	4.90	1.24	0.00
90.00	4.90	1.24	0.00	345.00	4.90	1.24	0.00
95.00	4.90	1.24	0.00	350.00	4.90	1.24	0.00
100.00	4.90	1.24	0.00	355.00	4.90	1.24	0.00
105.00	4.90	1.24	0.00	360.00	4.90	1.24	0.00
110.00	4.90	1.24	0.00	365.00	4.90	1.24	0.00
115.00	4.90	1.24	0.00	370.00	4.90	1.24	0.00
120.00	4.90	1.24	0.00	375.00	4.90	1.24	0.00
125.00	4.90	1.24	0.00	380.00	4.90	1.24	0.00
130.00	4.90	1.24	0.00	385.00	4.90	1.24	0.00
135.00	4.90	1.24	0.00	390.00	4.90	1.24	0.00
140.00	4.90	1.24	0.00	395.00	4.90	1.24	0.00
145.00	4.90	1.24	0.00	400.00	4.90	1.24	0.00
150.00	4.90	1.24	0.00	405.00	4.90	1.24	0.00
155.00	4.90	1.24	0.00	410.00	4.90	1.24	0.00
160.00	4.90	1.24	0.00	415.00	4.90	1.24	0.00
165.00	4.90	1.24	0.00	420.00	4.90	1.24	0.00
170.00	4.90	1.24	0.00	425.00	4.90	1.24	0.00
175.00	4.90	1.24	0.00	430.00	4.90	1.24	0.00
180.00	4.90	1.24	0.00	435.00	4.90	1.24	0.00
185.00	4.90	1.24	0.00	440.00	4.90	1.24	0.00
190.00	4.90	1.24	0.00	445.00	4.90	1.24	0.00
195.00	4.90	1.24	0.00	450.00	4.90	1.24	0.00
200.00	4.90	1.24	0.00	455.00	4.90	1.24	0.00
205.00	4.90	1.24	0.00	460.00	4.90	1.24	0.00
210.00	4.90	1.24	0.00	465.00	4.90	1.24	0.00
215.00	4.90	1.24	0.00	470.00	4.90	1.24	0.00
220.00	4.90	1.24	0.00	475.00	4.90	1.24	0.00
225.00	4.90	1.24	0.00	480.00	4.90	1.24	0.00
230.00	4.90	1.24	0.00	485.00	4.90	1.24	0.00
235.00	4.90	1.24	0.00	490.00	4.90	1.24	0.00
240.00	4.90	1.24	0.00	495.00	4.90	1.24	0.00
245.00	4.90	1.24	0.00	500.00	4.90	1.24	0.00
250.00	4.90	1.24	0.00				
255.00	4.90	1.24	0.00				

Summary for Subcatchment 3A: Post 3A

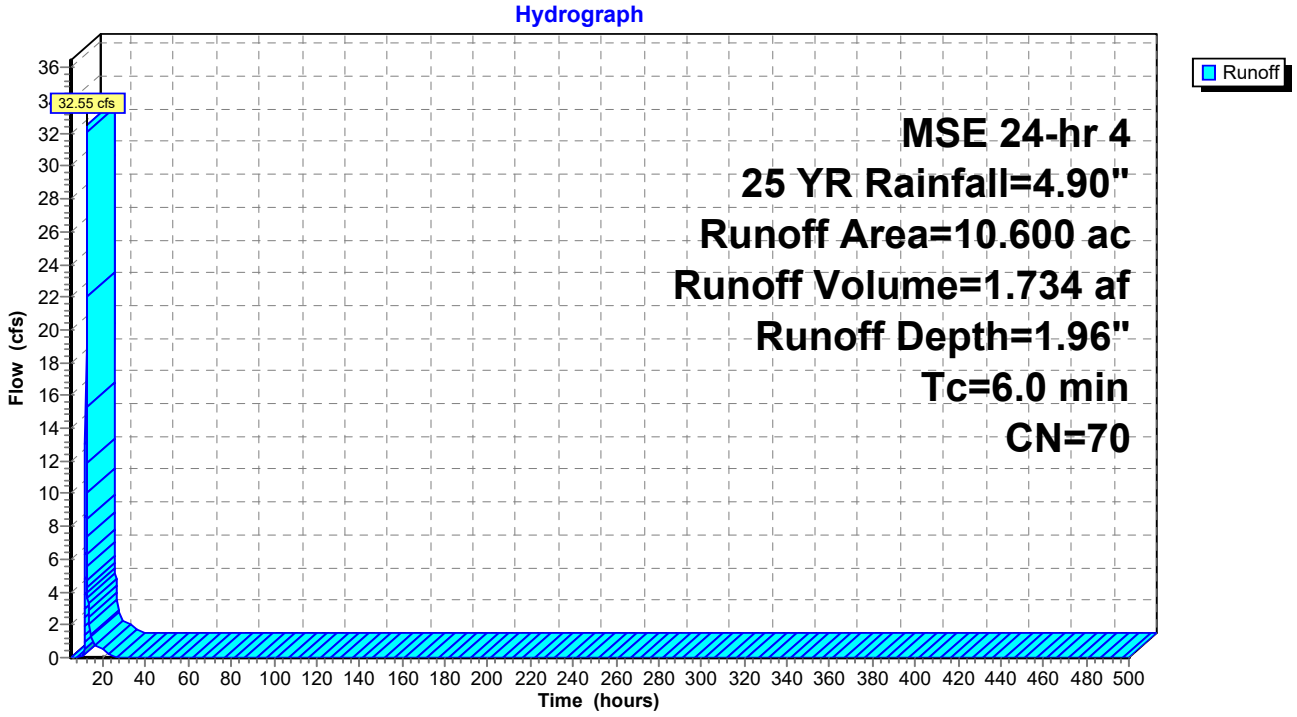
Runoff = 32.55 cfs @ 12.14 hrs, Volume= 1.734 af, Depth= 1.96"
Routed to Pond P3A : Pond 3A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 25 YR Rainfall=4.90"

	Area (ac)	CN	Description
*	1.970	98	Impervious
*	6.570	61	Post - B Soils
*	2.060	74	Post - C Soils
	10.600	70	Weighted Average
	8.630		81.42% Pervious Area
	1.970		18.58% Impervious Area

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

Subcatchment 3A: Post 3A



Hydrograph for Subcatchment 3A: Post 3A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00	260.00	4.90	1.96	0.00
10.00	0.78	0.00	**0.00**	265.00	4.90	1.96	0.00
15.00	4.31	1.54	**1.28**	270.00	4.90	1.96	0.00
20.00	**4.74**	**1.85**	0.48	275.00	4.90	1.96	0.00
25.00	**4.90**	**1.96**	0.00	280.00	4.90	1.96	0.00
30.00	4.90	1.96	0.00	285.00	4.90	1.96	0.00
35.00	4.90	1.96	0.00	290.00	4.90	1.96	0.00
40.00	4.90	1.96	0.00	295.00	4.90	1.96	0.00
45.00	4.90	1.96	0.00	300.00	4.90	1.96	0.00
50.00	4.90	1.96	0.00	305.00	4.90	1.96	0.00
55.00	4.90	1.96	0.00	310.00	4.90	1.96	0.00
60.00	4.90	1.96	0.00	315.00	4.90	1.96	0.00
65.00	4.90	1.96	0.00	320.00	4.90	1.96	0.00
70.00	4.90	1.96	0.00	325.00	4.90	1.96	0.00
75.00	4.90	1.96	0.00	330.00	4.90	1.96	0.00
80.00	4.90	1.96	0.00	335.00	4.90	1.96	0.00
85.00	4.90	1.96	0.00	340.00	4.90	1.96	0.00
90.00	4.90	1.96	0.00	345.00	4.90	1.96	0.00
95.00	4.90	1.96	0.00	350.00	4.90	1.96	0.00
100.00	4.90	1.96	0.00	355.00	4.90	1.96	0.00
105.00	4.90	1.96	0.00	360.00	4.90	1.96	0.00
110.00	4.90	1.96	0.00	365.00	4.90	1.96	0.00
115.00	4.90	1.96	0.00	370.00	4.90	1.96	0.00
120.00	4.90	1.96	0.00	375.00	4.90	1.96	0.00
125.00	4.90	1.96	0.00	380.00	4.90	1.96	0.00
130.00	4.90	1.96	0.00	385.00	4.90	1.96	0.00
135.00	4.90	1.96	0.00	390.00	4.90	1.96	0.00
140.00	4.90	1.96	0.00	395.00	4.90	1.96	0.00
145.00	4.90	1.96	0.00	400.00	4.90	1.96	0.00
150.00	4.90	1.96	0.00	405.00	4.90	1.96	0.00
155.00	4.90	1.96	0.00	410.00	4.90	1.96	0.00
160.00	4.90	1.96	0.00	415.00	4.90	1.96	0.00
165.00	4.90	1.96	0.00	420.00	4.90	1.96	0.00
170.00	4.90	1.96	0.00	425.00	4.90	1.96	0.00
175.00	4.90	1.96	0.00	430.00	4.90	1.96	0.00
180.00	4.90	1.96	0.00	435.00	4.90	1.96	0.00
185.00	4.90	1.96	0.00	440.00	4.90	1.96	0.00
190.00	4.90	1.96	0.00	445.00	4.90	1.96	0.00
195.00	4.90	1.96	0.00	450.00	4.90	1.96	0.00
200.00	4.90	1.96	0.00	455.00	4.90	1.96	0.00
205.00	4.90	1.96	0.00	460.00	4.90	1.96	0.00
210.00	4.90	1.96	0.00	465.00	4.90	1.96	0.00
215.00	4.90	1.96	0.00	470.00	4.90	1.96	0.00
220.00	4.90	1.96	0.00	475.00	4.90	1.96	0.00
225.00	4.90	1.96	0.00	480.00	4.90	1.96	0.00
230.00	4.90	1.96	0.00	485.00	4.90	1.96	0.00
235.00	4.90	1.96	0.00	490.00	4.90	1.96	0.00
240.00	4.90	1.96	0.00	495.00	4.90	1.96	0.00
245.00	4.90	1.96	0.00	500.00	4.90	1.96	0.00
250.00	4.90	1.96	0.00				
255.00	4.90	1.96	0.00				

Summary for Subcatchment 3B: Post 3B

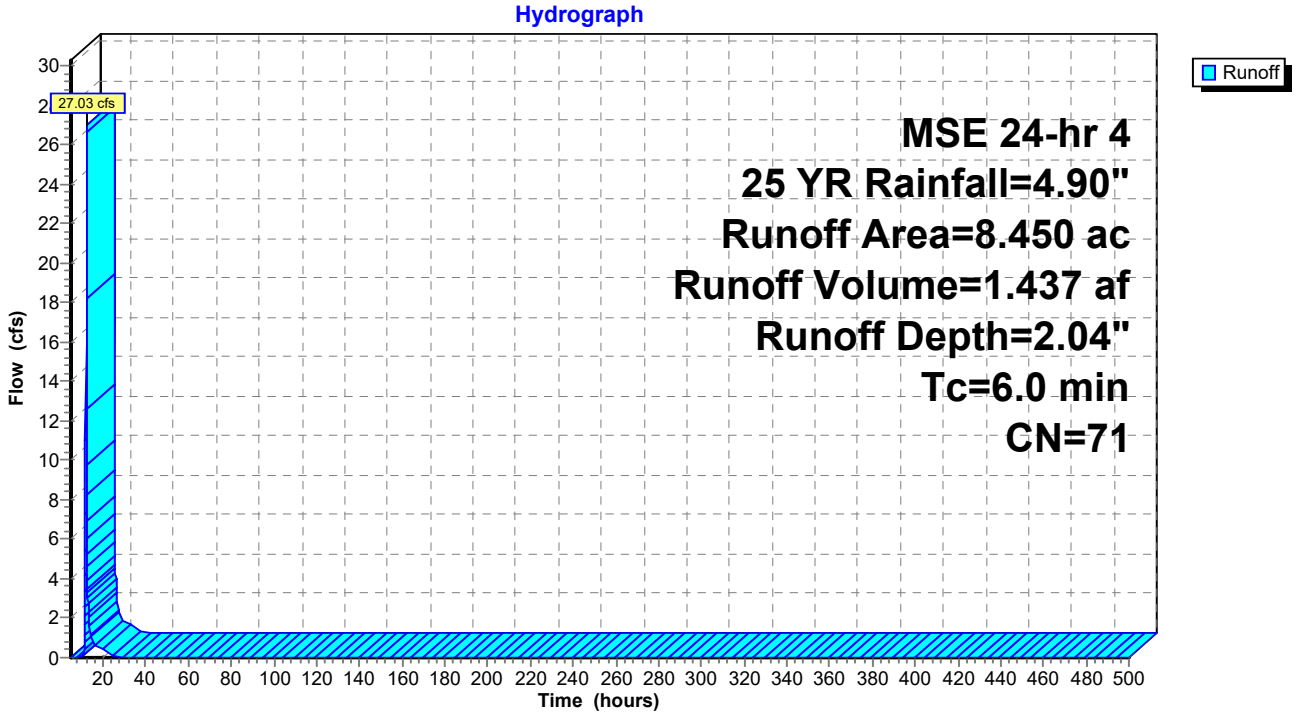
Runoff = 27.03 cfs @ 12.14 hrs, Volume= 1.437 af, Depth= 2.04"
Routed to Pond P3B : Pond 3B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 25 YR Rainfall=4.90"

	Area (ac)	CN	Description
*	1.680	98	Impervious
*	5.290	61	Post - B Soils
*	1.480	74	Post - C Soils
	8.450	71	Weighted Average
	6.770		80.12% Pervious Area
	1.680		19.88% Impervious Area

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

Subcatchment 3B: Post 3B



Hydrograph for Subcatchment 3B: Post 3B

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00	260.00	4.90	2.04	0.00
10.00	0.78	0.00	**0.00**	265.00	4.90	2.04	0.00
15.00	4.31	1.61	**1.05**	270.00	4.90	2.04	0.00
20.00	**4.74**	**1.92**	0.39	275.00	4.90	2.04	0.00
25.00	**4.90**	**2.04**	0.00	280.00	4.90	2.04	0.00
30.00	4.90	2.04	0.00	285.00	4.90	2.04	0.00
35.00	4.90	2.04	0.00	290.00	4.90	2.04	0.00
40.00	4.90	2.04	0.00	295.00	4.90	2.04	0.00
45.00	4.90	2.04	0.00	300.00	4.90	2.04	0.00
50.00	4.90	2.04	0.00	305.00	4.90	2.04	0.00
55.00	4.90	2.04	0.00	310.00	4.90	2.04	0.00
60.00	4.90	2.04	0.00	315.00	4.90	2.04	0.00
65.00	4.90	2.04	0.00	320.00	4.90	2.04	0.00
70.00	4.90	2.04	0.00	325.00	4.90	2.04	0.00
75.00	4.90	2.04	0.00	330.00	4.90	2.04	0.00
80.00	4.90	2.04	0.00	335.00	4.90	2.04	0.00
85.00	4.90	2.04	0.00	340.00	4.90	2.04	0.00
90.00	4.90	2.04	0.00	345.00	4.90	2.04	0.00
95.00	4.90	2.04	0.00	350.00	4.90	2.04	0.00
100.00	4.90	2.04	0.00	355.00	4.90	2.04	0.00
105.00	4.90	2.04	0.00	360.00	4.90	2.04	0.00
110.00	4.90	2.04	0.00	365.00	4.90	2.04	0.00
115.00	4.90	2.04	0.00	370.00	4.90	2.04	0.00
120.00	4.90	2.04	0.00	375.00	4.90	2.04	0.00
125.00	4.90	2.04	0.00	380.00	4.90	2.04	0.00
130.00	4.90	2.04	0.00	385.00	4.90	2.04	0.00
135.00	4.90	2.04	0.00	390.00	4.90	2.04	0.00
140.00	4.90	2.04	0.00	395.00	4.90	2.04	0.00
145.00	4.90	2.04	0.00	400.00	4.90	2.04	0.00
150.00	4.90	2.04	0.00	405.00	4.90	2.04	0.00
155.00	4.90	2.04	0.00	410.00	4.90	2.04	0.00
160.00	4.90	2.04	0.00	415.00	4.90	2.04	0.00
165.00	4.90	2.04	0.00	420.00	4.90	2.04	0.00
170.00	4.90	2.04	0.00	425.00	4.90	2.04	0.00
175.00	4.90	2.04	0.00	430.00	4.90	2.04	0.00
180.00	4.90	2.04	0.00	435.00	4.90	2.04	0.00
185.00	4.90	2.04	0.00	440.00	4.90	2.04	0.00
190.00	4.90	2.04	0.00	445.00	4.90	2.04	0.00
195.00	4.90	2.04	0.00	450.00	4.90	2.04	0.00
200.00	4.90	2.04	0.00	455.00	4.90	2.04	0.00
205.00	4.90	2.04	0.00	460.00	4.90	2.04	0.00
210.00	4.90	2.04	0.00	465.00	4.90	2.04	0.00
215.00	4.90	2.04	0.00	470.00	4.90	2.04	0.00
220.00	4.90	2.04	0.00	475.00	4.90	2.04	0.00
225.00	4.90	2.04	0.00	480.00	4.90	2.04	0.00
230.00	4.90	2.04	0.00	485.00	4.90	2.04	0.00
235.00	4.90	2.04	0.00	490.00	4.90	2.04	0.00
240.00	4.90	2.04	0.00	495.00	4.90	2.04	0.00
245.00	4.90	2.04	0.00	500.00	4.90	2.04	0.00
250.00	4.90	2.04	0.00				
255.00	4.90	2.04	0.00				

Summary for Subcatchment 3C: Post 3C

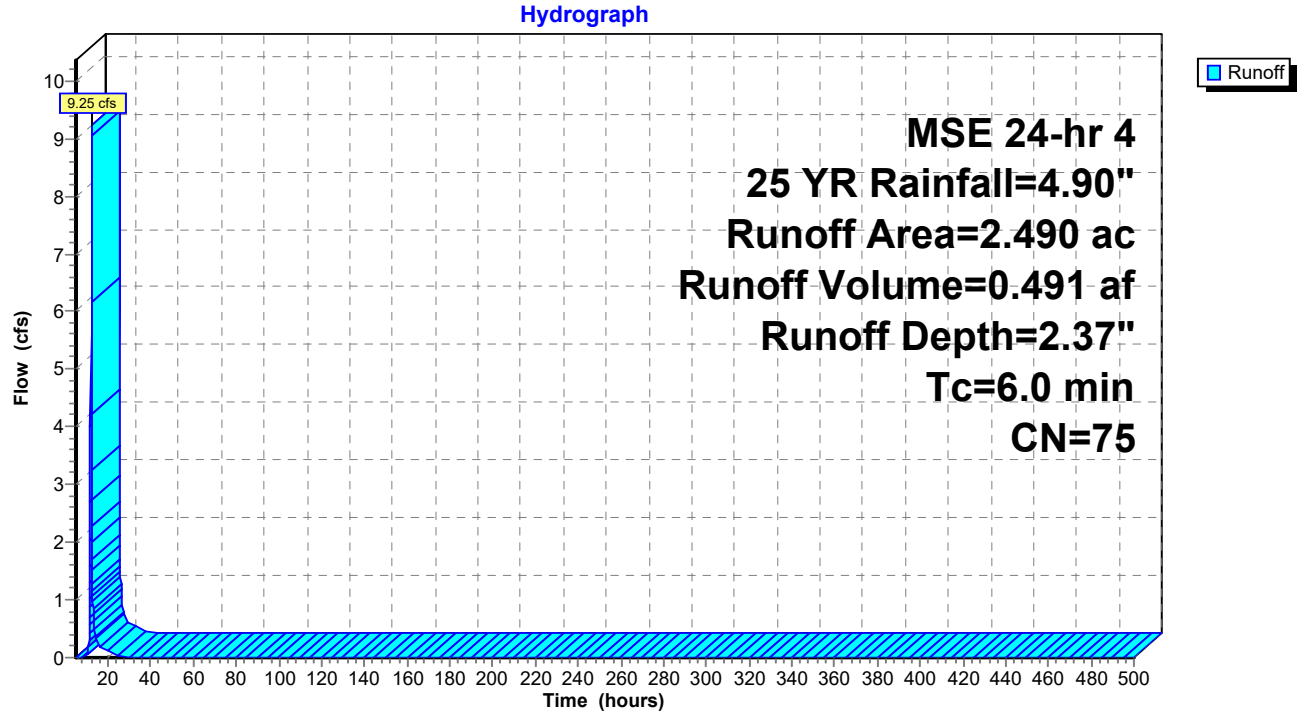
Runoff = 9.25 cfs @ 12.13 hrs, Volume= 0.491 af, Depth= 2.37"
Routed to Pond P3C : Pond 3C

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 25 YR Rainfall=4.90"

	Area (ac)	CN	Description
*	0.570	98	Impervious
*	0.800	61	Post - B Soils
*	1.120	74	Post - C Soils
	2.490	75	Weighted Average
	1.920		77.11% Pervious Area
	0.570		22.89% Impervious Area

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

Subcatchment 3C: Post 3C



Hydrograph for Subcatchment 3C: Post 3C

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00
10.00	0.78	0.00	**0.03**
15.00	4.31	1.90	**0.34**
20.00	**4.74**	**2.24**	0.12
25.00	**4.90**	**2.37**	0.00
30.00	4.90	2.37	0.00
35.00	4.90	2.37	0.00
40.00	4.90	2.37	0.00
45.00	4.90	2.37	0.00
50.00	4.90	2.37	0.00
55.00	4.90	2.37	0.00
60.00	4.90	2.37	0.00
65.00	4.90	2.37	0.00
70.00	4.90	2.37	0.00
75.00	4.90	2.37	0.00
80.00	4.90	2.37	0.00
85.00	4.90	2.37	0.00
90.00	4.90	2.37	0.00
95.00	4.90	2.37	0.00
100.00	4.90	2.37	0.00
105.00	4.90	2.37	0.00
110.00	4.90	2.37	0.00
115.00	4.90	2.37	0.00
120.00	4.90	2.37	0.00
125.00	4.90	2.37	0.00
130.00	4.90	2.37	0.00
135.00	4.90	2.37	0.00
140.00	4.90	2.37	0.00
145.00	4.90	2.37	0.00
150.00	4.90	2.37	0.00
155.00	4.90	2.37	0.00
160.00	4.90	2.37	0.00
165.00	4.90	2.37	0.00
170.00	4.90	2.37	0.00
175.00	4.90	2.37	0.00
180.00	4.90	2.37	0.00
185.00	4.90	2.37	0.00
190.00	4.90	2.37	0.00
195.00	4.90	2.37	0.00
200.00	4.90	2.37	0.00
205.00	4.90	2.37	0.00
210.00	4.90	2.37	0.00
215.00	4.90	2.37	0.00
220.00	4.90	2.37	0.00
225.00	4.90	2.37	0.00
230.00	4.90	2.37	0.00
235.00	4.90	2.37	0.00
240.00	4.90	2.37	0.00
245.00	4.90	2.37	0.00
250.00	4.90	2.37	0.00
255.00	4.90	2.37	0.00
260.00	4.90	2.37	0.00
265.00	4.90	2.37	0.00
270.00	4.90	2.37	0.00
275.00	4.90	2.37	0.00
280.00	4.90	2.37	0.00
285.00	4.90	2.37	0.00
290.00	4.90	2.37	0.00
295.00	4.90	2.37	0.00
300.00	4.90	2.37	0.00
305.00	4.90	2.37	0.00
310.00	4.90	2.37	0.00
315.00	4.90	2.37	0.00
320.00	4.90	2.37	0.00
325.00	4.90	2.37	0.00
330.00	4.90	2.37	0.00
335.00	4.90	2.37	0.00
340.00	4.90	2.37	0.00
345.00	4.90	2.37	0.00
350.00	4.90	2.37	0.00
355.00	4.90	2.37	0.00
360.00	4.90	2.37	0.00
365.00	4.90	2.37	0.00
370.00	4.90	2.37	0.00
375.00	4.90	2.37	0.00
380.00	4.90	2.37	0.00
385.00	4.90	2.37	0.00
390.00	4.90	2.37	0.00
395.00	4.90	2.37	0.00
400.00	4.90	2.37	0.00
405.00	4.90	2.37	0.00
410.00	4.90	2.37	0.00
415.00	4.90	2.37	0.00
420.00	4.90	2.37	0.00
425.00	4.90	2.37	0.00
430.00	4.90	2.37	0.00
435.00	4.90	2.37	0.00
440.00	4.90	2.37	0.00
445.00	4.90	2.37	0.00
450.00	4.90	2.37	0.00
455.00	4.90	2.37	0.00
460.00	4.90	2.37	0.00
465.00	4.90	2.37	0.00
470.00	4.90	2.37	0.00
475.00	4.90	2.37	0.00
480.00	4.90	2.37	0.00
485.00	4.90	2.37	0.00
490.00	4.90	2.37	0.00
495.00	4.90	2.37	0.00
500.00	4.90	2.37	0.00

Summary for Subcatchment 3D: Post 3D

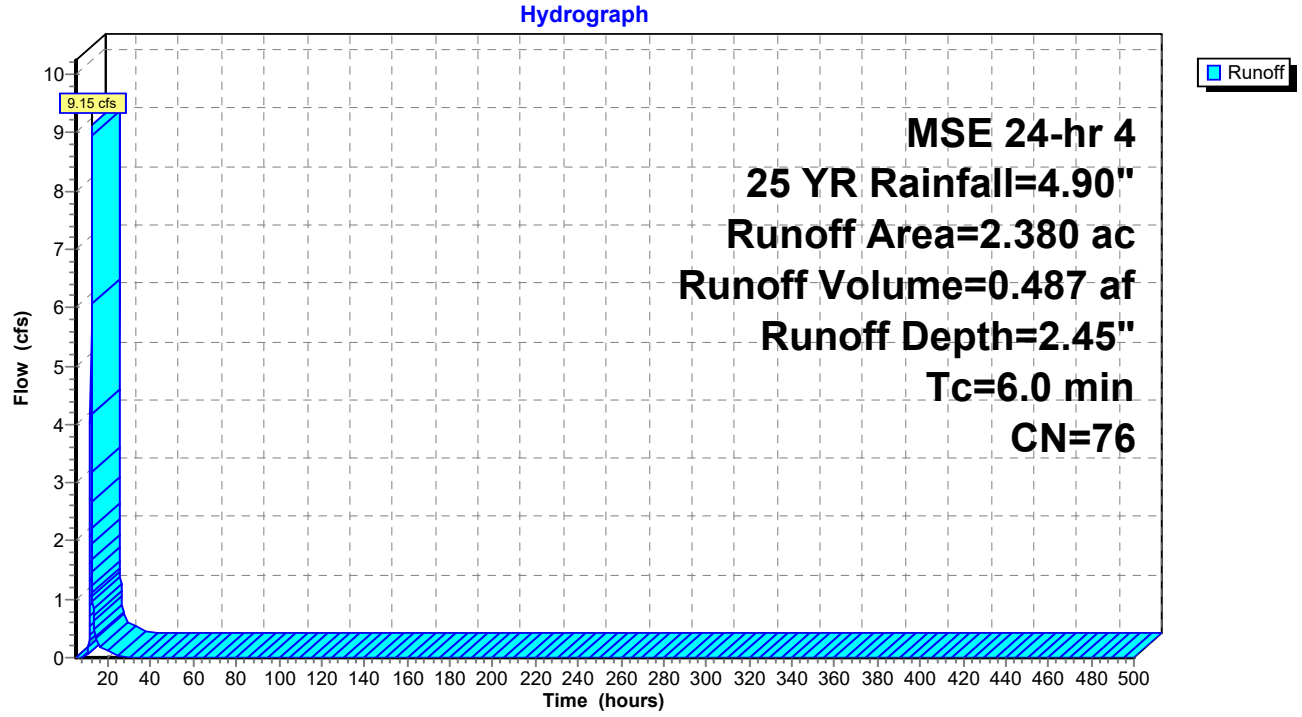
Runoff = 9.15 cfs @ 12.13 hrs, Volume= 0.487 af, Depth= 2.45"
Routed to Pond P3D : Pond 3D

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 25 YR Rainfall=4.90"

	Area (ac)	CN	Description
*	0.570	98	Impervious
*	0.610	61	Post - B Soils
*	1.200	74	Post - C Soils
	2.380	76	Weighted Average
	1.810		76.05% Pervious Area
	0.570		23.95% Impervious Area

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

Subcatchment 3D: Post 3D



Hydrograph for Subcatchment 3D: Post 3D

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00
10.00	0.78	0.01	**0.03**
15.00	4.31	1.98	**0.33**
20.00	**4.74**	**2.32**	0.12
25.00	**4.90**	**2.45**	0.00
30.00	4.90	2.45	0.00
35.00	4.90	2.45	0.00
40.00	4.90	2.45	0.00
45.00	4.90	2.45	0.00
50.00	4.90	2.45	0.00
55.00	4.90	2.45	0.00
60.00	4.90	2.45	0.00
65.00	4.90	2.45	0.00
70.00	4.90	2.45	0.00
75.00	4.90	2.45	0.00
80.00	4.90	2.45	0.00
85.00	4.90	2.45	0.00
90.00	4.90	2.45	0.00
95.00	4.90	2.45	0.00
100.00	4.90	2.45	0.00
105.00	4.90	2.45	0.00
110.00	4.90	2.45	0.00
115.00	4.90	2.45	0.00
120.00	4.90	2.45	0.00
125.00	4.90	2.45	0.00
130.00	4.90	2.45	0.00
135.00	4.90	2.45	0.00
140.00	4.90	2.45	0.00
145.00	4.90	2.45	0.00
150.00	4.90	2.45	0.00
155.00	4.90	2.45	0.00
160.00	4.90	2.45	0.00
165.00	4.90	2.45	0.00
170.00	4.90	2.45	0.00
175.00	4.90	2.45	0.00
180.00	4.90	2.45	0.00
185.00	4.90	2.45	0.00
190.00	4.90	2.45	0.00
195.00	4.90	2.45	0.00
200.00	4.90	2.45	0.00
205.00	4.90	2.45	0.00
210.00	4.90	2.45	0.00
215.00	4.90	2.45	0.00
220.00	4.90	2.45	0.00
225.00	4.90	2.45	0.00
230.00	4.90	2.45	0.00
235.00	4.90	2.45	0.00
240.00	4.90	2.45	0.00
245.00	4.90	2.45	0.00
250.00	4.90	2.45	0.00
255.00	4.90	2.45	0.00
260.00	4.90	2.45	0.00
265.00	4.90	2.45	0.00
270.00	4.90	2.45	0.00
275.00	4.90	2.45	0.00
280.00	4.90	2.45	0.00
285.00	4.90	2.45	0.00
290.00	4.90	2.45	0.00
295.00	4.90	2.45	0.00
300.00	4.90	2.45	0.00
305.00	4.90	2.45	0.00
310.00	4.90	2.45	0.00
315.00	4.90	2.45	0.00
320.00	4.90	2.45	0.00
325.00	4.90	2.45	0.00
330.00	4.90	2.45	0.00
335.00	4.90	2.45	0.00
340.00	4.90	2.45	0.00
345.00	4.90	2.45	0.00
350.00	4.90	2.45	0.00
355.00	4.90	2.45	0.00
360.00	4.90	2.45	0.00
365.00	4.90	2.45	0.00
370.00	4.90	2.45	0.00
375.00	4.90	2.45	0.00
380.00	4.90	2.45	0.00
385.00	4.90	2.45	0.00
390.00	4.90	2.45	0.00
395.00	4.90	2.45	0.00
400.00	4.90	2.45	0.00
405.00	4.90	2.45	0.00
410.00	4.90	2.45	0.00
415.00	4.90	2.45	0.00
420.00	4.90	2.45	0.00
425.00	4.90	2.45	0.00
430.00	4.90	2.45	0.00
435.00	4.90	2.45	0.00
440.00	4.90	2.45	0.00
445.00	4.90	2.45	0.00
450.00	4.90	2.45	0.00
455.00	4.90	2.45	0.00
460.00	4.90	2.45	0.00
465.00	4.90	2.45	0.00
470.00	4.90	2.45	0.00
475.00	4.90	2.45	0.00
480.00	4.90	2.45	0.00
485.00	4.90	2.45	0.00
490.00	4.90	2.45	0.00
495.00	4.90	2.45	0.00
500.00	4.90	2.45	0.00

Summary for Subcatchment 3E: Post 3E

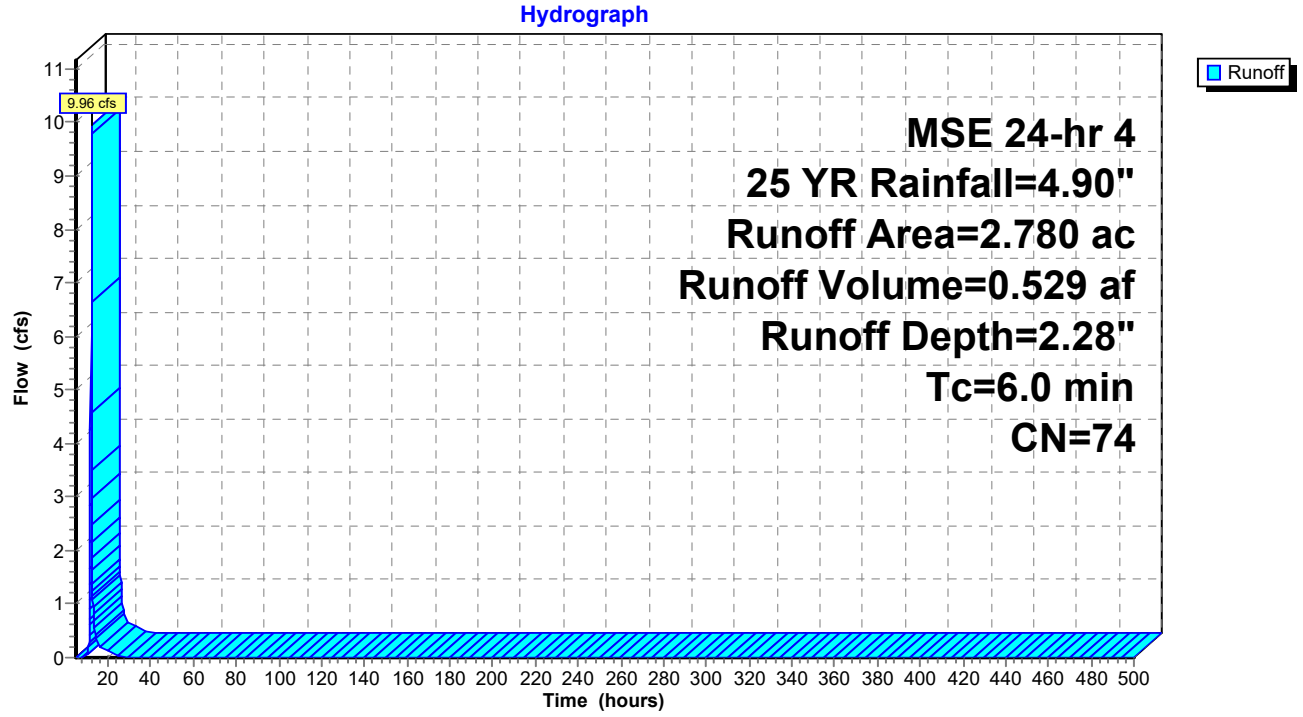
Runoff = 9.96 cfs @ 12.13 hrs, Volume= 0.529 af, Depth= 2.28"
Routed to Pond P3E : Pond 3E

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 25 YR Rainfall=4.90"

	Area (ac)	CN	Description
*	0.530	98	Impervious
*	0.920	61	Post - B Soils
*	1.330	74	Post - C Soils
	2.780	74	Weighted Average
	2.250		80.94% Pervious Area
	0.530		19.06% Impervious Area

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

Subcatchment 3E: Post 3E



Hydrograph for Subcatchment 3E: Post 3E

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00
10.00	0.78	0.00	**0.02**
15.00	4.31	1.83	**0.37**
20.00	**4.74**	**2.16**	0.14
25.00	**4.90**	**2.28**	0.00
30.00	4.90	2.28	0.00
35.00	4.90	2.28	0.00
40.00	4.90	2.28	0.00
45.00	4.90	2.28	0.00
50.00	4.90	2.28	0.00
55.00	4.90	2.28	0.00
60.00	4.90	2.28	0.00
65.00	4.90	2.28	0.00
70.00	4.90	2.28	0.00
75.00	4.90	2.28	0.00
80.00	4.90	2.28	0.00
85.00	4.90	2.28	0.00
90.00	4.90	2.28	0.00
95.00	4.90	2.28	0.00
100.00	4.90	2.28	0.00
105.00	4.90	2.28	0.00
110.00	4.90	2.28	0.00
115.00	4.90	2.28	0.00
120.00	4.90	2.28	0.00
125.00	4.90	2.28	0.00
130.00	4.90	2.28	0.00
135.00	4.90	2.28	0.00
140.00	4.90	2.28	0.00
145.00	4.90	2.28	0.00
150.00	4.90	2.28	0.00
155.00	4.90	2.28	0.00
160.00	4.90	2.28	0.00
165.00	4.90	2.28	0.00
170.00	4.90	2.28	0.00
175.00	4.90	2.28	0.00
180.00	4.90	2.28	0.00
185.00	4.90	2.28	0.00
190.00	4.90	2.28	0.00
195.00	4.90	2.28	0.00
200.00	4.90	2.28	0.00
205.00	4.90	2.28	0.00
210.00	4.90	2.28	0.00
215.00	4.90	2.28	0.00
220.00	4.90	2.28	0.00
225.00	4.90	2.28	0.00
230.00	4.90	2.28	0.00
235.00	4.90	2.28	0.00
240.00	4.90	2.28	0.00
245.00	4.90	2.28	0.00
250.00	4.90	2.28	0.00
255.00	4.90	2.28	0.00
260.00	4.90	2.28	0.00
265.00	4.90	2.28	0.00
270.00	4.90	2.28	0.00
275.00	4.90	2.28	0.00
280.00	4.90	2.28	0.00
285.00	4.90	2.28	0.00
290.00	4.90	2.28	0.00
295.00	4.90	2.28	0.00
300.00	4.90	2.28	0.00
305.00	4.90	2.28	0.00
310.00	4.90	2.28	0.00
315.00	4.90	2.28	0.00
320.00	4.90	2.28	0.00
325.00	4.90	2.28	0.00
330.00	4.90	2.28	0.00
335.00	4.90	2.28	0.00
340.00	4.90	2.28	0.00
345.00	4.90	2.28	0.00
350.00	4.90	2.28	0.00
355.00	4.90	2.28	0.00
360.00	4.90	2.28	0.00
365.00	4.90	2.28	0.00
370.00	4.90	2.28	0.00
375.00	4.90	2.28	0.00
380.00	4.90	2.28	0.00
385.00	4.90	2.28	0.00
390.00	4.90	2.28	0.00
395.00	4.90	2.28	0.00
400.00	4.90	2.28	0.00
405.00	4.90	2.28	0.00
410.00	4.90	2.28	0.00
415.00	4.90	2.28	0.00
420.00	4.90	2.28	0.00
425.00	4.90	2.28	0.00
430.00	4.90	2.28	0.00
435.00	4.90	2.28	0.00
440.00	4.90	2.28	0.00
445.00	4.90	2.28	0.00
450.00	4.90	2.28	0.00
455.00	4.90	2.28	0.00
460.00	4.90	2.28	0.00
465.00	4.90	2.28	0.00
470.00	4.90	2.28	0.00
475.00	4.90	2.28	0.00
480.00	4.90	2.28	0.00
485.00	4.90	2.28	0.00
490.00	4.90	2.28	0.00
495.00	4.90	2.28	0.00
500.00	4.90	2.28	0.00

Summary for Subcatchment 3Y: Post 3Y - Offsite

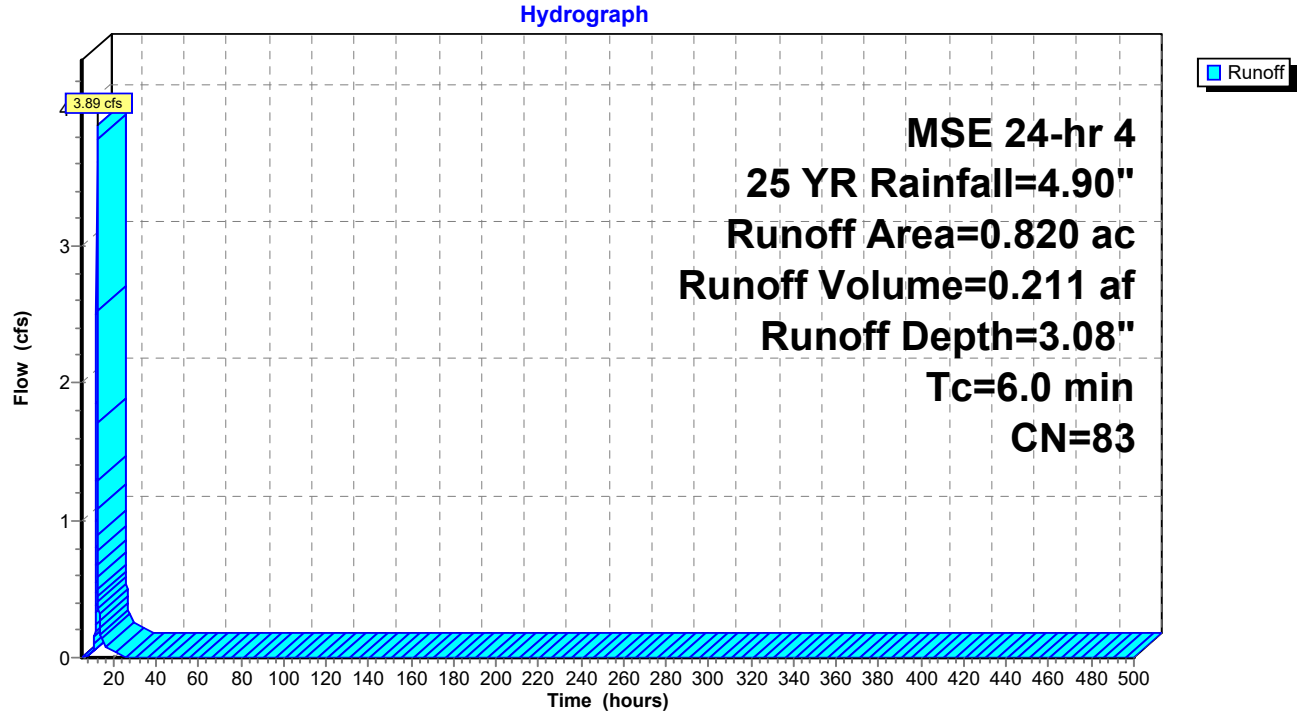
Runoff = 3.89 cfs @ 12.13 hrs, Volume= 0.211 af, Depth= 3.08"
Routed to Link 4L : Post - North

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 25 YR Rainfall=4.90"

	Area (ac)	CN	Description
*	0.300	98	Impervious
*	0.000	61	Post - B Soils
*	0.520	74	Post - C Soils
	0.820	83	Weighted Average
	0.520		63.41% Pervious Area
	0.300		36.59% Impervious Area

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

Subcatchment 3Y: Post 3Y - Offsite



Hydrograph for Subcatchment 3Y: Post 3Y - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00
10.00	0.78	0.06	**0.04**
15.00	4.31	2.55	**0.13**
20.00	**4.74**	**2.94**	0.05
25.00	**4.90**	**3.08**	0.00
30.00	4.90	3.08	0.00
35.00	4.90	3.08	0.00
40.00	4.90	3.08	0.00
45.00	4.90	3.08	0.00
50.00	4.90	3.08	0.00
55.00	4.90	3.08	0.00
60.00	4.90	3.08	0.00
65.00	4.90	3.08	0.00
70.00	4.90	3.08	0.00
75.00	4.90	3.08	0.00
80.00	4.90	3.08	0.00
85.00	4.90	3.08	0.00
90.00	4.90	3.08	0.00
95.00	4.90	3.08	0.00
100.00	4.90	3.08	0.00
105.00	4.90	3.08	0.00
110.00	4.90	3.08	0.00
115.00	4.90	3.08	0.00
120.00	4.90	3.08	0.00
125.00	4.90	3.08	0.00
130.00	4.90	3.08	0.00
135.00	4.90	3.08	0.00
140.00	4.90	3.08	0.00
145.00	4.90	3.08	0.00
150.00	4.90	3.08	0.00
155.00	4.90	3.08	0.00
160.00	4.90	3.08	0.00
165.00	4.90	3.08	0.00
170.00	4.90	3.08	0.00
175.00	4.90	3.08	0.00
180.00	4.90	3.08	0.00
185.00	4.90	3.08	0.00
190.00	4.90	3.08	0.00
195.00	4.90	3.08	0.00
200.00	4.90	3.08	0.00
205.00	4.90	3.08	0.00
210.00	4.90	3.08	0.00
215.00	4.90	3.08	0.00
220.00	4.90	3.08	0.00
225.00	4.90	3.08	0.00
230.00	4.90	3.08	0.00
235.00	4.90	3.08	0.00
240.00	4.90	3.08	0.00
245.00	4.90	3.08	0.00
250.00	4.90	3.08	0.00
255.00	4.90	3.08	0.00
260.00	4.90	3.08	0.00
265.00	4.90	3.08	0.00
270.00	4.90	3.08	0.00
275.00	4.90	3.08	0.00
280.00	4.90	3.08	0.00
285.00	4.90	3.08	0.00
290.00	4.90	3.08	0.00
295.00	4.90	3.08	0.00
300.00	4.90	3.08	0.00
305.00	4.90	3.08	0.00
310.00	4.90	3.08	0.00
315.00	4.90	3.08	0.00
320.00	4.90	3.08	0.00
325.00	4.90	3.08	0.00
330.00	4.90	3.08	0.00
335.00	4.90	3.08	0.00
340.00	4.90	3.08	0.00
345.00	4.90	3.08	0.00
350.00	4.90	3.08	0.00
355.00	4.90	3.08	0.00
360.00	4.90	3.08	0.00
365.00	4.90	3.08	0.00
370.00	4.90	3.08	0.00
375.00	4.90	3.08	0.00
380.00	4.90	3.08	0.00
385.00	4.90	3.08	0.00
390.00	4.90	3.08	0.00
395.00	4.90	3.08	0.00
400.00	4.90	3.08	0.00
405.00	4.90	3.08	0.00
410.00	4.90	3.08	0.00
415.00	4.90	3.08	0.00
420.00	4.90	3.08	0.00
425.00	4.90	3.08	0.00
430.00	4.90	3.08	0.00
435.00	4.90	3.08	0.00
440.00	4.90	3.08	0.00
445.00	4.90	3.08	0.00
450.00	4.90	3.08	0.00
455.00	4.90	3.08	0.00
460.00	4.90	3.08	0.00
465.00	4.90	3.08	0.00
470.00	4.90	3.08	0.00
475.00	4.90	3.08	0.00
480.00	4.90	3.08	0.00
485.00	4.90	3.08	0.00
490.00	4.90	3.08	0.00
495.00	4.90	3.08	0.00
500.00	4.90	3.08	0.00

Summary for Subcatchment 3Z: Post 3Z - Offsite

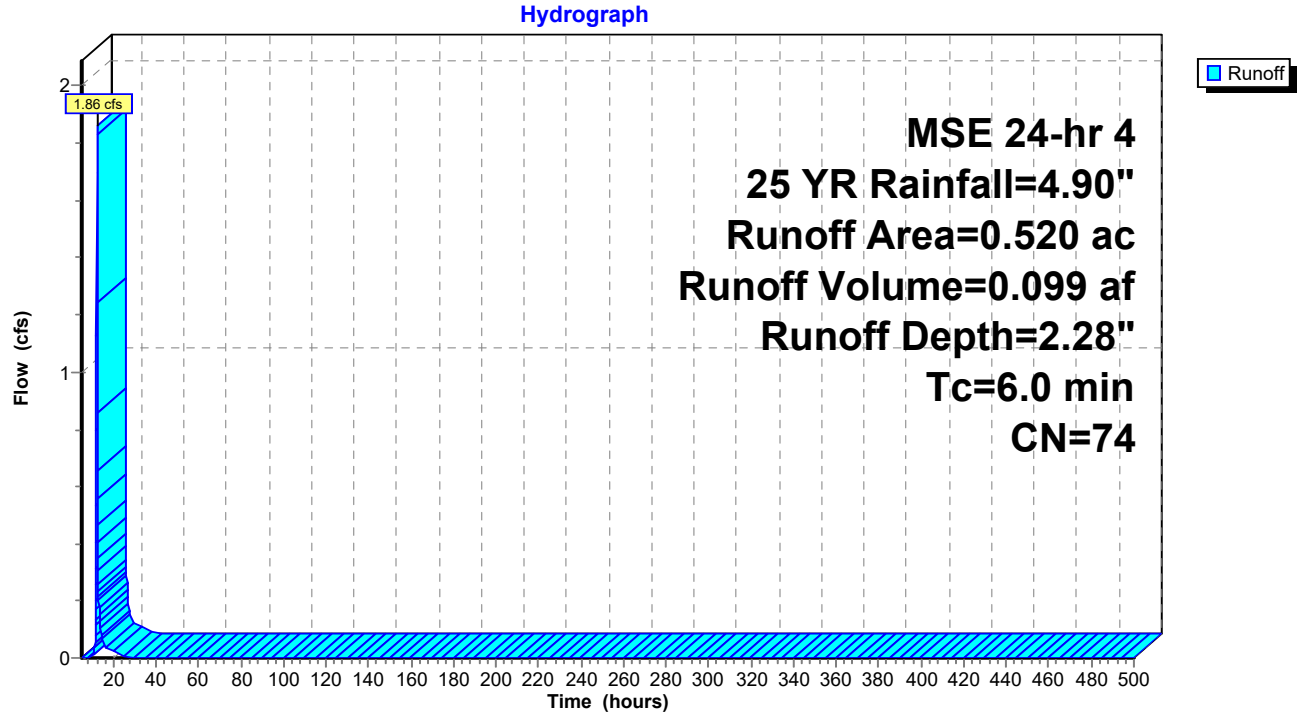
Runoff = 1.86 cfs @ 12.13 hrs, Volume= 0.099 af, Depth= 2.28"
Routed to Link 4L : Post - North

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 25 YR Rainfall=4.90"

	Area (ac)	CN	Description
*	0.000	98	Impervious
*	0.000	61	Post - B Soils
*	0.520	74	Post - C Soils
	0.520	74	Weighted Average
	0.520		100.00% Pervious Area

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

Subcatchment 3Z: Post 3Z - Offsite



Hydrograph for Subcatchment 3Z: Post 3Z - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00
10.00	0.78	0.00	**0.00**
15.00	4.31	1.83	**0.07**
20.00	**4.74**	**2.16**	0.03
25.00	**4.90**	**2.28**	0.00
30.00	4.90	2.28	0.00
35.00	4.90	2.28	0.00
40.00	4.90	2.28	0.00
45.00	4.90	2.28	0.00
50.00	4.90	2.28	0.00
55.00	4.90	2.28	0.00
60.00	4.90	2.28	0.00
65.00	4.90	2.28	0.00
70.00	4.90	2.28	0.00
75.00	4.90	2.28	0.00
80.00	4.90	2.28	0.00
85.00	4.90	2.28	0.00
90.00	4.90	2.28	0.00
95.00	4.90	2.28	0.00
100.00	4.90	2.28	0.00
105.00	4.90	2.28	0.00
110.00	4.90	2.28	0.00
115.00	4.90	2.28	0.00
120.00	4.90	2.28	0.00
125.00	4.90	2.28	0.00
130.00	4.90	2.28	0.00
135.00	4.90	2.28	0.00
140.00	4.90	2.28	0.00
145.00	4.90	2.28	0.00
150.00	4.90	2.28	0.00
155.00	4.90	2.28	0.00
160.00	4.90	2.28	0.00
165.00	4.90	2.28	0.00
170.00	4.90	2.28	0.00
175.00	4.90	2.28	0.00
180.00	4.90	2.28	0.00
185.00	4.90	2.28	0.00
190.00	4.90	2.28	0.00
195.00	4.90	2.28	0.00
200.00	4.90	2.28	0.00
205.00	4.90	2.28	0.00
210.00	4.90	2.28	0.00
215.00	4.90	2.28	0.00
220.00	4.90	2.28	0.00
225.00	4.90	2.28	0.00
230.00	4.90	2.28	0.00
235.00	4.90	2.28	0.00
240.00	4.90	2.28	0.00
245.00	4.90	2.28	0.00
250.00	4.90	2.28	0.00
255.00	4.90	2.28	0.00
260.00	4.90	2.28	0.00
265.00	4.90	2.28	0.00
270.00	4.90	2.28	0.00
275.00	4.90	2.28	0.00
280.00	4.90	2.28	0.00
285.00	4.90	2.28	0.00
290.00	4.90	2.28	0.00
295.00	4.90	2.28	0.00
300.00	4.90	2.28	0.00
305.00	4.90	2.28	0.00
310.00	4.90	2.28	0.00
315.00	4.90	2.28	0.00
320.00	4.90	2.28	0.00
325.00	4.90	2.28	0.00
330.00	4.90	2.28	0.00
335.00	4.90	2.28	0.00
340.00	4.90	2.28	0.00
345.00	4.90	2.28	0.00
350.00	4.90	2.28	0.00
355.00	4.90	2.28	0.00
360.00	4.90	2.28	0.00
365.00	4.90	2.28	0.00
370.00	4.90	2.28	0.00
375.00	4.90	2.28	0.00
380.00	4.90	2.28	0.00
385.00	4.90	2.28	0.00
390.00	4.90	2.28	0.00
395.00	4.90	2.28	0.00
400.00	4.90	2.28	0.00
405.00	4.90	2.28	0.00
410.00	4.90	2.28	0.00
415.00	4.90	2.28	0.00
420.00	4.90	2.28	0.00
425.00	4.90	2.28	0.00
430.00	4.90	2.28	0.00
435.00	4.90	2.28	0.00
440.00	4.90	2.28	0.00
445.00	4.90	2.28	0.00
450.00	4.90	2.28	0.00
455.00	4.90	2.28	0.00
460.00	4.90	2.28	0.00
465.00	4.90	2.28	0.00
470.00	4.90	2.28	0.00
475.00	4.90	2.28	0.00
480.00	4.90	2.28	0.00
485.00	4.90	2.28	0.00
490.00	4.90	2.28	0.00
495.00	4.90	2.28	0.00
500.00	4.90	2.28	0.00

Summary for Subcatchment 5S: Culvert 1

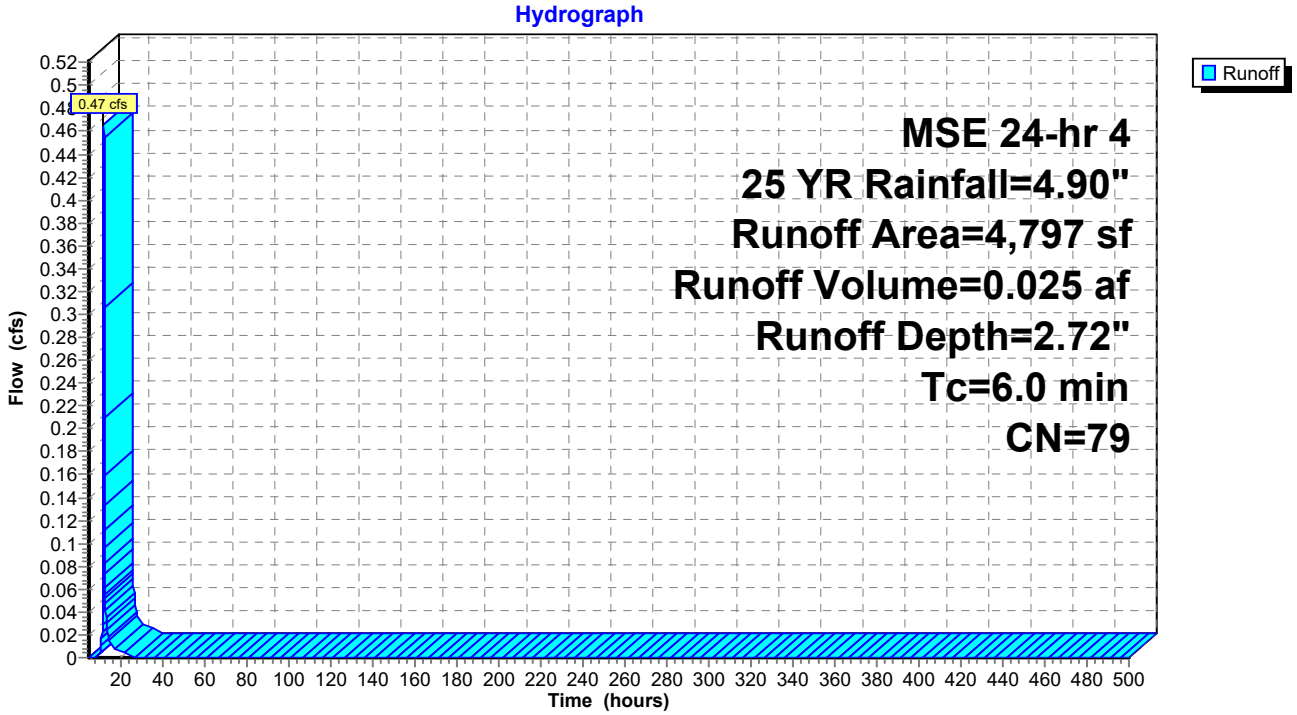
Runoff = 0.47 cfs @ 12.13 hrs, Volume= 0.025 af, Depth= 2.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 25 YR Rainfall=4.90"

	Area (sf)	CN	Description
*	2,465	61	Post - B Soils
*	2,332	98	Impervious
	4,797	79	Weighted Average
	2,465		51.39% Pervious Area
	2,332		48.61% Impervious Area

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

Subcatchment 5S: Culvert 1



Hydrograph for Subcatchment 5S: Culvert 1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00	260.00	4.90	2.72	0.00
10.00	0.78	0.02	**0.00**	265.00	4.90	2.72	0.00
15.00	4.31	2.22	**0.02**	270.00	4.90	2.72	0.00
20.00	**4.74**	**2.58**	0.01	275.00	4.90	2.72	0.00
25.00	**4.90**	**2.72**	0.00	280.00	4.90	2.72	0.00
30.00	4.90	2.72	0.00	285.00	4.90	2.72	0.00
35.00	4.90	2.72	0.00	290.00	4.90	2.72	0.00
40.00	4.90	2.72	0.00	295.00	4.90	2.72	0.00
45.00	4.90	2.72	0.00	300.00	4.90	2.72	0.00
50.00	4.90	2.72	0.00	305.00	4.90	2.72	0.00
55.00	4.90	2.72	0.00	310.00	4.90	2.72	0.00
60.00	4.90	2.72	0.00	315.00	4.90	2.72	0.00
65.00	4.90	2.72	0.00	320.00	4.90	2.72	0.00
70.00	4.90	2.72	0.00	325.00	4.90	2.72	0.00
75.00	4.90	2.72	0.00	330.00	4.90	2.72	0.00
80.00	4.90	2.72	0.00	335.00	4.90	2.72	0.00
85.00	4.90	2.72	0.00	340.00	4.90	2.72	0.00
90.00	4.90	2.72	0.00	345.00	4.90	2.72	0.00
95.00	4.90	2.72	0.00	350.00	4.90	2.72	0.00
100.00	4.90	2.72	0.00	355.00	4.90	2.72	0.00
105.00	4.90	2.72	0.00	360.00	4.90	2.72	0.00
110.00	4.90	2.72	0.00	365.00	4.90	2.72	0.00
115.00	4.90	2.72	0.00	370.00	4.90	2.72	0.00
120.00	4.90	2.72	0.00	375.00	4.90	2.72	0.00
125.00	4.90	2.72	0.00	380.00	4.90	2.72	0.00
130.00	4.90	2.72	0.00	385.00	4.90	2.72	0.00
135.00	4.90	2.72	0.00	390.00	4.90	2.72	0.00
140.00	4.90	2.72	0.00	395.00	4.90	2.72	0.00
145.00	4.90	2.72	0.00	400.00	4.90	2.72	0.00
150.00	4.90	2.72	0.00	405.00	4.90	2.72	0.00
155.00	4.90	2.72	0.00	410.00	4.90	2.72	0.00
160.00	4.90	2.72	0.00	415.00	4.90	2.72	0.00
165.00	4.90	2.72	0.00	420.00	4.90	2.72	0.00
170.00	4.90	2.72	0.00	425.00	4.90	2.72	0.00
175.00	4.90	2.72	0.00	430.00	4.90	2.72	0.00
180.00	4.90	2.72	0.00	435.00	4.90	2.72	0.00
185.00	4.90	2.72	0.00	440.00	4.90	2.72	0.00
190.00	4.90	2.72	0.00	445.00	4.90	2.72	0.00
195.00	4.90	2.72	0.00	450.00	4.90	2.72	0.00
200.00	4.90	2.72	0.00	455.00	4.90	2.72	0.00
205.00	4.90	2.72	0.00	460.00	4.90	2.72	0.00
210.00	4.90	2.72	0.00	465.00	4.90	2.72	0.00
215.00	4.90	2.72	0.00	470.00	4.90	2.72	0.00
220.00	4.90	2.72	0.00	475.00	4.90	2.72	0.00
225.00	4.90	2.72	0.00	480.00	4.90	2.72	0.00
230.00	4.90	2.72	0.00	485.00	4.90	2.72	0.00
235.00	4.90	2.72	0.00	490.00	4.90	2.72	0.00
240.00	4.90	2.72	0.00	495.00	4.90	2.72	0.00
245.00	4.90	2.72	0.00	500.00	4.90	2.72	0.00
250.00	4.90	2.72	0.00				
255.00	4.90	2.72	0.00				

Summary for Subcatchment 6S: Culvert 2

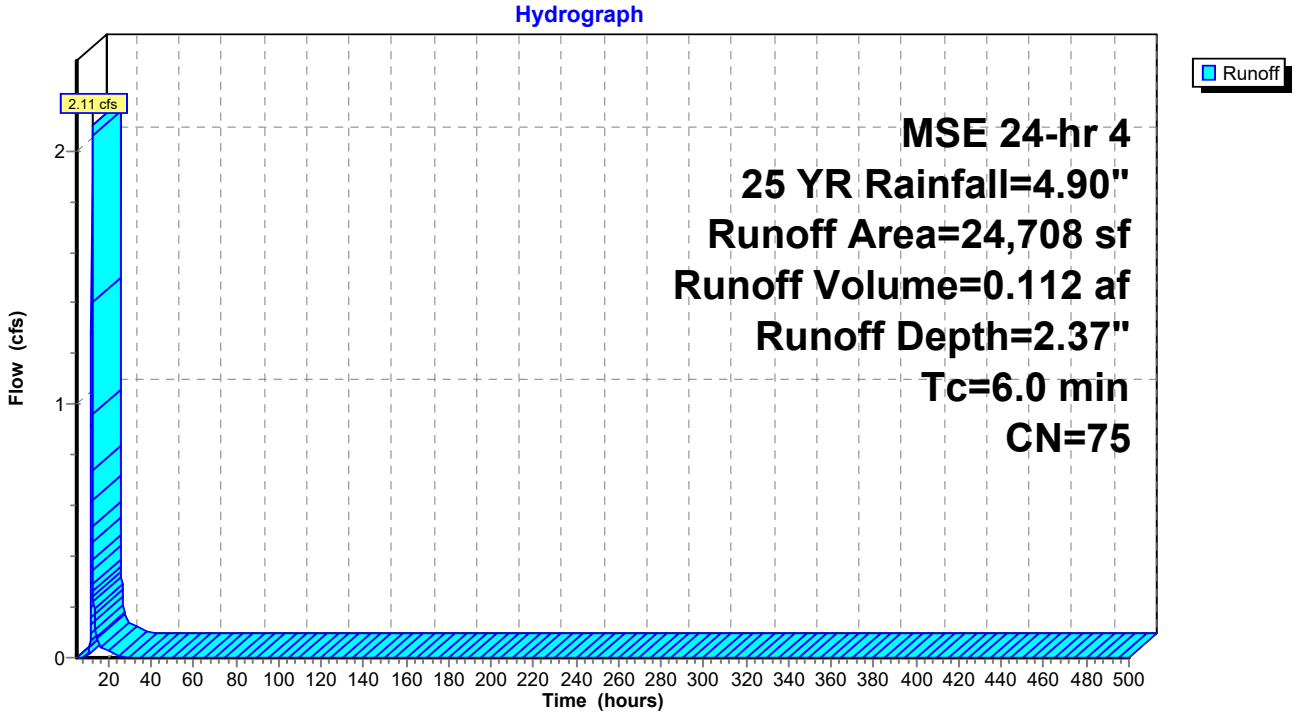
Runoff = 2.11 cfs @ 12.13 hrs, Volume= 0.112 af, Depth= 2.37"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 25 YR Rainfall=4.90"

	Area (sf)	CN	Description
*	15,597	61	Post - B Soils
*	9,111	98	Impervious
	24,708	75	Weighted Average
	15,597		63.13% Pervious Area
	9,111		36.87% Impervious Area

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

Subcatchment 6S: Culvert 2



Hydrograph for Subcatchment 6S: Culvert 2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00	260.00	4.90	2.37	0.00
10.00	0.78	0.00	**0.01**	265.00	4.90	2.37	0.00
15.00	4.31	1.90	**0.08**	270.00	4.90	2.37	0.00
20.00	**4.74**	**2.24**	0.03	275.00	4.90	2.37	0.00
25.00	**4.90**	**2.37**	0.00	280.00	4.90	2.37	0.00
30.00	4.90	2.37	0.00	285.00	4.90	2.37	0.00
35.00	4.90	2.37	0.00	290.00	4.90	2.37	0.00
40.00	4.90	2.37	0.00	295.00	4.90	2.37	0.00
45.00	4.90	2.37	0.00	300.00	4.90	2.37	0.00
50.00	4.90	2.37	0.00	305.00	4.90	2.37	0.00
55.00	4.90	2.37	0.00	310.00	4.90	2.37	0.00
60.00	4.90	2.37	0.00	315.00	4.90	2.37	0.00
65.00	4.90	2.37	0.00	320.00	4.90	2.37	0.00
70.00	4.90	2.37	0.00	325.00	4.90	2.37	0.00
75.00	4.90	2.37	0.00	330.00	4.90	2.37	0.00
80.00	4.90	2.37	0.00	335.00	4.90	2.37	0.00
85.00	4.90	2.37	0.00	340.00	4.90	2.37	0.00
90.00	4.90	2.37	0.00	345.00	4.90	2.37	0.00
95.00	4.90	2.37	0.00	350.00	4.90	2.37	0.00
100.00	4.90	2.37	0.00	355.00	4.90	2.37	0.00
105.00	4.90	2.37	0.00	360.00	4.90	2.37	0.00
110.00	4.90	2.37	0.00	365.00	4.90	2.37	0.00
115.00	4.90	2.37	0.00	370.00	4.90	2.37	0.00
120.00	4.90	2.37	0.00	375.00	4.90	2.37	0.00
125.00	4.90	2.37	0.00	380.00	4.90	2.37	0.00
130.00	4.90	2.37	0.00	385.00	4.90	2.37	0.00
135.00	4.90	2.37	0.00	390.00	4.90	2.37	0.00
140.00	4.90	2.37	0.00	395.00	4.90	2.37	0.00
145.00	4.90	2.37	0.00	400.00	4.90	2.37	0.00
150.00	4.90	2.37	0.00	405.00	4.90	2.37	0.00
155.00	4.90	2.37	0.00	410.00	4.90	2.37	0.00
160.00	4.90	2.37	0.00	415.00	4.90	2.37	0.00
165.00	4.90	2.37	0.00	420.00	4.90	2.37	0.00
170.00	4.90	2.37	0.00	425.00	4.90	2.37	0.00
175.00	4.90	2.37	0.00	430.00	4.90	2.37	0.00
180.00	4.90	2.37	0.00	435.00	4.90	2.37	0.00
185.00	4.90	2.37	0.00	440.00	4.90	2.37	0.00
190.00	4.90	2.37	0.00	445.00	4.90	2.37	0.00
195.00	4.90	2.37	0.00	450.00	4.90	2.37	0.00
200.00	4.90	2.37	0.00	455.00	4.90	2.37	0.00
205.00	4.90	2.37	0.00	460.00	4.90	2.37	0.00
210.00	4.90	2.37	0.00	465.00	4.90	2.37	0.00
215.00	4.90	2.37	0.00	470.00	4.90	2.37	0.00
220.00	4.90	2.37	0.00	475.00	4.90	2.37	0.00
225.00	4.90	2.37	0.00	480.00	4.90	2.37	0.00
230.00	4.90	2.37	0.00	485.00	4.90	2.37	0.00
235.00	4.90	2.37	0.00	490.00	4.90	2.37	0.00
240.00	4.90	2.37	0.00	495.00	4.90	2.37	0.00
245.00	4.90	2.37	0.00	500.00	4.90	2.37	0.00
250.00	4.90	2.37	0.00				
255.00	4.90	2.37	0.00				

Summary for Subcatchment 7S: Culvert 3

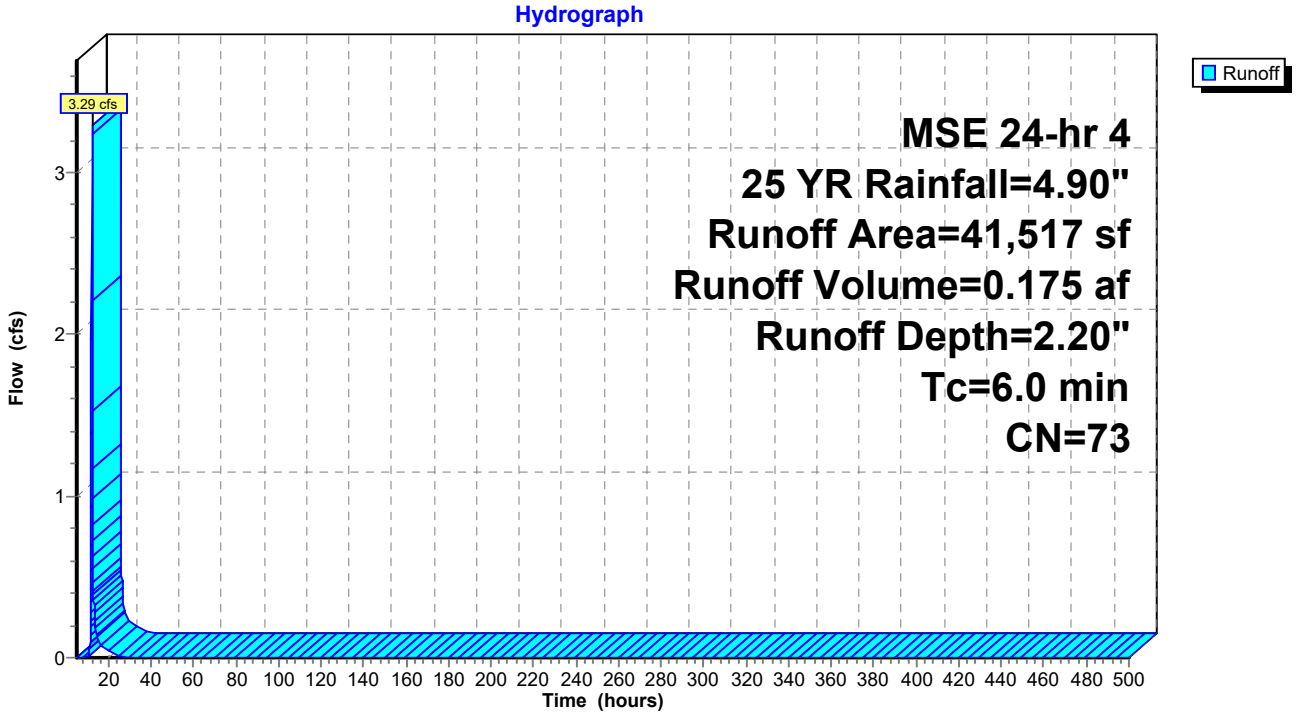
Runoff = 3.29 cfs @ 12.13 hrs, Volume= 0.175 af, Depth= 2.20"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 25 YR Rainfall=4.90"

	Area (sf)	CN	Description
*	28,233	61	Post - B Soils
*	13,284	98	Impervious
	41,517	73	Weighted Average
	28,233		68.00% Pervious Area
	13,284		32.00% Impervious Area

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

Subcatchment 7S: Culvert 3



Hydrograph for Subcatchment 7S: Culvert 3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00	260.00	4.90	2.20	0.00
10.00	0.78	0.00	**0.00**	265.00	4.90	2.20	0.00
15.00	4.31	1.75	**0.12**	270.00	4.90	2.20	0.00
20.00	**4.74**	**2.08**	0.05	275.00	4.90	2.20	0.00
25.00	**4.90**	**2.20**	0.00	280.00	4.90	2.20	0.00
30.00	4.90	2.20	0.00	285.00	4.90	2.20	0.00
35.00	4.90	2.20	0.00	290.00	4.90	2.20	0.00
40.00	4.90	2.20	0.00	295.00	4.90	2.20	0.00
45.00	4.90	2.20	0.00	300.00	4.90	2.20	0.00
50.00	4.90	2.20	0.00	305.00	4.90	2.20	0.00
55.00	4.90	2.20	0.00	310.00	4.90	2.20	0.00
60.00	4.90	2.20	0.00	315.00	4.90	2.20	0.00
65.00	4.90	2.20	0.00	320.00	4.90	2.20	0.00
70.00	4.90	2.20	0.00	325.00	4.90	2.20	0.00
75.00	4.90	2.20	0.00	330.00	4.90	2.20	0.00
80.00	4.90	2.20	0.00	335.00	4.90	2.20	0.00
85.00	4.90	2.20	0.00	340.00	4.90	2.20	0.00
90.00	4.90	2.20	0.00	345.00	4.90	2.20	0.00
95.00	4.90	2.20	0.00	350.00	4.90	2.20	0.00
100.00	4.90	2.20	0.00	355.00	4.90	2.20	0.00
105.00	4.90	2.20	0.00	360.00	4.90	2.20	0.00
110.00	4.90	2.20	0.00	365.00	4.90	2.20	0.00
115.00	4.90	2.20	0.00	370.00	4.90	2.20	0.00
120.00	4.90	2.20	0.00	375.00	4.90	2.20	0.00
125.00	4.90	2.20	0.00	380.00	4.90	2.20	0.00
130.00	4.90	2.20	0.00	385.00	4.90	2.20	0.00
135.00	4.90	2.20	0.00	390.00	4.90	2.20	0.00
140.00	4.90	2.20	0.00	395.00	4.90	2.20	0.00
145.00	4.90	2.20	0.00	400.00	4.90	2.20	0.00
150.00	4.90	2.20	0.00	405.00	4.90	2.20	0.00
155.00	4.90	2.20	0.00	410.00	4.90	2.20	0.00
160.00	4.90	2.20	0.00	415.00	4.90	2.20	0.00
165.00	4.90	2.20	0.00	420.00	4.90	2.20	0.00
170.00	4.90	2.20	0.00	425.00	4.90	2.20	0.00
175.00	4.90	2.20	0.00	430.00	4.90	2.20	0.00
180.00	4.90	2.20	0.00	435.00	4.90	2.20	0.00
185.00	4.90	2.20	0.00	440.00	4.90	2.20	0.00
190.00	4.90	2.20	0.00	445.00	4.90	2.20	0.00
195.00	4.90	2.20	0.00	450.00	4.90	2.20	0.00
200.00	4.90	2.20	0.00	455.00	4.90	2.20	0.00
205.00	4.90	2.20	0.00	460.00	4.90	2.20	0.00
210.00	4.90	2.20	0.00	465.00	4.90	2.20	0.00
215.00	4.90	2.20	0.00	470.00	4.90	2.20	0.00
220.00	4.90	2.20	0.00	475.00	4.90	2.20	0.00
225.00	4.90	2.20	0.00	480.00	4.90	2.20	0.00
230.00	4.90	2.20	0.00	485.00	4.90	2.20	0.00
235.00	4.90	2.20	0.00	490.00	4.90	2.20	0.00
240.00	4.90	2.20	0.00	495.00	4.90	2.20	0.00
245.00	4.90	2.20	0.00	500.00	4.90	2.20	0.00
250.00	4.90	2.20	0.00				
255.00	4.90	2.20	0.00				

Summary for Subcatchment 8S: Culvert 4

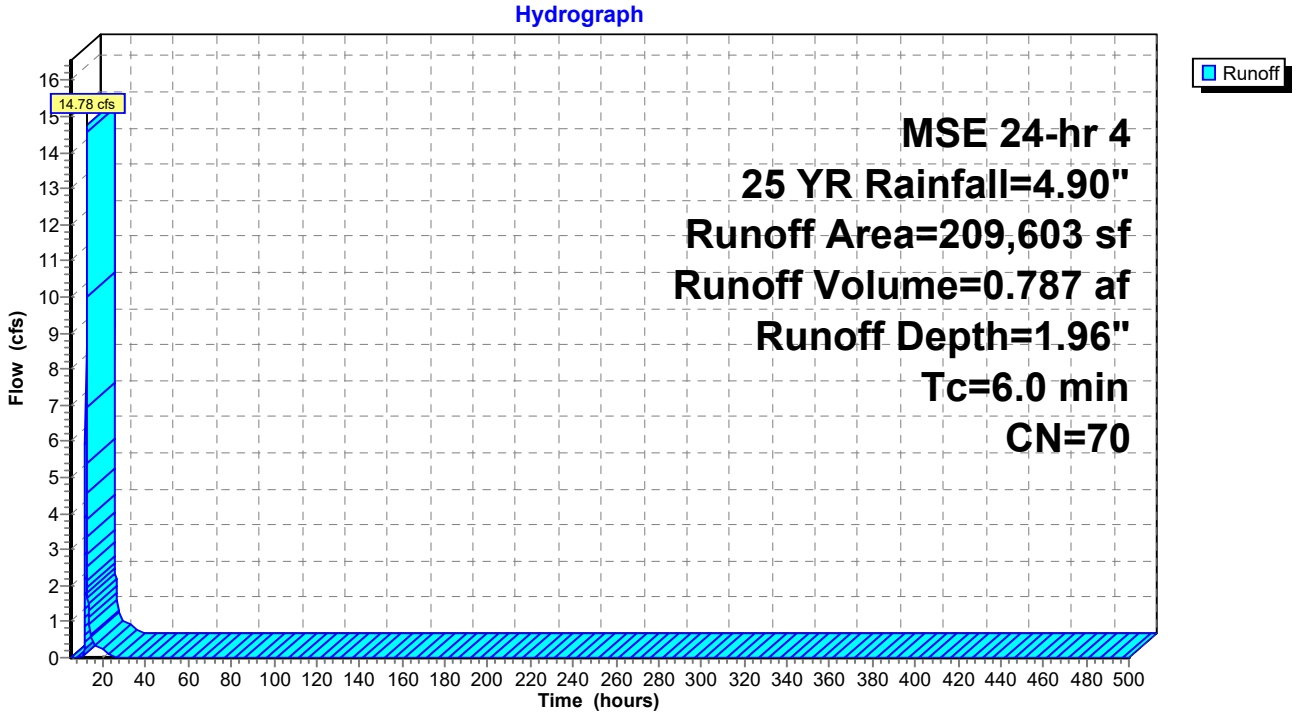
Runoff = 14.78 cfs @ 12.14 hrs, Volume= 0.787 af, Depth= 1.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 25 YR Rainfall=4.90"

	Area (sf)	CN	Description
*	156,823	61	Post - B Soils
*	52,780	98	Impervious
	209,603	70	Weighted Average
	156,823		74.82% Pervious Area
	52,780		25.18% Impervious Area

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

Subcatchment 8S: Culvert 4



Hydrograph for Subcatchment 8S: Culvert 4

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00	260.00	4.90	1.96	0.00
10.00	0.78	0.00	**0.00**	265.00	4.90	1.96	0.00
15.00	4.31	1.54	**0.58**	270.00	4.90	1.96	0.00
20.00	**4.74**	**1.85**	0.22	275.00	4.90	1.96	0.00
25.00	**4.90**	**1.96**	0.00	280.00	4.90	1.96	0.00
30.00	4.90	1.96	0.00	285.00	4.90	1.96	0.00
35.00	4.90	1.96	0.00	290.00	4.90	1.96	0.00
40.00	4.90	1.96	0.00	295.00	4.90	1.96	0.00
45.00	4.90	1.96	0.00	300.00	4.90	1.96	0.00
50.00	4.90	1.96	0.00	305.00	4.90	1.96	0.00
55.00	4.90	1.96	0.00	310.00	4.90	1.96	0.00
60.00	4.90	1.96	0.00	315.00	4.90	1.96	0.00
65.00	4.90	1.96	0.00	320.00	4.90	1.96	0.00
70.00	4.90	1.96	0.00	325.00	4.90	1.96	0.00
75.00	4.90	1.96	0.00	330.00	4.90	1.96	0.00
80.00	4.90	1.96	0.00	335.00	4.90	1.96	0.00
85.00	4.90	1.96	0.00	340.00	4.90	1.96	0.00
90.00	4.90	1.96	0.00	345.00	4.90	1.96	0.00
95.00	4.90	1.96	0.00	350.00	4.90	1.96	0.00
100.00	4.90	1.96	0.00	355.00	4.90	1.96	0.00
105.00	4.90	1.96	0.00	360.00	4.90	1.96	0.00
110.00	4.90	1.96	0.00	365.00	4.90	1.96	0.00
115.00	4.90	1.96	0.00	370.00	4.90	1.96	0.00
120.00	4.90	1.96	0.00	375.00	4.90	1.96	0.00
125.00	4.90	1.96	0.00	380.00	4.90	1.96	0.00
130.00	4.90	1.96	0.00	385.00	4.90	1.96	0.00
135.00	4.90	1.96	0.00	390.00	4.90	1.96	0.00
140.00	4.90	1.96	0.00	395.00	4.90	1.96	0.00
145.00	4.90	1.96	0.00	400.00	4.90	1.96	0.00
150.00	4.90	1.96	0.00	405.00	4.90	1.96	0.00
155.00	4.90	1.96	0.00	410.00	4.90	1.96	0.00
160.00	4.90	1.96	0.00	415.00	4.90	1.96	0.00
165.00	4.90	1.96	0.00	420.00	4.90	1.96	0.00
170.00	4.90	1.96	0.00	425.00	4.90	1.96	0.00
175.00	4.90	1.96	0.00	430.00	4.90	1.96	0.00
180.00	4.90	1.96	0.00	435.00	4.90	1.96	0.00
185.00	4.90	1.96	0.00	440.00	4.90	1.96	0.00
190.00	4.90	1.96	0.00	445.00	4.90	1.96	0.00
195.00	4.90	1.96	0.00	450.00	4.90	1.96	0.00
200.00	4.90	1.96	0.00	455.00	4.90	1.96	0.00
205.00	4.90	1.96	0.00	460.00	4.90	1.96	0.00
210.00	4.90	1.96	0.00	465.00	4.90	1.96	0.00
215.00	4.90	1.96	0.00	470.00	4.90	1.96	0.00
220.00	4.90	1.96	0.00	475.00	4.90	1.96	0.00
225.00	4.90	1.96	0.00	480.00	4.90	1.96	0.00
230.00	4.90	1.96	0.00	485.00	4.90	1.96	0.00
235.00	4.90	1.96	0.00	490.00	4.90	1.96	0.00
240.00	4.90	1.96	0.00	495.00	4.90	1.96	0.00
245.00	4.90	1.96	0.00	500.00	4.90	1.96	0.00
250.00	4.90	1.96	0.00				
255.00	4.90	1.96	0.00				

Summary for Subcatchment 9S: Culvert 5

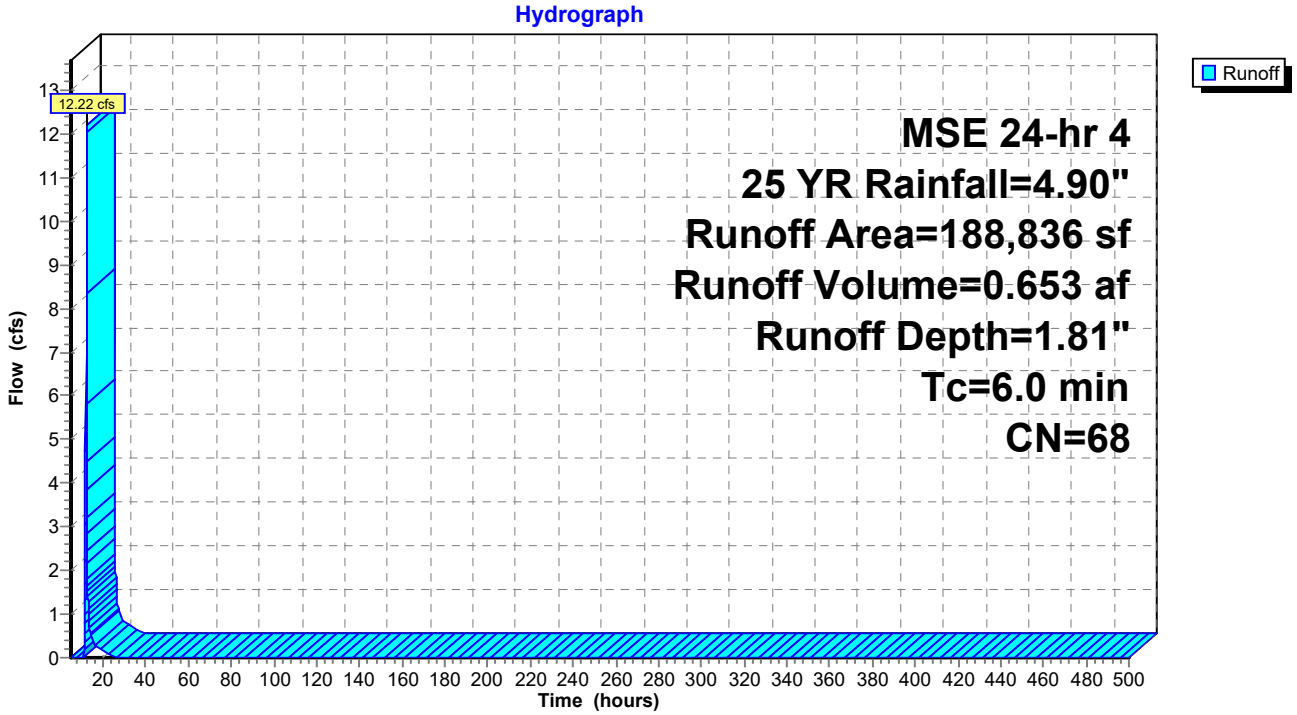
Runoff = 12.22 cfs @ 12.14 hrs, Volume= 0.653 af, Depth= 1.81"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 25 YR Rainfall=4.90"

	Area (sf)	CN	Description
*	151,149	61	Post - B Soils
*	37,687	98	Impervious
	188,836	68	Weighted Average
	151,149		80.04% Pervious Area
	37,687		19.96% Impervious Area

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

Subcatchment 9S: Culvert 5



Hydrograph for Subcatchment 9S: Culvert 5

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.22	0.00	0.00	260.00	4.90	1.81	0.00
10.00	0.78	0.00	**0.00**	265.00	4.90	1.81	0.00
15.00	4.31	1.40	**0.50**	270.00	4.90	1.81	0.00
20.00	**4.74**	**1.70**	0.19	275.00	4.90	1.81	0.00
25.00	**4.90**	**1.81**	0.00	280.00	4.90	1.81	0.00
30.00	4.90	1.81	0.00	285.00	4.90	1.81	0.00
35.00	4.90	1.81	0.00	290.00	4.90	1.81	0.00
40.00	4.90	1.81	0.00	295.00	4.90	1.81	0.00
45.00	4.90	1.81	0.00	300.00	4.90	1.81	0.00
50.00	4.90	1.81	0.00	305.00	4.90	1.81	0.00
55.00	4.90	1.81	0.00	310.00	4.90	1.81	0.00
60.00	4.90	1.81	0.00	315.00	4.90	1.81	0.00
65.00	4.90	1.81	0.00	320.00	4.90	1.81	0.00
70.00	4.90	1.81	0.00	325.00	4.90	1.81	0.00
75.00	4.90	1.81	0.00	330.00	4.90	1.81	0.00
80.00	4.90	1.81	0.00	335.00	4.90	1.81	0.00
85.00	4.90	1.81	0.00	340.00	4.90	1.81	0.00
90.00	4.90	1.81	0.00	345.00	4.90	1.81	0.00
95.00	4.90	1.81	0.00	350.00	4.90	1.81	0.00
100.00	4.90	1.81	0.00	355.00	4.90	1.81	0.00
105.00	4.90	1.81	0.00	360.00	4.90	1.81	0.00
110.00	4.90	1.81	0.00	365.00	4.90	1.81	0.00
115.00	4.90	1.81	0.00	370.00	4.90	1.81	0.00
120.00	4.90	1.81	0.00	375.00	4.90	1.81	0.00
125.00	4.90	1.81	0.00	380.00	4.90	1.81	0.00
130.00	4.90	1.81	0.00	385.00	4.90	1.81	0.00
135.00	4.90	1.81	0.00	390.00	4.90	1.81	0.00
140.00	4.90	1.81	0.00	395.00	4.90	1.81	0.00
145.00	4.90	1.81	0.00	400.00	4.90	1.81	0.00
150.00	4.90	1.81	0.00	405.00	4.90	1.81	0.00
155.00	4.90	1.81	0.00	410.00	4.90	1.81	0.00
160.00	4.90	1.81	0.00	415.00	4.90	1.81	0.00
165.00	4.90	1.81	0.00	420.00	4.90	1.81	0.00
170.00	4.90	1.81	0.00	425.00	4.90	1.81	0.00
175.00	4.90	1.81	0.00	430.00	4.90	1.81	0.00
180.00	4.90	1.81	0.00	435.00	4.90	1.81	0.00
185.00	4.90	1.81	0.00	440.00	4.90	1.81	0.00
190.00	4.90	1.81	0.00	445.00	4.90	1.81	0.00
195.00	4.90	1.81	0.00	450.00	4.90	1.81	0.00
200.00	4.90	1.81	0.00	455.00	4.90	1.81	0.00
205.00	4.90	1.81	0.00	460.00	4.90	1.81	0.00
210.00	4.90	1.81	0.00	465.00	4.90	1.81	0.00
215.00	4.90	1.81	0.00	470.00	4.90	1.81	0.00
220.00	4.90	1.81	0.00	475.00	4.90	1.81	0.00
225.00	4.90	1.81	0.00	480.00	4.90	1.81	0.00
230.00	4.90	1.81	0.00	485.00	4.90	1.81	0.00
235.00	4.90	1.81	0.00	490.00	4.90	1.81	0.00
240.00	4.90	1.81	0.00	495.00	4.90	1.81	0.00
245.00	4.90	1.81	0.00	500.00	4.90	1.81	0.00
250.00	4.90	1.81	0.00				
255.00	4.90	1.81	0.00				

Summary for Pond P1A: Pond 1A

Inflow Area = 6.030 ac, 19.24% Impervious, Inflow Depth = 1.81" for 25 YR event
Inflow = 16.99 cfs @ 12.14 hrs, Volume= 0.909 af
Outflow = 3.60 cfs @ 12.48 hrs, Volume= 0.909 af, Atten= 79%, Lag= 20.8 min
Primary = 3.02 cfs @ 12.48 hrs, Volume= 0.440 af
Routed to Link 3L : Post - South
Secondary = 0.58 cfs @ 12.48 hrs, Volume= 0.469 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,242.10' @ 12.48 hrs Surf.Area= 6,976 sf Storage= 14,669 cf

Plug-Flow detention time= 119.8 min calculated for 0.909 af (100% of inflow)
Center-of-Mass det. time= 119.8 min (956.0 - 836.2)

Volume	Invert	Avail.Storage	Storage Description
#1	1,239.00'	30,563 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

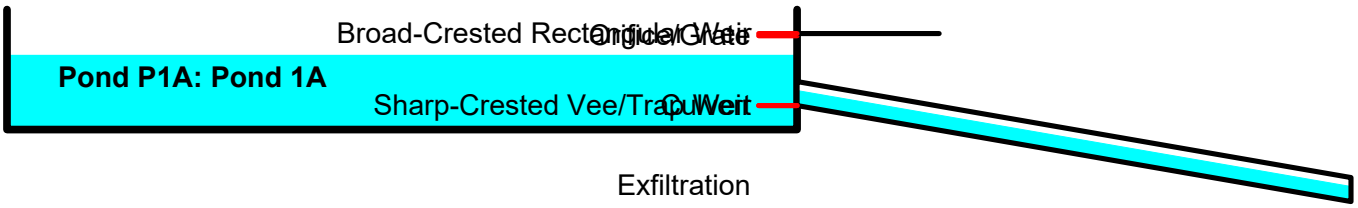
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,239.00	2,496	0	0
1,244.00	9,729	30,563	30,563

Device	Routing	Invert	Outlet Devices
#1	Primary	1,240.00'	**12.0" Round Culvert** L= 39.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,240.00' / 1,236.00' S= 0.1026 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,240.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,242.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,239.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,243.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

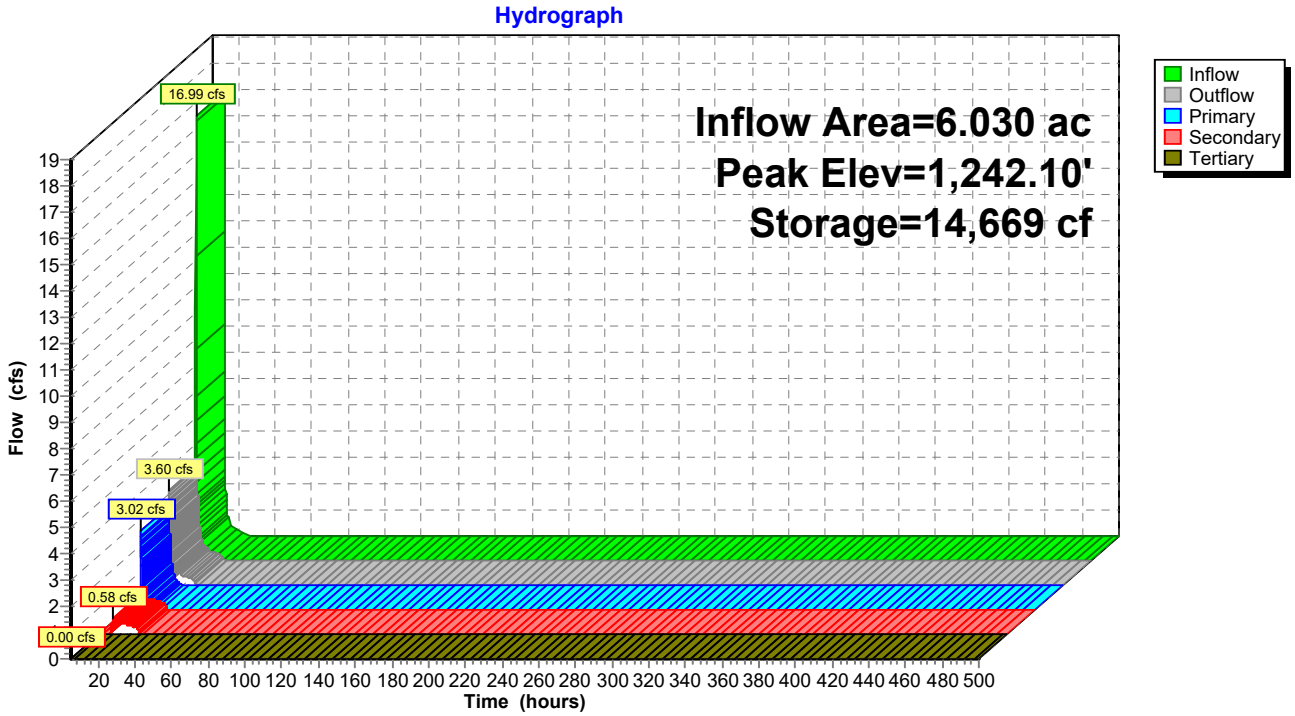
Primary OutFlow Max=3.02 cfs @ 12.48 hrs HW=1,242.10' (Free Discharge)
└**1=Culvert** (Passes 3.02 cfs of 4.78 cfs potential flow)
├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 3.02 cfs @ 3.89 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.58 cfs @ 12.48 hrs HW=1,242.10' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.58 cfs)

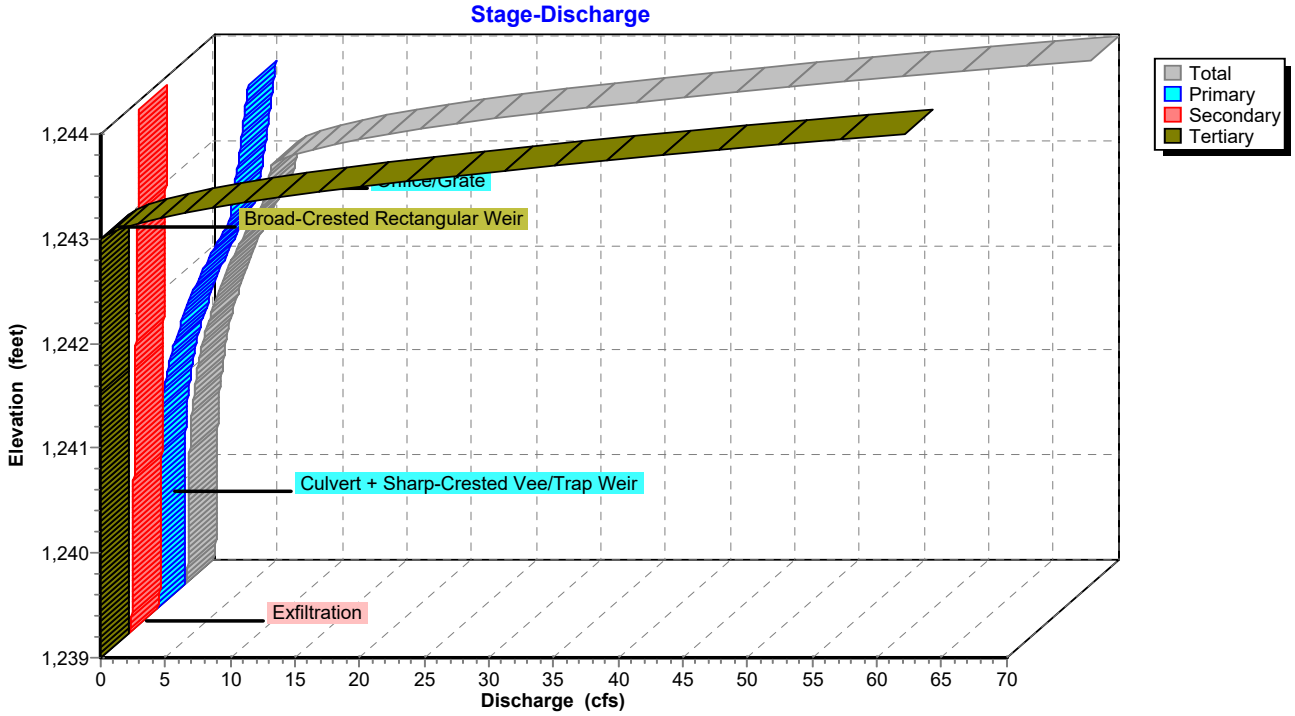
Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,239.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



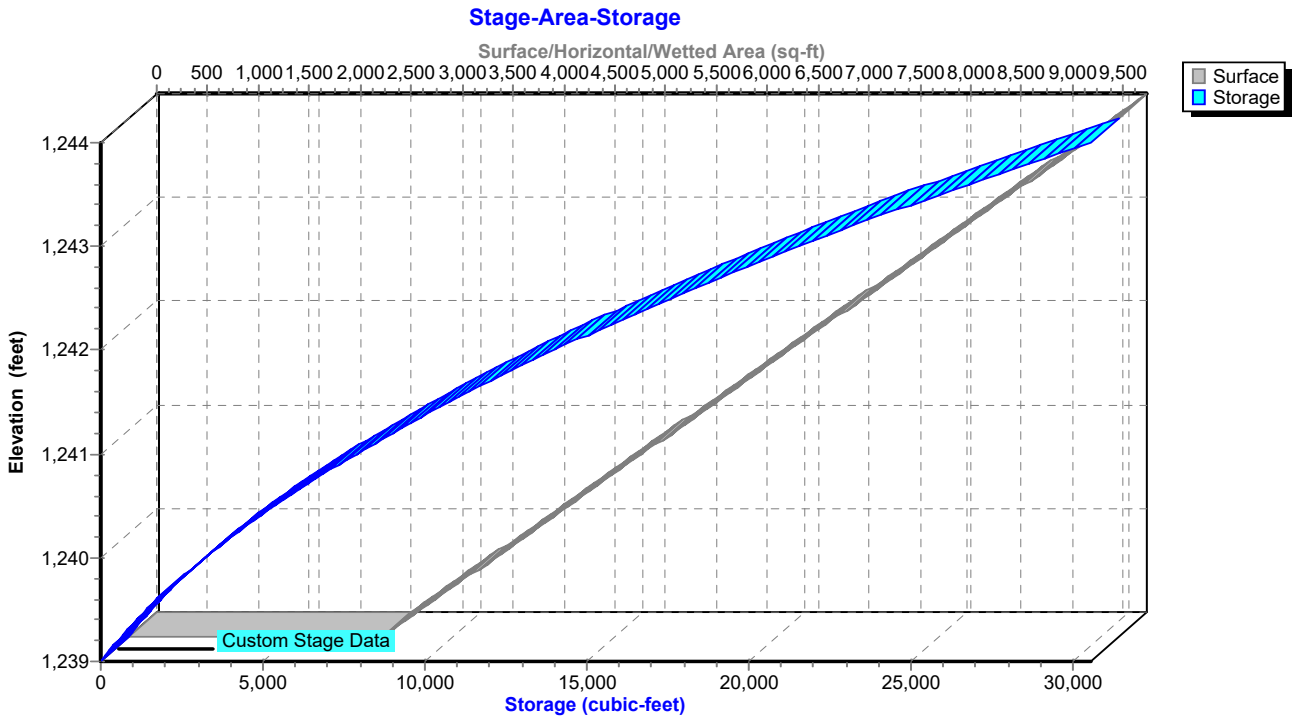
Pond P1A: Pond 1A



Pond P1A: Pond 1A



Pond P1A: Pond 1A



Hydrograph for Pond P1A: Pond 1A

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,239.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.69**	**8,153**	**1,241.05**	**0.99**	**0.54**	**0.46**	0.00
25.00	0.00	1,163	1,239.42	0.26	0.00	0.26	0.00
35.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P1A: Pond 1A

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,239.00	0.00	0.00	0.00	0.00
1,239.10	0.22	0.00	0.22	0.00
1,239.20	0.23	0.00	0.23	0.00
1,239.30	0.24	0.00	0.24	0.00
1,239.40	0.26	0.00	0.26	0.00
1,239.50	0.27	0.00	0.27	0.00
1,239.60	0.28	0.00	0.28	0.00
1,239.70	0.29	0.00	0.29	0.00
1,239.80	0.30	0.00	0.30	0.00
1,239.90	0.32	0.00	0.32	0.00
1,240.00	0.33	0.00	0.33	0.00
1,240.10	0.34	0.00	0.34	0.00
1,240.20	0.36	0.01	0.35	0.00
1,240.30	0.39	0.02	0.36	0.00
1,240.40	0.42	0.05	0.38	0.00
1,240.50	0.47	0.08	0.39	0.00
1,240.60	0.53	0.13	0.40	0.00
1,240.70	0.61	0.19	0.41	0.00
1,240.80	0.70	0.27	0.42	0.00
1,240.90	0.80	0.36	0.44	0.00
1,241.00	0.92	0.47	0.45	0.00
1,241.10	1.06	0.60	0.46	0.00
1,241.20	1.22	0.75	0.47	0.00
1,241.30	1.40	0.91	0.49	0.00
1,241.40	1.60	1.10	0.50	0.00
1,241.50	1.82	1.31	0.51	0.00
1,241.60	2.06	1.54	0.52	0.00
1,241.70	2.32	1.79	0.53	0.00
1,241.80	2.61	2.06	0.55	0.00
1,241.90	2.92	2.36	0.56	0.00
1,242.00	3.25	2.68	0.57	0.00
1,242.10	3.61	3.03	0.58	0.00
1,242.20	4.00	3.41	0.59	0.00
1,242.30	4.41	3.81	0.61	0.00
1,242.40	4.85	4.23	0.62	0.00
1,242.50	5.32	4.69	0.63	0.00
1,242.60	5.81	5.17	0.64	0.00
1,242.70	6.26	5.61	0.65	0.00
1,242.80	6.40	5.74	0.67	0.00
1,242.90	6.54	5.86	0.68	0.00
1,243.00	6.67	5.98	0.69	0.00
1,243.10	8.40	6.10	0.70	1.60
1,243.20	11.53	6.21	0.71	4.60
1,243.30	15.75	6.33	0.73	8.70
1,243.40	20.96	6.44	0.74	13.78
1,243.50	27.39	6.55	0.75	20.08
1,243.60	34.93	6.66	0.76	27.51
1,243.70	42.64	6.76	0.77	35.10
1,243.80	51.08	6.87	0.79	43.42
1,243.90	60.22	6.97	0.80	52.45
1,244.00	**70.06**	**7.07**	**0.81**	**62.18**

Stage-Area-Storage for Pond P1A: Pond 1A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,239.00	2,496	0
1,239.05	2,568	127
1,239.10	2,641	257
1,239.15	2,713	391
1,239.20	2,785	528
1,239.25	2,858	669
1,239.30	2,930	814
1,239.35	3,002	962
1,239.40	3,075	1,114
1,239.45	3,147	1,270
1,239.50	3,219	1,429
1,239.55	3,292	1,592
1,239.60	3,364	1,758
1,239.65	3,436	1,928
1,239.70	3,509	2,102
1,239.75	3,581	2,279
1,239.80	3,653	2,460
1,239.85	3,726	2,644
1,239.90	3,798	2,832
1,239.95	3,870	3,024
1,240.00	3,943	3,219
1,240.05	4,015	3,418
1,240.10	4,087	3,621
1,240.15	4,160	3,827
1,240.20	4,232	4,037
1,240.25	4,304	4,250
1,240.30	4,377	4,467
1,240.35	4,449	4,688
1,240.40	4,521	4,912
1,240.45	4,594	5,140
1,240.50	4,666	5,371
1,240.55	4,738	5,607
1,240.60	4,811	5,845
1,240.65	4,883	6,088
1,240.70	4,955	6,334
1,240.75	5,028	6,583
1,240.80	5,100	6,836
1,240.85	5,172	7,093
1,240.90	5,245	7,354
1,240.95	5,317	7,618
1,241.00	5,389	7,885
1,241.05	5,462	8,156
1,241.10	5,534	8,431
1,241.15	5,606	8,710
1,241.20	5,679	8,992
1,241.25	5,751	9,278
1,241.30	5,823	9,567
1,241.35	5,896	9,860
1,241.40	5,968	10,157
1,241.45	6,040	10,457
1,241.50	6,113	10,761
1,241.55	6,185	11,068
1,241.60	6,257	11,379
1,241.65	6,329	11,694
1,241.70	6,402	12,012
1,241.75	6,474	12,334
1,241.80	6,546	12,659
1,241.85	6,619	12,989
1,241.90	6,691	13,321
1,241.95	6,763	13,658
1,242.00	6,836	13,998
1,242.05	6,908	14,341
1,242.10	6,980	14,689
1,242.15	7,053	15,039
1,242.20	7,125	15,394
1,242.25	7,197	15,752
1,242.30	7,270	16,114
1,242.35	7,342	16,479
1,242.40	7,414	16,848
1,242.45	7,487	17,220
1,242.50	7,559	17,596
1,242.55	7,631	17,976
1,242.60	7,704	18,360
1,242.65	7,776	18,747
1,242.70	7,848	19,137
1,242.75	7,921	19,531
1,242.80	7,993	19,929
1,242.85	8,065	20,331
1,242.90	8,138	20,736
1,242.95	8,210	21,144
1,243.00	8,282	21,557
1,243.05	8,355	21,973
1,243.10	8,427	22,392
1,243.15	8,499	22,815
1,243.20	8,572	23,242
1,243.25	8,644	23,673
1,243.30	8,716	24,107
1,243.35	8,789	24,544
1,243.40	8,861	24,985
1,243.45	8,933	25,430
1,243.50	9,006	25,879
1,243.55	9,078	26,331
1,243.60	9,150	26,787
1,243.65	9,223	27,246
1,243.70	9,295	27,709
1,243.75	9,367	28,175
1,243.80	9,440	28,646
1,243.85	9,512	29,119
1,243.90	9,584	29,597
1,243.95	9,657	30,078
1,244.00	**9,729**	**30,563**

Summary for Pond P3A: Pond 3A

Inflow Area = 10.600 ac, 18.58% Impervious, Inflow Depth = 1.96" for 25 YR event
Inflow = 32.55 cfs @ 12.14 hrs, Volume= 1.734 af
Outflow = 6.79 cfs @ 12.48 hrs, Volume= 1.734 af, Atten= 79%, Lag= 20.6 min
Primary = 5.95 cfs @ 12.48 hrs, Volume= 0.991 af
Routed to Link 4L : Post - North
Secondary = 0.84 cfs @ 12.48 hrs, Volume= 0.743 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,195.98' @ 12.48 hrs Surf.Area= 10,097 sf Storage= 28,352 cf

Plug-Flow detention time= 120.8 min calculated for 1.733 af (100% of inflow)
Center-of-Mass det. time= 120.8 min (952.6 - 831.8)

Volume	Invert	Avail.Storage	Storage Description
#1	1,192.00'	51,846 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

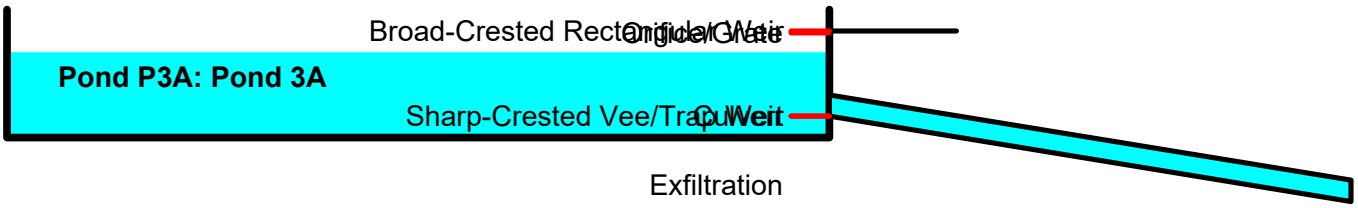
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,192.00	4,165	0	0
1,198.00	13,117	51,846	51,846

Device	Routing	Invert	Outlet Devices
#1	Primary	1,193.00'	**12.0" Round Culvert** L= 41.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,193.00' / 1,189.00' S= 0.0976 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,193.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,196.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,192.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,197.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

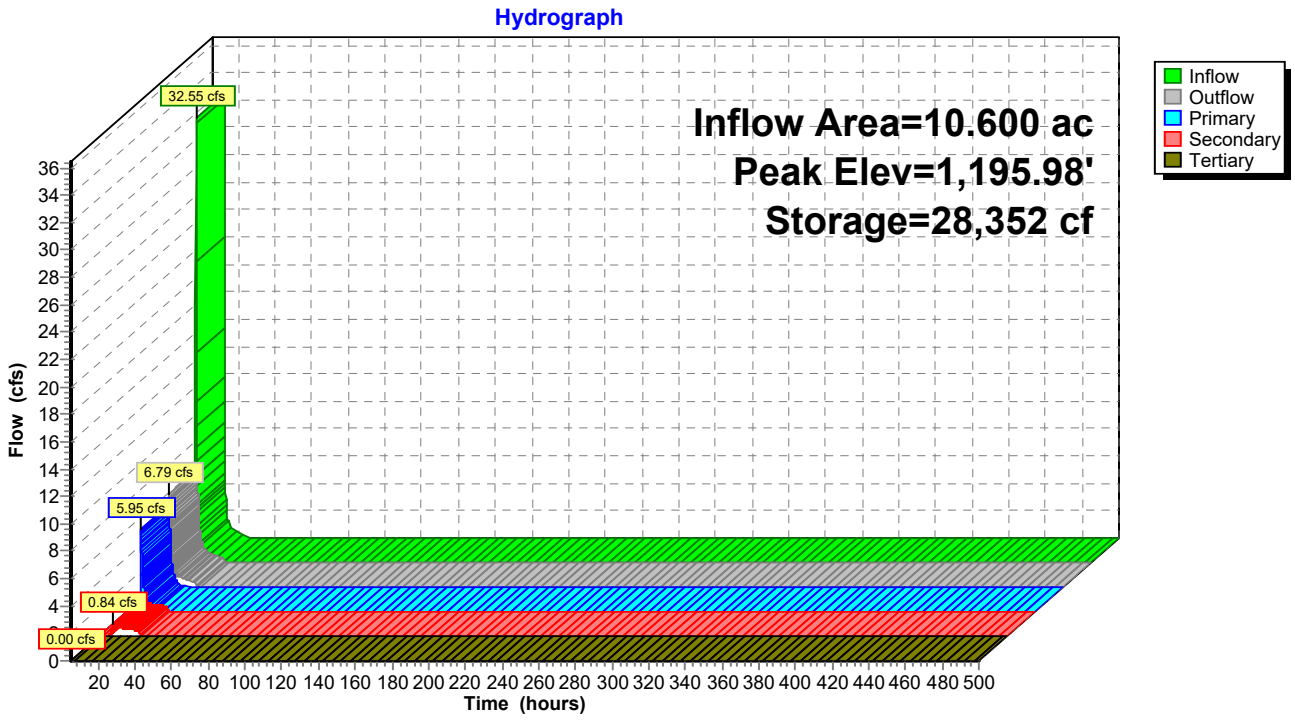
Primary OutFlow Max=5.95 cfs @ 12.48 hrs HW=1,195.97' (Free Discharge)
└**1=Culvert** (Inlet Controls 5.95 cfs @ 7.57 fps)
└**2=Sharp-Crested Vee/Trap Weir** (Passes 5.95 cfs of 7.23 cfs potential flow)
└**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.84 cfs @ 12.48 hrs HW=1,195.97' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.84 cfs)

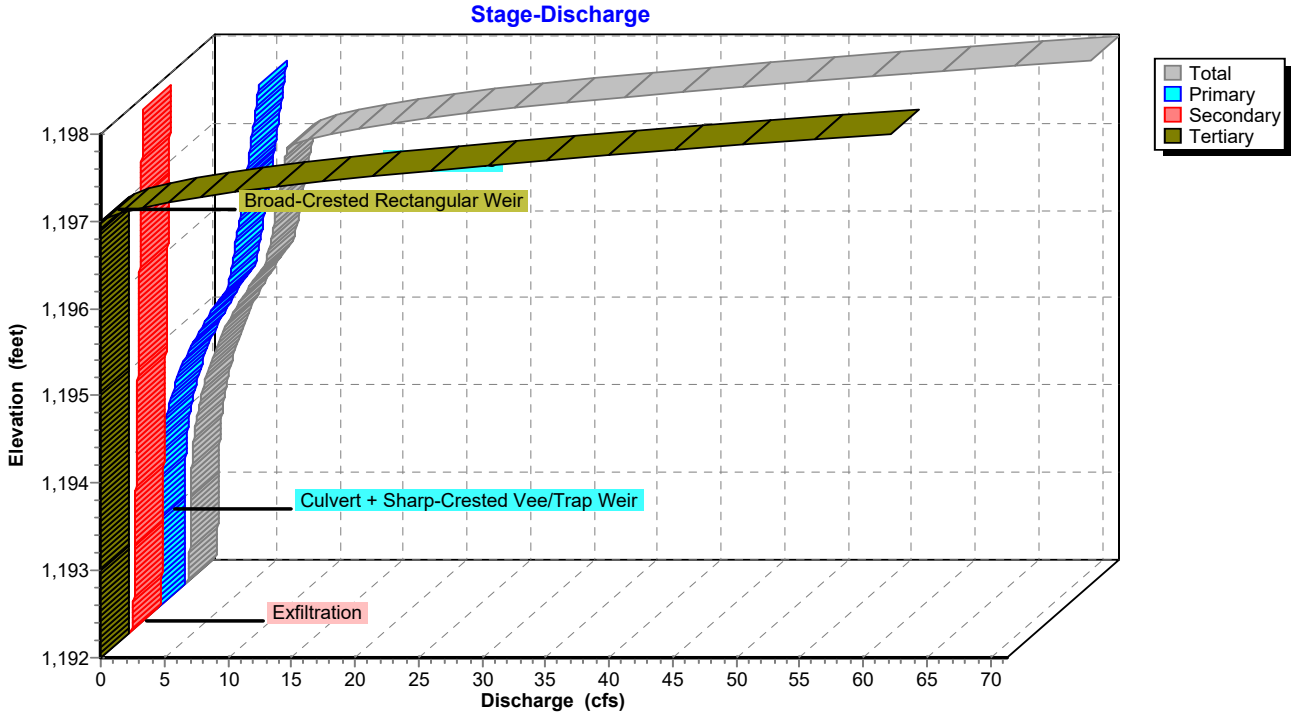
Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,192.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



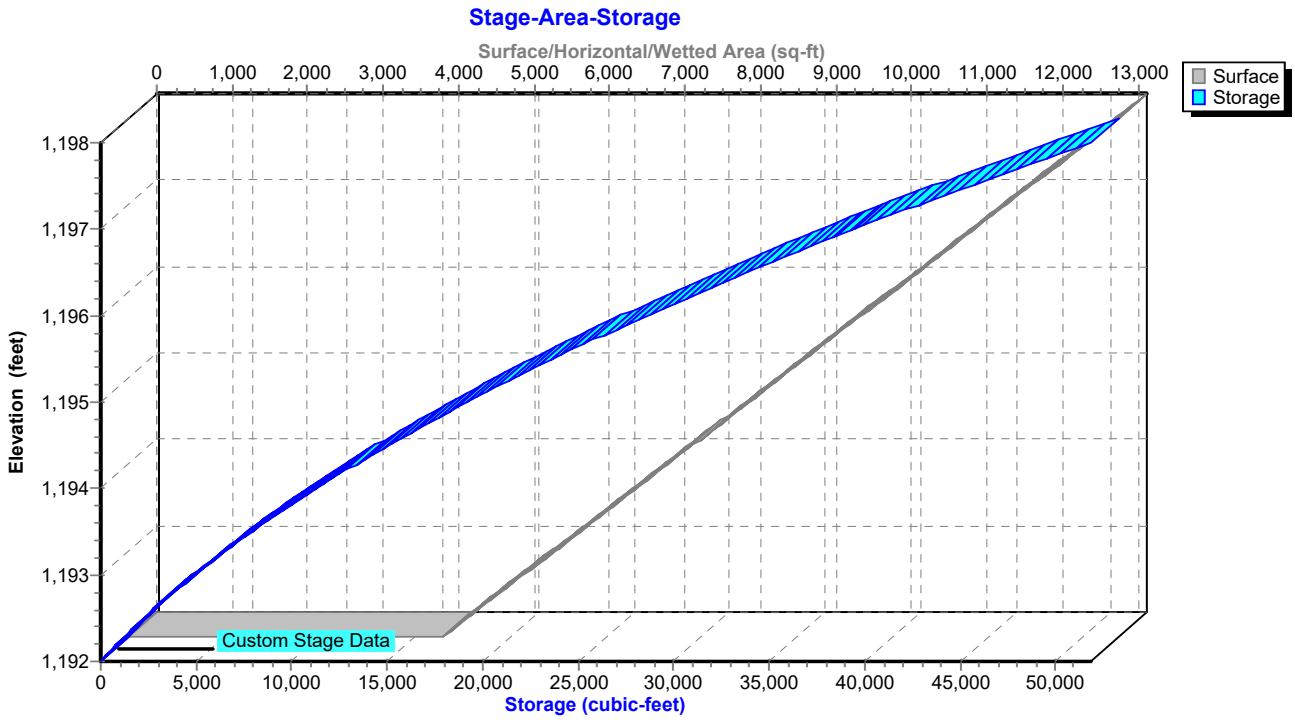
Pond P3A: Pond 3A



Pond P3A: Pond 3A



Pond P3A: Pond 3A



Hydrograph for Pond P3A: Pond 3A

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,192.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**1.28**	**14,510**	**1,194.43**	**1.81**	**1.16**	**0.65**	0.00
25.00	0.00	3,460	1,192.73	0.44	0.00	0.44	0.00
35.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3A: Pond 3A

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,192.00	0.00	0.00	0.00	0.00
1,192.20	0.37	0.00	0.37	0.00
1,192.40	0.40	0.00	0.40	0.00
1,192.60	0.42	0.00	0.42	0.00
1,192.80	0.45	0.00	0.45	0.00
1,193.00	0.47	0.00	0.47	0.00
1,193.20	0.50	0.01	0.50	0.00
1,193.40	0.57	0.05	0.52	0.00
1,193.60	0.68	0.13	0.55	0.00
1,193.80	0.84	0.27	0.57	0.00
1,194.00	1.07	0.47	0.60	0.00
1,194.20	1.37	0.75	0.62	0.00
1,194.40	1.75	1.10	0.65	0.00
1,194.60	2.21	1.54	0.67	0.00
1,194.80	2.76	2.06	0.70	0.00
1,195.00	3.40	2.68	0.72	0.00
1,195.20	4.15	3.41	0.74	0.00
1,195.40	5.00	4.23	0.77	0.00
1,195.60	5.96	5.17	0.79	0.00
1,195.80	6.55	5.74	0.82	0.00
1,196.00	6.82	5.98	0.84	0.00
1,196.20	7.08	6.21	0.87	0.00
1,196.40	7.33	6.44	0.89	0.00
1,196.60	7.58	6.66	0.92	0.00
1,196.80	7.81	6.87	0.94	0.00
1,197.00	8.04	7.07	0.97	0.00
1,197.20	12.86	7.27	0.99	4.60
1,197.40	22.27	7.47	1.02	13.78
1,197.60	36.21	7.66	1.04	27.51
1,197.80	52.33	7.84	1.07	43.42
1,198.00	**71.29**	**8.02**	**1.09**	**62.18**

Stage-Area-Storage for Pond P3A: Pond 3A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,192.00	4,165	0
1,192.10	4,314	424
1,192.20	4,463	863
1,192.30	4,613	1,317
1,192.40	4,762	1,785
1,192.50	4,911	2,269
1,192.60	5,060	2,768
1,192.70	5,209	3,281
1,192.80	5,359	3,809
1,192.90	5,508	4,353
1,193.00	5,657	4,911
1,193.10	5,806	5,484
1,193.20	5,955	6,072
1,193.30	6,105	6,675
1,193.40	6,254	7,293
1,193.50	6,403	7,926
1,193.60	6,552	8,574
1,193.70	6,701	9,236
1,193.80	6,851	9,914
1,193.90	7,000	10,607
1,194.00	7,149	11,314
1,194.10	7,298	12,036
1,194.20	7,447	12,774
1,194.30	7,597	13,526
1,194.40	7,746	14,293
1,194.50	7,895	15,075
1,194.60	8,044	15,872
1,194.70	8,193	16,684
1,194.80	8,343	17,511
1,194.90	8,492	18,352
1,195.00	8,641	19,209
1,195.10	8,790	20,081
1,195.20	8,939	20,967
1,195.30	9,089	21,868
1,195.40	9,238	22,785
1,195.50	9,387	23,716
1,195.60	9,536	24,662
1,195.70	9,685	25,623
1,195.80	9,835	26,599
1,195.90	9,984	27,590
1,196.00	10,133	28,596
1,196.10	10,282	29,617
1,196.20	10,431	30,652
1,196.30	10,581	31,703
1,196.40	10,730	32,769
1,196.50	10,879	33,849
1,196.60	11,028	34,944
1,196.70	11,177	36,055
1,196.80	11,327	37,180
1,196.90	11,476	38,320
1,197.00	11,625	39,475
1,197.10	11,774	40,645
1,197.20	11,923	41,830
1,197.30	12,073	43,030
1,197.40	12,222	44,244
1,197.50	12,371	45,474
1,197.60	12,520	46,719
1,197.70	12,669	47,978
1,197.80	12,819	49,252
1,197.90	12,968	50,542
1,198.00	**13,117**	**51,846**

Summary for Pond P3B: Pond 3B

Inflow Area = 8.450 ac, 19.88% Impervious, Inflow Depth = 2.04" for 25 YR event
Inflow = 27.03 cfs @ 12.14 hrs, Volume= 1.437 af
Outflow = 6.56 cfs @ 12.42 hrs, Volume= 1.437 af, Atten= 76%, Lag= 17.2 min
Primary = 5.81 cfs @ 12.42 hrs, Volume= 0.841 af
Routed to Link 4L : Post - North
Secondary = 0.75 cfs @ 12.42 hrs, Volume= 0.596 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,198.86' @ 12.42 hrs Surf.Area= 8,968 sf Storage= 22,719 cf

Plug-Flow detention time= 107.4 min calculated for 1.437 af (100% of inflow)
Center-of-Mass det. time= 107.4 min (937.1 - 829.6)

Volume	Invert	Avail.Storage	Storage Description
#1	1,195.00'	33,965 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

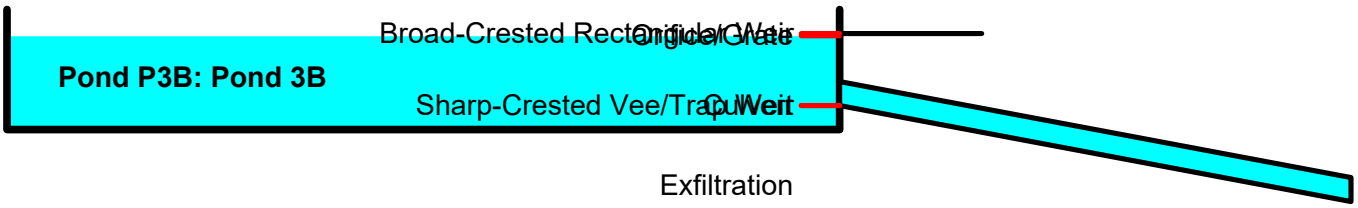
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,195.00	2,799	0	0
1,200.00	10,787	33,965	33,965

Device	Routing	Invert	Outlet Devices
#1	Primary	1,196.00'	**12.0" Round Culvert** L= 36.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,196.00' / 1,192.00' S= 0.1111 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,196.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,198.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,195.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,199.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

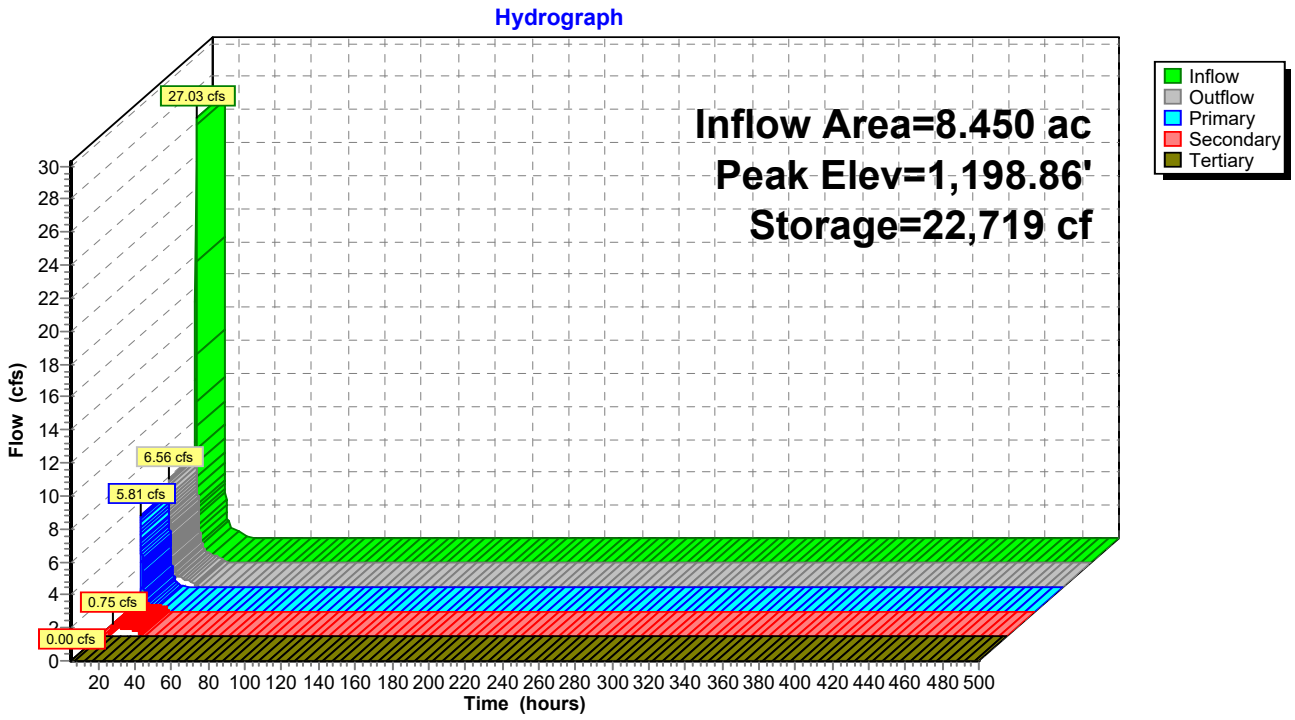
Primary OutFlow Max=5.81 cfs @ 12.42 hrs HW=1,198.86' (Free Discharge)
└**1=Culvert** (Inlet Controls 5.81 cfs @ 7.39 fps)
  ├**2=Sharp-Crested Vee/Trap Weir** (Passes 5.81 cfs of 6.55 cfs potential flow)
  └**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.75 cfs @ 12.42 hrs HW=1,198.86' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.75 cfs)

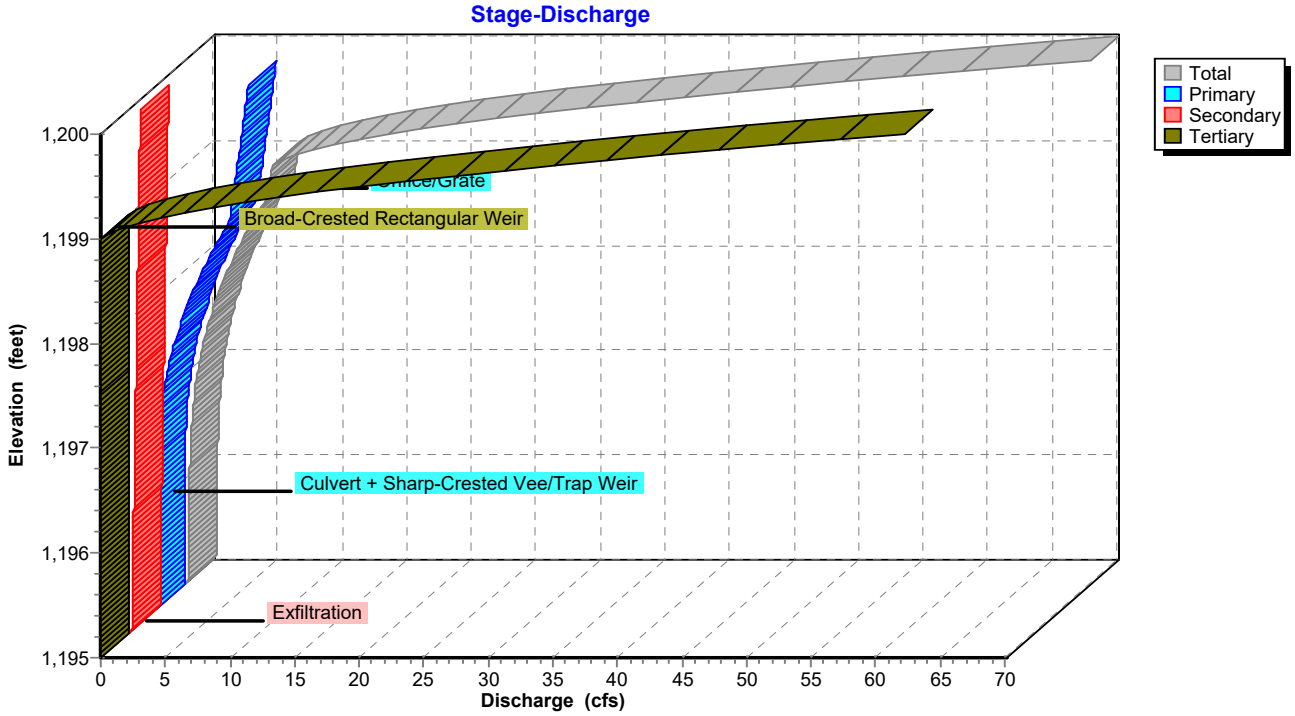
Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,195.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



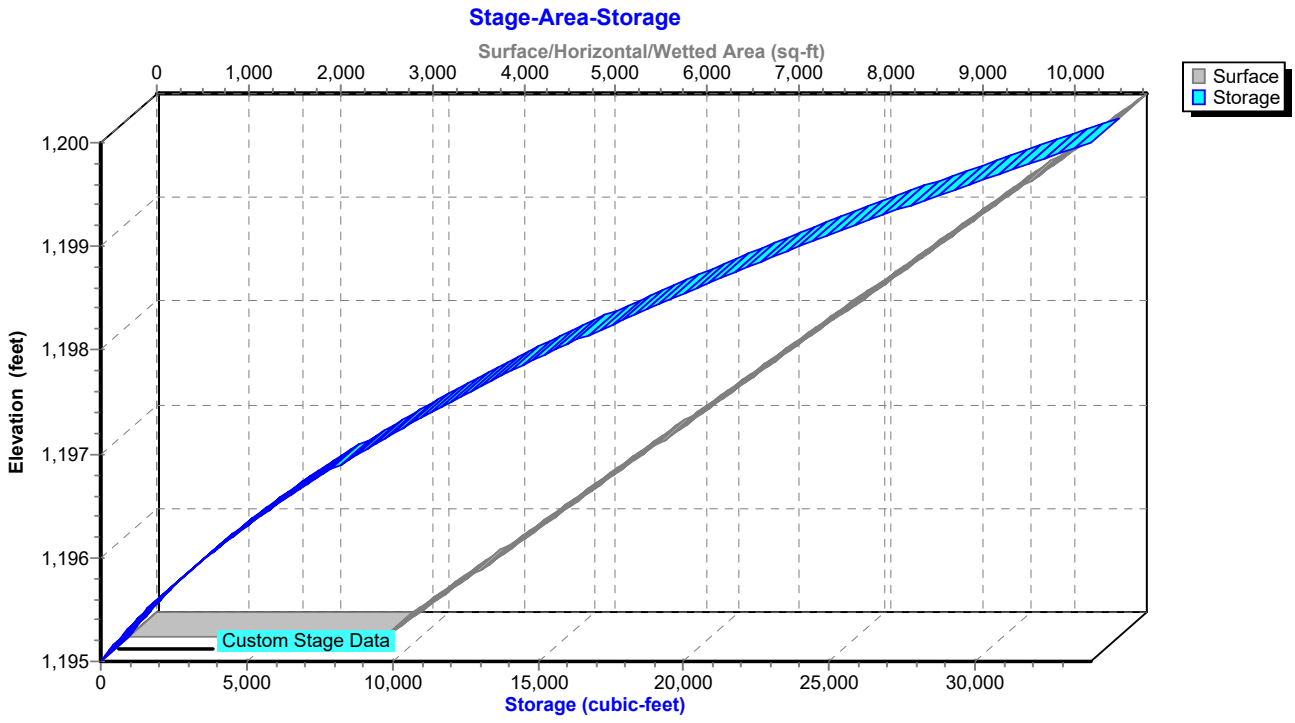
Pond P3B: Pond 3B



Pond P3B: Pond 3B



Pond P3B: Pond 3B



Hydrograph for Pond P3B: Pond 3B

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,195.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**1.05**	**10,621**	**1,197.29**	**1.44**	**0.90**	**0.54**	0.00
25.00	0.00	2,354	1,195.70	0.33	0.00	0.33	0.00
35.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3B: Pond 3B

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,195.00	0.00	0.00	0.00	0.00
1,195.10	0.25	0.00	0.25	0.00
1,195.20	0.26	0.00	0.26	0.00
1,195.30	0.27	0.00	0.27	0.00
1,195.40	0.29	0.00	0.29	0.00
1,195.50	0.30	0.00	0.30	0.00
1,195.60	0.31	0.00	0.31	0.00
1,195.70	0.33	0.00	0.33	0.00
1,195.80	0.34	0.00	0.34	0.00
1,195.90	0.35	0.00	0.35	0.00
1,196.00	0.37	0.00	0.37	0.00
1,196.10	0.38	0.00	0.38	0.00
1,196.20	0.40	0.01	0.39	0.00
1,196.30	0.43	0.02	0.41	0.00
1,196.40	0.47	0.05	0.42	0.00
1,196.50	0.52	0.08	0.43	0.00
1,196.60	0.58	0.13	0.45	0.00
1,196.70	0.65	0.19	0.46	0.00
1,196.80	0.74	0.27	0.47	0.00
1,196.90	0.85	0.36	0.49	0.00
1,197.00	0.97	0.47	0.50	0.00
1,197.10	1.11	0.60	0.51	0.00
1,197.20	1.27	0.75	0.53	0.00
1,197.30	1.45	0.91	0.54	0.00
1,197.40	1.65	1.10	0.55	0.00
1,197.50	1.87	1.31	0.57	0.00
1,197.60	2.12	1.54	0.58	0.00
1,197.70	2.38	1.79	0.59	0.00
1,197.80	2.67	2.06	0.61	0.00
1,197.90	2.98	2.36	0.62	0.00
1,198.00	3.32	2.68	0.63	0.00
1,198.10	3.68	3.03	0.65	0.00
1,198.20	4.06	3.41	0.66	0.00
1,198.30	4.48	3.81	0.67	0.00
1,198.40	4.92	4.23	0.69	0.00
1,198.50	5.39	4.69	0.70	0.00
1,198.60	5.88	5.17	0.71	0.00
1,198.70	6.33	5.61	0.73	0.00
1,198.80	6.47	5.74	0.74	0.00
1,198.90	6.61	5.86	0.75	0.00
1,199.00	6.75	5.98	0.77	0.00
1,199.10	8.48	6.10	0.78	1.60
1,199.20	11.60	6.21	0.79	4.60
1,199.30	15.83	6.33	0.81	8.70
1,199.40	21.04	6.44	0.82	13.78
1,199.50	27.47	6.55	0.83	20.08
1,199.60	35.01	6.66	0.85	27.51
1,199.70	42.73	6.76	0.86	35.10
1,199.80	51.17	6.87	0.87	43.42
1,199.90	60.31	6.97	0.89	52.45
1,200.00	**70.15**	**7.07**	**0.90**	**62.18**

Stage-Area-Storage for Pond P3B: Pond 3B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,195.00	2,799	0
1,195.05	2,879	142
1,195.10	2,959	288
1,195.15	3,039	438
1,195.20	3,119	592
1,195.25	3,198	750
1,195.30	3,278	912
1,195.35	3,358	1,078
1,195.40	3,438	1,247
1,195.45	3,518	1,421
1,195.50	3,598	1,599
1,195.55	3,678	1,781
1,195.60	3,758	1,967
1,195.65	3,837	2,157
1,195.70	3,917	2,351
1,195.75	3,997	2,549
1,195.80	4,077	2,750
1,195.85	4,157	2,956
1,195.90	4,237	3,166
1,195.95	4,317	3,380
1,196.00	4,397	3,598
1,196.05	4,476	3,820
1,196.10	4,556	4,045
1,196.15	4,636	4,275
1,196.20	4,716	4,509
1,196.25	4,796	4,747
1,196.30	4,876	4,989
1,196.35	4,956	5,234
1,196.40	5,036	5,484
1,196.45	5,116	5,738
1,196.50	5,195	5,996
1,196.55	5,275	6,258
1,196.60	5,355	6,523
1,196.65	5,435	6,793
1,196.70	5,515	7,067
1,196.75	5,595	7,345
1,196.80	5,675	7,626
1,196.85	5,755	7,912
1,196.90	5,834	8,202
1,196.95	5,914	8,495
1,197.00	5,994	8,793
1,197.05	6,074	9,095
1,197.10	6,154	9,401
1,197.15	6,234	9,710
1,197.20	6,314	10,024
1,197.25	6,394	10,342
1,197.30	6,473	10,663
1,197.35	6,553	10,989
1,197.40	6,633	11,319
1,197.45	6,713	11,652
1,197.50	6,793	11,990
1,197.55	6,873	12,332
1,197.60	6,953	12,677
1,197.65	7,033	13,027
1,197.70	7,113	13,381
1,197.75	7,192	13,738
1,197.80	7,272	14,100
1,197.85	7,352	14,465
1,197.90	7,432	14,835
1,197.95	7,512	15,209
1,198.00	7,592	15,586
1,198.05	7,672	15,968
1,198.10	7,752	16,353
1,198.15	7,831	16,743
1,198.20	7,911	17,137
1,198.25	7,991	17,534
1,198.30	8,071	17,936
1,198.35	8,151	18,341
1,198.40	8,231	18,751
1,198.45	8,311	19,164
1,198.50	8,391	19,582
1,198.55	8,470	20,003
1,198.60	8,550	20,429
1,198.65	8,630	20,858
1,198.70	8,710	21,292
1,198.75	8,790	21,729
1,198.80	8,870	22,171
1,198.85	8,950	22,616
1,198.90	9,030	23,066
1,198.95	9,110	23,519
1,199.00	9,189	23,977
1,199.05	9,269	24,438
1,199.10	9,349	24,904
1,199.15	9,429	25,373
1,199.20	9,509	25,847
1,199.25	9,589	26,324
1,199.30	9,669	26,806
1,199.35	9,749	27,291
1,199.40	9,828	27,780
1,199.45	9,908	28,274
1,199.50	9,988	28,771
1,199.55	10,068	29,273
1,199.60	10,148	29,778
1,199.65	10,228	30,287
1,199.70	10,308	30,801
1,199.75	10,388	31,318
1,199.80	10,467	31,840
1,199.85	10,547	32,365
1,199.90	10,627	32,894
1,199.95	10,707	33,428
1,200.00	**10,787**	**33,965**

Summary for Pond P3C: Pond 3C

Inflow Area = 2.490 ac, 22.89% Impervious, Inflow Depth = 2.37" for 25 YR event
Inflow = 9.25 cfs @ 12.13 hrs, Volume= 0.491 af
Outflow = 2.08 cfs @ 12.44 hrs, Volume= 0.491 af, Atten= 77%, Lag= 18.1 min
Primary = 1.72 cfs @ 12.44 hrs, Volume= 0.206 af
Routed to Link 4L : Post - North
Secondary = 0.36 cfs @ 12.44 hrs, Volume= 0.286 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,180.67' @ 12.44 hrs Surf.Area= 4,321 sf Storage= 8,327 cf

Plug-Flow detention time= 116.3 min calculated for 0.491 af (100% of inflow)
Center-of-Mass det. time= 116.3 min (937.4 - 821.1)

Volume	Invert	Avail.Storage	Storage Description
#1	1,178.00'	14,846 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

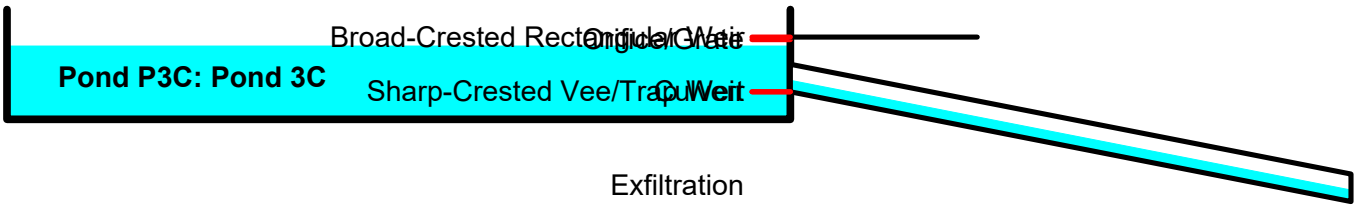
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,178.00	1,905	0	0
1,182.00	5,518	14,846	14,846

Device	Routing	Invert	Outlet Devices
#1	Primary	1,179.00'	**12.0" Round Culvert** L= 30.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,179.00' / 1,175.00' S= 0.1333 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,179.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,180.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,178.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,181.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=1.72 cfs @ 12.44 hrs HW=1,180.67' (Free Discharge)
└**1=Culvert** (Passes 1.72 cfs of 4.10 cfs potential flow)
├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 1.72 cfs @ 3.48 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

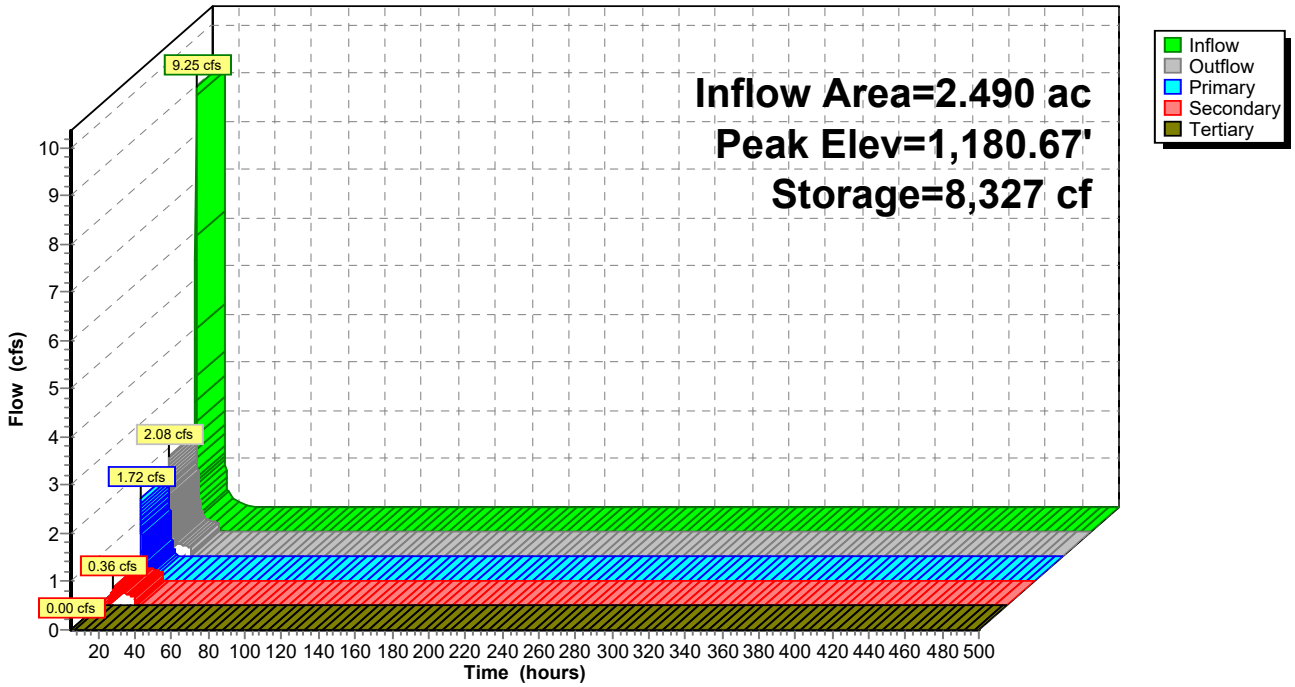
Secondary OutFlow Max=0.36 cfs @ 12.44 hrs HW=1,180.67' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.36 cfs)

Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,178.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

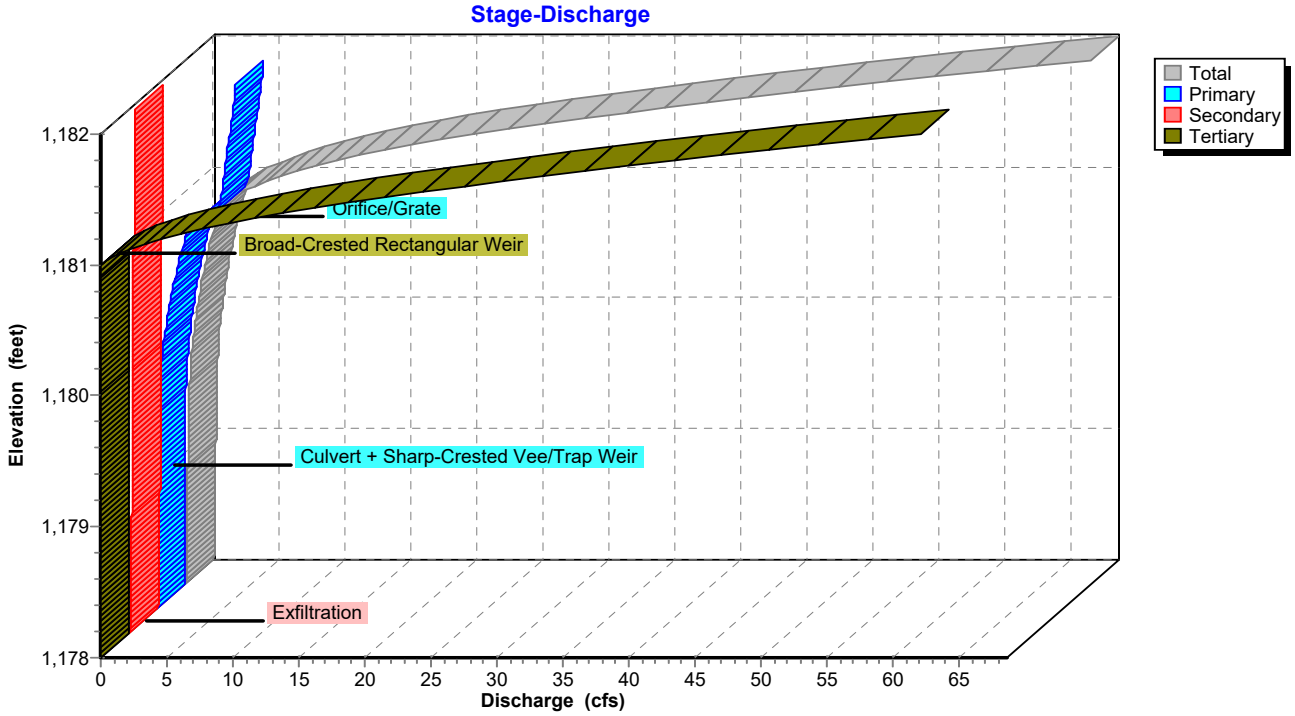


Pond P3C: Pond 3C

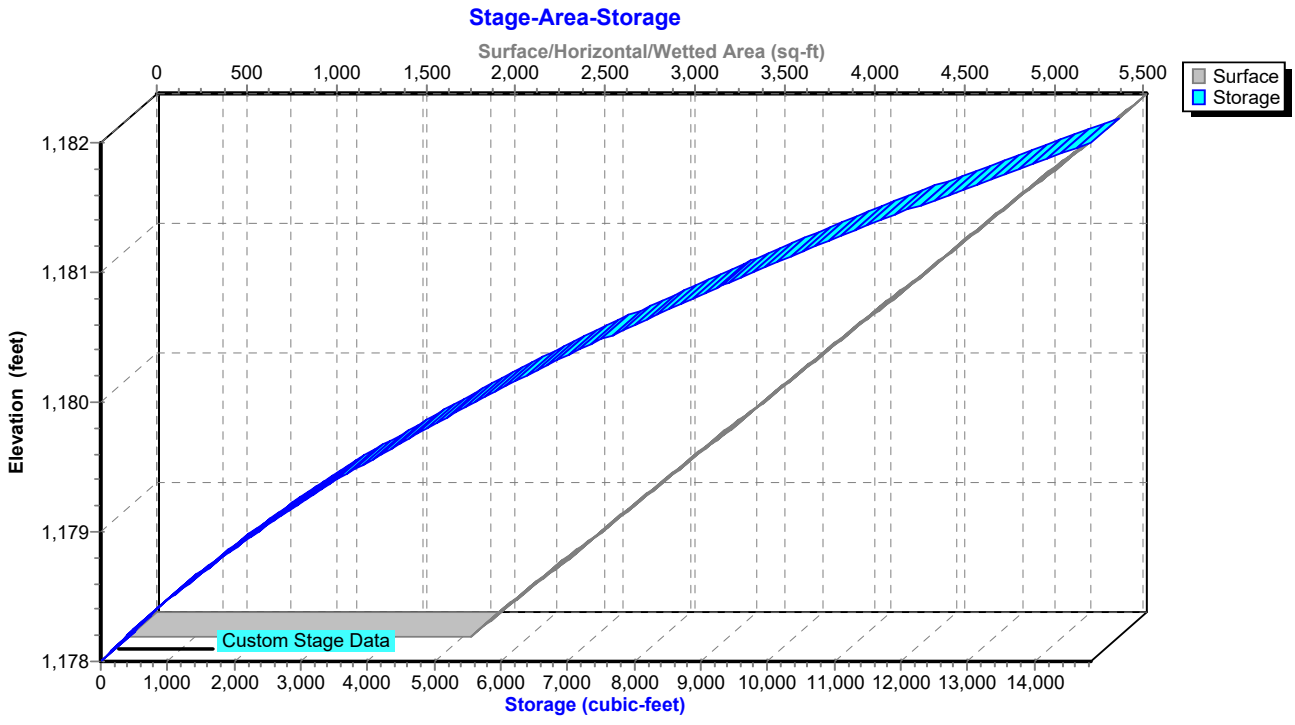
Hydrograph



Pond P3C: Pond 3C



Pond P3C: Pond 3C



Hydrograph for Pond P3C: Pond 3C

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,178.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.34**	**4,615**	**1,179.72**	**0.50**	**0.21**	**0.29**	0.00
25.00	0.00	9	1,178.00	0.02	0.00	0.02	0.00
35.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3C: Pond 3C

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,178.00	0.00	0.00	0.00	0.00
1,178.10	0.17	0.00	0.17	0.00
1,178.20	0.17	0.00	0.17	0.00
1,178.30	0.18	0.00	0.18	0.00
1,178.40	0.19	0.00	0.19	0.00
1,178.50	0.20	0.00	0.20	0.00
1,178.60	0.20	0.00	0.20	0.00
1,178.70	0.21	0.00	0.21	0.00
1,178.80	0.22	0.00	0.22	0.00
1,178.90	0.23	0.00	0.23	0.00
1,179.00	0.23	0.00	0.23	0.00
1,179.10	0.24	0.00	0.24	0.00
1,179.20	0.26	0.01	0.25	0.00
1,179.30	0.28	0.02	0.26	0.00
1,179.40	0.31	0.05	0.26	0.00
1,179.50	0.36	0.08	0.27	0.00
1,179.60	0.41	0.13	0.28	0.00
1,179.70	0.48	0.19	0.29	0.00
1,179.80	0.57	0.27	0.29	0.00
1,179.90	0.67	0.36	0.30	0.00
1,180.00	0.78	0.47	0.31	0.00
1,180.10	0.92	0.60	0.32	0.00
1,180.20	1.07	0.75	0.32	0.00
1,180.30	1.25	0.91	0.33	0.00
1,180.40	1.44	1.10	0.34	0.00
1,180.50	1.65	1.31	0.35	0.00
1,180.60	1.89	1.54	0.35	0.00
1,180.70	2.15	1.79	0.36	0.00
1,180.80	2.43	2.06	0.37	0.00
1,180.90	2.74	2.36	0.38	0.00
1,181.00	4.10	3.72	0.38	0.00
1,181.10	6.78	4.78	0.39	1.60
1,181.20	9.93	4.93	0.40	4.60
1,181.30	14.18	5.07	0.41	8.70
1,181.40	19.41	5.21	0.41	13.78
1,181.50	25.85	5.35	0.42	20.08
1,181.60	33.42	5.48	0.43	27.51
1,181.70	41.15	5.61	0.44	35.10
1,181.80	49.60	5.74	0.44	43.42
1,181.90	58.76	5.86	0.45	52.45
1,182.00	**68.62**	**5.98**	**0.46**	**62.18**

Stage-Area-Storage for Pond P3C: Pond 3C

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,178.00	1,905	0
1,178.05	1,950	96
1,178.10	1,995	195
1,178.15	2,040	296
1,178.20	2,086	399
1,178.25	2,131	504
1,178.30	2,176	612
1,178.35	2,221	722
1,178.40	2,266	834
1,178.45	2,311	949
1,178.50	2,357	1,065
1,178.55	2,402	1,184
1,178.60	2,447	1,306
1,178.65	2,492	1,429
1,178.70	2,537	1,555
1,178.75	2,582	1,683
1,178.80	2,628	1,813
1,178.85	2,673	1,946
1,178.90	2,718	2,080
1,178.95	2,763	2,217
1,179.00	2,808	2,357
1,179.05	2,853	2,498
1,179.10	2,899	2,642
1,179.15	2,944	2,788
1,179.20	2,989	2,936
1,179.25	3,034	3,087
1,179.30	3,079	3,240
1,179.35	3,124	3,395
1,179.40	3,170	3,552
1,179.45	3,215	3,712
1,179.50	3,260	3,874
1,179.55	3,305	4,038
1,179.60	3,350	4,204
1,179.65	3,395	4,373
1,179.70	3,441	4,544
1,179.75	3,486	4,717
1,179.80	3,531	4,892
1,179.85	3,576	5,070
1,179.90	3,621	5,250
1,179.95	3,666	5,432
1,180.00	3,712	5,617
1,180.05	3,757	5,803
1,180.10	3,802	5,992
1,180.15	3,847	6,183
1,180.20	3,892	6,377
1,180.25	3,937	6,573
1,180.30	3,982	6,771
1,180.35	4,028	6,971
1,180.40	4,073	7,173
1,180.45	4,118	7,378
1,180.50	4,163	7,585
1,180.55	4,208	7,794
1,180.60	4,253	8,006
1,180.65	4,299	8,220
1,180.70	4,344	8,436
1,180.75	4,389	8,654
1,180.80	4,434	8,875
1,180.85	4,479	9,098
1,180.90	4,524	9,323
1,180.95	4,570	9,550
1,181.00	4,615	9,780
1,181.05	4,660	10,011
1,181.10	4,705	10,246
1,181.15	4,750	10,482
1,181.20	4,795	10,721
1,181.25	4,841	10,962
1,181.30	4,886	11,205
1,181.35	4,931	11,450
1,181.40	4,976	11,698
1,181.45	5,021	11,948
1,181.50	5,066	12,200
1,181.55	5,112	12,454
1,181.60	5,157	12,711
1,181.65	5,202	12,970
1,181.70	5,247	13,231
1,181.75	5,292	13,495
1,181.80	5,337	13,760
1,181.85	5,383	14,028
1,181.90	5,428	14,299
1,181.95	5,473	14,571
1,182.00	**5,518**	**14,846**

Summary for Pond P3D: Pond 3D

Inflow Area = 2.380 ac, 23.95% Impervious, Inflow Depth = 2.45" for 25 YR event
Inflow = 9.15 cfs @ 12.13 hrs, Volume= 0.487 af
Outflow = 4.56 cfs @ 12.25 hrs, Volume= 0.487 af, Atten= 50%, Lag= 6.9 min
Primary = 4.31 cfs @ 12.25 hrs, Volume= 0.312 af
Routed to Link 4L : Post - North
Secondary = 0.24 cfs @ 12.25 hrs, Volume= 0.174 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,190.42' @ 12.25 hrs Surf.Area= 2,905 sf Storage= 6,232 cf

Plug-Flow detention time= 72.6 min calculated for 0.487 af (100% of inflow)
Center-of-Mass det. time= 72.5 min (891.5 - 818.9)

Volume	Invert	Avail.Storage	Storage Description
#1	1,187.00'	11,620 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

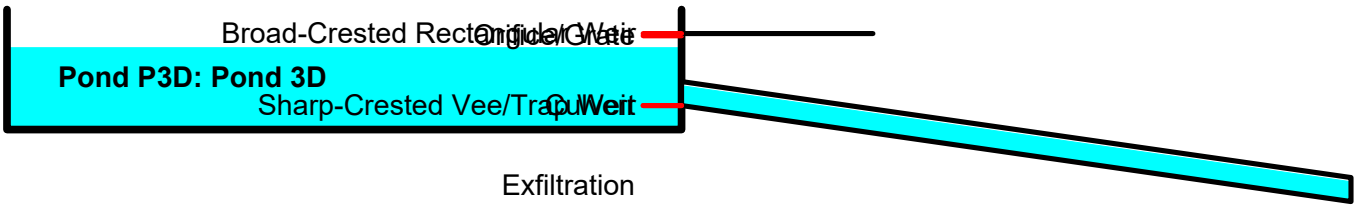
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,187.00	741	0	0
1,192.00	3,907	11,620	11,620

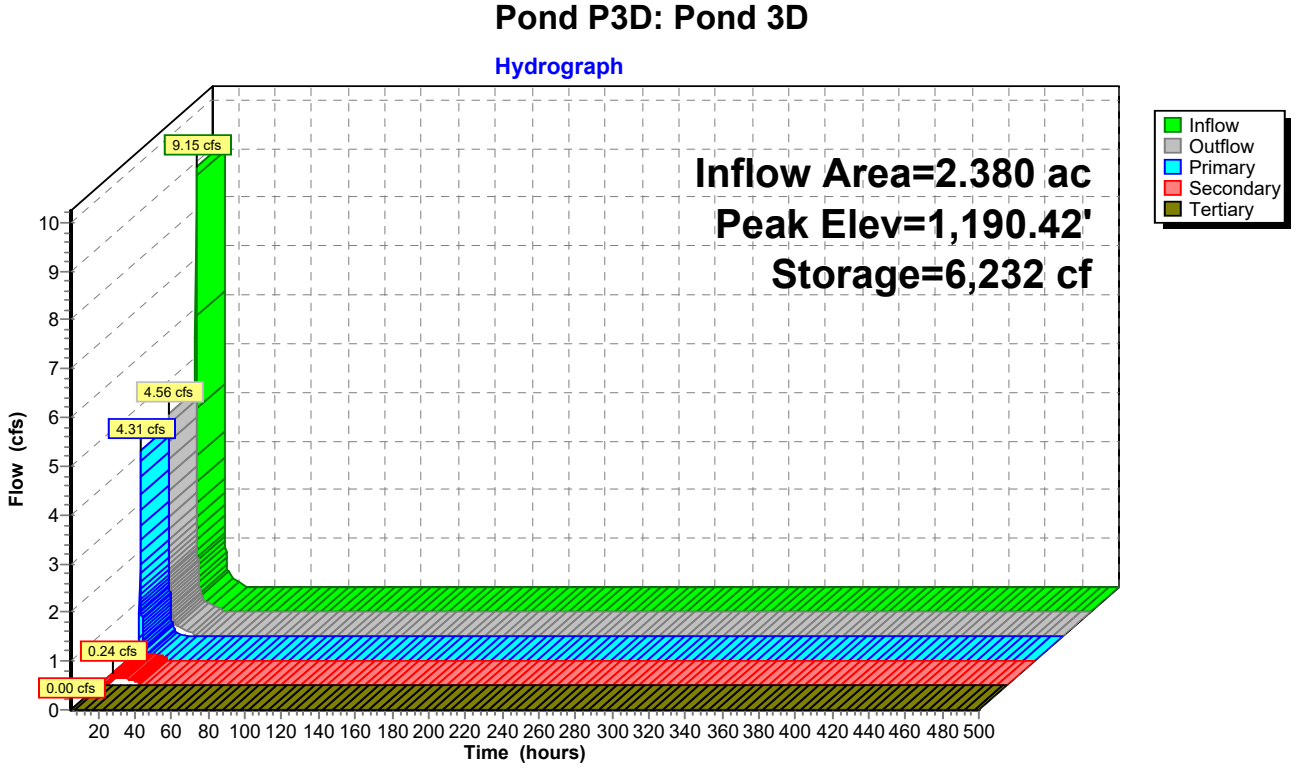
Device	Routing	Invert	Outlet Devices
#1	Primary	1,188.00'	**12.0" Round Culvert** L= 35.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,188.00' / 1,184.00' S= 0.1143 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,188.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,190.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600
#4	Secondary	1,187.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,191.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=4.30 cfs @ 12.25 hrs HW=1,190.42' (Free Discharge)
└**1=Culvert** (Passes 4.30 cfs of 5.23 cfs potential flow)
  ├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 4.30 cfs @ 4.18 fps)
  └**3=Orifice/Grate** (Controls 0.00 cfs)

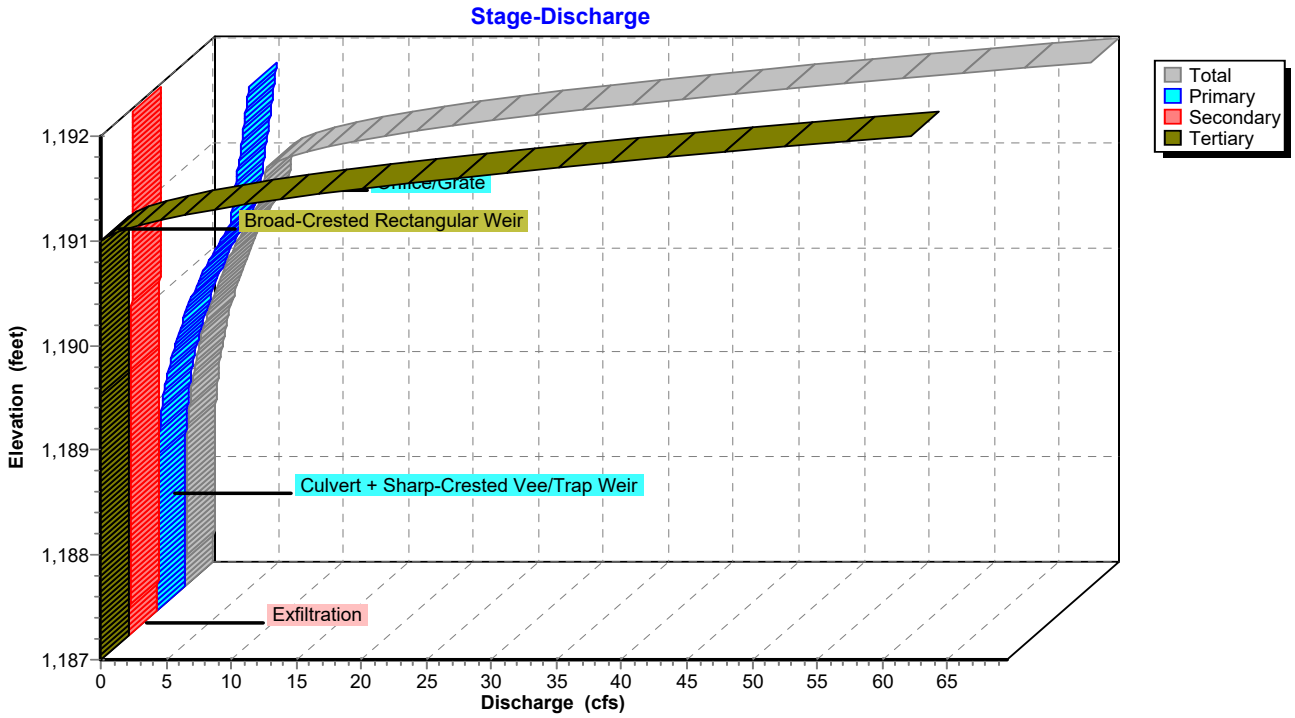
Secondary OutFlow Max=0.24 cfs @ 12.25 hrs HW=1,190.42' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.24 cfs)

Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,187.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

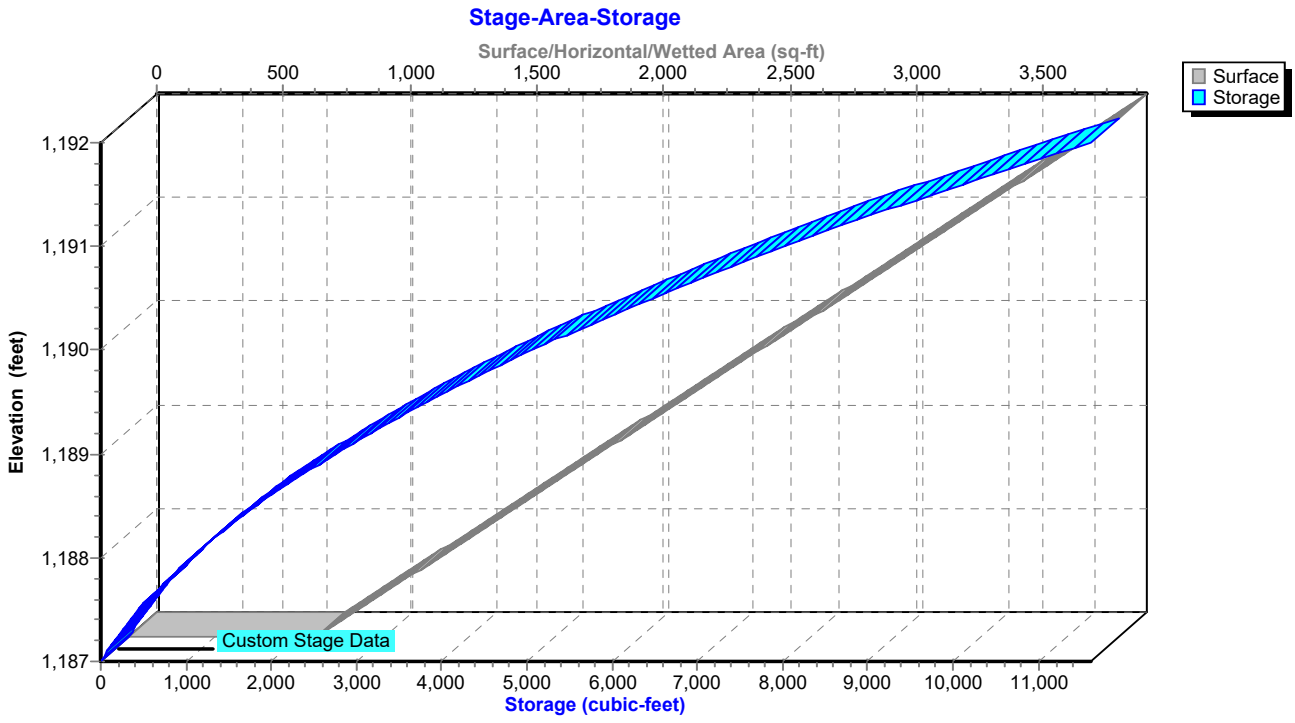

Broad-Crested Rectangular Weir
Orifice/Grate
Pond P3D: Pond 3D
Sharp-Crested Vee/Trap Weir
Exfiltration


Pond P3D: Pond 3D
Hydrograph
Inflow Area=2.380 ac
Peak Elev=1,190.42'
Storage=6,232 cf
9.15 cfs
4.56 cfs
4.31 cfs
0.24 cfs
0.00 cfs
Inflow
Outflow
Primary
Secondary
Tertiary
Flow (cfs)
Time (hours)

Pond P3D: Pond 3D



Pond P3D: Pond 3D



Hydrograph for Pond P3D: Pond 3D

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,187.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.33**	**2,246**	**1,188.74**	**0.38**	**0.22**	**0.15**	0.00
25.00	0.00	485	1,187.53	0.09	0.00	0.09	0.00
35.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3D: Pond 3D

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,187.00	0.00	0.00	0.00	0.00
1,187.10	0.07	0.00	0.07	0.00
1,187.20	0.07	0.00	0.07	0.00
1,187.30	0.08	0.00	0.08	0.00
1,187.40	0.08	0.00	0.08	0.00
1,187.50	0.09	0.00	0.09	0.00
1,187.60	0.09	0.00	0.09	0.00
1,187.70	0.10	0.00	0.10	0.00
1,187.80	0.10	0.00	0.10	0.00
1,187.90	0.11	0.00	0.11	0.00
1,188.00	0.11	0.00	0.11	0.00
1,188.10	0.12	0.00	0.12	0.00
1,188.20	0.13	0.01	0.13	0.00
1,188.30	0.15	0.02	0.13	0.00
1,188.40	0.18	0.05	0.14	0.00
1,188.50	0.22	0.08	0.14	0.00
1,188.60	0.28	0.13	0.15	0.00
1,188.70	0.35	0.19	0.15	0.00
1,188.80	0.43	0.27	0.16	0.00
1,188.90	0.53	0.36	0.16	0.00
1,189.00	0.64	0.47	0.17	0.00
1,189.10	0.77	0.60	0.17	0.00
1,189.20	0.93	0.75	0.18	0.00
1,189.30	1.10	0.91	0.18	0.00
1,189.40	1.29	1.10	0.19	0.00
1,189.50	1.50	1.31	0.19	0.00
1,189.60	1.73	1.54	0.20	0.00
1,189.70	1.99	1.79	0.20	0.00
1,189.80	2.27	2.06	0.21	0.00
1,189.90	2.58	2.36	0.21	0.00
1,190.00	2.90	2.68	0.22	0.00
1,190.10	3.26	3.03	0.23	0.00
1,190.20	3.64	3.41	0.23	0.00
1,190.30	4.04	3.81	0.24	0.00
1,190.40	4.47	4.23	0.24	0.00
1,190.50	4.93	4.69	0.25	0.00
1,190.60	5.42	5.17	0.25	0.00
1,190.70	5.87	5.61	0.26	0.00
1,190.80	6.00	5.74	0.26	0.00
1,190.90	6.13	5.86	0.27	0.00
1,191.00	6.25	5.98	0.27	0.00
1,191.10	7.98	6.10	0.28	1.60
1,191.20	11.09	6.21	0.28	4.60
1,191.30	15.31	6.33	0.29	8.70
1,191.40	20.52	6.44	0.29	13.78
1,191.50	26.93	6.55	0.30	20.08
1,191.60	34.47	6.66	0.30	27.51
1,191.70	42.18	6.76	0.31	35.10
1,191.80	50.61	6.87	0.32	43.42
1,191.90	59.75	6.97	0.32	52.45
1,192.00	**69.58**	**7.07**	**0.33**	**62.18**

Stage-Area-Storage for Pond P3D: Pond 3D

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,187.00	741	0
1,187.05	773	38
1,187.10	804	77
1,187.15	836	118
1,187.20	868	161
1,187.25	899	205
1,187.30	931	251
1,187.35	963	298
1,187.40	994	347
1,187.45	1,026	398
1,187.50	1,058	450
1,187.55	1,089	503
1,187.60	1,121	559
1,187.65	1,153	615
1,187.70	1,184	674
1,187.75	1,216	734
1,187.80	1,248	795
1,187.85	1,279	859
1,187.90	1,311	923
1,187.95	1,343	990
1,188.00	1,374	1,058
1,188.05	1,406	1,127
1,188.10	1,438	1,198
1,188.15	1,469	1,271
1,188.20	1,501	1,345
1,188.25	1,533	1,421
1,188.30	1,564	1,498
1,188.35	1,596	1,577
1,188.40	1,627	1,658
1,188.45	1,659	1,740
1,188.50	1,691	1,824
1,188.55	1,722	1,909
1,188.60	1,754	1,996
1,188.65	1,786	2,085
1,188.70	1,817	2,175
1,188.75	1,849	2,266
1,188.80	1,881	2,360
1,188.85	1,912	2,454
1,188.90	1,944	2,551
1,188.95	1,976	2,649
1,189.00	2,007	2,748
1,189.05	2,039	2,850
1,189.10	2,071	2,952
1,189.15	2,102	3,057
1,189.20	2,134	3,163
1,189.25	2,166	3,270
1,189.30	2,197	3,379
1,189.35	2,229	3,490
1,189.40	2,261	3,602
1,189.45	2,292	3,716
1,189.50	2,324	3,831
1,189.55	2,356	3,948
1,189.60	2,387	4,067
1,189.65	2,419	4,187
1,189.70	2,451	4,309
1,189.75	2,482	4,432
1,189.80	2,514	4,557
1,189.85	2,546	4,683
1,189.90	2,577	4,812
1,189.95	2,609	4,941
1,190.00	2,641	5,072
1,190.05	2,672	5,205
1,190.10	2,704	5,340
1,190.15	2,736	5,476
1,190.20	2,767	5,613
1,190.25	2,799	5,752
1,190.30	2,831	5,893
1,190.35	2,862	6,035
1,190.40	2,894	6,179
1,190.45	2,926	6,325
1,190.50	2,957	6,472
1,190.55	2,989	6,621
1,190.60	3,021	6,771
1,190.65	3,052	6,923
1,190.70	3,084	7,076
1,190.75	3,116	7,231
1,190.80	3,147	7,388
1,190.85	3,179	7,546
1,190.90	3,210	7,705
1,190.95	3,242	7,867
1,191.00	3,274	8,030
1,191.05	3,305	8,194
1,191.10	3,337	8,360
1,191.15	3,369	8,528
1,191.20	3,400	8,697
1,191.25	3,432	8,868
1,191.30	3,464	9,040
1,191.35	3,495	9,214
1,191.40	3,527	9,390
1,191.45	3,559	9,567
1,191.50	3,590	9,746
1,191.55	3,622	9,926
1,191.60	3,654	10,108
1,191.65	3,685	10,291
1,191.70	3,717	10,476
1,191.75	3,749	10,663
1,191.80	3,780	10,851
1,191.85	3,812	11,041
1,191.90	3,844	11,232
1,191.95	3,875	11,425
1,192.00	**3,907**	**11,620**

Summary for Pond P3E: Pond 3E

Inflow Area = 2.780 ac, 19.06% Impervious, Inflow Depth = 2.28" for 25 YR event
Inflow = 9.96 cfs @ 12.13 hrs, Volume= 0.529 af
Outflow = 2.04 cfs @ 12.47 hrs, Volume= 0.529 af, Atten= 80%, Lag= 20.3 min
Primary = 1.67 cfs @ 12.47 hrs, Volume= 0.212 af
Routed to Link 4L : Post - North
Secondary = 0.36 cfs @ 12.47 hrs, Volume= 0.318 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,218.66' @ 12.47 hrs Surf.Area= 4,346 sf Storage= 9,113 cf

Plug-Flow detention time= 126.7 min calculated for 0.529 af (100% of inflow)
Center-of-Mass det. time= 126.7 min (949.9 - 823.2)

Volume	Invert	Avail.Storage	Storage Description
#1	1,216.00'	15,578 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

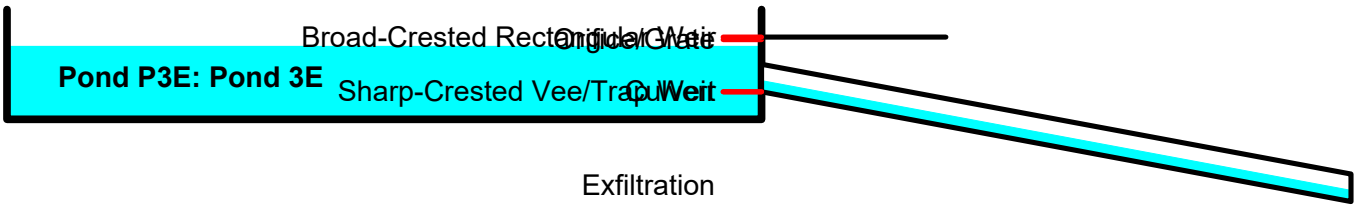
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,216.00	2,517	0	0
1,220.00	5,272	15,578	15,578

Device	Routing	Invert	Outlet Devices
#1	Primary	1,217.00'	**12.0" Round Culvert** L= 32.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,217.00' / 1,213.00' S= 0.1250 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,217.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,218.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600
#4	Secondary	1,216.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,219.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

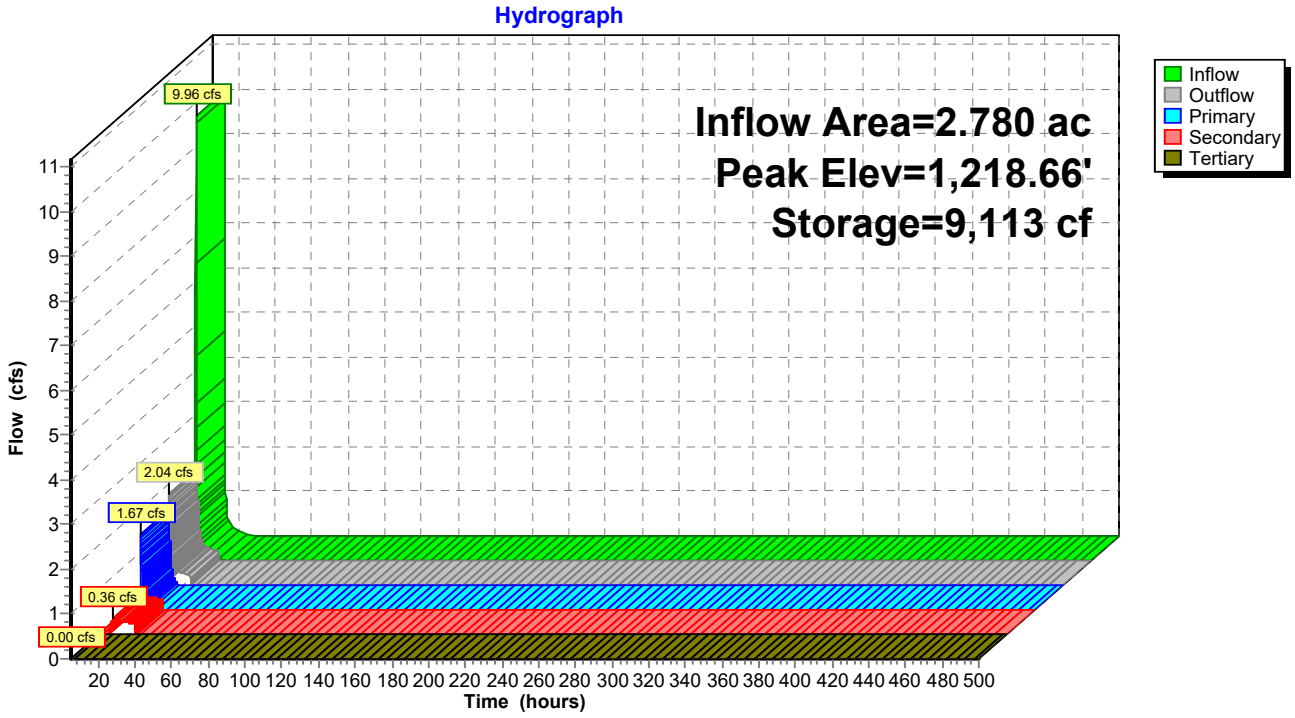
Primary OutFlow Max=1.67 cfs @ 12.47 hrs HW=1,218.65' (Free Discharge)
└**1=Culvert** (Passes 1.67 cfs of 4.06 cfs potential flow)
  ├**2=Sharp-Crested Vee/Trap Weir** (Weir Controls 1.67 cfs @ 3.46 fps)
  └**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.36 cfs @ 12.47 hrs HW=1,218.65' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.36 cfs)

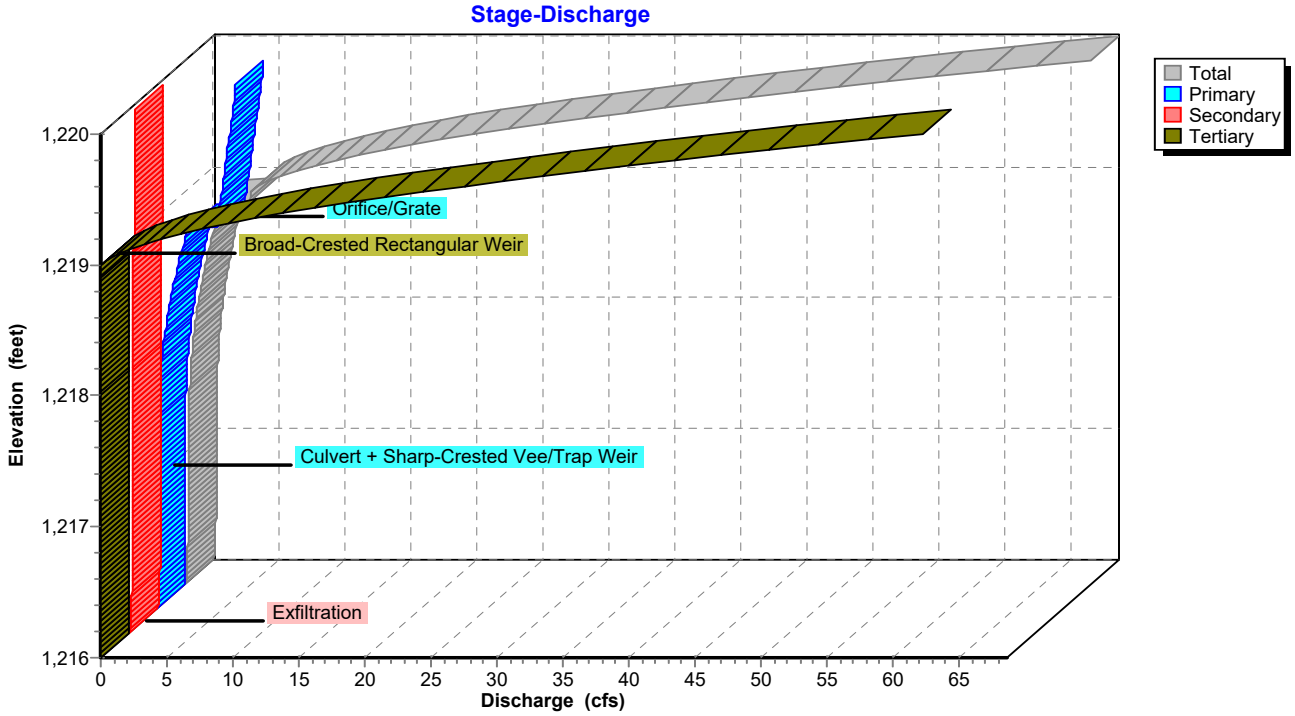
Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,216.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



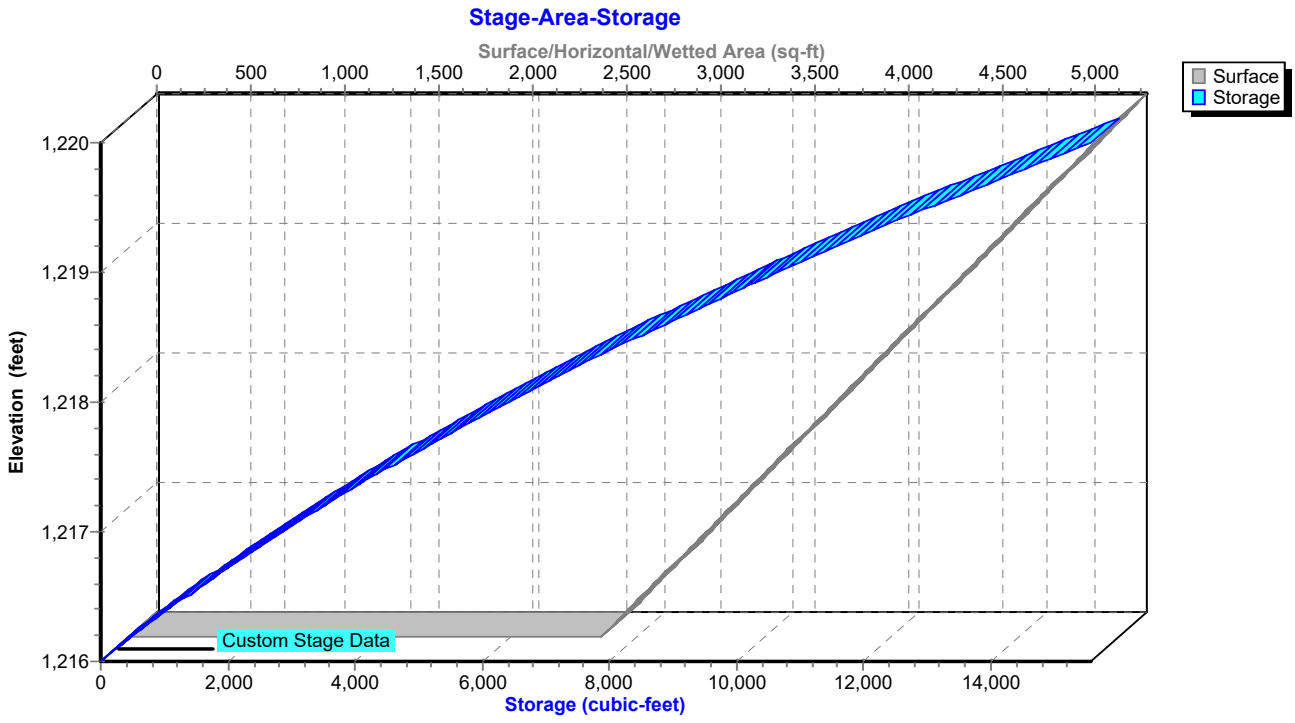
Pond P3E: Pond 3E



Pond P3E: Pond 3E



Pond P3E: Pond 3E



Hydrograph for Pond P3E: Pond 3E

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,216.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.37**	**5,470**	**1,217.75**	**0.54**	**0.23**	**0.31**	0.00
25.00	0.00	6	1,216.00	0.01	0.00	0.01	0.00
35.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3E: Pond 3E

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,216.00	0.00	0.00	0.00	0.00
1,216.10	0.22	0.00	0.22	0.00
1,216.20	0.22	0.00	0.22	0.00
1,216.30	0.23	0.00	0.23	0.00
1,216.40	0.23	0.00	0.23	0.00
1,216.50	0.24	0.00	0.24	0.00
1,216.60	0.24	0.00	0.24	0.00
1,216.70	0.25	0.00	0.25	0.00
1,216.80	0.26	0.00	0.26	0.00
1,216.90	0.26	0.00	0.26	0.00
1,217.00	0.27	0.00	0.27	0.00
1,217.10	0.27	0.00	0.27	0.00
1,217.20	0.29	0.01	0.28	0.00
1,217.30	0.31	0.02	0.28	0.00
1,217.40	0.34	0.05	0.29	0.00
1,217.50	0.38	0.08	0.30	0.00
1,217.60	0.43	0.13	0.30	0.00
1,217.70	0.50	0.19	0.31	0.00
1,217.80	0.58	0.27	0.31	0.00
1,217.90	0.68	0.36	0.32	0.00
1,218.00	0.80	0.47	0.32	0.00
1,218.10	0.93	0.60	0.33	0.00
1,218.20	1.08	0.75	0.34	0.00
1,218.30	1.26	0.91	0.34	0.00
1,218.40	1.45	1.10	0.35	0.00
1,218.50	1.66	1.31	0.35	0.00
1,218.60	1.89	1.54	0.36	0.00
1,218.70	2.15	1.79	0.36	0.00
1,218.80	2.43	2.06	0.37	0.00
1,218.90	2.74	2.36	0.38	0.00
1,219.00	5.01	4.63	0.38	0.00
1,219.10	6.77	4.78	0.39	1.60
1,219.20	9.92	4.93	0.39	4.60
1,219.30	14.17	5.07	0.40	8.70
1,219.40	19.40	5.21	0.40	13.78
1,219.50	25.84	5.35	0.41	20.08
1,219.60	33.40	5.48	0.42	27.51
1,219.70	41.13	5.61	0.42	35.10
1,219.80	49.59	5.74	0.43	43.42
1,219.90	58.74	5.86	0.43	52.45
1,220.00	**68.59**	**5.98**	**0.44**	**62.18**

Stage-Area-Storage for Pond P3E: Pond 3E

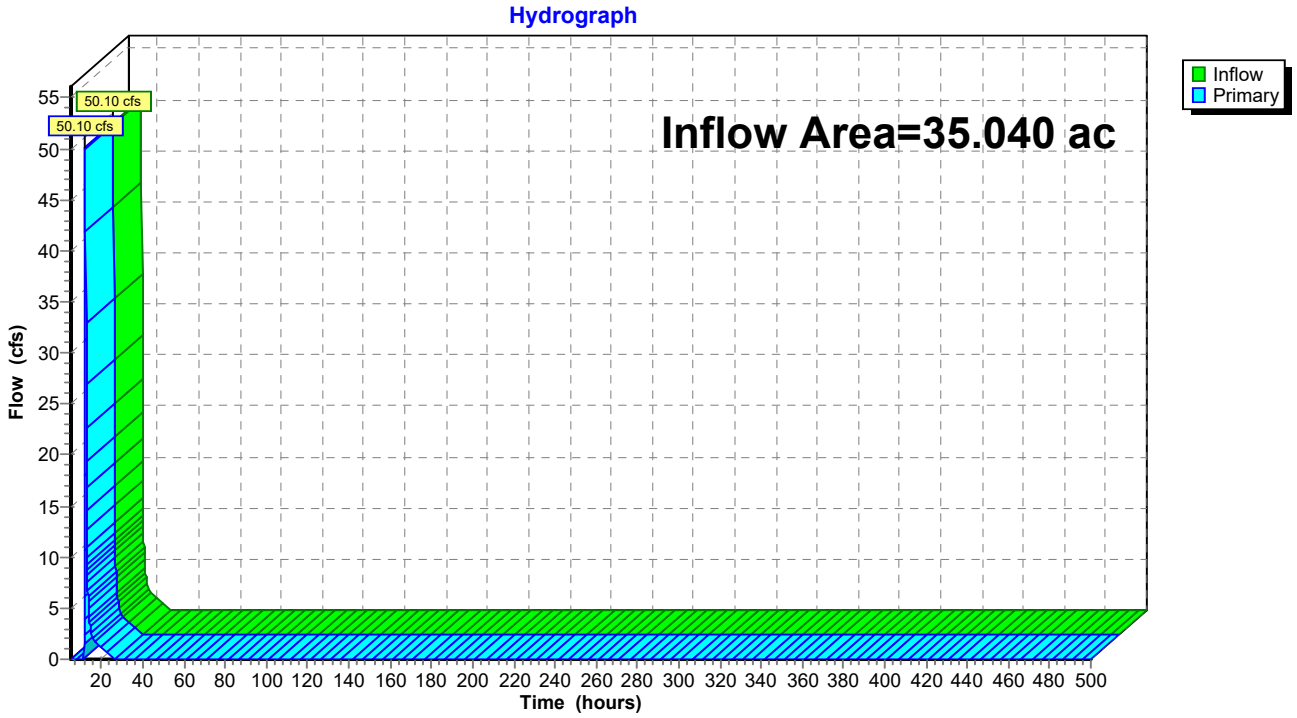
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,216.00	2,517	0
1,216.05	2,551	127
1,216.10	2,586	255
1,216.15	2,620	385
1,216.20	2,655	517
1,216.25	2,689	651
1,216.30	2,724	786
1,216.35	2,758	923
1,216.40	2,793	1,062
1,216.45	2,827	1,202
1,216.50	2,861	1,345
1,216.55	2,896	1,489
1,216.60	2,930	1,634
1,216.65	2,965	1,782
1,216.70	2,999	1,931
1,216.75	3,034	2,081
1,216.80	3,068	2,234
1,216.85	3,102	2,388
1,216.90	3,137	2,544
1,216.95	3,171	2,702
1,217.00	3,206	2,861
1,217.05	3,240	3,023
1,217.10	3,275	3,185
1,217.15	3,309	3,350
1,217.20	3,344	3,516
1,217.25	3,378	3,684
1,217.30	3,412	3,854
1,217.35	3,447	4,026
1,217.40	3,481	4,199
1,217.45	3,516	4,374
1,217.50	3,550	4,550
1,217.55	3,585	4,729
1,217.60	3,619	4,909
1,217.65	3,653	5,091
1,217.70	3,688	5,274
1,217.75	3,722	5,459
1,217.80	3,757	5,646
1,217.85	3,791	5,835
1,217.90	3,826	6,025
1,217.95	3,860	6,218
1,218.00	3,895	6,412
1,218.05	3,929	6,607
1,218.10	3,963	6,804
1,218.15	3,998	7,003
1,218.20	4,032	7,204
1,218.25	4,067	7,407
1,218.30	4,101	7,611
1,218.35	4,136	7,817
1,218.40	4,170	8,024
1,218.45	4,204	8,234
1,218.50	4,239	8,445
1,218.55	4,273	8,658
1,218.60	4,308	8,872
1,218.65	4,342	9,088
1,218.70	4,377	9,306
1,218.75	4,411	9,526
1,218.80	4,445	9,747
1,218.85	4,480	9,971
1,218.90	4,514	10,195
1,218.95	4,549	10,422
1,219.00	4,583	10,650
1,219.05	4,618	10,880
1,219.10	4,652	11,112
1,219.15	4,687	11,346
1,219.20	4,721	11,581
1,219.25	4,755	11,818
1,219.30	4,790	12,056
1,219.35	4,824	12,297
1,219.40	4,859	12,539
1,219.45	4,893	12,783
1,219.50	4,928	13,028
1,219.55	4,962	13,275
1,219.60	4,996	13,524
1,219.65	5,031	13,775
1,219.70	5,065	14,027
1,219.75	5,100	14,282
1,219.80	5,134	14,537
1,219.85	5,169	14,795
1,219.90	5,203	15,054
1,219.95	5,238	15,315
1,220.00	**5,272**	**15,578**

Summary for Link 1L: Total Pre - Development

Inflow Area = 35.040 ac, 0.00% Impervious, Inflow Depth = 1.18" for 25 YR event
Inflow = 50.10 cfs @ 12.19 hrs, Volume= 3.436 af
Primary = 50.10 cfs @ 12.19 hrs, Volume= 3.436 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 1L: Total Pre - Development



Hydrograph for Link 1L: Total Pre - Development

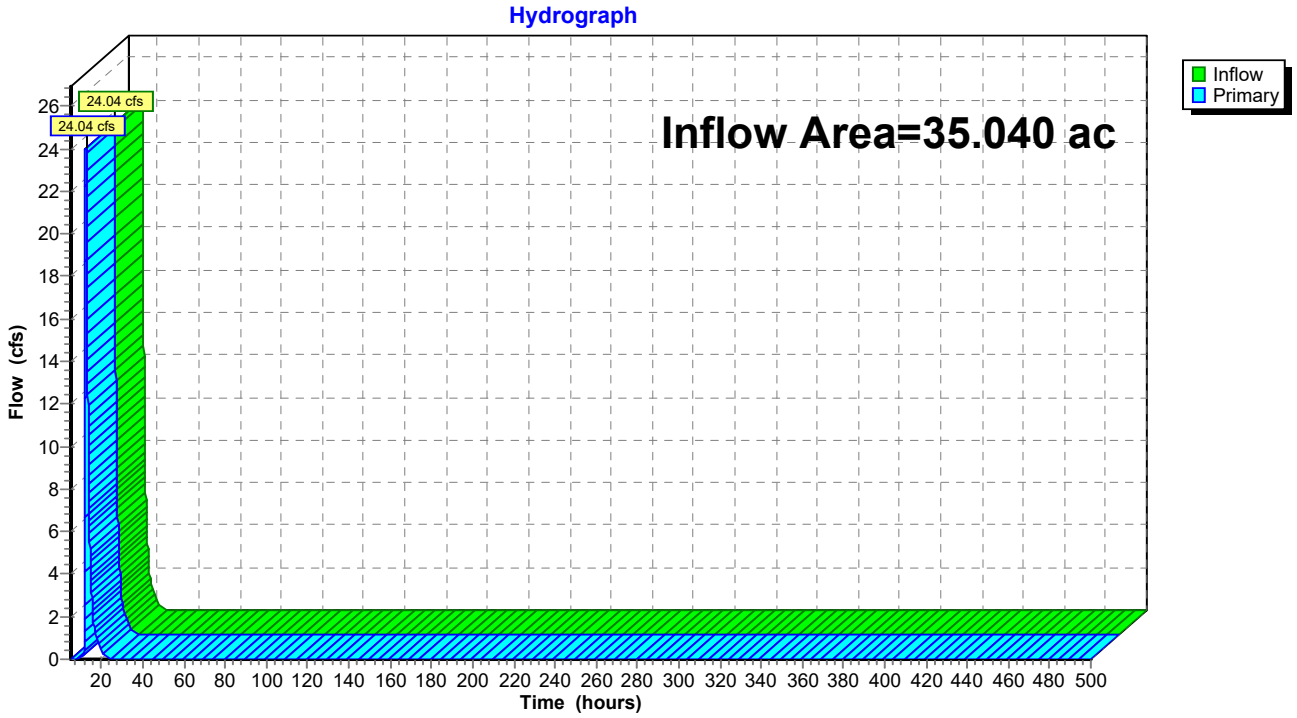
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.00**	0.00	**0.00**	265.00	0.00	0.00	0.00
15.00	**3.09**	0.00	**3.09**	270.00	0.00	0.00	0.00
20.00	1.19	0.00	1.19	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Summary for Link 2L: Total Post - Development

Inflow Area = 35.040 ac, 19.66% Impervious, Inflow Depth = 1.18" for 25 YR event
Inflow = 24.04 cfs @ 12.28 hrs, Volume= 3.439 af
Primary = 24.04 cfs @ 12.28 hrs, Volume= 3.439 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 2L: Total Post - Development



Hydrograph for Link 2L: Total Post - Development

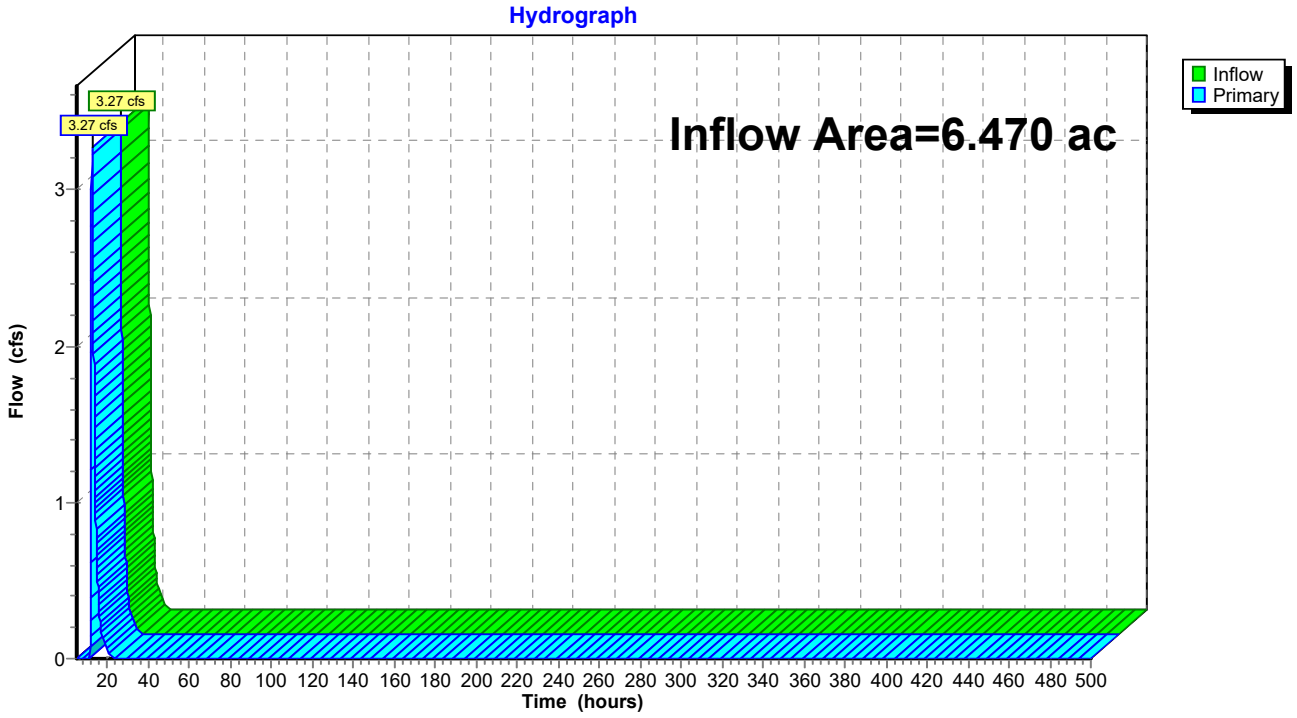
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.05**	0.00	**0.05**	265.00	0.00	0.00	0.00
15.00	**3.56**	0.00	**3.56**	270.00	0.00	0.00	0.00
20.00	0.38	0.00	0.38	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Summary for Link 3L: Post - South

Inflow Area = 6.470 ac, 18.70% Impervious, Inflow Depth = 0.92" for 25 YR event
Inflow = 3.27 cfs @ 12.45 hrs, Volume= 0.498 af
Primary = 3.27 cfs @ 12.45 hrs, Volume= 0.498 af, Atten= 0%, Lag= 0.0 min
Routed to Link 2L : Total Post - Development

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 3L: Post - South



Hydrograph for Link 3L: Post - South

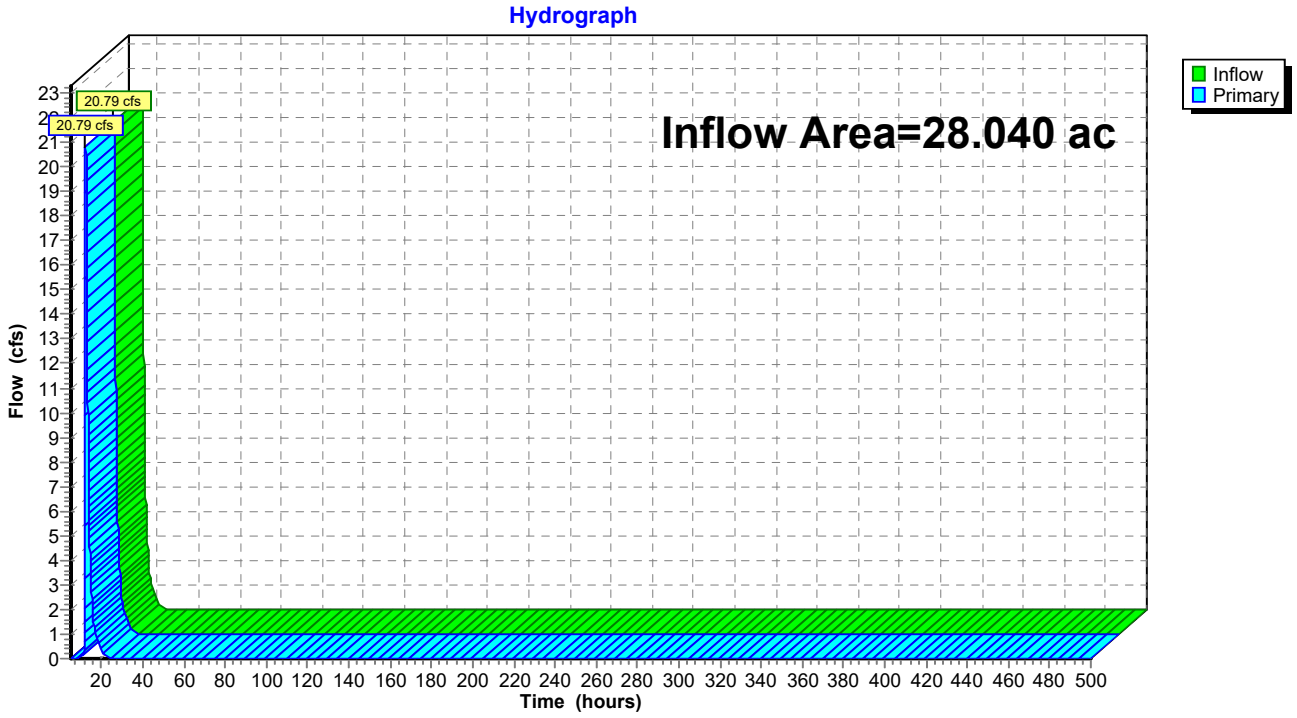
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.00**	0.00	**0.00**	265.00	0.00	0.00	0.00
15.00	**0.58**	0.00	**0.58**	270.00	0.00	0.00	0.00
20.00	0.04	0.00	0.04	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Summary for Link 4L: Post - North

Inflow Area = 28.040 ac, 20.04% Impervious, Inflow Depth = 1.23" for 25 YR event
Inflow = 20.79 cfs @ 12.27 hrs, Volume= 2.871 af
Primary = 20.79 cfs @ 12.27 hrs, Volume= 2.871 af, Atten= 0%, Lag= 0.0 min
Routed to Link 2L : Total Post - Development

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 4L: Post - North



Hydrograph for Link 4L: Post - North

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.05**	0.00	**0.05**	265.00	0.00	0.00	0.00
15.00	**2.92**	0.00	**2.92**	270.00	0.00	0.00	0.00
20.00	0.32	0.00	0.32	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Time span=5.00-500.00 hrs, dt=0.05 hrs, 9901 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1: Pre - South Runoff Area=4.910 ac 0.00% Impervious Runoff Depth=1.58"
Tc=10.0 min CN=55 Runoff=9.61 cfs 0.645 af

Subcatchment1A: Post 1A Runoff Area=6.030 ac 19.24% Impervious Runoff Depth=2.70"
Tc=6.0 min CN=68 Runoff=25.52 cfs 1.356 af

Subcatchment1B: Post 1B - Offsite Runoff Area=0.440 ac 11.36% Impervious Runoff Depth=2.42"
Tc=6.0 min CN=65 Runoff=1.67 cfs 0.089 af

Subcatchment2: Pre - West Runoff Area=2.540 ac 0.00% Impervious Runoff Depth=1.58"
Tc=6.0 min CN=55 Runoff=5.96 cfs 0.333 af

Subcatchment2A: Post 2A - Offsite Runoff Area=0.530 ac 11.32% Impervious Runoff Depth=2.42"
Tc=6.0 min CN=65 Runoff=2.01 cfs 0.107 af

Subcatchment3: Pre - North Runoff Area=27.590 ac 0.00% Impervious Runoff Depth=1.99"
Tc=10.0 min CN=60 Runoff=71.12 cfs 4.569 af

Subcatchment3A: Post 3A Runoff Area=10.600 ac 18.58% Impervious Runoff Depth=2.88"
Tc=6.0 min CN=70 Runoff=47.96 cfs 2.548 af

Subcatchment3B: Post 3B Runoff Area=8.450 ac 19.88% Impervious Runoff Depth=2.98"
Tc=6.0 min CN=71 Runoff=39.47 cfs 2.098 af

Subcatchment3C: Post 3C Runoff Area=2.490 ac 22.89% Impervious Runoff Depth=3.37"
Tc=6.0 min CN=75 Runoff=13.07 cfs 0.699 af

Subcatchment3D: Post 3D Runoff Area=2.380 ac 23.95% Impervious Runoff Depth=3.47"
Tc=6.0 min CN=76 Runoff=12.83 cfs 0.688 af

Subcatchment3E: Post 3E Runoff Area=2.780 ac 19.06% Impervious Runoff Depth=3.27"
Tc=6.0 min CN=74 Runoff=14.19 cfs 0.757 af

Subcatchment3Y: Post 3Y - Offsite Runoff Area=0.820 ac 36.59% Impervious Runoff Depth=4.18"
Tc=6.0 min CN=83 Runoff=5.20 cfs 0.286 af

Subcatchment3Z: Post 3Z - Offsite Runoff Area=0.520 ac 0.00% Impervious Runoff Depth=3.27"
Tc=6.0 min CN=74 Runoff=2.65 cfs 0.142 af

Subcatchment5S: Culvert 1 Runoff Area=4,797 sf 48.61% Impervious Runoff Depth=3.77"
Tc=6.0 min CN=79 Runoff=0.64 cfs 0.035 af

Subcatchment6S: Culvert 2 Runoff Area=24,708 sf 36.87% Impervious Runoff Depth=3.37"
Tc=6.0 min CN=75 Runoff=2.98 cfs 0.159 af

Subcatchment7S: Culvert 3 Runoff Area=41,517 sf 32.00% Impervious Runoff Depth=3.17"
Tc=6.0 min CN=73 Runoff=4.73 cfs 0.252 af

Subcatchment8S: Culvert 4 Runoff Area=209,603 sf 25.18% Impervious Runoff Depth=2.88"
Tc=6.0 min CN=70 Runoff=21.77 cfs 1.157 af

Subcatchment9S: Culvert 5 Runoff Area=188,836 sf 19.96% Impervious Runoff Depth=2.70"
Tc=6.0 min CN=68 Runoff=18.35 cfs 0.975 af

Pond P1A: Pond 1A Peak Elev=1,242.96' Storage=21,220 cf Inflow=25.52 cfs 1.356 af
Primary=5.93 cfs 0.818 af Secondary=0.69 cfs 0.537 af Tertiary=0.00 cfs 0.000 af Outflow=6.62 cfs 1.356 af

Pond P3A: Pond 3A Peak Elev=1,197.22' Storage=42,103 cf Inflow=47.96 cfs 2.548 af
Primary=7.30 cfs 1.598 af Secondary=1.00 cfs 0.844 af Tertiary=5.43 cfs 0.106 af Outflow=13.73 cfs 2.548 af

Pond P3B: Pond 3B Peak Elev=1,199.47' Storage=28,439 cf Inflow=39.47 cfs 2.098 af
Primary=6.51 cfs 1.159 af Secondary=0.83 cfs 0.668 af Tertiary=17.18 cfs 0.271 af Outflow=24.52 cfs 2.098 af

Pond P3C: Pond 3C Peak Elev=1,181.10' Storage=10,244 cf Inflow=13.07 cfs 0.699 af
Primary=4.78 cfs 0.358 af Secondary=0.39 cfs 0.326 af Tertiary=1.62 cfs 0.014 af Outflow=6.79 cfs 0.699 af

Pond P3D: Pond 3D Peak Elev=1,191.05' Storage=8,209 cf Inflow=12.83 cfs 0.688 af
Primary=6.04 cfs 0.488 af Secondary=0.28 cfs 0.196 af Tertiary=0.57 cfs 0.004 af Outflow=6.89 cfs 0.688 af

Pond P3E: Pond 3E Peak Elev=1,219.11' Storage=11,171 cf Inflow=14.19 cfs 0.757 af
Primary=4.80 cfs 0.380 af Secondary=0.39 cfs 0.361 af Tertiary=1.93 cfs 0.016 af Outflow=7.12 cfs 0.757 af

Link 1L: Total Pre - Development Inflow=85.40 cfs 5.547 af
Primary=85.40 cfs 5.547 af

Link 2L: Total Post - Development Inflow=41.84 cfs 5.425 af
Primary=41.84 cfs 5.425 af

Link 3L: Post - South Inflow=6.55 cfs 0.907 af
Primary=6.55 cfs 0.907 af

Link 4L: Post - North Inflow=34.01 cfs 4.411 af
Primary=34.01 cfs 4.411 af

Total Runoff Area = 80.857 ac Runoff Volume = 16.893 af Average Runoff Depth = 2.51"
88.21% Pervious = 71.323 ac 11.79% Impervious = 9.534 ac

Summary for Subcatchment 1: Pre - South

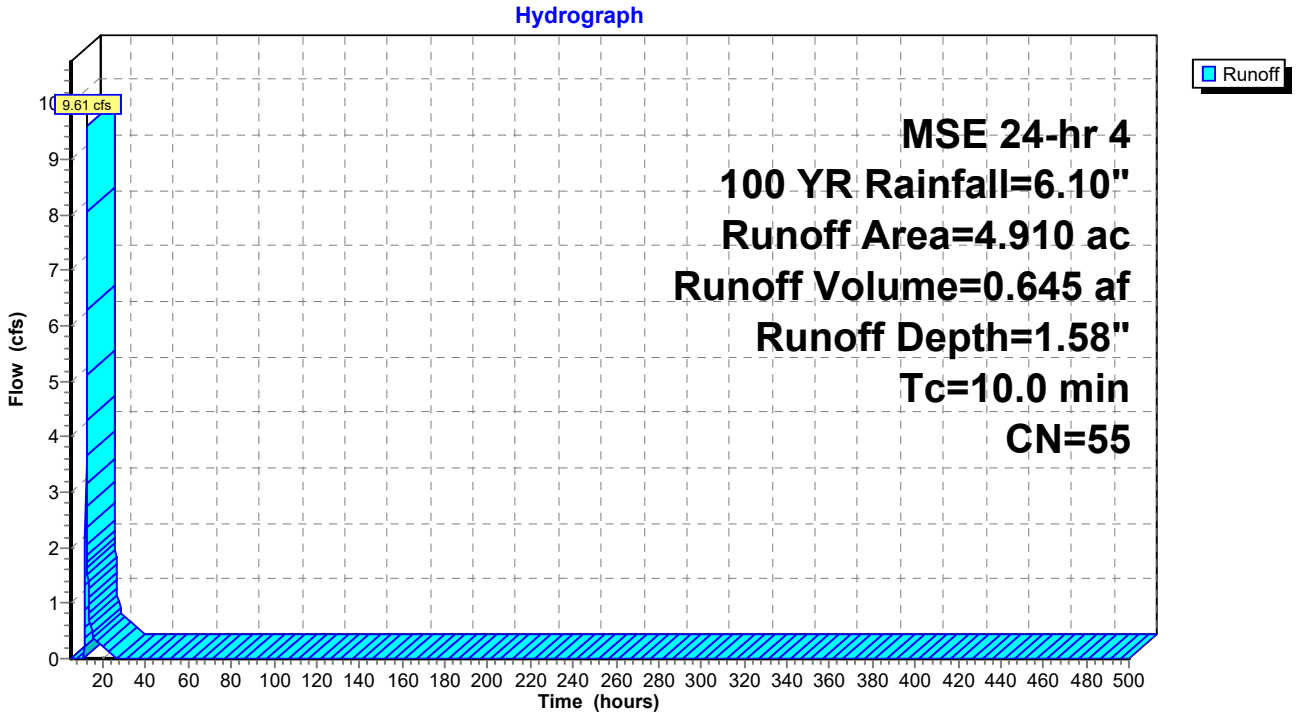
Runoff = 9.61 cfs @ 12.19 hrs, Volume= 0.645 af, Depth= 1.58"
Routed to Link 1L : Total Pre - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 100 YR Rainfall=6.10"

	Area (ac)	CN	Description
*	4.910	55	Pre Dev - B Soils
	4.910		100.00% Pervious Area

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

Subcatchment 1: Pre - South



Hydrograph for Subcatchment 1: Pre - South

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.28	0.00	0.00	260.00	6.10	1.58	0.00
10.00	0.97	0.00	**0.00**	265.00	6.10	1.58	0.00
15.00	5.36	1.17	**0.57**	270.00	6.10	1.58	0.00
20.00	**5.90**	**1.46**	0.22	275.00	6.10	1.58	0.00
25.00	**6.10**	**1.58**	0.00	280.00	6.10	1.58	0.00
30.00	6.10	1.58	0.00	285.00	6.10	1.58	0.00
35.00	6.10	1.58	0.00	290.00	6.10	1.58	0.00
40.00	6.10	1.58	0.00	295.00	6.10	1.58	0.00
45.00	6.10	1.58	0.00	300.00	6.10	1.58	0.00
50.00	6.10	1.58	0.00	305.00	6.10	1.58	0.00
55.00	6.10	1.58	0.00	310.00	6.10	1.58	0.00
60.00	6.10	1.58	0.00	315.00	6.10	1.58	0.00
65.00	6.10	1.58	0.00	320.00	6.10	1.58	0.00
70.00	6.10	1.58	0.00	325.00	6.10	1.58	0.00
75.00	6.10	1.58	0.00	330.00	6.10	1.58	0.00
80.00	6.10	1.58	0.00	335.00	6.10	1.58	0.00
85.00	6.10	1.58	0.00	340.00	6.10	1.58	0.00
90.00	6.10	1.58	0.00	345.00	6.10	1.58	0.00
95.00	6.10	1.58	0.00	350.00	6.10	1.58	0.00
100.00	6.10	1.58	0.00	355.00	6.10	1.58	0.00
105.00	6.10	1.58	0.00	360.00	6.10	1.58	0.00
110.00	6.10	1.58	0.00	365.00	6.10	1.58	0.00
115.00	6.10	1.58	0.00	370.00	6.10	1.58	0.00
120.00	6.10	1.58	0.00	375.00	6.10	1.58	0.00
125.00	6.10	1.58	0.00	380.00	6.10	1.58	0.00
130.00	6.10	1.58	0.00	385.00	6.10	1.58	0.00
135.00	6.10	1.58	0.00	390.00	6.10	1.58	0.00
140.00	6.10	1.58	0.00	395.00	6.10	1.58	0.00
145.00	6.10	1.58	0.00	400.00	6.10	1.58	0.00
150.00	6.10	1.58	0.00	405.00	6.10	1.58	0.00
155.00	6.10	1.58	0.00	410.00	6.10	1.58	0.00
160.00	6.10	1.58	0.00	415.00	6.10	1.58	0.00
165.00	6.10	1.58	0.00	420.00	6.10	1.58	0.00
170.00	6.10	1.58	0.00	425.00	6.10	1.58	0.00
175.00	6.10	1.58	0.00	430.00	6.10	1.58	0.00
180.00	6.10	1.58	0.00	435.00	6.10	1.58	0.00
185.00	6.10	1.58	0.00	440.00	6.10	1.58	0.00
190.00	6.10	1.58	0.00	445.00	6.10	1.58	0.00
195.00	6.10	1.58	0.00	450.00	6.10	1.58	0.00
200.00	6.10	1.58	0.00	455.00	6.10	1.58	0.00
205.00	6.10	1.58	0.00	460.00	6.10	1.58	0.00
210.00	6.10	1.58	0.00	465.00	6.10	1.58	0.00
215.00	6.10	1.58	0.00	470.00	6.10	1.58	0.00
220.00	6.10	1.58	0.00	475.00	6.10	1.58	0.00
225.00	6.10	1.58	0.00	480.00	6.10	1.58	0.00
230.00	6.10	1.58	0.00	485.00	6.10	1.58	0.00
235.00	6.10	1.58	0.00	490.00	6.10	1.58	0.00
240.00	6.10	1.58	0.00	495.00	6.10	1.58	0.00
245.00	6.10	1.58	0.00	500.00	6.10	1.58	0.00
250.00	6.10	1.58	0.00				
255.00	6.10	1.58	0.00				

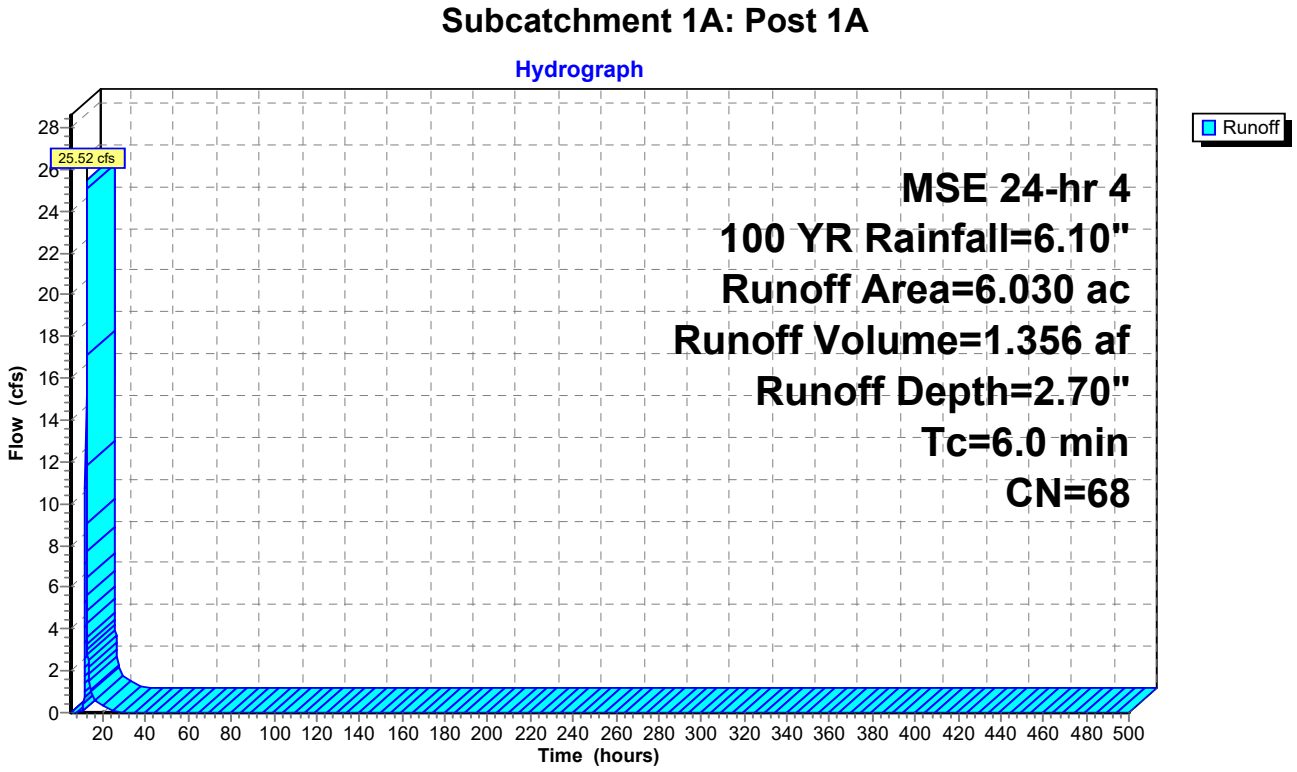
Summary for Subcatchment 1A: Post 1A

Runoff = 25.52 cfs @ 12.14 hrs, Volume= 1.356 af, Depth= 2.70"
Routed to Pond P1A : Pond 1A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 100 YR Rainfall=6.10"

	Area (ac)	CN	Description
*	1.160	98	Impervious
*	4.870	61	Post - B Soils
*	0.000	74	Post - C Soils
	6.030	68	Weighted Average
	4.870		80.76% Pervious Area
	1.160		19.24% Impervious Area

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



Hydrograph for Subcatchment 1A: Post 1A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.28	0.00	0.00	260.00	6.10	2.70	0.00
10.00	0.97	0.00	**0.00**	265.00	6.10	2.70	0.00
15.00	5.36	2.14	**0.96**	270.00	6.10	2.70	0.00
20.00	**5.90**	**2.55**	0.36	275.00	6.10	2.70	0.00
25.00	**6.10**	**2.70**	0.00	280.00	6.10	2.70	0.00
30.00	6.10	2.70	0.00	285.00	6.10	2.70	0.00
35.00	6.10	2.70	0.00	290.00	6.10	2.70	0.00
40.00	6.10	2.70	0.00	295.00	6.10	2.70	0.00
45.00	6.10	2.70	0.00	300.00	6.10	2.70	0.00
50.00	6.10	2.70	0.00	305.00	6.10	2.70	0.00
55.00	6.10	2.70	0.00	310.00	6.10	2.70	0.00
60.00	6.10	2.70	0.00	315.00	6.10	2.70	0.00
65.00	6.10	2.70	0.00	320.00	6.10	2.70	0.00
70.00	6.10	2.70	0.00	325.00	6.10	2.70	0.00
75.00	6.10	2.70	0.00	330.00	6.10	2.70	0.00
80.00	6.10	2.70	0.00	335.00	6.10	2.70	0.00
85.00	6.10	2.70	0.00	340.00	6.10	2.70	0.00
90.00	6.10	2.70	0.00	345.00	6.10	2.70	0.00
95.00	6.10	2.70	0.00	350.00	6.10	2.70	0.00
100.00	6.10	2.70	0.00	355.00	6.10	2.70	0.00
105.00	6.10	2.70	0.00	360.00	6.10	2.70	0.00
110.00	6.10	2.70	0.00	365.00	6.10	2.70	0.00
115.00	6.10	2.70	0.00	370.00	6.10	2.70	0.00
120.00	6.10	2.70	0.00	375.00	6.10	2.70	0.00
125.00	6.10	2.70	0.00	380.00	6.10	2.70	0.00
130.00	6.10	2.70	0.00	385.00	6.10	2.70	0.00
135.00	6.10	2.70	0.00	390.00	6.10	2.70	0.00
140.00	6.10	2.70	0.00	395.00	6.10	2.70	0.00
145.00	6.10	2.70	0.00	400.00	6.10	2.70	0.00
150.00	6.10	2.70	0.00	405.00	6.10	2.70	0.00
155.00	6.10	2.70	0.00	410.00	6.10	2.70	0.00
160.00	6.10	2.70	0.00	415.00	6.10	2.70	0.00
165.00	6.10	2.70	0.00	420.00	6.10	2.70	0.00
170.00	6.10	2.70	0.00	425.00	6.10	2.70	0.00
175.00	6.10	2.70	0.00	430.00	6.10	2.70	0.00
180.00	6.10	2.70	0.00	435.00	6.10	2.70	0.00
185.00	6.10	2.70	0.00	440.00	6.10	2.70	0.00
190.00	6.10	2.70	0.00	445.00	6.10	2.70	0.00
195.00	6.10	2.70	0.00	450.00	6.10	2.70	0.00
200.00	6.10	2.70	0.00	455.00	6.10	2.70	0.00
205.00	6.10	2.70	0.00	460.00	6.10	2.70	0.00
210.00	6.10	2.70	0.00	465.00	6.10	2.70	0.00
215.00	6.10	2.70	0.00	470.00	6.10	2.70	0.00
220.00	6.10	2.70	0.00	475.00	6.10	2.70	0.00
225.00	6.10	2.70	0.00	480.00	6.10	2.70	0.00
230.00	6.10	2.70	0.00	485.00	6.10	2.70	0.00
235.00	6.10	2.70	0.00	490.00	6.10	2.70	0.00
240.00	6.10	2.70	0.00	495.00	6.10	2.70	0.00
245.00	6.10	2.70	0.00	500.00	6.10	2.70	0.00
250.00	6.10	2.70	0.00				
255.00	6.10	2.70	0.00				

Summary for Subcatchment 1B: Post 1B - Offsite

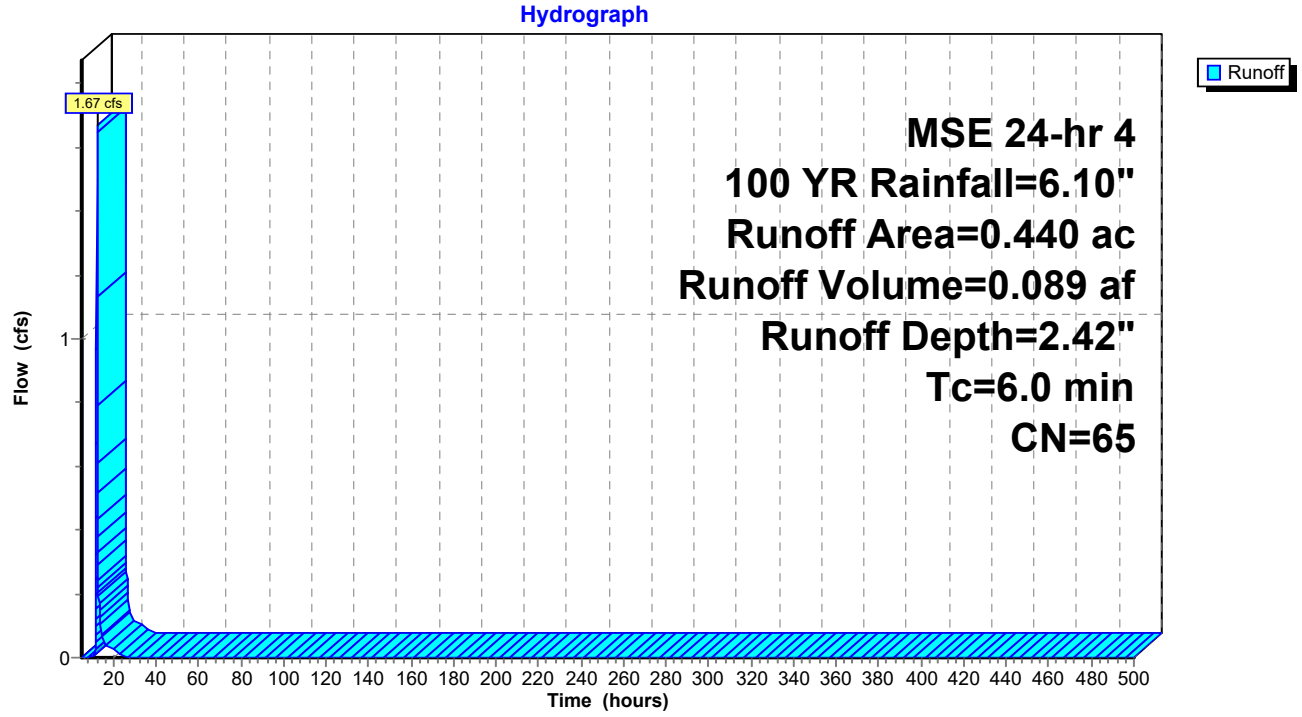
Runoff = 1.67 cfs @ 12.14 hrs, Volume= 0.089 af, Depth= 2.42"
Routed to Link 3L : Post - South

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 100 YR Rainfall=6.10"

	Area (ac)	CN	Description
*	0.050	98	Impervious
*	0.390	61	Post - B Soils
*	0.000	74	Post - C Soils
	0.440	65	Weighted Average
	0.390		88.64% Pervious Area
	0.050		11.36% Impervious Area

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

Subcatchment 1B: Post 1B - Offsite



Hydrograph for Subcatchment 1B: Post 1B - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.28	0.00	0.00	260.00	6.10	2.42	0.00
10.00	0.97	0.00	**0.00**	265.00	6.10	2.42	0.00
15.00	5.36	1.90	**0.07**	270.00	6.10	2.42	0.00
20.00	**5.90**	**2.28**	0.02	275.00	6.10	2.42	0.00
25.00	**6.10**	**2.42**	0.00	280.00	6.10	2.42	0.00
30.00	6.10	2.42	0.00	285.00	6.10	2.42	0.00
35.00	6.10	2.42	0.00	290.00	6.10	2.42	0.00
40.00	6.10	2.42	0.00	295.00	6.10	2.42	0.00
45.00	6.10	2.42	0.00	300.00	6.10	2.42	0.00
50.00	6.10	2.42	0.00	305.00	6.10	2.42	0.00
55.00	6.10	2.42	0.00	310.00	6.10	2.42	0.00
60.00	6.10	2.42	0.00	315.00	6.10	2.42	0.00
65.00	6.10	2.42	0.00	320.00	6.10	2.42	0.00
70.00	6.10	2.42	0.00	325.00	6.10	2.42	0.00
75.00	6.10	2.42	0.00	330.00	6.10	2.42	0.00
80.00	6.10	2.42	0.00	335.00	6.10	2.42	0.00
85.00	6.10	2.42	0.00	340.00	6.10	2.42	0.00
90.00	6.10	2.42	0.00	345.00	6.10	2.42	0.00
95.00	6.10	2.42	0.00	350.00	6.10	2.42	0.00
100.00	6.10	2.42	0.00	355.00	6.10	2.42	0.00
105.00	6.10	2.42	0.00	360.00	6.10	2.42	0.00
110.00	6.10	2.42	0.00	365.00	6.10	2.42	0.00
115.00	6.10	2.42	0.00	370.00	6.10	2.42	0.00
120.00	6.10	2.42	0.00	375.00	6.10	2.42	0.00
125.00	6.10	2.42	0.00	380.00	6.10	2.42	0.00
130.00	6.10	2.42	0.00	385.00	6.10	2.42	0.00
135.00	6.10	2.42	0.00	390.00	6.10	2.42	0.00
140.00	6.10	2.42	0.00	395.00	6.10	2.42	0.00
145.00	6.10	2.42	0.00	400.00	6.10	2.42	0.00
150.00	6.10	2.42	0.00	405.00	6.10	2.42	0.00
155.00	6.10	2.42	0.00	410.00	6.10	2.42	0.00
160.00	6.10	2.42	0.00	415.00	6.10	2.42	0.00
165.00	6.10	2.42	0.00	420.00	6.10	2.42	0.00
170.00	6.10	2.42	0.00	425.00	6.10	2.42	0.00
175.00	6.10	2.42	0.00	430.00	6.10	2.42	0.00
180.00	6.10	2.42	0.00	435.00	6.10	2.42	0.00
185.00	6.10	2.42	0.00	440.00	6.10	2.42	0.00
190.00	6.10	2.42	0.00	445.00	6.10	2.42	0.00
195.00	6.10	2.42	0.00	450.00	6.10	2.42	0.00
200.00	6.10	2.42	0.00	455.00	6.10	2.42	0.00
205.00	6.10	2.42	0.00	460.00	6.10	2.42	0.00
210.00	6.10	2.42	0.00	465.00	6.10	2.42	0.00
215.00	6.10	2.42	0.00	470.00	6.10	2.42	0.00
220.00	6.10	2.42	0.00	475.00	6.10	2.42	0.00
225.00	6.10	2.42	0.00	480.00	6.10	2.42	0.00
230.00	6.10	2.42	0.00	485.00	6.10	2.42	0.00
235.00	6.10	2.42	0.00	490.00	6.10	2.42	0.00
240.00	6.10	2.42	0.00	495.00	6.10	2.42	0.00
245.00	6.10	2.42	0.00	500.00	6.10	2.42	0.00
250.00	6.10	2.42	0.00				
255.00	6.10	2.42	0.00				

Summary for Subcatchment 2: Pre - West

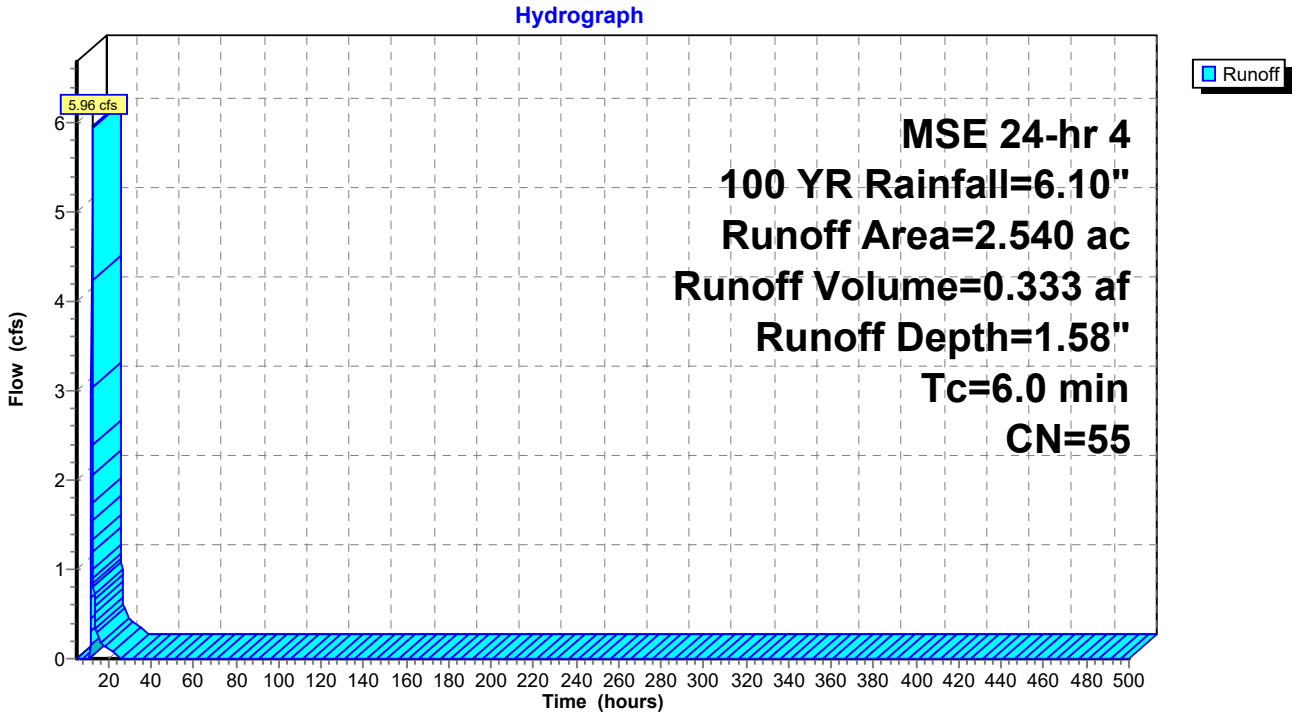
Runoff = 5.96 cfs @ 12.14 hrs, Volume= 0.333 af, Depth= 1.58"
Routed to Link 1L : Total Pre - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 100 YR Rainfall=6.10"

	Area (ac)	CN	Description
*	2.540	55	Pre Dev - B Soils
	2.540		100.00% Pervious Area

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

Subcatchment 2: Pre - West



Hydrograph for Subcatchment 2: Pre - West

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.28	0.00	0.00
10.00	0.97	0.00	**0.00**
15.00	5.36	1.17	**0.29**
20.00	**5.90**	**1.46**	0.11
25.00	**6.10**	**1.58**	0.00
30.00	6.10	1.58	0.00
35.00	6.10	1.58	0.00
40.00	6.10	1.58	0.00
45.00	6.10	1.58	0.00
50.00	6.10	1.58	0.00
55.00	6.10	1.58	0.00
60.00	6.10	1.58	0.00
65.00	6.10	1.58	0.00
70.00	6.10	1.58	0.00
75.00	6.10	1.58	0.00
80.00	6.10	1.58	0.00
85.00	6.10	1.58	0.00
90.00	6.10	1.58	0.00
95.00	6.10	1.58	0.00
100.00	6.10	1.58	0.00
105.00	6.10	1.58	0.00
110.00	6.10	1.58	0.00
115.00	6.10	1.58	0.00
120.00	6.10	1.58	0.00
125.00	6.10	1.58	0.00
130.00	6.10	1.58	0.00
135.00	6.10	1.58	0.00
140.00	6.10	1.58	0.00
145.00	6.10	1.58	0.00
150.00	6.10	1.58	0.00
155.00	6.10	1.58	0.00
160.00	6.10	1.58	0.00
165.00	6.10	1.58	0.00
170.00	6.10	1.58	0.00
175.00	6.10	1.58	0.00
180.00	6.10	1.58	0.00
185.00	6.10	1.58	0.00
190.00	6.10	1.58	0.00
195.00	6.10	1.58	0.00
200.00	6.10	1.58	0.00
205.00	6.10	1.58	0.00
210.00	6.10	1.58	0.00
215.00	6.10	1.58	0.00
220.00	6.10	1.58	0.00
225.00	6.10	1.58	0.00
230.00	6.10	1.58	0.00
235.00	6.10	1.58	0.00
240.00	6.10	1.58	0.00
245.00	6.10	1.58	0.00
250.00	6.10	1.58	0.00
255.00	6.10	1.58	0.00
260.00	6.10	1.58	0.00
265.00	6.10	1.58	0.00
270.00	6.10	1.58	0.00
275.00	6.10	1.58	0.00
280.00	6.10	1.58	0.00
285.00	6.10	1.58	0.00
290.00	6.10	1.58	0.00
295.00	6.10	1.58	0.00
300.00	6.10	1.58	0.00
305.00	6.10	1.58	0.00
310.00	6.10	1.58	0.00
315.00	6.10	1.58	0.00
320.00	6.10	1.58	0.00
325.00	6.10	1.58	0.00
330.00	6.10	1.58	0.00
335.00	6.10	1.58	0.00
340.00	6.10	1.58	0.00
345.00	6.10	1.58	0.00
350.00	6.10	1.58	0.00
355.00	6.10	1.58	0.00
360.00	6.10	1.58	0.00
365.00	6.10	1.58	0.00
370.00	6.10	1.58	0.00
375.00	6.10	1.58	0.00
380.00	6.10	1.58	0.00
385.00	6.10	1.58	0.00
390.00	6.10	1.58	0.00
395.00	6.10	1.58	0.00
400.00	6.10	1.58	0.00
405.00	6.10	1.58	0.00
410.00	6.10	1.58	0.00
415.00	6.10	1.58	0.00
420.00	6.10	1.58	0.00
425.00	6.10	1.58	0.00
430.00	6.10	1.58	0.00
435.00	6.10	1.58	0.00
440.00	6.10	1.58	0.00
445.00	6.10	1.58	0.00
450.00	6.10	1.58	0.00
455.00	6.10	1.58	0.00
460.00	6.10	1.58	0.00
465.00	6.10	1.58	0.00
470.00	6.10	1.58	0.00
475.00	6.10	1.58	0.00
480.00	6.10	1.58	0.00
485.00	6.10	1.58	0.00
490.00	6.10	1.58	0.00
495.00	6.10	1.58	0.00
500.00	6.10	1.58	0.00

Summary for Subcatchment 2A: Post 2A - Offsite

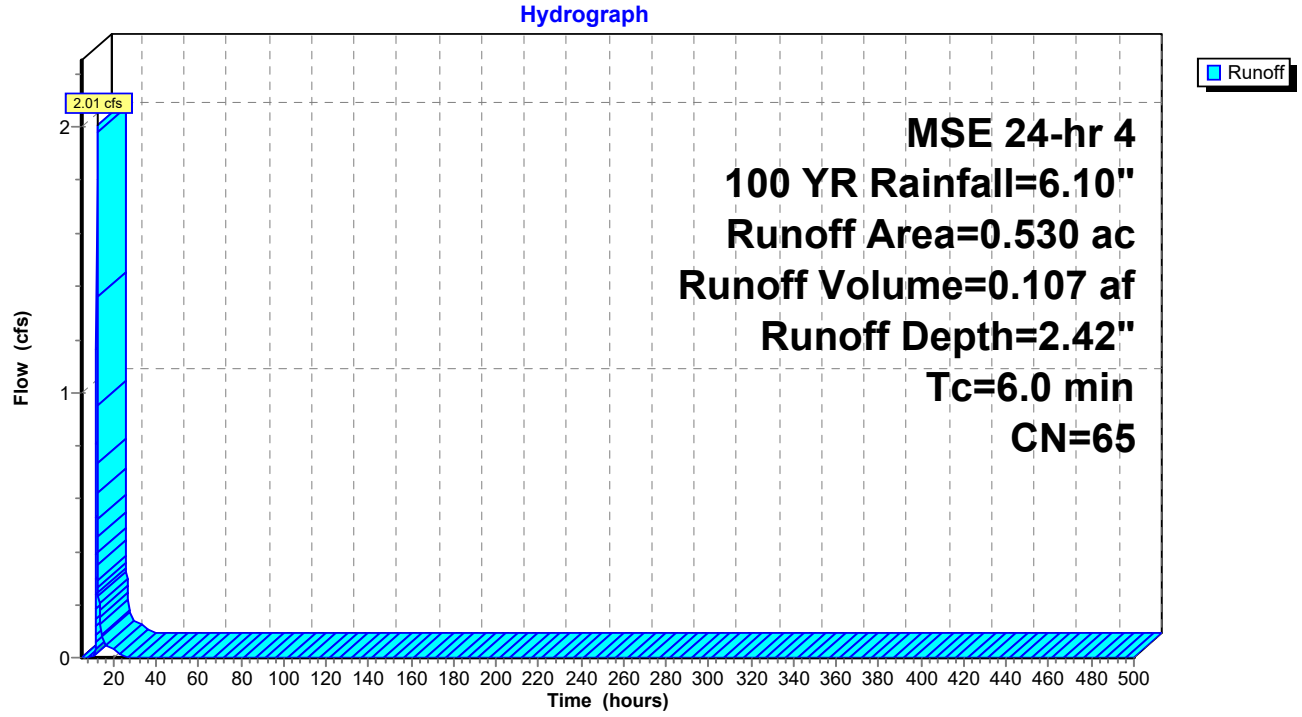
Runoff = 2.01 cfs @ 12.14 hrs, Volume= 0.107 af, Depth= 2.42"
Routed to Link 2L : Total Post - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 100 YR Rainfall=6.10"

	Area (ac)	CN	Description
*	0.060	98	Impervious
*	0.470	61	Post - B Soils
*	0.000	74	Post - C Soils
	0.530	65	Weighted Average
	0.470		88.68% Pervious Area
	0.060		11.32% Impervious Area

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

Subcatchment 2A: Post 2A - Offsite



Hydrograph for Subcatchment 2A: Post 2A - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.28	0.00	0.00
10.00	0.97	0.00	**0.00**
15.00	5.36	1.90	**0.08**
20.00	**5.90**	**2.28**	0.03
25.00	**6.10**	**2.42**	0.00
30.00	6.10	2.42	0.00
35.00	6.10	2.42	0.00
40.00	6.10	2.42	0.00
45.00	6.10	2.42	0.00
50.00	6.10	2.42	0.00
55.00	6.10	2.42	0.00
60.00	6.10	2.42	0.00
65.00	6.10	2.42	0.00
70.00	6.10	2.42	0.00
75.00	6.10	2.42	0.00
80.00	6.10	2.42	0.00
85.00	6.10	2.42	0.00
90.00	6.10	2.42	0.00
95.00	6.10	2.42	0.00
100.00	6.10	2.42	0.00
105.00	6.10	2.42	0.00
110.00	6.10	2.42	0.00
115.00	6.10	2.42	0.00
120.00	6.10	2.42	0.00
125.00	6.10	2.42	0.00
130.00	6.10	2.42	0.00
135.00	6.10	2.42	0.00
140.00	6.10	2.42	0.00
145.00	6.10	2.42	0.00
150.00	6.10	2.42	0.00
155.00	6.10	2.42	0.00
160.00	6.10	2.42	0.00
165.00	6.10	2.42	0.00
170.00	6.10	2.42	0.00
175.00	6.10	2.42	0.00
180.00	6.10	2.42	0.00
185.00	6.10	2.42	0.00
190.00	6.10	2.42	0.00
195.00	6.10	2.42	0.00
200.00	6.10	2.42	0.00
205.00	6.10	2.42	0.00
210.00	6.10	2.42	0.00
215.00	6.10	2.42	0.00
220.00	6.10	2.42	0.00
225.00	6.10	2.42	0.00
230.00	6.10	2.42	0.00
235.00	6.10	2.42	0.00
240.00	6.10	2.42	0.00
245.00	6.10	2.42	0.00
250.00	6.10	2.42	0.00
255.00	6.10	2.42	0.00
260.00	6.10	2.42	0.00
265.00	6.10	2.42	0.00
270.00	6.10	2.42	0.00
275.00	6.10	2.42	0.00
280.00	6.10	2.42	0.00
285.00	6.10	2.42	0.00
290.00	6.10	2.42	0.00
295.00	6.10	2.42	0.00
300.00	6.10	2.42	0.00
305.00	6.10	2.42	0.00
310.00	6.10	2.42	0.00
315.00	6.10	2.42	0.00
320.00	6.10	2.42	0.00
325.00	6.10	2.42	0.00
330.00	6.10	2.42	0.00
335.00	6.10	2.42	0.00
340.00	6.10	2.42	0.00
345.00	6.10	2.42	0.00
350.00	6.10	2.42	0.00
355.00	6.10	2.42	0.00
360.00	6.10	2.42	0.00
365.00	6.10	2.42	0.00
370.00	6.10	2.42	0.00
375.00	6.10	2.42	0.00
380.00	6.10	2.42	0.00
385.00	6.10	2.42	0.00
390.00	6.10	2.42	0.00
395.00	6.10	2.42	0.00
400.00	6.10	2.42	0.00
405.00	6.10	2.42	0.00
410.00	6.10	2.42	0.00
415.00	6.10	2.42	0.00
420.00	6.10	2.42	0.00
425.00	6.10	2.42	0.00
430.00	6.10	2.42	0.00
435.00	6.10	2.42	0.00
440.00	6.10	2.42	0.00
445.00	6.10	2.42	0.00
450.00	6.10	2.42	0.00
455.00	6.10	2.42	0.00
460.00	6.10	2.42	0.00
465.00	6.10	2.42	0.00
470.00	6.10	2.42	0.00
475.00	6.10	2.42	0.00
480.00	6.10	2.42	0.00
485.00	6.10	2.42	0.00
490.00	6.10	2.42	0.00
495.00	6.10	2.42	0.00
500.00	6.10	2.42	0.00

Summary for Subcatchment 3: Pre - North

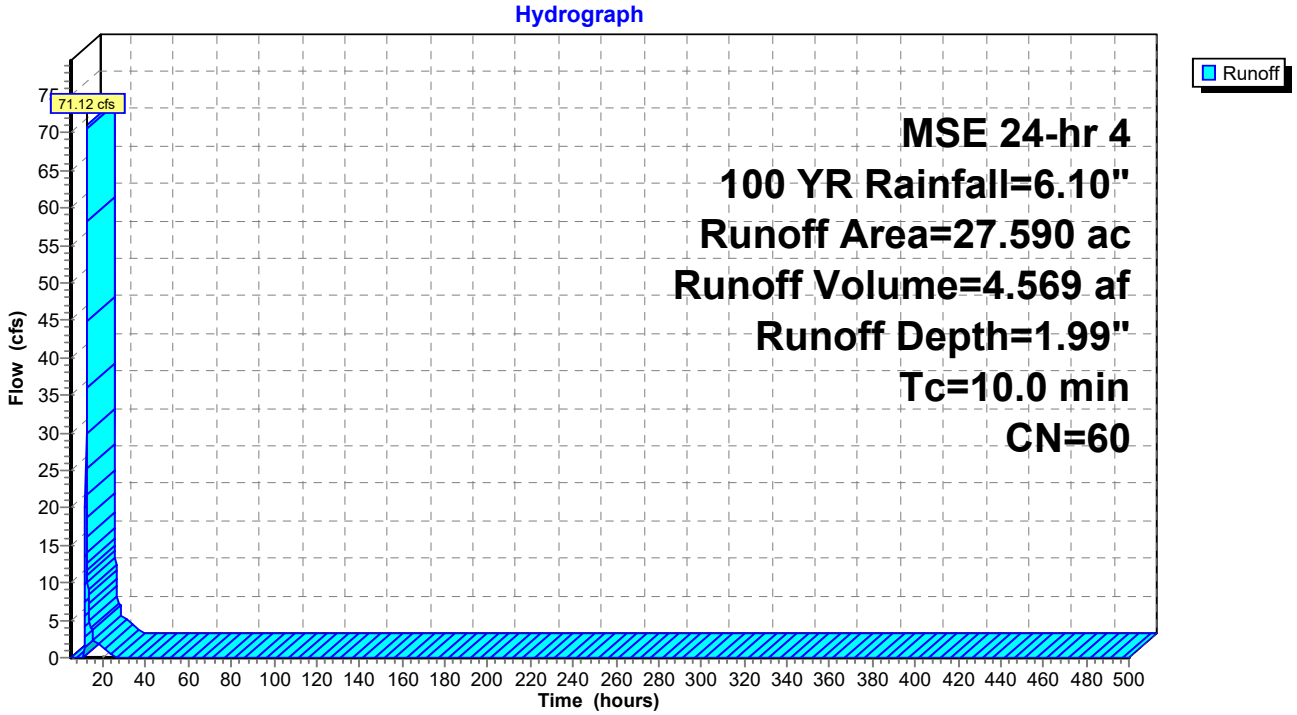
Runoff = 71.12 cfs @ 12.19 hrs, Volume= 4.569 af, Depth= 1.99"
Routed to Link 1L : Total Pre - Development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 100 YR Rainfall=6.10"

	Area (ac)	CN	Description
*	18.190	55	Pre Dev - B Soils
*	9.400	70	Pre Dev - C Soils
	27.590	60	Weighted Average
	27.590		100.00% Pervious Area

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

Subcatchment 3: Pre - North



Hydrograph for Subcatchment 3: Pre - North

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.28	0.00	0.00
10.00	0.97	0.00	**0.00**
15.00	5.36	1.52	**3.69**
20.00	**5.90**	**1.86**	1.40
25.00	**6.10**	**1.99**	0.00
30.00	6.10	1.99	0.00
35.00	6.10	1.99	0.00
40.00	6.10	1.99	0.00
45.00	6.10	1.99	0.00
50.00	6.10	1.99	0.00
55.00	6.10	1.99	0.00
60.00	6.10	1.99	0.00
65.00	6.10	1.99	0.00
70.00	6.10	1.99	0.00
75.00	6.10	1.99	0.00
80.00	6.10	1.99	0.00
85.00	6.10	1.99	0.00
90.00	6.10	1.99	0.00
95.00	6.10	1.99	0.00
100.00	6.10	1.99	0.00
105.00	6.10	1.99	0.00
110.00	6.10	1.99	0.00
115.00	6.10	1.99	0.00
120.00	6.10	1.99	0.00
125.00	6.10	1.99	0.00
130.00	6.10	1.99	0.00
135.00	6.10	1.99	0.00
140.00	6.10	1.99	0.00
145.00	6.10	1.99	0.00
150.00	6.10	1.99	0.00
155.00	6.10	1.99	0.00
160.00	6.10	1.99	0.00
165.00	6.10	1.99	0.00
170.00	6.10	1.99	0.00
175.00	6.10	1.99	0.00
180.00	6.10	1.99	0.00
185.00	6.10	1.99	0.00
190.00	6.10	1.99	0.00
195.00	6.10	1.99	0.00
200.00	6.10	1.99	0.00
205.00	6.10	1.99	0.00
210.00	6.10	1.99	0.00
215.00	6.10	1.99	0.00
220.00	6.10	1.99	0.00
225.00	6.10	1.99	0.00
230.00	6.10	1.99	0.00
235.00	6.10	1.99	0.00
240.00	6.10	1.99	0.00
245.00	6.10	1.99	0.00
250.00	6.10	1.99	0.00
255.00	6.10	1.99	0.00
260.00	6.10	1.99	0.00
265.00	6.10	1.99	0.00
270.00	6.10	1.99	0.00
275.00	6.10	1.99	0.00
280.00	6.10	1.99	0.00
285.00	6.10	1.99	0.00
290.00	6.10	1.99	0.00
295.00	6.10	1.99	0.00
300.00	6.10	1.99	0.00
305.00	6.10	1.99	0.00
310.00	6.10	1.99	0.00
315.00	6.10	1.99	0.00
320.00	6.10	1.99	0.00
325.00	6.10	1.99	0.00
330.00	6.10	1.99	0.00
335.00	6.10	1.99	0.00
340.00	6.10	1.99	0.00
345.00	6.10	1.99	0.00
350.00	6.10	1.99	0.00
355.00	6.10	1.99	0.00
360.00	6.10	1.99	0.00
365.00	6.10	1.99	0.00
370.00	6.10	1.99	0.00
375.00	6.10	1.99	0.00
380.00	6.10	1.99	0.00
385.00	6.10	1.99	0.00
390.00	6.10	1.99	0.00
395.00	6.10	1.99	0.00
400.00	6.10	1.99	0.00
405.00	6.10	1.99	0.00
410.00	6.10	1.99	0.00
415.00	6.10	1.99	0.00
420.00	6.10	1.99	0.00
425.00	6.10	1.99	0.00
430.00	6.10	1.99	0.00
435.00	6.10	1.99	0.00
440.00	6.10	1.99	0.00
445.00	6.10	1.99	0.00
450.00	6.10	1.99	0.00
455.00	6.10	1.99	0.00
460.00	6.10	1.99	0.00
465.00	6.10	1.99	0.00
470.00	6.10	1.99	0.00
475.00	6.10	1.99	0.00
480.00	6.10	1.99	0.00
485.00	6.10	1.99	0.00
490.00	6.10	1.99	0.00
495.00	6.10	1.99	0.00
500.00	6.10	1.99	0.00

Summary for Subcatchment 3A: Post 3A

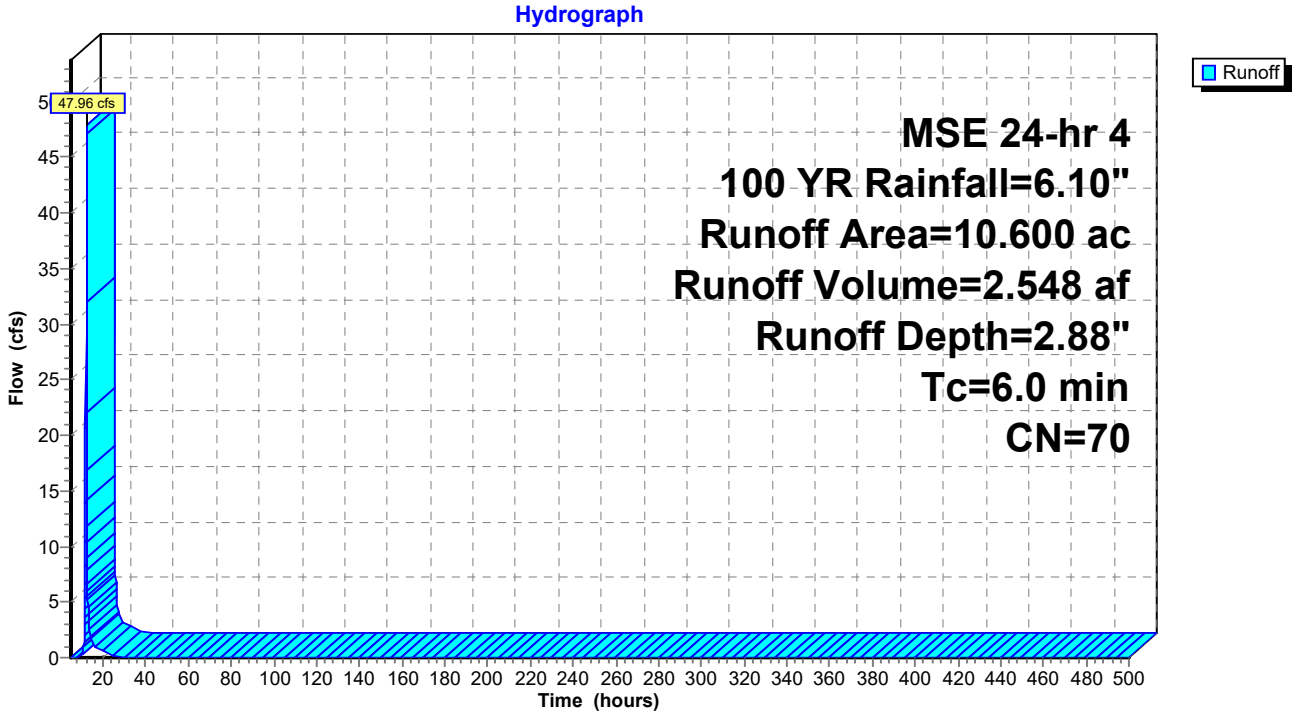
Runoff = 47.96 cfs @ 12.13 hrs, Volume= 2.548 af, Depth= 2.88"
Routed to Pond P3A : Pond 3A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 100 YR Rainfall=6.10"

	Area (ac)	CN	Description
*	1.970	98	Impervious
*	6.570	61	Post - B Soils
*	2.060	74	Post - C Soils
	10.600	70	Weighted Average
	8.630		81.42% Pervious Area
	1.970		18.58% Impervious Area

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

Subcatchment 3A: Post 3A



Hydrograph for Subcatchment 3A: Post 3A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.28	0.00	0.00
10.00	0.97	0.00	**0.10**
15.00	5.36	2.31	**1.76**
20.00	**5.90**	**2.73**	0.65
25.00	**6.10**	**2.88**	0.00
30.00	6.10	2.88	0.00
35.00	6.10	2.88	0.00
40.00	6.10	2.88	0.00
45.00	6.10	2.88	0.00
50.00	6.10	2.88	0.00
55.00	6.10	2.88	0.00
60.00	6.10	2.88	0.00
65.00	6.10	2.88	0.00
70.00	6.10	2.88	0.00
75.00	6.10	2.88	0.00
80.00	6.10	2.88	0.00
85.00	6.10	2.88	0.00
90.00	6.10	2.88	0.00
95.00	6.10	2.88	0.00
100.00	6.10	2.88	0.00
105.00	6.10	2.88	0.00
110.00	6.10	2.88	0.00
115.00	6.10	2.88	0.00
120.00	6.10	2.88	0.00
125.00	6.10	2.88	0.00
130.00	6.10	2.88	0.00
135.00	6.10	2.88	0.00
140.00	6.10	2.88	0.00
145.00	6.10	2.88	0.00
150.00	6.10	2.88	0.00
155.00	6.10	2.88	0.00
160.00	6.10	2.88	0.00
165.00	6.10	2.88	0.00
170.00	6.10	2.88	0.00
175.00	6.10	2.88	0.00
180.00	6.10	2.88	0.00
185.00	6.10	2.88	0.00
190.00	6.10	2.88	0.00
195.00	6.10	2.88	0.00
200.00	6.10	2.88	0.00
205.00	6.10	2.88	0.00
210.00	6.10	2.88	0.00
215.00	6.10	2.88	0.00
220.00	6.10	2.88	0.00
225.00	6.10	2.88	0.00
230.00	6.10	2.88	0.00
235.00	6.10	2.88	0.00
240.00	6.10	2.88	0.00
245.00	6.10	2.88	0.00
250.00	6.10	2.88	0.00
255.00	6.10	2.88	0.00
260.00	6.10	2.88	0.00
265.00	6.10	2.88	0.00
270.00	6.10	2.88	0.00
275.00	6.10	2.88	0.00
280.00	6.10	2.88	0.00
285.00	6.10	2.88	0.00
290.00	6.10	2.88	0.00
295.00	6.10	2.88	0.00
300.00	6.10	2.88	0.00
305.00	6.10	2.88	0.00
310.00	6.10	2.88	0.00
315.00	6.10	2.88	0.00
320.00	6.10	2.88	0.00
325.00	6.10	2.88	0.00
330.00	6.10	2.88	0.00
335.00	6.10	2.88	0.00
340.00	6.10	2.88	0.00
345.00	6.10	2.88	0.00
350.00	6.10	2.88	0.00
355.00	6.10	2.88	0.00
360.00	6.10	2.88	0.00
365.00	6.10	2.88	0.00
370.00	6.10	2.88	0.00
375.00	6.10	2.88	0.00
380.00	6.10	2.88	0.00
385.00	6.10	2.88	0.00
390.00	6.10	2.88	0.00
395.00	6.10	2.88	0.00
400.00	6.10	2.88	0.00
405.00	6.10	2.88	0.00
410.00	6.10	2.88	0.00
415.00	6.10	2.88	0.00
420.00	6.10	2.88	0.00
425.00	6.10	2.88	0.00
430.00	6.10	2.88	0.00
435.00	6.10	2.88	0.00
440.00	6.10	2.88	0.00
445.00	6.10	2.88	0.00
450.00	6.10	2.88	0.00
455.00	6.10	2.88	0.00
460.00	6.10	2.88	0.00
465.00	6.10	2.88	0.00
470.00	6.10	2.88	0.00
475.00	6.10	2.88	0.00
480.00	6.10	2.88	0.00
485.00	6.10	2.88	0.00
490.00	6.10	2.88	0.00
495.00	6.10	2.88	0.00
500.00	6.10	2.88	0.00

Summary for Subcatchment 3B: Post 3B

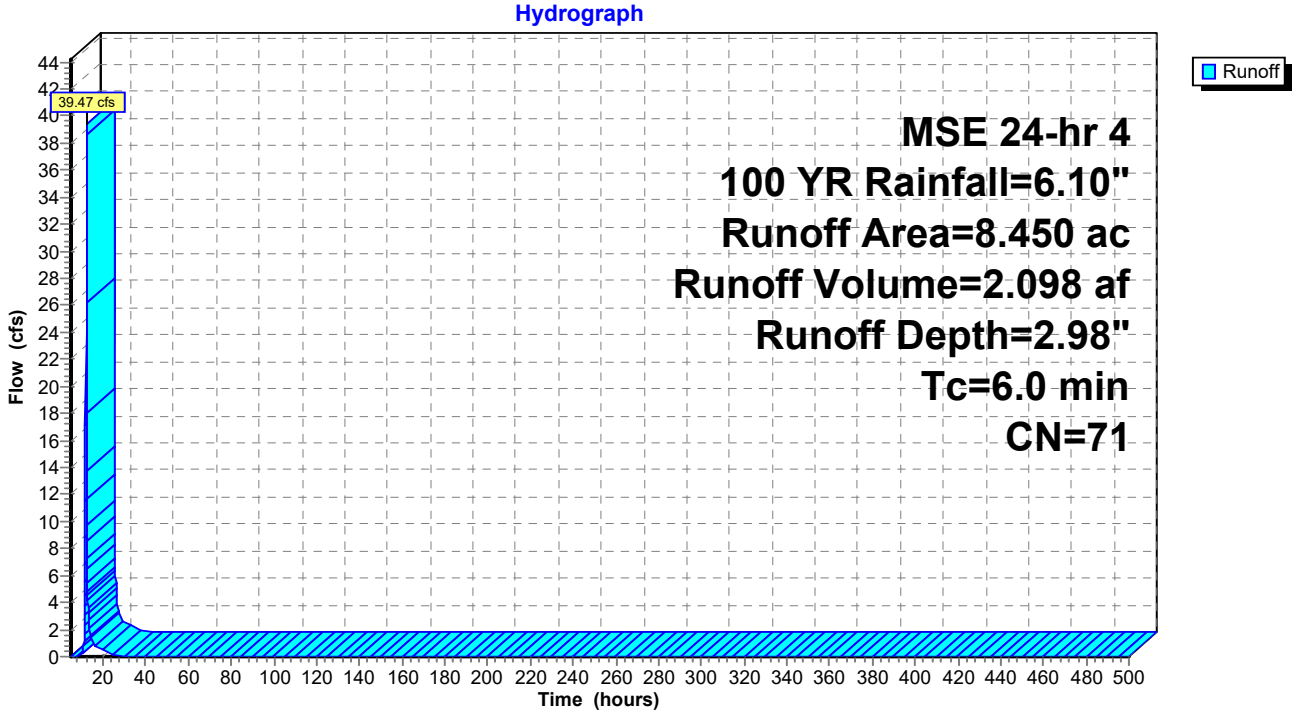
Runoff = 39.47 cfs @ 12.13 hrs, Volume= 2.098 af, Depth= 2.98"
Routed to Pond P3B : Pond 3B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 100 YR Rainfall=6.10"

	Area (ac)	CN	Description
*	1.680	98	Impervious
*	5.290	61	Post - B Soils
*	1.480	74	Post - C Soils
	8.450	71	Weighted Average
	6.770		80.12% Pervious Area
	1.680		19.88% Impervious Area

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

Subcatchment 3B: Post 3B



Hydrograph for Subcatchment 3B: Post 3B

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.28	0.00	0.00
10.00	0.97	0.01	**0.12**
15.00	5.36	2.39	**1.43**
20.00	**5.90**	**2.82**	0.52
25.00	**6.10**	**2.98**	0.00
30.00	6.10	2.98	0.00
35.00	6.10	2.98	0.00
40.00	6.10	2.98	0.00
45.00	6.10	2.98	0.00
50.00	6.10	2.98	0.00
55.00	6.10	2.98	0.00
60.00	6.10	2.98	0.00
65.00	6.10	2.98	0.00
70.00	6.10	2.98	0.00
75.00	6.10	2.98	0.00
80.00	6.10	2.98	0.00
85.00	6.10	2.98	0.00
90.00	6.10	2.98	0.00
95.00	6.10	2.98	0.00
100.00	6.10	2.98	0.00
105.00	6.10	2.98	0.00
110.00	6.10	2.98	0.00
115.00	6.10	2.98	0.00
120.00	6.10	2.98	0.00
125.00	6.10	2.98	0.00
130.00	6.10	2.98	0.00
135.00	6.10	2.98	0.00
140.00	6.10	2.98	0.00
145.00	6.10	2.98	0.00
150.00	6.10	2.98	0.00
155.00	6.10	2.98	0.00
160.00	6.10	2.98	0.00
165.00	6.10	2.98	0.00
170.00	6.10	2.98	0.00
175.00	6.10	2.98	0.00
180.00	6.10	2.98	0.00
185.00	6.10	2.98	0.00
190.00	6.10	2.98	0.00
195.00	6.10	2.98	0.00
200.00	6.10	2.98	0.00
205.00	6.10	2.98	0.00
210.00	6.10	2.98	0.00
215.00	6.10	2.98	0.00
220.00	6.10	2.98	0.00
225.00	6.10	2.98	0.00
230.00	6.10	2.98	0.00
235.00	6.10	2.98	0.00
240.00	6.10	2.98	0.00
245.00	6.10	2.98	0.00
250.00	6.10	2.98	0.00
255.00	6.10	2.98	0.00
260.00	6.10	2.98	0.00
265.00	6.10	2.98	0.00
270.00	6.10	2.98	0.00
275.00	6.10	2.98	0.00
280.00	6.10	2.98	0.00
285.00	6.10	2.98	0.00
290.00	6.10	2.98	0.00
295.00	6.10	2.98	0.00
300.00	6.10	2.98	0.00
305.00	6.10	2.98	0.00
310.00	6.10	2.98	0.00
315.00	6.10	2.98	0.00
320.00	6.10	2.98	0.00
325.00	6.10	2.98	0.00
330.00	6.10	2.98	0.00
335.00	6.10	2.98	0.00
340.00	6.10	2.98	0.00
345.00	6.10	2.98	0.00
350.00	6.10	2.98	0.00
355.00	6.10	2.98	0.00
360.00	6.10	2.98	0.00
365.00	6.10	2.98	0.00
370.00	6.10	2.98	0.00
375.00	6.10	2.98	0.00
380.00	6.10	2.98	0.00
385.00	6.10	2.98	0.00
390.00	6.10	2.98	0.00
395.00	6.10	2.98	0.00
400.00	6.10	2.98	0.00
405.00	6.10	2.98	0.00
410.00	6.10	2.98	0.00
415.00	6.10	2.98	0.00
420.00	6.10	2.98	0.00
425.00	6.10	2.98	0.00
430.00	6.10	2.98	0.00
435.00	6.10	2.98	0.00
440.00	6.10	2.98	0.00
445.00	6.10	2.98	0.00
450.00	6.10	2.98	0.00
455.00	6.10	2.98	0.00
460.00	6.10	2.98	0.00
465.00	6.10	2.98	0.00
470.00	6.10	2.98	0.00
475.00	6.10	2.98	0.00
480.00	6.10	2.98	0.00
485.00	6.10	2.98	0.00
490.00	6.10	2.98	0.00
495.00	6.10	2.98	0.00
500.00	6.10	2.98	0.00

Summary for Subcatchment 3C: Post 3C

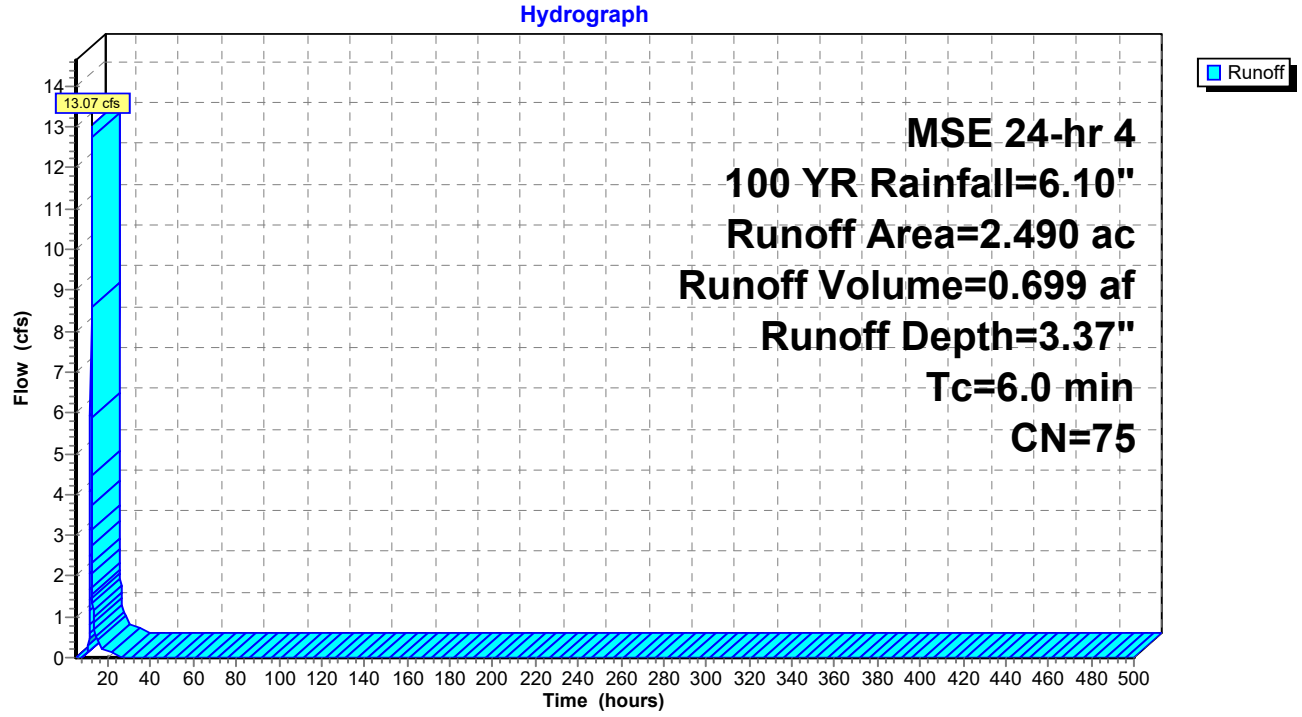
Runoff = 13.07 cfs @ 12.13 hrs, Volume= 0.699 af, Depth= 3.37"
Routed to Pond P3C : Pond 3C

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 100 YR Rainfall=6.10"

	Area (ac)	CN	Description
*	0.570	98	Impervious
*	0.800	61	Post - B Soils
*	1.120	74	Post - C Soils
	2.490	75	Weighted Average
	1.920		77.11% Pervious Area
	0.570		22.89% Impervious Area

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

Subcatchment 3C: Post 3C



Hydrograph for Subcatchment 3C: Post 3C

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.28	0.00	0.00	260.00	6.10	3.37	0.00
10.00	0.97	0.02	**0.09**	265.00	6.10	3.37	0.00
15.00	5.36	2.75	**0.45**	270.00	6.10	3.37	0.00
20.00	**5.90**	**3.20**	0.16	275.00	6.10	3.37	0.00
25.00	**6.10**	**3.37**	0.00	280.00	6.10	3.37	0.00
30.00	6.10	3.37	0.00	285.00	6.10	3.37	0.00
35.00	6.10	3.37	0.00	290.00	6.10	3.37	0.00
40.00	6.10	3.37	0.00	295.00	6.10	3.37	0.00
45.00	6.10	3.37	0.00	300.00	6.10	3.37	0.00
50.00	6.10	3.37	0.00	305.00	6.10	3.37	0.00
55.00	6.10	3.37	0.00	310.00	6.10	3.37	0.00
60.00	6.10	3.37	0.00	315.00	6.10	3.37	0.00
65.00	6.10	3.37	0.00	320.00	6.10	3.37	0.00
70.00	6.10	3.37	0.00	325.00	6.10	3.37	0.00
75.00	6.10	3.37	0.00	330.00	6.10	3.37	0.00
80.00	6.10	3.37	0.00	335.00	6.10	3.37	0.00
85.00	6.10	3.37	0.00	340.00	6.10	3.37	0.00
90.00	6.10	3.37	0.00	345.00	6.10	3.37	0.00
95.00	6.10	3.37	0.00	350.00	6.10	3.37	0.00
100.00	6.10	3.37	0.00	355.00	6.10	3.37	0.00
105.00	6.10	3.37	0.00	360.00	6.10	3.37	0.00
110.00	6.10	3.37	0.00	365.00	6.10	3.37	0.00
115.00	6.10	3.37	0.00	370.00	6.10	3.37	0.00
120.00	6.10	3.37	0.00	375.00	6.10	3.37	0.00
125.00	6.10	3.37	0.00	380.00	6.10	3.37	0.00
130.00	6.10	3.37	0.00	385.00	6.10	3.37	0.00
135.00	6.10	3.37	0.00	390.00	6.10	3.37	0.00
140.00	6.10	3.37	0.00	395.00	6.10	3.37	0.00
145.00	6.10	3.37	0.00	400.00	6.10	3.37	0.00
150.00	6.10	3.37	0.00	405.00	6.10	3.37	0.00
155.00	6.10	3.37	0.00	410.00	6.10	3.37	0.00
160.00	6.10	3.37	0.00	415.00	6.10	3.37	0.00
165.00	6.10	3.37	0.00	420.00	6.10	3.37	0.00
170.00	6.10	3.37	0.00	425.00	6.10	3.37	0.00
175.00	6.10	3.37	0.00	430.00	6.10	3.37	0.00
180.00	6.10	3.37	0.00	435.00	6.10	3.37	0.00
185.00	6.10	3.37	0.00	440.00	6.10	3.37	0.00
190.00	6.10	3.37	0.00	445.00	6.10	3.37	0.00
195.00	6.10	3.37	0.00	450.00	6.10	3.37	0.00
200.00	6.10	3.37	0.00	455.00	6.10	3.37	0.00
205.00	6.10	3.37	0.00	460.00	6.10	3.37	0.00
210.00	6.10	3.37	0.00	465.00	6.10	3.37	0.00
215.00	6.10	3.37	0.00	470.00	6.10	3.37	0.00
220.00	6.10	3.37	0.00	475.00	6.10	3.37	0.00
225.00	6.10	3.37	0.00	480.00	6.10	3.37	0.00
230.00	6.10	3.37	0.00	485.00	6.10	3.37	0.00
235.00	6.10	3.37	0.00	490.00	6.10	3.37	0.00
240.00	6.10	3.37	0.00	495.00	6.10	3.37	0.00
245.00	6.10	3.37	0.00	500.00	6.10	3.37	0.00
250.00	6.10	3.37	0.00				
255.00	6.10	3.37	0.00				

Summary for Subcatchment 3D: Post 3D

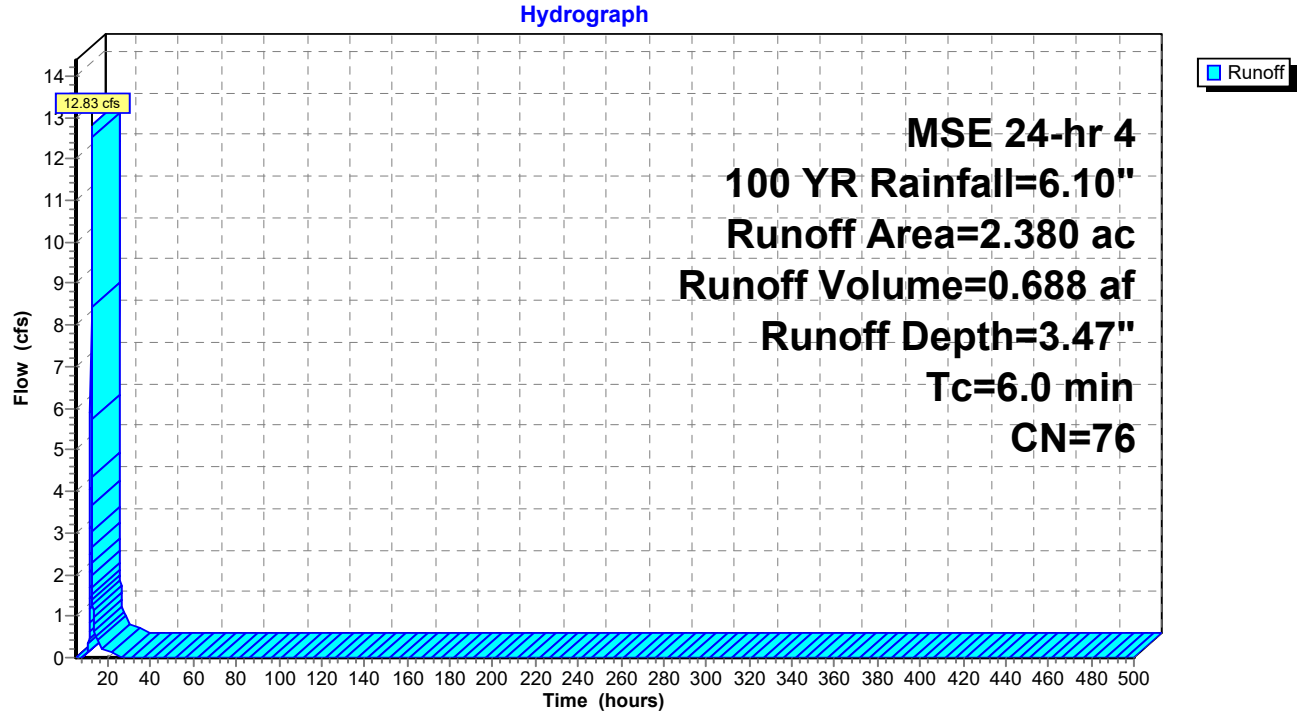
Runoff = 12.83 cfs @ 12.13 hrs, Volume= 0.688 af, Depth= 3.47"
Routed to Pond P3D : Pond 3D

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 100 YR Rainfall=6.10"

	Area (ac)	CN	Description
*	0.570	98	Impervious
*	0.610	61	Post - B Soils
*	1.200	74	Post - C Soils
	2.380	76	Weighted Average
	1.810		76.05% Pervious Area
	0.570		23.95% Impervious Area

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

Subcatchment 3D: Post 3D



Hydrograph for Subcatchment 3D: Post 3D

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.28	0.00	0.00	260.00	6.10	3.47	0.00
10.00	0.97	0.03	**0.10**	265.00	6.10	3.47	0.00
15.00	5.36	2.84	**0.43**	270.00	6.10	3.47	0.00
20.00	**5.90**	**3.30**	0.16	275.00	6.10	3.47	0.00
25.00	**6.10**	**3.47**	0.00	280.00	6.10	3.47	0.00
30.00	6.10	3.47	0.00	285.00	6.10	3.47	0.00
35.00	6.10	3.47	0.00	290.00	6.10	3.47	0.00
40.00	6.10	3.47	0.00	295.00	6.10	3.47	0.00
45.00	6.10	3.47	0.00	300.00	6.10	3.47	0.00
50.00	6.10	3.47	0.00	305.00	6.10	3.47	0.00
55.00	6.10	3.47	0.00	310.00	6.10	3.47	0.00
60.00	6.10	3.47	0.00	315.00	6.10	3.47	0.00
65.00	6.10	3.47	0.00	320.00	6.10	3.47	0.00
70.00	6.10	3.47	0.00	325.00	6.10	3.47	0.00
75.00	6.10	3.47	0.00	330.00	6.10	3.47	0.00
80.00	6.10	3.47	0.00	335.00	6.10	3.47	0.00
85.00	6.10	3.47	0.00	340.00	6.10	3.47	0.00
90.00	6.10	3.47	0.00	345.00	6.10	3.47	0.00
95.00	6.10	3.47	0.00	350.00	6.10	3.47	0.00
100.00	6.10	3.47	0.00	355.00	6.10	3.47	0.00
105.00	6.10	3.47	0.00	360.00	6.10	3.47	0.00
110.00	6.10	3.47	0.00	365.00	6.10	3.47	0.00
115.00	6.10	3.47	0.00	370.00	6.10	3.47	0.00
120.00	6.10	3.47	0.00	375.00	6.10	3.47	0.00
125.00	6.10	3.47	0.00	380.00	6.10	3.47	0.00
130.00	6.10	3.47	0.00	385.00	6.10	3.47	0.00
135.00	6.10	3.47	0.00	390.00	6.10	3.47	0.00
140.00	6.10	3.47	0.00	395.00	6.10	3.47	0.00
145.00	6.10	3.47	0.00	400.00	6.10	3.47	0.00
150.00	6.10	3.47	0.00	405.00	6.10	3.47	0.00
155.00	6.10	3.47	0.00	410.00	6.10	3.47	0.00
160.00	6.10	3.47	0.00	415.00	6.10	3.47	0.00
165.00	6.10	3.47	0.00	420.00	6.10	3.47	0.00
170.00	6.10	3.47	0.00	425.00	6.10	3.47	0.00
175.00	6.10	3.47	0.00	430.00	6.10	3.47	0.00
180.00	6.10	3.47	0.00	435.00	6.10	3.47	0.00
185.00	6.10	3.47	0.00	440.00	6.10	3.47	0.00
190.00	6.10	3.47	0.00	445.00	6.10	3.47	0.00
195.00	6.10	3.47	0.00	450.00	6.10	3.47	0.00
200.00	6.10	3.47	0.00	455.00	6.10	3.47	0.00
205.00	6.10	3.47	0.00	460.00	6.10	3.47	0.00
210.00	6.10	3.47	0.00	465.00	6.10	3.47	0.00
215.00	6.10	3.47	0.00	470.00	6.10	3.47	0.00
220.00	6.10	3.47	0.00	475.00	6.10	3.47	0.00
225.00	6.10	3.47	0.00	480.00	6.10	3.47	0.00
230.00	6.10	3.47	0.00	485.00	6.10	3.47	0.00
235.00	6.10	3.47	0.00	490.00	6.10	3.47	0.00
240.00	6.10	3.47	0.00	495.00	6.10	3.47	0.00
245.00	6.10	3.47	0.00	500.00	6.10	3.47	0.00
250.00	6.10	3.47	0.00				
255.00	6.10	3.47	0.00				

Summary for Subcatchment 3E: Post 3E

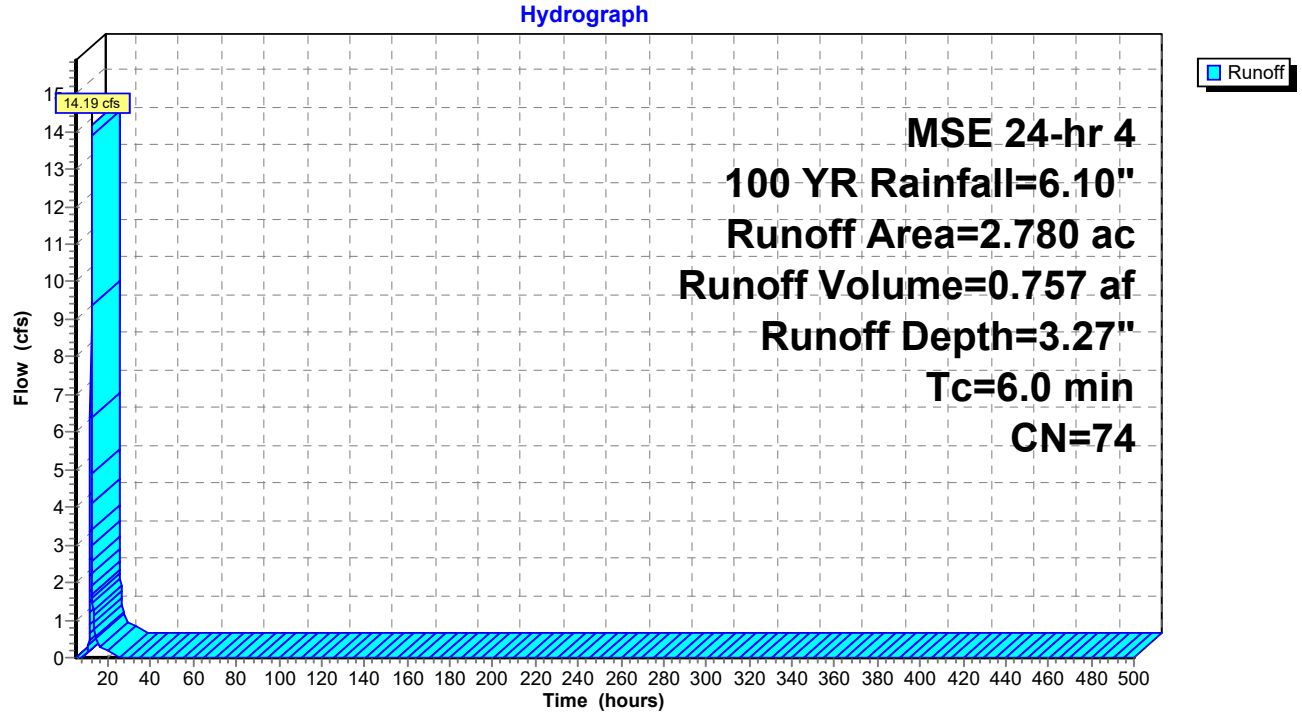
Runoff = 14.19 cfs @ 12.13 hrs, Volume= 0.757 af, Depth= 3.27"
Routed to Pond P3E : Pond 3E

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 100 YR Rainfall=6.10"

	Area (ac)	CN	Description
*	0.530	98	Impervious
*	0.920	61	Post - B Soils
*	1.330	74	Post - C Soils
	2.780	74	Weighted Average
	2.250		80.94% Pervious Area
	0.530		19.06% Impervious Area

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

Subcatchment 3E: Post 3E



Hydrograph for Subcatchment 3E: Post 3E

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.28	0.00	0.00	260.00	6.10	3.27	0.00
10.00	0.97	0.02	**0.08**	265.00	6.10	3.27	0.00
15.00	5.36	2.66	**0.49**	270.00	6.10	3.27	0.00
20.00	**5.90**	**3.10**	0.18	275.00	6.10	3.27	0.00
25.00	**6.10**	**3.27**	0.00	280.00	6.10	3.27	0.00
30.00	6.10	3.27	0.00	285.00	6.10	3.27	0.00
35.00	6.10	3.27	0.00	290.00	6.10	3.27	0.00
40.00	6.10	3.27	0.00	295.00	6.10	3.27	0.00
45.00	6.10	3.27	0.00	300.00	6.10	3.27	0.00
50.00	6.10	3.27	0.00	305.00	6.10	3.27	0.00
55.00	6.10	3.27	0.00	310.00	6.10	3.27	0.00
60.00	6.10	3.27	0.00	315.00	6.10	3.27	0.00
65.00	6.10	3.27	0.00	320.00	6.10	3.27	0.00
70.00	6.10	3.27	0.00	325.00	6.10	3.27	0.00
75.00	6.10	3.27	0.00	330.00	6.10	3.27	0.00
80.00	6.10	3.27	0.00	335.00	6.10	3.27	0.00
85.00	6.10	3.27	0.00	340.00	6.10	3.27	0.00
90.00	6.10	3.27	0.00	345.00	6.10	3.27	0.00
95.00	6.10	3.27	0.00	350.00	6.10	3.27	0.00
100.00	6.10	3.27	0.00	355.00	6.10	3.27	0.00
105.00	6.10	3.27	0.00	360.00	6.10	3.27	0.00
110.00	6.10	3.27	0.00	365.00	6.10	3.27	0.00
115.00	6.10	3.27	0.00	370.00	6.10	3.27	0.00
120.00	6.10	3.27	0.00	375.00	6.10	3.27	0.00
125.00	6.10	3.27	0.00	380.00	6.10	3.27	0.00
130.00	6.10	3.27	0.00	385.00	6.10	3.27	0.00
135.00	6.10	3.27	0.00	390.00	6.10	3.27	0.00
140.00	6.10	3.27	0.00	395.00	6.10	3.27	0.00
145.00	6.10	3.27	0.00	400.00	6.10	3.27	0.00
150.00	6.10	3.27	0.00	405.00	6.10	3.27	0.00
155.00	6.10	3.27	0.00	410.00	6.10	3.27	0.00
160.00	6.10	3.27	0.00	415.00	6.10	3.27	0.00
165.00	6.10	3.27	0.00	420.00	6.10	3.27	0.00
170.00	6.10	3.27	0.00	425.00	6.10	3.27	0.00
175.00	6.10	3.27	0.00	430.00	6.10	3.27	0.00
180.00	6.10	3.27	0.00	435.00	6.10	3.27	0.00
185.00	6.10	3.27	0.00	440.00	6.10	3.27	0.00
190.00	6.10	3.27	0.00	445.00	6.10	3.27	0.00
195.00	6.10	3.27	0.00	450.00	6.10	3.27	0.00
200.00	6.10	3.27	0.00	455.00	6.10	3.27	0.00
205.00	6.10	3.27	0.00	460.00	6.10	3.27	0.00
210.00	6.10	3.27	0.00	465.00	6.10	3.27	0.00
215.00	6.10	3.27	0.00	470.00	6.10	3.27	0.00
220.00	6.10	3.27	0.00	475.00	6.10	3.27	0.00
225.00	6.10	3.27	0.00	480.00	6.10	3.27	0.00
230.00	6.10	3.27	0.00	485.00	6.10	3.27	0.00
235.00	6.10	3.27	0.00	490.00	6.10	3.27	0.00
240.00	6.10	3.27	0.00	495.00	6.10	3.27	0.00
245.00	6.10	3.27	0.00	500.00	6.10	3.27	0.00
250.00	6.10	3.27	0.00				
255.00	6.10	3.27	0.00				

Summary for Subcatchment 3Y: Post 3Y - Offsite

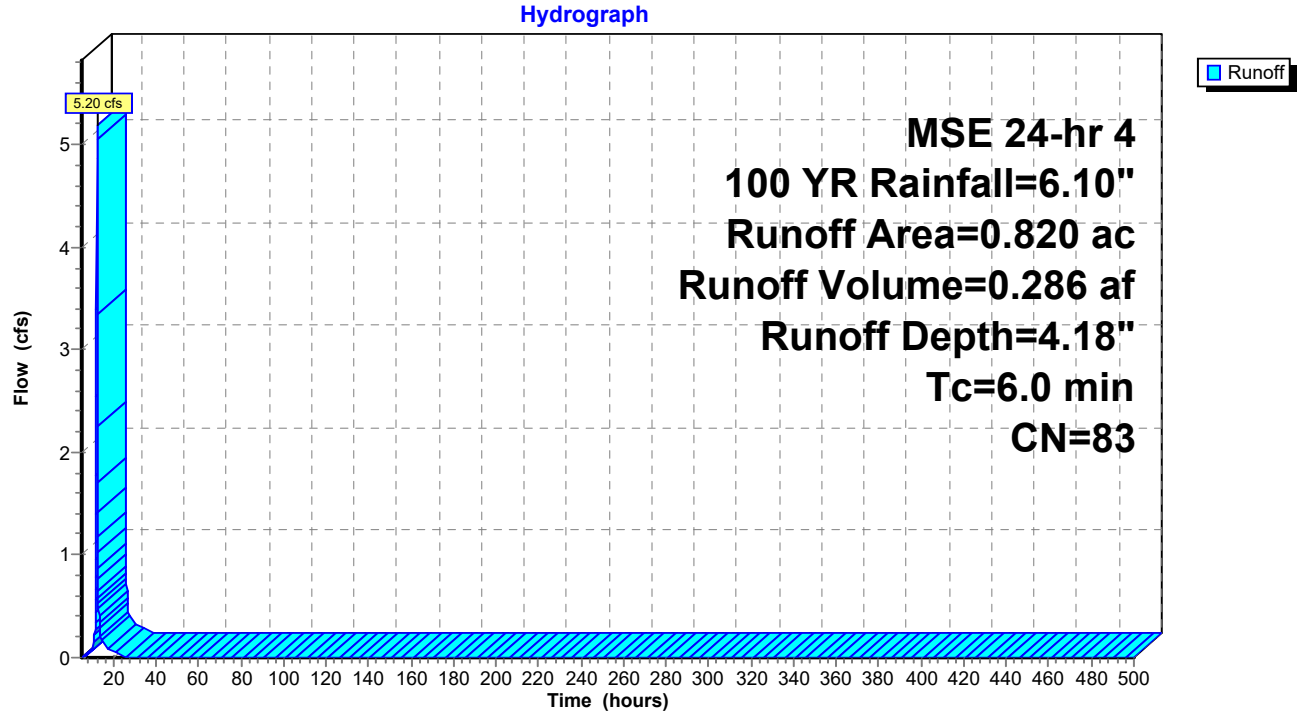
Runoff = 5.20 cfs @ 12.13 hrs, Volume= 0.286 af, Depth= 4.18"
Routed to Link 4L : Post - North

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 100 YR Rainfall=6.10"

	Area (ac)	CN	Description
*	0.300	98	Impervious
*	0.000	61	Post - B Soils
*	0.520	74	Post - C Soils
	0.820	83	Weighted Average
	0.520		63.41% Pervious Area
	0.300		36.59% Impervious Area

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

Subcatchment 3Y: Post 3Y - Offsite



Hydrograph for Subcatchment 3Y: Post 3Y - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.28	0.00	0.00
10.00	0.97	0.12	**0.07**
15.00	5.36	3.50	**0.16**
20.00	**5.90**	**4.00**	0.06
25.00	**6.10**	**4.18**	0.00
30.00	6.10	4.18	0.00
35.00	6.10	4.18	0.00
40.00	6.10	4.18	0.00
45.00	6.10	4.18	0.00
50.00	6.10	4.18	0.00
55.00	6.10	4.18	0.00
60.00	6.10	4.18	0.00
65.00	6.10	4.18	0.00
70.00	6.10	4.18	0.00
75.00	6.10	4.18	0.00
80.00	6.10	4.18	0.00
85.00	6.10	4.18	0.00
90.00	6.10	4.18	0.00
95.00	6.10	4.18	0.00
100.00	6.10	4.18	0.00
105.00	6.10	4.18	0.00
110.00	6.10	4.18	0.00
115.00	6.10	4.18	0.00
120.00	6.10	4.18	0.00
125.00	6.10	4.18	0.00
130.00	6.10	4.18	0.00
135.00	6.10	4.18	0.00
140.00	6.10	4.18	0.00
145.00	6.10	4.18	0.00
150.00	6.10	4.18	0.00
155.00	6.10	4.18	0.00
160.00	6.10	4.18	0.00
165.00	6.10	4.18	0.00
170.00	6.10	4.18	0.00
175.00	6.10	4.18	0.00
180.00	6.10	4.18	0.00
185.00	6.10	4.18	0.00
190.00	6.10	4.18	0.00
195.00	6.10	4.18	0.00
200.00	6.10	4.18	0.00
205.00	6.10	4.18	0.00
210.00	6.10	4.18	0.00
215.00	6.10	4.18	0.00
220.00	6.10	4.18	0.00
225.00	6.10	4.18	0.00
230.00	6.10	4.18	0.00
235.00	6.10	4.18	0.00
240.00	6.10	4.18	0.00
245.00	6.10	4.18	0.00
250.00	6.10	4.18	0.00
255.00	6.10	4.18	0.00
260.00	6.10	4.18	0.00
265.00	6.10	4.18	0.00
270.00	6.10	4.18	0.00
275.00	6.10	4.18	0.00
280.00	6.10	4.18	0.00
285.00	6.10	4.18	0.00
290.00	6.10	4.18	0.00
295.00	6.10	4.18	0.00
300.00	6.10	4.18	0.00
305.00	6.10	4.18	0.00
310.00	6.10	4.18	0.00
315.00	6.10	4.18	0.00
320.00	6.10	4.18	0.00
325.00	6.10	4.18	0.00
330.00	6.10	4.18	0.00
335.00	6.10	4.18	0.00
340.00	6.10	4.18	0.00
345.00	6.10	4.18	0.00
350.00	6.10	4.18	0.00
355.00	6.10	4.18	0.00
360.00	6.10	4.18	0.00
365.00	6.10	4.18	0.00
370.00	6.10	4.18	0.00
375.00	6.10	4.18	0.00
380.00	6.10	4.18	0.00
385.00	6.10	4.18	0.00
390.00	6.10	4.18	0.00
395.00	6.10	4.18	0.00
400.00	6.10	4.18	0.00
405.00	6.10	4.18	0.00
410.00	6.10	4.18	0.00
415.00	6.10	4.18	0.00
420.00	6.10	4.18	0.00
425.00	6.10	4.18	0.00
430.00	6.10	4.18	0.00
435.00	6.10	4.18	0.00
440.00	6.10	4.18	0.00
445.00	6.10	4.18	0.00
450.00	6.10	4.18	0.00
455.00	6.10	4.18	0.00
460.00	6.10	4.18	0.00
465.00	6.10	4.18	0.00
470.00	6.10	4.18	0.00
475.00	6.10	4.18	0.00
480.00	6.10	4.18	0.00
485.00	6.10	4.18	0.00
490.00	6.10	4.18	0.00
495.00	6.10	4.18	0.00
500.00	6.10	4.18	0.00

Summary for Subcatchment 3Z: Post 3Z - Offsite

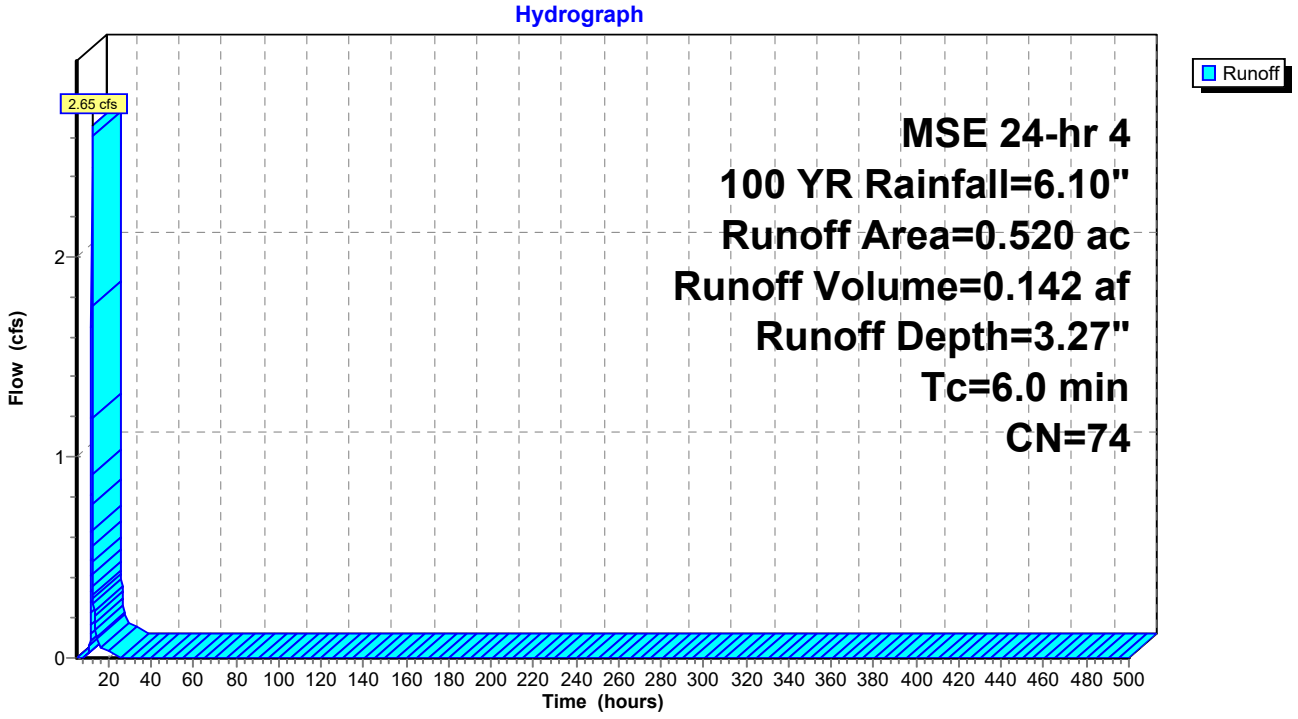
Runoff = 2.65 cfs @ 12.13 hrs, Volume= 0.142 af, Depth= 3.27"
Routed to Link 4L : Post - North

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 100 YR Rainfall=6.10"

	Area (ac)	CN	Description
*	0.000	98	Impervious
*	0.000	61	Post - B Soils
*	0.520	74	Post - C Soils
	0.520	74	Weighted Average
	0.520		100.00% Pervious Area

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

Subcatchment 3Z: Post 3Z - Offsite



Hydrograph for Subcatchment 3Z: Post 3Z - Offsite

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.28	0.00	0.00	260.00	6.10	3.27	0.00
10.00	0.97	0.02	**0.02**	265.00	6.10	3.27	0.00
15.00	5.36	2.66	**0.09**	270.00	6.10	3.27	0.00
20.00	**5.90**	**3.10**	0.03	275.00	6.10	3.27	0.00
25.00	**6.10**	**3.27**	0.00	280.00	6.10	3.27	0.00
30.00	6.10	3.27	0.00	285.00	6.10	3.27	0.00
35.00	6.10	3.27	0.00	290.00	6.10	3.27	0.00
40.00	6.10	3.27	0.00	295.00	6.10	3.27	0.00
45.00	6.10	3.27	0.00	300.00	6.10	3.27	0.00
50.00	6.10	3.27	0.00	305.00	6.10	3.27	0.00
55.00	6.10	3.27	0.00	310.00	6.10	3.27	0.00
60.00	6.10	3.27	0.00	315.00	6.10	3.27	0.00
65.00	6.10	3.27	0.00	320.00	6.10	3.27	0.00
70.00	6.10	3.27	0.00	325.00	6.10	3.27	0.00
75.00	6.10	3.27	0.00	330.00	6.10	3.27	0.00
80.00	6.10	3.27	0.00	335.00	6.10	3.27	0.00
85.00	6.10	3.27	0.00	340.00	6.10	3.27	0.00
90.00	6.10	3.27	0.00	345.00	6.10	3.27	0.00
95.00	6.10	3.27	0.00	350.00	6.10	3.27	0.00
100.00	6.10	3.27	0.00	355.00	6.10	3.27	0.00
105.00	6.10	3.27	0.00	360.00	6.10	3.27	0.00
110.00	6.10	3.27	0.00	365.00	6.10	3.27	0.00
115.00	6.10	3.27	0.00	370.00	6.10	3.27	0.00
120.00	6.10	3.27	0.00	375.00	6.10	3.27	0.00
125.00	6.10	3.27	0.00	380.00	6.10	3.27	0.00
130.00	6.10	3.27	0.00	385.00	6.10	3.27	0.00
135.00	6.10	3.27	0.00	390.00	6.10	3.27	0.00
140.00	6.10	3.27	0.00	395.00	6.10	3.27	0.00
145.00	6.10	3.27	0.00	400.00	6.10	3.27	0.00
150.00	6.10	3.27	0.00	405.00	6.10	3.27	0.00
155.00	6.10	3.27	0.00	410.00	6.10	3.27	0.00
160.00	6.10	3.27	0.00	415.00	6.10	3.27	0.00
165.00	6.10	3.27	0.00	420.00	6.10	3.27	0.00
170.00	6.10	3.27	0.00	425.00	6.10	3.27	0.00
175.00	6.10	3.27	0.00	430.00	6.10	3.27	0.00
180.00	6.10	3.27	0.00	435.00	6.10	3.27	0.00
185.00	6.10	3.27	0.00	440.00	6.10	3.27	0.00
190.00	6.10	3.27	0.00	445.00	6.10	3.27	0.00
195.00	6.10	3.27	0.00	450.00	6.10	3.27	0.00
200.00	6.10	3.27	0.00	455.00	6.10	3.27	0.00
205.00	6.10	3.27	0.00	460.00	6.10	3.27	0.00
210.00	6.10	3.27	0.00	465.00	6.10	3.27	0.00
215.00	6.10	3.27	0.00	470.00	6.10	3.27	0.00
220.00	6.10	3.27	0.00	475.00	6.10	3.27	0.00
225.00	6.10	3.27	0.00	480.00	6.10	3.27	0.00
230.00	6.10	3.27	0.00	485.00	6.10	3.27	0.00
235.00	6.10	3.27	0.00	490.00	6.10	3.27	0.00
240.00	6.10	3.27	0.00	495.00	6.10	3.27	0.00
245.00	6.10	3.27	0.00	500.00	6.10	3.27	0.00
250.00	6.10	3.27	0.00				
255.00	6.10	3.27	0.00				

Summary for Subcatchment 5S: Culvert 1

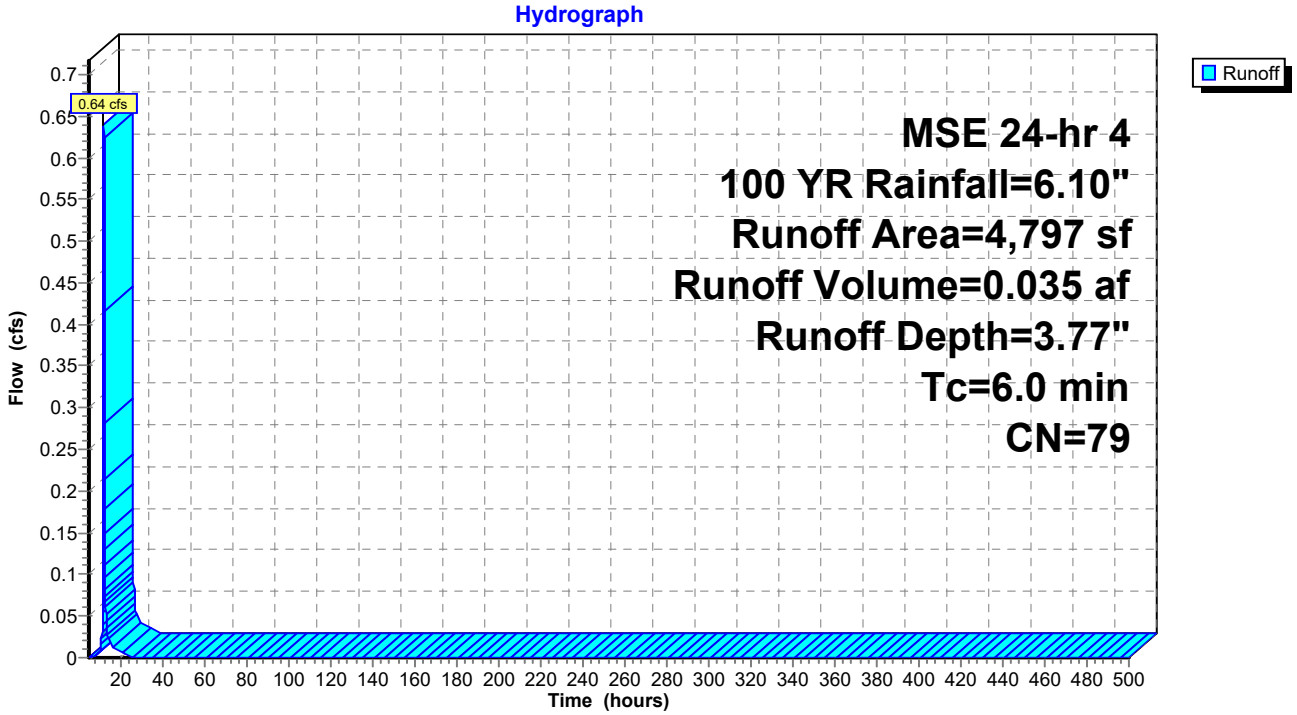
Runoff = 0.64 cfs @ 12.13 hrs, Volume= 0.035 af, Depth= 3.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 100 YR Rainfall=6.10"

	Area (sf)	CN	Description
*	2,465	61	Post - B Soils
*	2,332	98	Impervious
	4,797	79	Weighted Average
	2,465		51.39% Pervious Area
	2,332		48.61% Impervious Area

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

Subcatchment 5S: Culvert 1



Hydrograph for Subcatchment 5S: Culvert 1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.28	0.00	0.00	260.00	6.10	3.77	0.00
10.00	0.97	0.06	**0.01**	265.00	6.10	3.77	0.00
15.00	5.36	3.12	**0.02**	270.00	6.10	3.77	0.00
20.00	**5.90**	**3.59**	0.01	275.00	6.10	3.77	0.00
25.00	**6.10**	**3.77**	0.00	280.00	6.10	3.77	0.00
30.00	6.10	3.77	0.00	285.00	6.10	3.77	0.00
35.00	6.10	3.77	0.00	290.00	6.10	3.77	0.00
40.00	6.10	3.77	0.00	295.00	6.10	3.77	0.00
45.00	6.10	3.77	0.00	300.00	6.10	3.77	0.00
50.00	6.10	3.77	0.00	305.00	6.10	3.77	0.00
55.00	6.10	3.77	0.00	310.00	6.10	3.77	0.00
60.00	6.10	3.77	0.00	315.00	6.10	3.77	0.00
65.00	6.10	3.77	0.00	320.00	6.10	3.77	0.00
70.00	6.10	3.77	0.00	325.00	6.10	3.77	0.00
75.00	6.10	3.77	0.00	330.00	6.10	3.77	0.00
80.00	6.10	3.77	0.00	335.00	6.10	3.77	0.00
85.00	6.10	3.77	0.00	340.00	6.10	3.77	0.00
90.00	6.10	3.77	0.00	345.00	6.10	3.77	0.00
95.00	6.10	3.77	0.00	350.00	6.10	3.77	0.00
100.00	6.10	3.77	0.00	355.00	6.10	3.77	0.00
105.00	6.10	3.77	0.00	360.00	6.10	3.77	0.00
110.00	6.10	3.77	0.00	365.00	6.10	3.77	0.00
115.00	6.10	3.77	0.00	370.00	6.10	3.77	0.00
120.00	6.10	3.77	0.00	375.00	6.10	3.77	0.00
125.00	6.10	3.77	0.00	380.00	6.10	3.77	0.00
130.00	6.10	3.77	0.00	385.00	6.10	3.77	0.00
135.00	6.10	3.77	0.00	390.00	6.10	3.77	0.00
140.00	6.10	3.77	0.00	395.00	6.10	3.77	0.00
145.00	6.10	3.77	0.00	400.00	6.10	3.77	0.00
150.00	6.10	3.77	0.00	405.00	6.10	3.77	0.00
155.00	6.10	3.77	0.00	410.00	6.10	3.77	0.00
160.00	6.10	3.77	0.00	415.00	6.10	3.77	0.00
165.00	6.10	3.77	0.00	420.00	6.10	3.77	0.00
170.00	6.10	3.77	0.00	425.00	6.10	3.77	0.00
175.00	6.10	3.77	0.00	430.00	6.10	3.77	0.00
180.00	6.10	3.77	0.00	435.00	6.10	3.77	0.00
185.00	6.10	3.77	0.00	440.00	6.10	3.77	0.00
190.00	6.10	3.77	0.00	445.00	6.10	3.77	0.00
195.00	6.10	3.77	0.00	450.00	6.10	3.77	0.00
200.00	6.10	3.77	0.00	455.00	6.10	3.77	0.00
205.00	6.10	3.77	0.00	460.00	6.10	3.77	0.00
210.00	6.10	3.77	0.00	465.00	6.10	3.77	0.00
215.00	6.10	3.77	0.00	470.00	6.10	3.77	0.00
220.00	6.10	3.77	0.00	475.00	6.10	3.77	0.00
225.00	6.10	3.77	0.00	480.00	6.10	3.77	0.00
230.00	6.10	3.77	0.00	485.00	6.10	3.77	0.00
235.00	6.10	3.77	0.00	490.00	6.10	3.77	0.00
240.00	6.10	3.77	0.00	495.00	6.10	3.77	0.00
245.00	6.10	3.77	0.00	500.00	6.10	3.77	0.00
250.00	6.10	3.77	0.00				
255.00	6.10	3.77	0.00				

Summary for Subcatchment 6S: Culvert 2

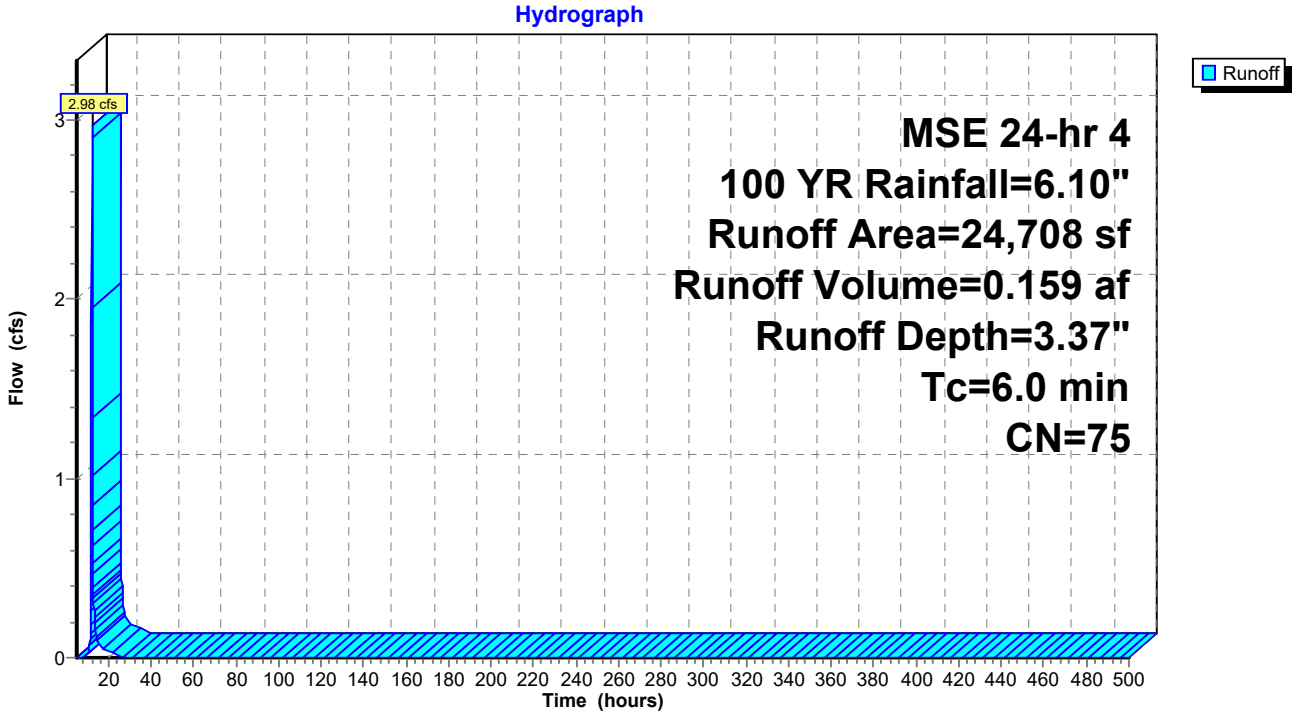
Runoff = 2.98 cfs @ 12.13 hrs, Volume= 0.159 af, Depth= 3.37"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 100 YR Rainfall=6.10"

	Area (sf)	CN	Description
*	15,597	61	Post - B Soils
*	9,111	98	Impervious
	24,708	75	Weighted Average
	15,597		63.13% Pervious Area
	9,111		36.87% Impervious Area

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

Subcatchment 6S: Culvert 2



Hydrograph for Subcatchment 6S: Culvert 2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.28	0.00	0.00	260.00	6.10	3.37	0.00
10.00	0.97	0.02	**0.02**	265.00	6.10	3.37	0.00
15.00	5.36	2.75	**0.10**	270.00	6.10	3.37	0.00
20.00	**5.90**	**3.20**	0.04	275.00	6.10	3.37	0.00
25.00	**6.10**	**3.37**	0.00	280.00	6.10	3.37	0.00
30.00	6.10	3.37	0.00	285.00	6.10	3.37	0.00
35.00	6.10	3.37	0.00	290.00	6.10	3.37	0.00
40.00	6.10	3.37	0.00	295.00	6.10	3.37	0.00
45.00	6.10	3.37	0.00	300.00	6.10	3.37	0.00
50.00	6.10	3.37	0.00	305.00	6.10	3.37	0.00
55.00	6.10	3.37	0.00	310.00	6.10	3.37	0.00
60.00	6.10	3.37	0.00	315.00	6.10	3.37	0.00
65.00	6.10	3.37	0.00	320.00	6.10	3.37	0.00
70.00	6.10	3.37	0.00	325.00	6.10	3.37	0.00
75.00	6.10	3.37	0.00	330.00	6.10	3.37	0.00
80.00	6.10	3.37	0.00	335.00	6.10	3.37	0.00
85.00	6.10	3.37	0.00	340.00	6.10	3.37	0.00
90.00	6.10	3.37	0.00	345.00	6.10	3.37	0.00
95.00	6.10	3.37	0.00	350.00	6.10	3.37	0.00
100.00	6.10	3.37	0.00	355.00	6.10	3.37	0.00
105.00	6.10	3.37	0.00	360.00	6.10	3.37	0.00
110.00	6.10	3.37	0.00	365.00	6.10	3.37	0.00
115.00	6.10	3.37	0.00	370.00	6.10	3.37	0.00
120.00	6.10	3.37	0.00	375.00	6.10	3.37	0.00
125.00	6.10	3.37	0.00	380.00	6.10	3.37	0.00
130.00	6.10	3.37	0.00	385.00	6.10	3.37	0.00
135.00	6.10	3.37	0.00	390.00	6.10	3.37	0.00
140.00	6.10	3.37	0.00	395.00	6.10	3.37	0.00
145.00	6.10	3.37	0.00	400.00	6.10	3.37	0.00
150.00	6.10	3.37	0.00	405.00	6.10	3.37	0.00
155.00	6.10	3.37	0.00	410.00	6.10	3.37	0.00
160.00	6.10	3.37	0.00	415.00	6.10	3.37	0.00
165.00	6.10	3.37	0.00	420.00	6.10	3.37	0.00
170.00	6.10	3.37	0.00	425.00	6.10	3.37	0.00
175.00	6.10	3.37	0.00	430.00	6.10	3.37	0.00
180.00	6.10	3.37	0.00	435.00	6.10	3.37	0.00
185.00	6.10	3.37	0.00	440.00	6.10	3.37	0.00
190.00	6.10	3.37	0.00	445.00	6.10	3.37	0.00
195.00	6.10	3.37	0.00	450.00	6.10	3.37	0.00
200.00	6.10	3.37	0.00	455.00	6.10	3.37	0.00
205.00	6.10	3.37	0.00	460.00	6.10	3.37	0.00
210.00	6.10	3.37	0.00	465.00	6.10	3.37	0.00
215.00	6.10	3.37	0.00	470.00	6.10	3.37	0.00
220.00	6.10	3.37	0.00	475.00	6.10	3.37	0.00
225.00	6.10	3.37	0.00	480.00	6.10	3.37	0.00
230.00	6.10	3.37	0.00	485.00	6.10	3.37	0.00
235.00	6.10	3.37	0.00	490.00	6.10	3.37	0.00
240.00	6.10	3.37	0.00	495.00	6.10	3.37	0.00
245.00	6.10	3.37	0.00	500.00	6.10	3.37	0.00
250.00	6.10	3.37	0.00				
255.00	6.10	3.37	0.00				

Summary for Subcatchment 7S: Culvert 3

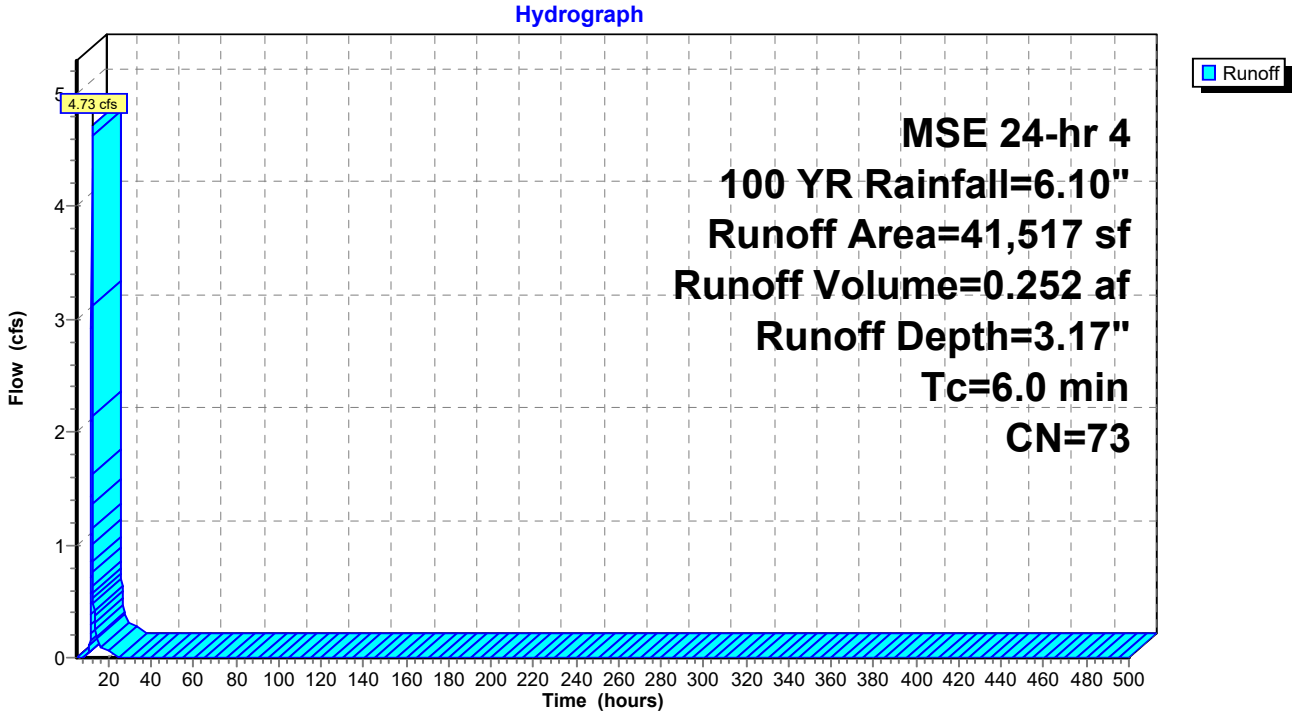
Runoff = 4.73 cfs @ 12.13 hrs, Volume= 0.252 af, Depth= 3.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 100 YR Rainfall=6.10"

	Area (sf)	CN	Description
*	28,233	61	Post - B Soils
*	13,284	98	Impervious
	41,517	73	Weighted Average
	28,233		68.00% Pervious Area
	13,284		32.00% Impervious Area

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

Subcatchment 7S: Culvert 3



Hydrograph for Subcatchment 7S: Culvert 3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.28	0.00	0.00	260.00	6.10	3.17	0.00
10.00	0.97	0.01	**0.02**	265.00	6.10	3.17	0.00
15.00	5.36	2.57	**0.17**	270.00	6.10	3.17	0.00
20.00	**5.90**	**3.01**	0.06	275.00	6.10	3.17	0.00
25.00	**6.10**	**3.17**	0.00	280.00	6.10	3.17	0.00
30.00	6.10	3.17	0.00	285.00	6.10	3.17	0.00
35.00	6.10	3.17	0.00	290.00	6.10	3.17	0.00
40.00	6.10	3.17	0.00	295.00	6.10	3.17	0.00
45.00	6.10	3.17	0.00	300.00	6.10	3.17	0.00
50.00	6.10	3.17	0.00	305.00	6.10	3.17	0.00
55.00	6.10	3.17	0.00	310.00	6.10	3.17	0.00
60.00	6.10	3.17	0.00	315.00	6.10	3.17	0.00
65.00	6.10	3.17	0.00	320.00	6.10	3.17	0.00
70.00	6.10	3.17	0.00	325.00	6.10	3.17	0.00
75.00	6.10	3.17	0.00	330.00	6.10	3.17	0.00
80.00	6.10	3.17	0.00	335.00	6.10	3.17	0.00
85.00	6.10	3.17	0.00	340.00	6.10	3.17	0.00
90.00	6.10	3.17	0.00	345.00	6.10	3.17	0.00
95.00	6.10	3.17	0.00	350.00	6.10	3.17	0.00
100.00	6.10	3.17	0.00	355.00	6.10	3.17	0.00
105.00	6.10	3.17	0.00	360.00	6.10	3.17	0.00
110.00	6.10	3.17	0.00	365.00	6.10	3.17	0.00
115.00	6.10	3.17	0.00	370.00	6.10	3.17	0.00
120.00	6.10	3.17	0.00	375.00	6.10	3.17	0.00
125.00	6.10	3.17	0.00	380.00	6.10	3.17	0.00
130.00	6.10	3.17	0.00	385.00	6.10	3.17	0.00
135.00	6.10	3.17	0.00	390.00	6.10	3.17	0.00
140.00	6.10	3.17	0.00	395.00	6.10	3.17	0.00
145.00	6.10	3.17	0.00	400.00	6.10	3.17	0.00
150.00	6.10	3.17	0.00	405.00	6.10	3.17	0.00
155.00	6.10	3.17	0.00	410.00	6.10	3.17	0.00
160.00	6.10	3.17	0.00	415.00	6.10	3.17	0.00
165.00	6.10	3.17	0.00	420.00	6.10	3.17	0.00
170.00	6.10	3.17	0.00	425.00	6.10	3.17	0.00
175.00	6.10	3.17	0.00	430.00	6.10	3.17	0.00
180.00	6.10	3.17	0.00	435.00	6.10	3.17	0.00
185.00	6.10	3.17	0.00	440.00	6.10	3.17	0.00
190.00	6.10	3.17	0.00	445.00	6.10	3.17	0.00
195.00	6.10	3.17	0.00	450.00	6.10	3.17	0.00
200.00	6.10	3.17	0.00	455.00	6.10	3.17	0.00
205.00	6.10	3.17	0.00	460.00	6.10	3.17	0.00
210.00	6.10	3.17	0.00	465.00	6.10	3.17	0.00
215.00	6.10	3.17	0.00	470.00	6.10	3.17	0.00
220.00	6.10	3.17	0.00	475.00	6.10	3.17	0.00
225.00	6.10	3.17	0.00	480.00	6.10	3.17	0.00
230.00	6.10	3.17	0.00	485.00	6.10	3.17	0.00
235.00	6.10	3.17	0.00	490.00	6.10	3.17	0.00
240.00	6.10	3.17	0.00	495.00	6.10	3.17	0.00
245.00	6.10	3.17	0.00	500.00	6.10	3.17	0.00
250.00	6.10	3.17	0.00				
255.00	6.10	3.17	0.00				

Summary for Subcatchment 8S: Culvert 4

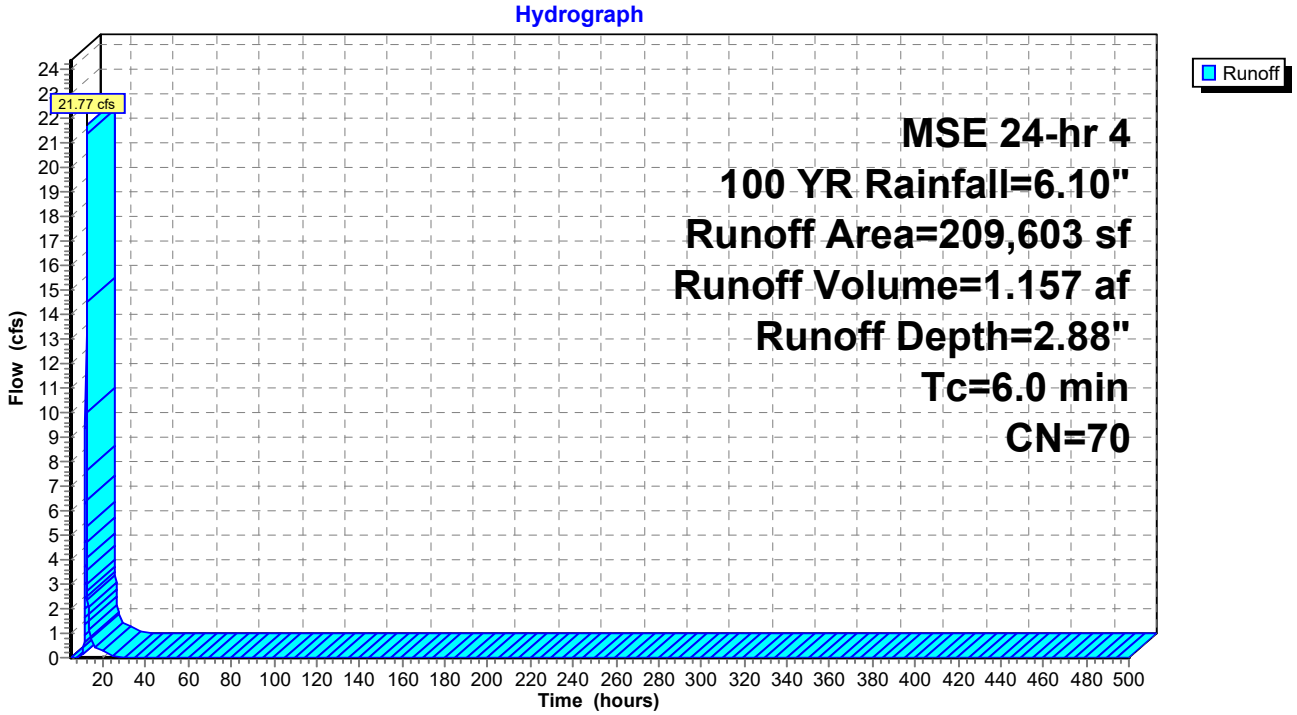
Runoff = 21.77 cfs @ 12.13 hrs, Volume= 1.157 af, Depth= 2.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 100 YR Rainfall=6.10"

	Area (sf)	CN	Description
*	156,823	61	Post - B Soils
*	52,780	98	Impervious
	209,603	70	Weighted Average
	156,823		74.82% Pervious Area
	52,780		25.18% Impervious Area

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

Subcatchment 8S: Culvert 4



Hydrograph for Subcatchment 8S: Culvert 4

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.28	0.00	0.00	260.00	6.10	2.88	0.00
10.00	0.97	0.00	**0.05**	265.00	6.10	2.88	0.00
15.00	5.36	2.31	**0.80**	270.00	6.10	2.88	0.00
20.00	**5.90**	**2.73**	0.29	275.00	6.10	2.88	0.00
25.00	**6.10**	**2.88**	0.00	280.00	6.10	2.88	0.00
30.00	6.10	2.88	0.00	285.00	6.10	2.88	0.00
35.00	6.10	2.88	0.00	290.00	6.10	2.88	0.00
40.00	6.10	2.88	0.00	295.00	6.10	2.88	0.00
45.00	6.10	2.88	0.00	300.00	6.10	2.88	0.00
50.00	6.10	2.88	0.00	305.00	6.10	2.88	0.00
55.00	6.10	2.88	0.00	310.00	6.10	2.88	0.00
60.00	6.10	2.88	0.00	315.00	6.10	2.88	0.00
65.00	6.10	2.88	0.00	320.00	6.10	2.88	0.00
70.00	6.10	2.88	0.00	325.00	6.10	2.88	0.00
75.00	6.10	2.88	0.00	330.00	6.10	2.88	0.00
80.00	6.10	2.88	0.00	335.00	6.10	2.88	0.00
85.00	6.10	2.88	0.00	340.00	6.10	2.88	0.00
90.00	6.10	2.88	0.00	345.00	6.10	2.88	0.00
95.00	6.10	2.88	0.00	350.00	6.10	2.88	0.00
100.00	6.10	2.88	0.00	355.00	6.10	2.88	0.00
105.00	6.10	2.88	0.00	360.00	6.10	2.88	0.00
110.00	6.10	2.88	0.00	365.00	6.10	2.88	0.00
115.00	6.10	2.88	0.00	370.00	6.10	2.88	0.00
120.00	6.10	2.88	0.00	375.00	6.10	2.88	0.00
125.00	6.10	2.88	0.00	380.00	6.10	2.88	0.00
130.00	6.10	2.88	0.00	385.00	6.10	2.88	0.00
135.00	6.10	2.88	0.00	390.00	6.10	2.88	0.00
140.00	6.10	2.88	0.00	395.00	6.10	2.88	0.00
145.00	6.10	2.88	0.00	400.00	6.10	2.88	0.00
150.00	6.10	2.88	0.00	405.00	6.10	2.88	0.00
155.00	6.10	2.88	0.00	410.00	6.10	2.88	0.00
160.00	6.10	2.88	0.00	415.00	6.10	2.88	0.00
165.00	6.10	2.88	0.00	420.00	6.10	2.88	0.00
170.00	6.10	2.88	0.00	425.00	6.10	2.88	0.00
175.00	6.10	2.88	0.00	430.00	6.10	2.88	0.00
180.00	6.10	2.88	0.00	435.00	6.10	2.88	0.00
185.00	6.10	2.88	0.00	440.00	6.10	2.88	0.00
190.00	6.10	2.88	0.00	445.00	6.10	2.88	0.00
195.00	6.10	2.88	0.00	450.00	6.10	2.88	0.00
200.00	6.10	2.88	0.00	455.00	6.10	2.88	0.00
205.00	6.10	2.88	0.00	460.00	6.10	2.88	0.00
210.00	6.10	2.88	0.00	465.00	6.10	2.88	0.00
215.00	6.10	2.88	0.00	470.00	6.10	2.88	0.00
220.00	6.10	2.88	0.00	475.00	6.10	2.88	0.00
225.00	6.10	2.88	0.00	480.00	6.10	2.88	0.00
230.00	6.10	2.88	0.00	485.00	6.10	2.88	0.00
235.00	6.10	2.88	0.00	490.00	6.10	2.88	0.00
240.00	6.10	2.88	0.00	495.00	6.10	2.88	0.00
245.00	6.10	2.88	0.00	500.00	6.10	2.88	0.00
250.00	6.10	2.88	0.00				
255.00	6.10	2.88	0.00				

Summary for Subcatchment 9S: Culvert 5

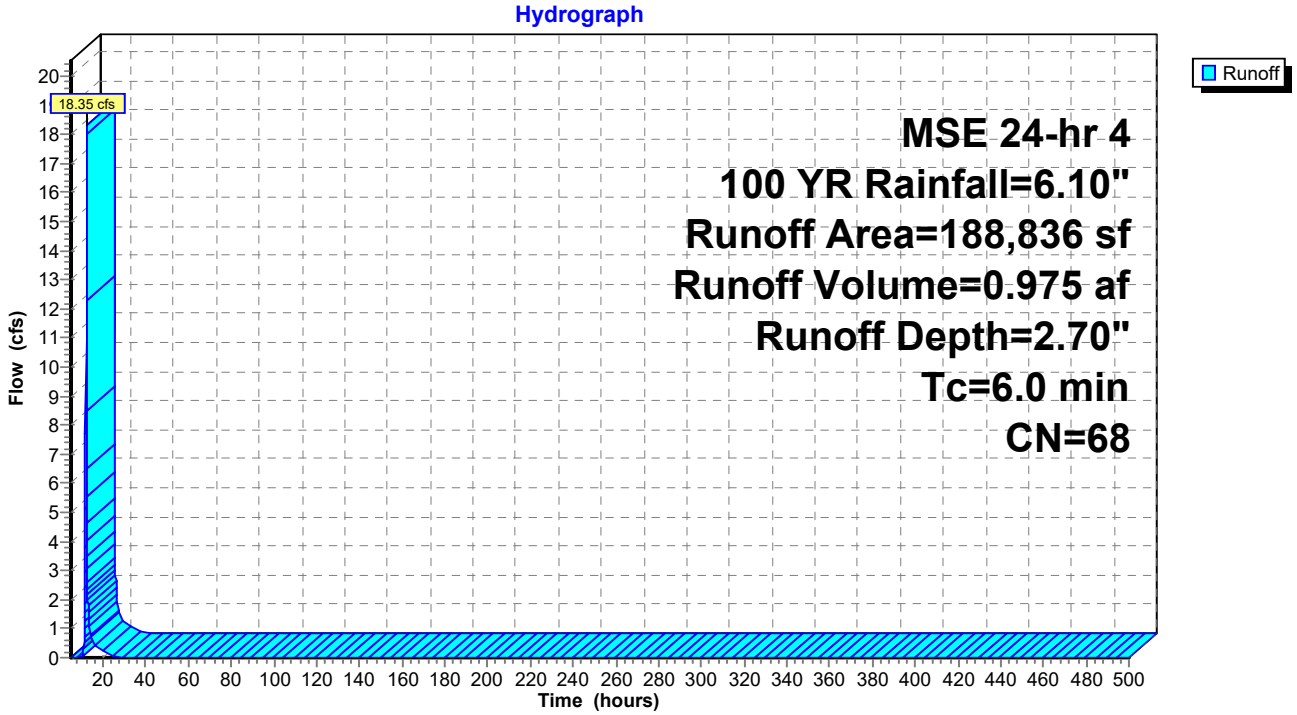
Runoff = 18.35 cfs @ 12.14 hrs, Volume= 0.975 af, Depth= 2.70"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 100 YR Rainfall=6.10"

	Area (sf)	CN	Description
*	151,149	61	Post - B Soils
*	37,687	98	Impervious
	188,836	68	Weighted Average
	151,149		80.04% Pervious Area
	37,687		19.96% Impervious Area

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

Subcatchment 9S: Culvert 5



Hydrograph for Subcatchment 9S: Culvert 5

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
5.00	0.28	0.00	0.00	260.00	6.10	2.70	0.00
10.00	0.97	0.00	**0.00**	265.00	6.10	2.70	0.00
15.00	5.36	2.14	**0.69**	270.00	6.10	2.70	0.00
20.00	**5.90**	**2.55**	0.26	275.00	6.10	2.70	0.00
25.00	**6.10**	**2.70**	0.00	280.00	6.10	2.70	0.00
30.00	6.10	2.70	0.00	285.00	6.10	2.70	0.00
35.00	6.10	2.70	0.00	290.00	6.10	2.70	0.00
40.00	6.10	2.70	0.00	295.00	6.10	2.70	0.00
45.00	6.10	2.70	0.00	300.00	6.10	2.70	0.00
50.00	6.10	2.70	0.00	305.00	6.10	2.70	0.00
55.00	6.10	2.70	0.00	310.00	6.10	2.70	0.00
60.00	6.10	2.70	0.00	315.00	6.10	2.70	0.00
65.00	6.10	2.70	0.00	320.00	6.10	2.70	0.00
70.00	6.10	2.70	0.00	325.00	6.10	2.70	0.00
75.00	6.10	2.70	0.00	330.00	6.10	2.70	0.00
80.00	6.10	2.70	0.00	335.00	6.10	2.70	0.00
85.00	6.10	2.70	0.00	340.00	6.10	2.70	0.00
90.00	6.10	2.70	0.00	345.00	6.10	2.70	0.00
95.00	6.10	2.70	0.00	350.00	6.10	2.70	0.00
100.00	6.10	2.70	0.00	355.00	6.10	2.70	0.00
105.00	6.10	2.70	0.00	360.00	6.10	2.70	0.00
110.00	6.10	2.70	0.00	365.00	6.10	2.70	0.00
115.00	6.10	2.70	0.00	370.00	6.10	2.70	0.00
120.00	6.10	2.70	0.00	375.00	6.10	2.70	0.00
125.00	6.10	2.70	0.00	380.00	6.10	2.70	0.00
130.00	6.10	2.70	0.00	385.00	6.10	2.70	0.00
135.00	6.10	2.70	0.00	390.00	6.10	2.70	0.00
140.00	6.10	2.70	0.00	395.00	6.10	2.70	0.00
145.00	6.10	2.70	0.00	400.00	6.10	2.70	0.00
150.00	6.10	2.70	0.00	405.00	6.10	2.70	0.00
155.00	6.10	2.70	0.00	410.00	6.10	2.70	0.00
160.00	6.10	2.70	0.00	415.00	6.10	2.70	0.00
165.00	6.10	2.70	0.00	420.00	6.10	2.70	0.00
170.00	6.10	2.70	0.00	425.00	6.10	2.70	0.00
175.00	6.10	2.70	0.00	430.00	6.10	2.70	0.00
180.00	6.10	2.70	0.00	435.00	6.10	2.70	0.00
185.00	6.10	2.70	0.00	440.00	6.10	2.70	0.00
190.00	6.10	2.70	0.00	445.00	6.10	2.70	0.00
195.00	6.10	2.70	0.00	450.00	6.10	2.70	0.00
200.00	6.10	2.70	0.00	455.00	6.10	2.70	0.00
205.00	6.10	2.70	0.00	460.00	6.10	2.70	0.00
210.00	6.10	2.70	0.00	465.00	6.10	2.70	0.00
215.00	6.10	2.70	0.00	470.00	6.10	2.70	0.00
220.00	6.10	2.70	0.00	475.00	6.10	2.70	0.00
225.00	6.10	2.70	0.00	480.00	6.10	2.70	0.00
230.00	6.10	2.70	0.00	485.00	6.10	2.70	0.00
235.00	6.10	2.70	0.00	490.00	6.10	2.70	0.00
240.00	6.10	2.70	0.00	495.00	6.10	2.70	0.00
245.00	6.10	2.70	0.00	500.00	6.10	2.70	0.00
250.00	6.10	2.70	0.00				
255.00	6.10	2.70	0.00				

Summary for Pond P1A: Pond 1A

Inflow Area = 6.030 ac, 19.24% Impervious, Inflow Depth = 2.70" for 100 YR event
Inflow = 25.52 cfs @ 12.14 hrs, Volume= 1.356 af
Outflow = 6.62 cfs @ 12.40 hrs, Volume= 1.356 af, Atten= 74%, Lag= 15.7 min
Primary = 5.93 cfs @ 12.40 hrs, Volume= 0.818 af
Routed to Link 3L : Post - South
Secondary = 0.69 cfs @ 12.40 hrs, Volume= 0.537 af
Tertiary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,242.96' @ 12.40 hrs Surf.Area= 8,223 sf Storage= 21,220 cf

Plug-Flow detention time= 101.4 min calculated for 1.356 af (100% of inflow)
Center-of-Mass det. time= 101.4 min (927.7 - 826.3)

Volume	Invert	Avail.Storage	Storage Description
#1	1,239.00'	30,563 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

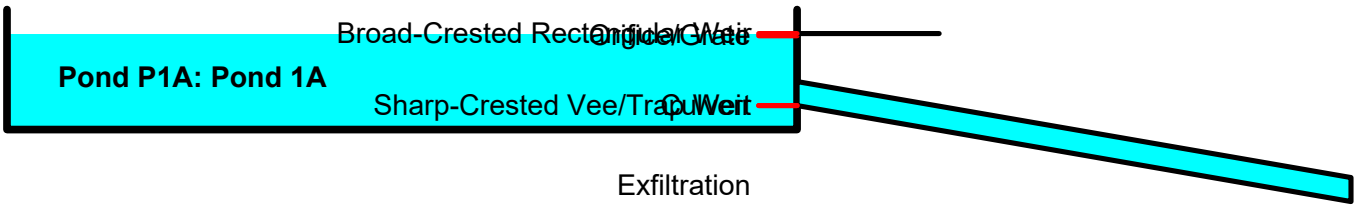
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,239.00	2,496	0	0
1,244.00	9,729	30,563	30,563

Device	Routing	Invert	Outlet Devices
#1	Primary	1,240.00'	**12.0" Round Culvert** L= 39.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,240.00' / 1,236.00' S= 0.1026 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,240.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,242.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,239.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,243.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

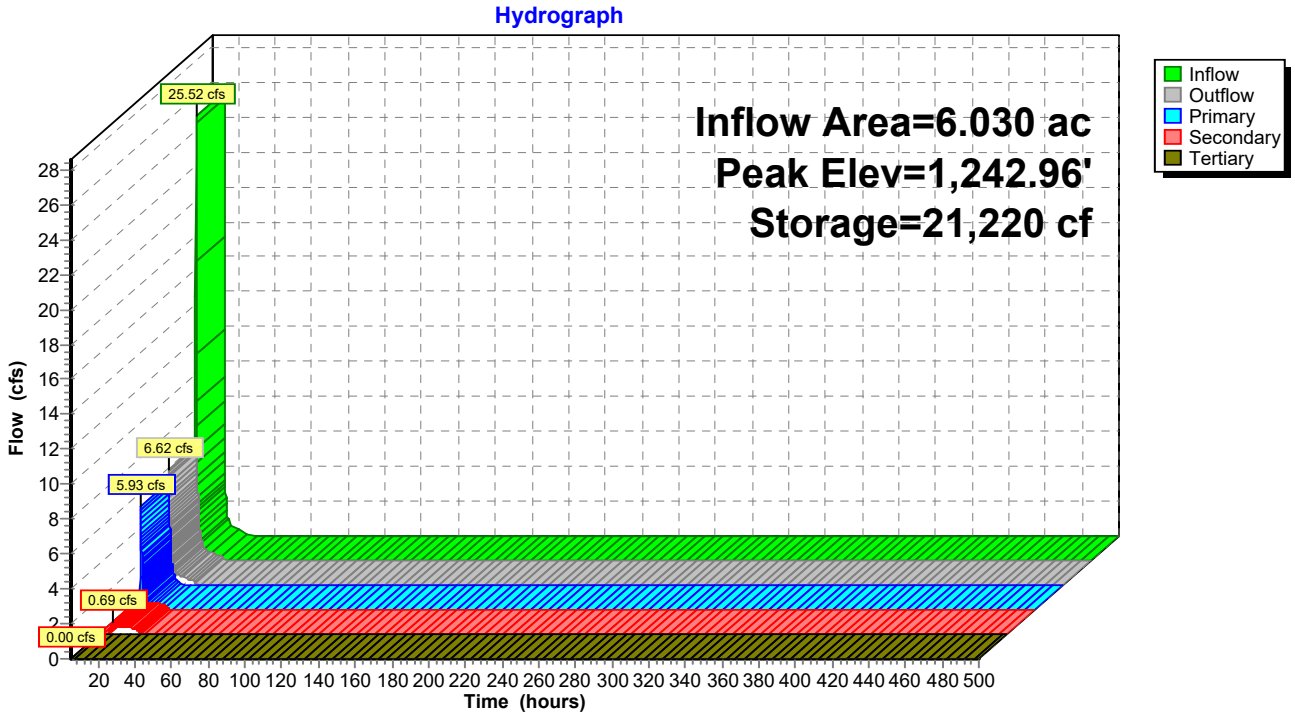
Primary OutFlow Max=5.93 cfs @ 12.40 hrs HW=1,242.96' (Free Discharge)
└**1=Culvert** (Inlet Controls 5.93 cfs @ 7.55 fps)
├**2=Sharp-Crested Vee/Trap Weir** (Passes < 7.14 cfs potential flow)
└**3=Orifice/Grate** (Passes < 0.46 cfs potential flow)

Secondary OutFlow Max=0.69 cfs @ 12.40 hrs HW=1,242.96' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.69 cfs)

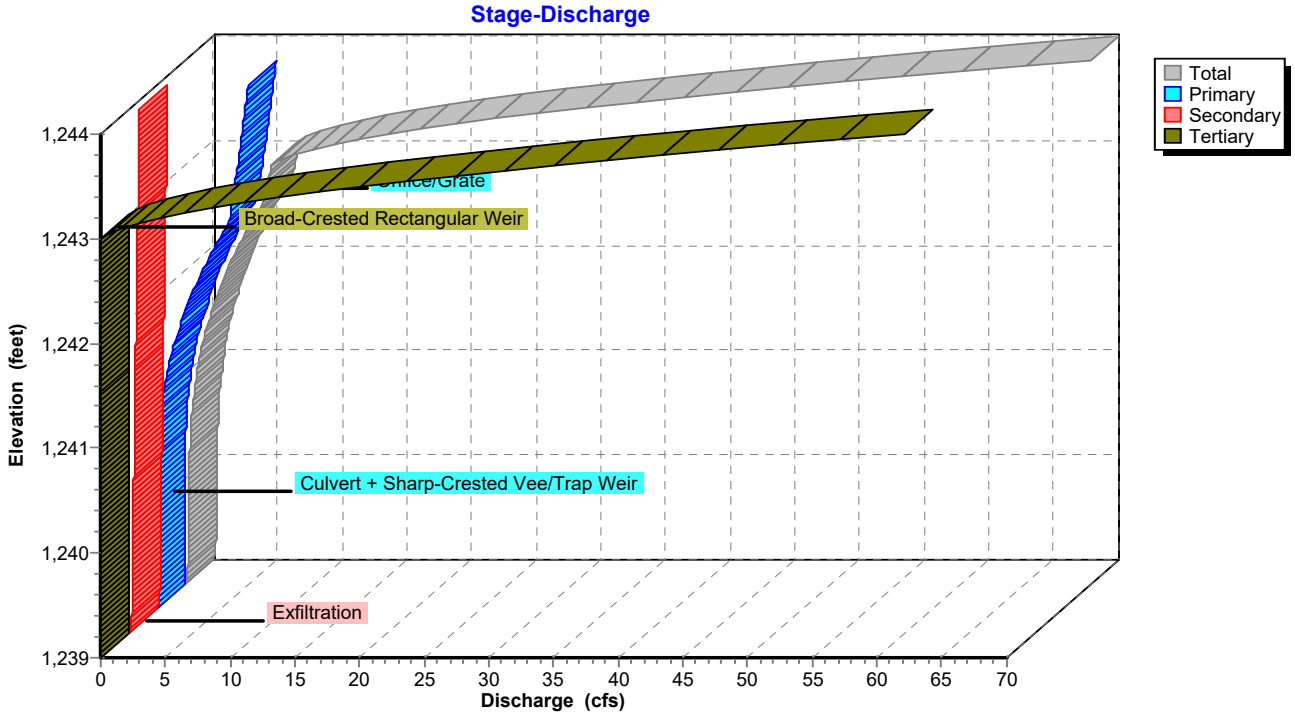
Tertiary OutFlow Max=0.00 cfs @ 5.00 hrs HW=1,239.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



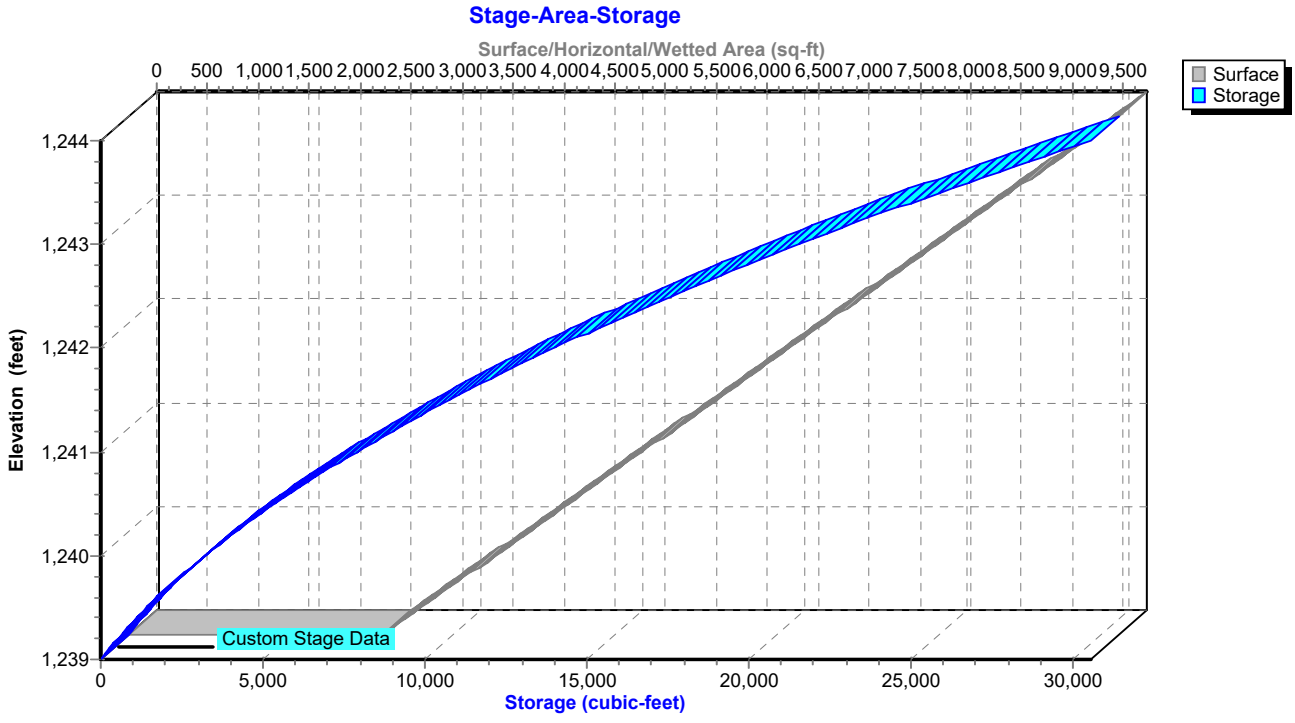
Pond P1A: Pond 1A



Pond P1A: Pond 1A



Pond P1A: Pond 1A



Hydrograph for Pond P1A: Pond 1A

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,239.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.96**	**9,234**	**1,241.24**	**1.29**	**0.82**	**0.48**	0.00
25.00	0.00	2,098	1,239.70	0.29	0.00	0.29	0.00
35.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,239.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P1A: Pond 1A

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,239.00	0.00	0.00	0.00	0.00
1,239.10	0.22	0.00	0.22	0.00
1,239.20	0.23	0.00	0.23	0.00
1,239.30	0.24	0.00	0.24	0.00
1,239.40	0.26	0.00	0.26	0.00
1,239.50	0.27	0.00	0.27	0.00
1,239.60	0.28	0.00	0.28	0.00
1,239.70	0.29	0.00	0.29	0.00
1,239.80	0.30	0.00	0.30	0.00
1,239.90	0.32	0.00	0.32	0.00
1,240.00	0.33	0.00	0.33	0.00
1,240.10	0.34	0.00	0.34	0.00
1,240.20	0.36	0.01	0.35	0.00
1,240.30	0.39	0.02	0.36	0.00
1,240.40	0.42	0.05	0.38	0.00
1,240.50	0.47	0.08	0.39	0.00
1,240.60	0.53	0.13	0.40	0.00
1,240.70	0.61	0.19	0.41	0.00
1,240.80	0.70	0.27	0.42	0.00
1,240.90	0.80	0.36	0.44	0.00
1,241.00	0.92	0.47	0.45	0.00
1,241.10	1.06	0.60	0.46	0.00
1,241.20	1.22	0.75	0.47	0.00
1,241.30	1.40	0.91	0.49	0.00
1,241.40	1.60	1.10	0.50	0.00
1,241.50	1.82	1.31	0.51	0.00
1,241.60	2.06	1.54	0.52	0.00
1,241.70	2.32	1.79	0.53	0.00
1,241.80	2.61	2.06	0.55	0.00
1,241.90	2.92	2.36	0.56	0.00
1,242.00	3.25	2.68	0.57	0.00
1,242.10	3.61	3.03	0.58	0.00
1,242.20	4.00	3.41	0.59	0.00
1,242.30	4.41	3.81	0.61	0.00
1,242.40	4.85	4.23	0.62	0.00
1,242.50	5.32	4.69	0.63	0.00
1,242.60	5.81	5.17	0.64	0.00
1,242.70	6.26	5.61	0.65	0.00
1,242.80	6.40	5.74	0.67	0.00
1,242.90	6.54	5.86	0.68	0.00
1,243.00	6.67	5.98	0.69	0.00
1,243.10	8.40	6.10	0.70	1.60
1,243.20	11.53	6.21	0.71	4.60
1,243.30	15.75	6.33	0.73	8.70
1,243.40	20.96	6.44	0.74	13.78
1,243.50	27.39	6.55	0.75	20.08
1,243.60	34.93	6.66	0.76	27.51
1,243.70	42.64	6.76	0.77	35.10
1,243.80	51.08	6.87	0.79	43.42
1,243.90	60.22	6.97	0.80	52.45
1,244.00	**70.06**	**7.07**	**0.81**	**62.18**

Stage-Area-Storage for Pond P1A: Pond 1A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,239.00	2,496	0	1,241.55	6,185	11,068
1,239.05	2,568	127	1,241.60	6,257	11,379
1,239.10	2,641	257	1,241.65	6,329	11,694
1,239.15	2,713	391	1,241.70	6,402	12,012
1,239.20	2,785	528	1,241.75	6,474	12,334
1,239.25	2,858	669	1,241.80	6,546	12,659
1,239.30	2,930	814	1,241.85	6,619	12,989
1,239.35	3,002	962	1,241.90	6,691	13,321
1,239.40	3,075	1,114	1,241.95	6,763	13,658
1,239.45	3,147	1,270	1,242.00	6,836	13,998
1,239.50	3,219	1,429	1,242.05	6,908	14,341
1,239.55	3,292	1,592	1,242.10	6,980	14,689
1,239.60	3,364	1,758	1,242.15	7,053	15,039
1,239.65	3,436	1,928	1,242.20	7,125	15,394
1,239.70	3,509	2,102	1,242.25	7,197	15,752
1,239.75	3,581	2,279	1,242.30	7,270	16,114
1,239.80	3,653	2,460	1,242.35	7,342	16,479
1,239.85	3,726	2,644	1,242.40	7,414	16,848
1,239.90	3,798	2,832	1,242.45	7,487	17,220
1,239.95	3,870	3,024	1,242.50	7,559	17,596
1,240.00	3,943	3,219	1,242.55	7,631	17,976
1,240.05	4,015	3,418	1,242.60	7,704	18,360
1,240.10	4,087	3,621	1,242.65	7,776	18,747
1,240.15	4,160	3,827	1,242.70	7,848	19,137
1,240.20	4,232	4,037	1,242.75	7,921	19,531
1,240.25	4,304	4,250	1,242.80	7,993	19,929
1,240.30	4,377	4,467	1,242.85	8,065	20,331
1,240.35	4,449	4,688	1,242.90	8,138	20,736
1,240.40	4,521	4,912	1,242.95	8,210	21,144
1,240.45	4,594	5,140	1,243.00	8,282	21,557
1,240.50	4,666	5,371	1,243.05	8,355	21,973
1,240.55	4,738	5,607	1,243.10	8,427	22,392
1,240.60	4,811	5,845	1,243.15	8,499	22,815
1,240.65	4,883	6,088	1,243.20	8,572	23,242
1,240.70	4,955	6,334	1,243.25	8,644	23,673
1,240.75	5,028	6,583	1,243.30	8,716	24,107
1,240.80	5,100	6,836	1,243.35	8,789	24,544
1,240.85	5,172	7,093	1,243.40	8,861	24,985
1,240.90	5,245	7,354	1,243.45	8,933	25,430
1,240.95	5,317	7,618	1,243.50	9,006	25,879
1,241.00	5,389	7,885	1,243.55	9,078	26,331
1,241.05	5,462	8,156	1,243.60	9,150	26,787
1,241.10	5,534	8,431	1,243.65	9,223	27,246
1,241.15	5,606	8,710	1,243.70	9,295	27,709
1,241.20	5,679	8,992	1,243.75	9,367	28,175
1,241.25	5,751	9,278	1,243.80	9,440	28,646
1,241.30	5,823	9,567	1,243.85	9,512	29,119
1,241.35	5,896	9,860	1,243.90	9,584	29,597
1,241.40	5,968	10,157	1,243.95	9,657	30,078
1,241.45	6,040	10,457	1,244.00	**9,729**	**30,563**
1,241.50	6,113	10,761			

Summary for Pond P3A: Pond 3A

Inflow Area = 10.600 ac, 18.58% Impervious, Inflow Depth = 2.88" for 100 YR event
Inflow = 47.96 cfs @ 12.13 hrs, Volume= 2.548 af
Outflow = 13.73 cfs @ 12.37 hrs, Volume= 2.548 af, Atten= 71%, Lag= 14.0 min
Primary = 7.30 cfs @ 12.37 hrs, Volume= 1.598 af
Routed to Link 4L : Post - North
Secondary = 1.00 cfs @ 12.37 hrs, Volume= 0.844 af
Tertiary = 5.43 cfs @ 12.37 hrs, Volume= 0.106 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,197.22' @ 12.37 hrs Surf.Area= 11,957 sf Storage= 42,103 cf

Plug-Flow detention time= 106.9 min calculated for 2.548 af (100% of inflow)
Center-of-Mass det. time= 106.9 min (929.3 - 822.4)

Volume	Invert	Avail.Storage	Storage Description
#1	1,192.00'	51,846 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

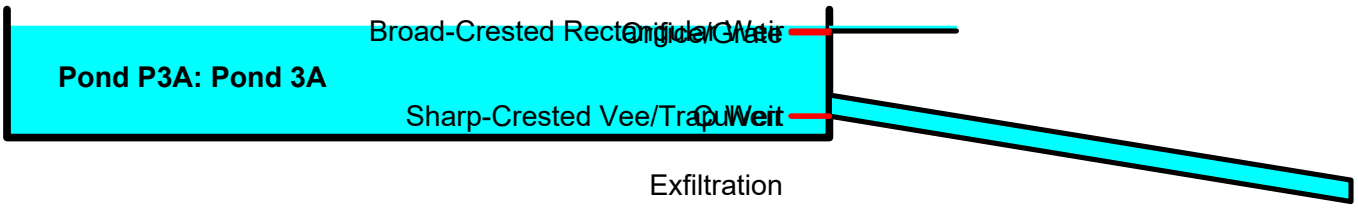
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,192.00	4,165	0	0
1,198.00	13,117	51,846	51,846

Device	Routing	Invert	Outlet Devices
#1	Primary	1,193.00'	**12.0" Round Culvert** L= 41.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,193.00' / 1,189.00' S= 0.0976 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,193.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,196.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,192.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,197.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

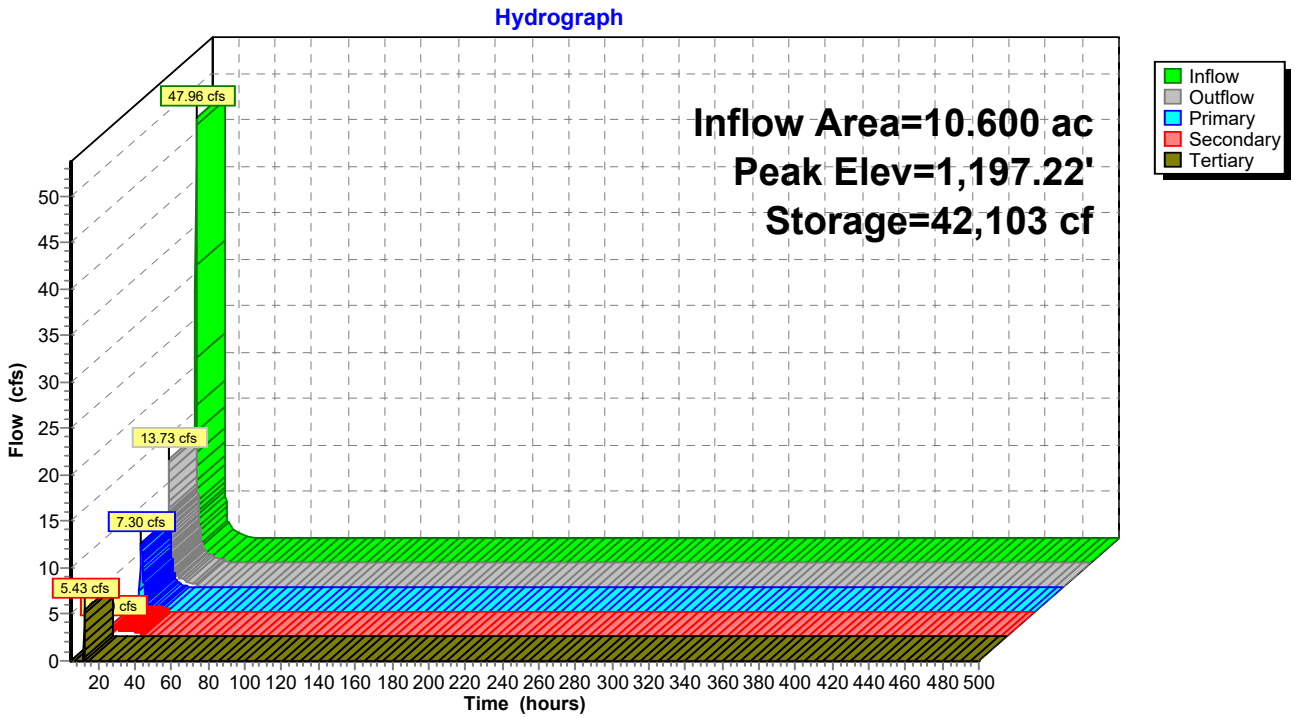
Primary OutFlow Max=7.29 cfs @ 12.37 hrs HW=1,197.22' (Free Discharge)
└**1=Culvert** (Inlet Controls 7.29 cfs @ 9.28 fps)
├**2=Sharp-Crested Vee/Trap Weir** (Passes < 17.33 cfs potential flow)
└**3=Orifice/Grate** (Passes < 5.85 cfs potential flow)

Secondary OutFlow Max=1.00 cfs @ 12.37 hrs HW=1,197.22' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 1.00 cfs)

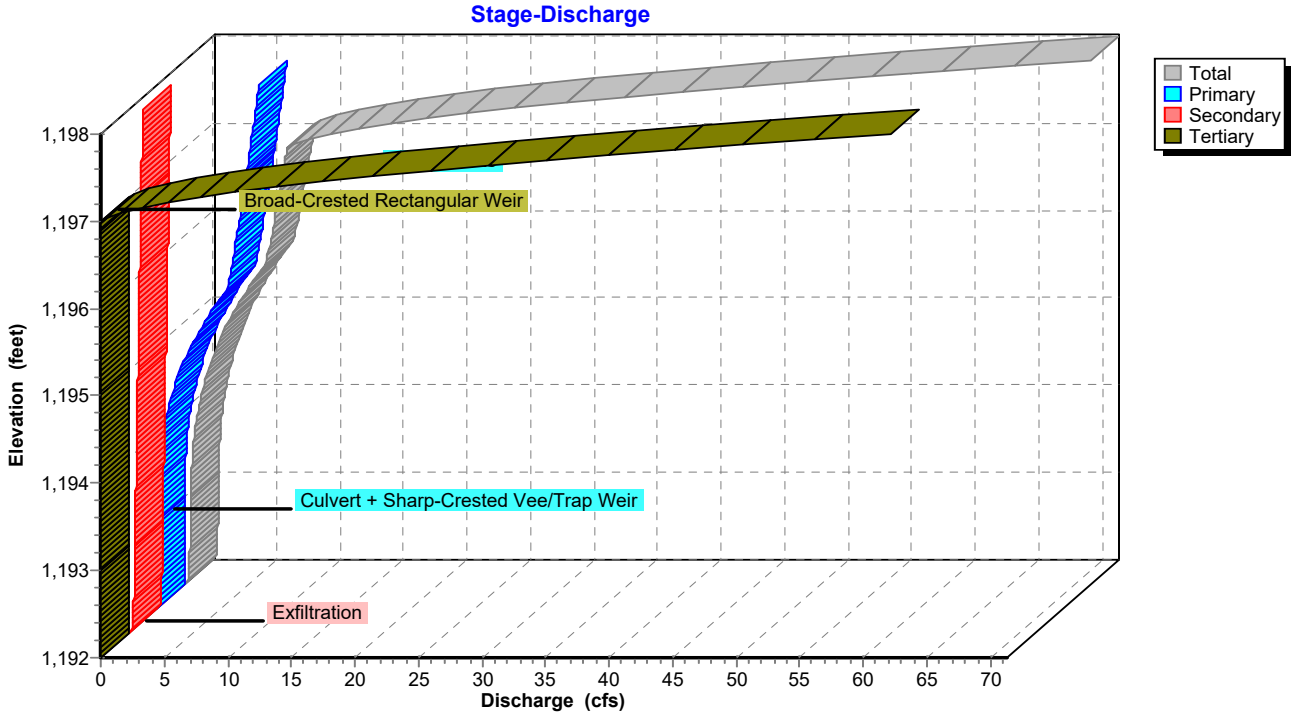
Tertiary OutFlow Max=5.24 cfs @ 12.37 hrs HW=1,197.22' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Weir Controls 5.24 cfs @ 1.15 fps)



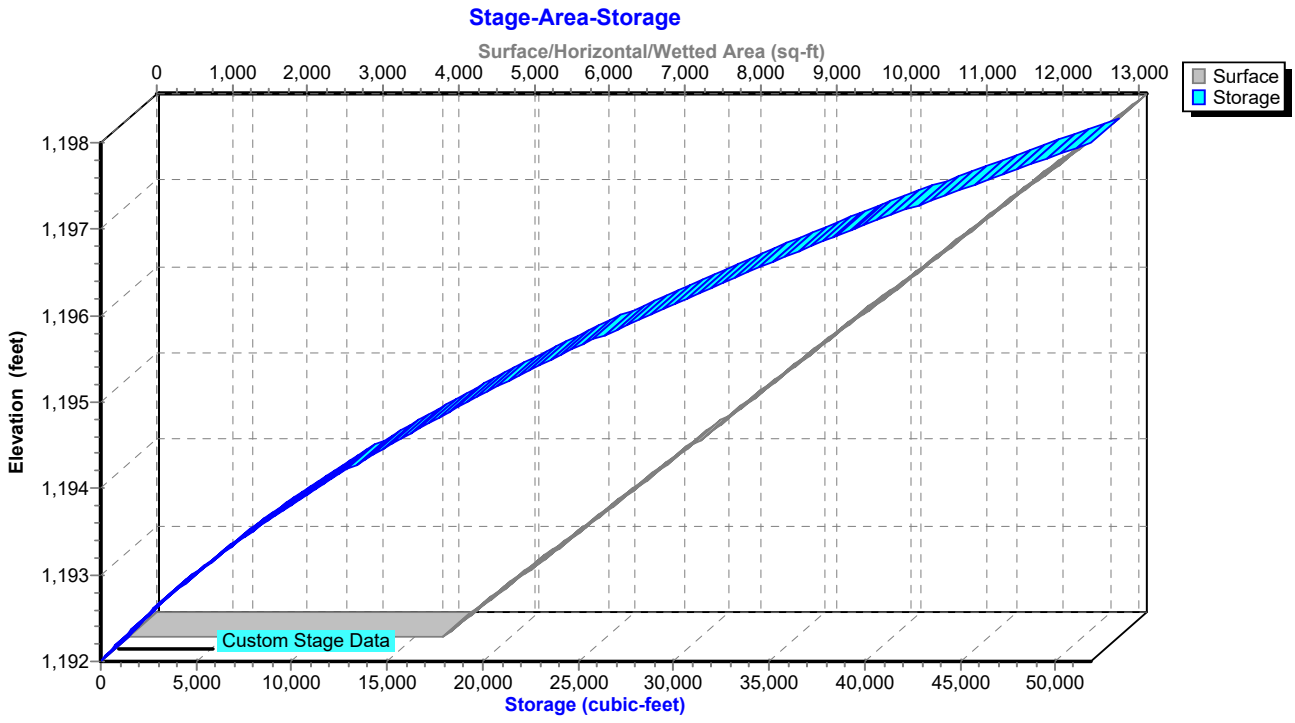
Pond P3A: Pond 3A



Pond P3A: Pond 3A



Pond P3A: Pond 3A



Hydrograph for Pond P3A: Pond 3A

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,192.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**1.76**	**17,009**	**1,194.74**	**2.58**	**1.89**	**0.69**	**0.00**
25.00	0.00	4,780	1,192.98	0.47	0.00	0.47	0.00
35.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,192.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3A: Pond 3A

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,192.00	0.00	0.00	0.00	0.00
1,192.20	0.37	0.00	0.37	0.00
1,192.40	0.40	0.00	0.40	0.00
1,192.60	0.42	0.00	0.42	0.00
1,192.80	0.45	0.00	0.45	0.00
1,193.00	0.47	0.00	0.47	0.00
1,193.20	0.50	0.01	0.50	0.00
1,193.40	0.57	0.05	0.52	0.00
1,193.60	0.68	0.13	0.55	0.00
1,193.80	0.84	0.27	0.57	0.00
1,194.00	1.07	0.47	0.60	0.00
1,194.20	1.37	0.75	0.62	0.00
1,194.40	1.75	1.10	0.65	0.00
1,194.60	2.21	1.54	0.67	0.00
1,194.80	2.76	2.06	0.70	0.00
1,195.00	3.40	2.68	0.72	0.00
1,195.20	4.15	3.41	0.74	0.00
1,195.40	5.00	4.23	0.77	0.00
1,195.60	5.96	5.17	0.79	0.00
1,195.80	6.55	5.74	0.82	0.00
1,196.00	6.82	5.98	0.84	0.00
1,196.20	7.08	6.21	0.87	0.00
1,196.40	7.33	6.44	0.89	0.00
1,196.60	7.58	6.66	0.92	0.00
1,196.80	7.81	6.87	0.94	0.00
1,197.00	8.04	7.07	0.97	0.00
1,197.20	12.86	7.27	0.99	4.60
1,197.40	22.27	7.47	1.02	13.78
1,197.60	36.21	7.66	1.04	27.51
1,197.80	52.33	7.84	1.07	43.42
1,198.00	**71.29**	**8.02**	**1.09**	**62.18**

Stage-Area-Storage for Pond P3A: Pond 3A

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,192.00	4,165	0
1,192.10	4,314	424
1,192.20	4,463	863
1,192.30	4,613	1,317
1,192.40	4,762	1,785
1,192.50	4,911	2,269
1,192.60	5,060	2,768
1,192.70	5,209	3,281
1,192.80	5,359	3,809
1,192.90	5,508	4,353
1,193.00	5,657	4,911
1,193.10	5,806	5,484
1,193.20	5,955	6,072
1,193.30	6,105	6,675
1,193.40	6,254	7,293
1,193.50	6,403	7,926
1,193.60	6,552	8,574
1,193.70	6,701	9,236
1,193.80	6,851	9,914
1,193.90	7,000	10,607
1,194.00	7,149	11,314
1,194.10	7,298	12,036
1,194.20	7,447	12,774
1,194.30	7,597	13,526
1,194.40	7,746	14,293
1,194.50	7,895	15,075
1,194.60	8,044	15,872
1,194.70	8,193	16,684
1,194.80	8,343	17,511
1,194.90	8,492	18,352
1,195.00	8,641	19,209
1,195.10	8,790	20,081
1,195.20	8,939	20,967
1,195.30	9,089	21,868
1,195.40	9,238	22,785
1,195.50	9,387	23,716
1,195.60	9,536	24,662
1,195.70	9,685	25,623
1,195.80	9,835	26,599
1,195.90	9,984	27,590
1,196.00	10,133	28,596
1,196.10	10,282	29,617
1,196.20	10,431	30,652
1,196.30	10,581	31,703
1,196.40	10,730	32,769
1,196.50	10,879	33,849
1,196.60	11,028	34,944
1,196.70	11,177	36,055
1,196.80	11,327	37,180
1,196.90	11,476	38,320
1,197.00	11,625	39,475
1,197.10	11,774	40,645
1,197.20	11,923	41,830
1,197.30	12,073	43,030
1,197.40	12,222	44,244
1,197.50	12,371	45,474
1,197.60	12,520	46,719
1,197.70	12,669	47,978
1,197.80	12,819	49,252
1,197.90	12,968	50,542
1,198.00	**13,117**	**51,846**

Summary for Pond P3B: Pond 3B

Inflow Area = 8.450 ac, 19.88% Impervious, Inflow Depth = 2.98" for 100 YR event
Inflow = 39.47 cfs @ 12.13 hrs, Volume= 2.098 af
Outflow = 24.52 cfs @ 12.22 hrs, Volume= 2.098 af, Atten= 38%, Lag= 5.3 min
Primary = 6.51 cfs @ 12.22 hrs, Volume= 1.159 af
Routed to Link 4L : Post - North
Secondary = 0.83 cfs @ 12.22 hrs, Volume= 0.668 af
Tertiary = 17.18 cfs @ 12.22 hrs, Volume= 0.271 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,199.47' @ 12.22 hrs Surf.Area= 9,935 sf Storage= 28,439 cf

Plug-Flow detention time= 88.3 min calculated for 2.098 af (100% of inflow)
Center-of-Mass det. time= 88.3 min (908.7 - 820.5)

Volume	Invert	Avail.Storage	Storage Description
#1	1,195.00'	33,965 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

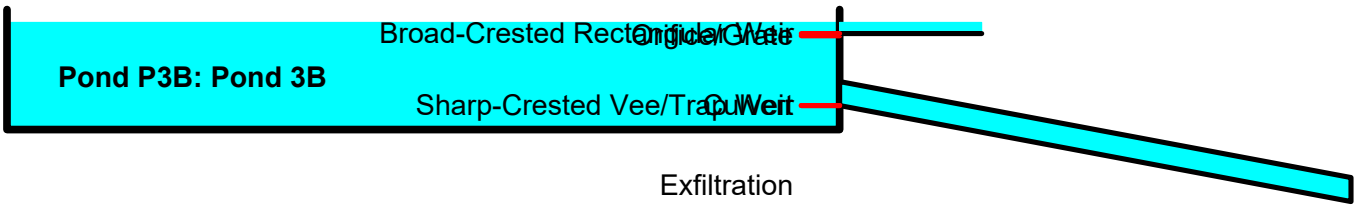
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,195.00	2,799	0	0
1,200.00	10,787	33,965	33,965

Device	Routing	Invert	Outlet Devices
#1	Primary	1,196.00'	**12.0" Round Culvert** L= 36.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,196.00' / 1,192.00' S= 0.1111 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,196.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,198.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,195.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,199.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

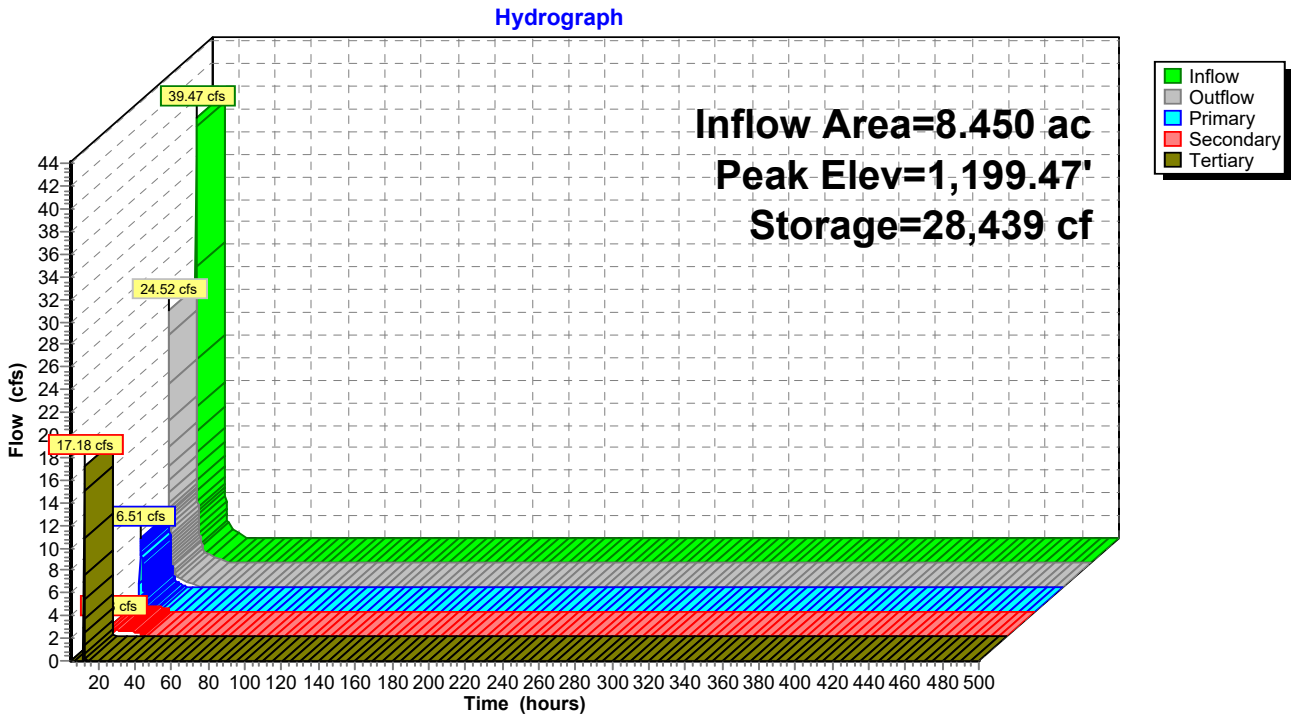
Primary OutFlow Max=6.47 cfs @ 12.22 hrs HW=1,199.43' (Free Discharge)
└**1=Culvert** (Inlet Controls 6.47 cfs @ 8.24 fps)
├**2=Sharp-Crested Vee/Trap Weir** (Passes < 10.32 cfs potential flow)
└**3=Orifice/Grate** (Passes < 12.53 cfs potential flow)

Secondary OutFlow Max=0.82 cfs @ 12.22 hrs HW=1,199.43' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.82 cfs)

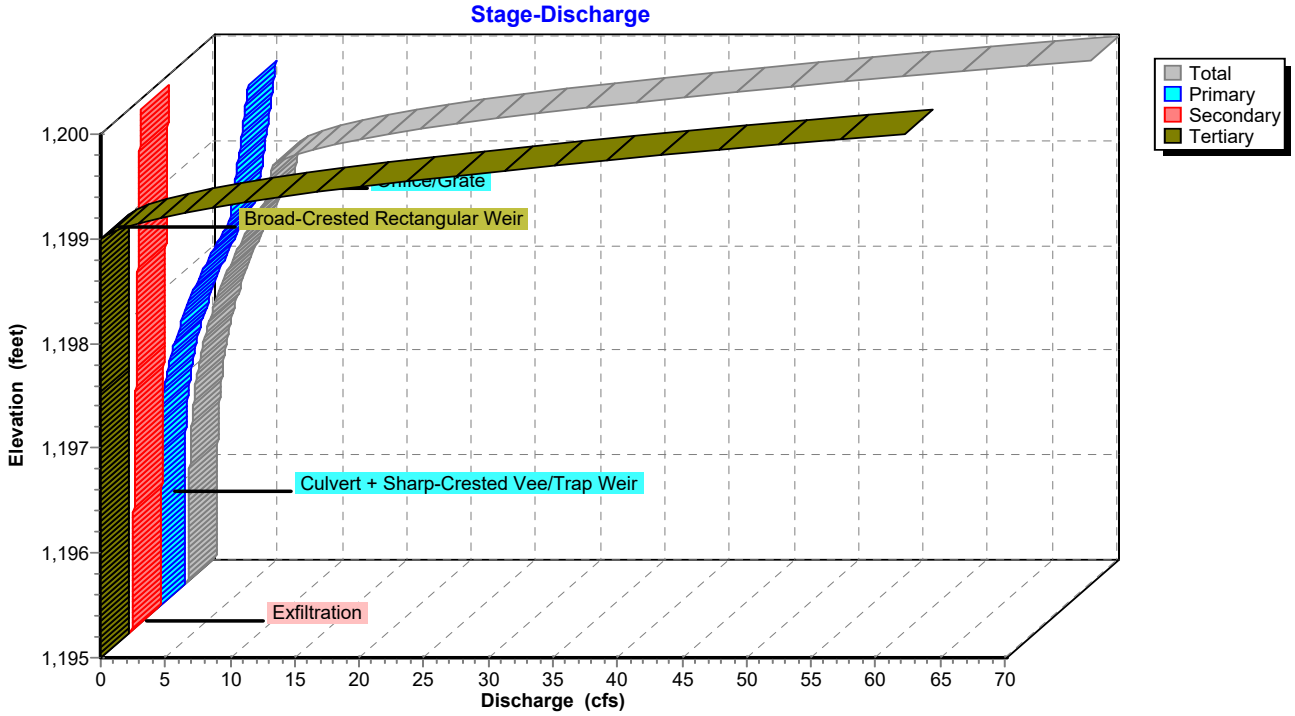
Tertiary OutFlow Max=15.41 cfs @ 12.22 hrs HW=1,199.43' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Weir Controls 15.41 cfs @ 1.66 fps)



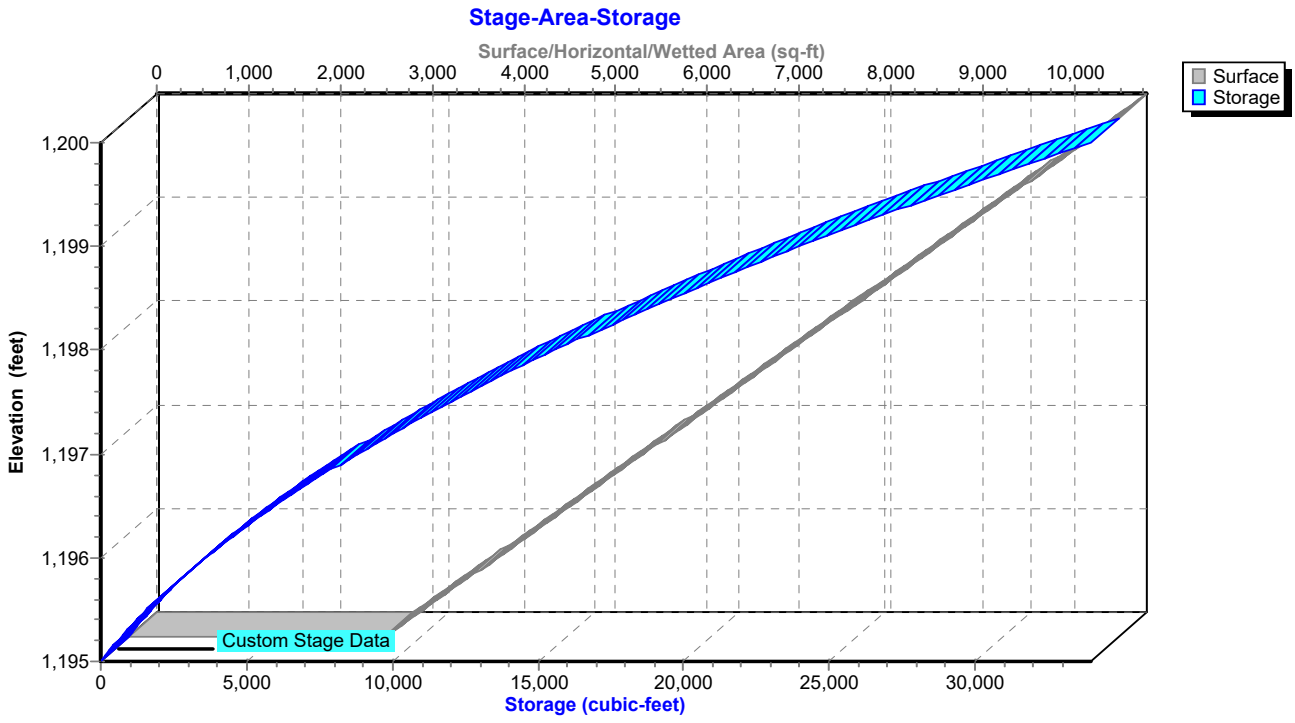
Pond P3B: Pond 3B



Pond P3B: Pond 3B



Pond P3B: Pond 3B



Hydrograph for Pond P3B: Pond 3B

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,195.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**1.43**	**11,895**	**1,197.49**	**1.84**	**1.28**	**0.56**	**0.00**
25.00	0.00	3,283	1,195.93	0.36	0.00	0.36	0.00
35.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,195.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3B: Pond 3B

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,195.00	0.00	0.00	0.00	0.00
1,195.10	0.25	0.00	0.25	0.00
1,195.20	0.26	0.00	0.26	0.00
1,195.30	0.27	0.00	0.27	0.00
1,195.40	0.29	0.00	0.29	0.00
1,195.50	0.30	0.00	0.30	0.00
1,195.60	0.31	0.00	0.31	0.00
1,195.70	0.33	0.00	0.33	0.00
1,195.80	0.34	0.00	0.34	0.00
1,195.90	0.35	0.00	0.35	0.00
1,196.00	0.37	0.00	0.37	0.00
1,196.10	0.38	0.00	0.38	0.00
1,196.20	0.40	0.01	0.39	0.00
1,196.30	0.43	0.02	0.41	0.00
1,196.40	0.47	0.05	0.42	0.00
1,196.50	0.52	0.08	0.43	0.00
1,196.60	0.58	0.13	0.45	0.00
1,196.70	0.65	0.19	0.46	0.00
1,196.80	0.74	0.27	0.47	0.00
1,196.90	0.85	0.36	0.49	0.00
1,197.00	0.97	0.47	0.50	0.00
1,197.10	1.11	0.60	0.51	0.00
1,197.20	1.27	0.75	0.53	0.00
1,197.30	1.45	0.91	0.54	0.00
1,197.40	1.65	1.10	0.55	0.00
1,197.50	1.87	1.31	0.57	0.00
1,197.60	2.12	1.54	0.58	0.00
1,197.70	2.38	1.79	0.59	0.00
1,197.80	2.67	2.06	0.61	0.00
1,197.90	2.98	2.36	0.62	0.00
1,198.00	3.32	2.68	0.63	0.00
1,198.10	3.68	3.03	0.65	0.00
1,198.20	4.06	3.41	0.66	0.00
1,198.30	4.48	3.81	0.67	0.00
1,198.40	4.92	4.23	0.69	0.00
1,198.50	5.39	4.69	0.70	0.00
1,198.60	5.88	5.17	0.71	0.00
1,198.70	6.33	5.61	0.73	0.00
1,198.80	6.47	5.74	0.74	0.00
1,198.90	6.61	5.86	0.75	0.00
1,199.00	6.75	5.98	0.77	0.00
1,199.10	8.48	6.10	0.78	1.60
1,199.20	11.60	6.21	0.79	4.60
1,199.30	15.83	6.33	0.81	8.70
1,199.40	21.04	6.44	0.82	13.78
1,199.50	27.47	6.55	0.83	20.08
1,199.60	35.01	6.66	0.85	27.51
1,199.70	42.73	6.76	0.86	35.10
1,199.80	51.17	6.87	0.87	43.42
1,199.90	60.31	6.97	0.89	52.45
1,200.00	**70.15**	**7.07**	**0.90**	**62.18**

Stage-Area-Storage for Pond P3B: Pond 3B

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,195.00	2,799	0
1,195.05	2,879	142
1,195.10	2,959	288
1,195.15	3,039	438
1,195.20	3,119	592
1,195.25	3,198	750
1,195.30	3,278	912
1,195.35	3,358	1,078
1,195.40	3,438	1,247
1,195.45	3,518	1,421
1,195.50	3,598	1,599
1,195.55	3,678	1,781
1,195.60	3,758	1,967
1,195.65	3,837	2,157
1,195.70	3,917	2,351
1,195.75	3,997	2,549
1,195.80	4,077	2,750
1,195.85	4,157	2,956
1,195.90	4,237	3,166
1,195.95	4,317	3,380
1,196.00	4,397	3,598
1,196.05	4,476	3,820
1,196.10	4,556	4,045
1,196.15	4,636	4,275
1,196.20	4,716	4,509
1,196.25	4,796	4,747
1,196.30	4,876	4,989
1,196.35	4,956	5,234
1,196.40	5,036	5,484
1,196.45	5,116	5,738
1,196.50	5,195	5,996
1,196.55	5,275	6,258
1,196.60	5,355	6,523
1,196.65	5,435	6,793
1,196.70	5,515	7,067
1,196.75	5,595	7,345
1,196.80	5,675	7,626
1,196.85	5,755	7,912
1,196.90	5,834	8,202
1,196.95	5,914	8,495
1,197.00	5,994	8,793
1,197.05	6,074	9,095
1,197.10	6,154	9,401
1,197.15	6,234	9,710
1,197.20	6,314	10,024
1,197.25	6,394	10,342
1,197.30	6,473	10,663
1,197.35	6,553	10,989
1,197.40	6,633	11,319
1,197.45	6,713	11,652
1,197.50	6,793	11,990
1,197.55	6,873	12,332
1,197.60	6,953	12,677
1,197.65	7,033	13,027
1,197.70	7,113	13,381
1,197.75	7,192	13,738
1,197.80	7,272	14,100
1,197.85	7,352	14,465
1,197.90	7,432	14,835
1,197.95	7,512	15,209
1,198.00	7,592	15,586
1,198.05	7,672	15,968
1,198.10	7,752	16,353
1,198.15	7,831	16,743
1,198.20	7,911	17,137
1,198.25	7,991	17,534
1,198.30	8,071	17,936
1,198.35	8,151	18,341
1,198.40	8,231	18,751
1,198.45	8,311	19,164
1,198.50	8,391	19,582
1,198.55	8,470	20,003
1,198.60	8,550	20,429
1,198.65	8,630	20,858
1,198.70	8,710	21,292
1,198.75	8,790	21,729
1,198.80	8,870	22,171
1,198.85	8,950	22,616
1,198.90	9,030	23,066
1,198.95	9,110	23,519
1,199.00	9,189	23,977
1,199.05	9,269	24,438
1,199.10	9,349	24,904
1,199.15	9,429	25,373
1,199.20	9,509	25,847
1,199.25	9,589	26,324
1,199.30	9,669	26,806
1,199.35	9,749	27,291
1,199.40	9,828	27,780
1,199.45	9,908	28,274
1,199.50	9,988	28,771
1,199.55	10,068	29,273
1,199.60	10,148	29,778
1,199.65	10,228	30,287
1,199.70	10,308	30,801
1,199.75	10,388	31,318
1,199.80	10,467	31,840
1,199.85	10,547	32,365
1,199.90	10,627	32,894
1,199.95	10,707	33,428
1,200.00	**10,787**	**33,965**

Summary for Pond P3C: Pond 3C

Inflow Area = 2.490 ac, 22.89% Impervious, Inflow Depth = 3.37" for 100 YR event
Inflow = 13.07 cfs @ 12.13 hrs, Volume= 0.699 af
Outflow = 6.79 cfs @ 12.25 hrs, Volume= 0.699 af, Atten= 48%, Lag= 6.9 min
Primary = 4.78 cfs @ 12.24 hrs, Volume= 0.358 af
Routed to Link 4L : Post - North
Secondary = 0.39 cfs @ 12.25 hrs, Volume= 0.326 af
Tertiary = 1.62 cfs @ 12.25 hrs, Volume= 0.014 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,181.10' @ 12.25 hrs Surf.Area= 4,705 sf Storage= 10,244 cf

Plug-Flow detention time= 99.6 min calculated for 0.699 af (100% of inflow)
Center-of-Mass det. time= 99.7 min (912.3 - 812.7)

Volume	Invert	Avail.Storage	Storage Description
#1	1,178.00'	14,846 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

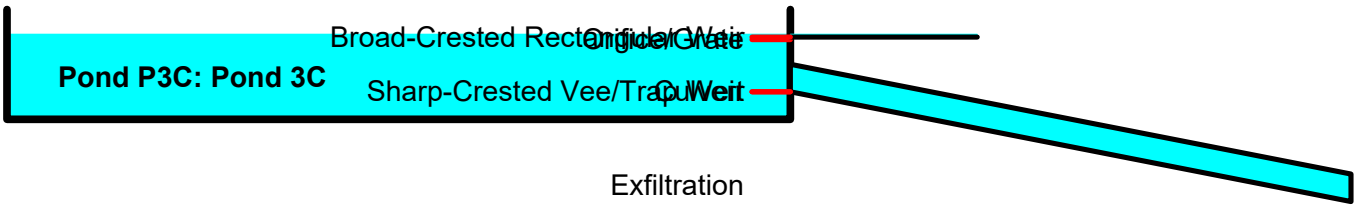
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,178.00	1,905	0	0
1,182.00	5,518	14,846	14,846

Device	Routing	Invert	Outlet Devices
#1	Primary	1,179.00'	**12.0" Round Culvert** L= 30.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,179.00' / 1,175.00' S= 0.1333 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,179.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,180.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,178.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,181.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

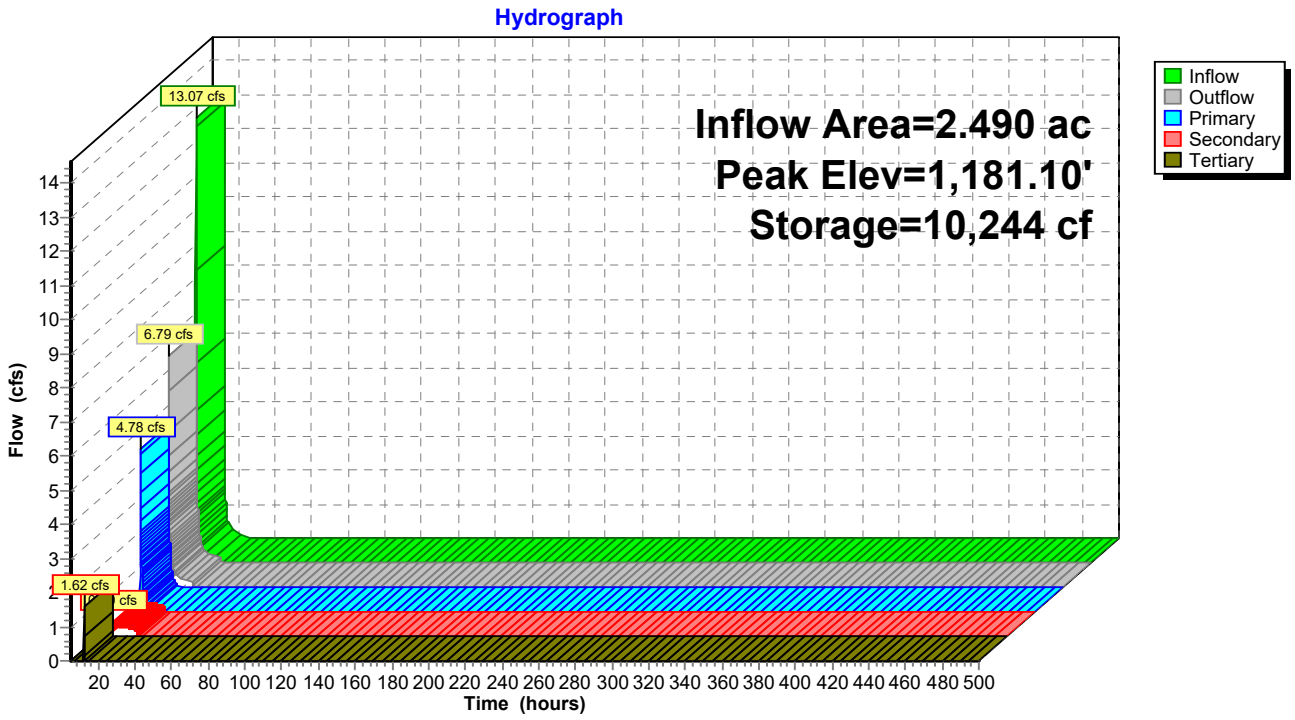
Primary OutFlow Max=4.78 cfs @ 12.24 hrs HW=1,181.10' (Free Discharge)
└**1=Culvert** (Inlet Controls 4.78 cfs @ 6.08 fps)
├**2=Sharp-Crested Vee/Trap Weir** (Passes < 3.02 cfs potential flow)
└**3=Orifice/Grate** (Passes < 2.84 cfs potential flow)

Secondary OutFlow Max=0.39 cfs @ 12.25 hrs HW=1,181.10' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.39 cfs)

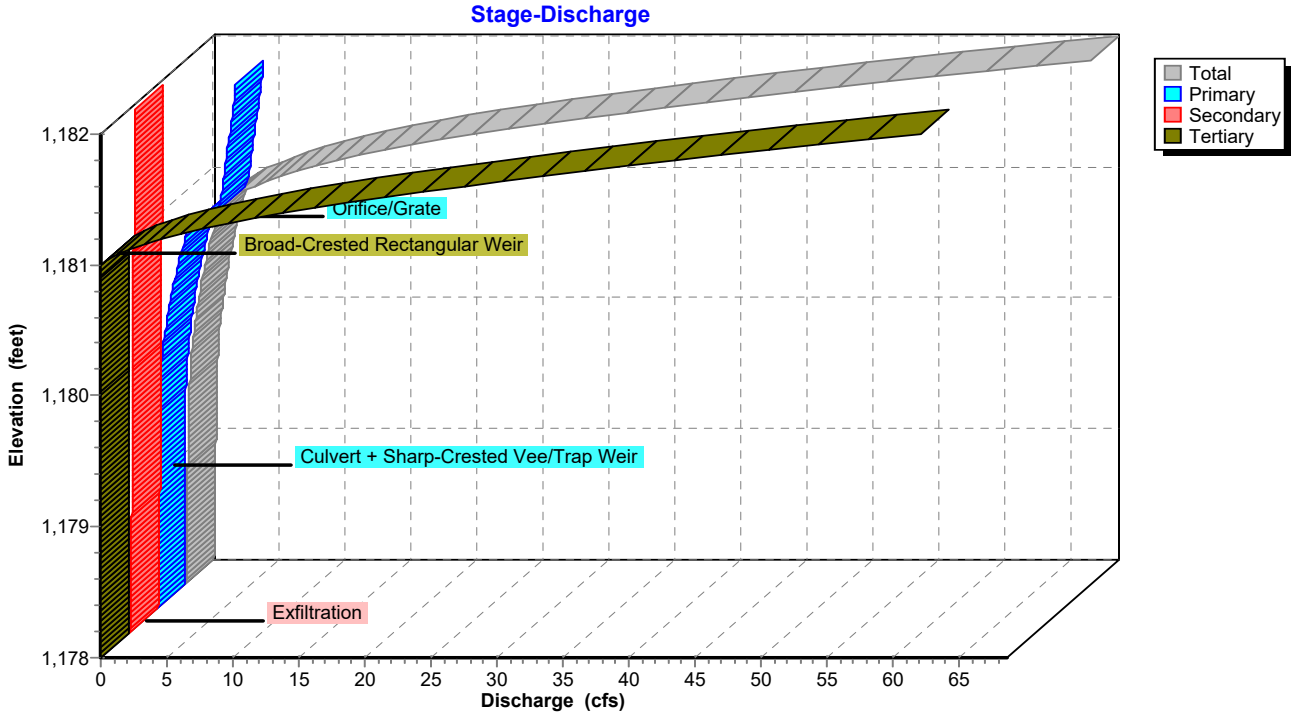
Tertiary OutFlow Max=1.54 cfs @ 12.25 hrs HW=1,181.10' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Weir Controls 1.54 cfs @ 0.78 fps)



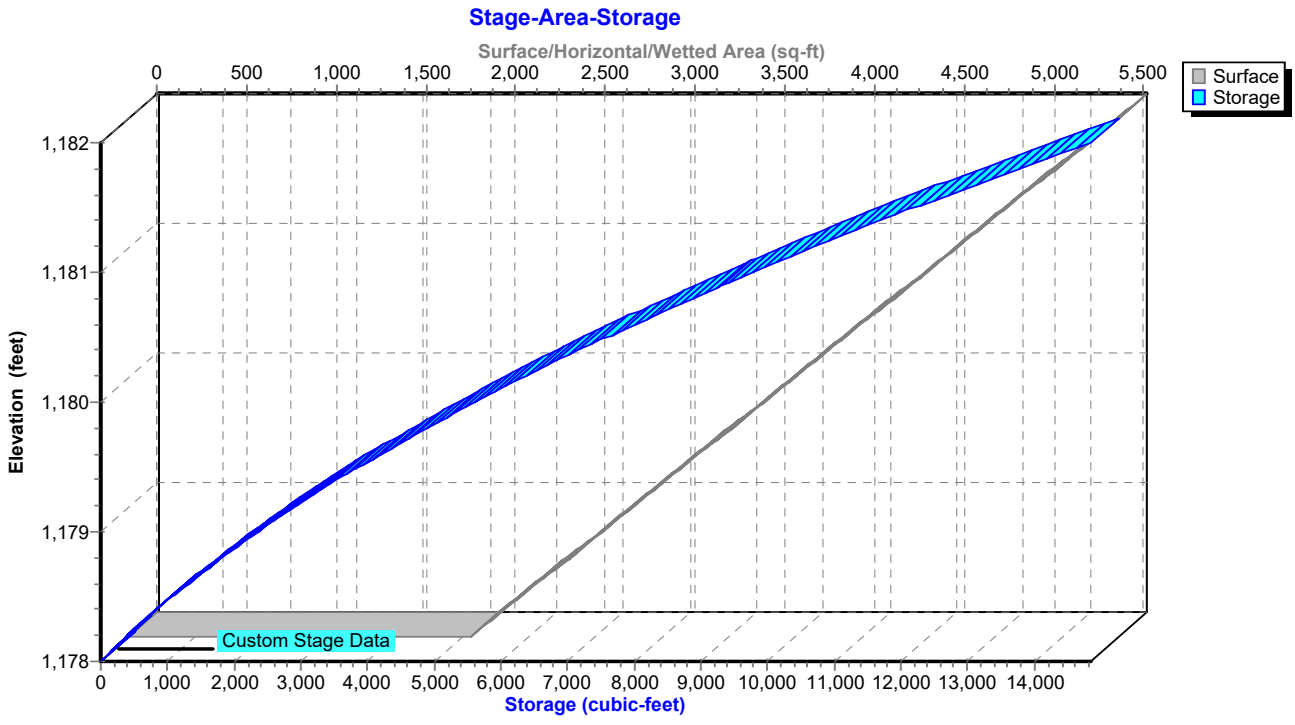
Pond P3C: Pond 3C



Pond P3C: Pond 3C



Pond P3C: Pond 3C



Hydrograph for Pond P3C: Pond 3C

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,178.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.45**	**5,056**	**1,179.85**	**0.61**	**0.31**	**0.30**	**0.00**
25.00	0.00	501	1,178.25	0.18	0.00	0.18	0.00
35.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,178.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3C: Pond 3C

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,178.00	0.00	0.00	0.00	0.00
1,178.10	0.17	0.00	0.17	0.00
1,178.20	0.17	0.00	0.17	0.00
1,178.30	0.18	0.00	0.18	0.00
1,178.40	0.19	0.00	0.19	0.00
1,178.50	0.20	0.00	0.20	0.00
1,178.60	0.20	0.00	0.20	0.00
1,178.70	0.21	0.00	0.21	0.00
1,178.80	0.22	0.00	0.22	0.00
1,178.90	0.23	0.00	0.23	0.00
1,179.00	0.23	0.00	0.23	0.00
1,179.10	0.24	0.00	0.24	0.00
1,179.20	0.26	0.01	0.25	0.00
1,179.30	0.28	0.02	0.26	0.00
1,179.40	0.31	0.05	0.26	0.00
1,179.50	0.36	0.08	0.27	0.00
1,179.60	0.41	0.13	0.28	0.00
1,179.70	0.48	0.19	0.29	0.00
1,179.80	0.57	0.27	0.29	0.00
1,179.90	0.67	0.36	0.30	0.00
1,180.00	0.78	0.47	0.31	0.00
1,180.10	0.92	0.60	0.32	0.00
1,180.20	1.07	0.75	0.32	0.00
1,180.30	1.25	0.91	0.33	0.00
1,180.40	1.44	1.10	0.34	0.00
1,180.50	1.65	1.31	0.35	0.00
1,180.60	1.89	1.54	0.35	0.00
1,180.70	2.15	1.79	0.36	0.00
1,180.80	2.43	2.06	0.37	0.00
1,180.90	2.74	2.36	0.38	0.00
1,181.00	4.10	3.72	0.38	0.00
1,181.10	6.78	4.78	0.39	1.60
1,181.20	9.93	4.93	0.40	4.60
1,181.30	14.18	5.07	0.41	8.70
1,181.40	19.41	5.21	0.41	13.78
1,181.50	25.85	5.35	0.42	20.08
1,181.60	33.42	5.48	0.43	27.51
1,181.70	41.15	5.61	0.44	35.10
1,181.80	49.60	5.74	0.44	43.42
1,181.90	58.76	5.86	0.45	52.45
1,182.00	**68.62**	**5.98**	**0.46**	**62.18**

Stage-Area-Storage for Pond P3C: Pond 3C

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,178.00	1,905	0
1,178.05	1,950	96
1,178.10	1,995	195
1,178.15	2,040	296
1,178.20	2,086	399
1,178.25	2,131	504
1,178.30	2,176	612
1,178.35	2,221	722
1,178.40	2,266	834
1,178.45	2,311	949
1,178.50	2,357	1,065
1,178.55	2,402	1,184
1,178.60	2,447	1,306
1,178.65	2,492	1,429
1,178.70	2,537	1,555
1,178.75	2,582	1,683
1,178.80	2,628	1,813
1,178.85	2,673	1,946
1,178.90	2,718	2,080
1,178.95	2,763	2,217
1,179.00	2,808	2,357
1,179.05	2,853	2,498
1,179.10	2,899	2,642
1,179.15	2,944	2,788
1,179.20	2,989	2,936
1,179.25	3,034	3,087
1,179.30	3,079	3,240
1,179.35	3,124	3,395
1,179.40	3,170	3,552
1,179.45	3,215	3,712
1,179.50	3,260	3,874
1,179.55	3,305	4,038
1,179.60	3,350	4,204
1,179.65	3,395	4,373
1,179.70	3,441	4,544
1,179.75	3,486	4,717
1,179.80	3,531	4,892
1,179.85	3,576	5,070
1,179.90	3,621	5,250
1,179.95	3,666	5,432
1,180.00	3,712	5,617
1,180.05	3,757	5,803
1,180.10	3,802	5,992
1,180.15	3,847	6,183
1,180.20	3,892	6,377
1,180.25	3,937	6,573
1,180.30	3,982	6,771
1,180.35	4,028	6,971
1,180.40	4,073	7,173
1,180.45	4,118	7,378
1,180.50	4,163	7,585
1,180.55	4,208	7,794
1,180.60	4,253	8,006
1,180.65	4,299	8,220
1,180.70	4,344	8,436
1,180.75	4,389	8,654
1,180.80	4,434	8,875
1,180.85	4,479	9,098
1,180.90	4,524	9,323
1,180.95	4,570	9,550
1,181.00	4,615	9,780
1,181.05	4,660	10,011
1,181.10	4,705	10,246
1,181.15	4,750	10,482
1,181.20	4,795	10,721
1,181.25	4,841	10,962
1,181.30	4,886	11,205
1,181.35	4,931	11,450
1,181.40	4,976	11,698
1,181.45	5,021	11,948
1,181.50	5,066	12,200
1,181.55	5,112	12,454
1,181.60	5,157	12,711
1,181.65	5,202	12,970
1,181.70	5,247	13,231
1,181.75	5,292	13,495
1,181.80	5,337	13,760
1,181.85	5,383	14,028
1,181.90	5,428	14,299
1,181.95	5,473	14,571
1,182.00	**5,518**	**14,846**

Summary for Pond P3D: Pond 3D

Inflow Area = 2.380 ac, 23.95% Impervious, Inflow Depth = 3.47" for 100 YR event
Inflow = 12.83 cfs @ 12.13 hrs, Volume= 0.688 af
Outflow = 6.89 cfs @ 12.24 hrs, Volume= 0.688 af, Atten= 46%, Lag= 6.3 min
Primary = 6.04 cfs @ 12.23 hrs, Volume= 0.488 af
Routed to Link 4L : Post - North
Secondary = 0.28 cfs @ 12.23 hrs, Volume= 0.196 af
Tertiary = 0.57 cfs @ 12.24 hrs, Volume= 0.004 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,191.05' @ 12.23 hrs Surf.Area= 3,308 sf Storage= 8,209 cf

Plug-Flow detention time= 61.5 min calculated for 0.687 af (100% of inflow)
Center-of-Mass det. time= 61.5 min (872.2 - 810.7)

Volume	Invert	Avail.Storage	Storage Description
#1	1,187.00'	11,620 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

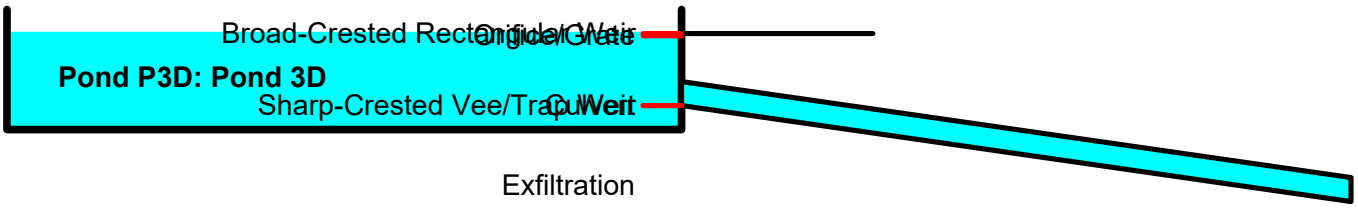
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,187.00	741	0	0
1,192.00	3,907	11,620	11,620

Device	Routing	Invert	Outlet Devices
#1	Primary	1,188.00'	**12.0" Round Culvert** L= 35.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,188.00' / 1,184.00' S= 0.1143 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,188.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,190.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600
#4	Secondary	1,187.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,191.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

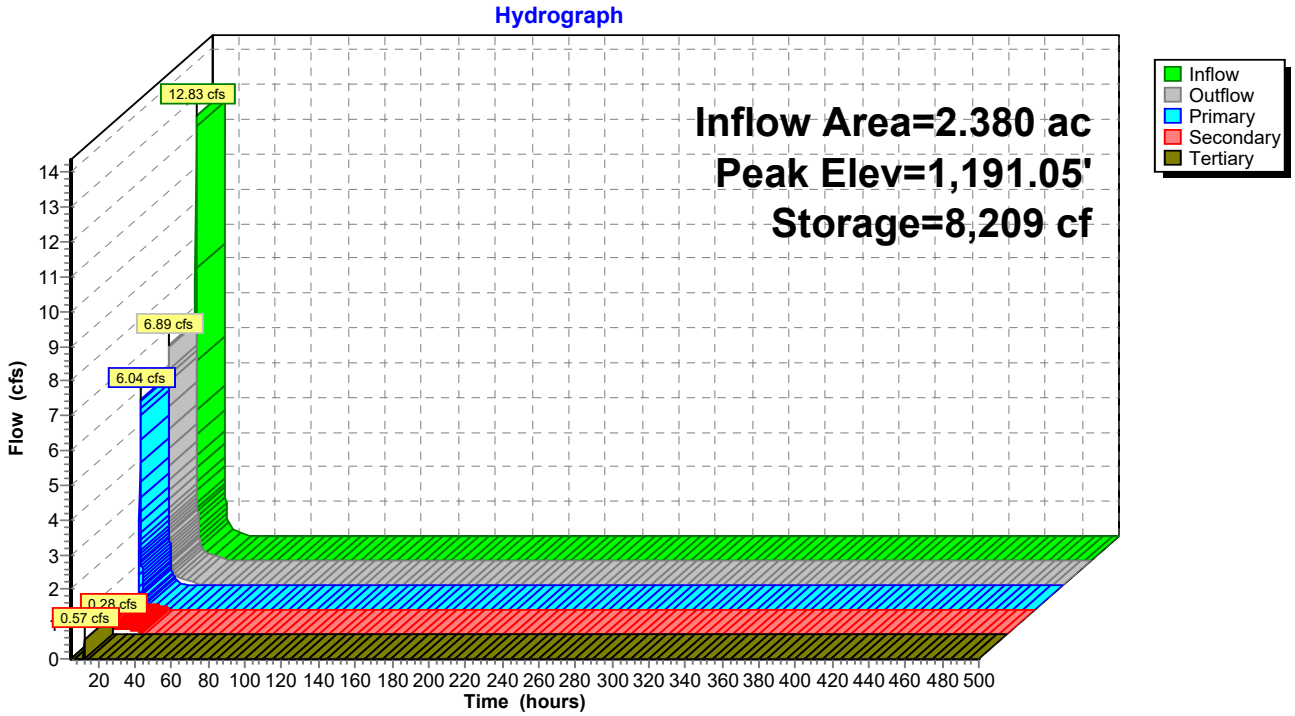
Primary OutFlow Max=6.03 cfs @ 12.23 hrs HW=1,191.04' (Free Discharge)
└**1=Culvert** (Inlet Controls 6.03 cfs @ 7.68 fps)
└**2=Sharp-Crested Vee/Trap Weir** (Passes < 7.67 cfs potential flow)
└**3=Orifice/Grate** (Passes < 10.95 cfs potential flow)

Secondary OutFlow Max=0.28 cfs @ 12.23 hrs HW=1,191.04' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.28 cfs)

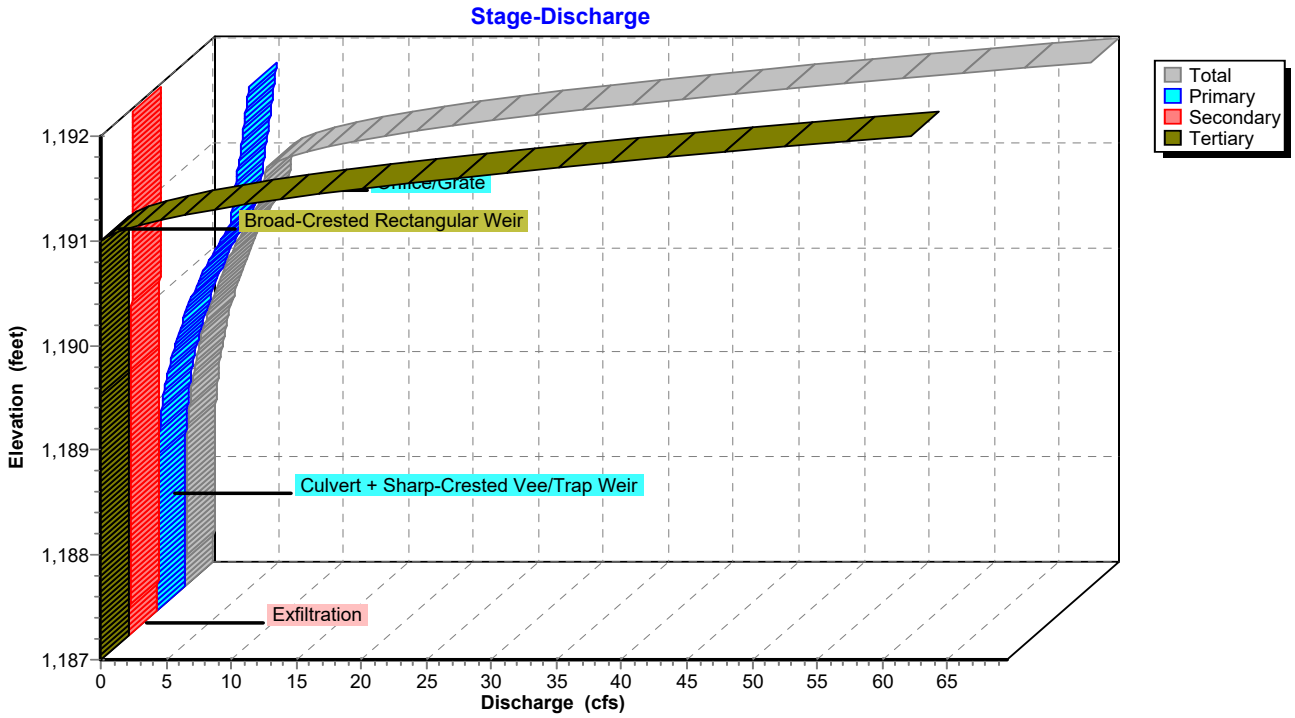
Tertiary OutFlow Max=0.48 cfs @ 12.24 hrs HW=1,191.05' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Weir Controls 0.48 cfs @ 0.53 fps)



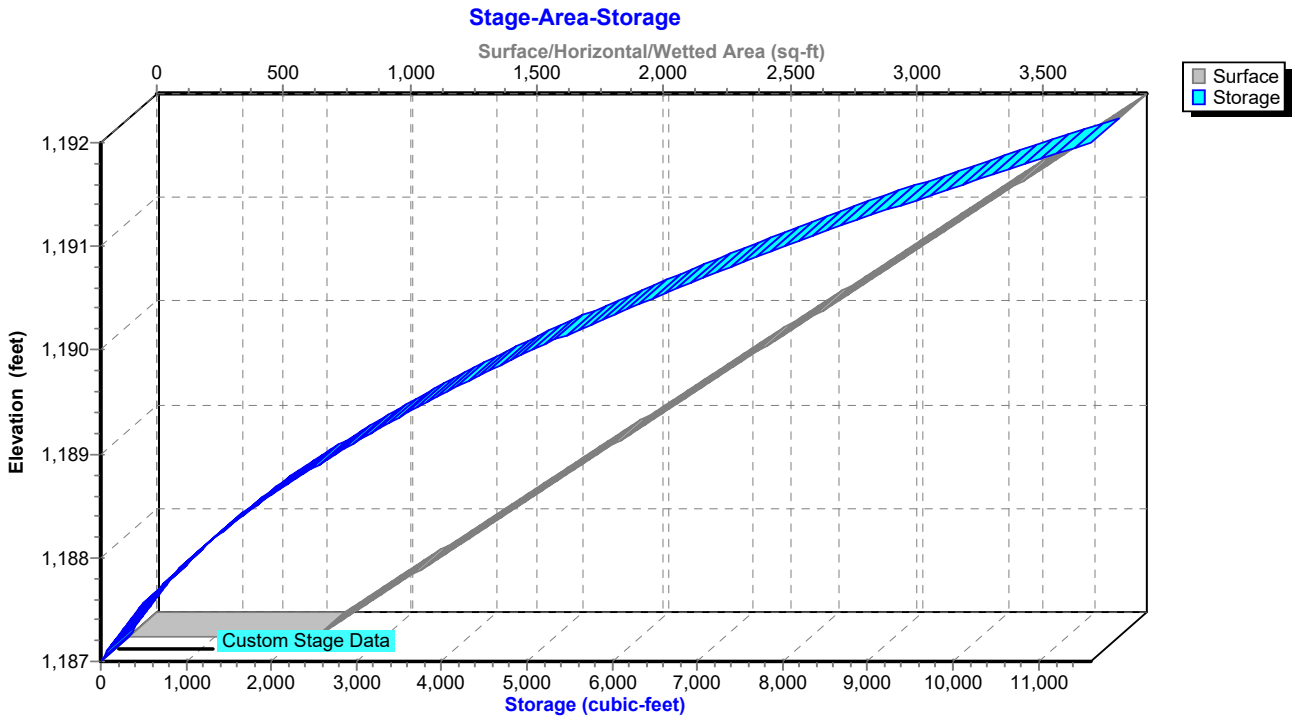
Pond P3D: Pond 3D



Pond P3D: Pond 3D



Pond P3D: Pond 3D



Hydrograph for Pond P3D: Pond 3D

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,187.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.43**	**2,469**	**1,188.86**	**0.48**	**0.32**	**0.16**	**0.00**
25.00	0.00	703	1,187.72	0.10	0.00	0.10	0.00
35.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,187.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3D: Pond 3D

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,187.00	0.00	0.00	0.00	0.00
1,187.10	0.07	0.00	0.07	0.00
1,187.20	0.07	0.00	0.07	0.00
1,187.30	0.08	0.00	0.08	0.00
1,187.40	0.08	0.00	0.08	0.00
1,187.50	0.09	0.00	0.09	0.00
1,187.60	0.09	0.00	0.09	0.00
1,187.70	0.10	0.00	0.10	0.00
1,187.80	0.10	0.00	0.10	0.00
1,187.90	0.11	0.00	0.11	0.00
1,188.00	0.11	0.00	0.11	0.00
1,188.10	0.12	0.00	0.12	0.00
1,188.20	0.13	0.01	0.13	0.00
1,188.30	0.15	0.02	0.13	0.00
1,188.40	0.18	0.05	0.14	0.00
1,188.50	0.22	0.08	0.14	0.00
1,188.60	0.28	0.13	0.15	0.00
1,188.70	0.35	0.19	0.15	0.00
1,188.80	0.43	0.27	0.16	0.00
1,188.90	0.53	0.36	0.16	0.00
1,189.00	0.64	0.47	0.17	0.00
1,189.10	0.77	0.60	0.17	0.00
1,189.20	0.93	0.75	0.18	0.00
1,189.30	1.10	0.91	0.18	0.00
1,189.40	1.29	1.10	0.19	0.00
1,189.50	1.50	1.31	0.19	0.00
1,189.60	1.73	1.54	0.20	0.00
1,189.70	1.99	1.79	0.20	0.00
1,189.80	2.27	2.06	0.21	0.00
1,189.90	2.58	2.36	0.21	0.00
1,190.00	2.90	2.68	0.22	0.00
1,190.10	3.26	3.03	0.23	0.00
1,190.20	3.64	3.41	0.23	0.00
1,190.30	4.04	3.81	0.24	0.00
1,190.40	4.47	4.23	0.24	0.00
1,190.50	4.93	4.69	0.25	0.00
1,190.60	5.42	5.17	0.25	0.00
1,190.70	5.87	5.61	0.26	0.00
1,190.80	6.00	5.74	0.26	0.00
1,190.90	6.13	5.86	0.27	0.00
1,191.00	6.25	5.98	0.27	0.00
1,191.10	7.98	6.10	0.28	1.60
1,191.20	11.09	6.21	0.28	4.60
1,191.30	15.31	6.33	0.29	8.70
1,191.40	20.52	6.44	0.29	13.78
1,191.50	26.93	6.55	0.30	20.08
1,191.60	34.47	6.66	0.30	27.51
1,191.70	42.18	6.76	0.31	35.10
1,191.80	50.61	6.87	0.32	43.42
1,191.90	59.75	6.97	0.32	52.45
1,192.00	**69.58**	**7.07**	**0.33**	**62.18**

Stage-Area-Storage for Pond P3D: Pond 3D

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,187.00	741	0
1,187.05	773	38
1,187.10	804	77
1,187.15	836	118
1,187.20	868	161
1,187.25	899	205
1,187.30	931	251
1,187.35	963	298
1,187.40	994	347
1,187.45	1,026	398
1,187.50	1,058	450
1,187.55	1,089	503
1,187.60	1,121	559
1,187.65	1,153	615
1,187.70	1,184	674
1,187.75	1,216	734
1,187.80	1,248	795
1,187.85	1,279	859
1,187.90	1,311	923
1,187.95	1,343	990
1,188.00	1,374	1,058
1,188.05	1,406	1,127
1,188.10	1,438	1,198
1,188.15	1,469	1,271
1,188.20	1,501	1,345
1,188.25	1,533	1,421
1,188.30	1,564	1,498
1,188.35	1,596	1,577
1,188.40	1,627	1,658
1,188.45	1,659	1,740
1,188.50	1,691	1,824
1,188.55	1,722	1,909
1,188.60	1,754	1,996
1,188.65	1,786	2,085
1,188.70	1,817	2,175
1,188.75	1,849	2,266
1,188.80	1,881	2,360
1,188.85	1,912	2,454
1,188.90	1,944	2,551
1,188.95	1,976	2,649
1,189.00	2,007	2,748
1,189.05	2,039	2,850
1,189.10	2,071	2,952
1,189.15	2,102	3,057
1,189.20	2,134	3,163
1,189.25	2,166	3,270
1,189.30	2,197	3,379
1,189.35	2,229	3,490
1,189.40	2,261	3,602
1,189.45	2,292	3,716
1,189.50	2,324	3,831
1,189.55	2,356	3,948
1,189.60	2,387	4,067
1,189.65	2,419	4,187
1,189.70	2,451	4,309
1,189.75	2,482	4,432
1,189.80	2,514	4,557
1,189.85	2,546	4,683
1,189.90	2,577	4,812
1,189.95	2,609	4,941
1,190.00	2,641	5,072
1,190.05	2,672	5,205
1,190.10	2,704	5,340
1,190.15	2,736	5,476
1,190.20	2,767	5,613
1,190.25	2,799	5,752
1,190.30	2,831	5,893
1,190.35	2,862	6,035
1,190.40	2,894	6,179
1,190.45	2,926	6,325
1,190.50	2,957	6,472
1,190.55	2,989	6,621
1,190.60	3,021	6,771
1,190.65	3,052	6,923
1,190.70	3,084	7,076
1,190.75	3,116	7,231
1,190.80	3,147	7,388
1,190.85	3,179	7,546
1,190.90	3,210	7,705
1,190.95	3,242	7,867
1,191.00	3,274	8,030
1,191.05	3,305	8,194
1,191.10	3,337	8,360
1,191.15	3,369	8,528
1,191.20	3,400	8,697
1,191.25	3,432	8,868
1,191.30	3,464	9,040
1,191.35	3,495	9,214
1,191.40	3,527	9,390
1,191.45	3,559	9,567
1,191.50	3,590	9,746
1,191.55	3,622	9,926
1,191.60	3,654	10,108
1,191.65	3,685	10,291
1,191.70	3,717	10,476
1,191.75	3,749	10,663
1,191.80	3,780	10,851
1,191.85	3,812	11,041
1,191.90	3,844	11,232
1,191.95	3,875	11,425
1,192.00	**3,907**	**11,620**

Summary for Pond P3E: Pond 3E

Inflow Area = 2.780 ac, 19.06% Impervious, Inflow Depth = 3.27" for 100 YR event
Inflow = 14.19 cfs @ 12.13 hrs, Volume= 0.757 af
Outflow = 7.12 cfs @ 12.25 hrs, Volume= 0.757 af, Atten= 50%, Lag= 7.2 min
Primary = 4.80 cfs @ 12.25 hrs, Volume= 0.380 af
Routed to Link 4L : Post - North
Secondary = 0.39 cfs @ 12.25 hrs, Volume= 0.361 af
Tertiary = 1.93 cfs @ 12.25 hrs, Volume= 0.016 af

Routing by Stor-Ind method, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 1,219.11' @ 12.25 hrs Surf.Area= 4,661 sf Storage= 11,171 cf

Plug-Flow detention time= 107.5 min calculated for 0.757 af (100% of inflow)
Center-of-Mass det. time= 107.5 min (922.2 - 814.6)

Volume	Invert	Avail.Storage	Storage Description
#1	1,216.00'	15,578 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

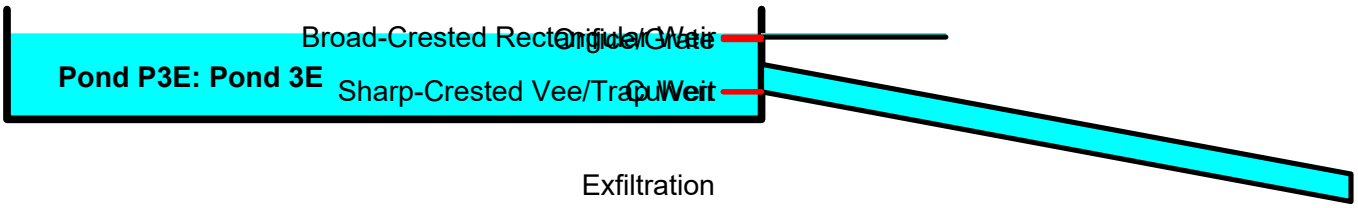
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,216.00	2,517	0	0
1,220.00	5,272	15,578	15,578

Device	Routing	Invert	Outlet Devices
#1	Primary	1,217.00'	**12.0" Round Culvert** L= 32.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,217.00' / 1,213.00' S= 0.1250 '/' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	1,217.00'	**20.0 deg Sharp-Crested Vee/Trap Weir** Cv= 2.69 (C= 3.36)
#3	Device 1	1,218.90'	**24.0" x 36.0" Horiz. Orifice/Grate** C= 0.600
#4	Secondary	1,216.00'	**3.600 in/hr Exfiltration over Surface area**
#5	Tertiary	1,219.00'	**20.0' long + 4.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

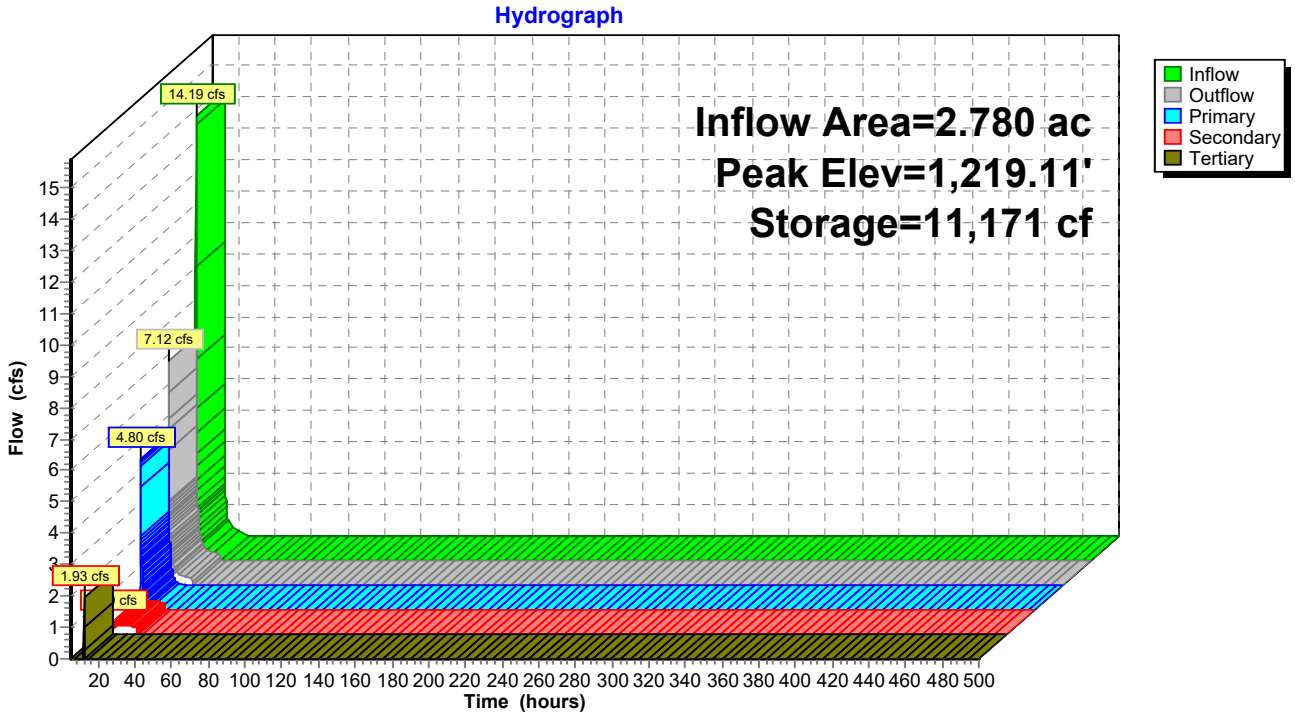
Primary OutFlow Max=4.80 cfs @ 12.25 hrs HW=1,219.11' (Free Discharge)
└**1=Culvert** (Inlet Controls 4.80 cfs @ 6.11 fps)
└**2=Sharp-Crested Vee/Trap Weir** (Passes < 3.08 cfs potential flow)
└**3=Orifice/Grate** (Passes < 13.32 cfs potential flow)

Secondary OutFlow Max=0.39 cfs @ 12.25 hrs HW=1,219.11' (Free Discharge)
└**4=Exfiltration** (Exfiltration Controls 0.39 cfs)

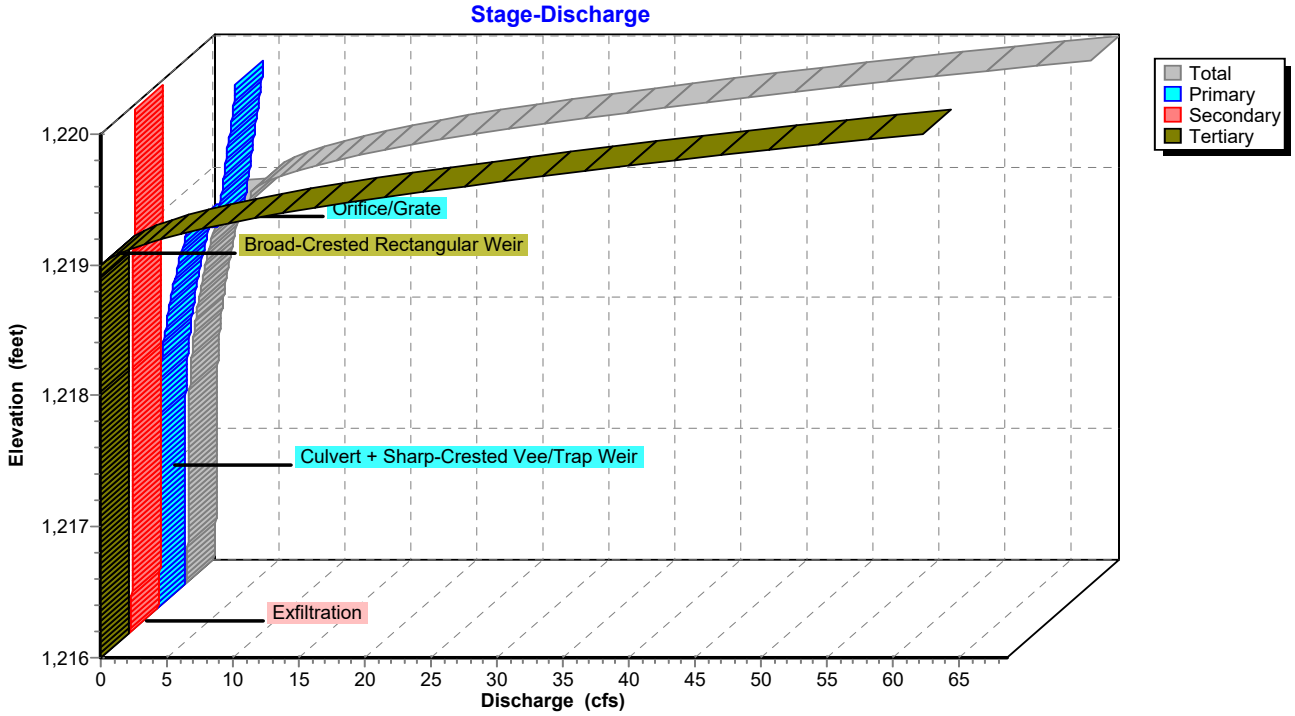
Tertiary OutFlow Max=1.84 cfs @ 12.25 hrs HW=1,219.11' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Weir Controls 1.84 cfs @ 0.82 fps)



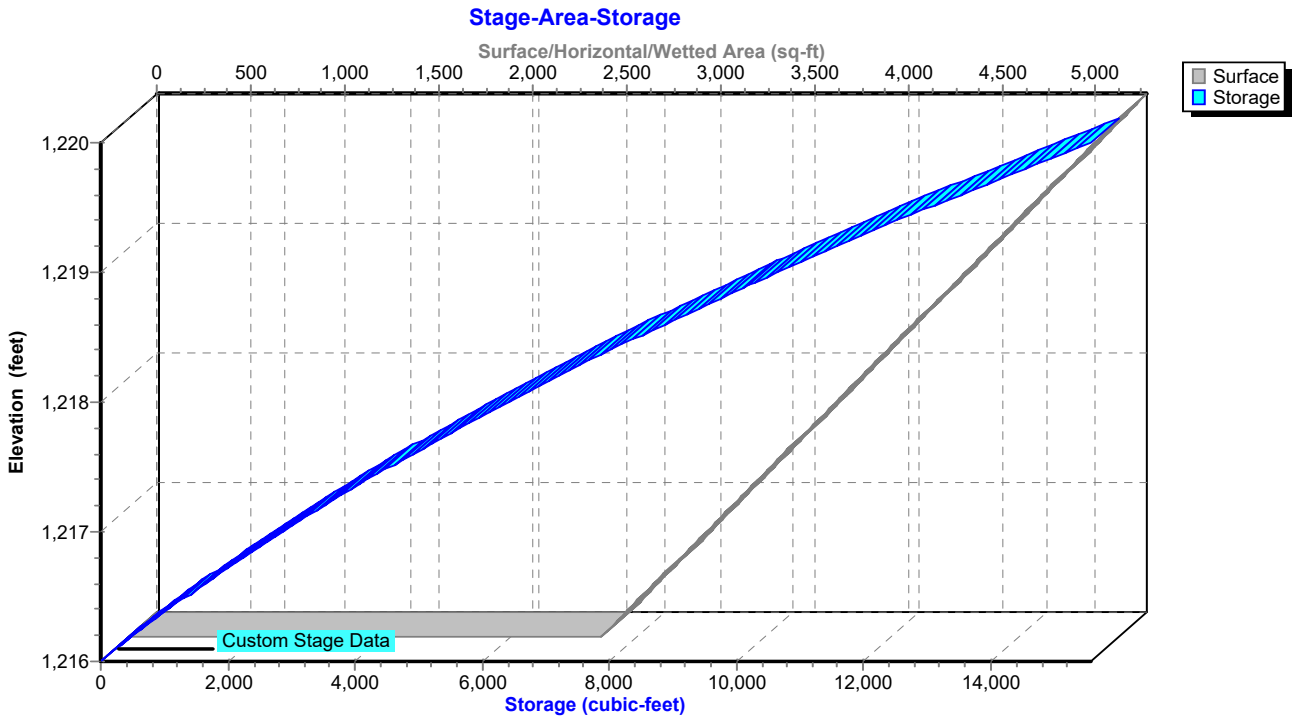
Pond P3E: Pond 3E



Pond P3E: Pond 3E



Pond P3E: Pond 3E



Hydrograph for Pond P3E: Pond 3E

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
5.00	**0.00**	**0**	**1,216.00**	**0.00**	**0.00**	**0.00**	**0.00**
15.00	**0.49**	**5,966**	**1,217.88**	**0.67**	**0.35**	**0.32**	**0.00**
25.00	0.00	622	1,216.24	0.22	0.00	0.22	0.00
35.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
45.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
55.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
65.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
75.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
85.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
95.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
105.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
115.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
125.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
135.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
145.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
155.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
165.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
175.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
185.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
195.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
205.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
215.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
225.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
235.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
245.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
255.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
265.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
275.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
285.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
295.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
305.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
315.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
325.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
335.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
345.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
355.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
365.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
375.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
385.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
395.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
405.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
415.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
425.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
435.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
445.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
455.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
465.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
475.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
485.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00
495.00	0.00	0	1,216.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond P3E: Pond 3E

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)	Tertiary (cfs)
1,216.00	0.00	0.00	0.00	0.00
1,216.10	0.22	0.00	0.22	0.00
1,216.20	0.22	0.00	0.22	0.00
1,216.30	0.23	0.00	0.23	0.00
1,216.40	0.23	0.00	0.23	0.00
1,216.50	0.24	0.00	0.24	0.00
1,216.60	0.24	0.00	0.24	0.00
1,216.70	0.25	0.00	0.25	0.00
1,216.80	0.26	0.00	0.26	0.00
1,216.90	0.26	0.00	0.26	0.00
1,217.00	0.27	0.00	0.27	0.00
1,217.10	0.27	0.00	0.27	0.00
1,217.20	0.29	0.01	0.28	0.00
1,217.30	0.31	0.02	0.28	0.00
1,217.40	0.34	0.05	0.29	0.00
1,217.50	0.38	0.08	0.30	0.00
1,217.60	0.43	0.13	0.30	0.00
1,217.70	0.50	0.19	0.31	0.00
1,217.80	0.58	0.27	0.31	0.00
1,217.90	0.68	0.36	0.32	0.00
1,218.00	0.80	0.47	0.32	0.00
1,218.10	0.93	0.60	0.33	0.00
1,218.20	1.08	0.75	0.34	0.00
1,218.30	1.26	0.91	0.34	0.00
1,218.40	1.45	1.10	0.35	0.00
1,218.50	1.66	1.31	0.35	0.00
1,218.60	1.89	1.54	0.36	0.00
1,218.70	2.15	1.79	0.36	0.00
1,218.80	2.43	2.06	0.37	0.00
1,218.90	2.74	2.36	0.38	0.00
1,219.00	5.01	4.63	0.38	0.00
1,219.10	6.77	4.78	0.39	1.60
1,219.20	9.92	4.93	0.39	4.60
1,219.30	14.17	5.07	0.40	8.70
1,219.40	19.40	5.21	0.40	13.78
1,219.50	25.84	5.35	0.41	20.08
1,219.60	33.40	5.48	0.42	27.51
1,219.70	41.13	5.61	0.42	35.10
1,219.80	49.59	5.74	0.43	43.42
1,219.90	58.74	5.86	0.43	52.45
1,220.00	**68.59**	**5.98**	**0.44**	**62.18**

Stage-Area-Storage for Pond P3E: Pond 3E

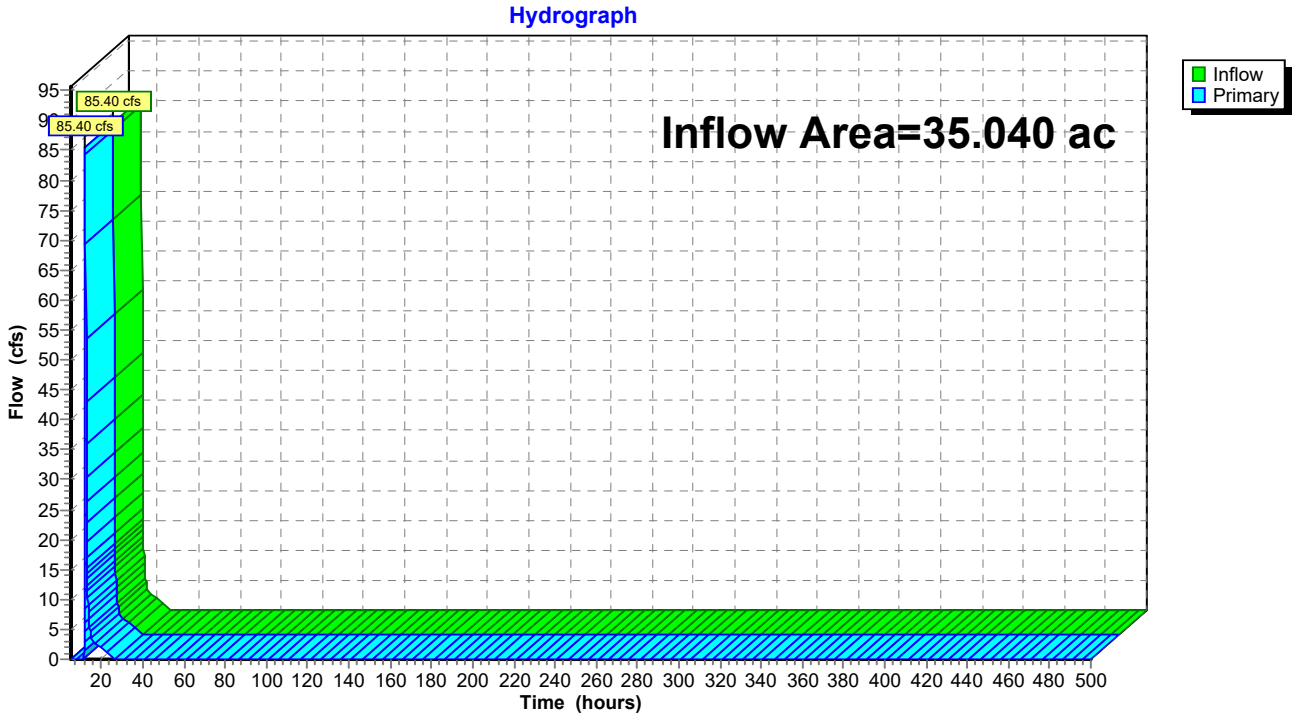
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
1,216.00	2,517	0
1,216.05	2,551	127
1,216.10	2,586	255
1,216.15	2,620	385
1,216.20	2,655	517
1,216.25	2,689	651
1,216.30	2,724	786
1,216.35	2,758	923
1,216.40	2,793	1,062
1,216.45	2,827	1,202
1,216.50	2,861	1,345
1,216.55	2,896	1,489
1,216.60	2,930	1,634
1,216.65	2,965	1,782
1,216.70	2,999	1,931
1,216.75	3,034	2,081
1,216.80	3,068	2,234
1,216.85	3,102	2,388
1,216.90	3,137	2,544
1,216.95	3,171	2,702
1,217.00	3,206	2,861
1,217.05	3,240	3,023
1,217.10	3,275	3,185
1,217.15	3,309	3,350
1,217.20	3,344	3,516
1,217.25	3,378	3,684
1,217.30	3,412	3,854
1,217.35	3,447	4,026
1,217.40	3,481	4,199
1,217.45	3,516	4,374
1,217.50	3,550	4,550
1,217.55	3,585	4,729
1,217.60	3,619	4,909
1,217.65	3,653	5,091
1,217.70	3,688	5,274
1,217.75	3,722	5,459
1,217.80	3,757	5,646
1,217.85	3,791	5,835
1,217.90	3,826	6,025
1,217.95	3,860	6,218
1,218.00	3,895	6,412
1,218.05	3,929	6,607
1,218.10	3,963	6,804
1,218.15	3,998	7,003
1,218.20	4,032	7,204
1,218.25	4,067	7,407
1,218.30	4,101	7,611
1,218.35	4,136	7,817
1,218.40	4,170	8,024
1,218.45	4,204	8,234
1,218.50	4,239	8,445
1,218.55	4,273	8,658
1,218.60	4,308	8,872
1,218.65	4,342	9,088
1,218.70	4,377	9,306
1,218.75	4,411	9,526
1,218.80	4,445	9,747
1,218.85	4,480	9,971
1,218.90	4,514	10,195
1,218.95	4,549	10,422
1,219.00	4,583	10,650
1,219.05	4,618	10,880
1,219.10	4,652	11,112
1,219.15	4,687	11,346
1,219.20	4,721	11,581
1,219.25	4,755	11,818
1,219.30	4,790	12,056
1,219.35	4,824	12,297
1,219.40	4,859	12,539
1,219.45	4,893	12,783
1,219.50	4,928	13,028
1,219.55	4,962	13,275
1,219.60	4,996	13,524
1,219.65	5,031	13,775
1,219.70	5,065	14,027
1,219.75	5,100	14,282
1,219.80	5,134	14,537
1,219.85	5,169	14,795
1,219.90	5,203	15,054
1,219.95	5,238	15,315
1,220.00	**5,272**	**15,578**

Summary for Link 1L: Total Pre - Development

Inflow Area = 35.040 ac, 0.00% Impervious, Inflow Depth = 1.90" for 100 YR event
Inflow = 85.40 cfs @ 12.18 hrs, Volume= 5.547 af
Primary = 85.40 cfs @ 12.18 hrs, Volume= 5.547 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 1L: Total Pre - Development



Hydrograph for Link 1L: Total Pre - Development

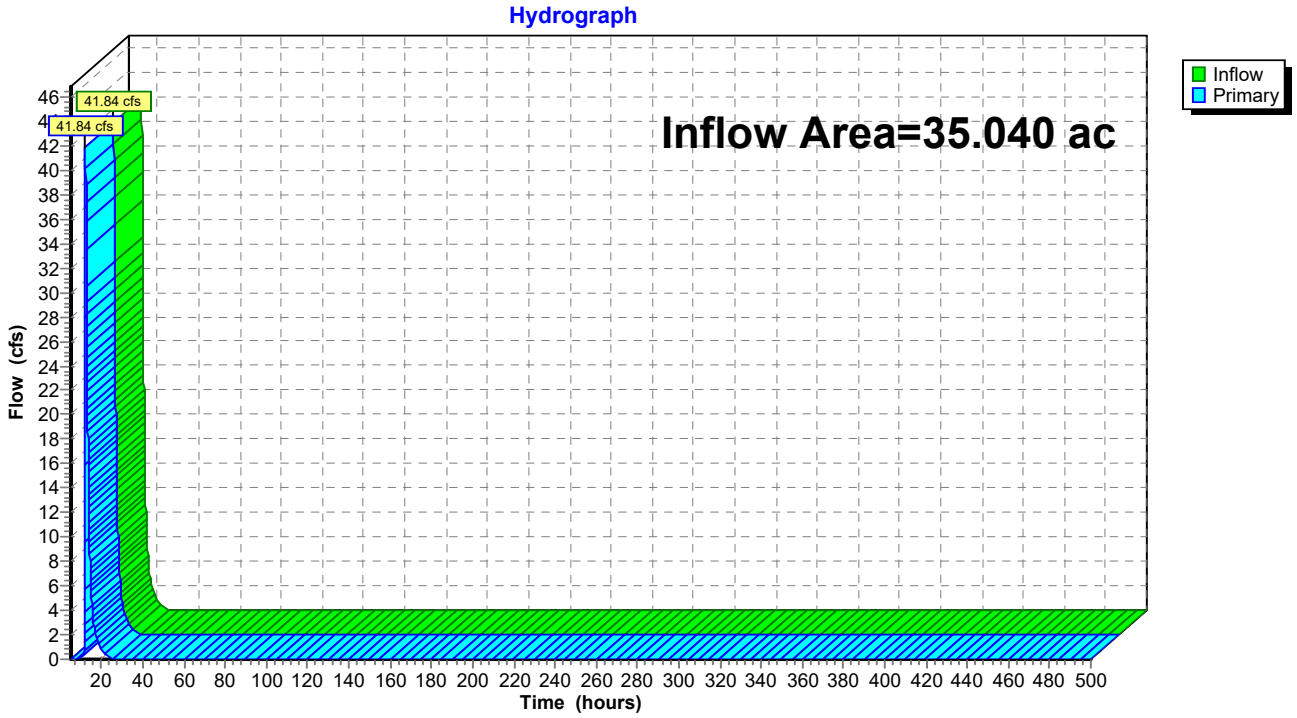
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.00**	0.00	**0.00**	265.00	0.00	0.00	0.00
15.00	**4.55**	0.00	**4.55**	270.00	0.00	0.00	0.00
20.00	1.73	0.00	1.73	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Summary for Link 2L: Total Post - Development

Inflow Area = 35.040 ac, 19.66% Impervious, Inflow Depth = 1.86" for 100 YR event
Inflow = 41.84 cfs @ 12.21 hrs, Volume= 5.425 af
Primary = 41.84 cfs @ 12.21 hrs, Volume= 5.425 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 2L: Total Post - Development



Hydrograph for Link 2L: Total Post - Development

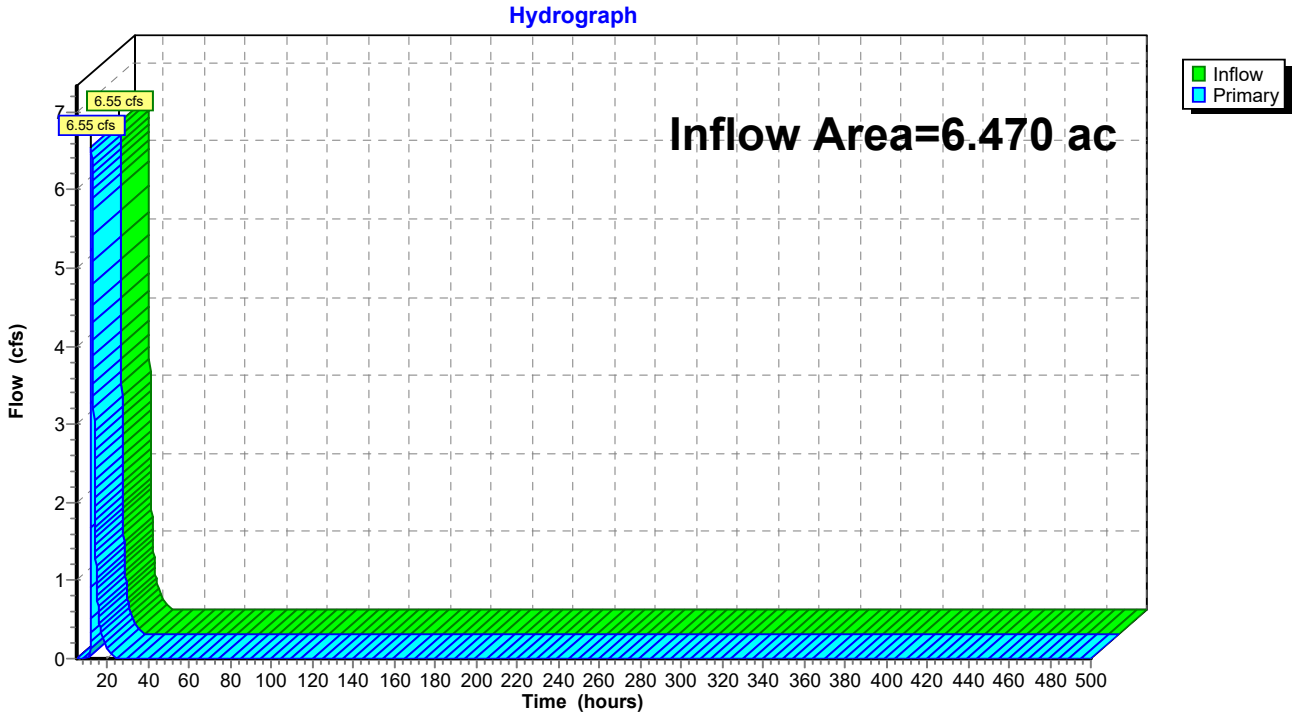
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.09**	0.00	**0.09**	265.00	0.00	0.00	0.00
15.00	**5.37**	0.00	**5.37**	270.00	0.00	0.00	0.00
20.00	0.78	0.00	0.78	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Summary for Link 3L: Post - South

Inflow Area = 6.470 ac, 18.70% Impervious, Inflow Depth = 1.68" for 100 YR event
Inflow = 6.55 cfs @ 12.25 hrs, Volume= 0.907 af
Primary = 6.55 cfs @ 12.25 hrs, Volume= 0.907 af, Atten= 0%, Lag= 0.0 min
Routed to Link 2L : Total Post - Development

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

Link 3L: Post - South



Hydrograph for Link 3L: Post - South

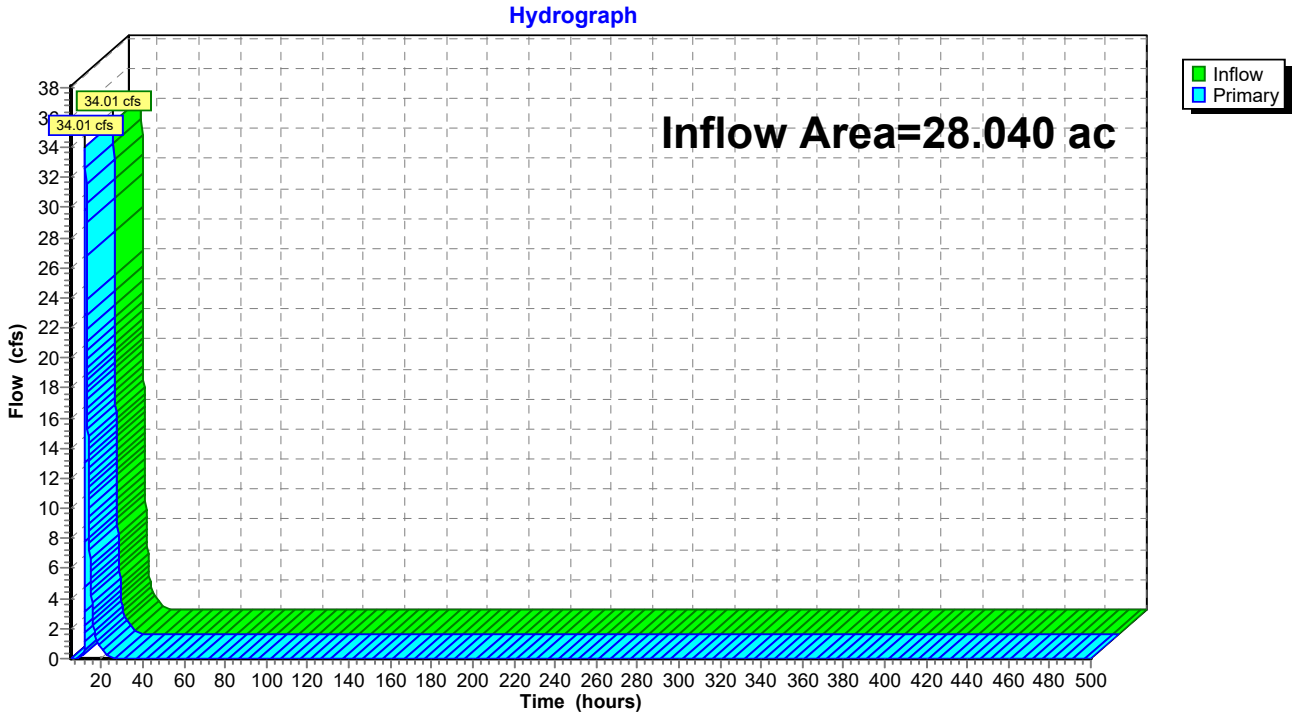
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.00**	0.00	**0.00**	265.00	0.00	0.00	0.00
15.00	**0.88**	0.00	**0.88**	270.00	0.00	0.00	0.00
20.00	0.11	0.00	0.11	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Summary for Link 4L: Post - North

Inflow Area = 28.040 ac, 20.04% Impervious, Inflow Depth = 1.89" for 100 YR event
Inflow = 34.01 cfs @ 12.21 hrs, Volume= 4.411 af
Primary = 34.01 cfs @ 12.21 hrs, Volume= 4.411 af, Atten= 0%, Lag= 0.0 min
Routed to Link 2L : Total Post - Development

Primary outflow = Inflow, Time Span= 5.00-500.00 hrs, dt= 0.05 hrs

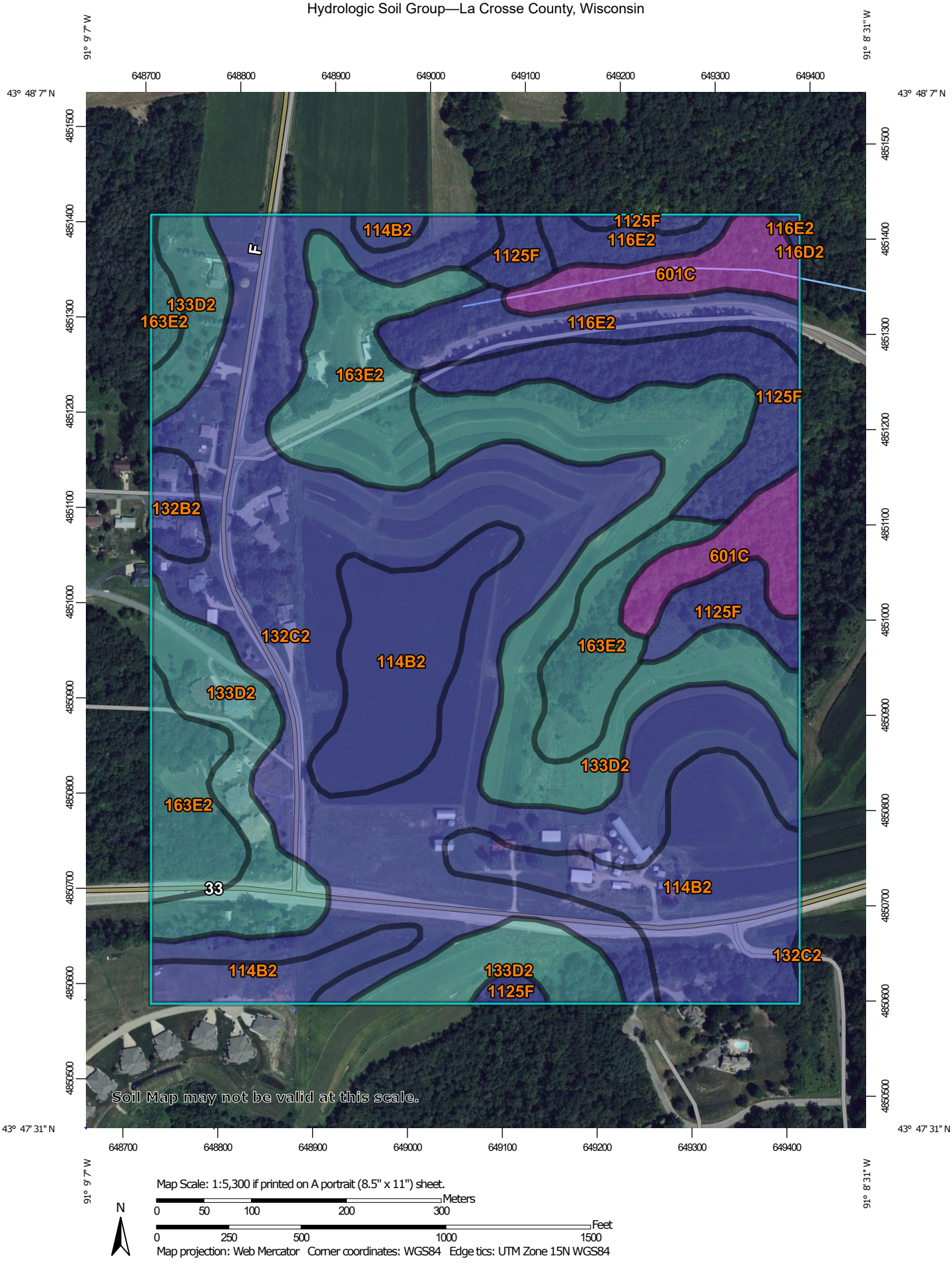
Link 4L: Post - North



Hydrograph for Link 4L: Post - North

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
5.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
10.00	**0.09**	0.00	**0.09**	265.00	0.00	0.00	0.00
15.00	**4.41**	0.00	**4.41**	270.00	0.00	0.00	0.00
20.00	0.64	0.00	0.64	275.00	0.00	0.00	0.00
25.00	0.00	0.00	0.00	280.00	0.00	0.00	0.00
30.00	0.00	0.00	0.00	285.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	290.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Appendix D: Web Soil Survey Map


91° 9' 7" W
91° 8' 31" W
43° 48' 7" N
43° 47' 31" N
648700
648800
648900
649000
649100
649200
649300
649400
4851500
4851400
4851300
4851200
4851100
4851000
4850900
4850800
4850700
4850600
4850500
114B2
1125F
116E2
116D2
601C
133D2
163E2
132B2
132C2
33
F
Soil Map may not be valid at this scale.
Map Scale: 1:5,300 if printed on A portrait (8.5" x 11") sheet.
Meters
0 50 100 200 300
Feet
0 250 500 1000 1500
N
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Lines

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Points

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

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

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: La Crosse County, Wisconsin
Survey Area Data: Version 24, Sep 10, 2025

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

Date(s) aerial images were photographed: Jul 31, 2020—Sep 2, 2020

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

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
114B2	Mt. Carroll silt loam, 2 to 6 percent slopes, moderately eroded	B	22.5	16.0%
116D2	Churchtown silt loam, 12 to 20 percent slopes, moderately eroded	B	0.0	0.0%
116E2	Churchtown silt loam, 20 to 30 percent slopes, moderately eroded	B	7.2	5.1%
132B2	Brinkman silt loam, 2 to 6 percent slopes, moderately eroded	B	1.4	1.0%
132C2	Brinkman silt loam, 6 to 12 percent slopes, moderately eroded	B	47.1	33.5%
133D2	Valton silt loam, 12 to 20 percent slopes, moderately eroded	C	28.1	20.0%
163E2	Elbaville silt loam, 20 to 30 percent slopes, moderately eroded	C	16.3	11.6%
601C	Beavercreek cobbly fine sandy loam, 3 to 12 percent slopes, occasionally flooded	A	7.0	4.9%
1125F	Dorerton, very stony-Elbaville complex, 30 to 60 percent slopes	B	11.1	7.9%
Totals for Area of Interest			**140.6**	**100.0%**

Description

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

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

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

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

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

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

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

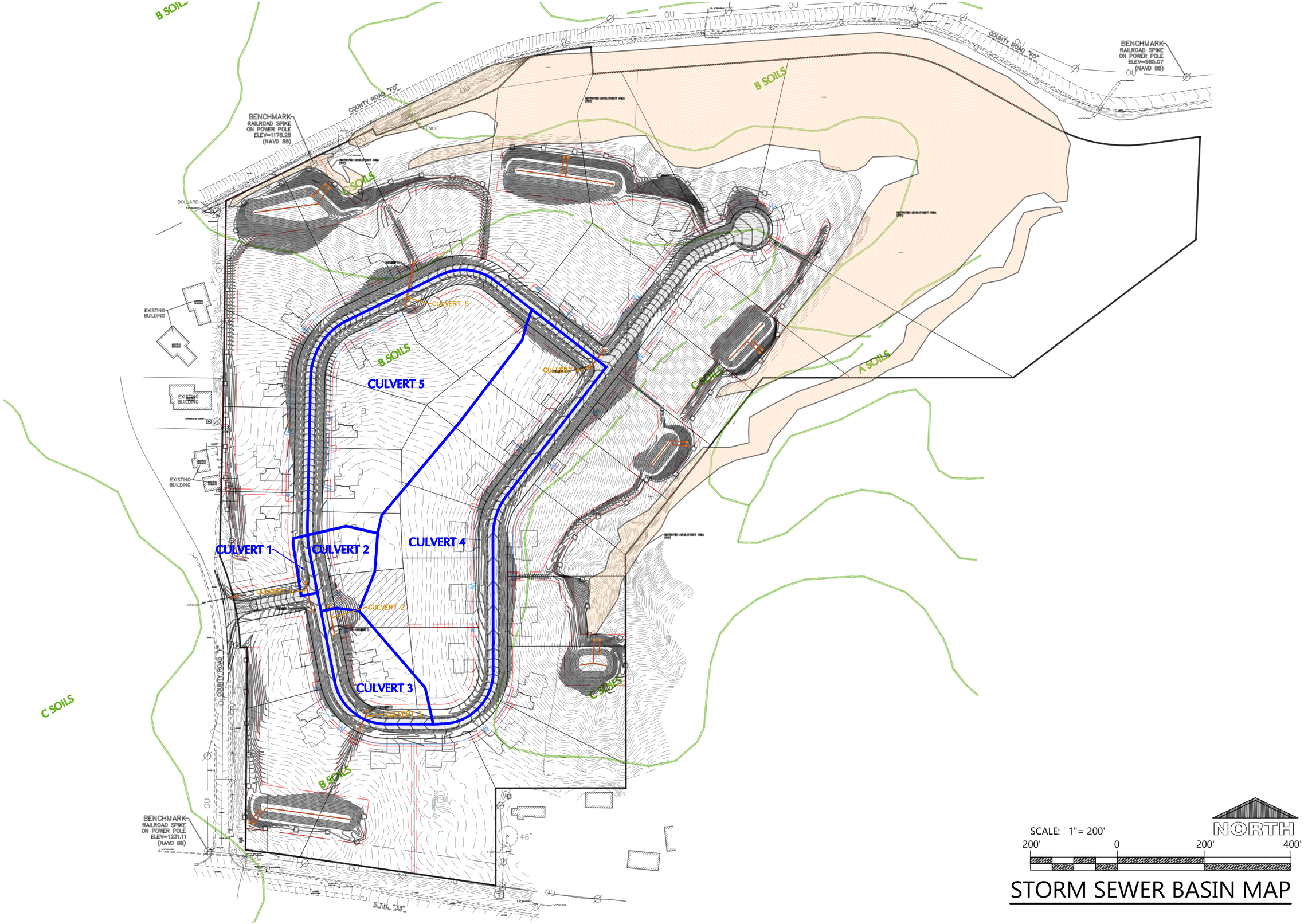
Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Appendix E: Storm Sewer Basin Map



SCALE: 1"= 200'

200' 0 200' 400'

NORTH

STORM SEWER BASIN MAP

Appendix F: Storm Sewer Culvert Calculations

Culvert Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Monday, Feb 23 2026

Culvert 1 - 25 YR Storm

Invert Elev Dn (ft)	=	1261.52
Pipe Length (ft)	=	70.35
Slope (%)	=	0.50
Invert Elev Up (ft)	=	1261.87
Rise (in)	=	12.0
Shape	=	Circular
Span (in)	=	12.0
No. Barrels	=	1
n-Value	=	0.024
Culvert Type	=	Circular Corrugate Metal Pipe
Culvert Entrance	=	Headwall
Coeff. K,M,c,Y,k	=	0.0078, 2, 0.0379, 0.69, 0.5

Embankment

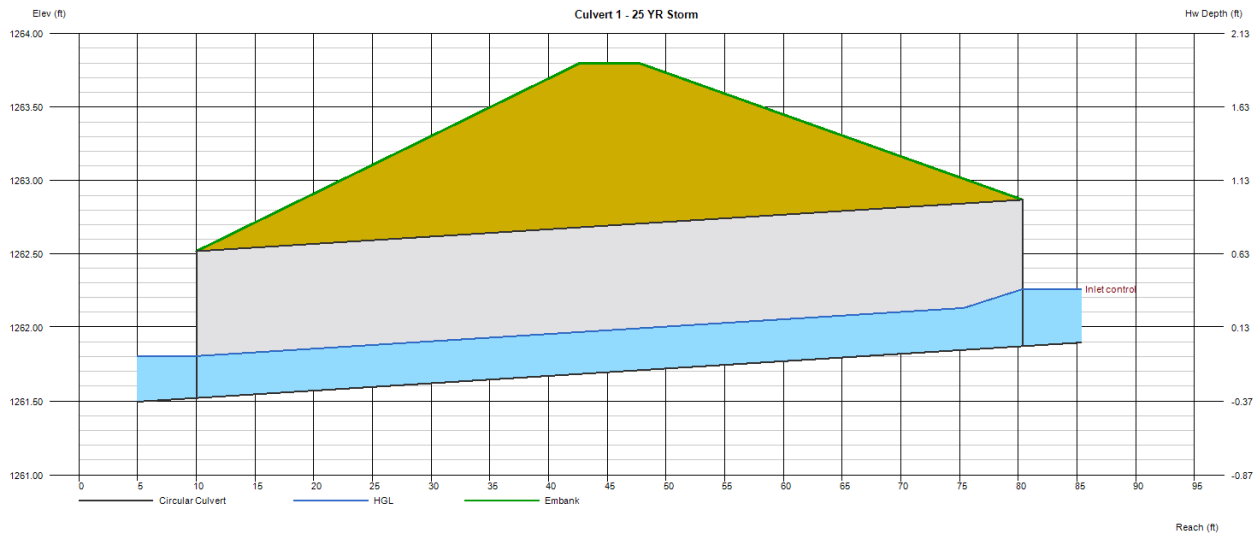
Top Elevation (ft)	=	1263.80
Top Width (ft)	=	5.00
Crest Width (ft)	=	5.00

Calculations

Qmin (cfs)	=	0.47
Qmax (cfs)	=	0.47
Tailwater Elev (ft)	=	0.00

Highlighted

Qtotal (cfs)	=	0.47
Qpipe (cfs)	=	0.47
Qovertop (cfs)	=	0.00
Veloc Dn (ft/s)	=	2.56
Veloc Up (ft/s)	=	2.56
HGL Dn (ft)	=	1261.80
HGL Up (ft)	=	1262.15
Hw Elev (ft)	=	1262.26
Hw/D (ft)	=	0.39
Flow Regime	=	Inlet Control



Culvert Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Feb 18 2026

Culvert 2 - 25 YR Storm

Invert Elev Dn (ft)	=	1260.75
Pipe Length (ft)	=	72.00
Slope (%)	=	0.50
Invert Elev Up (ft)	=	1261.11
Rise (in)	=	12.0
Shape	=	Circular
Span (in)	=	12.0
No. Barrels	=	1
n-Value	=	0.024
Culvert Type	=	Circular Corrugate Metal Pipe
Culvert Entrance	=	Headwall
Coeff. K,M,c,Y,k	=	0.0078, 2, 0.0379, 0.69, 0.5

Embankment

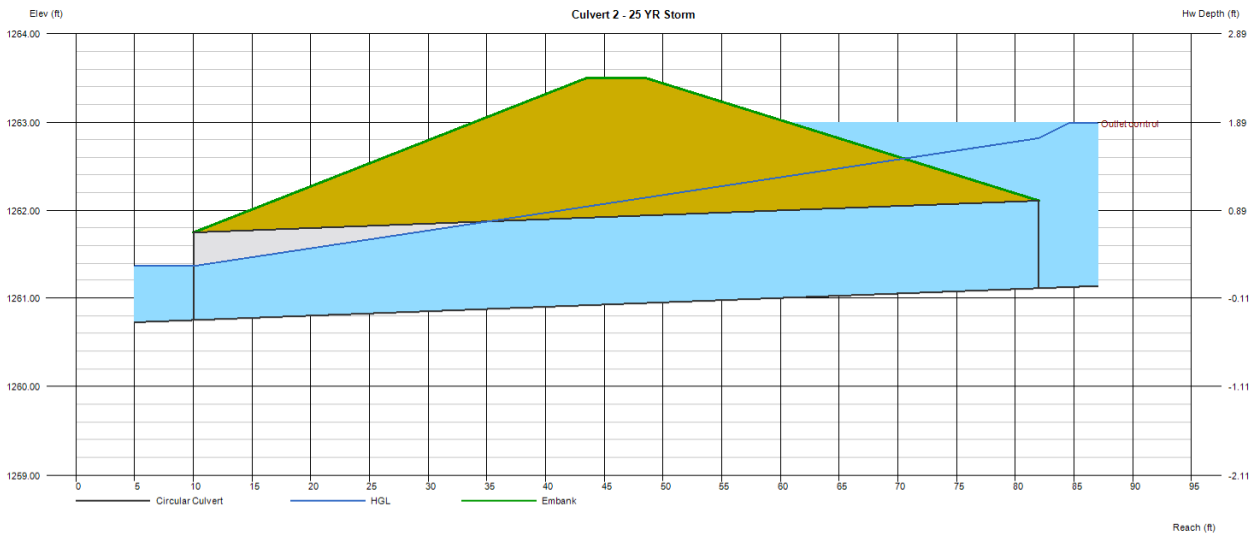
Top Elevation (ft)	=	1263.50
Top Width (ft)	=	5.00
Crest Width (ft)	=	5.00

Calculations

Qmin (cfs)	=	2.11
Qmax (cfs)	=	2.11
Tailwater Elev (ft)	=	0.00

Highlighted

Qtotal (cfs)	=	2.11
Qpipe (cfs)	=	2.11
Qovertop (cfs)	=	0.00
Veloc Dn (ft/s)	=	4.13
Veloc Up (ft/s)	=	2.69
HGL Dn (ft)	=	1261.37
HGL Up (ft)	=	1262.82
Hw Elev (ft)	=	1262.99
Hw/D (ft)	=	1.88
Flow Regime	=	Outlet Control



Culvert Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Monday, Feb 23 2026

Culvert 3 - 25 YR Storm

Invert Elev Dn (ft)	=	1257.05
Pipe Length (ft)	=	50.00
Slope (%)	=	1.00
Invert Elev Up (ft)	=	1257.55
Rise (in)	=	15.0
Shape	=	Circular
Span (in)	=	15.0
No. Barrels	=	1
n-Value	=	0.024
Culvert Type	=	Circular Corrugate Metal Pipe
Culvert Entrance	=	Headwall
Coeff. K,M,c,Y,k	=	0.0078, 2, 0.0379, 0.69, 0.5

Embankment

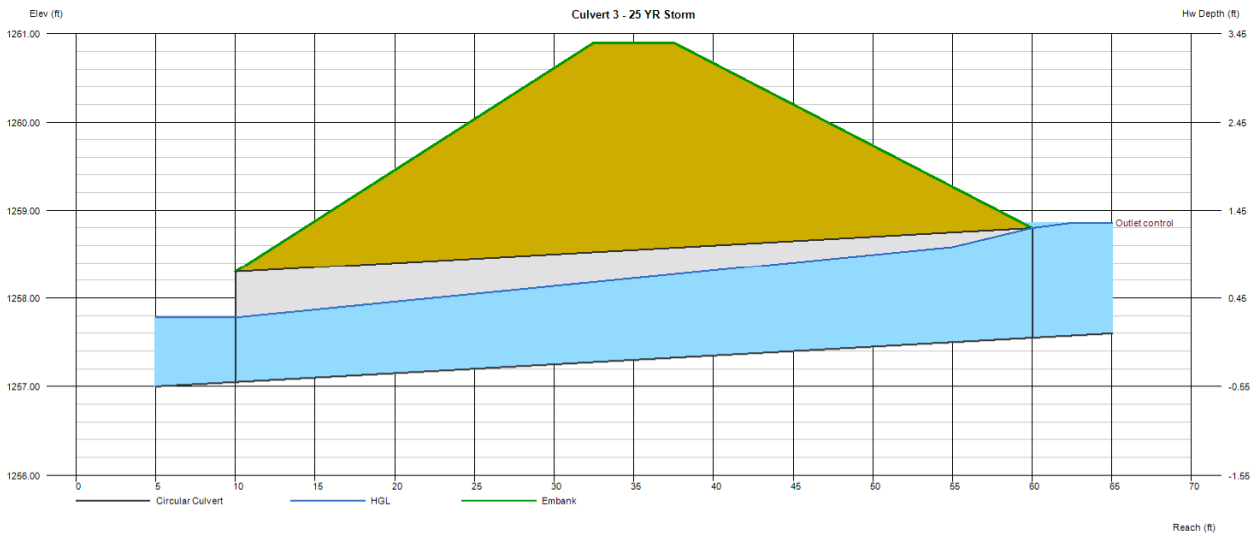
Top Elevation (ft)	=	1260.90
Top Width (ft)	=	5.00
Crest Width (ft)	=	5.00

Calculations

Qmin (cfs)	=	3.29
Qmax (cfs)	=	3.29
Tailwater Elev (ft)	=	0.00

Highlighted

Qtotal (cfs)	=	3.29
Qpipe (cfs)	=	3.29
Qovertop (cfs)	=	0.00
Veloc Dn (ft/s)	=	4.42
Veloc Up (ft/s)	=	2.83
HGL Dn (ft)	=	1257.78
HGL Up (ft)	=	1258.67
Hw Elev (ft)	=	1258.86
Hw/D (ft)	=	1.05
Flow Regime	=	Outlet Control



Culvert Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Monday, Feb 23 2026

Culvert 4 - 25 YR Storm

Invert Elev Dn (ft)	=	1231.15
Pipe Length (ft)	=	60.00
Slope (%)	=	2.25
Invert Elev Up (ft)	=	1232.50
Rise (in)	=	24.0
Shape	=	Circular
Span (in)	=	24.0
No. Barrels	=	1
n-Value	=	0.024
Culvert Type	=	Circular Corrugate Metal Pipe
Culvert Entrance	=	Headwall
Coeff. K,M,c,Y,k	=	0.0078, 2, 0.0379, 0.69, 0.5

Embankment

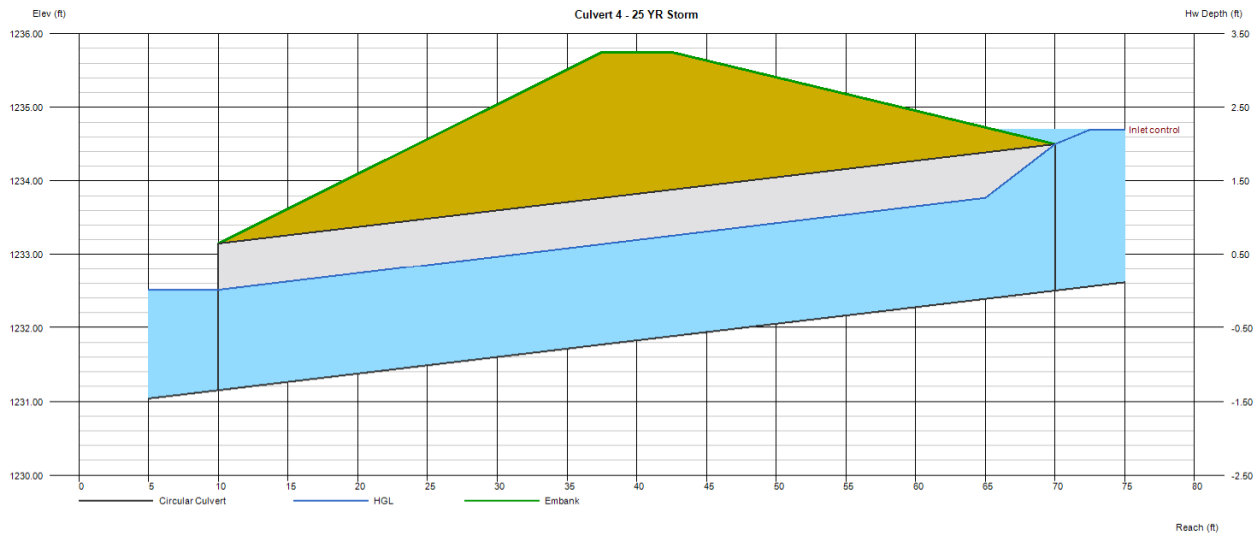
Top Elevation (ft)	=	1235.75
Top Width (ft)	=	5.00
Crest Width (ft)	=	5.00

Calculations

Qmin (cfs)	=	14.78
Qmax (cfs)	=	14.78
Tailwater Elev (ft)	=	0.00

Highlighted

Qtotal (cfs)	=	14.78
Qpipe (cfs)	=	14.78
Qovertop (cfs)	=	0.00
Veloc Dn (ft/s)	=	6.49
Veloc Up (ft/s)	=	6.37
HGL Dn (ft)	=	1232.51
HGL Up (ft)	=	1233.89
Hw Elev (ft)	=	1234.70
Hw/D (ft)	=	1.10
Flow Regime	=	Inlet Control



Culvert Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Monday, Feb 23 2026

Culvert 5 - 25 YR Storm

Invert Elev Dn (ft)	=	1219.00
Pipe Length (ft)	=	104.50
Slope (%)	=	6.70
Invert Elev Up (ft)	=	1226.00
Rise (in)	=	24.0
Shape	=	Circular
Span (in)	=	24.0
No. Barrels	=	1
n-Value	=	0.024
Culvert Type	=	Circular Corrugate Metal Pipe
Culvert Entrance	=	Headwall
Coeff. K,M,c,Y,k	=	0.0078, 2, 0.0379, 0.69, 0.5

Embankment

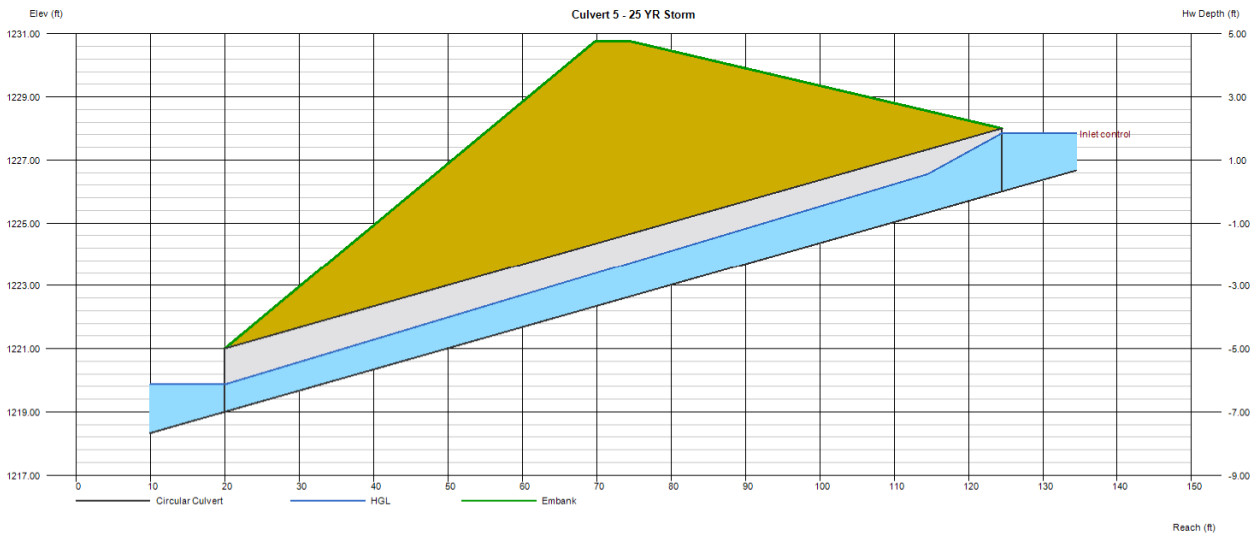
Top Elevation (ft)	=	1230.75
Top Width (ft)	=	5.00
Crest Width (ft)	=	5.00

Calculations

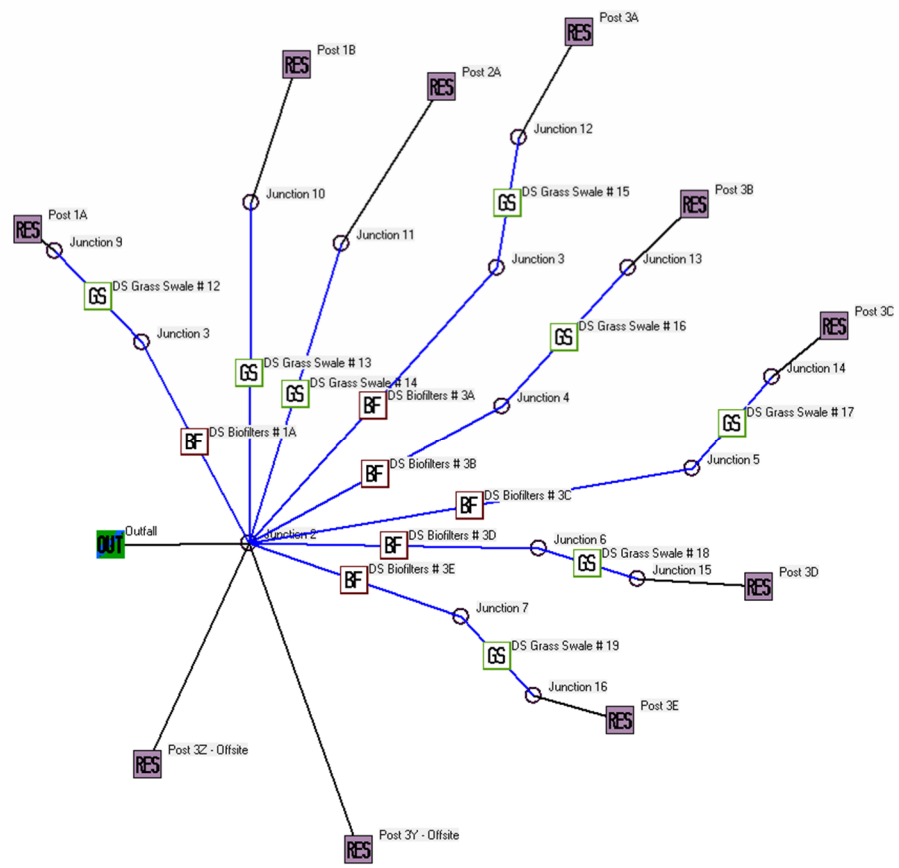
Qmin (cfs)	=	12.22
Qmax (cfs)	=	12.22
Tailwater Elev (ft)	=	0.00

Highlighted

Qtotal (cfs)	=	12.22
Qpipe (cfs)	=	12.22
Qovertop (cfs)	=	0.00
Veloc Dn (ft/s)	=	9.39
Veloc Up (ft/s)	=	5.89
HGL Dn (ft)	=	1219.87
HGL Up (ft)	=	1227.26
Hw Elev (ft)	=	1227.85
Hw/D (ft)	=	0.92
Flow Regime	=	Inlet Control



Appendix G: SLAMM Basin Map & Input/ Output Information



Outfall Output Summary

	Runoff Volume (cu. ft.)	Percent Runoff Reduction	Runoff Coefficient (Rv)	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
Total of All Land Uses without Controls	377181		0.09	245.5	5780	
Outfall Total with Controls	304336	19.31 %	0.07	60.50	1150	80.10 %
Current File Output: Annualized Total After Outfall Controls	305172	Years in Model Run:	1.00		1153	

Print Output Summary to .csv File
Print Output Summary to Text File
Print Output Summary to Printer

Total Area Modeled (ac): 34.890

A biofilter will clog. Review biofilter control practice summary tab to determine which biofilter it is.

Total Control Practice Costs

Capital Cost	N/A
Land Cost	N/A
Annual Maintenance Cost	N/A
Present Value of All Costs	N/A
Annualized Value of All Costs	N/A

Perform Outfall Flow Duration Curve Calculations

Receiving Water Impacts Due To Stormwater Runoff

(CWP Impervious Cover Model)

	Calculated Rv	Approximate Urban Stream Classification
Without Controls	0.09	Good
With Controls	0.07	Good

Input Data

Data file name: \\job-files\2025 Job Files\250128900 Weber - Subdivision Planning - Town of Shelby WI\250128904 Civil\storm water report and calculations\slamm\Current - slamm.mdb
WinSLAMM Version 10.5.0
Rain file name: J:\Programs\civil\WinSLAMM\v10.5.0\Parameter Files\WisReg - Madison WI 1981.ran
Particulate Solids Concentration file name: J:\Programs\civil\WinSLAMM\v10.5.0\Parameter Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: J:\Programs\civil\WinSLAMM\v10.5.0\Parameter Files\WI_SL06 Dec06.rsvx
Residential Street Delivery file name: J:\Programs\civil\WinSLAMM\v10.5.0\Parameter Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: J:\Programs\civil\WinSLAMM\v10.5.0\Parameter Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: J:\Programs\civil\WinSLAMM\v10.5.0\Parameter Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: J:\Programs\civil\WinSLAMM\v10.5.0\Parameter Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: J:\Programs\civil\WinSLAMM\v10.5.0\Parameter Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: J:\Programs\civil\WinSLAMM\v10.5.0\Parameter Files\Freeway Dec06.std
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Pollutant Relative Concentration file name: J:\Programs\civil\WinSLAMM\v10.5.0\Parameter Files\WI_GEO03.ppdx
Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv
Cost Data file name:
Seed for random number generator: -42
Study period starting date: 01/01/81 Study period ending date: 12/31/81
Start of Winter Season: 12/02 End of Winter Season: 03/12
Date: 02-23-2026 Time: 12:35:52
Site information:

LU# 1 - Residential: Post 1A Total area (ac): 6.030
1 - Roofs 1: 0.480 ac. Pitched Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
25 - Driveways 1: 0.250 ac. Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.090 ac. Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
37 - Streets 1: 0.340 ac. Smooth Street Length = 0.1169 mi Street Width = 23.99487 ft Street Edges = 2
Default St. Dirt Accum. Annual Winter Load = 2500 lbs Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 4.870 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
LU# 2 - Residential: Post 1B Total area (ac): 0.440
37 - Streets 1: 0.050 ac. Smooth Street Length = 0.0172 mi Street Width = 23.98256 ft Street Edges = 2
Default St. Dirt Accum. Annual Winter Load = 2500 lbs Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 0.390 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
LU# 3 - Residential: Post 2A Total area (ac): 0.520
37 - Streets 1: 0.050 ac. Smooth Street Length = 0.0172 mi Street Width = 23.98256 ft Street Edges = 2
Default St. Dirt Accum. Annual Winter Load = 2500 lbs Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 0.470 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
LU# 4 - Residential: Post 3A Total area (ac): 10.600
1 - Roofs 1: 0.800 ac. Pitched Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
25 - Driveways 1: 0.460 ac. Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.150 ac. Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
37 - Streets 1: 0.560 ac. Smooth Street Length = 0.1925 mi Street Width = 24 ft Street Edges = 2
Default St. Dirt Accum. Annual Winter Load = 2500 lbs Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 8.630 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
LU# 5 - Residential: Post 3B Total area (ac): 8.450
1 - Roofs 1: 0.720 ac. Pitched Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
25 - Driveways 1: 0.340 ac. Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.130 ac. Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
37 - Streets 1: 0.490 ac. Smooth Street Length = 0.1891 mi Street Width = 21.37758 ft Street Edges = 2
Default St. Dirt Accum. Annual Winter Load = 2500 lbs Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 6.770 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
LU# 6 - Residential: Post 3C Total area (ac): 2.380
1 - Roofs 1: 0.280 ac. Pitched Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
25 - Driveways 1: 0.120 ac. Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

31 - Sidewalks 1: 0.060 ac. Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
37 - Streets 1: 0.110 ac. Smooth Street Length = 0.1616 mi Street Width = 5.615718 ft Street Edges = 2
Default St. Dirt Accum. Annual Winter Load = 2500 lbs Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 1.810 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
LU# 7 - Residential: Post 3D Total area (ac): 2.370
1 - Roofs 1: 0.240 ac. Pitched Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
25 - Driveways 1: 0.120 ac. Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.040 ac. Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
37 - Streets 1: 0.160 ac. Smooth Street Length = 0.0619 mi Street Width = 21.32472 ft Street Edges = 2
Default St. Dirt Accum. Annual Winter Load = 2500 lbs Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 1.810 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
LU# 8 - Residential: Post 3E Total area (ac): 2.770
1 - Roofs 1: 0.240 ac. Pitched Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
25 - Driveways 1: 0.120 ac. Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.040 ac. Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
37 - Streets 1: 0.120 ac. Smooth Street Length = 0.055 mi Street Width = 18 ft Street Edges = 2
Default St. Dirt Accum. Annual Winter Load = 2500 lbs Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 2.250 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
LU# 9 - Residential: Post 3Y - Offsite Total area (ac): 0.810
1 - Roofs 1: 0.120 ac. Pitched Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
25 - Driveways 1: 0.080 ac. Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.010 ac. Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
37 - Streets 1: 0.080 ac. Smooth Street Length = 0.0413 mi Street Width = 15.98063 ft Street Edges = 2
Default St. Dirt Accum. Annual Winter Load = 2500 lbs Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 0.520 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
LU# 10 - Residential: Post 3Z - Offsite Total area (ac): 0.520
45 - Large Landscaped Areas 1: 0.520 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

Control Practice 1: Biofilter CP# 1 (DS) - DS Biofilters # 1A
1. Top area (square feet) = 11677
2. Bottom aea (square feet) = 4186
3. Depth (ft): 7
4. Biofilter width (ft) - for Cost Purposes Only: 10
5. Infiltration rate (in/hr) = 0.02
6. Random infiltration rate generation? No
7. Infiltration rate fraction (side): 0.01
8. Infiltration rate fraction (bottom): 1
9. Depth of biofilter that is rock filled (ft) 0
10. Porosity of rock filled volume = 0
11. Engineered soil infiltration rate: 3.6
12. Engineered soil depth (ft) = 2
13. Engineered soil porosity = 0.27
14. Percent solids reduction due to flow through engineered soil = 80
15. Biofilter peak to average flow ratio = 3.8
16. Number of biofiltration control devices = 1
17. Particle size distribution file: Not needed - calculated by program
18. Initial water surface elevation (ft): 0

Soil Data Soil Type Fraction in Eng. Soil
User-Defined Media Type 1.000
Biofilter Outlet/Discharge Characteristics:
Outlet type: Sharp Crested Weir
1. Weir length (ft): 0.17
2. Invert elevation above datum (ft): 3
Outlet type: Broad Crested Weir
1. Weir crest length (ft): 20
2. Weir crest width (ft): 10
3. Height of datum to bottom of weir opening: 6
Outlet type: Vertical Stand Pipe

1. Stand pipe diameter (ft): 1
2. Stand pipe height above datum (ft): 5.9

Outlet type: Drain Tile/Underdrain

1. Underdrain outlet diameter (ft): 0.5
2. Invert elevation above datum (ft): 0.25
3. Number of underdrain outlets: 1

Control Practice 2: Biofilter CP# 2 (DS) - DS Biofilters # 3A

1. Top area (square feet) = 15329
2. Bottom aea (square feet) = 6290
3. Depth (ft): 8
4. Biofilter width (ft) - for Cost Purposes Only: 10
5. Infiltration rate (in/hr) = 0.02
6. Random infiltration rate generation? No
7. Infiltration rate fraction (side): 0.01
8. Infiltration rate fraction (bottom): 1
9. Depth of biofilter that is rock filled (ft) 0
10. Porosity of rock filled volume = 0
11. Engineered soil infiltration rate: 3.6
12. Engineered soil depth (ft) = 2
13. Engineered soil porosity = 0.27
14. Percent solids reduction due to flow through engineered soil = 80
15. Biofilter peak to average flow ratio = 3.8
16. Number of biofiltration control devices = 1
17. Particle size distribution file: Not needed - calculated by program
18. Initial water surface elevation (ft): 0

Soil Data Soil Type Fraction in Eng. Soil

User-Defined Media Type 1.000

Biofilter Outlet/Discharge Characteristics:

Outlet type: Sharp Crested Weir

1. Weir length (ft): 0.17
2. Invert elevation above datum (ft): 3

Outlet type: Broad Crested Weir

1. Weir crest length (ft): 20
2. Weir crest width (ft): 10
3. Height of datum to bottom of weir opening: 7

Outlet type: Vertical Stand Pipe

1. Stand pipe diameter (ft): 1
2. Stand pipe height above datum (ft): 6.9

Outlet type: Drain Tile/Underdrain

1. Underdrain outlet diameter (ft): 0.5
2. Invert elevation above datum (ft): 0.25
3. Number of underdrain outlets: 1

Control Practice 3: Biofilter CP# 3 (DS) - DS Biofilters # 3B

1. Top area (square feet) = 12112
2. Bottom aea (square feet) = 3974
3. Depth (ft): 7
4. Biofilter width (ft) - for Cost Purposes Only: 10
5. Infiltration rate (in/hr) = 0.02
6. Random infiltration rate generation? No
7. Infiltration rate fraction (side): 0.01
8. Infiltration rate fraction (bottom): 1
9. Depth of biofilter that is rock filled (ft) 0
10. Porosity of rock filled volume = 0
11. Engineered soil infiltration rate: 3.6
12. Engineered soil depth (ft) = 2
13. Engineered soil porosity = 0.27

14. Percent solids reduction due to flow through engineered soil = 80
15. Biofilter peak to average flow ratio = 3.8
16. Number of biofiltration control devices = 1
17. Particle size distribution file: Not needed - calculated by program
18. Initial water surface elevation (ft): 0

Soil Data Soil Type Fraction in Eng. Soil
User-Defined Media Type 1.000
Biofilter Outlet/Discharge Characteristics:
Outlet type: Sharp Crested Weir
1. Weir length (ft): 0.17
2. Invert elevation above datum (ft): 3

Outlet type: Broad Crested Weir
1. Weir crest length (ft): 20
2. Weir crest width (ft): 10
3. Height of datum to bottom of weir opening: 6

Outlet type: Vertical Stand Pipe
1. Stand pipe diameter (ft): 1
2. Stand pipe height above datum (ft): 5.9

Outlet type: Drain Tile/Underdrain
1. Underdrain outlet diameter (ft): 0.5
2. Invert elevation above datum (ft): 0.25
3. Number of underdrain outlets: 1

Control Practice 4: Biofilter CP# 4 (DS) - DS Biofilters # 3C
1. Top area (square feet) = 5518
2. Bottom aea (square feet) = 1905
3. Depth (ft): 6
4. Biofilter width (ft) - for Cost Purposes Only: 10
5. Infiltration rate (in/hr) = 0.1
6. Random infiltration rate generation? No
7. Infiltration rate fraction (side): 0.01
8. Infiltration rate fraction (bottom): 1
9. Depth of biofilter that is rock filled (ft) 0
10. Porosity of rock filled volume = 0
11. Engineered soil infiltration rate: 3.6
12. Engineered soil depth (ft) = 2
13. Engineered soil porosity = 0.27
14. Percent solids reduction due to flow through engineered soil = 80
15. Biofilter peak to average flow ratio = 3.8
16. Number of biofiltration control devices = 1
17. Particle size distribution file: Not needed - calculated by program
18. Initial water surface elevation (ft): 0

Soil Data Soil Type Fraction in Eng. Soil
User-Defined Media Type 1.000
Biofilter Outlet/Discharge Characteristics:
Outlet type: Sharp Crested Weir
1. Weir length (ft): 0.17
2. Invert elevation above datum (ft): 3

Outlet type: Broad Crested Weir
1. Weir crest length (ft): 20
2. Weir crest width (ft): 10
3. Height of datum to bottom of weir opening: 5

Outlet type: Vertical Stand Pipe
1. Stand pipe diameter (ft): 1
2. Stand pipe height above datum (ft): 4.9

Outlet type: Drain Tile/Underdrain
1. Underdrain outlet diameter (ft): 0.5
2. Invert elevation above datum (ft): 0.25

3. Number of underdrain outlets: 1

Control Practice 5: Biofilter CP# 5 (DS) - DS Biofilters # 3D
1. Top area (square feet) = 3907
2. Bottom aea (square feet) = 741
3. Depth (ft): 7
4. Biofilter width (ft) - for Cost Purposes Only: 10
5. Infiltration rate (in/hr) = 0.02
6. Random infiltration rate generation? No
7. Infiltration rate fraction (side): 0.01
8. Infiltration rate fraction (bottom): 1
9. Depth of biofilter that is rock filled (ft) 0
10. Porosity of rock filled volume = 0
11. Engineered soil infiltration rate: 3.6
12. Engineered soil depth (ft) = 2
13. Engineered soil porosity = 0.27
14. Percent solids reduction due to flow through engineered soil = 80
15. Biofilter peak to average flow ratio = 3.8
16. Number of biofiltration control devices = 1
17. Particle size distribution file: Not needed - calculated by program
18. Initial water surface elevation (ft): 0

Soil Data Soil Type Fraction in Eng. Soil
User-Defined Media Type 1.000

Biofilter Outlet/Discharge Characteristics:

Outlet type: Sharp Crested Weir
1. Weir length (ft): 0.17
2. Invert elevation above datum (ft): 3

Outlet type: Broad Crested Weir
1. Weir crest length (ft): 20
2. Weir crest width (ft): 10
3. Height of datum to bottom of weir opening: 6

Outlet type: Vertical Stand Pipe
1. Stand pipe diameter (ft): 1
2. Stand pipe height above datum (ft): 5.9

Outlet type: Drain Tile/Underdrain
1. Underdrain outlet diameter (ft): 0.5
2. Invert elevation above datum (ft): 0.25
3. Number of underdrain outlets: 1

Control Practice 6: Biofilter CP# 6 (DS) - DS Biofilters # 3E
1. Top area (square feet) = 5272
2. Bottom aea (square feet) = 2517
3. Depth (ft): 6
4. Biofilter width (ft) - for Cost Purposes Only: 10
5. Infiltration rate (in/hr) = 0.02
6. Random infiltration rate generation? No
7. Infiltration rate fraction (side): 0.01
8. Infiltration rate fraction (bottom): 1
9. Depth of biofilter that is rock filled (ft) 0
10. Porosity of rock filled volume = 0
11. Engineered soil infiltration rate: 3.6
12. Engineered soil depth (ft) = 2
13. Engineered soil porosity = 0.27
14. Percent solids reduction due to flow through engineered soil = 80
15. Biofilter peak to average flow ratio = 3.8
16. Number of biofiltration control devices = 1
17. Particle size distribution file: Not needed - calculated by program
18. Initial water surface elevation (ft): 0

Soil Data Soil Type Fraction in Eng. Soil
User-Defined Media Type 1.000
Biofilter Outlet/Discharge Characteristics:
Outlet type: Sharp Crested Weir
1. Weir length (ft): 0.17
2. Invert elevation above datum (ft): 3
Outlet type: Broad Crested Weir
1. Weir crest length (ft): 20
2. Weir crest width (ft): 10
3. Height of datum to bottom of weir opening: 5
Outlet type: Vertical Stand Pipe
1. Stand pipe diameter (ft): 1
2. Stand pipe height above datum (ft): 4.9
Outlet type: Drain Tile/Underdrain
1. Underdrain outlet diameter (ft): 0.5
2. Invert elevation above datum (ft): 0.25
3. Number of underdrain outlets: 1

Control Practice 7: Grass Swale CP# 1 (DS) - DS Grass Swale # 12
Total drainage area (acres)= 6.030
Fraction of drainage area served by swales (ac) = 0.63
Swale density (ft/ac) = 262.35
Total swale length (ft) = 1582
Average swale length to outlet (ft)= 248
Typical bottom width (ft) = 2.0
Typical swale side slope (_H:1V) = 3.0
Typical longitudinal slope (ft.H/ft.V) = 0.020
Swale retardance factor: C
Typical grass height (in) = 2.0
Swale dynamic infiltration rate (in/hr)= 0.010
Typical swale depth (ft) for cost analysis (optional) = 0.0
Particle size distribution file name: Not needed - calculated by program
Use total swale length instead of swale density for infiltration calculations: True

Control Practice 8: Grass Swale CP# 2 (DS) - DS Grass Swale # 13
Total drainage area (acres)= 0.440
Fraction of drainage area served by swales (ac) = 1.00
Swale density (ft/ac) = 615.91
Total swale length (ft) = 271
Average swale length to outlet (ft)= 240
Typical bottom width (ft) = 2.0
Typical swale side slope (_H:1V) = 3.0
Typical longitudinal slope (ft.H/ft.V) = 0.035
Swale retardance factor: C
Typical grass height (in) = 2.0
Swale dynamic infiltration rate (in/hr)= 0.010
Typical swale depth (ft) for cost analysis (optional) = 0.0
Particle size distribution file name: Not needed - calculated by program
Use total swale length instead of swale density for infiltration calculations: True

Control Practice 9: Grass Swale CP# 3 (DS) - DS Grass Swale # 14
Total drainage area (acres)= 0.520
Fraction of drainage area served by swales (ac) = 1.00
Swale density (ft/ac) = 461.54
Total swale length (ft) = 240
Average swale length to outlet (ft)= 200
Typical bottom width (ft) = 2.0
Typical swale side slope (_H:1V) = 3.0

Typical longitudinal slope (ft.H/ft.V) = 0.035
Swale retardance factor: C
Typical grass height (in) = 2.0
Swale dynamic infiltration rate (in/hr)= 0.010
Typical swale depth (ft) for cost analysis (optional) = 0.0
Particle size distribution file name: Not needed - calculated by program
Use total swale length instead of swale density for infiltration calculations: True

Control Practice 10: Grass Swale CP# 4 (DS) - DS Grass Swale # 15
Total drainage area (acres)= 10.600
Fraction of drainage area served by swales (ac) = 0.88
Swale density (ft/ac) = 486.67
Total swale length (ft) = 3250
Average swale length to outlet (ft)= 294
Typical bottom width (ft) = 2.0
Typical swale side slope (_H:1V) = 3.0
Typical longitudinal slope (ft.H/ft.V) = 0.035
Swale retardance factor: C
Typical grass height (in) = 2.0
Swale dynamic infiltration rate (in/hr)= 0.010
Typical swale depth (ft) for cost analysis (optional) = 0.0
Particle size distribution file name: Not needed - calculated by program
Use total swale length instead of swale density for infiltration calculations: True

Control Practice 11: Grass Swale CP# 5 (DS) - DS Grass Swale # 16
Total drainage area (acres)= 8.450
Fraction of drainage area served by swales (ac) = 0.79
Swale density (ft/ac) = 278.63
Total swale length (ft) = 1860
Average swale length to outlet (ft)= 278
Typical bottom width (ft) = 2.0
Typical swale side slope (_H:1V) = 3.0
Typical longitudinal slope (ft.H/ft.V) = 0.030
Swale retardance factor: C
Typical grass height (in) = 2.0
Swale dynamic infiltration rate (in/hr)= 0.010
Typical swale depth (ft) for cost analysis (optional) = 0.0
Particle size distribution file name: Not needed - calculated by program
Use total swale length instead of swale density for infiltration calculations: True

Control Practice 12: Grass Swale CP# 6 (DS) - DS Grass Swale # 17
Total drainage area (acres)= 2.380
Fraction of drainage area served by swales (ac) = 0.72
Swale density (ft/ac) = 466.85
Total swale length (ft) = 800
Average swale length to outlet (ft)= 266
Typical bottom width (ft) = 2.0
Typical swale side slope (_H:1V) = 3.0
Typical longitudinal slope (ft.H/ft.V) = 0.035
Swale retardance factor: C
Typical grass height (in) = 2.0
Swale dynamic infiltration rate (in/hr)= 0.010
Typical swale depth (ft) for cost analysis (optional) = 0.0
Particle size distribution file name: Not needed - calculated by program
Use total swale length instead of swale density for infiltration calculations: True

Control Practice 13: Grass Swale CP# 7 (DS) - DS Grass Swale # 18
Total drainage area (acres)= 2.370

Fraction of drainage area served by swales (ac) = 0.80
Swale density (ft/ac) = 263.71
Total swale length (ft) = 500
Average swale length to outlet (ft)= 280
Typical bottom width (ft) = 2.0
Typical swale side slope (_H:1V) = 3.0
Typical longitudinal slope (ft.H/ft.V) = 0.035
Swale retardance factor: C
Typical grass height (in) = 2.0
Swale dynamic infiltration rate (in/hr)= 0.010
Typical swale depth (ft) for cost analysis (optional) = 0.0
Particle size distribution file name: Not needed - calculated by program
Use total swale length instead of swale density for infiltration calculations: True

Control Practice 14: Grass Swale CP# 8 (DS) - DS Grass Swale # 19
Total drainage area (acres)= 2.770
Fraction of drainage area served by swales (ac) = 0.69
Swale density (ft/ac) = 355.21
Total swale length (ft) = 500
Average swale length to outlet (ft)= 260
Typical bottom width (ft) = 2.0
Typical swale side slope (_H:1V) = 3.0
Typical longitudinal slope (ft.H/ft.V) = 0.035
Swale retardance factor: C
Typical grass height (in) = 2.0
Swale dynamic infiltration rate (in/hr)= 0.010
Typical swale depth (ft) for cost analysis (optional) = 0.0
Particle size distribution file name: Not needed - calculated by program
Use total swale length instead of swale density for infiltration calculations: True

Output Data

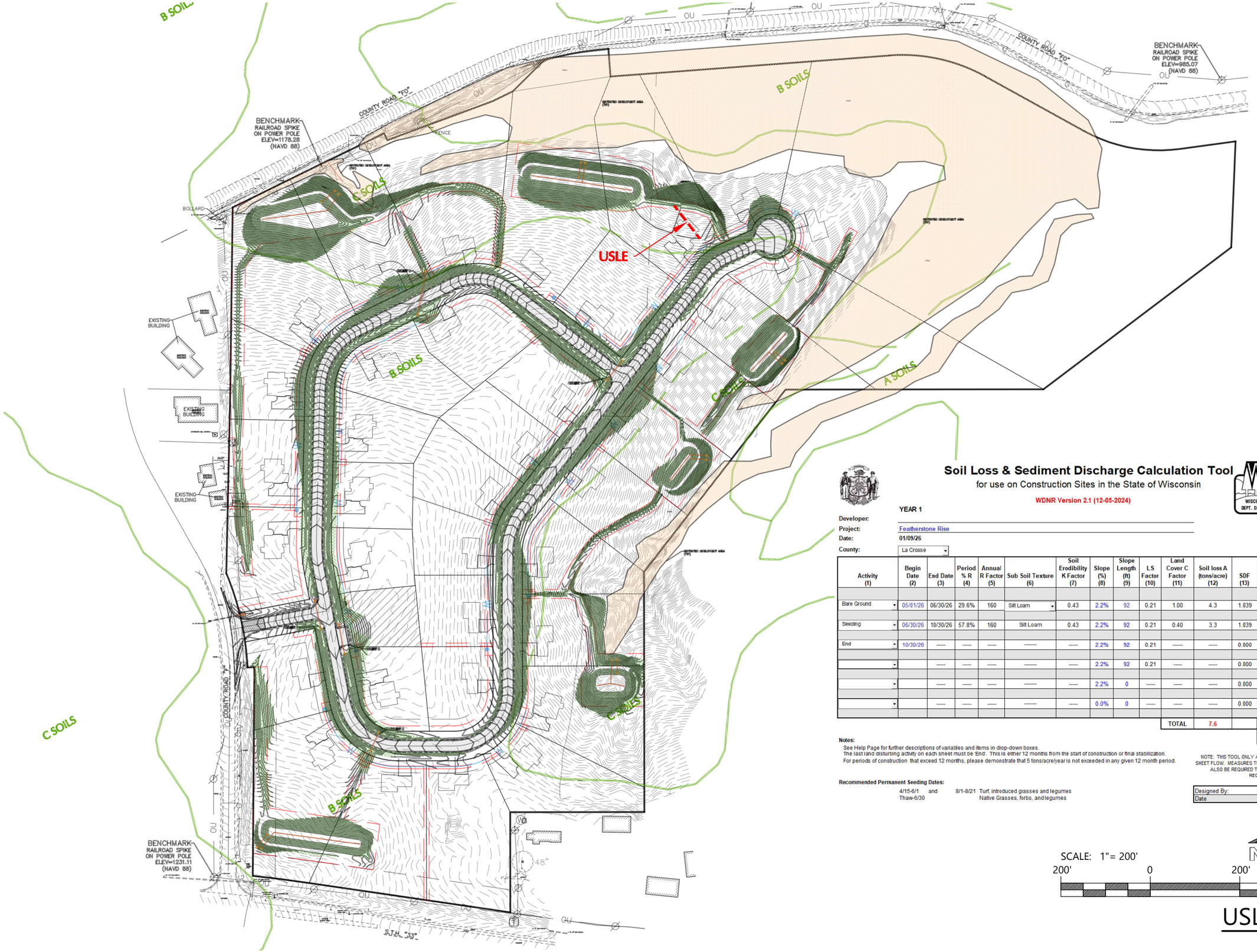
SLAMM for Windows Version 10.5.0

Data file name: \\job-files\2025 Job Files\250128900 Weber - Subdivision Planning - Town of Shelby WI\250128904 Civil\storm water report and calculations\slamm\Current - slamm.mdb
Data file description:
Rain file name: J:\Programs\civil\WinSLAMM\v10.5.0\Parameter Files\WisReg - Madison WI 1981.ran
Particulate Solids Concentration file name: J:\Programs\civil\WinSLAMM\v10.5.0\Parameter Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: J:\Programs\civil\WinSLAMM\v10.5.0\Parameter Files\WI_SL06 Dec06.rsvx
Pollutant Relative Concentration file name: J:\Programs\civil\WinSLAMM\v10.5.0\Parameter Files\WI_GEO03.ppdx
Residential Street Delivery file name: J:\Programs\civil\WinSLAMM\v10.5.0\Parameter Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: J:\Programs\civil\WinSLAMM\v10.5.0\Parameter Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: J:\Programs\civil\WinSLAMM\v10.5.0\Parameter Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: J:\Programs\civil\WinSLAMM\v10.5.0\Parameter Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: J:\Programs\civil\WinSLAMM\v10.5.0\Parameter Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: J:\Programs\civil\WinSLAMM\v10.5.0\Parameter Files\Freeway Dec06.std
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv
Cost Data file name:
Seed for random number generator: -42
Start of Winter Season: 12/02 End of Winter Season: 03/12
Model Run Start Date: 01/01/81 Model Run End Date: 12/31/81
Date of run: 02-23-2026 Time of run: 12:34:42
Total Area Modeled (acres): 34.890
Years in Model Run: 1.00

	Runoff Volume (cu ft)	Percent Runoff Volume Reduction	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
Total of all Land Uses without Controls:	377181	-	245.5	5780	-
Outfall Total with Controls:	304336	19.31%	60.50	1150	80.10%
Annualized Total After Outfall Controls:	305172			1153	

Biofilter # 1 is expected to clog in 11.01 years.. Percent Solids Reduction due to Engineered Media = 80
Biofilter # 2 is expected to clog in 10.13 years.. Percent Solids Reduction due to Engineered Media = 80
Biofilter # 3 is expected to clog in 7.29 years.. Percent Solids Reduction due to Engineered Media = 80
Biofilter # 4 is expected to clog in 6.06 years.. Percent Solids Reduction due to Engineered Media = 80
Biofilter # 5 is expected to clog in 4.89 years.. Percent Solids Reduction due to Engineered Media = 80
Biofilter # 6 is expected to clog in 14.34 years.. Percent Solids Reduction due to Engineered Media = 80

Appendix H: USLE Map and Calculations



Soil Loss & Sediment Discharge Calculation Tool

for use on Construction Sites in the State of Wisconsin

WDNR Version 2.1 (12-05-2024)

WISCONSIN DEPT. OF NATURAL RESOURCES

YEAR 1

Developer:

Project: Featherstone Rise

Date: 01/09/26

County: La Crosse

Version 2.1

Activity (1)	Begin Date (2)	End Date (3)	Period % R (4)	Annual R Factor (5)	Sub Soil Texture (6)	Soil Erodibility K Factor (7)	Slope (%) (8)	Slope Length (ft) (9)	LS Factor (10)	Land Cover C Factor (11)	Soil loss A (tons/acre) (12)	SDF (13)	Sediment Control Practice (14)	Sediment Discharge (t/ac) (15)
Bare Ground	05/01/26	06/30/26	29.6%	160	Silt Loam	0.43	2.2%	92	0.21	1.00	4.3	1.039	Silt Fence	2.7
Seeding	06/30/26	10/30/26	57.8%	160	Silt Loam	0.43	2.2%	92	0.21	0.40	3.3	1.039	Silt Fence	2.1
End	10/30/26	-----	-----	-----	-------	-----	2.2%	92	0.21	-----	-----	0.000	Silt Fence	0.0
		-----	-----	-----	-------	-----	2.2%	92	0.21	-----	-----	0.000		0.0
		-----	-----	-----	-------	-----	2.2%	0	-----	-----	-----	0.000		0.0
		-----	-----	-----	-------	-----	0.0%	0	-----	-----	-----	0.000		0.0
										TOTAL	7.6		TOTAL	4.7
													% Reduction Required	NONE

Notes:
See Help Page for further descriptions of variables and items in drop-down boxes.
The last land disturbing activity on each sheet must be 'End'. This is either 12 months from the start of construction or final stabilization.
For periods of construction that exceed 12 months, please demonstrate that 5 tons/acre/year is not exceeded in any given 12 month period.

NOTE: THIS TOOL ONLY ADDRESSED SOIL EROSION DUE TO SHEET FLOW. MEASURES TO CONTROL CHANNEL EROSION MAY ALSO BE REQUIRED TO MEET SEDIMENT DISCHARGE REQUIREMENTS.

Recommended Permanent Seeding Dates:

4/15-6/1 and Thaw-6/30 — 8/1-8/21 — Turf, introduced grasses and legumes; Native Grasses, forbs, and legumes

Designed By:	JEC
Date	1/9/2026

SCALE: 1"= 200'

200' 0 200' 400'

NORTH

USLE MAP

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS FOR [FEATHERSTONE RISE] SUBDIVISION

Name and Return Address:

Michelle W. Ebben, Esq.
Michael Best & Friedrich LLP
790 N. Water Street, Ste. 2500
Milwaukee, WI 53202

This Declaration of Covenants, Conditions and Restrictions ("Declaration") is made this ___ day of _____, 2026 by **[insert entity name] LLC**, a Wisconsin limited liability company ("Developer").

RECITALS

WHEREAS, Developer is the owner of all the real estate located in the [Featherstone Rise] Subdivision to the Town of Shelby, La Crosse County, Wisconsin, and legally described in Exhibit A attached hereto ("Property"); and

WHEREAS, Developer desires to make the Property subject to all of the covenants, conditions and restrictions of this Declaration for the purpose of protecting the value and desirability of the Property.

NOW THEREFORE, Developer hereby declares that the Property is and shall be subject to all of the provisions of this Declaration and shall be held, owned, sold, transferred, conveyed, hypothecated, encumbered, leased, occupied, built upon and otherwise used, improved, and maintained subject to all of the provisions of this Declaration, which provisions shall run with the title to the Property and shall be binding upon and inure to the benefit of Developer and all Owners of the Property.

ARTICLE I
DEFINITIONS

As used throughout this Declaration, the following terms shall have the meanings set forth below, which meanings shall be applicable to both the singular and plural forms and tenses of such terms:

1.01. ARC. The term “ARC” shall mean the architectural review committee as established herein.

1.02. Declaration. The term "Declaration" shall mean this Declaration of Covenants, Conditions and Restrictions and all amendments thereto.

1.03. Developer. The term "Developer" shall mean [insert entity name] LLC, a Wisconsin limited liability company, its successors and assigns.

1.04 Improvement. The term “Improvement” shall mean and refer to any building, structure, object or device constructed, erected or placed upon any Lot which in any way affects the exterior appearance of the Lot. Improvements shall include by way of illustration and not limitation, buildings, sheds, foundations, structures, mailboxes, decks, patios, swimming pools, sidewalks, utility lines, roads, driveways, walkways, paving, curbing, parking areas, grading, excavation, trees, shrubbery, landscaping, fences, exterior lighting, screening, walls, signs and any other man-made changes or alterations to the condition of the Lot on the date of this Declaration.

1.05. Lot. The term "Lot" shall mean any of the Lots in [Featherstone Rise] Subdivision to the Town of Shelby, La Crosse County, Wisconsin, as legally described herein, and any Improvements located thereon. In the event that any Lots are combined or subdivided pursuant to Article 9.02 hereof, then each new parcel created by said approved combination or subdivision shall thereafter be considered a Lot.

1.06. Occupant. The term "Occupant" shall mean and include any Owner and the family members, guests, tenants, agents, servants, employees and invitees of any Owner, and any other person who occupies or uses any Lot. All actions or omissions of any Occupant are and shall be deemed the actions or omissions of the Owner.

1.07. Owner. The term "Owner" or “Owners” shall mean and refer to the record owner, including Developer, of fee simple title to any Lot. A land contract purchaser shall be considered an Owner after the date of closing of the land contract.

1.08. Property. The term "Property" shall have the meaning ascribed to it in the Recitals.

ARTICLE II
EASEMENTS

2.01. Reservation of General Access Easement. Developer does hereby establish and reserve for itself and the ARC and their respective agents, employees, successors and assigns, a permanent

and perpetual non-exclusive easement appurtenant over, across, through and upon each Lot for the purpose of providing ingress to and egress from each Lot for: (a) inspecting each Lot in order to determine compliance with the provisions of this Declaration and (b) taking any action permitted to be taken by Developer or the ARC pursuant to any of the provisions of this Declaration. Upon completion and occupancy of any residence, except in the event of emergencies, the foregoing easement shall be utilized only during normal business hours and then, whenever practicable, only upon advance notice to the Owner or Occupant of such residence.

2.02. Reservation of Easement for Stormwater Drainage. Developer does hereby reserve for itself and the ARC and their respective agents, employees, successors and assigns, for the benefit of all Owners of any portion of the Property, the right to grant a permanent and perpetual non-exclusive easement appurtenant over, across, through and upon each Lot for the flow of stormwater in such locations as necessary to protect the Property. No Owner shall develop their respective Lot in such a way that negatively impacts the flow of any swale or drainage way so as to impede the flow of surface water from or onto other Lots. The easement right reserved herein shall include the right to excavate, grade and fill and to otherwise take all other action reasonably necessary to establish appropriate stormwater drainage patterns; provided, however, that such easement does not impose any duty or obligation upon Developer or the ARC to perform any of the foregoing actions.

2.03. Reservation of Utility Easements. Developer hereby reserves the rights to grant to the Town of Shelby, City of La Crosse, and/or La Crosse County any public or semi-public utility companies, easements and rights-of-way for the erection, construction, and maintenance of all poles, wires, pipes, and conduits for the transmission of electricity, gas, water, telephone, and for other purposes, for sewers, stormwater drains, gas mains, water pipes and mains, and similar services and for performing any public or quasi-public utility function that Developer may deem fit and proper for the improvement and benefit of the Property. Such easements and rights-of-way shall be confined, so far as possible in underground pipes or other conduits, with the necessary rights of ingress and egress and with the rights to do whatever may be necessary to carry out the purposes for which the easement is created.

ARTICLE III
ARCHITECTURAL REVIEW COMMITTEE AND APPROVALS

3.01. Purpose of the ARC. The purpose of the ARC shall be to approve, approve with conditions or disapprove any plans and specifications for any proposed Improvement that are submitted to the ARC, to respond to inquiries from any Owner regarding this Declaration and to take any enforcement or other action that is both authorized by this Declaration and deemed appropriate by the ARC in the circumstances.

3.02. Composition of the ARC. The ARC shall consist initially of the Developer. Developer may appoint up to two additional members to serve on the ARC with Developer. Any members so appointed may be removed by Developer at any time. Developer and any members appointed by Developer shall cease to be members of the ARC on a date that is one year after the first day on which Developer no longer owns any portion of the Property. Notwithstanding the above, Developer may resign from the ARC (which resignation shall also be effective for any members appointed by Developer) by giving written notice to each Owner.

3.03. Continuation of the ARC. If a majority of the Owners wish to continue the ARC beyond the date Developer and members appointed by Developer cease to be members of the ARC, then the Owners shall elect three (3) Owners to serve on the ARC. One Owner shall be elected for a one-year term, one for a two-year term, and one for a three-year term. Thereafter one Owner shall be elected or re-elected each year for a three-year term to take the place of the Owner whose term is expiring. Said elections shall be by majority vote of the Owners present in person or by proxy at a meeting of Owners called by written notice for this purpose.

3.04. Procedure and Meetings. While Developer serves as a member of the ARC, meetings shall be held at such time and place as Developer determines is necessary to conduct the business of the ARC. Thereafter the scheduling of meetings shall be determined by the members of the ARC. A majority of the members shall constitute a quorum of the ARC for the transaction of business and the affirmative vote of a majority of those members present in person or by proxy at a meeting of the ARC shall constitute the action of the ARC on any matter which comes before it. The ARC shall have the right from time to time to adopt and establish such rules and regulations as may be determined to be necessary concerning the procedure, notice of meetings and all other matters concerning the conduct of the business of the ARC.

3.05. Approval of Plans and Specifications.

A. No Improvement (as defined in Article 1.04) of any kind shall be erected, installed, placed, moved onto, altered, replaced, relocated, permitted to remain on or maintained on any Lot unless plans and specifications therefore have been submitted to and approved by the ARC.

B. The ARC is hereby authorized and empowered to approve, approve with conditions or disapprove all plans and specifications for any Improvements on any part of the Property. Prior to commencement of any Improvement on any Lot, the Owner thereof shall submit to the ARC plans and specifications and all related information requested by the ARC for the purpose of evaluating the proposed Improvement. It is the sole responsibility of the Owner to consult with the ARC to determine what information the ARC believes is necessary to adequately evaluate the proposed Improvement.

C. The ARC shall, in its sole discretion, approve, approve with conditions or disapprove any proposed Improvement. Notwithstanding anything herein to the contrary, no ARC approval is required for an Owner to make interior improvements and alterations that do not affect exterior appearance.

D. The ARC's decision to approve, approve with conditions or disapprove any proposed Improvement may be based on any grounds that the ARC believes in good faith to be appropriate, including but not limited to purely aesthetic considerations, failure to comply with any provisions of this Declaration, failure to provide requested information, objection to exterior design, appearance or materials, objection on the grounds of incompatibility with other Improvements on the Property, objection to the landscaping plan, color scheme, finish, proportions, style of architecture, height, bulk or appropriateness of any Improvement or any

other matter which, in the sole judgment of the ARC, would render the proposed Improvement inappropriate for the Property. Approval of plans and specifications by the ARC for Improvements to one particular Lot shall not be deemed an approval, or otherwise obligate the ARC to approve similar plans and specifications or any of the features or elements thereof for any other Lot.

E. In the event the ARC fails to approve plans and specifications for any proposed Improvement within thirty (30) days after receipt by the ARC, then those plans and specifications will be deemed to have been disapproved.

F. Any revisions, modifications or changes to any plans and specifications previously approved by the ARC must be approved in the same manner as the original plans and specifications.

G. If construction of approved Improvements has not substantially commenced within one year of approval, then the original approval shall be void and the Owner shall resubmit all plans and specifications to the ARC for approval in the manner specified above.

H. It is the sole responsibility of the Owner to secure approval for all aspects of any proposed Improvement. Any Improvement that is constructed, erected or placed on any Lot without approval of the ARC shall be deemed disapproved for a period of three years from the date of completion of the Improvement. In the event that an action for enforcement with respect to the disapproved Improvement is not undertaken pursuant to Article VIII of this Declaration within three years of the date of completion, then that Improvement shall be deemed approved. Notwithstanding the above, the ARC shall have the authority, in its sole discretion, to approve an Improvement after its completion, if the ARC believes the Improvement would have been approved had the appropriate plans and specifications been submitted to the ARC prior to the start of the Improvement.

3.06. ARC Not Continued. In the event that the Owners do not continue the ARC as permitted by Article 3.03 hereof beyond the date Developer and members appointed by Developers cease to be members of the ARC, then the approvals under Article 3.05 hereof are no longer required. However, regardless of the existence of the ARC, the restrictions contained in Article IV are applicable to all Improvements.

3.07. No Implied Variance. The approval of any plans and specifications under this Article III shall not be presumed to grant any variance from the provisions of Article IV of this Declaration, unless the specific provisions of Article 4.18 are also complied with.

3.08. Subsurface Conditions. The approval of plans and specifications by the ARC for any Improvements on a Lot shall not be construed in any respect as a representation or warranty by the ARC to the Owner submitting such plans and specifications or to any of the successors or assigns of such Owner that the surface or subsurface conditions of such Lot are suitable for the construction of the Improvements contemplated. It shall be the sole responsibility of each Owner to determine the suitability and adequacy of the surface and subsurface conditions of any Lot for the construction of any Improvements contemplated thereon.

ARTICLE IV
USE AND DEVELOPMENT RESTRICTIONS AND ARCHITECTURAL STANDARDS

4.01. General Use Restrictions.

A. Each Lot shall be used for residential use only as permitted by local zoning. All single-family homes that are one-story dwellings constructed on a Lot shall consist of at least 1,600 square feet of living space, exclusive of garages and porches. All single- family homes that are two-story dwellings constructed on a Lot shall consist of at least 1,800 square feet of living space, exclusive of garages and porches. All single-family homes that are split level or multi-story dwellings constructed on a Lot shall consist of at least 1,200 square feet ground floor area, exclusive of garages and porches. All single- family homes constructed on a Lot shall have a minimum value of $500,000.00 at the time of construction.

B. Accessory buildings and detached garages may also be permitted subject to these Declarations, approval of the ARC, and local ordinances. Accessory buildings shall be erected with stick framing, framed within a foundation to code, and aesthetically blend in with the house on the Lot. No mobile home, travel trailer, motorhome, tent, shack, garage, barn or other accessory building shall be used as a temporary or permanent residence for any Occupant. No portable or metal accessory buildings, playhouses, or other play structure are permitted on any Lot.

C. No trade or business of any kind may be carried on, in or from any Lot. The use of any portion of a Lot as an office by an Owner or Occupant shall not be considered a violation of this Declaration if such use does not create customer, client or employee traffic on or around the Lot. No building previously erected elsewhere shall be moved onto any Lot.

D. No fences shall be installed without approval by the ARC. No chain link fences shall be permitted on any Lot. No fences shall be installed in easement areas. Wood and vinyl fences will be allowed if approved by the ARC and cannot exceed six (6) feet in height. The selection and type of mailboxes shall be approved by the ARC.

E. All Owners shall keep the Lot and all Improvements in neat and clean condition, including but not limited to repainting, residing, refinishing, staining, and re-roofing when the same becomes worn or deteriorated.

4.02 Underground Utilities. All utility lines, conduit and wiring for electrical, gas, telephone, water, sewer, cable television, security and any other utility service for any portion of the Property shall be installed and maintained below ground. Above ground tanks for fuel or water are prohibited.

4.03 Utility Meters and HVAC Equipment. All utility meters, HVAC equipment, electrical transformers, telephone and cable television pedestals or junction boxes located on any Lot shall, to the extent practicable, be located on the side or rear of the house and screened from view.

4.04 Lot Corners. Owner shall promptly cause to be replaced by a licensed surveyor any Lot

corner monuments which are removed or displaced during construction of Owner's Improvements. All Lot corner monuments are to remain in place and visibly marked.

4.05 Satellite Dishes and Antennae. One satellite dish not greater than eighteen inches (18") in diameter may be attached to the house or mounted adjacent to the house so long as it is of a neutral color and the highest portion of the dish is lower than the nearest roof peak. No other satellite dishes, radio antenna, radio receiver, aerial or other similar device may be installed on any Lot unless it is contained entirely within the interior of a building and is not visible from any street or other Lot.

4.06 Building Setbacks. The Owner shall comply with all Town of Shelby setback requirements. In addition, any garage door facing a street must be not more than twelve (12) feet closer to the street than the front façade of the house and shall not be wider than necessary to accommodate three vehicles. Notwithstanding the above, the exact location, both horizontal and vertical, of any Improvement on any Lot shall be subject to the approval of the ARC.

4.07 Vehicles, Machinery and Equipment. Motorhomes, mobile homes, any vehicles not normally used by the general public for daily passenger use, trailers of any kind, campers, motorcycles, bicycles, motorized carts and all-terrain vehicles, lawn mowers, tractors, tools, construction machinery and equipment of any nature, golf carts, boats and any other type of watercraft, including boat trailers, inoperable vehicles of any type and any other similar types of vehicles, machinery and equipment shall not be permitted, stored or allowed to remain on any Lot unless the same is placed, stored and maintained within a fully enclosed structure on such Lot. No vehicle shall be parked on any non-paved area. No Owner or Occupant shall repair or restore any vehicle, machinery or equipment on any Lot except within enclosed garages or workshops or for emergency repairs only.

4.08 Driveways and Parking Areas. All driveways, sidewalks, and parking areas on any Lot shall be constructed of concrete and approved by the ARC. Each Owner, at the Owner's expense, shall install a sidewalk on near the boulevard of the Lot of a size and location as required by the Town of Shelby and as approved by ARC.

4.09 Street Trees. The Owner shall install and maintain (including prompt replacement of dead or diseased trees) at the Owner's cost, street trees in all boulevard areas of a size and type and in locations permitted by the Town of Shelby.

4.10. Lawn Areas. All areas of the lawn located between the house and any street, and all side yard areas extending to the rear corner of the house and rear yards, shall be sodded within thirty (30) days of issuing of the occupancy permit. Rear yards may be seeded at the discretion of the ARC. All Owners shall be required to control and maintain weeds and grasses on the Lot and Town of Shelby right of ways. Additional time to complete the landscaping may be granted by the ARC if weather conditions prevent completion within the prescribed time. All lawns shall be kept in neat trimmed condition.

4.11. Windows and Window Treatments. Reflective window coverings are not permitted on the exterior of any windows. No window treatments are permitted except shades, blinds or other materials designed, manufactured and intended for that specific use. Windows and window

treatments visible from the exterior are considered Improvements subject to the provisions of Article 3.05 of this Declaration.

4.12. Exterior Lighting. All exterior lighting should be directed downward and shielded in a manner that minimizes the impact on other Lots. Exterior lighting not attached to the house or Improvements shall be approved by ARC. No post lights or mercury vapor lights. Exterior lights shall be "shoe box" style or other covered lens.

4.13. Play Equipment. Children's toys, swing sets, jungle gyms and similar outdoor recreational equipment shall be approved only in the rear yard.

4.14. Signage. No sign of any kind shall be displayed to the public view on any Lot except one (1) sign of not more than three (3) square feet located in the front yard advertising said Lot for sale or advertising the name of the home builder during the construction period. Owners may have temporary holiday decorations on the exterior of a dwelling provided the decorations are not obnoxious and/or offensive as determined by the ARC in its sole and absolute discretion.

4.15. Clotheslines. Clotheslines that are installed and extended in a permanent manner are not permitted. Clotheslines that can be installed or extended on a temporary basis are permitted, so long as they are promptly removed when not in use.

4.16. Noxious Practices. No noxious or offensive activity or practice shall be carried on upon the Property nor any Lot, nor shall any activity or practice become an annoyance or nuisance to other Owners or Occupants. Rubbish, trash, garbage and other waste shall be kept in clean and sanitary containers and stored within a garage. Outside storage of garbage or recycling bins is strictly prohibited.

4.17. Objectionable Colors for Homes. Variety in colors and multiple colors on a home are encouraged. However, the ARC, in its sole and absolute discretion, may prohibit individual colors or color schemes it regards as objectionable that create disharmony amongst the Lots. Colors on a home shall be assessed by ARC in accordance with Article 4.23 below. In all instances, fluorescent colors are prohibited on a home.

4.18. Variances. The ARC, in its sole and absolute discretion, shall have the exclusive right to grant variances with respect to this Article IV. A request for a variance shall be submitted to the ARC by the Owner in writing. No variance shall be effective unless granted by the ARC in writing. The approval of any plans and specifications under the procedure established in Article III of this Declaration shall not be presumed to grant any variance unless specifically granted under the provisions of this Article 4.18.

4.19. Animals. No domestic animals, chickens or other fowl may be kept on the Lot, except Owner may keep up to a total of two (2) dogs or cats. All dog kennels must be approved by the ARC and must be screened in with fencing subject to the restrictions of Article 4.01.

4.20. Roofing. No raw aluminum or galvanized material is permitted. No solar or energy collection panels or equipment shall be installed without approval of the ARC. All heating vents

or other projection of any nature that are placed on the roof shall be of a color that closely matches the roofing material. Roofs shall be asphalt, steel or tile. Fascia shall be aluminum, steel or wood.

4.21. Swimming Pools. Swimming pools shall be limited to in-ground type and no above ground pools. All pools must be enclosed by a fence with a minimum height of six feet and have a gate that must be secured. Above-ground pools may be allowed at the discretion of the ARC, when adequately screened from view of neighboring Lots. Under no circumstances will an above-ground pool be permitted if it extends above the existing grade by more than eighteen inches. All swimming pool construction and installation must be done in accordance with Town of Shelby Ordinances.

4.22. Exterior Siding. Exterior siding shall be aluminum, steel, vinyl, wood, brick, stone or stucco.

4.23. Colors. Homes shall not be built with more than four (4) colors, including. All colors are subject to the approval of the ARC. The following colors are acceptable tones to consider as an Owner prepares to erect a home or any other Improvement on their respective Lot:

A. Main Color: Subtle hues of muted/grayed earth tones of beige, tan, brown, rust, rose, gray-green, gray-blue, gray, dark tones, white and off-whites.

B. Accent Colors: carefully related earth tones, grayed or muted colors, and white.

ARTICLE V
OWNER'S RESPONSIBILITIES

5.01. Approvals. It is the sole responsibility of the Owner to secure approval for all aspects of any proposed Improvement. In the event that any Improvement or aspect thereof is constructed, erected or placed on any Lot without approval of the ARC, and the ARC requests removal of said Improvement, the Owner will comply with said request promptly and restore the disturbed portion of the Lot to its condition prior to commencement of the Improvement.

5.02. Construction Period. During the construction of any Improvements, all Lots shall be maintained in a clean condition, free of debris and waste material. All unused construction materials shall be stored, to the extent practicable, out of view from any street. All construction trash, debris and rubbish shall be properly disposed of off of the Property or contained within a dumpster.

5.03. Commencement and Completion of Construction. Upon commencement of construction of any Improvement, work thereon shall be prosecuted diligently and continuously and shall be completed within one (1) year of the commencement date of said construction.

5.04. Erosion Control. No Owner shall allow dirt, mud, gravel or other substances to collect or remain on any street or on any other Lot. Each Owner shall cause all such dirt, mud, gravel and other substances to be removed from the treads and wheels of all vehicles used in or related to the construction of Improvements prior to such vehicle traveling on any street adjacent to the Property.

Each Owner shall install and maintain at the Owner's cost all erosion control measures requested by the ARC, Town of Shelby, La Crosse County, or the Developer for the purpose of preventing soil material from eroding from the Owner's Lot onto adjacent Lots or the street. Regardless of the foregoing, it shall be the Owner's responsibility to promptly clean up, repair and restore any damage caused by erosion from the Owner's Lot to adjacent Lots or the street.

5.05. General Maintenance. The Owner shall maintain all Improvements, including but not limited to all structures of any kind and all landscaping, in a neat, clean and sanitary condition at all times. Dead or diseased vegetation, stumps, weeds, rubbish, debris, garbage and waste material shall be promptly removed from each Lot.

ARTICLE VI
CASUALTY AND CONDEMNATION

6.01. Damage or Destruction. In the event of any fire or any other casualty which damages or destroys any portion of any Lot, the Owner shall promptly repair and otherwise restore such Lot to the condition in which the same existed immediately prior to such damage; provided, however, that any such restoration or repair shall be subject to compliance with all of the terms and provisions of this Declaration. In the event of complete destruction of the Improvement, then the Owner shall promptly clear away any remaining debris and shall leave such Lot and any remaining Improvements in a clean, orderly and safe condition.

6.02. Condemnation of Lots or Dwellings. In the event that all or any portion of a Lot is taken as a result of in lieu of or in anticipation of the exercise of the right of eminent domain or condemnation, then, to the extent practicable, the Owner of such Lot shall promptly repair, reconstruct, rebuild and otherwise restore the remaining portions of the Lot subject to such taking as nearly as practicable to the condition in which the same existed immediately prior to such taking; provided, however, that any such restoration shall be subject to compliance with all of the terms and provisions of this Declaration. In the event the restoration is impracticable or would otherwise violate any of the terms and provisions of this Declaration, then such Owner shall promptly clear away any remaining Improvements damaged or destroyed by such taking and shall leave such Lot and any remaining Improvements in a clean, orderly and safe condition.

ARTICLE VII
TERM AND AMENDMENTS

7.01. Term. The covenants, conditions and restrictions set forth in this Declaration shall run with and bind all of the Property, shall inure to the benefit of all Owners and their heirs, executors, personal representatives, administrators, successors and assigns, and shall be and remain in effect for a period of thirty (30) years from and after the date hereof, after which time this Declaration shall be automatically renewed and extended for successive and continuous periods of ten (10) years each, unless an agreement executed by the Owners of at least two-thirds or more of the Lots agreeing to terminate or modify this Declaration has been recorded in the office of the Register of Deeds of La Crosse, County, Wisconsin.

7.02. Amendment by Developer. So long as Developer is also an Owner, as defined in Article

1.07 of this Declaration, Developer may amend this Declaration by a written instrument filed and recorded in the office of the Register of Deeds of La Crosse County, Wisconsin, without obtaining the approval of any other Owner. Any amendment made pursuant to this Article 7.02 shall be certified by Developer and shall be effective upon recording. Each Owner, by acceptance of a deed or other conveyance to a Lot, agrees to be bound by all amendments permitted by this Article 7.02 and further agrees that, if requested to do so by Developer, such Owner will consent in writing to such amendment.

7.03. Amendment by Owners. Except for amendments under Article 7.02 hereof, any amendments to this Declaration shall be executed by the Owners of at least two-thirds of the Lots, shall be consented to by Developer if Developer owns any of the Lots, and shall be recorded in the office of the Register of Deeds of La Crosse County.

ARTICLE VIII
ENFORCEMENT

8.01 Enforcement. In the event any of the provisions of this Declaration are breached or are otherwise not being complied with in all respects by the Owner or Occupant or the respective family members, guests, invitees, agents, employees or contractors of such Owner or Occupant, then the Developer or the ARC shall have the right and authority, at its option to (a) enjoin such violation or non-compliance and/or (b) through their designated agent, employees, representatives and independent contractors, enter upon such Lot or dwelling thereon and take all action necessary to extinguish or correct such violation or breach. Any other Owner or Owners shall have the right and authority, at its/their option, to enjoin such violation or non-compliance.

8.02 Costs of Enforcement. All costs and expenses incurred by the ARC or Developer in enforcing any of the provisions of this Declaration that are in violation or non-compliance including without limitation, attorney fees, court costs, expenses and witness fees, shall be paid by such Owner who has violated or breached any of the provisions of this Declaration. Non-payment of the costs and expenses by the Owner who has violated or breached the provisions shall constitute a lien upon the premises of the Owner's Property, wherein the breach or non-compliance has occurred. Costs and expenses incurred by an Owner or Owners seeking enforcement for violations or non-compliance shall be determined by the Court finding a violation or noncompliance of any provisions of this Declaration.

ARTICLE IX
MISCELLANEOUS PROVISIONS

9.01. Rezoning. No owner may rezone their respective Lot nor any other portion of the Property without permission of the ARC.

9.02. Further Subdivision. No Lot or Lots may be combined or subdivided without the prior written consent of the ARC. Further, any approved combination or subdivision of a Lot shall comply with all applicable municipal and/or county ordinances related thereto.

9.03. Severability. If any provisions of this Declaration or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this Declaration

or the application of such provisions to persons or circumstances other than those as to which it is held invalid or unenforceable shall not be affected thereby and each provision shall be valid and enforceable to the fullest extent permitted by law.

9.04. Captions and Headings. The captions and headings contained in this Declaration are for convenience of reference only and shall not be used in the construction or interpretation of any provisions of this Declaration. The table of contents, cover page and any index to this Declaration are for convenience of reference only and shall not define or limit any of the terms and provisions hereof.

9.05. Pronouns and Plurals. All personal pronouns used in this Declaration, whether used in the masculine, feminine or neuter gender, shall include all other genders. The use of the singular tense shall include the plural and the use of the plural shall include the singular.

9.06. Binding Effect. The terms and conditions of this Declaration shall be binding upon each Owner or Occupant and their respective heirs, executors, administrators, personal representatives, successors and assigns and shall inure to the benefit of Developer, the ARC and all Owners and their respective heirs, executors, administrators, personal representatives, successors and assigns.

9.07. Conflict or Ambiguity. In the event of any conflict or ambiguity in the terms and provisions of this Declaration, the general rules of construction against one party as a result of that party having drafted this Declaration are hereby waived by each Owner. To the fullest extent allowed by law, no conflicts or ambiguity shall be resolved in favor of or to the advantage of one party as opposed to another.

9.08. Interpretation. In all cases, the provisions set forth and provided for in this Declaration shall be construed together and given that interpretation or construction which, in the opinion of the Developer, will best effect the intent of the general plan of development for the Property. The provisions hereof shall be liberally interpreted and, if necessary, they shall be so extended or enlarged by implication so as to make them fully effective. The provisions of this Declaration shall be given force and effect, notwithstanding the existence of any zoning or building codes which are less restrictive. The effective date of this Declaration shall be the date hereof. This Declaration shall be construed under and in accordance with the laws of the State of Wisconsin.

9.09. Rights of Third Parties. This Declaration shall be recorded for the benefit of Developer, the ARC, the Owners and such third parties and entities as are herein or in any other document or instrument granted rights, privileges and easement in the Property, and by such recording, no other adjoining property owners or third parties shall have any right, title or interest whatsoever in the Property or its operation and continuation, in the enforcement of any of the provisions if this Declaration or the right to consent to or approve any amendment or modification to this Declaration.

9.10. No Trespass. Whenever the Developer, the ARC and their respective agents, employees, representatives, successors and assigns, are permitted by this Declaration to enter upon any Lot to take any action permitted herein, the entering thereon and the taking of such action shall not be deemed a trespass.

9.11. No Partition. Each Owner hereby waives any right to seek or obtain judicial partition of any portion of the Property.

9.12. Reservation of Rights. Notwithstanding anything provided herein to the contrary, no sale, transfer, conveyance, lease, pledge, encumbrance or other hypothecation of any Lot by Developer to any other party shall constitute or be deemed a transfer of any of the rights reserved herein to Developer. Developer reserves the right to change location of any Lot owned by Developer including changes to the boundaries of any Lot owned by Developer.

9.13. Standards for Review. Whenever in this Declaration Developer or the ARC has the right to approve, consent to or require any action be taken pursuant to the terms hereof, such approval, consent or required action shall, except as otherwise specifically provided herein to the contrary, be given or withheld in the sole and absolute discretion of Developer or the ARC, as the case may be.

9.14. Oral Statements. Oral statements or representations by Developer, the ARC or any of their respective employees, agents, representatives, successors or assigns shall not be binding on Developer or the ARC.

9.15. Notices. Notices required hereunder shall be in writing and shall be delivered by hand or sent by United States mail, postage prepaid. All notices to Owners shall be delivered or sent to such addresses as have been designated in writing or, if no such address has been so designated, at the address of such Owner's respective Lot. All notices to the ARC shall be delivered or sent in care of Developer to:

_____
Attn: _____
_____
_____

or to such other address as the ARC may from time to time specify in a notice to the Owners. All notices to Developer shall be sent or delivered to Developer at the above address or to such other address as Developer shall specify.

9.16. Assignment. Developer and the ARC shall each have the right to assign any and all of the rights, powers, reservations and duties contained herein to any person or entity who shall thereupon have the same rights, powers, reservations and duties as Developer and the ARC, respectively.

9.17. No Waiver. All rights, remedies and privileges granted to Developer and the ARC pursuant to the terms and provisions of this Declaration shall be deemed to be cumulative and the exercise of any one or more of such rights, remedies or privileges shall not be deemed to constitute an election of remedies nor shall it preclude the party exercising the same, or any other party, from pursuing such other additional rights, remedies and privileges as may be available to such party at law or in equity. The failure at any time to enforce any covenant, condition or restriction set forth herein shall in no event be deemed a waiver of the right to enforce such covenant, condition or restriction.

9.18. Non-Merger. The terms of this Declaration and any rights hereunder shall not merge into the estate of any Owner and shall survey transfer of any Lot or any part thereof.

[Signature Page to Follow]

IN WITNESS WHEREOF, Developer has caused this Declaration to be duly executed as of the date first set forth above.

[INSERT NAME OF DEVELOPER ENTITY]

By: _____
Printed Name: _____
Title: _____

STATE OF WISCONSIN)
) ss.
COUNTY OF LA CROSSE)

Personally came before me this ___ day of _____, 2026, the above-named _____, to me known to be the person who executed the foregoing instrument and acknowledged the same.

_____
Printed Name: _____
Notary Public, State of Wisconsin
My Commission expires: _____

This document was drafted by:
Michelle W. Ebben, Esq.
Michael Best & Friedrich LLP
790 N. Water Street, Ste. 2500
Milwaukee, WI 53202

EXHIBIT A
LEGAL DESCRIPTION

[To be inserted]

PLANNING, RESOURCES AND DEVELOPMENT COMMITTEE
Monday, March 2, 2026
Administrative Center – County Board Room (1700)
4:35 p.m. – 5:25 p.m.
Recess
6:00 p.m. – 6:06 p.m.

MEMBERS PRESENT: Ken Schlimgen, Patrick Scheller, Peg Isola, Kristi Tweed, David Pierce, Dennis Jacobson
MEMBERS EXCUSED: Ron Rothering, Doug Servais
MEMBERS ABSENT:
STAFF & GUESTS: Angel Much, Kaleb Schuster, Jacob Schweitzer, Brock Tokach, Dillon Constant, Bryan Meyer, Dale Hewitt, Kathleen Stewart, Sara Koopman, Jane Klekamp, Sarah Torbert, Carol Engle-Drury, Bob Gollnik, Ethan Welter (recorder)

APPROVAL OF MINUTES & PUBLIC HEARING MINUTES FROM FEBRUARY 2, 2026
MOTION by Scheller/Isola to approve the **February 2, 2026,** business & public hearing minutes.
6 Aye, 0 No, 1 Excused (Rothering), 0 Absent, Motion carried.

PUBLIC COMMENT

Regarding Featherstone Rise Development:
IN FAVOR
Tim Candell, W4709 Cherrywood DR, La Crosse, WI
Joe Ledvina, 4071 Starlite DR, La Crosse, WI
Mike Kendhamm, N1337 Leske RD, La Crosse, WI
Fortune Berg, 2800 Ward Ave, La Crosse, WI
Libby Weber, N2248 Pammel Pass E, La Crosse, WI
Angela Weber, 232 3rd ST N, La Crosse, WI
Tyler Fortune, W5050 Knobloch RD, La Crosse, WI

IN OPPOSITION
Tim Buisman, W4896 CTH FO, La Crosse, WI
Dennis Justin, W4987 Woodhaven DR, La Crosse, WI
Ray Hach, N2082 County RD F, La Crosse, WI

Regarding Tracking Pad Current Standards:
IN OPPOSITION
Paul Wuensch, N4802 CTH J, Rockland

SUPERVISOR CONFERENCE REPORTS
Supervisor Isola – WCA Legislative Conference

CONSIDER AND ACT: STORMWATER AND EROSION CONTROL PLAN FOR FEATHERSTONE RISE IN THE TOWN OF SHELBY – KALEB SCHUSTER
Schuster stated that the La Crosse County Department of Land Conservation (DLC) has reviewed the submitted Erosion Control and Stormwater Management Plan for the Featherstone Rise Subdivision on the Town of Shelby. The project will include 36 single-family residential lots. Stormwater runoff from the development will be conveyed through a network of swales and culverts to six stormwater management biofiltration basins located around the perimeter of the site. These basins are designed to promote infiltration, reduce peak discharge rates, and provide stormwater treatment.

Discussion between Committee and Staff ensued.

Proposed Conditions

1. Results from the 15 soil borings submitted to the DLC upon completion. Adjust stormwater infrastructure to reflect any limiting factors discovered from the soil borings.
2. Submit final plat within 36 months of preliminary plat approval.

MOTION by Isola/Scheller to approve the Stormwater and Erosion Control Plan for Featherstone Rise in the Town of Shelby with the 2 proposed conditions.
6 Aye, 0 No, 1 Excused (Rothering), 0 Absent, Motion carried.

CONSIDER AND ACT: PRELIMINARY PLAT FOR FEATHERSTONE RISE IN THE TOWN OF SHELBY – BRYAN MEYER

Meyer stated that the La Crosse County Surveyors Department coordinated the review of the preliminary plat of Featherstone Rise, a 36-lot subdivision near the intersection of STH 33 and CTH F in the Town of Shelby. Our review looks at compliance with Chapter 236 of the Wisconsin Statutes, AE-7 of the Wisconsin Administrative Code and Chapter 18 of the La Crosse County Code. We also sought input on the plat from The Wisconsin Department of Transportation, Town of Shelby, the La Crosse County Highway Department, the Land Conservation Department and Zoning, Planning and Land Information Department. All of the input was shared with Excel Engineering, Inc. Updates were made, and a final version of the map was shown.

Discussion between Committee and Staff ensued.

Chair Schlimgen closed the business meeting at 5:25 p.m.

Chair Schlimgen reopened the business meeting at 6:00 p.m.

Discussion between Committee and Staff ensued.

Proposed Conditions

1. Lot 1 and 24 will need a variance for lot depth requirements.

MOTION by Scheller/Tweed to approve the Preliminary Plat for Featherstone Rise in the Town of Shelby with the 1 proposed condition.
5 Aye, 1 No (Schlimgen), 1 Excused (Rothering), 0 Absent, Motion carried.

NEXT MEETING – Monday, April 6, 2026

FUTURE AGENDA ITEMS
None

MOTION by Tweed/Pierce to adjourn.
6 Aye, 0 No, 1 Excused (Rothering), 0 Absent, Motion carried.

Meeting adjourned at 6:06 p.m.

The above minutes may be approved, amended, or corrected at the next committee meeting.

Ethan Welter, Recorder

TOWN OF SHELBY
2800 Ward Avenue La Crosse, WI 54601
608.788.1032
608.788.6840
info@townofshelby.com
www.townofshelby.com
www.facebook.com/townofshelby

Town Board Meeting Minutes – APPROVED

Date: Tuesday, February 17, 2026
Time: 8:30 a.m.
Location: 2800 Ward Ave, La Crosse, WI 54601
Present: Chairperson Tim Candahl, Supervisors Tim Ehler (until 9:45), Tim Padesky and Marlene Heal; Public Works Foreman Terry Wright, Administrator Christina Peterson, Clerk Fortune Berg, and Treasurer Melissa Erdman.
Excused/Absent: Supervisor Renee Knutson.
Attendance List: Brian Malm (Bolton and Menk), Tom Myhre, Todd Fischer, Dennis Justin, Joe and Dianne Hauser, Alan Lorenz, Nick and Angela Weber, Grant Duchac (Excel Engineering), Tim Buisman, Erik Miller, and Dan Oelke .

1. Meeting called to order by Candahl at 8:30 a.m.
2. Minutes from 02/03/2026. Motion by Padesky to approve minutes from 02/03/2026, second by Ehler. Motion carried unanimously.
3. Bills Payable. Motion by Heal to accept closed invoices for $2,111,737.77, second by Ehler. Motion carried unanimously. Motion by Ehler to pay open invoices for $595,397.90, second by Padesky. Motion carried unanimously.
4. Public Comment. None.
5. Preliminary Plat Review – Featherstone Rise LLC (11-37-0, 11-16-0, 11-18-0, 11-35-1, County Road F and Highway 33). Peterson noted that the plat was reviewed and discussed at the Technical Advisory Committee (TAC) Meeting with La Crosse County, School District, Town, Developer, etc. Changes were made based on that meeting, and this Preliminary Plat was created and submitted. The Planning Commission reviewed this and recommended approval. Peterson noted items that needed additional review based on discussion at the Planning Commission such as traffic, location of the shared wells and drainage. Traffic concerns were addressed by the County Highway Department, no concerns. Peterson confirmed the locations of the shared wells exceed the minimum distance from other shared wells, no concerns. Discussion on the slopes, grading and drainage. Peterson recommends that the Town require grading plans when each lot is developed to ensure each property will drain appropriately.

Public Comment

a. Joe Hauser (N2095 County Road F) asked about retention pond maintenance and asked if there is someone who works for the Town that can guarantee they are working properly. Candahl stated the Town works with La Crosse County to make sure the ponds are maintained and working as they were designed to.

b. Tim Buisman (W4896 County Road FO) asked when the park needs to be completed during construction. Nick Weber (145 17th Street S) noted it would be completed at the same time as the roads and retention ponds are deeded to the Town.

Motion by Heal to approve the preliminary plat with the condition that each lot submit a grading plan before construction begins, second by Ehler. Motion carried unanimously.

6. Driveway Exception – Johnson (11-1205-0, 3725 Cliffside Drive). Candahl would like to have a conversation with the property owner. Motion by Ehler to table until Tim Candahl can speak with the owner, second by Heal. Motion carried unanimously.
7. Certified Survey Map (CSM) – Kramer (11-2329-0, N124 Cedar Hills Lane). Peterson reviewed the Planning Commission recommendation and reminded the Board that Cedar Hills Lane is a private road, and residents share ownership of the road. Motion by Ehler to approve the Certified Survey Map, second by Padesky. Motion carried unanimously.
8. Applications to Exceed Two-Dog Limit – Cutter (W5907 Hillcrest Drive), Hermanson (2340 Redwood Court). No issues reported from Sheriff/Coulee Region Humane Society. Motion by Heal to approve, second by Padesky. Motion carried unanimously.
9. Updates on the Mormon Creek Watershed Study and the Millstream Addition – Bolton and Menk. Brian Malm reviewed updates and project goals. There will likely be another public information meeting in Summer 2026.

Public Comment

a. Erik Miller (W4944 Center Street) stated he does not plan to repair his culvert or driveway until the drainage issues are resolved, also concerned about water issues in backyards and his septic being affected. Peterson noted if there are too many impacts to backyards, the Town may not be able to address backyard drainage.
b. Dennis Justin (W4987 Woodhaven Drive) is concerned about how many residents are using the right-of-ways as their front yards and creating steep ditches along the road would cause issues for residents. Also concerned about pavement repairs, if they will have to install water and sewer in a few years, is it worth the cost?
c. Al Lorenz (W4927 Hoeth Street) asked what funding options are, Candahl answered that the options will be provided when the Town has a better idea of what the scope of the project and cost of the project will be.
d. Dan Oelke (N656 Hwy 35) noted special pavement used on Diagonal Road could be an option to mitigate problems in Millstream.

10. Administrator and Public Works Report. Peterson reported…
    a. Meeting at All Star at noon today for the Highway 35 project.
    b. Peterson is attending the Blufflands Coalition meeting today at 2:00 p.m.
    c. Tentative meeting on Thursday to discuss use of Hillview Ballfields.
    d. Public Works will be purchasing a new mower head to upgrade mower used for roadside ditches that can handle the terrain. Discussion on repairs and rentals to finish up the ditches.

e. Wright reported that they will be boring out the sewer to camera and clean the sewer lines in Arbor Hills.
f. Public Works will be cutting off I beams at the inlet structure at the end of Valley Road.
g. Public Works will be clearing brush on the sides of roads and clean up the corner of Crown Blvd and Cliffside Drive.
h. Public Works will be working on trucks.
i. Public Works will be cutting and trimming trees that overhang the roads.

11. Chairperson and Supervisors Report.
    a. Candahl reported he will be attending a future City of La Crosse Public Works Board Meeting.
    b. Heal asked Wright about the timeline for bench installation and park inspections. Wright answered the frost needs melt before they can put the slabs down for the benches, the playground inspections are supposed to be completed by April 15.
    c. Berg asked Wright about road bans, Wright answered he needs to assess the roads but is not planning to place them on roads at this time.
    d. Heal stated she will not be helping the Chicken Q this year. Peterson noted she or Erdman will be assisting. Heal asked how much the 2025 Chicken Q made. Berg will find the answer.
12. Fire Department Report. Candahl reported
    a. Chicken Q is going to be on March 15th.
    b. Firefighter Daren Schieldt retired this week.
    c. Engine 1 and 3 had minor work done are now back in service
13. Clerk's Report.
    a. Berg reviewed monthly report for permits, licenses, etc. Also reported on the recent meeting with La Crosse County Sheriff to discuss coverage.
14. Adjournment. Motion by Heal to adjourn at 10:09 a.m., second by Padesky. Motion carried unanimously.

Next Regular Meeting on March 3, 2026, at 5:00 p.m. at Town Hall
Respectfully Submitted by Fortune Berg, Clerk

Craig, Sondra

From: Neumann, Shannon
Sent: Wednesday, March 11, 2026 1:40 PM
To: Craig, Sondra
Subject: RE: For Review: Preliminary Plat - Featherstone Rise Subdivision

I cannot foresee any problems with the subdivision.

Shannon L. Neumann
Chief City Assessor
City of La Crosse Assessor's Office
400 La Crosse St. 54601
608-789-7525 Main | 608-789-7544 Office
neumanns@cityoflacrosse.org
www.cityoflacrosse.org

From: Craig, Sondra <craigs@cityoflacrosse.org>
Sent: Wednesday, March 11, 2026 12:43 PM
To: Acklin, Tim <Acklint@cityoflacrosse.org>; Asp, Brian <aspb@cityoflacrosse.org>; Coman, Kyle <comank@cityoflacrosse.org>; Crandall, Jay <CrandallJ@cityoflacrosse.org>; Erickson, Tina <ericksont@cityoflacrosse.org>; Gallager, Matthew <gallagerm@cityoflacrosse.org>; Holland, Michelle <hollandm@cityoflacrosse.org>; Neumann, Shannon <Neumanns@cityoflacrosse.org>; Reinhart, David <Reinhartd@cityoflacrosse.org>; Trane, Andrea <tranea@cityoflacrosse.org>
Subject: RE: For Review: Preliminary Plat - Featherstone Rise Subdivision

The subdivision plans are too large to attach. I have copied all of the documents to a folder on the O Drive.

O:\City_Clerk\Featherstone Rise - T-Shelby

Thank you,

SONDRA CRAIG, WCMC (she/her)
Deputy City Clerk
City Clerk's Office
City of La Crosse
400 La Crosse Street
La Crosse WI 54601

craigs@cityoflacrosse.org
Direct: 608.789.7549 | Office: 608.789.7510

From: Craig, Sondra
Sent: Wednesday, March 11, 2026 12:41 PM
To: Acklin, Tim <Acklint@cityoflacrosse.org>; Asp, Brian <aspb@cityoflacrosse.org>; Coman, Kyle <comank@cityoflacrosse.org>; Crandall, Jay <CrandallJ@cityoflacrosse.org>; Erickson, Tina <ericksont@cityoflacrosse.org>; Gallager, Matthew

<gallagerm@cityoflacrosse.org>; Holland, Michelle <hollandm@cityoflacrosse.org>; Neumann, Shannon <Neumanns@cityoflacrosse.org>; Reinhart, David <Reinhartd@cityoflacrosse.org>; Trane, Andrea <tranea@cityoflacrosse.org>
Subject: For Review: Preliminary Plat - Featherstone Rise Subdivision

Good afternoon,

Attached for your review is a preliminary plat for the Feathersone Rise Subdivision in the Town of Shelby (City's extraterritorial jurisdiction). The Town and County have already approved. This will be routed to the April committee meetings (CPC 3/30, J&A 3/31, and Council 4/9).

Attached is the checklist, preliminary plat, Declaration of Restrictions, and Stormwater & Erosion Control report. They also submitted Subdivision Plans, which I'll send separately because it is a very large document.

Please let me know if you have any concerns or if you approve (or N/A if this is not applicable for your review – I'm sending to the normal City CSM reviewers).

Thank you,

SONDRA CRAIG, WCMC (she/her)
Deputy City Clerk
City Clerk's Office
City of La Crosse
400 La Crosse Street
La Crosse WI 54601

craigs@cityoflacrosse.org
Direct: 608.789.7549 | Office: 608.789.7510
Visit the City Clerk webpage: https://www.cityoflacrosse.org/your-government/departments/city-clerk

City Clerk's Office hours:
8:00 a.m. to 4:30 p.m., Monday through Thursday
8:00 a.m. to 2:00 p.m., Friday
Public Service (walk in) hours 8:00 a.m. to 4:00 p.m. Monday through Thursday & 8:00 a.m. to 12:00 p.m. on Friday in the City Hall Lobby

Craig, Sondra

From: Reinhart, David
Sent: Wednesday, March 11, 2026 2:09 PM
To: Craig, Sondra
Subject: RE: For Review: Preliminary Plat - Featherstone Rise Subdivision

Approve.

Thanks,

David Reinhart
Chief Building Inspector
Building & Inspections
400 La Crosse St., La Crosse, WI 54601
Office: 608-789-7564

From: Craig, Sondra <craigs@cityoflacrosse.org>
Sent: Wednesday, March 11, 2026 12:43 PM
To: Acklin, Tim <Acklint@cityoflacrosse.org>; Asp, Brian <aspb@cityoflacrosse.org>; Coman, Kyle <comank@cityoflacrosse.org>; Crandall, Jay <CrandallJ@cityoflacrosse.org>; Erickson, Tina <ericksont@cityoflacrosse.org>; Gallager, Matthew <gallagerm@cityoflacrosse.org>; Holland, Michelle <hollandm@cityoflacrosse.org>; Neumann, Shannon <Neumanns@cityoflacrosse.org>; Reinhart, David <Reinhartd@cityoflacrosse.org>; Trane, Andrea <tranea@cityoflacrosse.org>
Subject: RE: For Review: Preliminary Plat - Featherstone Rise Subdivision

The subdivision plans are too large to attach. I have copied all of the documents to a folder on the O Drive.

O:\City_Clerk\Featherstone Rise - T-Shelby

Thank you,

SONDRA CRAIG, WCMC (she/her)
Deputy City Clerk
City Clerk's Office
City of La Crosse
400 La Crosse Street
La Crosse WI 54601

craigs@cityoflacrosse.org
Direct: 608.789.7549 | Office: 608.789.7510

From: Craig, Sondra
Sent: Wednesday, March 11, 2026 12:41 PM
To: Acklin, Tim <Acklint@cityoflacrosse.org>; Asp, Brian <aspb@cityoflacrosse.org>; Coman, Kyle <comank@cityoflacrosse.org>; Crandall, Jay <CrandallJ@cityoflacrosse.org>; Erickson, Tina <ericksont@cityoflacrosse.org>; Gallager, Matthew

<gallagerm@cityoflacrosse.org>; Holland, Michelle <hollandm@cityoflacrosse.org>; Neumann, Shannon <Neumanns@cityoflacrosse.org>; Reinhart, David <Reinhartd@cityoflacrosse.org>; Trane, Andrea <tranea@cityoflacrosse.org>
Subject: For Review: Preliminary Plat - Featherstone Rise Subdivision

Good afternoon,

Attached for your review is a preliminary plat for the Feathersone Rise Subdivision in the Town of Shelby (City's extraterritorial jurisdiction). The Town and County have already approved. This will be routed to the April committee meetings (CPC 3/30, J&A 3/31, and Council 4/9).

Attached is the checklist, preliminary plat, Declaration of Restrictions, and Stormwater & Erosion Control report. They also submitted Subdivision Plans, which I'll send separately because it is a very large document.

Please let me know if you have any concerns or if you approve (or N/A if this is not applicable for your review – I'm sending to the normal City CSM reviewers).

Thank you,

SONDRA CRAIG, WCMC (she/her)
Deputy City Clerk
City Clerk's Office
City of La Crosse
400 La Crosse Street
La Crosse WI 54601

craigs@cityoflacrosse.org
Direct: 608.789.7549 | Office: 608.789.7510
Visit the City Clerk webpage: https://www.cityoflacrosse.org/your-government/departments/city-clerk

City Clerk's Office hours:
8:00 a.m. to 4:30 p.m., Monday through Thursday
8:00 a.m. to 2:00 p.m., Friday
Public Service (walk in) hours 8:00 a.m. to 4:00 p.m. Monday through Thursday & 8:00 a.m. to 12:00 p.m. on Friday in the City Hall Lobby

Agenda Item 26-0254 (Tim Acklin)

Preliminary Plat of Featherstone Rise - Part of the Northwest 1/4 & Northeast 1/4 of the Northwest 1/4 of Section 7 and Part of the Southwest 1/4 & Southeast 1/4 of the Southwest 1/4 of Section 6, all in Township 15 North, Range 6 West, Town of Shelby, La Crosse County, Wisconsin.

General Location

Town of Shelby- Located at the NE corner of the intersection of State Highway 33 and County Road F as depicted in attached Map PC26-0254. The property was used as farmland. The property is surrounded by residential homes to the west and south and farmland to the north and east. It is approximately 2 miles from the nearest city limits of La Crosse.

Background Information

The applicant is requesting approval of the Preliminary Plat for the Featherstone Rise Subdivision in the Town of Shelby. The proposed subdivision is taking four existing parcels and subdividing them into 36 residential parcels and one outlot to be dedicated for a ½ acre public park. The existing buildings to the southeast of the project site will be left on their own parcel.

The proposed subdivision will be served by private wells. The proposed streets (Featherstone Way, Circle, and Court) will be dedicated as public right-of-way.

See attached plans for more information.

This item is reviewed by the City of La Crosse because it is within three miles of the city limits and therefore it is a part of the City's extraterritorial review process.

Recommendation of Other Boards and Commissions

The Town of Shelby approved the plat at their February 17, 2026, meeting.

The La Crosse County Board approved the plat at their March 2, 2026, meeting.

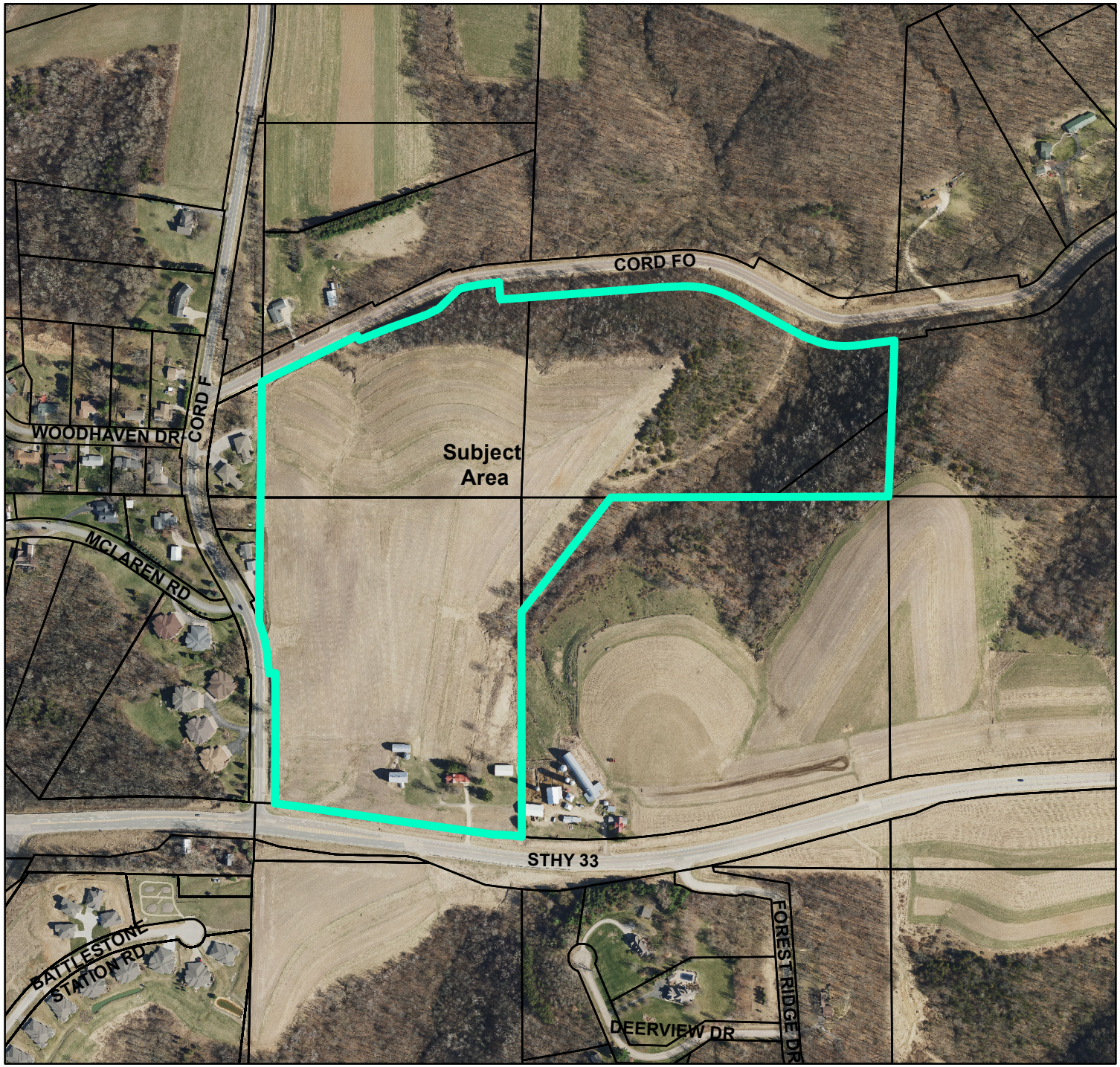
Consistency with Adopted Comprehensive Plan

N/A

Staff Recommendation

This item is recommended for approval per any conditions required by the Engineering and Fire Departments.

Routing J&A 3.31.26



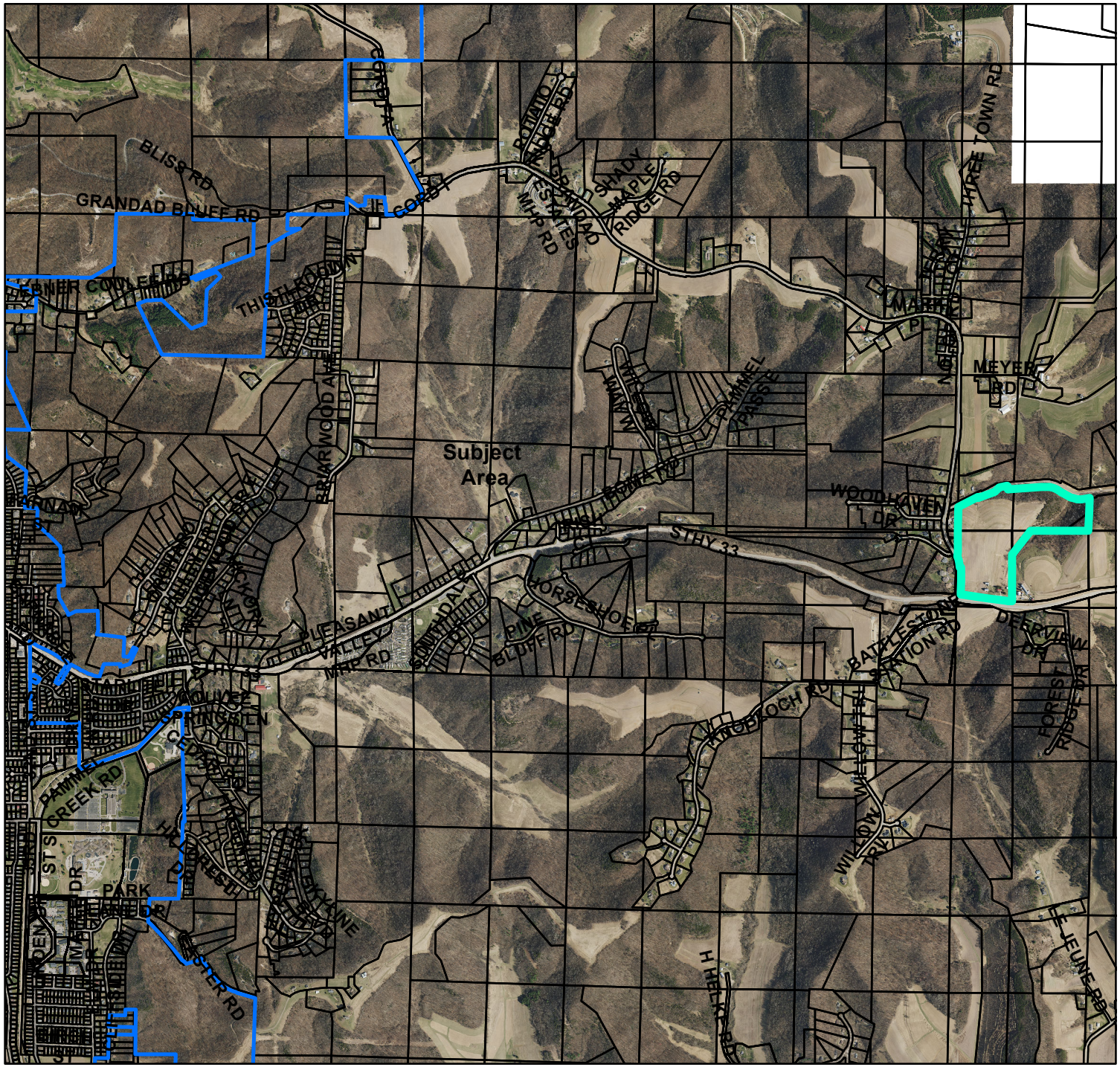
BASIC ZONING DISTRICTS

- R1 - SINGLE FAMILY
- R2 - RESIDENCE
- WR - WASHBURN RES
- R3 - SPECIAL RESIDENCE
- R4 - LOW DENSITY MULTI
- R5 - MULTIPLE DWELLING
- R6 - SPECIAL MULTIPLE
- PD- PLANNED DEVELOP
- TND - TRAD NEIGH DEV.
- C1 - LOCAL BUSINESS
- C2 - COMMERCIAL
- C3 - COMMUNITY BUSINESS
- M1 - LIGHT INDUSTRIAL
- M2 - HEAVY INDUSTRIAL
- PS - PUBLIC & SEMI-PUBLIC
- PL - PARKING LOT
- UT - PUBLIC UTILITY
- CON - CONSERVANCY
- FW - FLOODWAY
- A1 - AGRICULTURAL
- EA - EXCLUSIVE AG
- City Limits
- SUBJECT PROPERTY

0 240 480 960 Feet

City of La Crosse Planning Department - 2026

PC 26-0254 627



BASIC ZONING DISTRICTS

- R1 - SINGLE FAMILY
- R2 - RESIDENCE
- WR - WASHBURN RES
- R3 - SPECIAL RESIDENCE
- R4 - LOW DENSITY MULTI
- R5 - MULTIPLE DWELLING
- R6 - SPECIAL MULTIPLE
- PD- PLANNED DEVELOP
- TND - TRAD NEIGH DEV.
- C1 - LOCAL BUSINESS
- C2 - COMMERCIAL
- C3 - COMMUNITY BUSINESS
- M1 - LIGHT INDUSTRIAL
- M2 - HEAVY INDUSTRIAL
- PS - PUBLIC & SEMI-PUBLIC
- PL - PARKING LOT
- UT - PUBLIC UTILITY
- CON - CONSERVANCY
- FW - FLOODWAY
- A1 - AGRICULTURAL
- EA - EXCLUSIVE AG
- City Limits
- SUBJECT PROPERTY

0 1,150 2,300 4,600 Feet

City of La Crosse Planning Department - 2026

PC 26-0254 628

City of La Crosse, Wisconsin

City Hall
400 La Crosse Street
La Crosse, WI 54601

Text File

File Number: 25-0143

Agenda Date:

Version: 1

Status: Agenda Ready

In Control: City Plan Commission

File Type: General Item

Agenda Number: 5.

Forward La Crosse: 2025 Zoning Code Update Promotion
www.forwardlacrosse.org
Campaign Timeline: Kick Off February 2025

Overview
The City of La Crosse is updating its Zoning and Subdivision code, an 18-month initiative to help shape a more vibrant, resilient, and livable city for the residents of La Crosse, Wisconsin. This collaborative effort will build on the efforts of past City plans, including the most recently adopted 2040 Comprehensive Plan and the La Crosse 2024 Housing Study.

ForwardLacrosse.org
Since the launch of the 2025 Zoning Code Update in February, the website https://forwardlacrosse.org has recorded 3,896 users and 14,952 page views.

Social Media
Since February 2025, the Forward La Crosse Facebook page has received 17,570 views, with 80.3% of the audience located in La Crosse, WI, followed by viewers in Onalaska and Holmen. The strongest age group is 35–64 (women), with the 35–44 range accounting for 29% of total viewership.

On Instagram, over the past 30 days, Forward La Crosse received 248 views.

Regional Press Releases
May 7, 2025 - City of La Crosse Launches Zoning Survey to Gather Input on Future Development and Neighborhood Character
March 20, 2025 - La Crosse Housing Week Returns! April 28 – May 3, 2025: Join the Conversation on the Future of Housing
Feb 17, 2025 - The City of La Crosse Announces an Update to their Zoning and Subdivision Code and Upcoming

E-newsletters
July 14, 2024 - ✉️ Submit Your Comments: info@forwardlacrosse.org – We're Listening
- Zoning Comments - LINK

June 16, 2025 - 🗣️📈Survey Deadline June 30: Shape La Crosse's Future! 🗓️✨
June 9, 2025 - 📘 🗓️ Zoning Code 101 – Join Us June 9th & 23rd! $20 gift card!
May 21, 2025 - Zoning Code 101 – Join Us This Thursday!
May 9, 2025 - Help Shape La Crosse's Future—Take the Zoning Code Survey Today!
April 24, 2025 - NEXT WEEK! 🏡 La Crosse Housing Week 🗓️ April 28 – May 3, 2025!
April 3, 2025 - Forward La Crosse News: La Crosse Housing Week April 28 – May 3, 2025!

In the News
2025

1. Feb 17, 2025 (Around River City - Online Print) - La Crosse Seeks Community Input for Zoning and Subdivision Code Update
2. March 14, 2025 (WIZM News - Radio) Women Build, Housing Week and Neighbor's Day with Habitat La Crosse's Kahya Fox
3. March 24, 2025 (AARP Local) - Join La Crosse Housing Week April 28 through May 3
4. Apr 17, 2025 (WIZM News+Podcast) - Habitat's Kahya Fox previews La Crosse Housing Week
5. Apr 21, 2025 (wiproud.com) - La Crosse organizations to launch first-ever La Crosse Housing Week April 28 to May 3
6. April 21, 2025 (Yahoo News) - La Crosse organizations to launch first-ever La Crosse Housing Week April 28 to May 3
7. Apr 23, 2025 - (La Crosse Tribune) - Housing Week aims to engage La Crosse on affordable housing issues
8. Apr 23, 2025 - (La Crosse Tribune) - La Crosse Housing Week: Affordable housing..
9. Apr. 28, 2025 (WEAU 13) - Local organizations launch first La Crosse Housing Week
10. April 29, 2025 (Yahoo News) - Housing Week kicks off in La Crosse
11. Apr 29, 2025 - (wiproud.com) Housing Week kicks off in La Crosse
12. Apr 30, 2025 (News 8) - La Crosse Housing Week aims to address community…
13. May 7, 2025 (WXOW 19) - City of La Crosse is seeking input on future development and neighborhood character
14. June 30, 2025 (WIZM News) - Zoning and neighborhood needs are top priorities for new development in La Crosse, for city plan commission
15. June 09, 2025 (News 8) - City of La Crosse educates residents on the importance of zoning

Event Calendars Submissions

- La Crosse Tribune
- WXOW News 19
- News 8
- Next Door
- WI Proud (Fox 25/48)
- Good Morning Coulee
- La Crosse Local
- City of La Crosse Event Calendar
- Around River City

Physical Media – Posters

Forty posters were distributed across locations in La Crosse, including Viterbo University, UW-La Crosse, the public library, City Hall, and various spots throughout downtown for Housing Week.

In Person Presentations/Discussions

2025

June 23, 2025 - Zoning Code 101 - Bluffside and Grandview Emerson Neighborhood Associations
June 9, 2025 - Zoning Code 101 - Weigent-Hogan, Holy Trinity-Longfellow, and Hintgen Neighborhood Associations
May 27, 2025 - Zoning Code 101 - Logan-Northside Neighborhood Association and Lower Northside Depot Neighborhood
May 22, 2025 - Zoning Code 101 - Washburn, Downtown, and Powell-Poage-Hamilton Neighborhood Associations
May 5 - La Crosse Chamber - The Forum: La Crosse Housing & Zoning Changes
April 30, 2025 - Zoning & Beyond: Forward La Crosse - La Crosse Public Library Main Branch
May 1, 2025 - Zoning & Beyond: Forward La Crosse - La Crosse Public Library Main Branch

Housing Week April 30- May 2, 2024

Wednesday, April 30

- **12:00–1:00 PM** – *Zoning & Beyond*
  La Crosse Public Library *(City Standalone Event)*
- **2:00–3:30 PM** – Riverside Park *(Pop-up Table)*
- **6:30–8:00 PM** – *Housing on Tap*
  Cappella Events Center *(Pop-up Table)*

Thursday, May 1

- **8:30–10:00 AM** – Grounded Patio Cafe *(Pop-up Table)*
- **12:00–1:00 PM** – *Let's 'Taco Boat' Housing Lunch*
  Pump House Regional Arts Center *(Pop-up Table)*
- **2:00–3:30 PM** – *(Pop-up Table)*
- **5:00–6:00 PM** – *Zoning & Beyond: Forward La Crosse*
  La Crosse Public Library *(City Standalone Event)*

Friday, May 2

- **9:30–11:30 AM** – *Then & Now History Exhibit*
  La Crosse Public Library *(Pop-up Table)*
- **1:00–3:00 PM** – *The Economics of Redevelopment*
  Black River Beach Neighborhood Center *(Pop-up Table)*

Organizational Media Inclusion

May 25, 2025 – The Bluffside Neighborhood Association shared the Forward La Crosse newsletter with their network.

Before and during Housing Week- Habitat for Humanity of the Greater La Crosse Region - including outreach through social media, newsletters, and other communication channels.

April 18, 2025 - (Couleecap, Inc. FB Page) - Don’t miss La Crosse Housing Week! April 28th…

April 30, 2025 - (Extension La Crosse County FB Page) - “Get ready, La Crosse! The first-ever Housing Week is happening this spring.

City of La Crosse, Wisconsin

PROJECT TEAM:

Claire Stickler, Project Manager MSA Professional Services
cstickler@msa-ps.com

Emily Soderberg, Engagement Manager MSA Professional Services esoderberg@msa-ps.com

Mike Lamb, Mike Lamb Consulting mlambnet@gmail.com

DATE:

May 29th , 2025

LA CROSSE ZONING AND SUBDIVISION CODE UPDATE

Housing Week
La Crosse Housing Week was a major success, generating strong community interest and engagement around housing, zoning, and the future of development in the city. Thank you to all the partners for allowing our presentation to be apart of the week.

Events throughout the week were well-attended by a diverse group of residents, stakeholders, and community leaders. Our presentation encouraged dialogue, with many participants contributing thoughtful questions, comments and personal insights.

Survey Update
As of Tuesday 5/27, we have received 617 responses to Community Survey #1. The survey will be open until June 30th. Please share the survey with your connections throughout the community. The survey is available on forwardlacrosse.org.

Below is a brief analysis of the responses so far. This is very high level as we will provide a full analysis when the survey closes. Thus far -

- 73% of respondents are homeowners, with many having lived in the city for 11 or more years.
- We're seeing a broad range of age groups represented.
- Most respondents agree or strongly agree with statements regarding high-density and low-density residential buildings, as well as neighborhood-related questions.
- The only statements with less agreement were:
  - "Situate closer to the street than they typically are today"
  - "Set back the top stories of the building to better improve compatibility with the surrounding neighborhoods" (in reference to multi-family/high-density residential buildings).
- Open-Ended Question Themes
  The open-ended question asked about concerns related to property regulations (e.g.,

setbacks, height, landscaping, stormwater, lighting, parking, noise). A quick tally of common themes shows top concerns include:

- Parking
- Noise
- Overly burdensome regulations
- Restrictions limiting density and housing flexibility
- Stormwater infrastructure
- Building heights

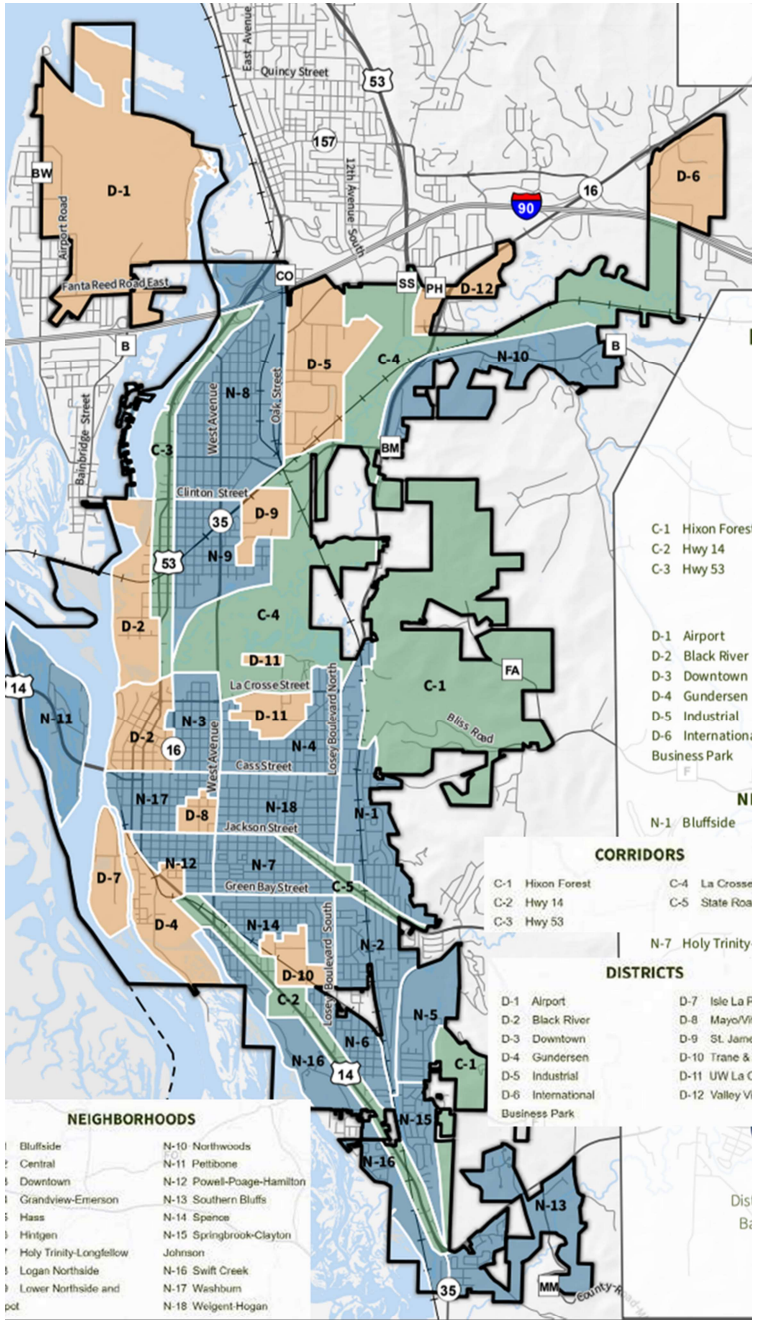
Focus Groups and Interviews

These will primarily take place throughout June.

For any in-person focus groups or interviews, we're tentatively looking at June 30 and July 1st, as our project team will be in town for the Planning Commission Meeting.

Project Next Steps

- Stakeholder Interview Discussions
- Code Diagnostics
- Specific Code Approaches



Built Form Study | Districts

Based on the Comprehensive Plan NDC framework, the Built Form Study samples the typical development pattern for each of the neighborhoods, districts and corridors as identified in the comp plan to better understand the physical dimensions of building type, site plan, street frontage and block pattern as well as other conditions.

Districts

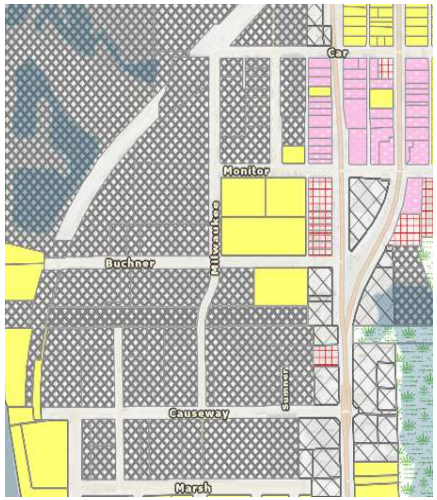
D-1 thru D-12

D-1 Airport and D-12 Valley View Mall not included

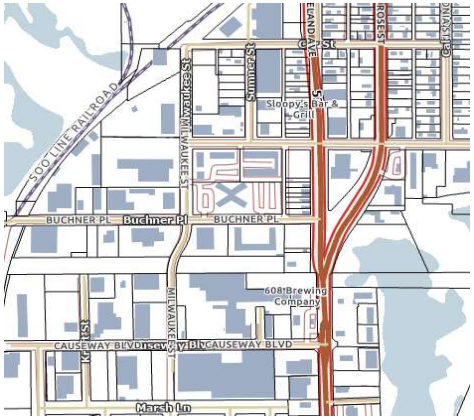
FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate D-2: Black River

NDC Framework: District



Urban Pattern



Built Form Examples

Notes

- Existing zoning: M1 Light Industrial, M2 Heavy Industrial, R1 Single Family, C1 Local Commercial, C2 Commercial
- Character area: Industrial small lot
- Key intersection: Hwy 53 & Monitor St, Hwy 53 & Copeland Ave
- Parcel pattern: Large rectangular lots fronting side streets; small rectangular residential/commercial lots with alley fronting Hwy 53, most lots are 25-50 feet wide and 140 feet deep
- Scale: Industrial area has medium to large 1-2 story structures
- Yards: Buildings on streets off of Hwy 53 generally have 20-foot setbacks (40 feet from road
- Parking: Surface lots (paved and gravel) for industrial/commercial
- Materials: Lap siding (vinyl and wood), concrete, stucco
- Street: 50-65 foot ROW with limited sidewalk coverage on side streets, with no sidewalks; Hwy 53 has 70-100 foot ROW with 6-foot sidewalks on one or both sides
- Alley/Service Drive: N/A

FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate D-4: Gundersen

NDC Framework: District

Urban Pattern

Built Form Examples

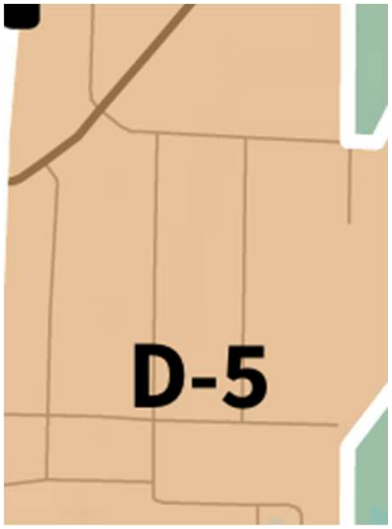
Notes

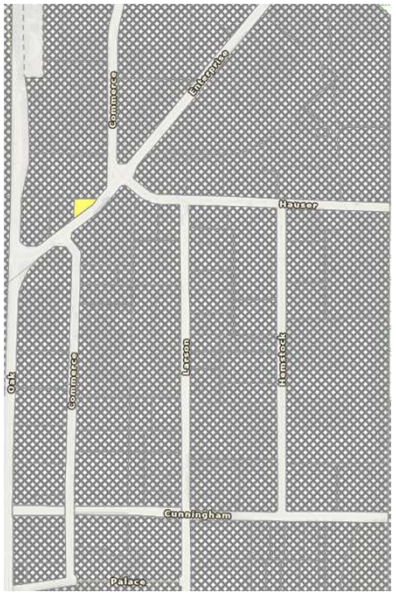
- Existing zoning: Public and Semi-Public & PD Planned Development
- Character area: Campus/medical
- Key intersection: South Ave & 7th St
- Parcel pattern: Large irregular lots abutting an access road on at least one edge; Main hospital is 50 ft from road,
- Scale: 5-7 story medical buildings and residential halls
- Yards: Most building are placed near property line with setbacks of at least 25-30 feet (with deeper setbacks on sides with large parking lots)
- Parking: Surface parking, parking ramps, limited street parking
- Materials: Masonry, glass
- Street: 100-foot ROW width for 7th street with 8-foot sidewalks on both sides, 90-foot ROW width for South Ave with 10-foot sidewalks on both sides; limited sidewalk coverage on side streets
- Alley/Service Drive: Sidewalk network that can be used between buildings (most sidewalks are 8 feet wide)

FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate D-5: Industrial

NDC Framework: District





Urban Pattern

Built Form Examples

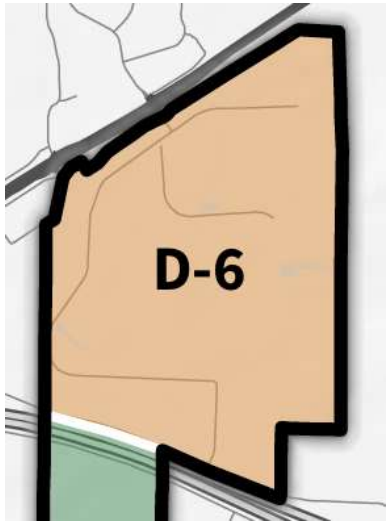
Notes

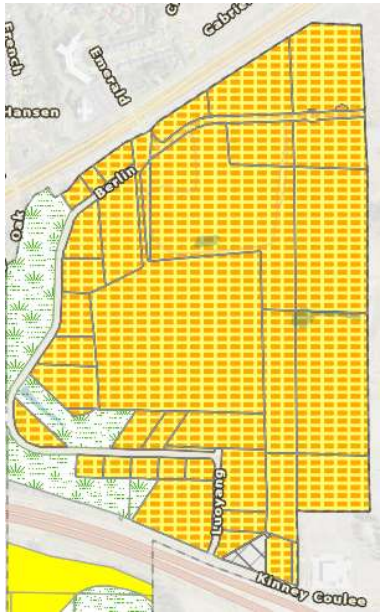
- Existing zoning: M2 Heavy Industrial
- Character area: Industrial large lot
- Key intersection: Oak St & Enterprise Ave
- Parcel pattern: Large irregular lots fronting Enterprise Ave and side streets
- Scale: Large floor plate buildings not exceeding 100 feet in height
- Yards: Shallow setbacks from roads and neighboring buildings
- Parking: Large surface parking lots, some parallel parking on each side of street
- Materials: Vinyl lap siding, masonry, metal panel
- Street: all streets have 60-65 foot ROW; Enterprise Ave and Larson St have 6-foot sidewalk on one side with 3-foot grass road verges
- Alley/Service Drive: N/A

FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate D-6: International

NDC Framework: District





Urban Pattern

Built Form Examples

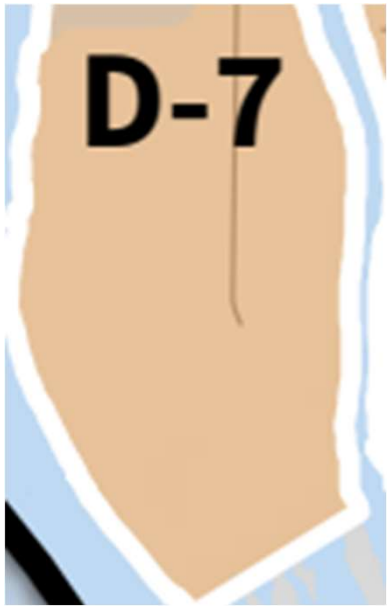
Notes

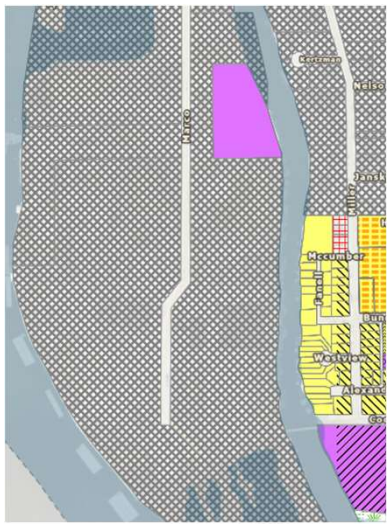
- Existing zoning: PD Planned Development
- Character area: Industrial large lot
- Key intersection: WI-16 & Berlin Dr
- Parcel pattern: Large irregular lots fronting Berlin Dr
- Scale: Large floor plate buildings not exceeding 2-3 stories
- Yards: Buildings with parking behind/beside have shallow setbacks fronting Berlin Dr; some buildings have surface lots in front
- Parking: Surface lots for all buildings, no street parking
- Materials: Masonry, metal panel
- Street: 65-foot ROW with no sidewalks; apparent 10-foot walking paths running through center of business parking and connecting to sidewalk on WI-16 & N Kinney Coulee Rd
- Alley/Service Drive: N/A

FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate D-7 Isle La Plume

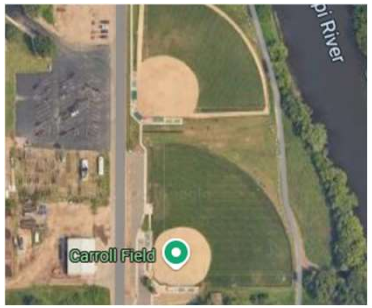
NDC Framework: District





Urban Pattern

Built Form Examples



Notes

- Existing zoning: M2 Heavy Industrial & Public & Semi-Public
- Character area: Industrial large lot
- Key intersection: N/A
- Parcel pattern: Large irregular lots fronting Marco Dr
- Scale: Large floor plate 1-4-story buildings
- Yards: Buildings on streets off Marco Dr setback 10-20 feet from ROW (parking of cars in the setback area)
- Parking: Large gravel surface lots (except two large paved lots)
- Materials: Vinyl lap siding, masonry, metal panel
- Street: 60-foot ROW with no sidewalk coverage
- Alley/Service Drive: N/A

FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate D-8: Mayo/Viterbo/FSPA

NDC Framework: District

Urban Pattern

Built Form Examples

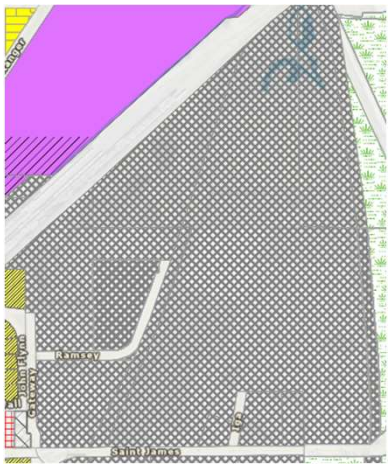
Notes

- Existing zoning: PS Public and Semi-Public, C1 Local Business
- Character area: Campus/medical & educational
- Key intersection: West Ave & Jackson St, West Ave & Market St
- Parcel pattern: Large rectangular lots fronting side streets abutting an access road on at least one edge; large commercial lots along West Ave
- Scale: 5-15 stories medical buildings; 3-5 story academic buildings; Few 1-story commercial buildings
- Yards: 50-80 feet from West Ave ROW; 10-15 feet from other side streets ROW
- Parking: Surface parking, parking ramps, street parking on side streets
- Materials: Masonry, glass
- Street: West Ave 80-foot ROW with 6-foot sidewalks on both sides; 65-70-foot ROW on other roads in district with 6-foot sidewalks on both sides
- Alley/Service Drive: Several driveways into parking lots off side streets; extensive sidewalk network in both medical and academic campuses (most sidewalks 10-15 feet wide)

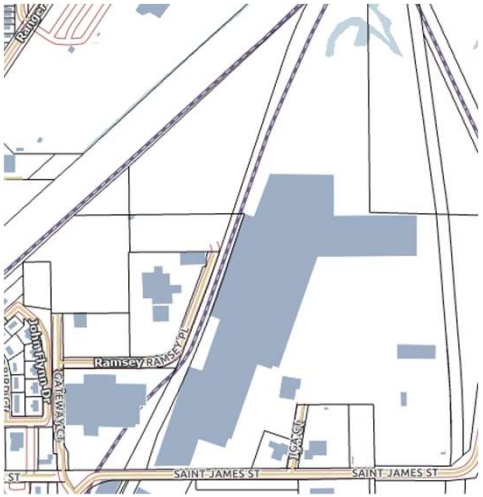
FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate D-9: St. James Industrial

NDC Framework: District



Urban Pattern



Built Form Examples

Notes

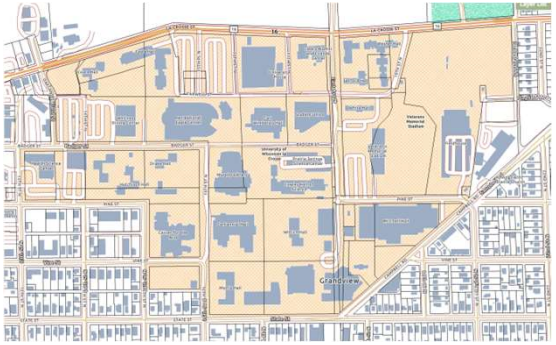
- Existing zoning: M2 Heavy Industrial
- Character area: Industrial large Lot
- Key intersection: N/A
- Parcel pattern: Large irregular lots fronting Saint James St
- Scale: Large floor plate 1-2-story industrial buildings
- Yards: Large building set back 0 feet, others between 30-175 feet with parking lot in front or behind buildings
- Parking: Large paved surface lots
- Materials: Vinyl lap siding, masonry, metal panel
- Street: 60-foot ROW with no sidewalk coverage
- Alley/Service Drive: N/A

FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate D-11: UW La Crosse

NDC Framework: District

Urban Pattern

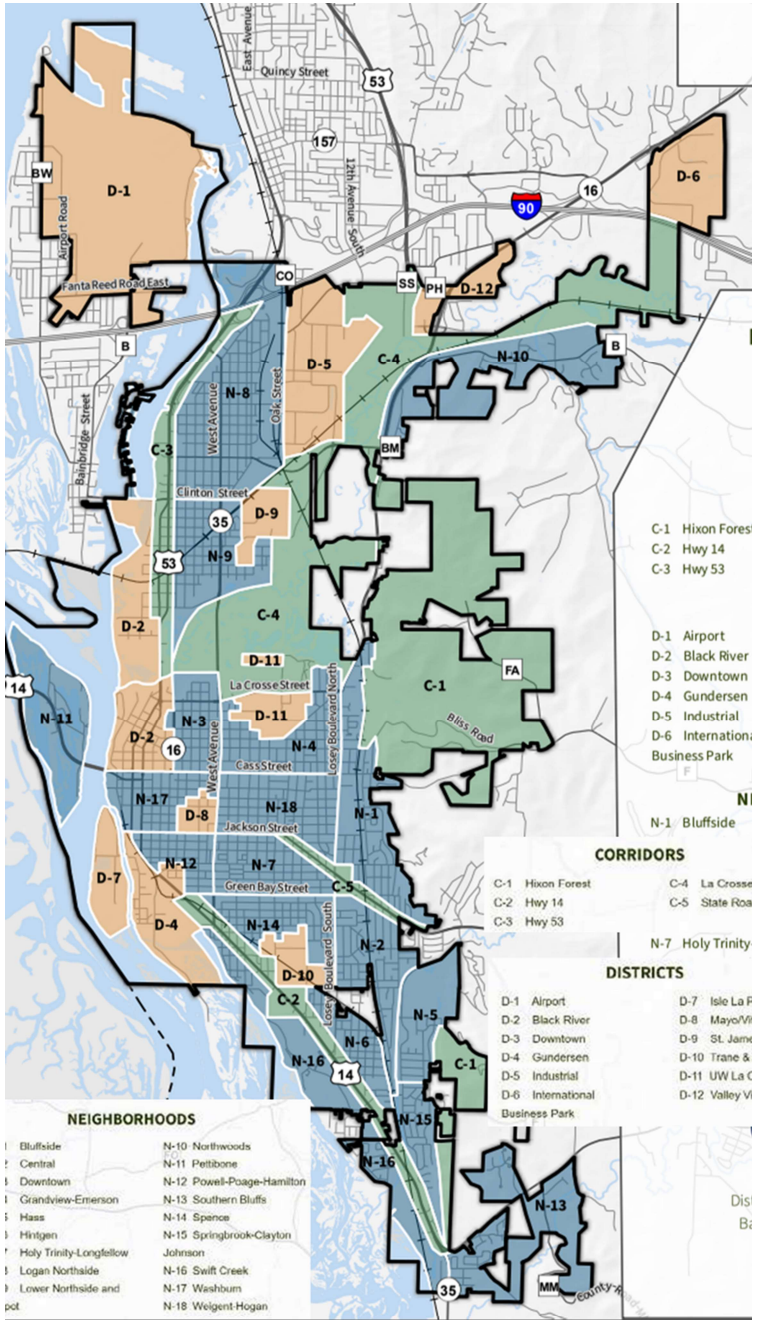


Built Form Examples

Notes

- Existing zoning: Public and Semi-Public
- Character area: Campus/educational
- Key intersection: La Crosse St & East Ave, La Crosse St & Losey Blvd
- Parcel pattern: Large rectangular lots abutting an access road on at least one edge; most lots are 300-370 feet deep
- Scale: 2-5 story academic buildings and residential halls
- Yards: Most buildings are placed in center of parcel with setbacks of 30-40 feet from each property line
- Parking: Surface parking, parking ramps, limited street parking
- Materials: Masonry, glass
- Street: 65-foot ROW with 7-13 foot sidewalks on each side; curb cuts for surface lots and drop-off points
- Alley/Service Drive: Extensive sidewalk network that can be used by university vehicles (most sidewalks are 10-20 feet wide)

FORWARD LA CROSSE
ZONING CODE UPDATE



Built Form Study | Neighborhoods

Based on the Comprehensive Plan NDC framework, the Built Form Study samples the typical development pattern for each of the neighborhoods, districts and corridors as identified in the comp plan to better understand the physical dimensions of building type, site plan, street frontage and block pattern as well as other conditions.

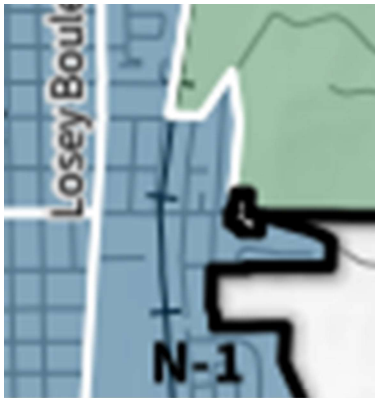
Neighborhoods

- N-1 thru N-18
- N-2 Central, N-3 Downtown and N-11 Pettibone are addressed in the Character Areas analysis

FORWARD LA CROSSE
ZONING CODE UPDATE

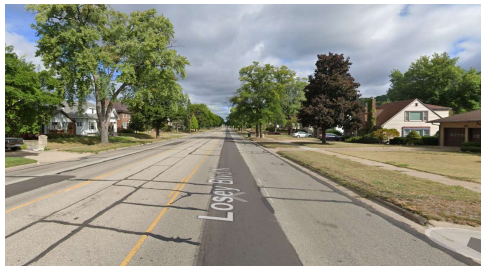
Built Form Study | Plate N-1: R1 Neighborhood East of Losey Blvd N

NDC Framework: Neighborhoods



Urban Pattern

Built Form Examples



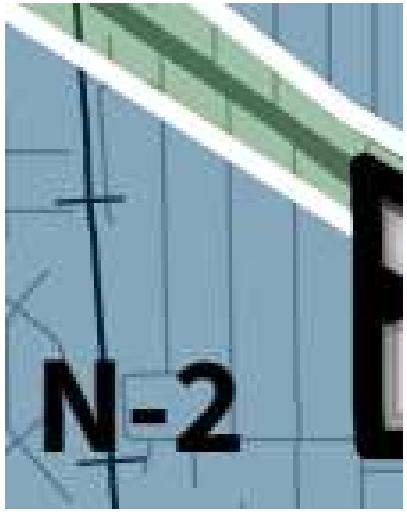
Notes

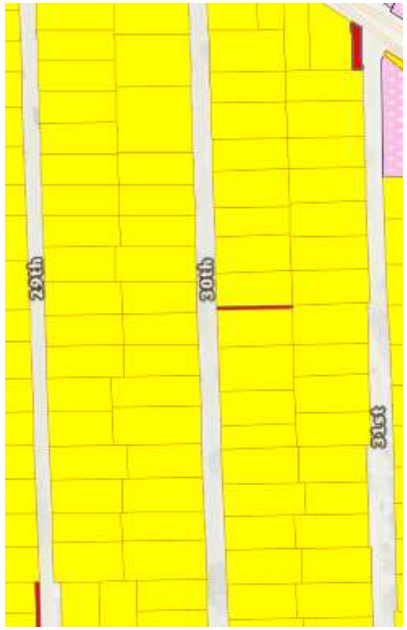
- Existing zoning: R1 Single Family
- Character area: contemporary neighborhood
- Key intersection: Losey Blvd & State St
- Parcel pattern: Residential lots in warped-grid layout and cul-de-sacs; most lots are 60-100 feet wide and <0.5 acres
- Scale: 1-2 story single-family buildings
- Yards: 35-foot front yard setback
- Parking: Private off-street
- Materials: Lap siding (vinyl and wood), brick, stone veneer
- Street: Losey Blvd has 100-foot ROW with 6-foot sidewalks on each side and 12-foot road verges; roads have no sidewalks
- Service Drive: Front-loaded
- Bluffside Tavern embedded in the SF neighborhood

FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate N-2: Central

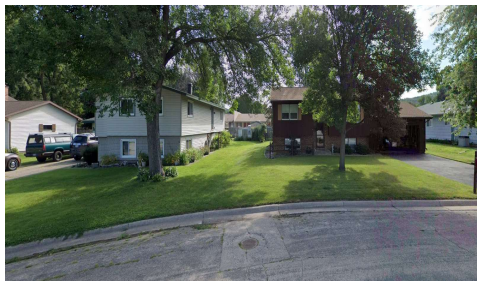
NDC Framework: Neighborhoods

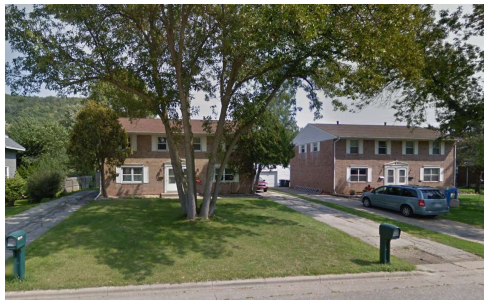




Urban Pattern

Built Form Examples





Notes

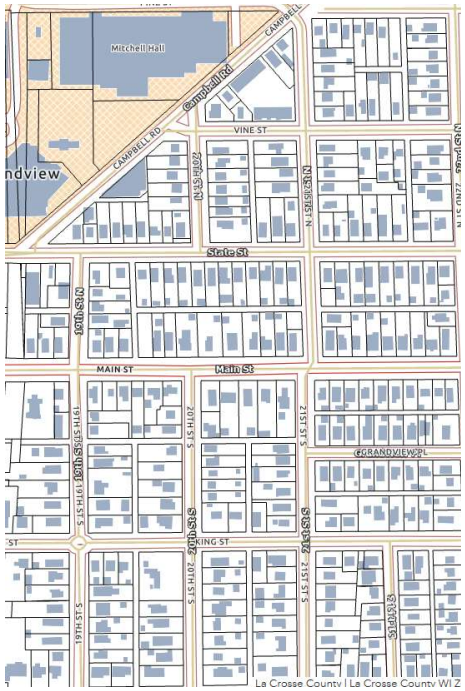
- Existing zoning: R1 Single Family
- Character area: Traditional neighborhood
- Key intersection: State Rd & 31st St
- Parcel pattern: Small rectangular lots; most lots are 70-85 feet wide and 140-150 feet deep
- Scale: 1-2 story single-family buildings with a few 2-story multi-family duplexes
- Yards: 15-30 foot front yard setback (from front property line); small rear yards
- Parking: Garages and driveways accessible from main streets; parallel parking on each side of street
- Materials: Lap siding (vinyl and wood), masonry
- Street: 40-foot ROW with no sidewalks; curb cuts for driveways with 5-foot grass road verges
- Service Drive: Front-loaded

FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate N-4: Grandview Emerson

NDC Framework: Neighborhoods

Urban Pattern



Built Form Examples

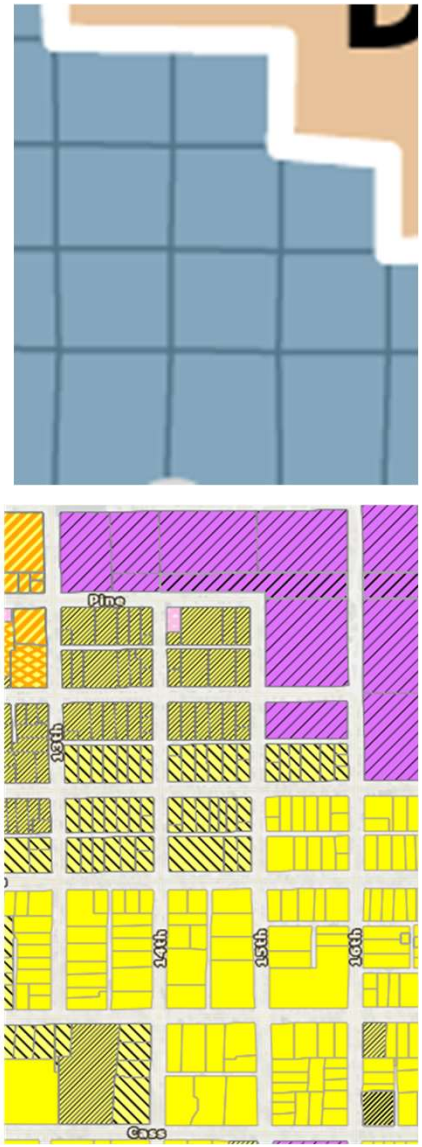
Notes

- Existing zoning: R1 Single Family
- Character area: Traditional neighborhood
- Key intersection: N/A
- Parcel pattern: Small rectangular lots with alley access in rear; most lots are 30-50 feet wide and 140-150 feet deep
- Scale: 1-3 story multi-tenant rental homes; 1-2 story single-family homes
- Yards: 20-foot front yard setback (from sidewalk); small rear yards (or additional parking) with garages on alley
- Parking: Garages and driveways accessible from main streets and alleys; parallel parking on each side of street
- Materials: Vinyl lap siding, brick
- Street: 65-foot ROW with 6-foot sidewalk on each side; curb cuts for driveways with 8-foot grass road verges
- Alley/Service Drive: 20 ft ROW, paved concrete typ.

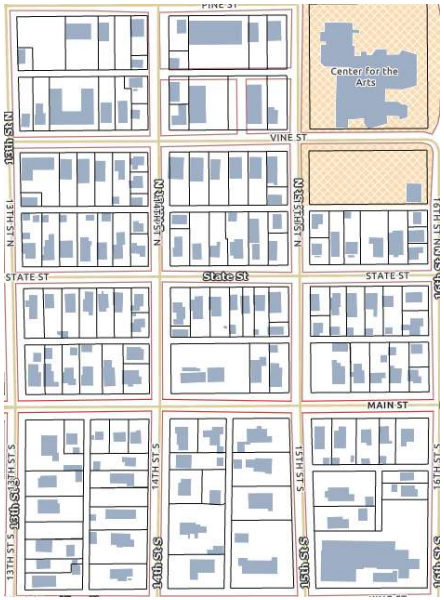
FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate N-4.1: Grandview Emerson

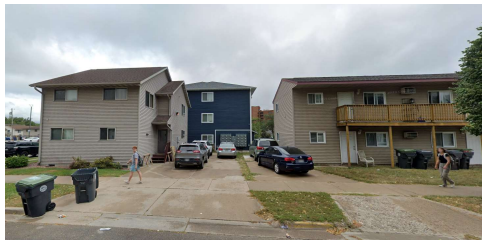
NDC Framework: Neighborhoods

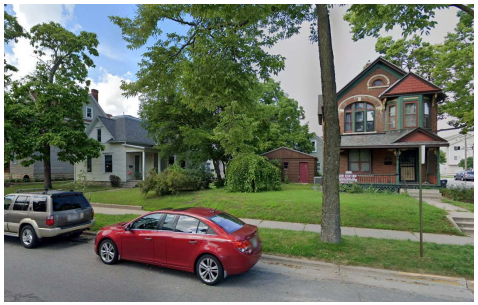


Urban Pattern



Built Form Examples





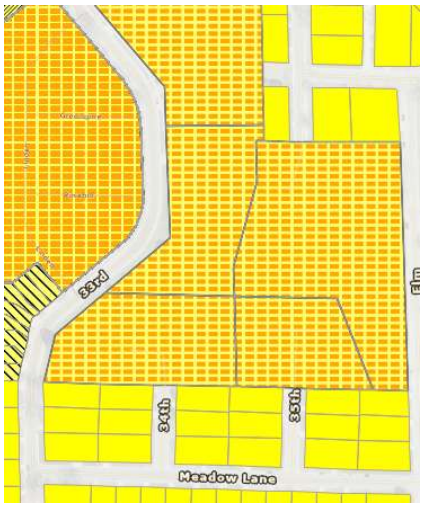
Notes

- Existing zoning: R1 Single Family, R2 Residence, R5 Multiple Dwelling, C1 Local Business, TND Traditional Neighborhood Development
- Character area: Student housing and neighborhood retail/restaurants
- Key intersection: State St & Campbell Rd
- Parcel pattern: Small rectangular lots with alley access in rear; most lots are 50-60 feet wide and 150 feet deep; some lots are divided width-wise into halves/thirds with depths of 50-100 feet each; neighborhood commercial fronting State St and Campbell Rd
- Scale: 2-3 story multi-tenant rental homes and apartment buildings; 1-2 story single-family homes, 1 story commercial with flat roofs
- Yards: 15-foot front yard setback (from sidewalk); small rear yards (or additional parking) with garages on alley
- Parking: Garages and driveways accessible from main streets and alleys; parallel parking on each side of street, surface parking behind multi-tenant buildings
- Materials: Vinyl lap siding, brick, stucco
- Street: 65-foot ROW with 6-foot sidewalk on each side; curb cuts for driveways with 8-foot grass road verges
- Alley/Service Drive: 20 ft ROW, paved concrete typ.

FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate N-5: Hass

NDC Framework: Neighborhoods



Urban Pattern

Built Form Examples

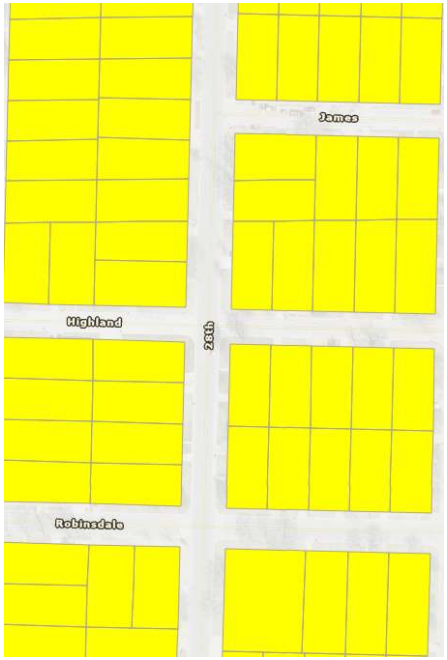
Notes

- Existing zoning: PD Planned Development
- Character area: Comtemporary neighborhood
- Key intersection: N/A
- Parcel pattern: Large multi-structure lots fronting public/private roads and surface parking lots
- Scale: 2-story multi-family residential buildings and twinhomes
- Yards: 15-20 foot structure setback from road frontage or shared surface parking
- Parking: Surface lots for multi-family structures, private driveways for twinhomes
- Materials: Lap siding (vinyl and wood), brick
- Street: Most streets have 60-foot ROW with no sidewalks; 33rd St S has 6-foot sidewalk on western side and 8-foot road verge
- Service Drive: Front-loaded for twinhomes

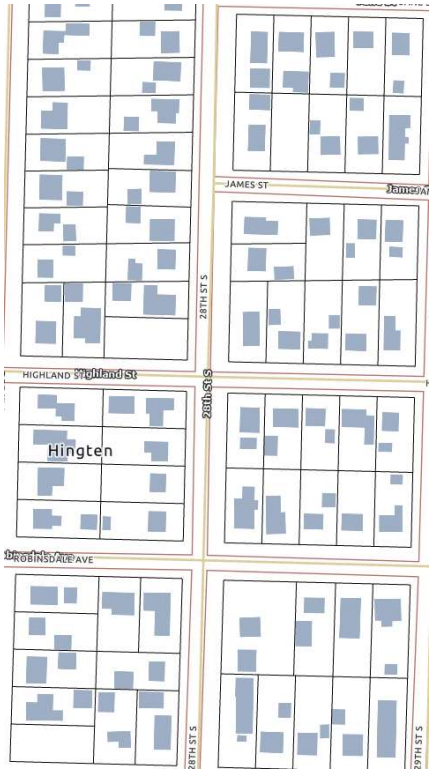
FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate N-6: Hingten

NDC Framework: Neighborhoods



Urban Pattern



Built Form Examples

Notes

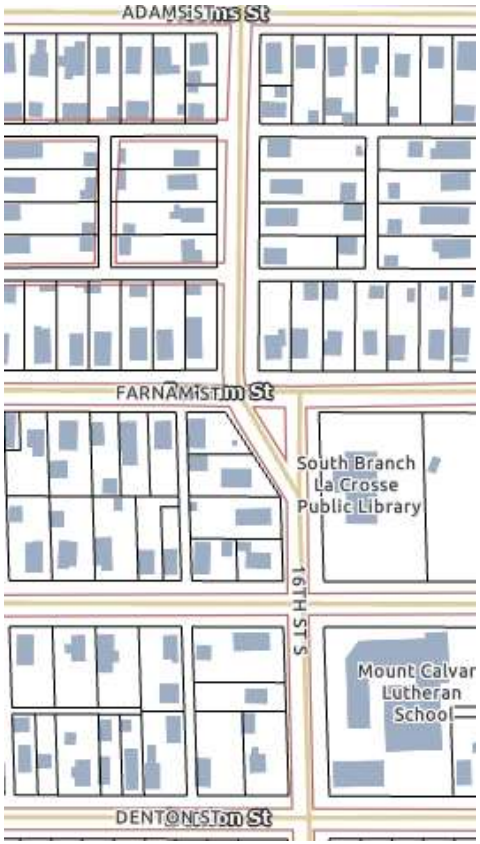
- Existing zoning: R1 Single Family
- Character area: Traditional neighborhood
- Key intersection: N/A
- Parcel pattern: Small rectangular lots that are 60 feet wide and 120-135 feet deep
- Scale: 1-2 story single-family buildings
- Yards: 20-25 foot front yard setback (from front property line); small rear yards
- Parking: Garages and driveways accessible from main; parallel parking on each side of street
- Materials: Lap siding (vinyl and wood), masonry
- Street: Highland St has 50-foot ROW and north-south streets have 65-foot ROW; inconsistent sidewalk coverage from property to property
- Service Drive: Front-loaded

FORWARD LA CROSSE
ZONING CODE UPDATE

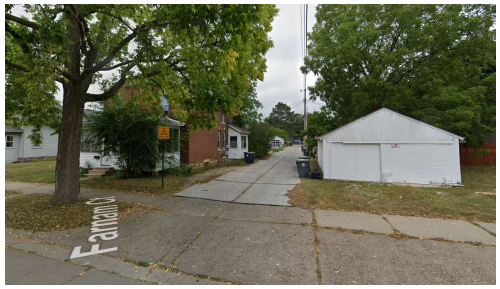
Built Form Study | Plate N-7 : Holy Trinity-Longfellow

NDC Framework: Neighborhoods

Urban Pattern



Built Form Examples

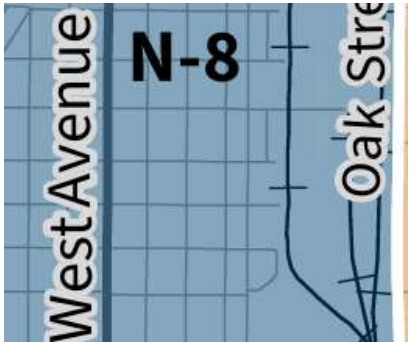


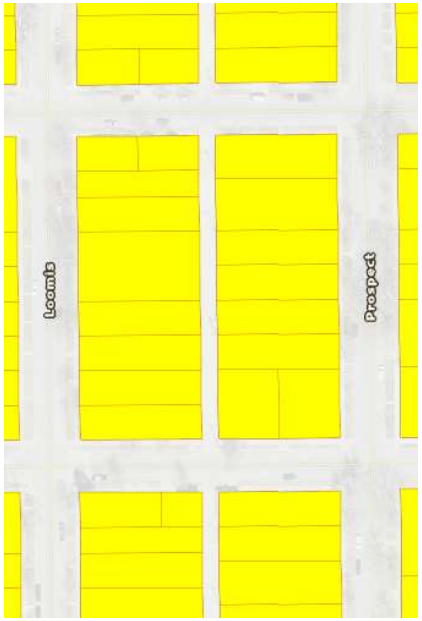
Notes

- Existing zoning: R1 Single Family, R2 Residence, PS Public and Semi-Public
- Character area: Traditional neighborhood
- Key intersection: N/A
- Parcel pattern: Small rectangular lots that are 50 feet wide and 130-170 feet deep
- Scale: 1-2 story single-family buildings
- Yards: 15-foot front yard setback (from sidewalk, if applicable); small rear yards with garages on alley
- Parking: Garages and driveways accessible from main streets and alleys; parallel parking on each side of street
- Materials: Lap siding (vinyl and wood), masonry
- Street: 65-foot ROW with 6-foot sidewalk on each side; curb cuts for driveways with 9-foot grass road verges
- Service Drive: 20 ft ROW, paved concrete typ.

Built Form Study | Plate N-8: Logan Northside

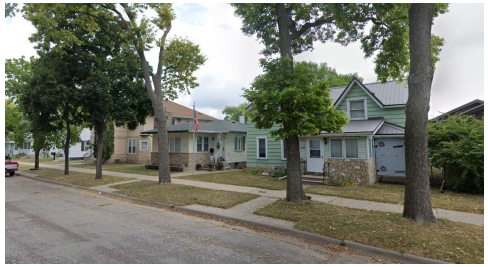
NDC Framework: Neighborhoods





Urban Pattern

Built Form Examples



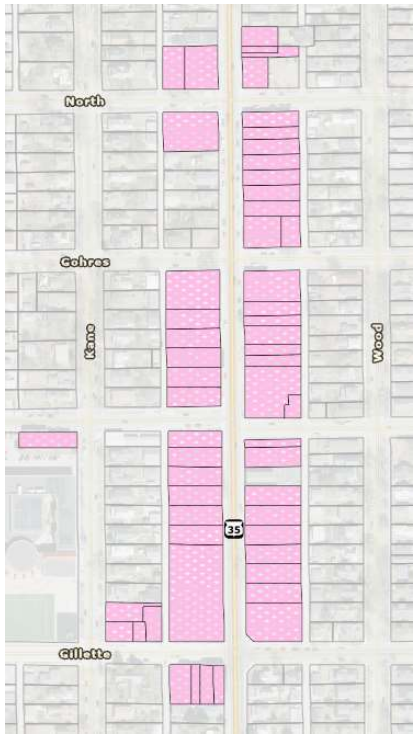
Notes

- Existing zoning: R1 Single Family
- Character area: Traditional neighborhood
- Key intersection: N/A
- Parcel pattern: Small rectangular lots with alley access in rear; most lots are 40-60 feet wide and 140 feet deep; some lots are double-wide (80 feet); some lots are divided width-wise with depths of 70 feet each
- Scale: 1-2 story single-family buildings
- Yards: 10-foot front yard setback (from sidewalk); small rear yards with garages on alley
- Parking: Garages and driveways accessible from main streets and alleys; parallel parking on each side of street
- Materials: Lap siding (vinyl and wood)
- Street: 70-foot ROW with 6-foot sidewalk on each side; curb cuts for driveways with 10-foot grass road verges
- Alley/Service Drive: 20 ft ROW, paved concrete typ.

FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate N-8.1: Logan Northside (George St Commercial)

NDC Framework: Neighborhoods



Urban Pattern

Built Form Examples

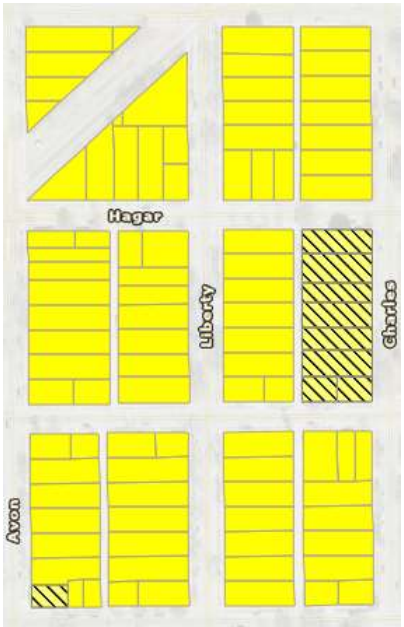
Notes

- Existing zoning: C1 Local Business
- Character area: Traditional shopping street
- Key intersection: George St & Gillette St
- Parcel pattern: incremental, small lot typically alley loaded; some curb cuts from George; common residential lots are 50 feet wide; some residential lots measure 30 feet wide
- Scale: 1 and 2 story retail and residential buildings; commercial buildings tend to have flat roofs and transparent shopfronts
- Yards: Zero lot line for commercial structures; shallow setback for residential along George
- Parking: several surface lots front onto George
- Materials: brick, stucco, lap siding—vinyl and wood
- Street: 64 foot ROW; curb and gutter with sidewalk back of curb; narrow grassed boulevards here and there
- Alley/Service Drive: 20 ft ROW, paved concrete typ.

FORWARD LA CROSSE
ZONING CODE UPDATE

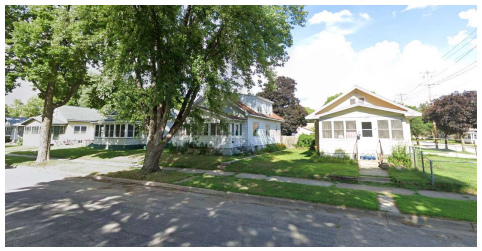
Built Form Study | Plate N-9: Lower Northside and Depot

NDC Framework: Neighborhoods



Urban Pattern

Built Form Examples



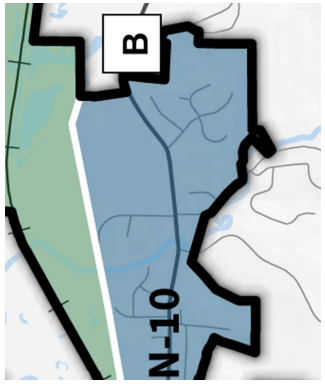
Notes

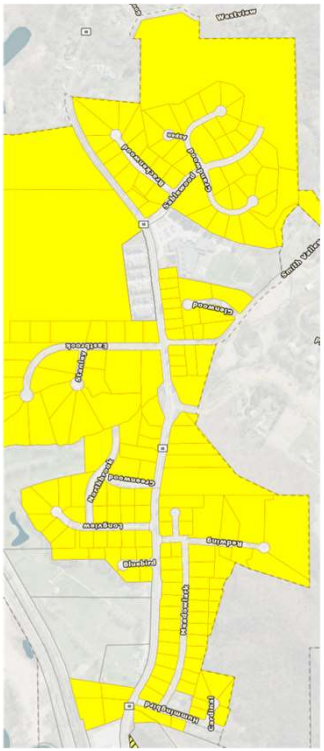
- Existing zoning: R1 Single Family, R2 Residential
- Character area: Traditional neighborhood
- Key intersection: Hagar St & Avon St
- Parcel pattern: Small rectangular lots with alley access in rear; most lots are 40-55 feet wide and 140 feet deep; some lots are divided width-wise with depths of 70 feet each
- Scale: 1-2 story single-family buildings
- Yards: 15-25 foot front yard setback (from sidewalk); small rear yards with garages on alley
- Parking: Garages and driveways accessible from main streets and alleys; parallel parking on each side of street
- Materials: Lap siding (vinyl and wood), masonry
- Street: 60-foot ROW with 6-foot sidewalk on each side; curb cuts for driveways with 5-foot grass road verges
- Alley/Service Drive: 15-20 foot ROW, paved concrete typ.

FORWARD LA CROSSE
ZONING CODE UPDATE

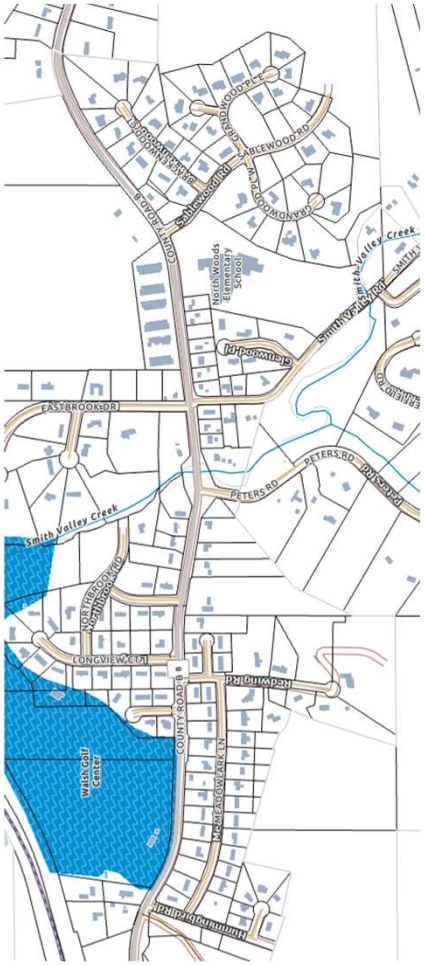
Built Form Study | Plate N-10: Northwoods

NDC Framework: Neighborhoods





Urban Pattern



Built Form Examples

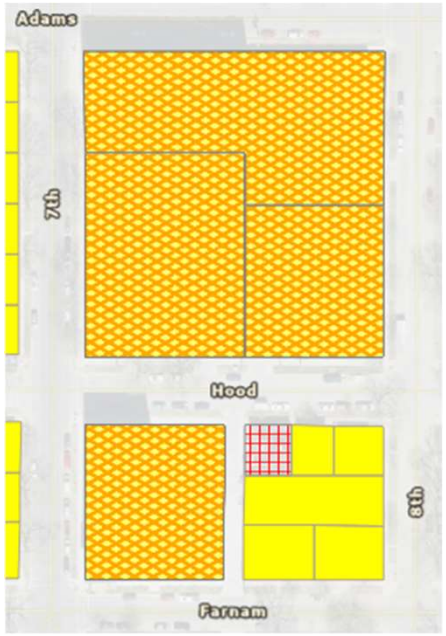
Notes

- Existing zoning: R1 Single Family
- Character area: Contemporary neighborhood
- Key intersection: CH B & Sablewood Rd
- Parcel pattern: Residential lots in dendritic layout
- Scale: 1-2 story single-family homes
- Yards: 40-foot front yard setback
- Parking: Driveways accessible from subdivision roads
- Materials: Vinyl lap siding, brick, stone veneer
- Street: 65-foot ROW with 6-foot sidewalk on one side; curb cuts for driveways with grass road verges
- Service: Front loaded

FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate N-12: Powell-Poage Hamilton

NDC Framework: Neighborhoods



Urban Pattern

Built Form Examples

Notes

- Existing zoning: TND Traditional Neighborhood Development, C2 Commercial, & R1 Single Family
- Character area: Urban Mixed
- Key intersection: 7th St & Farnam St
- Parcel pattern: Large lots with apartment buildings with large parking lots and small rectangular and square single-family residential lots
- Scale: 3-4 story apartment buildings; 1-2 story single-family buildings; 1-story commercial buildings with flat roofs
- Yards: 5-15 feet front yard setback (from sidewalk for apartments); large surface parking lots behind apartments
- Parking: Several large surface lots front onto Hood St and 8th St and garages and driveways accessible from main streets and alleys; parallel parking on each side of street
- Materials: Vinyl lap siding, brick, stucco
- Street: 65-foot ROW with 6-foot sidewalk on each side; curb cuts for driveways with 7-8-foot grass road verges
- Alley/Service Drive: 20-foot ROW alley, paved concrete typ and service drives off Hood st (see top 3 images)

FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate N-14: Spence

NDC Framework: Neighborhoods

Urban Pattern

Built Form Examples

Notes

- Existing zoning: R1 Single Family
- Character area: Traditional neighborhood
- Key intersection: N/A
- Parcel pattern: Small rectangular lots that are 50-60 feet wide and 100-130 feet deep from ROW line
- Scale: 1-2 story single-family buildings
- Yards: 15-25 front yard setback (from sidewalk, if applicable); small rear yards with garages on alley
- Parking: Garages and driveways accessible from main streets and alleys; parallel parking on each side of street
- Materials: Lap siding (vinyl and wood), masonry
- Street: 65-foot ROW with 6-foot sidewalk on each side; curb cuts for driveways with 9-foot grass road verges
- Alley/Service Drive: 16-foot ROW, paved concrete typ a few gravel and a few front-loaded

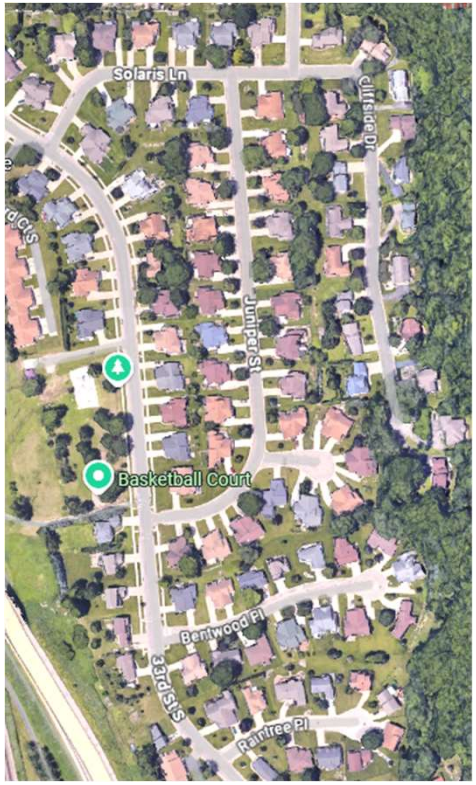
FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate N-15: Springbrook-Clayton Johnson

NDC Framework: Neighborhoods

Urban Pattern

Built Form Examples

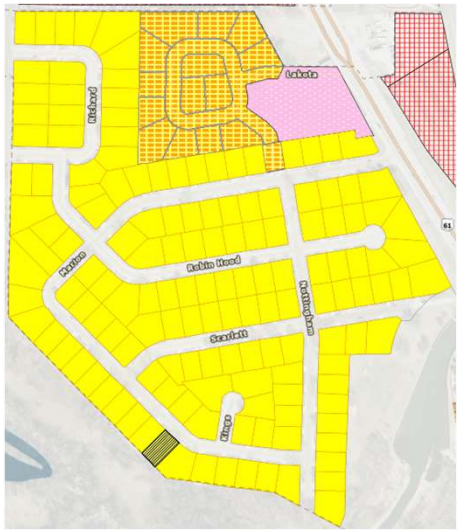


Notes

- Existing zoning: N/A
- Character area: contemporary neighborhood
- Key intersection: 33rd St S and Solaris
- Parcel pattern: 85 ft wide lots typical
- Scale: 1 story; some taller
- Yards: 25 foot front yard setback (from front property line)
- Parking: Driveways accessible from streets; parallel parking on each side of streets
- Materials: Lap siding (vinyl and wood), masonry
- Street: 60 foot ROW with sidewalks on most streets but not all;
- Service Drive: Front-loaded

Built Form Study | Plate N-16: Swift Creek

NDC Framework: Neighborhoods



Urban Pattern

Built Form Examples

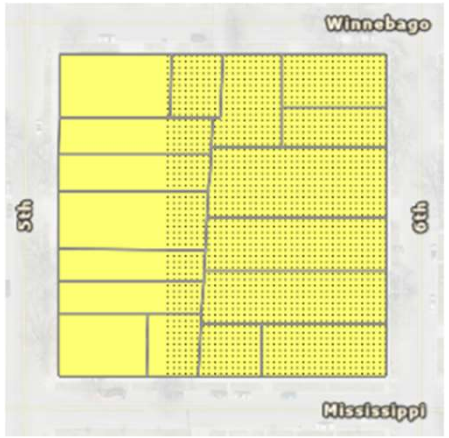
Notes

- Existing zoning: R1 Single Family, PD Planned Development, & C1 Local Business
- Character area: Contemporary neighborhood
- Key intersection: US-35 & N Marion Rd
- Parcel pattern: Small rectangular lots; most lots are 75-85 feet wide and 95-115 feet deep from ROW line
- Scale: 1-2 story single-family buildings with 11 1-story multi-family duplexes/triplexes/quadplexes in Lakota Pl development area
- Yards: 15-30 foot front yard setback (from ROW line)); rear yards varying between 30-50 feet; 20 foot front yard setback (from ROW line) and 10-15 feet rear yard setback in Lakota Pl duplexes/triplex/quadplex
- Parking: Garages and driveways accessible from main streets; parallel parking on each side of street
- Materials: Lap siding (vinyl and wood), masonry
- Street: 40-foot ROW with no sidewalks; curb cuts for driveways with 5-foot grass road verges
- Service Drive: Front-loaded

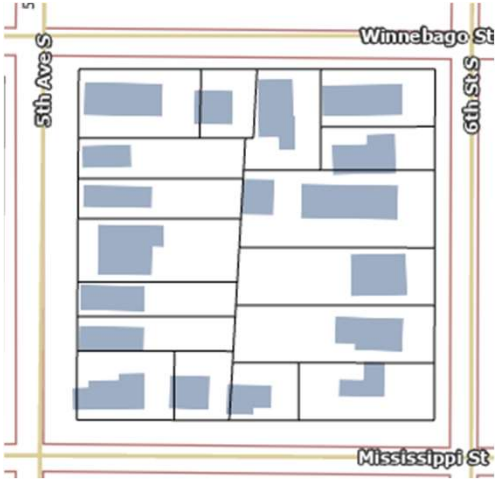
FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate N-17: Washburn

NDC Framework: Neighborhoods



Urban Pattern



Built Form Examples

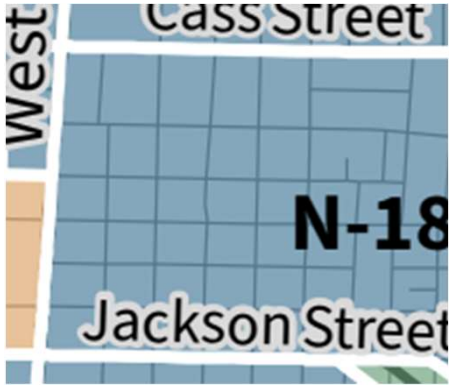
Notes

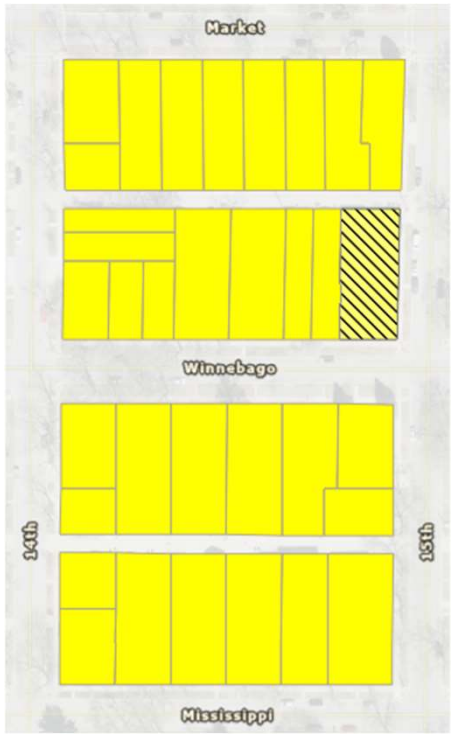
- Existing zoning: R1 Single Family & WR Washburn Residential
- Character area: Traditional neighborhood
- Key intersection: N/A
- Parcel pattern: Small rectangular lots that are 50-60 feet wide and 140-145 feet deep from ROW line
- Scale: 1-2 story single-family buildings, two 2-story apartments, and scattered 1-2 story commercial buildings
- Yards: 10-20 front yard setback (from sidewalk, if applicable); 100 foot rear yard setback (on average)
- Parking: Garages and driveways accessible from main streets; parallel parking on each side of street
- Materials: Lap siding (vinyl and wood), masonry
- Street: 65-foot ROW with 6-foot sidewalk on each side; curb cuts for driveways with 8-foot grass road verges
- Service Drive: Front-loaded

FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate N-18: Weigent Hogan

NDC Framework: Neighborhoods





Urban Pattern

Built Form Examples

Notes

- Existing zoning: R1 Single Family & WR Washburn Residential
- Character area: Traditional neighborhood
- Key intersection: N/A
- Parcel pattern: Small rectangular lots that are 60 feet wide and 140 feet deep from ROW line
- Scale: 2-3 story single-family buildings
- Yards: 10-20 front yard setback (from sidewalk, if applicable); 50-70 foot rear yard setback (70 foot on average)
- Parking: Garages and driveways accessible from main streets and alleys; parallel parking on each side of street
- Materials: Lap siding (vinyl and wood), masonry
- Street: 65-70-foot ROW with 6-foot sidewalk on each side; curb cuts for driveways with 8-10-foot grass road verges
- Alley/Service Drive: 20-foot ROW, paved concrete typ a few gravel and a few front-loaded

FORWARD LA CROSSE
ZONING CODE UPDATE

Character Area Definitions

Zoning Update using a Context Sensitive, Character-based Approach

A character-based approach to the zoning code update is based on the NDC Framework used in the Comprehensive Plan. The Built Form Study sampled all of the identified areas to better understand typical character, context, building, lot and street types. This analysis will then be used to confirm particular “character” areas of the city that will be used to calibrate applicable urban standards and dimensions.

The Comprehensive Plan sets forth the vision for future land uses across all properties within the City of La Crosse. Future land use identifies the mix of uses which may become appropriate for a given property over the next twenty years. This concept takes into account the larger context of neighboring properties and how they interact together to serve residents Future land use is based on the "Neighborhood, District, and Corridor Framework" (NDC), a system devised by the Congress for New Urbanism (CNU). *Source: 2040 Comprehensive Plan*

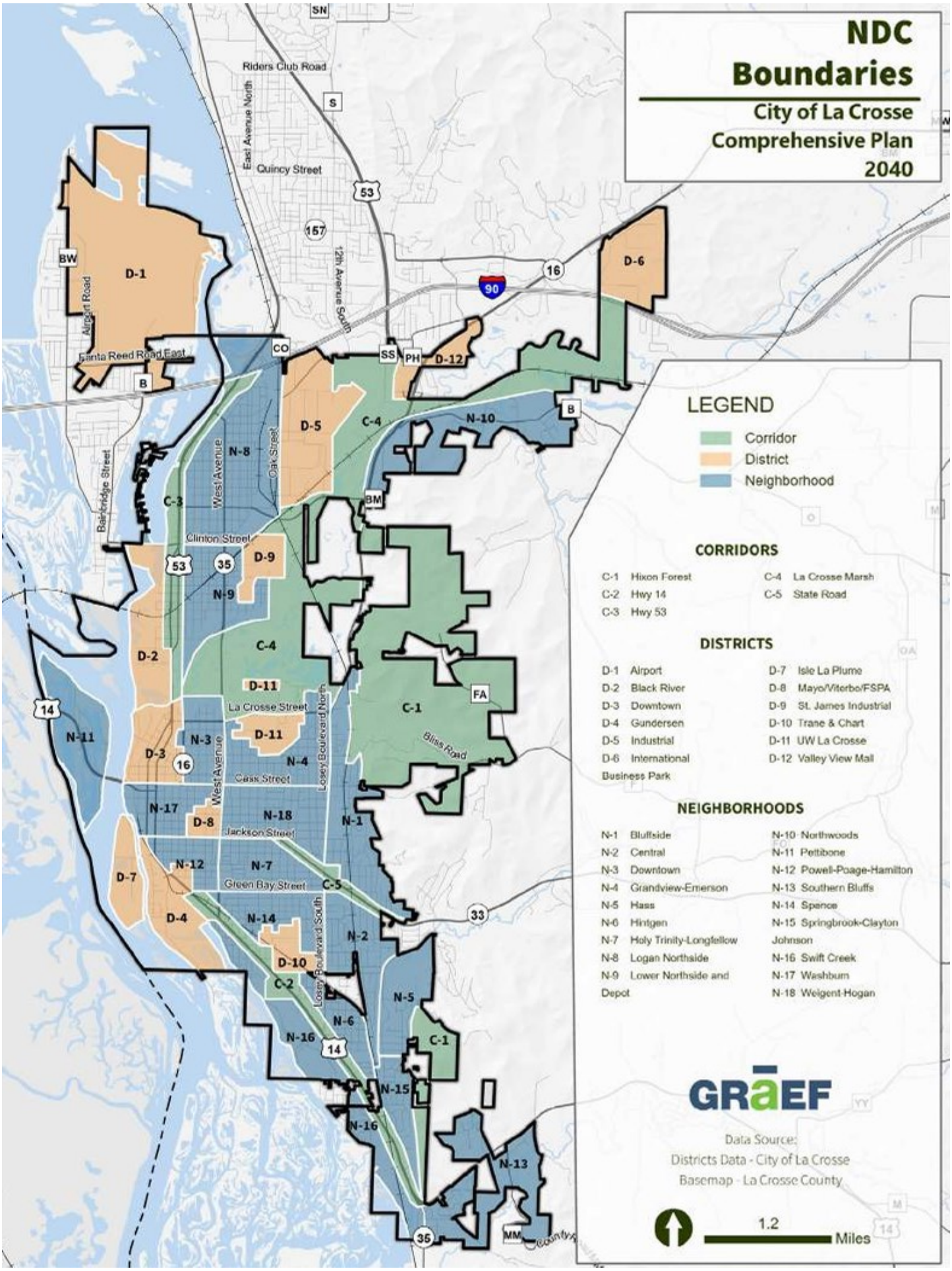
The intent of the NDC Framework model is to encourage walkable, compact communities that are rich with amenities and celebrate the history of the built environment and the preservation of natural features, all while respecting the fabric of communities. NDC proposes three fundamental classifications that organize La Crosse into a mix of uses rather than isolated land uses. NDC does not replace the adopted zoning code, but instead paints a broad and cohesive long-term picture for the built environment. The NDC model can pair well with form-based codes, a land development regulation that focuses on the physical form of the built environment in relation to the public realm as the code's overarching principle. If the City decides to integrate a form-based code in the future, the NDC model can be used to guide a cohesive urban form. *Source: 2040 Comprehensive Plan*

A character-based code guides development to build upon and strengthen the unique characteristics of a community, helping to preserve desired character. A character-based code is organized around the unique physical features of the built environment by documenting and analyzing the community’s existing urban form at different scales, from the broad characteristics of a community’s neighborhoods to particular building types.

Neighborhoods, which usually are areas that contain blocks or buildings that are unified in character or style. A neighborhood is often walkable and may have a clearly defined center or edge.

Districts, which are areas typically defined by a particular use or activity, such as light industrial districts.

Corridors, which can be man-made elements relating to movement, such as roads or railways, or natural elements such as rivers. Whether man-made or natural, these corridors often define boundaries within and between neighborhoods. However, roads that function as commercial corridors often serve as the center of many communities. *Source: adapted from “Form-based Codes: A Step by Step Guide for Communities”, Chicago Metropolitan Agency for Planning & the Form Based Codes Institute*


NDC Boundaries
City of La Crosse Comprehensive Plan 2040
LEGEND
Corridor
District
Neighborhood
CORRIDORS
C-1 Hixon Forest
C-2 Hwy 14
C-3 Hwy 53
C-4 La Crosse Marsh
C-5 State Road
DISTRICTS
D-1 Airport
D-2 Black River
D-3 Downtown
D-4 Gundersen
D-5 Industrial
D-6 International Business Park
D-7 Isle La Plume
D-8 Mayo/Viterbo/FSPA
D-9 St. James Industrial
D-10 Trane & Chart
D-11 UW La Crosse
D-12 Valley View Mall
NEIGHBORHOODS
N-1 Bluffside
N-2 Central
N-3 Downtown
N-4 Grandview-Emerson
N-5 Hass
N-6 Hintgen
N-7 Holy Trinity-Longfellow
N-8 Logan Northside
N-9 Lower Northside and Depot
N-10 Northwoods
N-11 Pettibone
N-12 Powell-Poage-Hamilton
N-13 Southern Bluffs
N-14 Spence
N-15 Springbrook-Clayton Johnson
N-16 Swift Creek
N-17 Washburn
N-18 Weigent-Hogan
GRAEF
Data Source:
Districts Data - City of La Crosse
Basemap - La Crosse County
1.2
Miles
Riders Club Road
East Avenue North
Quincy Street
12th Avenue South
Airport Road
Barlridge Street
West Avenue
Oak Street
Clinton Street
La Crosse Street
Cass Street
Jackson Street
Green Bay Street
Losey Boulevard North
Losey Boulevard South
Bliss Road
Santa Reed Road East

Traditional neighborhoods—residential areas that are mostly historic with fine grain block and street pattern, alley service, prominent parks and walkable streets that connect to neighborhood destinations. Physical features: compact lots, 1.5– 2.5 stories in height, shallow front yards, sidewalks and alley loaded parking.

Traditional neighborhoods/varied - residential areas that mostly contain smaller lots with connected streets and alley service but also include a mix of contemporary, front -loaded building types. historic with fine grain block and street pattern, alley service, prominent parks and walkable streets that connect to neighborhood destinations. Physical features: 1 to 1.5 stories in height, common front yards and some lots that area wider.

Traditional shopping street—a walkable, retail environment located in traditional neighborhoods that contain commercial sales and services more scaled and compatible with existing residential development.

Physical features: compact lots, 1-2 stories in height, zero front yards, shopfront frontage common with alley loaded service and on-street parking.

Urban Mixed Residential—an area that contains a mix residential building types from detached single family to larger multi-family apartments.

Physical features: compact lots, 1-stories in height, shallow front yards; alley loaded and on-street parking.

Modular neighborhood—residential areas that are composed mobile and manufactured building types. Urban pattern is usually tight (narrow) sites with generous streets; lot is often in single ownership

Physical features: 1 stories in height, shallow front yards, parking in front or the side of the unit

Corridor mixed– typically corridors that contain a mix of commercial, residential and institutional buildings within the same block and/or across the street from each other; common in traditional neighborhoods that are transitioning or growing. service, prominent parks and walkable streets that connect to neighborhood destinations.

Physical features: 1-2 stories but other physical features vary depending on building type

Commercial Corridor/Small Format— most commercial corridors in the city contain a mix of building types and sizes; the small format commercial corridor is common in several areas

Physical features: wide lots, 1-2 stories in height, generous setbacks with parking common in front of the entrance

Commercial Corridor/Large Format— most commercial corridors in the city contain a mix of building types and sizes; the large format commercial corridor is common in several areas such as the Valley View Mall.

Physical features: wide and deep lots, 1-2 stories in height, generous setbacks with parking common in front of the entrance

Downtown—The downtown is made up of a larger “core” area that contains a number “main street” blocks that are highly walkable and characterized by transparent store-fronts. The downtown also includes a historic district which overlaps much of the “main street” blocks.

Physical features: “main street” blocks are multiple stories with highly defined shopfronts; masonry construction is typical; the periphery of the core contains more and larger surface parking areas.

Downtown/”Main Street”– the heart of downtown contains a well defined walkable district with retail shop fronts set at the back of the sidewalk creating a very intimate, human scaled environment;

Physical features: high level of shopfront transparency at the street level, common exterior is brick; alley service to the block interiors; parking on-street

District — a number of districts occur in the city—these can be education, health or recreation in use; they tend to include larger buildings arranged to form an identity or sense of spaces but also can include large parking areas.

Physical features: wide lots, buildings often more than 3 stories in height, setbacks and yard vary

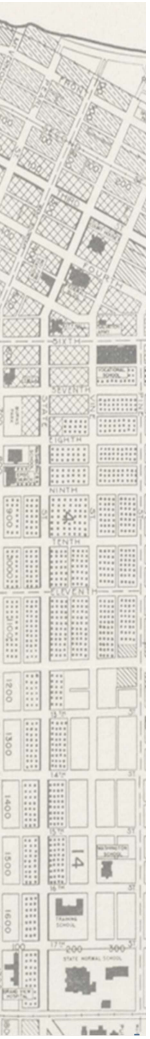
Industrial small format— there area multiple areas characterized as ‘industrial’ with these building types arranged into small formats where they respond to a connected street and block pattern, alley loaded and small operationa areas

Physical features: typical traditional small lots, 1-2 stories in height, common material is metal siding and some masonry finishes at the building base

Industrial large format— there area multiple areas characterized as 'large format industrial' that include very large floorplate buildings including large outdoor storage areas, loading and large surface parking areas

Physical features: multiple stories in height depending on functions and use; typical flats roofs, common material is metal siding and some masonry finishes at the building base

Character Area: *Downtown – Three Distinct Areas*



Three distinct areas assume that the zoning districts may also be more responsive to the character of each with the "main street" area requiring the most rigorous standards and regulations.

Downtown Area

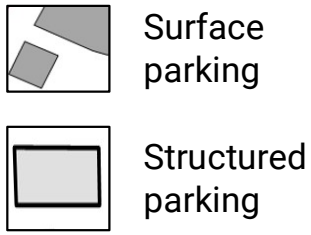
Core

"Main street"

Character Areas: *Downtown Core/Building Frontage & Parking*

- Active building frontage
- Blank building wall
- Surface parking
- Structured parking

Character Areas: *Downtown Core/Parking Diagram*



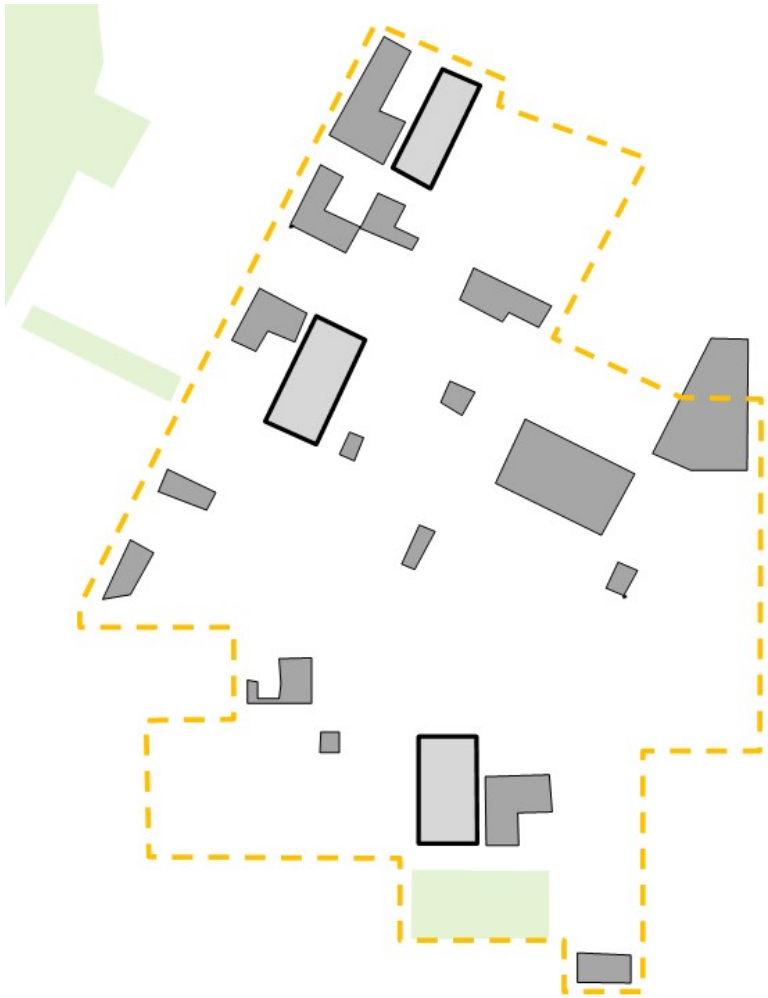
Character Areas: *"Main Street"/Frontage & Parking Diagram*

Structured parking

Surface parking

Active building frontage

Character Areas: *Main Street/Frontage & Parking Diagram*



The building frontage and parking diagram illustrates the key blocks of the downtown “main street” area. These block faces are the most walkable and pedestrian friendly places in downtown; zoning standards can be more specific about this built environment character and regulate future development to recognize these conditions and respond in similar ways.

Character Areas: *Building Standards*

Newer buildings at Jay and Front St share common design features and materials.

A recent residential building uses more clean, modern materials that are compatible with traditional buildings.

Renovations highlight the historic character of street level shopfronts; graphics obscure window transparency.

Street level façade works with the bay and window design but presents exposed parking to the street.

Super graphics that may or may not be appropriate for some "main street" building locations.

Recent residential building includes large setback from the street.

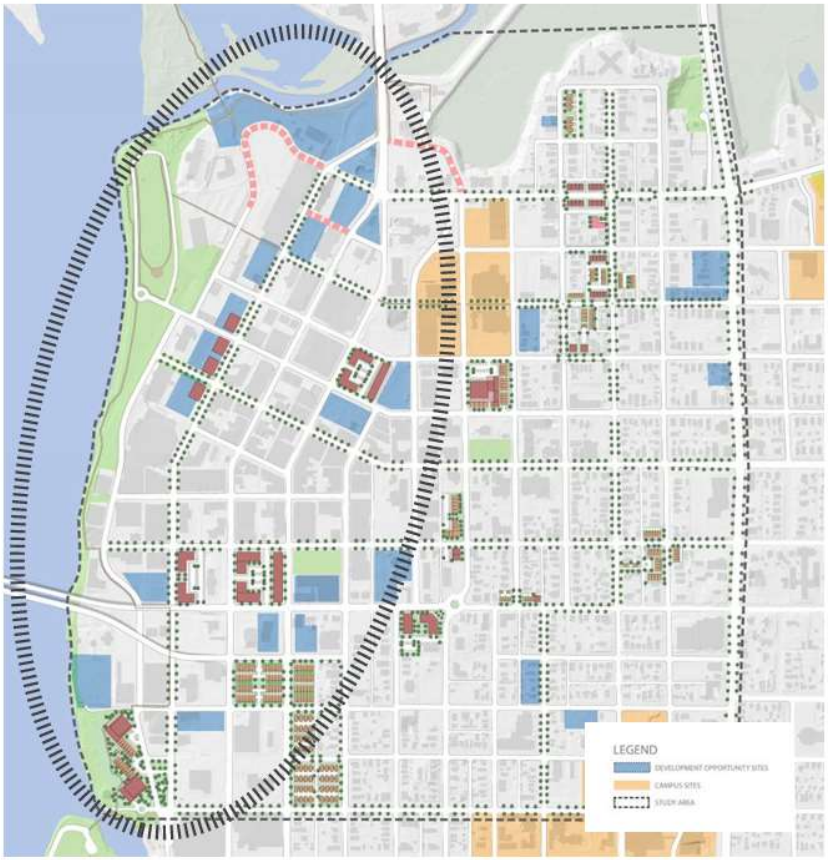
Character Areas: *Downtown Development Opportunities*

CORE CLUSTER CONCEPTS

This plan recognizes that sites may redevelop entirely differently than imagined in this plan, yet the plan illustrates possibilities that may complement downtown as a place to work, live, and visit.

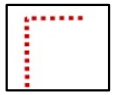
1. **Surface Parking Lots.** Privately owned parking lots could be redeveloped into a vertical mixed use. These sites are subject to concepts in the prototypical development diagrams.
2. **US Post Office Site.** Redeveloping the US Post Office site for a project that better contributes to the culture of downtown is a high-priority from the planning participants.
3. **Core Gateway.** Blocks located north of the bridge are candidates for signature projects like Belle Square.
4. **Houska Village.** A long-term vision for this area should protect the site until the market can support the project. The concept leverages the views of the Mississippi River and proximity to downtown.
5. **La Crosse River Area.** Sites near the La Crosse River can become prime for development by connecting La Crosse Street to Front Street.
6. **Salvation Army.** A redevelopment concept for a block that straddles the core of downtown and traditional neighborhood.

DEVELOPMENT CONCEPT MAP

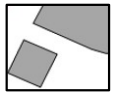


Character Areas: *Downtown Core/Frontage & Parking*

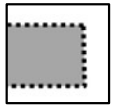
Active building frontage



Blank building wall



Surface parking

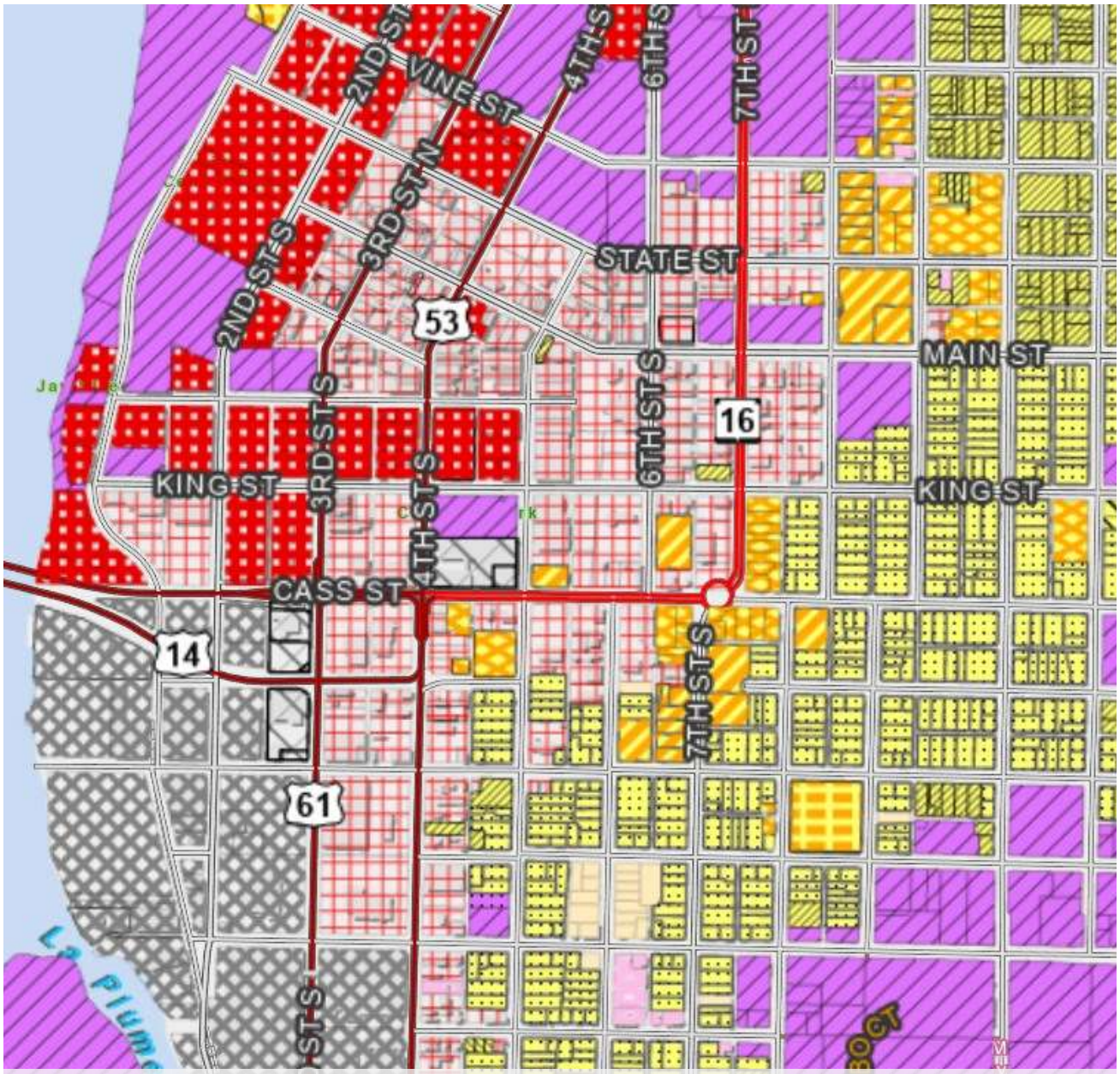


Structured parking

Zoning 101

FORWARD LA CROSSE ZONING CODE UPDATE

Contents



La Crosse Zoning Map - Partial Example

Introduction & History

Zoning is one of the most common methods of land use control used by local governments. Zoning works by defining a community into districts, regulating uses that are allowed within those districts, and prescribing allowable dimensions such as lot sizes, setbacks and building height. Zoning can help a community to achieve goals outlined in a comprehensive plan including:

- Protecting public health, safety and general welfare.
- Promoting desirable patterns of development.
- Separating incompatible land uses.
- Maintaining community character and aesthetics.
- Protecting community resources such as farmland, woodlands, groundwater, surface water, and historic and cultural resources.
- Providing public services and infrastructure in an economical and efficient manner.
- Protecting public and private investments.

Additional Forms of Zoning

State statutes require communities to administer certain types of zoning as described below:

- **Shoreland zoning**
- **Shoreland-wetland zoning**
- **Floodplain zoning**

Source: UW- Madison Division of Extension

- *1920 - First Wisconsin zoning ordinance created by City of Milwaukee*
- *1923 - Zoning upheld by the Wisconsin Supreme Court*
- *1929 - Wisconsin Legislature authorizes zoning to regulate all uses in rural areas*
- *1933 - Oneida County adopts first comprehensive rural zoning ordinance in the U.S.*
- *1966 - Wisconsin Legislature adopts the Water Resources Act*
- *1968 - Local governments required to administer minimum shoreland and floodplain zoning regulations*
- *1999 - Wisconsin adopts Comprehensive Planning Act and establishes grant program*
- *2010 - Zoning must be consistent with a local comprehensive plan*

Scope of Work & Organization

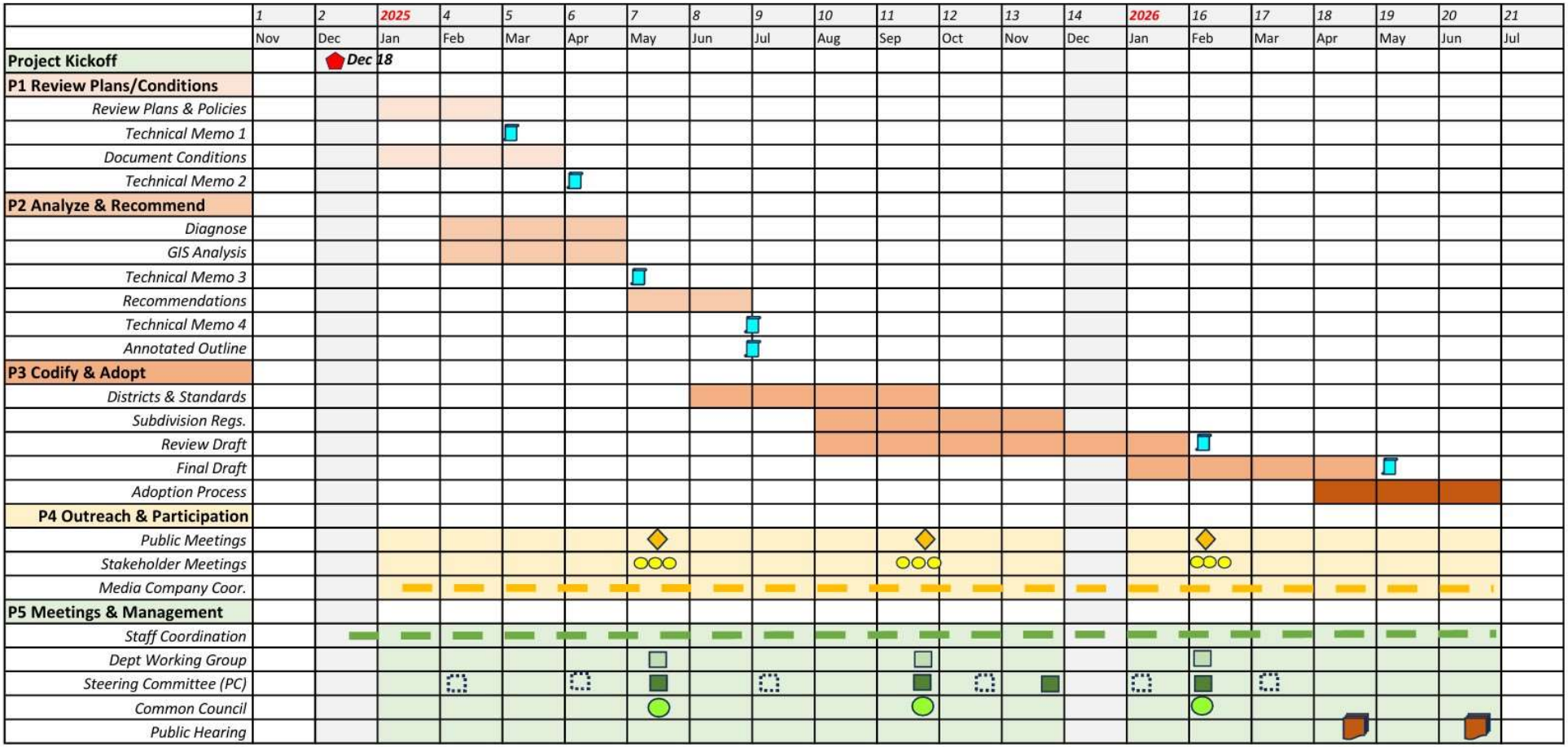
1) **Review of Current Municipal Code**-– Review, familiarize, analyze, and critique Municipal Code Chapter 113- Subdivisions and Chapter 115- Zoning and any other related codes.
2) **Review of Comprehensive Plan and other related plans:** The consultant will review the plans, goals, objectives, and recommendations of the comprehensive plan and other related plans identified by planning staff and the steering committee to ensure the new code will be consistent with current planning documents.
3) **Public Outreach:** The consultant will provide a public participation plan designed to receive input from community stakeholders, staff, and the public as well as educate and inform them on the process.
4) **Analysis and Recommendations.** Provide an analysis of the City's existing code, highlighting its strengths and shortcomings based on the consultant's review of existing code, review of current plans, and community and stakeholder input. Include recommended approach for potential revisions that include best practices/example codes as related to low-carbon sustainable development, form base designs, affordable/attainable housing, missing middle housing, mixed housing integration, parking reductions, multi-modal transportation, performance standards for various uses, equity, accessibility, etc.
5) **Documents:** The consultant will prepare drafts of the zoning ordinance for review by staff, the steering committee, and the public culminating in a final version to be acted upon by the City Plan Commission and adopted by the Common Council.

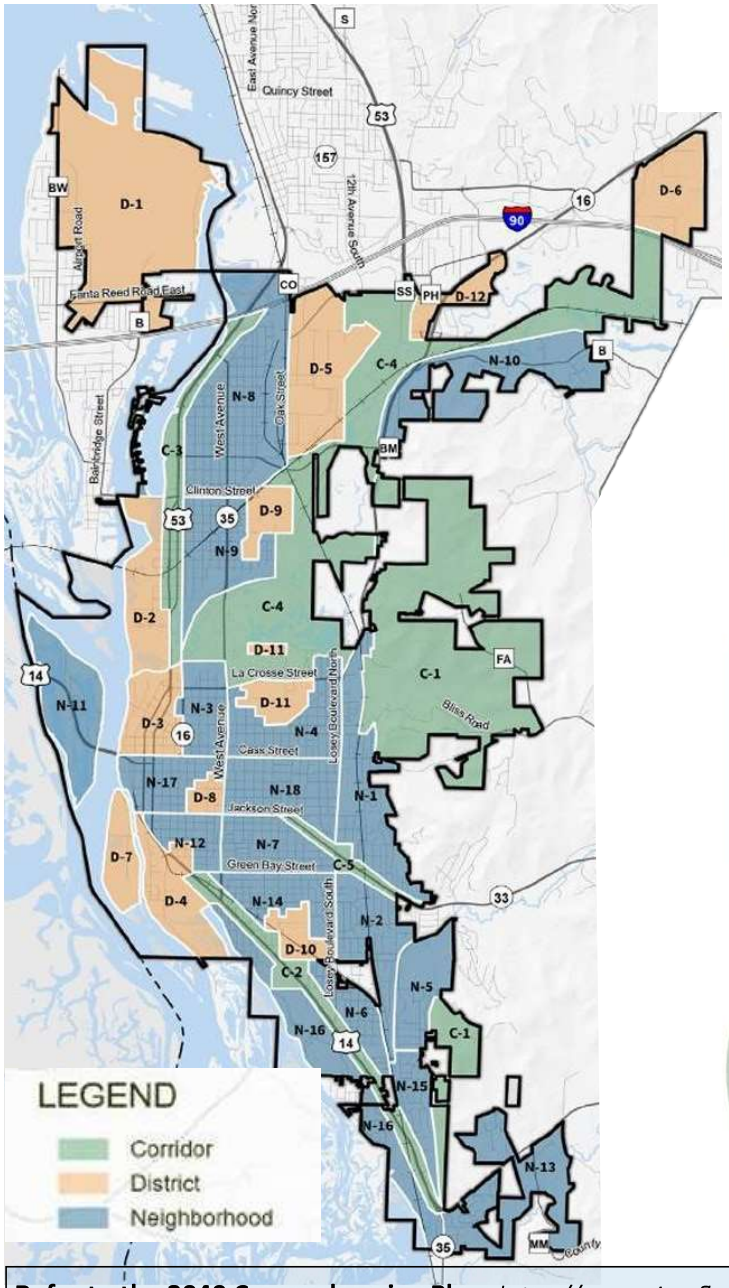
Organization of a Zoning Code

Most zoning ordinances are organized in the following manner:

- **Title, Authority and Purpose**
- **General Provisions**
- **Zoning Districts and Regulations**
- **Zoning Nonconformities**
- **Impact Regulations**
- **Administration and Enforcement**

Schedule


1 2 2025 4 5 6 7 8 9 10 11 12 13 14 2026 16 17 18 19 20 21
Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul
Project Kickoff
Dec 18
P1 Review Plans/Conditions
Review Plans & Policies
Technical Memo 1
Document Conditions
Technical Memo 2
P2 Analyze & Recommend
Diagnose
GIS Analysis
Technical Memo 3
Recommendations
Technical Memo 4
Annotated Outline
P3 Codify & Adopt
Districts & Standards
Subdivision Regs.
Review Draft
Final Draft
Adoption Process
P4 Outreach & Participation
Public Meetings
Stakeholder Meetings
Media Company Coor.
P5 Meetings & Management
Staff Coordination
Dept Working Group
Steering Committee (PC)
Common Council
Public Hearing



The **Comprehensive Plan** sets forth the vision of future land uses within the City of La Crosse. Future land use is based on the "Neighborhood, District and Corridor Framework" (NDC), a system devised by the Congress for New Urbanism (CNU).

How does NDC Work? The intent of the NDC model is to encourage walkable, compact communities that are rich with amenities and celebrate the history of the built environment and the preservation of natural features, all while respecting the fabric of communities. NDC proposes three fundamental classifications that organize La Crosse into a mix of uses rather than isolated land uses.

Neighborhoods:

La Crosse neighborhoods have distinct identities, housing characteristics, unique history, and geographic features. They are typically compact, pedestrian-friendly, and mixed-use. Neighborhoods may contain a number of supporting uses and activities that serve residents, such as parks, schools, libraries, small-scale retail, and other services. Neighborhood associations were consulted during the creation of this comprehensive plan to help identify the vision and land uses within La Crosse's neighborhoods.

Districts:

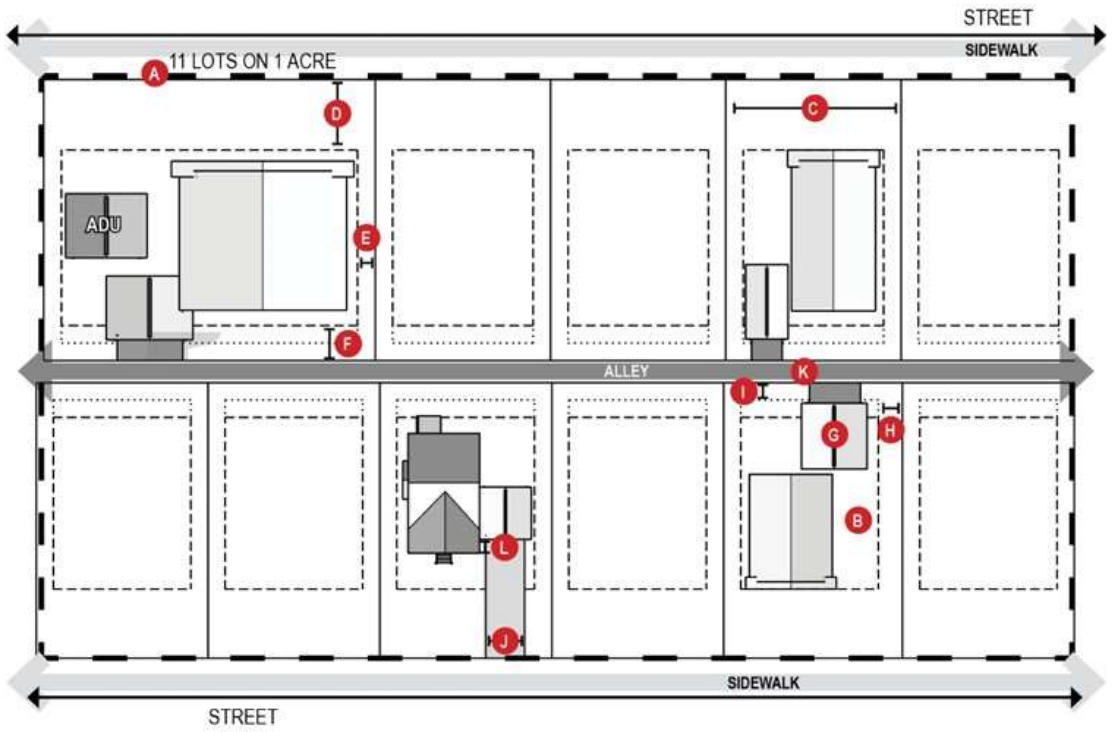
Districts are larger areas where the City, property owners, developers, and investors should concentrate business, commercial, and industrial activity and expansion over the next twenty years. Districts may emphasize a special single use or purpose, but may contain a variety of other uses and activities. For example, a shopping district may have primarily commercial uses with a few small-scale industrial uses mixed in. La Crosse's districts are based on types of dominant uses, include overlapping neighborhoods, and have generally larger geographic extents.

Corridors:

Corridors are linear areas that provide connectivity between the neighborhoods and districts. Corridors can accommodate a variety of land uses, including natural, recreational, and cultural uses. They can range from boulevards and rail lines to rivers and parkways. La Crosse has several major corridors identified based on transportation and environmental features.

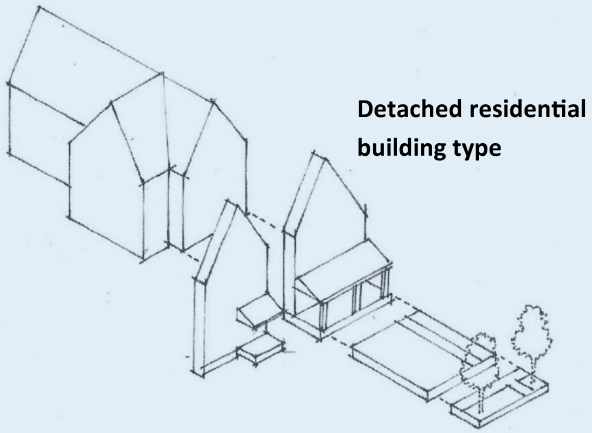
Refer to the 2040 Comprehensive Plan: *https://www.cityoflacrosse.org/home/showpublisheddocument/7655/638345999839030000*

Typical Urban Standards

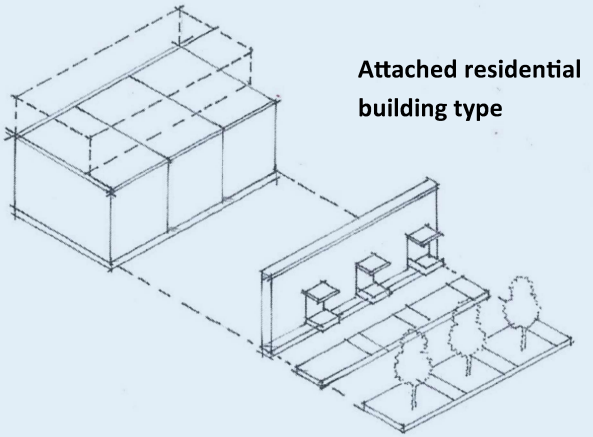


Typical Lot Regulations

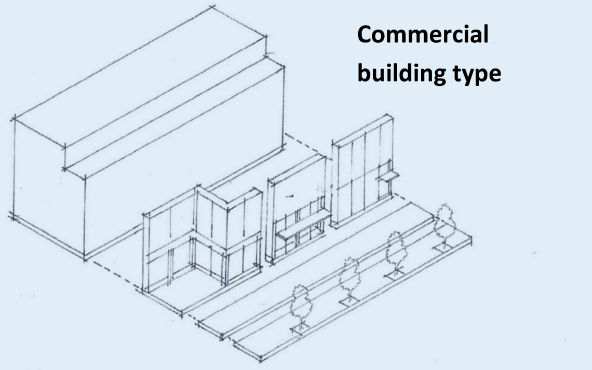
A: Lot area
B: Buildable area
C : Lot width
D : Front yard/setback
E: Side yard/setback
F : Rear yard/setback
G : Accessory building
H/I: Parking setback
J: Driveway width
K: Alley width
L: Garage stepback from main house



Detached residential building type



Attached residential building type



Commercial building type

Possible Housing Types

FORWARD LA CROSSE ZONING CODE UPDATE

HOUSE HACKS
Entrepreneurial adaptations to an existing home that diversify housing options or generate an income.


ATTACHED ADU


DETACHED ADU


SHARED HOUSE


GUEST SUITE


GUEST HOUSE


HOUSE ON WHEELS


FLEX SHED

COMMERCIAL INCUBATION
Low-cost ways to grow and validate an early-stage business.


HOME OFFICE / WORKSHOP


MARKET TENT


PUSH CART


TRAILER


TRUCK


TEMPORARY EVENT


POP-UP SHOP


KIOSK


MAKERSPACE

COMPACT SINGLES
One-unit dwellings that fit on small infill lots alone or in combination with other buildings.


SKINNY HOUSE


COTTAGE


SEMI-DETACHED


ROWHOUSE


TOWNHOUSE

MIDDLE HOUSING
Multi-unit residential buildings that blend well with detached homes.


STACKED DUPLEX


SIDE-BY-SIDE DUPLEX


FRONT-BACK DUPLEX


APT HOUSE (RENO)


HOME CONVERSION


APT HOUSE (NEW)


SMALL APT


STACKED FLATS


WALK-UP APT


COURTYARD APT


ALLEY TOWNHOUSES

NEIGHBORHOOD NODE
Walkable neighborhood destinations like corner stores and workspaces. 1-3 storeys, mixed-use or commercial.


SHOPHOUSE (GRANDFATHERED)


LIVE/WORK


MAINSTREET LITE


MAINSTREET (GRANDFATHERED)


SHOP


MULTI-TENANT COMMERCIAL


SMALL MAINSTREET MIXED


LARGE MAINSTREET MIXED

COMBO
Creative tactics or building combinations that solve for a common development scenario.


PARKING LOT MARKET


BOOTLEG SHOPHOUSE


BOOTLEG TRIPLEX


DETACHED TRIPLEX


GUEST VILLAGE


DOUBLE DUPLEX


DUPLEX COURT


COTTAGE SQUARE


COTTAGE COURT

STEP BUILDINGS
Small-scale
Time-enhanced
Entrepreneurial
Purposeful

Developed by Graeme Johnson and the Incremental Development Alliance.

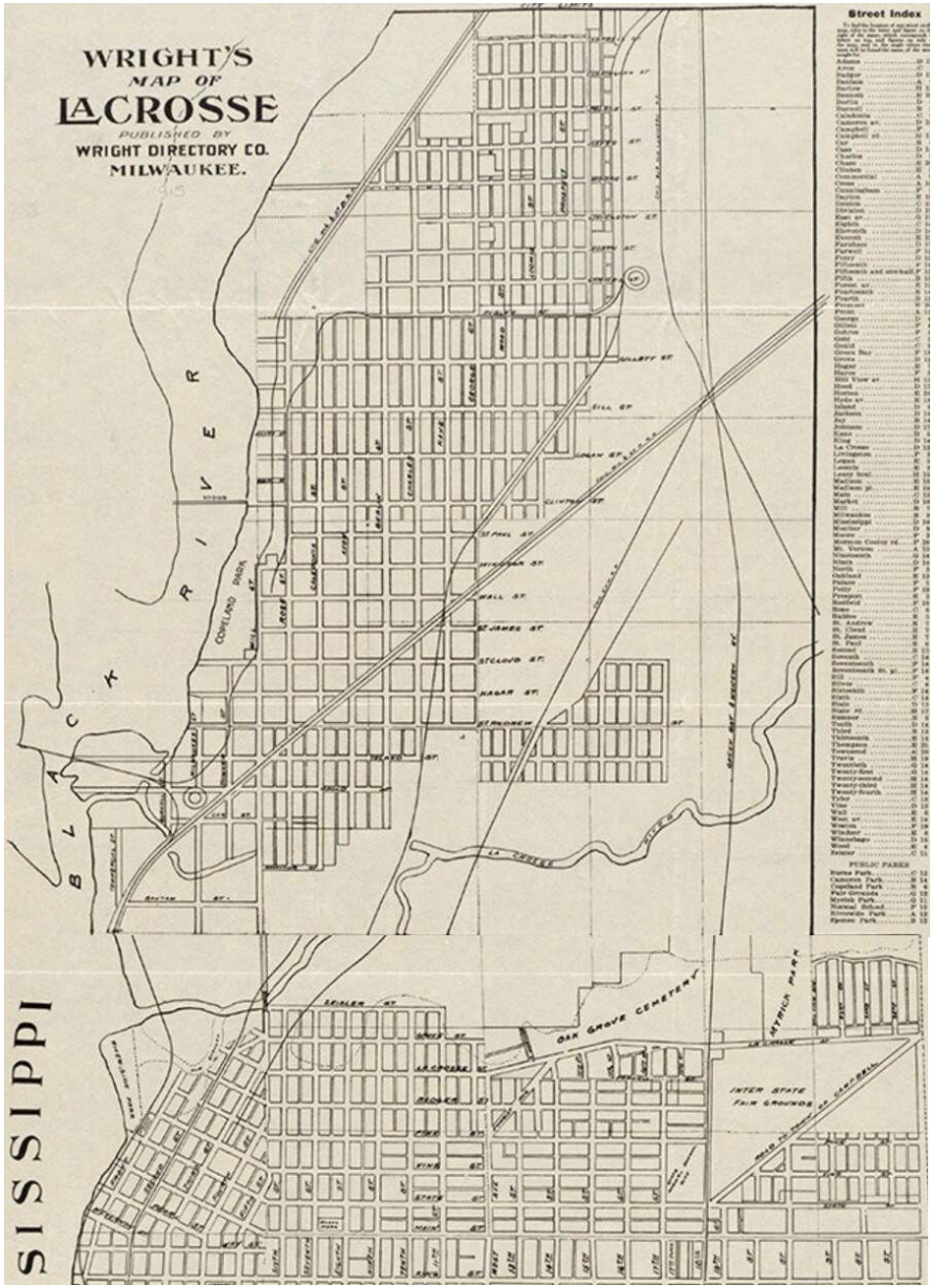
Subdivision of Land

Much of the form and character of a community is determined by the design of subdivisions and the standards by which they are built. State statutes regulate the technical and procedural aspects of dividing land for development and provide minimum standards for subdivisions related to sanitation, street access and layout. Among its many purposes, land division regulations can help a community to:

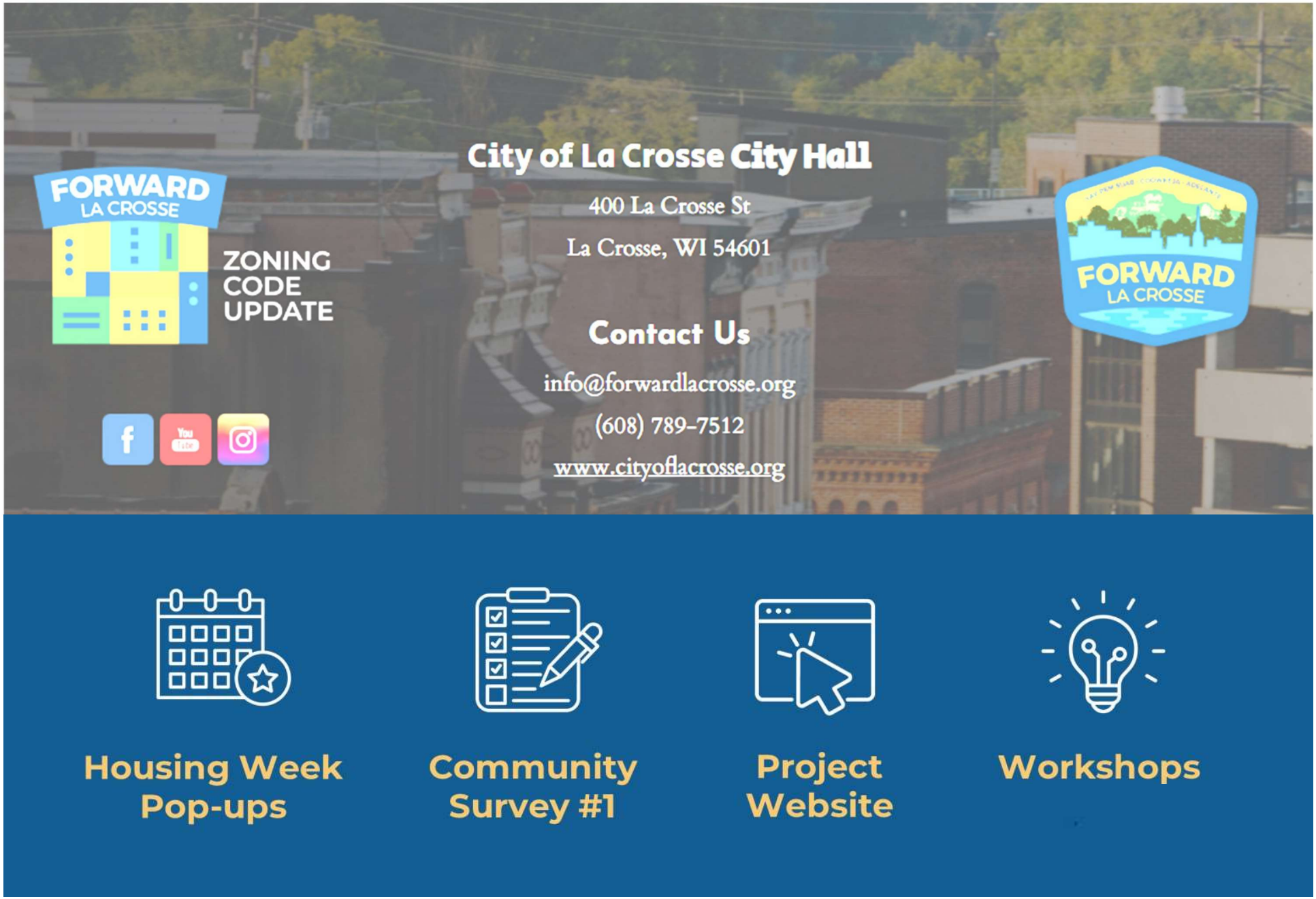
- Address health and safety issues such as stormwater runoff and emergency access.
- Ensure new development is adequately served by public facilities such as roads and parks.
- Provide for the efficient placement and delivery of public services and facilities.
- Promote neighborhood designs that meet the needs of residents.
- Ensure accurate legal descriptions of properties.
- Avoid disputes regarding the sale, transfer or subdivision of land.
- Protect other community interests outlined in a comprehensive plan or local ordinance.

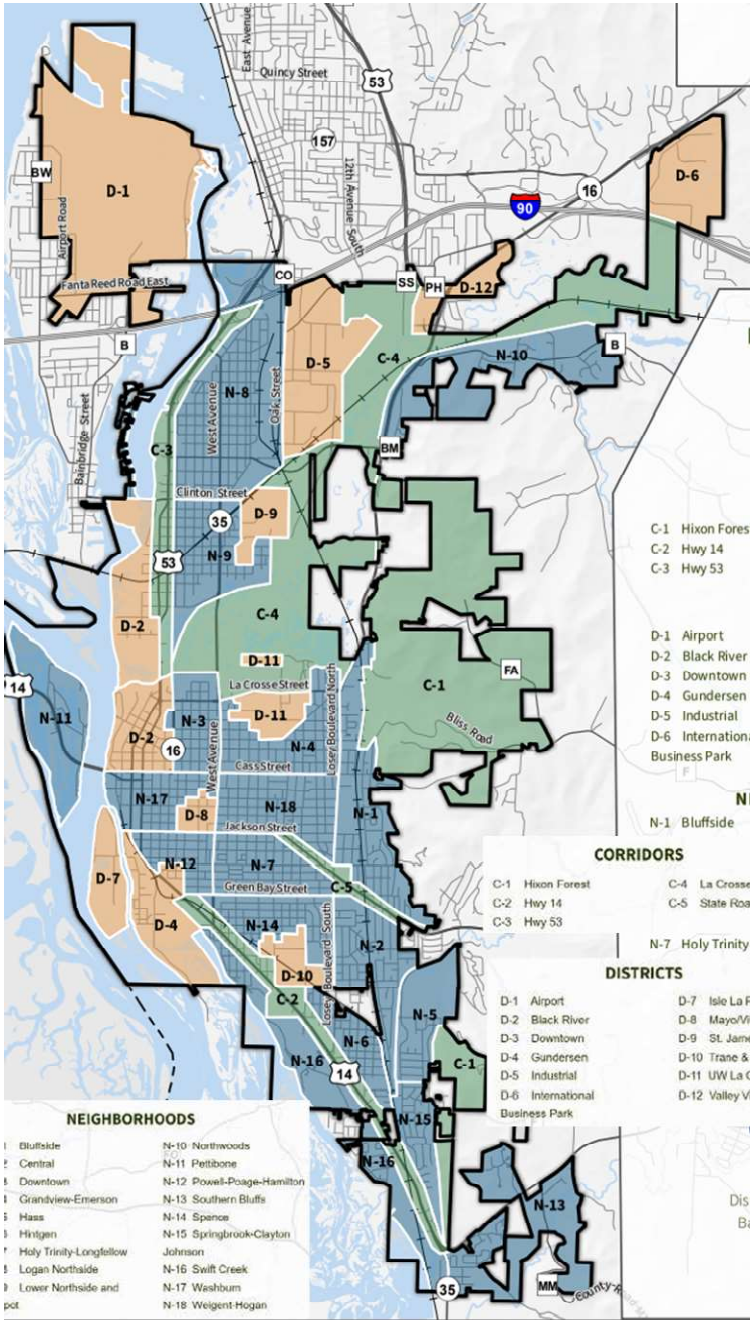
State Defined "Subdivision" – a division of a lot, parcel or tract of land by the same owner that creates 5 or more parcels or building sites of 1½ acre or less, *or* successive divisions of land by the same owner within a five year period that result in 5 or more parcels of 1½ acre or less.
Wis. Stat. § 236.02(12)

Local "Land Division" – local ordinances may be more restrictive than the state definition with regard to the number or size of lots regulated. This publication will generally use the term "land division" to refer to all such developments.
Wis. Stat. § 236.45



Contact Information





Built Form Study | Corridors

Based on the Comprehensive Plan NDC framework, the Built Form Study samples the typical development pattern for each of the neighborhoods, districts and corridors as identified in the comp plan to better understand the physical dimensions of building type, site plan, street frontage and block pattern as well as other conditions.

Corridors

- C-1 thru C-5
- C-1 Hixson Forest and C-4 La Crosse Marsh not included

Built Form Study | Plate C-2: Highway 14

NDC Framework: Corridor

Urban Pattern

Built Form Examples

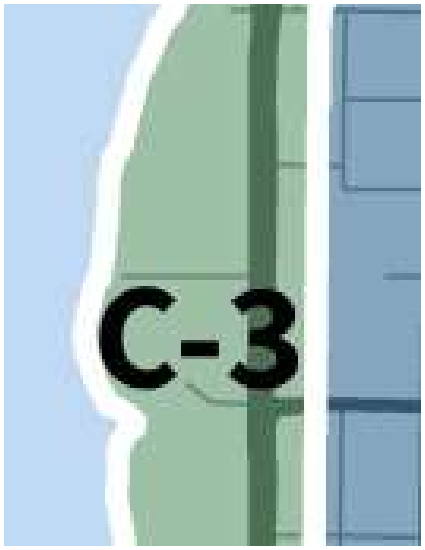
Notes

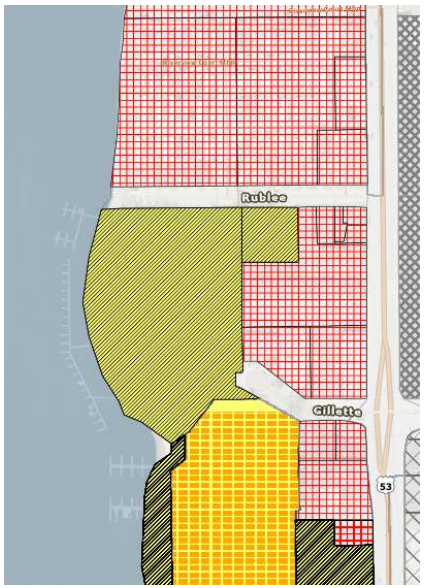
- Existing zoning: C2 Commercial
- Character area: Commercial Corridor
- Key intersection: US-14 & Ward Ave/S East Ave
- Parcel pattern: Large irregular lots fronting US-14 & Ward Ave/S East Ave
- Scale: Standalone 1-story commercial structures
- Yards: Deep setback for commercial buildings; large surface parking lots
- Parking: several surface lots front onto Hwy 14 and Ward Ave/S East Ave
- Materials: Brick, metal panel, glass
- Street: US-53 has 85-foot ROW with 9-foot sidewalk on both sides, 5 lanes including two-way left-turn lane in center; Ward Ave/S East Ave are 90-100 feet in width
- Service Drive:

FORWARD LA CROSSE
ZONING CODE UPDATE

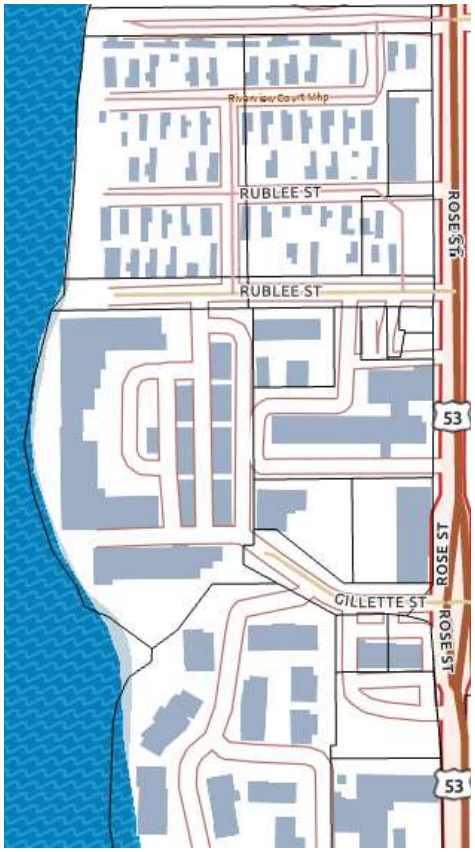
Built Form Study | Plate C-3: Highway 53

NDC Framework: Corridor





Urban Pattern



Built Form Examples

Notes

- Existing zoning: C2 Commercial, R5 Multiple Dwelling, PD Planned Development
- Character area: Urban mixed
- Key intersection: US-53 & Gilette St
- Parcel pattern: Irregular lots fronting US-53 and side streets
- Scale: 1 story manufactured homes and retail, 2 story hotels, townhomes; multi-family buildings
- Yards: Shallow setbacks fronting US-53 with parking behind or beside buildings, shallow setbacks between manufactured homes
- Parking: Surface lots for commercial along US-53, wide roads with street parking for manufactured homes
- Materials: Wood siding, masonry, metal structure
- Street: US-53 has 90-foot ROW with 9-foot sidewalk on both sides, 5 lanes including two-way left-turn lane in center; Riverview Court roads are 40 feet in width
- Service Drive: n/a

FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate C-3.1: Highway 53

NDC Framework: Corridor

Urban Pattern

Built Form Examples

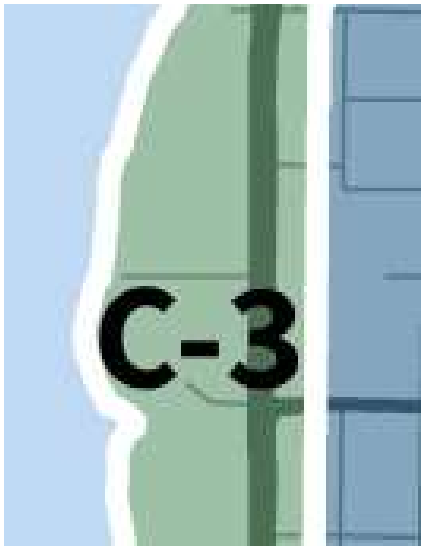
Notes

- Existing zoning: C2 Commercial, C1 Local Business
- Character area: Commercial corridor
- Key intersection: US-53 & W George St
- Parcel pattern: Large lots fronting US-53
- Scale: 1 story strip mall and standalone commercial buildings; commercial structures tend to have flat roofs and tall pylon signs along highway
- Yards: Deep setback for commercial buildings; large surface parking lots with buildings set behind
- Parking: Several large surface lots front onto US-53 or W George St
- Materials: Brick, lap siding (vinyl and wood), glass
- Street: 150-foot ROW with 6-10 foot sidewalk on both sides; US-53 has grassed boulevards and 7 lanes (including turn lanes); W George St has paved median and island for pedestrian crossing
- Alley/Service Drive: Service drive behind strip mall, built around existing Badger Hickey Park (see image)

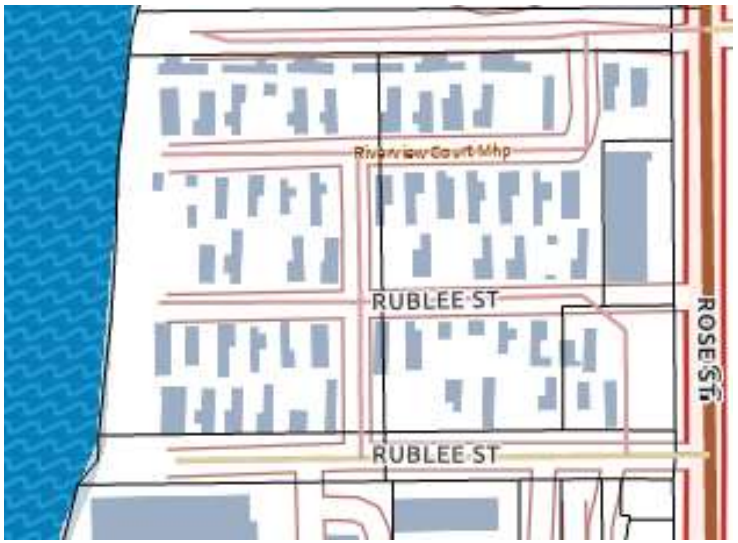
FORWARD LA CROSSE
ZONING CODE UPDATE

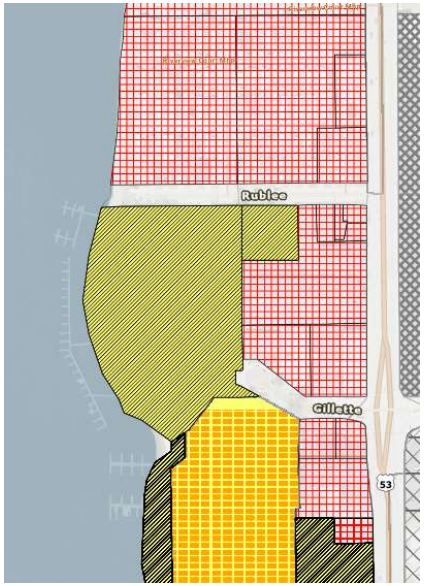
Built Form Study | Plate C-3.2: Highway 53

NDC Framework: Corridor



Urban Pattern





Built Form Example

Notes

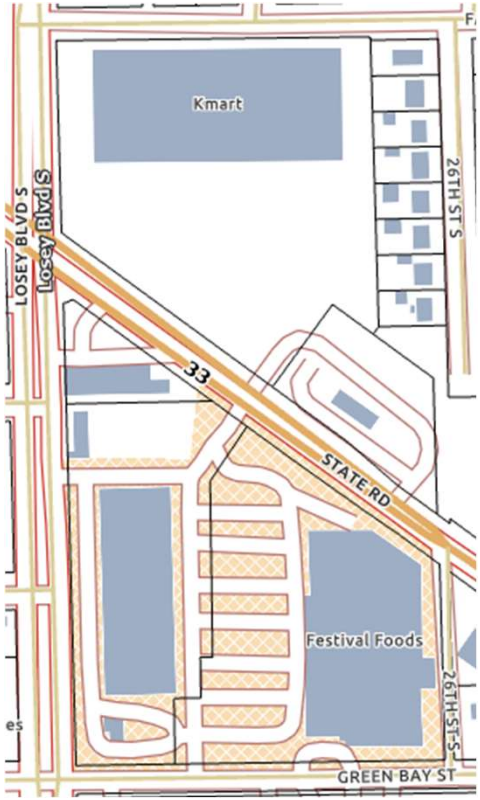
- Existing zoning: R5 Multiple Dwelling,
- Character area: Modular neighborhood
- Key intersection: US-53 & Gilette St
- Parcel pattern: Irregular lots fronting US-53 and side streets
- Scale: 1 story manufactured homes
- Yards: Shallow setbacks with parking behind or beside buildings, shallow setbacks between manufactured homes
- Parking: wide roads with street parking for manufactured homes
- Materials: metal siding
- Street: US-53 has 90-foot ROW with 9-foot sidewalk on both sides, 5 lanes including two-way left-turn lane in center; Riverview Court roads are 40 feet in width
- Service Drive: n/a

FORWARD LA CROSSE
ZONING CODE UPDATE

Built Form Study | Plate C-5 : State Rd

NDC Framework: Corridor

Urban Pattern



Built Form Examples

Notes

- Existing zoning: C2 Commercial, PD Planned Development, C1 Local Business, & R1 Single Family
- Character area: Commercial Corridor
- Key intersection: State Rd & S Losey Blvd
- Parcel pattern: Large irregular lots fronting State Rd & S Losey Blvd
- Scale: 1-story in-line commercial and standalone buildings
- Yards: Deep setback for commercial buildings; large surface parking lots
- Parking: Several surface lots front onto State Rd and S Losey Blvd
- Materials: Brick, glass, common masonry
- Street: State Rd has 85-foot ROW with 9-foot sidewalk on both sides, 4 lanes with left-turn lanes in both directions at intersection; S Losey Blvd is 100 feet in width and has 6-foot sidewalk on both sides, 4-lanes including occasional left-turn lanes in both directions
- Service Drive: rear & front loaded

FORWARD LA CROSSE
ZONING CODE UPDATE

:

Memo 2

To: City of La Crosse

From: MSA Zoning Code team

Subject: Diagnostic Summary

Date: February 21, 2025 (Residential Districts: pages 1-4)

Date: March 25, 2025 (Commercial & Industrial Districts; Subdivision Regulations: pages 5-9)

The La Crosse Zoning Code is found in Chapter 115 of the Municipal Code and is defined by seven articles and contains the following:

- A total of 211 pages
- 21 districts and 2 overlay districts
- Definitions, penalties, administration, appeals and amendments are found in Articles I and II
- District regulations are found in Article IV; dimensional standards that apply for each district begin on page 26.
- Overlay regulations are defined in Article V.
- A generous list of conditional uses is defined in Article VI that covers 23 pages of address additional standards and regulations. We will provide an additional analysis just focused on conditional uses.
- Article VII cover supplemental regulations including design standards for multi-family housing and commercial uses and the traditional neighborhood development (section 115-403).
- Generally, urban standards (and dimensional requirements) are written out in extended sentences and are often difficult to follow.
- It seems, in general, that most of the residential districts share dimensional standards and regulations subject to different time periods, going back to the 1938 edition of the code.
- The word 'special' is used in the title for the R-3 and R-6 districts but it isn't clear exactly what this means or designates.

Residential

A high level review of the R districts follows; titles are spelled out as they appear in the body of the code.

Agriculture (A-1) and Exclusive Agriculture (EA) Districts

The code includes an Agricultural district and an Exclusive Agricultural district. The A-1 district's purpose is to act as a preserve for future urban development. The Exclusive Ag district is intended to preserve lands for food and fiber production. In either case not many areas/parcels zoned are A-1 or EA; it appears the only active agricultural use is in the southern part of the city along Old Town Hall Rd.

R1 District

Unlike the A-1 and EA districts, the R1 district does not include a direct purpose statement. The R1 Single Family district does allow two-family dwellings provided they were in existence on September 13, 1984 with an odd requirement that a new two family dwelling can replace an existing two family dwelling if it is limited to 2 bedrooms in each unit; no additional bedrooms can be added I any case.

There is no direct mention of lot area and dimensional standards except for the reference to the 'Residence District' (this is a reference to the 1938 zoning code which included two residential districts: Residence and Multiple Dwelling) - apparently this is assumed to refer to the R2 District and these standards apply to R1.

Language and requirements like the following paragraph will need to be resolved regarding the uses in the R1 district:

- *Two or more family dwellings provided that such were in existence on April 10, 1997, have not discontinued the number of dwelling units for a period of 12 months or more, and are located within the area bounded by 9th Street-Farnam Street-east-west alley north of Green Bay Street-West Avenue, and provided further that such two or more family dwellings may be replaced by another two or more family dwellings as long as such replacement shall not contain more units or bedrooms than existed on April 10, 1997 and other applicable building and zoning code requirements for the R-1 District are met.*

R2 District

Like the R1 District, the R2 District does not have a specific purpose statement. It allows two family dwellings but only if they contain no more than three bedrooms per unit. It allows churches that were in existence on August 10, 1989. As in other districts, language makes multiple references to specific dates in time that provide a threshold for permitted uses.

Language and requirements like this this will need to be resolved regarding the uses in the R1 district:

- *The side yard regulations in subsections (3)a. and b. of this section shall apply to all lots including corner lots, except that in the case of a reversed corner lot which faces intersecting streets, the side yard on the street side of such reversed corner lot shall have a width of not less than 50 percent of the front yard depth required on the lots in the rear of such reversed corner lot, and no accessory building on such reversed corner lot shall project beyond the front building line of the lots in the rear of such reversed corner lot; provided, however, that this regulation for reversed corner lots shall not have the effect of reducing the buildable width for the main building to less than 26 feet, or for an accessory building to less than 20 feet, on any lot of record August 27, 1938.*

R3 Special Residence District

This district is meant to allow single family, two-family and up to four or more dwellings provided they were in existence on April 10, 1997. Lot and dimensional standards are the same or similar to R1 and R2.

Standards for yards are laboriously overwritten (similar to R1 and R2) and difficult to interpret in a single reading. These will benefit from summary and simplification:

a. *On every lot in the Special Residence District, there shall be two side yards, one on each side of the building, and except as hereinafter provided, neither of such side yards shall be less than six feet in width, and provided further that for any main building other than a one-family dwelling neither of such side yards shall be less than seven feet in width, except that lots occupied by each attached dwelling unit which is located within a single structure, which is attached along a lot line which is approximately perpendicular to the street right-of-way line, shall not be required to meet this requirement other than the outer side yards of the structure in which the two attached dwelling units are located shall not be less than seven feet in width.*
b. *On any lot having a width of less than 44 feet, and of record on August 27, 1938, the width of no side yard shall be less than that heretofore prescribed less one-fourth foot for each foot said lot is less than 44 feet in width; provided further, however, that no side yard shall be less than four feet in width in any case.*
c. *The side yard regulations in subsections (2)a and b of this section shall apply to all lots including corner lots, except that in the case of a reversed corner lot which faces intersecting streets, the side yard on the street side of such reversed corner lot shall have a width of not less than 50 percent of the front yard depth required on the lots in the rear of such reversed corner lot, and no accessory building on such reversed corner lot shall project beyond the front building line of the lots in the rear of such reversed corner lot; provided, however, that this regulation for reversed corner lots shall not have the effect of*

reducing the buildable width for the main building to less than 26 feet, or for an accessory building to less than 20 feet, on any lot of record August 27, 1938.

Low Density Multiple Dwelling District (R4)
This district is shown as the R4 district on the map but is not titled as that in the body of the code and allows multiple dwelling buildings that contain more than 4 units. Similar to the other R districts language and standards regarding lot area and yards are very overwritten and can benefit from simplification and more direct language.

Multiple Dwelling District (R5)
This district is "nested" into the R4 and thus any use allowed in R4 is permitted in this district. Uses include boarding house, room houses, fraternities and sororities (occupied by less than 6 persons). Height is allowed up to 55 feet and may exceed this per section 115-390 (Art. VII Supplemental Regulations).

R-6 Special Multiple Dwelling District
This district is "nested" into the R5 and thus any use allowed in R5 is permitted in this district. Uses include boarding house, room houses, fraternities and sororities (occupied by less than 6 persons). Height is allowed up to 55 feet and may exceed this per section 115-390 (Art. VII Supplemental Regulations).

Washburn Neighborhood District (R-7)
The purpose of the district is to encourage people to work and live in the City of La Crosse and will encourage single family dwellings. The district standards and regulations are "nested" in the R1 district (but excludes section 114-142(a) (10). A unique condition in this district is the requirement of Architectural Control that is to encourage physical development to a higher degree of aesthetic satisfaction per approval of the Design Review Board.

Map Diagrams

In a separate document we reviewed lot sizes for R-1, R-2, R-3 and the Washburn zoning districts based on the threshold of 5000 sf, lots that fall between 5000 -7200 sf and lots over 7200 sf. Lots under 5000 sf are shown in red and based on how the districts are defined many of these lots, we assume, were platted in 1938 or earlier so are not technically nonconforming. Nevertheless there is a distinct pattern (and a significant number) of smaller lots that seem to be functioning well today. More analysis is needed which will help determine how best to define standards.

R-1 = 10,833 Parcels
>7,200 sqft = 4,878 Parcels (45%)
5,000-7,200 sqft = 4,454 Parcels (41%)
<5,000 sqft = 1,501 Parcels (13.9%)
R-2 = 1,298 Parcels
>7,200 sqft = 504 Parcels (38.8%)
5,000-7,200 sqft = 522 Parcels (40.2%)
<5,000 sqft = 272 Parcels (20.9%)
R-3 = 4 Parcels
>7,200 sqft = 1 Parcel (25%)
5,000-7,200 sqft = 2 Parcels (50%)
<5,000 sqft = 1 Parcel (25%)
Washburn Neighborhood District = 451 Parcels
>7,200 sqft = 185 Parcels (41%)
5,000-7,200 sqft = 111 Parcels (24.6%)
<5,000 sqft = 155 Parcels (34.4%)
R-4 = 169 parcels
>7,200 sqft = 68 (40.2%)
5,000-7,200 sqft = 68 (40.2%)
<5,000 sqft = 33 (19.6%)
R-5 = 941 parcels
>7,200 sqft = 592 (62.9%)
5,000-7,200 sqft = 159 (16.9%)
<5,000 sqft = 190 (20.2%)
R-6 = 117 parcels
>7,200 sqft = 65 (55.6%)
5,000-7,200 sqft = 11 (9.4%)
<5,000 sqft = 41 (35%)

Total = 13,813
<5,000 sqft = 2,193 (15.8%)

Commercial Districts
There are three (3) commercial districts that are closely related to each other relative to dimensional standards, with distinctions for building heights and certain uses.

- Local Business: C-1
- Commercial District: C-2
- Community Business: C-3

The code is written to identify uses that are not allowed in the C-1; and C-2 and C-3 are written that list what uses are allowed. It appears that the Local Business District (C-1) provides the basis for most commercial uses in the city; any use in this district is also permitted in the Commercial District (C-2) . The Community Business (C-3) district is mostly focused on blocks and parcels in the downtown area and includes a more narrow range of uses. All of the commercial districts allow some type of residential use and appear to rely on bulk standards based in the Residence (clarified to refer to the current R2 District) and Multiple Dwelling (the R-5 District) districts.

Conditional uses are coded in Article VI; we will provide an additional analysis just focused on conditional uses.

Local Business C-1
Despite its title this district regulates a broad range of uses throughout the city and also provides the basis for allowed uses in the Commercial district (C-2). The title, which dates back to the 1938 code, may have regulated smaller size commercial parcels and allowed uses more related to neighborhoods in the city at a point in history. Among the dimensional standards are references to 'outer' and 'inner' courts, a very specific outdoor space that we have not found a local example of from our current analysis.

Commercial District C-2
This district functions as the general and 'highway' commercial district throughout the city and as such regulates a wide range of commercial buildings from enclosed malls to small franchise operations to less intensive uses surrounding the downtown core. It regulates large commercial areas like Valley View Mall, in -line and shopping center uses along Hwy 53, commercial uses along Hwy 61 and a number of blocks and partial blocks surrounding the downtown core. The language, unlike language in the C-1 district, defines uses that are allowed Like the Local Business District, C-2 defines regulations for 'outer' and 'inner' courts as well as residential uses.

Community Business C-3
This district is mainly concentrated on the downtown core that is defined by walkable streets, urban storefronts, on-street and structured parking as well as a mix of uses including historic districts and properties.

Page 41 of the code under 'Vision Clearance' refers to properties in the Central Business District (capitalized) and defines a specific boundary (Cameron Ave, Mississippi River, La Crosse St and Sevent St) but there is no Central Business District in the code or zoning map. This appears to be a generic reference but it's capitalized spelling is confusing.

Industrial
There are two industrial districts, Light M-1 and Heavy M-2, both of which operate from a similar set of uses. Both of these districts declare particular uses that are not allowed as a distinction for what is allowed. The Heavy Industrial district includes a majority of the land mapped; Light Industrial zoning tends to be smaller lots and parcels in discrete locations.

Other Districts

- Public utility (Sec. 115-154) – a very few specific locations
- Parking (Sec. 115-155) – mainly focused on downtown but this district is not mapped
- Planned Development (Sec. 115-156) – strategic locations throughout the city that requires a minimum 2 acre site; a recent example is the River North development.
- Public and Semi-Public (Sec. 115-157) -large parts of the city are zoned including the airport and parts of Barron Island.
- Conservancy (Sec. 115-158) – this district covers one of the largest land areas of the city including wetlands, marshes, lakes, waterways and bluffs.
- Traditional Neighborhood Development (Sec. 115-403) – this district is located in Article VII Supplement Regulations and regulates compact traditional mixed use development pattern. This is no minimum acreage for this district and no requirements for lot dimensional standards.

Overlay Districts (Article V)

- Neighborhood Center (Sec. 15-185) – there is one district defined in the code for this overlay, located in the Logan Northside neighborhood but it is not officially mapped.
- Floodplain (Div. 2: Sec. 115-207)
- Historic Zoning Overlay (Div. 3: Sec 115-313) – contains an abundance of requirements and regulations related to the city's historic districts and properties. Design standards are very specific about renovation, rehabilitation and demolition for each historic district.

Attachments

Attachment 2.1 - Summary Table of Dimensional Standards (in-progress)

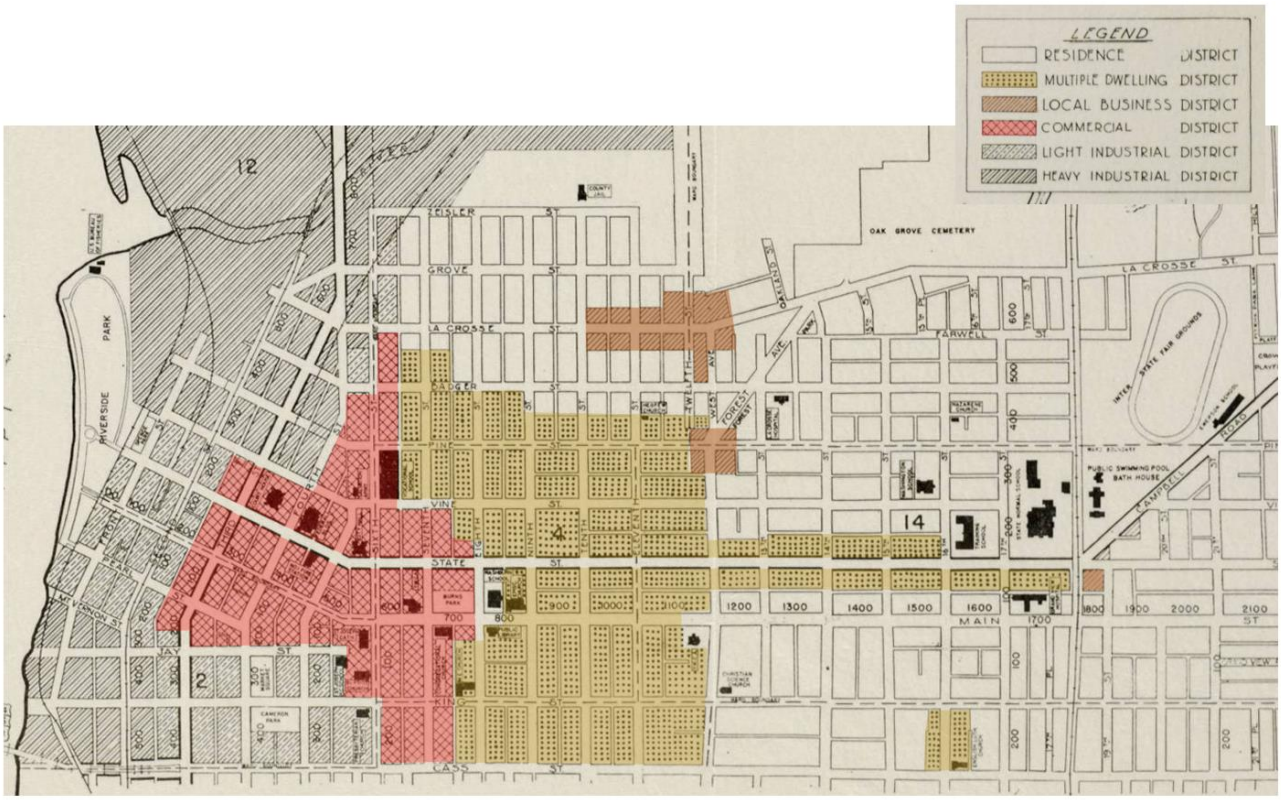
Attachment 2.1: Summary of Dimensional Standards (in progress)

Residential	**AG**	**EX AG**	**R1**	**R2**	**R3**	**R4**	**R5**	R6	Washburn
lot area	7200	35ac							
before 1938 less than:	5000sf		5000sf	5000sf	5000 sf	5000 sf	5000 sf	5000sf	5000sf
between 1938 & 1966:	5000+sf		5000+sf	5000+sf	5000+ sf	5000 sf	5000+ sf	5000+sf	5000+sf
after 1966:	7200sf		7200sf	7200sf	7200 sf	7200 sf	7200 sf	7200 sf	7200sf
other		20,000sf							
lot area per per family					1800 sf/unit	1800sf/unit	1500sf/unit	400sf/unit	
front yard			25 fyt	25 ft	25 ft	20 ft	20ft	15 ft	25 ft
side yard		6 ft	6 ft	6 ft	6 ft	6 ft	6 ft	6 ft	6 ft
lots as of 1938 or before			4 ft	4 ft					4 ft
rear yard		6 ft	20% depth	20% depth	20% depth	20% depth	20% depth	20% depth	20% depth
max. height		35 ft	35 ft	35 ft	35 ft	35 ft	55 ft	100 ft	35 ft
max. height, other		2x fr nearest					55ft		
		lot line							
public street frontage	min 30 ft	none	min. 30 ft	min. 30 ft	min 30 ft	none	min 30 st	min 30 ft	min 30 ft
court width not to exceed							24 ft	24 ft	
architectural control									Design Rev Bd.

	Local	*Commercial*	*Community*		*Light*	*Heavy*			
Business/Commerical & Industrial	**C-1**	**C-2**	**C-3**		M-1	M-2			
lot area	none		none		none	none			
height	45 ft	100 ft	160 ft		100 ft	100 ft			
dwelling height						35 ft			
side yard	none/6 ft	none/6ft	none/6ft		none/6ft	none/6ft			
side yard: residence or multiple dwelling	6 ft	6 ft	0 ft/or 6 ft						
rear yard	20 ft	no less than 9ft	no less than 9 ft		no less than 9 ft	no less than 9 ft			
outer courts (min)	10 ft x 30 ft	10 ft x 30 ft	na		10 ft x 30 ft	10 ft x 30 ft			
inner courts (min)	8 ft x 16 ft	8 ft x 16 ft	na		8 ft x 16 ft	8 ft x 16 ft			
lot area per family(	1000 sf	1000 sf	na			2500 sf			
Exceptions									

Attachment 2.2 Historic Zoning Map

Attached is part of the zoning map from 1938 that shows the very simple zoning organization of industrial, commercial, multi-family and single family zoning districts. This simplistic approach may have some benefits as we continue to consider regulations and how best to apply them.



Chapter 113 Subdivisions

The Subdivisions chapter covers 23 pages spelled out over four Articles:

- Article I, In General – includes definitions, purpose, intent, compliance, jurisdiction, improvements, fees and a few other administrative rules;
- Article II, Platting – includes Div. 1 Generally, Div. 2 Preliminary Plats, Div. 3 Final Plats;
- Article III, Design Standards – includes street arrangement, street design standards, blocks, lots, easements, public open space, etc;
- Article IV Required Improvements – includes grading, surfaces, curb & gutter, sidewalks, stormwater, other utilities, etc.

Some highlights:

- Cul de sac streets to be no less than 500 ft long.
- A reference to 'green complete streets'; must be reviewed by City Traffic Engineer, City Engineer, City Planner and approved by the Board of Public Works prior to any preliminary or final plat. More detail is found in Chapter 40 Street and Sidewalks.
- Blocks shall not be less than 500 ft long and no longer than 1200 ft long (with exceptions) (as an example the Riverpoint North Planned Development District street and block layout do not meet these standards and this may also conflict with the purpose and intent of the TND ordinance).
- Mid block crossings are required for a street if over 900 ft in length
- Regarding access every lot shall not be less than 60 ft wide and lot depth should not be less than 100 ft.
- Street names must refer to the use of 'courts', 'places' or 'lanes' in certain conditions.
- Local Residential Streets shall have a pavement width of 36 ft.
- Street trees shall be planted at least one per every 50 ft on all streets to be dedicated.
- Reference is made to 'Confluence The La Crosse Comprehensive Plan' (Dec. 2002).
- Plat shall be prepared on tracing cloth or paper of good quality – state statutes (WI 236.12) refer to submitting an electronic copy.

DRAFT - City of La Crosse Zoning Code Update

Community Survey #1

Zoning is a powerful tool that significantly impacts our daily lives, from the streets we travel on to the buildings we live in and the parks we enjoy. However, zoning regulations can often be confusing and impose barriers to necessary community changes.

Forward La Crosse Zoning Code Update is a collaborative initiative aimed at rewriting the city of La Crosse's Zoning Code and Subdivision Ordinance. The update aims to modernize regulations to better reflect current community needs and growth patterns.

This survey is one of many opportunities for you to provide feedback and influence the new code. Please take a few moments to share your thoughts by completing this quick 10-minute survey.

Learn more about the planning process and get updates at https://forwardlacrosse.org/

1. What is your age?

- ◯ Under 18
- ◯ 18-24
- ◯ 25-34
- ◯ 35-44
- ◯ 45-54
- ◯ 55-64
- ◯ 65+
- ◯ Prefer not to answer

2. How do you identify your race and/or ethnicity? Select all that apply.

- [ ] Native American/Alaska Native
- [ ] Asian/Asian American
- [ ] Black/African American
- [ ] Hispanic/Latino
- [ ] Native Hawaiian or other Pacific Islander
- [ ] White
- [ ] Prefer not to say
- [ ] Other, or prefer to self-describe:

* 3. Do you own or rent property in the City of La Crosse? Check all that apply.

- [ ] I'm a renter
- [ ] I own my home (owner-occupied)
- [ ] I own rental property (landlord)
- [ ] Other (please specify)

DRAFT - City of La Crosse Zoning Code Update

4. How long have you lived in the City of La Crosse?

- ◯ Less than a year
- ◯ 1-5 years
- ◯ 6-10 years
- ◯ 11-20 years
- ◯ 21+ years
- ◯ I do not live in La Crosse.

5. How long have you lived in your current residence?

- ◯ Less than a year
- ◯ 1-5 years
- ◯ 6-10 years
- ◯ 11-20 years
- ◯ 21+ years
- ◯ Other (please specify)

6. In what type of dwelling do you live?

- ◯ Detached (single-dwelling) home
- ◯ 2-unit Building or Duplex
- ◯ 3-4 unit Building
- ◯ 5-19 unit Building
- ◯ 20+ unit Building
- ◯ Accessory Dwelling Unit (secondary unit in or outside of the principal structure)
- ◯ Shelter/transitional facility
- ◯ Assisted living/other group facility
- ◯ Unhoused
- ◯ Other (please specify)

7. How do the members of your household park their personal vehicles at your residence?

- ◯ I don’t own a vehicle.
- ◯ Outside in a parking lot or driveway.
- ◯ Inside a garage structure.
- ◯ On the street.
- ◯ Some vehicles are parked inside a garage and others are parked outside in a driveway, parking lot, or on the street.
- ◯ Other (please specify)

DRAFT - City of La Crosse Zoning Code Update

8. Do you think La Crosse has enough of the following housing types?

	Not enough	Right amount	Too much
Freestanding single-dwelling houses	◯	◯	◯
Two-unit building (Twinhome/Duplex)	◯	◯	◯
3-4 unit building (Triplex/Quadplexes)	◯	◯	◯
Townhomes/Row housing	◯	◯	◯
Multi-building complex (multiple 3-19 unit buildings in a group or cluster on one property)	◯	◯	◯
Apartment/condo building with 4-19 units	◯	◯	◯
Apartment/condo building with 20+ units	◯	◯	◯
Units above commercial uses (mixed-use buildings)	◯	◯	◯

9. Share how you feel about the following statements regarding new **large (20+ unit) residential buildings.**

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Create screening when adjacent to lower-intensity residential uses.	◯	◯	◯	◯	◯
Provide outdoor common areas for the residents.	◯	◯	◯	◯	◯
Be situated closer to the street than they typically are today.	◯	◯	◯	◯	◯
Maximize the use of the lot area.	◯	◯	◯	◯	◯
Locate parking in well-screened areas behind the building or in a garage structure.	◯	◯	◯	◯	◯
Meet pedestrian-friendly neighborhood standards for building entrance locations, landscaping, and frontage features such as patios and seating, ample windows, overhangs and awnings, architectural details, etc.	◯	◯	◯	◯	◯
Set back the top stories of the building to better improve compatibility with surrounding neighborhoods.	◯	◯	◯	◯	◯

10. Share how you feel about the following statements regarding **low-density residential uses (free-standing house, duplex, triplex, fourplex)**.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Entrances should face the street and have front porches or covered entries.	◯	◯	◯	◯	◯
Side entry garages look better than front entry garages.	◯	◯	◯	◯	◯
It is acceptable for a garage to be the prominent feature of a residence from the street.	◯	◯	◯	◯	◯
Alleyways should be incorporated in new subdivisions for garage access.	◯	◯	◯	◯	◯
An Accessory Dwelling Unit (secondary unit in or outside of the principal structure) is acceptable on a property.	◯	◯	◯	◯	◯
Limits should be placed on impervious surfaces such as pavement.	◯	◯	◯	◯	◯

DRAFT - City of La Crosse Zoning Code Update

11. Share how you feel about the following statements.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Neighborhoods should incorporate small retail, food, and service businesses.	◯	◯	◯	◯	◯
Neighborhoods should incorporate a range of housing types, sizes, and price points.	◯	◯	◯	◯	◯
Neighborhood design should emphasize and enable people to safely and enjoyably meet most of their needs within a 15-minute walk or bike (employment, recreation, services, grocery, school, etc.)	◯	◯	◯	◯	◯
Proximity between homes and services/retail is	◯	◯	◯	◯	◯

important.

Proximity to parks and open spaces is important.	◯	◯	◯	◯	◯
New development must promote environmental stewardship through environmentally friendly design practices.	◯	◯	◯	◯	◯
It is easy to find parking in the downtown within three blocks of my destination.	◯	◯	◯	◯	◯

DRAFT - City of La Crosse Zoning Code Update

12. Select your top THREE property regulations that you are most concerned about.

- [ ] No specific concerns / Not sure
- [ ] Parking
- [ ] Building Height
- [ ] Landscaping
- [ ] Building Setbacks
- [ ] Incompatible Uses
- [ ] Building Design Standards
- [ ] Other (please specify)
- [ ] Frontages / Streetscape
- [ ] Stormwater / Green Infrastructure
- [ ] Exterior Lighting
- [ ] Noise / Nuisances
- [ ] Large Retail Sites
- [ ] Drive-through Businesses
- [ ] Property Maintenance / Upkeep

13. In your experience, La Crosse's zoning code is:

- ◯ Too restrictive
- ◯ Fair
- ◯ Too flexible
- ◯ Not sure- no experience

14. How informed do you feel about zoning decisions and their potential impact on your neighborhood?

- ◯ Very
- ◯ Neutral
- ◯ Not at all
- ◯ Not sure - no experience

15. Have you been involved in zoning discussions or decisions affecting your neighborhood?

- ◯ Yes
- ◯ No
- ◯ Not sure

16. How concerned are you about environmental risks and hazards in your neighborhood?

- ◯ Very
- ◯ Neutral
- ◯ Not at all
- ◯ Not sure

17. Any other comments about anything related to existing or future developments in La Crosse or the current zoning code?

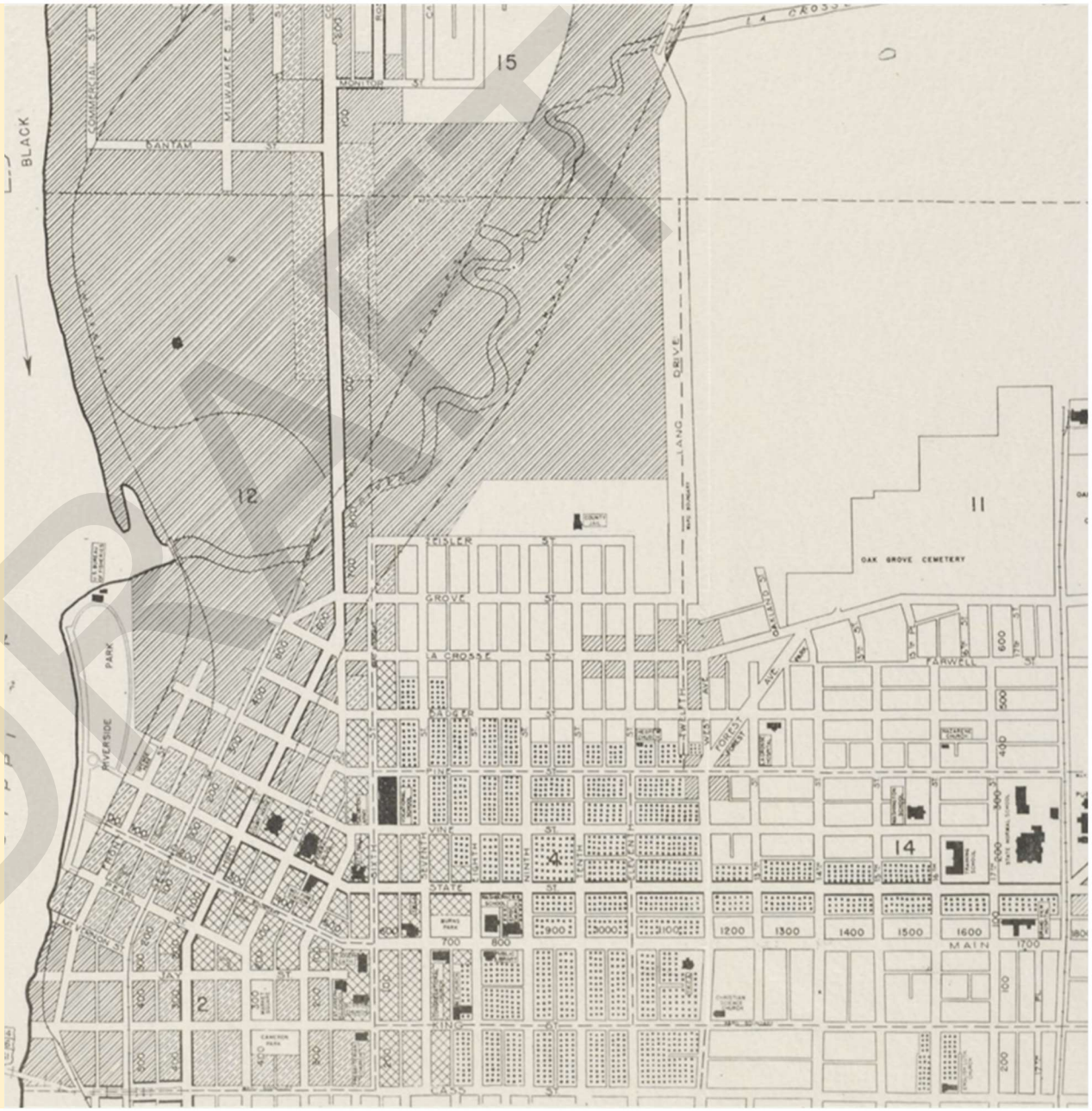
Thank you for your time and valuable feedback!

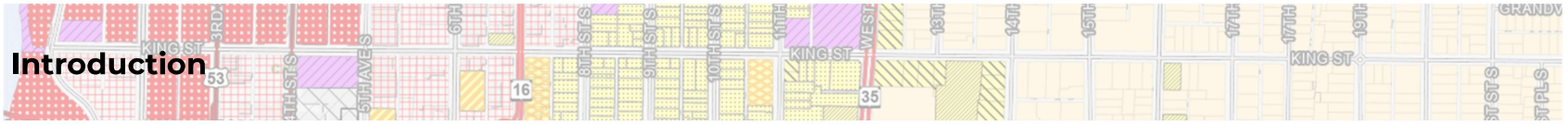
To learn more about the project and get involved, visit https://forwardlacrosse.org/

Zoning 101

FORWARD LA CROSSE ZONING CODE UPDATE

Contents





Zoning is one of the most common methods of land use control used by local governments. Zoning works by defining a community into districts, regulating uses that are allowed within those districts, and prescribing allowable dimensions such as lot sizes, setbacks and building height. Zoning can help a community to achieve goals outlined in a comprehensive plan including:

- Protecting public health, safety and general welfare.
- Promoting desirable patterns of development.
- Separating incompatible land uses.
- Maintaining community character and aesthetics.
- Protecting community resources such as farmland, woodlands, groundwater, surface water, and historic and cultural resources.
- Providing public services and infrastructure in an economical and efficient manner.
- Protecting public and private investments.

Local governments in Wisconsin decide for themselves whether or not to adopt general zoning, also known as comprehensive zoning. Authority to adopt general zoning is outlined in state statutes and summarized below:

- Cities and villages may adopt general zoning which applies to lands within their municipal boundaries.[1] Cities and villages may also adopt extraterritorial zoning which applies to land in surrounding unincorporated areas.[2]
- The zoning ordinance and map describe uses that are allowed within each zoning district.

Additional Forms of Zoning

State statutes require communities to administer certain types of zoning as described below:

- **Shoreland zoning** provides development standards near waterways to protect water quality, aquatic and wildlife habitat, shore cover and natural scenic beauty. Wisconsin statutes require counties to exercise shoreland zoning in unincorporated areas.[6]
- **Shoreland-wetland zoning** generally prohibits or severely restricts development in wetlands near waterways. It has the same objectives as shoreland zoning and is required of counties, cities and villages that have received wetland maps from the state.[7]
- **Floodplain zoning** provides location and development standards to protect human life, health and property from flooding. It is required of counties, cities and villages that have been issued maps designating flood prone areas.[8]

Source: UW- Madison Division of Extension

History

1920 – First Wisconsin zoning ordinance created by City of Milwaukee

1923 – Zoning upheld by Wisconsin Supreme Court

1929 – Wisconsin Legislature authorizes zoning to regulate all uses in rural areas

1933 – Oneida County adopts first comprehensive rural zoning ordinance in the United States

1966 – Wisconsin Legislature adopts the Water Resources Act

1968 – Local governments required to administer minimum shoreland and floodplain zoning regulations

1999 – Wisconsin adopts Comprehensive Planning Law and establishes grant program

2010 – Zoning must be consistent with a comprehensive plan

Source: UW- Madison Division of Extension

Organization of a Zoning Ordinance

Most zoning ordinances are organized in the following manner:

Title, Authority and Purpose. This section lists the state enabling legislation which empowers the community to adopt zoning and outlines the community's "statements of purpose" or reasons for having zoning.

General Provisions. This section includes definitions of terms and describes the area affected by the ordinance.

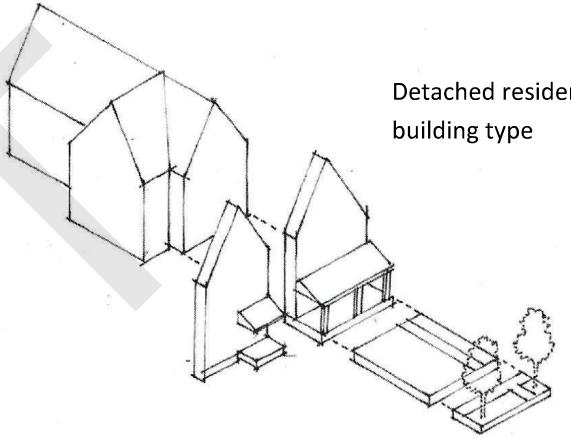
Zoning Districts and Regulations. This section lists and defines each zoning district and sets out rules that apply to land in each district. These rules may include permitted and conditional uses, the density of structural development, dimensions of structures and setbacks, and provisions for open space.

Zoning Nonconformities. This section describes limitations associated with nonconforming uses, structures and lots.

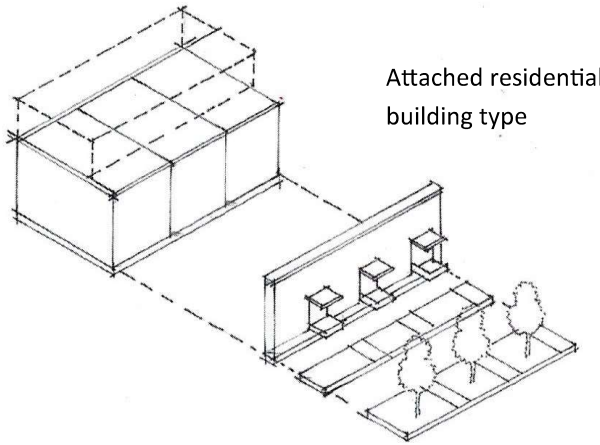
Impact Regulations. This section describes parking, landscaping, signage, historic preservation, environmental and other development regulations designed to mitigate the impacts of development.

Administration and Enforcement. This section outlines the duties of those involved in administering the zoning ordinance, specifies procedures for amending the ordinance, and sets fines for zoning violations. Enforcement techniques generally include refusal of building or occupancy permits, remediation, fines and forfeitures, or court action to force compliance.[2] Enforcement actions may be initiated by the governing body or an affected landowner.[3]

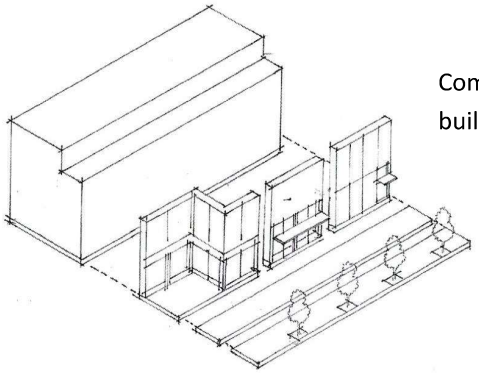
Source: UW- Madison Division of Extension



Detached residential building type



Attached residential building type



Commercial building type

ACCESSORY DWELLING UNITS (ADUs) a small home that is ancillary to a principal dwelling unit on a property.

ARCADE a feature for Retail use where the Facade is a colonnade that overhangs the Sidewalk.

ARCHITECTURAL DESIGN STANDARDS Requirements that specify building materials, details and facade variations.

BLANK WALLS a blank wall is a length of 30 or more feet without openings.

BLOCK FACE all the building Facades on one side of a block

BUILD-TO LINE A horizontal regulation on the lot for where a building must be located.

BY RIGHT a proposal that complies with the code and is permitted and processed administratively, without public hearing.

CIVIC SPACE an outdoor area dedicated for public use.

CONFIGURATION the form of a building, based on its massing, frontage and height.

ENCROACHMENT A structural feature that extends into a yard, space or above a height limit; often used to describe awnings, signs and balconies that project over sidewalks.

FLOOR AREA RATIO (FAR) The ratio of a building's floor area to the size of the lot.

HOME OCCUPATION When a business is located within a residence.

LINER BUILDING A shallow building that is sited in front of parking and service areas.

LIVE WORK a mixed use unit consisting of a commercial and residential uses; intended to be occupied by a business operator who lives in the same structure.

LOT means land occupied by a permitted use including one main building together with its accessory buildings, and the yards and parking spaces and having its principal frontage on a public street.

LOT LINE the boundary that legally and geometrically defines a lot.

MISSING MIDDLE HOUSING A term that refers to small multifamily, live/work and cottage-like residences that are generally more affordable, and their neighborhoods more walkable.

MIXED USE multiple uses within the same building or in multiple adjacent buildings

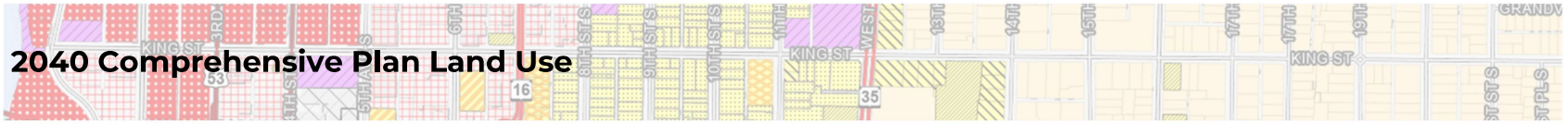
NONCONFORMING USE means any building or land lawfully occupied by a use per the regulations of the district it is in.

type.

PUBLIC REALM Areas that are not privately owned — including streets, sidewalks, other rights-of-way, open spaces, and public facilities such as parks, green spaces and municipal buildings.

REGULATING PLAN a Zoning Map or set of maps that shows the special requirements subject to, particular regulations, often in response to a well defined context.

2040 Comprehensive Plan Land Use



FORWARD LA CROSSE ZONING CODE UPDATE

Future Land Use includes twelve (12) categories *(summarized from the 2040 Comprehensive Plan):*

- **Existing Uses**: Existing Uses are noted within each Future Land Use Category to specify that an existing use is always "Allowable" on any property in La Crosse and that no existing property must be changed in order to comply with the Future Land Use Plan.
- **Low-Density Residential**: Low-Density Residential land uses are predominantly made up of one-two story single-family structures but may also include two- and three-unit dwellings that may have been converted from single-family structures. Other housing types such as townhomes and rowhomes may be compatible, especially if developed to fit a single-family mold.
- **Medium-Density Residential**: Medium Density Residential may include more variety of housing types than Low-Density Residential, including townhomes, rowhomes, small multi-family buildings, and large multi family buildings of two-four stories The uses in this category are interconnected within surrounding neighborhoods as part of a complete neighborhood, providing access to a variety of uses and amenities through enhanced walkability and connectivity.
- **High-Density Residential**: High-Density Residential typically includes multi-family owner-occupied and rental units in structures taller than three stories Similar to medium- density, high-density is interconnected within surrounding neighborhoods and may be concentrated in areas with major streets connections and employment and commercial areas.
- **Low-Intensity Mixed-Use**: Low-Intensity Mixed-Use may include relatively small existing and planned activity centers that include a variety of uses such as residential, retail, restaurant, service, institutional, and civic uses primarily serving existing neighborhoods and their residents The design and layout is typically compact, walkable, and nearby transit.
- **High-Intensity Mixed-Use**: High-Intensity Mixed-Use was included to delineate areas of higher-intensity mixed-uses that support an active and vibrant street life These can be located within the core of Downtown La Crosse, as well as outside of the Downtown core in areas still appropriate for a higher intensity mix of uses.
- **Neighborhood Retail/Commercial**: These areas include walkable, small-business, small format, independent businesses primarily serving walk-up customers from within the neighborhood.
- **Commercial**: Commercial includes professional service uses, corporate, retail, services, and other commercial/consumer based land uses providing consumer and employment opportunities Commercial can also feature businesses considered "big box" stores, drive-ups, and large format services such as car dealerships.
- **Industrial**: Industrial includes uses involved in manufacturing, wholesale, storage, distribution, transportation, repair/ maintenance, and utilities These can also include uses typically identified as "nuisance" uses that should not be located in proximity to residential, neighborhood mixed-use, or other non-residential uses due to noise, odor, appearance, traffic, or other potentially adverse impacts. Screening, buffering, and securitization should be deployed to protect surrounding uses wherever possible
- **Institutional**: Institutional includes government buildings, structures, and campuses, as well as public community
- **Parks & Open Space**: This category includes public parks, trails, and recreation areas, private recreation uses (such as golf courses), cemeteries, and other natural features that create a park-like setting The emphasis is on natural and open spaces that provide for recreation and environmental uses
- **Conservancy, Wetland, & Agricultural**: This category includes wetlands and marshes, greenways and environmental corridors, and other natural areas These may function as natural drainage or expansion of the Mississippi River corridor This category includes areas of the City identified as wooded and steep slope areas and also includes any land or parcel used for agricultural purposes. Agricultural uses are typically located at the periphery of the City

Refer to the 2040 Comprehensive Plan: *https://www.cityoflacrosse.org/home/showpublisheddocument/7655/638345999839030000*

Future Land Use & Building Types

FORWARD LA CROSSE
ZONING CODE UPDATE


Low-Density Residential


High-Density Residential

Neighborhood Retail/Commercial (Credit: City)


Low-Density Residential


High-Density Residential

Commercial (credit: La Crosse Chamber)


Medium-Density Residential

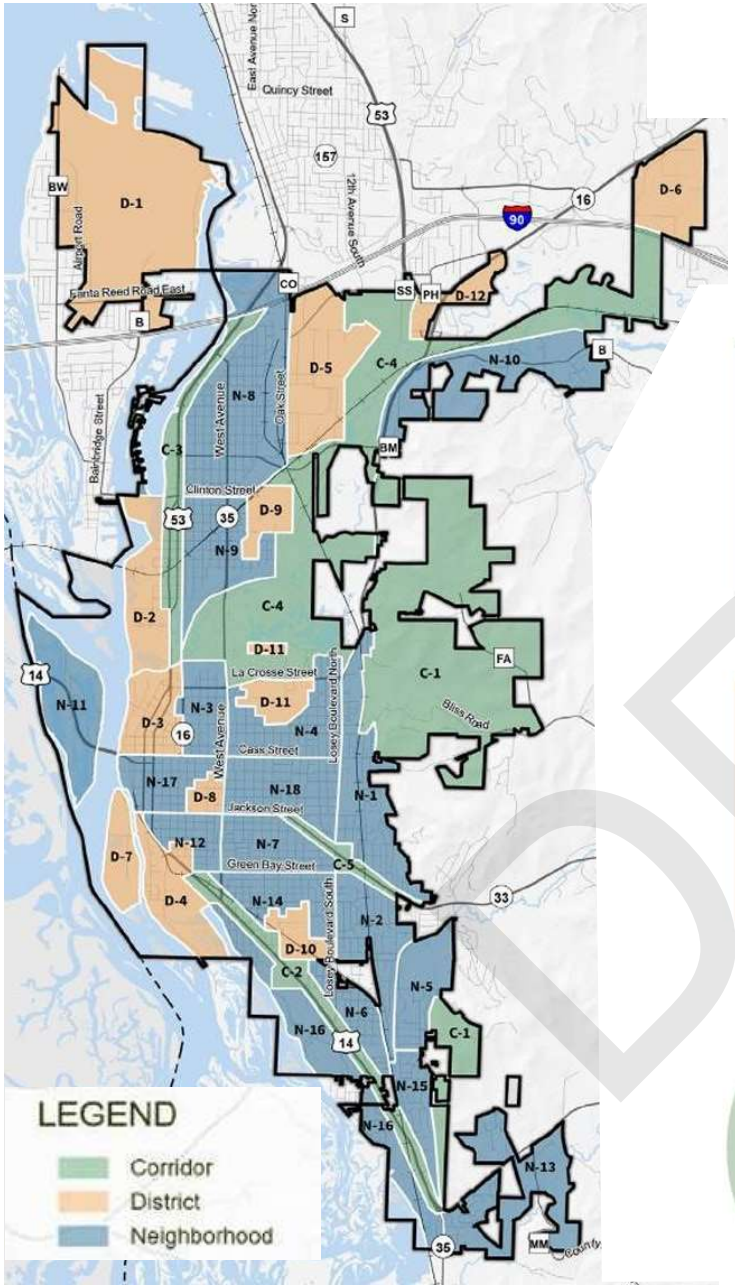

Low-Intensity Mixed-Use

Institutional (Credit: City)


Medium-Density Residential


High-Intensity Mixed-Use


Industrial



The **Comprehensive Plan** sets forth the vision of future land uses within the City of La Crosse. Future land use is based on the "Neighborhood, District and Corridor Framework" (NDC), a system devised by the Congress for New Urbanism (CNU).

How does NDC Work? The intent of the NDC model is to encourage walkable, compact communities that are rich with amenities and celebrate the history of the built environment and the preservation of natural features, all while respecting the fabric of communities. NDC proposes three fundamental classifications that organize La Crosse into a mix of uses rather than isolated land uses.

Neighborhoods:

La Crosse neighborhoods have distinct identities, housing characteristics, unique history, and geographic features. They are typically compact, pedestrian-friendly, and mixed-use. Neighborhoods may contain a number of supporting uses and activities that serve residents, such as parks, schools, libraries, small-scale retail, and other services. Neighborhood associations were consulted during the creation of this comprehensive plan to help identify the vision and land uses within La Crosse's neighborhoods.

Districts:

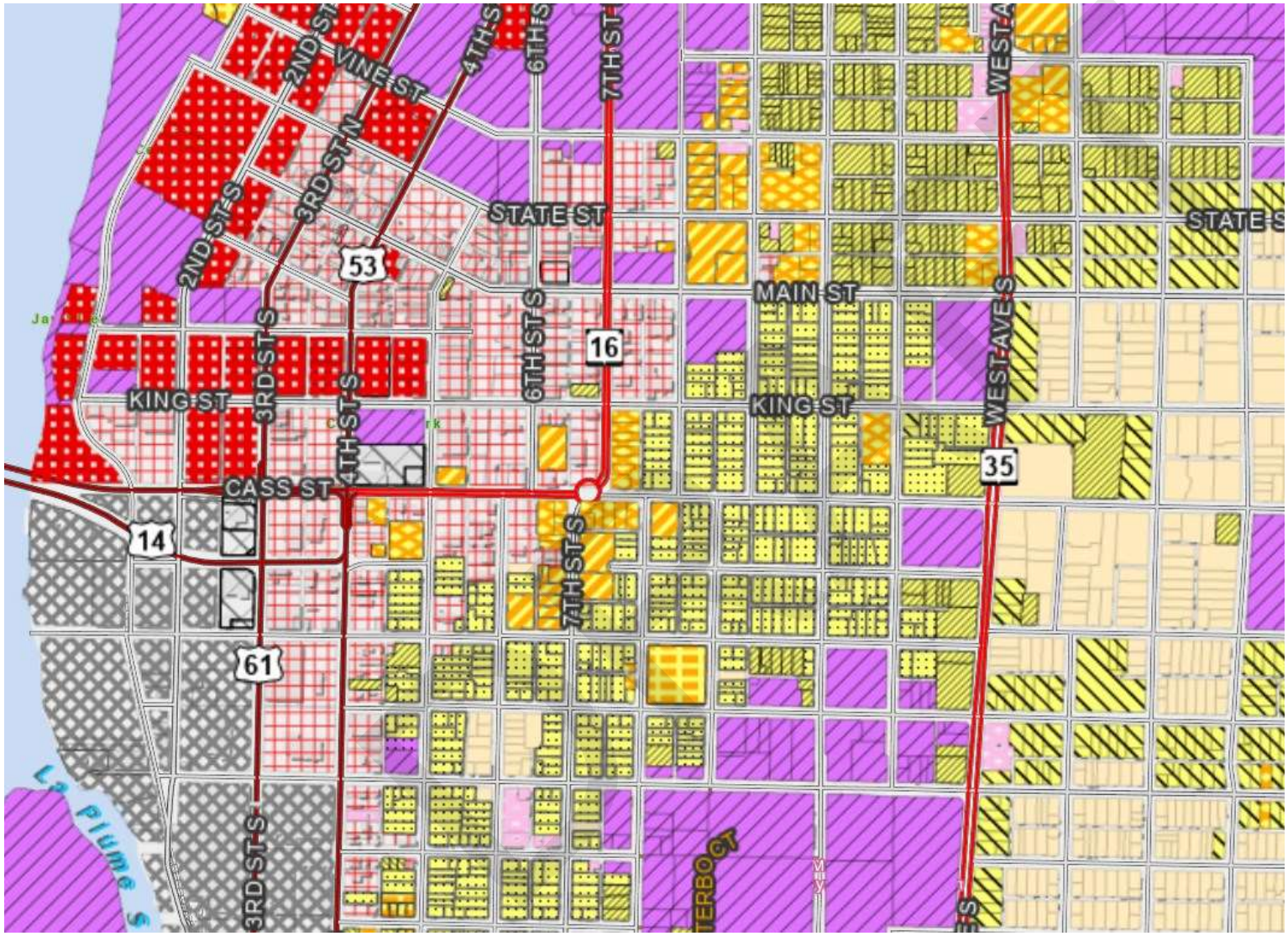
Districts are larger areas where the City, property owners, developers, and investors should concentrate business, commercial, and industrial activity and expansion over the next twenty years. Districts may emphasize a special single use or purpose, but may contain a variety of other uses and activities. For example, a shopping district may have primarily commercial uses with a few small-scale industrial uses mixed in. La Crosse's districts are based on types of dominant uses, include overlapping neighborhoods, and have generally larger geographic extents.

Corridors:

Corridors are linear areas that provide connectivity between the neighborhoods and districts. Corridors can accommodate a variety of land uses, including natural, recreational, and cultural uses. They can range from boulevards and rail lines to rivers and parkways. La Crosse has several major corridors identified based on transportation and environmental features.

Zoning Map—Partial Example

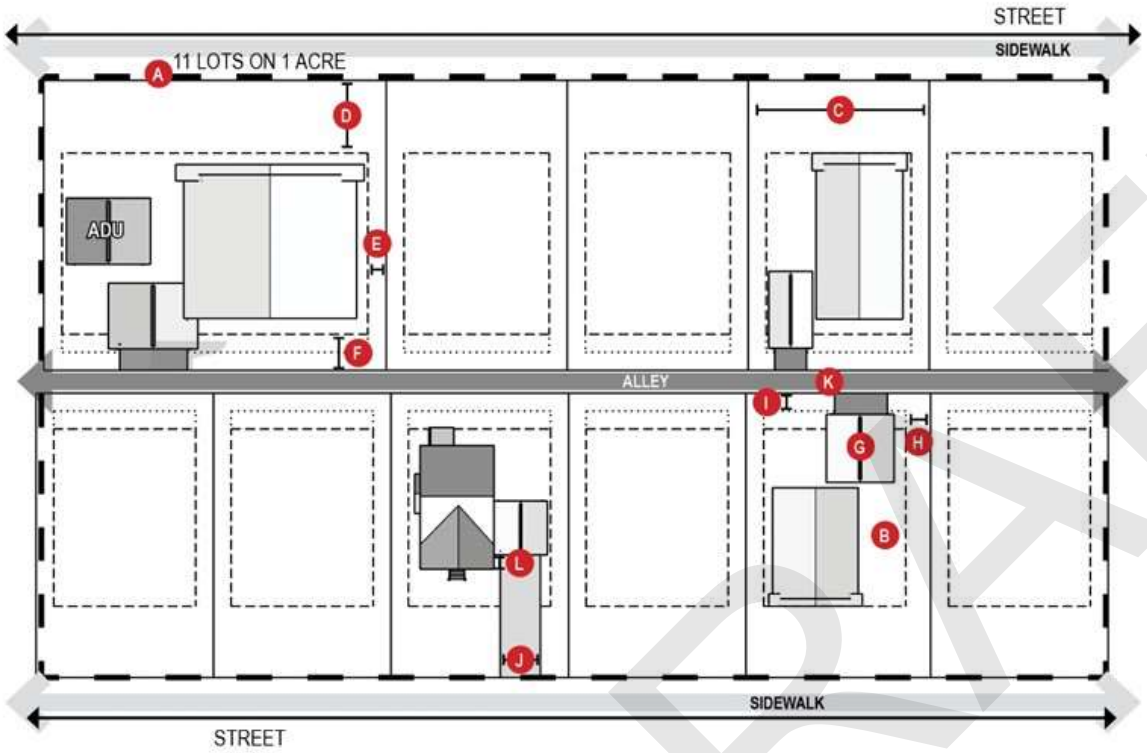
FORWARD LA CROSSE
ZONING CODE UPDATE



Zoning

Zoning Information

- R1 - SINGLE FAMILY
- R2 - RESIDENCE
- WR - WASHBURN RESIDENTIAL
- R3 - SPECIAL RESIDENCE
- R4 - LOW DENSITY MULTIPLE
- R5 - MULTIPLE DWELLING
- R6 - SPECIAL MULTIPLE
- PD- PLANNED DEVELOPMENT
- TND - TRADITIONAL NEIGHBORHOOD
- C1 - LOCAL BUSINESS
- C2 - COMMERCIAL
- C3 - COMMUNITY BUSINESS
- M1 - LIGHT INDUSTRIAL
- M2 - HEAVY INDUSTRIAL
- PS - PUBLIC AND SEMI-PUBLIC
- PL - PARKING LOT
- UT - PUBLIC UTILITY
- CON - CONSERVANCY
- FW - FLOODWAY
- A1 - AGRICULTURAL
- EA



Typical Lot Regulations

A: Lot area

B: Buildable area

C : Lot width

D : Front yard/setback

E: Side yard/setback

F : Rear yard/setback

G : Accessory building

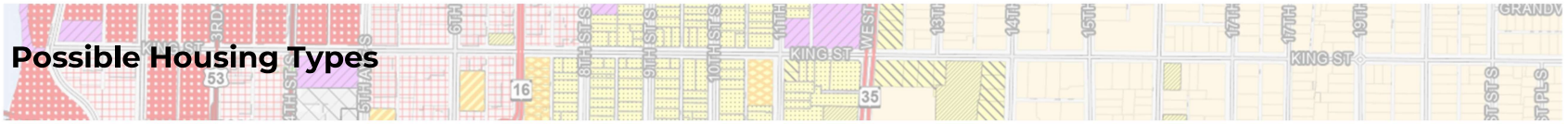
H/I: Parking setback

J: Driveway width

K: Alley width

L: Front loaded garage stepback from main structure

Possible Housing Types



FORWARD LA CROSSE
ZONING CODE UPDATE

HOUSE HACKS
Entrepreneurial adaptations to an existing home that diversify housing options or generate an income.


ATTACHED ADU


DETACHED ADU


SHARED HOUSE


GUEST SUITE


GUEST HOUSE


HOUSE ON WHEELS


FLEX SHED

COMMERCIAL INCUBATION
Low-cost ways to grow and validate an early-stage business.


HOME OFFICE / WORKSHOP


MARKET TENT


PUSH CART


TRAILER


TRUCK


TEMPORARY EVENT


POP-UP SHOP


KIOSK


MAKERSPACE

COMPACT SINGLES
One-unit dwellings that fit on small infill lots alone or in combination with other buildings.


SKINNY HOUSE


COTTAGE


SEMI-DETACHED


ROWNHOUSE


TOWNHOUSE

MIDDLE HOUSING
Multi-unit residential buildings that blend well with detached homes.


STACKED DUPLEX


SIDE-BY-SIDE DUPLEX


FRONT-BACK DUPLEX


APT HOUSE (RENO)


HOME CONVERSION

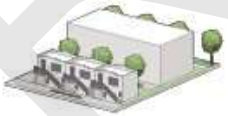

APT HOUSE (NEW)


SMALL APT


STACKED FLATS


WALK-UP APT


COURTYARD APT


ALLEY TOWNHOUSES

NEIGHBORHOOD NODE
Walkable neighborhood destinations like corner stores and workspaces. 1-3 storeys, mixed-use or commercial.


SHOPHOUSE (GRANDFATHERED)


LIVE/WORK


MAINSTREET LITE


MAINSTREET (GRANDFATHERED)


SHOP


MULTI-TENANT COMMERCIAL


SMALL MAINSTREET MIXED


LARGE MAINSTREET MIXED

COMBO
Creative tactics or building combinations that solve for a common development scenario.


PARKING LOT MARKET


BOOTLEG SHOPHOUSE


BOOTLEG TRIPLEX


DETACHED TRIPLEX


GUEST VILLAGE


DOUBLE DUPLEX


DUPLEX COURT


COTTAGE SQUARE


COTTAGE COURT

STEP BUILDINGS
Small-scale
Time-enhanced
Entrepreneurial
Purposeful

Developed by Gregory Johnson and the Incremental Development Alliance.

Much of the form and character of a community is determined by the design of subdivisions and the standards by which they are built. State statutes regulate the technical and procedural aspects of dividing land for development and provide minimum standards for subdivisions related to sanitation, street access and layout.

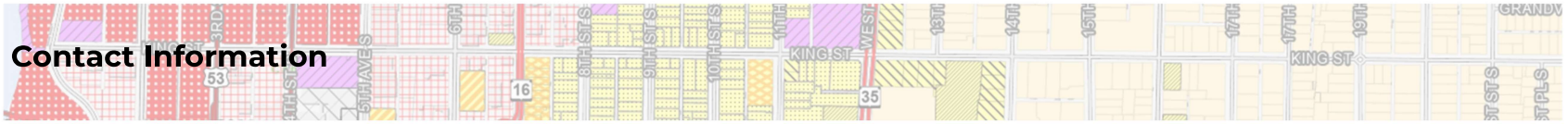
Local communities (counties, towns, cities and villages) may also adopt local land division or subdivision regulations. Local ordinances may be more restrictive than the state with regard to the number or size of lots regulated. Local ordinances tend to focus on the density, layout and design of new developments. They may also require developers to provide public improvements such as roads, storm sewers, water supply systems, landscaping or signage. If a local community does not exert control over local land divisions, the result may be excessive or premature division of land, poor quality or substandard development, or partial or inadequate infrastructure development.

Among its many purposes, land division regulations can help a community to:

- Address health and safety issues such as stormwater runoff and emergency access.
- Ensure new development is adequately served by public facilities such as roads and parks.
- Provide for the efficient placement and delivery of public services and facilities.
- Promote neighborhood designs that meet the needs of residents.
- Ensure accurate legal descriptions of properties.
- Avoid disputes regarding the sale, transfer or subdivision of land.
- Protect other community interests outlined in a comprehensive plan or local ordinance.

State Defined "Subdivision" – a division of a lot, parcel or tract of land by the same owner that creates 5 or more parcels or building sites of 1½ acre or less, *or* successive divisions of land by the same owner within a five year period that result in 5 or more parcels of 1½ acre or less.
Wis. Stat. § 236.02(12)

Local "Land Division" – local ordinances may be more restrictive than the state definition with regard to the number or size of lots regulated. This publication will generally use the term "land division" to refer to all such developments.
Wis. Stat. § 236.45

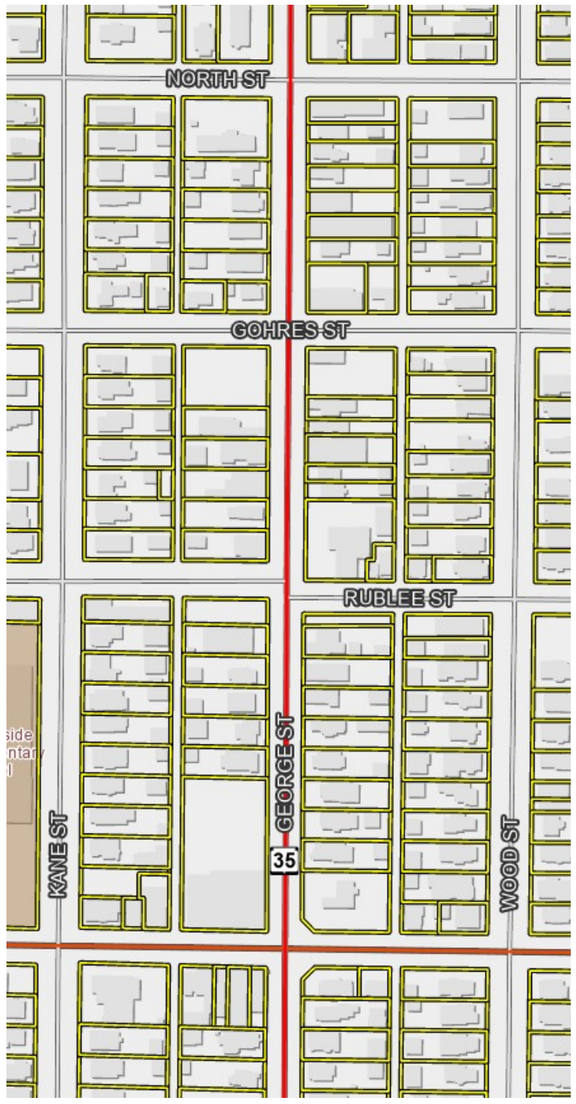

KING ST
KING ST
WEST
53
16
35


Contact Us
FORWARD
LA CROSSE
ZONING
CODE
UPDATE
City of La Crosse City Hall
400 La Crosse St
La Crosse, WI 54601
Contact Us
info@forwardlacrosse.org
(608) 789-7512
www.cityoflacrosse.org
FORWARD
LA CROSSE

Built Form Study | Plate 1: Logan Northside - George St Commercial

NDC Framework: Neighborhood

Urban Pattern



Built Form Examples

Notes

- Existing zoning: C1 Local Business
- Character area: small scale neighborhood retail street embedded in predominant traditional residential pattern
- Key intersection: George & Gillette
- Parcel pattern: incremental, small lot typically alley loaded; some curb cuts from George; common residential lots are 50 feet wide; some residential lots measure 30 feet wide
- Scale: 1 and 2 story retail and residential buildings; commercial buildings tend to have flat roofs and transparent shopfronts
- Yards: Zero lot line for commercial structures; shallow setback for residential along George
- Parking: several surface lots front onto George
- Materials: brick, stucco, lap siding—vinyl and wood
- Street: 64 foot ROW; curb and gutter with sidewalk back of curb; narrow grassed boulevards here and there
- Alley: 20 ft ROW, paved concrete typ.

FORWARD LA CROSSE ZONING CODE UPDATE

City of La Crosse, Wisconsin

PROJECT TEAM:

Claire Stickler, Project Manager MSA Professional Services
cstickler@msa-ps.com

Emily Soderberg, Engagement Manager MSA Professional Services esoderberg@msa-ps.com

Mike Lamb, Mike Lamb Consulting mlambnet@gmail.com

DATE:

February 26, 2025

LA CROSSE ZONING AND SUBDIVISION CODE UPDATE

Overview
The project team has started the existing conditions analysis. This covers a review of existing City plans and policies, as well as an analysis of the existing code.

The project had its first engagement push on the Forward La Crosse website. River Travel Media saw great engagement with the post. There was an excellent open rate, engagement, and click-throughs, and an increase in web traffic to the site. The next pushes will include zoning 101 content to start educating the community about the importance of zoning and this update.

The engagement team is still collaborating with Habitat for Humanity and will have two scheduled events, during housing week. They are scheduled for 12-1 on April 30th and 5pm-6pm on May 1st. In-between those scheduled events we are planning on hosting some pop-up events around town, and having stakeholder discussions. More information to come on the programming of the events.

Attached for the commissions review is a short summary of the existing conditions review and a diagnostic summary of the residential zoning districts.

Project Next Steps

- Finalize zoning 101 content for public engagement pushes.
- Finalize community survey
- Continuation of Existing Conditions Analysis

Memo 1

To: City of La Crosse

From: MSA Zoning Code team

Subject: Existing Conditions Analysis Summary

Date: February 26, 2025

The City of La Crosse has several plans with goals and policies pertaining to zoning. Our analysis of these plans allows us to ensure continuity between policy plans and the code. This memo provides a very brief summary of our analysis of the 2040 Comprehensive Plan, Imagine 2040 La Crosse Downtown Plan, and the 2024 Housing Study.

The Comprehensive Plan outlines the importance of aligning the updated code with the Future Land Use (Neighborhood, Districts, Corridors) Map. The NDC organizes the City into a mix of uses rather than isolated land uses, which opens the opportunity for this code update to integrate form based sections. The form-based approach focuses on the physical relationship of development as the existing built form and how it interacts with the public.

There were several elements of the comprehensive plan that had recommendations relevant to the code update.

1. Environmental
    a. Urban Agriculture and having code amendments that allow for community gardens, local food production and urban farming.
    b. Wellhead protection and code amendments for setbacks
    c. Stormwater Management and Impervious Surface Coverage – amending ordinances decrease allowed impervious coverage.
    d. Shoreland and Floodplain regulation updates to align with State Statute.
2. Historic Preservation (also a big theme in the Imagine 2040 La Crosse Downtown Plan)
    a. Update ordinances to prevent demolition and establish design standards to integrate new construction in those areas.
    b. “the maintenance and care of older buildings should continue to remain a priority for preserving the history of La Crosse” – Community Engagement from Imagine 2040 La Crosse Downtown Plan
3. Housing
    a. Affordability
    b. Infill Development (also theme in Imagine 2040 La Crosse Downtown Plan)
        i. Surface lot re-use
        ii. Neighborhood infill
        iii. Allow for mix of housing types
    c. Property conditions

The City of La Crosse Housing Study from 2024 also outlines several very specific code updates, and provides great direction. In summary.

1. Allowing two-unit homes by right in R-1 and amend the # of bedrooms rule.
2. Provide a better understanding in the code of what mix use is and allow them by right in commercial and high density areas.
3. Provide clearer language in the code update.
4. Reduce minimum lot sizes in R-1, R-2, R-3
5. Reduce residential parking to one space per unit
6. Allow more options for Accessory Dwelling Units.

MSA Memo 2

To:	City of La Crosse
From:	MSA Zoning Code team
Subject:	Diagnostic Summary: Residential Zoning Districts *(Commercial, Industrial and Subdivision review pending)*
Date:	February 21, 2025

The La Crosse Zoning Code is found in Chapter 115 of the Municipal Code and is defined by seven articles and contains the following:

- A total of 211 pages
- 21 districts and 2 overlay districts
- Definitions, penalties, administration, appeals and amendments are found in Articles I and II
- District regulations are found in Article IV; dimensional standards that apply for each district begin on page 26.
- Overlay regulations are defined in Article V.
- Generally, urban standards (and dimensional requirements) are written out in extended sentences and are often difficult to follow.
- It seems, in general, that most of the residential districts share dimensional standards and regulations subject to different time periods, going back to the 1938 edition of the code.
- The word 'special' is used in the title for the R-3 and R-6 districts but it isn't clear exactly what this means or designates.

A high level review of the R districts follows; titles are spelled out as they appear in the body of the code.

Agriculture and Exclusive Agriculture Districts
The code includes an AG district and an Exclusive AG district. The AG district's purpose is to act as a preserve for future urban development. The Exclusive AG district is intended to preserve lands for food and fiber production.

R1 District
Unlike the AG and EX AG districts, the R1 district does not include a direct purpose statement. The R1 Single Family district does allow two-family dwellings provided they were in existence on September 13, 1984 with an odd requirement that a new two family dwelling can replace an existing two family dwelling if it is limited to 2 bedrooms in each unit; no additional bedrooms can be added I any case.

There is no direct mention of lot area and dimensional standards except for the reference to the 'Residence District' (this is a reference to the 1938 zoning code which included two residential districts: Residence and Multiple Dwelling) - apparently this is assumed to refer to the R2 District and these standards apply to R1.

Language and requirements like this this will need to be resolved regarding the uses in the R1 district:

- *Two or more family dwellings provided that such were in existence on April 10, 1997, have not discontinued the number of dwelling units for a period of 12 months or more, and are located within the area bounded by 9th Street-Farnam Street-east-west alley north of Green Bay Street-West Avenue, and*

provided further that such two or more family dwellings may be replaced by another two or more family dwellings as long as such replacement shall not contain more units or bedrooms than existed on April 10, 1997 and other applicable building and zoning code requirements for the R-1 District are met.

R2 District
Like the R1 District, the R2 District does not have a specific purpose statement. It allows two family dwellings but only if they contain no more than three bedrooms per unit. It allows churches that were in existence on August 10, 1989. As in other districts, language makes multiple references to specific dates in time that provide a threshold for permitted uses.

Language and requirements like this this will need to be resolved regarding the uses in the R1 district:

- *The side yard regulations in subsections (3)a. and b. of this section shall apply to all lots including corner lots, except that in the case of a reversed corner lot which faces intersecting streets, the side yard on the street side of such reversed corner lot shall have a width of not less than 50 percent of the front yard depth required on the lots in the rear of such reversed corner lot, and no accessory building on such reversed corner lot shall project beyond the front building line of the lots in the rear of such reversed corner lot; provided, however, that this regulation for reversed corner lots shall not have the effect of reducing the buildable width for the main building to less than 26 feet, or for an accessory building to less than 20 feet, on any lot of record August 27, 1938.*

R3 Special Residence District
This district is meant to allow single family, two-family and up to four or more dwellings provided they were in existence on April 10, 1997. Lot and dimensional standards are the same or similar to R1 and R2.

Standards for yards are laboriously overwritten (similar to R1 and R2) and difficult to interpret in a single reading. These will benefit from summary and simplification:

a. *On every lot in the Special Residence District, there shall be two side yards, one on each side of the building, and except as hereinafter provided, neither of such side yards shall be less than six feet in width, and provided further that for any main building other than a one-family dwelling neither of such side yards shall be less than seven feet in width, except that lots occupied by each attached dwelling unit which is located within a single structure, which is attached along a lot line which is approximately perpendicular to the street right-of-way line, shall not be required to meet this requirement other than the outer side yards of the structure in which the two attached dwelling units are located shall not be less than seven feet in width.*
b. *On any lot having a width of less than 44 feet, and of record on August 27, 1938, the width of no side yard shall be less than that heretofore prescribed less one-fourth foot for each foot said lot is less than 44 feet in width; provided further, however, that no side yard shall be less than four feet in width in any case.*
c. *The side yard regulations in subsections (2)a and b of this section shall apply to all lots including corner lots, except that in the case of a reversed corner lot which faces intersecting streets, the side yard on the street side of such reversed corner lot shall have a width of not less than 50 percent of the front yard depth required on the lots in the rear of such reversed corner lot, and no accessory building on such reversed corner lot shall project beyond the front building line of the lots in the rear of such reversed corner lot; provided, however, that this regulation for reversed corner lots shall not have the effect of reducing the buildable width for the main building to less than 26 feet, or for an accessory building to less than 20 feet, on any lot of record August 27, 1938.*

Low Density Multiple Dwelling District (R4)
This district is shown as the R4 district on the map but is not titled as that in the body of the code and allows multiple dwelling buildings that contain more than 4 units. Similar to the other R districts language and standards regarding lot area and yards are very overwritten and can benefit from simplification and more direct language.

Multiple Dwelling District (R5)
This district is "nested" into the R4 and thus any use allowed in R4 is permitted in this district. Uses include boarding house, room houses, fraternities and sororities (occupied by less than 6 persons). Height is allowed up to 55 feet and may exceed this per section 115-390 (Art. VII Supplemental Regulations).

R-6 Special Multiple Dwelling District
This district is "nested" into the R5 and thus any use allowed in R5 is permitted in this district. Uses include boarding house, room houses, fraternities and sororities (occupied by less than 6 persons). Height is allowed up to 55 feet and may exceed this per section 115-390 (Art. VII Supplemental Regulations).

Washburn Neighborhood District (R-7)
The purpose of the district is to encourage people to work and live in the City of La Crosse and will encourage single family dwellings. The district standards and regulations are "nested" in the R1 district (but excludes section 114-142(a) (10). A unique condition in this district is the requirement of Architectural Control that is to encourage physical development to a higher degree of aesthetic satisfaction per approval of the Design Review Board.

Map Diagrams
In a separate document we reviewed lot sizes for R-1, R-2, R-3 and the Washburn zoning districts based on the threshold of 5000 sf, lots that fall between 5000 -7200 sf and lots over 7200 sf. Lots under 5000 sf are shown in red and based on how the districts are defined many of these lots, we assume, were platted in 1938 or earlier so are not technically nonconforming. Nevertheless there is a distinct pattern (and a significant number) of smaller lots that seem to be functioning well today. More analysis is needed which will help determine how best to define appropriate standards.

R-1 = 10,833 Parcels
>7,200 sqft = 4,878 Parcels (45%)
5,000-7,200 sqft = 4,454 Parcels (41%)
<5,000 sqft = 1,501 Parcels (13.9%)

R-2 = 1,298 Parcels
>7,200 sqft = 504 Parcels (38.8%)
5,000-7,200 sqft = 522 Parcels (40.2%)
<5,000 sqft = 272 Parcels (20.9%)

R-3 = 4 Parcels
>7,200 sqft = 1 Parcel (25%)
5,000-7,200 sqft = 2 Parcels (50%)
<5,000 sqft = 1 Parcel (25%)

Washburn Neighborhood District = 451 Parcels
>7,200 sqft = 185 Parcels (41%)
5,000-7,200 sqft = 111 Parcels (24.6%)
<5,000 sqft = 155 Parcels (34.4%)

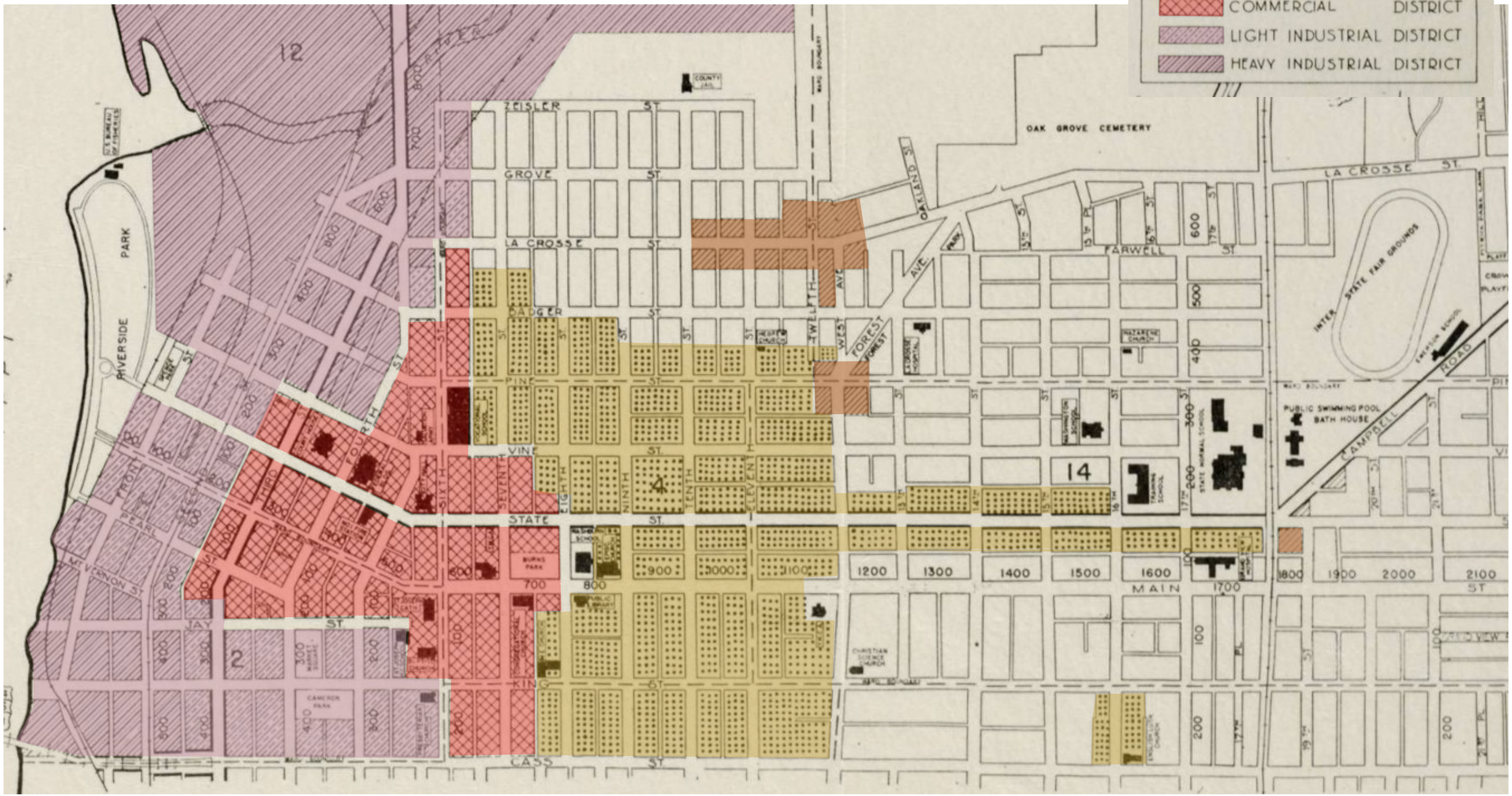
Attachments
Attachment 2.1 - Summary Table of Dimensional Standards

Attachment 2.2 Historic Zoning Map
Also attached as a zoning map from 1938 that shows the very simple zoning organization of industrial, commercial, multi-family and single family zoning districts. This simplistic approach may have some benefits as we continue to consider regulations and how best to apply them.

Attachment 2.1: Summary of Dimensional Standards

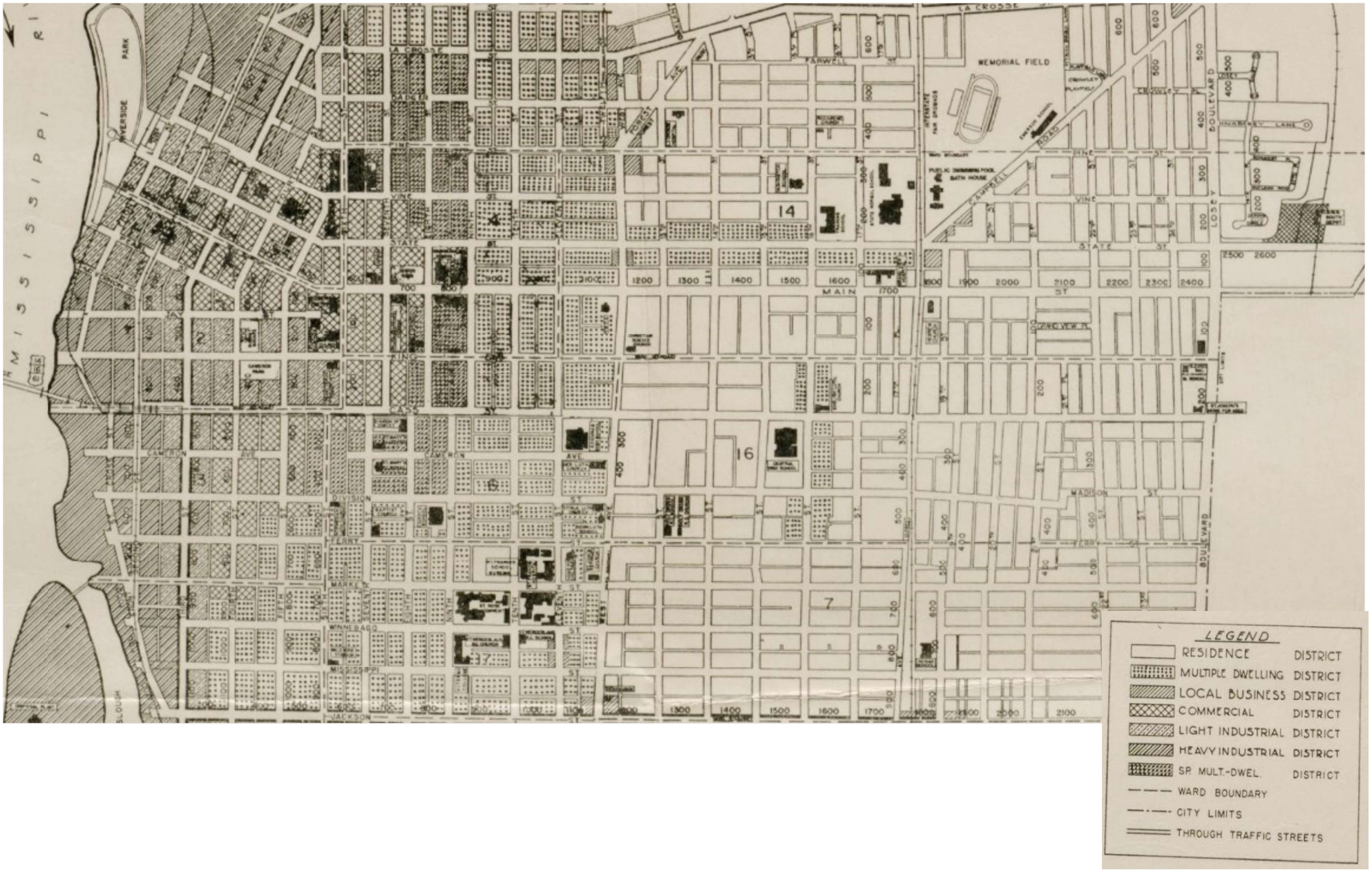
	AG	EX AG	R1	R2	R3	R4	R5	R6	Washburn
lot area	7200	35ac							
before 1938 less than:	5000sf		5000sf	5000sf	5000 sf	5000 sf	5000 sf	5000sf	5000sf
between 1938 & 1966:	5000+sf		5000+sf	5000+sf	5000+ sf	5000 sf	5000+ sf	5000+sf	5000+sf
after 1966:	7200sf		7200sf	7200sf	7200 sf	7200 sf	7200 sf	7200 sf	7200sf
other		20,000sf							
lot area per per family					1800 sf/unit	1800sf/unit	1500sf/unit	400sf/unit	
front yard			25 fyt	25 ft	25 ft	20 ft	20ft	15 ft	25 ft
side yard		6 ft	6 ft	6 ft	6 ft	6 ft	6 ft	6 ft	6 ft
lots as of 1938 or before			4 ft	4 ft					4 ft
rear yard		6 ft	20% depth	20% depth	20 % depth	20% depth	20% depth	20% depth	20% depth
max. height		35 ft	35 ft	35 ft	35 ft	35 ft	55 ft	100 ft	35 ft
max. height, other		2x fr nearest					55ft		
		lot line							
public street frontage	min 30 ft	none	min. 30 ft	min. 30 ft	min 30 ft	none	min 30 st	min 30 ft	min 30 ft
court width not to exceed							24 ft	24 ft	
architectural control									Design Rev Bd.

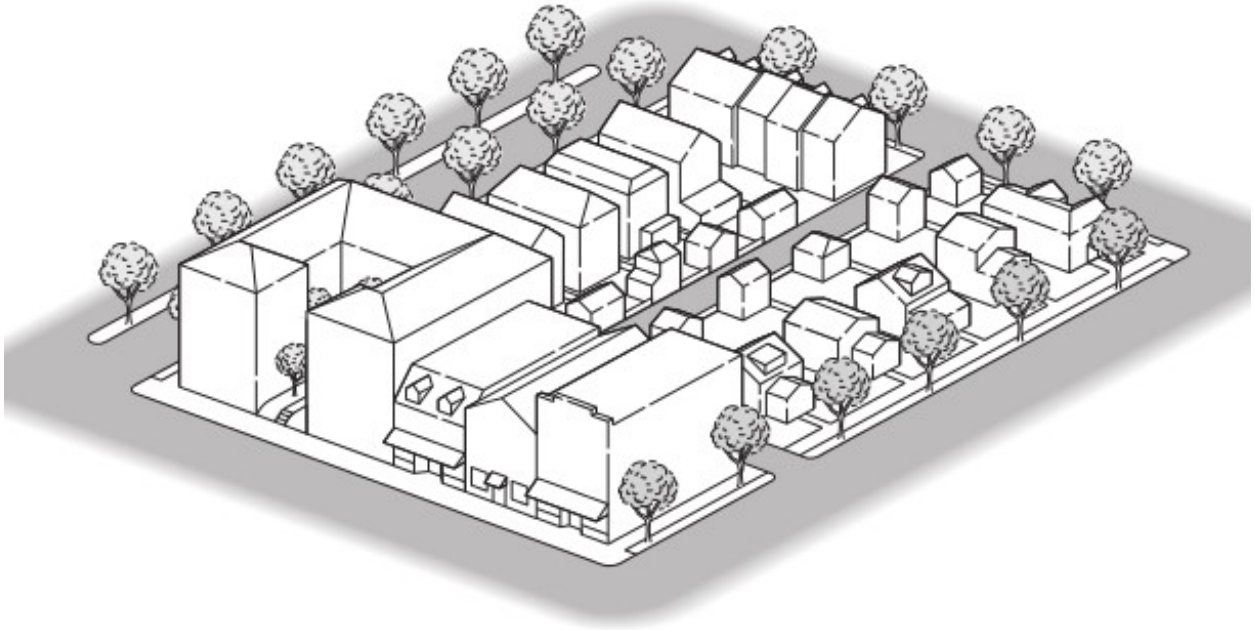
Attachment 2.2: Excerpt from 1938 Zoning Map



Summary of lot standards

	AG	EX AG	R1	R2	R3	R4	R5	R6	Washburn
lot area	7200	35ac							
before 1938 less than:	5000sf		5000sf	5000sf	5000 sf	5000 sf	5000 sf	5000sf	5000sf
between 1938 & 1966:	5000+sf		5000+sf	5000+sf	5000+ sf	5000 sf	5000+ sf	5000+sf	5000+sf
after 1966:	7200sf		7200sf	7200sf	7200 sf	7200 sf	7200 sf	7200 sf	7200sf
other		20,000sf							
lot area per per family					1800 sf/unit	1800sf/unit	1500sf/unit	400sf/unit	
front yard			25 fyt	25 ft	25 ft	20 ft	20ft	15 ft	25 ft
side yard		6 ft	6 ft	6 ft	6 ft	6 ft	6 ft	6 ft	6 ft
lots as of 1938 or before			4 ft	4 ft					4 ft
rear yard		6 ft	20% depth	20% depth	20 % depth	20% depth	20% depth	20% depth	20% depth
max. height	Mf district	35 ft	35 ft	35 ft	35 ft	35 ft	55 ft	100 ft	35 ft
max. height, other		2x fr nearest					55ft		
		lot line							
public street frontage	min 30 ft	none	min. 30 ft	min. 30 ft	min 30 ft	none	min 30 st	min 30 ft	min 30 ft
court width not to exceed							24 ft	24 ft	
architectural control									Design Rev Bd.


MISSISSIPPI R.
RIVERSIDE PARK
LA CROSSE
FARNELL
MEMORIAL FIELD
CAMPBELL ROAD
BOULEVARD
PINE
VINE
STATE
MAIN
ST
CAMERON AVE
FERRY
WINNEBAGO
MISSISSIPPI
JACKSON
MADISON
14
16
7
17
LEGEND
RESIDENCE DISTRICT
MULTIPLE DWELLING DISTRICT
LOCAL BUSINESS DISTRICT
COMMERCIAL DISTRICT
LIGHT INDUSTRIAL DISTRICT
HEAVY INDUSTRIAL DISTRICT
SP. MULT.-DWEL. DISTRICT
WARD BOUNDARY
CITY LIMITS
THROUGH TRAFFIC STREETS



Zoning & Subdivision Update

City Plan Commission

Study Guide | *June 30, 2025*

FORWARD LA CROSSE

ZONING CODE UPDATE

Study Guide

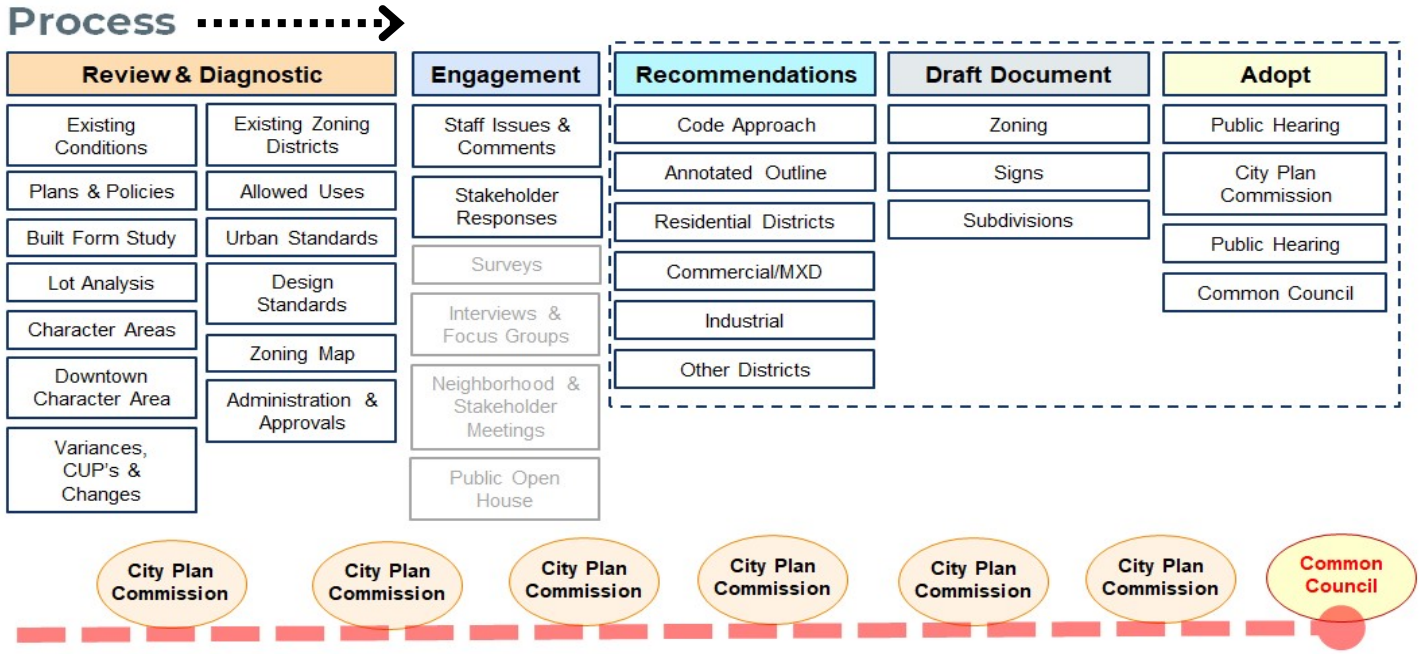
FORWARD LA CROSSE ZONING CODE UPDATE

Introduction

Use this study guide to help organize the information, analysis and steps to better understand the content of the zoning code and subdivision regulations including existing conditions, code diagnostics, applicable plans and policies, built form and character analysis. Below is the general process for how the code and subdivision regulations will be updated based on direction and input from community stakeholders, staff comments and guidance from the City Plan Commission.

Topics to Review

1) Memo 1 - Conditions & Plans
2) Memo 2 - District Summaries & Subdivisions
3) Built Form Study
4) Character Areas
5) Downtown Character Areas
6) Lot Size Study
7) Memo 3—Administration
8) Approval Flowchart Diagrams



Notes

Memo 1: Existing Conditions

a) 2040 Comprehensive Plan

b) 2024 Housing Study Summary

c) Analysis to Impediments to Fair Housing Choice

d) Imagine 2040 Downtown Plan

e) History of Variances

f) History of Conditional Use Permits

g) Other adopted plans & policies

!/?

- *What are the key policies from the Comp Plan driving the zoning and subdivision updates?*
- *Review the Housing Study recommendations relative to zoning code content.*

!/?

Population information from the Comp Plan:

- *Population is projected to moderately increase from 50,869 (2021) to 53,480 (2050)*
- *As of Jan 1, 2024 the population was 52,115 (WI Department of Admin. Estimate)*

Residential land use makes up about 19% of the total land area in the City. Residential definitions from the Comp Plan (p. 32):

- ***Low-Density Residential**—mostly one-two story single-family structures but may also include two- and three-unit dwellings; other housing types such as townhomes and rowhomes may be compatible, especially if developed to fit a single-family mold*
- ***Medium Density Residential** - may include a variety of housing types including townhomes, rowhomes, small multi-family buildings, and large multi family buildings of two-four stories*
- ***High-Density Residential** - includes multi-family units in structures taller than three stories; interconnected within surrounding neighborhoods and as well as near major streets connections and employment/ commercial areas.*

Notes

!/? *Land Use and Zoning matrix from the Comp Plan (p. 69)*

Zoning Guide for future land use: how to use this matrix

As the neighborhoods, districts, and corridors chapter guides property owners and policymakers in land use decisions, it also appropriately locates development within La Crosse's zoning code. Any zoning amendments should refer to this matrix to ensure the proposed zoning is consistent with the Future Land Use (NDC) Map.

Future Land Use	Zoning																	
	Single-Family Residential R-1	Residence District R-2	Special Residence R-3	Low-Density Multiple Dwelling District R-4	Multiple Dwelling District R-5	Special Multiple Dwelling District R-6	Washburn Neighborhood Residential District	Local Business District	Community Business District	Commercial District	Light Manufacturing District M-1	Heavy Industrial District	Public Utility District	Parking Lot District	Public and Semi-Public District	Conservancy District	Agricultural District	Exclusive Agricultural District
Low-Density Residential	C	C	C	C	i	i	C	i	i	i	i	i	i	i	i	C	i	i
Medium-Density Residential	i	C	C	C	C	i	C	i	i	i	i	i	i	i	i	C	i	i
High-Density Residential	i	i	i	i	C	C	i	i	i	i	i	i	i	i	i	C	i	i
Low-Intensity Mixed-Use	i	i	i	C	C	i	C	C	C	i	i	i	i	i	C	i	i	i
High-Intensity Mixed-Use	i	i	i	i	C	C	i	C	C	C	i	i	i	i	C	i	i	i
Neighborhood Retail/ Commercial	i	i	i	i	i	i	i	C	C	C	i	i	i	i	i	i	i	i
Commercial	i	i	i	i	i	i	i	C	C	C	C	i	i	i	i	i	i	i
Industrial	i	i	i	i	i	i	i	i	i	i	C	C	i	i	i	i	i	i
Institutional	i	i	i	i	i	i	i	i	i	i	i	i	C	i	C	i	i	i
Parks & Open Space	i	i	i	i	i	i	i	i	i	i	i	i	i	i	i	C	C	C
Conservancy, Wetlands, Agriculture	i	i	i	i	i	i	i	i	i	i	i	i	i	i	i	C	C	C

C= Consistent | i=Inconsistent

Notes

Memo 2: Diagnostic Summary

a) Introduction

b) Residential Districts

c) Residential Map Diagrams

d) Commercial Districts

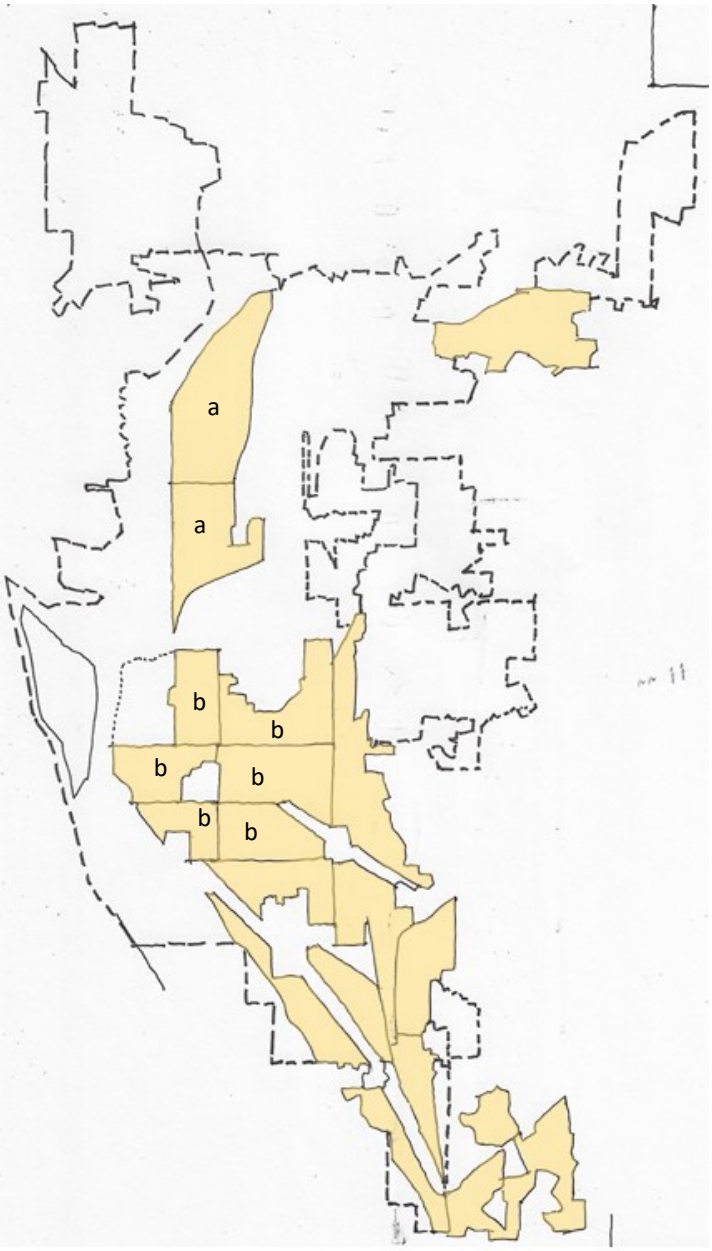
e) Industrial Districts

f) Overlay & Other Districts

g) Summary Dimensional Standards Table

h) Historic Zoning Map

i) Chapter 113 Subdivisions



!/?

- *Residential neighborhood boundaries are shown in yellow at right. The Logan Northside and Lower Northside neighborhoods (a) contain a more consistent low density, detached residential pattern. Neighborhoods in the central part of the city (e.g., Downtown, Grandview-Emerson, Washburn, Weigent-Hogan, Powell-Poage-Hamilton and Holy Trinity-Longfellow) include a similar street and block pattern but contain more corridors and districts that tend to support greater density and diversity with housing, related uses and development changes.*

Notes

Built Form Study*

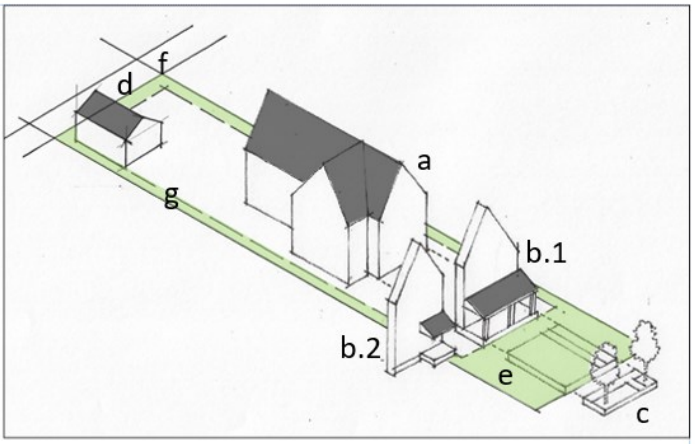
a) 18 Neighborhoods

b) 12 Districts

c) 5 Corridors

**based on the NDC Framework as defined in the Comp Plan*

Typical single family lot arrangement and built pattern



Common features

A. 1.5 to 2 story
B.1 Stoop entry
B.2 Porch entry
C. Sidewalk, planted blvds & on-street parking
D. Off street parking: alley loaded
E. Front yards: 15-25 ft
F. Rear yards: 6-8 ft
G. Side yard: one tends to be shifted more to one side

!/?

- *Compare the built form study characteristics of the various neighborhoods to confirm physical form patterns for neighborhood scale residential and commercial uses.*
- *Should changes to urban and dimensional standards recognize and respond to the local context and character?*

Notes

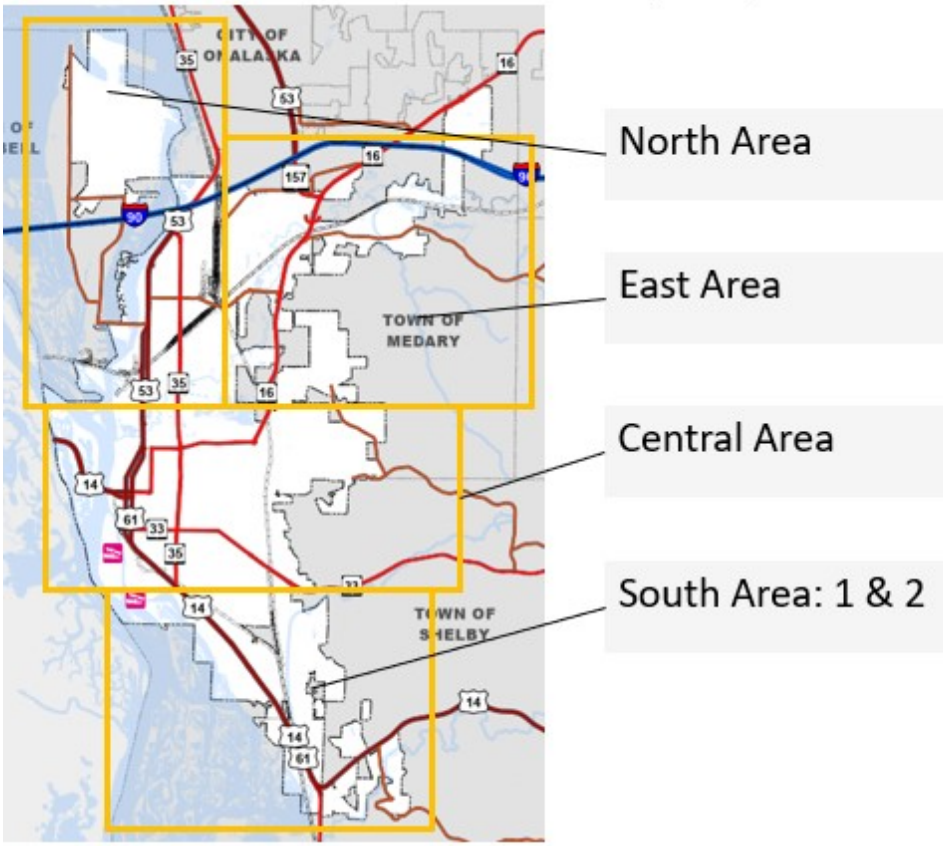
Character Areas

a) North Area

b) East Area

c) Central Area

d) South Area 1 & 2



!/?

- *Areas adjacent to a number of districts include "district orbits", areas that tend to attract interest, investment and influence that may be less compatible with established neighborhood character.*
- *Do these areas need additional standards and regulations relative to scale, density and physical form (e.g., the residential areas west, south and east of the UW campus)?*

Notes

Downtown Character Areas

a) Downtown Area

b) Core

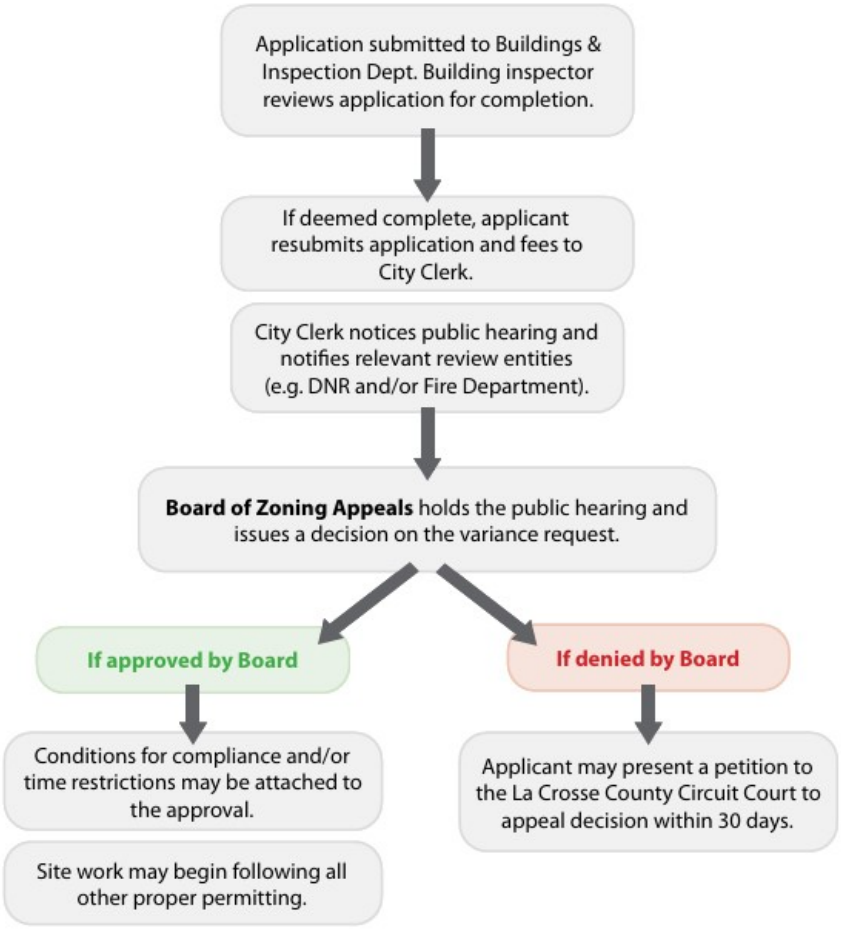
c) Main Street

!/?

- *Note distinctions between the "main street" area and the larger downtown boundary.*
- *Some new development have included parking on the ground floor (within the building envelope) fronting the pedestrian public realm. Should this condition be differentiated in the "main street" area vs. other areas of downtown.*

Notes

Approval Process Diagrams: Variance (Board of Zoning Appeals)



Phase Duration:

~1 month
(Application period: 13 days before previous Board meeting to 14 days prior to current meeting)

2 weeks
(14 days prior to Board meeting)

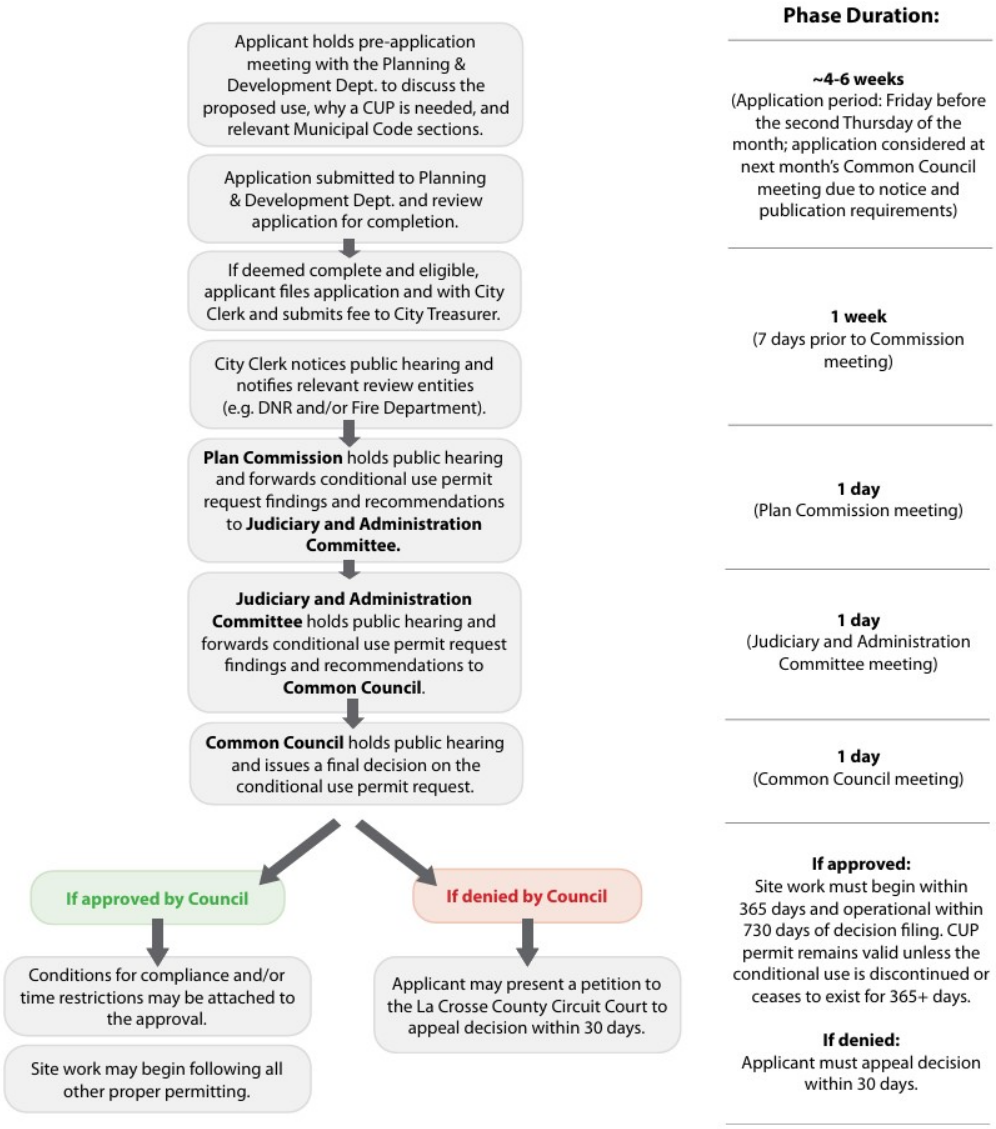
1 day
(Board of Zoning Appeals meeting)

If approved:
Site work must begin within 180 days of decision filing.

If denied:
Applicant must appeal decision within 30 days.

Notes

Approval Process Diagrams: Conditional Use Permit



Phase Duration:

~4-6 weeks
(Application period: Friday before the second Thursday of the month; application considered at next month's Common Council meeting due to notice and publication requirements)

1 week
(7 days prior to Commission meeting)

1 day
(Plan Commission meeting)

1 day
(Judiciary and Administration Committee meeting)

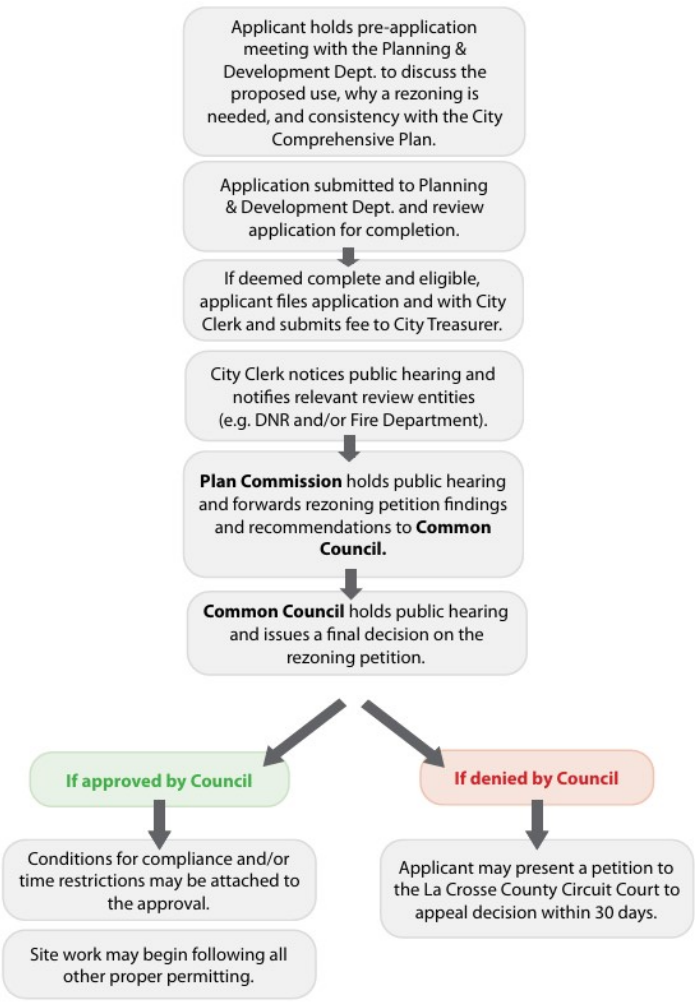
1 day
(Common Council meeting)

If approved:
Site work must begin within 365 days and operational within 730 days of decision filing. CUP permit remains valid unless the conditional use is discontinued or ceases to exist for 365+ days.

If denied:
Applicant must appeal decision within 30 days.

Notes

Approval Process Diagrams: Zoning Amendment (Rezoning)



Phase Duration:

~4-6 weeks
(Application period: Friday before the second Thursday of the month; application considered at next month's Common Council meeting due to notice and publication requirements)

2 weeks
(14 days prior to Commission meeting)

1 day
(Plan Commission meeting)

1 day
(Common Council meeting)

If approved:
Site work cannot begin until the rezoning is finalized and filed, and a building permit has been issued by the Fire Department. Permits will not be issued during the rezoning process unless the applicant requests and receives authorization from the Judiciary and Administration Committee of the Common Council following a public hearing.

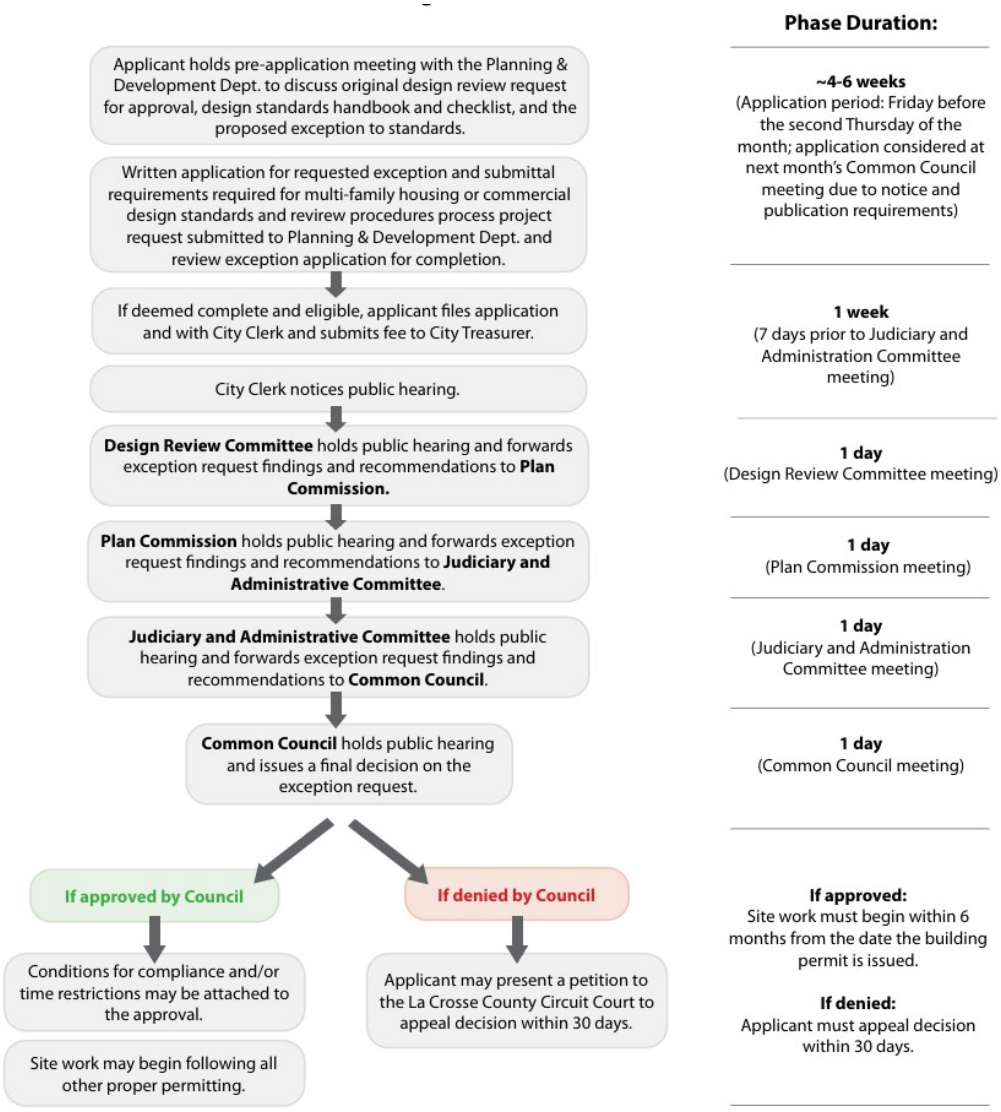
If denied:
Applicant must appeal decision within 30 days.

Note:

1. Petition for zoning amendment may be initiated by one or more property owners of the property within the area proposed to be changed.
2. Petitions to change any flood district boundary or floodplain regulation may require technical data, including aerial maps, flood elevations, and development details, as determined by the Fire Department - Division of Fire Prevention and Building Safety and DNR.
3. Floodplain zoning amendments require approval from the DNR and FEMA before becoming effective, except for map changes tied to the La Crosse River Valley Floodplain Study.

Notes

Approval Process Diagrams: Request for Exemption to Design Standards



Phase Duration:

~4-6 weeks
(Application period: Friday before the second Thursday of the month; application considered at next month's Common Council meeting due to notice and publication requirements)

1 week
(7 days prior to Judiciary and Administration Committee meeting)

1 day
(Design Review Committee meeting)

1 day
(Plan Commission meeting)

1 day
(Judiciary and Administration Committee meeting)

1 day
(Common Council meeting)

If approved:
Site work must begin within 6 months from the date the building permit is issued.

If denied:
Applicant must appeal decision within 30 days.

Note:

1. Ch. 11 Art. VII Div. 3. Multi-Family Housing Design Standards.
2. Ch. 11 Art. VII Div. 4. Commercial Design Standards. The applicant is encouraged to meet with City staff at the schematic stage, the design stage, and at the submittal stage. Members of the Design Review Committee will be encouraged to attend the pre-application meeting to facilitate the development review process. Developers are strongly encouraged to obtain Design Review Committee approval prior to submitting plans to the State for State review and approval.

Notes

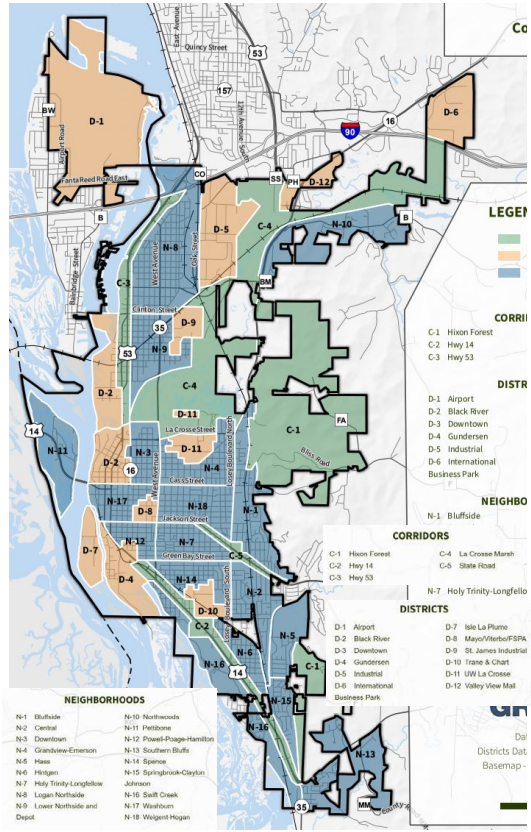
City Plan Commission Meeting

June 30, 2025

Agenda

a. Introduction & April recap
b. Scope, Schedule & Progress
c. Update Process
d. Study Guide
e. General Ideas: Residential, Commercial & Industrial
f. Next steps

Comprehensive Plan - NDC Framework



Neighborhoods:

La Crosse neighborhoods have distinct identities, housing characteristics, unique history, and geographic features. They are typically compact, pedestrian-friendly, and mixed-use. Neighborhoods may contain a number of supporting uses and activities that serve residents, such as parks, schools, libraries, small-scale retail, and other services. Neighborhood associations were consulted during the creation of this comprehensive plan to help identify the vision and land uses within La Crosse's neighborhoods.

Districts:

Districts are larger areas where the City, property owners, developers, and investors should concentrate business, commercial, and industrial activity and expansion over the next twenty years. Districts may emphasize a special single use or purpose, but may contain a variety of other uses and activities. For example, a shopping district may have primarily commercial uses with a few small-scale industrial uses mixed in. La Crosse's districts are based on types of dominant uses, include overlapping neighborhoods, and have generally larger geographic extents.

Corridors:

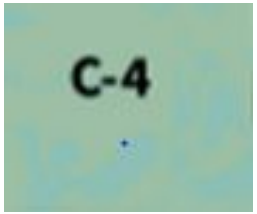
Corridors are linear areas that provide connectivity between the neighborhoods and districts. Corridors can accommodate a variety of land uses, including natural, recreational, and cultural uses. They can range from boulevards and rail lines to rivers and parkways. La Crosse has several major corridors identified based on transportation and environmental features.

The Built Form Study:

- samples the typical development pattern for each of the neighborhoods, districts and corridors
- better understand the physical dimensions of building type, site plan, street frontage and block pattern as well as other conditions.

18 Neighborhoods

12 Districts



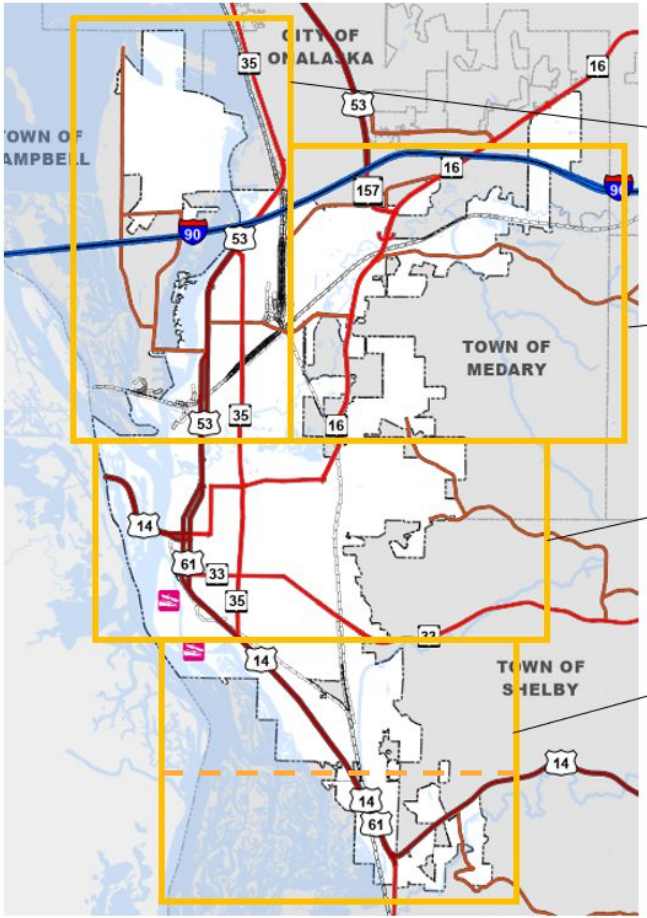
5 Corridors

General Character Areas

Map Key

Character Areas

TN – Traditional Neighborhood
TNV – Traditional Neighborhood Varied
TSS – Traditional Shopping Street
CN – Contemporary Neighborhood
UMX – Urban Mixed Residential
MN – Modular Neighborhood
CMX – Corridor Mixed
CSF – Commercial Small Format
CLF – Commercial Large Format
C/E/M – Campus/Ed./Med.
DT- Downtown
DC- Downtown Core/Main Street
ISL – Industrial Small Lot
ILL – Industrial Large Lot



North Area

East Area

Central Area

South Area: 1 & 2

General Character Areas


Traditional neighborhood


Traditional neighborhood varied


Contemporary neighborhood


Urban mixed residential


Modular neighborhood


Traditional shopping street


Corridor mixed


Corridor commercial: large & small format


District (medical/ed)

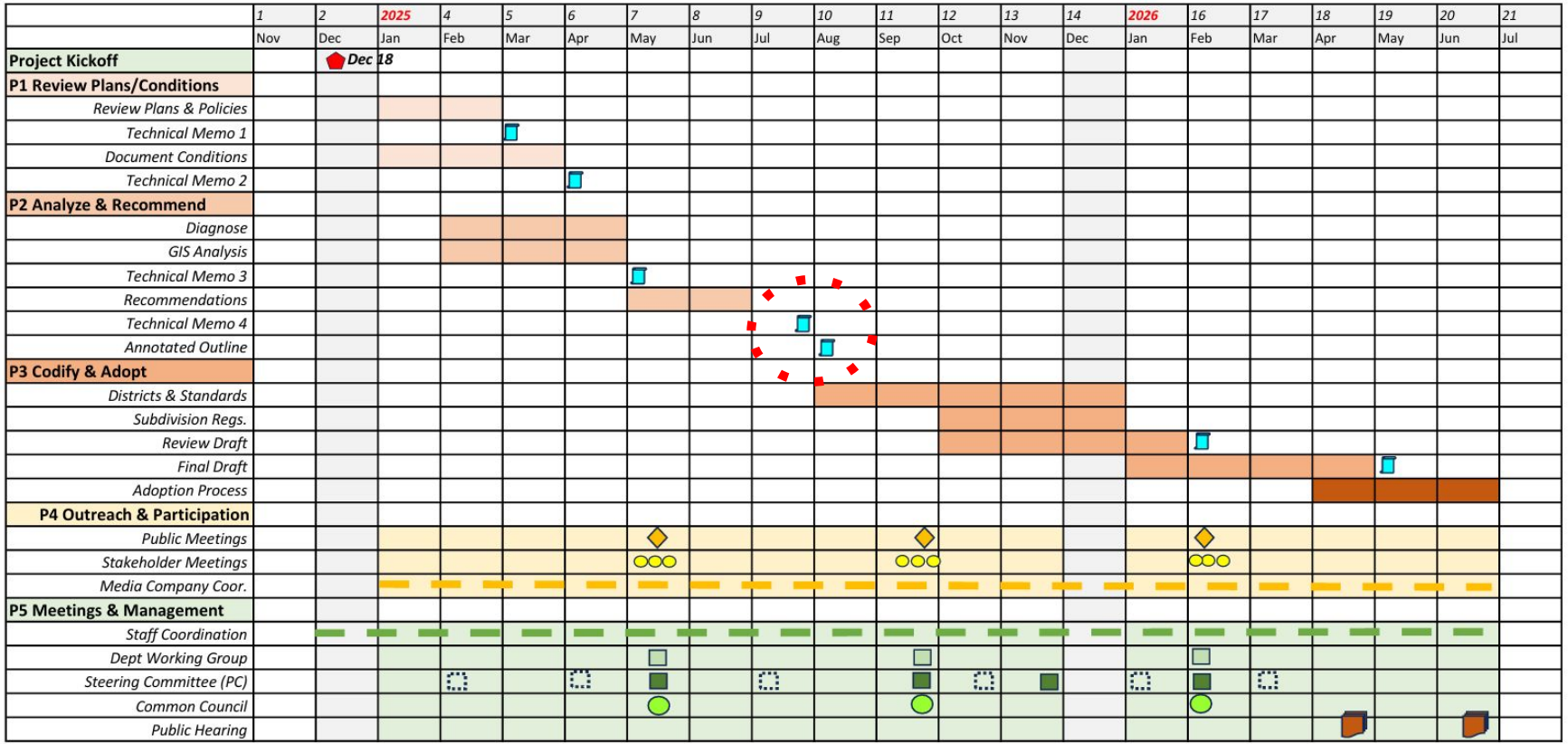

Downtown


Downtown Core (Main Street)


Industrial large lot


Industrial small lot

Scope, Schedule & Progress



FORWARD LA CROSSE 753 CODE UPDATE

Process

Review & Diagnostic

- Existing Conditions
- Plans & Policies
- Built Form Study
- Lot Analysis
- Character Areas
- Downtown Character Area
- Variances, CUP's & Changes
- Existing Zoning Districts
- Allowed Uses
- Urban Standards
- Design Standards
- Zoning Map
- Administration & Approvals

Engagement

- Staff Issues & Comments
- Stakeholder Responses
- Surveys
- Interviews & Focus Groups
- Neighborhood & Stakeholder Meetings
- Public Open House

Recommendations

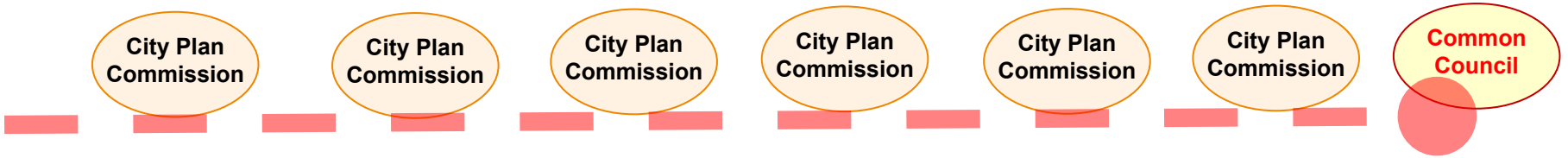
- Code Approach
- Annotated Outline
- Residential Districts
- Commercial/MXD
- Industrial
- Other Districts

Draft Document

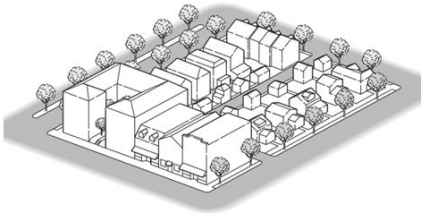
- Zoning
- Signs
- Subdivisions

Adopt

- Public Hearing
- City Plan Commission
- Public Hearing
- Common Council



Study Guide



Zoning & Subdivision Update
City Plan Commission

Study Guide | *June 30, 2025*

FORWARD LA CROSSE ZONING CODE UPDATE

Study Guide

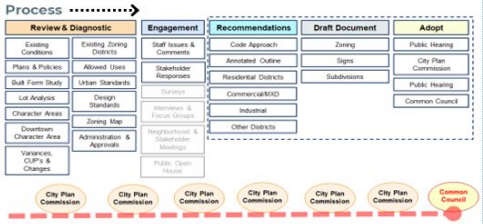
Introduction

Use this study guide to help organize the information, analysis and steps to better understand the content of the zoning code and subdivision regulations including existing conditions, code diagnostics, applicable plans and policies, built form and character analysis. Below is the general process for how the code and subdivision regulations will be updated based on direction and input from community stakeholders, staff comments and guidance from the City Plan Commission.

Topics to Review

1) Memo 1 - Conditions & Plans
2) Memo 2 - District Summaries & Subdivisions
3) Built Form Study
4) Character Areas
5) Downtown Character Areas
6) Lot Size Study
7) Memo 3—Administration
8) Approval Flowchart Diagrams

Process



Notes

Study Guide

Memo 1: Existing Conditions

a) 2040 Comprehensive Plan
b) 2024 Housing Study Summary
c) Analysis to Impediments to Fair Housing Choice
d) Imagine 2040 Downtown Plan
e) History of Variances
f) History of Conditional Use Permits
g) Other adopted plans & policies

!/?

- *What are the key policies from the Comp Plan driving the zoning and subdivision updates?*
- *Review the Housing Study recommendations relative to zoning code content.*

!/?

Population information from the Comp Plan:

- *Population is projected to moderately increase from 50,869 (2021) to 53,480 (2050)*
- *As of Jan 1, 2024 the population was 52,115 (WI Department of Admin. Estimate)*

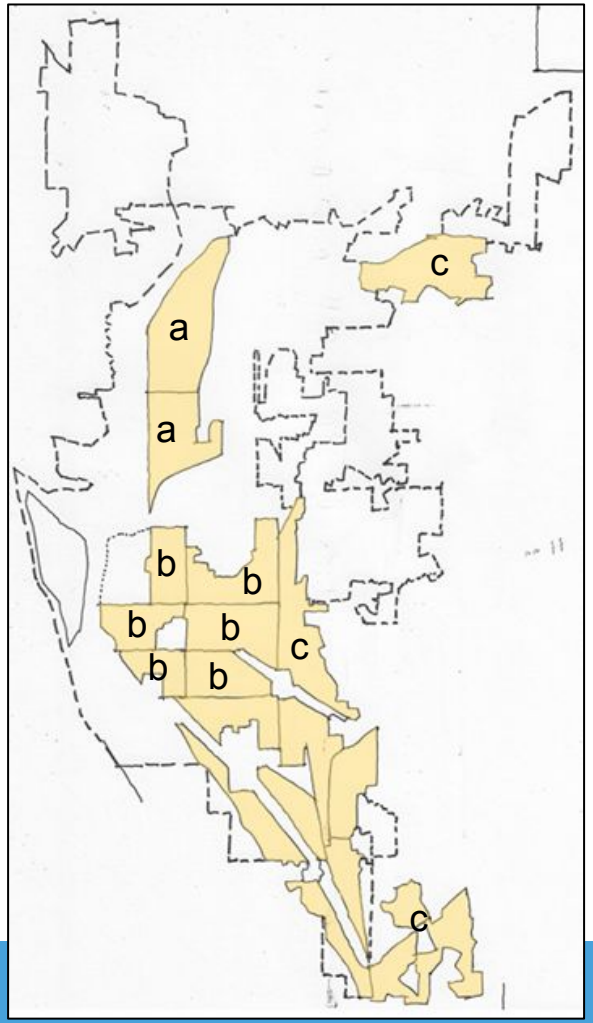
Residential land use makes up about 19% of the total land area in the City. Residential definitions from the Comp Plan (p. 32):

- ***Low-Density Residential**—mostly one-two story single-family structures but may also include two- and three-unit dwellings; other housing types such as townhomes and rowhomes may be compatible, especially if developed to fit a single-family mold*
- ***Medium Density Residential** - may include a variety of housing types including townhomes, rowhomes, small multi-family buildings, and large multi family buildings of two-four stories*
- ***High-Density Residential** - includes multi-family units in structures taller than three stories; interconnected within surrounding neighborhoods and as well as near major streets connections and employment/ commercial areas.*

Notes

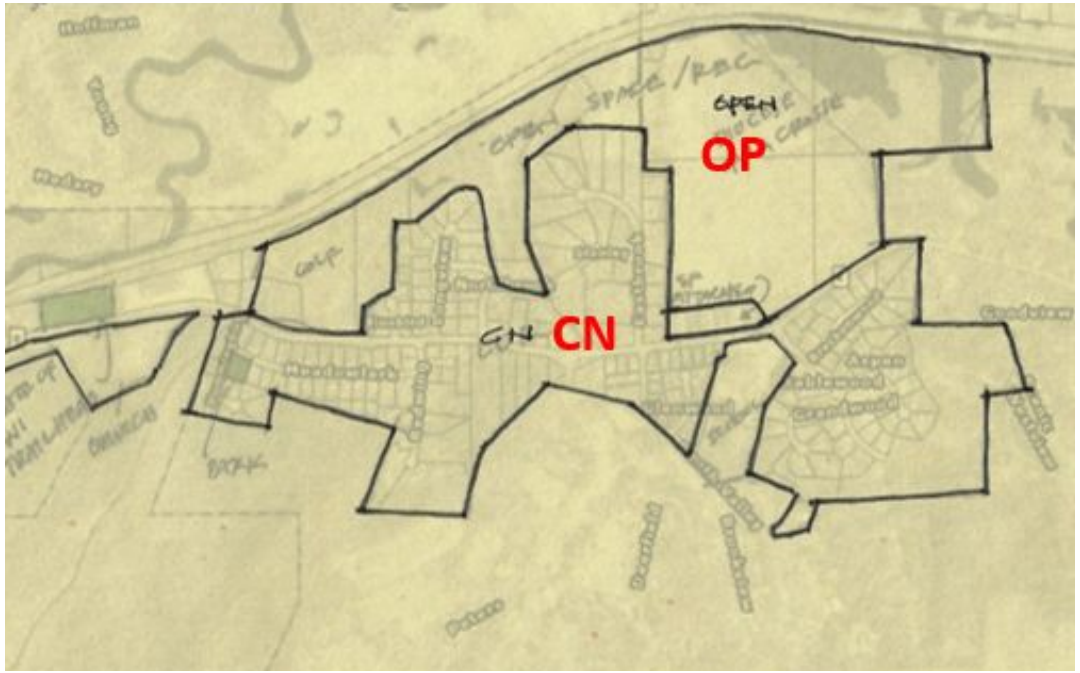
General Ideas for Districts: *Residential*

- *Residential neighborhood boundaries are shown in yellow at right*
- *(a) The Logan Northside and Lower Northside neighborhoods contain a more consistent low density, detached residential pattern*
- *(b) Neighborhoods in the central part of the city (e.g., Downtown, Grandview-Emerson, Washburn, Weigent-Hogan, Powell-Poage-Hamilton and Holy Trinity-Longfellow) include more corridors and districts that tend to influence greater housing development changes, density and diversity*
- *(c) Typical large lot, single family zoning would pretty much remain as is*



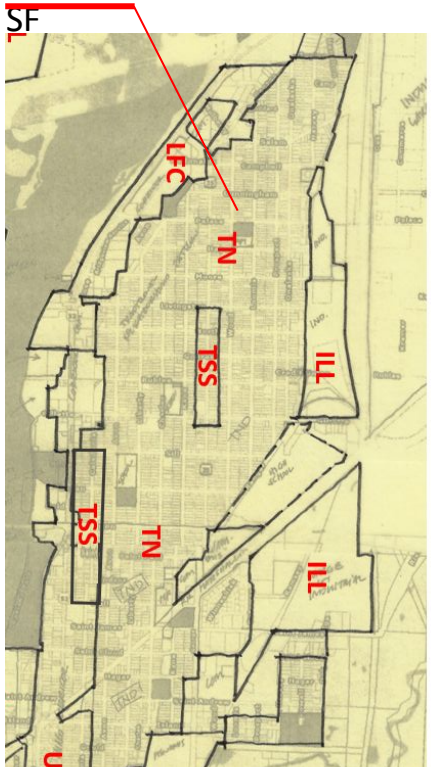
General Ideas for Districts: *Residential*

Garden District – single unit, detached, larger lots: 10,000 SF or more



General Ideas for Districts: *Residential*

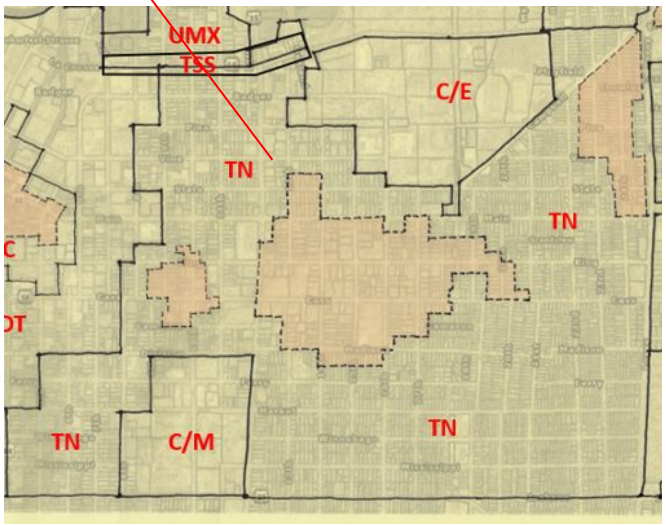
Neighborhood District North – attached, detached & small cluster types, lot range from 2500-7500



- Building types should respond to the scale and character of the neighborhood
- Can include detached types, 2 unit/lot & duplex types.
- Other building types: small residential court, pocket neighborhood, attached townhouses and accessory dwelling units.
- Lot size range from 2500 sf to 7500 sf

General Ideas for Districts: *Residential*

Neighborhood District Central – attached, detached & smaller multi-family types
Neighborhood Mixed Use – range of residential types & small commercial shops



- Building types should respond to the scale and character of the neighborhood
- Building types include: attached, detached units, and neighborhood scale multi-family & mixed use buildings
- Lot size range from 5000 sf

General Ideas for Districts: *Residential*

Traditional Neighborhood Development District

WI Model Ordinance

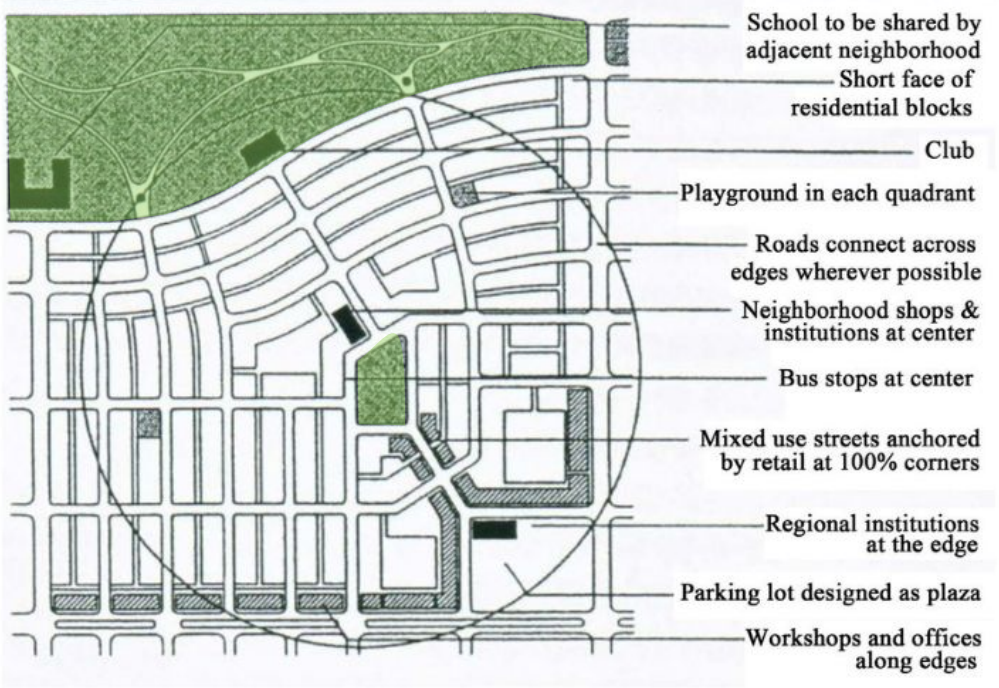
1.3 Applicability. The traditional neighborhood development ordinance is an alternative set of standards for development within the [City/Village] for new development of [15 acres or more] contiguous to existing development, redevelopment or infill development of [10 acres or more].

Source: A Model Ordinance for a Traditional Neighborhood Development, UW Extension, April 2001

La Crosse Zoning

(b)*Applicability*.

(1)Traditional Neighborhood Development is for lot sizes less than two acres.



General Ideas for Districts: *Commercial Corridor & Large Format*

Commercial Corridor – auto-oriented pattern common to local corridors today; mainly commercial/service uses (re: Hwy 14 & Losey Blvd)

Urban Corridor/MXD – range of commercial uses & larger multi-family units in a walkable pattern; use of regulating plan (re: Hwy 53 Plan)

General Ideas for Districts: *Industrial*

General Industrial – addresses most industrial/large lots *& large format buildings in current use

Crafters & Makers District – smaller lot industrial, assembly, & employment that fits into existing neighborhood/corridor character

Character Area: *Downtown – Three Distinct Areas*

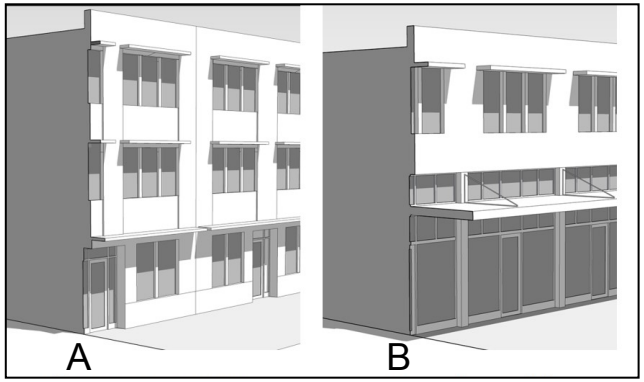
Three distinct areas assume that the zoning districts may also be more responsive to the character of each with the “main street” area requiring the most rigorous standards and regulations.

Downtown Area

Core

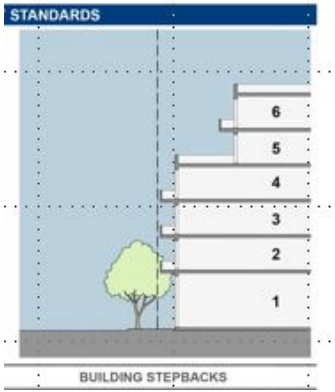
“Main street”

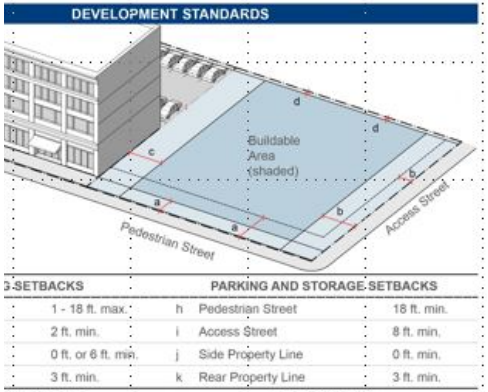
Downtown "*Main Street*" - *Coding for Frontage*



"Main Street" district would be regulated by two frontage types:

- common entry (A)
- Shopfront (B)





Dimensional & urban standards would use simple graphics to communicate regulations

Active building frontage

Next Steps: July, August…..

- Engagement – Interviews and Focus Groups
- Compile and summarize survey
- Approach & Recommendations
- Annotated Outline

Questions & Comments

FORWARD LA CROSSE

ZONING CODE UPDATE

To learn more & get involved, visit:

www.forwardlacrosse.org

To: Tim Acklin, City Planning Department, Mayor Washington-Spivey, Council Members

From: Friends of the La Crosse River Marsh

Re: City Council Planning Meeting September 16, 2025. Potential Zoning District Recommendations

Date: September 12, 2025

The Friends of the Marsh have met with Tim Acklin regarding the city re-zoning process at one of our monthly Enviro-Wednesday meetings and more recently we were pleased to sit down, online, as a board with the re-zoning consultants to discuss our concerns regarding comprehensive re-zoning. We have now reviewed the materials available online in advance of the Council Planning Meeting scheduled for Tuesday September 16, 2025. We have the following comments:

1. Our basic interest can be stated simply. We would like the highest level of zoning protection possible for the La Crosse River Marsh, wetland, floodplain, flood fringe. Conservancy District zoning accomplishes that objective. We are pleased to see that the proposal includes no changes to Conservancy criteria.

2. Breaking our objective down into component parts, though, It does not appear Conservancy District zoning has been expanded to include all of the northern portion of the marsh. If we are misreading the maps, please correct us. Heavy industrial zoning for the northern part of the marsh reflects the historic predisposition to develop the wetland and floodplain, something that law and practice now limit. We ask that the entire marsh be Conservancy District.

3. A twenty-acre section of what is called the River Point District situated at the mouth of the La Crosse River is not included in the proposed Conservancy District, although that property has been transferred to the Parks, Recreation, and Forestry Department. it includes a perched wetland, and the property is planned as minimum maintenance floodplain forest.

4. At our meeting with the consultants we spoke about the need for what I would now call a new Overlay District; a Conservation Overlay District that will extend perpendicular to the high-water mark around the entire marsh. This proposed new district would extend 500 feet from the edge of the marsh, all the way around, include all properties and have the following provisions: all new or re-constructed surfaces within that zone will include permeable pavement; the application of nitrogen, phosphorous and chloride will be limited; rain garden and retention basin structures will be encouraged through the use of property or water tax credits; and canopy trees will be protected and planted. An overlay district like this will extend some of the positive services of the marsh into adjacent areas of the city. It will also enhance environmental sustainability. Finally, it will contribute to the Climate Action Plan. The long-standing trend has been for the marsh to be encircled by concrete, streets, highways, parking lots, buildings.. Each of these things defeat at least some of the environmental benefits of the marsh. It's time to make good on one of our best community features.

In sum, we see this re-zoning process not as work designed to confirm past practice, to stand pat, but to make some improvements not only in the built environment of our community but in our natural environment as well. Working with our landscape, not against it.

Thanks for the work you have done so far. The opportunities for community input have been very welcome. We'll be happy to respond to questions or comments.

Chuck Lee, President of the Board
Friends of the La Crosse River Marsh