Bryant Development and Review Committee Meeting

Boswell Municipal Complex - City Hall Conference Room

210 SW 3rd Street

Date: April 02, 2026 - **Time:** 9:00 AM

Call to Order

Old Business

New Business

1. Goddard School - Christy Ln - Site Plan

PLE - Requesting Site Plan Approval

- 1021-SWPPP-01.pdf
- 1021-PLN-02.pdf
- 1021-SWP-01.pdf
- 1021-RSP-01.pdf
- 1021-DRN-02.pdf
- 1021-LTR-01.pdf

2. 2913 Springhill Road - 2 Lots - Rezoning from R-M to C-1

Hope Consulting - Requesting Recommendation for Rezoning from R-M to C-1

- 1023-PUB-01.pdf
- 1023-APP-01.pdf
- 1023-LTR-01.pdf
- 1023-AFF-01.pdf

3. 500 Prickett Rd - Rezoning from C-2 to R-1

Hope Consulting - Requesting Recommendation for Rezoning from C-2 to R-1

- 1035-GRR-01.pdf
- 1035-APP-01.pdf
- 1035-APPLTR-01.pdf
- 1035-CERTLTR-01.pdf
- 1035-AFF-01.pdf

4. Lindsey Pools - 9318 Hwy 5 - Site Plan Additon

Requesting Approval for two new accessory structures on site

- 1034-PLN-01.pdf

5. 2712 Lavern St - CUP for Short Term Rental

Vanessa Guerra - Requesting Recommendation for Approval of CUP for Short Term Rental

- 1030-LTR-01.pdf

- 1030-APP-01.pdf

6. 111 NE 2nd St - Site Plan

Bart Ferguson - Requesting Site Plan Approval

- 1036-PLN-01.pdf

7. 711 W. Commerce Dr - Building Addition

Craig Betts - Requesting Discussion on Building Addition

- 1028-PLN-01.pdf
- 1028-EXISTING-01.pdf

8. Collective Church - 605 Progress Way - Sign Permit

Ace Sign Company - Requesting Sign Permit Approval

- 94821-SGNAPP-01.pdf

Staff Approved

Permit Report

Adjournments

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
CONSTRUCTION ACTIVITY for

Goddard School
Christy Ln
Alexander, Arkansas 72002

National Pollutant Discharge Elimination (NPDES)
General Permit #ARR150000

Prepared for:
AF Partners, LLC
Attn: Doug Hendrix
1500 Christy Lane
Alexander, Arkansas 72002

Date: March 2026

Prepared by:
Phillip Lewis Engineering, Inc.
23620 Interstate 30
Bryant, Arkansas 72022

PHILLIP LEWIS ENGINEERING
Structural + Civil Consultants
23620 Interstate 30 | Bryant, AR
PH: 501-350-9840

Project Name and Location: Goddard School, Christy Ln Alexander, AR 72002

County Parcel ID: 840-11661-034| Saline County, Arkansas

Operator Name and Address: Delk Construction Company Searcy Arkansas 72143

A. Site Description

a. Project description, intended use after NOI is filed

An Overall Layout Map is included showing total project area of 2.25 with 2.12 Acres disturbed. That provides for buffer zones, construction of utilities, new building, parking lot and landscaping improvements. All areas will be covered with vegetation or paving. Details on the sediment and Erosion Control Plan shows drainage patterns, surface waters, storm water discharge locations and receiving streams. The Site Map included at the end of this SWPPP shows the buffer zones, approximate slopes after grading activities, area of soil disturbance, areas that will not be disturbed, location of controls and areas. A concrete washout is shown on the site map.

b. Sequence of major activities which disturb soils:

1. Construct stabilized construction entrance. This will be the first construction work on the project.
2. Construct the silt fences and BMP controls on the site.
3. Perform site demolition (if any).
4. Clear and grub the site.
5. Begin grading the site.
6. Start construction of building pad and structures.
7. Temporarily seed denuded areas.
8. Install underground utilities and curbs and gutters – Sediment barriers shall be utilized as required to bound the down slope side of utility construction.
9. Prepare site for paving.
10. Pave site.
11. Complete Grading and install permanent sodding and landscaping.
12. Remove all temporary erosion and sediment control devices (only if site stabilized).

The actual schedule for implementing pollutant control measures will be determined by project construction progress. Down slope protective measures must always be in place before soil is disturbed.

c. Total Area: 2.25 Acres **Disturbed Area: 2.12 Acres**

B. Responsible Parties

Be sure to assign all SWPPP related activities to an individual or position; even if the specific individual is not yet known (i.e. contractor has not been chosen).

Individual/Company	Phone Number	Service Provided for SWPPP (i.e., Inspector, SWPPP revision, Stabilization Activities, BMP Maintenance, etc.)
Marvin Delk	*501-281-4404*	Inspection of Controls
Aaron Davidson	*501-319-3301*	Stabilization, BMP Maintenance, Construction Oversite, Stormwater Inspection

C. Receiving Waters

a. The following waterbodies receive stormwater from the project property:

Owen Creek, thence to Fourche Creek, thence to the Arkansas River.

b. Is the project located within the jurisdiction of an MS4? Yes

If yes, Name of MS4: City of Bryant

c. Ultimate Receiving Water: Arkansas River

D. Site Map Requirements, shown on Site Map and to be Revised for Construction:

a. Pre-construction topographic view
b. Direction of stormwater flow (i.e., use arrows to show which direction stormwater will flow) and approximate slopes anticipated after grading activities;
c. Delineate on the site map areas of soil disturbance and areas that will not be disturbed under the coverage of this permit;
d. Location of major structural and nonstructural controls identified in the plan;
e. Location of main construction entrance and exit;
f. Location where stabilization practices are expected to occur;
g. Locations of off-site materials, waste, borrow area, or equipment storage area;
h. Location of areas used for concrete wash-out;
i. Location of all surface water bodies (including wetlands);
j. Locations where stormwater is discharged to a surface water and/or municipal separate storm sewer system if applicable,
k. Locations where stormwater is discharged off-site (should be continuously updated);

l. Areas where final stabilization has been accomplished and no further construction phase permit requirements apply.
m. A legend that identifies any erosion and sediment control measure symbols/labels used in the site map and/or detail sheet; and
n. Locations of any storm drain inlets on the site and in the immediate vicinity of the site.

E. **Other Potential Pollution Sources:**

i. Concrete – Source: Foundation and Curb and Gutter
ii. Curing Compound – Source: Concrete Finishing
iii. Waste Concrete – Truck Washout
iv. Sediment – Disturbed Soil Area
v. Paints and Solvent – Painting Operations
vi. Petroleum Based Product – Equipment and Vehicles
vii. Emulsified Asphalt – Paving Operations
viii. Trash/Litter/Debris – General Construction Activities
ix. Sanitary Waste – Portable Toilets
x. Potentially Hazardous Materials – General Construction Activities

The concrete washout will be located at the construction entrance/exit while the other sources of potential pollution will be located on the temporary parking/storage areas of the site.

F. Stormwater Controls

a. Initial Site stabilization, Erosion and Sediment Controls, and Best Management Practices:

i. Initial Site Stabilization: Construct sediment fence if needed and entrance/exit pad if tracking onto roads occurs
ii. Erosion and Sediment Controls: Sediment fence, waddles near mouth of inlets for inlet protection on and in the vicinity of the project.
iii. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the operator will replace or modify the control for site situations: Yes
iv. Off-site accumulations of sediment will be removed at a frequency sufficient to minimize off-site impacts: Yes
v. Sediment will be removed from sediment traps or sedimentation ponds when design capacity has been reduced by 50%: Yes
vi. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges: Yes
vii. Off-site material storage areas used solely by the permitted project are not being used for this project

b. Stabilization Practices

i. Description and Schedule: Disturbed areas will be vegetated once work is ceased in a

particular area. Driveway and parking areas will be paved immediately after subgrade is developed.

ii. Are buffer areas required? No.

iii. A record of the dates when grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be done with the project.

iv. **Deadlines for Stabilization**: Stabilization procedures

1. Stabilization procedures will be initiated 14 days after construction activity temporarily ceases on a portion of the site.
2. Temporary Seeding or Stabilization: Must initiate stabilization measures immediately, but not more than 14 days after construction activity ceases on any particular area, all disturbed ground where there will be no construction for longer than 14 days must be seeded with fast-germinating temporary seed and protected with mulch. Stockpiles and diversion ditches/berms must be stabilized to prevent erosion and dust issues. Where temporary stabilization measure are not appropriate, adequate erosion and sediment controls and appropriate maintenance must be implemented. Temporary stabilization may be used whenever construction activities are expected to resume in the area to be stabilized or when weather or other conditions are not appropriate for initiation of permanent stabilization.
3. Permanent Seeding: All areas at final grade must be seeded or sodded immediately, but not more than 14 days after completion of the major construction activity. Except for small level spots, seeded areas should generally be protected with mulch. See immediately after final grade is achieved and soils are prepared to take advantage of soil moisture and see germination. At the completion of ground-disturbing activities the entire site must have permanent vegetative cover, meeting vegetative density requirements, or mulch per landscape plan, in all areas not covered by hardscape (pavement, building, etc.) To minimize the potential for erosion and maximize seed germination & growth, the General Contractor must evaluate the short and long-term local forecast prior to applying permanent seed or sod.

c. Structural Practices

i. Describe any structural practices to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site: sediment fences and rock check dams will be used to prevent scouring in ditches or from sheet flow.

ii. Sediment Basins:
Are 10 or more acres draining to a common point? No
Is a sediment basin included in the project? Yes

iii. Describe Velocity Dissipation Devices: Rip Rap & Hay Bales where specified.

G. Other Controls

a. Solid materials, including building materials, shall be prevented from being discharged to Waters of the State: Yes

b. Off-site vehicle tracking of sediments and the generation of dush shall be minimized through the use of: A stabilized construction entrance and exit pad if tracking occurs

c. Temporary Sanitary Facilities: These will be provided by; _____

All personnel involved with construction activities must comply with state and local sanitary or septic system regulations. Temporary sanitary facilities will be provided at the site throughout the construction phase. They must be utilized by all construction personnel and will be serviced by a commercial operator. Portable toilets must be securely anchored and are not allowed with 30' of inlets or permitted limit of disturbance or with 50' of a water of the State.

d. Concrete Waste Area Provided: Yes

e. Fuel Storage Areas, Hazardous Waste Storage, and Truck Wash Areas: Are not used for this project

f. Dust Control: Construction must enter and exit the site at the stabilized construction exit. The purpose is to trap dust and mud that would otherwise be carried off-site by construction traffic. Large areas of soil that are denuded of vegetation and have no protection or from particles being picked up and carried by wind should be protected with a temporary cover or kept under control with water or other soil adhering product to limit wind transported particles existing the site perimeter. Water trucks or other dust controls agents will used as needed during construction minimize dust generated from the site.

H. Non-Stormwater Discharges

a. The following allowable non-stormwater discharges comingled with stormwater are present or anticipated at the site:

Potable water sources including uncontaminated waterline flushings;
Landscape Irrigation;
Routine external building wash down which does not detergents or other chemicals;
Uncontaminated are conditioning, compressor condensate (See Part I.B.12.C of the Permit;,
Uncontaminated springs, excavation dewatering and groundwater (See Part I.B.12.C of the permit);

b. Describe any controls associated with non-stormwater discharges present at the site:
None

I. Applicable State or Local Programs: The SWPPP will be updated as necessary to reflect any revisions to applicable federal, state, or local requirements that affect the stormwater controls

implemented at the site.

J. Hazardous Material Management and Spill Reporting Plan

Any hazardous or potentially hazardous material that is brought onto the construction site will be handled properly in order to reduce the potential for storm water pollution. All materials used on this construction site will be properly stored, handled, dispensed, and disposed of following all applicable label directions.

Material Safety Data Sheets (MSDS information will be kept on site for any and all applicable materials.)

In the event of an accidental spill, immediate action will be undertaken by the General Contractor to contain and remove the spilled materials All hazardous materials will be disposed of by the Contractor in the manner specified by federal, state and local regulations and by the manufacturer of such products. As soon as possible, the spill will be reported to the appropriate agencies. As required under the provisions of the Clean Water Act, any spill or discharge entering waters of the United States will be properly reported. The General Contractor will prepare a written record of any spill and associated clean-up activities of petroleum products or hazardous materials in excess of 1 gallon or reportable quantities, whichever is less. It is recommended that the contractor take photos to document spill clean-up measures and attach the photos to the Spill Report Form. All spill information must be transferred to the next inspection report and resolved as appropriate.

If the spill greater than the applicable reportable quantity, the contractor must follow the information below:

a. The permittee is required to notify the National Response Center (NRC) (800-424-8802) as soon as permittee has knowledge of the discharge;

b. Permittee shall prepare, within 14 days of knowledge of the release, a written description of: the release (including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, what actions were taken to mitigate effects of the release, and steps to be taken to minimize the chance of future occurrences and retain with the SWPPP.

c. The SWPPP must be updated within 14 days of knowledge of the release to provide a description of the release, the circumstances lading to the release, and the date of the release. This can be accomplished by including a cop of the written description of the release as described above in Item B.

In order to minimize the potential for a spill of petroleum product or hazardous materials to come in contact with storm water, the following steps will be implemented:

a. All material with hazardous properties (such as pesticides, petroleum products, fertilizers, detergents, construction chemicals, acids, paints, paint solvents, additives for soil stabilization, concrete, curing compounds and additives, etc.) will be stored in a secure location, under cover, when not in use.

b. The minimum practical quantity of all such materials will be kept on the job site and scheduled for delivery as close to time of use as practical.

c. A spill control and containment kit (containing for example, absorbent materials such as kitty litter or sawdust, acid neutralizing agent, brooms, dust pans, mops, rags, glove, goggles, plastic and metal trash containers, etc. shall be provided.

d. All of the product in a container will be used before the container with original product label.

e. All products will be stored in and used from the original container with original product label.

f. All products will be used in strict compliance with instructions on the product label.

g. The disposal of excess or used products will be in strict compliance with instruction on the products label.

K. Inspections

a. Inspection frequency: Every 14 calendar days and within 24 hours of a storm event of 0.25 inches or greater (a rain gauge must be maintained on site)
b. Inspections: Completed inspection forms will be kept with the SWPPP and ADEQ's form will be used (See Appendix C)
c. Inspection records will be retained as part of the SWPPP for at least 3 years from the date of termination.
d. It is understood that the following sections describe waivers of site inspection requirements. All applicable documentation requirements will be followed in accordance with the referenced sections.
    i. Winter Conditions (Part II.A.4.L.3)
    ii. Adverse Weather Conditions (Part II.A.4.L.4)

L. Maintenance:

The following procedures to maintain vegetation, erosion and sediment control measures and other protective measures in good, effective operating condition will be followed:

a. A rain gauge must be maintained on site.
b. The following are maintenance practices that will be used to maintain erosion and sediment controls.

c. All measures will be maintained in good working order; and if a repair is necessary, it will be initiated within three (3) business days of discovery, or as otherwise directed by state or local officials.
d. Accumulated sediment will be removed from the silt fence, straw bales and sediment basins when it has reached one-fourth the height of the fence, bale or depth of the basin.
e. Sediment fence, rock or sand bag check dams and sediment basins will be inspected for depth of sediment, tears, to see if the fabric is securely attached to the posts or anchored by stakes, and to see that the posts or stakes are firmly in the ground.
f. Small diversion sediment basins and rock or sand bag check dams will be cleaned as necessary to prevent overflow or bypassing.
g. Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and health growth and repaired as necessary.

Any necessary repairs will be completed, when practicable, before the next storm event, but not to exceed a period of 3 business days of discovery, or as otherwise directed by state or local officials.

M. Employee Training:

Employee training must be provided annually, as new employees are hired, or as necessary to ensure personnel are informed of their responsibility in implementing the practices and controls included in the SWPPP and to ensure compliance with the SWPPP and general permit. A stormwater Pollution Prevention Training Log should be kept on site in order to log dates, hours, topics, objectives, attendee roster, etc., of any employee training that takes place.

Training topics that should be addressed, at minimum, include Erosion Control BMPs, Sediment Control BMPs, Non-Stormwater BMPs, Emergency Procedures, and Good Housekeeping BMPs.

Certification

"I certify under penalty of law that this document and all attachments such as Inspection Form were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature of Responsible or Cognizant Official: _____

Title: _____ Date: _____

LIST OF APPENDICES

APPENDIX “A” - CONTACT LIST

APPENDIX “B” - CONTRACTOR/SUB-CONTRACTOR LIST

APPENDIX “C” - INSPECTION REPORT & GENERAL CONTRACTOR’S DELEGATED INSPECTOR FORM

APPENDIX “D” - RECORD OF STABILIZATION AND CONSTRUCTION ACTIVITIES DATES

APPENDIX “E” - SOIL REPORT AND MAP

APPENDIX “F” - SPILL REPORT FORM

APPENDIX “G” - ADDITIONAL SITE INSPECTOR LOG

APPENDIX “H” - WEEKLY STORMWATER MEETING LOG

APPENDIX “I” - CORRECTIVE ACTION LOG

APPENDIX “J” - SWPPP AMENDMENT LOG

APPENDIX “K” - RAIN GAUGE LOG

APPENDIX “L” - SWPPP TRAINING LOG

APPENDIX “M” - EROSION CONTROL PLAN & DETAILS

APPENDIX “N” - ADEQ PERMIT ARR150000

APPENDIX “O” - NOTICE OF COVERAGE

APPENDIX "A"

CONTACT LIST

CONTACT LIST

Contacts for: **Goddard School, Bryant, AR** Date: _____

Responsible for conducting monthly inspections, conducting the final site inspection after verifying final stabilization and overseeing compliance with all applicable permits, the Clean Water Act, and the site SWPPP.

Responsible Contractor's Compliance Officer:

Name: _____

Company: _____

Phone: _____

Responsible for the supervision or completion of construction at a site and able to adequately identify and implement storm water sedimentation and erosion control practices and effectively instruct employees and contractors in the implementation of such practices.

Project Superintendent:

Name: _____

Company: _____

Phone (office): _____

Phone (mobile): _____

Responsible for SWPPP inspection at a site; is available 24-hours a day and can easily visit the site when needed in case of an emergency; able to adequately identify and implement storm water sediment and erosion control practices and effectively instruct employees and contractor in the implementation of such practices.

24-hour Emergency Contact:

Name: _____

Company: _____

Phone (office): _____

Phone (mobile): _____

Responsible for overseeing activities and work at a site; has the authority to direct employees and contractors to undertake actions to comply with all applicable permits, the Clean Water Act, and the site's SWPPP.

Construction Manger:

Name: _____

Company: _____

Phone (office): _____

Phone (mobile): _____

Note to General Contractors: Date this form each time contact information is added or updated. Do not erase information from this form. If information is incorrect or outdated, line through incorrect / outdated information and write in correct / new information. If contact information changes more than once, create a new update Contact List, date, and place on top of old Contact List in the SWPPP Binder.

APPENDIX "B"

Contractor/Sub-Contractor List

Company/Firm	Name	Address	Phone Number	Responsibility/Trade

APPENDIX "C"

INSPECTION REPORT & GENERAL CONTRACTOR'S DELEGATED INSPECTOR FORM

STORM WATER POLLUTION PREVENTION PLAN INSPECTION REPORT

Completion Date: _____

Contractor: _____ Inspector: _____ Inspection Date: _____

Inspector's Qualifications*: Inspection Time: _____

_____ Reason for Inspection: _____

SITE CONDITIONS:

POLLUTANT CONTROL	IN CONFORMANCE	EFFECTIVE	LOCATION OF NON-CONFORMANCE
Construction Entrance	YES NO NA	YES NO NA	
Sediment Barriers, Fences, etc.	YES NO NA	YES NO NA	
Storage/Disposal Areas	YES NO NA	YES NO NA	
Sediment Pond	YES NO NA	YES NO NA	
Outfall Locations	YES NO NA	YES NO NA	
	YES NO NA	YES NO NA	

DEFICIENCIES NOTED: (Explain each "NO" circled above)

REMEDIAL ACTIONS TO BE TAKEN:

COMMENTS:

Based on the results of the inspection, necessary control modifications shall be implemented within 7 calendar days. This report shall be kept on file by the General Contractor as part of the Storm Water Pollution Prevention Plan for at least 5 years from the date of completion and submission of the Notice of Termination.

| | ***Based on the results the inspection, the site is in compliance with the SWPPP and the generalpermit. No corrective measures need to be made at this time.***

Certification Statement

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Name: _____

Address: _____

Phone: _____

_____ Date: _____

(Authorized Signature*)

*It is the General Contractor's responsibility to insure that the inspector has been properly authorized under the applicable General Permit Regulations to sign these inspection forms.

General Contractor's Inspector
Delegation of Authority

Goddard School, Bryant, AR

I, _____ (name), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Construction General Permit, at the Goddard School construction site. The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit.

_____ (name of person or position)

_____ (company)

_____ (address)

_____ (city, state, zip)

_____ (phone)

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in the Arkansas Large Site Stormwater General Permit – ARR150000 Small Site, and that the designee above meets the definition of a "duly authorized representative" as set forth in Arkansas Small Site Stormwater General Permit – ARR150000 Small Site.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____

Company: _____

Title: _____

Signature: _____

Date: _____

APPENDIX "D"

RECORD OF STABILIZATION

SITE STABILIZATION and CONSTRUCTION ACTIVITY DATES

A record of dates when stabilization measures are initiated, when major grading activities occur, and when construction activities temporarily or permanently cease on a portion of the site shall be maintained until final site stabilization is achieved and the Notice of Termination is filed.

MAJOR STABILIZATION AND GRADING ACTIVITIES

Description of Activity:_____
Site Contractor: _____ Begin (date): _____ End(date):_____
Location:_____

Description of Activity:_____
Site Contractor: _____ Begin (date): _____ End(date):_____
Location:_____

Description of Activity:_____
Site Contractor: _____ Begin (date): _____ End(date):_____
Location:_____

Description of Activity:_____
Site Contractor: _____ Begin (date): _____ End(date):_____
Location:_____

Description of Activity:_____
Site Contractor: _____ Begin (date): _____ End(date):_____
Location:_____

Description of Activity:_____
Site Contractor: _____ Begin (date): _____ End(date):_____
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Site Contractor: _____ Begin (date): _____ End(date):_____
Location:_____

Description of Activity:_____
Site Contractor: _____ Begin (date): _____ End(date):_____
Location:_____

Description of Activity:_____
Site Contractor: _____ Begin (date): _____ End(date):_____
Location:_____

Description of Activity:_____
Site Contractor: _____ Begin (date): _____ End(date):_____
Location:_____

Description of Activity:_____
Site Contractor: _____ Begin (date): _____ End(date):_____
Location:_____

APPENDIX "E"

SOIL REPORT & MAP

GENERAL SITE AND SUBSURFACE CONDITIONS

This geotechnical exploration was conducted on a property situated at the intersection between Christy Lane and Henry Avenue in Bryant, Arkansas. The general topography was leveled with a downward slope towards the roads. The in-situ soils primarily consist of soft to firm silty soils near the surface and soft to medium-stiff elastic silt in the primary grades and at depths.

A minimum site striping of **5** inches is expected to remove topsoil and surface organics. The likelihood of encountering buried stumps or other organic materials is low. Overall, the subsurface conditions were consistent throughout the entire area designated for development.

Figure 2. Site Investigated

The stratigraphy observed at the boring locations is summarized in Table 2. The subsurface conditions were consistent throughout the entire area proposed for development. Borings were drilled to a maximum depth of **15** feet using dry auger procedures. Auger refusal was nowhere achieved within the depths and locations explored.

For a more detailed description of soils encountered during testing, please refer to the boring log sheets found in Appendix B: Boring Logs attached to this report.

Table2. General Strata Classification of Boring Logs

STRATA	DEPTH *(ft)*	GROUP SYMBOL	SOIL DESCRIPTION	SIGNIFICANT PROPERTIES
4 inches of Topsoil with Surface Organics				
STRATUM I	0 to 2 - 4	**CL-ML / ML**	• Brown, Silty Clay • Brown-Red, Silt w/ sand	• Soft to firm • Moisture Sensitive • Very Light Bearing
STRATUM II	2 - 4 to 10 - 13	**MH**	• Tan-Red, Elastic Silt w/ Sand	• Soft to Medium-Stiff • Low Permeability & Unstable • Very Light to Light Bearing
STRATUM III	4 - 13 to 10 - 15	**ML**	• Brown-Tan, Sandy Silt	• Stiff to Very Stiff • Unstable Upon Saturation
• ***Water Encountered:*** *none encountered*			• ***Auger Refusal:*** *none achieved*	

During our exploration, no groundwater was encountered within the depths explored. However, there is potential for groundwater to form within the silty layers during wetter periods of the year. The significant properties and characteristics of the subsurface strata pertinent to design and construction are as follows:

A. The site's topography and the planned location of the building.
B. The anticipated bearing load.
C. The presence of silty soils with low shear strength near the surface.
D. The elastic silt layers found at bearing depths.
E. The possibility of groundwater forming during rainy periods.
F. The expected pavement loading.

APPENDIX “F”

SPILL REPORT FORM

Spill Report Form

Spill Reported by: _____

Date/Time Spill: _____

Describe spill location and events leading to spill: _____

_____

Material spilled: _____

Source of spill: _____

Amount spilled:_____Amount spilled to waterway: _____

Containment or clean up action: _____

_____

_____

Approximate depth of soil excavation: _____

List Injuries of Personal Contamination: _____

Action to be taken to prevent future spills: _____

_____

Modifications to the SWPPP, including required sampling, necessary due to this spill: _____

_____

_____

Agencies notified of the spill: _____

_____

_____

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____ _____

Contractor / Superintendent Date

APPENDIX "G"

ADDITIONAL SITE INSPECTOR LOG

Federal, State, or Local Storm Water or other Environmental Inspector Site Visit Log

Inspectors Name:_____ Agency: _____

Contractors Representative Present_____

Others Presen:t_____

Comments:_____

Time and Date:_____ Report Prepared: Yes No

Inspectors Name:_____ Agency: _____

Contractors Representative Present_____

Others Presen:t_____

Comments:_____

Time and Date:_____ Report Prepared: Yes No

Inspectors Name:_____ Agency: _____

Contractors Representative Present_____

Others Presen:t_____

Comments:_____

Time and Date:_____ Report Prepared: Yes No

Inspectors Name:_____ Agency: _____

Contractors Representative Present_____

Others Presen:t_____

Comments:_____

Time and Date:_____ Report Prepared: Yes No

APPENDIX "H"

WEEKLY STOR MWATER MEETING LOG

Weekly Storm Water Meeting Review and Comment Form

Project Site Superintendent: _____ Date and Time: _____

Others Present: NAME TITLE COMPANY

Installation/Removal of BMPs (include subcontractors performing the activities): _____

_____

BMP Maintenance and Repair (include subcontractors performing the activities): _____

_____

Non-effective BMPs: _____

Efforts to mitigate or correct non-effective BMPs: _____

_____

Status of staging areas, storage, borrow, fill, concrete wash-out, and exits: _____

_____

Upcoming Activities: _____

Modifications or additions to SWPPP or project phasing: _____

_____

Finding, Conclusions & Additional Information: _____

_____

APPENDIX “I”

CORRECTIVE ACTION LOG

Inspection Date:	Inspector Name(s:)	Description of BMP Deficiency	Corrective Action Needed (including planned date/responsible person)	Date Action Taken/Responsible person

APPENDIX "J"

SWPPP AMENDMENT LOG

Amendment No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title]

APPENDIX“K”

RAIN GAUGE LOG

Date of Reading	Reading (In)	Date of Reading	Reading (In)

APPENDIX "L"

SWPPP TRAINING LOG

Stormwater Pollution Prevention Training Log

Project Name: Goddard School
Project Location: Christy Ln Alexander, AR 72002

Instructor's Name(s):

Instructor's Title(s):

Course Location: _____ Date: _____

Course Length (hours): _____

Stormwater Training Topic: *(check as appropriate)*

- ☐ Erosion Control BMPs
- ☐ Sediment Control BMPs
- ☐ Non-Stormwater BMPs
- ☐ Emergency Procedures
- ☐ Good Housekeeping BMPs

Specific Training Objective: _____

Attendee Roster: *(attach additional pages as necessary)*

No.	Name of Attendee	Company
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

APPENDIX "M"

EROSION CONTROL PL AN & DETAILS

NOTES (GENERAL):

1. SEE EROSION CONTROL DETAILS IN SWPPP FOR EROSION CONTROL FACILITIES.
2. SEE SWPPP FOR INSTALLATION, MAINTENANCE, INSPECTION, AND RECORD KEEPING REQUIREMENTS.
3. CONTRACTOR SHALL REPLACE SILT FENCE WHEN FENCE BECOMES DAMAGED TO THE POINT OF NO LONGER BEING ABLE TO ADEQUATELY PREVENTING SEDIMENT RUNOFF FROM THE SITE.
4. CONTRACTOR SHALL SHOW EROSION CONTROL MEASURE ON SITE MAP.
5. EROSION AND SEDIMENT CONTROL STRUCTURES TO MEET SWPPP DETAILS - APPENDIX D
6. INSTALL ROCK DITCH, CHECK, OR SAND BAG CHECKS AS NECESSARY TO PREVENT SCOUR UNTIL LANDSCAPING IS ESTABLISHED.
7. CONTRACTOR MUST PLACE SEDIMENT BASIN WITH SEDIMENT FENCE OUTLET FOR ANY SEDIMENT CONTAMINATED DEWATERING DISCHARGE IF BASIN IS CONSTRUCTED.
8. FINAL SLOPE WILL BE SAME DIRECTION AS EXISTING SLOPE.
9. TEMPORARY STABILIZATION PRACTICES WILL NOT BE REQUIRED. WORK WILL BE CONTINUOUS AND DISTURBED AREA REVEGITATED IN A TIMELY MANNER. SEE SWPPP FOR SEEDING MIXES.
10. PERMANENT STABILIZATION OF ALL DISTURBED AREAS ARE TO BE SEEDED, FERTILIZED, WATERED AND COVERED WITH STRAW UNLESS OTHERWISE NOTED ON PLANS TO BE HYDROSEEDED.
11. CONTRACTOR TO SHOW CONCRETE WASH OUT SUMP, ENTRANCE/EXIT PAD AND OTHER CONTROLS AS REQUIRED/NEEDED AS SWPPP SITE MAP IS UPDATED THROUGHOUT THE DURATION OF THE PROJECT.
12. STOCKPILING OF CONSTRUCTION SPOIL MATERIAL AT PARTICULAR LOCATIONS SHALL ONLY BE ALLOWED FOR A LIMITED TIME PERIOD, NOT TO EXCEED (6) MONTHS. PRIOR TO A FINAL INSPECTION OF THE GRADING PERMIT, THE FOLLOWING STANDARDS SHALL BE ACHIEVED FOR COMPLETION OF CONSTRUCTION:
    a) DEVELOPMENT AND GRADING WITHIN THE DISTURBED AREA IS COMPLETE AND MATCHES PLANS AS APPROVED BY THE PLANNING COMMISSION, AND
    b) THE DISTURBED SOIL AREA IS OBSERVED TO HAVE 80% GRASS COVERAGE AND 100% STABILITY, AND
    c) NO SLOPES STEEPER THAN A 3:1 PITCH UNLESS OTHERWISE APPROVED IN WRITING BY THE DIRECTOR OF ENGINEERING, AND
    d) NOTICE OF VIOLATIONS ISSUED HAVE ALL CORRECTIVE ACTIONS APPROVED WITH AN INSPECTION REPORT SIGNED BY A REPRESENTATIVE OF THE DIRECTOR OF ENGINEERING, AND
    e) ALL HEAVY EQUIPMENT, STOCKPILES, AND CONSTRUCTION SITE MATERIALS HAVE BEEN REMOVED FROM THE CONSTRUCTION SITE.

SWPPP PH 1

SCALE 1" = 20'

LEGEND

- DISTURBED AREA
- UNDISTURBED AREA
- SEDIMENT FENCE WITH WIRE BACKING
- DRAINAGE DIRECTION

CONSTRUCTION SCHEDULE

04-27-26 MOBILIZE EQUIPMENT ON SITE AND CONSTRUCT STABILIZED ENTRANCE.
04-28-26 CONSTRUCT SILT FENCES AND BMP CONTROLS ON SITE
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12-18-26 REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVISES (ONCE SITE IS STABILIZED)

SOIL LOSS CALCS:

UNIVERSAL SOIL LOSS EQUATION: E=(R)(K)(LS)(C)(P)

DEFINITION OF VARIABLES:

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1" = 20'-0"

PHILLIP LEWIS ENGINEERING, INC.
Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840

REVISION:

THE GODDARD SCHOOL OF BRYANT
ALEXANDER, ARKANSAS

CERTIFICATE OF AUTHORIZATION
PHILLIP LEWIS ENGINEERING, INC.
No. 566
ARKANSAS ENGINEER

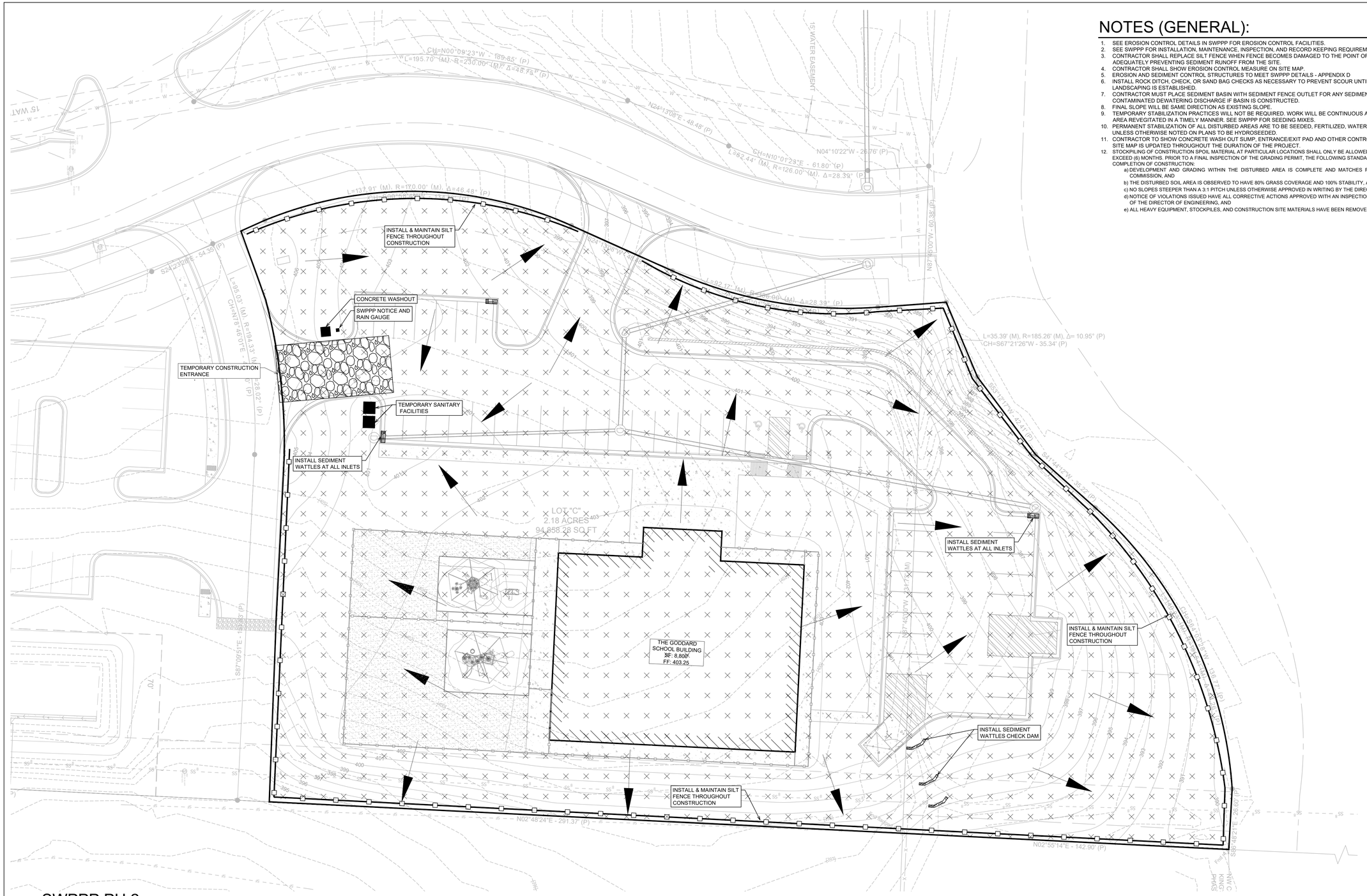
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP A. LEWIS

PROJECT NUMBER:

SHEET ISSUE DATE:
03-25-2026

PAGE TITLE:
SWPPP PH 1

SHEET NUMBER:
C1.13



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SWPPP PH 2

SCALE 1" = 20'

LEGEND

- DISTURBED AREA
- UNDISTURBED AREA
- SEDIMENT FENCE WITH WIRE BACKING
- DRAINAGE DIRECTION

CONSTRUCTION SCHEDULE

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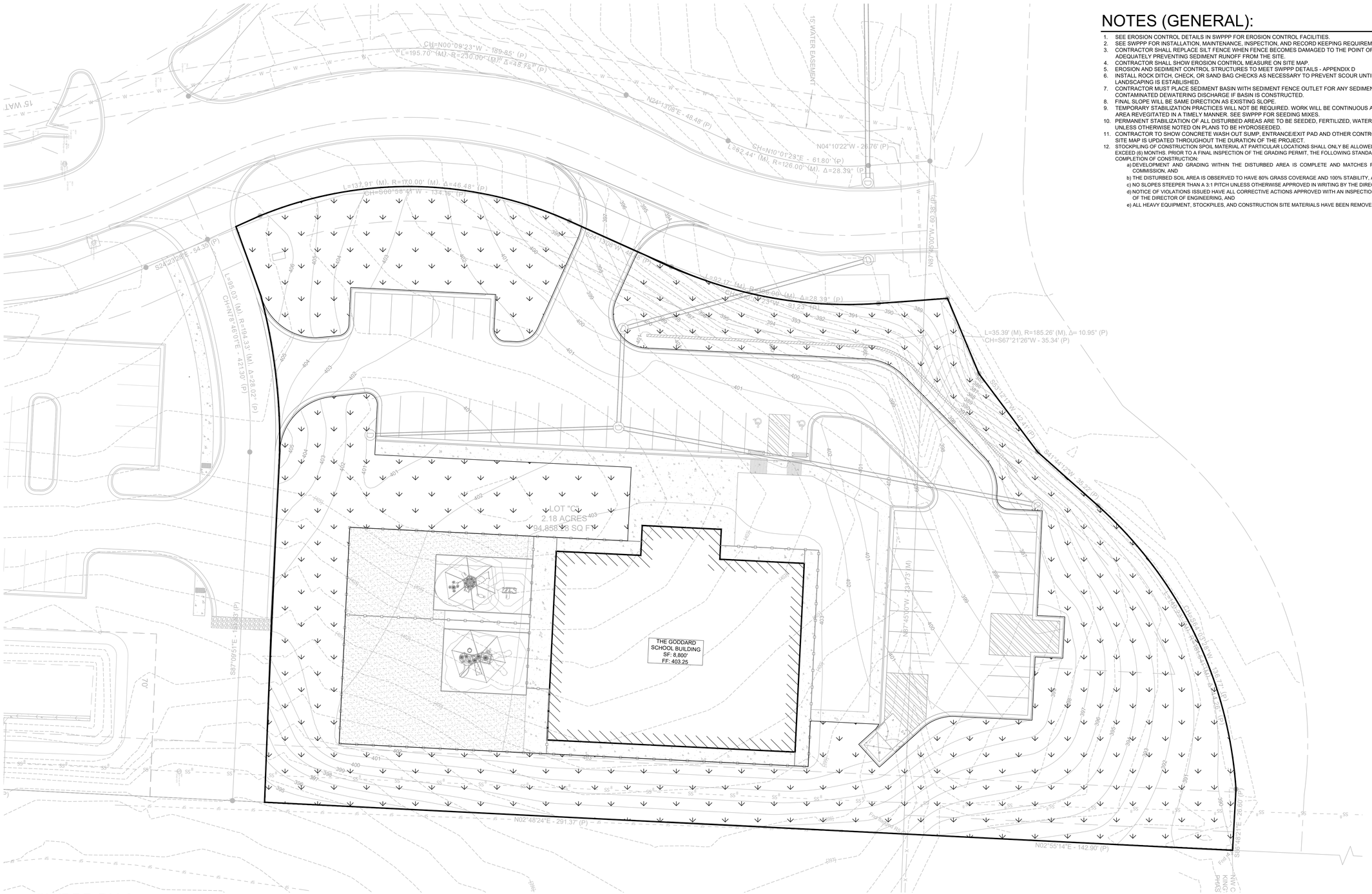
PROJECT NUMBER:

SHEET ISSUE DATE: 03-25-2026

PAGE TITLE: SWPPP PH 2

SHEET NUMBER: C1.14



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SWPPP PH 3

SCALE 1" = 20'

LEGEND

GRASS SOD OR SEED

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PAGE TITLE:
SWPPP PH 3

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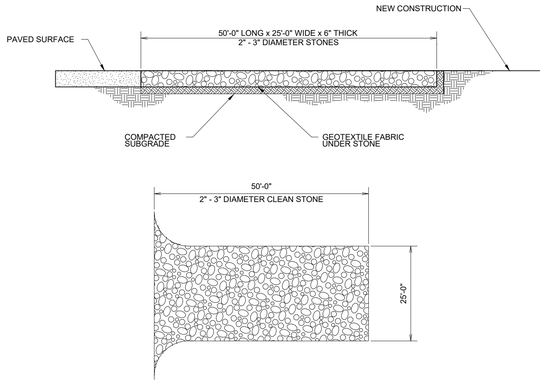

CONSTRUCTION ENTRANCE

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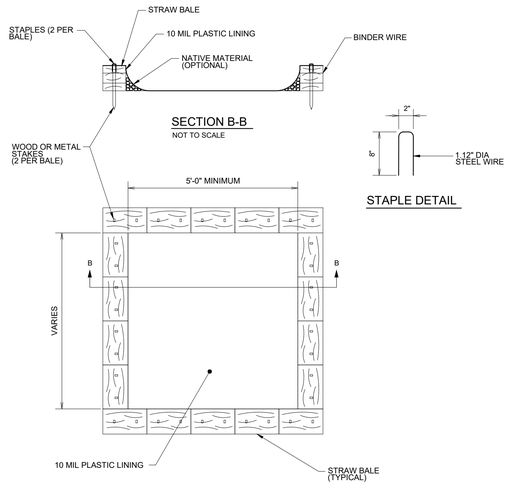

CONCRETE WASHOUT

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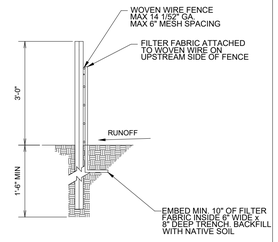
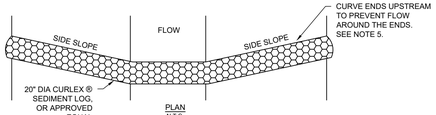


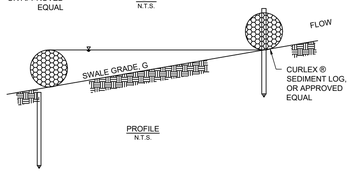
SILT FENCE

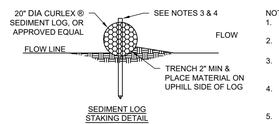
NOT TO SCALE

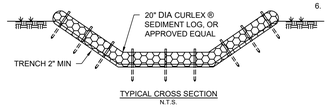
NOTES AND SPECIFICATIONS:

1. POSTS SHALL BE A MINIMUM OF 36 INCHES CONSTRUCTED OF EITHER OF THE FOLLOWING MATERIALS: STEEL "T" OR "U" TYPE, OR 2" x 2" HARDWOOD.
2. WOVEN WIRE USED AS ADDITIONAL FENCE SUPPORT SHALL BE MINIMUM 14.5 GA. WITH 6" MAXIMUM SPACING.
3. WOVEN WIRE SHALL BE PLACED ALONG THE UPHILL SIDE OF THE FENCE AND FASTENED WITH WIRE TIES OR 1" STAPLES ALONG THE UPHILL SIDE OF THE POSTS.
4. FILTER FABRIC SHALL BE FASTENED TO WOVEN WIRE ACCORDING TO MANUFACTURER'S RECOMMENDATION, OR WITH TIES EVERY 24" AT THE TOP AND MID-SECTIONS.
5. WHERE TWO PIECES OF FILTER FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6 INCHES AND FOLDED TOGETHER.
6. WHERE TWO POSTS MEET TO JOIN FENCE SECTIONS, THE TOPS OF THE POSTS SHALL BE SECURED TOGETHER WITH WIRE.
7. THE FENCE SHALL BE CONSTRUCTED ALONG THE CONTOUR AS MUCH AS POSSIBLE.
8. ENDS OF FENCES SHALL BE EXTENDED UP THE SLOPE TO PRVENT RUNOFF FROM MIGRATING AROUND THE END OF THE FENCE.
9. INSPECTION OF THE FENCE SHALL BE PERFORMED WEEKLY, OR IMMEDIATELY AFTER A RAIN EVENT, OR WHEN BULGES APPEAR IN THE FENCE. ACCUMALTED SILT SHALL NOT BE ALLOWED TO EXCEED HALF THE HEIGHT OF THE FABRIC. REPAIR AND OR REPLACMENT OF DAMAGED FENCE SHALL BE COMPLETED PROMPTLY.
10. ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED SITE IN SUCH A MANNER THAT IT WILL NOT CONTRIBUTE TO OFF-SITE SILTATION.
11. ALL FENCING SHALL BE REMOVED WITH THE CONSTRUCTION SITE IS FULLY STABLIZED SO AS TO NOT IMPEDE STORM FLOW OR DRAINAGE.
12. PRE-FRABRICATED UNITS DO NOT REQUIRE THE USE OF WOVEN WIRE FENCE.









NOTE:
1. REPAIR ALL RILLS OR GULLIES PRIOR TO INSTALLATION
2. INSTALL CHECK DAMS IN SWALES PERPENDICULAR TO THE FLOWLINE
3. STAKE SEDIMENT LOGS IN PLACE WITH 1½" X 1½" WOODEN STAKES. DRIVE STAKES AT EACH END OF THE SEDIMENT LOG AT 2' (MAX) SPACING.
4. DRIVE STAKES INTO UNDISTURBED SOIL OF SWALE BOTTOM 16" (MIN). EXPOSE STAKES 2" MIN ABOVE TOP OF LOG.
5. PROVIDE SUFFICIENT LENGTH TO PREVENT WATER FROM FLOWING AROUND THE ENDS OF THE SEDIMENT LOG.
6. DO NOT USE WITH SWALE GRADE > 5%

CHECK DAM SPACING	
G (%)	S (FT)
1	150
2	75
3	50
4	40
5	30

NOTES AND SPECIFICATIONS:

1. SEDIMENT LOGS SHOULD BE PLACED 180 FT APART BASED ON THE SLOPE OF THE SURFACE
2. THERE SHOULD BE THREE SEDIMENT LOGS USED IN THE DRAINAGE DITCH RUNNING SOUTH ALONG SKYLINE DR UNTIL IT MEETS THE LARGE DRAINAGE DITCH THAT RUNS ALONG THE FRONT OF THE DEALERSHIP
3. SHOULD BE INSTALLED FROM BOC TO THE EDGE OF THE ROW

.

SEDIMENT WATTLE

NOT TO SCALE

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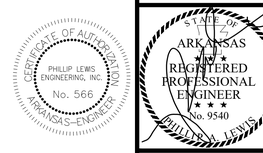
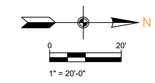


PROJECT NUMBER:

SHEET ISSUE DATE:
03-25-2026

PAGE TITLE:
SWPPP DETAILS

SHEET NUMBER:
C1.16



APPENDIX "N"

CGP Permit

AUTHORIZATION TO DISCHARGE STORMWATER UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT

In accordance with the provisions of the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. 8-4-101 et seq.), and the Clean Water Act (33 U.S.C. 1251 et seq.), an

Operator of Facilities with Stormwater Discharges Associated with Construction Activity

is authorized to discharge to all receiving waters except as stated in Part I.B.11 (Exclusions).

For large construction sites that are eligible for coverage under this General Permit (GP), the Arkansas Department of Energy and Environment - Division of Environmental Quality (DEQ), Office of Water Quality will provide a Notice of Coverage (NOC) with tracking permit number which starts with ARR15 and a copy of the permit to the facility. The cover letter includes the DEQ's determination that a facility is covered under the GP and may specify alternate requirements outlined in the permit.

Small construction sites that are eligible for coverage under this GP will be considered to have automatic coverage under this GP and must follow the permit requirements outlined in Condition 6 of Part I.

Effective Date: November 1, 2021

Expiration Date: October 31, 2026

Alan J. York
Associate Director, Office of Water Quality
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05/04/2021
Issue Date

PART I
PERMIT REQUIREMENTS

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SECTION A: DEFINITIONS WITH INCLUDED COMMENTARY

1. **"Arkansas Pollution Control and Ecology Commission"** shall be referred to as APC&EC throughout this permit.

2. **"Automatic Coverage"** is a term used to define the method of coverage for a small construction site.

3. **"Best Management Practices (BMPs)"** schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control construction site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. According to the EPA BMP manual, the use of hay-bales in concentrated flow areas is not recommended as a BMP.

4. **"Cognizant Official" is** a duly authorized representative, as defined in Part II.B.9.B.

5. **"Commencement of Construction"** is the initial disturbance of soils (or breaking ground) associated with clearing, grading, or excavating activities or other construction-related activities (e.g., stockpiling of fill material; placement of raw materials at the site).

6. **"Contaminated"** is a substance the entry of which into the MS4, waters of the State, or Waters of the United States may cause or contribute to a violation of Arkansas water quality standards.

7. **"Control Measure"** as used in this permit, refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to waters of the State.

8. **"Construction Activity"** earth-disturbing activities, such as the clearing, grading, and excavation of land, and other construction–related activities (e.g., stockpiling of fill material; placement of raw materials at the site) that could lead to the generation of pollutants.

9. **"Construction Site"** is an area upon which one or more land disturbing construction activities occur that in total will disturb one acre or more of land, including areas that are part of a larger common plan of development or sale that may be less than one acre where multiple separate and distinct land disturbing construction activities may be taking place at different times on different schedules but under one plan such that the total disturbed area is one acre or more.

10. **"Construction Support Activity"** a construction-related activity that specifically supports the construction activity and involves earth disturbance of pollutant-generating activities of its own, and can include, but not limited to, activities associated with concrete or asphalt batch plants, equipment staging yards, materials storage areas, excavated material disposal areas, and burrow areas.

11. **"CWA"** is the Clean Water Act or the Federal Water Pollution Control Act.

12. **"Department"** is referencing the Department of Energy and Environment.

13. **"DEQ"** or **"Division"** is referencing the Division of Environmental Quality. The Division is the governing authority for the National Pollutant Discharge Elimination System program in the state of Arkansas.

14. **"Detention Basin"** is an area where excess stormwater is stored or held temporarily and then slowly drains when water levels in the receiving channel recede. In essence, the water in a detention basin is temporarily detained until additional room becomes available in the receiving channel.

15. **"Director"** is the Director of the Division of Environmental Quality, or a designated representative.

16. **"Discharge"** is when used without qualification means the "discharge of a pollutant".

17. **"Disturbed area"** is the total area of the site where any construction activity is expected to disturb the ground surface. This includes any activity that could increase the rate of erosion, including, but not limited to, clearing, grubbing, grading, excavation, demolition activities, haul roads, and areas used for staging. Also included are stockpiles of topsoil, fill material and any other stockpiles with a potential to create additional runoff.

18. **"Drainageway"** is an open linear depression, whether constructed or natural, that functions for the collection and drainage of surface water.

19. **"Duly Authorized Representative"** is a representative of the Responsible Official meeting the requirements specified in Part II.B.9.B.

20. **"Eligible"** refers to being qualified for authorization to discharge stormwater under this general permit.

21. **"Erosion"** is the process by which the land's surface is worn away by the action of wind, water, ice or gravity.

22. **"ERW"** Extraordinary Resource Water, in accordance with Rule 2.

23. **"ESW"** Ecologically Sensitive Waterbodies, in accordance with Rule 2.

24. **"Facility" or "Activity"** is any NPDES "point source" or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program.

25. **"Final Stabilization"**:

A. All soil disturbing activities at the site have been completed and either of the two following criteria are met:

   1) A uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 80% or more of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or
   2) Equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

B. When background native vegetation will cover less than 100% of the ground (e.g., arid areas, beaches), the 80% coverage criteria is adjusted as follows: if the native vegetation covers 50% of the ground, 80% of 50% (0.80 x 0.50 = 0.40) would require 40% total cover for final stabilization. On a beach with no natural vegetation, no stabilization is required.

C. For individual lots in residential construction, final stabilization means that either:

   1) The homebuilder has completed final stabilization as specified above, or

2) The homebuilder has established temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need for, and benefits of, final stabilization.

D. For construction projects on land used for agricultural purposes (e.g., pipelines across crop or range land, staging areas for highway construction, etc.), final stabilization may be accomplished by returning the disturbed land to its pre-construction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to "waters of the State", and areas which are not being returned to their pre-construction agricultural use shall meet the final stabilization criteria in A, B**,** or C above.

26. "Grading Activities" as used in this permit are those actions that disturb the surface layer of the ground to change the contouring, surface drainage pattern, or any other slope characteristics of the land without significantly adding or removing on-site rock, soil, and other materials. This can include demolition, excavation, and filling.

27. "Impaired Water" is a waterbody listed in the current, approved Arkansas 303(d) list.

28. "Infrastructure" refers to streets, drainage, curbs, utilities, etc.

29. "Landscaping" is improving the natural beauty of a piece of land (i.e. entrance of subdivision) through plantings or altering the contours of the ground.

30. "Large Construction Site" is a construction site in which construction activity including clearing, grading and excavation. Construction activity also includes the disturbance of less than five acres of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres or greater. (Please see Part I.B.15 for partial waivers.)

31. "Larger Common Plan of Development or Sale" is a contiguous (sharing a boundary or edge; adjacent; touching) area where multiple and distinct construction activities may be taking place at different times on different schedules under one plan. Such a plan might consist of many small projects (e.g. a common plan of development for a residential subdivision might lay out the streets, house lots, and areas for parks, schools and commercial development that the developer plans to build or sell to others for development). All these areas would remain part of the common plan of development or sale. The following items can be used as guidance for deciding what might or might not be considered a "Common Plan of Development or Sale." The ''plan'' in a common plan of development or sale is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot. The applicant shall still meet the definition of operator in order to be required to get permit coverage, regardless of the acreage that is personally disturbed.

If a smaller project (i.e., less than 1 acre) is part of a larger common plan of development or sale (e.g., you are building a residential home on a ½ acre lot in a 40 acre subdivision or are putting in a fast food restaurant on a ¾ acre pad that is part of a 20 acre retail center), permit coverage is required.

32. "Losing Stream Segment" a stream segment which, beginning at the point of existing or proposed discharge and extending two (2) miles downstream, contribute thirty percent (30%) or more of its flow at a 7Q10 flow or one (1) cfs, whichever is greater, through natural processes such as permeable subsoil or cavernous bedrock into an aquifer.

33. "Natural Buffer" for purposes of this permit, an area of undisturbed natural cover surrounding waters of the State. Natural cover includes vegetation, exposed rock, or barren ground that exists prior to commencement of construction activities

at the site.

34. **"NOC"** Notice of Coverage.

35. **"NOI"** Notice of Intent to be covered by this permit.

36. **"NOT"** Notice of Termination.

37. **"NSW"** Natural and Scenic Waterways, in accordance with Rule 2.

38. **"Operator"/"Permittee"** for the purpose of this permit and in the context of stormwater associated with construction activity, means any person(s),an individual, association, partnership, corporation, municipality, state or federal agency, associated with a construction project that has financial and operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; additionally, the Division may require any person(s), an individual, association, partnership, corporation, municipality, state or federal agency, associated with a construction project that has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions can be named as a co-permittee.

In addition, for purposes of this permit and determining who is an operator, ''owner'' refers to the party that owns the structure being built. Ownership of the land where construction is occurring does not necessarily imply the property owner is an operator (e.g., a landowner whose property is being disturbed by construction of a gas pipeline or a landowner who allows a mining company to remove dirt, shale, clay, sand, gravel, etc. from a portion of his property). Likewise, if the erection of a structure has been contracted for, but possession of the title or lease to the land or structure is not to occur until after construction, the would-be owner may not be considered an operator (e.g., having a house built by a residential homebuilder).

39. **"Outfall"** a point source where stormwater leaves the construction site.

40. **"Owner"** refers to the owner or operator of any "facility or activity" subject to regulation under the NPDES program. In addition, for purposes of this permit and determining who is an operator, ''owner'' refers to the party that owns the structure being built. Ownership of the land where construction is occurring does not necessarily imply the property owner is an operator (e.g., a landowner whose property is being disturbed by construction of a gas pipeline). Likewise, if the erection of a structure has been contracted for, but possession of the title or lease to the land or structure is not to occur until after construction, the would-be owner may not be considered an operator (e.g. having a house built by a residential homebuilder).

41. **"Physically Interconnected"** means that one municipal separate storm sewer system is connected to a second municipal separate storm sewer system in such a way that it allows for direct discharges into the second system.

42. **"Point Source"** is any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

43. **"Qualified Local Program"** is a municipal program for stormwater discharges associated with construction sites that has been formally approved by DEQ.

44. **"Qualified personnel"** a person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact stormwater quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of stormwater discharges from the

construction activity.

45. **"Regulated Small Municipal Separate Storm Sewer System"** are all municipal separate storm sewer systems that are either:

A. Located within the boundaries of an "urbanized area" with a population of 50,000 or more as determined by the latest Decennial Census by the Bureau of Census; or
B. Owned or operated by a municipality other than those described in paragraph A and that serve a jurisdiction with a population of at least 10,000 and a population density of at least 1,000 people per square mile; or
C. Owned or operated by a municipality other than those described in paragraphs A and B and that contributes substantially to the pollutant loadings of a "physically interconnected" municipal separate storm sewer system.

46. **"Responsible Official"** is the authorized representative, as defined in Part II.B.9.A.

47. **"Retention Basin"** a basin that is designed to hold the stormwater from a rain event and allow the water to infiltrate through the bottom of the basin. A retention basin also stores stormwater, but the storage of the stormwater would be on a more permanent basis. In fact, water often remains in a retention basin indefinitely, with the exception of the volume lost to evaporation and the volume absorbed into the soils. This differs greatly from a detention basin, which typically drains after the peak of the storm flow has passed, sometimes while it is still raining.

48. **"Runoff Coefficient"** is the fraction of total rainfall that will appear at the conveyance as runoff.

49. **"Sediment"** is material that settles to the bottom of a liquid.

50. **"Sediment Basin"** is a basin that is designed to maintain a 10 year-24 hour storm event for a minimum of 24-hours in order to allow sediment to settle out of the water.

51. **"Small Construction Site"** is a construction site in which construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one acre and less than five acres. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

52. **"Stormwater"** is stormwater runoff from rainfall, snow melt runoff, and surface runoff and drainage.

53. **"Stormwater Discharge Associated with Construction Activity"** refers to the discharge of runoff from any conveyance which is used for collecting and conveying stormwater and which is directly related to construction activity.

54. **"Stormwater Pollution Prevention Plan (SWPPP or SWP3)"** is a plan that includes site map(s), an identification of construction/contractor, activities that could cause pollutants in the stormwater, and a description of measures or practices to control these pollutants.

55. **"Temporary Sediment Controls"** are controls that are installed to control sediment runoff from the site during construction activity. These could be silt fencing, rock check dams, etc.

56. **"Total Maximum Daily Load" or "TMDL"** is the sum of the individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for non-point sources and natural background. If the receiving water has only one point

source discharger, the TMDL is the sum of that point source WLA plus the LAs for any non-point sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of mass per time, toxicity, or other appropriate measure.

57. "Uncontaminated" means that the water will not exceed the water quality standards as set forth in APC&EC Rule 2; also not containing a harmful quantity of any substance.

58. "Urbanized Area" means the areas of urban population density delineated by the Bureau of the Census for statistical purposes and generally consisting of the land area comprising one or more central place(s) and the adjacent densely settled surrounding area that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile as determined by the latest Decennial Census by the Bureau of Census.

59. "Waters of the State" waters of the State means all streams, lakes, marshes, ponds, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion of the state.

SECTION B: COVERAGE UNDER THIS PERMIT

Introduction

This Construction General Permit (CGP) authorizes stormwater discharges from large and small construction activities that result in a total land disturbance of equal to or greater than one acre or less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one acre. This permit also authorizes stormwater discharges from any other construction activity designated by DEQ where DEQ makes that designation based on the potential for contribution to an excursion of a water quality standard or for significant contribution of pollutants to waters of the State. This permit replaces the permit issued in 2016. The goal of this permit is to minimize the discharge of stormwater pollutants from construction activity into waters of the State. The operator shall read and understand the conditions of the permit. A copy of the CGP is available on the DEQ web site at https://www.adeq.state.ar.us/water/permits/npdes/stormwater/. A hard copy may be obtained by contacting the DEQ's General Permits Section at (501) 682-0623.

1. **Permitted Area.** If a large or small construction activity is located within the State of Arkansas, the operator may be eligible to obtain coverage under this permit.

2. **Eligibility.** Permit eligibility is limited to discharges from "large" and "small" construction activity, or as otherwise designated by DEQ. This general permit contains eligibility restrictions, as well as permit conditions and requirements. Operators shall meet the requirements of Part I.B.6.A or Part I.B.6.B to be eligible for coverage under this permit. In such cases, operators shall continue to satisfy those eligibility provisions to maintain permit authorization. If operators do not meet the requirements that are a pre-condition to eligibility, then resulting discharges constitute unpermitted discharges. By contrast, if operators are eligible for coverage under this permit and do not comply with the requirements of the general permit, they may be in violation of the general permit for otherwise eligible discharges.

   A. This general permit authorizes discharges from construction activities as defined in 40 C.F.R. §122.26(a), 40 C.F.R. §122.26(b)(14)(x), 40 C.F.R. §122.26(b)(15)(i)-(ii) and 40 C.F.R. §450.

   B. This permit also authorizes stormwater discharges from support activities (e.g., concrete or asphalt batch plants, concrete truck washout, fueling, equipment staging yards, materials storage areas, excavated material disposal areas, stockpiles of top soil, borrow areas) provided:

      1) The support activity is directly related to a specific construction site that is required to have NPDES permit coverage for discharges of stormwater associated with the construction activity;
      2) The support activity is not a commercial operation, nor does it serve multiple unrelated construction projects; and does not continue to operate beyond the completion of the construction activity at the project it supports;
      3) Pollutant discharges from support activity areas are minimized in compliance with conditions of this permit; and
      4) Discharges from the support activity areas shall be identified in a Stormwater Pollution Prevention Plan (SWPPP) stating appropriate controls and measures for the areas off the construction site.

   C. Other activities may be considered for this permit at the discretion of the Director as defined in 40 C.F.R. §122.26(b)(15)(ii).

3. **Responsibilities of the Operator.** Permittees with operational control are responsible for compliance with all applicable terms and conditions of this permit as it relates to their activities on the construction site including construction support activities off site, including protection of endangered species and implementation of BMPs and other controls required by the SWPPP. Receipt of this general permit does not relieve any operator of the responsibility to comply with any other applicable federal, state or local statute, ordinance or regulation.

4. **Where to Submit.** The operator shall submit a complete and signed Notice of Intent (NOI) and SWPPP to DEQ through ePortal, unless the operator receives a waiver from DEQ, which can be found on the following website:

   https://eportal.adeq.state.ar.us/

   A. The operator shall submit the application fee to DEQ through ePortal (when available), submit an email requesting an invoice to be created to pay online, or mail in invoice from ePortal with a check (listing the invoice number on the check) to the follow address:

      Division of Environmental Quality
      ATTN: Fiscal
      5301 Northshore Drive
      North Little Rock, AR 72118-5317

   NOTE: Notice of Coverage (NOC) will **NOT** be issued until payment has been received by DEQ.

   B. Waivers from electronic reporting may be granted based on one of the following conditions:

      1) If the operational headquarters is physically located in a geographic area (i.e. Zip code or census tract) that is identified as under-served for broadcast internet access in the most recent report from the Federal Communications Commission;
      2) If available computer access or computer capability is limited; or
      3) If the operator is a religious community that choose not to use certain modern technologies pursuant to 40 C.F.R. §127.15(c)(1).

   C. In order to apply for a waiver from the electronic reporting, the operator must submit the required information outlined in 40 C.F.R. §127.15(b)(2).

   D. If DEQ grants a waiver approval to use a paper NOI, and operator elects to use it, the operator **must** use the approved form developed by DEQ.

5. **Requirements for Qualifying Local Program (QLP).** DEQ reviews and approves the QLPs to ensure that they meet or supersede both state and federal requirements outlined in this permit and 40 C.F.R. §122.44(s). DEQ will review the QLP at least every 5 years for recertification. If DEQ approves a QLP, then the QLP requirements shall at the minimum meet the DEQ's requirements. This includes all templates and forms. This permit may be modified to add new QLPs or modify existing QLPs at DEQ's discretion. All public notice and other applicable costs incurred by the modification of the permit for the addition or modification of a QLP will be paid by the QLP.

   If a small construction site is within the jurisdiction of a QLP, the operator of the small construction site is authorized to discharge stormwater associated with construction activity under QLP permit requirements only.

   At the time of issuance of this permit, only the City of Hot Springs is meeting the DEQ minimum requirements.

6. Requirements for Coverage.

A. *Small Construction Sites*. An operator of a small construction site will be considered to have automatic coverage under this general permit and may discharge without submitting a NOI, SWPPP or fee if the following conditions are met:

1) A completed Notice of Coverage (NOC) must be posted at the site prior to commencing construction and remain posted until final stabilization is completed;
2) A Stormwater Pollution Prevention Plan must be prepared in accordance with good engineering practice as described in Rule 6.203(B), completed prior to posting the NOC, implemented upon commencement of construction activities, and the latest copy must be maintained at the construction site;
3) All permit conditions set forth in this general permit must be followed; and
4) The operator is responsible for ensuring that the site is in compliance with any changes or updates of this general permit, by either contacting DEQ or reviewing the DEQ website:

https://www.adeq.state.ar.us/water/permits/npdes/stormwater/

B. *Large Construction Sites.* An operator of a large construction site discharging under this general permit shall submit the following items at least ten (10) business days prior to the commencement of construction activities:

1) A complete NOI in accordance with the requirements of Part I.B.7 of this permit.
2) A complete SWPPP in accordance with the requirements of Part II.A of this permit.
3) An initial permit fee shall accompany the NOI under the provisions of APC&EC Rule 9. Subsequent annual fees will be billed by DEQ until the operator has requested a termination of coverage by submitting a Notice of Termination (NOT). Failure to remit the required initial permit fee shall be grounds for the Director to deny coverage under this general permit. Failure to remit the required annual fees shall be grounds for the Director to revoke coverage under this permit.

C. Modification of Permit Coverage to Include Additional Acreage. Any request to increase the total acreage of a construction site shall be accompanied by a $200 permit modification fee and an updated SWPPP. Any request to only increase the disturbed acreage without changing the total acreage shall be accompanied by an updated SWPPP. A $200 permit modification fee is not required with an increase in disturbed acreage. The operator shall submit a complete and signed Additional Acreage Request Form to DEQ through ePortal, which can be found on the following website:

https://eportal.adeq.state.ar.us/

7. Notice of Intent (NOI) Requirements.

A. *NOI Form*. Large construction site operators who intend to seek coverage for a stormwater discharge under this general permit shall submit a complete and accurate DEQ NOI form through the ePortal system (at https://eportal.adeq.state.ar.us/) at least ten (10) business days prior to the date coverage under this permit is desired, unless granted a waiver in accordance with Part I.B.4.D. The NOI form completed **must** be the current version obtained from ePortal.

If the NOI is deemed incomplete, DEQ will notify the applicant with regard to the deficiencies by a letter, email, or phone within ten (10) business days of the receipt of the NOI. If the operator does not receive a notification of deficiencies from DEQ's receipt of the NOI, the NOI is deemed complete. If the applicant does not provide DEQ with the requested deficiencies within the deadline set by DEQ, then DEQ will return the NOI, fee and SWPPP back to the

applicant.

B. *Contents of the NOI*. The NOI form contains, at a minimum, the following information:

1) Operator (Permittee) information (name, mailing address, telephone, and E-mail address)
2) Whether the operator is a federal, state, private, public, corporation, or other entity
3) Invoice mailing information (name, address, and telephone and fax numbers)
4) Project Construction site information (name, county, address, contact person, directions to the site, latitude and longitude for the entrance of the site or the endpoints for linear project (in degrees, minutes, and seconds), estimated construction start date and completion date through site final stabilization, the total project acreage and the acreage to be disturbed by the operator submitting the NOI, type of the project (subdivision, school, etc), whether the project is part of a larger common plan of development or sale.)
5) Discharge information (name of the receiving stream, ultimate receiving stream, name of municipal storm sewer system)
6) List of current permits
7) The Certification statement and signature of a qualified signatory person in accordance with 40 CFR 122.22, as adopted by reference in APC&EC Rule 6
8) The certification of the facility corporation
9) Other information (location of the SWPPP)
10) And the SIC Code.

C. *Notice of Coverage (NOC)*. Unless notified by the Director to the contrary, operators who submit a complete NOI and SWPPP in accordance with the requirements of this permit are authorized to discharge stormwater from the construction sites under the terms and conditions of this permit ten (10) business days after the date the NOI is deemed complete (which may not be the original submission date if revisions or additions were necessary) by DEQ. If the NOC has not been received by the permittee ten (10) business days after the date the NOI is deemed complete by DEQ, the NOI may be posted until the NOC is received. Upon review of the NOI and other available information, the Director may deny coverage under this permit and require submittal of an application for an individual NPDES permit.

8. Posting Notice of Coverage (NOC).

A. *Automatic Coverage Sites*. The NOC for small sites, as defined in Part I.A.51, shall be obtained from the DEQ's Stormwater website:

https://www.adeq.state.ar.us/water/permits/npdes/stormwater/ .

The NOC must be posted at the site prior to commencing construction. In addition, a copy of the latest signed and certified SWPPP must be available at the construction site in accordance with Part II.A.2.B and D prior to commencing construction.

B. *Large Sites: NOC Posting for Large Construction Sites*. The posting for large construction sites shall be obtained from DEQ only after the permittee has submitted the required NOI, permit fee and complete SWPPP to DEQ for the coverage.

C. *Linear Projects*. If the construction project is a linear construction project (e.g., pipeline, highway, etc.), the notice shall be placed in a publicly accessible location near where construction is actively underway and moved as necessary.

Please note, this permit does not provide the public with any right to trespass on a construction site for any reason, including inspection of a site; nor does this permit require that the permittee allow members of the public access to a construction site.

9. Applicable Federal, State or Local Requirements. The operator shall ensure that the stormwater controls implemented at the site are consistent with all applicable federal, state, or local requirements. Additionally, an operator who is operating under approved local erosion and sediment plans, grading plans, local stormwater permits, or stormwater management plans shall submit signed copies of the NOI to the local agency (or authority) upon the local agency's request.

10. Allowable Non-Stormwater Discharges.

A. The following non-stormwater discharges as part of the construction activity may be authorized by this permit through appropriate controls. Non-stormwater discharges shall be addressed in the stormwater pollution prevention plan and measures to minimize or eliminate non-stormwater discharge should be taken if reasonably possible.
   1) Fire-fighting activities;
   2) Fire hydrant flushings;
   3) Water used to wash vehicles and equipment (where detergents, soaps, solvents or other chemicals are not used) or to control dust in accordance with Part II.A.4.J.2;
   4) Potable water sources including uncontaminated waterline flushings;
   5) Uncontaminated landscape irrigation;
   6) Uncontaminated routine external building wash down which does not use detergents, soaps, solvents or other chemicals;
   7) Uncontaminated pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled materials have been removed) and where detergents, soaps. solvents or other chemicals are not used);
   8) Uncontaminated air conditioning compressor condensate (See Part I.B.13.C of this permit);
   9) Uncontaminated springs, excavation dewatering and uncontaminated groundwater (See Part I.B.13.C of this permit);
   10) Foundation or footing drains where flows are not contaminated with process materials such as solvents or contaminated groundwater (See Part I.B.13.C of this permit).

11. Limitations on Coverage (Exclusions). The following stormwater discharges associated with construction activity are not covered by this permit:

A. *Post Construction Discharge.* Stormwater discharges associated with construction activities that originate from the site, as well as construction support activities located off site, after construction activities have been completed, the site has undergone final stabilization, and the permit has been terminated.

B. *Discharges Mixed with Non-Stormwater.* Stormwater discharges that are mixed with sources of non-stormwater other than those identified in Part I.B.10.

C. *Discharges Covered by another Permit.* Stormwater discharges associated with construction activity that are covered under an individual or an alternative general permit may be authorized by this permit after an existing permit expires, provided the expired permit did not establish numeric effluent limitations for such discharges.

D. *Discharges into Receiving Waters with an Approved TMDL.* Discharges from a site into receiving waters for which there is an established total maximum daily load (TMDL) allocation (https://www.adeq.state.ar.us/water/planning/integrated/tmdl/) are not eligible for coverage under this permit unless the permittee develops and certifies a SWPPP that is consistent with the assumptions and requirements in the EPA approved TMDL. To be eligible for coverage under this general permit, operators shall incorporate into their SWPPP all conditions applicable to their discharges necessary for consistency with the assumptions and requirements of the TMDL within the timeframes established in the TMDL. If a specific numeric allocation has been established that

applies to the project's discharges, the operator shall incorporate that allocation into its SWPPP and implement necessary steps to meet that allocation. If a numeric limit has been assigned to the facility, quarterly monitoring shall be submitted to DEQ demonstrating compliance with the assigned Waste Load Allocation established in the TMDL. Please note that DEQ will be reviewing this information. If it is determined that the project will discharge into a receiving stream with a TMDL, then DEQ may require additional BMPs.

E. *Discharges into Impaired Receiving Waters (303(d) List).* If stormwater discharges from a construction site enters the receiving water listed as impaired under Section 303(d) of the Clean Water Act (https://www.adeq.state.ar.us/water/planning/integrated/), the permittee shall incorporate into the SWPPP the additional BMPs needed to sufficiently protect water quality. Please note that DEQ will be reviewing this information. If it is determined that the project will discharge to an impaired water body, then DEQ may require additional BMPs.

F. *Discharges into an Extraordinary Resource Water (ERW), Natural and Scenic Waterway (NSW), or Ecologically Sensitive Waterbody (ESW).* Discharges from a construction site located within the watershed of any water body or waterway designated as an Outstanding Resource Water as defined in the APC&EC Rule 2.203, including ERWs, NSWs, or ESWs are not eligible for coverage under this permit unless the permittee develops and certifies a SWPPP that includes additional BMPs needed to prevent to the maximum extent possible exposure to precipitation and to stormwater of pollutants that could potentially impact water quality. For the purposes of this permit, the watershed of an Outstanding Resource Water will be identified by the United States Geological Survey's twelve (12) digit Hydrological Unit Code (HUC). Please note that DEQ will be reviewing this information. If the site will discharge to an ERW, NSW, or ESW, then DEQ may determine that additional requirements are necessary.

G. *Discharges into an area of the state which includes potential losing stream and/or sensitive aquatic species native to these areas.* Discharges from a construction site located within the watershed of any potential losing stream and/or sensitive aquatic species native to the area are not eligible for coverage under this permit unless the permittee develops and certifies a SWPPP that includes additional BMPs needed to prevent to the maximum extent possible exposure to precipitation and to stormwater of pollutants that could potentially impact water quality. In accordance with Part I.B.3, it is the responsibility of the permittee to prevent activity which may take or otherwise risk harm to endangered species. Please note that DEQ will be reviewing this information. If the site will discharge to an area of the state which includes potential losing stream and/or sensitive aquatic species native to these areas, then DEQ may determine that additional requirements are necessary.

12. Short Term Activity Authorization (STAA). Any work being conducted in waters of the State will require a STAA from DEQ in accordance with Rule 2.305. An STAA is necessary for any in-stream activity that has the potential to exceed the water quality standards, including, but not limited to: gravel removal, bridge or crossing repair/maintenance, bank stabilization, debris removal, culvert replacement, flood control projects, and stream relocation. Any work being conducted in Waters of the United States may require a Section 404 permit from the U.S. Army Corps of Engineers. This permit does not authorize any activity under an STAA, Individual 401 Certification, or Section 404 permit. The necessary forms to apply for coverage under an STAA or Individual 401 Certification can be found on the following website:

https://www.adeq.state.ar.us/water/planning/instream/

The SWPPP shall be updated to include a copy of the STAA letter (and Individual 401 Certification if needed) upon receipt. Re-submittal of the SWPPP is not required unless specifically requested by DEQ.

13. Effluent Limitation Guidelines (ELG). All permittees shall comply with the following effluent limits:

A. *Erosion and Sediment Controls.* Design, install, and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls shall be designed, installed and maintained to:

1) Control stormwater volume and velocity to minimize soil erosion in order to minimize pollutant discharges;
2) Control stormwater discharges, including both peak flowrates and total stormwater volume, to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points;
3) Minimize the amount of soil exposed during construction activity;
4) Minimize the disturbance of steep slopes;
5) Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls shall address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
6) Provide and maintain natural buffers around waters of the State, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce pollutant discharges, unless infeasible;
7) Minimize soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted; and
8) Unless infeasible, preserve topsoil. Preserving topsoil is not required where the intended function of a specific area of the site dictates that the topsoil be disturbed or removed.

B. *Soil Stabilization.* Stabilization of disturbed areas must, at a minimum, be initiated immediately (unless weather conditions do not allow immediate initiation) whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding fourteen (14) calendar days. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permitting authority. Stabilization must be completed within fourteen (14) calendar days. In limited circumstances, stabilization may not be required if the intended function of a specific area of the site necessitates that it remain disturbed.

C. *Dewatering.* Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls. There shall be no turbid discharges to waters of the State resulting from dewatering activities. If trench or ground waters contain sediment, it shall pass through a sediment settling pond or other equally effective sediment control device, prior to being discharged from the construction site. Alternatively, sediment may be removed by settling in place or by dewatering into a sump pit, filter bag, or comparable practice. Ground water dewatering which does not contain sediment or other pollutants is not required to be treated prior to discharge. However, care shall be taken when discharging ground water to ensure that it does not become pollutant-laden by traversing over disturbed soils or other pollutant sources.

D. *Pollution Prevention Measures.* Design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures shall be designed, installed, implemented and maintained to:

1) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters shall be treated in a sediment basin or BMP control that provides equivalent or better treatment prior to discharge;
2) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use); and
3) Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

E. *Prohibited discharges.* The following discharges are prohibited:

1) Wastewater from washout of concrete, unless managed by an appropriate control;
2) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
3) Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
4) Soaps, solvents, or detergents used in vehicle, equipment washing, or external building washdown.
5) Toxic or hazardous substances from a spill or release.

F. *Surface Outlets.* When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible.

14. Natural Buffer Zones. A natural buffer zone as stated below shall be maintained at all times and direct stormwater to vegetated areas and maximize stormwater infiltration to reduce pollutant discharges, unless infeasible. Exceptions from this requirement for areas such as water crossings, limited water access, and restoration of the buffer are allowed if the permittee fully documents in the SWPPP the circumstances and reasons for the buffer zone encroachment. Additionally, this requirement is not intended to interfere with any other ordinance, rule or regulation, statute or other provision of law.

A. For construction projects where construction activities or construction support activities occur, the SWPPP shall provide at least twenty-five (25) feet of natural buffer zone, as measured horizontally from the top of the bank to the disturbed area, from any waters of the State.

B. DEQ will require at least fifty (50) feet of natural buffer zone, as measured horizontally from the top of the bank to the disturbed area, from established TMDL water bodies, streams listed on the 303(d) list, an Extraordinary Resource Water (ERW), Ecologically Sensitive Waterbody (ESW), Natural and Scenic Waterway (NSW), or any other uses at the discretion of the Director.

C. Linear projects will be evaluated individually by DEQ to determine natural buffer zone setbacks.

15. Waivers from Permit Coverage. The Director may waive the otherwise applicable requirements of this general permit for stormwater discharges from construction activities under the terms and conditions described in this section.

A. *Waiver Applicability and Coverage*. Based upon 40 C.F.R. §122.26.b.15.i.A, operators of small construction activities may apply for and receive a waiver from the requirements to obtain this permit.

B. *No Stormwater Leaving the Site.* If all of the stormwater from the construction activity is captured on-site under any size storm event and allowed to evaporate, soak into the ground on-site, or is used for irrigation, a permit is not needed.

C. *TMDL Waivers.* This waiver is available for sites with automatic coverage if the DEQ has established or approved a TMDL that addresses the pollutant(s) of concern and has determined that controls on stormwater discharges from small construction activity are not needed to protect water quality. The pollutant(s) of concern include sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. The operator must certify to the Director that construction activity will take place, and storm water discharges will occur within the drainage area addressed by the TMDL or equivalent analysis. Information on approved TMDLs is available on DEQ's website:

https://www.adeq.state.ar.us/water/planning/integrated/tmdl/.

16. Notice of Termination (NOT). When all construction activities that disturbed soil are complete, the site has reached final stabilization (100% stabilization with 80% density or greater, or as defined in Part I.A.25.B for sites where background native vegetation will cover less than 100% of the ground), all stormwater discharges from construction activities authorized by this permit are eliminated and all temporary sediment controls are removed and properly disposed, the operator of the facility may submit a complete Notice of Termination (NOT) to the Director. Along with the NOT, pictures that represent the entire site shall be submitted for review. Final stabilization is not required if the land is returned to its pre-construction agriculture use. Operators of small construction sites are not required to submit NOTs for their construction sites. However, final stabilization is required on all sites. If a NOT is not submitted when the project is completed, the operator will be responsible for annual fees.

17. Responsibilities of the Operator of a Larger Common Plan of Development or Sale.

A. The operator is ultimately responsible for the runoff from the perimeter of the entire development. Regardless of the reason for the runoff, the operator is responsible for ensuring sufficient overall controls of the development.

B. The operator shall not terminate the permit coverage until the following conditions have been met:

1) After all construction activities including landscaping and lot development has been completed; and
2) All lots are sold and developed.

The following exceptions to this requirement may apply:

a. Less than 100% sold and developed at the discretion of the Director, or
b. Separation of the larger common plan if twenty-four (24) months have passed with no construction activity, or
c. All lots are developed and there are no temporary common controls for subdivision outfalls, i.e. sediment basins, large sediment traps, check dams, etc.

3) If lots are sold and then re-sold to a third party, permit coverage shall be obtained by each of the operators while they have ownership of the lots. The second owner is responsible for obtaining the same certification from the third owner (i.e. the certification shall pass from owner to owner).

C. The operator shall not terminate permit coverage until the operators of all of the individual lots within the larger common plan of development or sale are notified of their permitting requirements under this general permit. In this case, the signed certification statements from each operator of individual lots shall be maintained in the stormwater pollution prevention plan for the larger common plan of development or sale. A copy of the signed certifications shall be submitted to DEQ with the NOT. The certification shall be as follows:

"I, _____, operator of an individual lot #_____, block #_____ of _____ subdivision, certify under penalty of law that I was notified by the operator of the larger common plan of the stormwater permitting requirements for my construction site(s). I understand prior to commencement of any construction activity I have to prepare and comply with a SWPPP and post the Construction Site Notice . I understand that prior to the sale of this lot to another party; I must notify the new owner of DEQ requirements and obtain this certification from the new owner."

Signature _____

D. The following examples are provided as clarification:

1) If a small portion of the original common plan of development remains undeveloped and there has been a period of time (i.e., more than 24 months) where there are no ongoing construction activities (i.e., all areas are either undisturbed or have been finally stabilized), operators may re-evaluate the original project based on the acreage remaining from the original "larger common plan of development or sale." If less than five (5) but more than one (1) acre remains to build out the original "common plan", coverage under the large permit may not be required. However, operators will need to comply with the terms and conditions for Small Construction Sites in the Construction General Permit. If less than one acre remains of the original common plan, the individual project may be treated as a part of a less than one acre development and no permit would be required.
2) If operators have a long-range master plan of development or sale where some portions of the master plan are conceptual rather than a specific plan of future development and the future construction activities would, if they occur at all, happen over an extended period of time (i.e., more than 24 months), operators may consider the "conceptual" phases of development to be separate "common plans" provided the periods of construction for the physically interconnected phases will not overlap.
3) Where discrete construction projects within a larger common plan of development or sale are located ¼ mile or more apart and the area between the projects is not being disturbed, each individual project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same "common plan" is not concurrently being disturbed. For example, if an interconnecting access road or pipeline were under construction at the same time, they would generally be considered as a part of a single "common plan" for permitting purposes.
4) If the operator sells all the lots in the subdivision to one or more multi-lot homebuilder(s), provisions shall be made to obtain stormwater permit coverage by one of the following options:
   a. The permit may be transferred from the first "operator" to the new/second "operator".
   b. A new, separate permit coverage may be obtained by the second "operator".
   NOTE: If a new permit coverage is to be obtained, then it shall be obtained before the first/original permit is terminated.
5) If the operator retains ownership of any lots in the subdivision, the operator shall maintain permit coverage for those lots under the original permit coverage. The operator shall modify the SWPPP by stating which lots are owned and marking the lots on the site map. If there are one (1) or two (2) lots remaining and the total acreage is less than five (5) acres, the original permit coverage could be terminated and those lots could be covered as a small site.

18. <u>Change in Operator</u>. For stormwater discharges from large construction sites where the operator changes, including instances where an operator is added after the initial NOI has been submitted, the new operator shall ensure that a permit transfer form is received by DEQ at least two (2) weeks prior to the new operator beginning work at the site.

19. <u>Late Notifications</u>. A discharger is not precluded from submitting an NOI in accordance with the requirements of this part after the dates provided in Part I.B.7 of this permit. In such instances, the Director may bring an enforcement action for failure to submit an NOI in a timely manner or for any unauthorized discharges of stormwater associated with construction activity that have occurred on or after the dates specified in this permit.

20. <u>Failure to Notify</u>. The operator of a construction site who fails to notify the Director of their intent to be covered under this permit, and who potentially discharges pollutants (sediment, debris, etc.) to waters of the State without an NPDES permit, is in violation of the Arkansas Water and Air Pollution Control Act.

21. <u>Maintenance</u>. Determination of the acreage of disturbance does not typically include disturbance for routine maintenance activities on existing roads where the original line and grade, hydraulic capacity, or original purpose of the road is not being altered, nor does it include the paving of existing roads. Maintenance activities (returning to original conditions) are not

regulated under this permit unless one or more acres of underlying or surrounding soil are cleared, graded, or excavated as part of the operation.

22. Releases in Excess of Reportable Quantities.

A. The discharge of hazardous substances or oil in the stormwater discharge(s) from a facility shall be prevented or minimized in accordance with the applicable stormwater pollution prevention plan for the facility. This permit does not relieve the operator of the reporting requirements of 40 C.F.R. §110, §117 and §302. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reporting quantity established under either 40 C.F.R. §110, 40 C.F.R. §117, or 40 C.F.R. §302, occurs during a twenty-four (24) hour period, the following action shall be taken:

1) Any person in charge of the facility is required to notify the National Response Center (NRC) (800-424-8802) in accordance with the requirements of 40 C.F.R. §110, 40 C.F.R. §117, or 40 C.F.R. §302 as soon as he/she has knowledge of the discharge;
2) The operator shall submit within five (5) calendar days of knowledge of the release a written description of the release (including the type and estimate of the amount of material released), the date that such release occurred, and the circumstances leading to the release, and steps to be taken in accordance with Part II.B.17 of this permit to the DEQ.
3) The SWPPP described in Part II.A of this permit shall be modified within fourteen (14) calendar days of knowledge of the release to:

    a. Provide a description of the release and the circumstances leading to the release; and
    b. The date of the release;

4) Additionally, the SWPPP shall be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan shall be modified where appropriate.

B. *Spills*. This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill.

23. Attainment of Water Quality Standards.

The operator shall select, install, implement, and maintain control measures at the construction site and construction support activities off site that minimize the discharge of pollutants for which a stream is impaired at the discretion of the Director as necessary to protect water quality. In general, except in situations explained below, the stormwater controls developed, implemented, and updated to be considered stringent enough to ensure that discharges do not cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard.

At any time after authorization, DEQ may determine that the stormwater discharges may cause, have reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. If such a determination is made, DEQ will require the permittee to:

A. Develop a supplemental BMP action plan describing SWPPP modifications to address adequately the identified water quality concerns and submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards; or

B. Cease discharges of pollutants from construction activity and submit an individual permit application.

All written responses required under this part shall include a signed certification consistent with Part II.B.9.

24. Requiring an Individual Permit

The Director may require any person eligible for coverage under the general permit to apply for and obtain an individual permit. In addition, any interested person(s) may submit an application for an individual permit. The Director may consider the issuance of individual permits according to the criteria in 40 C.F.R. §122.28(b)(3).

Coverage of the facility under this general permit is may be terminated by DEQ if the operator fails to submit or respond to the permitting process or requests for information in a timely manner.

Any operator covered under this general permit may request to be excluded from the coverage of this permit by applying for an APC&EC Rule 6 individual permit. The operator shall submit an application for an individual permit with the reasons supporting the application to DEQ. If a final, individual NPDES permit is issued to an operator otherwise subject to this general permit, the operator is required to submit a NOT. Coverage under this general permit will then be terminated no earlier than the effective date of the individual NPDES permit. Otherwise, the applicability of this general permit to the facility remains in full force and effect.

PART II
STANDARD CONDITIONS

Information in **Part II** is organized as follows:

Section A: Stormwater Pollution Prevention Plans (SWPPP):

1. Deadlines for Plan Preparation and Compliance
2. Signature, SWPPP, Inspection Reports, and Notice of Coverage (NOC)
3. Keeping SWPPP Current
4. Contents of the Stormwater Pollution Prevention Plan
5. Plan Certification

Section B: Standard Permit Conditions:

1. Retention of Records
2. Duty to Comply
3. Penalties for Violations of Permit Conditions
4. Continuance of the General Permit
5. Need to Halt or Reduce Activity Not a Defense
6. Duty to Mitigate
7. Duty to Provide Information
8. Other Information
9. Signatory Requirements
10. Certification
11. Penalties for Falsification of Reports
12. Penalties for Tampering
13. Oil and Hazardous Substance Liability
14. Property Rights
15. Severability
16. Transfers
17. Proper Operation and Maintenance
18. Inspection and Entry
19. Permit Actions
20. Re-Opener Clause
21. Local Requirements
22. Applicable Federal, State Requirements

SECTION A: STORMWATER POLLUTION PREVENTION PLANS (SWPPP)

The operator shall prepare a SWPPP before permit coverage. The SWPPP shall follow the order outlined in Part II.A.4 & 5 below. This basic DEQ format is available through DEQ's website https://www.adeq.state.ar.us/water/permits/npdes/stormwater/. Other formats may be used at the discretion of the Director if the format has been approved by DEQ prior to use. The operator shall implement the SWPPP as written from initial commencement of construction activity until final stabilization is complete, with changes being made as deemed necessary by the permittee, local, state or federal officials. The plan shall be prepared in accordance with good engineering practices, by qualified personnel and shall:

- Identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges from the construction site and construction support activities off site;
- Identify, describe and ensure the implementation of BMPs, with emphasis on initial site stabilization, which are to be used to reduce pollutants in stormwater discharges from the construction site and construction support activities off site;
- Be site specific to what is taking place on a particular construction site;
- Ensure compliance with the terms and conditions of this permit; and
- Identify the responsible party for on-site SWPPP implementation.

1. Deadlines for Plan Preparation and Compliance.

A. *Automatic Coverage Sites.*

The plan shall be completed prior to obtaining permit coverage and commencement of construction activities and updated as appropriate. Submittal of the NOI, permit fee and SWPPP is not required. All conditions set forth in Part II.A must be followed, and the NOC must be posted at the site prior to commencing construction activities. In addition, a copy of the SWPPP must be available at the construction site in accordance with Part II.A.2.B and D prior to commencing construction.

B. *Large Construction Sites.*

The plan shall be completed and submitted for review, along with an NOI and initial permit fee ten (10) business days prior to the commencement of construction activities. Submittals of updates to the plan during the construction process are required in accordance with Part I.B.6.C or if requested by the Director.

C. *Existing Permittees.*

Existing permittees that were permitted prior to the issuance of this renewal permit are required to update their plan as appropriate to come into compliance with the requirements contained in Part II.A.4 by the effective date of this permit.

2. Signature, SWPPP, Inspection Reports and Notice of Coverage (NOC).

A. The SWPPP and inspection reports shall be signed by the operator (or cognizant official) in accordance with Part II.B.9 and be retained at the construction site during normal business hours (8:00 A.M. – 5:00 P.M.). The inspections frequency shall be conducted in accordance with Part II.A.4.N.1.

B. The operator shall make SWPPP and inspection reports available, upon request, to the Director, the EPA, or a State or local agency reviewing sediment and erosion plans, grading plans, or stormwater management plans, or, in the case of a stormwater discharge associated with construction activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system.

C. The Director, or authorized representative, may notify the operator at any time that the plan does not meet one or more of the minimum requirements of this Part. Within seven (7) business days of such notification from the Director (or as otherwise provided by the Director) or authorized representative, the operator shall make the required changes to the plan and submit to the Director a written certification that the requested changes have been made. DEQ may request re-submittal of the SWPPP to confirm that all deficiencies have been adequately addressed. DEQ may also take appropriate enforcement action for the period of time the operator was operating under SWPPP that did not meet the minimum requirements of this permit.

D. The operator shall post the NOC near the main entrance of the construction site and visible to the public. The NOC shall indicate the location of the SWPPP. If the SWPPP location is changed from the initial location, the NOC shall be updated to reflect the correct location of the SWPPP.

3. Keeping SWPPP Current. The operator shall amend the SWPPP within seven (7) business days or whenever there is a change in design, construction, operation, or maintenance at the construction site which has or could have a significant effect on the potential for the discharge of pollutants to the waters of the State that has not been previously addressed in the SWPPP. The SWPPP shall also be modified if a determination has been made through inspections, monitoring (if required), ***or*** investigation by the operator, local, state, or federal officials that the discharges are causing or contributing to water quality violation or the plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified in stormwater discharges from the construction site.

4. Contents of the SWPPP. The SWPPP shall include the following items:

A. *Site Description*. SWPPP shall provide a description of the following:

1) A description of the nature of the construction activity and its intended use after the NOI is filed (i.e., residential subdivision, shopping mall, etc.);
2) A description of the intended sequence of major activities which disturb soils for major portions of the site (e.g. grubbing, excavation, grading, infrastructure installation, etc.);
3) Estimates of the total area of the site including off-site borrow and fill areas and the total area of the site that is expected to be disturbed by excavation, grading or other activities; and
4) An estimate of the runoff coefficient of the site for pre- and post-construction activities and existing data describing the soil or the quality of any discharge from the site.

B. *Responsible Parties*. The SWPPP shall identify (as soon as this information is known) all parties (i.e., General Contractors, Landscapers, Project Designers, and Inspectors) responsible for particular construction activities and services they provide to the operator to comply with the requirements of the SWPPP for the project site and construction support activities off site, and areas over which each party has control. If these parties change over the life of the permit, or new parties are added, the SWPPP shall be updated to reflect these changes.

C. *Receiving Waters*. The SWPPP shall include a clear description of the nearest receiving water(s), or if the discharge is to a MS4, the name of the operator of the municipal system, and the ultimate receiving water(s).

D. *Documentation of Permit Eligibility Related to the 303(d) list and Total Maximum Daily Loads (TMDL)*. The SWPPP shall include information on whether or not the stormwater discharges from the site enter a waterbody that is on the most recent 303(d) list or with an approved TMDL. If the stormwater discharge does enter a waterbody that is on the most recent 303(d) list or with an approved TMDL, then the SWPPP shall address the following items:

1) Identification of the pollutants that the 303(d) list or TMDL addresses, specifically whether the 303(d) list or TMDL addresses sediment or a parameter that addresses sediment (such as total suspended solids, turbidity, or siltation);
2) Identification of whether the operator's discharge is identified, either specifically or generally, on the 303(d) list or

any associated assumptions and allocations identified in the TMDL for the discharge; and

3) Measures taken by the operator to ensure that its discharge of pollutants from the site is consistent with the assumptions and allocations of the TMDL.

If DEQ determines during the review process that the proposed project will be discharging to a receiving water that is on the most recent 303(d) list or with an approved TMDL, then DEQ may notify the applicant to include additional Best Management Practices in the SWPPP.

E. *Documentation of Permit Eligibility Related to Discharges into an ERW, NSW, or ESW*. The SWPPP shall include information whether or not the construction site located within a watershed of an ERW, ESW, or NSW. If the construction site is located within a watershed of an ERW, ESW, or NSW, then the SWPPP should consider using additional BMPs for these areas. The practices shall be considered during the progression of site activities and updates to the construction site SWPPP for continued protection of underground water resources.

F. *Documentation of Permit Eligibility related to potential losing stream and/or sensitive aquatic species native to these areas.* The SWPPP shall include information whether or not the construction site located within a watershed of a potential losing stream, and/or sensitive aquatic species native to these areas. If the construction site is located within a watershed of a potential losing stream and/or sensitive aquatic species native to these areas, then the SWPPP shall consider using BMPs for losing stream areas. The practices should be considered during the progression of site activities and updates to the facility SWPPP for continued protection of underground water resources.

G. *Attainment of Water Quality Standards After Authorization*.

1) The permittee shall select, install, implement, and maintain BMPs at the construction site and at the construction support activities off site that minimize pollutants in the discharge as necessary to meet applicable water quality standards. In general, except in situations explained below, the SWPPP shall be developed, implemented, and updated to be considered as stringent as necessary to ensure that the discharges do not cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard.

2) At any time after authorization, DEQ may determine that the stormwater discharges may cause, have reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. If such a determination is made, DEQ will require the permittee to:

   a. Develop a supplemental BMP action plan describing SWPPP modifications to adequately address the identified water quality concerns and submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards; or

   b. Cease discharges of pollutants from construction activity and submit an individual permit application.

3) All written responses required under this part shall include a signed certification (Part II.B.9).

H. *Site Map*. The SWPPP shall contain a legible site map (or multiple maps, if necessary) complete to scale, showing the entire site, that identifies, at a minimum, the following:

1) Pre-construction topographic view;
2) Direction of stormwater flow (i.e., use arrows to show which direction stormwater will flow) and approximate slopes anticipated after grading activities;
3) Delineate on the site map areas of soil disturbance and areas that will not be disturbed with regards to the construction activities and construction support activities off site under the coverage of this permit;
4) Location of major structural and nonstructural controls identified in the plan;
5) Location of main construction entrance and exit;

6) Location where stabilization practices are expected to occur;
7) Locations of all construction support activities off-site (i.e. materials, waste, borrow area, or equipment storage areas);
8) Location of areas used for concrete wash-out;
9) Location of all waters of the State with associated natural buffer boundary lines. Identify floodplain and floodway boundaries, if available;
10) Locations where stormwater is discharged to waters of the State or a municipal separate storm sewer system if applicable,
11) Locations where stormwater is discharged off-site (shall be continuously updated);
12) Areas where final stabilization has been accomplished and no further construction phase permit requirements apply;
13) A legend that clearly specifies any erosion and sediment control measure symbols/labels used in the site map and/or detail sheet; and
14) Locations of any storm drain inlets on the site and in the immediate vicinity of the site.

I. *Stormwater Controls*. Each plan shall include a description of appropriate controls and measures that will be installed and implemented at the construction site. The plan shall clearly describe each construction activity identified in the project description control measures associated with the construction activity and the schedule during the construction process that the measures will be implemented. Perimeter controls for the site shall be installed after the clearing and grubbing necessary for installation of the measure, but before the clearing and grubbing for the remaining portions of the site. Perimeter controls shall be actively maintained until final stabilization of those portions of the site upward of the perimeter control. Temporary controls shall be removed and properly disposed of after final stabilization. The description and implementation of controls shall address the following minimum components:

1) Initial Site Stabilization, Erosion, and Sediment Controls and Best Management Practices. Design, install, implement, and maintain effective erosion and sediment controls to minimize the discharge of pollutants. At a minimum the following controls and BMPs shall be designed, installed, implemented, and maintained. Therefore, the SWPPP shall address, at a minimum, the following:

   a. For larger common plans of development or sale, only streets, drainage, utility areas, areas needed for initial construction of streets (e.g., borrow pits, parking areas, etc.) and areas needed for stormwater structures may be disturbed initially. Upon stabilization of the initial areas, additional areas may be disturbed.
   b. The construction-phase erosion (such as site stabilization) and sediment controls (such as check dams) shall be designed to retain sediment on-site to the extent practicable.
   c. All control measures shall be properly selected, installed, and maintained in accordance with the manufacturer's specifications, good engineering, and construction practices. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the permittee shall replace or modify the control for site situations.
   d. If sediment escapes the construction site, off site accumulations of sediment shall be removed before the next business day to minimize off-site impacts (e.g., to prevent fugitive sediment in a street could be washed into storm sewers by the next rain or pose a safety hazard to users of public streets). This permit does not give the authority to trespass onto other property; therefore this condition should be carried out along with the permission of neighboring land owners to remove sediment.
   e. Sediment shall be removed from sediment traps (if used, please specify what type) or sedimentation ponds when design capacity has been reduced by 50%.
   f. Litter, construction debris, and construction chemicals exposed to precipitation and to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls picked up daily).
   g. Construction support activities off site (i.e. material storage areas, overburden and stockpiles of dirt, borrow areas, etc.) used solely by the permitted project are considered a part of the project and shall be addressed in the SWPPP.

2) Stabilization practices. The SWPPP shall include, at a minimum, the following information:

a. Description and Schedule: A description of initial, interim, and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans shall ensure that existing vegetation is preserved where attainable and that disturbed areas are stabilized. Stabilization practices may include, but not limited to: mulching, temporary seeding, permanent seeding, geotextiles, sod stabilization, natural buffer strips, protection of trees, and preservation of mature vegetation and other appropriate measures.

b. Description of natural buffer areas: DEQ requires that a natural buffer zone be established between the top of stream bank and the disturbed area. The SWPPP shall contain a description of how the site will maintain natural buffer zones. For construction projects where clearing and grading activities will occur, SWPPP shall provide at least twenty-five (25) feet of natural buffer zone from any named or unnamed streams, creeks, rivers, lakes or other water bodies. The plan shall also provide at least fifty (50) feet of natural buffer zone from established TMDL waterbodies, waterbodies listed on the 303(d) list, an ERW, ESW, NSW, or other uses at the discretion of the Director. If the site will be disturbed within the recommended buffer zone, then the buffer zone area shall be stabilized as soon as possible. Exceptions from this requirement for areas such as water crossings, limited water access, and restoration of the buffer are allowed if the permittee fully documents in the SWPPP the circumstances and reasons for the buffer zone encroachment. Additionally, this requirement is not intended to interfere with any other ordinance, rule or regulation, statute or other provision of law. Please note that above-grade clearing that does not disturb the soil in the buffer zone area does not have to comply with buffer zone requirements.

c. Records of Stabilization: A record of the dates when grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included in the plan.

d. Deadlines for Stabilization After Construction Activity Temporarily Ceases: Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily ceased, but in no case more than fourteen (14) calendar days after the construction activity in that portion of the site has temporarily ceased, except:

(1) Where the initiation of stabilization measures by the fourteenth (14^{th}) calendar day after construction activity temporarily ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.

(2) In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures shall be employed as specified by the permitting authority.

e. Deadline for Stabilization After Construction Activity Permanently Ceases: Stabilization measures shall be initiated immediately in portions of the site where construction activities have permanently ceased, except:

(1) Where the initiation of stabilization measures immediately after construction activity permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.

(2) In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures shall be employed as specified by the permitting authority.

3) Structural Practices. A description of structural practices to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Structural practices should be placed on upland soils to the degree attainable. The installation of these devices may

be subject to Section 404 of the Clean Water Act. Such practices may include but are not limited to:

- silt fences (installed and maintained);
- earthen dikes to prevent run-on;
- drainage swales to prevent run-on;
- check dams;
- subsurface drains;
- pipe slope drains;
- storm drain inlet protection;
- rock outlet protection;
- sediment traps;
- reinforced soil retaining systems;
- gabions;
- temporary or permanent sediment basins.

A combination of erosion and sediment control measures is encouraged to achieve maximum pollutant removal. Adequate spillway cross-sectional area and re-enforcement shall be provided for check dams, sediment traps, and sediment basins.

a. Sediment Basins:

(1) For common drainage locations that serve an area with ten (10) or more acres (including run-on from other areas) draining to a common point, a temporary or permanent sediment basin that provides storage based on either the smaller of 3600 cubic feet per acre, or a size based on the runoff volume of a 10 year, 24 hour storm, shall be provided where attainable (so as not to adversely impact water quality) until final stabilization of the site. In determining whether installing a sediment basin is attainable, the operator may consider factors such as site soils, slope, available area on site, etc. Proper hydraulic design of the outlet is critical to achieving the desired performance of the basin. The outlet should be designed to drain the basin within twenty-four (24) to seventy-two (72) hours. (A rule of thumb is one square foot per acre for a spillway design.) The 24-hour limit is specified to provide adequate settling time; the seventy-two (72) hour limit is specified to mitigate vector control concerns. If a pipe outlet design is chosen for the outfall, then an emergency spillway is required. If "non-attainability" is claimed, then an explanation of non-attainability shall be included in the SWPPP**.** Where a sediment basin is not attainable, smaller sediment basins or sediment traps shall be used. Where a sediment basin is un-attainable, natural buffer strips or other suitable controls which are effective are required for all side slopes and down slope boundaries of the construction area. The plans for removal or final usage of the sediment basin shall be included with the description of the basin in the SWPPP.

(2) For drainage locations serving an area less than ten (10) acres, sediment traps, silt fences, or equivalent sediment controls are required for all side slope and down slope boundaries of the construction area unless a sediment basin providing storage based on either the smaller of 3600 cubic feet per acre, or a size based on the run off volume of a 10 year, 24 hour storm is provided. The outlet should be designed to drain the basin within twenty-four (24) to seventy-two (72) hours. (A rule of thumb is one square foot per acre for a spillway design.) The 24-hour limit is specified to provide adequate settling time; the seventy-two (72) hour limit is specified to mitigate vector control concerns. If a pipe outlet design is chosen for the outfall, then an emergency spillway is required. However, in order to protect the waters of the State, the Director, at their discretion, may require a sediment basin for any drainage areas draining to a common point.

b. Velocity Dissipation Devices:

Velocity dissipation devices shall be placed at discharge locations, within concentrated flow areas serving two

or more acres, and along the length of any outfall channel to provide a non-erosive flow velocity from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (i.e., no significant changes in the hydrological regime of the receiving water). Please note that the use of hay-bales is not recommended in areas of concentrated flow.

J. *Other Controls*.

1) No solid materials identified in Part I.B.13.D shall be discharged to waters of the State or offsite.
2) Off-site vehicle tracking of sediments and the generation of dust shall be minimized through the use of a stabilized construction entrance and exit or vehicle tire washing.
3) For lots that are less than one (1) acre in size an alternative method may be used in addition to a stabilized construction entrance. An example of an alternative method could be daily street sweeping. This could allow for the shortening of the construction entrance.
4) The plan shall ensure and demonstrate compliance with applicable State or local waste disposal, temporary and permanent sanitary sewer or septic system regulations.
5) No liquid concrete waste shall be discharged to waters of the State. Appropriate controls to prevent the discharge of concrete washout waters shall be implemented if concrete washout will occur on-site.
6) No contaminants from fuel storage areas, hazardous waste storage and truck wash areas shall be discharged to waters of the State or offsite. Methods for protecting these areas shall be identified and implemented. These areas shall not be located near a waterbody, if there is a water body on or near the project.

K. *Non-stormwater discharges*. Sources of non-stormwater listed in Part I.B.10 of this permit that are combined with stormwater discharges associated with construction activity shall be identified in the plan. This list shall be site specific non-stormwater discharges.

L. *Post-Construction Stormwater Management*. The operator is required to provide a description of measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed. Structural measures shall be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 (Corps of Engineers) of the Clean Water Act. This permit only addresses the installation of stormwater management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed and the site has undergone final stabilization. However, post-construction stormwater BMPs that discharge pollutants from a point source once construction is completed may need authorization under a separate DEQ NPDES permit. Such practices may include but are not limited to:

- infiltration of runoff onsite;
- flow attenuation by use of open vegetated swales and natural depressions;
- stormwater retention structures;
- stormwater detention structures (including wet ponds);
- sequential systems, which combine several practices.

A goal of at least eighty percent 80 % removal of total suspended solids from these flows which exceed predevelopment levels should be used in designing and installing stormwater management controls (where practicable). Where this goal is not met, the operator shall provide justification for rejecting each practice listed above based on site conditions.

M. *Applicable State or Local Programs*. The SWPPP shall be updated as necessary to reflect any revisions to applicable federal, state, or local requirements that affect the stormwater controls implemented at the site.

N. *Inspections*. Inspections shall be conducted by qualified personnel (provided by the operator). Inspections shall include all areas of the site disturbed by construction activity and construction support activities located off site that are exposed to precipitation and to stormwater. Inspectors shall look for evidence of, or the potential for, pollutants entering

the stormwater conveyance system. All stormwater control measures shall be observed to ensure proper installation, operation, and maintenance. Discharge locations shall be inspected to determine whether all stormwater control measures are effective in preventing significant impacts to waters of the State or offsite, where accessible. Where discharge locations are inaccessible, nearby downstream locations shall be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site shall be inspected for evidence of off-site sediment tracking. Inspections may not be required if the remaining lot(s) within a larger common plan of development or sale disturb less than one acre of land In addition, inspections may not be required on a completed section of a linear project if final stabilization has been completed for that section. Stabilized areas of the project shall be indicated in the SWPPP and site map and show what date they were stabilized. The operator shall ensure that no sediment will leave the lot(s) that are stabilized. These lots shall be identified within the SWPPP and show what date they were stabilized. If the operator is unable to ensure this, then inspections shall continue.

1) Inspection Frequency. Inspections shall be conducted in accordance with one of the following schedules listed below. The schedule **must be specified** in the SWPPP.

   a. At least once every seven (7) calendar days, or
   b. At least once every fourteen (14) calendar days and within twenty-four (24) hours of the end of a storm event of 0.25 inches or greater (a rain gauge must be maintained on-site).

2) Inspection Form. The DEQ inspection form should be used for all inspections. The inspection form shall include all stormwater controls that are being used on site as well as at construction support activities off site. The form is available on DEQ's website www.adeq.state.ar.us. If a different form is used, it shall at a minimum contain the following information:

   a. Inspector name and title;
   b. Date of Inspection;
   c. Amount of rainfall and days since last rain event (only applicable to Part II.A.4.N.1.b);
   d. Approximate beginning and duration of the storm event;
   e. Description of any discharges during inspection;
   f. Locations of discharges of sediment/other pollutants;
   g. Locations of BMPs in need of maintenance or where maintenance was performed;
   h. If the BMPs are in working order and if maintenance is required (including when scheduled and completed);
   i. Locations that are in need of additional controls;
   j. Location and dates when major construction activities begin, occur or cease;
   k. Signature of qualified signatory official, in accordance with Part II.B.9.

   Additional information may be added to the inspection report at the permittee's discretion.

3) Inspection Records. Each report shall be retained as part of the SWPPP for at least three (3) years from the date the site is finally stabilized. Each report shall be signed and have a certification statement in accordance with Parts II.B.9 and 10 of this permit.

4) Winter Conditions. Inspections will not be required at construction sites nor the construction support activities located off site where snow cover exists over the entire site for an extended period, and melting conditions do not exist. If there is any runoff from the site at any time during snow cover, melting conditions are considered to be existent at the site and this inspection waiver does not apply. Regular inspections, as required by this permit, are required at all other times as specified in this permit. If winter conditions prevent compliance with the permit, documentation of the beginning and ending date of winter conditions shall be included in the SWPPP.

5) Adverse Weather Conditions. Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make inspections

impractical, such as extended frozen conditions. When adverse weather conditions prevent the inspection of the site, an inspection shall be completed as soon as is safe and feasible. If adverse weather conditions prevent compliance with the permit, documentation of the beginning and ending date of adverse weather conditions shall be included in the SWPPP.

O. *Maintenance*. A description of procedures to maintain vegetation, erosion and sediment control measures and other protective measures in good, effective operating condition shall be outlined in the plan. Any repairs that are needed based on an inspection shall be completed, when practicable, before the next storm event, but not to exceed a period of three (3) business days of discovery, or as otherwise directed by state or local officials. However, if conditions do not permit large equipment to be used, a longer time frame is allowed if the condition is thoroughly documented on the inspection form. Maintenance for manufactured controls shall be done at a minimum of the manufacturer's specifications. Maintenance for non-manufactured controls, i.e. check dams and sediment traps, shall be done when 50% of treatment capacity remains.

P. *Employee Training*. The permittee/operator is responsible for training personnel, who are responsible for implementing activities identified in the SWPPP, on the components and requirements of the SWPPP and the requirements of the general permit. This includes contractors and subcontractors. Training shall be given by a knowledgeable and qualified trainer. The SWPPP shall identify periodic dates for such training for all personnel and records of training shall be maintained with the SWPPP. Training records that are maintained electronically (i.e. database, etc.) do not need to be maintained with the SWPPP, but shall be accessible upon request. Formal training classes given by Universities or other third-party organizations are not required but recommended for qualified trainers; the permittee is responsible for the content of the training being adequate for personnel to implement the requirements of the permit.

5. Plan Certification. The SWPPP Certification shall be signed by either the operator or the cognizant official identified on the NOI. All documents required by the permit and other information requested by the Director shall be signed by operator or by a duly authorized representative of the operator (Please see Part II.B.10 below for certification).

SECTION B: STANDARD PERMIT CONDITIONS

1. **Retention of Records.**

   A. The operator shall retain records of all Stormwater Pollution Prevention Plans, all inspection reports required by this permit, and records of all data used to complete the NOI to be covered by this permit for a period of at least three (3) years from the date the NOT letter is signed by DEQ. This period may be extended by request of the Director at any time.

   B. The operator shall retain a signed copy of the SWPPP and inspection reports required by this permit at the construction site from the date of project initiation to the date of final stabilization.

2. **Duty to Comply.** The operator shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Water Act and the Arkansas Water and Air Pollution Control Act and is grounds for: enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application.

3. **Penalties for Violations of Permit Conditions.** The Arkansas Water and Air Pollution Control Act (Ark. Code Ann. 8-4-101 et seq.) provides that any person who violates any provisions of a permit issued under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year, or a criminal penalty of not more than twenty five thousand dollars ($25,000) or by both such fine and imprisonment for each day of such violation. Any person who violates any provision of a permit issued under the Act may also be subject to civil penalty in such amount as the court shall find appropriate, not to exceed ten thousand dollars ($10,000) for each day of such violation. The fact that any such violation may constitute a misdemeanor shall not be a bar to the maintenance of such civil action. Any person that purposely, knowingly, or recklessly causes pollution of the water of the state in a manner not otherwise permitted by law and thereby places another person in imminent danger of death or serious bodily injury shall be guilty of a felony and shall be subject to imprisonment, a fine not more than two hundred fifty thousand dollars ($250,000), or both such fine and imprisonment.

4. **Continuance of the General Permit.** Permittees wishing to continue coverage under this general permit shall submit a Renewal NOI (see Part I.B.4 for where to submit documentation) up to 180 days prior to the expiration date, but no later than thirty (30) days prior to the expiration date. No additional fee is required to be submitted along with the Renewal NOI.

   An expired general permit continues in force and effect until a new general permit is issued. If this permit is not re-issued or replaced prior to the expiration date, it will be administratively continued in accordance with Ark. Code Ann. § 8-4-203(m) and remain in force and effect. If a permittee was granted permit coverage prior to the expiration date, the permittee will remain covered by the continued permit until the earliest of:

   A. The effective date of the re-issuance or replacement of this permit and a timely submittal of a renewal NOI by the operator; or

   B. The operator's submittal and DEQ approval of a NOT; or

   C. Issuance and effectiveness of an individual permit for the project's discharges and completion of item B of this section (see Part I.B.24); or

   D. A formal permit decision by DEQ to not re-issue this general permit, at which time operators must seek coverage under an alternative permit (see Part I.B.24).

   Small site operators are responsible for ensuring that the site is in compliance with any changes or updates of this general permit by reviewing DEQ's website at:

https://www.adeq.state.ar.us/water/permits/npdes/stormwater/

5. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for an operator in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

6. **Duty to Mitigate.** The operator shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has reasonable likelihood of adversely affecting human health or the environment.

7. **Duty to Provide Information.** The operator shall furnish to the Director, an authorized representative of the Director, the EPA, a State or local agency reviewing sediment and erosion plans, grading plans, or stormwater management plans, or in the case of a stormwater discharge associated with industrial activity which discharges through a MS4 with an NPDES permit, to the municipal operator of the system, within a reasonable time, any information which is requested to determine compliance with this permit.

8. **Other Information.** When the operator becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the NOI or in any other report to the Director, he or she shall promptly submit such facts or information.

9. **Signatory Requirements.** All NOIs, reports, or information submitted to the Director shall be signed and certified by the operator.

   A. All NOI shall be signed as follows:

      1) For a corporation: by a responsible corporate officer. For purposes of this section, a responsible corporate officer means:

         a. A president, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

         b. The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to ensure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

      2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;

      3) For a municipality, State, Federal or other public agency: by either a principal executive or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

         a. The chief executive officer of the agency; or

         b. A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

   B. All reports required by the permit and other information requested by the Director shall be signed by a person described

above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1) The authorization is made in writing by a person described above and submitted to the Director;

2) The authorization specifies either an individual or a person having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility, or position of equivalent responsibility for environmental matters for the company (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

3) Changes to authorization. If an authorization under this Part is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the above requirements shall be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

10. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments such as Inspection Form were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Note: For this permit only, “this document” refers to the Stormwater Pollution Prevention Plan, “attachments” refers to the site map and inspection forms, and “system” is referencing the project site.

11. Penalties for Falsification of Reports. The Arkansas Water and Air Pollution Control Act provides that any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under this permit shall be subject to civil penalties specified in Part II.B.3 of this permit and/or criminal penalties under the authority of the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. 8-4-101 et seq.).

12. Penalties for Tampering. The Arkansas Water and Air Pollution Control act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year or a fine of not more than twenty five thousand dollars ($25,000) or by both such fine and imprisonment.

13. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties to which the operator is or may be subject under Section 311 of the Clean Water Act or Section 106 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

14. Property Rights. The issuance of this permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property, any invasion of personal rights, or any infringement of Federal, State, or local laws or regulations.

15. Severability. The provisions of this permit are severable. If any provisions of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provisions to other circumstances and the remainder of this permit shall not be affected thereby.

16. Transfers. This permit is not transferable to any person except after notice to the Director. A transfer form shall be submitted to DEQ as required by this permit.

17. Proper Operation and Maintenance. The operator shall at all times:

A. Properly operate and maintain all systems of treatment and control (and related appurtenances) which are installed or used by the operator to achieve compliance with the conditions of this permit. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by an operator only when the operation is necessary to achieve compliance with the conditions of the permit.
B. Provide an adequate operating staff which is duly qualified to carry out operation, inspection, maintenance, and testing functions required to ensure compliance with the conditions of this permit.

18. Inspection and Entry. The operator shall allow the Director, the EPA, or an authorized representative, or, in the case of a construction site which discharges to a municipal separate storm sewer, an authorized representative of the municipal operator of the separate sewer system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

A. Enter upon the operator's premises where a regulated facility or activity is located or conducted, or where records shall be kept under the conditions of this permit;
B. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this permit;
C. Inspect at reasonable times any facilities or equipment, including monitoring and control equipment and practices or operations regulated or required by the permit;
D. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location on the permitted property.

19. Permit Actions. This permit may be modified, revoked and reissued, or terminated for any cause including, but not limited to, the following;

A. Violation of any terms or conditions of this permit;
B. Obtaining this permit by misrepresentation or failure to fully disclose all relevant facts;
C. A change in any conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge;
D. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or
E. Failure of the operator to comply with the provisions of DEQ Rule 9 (Fee Rule). Failure to promptly remit all required fees shall be grounds for the Director to initiate action to terminate this permit under the provisions of 40 C.F.R. §122.64 and §124.5(d), as adopted by reference in DEQ Rule 6, and the provisions of DEQ Rule 8.

20. Re-Opener Clause.

A. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with industrial activity covered by this permit, the operator of such discharge may be required to obtain an individual permit or an alternative general permit in accordance with Part I.B.24 of this permit, or the permit may be modified to include different limitations and/or requirements.

B. Permit modification or revocation will be conducted in accordance with the provisions of 40 C.F.R. §122.62, §122.63, §122.64 and §124.5, as adopted by reference in DEQ Rule 6.

21. Local Requirements. All dischargers shall comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding any discharges of stormwater to storm drain systems or other water sources under their jurisdiction, including applicable requirements in municipal stormwater management programs developed to

comply with the DEQ permits. Dischargers shall comply with local stormwater management requirements, policies, or guidelines including erosion and sediment control.

22. **Applicable Federal, State, or local Requirements.** Permittees are responsible for compliance with all applicable terms and conditions of this permit. Receipt of this permit does not relieve any operator of the responsibility to comply with any other applicable federal, state or local statute, ordinance policy, or regulation. Nothing in this permit shall be construed to preclude the institution of any legal action or enforcement actions or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable local state, or federal law or regulation.

APPENDIX "O"

ARR150000 SMALL SITE NOC

SITE WITH AUTOMATIC COVERAGE (LESS THAN 5 ACRES) CONSTRUCTION SITE NOTICE

FOR THE
Division of Environmental Quality (DEQ)
Stormwater Program

NPDES GENERAL PERMIT NO. ARR150000

The following information is posted in compliance with **Part I.B.8.a** of the DEQ General Permit Number **ARR150000** for discharges of stormwater runoff from sites with automatic coverage. Additional information regarding the DEQ stormwater program may be found on the internet at:
www.adeq.state.ar.us/water/branch_npdes/stormwater

Permit Number	ARR150000
Contact Name: Phone Number:	Aaron Davidson 501-319-3301
Project Description (Name, Location, etc.): Start Date: End Date: Total Acres:	Site prep & construction of commercial site Christy Ln 04-27-26 Approximately 12-18-26 Approximately 2.10
Location of Stormwater Pollution Prevention Plan:	At entrance in mailbox

Does this construction activity take place, and does the stormwater discharge occur within the drainage area addressed by a TMDL?

✓ YES _____ NO

For Construction Sites Authorized under **Part I.B.6.a** (Automatic Coverage) the following certification must be completed:

I Aaron Davidson (Typed or Printed Name of Person Completing this Certification) certify under penalty of law that I have read and understand the eligibility requirements for claiming an authorization under Part I.B.2. of the DEQ General Permit Number ARR150000. A stormwater pollution prevention plan has been developed and implemented according to the requirements contained in Part II.A.2.B & D of the permit. I am aware there are significant penalties for providing false information or for conducted unauthorized discharges, including the possibility of fine and imprisonment for knowing violations.

Owner Rep
Signature and Title

3/25/2026
Date

THE GODDARD SCHOOL OF BRYANT

CHRISTY LANE
ALEXANDER, AR

Sheet List Table	
Sheet Number	Sheet Title
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C1.1	Demo Plan
C1.2	Site Plan
C1.3	Site Details
C1.4	Grading Plan
C1.5	Stormwater Plan
C1.6	Stormwater Profiles
C1.7	Pre Drainage Plan
C1.8	Overall Drainage Plan
C1.9	Post Drainage Plan
C1.10	Overall Drainage Plan 1
C1.11	Overall Drainage Plan 2
C1.12	Utility Plan
C1.13	Utility Details
C1.14	Landscape Plan
C1.15	SWPPP Ph 1
C1.16	SWPPP Ph 2
C1.17	SWPPP Ph 3
C1.18	SWPPP Details
C1.19	Playground Details
C1.20	Prototype Details I
C1.21	Prototype Details II

SURVEY LEGEND

- GAS METER
- WATER METER
- GUY WIRE
- POWER/UTILITY POLE
- TELEPHONE PEDESTAL
- SEWER MANHOLE
- WATER VALVE
- FIRE HYDRANT
- SIGNS
- LIGHT POLE
- TELEPHONE MANHOLE
- SS SANITARY SEWER LINE
- W WATER LINE
- STORM SEWER PIPE
- ROADWAY CENTERLINE
- WATER & SEWER EASEMENT
- BUILDING SETBACK LINE
- R/W ROADWAY RIGHT-OF-WAY
- OHE OVERHEAD ELECTRIC LINES
- UGT UNDERGROUND TELEPHONE
- G UNDERGROUND GAS
- F.O. UNDERGROUND FIBER OPTIC
- X FENCE
- STEEL GUARD RAIL
- [100] SURFACE CONTOUR LINE & ELEVATION

N	NORTH
S	SOUTH
E	EAST
W	WEST
(M)	AS MEASURED
(D)	PER DEED
R/W	RIGHT-OF-WAY
L.A.	LANDSCAPED AREA
CR4	CAPPED 1/2" REBAR
CONC.	CONCRETE
P.O.C.	POINT OF COMMENCEMENT
P.O.B.	POINT OF BEGINNING
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
ESMT	EASEMENT
SUBD	SUBDIVISION
HDPE	HIGH DENSITY POLYETHYLENE
FDC	FIRE DEPARTMENT CONNECTION
●	SET 1/2" REBAR w/ CAP #1853
⬟	SET COTTON-PICKER SPINDLE
○	FOUND MONUMENT (DESC. NOTED)
△	COMPUTED CORNER (NOT SET)

Vicinity Map

SCALE 1" = 1000'

Know what's **below.** **Call** before you dig.

GENERAL CONSTRUCTION NOTES

A. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR DAMAGES OCCURRING TO ANY PROPERTY DURING THE CONSTRUCTION OF THIS PROJECT. SAID CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT PROPERTY DAMAGE.

B. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL SOLELY AND COMPLETELY BE RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING HOURS.

THE DUTY OF BRYANT TO CONDUCT CONSTRUCTION INSPECTION REVIEWS OF THE CONTRACTOR'S PERFORMANCE IS NOT AN INSPECTION OR REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.

C. ALL WATER AND SEWER IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST REVISION TO THE CITY OF BRYANT'S WATER AND WASTEWATER (SANITARY SEWER) STANDARD SPECIFICATIONS.

D. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF ALL UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.

E. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.

F. PRIOR TO INSTALLATION OF ANY UTILITIES, THE CONTRACTOR IS TO EXCAVATE, VERIFY AND CALCULATE ALL CROSSINGS AND INFORM ANY AND ALL UTILITIES OF ANY CONFLICTS PRIOR TO CONSTRUCTION.

G. CONSTRUCTION SHALL NOT START ON ANY WATER UTILITY TIE-INS UNTIL APPROVAL IS GIVEN BY BRYANT WATER. SAID CONTRACTOR SHALL NOT OPERATE ANY VALVE, HYDRANT, OR WATER UTILITY APPURTENANCE NOR SHALL HE ATTACH TO OR TAP ANY WATER UTILITY MAIN WITHOUT APPROVAL. THE CONTRACTOR SHALL BEAR THE COST AND CONSEQUENCE OF ANY DISRUPTION OF UTILITY OPERATION CAUSED BY CONSTRUCTION.

H. FIBER OPTIC CABLE ON AND/OR ADJACENT TO THIS SITE WERE NOT LOCATED BY THE SURVEY AND ARE NOT SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ANY FIBER OPTIC CABLES ASSOCIATED WITH THIS SITE AND TAKE ALL NECESSARY AND REQUIRED PRECAUTIONS TO PROTECT ANY EXISTING FIBER OPTIC CABLES. CONTRACTORS SHALL COORDINATE ALL EFFORTS WITH OWNER OF FIBER OPTIC CABLES OR THEIR DESIGNATED REPRESENTATIVE.

J. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "ONECALL" SERVICE TO MARK ALL UTILITIES PRIOR TO ANY DEMOLITION, EARTHWORK, OR UTILITY WORK ON THIS SITE.

GODDARD GENERAL CONSTRUCTION NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", AS APPLICABLE.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS AND SHALL REPORT ANY DISCREPANCIES BETWEEN THE PLANS AND ACTUAL FIELD CONDITIONS TO THE OWNER OR OWNER'S REPRESENTATIVE IMMEDIATELY.
3. CONTRACTOR SHALL PROVIDE SMOOTH TRANSITIONS FROM PROPOSED FEATURES TO EXISTING FEATURES AS NECESSARY.
4. ALL DISTURBED AREAS SHALL BE SEEDED OR SODDED AFTER FINISH GRADING IS COMPLETED UNLESS OTHERWISE NOTED. ALL NEW SEEDED OR SODDED AREAS SHALL HAVE A TOPSOIL LAYER OF 4" MINIMUM. TOP OF TOPSOIL LAYER SHALL BE PLACED 1" BELOW TOPS OF CURBS, WALKS, OR PAVEMENT ELEVATIONS WHERE TOPSOIL ABUTS THOSE AREAS.
5. CONTRACTOR SHALL SUPPLY AND PLACE STRAW MULCH WHEREVER GRASS SEED HAS BEEN PLACED.
6. CONTRACTOR SHALL SEAL THE EDGE OF EXISTING ASPHALT PAVEMENT WITH TACK COAT IN ACCORDANCE WITH THE STATES DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS WHERE NEW ASPHALT JOINS EXISTING ASPHALT.
7. CONTRACTOR SHALL REPAIR, RESURFACE, RECONSTRUCT OR REFURBISH ANY AREAS DAMAGED DURING CONSTRUCTION BY THE CONTRACTOR, HIS SUBCONTRACTORS OR SUPPLIERS AT NO ADDITIONAL COST TO THE OWNER.
8. CONTRACTOR SHALL COMPLETELY FILL ALL TRENCHES WITHIN 5 FEET OF PLAYGROUND BOXES. PAVEMENT EDGES WITH GRANULAR BACKFILL. REFER TO GEOTECHNICAL REPORT FOR TYPE OF FILL TO ACHIEVE DESIRED COMPACTION. EG: 2A OR EQUIVALENT.
9. ALL PAINT STRIPING SHALL BE 4" TRAFFIC PAINT IN ACCORDANCE WITH THE STATES DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND SHALL BE YELLOW.
10. CONTRACTOR TO CONFIRM WITH LOCAL CODES AND BUILDING INSPECTOR FOR SPECIFIC DISABLED PARKING SIZES, STRIPPING AND SIGNAGE REQUIREMENTS.
11. PRIMARY COLORED PLAYGROUND EQUIPMENT WILL BE INSTALLED UNLESS THE LOCAL JURISDICTION, HOA OR COVENANTS AND RESTRICTIONS REQUIRE EARTHTONE.
12. GATES TO BE HARD WIRED, CONNECTED TO SEPARATE ALARM SYSTEM. CHIME BACK AT OFFICE WHEN OPENED. PUSH BARS TO HAVE MINIMUM 12" DEPTH 16 GAUGE EXPANDED METAL BACKING ALONG WIDTH OF GATE WITH LOCKABLE HANDLES ON EXTERIOR.
13. G.C. SHALL INSTALL GSL'S STANDARD 'COMING SOON' TEMPORARY SIGN PER AHJ STANDARDS.
14. G.C. TO PROVIDE QTY. 3 MIN. SELF CLOSING HINGE SETS TO ALL EXTERIOR GATES, DUE TO 4FT WIDTH AND TO PREVENT POSSIBLE SAGGING .
15. G.C. TO INSTALL & LOCATE CLEAN OUTS PER PLUMBING PLANS AND SPECIFICATIONS.

DEVIATIONS/VARIANCES

PHILLIP LEWIS ENGINEERING, INC.

Structural + Civil Consultants

23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840

DEMO PLAN

SCALE 1" = 20'

1. DAMAGE TO PUBLIC AND PRIVATE PROPERTY DUE TO HAULING OPERATIONS OR OPERATIONS OF CONSTRUCTION RELATED EQUIPMENT FROM A CONSTRUCTION SITE SHALL BE REPAIRED BY THE THE RESPONSIBLE PARTY PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
2. REPAIR, REPLACE, OR EXTEND EXISTING DAMAGED OR MISSING CURB AND GUTTER, SIDEWALK OR RAMPS WITHIN THE PUBLIC RIGHT OF WAY.

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PHILLIP LEWIS ENGINEERING, INC.
Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840

REVISION:

THE GODDARD SCHOOL OF BRYANT
ALEXANDER, ARKANSAS

CERTIFICATE OF AUTHORIZATION
PHILLIP LEWIS ENGINEERING, INC.
No. 566
ARKANSAS ENGINEER

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP A. LEWIS

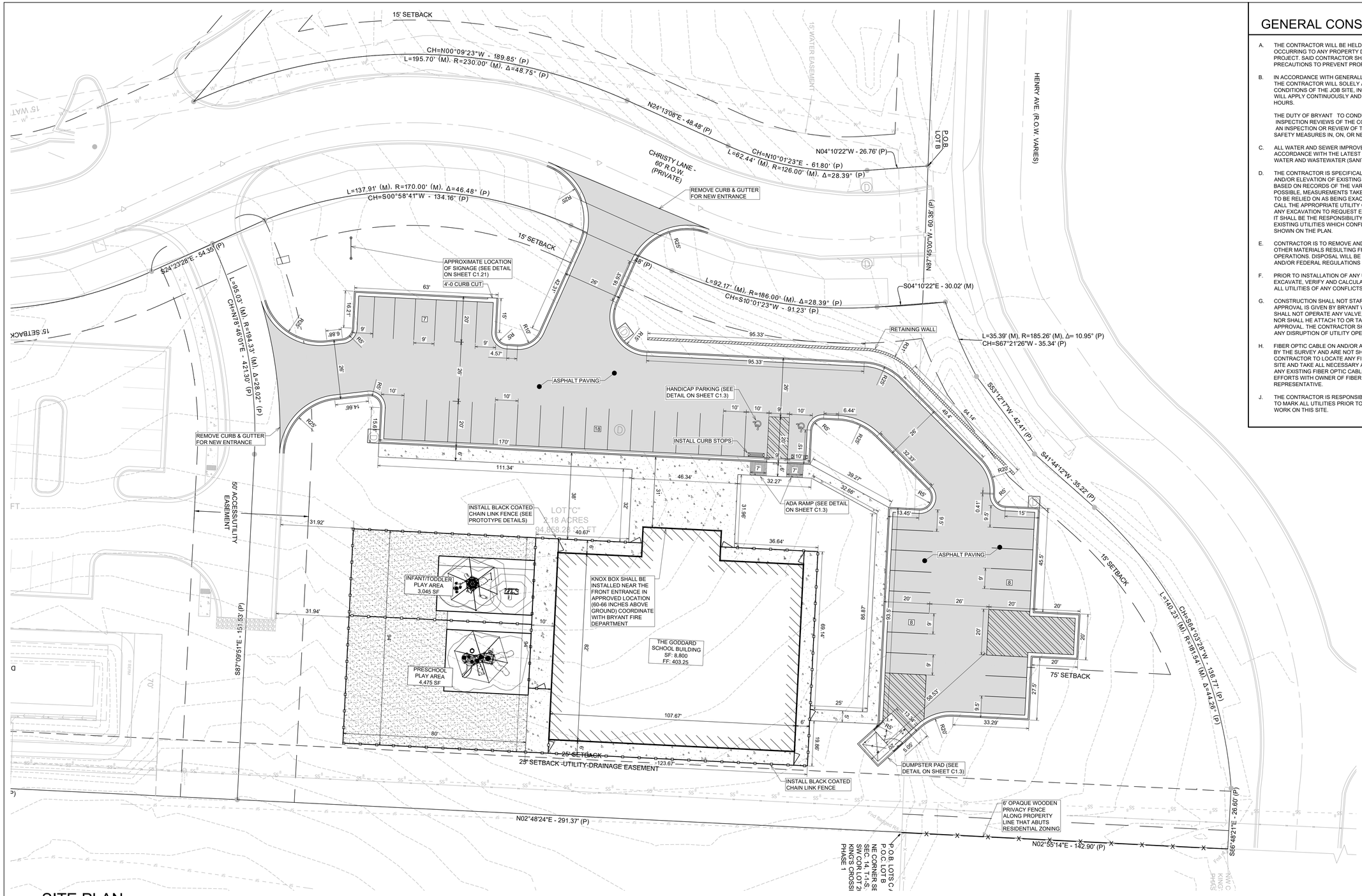
PROJECT NUMBER:

SHEET ISSUE DATE:
03-25-2026

PAGE TITLE:
DEMO PLAN

SHEET NUMBER:
C1.1

N
0 20'
1" = 20'-0"



SITE PLAN

SCALE 1" = 20'

1. TOTAL NEW DEVELOPMENT AREA = (+/-) 2.18 ACRES
2. PROPERTY IS ZONED C-2
3. 41 PARKING SPACES PROVIDED INCLUDING 2 ADA ACCESSIBLE PARKING SPACES
4. ALL DIMENSIONS ARE TO THE BACK OF CURB AND/OR EDGE OF PAVEMENT
5. DAMAGE TO PUBLIC AND PRIVATE PROPERTY DUE TO HAULING OPERATIONS OR OPERATIONS OF CONSTRUCTION RELATED EQUIPMENT FROM A CONSTRUCTION SITE SHALL BE REPAIRED BY THE THE RESPONSIBLE PARTY PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
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7. ALL SIGNAGE, PAVEMENT MARKING AND PARKING LOT STRIPING SHALL CONFORM TO REQUIREMENTS GIVEN IN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). MUTCD REQUIRES THAT PARKING SPACES BE MARKED IN WHITE.

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REVISION:

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CERTIFICATE OF AUTHORIZATION — PHILLIP LEWIS ENGINEERING, INC. — No. 566 — ARKANSAS—ENGINEER

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 9540 — PHILLIP A. LEWIS

PROJECT NUMBER:

SHEET ISSUE DATE: 03-25-2026

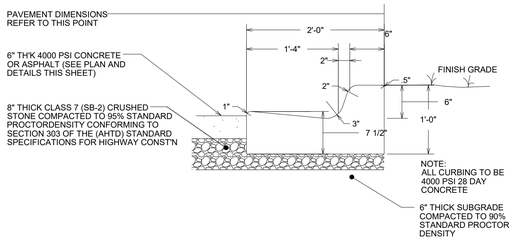
PAGE TITLE: SITE PLAN

SHEET NUMBER: C1.2

N

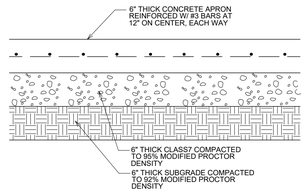
0 20'

1" = 20'-0"



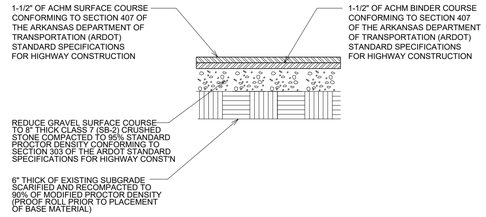
2'-0" CONCRETE CURB & GUTTER

NOT TO SCALE



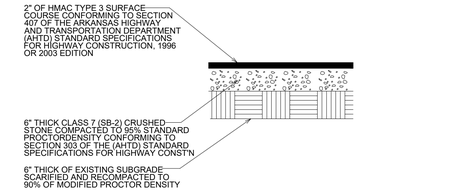
CONCRETE ENTRANCE DRIVE SECTION

NOT TO SCALE



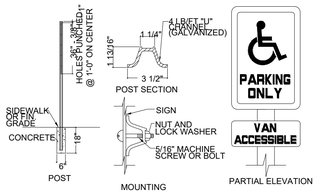
HMAC ASPHALT SURFACE COURSE MEDIUM DUTY

NOT TO SCALE



HMAC ASPHALT SURFACE COURSE LIGHT DUTY

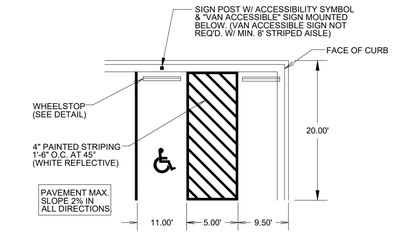
NOT TO SCALE



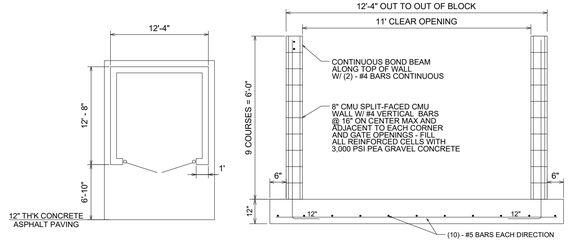
HANDICAP SIGN DETAIL

NOT TO SCALE

NOTE:
HANDICAP SIGNAGE SHALL BE IN STRICT COMPLIANCE WITH CURRENT FEDERAL AND LOCAL LAW REQUIREMENTS

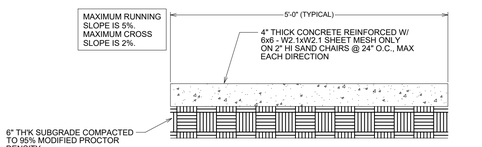


TYPICAL ACCESSIBLE PARKING STALLS



DUMPSTER PAD/ENCLOSURE DETAIL

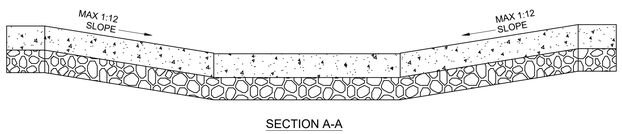
NOT TO SCALE



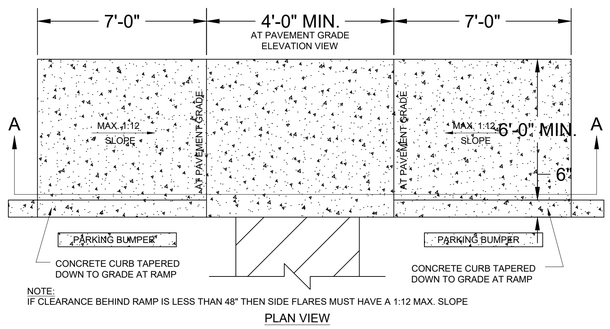
SIDEWALK SECTION

NOT TO SCALE

NOTE:
1. ALL SIDEWALK JOINTS TO BE STEEL TROWELED. ALL JOINT EDGES AND SHALL BE SPACED AT 5 FEET ON CENTER MAXIMUM IN ALL DIRECTIONS AND SHALL BE STEEL TROWELED ON A RADIUS NOT TO EXCEED ONE-HALF INCH.
2. SIDEWALK SHALL BE MIN 6" THICK THROUGH DRIVE APRON



SECTION A-A

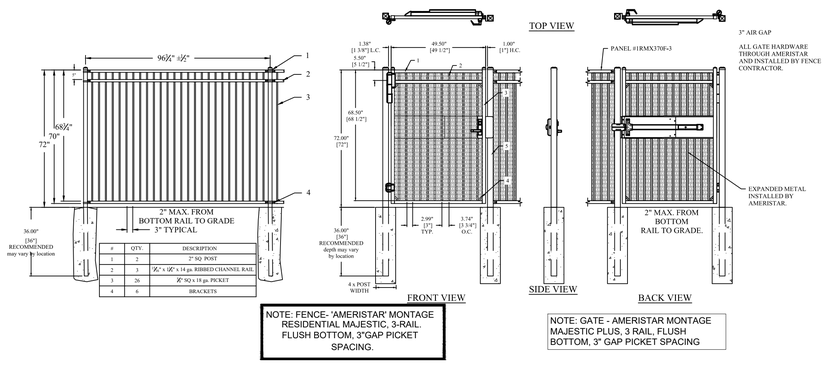


NOTE:
IF CLEARANCE BEHIND RAMP IS LESS THAN 48" THEN SIDE FLARES MUST HAVE A 1:12 MAX. SLOPE

PLAN VIEW

HANDICAP RAMP DETAIL

NOT TO SCALE



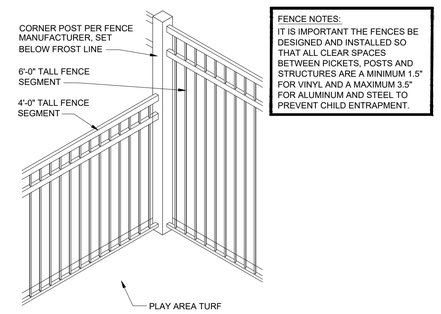
#	QTY.	DESCRIPTION
1	2	7" SQ. POST
2	3	3½" x 1½" x 14 ga. RIBBED CHANNEL RAIL
3	26	2" SQ x 18 ga. PICKET
4	6	BRACKETS

NOTE: FENCE- 'AMERISTAR' MONTAGE RESIDENTIAL MAJESTIC, 3-RAIL, FLUSH BOTTOM, 3"GAP PICKET SPACING.

NOTE: GATE - AMERISTAR MONTAGE MAJESTIC PLUS, 3 RAIL, FLUSH BOTTOM, 3" GAP PICKET SPACING

TYPICAL FENCE DETAIL

NOT TO SCALE



FENCE NOTES:
IT IS IMPORTANT THE FENCES BE DESIGNED AND INSTALLED SO THAT ALL CLEAR SPACES BETWEEN PICKETS, POSTS AND STRUCTURES ARE A MINIMUM 1.5" FOR VINYL AND A MAXIMUM 3.5" FOR ALUMINUM AND STEEL TO PREVENT CHILD ENTRAPMENT.

FENCE TRANSITION DETAIL

NOT TO SCALE

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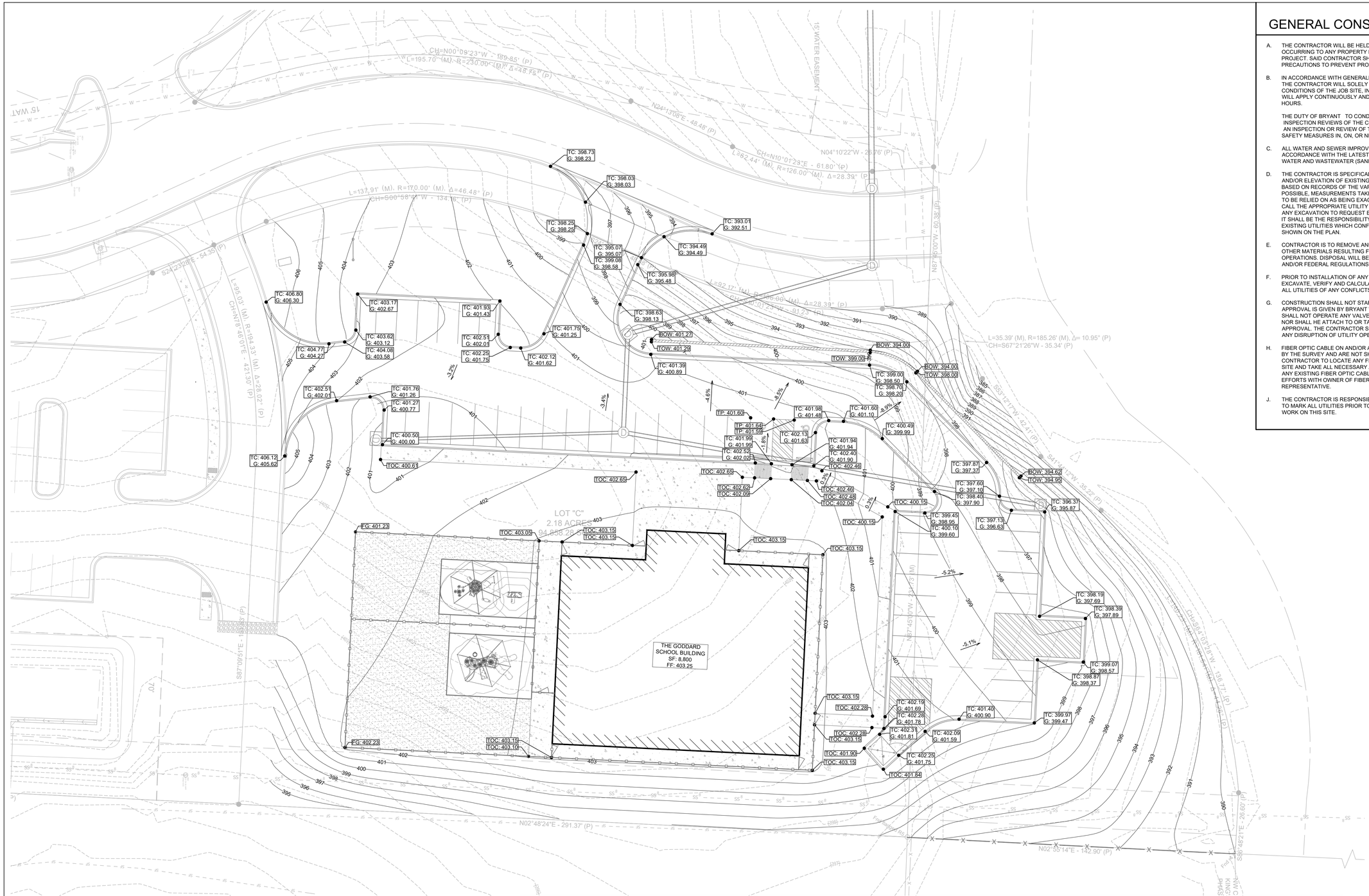
PHILLIP LEWIS ENGINEERING, INC.
No. 566
CERTIFICATE OF AUTHORIZATION
ARKANSAS ENGINEER

PROJECT NUMBER:

SHEET ISSUE DATE:
03-25-2026

PAGE TITLE:
SITE DETAILS

SHEET NUMBER:
C1.3


LOT "C"
2.18 ACRES ± 94,858.28 SF
THE GODDARD SCHOOL BUILDING
SF: 8,800
FF: 403.25
TC: 398.73
G: 398.23
TC: 398.03
G: 398.03
TC: 398.25
G: 398.25
TC: 395.07
G: 395.07
TC: 399.08
G: 398.58
TC: 395.98
G: 395.48
TC: 393.01
G: 392.51
TC: 394.49
G: 394.49
TC: 398.63
G: 398.13
BOW: 401.27
TOW: 401.29
TC: 401.39
G: 400.89
BOW: 394.00
TOW: 399.00
TOW: 398.00
TC: 399.00
G: 398.50
TC: 398.70
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TC: 402.51
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TC: 400.50
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TC: 406.12
G: 405.62
TOC: 400.68
TOC: 402.65
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TP: 401.64
TP: 401.59
TC: 401.98
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BOW: 394.62
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TOC: 402.28
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TOC: 403.15
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TOC: 403.15
TOC: 401.84
TOC: 403.15
TOC: 403.15
TOC: 403.15
TOC: 403.15
TOC: 403.15
TOC: 403.10
FG: 401.23
FG: 402.23
-3.2%
-3.4%
-4.6%
-8.5%
-8.9%
-5.2%
-5.1%
-0.3%
-0.3%
-0.3%
L=137.91' (M), R=170.00' (M), Δ=46.48° (P)
CH=S00°58'34"W - 134.16' (P)
L=195.70' (M), R=230.00' (M), Δ=48.75° (P)
CH=N00°09'23"W - 189.85' (P)
N24°13'05"E - 48.48' (P)
L=62.44' (M), R=126.00' (M), Δ=28.39° (P)
CH=N10°01'23"E - 61.80' (P)
N04°10'22"W - 26.76' (P)
L=92.17' (M), R=186.00' (M), Δ=28.39° (P)
CH=N10°01'23"E - 91.23' (P)
N18°12'08"E - 36.38' (P)
L=35.39' (M), R=185.26' (M), Δ= 10.95° (P)
CH=S67°21'26"W - 35.34' (P)
S53°12'01"W - 42.41' (P)
S41°41'12"W - 38.22' (P)
L=95.03' (M), R=194.33' (M), Δ=28.02° (P)
CHN78°46'01"E - 42.30' (P)
S24°23'28"E - 54.35' (P)
S87°09'51"E - 5.43' (P)
N02°48'24"E - 291.37' (P)
N02°55'14"E - 142.90' (P)
S56°48'21"E - 26.60' (P)
CHS64°09'18"W - 136.77' (P)
15' WATER EASEMENT
PHASING LINE
PHASING LINE
SS
SS
SS

STORMWATER PLAN

SCALE 1" = 20'

REFERENCE STORMWATER DETAILS ON THE UTILITY DETAIL SHEET C1.13.

INSTALL RIP RAP AT TOE OF FLARED END FOR EROSION PREVENTION

FE - C2
24" TYPICAL FLARED END
STA: 1+78.24
INV IN: 381.62 24" RCP

178' of 24" RCP @ 0.72%

JB - A5
EXISTING CURB INLET
STA: 0+00.00
RIM: 388.79
SUMP: 382.91
INV IN: 382.91 18" RCP FROM JB - A4
INV OUT: 382.91 24" RCP TO FE - C2

50' of 18" RCP @ 4.85%

JB - A4
EXISTING CURB INLT
STA: 3+37.78
RIM: 389.02
SUMP: 384.34
INV IN: 384.44 18" RCP FROM JB - A3
INV OUT: 384.34 18" RCP TO JB - A5

110' of 18" RCP @ 6.20%

JB - A3
CURB INLET JUNCTION BOX
(4' ID) W/ 6"x6'-0" THROAT
STA: 2+27.31
RIM: 400.01
SUMP: 391.29
INV IN: 391.39 18" RCP FROM JB - A2
INV OUT: 391.29 18" RCP TO JB - A4

43' of 18" RCP @ 0.50%

JB - B1
CURB INLET JUNCTION BOX
(4' ID) W/ 6"x6'-0" THROAT
STA: 0+00.00
RIM: 400.50
SUMP: 397.00
INV OUT: 397.00 12" RCP TO JB - A2

108' of 12" RCP @ 4.92%

JB - A2
JUNCTION BOX (4' ID)
STA: 1+84.41
RIM: 401.79
SUMP: 391.60
INV IN: 391.70 18" RCP FROM JB - A1
INV IN: 391.70 12" RCP FROM JB - B1
INV OUT: 391.60 18" RCP TO JB - A3

184' of 18" RCP @ 0.50%

JB - A1
CURB INLET JUNCTION BOX
(4' ID) W/ 6"x4'-0" THROAT
STA: 0+00.00
RIM: 396.37
SUMP: 392.62
INV OUT: 392.62 18" RCP TO JB - A2

LOT "B"
1.60 ACRES
69,887.15 SQ FT

LOT "C"
2.18 ACRES
94,858.28 SQ FT

HENRY AVE (R.O.W. VARIES)

CHRISTY LANE - 60' R.O.W. (PRIVATE)

15' SETBACK

15' WATER EASEMENT

50' ACCESS/UTILITY EASEMENT

N

0 20'

1" = 20'-0"

GENERAL CONSTRUCTION NOTES

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B. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL SOLELY AND COMPLETELY BE RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING HOURS.

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C. ALL WATER AND SEWER IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST REVISION TO THE CITY OF BRYANT'S WATER AND WASTEWATER (SANITARY SEWER) STANDARD SPECIFICATIONS.

D. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF ALL UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.

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H. FIBER OPTIC CABLE ON AND/OR ADJACENT TO THIS SITE WERE NOT LOCATED BY THE SURVEY AND ARE NOT SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ANY FIBER OPTIC CABLES ASSOCIATED WITH THIS SITE AND TAKE ALL NECESSARY AND REQUIRED PRECAUTIONS TO PROTECT ANY EXISTING FIBER OPTIC CABLES. CONTRACTORS SHALL COORDINATE ALL EFFORTS WITH OWNER OF FIBER OPTIC CABLES OR THEIR DESIGNATED REPRESENTATIVE.

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PHILLIP LEWIS ENGINEERING, INC.
Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840

REVISION:

THE GODDARD SCHOOL OF BRYANT
ALEXANDER, ARKANSAS

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PHILLIP LEWIS ENGINEERING, INC.
No. 566
ARKANSAS ENGINEER

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP W. LEWIS

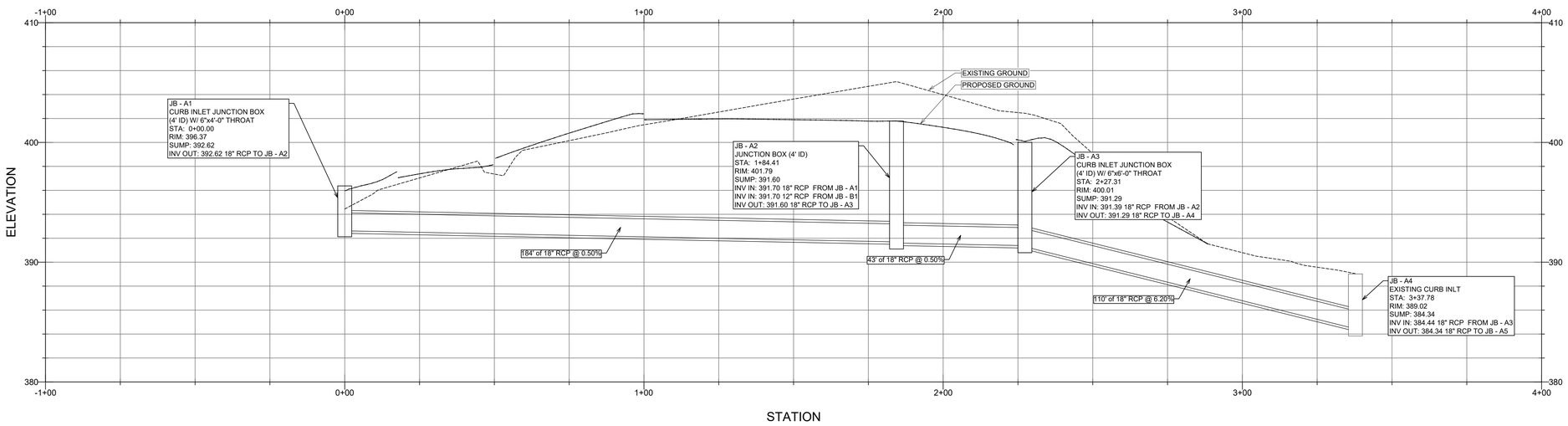
PROJECT NUMBER:

SHEET ISSUE DATE:
03-25-2026

PAGE TITLE:
STORMWATER PLAN

SHEET NUMBER:
C1.5

STORM SEWER A



STORM SEWER B

STORM SEWER C

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No. 566
ARKANSAS ENGINEER

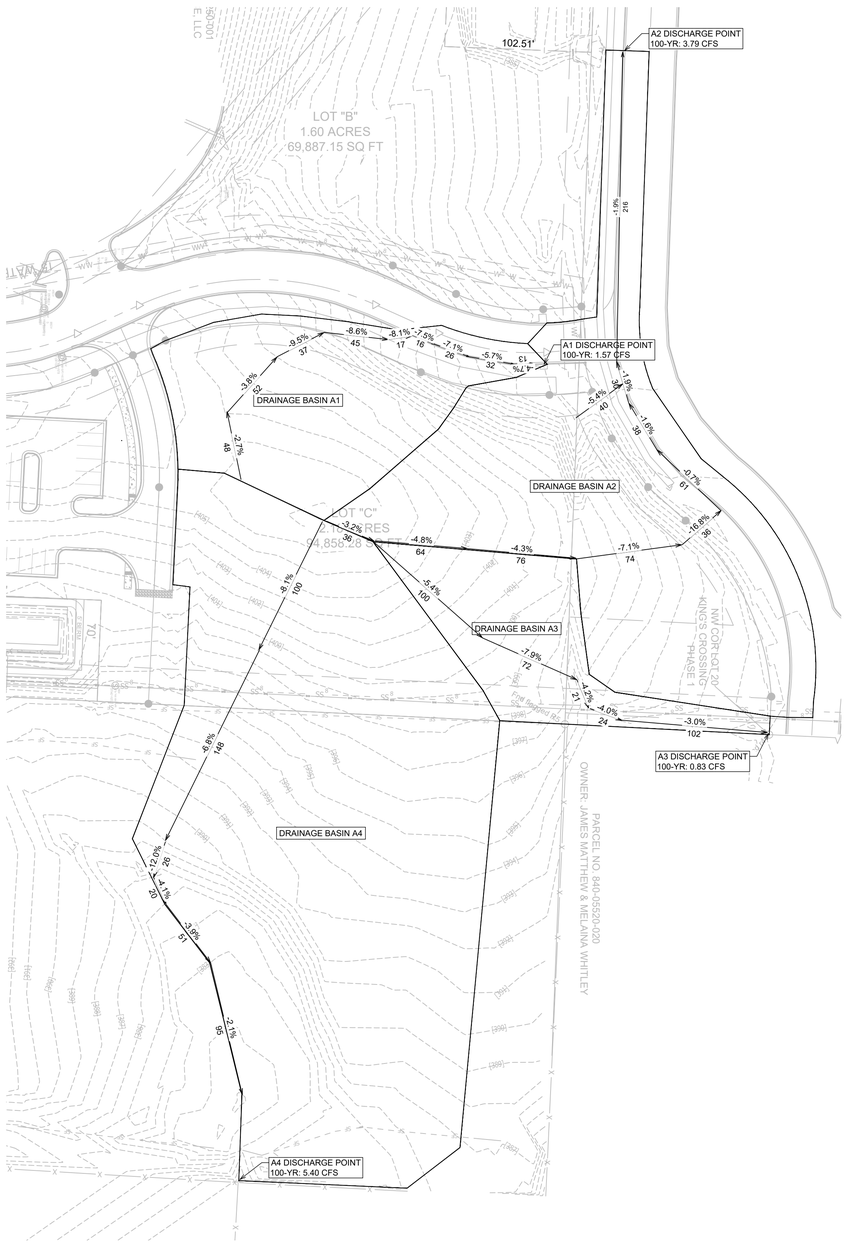
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP A. LEWIS

PROJECT NUMBER:

SHEET ISSUE DATE:
03-25-2026

PAGE TITLE:
STORMWATER PROFILES

SHEET NUMBER:
C1.6



PRE DRAINAGE PLAN

SCALE 1" = 50'

DRAINAGE BASINS AREAS

DRAINAGE BASIN	PERVIOUS	IMPERVIOUS
A1	20,204	3,399
A2	37,816	14,559
A3	13,861	0
A4	90,137	0

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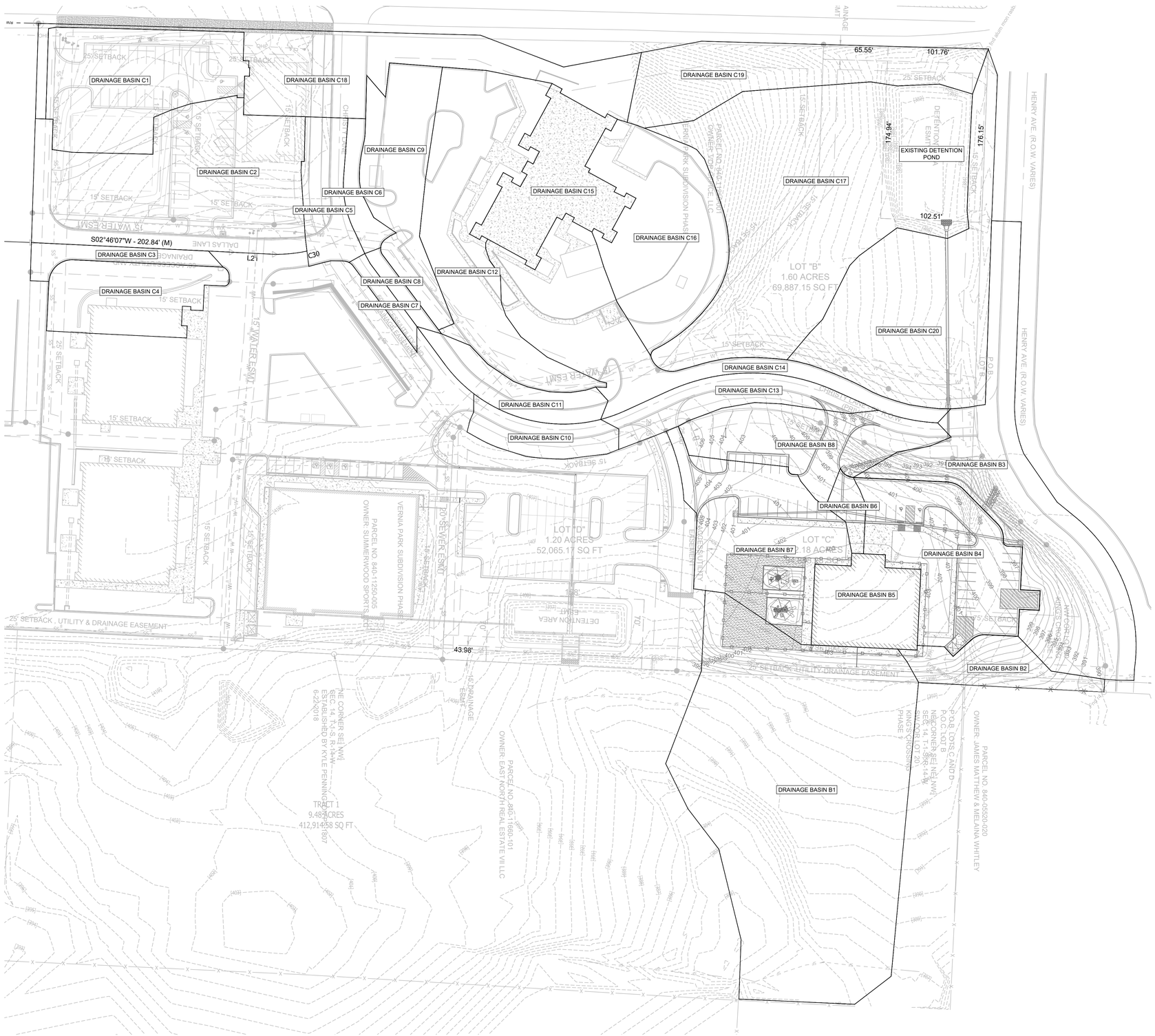
03-25-2026

PAGE TITLE:
PRE DRAINAGE PLAN

SHEET NUMBER:
C1.7

N
0 50'
1" = 50'-0"



DRAINAGE BASINS AREAS

DRAINAGE BASIN	PERVIOUS	IMPERVIOUS
B1	74,165	602
B2	6,595	167
B3	18,730	14559
B4	4,916	14,577
B5	0	9,275
B6	0	1887
B7	12,580	8,589
B8	7,982	6,458
C1	6,135	14,202
C2	11,376	22,963
C3	0	3,480
C4	8,130	3,245
C5	1,634	5,061
C6	0	2,835
C7	0	1,597
C8	0	1,548
C9	4,456	9,361
C10	1,225	4,183
C11	2,876	3,307
C12	7,218	18,440
C13	1,558	6,388
C14	6,127	15,898
C15	0	13,450
C16	15,465	6,612
C17	56,749	0
C18	12,812	9,973
C19	18,009	0
C20	30,789	0

OVERALL DRAINAGE PLAN

SCALE 1" = 50'

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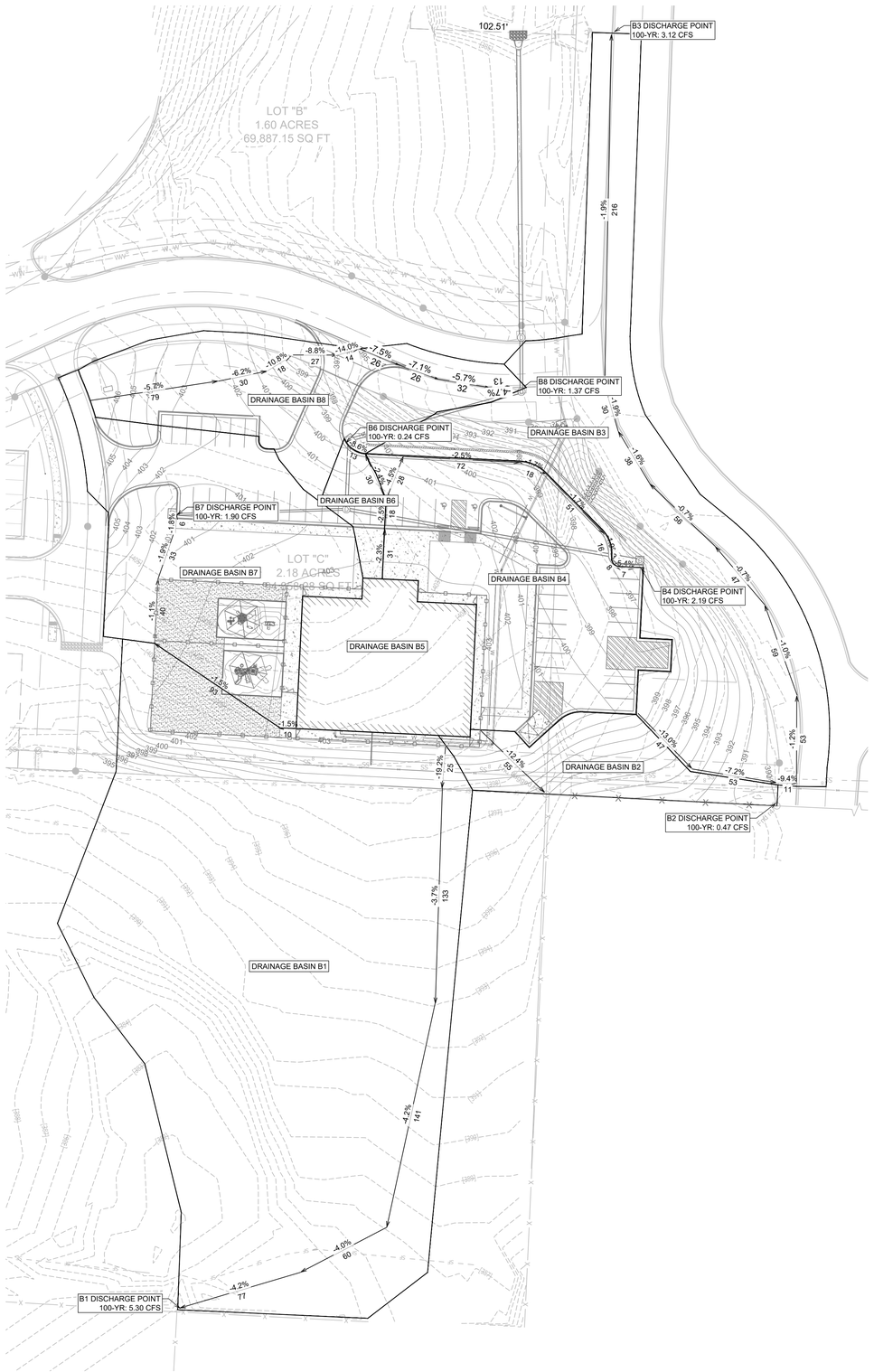
PROJECT NUMBER:

SHEET ISSUE DATE:
03-25-2026

PAGE TITLE:
OVERALL DRAINAGE PLAN

SHEET NUMBER:
C1.8

N
0 50'
1" = 50'-0"



POST DRAINAGE PLAN

SCALE 1" = 40'

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H. FIBER OPTIC CABLE ON AND/OR ADJACENT TO THIS SITE WERE NOT LOCATED BY THE SURVEY AND ARE NOT SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ANY FIBER OPTIC CABLES ASSOCIATED WITH THIS SITE AND TAKE ALL NECESSARY AND REQUIRED PRECAUTIONS TO PROTECT ANY EXISTING FIBER OPTIC CABLES. CONTRACTORS SHALL COORDINATE ALL EFFORTS WITH OWNER OF FIBER OPTIC CABLES OR THEIR DESIGNATED REPRESENTATIVE.

J. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "ONECALL" SERVICE TO MARK ALL UTILITIES PRIOR TO ANY DEMOLITION, EARTHWORK, OR UTILITY WORK ON THIS SITE.

PHILLIP LEWIS ENGINEERING, INC.
Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840

REVISION:

THE GODDARD SCHOOL OF BRYANT
ALEXANDER, ARKANSAS

CERTIFICATE OF AUTHORIZATION
PHILLIP LEWIS ENGINEERING, INC.
No. 566
ARKANSAS ENGINEER

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP LEWIS

PROJECT NUMBER:

SHEET ISSUE DATE:
03-25-2026

PAGE TITLE:
POST DRAINAGE PLAN

SHEET NUMBER:
C1.9

N
0 40'
1" = 40'-0"

OVERALL DRAINAGE PLAN 1

SCALE 1" = 20'

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PHILLIP A. LEWIS

PROJECT NUMBER:

SHEET ISSUE DATE:
03-25-2026

PAGE TITLE:
OVERALL DRAINAGE PLAN 1

SHEET NUMBER:
C1.10

N
0 20'
1" = 20'-0"

OVERALL DRAINAGE PLAN 2

SCALE 1" = 20'

DRAINAGE BASIN C19
DRAINAGE BASIN C17
DRAINAGE BASIN C16
DRAINAGE BASIN C15
DRAINAGE BASIN C14
DRAINAGE BASIN C13
DRAINAGE BASIN C20
DRAINAGE BASIN C11
DRAINAGE BASIN C10

C19 DISCHARGE POINT
100-YR: 0.96 CFS

C17 DISCHARGE POINT
100-YR: 3.04 CFS

C16 DISCHARGE POINT
100-YR: 1.65 CFS

C12 DISCHARGE POINT
100-YR: 2.75 CFS

C11 DISCHARGE POINT
100-YR: 0.57 CFS

C10 DISCHARGE POINT
100-YR: 0.60 CFS

C14 DISCHARGE POINT
100-YR: 2.36 CFS

C13 DISCHARGE POINT
100-YR: 0.89 CFS

C20 DISCHARGE POINT
100-YR: 1.65 CFS

EXISTING OUTLET STRUCTURE

EXISTING DETENTION POND

DETENTION AREA ESMT

LOT B
2.60 ACRES
69,887.15 SQ FT

25' SETBACK
15' SETBACK
15' WATER EASEMENT

SIRNIA PARK SUBDIVISION PHASE 1

PARCEL NO. 840-11-001.00
OWNER: NOW TECHNOLOGY CO.

CHRISTY LANE
60' R.O.W
(PRIVATE)

N01°33'25"E - 123.62' (P)
N20°58'40"E - 90.12' (P)
N10°33'25"W - 142.94' (P)
S01°33'25"W - 167.30' (P)
S87°58'00"E - 198.47' (P)
S49°03'54"E - 251.89' (P)
S24°43'08"W - 454.35' (P)
N24°13'08"E - 48.48' (P)
N87°45'00"W - 353.99' (P)
N87°45'00"W - 60.38' (P)
S04°10'22"E - 30.02' (M)
N04°10'22"W - 21.76' (P)

65.55'
101.76'
174.94'
176.15'
102.51'

L=195.70' (M), R=230.00' (M), Δ=48.74° (P)
CH=N00°09'23"W - 189.78' (P)
L=137.31' (M), R=170.00' (M), Δ=46.48° (P)
CH=S00°58'41"W - 134.16' (P)
L=191.55' (M), R=186.00' (M), Δ=59.01° (P)
CH=S04°58'18"W - 183.20' (P)
L=82.44' (M), R=126.00' (M), Δ=28.39° (P)
CH=N10°01'23"E - 61.80' (P)
L=92.12' (M), R=186.00' (M), Δ=28.39° (P)
CH=N10°01'23"W - 91.23' (P)

POB
LOT B

HARGE POINT
1.42 CFS

IN C12

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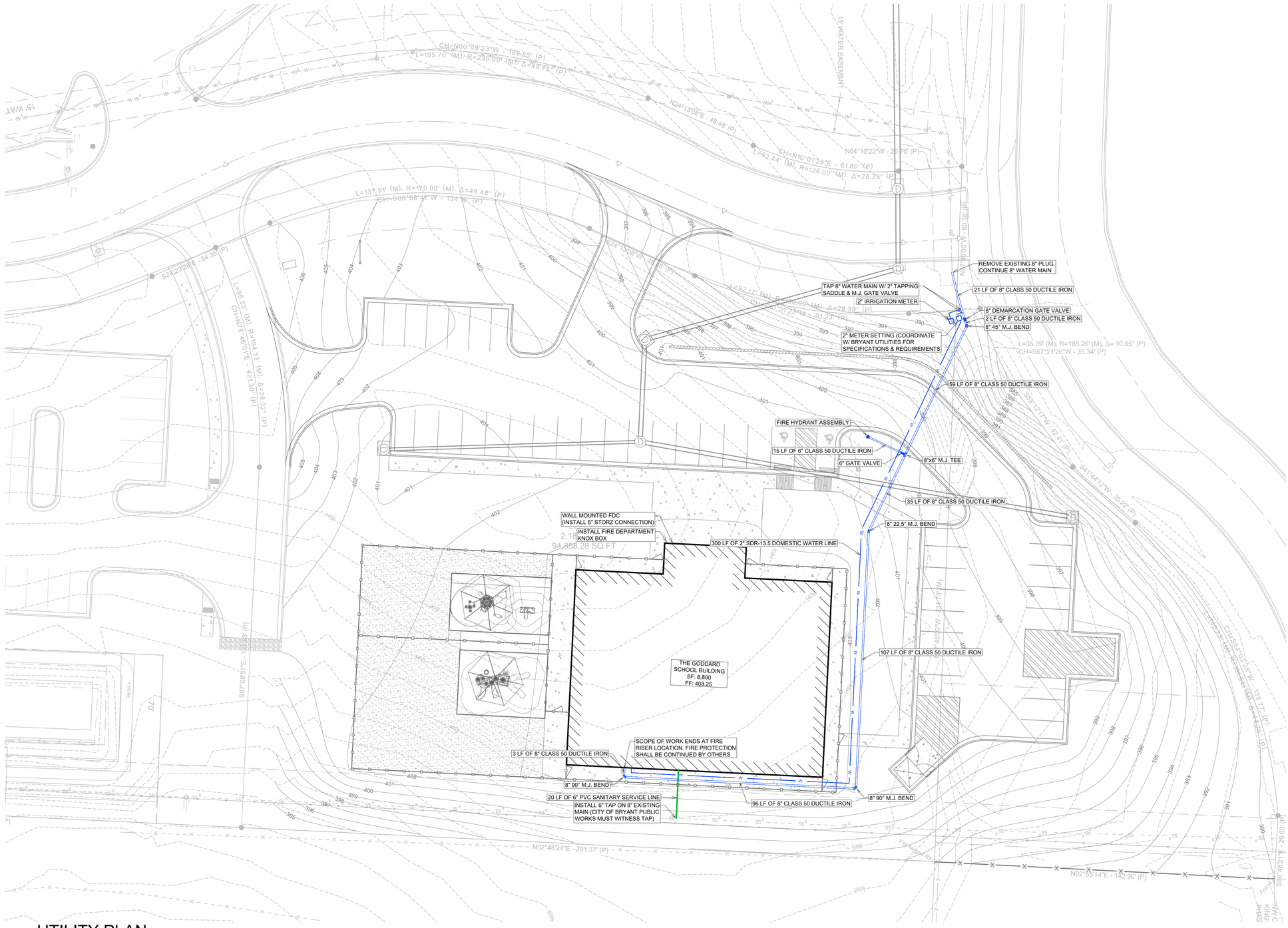
PAGE TITLE:
OVERALL DRAINAGE PLAN 2

SHEET NUMBER:
C1.11

N
0 20'
1" = 20'-0"



UTILITY PLAN

SCALE 1" = 20'

GENERAL CONSTRUCTION NOTES

A. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR DAMAGES OCCURRING TO ANY PROPERTY DURING THE CONSTRUCTION OF THIS PROJECT. SAID CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT PROPERTY DAMAGE.

B. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL SOLELY AND COMPLETELY BE RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING HOURS.

THE DUTY OF BRYANT TO CONDUCT CONSTRUCTION INSPECTION REVIEWS OF THE CONTRACTOR'S PERFORMANCE IS NOT AN INSPECTION OR REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.

C. ALL WATER AND SEWER IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST REVISION TO THE CITY OF BRYANT'S WATER AND WASTEWATER (SANITARY SEWER) STANDARD SPECIFICATIONS.

D. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF ALL UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.

E. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.

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J. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "ONECALL" SERVICE TO MARK ALL UTILITIES PRIOR TO ANY DEMOLITION, EARTHWORK, OR UTILITY WORK ON THIS SITE.

GODDARD UTILITY NOTES

1. THERE SHALL BE NO UTILITIES RUN UNDER PLAYGROUND AREAS.
2. THE UTILITIES INDICATED ON THESE PLANS AND ON THE SURVEY MAY NOT BE A COMPLETE INVENTORY OF ALL THE EXISTING UTILITIES PRESENT ON AND AROUND THE SITE. THE LOCATION AND SIZE OF THESE UTILITIES MAY BE APPROXIMATE. THE ENGINEER SHALL NOT BE HELD LIABLE FOR ANY INACCURATE UTILITY INFORMATION INDICATED, IMPLIED, OR NOT INDICATED ON THESE PLANS.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND ORDER ALL NEW SERVICES, LOCATE AND MAINTAIN IN SERVICE ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION UNLESS OTHERWISE INDICATED IN THE DRAWINGS. ANY PIPING, WHICH CAN BE REMOVED DURING CONSTRUCTION WITHOUT UNDUE INTERRUPTION OF SERVICE MAY BE REMOVED AND REPLACED BY THE CONTRACTOR, AT HIS EXPENSE WITH THE PERMISSION OF THE OWNER.
4. BEFORE WORKING WITH OR AROUND EXISTING UTILITIES, THE APPLICABLE UTILITY COMPANY SHALL BE CONTACTED BY THE CONTRACTOR.
5. WHEN CONNECTIONS ARE TO BE MADE TO EXISTING PIPING AND STRUCTURES OR WHERE CONSTRUCTION IS IN THE VICINITY OF EXISTING PIPING, THE LOCATION AND ELEVATION OF THE EXISTING PIPING SHALL BE FIELD VERIFIED. NOTIFICATION SHALL BE GIVEN TO THE OWNER IF THE EXISTING PIPING IS FOUND TO BE DIFFERENT THAN THAT SHOWN ON THE DRAWINGS.
6. FOR CLARITY OF THESE DRAWINGS, PIPES MAY NOT BE DRAWN TO SCALE OR EXACTLY LOCATED.
7. NEW 6" WATER LINES SHALL BE DUCTILE IRON CONFORMING TO AWWA C151, CLASS 55. NEW 2" WATER LINES SHALL BE SEAMLESS COPPER WATER TUBING THAT SATISFIES THE REQUIREMENTS OF ASTM 1888.
8. ALL NEW WATER LINES SHALL HAVE A MINIMUM OF 54 INCHES OF COVER.
9. MINIMUM OF 18 INCHES OF VERTICAL CLEARANCE SHALL BE PROVIDED BETWEEN NEW WATER AND SANITARY SEWER LINES. IF 18 INCHES OF CLEARANCE IS NOT PROVIDED THEN THE SEWER MUST BE CONSTRUCTED OF WATER WORKS GRADE DUCTILE IRON PIPE WITH MECHANICAL JOINTS OR PVC (SDR-26) PIPE WITH GASKETTED, COMPRESSION-TYPE JOINTS WITHIN TEN FEET OF THE WATER LINE.
10. NEW 6" SANITARY LATERALS SHALL BE SDR-35, SCHEDULE 80 OR SCHEDULE 40 PVC PIPE CONFORMING TO ASTM D2241, AND SHALL MEET THE DEFLECTION STANDARDS OF ASTM D-3303.
11. ALL INLET COVER GRATES LOCATED IN PLAYGROUND AREA TO BE EXTERIOR GRADE RIDGED PVC (NO CAST IRON).
12. NATIONAL ACCOUNT VENDOR TO PROVIDE SURFACE MOUNT EXTERIOR GRADE PHONE CABINET AND PHONE, 60" A.F.F. TO PROTRUDE 4" MAX. FROM FACE OF WALL. SEE GAI-TRONICS MODEL 255-033-SERIES. PAINT TO MATCH ADJACENT WALL COLOR.
13. CONTRACTOR TO COORDINATE INTERNET SERVICE AND TELE/COM INSTALL AND LOCATIONS WITH OWNER AND INTERNET PROVIDER REPRESENTATIVE.

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REVISION:

THE GODDARD SCHOOL OF BRYANT
ALEXANDER, ARKANSAS

CERTIFICATE OF AUTHORIZATION — PHILLIP LEWIS ENGINEERING, INC. — No. 566 — ARKANSAS ENGINEER

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 9540 — PHILLIP A. LEWIS

PROJECT NUMBER:

SHEET ISSUE DATE: 03-25-2026

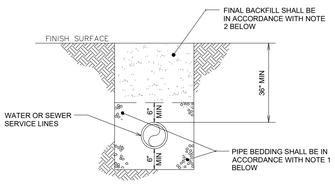
PAGE TITLE: UTILITY PLAN

SHEET NUMBER: C1.12

N

0 20'

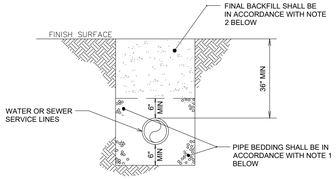
1" = 20'-0"



WATER AND SEWER LINES BEDDING DETAIL

NOT TO SCALE

NOTES:
1. BEDDING SHALL BE "GRIT" PER ASTM 2774 OR ASTM D448 SIZE 67 A MINIMUM OF 6" ALL AROUND PIPE.
2. INITIAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS III COMPACTED TO 90% STANDARD PROCTOR. ALL BACKFILL UNDER PAVED AREAS SHALL BE CLASS 7 CRUSHED STONE (SB-2) COMPACTED TO 95% STANDARD PROCTOR DENSITY.
3. ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D2321-89.
4. ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 8" LIFTS IN ACCORDANCE WITH ASTM D698. CLASS III AND IV-A MATERIALS SHALL BE COMPACTED TO NEAR OPTIMUM MOISTURE CONTENT.
6. FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS, AND ROCKS LARGER THAN 3".
7. ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES.



GAS LINE BEDDING DETAIL

NOT TO SCALE

NOTES:
1. BEDDING SHALL BE "GRIT" PER ASTM 2774 OR ASTM D448 SIZE 67 A MINIMUM OF 6" ALL AROUND PIPE.
1. BEDDING SHALL BE CLEAN SAND A MINIMUM OF 6" ALL AROUND PIPE.
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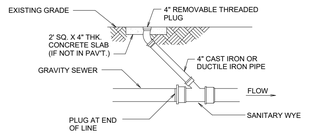
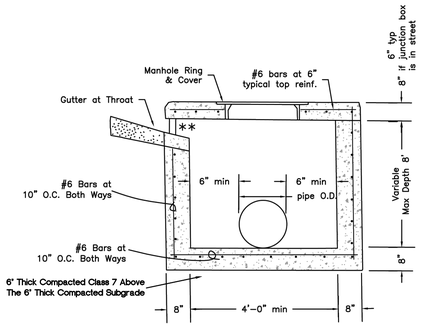


THROUGH FLOW CLEANOUT

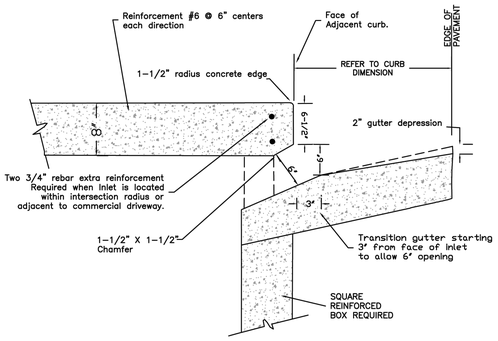
NOT TO SCALE



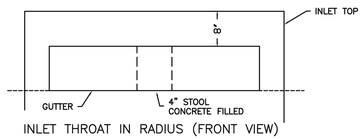
SECTION

TYPICAL CURB INLET JUNCTION BOX

NOT TO SCALE



INLET THROAT IN RADIUS (SIDE VIEW)

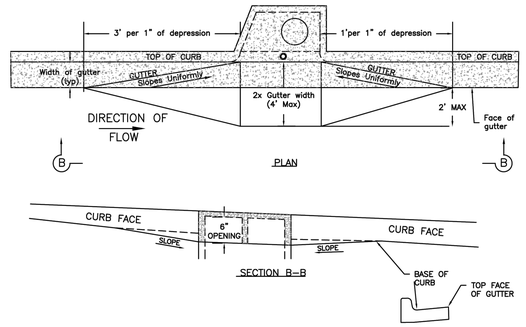


INLET THROAT IN RADIUS (FRONT VIEW)

PLACE 4" DIA. STOOLS AT CENTERLINE OF INLET, THEN SPACE ADDITIONAL STOOLS EQUAL DISTANCE FROM CENTERLINE NOT TO EXCEED 3'.

TYPICAL THROAT OPENING IN CURB RADIUS

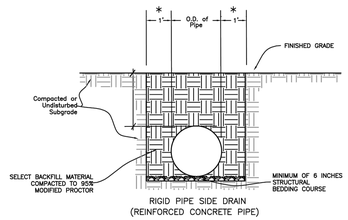
NOT TO SCALE



NOTE: LOW POINT /(SAG) INLETS : SLOPE SHALL BE 1 FT PER 1" OF DEPRESSION BOTH SIDES

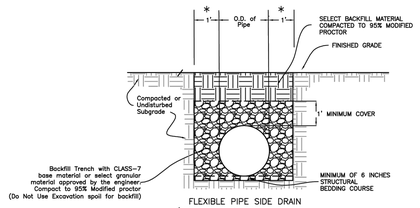
GUTTER DEPRESSION DETAIL

NOT TO SCALE



RIGID PIPE SIDE DRAIN
(REINFORCED CONCRETE PIPE)

OUTSIDE ROADWAY / SIDE DRAIN BEDDING



FLEXIBLE PIPE SIDE DRAIN
(HIGH DENSITY POLYETHYLENE
HIGH DENSITY POLYPROPYLENE)

OUTSIDE ROADWAY / SIDE DRAIN BEDDING

STORM PIPE BEDDING DETAIL

NOT TO SCALE

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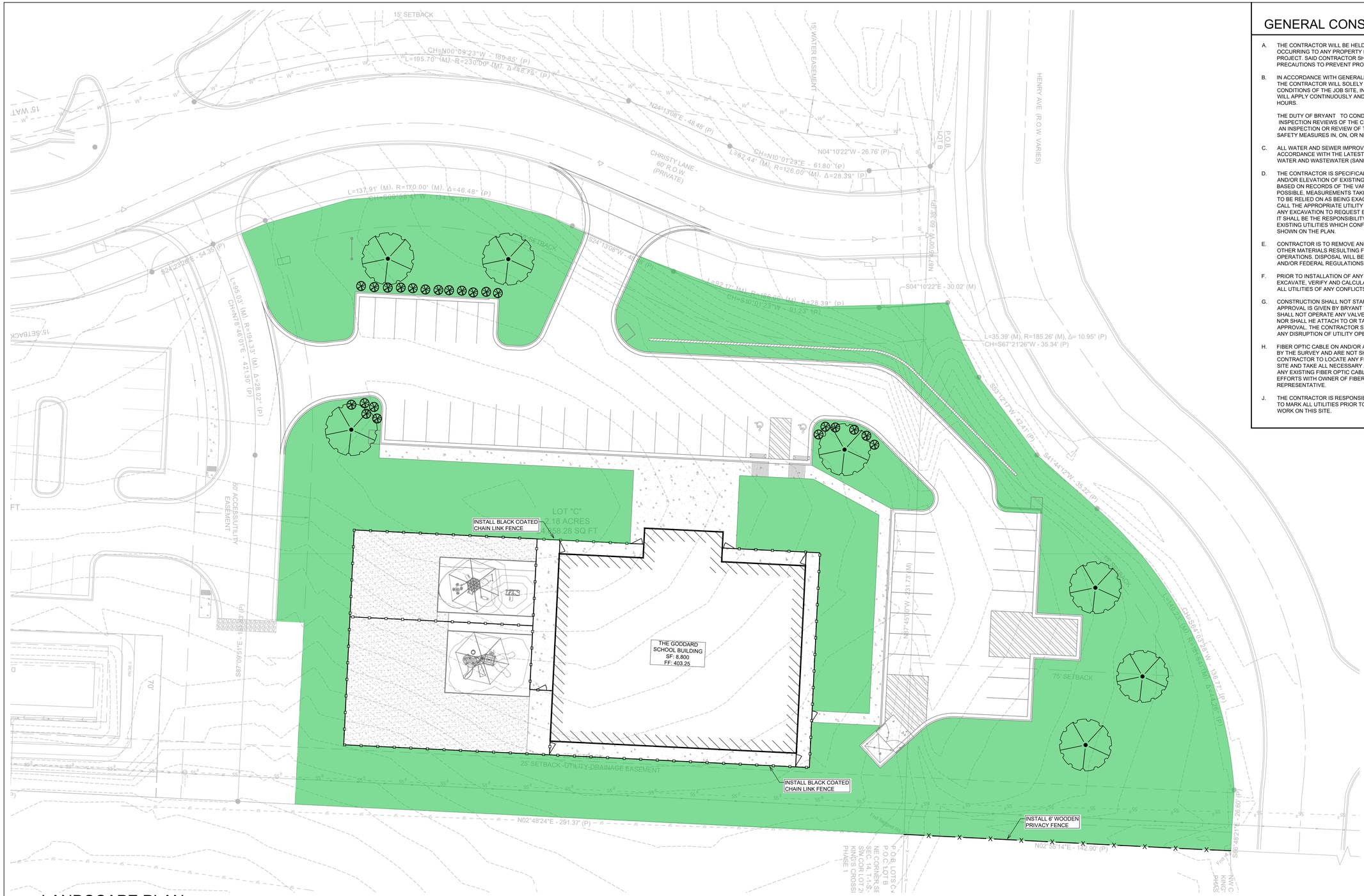
03-25-2026

PAGE TITLE:
UTILITY DETAILS

SHEET NUMBER:
C1.13



LANDSCAPE PLAN

SCALE 1" = 20'

NOTES:

1. ALL LANDSCAPED AREAS OF THE SITE SHALL BE CONSTRUCTED WITH AN AUTOMATIC SPRINKLER IRRIGATION SYSTEM AS PART OF THE LANDSCAPING SUBCONTRACT.
2. GENERAL CONTRACTOR SHALL PROVIDE SCHEDULE 40 PVC SLEEVING 4" OR 6" UNDER ALL DRIVES AND PAVED AREAS FOR IRRIGATION SLEEVING SHALL BE BURIED A MINIMUM OF 18" BELOW GRADE AND THE ENDS OF THE SLEEVES CLEARLY MARKED BY THE GENERAL CONTRACTOR AND SHALL EXTEND OUT A MINIMUM OF 18" PAST ANY CURB OR PAVING.
3. LANDSCAPED AREAS TO BE AMENDED WITH 4" OF TOPSOIL, SCARIFY SOIL 3" PRIOR TO APPLICATION. ALL TOP SOIL SHALL BE PLACED IN COORDINATION WITH GRADING AND DRAINAGE PLANS TO ENSURE THAT THE GRADING AND DRAINAGE DESIGN FOR THE SITE IS MAINTAINED AFTER BEING SODDED OR SEEDED. EXISTING SOIL FROM THE SITE CAN BE STOCK PILED AND REUSED AS LONG AS IT IS OF QUALITY THAT ENCOURAGES ADEQUATE GROWTH OF PLANTING MATERIAL. THE CONTRACTOR IS RESPONSIBLE FOR ANY SOIL TESTING THAT MAY BE REQUIRED.
4. ALL DISTRUBED AREAS ARE TO BE SODDED.
5. ALL LANDSCAPED AREAS (SHRUBS/TREES/ISLANDS) TO HAVE APPROPRIATE BEDDING AND EDGING INSTALLED (NOT DETAILED ON PLAN).
6. ALL LANDSCAPING MUST BE GUARANTEED FOR TWO YEARS.
7. A MINIMUM OF 100SF OF MULCH BEDDING IS REQUIRED AROUND ANY BEDDING PLANS OR GROUND COVER IN CONTAINMENT.

PLANT SCHEDULE

PLANT TYPE	SYMBOL	CODE	QTY	COMMON SPECIES	SCIENTIFIC NAME	CAL / SIZE
TREES		WO	7	WILLOW OAK	QUERCUS PHELLOS	MIN. 3" DIAMETER @ BASE AND 12' TALL
SHRUBS		DN	23	DWARF NANDINA	N. DOMESTICA "HARBOUR DWARF"	3 GAL
GROUND COVER		BR		BERMUDA GRASS	CYNODON DACTYLON	

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F. PRIOR TO INSTALLATION OF ANY UTILITIES, THE CONTRACTOR IS TO EXCAVATE, VERIFY AND CALCULATE ALL CROSSINGS AND INFORM ANY AND ALL UTILITIES OF ANY CONFLICTS PRIOR TO CONSTRUCTION.

G. CONSTRUCTION SHALL NOT START ON ANY WATER UTILITY TIE-INS UNTIL APPROVAL IS GIVEN BY BRYANT WATER. SAID CONTRACTOR SHALL NOT OPERATE ANY VALVE, HYDRANT, OR WATER UTILITY APPURTENANCE NOR SHALL HE ATTACH TO OR TAP ANY WATER UTILITY MAIN WITHOUT APPROVAL. THE CONTRACTOR SHALL BEAR THE COST AND CONSEQUENCE OF ANY DISRUPTION OF UTILITY OPERATION CAUSED BY CONSTRUCTION.

H. FIBER OPTIC CABLE ON AND/OR ADJACENT TO THIS SITE WERE NOT LOCATED BY THE SURVEY AND ARE NOT SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ANY FIBER OPTIC CABLES ASSOCIATED WITH THIS SITE AND TAKE ALL NECESSARY AND REQUIRED PRECAUTIONS TO PROTECT ANY EXISTING FIBER OPTIC CABLES. CONTRACTORS SHALL COORDINATE ALL EFFORTS WITH OWNER OF FIBER OPTIC CABLES OR THEIR DESIGNATED REPRESENTATIVE.

J. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "ONECALL" SERVICE TO MARK ALL UTILITIES PRIOR TO ANY DEMOLITION, EARTHWORK, OR UTILITY WORK ON THIS SITE.

PHILLIP LEWIS ENGINEERING, INC.
Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840

REVISION:

THE GODDARD SCHOOL OF BRYANT

ALEXANDER, ARKANSAS

STATE OF ARKANSAS
ARKANSAS REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP A. LEWIS

CERTIFICATE OF AUTHORIZATION
PHILLIP LEWIS ENGINEERING, INC.
No. 566
ARKANSAS ENGINEER

PROJECT NUMBER:

SHEET ISSUE DATE: 03-25-2026

PAGE TITLE: LANDSCAPE PLAN

SHEET NUMBER: C1.14

N

0 20'

1" = 20'-0"

NOTES (GENERAL):

1. SEE EROSION CONTROL DETAILS IN SWPPP FOR EROSION CONTROL FACILITIES.
2. SEE SWPPP FOR INSTALLATION, MAINTENANCE, INSPECTION, AND RECORD KEEPING REQUIREMENTS.
3. CONTRACTOR SHALL REPLACE SILT FENCE WHEN FENCE BECOMES DAMAGED TO THE POINT OF NO LONGER BEING ABLE TO ADEQUATELY PREVENTING SEDIMENT RUNOFF FROM THE SITE.
4. CONTRACTOR SHALL SHOW EROSION CONTROL MEASURE ON SITE MAP.
5. EROSION AND SEDIMENT CONTROL STRUCTURES TO MEET SWPPP DETAILS - APPENDIX D
6. INSTALL ROCK DITCH, CHECK, OR SAND BAG CHECKS AS NECESSARY TO PREVENT SCOUR UNTIL LANDSCAPING IS ESTABLISHED.
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8. FINAL SLOPE WILL BE SAME DIRECTION AS EXISTING SLOPE.
9. TEMPORARY STABILIZATION PRACTICES WILL NOT BE REQUIRED. WORK WILL BE CONTINUOUS AND DISTURBED AREA REVEGITATED IN A TIMELY MANNER. SEE SWPPP FOR SEEDING MIXES.
10. PERMANENT STABILIZATION OF ALL DISTURBED AREAS ARE TO BE SEEDED, FERTILIZED, WATERED AND COVERED WITH STRAW UNLESS OTHERWISE NOTED ON PLANS TO BE HYDROSEEDED.
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    b) THE DISTURBED SOIL AREA IS OBSERVED TO HAVE 80% GRASS COVERAGE AND 100% STABILITY, AND
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SWPPP PH 1

SCALE 1" = 20'

LEGEND

- DISTURBED AREA
- UNDISTURBED AREA
- SEDIMENT FENCE WITH WIRE BACKING
- DRAINAGE DIRECTION

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UNIVERSAL SOIL LOSS EQUATION: E=(R)(K)(LS)(C)(P)

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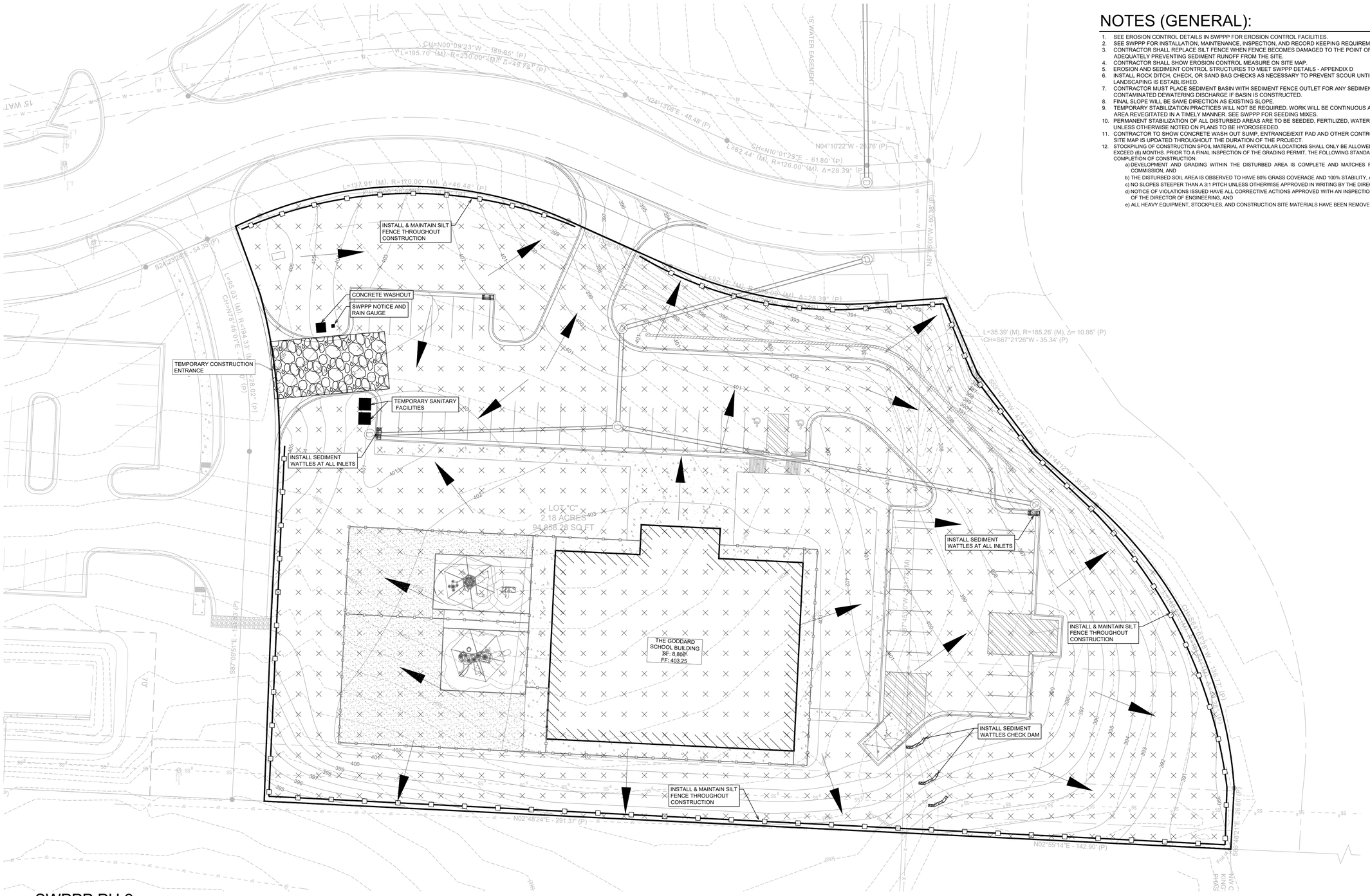
SHEET ISSUE DATE: 03-25-2026

PAGE TITLE: SWPPP PH 1

SHEET NUMBER: C1.15



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SWPPP PH 2

SCALE 1" = 20'

LEGEND

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- UNDISTURBED AREA
- SEDIMENT FENCE WITH WIRE BACKING
- DRAINAGE DIRECTION

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SHEET ISSUE DATE: 03-25-2026

PAGE TITLE: SWPPP PH 2

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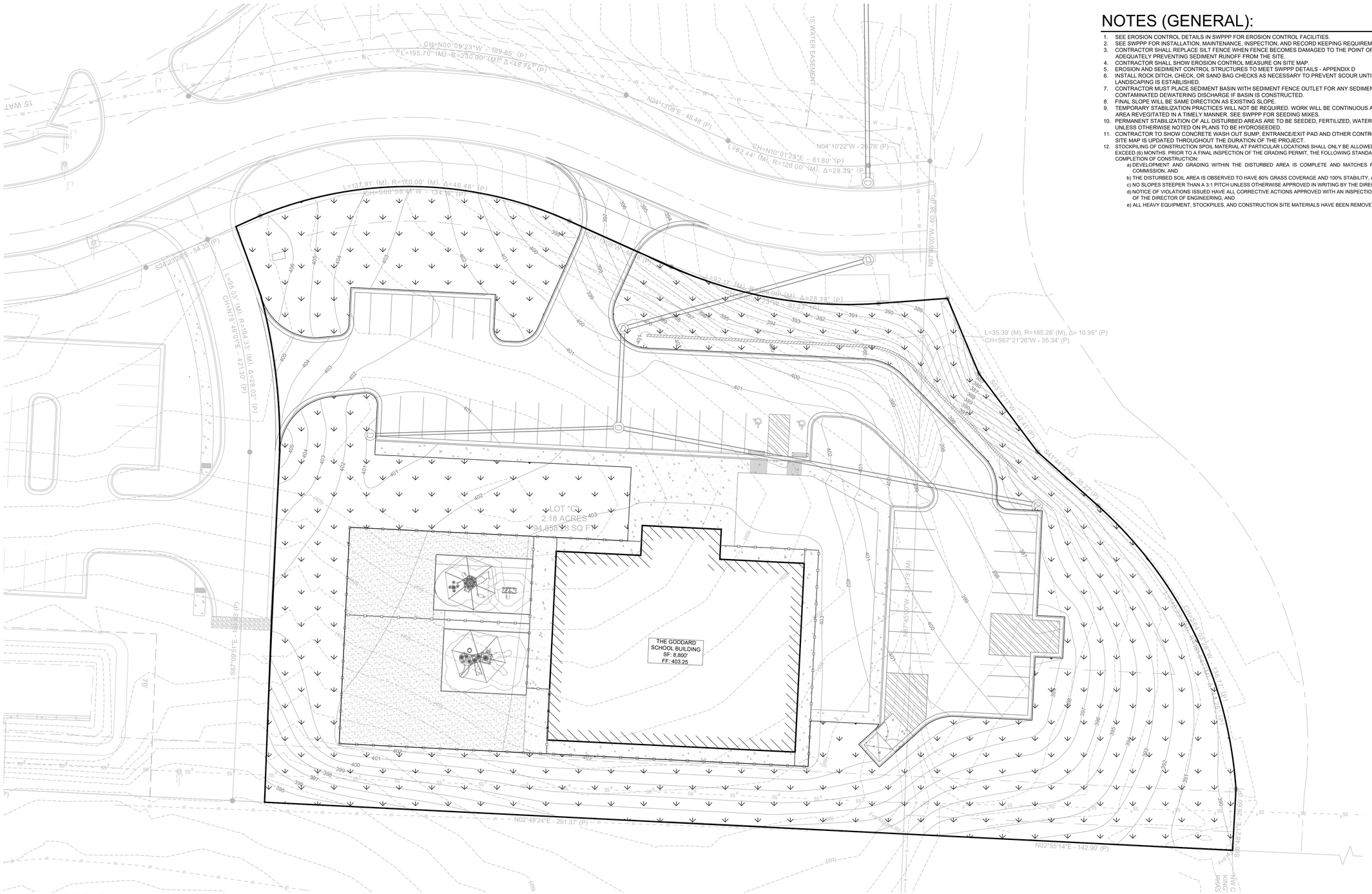

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SWPPP PH 3

SCALE 1" = 20'

LEGEND

GRASS SOD OR SEED

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SWPPP PH 3

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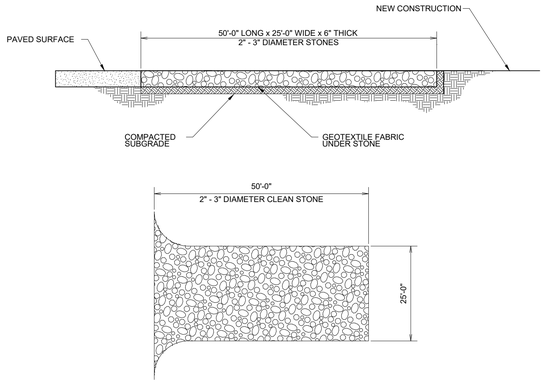
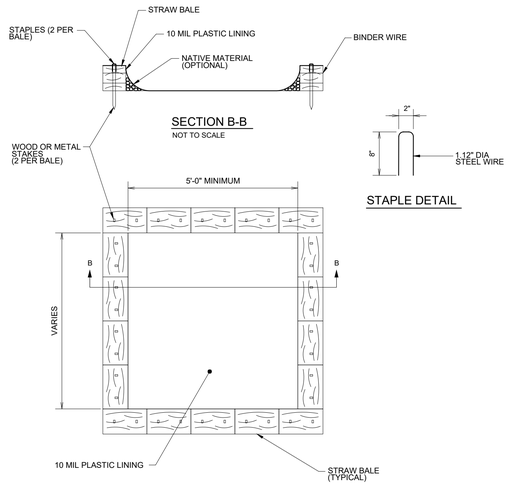


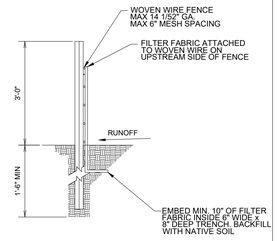
CONSTRUCTION ENTRANCE

NOT TO SCALE



CONCRETE WASHOUT

NOT TO SCALE

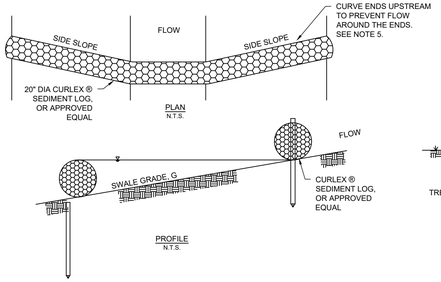


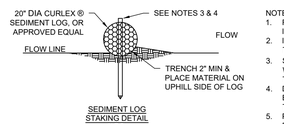
SILT FENCE

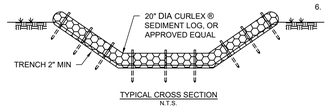
NOT TO SCALE

NOTES AND SPECIFICATIONS:

1. POSTS SHALL BE A MINIMUM OF 36 INCHES CONSTRUCTED OF EITHER OF THE FOLLOWING MATERIALS: STEEL "T" OR "U" TYPE, OR 2" x 2" HARDWOOD.
2. WOVEN WIRE USED AS ADDITIONAL FENCE SUPPORT SHALL BE MINIMUM 14.5 GA. WITH 6" MAXIMUM SPACING.
3. WOVEN WIRE SHALL BE PLACED ALONG THE UPHILL SIDE OF THE FENCE AND FASTENED WITH WIRE TIES OR 1" STAPLES ALONG THE UPHILL SIDE OF THE POSTS.
4. FILTER FABRIC SHALL BE FASTENED TO WOVEN WIRE ACCORDING TO MANUFACTURER'S RECOMMENDATION, OR WITH TIES EVERY 24" AT THE TOP AND MID-SECTIONS.
5. WHERE TWO PIECES OF FILTER FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6 INCHES AND FOLDED TOGETHER.
6. WHERE TWO POSTS MEET TO JOIN FENCE SECTIONS, THE TOPS OF THE POSTS SHALL BE SECURED TOGETHER WITH WIRE.
7. THE FENCE SHALL BE CONSTRUCTED ALONG THE CONTOUR AS MUCH AS POSSIBLE.
8. ENDS OF FENCES SHALL BE EXTENDED UP THE SLOPE TO PRVENT RUNOFF FROM MIGRATING AROUND THE END OF THE FENCE.
9. INSPECTION OF THE FENCE SHALL BE PERFORMED WEEKLY, OR IMMEDIATELY AFTER A RAIN EVENT, OR WHEN BULGES APPEAR IN THE FENCE. ACCUMALTED SILT SHALL NOT BE ALLOWED TO EXCEED HALF THE HEIGHT OF THE FABRIC. REPAIR AND OR REPLACMENT OF DAMAGED FENCE SHALL BE COMPLETED PROMPTLY.
10. ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED SITE IN SUCH A MANNER THAT IT WILL NOT CONTRIBUTE TO OFF-SITE SILTATION.
11. ALL FENCING SHALL BE REMOVED WITH THE CONSTRUCTION SITE IS FULLY STABLIZED SO AS TO NOT IMPEDE STORM FLOW OR DRAINAGE.
12. PRE-FRABRICATED UNITS DO NOT REQUIRE THE USE OF WOVEN WIRE FENCE.







NOTE:
1. REPAIR ALL RILLS OR GULLIES PRIOR TO INSTALLATION
2. INSTALL CHECK DAMS IN SWALES PERPENDICULAR TO THE FLOWLINE
3. STAKE SEDIMENT LOGS IN PLACE WITH 1½" X 1½" WOODEN STAKES. DRIVE STAKES AT EACH END OF THE SEDIMENT LOG AT 2' (MAX) SPACING.
4. DRIVE STAKES INTO UNDISTURBED SOIL OF SWALE BOTTOM 16" (MIN). EXPOSE STAKES 2" MIN ABOVE TOP OF LOG.
5. PROVIDE SUFFICIENT LENGTH TO PREVENT WATER FROM FLOWING AROUND THE ENDS OF THE SEDIMENT LOG.
6. DO NOT USE WITH SWALE GRADE > 5%

CHECK DAM SPACING	
G (%)	S (FT)
1	150
2	75
3	50
4	40
5	30

NOTES AND SPECIFICATIONS:

1. SEDIMENT LOGS SHOULD BE PLACED 180 FT APART BASED ON THE SLOPE OF THE SURFACE
2. THERE SHOULD BE THREE SEDIMENT LOGS USED IN THE DRAINAGE DITCH RUNNING SOUTH ALONG SKYLINE DR UNTIL IT MEETS THE LARGE DRAINAGE DITCH THAT RUNS ALONG THE FRONT OF THE DEALERSHIP
3. SHOULD BE INSTALLED FROM BOC TO THE EDGE OF THE ROW

.

SEDIMENT WATTLE

NOT TO SCALE

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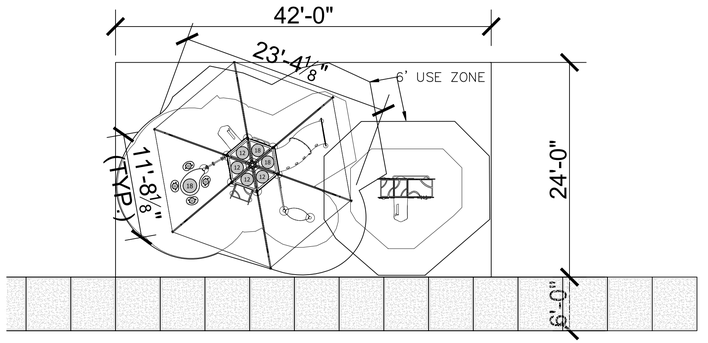
SWPPP DETAILS

SHEET NUMBER:
C1.18

08 INFANT/TODDLER PLAYGROUND RENDERING

SCALE: N.T.S.

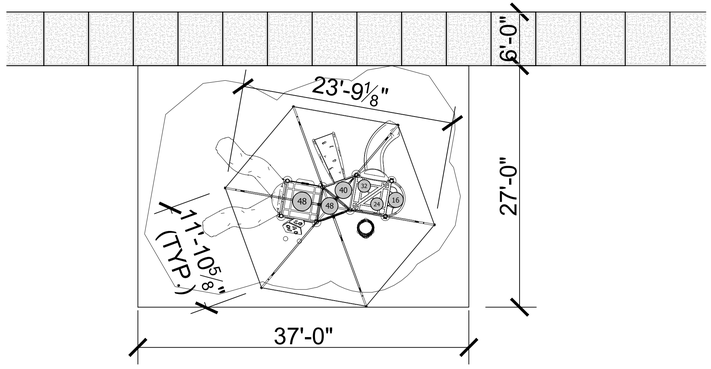


09 INFANT/ TODDLER PLAY STRUCTURE

SCALE: 1/8" = 1'-0"

10 PRESCHOOL PLAYGROUND RENDERING

SCALE: N.T.S.



11 PRESCHOOL PLAY STRUCTURE

SCALE: 1/8" = 1'-0"

DEVELOPER / GENERAL CONTRACTOR'S PLAYGROUND RESPONSIBILITIES

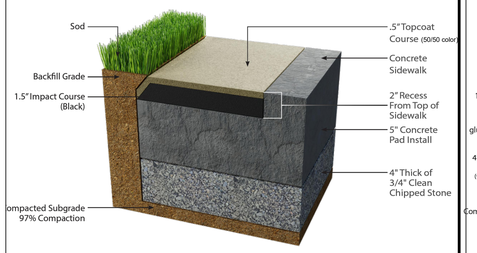
1. PLAYGROUND STRUCTURE AND SHADE STRUCTURE APPROVALS OR PERMITS IF REQUIRED. APPROVALS AND PERMITTING MAY BE REQUIRED FOR COLOR SCHEME, HEIGHT, MANUFACTURER DESIGN METHODS, ETC.
2. UTILITIES CANNOT BE LOCATED UNDER OR OVER PLAYGROUND BOXES.
3. ELECTRIC AND WATER ARE NEEDED ON SITE, FOR THE PLAYGROUND INSTALLERS USE. IF NOT, OTHER PRIOR ARRANGEMENTS SHALL BE MADE.
4. SOILS WITHIN THE PLAYGROUND BOX DIMENSIONS SHOULD BE SUITABLE FOR SLAB AT GRADE INSTALLATIONS. SOILS SHOULD NOT CONTAIN DEBRIS AND COMPACTED TO 95% IN ACCEPTED INCREMENTS CONTAINING SUITABLE SOIL.
5. PROVIDE GODDARD SYSTEM INC.'S PROJECT MANAGER WITH A TIMELINE FOR PLAYGROUND INSTALLATION. ROUGH GRADE IS REQUIRED AND SIDEWALKS AND PLAYGROUND PADS ARE REQUIRED TO BE INSTALLED PRIOR TO PLAYGROUND INSTALLATION, SOD, ARTIFICIAL TURF, FENCE AND PARKING LOT TOP COAT.
6. LOCATE PLAYGROUND PADS PER SITE PLAN, PLAYGROUND PADS CANNOT EXCEED A MAXIMUM 2% GRADE. (DTL. 14/C2.1)
7. SUB-GRADE BACKFILL MUST BE COMPACTED TO AT LEAST 95% AND SHOULD NOT CONTAIN MATERIALS SUCH AS LARGE ROCKS, SCRAP WOOD, CONCRETE SPOILS, ETC. PLAYGROUND INSTALLERS NEED TO DRILL ACCURATE HOLES FOR PLAYGROUND POLE INSTALLATION.
8. ENSURE ADEQUATE AREA FOR PLAYGROUND INSTALLERS. STAGING AREA NEEDED TO UNLOAD AND PRE-ASSEMBLE APPROX. 1,000 CUBIC FOOT SHIPMENT OF PLAYGROUND EQUIPMENT. HOLDING AREA NEEDED TO RECEIVE DELIVERY OF APPROXIMATELY 40-50 TONS OF CRUSHED STONE. PARKING AREA NEEDED FOR TWO TRUCKS AND ONE 30' TRAILER OF EXCAVATING EQUIPMENT.
9. IN ORDER TO AVOID POSSIBLE DAMAGE, PARKING LOTS SHOULD NOT HAVE TOPCOAT APPLIED AND FENCING SHOULD NOT BE INSTALLED UNTIL PLAYGROUND IS COMPLETE. IF FENCING IS INSTALLED, LEAVE OUT NECESSARY SECTIONS TO PROVIDE ACCESS TO PLAYGROUND AREA.
10. ONCE CONCRETE PADS AND EQUIPMENT HAVE BEEN INSTALLED, THEY SHOULD NOT BE DRIVEN OR WALKED ON AND SHOULD NOT BE USED FOR STORAGE AREA.
11. PLAYGROUND INSTALLATION DESCRIBED ABOVE SHOULD TAKE APPROXIMATELY ONE TO FIVE DAYS, DEPENDING ON SITE CONDITIONS, WEATHER, INSTALLER CREW SIZE, ETC.
12. INSTALLATION OF POUR-IN-PLACE SURFACING USUALLY TAKES PLACE UP TO TWO WEEKS AFTER PLAYGROUND IS INSTALLED, DEPENDING MAINLY ON WEATHER CONDITIONS.
13. GENERALLY ONLY THREE OR FOUR PARKING SPACES ARE NEEDED FOR SURFACING INSTALLERS. (ONE OR TWO VEHICLES AND A MIXER STAGING AREA)
14. TYPICALLY, TWO MEN MIX THE SURFACING PRODUCT IN THE PARKING LOT AND TRANSPORT BY WHEELBARROW TO PLAYGROUNDS WHERE IT IS POURED AND TROWELED. THEREFORE, NO SPECIAL ALLOWANCES ARE NECESSARY (FENCING CAN BE INSTALLED AND FINISH LANDSCAPING CAN BE COMPLETED)
15. THIS IS USUALLY A TWO-DAY INSTALLATION, DEPENDING MAINLY ON WEATHER CONDITIONS. IMPACT COURSE APPLIED ON DAY ONE, AND TOPCOAT (COLOR) APPLIED ON DAY TWO.
16. ONCE THE TOPCOAT APPLICATION IS COMPLETE, THE BINDING AGENTS WILL TAKE A MINIMUM 24 HOURS TO CURE. DURING THAT TIME THERE IS TO BE ABSOLUTELY NO WALKING ON, PLACING OBJECTS ON, OR ALLOWING ANY DUST TO ACCUMULATE ON THE TOPCOAT SURFACE.
17. FINISH GRADING AND LANDSCAPING MUST BE THE SAME ELEVATION AT THE PLAYGROUND BORDERS.
18. ENSURE THAT THE SITE IS SECURE AND THAT OTHER CONTRACTORS WILL NOT BE STORING, WORKING, WALKING, ETC. ON FINISHED PLAYGROUNDS, SURFACES OR BORDERS.

GENERAL NOTES:

DEVELOPER/GENERAL CONTRACTOR SHOULD BE IN CONSTANT COMMUNICATION WITH GSF TO SCHEDULE DELIVERY AND INSTALLATION OF THE PLAYGROUND STRUCTURES. PLAYGROUND INSTALLERS TRAVEL LONG DISTANCES AND IT IS IMPERATIVE THE SITE IS PROPERLY PREPARED AS SPECIFIED TO AVOID COSTLY MOBILIZATION, SHIPPING AND STORAGE FEES.

GSF'S PLAYGROUND INSTALLERS TRAVEL GREAT DISTANCES, INCURRING EXPENSES FOR BOTH TRANSPORTATION AND LODGING. IN ADDITION THEY ARE REQUIRED TO RESERVE RENTAL MACHINERY. IF THEY ARE TURNED AWAY BECAUSE THE SITE IS NOT READY, A TRAVEL CHARGE WILL APPLY. THIS CHARGE COULD BE SIGNIFICANT ($50.00 PER MAN-HOUR FOR A CREW OF FIVE, LODGING AT $175 PER ROOM PER NIGHT, AND EQUIPMENT RENTAL DEPOSITS). THEREFORE, FOLLOWING ALL OF THE ABOVE GUIDELINES, ESPECIALLY WITH RESPECT TO DISCLOSING EXCESSIVELY ROCKY CONDITIONS, PROHIBITING THE USE OF LARGE ROCKS, CEMENT, ETC. IN BACKFILL MATERIALS, AND PROVIDING THE PROJECT MANAGER AN ACCURATE TIMELINE, WILL SAVE BOTH MONEY AND TIME.

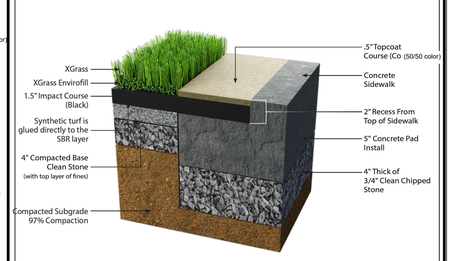
Duraflex
Pour-in-Place Rubber
Goddard Schools Custom



12 POUR IN PLACE W/ SOD

SCALE: N.T.S.

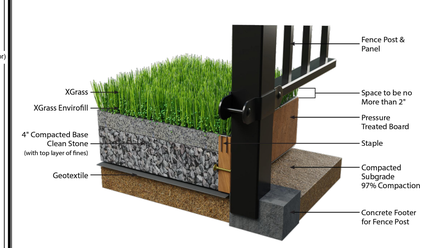
Synthetic Turf and Pour-in-Place
Adjacent Installation
Goddard Schools Custom



13 POUR IN PLACE W/ TURF

SCALE: N.T.S.

Synthetic Turf for Landscapes
With Fenced Border
Goddard Schools Custom



14 BORDER DETAIL

SCALE: N.T.S.

Synthetic Turf for Landscapes
With Concrete Border and Nailer Board
Goddard Schools Custom

Compacted Base Depth - 4"
Infill Depth - ¾"

To accommodate this application prepare your site 4 ¾"below grade.

15 BORDER DETAIL

SCALE: N.T.S.

PHILLIP LEWIS ENGINEERING, INC.
Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840

REVISION:

THE GODDARD SCHOOL OF BRYANT
ALEXANDER, ARKANSAS

CERTIFICATE OF AUTHORIZATION
PHILLIP LEWIS ENGINEERING, INC.
No. 566
ARKANSAS—ENGINEER

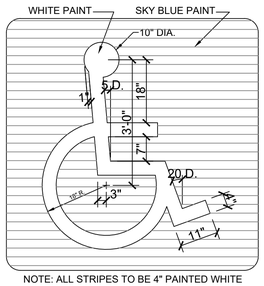
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP LEWIS

PROJECT NUMBER:

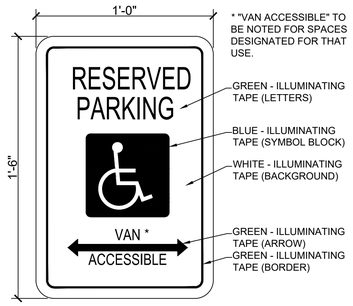
SHEET ISSUE DATE:
03-25-2026

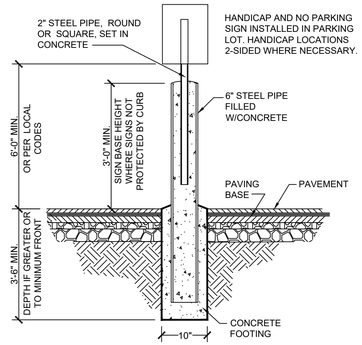
PAGE TITLE:
PLAYGROUND DETAILS

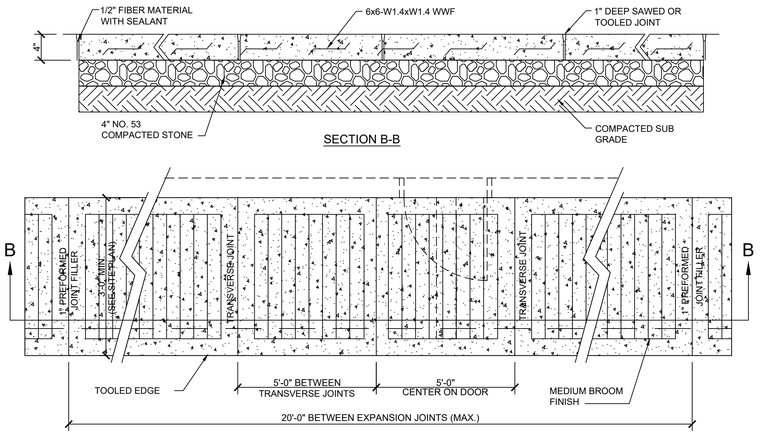
SHEET NUMBER:
C1.19

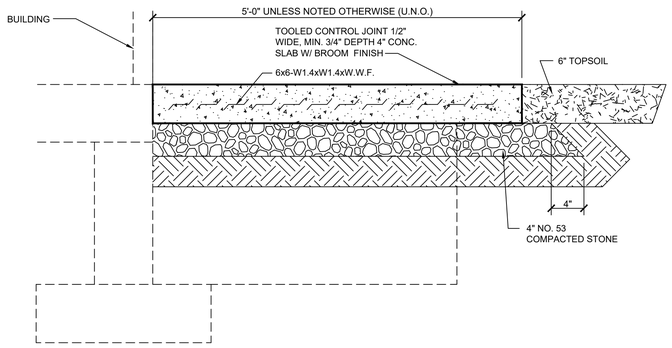


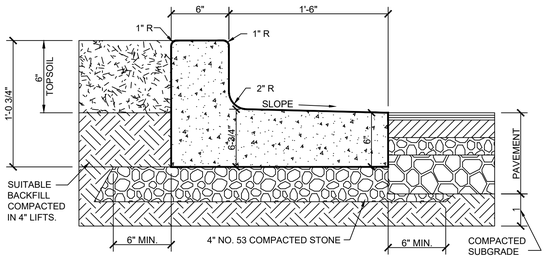
NOTE: ALL STRIPES TO BE 4" PAINTED WHITE

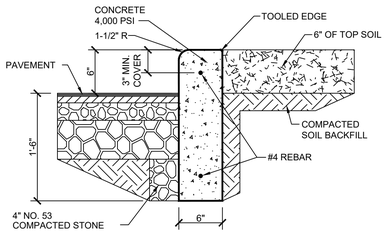












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STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP A. LEWIS

CERTIFICATE OF AUTHORIZATION
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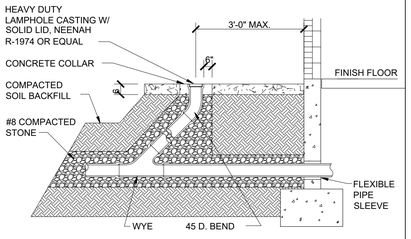
ARKANSAS ENGINEER

PROJECT NUMBER:

SHEET ISSUE DATE:
03-25-2026

PAGE TITLE:
PROTOTYPE DETAILS I

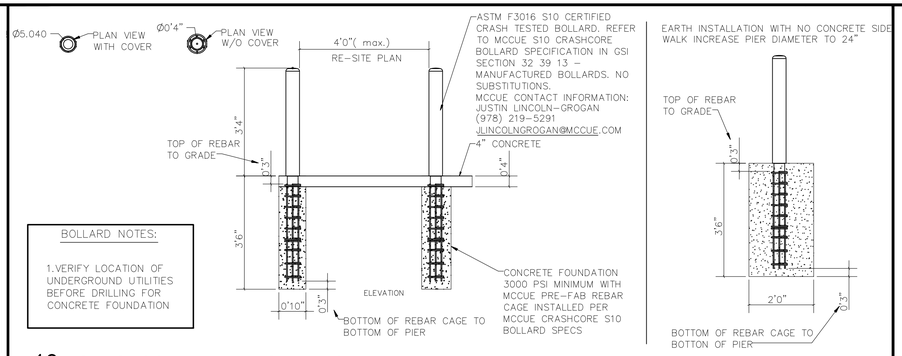
SHEET NUMBER:
C1.20



MAXIMUM CLEANOUT SPACING TO BE NO MORE THAN 100 FEET.

18 TYP. CLEANOUT DETAIL

SCALE: N.T.S.



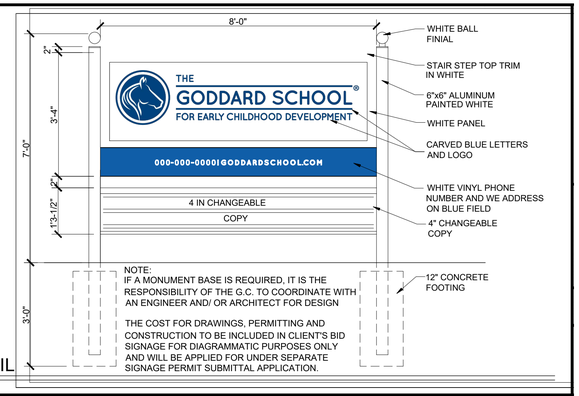
BOLLARD NOTES:

1. VERIFY LOCATION OF UNDERGROUND UTILITIES BEFORE DRILLING FOR CONCRETE FOUNDATION

10 CRASHCORE DEEP MOUNT BOLLARD

SCALE: 1/2"=1'-0"

SIGN DIMENSIONS SUBJECT TO LOCAL JURISDICTIONAL REGULATIONS.



05 MONUMENT SIGNAGE DETAIL

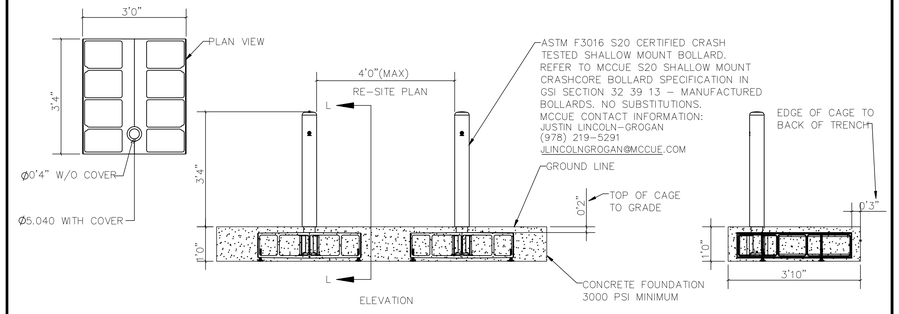
SCALE: N.T.S.

HANDRAIL ACCESSIBILITY NOTES:

1. FOR ACCESSIBILITY, PLEASE REFERENCE ADA 36 CFR 1191 FINAL RULE: PLAY AREAS 15.6. MAIN ENTRANCE PATHWAYS SHOULD BE 72 INCHES TO 96 INCHES WIDE. ALL PATHWAYS MUST PROVIDE ADEQUATE CLEARANCES AS PRESCRIBED BY THE UFAS AND ADA STANDARDS. PATHWAY SLOPES SHOULD BE NO GREATER THAN 1:20 UNLESS THEY ARE PROVIDED WITH A HANDRAIL. (MORE THAN 1:20 IS CONSIDERED A RAMP.) CROSS SLOPES WILL BE LIMITED TO 1:50.
2. PLATFORMS, STAIRS, HANDRAILS ON STAIRS, GUARDRAILS, AND PROTECTIVE BARRIERS ON PLATFORMS MUST BE DESIGNED IN COMPLIANCE WITH REQUIREMENTS CONTAINED IN THE LATEST EDITION OF THE HANDBOOK FOR PUBLIC PLAYGROUND SAFETY, CONSUMER PRODUCT SAFETY COMMISSION (CPSC). THE HEIGHT OF PLATFORMS AND THE AGE GROUP USING THE PLATFORM WILL DETERMINE WHEN A GUARDRAIL OR PROTECTIVE BARRIER IS REQUIRED. GUARDRAILS MAY BE USED IN PLATFORMS AT LOWER HEIGHTS, WHILE PROTECTIVE BARRIERS MUST BE PROVIDED ON HIGHER PLATFORMS.
3. HANDRAILS MUST BE PROVIDED TO ACCOMMODATE THE INTENDED AGE GROUP ON ALL STAIRS (INCLUDING ADULTS). FOR CHILDREN, HEIGHTS WILL RANGE BETWEEN 20 INCHED ABOVE THE LEADING EDGE OF THE TREAD AND 36 INCHES. IN CERTAIN INSTANCES, IT MAY NECESSARY TO HAVE TWO RAILINGS MOUNTED AT DIFFERING HEIGHTS.
4. GUARDRAILS MUST BE PROVIDED FOR INFANTS AND TODDLERS ON ALL PLATFORMS GREATER THAN 11-13/16 INCHES ABOVE ADJACENT SURFACES. GUARDRAILS MUST BE PROVIDED FOR PRE-SCHOOL-AGE CHILDREN ON ALL PLATFORMS GREATER THAN 11-13/16 INCHES ABOVE ADJACENT SURFACES.
5. ALL HANDRAILS TO COMPLY WITH 3.5" SPACING ON THE PICKETS AND 2" ON THE BOTTOM RAIL.

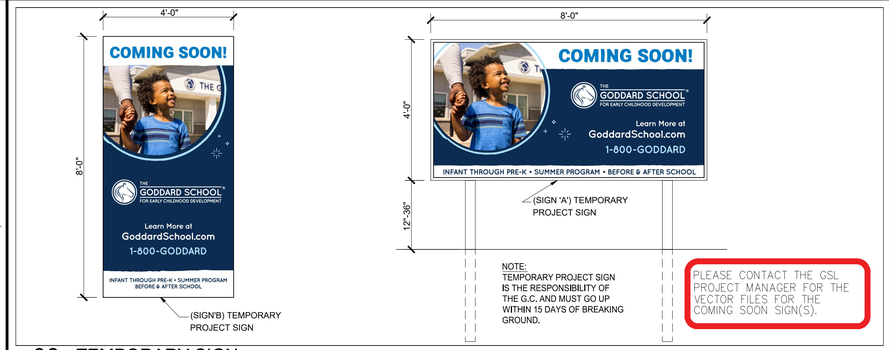
19 HANDRAIL DETAIL

SCALE: N.T.S.



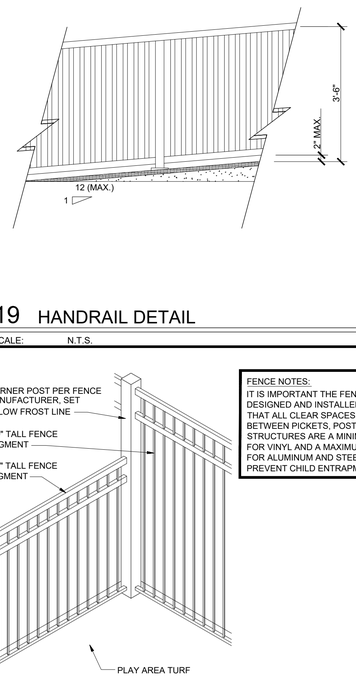
11 SHALLOW MOUNT CRASHCORE BOLLARD

SCALE: 1/2"=1'-0"



06 TEMPORARY SIGN

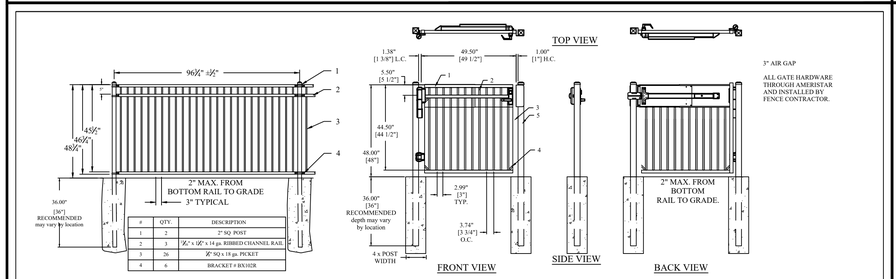
SCALE: N.T.S.



FENCE NOTES:
IT IS IMPORTANT THE FENCES BE DESIGNED AND INSTALLED SO THAT ALL CLEAR SPACES BETWEEN PICKETS, POSTS AND STRUCTURES ARE A MINIMUM 1.5" FOR VINYL AND A MAXIMUM 3.5" FOR ALUMINUM AND STEEL TO PREVENT CHILD ENTRAPMENT.

20 FENCE TRANSITION DETAIL

SCALE: N.T.S.

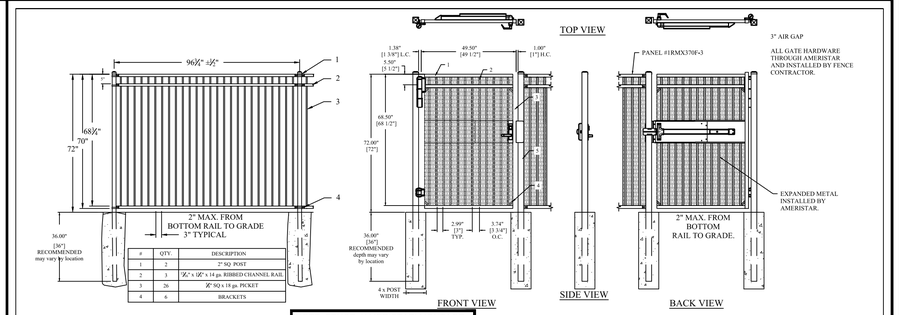


NOTE: FENCE- 'AMERISTAR' MONTAGE RESIDENTIAL MAJESTIC, 3-RAIL FLUSH BOTTOM, 3"GAP PICKET SPACING.

NOTE: GATE - AMERISTAR MONTAGE MAJESTIC PLUS, 3 RAIL, FLUSH BOTTOM, 3" GAP PICKET SPACING

15 TYPICAL FENCE DETAIL

SCALE: N.T.S.

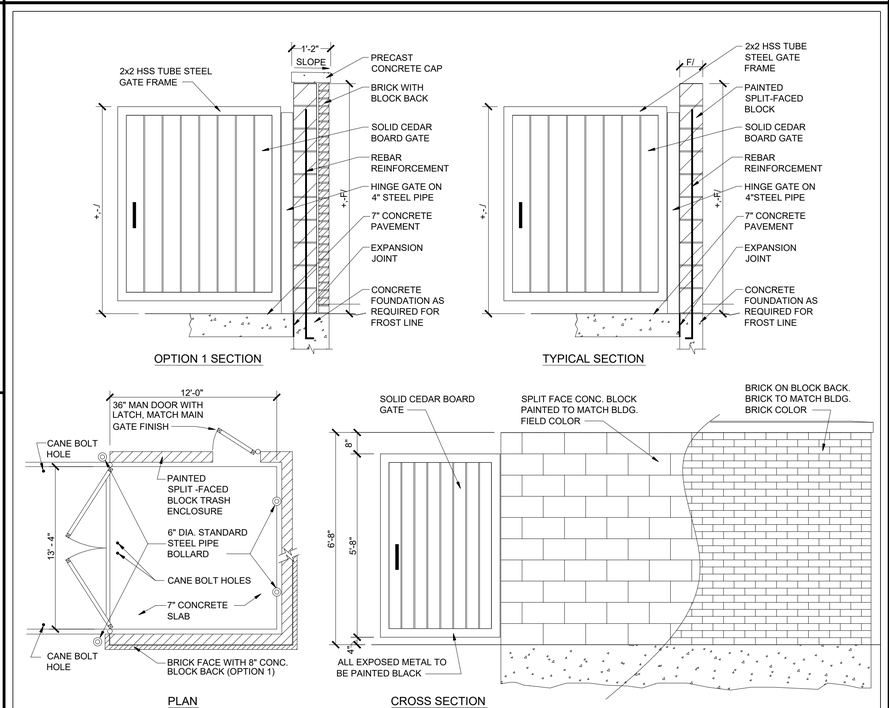


NOTE: FENCE- 'AMERISTAR' MONTAGE RESIDENTIAL MAJESTIC, 3-RAIL FLUSH BOTTOM, 3"GAP PICKET SPACING.

NOTE: GATE - AMERISTAR MONTAGE MAJESTIC PLUS, 3 RAIL, FLUSH BOTTOM, 3" GAP PICKET SPACING

16 TYPICAL FENCE DETAIL

SCALE: N.T.S.



08 TRASH ENCLOSURE DETAILS

SCALE: N.T.S.

PHILLIP LEWIS ENGINEERING, INC.
Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840

REVISION:

THE GODDARD SCHOOL OF BRYANT
ALEXANDER, ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP A. LEWIS

CERTIFICATE OF AUTHORIZATION
PHILLIP LEWIS ENGINEERING, INC.
No. 566
ARKANSAS ENGINEER

PROJECT NUMBER:

SHEET ISSUE DATE:
03-25-2026

PAGE TITLE:
PROTOTYPE DETAILS II

SHEET NUMBER:
C1.21

Stormwater Management Plan (SWMP)
For
Construction Activity

Prepared for

AF Partners, LLC

Date: MARCH 2026

Prepared by

Phillip Lewis Engineering

CITY OF BRYANT, ARKANSAS
STORMWATER DIVISION

STORMWATER MANAGEMENT PLAN

General Information:

Construction of approximately a 8,800 Sq. Ft. building that will serve as an early childhood educational facility as well as a 8,500 Sq. Ft. outdoor play area. Additionally, approximately 31,800 square feet of associated parking, driveways, sidewalks, and sidewalks.

Project Name:

Goddard School

Physical Address of Site:

Christy Ln Alexander AR, 72002

Latitude:

34.640044

Longitude:

-92.471555

Owner / Operator Name, Address, Phone and Email:

AF Partners, LLC
Attn: Doug Hendrix
1500 Christy Lane Alexander, Arkansas 72002
(602)-263-6555
stephany_sheekey@uhaul.com

Contractor Name, Address, Phone and Email:

Delk Construction Company
111 W Booth Rd
Searcy, AR 72143
501-847-7964
mdjr@delkconstruction.com

A. Identification and Description

1. **Project Name**: Goddard School

2. **Project Type**: Commercial

3. **Project location**: Christy Ln Alexander Arkansas, 72002

4. **Legal Description**: Not Available at this time.

5. **Responsible Parties**

Owner / Operator Name, Address, Phone and Email:
AF Partners, LLC
Attn: Doug Hendrix
1500 Christy Lane Alexander, Arkansas 72002
501-847-7964
doug.hendrix@summerwoodpartners.com

Owner / Operator Name, Address, Phone and Email:
AF Partners, LLC
Attn: Doug Hendrix
1500 Christy Lane Alexander, Arkansas 72002
501-847-7964
doug.hendrix@summerwoodpartners.com

Contractor Name, Address, Phone and Email:
Delk Construction Company
111 W Booth Rd
Searcy, AR 72143
501-281-4404
mdjr@delkconstruction.com

Land Surveyor Name, Address, Phone and Email:
Robbins Professional Land Services
3381 Garden Club Dr
Bryant, AR 72022
501-425-6380
zanerobbins3@gmail.com

Engineer Name, Address, Phone and Email:
Phillip Lewis Engineering
23620 I-30 W
Bryant, AR 72022
501-326-0662
dylan@phillplewisengineering.com

6. **Long Term Maintenance**
   The GC, Delk Construction Company, will install and maintain all stormwater controls. Delk Construction shall be responsible for the short term maintenance of this project during construction. Inspections shall be done at least once per 7 days or within 24 hours of any storm event of ½ inch or greater. Once a Certificate of Occupancy is received, the site will then be subject to the long term maintenance plan. The owner/operator shall be responsible for long term maintenance. Post construction storage shall be accomplished by utilizing regional detention. Water quality will be achieved by stabilizing all areas that were disturbed during construction with vegetative cover of the proper density thus preventing sediment exposure and erosion.

7. **The Nature of the Construction Activity**
   Construction of approximately 31,500 Sq. Ft. multi story indoor storage facility as well as a 10,500 Sq. Ft. U-Box facility equipped with a recessed truck dock. Approximately 95,992 Sq. Ft. of associated parking, driveways, sidewalks, and swale. Without proper erosion control devices and BMPs, sediment could run off or be tracked off site. There will not be hazardous materials or wastes stored onsite.

8. **Phasing of Construction**
   04-27-26 Mobilize equipment on site and construct stabilized construction entrance.
   04-28-26 Construct silt fences and BMP controls on site
   05-04-26 Clear and grub site
   05-18-26 Begin grading site

06-15-26 Install stormwater structures
07-06-26 Install underground utilities
07-27-26 Start construction of building pad and structures
07-29-26 Temporarily seed denuded areas
08-24-26 Install curb & gutter- sediment barriers shall be utilized as required to bound the down slope side of utility trenching and construction.
10-12-26 Prepare site for paving
10-19-26 Pave site.
12-07-26 Complete grading and install permanent sodding and landscaping
12-18-26 Remove all temporary erosion and sediment control devises (once site is stabilized)

*** The actual schedule for implementing pollutant control measures will be determined by project construction progress. Down slope protective measures must always be in place before soil is disturbed.

9. **Other permits**: N/A

B. Existing Conditions

See appendix A for a complete predevelopment site plan and hydrographs satisfying the requirements outlined in section 200 of the City of Bryant Stormwater Management Manual.

C. Proposed Conditions

See appendix B for a complete post development site plan and hydrographs satisfying the requirements outlined in section 200 of the City of Hot Springs Stormwater Management Manual.

APPENDIX A: PRE-DEVELOPMENT SITE MAP & HYDROGRAPHS

NOTES (GENERAL):

1. SEE EROSION CONTROL DETAILS IN SWPPP FOR EROSION CONTROL FACILITIES.
2. SEE SWPPP FOR INSTALLATION, MAINTENANCE, INSPECTION, AND RECORD KEEPING REQUIREMENTS.
3. CONTRACTOR SHALL REPLACE SILT FENCE WHEN FENCE BECOMES DAMAGED TO THE POINT OF NO LONGER BEING ABLE TO ADEQUATELY PREVENTING SEDIMENT RUNOFF FROM THE SITE.
4. CONTRACTOR SHALL SHOW EROSION CONTROL MEASURE ON SITE MAP.
5. EROSION AND SEDIMENT CONTROL STRUCTURES TO MEET SWPPP DETAILS - APPENDIX D
6. INSTALL ROCK DITCH, CHECK, OR SAND BAG CHECKS AS NECESSARY TO PREVENT SCOUR UNTIL LANDSCAPING IS ESTABLISHED.
7. CONTRACTOR MUST PLACE SEDIMENT BASIN WITH SEDIMENT FENCE OUTLET FOR ANY SEDIMENT CONTAMINATED DEWATERING DISCHARGE IF BASIN IS CONSTRUCTED.
8. FINAL SLOPE WILL BE SAME DIRECTION AS EXISTING SLOPE.
9. TEMPORARY STABILIZATION PRACTICES WILL NOT BE REQUIRED. WORK WILL BE CONTINUOUS AND DISTURBED AREA REVEGITATED IN A TIMELY MANNER. SEE SWPPP FOR SEEDING MIXES.
10. PERMANENT STABILIZATION OF ALL DISTURBED AREAS ARE TO BE SEEDED, FERTILIZED, WATERED AND COVERED WITH STRAW UNLESS OTHERWISE NOTED ON PLANS TO BE HYDROSEEDED.
11. CONTRACTOR TO SHOW CONCRETE WASH OUT SUMP, ENTRANCE/EXIT PAD AND OTHER CONTROLS AS REQUIRED/NEEDED AS SWPPP SITE MAP IS UPDATED THROUGHOUT THE DURATION OF THE PROJECT.
12. STOCKPILING OF CONSTRUCTION SPOIL MATERIAL AT PARTICULAR LOCATIONS SHALL ONLY BE ALLOWED FOR A LIMITED TIME PERIOD, NOT TO EXCEED (6) MONTHS. PRIOR TO A FINAL INSPECTION OF THE GRADING PERMIT, THE FOLLOWING STANDARDS SHALL BE ACHIEVED FOR COMPLETION OF CONSTRUCTION:
    a) DEVELOPMENT AND GRADING WITHIN THE DISTURBED AREA IS COMPLETE AND MATCHES PLANS AS APPROVED BY THE PLANNING COMMISSION, AND
    b) THE DISTURBED SOIL AREA IS OBSERVED TO HAVE 80% GRASS COVERAGE AND 100% STABILITY, AND
    c) NO SLOPES STEEPER THAN A 3:1 PITCH UNLESS OTHERWISE APPROVED IN WRITING BY THE DIRECTOR OF ENGINEERING, AND
    d) NOTICE OF VIOLATIONS ISSUED HAVE ALL CORRECTIVE ACTIONS APPROVED WITH AN INSPECTION REPORT SIGNED BY A REPRESENTATIVE OF THE DIRECTOR OF ENGINEERING, AND
    e) ALL HEAVY EQUIPMENT, STOCKPILES, AND CONSTRUCTION SITE MATERIALS HAVE BEEN REMOVED FROM THE CONSTRUCTION SITE.

SWPPP PH 1

SCALE 1" = 20'

LEGEND

- DISTURBED AREA
- UNDISTURBED AREA
- SEDIMENT FENCE WITH WIRE BACKING
- DRAINAGE DIRECTION

CONSTRUCTION SCHEDULE

04-27-26 MOBILIZE EQUIPMENT ON SITE AND CONSTRUCT STABILIZED ENTRANCE.
04-28-26 CONSTRUCT SILT FENCES AND BMP CONTROLS ON SITE
05-04-26 CLEAR AND GRUB SITE
05-18-26 BEGIN GRADING SITE
06-15-26 INSTALL STORMWATER STRUCTURES
07-06-26 INSTALL UNDERGROUND UTILITIES
07-27-26 START CONSTRUCTION OF BUILDING PAD AND STRUCTURES
08-24-26 INSTALL CURB & GUTTER - SEDIMENT BARRIERS SHALL BE UTILIZED AS REQUIRED TO BOUND THE DOWN SLOPE SIDE OF UTILITY TRENCHING AND CONSTRUCTION
10-12-26 PREPARE SITE FOR PAVING
10-19-26 PAVE SITE
12-07-26 COMPLETE GRADING AND INSTALL PERMANENT SODDING AND LANDSCAPING
12-18-26 REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVISES (ONCE SITE IS STABILIZED)

SOIL LOSS CALCS:

UNIVERSAL SOIL LOSS EQUATION: E=(R)(K)(LS)(C)(P)

DEFINITION OF VARIABLES:

A: SEDIMENT YIELD, IN TONS PER ACRE PER YEAR
R: RAINFALL FACTOR
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CALCULATION WITH EROSION CONTROL: A = (300)(0.32)(0.9885)(0.06)(0.50) = 2.85 TONS PER ACRE PER YEAR

CALCULATION WITHOUT EROSION CONTROL: A = (300)(0.32)(0.9885)(1.0)(1.0) = 94.896 TONS PER ACRE PER YEAR

N

0 20'

1" = 20'-0"

PHILLIP LEWIS ENGINEERING, INC.
Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840

REVISION:

THE GODDARD SCHOOL OF BRYANT
ALEXANDER, ARKANSAS

CERTIFICATE OF AUTHORIZATION
PHILLIP LEWIS ENGINEERING, INC.
No. 566
ARKANSAS ENGINEER

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP A. LEWIS

PROJECT NUMBER:

SHEET ISSUE DATE:
03-25-2026

PAGE TITLE:
SWPPP PH 1

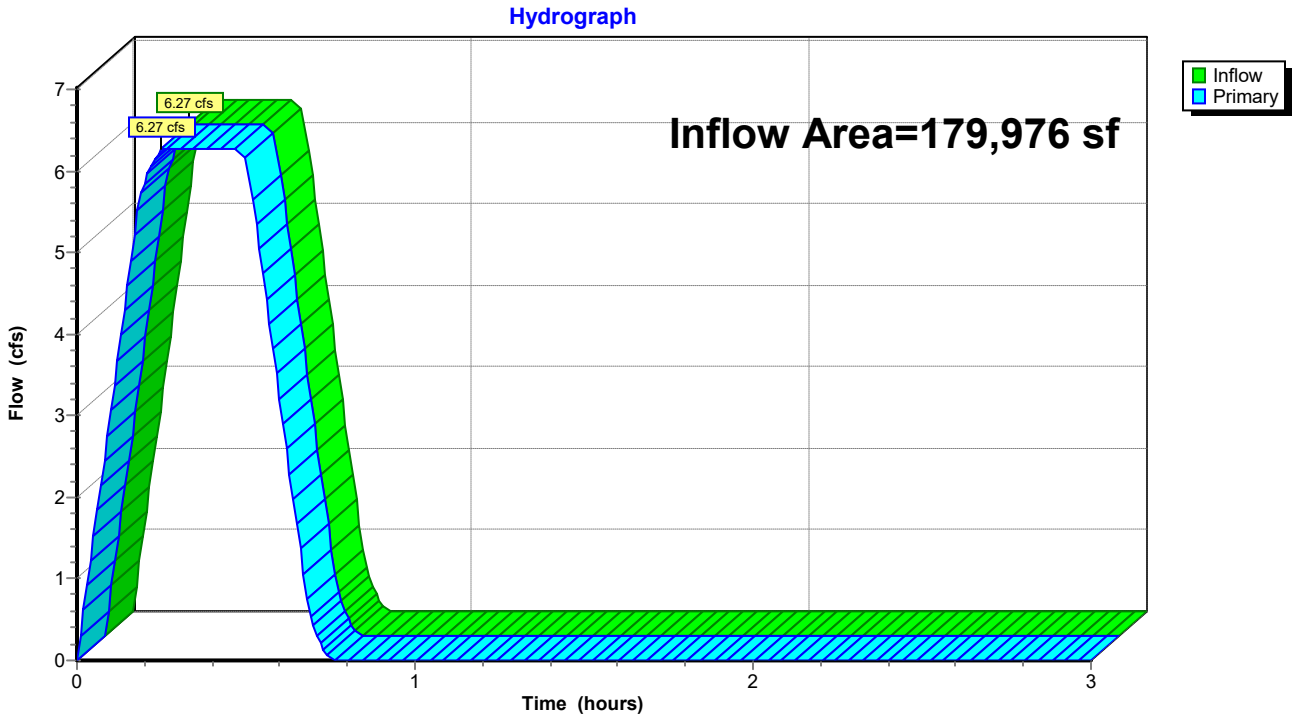
SHEET NUMBER:
C1.13

Summary for Link PRE: Pre Dev Runoff

Inflow Area = 179,976 sf, 0.00% Impervious, Inflow Depth = 0.75" for 2-yr event
Inflow = 6.27 cfs @ 0.25 hrs, Volume= 11,282 cf
Primary = 6.27 cfs @ 0.25 hrs, Volume= 11,282 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link PRE: Pre Dev Runoff

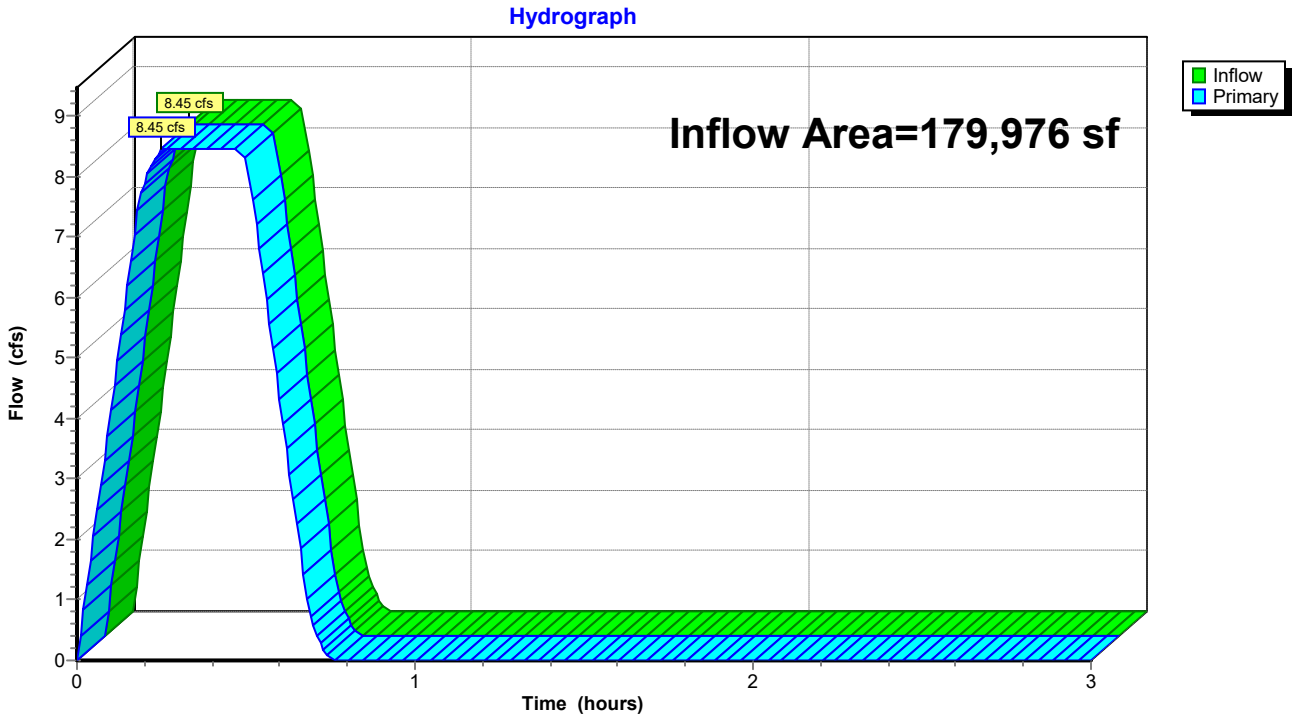


Summary for Link PRE: Pre Dev Runoff

Inflow Area = 179,976 sf, 0.00% Impervious, Inflow Depth = 1.01" for 10-yr event
Inflow = 8.45 cfs @ 0.25 hrs, Volume= 15,214 cf
Primary = 8.45 cfs @ 0.25 hrs, Volume= 15,214 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link PRE: Pre Dev Runoff

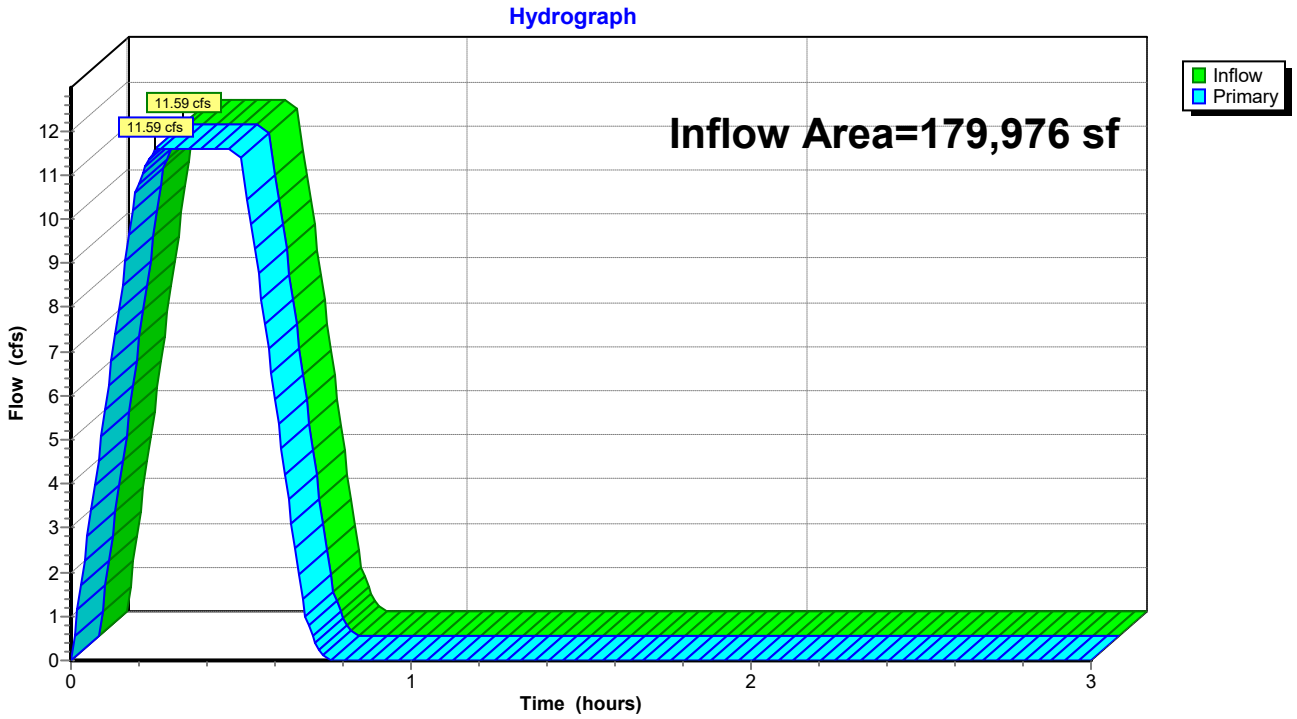


Summary for Link PRE: Pre Dev Runoff

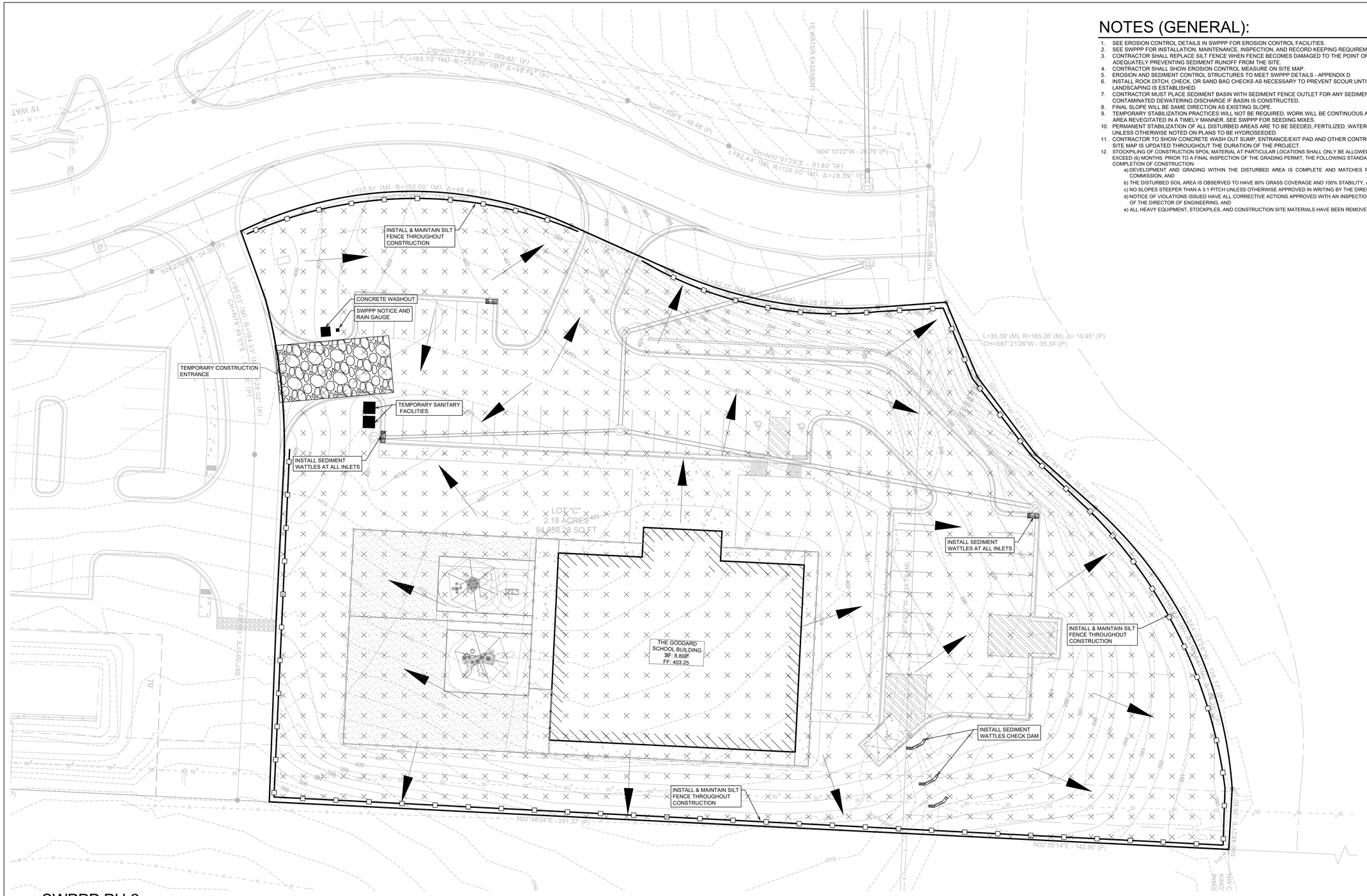
Inflow Area = 179,976 sf, 0.00% Impervious, Inflow Depth = 1.39" for 100-yr event
Inflow = 11.59 cfs @ 0.25 hrs, Volume= 20,855 cf
Primary = 11.59 cfs @ 0.25 hrs, Volume= 20,855 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link PRE: Pre Dev Runoff



APPENDIX B: POST-DEVELOPMENT SITE MAP & HYDROGRAPHS



NOTES (GENERAL):

1. SEE EROSION CONTROL DETAILS IN SWPPP FOR EROSION CONTROL FACILITIES.
2. SEE SWPPP FOR INSTALLATION, MAINTENANCE, INSPECTION, AND RECORD KEEPING REQUIREMENTS.
3. CONTRACTOR SHALL REPLACE SILT FENCE WHEN FENCE BECOMES DAMAGED TO THE POINT OF NO LONGER BEING ABLE TO ADEQUATELY PREVENTING SEDIMENT RUNOFF FROM THE SITE.
4. CONTRACTOR SHALL SHOW EROSION CONTROL MEASURE ON SITE MAP.
5. EROSION AND SEDIMENT CONTROL STRUCTURES TO MEET SWPPP DETAILS - APPENDIX D
6. INSTALL ROCK DITCH, CHECK, OR SAND BAG CHECKS AS NECESSARY TO PREVENT SCOUR UNTIL LANDSCAPING IS ESTABLISHED.
7. CONTRACTOR MUST PLACE SEDIMENT BASIN WITH SEDIMENT FENCE OUTLET FOR ANY SEDIMENT CONTAMINATED DEWATERING DISCHARGE IF BASIN IS CONSTRUCTED.
8. FINAL SLOPE WILL BE SAME DIRECTION AS EXISTING SLOPE.
9. TEMPORARY STABILIZATION PRACTICES WILL NOT BE REQUIRED. WORK WILL BE CONTINUOUS AND DISTURBED AREA REVEGITATED IN A TIMELY MANNER. SEE SWPPP FOR SEEDING MIXES.
10. PERMANENT STABILIZATION OF ALL DISTURBED AREAS ARE TO BE SEEDED, FERTILIZED, WATERED AND COVERED WITH STRAW UNLESS OTHERWISE NOTED ON PLANS TO BE HYDROSEEDED.
11. CONTRACTOR TO SHOW CONCRETE WASH OUT SUMP, ENTRANCE/EXIT PAD AND OTHER CONTROLS AS REQUIRED/NEEDED AS SWPPP SITE MAP IS UPDATED THROUGHOUT THE DURATION OF THE PROJECT.
12. STOCKPILING OF CONSTRUCTION SPOIL MATERIAL AT PARTICULAR LOCATIONS SHALL ONLY BE ALLOWED FOR A LIMITED TIME PERIOD, NOT TO EXCEED (6) MONTHS. PRIOR TO A FINAL INSPECTION OF THE GRADING PERMIT, THE FOLLOWING STANDARDS SHALL BE ACHIEVED FOR COMPLETION OF CONSTRUCTION:
    a) DEVELOPMENT AND GRADING WITHIN THE DISTURBED AREA IS COMPLETE AND MATCHES PLANS AS APPROVED BY THE PLANNING COMMISSION, AND
    b) THE DISTURBED SOIL AREA IS OBSERVED TO HAVE 80% GRASS COVERAGE AND 100% STABILITY, AND
    c) NO SLOPES STEEPER THAN A 3:1 PITCH UNLESS OTHERWISE APPROVED IN WRITING BY THE DIRECTOR OF ENGINEERING, AND
    d) NOTICE OF VIOLATIONS ISSUED HAVE ALL CORRECTIVE ACTIONS APPROVED WITH AN INSPECTION REPORT SIGNED BY A REPRESENTATIVE OF THE DIRECTOR OF ENGINEERING, AND
    e) ALL HEAVY EQUIPMENT, STOCKPILES, AND CONSTRUCTION SITE MATERIALS HAVE BEEN REMOVED FROM THE CONSTRUCTION SITE.

SWPPP PH 2

SCALE 1" = 20'

LEGEND

- DISTURBED AREA
- UNDISTURBED AREA
- SEDIMENT FENCE WITH WIRE BACKING
- DRAINAGE DIRECTION

CONSTRUCTION SCHEDULE

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REVISION:

THE GODDARD SCHOOL OF BRYANT
ALEXANDER, ARKANSAS

PROJECT NUMBER:

SHEET ISSUE DATE: 03-25-2026

PAGE TITLE: SWPPP PH 2

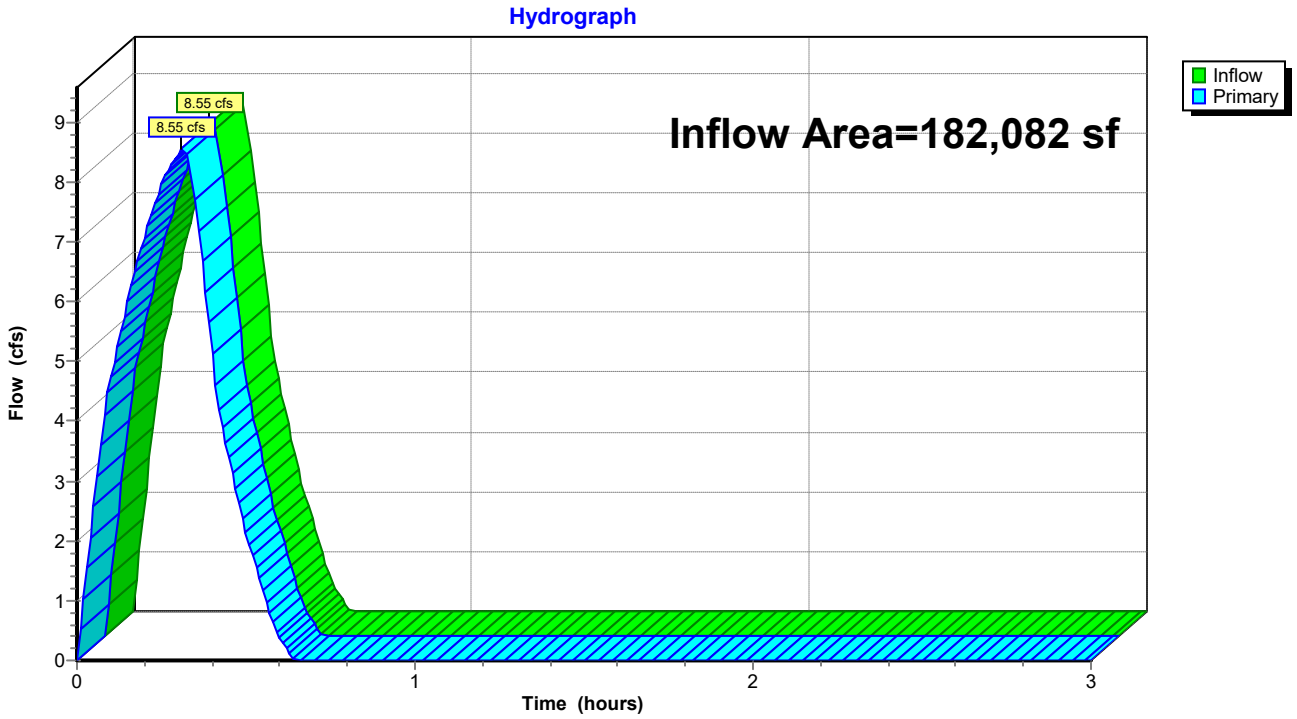
SHEET NUMBER: C1.14

Summary for Link GODDARD PRE: post without detention

Inflow Area = 182,082 sf, 29.72% Impervious, Inflow Depth = 0.68" for 2-yr event
Inflow = 8.55 cfs @ 0.31 hrs, Volume= 10,259 cf
Primary = 8.55 cfs @ 0.31 hrs, Volume= 10,259 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link GODDARD PRE: post without detention

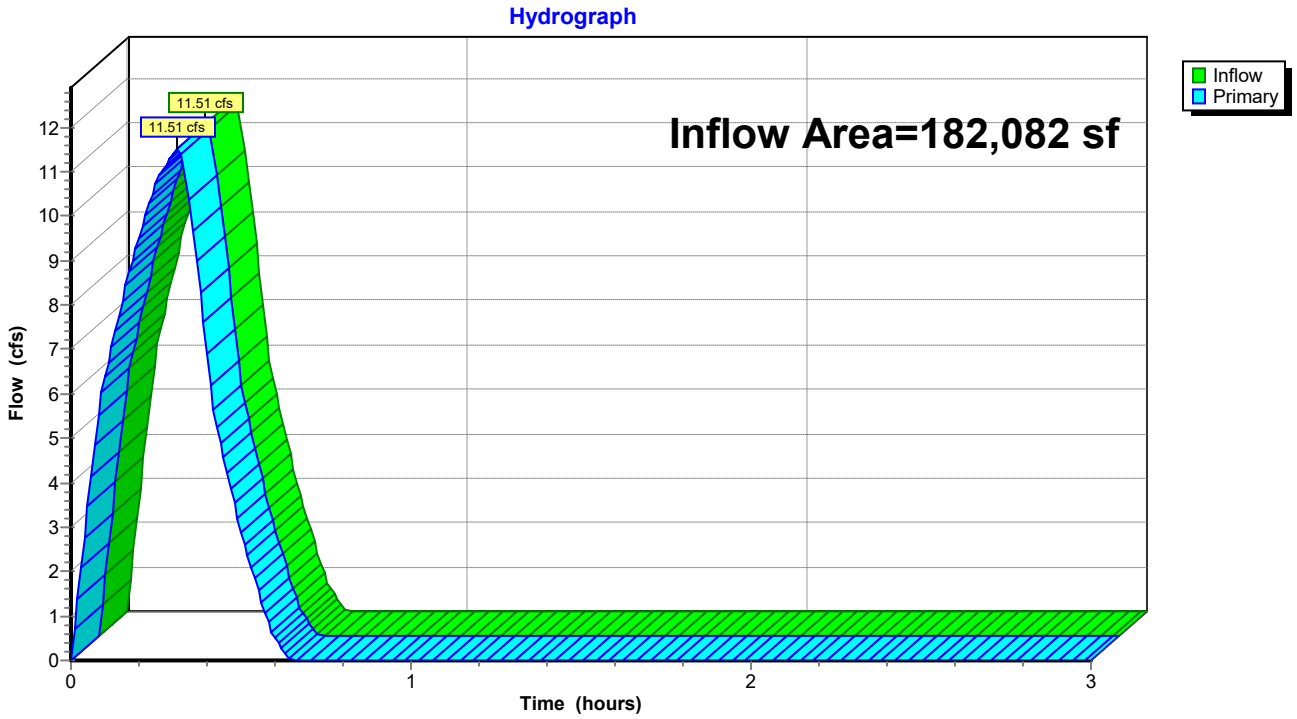


Summary for Link GODDARD PRE: post without detention

Inflow Area = 182,082 sf, 29.72% Impervious, Inflow Depth = 0.91" for 10-yr event
Inflow = 11.51 cfs @ 0.31 hrs, Volume= 13,811 cf
Primary = 11.51 cfs @ 0.31 hrs, Volume= 13,811 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link GODDARD PRE: post without detention

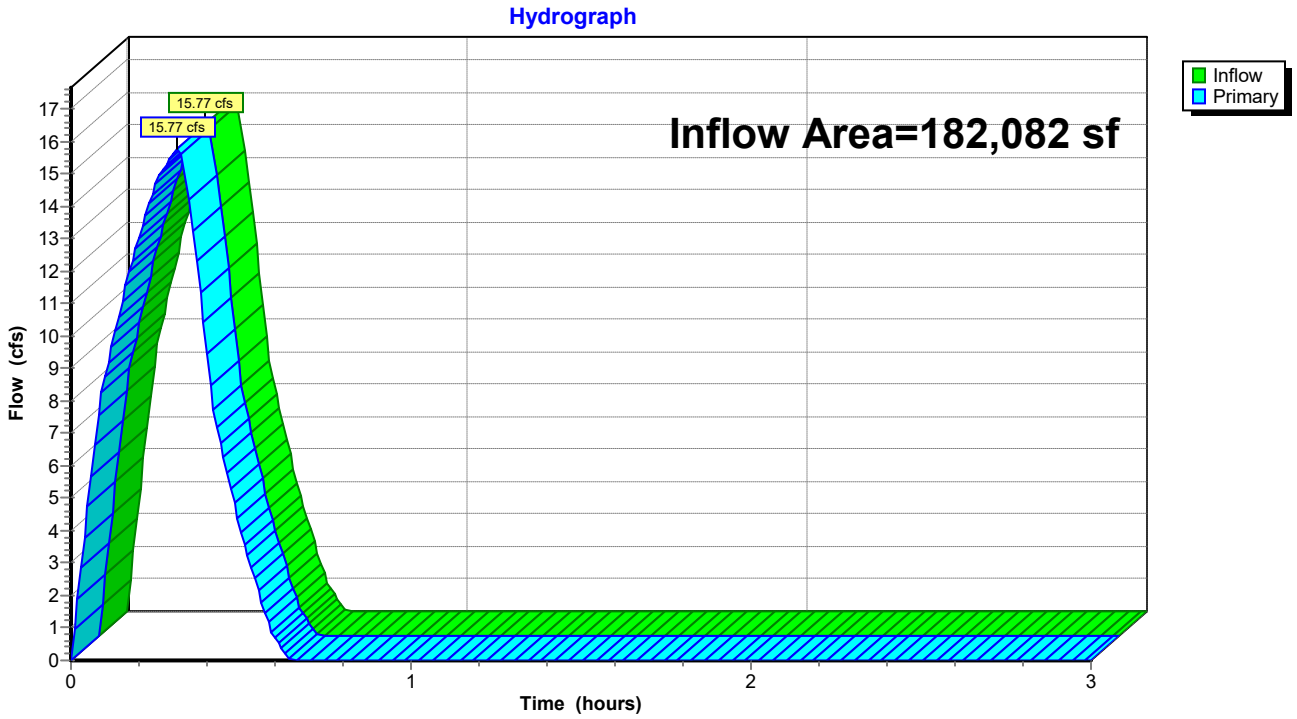


Summary for Link GODDARD PRE: post without detention

Inflow Area = 182,082 sf, 29.72% Impervious, Inflow Depth = 1.25" for 100-yr event
Inflow = 15.77 cfs @ 0.31 hrs, Volume= 18,923 cf
Primary = 15.77 cfs @ 0.31 hrs, Volume= 18,923 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link GODDARD PRE: post without detention



PHILLIP LEWIS ENGINEERING
Structural + Civil Consultants
23620 Interstate 30 | Bryant, AR
PH: 501-350-9840

March 25, 2026

Colton Leonard
Community Development
Community development Director
cleonard@cityofbryant.com

RE: Goddard School of Bryant

To whom it may concern,

Please accept this letter as our response to the planning/engineering comments regarding the Goddard School of Bryant development. We are requesting to be placed on the next upcoming DRC agenda for Site Plan Approval. Please find our comment responses below.

Utilities

1. Fire line minimum is 8" DI.
   Fire line routing has been changed to 8" DI.
2. Discussion about water line routing per JH.
   - Line has been rerouted per discussion.
3. Wet Tap is not necessary. The water line can be extended.
4. Will there be food prep? If so a grease trap will be required.
   - There will be no daily meal preparation. A letter from the Franchise Owner is included with the resubmission documents.

Streets

1. Private Streets

Stormwater

1. Submit Stormwater Application and Impact Fee
   - Application and Impact fee will accompany this response letter.
2. ADEQ Permit & Notice of Coverage
   - Small site permit and NOC is included in the written SWPPP report.
3. SWPPP submitted to City of Bryant
   - SWPPP will accompany this response letter.
4. $250 Stormwater Engineering Review fee will be required
   - Fee will accompany this letter.

Engineering

1. General Comments

a. It is recommended that the developer / Engineer schedule a meeting with City Staff to review this project.
    - We met with city staff on March 20th to discuss all open items.
b. Pre-Construction meeting required. Prior to commencing construction, schedule a meeting with Bryant Public Works.
    - Acknowledged

2. Drawing C1.1 Site Plan
    a. Show all Road names
        - Street names have been added.
    b. Show referenced to details, where appropriate (ie. Handicap parking, retaining wall, etc.)
        - References Added.
    c. Show location of on-site drainage structures.
        - On-Site curb inlets are now shown more clear
3. Drawing C1.2 Site Details
    a. Retaining wall details?
        - Retaining wall is to be designed my MTA Engineering to match the design of existing walls within the business park. Wall design document will be provided prior to wall construction approval.
    b. Sidewalk details?
        - Added. See "prototype details"
    c. Fencing and Gate Details?
        - Added. See "prototype details"
4. Drawing C1.3 Grading Plan
    a. Note about curb removal at entrance/exits?
        - A demo plan has been added.
    b. Show existing storm pipe under Christy Lane
        - This has been added.
5. Drawing C1.4 Stormwater Plan
    a. Show profiles of storm drainage.
        - A sheet has been added for Storm Sewer Profiles
    b. Show existing storm pipe connecting JB-A4 to JB-C1
        - This has been added.
    c. References to Details
        - General note added to plan to reference Utility Details sheet for Stormwater details.
6. Drawing C1.5 Pre-Drainage Plan
    a. Demonstrate that drainage basin outline is drawn correctly. There are existing inlets that capture runoff from the site. Stormwater drainage basins are not confirmed by property boundaries.
        - Drainage basins have been revised per meeting March 20th.
    b. Show check points for development of drainage basin.
        - Check Points have been updated.
7. Drawing C1.6 Overall Drainage Plan
    a. Demonstrate the drainage basin B1 is outlined correctly. Drainage basins are not confined to a property boundary
        - Drainage basin B1-B3 have been updated per meeting March 20th. There is in fact existing ditches along the residential adjacent property creating a local discharge point for B2 at the NE corner. There is a localized discharge point for

B1 at the easter edge of the adjacent property where a “check dam” of sorts is located, creating the beginning of a wet weather creek.

b. Demonstrate downstream impacts of drainage from Basin B1
   - The updated hydrographs will show that the new development will not have an adverse effect on the surrounding properties

c. Show drainage arrows in direction of flow.
   - TC slope arrows are demonstrated on the other drainage plans.

d. Show peak discharge flow rates that are leaving the site.
   - 100-yr discharges are now added to the enlarged plans.

e. Confirm that downstream drainage structures have the capacity to handle the additional flow. Show flow capacities and projected peak flow for enclosed storm drainage system.
   - Projected peak flow calcs have been added for the downstream inlets/pipes, in addition to the inlet/pipe calcs of the new development.

8. Drawing C1.7 – Post Drainage Plan
   a. Demonstrate that drainage basin B1 is outlined correctly. Drainage basins are not confined to the property boundary.
      - Addressed.
   b. Demonstrate downstream impacts of drainage from Basin B1
      - Addressed.
9. Drawing C1.8 – Overall Drainage Plan (2)
   a. Show drainage arrows in the direction of flow
      - TC slope arrows demonstrate direction of flow.
   b. Show flow capacities and projected peak flows for enclosed storm drainage system
   c. Demonstrate that the flow into existing drainage basins do not exceed the peak flow design capacity of the basins.
      - Existing catch basin calcs have now been added to the drainage report with the increase in cfs from this project.
10. Drawing C1.9 – Overall Drainage Plan (3)
    a. Show drainage arrows in the direction of flow.
       - See comment above.
    b. Show flow capacities and projected peak flows for enclosed storm drainage system.
       - See comment above.
    c. Demonstrate that the flow into existing drainage basin do not exceed the peak flow design capacity of the basins.
       - See comment above.
11. Drawing C1.10 – Utility Plan
    a. See comments from utilities above.
12. Drawing C1.11 – Utility Details
    a. Stormpipe trench details?
       - Added
    b. Show bedding and compacted subgrade under curb inlets
       - Bedding notes have been added to the curb inlet detail
    c. Show plan view of curb inlets
13. Drawing C1.12 – Landscaping Plan
    a. Must meet city planning code requirements, see planning comments
14. Drawing C1.13 SWPPP
    a. The notes should show a reference to the SWPPP
       - General notes on Erosion Control sheets, C1.15, C1.16, & C1.17, reference SWPPP.

b. Show existing and proposed topography
   - Existing and proposed topography is shown on Erosion Control plans

c. Erosion control planning is in phases. For this drawing, indicate which measures are being taken for the initial phase, the construction phase, and the post-construction phase. Label erosion and sediment control structures as either permanent or temporary.
   - Erosion Control phasing is shown on sheets C1.15, C1.16, & C1.17

d. Show a schedule or sequence of construction on the plan.
   - Approximate construction schedule is shown on sheets C1.15, C1.16, & C1.17

e. Show soil loss calculations
   - Soil loss calculations are shown on Erosion Control sheets.

f. Show the soil loss calculations on the erosion control plan or submit them on a separate document.
   - Soil loss calculations are shown on Erosion Control sheets.

g. Include an inspection and maintenance plan
   - Inspection & maintenance plan are included in the written SWPPP and referenced in the general notes on all Erosion Control sheets.

h. Verify proper application of silt fencing is shown on the plan.
   1. Maximum allowable slope length contributing runoff to a silt fence
   - Maximum slope length from 5% to 10% is 50 feet.
   2. Maximum drainage area contributing flow to a silt fence shall not exceed 0.5 acres per 100-ft of fence.
   - Acknowledged.
   3. Place silt fences below the toe of exposed and erodible slopes
   - Silt fences placed below the toe of exposed and erodible slopes.
   4. Show the replacement schedule for silt fences in the schedule/sequence.
   - Inspection & maintenance plan are included in the written SWPPP and referenced in the general notes on all Erosion Control sheets.
   5. Show material specifications for silt fence, wire mesh, etc.
   - Material specs for silt fence, wire mesh, etc are specified in SWPPP details on sheet C1.16
   6. Add notes on the silt fence detail which shows compliance with section 1100.5
   - Notes on silt fence detail comply with section 1100.5
   7. Show materials specifications for the silt fence, posts, etc.
   - Notes on silt fence specify needed material.

i. Are there any sedimentation traps planned?
   - Wattle check dams are placed as sediment traps.

j. See sections 1105.7 of the Bryant stormwater management manual, including exhibits 1100-26 thru 1100-30
   - Acknowledged.

k. What materials are planned to be utilized during construction for areas that require temporary stabilization (any areas that are not worked for more than 14 calendar days)?
   - Vegetation & mulching.

l. Show in notes that existing vegetation that is established will be preserved.
   - There isn't any undisturbed area on site.

m. Show a list of any other erosion control structures/materials that may be utilized during construction phase as required to minimize soil loss.
   - Silt fence & sediment wattles are the controls used to minimize soil loss.

n. Add a note that the ECP is subject to change based on current site conditions. Additional measures may be needed to mitigate illicit discharges of sediment and/or debris from the site. See section 1100 of the Bryant stormwater management manual to see what other devices are recommended. Added note to "install supplemental measures as needed to contain runoff" but does not list specific erosion control measures.
    - Written SWPPP report notes the need to install supplemental measures as needed.

15. Drawing C1.14 SWPPP Details
    a. Show curb inlet protection detail with material specifications
        - Sediment wattle detail is shown as inlet protection.
    b. Show check dam detail with material specifications, if there are any
        - Sediment wattle detail is shown as check dam detail.
    c. Show maintenance information for the construction entrance
        - Rock will be added to the construction entrance as needed.
16. Drainage Calculations
    a. Page 5 – Show post-development discharge without detention as well as post-development with detention.
        - The summary has been revised to reflect this
    b. See comments above regarding the drainage basin delineations. This may have an impact on the calculations.
        - Basins have been revised.
    c. Show a summary of the design capacity and peak flow for the storm sewer system (pipes and inlets)
        - Pipe/inlet peak calcs are now compiled sooner and more clear in the report. The existing inlets are now added along Christy Lane. The existing storm sewer analysis that this site ties into is also now added.
    d. Demonstrate that any discharge from the site which is not captured in the detention will not have an overall negative impact on drainage downstream.
        - Drainage basin B1-B3 have been updated per meeting March 20th. There is in fact existing ditches along the residential adjacent property creating a local discharge point for B2 at the NE corner. There is a localized discharge point for B1 at the easter edge of the adjacent property where a "check dam" of sorts is located, creating the beginning of a wet weather creek.
17. Bryant Stormwater Manual requirements:
    a. Section 200
        1. 200.1.1 See requirements for submittals
        - Acknowledged.
        2. 200.3 Was a written stormwater management plan prepared for this development? If not, prepare a SMP for review.
        - SWMP has been prepared.
        3. 200.4 Prepare a written Pollution Prevention Pan, including the notice of Intent
        - SWPPP written report has been prepared.
        4. 200.5 It appears that an evaluation has been performed by the engineer of record which shows that the existing detention basin can handle the runoff from the new commercial development.
        5. 200.7 Obtain required permits prior to commencement of clearing or construction activities, including but not limited to the stormwater permit.
        - Acknowledged.
    b. Section 300 – Read and confirm acknowledgement of design policy.

- Acknowledged.

c. Section 400 – See comments on drainage plans
d. Section 500 – not applicable
e. Section 600 – Appears that requirements have been met, a summary table is needed in the calculations
   - Final discharge summaries have been added for the overall contributing basins to the existing pond, as well as overall pre/post discharges for the Goddard Site. Additionally, subcatchment summaries have been added before the hydrographs in the report
f. Section 700 – Verify that street flow does not exceed these requirements. Emergency vehicles must have clear access to the project.
   - Inlet calculations have been added to the report to represent 25 year flow at each inlet along Christy lane, including the additional discharge from this development.
g. Section 800 – Show the capture rate on each of the inlets and the amount of bypass flow, if any
   - Inlet calcs, with bypass, have been added to the report.
h. Section 900 – Not applicable
i. Section 1000 – Detention was planned as part of a master drainage plan, appears that the evaluation requirements have been met for this commercial development.
j. Section 1100 – See erosion control comments above.

18. Planning
    a. When a C-2 or C-3 District abuts a residential district, a minimum 6' high wood, rock or masonry fence is required with a landscape screen to buffer any commercial structure or activity from the residential district. For the portion of property abutting the neighborhood a landscape screening and fence is required.
       - The landscape ordinance is a bit unclear on if the requirement is opaque fencing plus landscape, or if opaque fencing satisfies the screening requirement. Wooden privacy fence has been added to the plan. If a tree/shrubs screening is also require, we agree to add what is required along the residential property line as well.
    b. As mentioned in other comments above, the commercial stormwater detention review fee will need to be paid ($250).
       - Acknowledged.
    c. Landscape code requires 100 sf of bedding plants or ground cover in containment.
       - This has been added to the Landscape notes on sheet C1.13
    d. What is the height on the retaining wall?
       - Max height is 5 feet. This is planned to be a stacked wall designed by MTA Engineers (similar to other walls within this business park).
19. Fire
    a. Fire apparatus access road must extend to within 150 feet of all portions of the facility
       1. Unless the building is equipped throughout with an automatic sprinkle system.
       - The building will be equipped with fire suppression.
    b. Dead-end fire apparatus access road on the north side is longer than 150 feet and will require an approved area for turning fire apparatus around.
       - We have extended the garbage truck turn-around area with the north parking lot. Please review and deem if this is acceptable.
    c. Knox Key box needs to be installed near the front entrance in an approved location 60-66 inches above the ground.
       - Acknowledged. A note has been added on the site plan

d. FDC mush be within 100 feet of fire hydrant. FDC can be building mounted or remote.
   - Acknowledged. The FDC will be wall mounted on the front face of the building. The new hydrant has been placed accordingly.

Additional Note: There was discussion on whether this facility would require by code a storm shelter. The architect confirmed that this facility is Group E day care, which is exempt from the storm shelter requirement under exemption #1, code "423.5: Group E occupancies."

This letter accompanies a revised civil plan set, drainage report, and other supporting documents.

If you have any questions, please give me a call.

Garrett Rich
Project Engineer
Phillip Lewis Engineering
501-213-5190

GODDARD SCHOOL OF BRYANT

DRAINAGE REPORT

Date: **03-25-2026**

Located in: **Bryant, Arkansas**

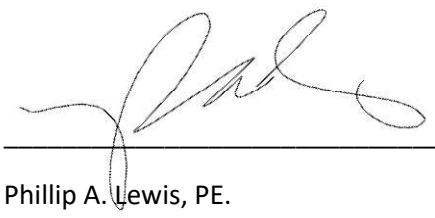
Prepared for:
City of Bryant, Arkansas

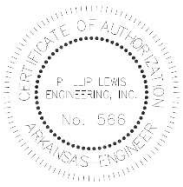
Prepared by:

PHILLIP LEWIS ENGINEERING
Structural + Civil Consultants
23620 Interstate 30 | Bryant, AR
PH: 501-350-9840

CERTIFICATION

I hereby state that this Final Drainage has been prepared by me or under my supervision and meets the standard of care and expertise which is usual and customary in this community of professional engineers. The analysis has been prepared utilizing procedures and practices by the City of Bryant and within the standard accepted practices.





DATE: 03-25-2026

Phillip A. Lewis, PE.

PROJECT LOCATION MAP

DESCRIPTION OF PROPERTY

The proposed project is for the consruction of the Goddard School of Bryant located on Christy Lane, Alexander, AR. The proposed development is a 9,000 sq. ft. building, parking lot, and outdoor playground.

The intent of this drainage analysis is to reevaluate the previous drainage design and ensure that the completetion of this development still meets the design intent and capacity of the previous constructed onsite detention facility located at the corner of Henry Avenue and Bryant Parkway.

Per previous drainage calculations performed for the construction of the existing pond, the existing ground coverage for the entire development drainage basin consisted of and partially still consists of natural vegetation (3%-8% slope), hydrologic soil group C/D (C = 0.50).

According to FEMA Flood Insurance Rate Map, Panel 05125C0240E, this property lies within Zone X, areas determined to be outside the 0.2% annual chance floodplain. A copy of the map can be found in the appendix.

DRAINAGE CRITERIA

In accordance with the requirements of the City of Bryant, the proposed developments drainage plan and this drainage report were developed with the criteria established in the Bryant Stormwater Management & Drainage Manual provided on cityofbryant.com.

All drainage calculations were performed using HydroCAD software to determine and analyze the changes in stormrunoff volume, flow rates, and design the outlet release structure. Hydraflow Express software was used to appropriately design and size all storm sewer inlets, pipes and channels.

Calculations were performed using the Rational Method, using NOAA rainfall data, and the pond volume and outlet structure was analyzed for the 100-year storm event while the outlet structure is expected to match or reduce pre-development flow rates for all storm events: 2-yr, 10-yr, 25-yr, and 100-yr storms.

DESCRIPTION OF PREVIOUS DETENTION FACILITIES

Phillip Lewis Engineering has evaluated the previously supplied drainage analysis and made site investigations to fully understand the current drainage situation.

The previous drainage analysis studied the pre vs. post scenarios as a single 8.5 acre node. Post development was studied as one node routing through the detention pond that is now constructed on the site. Due to the nature of how construction phasing has evolved, some areas were not routed to this detention pond. Some of these areas ultimately discharge to locations that bypass the detention basin. Additionally, we believe that the current pond actually was intended to capture approximately 10 acres, which ecompasses the Goddard facility, Christy Lane, Summerwood Offices, and Genwealth Financial Services.

This drainage study is intended to account for these descrepencies and ensure that the detention basin is throttling appropriately for the current and proposed increases in runoff. Additionally, within this design, the intent is to capture open pipe discharges (intended for pond capture) and route them correctly through adequate storm sewer.

PROPOSED DRAINAGE SYSTEM

This develompent is designed to capture the majority of runoff within the parking lot curb and gutter, collecting stormwater with standard curb inlets and downspout collector pipes. New storm sewer onsite will connect to an existing storm junction box on Christy Lane, utimaley discharging into the existing detention pond. The detention pond will remain in place as constructed. This drainage analysis will provide supporting evidence to validate the previously constructed detention basin’s functionality.

The detention pond was designed to detain stromwater volumes based off the 100-yr storm events with a concrete overflow spillway to release water if a rainfall event were to exceed the 100-yr storm event. The outlet control structures are detailed within this report.

Overall Regional Study Pre vs. Post Summary

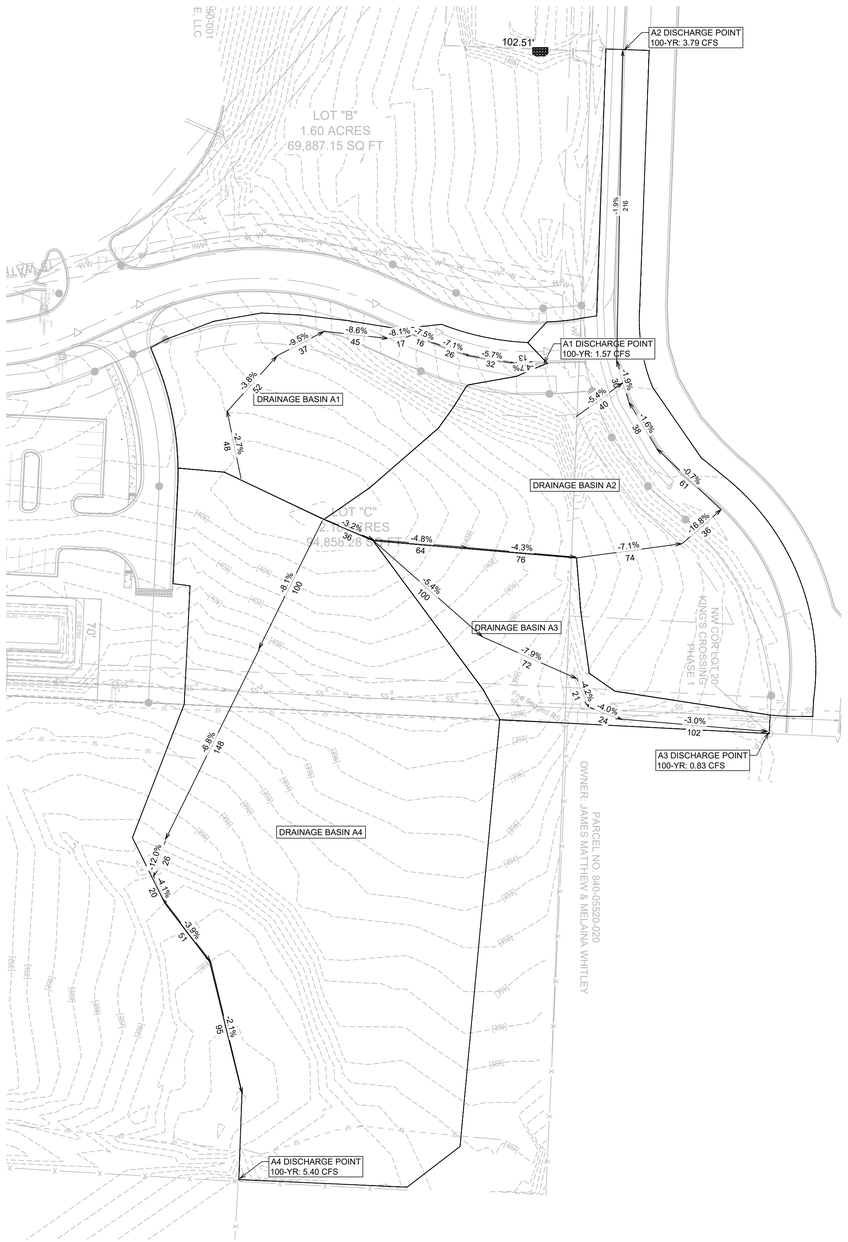
Storm Event	Pre-development Discharge (cfs)	Post-development Discharge w/o Detention (cfs)	Post-development Discharge w/ Detention (cfs)
2-yr	16.26	23.74	15.57
5-yr	19.47	28.27	17.90
10-yr	21.93	31.95	19.81
25-yr	25.26	26.64	22.19
100-yr	30.06	43.78	25.43

Goddard Site Pre vs. Post Summary

Storm Event	Pre-development Discharge (cfs)	Post-development Discharge w/o Detention (cfs)
2-yr	6.27	8.55
5-yr	7.50	10.18
10-yr	8.45	11.51
25-yr	9.73	13.20
100-yr	11.59	15.77

Overall pre development and post development discharge rates are displayed in the following hydrographs. A final discharge link has been added to show one comparable discharge number.

DRAINAGE BASIN MAPS



PRE DRAINAGE PLAN

SCALE 1" = 50'

DRAINAGE BASINS AREAS

DRAINAGE BASIN	PERVIOUS	IMPERVIOUS
A1	20,204	3,399
A2	37,816	14,559
A3	13,861	0
A4	90,137	0

GENERAL CONSTRUCTION NOTES

A. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR DAMAGES OCCURRING TO ANY PROPERTY DURING THE CONSTRUCTION OF THIS PROJECT. SAID CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT PROPERTY DAMAGE.

B. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL SOLELY AND COMPLETELY BE RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING HOURS.

THE DUTY OF BRYANT TO CONDUCT CONSTRUCTION INSPECTION REVIEWS OF THE CONTRACTOR'S PERFORMANCE IS NOT AN INSPECTION OR REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.

C. ALL WATER AND SEWER IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST REVISION TO THE CITY OF BRYANT'S WATER AND WASTEWATER (SANITARY SEWER) STANDARD SPECIFICATIONS.

D. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF ALL UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.

E. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.

F. PRIOR TO INSTALLATION OF ANY UTILITIES, THE CONTRACTOR IS TO EXCAVATE, VERIFY AND CALCULATE ALL CROSSINGS AND INFORM ANY AND ALL UTILITIES OF ANY CONFLICTS PRIOR TO CONSTRUCTION.

G. CONSTRUCTION SHALL NOT START ON ANY WATER UTILITY TIE-INS UNTIL APPROVAL IS GIVEN BY BRYANT WATER. SAID CONTRACTOR SHALL NOT OPERATE ANY VALVE, HYDRANT, OR WATER UTILITY APPURTENANCE NOR SHALL HE ATTACH TO OR TAP ANY WATER UTILITY MAIN WITHOUT APPROVAL. THE CONTRACTOR SHALL BEAR THE COST AND CONSEQUENCE OF ANY DISRUPTION OF UTILITY OPERATION CAUSED BY CONSTRUCTION.

H. FIBER OPTIC CABLE ON AND/OR ADJACENT TO THIS SITE WERE NOT LOCATED BY THE SURVEY AND ARE NOT SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ANY FIBER OPTIC CABLES ASSOCIATED WITH THIS SITE AND TAKE ALL NECESSARY AND REQUIRED PRECAUTIONS TO PROTECT ANY EXISTING FIBER OPTIC CABLES. CONTRACTORS SHALL COORDINATE ALL EFFORTS WITH OWNER OF FIBER OPTIC CABLES OR THEIR DESIGNATED REPRESENTATIVE.

J. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "ONECALL" SERVICE TO MARK ALL UTILITIES PRIOR TO ANY DEMOLITION, EARTHWORK, OR UTILITY WORK ON THIS SITE.

PHILLIP LEWIS ENGINEERING, INC.
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REVISION:

THE GODDARD SCHOOL OF BRYANT
ALEXANDER, ARKANSAS

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No. 566
ARKANSAS ENGINEERS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP A. LEWIS

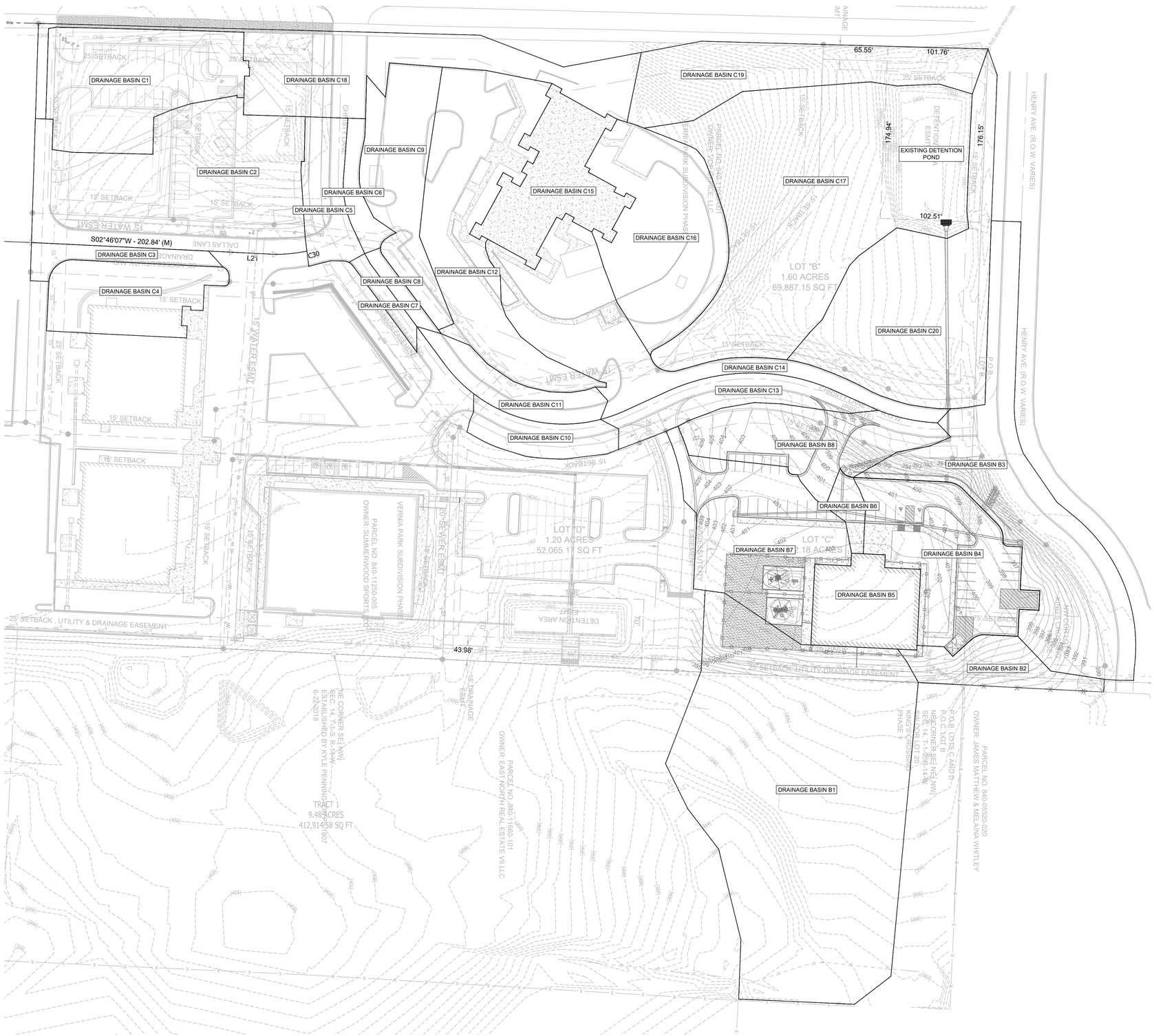
PROJECT NUMBER:

SHEET ISSUE DATE:
03-25-2026

PAGE TITLE:
PRE DRAINAGE PLAN

SHEET NUMBER:
C1.6

N
0 50'
1" = 50'-0"



DRAINAGE BASINS AREAS

DRAINAGE BASIN	PERVIOUS	IMPERVIOUS
B1	74,165	602
B2	6,595	167
B3	18,730	14559
B4	4,916	14,577
B5	0	9,275
B6	0	1887
B7	12,580	8,589
B8	7,982	6,458
C1	6,135	14,202
C2	11,376	22,963
C3	0	3,480
C4	8,130	3,245
C5	1,634	5,061
C6	0	2,835
C7	0	1,597
C8	0	1,548
C9	4,456	9,361
C10	1,225	4,183
C11	2,876	3,307
C12	7,218	18,440
C13	1,558	6,388
C14	6,127	15,898
C15	0	13,450
C16	15,465	6,612
C17	56,749	0
C18	12,812	9,973
C19	18,009	0
C20	30,789	0

OVERALL DRAINAGE PLAN

SCALE 1" = 50'

N

0 50'

1" = 50'-0"

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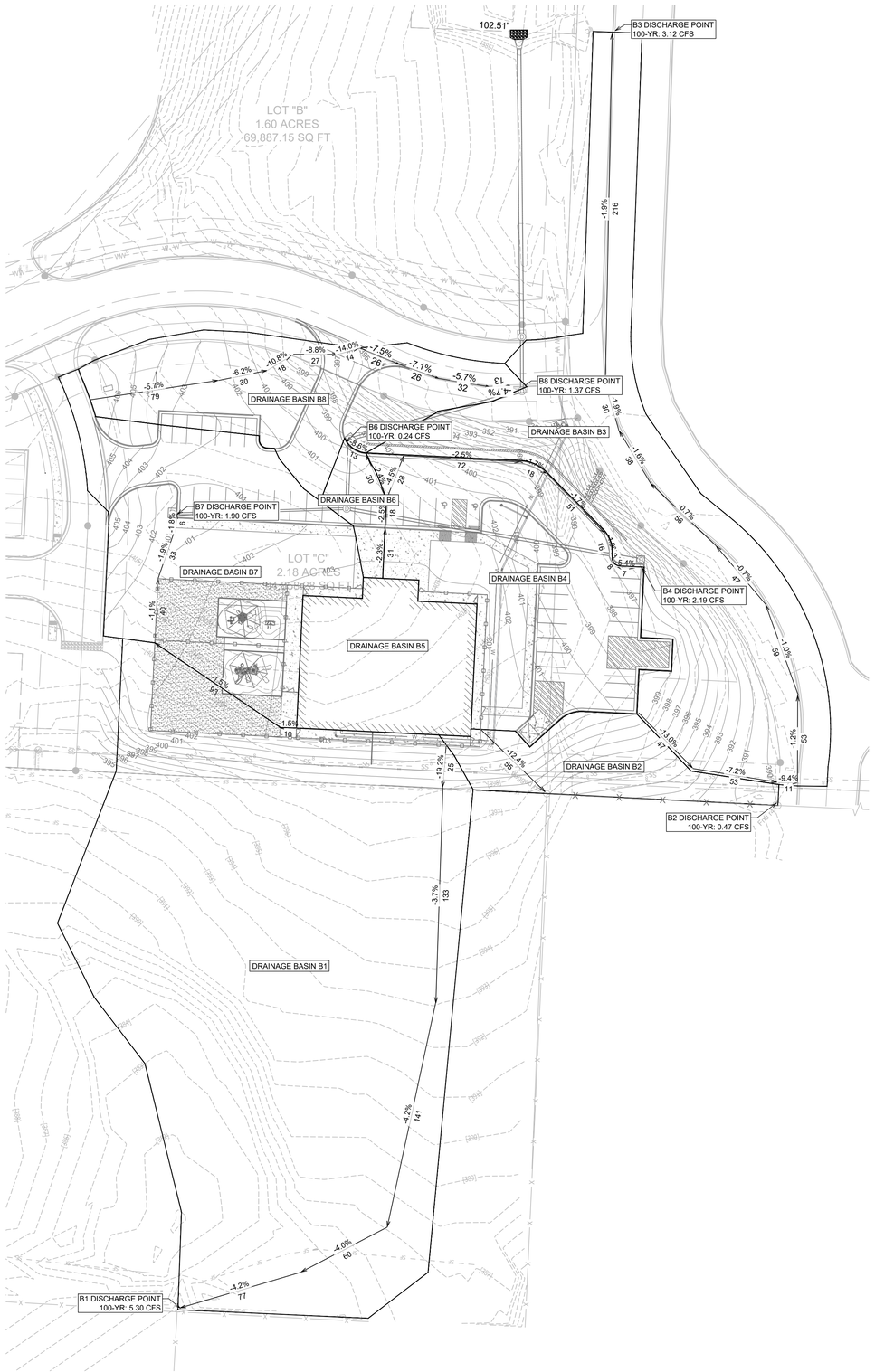
03-25-2026

PAGE TITLE:
OVERALL DRAINAGE PLAN

SHEET NUMBER:
C1.7



POST DRAINAGE PLAN

SCALE 1" = 40'

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ARKANSAS ENGINEER

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ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP A. LEWIS

N
0 40'
1" = 40'-0"

PROJECT NUMBER:

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PAGE TITLE:
POST DRAINAGE PLAN

SHEET NUMBER:
C1.8

OVERALL DRAINAGE PLAN 1

SCALE 1" = 20'

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STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP L. LEWIS

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No. 566

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03-25-2026

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OVERALL DRAINAGE PLAN 1

SHEET NUMBER:
C1.9

N
0 20'
1" = 20'-0"

OVERALL DRAINAGE PLAN 2

SCALE 1" = 20'

DRAINAGE BASIN C19
DRAINAGE BASIN C17
DRAINAGE BASIN C16
DRAINAGE BASIN C15
DRAINAGE BASIN C14
DRAINAGE BASIN C13
DRAINAGE BASIN C20
DRAINAGE BASIN C11
DRAINAGE BASIN C10
DRAINAGE BASIN C12

C19 DISCHARGE POINT
100-YR: 0.96 CFS

C17 DISCHARGE POINT
100-YR: 3.04 CFS

C16 DISCHARGE POINT
100-YR: 1.65 CFS

C20 DISCHARGE POINT
100-YR: 1.65 CFS

C14 DISCHARGE POINT
100-YR: 2.36 CFS

C13 DISCHARGE POINT
100-YR: 0.89 CFS

C12 DISCHARGE POINT
100-YR: 2.75 CFS

C11 DISCHARGE POINT
100-YR: 0.57 CFS

C10 DISCHARGE POINT
100-YR: 0.60 CFS

INSTALL RIP RAP AT TOE OF FLARED END FOR EROSION PREVENTION

EXISTING DETENTION POND

DETENTION AREA ESMT

15' SETBACK

25' SETBACK

15' WATER EASEMENT

LOT B
1.60 ACRES
69,887.15 SQ FT

SYRNIA PARK SUBDIVISION PHASE 1

PARCEL NO. 840-[illegible]
OWNER: [illegible]

CHRISTY LANE
60' R.O.W
(PRIVATE)

N01°33'25"E - 123.62' (P)
N20°58'40"E - 90.12' (P)
N10°33'25"W - 142.94' (P)
S01°33'25"W - 167.30' (P)
S87°58'00"E - 108.47' (P)
S49°03'54"E - 251.89' (P)
S24°13'08"W - 40.78' (P)
N24°13'08"E - 48.48' (P)
N04°10'22"W - 20.76' (P)
S04°10'22"E - 30.02' (M)
N87°45'00"W - 353.99' (P)
N87°45'00"W - 60.38' (P)
CH=N00°09'23"W - 189.70' (M)
L=195.70' (M), R=230.00' (M), Δ=48.78° (P)
CH=N10°01'28"E - 61.80' (P)
L=62.44' (M), R=126.00' (M), Δ=28.39° (P)
L=137.31' (M), R=170.00' (M), Δ=46.48° (P)
CH=S00°58'44"W - 134.16' (P)
L=92.17' (M), R=186.00' (M), Δ=28.39° (P)
CH=S00°01'23"W - 91.23' (P)
L=191.55' (M), R=186.00' (M), Δ=59.01° (P)
CH=S04°58'18"W - 183.20' (P)
L=595.03' (M)
CH=N[illegible]

174.94'
176.15'
65.55'
101.76'

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OVERALL DRAINAGE PLAN 2

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C1.10

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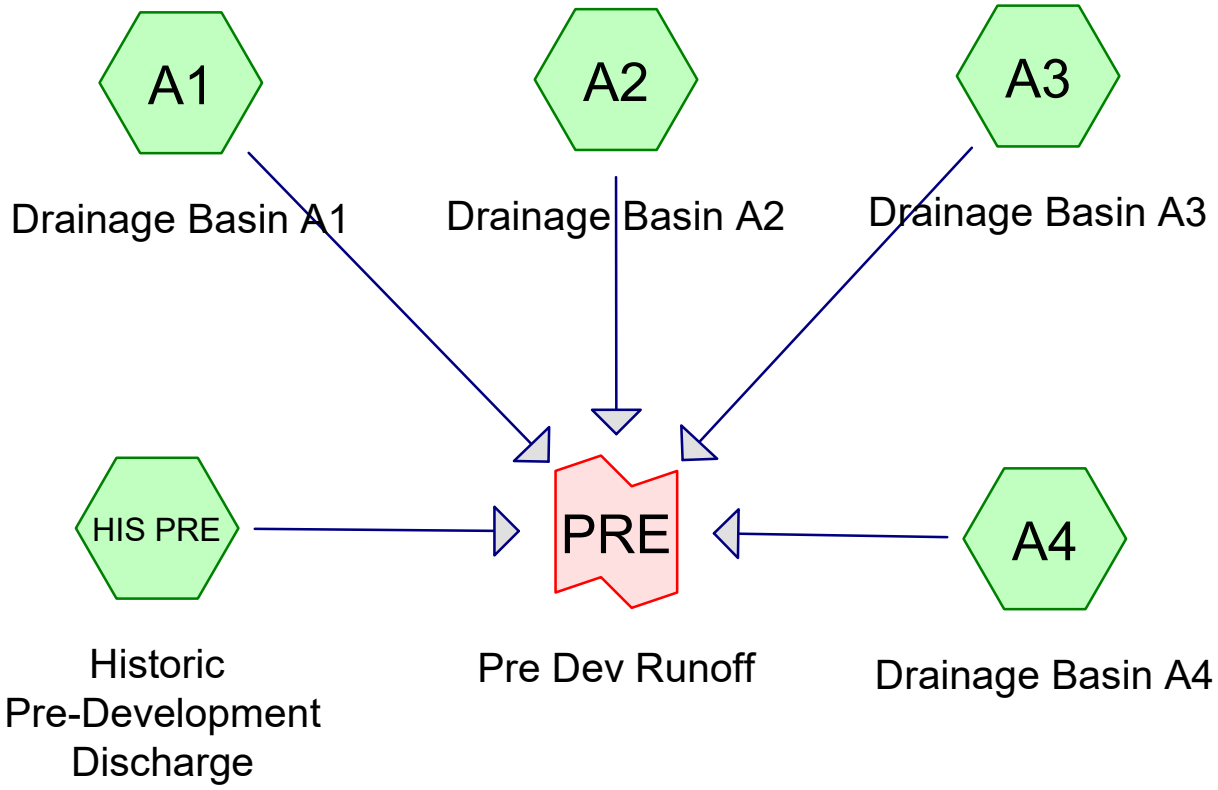
1" = 20'-0"

PRE DEVELOPMENT HYDROGRAPHS



Subcat Reach Pond Link

Routing Diagram for Goddard
Prepared by Phillip Lewis Engineering, Printed 3/25/2026
HydroCAD® 10.20-5c s/n 12520 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment A1: Drainage Basin A1

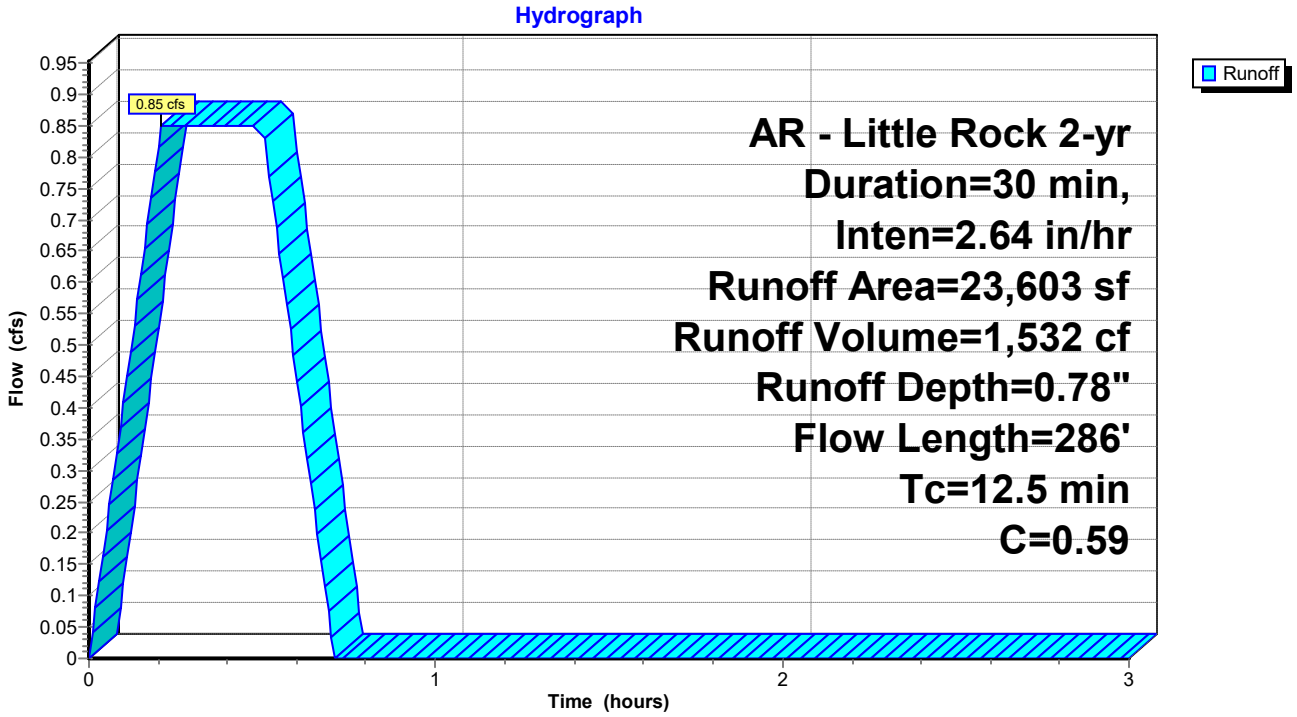
Runoff = 0.85 cfs @ 0.21 hrs, Volume= 1,532 cf, Depth= 0.78"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

Area (sf)	C	Description
20,204	0.53	Undeveloped
3,399	0.92	Paving
23,603	0.59	Weighted Average
23,603		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.1	48	0.0270	0.13		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
5.7	52	0.0380	0.15		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.3	37	0.0950	2.16		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.1	45	0.0860	5.95		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	17	0.0810	4.27		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.0	16	0.0750	5.56		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	26	0.0710	5.41		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	32	0.0570	4.85		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	13	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
12.5	286	Total			

Subcatchment A1: Drainage Basin A1



Summary for Subcatchment A2: Drainage Basin A2

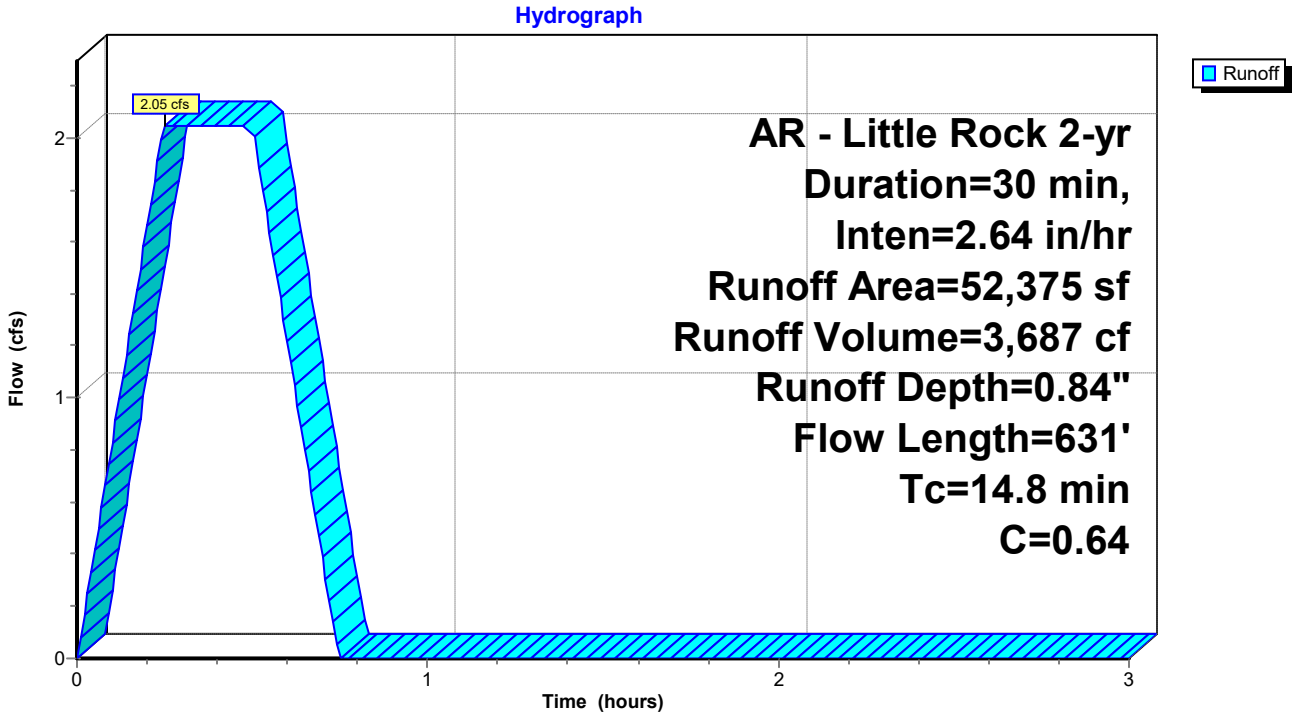
Runoff = 2.05 cfs @ 0.25 hrs, Volume= 3,687 cf, Depth= 0.84"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

Area (sf)	C	Description
37,816	0.53	Undeveloped
14,559	0.92	Paving
52,375	0.64	Weighted Average
52,375		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	36	0.0320	0.13		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
6.1	64	0.0480	0.17		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.9	76	0.0430	1.45		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.7	74	0.0710	1.87		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.2	36	0.1680	2.87		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.6	61	0.0070	1.70		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	38	0.0160	2.57		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	30	0.0190	2.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
1.3	216	0.0190	2.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
14.8	631	Total			

Subcatchment A2: Drainage Basin A2



Summary for Subcatchment A3: Drainage Basin A3

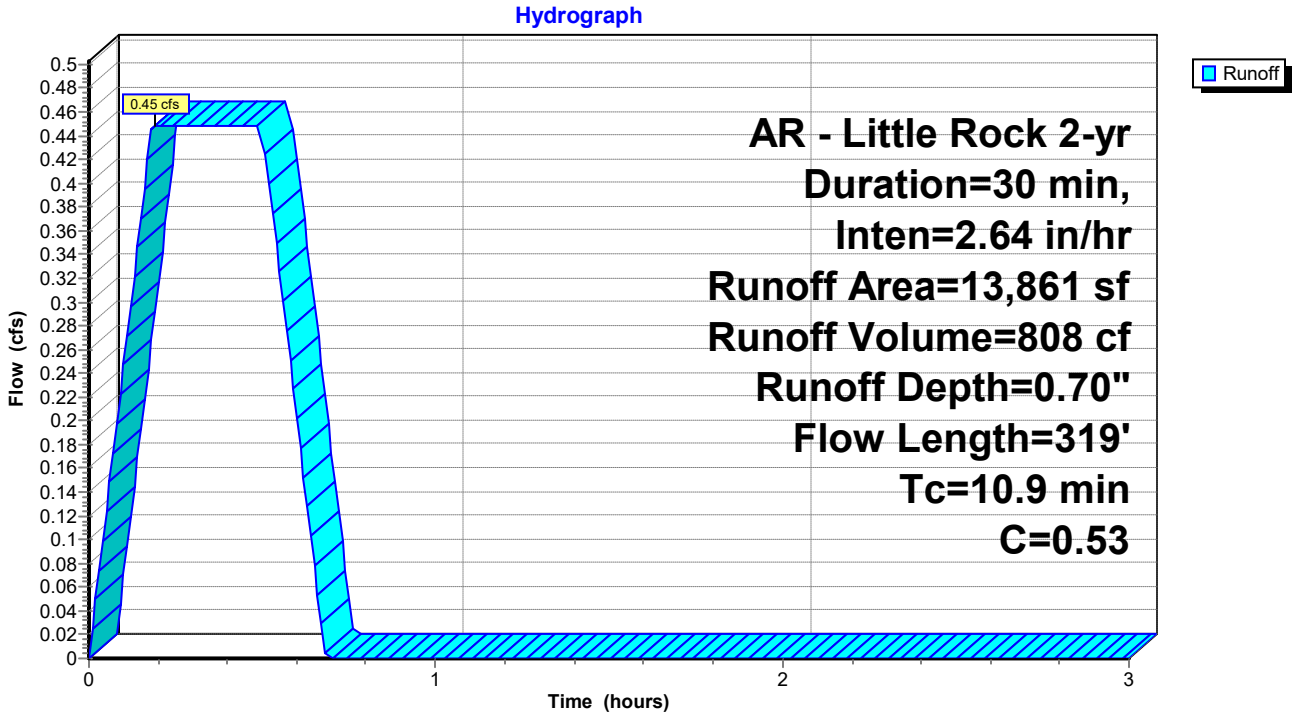
Runoff = 0.45 cfs @ 0.19 hrs, Volume= 808 cf, Depth= 0.70"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

Area (sf)	C	Description
13,861	0.53	Undeveloped
0	0.92	Paving
13,861	0.53	Weighted Average
13,861		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.4	100	0.0540	0.20		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.6	72	0.0790	1.97		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.2	21	0.0420	1.43		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.3	24	0.0400	1.40		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.4	102	0.0300	1.21		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
10.9	319	Total			

Subcatchment A3: Drainage Basin A3



Summary for Subcatchment A4: Drainage Basin A4

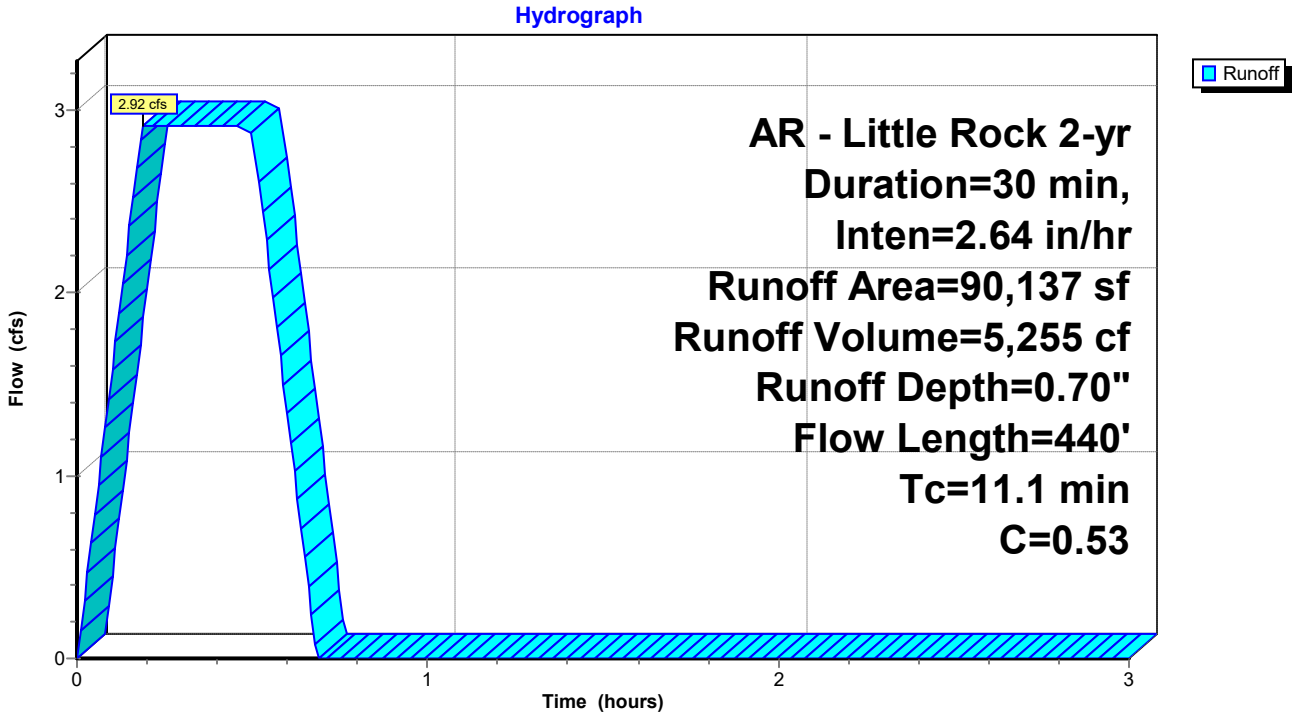
Runoff = 2.92 cfs @ 0.19 hrs, Volume= 5,255 cf, Depth= 0.70"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

Area (sf)	C	Description
90,137	0.53	Undeveloped
0	0.92	Paving
90,137	0.53	Weighted Average
90,137		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	100	0.0810	0.23		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
1.4	148	0.0680	1.83		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.2	26	0.1200	2.42		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.2	20	0.0410	1.42		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.6	51	0.0390	1.38		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.6	95	0.0210	1.01		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
11.1	440	Total			

Subcatchment A4: Drainage Basin A4



Summary for Subcatchment HIS PRE: Historic Pre-Development Discharge

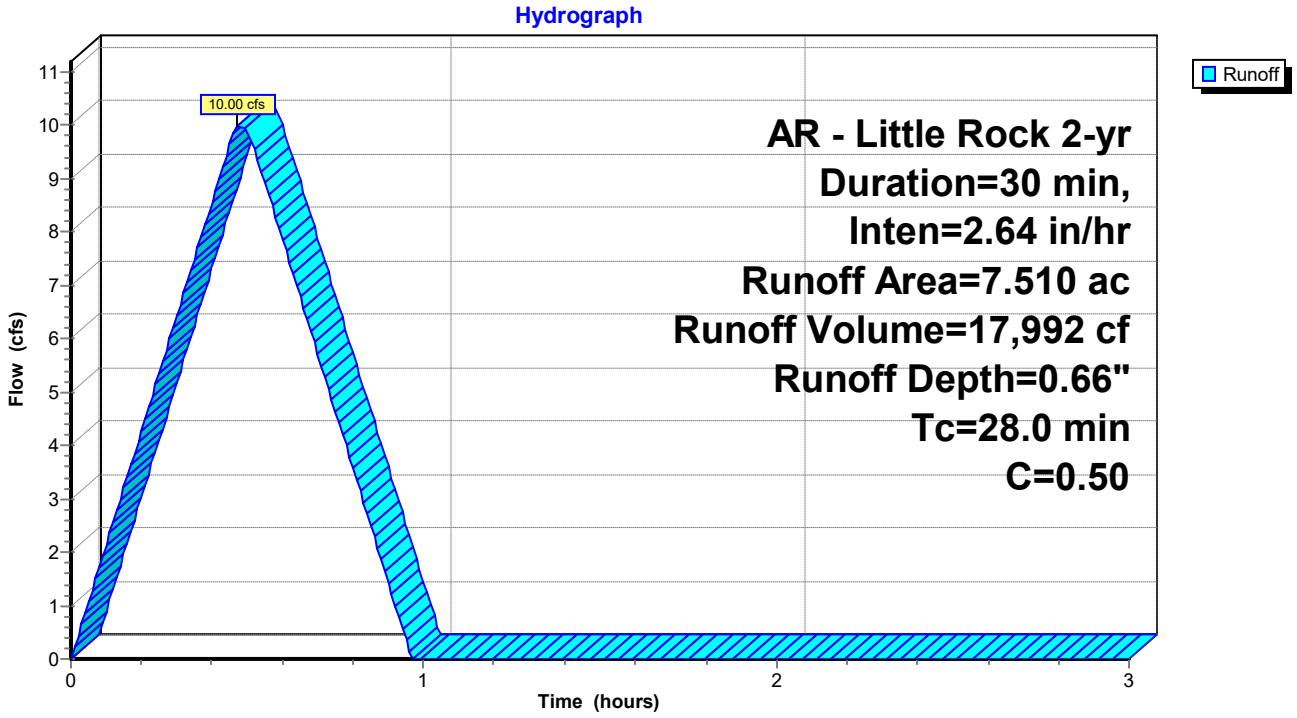
Runoff = 10.00 cfs @ 0.47 hrs, Volume= 17,992 cf, Depth= 0.66"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=30 min, Inten=2.64 in/hr

Area (ac)	C	Description
7.510	0.50	Undeveloped
7.510		100.00% Pervious Area

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

Subcatchment HIS PRE: Historic Pre-Development Discharge

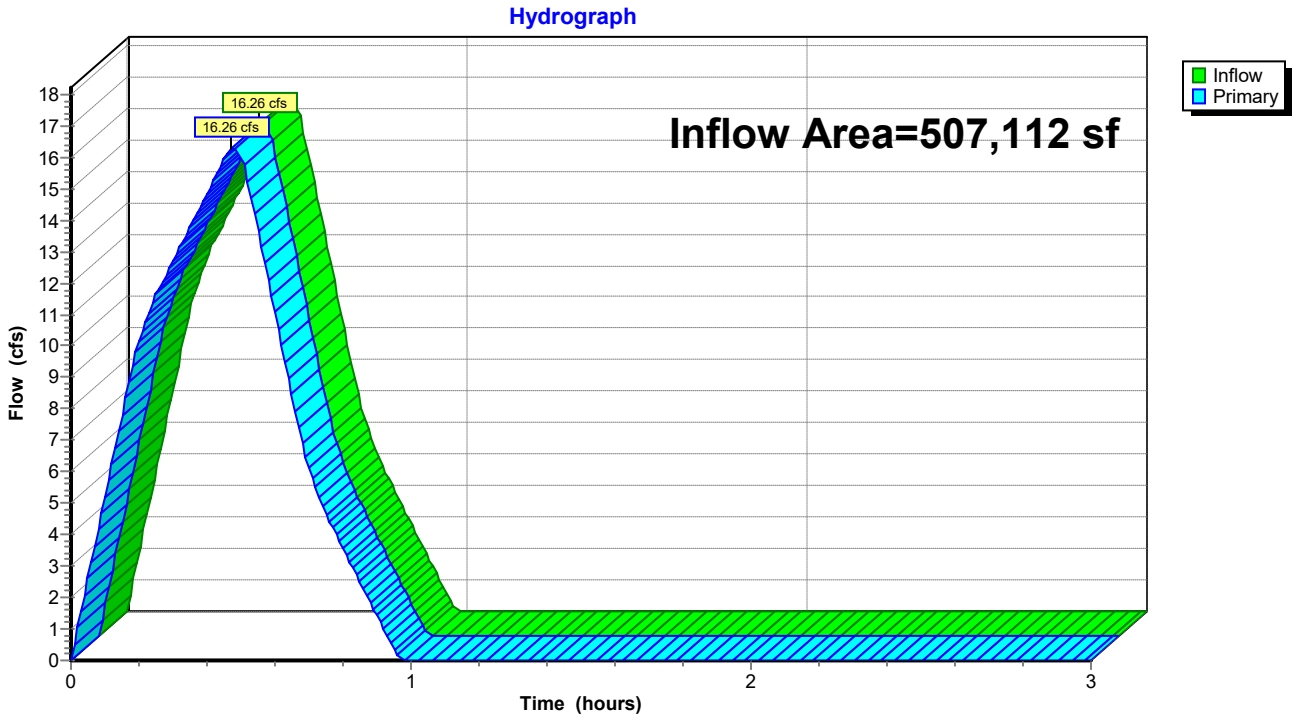


Summary for Link PRE: Pre Dev Runoff

Inflow Area = 507,112 sf, 0.00% Impervious, Inflow Depth = 0.69" for 2-yr event
Inflow = 16.26 cfs @ 0.47 hrs, Volume= 29,275 cf
Primary = 16.26 cfs @ 0.47 hrs, Volume= 29,275 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link PRE: Pre Dev Runoff



Summary for Subcatchment A1: Drainage Basin A1

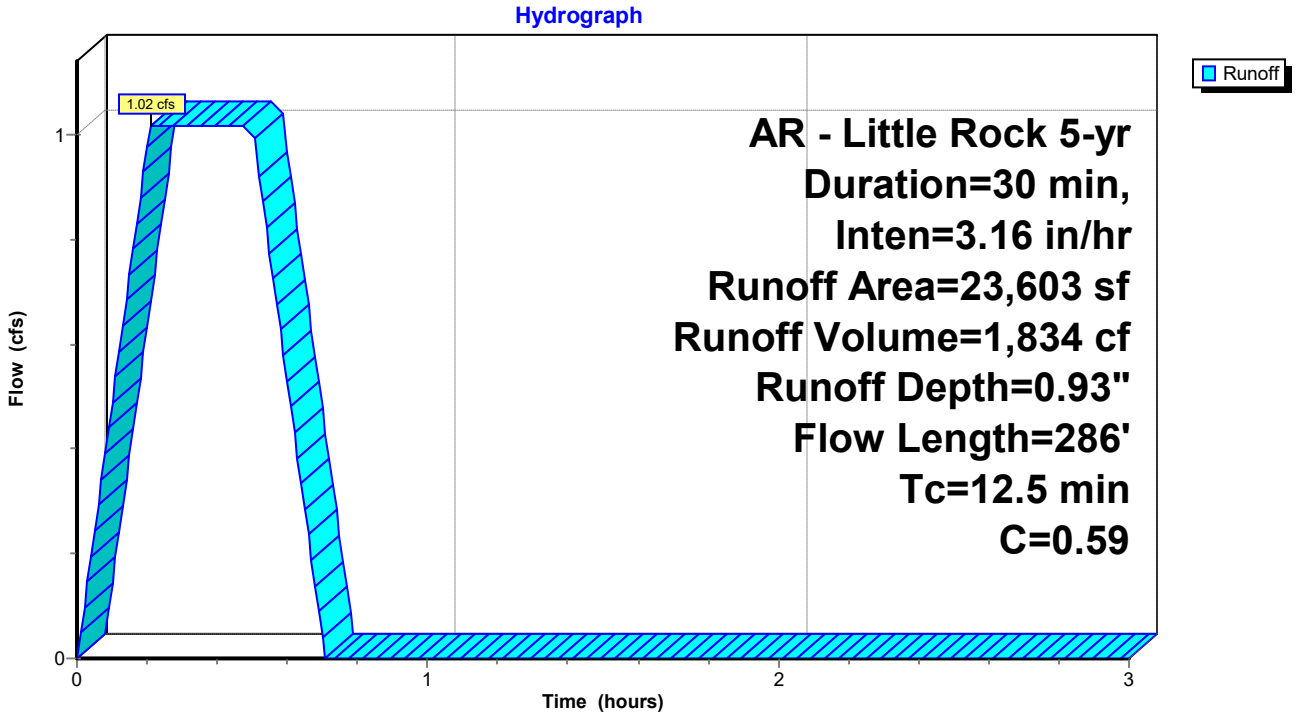
Runoff = 1.02 cfs @ 0.21 hrs, Volume= 1,834 cf, Depth= 0.93"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

Area (sf)	C	Description
20,204	0.53	Undeveloped
3,399	0.92	Paving
23,603	0.59	Weighted Average
23,603		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.1	48	0.0270	0.13		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
5.7	52	0.0380	0.15		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.3	37	0.0950	2.16		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.1	45	0.0860	5.95		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	17	0.0810	4.27		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.0	16	0.0750	5.56		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	26	0.0710	5.41		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	32	0.0570	4.85		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	13	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
12.5	286	Total			

Subcatchment A1: Drainage Basin A1



Summary for Subcatchment A2: Drainage Basin A2

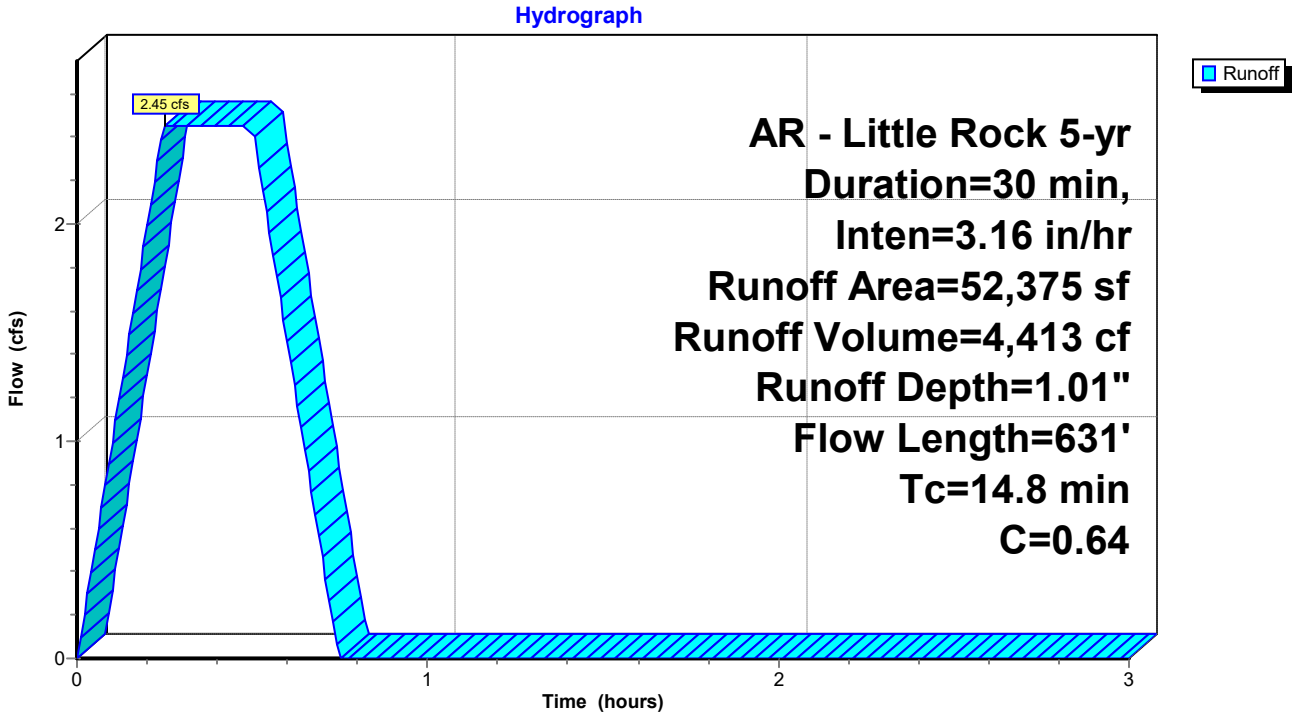
Runoff = 2.45 cfs @ 0.25 hrs, Volume= 4,413 cf, Depth= 1.01"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

Area (sf)	C	Description
37,816	0.53	Undeveloped
14,559	0.92	Paving
52,375	0.64	Weighted Average
52,375		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	36	0.0320	0.13		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
6.1	64	0.0480	0.17		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.9	76	0.0430	1.45		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.7	74	0.0710	1.87		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.2	36	0.1680	2.87		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.6	61	0.0070	1.70		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	38	0.0160	2.57		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	30	0.0190	2.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
1.3	216	0.0190	2.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
14.8	631	Total			

Subcatchment A2: Drainage Basin A2



Summary for Subcatchment A3: Drainage Basin A3

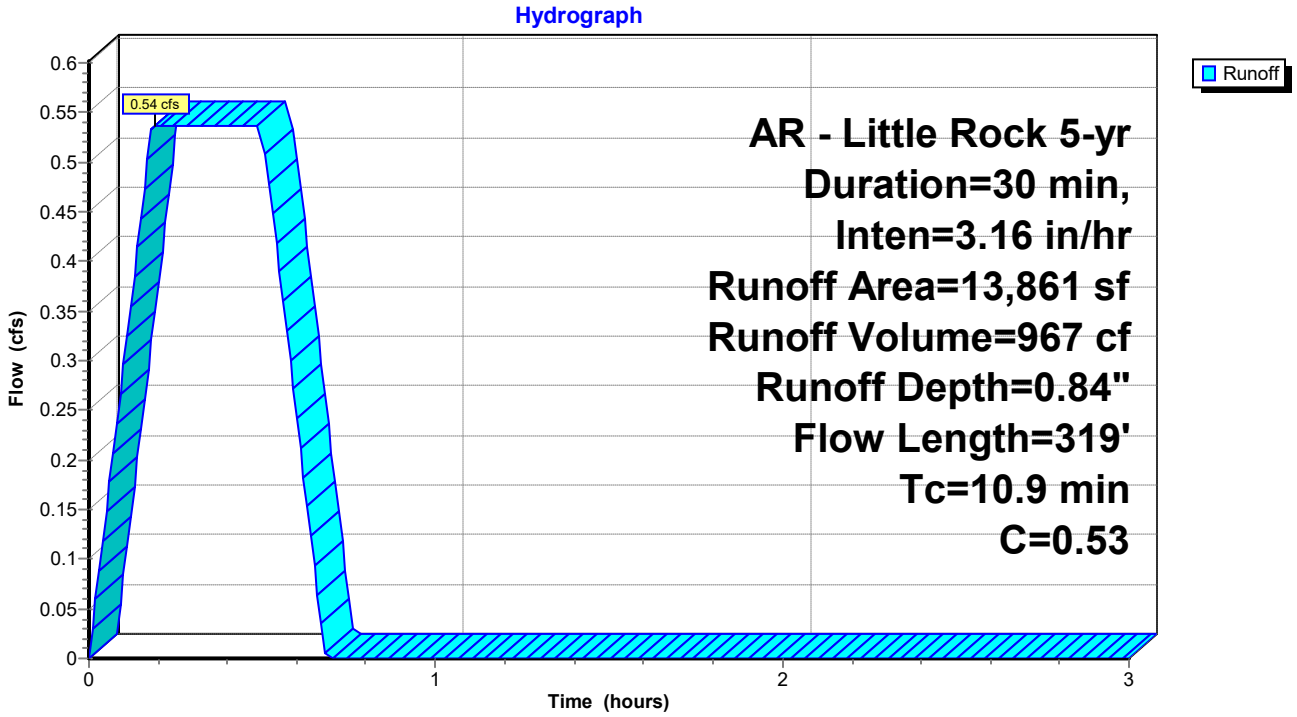
Runoff = 0.54 cfs @ 0.19 hrs, Volume= 967 cf, Depth= 0.84"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

Area (sf)	C	Description
13,861	0.53	Undeveloped
0	0.92	Paving
13,861	0.53	Weighted Average
13,861		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.4	100	0.0540	0.20		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.6	72	0.0790	1.97		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.2	21	0.0420	1.43		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.3	24	0.0400	1.40		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.4	102	0.0300	1.21		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
10.9	319	Total			

Subcatchment A3: Drainage Basin A3



Summary for Subcatchment A4: Drainage Basin A4

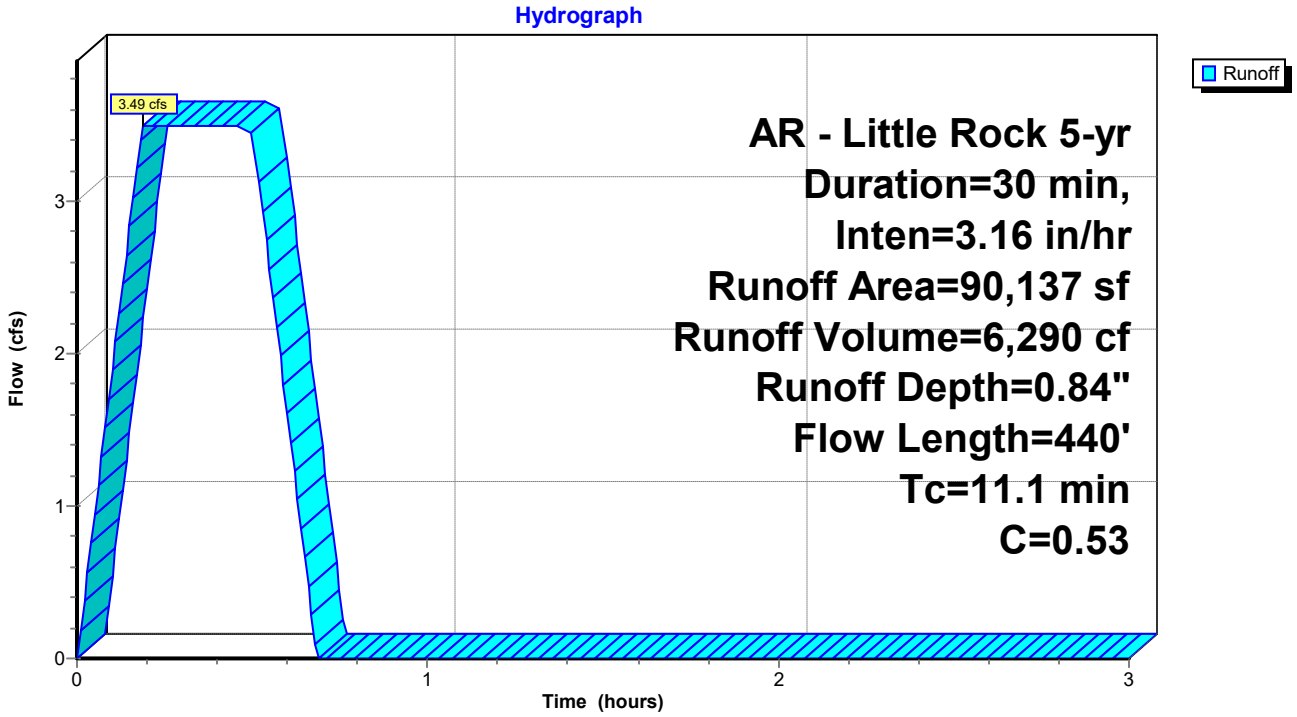
Runoff = 3.49 cfs @ 0.19 hrs, Volume= 6,290 cf, Depth= 0.84"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

Area (sf)	C	Description
90,137	0.53	Undeveloped
0	0.92	Paving
90,137	0.53	Weighted Average
90,137		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	100	0.0810	0.23		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
1.4	148	0.0680	1.83		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.2	26	0.1200	2.42		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.2	20	0.0410	1.42		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.6	51	0.0390	1.38		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.6	95	0.0210	1.01		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
11.1	440	Total			

Subcatchment A4: Drainage Basin A4



Summary for Subcatchment HIS PRE: Historic Pre-Development Discharge

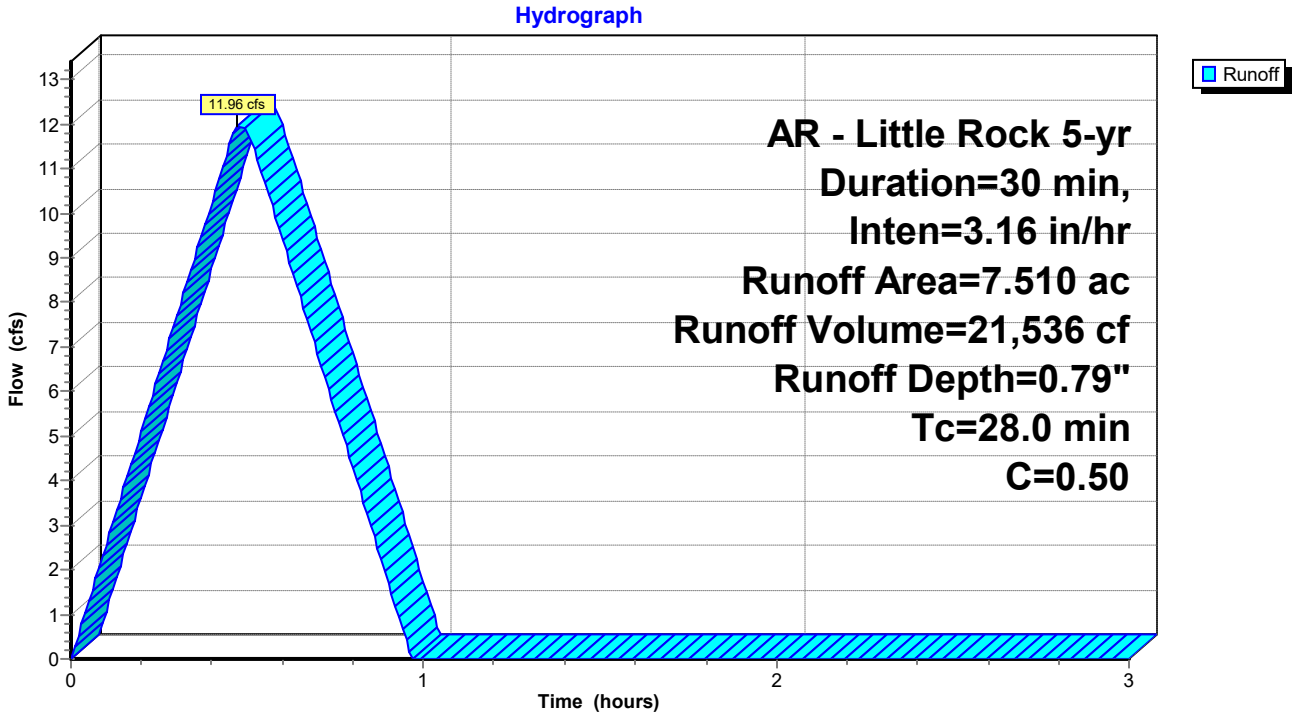
Runoff = 11.96 cfs @ 0.47 hrs, Volume= 21,536 cf, Depth= 0.79"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=30 min, Inten=3.16 in/hr

Area (ac)	C	Description
7.510	0.50	Undeveloped
7.510		100.00% Pervious Area

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

Subcatchment HIS PRE: Historic Pre-Development Discharge

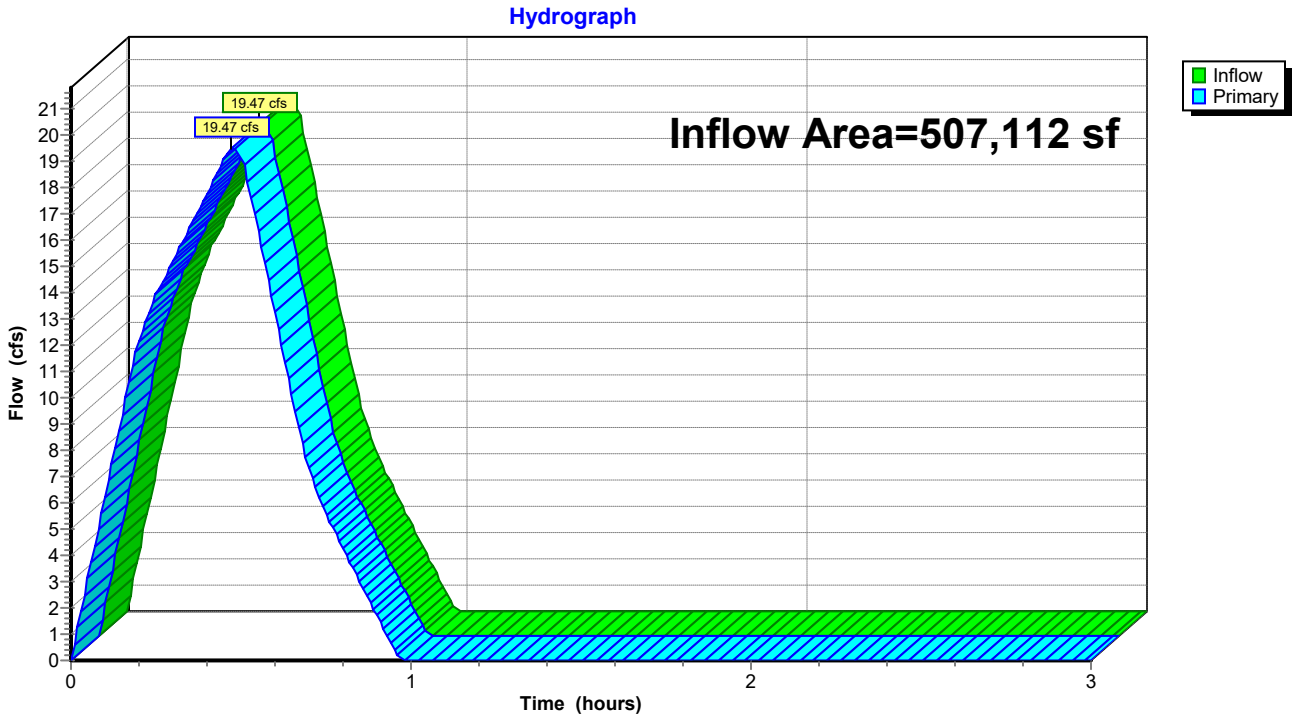


Summary for Link PRE: Pre Dev Runoff

Inflow Area = 507,112 sf, 0.00% Impervious, Inflow Depth = 0.83" for 5-yr event
Inflow = 19.47 cfs @ 0.47 hrs, Volume= 35,041 cf
Primary = 19.47 cfs @ 0.47 hrs, Volume= 35,041 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link PRE: Pre Dev Runoff



Summary for Subcatchment A1: Drainage Basin A1

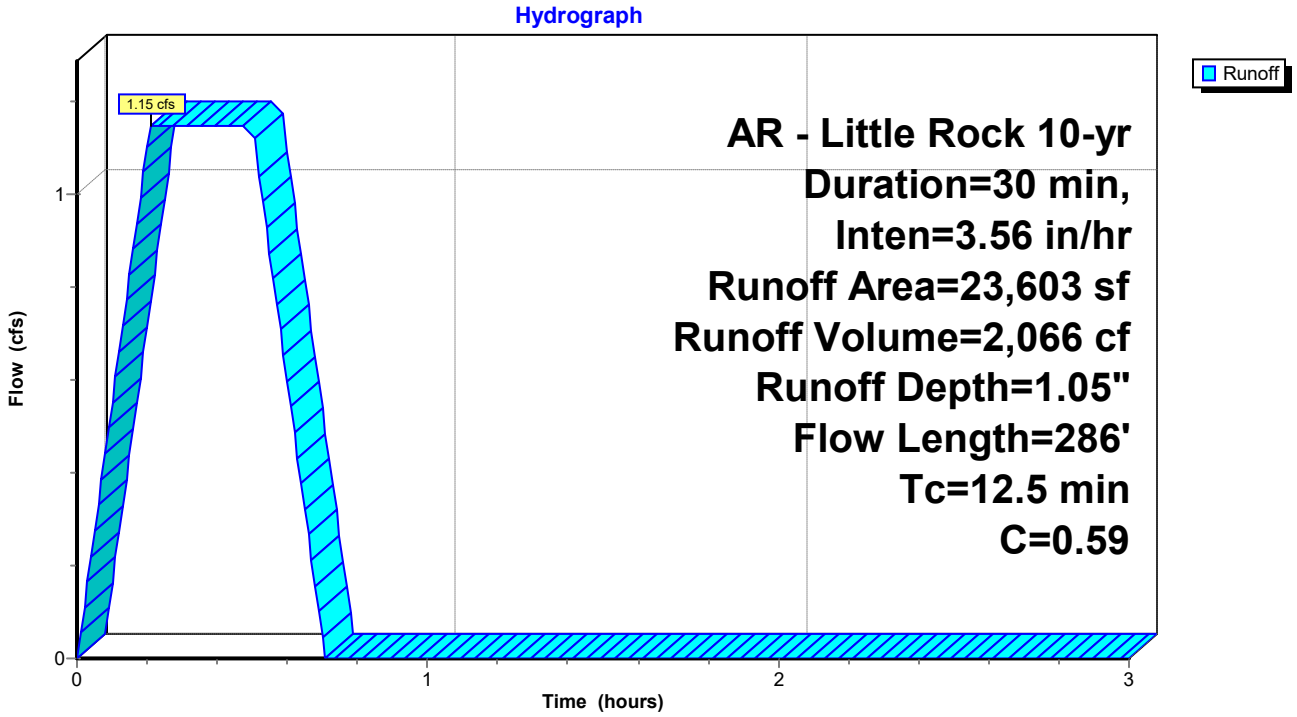
Runoff = 1.15 cfs @ 0.21 hrs, Volume= 2,066 cf, Depth= 1.05"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

Area (sf)	C	Description
20,204	0.53	Undeveloped
3,399	0.92	Paving
23,603	0.59	Weighted Average
23,603		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.1	48	0.0270	0.13		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
5.7	52	0.0380	0.15		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.3	37	0.0950	2.16		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.1	45	0.0860	5.95		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	17	0.0810	4.27		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.0	16	0.0750	5.56		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	26	0.0710	5.41		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	32	0.0570	4.85		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	13	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
12.5	286	Total			

Subcatchment A1: Drainage Basin A1



Summary for Subcatchment A2: Drainage Basin A2

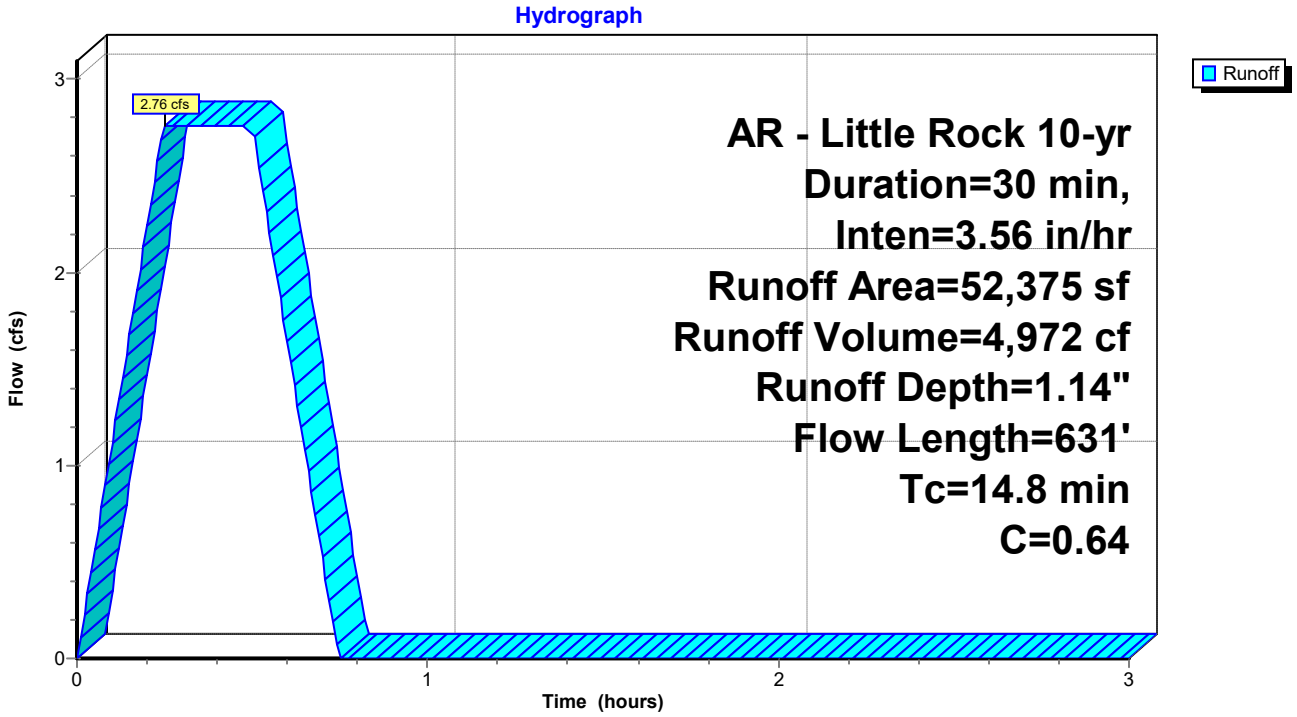
Runoff = 2.76 cfs @ 0.25 hrs, Volume= 4,972 cf, Depth= 1.14"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

Area (sf)	C	Description
37,816	0.53	Undeveloped
14,559	0.92	Paving
52,375	0.64	Weighted Average
52,375		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	36	0.0320	0.13		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
6.1	64	0.0480	0.17		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.9	76	0.0430	1.45		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.7	74	0.0710	1.87		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.2	36	0.1680	2.87		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.6	61	0.0070	1.70		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	38	0.0160	2.57		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	30	0.0190	2.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
1.3	216	0.0190	2.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
14.8	631	Total			

Subcatchment A2: Drainage Basin A2



Summary for Subcatchment A3: Drainage Basin A3

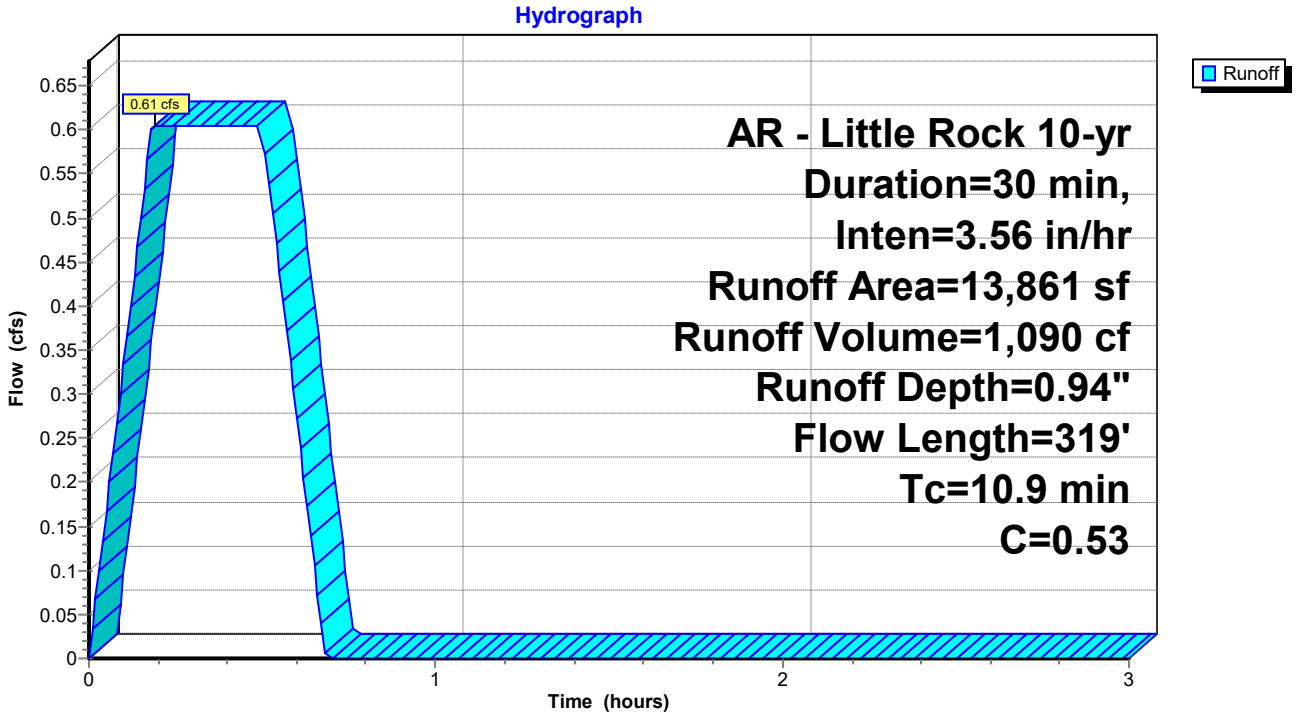
Runoff = 0.61 cfs @ 0.19 hrs, Volume= 1,090 cf, Depth= 0.94"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

Area (sf)	C	Description
13,861	0.53	Undeveloped
0	0.92	Paving
13,861	0.53	Weighted Average
13,861		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.4	100	0.0540	0.20		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.6	72	0.0790	1.97		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.2	21	0.0420	1.43		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.3	24	0.0400	1.40		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.4	102	0.0300	1.21		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
10.9	319	Total			

Subcatchment A3: Drainage Basin A3



Summary for Subcatchment A4: Drainage Basin A4

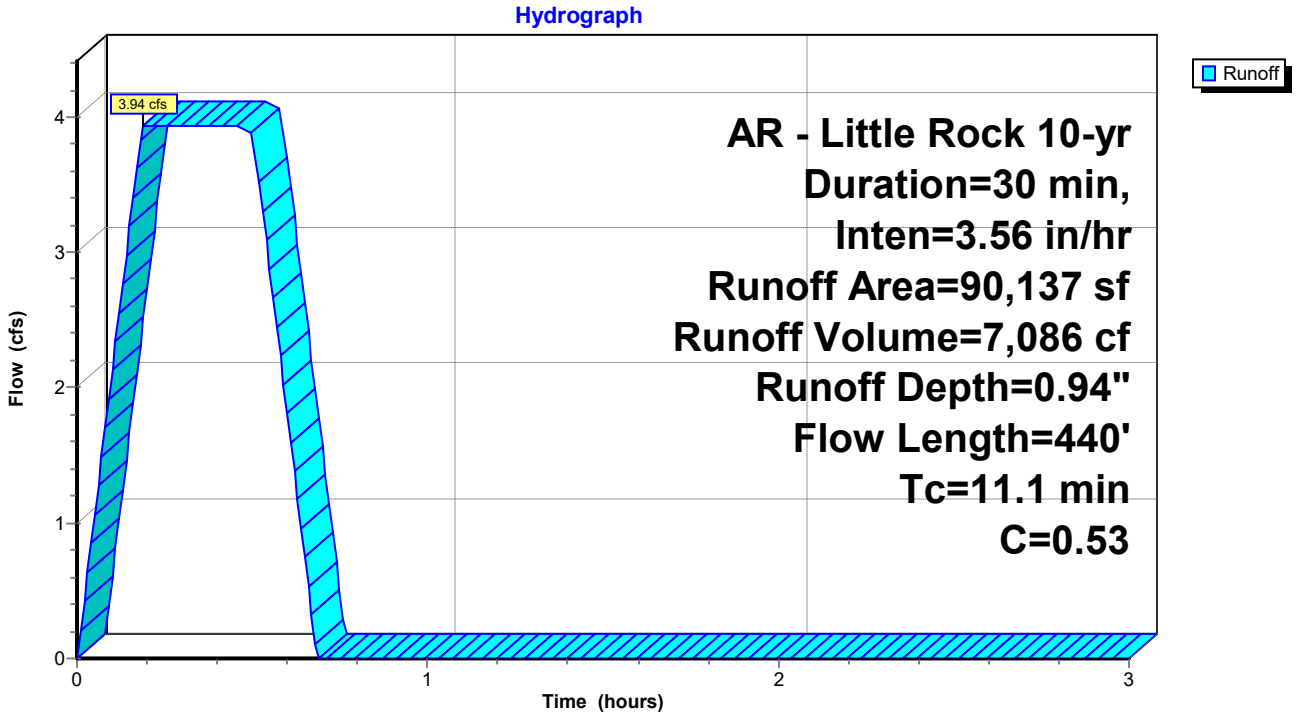
Runoff = 3.94 cfs @ 0.19 hrs, Volume= 7,086 cf, Depth= 0.94"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

Area (sf)	C	Description
90,137	0.53	Undeveloped
0	0.92	Paving
90,137	0.53	Weighted Average
90,137		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	100	0.0810	0.23		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
1.4	148	0.0680	1.83		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.2	26	0.1200	2.42		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.2	20	0.0410	1.42		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.6	51	0.0390	1.38		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.6	95	0.0210	1.01		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
11.1	440	Total			

Subcatchment A4: Drainage Basin A4



Summary for Subcatchment HIS PRE: Historic Pre-Development Discharge

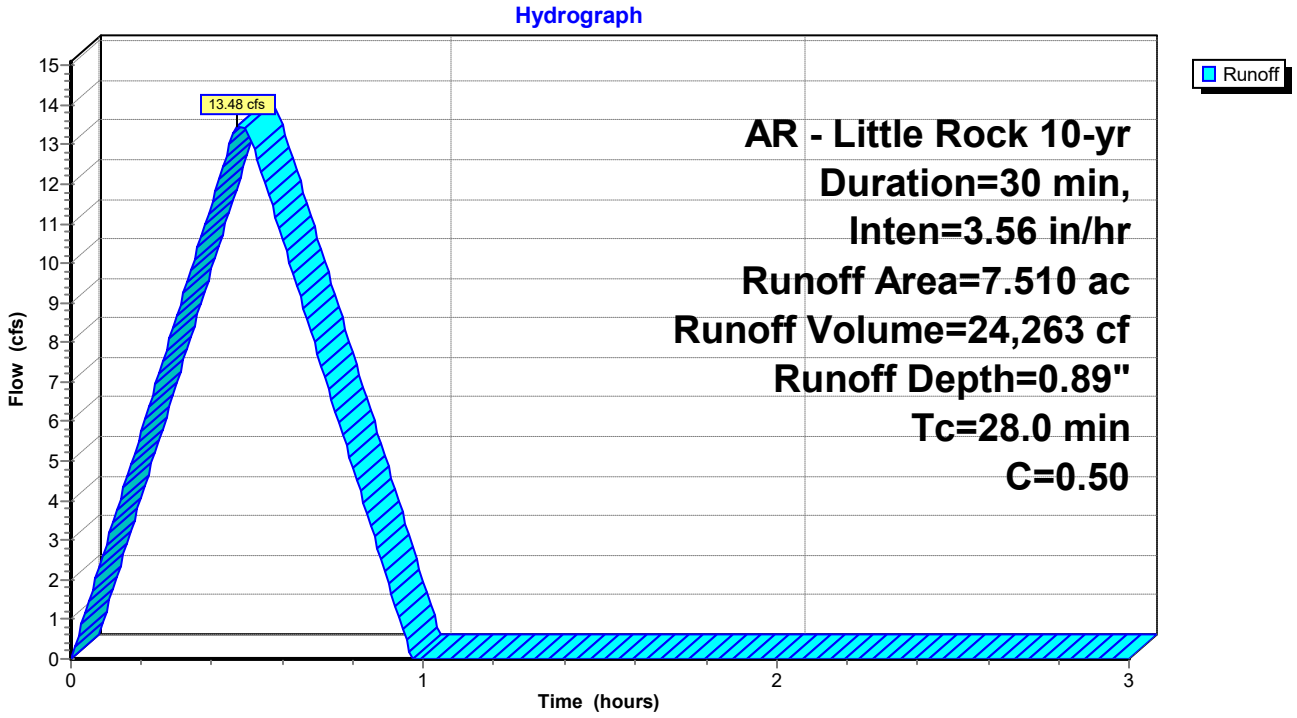
Runoff = 13.48 cfs @ 0.47 hrs, Volume= 24,263 cf, Depth= 0.89"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=30 min, Inten=3.56 in/hr

Area (ac)	C	Description
7.510	0.50	Undeveloped
7.510		100.00% Pervious Area

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

Subcatchment HIS PRE: Historic Pre-Development Discharge

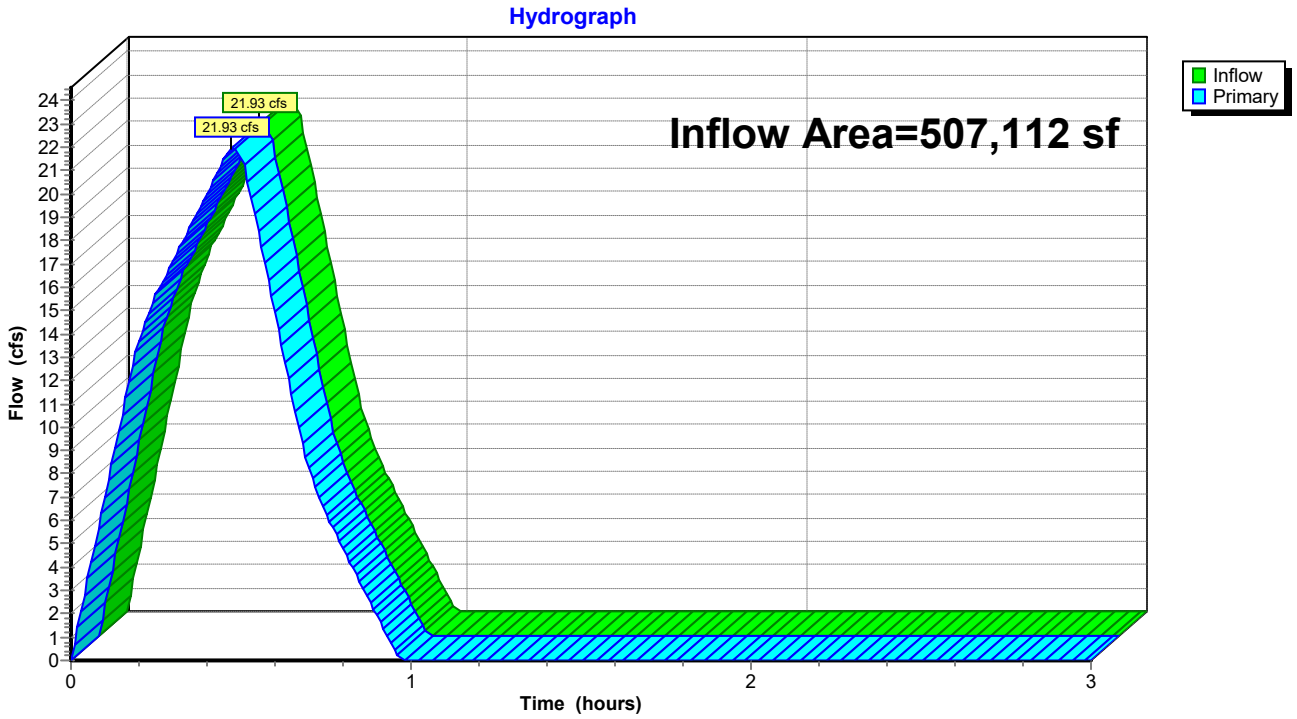


Summary for Link PRE: Pre Dev Runoff

Inflow Area = 507,112 sf, 0.00% Impervious, Inflow Depth = 0.93" for 10-yr event
Inflow = 21.93 cfs @ 0.47 hrs, Volume= 39,476 cf
Primary = 21.93 cfs @ 0.47 hrs, Volume= 39,476 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link PRE: Pre Dev Runoff



Summary for Subcatchment A1: Drainage Basin A1

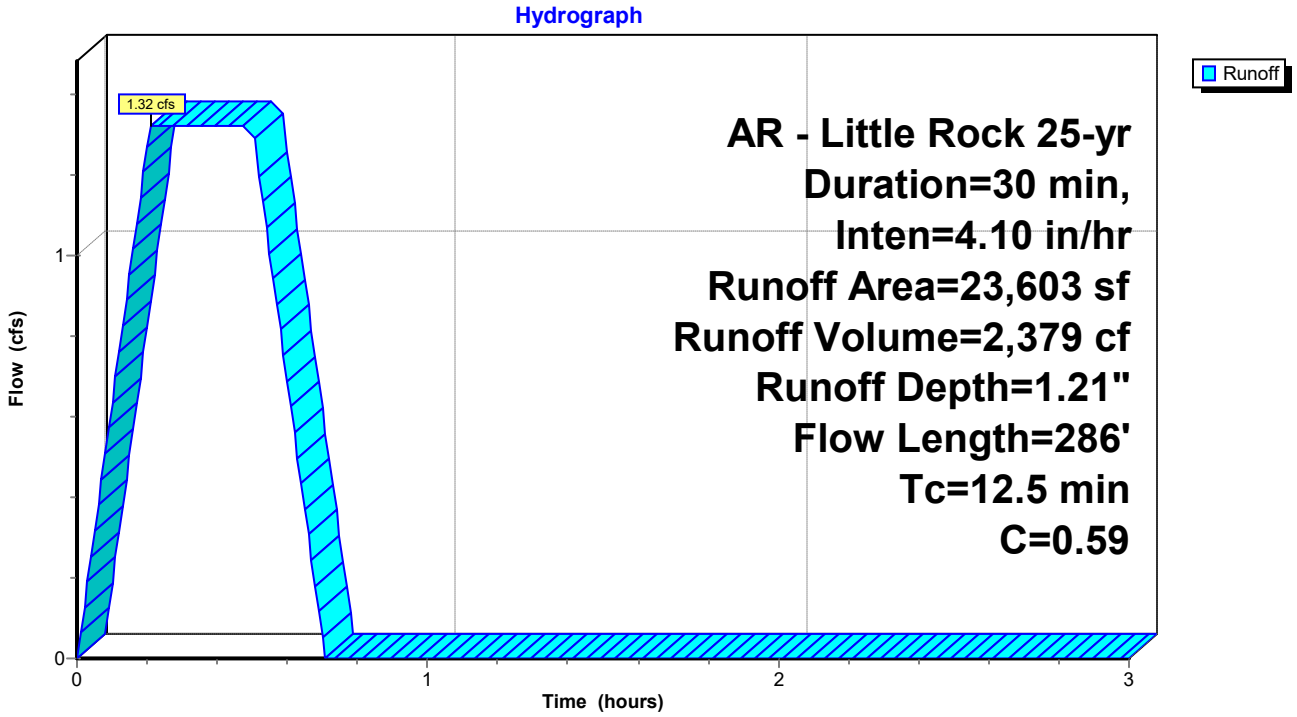
Runoff = 1.32 cfs @ 0.21 hrs, Volume= 2,379 cf, Depth= 1.21"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

Area (sf)	C	Description
20,204	0.53	Undeveloped
3,399	0.92	Paving
23,603	0.59	Weighted Average
23,603		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.1	48	0.0270	0.13		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
5.7	52	0.0380	0.15		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.3	37	0.0950	2.16		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.1	45	0.0860	5.95		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	17	0.0810	4.27		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.0	16	0.0750	5.56		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	26	0.0710	5.41		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	32	0.0570	4.85		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	13	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
12.5	286	Total			

Subcatchment A1: Drainage Basin A1



Summary for Subcatchment A2: Drainage Basin A2

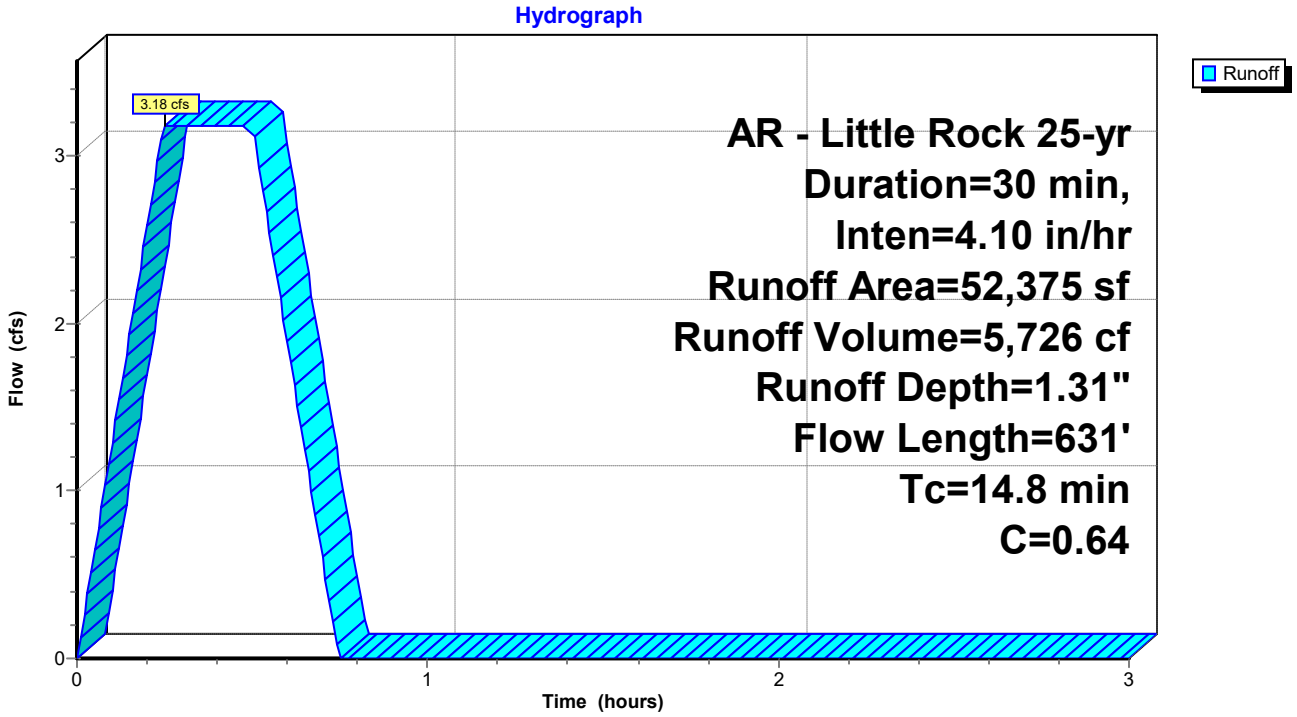
Runoff = 3.18 cfs @ 0.25 hrs, Volume= 5,726 cf, Depth= 1.31"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

Area (sf)	C	Description
37,816	0.53	Undeveloped
14,559	0.92	Paving
52,375	0.64	Weighted Average
52,375		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	36	0.0320	0.13		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
6.1	64	0.0480	0.17		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.9	76	0.0430	1.45		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.7	74	0.0710	1.87		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.2	36	0.1680	2.87		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.6	61	0.0070	1.70		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	38	0.0160	2.57		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	30	0.0190	2.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
1.3	216	0.0190	2.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
14.8	631	Total			

Subcatchment A2: Drainage Basin A2



Summary for Subcatchment A3: Drainage Basin A3

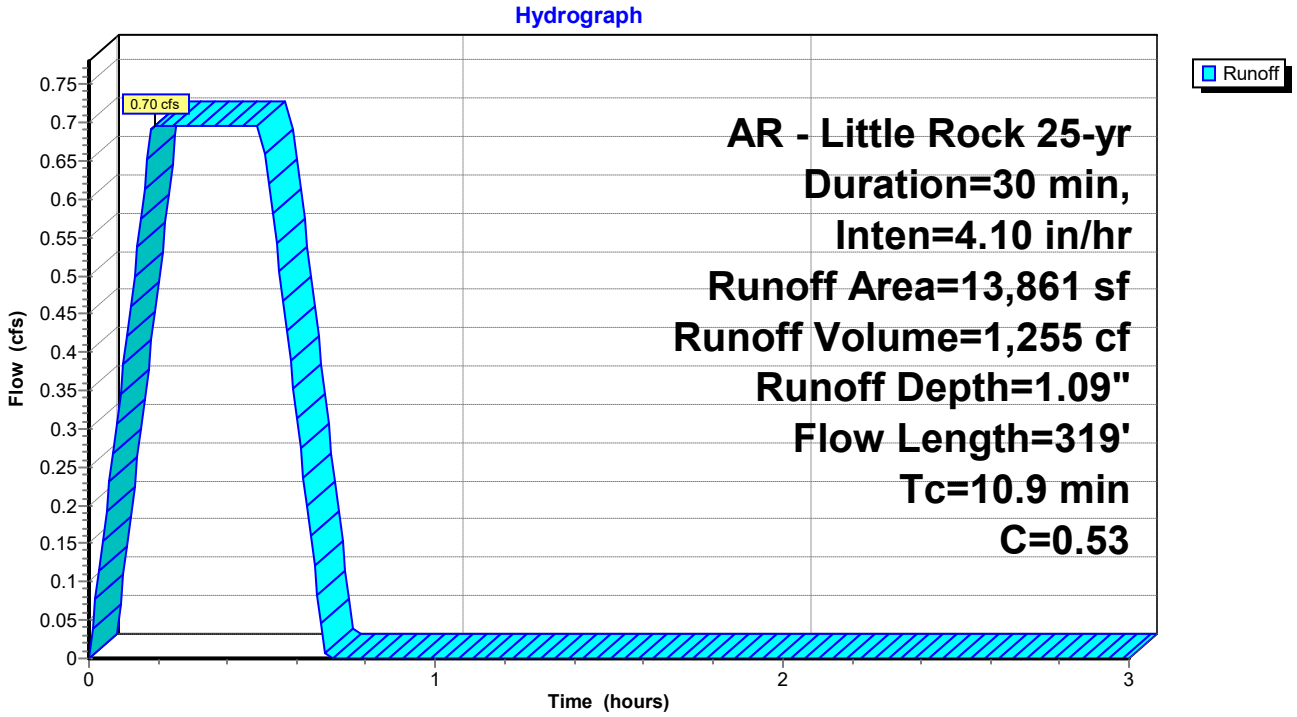
Runoff = 0.70 cfs @ 0.19 hrs, Volume= 1,255 cf, Depth= 1.09"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

Area (sf)	C	Description
13,861	0.53	Undeveloped
0	0.92	Paving
13,861	0.53	Weighted Average
13,861		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.4	100	0.0540	0.20		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.6	72	0.0790	1.97		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.2	21	0.0420	1.43		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.3	24	0.0400	1.40		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.4	102	0.0300	1.21		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
10.9	319	Total			

Subcatchment A3: Drainage Basin A3



Summary for Subcatchment A4: Drainage Basin A4

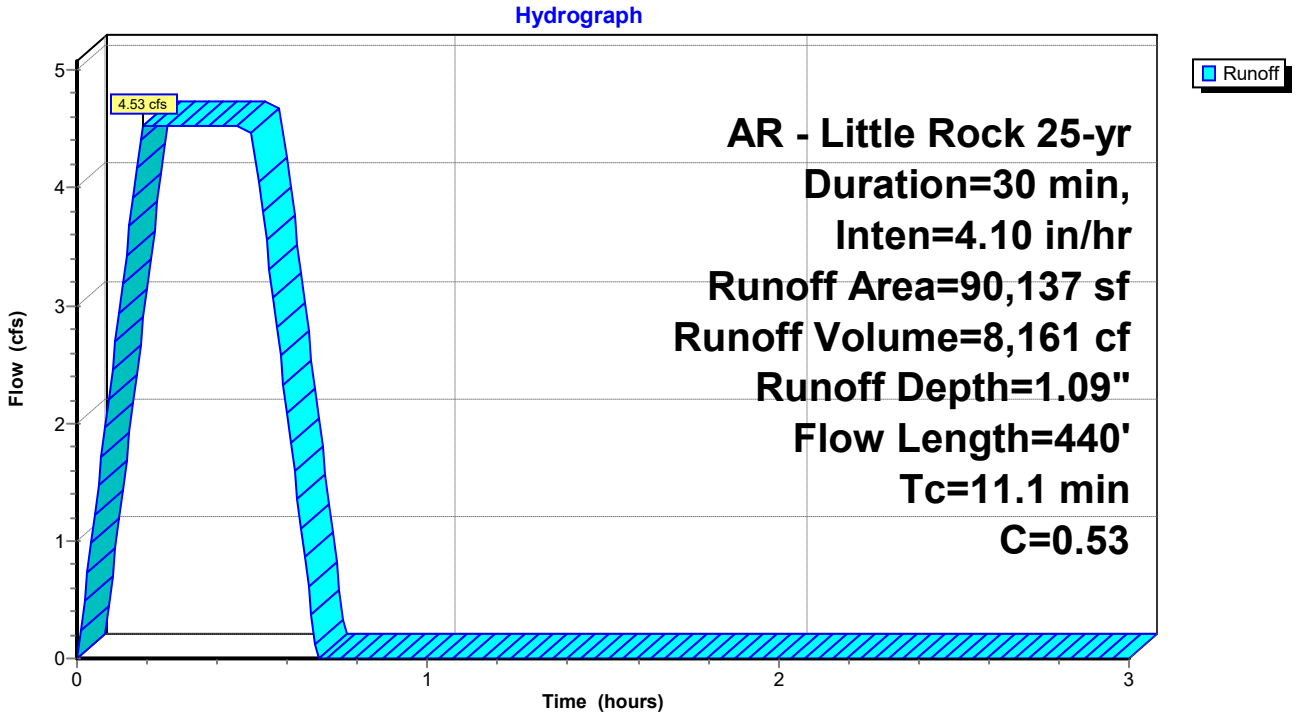
Runoff = 4.53 cfs @ 0.19 hrs, Volume= 8,161 cf, Depth= 1.09"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

Area (sf)	C	Description
90,137	0.53	Undeveloped
0	0.92	Paving
90,137	0.53	Weighted Average
90,137		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	100	0.0810	0.23		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
1.4	148	0.0680	1.83		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.2	26	0.1200	2.42		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.2	20	0.0410	1.42		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.6	51	0.0390	1.38		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.6	95	0.0210	1.01		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
11.1	440	Total			

Subcatchment A4: Drainage Basin A4



Summary for Subcatchment HIS PRE: Historic Pre-Development Discharge

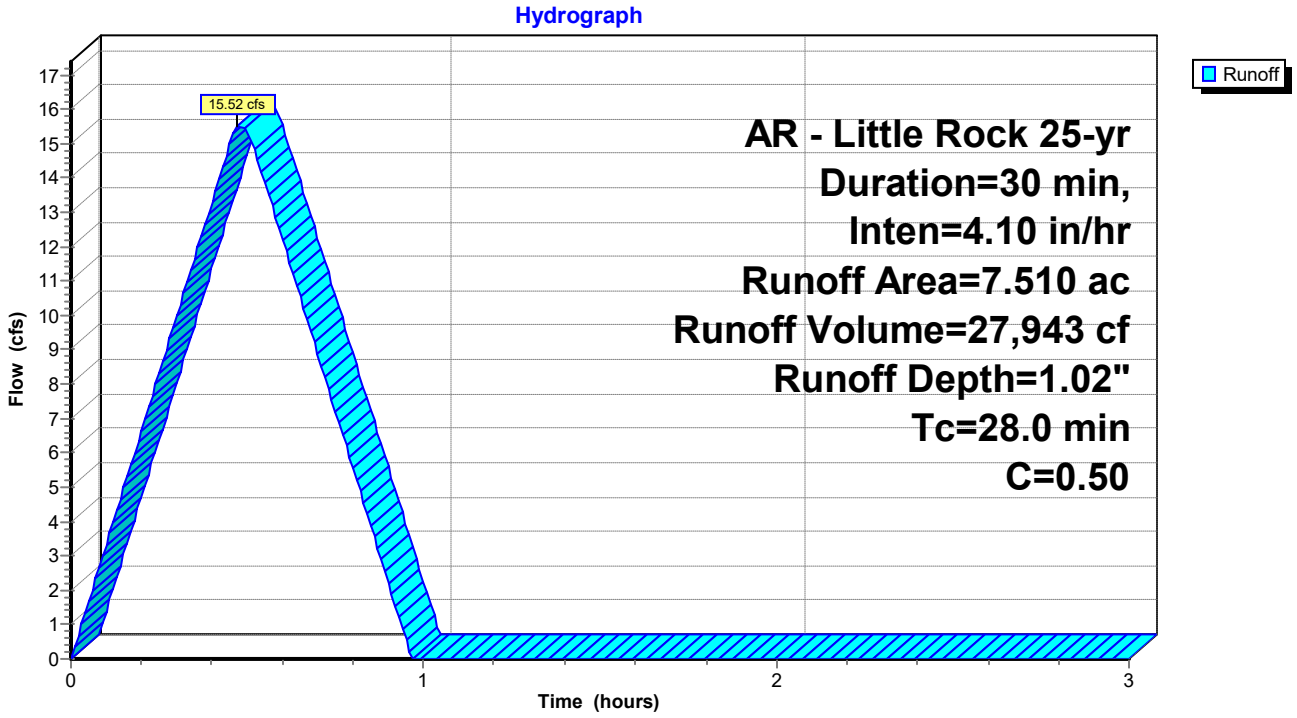
Runoff = 15.52 cfs @ 0.47 hrs, Volume= 27,943 cf, Depth= 1.02"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=30 min, Inten=4.10 in/hr

Area (ac)	C	Description
7.510	0.50	Undeveloped
7.510		100.00% Pervious Area

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

Subcatchment HIS PRE: Historic Pre-Development Discharge

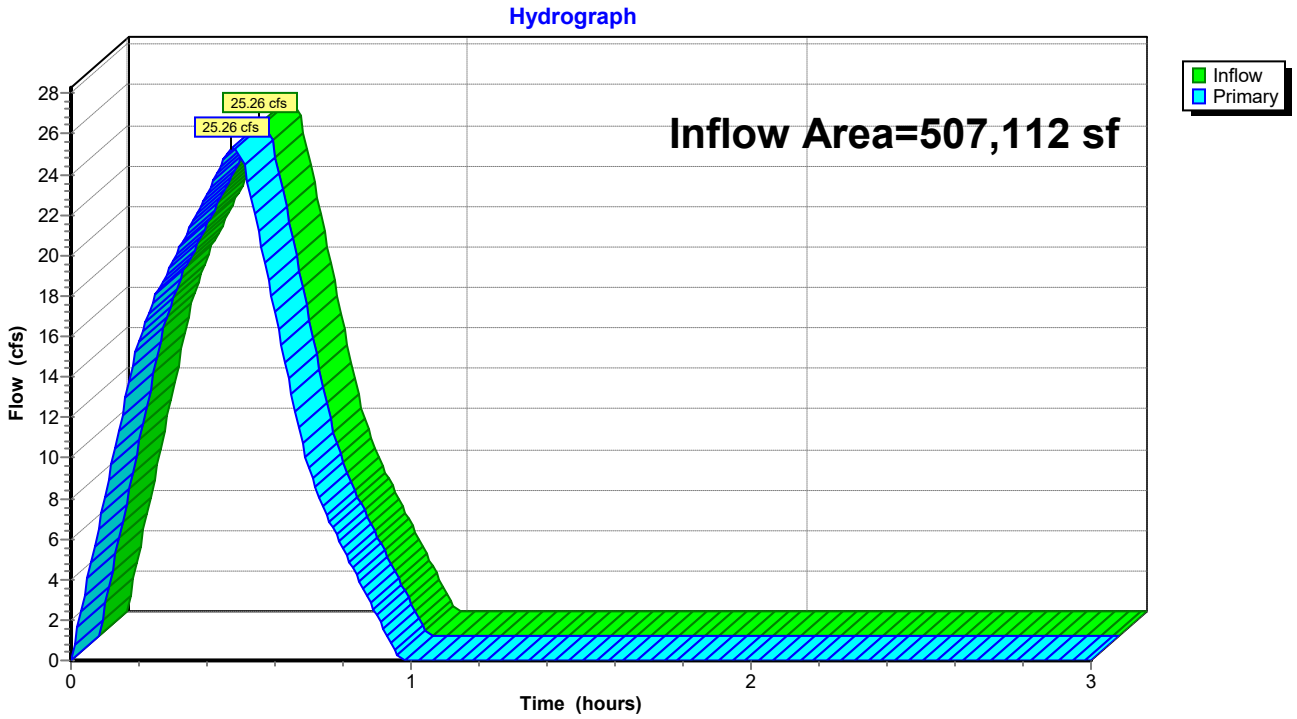


Summary for Link PRE: Pre Dev Runoff

Inflow Area = 507,112 sf, 0.00% Impervious, Inflow Depth = 1.08" for 25-yr event
Inflow = 25.26 cfs @ 0.47 hrs, Volume= 45,464 cf
Primary = 25.26 cfs @ 0.47 hrs, Volume= 45,464 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link PRE: Pre Dev Runoff



Summary for Subcatchment A1: Drainage Basin A1

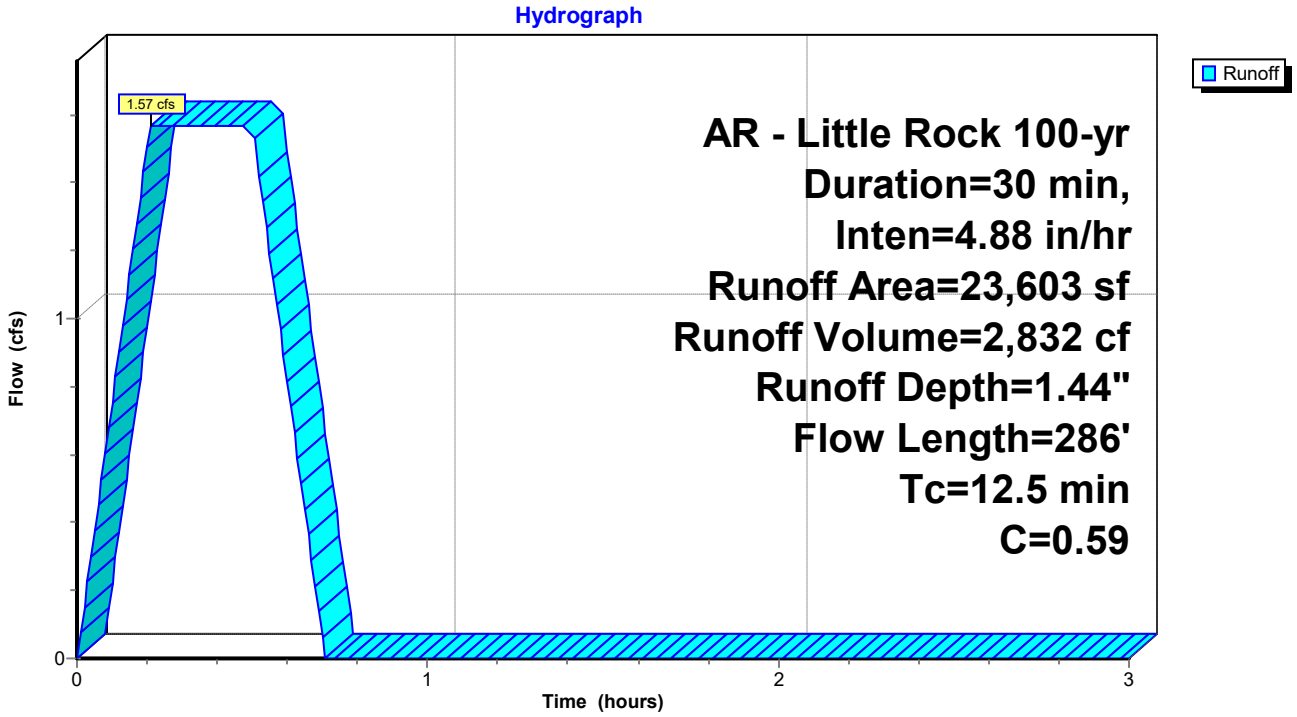
Runoff = 1.57 cfs @ 0.21 hrs, Volume= 2,832 cf, Depth= 1.44"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

Area (sf)	C	Description
20,204	0.53	Undeveloped
3,399	0.92	Paving
23,603	0.59	Weighted Average
23,603		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.1	48	0.0270	0.13		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
5.7	52	0.0380	0.15		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.3	37	0.0950	2.16		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.1	45	0.0860	5.95		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	17	0.0810	4.27		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.0	16	0.0750	5.56		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	26	0.0710	5.41		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	32	0.0570	4.85		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	13	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
12.5	286	Total			

Subcatchment A1: Drainage Basin A1



Summary for Subcatchment A2: Drainage Basin A2

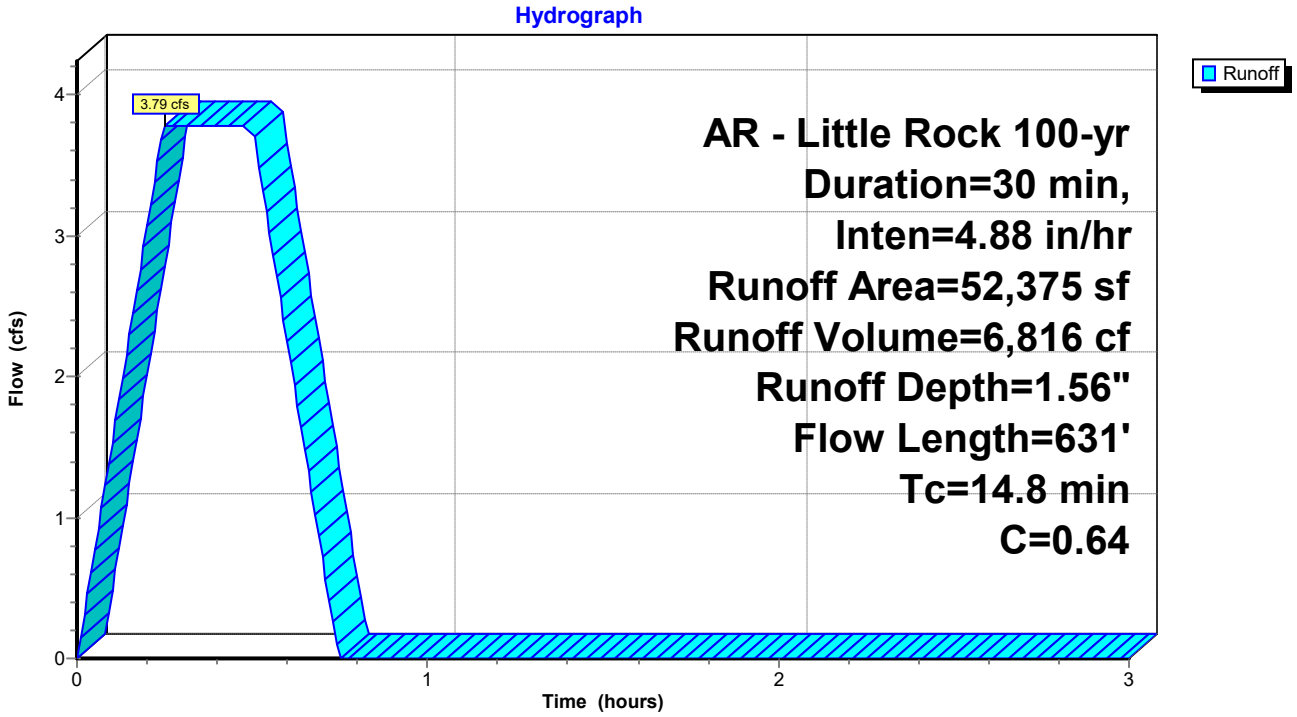
Runoff = 3.79 cfs @ 0.25 hrs, Volume= 6,816 cf, Depth= 1.56"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

Area (sf)	C	Description
37,816	0.53	Undeveloped
14,559	0.92	Paving
52,375	0.64	Weighted Average
52,375		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	36	0.0320	0.13		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
6.1	64	0.0480	0.17		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.9	76	0.0430	1.45		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.7	74	0.0710	1.87		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.2	36	0.1680	2.87		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.6	61	0.0070	1.70		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	38	0.0160	2.57		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	30	0.0190	2.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
1.3	216	0.0190	2.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
14.8	631	Total			

Subcatchment A2: Drainage Basin A2



Summary for Subcatchment A3: Drainage Basin A3

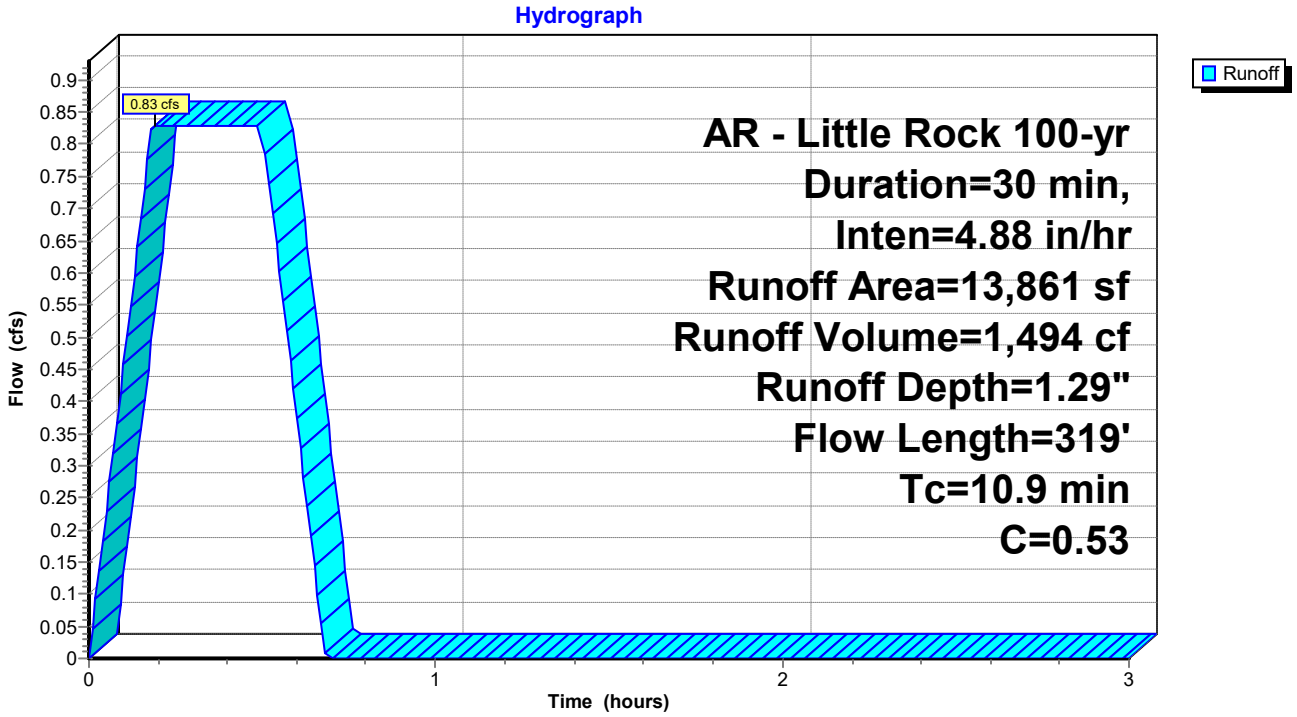
Runoff = 0.83 cfs @ 0.19 hrs, Volume= 1,494 cf, Depth= 1.29"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

Area (sf)	C	Description
13,861	0.53	Undeveloped
0	0.92	Paving
13,861	0.53	Weighted Average
13,861		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.4	100	0.0540	0.20		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.6	72	0.0790	1.97		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.2	21	0.0420	1.43		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.3	24	0.0400	1.40		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.4	102	0.0300	1.21		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
10.9	319	Total			

Subcatchment A3: Drainage Basin A3



Summary for Subcatchment A4: Drainage Basin A4

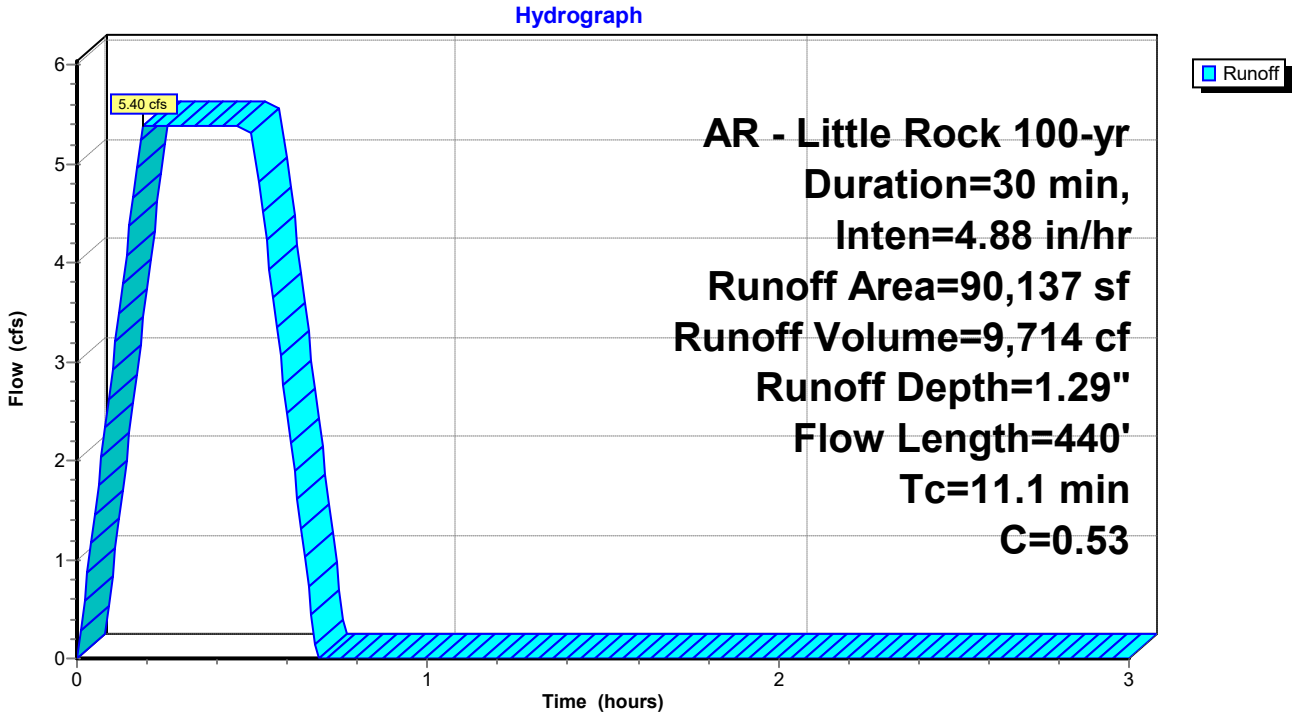
Runoff = 5.40 cfs @ 0.19 hrs, Volume= 9,714 cf, Depth= 1.29"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

Area (sf)	C	Description
90,137	0.53	Undeveloped
0	0.92	Paving
90,137	0.53	Weighted Average
90,137		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	100	0.0810	0.23		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
1.4	148	0.0680	1.83		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.2	26	0.1200	2.42		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.2	20	0.0410	1.42		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.6	51	0.0390	1.38		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.6	95	0.0210	1.01		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
11.1	440	Total			

Subcatchment A4: Drainage Basin A4



Summary for Subcatchment HIS PRE: Historic Pre-Development Discharge

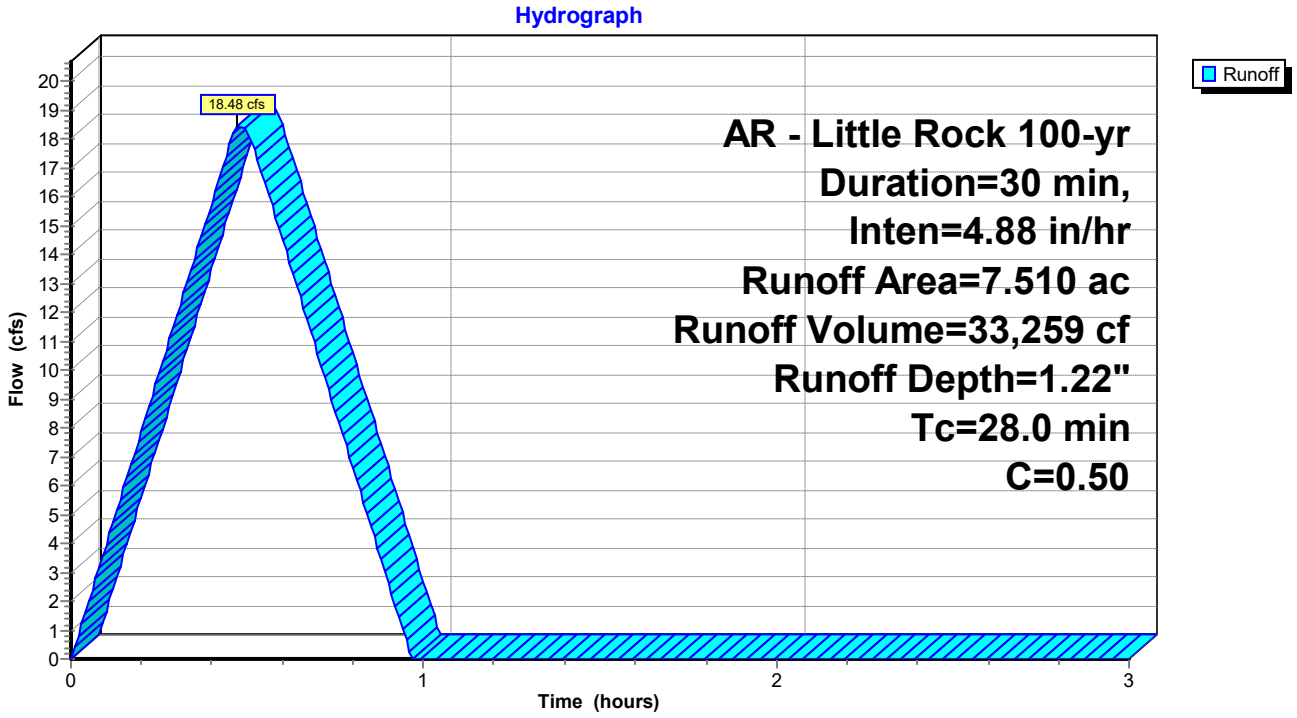
Runoff = 18.48 cfs @ 0.47 hrs, Volume= 33,259 cf, Depth= 1.22"
Routed to Link PRE : Pre Dev Runoff

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=30 min, Inten=4.88 in/hr

Area (ac)	C	Description
7.510	0.50	Undeveloped
7.510		100.00% Pervious Area

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

Subcatchment HIS PRE: Historic Pre-Development Discharge

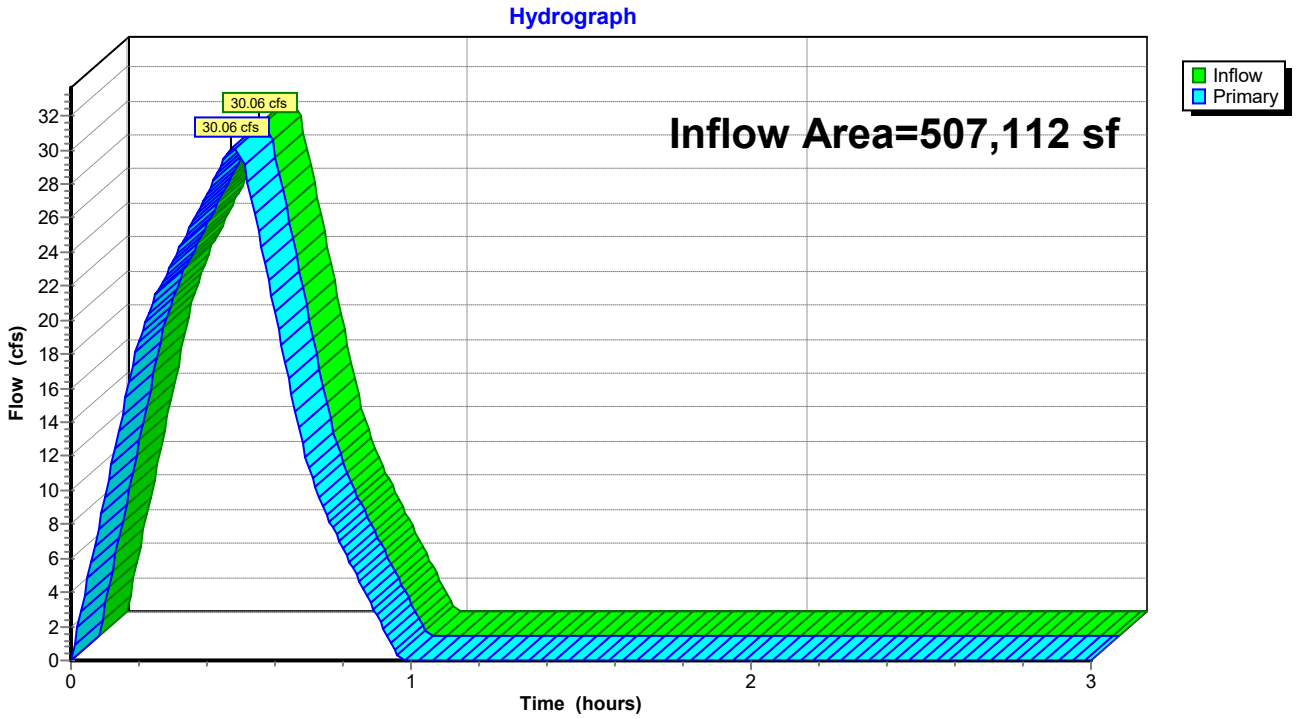


Summary for Link PRE: Pre Dev Runoff

Inflow Area = 507,112 sf, 0.00% Impervious, Inflow Depth = 1.28" for 100-yr event
Inflow = 30.06 cfs @ 0.47 hrs, Volume= 54,114 cf
Primary = 30.06 cfs @ 0.47 hrs, Volume= 54,114 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link PRE: Pre Dev Runoff



POST DEVELOPMENT SUMMARY

Time span=0.00-3.00 hrs, dt=0.01 hrs, 301 points
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment B1: Drainage Basin B1 Runoff Area=74,767 sf 0.81% Impervious Runoff Depth=0.55"
Flow Length=442' Tc=18.5 min C=0.53 Runoff=2.87 cfs 3,450 cf

Subcatchment B2: Drainage Basin B2 Runoff Area=6,762 sf 2.47% Impervious Runoff Depth=0.54"
Flow Length=61' Tc=5.8 min C=0.52 Runoff=0.26 cfs 306 cf

Subcatchment B3: Drainage Basin B3 Runoff Area=33,289 sf 43.74% Impervious Runoff Depth=0.73"
Flow Length=610' Tc=15.4 min C=0.70 Runoff=1.69 cfs 2,028 cf

Subcatchment B4: Drainage Basin B4 Runoff Area=19,493 sf 74.78% Impervious Runoff Depth=0.88"
Flow Length=249' Tc=5.0 min C=0.84 Runoff=1.19 cfs 1,425 cf

Subcatchment B5: Drainage Basin B5 Runoff Area=9,275 sf 100.00% Impervious Runoff Depth=0.99"
Tc=5.0 min C=0.95 Runoff=0.64 cfs 767 cf

Subcatchment B6: Drainage Basin B6 Runoff Area=1,887 sf 100.00% Impervious Runoff Depth=0.99"
Flow Length=507' Tc=5.0 min C=0.95 Runoff=0.13 cfs 156 cf

Subcatchment B7: Drainage Basin B7 Runoff Area=22,169 sf 29.72% Impervious Runoff Depth=0.67"
Flow Length=182' Tc=10.0 min C=0.64 Runoff=1.03 cfs 1,235 cf

Subcatchment B8: Drainage Basin B8 Runoff Area=14,440 sf 44.72% Impervious Runoff Depth=0.74"
Flow Length=127' Tc=14.0 min C=0.71 Runoff=0.74 cfs 892 cf

Subcatchment C1: Drainage Basin C1 Runoff Area=20,337 sf 69.83% Impervious Runoff Depth=0.81"
Flow Length=134' Tc=5.2 min C=0.78 Runoff=1.15 cfs 1,380 cf

Subcatchment C10: Drainage Basin C10 Runoff Area=5,408 sf 77.35% Impervious Runoff Depth=0.87"
Flow Length=582' Tc=5.0 min C=0.83 Runoff=0.33 cfs 391 cf

Subcatchment C11: Drainage Basin C11 Runoff Area=6,183 sf 53.49% Impervious Runoff Depth=0.72"
Flow Length=633' Tc=5.0 min C=0.69 Runoff=0.31 cfs 371 cf

Subcatchment C12: Drainage Basin C12 Runoff Area=25,658 sf 71.87% Impervious Runoff Depth=0.84"
Flow Length=880' Tc=5.0 min C=0.80 Runoff=1.49 cfs 1,786 cf

Subcatchment C13: Drainage Basin C13 Runoff Area=7,946 sf 80.39% Impervious Runoff Depth=0.88"
Flow Length=777' Tc=5.0 min C=0.84 Runoff=0.48 cfs 581 cf

Subcatchment C14: Drainage Basin C14 Runoff Area=22,025 sf 72.18% Impervious Runoff Depth=0.84"
Flow Length=492' Tc=15.9 min C=0.80 Runoff=1.28 cfs 1,534 cf

Subcatchment C15: Drainage Basin C15 Runoff Area=13,450 sf 100.00% Impervious Runoff Depth=0.99"
Flow Length=415' Tc=5.0 min C=0.95 Runoff=0.93 cfs 1,112 cf

Subcatchment C16: Drainage Basin C16 Runoff Area=22,077 sf 29.95% Impervious Runoff Depth=0.58"
Flow Length=714' Tc=5.0 min C=0.56 Runoff=0.90 cfs 1,076 cf

Subcatchment C17: Drainage Basin C17 Runoff Area=56,749 sf 0.00% Impervious Runoff Depth=0.42"
Flow Length=298' Tc=9.6 min C=0.40 Runoff=1.65 cfs 1,976 cf

Subcatchment C18: Drainage Basin C18 Runoff Area=22,785 sf 43.77% Impervious Runoff Depth=0.67"
Flow Length=520' Tc=5.0 min C=0.64 Runoff=1.06 cfs 1,269 cf

Subcatchment C19: Drainage Basin C19 Runoff Area=18,009 sf 0.00% Impervious Runoff Depth=0.42"
Flow Length=393' Tc=7.2 min C=0.40 Runoff=0.52 cfs 627 cf

Subcatchment C2: Drainage Basin C2 Runoff Area=34,339 sf 66.87% Impervious Runoff Depth=0.80"
Flow Length=695' Tc=5.0 min C=0.77 Runoff=1.92 cfs 2,301 cf

Subcatchment C20: Drainage Basin C20 Runoff Area=30,789 sf 0.00% Impervious Runoff Depth=0.42"
Flow Length=205' Tc=7.9 min C=0.40 Runoff=0.89 cfs 1,072 cf

Subcatchment C3: Drainage Basin C3 Runoff Area=3,480 sf 100.00% Impervious Runoff Depth=0.99"
Flow Length=612' Tc=5.0 min C=0.95 Runoff=0.24 cfs 288 cf

Subcatchment C4: Drainage Basin C4 Runoff Area=11,375 sf 28.53% Impervious Runoff Depth=0.58"
Flow Length=415' Tc=5.0 min C=0.56 Runoff=0.46 cfs 554 cf

Subcatchment C5: Drainage Basin C5 Runoff Area=6,695 sf 75.59% Impervious Runoff Depth=0.86"
Flow Length=176' Tc=5.6 min C=0.82 Runoff=0.40 cfs 478 cf

Subcatchment C6: Drainage Basin C6 Runoff Area=2,835 sf 100.00% Impervious Runoff Depth=0.99"
Flow Length=554' Tc=5.0 min C=0.95 Runoff=0.20 cfs 234 cf

Subcatchment C7: Drainage Basin C7 Runoff Area=1,597 sf 100.00% Impervious Runoff Depth=0.99"
Flow Length=531' Tc=5.0 min C=0.95 Runoff=0.11 cfs 132 cf

Subcatchment C8: Drainage Basin C8 Runoff Area=1,548 sf 100.00% Impervious Runoff Depth=0.99"
Flow Length=527' Tc=5.0 min C=0.95 Runoff=0.11 cfs 128 cf

Subcatchment C9: Drainage Basin C9 Runoff Area=13,817 sf 67.75% Impervious Runoff Depth=0.80"
Flow Length=709' Tc=5.0 min C=0.77 Runoff=0.77 cfs 926 cf

Time span=0.00-3.00 hrs, dt=0.01 hrs, 301 points
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment B1: Drainage Basin B1 Runoff Area=74,767 sf 0.81% Impervious Runoff Depth=0.66"
Flow Length=442' Tc=18.5 min C=0.53 Runoff=3.42 cfs 4,108 cf

Subcatchment B2: Drainage Basin B2 Runoff Area=6,762 sf 2.47% Impervious Runoff Depth=0.65"
Flow Length=61' Tc=5.8 min C=0.52 Runoff=0.30 cfs 364 cf

Subcatchment B3: Drainage Basin B3 Runoff Area=33,289 sf 43.74% Impervious Runoff Depth=0.87"
Flow Length=610' Tc=15.4 min C=0.70 Runoff=2.01 cfs 2,415 cf

Subcatchment B4: Drainage Basin B4 Runoff Area=19,493 sf 74.78% Impervious Runoff Depth=1.04"
Flow Length=249' Tc=5.0 min C=0.84 Runoff=1.41 cfs 1,697 cf

Subcatchment B5: Drainage Basin B5 Runoff Area=9,275 sf 100.00% Impervious Runoff Depth=1.18"
Tc=5.0 min C=0.95 Runoff=0.76 cfs 913 cf

Subcatchment B6: Drainage Basin B6 Runoff Area=1,887 sf 100.00% Impervious Runoff Depth=1.18"
Flow Length=507' Tc=5.0 min C=0.95 Runoff=0.15 cfs 186 cf

Subcatchment B7: Drainage Basin B7 Runoff Area=22,169 sf 29.72% Impervious Runoff Depth=0.80"
Flow Length=182' Tc=10.0 min C=0.64 Runoff=1.23 cfs 1,470 cf

Subcatchment B8: Drainage Basin B8 Runoff Area=14,440 sf 44.72% Impervious Runoff Depth=0.88"
Flow Length=127' Tc=14.0 min C=0.71 Runoff=0.89 cfs 1,063 cf

Subcatchment C1: Drainage Basin C1 Runoff Area=20,337 sf 69.83% Impervious Runoff Depth=0.97"
Flow Length=134' Tc=5.2 min C=0.78 Runoff=1.37 cfs 1,643 cf

Subcatchment C10: Drainage Basin C10 Runoff Area=5,408 sf 77.35% Impervious Runoff Depth=1.03"
Flow Length=582' Tc=5.0 min C=0.83 Runoff=0.39 cfs 465 cf

Subcatchment C11: Drainage Basin C11 Runoff Area=6,183 sf 53.49% Impervious Runoff Depth=0.86"
Flow Length=633' Tc=5.0 min C=0.69 Runoff=0.37 cfs 442 cf

Subcatchment C12: Drainage Basin C12 Runoff Area=25,658 sf 71.87% Impervious Runoff Depth=0.99"
Flow Length=880' Tc=5.0 min C=0.80 Runoff=1.77 cfs 2,127 cf

Subcatchment C13: Drainage Basin C13 Runoff Area=7,946 sf 80.39% Impervious Runoff Depth=1.04"
Flow Length=777' Tc=5.0 min C=0.84 Runoff=0.58 cfs 692 cf

Subcatchment C14: Drainage Basin C14 Runoff Area=22,025 sf 72.18% Impervious Runoff Depth=1.00"
Flow Length=492' Tc=15.9 min C=0.80 Runoff=1.52 cfs 1,826 cf

Subcatchment C15: Drainage Basin C15 Runoff Area=13,450 sf 100.00% Impervious Runoff Depth=1.18"
Flow Length=415' Tc=5.0 min C=0.95 Runoff=1.10 cfs 1,324 cf

Subcatchment C16: Drainage Basin C16 Runoff Area=22,077 sf 29.95% Impervious Runoff Depth=0.70"
Flow Length=714' Tc=5.0 min C=0.56 Runoff=1.07 cfs 1,281 cf

Subcatchment C17: Drainage Basin C17 Runoff Area=56,749 sf 0.00% Impervious Runoff Depth=0.50"
Flow Length=298' Tc=9.6 min C=0.40 Runoff=1.96 cfs 2,353 cf

Subcatchment C18: Drainage Basin C18 Runoff Area=22,785 sf 43.77% Impervious Runoff Depth=0.80"
Flow Length=520' Tc=5.0 min C=0.64 Runoff=1.26 cfs 1,511 cf

Subcatchment C19: Drainage Basin C19 Runoff Area=18,009 sf 0.00% Impervious Runoff Depth=0.50"
Flow Length=393' Tc=7.2 min C=0.40 Runoff=0.62 cfs 747 cf

Subcatchment C2: Drainage Basin C2 Runoff Area=34,339 sf 66.87% Impervious Runoff Depth=0.96"
Flow Length=695' Tc=5.0 min C=0.77 Runoff=2.28 cfs 2,740 cf

Subcatchment C20: Drainage Basin C20 Runoff Area=30,789 sf 0.00% Impervious Runoff Depth=0.50"
Flow Length=205' Tc=7.9 min C=0.40 Runoff=1.06 cfs 1,277 cf

Subcatchment C3: Drainage Basin C3 Runoff Area=3,480 sf 100.00% Impervious Runoff Depth=1.18"
Flow Length=612' Tc=5.0 min C=0.95 Runoff=0.29 cfs 343 cf

Subcatchment C4: Drainage Basin C4 Runoff Area=11,375 sf 28.53% Impervious Runoff Depth=0.70"
Flow Length=415' Tc=5.0 min C=0.56 Runoff=0.55 cfs 660 cf

Subcatchment C5: Drainage Basin C5 Runoff Area=6,695 sf 75.59% Impervious Runoff Depth=1.02"
Flow Length=176' Tc=5.6 min C=0.82 Runoff=0.47 cfs 569 cf

Subcatchment C6: Drainage Basin C6 Runoff Area=2,835 sf 100.00% Impervious Runoff Depth=1.18"
Flow Length=554' Tc=5.0 min C=0.95 Runoff=0.23 cfs 279 cf

Subcatchment C7: Drainage Basin C7 Runoff Area=1,597 sf 100.00% Impervious Runoff Depth=1.18"
Flow Length=531' Tc=5.0 min C=0.95 Runoff=0.13 cfs 157 cf

Subcatchment C8: Drainage Basin C8 Runoff Area=1,548 sf 100.00% Impervious Runoff Depth=1.18"
Flow Length=527' Tc=5.0 min C=0.95 Runoff=0.13 cfs 152 cf

Subcatchment C9: Drainage Basin C9 Runoff Area=13,817 sf 67.75% Impervious Runoff Depth=0.96"
Flow Length=709' Tc=5.0 min C=0.77 Runoff=0.92 cfs 1,103 cf

Time span=0.00-3.00 hrs, dt=0.01 hrs, 301 points
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment B1: Drainage Basin B1 Runoff Area=74,767 sf 0.81% Impervious Runoff Depth=0.75"
Flow Length=442' Tc=18.5 min C=0.53 Runoff=3.87 cfs 4,644 cf

Subcatchment B2: Drainage Basin B2 Runoff Area=6,762 sf 2.47% Impervious Runoff Depth=0.73"
Flow Length=61' Tc=5.8 min C=0.52 Runoff=0.34 cfs 412 cf

Subcatchment B3: Drainage Basin B3 Runoff Area=33,289 sf 43.74% Impervious Runoff Depth=0.98"
Flow Length=610' Tc=15.4 min C=0.70 Runoff=2.28 cfs 2,730 cf

Subcatchment B4: Drainage Basin B4 Runoff Area=19,493 sf 74.78% Impervious Runoff Depth=1.18"
Flow Length=249' Tc=5.0 min C=0.84 Runoff=1.60 cfs 1,918 cf

Subcatchment B5: Drainage Basin B5 Runoff Area=9,275 sf 100.00% Impervious Runoff Depth=1.34"
Tc=5.0 min C=0.95 Runoff=0.86 cfs 1,032 cf

Subcatchment B6: Drainage Basin B6 Runoff Area=1,887 sf 100.00% Impervious Runoff Depth=1.34"
Flow Length=507' Tc=5.0 min C=0.95 Runoff=0.18 cfs 210 cf

Subcatchment B7: Drainage Basin B7 Runoff Area=22,169 sf 29.72% Impervious Runoff Depth=0.90"
Flow Length=182' Tc=10.0 min C=0.64 Runoff=1.39 cfs 1,662 cf

Subcatchment B8: Drainage Basin B8 Runoff Area=14,440 sf 44.72% Impervious Runoff Depth=1.00"
Flow Length=127' Tc=14.0 min C=0.71 Runoff=1.00 cfs 1,201 cf

Subcatchment C1: Drainage Basin C1 Runoff Area=20,337 sf 69.83% Impervious Runoff Depth=1.10"
Flow Length=134' Tc=5.2 min C=0.78 Runoff=1.55 cfs 1,858 cf

Subcatchment C10: Drainage Basin C10 Runoff Area=5,408 sf 77.35% Impervious Runoff Depth=1.17"
Flow Length=582' Tc=5.0 min C=0.83 Runoff=0.44 cfs 526 cf

Subcatchment C11: Drainage Basin C11 Runoff Area=6,183 sf 53.49% Impervious Runoff Depth=0.97"
Flow Length=633' Tc=5.0 min C=0.69 Runoff=0.42 cfs 500 cf

Subcatchment C12: Drainage Basin C12 Runoff Area=25,658 sf 71.87% Impervious Runoff Depth=1.12"
Flow Length=880' Tc=5.0 min C=0.80 Runoff=2.00 cfs 2,405 cf

Subcatchment C13: Drainage Basin C13 Runoff Area=7,946 sf 80.39% Impervious Runoff Depth=1.18"
Flow Length=777' Tc=5.0 min C=0.84 Runoff=0.65 cfs 782 cf

Subcatchment C14: Drainage Basin C14 Runoff Area=22,025 sf 72.18% Impervious Runoff Depth=1.12"
Flow Length=492' Tc=15.9 min C=0.80 Runoff=1.72 cfs 2,065 cf

Subcatchment C15: Drainage Basin C15 Runoff Area=13,450 sf 100.00% Impervious Runoff Depth=1.34"
Flow Length=415' Tc=5.0 min C=0.95 Runoff=1.25 cfs 1,497 cf

Subcatchment C16: Drainage Basin C16 Runoff Area=22,077 sf 29.95% Impervious Runoff Depth=0.79"
Flow Length=714' Tc=5.0 min C=0.56 Runoff=1.21 cfs 1,448 cf

Subcatchment C17: Drainage Basin C17 Runoff Area=56,749 sf 0.00% Impervious Runoff Depth=0.56"
Flow Length=298' Tc=9.6 min C=0.40 Runoff=2.22 cfs 2,660 cf

Subcatchment C18: Drainage Basin C18 Runoff Area=22,785 sf 43.77% Impervious Runoff Depth=0.90"
Flow Length=520' Tc=5.0 min C=0.64 Runoff=1.42 cfs 1,708 cf

Subcatchment C19: Drainage Basin C19 Runoff Area=18,009 sf 0.00% Impervious Runoff Depth=0.56"
Flow Length=393' Tc=7.2 min C=0.40 Runoff=0.70 cfs 844 cf

Subcatchment C2: Drainage Basin C2 Runoff Area=34,339 sf 66.87% Impervious Runoff Depth=1.08"
Flow Length=695' Tc=5.0 min C=0.77 Runoff=2.58 cfs 3,098 cf

Subcatchment C20: Drainage Basin C20 Runoff Area=30,789 sf 0.00% Impervious Runoff Depth=0.56"
Flow Length=205' Tc=7.9 min C=0.40 Runoff=1.20 cfs 1,443 cf

Subcatchment C3: Drainage Basin C3 Runoff Area=3,480 sf 100.00% Impervious Runoff Depth=1.34"
Flow Length=612' Tc=5.0 min C=0.95 Runoff=0.32 cfs 387 cf

Subcatchment C4: Drainage Basin C4 Runoff Area=11,375 sf 28.53% Impervious Runoff Depth=0.79"
Flow Length=415' Tc=5.0 min C=0.56 Runoff=0.62 cfs 746 cf

Subcatchment C5: Drainage Basin C5 Runoff Area=6,695 sf 75.59% Impervious Runoff Depth=1.15"
Flow Length=176' Tc=5.6 min C=0.82 Runoff=0.54 cfs 643 cf

Subcatchment C6: Drainage Basin C6 Runoff Area=2,835 sf 100.00% Impervious Runoff Depth=1.34"
Flow Length=554' Tc=5.0 min C=0.95 Runoff=0.26 cfs 316 cf

Subcatchment C7: Drainage Basin C7 Runoff Area=1,597 sf 100.00% Impervious Runoff Depth=1.34"
Flow Length=531' Tc=5.0 min C=0.95 Runoff=0.15 cfs 178 cf

Subcatchment C8: Drainage Basin C8 Runoff Area=1,548 sf 100.00% Impervious Runoff Depth=1.34"
Flow Length=527' Tc=5.0 min C=0.95 Runoff=0.14 cfs 172 cf

Subcatchment C9: Drainage Basin C9 Runoff Area=13,817 sf 67.75% Impervious Runoff Depth=1.08"
Flow Length=709' Tc=5.0 min C=0.77 Runoff=1.04 cfs 1,246 cf

Time span=0.00-3.00 hrs, dt=0.01 hrs, 301 points
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment B1: Drainage Basin B1 Runoff Area=74,767 sf 0.81% Impervious Runoff Depth=0.85"
Flow Length=442' Tc=18.5 min C=0.53 Runoff=4.44 cfs 5,324 cf

Subcatchment B2: Drainage Basin B2 Runoff Area=6,762 sf 2.47% Impervious Runoff Depth=0.84"
Flow Length=61' Tc=5.8 min C=0.52 Runoff=0.39 cfs 472 cf

Subcatchment B3: Drainage Basin B3 Runoff Area=33,289 sf 43.74% Impervious Runoff Depth=1.13"
Flow Length=610' Tc=15.4 min C=0.70 Runoff=2.61 cfs 3,130 cf

Subcatchment B4: Drainage Basin B4 Runoff Area=19,493 sf 74.78% Impervious Runoff Depth=1.35"
Flow Length=249' Tc=5.0 min C=0.84 Runoff=1.83 cfs 2,199 cf

Subcatchment B5: Drainage Basin B5 Runoff Area=9,275 sf 100.00% Impervious Runoff Depth=1.53"
Tc=5.0 min C=0.95 Runoff=0.99 cfs 1,184 cf

Subcatchment B6: Drainage Basin B6 Runoff Area=1,887 sf 100.00% Impervious Runoff Depth=1.53"
Flow Length=507' Tc=5.0 min C=0.95 Runoff=0.20 cfs 241 cf

Subcatchment B7: Drainage Basin B7 Runoff Area=22,169 sf 29.72% Impervious Runoff Depth=1.03"
Flow Length=182' Tc=10.0 min C=0.64 Runoff=1.59 cfs 1,906 cf

Subcatchment B8: Drainage Basin B8 Runoff Area=14,440 sf 44.72% Impervious Runoff Depth=1.14"
Flow Length=127' Tc=14.0 min C=0.71 Runoff=1.15 cfs 1,377 cf

Subcatchment C1: Drainage Basin C1 Runoff Area=20,337 sf 69.83% Impervious Runoff Depth=1.26"
Flow Length=134' Tc=5.2 min C=0.78 Runoff=1.78 cfs 2,130 cf

Subcatchment C10: Drainage Basin C10 Runoff Area=5,408 sf 77.35% Impervious Runoff Depth=1.34"
Flow Length=582' Tc=5.0 min C=0.83 Runoff=0.50 cfs 603 cf

Subcatchment C11: Drainage Basin C11 Runoff Area=6,183 sf 53.49% Impervious Runoff Depth=1.11"
Flow Length=633' Tc=5.0 min C=0.69 Runoff=0.48 cfs 573 cf

Subcatchment C12: Drainage Basin C12 Runoff Area=25,658 sf 71.87% Impervious Runoff Depth=1.29"
Flow Length=880' Tc=5.0 min C=0.80 Runoff=2.30 cfs 2,757 cf

Subcatchment C13: Drainage Basin C13 Runoff Area=7,946 sf 80.39% Impervious Runoff Depth=1.35"
Flow Length=777' Tc=5.0 min C=0.84 Runoff=0.75 cfs 897 cf

Subcatchment C14: Drainage Basin C14 Runoff Area=22,025 sf 72.18% Impervious Runoff Depth=1.29"
Flow Length=492' Tc=15.9 min C=0.80 Runoff=1.97 cfs 2,367 cf

Subcatchment C15: Drainage Basin C15 Runoff Area=13,450 sf 100.00% Impervious Runoff Depth=1.53"
Flow Length=415' Tc=5.0 min C=0.95 Runoff=1.43 cfs 1,716 cf

Subcatchment C16: Drainage Basin C16 Runoff Area=22,077 sf 29.95% Impervious Runoff Depth=0.90"
Flow Length=714' Tc=5.0 min C=0.56 Runoff=1.38 cfs 1,661 cf

Subcatchment C17: Drainage Basin C17 Runoff Area=56,749 sf 0.00% Impervious Runoff Depth=0.65"
Flow Length=298' Tc=9.6 min C=0.40 Runoff=2.54 cfs 3,050 cf

Subcatchment C18: Drainage Basin C18 Runoff Area=22,785 sf 43.77% Impervious Runoff Depth=1.03"
Flow Length=520' Tc=5.0 min C=0.64 Runoff=1.63 cfs 1,959 cf

Subcatchment C19: Drainage Basin C19 Runoff Area=18,009 sf 0.00% Impervious Runoff Depth=0.65"
Flow Length=393' Tc=7.2 min C=0.40 Runoff=0.81 cfs 968 cf

Subcatchment C2: Drainage Basin C2 Runoff Area=34,339 sf 66.87% Impervious Runoff Depth=1.24"
Flow Length=695' Tc=5.0 min C=0.77 Runoff=2.96 cfs 3,552 cf

Subcatchment C20: Drainage Basin C20 Runoff Area=30,789 sf 0.00% Impervious Runoff Depth=0.64"
Flow Length=205' Tc=7.9 min C=0.40 Runoff=1.38 cfs 1,655 cf

Subcatchment C3: Drainage Basin C3 Runoff Area=3,480 sf 100.00% Impervious Runoff Depth=1.53"
Flow Length=612' Tc=5.0 min C=0.95 Runoff=0.37 cfs 444 cf

Subcatchment C4: Drainage Basin C4 Runoff Area=11,375 sf 28.53% Impervious Runoff Depth=0.90"
Flow Length=415' Tc=5.0 min C=0.56 Runoff=0.71 cfs 856 cf

Subcatchment C5: Drainage Basin C5 Runoff Area=6,695 sf 75.59% Impervious Runoff Depth=1.32"
Flow Length=176' Tc=5.6 min C=0.82 Runoff=0.61 cfs 737 cf

Subcatchment C6: Drainage Basin C6 Runoff Area=2,835 sf 100.00% Impervious Runoff Depth=1.53"
Flow Length=554' Tc=5.0 min C=0.95 Runoff=0.30 cfs 362 cf

Subcatchment C7: Drainage Basin C7 Runoff Area=1,597 sf 100.00% Impervious Runoff Depth=1.53"
Flow Length=531' Tc=5.0 min C=0.95 Runoff=0.17 cfs 204 cf

Subcatchment C8: Drainage Basin C8 Runoff Area=1,548 sf 100.00% Impervious Runoff Depth=1.53"
Flow Length=527' Tc=5.0 min C=0.95 Runoff=0.16 cfs 198 cf

Subcatchment C9: Drainage Basin C9 Runoff Area=13,817 sf 67.75% Impervious Runoff Depth=1.24"
Flow Length=709' Tc=5.0 min C=0.77 Runoff=1.19 cfs 1,429 cf

Time span=0.00-3.00 hrs, dt=0.01 hrs, 301 points
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment B1: Drainage Basin B1 Runoff Area=74,767 sf 0.81% Impervious Runoff Depth=1.02"
Flow Length=442' Tc=18.5 min C=0.53 Runoff=5.30 cfs 6,363 cf

Subcatchment B2: Drainage Basin B2 Runoff Area=6,762 sf 2.47% Impervious Runoff Depth=1.00"
Flow Length=61' Tc=5.8 min C=0.52 Runoff=0.47 cfs 564 cf

Subcatchment B3: Drainage Basin B3 Runoff Area=33,289 sf 43.74% Impervious Runoff Depth=1.35"
Flow Length=610' Tc=15.4 min C=0.70 Runoff=3.12 cfs 3,741 cf

Subcatchment B4: Drainage Basin B4 Runoff Area=19,493 sf 74.78% Impervious Runoff Depth=1.62"
Flow Length=249' Tc=5.0 min C=0.84 Runoff=2.19 cfs 2,628 cf

Subcatchment B5: Drainage Basin B5 Runoff Area=9,275 sf 100.00% Impervious Runoff Depth=1.83"
Tc=5.0 min C=0.95 Runoff=1.18 cfs 1,414 cf

Subcatchment B6: Drainage Basin B6 Runoff Area=1,887 sf 100.00% Impervious Runoff Depth=1.83"
Flow Length=507' Tc=5.0 min C=0.95 Runoff=0.24 cfs 288 cf

Subcatchment B7: Drainage Basin B7 Runoff Area=22,169 sf 29.72% Impervious Runoff Depth=1.23"
Flow Length=182' Tc=10.0 min C=0.64 Runoff=1.90 cfs 2,278 cf

Subcatchment B8: Drainage Basin B8 Runoff Area=14,440 sf 44.72% Impervious Runoff Depth=1.37"
Flow Length=127' Tc=14.0 min C=0.71 Runoff=1.37 cfs 1,646 cf

Subcatchment C1: Drainage Basin C1 Runoff Area=20,337 sf 69.83% Impervious Runoff Depth=1.50"
Flow Length=134' Tc=5.2 min C=0.78 Runoff=2.12 cfs 2,545 cf

Subcatchment C10: Drainage Basin C10 Runoff Area=5,408 sf 77.35% Impervious Runoff Depth=1.60"
Flow Length=582' Tc=5.0 min C=0.83 Runoff=0.60 cfs 721 cf

Subcatchment C11: Drainage Basin C11 Runoff Area=6,183 sf 53.49% Impervious Runoff Depth=1.33"
Flow Length=633' Tc=5.0 min C=0.69 Runoff=0.57 cfs 685 cf

Subcatchment C12: Drainage Basin C12 Runoff Area=25,658 sf 71.87% Impervious Runoff Depth=1.54"
Flow Length=880' Tc=5.0 min C=0.80 Runoff=2.75 cfs 3,295 cf

Subcatchment C13: Drainage Basin C13 Runoff Area=7,946 sf 80.39% Impervious Runoff Depth=1.62"
Flow Length=777' Tc=5.0 min C=0.84 Runoff=0.89 cfs 1,071 cf

Subcatchment C14: Drainage Basin C14 Runoff Area=22,025 sf 72.18% Impervious Runoff Depth=1.54"
Flow Length=492' Tc=15.9 min C=0.80 Runoff=2.36 cfs 2,829 cf

Subcatchment C15: Drainage Basin C15 Runoff Area=13,450 sf 100.00% Impervious Runoff Depth=1.83"
Flow Length=415' Tc=5.0 min C=0.95 Runoff=1.71 cfs 2,051 cf

Subcatchment C16: Drainage Basin C16 Runoff Area=22,077 sf 29.95% Impervious Runoff Depth=1.08"
Flow Length=714' Tc=5.0 min C=0.56 Runoff=1.65 cfs 1,985 cf

Subcatchment C17: Drainage Basin C17 Runoff Area=56,749 sf 0.00% Impervious Runoff Depth=0.77"
Flow Length=298' Tc=9.6 min C=0.40 Runoff=3.04 cfs 3,645 cf

Subcatchment C18: Drainage Basin C18 Runoff Area=22,785 sf 43.77% Impervious Runoff Depth=1.23"
Flow Length=520' Tc=5.0 min C=0.64 Runoff=1.95 cfs 2,341 cf

Subcatchment C19: Drainage Basin C19 Runoff Area=18,009 sf 0.00% Impervious Runoff Depth=0.77"
Flow Length=393' Tc=7.2 min C=0.40 Runoff=0.96 cfs 1,157 cf

Subcatchment C2: Drainage Basin C2 Runoff Area=34,339 sf 66.87% Impervious Runoff Depth=1.48"
Flow Length=695' Tc=5.0 min C=0.77 Runoff=3.54 cfs 4,244 cf

Subcatchment C20: Drainage Basin C20 Runoff Area=30,789 sf 0.00% Impervious Runoff Depth=0.77"
Flow Length=205' Tc=7.9 min C=0.40 Runoff=1.65 cfs 1,978 cf

Subcatchment C3: Drainage Basin C3 Runoff Area=3,480 sf 100.00% Impervious Runoff Depth=1.83"
Flow Length=612' Tc=5.0 min C=0.95 Runoff=0.44 cfs 531 cf

Subcatchment C4: Drainage Basin C4 Runoff Area=11,375 sf 28.53% Impervious Runoff Depth=1.08"
Flow Length=415' Tc=5.0 min C=0.56 Runoff=0.85 cfs 1,023 cf

Subcatchment C5: Drainage Basin C5 Runoff Area=6,695 sf 75.59% Impervious Runoff Depth=1.58"
Flow Length=176' Tc=5.6 min C=0.82 Runoff=0.73 cfs 881 cf

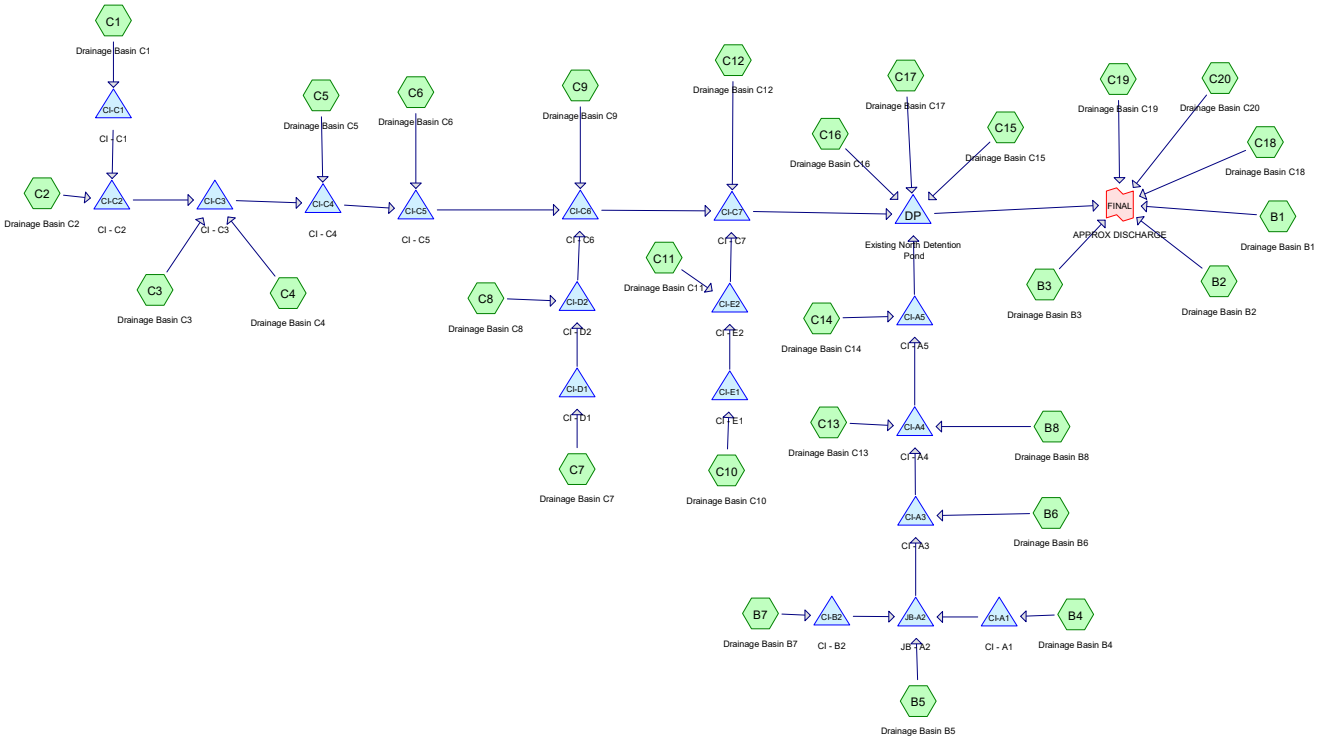
Subcatchment C6: Drainage Basin C6 Runoff Area=2,835 sf 100.00% Impervious Runoff Depth=1.83"
Flow Length=554' Tc=5.0 min C=0.95 Runoff=0.36 cfs 432 cf

Subcatchment C7: Drainage Basin C7 Runoff Area=1,597 sf 100.00% Impervious Runoff Depth=1.83"
Flow Length=531' Tc=5.0 min C=0.95 Runoff=0.20 cfs 244 cf

Subcatchment C8: Drainage Basin C8 Runoff Area=1,548 sf 100.00% Impervious Runoff Depth=1.83"
Flow Length=527' Tc=5.0 min C=0.95 Runoff=0.20 cfs 236 cf

Subcatchment C9: Drainage Basin C9 Runoff Area=13,817 sf 67.75% Impervious Runoff Depth=1.48"
Flow Length=709' Tc=5.0 min C=0.77 Runoff=1.42 cfs 1,708 cf

POST DEVELOPMENT HYDROGRAPHS



Subcat Reach Pond Link

Routing Diagram for Goddard

Prepared by Phillip Lewis Engineering, Printed 3/25/2026

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Summary for Subcatchment B1: Drainage Basin B1

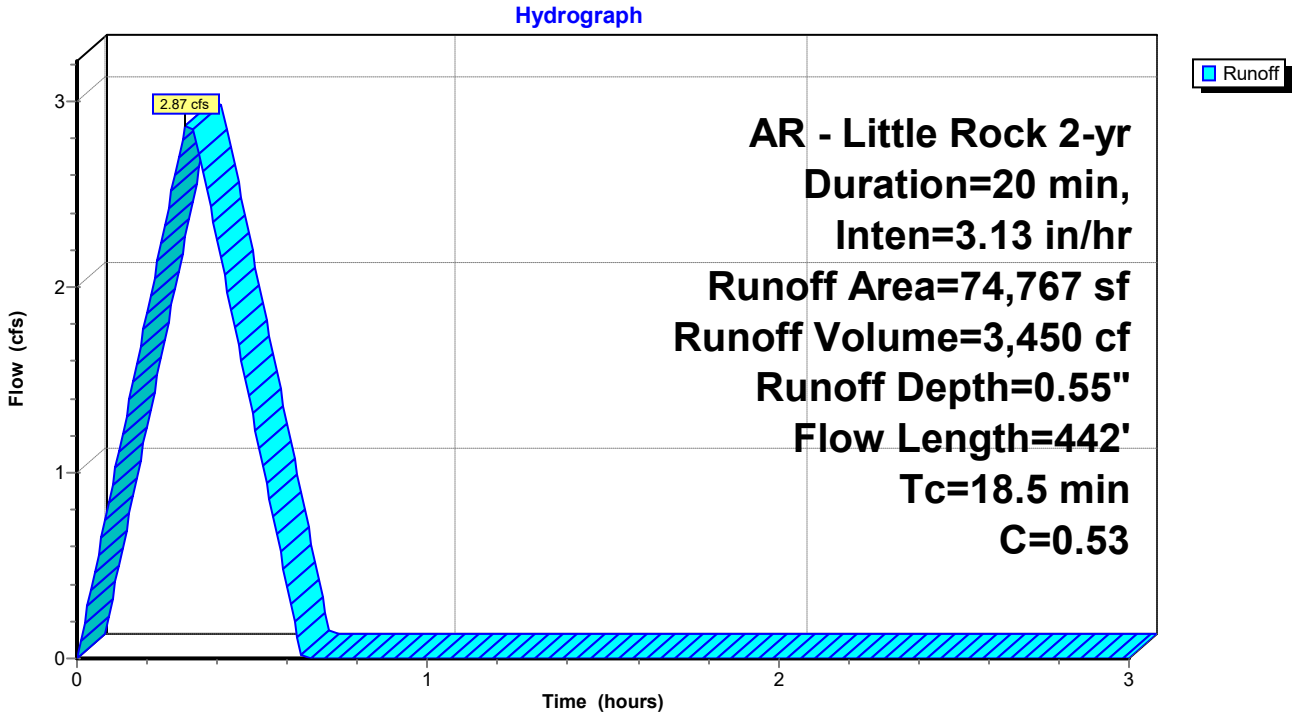
Runoff = 2.87 cfs @ 0.31 hrs, Volume= 3,450 cf, Depth= 0.55"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
9,241	0.51	Sod Yard
602	0.95	Paving, Sidewalks
64,924	0.53	Undeveloped
74,767	0.53	Weighted Average
74,165		99.19% Pervious Area
602		0.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	6	0.0180	0.86		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
2.6	25	0.1920	0.16		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
11.9	75	0.0370	0.11		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.7	58	0.0370	1.35		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.6	141	0.0420	1.43		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.7	60	0.0400	1.40		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.9	77	0.0420	1.43		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
18.5	442	Total			

Subcatchment B1: Drainage Basin B1



Summary for Subcatchment B2: Drainage Basin B2

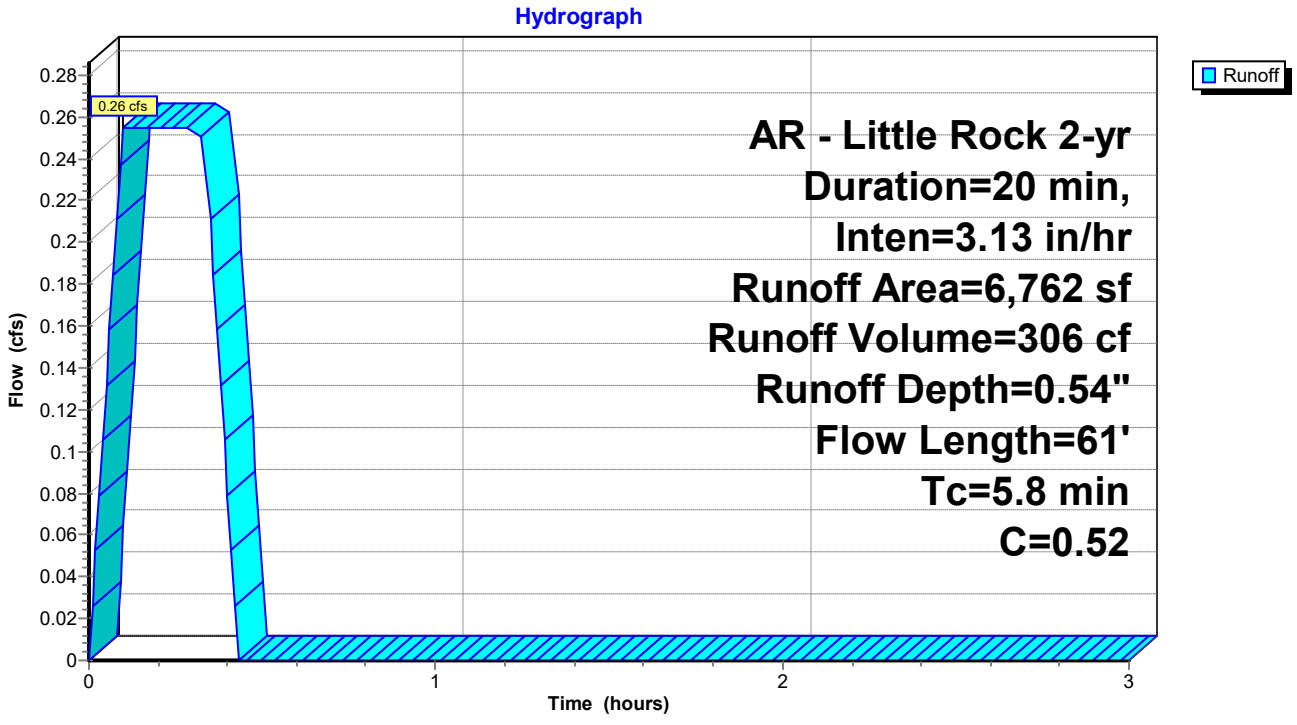
Runoff = 0.26 cfs @ 0.10 hrs, Volume= 306 cf, Depth= 0.54"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
6,595	0.51	Sod Yard
167	0.95	Paving, Sidewalks
6,762	0.52	Weighted Average
6,595		97.53% Pervious Area
167		2.47% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	6	0.0180	0.86		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
5.7	55	0.1240	0.16		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
5.8	61	Total			

Subcatchment B2: Drainage Basin B2



Summary for Subcatchment B3: Drainage Basin B3

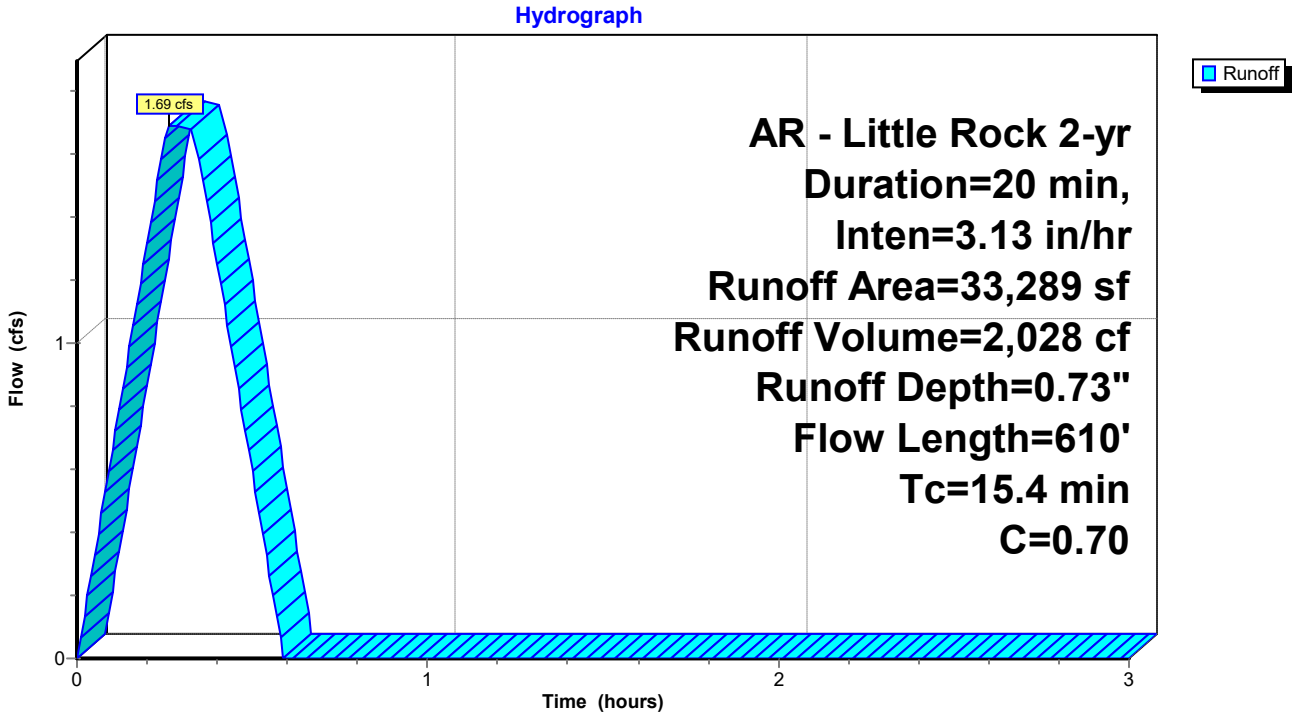
Runoff = 1.69 cfs @ 0.26 hrs, Volume= 2,028 cf, Depth= 0.73"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
18,730	0.51	Sod Yard
14,559	0.95	Paving, Sidewalks
33,289	0.70	Weighted Average
18,730		56.26% Pervious Area
14,559		43.74% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	47	0.1300	0.16		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
6.9	53	0.0730	0.13		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.0	11	0.0940	4.60		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.4	53	0.0120	2.22		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.5	59	0.0100	2.03		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.5	47	0.0070	1.70		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.5	56	0.0070	1.70		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	38	0.0160	2.57		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	30	0.0190	2.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
1.3	216	0.0190	2.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
15.4	610	Total			

Subcatchment B3: Drainage Basin B3



Summary for Subcatchment B4: Drainage Basin B4

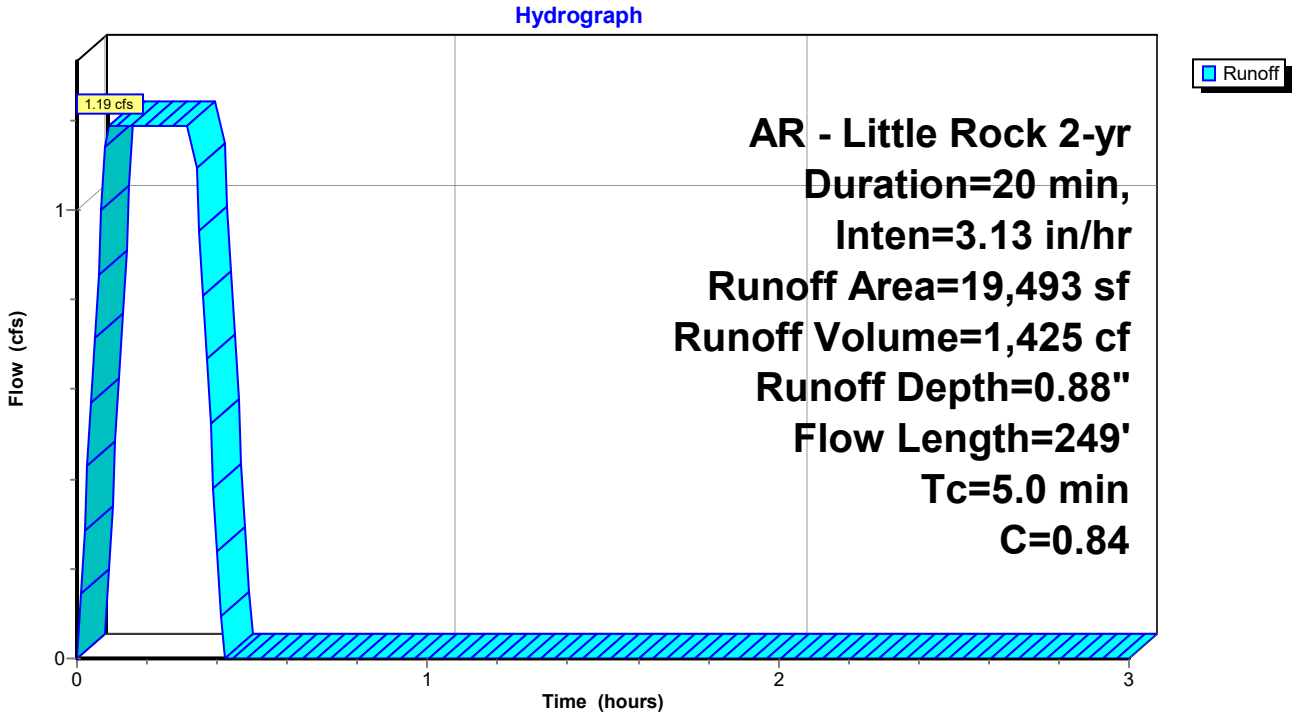
Runoff = 1.19 cfs @ 0.09 hrs, Volume= 1,425 cf, Depth= 0.88"
Routed to Pond CI-A1 : CI - A1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
4,916	0.51	Sod Yard
14,577	0.95	Paving, Sidewalks
19,493	0.84	Weighted Average
4,916		25.22% Pervious Area
14,577		74.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	31	0.0230	1.32		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	18	0.0250	1.22		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.3	28	0.0450	1.69		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.4	72	0.0250	3.21		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	18	0.0170	2.65		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.3	51	0.0170	2.65		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	16	0.0170	2.65		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	8	0.0430	4.21		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	7	0.0580	4.89		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
3.2					**Direct Entry, Overland Concentrated Flow (Min)**
5.0	249	Total			

Subcatchment B4: Drainage Basin B4



Summary for Subcatchment B5: Drainage Basin B5

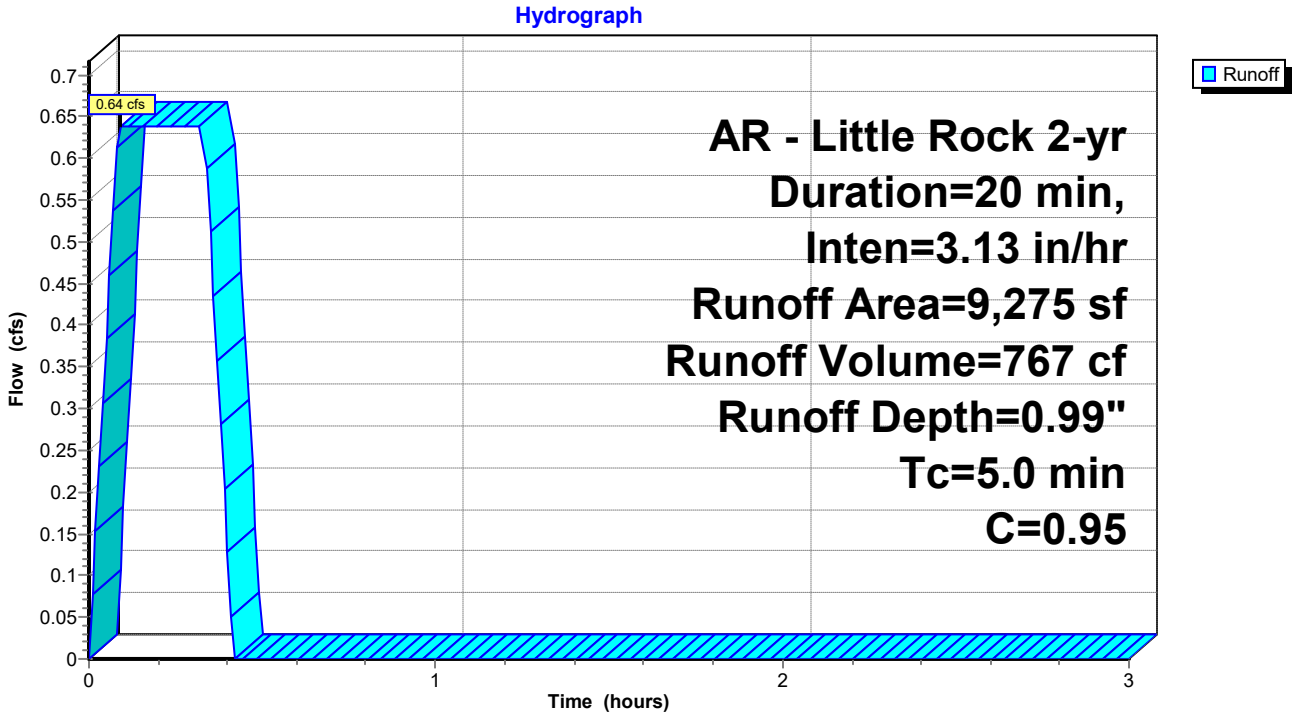
Runoff = 0.64 cfs @ 0.09 hrs, Volume= 767 cf, Depth= 0.99"
Routed to Pond JB-A2 : JB - A2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
9,275	0.95	Roof
9,275		100.00% Impervious Area

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

Subcatchment B5: Drainage Basin B5



Summary for Subcatchment B6: Drainage Basin B6

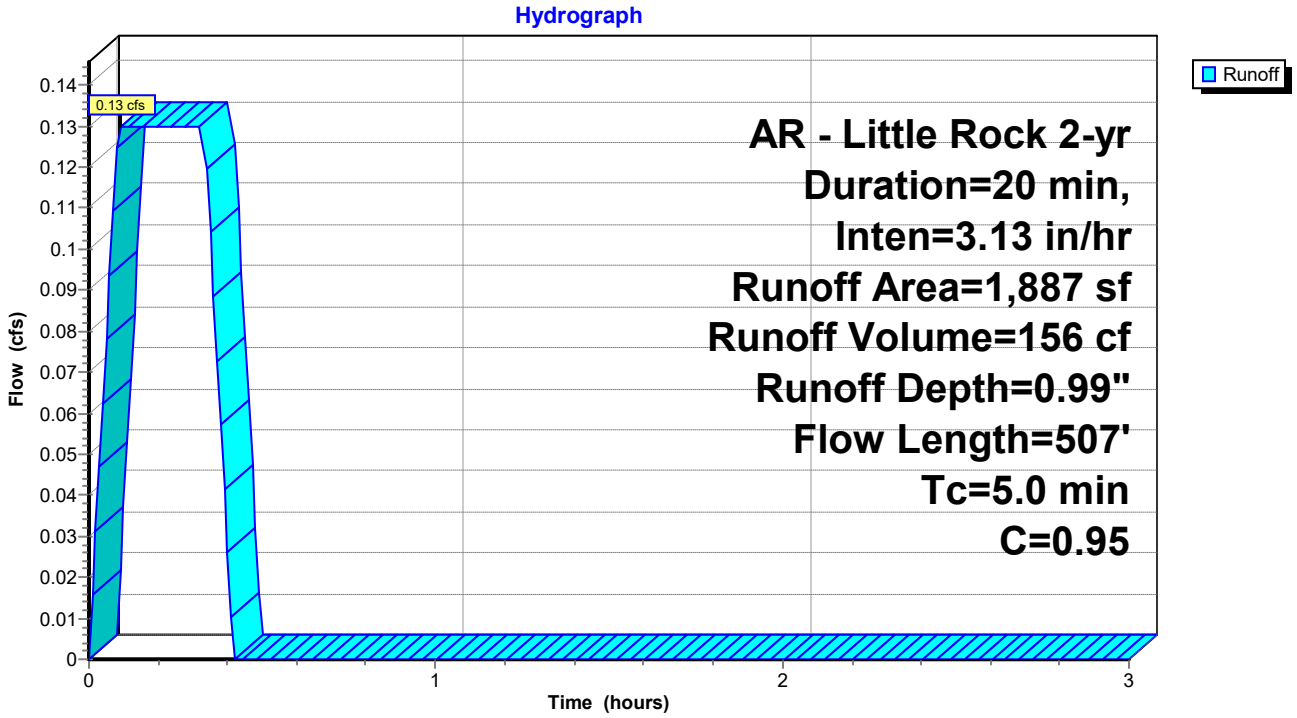
Runoff = 0.13 cfs @ 0.09 hrs, Volume= 156 cf, Depth= 0.99"
Routed to Pond CI-A3 : CI - A3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
0	0.51	Sod Yard
1,887	0.95	Paving, Sidewalks
1,887	0.95	Weighted Average
1,887		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	31	0.0230	1.32		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	18	0.0250	1.22		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.4	30	0.0240	1.33		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.0	13	0.0860	5.95		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.0	415		1.73		**Direct Entry, Overland Concentrated Flow (Min)**
5.0	507	Total			

Subcatchment B6: Drainage Basin B6



Summary for Subcatchment B7: Drainage Basin B7

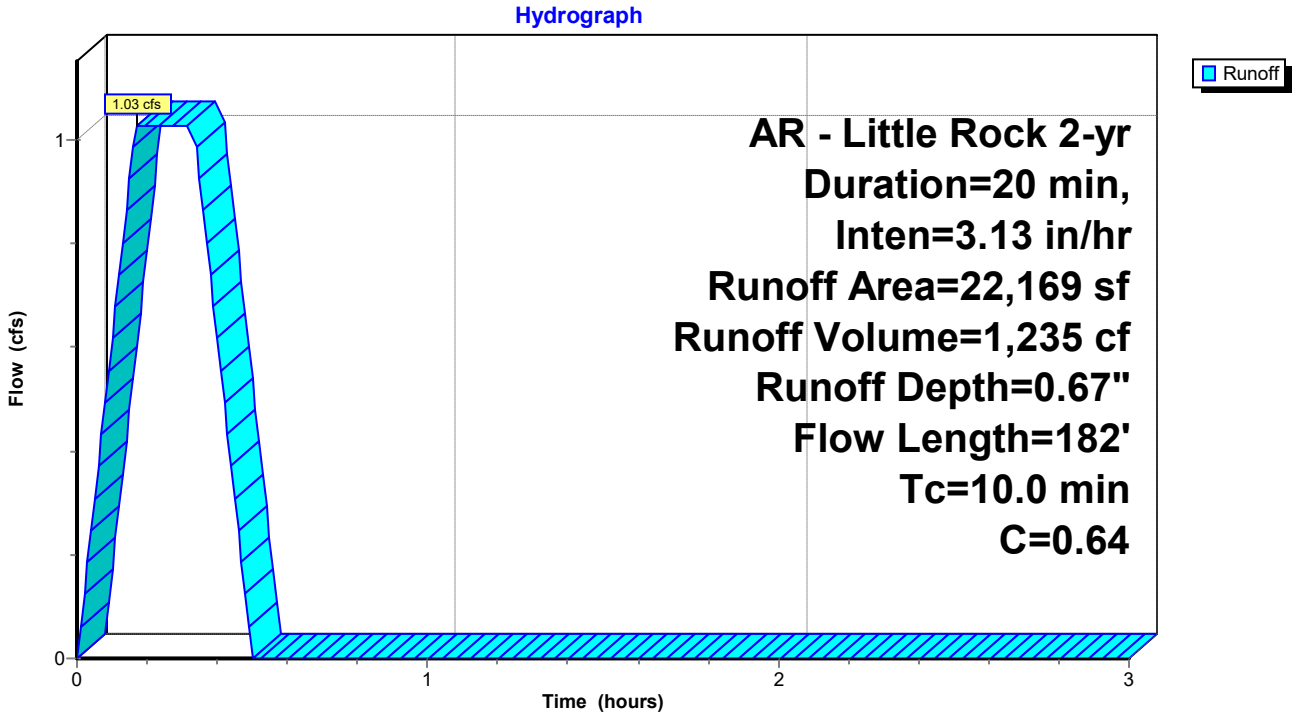
Runoff = 1.03 cfs @ 0.17 hrs, Volume= 1,235 cf, Depth= 0.67"
Routed to Pond CI-B2 : CI - B2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
15,580	0.51	Sod Yard
6,589	0.95	Paving, Sidewalks
22,169	0.64	Weighted Average
15,580		70.28% Pervious Area
6,589		29.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	10	0.0150	0.89		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
9.1	93	0.0150	0.17		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
0.4	40	0.0110	1.57		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	33	0.0190	2.07		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.0	6	0.0180	2.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
10.0	182	Total			

Subcatchment B7: Drainage Basin B7



Summary for Subcatchment B8: Drainage Basin B8

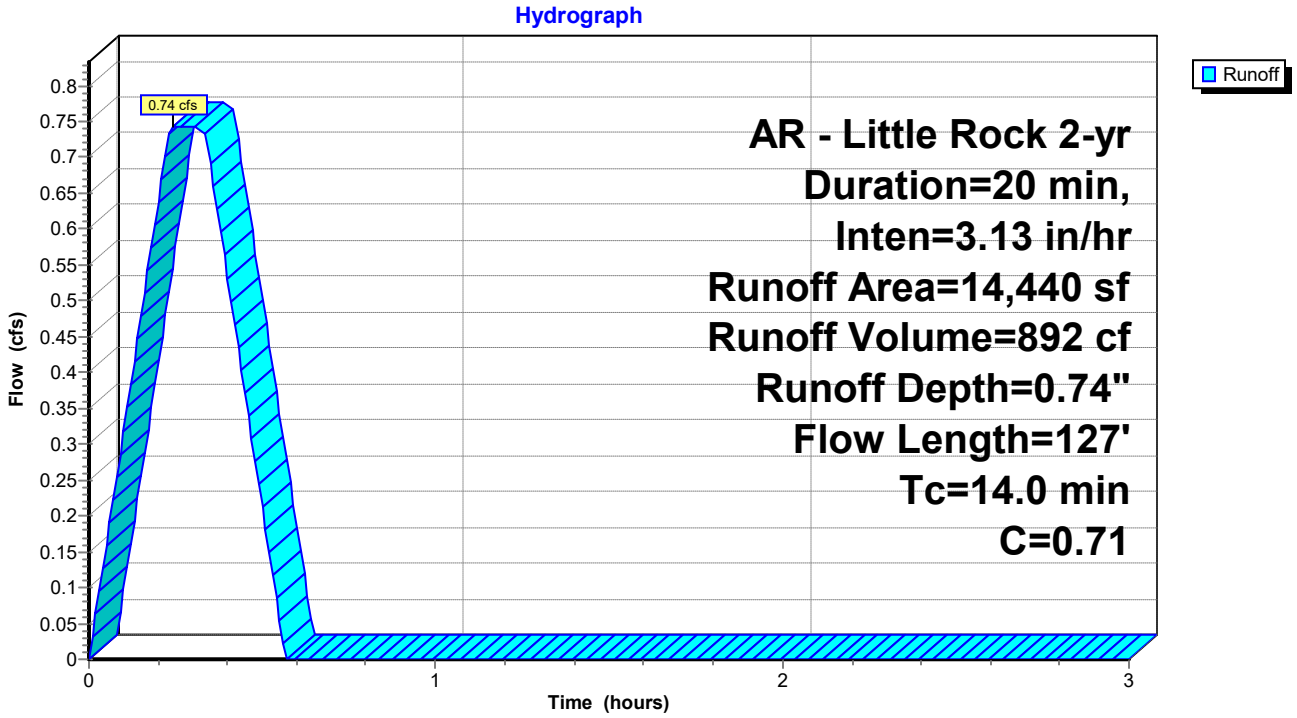
Runoff = 0.74 cfs @ 0.24 hrs, Volume= 892 cf, Depth= 0.74"
Routed to Pond CI-A4 : CI - A4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
7,982	0.51	Sod Yard
6,458	0.95	Paving, Sidewalks
14,440	0.71	Weighted Average
7,982		55.28% Pervious Area
6,458		44.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4	79	0.0570	0.13		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
3.5	21	0.0620	0.10		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.0	9	0.0620	3.73		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.1	18	0.1080	4.93		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
14.0	127	Total			

Subcatchment B8: Drainage Basin B8



Summary for Subcatchment C1: Drainage Basin C1

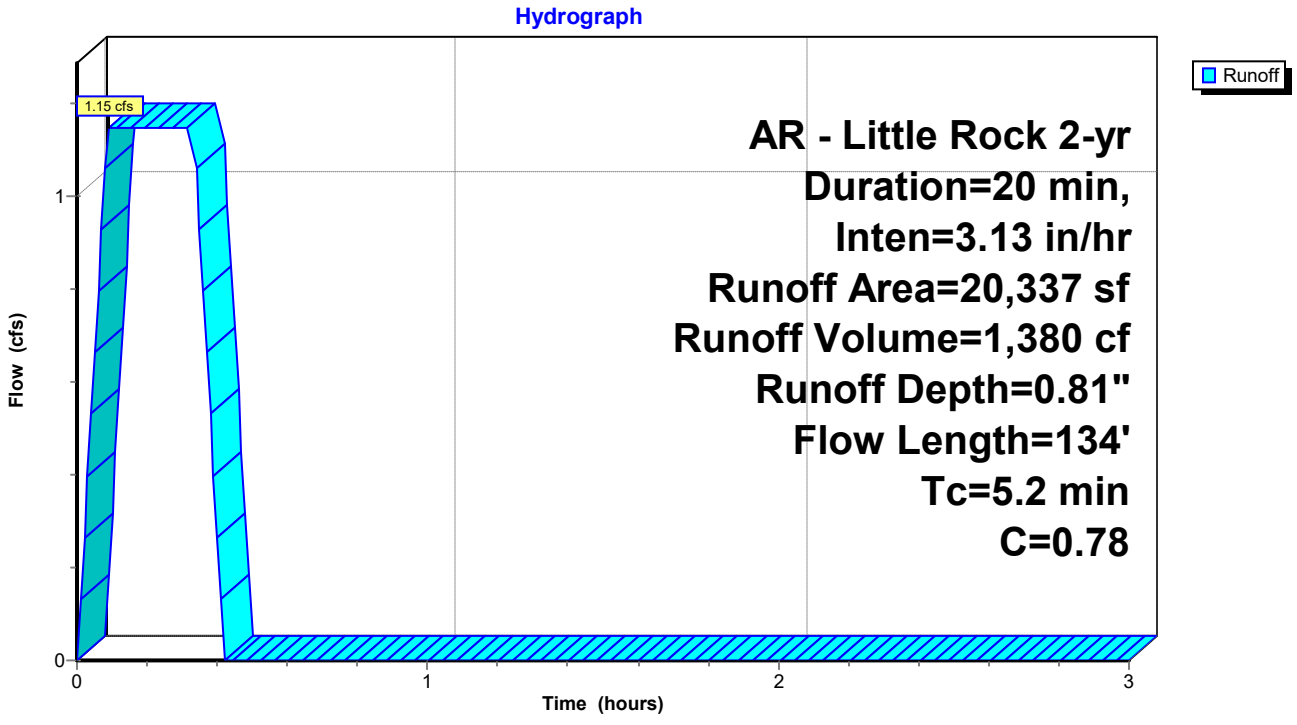
Runoff = 1.15 cfs @ 0.09 hrs, Volume= 1,380 cf, Depth= 0.81"
Routed to Pond CI-C1 : CI - C1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
6,135	0.40	Sod Yard
14,202	0.95	Paving, Sidewalks
20,337	0.78	Weighted Average
6,135		30.17% Pervious Area
14,202		69.83% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	32	0.0660	0.11		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.4	102	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
5.2	134	Total			

Subcatchment C1: Drainage Basin C1



Summary for Subcatchment C10: Drainage Basin C10

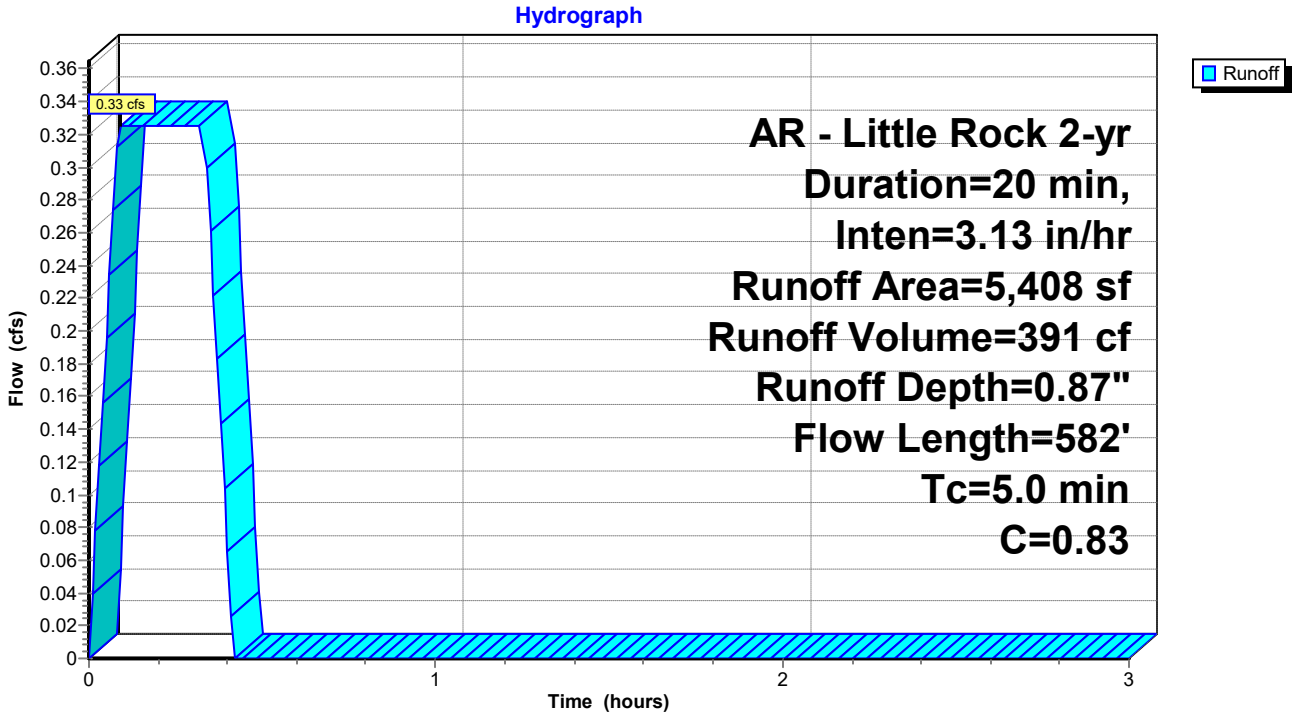
Runoff = 0.33 cfs @ 0.09 hrs, Volume= 391 cf, Depth= 0.87"
Routed to Pond CI-E1 : CI - E1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
1,225	0.40	Sod Yard
4,183	0.95	Paving, Sidewalks
5,408	0.83	Weighted Average
1,225		22.65% Pervious Area
4,183		77.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	18	0.0200	1.12		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	29	0.0210	2.94		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	23	0.0320	3.63		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	36	0.0320	3.63		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	48	0.0330	3.69		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	13	0.0350	3.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
3.9	415		1.77		**Direct Entry, Concentrated Flow (Min)**
5.0	582	Total			

Subcatchment C10: Drainage Basin C10



Summary for Subcatchment C11: Drainage Basin C11

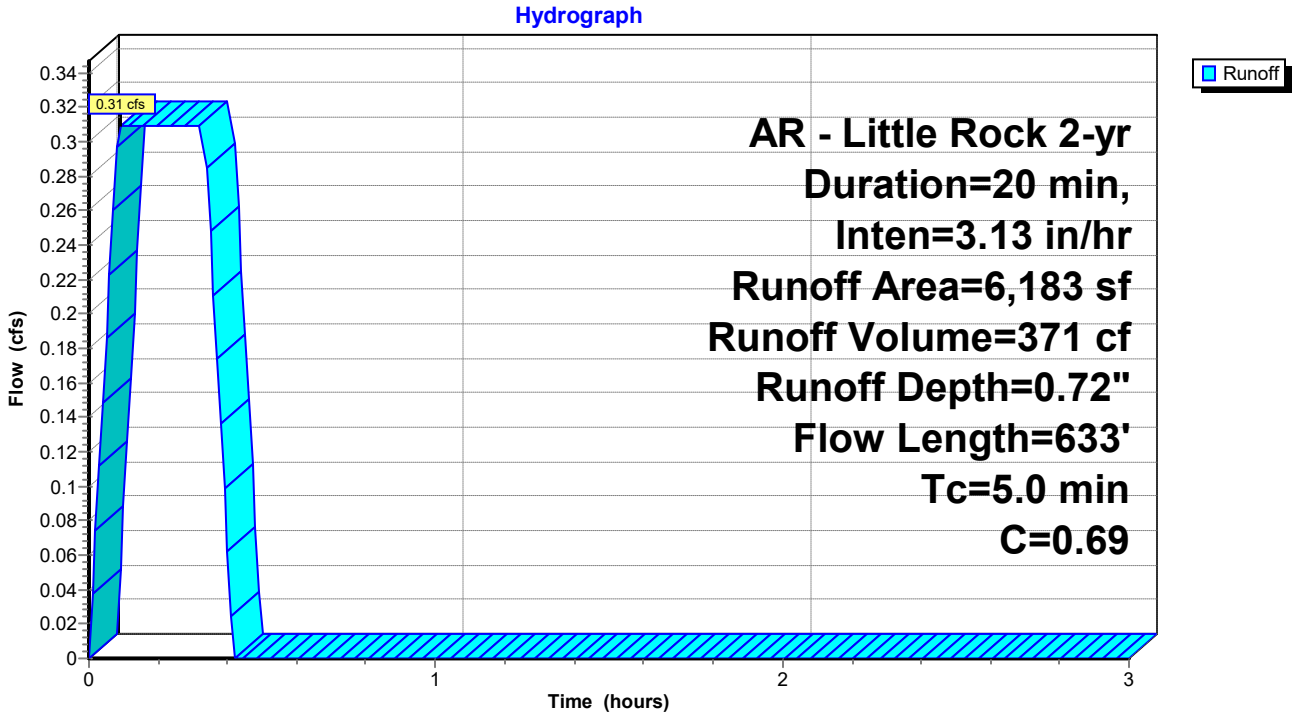
Runoff = 0.31 cfs @ 0.09 hrs, Volume= 371 cf, Depth= 0.72"
Routed to Pond CI-E2 : CI - E2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
2,876	0.40	Sod Yard
3,307	0.95	Paving, Sidewalks
6,183	0.69	Weighted Average
2,876		46.51% Pervious Area
3,307		53.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	25	0.0200	1.19		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	33	0.0620	5.05		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	29	0.0540	4.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	47	0.0410	4.11		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	47	0.0390	4.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	37	0.0420	4.16		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.0	415		1.73		**Direct Entry, Concentrated Flow (Min)**
5.0	633	Total			

Subcatchment C11: Drainage Basin C11



Summary for Subcatchment C12: Drainage Basin C12

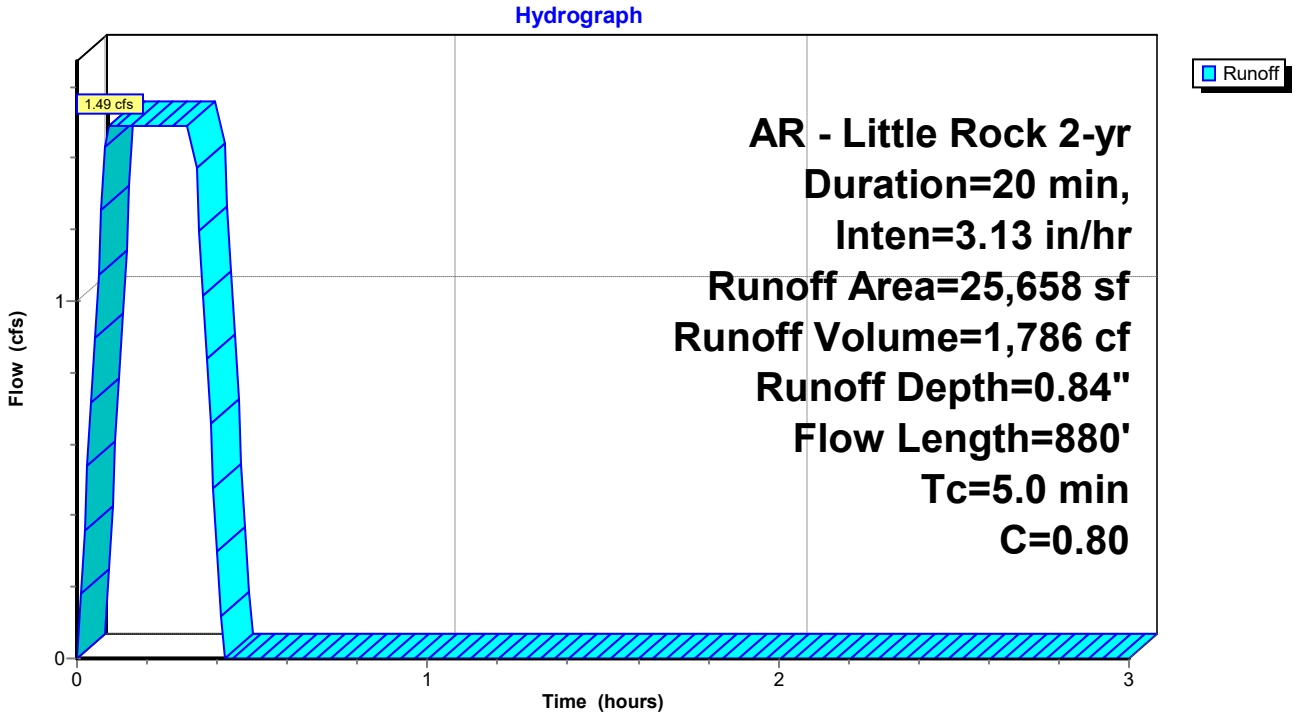
Runoff = 1.49 cfs @ 0.09 hrs, Volume= 1,786 cf, Depth= 0.84"
Routed to Pond CI-C7 : CI - C7

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
7,218	0.40	Sod Yard
18,440	0.95	Paving, Sidewalks
25,658	0.80	Weighted Average
7,218		28.13% Pervious Area
18,440		71.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	24	0.0360	1.50		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	5	0.0190	0.85		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	21	0.0100	2.03		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.9	49	0.0020	0.91		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.4	96	0.0330	3.69		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.3	94	0.0570	4.85		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	28	0.0560	4.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	25	0.0450	4.31		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	31	0.0410	4.11		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	39	0.0490	4.49		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	36	0.0460	4.35		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	11	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	6	0.0440	4.26		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
2.3	415		3.01		**Direct Entry, Concentrated Flow (Min)**
5.0	880	Total			

Subcatchment C12: Drainage Basin C12



Summary for Subcatchment C13: Drainage Basin C13

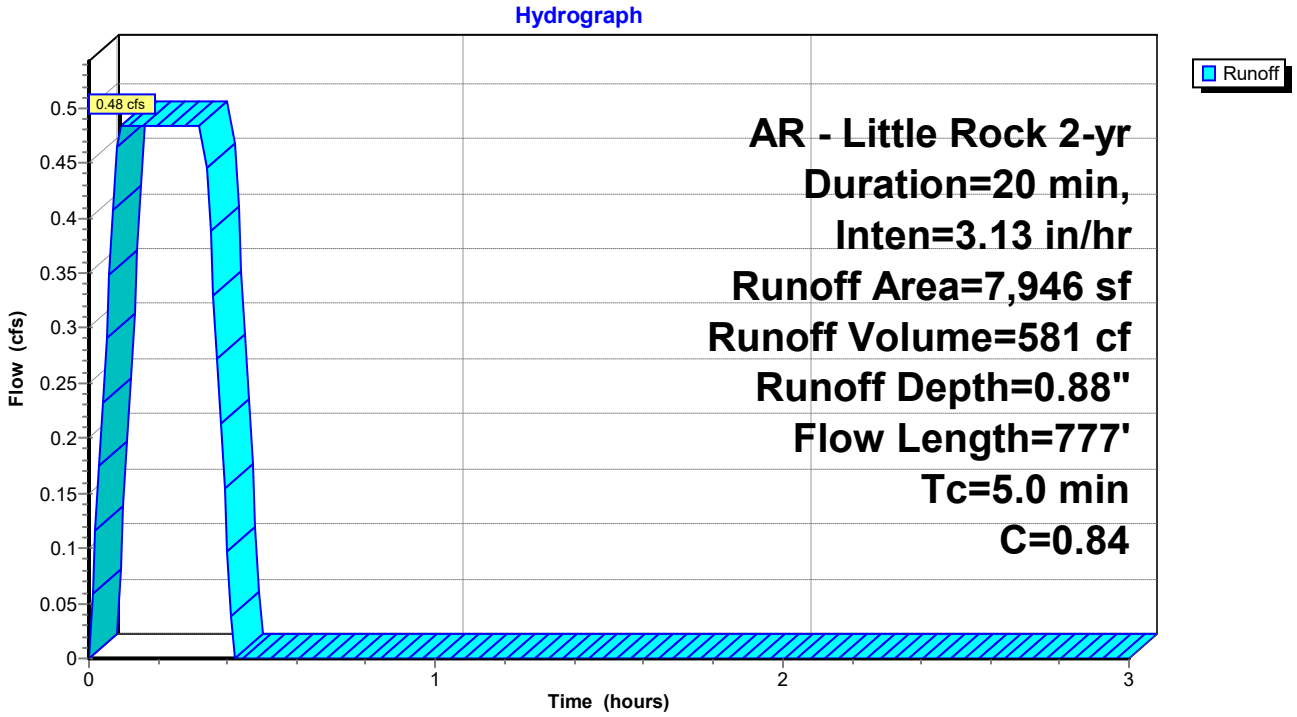
Runoff = 0.48 cfs @ 0.09 hrs, Volume= 581 cf, Depth= 0.88"
Routed to Pond CI-A4 : CI - A4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
1,558	0.40	Sod Yard
6,388	0.95	Paving, Sidewalks
7,946	0.84	Weighted Average
1,558		19.61% Pervious Area
6,388		80.39% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	19	0.0200	1.13		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.3	75	0.0340	3.74		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	52	0.0410	4.11		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	29	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	42	0.0730	5.48		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	74	0.0750	5.56		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	26	0.0710	5.41		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	32	0.0570	4.85		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	13	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
3.6	415		1.92		**Direct Entry, Overland Concentrated Flow (Min)**
5.0	777	Total			

Subcatchment C13: Drainage Basin C13



Summary for Subcatchment C14: Drainage Basin C14

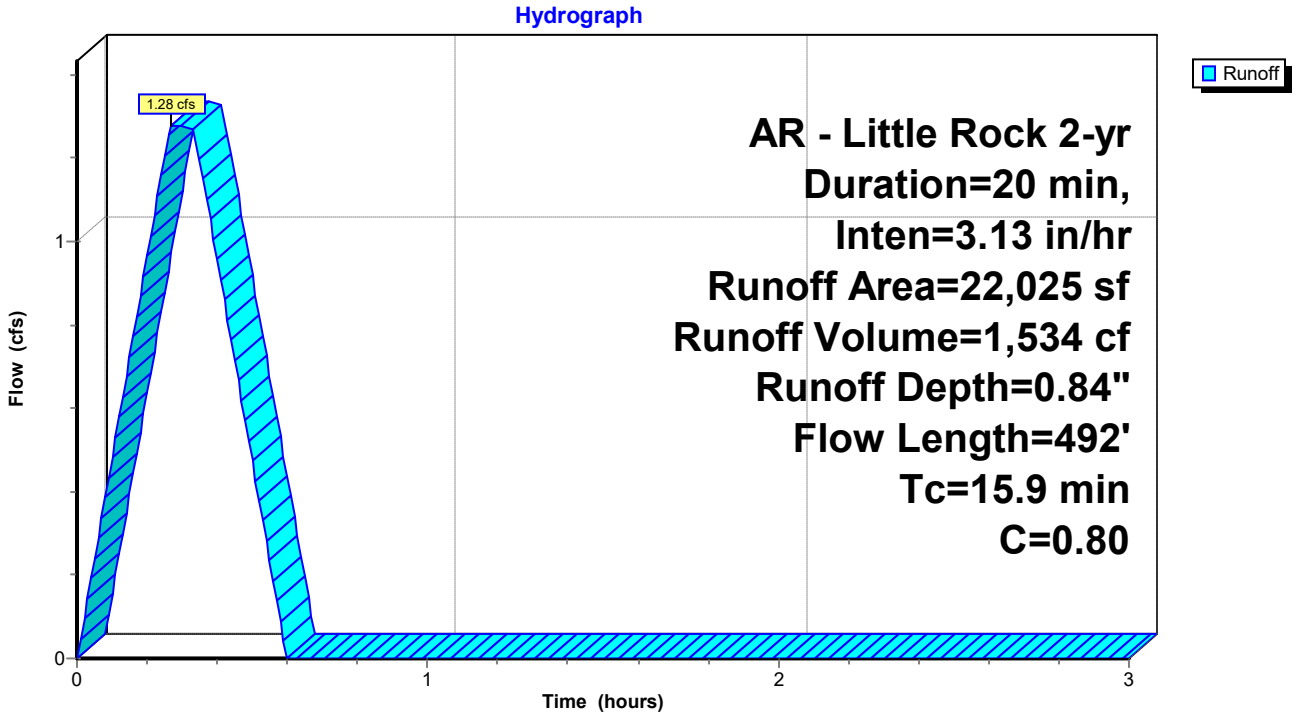
Runoff = 1.28 cfs @ 0.27 hrs, Volume= 1,534 cf, Depth= 0.84"
Routed to Pond CI-A5 : CI - A5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
6,127	0.40	Sod Yard
15,898	0.95	Paving, Sidewalks
22,025	0.80	Weighted Average
6,127		27.82% Pervious Area
15,898		72.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	5	0.0310	0.06		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
9.2	45	0.0250	0.08		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
3.8	41	0.1940	0.18		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.1	6	0.0100	0.68		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	51	0.0870	5.99		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	52	0.0310	3.57		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	18	0.0270	3.34		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	20	0.0400	4.06		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	34	0.0410	4.11		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	46	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	36	0.0580	4.89		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	58	0.0690	5.33		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	49	0.0840	5.88		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	31	0.0690	5.33		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
15.9	492	Total			

Subcatchment C14: Drainage Basin C14



Summary for Subcatchment C15: Drainage Basin C15

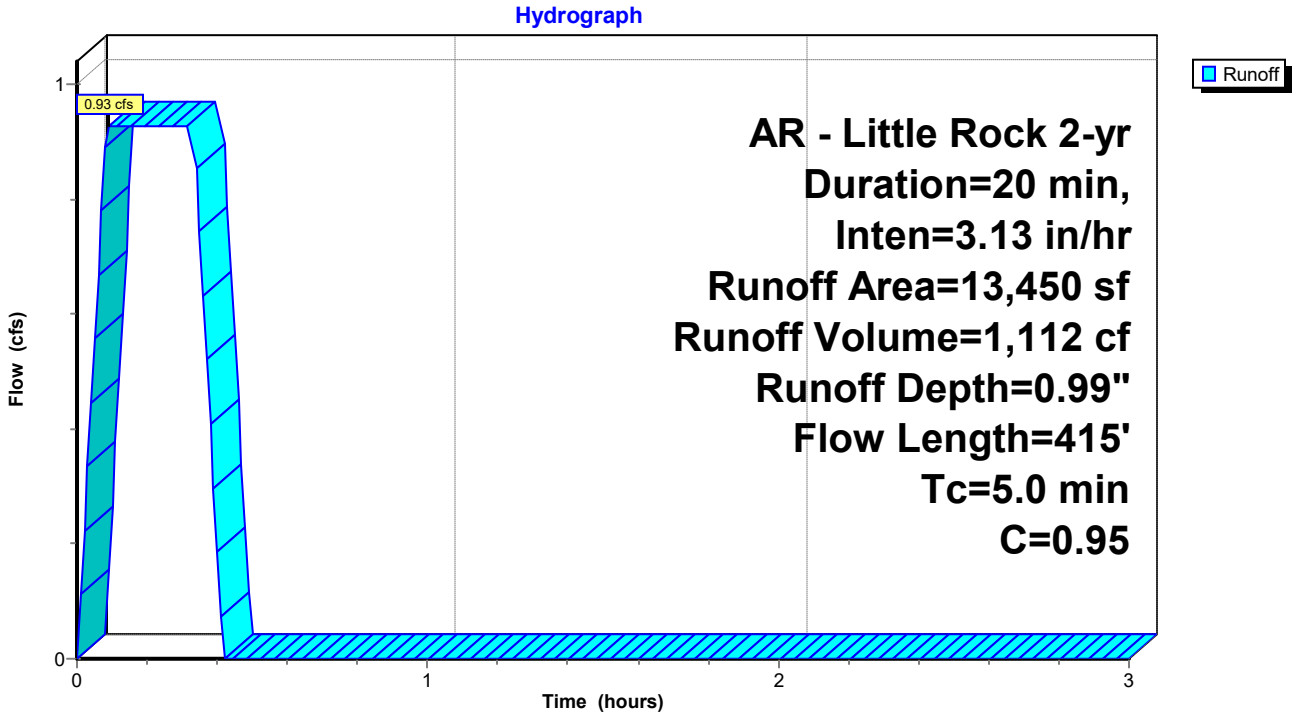
Runoff = 0.93 cfs @ 0.09 hrs, Volume= 1,112 cf, Depth= 0.99"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
13,450	0.95	Paving, Sidewalks
13,450	0.95	Weighted Average
13,450		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	415		1.38		**Direct Entry, Overland Concentrated Flow (Min)**

Subcatchment C15: Drainage Basin C15



Summary for Subcatchment C16: Drainage Basin C16

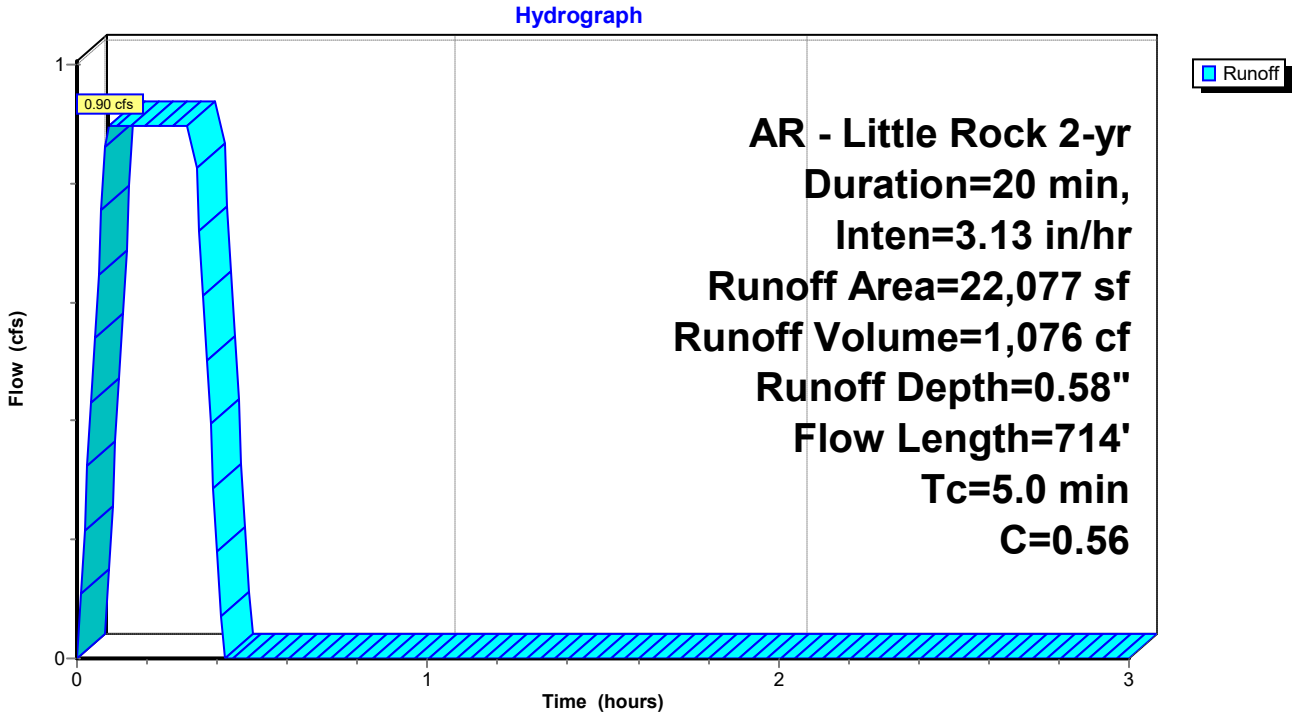
Runoff = 0.90 cfs @ 0.09 hrs, Volume= 1,076 cf, Depth= 0.58"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
15,465	0.40	Sod Yard
6,612	0.95	Paving, Sidewalks
22,077	0.56	Weighted Average
15,465		70.05% Pervious Area
6,612		29.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	26	0.0190	1.18		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	5	0.0100	0.66		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.4	51	0.0500	1.98		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	12	0.1540	2.33		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	50	0.1330	7.40		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
0.1	50	0.1170	6.94		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
0.2	46	0.0430	4.21		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
0.3	59	0.0370	3.90		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
3.3	415		2.10		**Direct Entry, Overland Concentrated Flow (Min)**
5.0	714	Total			

Subcatchment C16: Drainage Basin C16



Summary for Subcatchment C17: Drainage Basin C17

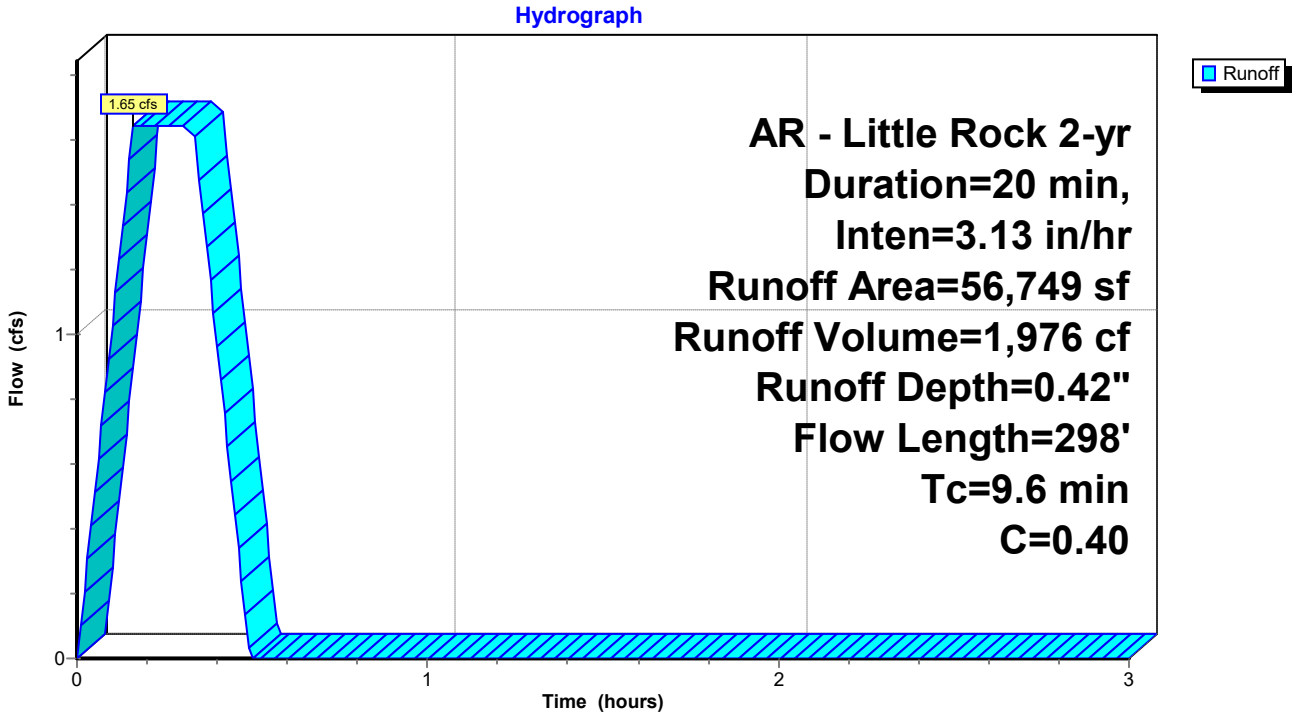
Runoff = 1.65 cfs @ 0.16 hrs, Volume= 1,976 cf, Depth= 0.42"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
56,749	0.40	Sod Yard
0	0.95	Paving, Sidewalks
56,749	0.40	Weighted Average
56,749		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	43	0.0410	0.15		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
3.9	43	0.0690	0.19		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.1	41	0.0980	4.70		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	61	0.0730	4.05		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.2	46	0.0570	3.58		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	64	0.0450	3.18		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
9.6	298	Total			

Subcatchment C17: Drainage Basin C17



Summary for Subcatchment C18: Drainage Basin C18

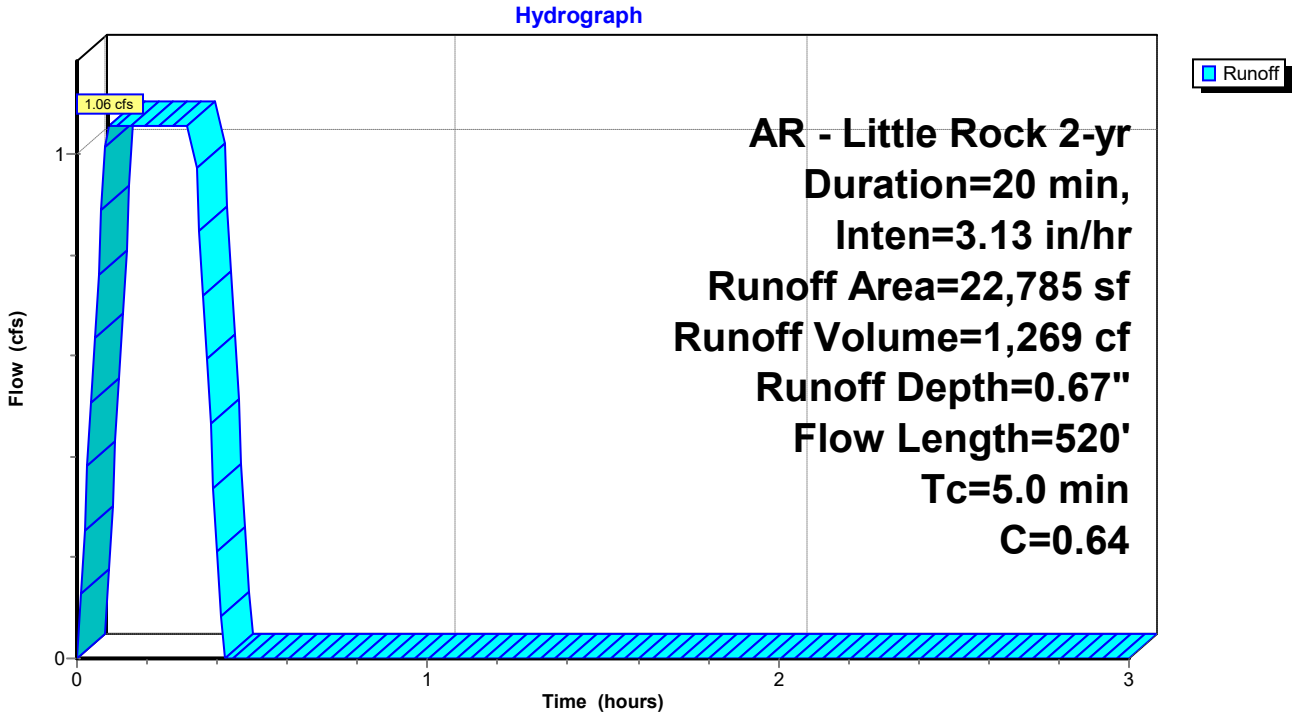
Runoff = 1.06 cfs @ 0.09 hrs, Volume= 1,269 cf, Depth= 0.67"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
12,812	0.40	Sod Yard
9,973	0.95	Paving, Sidewalks
22,785	0.64	Weighted Average
12,812		56.23% Pervious Area
9,973		43.77% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	5	0.2980	0.14		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.2	12	0.0130	0.87		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
3.3	8	0.0100	0.04		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.5	80	0.0210	2.94		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.4	415		17.29		**Direct Entry, Concentrated Flow (Min)**
5.0	520	Total			

Subcatchment C18: Drainage Basin C18



Summary for Subcatchment C19: Drainage Basin C19

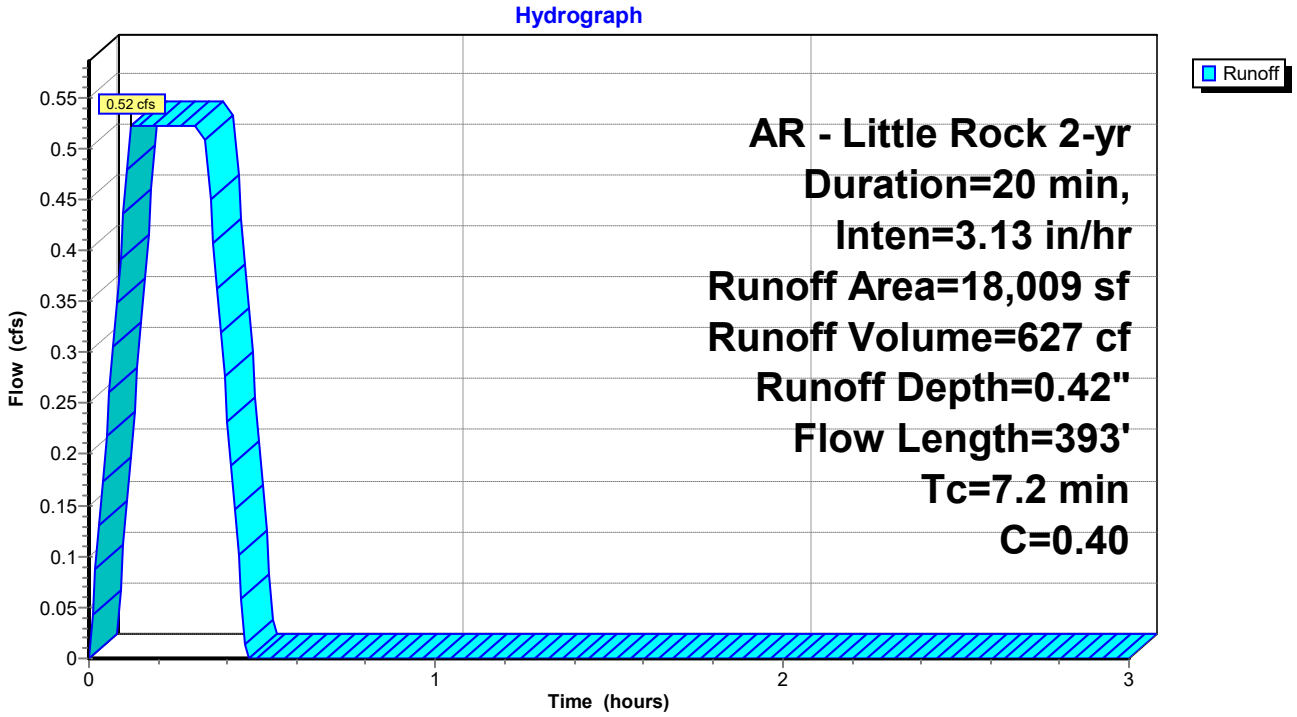
Runoff = 0.52 cfs @ 0.12 hrs, Volume= 627 cf, Depth= 0.42"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
18,009	0.40	Sod Yard
0	0.95	Paving, Sidewalks
18,009	0.40	Weighted Average
18,009		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	34	0.1110	0.21		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
3.3	66	0.2450	0.34		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.0	9	0.2450	7.42		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.5	106	0.0610	3.70		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.2	46	0.0800	4.24		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.1	41	0.0960	4.65		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	66	0.0680	3.91		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.1	19	0.1070	4.91		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.0	6	0.0750	4.11		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
7.2	393	Total			

Subcatchment C19: Drainage Basin C19



Summary for Subcatchment C2: Drainage Basin C2

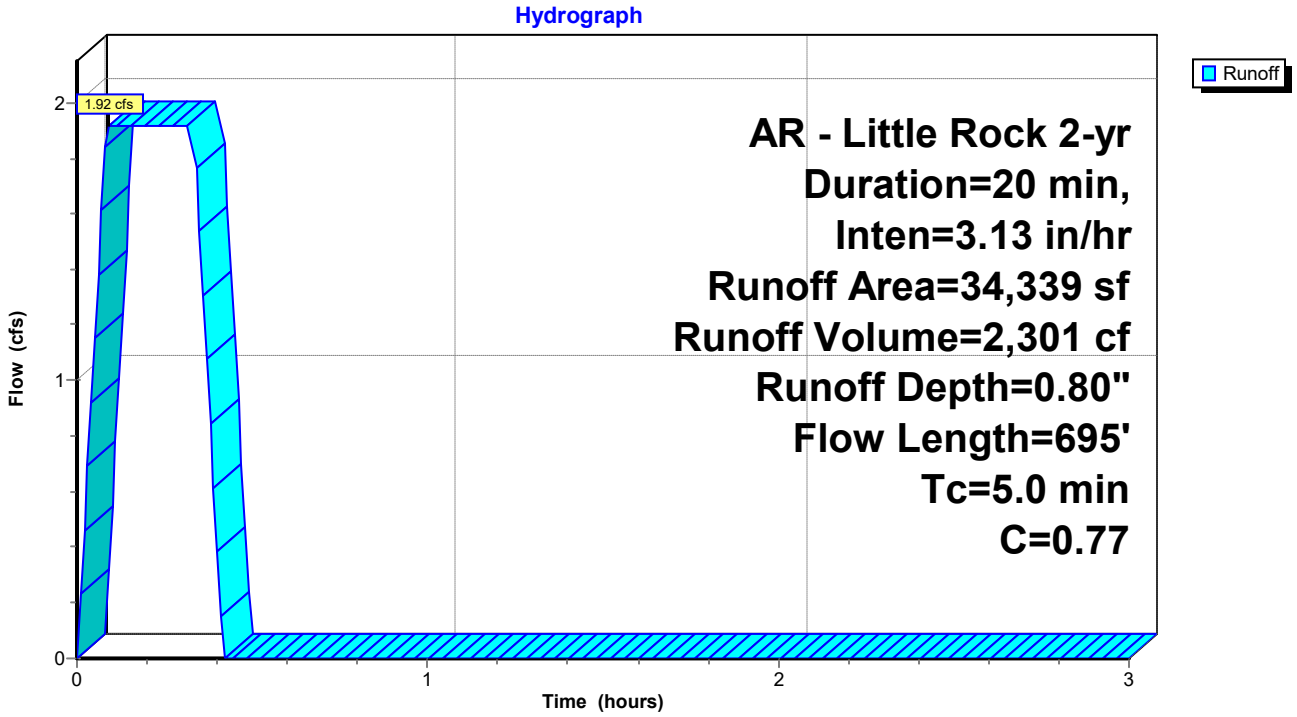
Runoff = 1.92 cfs @ 0.09 hrs, Volume= 2,301 cf, Depth= 0.80"
Routed to Pond CI-C2 : CI - C2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
11,376	0.40	Sod Yard
22,963	0.95	Roof, Paving, Sidewalks
34,339	0.77	Weighted Average
11,376		33.13% Pervious Area
22,963		66.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	20	0.0200	1.14		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.4	74	0.0240	3.14		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	17	0.0710	5.41		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	21	0.0610	5.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.6	148	0.0380	3.96		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
3.5	415		1.98		**Direct Entry, Concentrated Flow (Min)**
5.0	695	Total			

Subcatchment C2: Drainage Basin C2



Summary for Subcatchment C20: Drainage Basin C20

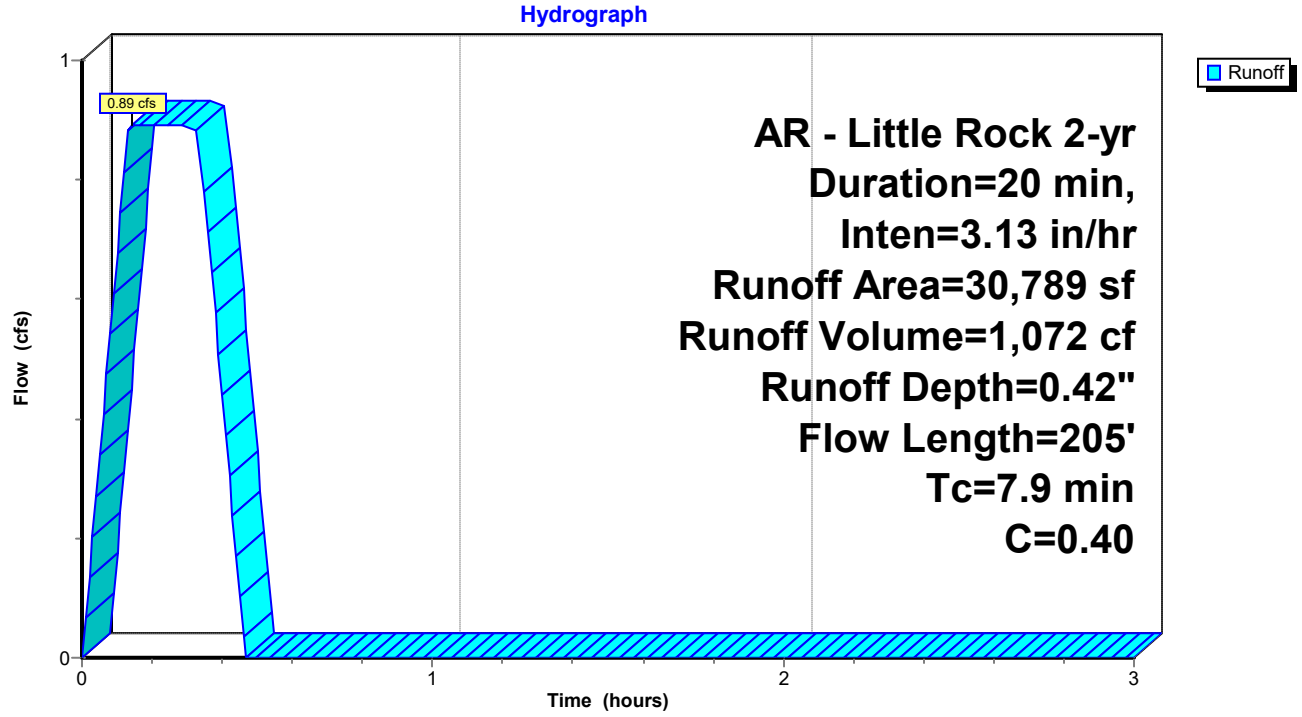
Runoff = 0.89 cfs @ 0.14 hrs, Volume= 1,072 cf, Depth= 0.42"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
30,789	0.40	Sod Yard
0	0.95	Paving, Sidewalks
30,789	0.40	Weighted Average
30,789		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	45	0.1430	0.25		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
4.5	55	0.0780	0.20		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.1	37	0.0780	4.19		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	68	0.0710	4.00		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
7.9	205	Total			

Subcatchment C20: Drainage Basin C20



Summary for Subcatchment C3: Drainage Basin C3

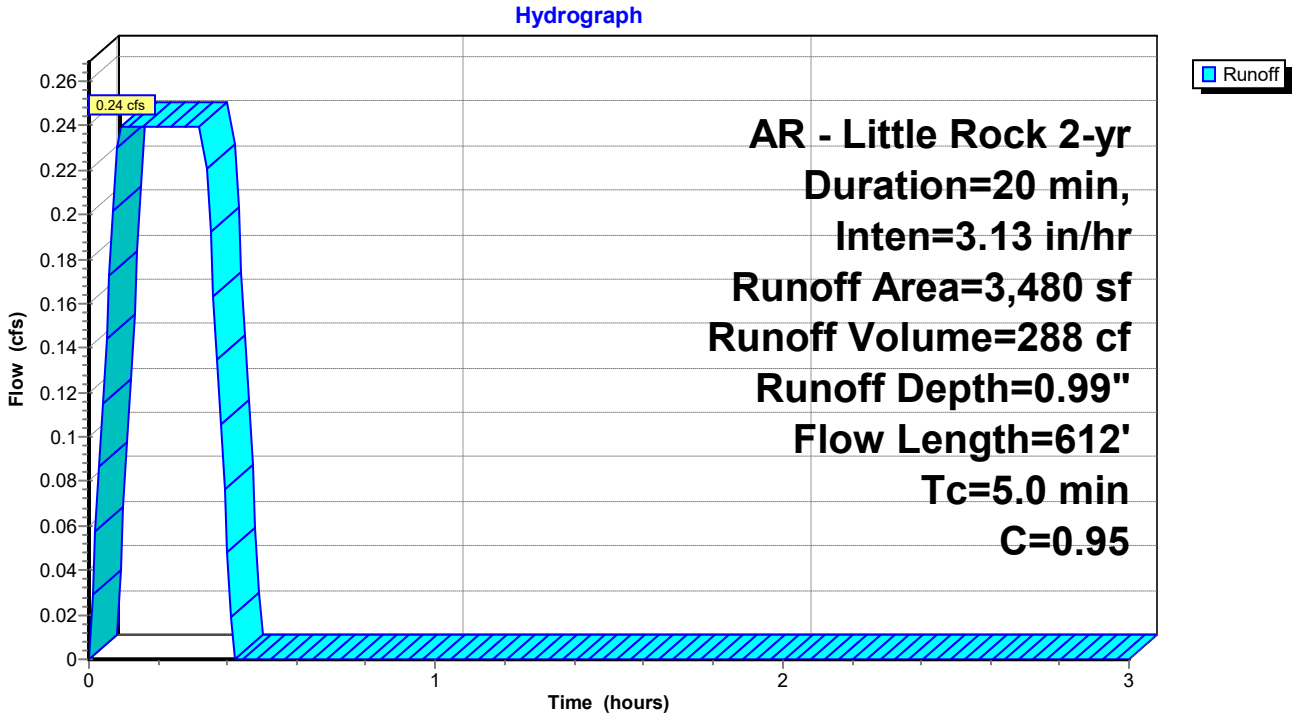
Runoff = 0.24 cfs @ 0.09 hrs, Volume= 288 cf, Depth= 0.99"
Routed to Pond CI-C3 : CI - C3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
3,480	0.95	Paving, Sidewalks
3,480	0.95	Weighted Average
3,480		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	22	0.0200	1.16		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.0	10	0.0340	3.74		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	18	0.0390	4.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.6	147	0.0380	3.96		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.0	415		1.73		**Direct Entry, Concentrated Flow (Min)**
5.0	612	Total			

Subcatchment C3: Drainage Basin C3



Summary for Subcatchment C4: Drainage Basin C4

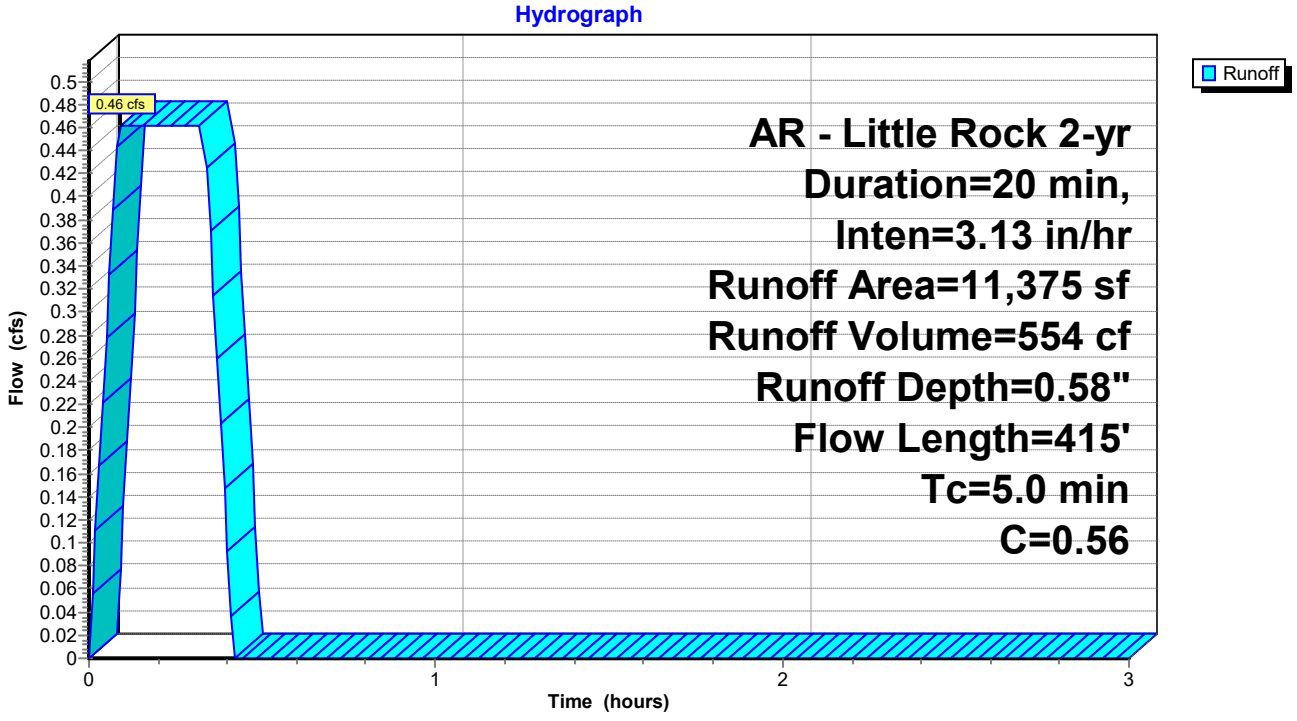
Runoff = 0.46 cfs @ 0.09 hrs, Volume= 554 cf, Depth= 0.58"
Routed to Pond CI-C3 : CI - C3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
8,130	0.40	Sod Yard
3,245	0.95	Paving, Sidewalks
11,375	0.56	Weighted Average
8,130		71.47% Pervious Area
3,245		28.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	415		1.38		**Direct Entry, Concentrated Flow (Min)**

Subcatchment C4: Drainage Basin C4



Summary for Subcatchment C5: Drainage Basin C5

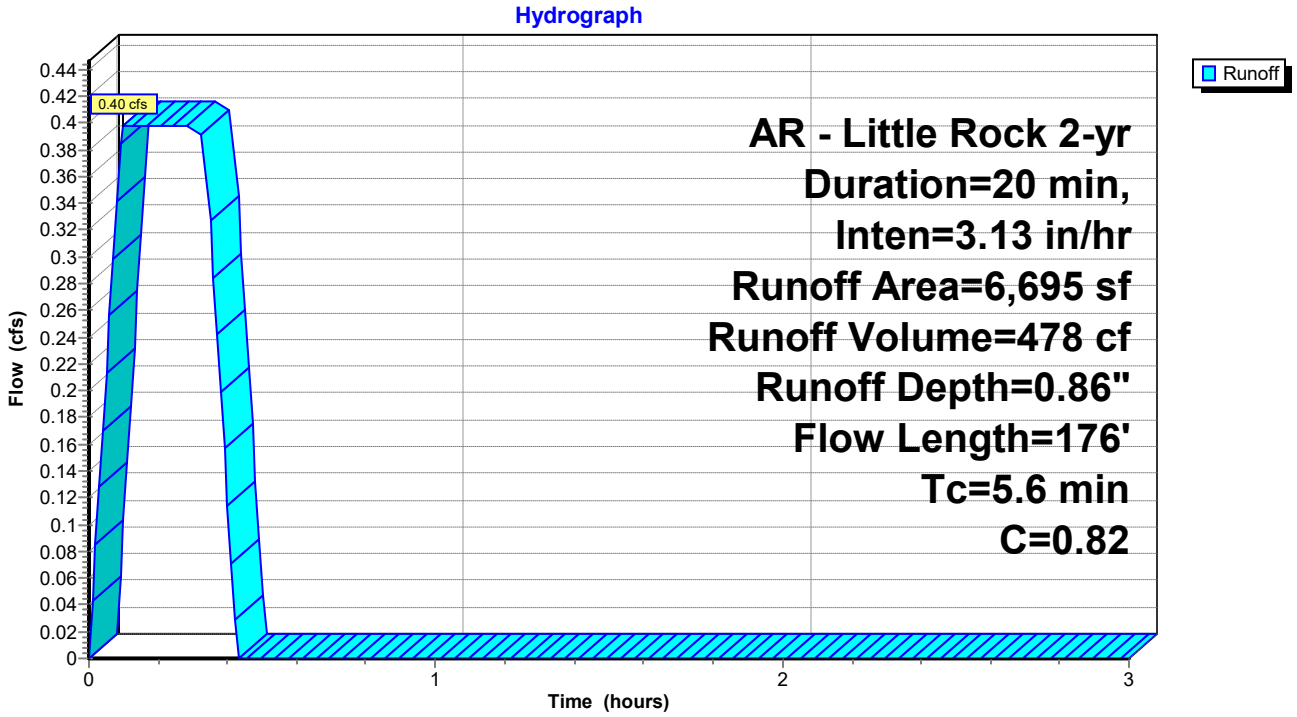
Runoff = 0.40 cfs @ 0.10 hrs, Volume= 478 cf, Depth= 0.86"
Routed to Pond CI-C4 : CI - C4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
1,634	0.40	Sod Yard
5,061	0.95	Paving, Sidewalks
6,695	0.82	Weighted Average
1,634		24.41% Pervious Area
5,061		75.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	5	0.2990	0.14		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.2	12	0.0130	0.87		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
3.9	8	0.0070	0.03		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.5	58	0.0080	1.82		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	14	0.0280	3.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	23	0.0370	3.90		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	13	0.0940	6.22		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	13	0.0560	4.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	30	0.0180	2.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
5.6	176	Total			

Subcatchment C5: Drainage Basin C5



Summary for Subcatchment C6: Drainage Basin C6

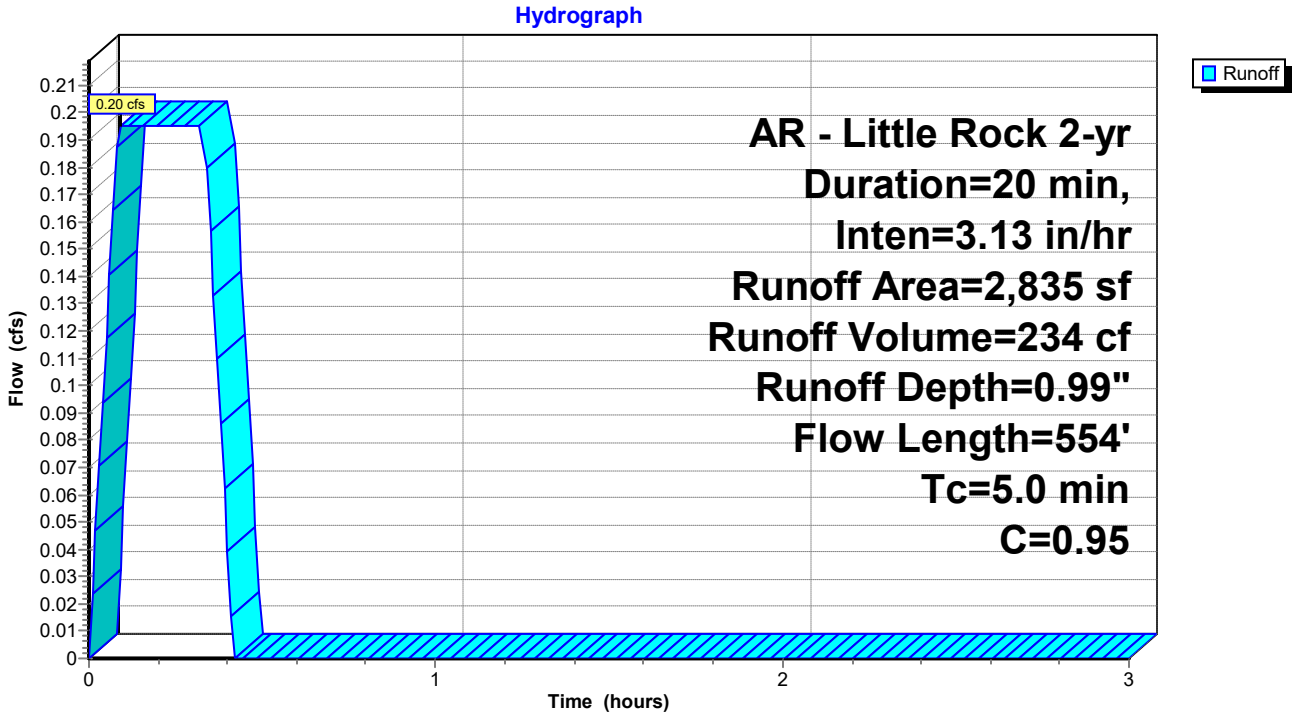
Runoff = 0.20 cfs @ 0.09 hrs, Volume= 234 cf, Depth= 0.99"
Routed to Pond CI-C5 : CI - C5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
2,835	0.95	Paving, Sidewalks
2,835	0.95	Weighted Average
2,835		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	22	0.0200	1.16		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	19	0.0100	2.03		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	17	0.0170	2.65		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	26	0.0360	3.85		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	28	0.0610	5.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	27	0.0610	5.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.1	415		1.69		**Direct Entry, Concentrated Flow (Min)**
5.0	554	Total			

Subcatchment C6: Drainage Basin C6



Summary for Subcatchment C7: Drainage Basin C7

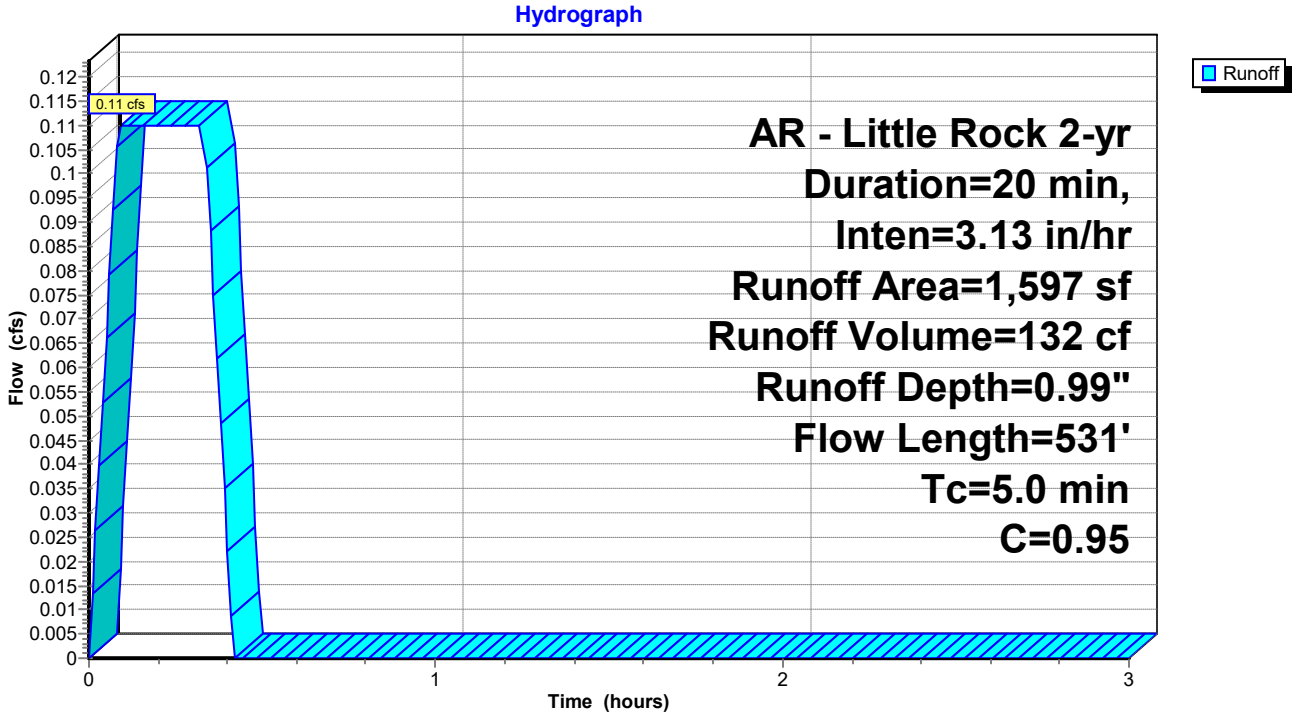
Runoff = 0.11 cfs @ 0.09 hrs, Volume= 132 cf, Depth= 0.99"
Routed to Pond CI-D1 : CI - D1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
1,597	0.95	Paving, Sidewalks
1,597	0.95	Weighted Average
1,597		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	19	0.0200	1.13		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	16	0.0540	4.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.3	81	0.0580	4.89		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.3	415		1.61		**Direct Entry, Concentrated Flow (Min)**
5.0	531	Total			

Subcatchment C7: Drainage Basin C7



Summary for Subcatchment C8: Drainage Basin C8

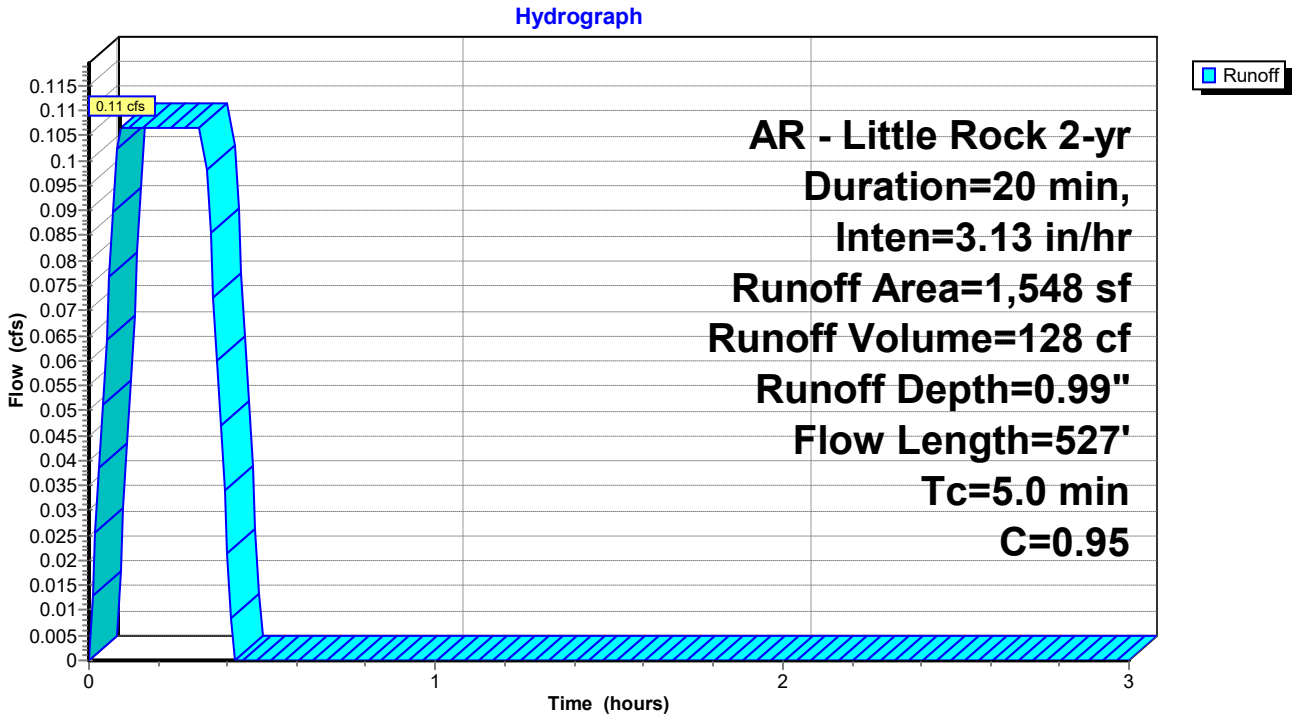
Runoff = 0.11 cfs @ 0.09 hrs, Volume= 128 cf, Depth= 0.99"
Routed to Pond CI-D2 : CI - D2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
1,548	0.95	Paving, Sidewalks
1,548	0.95	Weighted Average
1,548		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	18	0.0200	1.12		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.3	94	0.0610	5.01		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
4.4	415		1.57		**Direct Entry, Concentrated Flow (Min)**
5.0	527	Total			

Subcatchment C8: Drainage Basin C8



Summary for Subcatchment C9: Drainage Basin C9

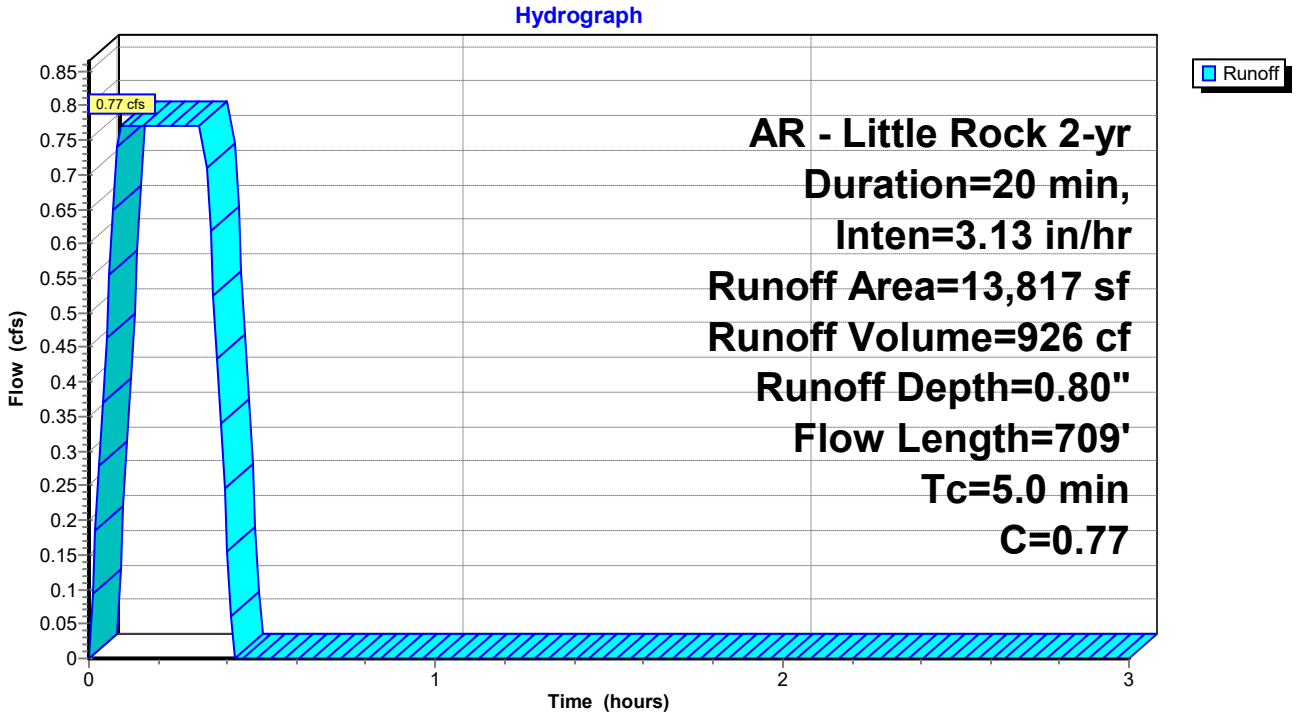
Runoff = 0.77 cfs @ 0.09 hrs, Volume= 926 cf, Depth= 0.80"
Routed to Pond CI-C6 : CI - C6

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=20 min, Inten=3.13 in/hr

Area (sf)	C	Description
4,456	0.40	Sod Yard
9,361	0.95	Paving, Sidewalks
13,817	0.77	Weighted Average
4,456		32.25% Pervious Area
9,361		67.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	100	0.0140	1.36		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	13	0.0150	2.49		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	23	0.0160	2.57		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	7	0.0050	1.44		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	8	0.0100	2.03		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	41	0.0420	4.16		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	41	0.0540	4.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	61	0.0520	4.63		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
2.9	415		2.39		**Direct Entry, Concentrated Flow (Min)**
5.0	709	Total			

Subcatchment C9: Drainage Basin C9

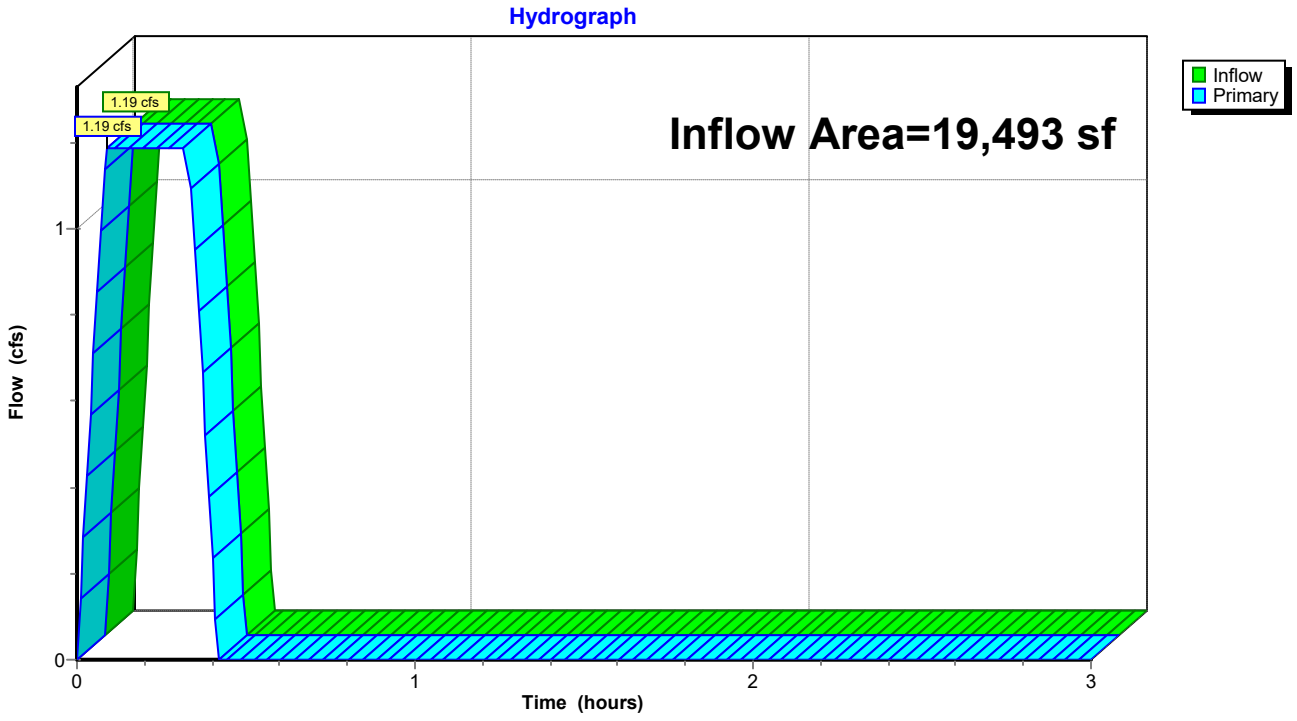


Summary for Pond CI-A1: CI - A1

Inflow Area = 19,493 sf, 74.78% Impervious, Inflow Depth = 0.88" for 2-yr event
Inflow = 1.19 cfs @ 0.09 hrs, Volume= 1,425 cf
Primary = 1.19 cfs @ 0.09 hrs, Volume= 1,425 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond JB-A2 : JB - A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-A1: CI - A1

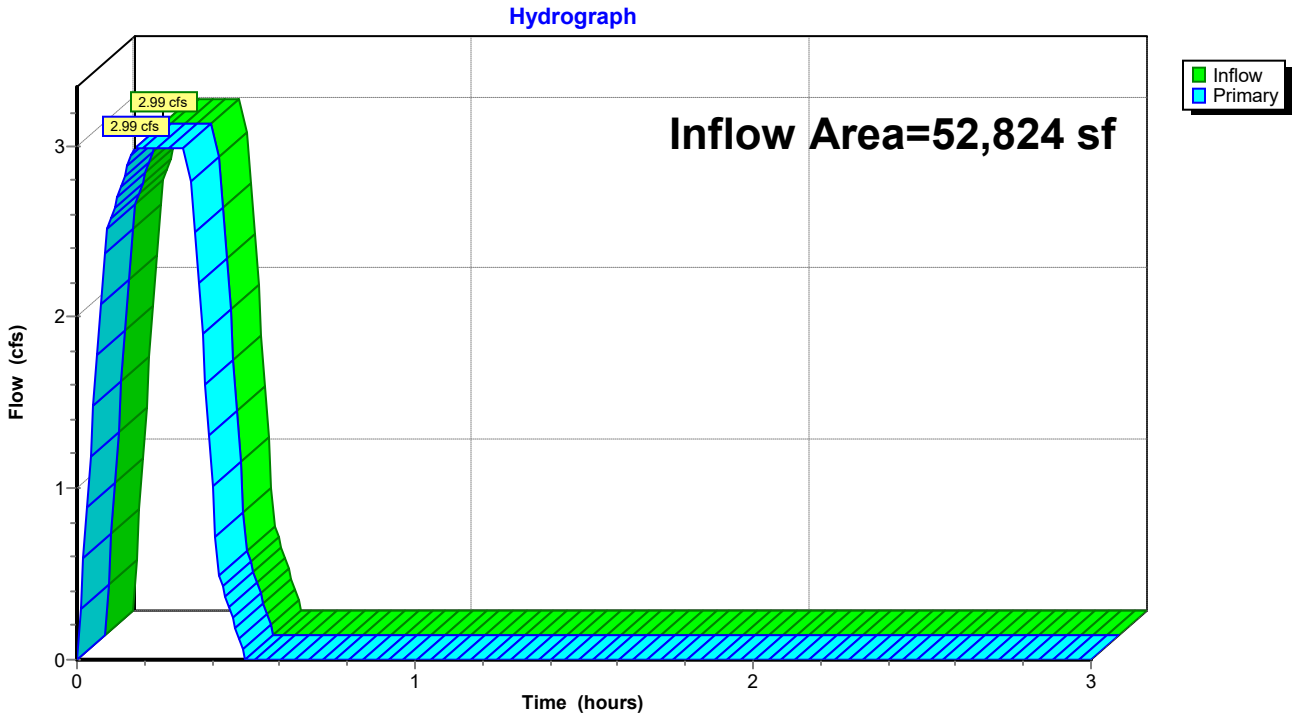


Summary for Pond CI-A3: CI - A3

Inflow Area = 52,824 sf, 61.20% Impervious, Inflow Depth = 0.81" for 2-yr event
Inflow = 2.99 cfs @ 0.17 hrs, Volume= 3,583 cf
Primary = 2.99 cfs @ 0.17 hrs, Volume= 3,583 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A4 : CI - A4

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-A3: CI - A3

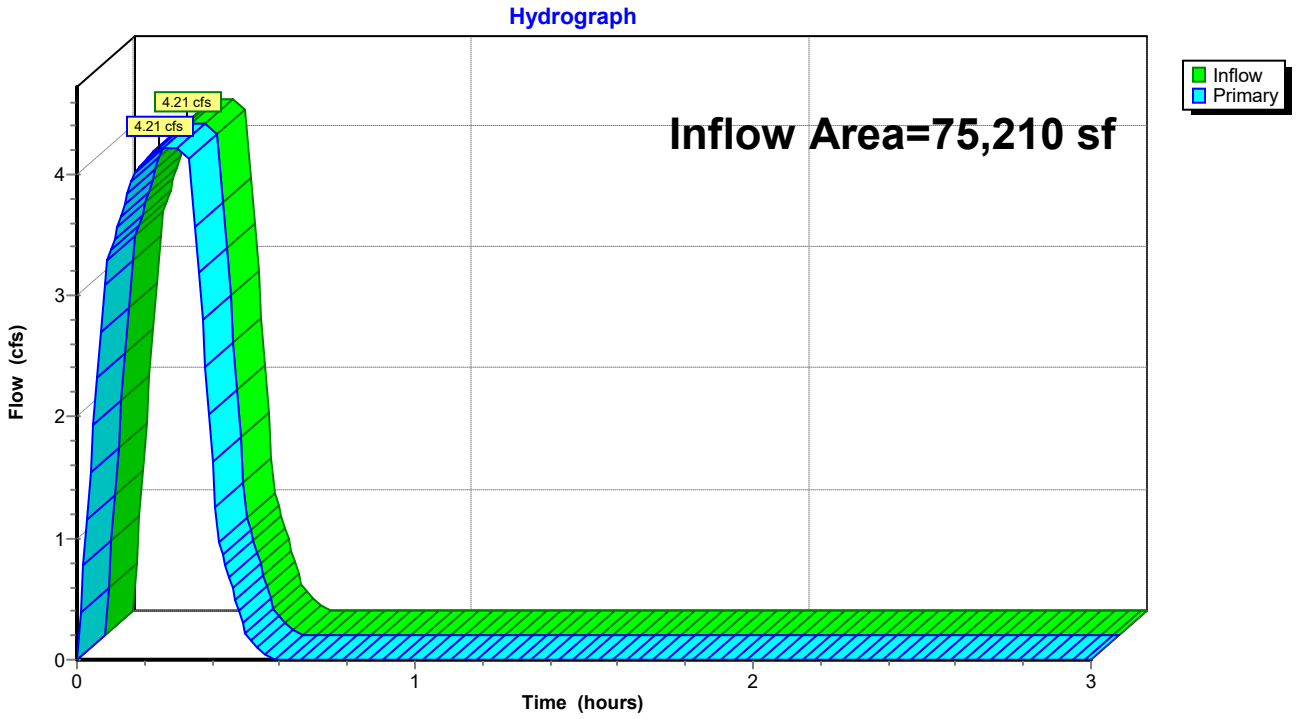


Summary for Pond CI-A4: CI - A4

Inflow Area = 75,210 sf, 60.06% Impervious, Inflow Depth = 0.81" for 2-yr event
Inflow = 4.21 cfs @ 0.24 hrs, Volume= 5,056 cf
Primary = 4.21 cfs @ 0.24 hrs, Volume= 5,056 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A5 : CI - A5

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-A4: CI - A4

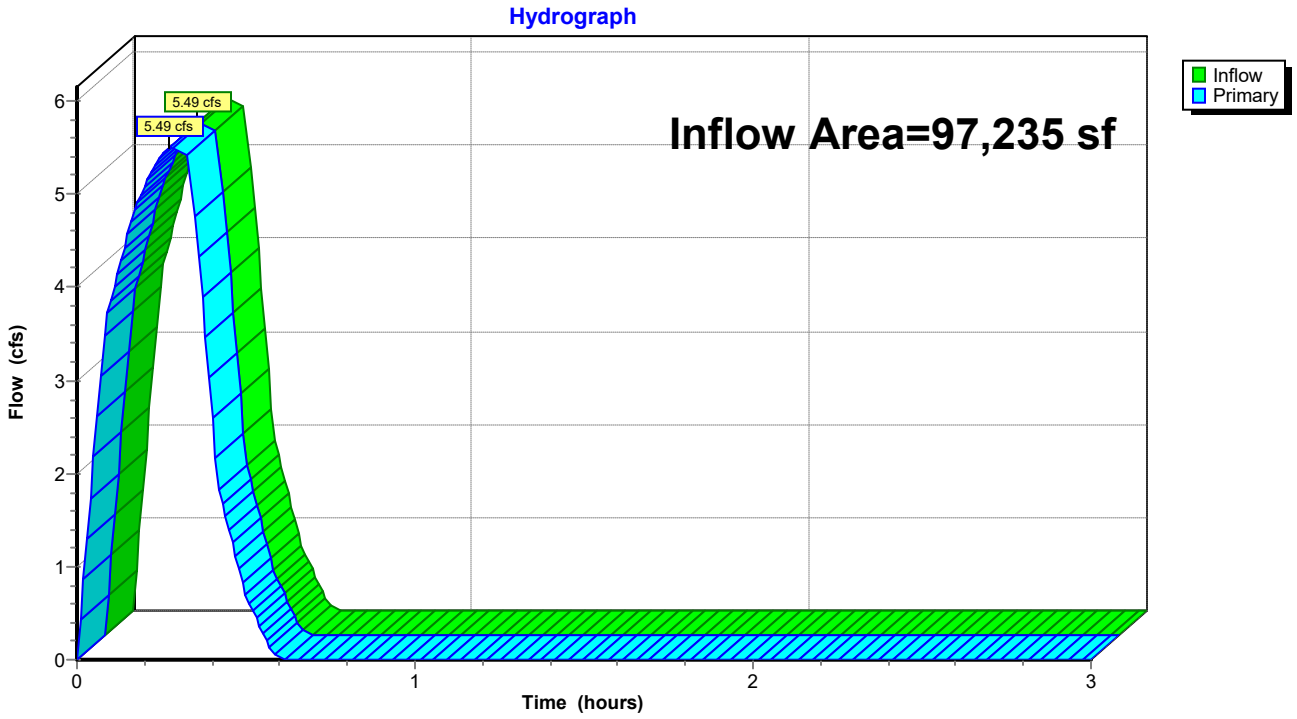


Summary for Pond CI-A5: CI - A5

Inflow Area = 97,235 sf, 62.81% Impervious, Inflow Depth = 0.81" for 2-yr event
Inflow = 5.49 cfs @ 0.27 hrs, Volume= 6,590 cf
Primary = 5.49 cfs @ 0.27 hrs, Volume= 6,590 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond DP : Existing North Detention Pond

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-A5: CI - A5

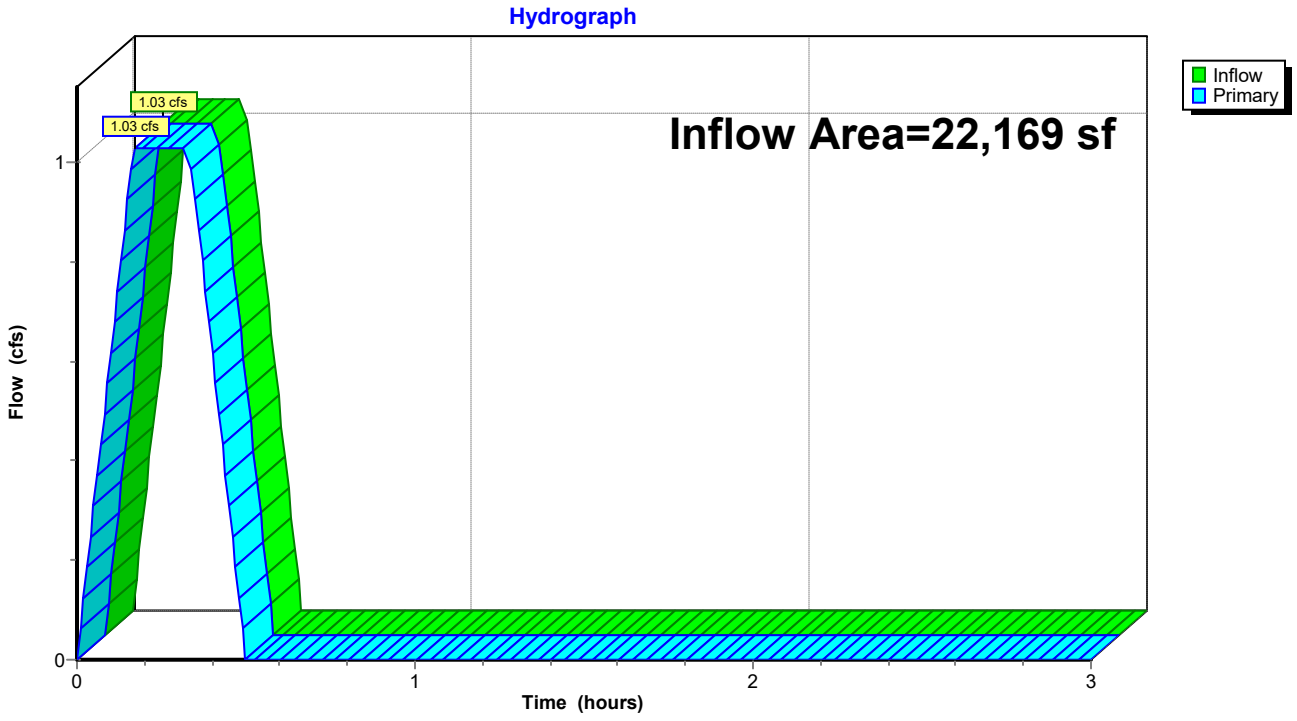


Summary for Pond CI-B2: CI - B2

Inflow Area = 22,169 sf, 29.72% Impervious, Inflow Depth = 0.67" for 2-yr event
Inflow = 1.03 cfs @ 0.17 hrs, Volume= 1,235 cf
Primary = 1.03 cfs @ 0.17 hrs, Volume= 1,235 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond JB-A2 : JB - A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-B2: CI - B2

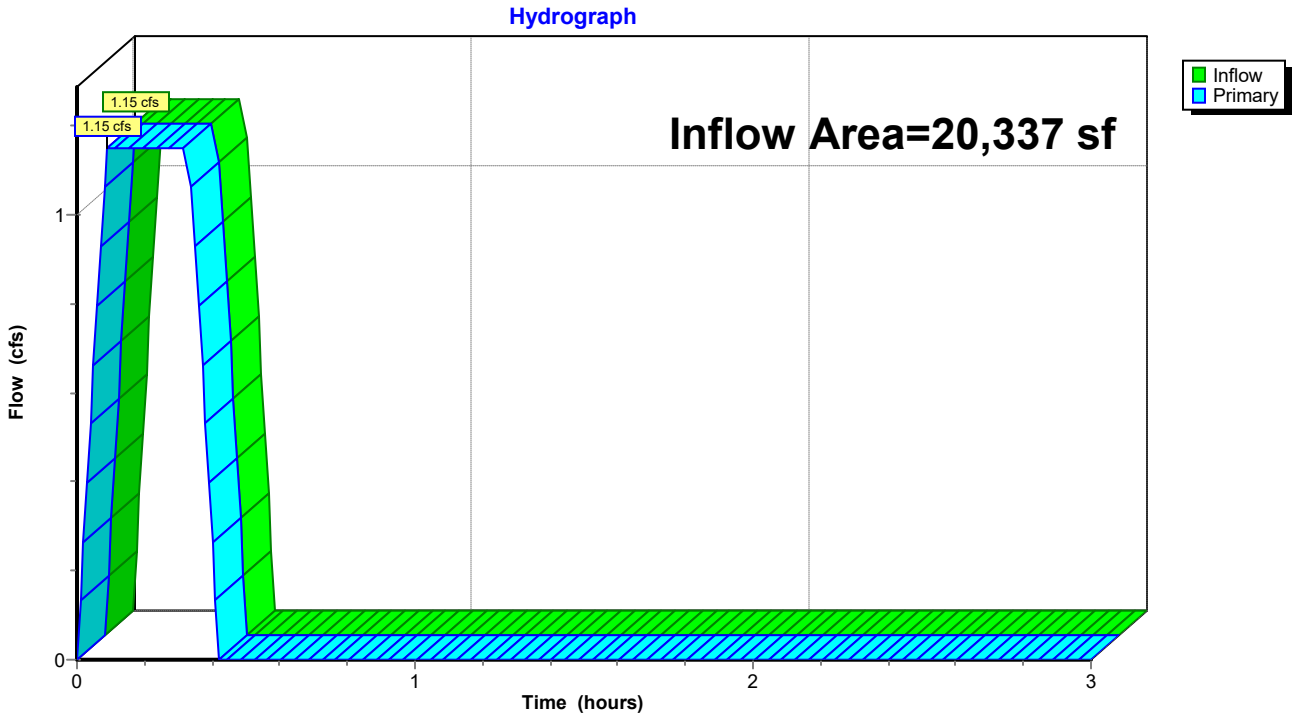


Summary for Pond CI-C1: CI - C1

Inflow Area = 20,337 sf, 69.83% Impervious, Inflow Depth = 0.81" for 2-yr event
Inflow = 1.15 cfs @ 0.09 hrs, Volume= 1,380 cf
Primary = 1.15 cfs @ 0.09 hrs, Volume= 1,380 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C2 : CI - C2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C1: CI - C1

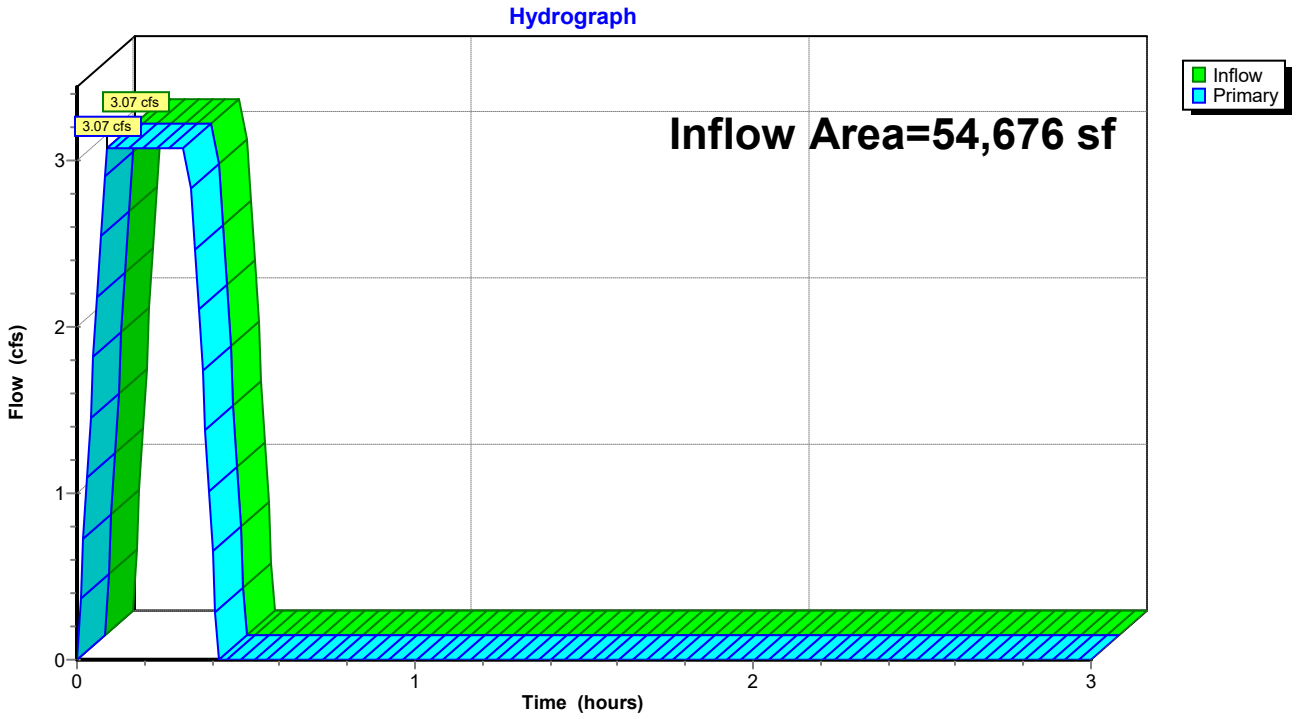


Summary for Pond CI-C2: CI - C2

Inflow Area = 54,676 sf, 67.97% Impervious, Inflow Depth = 0.81" for 2-yr event
Inflow = 3.07 cfs @ 0.09 hrs, Volume= 3,681 cf
Primary = 3.07 cfs @ 0.09 hrs, Volume= 3,681 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C3 : CI - C3

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C2: CI - C2

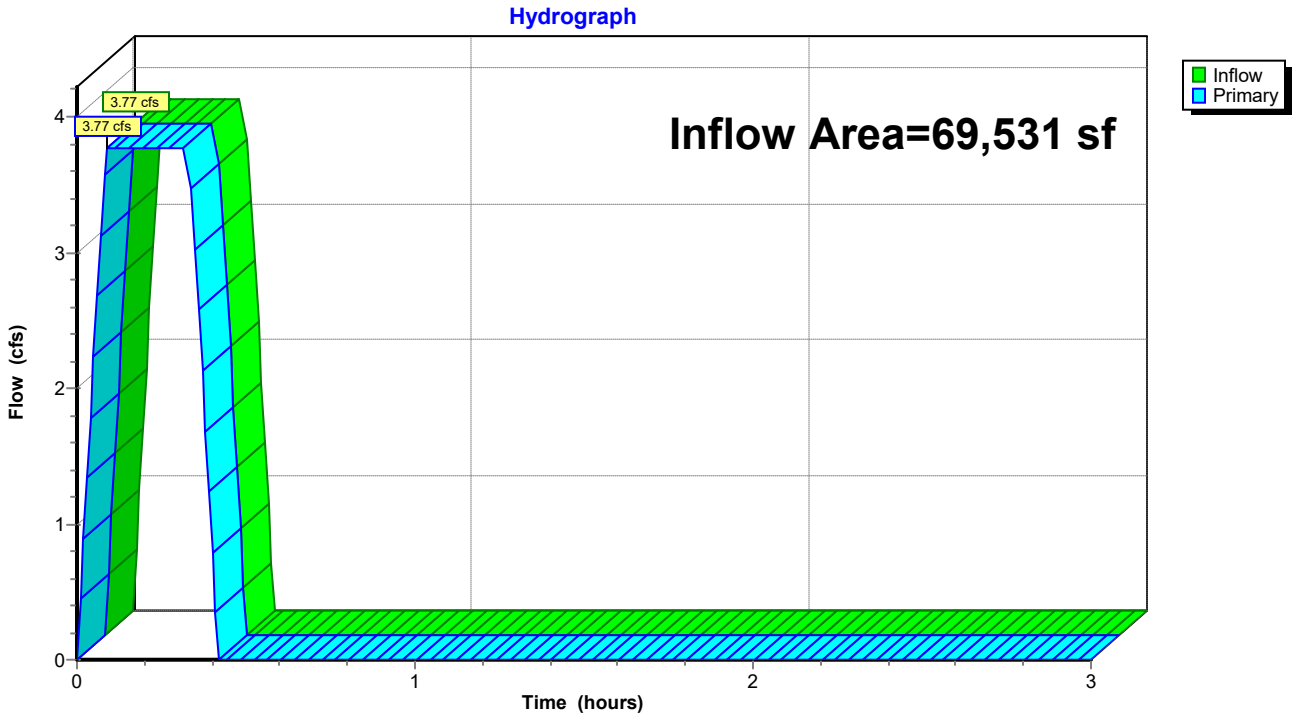


Summary for Pond CI-C3: CI - C3

Inflow Area = 69,531 sf, 63.12% Impervious, Inflow Depth = 0.78" for 2-yr event
Inflow = 3.77 cfs @ 0.09 hrs, Volume= 4,523 cf
Primary = 3.77 cfs @ 0.09 hrs, Volume= 4,523 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C4 : CI - C4

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C3: CI - C3

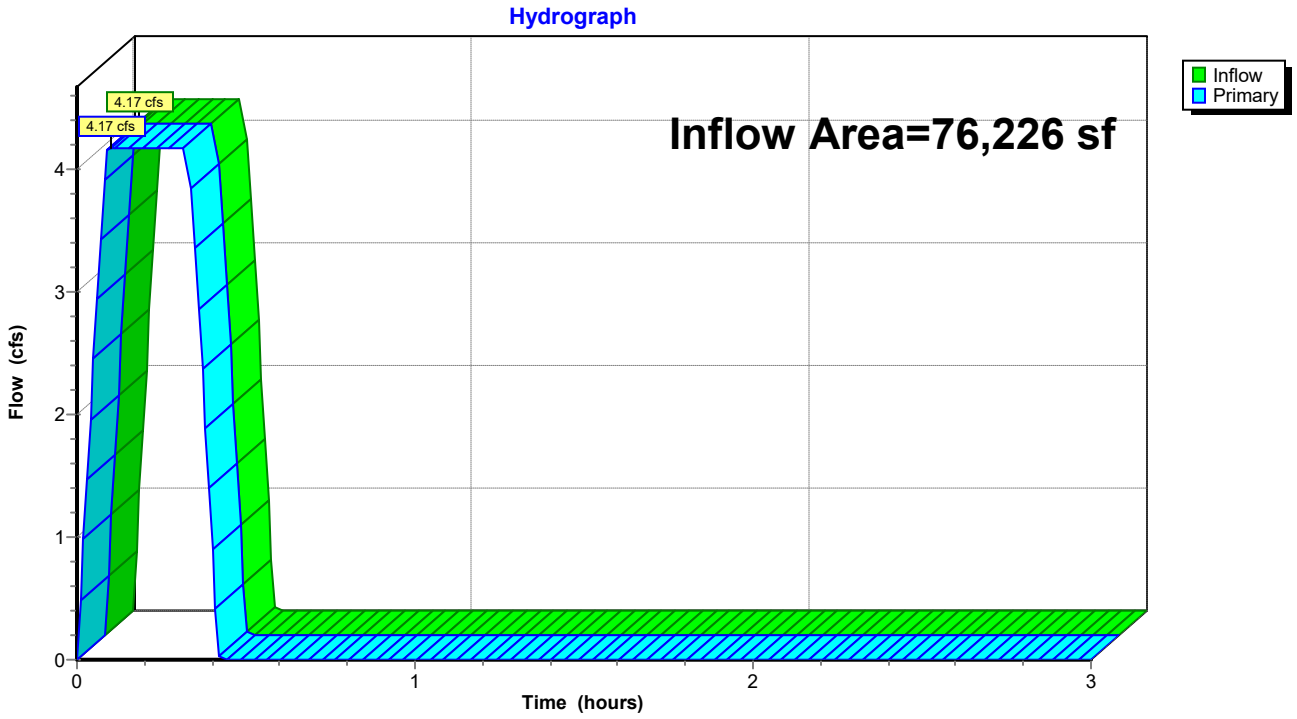


Summary for Pond CI-C4: CI - C4

Inflow Area = 76,226 sf, 64.22% Impervious, Inflow Depth = 0.79" for 2-yr event
Inflow = 4.17 cfs @ 0.10 hrs, Volume= 5,001 cf
Primary = 4.17 cfs @ 0.10 hrs, Volume= 5,001 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C5 : CI - C5

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C4: CI - C4

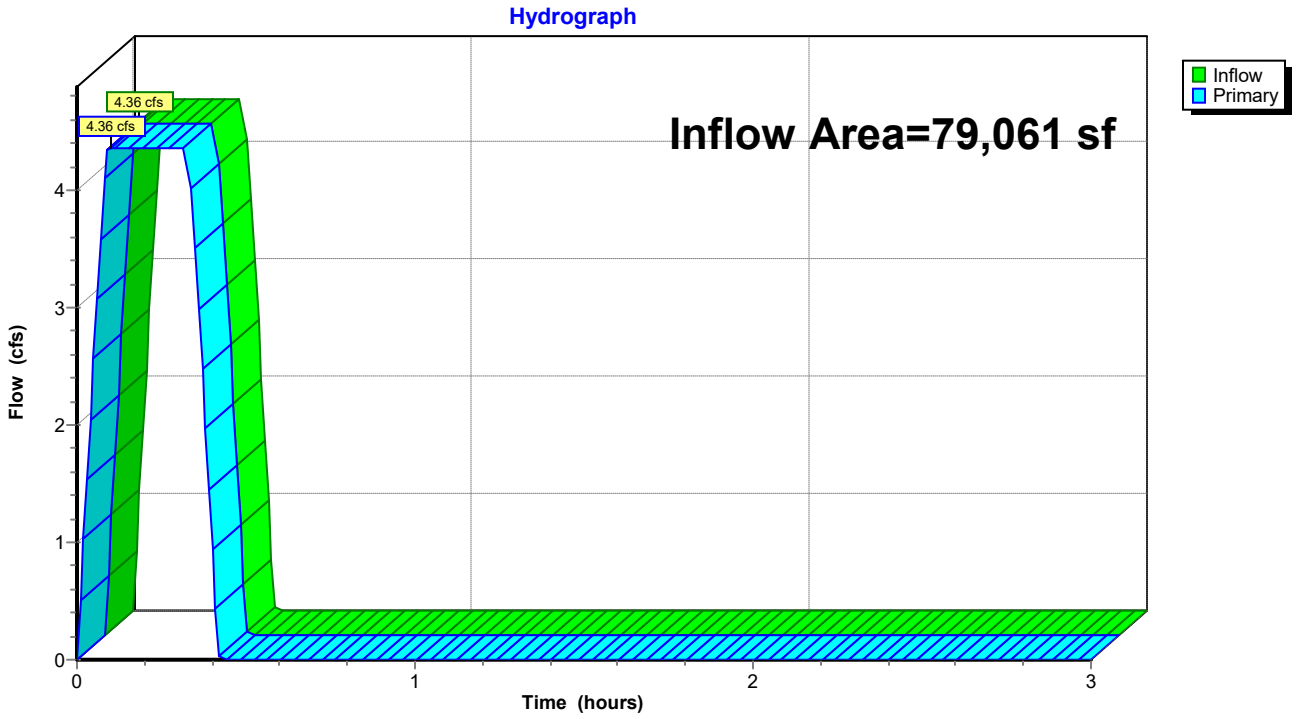


Summary for Pond CI-C5: CI - C5

Inflow Area = 79,061 sf, 65.50% Impervious, Inflow Depth = 0.79" for 2-yr event
Inflow = 4.36 cfs @ 0.10 hrs, Volume= 5,235 cf
Primary = 4.36 cfs @ 0.10 hrs, Volume= 5,235 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C6 : CI - C6

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C5: CI - C5

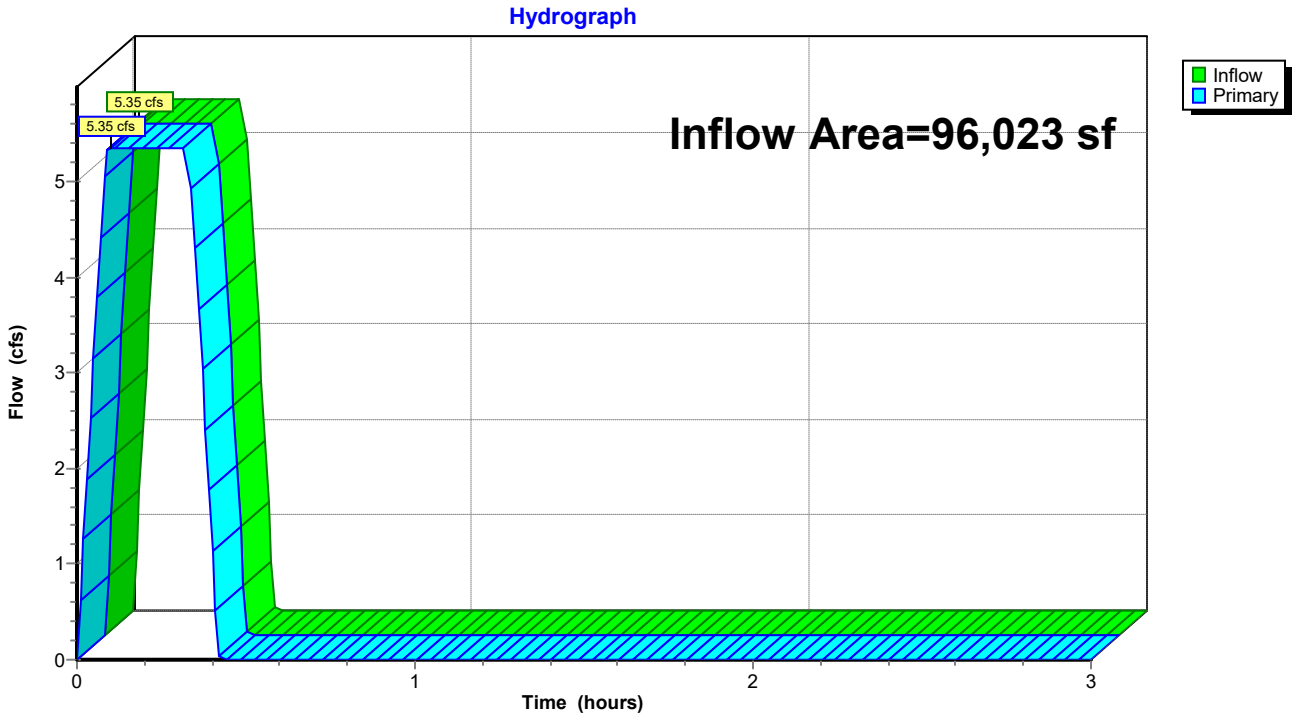


Summary for Pond CI-C6: CI - C6

Inflow Area = 96,023 sf, 66.95% Impervious, Inflow Depth = 0.80" for 2-yr event
Inflow = 5.35 cfs @ 0.10 hrs, Volume= 6,421 cf
Primary = 5.35 cfs @ 0.10 hrs, Volume= 6,421 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C7 : CI - C7

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C6: CI - C6

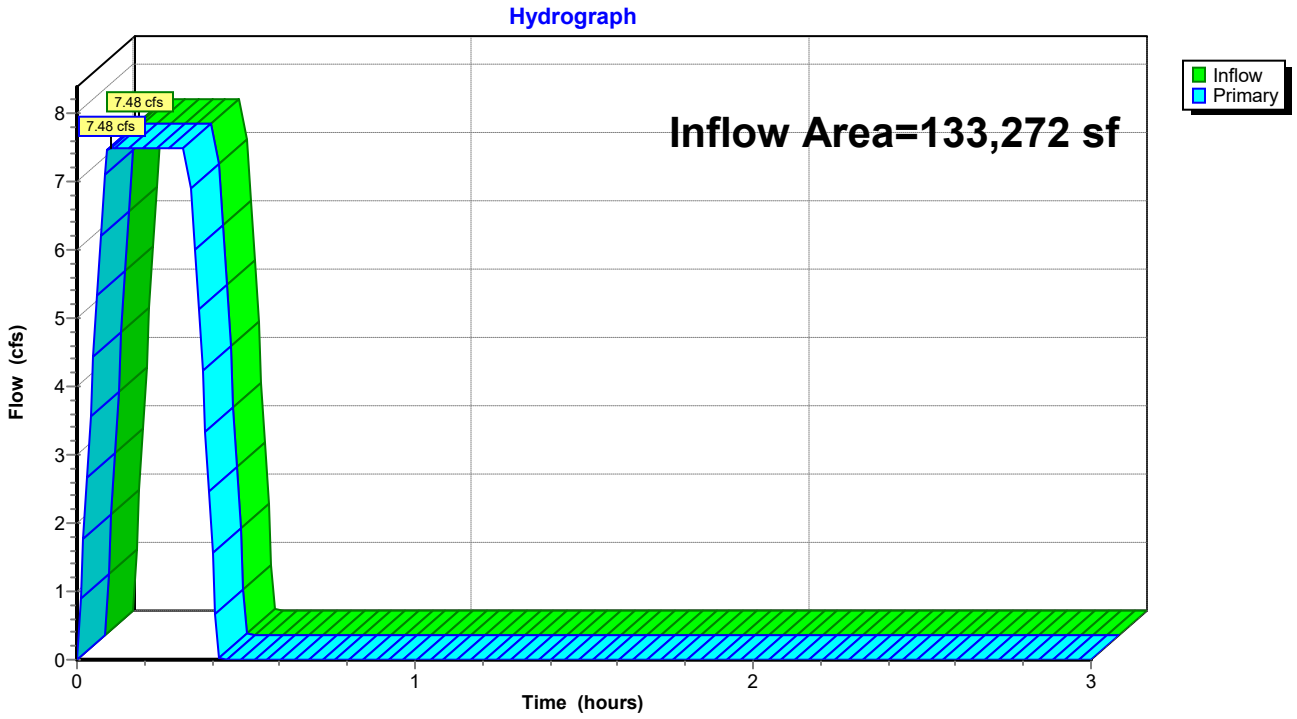


Summary for Pond CI-C7: CI - C7

Inflow Area = 133,272 sf, 67.70% Impervious, Inflow Depth = 0.81" for 2-yr event
Inflow = 7.48 cfs @ 0.10 hrs, Volume= 8,969 cf
Primary = 7.48 cfs @ 0.10 hrs, Volume= 8,969 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond DP : Existing North Detention Pond

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C7: CI - C7

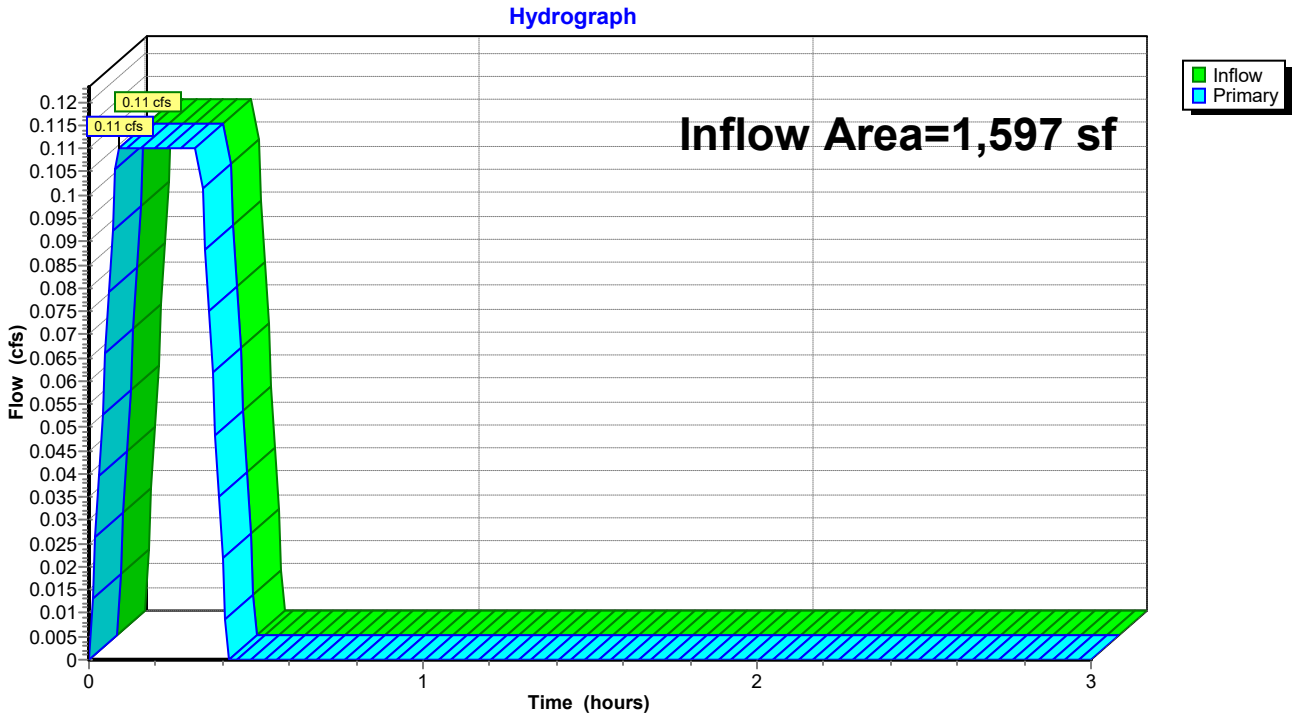


Summary for Pond CI-D1: CI - D1

Inflow Area = 1,597 sf,100.00% Impervious, Inflow Depth = 0.99" for 2-yr event
Inflow = 0.11 cfs @ 0.09 hrs, Volume= 132 cf
Primary = 0.11 cfs @ 0.09 hrs, Volume= 132 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-D2 : CI - D2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-D1: CI - D1

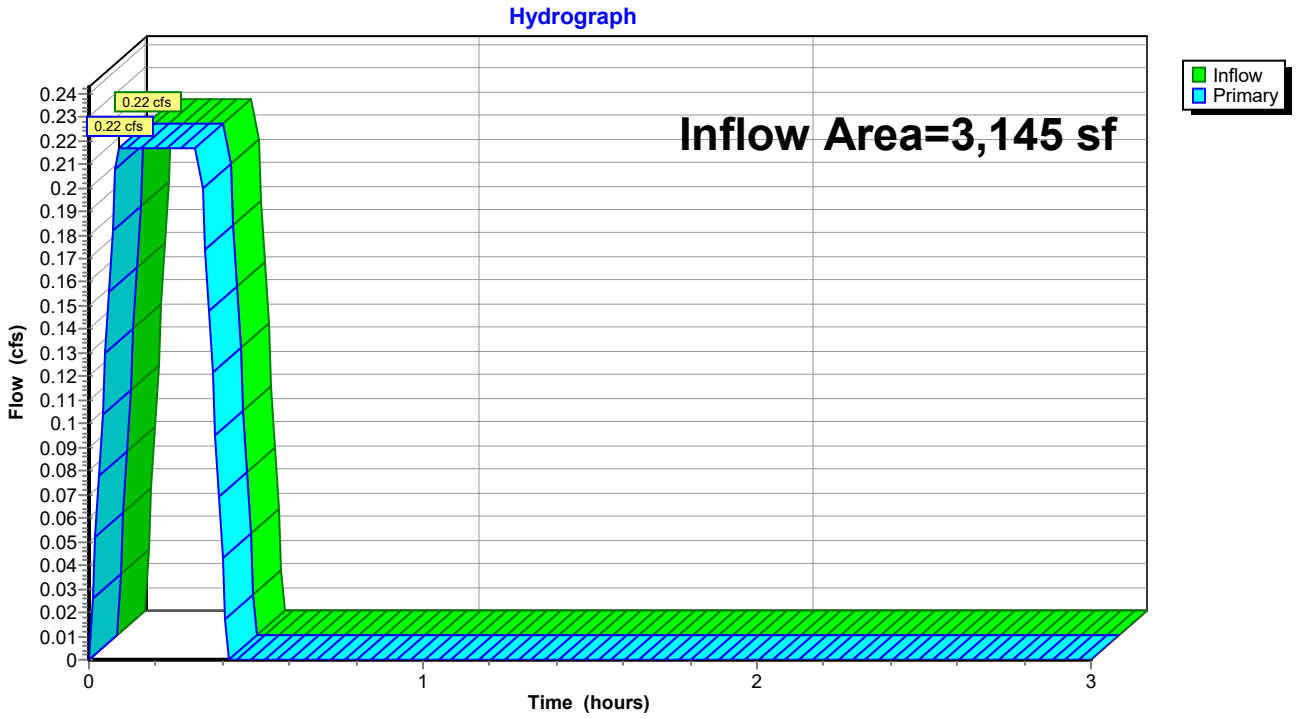


Summary for Pond CI-D2: CI - D2

Inflow Area = 3,145 sf,100.00% Impervious, Inflow Depth = 0.99" for 2-yr event
Inflow = 0.22 cfs @ 0.09 hrs, Volume= 260 cf
Primary = 0.22 cfs @ 0.09 hrs, Volume= 260 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C6 : CI - C6

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-D2: CI - D2

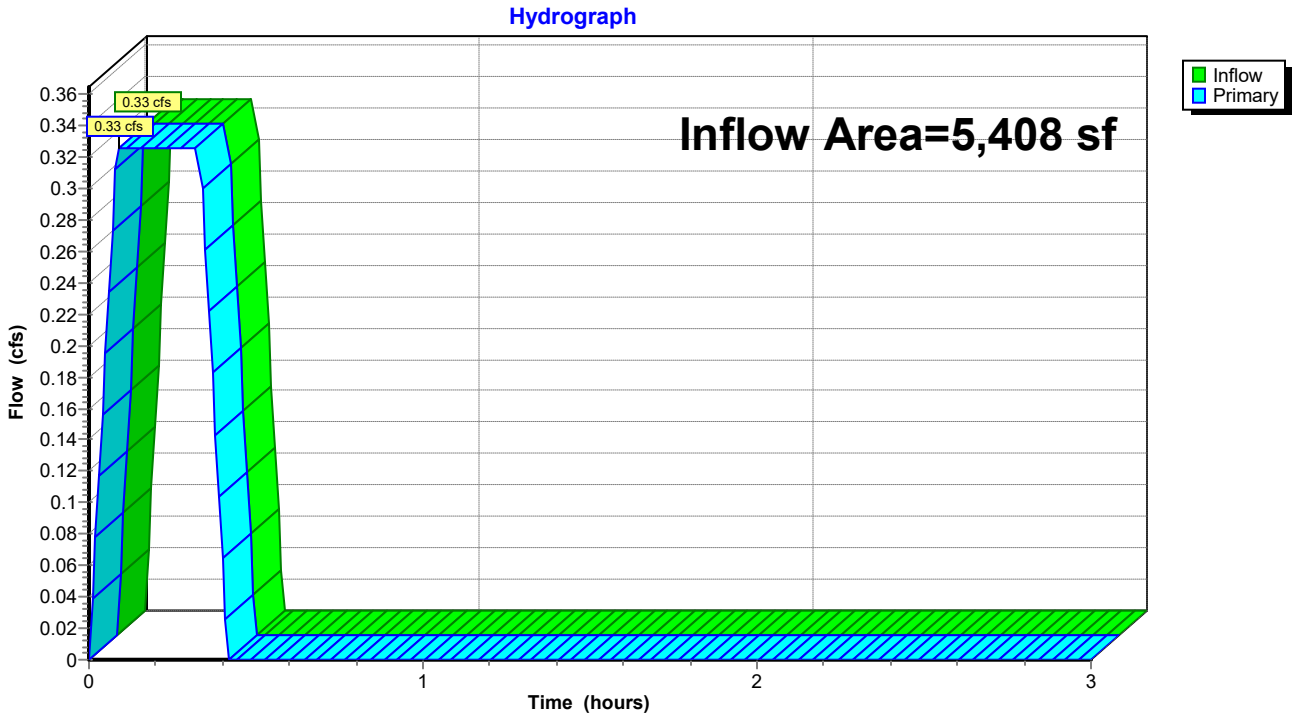


Summary for Pond CI-E1: CI - E1

Inflow Area = 5,408 sf, 77.35% Impervious, Inflow Depth = 0.87" for 2-yr event
Inflow = 0.33 cfs @ 0.09 hrs, Volume= 391 cf
Primary = 0.33 cfs @ 0.09 hrs, Volume= 391 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-E2 : CI - E2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-E1: CI - E1

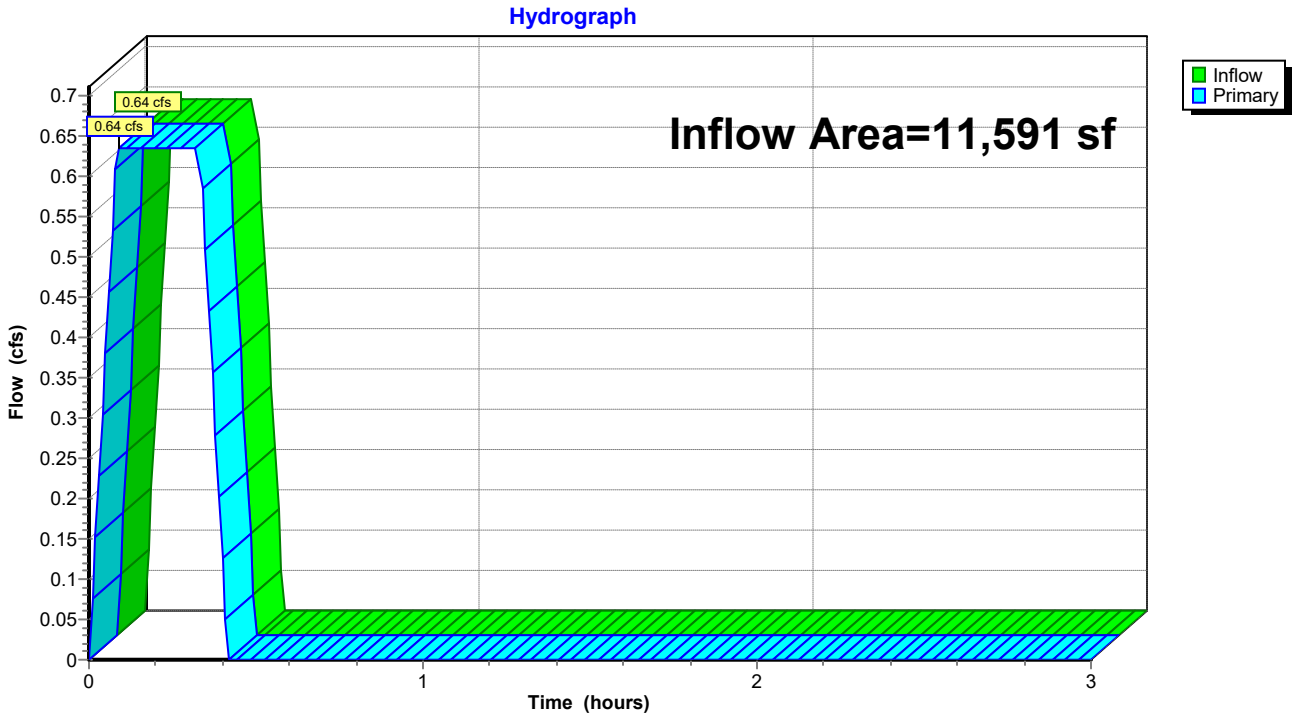


Summary for Pond CI-E2: CI - E2

Inflow Area = 11,591 sf, 64.62% Impervious, Inflow Depth = 0.79" for 2-yr event
Inflow = 0.64 cfs @ 0.09 hrs, Volume= 762 cf
Primary = 0.64 cfs @ 0.09 hrs, Volume= 762 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C7 : CI - C7

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-E2: CI - E2



Summary for Pond DP: Existing North Detention Pond

Inflow Area = 322,783 sf, 53.09% Impervious, Inflow Depth = 0.73" for 2-yr event
Inflow = 16.44 cfs @ 0.27 hrs, Volume= 19,723 cf
Outflow = 8.58 cfs @ 0.38 hrs, Volume= 19,723 cf, Atten= 48%, Lag= 6.7 min
Primary = 8.58 cfs @ 0.38 hrs, Volume= 19,723 cf
Routed to Link FINAL : APPROX DISCHARGE

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 382.69' @ 0.38 hrs Storage= 10,893 cf

Plug-Flow detention time= 15.8 min calculated for 19,723 cf (100% of inflow)
Center-of-Mass det. time= 15.7 min (29.2 - 13.5)

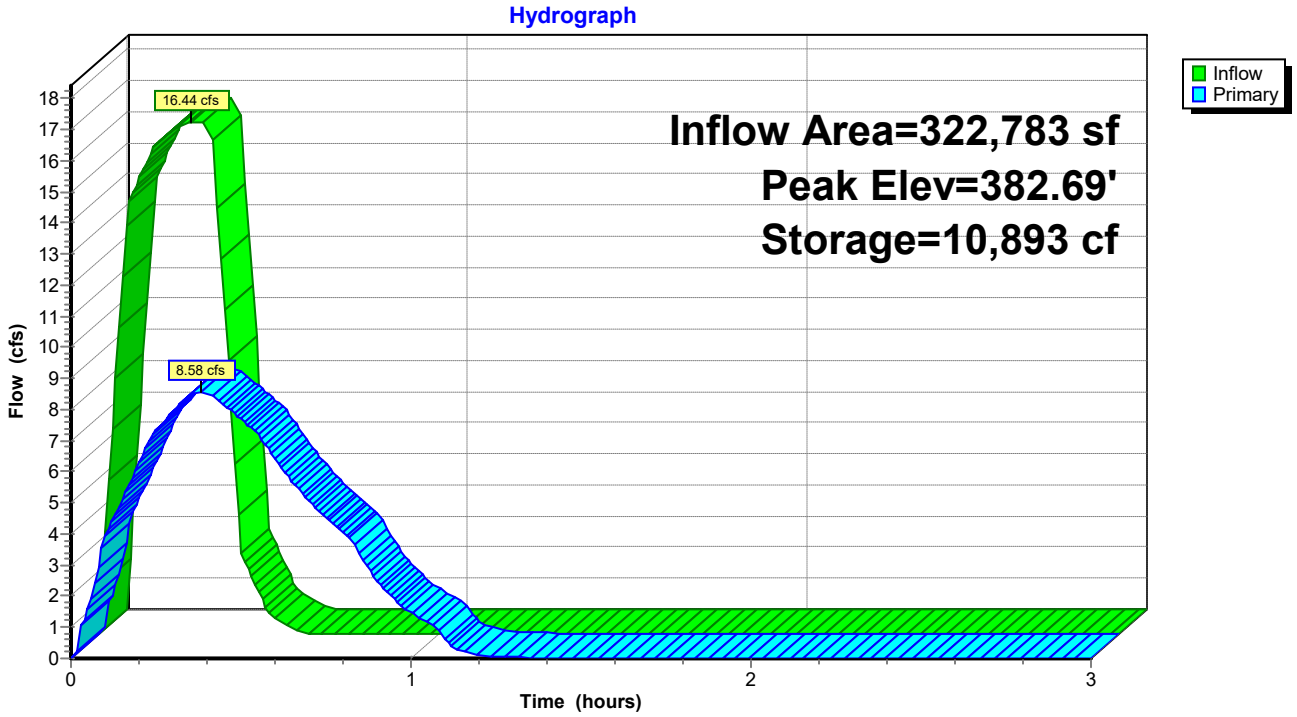
Volume	Invert	Avail.Storage	Storage Description
#1	381.17'	72,742 cf	**Custom Stage Data** Listed below

Elevation (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
381.17	0	0
381.50	200	200
382.00	1,825	2,025
382.50	5,265	7,290
383.00	9,300	16,590
383.50	13,733	30,323
384.00	18,578	48,901
384.50	23,841	72,742

Device	Routing	Invert	Outlet Devices
#1	Primary	384.16'	**5.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#2	Primary	381.17'	**1.7' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=8.58 cfs @ 0.38 hrs HW=382.69' (Free Discharge)
1=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
2=Sharp-Crested Rectangular Weir (Weir Controls 8.58 cfs @ 4.04 fps)

Pond DP: Existing North Detention Pond

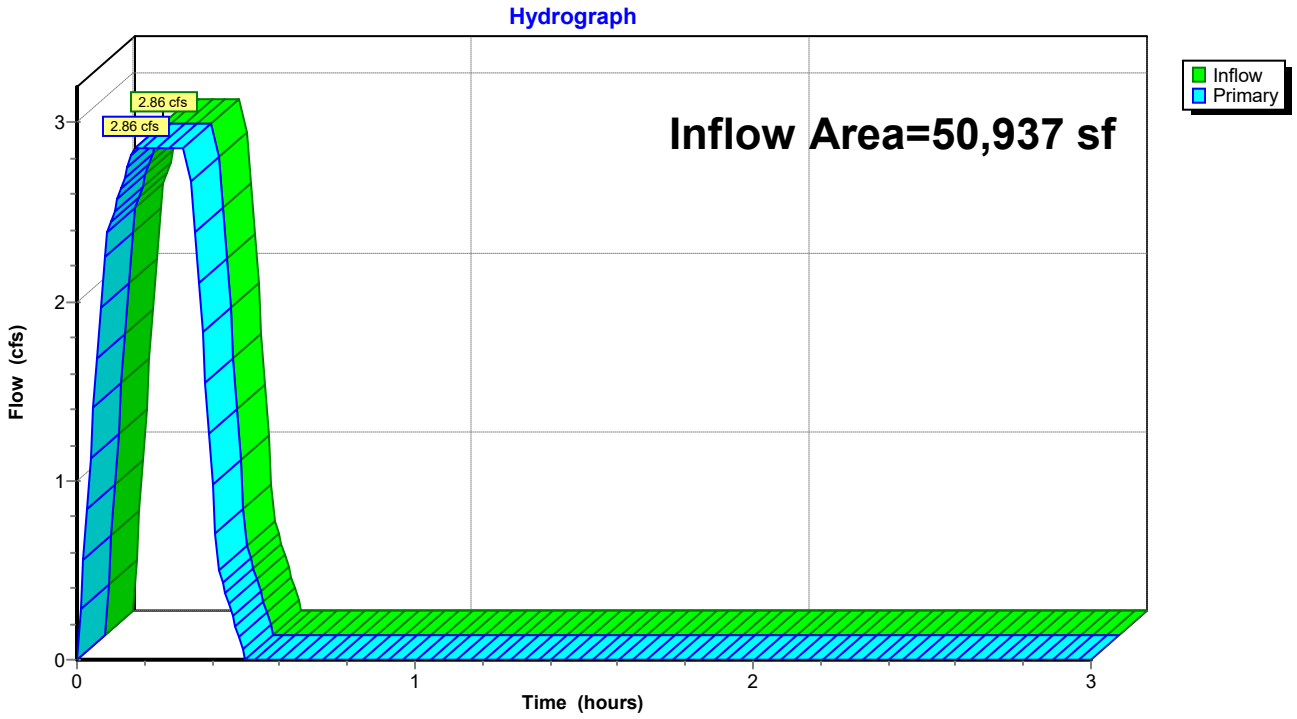


Summary for Pond JB-A2: JB - A2

Inflow Area = 50,937 sf, 59.76% Impervious, Inflow Depth = 0.81" for 2-yr event
Inflow = 2.86 cfs @ 0.17 hrs, Volume= 3,427 cf
Primary = 2.86 cfs @ 0.17 hrs, Volume= 3,427 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A3 : CI - A3

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond JB-A2: JB - A2

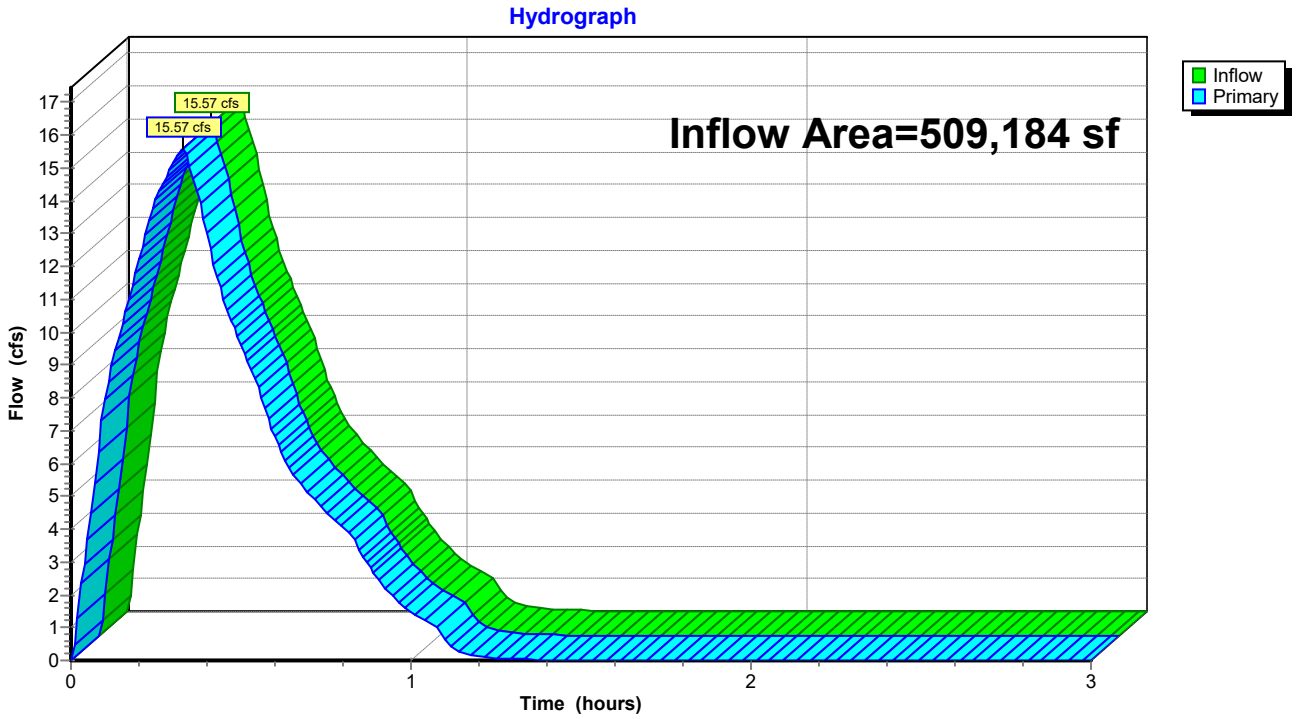


Summary for Link FINAL: APPROX DISCHARGE

Inflow Area = 509,184 sf, 38.62% Impervious, Inflow Depth = 0.67" for 2-yr event
Inflow = 15.57 cfs @ 0.33 hrs, Volume= 28,475 cf
Primary = 15.57 cfs @ 0.33 hrs, Volume= 28,475 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link FINAL: APPROX DISCHARGE



Summary for Subcatchment B1: Drainage Basin B1

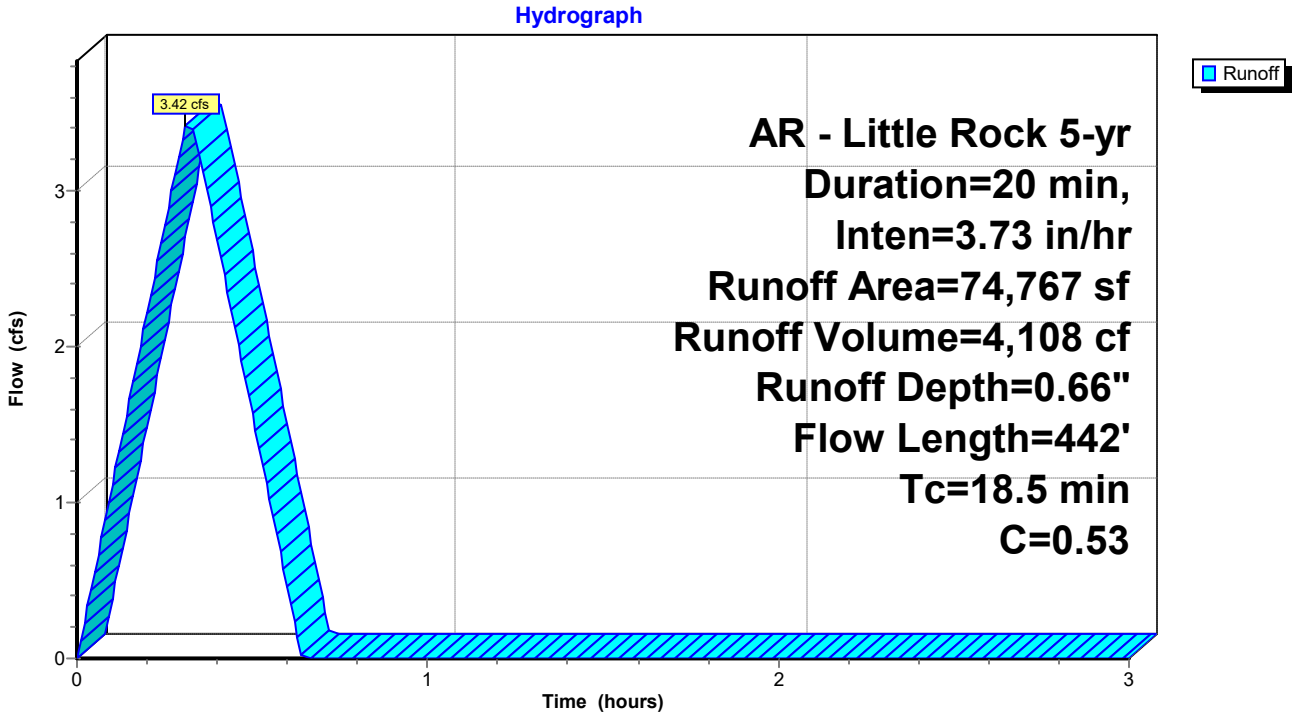
Runoff = 3.42 cfs @ 0.31 hrs, Volume= 4,108 cf, Depth= 0.66"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
9,241	0.51	Sod Yard
602	0.95	Paving, Sidewalks
64,924	0.53	Undeveloped
74,767	0.53	Weighted Average
74,165		99.19% Pervious Area
602		0.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	6	0.0180	0.86		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
2.6	25	0.1920	0.16		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
11.9	75	0.0370	0.11		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.7	58	0.0370	1.35		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.6	141	0.0420	1.43		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.7	60	0.0400	1.40		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.9	77	0.0420	1.43		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
18.5	442	Total			

Subcatchment B1: Drainage Basin B1



Summary for Subcatchment B2: Drainage Basin B2

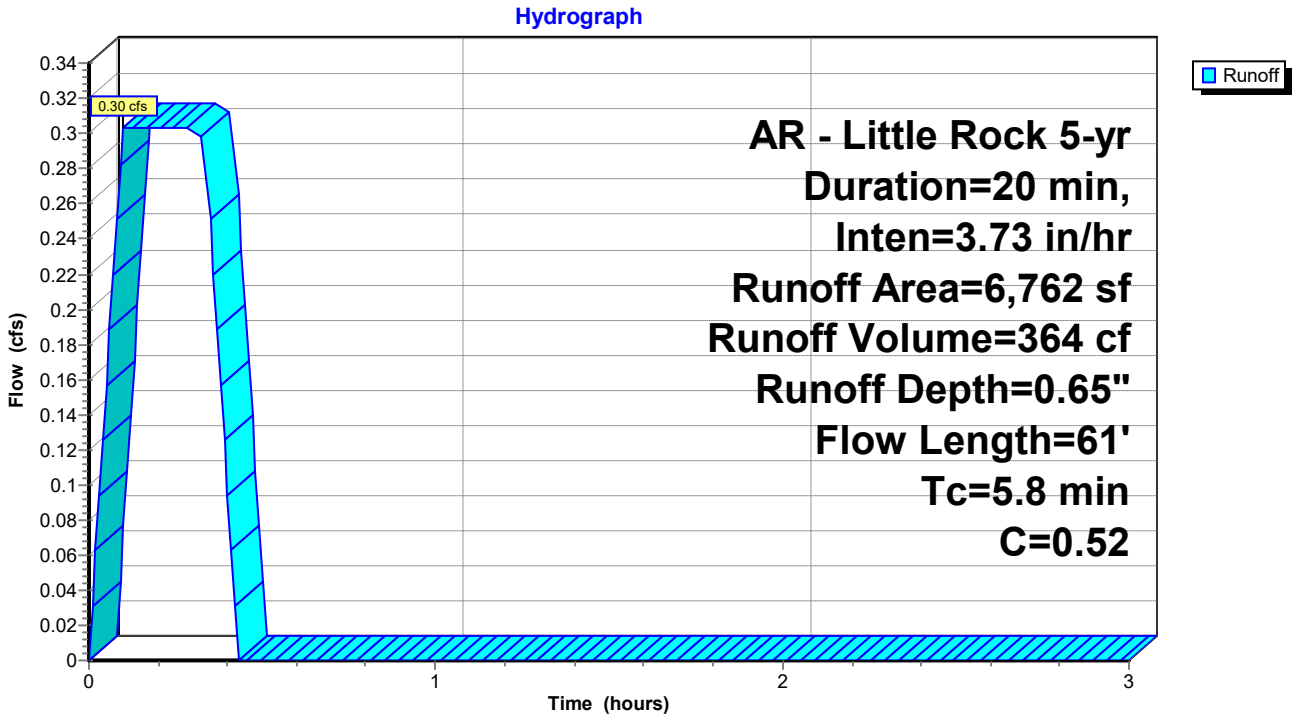
Runoff = 0.30 cfs @ 0.10 hrs, Volume= 364 cf, Depth= 0.65"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
6,595	0.51	Sod Yard
167	0.95	Paving, Sidewalks
6,762	0.52	Weighted Average
6,595		97.53% Pervious Area
167		2.47% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	6	0.0180	0.86		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
5.7	55	0.1240	0.16		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
5.8	61	Total			

Subcatchment B2: Drainage Basin B2



Summary for Subcatchment B3: Drainage Basin B3

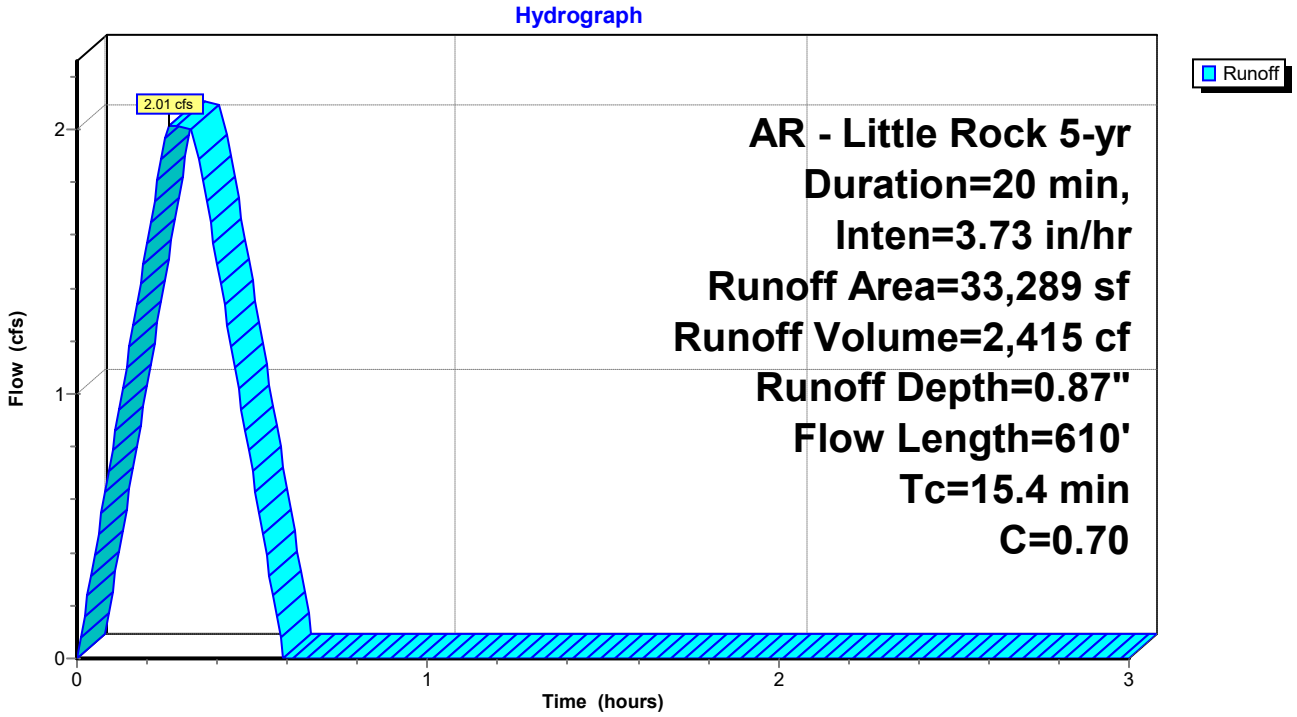
Runoff = 2.01 cfs @ 0.26 hrs, Volume= 2,415 cf, Depth= 0.87"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
18,730	0.51	Sod Yard
14,559	0.95	Paving, Sidewalks
33,289	0.70	Weighted Average
18,730		56.26% Pervious Area
14,559		43.74% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	47	0.1300	0.16		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
6.9	53	0.0730	0.13		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.0	11	0.0940	4.60		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.4	53	0.0120	2.22		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.5	59	0.0100	2.03		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.5	47	0.0070	1.70		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.5	56	0.0070	1.70		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	38	0.0160	2.57		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	30	0.0190	2.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
1.3	216	0.0190	2.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
15.4	610	Total			

Subcatchment B3: Drainage Basin B3



Summary for Subcatchment B4: Drainage Basin B4

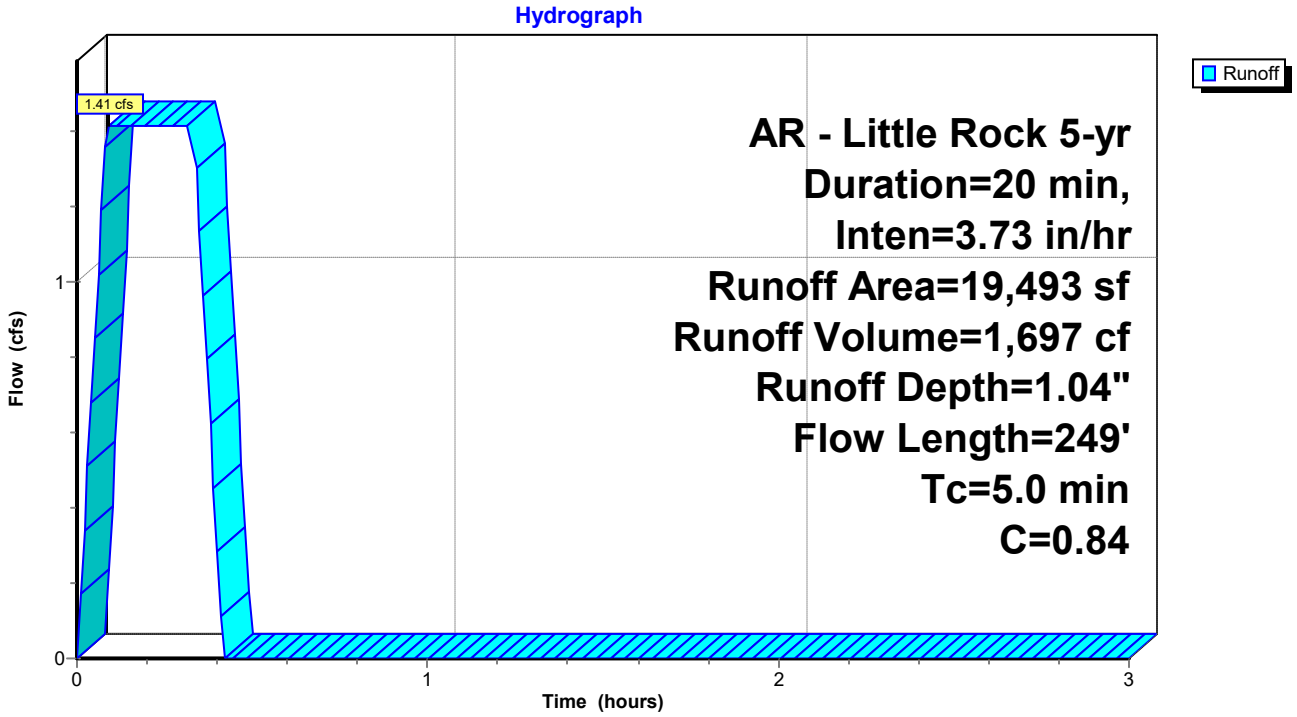
Runoff = 1.41 cfs @ 0.09 hrs, Volume= 1,697 cf, Depth= 1.04"
Routed to Pond CI-A1 : CI - A1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
4,916	0.51	Sod Yard
14,577	0.95	Paving, Sidewalks
19,493	0.84	Weighted Average
4,916		25.22% Pervious Area
14,577		74.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	31	0.0230	1.32		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	18	0.0250	1.22		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.3	28	0.0450	1.69		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.4	72	0.0250	3.21		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	18	0.0170	2.65		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.3	51	0.0170	2.65		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	16	0.0170	2.65		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	8	0.0430	4.21		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	7	0.0580	4.89		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
3.2					**Direct Entry, Overland Concentrated Flow (Min)**
5.0	249	Total			

Subcatchment B4: Drainage Basin B4



Summary for Subcatchment B5: Drainage Basin B5

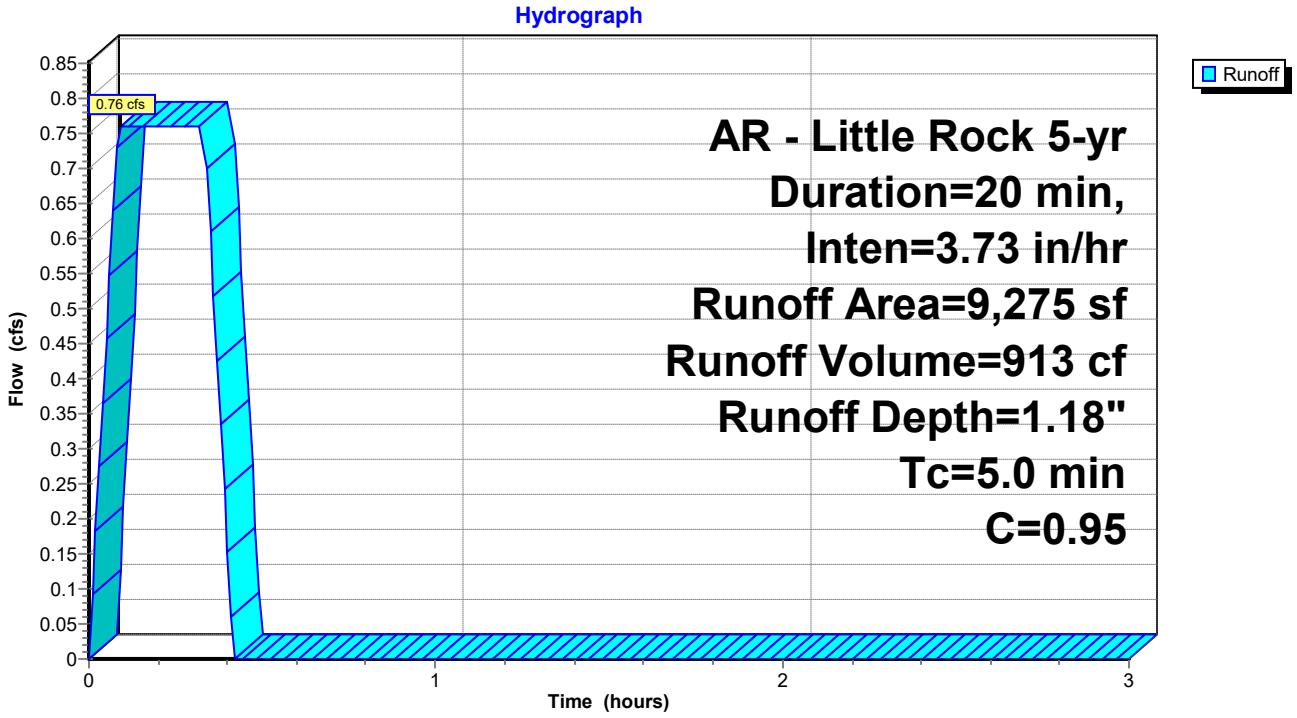
Runoff = 0.76 cfs @ 0.09 hrs, Volume= 913 cf, Depth= 1.18"
Routed to Pond JB-A2 : JB - A2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
9,275	0.95	Roof
9,275		100.00% Impervious Area

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

Subcatchment B5: Drainage Basin B5



Summary for Subcatchment B6: Drainage Basin B6

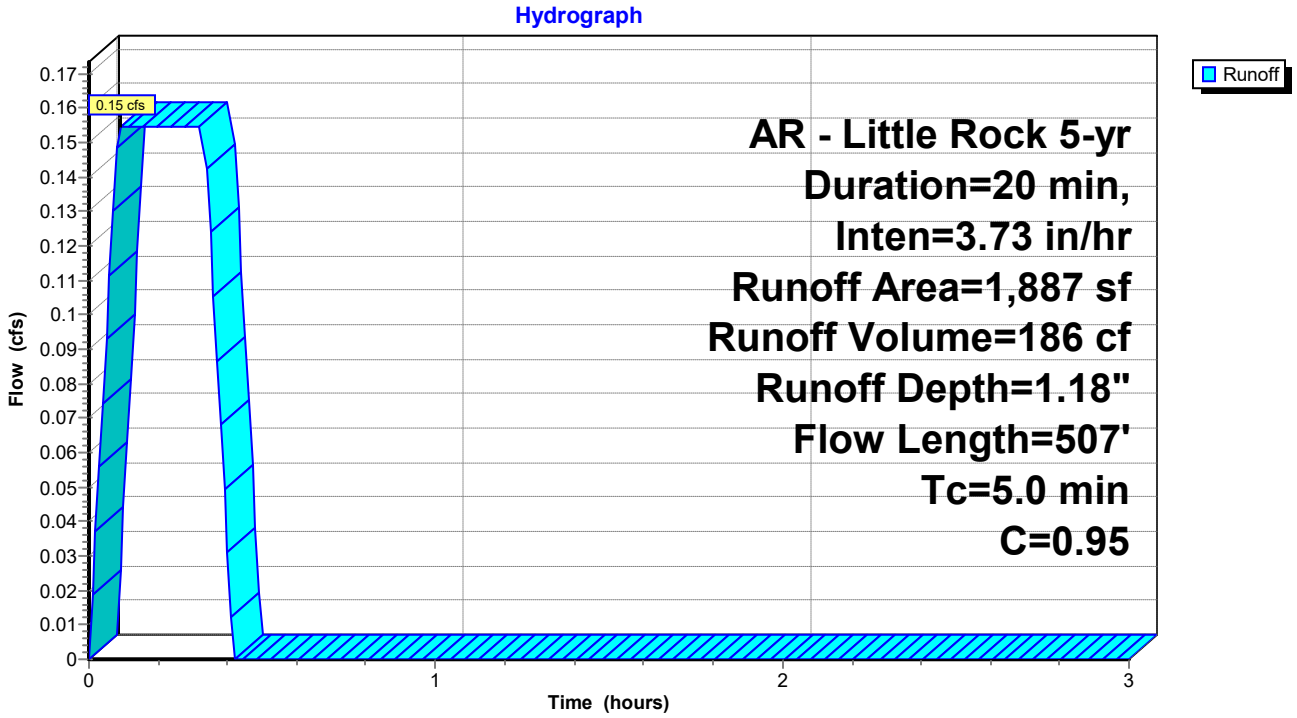
Runoff = 0.15 cfs @ 0.09 hrs, Volume= 186 cf, Depth= 1.18"
Routed to Pond CI-A3 : CI - A3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
0	0.51	Sod Yard
1,887	0.95	Paving, Sidewalks
1,887	0.95	Weighted Average
1,887		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	31	0.0230	1.32		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	18	0.0250	1.22		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.4	30	0.0240	1.33		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.0	13	0.0860	5.95		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.0	415		1.73		**Direct Entry, Overland Concentrated Flow (Min)**
5.0	507	Total			

Subcatchment B6: Drainage Basin B6



Summary for Subcatchment B7: Drainage Basin B7

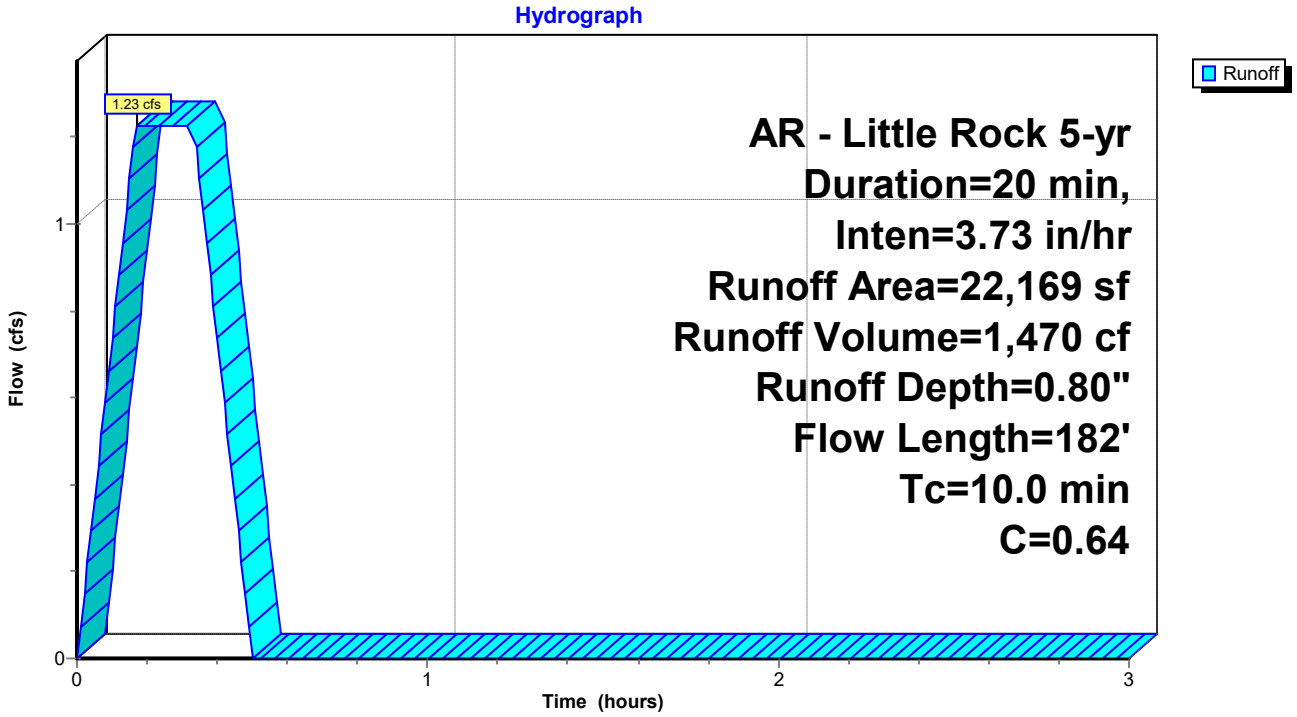
Runoff = 1.23 cfs @ 0.17 hrs, Volume= 1,470 cf, Depth= 0.80"
Routed to Pond CI-B2 : CI - B2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
15,580	0.51	Sod Yard
6,589	0.95	Paving, Sidewalks
22,169	0.64	Weighted Average
15,580		70.28% Pervious Area
6,589		29.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	10	0.0150	0.89		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
9.1	93	0.0150	0.17		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
0.4	40	0.0110	1.57		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	33	0.0190	2.07		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.0	6	0.0180	2.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
10.0	182	Total			

Subcatchment B7: Drainage Basin B7



Summary for Subcatchment B8: Drainage Basin B8

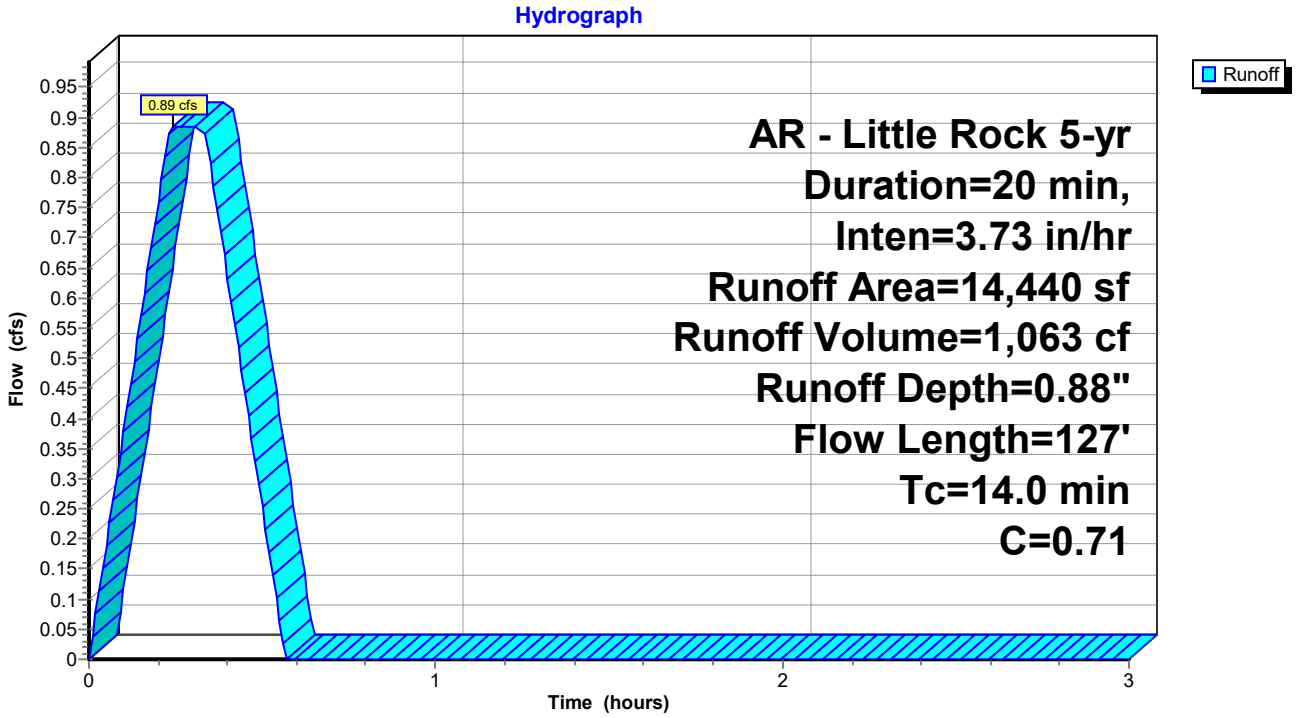
Runoff = 0.89 cfs @ 0.24 hrs, Volume= 1,063 cf, Depth= 0.88"
Routed to Pond CI-A4 : CI - A4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
7,982	0.51	Sod Yard
6,458	0.95	Paving, Sidewalks
14,440	0.71	Weighted Average
7,982		55.28% Pervious Area
6,458		44.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4	79	0.0570	0.13		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
3.5	21	0.0620	0.10		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.0	9	0.0620	3.73		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.1	18	0.1080	4.93		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
14.0	127	Total			

Subcatchment B8: Drainage Basin B8



Summary for Subcatchment C1: Drainage Basin C1

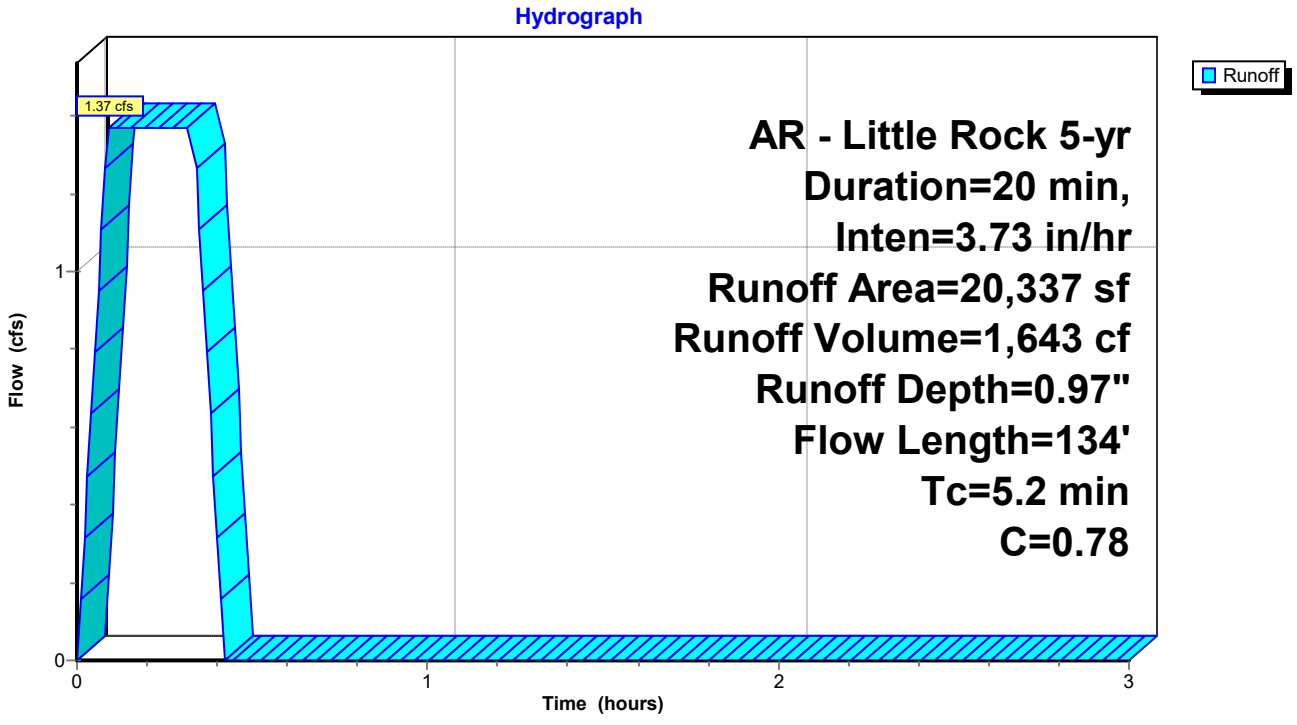
Runoff = 1.37 cfs @ 0.09 hrs, Volume= 1,643 cf, Depth= 0.97"
Routed to Pond CI-C1 : CI - C1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
6,135	0.40	Sod Yard
14,202	0.95	Paving, Sidewalks
20,337	0.78	Weighted Average
6,135		30.17% Pervious Area
14,202		69.83% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	32	0.0660	0.11		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.4	102	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
5.2	134	Total			

Subcatchment C1: Drainage Basin C1



Summary for Subcatchment C10: Drainage Basin C10

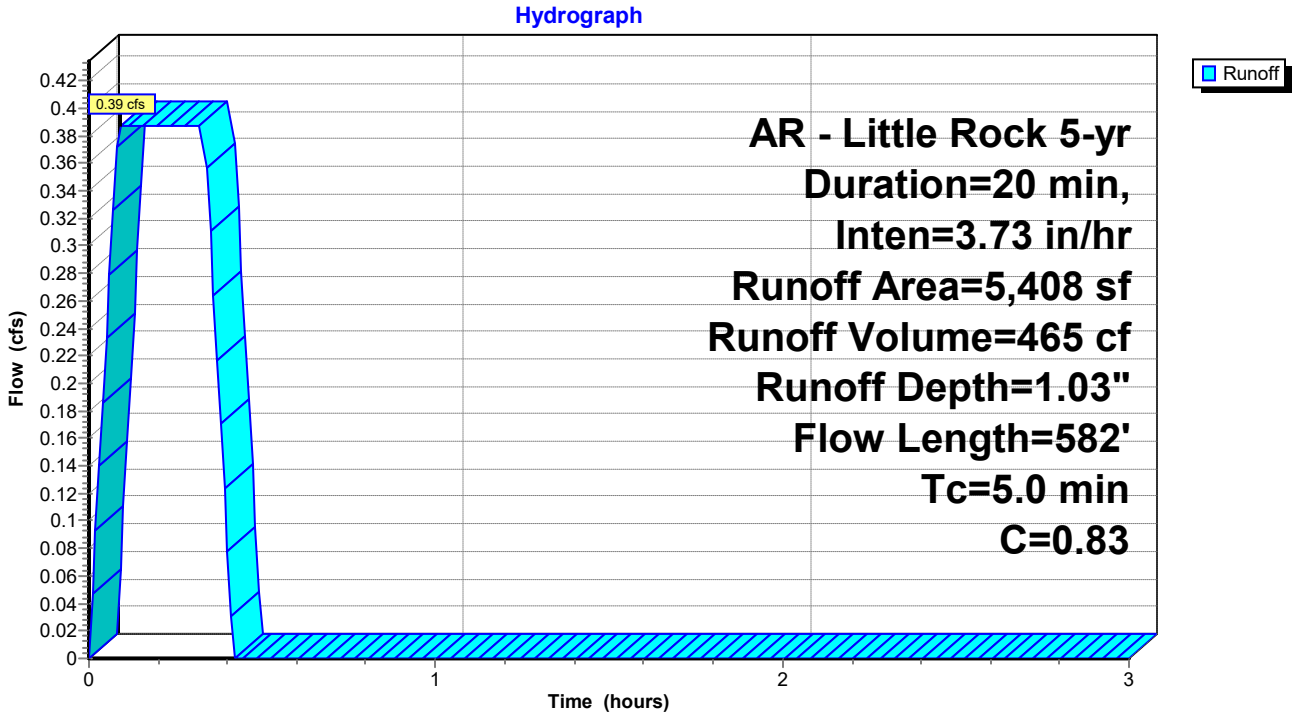
Runoff = 0.39 cfs @ 0.09 hrs, Volume= 465 cf, Depth= 1.03"
Routed to Pond CI-E1 : CI - E1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
1,225	0.40	Sod Yard
4,183	0.95	Paving, Sidewalks
5,408	0.83	Weighted Average
1,225		22.65% Pervious Area
4,183		77.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	18	0.0200	1.12		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	29	0.0210	2.94		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	23	0.0320	3.63		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	36	0.0320	3.63		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	48	0.0330	3.69		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	13	0.0350	3.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
3.9	415		1.77		**Direct Entry, Concentrated Flow (Min)**
5.0	582	Total			

Subcatchment C10: Drainage Basin C10



Summary for Subcatchment C11: Drainage Basin C11

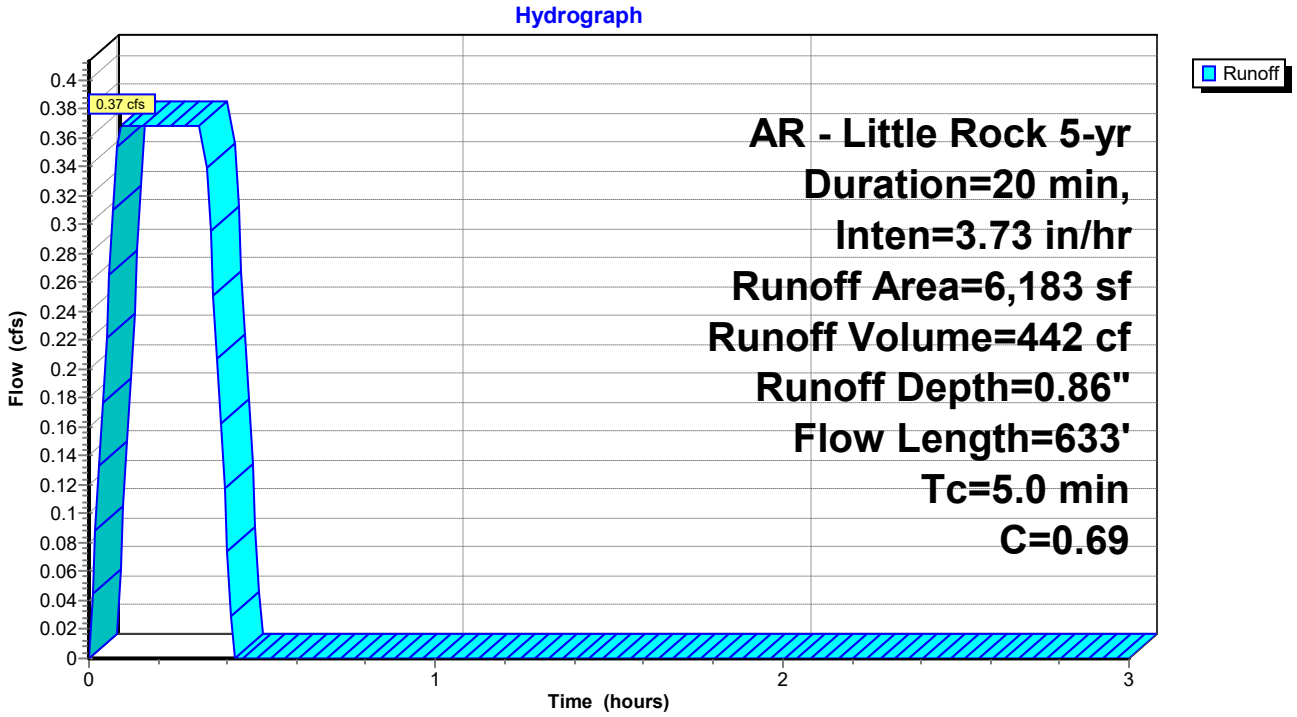
Runoff = 0.37 cfs @ 0.09 hrs, Volume= 442 cf, Depth= 0.86"
Routed to Pond CI-E2 : CI - E2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
2,876	0.40	Sod Yard
3,307	0.95	Paving, Sidewalks
6,183	0.69	Weighted Average
2,876		46.51% Pervious Area
3,307		53.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	25	0.0200	1.19		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	33	0.0620	5.05		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	29	0.0540	4.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	47	0.0410	4.11		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	47	0.0390	4.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	37	0.0420	4.16		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.0	415		1.73		**Direct Entry, Concentrated Flow (Min)**
5.0	633	Total			

Subcatchment C11: Drainage Basin C11



Summary for Subcatchment C12: Drainage Basin C12

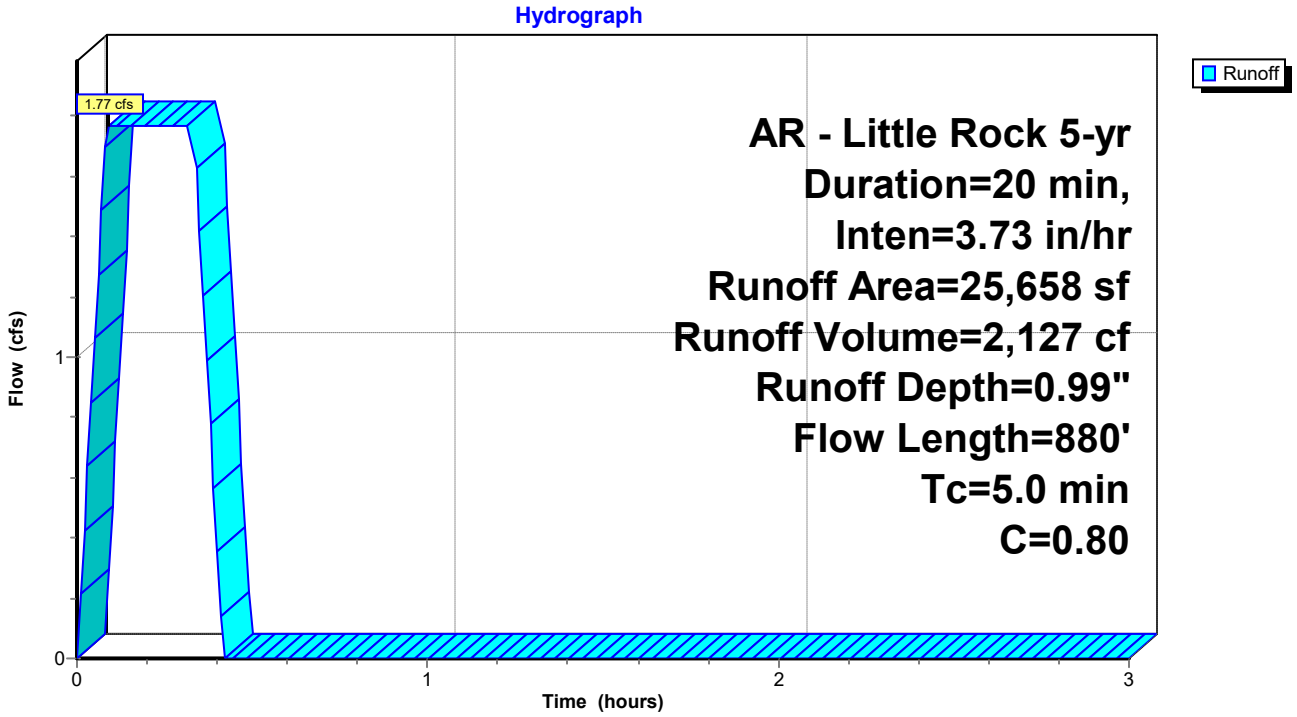
Runoff = 1.77 cfs @ 0.09 hrs, Volume= 2,127 cf, Depth= 0.99"
Routed to Pond CI-C7 : CI - C7

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
7,218	0.40	Sod Yard
18,440	0.95	Paving, Sidewalks
25,658	0.80	Weighted Average
7,218		28.13% Pervious Area
18,440		71.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	24	0.0360	1.50		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	5	0.0190	0.85		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	21	0.0100	2.03		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.9	49	0.0020	0.91		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.4	96	0.0330	3.69		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.3	94	0.0570	4.85		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	28	0.0560	4.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	25	0.0450	4.31		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	31	0.0410	4.11		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	39	0.0490	4.49		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	36	0.0460	4.35		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	11	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	6	0.0440	4.26		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
2.3	415		3.01		**Direct Entry, Concentrated Flow (Min)**
5.0	880	Total			

Subcatchment C12: Drainage Basin C12



Summary for Subcatchment C13: Drainage Basin C13

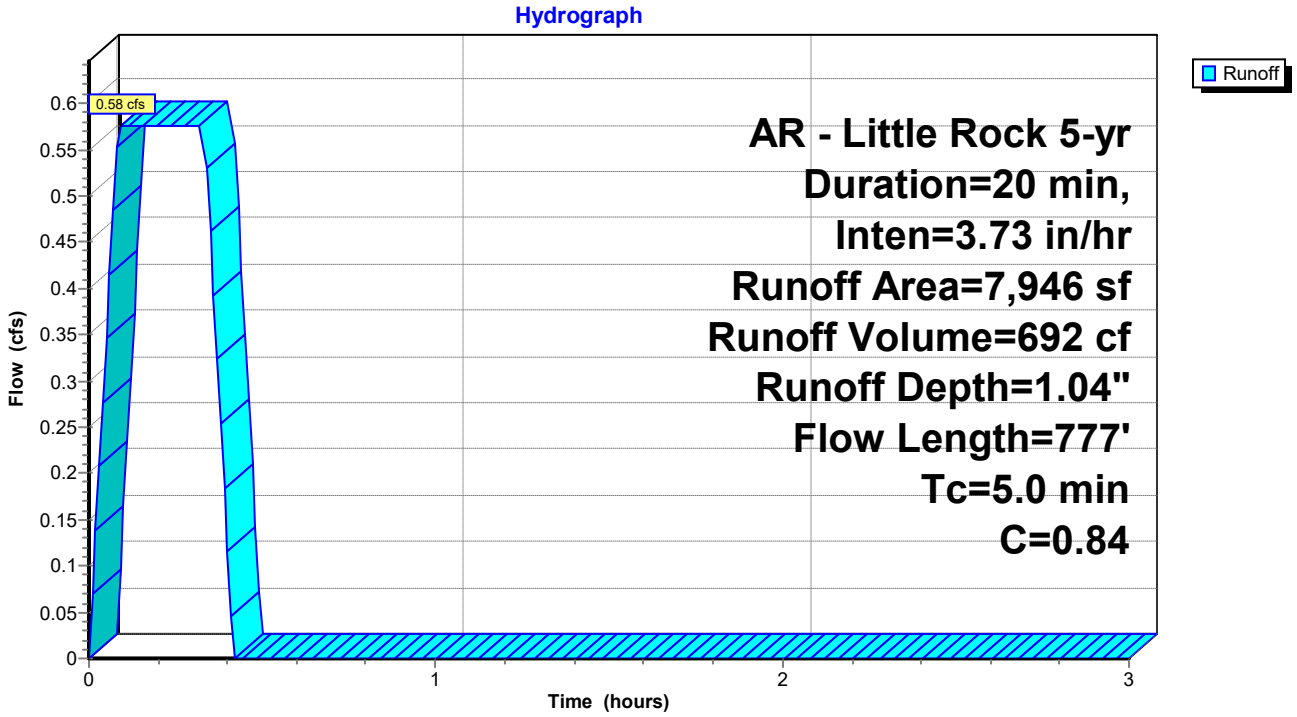
Runoff = 0.58 cfs @ 0.09 hrs, Volume= 692 cf, Depth= 1.04"
Routed to Pond CI-A4 : CI - A4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
1,558	0.40	Sod Yard
6,388	0.95	Paving, Sidewalks
7,946	0.84	Weighted Average
1,558		19.61% Pervious Area
6,388		80.39% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	19	0.0200	1.13		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.3	75	0.0340	3.74		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	52	0.0410	4.11		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	29	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	42	0.0730	5.48		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	74	0.0750	5.56		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	26	0.0710	5.41		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	32	0.0570	4.85		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	13	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
3.6	415		1.92		**Direct Entry, Overland Concentrated Flow (Min)**
5.0	777	Total			

Subcatchment C13: Drainage Basin C13



Summary for Subcatchment C14: Drainage Basin C14

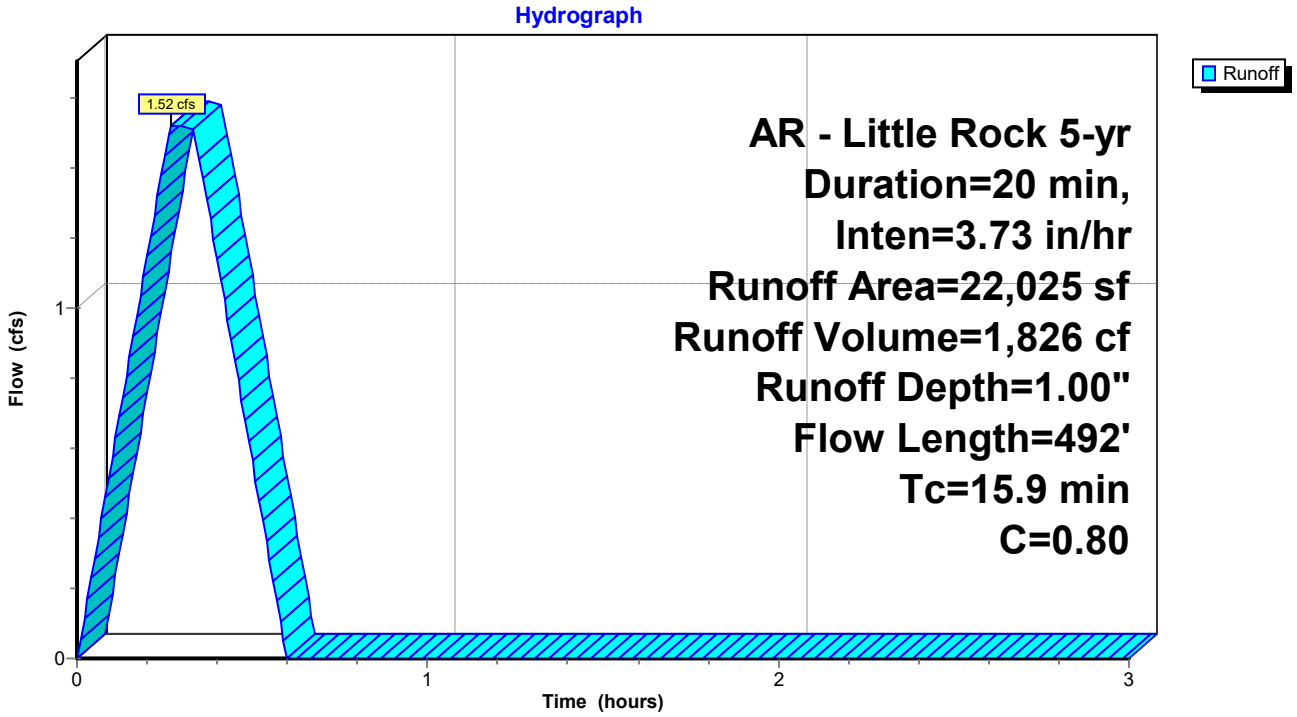
Runoff = 1.52 cfs @ 0.27 hrs, Volume= 1,826 cf, Depth= 1.00"
Routed to Pond CI-A5 : CI - A5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
6,127	0.40	Sod Yard
15,898	0.95	Paving, Sidewalks
22,025	0.80	Weighted Average
6,127		27.82% Pervious Area
15,898		72.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	5	0.0310	0.06		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
9.2	45	0.0250	0.08		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
3.8	41	0.1940	0.18		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.1	6	0.0100	0.68		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	51	0.0870	5.99		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	52	0.0310	3.57		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	18	0.0270	3.34		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	20	0.0400	4.06		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	34	0.0410	4.11		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	46	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	36	0.0580	4.89		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	58	0.0690	5.33		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	49	0.0840	5.88		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	31	0.0690	5.33		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
15.9	492	Total			

Subcatchment C14: Drainage Basin C14



Summary for Subcatchment C15: Drainage Basin C15

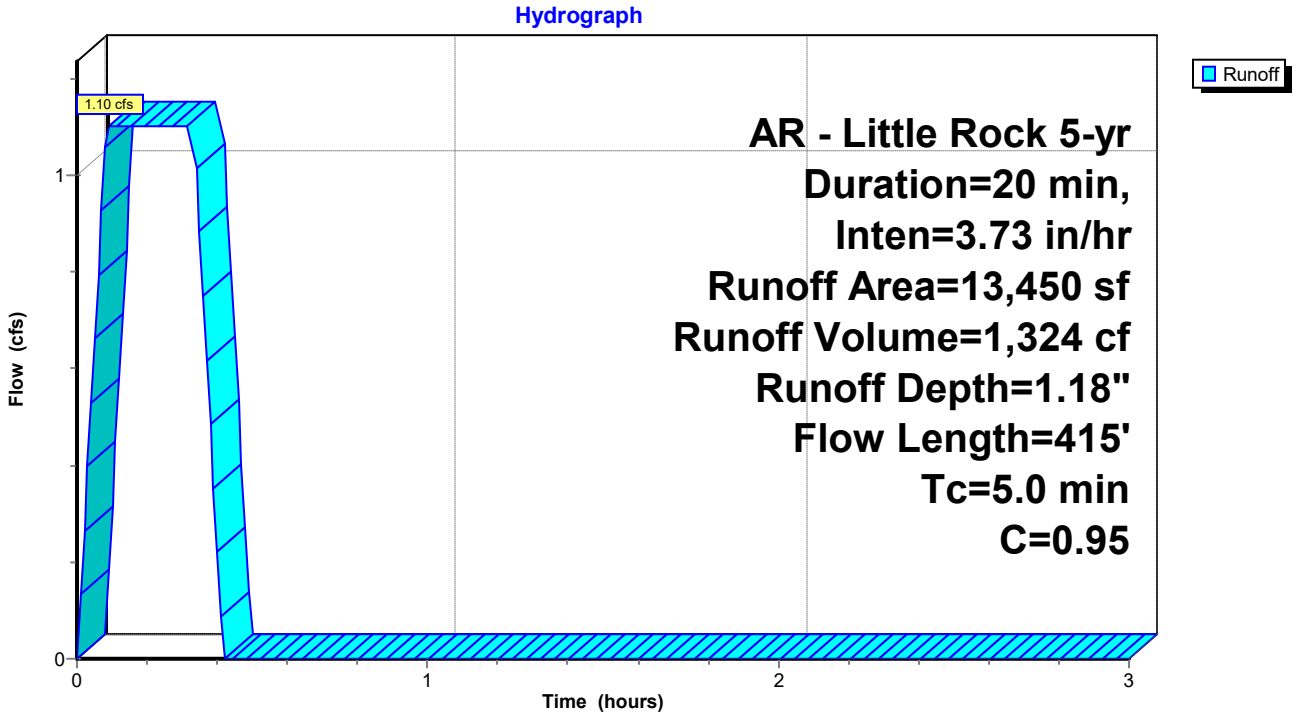
Runoff = 1.10 cfs @ 0.09 hrs, Volume= 1,324 cf, Depth= 1.18"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
13,450	0.95	Paving, Sidewalks
13,450	0.95	Weighted Average
13,450		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	415		1.38		**Direct Entry, Overland Concentrated Flow (Min)**

Subcatchment C15: Drainage Basin C15



Summary for Subcatchment C16: Drainage Basin C16

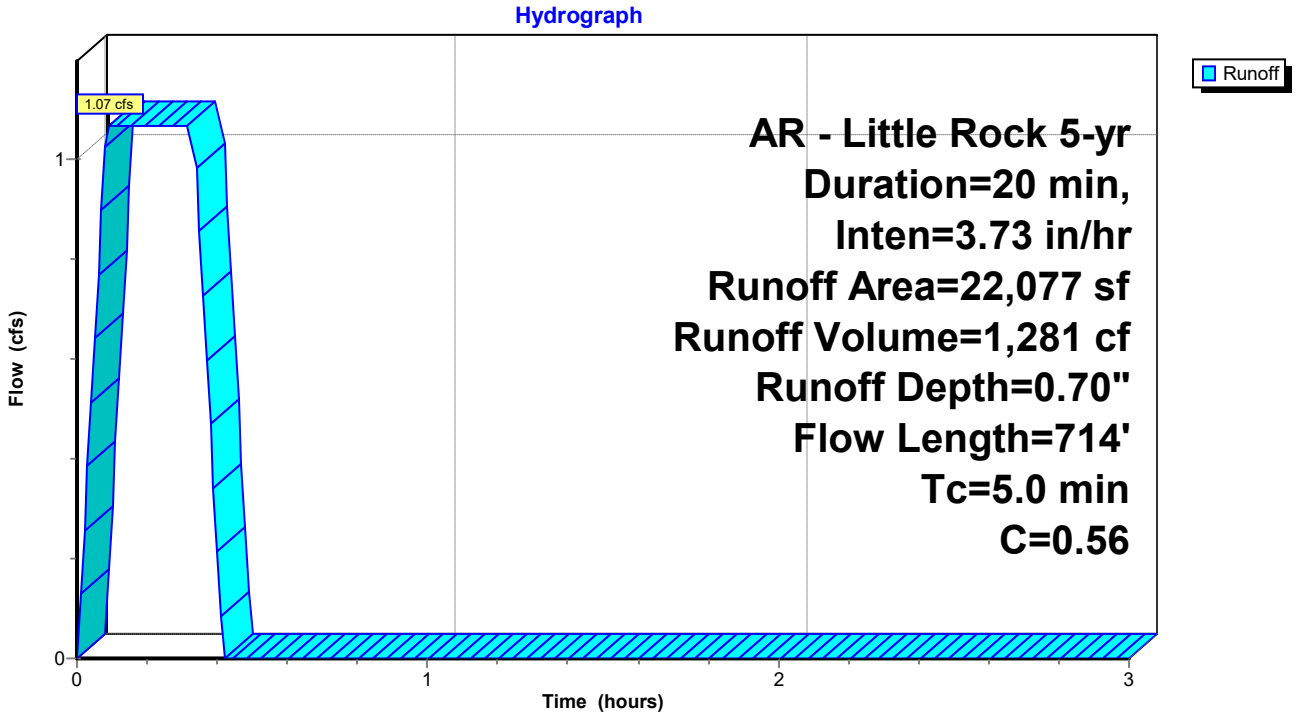
Runoff = 1.07 cfs @ 0.09 hrs, Volume= 1,281 cf, Depth= 0.70"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
15,465	0.40	Sod Yard
6,612	0.95	Paving, Sidewalks
22,077	0.56	Weighted Average
15,465		70.05% Pervious Area
6,612		29.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	26	0.0190	1.18		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	5	0.0100	0.66		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.4	51	0.0500	1.98		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	12	0.1540	2.33		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	50	0.1330	7.40		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
0.1	50	0.1170	6.94		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
0.2	46	0.0430	4.21		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
0.3	59	0.0370	3.90		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
3.3	415		2.10		**Direct Entry, Overland Concentrated Flow (Min)**
5.0	714	Total			

Subcatchment C16: Drainage Basin C16



Summary for Subcatchment C17: Drainage Basin C17

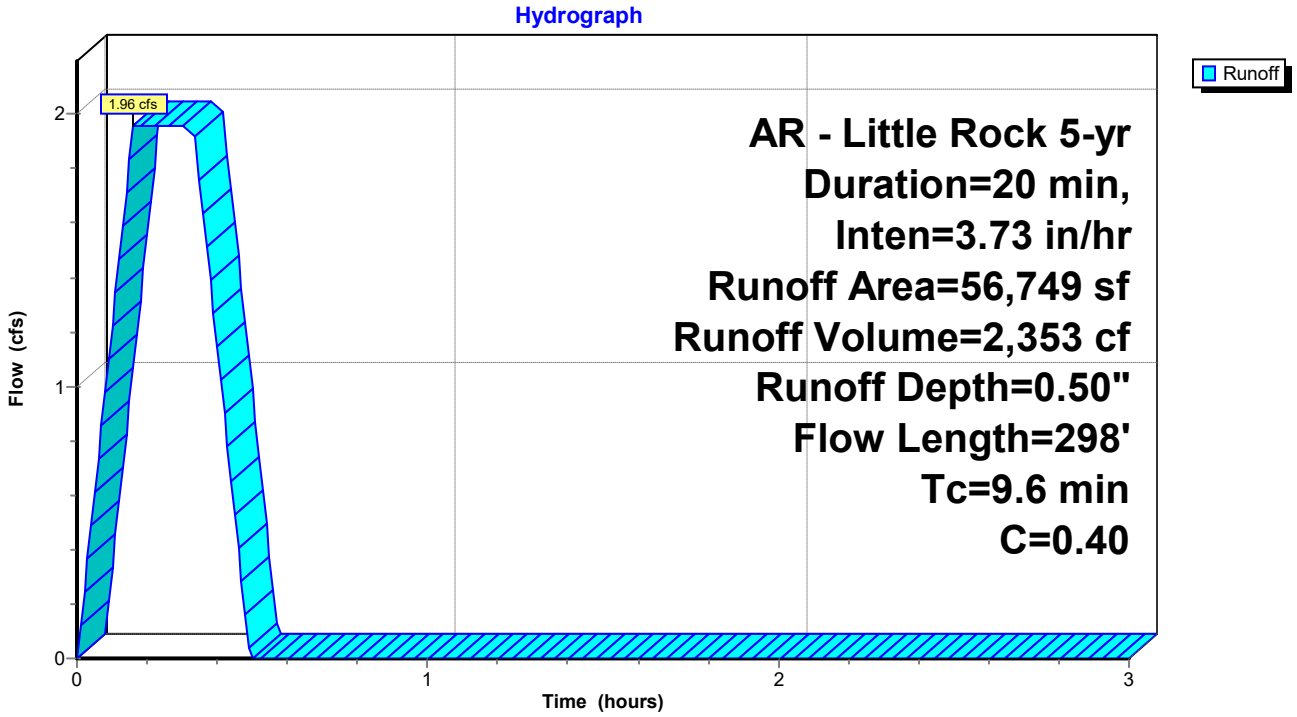
Runoff = 1.96 cfs @ 0.16 hrs, Volume= 2,353 cf, Depth= 0.50"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
56,749	0.40	Sod Yard
0	0.95	Paving, Sidewalks
56,749	0.40	Weighted Average
56,749		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	43	0.0410	0.15		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
3.9	43	0.0690	0.19		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.1	41	0.0980	4.70		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	61	0.0730	4.05		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.2	46	0.0570	3.58		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	64	0.0450	3.18		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
9.6	298	Total			

Subcatchment C17: Drainage Basin C17



Summary for Subcatchment C18: Drainage Basin C18

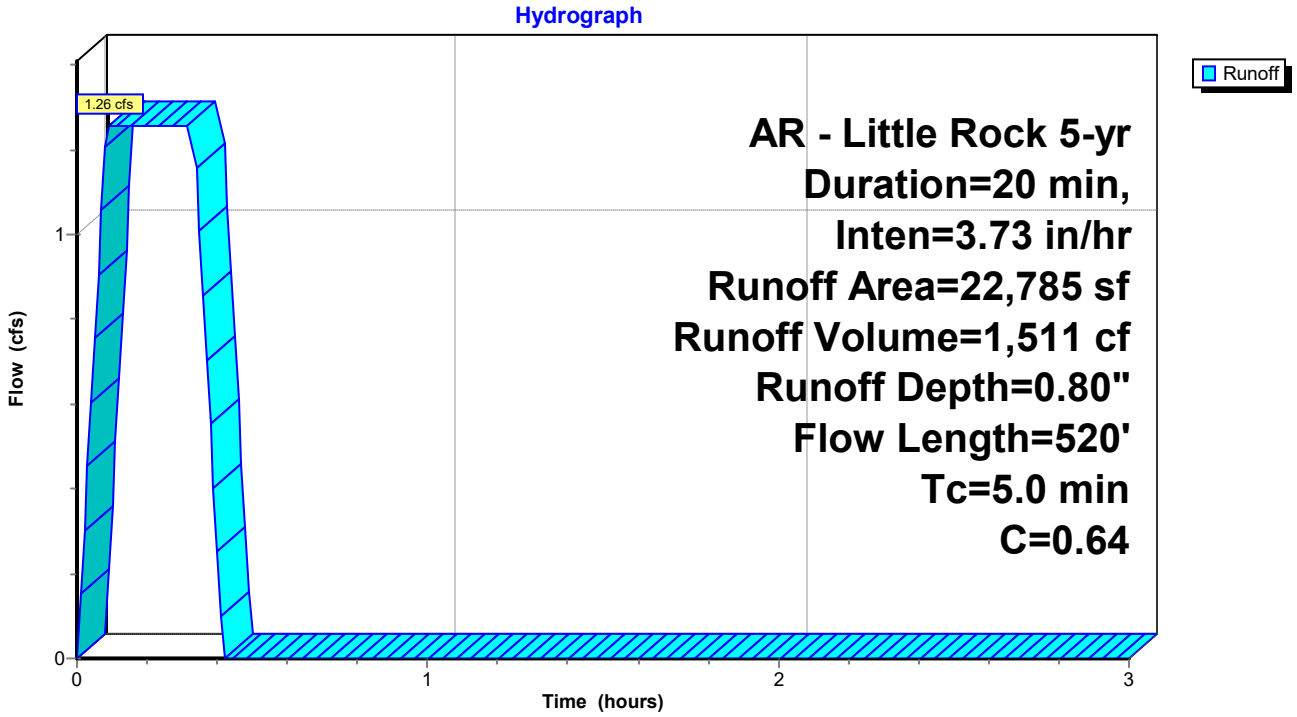
Runoff = 1.26 cfs @ 0.09 hrs, Volume= 1,511 cf, Depth= 0.80"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
12,812	0.40	Sod Yard
9,973	0.95	Paving, Sidewalks
22,785	0.64	Weighted Average
12,812		56.23% Pervious Area
9,973		43.77% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	5	0.2980	0.14		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.2	12	0.0130	0.87		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
3.3	8	0.0100	0.04		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.5	80	0.0210	2.94		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.4	415		17.29		**Direct Entry, Concentrated Flow (Min)**
5.0	520	Total			

Subcatchment C18: Drainage Basin C18



Summary for Subcatchment C19: Drainage Basin C19

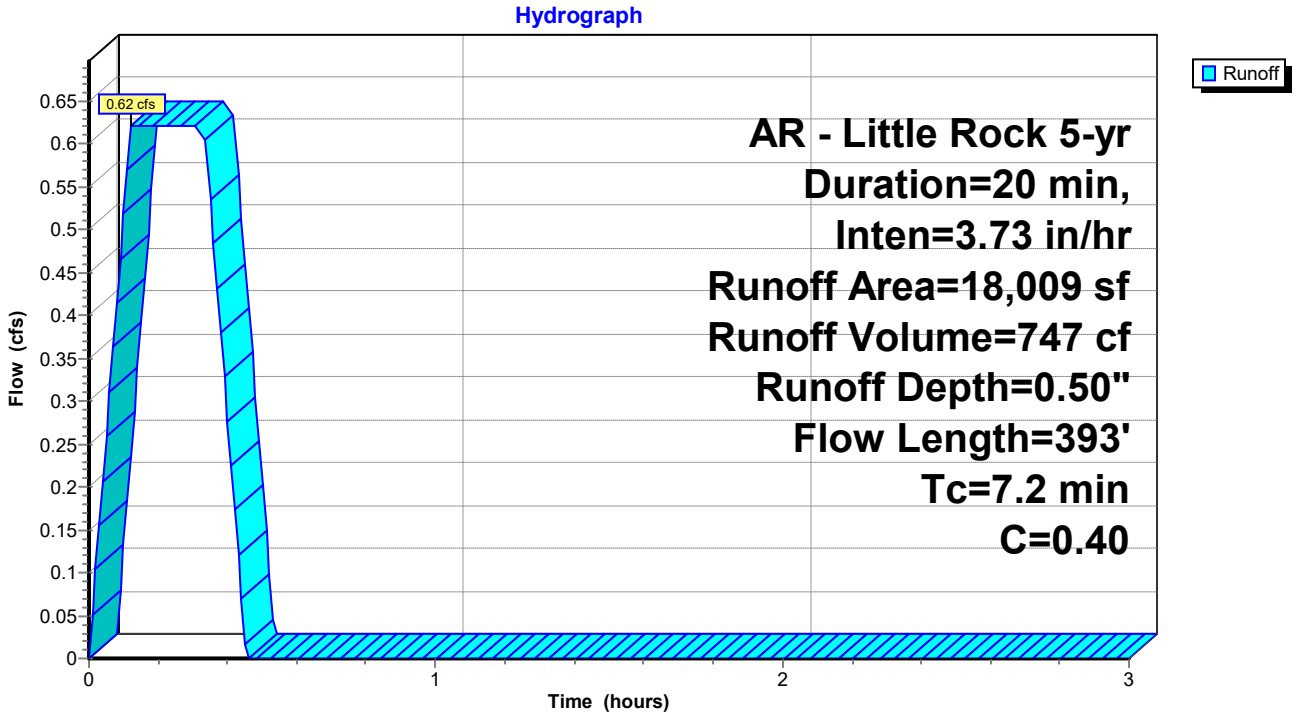
Runoff = 0.62 cfs @ 0.12 hrs, Volume= 747 cf, Depth= 0.50"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
18,009	0.40	Sod Yard
0	0.95	Paving, Sidewalks
18,009	0.40	Weighted Average
18,009		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	34	0.1110	0.21		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
3.3	66	0.2450	0.34		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.0	9	0.2450	7.42		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.5	106	0.0610	3.70		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.2	46	0.0800	4.24		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.1	41	0.0960	4.65		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	66	0.0680	3.91		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.1	19	0.1070	4.91		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.0	6	0.0750	4.11		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
7.2	393	Total			

Subcatchment C19: Drainage Basin C19



Summary for Subcatchment C2: Drainage Basin C2

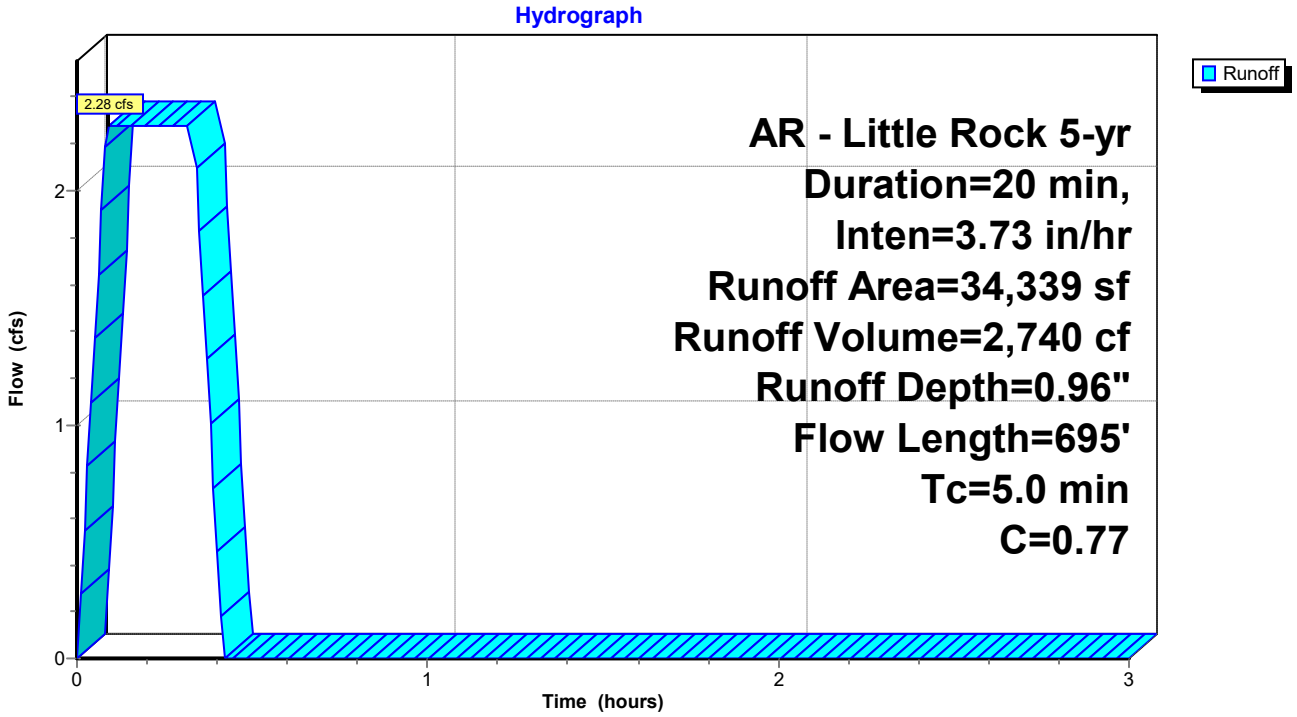
Runoff = 2.28 cfs @ 0.09 hrs, Volume= 2,740 cf, Depth= 0.96"
Routed to Pond CI-C2 : CI - C2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
11,376	0.40	Sod Yard
22,963	0.95	Roof, Paving, Sidewalks
34,339	0.77	Weighted Average
11,376		33.13% Pervious Area
22,963		66.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	20	0.0200	1.14		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.4	74	0.0240	3.14		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	17	0.0710	5.41		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	21	0.0610	5.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.6	148	0.0380	3.96		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
3.5	415		1.98		**Direct Entry, Concentrated Flow (Min)**
5.0	695	Total			

Subcatchment C2: Drainage Basin C2



Summary for Subcatchment C20: Drainage Basin C20

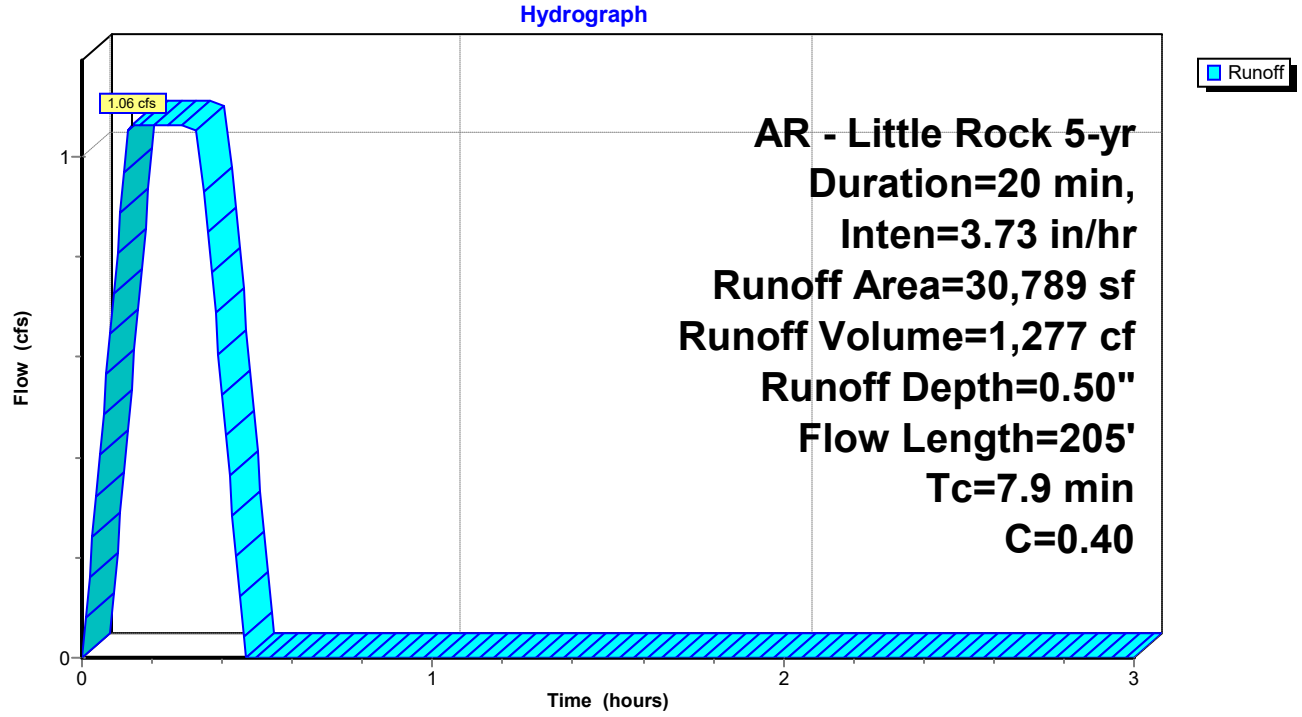
Runoff = 1.06 cfs @ 0.14 hrs, Volume= 1,277 cf, Depth= 0.50"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
30,789	0.40	Sod Yard
0	0.95	Paving, Sidewalks
30,789	0.40	Weighted Average
30,789		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	45	0.1430	0.25		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
4.5	55	0.0780	0.20		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.1	37	0.0780	4.19		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	68	0.0710	4.00		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
7.9	205	Total			

Subcatchment C20: Drainage Basin C20



Summary for Subcatchment C3: Drainage Basin C3

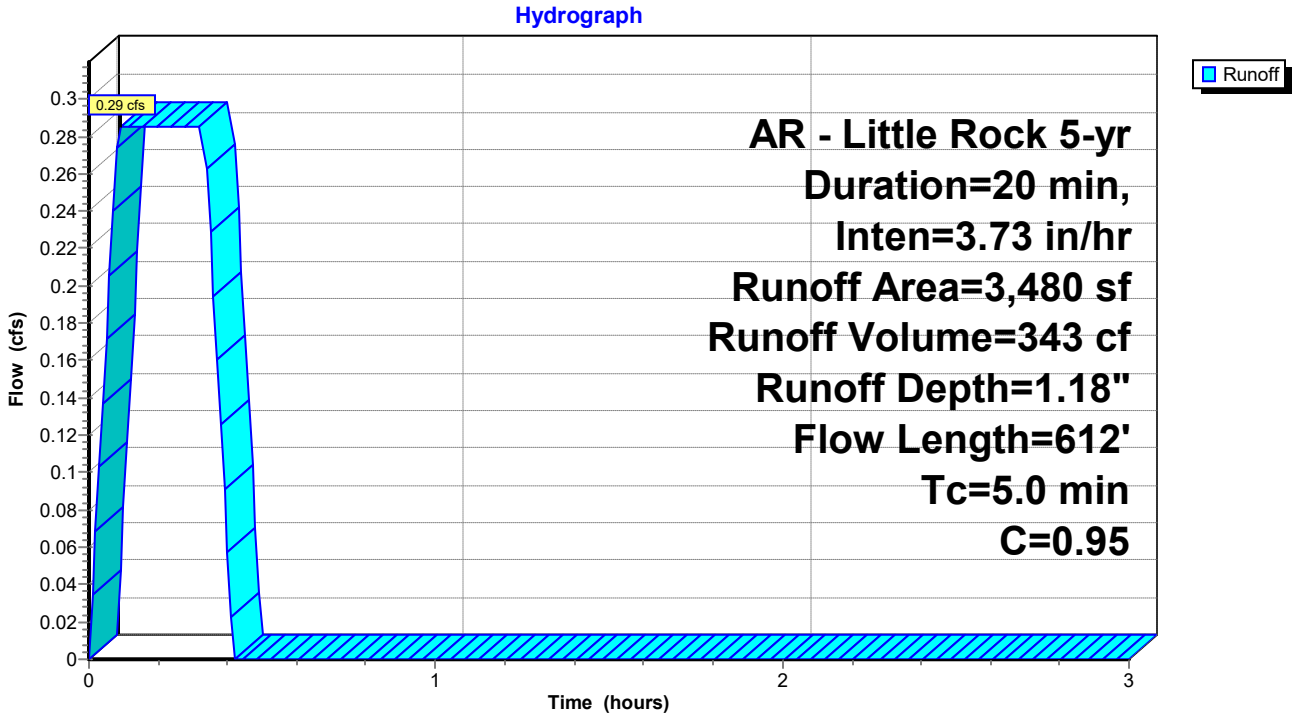
Runoff = 0.29 cfs @ 0.09 hrs, Volume= 343 cf, Depth= 1.18"
Routed to Pond CI-C3 : CI - C3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
3,480	0.95	Paving, Sidewalks
3,480	0.95	Weighted Average
3,480		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	22	0.0200	1.16		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.0	10	0.0340	3.74		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	18	0.0390	4.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.6	147	0.0380	3.96		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.0	415		1.73		**Direct Entry, Concentrated Flow (Min)**
5.0	612	Total			

Subcatchment C3: Drainage Basin C3



Summary for Subcatchment C4: Drainage Basin C4

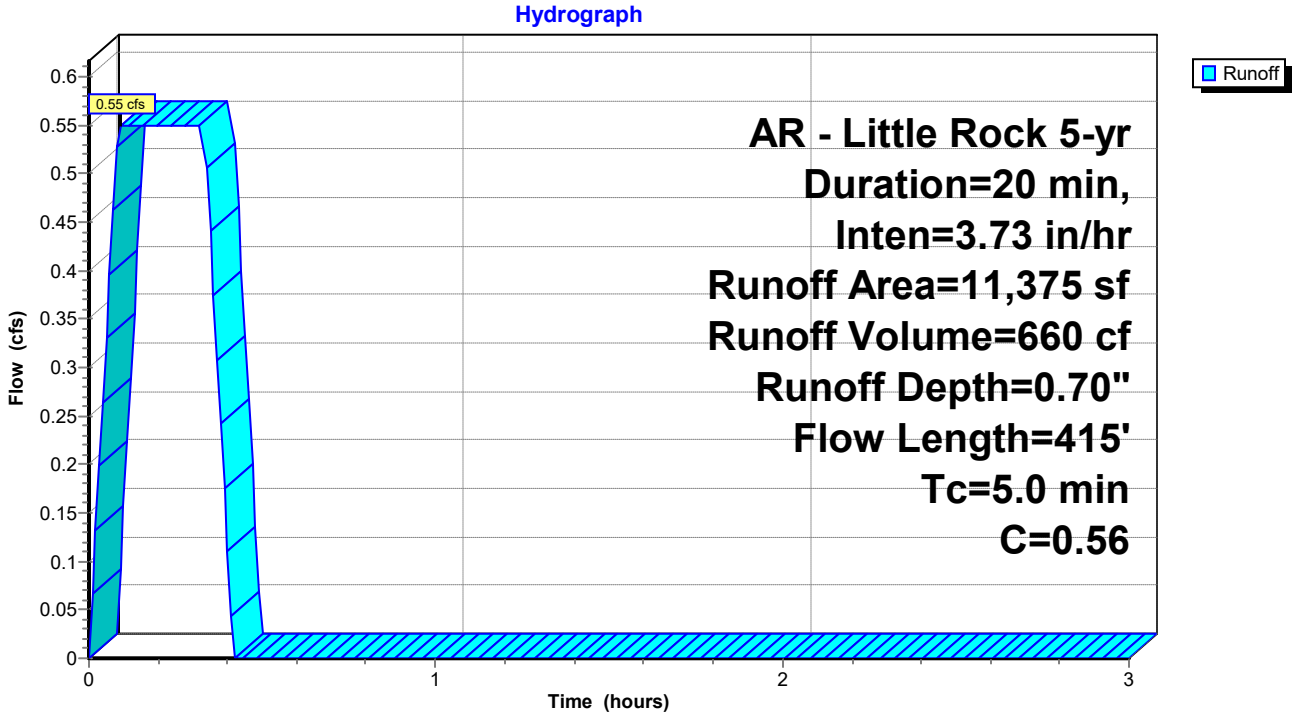
Runoff = 0.55 cfs @ 0.09 hrs, Volume= 660 cf, Depth= 0.70"
Routed to Pond CI-C3 : CI - C3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
8,130	0.40	Sod Yard
3,245	0.95	Paving, Sidewalks
11,375	0.56	Weighted Average
8,130		71.47% Pervious Area
3,245		28.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	415		1.38		**Direct Entry, Concentrated Flow (Min)**

Subcatchment C4: Drainage Basin C4



Summary for Subcatchment C5: Drainage Basin C5

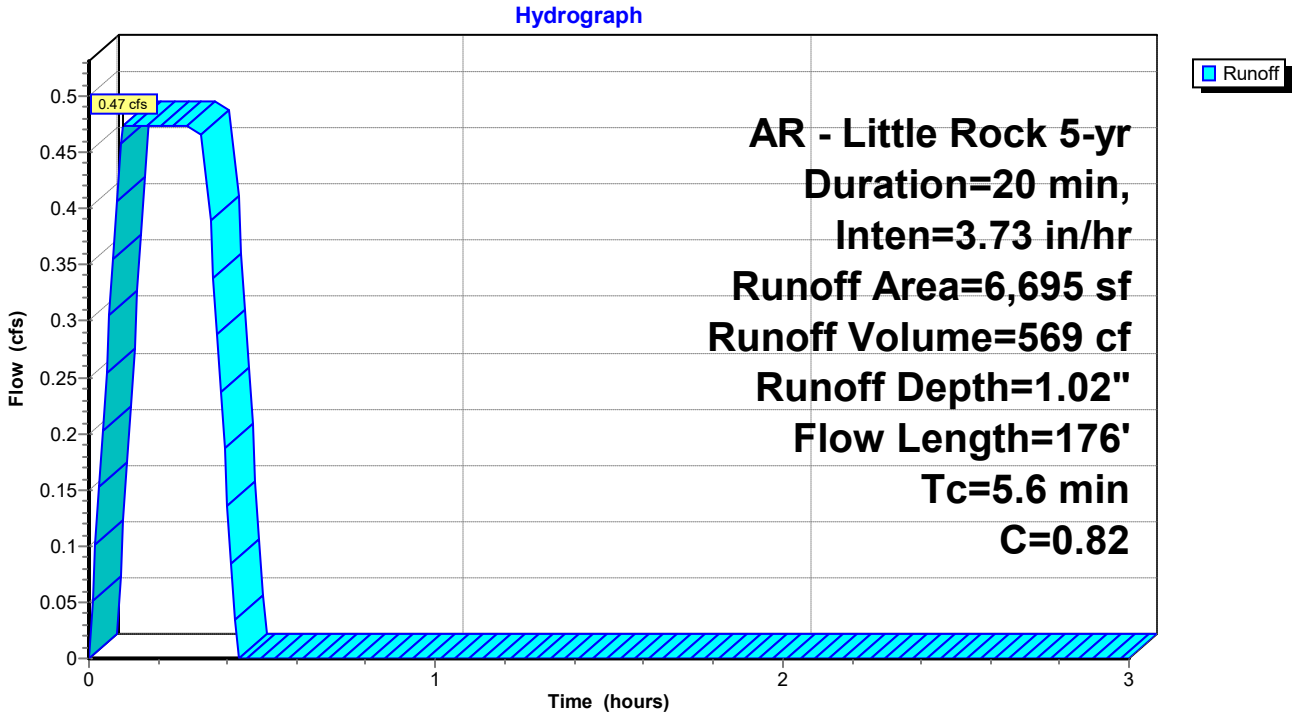
Runoff = 0.47 cfs @ 0.10 hrs, Volume= 569 cf, Depth= 1.02"
Routed to Pond CI-C4 : CI - C4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
1,634	0.40	Sod Yard
5,061	0.95	Paving, Sidewalks
6,695	0.82	Weighted Average
1,634		24.41% Pervious Area
5,061		75.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	5	0.2990	0.14		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.2	12	0.0130	0.87		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
3.9	8	0.0070	0.03		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.5	58	0.0080	1.82		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	14	0.0280	3.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	23	0.0370	3.90		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	13	0.0940	6.22		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	13	0.0560	4.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	30	0.0180	2.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
5.6	176	Total			

Subcatchment C5: Drainage Basin C5



Summary for Subcatchment C6: Drainage Basin C6

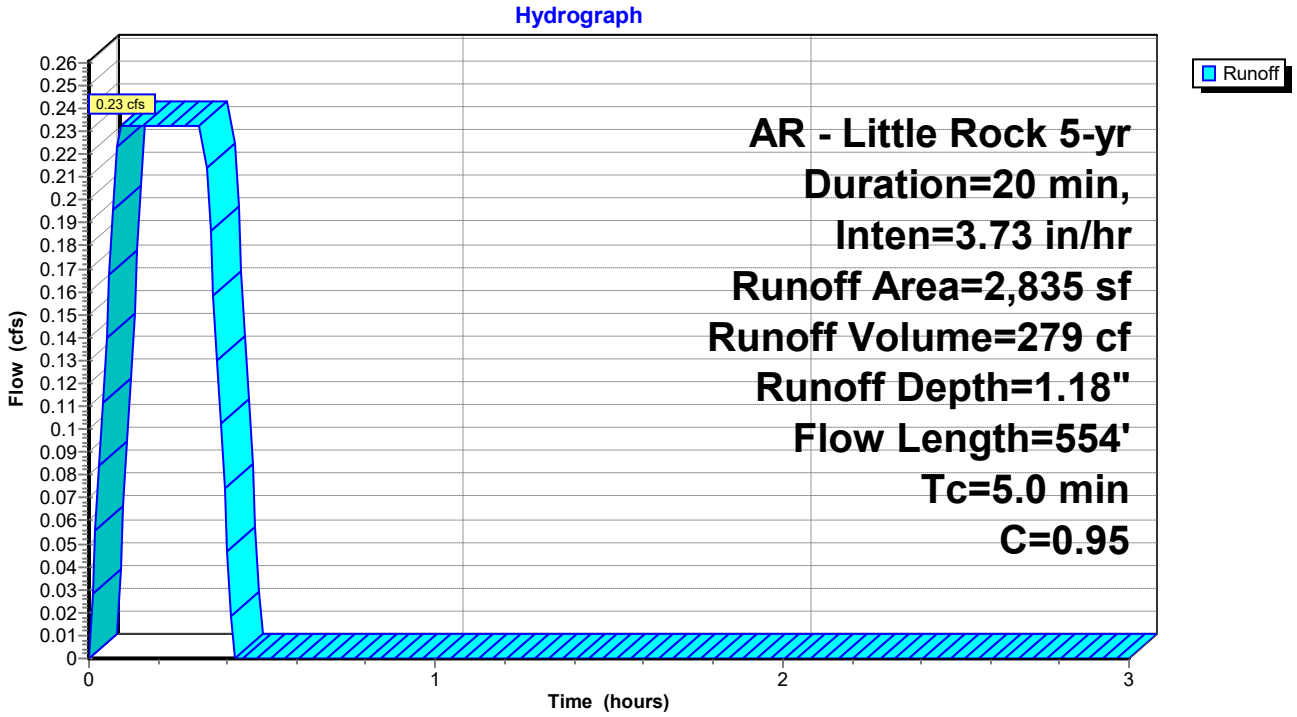
Runoff = 0.23 cfs @ 0.09 hrs, Volume= 279 cf, Depth= 1.18"
Routed to Pond CI-C5 : CI - C5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
2,835	0.95	Paving, Sidewalks
2,835	0.95	Weighted Average
2,835		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	22	0.0200	1.16		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	19	0.0100	2.03		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	17	0.0170	2.65		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	26	0.0360	3.85		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	28	0.0610	5.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	27	0.0610	5.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.1	415		1.69		**Direct Entry, Concentrated Flow (Min)**
5.0	554	Total			

Subcatchment C6: Drainage Basin C6



Summary for Subcatchment C7: Drainage Basin C7

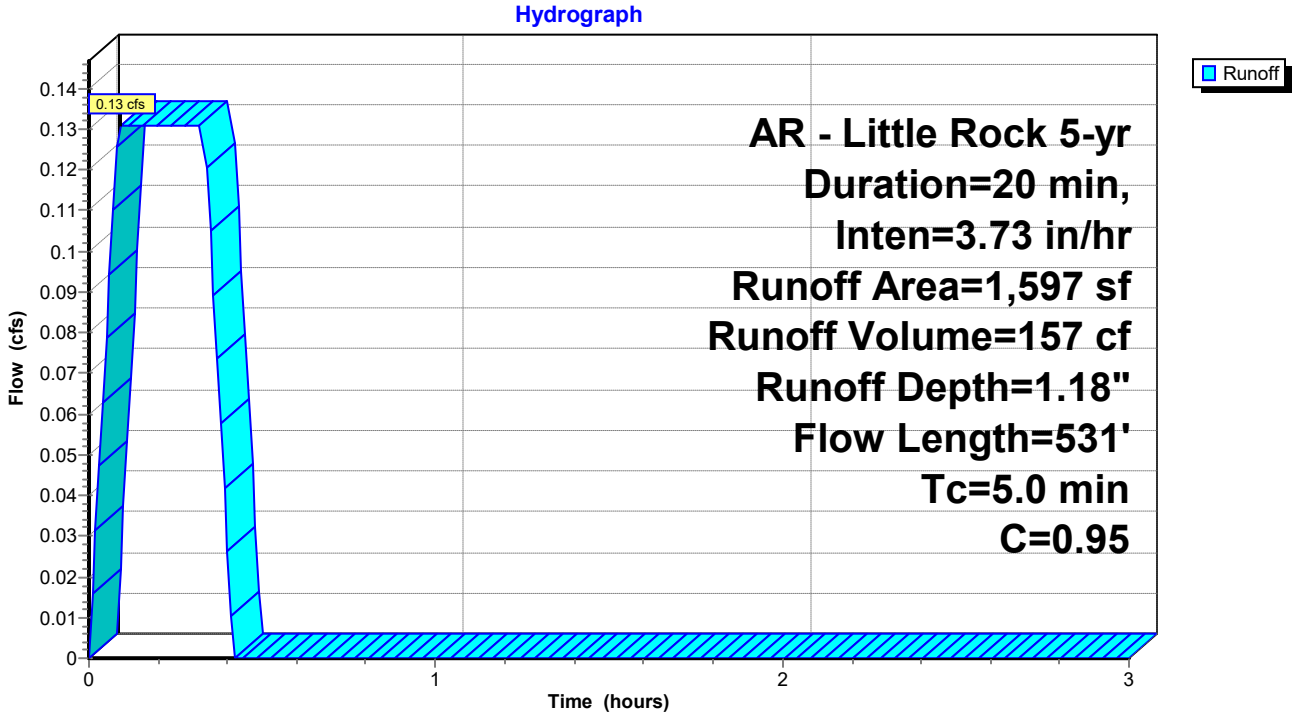
Runoff = 0.13 cfs @ 0.09 hrs, Volume= 157 cf, Depth= 1.18"
Routed to Pond CI-D1 : CI - D1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
1,597	0.95	Paving, Sidewalks
1,597	0.95	Weighted Average
1,597		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	19	0.0200	1.13		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	16	0.0540	4.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.3	81	0.0580	4.89		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.3	415		1.61		**Direct Entry, Concentrated Flow (Min)**
5.0	531	Total			

Subcatchment C7: Drainage Basin C7



Summary for Subcatchment C8: Drainage Basin C8

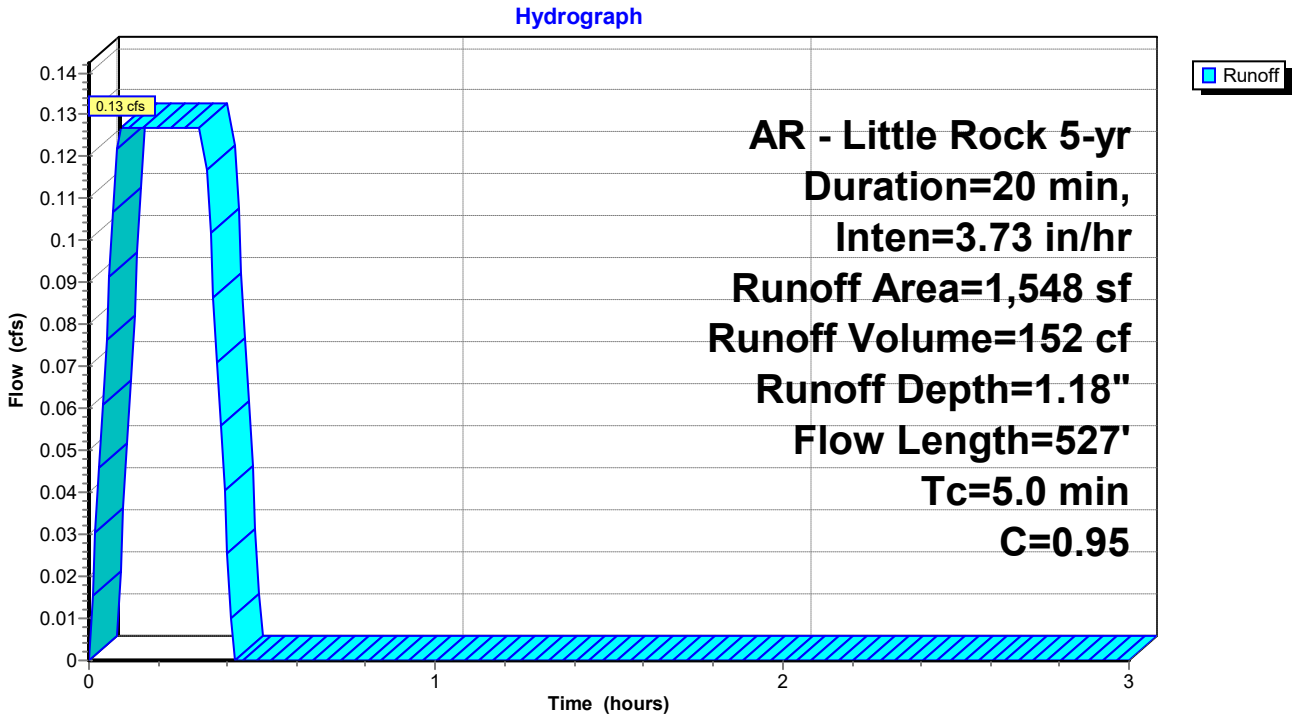
Runoff = 0.13 cfs @ 0.09 hrs, Volume= 152 cf, Depth= 1.18"
Routed to Pond CI-D2 : CI - D2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
1,548	0.95	Paving, Sidewalks
1,548	0.95	Weighted Average
1,548		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	18	0.0200	1.12		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.3	94	0.0610	5.01		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
4.4	415		1.57		**Direct Entry, Concentrated Flow (Min)**
5.0	527	Total			

Subcatchment C8: Drainage Basin C8



Summary for Subcatchment C9: Drainage Basin C9

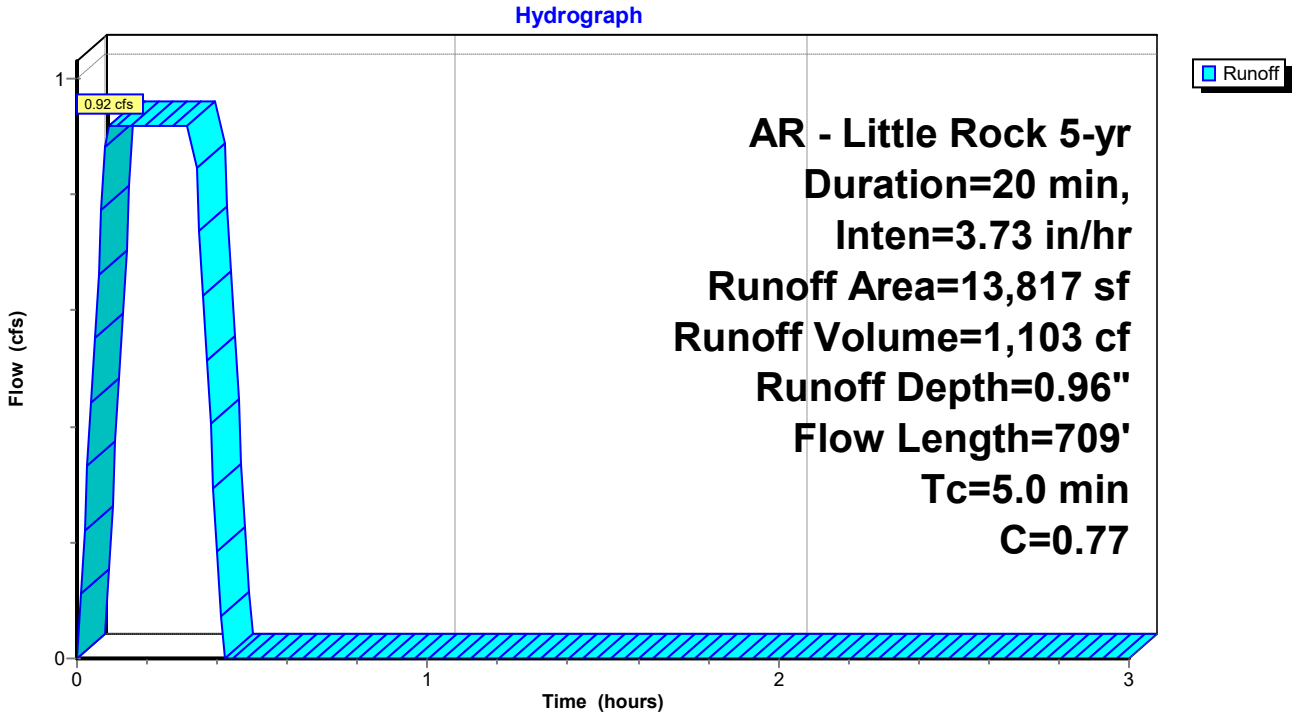
Runoff = 0.92 cfs @ 0.09 hrs, Volume= 1,103 cf, Depth= 0.96"
Routed to Pond CI-C6 : CI - C6

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 5-yr Duration=20 min, Inten=3.73 in/hr

Area (sf)	C	Description
4,456	0.40	Sod Yard
9,361	0.95	Paving, Sidewalks
13,817	0.77	Weighted Average
4,456		32.25% Pervious Area
9,361		67.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	100	0.0140	1.36		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	13	0.0150	2.49		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	23	0.0160	2.57		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	7	0.0050	1.44		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	8	0.0100	2.03		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	41	0.0420	4.16		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	41	0.0540	4.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	61	0.0520	4.63		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
2.9	415		2.39		**Direct Entry, Concentrated Flow (Min)**
5.0	709	Total			

Subcatchment C9: Drainage Basin C9

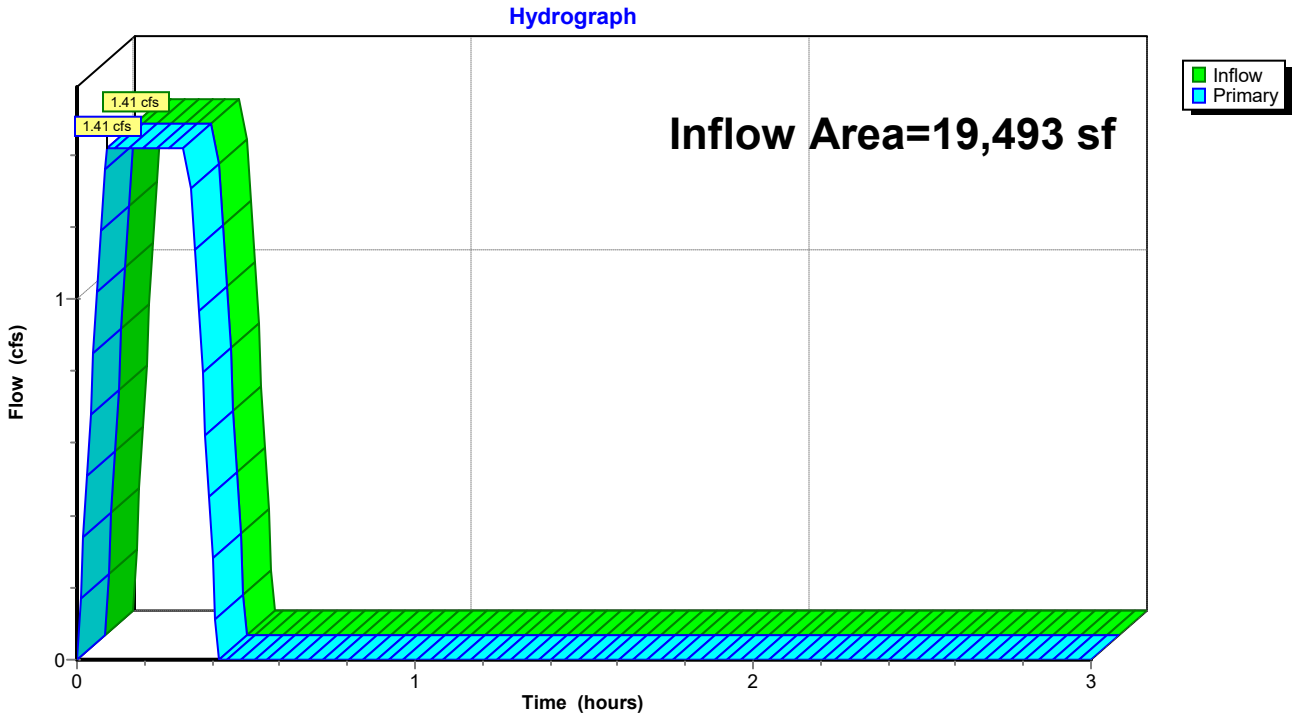


Summary for Pond CI-A1: CI - A1

Inflow Area = 19,493 sf, 74.78% Impervious, Inflow Depth = 1.04" for 5-yr event
Inflow = 1.41 cfs @ 0.09 hrs, Volume= 1,697 cf
Primary = 1.41 cfs @ 0.09 hrs, Volume= 1,697 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond JB-A2 : JB - A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-A1: CI - A1

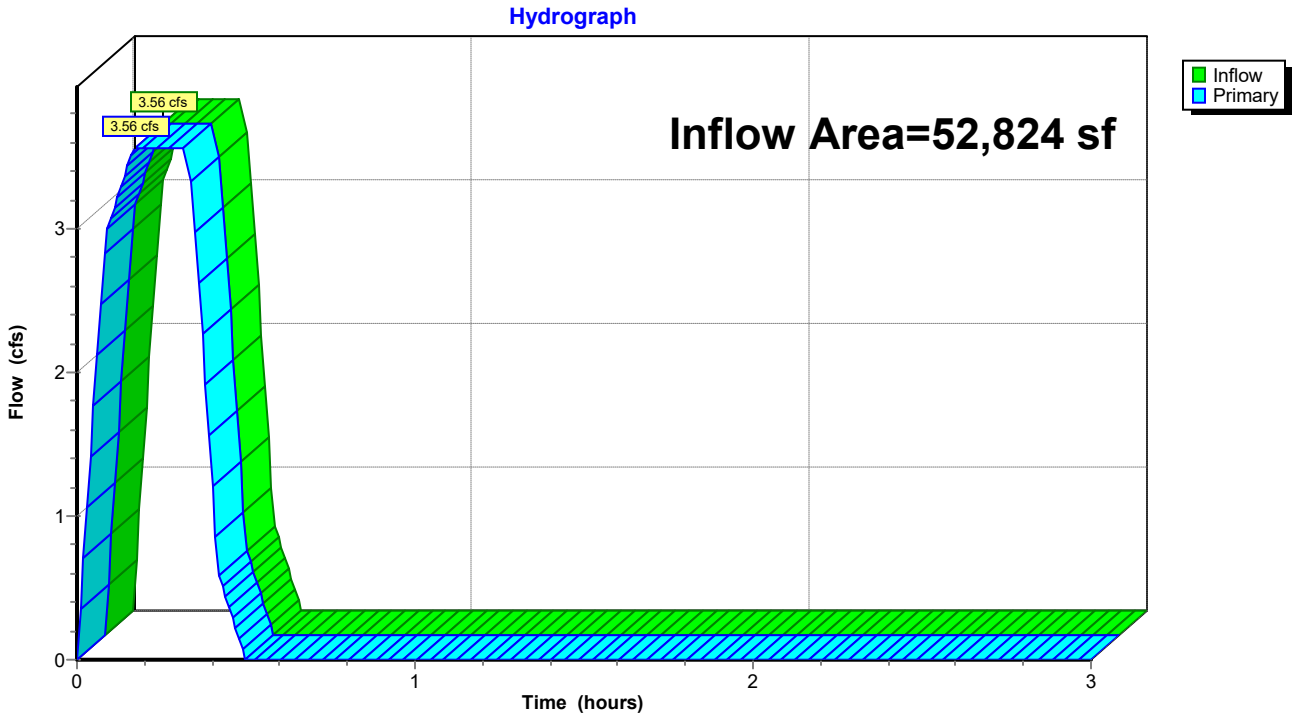


Summary for Pond CI-A3: CI - A3

Inflow Area = 52,824 sf, 61.20% Impervious, Inflow Depth = 0.97" for 5-yr event
Inflow = 3.56 cfs @ 0.17 hrs, Volume= 4,266 cf
Primary = 3.56 cfs @ 0.17 hrs, Volume= 4,266 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A4 : CI - A4

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-A3: CI - A3

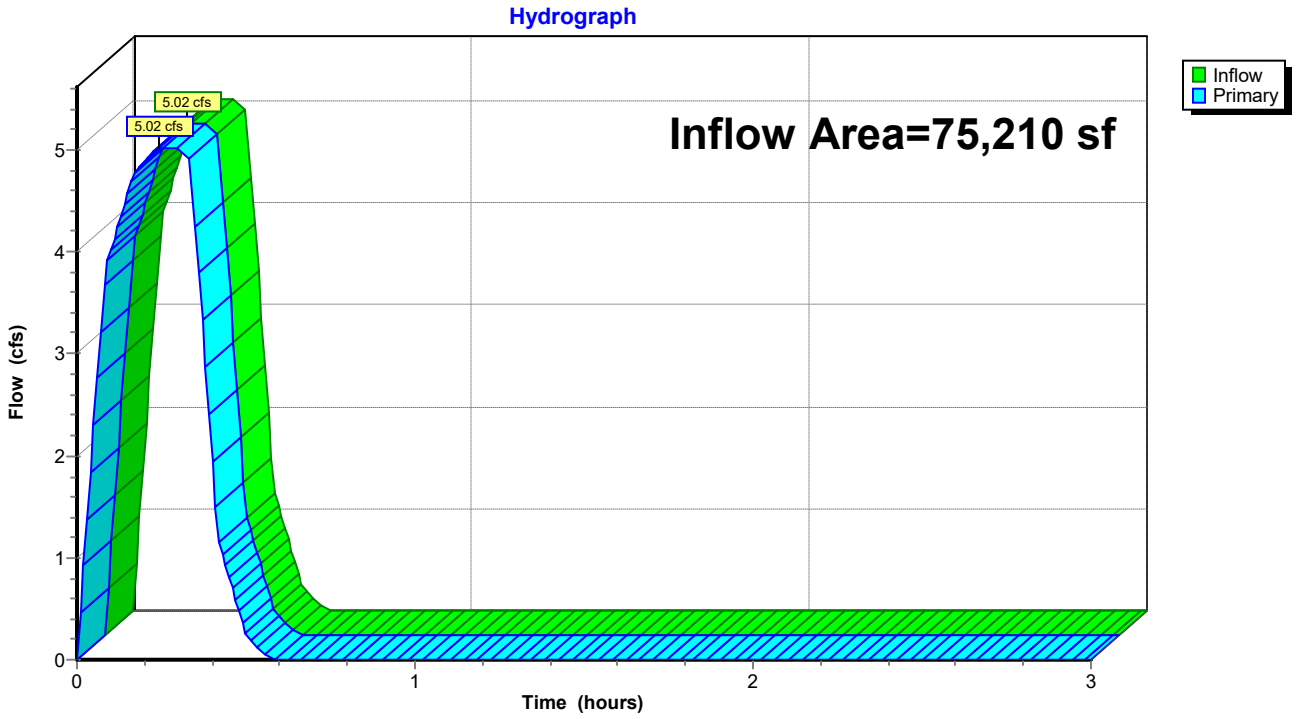


Summary for Pond CI-A4: CI - A4

Inflow Area = 75,210 sf, 60.06% Impervious, Inflow Depth = 0.96" for 5-yr event
Inflow = 5.02 cfs @ 0.24 hrs, Volume= 6,021 cf
Primary = 5.02 cfs @ 0.24 hrs, Volume= 6,021 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A5 : CI - A5

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-A4: CI - A4

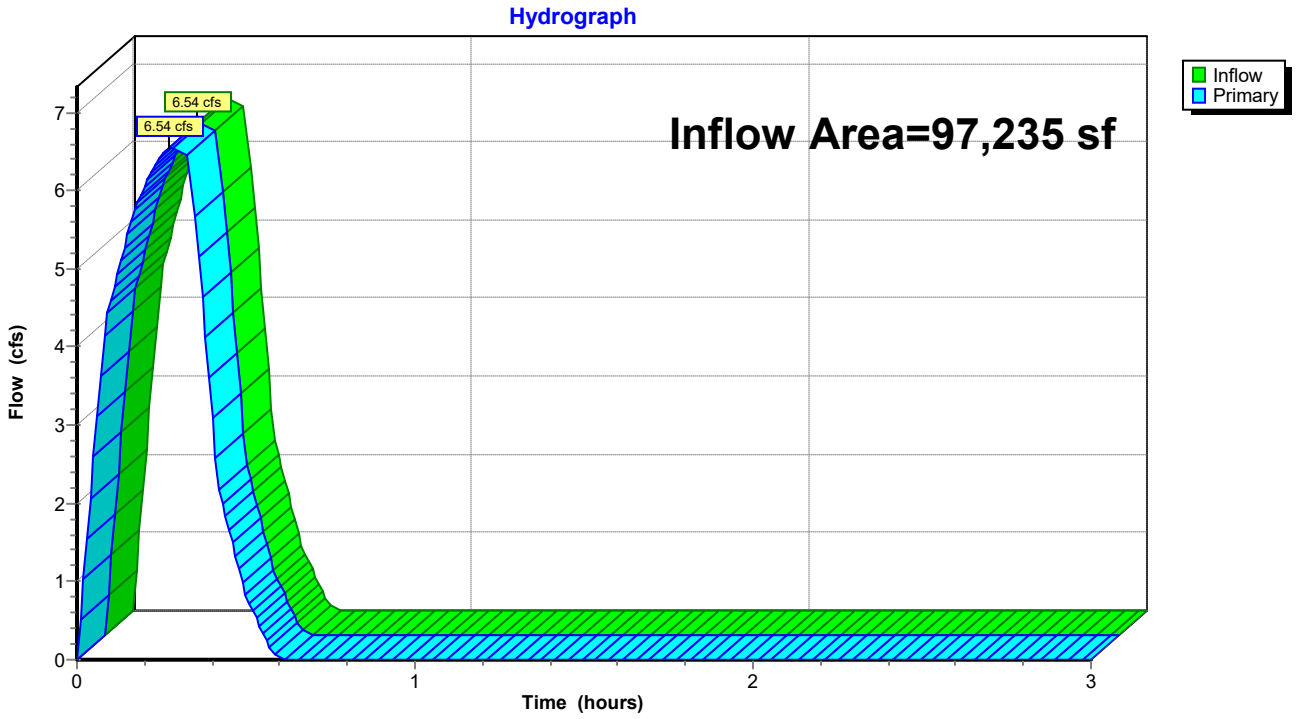


Summary for Pond CI-A5: CI - A5

Inflow Area = 97,235 sf, 62.81% Impervious, Inflow Depth = 0.97" for 5-yr event
Inflow = 6.54 cfs @ 0.27 hrs, Volume= 7,847 cf
Primary = 6.54 cfs @ 0.27 hrs, Volume= 7,847 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond DP : Existing North Detention Pond

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-A5: CI - A5

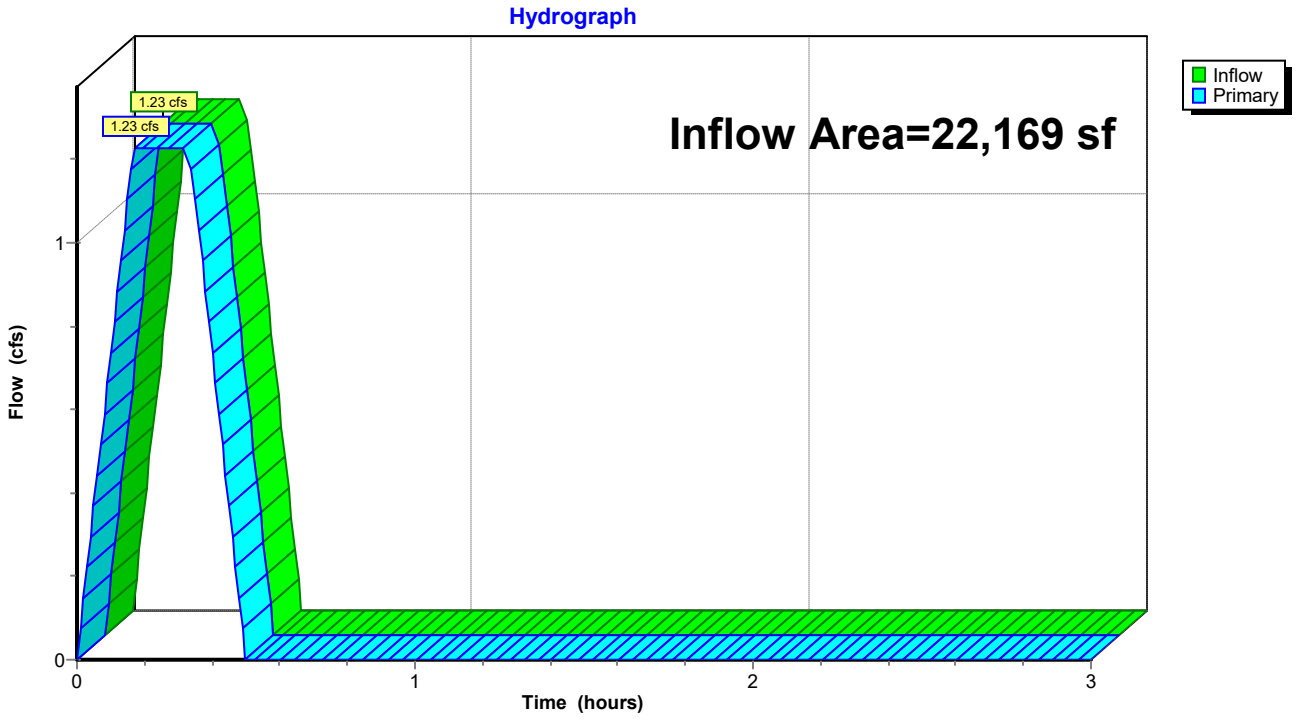


Summary for Pond CI-B2: CI - B2

Inflow Area = 22,169 sf, 29.72% Impervious, Inflow Depth = 0.80" for 5-yr event
Inflow = 1.23 cfs @ 0.17 hrs, Volume= 1,470 cf
Primary = 1.23 cfs @ 0.17 hrs, Volume= 1,470 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond JB-A2 : JB - A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-B2: CI - B2

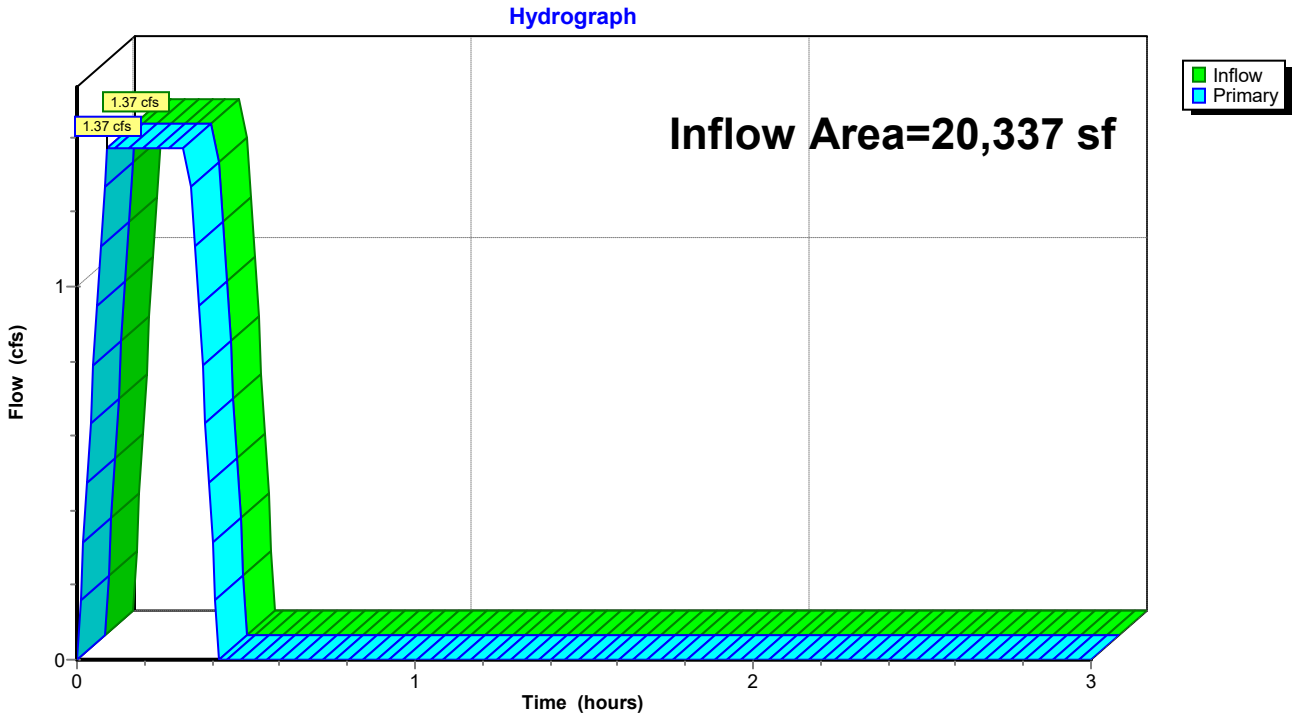


Summary for Pond CI-C1: CI - C1

Inflow Area = 20,337 sf, 69.83% Impervious, Inflow Depth = 0.97" for 5-yr event
Inflow = 1.37 cfs @ 0.09 hrs, Volume= 1,643 cf
Primary = 1.37 cfs @ 0.09 hrs, Volume= 1,643 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C2 : CI - C2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C1: CI - C1

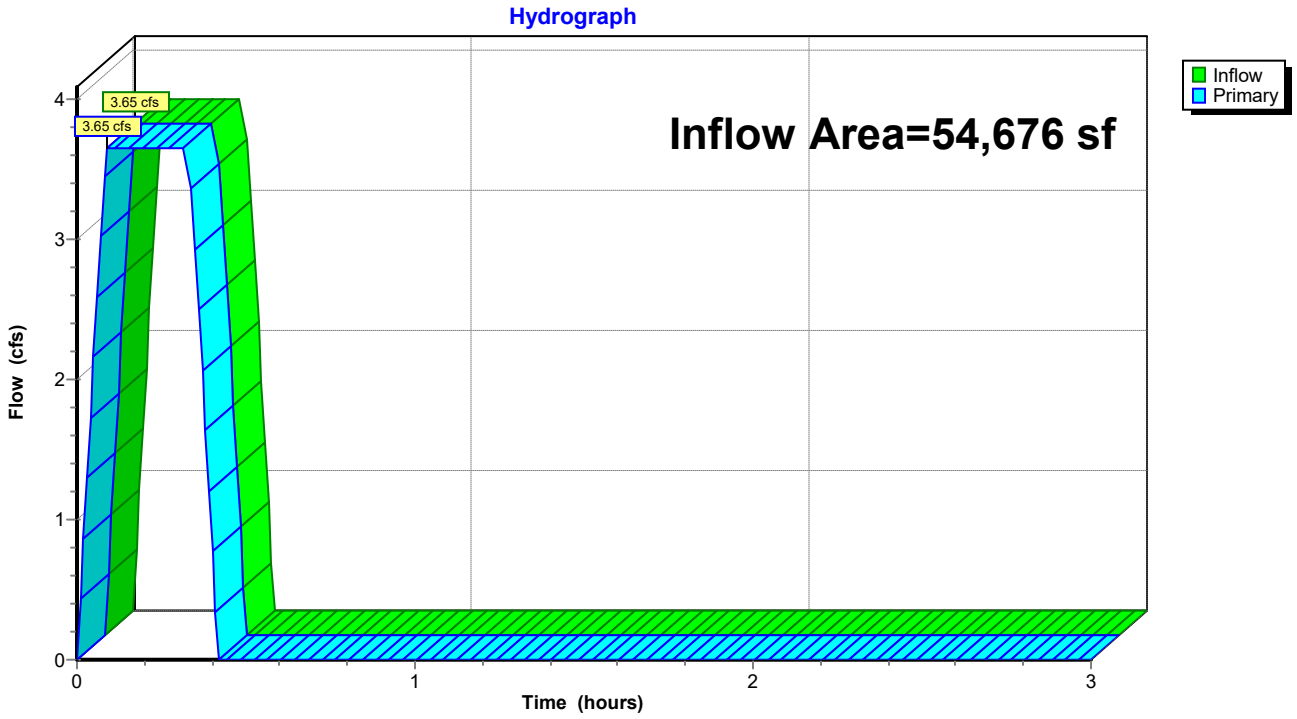


Summary for Pond CI-C2: CI - C2

Inflow Area = 54,676 sf, 67.97% Impervious, Inflow Depth = 0.96" for 5-yr event
Inflow = 3.65 cfs @ 0.09 hrs, Volume= 4,383 cf
Primary = 3.65 cfs @ 0.09 hrs, Volume= 4,383 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C3 : CI - C3

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C2: CI - C2

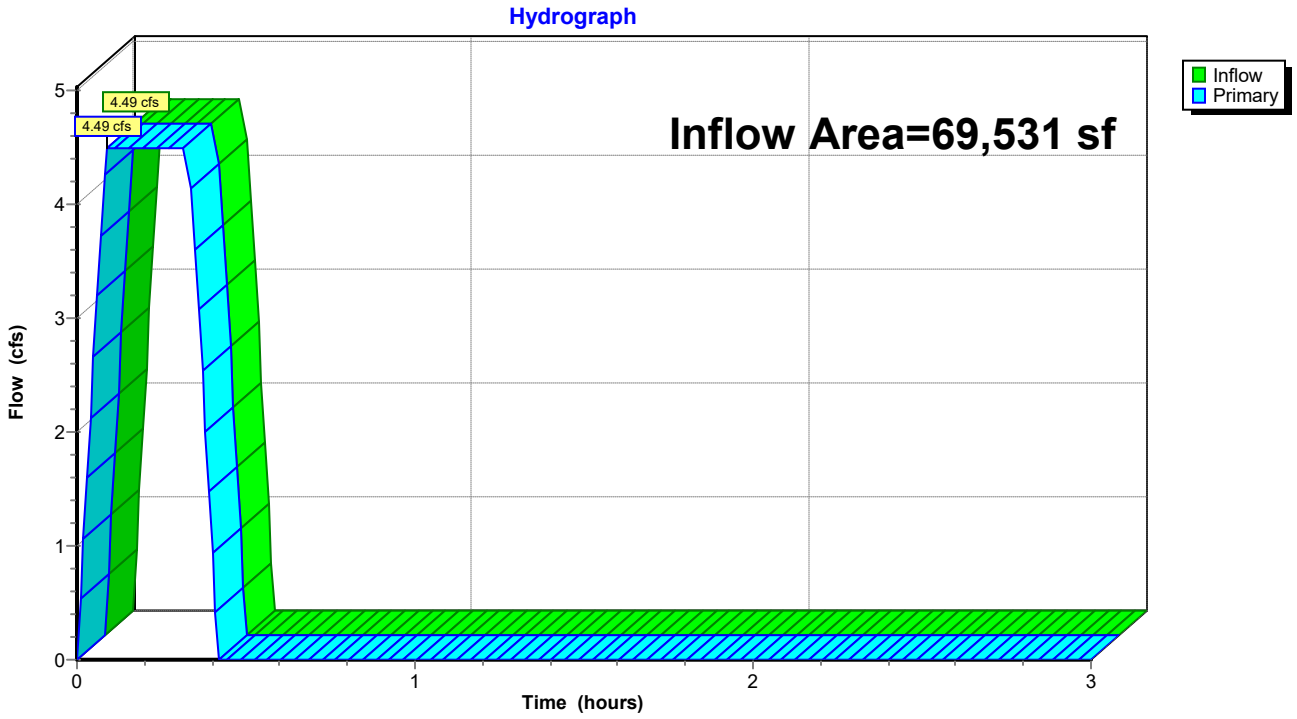


Summary for Pond CI-C3: CI - C3

Inflow Area = 69,531 sf, 63.12% Impervious, Inflow Depth = 0.93" for 5-yr event
Inflow = 4.49 cfs @ 0.09 hrs, Volume= 5,386 cf
Primary = 4.49 cfs @ 0.09 hrs, Volume= 5,386 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C4 : CI - C4

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C3: CI - C3

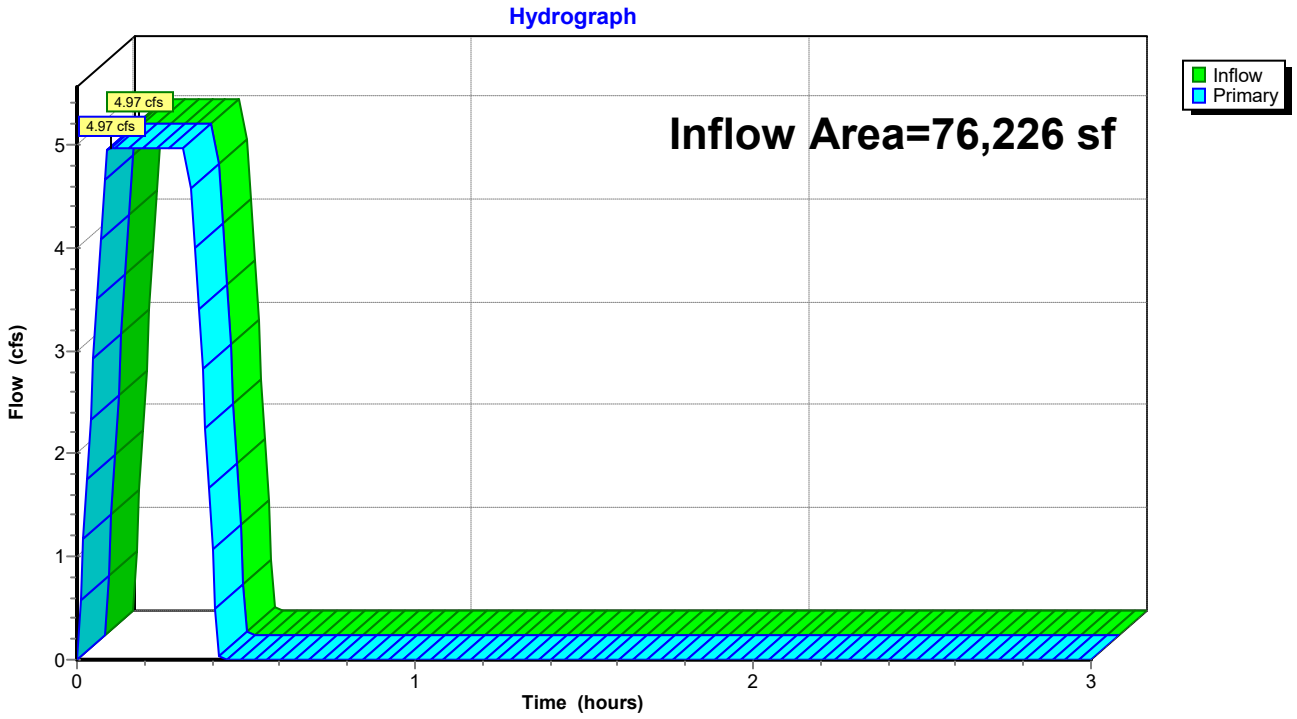


Summary for Pond CI-C4: CI - C4

Inflow Area = 76,226 sf, 64.22% Impervious, Inflow Depth = 0.94" for 5-yr event
Inflow = 4.97 cfs @ 0.10 hrs, Volume= 5,955 cf
Primary = 4.97 cfs @ 0.10 hrs, Volume= 5,955 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C5 : CI - C5

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C4: CI - C4

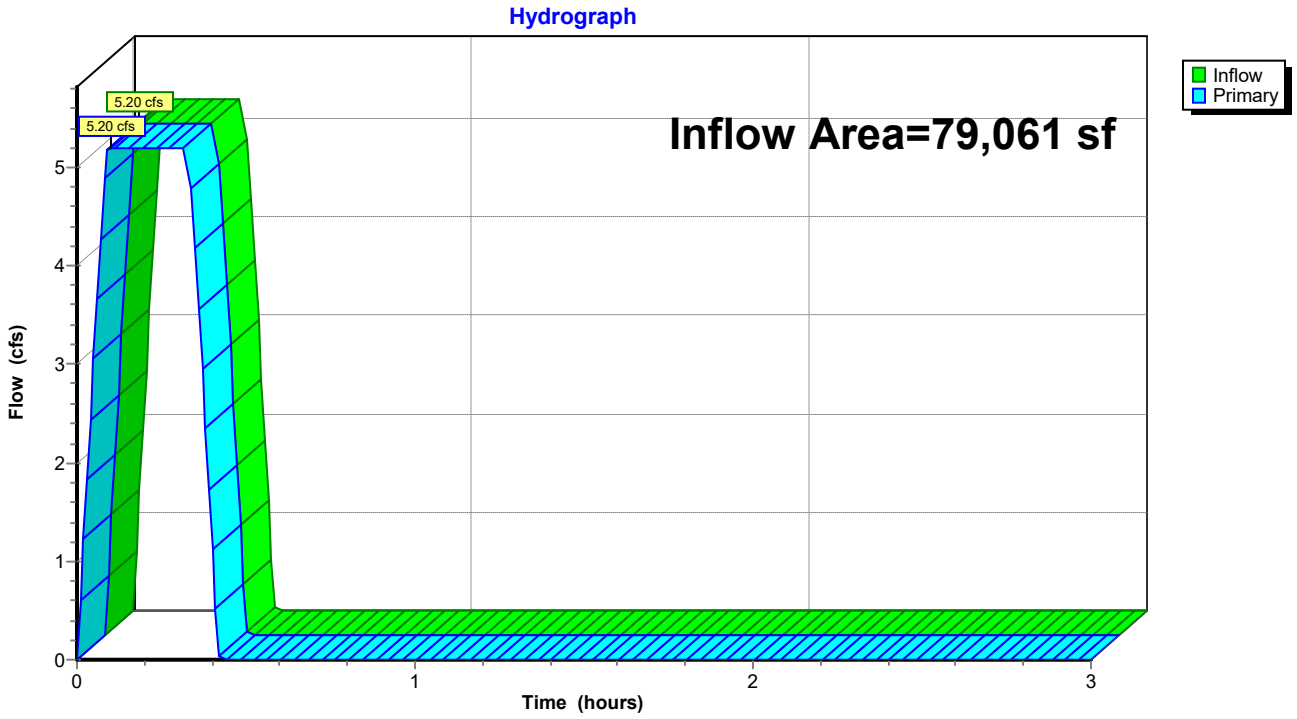


Summary for Pond CI-C5: CI - C5

Inflow Area = 79,061 sf, 65.50% Impervious, Inflow Depth = 0.95" for 5-yr event
Inflow = 5.20 cfs @ 0.10 hrs, Volume= 6,234 cf
Primary = 5.20 cfs @ 0.10 hrs, Volume= 6,234 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C6 : CI - C6

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C5: CI - C5

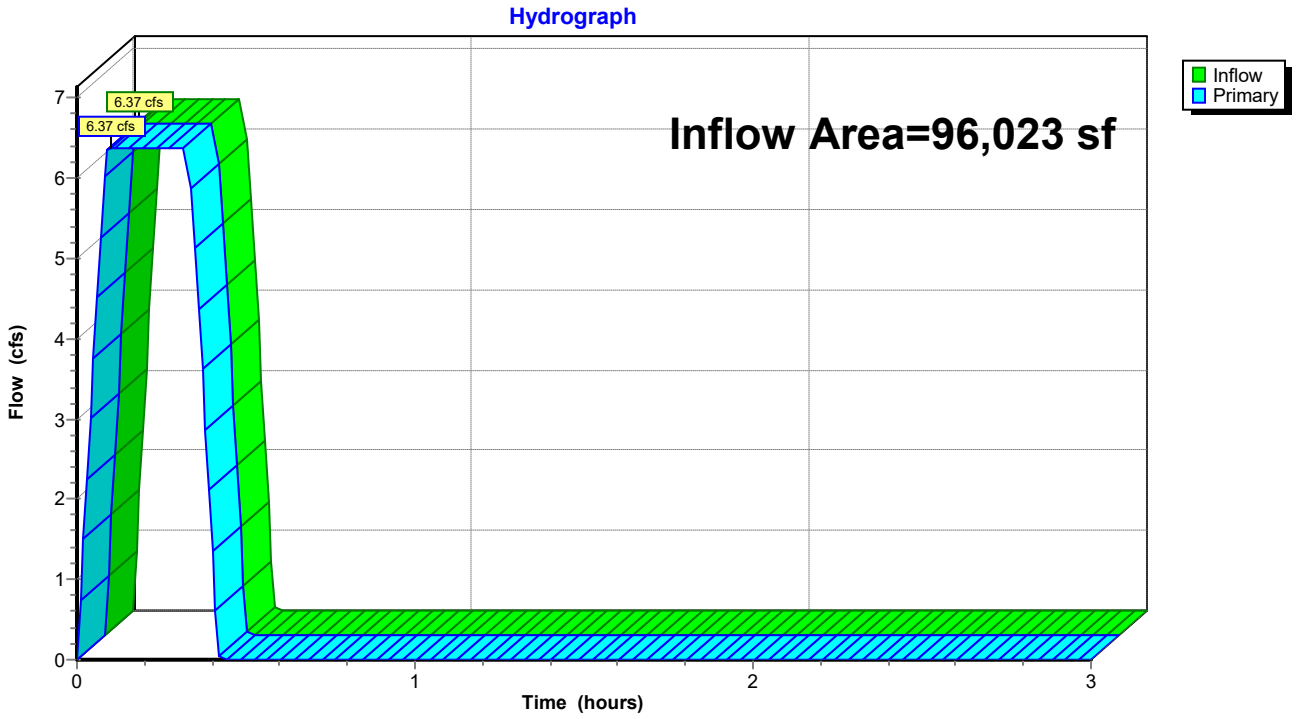


Summary for Pond CI-C6: CI - C6

Inflow Area = 96,023 sf, 66.95% Impervious, Inflow Depth = 0.96" for 5-yr event
Inflow = 6.37 cfs @ 0.10 hrs, Volume= 7,646 cf
Primary = 6.37 cfs @ 0.10 hrs, Volume= 7,646 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C7 : CI - C7

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C6: CI - C6

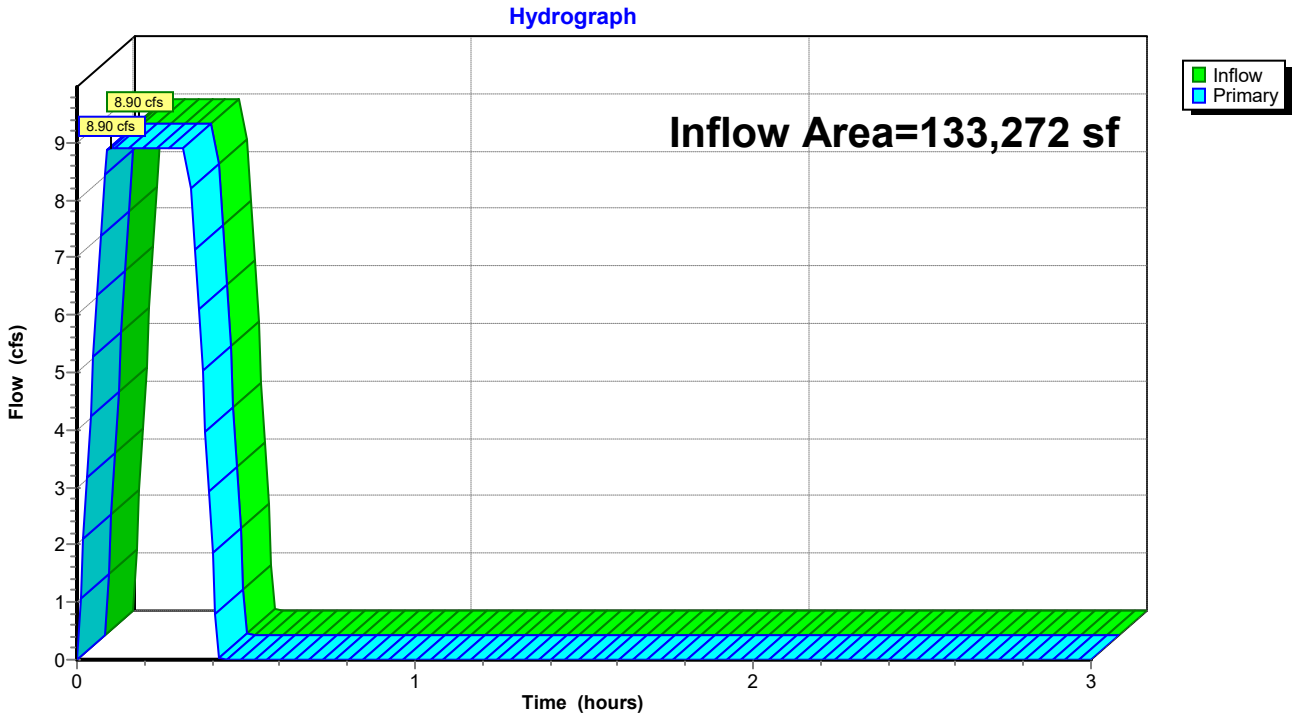


Summary for Pond CI-C7: CI - C7

Inflow Area = 133,272 sf, 67.70% Impervious, Inflow Depth = 0.96" for 5-yr event
Inflow = 8.90 cfs @ 0.10 hrs, Volume= 10,681 cf
Primary = 8.90 cfs @ 0.10 hrs, Volume= 10,681 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond DP : Existing North Detention Pond

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C7: CI - C7

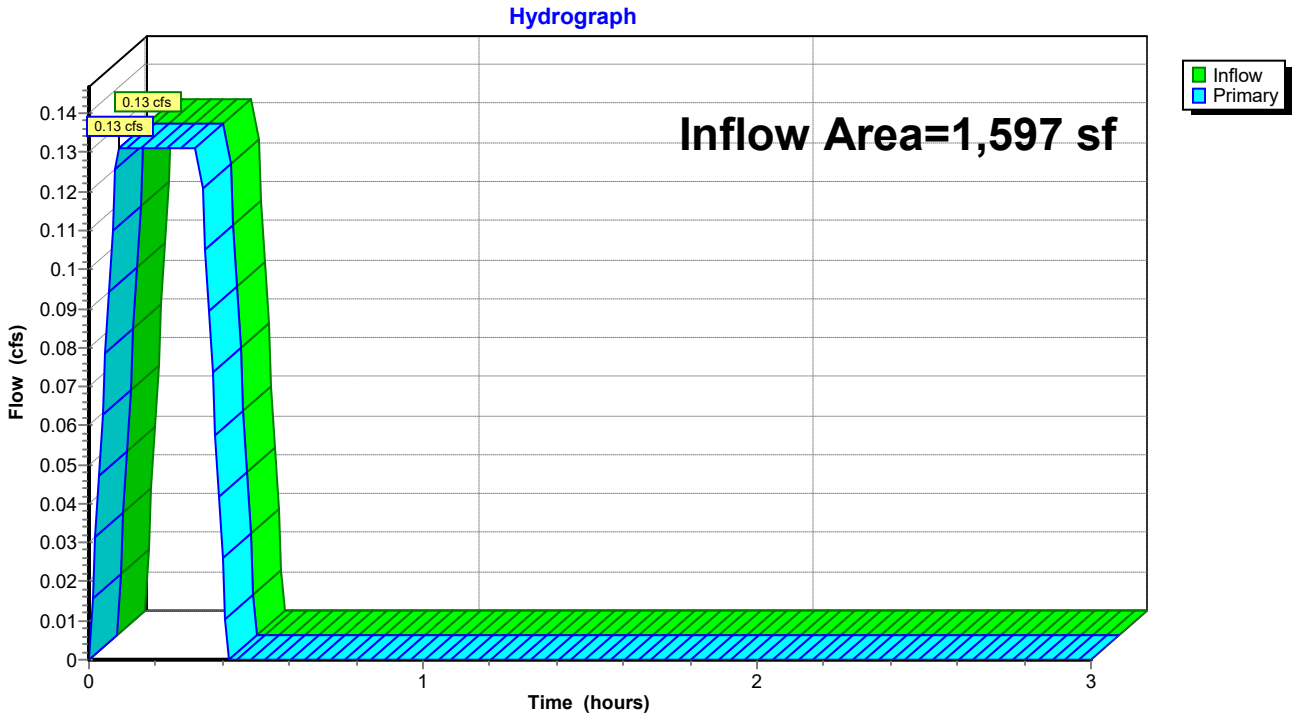


Summary for Pond CI-D1: CI - D1

Inflow Area = 1,597 sf,100.00% Impervious, Inflow Depth = 1.18" for 5-yr event
Inflow = 0.13 cfs @ 0.09 hrs, Volume= 157 cf
Primary = 0.13 cfs @ 0.09 hrs, Volume= 157 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-D2 : CI - D2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-D1: CI - D1

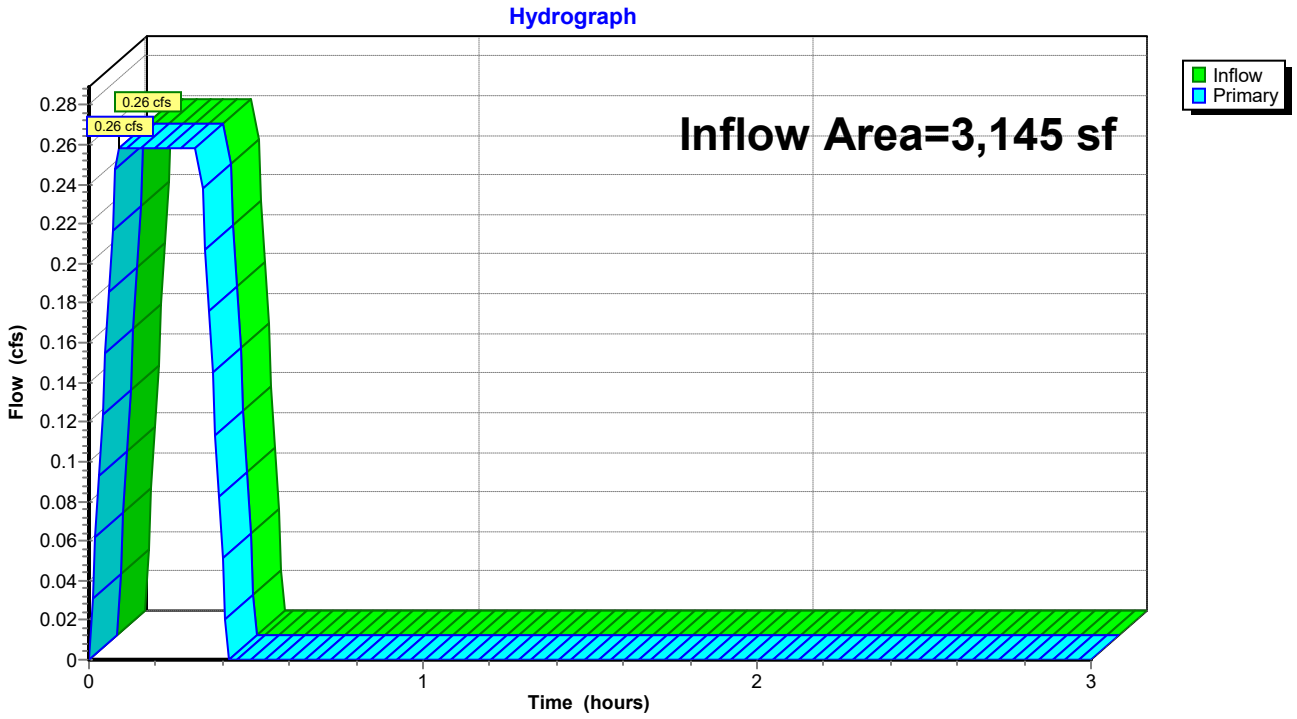


Summary for Pond CI-D2: CI - D2

Inflow Area = 3,145 sf,100.00% Impervious, Inflow Depth = 1.18" for 5-yr event
Inflow = 0.26 cfs @ 0.09 hrs, Volume= 310 cf
Primary = 0.26 cfs @ 0.09 hrs, Volume= 310 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C6 : CI - C6

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-D2: CI - D2

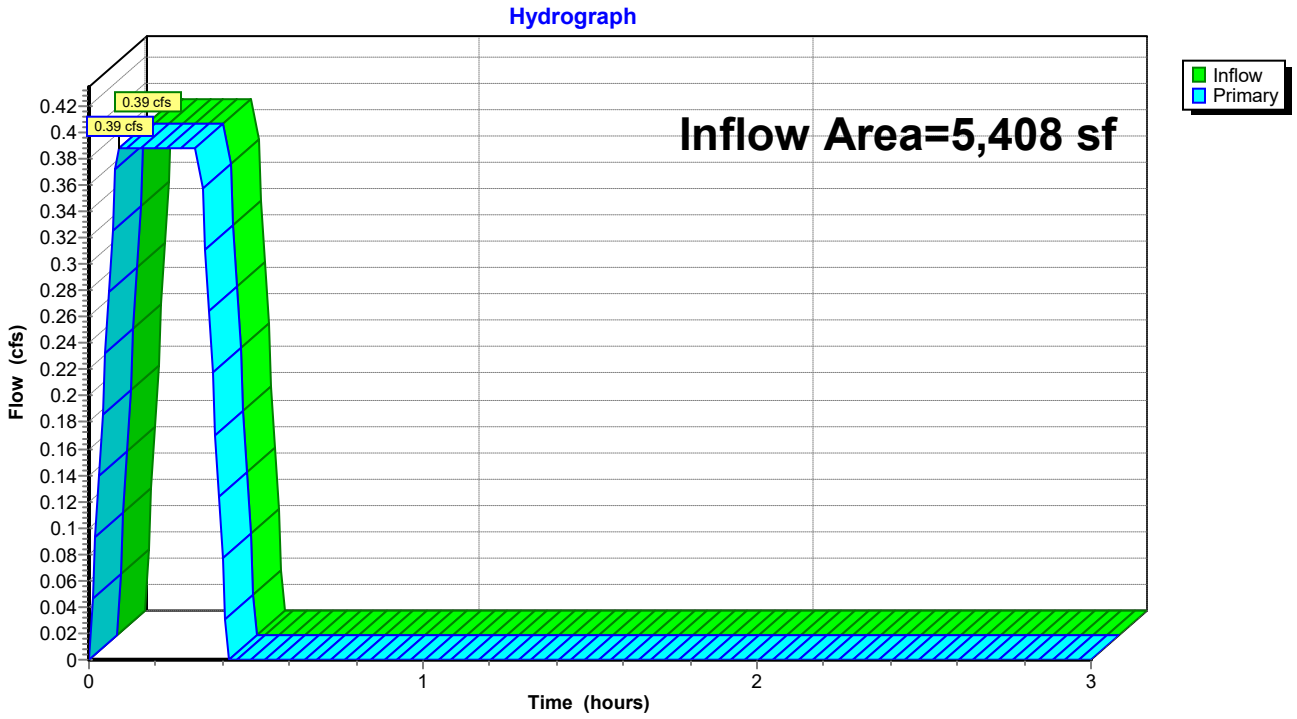


Summary for Pond CI-E1: CI - E1

Inflow Area = 5,408 sf, 77.35% Impervious, Inflow Depth = 1.03" for 5-yr event
Inflow = 0.39 cfs @ 0.09 hrs, Volume= 465 cf
Primary = 0.39 cfs @ 0.09 hrs, Volume= 465 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-E2 : CI - E2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-E1: CI - E1

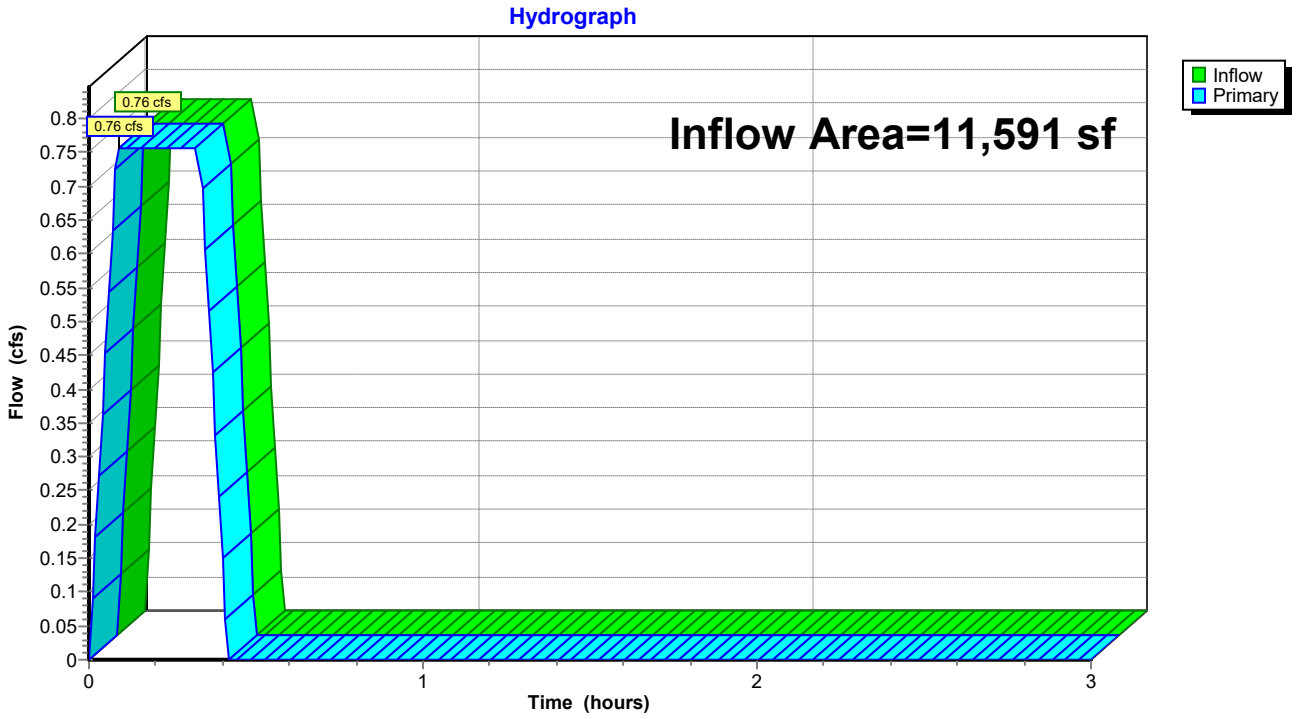


Summary for Pond CI-E2: CI - E2

Inflow Area = 11,591 sf, 64.62% Impervious, Inflow Depth = 0.94" for 5-yr event
Inflow = 0.76 cfs @ 0.09 hrs, Volume= 907 cf
Primary = 0.76 cfs @ 0.09 hrs, Volume= 907 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C7 : CI - C7

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-E2: CI - E2



Summary for Pond DP: Existing North Detention Pond

Inflow Area = 322,783 sf, 53.09% Impervious, Inflow Depth = 0.87" for 5-yr event
Inflow = 19.58 cfs @ 0.27 hrs, Volume= 23,486 cf
Outflow = 9.62 cfs @ 0.38 hrs, Volume= 23,486 cf, Atten= 51%, Lag= 6.9 min
Primary = 9.62 cfs @ 0.38 hrs, Volume= 23,486 cf
Routed to Link FINAL : APPROX DISCHARGE

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 382.84' @ 0.38 hrs Storage= 13,568 cf

Plug-Flow detention time= 17.2 min calculated for 23,408 cf (100% of inflow)
Center-of-Mass det. time= 17.3 min (30.8 - 13.5)

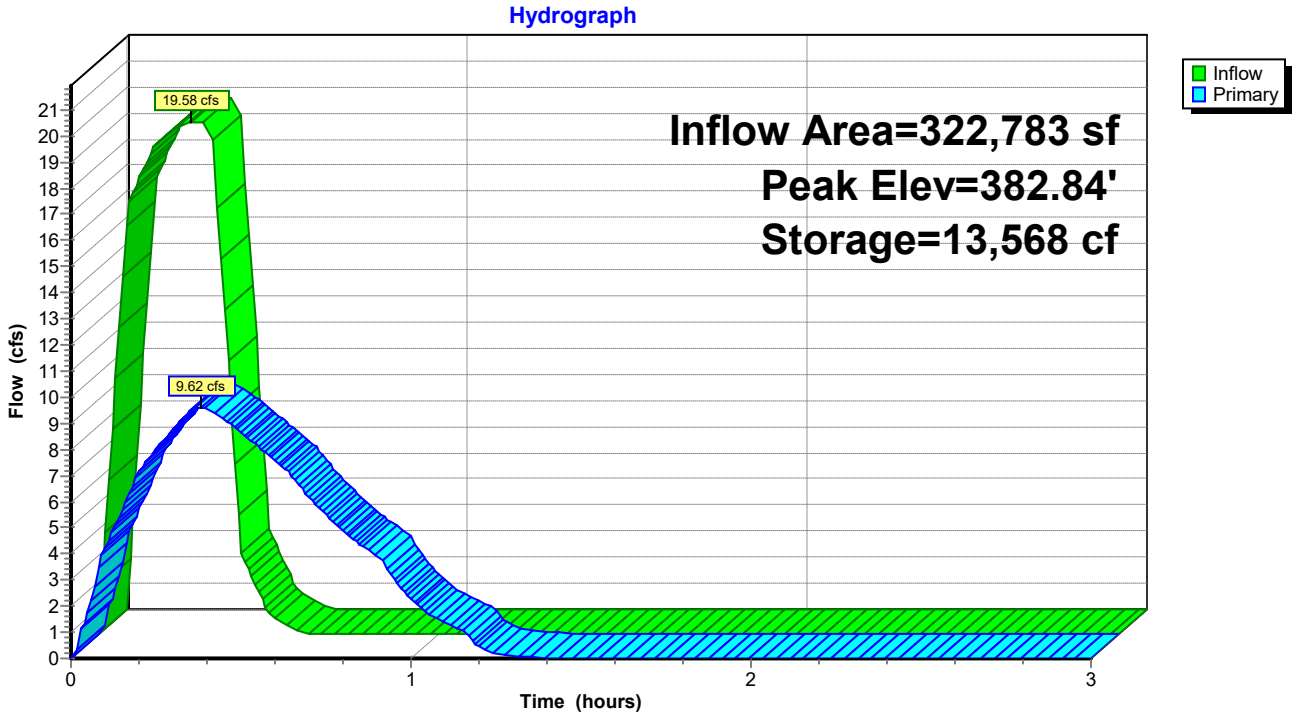
Volume	Invert	Avail.Storage	Storage Description
#1	381.17'	72,742 cf	**Custom Stage Data** Listed below

Elevation (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
381.17	0	0
381.50	200	200
382.00	1,825	2,025
382.50	5,265	7,290
383.00	9,300	16,590
383.50	13,733	30,323
384.00	18,578	48,901
384.50	23,841	72,742

Device	Routing	Invert	Outlet Devices
#1	Primary	384.16'	**5.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#2	Primary	381.17'	**1.7' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=9.62 cfs @ 0.38 hrs HW=382.84' (Free Discharge)
└**1=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
└**2=Sharp-Crested Rectangular Weir** (Weir Controls 9.62 cfs @ 4.22 fps)

Pond DP: Existing North Detention Pond

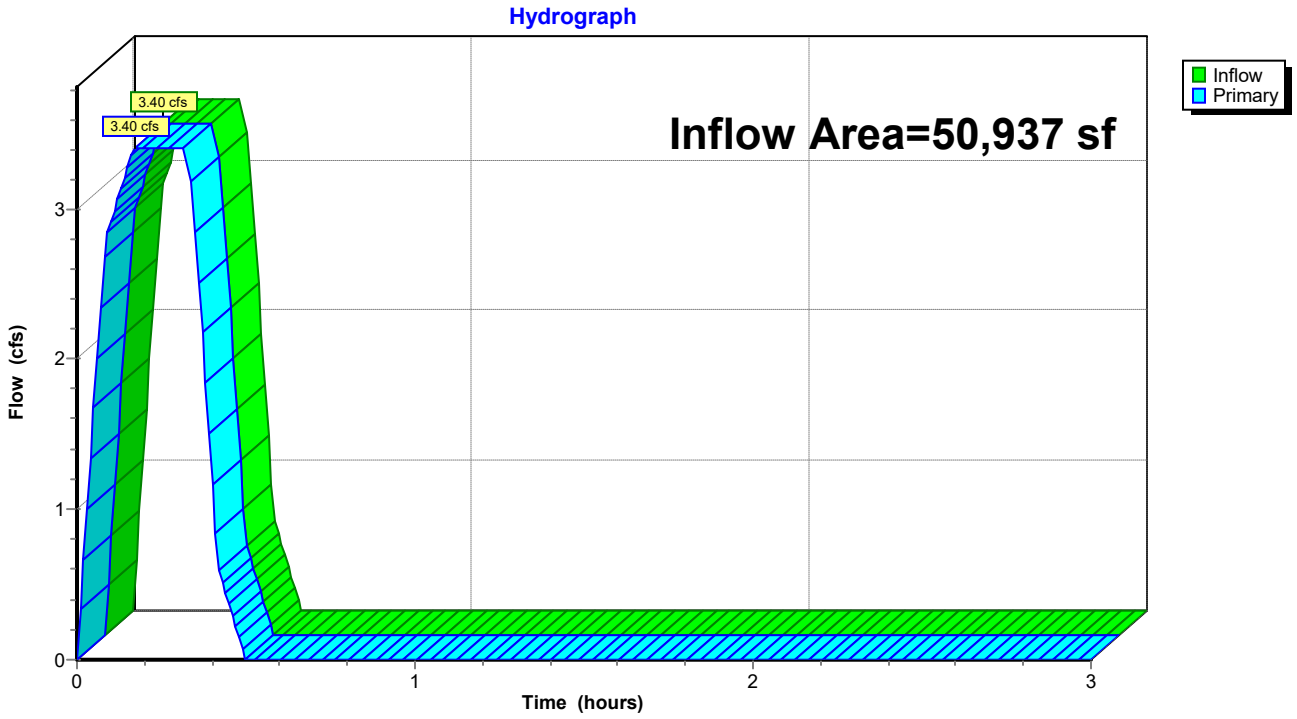


Summary for Pond JB-A2: JB - A2

Inflow Area = 50,937 sf, 59.76% Impervious, Inflow Depth = 0.96" for 5-yr event
Inflow = 3.40 cfs @ 0.17 hrs, Volume= 4,080 cf
Primary = 3.40 cfs @ 0.17 hrs, Volume= 4,080 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A3 : CI - A3

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond JB-A2: JB - A2

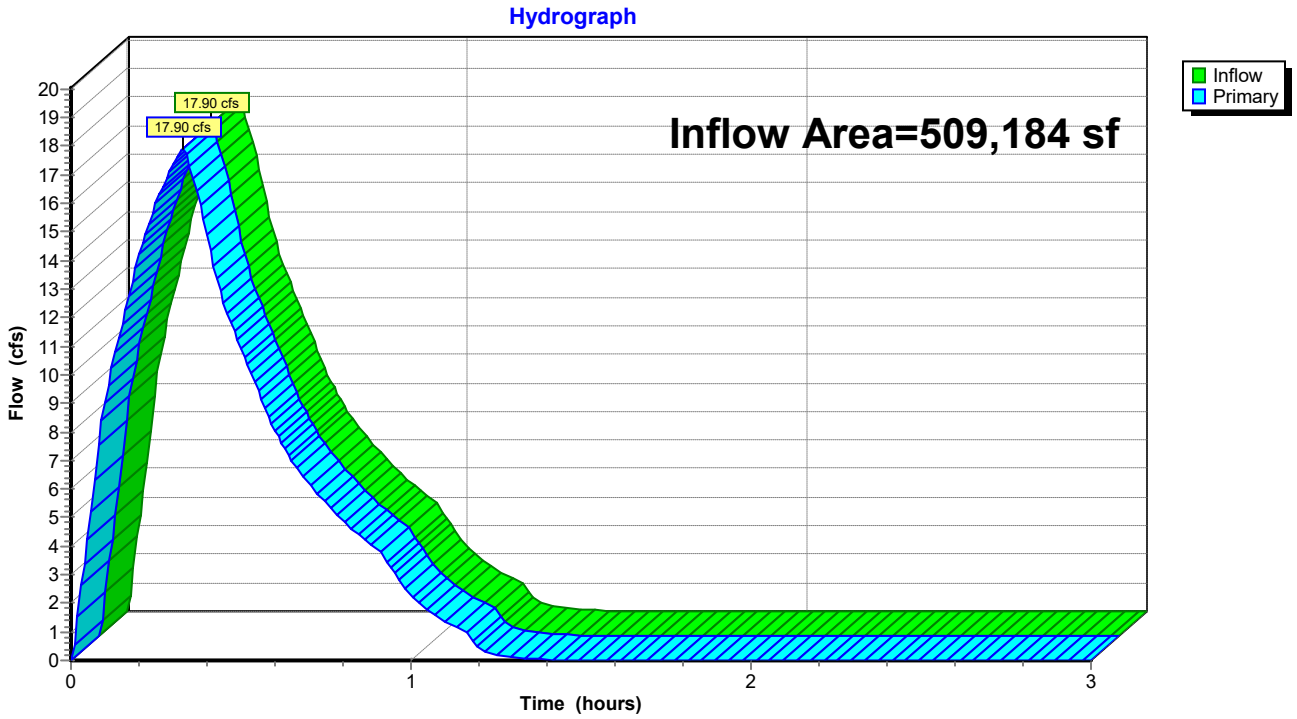


Summary for Link FINAL: APPROX DISCHARGE

Inflow Area = 509,184 sf, 38.62% Impervious, Inflow Depth = 0.80" for 5-yr event
Inflow = 17.90 cfs @ 0.33 hrs, Volume= 33,908 cf
Primary = 17.90 cfs @ 0.33 hrs, Volume= 33,908 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link FINAL: APPROX DISCHARGE



Summary for Subcatchment B1: Drainage Basin B1

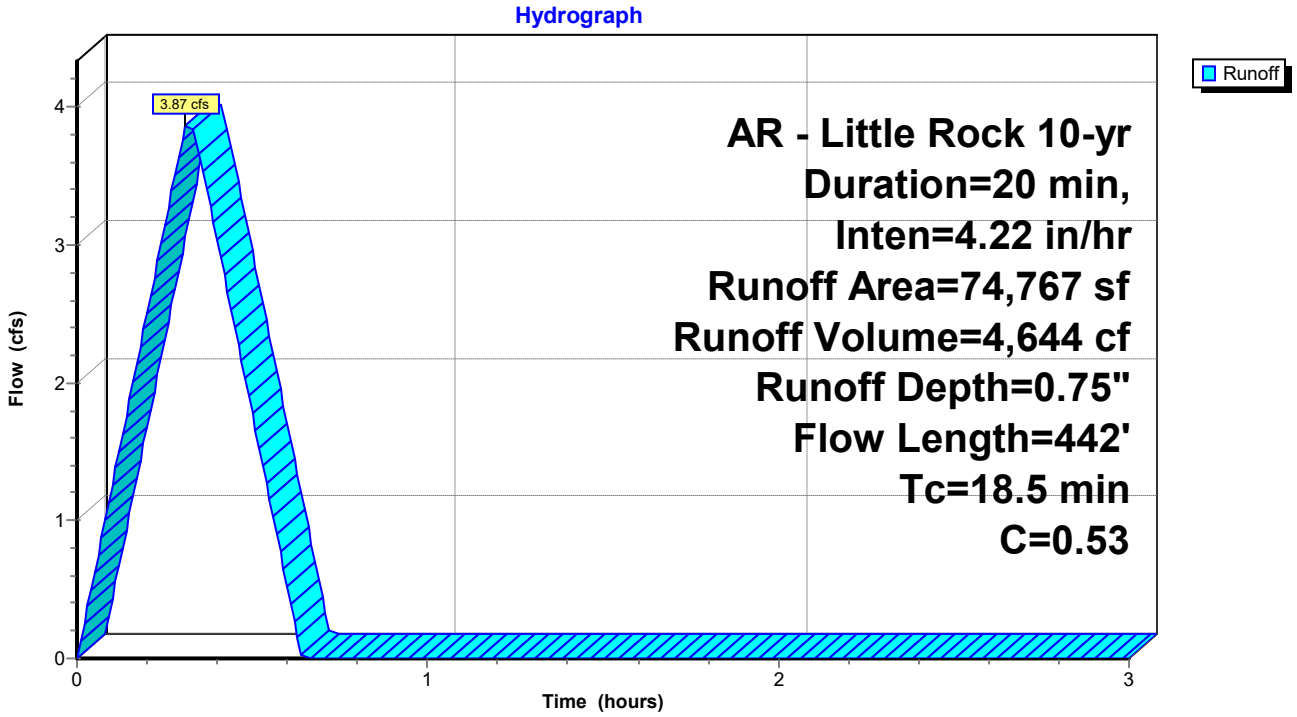
Runoff = 3.87 cfs @ 0.31 hrs, Volume= 4,644 cf, Depth= 0.75"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
9,241	0.51	Sod Yard
602	0.95	Paving, Sidewalks
64,924	0.53	Undeveloped
74,767	0.53	Weighted Average
74,165		99.19% Pervious Area
602		0.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	6	0.0180	0.86		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
2.6	25	0.1920	0.16		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
11.9	75	0.0370	0.11		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.7	58	0.0370	1.35		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.6	141	0.0420	1.43		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.7	60	0.0400	1.40		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.9	77	0.0420	1.43		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
18.5	442	Total			

Subcatchment B1: Drainage Basin B1



Summary for Subcatchment B2: Drainage Basin B2

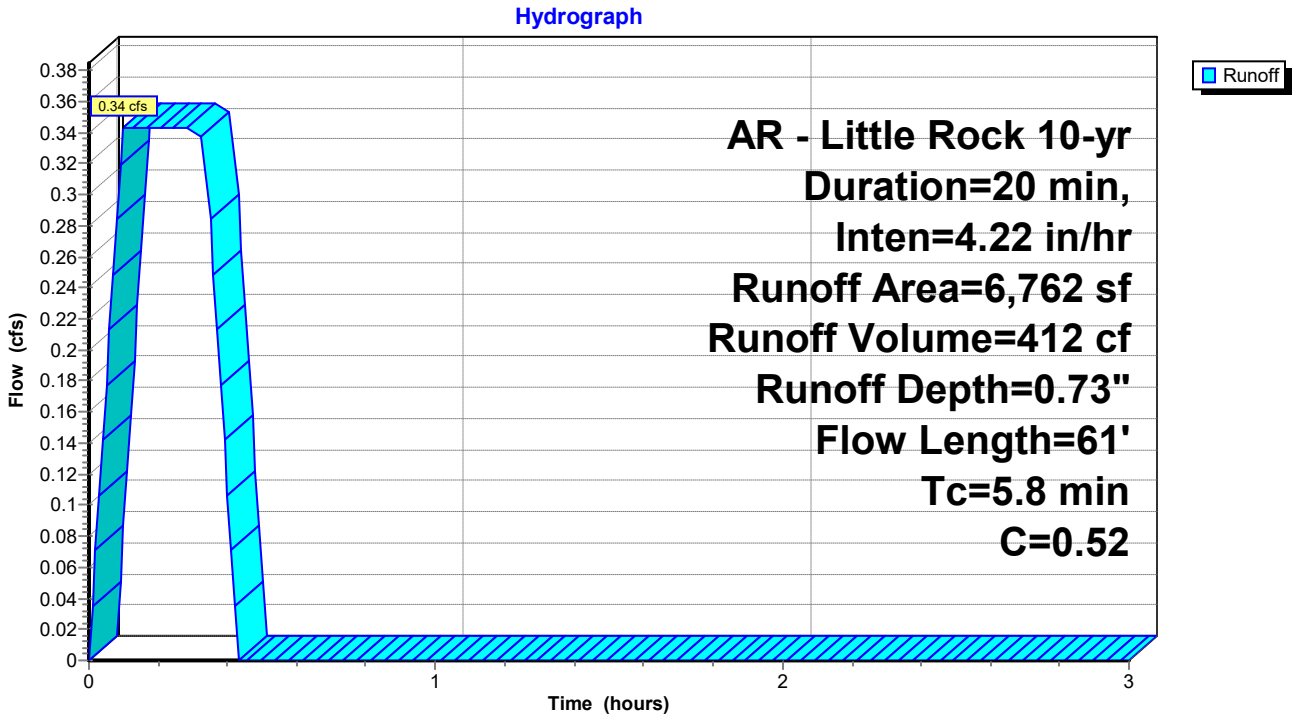
Runoff = 0.34 cfs @ 0.10 hrs, Volume= 412 cf, Depth= 0.73"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
6,595	0.51	Sod Yard
167	0.95	Paving, Sidewalks
6,762	0.52	Weighted Average
6,595		97.53% Pervious Area
167		2.47% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	6	0.0180	0.86		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
5.7	55	0.1240	0.16		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
5.8	61	Total			

Subcatchment B2: Drainage Basin B2



Summary for Subcatchment B3: Drainage Basin B3

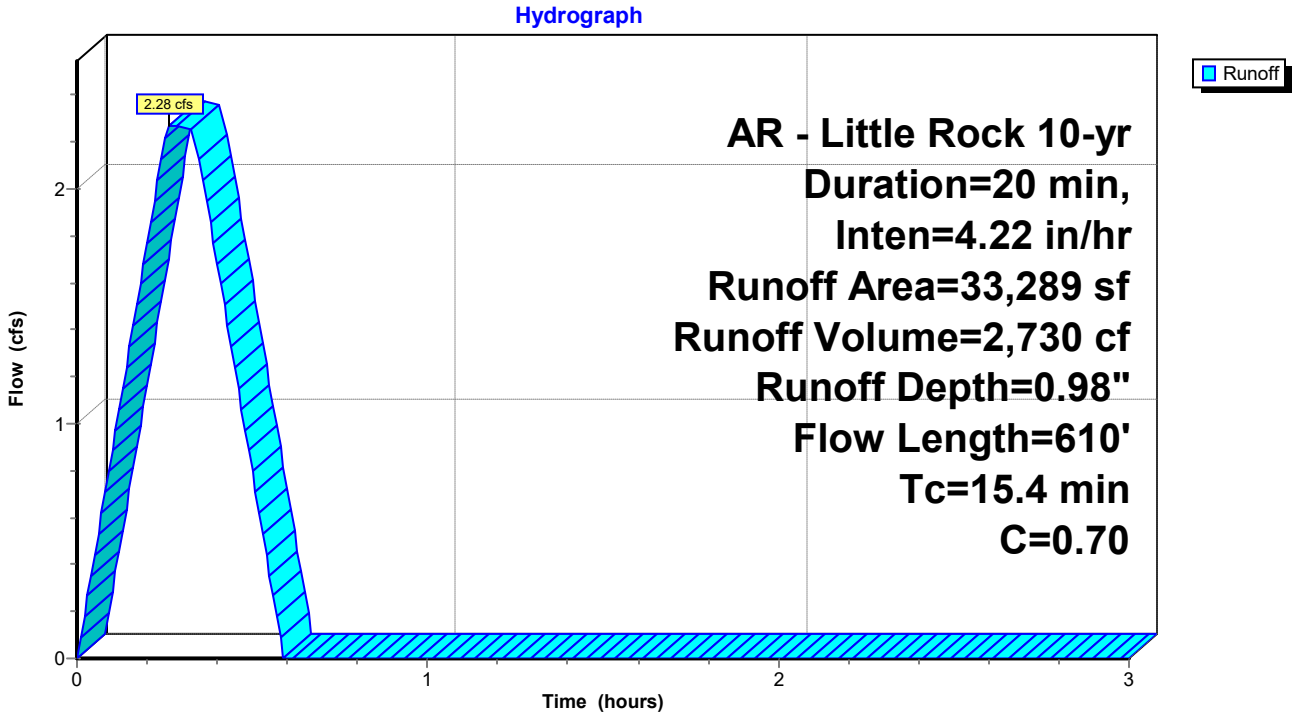
Runoff = 2.28 cfs @ 0.26 hrs, Volume= 2,730 cf, Depth= 0.98"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
18,730	0.51	Sod Yard
14,559	0.95	Paving, Sidewalks
33,289	0.70	Weighted Average
18,730		56.26% Pervious Area
14,559		43.74% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	47	0.1300	0.16		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
6.9	53	0.0730	0.13		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.0	11	0.0940	4.60		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.4	53	0.0120	2.22		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.5	59	0.0100	2.03		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.5	47	0.0070	1.70		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.5	56	0.0070	1.70		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	38	0.0160	2.57		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	30	0.0190	2.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
1.3	216	0.0190	2.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
15.4	610	Total			

Subcatchment B3: Drainage Basin B3



Summary for Subcatchment B4: Drainage Basin B4

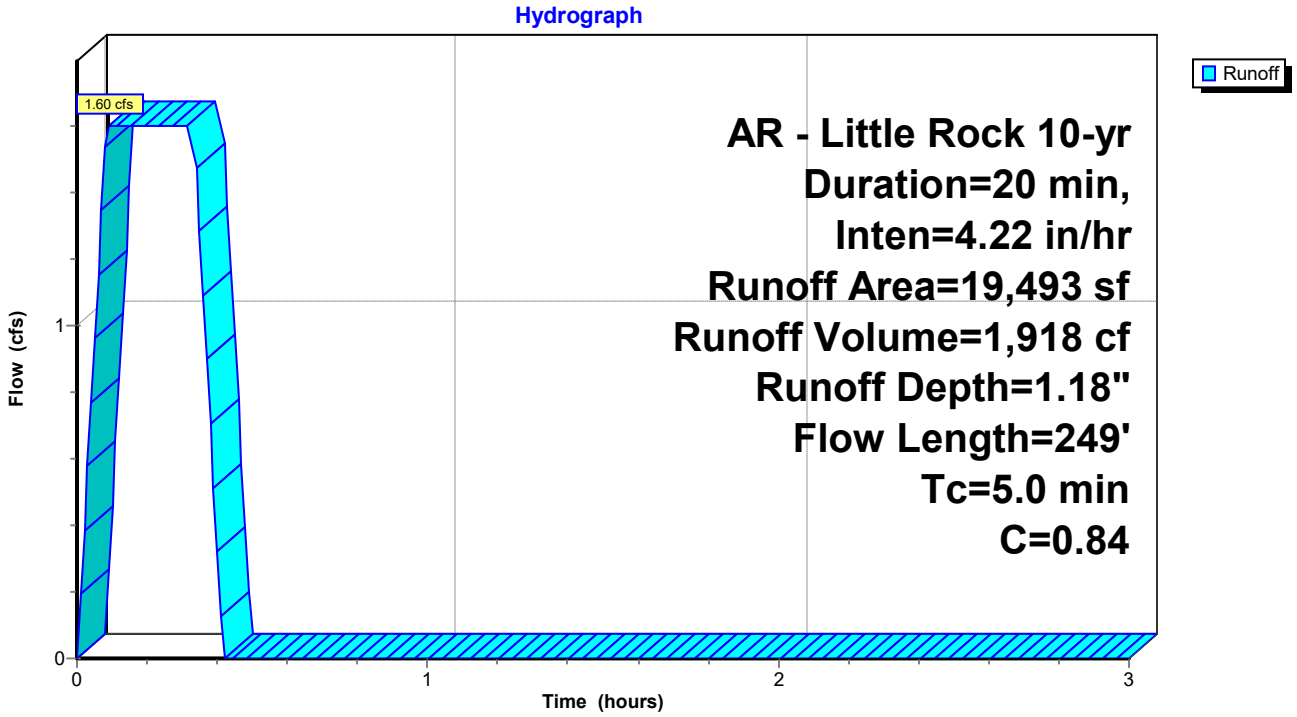
Runoff = 1.60 cfs @ 0.09 hrs, Volume= 1,918 cf, Depth= 1.18"
Routed to Pond CI-A1 : CI - A1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
4,916	0.51	Sod Yard
14,577	0.95	Paving, Sidewalks
19,493	0.84	Weighted Average
4,916		25.22% Pervious Area
14,577		74.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	31	0.0230	1.32		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	18	0.0250	1.22		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.3	28	0.0450	1.69		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.4	72	0.0250	3.21		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	18	0.0170	2.65		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.3	51	0.0170	2.65		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	16	0.0170	2.65		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	8	0.0430	4.21		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	7	0.0580	4.89		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
3.2					**Direct Entry, Overland Concentrated Flow (Min)**
5.0	249	Total			

Subcatchment B4: Drainage Basin B4



Summary for Subcatchment B5: Drainage Basin B5

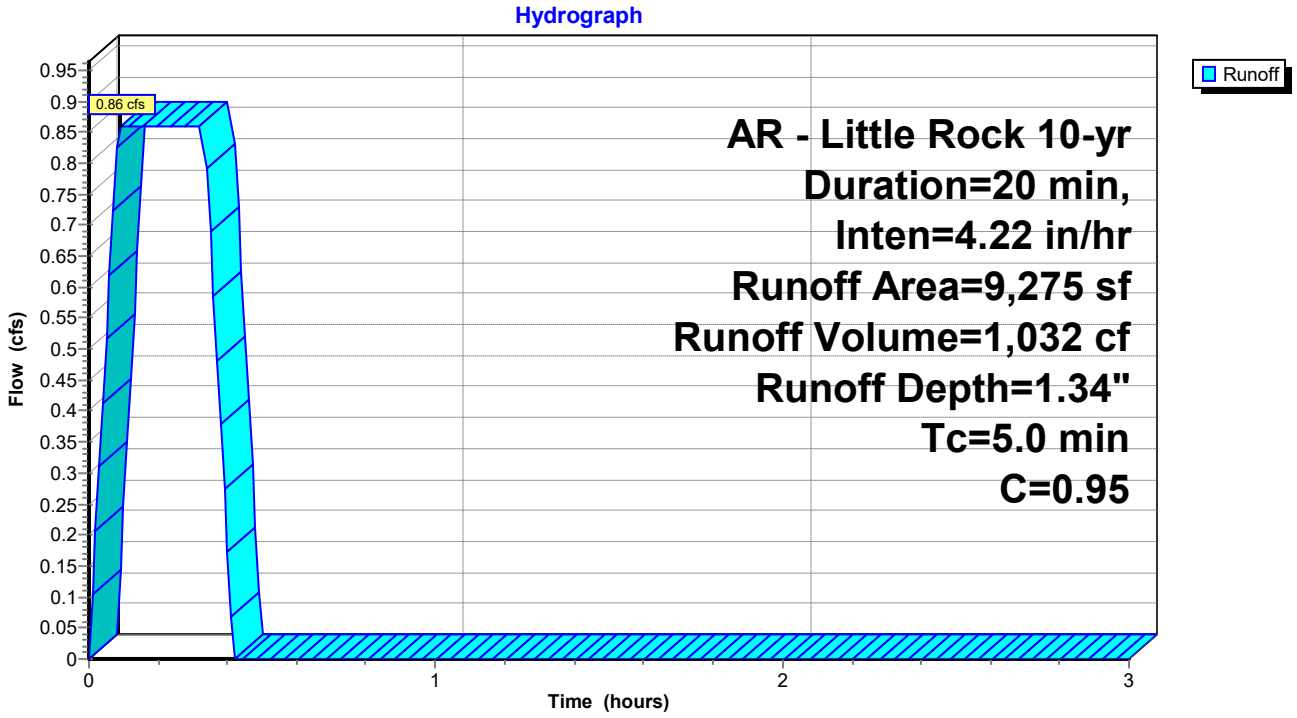
Runoff = 0.86 cfs @ 0.09 hrs, Volume= 1,032 cf, Depth= 1.34"
Routed to Pond JB-A2 : JB - A2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
9,275	0.95	Roof
9,275		100.00% Impervious Area

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

Subcatchment B5: Drainage Basin B5



Summary for Subcatchment B6: Drainage Basin B6

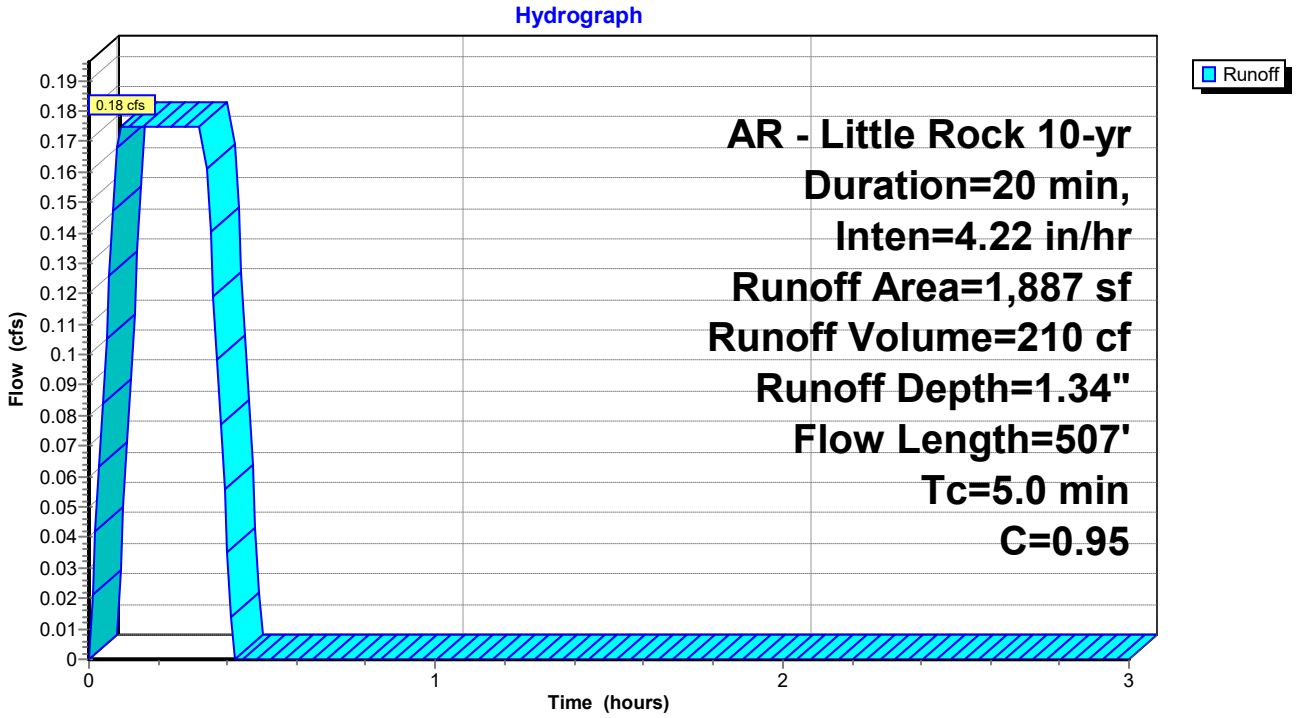
Runoff = 0.18 cfs @ 0.09 hrs, Volume= 210 cf, Depth= 1.34"
Routed to Pond CI-A3 : CI - A3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
0	0.51	Sod Yard
1,887	0.95	Paving, Sidewalks
1,887	0.95	Weighted Average
1,887		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	31	0.0230	1.32		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	18	0.0250	1.22		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.4	30	0.0240	1.33		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.0	13	0.0860	5.95		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.0	415		1.73		**Direct Entry, Overland Concentrated Flow (Min)**
5.0	507	Total			

Subcatchment B6: Drainage Basin B6



Summary for Subcatchment B7: Drainage Basin B7

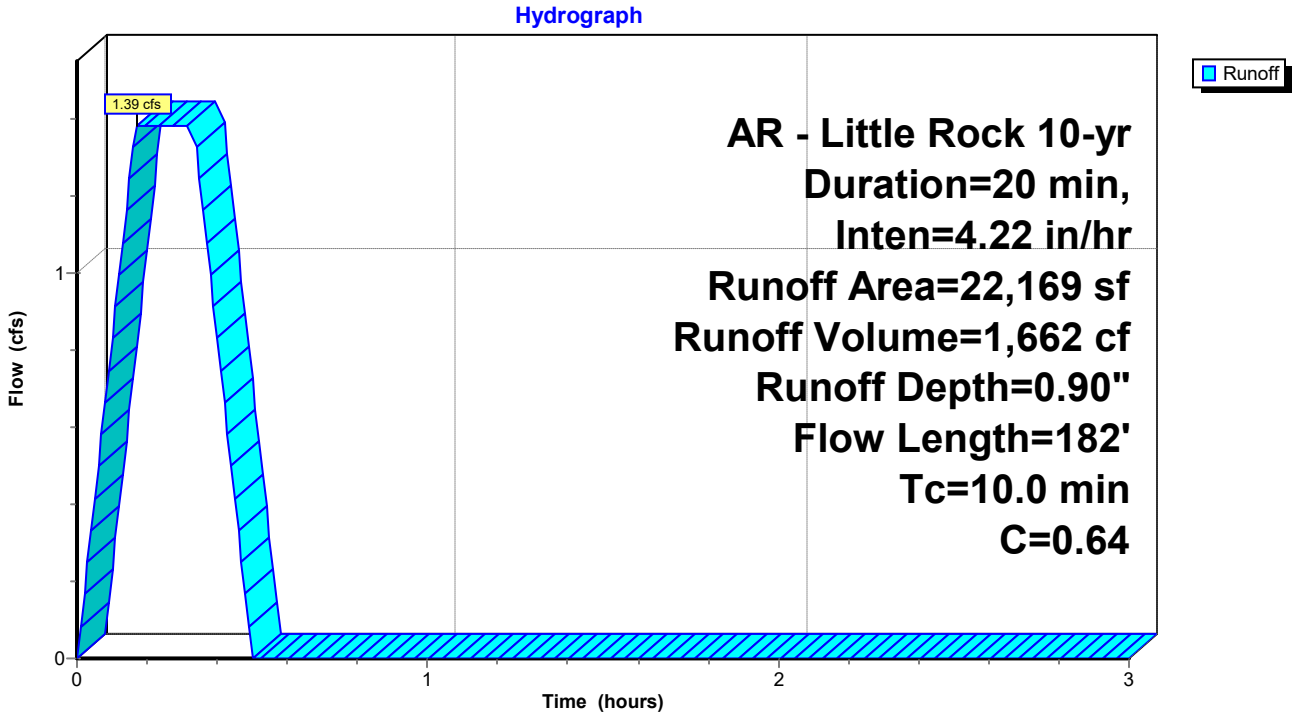
Runoff = 1.39 cfs @ 0.17 hrs, Volume= 1,662 cf, Depth= 0.90"
Routed to Pond CI-B2 : CI - B2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
15,580	0.51	Sod Yard
6,589	0.95	Paving, Sidewalks
22,169	0.64	Weighted Average
15,580		70.28% Pervious Area
6,589		29.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	10	0.0150	0.89		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
9.1	93	0.0150	0.17		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
0.4	40	0.0110	1.57		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	33	0.0190	2.07		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.0	6	0.0180	2.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
10.0	182	Total			

Subcatchment B7: Drainage Basin B7



Summary for Subcatchment B8: Drainage Basin B8

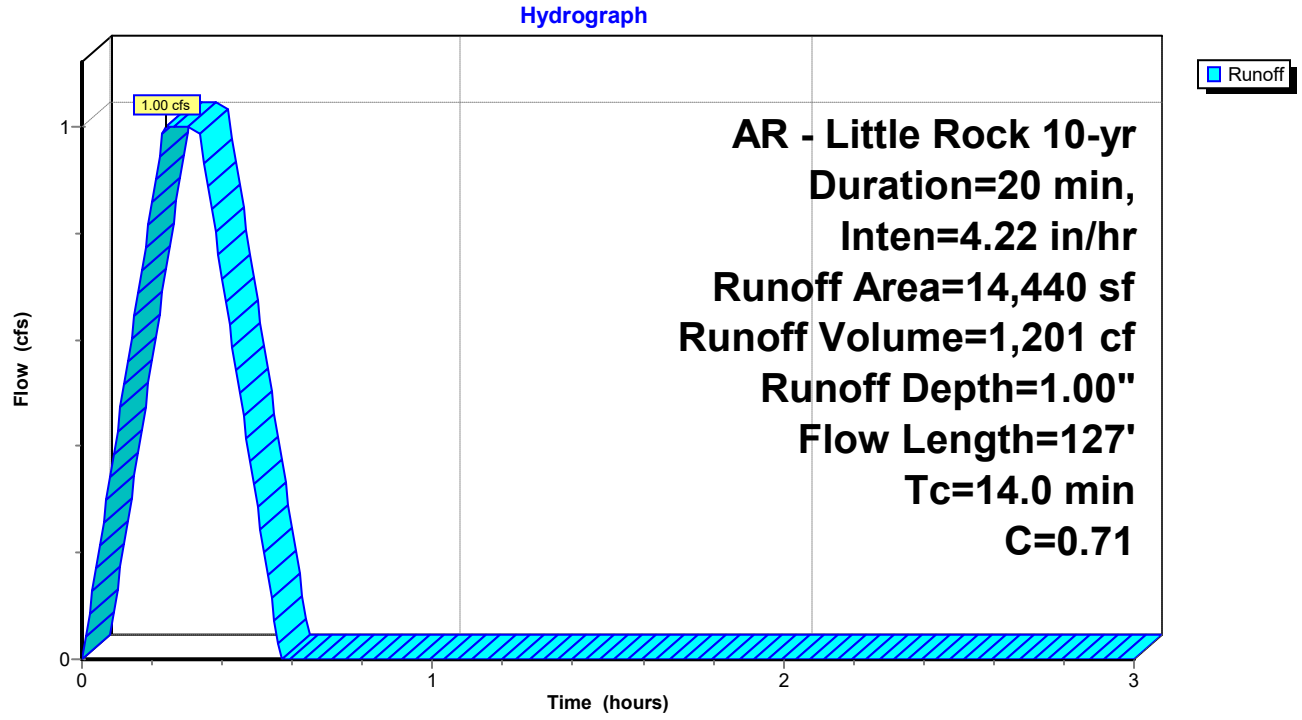
Runoff = 1.00 cfs @ 0.24 hrs, Volume= 1,201 cf, Depth= 1.00"
Routed to Pond CI-A4 : CI - A4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
7,982	0.51	Sod Yard
6,458	0.95	Paving, Sidewalks
14,440	0.71	Weighted Average
7,982		55.28% Pervious Area
6,458		44.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4	79	0.0570	0.13		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
3.5	21	0.0620	0.10		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.0	9	0.0620	3.73		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.1	18	0.1080	4.93		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
14.0	127	Total			

Subcatchment B8: Drainage Basin B8



Summary for Subcatchment C1: Drainage Basin C1

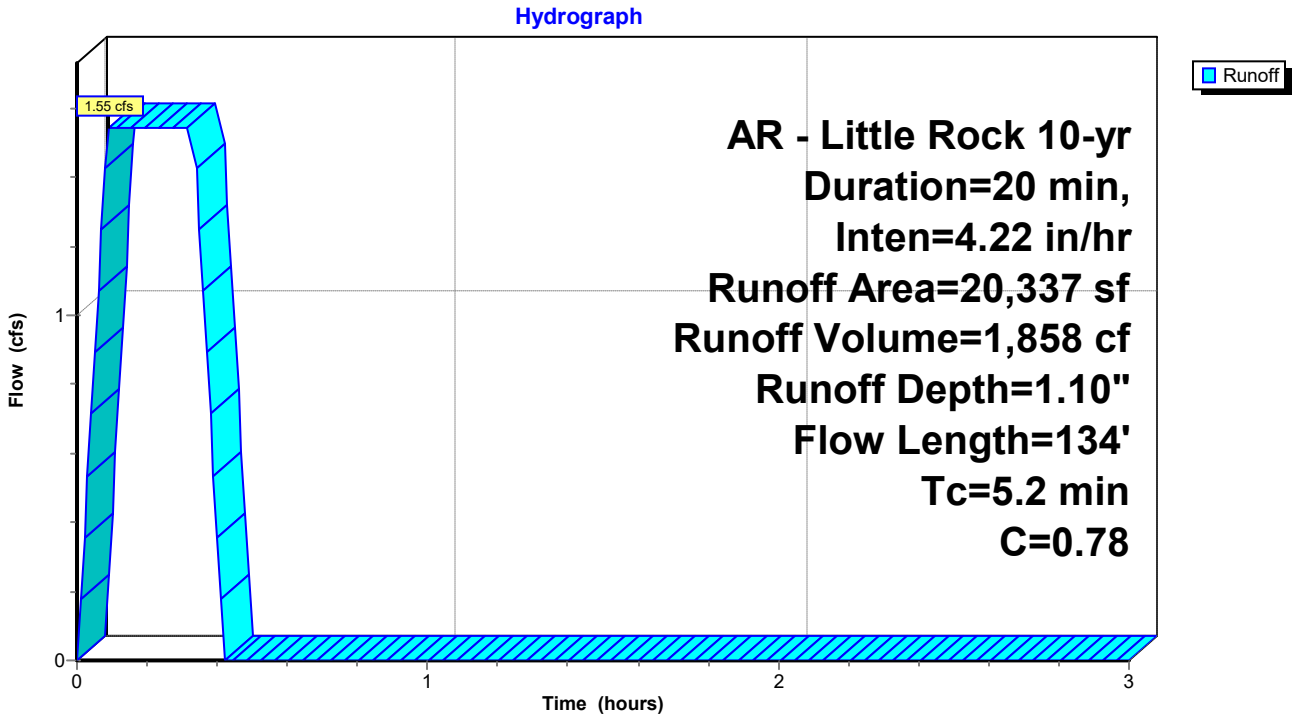
Runoff = 1.55 cfs @ 0.09 hrs, Volume= 1,858 cf, Depth= 1.10"
Routed to Pond CI-C1 : CI - C1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
6,135	0.40	Sod Yard
14,202	0.95	Paving, Sidewalks
20,337	0.78	Weighted Average
6,135		30.17% Pervious Area
14,202		69.83% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	32	0.0660	0.11		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.4	102	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
5.2	134	Total			

Subcatchment C1: Drainage Basin C1



Summary for Subcatchment C10: Drainage Basin C10

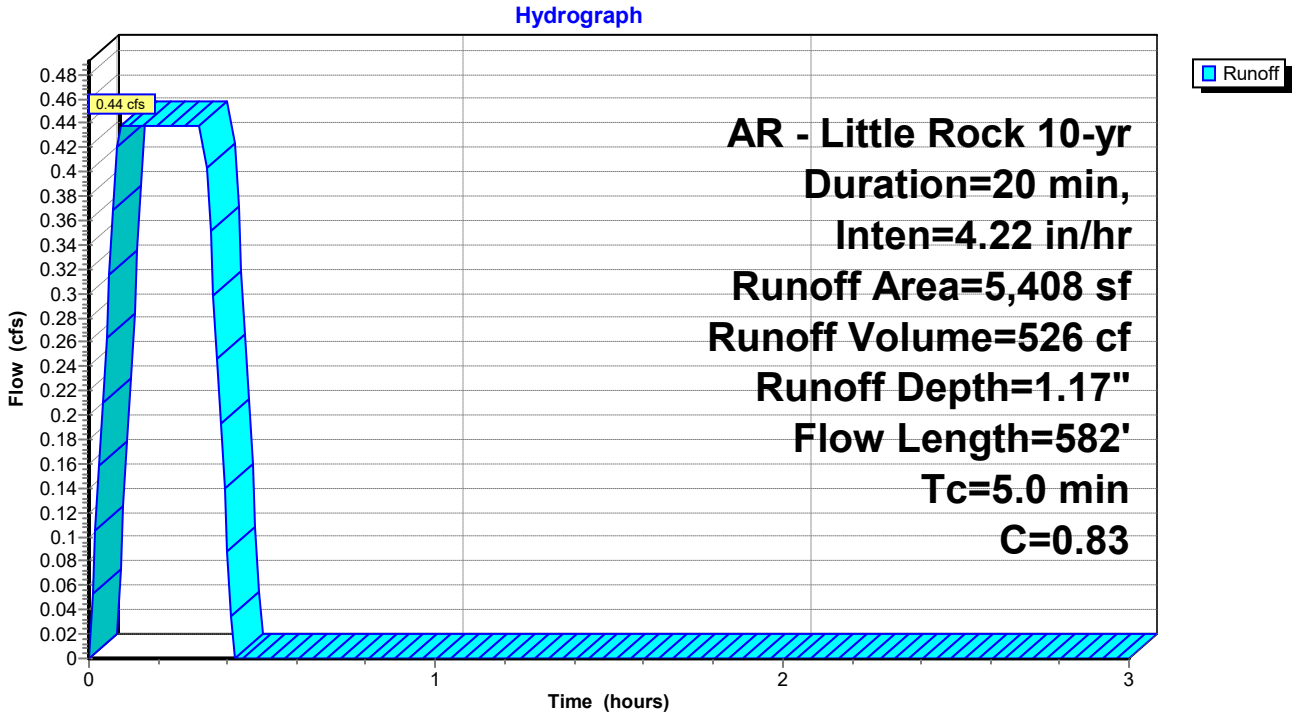
Runoff = 0.44 cfs @ 0.09 hrs, Volume= 526 cf, Depth= 1.17"
Routed to Pond CI-E1 : CI - E1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
1,225	0.40	Sod Yard
4,183	0.95	Paving, Sidewalks
5,408	0.83	Weighted Average
1,225		22.65% Pervious Area
4,183		77.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	18	0.0200	1.12		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	29	0.0210	2.94		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	23	0.0320	3.63		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	36	0.0320	3.63		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	48	0.0330	3.69		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	13	0.0350	3.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
3.9	415		1.77		**Direct Entry, Concentrated Flow (Min)**
5.0	582	Total			

Subcatchment C10: Drainage Basin C10



Summary for Subcatchment C11: Drainage Basin C11

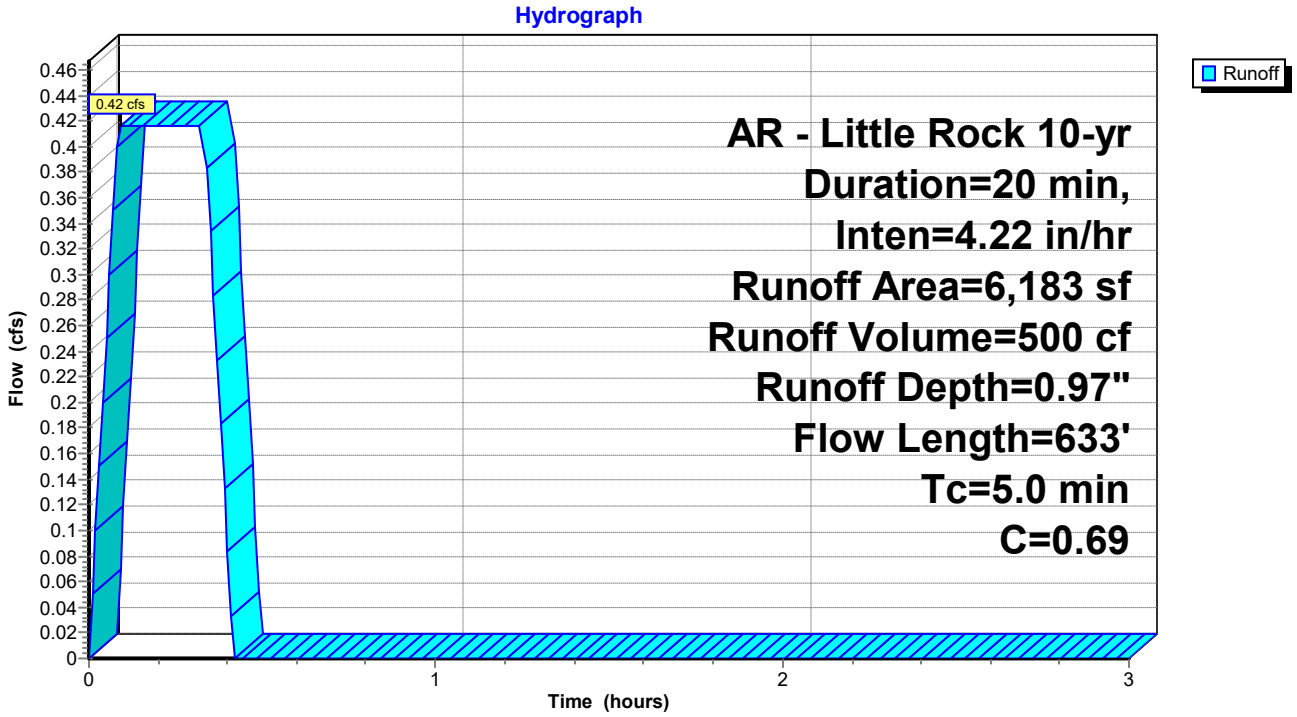
Runoff = 0.42 cfs @ 0.09 hrs, Volume= 500 cf, Depth= 0.97"
Routed to Pond CI-E2 : CI - E2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
2,876	0.40	Sod Yard
3,307	0.95	Paving, Sidewalks
6,183	0.69	Weighted Average
2,876		46.51% Pervious Area
3,307		53.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	25	0.0200	1.19		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	33	0.0620	5.05		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	29	0.0540	4.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	47	0.0410	4.11		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	47	0.0390	4.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	37	0.0420	4.16		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.0	415		1.73		**Direct Entry, Concentrated Flow (Min)**
5.0	633	Total			

Subcatchment C11: Drainage Basin C11



Summary for Subcatchment C12: Drainage Basin C12

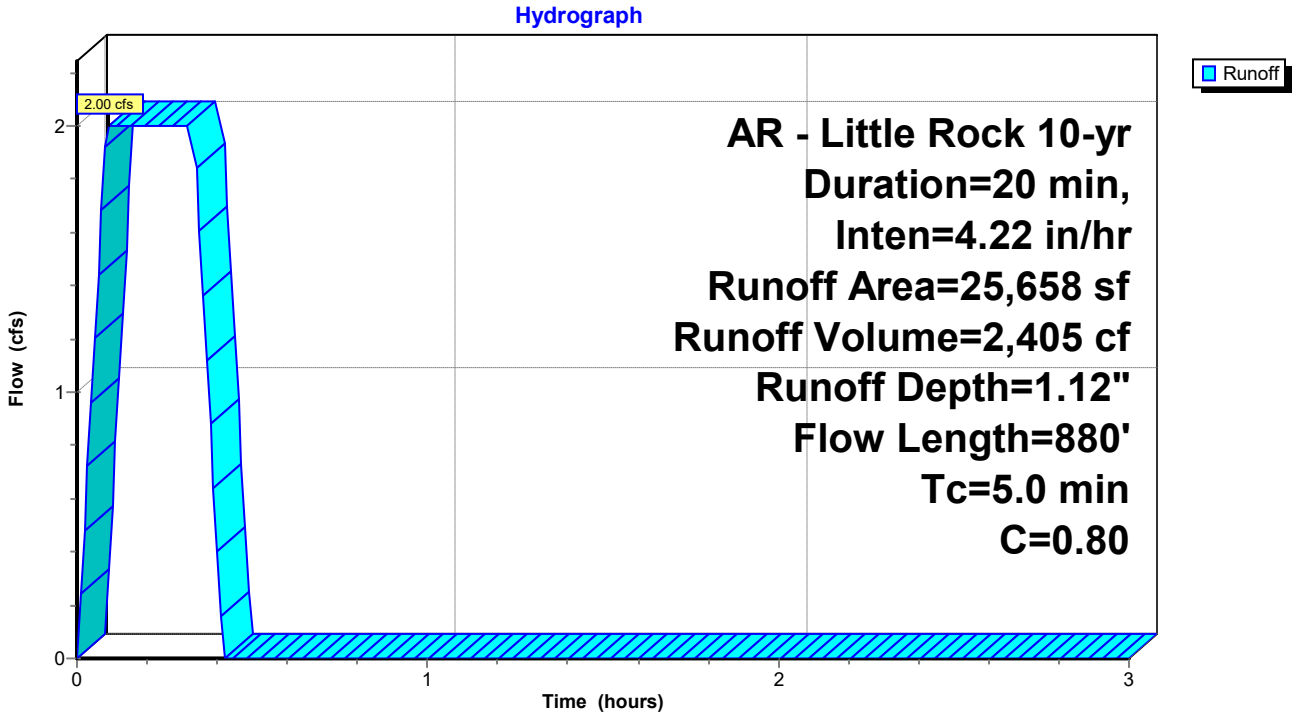
Runoff = 2.00 cfs @ 0.09 hrs, Volume= 2,405 cf, Depth= 1.12"
Routed to Pond CI-C7 : CI - C7

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
7,218	0.40	Sod Yard
18,440	0.95	Paving, Sidewalks
25,658	0.80	Weighted Average
7,218		28.13% Pervious Area
18,440		71.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	24	0.0360	1.50		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	5	0.0190	0.85		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	21	0.0100	2.03		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.9	49	0.0020	0.91		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.4	96	0.0330	3.69		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.3	94	0.0570	4.85		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	28	0.0560	4.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	25	0.0450	4.31		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	31	0.0410	4.11		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	39	0.0490	4.49		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	36	0.0460	4.35		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	11	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	6	0.0440	4.26		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
2.3	415		3.01		**Direct Entry, Concentrated Flow (Min)**
5.0	880	Total			

Subcatchment C12: Drainage Basin C12



Summary for Subcatchment C13: Drainage Basin C13

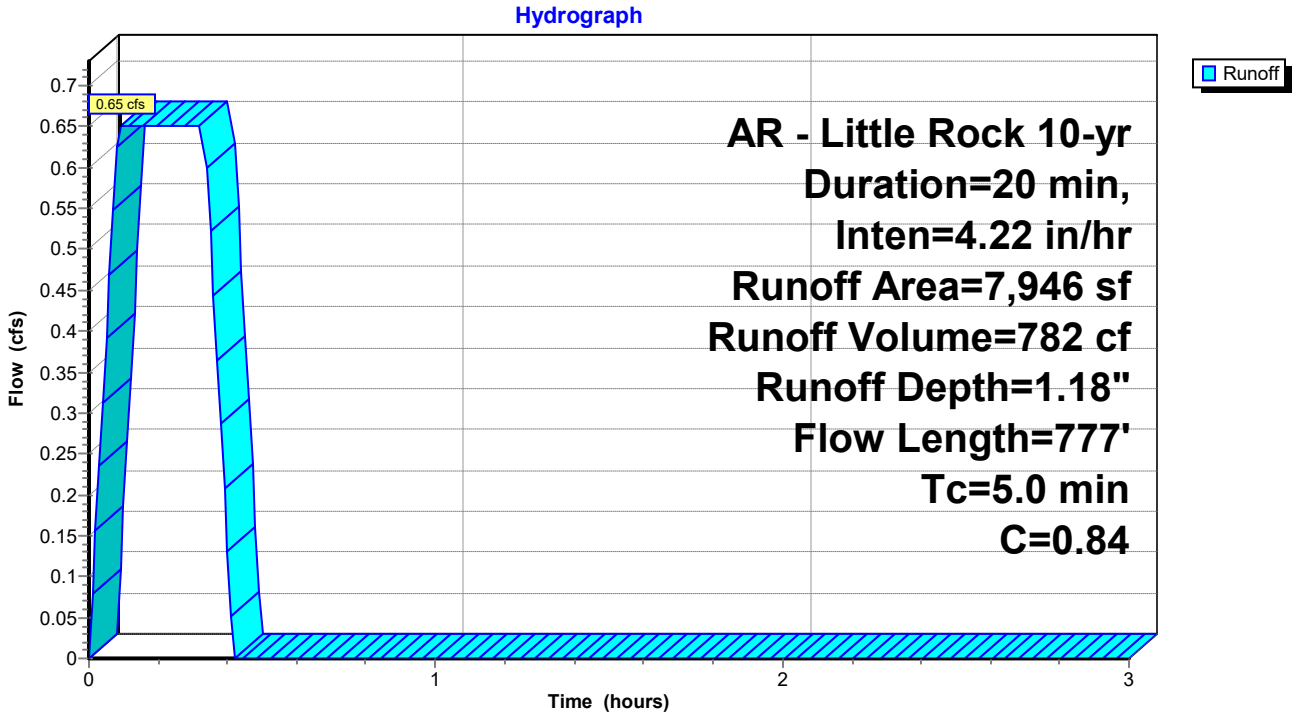
Runoff = 0.65 cfs @ 0.09 hrs, Volume= 782 cf, Depth= 1.18"
Routed to Pond CI-A4 : CI - A4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
1,558	0.40	Sod Yard
6,388	0.95	Paving, Sidewalks
7,946	0.84	Weighted Average
1,558		19.61% Pervious Area
6,388		80.39% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	19	0.0200	1.13		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.3	75	0.0340	3.74		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	52	0.0410	4.11		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	29	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	42	0.0730	5.48		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	74	0.0750	5.56		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	26	0.0710	5.41		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	32	0.0570	4.85		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	13	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
3.6	415		1.92		**Direct Entry, Overland Concentrated Flow (Min)**
5.0	777	Total			

Subcatchment C13: Drainage Basin C13



Summary for Subcatchment C14: Drainage Basin C14

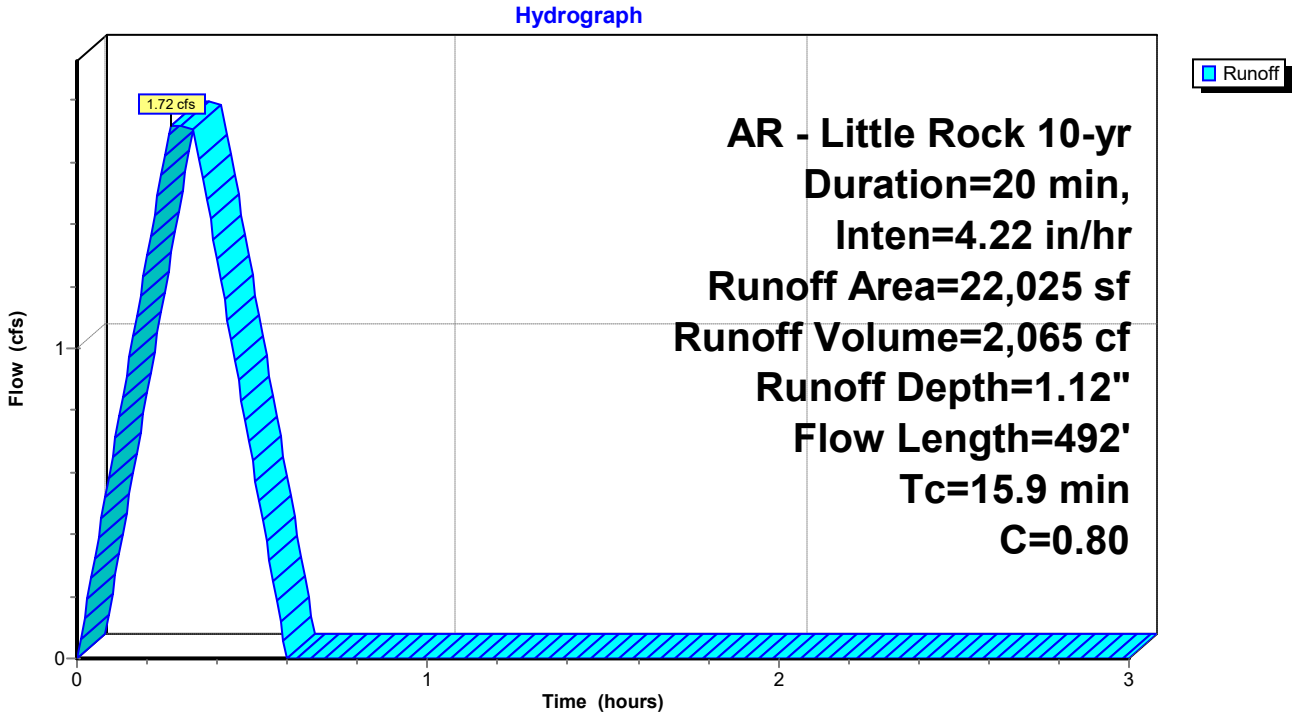
Runoff = 1.72 cfs @ 0.27 hrs, Volume= 2,065 cf, Depth= 1.12"
Routed to Pond CI-A5 : CI - A5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
6,127	0.40	Sod Yard
15,898	0.95	Paving, Sidewalks
22,025	0.80	Weighted Average
6,127		27.82% Pervious Area
15,898		72.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	5	0.0310	0.06		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
9.2	45	0.0250	0.08		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
3.8	41	0.1940	0.18		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.1	6	0.0100	0.68		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	51	0.0870	5.99		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	52	0.0310	3.57		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	18	0.0270	3.34		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	20	0.0400	4.06		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	34	0.0410	4.11		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	46	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	36	0.0580	4.89		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	58	0.0690	5.33		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	49	0.0840	5.88		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	31	0.0690	5.33		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
15.9	492	Total			

Subcatchment C14: Drainage Basin C14



Summary for Subcatchment C15: Drainage Basin C15

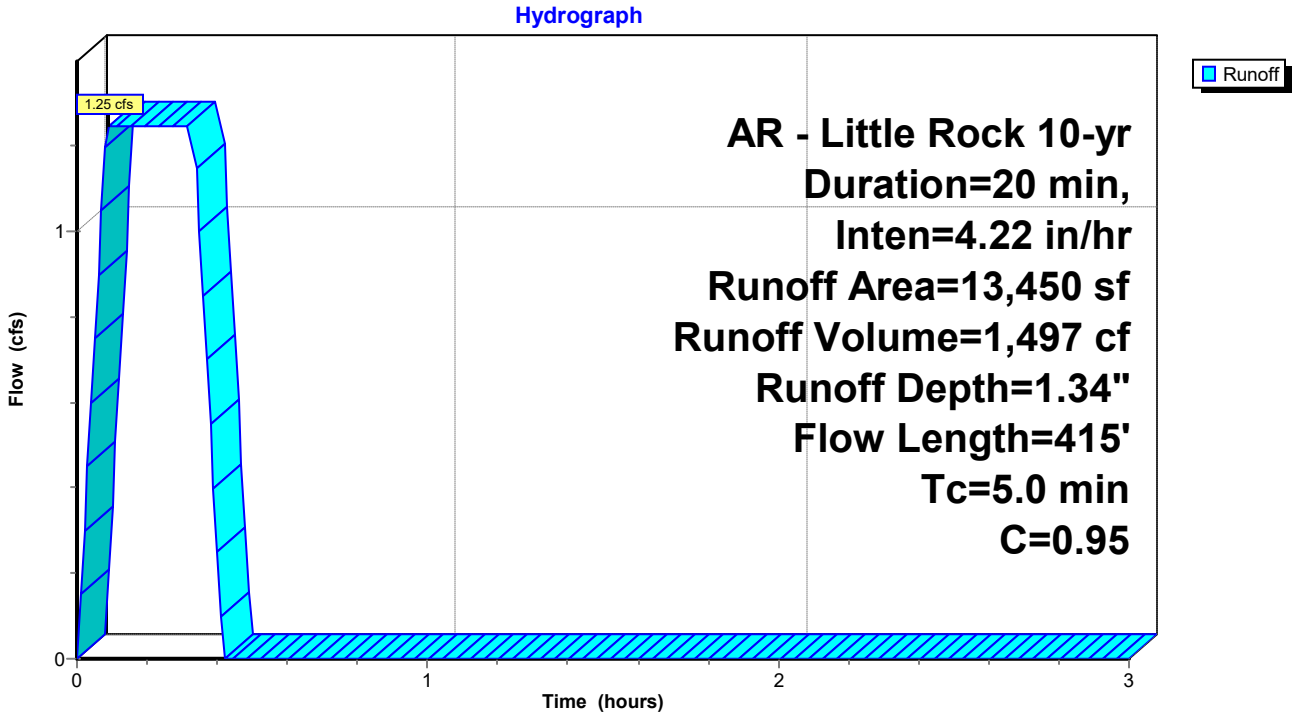
Runoff = 1.25 cfs @ 0.09 hrs, Volume= 1,497 cf, Depth= 1.34"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
13,450	0.95	Paving, Sidewalks
13,450	0.95	Weighted Average
13,450		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	415		1.38		**Direct Entry, Overland Concentrated Flow (Min)**

Subcatchment C15: Drainage Basin C15



Summary for Subcatchment C16: Drainage Basin C16

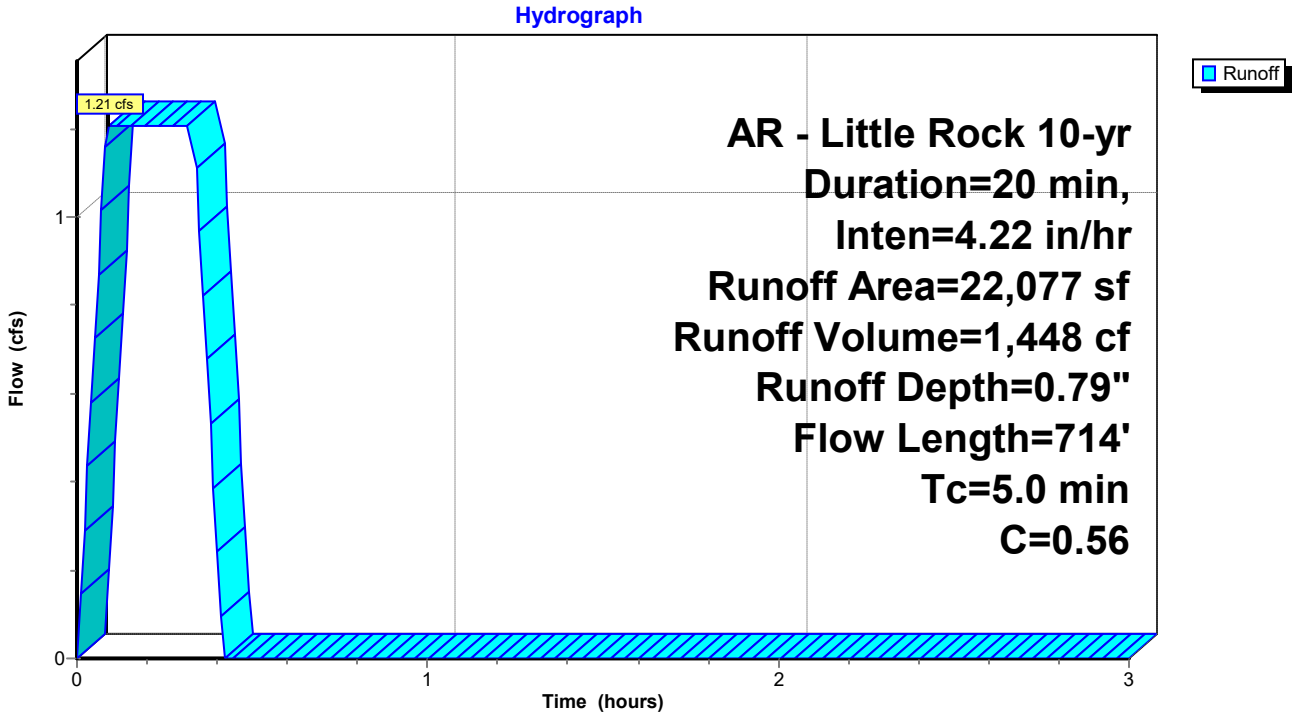
Runoff = 1.21 cfs @ 0.09 hrs, Volume= 1,448 cf, Depth= 0.79"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
15,465	0.40	Sod Yard
6,612	0.95	Paving, Sidewalks
22,077	0.56	Weighted Average
15,465		70.05% Pervious Area
6,612		29.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	26	0.0190	1.18		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	5	0.0100	0.66		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.4	51	0.0500	1.98		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	12	0.1540	2.33		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	50	0.1330	7.40		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
0.1	50	0.1170	6.94		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
0.2	46	0.0430	4.21		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
0.3	59	0.0370	3.90		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
3.3	415		2.10		**Direct Entry, Overland Concentrated Flow (Min)**
5.0	714	Total			

Subcatchment C16: Drainage Basin C16



Summary for Subcatchment C17: Drainage Basin C17

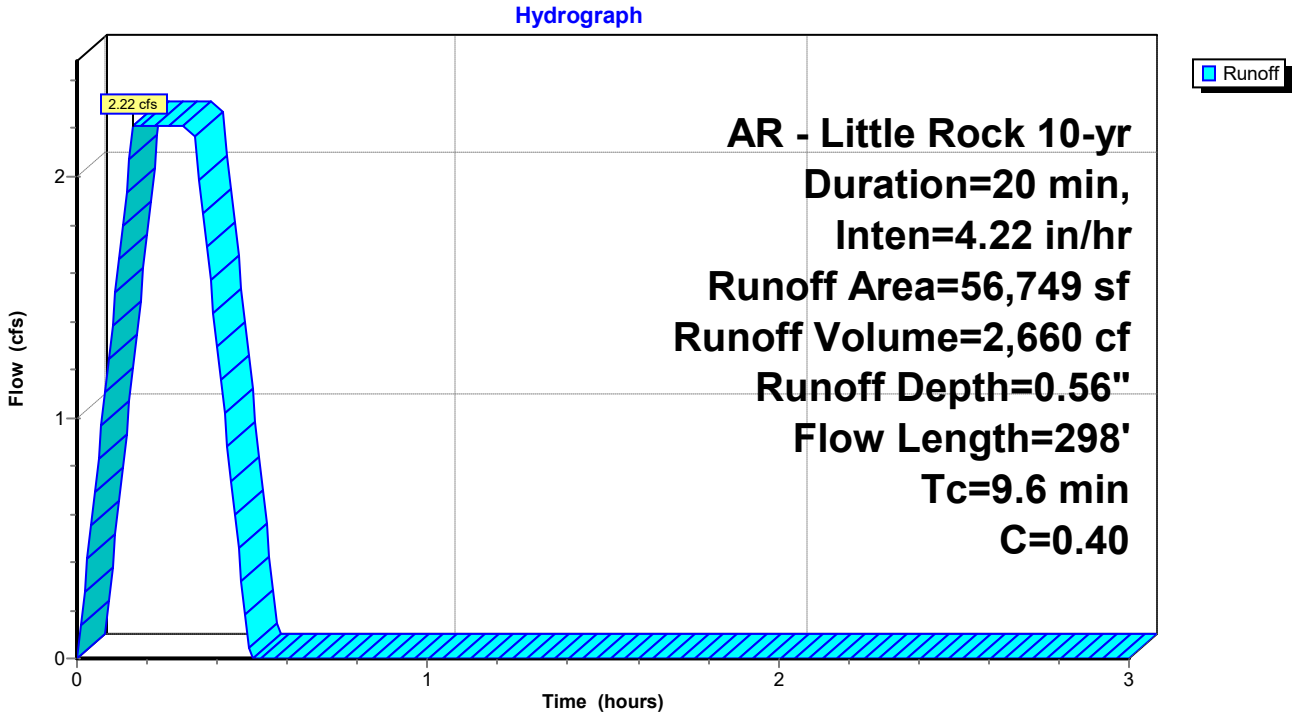
Runoff = 2.22 cfs @ 0.16 hrs, Volume= 2,660 cf, Depth= 0.56"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
56,749	0.40	Sod Yard
0	0.95	Paving, Sidewalks
56,749	0.40	Weighted Average
56,749		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	43	0.0410	0.15		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
3.9	43	0.0690	0.19		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.1	41	0.0980	4.70		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	61	0.0730	4.05		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.2	46	0.0570	3.58		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	64	0.0450	3.18		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
9.6	298	Total			

Subcatchment C17: Drainage Basin C17



Summary for Subcatchment C18: Drainage Basin C18

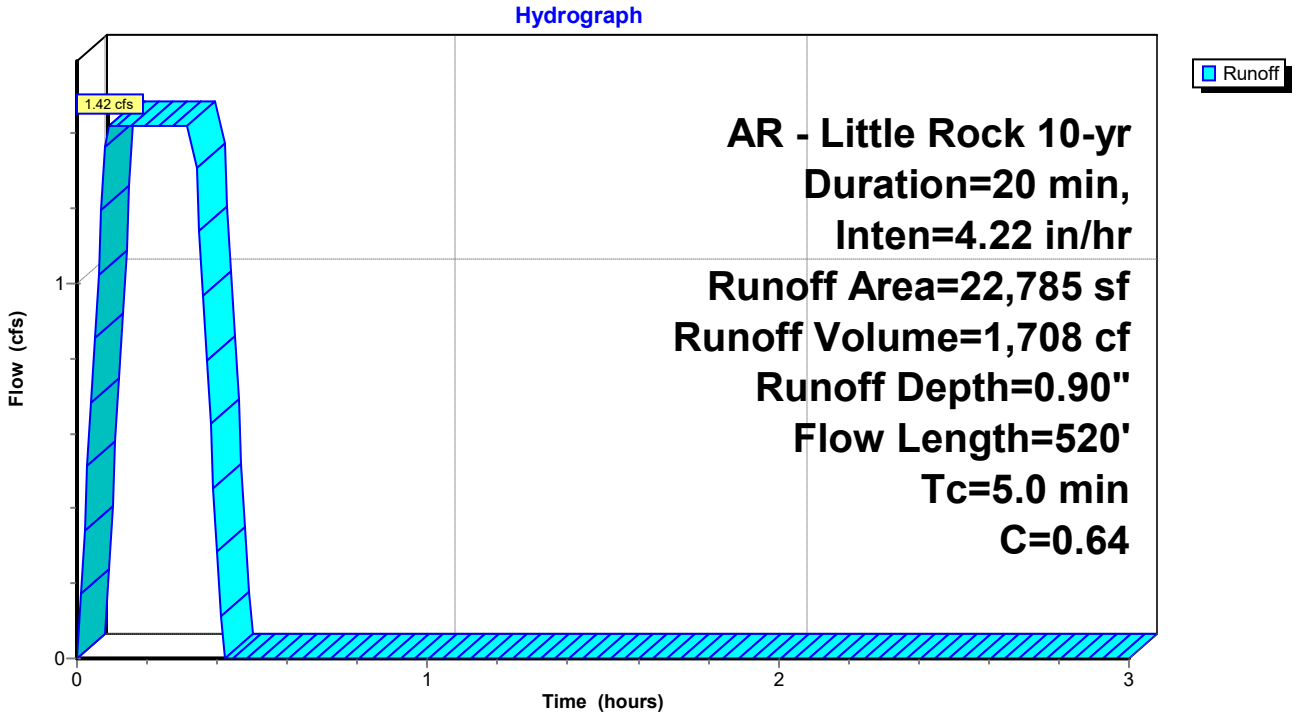
Runoff = 1.42 cfs @ 0.09 hrs, Volume= 1,708 cf, Depth= 0.90"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
12,812	0.40	Sod Yard
9,973	0.95	Paving, Sidewalks
22,785	0.64	Weighted Average
12,812		56.23% Pervious Area
9,973		43.77% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	5	0.2980	0.14		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.2	12	0.0130	0.87		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
3.3	8	0.0100	0.04		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.5	80	0.0210	2.94		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.4	415		17.29		**Direct Entry, Concentrated Flow (Min)**
5.0	520	Total			

Subcatchment C18: Drainage Basin C18



Summary for Subcatchment C19: Drainage Basin C19

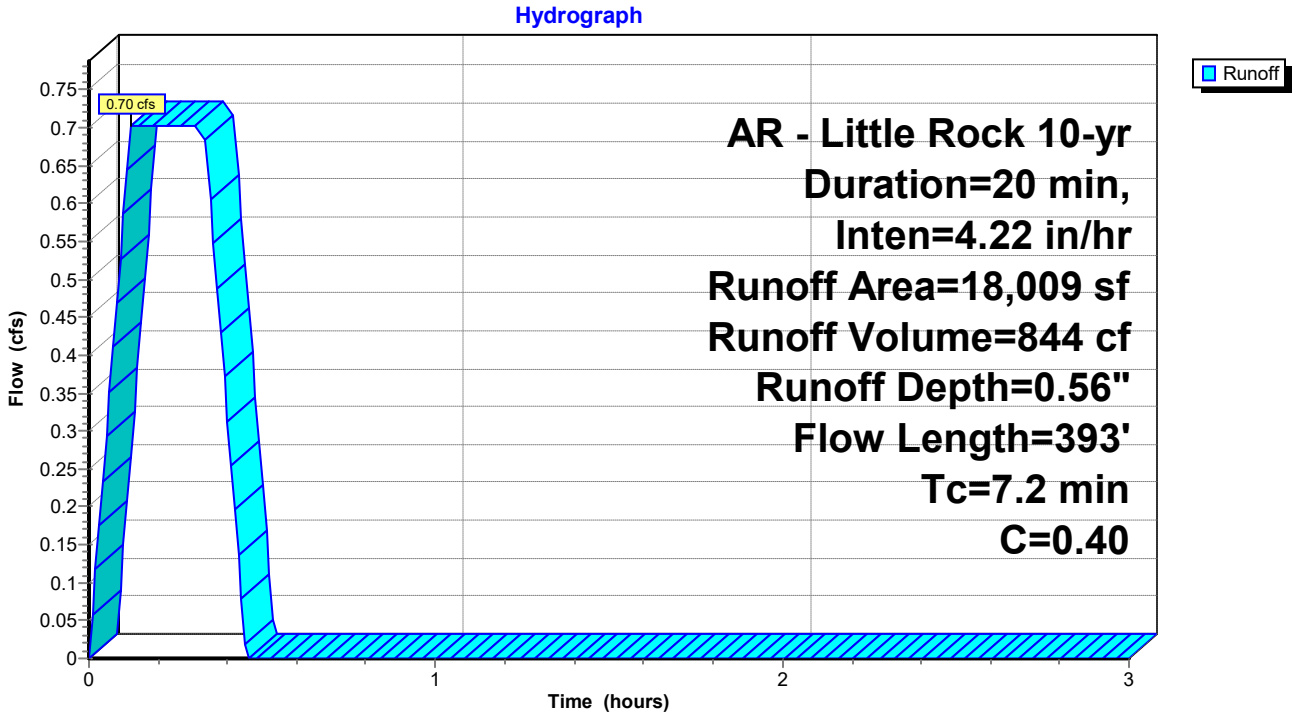
Runoff = 0.70 cfs @ 0.12 hrs, Volume= 844 cf, Depth= 0.56"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
18,009	0.40	Sod Yard
0	0.95	Paving, Sidewalks
18,009	0.40	Weighted Average
18,009		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	34	0.1110	0.21		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
3.3	66	0.2450	0.34		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.0	9	0.2450	7.42		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.5	106	0.0610	3.70		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.2	46	0.0800	4.24		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.1	41	0.0960	4.65		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	66	0.0680	3.91		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.1	19	0.1070	4.91		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.0	6	0.0750	4.11		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
7.2	393	Total			

Subcatchment C19: Drainage Basin C19



Summary for Subcatchment C2: Drainage Basin C2

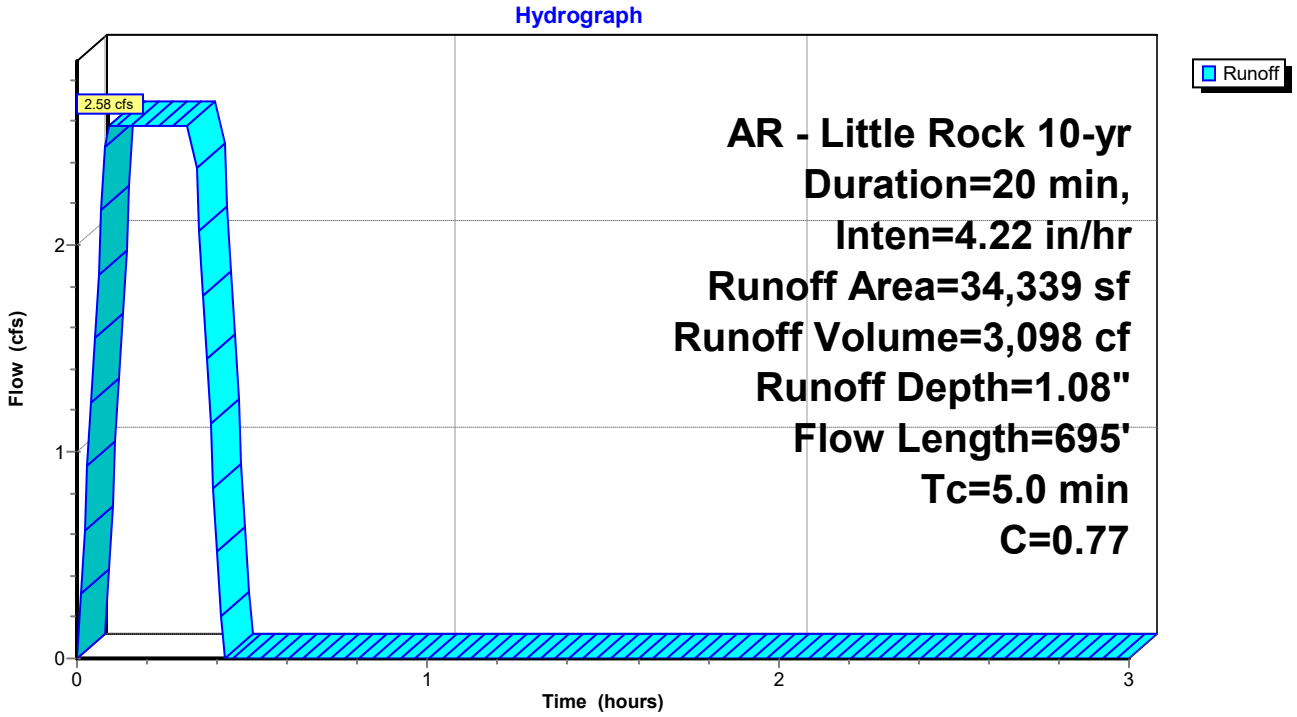
Runoff = 2.58 cfs @ 0.09 hrs, Volume= 3,098 cf, Depth= 1.08"
Routed to Pond CI-C2 : CI - C2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
11,376	0.40	Sod Yard
22,963	0.95	Roof, Paving, Sidewalks
34,339	0.77	Weighted Average
11,376		33.13% Pervious Area
22,963		66.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	20	0.0200	1.14		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.4	74	0.0240	3.14		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	17	0.0710	5.41		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	21	0.0610	5.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.6	148	0.0380	3.96		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
3.5	415		1.98		**Direct Entry, Concentrated Flow (Min)**
5.0	695	Total			

Subcatchment C2: Drainage Basin C2



Summary for Subcatchment C20: Drainage Basin C20

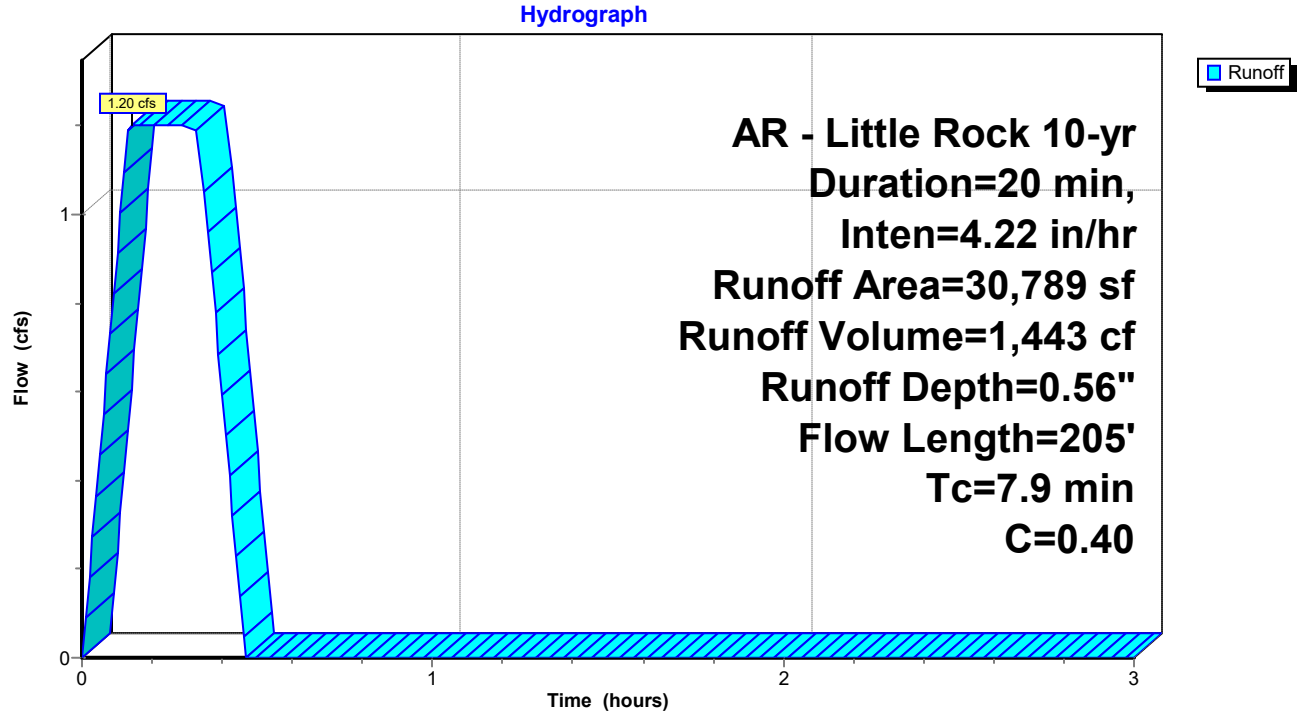
Runoff = 1.20 cfs @ 0.14 hrs, Volume= 1,443 cf, Depth= 0.56"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
30,789	0.40	Sod Yard
0	0.95	Paving, Sidewalks
30,789	0.40	Weighted Average
30,789		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	45	0.1430	0.25		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
4.5	55	0.0780	0.20		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.1	37	0.0780	4.19		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	68	0.0710	4.00		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
7.9	205	Total			

Subcatchment C20: Drainage Basin C20



Summary for Subcatchment C3: Drainage Basin C3

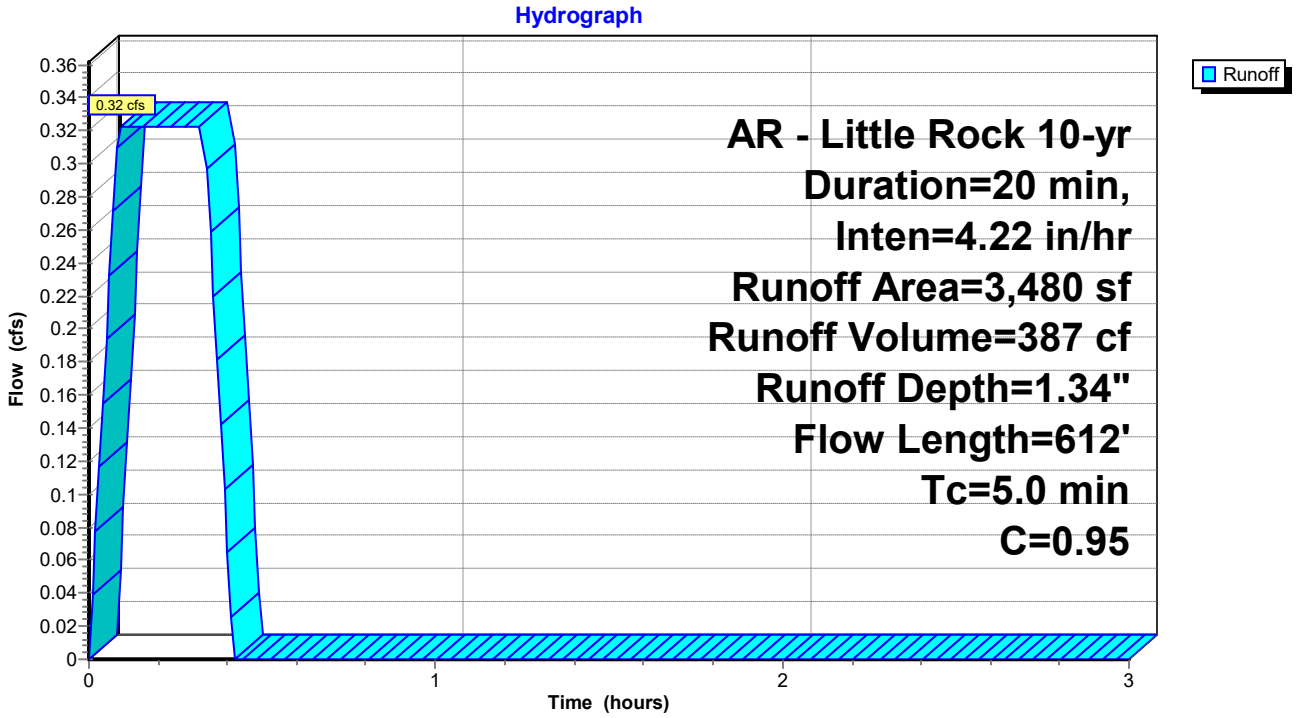
Runoff = 0.32 cfs @ 0.09 hrs, Volume= 387 cf, Depth= 1.34"
Routed to Pond CI-C3 : CI - C3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
3,480	0.95	Paving, Sidewalks
3,480	0.95	Weighted Average
3,480		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	22	0.0200	1.16		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.0	10	0.0340	3.74		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	18	0.0390	4.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.6	147	0.0380	3.96		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.0	415		1.73		**Direct Entry, Concentrated Flow (Min)**
5.0	612	Total			

Subcatchment C3: Drainage Basin C3



Summary for Subcatchment C4: Drainage Basin C4

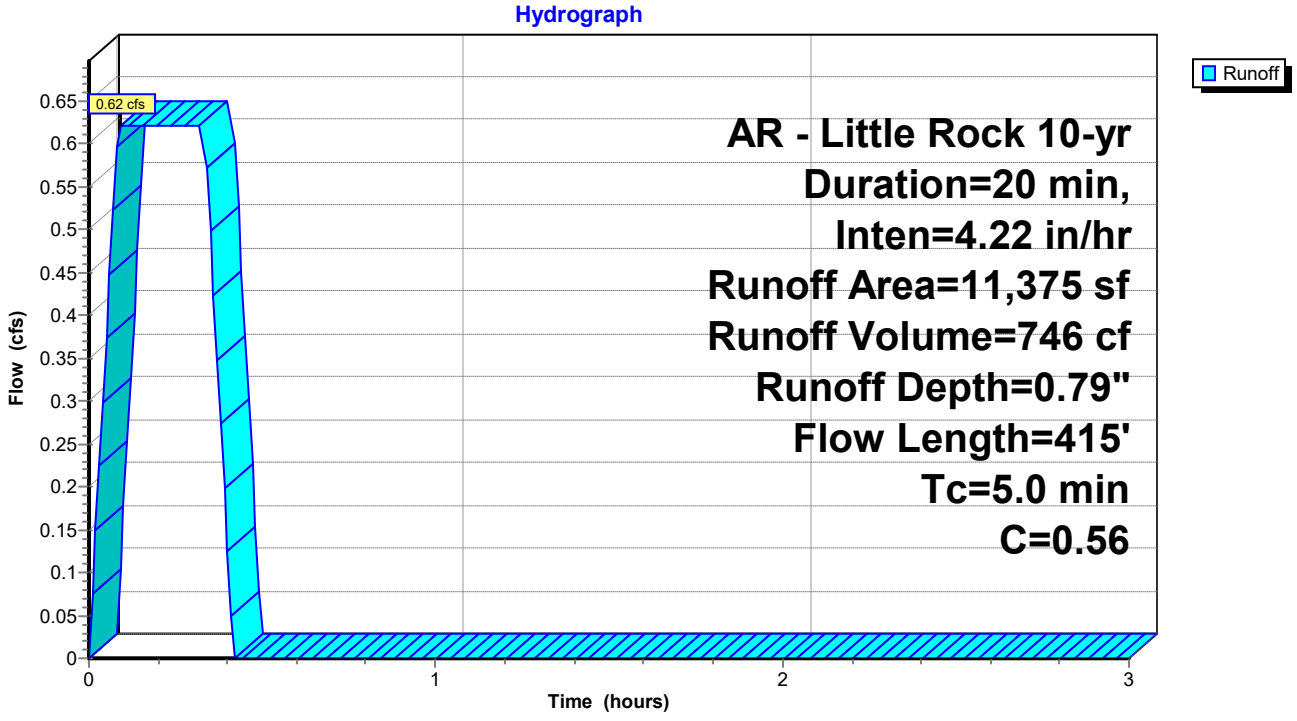
Runoff = 0.62 cfs @ 0.09 hrs, Volume= 746 cf, Depth= 0.79"
Routed to Pond CI-C3 : CI - C3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
8,130	0.40	Sod Yard
3,245	0.95	Paving, Sidewalks
11,375	0.56	Weighted Average
8,130		71.47% Pervious Area
3,245		28.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	415		1.38		**Direct Entry, Concentrated Flow (Min)**

Subcatchment C4: Drainage Basin C4



Summary for Subcatchment C5: Drainage Basin C5

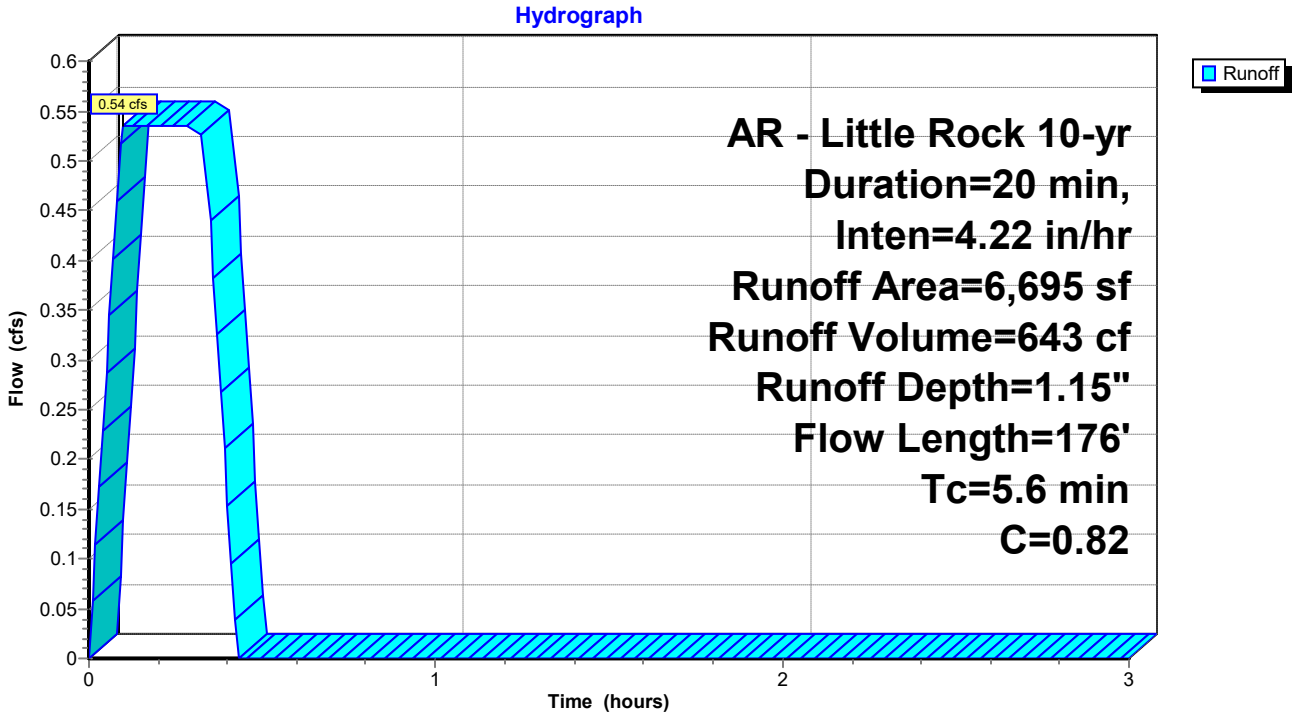
Runoff = 0.54 cfs @ 0.10 hrs, Volume= 643 cf, Depth= 1.15"
Routed to Pond CI-C4 : CI - C4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
1,634	0.40	Sod Yard
5,061	0.95	Paving, Sidewalks
6,695	0.82	Weighted Average
1,634		24.41% Pervious Area
5,061		75.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	5	0.2990	0.14		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.2	12	0.0130	0.87		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
3.9	8	0.0070	0.03		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.5	58	0.0080	1.82		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	14	0.0280	3.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	23	0.0370	3.90		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	13	0.0940	6.22		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	13	0.0560	4.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	30	0.0180	2.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
5.6	176	Total			

Subcatchment C5: Drainage Basin C5



Summary for Subcatchment C6: Drainage Basin C6

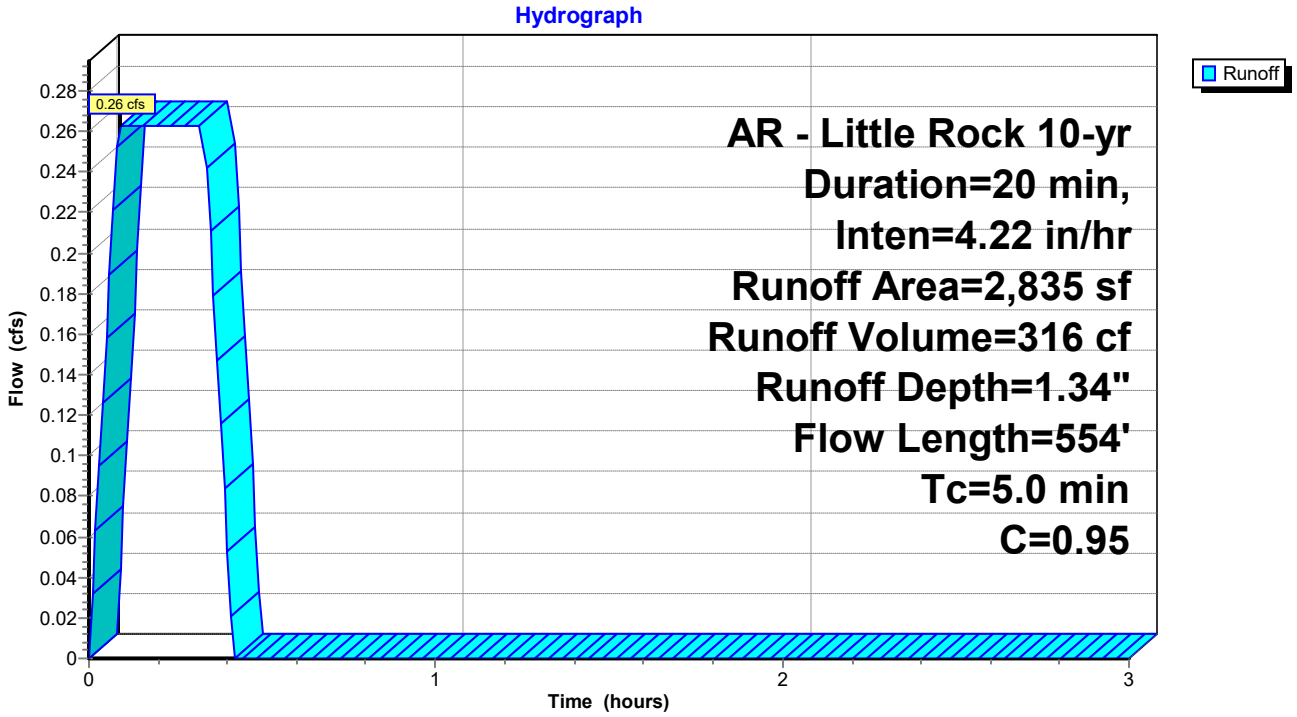
Runoff = 0.26 cfs @ 0.09 hrs, Volume= 316 cf, Depth= 1.34"
Routed to Pond CI-C5 : CI - C5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
2,835	0.95	Paving, Sidewalks
2,835	0.95	Weighted Average
2,835		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	22	0.0200	1.16		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	19	0.0100	2.03		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	17	0.0170	2.65		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	26	0.0360	3.85		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	28	0.0610	5.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	27	0.0610	5.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.1	415		1.69		**Direct Entry, Concentrated Flow (Min)**
5.0	554	Total			

Subcatchment C6: Drainage Basin C6



Summary for Subcatchment C7: Drainage Basin C7

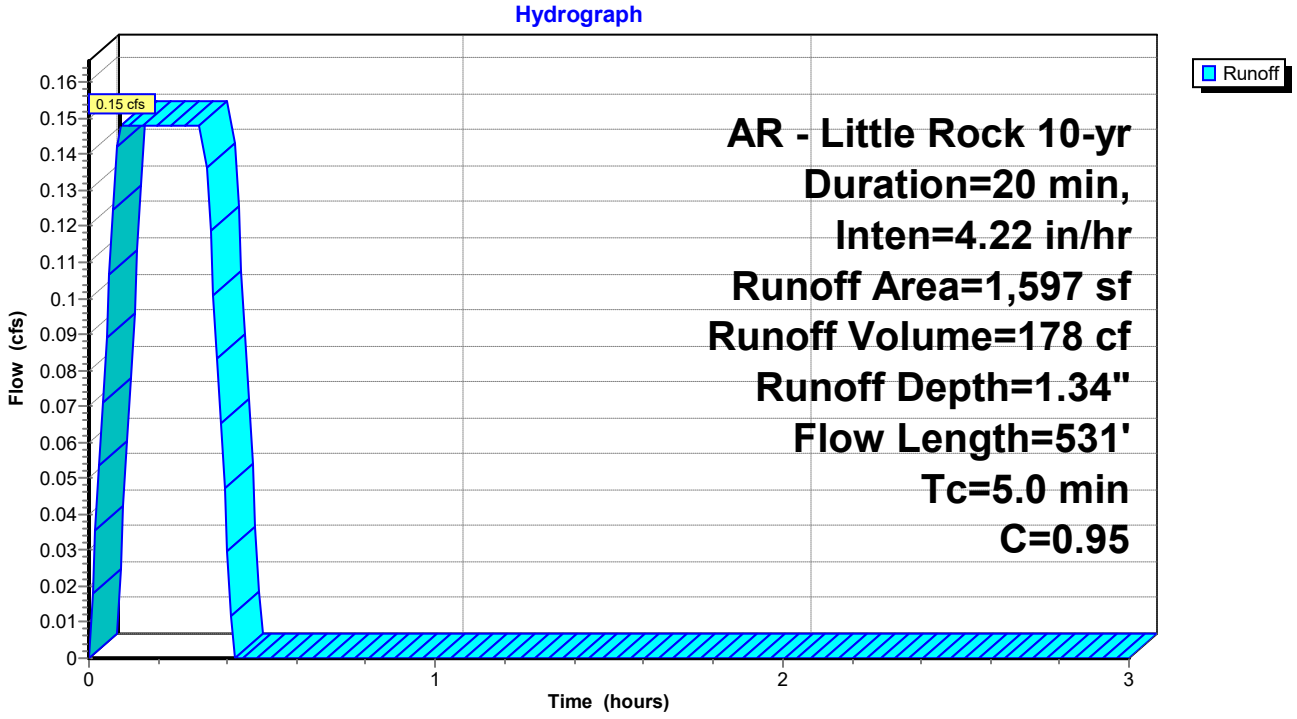
Runoff = 0.15 cfs @ 0.09 hrs, Volume= 178 cf, Depth= 1.34"
Routed to Pond CI-D1 : CI - D1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
1,597	0.95	Paving, Sidewalks
1,597	0.95	Weighted Average
1,597		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	19	0.0200	1.13		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	16	0.0540	4.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.3	81	0.0580	4.89		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.3	415		1.61		**Direct Entry, Concentrated Flow (Min)**
5.0	531	Total			

Subcatchment C7: Drainage Basin C7



Summary for Subcatchment C8: Drainage Basin C8

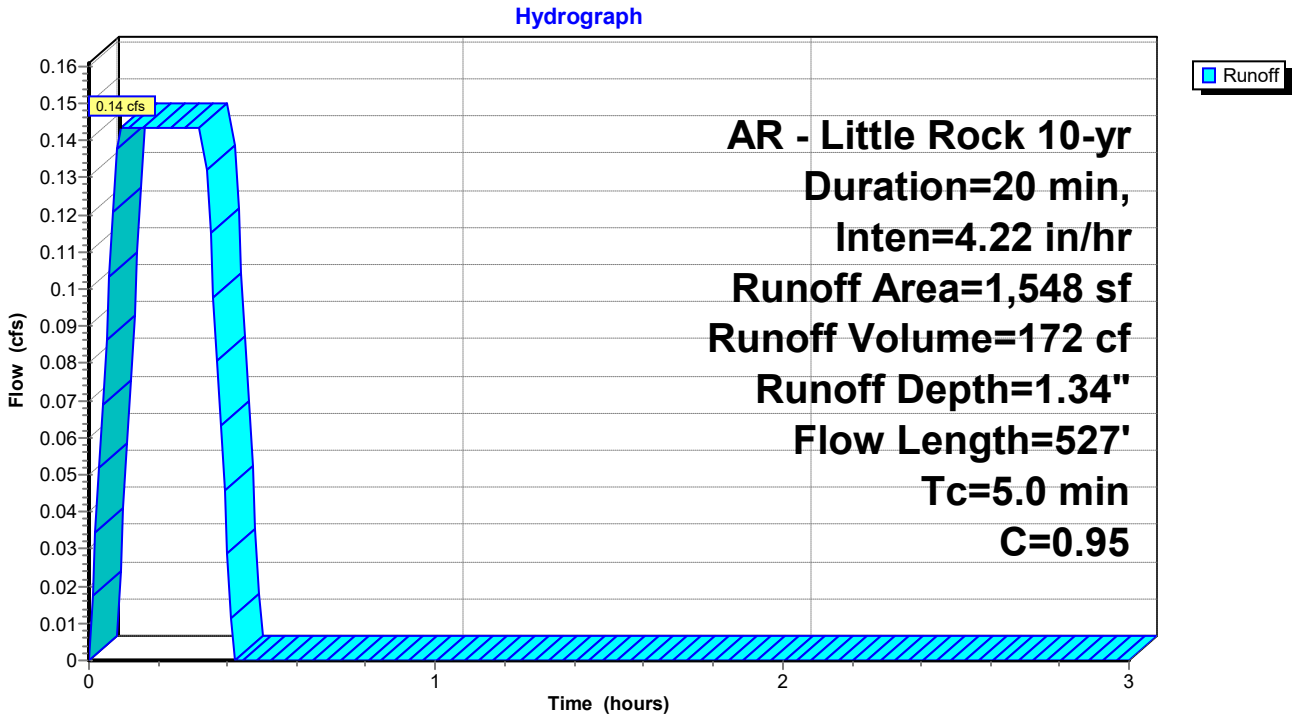
Runoff = 0.14 cfs @ 0.09 hrs, Volume= 172 cf, Depth= 1.34"
Routed to Pond CI-D2 : CI - D2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
1,548	0.95	Paving, Sidewalks
1,548	0.95	Weighted Average
1,548		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	18	0.0200	1.12		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.3	94	0.0610	5.01		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
4.4	415		1.57		**Direct Entry, Concentrated Flow (Min)**
5.0	527	Total			

Subcatchment C8: Drainage Basin C8



Summary for Subcatchment C9: Drainage Basin C9

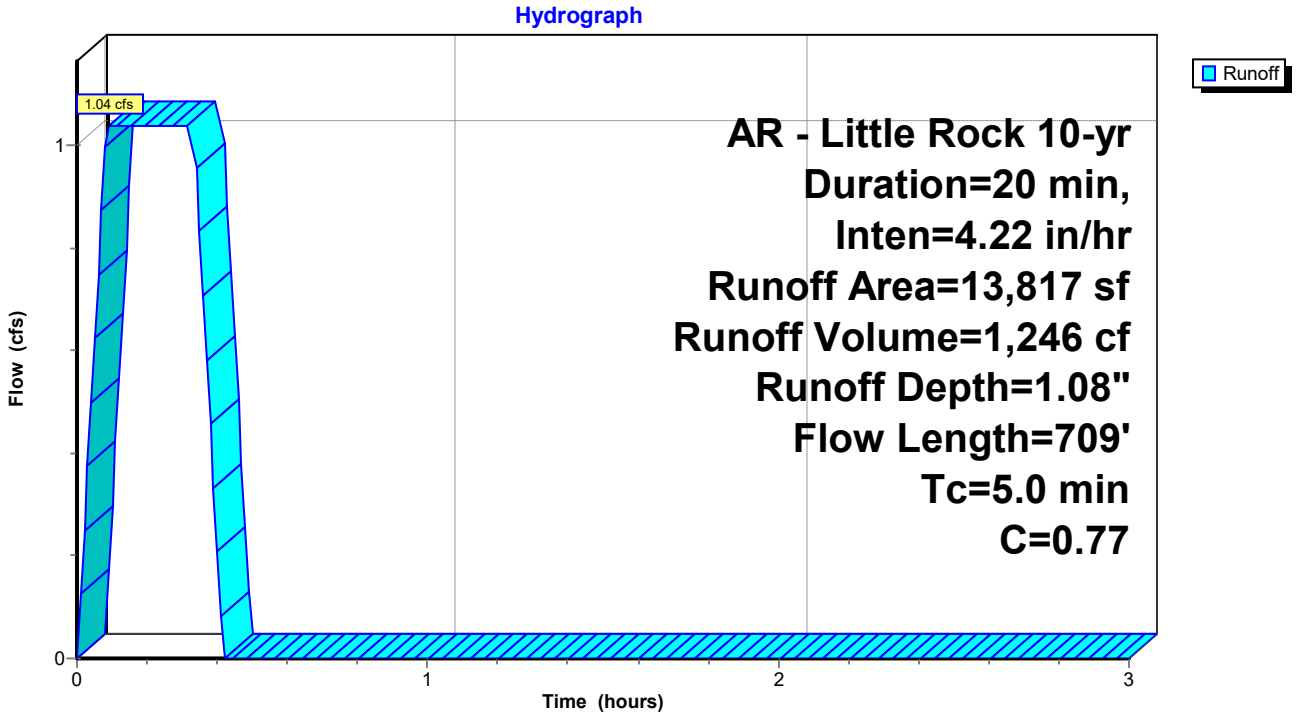
Runoff = 1.04 cfs @ 0.09 hrs, Volume= 1,246 cf, Depth= 1.08"
Routed to Pond CI-C6 : CI - C6

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=20 min, Inten=4.22 in/hr

Area (sf)	C	Description
4,456	0.40	Sod Yard
9,361	0.95	Paving, Sidewalks
13,817	0.77	Weighted Average
4,456		32.25% Pervious Area
9,361		67.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	100	0.0140	1.36		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	13	0.0150	2.49		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	23	0.0160	2.57		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	7	0.0050	1.44		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	8	0.0100	2.03		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	41	0.0420	4.16		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	41	0.0540	4.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	61	0.0520	4.63		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
2.9	415		2.39		**Direct Entry, Concentrated Flow (Min)**
5.0	709	Total			

Subcatchment C9: Drainage Basin C9

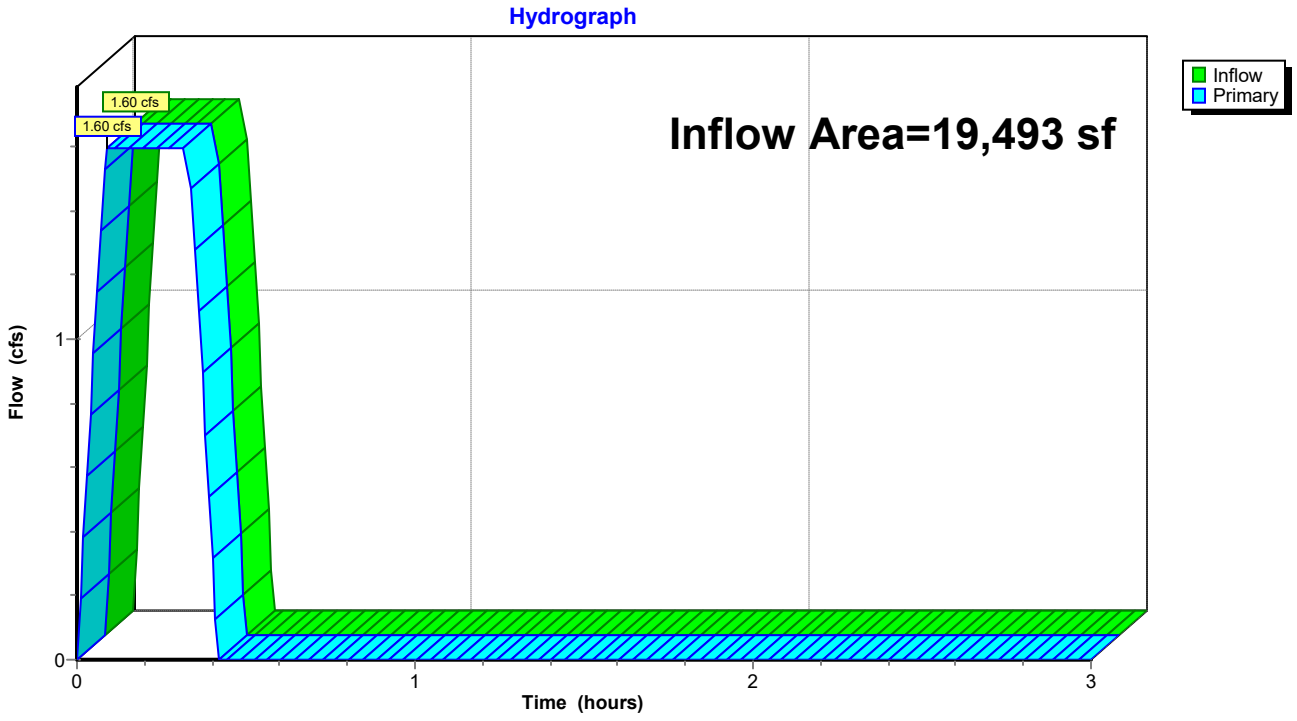


Summary for Pond CI-A1: CI - A1

Inflow Area = 19,493 sf, 74.78% Impervious, Inflow Depth = 1.18" for 10-yr event
Inflow = 1.60 cfs @ 0.09 hrs, Volume= 1,918 cf
Primary = 1.60 cfs @ 0.09 hrs, Volume= 1,918 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond JB-A2 : JB - A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-A1: CI - A1

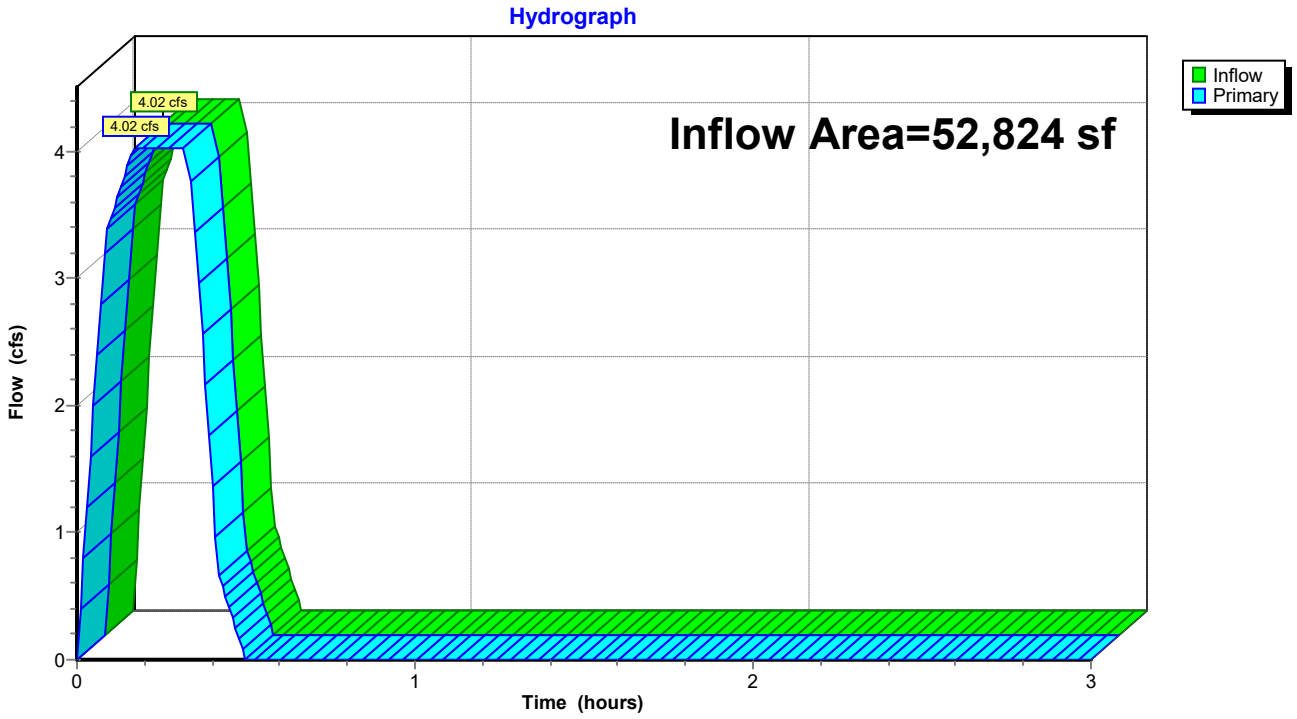


Summary for Pond CI-A3: CI - A3

Inflow Area = 52,824 sf, 61.20% Impervious, Inflow Depth = 1.10" for 10-yr event
Inflow = 4.02 cfs @ 0.17 hrs, Volume= 4,823 cf
Primary = 4.02 cfs @ 0.17 hrs, Volume= 4,823 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A4 : CI - A4

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-A3: CI - A3

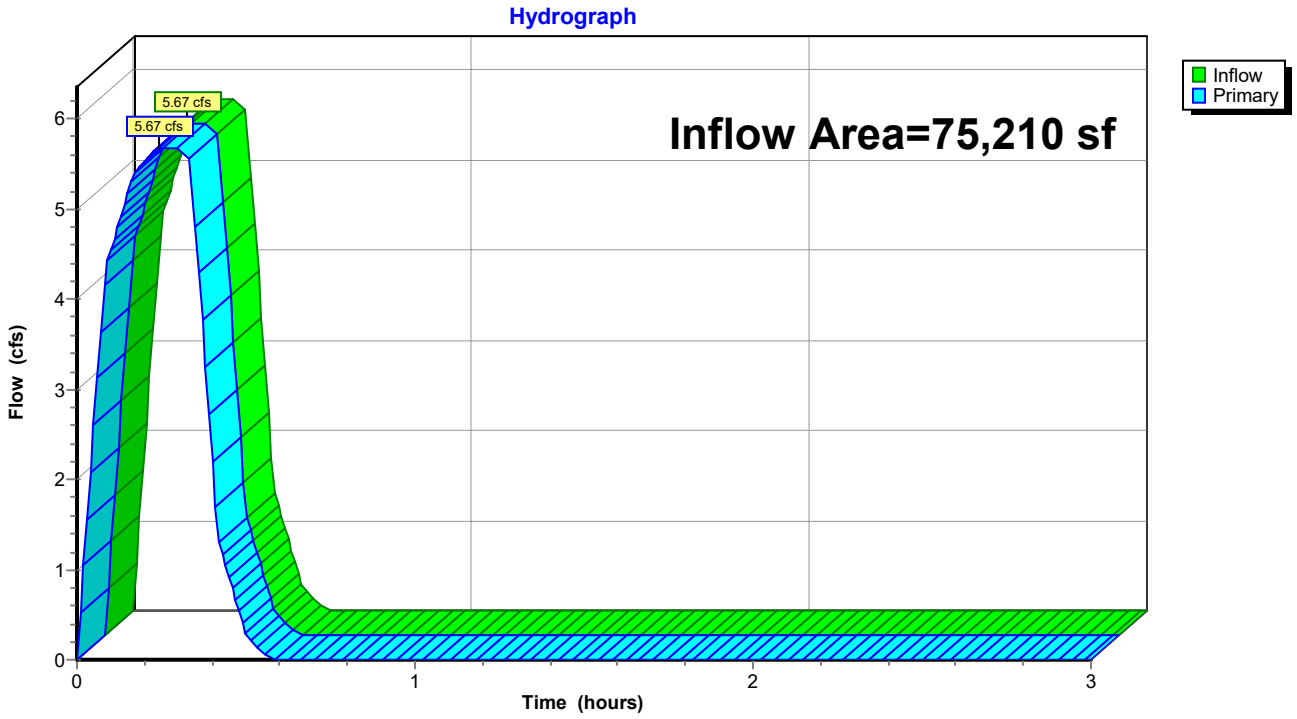


Summary for Pond CI-A4: CI - A4

Inflow Area = 75,210 sf, 60.06% Impervious, Inflow Depth = 1.09" for 10-yr event
Inflow = 5.67 cfs @ 0.24 hrs, Volume= 6,806 cf
Primary = 5.67 cfs @ 0.24 hrs, Volume= 6,806 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A5 : CI - A5

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-A4: CI - A4

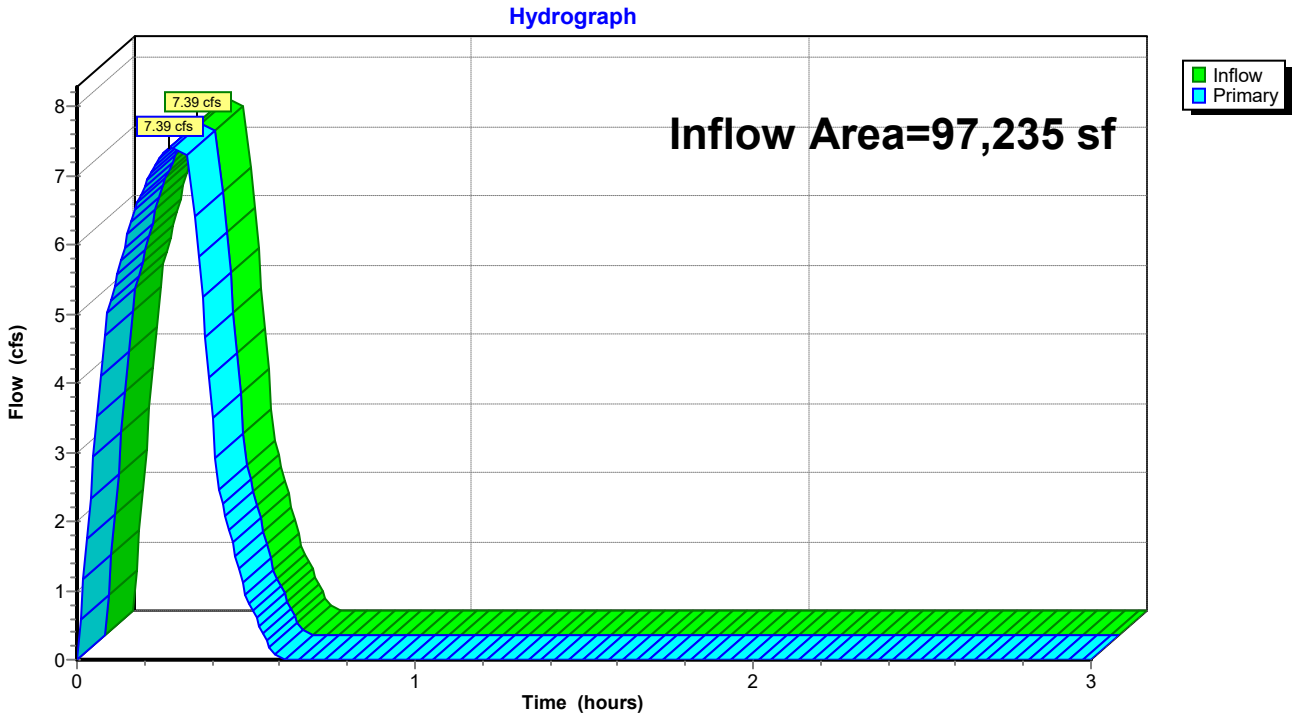


Summary for Pond CI-A5: CI - A5

Inflow Area = 97,235 sf, 62.81% Impervious, Inflow Depth = 1.09" for 10-yr event
Inflow = 7.39 cfs @ 0.27 hrs, Volume= 8,871 cf
Primary = 7.39 cfs @ 0.27 hrs, Volume= 8,871 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond DP : Existing North Detention Pond

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-A5: CI - A5

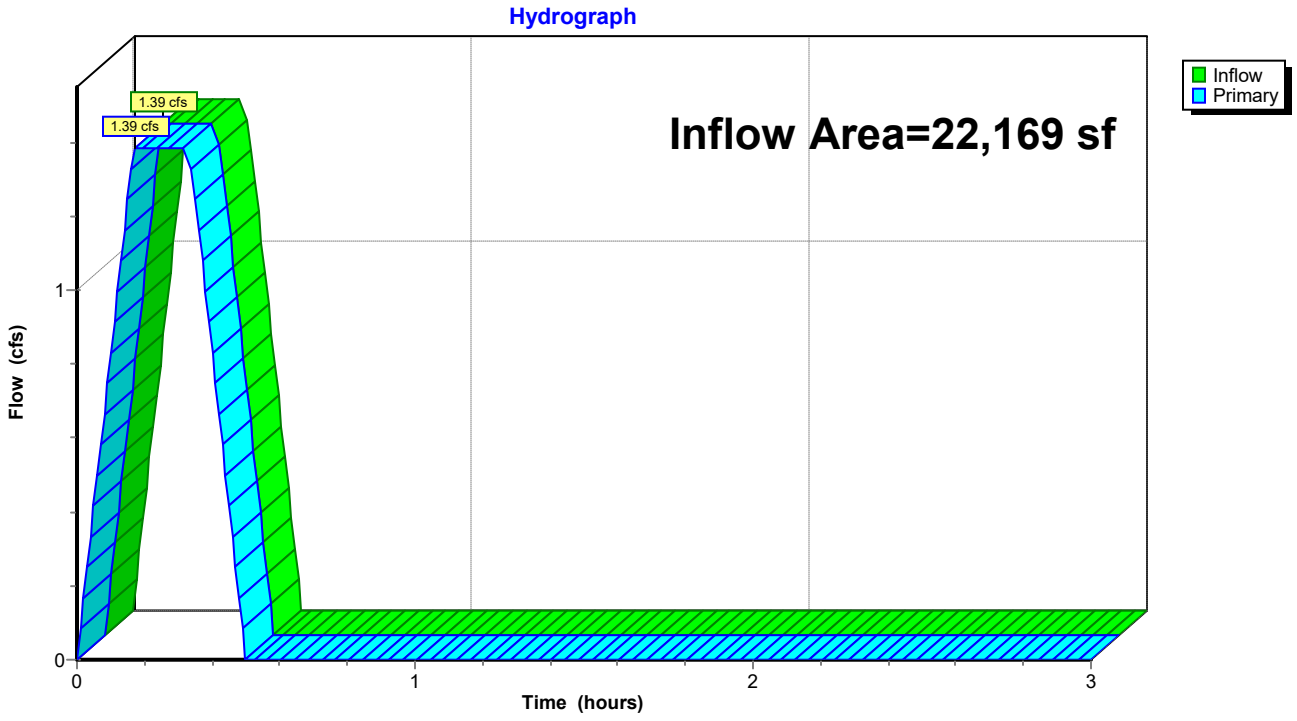


Summary for Pond CI-B2: CI - B2

Inflow Area = 22,169 sf, 29.72% Impervious, Inflow Depth = 0.90" for 10-yr event
Inflow = 1.39 cfs @ 0.17 hrs, Volume= 1,662 cf
Primary = 1.39 cfs @ 0.17 hrs, Volume= 1,662 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond JB-A2 : JB - A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-B2: CI - B2

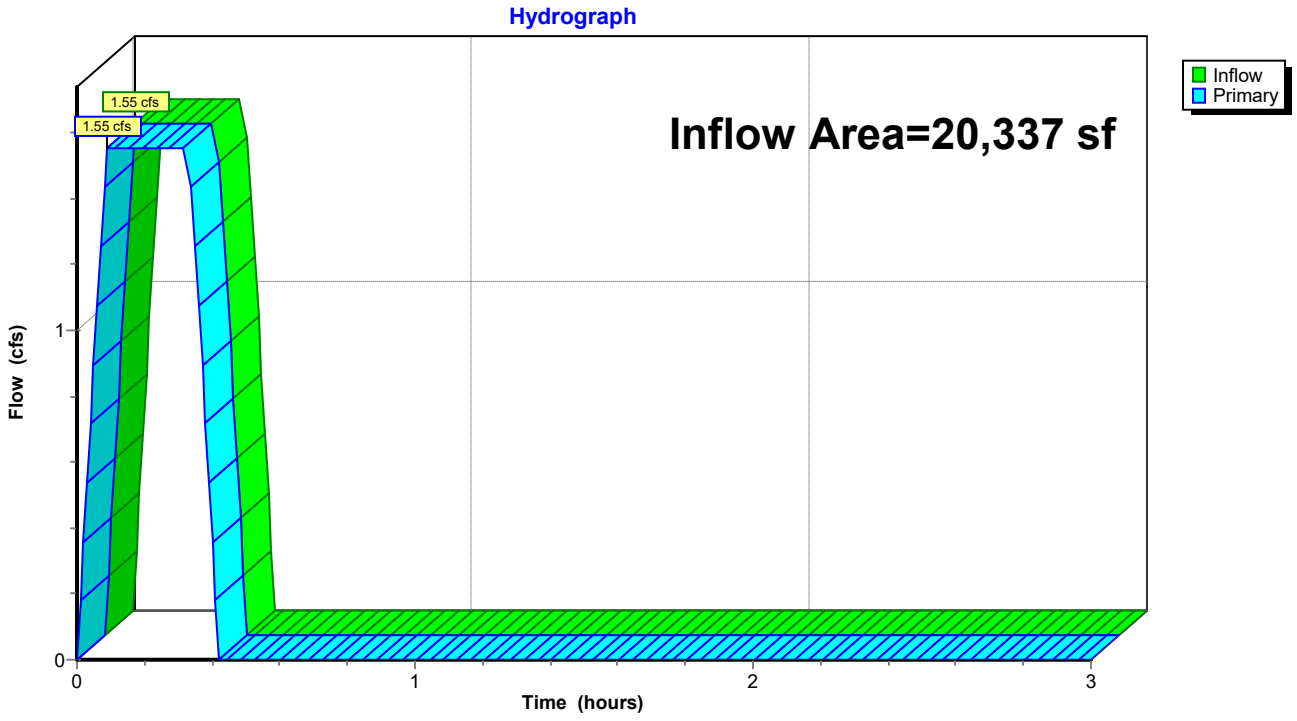


Summary for Pond CI-C1: CI - C1

Inflow Area = 20,337 sf, 69.83% Impervious, Inflow Depth = 1.10" for 10-yr event
Inflow = 1.55 cfs @ 0.09 hrs, Volume= 1,858 cf
Primary = 1.55 cfs @ 0.09 hrs, Volume= 1,858 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C2 : CI - C2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C1: CI - C1

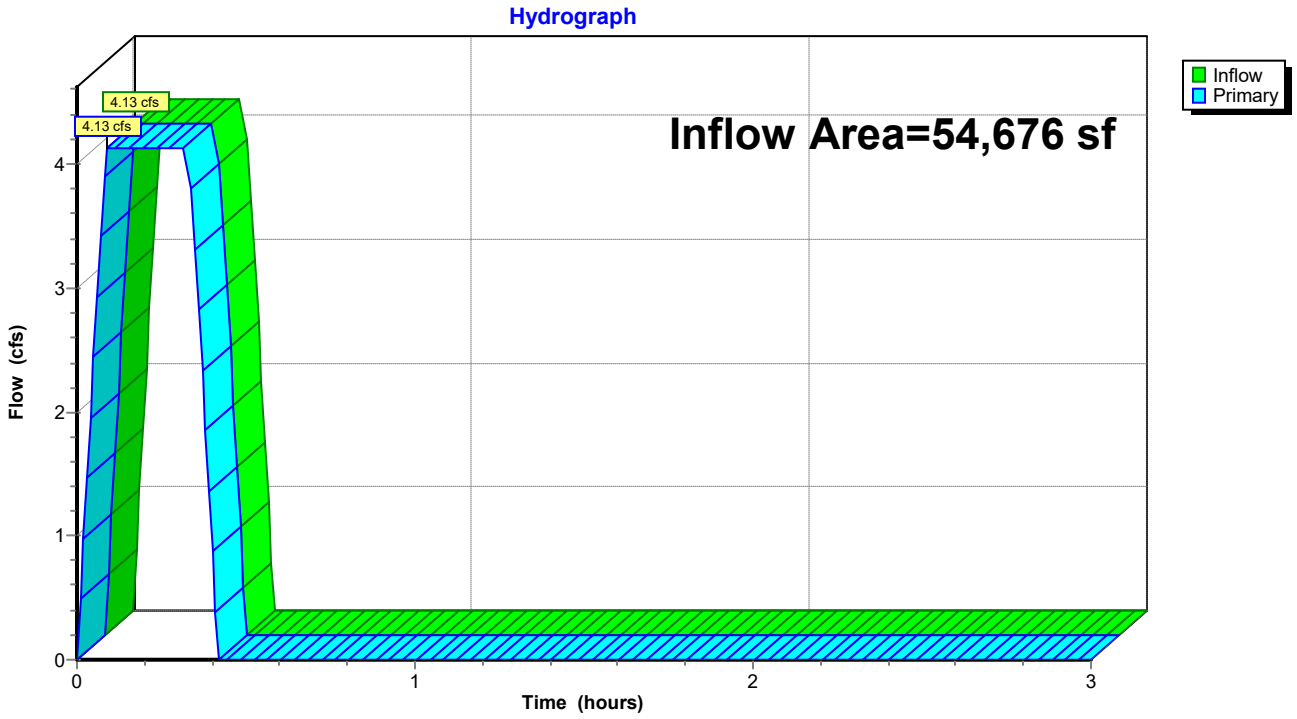


Summary for Pond CI-C2: CI - C2

Inflow Area = 54,676 sf, 67.97% Impervious, Inflow Depth = 1.09" for 10-yr event
Inflow = 4.13 cfs @ 0.09 hrs, Volume= 4,956 cf
Primary = 4.13 cfs @ 0.09 hrs, Volume= 4,956 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C3 : CI - C3

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C2: CI - C2

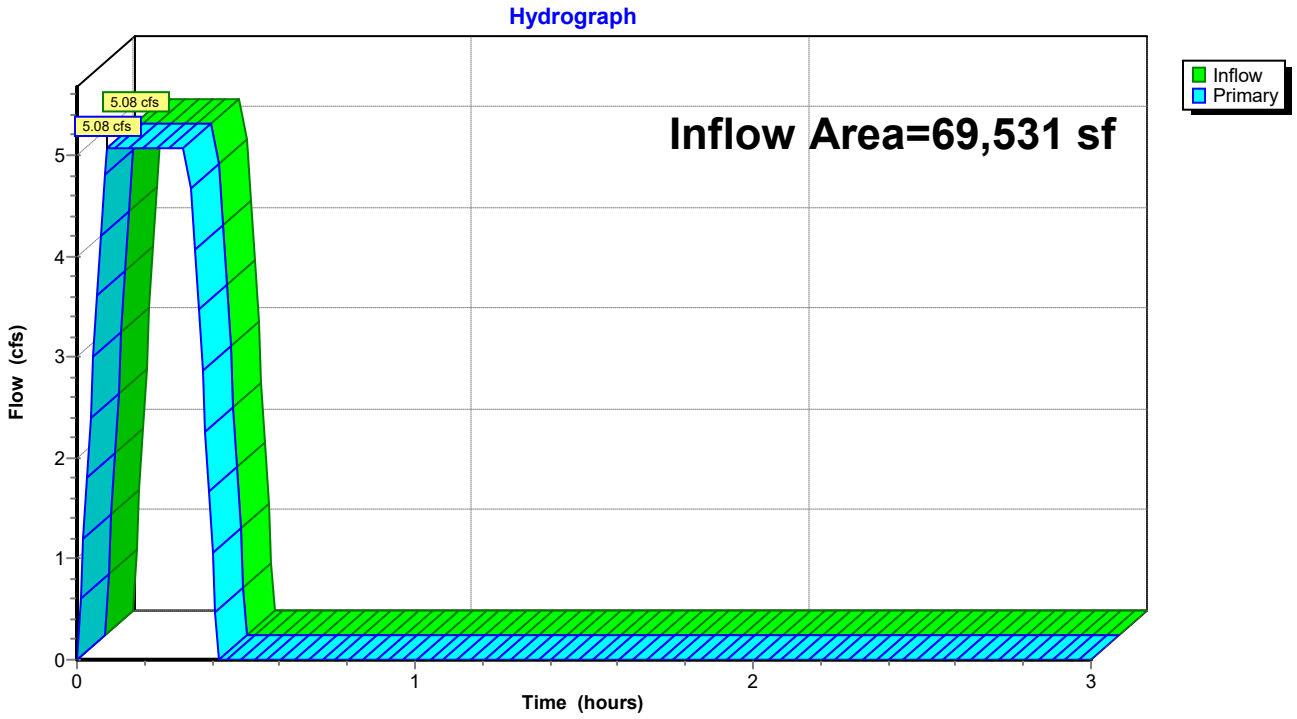


Summary for Pond CI-C3: CI - C3

Inflow Area = 69,531 sf, 63.12% Impervious, Inflow Depth = 1.05" for 10-yr event
Inflow = 5.08 cfs @ 0.09 hrs, Volume= 6,089 cf
Primary = 5.08 cfs @ 0.09 hrs, Volume= 6,089 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C4 : CI - C4

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C3: CI - C3

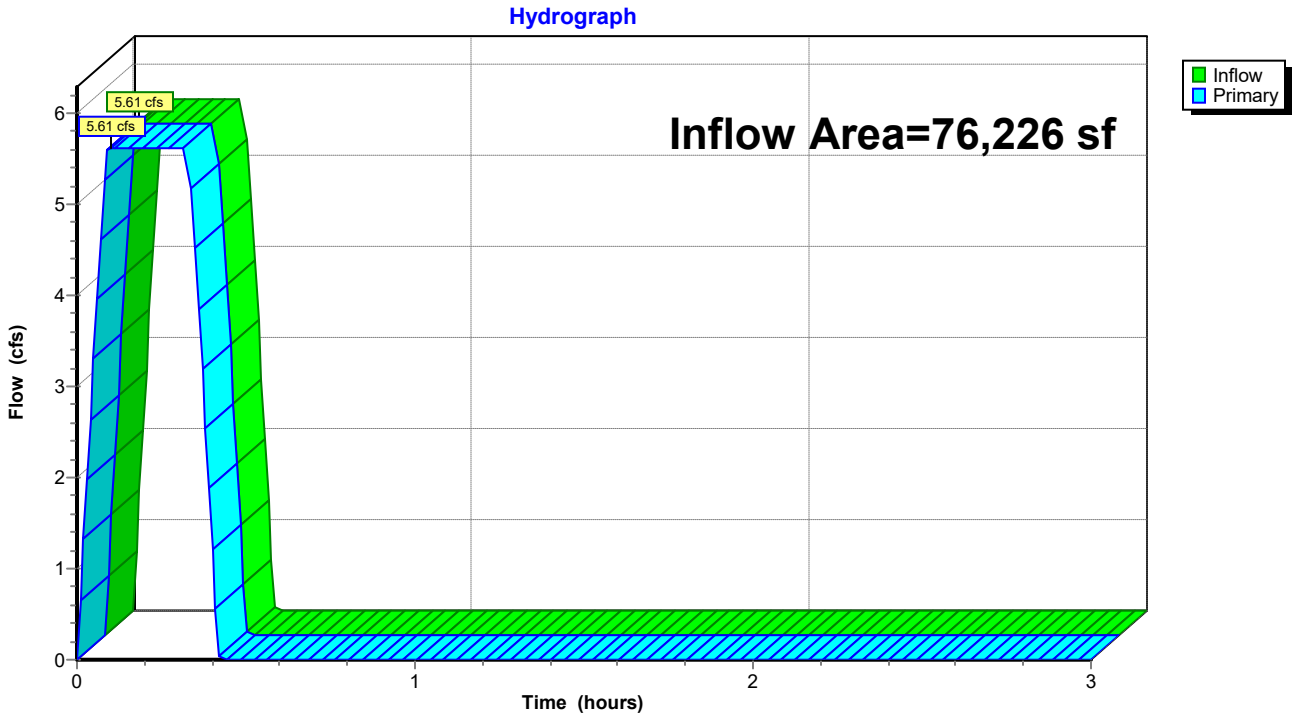


Summary for Pond CI-C4: CI - C4

Inflow Area = 76,226 sf, 64.22% Impervious, Inflow Depth = 1.06" for 10-yr event
Inflow = 5.61 cfs @ 0.10 hrs, Volume= 6,732 cf
Primary = 5.61 cfs @ 0.10 hrs, Volume= 6,732 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C5 : CI - C5

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C4: CI - C4

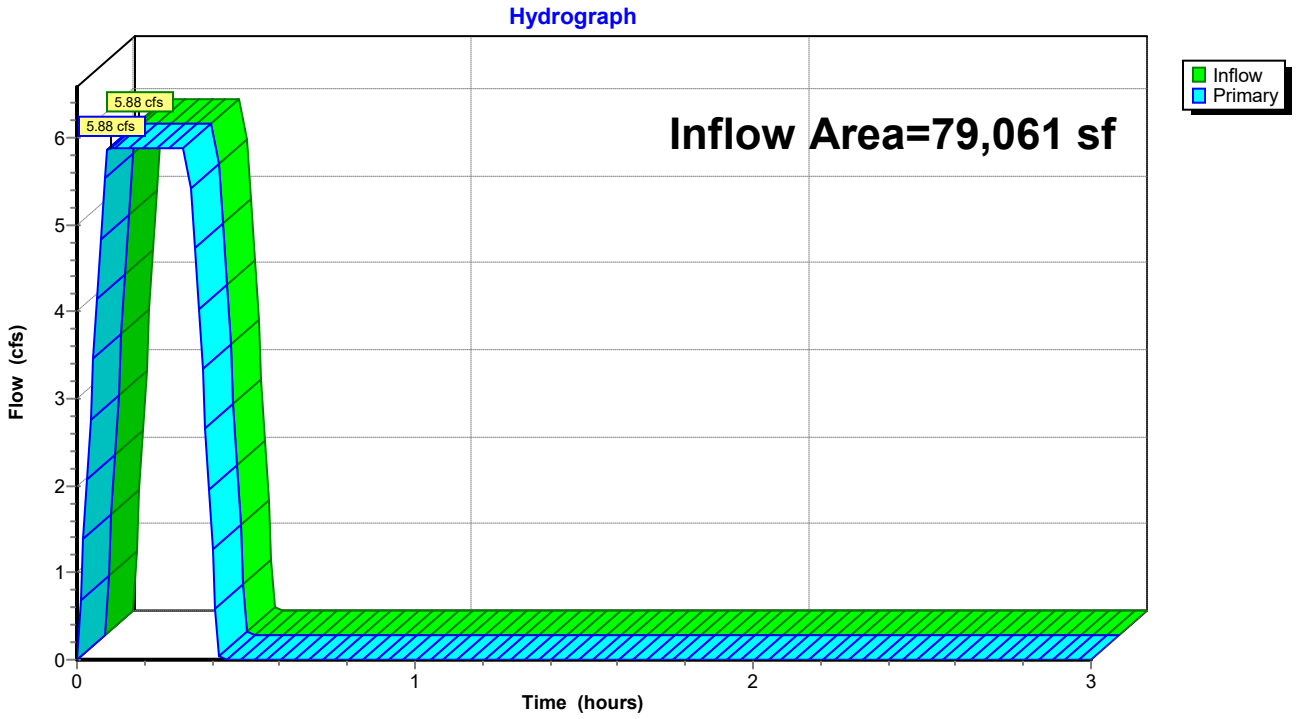


Summary for Pond CI-C5: CI - C5

Inflow Area = 79,061 sf, 65.50% Impervious, Inflow Depth = 1.07" for 10-yr event
Inflow = 5.88 cfs @ 0.10 hrs, Volume= 7,048 cf
Primary = 5.88 cfs @ 0.10 hrs, Volume= 7,048 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C6 : CI - C6

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C5: CI - C5

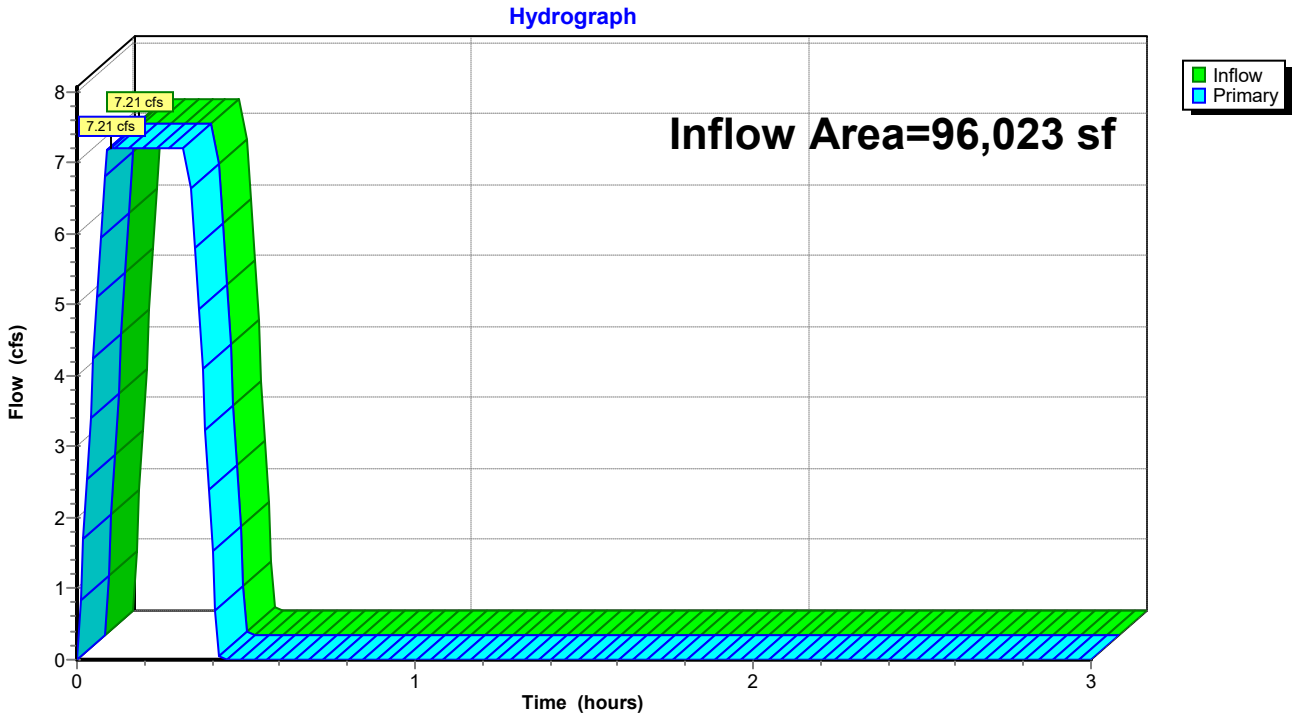


Summary for Pond CI-C6: CI - C6

Inflow Area = 96,023 sf, 66.95% Impervious, Inflow Depth = 1.08" for 10-yr event
Inflow = 7.21 cfs @ 0.10 hrs, Volume= 8,644 cf
Primary = 7.21 cfs @ 0.10 hrs, Volume= 8,644 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C7 : CI - C7

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C6: CI - C6

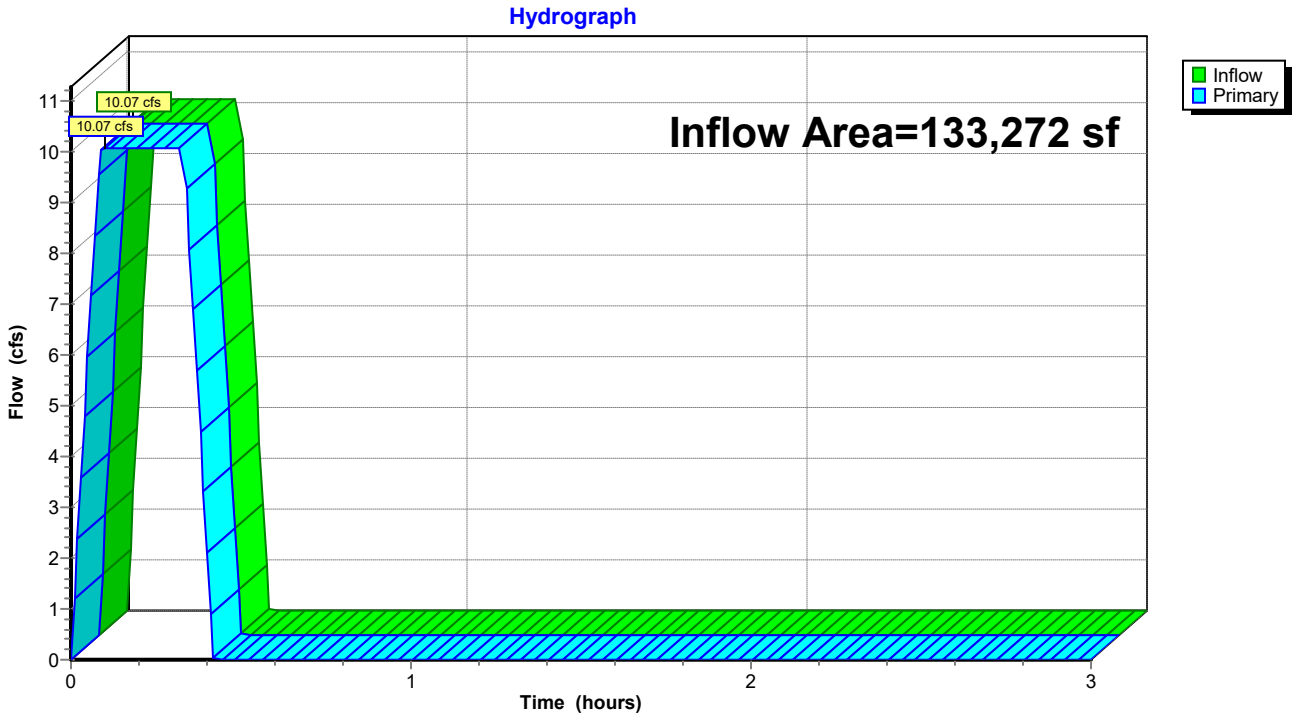


Summary for Pond CI-C7: CI - C7

Inflow Area = 133,272 sf, 67.70% Impervious, Inflow Depth = 1.09" for 10-yr event
Inflow = 10.07 cfs @ 0.10 hrs, Volume= 12,075 cf
Primary = 10.07 cfs @ 0.10 hrs, Volume= 12,075 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond DP : Existing North Detention Pond

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C7: CI - C7

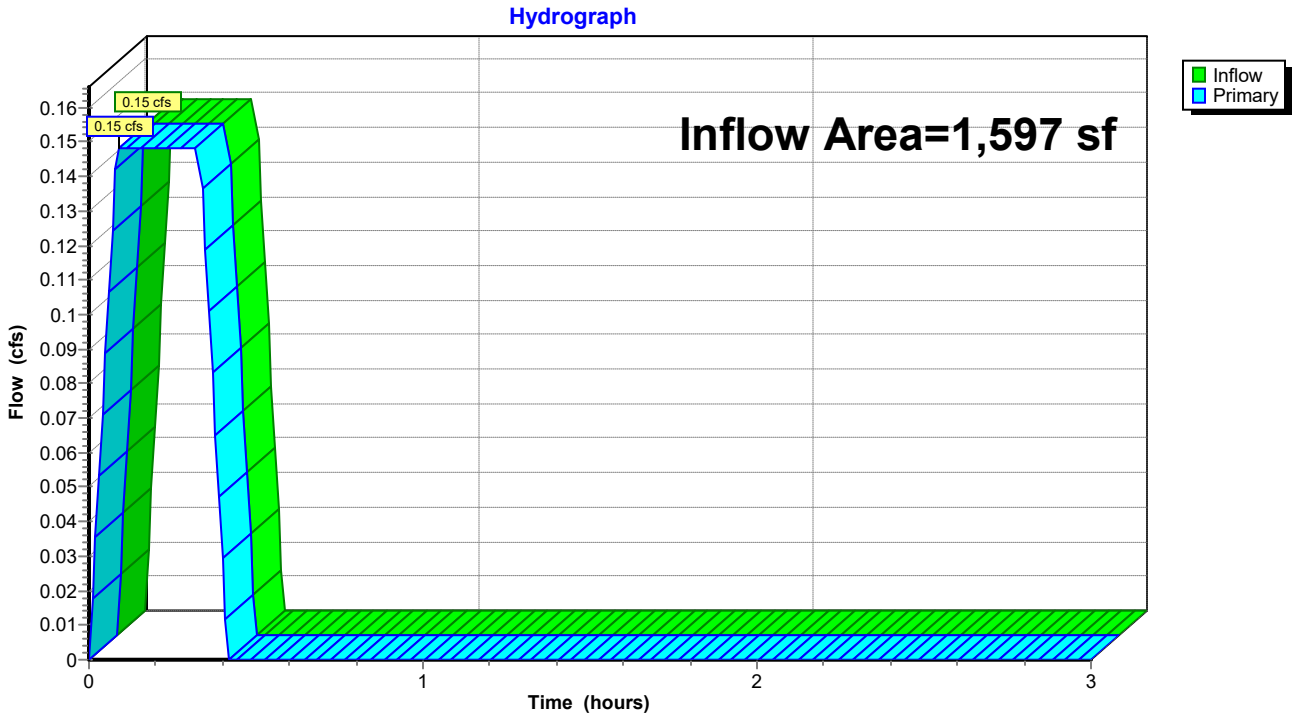


Summary for Pond CI-D1: CI - D1

Inflow Area = 1,597 sf,100.00% Impervious, Inflow Depth = 1.34" for 10-yr event
Inflow = 0.15 cfs @ 0.09 hrs, Volume= 178 cf
Primary = 0.15 cfs @ 0.09 hrs, Volume= 178 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-D2 : CI - D2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-D1: CI - D1

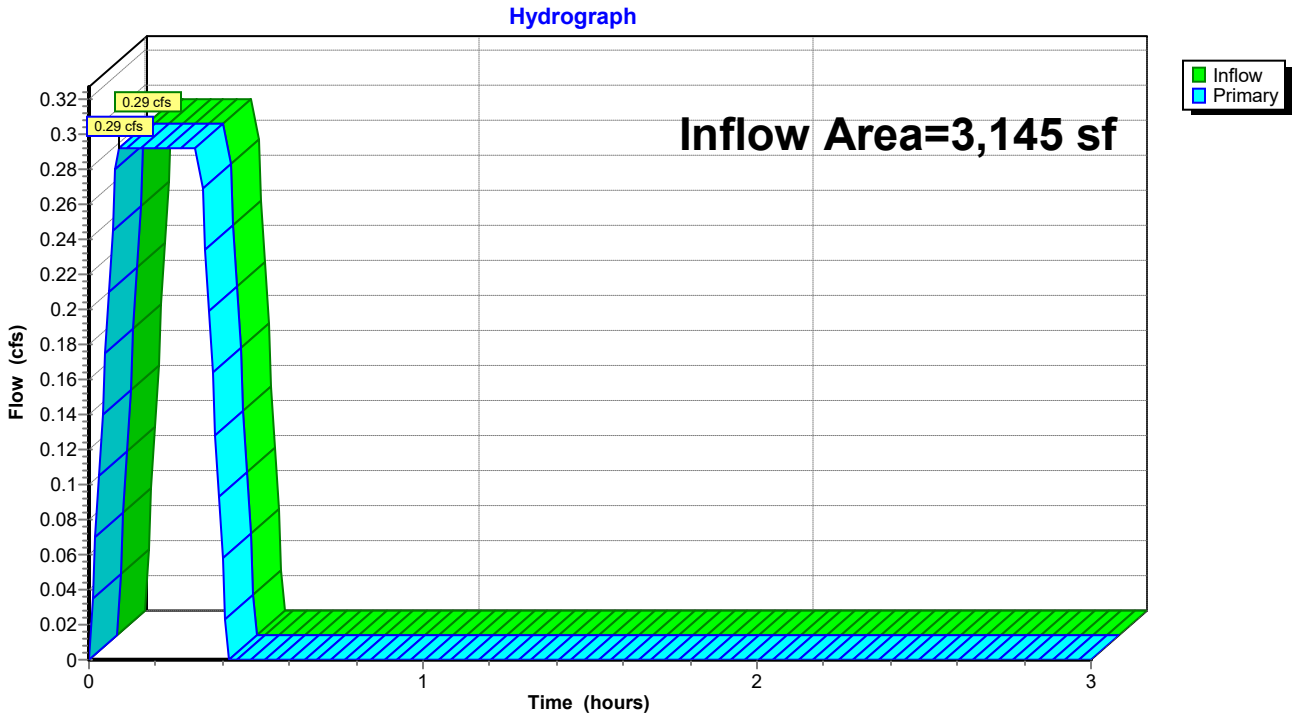


Summary for Pond CI-D2: CI - D2

Inflow Area = 3,145 sf,100.00% Impervious, Inflow Depth = 1.34" for 10-yr event
Inflow = 0.29 cfs @ 0.09 hrs, Volume= 350 cf
Primary = 0.29 cfs @ 0.09 hrs, Volume= 350 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C6 : CI - C6

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-D2: CI - D2

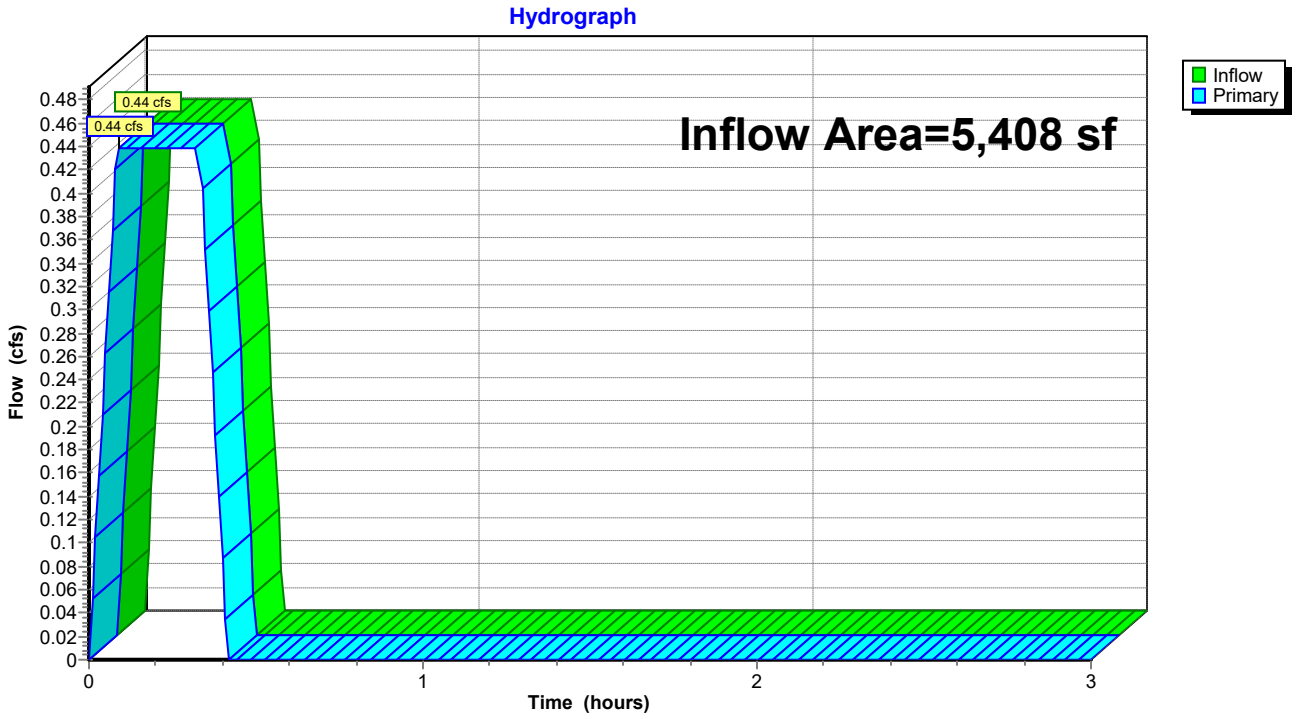


Summary for Pond CI-E1: CI - E1

Inflow Area = 5,408 sf, 77.35% Impervious, Inflow Depth = 1.17" for 10-yr event
Inflow = 0.44 cfs @ 0.09 hrs, Volume= 526 cf
Primary = 0.44 cfs @ 0.09 hrs, Volume= 526 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-E2 : CI - E2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-E1: CI - E1

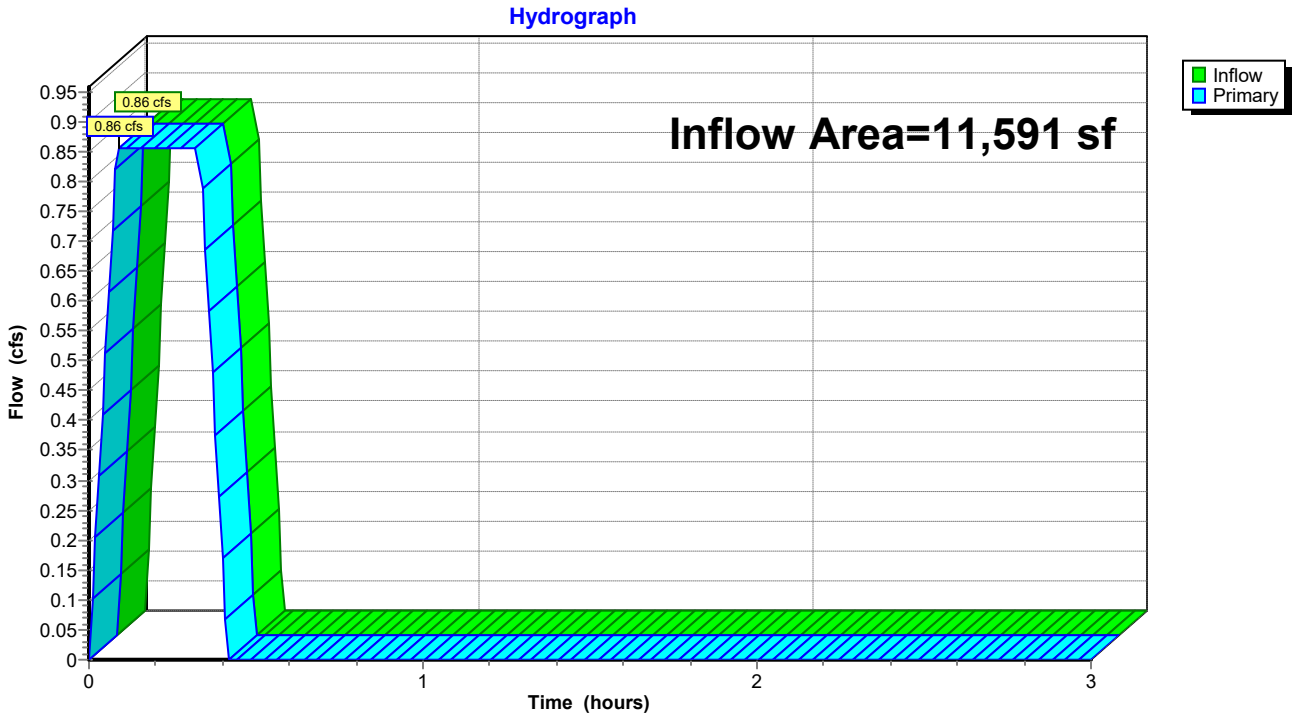


Summary for Pond CI-E2: CI - E2

Inflow Area = 11,591 sf, 64.62% Impervious, Inflow Depth = 1.06" for 10-yr event
Inflow = 0.86 cfs @ 0.09 hrs, Volume= 1,026 cf
Primary = 0.86 cfs @ 0.09 hrs, Volume= 1,026 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C7 : CI - C7

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-E2: CI - E2



Summary for Pond DP: Existing North Detention Pond

Inflow Area = 322,783 sf, 53.09% Impervious, Inflow Depth = 0.99" for 10-yr event
Inflow = 22.13 cfs @ 0.27 hrs, Volume= 26,552 cf
Outflow = 10.48 cfs @ 0.39 hrs, Volume= 26,552 cf, Atten= 53%, Lag= 7.0 min
Primary = 10.48 cfs @ 0.39 hrs, Volume= 26,552 cf
Routed to Link FINAL : APPROX DISCHARGE

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 382.96' @ 0.39 hrs Storage= 15,778 cf

Plug-Flow detention time= 18.4 min calculated for 26,464 cf (100% of inflow)
Center-of-Mass det. time= 18.5 min (32.0 - 13.5)

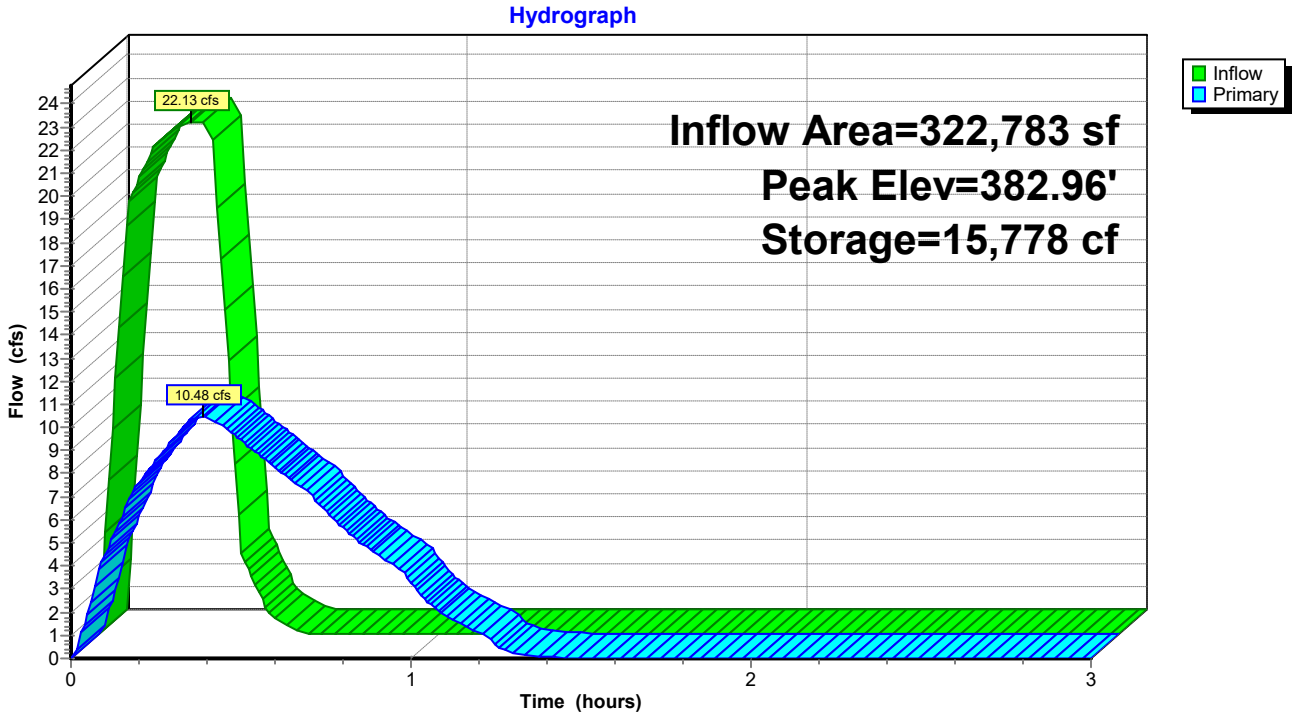
Volume	Invert	Avail.Storage	Storage Description
#1	381.17'	72,742 cf	**Custom Stage Data** Listed below

Elevation (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
381.17	0	0
381.50	200	200
382.00	1,825	2,025
382.50	5,265	7,290
383.00	9,300	16,590
383.50	13,733	30,323
384.00	18,578	48,901
384.50	23,841	72,742

Device	Routing	Invert	Outlet Devices
#1	Primary	384.16'	**5.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#2	Primary	381.17'	**1.7' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=10.48 cfs @ 0.39 hrs HW=382.96' (Free Discharge)
└**1=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
└**2=Sharp-Crested Rectangular Weir** (Weir Controls 10.48 cfs @ 4.37 fps)

Pond DP: Existing North Detention Pond

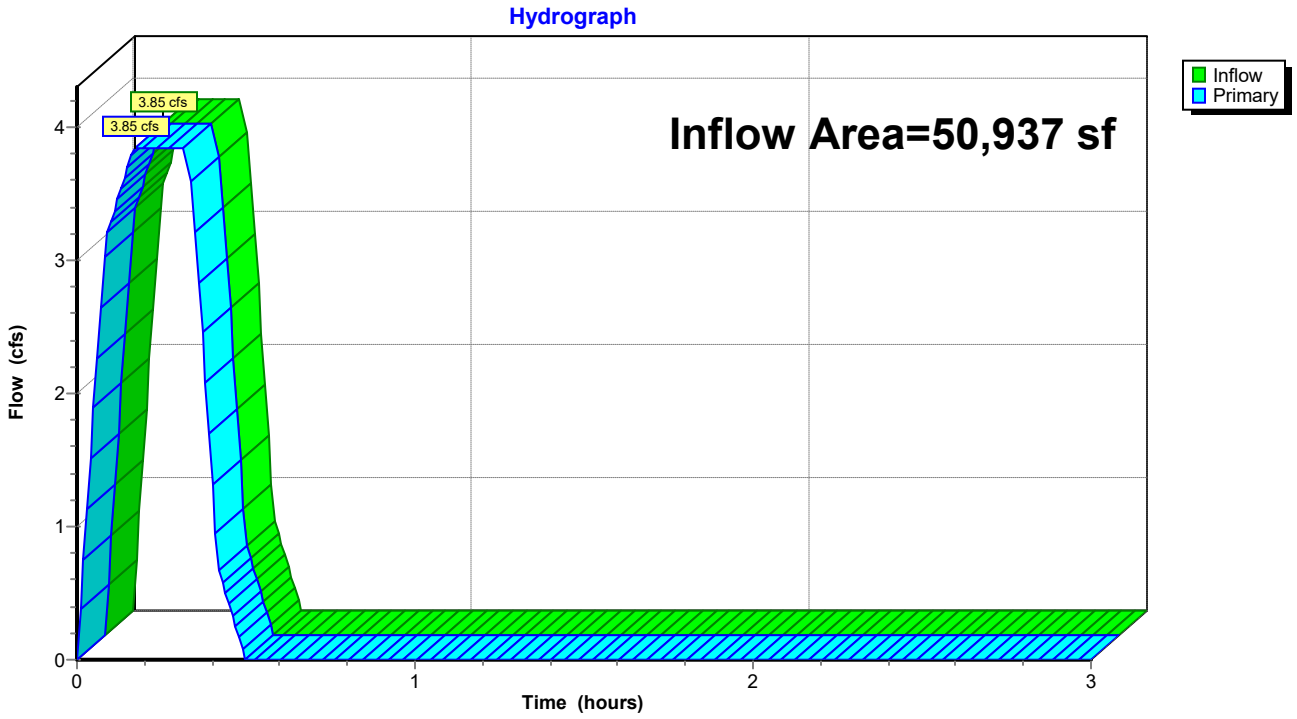


Summary for Pond JB-A2: JB - A2

Inflow Area = 50,937 sf, 59.76% Impervious, Inflow Depth = 1.09" for 10-yr event
Inflow = 3.85 cfs @ 0.17 hrs, Volume= 4,613 cf
Primary = 3.85 cfs @ 0.17 hrs, Volume= 4,613 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A3 : CI - A3

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond JB-A2: JB - A2

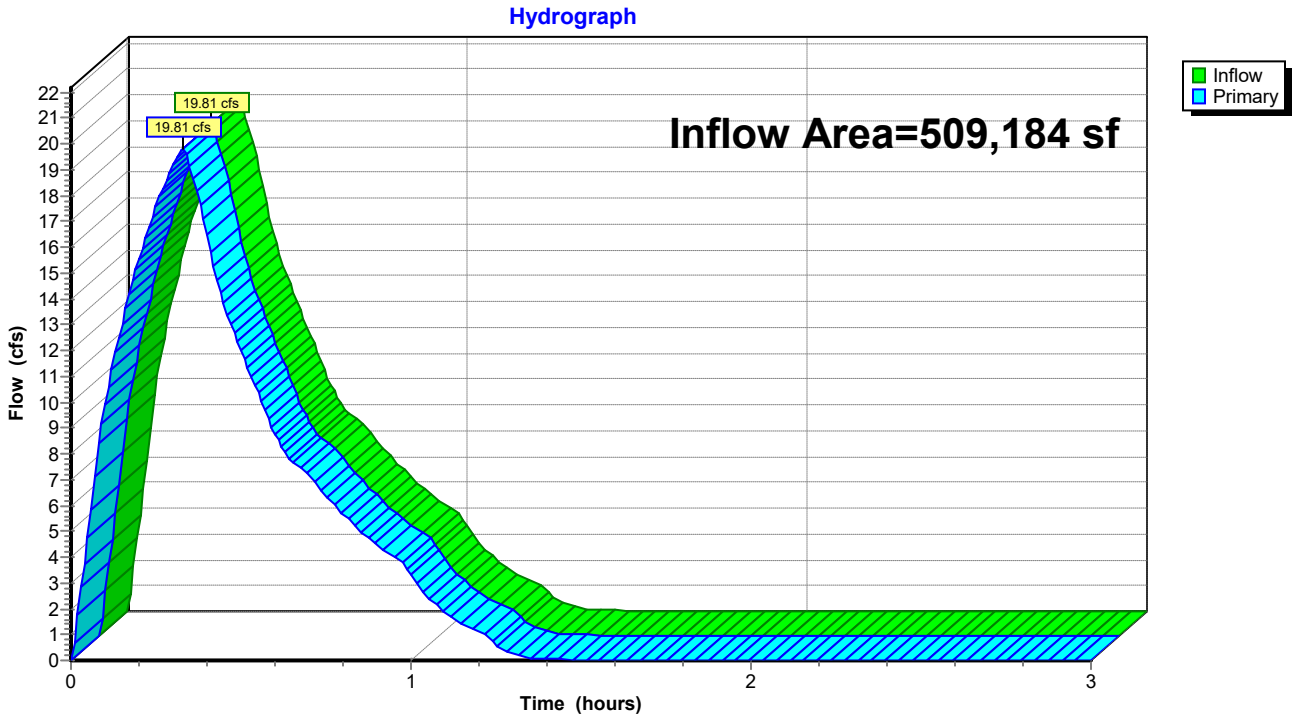


Summary for Link FINAL: APPROX DISCHARGE

Inflow Area = 509,184 sf, 38.62% Impervious, Inflow Depth = 0.90" for 10-yr event
Inflow = 19.81 cfs @ 0.33 hrs, Volume= 38,334 cf
Primary = 19.81 cfs @ 0.33 hrs, Volume= 38,334 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link FINAL: APPROX DISCHARGE



Summary for Subcatchment B1: Drainage Basin B1

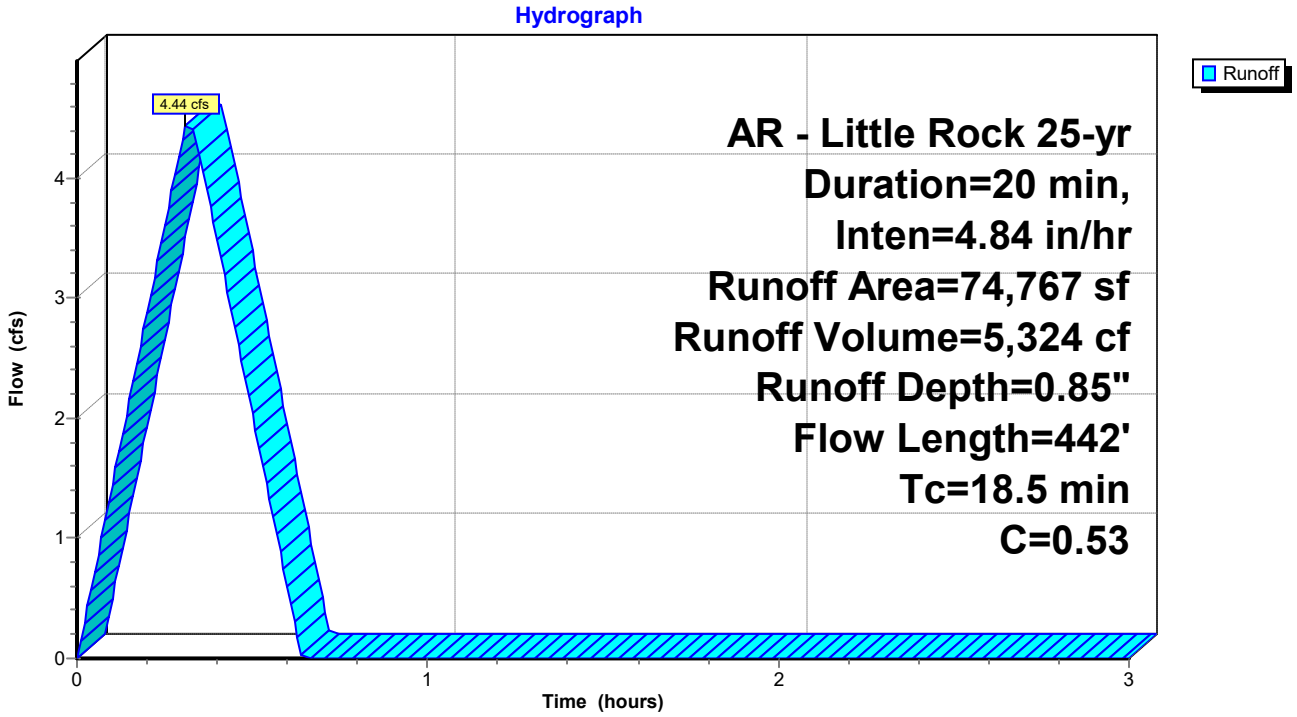
Runoff = 4.44 cfs @ 0.31 hrs, Volume= 5,324 cf, Depth= 0.85"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
9,241	0.51	Sod Yard
602	0.95	Paving, Sidewalks
64,924	0.53	Undeveloped
74,767	0.53	Weighted Average
74,165		99.19% Pervious Area
602		0.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	6	0.0180	0.86		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
2.6	25	0.1920	0.16		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
11.9	75	0.0370	0.11		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.7	58	0.0370	1.35		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.6	141	0.0420	1.43		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.7	60	0.0400	1.40		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.9	77	0.0420	1.43		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
18.5	442	Total			

Subcatchment B1: Drainage Basin B1



Summary for Subcatchment B2: Drainage Basin B2

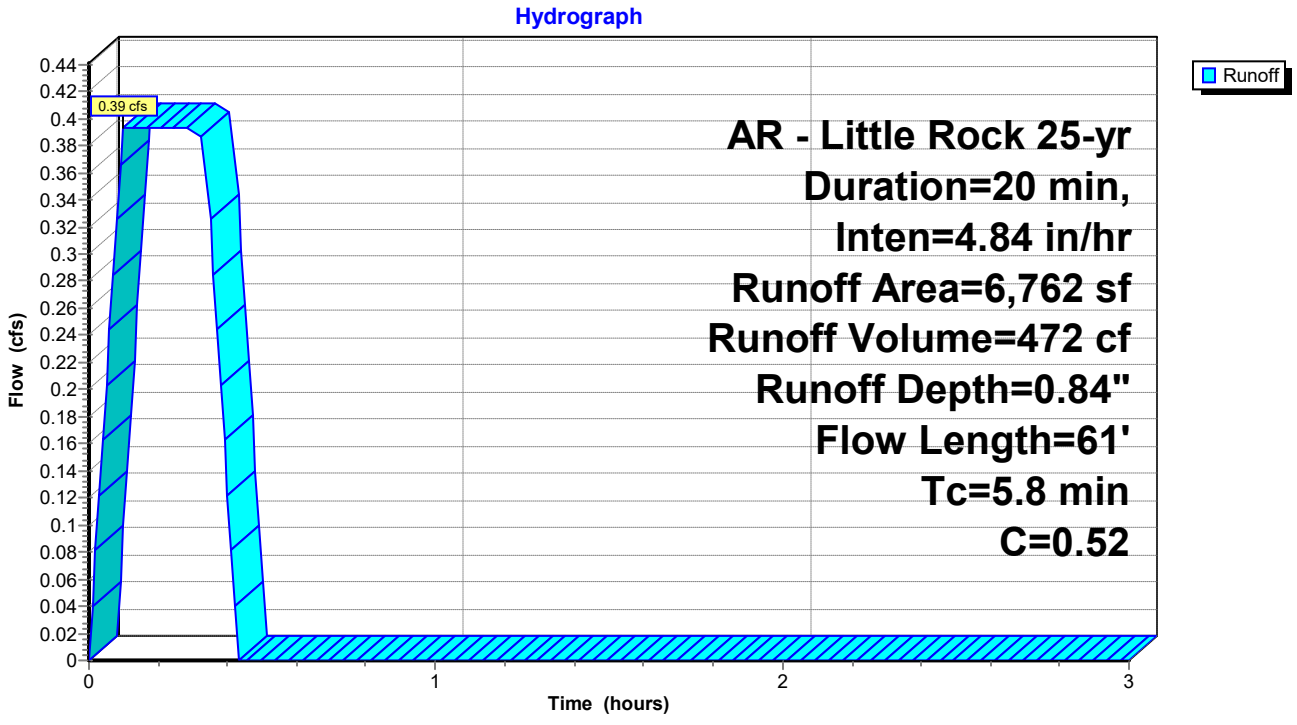
Runoff = 0.39 cfs @ 0.10 hrs, Volume= 472 cf, Depth= 0.84"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
6,595	0.51	Sod Yard
167	0.95	Paving, Sidewalks
6,762	0.52	Weighted Average
6,595		97.53% Pervious Area
167		2.47% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	6	0.0180	0.86		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
5.7	55	0.1240	0.16		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
5.8	61	Total			

Subcatchment B2: Drainage Basin B2



Summary for Subcatchment B3: Drainage Basin B3

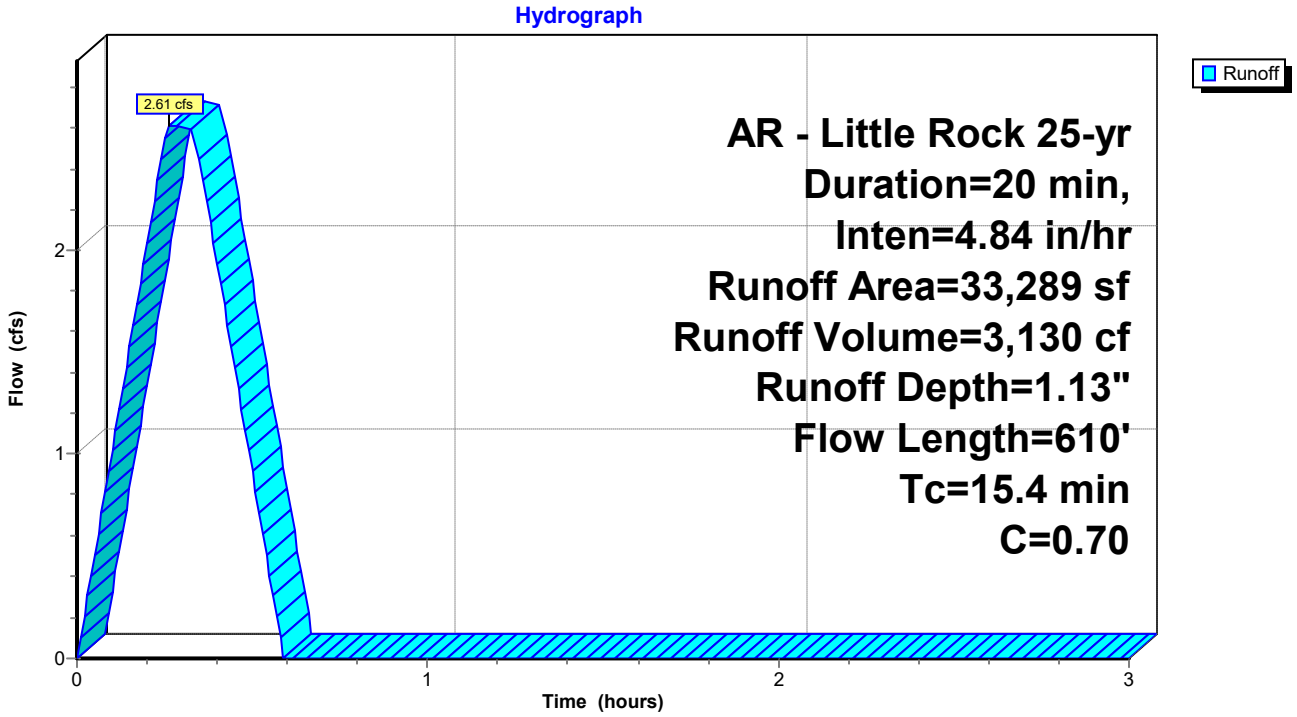
Runoff = 2.61 cfs @ 0.26 hrs, Volume= 3,130 cf, Depth= 1.13"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
18,730	0.51	Sod Yard
14,559	0.95	Paving, Sidewalks
33,289	0.70	Weighted Average
18,730		56.26% Pervious Area
14,559		43.74% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	47	0.1300	0.16		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
6.9	53	0.0730	0.13		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.0	11	0.0940	4.60		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.4	53	0.0120	2.22		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.5	59	0.0100	2.03		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.5	47	0.0070	1.70		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.5	56	0.0070	1.70		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	38	0.0160	2.57		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	30	0.0190	2.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
1.3	216	0.0190	2.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
15.4	610	Total			

Subcatchment B3: Drainage Basin B3



Summary for Subcatchment B4: Drainage Basin B4

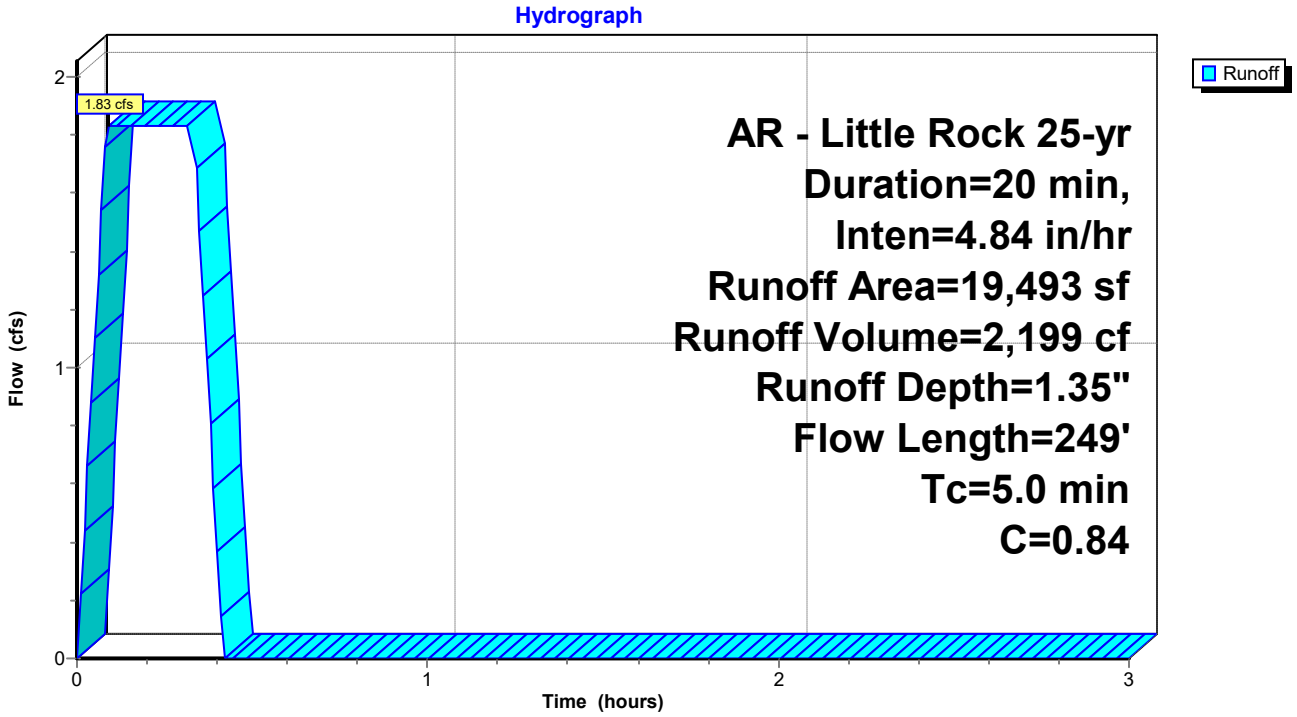
Runoff = 1.83 cfs @ 0.09 hrs, Volume= 2,199 cf, Depth= 1.35"
Routed to Pond CI-A1 : CI - A1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
4,916	0.51	Sod Yard
14,577	0.95	Paving, Sidewalks
19,493	0.84	Weighted Average
4,916		25.22% Pervious Area
14,577		74.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	31	0.0230	1.32		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	18	0.0250	1.22		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.3	28	0.0450	1.69		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.4	72	0.0250	3.21		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	18	0.0170	2.65		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.3	51	0.0170	2.65		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	16	0.0170	2.65		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	8	0.0430	4.21		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	7	0.0580	4.89		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
3.2					**Direct Entry, Overland Concentrated Flow (Min)**
5.0	249	Total			

Subcatchment B4: Drainage Basin B4



Summary for Subcatchment B5: Drainage Basin B5

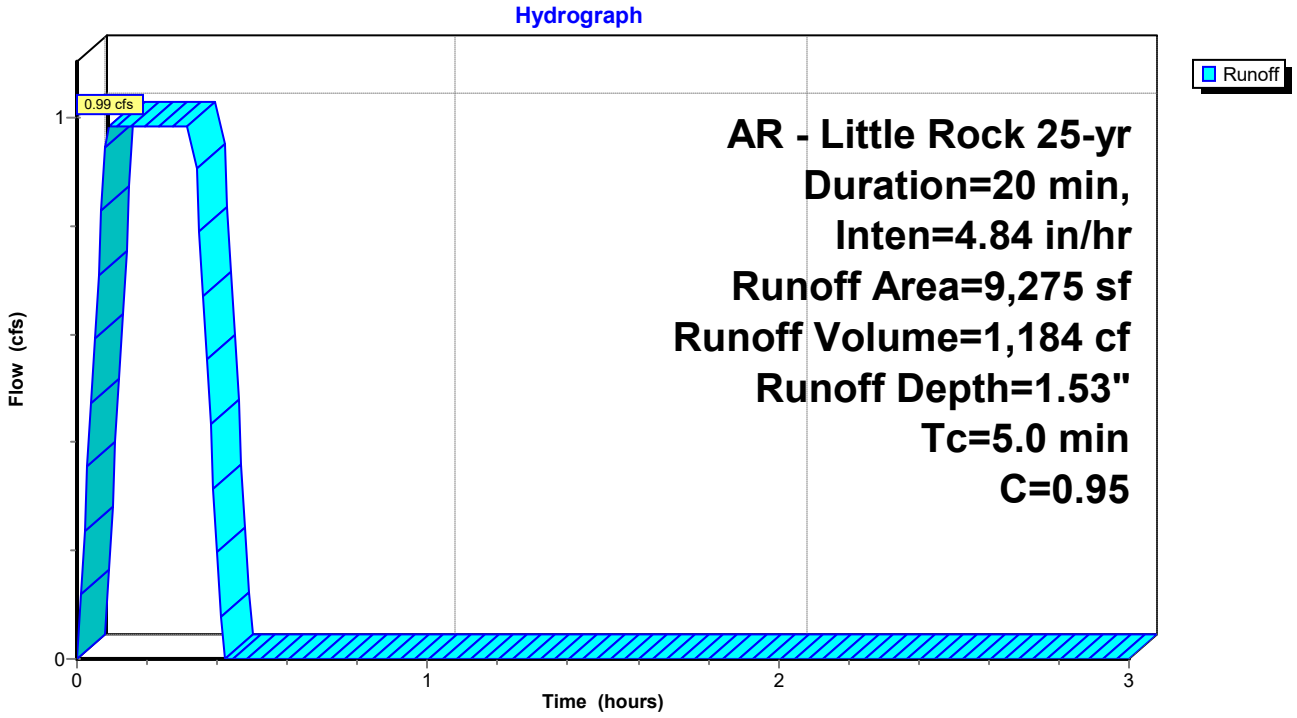
Runoff = 0.99 cfs @ 0.09 hrs, Volume= 1,184 cf, Depth= 1.53"
Routed to Pond JB-A2 : JB - A2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
9,275	0.95	Roof
9,275		100.00% Impervious Area

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

Subcatchment B5: Drainage Basin B5



Summary for Subcatchment B6: Drainage Basin B6

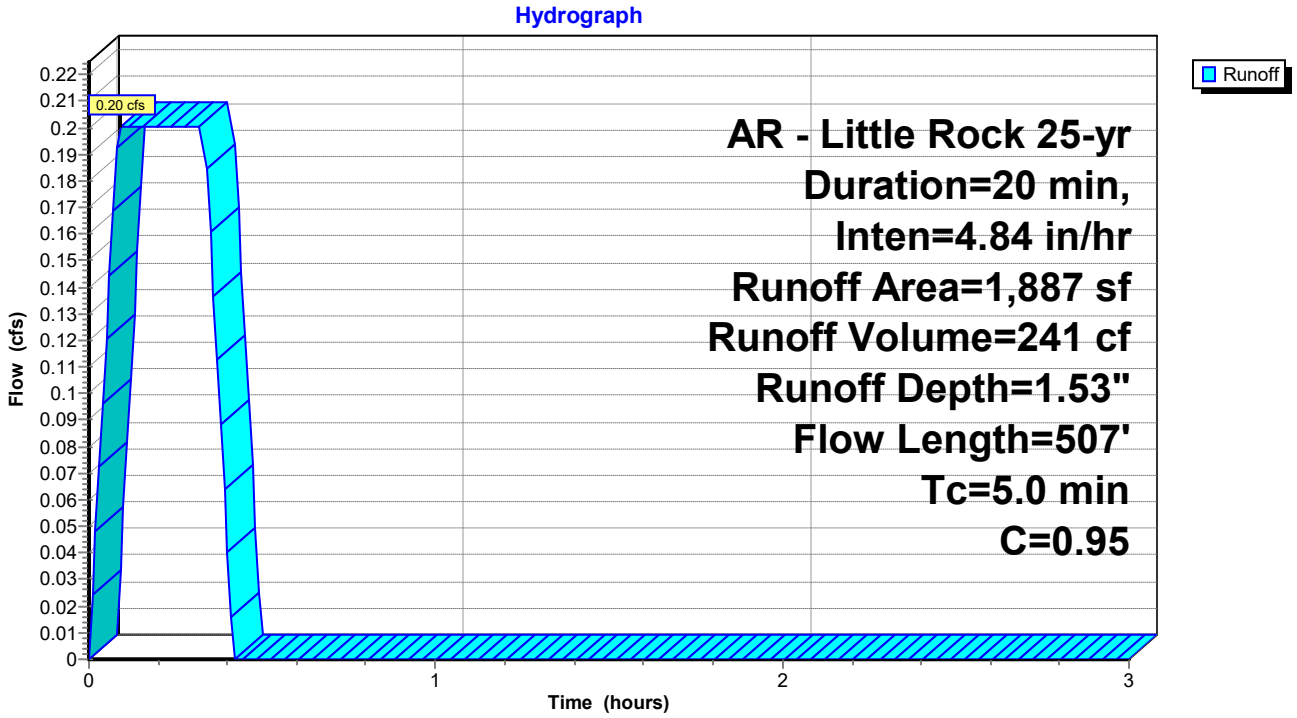
Runoff = 0.20 cfs @ 0.09 hrs, Volume= 241 cf, Depth= 1.53"
Routed to Pond CI-A3 : CI - A3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
0	0.51	Sod Yard
1,887	0.95	Paving, Sidewalks
1,887	0.95	Weighted Average
1,887		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	31	0.0230	1.32		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	18	0.0250	1.22		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.4	30	0.0240	1.33		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.0	13	0.0860	5.95		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.0	415		1.73		**Direct Entry, Overland Concentrated Flow (Min)**
5.0	507	Total			

Subcatchment B6: Drainage Basin B6



Summary for Subcatchment B7: Drainage Basin B7

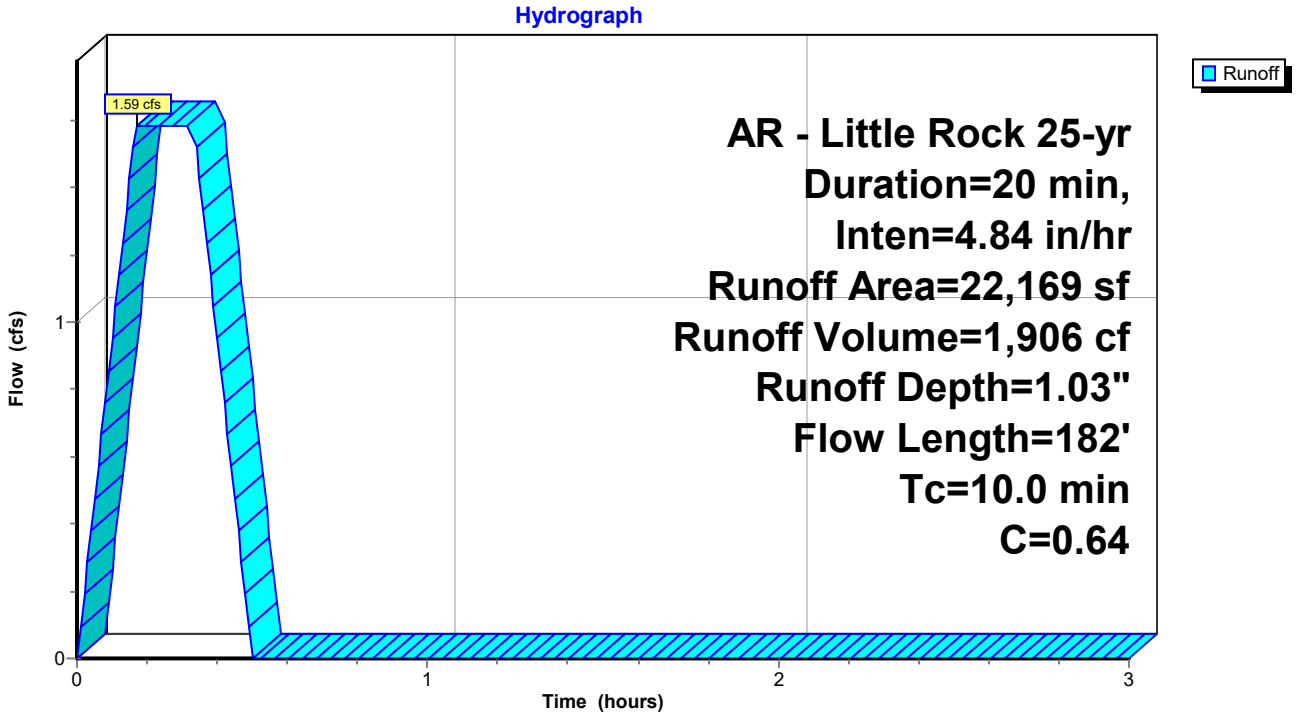
Runoff = 1.59 cfs @ 0.17 hrs, Volume= 1,906 cf, Depth= 1.03"
Routed to Pond CI-B2 : CI - B2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
15,580	0.51	Sod Yard
6,589	0.95	Paving, Sidewalks
22,169	0.64	Weighted Average
15,580		70.28% Pervious Area
6,589		29.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	10	0.0150	0.89		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
9.1	93	0.0150	0.17		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
0.4	40	0.0110	1.57		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	33	0.0190	2.07		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.0	6	0.0180	2.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
10.0	182	Total			

Subcatchment B7: Drainage Basin B7



Summary for Subcatchment B8: Drainage Basin B8

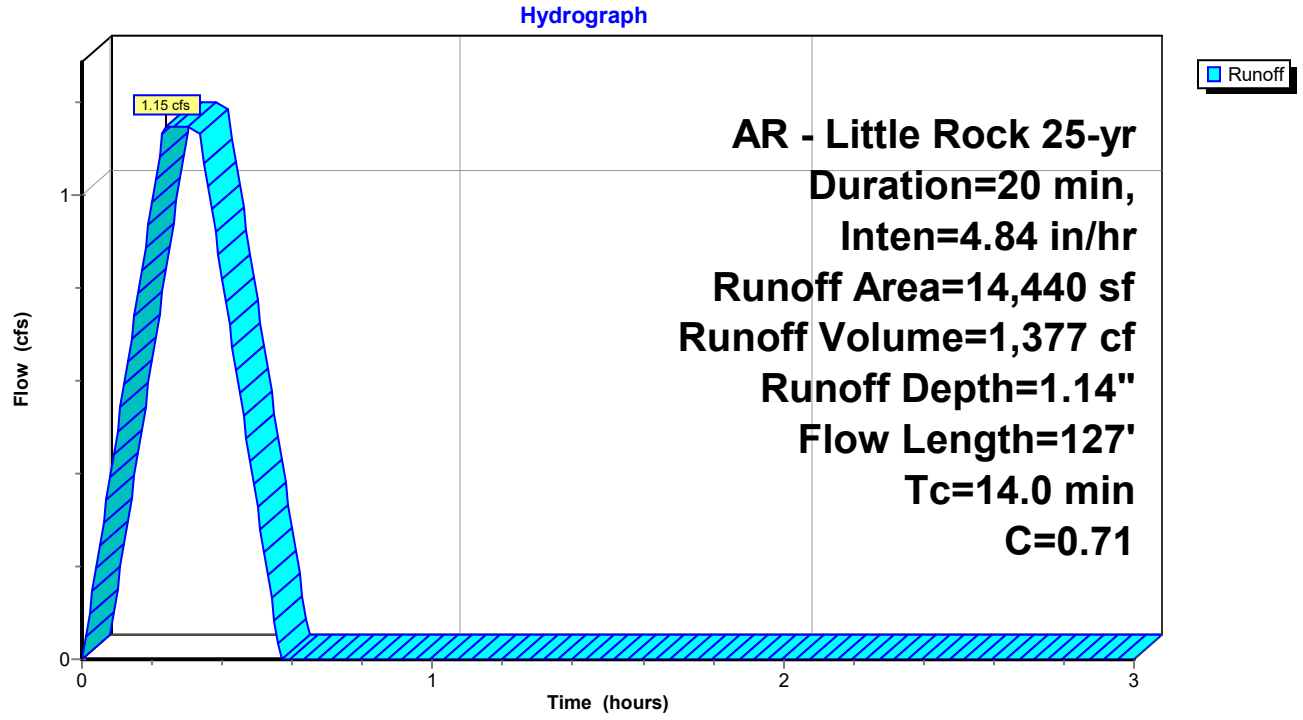
Runoff = 1.15 cfs @ 0.24 hrs, Volume= 1,377 cf, Depth= 1.14"
Routed to Pond CI-A4 : CI - A4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
7,982	0.51	Sod Yard
6,458	0.95	Paving, Sidewalks
14,440	0.71	Weighted Average
7,982		55.28% Pervious Area
6,458		44.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4	79	0.0570	0.13		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
3.5	21	0.0620	0.10		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.0	9	0.0620	3.73		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.1	18	0.1080	4.93		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
14.0	127	Total			

Subcatchment B8: Drainage Basin B8



Summary for Subcatchment C1: Drainage Basin C1

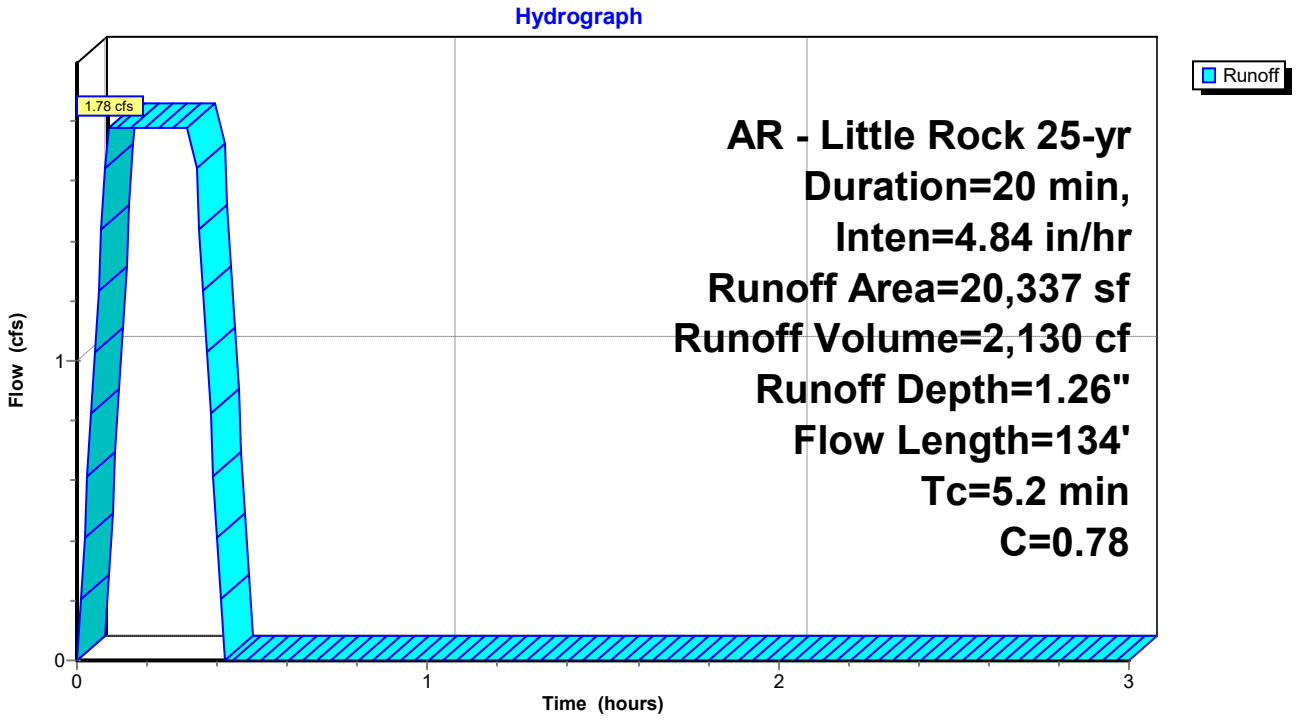
Runoff = 1.78 cfs @ 0.09 hrs, Volume= 2,130 cf, Depth= 1.26"
Routed to Pond CI-C1 : CI - C1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
6,135	0.40	Sod Yard
14,202	0.95	Paving, Sidewalks
20,337	0.78	Weighted Average
6,135		30.17% Pervious Area
14,202		69.83% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	32	0.0660	0.11		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.4	102	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
5.2	134	Total			

Subcatchment C1: Drainage Basin C1



Summary for Subcatchment C10: Drainage Basin C10

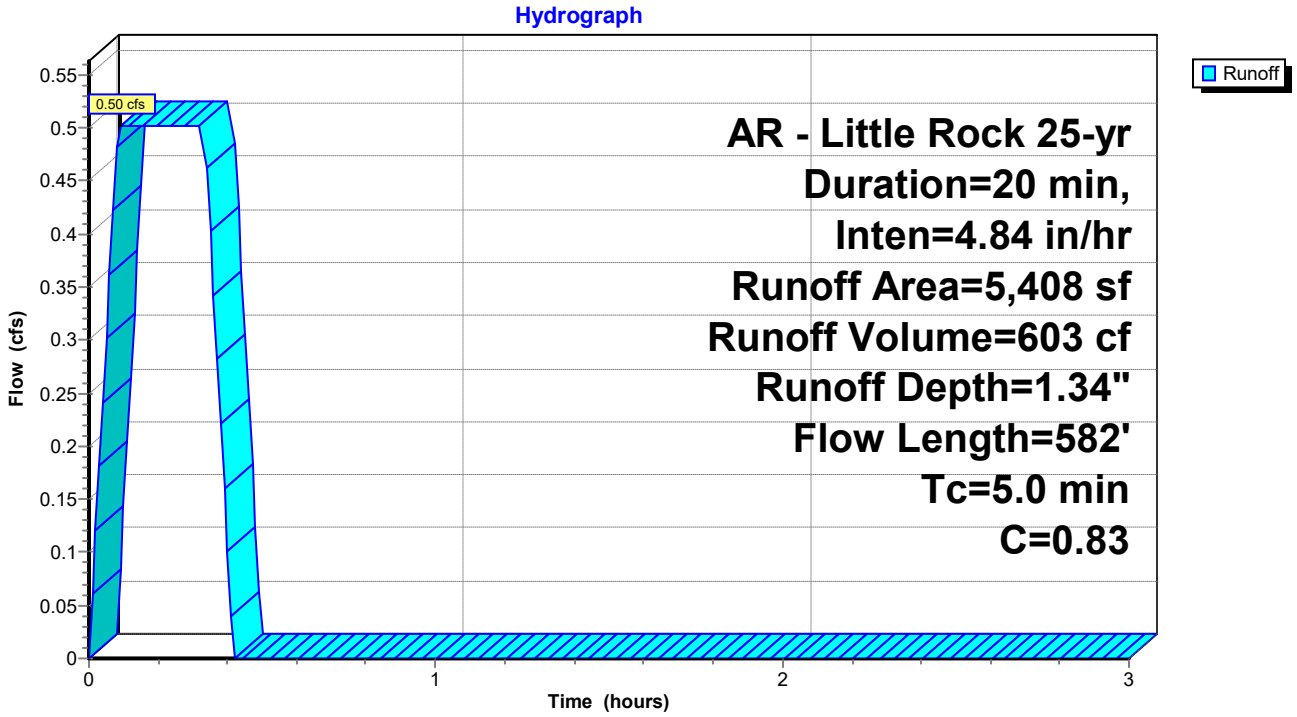
Runoff = 0.50 cfs @ 0.09 hrs, Volume= 603 cf, Depth= 1.34"
Routed to Pond CI-E1 : CI - E1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
1,225	0.40	Sod Yard
4,183	0.95	Paving, Sidewalks
5,408	0.83	Weighted Average
1,225		22.65% Pervious Area
4,183		77.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	18	0.0200	1.12		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	29	0.0210	2.94		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	23	0.0320	3.63		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	36	0.0320	3.63		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	48	0.0330	3.69		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	13	0.0350	3.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
3.9	415		1.77		**Direct Entry, Concentrated Flow (Min)**
5.0	582	Total			

Subcatchment C10: Drainage Basin C10



Summary for Subcatchment C11: Drainage Basin C11

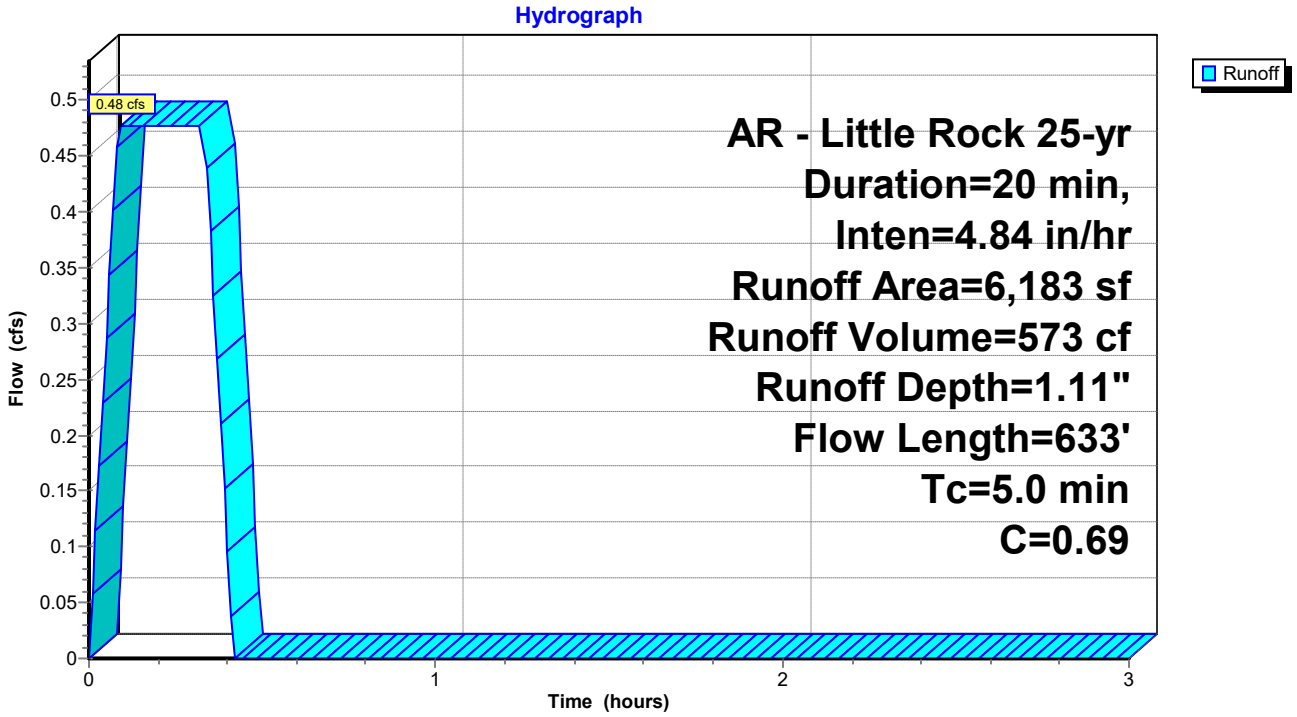
Runoff = 0.48 cfs @ 0.09 hrs, Volume= 573 cf, Depth= 1.11"
Routed to Pond CI-E2 : CI - E2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
2,876	0.40	Sod Yard
3,307	0.95	Paving, Sidewalks
6,183	0.69	Weighted Average
2,876		46.51% Pervious Area
3,307		53.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	25	0.0200	1.19		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	33	0.0620	5.05		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	29	0.0540	4.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	47	0.0410	4.11		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	47	0.0390	4.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	37	0.0420	4.16		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.0	415		1.73		**Direct Entry, Concentrated Flow (Min)**
5.0	633	Total			

Subcatchment C11: Drainage Basin C11



Summary for Subcatchment C12: Drainage Basin C12

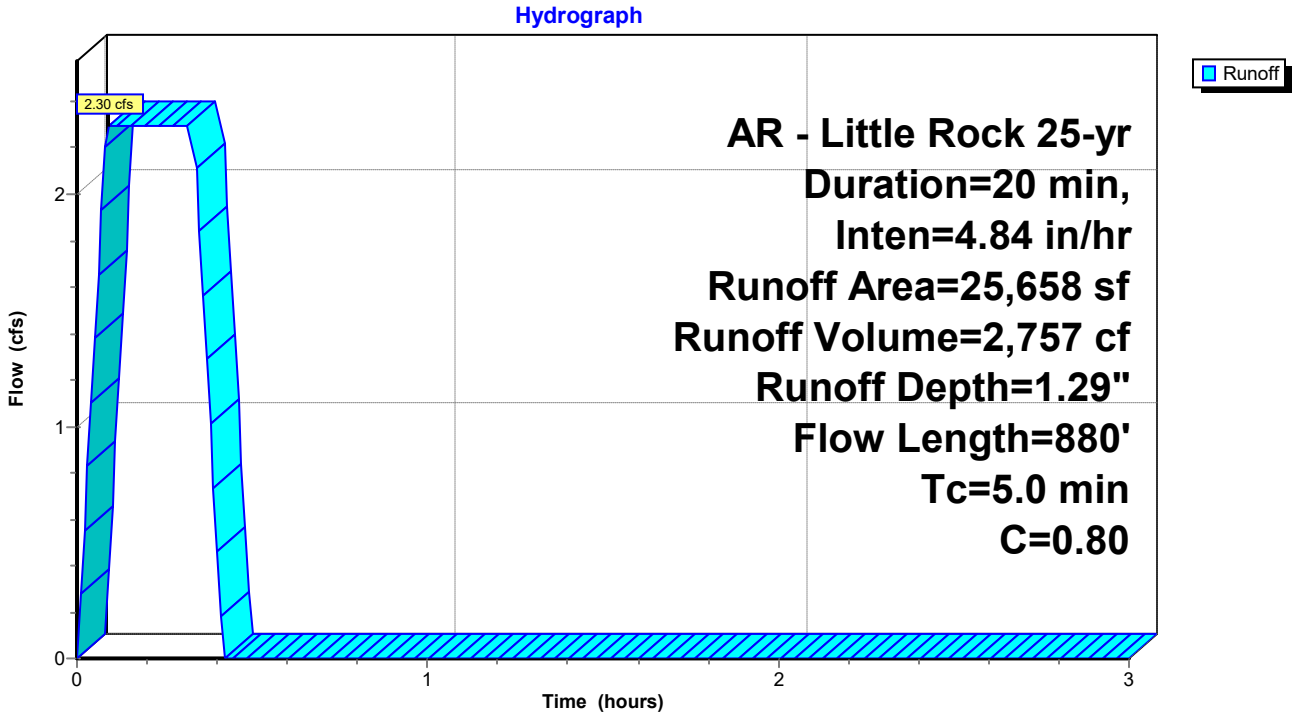
Runoff = 2.30 cfs @ 0.09 hrs, Volume= 2,757 cf, Depth= 1.29"
Routed to Pond CI-C7 : CI - C7

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
7,218	0.40	Sod Yard
18,440	0.95	Paving, Sidewalks
25,658	0.80	Weighted Average
7,218		28.13% Pervious Area
18,440		71.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	24	0.0360	1.50		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	5	0.0190	0.85		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	21	0.0100	2.03		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.9	49	0.0020	0.91		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.4	96	0.0330	3.69		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.3	94	0.0570	4.85		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	28	0.0560	4.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	25	0.0450	4.31		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	31	0.0410	4.11		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	39	0.0490	4.49		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	36	0.0460	4.35		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	11	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	6	0.0440	4.26		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
2.3	415		3.01		**Direct Entry, Concentrated Flow (Min)**
5.0	880	Total			

Subcatchment C12: Drainage Basin C12



Summary for Subcatchment C13: Drainage Basin C13

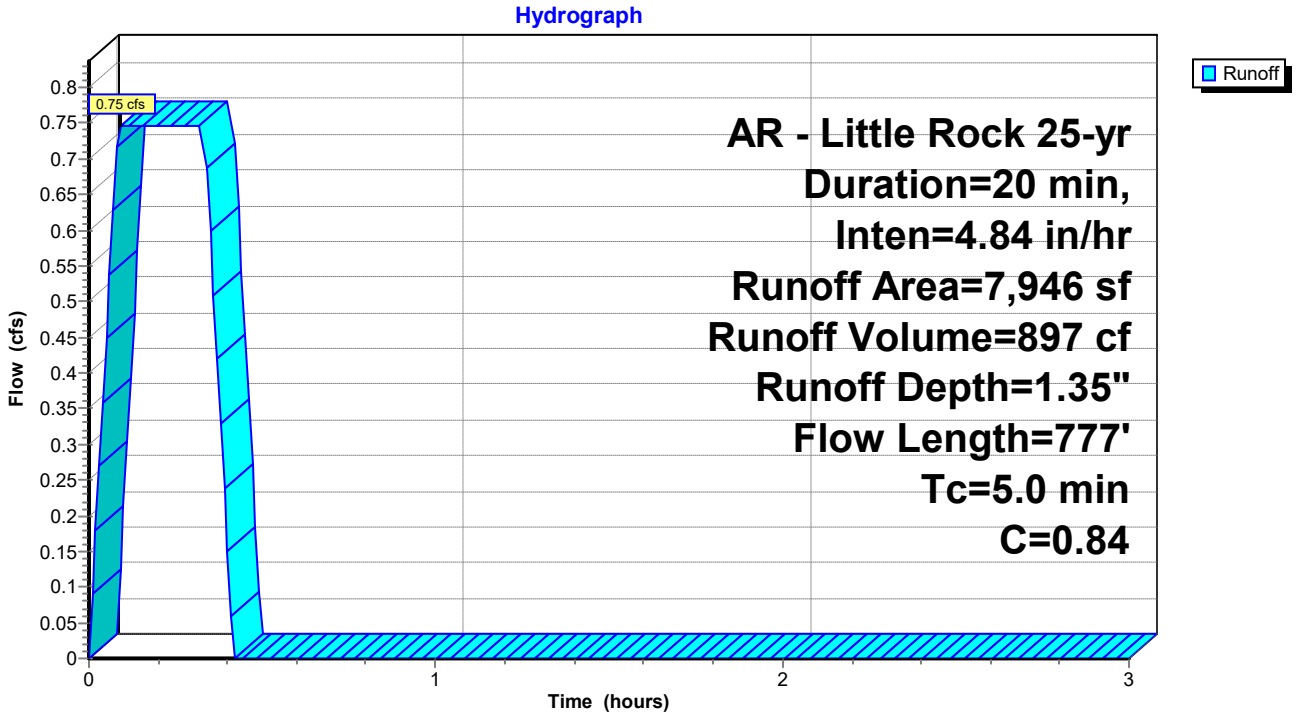
Runoff = 0.75 cfs @ 0.09 hrs, Volume= 897 cf, Depth= 1.35"
Routed to Pond CI-A4 : CI - A4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
1,558	0.40	Sod Yard
6,388	0.95	Paving, Sidewalks
7,946	0.84	Weighted Average
1,558		19.61% Pervious Area
6,388		80.39% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	19	0.0200	1.13		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.3	75	0.0340	3.74		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	52	0.0410	4.11		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	29	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	42	0.0730	5.48		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	74	0.0750	5.56		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	26	0.0710	5.41		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	32	0.0570	4.85		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	13	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
3.6	415		1.92		**Direct Entry, Overland Concentrated Flow (Min)**
5.0	777	Total			

Subcatchment C13: Drainage Basin C13



Summary for Subcatchment C14: Drainage Basin C14

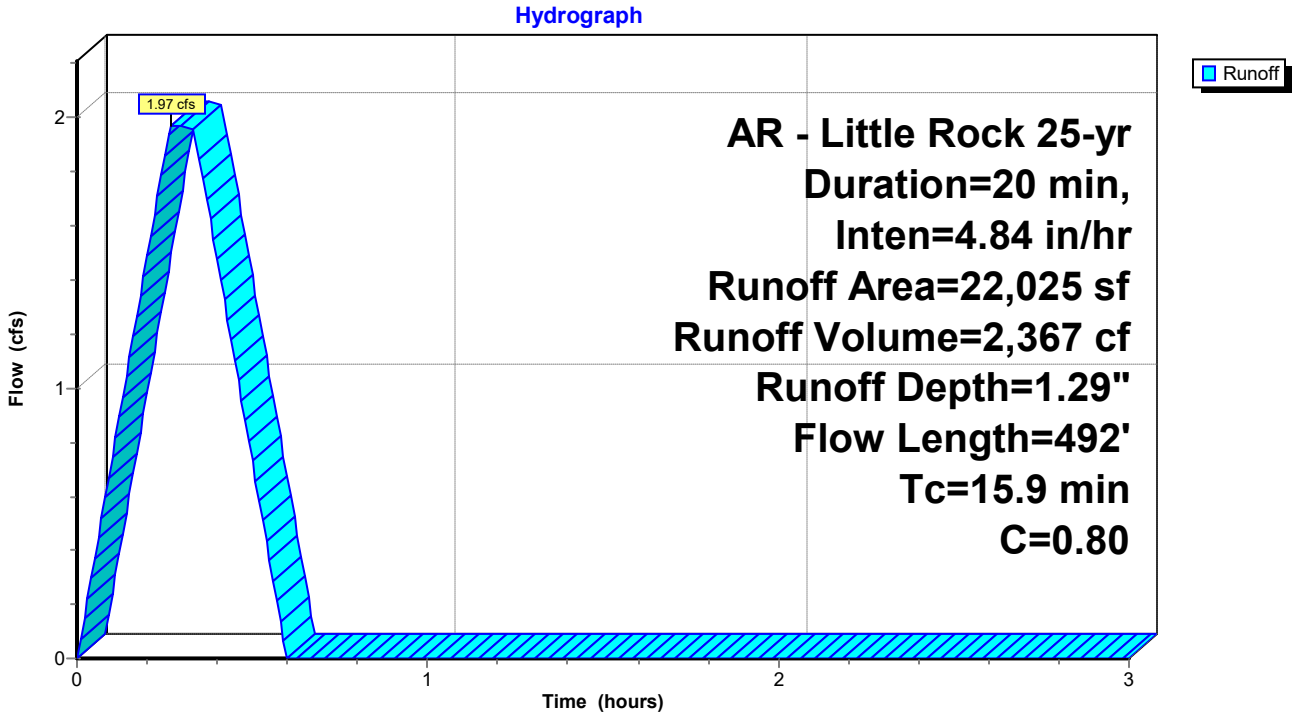
Runoff = 1.97 cfs @ 0.27 hrs, Volume= 2,367 cf, Depth= 1.29"
Routed to Pond CI-A5 : CI - A5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
6,127	0.40	Sod Yard
15,898	0.95	Paving, Sidewalks
22,025	0.80	Weighted Average
6,127		27.82% Pervious Area
15,898		72.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	5	0.0310	0.06		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
9.2	45	0.0250	0.08		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
3.8	41	0.1940	0.18		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.1	6	0.0100	0.68		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	51	0.0870	5.99		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	52	0.0310	3.57		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	18	0.0270	3.34		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	20	0.0400	4.06		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	34	0.0410	4.11		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	46	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	36	0.0580	4.89		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	58	0.0690	5.33		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	49	0.0840	5.88		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	31	0.0690	5.33		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
15.9	492	Total			

Subcatchment C14: Drainage Basin C14



Summary for Subcatchment C15: Drainage Basin C15

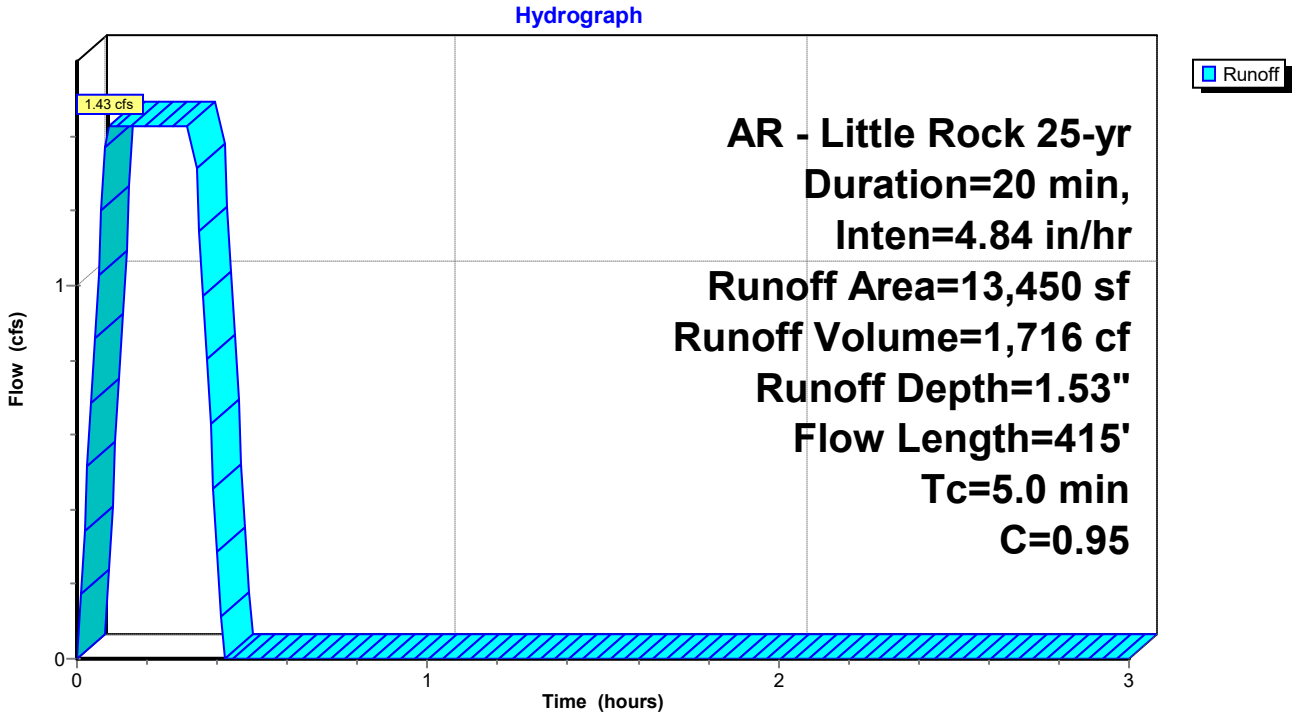
Runoff = 1.43 cfs @ 0.09 hrs, Volume= 1,716 cf, Depth= 1.53"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
13,450	0.95	Paving, Sidewalks
13,450	0.95	Weighted Average
13,450		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	415		1.38		**Direct Entry, Overland Concentrated Flow (Min)**

Subcatchment C15: Drainage Basin C15



Summary for Subcatchment C16: Drainage Basin C16

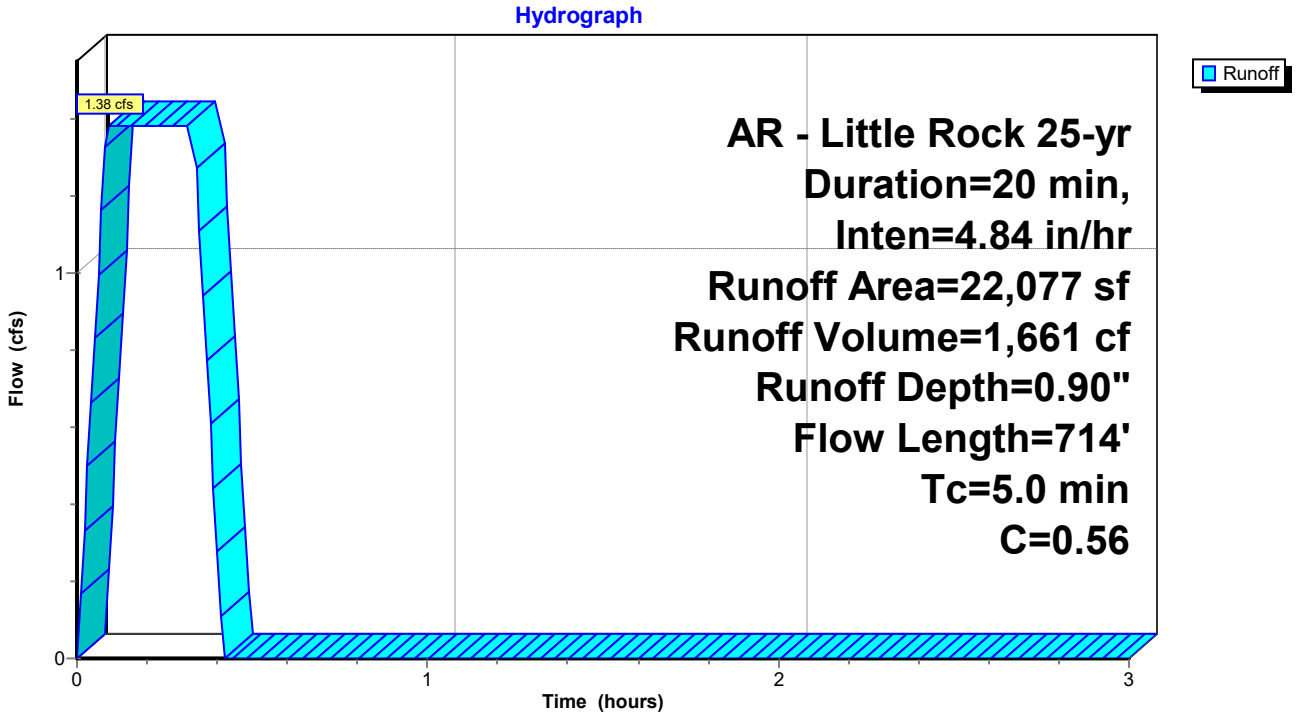
Runoff = 1.38 cfs @ 0.09 hrs, Volume= 1,661 cf, Depth= 0.90"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
15,465	0.40	Sod Yard
6,612	0.95	Paving, Sidewalks
22,077	0.56	Weighted Average
15,465		70.05% Pervious Area
6,612		29.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	26	0.0190	1.18		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	5	0.0100	0.66		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.4	51	0.0500	1.98		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	12	0.1540	2.33		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	50	0.1330	7.40		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
0.1	50	0.1170	6.94		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
0.2	46	0.0430	4.21		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
0.3	59	0.0370	3.90		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
3.3	415		2.10		**Direct Entry, Overland Concentrated Flow (Min)**
5.0	714	Total			

Subcatchment C16: Drainage Basin C16



Summary for Subcatchment C17: Drainage Basin C17

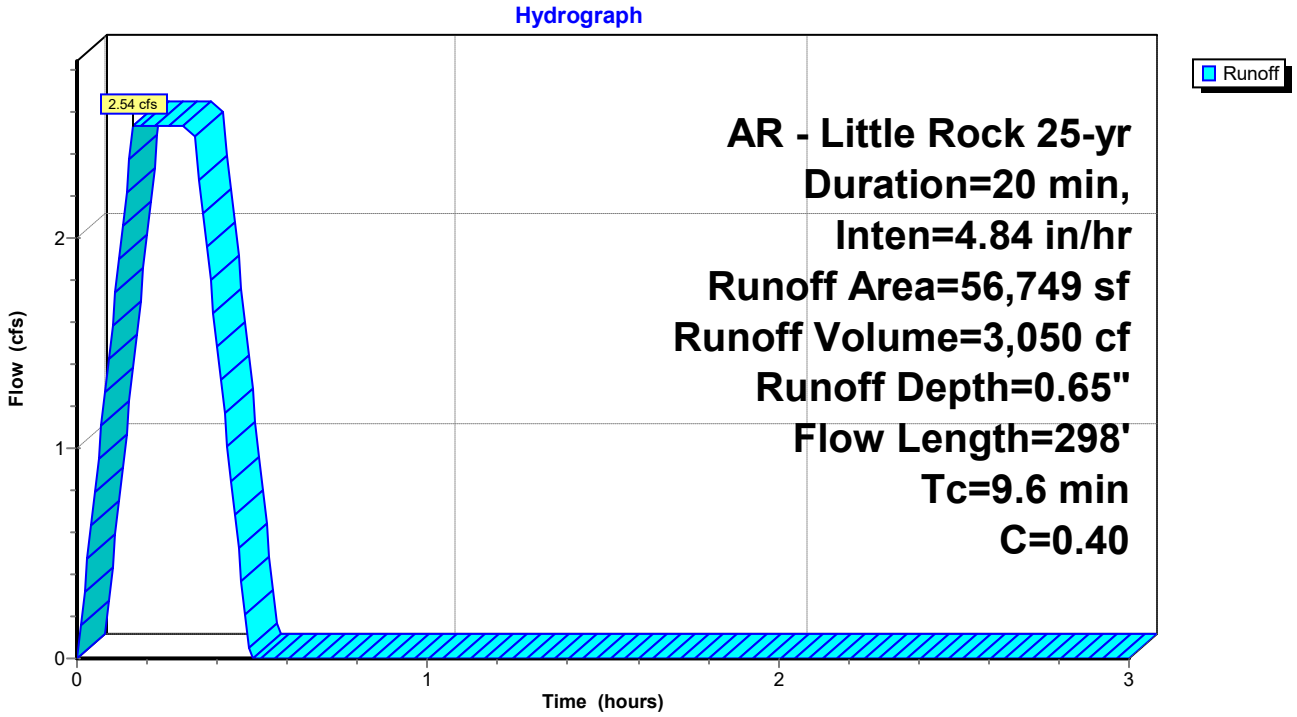
Runoff = 2.54 cfs @ 0.16 hrs, Volume= 3,050 cf, Depth= 0.65"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
56,749	0.40	Sod Yard
0	0.95	Paving, Sidewalks
56,749	0.40	Weighted Average
56,749		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	43	0.0410	0.15		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
3.9	43	0.0690	0.19		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.1	41	0.0980	4.70		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	61	0.0730	4.05		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.2	46	0.0570	3.58		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	64	0.0450	3.18		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
9.6	298	Total			

Subcatchment C17: Drainage Basin C17



Summary for Subcatchment C18: Drainage Basin C18

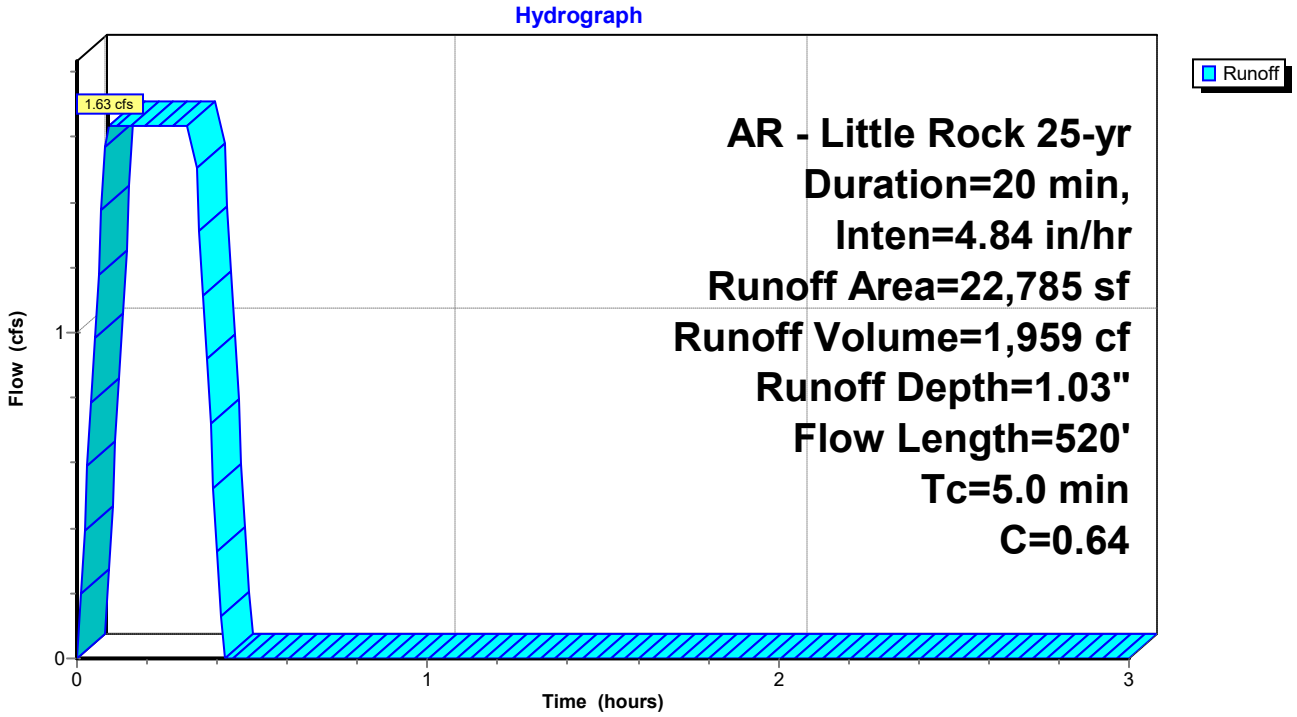
Runoff = 1.63 cfs @ 0.09 hrs, Volume= 1,959 cf, Depth= 1.03"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
12,812	0.40	Sod Yard
9,973	0.95	Paving, Sidewalks
22,785	0.64	Weighted Average
12,812		56.23% Pervious Area
9,973		43.77% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	5	0.2980	0.14		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.2	12	0.0130	0.87		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
3.3	8	0.0100	0.04		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.5	80	0.0210	2.94		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.4	415		17.29		**Direct Entry, Concentrated Flow (Min)**
5.0	520	Total			

Subcatchment C18: Drainage Basin C18



Summary for Subcatchment C19: Drainage Basin C19

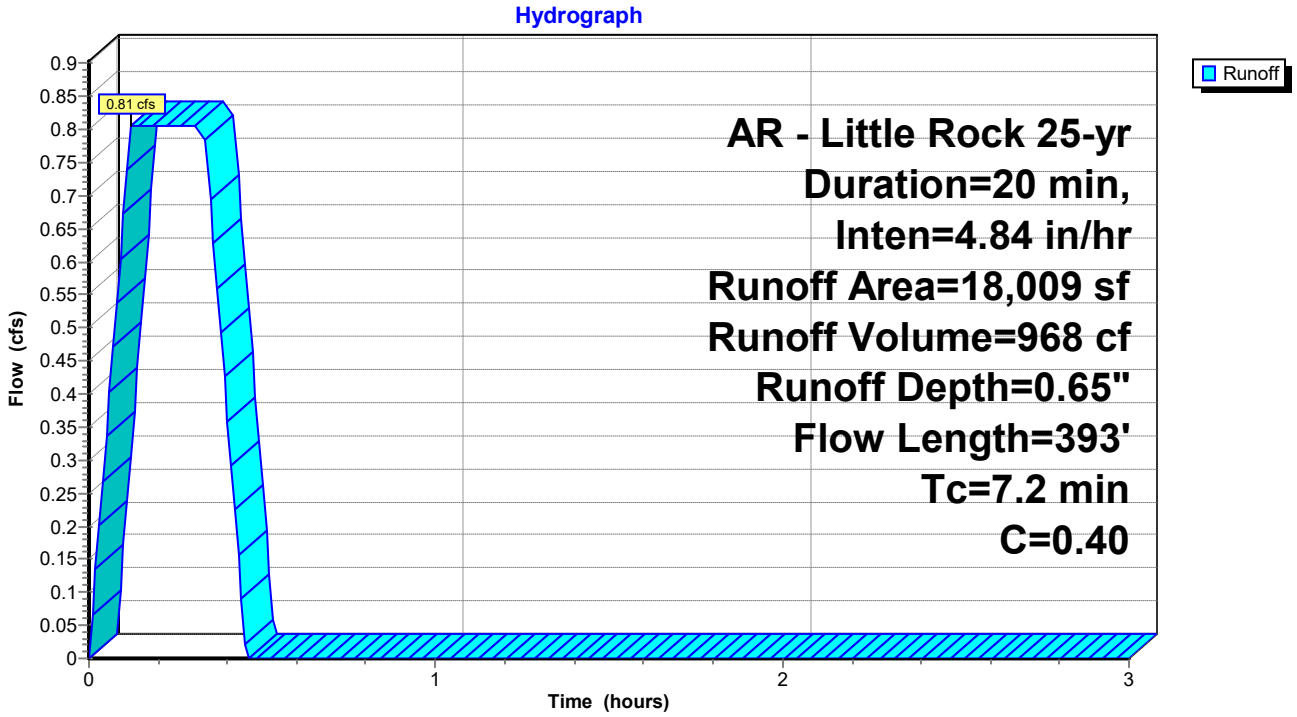
Runoff = 0.81 cfs @ 0.12 hrs, Volume= 968 cf, Depth= 0.65"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
18,009	0.40	Sod Yard
0	0.95	Paving, Sidewalks
18,009	0.40	Weighted Average
18,009		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	34	0.1110	0.21		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
3.3	66	0.2450	0.34		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.0	9	0.2450	7.42		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.5	106	0.0610	3.70		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.2	46	0.0800	4.24		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.1	41	0.0960	4.65		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	66	0.0680	3.91		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.1	19	0.1070	4.91		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.0	6	0.0750	4.11		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
7.2	393	Total			

Subcatchment C19: Drainage Basin C19



Summary for Subcatchment C2: Drainage Basin C2

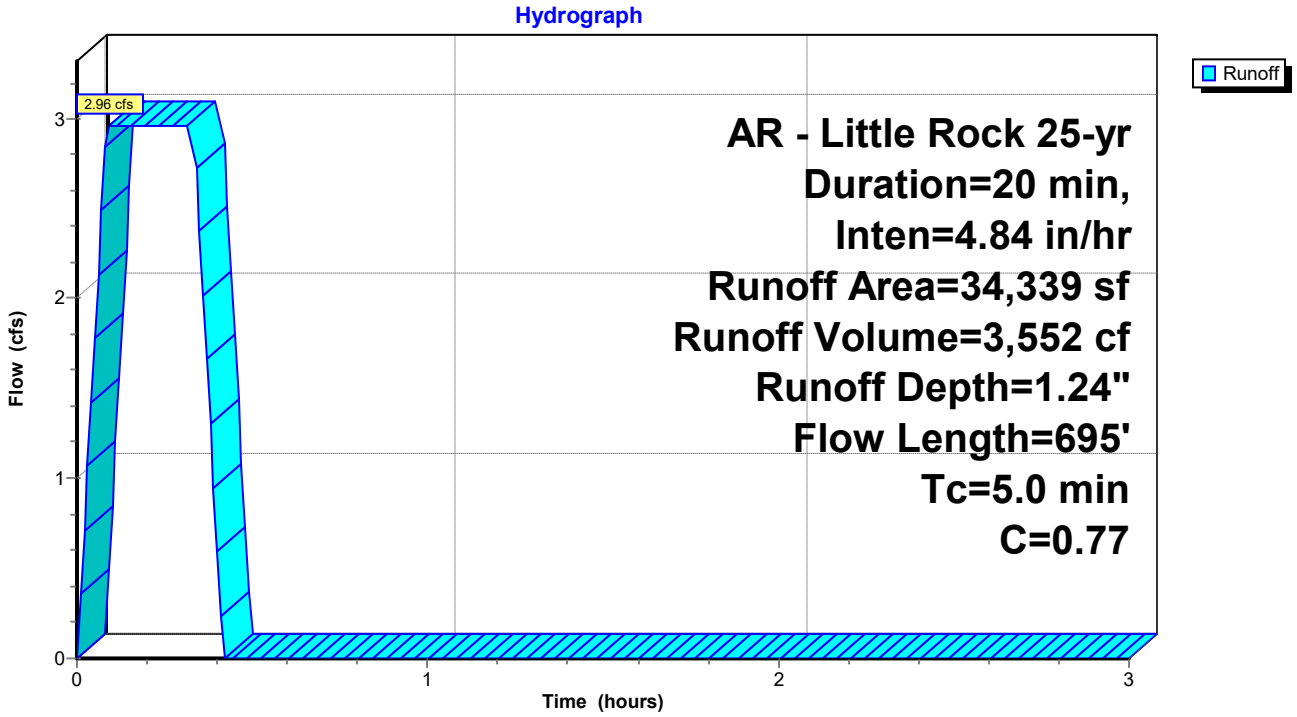
Runoff = 2.96 cfs @ 0.09 hrs, Volume= 3,552 cf, Depth= 1.24"
Routed to Pond CI-C2 : CI - C2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
11,376	0.40	Sod Yard
22,963	0.95	Roof, Paving, Sidewalks
34,339	0.77	Weighted Average
11,376		33.13% Pervious Area
22,963		66.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	20	0.0200	1.14		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.4	74	0.0240	3.14		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	17	0.0710	5.41		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	21	0.0610	5.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.6	148	0.0380	3.96		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
3.5	415		1.98		**Direct Entry, Concentrated Flow (Min)**
5.0	695	Total			

Subcatchment C2: Drainage Basin C2



Summary for Subcatchment C20: Drainage Basin C20

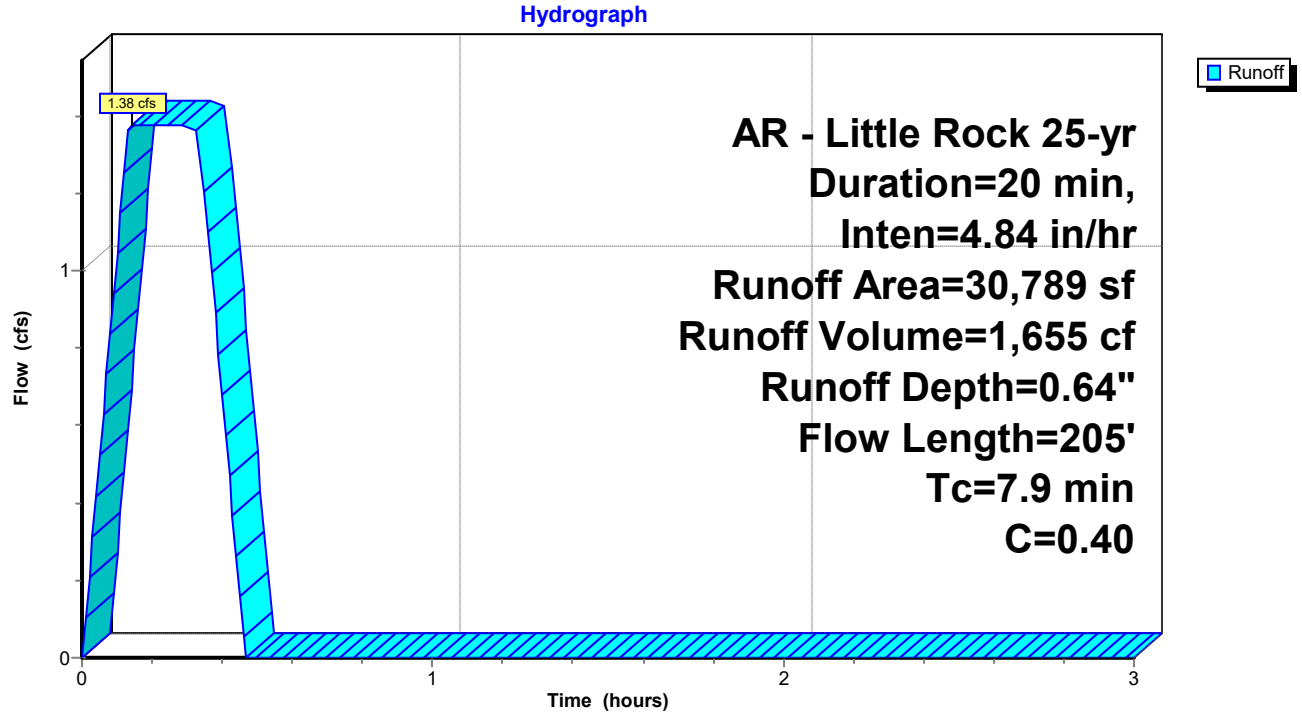
Runoff = 1.38 cfs @ 0.14 hrs, Volume= 1,655 cf, Depth= 0.64"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
30,789	0.40	Sod Yard
0	0.95	Paving, Sidewalks
30,789	0.40	Weighted Average
30,789		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	45	0.1430	0.25		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
4.5	55	0.0780	0.20		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.1	37	0.0780	4.19		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	68	0.0710	4.00		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
7.9	205	Total			

Subcatchment C20: Drainage Basin C20



Summary for Subcatchment C3: Drainage Basin C3

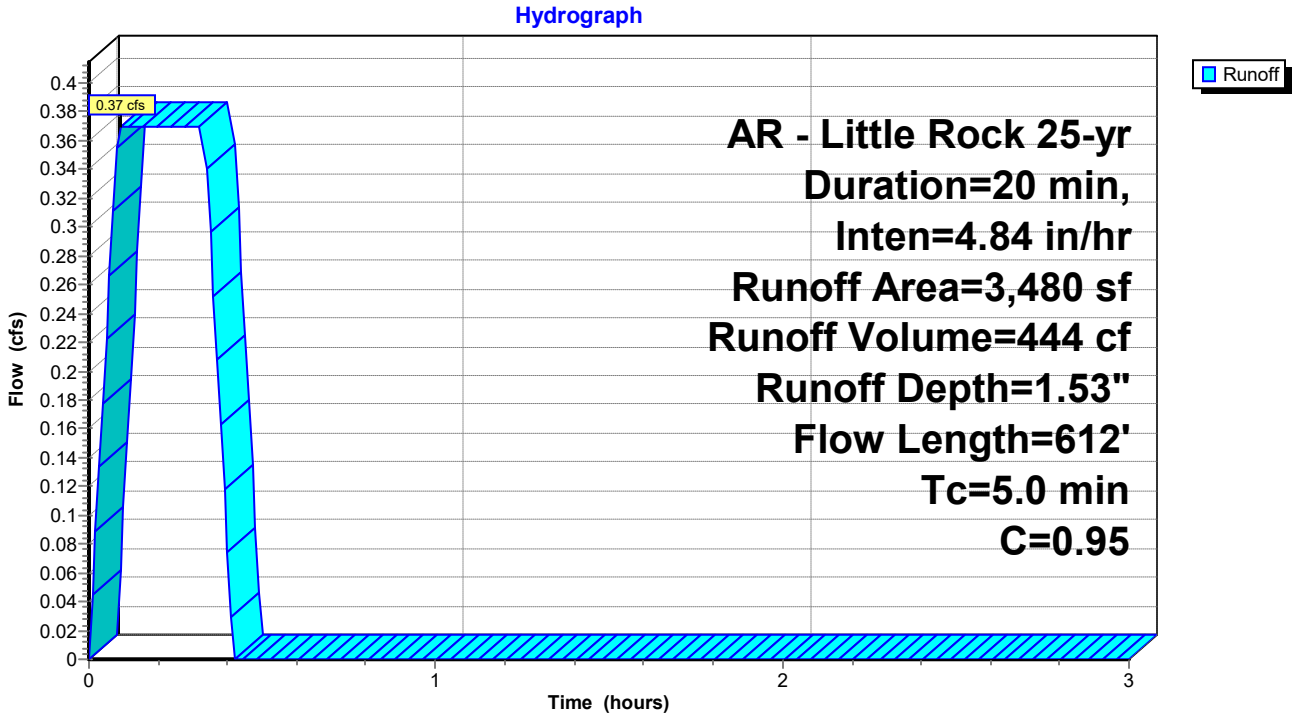
Runoff = 0.37 cfs @ 0.09 hrs, Volume= 444 cf, Depth= 1.53"
Routed to Pond CI-C3 : CI - C3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
3,480	0.95	Paving, Sidewalks
3,480	0.95	Weighted Average
3,480		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	22	0.0200	1.16		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.0	10	0.0340	3.74		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	18	0.0390	4.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.6	147	0.0380	3.96		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.0	415		1.73		**Direct Entry, Concentrated Flow (Min)**
5.0	612	Total			

Subcatchment C3: Drainage Basin C3



Summary for Subcatchment C4: Drainage Basin C4

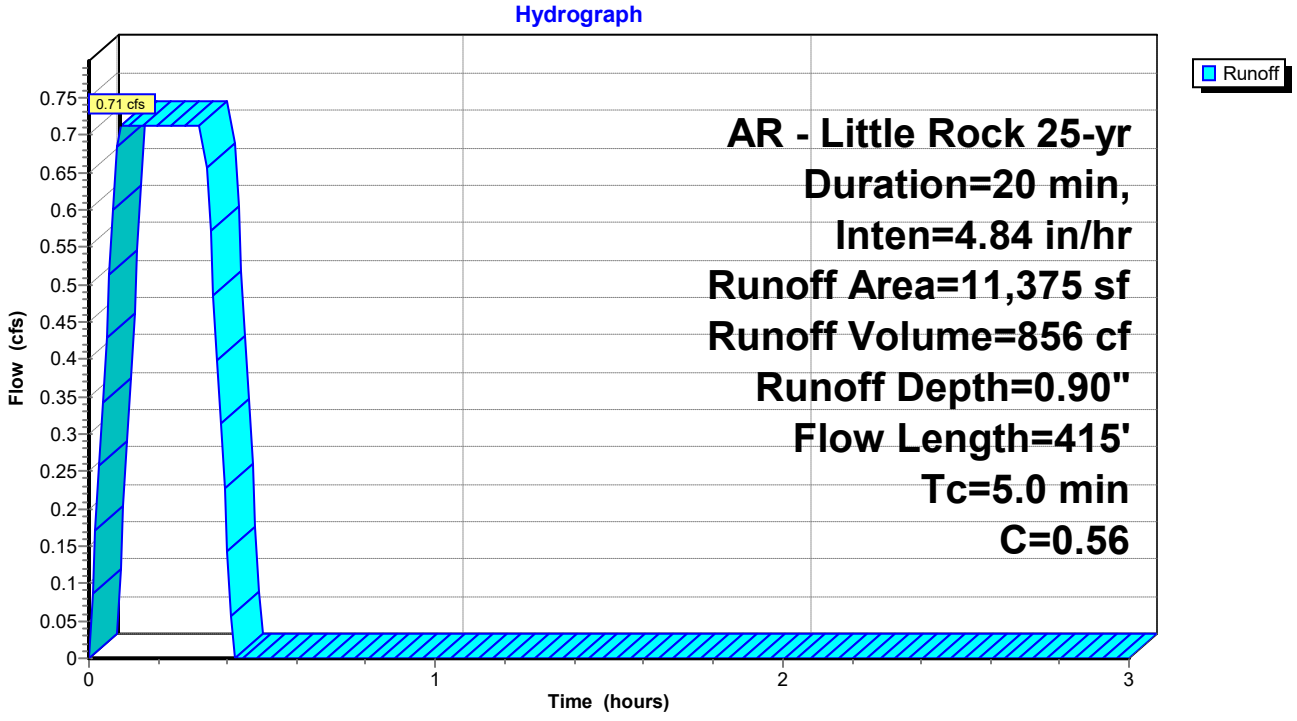
Runoff = 0.71 cfs @ 0.09 hrs, Volume= 856 cf, Depth= 0.90"
Routed to Pond CI-C3 : CI - C3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
8,130	0.40	Sod Yard
3,245	0.95	Paving, Sidewalks
11,375	0.56	Weighted Average
8,130		71.47% Pervious Area
3,245		28.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	415		1.38		**Direct Entry, Concentrated Flow (Min)**

Subcatchment C4: Drainage Basin C4



Summary for Subcatchment C5: Drainage Basin C5

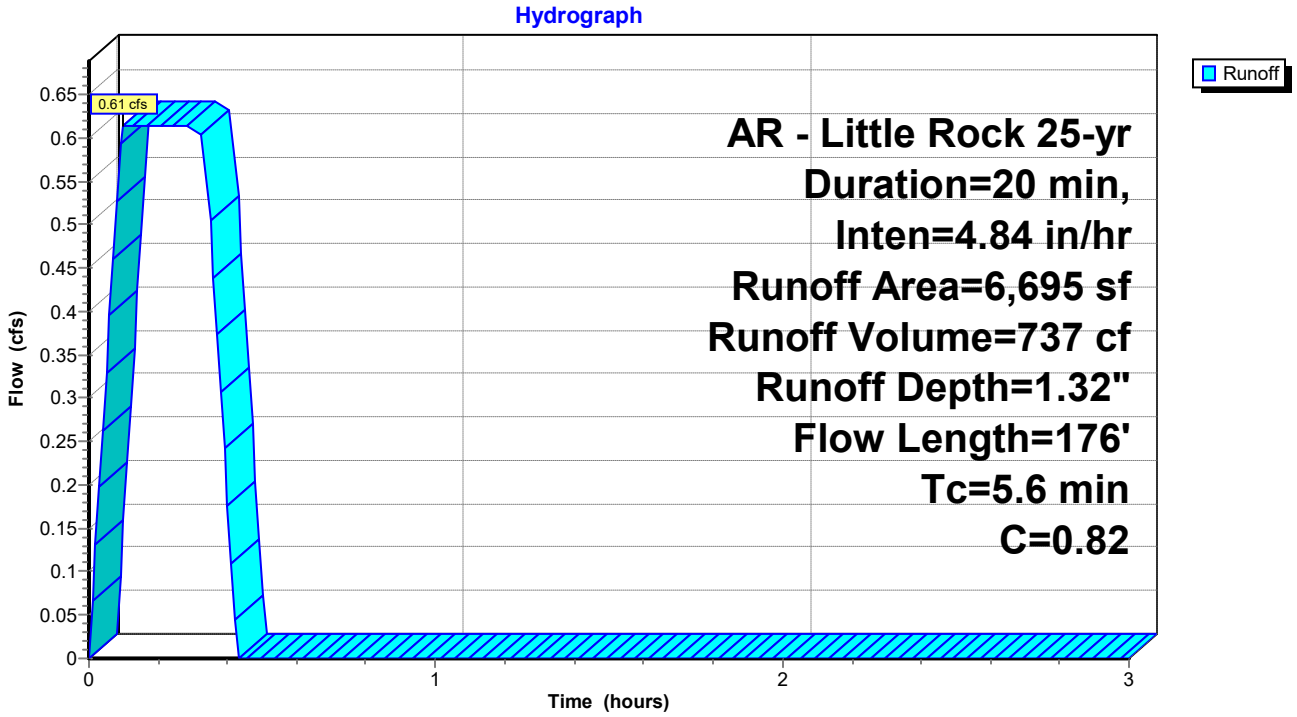
Runoff = 0.61 cfs @ 0.10 hrs, Volume= 737 cf, Depth= 1.32"
Routed to Pond CI-C4 : CI - C4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
1,634	0.40	Sod Yard
5,061	0.95	Paving, Sidewalks
6,695	0.82	Weighted Average
1,634		24.41% Pervious Area
5,061		75.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	5	0.2990	0.14		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.2	12	0.0130	0.87		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
3.9	8	0.0070	0.03		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.5	58	0.0080	1.82		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	14	0.0280	3.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	23	0.0370	3.90		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	13	0.0940	6.22		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	13	0.0560	4.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	30	0.0180	2.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
5.6	176	Total			

Subcatchment C5: Drainage Basin C5



Summary for Subcatchment C6: Drainage Basin C6

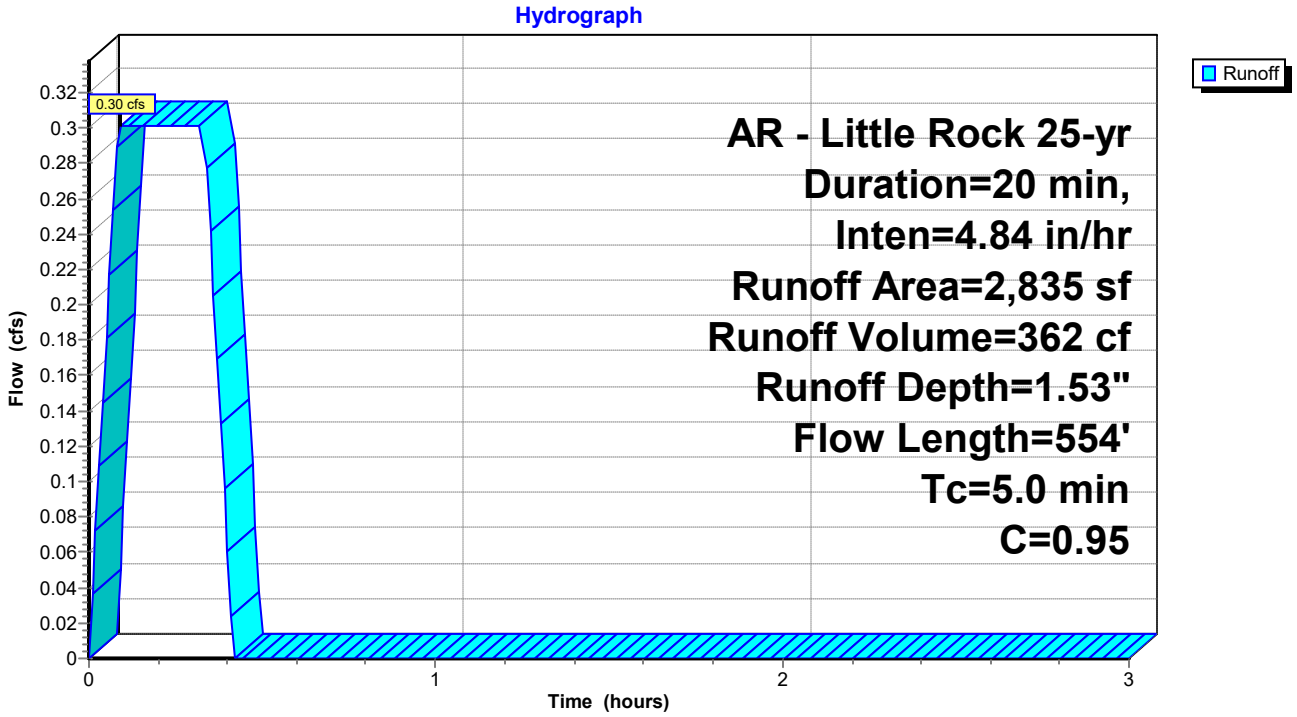
Runoff = 0.30 cfs @ 0.09 hrs, Volume= 362 cf, Depth= 1.53"
Routed to Pond CI-C5 : CI - C5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
2,835	0.95	Paving, Sidewalks
2,835	0.95	Weighted Average
2,835		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	22	0.0200	1.16		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	19	0.0100	2.03		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	17	0.0170	2.65		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	26	0.0360	3.85		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	28	0.0610	5.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	27	0.0610	5.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.1	415		1.69		**Direct Entry, Concentrated Flow (Min)**
5.0	554	Total			

Subcatchment C6: Drainage Basin C6



Summary for Subcatchment C7: Drainage Basin C7

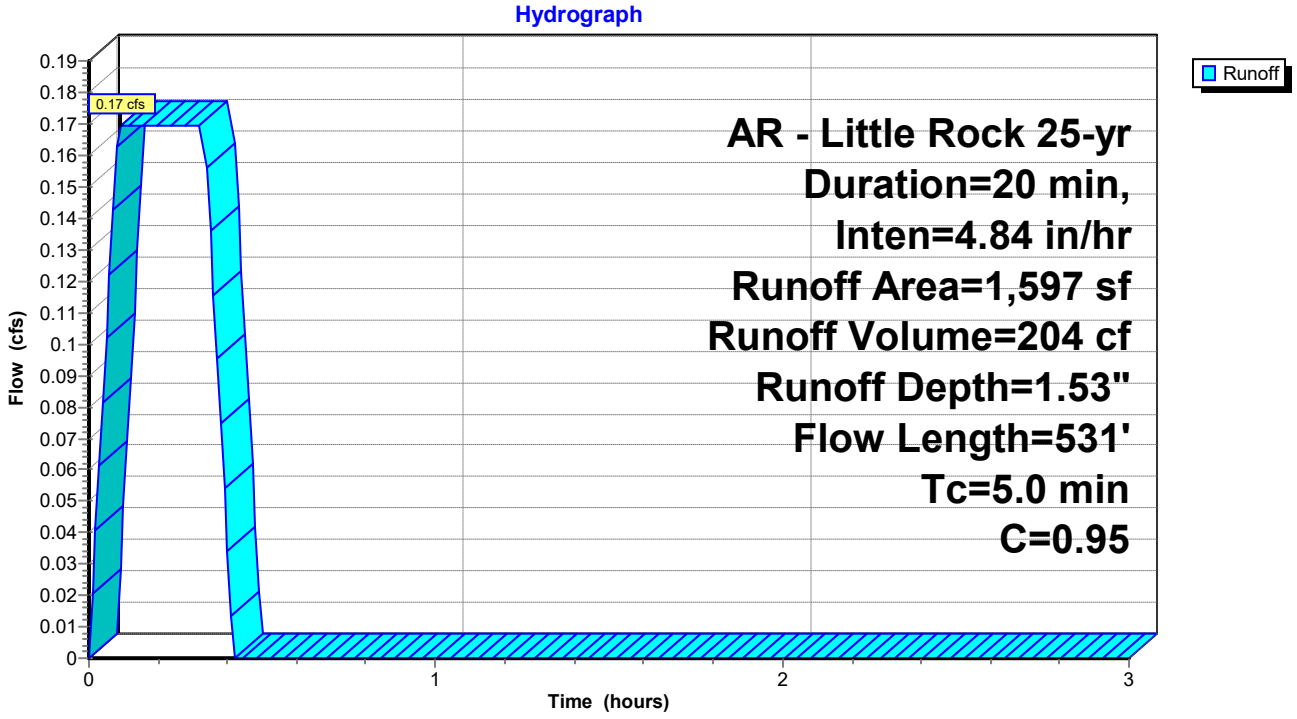
Runoff = 0.17 cfs @ 0.09 hrs, Volume= 204 cf, Depth= 1.53"
Routed to Pond CI-D1 : CI - D1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
1,597	0.95	Paving, Sidewalks
1,597	0.95	Weighted Average
1,597		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	19	0.0200	1.13		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	16	0.0540	4.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.3	81	0.0580	4.89		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.3	415		1.61		**Direct Entry, Concentrated Flow (Min)**
5.0	531	Total			

Subcatchment C7: Drainage Basin C7



Summary for Subcatchment C8: Drainage Basin C8

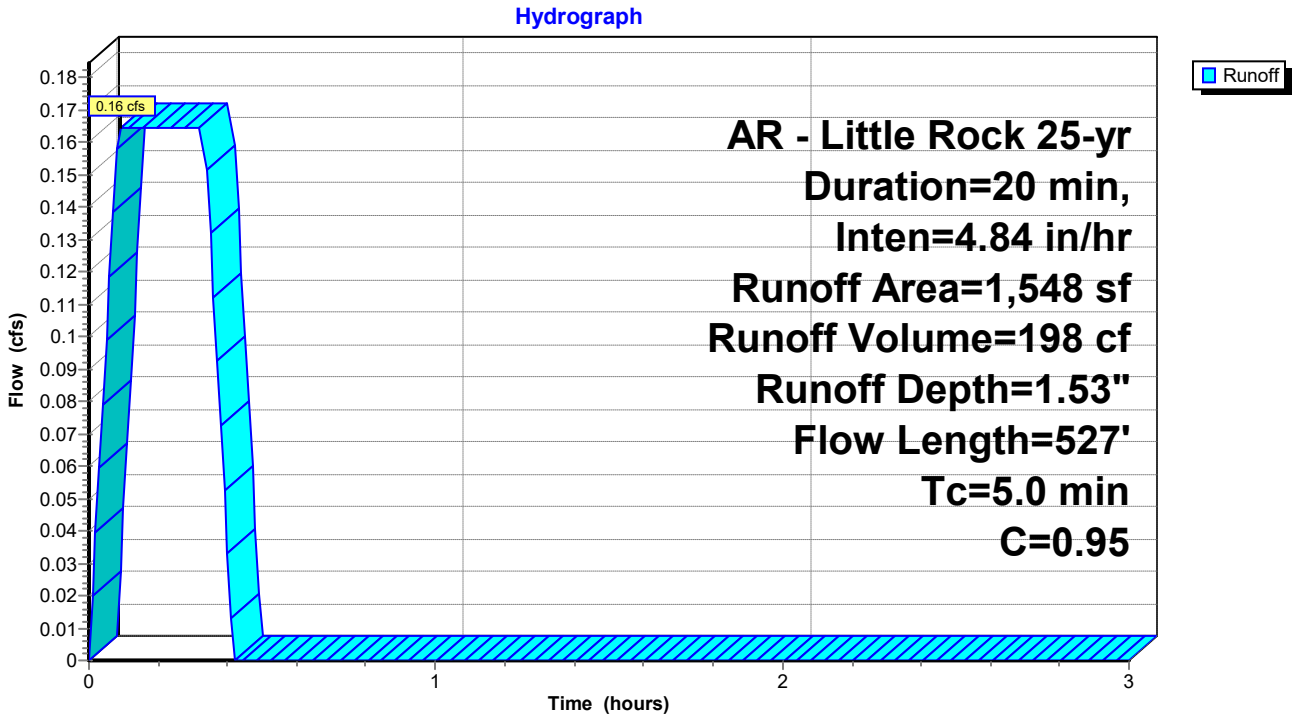
Runoff = 0.16 cfs @ 0.09 hrs, Volume= 198 cf, Depth= 1.53"
Routed to Pond CI-D2 : CI - D2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
1,548	0.95	Paving, Sidewalks
1,548	0.95	Weighted Average
1,548		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	18	0.0200	1.12		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.3	94	0.0610	5.01		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
4.4	415		1.57		**Direct Entry, Concentrated Flow (Min)**
5.0	527	Total			

Subcatchment C8: Drainage Basin C8



Summary for Subcatchment C9: Drainage Basin C9

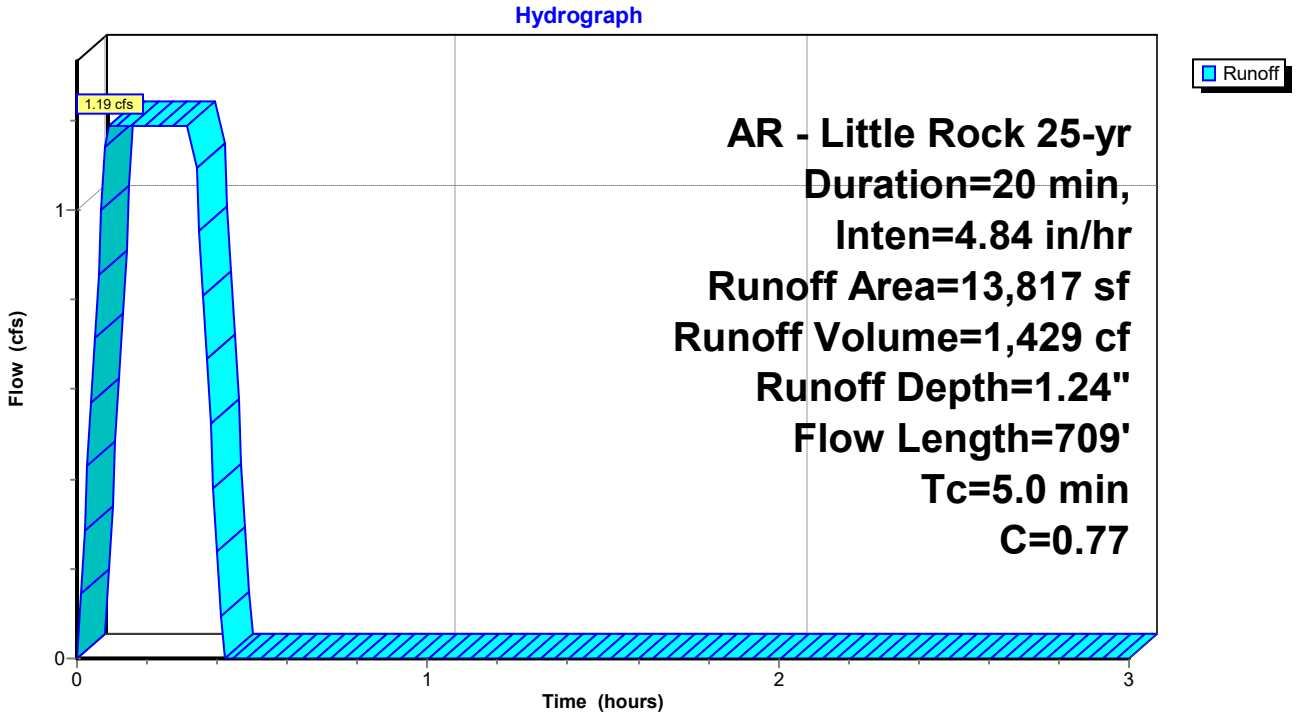
Runoff = 1.19 cfs @ 0.09 hrs, Volume= 1,429 cf, Depth= 1.24"
Routed to Pond CI-C6 : CI - C6

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=20 min, Inten=4.84 in/hr

Area (sf)	C	Description
4,456	0.40	Sod Yard
9,361	0.95	Paving, Sidewalks
13,817	0.77	Weighted Average
4,456		32.25% Pervious Area
9,361		67.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	100	0.0140	1.36		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	13	0.0150	2.49		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	23	0.0160	2.57		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	7	0.0050	1.44		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	8	0.0100	2.03		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	41	0.0420	4.16		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	41	0.0540	4.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	61	0.0520	4.63		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
2.9	415		2.39		**Direct Entry, Concentrated Flow (Min)**
5.0	709	Total			

Subcatchment C9: Drainage Basin C9

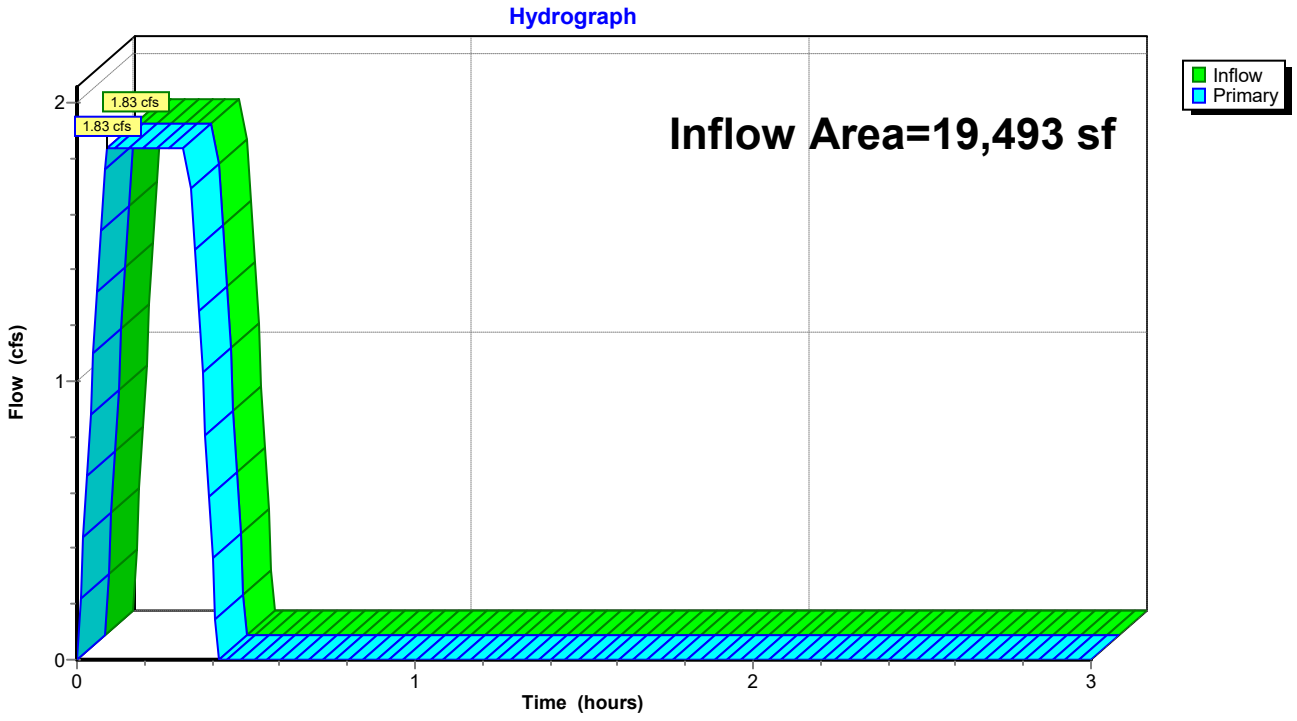


Summary for Pond CI-A1: CI - A1

Inflow Area = 19,493 sf, 74.78% Impervious, Inflow Depth = 1.35" for 25-yr event
Inflow = 1.83 cfs @ 0.09 hrs, Volume= 2,199 cf
Primary = 1.83 cfs @ 0.09 hrs, Volume= 2,199 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond JB-A2 : JB - A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-A1: CI - A1

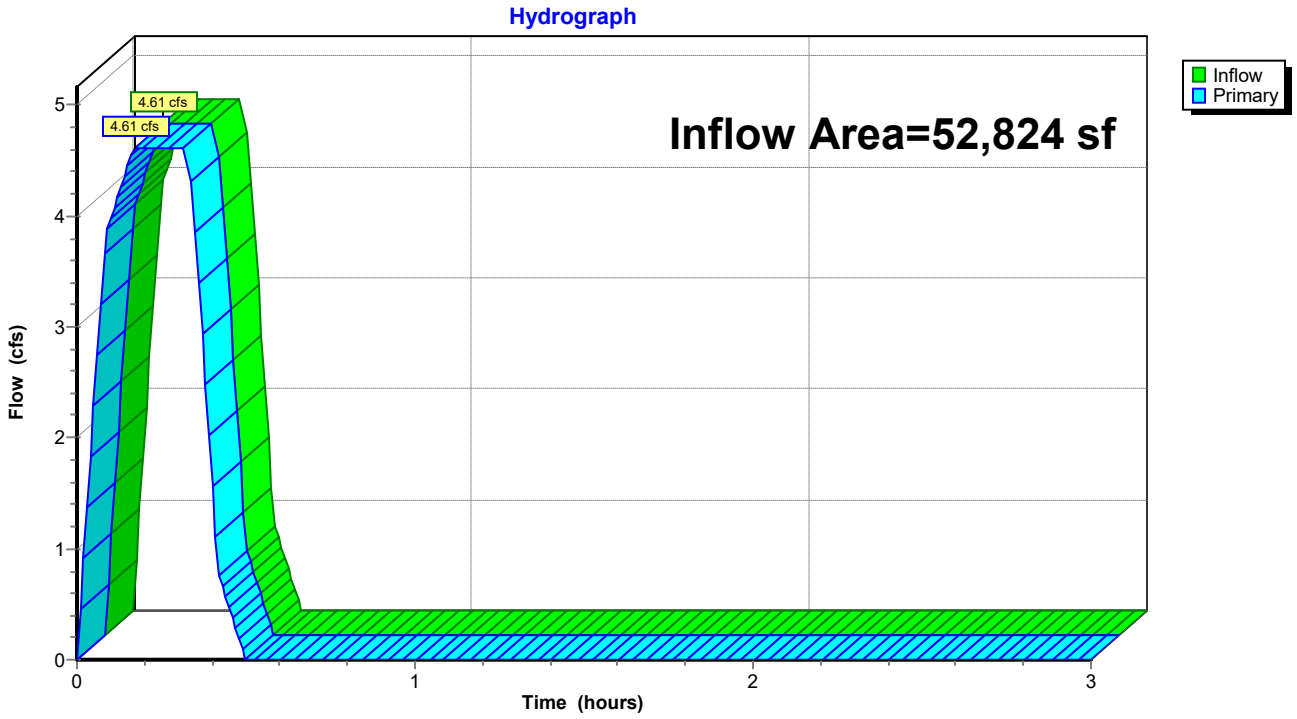


Summary for Pond CI-A3: CI - A3

Inflow Area = 52,824 sf, 61.20% Impervious, Inflow Depth = 1.26" for 25-yr event
Inflow = 4.61 cfs @ 0.17 hrs, Volume= 5,530 cf
Primary = 4.61 cfs @ 0.17 hrs, Volume= 5,530 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A4 : CI - A4

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-A3: CI - A3

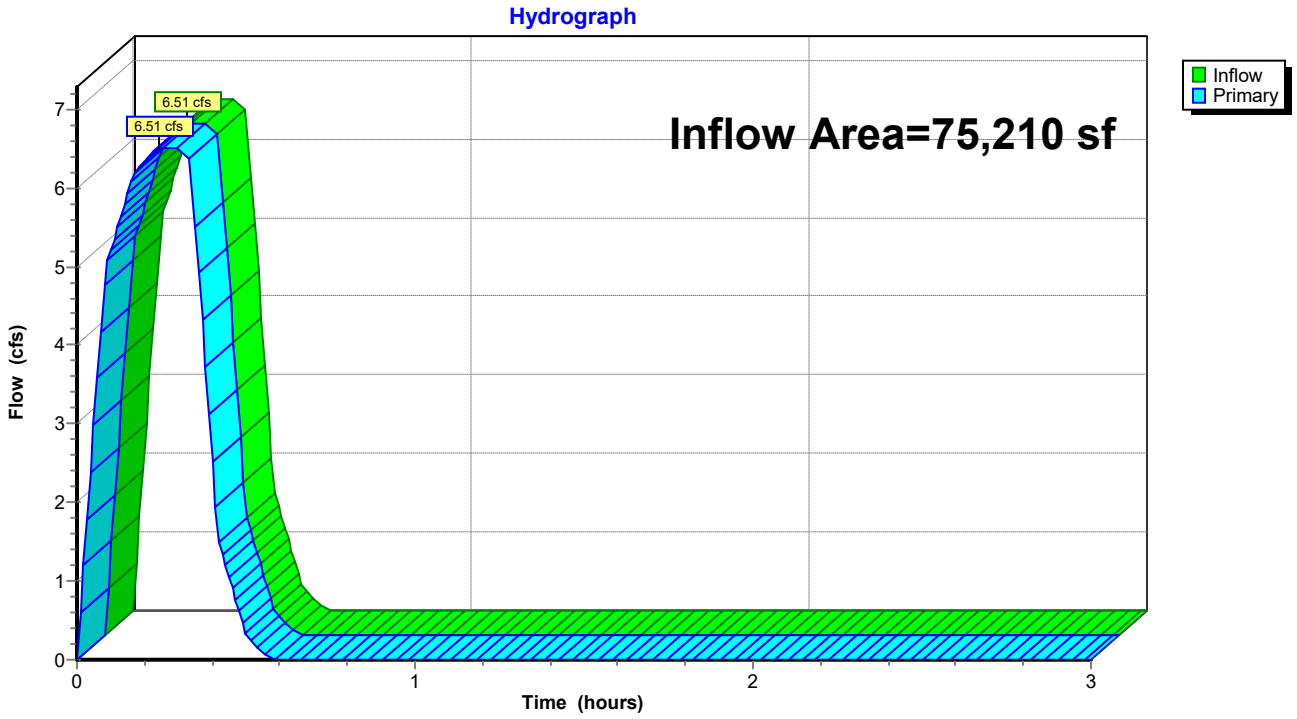


Summary for Pond CI-A4: CI - A4

Inflow Area = 75,210 sf, 60.06% Impervious, Inflow Depth = 1.25" for 25-yr event
Inflow = 6.51 cfs @ 0.24 hrs, Volume= 7,804 cf
Primary = 6.51 cfs @ 0.24 hrs, Volume= 7,804 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A5 : CI - A5

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-A4: CI - A4

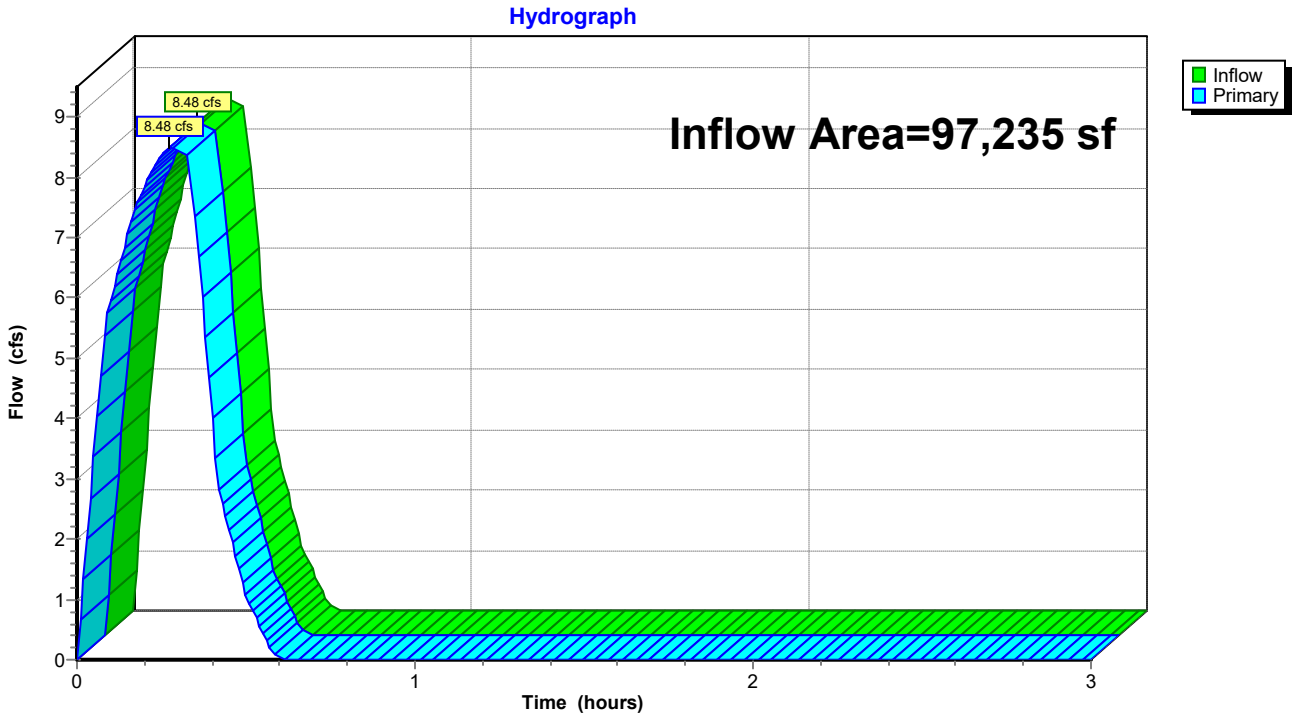


Summary for Pond CI-A5: CI - A5

Inflow Area = 97,235 sf, 62.81% Impervious, Inflow Depth = 1.26" for 25-yr event
Inflow = 8.48 cfs @ 0.27 hrs, Volume= 10,171 cf
Primary = 8.48 cfs @ 0.27 hrs, Volume= 10,171 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond DP : Existing North Detention Pond

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-A5: CI - A5

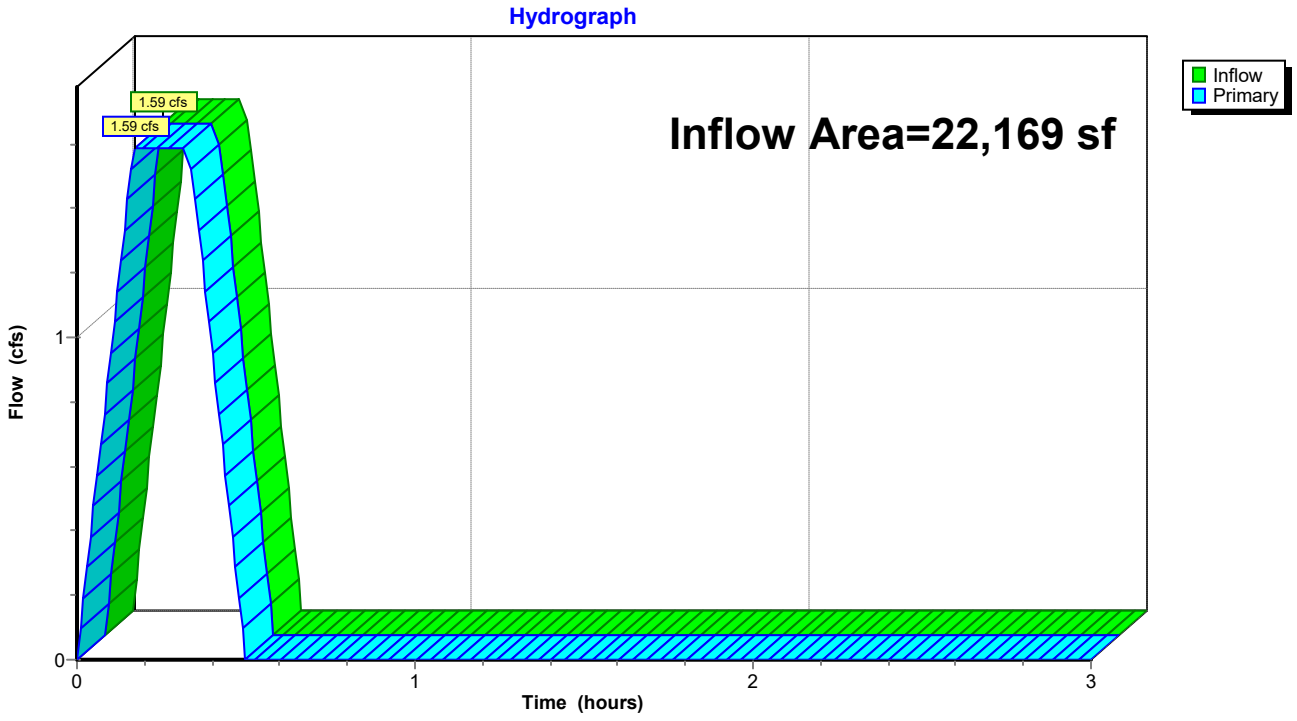


Summary for Pond CI-B2: CI - B2

Inflow Area = 22,169 sf, 29.72% Impervious, Inflow Depth = 1.03" for 25-yr event
Inflow = 1.59 cfs @ 0.17 hrs, Volume= 1,906 cf
Primary = 1.59 cfs @ 0.17 hrs, Volume= 1,906 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond JB-A2 : JB - A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-B2: CI - B2

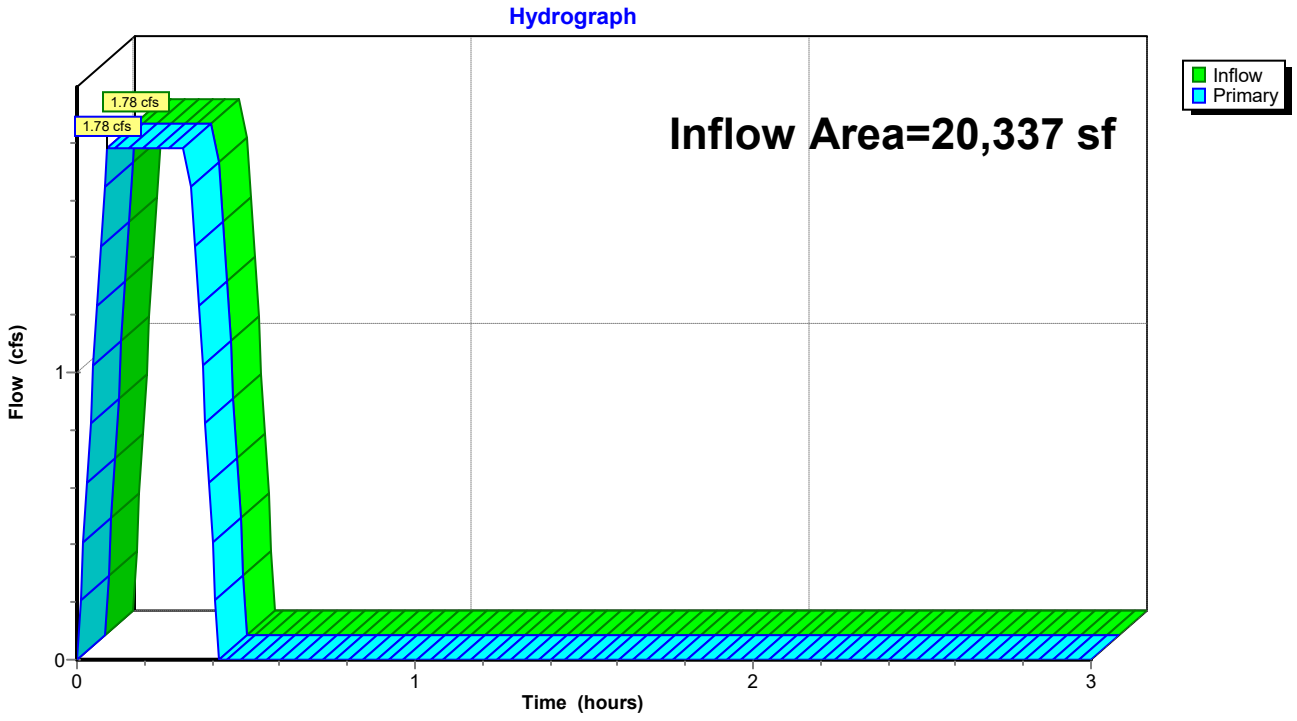


Summary for Pond CI-C1: CI - C1

Inflow Area = 20,337 sf, 69.83% Impervious, Inflow Depth = 1.26" for 25-yr event
Inflow = 1.78 cfs @ 0.09 hrs, Volume= 2,130 cf
Primary = 1.78 cfs @ 0.09 hrs, Volume= 2,130 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C2 : CI - C2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C1: CI - C1

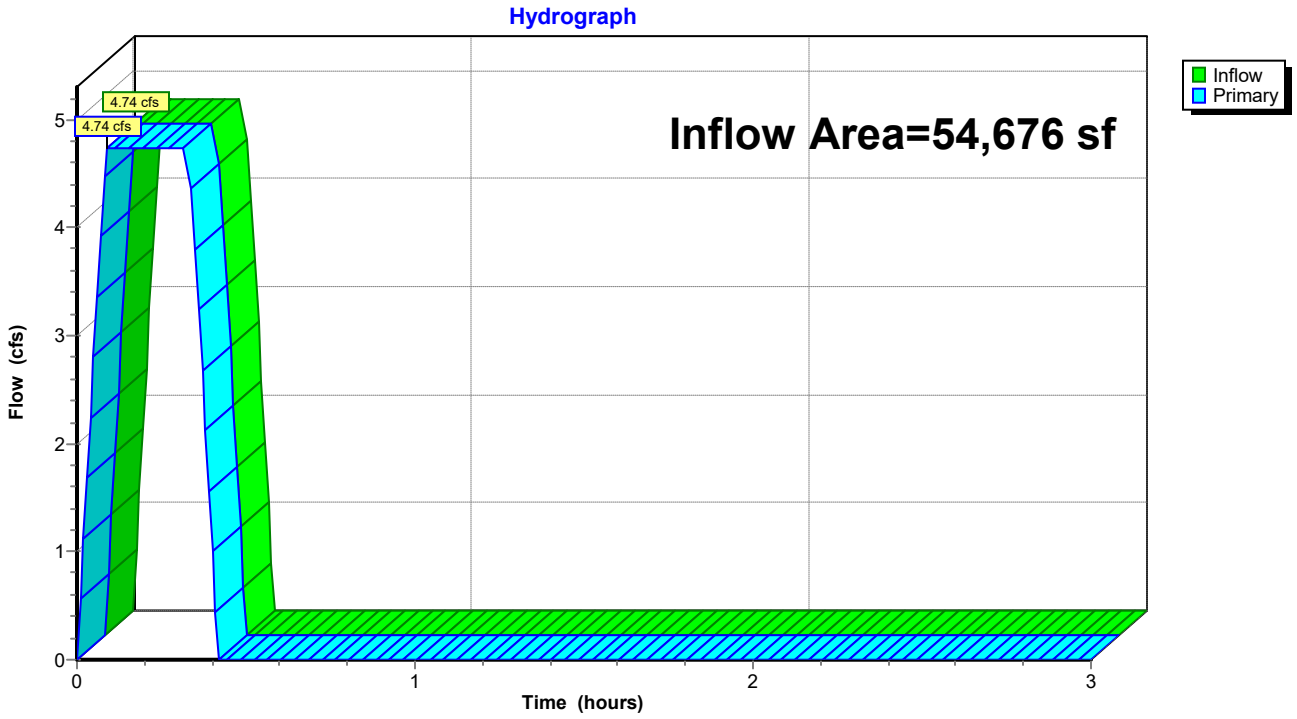


Summary for Pond CI-C2: CI - C2

Inflow Area = 54,676 sf, 67.97% Impervious, Inflow Depth = 1.25" for 25-yr event
Inflow = 4.74 cfs @ 0.09 hrs, Volume= 5,682 cf
Primary = 4.74 cfs @ 0.09 hrs, Volume= 5,682 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C3 : CI - C3

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C2: CI - C2

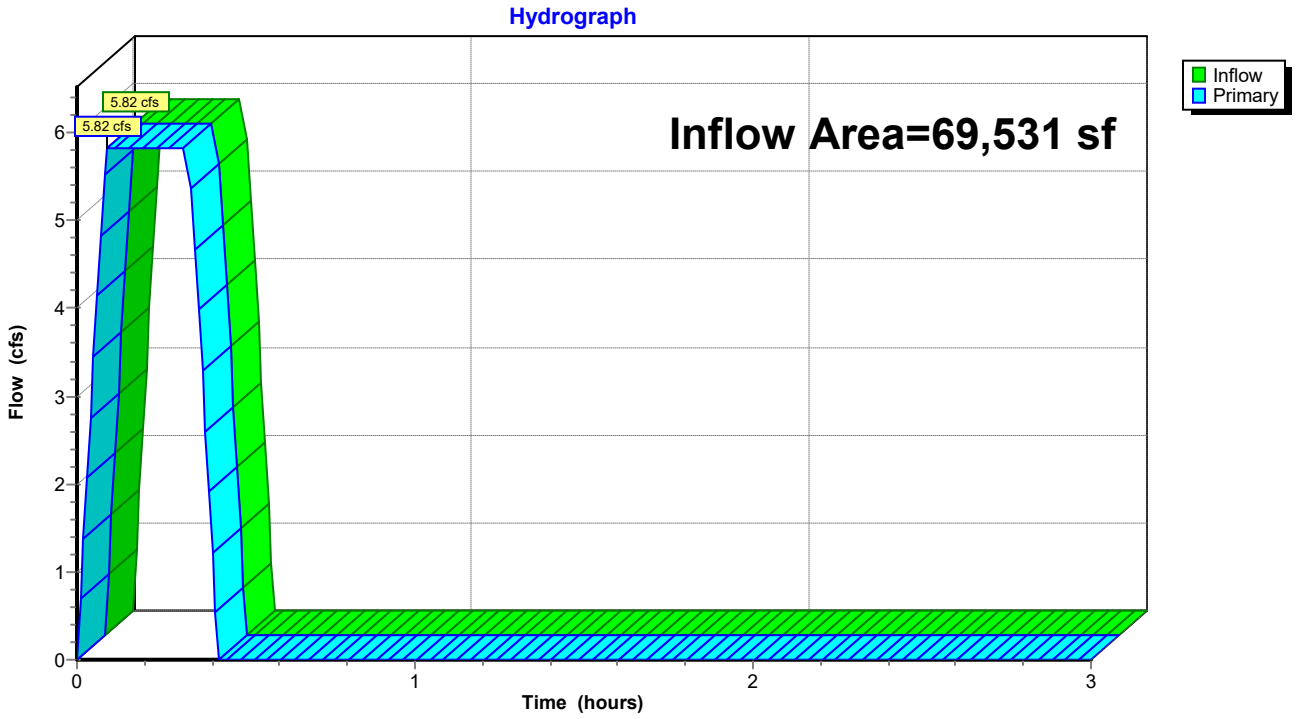


Summary for Pond CI-C3: CI - C3

Inflow Area = 69,531 sf, 63.12% Impervious, Inflow Depth = 1.20" for 25-yr event
Inflow = 5.82 cfs @ 0.09 hrs, Volume= 6,981 cf
Primary = 5.82 cfs @ 0.09 hrs, Volume= 6,981 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C4 : CI - C4

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C3: CI - C3

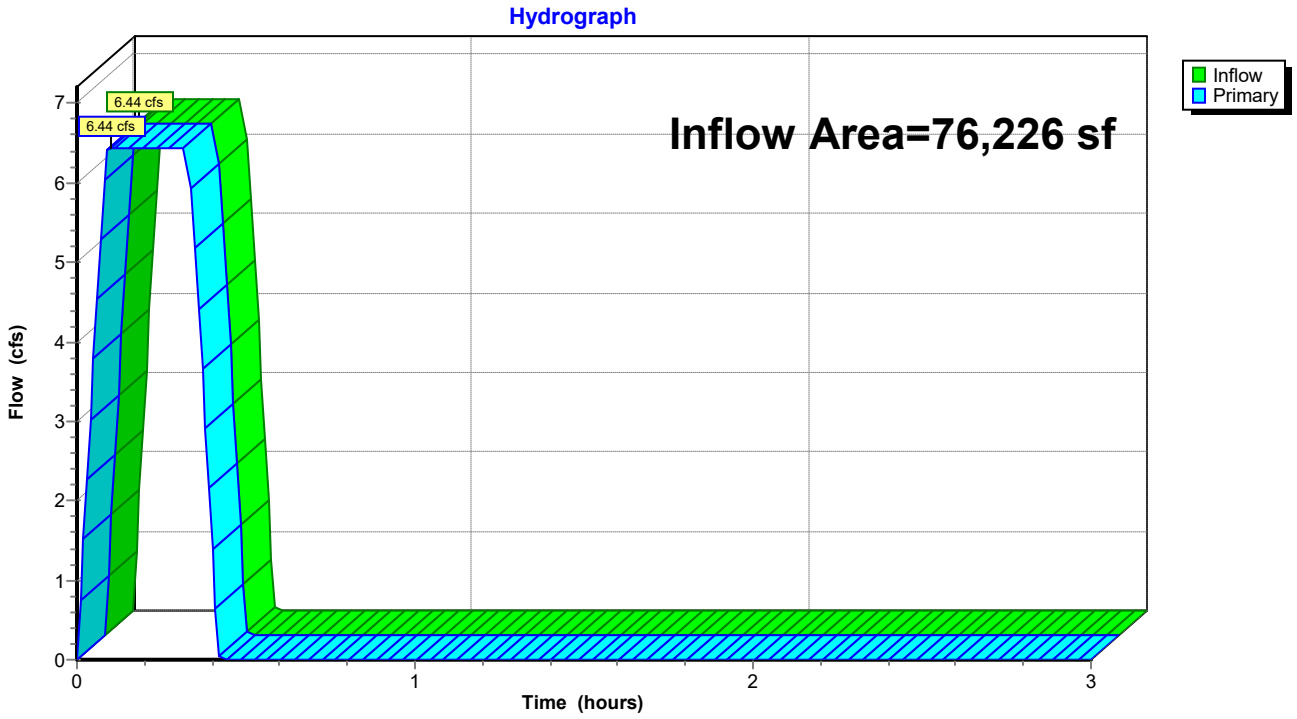


Summary for Pond CI-C4: CI - C4

Inflow Area = 76,226 sf, 64.22% Impervious, Inflow Depth = 1.22" for 25-yr event
Inflow = 6.44 cfs @ 0.10 hrs, Volume= 7,719 cf
Primary = 6.44 cfs @ 0.10 hrs, Volume= 7,719 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C5 : CI - C5

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C4: CI - C4

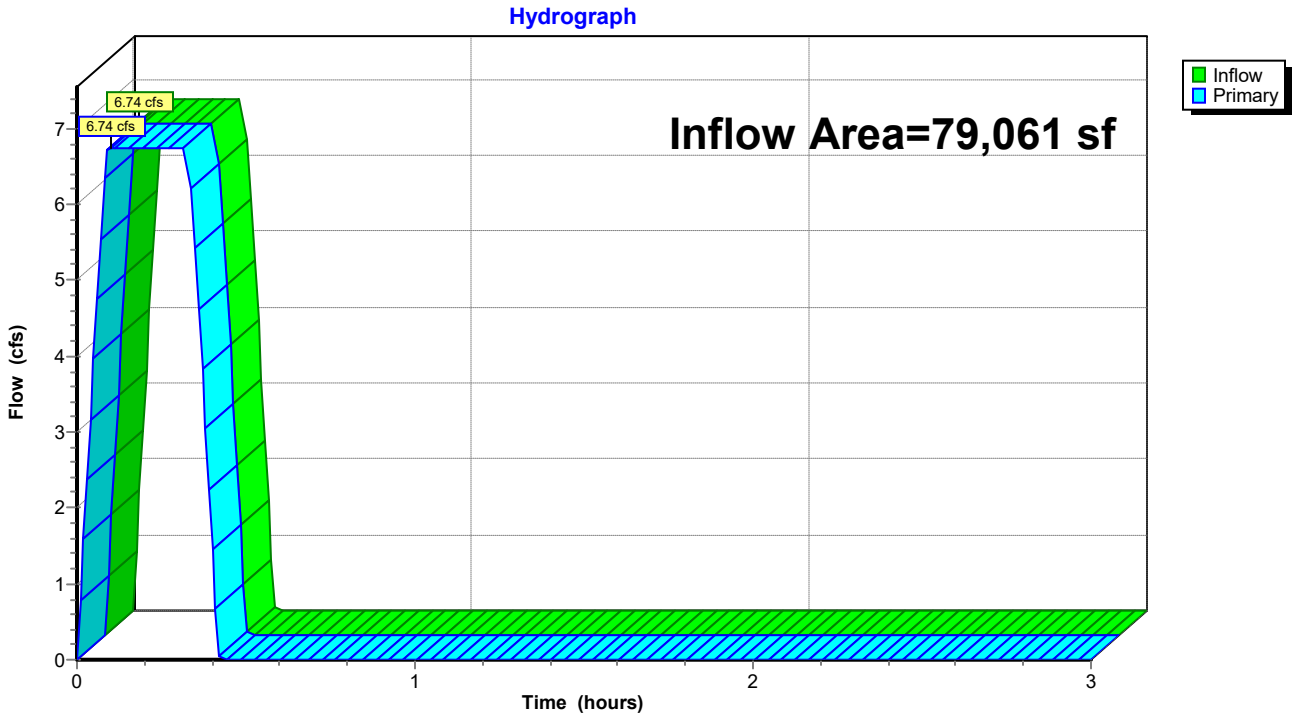


Summary for Pond CI-C5: CI - C5

Inflow Area = 79,061 sf, 65.50% Impervious, Inflow Depth = 1.23" for 25-yr event
Inflow = 6.74 cfs @ 0.10 hrs, Volume= 8,081 cf
Primary = 6.74 cfs @ 0.10 hrs, Volume= 8,081 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C6 : CI - C6

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C5: CI - C5

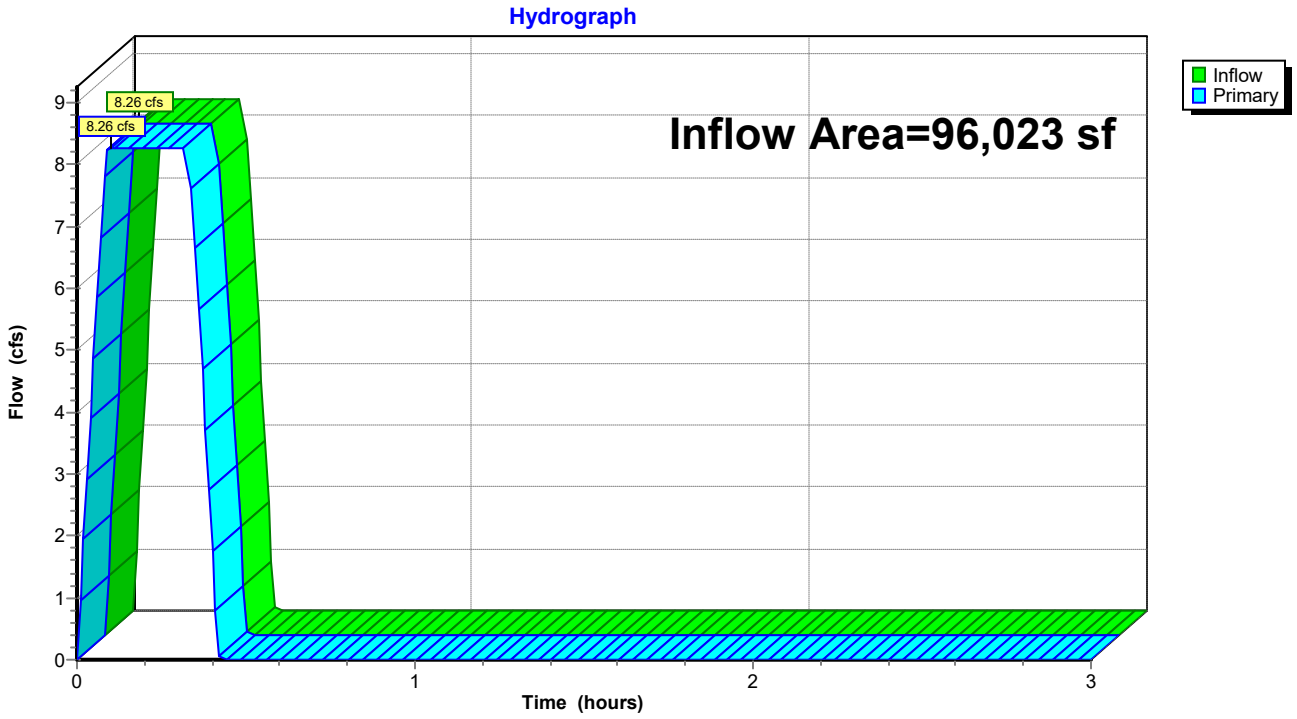


Summary for Pond CI-C6: CI - C6

Inflow Area = 96,023 sf, 66.95% Impervious, Inflow Depth = 1.24" for 25-yr event
Inflow = 8.26 cfs @ 0.10 hrs, Volume= 9,911 cf
Primary = 8.26 cfs @ 0.10 hrs, Volume= 9,911 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C7 : CI - C7

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C6: CI - C6

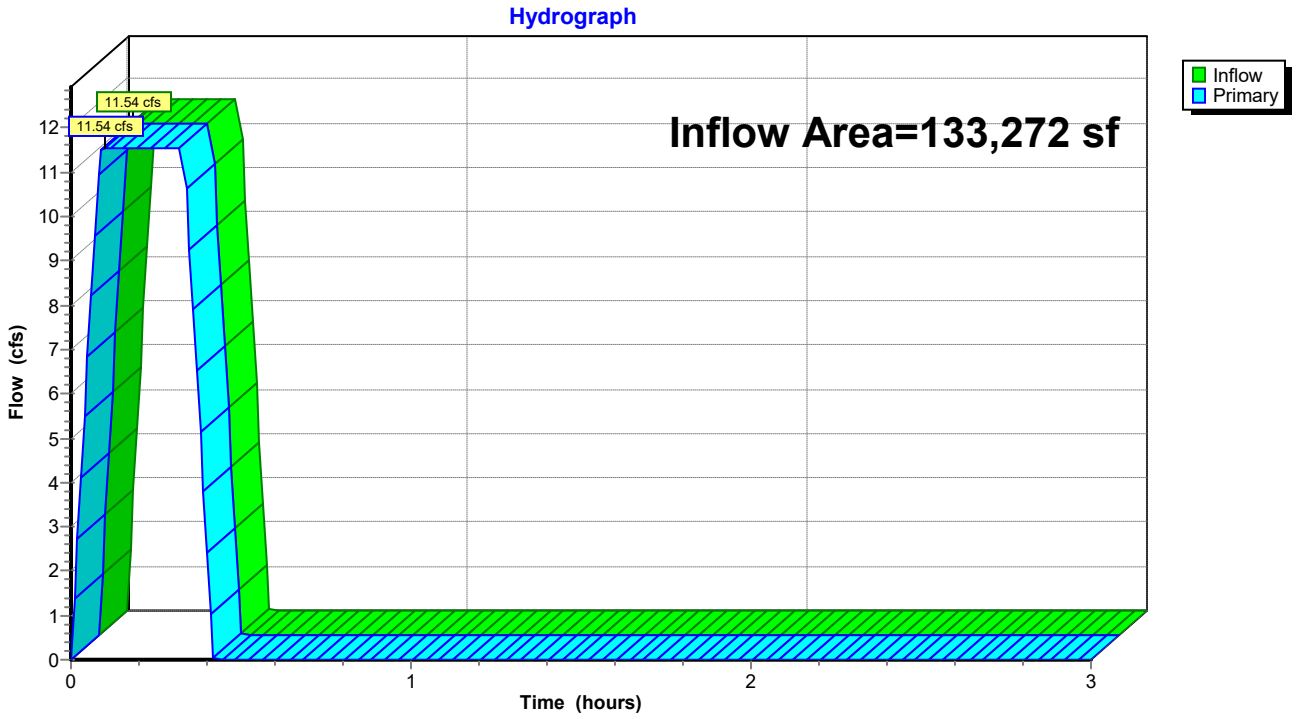


Summary for Pond CI-C7: CI - C7

Inflow Area = 133,272 sf, 67.70% Impervious, Inflow Depth = 1.25" for 25-yr event
Inflow = 11.54 cfs @ 0.10 hrs, Volume= 13,844 cf
Primary = 11.54 cfs @ 0.10 hrs, Volume= 13,844 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond DP : Existing North Detention Pond

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C7: CI - C7

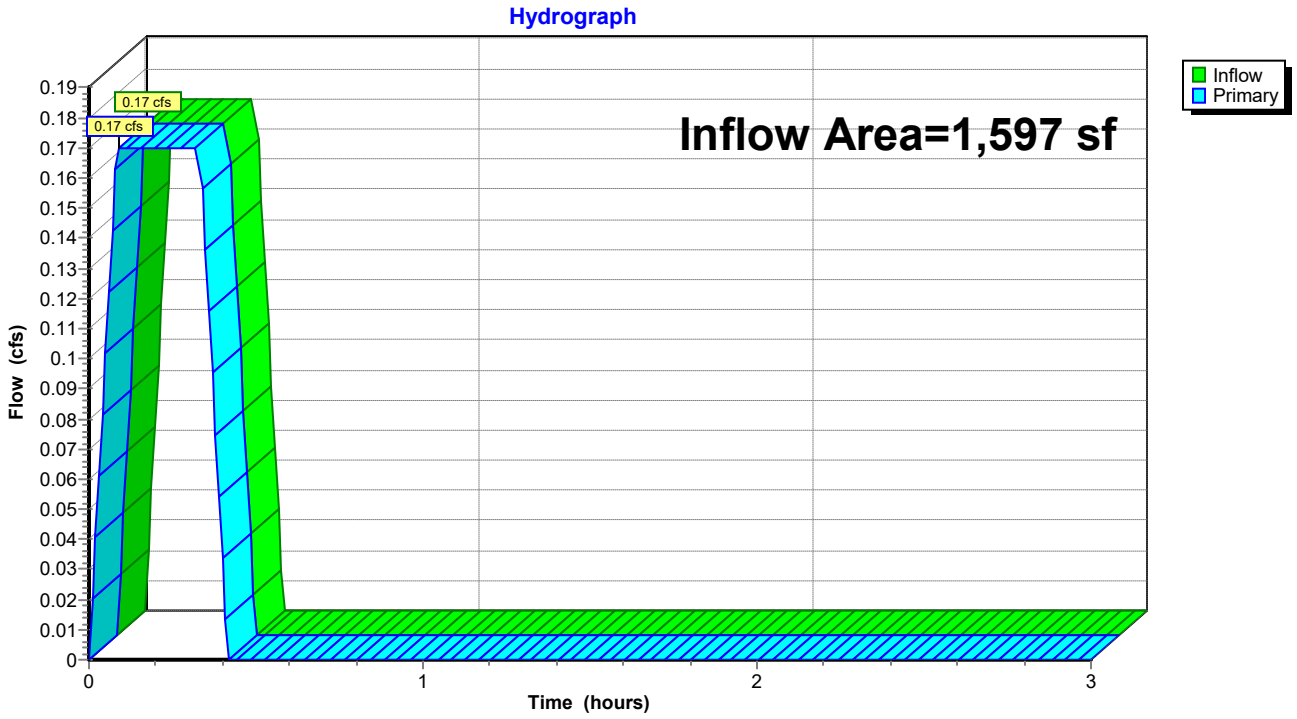


Summary for Pond CI-D1: CI - D1

Inflow Area = 1,597 sf,100.00% Impervious, Inflow Depth = 1.53" for 25-yr event
Inflow = 0.17 cfs @ 0.09 hrs, Volume= 204 cf
Primary = 0.17 cfs @ 0.09 hrs, Volume= 204 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-D2 : CI - D2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-D1: CI - D1

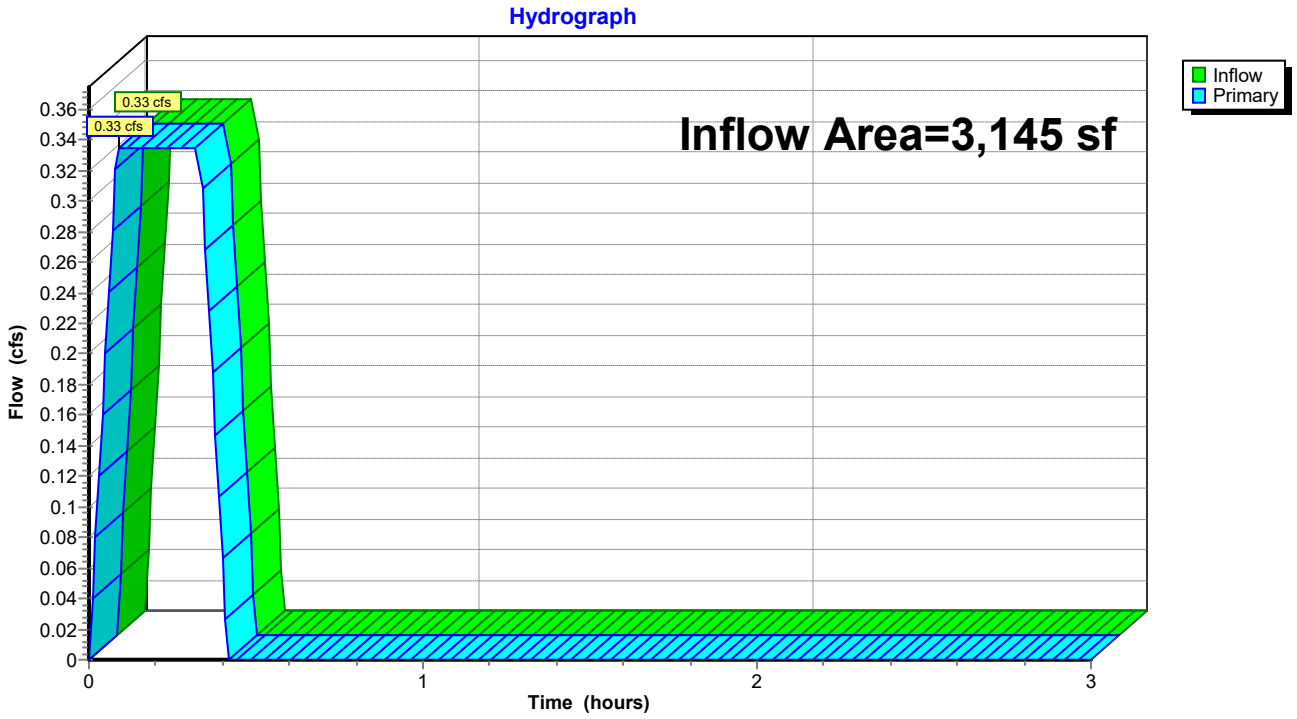


Summary for Pond CI-D2: CI - D2

Inflow Area = 3,145 sf,100.00% Impervious, Inflow Depth = 1.53" for 25-yr event
Inflow = 0.33 cfs @ 0.09 hrs, Volume= 401 cf
Primary = 0.33 cfs @ 0.09 hrs, Volume= 401 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C6 : CI - C6

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-D2: CI - D2

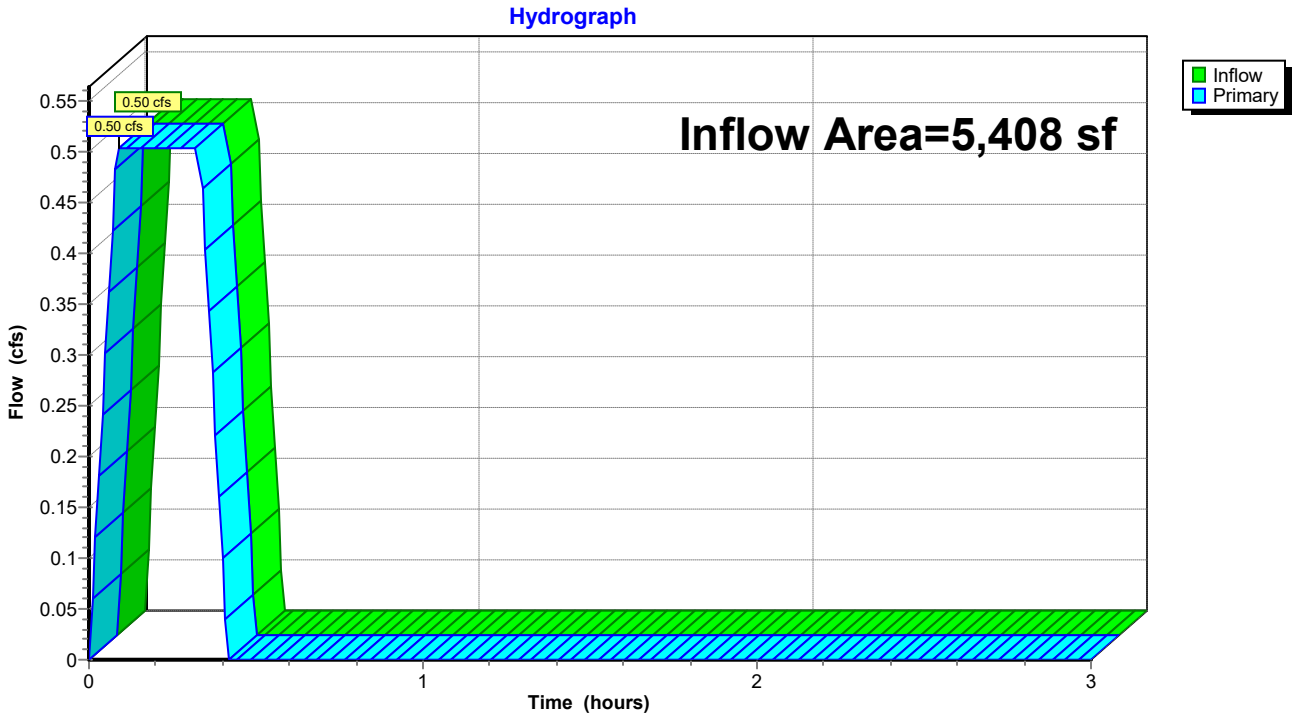


Summary for Pond CI-E1: CI - E1

Inflow Area = 5,408 sf, 77.35% Impervious, Inflow Depth = 1.34" for 25-yr event
Inflow = 0.50 cfs @ 0.09 hrs, Volume= 603 cf
Primary = 0.50 cfs @ 0.09 hrs, Volume= 603 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-E2 : CI - E2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-E1: CI - E1

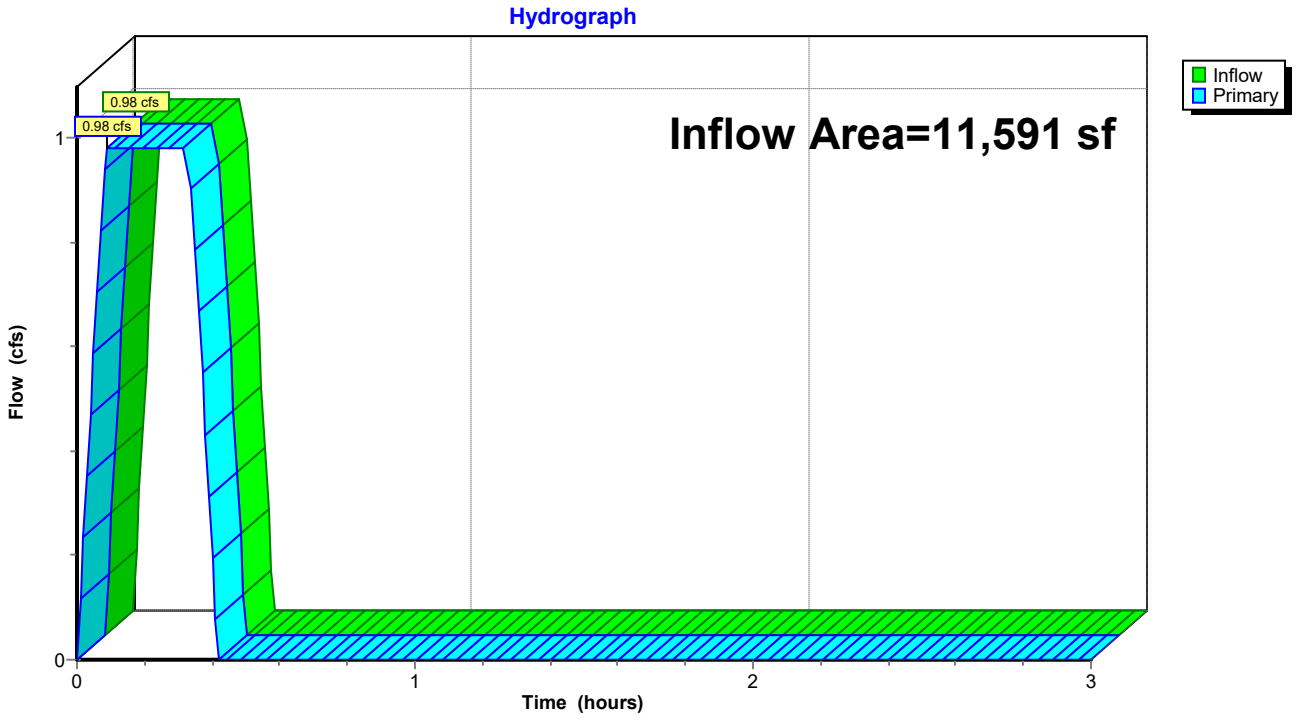


Summary for Pond CI-E2: CI - E2

Inflow Area = 11,591 sf, 64.62% Impervious, Inflow Depth = 1.22" for 25-yr event
Inflow = 0.98 cfs @ 0.09 hrs, Volume= 1,176 cf
Primary = 0.98 cfs @ 0.09 hrs, Volume= 1,176 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C7 : CI - C7

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-E2: CI - E2



Summary for Pond DP: Existing North Detention Pond

Inflow Area = 322,783 sf, 53.09% Impervious, Inflow Depth = 1.13" for 25-yr event
Inflow = 25.38 cfs @ 0.27 hrs, Volume= 30,442 cf
Outflow = 11.34 cfs @ 0.39 hrs, Volume= 30,442 cf, Atten= 55%, Lag= 7.1 min
Primary = 11.34 cfs @ 0.39 hrs, Volume= 30,442 cf
Routed to Link FINAL : APPROX DISCHARGE

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 383.07' @ 0.39 hrs Storage= 18,646 cf

Plug-Flow detention time= 19.8 min calculated for 30,341 cf (100% of inflow)
Center-of-Mass det. time= 20.0 min (33.5 - 13.5)

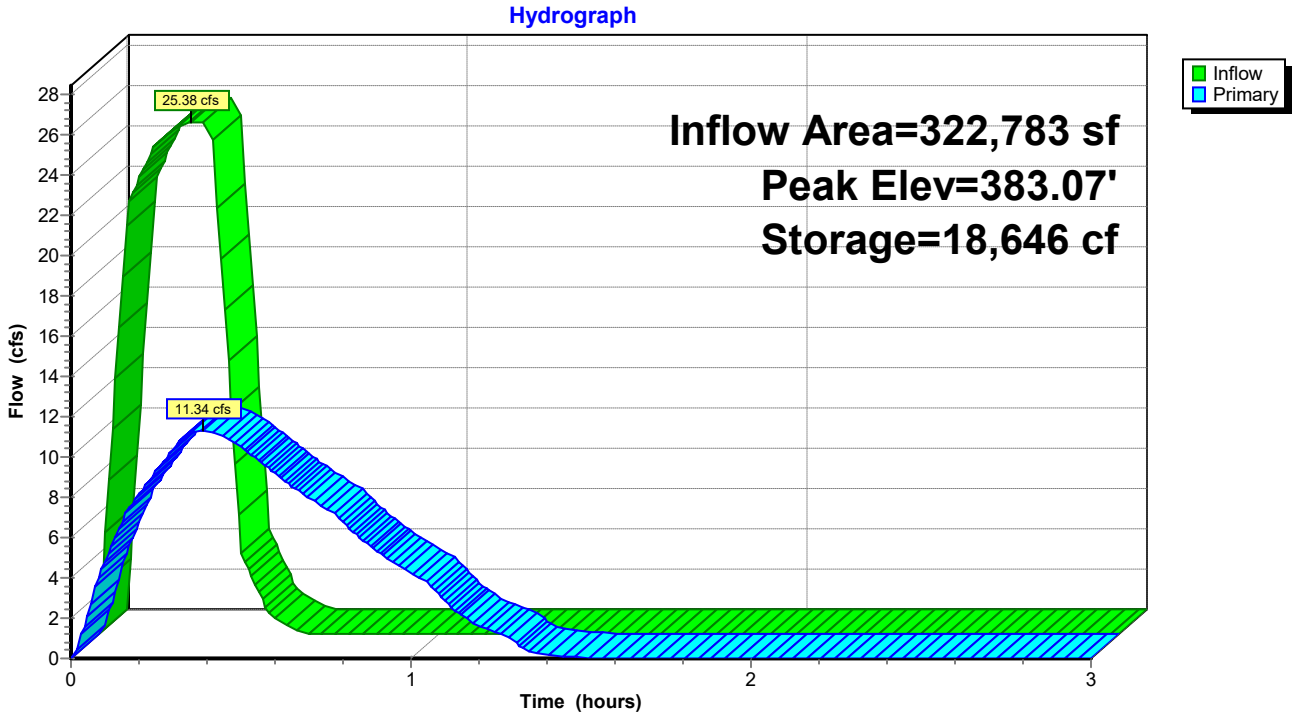
Volume	Invert	Avail.Storage	Storage Description
#1	381.17'	72,742 cf	**Custom Stage Data** Listed below

Elevation (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
381.17	0	0
381.50	200	200
382.00	1,825	2,025
382.50	5,265	7,290
383.00	9,300	16,590
383.50	13,733	30,323
384.00	18,578	48,901
384.50	23,841	72,742

Device	Routing	Invert	Outlet Devices
#1	Primary	384.16'	**5.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#2	Primary	381.17'	**1.7' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=11.34 cfs @ 0.39 hrs HW=383.07' (Free Discharge)
└**1=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)
└**2=Sharp-Crested Rectangular Weir** (Weir Controls 11.34 cfs @ 4.51 fps)

Pond DP: Existing North Detention Pond

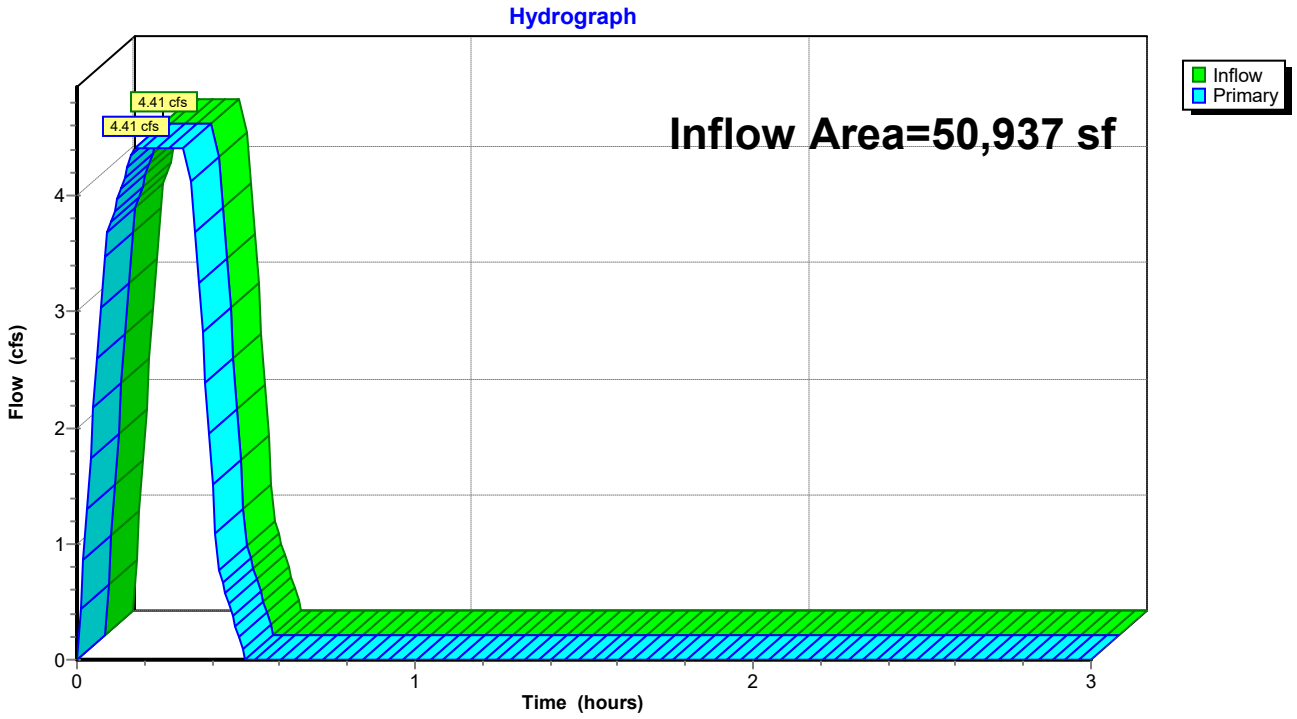


Summary for Pond JB-A2: JB - A2

Inflow Area = 50,937 sf, 59.76% Impervious, Inflow Depth = 1.25" for 25-yr event
Inflow = 4.41 cfs @ 0.17 hrs, Volume= 5,289 cf
Primary = 4.41 cfs @ 0.17 hrs, Volume= 5,289 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A3 : CI - A3

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond JB-A2: JB - A2

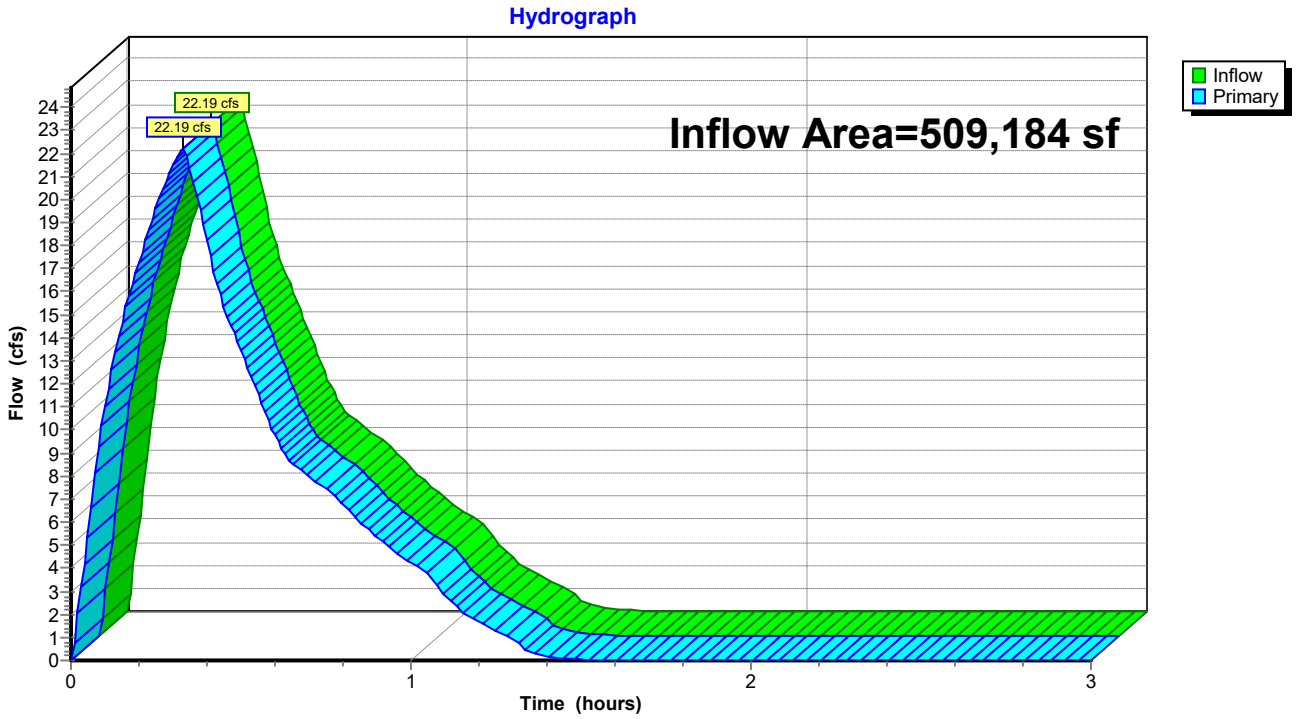


Summary for Link FINAL: APPROX DISCHARGE

Inflow Area = 509,184 sf, 38.62% Impervious, Inflow Depth = 1.04" for 25-yr event
Inflow = 22.19 cfs @ 0.33 hrs, Volume= 43,951 cf
Primary = 22.19 cfs @ 0.33 hrs, Volume= 43,951 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link FINAL: APPROX DISCHARGE



Summary for Subcatchment B1: Drainage Basin B1

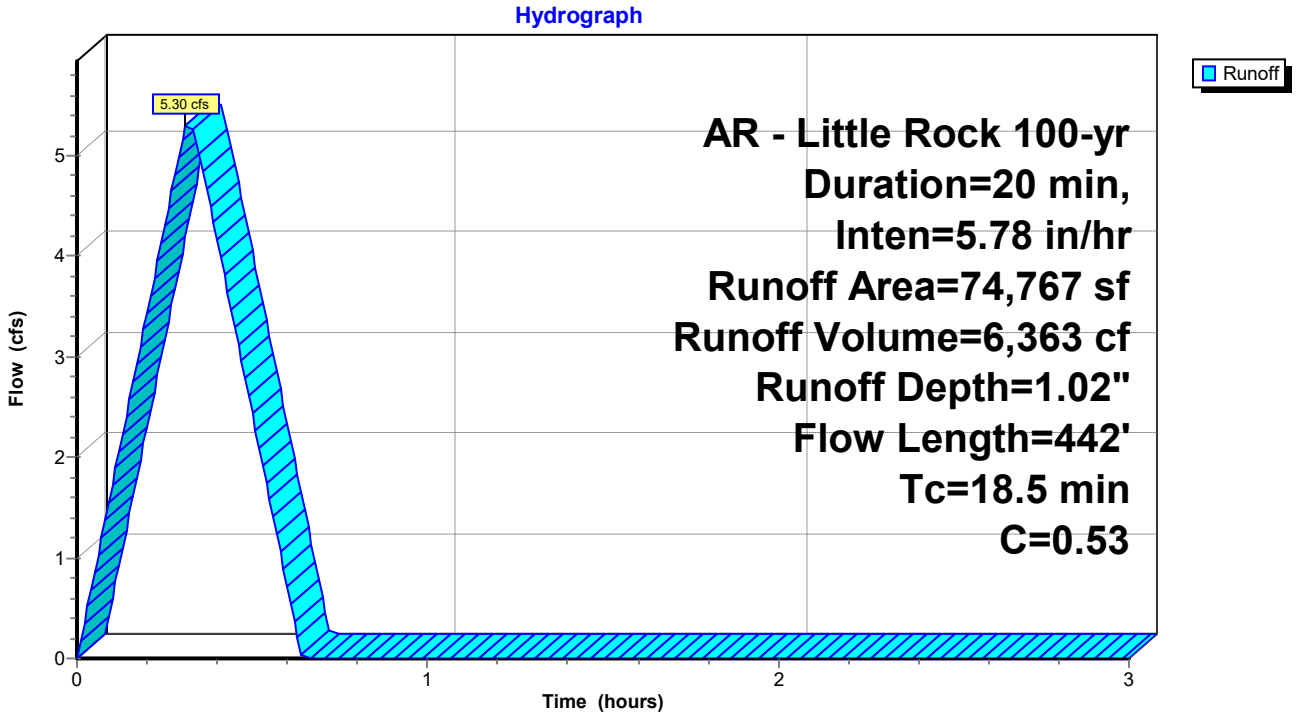
Runoff = 5.30 cfs @ 0.31 hrs, Volume= 6,363 cf, Depth= 1.02"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
9,241	0.51	Sod Yard
602	0.95	Paving, Sidewalks
64,924	0.53	Undeveloped
74,767	0.53	Weighted Average
74,165		99.19% Pervious Area
602		0.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	6	0.0180	0.86		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
2.6	25	0.1920	0.16		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
11.9	75	0.0370	0.11		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.7	58	0.0370	1.35		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.6	141	0.0420	1.43		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.7	60	0.0400	1.40		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
0.9	77	0.0420	1.43		**Shallow Concentrated Flow, Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
18.5	442	Total			

Subcatchment B1: Drainage Basin B1



Summary for Subcatchment B2: Drainage Basin B2

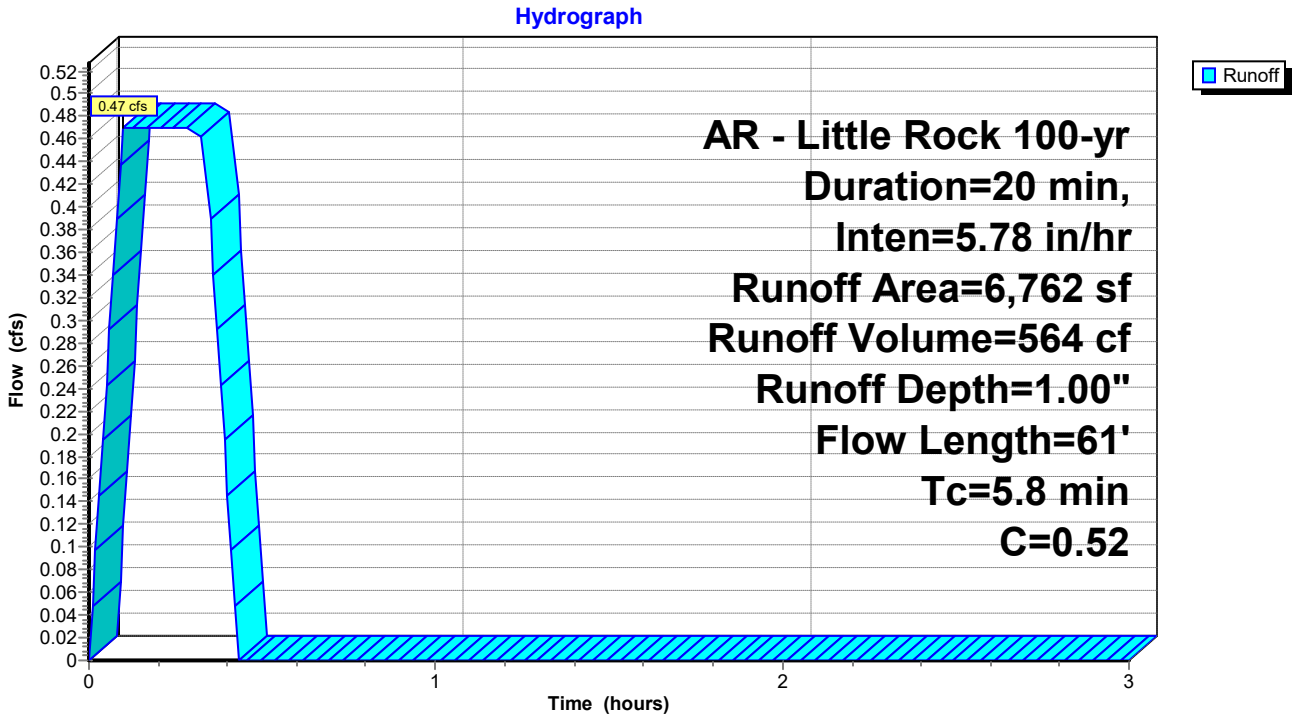
Runoff = 0.47 cfs @ 0.10 hrs, Volume= 564 cf, Depth= 1.00"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
6,595	0.51	Sod Yard
167	0.95	Paving, Sidewalks
6,762	0.52	Weighted Average
6,595		97.53% Pervious Area
167		2.47% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	6	0.0180	0.86		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
5.7	55	0.1240	0.16		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
5.8	61	Total			

Subcatchment B2: Drainage Basin B2



Summary for Subcatchment B3: Drainage Basin B3

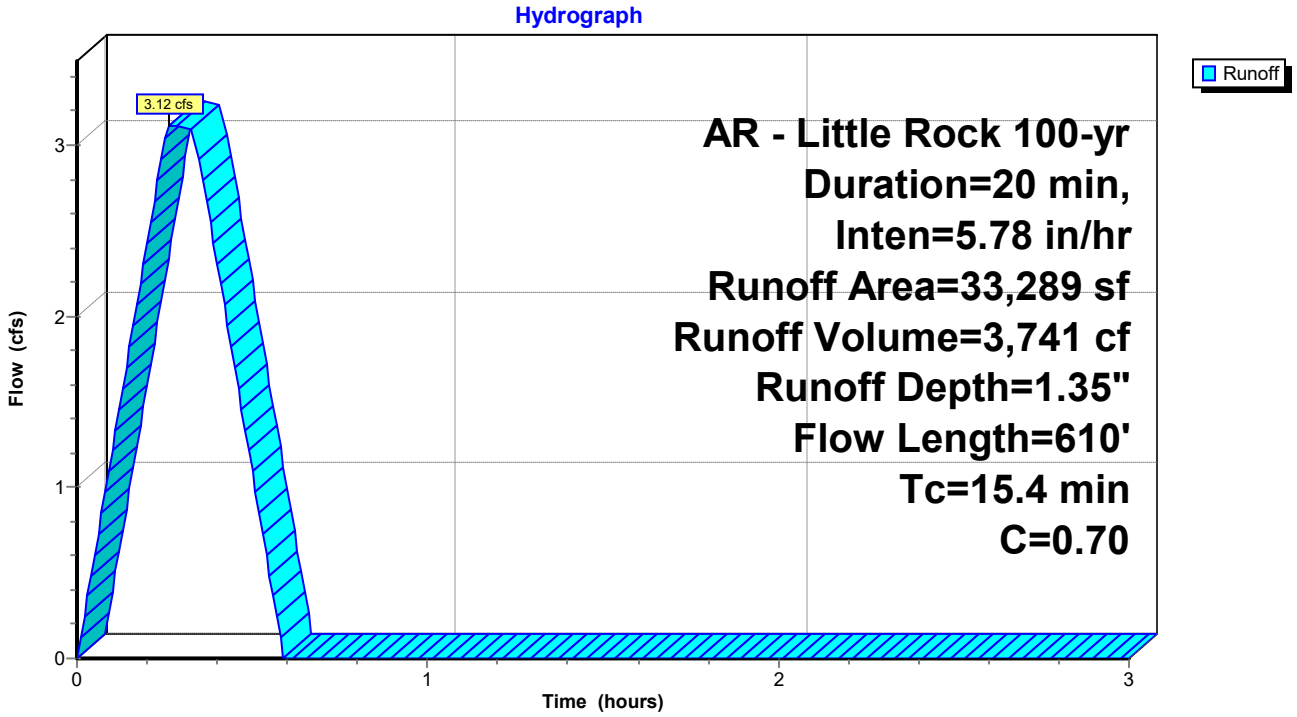
Runoff = 3.12 cfs @ 0.26 hrs, Volume= 3,741 cf, Depth= 1.35"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
18,730	0.51	Sod Yard
14,559	0.95	Paving, Sidewalks
33,289	0.70	Weighted Average
18,730		56.26% Pervious Area
14,559		43.74% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	47	0.1300	0.16		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
6.9	53	0.0730	0.13		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.0	11	0.0940	4.60		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.4	53	0.0120	2.22		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.5	59	0.0100	2.03		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.5	47	0.0070	1.70		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.5	56	0.0070	1.70		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	38	0.0160	2.57		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	30	0.0190	2.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
1.3	216	0.0190	2.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
15.4	610	Total			

Subcatchment B3: Drainage Basin B3



Summary for Subcatchment B4: Drainage Basin B4

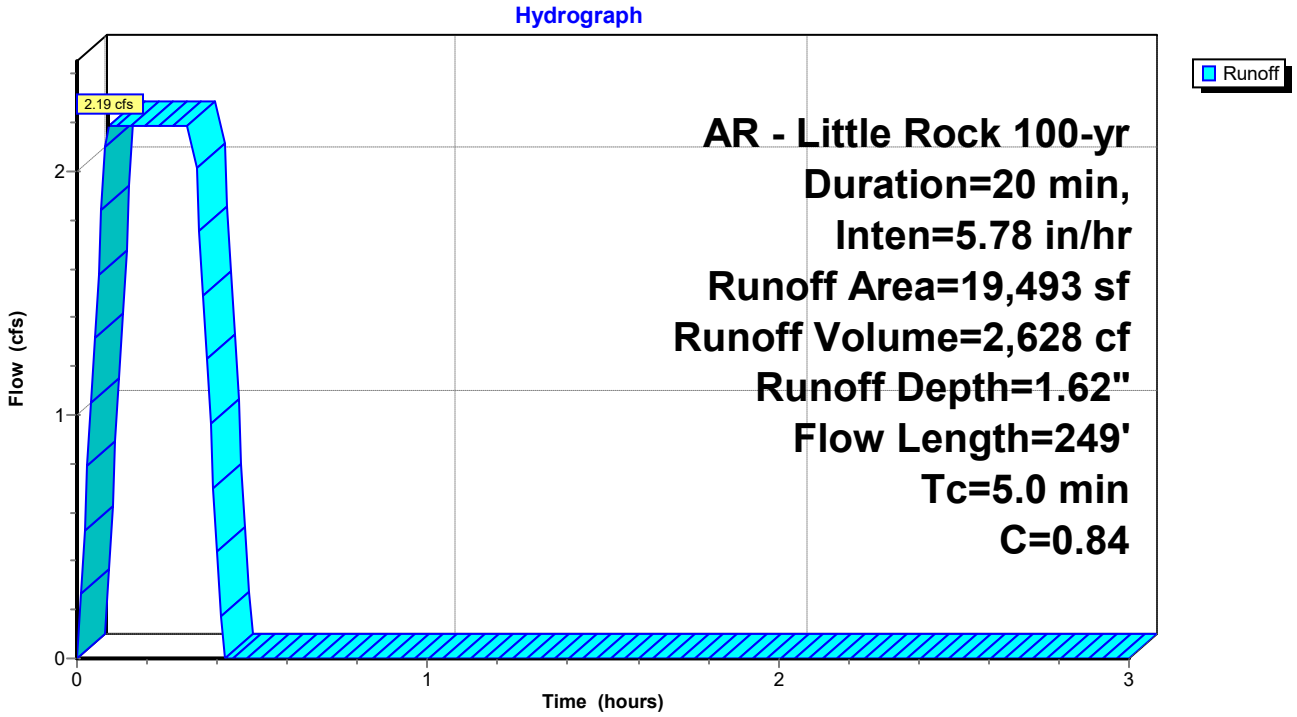
Runoff = 2.19 cfs @ 0.09 hrs, Volume= 2,628 cf, Depth= 1.62"
Routed to Pond CI-A1 : CI - A1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
4,916	0.51	Sod Yard
14,577	0.95	Paving, Sidewalks
19,493	0.84	Weighted Average
4,916		25.22% Pervious Area
14,577		74.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	31	0.0230	1.32		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	18	0.0250	1.22		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.3	28	0.0450	1.69		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.4	72	0.0250	3.21		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	18	0.0170	2.65		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.3	51	0.0170	2.65		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	16	0.0170	2.65		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	8	0.0430	4.21		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	7	0.0580	4.89		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
3.2					**Direct Entry, Overland Concentrated Flow (Min)**
5.0	249	Total			

Subcatchment B4: Drainage Basin B4



Summary for Subcatchment B5: Drainage Basin B5

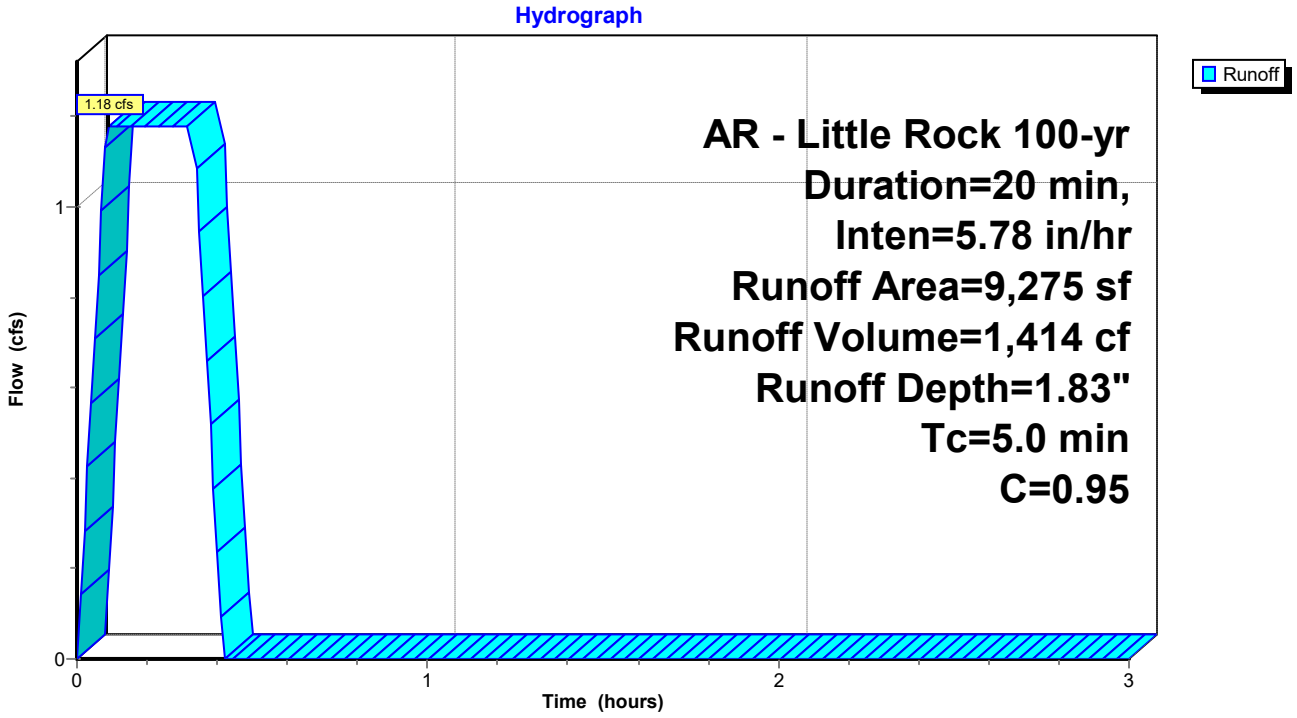
Runoff = 1.18 cfs @ 0.09 hrs, Volume= 1,414 cf, Depth= 1.83"
Routed to Pond JB-A2 : JB - A2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
9,275	0.95	Roof
9,275		100.00% Impervious Area

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

Subcatchment B5: Drainage Basin B5



Summary for Subcatchment B6: Drainage Basin B6

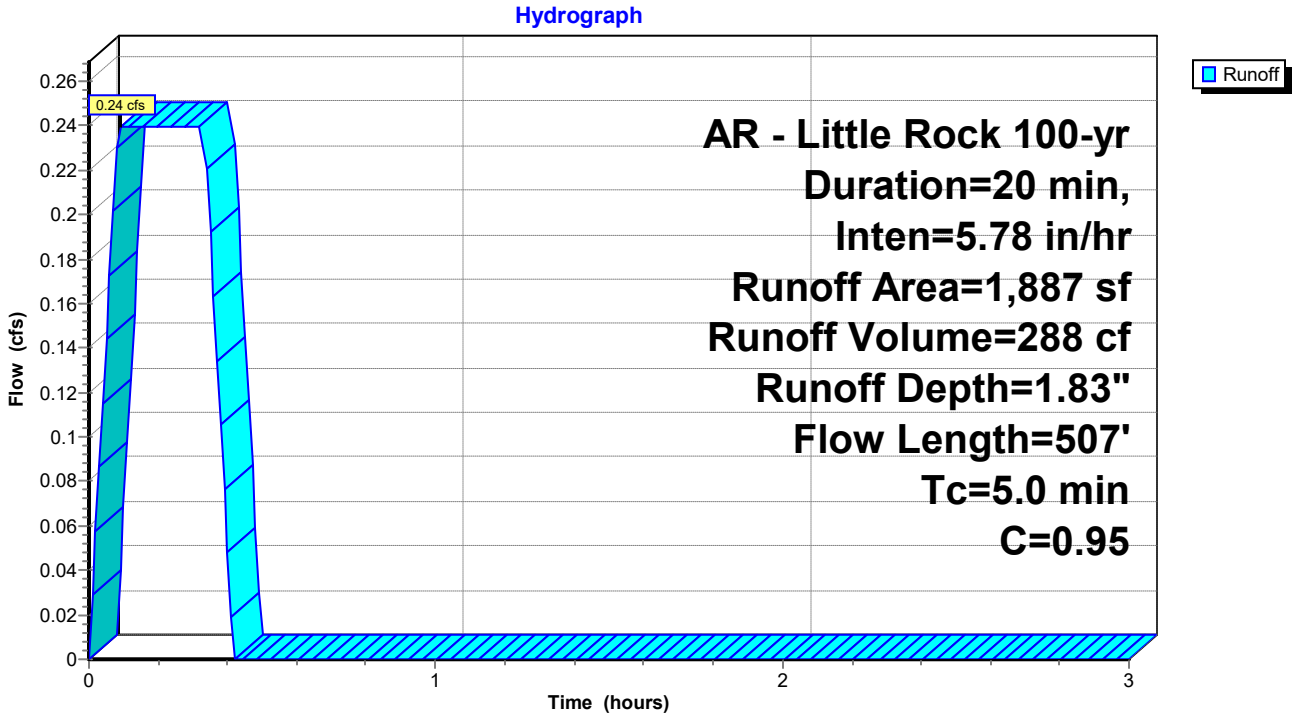
Runoff = 0.24 cfs @ 0.09 hrs, Volume= 288 cf, Depth= 1.83"
Routed to Pond CI-A3 : CI - A3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
0	0.51	Sod Yard
1,887	0.95	Paving, Sidewalks
1,887	0.95	Weighted Average
1,887		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	31	0.0230	1.32		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	18	0.0250	1.22		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.4	30	0.0240	1.33		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.0	13	0.0860	5.95		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.0	415		1.73		**Direct Entry, Overland Concentrated Flow (Min)**
5.0	507	Total			

Subcatchment B6: Drainage Basin B6



Summary for Subcatchment B7: Drainage Basin B7

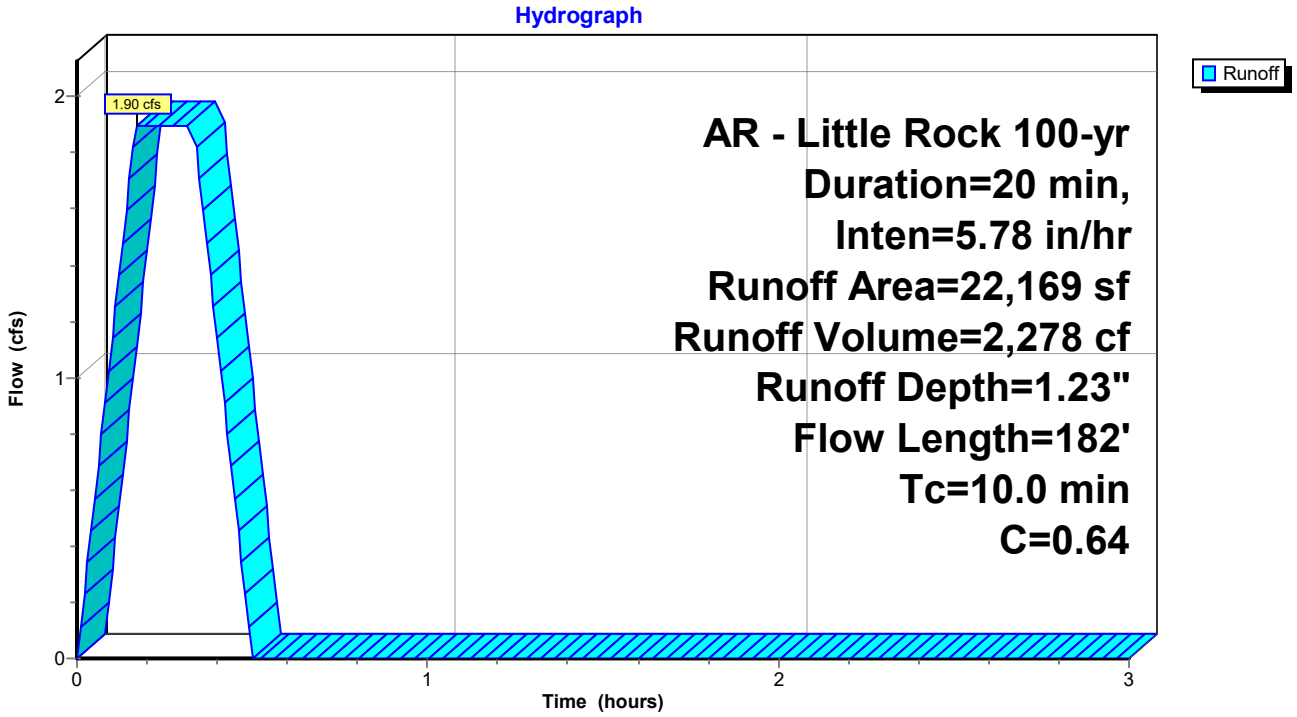
Runoff = 1.90 cfs @ 0.17 hrs, Volume= 2,278 cf, Depth= 1.23"
Routed to Pond CI-B2 : CI - B2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
15,580	0.51	Sod Yard
6,589	0.95	Paving, Sidewalks
22,169	0.64	Weighted Average
15,580		70.28% Pervious Area
6,589		29.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	10	0.0150	0.89		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
9.1	93	0.0150	0.17		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
0.4	40	0.0110	1.57		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	33	0.0190	2.07		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.0	6	0.0180	2.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
10.0	182	Total			

Subcatchment B7: Drainage Basin B7



Summary for Subcatchment B8: Drainage Basin B8

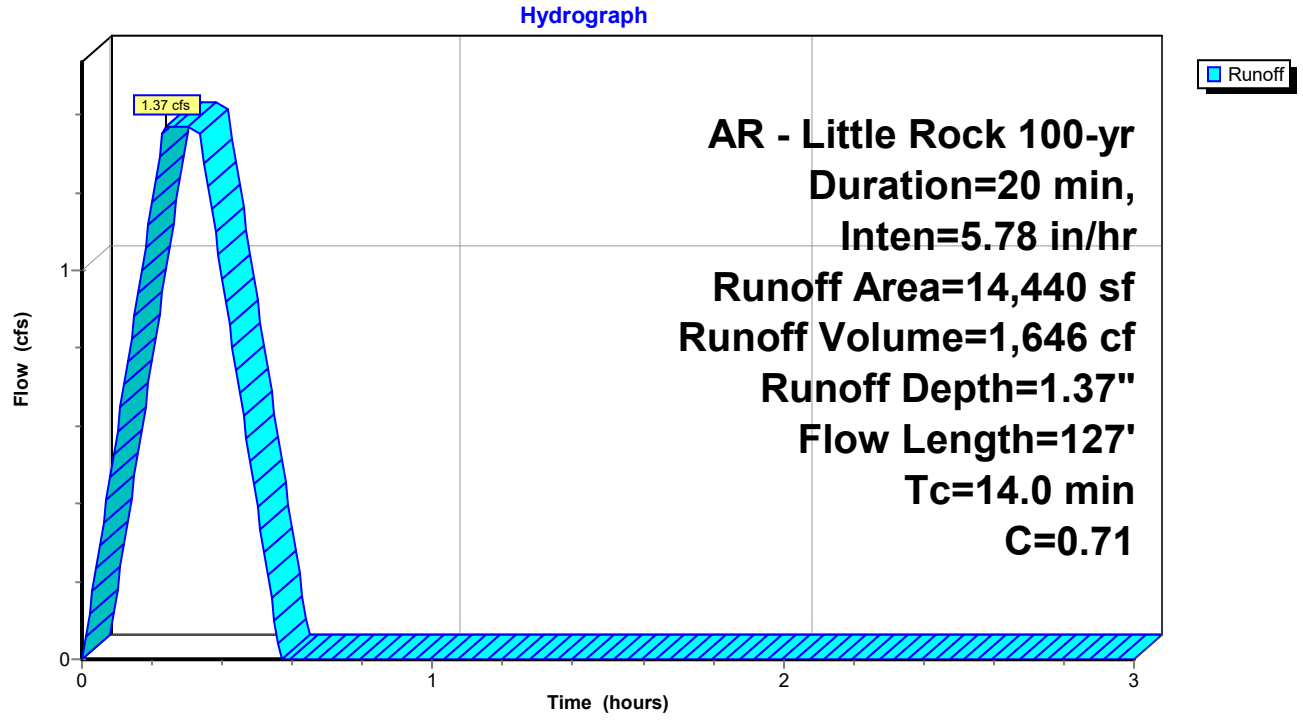
Runoff = 1.37 cfs @ 0.24 hrs, Volume= 1,646 cf, Depth= 1.37"
Routed to Pond CI-A4 : CI - A4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
7,982	0.51	Sod Yard
6,458	0.95	Paving, Sidewalks
14,440	0.71	Weighted Average
7,982		55.28% Pervious Area
6,458		44.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4	79	0.0570	0.13		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
3.5	21	0.0620	0.10		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.0	9	0.0620	3.73		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.1	18	0.1080	4.93		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
14.0	127	Total			

Subcatchment B8: Drainage Basin B8



Summary for Subcatchment C1: Drainage Basin C1

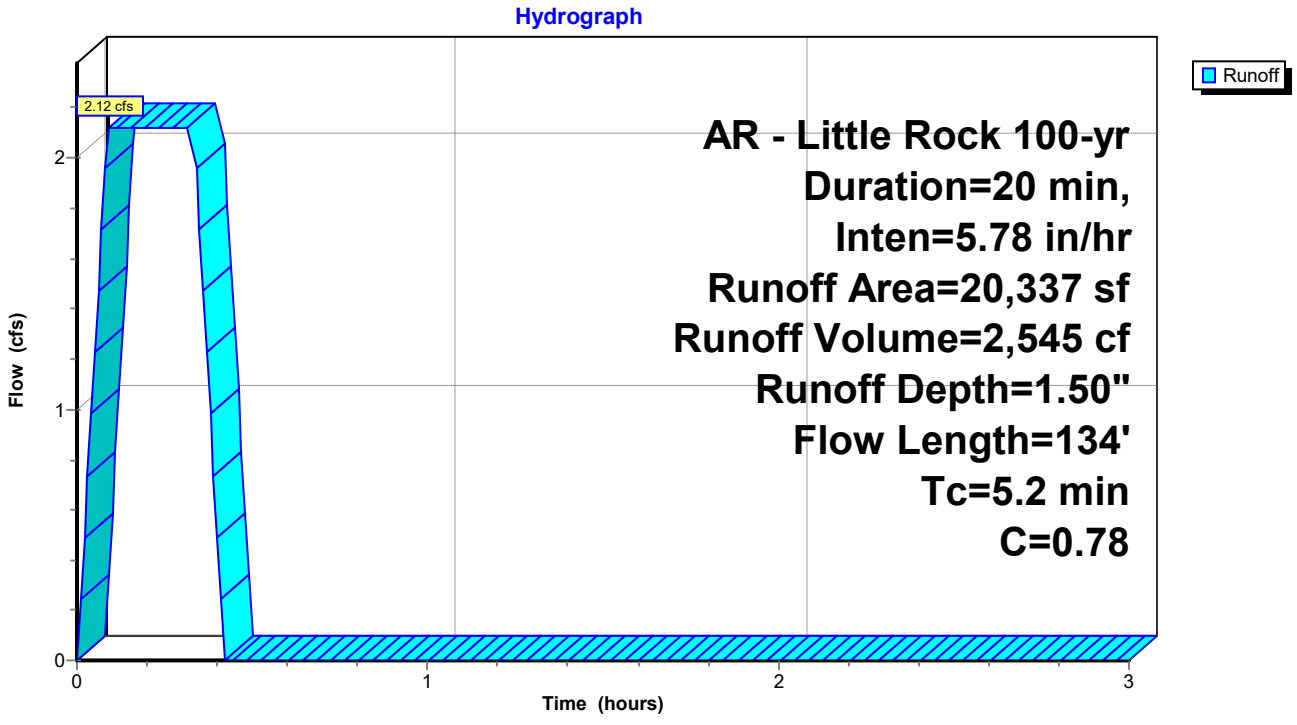
Runoff = 2.12 cfs @ 0.09 hrs, Volume= 2,545 cf, Depth= 1.50"
Routed to Pond CI-C1 : CI - C1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
6,135	0.40	Sod Yard
14,202	0.95	Paving, Sidewalks
20,337	0.78	Weighted Average
6,135		30.17% Pervious Area
14,202		69.83% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	32	0.0660	0.11		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.4	102	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
5.2	134	Total			

Subcatchment C1: Drainage Basin C1



Summary for Subcatchment C10: Drainage Basin C10

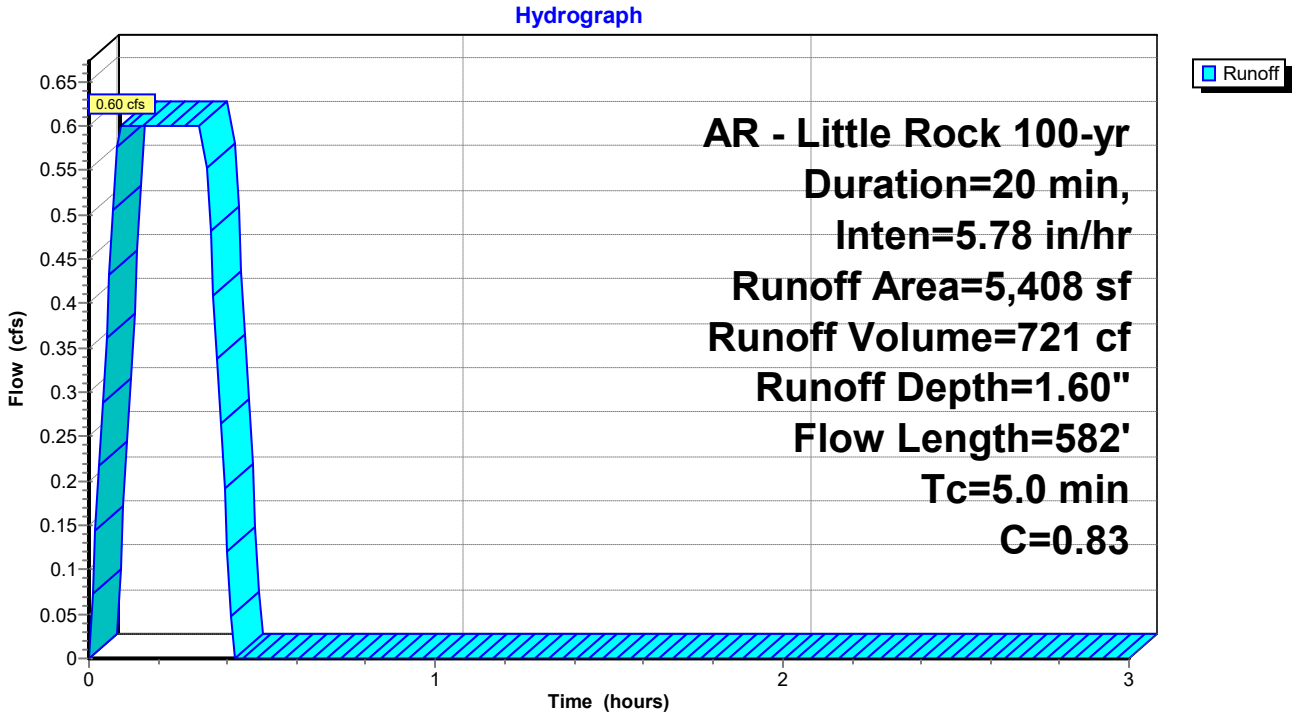
Runoff = 0.60 cfs @ 0.09 hrs, Volume= 721 cf, Depth= 1.60"
Routed to Pond CI-E1 : CI - E1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
1,225	0.40	Sod Yard
4,183	0.95	Paving, Sidewalks
5,408	0.83	Weighted Average
1,225		22.65% Pervious Area
4,183		77.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	18	0.0200	1.12		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	29	0.0210	2.94		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	23	0.0320	3.63		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	36	0.0320	3.63		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	48	0.0330	3.69		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	13	0.0350	3.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
3.9	415		1.77		**Direct Entry, Concentrated Flow (Min)**
5.0	582	Total			

Subcatchment C10: Drainage Basin C10



Summary for Subcatchment C11: Drainage Basin C11

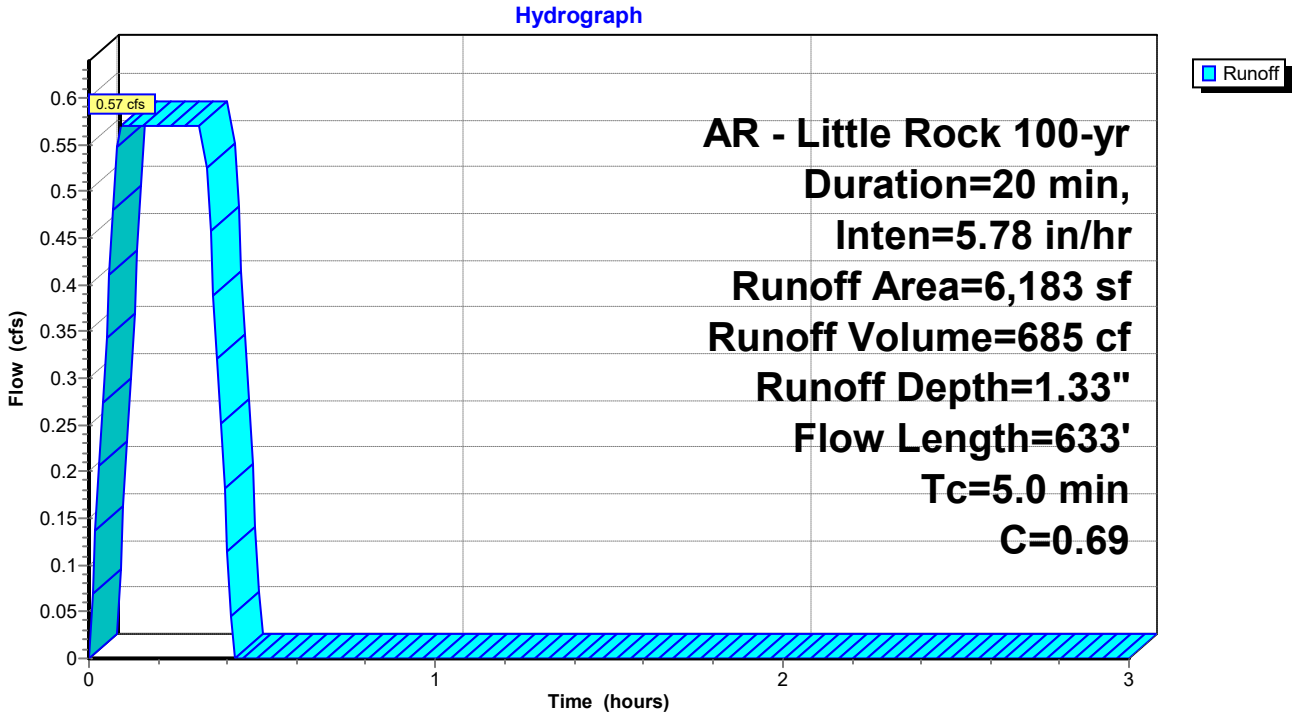
Runoff = 0.57 cfs @ 0.09 hrs, Volume= 685 cf, Depth= 1.33"
Routed to Pond CI-E2 : CI - E2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
2,876	0.40	Sod Yard
3,307	0.95	Paving, Sidewalks
6,183	0.69	Weighted Average
2,876		46.51% Pervious Area
3,307		53.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	25	0.0200	1.19		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	33	0.0620	5.05		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	29	0.0540	4.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	47	0.0410	4.11		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	47	0.0390	4.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	37	0.0420	4.16		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.0	415		1.73		**Direct Entry, Concentrated Flow (Min)**
5.0	633	Total			

Subcatchment C11: Drainage Basin C11



Summary for Subcatchment C12: Drainage Basin C12

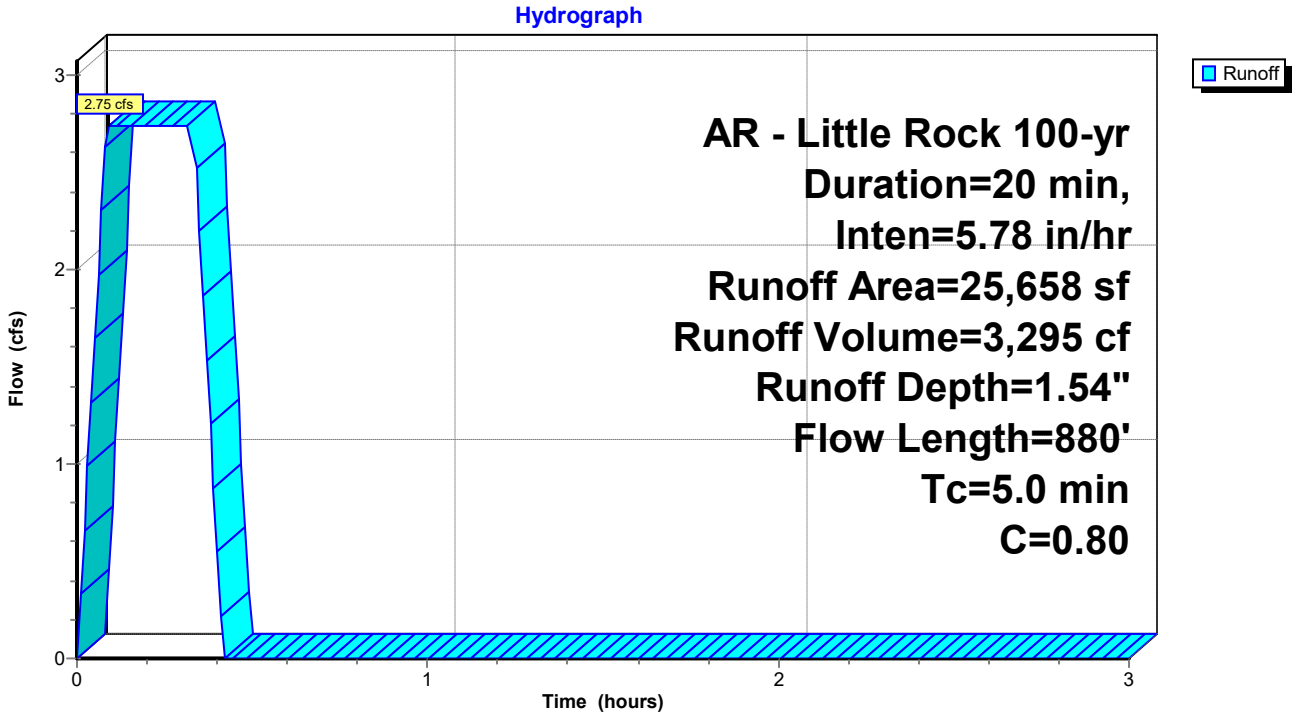
Runoff = 2.75 cfs @ 0.09 hrs, Volume= 3,295 cf, Depth= 1.54"
Routed to Pond CI-C7 : CI - C7

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
7,218	0.40	Sod Yard
18,440	0.95	Paving, Sidewalks
25,658	0.80	Weighted Average
7,218		28.13% Pervious Area
18,440		71.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	24	0.0360	1.50		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	5	0.0190	0.85		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	21	0.0100	2.03		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.9	49	0.0020	0.91		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.4	96	0.0330	3.69		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.3	94	0.0570	4.85		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	28	0.0560	4.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	25	0.0450	4.31		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	31	0.0410	4.11		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	39	0.0490	4.49		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	36	0.0460	4.35		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	11	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	6	0.0440	4.26		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
2.3	415		3.01		**Direct Entry, Concentrated Flow (Min)**
5.0	880	Total			

Subcatchment C12: Drainage Basin C12



Summary for Subcatchment C13: Drainage Basin C13

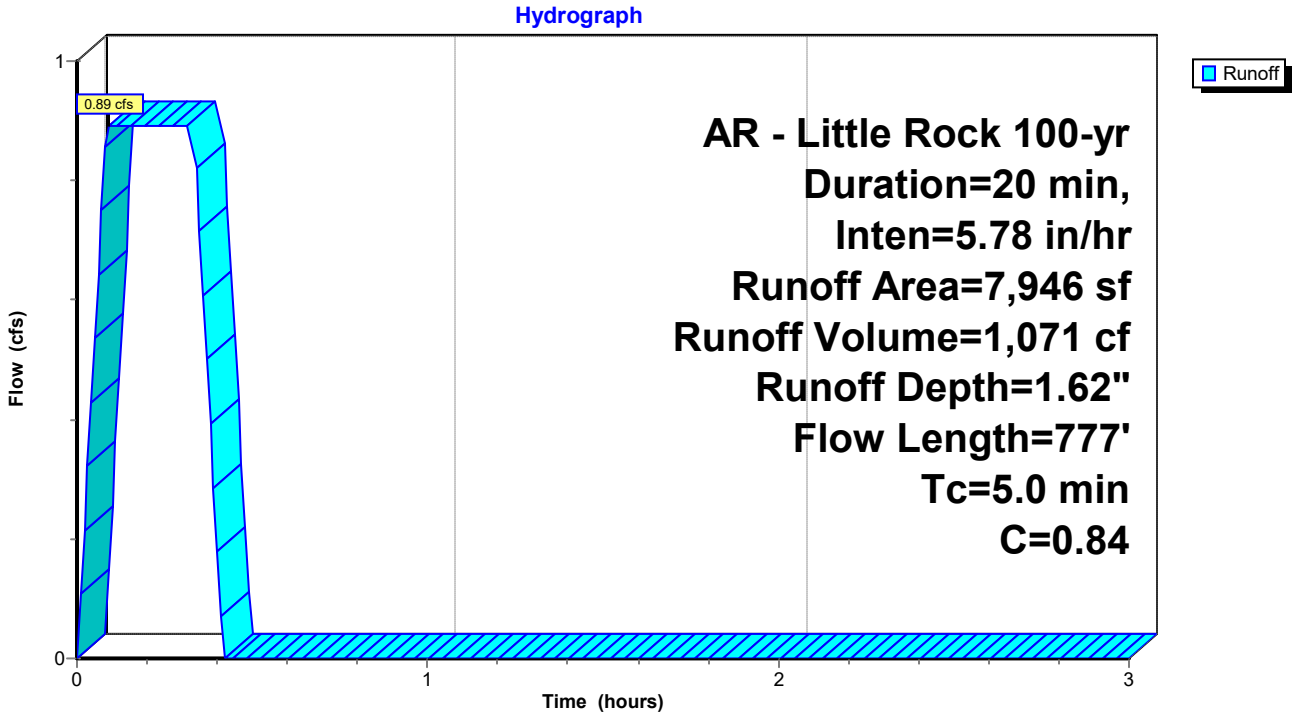
Runoff = 0.89 cfs @ 0.09 hrs, Volume= 1,071 cf, Depth= 1.62"
Routed to Pond CI-A4 : CI - A4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
1,558	0.40	Sod Yard
6,388	0.95	Paving, Sidewalks
7,946	0.84	Weighted Average
1,558		19.61% Pervious Area
6,388		80.39% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	19	0.0200	1.13		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.3	75	0.0340	3.74		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	52	0.0410	4.11		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	29	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	42	0.0730	5.48		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	74	0.0750	5.56		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	26	0.0710	5.41		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	32	0.0570	4.85		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	13	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
3.6	415		1.92		**Direct Entry, Overland Concentrated Flow (Min)**
5.0	777	Total			

Subcatchment C13: Drainage Basin C13



Summary for Subcatchment C14: Drainage Basin C14

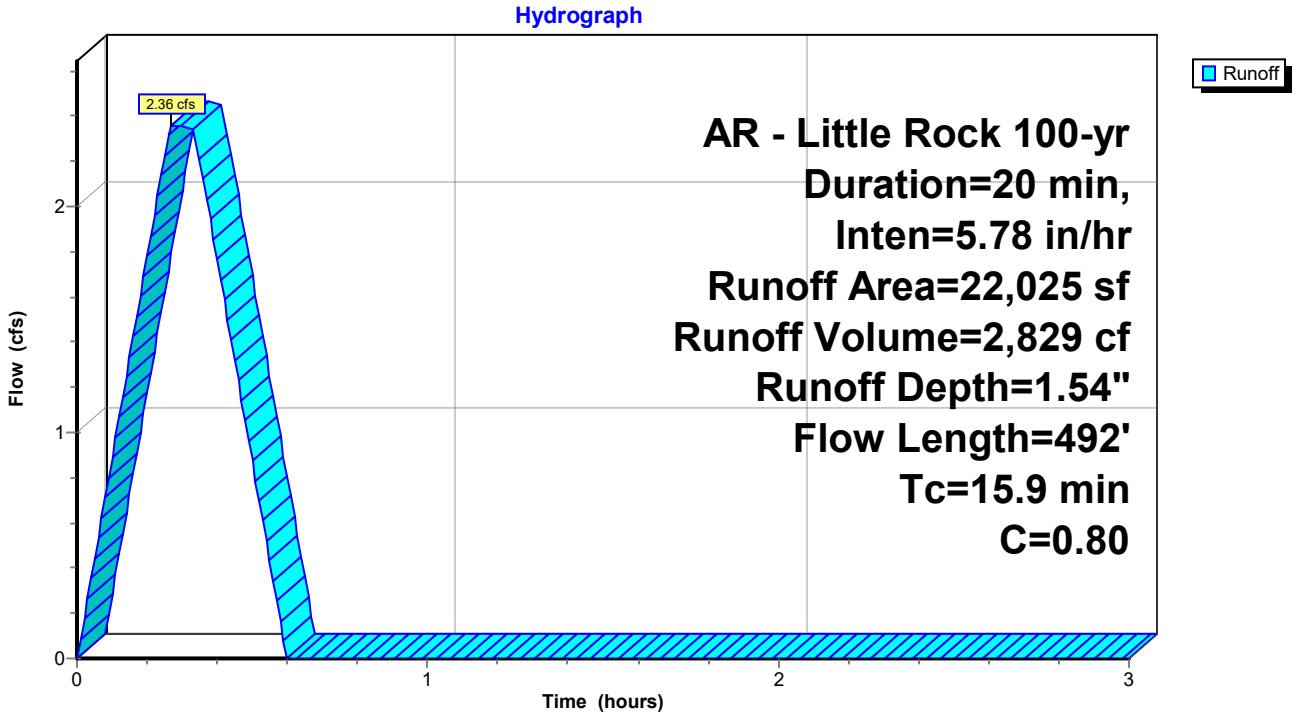
Runoff = 2.36 cfs @ 0.27 hrs, Volume= 2,829 cf, Depth= 1.54"
Routed to Pond CI-A5 : CI - A5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
6,127	0.40	Sod Yard
15,898	0.95	Paving, Sidewalks
22,025	0.80	Weighted Average
6,127		27.82% Pervious Area
15,898		72.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	5	0.0310	0.06		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
9.2	45	0.0250	0.08		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
3.8	41	0.1940	0.18		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.1	6	0.0100	0.68		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	51	0.0870	5.99		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	52	0.0310	3.57		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	18	0.0270	3.34		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	20	0.0400	4.06		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	34	0.0410	4.11		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	46	0.0470	4.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	36	0.0580	4.89		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	58	0.0690	5.33		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	49	0.0840	5.88		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	31	0.0690	5.33		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
15.9	492	Total			

Subcatchment C14: Drainage Basin C14



Summary for Subcatchment C15: Drainage Basin C15

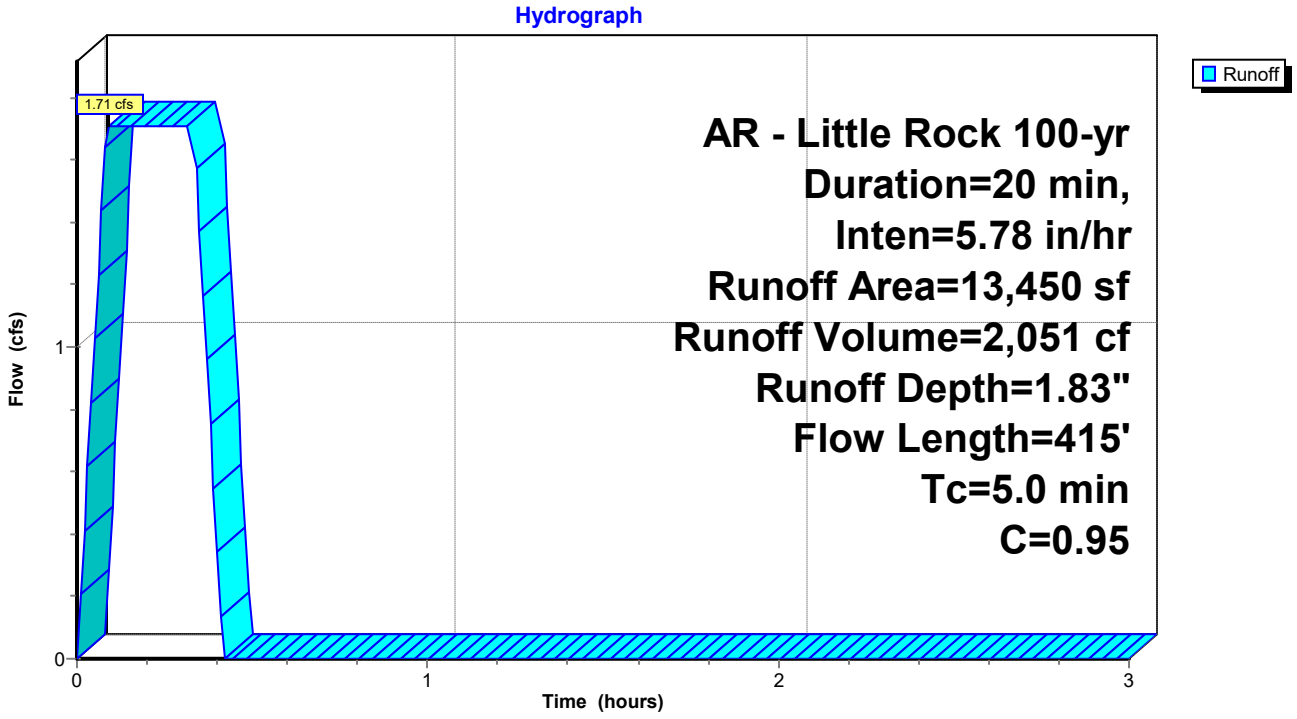
Runoff = 1.71 cfs @ 0.09 hrs, Volume= 2,051 cf, Depth= 1.83"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
13,450	0.95	Paving, Sidewalks
13,450	0.95	Weighted Average
13,450		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	415		1.38		**Direct Entry, Overland Concentrated Flow (Min)**

Subcatchment C15: Drainage Basin C15



Summary for Subcatchment C16: Drainage Basin C16

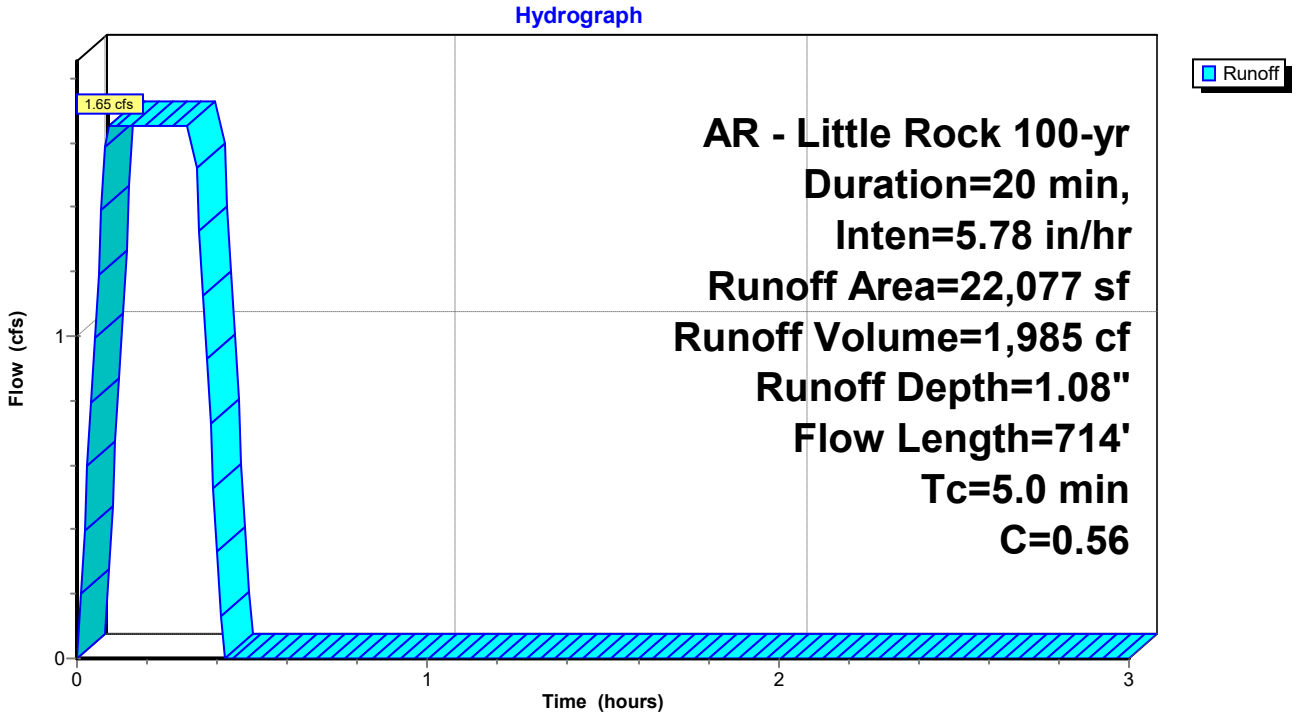
Runoff = 1.65 cfs @ 0.09 hrs, Volume= 1,985 cf, Depth= 1.08"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
15,465	0.40	Sod Yard
6,612	0.95	Paving, Sidewalks
22,077	0.56	Weighted Average
15,465		70.05% Pervious Area
6,612		29.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	26	0.0190	1.18		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	5	0.0100	0.66		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.4	51	0.0500	1.98		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	12	0.1540	2.33		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	50	0.1330	7.40		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
0.1	50	0.1170	6.94		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
0.2	46	0.0430	4.21		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
0.3	59	0.0370	3.90		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
3.3	415		2.10		**Direct Entry, Overland Concentrated Flow (Min)**
5.0	714	Total			

Subcatchment C16: Drainage Basin C16



Summary for Subcatchment C17: Drainage Basin C17

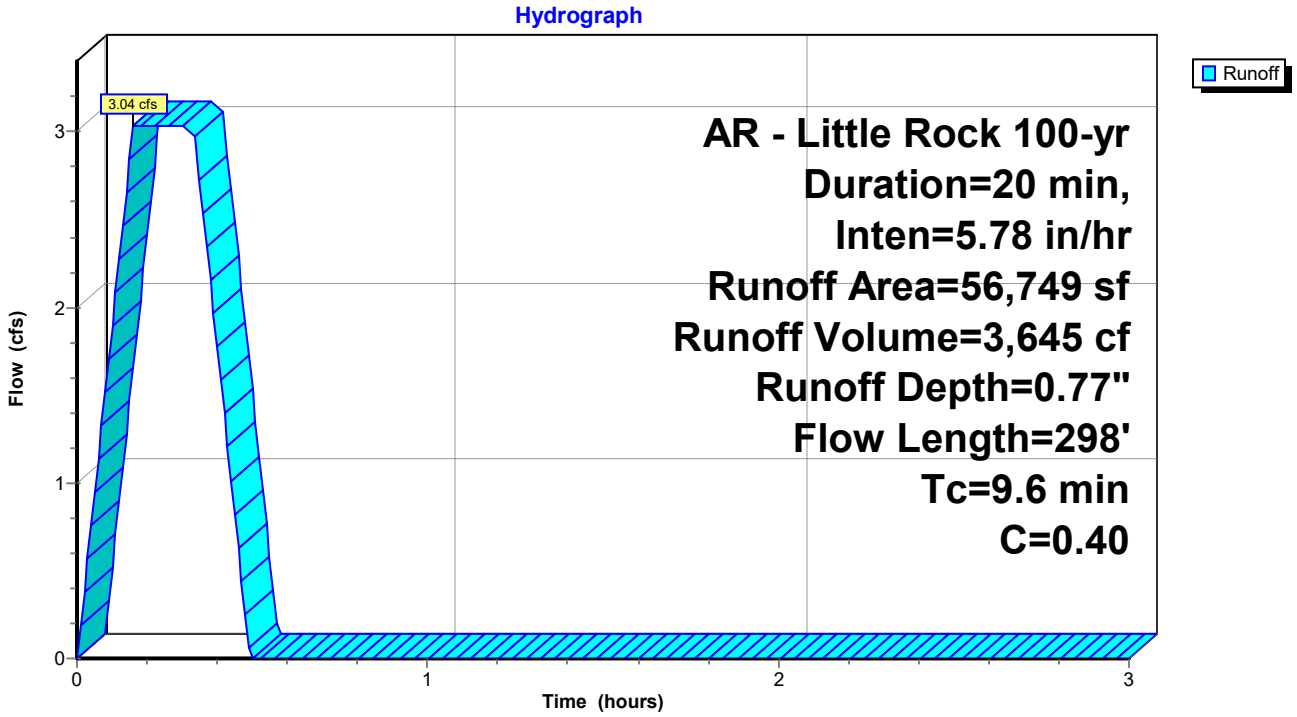
Runoff = 3.04 cfs @ 0.16 hrs, Volume= 3,645 cf, Depth= 0.77"
Routed to Pond DP : Existing North Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
56,749	0.40	Sod Yard
0	0.95	Paving, Sidewalks
56,749	0.40	Weighted Average
56,749		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	43	0.0410	0.15		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
3.9	43	0.0690	0.19		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.1	41	0.0980	4.70		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	61	0.0730	4.05		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.2	46	0.0570	3.58		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	64	0.0450	3.18		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
9.6	298	Total			

Subcatchment C17: Drainage Basin C17



Summary for Subcatchment C18: Drainage Basin C18

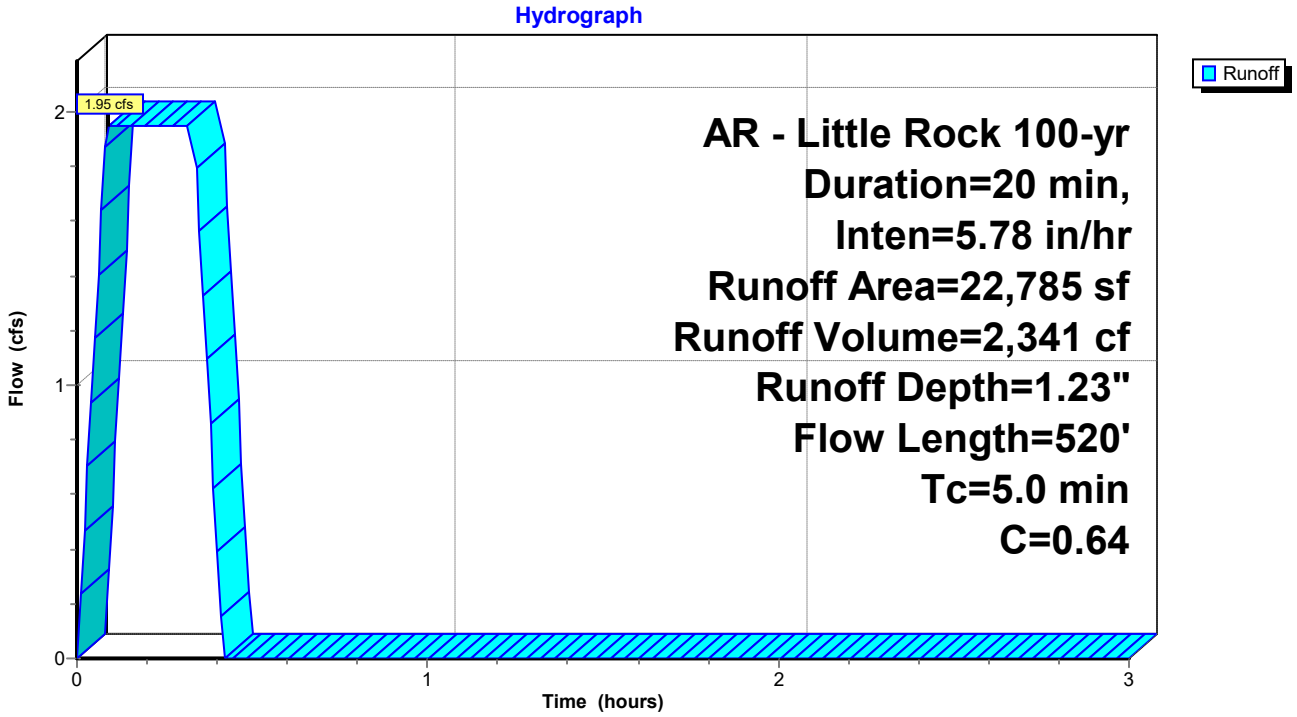
Runoff = 1.95 cfs @ 0.09 hrs, Volume= 2,341 cf, Depth= 1.23"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
12,812	0.40	Sod Yard
9,973	0.95	Paving, Sidewalks
22,785	0.64	Weighted Average
12,812		56.23% Pervious Area
9,973		43.77% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	5	0.2980	0.14		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.2	12	0.0130	0.87		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
3.3	8	0.0100	0.04		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.5	80	0.0210	2.94		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.4	415		17.29		**Direct Entry, Concentrated Flow (Min)**
5.0	520	Total			

Subcatchment C18: Drainage Basin C18



Summary for Subcatchment C19: Drainage Basin C19

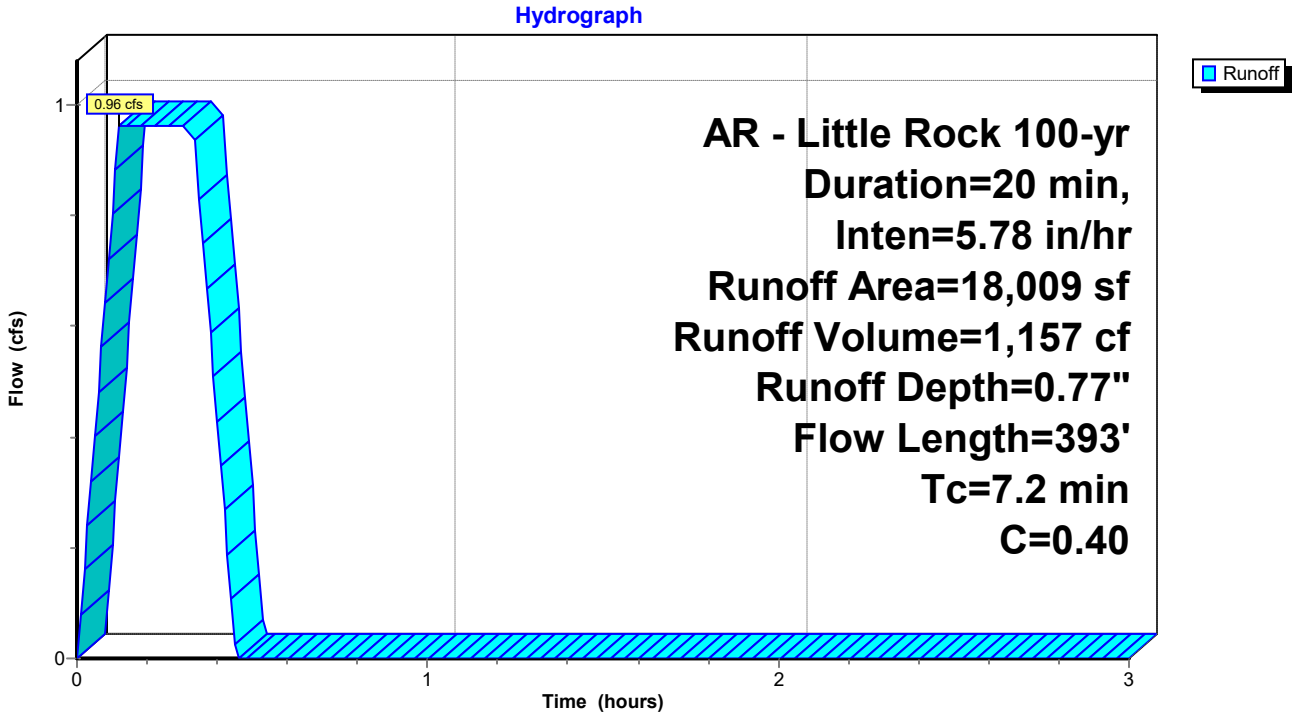
Runoff = 0.96 cfs @ 0.12 hrs, Volume= 1,157 cf, Depth= 0.77"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
18,009	0.40	Sod Yard
0	0.95	Paving, Sidewalks
18,009	0.40	Weighted Average
18,009		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	34	0.1110	0.21		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
3.3	66	0.2450	0.34		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.0	9	0.2450	7.42		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.5	106	0.0610	3.70		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.2	46	0.0800	4.24		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.1	41	0.0960	4.65		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	66	0.0680	3.91		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.1	19	0.1070	4.91		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.0	6	0.0750	4.11		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
7.2	393	Total			

Subcatchment C19: Drainage Basin C19



Summary for Subcatchment C2: Drainage Basin C2

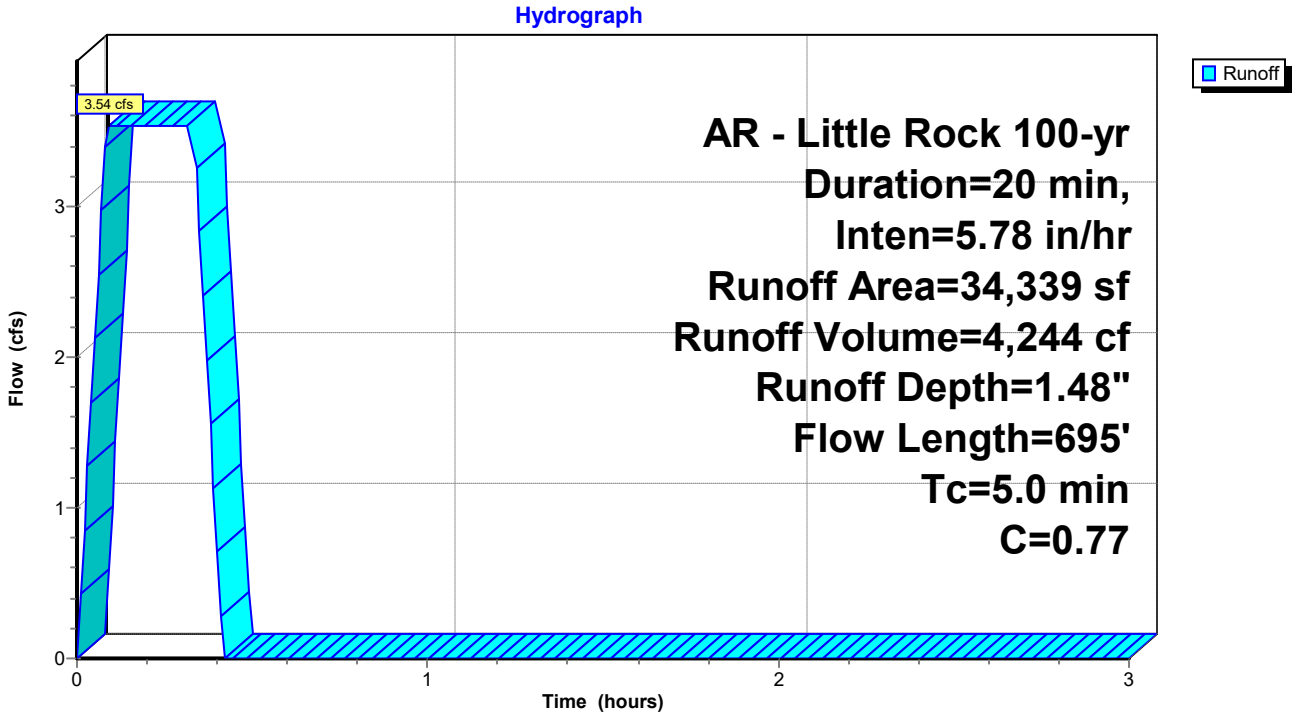
Runoff = 3.54 cfs @ 0.09 hrs, Volume= 4,244 cf, Depth= 1.48"
Routed to Pond CI-C2 : CI - C2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
11,376	0.40	Sod Yard
22,963	0.95	Roof, Paving, Sidewalks
34,339	0.77	Weighted Average
11,376		33.13% Pervious Area
22,963		66.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	20	0.0200	1.14		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.4	74	0.0240	3.14		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	17	0.0710	5.41		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	21	0.0610	5.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.6	148	0.0380	3.96		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
3.5	415		1.98		**Direct Entry, Concentrated Flow (Min)**
5.0	695	Total			

Subcatchment C2: Drainage Basin C2



Summary for Subcatchment C20: Drainage Basin C20

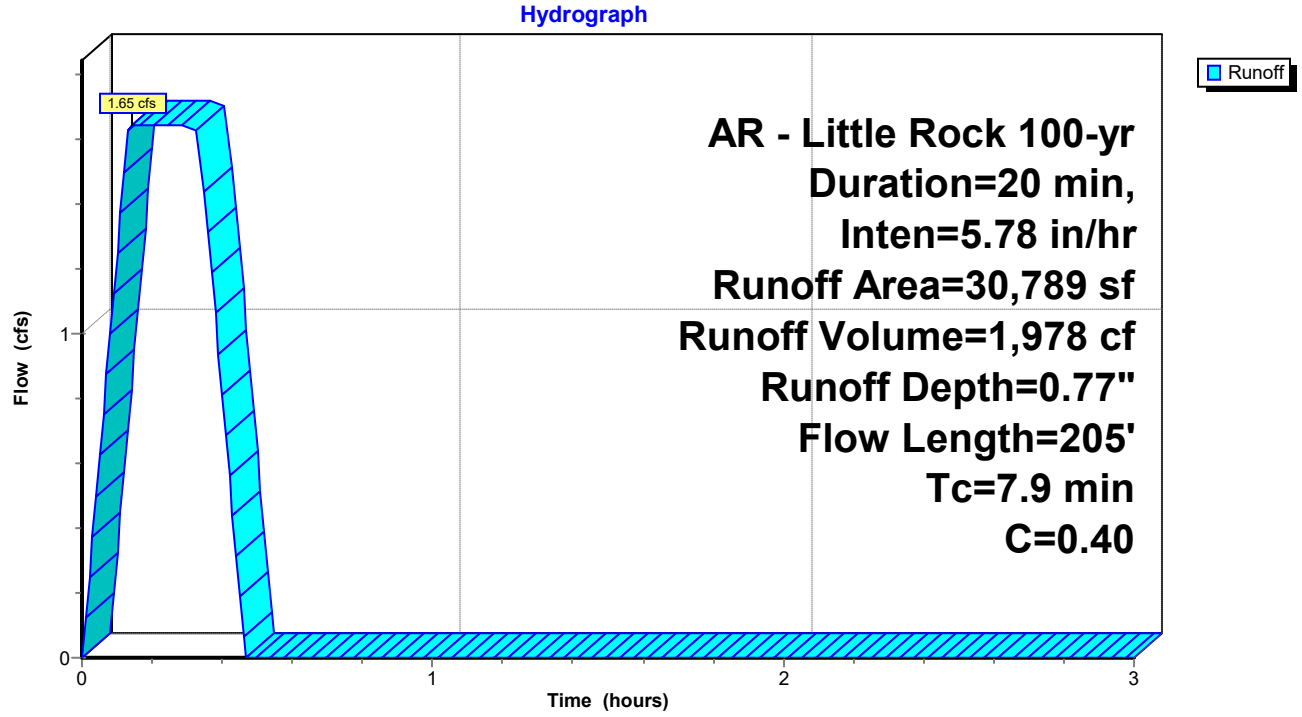
Runoff = 1.65 cfs @ 0.14 hrs, Volume= 1,978 cf, Depth= 0.77"
Routed to Link FINAL : APPROX DISCHARGE

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
30,789	0.40	Sod Yard
0	0.95	Paving, Sidewalks
30,789	0.40	Weighted Average
30,789		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	45	0.1430	0.25		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
4.5	55	0.0780	0.20		**Sheet Flow, Sheet Flow** Grass: Dense n= 0.240 P2= 4.19"
0.1	37	0.0780	4.19		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
0.3	68	0.0710	4.00		**Shallow Concentrated Flow, Concentrated Flow** Grassed Waterway Kv= 15.0 fps
7.9	205	Total			

Subcatchment C20: Drainage Basin C20



Summary for Subcatchment C3: Drainage Basin C3

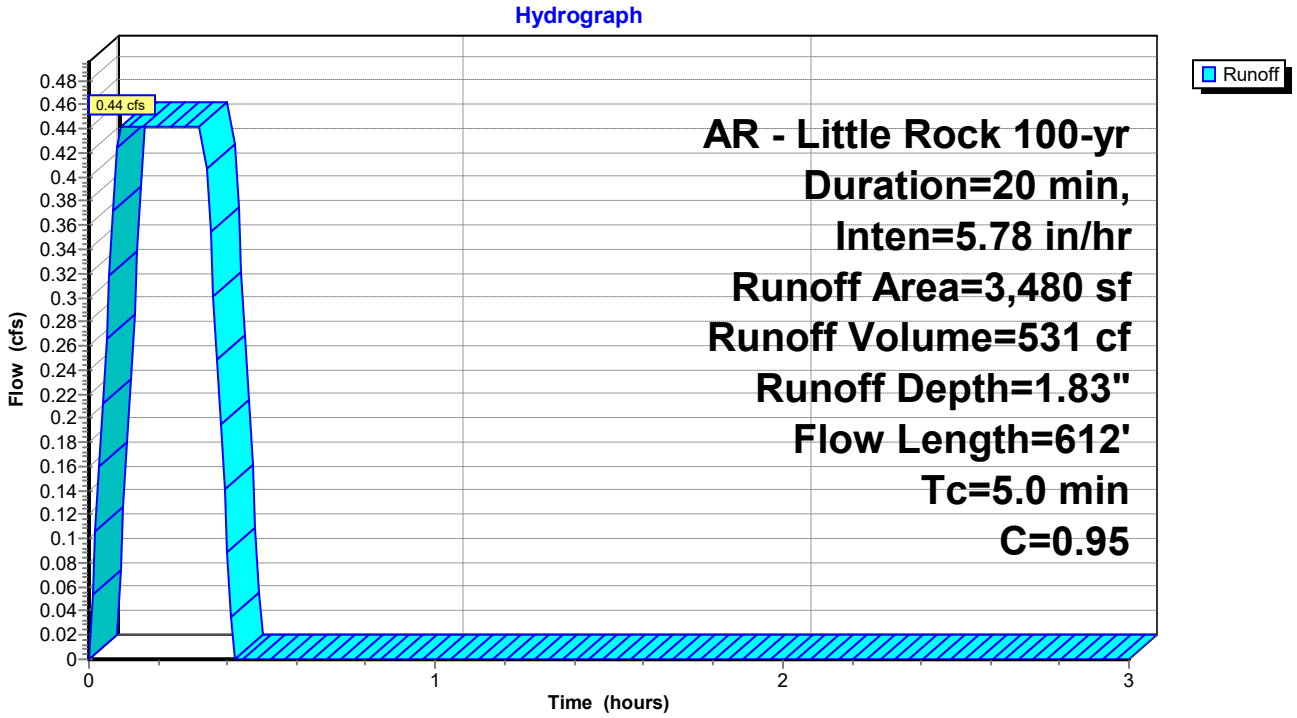
Runoff = 0.44 cfs @ 0.09 hrs, Volume= 531 cf, Depth= 1.83"
Routed to Pond CI-C3 : CI - C3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
3,480	0.95	Paving, Sidewalks
3,480	0.95	Weighted Average
3,480		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	22	0.0200	1.16		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.0	10	0.0340	3.74		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	18	0.0390	4.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.6	147	0.0380	3.96		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.0	415		1.73		**Direct Entry, Concentrated Flow (Min)**
5.0	612	Total			

Subcatchment C3: Drainage Basin C3



Summary for Subcatchment C4: Drainage Basin C4

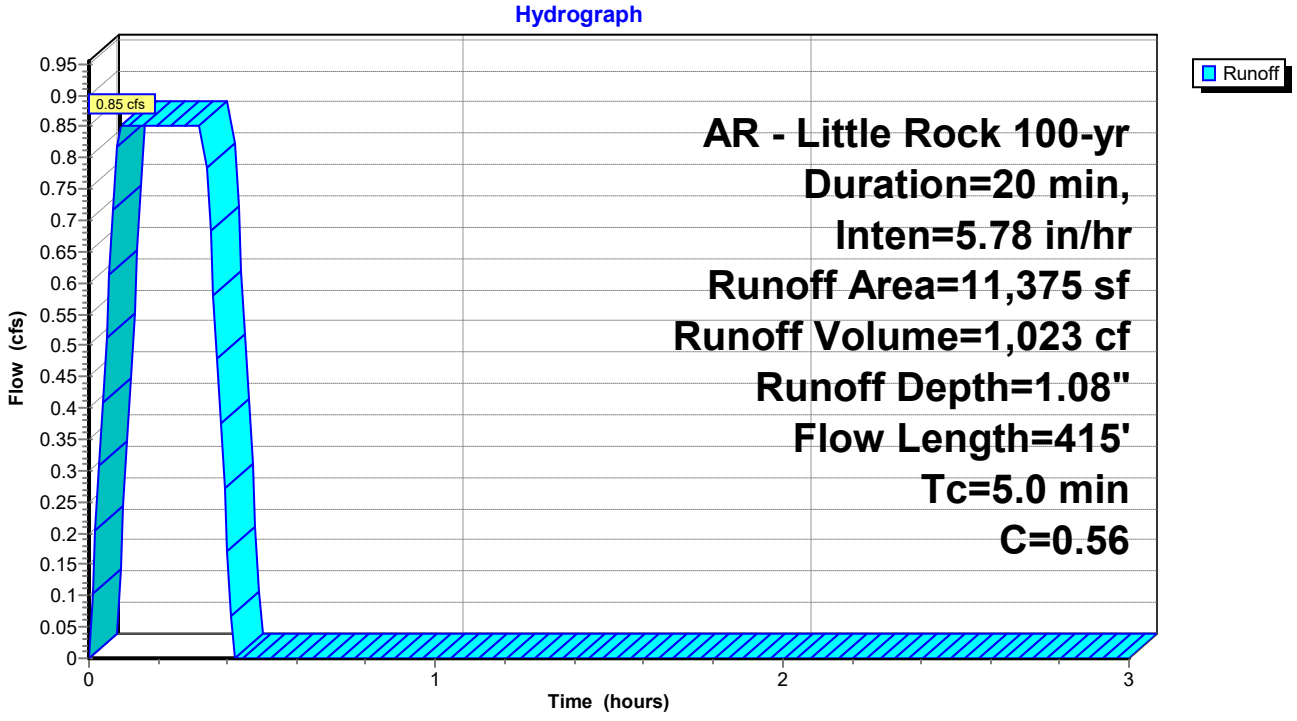
Runoff = 0.85 cfs @ 0.09 hrs, Volume= 1,023 cf, Depth= 1.08"
Routed to Pond CI-C3 : CI - C3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
8,130	0.40	Sod Yard
3,245	0.95	Paving, Sidewalks
11,375	0.56	Weighted Average
8,130		71.47% Pervious Area
3,245		28.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	415		1.38		**Direct Entry, Concentrated Flow (Min)**

Subcatchment C4: Drainage Basin C4



Summary for Subcatchment C5: Drainage Basin C5

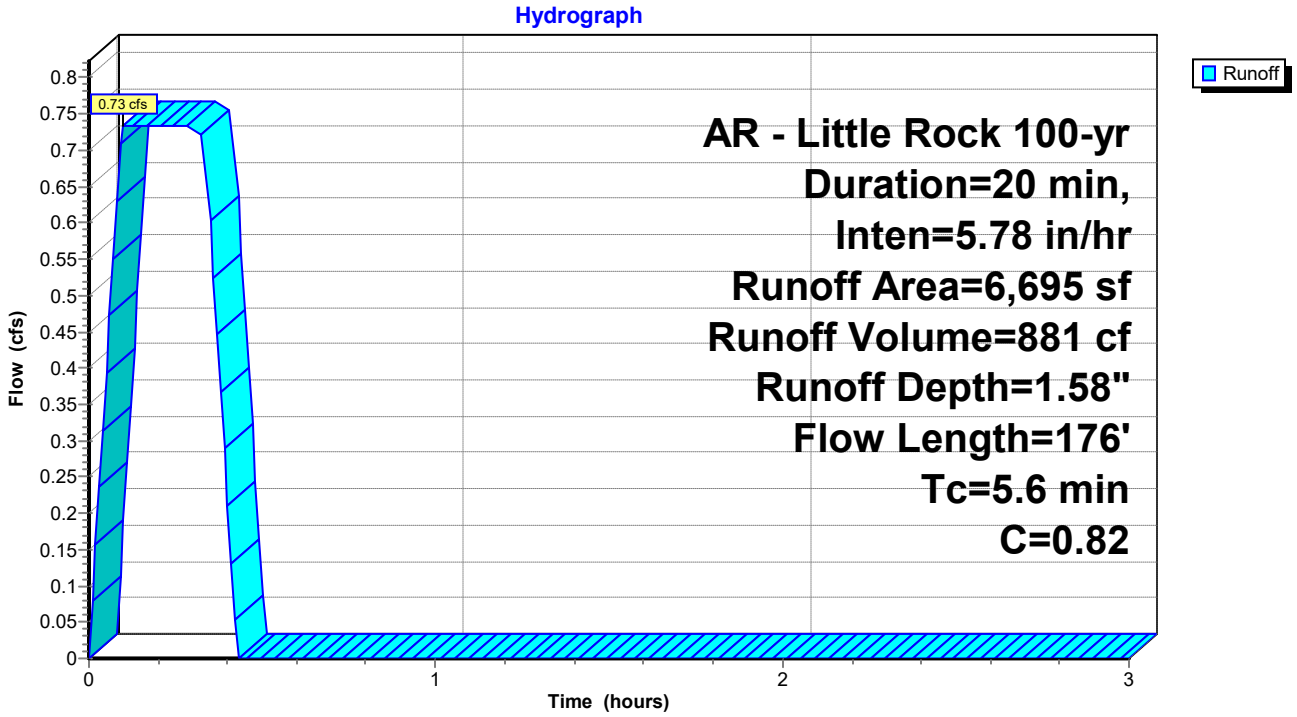
Runoff = 0.73 cfs @ 0.10 hrs, Volume= 881 cf, Depth= 1.58"
Routed to Pond CI-C4 : CI - C4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
1,634	0.40	Sod Yard
5,061	0.95	Paving, Sidewalks
6,695	0.82	Weighted Average
1,634		24.41% Pervious Area
5,061		75.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	5	0.2990	0.14		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.2	12	0.0130	0.87		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
3.9	8	0.0070	0.03		**Sheet Flow, Sheet Flow** Grass: Bermuda n= 0.410 P2= 4.19"
0.5	58	0.0080	1.82		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	14	0.0280	3.40		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	23	0.0370	3.90		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	13	0.0940	6.22		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.0	13	0.0560	4.80		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	30	0.0180	2.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
5.6	176	Total			

Subcatchment C5: Drainage Basin C5



Summary for Subcatchment C6: Drainage Basin C6

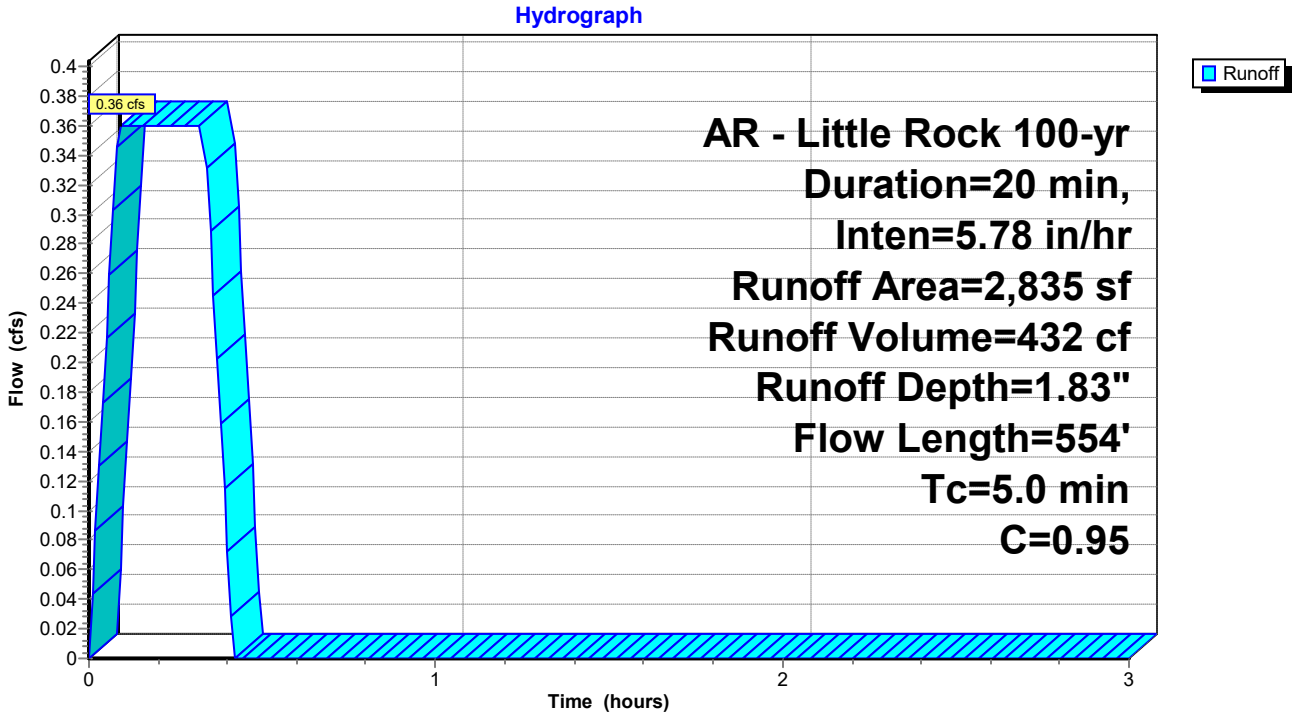
Runoff = 0.36 cfs @ 0.09 hrs, Volume= 432 cf, Depth= 1.83"
Routed to Pond CI-C5 : CI - C5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
2,835	0.95	Paving, Sidewalks
2,835	0.95	Weighted Average
2,835		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	22	0.0200	1.16		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.2	19	0.0100	2.03		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	17	0.0170	2.65		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	26	0.0360	3.85		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	28	0.0610	5.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	27	0.0610	5.01		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.1	415		1.69		**Direct Entry, Concentrated Flow (Min)**
5.0	554	Total			

Subcatchment C6: Drainage Basin C6



Summary for Subcatchment C7: Drainage Basin C7

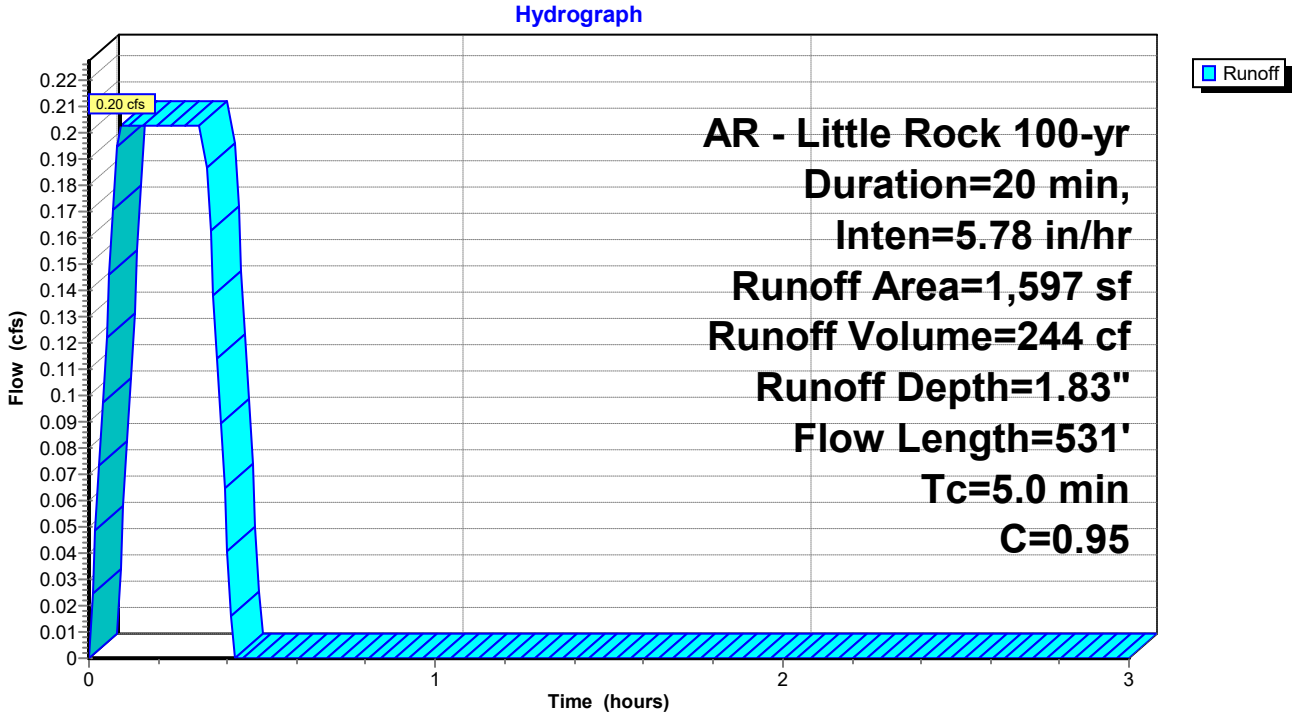
Runoff = 0.20 cfs @ 0.09 hrs, Volume= 244 cf, Depth= 1.83"
Routed to Pond CI-D1 : CI - D1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
1,597	0.95	Paving, Sidewalks
1,597	0.95	Weighted Average
1,597		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	19	0.0200	1.13		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	16	0.0540	4.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.3	81	0.0580	4.89		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
4.3	415		1.61		**Direct Entry, Concentrated Flow (Min)**
5.0	531	Total			

Subcatchment C7: Drainage Basin C7



Summary for Subcatchment C8: Drainage Basin C8

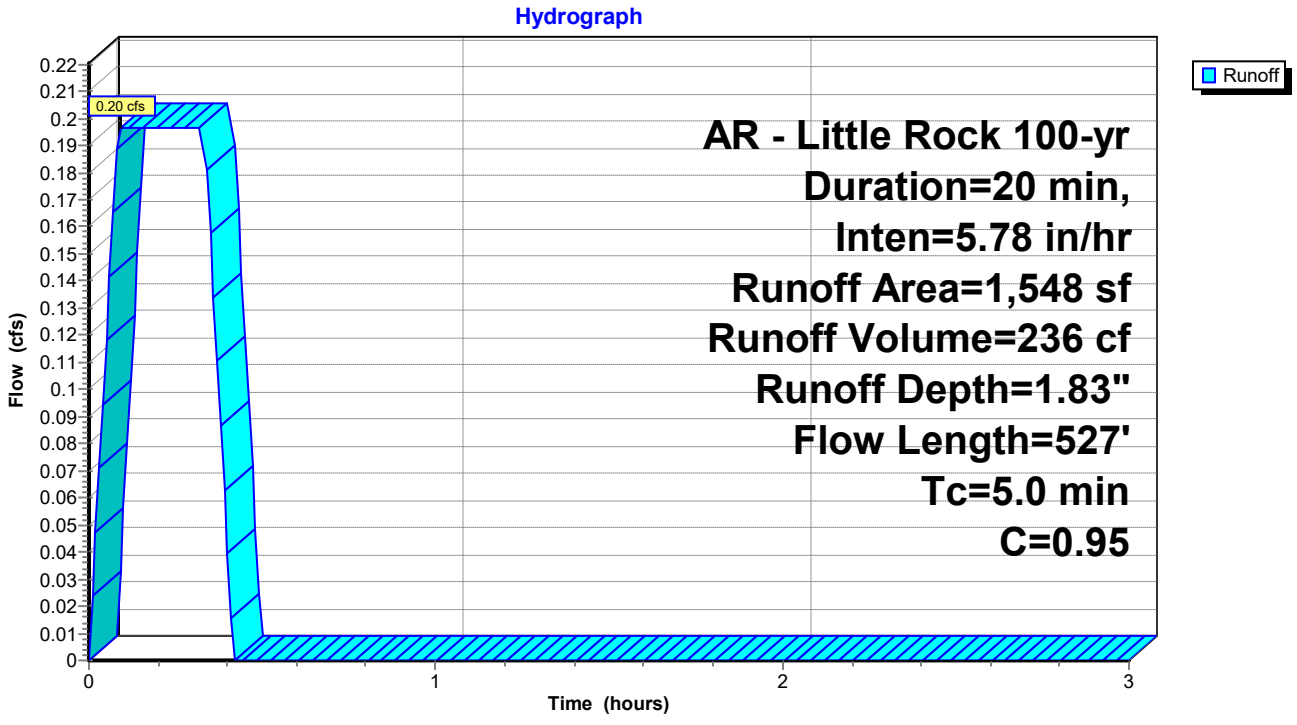
Runoff = 0.20 cfs @ 0.09 hrs, Volume= 236 cf, Depth= 1.83"
Routed to Pond CI-D2 : CI - D2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
0	0.40	Sod Yard
1,548	0.95	Paving, Sidewalks
1,548	0.95	Weighted Average
1,548		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	18	0.0200	1.12		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.3	94	0.0610	5.01		**Shallow Concentrated Flow, Cncentrated Flow** Paved Kv= 20.3 fps
4.4	415		1.57		**Direct Entry, Concentrated Flow (Min)**
5.0	527	Total			

Subcatchment C8: Drainage Basin C8



Summary for Subcatchment C9: Drainage Basin C9

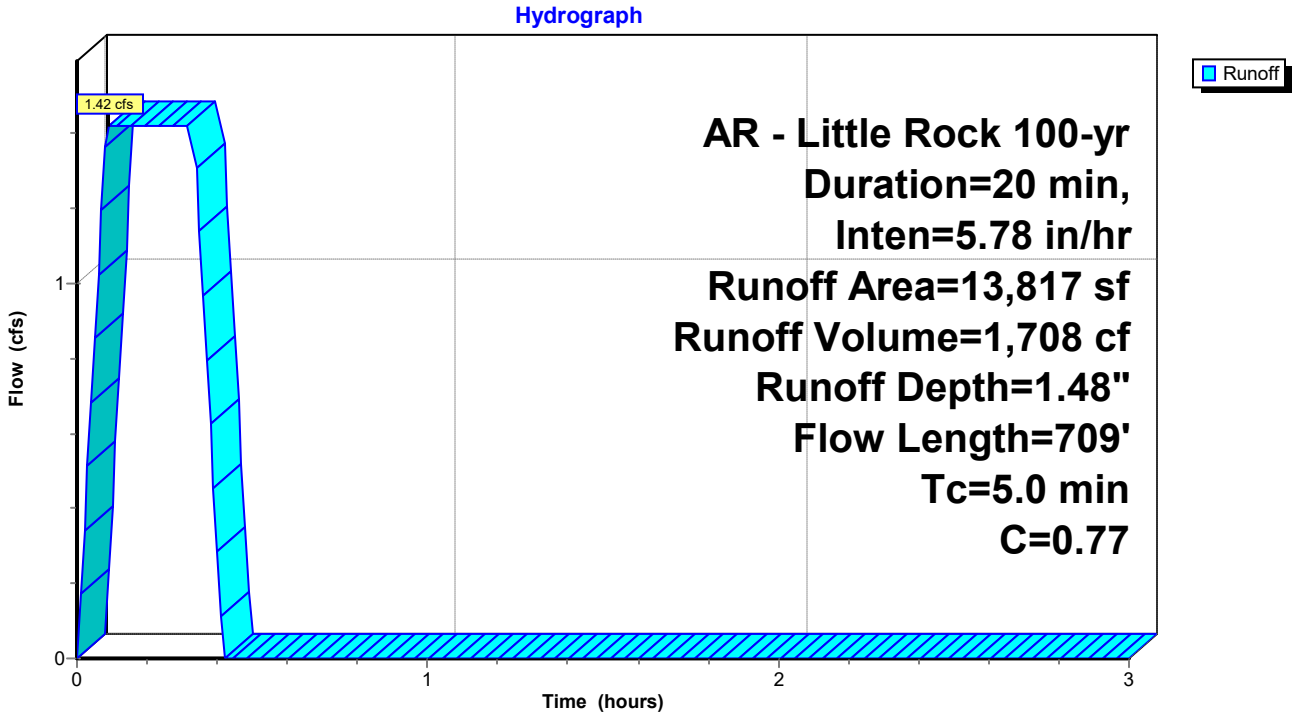
Runoff = 1.42 cfs @ 0.09 hrs, Volume= 1,708 cf, Depth= 1.48"
Routed to Pond CI-C6 : CI - C6

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=20 min, Inten=5.78 in/hr

Area (sf)	C	Description
4,456	0.40	Sod Yard
9,361	0.95	Paving, Sidewalks
13,817	0.77	Weighted Average
4,456		32.25% Pervious Area
9,361		67.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	100	0.0140	1.36		**Sheet Flow, Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
0.1	13	0.0150	2.49		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	23	0.0160	2.57		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	7	0.0050	1.44		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	8	0.0100	2.03		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	41	0.0420	4.16		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.1	41	0.0540	4.72		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
0.2	61	0.0520	4.63		**Shallow Concentrated Flow, Concentrated Flow** Paved Kv= 20.3 fps
2.9	415		2.39		**Direct Entry, Concentrated Flow (Min)**
5.0	709	Total			

Subcatchment C9: Drainage Basin C9

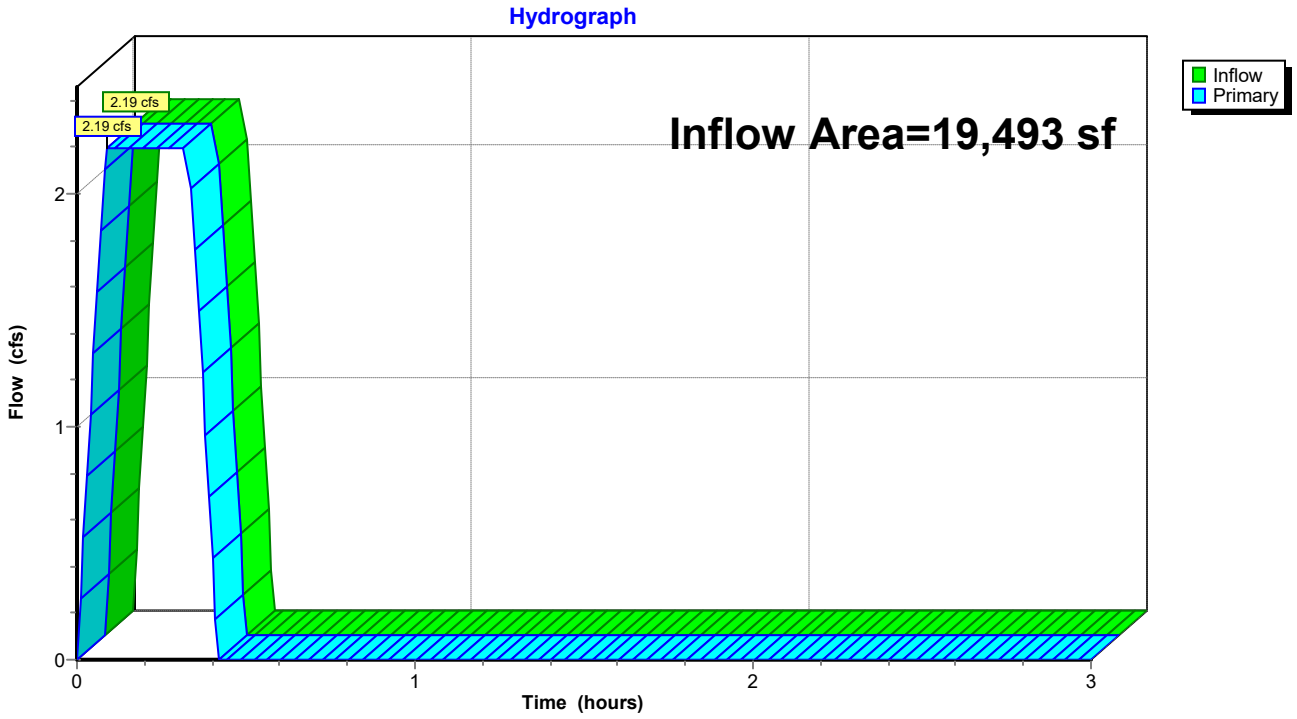


Summary for Pond CI-A1: CI - A1

Inflow Area = 19,493 sf, 74.78% Impervious, Inflow Depth = 1.62" for 100-yr event
Inflow = 2.19 cfs @ 0.09 hrs, Volume= 2,628 cf
Primary = 2.19 cfs @ 0.09 hrs, Volume= 2,628 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond JB-A2 : JB - A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-A1: CI - A1

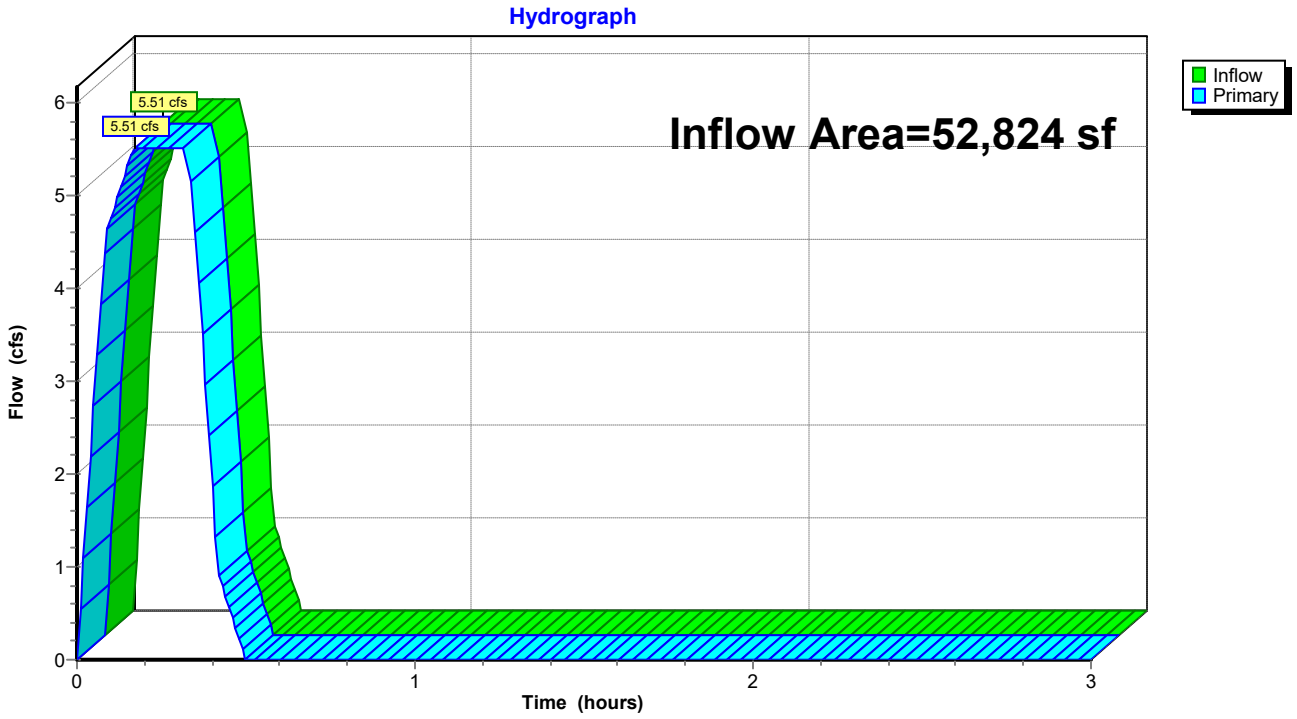


Summary for Pond CI-A3: CI - A3

Inflow Area = 52,824 sf, 61.20% Impervious, Inflow Depth = 1.50" for 100-yr event
Inflow = 5.51 cfs @ 0.17 hrs, Volume= 6,608 cf
Primary = 5.51 cfs @ 0.17 hrs, Volume= 6,608 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A4 : CI - A4

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-A3: CI - A3

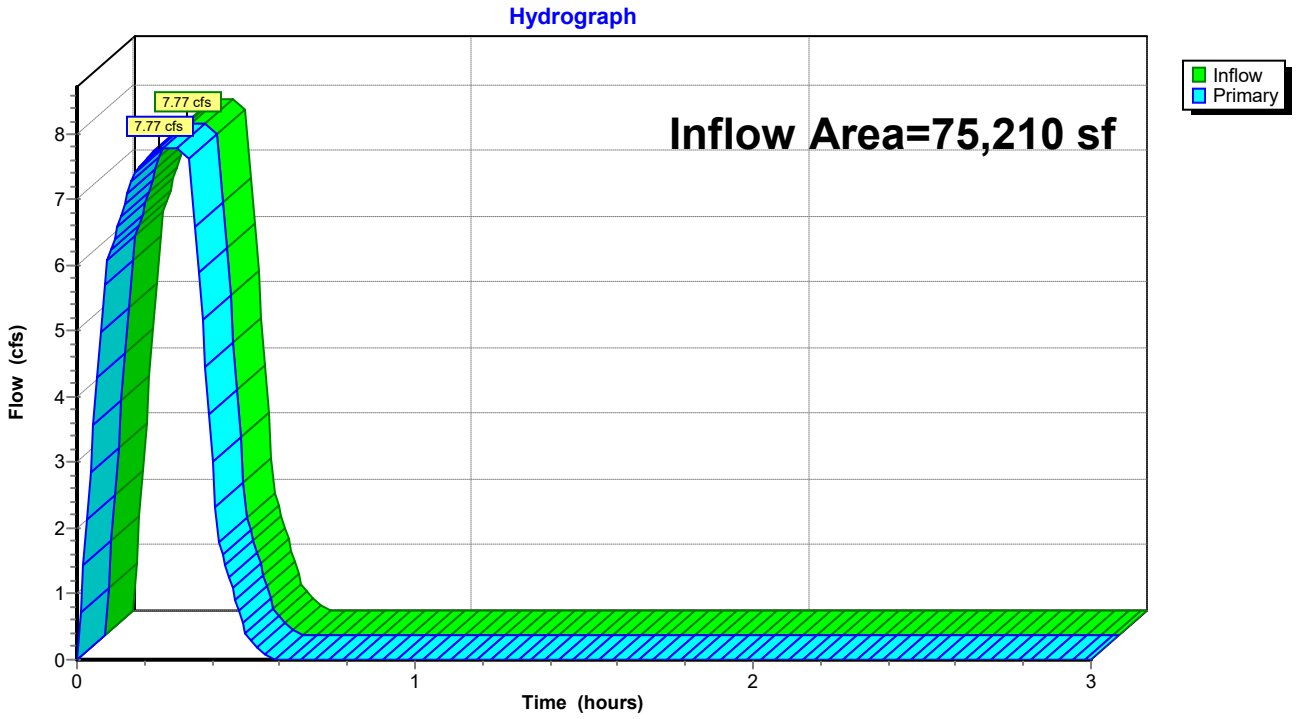


Summary for Pond CI-A4: CI - A4

Inflow Area = 75,210 sf, 60.06% Impervious, Inflow Depth = 1.49" for 100-yr event
Inflow = 7.77 cfs @ 0.24 hrs, Volume= 9,326 cf
Primary = 7.77 cfs @ 0.24 hrs, Volume= 9,326 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A5 : CI - A5

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-A4: CI - A4

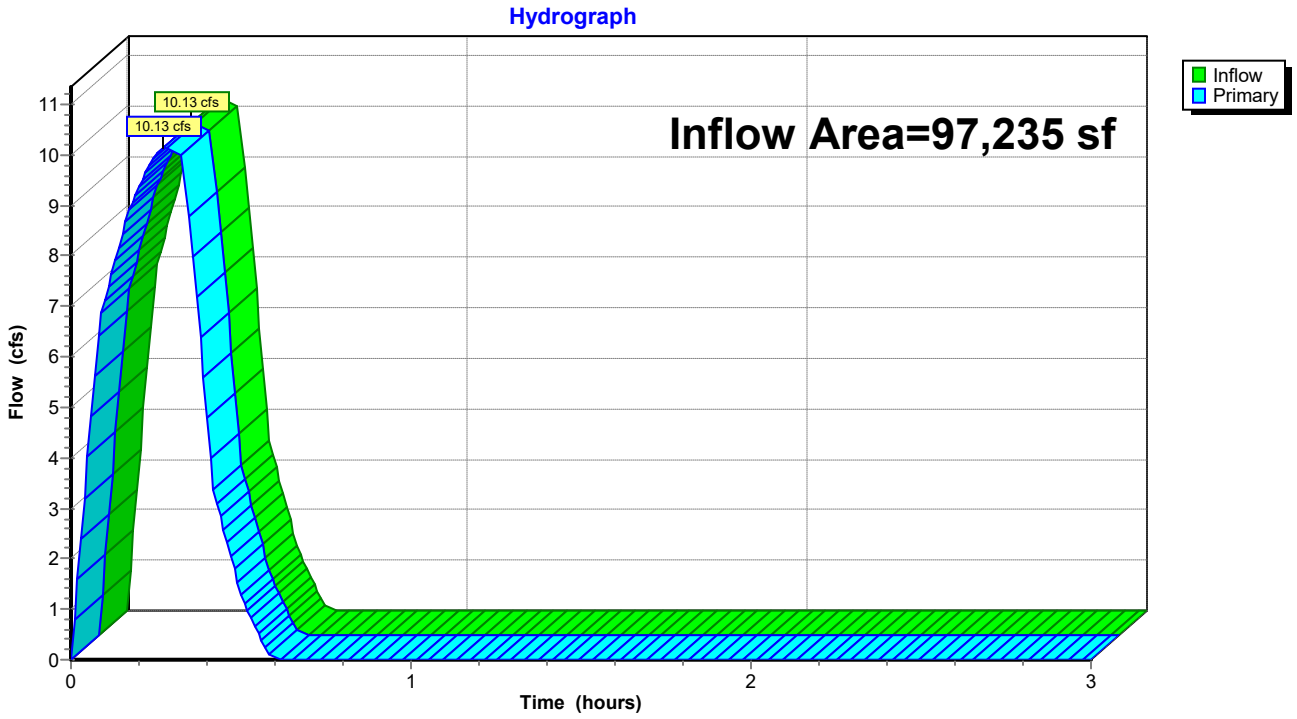


Summary for Pond CI-A5: CI - A5

Inflow Area = 97,235 sf, 62.81% Impervious, Inflow Depth = 1.50" for 100-yr event
Inflow = 10.13 cfs @ 0.27 hrs, Volume= 12,155 cf
Primary = 10.13 cfs @ 0.27 hrs, Volume= 12,155 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond DP : Existing North Detention Pond

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-A5: CI - A5

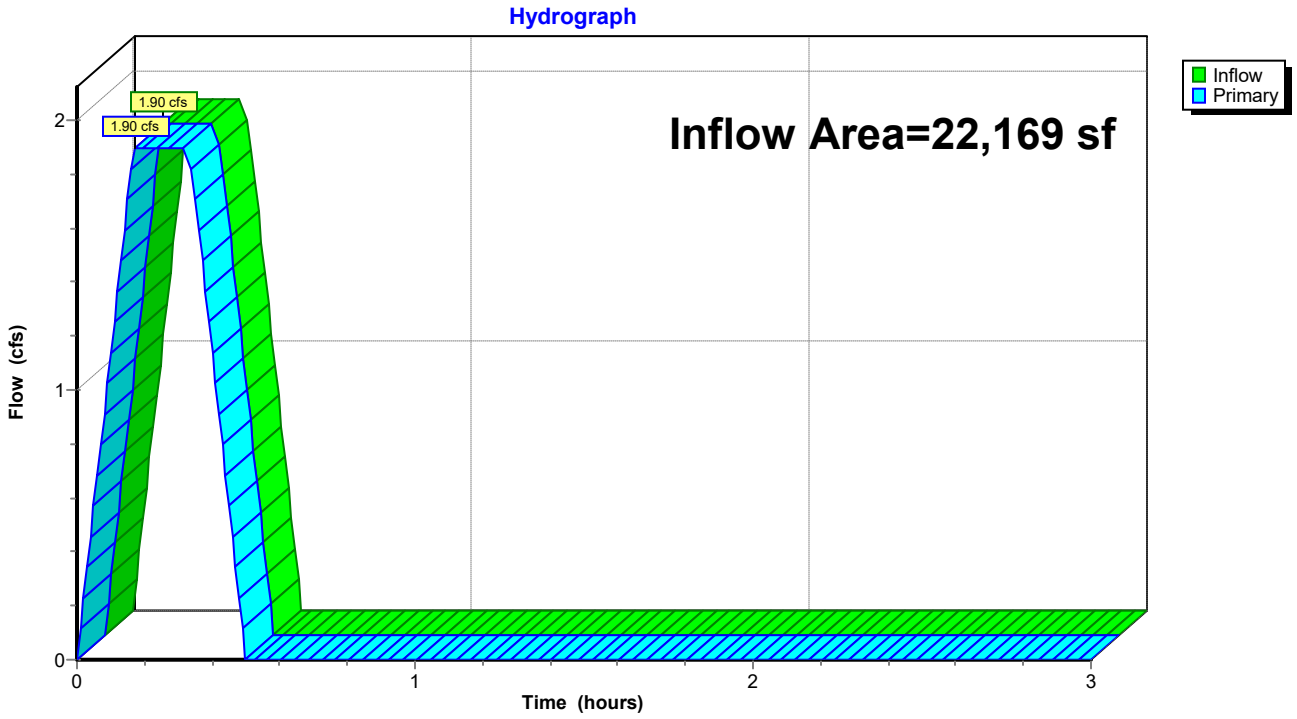


Summary for Pond CI-B2: CI - B2

Inflow Area = 22,169 sf, 29.72% Impervious, Inflow Depth = 1.23" for 100-yr event
Inflow = 1.90 cfs @ 0.17 hrs, Volume= 2,278 cf
Primary = 1.90 cfs @ 0.17 hrs, Volume= 2,278 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond JB-A2 : JB - A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-B2: CI - B2

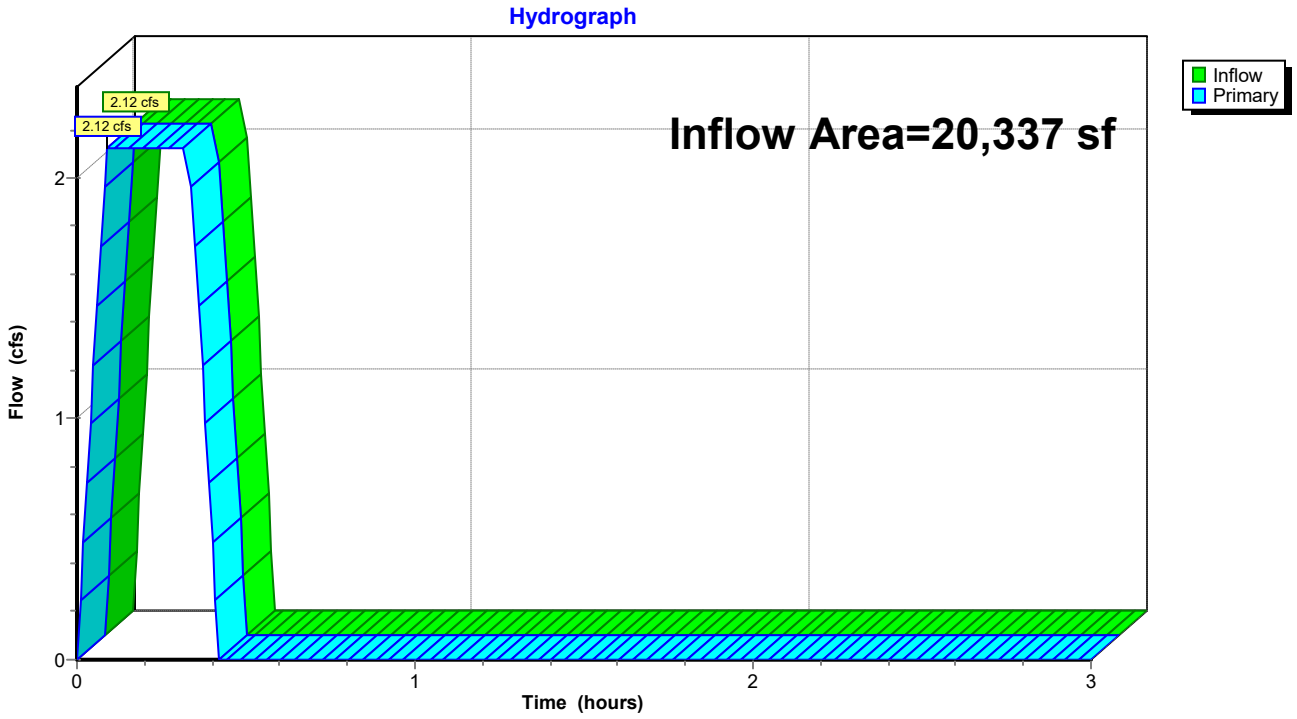


Summary for Pond CI-C1: CI - C1

Inflow Area = 20,337 sf, 69.83% Impervious, Inflow Depth = 1.50" for 100-yr event
Inflow = 2.12 cfs @ 0.09 hrs, Volume= 2,545 cf
Primary = 2.12 cfs @ 0.09 hrs, Volume= 2,545 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C2 : CI - C2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C1: CI - C1

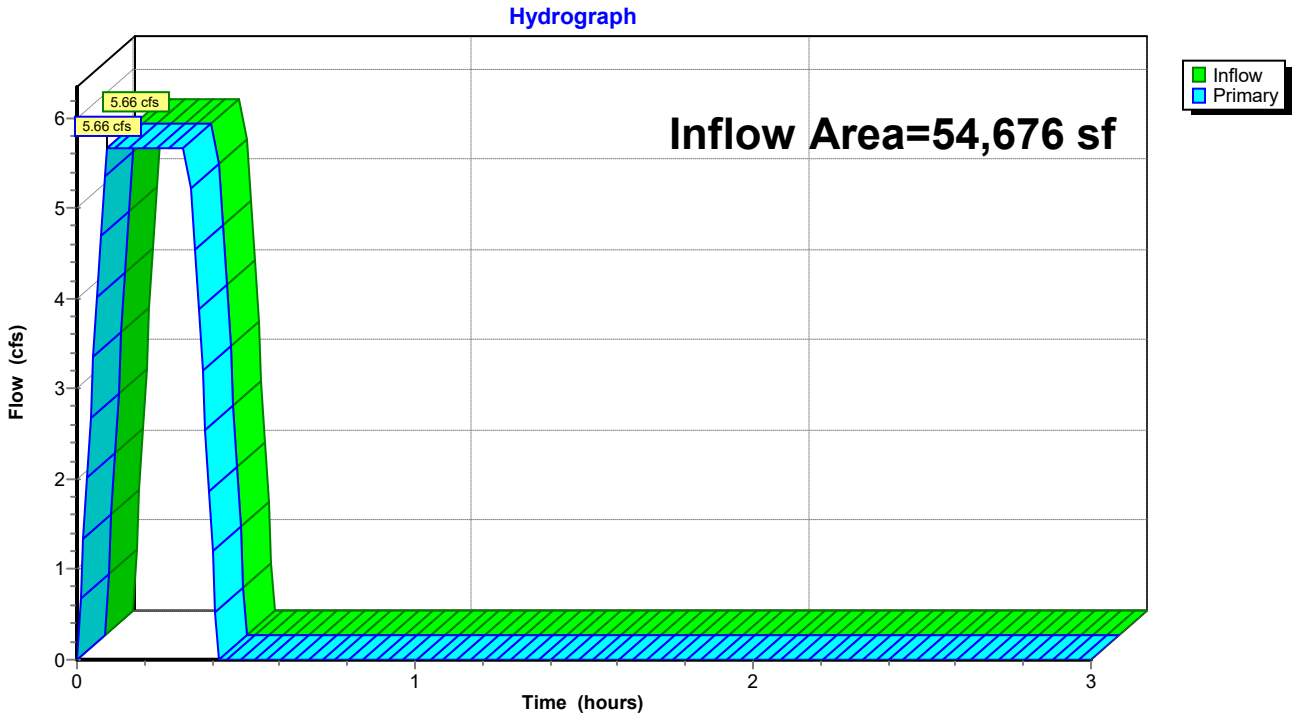


Summary for Pond CI-C2: CI - C2

Inflow Area = 54,676 sf, 67.97% Impervious, Inflow Depth = 1.49" for 100-yr event
Inflow = 5.66 cfs @ 0.09 hrs, Volume= 6,790 cf
Primary = 5.66 cfs @ 0.09 hrs, Volume= 6,790 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C3 : CI - C3

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C2: CI - C2

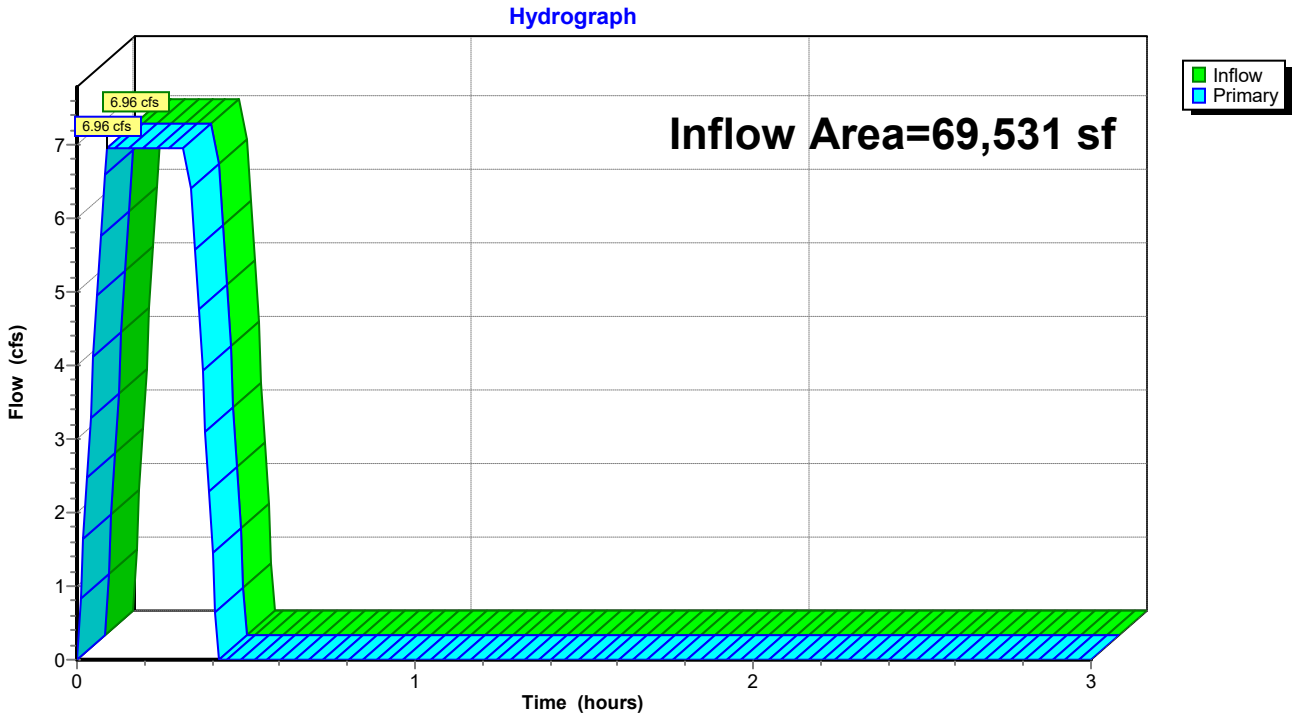


Summary for Pond CI-C3: CI - C3

Inflow Area = 69,531 sf, 63.12% Impervious, Inflow Depth = 1.44" for 100-yr event
Inflow = 6.96 cfs @ 0.09 hrs, Volume= 8,343 cf
Primary = 6.96 cfs @ 0.09 hrs, Volume= 8,343 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C4 : CI - C4

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C3: CI - C3

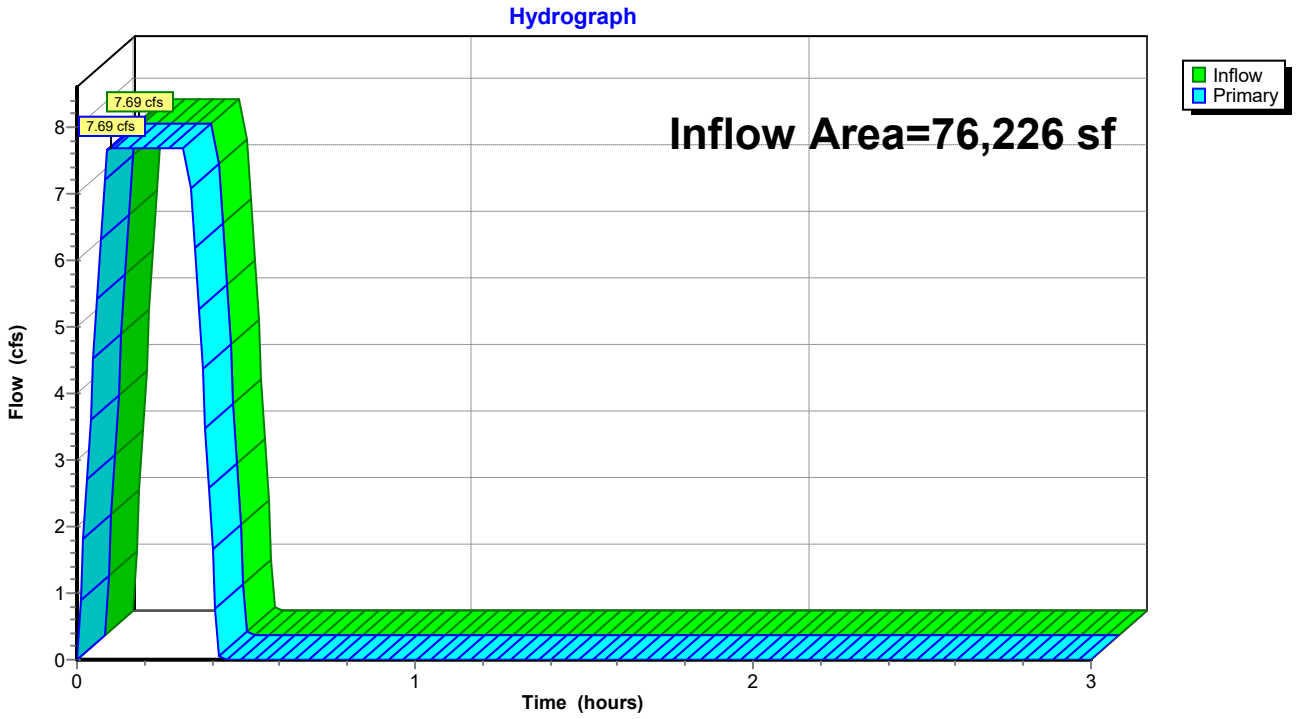


Summary for Pond CI-C4: CI - C4

Inflow Area = 76,226 sf, 64.22% Impervious, Inflow Depth = 1.45" for 100-yr event
Inflow = 7.69 cfs @ 0.10 hrs, Volume= 9,225 cf
Primary = 7.69 cfs @ 0.10 hrs, Volume= 9,225 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C5 : CI - C5

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C4: CI - C4

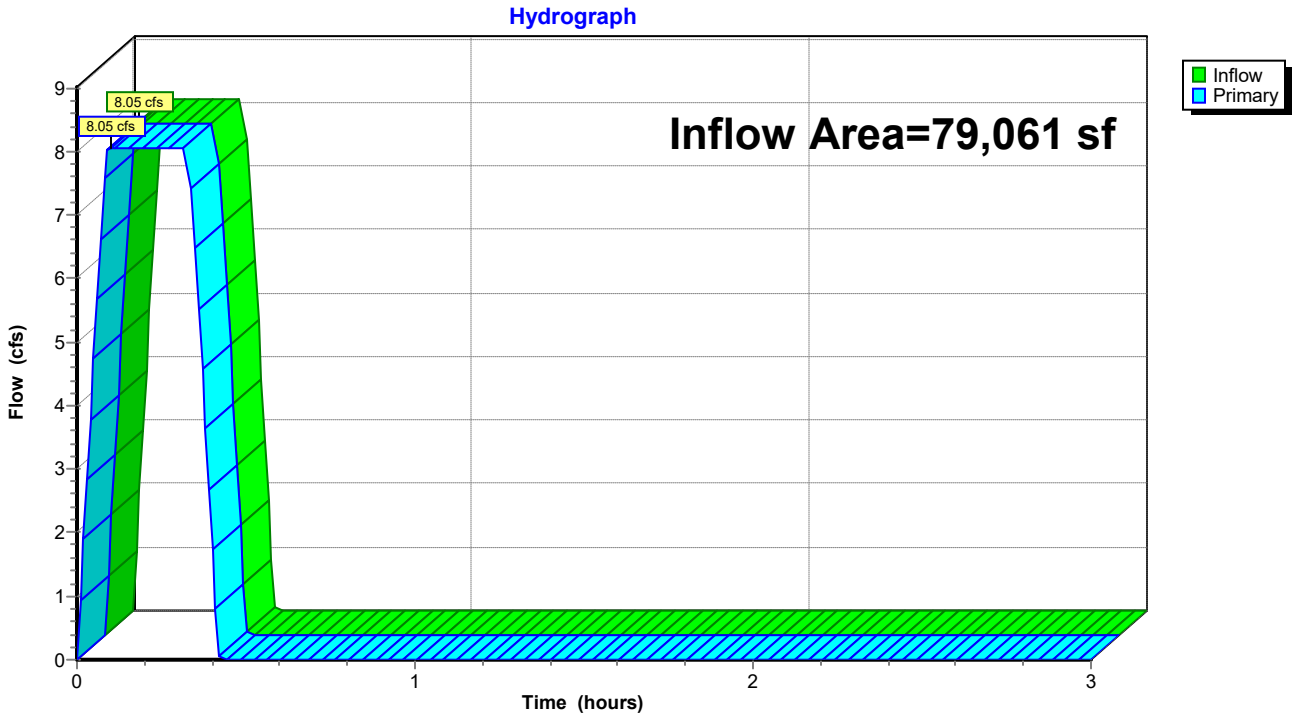


Summary for Pond CI-C5: CI - C5

Inflow Area = 79,061 sf, 65.50% Impervious, Inflow Depth = 1.47" for 100-yr event
Inflow = 8.05 cfs @ 0.10 hrs, Volume= 9,657 cf
Primary = 8.05 cfs @ 0.10 hrs, Volume= 9,657 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C6 : CI - C6

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C5: CI - C5

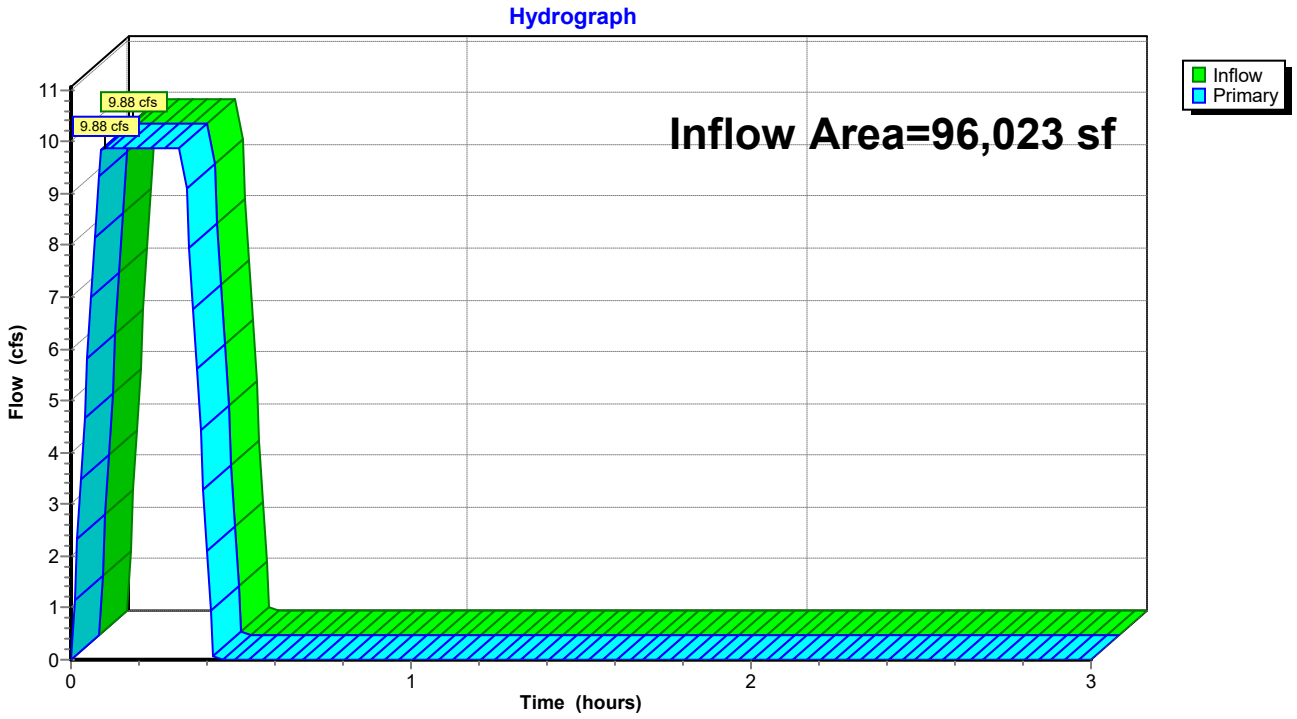


Summary for Pond CI-C6: CI - C6

Inflow Area = 96,023 sf, 66.95% Impervious, Inflow Depth = 1.48" for 100-yr event
Inflow = 9.88 cfs @ 0.10 hrs, Volume= 11,844 cf
Primary = 9.88 cfs @ 0.10 hrs, Volume= 11,844 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C7 : CI - C7

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C6: CI - C6

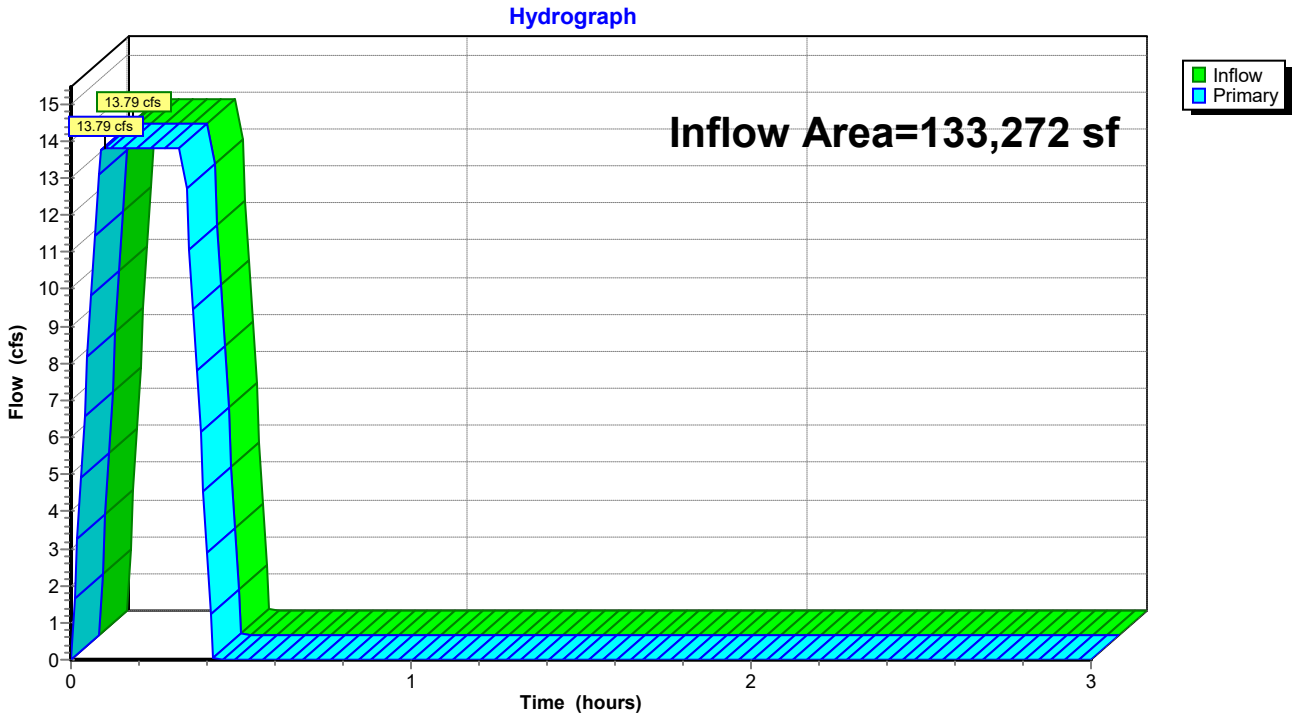


Summary for Pond CI-C7: CI - C7

Inflow Area = 133,272 sf, 67.70% Impervious, Inflow Depth = 1.49" for 100-yr event
Inflow = 13.79 cfs @ 0.10 hrs, Volume= 16,545 cf
Primary = 13.79 cfs @ 0.10 hrs, Volume= 16,545 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond DP : Existing North Detention Pond

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-C7: CI - C7

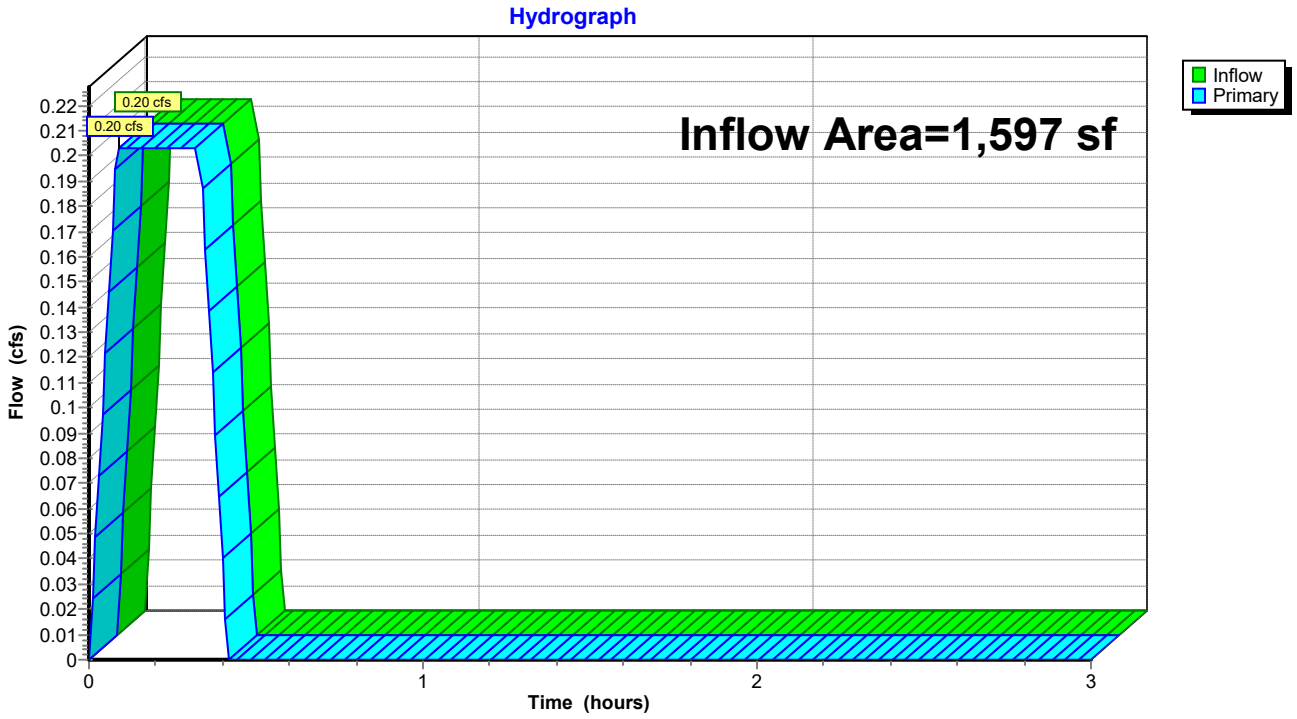


Summary for Pond CI-D1: CI - D1

Inflow Area = 1,597 sf,100.00% Impervious, Inflow Depth = 1.83" for 100-yr event
Inflow = 0.20 cfs @ 0.09 hrs, Volume= 244 cf
Primary = 0.20 cfs @ 0.09 hrs, Volume= 244 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-D2 : CI - D2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-D1: CI - D1

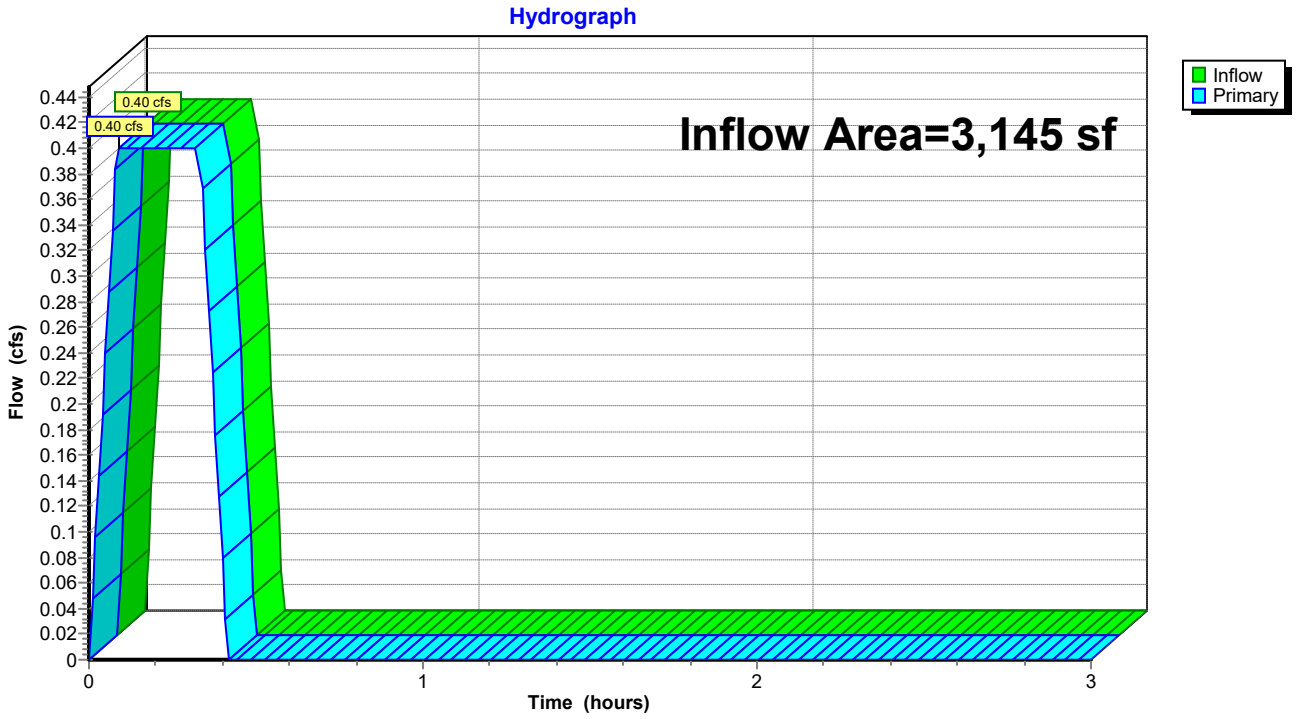


Summary for Pond CI-D2: CI - D2

Inflow Area = 3,145 sf,100.00% Impervious, Inflow Depth = 1.83" for 100-yr event
Inflow = 0.40 cfs @ 0.09 hrs, Volume= 480 cf
Primary = 0.40 cfs @ 0.09 hrs, Volume= 480 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C6 : CI - C6

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-D2: CI - D2

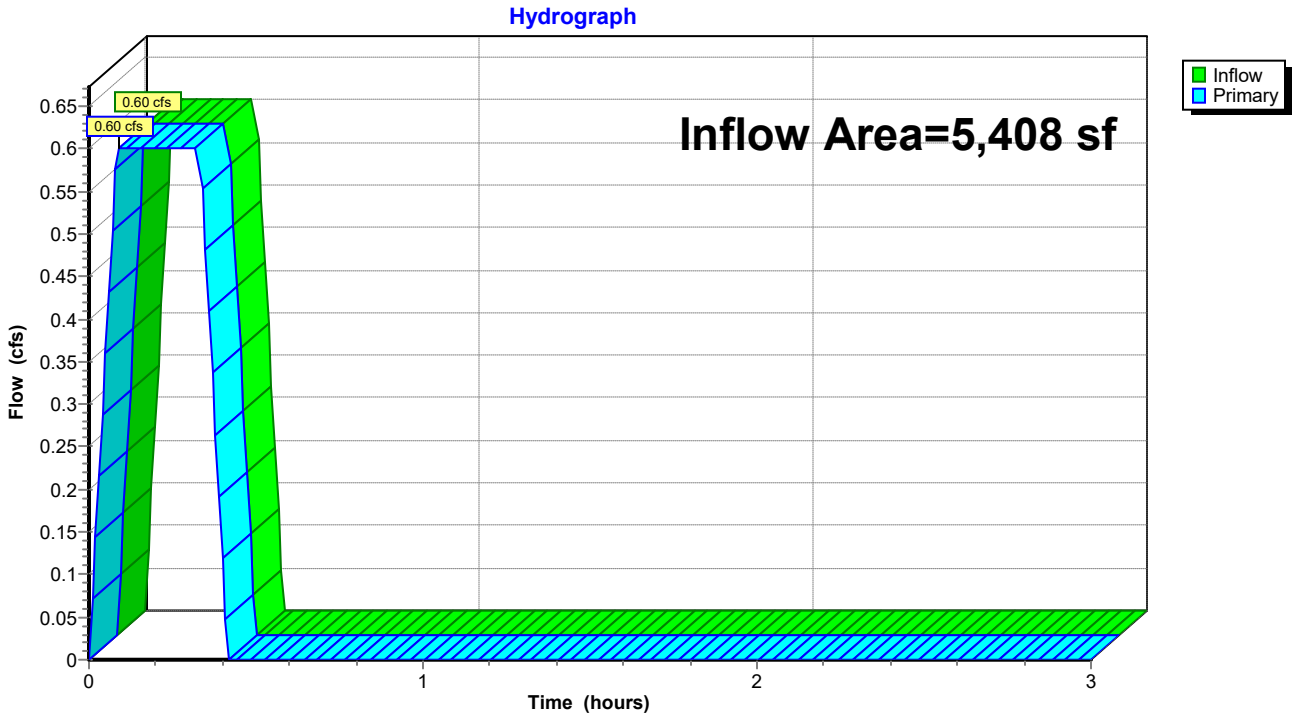


Summary for Pond CI-E1: CI - E1

Inflow Area = 5,408 sf, 77.35% Impervious, Inflow Depth = 1.60" for 100-yr event
Inflow = 0.60 cfs @ 0.09 hrs, Volume= 721 cf
Primary = 0.60 cfs @ 0.09 hrs, Volume= 721 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-E2 : CI - E2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-E1: CI - E1

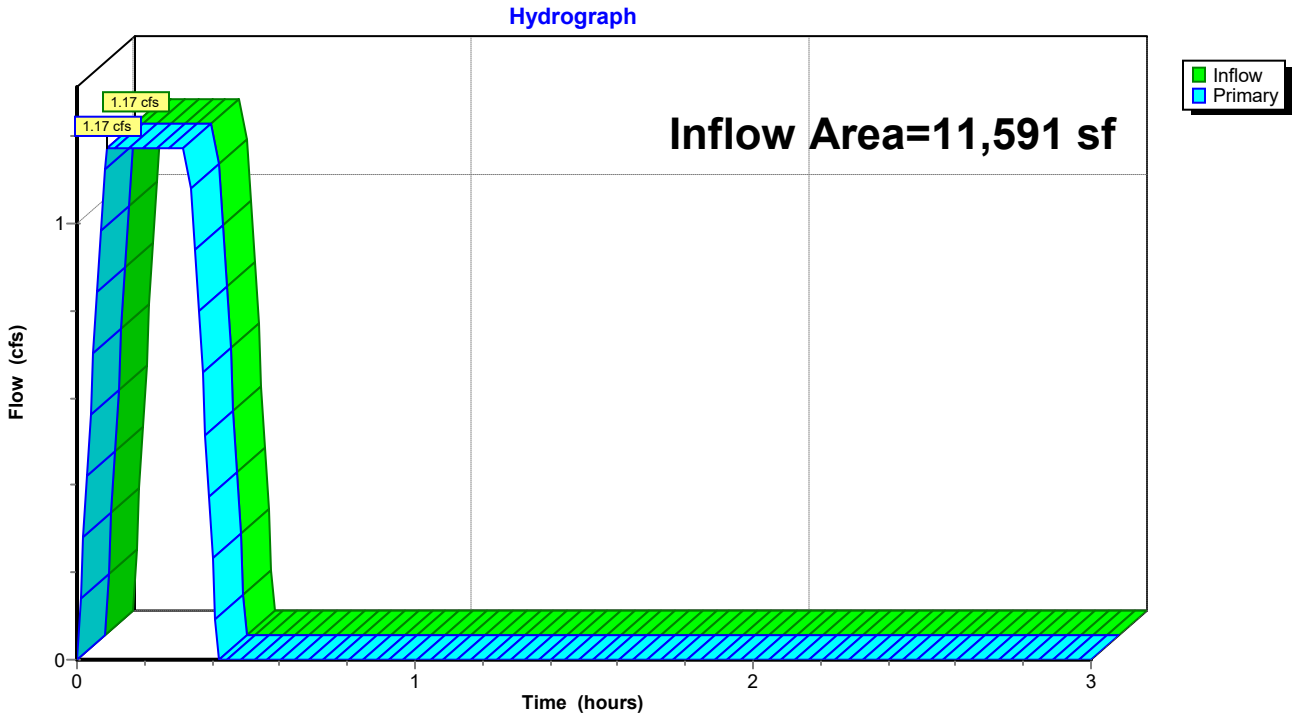


Summary for Pond CI-E2: CI - E2

Inflow Area = 11,591 sf, 64.62% Impervious, Inflow Depth = 1.45" for 100-yr event
Inflow = 1.17 cfs @ 0.09 hrs, Volume= 1,405 cf
Primary = 1.17 cfs @ 0.09 hrs, Volume= 1,405 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-C7 : CI - C7

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond CI-E2: CI - E2



Summary for Pond DP: Existing North Detention Pond

Inflow Area = 322,783 sf, 53.09% Impervious, Inflow Depth = 1.35" for 100-yr event
Inflow = 30.33 cfs @ 0.27 hrs, Volume= 36,381 cf
Outflow = 12.52 cfs @ 0.39 hrs, Volume= 36,381 cf, Atten= 59%, Lag= 7.3 min
Primary = 12.52 cfs @ 0.39 hrs, Volume= 36,381 cf
Routed to Link FINAL : APPROX DISCHARGE

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 383.24' @ 0.39 hrs Storage= 23,171 cf

Plug-Flow detention time= 22.0 min calculated for 36,260 cf (100% of inflow)
Center-of-Mass det. time= 22.1 min (35.7 - 13.5)

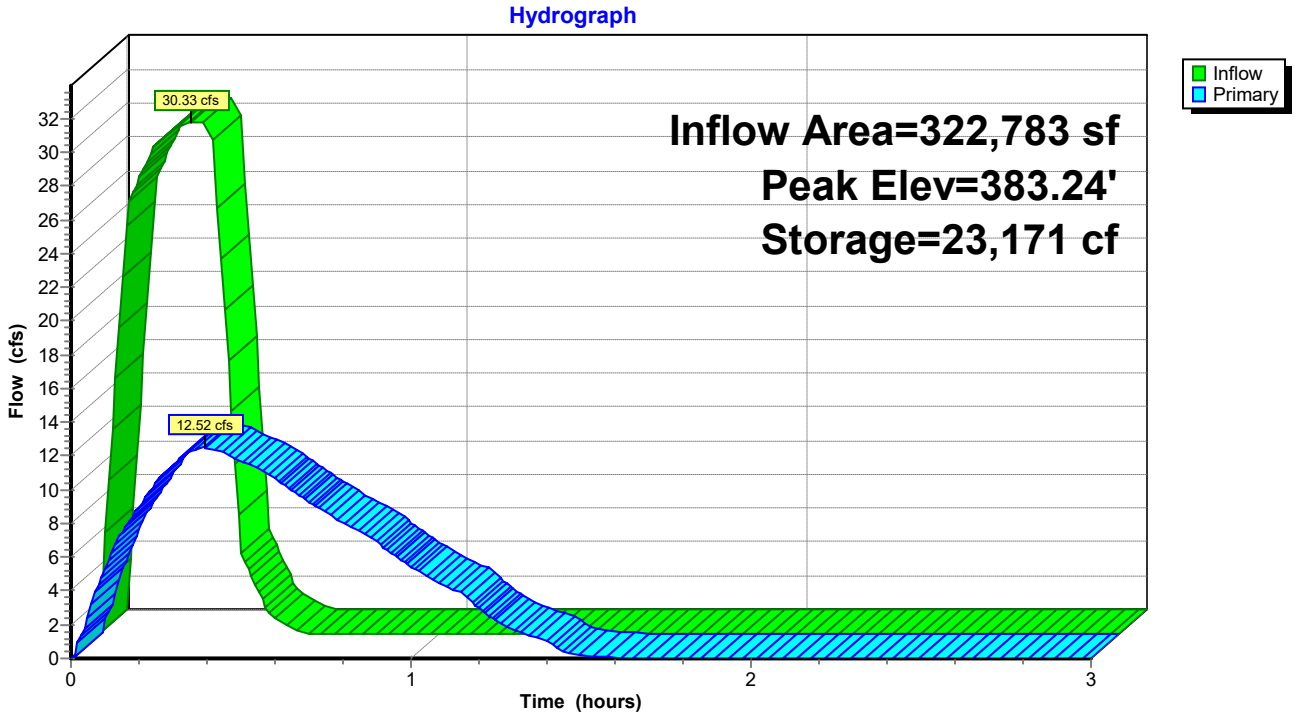
Volume	Invert	Avail.Storage	Storage Description
#1	381.17'	72,742 cf	**Custom Stage Data** Listed below

Elevation (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
381.17	0	0
381.50	200	200
382.00	1,825	2,025
382.50	5,265	7,290
383.00	9,300	16,590
383.50	13,733	30,323
384.00	18,578	48,901
384.50	23,841	72,742

Device	Routing	Invert	Outlet Devices
#1	Primary	384.16'	**5.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#2	Primary	381.17'	**1.7' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=12.52 cfs @ 0.39 hrs HW=383.24' (Free Discharge)
1=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)
2=Sharp-Crested Rectangular Weir (Weir Controls 12.52 cfs @ 4.70 fps)

Pond DP: Existing North Detention Pond

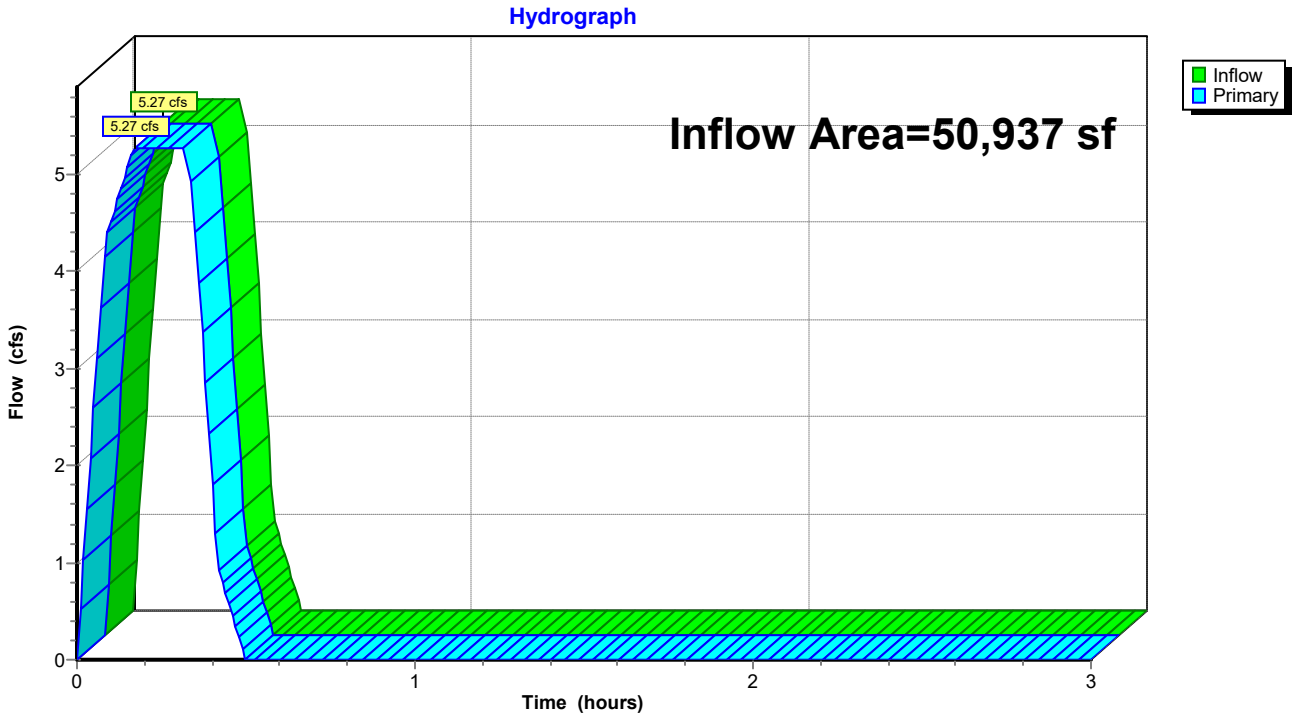


Summary for Pond JB-A2: JB - A2

Inflow Area = 50,937 sf, 59.76% Impervious, Inflow Depth = 1.49" for 100-yr event
Inflow = 5.27 cfs @ 0.17 hrs, Volume= 6,321 cf
Primary = 5.27 cfs @ 0.17 hrs, Volume= 6,321 cf, Atten= 0%, Lag= 0.0 min
Routed to Pond CI-A3 : CI - A3

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Pond JB-A2: JB - A2

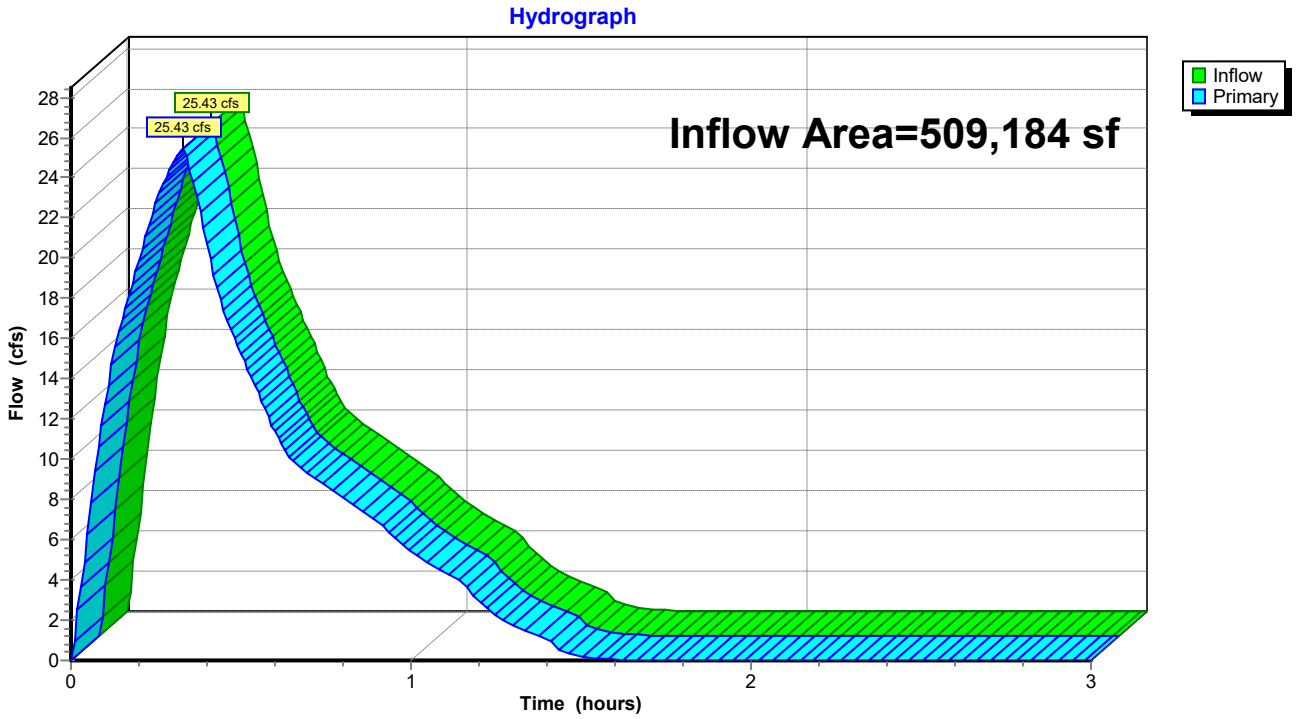


Summary for Link FINAL: APPROX DISCHARGE

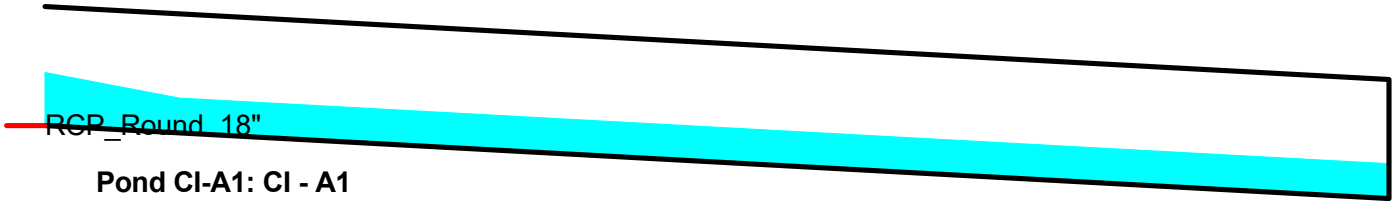
Inflow Area = 509,184 sf, 38.62% Impervious, Inflow Depth = 1.24" for 100-yr event
Inflow = 25.43 cfs @ 0.33 hrs, Volume= 52,525 cf
Primary = 25.43 cfs @ 0.33 hrs, Volume= 52,525 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link FINAL: APPROX DISCHARGE

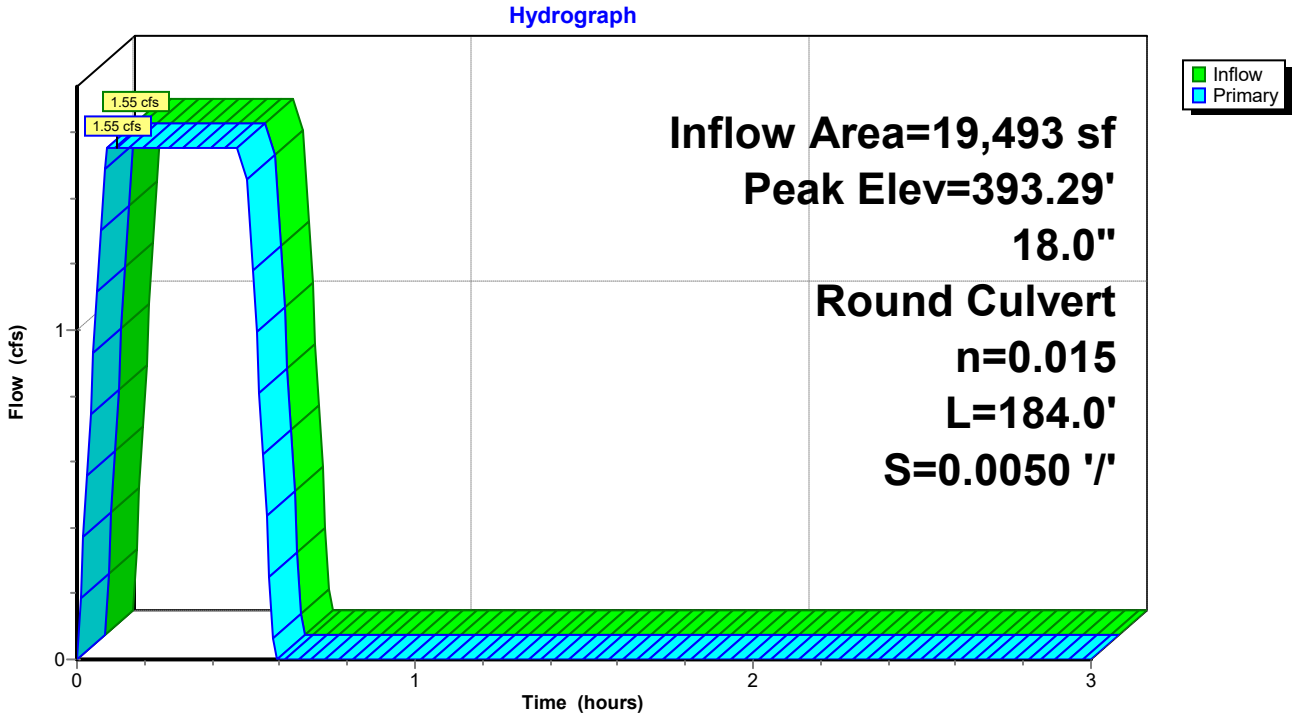


STORM SEWER ANALYSIS



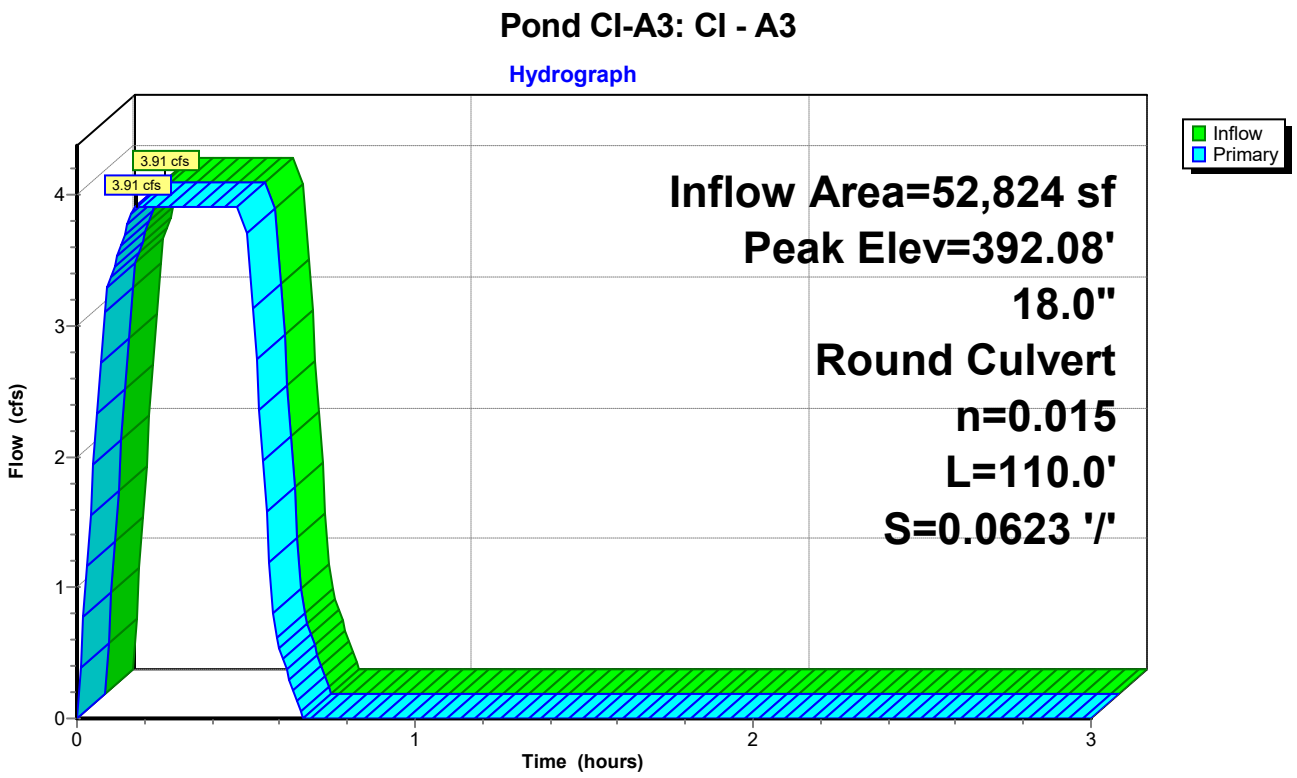
Pond CI-A1: CI - A1

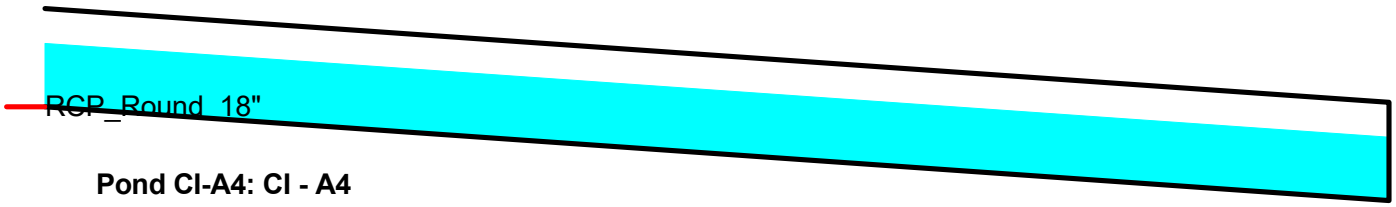
Pond CI-A1: CI - A1



RCP_Round 18"

Pond CI-A3: CI - A3

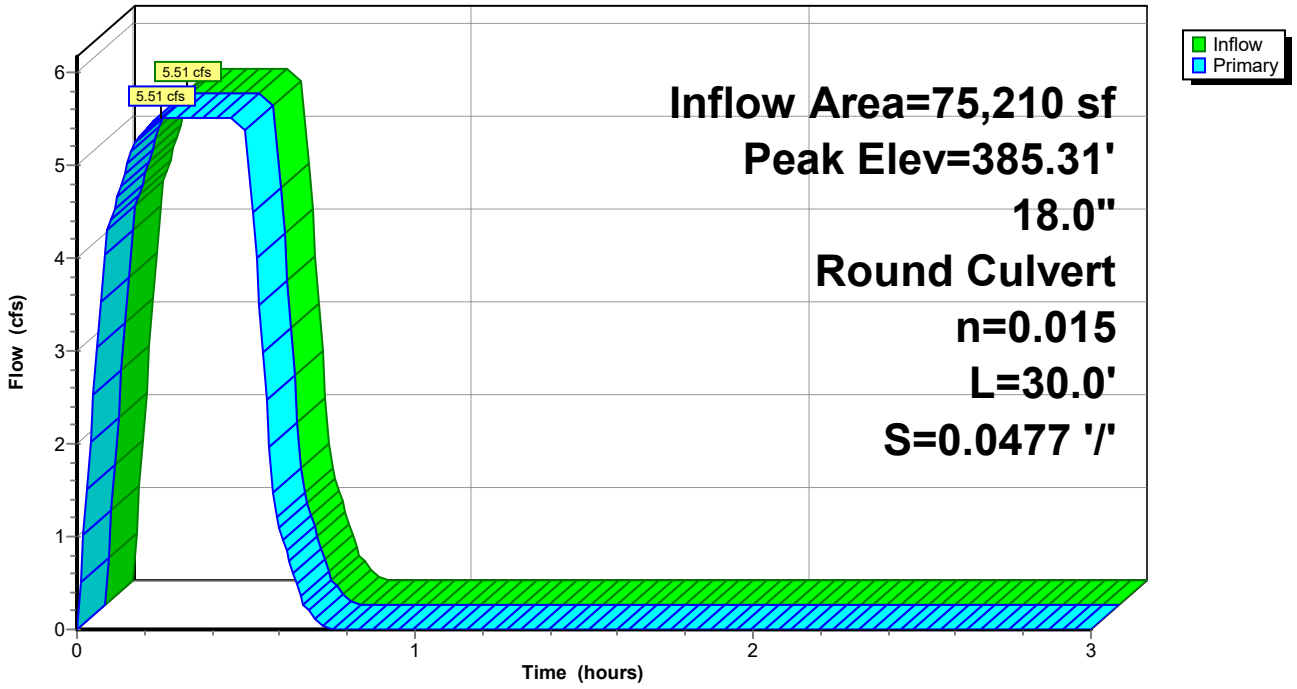


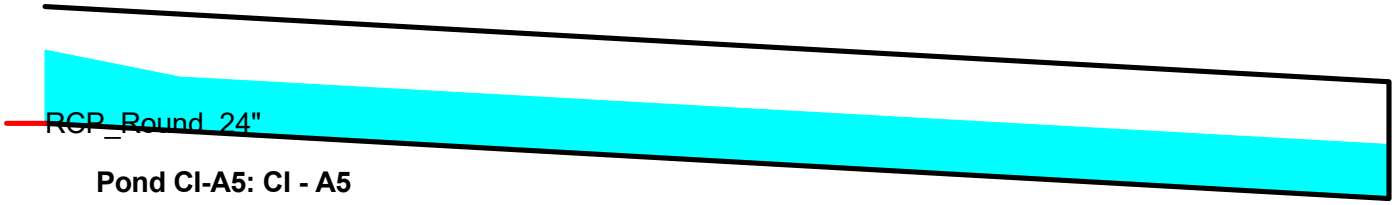


Pond CI-A4: CI - A4

Pond CI-A4: CI - A4

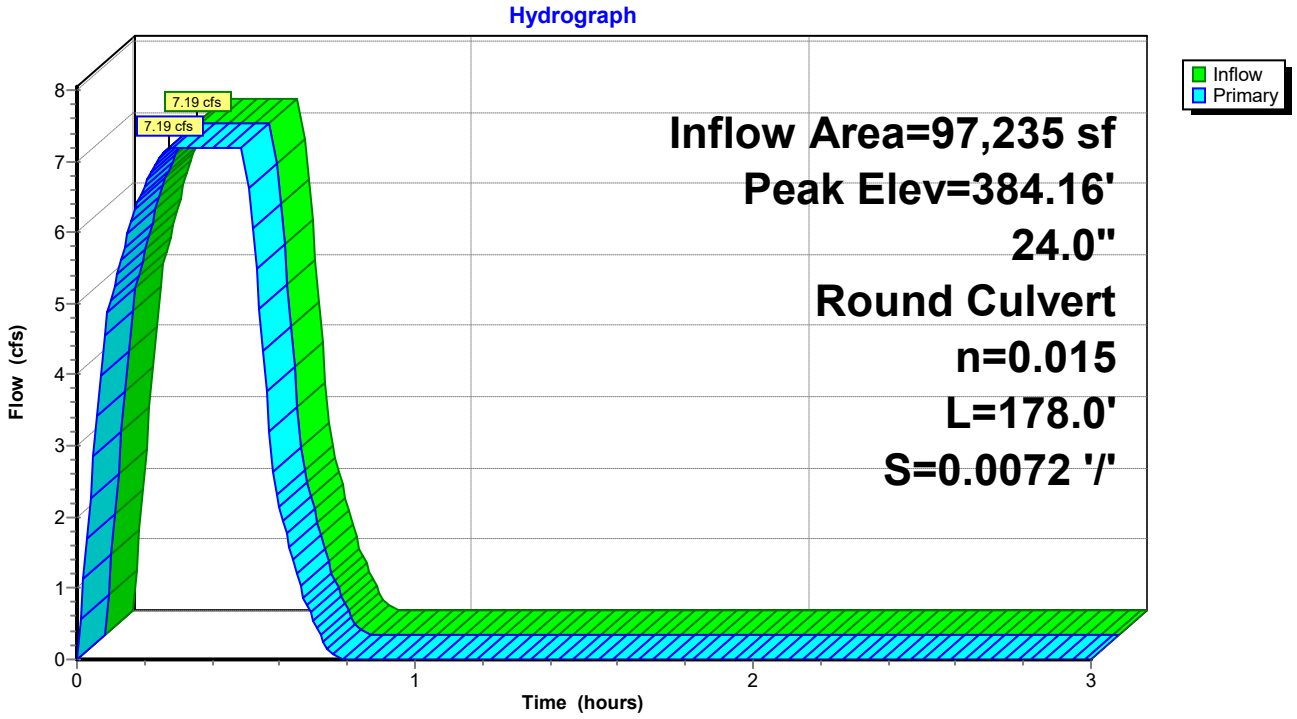
Hydrograph

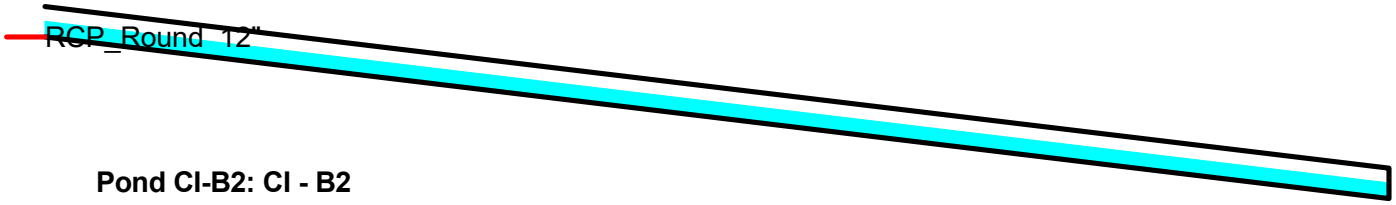




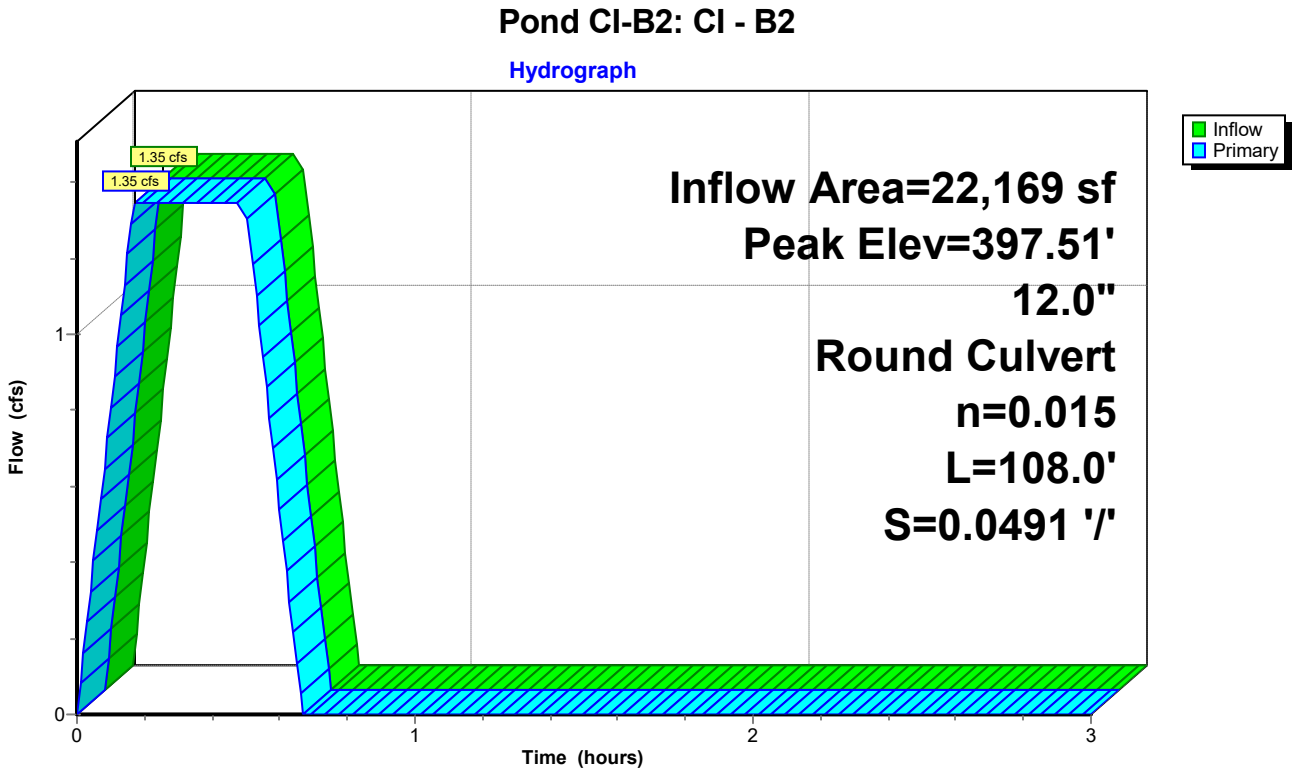
Pond CI-A5: CI - A5

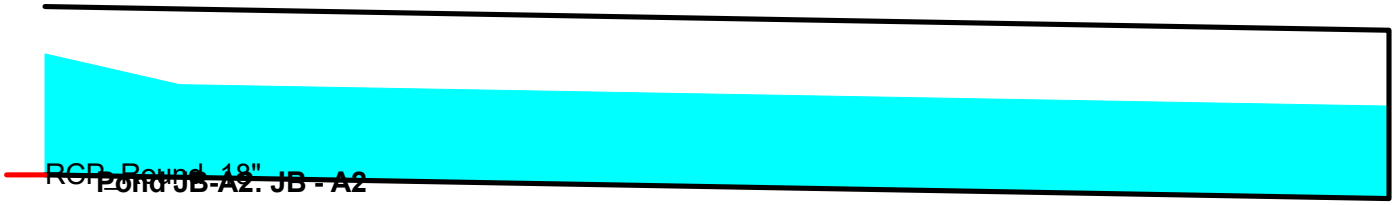
Pond CI-A5: CI - A5



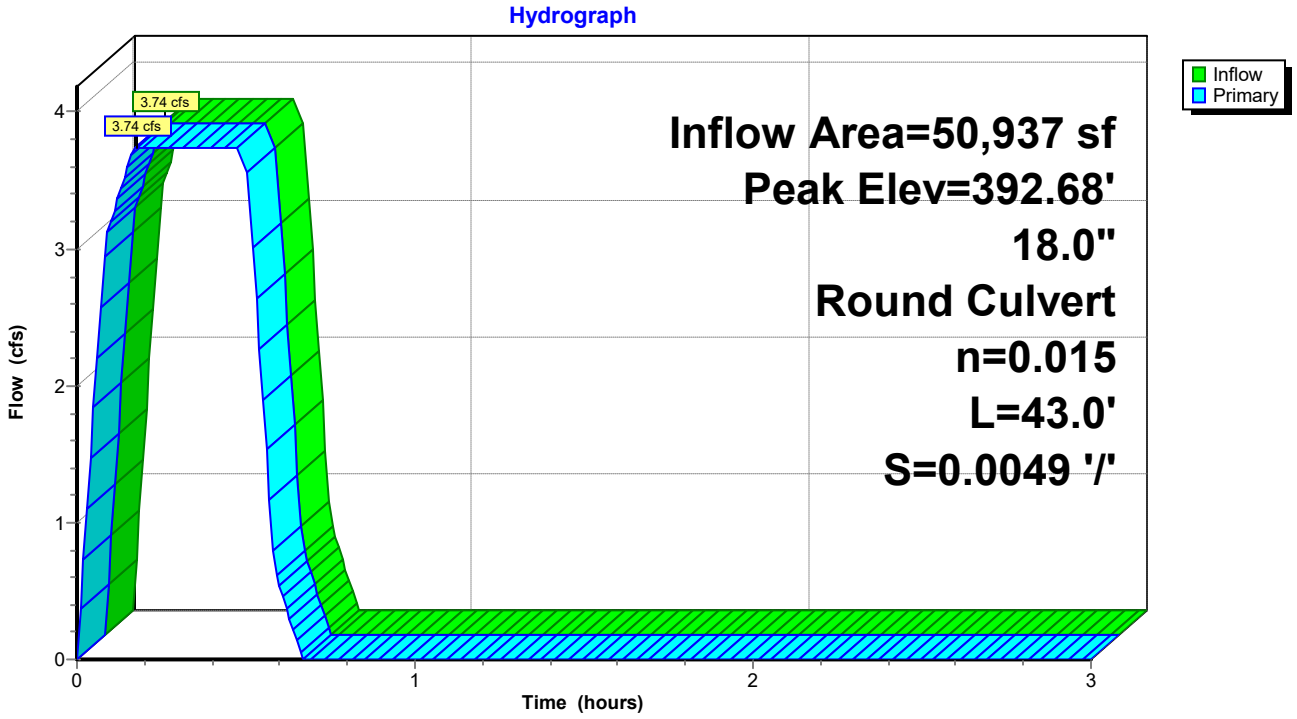


Pond CI-B2: CI - B2





Pond JB-A2: JB - A2



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Mar 11 2026

Pipe-A1

Circular

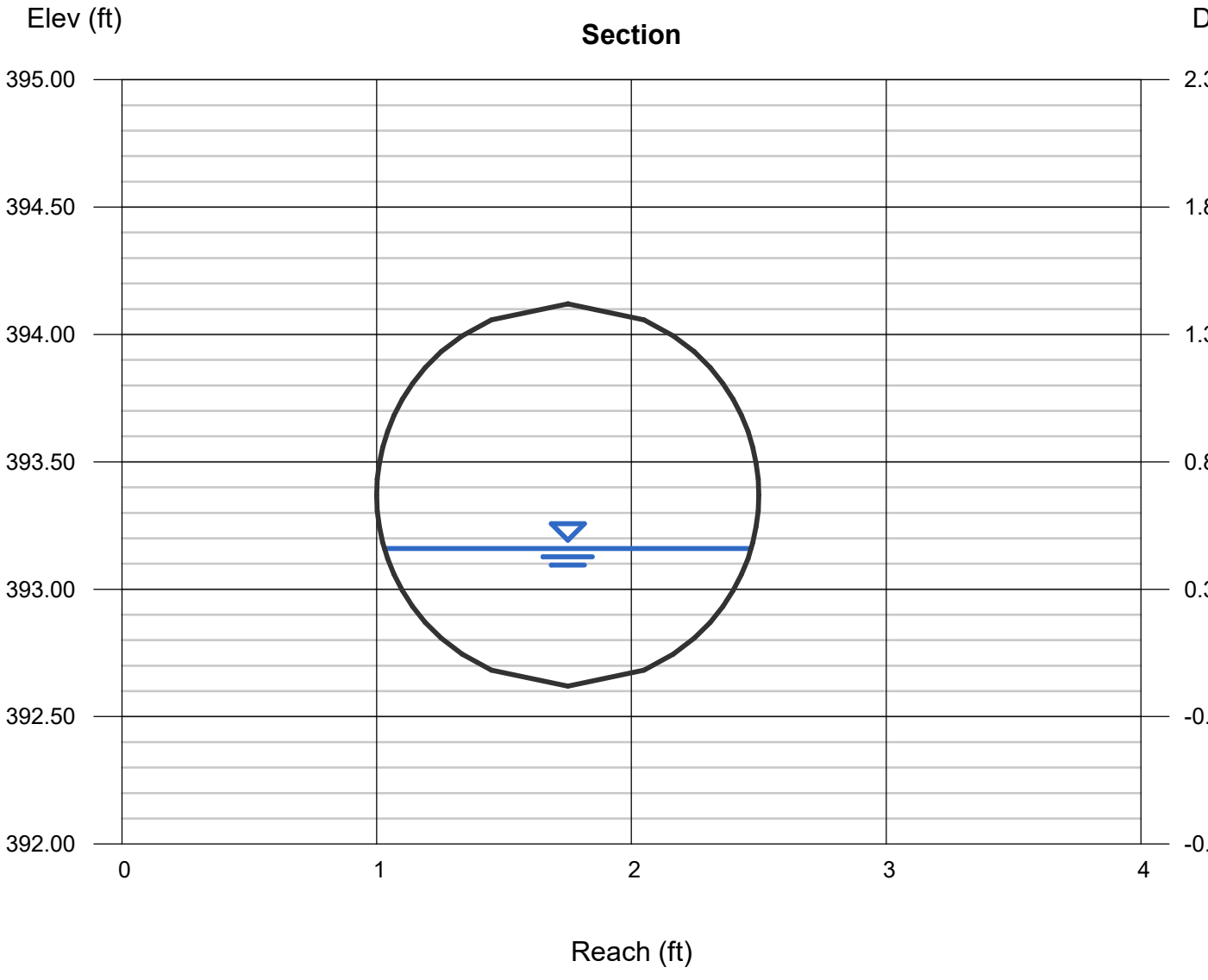
Diameter (ft)	= 1.50
Invert Elev (ft)	= 392.62
Slope (%)	= 0.50
N-Value	= 0.015

Calculations

Compute by:	Known Q
Known Q (cfs)	= 1.78

Highlighted

Depth (ft)	= 0.54
Q (cfs)	= 1.780
Area (sqft)	= 0.58
Velocity (ft/s)	= 3.09
Wetted Perim (ft)	= 1.93
Crit Depth, Yc (ft)	= 0.50
Top Width (ft)	= 1.44
EGL (ft)	= 0.69



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Mar 11 2026

Pipe-A2

Circular

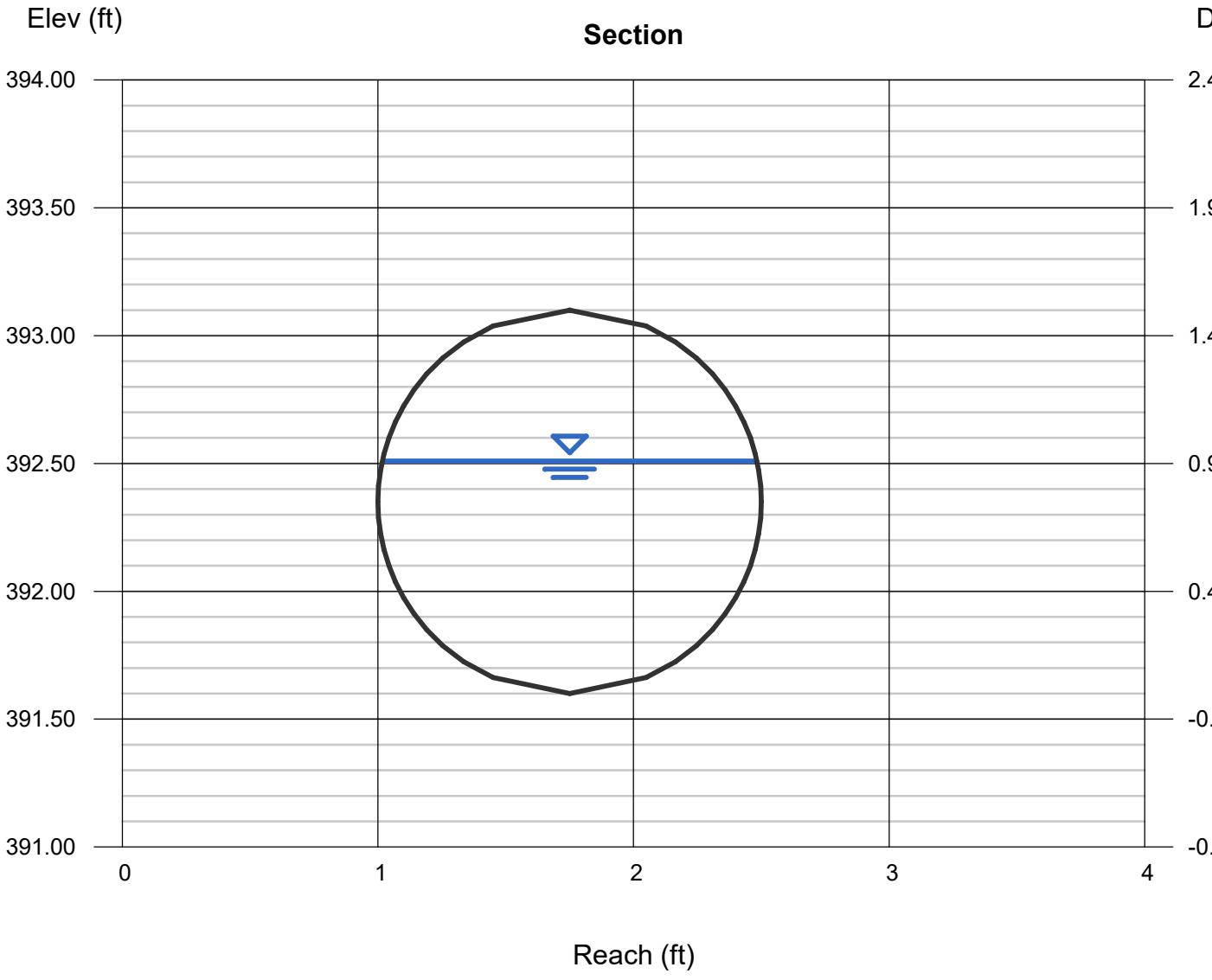
Diameter (ft)	= 1.50
Invert Elev (ft)	= 391.60
Slope (%)	= 0.50
N-Value	= 0.015

Calculations

Compute by:	Known Q
Known Q (cfs)	= 4.35

Highlighted

Depth (ft)	= 0.91
Q (cfs)	= 4.350
Area (sqft)	= 1.13
Velocity (ft/s)	= 3.86
Wetted Perim (ft)	= 2.68
Crit Depth, Yc (ft)	= 0.80
Top Width (ft)	= 1.46
EGL (ft)	= 1.14



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Mar 11 2026

Pipe-A3

Circular

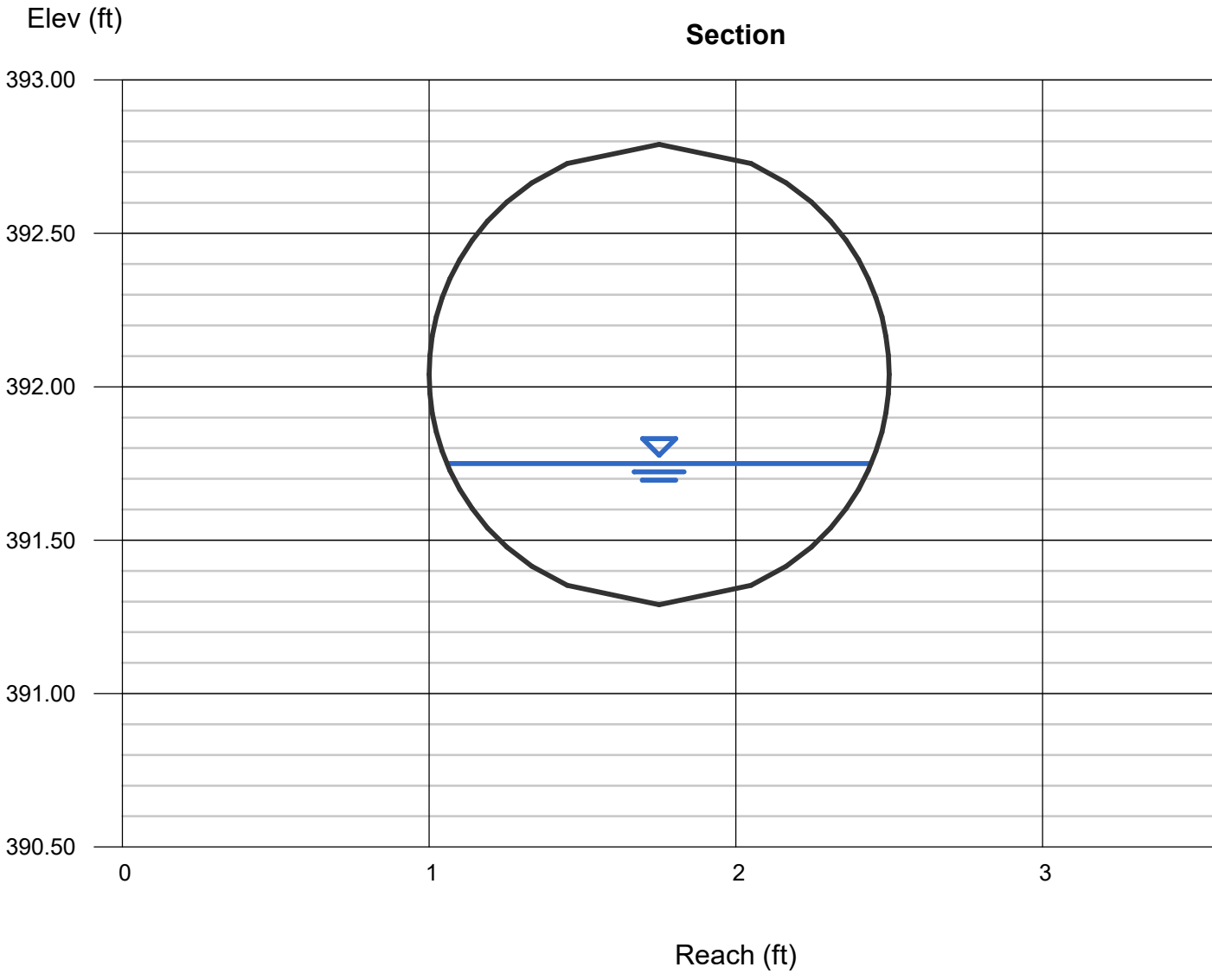
Diameter (ft)	= 1.50
Invert Elev (ft)	= 391.29
Slope (%)	= 6.20
N-Value	= 0.015

Calculations

Compute by:	Known Q
Known Q (cfs)	= 4.55

Highlighted

Depth (ft)	= 0.46
Q (cfs)	= 4.550
Area (sqft)	= 0.46
Velocity (ft/s)	= 9.87
Wetted Perim (ft)	= 1.76
Crit Depth, Yc (ft)	= 0.82
Top Width (ft)	= 1.38
EGL (ft)	= 1.98



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Mar 25 2026

Pipe-A4 (25 yr)

Circular

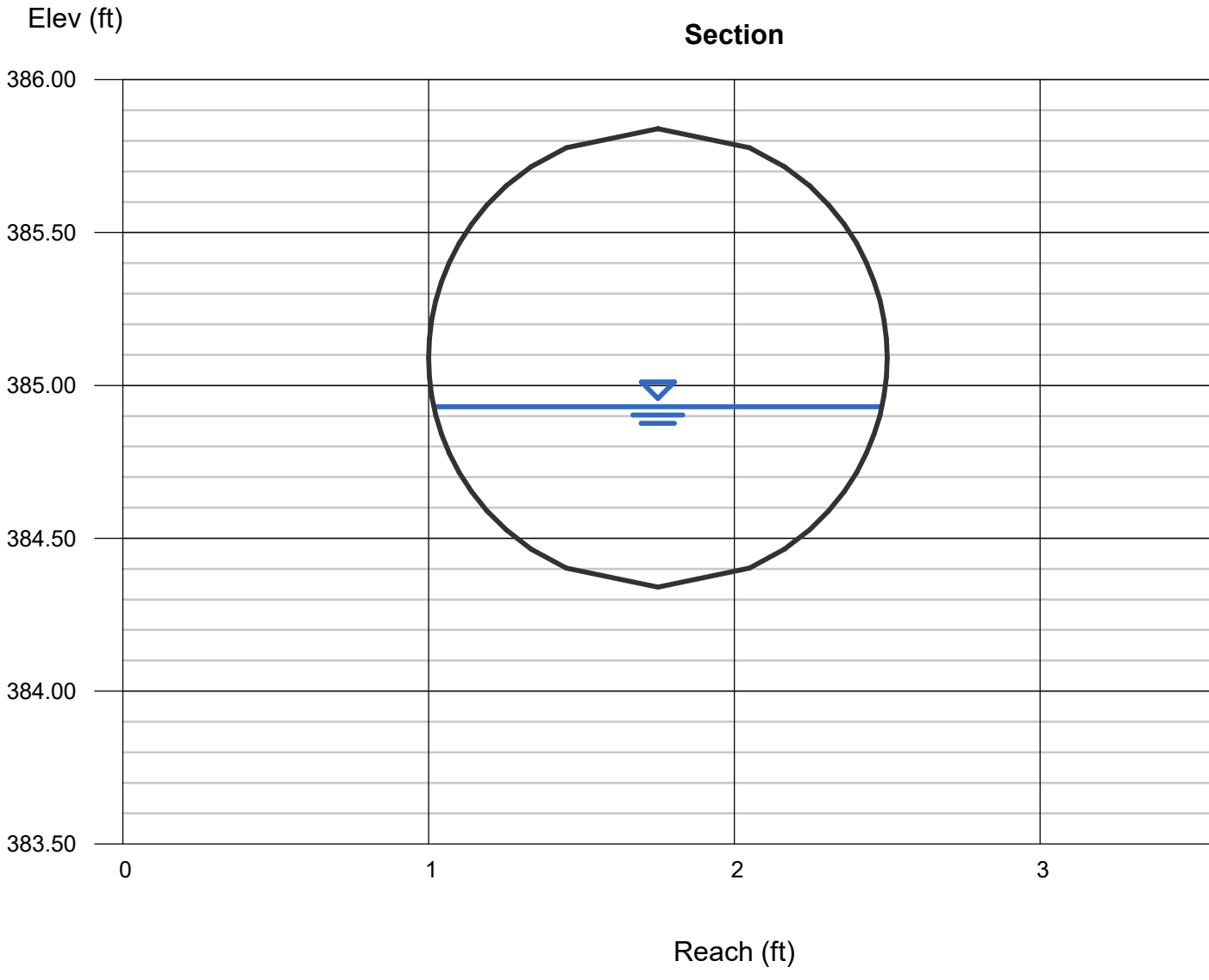
Diameter (ft)	= 1.50
Invert Elev (ft)	= 384.34
Slope (%)	= 4.85
N-Value	= 0.015

Calculations

Compute by:	Known Q
Known Q (cfs)	= 6.51

Highlighted

Depth (ft)	= 0.59
Q (cfs)	= 6.510
Area (sqft)	= 0.65
Velocity (ft/s)	= 10.02
Wetted Perim (ft)	= 2.04
Crit Depth, Yc (ft)	= 0.99
Top Width (ft)	= 1.47
EGL (ft)	= 2.15



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc.

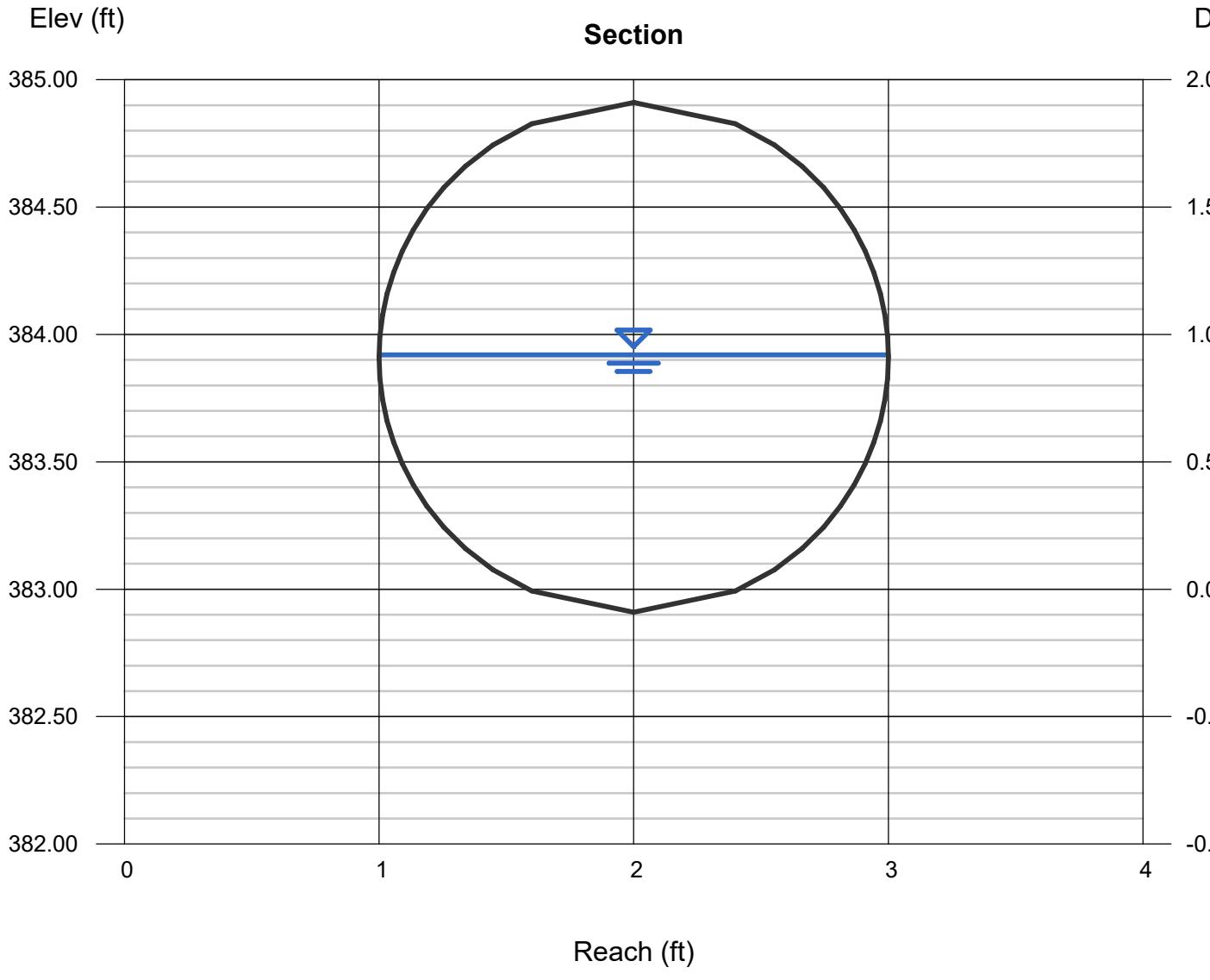
Wednesday, Mar 25 2026

Pipe-A5 (25 yr)

Circular Diameter (ft)	= 2.00
	= 382.91
Invert Elev (ft)	= 0.72
Slope (%)	= 0.015
N-Value	
Calculations	Known Q
Compute by:	= 8.48
Known Q (cfs)	

Highlighted

Depth (ft)	= 1.01
Q (cfs)	= 8.480
Area (sqft)	= 1.60
Velocity (ft/s)	= 5.30
Wetted Perim (ft)	= 3.17
Crit Depth, Yc (ft)	= 1.04
Top Width (ft)	= 2.00
EGL (ft)	= 1.45



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Mar 11 2026

Pipe-B1

Circular

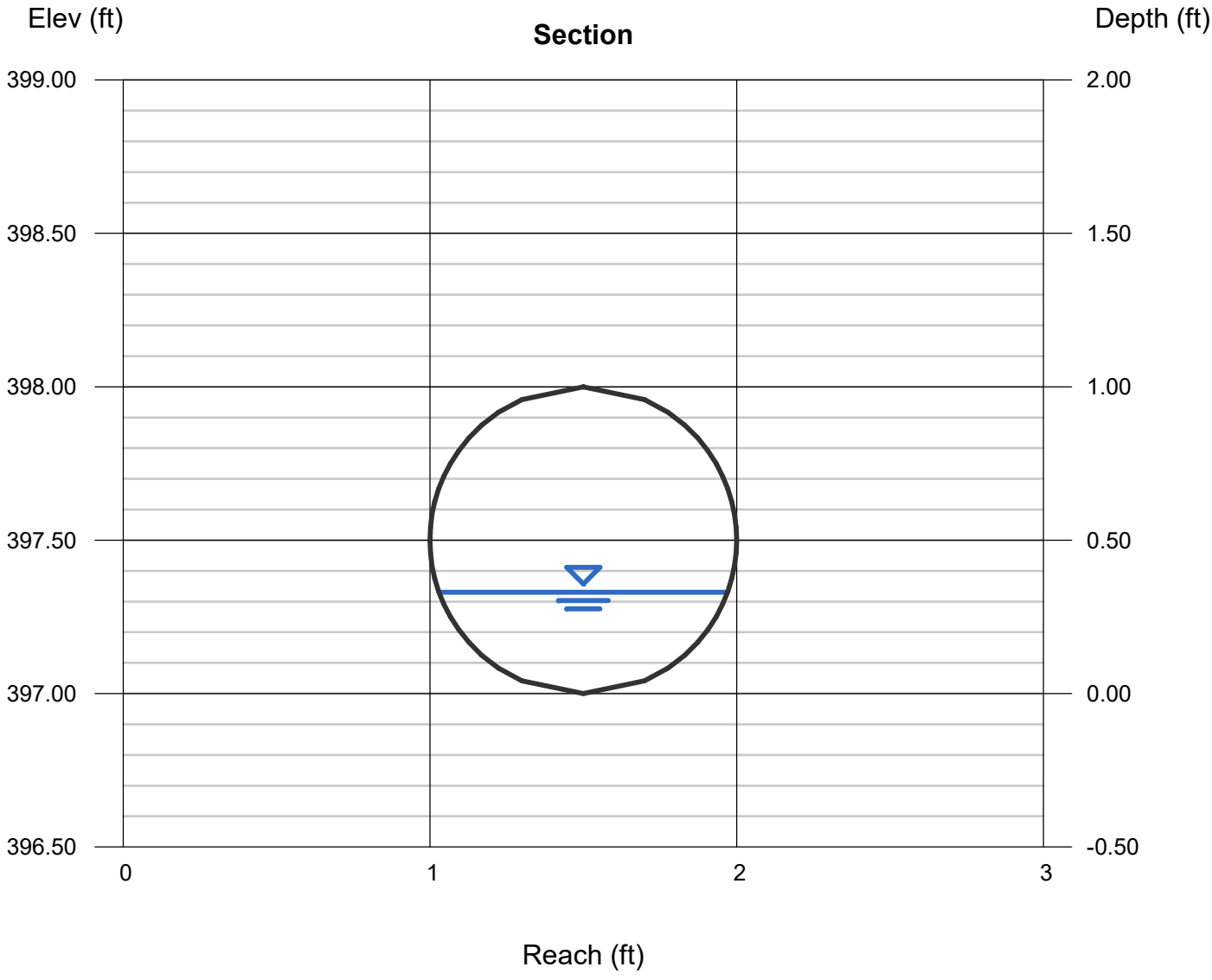
Diameter (ft)	= 1.00
Invert Elev (ft)	= 397.00
Slope (%)	= 4.92
N-Value	= 0.015

Calculations

Compute by:	Known Q
Known Q (cfs)	= 1.57

Highlighted

Depth (ft)	= 0.33
Q (cfs)	= 1.570
Area (sqft)	= 0.23
Velocity (ft/s)	= 6.93
Wetted Perim (ft)	= 1.22
Crit Depth, Yc (ft)	= 0.53
Top Width (ft)	= 0.94
EGL (ft)	= 1.08



Inlet Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Mar 25 2026

C-9 Discharge Inlet (25 yr)

Curb Inlet

Location	= On grade
Curb Length (ft)	= 4.00
Throat Height (in)	= 6.00
Grate Area (sqft)	= -0-
Grate Width (ft)	= -0-
Grate Length (ft)	= -0-

Gutter

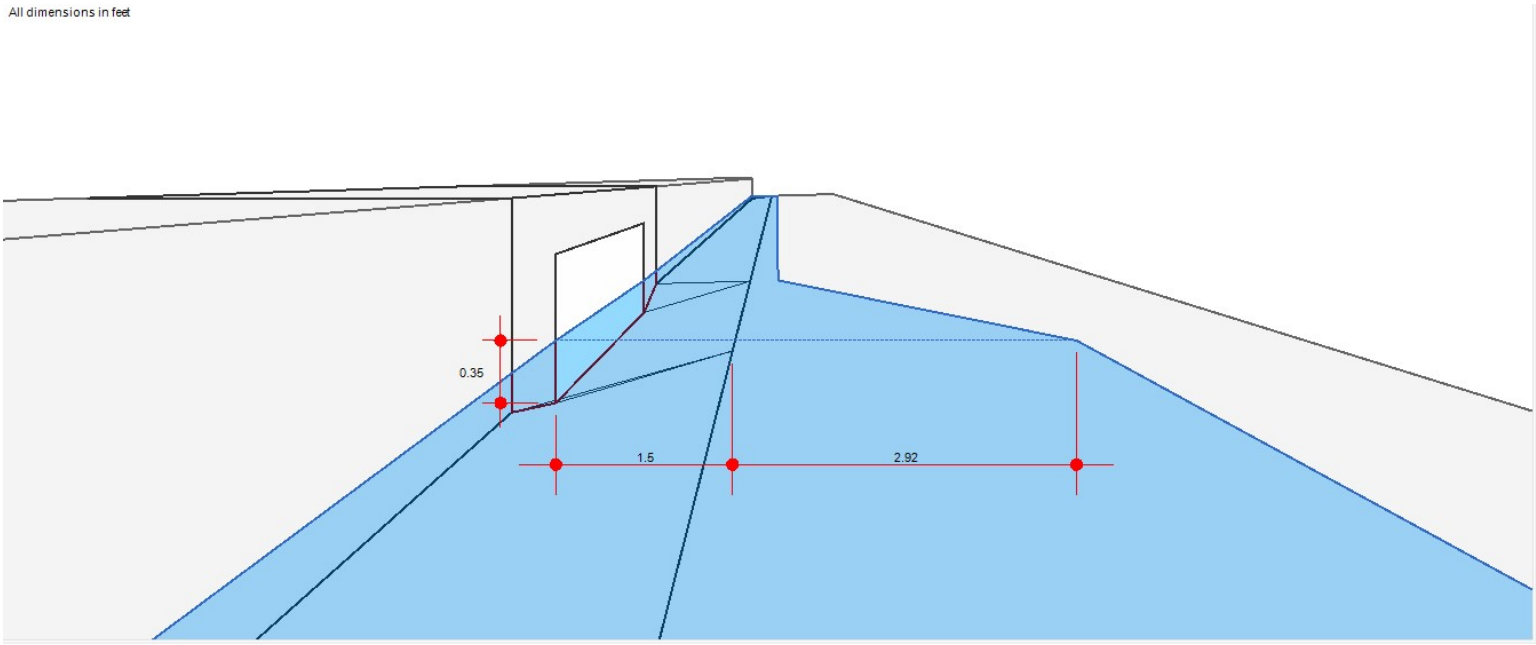
Slope, Sw (ft/ft)	= 0.083
Slope, Sx (ft/ft)	= 0.020
Local Depr (in)	= 2.00
Gutter Width (ft)	= 1.50
Gutter Slope (%)	= 5.20
Gutter n-value	= 0.016

Calculations

Compute by:	Known Q
Q (cfs)	= 1.19

Highlighted

Q Total (cfs)	= 1.19
Q Capt (cfs)	= 0.75
Q Bypass (cfs)	= 0.44
Depth at Inlet (in)	= 4.19
Efficiency (%)	= 63
Gutter Spread (ft)	= 4.42
Gutter Vel (ft/s)	= 4.47
Bypass Spread (ft)	= 1.90
Bypass Depth (in)	= 1.59



Inlet Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Mar 25 2026

C-10 Discharge Inlet (25 yr)

Curb Inlet

Location	= On grade
Curb Length (ft)	= 4.00
Throat Height (in)	= 6.00
Grate Area (sqft)	= -0-
Grate Width (ft)	= -0-
Grate Length (ft)	= -0-

Gutter

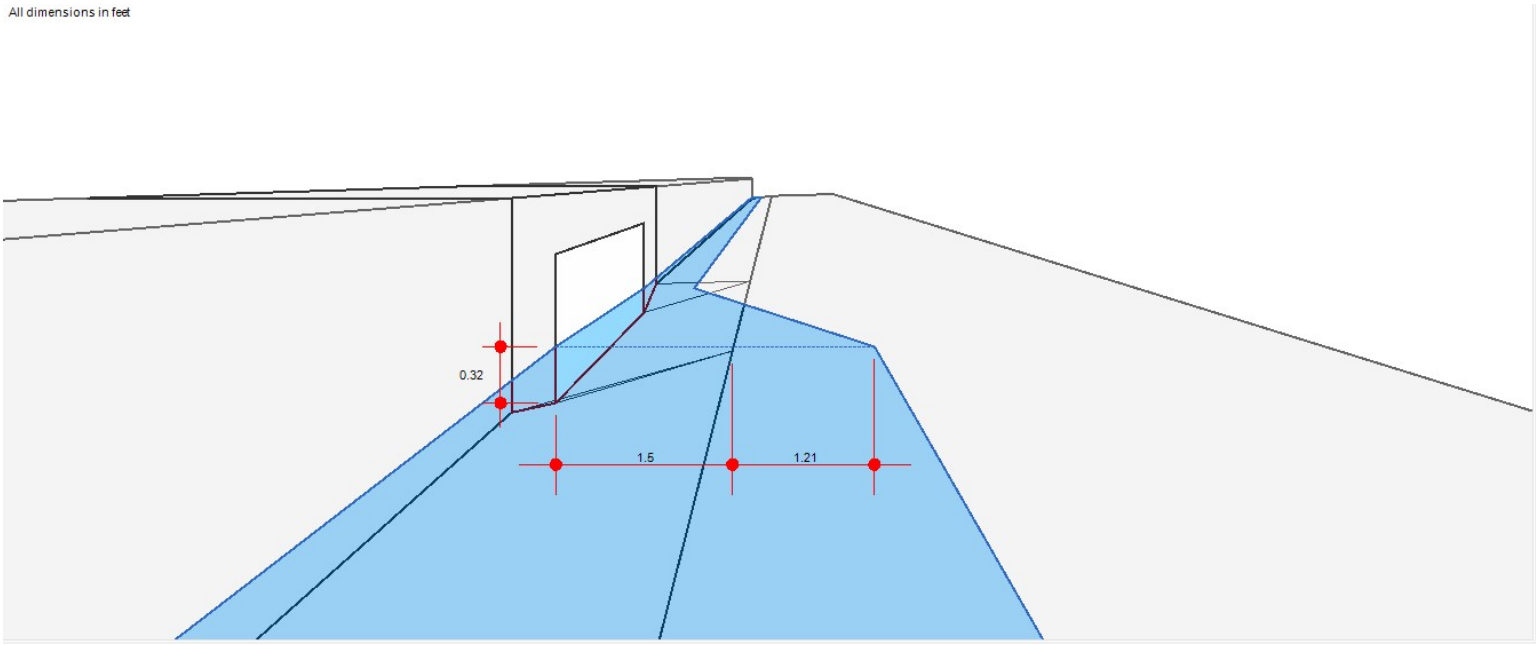
Slope, Sw (ft/ft)	= 0.083
Slope, Sx (ft/ft)	= 0.020
Local Depr (in)	= 2.00
Gutter Width (ft)	= 1.50
Gutter Slope (%)	= 3.50
Gutter n-value	= 0.016

Calculations

Compute by:	Known Q
Q (cfs)	= 0.50

Highlighted

Q Total (cfs)	= 0.50
Q Capt (cfs)	= 0.46
Q Bypass (cfs)	= 0.04
Depth at Inlet (in)	= 3.78
Efficiency (%)	= 92
Gutter Spread (ft)	= 2.71
Gutter Vel (ft/s)	= 3.47
Bypass Spread (ft)	= 0.71
Bypass Depth (in)	= 0.71



Inlet Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Mar 25 2026

C-13 Discharge Inlet (25 yr)

Curb Inlet

Location	= On grade
Curb Length (ft)	= 8.00
Throat Height (in)	= 6.00
Grate Area (sqft)	= -0-
Grate Width (ft)	= -0-
Grate Length (ft)	= -0-

Gutter

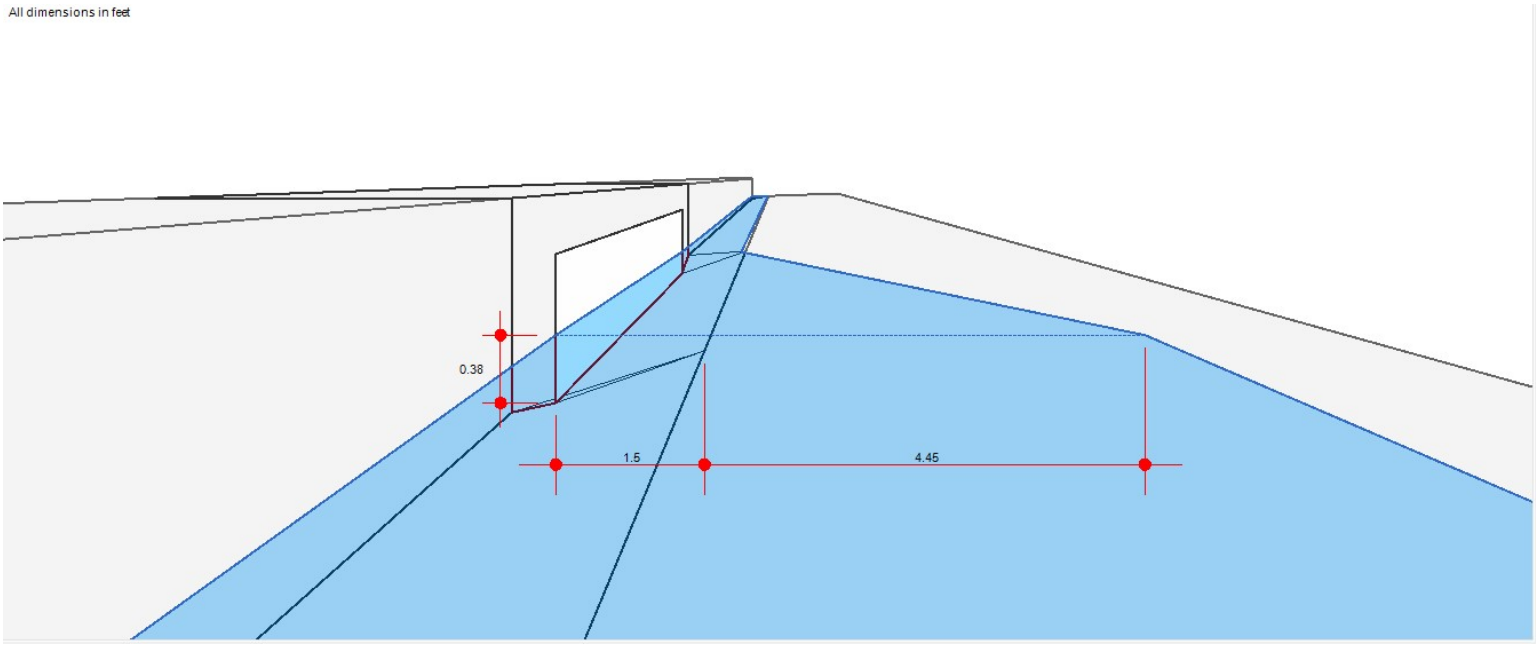
Slope, Sw (ft/ft)	= 0.083
Slope, Sx (ft/ft)	= 0.020
Local Depr (in)	= 2.00
Gutter Width (ft)	= 1.50
Gutter Slope (%)	= 4.70
Gutter n-value	= 0.016

Calculations

Compute by:	Known Q
Q (cfs)	= 1.94

Highlighted

Q Total (cfs)	= 1.94
Q Capt (cfs)	= 1.65
Q Bypass (cfs)	= 0.29
Depth at Inlet (in)	= 4.56
Efficiency (%)	= 85
Gutter Spread (ft)	= 5.95
Gutter Vel (ft/s)	= 4.57
Bypass Spread (ft)	= 1.40
Bypass Depth (in)	= 1.39



Inlet Report

C-14 Discharge Inlet (25 yr)

Curb Inlet

Location	= On grade
Curb Length (ft)	= 8.00
Throat Height (in)	= 6.00
Grate Area (sqft)	= -0-
Grate Width (ft)	= -0-
Grate Length (ft)	= -0-

Gutter

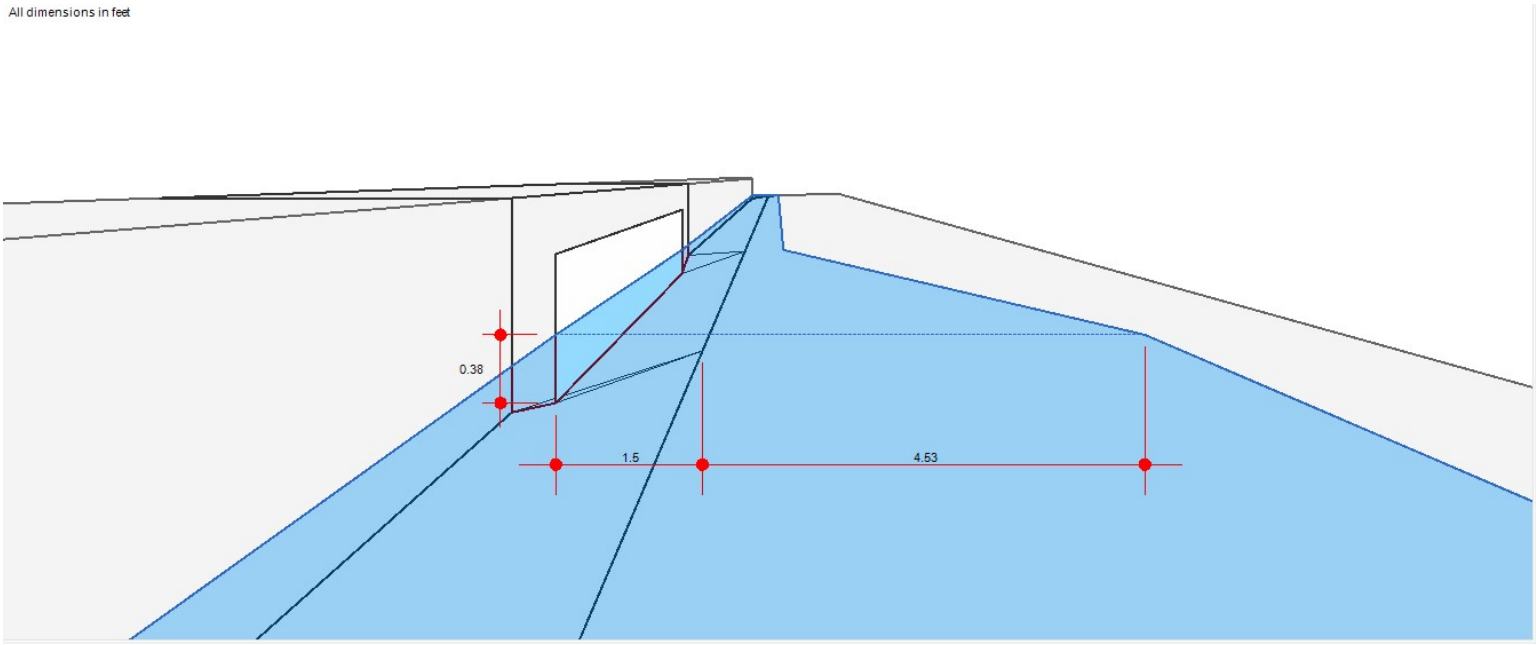
Slope, Sw (ft/ft)	= 0.083
Slope, Sx (ft/ft)	= 0.020
Local Depr (in)	= 2.00
Gutter Width (ft)	= 1.50
Gutter Slope (%)	= 6.90
Gutter n-value	= 0.016

Calculations

Compute by:	Known Q
Q (cfs)	= 2.41

Highlighted

Q Total (cfs)	= 2.41
Q Capt (cfs)	= 1.78
Q Bypass (cfs)	= 0.63
Depth at Inlet (in)	= 4.58
Efficiency (%)	= 74
Gutter Spread (ft)	= 6.03
Gutter Vel (ft/s)	= 5.55
Bypass Spread (ft)	= 2.42
Bypass Depth (in)	= 1.71



Inlet Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Mar 11 2026

JB-A1 (100 yr)

Curb Inlet

Location	= Sag
Curb Length (ft)	= 4.00
Throat Height (in)	= 6.00
Grate Area (sqft)	= -0-
Grate Width (ft)	= -0-
Grate Length (ft)	= -0-

Gutter

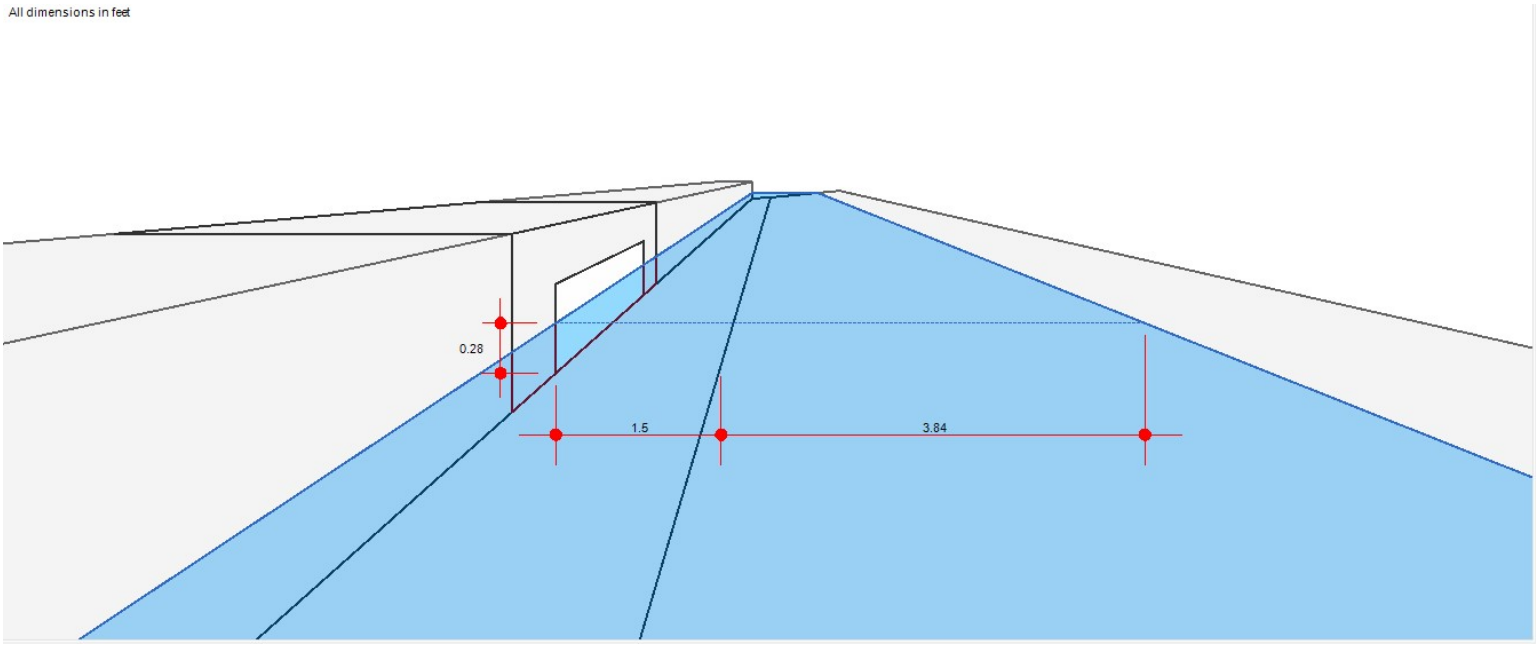
Slope, Sw (ft/ft)	= 0.033
Slope, Sx (ft/ft)	= 0.060
Local Depr (in)	= -0-
Gutter Width (ft)	= 1.50
Gutter Slope (%)	= -0-
Gutter n-value	= -0-

Calculations

Compute by:	Known Q
Q (cfs)	= 1.78

Highlighted

Q Total (cfs)	= 1.78
Q Capt (cfs)	= 1.78
Q Bypass (cfs)	= -0-
Depth at Inlet (in)	= 3.36
Efficiency (%)	= 100
Gutter Spread (ft)	= 5.34
Gutter Vel (ft/s)	= -0-
Bypass Spread (ft)	= -0-
Bypass Depth (in)	= -0-



Inlet Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Mar 11 2026

JB-A3 (100 yr)

Curb Inlet

Location	= Sag
Curb Length (ft)	= 4.00
Throat Height (in)	= 6.00
Grate Area (sqft)	= -0-
Grate Width (ft)	= -0-
Grate Length (ft)	= -0-

Gutter

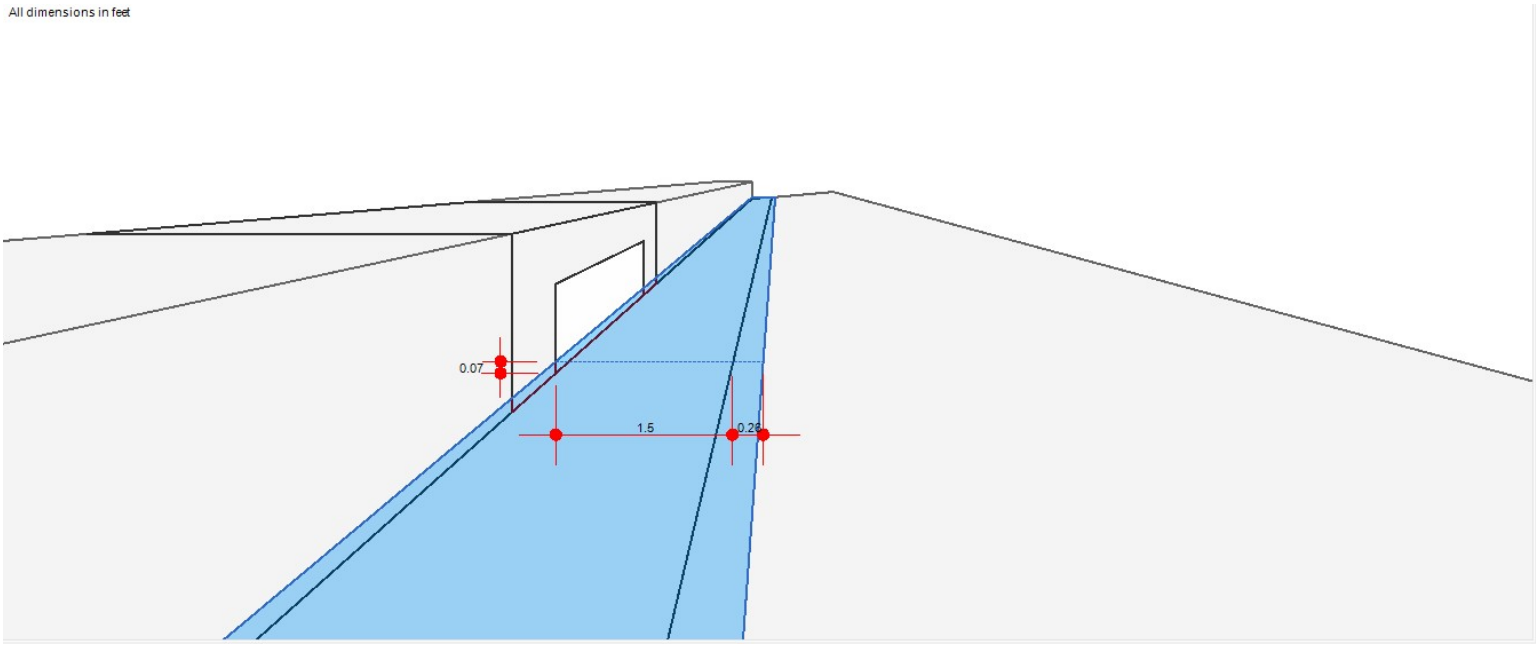
Slope, Sw (ft/ft)	= 0.033
Slope, Sx (ft/ft)	= 0.060
Local Depr (in)	= -0-
Gutter Width (ft)	= 1.50
Gutter Slope (%)	= -0-
Gutter n-value	= -0-

Calculations

Compute by:	Known Q
Q (cfs)	= 0.20

Highlighted

Q Total (cfs)	= 0.20
Q Capt (cfs)	= 0.20
Q Bypass (cfs)	= -0-
Depth at Inlet (in)	= 0.78
Efficiency (%)	= 100
Gutter Spread (ft)	= 1.76
Gutter Vel (ft/s)	= -0-
Bypass Spread (ft)	= -0-
Bypass Depth (in)	= -0-



Inlet Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Mar 11 2026

JB-B1 (100 yr)

Curb Inlet

Location	= Sag
Curb Length (ft)	= 6.00
Throat Height (in)	= 6.00
Grate Area (sqft)	= -0-
Grate Width (ft)	= -0-
Grate Length (ft)	= -0-

Gutter

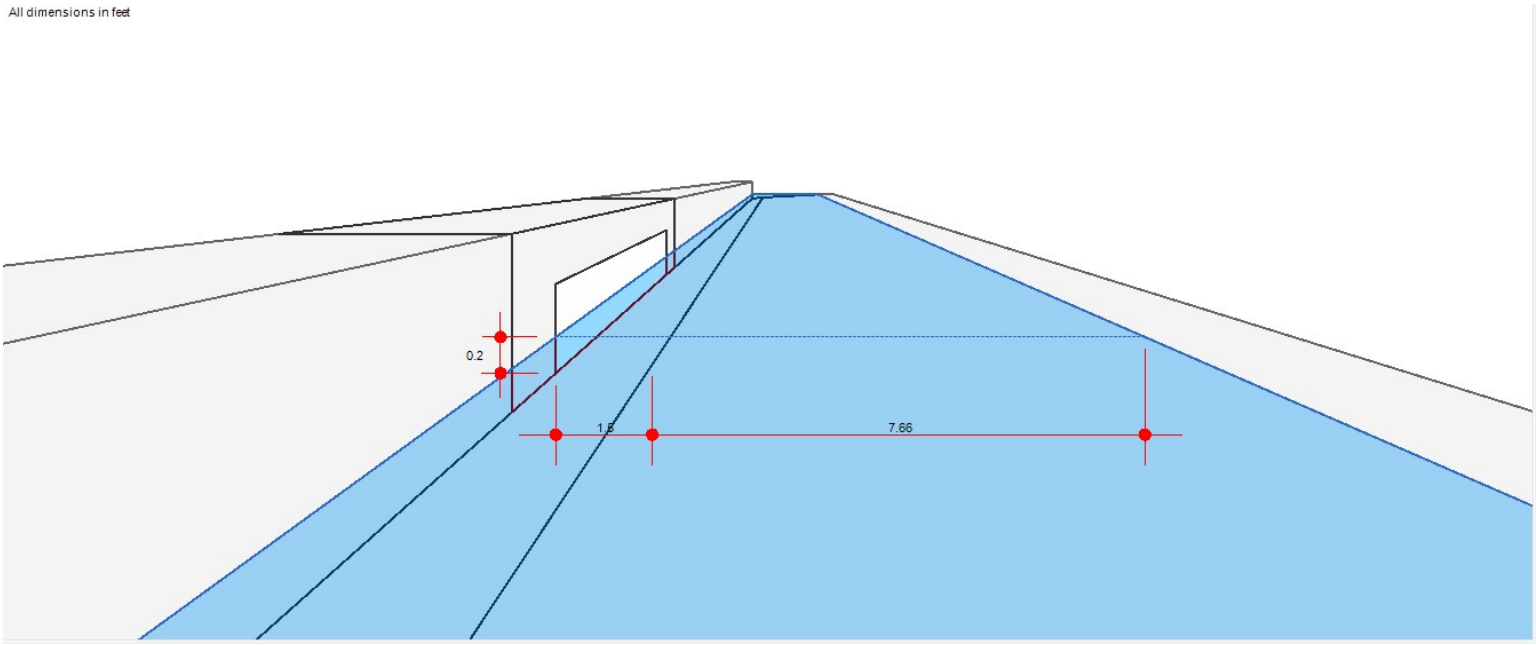
Slope, Sw (ft/ft)	= 0.033
Slope, Sx (ft/ft)	= 0.020
Local Depr (in)	= -0-
Gutter Width (ft)	= 1.50
Gutter Slope (%)	= -0-
Gutter n-value	= -0-

Calculations

Compute by:	Known Q
Q (cfs)	= 1.57

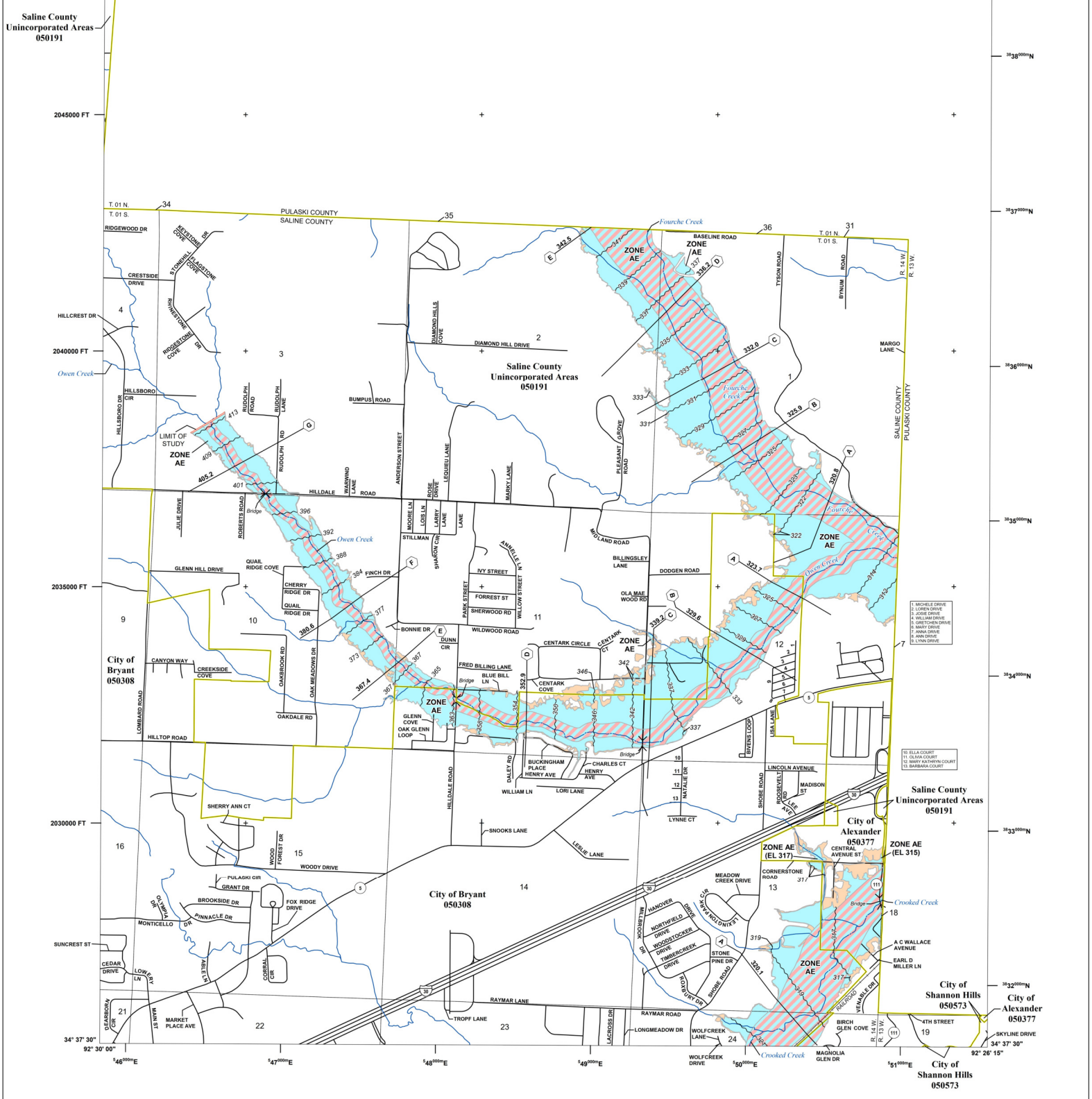
Highlighted

Q Total (cfs)	= 1.57
Q Capt (cfs)	= 1.57
Q Bypass (cfs)	= -0-
Depth at Inlet (in)	= 2.43
Efficiency (%)	= 100
Gutter Spread (ft)	= 9.16
Gutter Vel (ft/s)	= -0-
Bypass Spread (ft)	= -0-
Bypass Depth (in)	= -0-



DETENTION BASIN OUTLET STRUCTURES

FEMA FLOOD INSURANCE RATE MAP



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT

HTTPS://MSC.FEMA.GOV

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) *Zone A,V, A99*
	With BFE or Depth *Zone AE, AO, AH, VE, AR*
	Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
	Future Conditions 1% Annual Chance Flood Hazard *Zone X*
	Area with Reduced Flood Risk due to Levee See Notes. *Zone X*
	Area with Flood Risk due to Levee *Zone D*
OTHER AREAS	NO SCREEN Area of Minimal Flood Hazard *Zone X*
	Area of Undetermined Flood Hazard *Zone D*
GENERAL STRUCTURES	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall
	18.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at https://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in the community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was derived from U.S. Census Bureau TIGER files, dated 2015, and digital data provided by the Arkansas Geographic Information Office, dated 2015.

SCALE

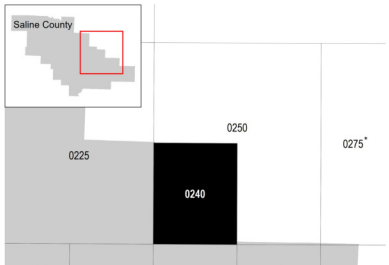
Map Projection:
State Plane Lambert Conformal Conic Arkansas South FIPS Zone 0302:
North American Datum 1983; Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 1,000 feet 1:12,000

0 1,000 2,000 4,000 Feet

0 250 500 1,000 Meters

PANEL LOCATOR



FEMA

National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

SALINE COUNTY, ARKANSAS

and Incorporated Areas

PANEL **240** OF **575**

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
ALEXANDER, CITY OF	050377	0240	E
BRYANT, CITY OF	050308	0240	E
SALINE COUNTY	050191	0240	E
SHANNON HILLS, CITY OF	050573	0240	E

Universal Soil loss calc Equation: $A = R \cdot K \cdot LS \cdot C \cdot P$

A = sediment yield; tons per acre per yr
R = Rainfall factor
K = soil erodibility factor
L = slope length factor
S = slope gradient factor
C = cropping Management factor
P = erosion control practice factor

Allowable soilloss shall not exceed 5 tons/acre/yr
R in Bryant is 300
K Tuc-Tiak silt loam 3-8% factor: 0.32
LS: 5.25% 300 ft 0.9885
C: .06 straw or hay tied, anchored
P: Interceptor Dikes 0.50

$E = (300)(0.32)(0.9885)(1)(1) = 94.896$ tons/Acre/yr w/out erosion control

$E = (300)(0.32)(0.9885)(.06)(0.50) = 2.85$ tons/Acre/yr w/erosion control

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

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

Custom Soil Resource Report for Saline County, Arkansas

March 23, 2026

Preface

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

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

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

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

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

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

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

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

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How Soil Surveys Are Made

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

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

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

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

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

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

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

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

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

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

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

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

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

Soil Map

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

92° 28' 18" W
92° 28' 14" W
34° 38' 26" N
34° 38' 21" N

Map Scale: 1:722 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 10 20 40 60

Feet
0 35 70 140 210

Map projection: Web Mercator Corner coordinates: WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

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

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

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Saline County, Arkansas
Survey Area Data: Version 22, 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: May 1, 2022—May 29, 2022

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
29	Tiak silt loam, 3 to 8 percent slopes	2.0	100.0%
Totals for Area of Interest		**2.0**	**100.0%**

Map Unit Descriptions

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

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

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

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

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

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

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

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

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

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

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

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

Saline County, Arkansas

29—Tiak silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: m06q
Landscape: Coastal plains
Elevation: 70 to 570 feet
Mean annual precipitation: 44 to 61 inches
Mean annual air temperature: 49 to 74 degrees F
Frost-free period: 185 to 230 days
Farmland classification: Not prime farmland

Map Unit Composition

Tiak and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tiak

Setting

Landscape: Coastal plains
Landform: Interfluves
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Loamy and clayey marine deposits

Typical profile

A - 0 to 7 inches: silt loam
E - 7 to 9 inches: loam
Bt1 - 9 to 32 inches: clay
Bt2 - 32 to 72 inches: clay

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 12 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C/D
Ecological site: F133BY002TX - Seasonally Wet Upland
Hydric soil rating: No

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

THE GODDARD SCHOOL℠
FOR EARLY CHILDHOOD DEVELOPMENT

March 24, 2026

To Whom it May Concern,

This letter is to clarify the extent of food preparation and service that will be offered to families at the proposed Goddard School in Bryant, Arkansas.

Meals for each student will not be cooked or prepared on-site by the Goddard team. Parents will be responsible for providing their child's meals each day, fully prepared and packaged with any necessary cooling packs or thermos containers to maintain proper temperature until service.

The school will not offer any cooking or meal preparation using ovens or similar equipment. A convection oven and hood will not be included in the building plans.

Per state licensing requirements, the school will provide two snacks per day. Snack preparation will be limited to minimal handling, such as cutting fruits and vegetables and portioning pre-packaged items (e.g., crackers). No cooking equipment is required for this level of food service.

As there is no food service being conducted at this facility, a grease trap or grease interceptor will not be installed.

If you have any questions or need additional clarification, please feel free to contact me.

Sincerely,

Casey Ball
Owner
Casey.Ball@goddardschools.com
501-269-6256

Order Receipt

Saline Courier

321 N. Market St.
Benton, AR 72015

Phone: 501-315-8228

URL: https://www.bentoncourier.com/

Melanie Gentry
Hope Consulting, Inc (28)
129 N. Main Street
Benton, AR 72015

Acct #: 01119461
Phone: (501)315-2626
Date: 03/10/2026
Ad #: 00198120
Salesperson: SCL Ad Taker: SC5

Class: 101

Ad Notes:

Sort Line: NOTICE Notice is hereby given

Description	Amount
AVDT LEGAL AFFIDAVIT	4.50
28 Saline Courier 2026-03-11	49.40

Ad Text:

NOTICE
Notice is hereby given that a hearing will be held by the Planning Commission of the City of Bryant, AR on the 13th day of April 2026 at 6:00 pm. This is located at the Boswell Municipal Complex at 210 SW Third St, Bryant, AR 72022. This will be for the petition of Ladonna Henry and Lonnie Humphries for Rezone Approval from R-X to C-1 on the following lands to wit:
Springhill Road and W. Robinhood Road, Bryant, AR 72022
LEGAL DESCRIPTION:
Parcels # 840-08850-021, 840-08850-022, 840-08850-023
Lots 12, 11, & the S 10' of Lot 10 Block 2 of Sherwood Park Subdivision.

Payment Reference:

Total:	53.90
Tax:	0.00
Net:	53.90
Prepaid:	0.00
Total Due	**53.90**

City of Bryant, Arkansas
Community Development
210 SW 3rd Street Bryant, AR 72022
501-943-0943

Rezoning Application

Applicants are advised to read the Amendments section of Bryant Zoning Code prior to completing and signing this form. The Zoning Code is available at www.cityofbryant.com under the Planning and Community Development tab.

Date: 2/24/24

Applicant or Designee:

Name Jonathan Hope
Address 129 N. Main St. Benton
Phone (501) 315-2626
Email Address jonathanhope@gmail

Property Owner (If different from Applicant):

Name Ladonna Henry + Lonnie Humphries
Address 209 Texas Ave. NLR
Phone (501) 281-3549
Email Address ldr0218@hotmail.com

Property Information:

Address Springhill Rd. Bryant, AR 72022
Parcel Number 840-08850-023, 840-08850-021, and 840-08850-022
Existing Zoning Classification R-X
Requested Zoning Classification C-1
Legal Description (If Acreage or Metes and Bounds description, please attach in a legible typed format)
South 10' of Lot 10, all of Lots 11 + 12, Blk 2, Sherwood Park

Application Submission Checklist:

- ☐ Letter stating request of zoning change from (Current Zoning) to (Requested Zoning) and to be placed on the Planning Commission Agenda
- ☐ Completed Rezoning Application
- ☐ Rezoning Application Fee ($40 fee for lot and black descriptions or $125 for acreage or metes and bound descriptions)
- ☐ If someone, other than the owner, will be handling the zoning process, we will require a

letter from the owner of said property, giving him or her authority to do so.

☐ Recent surveyed plat of the property including vicinity map

Additional Requirements:

*Items below **must be completed before the public hearing can occur**. Failure to provide notices in the following manners shall require delay of the public hearing until notice has been properly made.*

☐ Publication: Public Notice shall be published by the applicant at least one (1) time fifteen (15) days prior to the public hearing at which the rezoning application will be heard. Once published please provide a proof of publication to the Community Development office. (Sample notice attached below)

☐ Posting of Property: The city shall provide signs to post on the property involved for the fifteen (15) consecutive days leading up to Public hearing. One (1) sign is required for every two hundred (200) feet of street frontage.

☐ Notification of adjacent landowners: Applicant shall attempt to inform by certified letter, return receipt requested, all owners of land within three hundred (300) feet of any boundary of the subject property of the public hearing. (Sample letter attached below)

☐ Certified list of property owners, all return receipts, and a copy of the notice shall be provided to the Community Development Department at least five (5) days prior to the public hearing.

Note: that this is not an exhaustive guideline regarding the Conditional Use Permit Process. Additional information is available in the Bryant Zoning Ordinance.

READ CAREFULLY BEFORE SIGNING

I _____, do hereby certify that all information contained within this application is true and correct. I further certify that the owner of the property authorizes this proposed application. I understand that I must comply with all City Codes that pertain to this project and that it is my responsibility to obtain all necessary permits as needed.

HOPE
CONSULTING
ENGINEERS - SURVEYORS

February 23, 2026

Colton Leonard
City of Bryant
210 SW 3rd Street
Bryant, AR 72022

RE: Rezone Petition – S 10' of Lot 10, All of Lot 11 & 12, Block 2, Sherwood Park

Colton,

On behalf of our client, Hope Consulting is formally requesting the City of Bryant Staff and Planning Commission begin the review and approval process for the Rezone of this property. This property, located on Springhill Road in Bryant, is currently zoned R-X and our client, Ladonna Henry & Lonny Humphries, is requesting to rezone it to C-1. We would like to be included in the April 13th Planning Commission Meeting. Please feel free to contact me with any questions, concerns, or if I can be of any further assistance.

Sincerely,

Jonathan Hope

129 N. Main St. Benton, AR 72015 * 501-315-2626 * Fax 501-315-0024

HOPE CONSULTING
ENGINEERS - SURVEYORS

February 24, 2026

Colton Leonard
City of Bryant
210 SW 3rd Street
Bryant, AR 72022

RE: Authorization Letter – Lots Pt Lot 10, 11, and Lot 12, Block 2, Sherwood Park (Parcel #: 840-08850-023, 840-08850-022, and 840-08850-021)

Colton,

I, LaDonna Henry and Lonnie Humphries, hereby authorize Hope Consulting, Inc to act on our behalf for the Rezone Process of our property located on Springhill Road, Bryant, AR. Thank you in advance for your assistance with this matter. Should you require any further information, we can be reached at the contact details below.

E-Mail: Ldh0218@hotmail.com Phone: 501-281-3549

Sincerely,

LaDonna Henry
Signature

02-24-2026
Date

Lonnie Humphries
Signature

02-24-2026
Date

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4100 Corporate Center, Ste. 220
City, State, ZIP+4
Springdale, AR 72761

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11014 Boatwood Cv.
City, State, ZIP+4
Little Rock, AR 72210

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Kevin + Kara Frazer
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Benton, AR 72019

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Sent To: Ecprop Development

Street and Apt. No., or PO Box No.: 128 Lee 310

City, State, ZIP+4: Marianna, AR 72360

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City, State, ZIP+4: Benton, AR 72019

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Sent To: ESCH, Inc. General

Street and Apt. No., or PO Box No.: 400 Commodore Center, Ste 220

City, State, ZIP+4: Rogersdale, AR 72762

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City, State, ZIP+4: Little Rock, AR 72223

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Sent To: Andrew Bunten

Street and Apt. No., or PO Box No.: 6128 Westminster

City, State, ZIP+4: Benton, AR 72019

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☐ Adult Signature Required	$ $0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.78
Total Postage and Fees	$6.08

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Sent To: Alex Jasso

Street and Apt. No., or PO Box No.: 2110 N Reynolds Rd.

City, State, ZIP+4: Bryant, AR 72022

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Postage	$0.78
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Hot Springs National Park, AR 71901

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- Adult Signature Required $0.00
- Adult Signature Restricted Delivery $

Postage $0.78
Total Postage and Fees $10.48

Postmark Here
0315 20
03/25/2026

Sent To: Lloyd Bishop Trust
Street and Apt. No., or PO Box No.: 234 High Meadow Dr.
City, State, ZIP+4®: Hot Springs, AR 71901

BENTON POST OFFICE 72015 MAR 25 2026 USPS

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 2518 8400 21

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Bryant, AR 72089

Certified Mail Fee $5.30
Extra Services & Fees (check box, add fee as appropriate)
- Return Receipt (hardcopy) $4.40
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- Certified Mail Restricted Delivery $0.00
- Adult Signature Required $0.00
- Adult Signature Restricted Delivery $

Postage $0.78
Total Postage and Fees $10.48

Postmark Here
0315 20
03/25/2026

Sent To: Bryant Chamber of Comm.
Street and Apt. No., or PO Box No.: P.O. Box 201
City, State, ZIP+4®: Bryant, AR 72089

BENTON POST OFFICE 72015 MAR 25 2026 USPS

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

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Benton, AR 72015

Certified Mail Fee $5.30
Extra Services & Fees (check box, add fee as appropriate)
- Return Receipt (hardcopy) $4.40
- Return Receipt (electronic) $0.00
- Certified Mail Restricted Delivery $0.00
- Adult Signature Required $0.00
- Adult Signature Restricted Delivery $

Postage $0.78
Total Postage and Fees $10.48

Postmark Here
0315 20
03/25/2026

Sent To: ENA Property Investment
Street and Apt. No., or PO Box No.: 6132 Hilo Ave
City, State, ZIP+4®: Benton, AR 72019

BENTON POST OFFICE 72015 MAR 25 2026 USPS

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

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Bryant, AR 72022

Certified Mail Fee $5.30
Extra Services & Fees (check box, add fee as appropriate)
- Return Receipt (hardcopy) $4.40
- Return Receipt (electronic) $0.00
- Certified Mail Restricted Delivery $0.00
- Adult Signature Required $0.00
- Adult Signature Restricted Delivery $

Postage $0.78
Total Postage and Fees $10.48

Postmark Here
0315 20
03/25/2026

Sent To: Barry Laughlin
Street and Apt. No., or PO Box No.: 1601 Mills Park
City, State, ZIP+4®: Bryant, AR 72022

BENTON POST OFFICE 72015 MAR 25 2026 USPS

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 2518 8401 06

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Westbury, NY 11590

Certified Mail Fee $5.30
Extra Services & Fees (check box, add fee as appropriate)
- Return Receipt (hardcopy) $4.40
- Return Receipt (electronic) $0.00
- Certified Mail Restricted Delivery $0.00
- Adult Signature Required $0.00
- Adult Signature Restricted Delivery $

Postage $0.78
Total Postage and Fees $10.48

Postmark Here
0315 20
03/25/2026

Sent To: Christian Bawling
Street and Apt. No., or PO Box No.: 1400 Old Country Rd. Ste 301
City, State, ZIP+4®: Westbury, NY 11590

BENTON POST OFFICE 72015 MAR 25 2026 USPS

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 2518 8400 14

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Benton, AR 72015

Certified Mail Fee $5.30
Extra Services & Fees (check box, add fee as appropriate)
- Return Receipt (hardcopy) $4.40
- Return Receipt (electronic) $0.00
- Certified Mail Restricted Delivery $0.00
- Adult Signature Required $0.00
- Adult Signature Restricted Delivery $

Postage $0.78
Total Postage and Fees $10.48

Postmark Here
0315 20
03/25/2026

Sent To: Jumper Kuhlmann
Street and Apt. No., or PO Box No.: 325 Landmark Ln.
City, State, ZIP+4®: Benton, AR 72019

BENTON POST OFFICE 72015 MAR 25 2026 USPS

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 1836 4855 01

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Little Rock, AR 72223

Certified Mail Fee $5.30
Extra Services & Fees (check box, add fee as appropriate)
- Return Receipt (hardcopy) $1.00
- Return Receipt (electronic) $0.00
- Certified Mail Restricted Delivery $0.00
- Adult Signature Required $0.00
- Adult Signature Restricted Delivery $

Postage $0.78
Total Postage and Fees $10.48

Postmark Here
0315 20
03/25/2026

Sent To: Cipriano Gaspey
Street and Apt. No., or PO Box No.: PO Box 241910
City, State, ZIP+4®: Little Rock, AR 72223

BENTON POST OFFICE 72015 MAR 25 2026 USPS

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 2518 8400 69

U.S. Postal Service™
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For delivery information, visit our website at www.usps.com®.

Springfield, MO 65801

Certified Mail Fee $5.30
Extra Services & Fees (check box, add fee as appropriate)
- Return Receipt (hardcopy) $4.40
- Return Receipt (electronic) $0.00
- Certified Mail Restricted Delivery $0.00
- Adult Signature Required $0.00
- Adult Signature Restricted Delivery $

Postage $0.78
Total Postage and Fees $10.48

Postmark Here
0315 20
03/25/2026

Sent To: O'Reilly Automotives
Street and Apt. No., or PO Box No.: P.O. Box 9167
City, State, ZIP+4®: Springfield, MO 65801

BENTON POST OFFICE 72015 MAR 25 2026 USPS

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 2518 8400 90

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For delivery information, visit our website at www.usps.com®.

Bryant, AR 72022

Certified Mail Fee $5.30
Extra Services & Fees (check box, add fee as appropriate)
- Return Receipt (hardcopy) $4.40
- Return Receipt (electronic) $0.00
- Certified Mail Restricted Delivery $0.00
- Adult Signature Required $0.00
- Adult Signature Restricted Delivery $

Postage $0.78
Total Postage and Fees $10.48

Postmark Here
0315 20
03/25/2026

Sent To: New B.B. + I, LLC.
Street and Apt. No., or PO Box No.: 201 Foyil Dr.
City, State, ZIP+4®: Bryant, AR 72022

BENTON POST OFFICE 72015 MAR 25 2026 USPS

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 2518 8400 38

U.S. Postal Service™
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For delivery information, visit our website at www.usps.com®.

Alexander, AR 72002

Certified Mail Fee $5.30
Extra Services & Fees (check box, add fee as appropriate)
- Return Receipt (hardcopy) $4.40
- Return Receipt (electronic) $0.00
- Certified Mail Restricted Delivery $0.00
- Adult Signature Required $0.00
- Adult Signature Restricted Delivery $

Postage $0.78
Total Postage and Fees $10.48

Postmark Here
0315 20
03/25/2026

Sent To: John + Danita
Street and Apt. No., or PO Box No.: 120 Woody Dr.
City, State, ZIP+4®: Alexander, AR 72002

BENTON POST OFFICE 72015 MAR 25 2026 USPS

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 2518 8400 52

U.S. Postal Service™
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For delivery information, visit our website at www.usps.com®.

Maumelle, AR 72113

Certified Mail Fee $5.30
Extra Services & Fees (check box, add fee as appropriate)
- Return Receipt (hardcopy) $4.40
- Return Receipt (electronic) $0.00
- Certified Mail Restricted Delivery $0.00
- Adult Signature Required $0.00
- Adult Signature Restricted Delivery $

Postage $0.78
Total Postage and Fees $10.48

Postmark Here
0315 20
03/25/2026

Sent To: 10105 Reynolds Rd. LLC.
Street and Apt. No., or PO Box No.: P.O. Box 139985
City, State, ZIP+4®: Maumelle, AR 72113

BENTON POST OFFICE 72015 MAR 25 2026 USPS

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 2518 8400 83

City of Bryant, Arkansas
Community Development
210 SW 3rd Street Bryant, AR 72022
501-943-0943

Rezoning Application

Applicants are advised to read the Amendments section of Bryant Zoning Code prior to completing and signing this form. The Zoning Code is available at www.cityofbryant.com under the Planning and Community Development tab.

Date: March 20, 2024

Applicant or Designee:

Name Jonathan Hope
Address 129 N. Main St.
Phone (501) 860-0467
Email Address jonathanlhope@gmail

Property Owner (If different from Applicant):

Name Joel Green - Heritage Homes
Address 12586 Samples Road
Phone (501) 804-7655
Email Address heritage.homes@gmail

Property Information:

Address 600 Prickett Rd. Bryant, AR 72022
Parcel Number 840-14856-000 + 840-14849-002 + 840-14257-001
Existing Zoning Classification RE + C-2 + C-2
Requested Zoning Classification R-1 for all 3
Legal Description (If Acreage or Metes and Bounds description, please attach in a legible typed format)
T01S, R14W, Sec 28 PT E/2, NE NE Instrument 2023-015874

Application Submission Checklist:

- ☑ Letter stating request of zoning change from (Current Zoning) to (Requested Zoning) and to be placed on the Planning Commission Agenda
- ☑ Completed Rezoning Application
- ☑ Rezoning Application Fee ($40 fee for lot and black descriptions or $125 for acreage or metes and bound descriptions)
- ☑ If someone, other than the owner, will be handling the zoning process, we will require a

letter from the owner of said property, giving him or her authority to do so.

☑ Recent surveyed plat of the property including vicinity map

Additional Requirements:

*Items below **must be completed before the public hearing can occur**. Failure to provide notices in the following manners shall require delay of the public hearing until notice has been properly made.*

☐ Publication: Public Notice shall be published by the applicant at least one (1) time fifteen (15) days prior to the public hearing at which the rezoning application will be heard. Once published please provide a proof of publication to the Community Development office. (Sample notice attached below)

☐ Posting of Property: The city shall provide signs to post on the property involved for the fifteen (15) consecutive days leading up to Public hearing. One (1) sign is required for every two hundred (200) feet of street frontage.

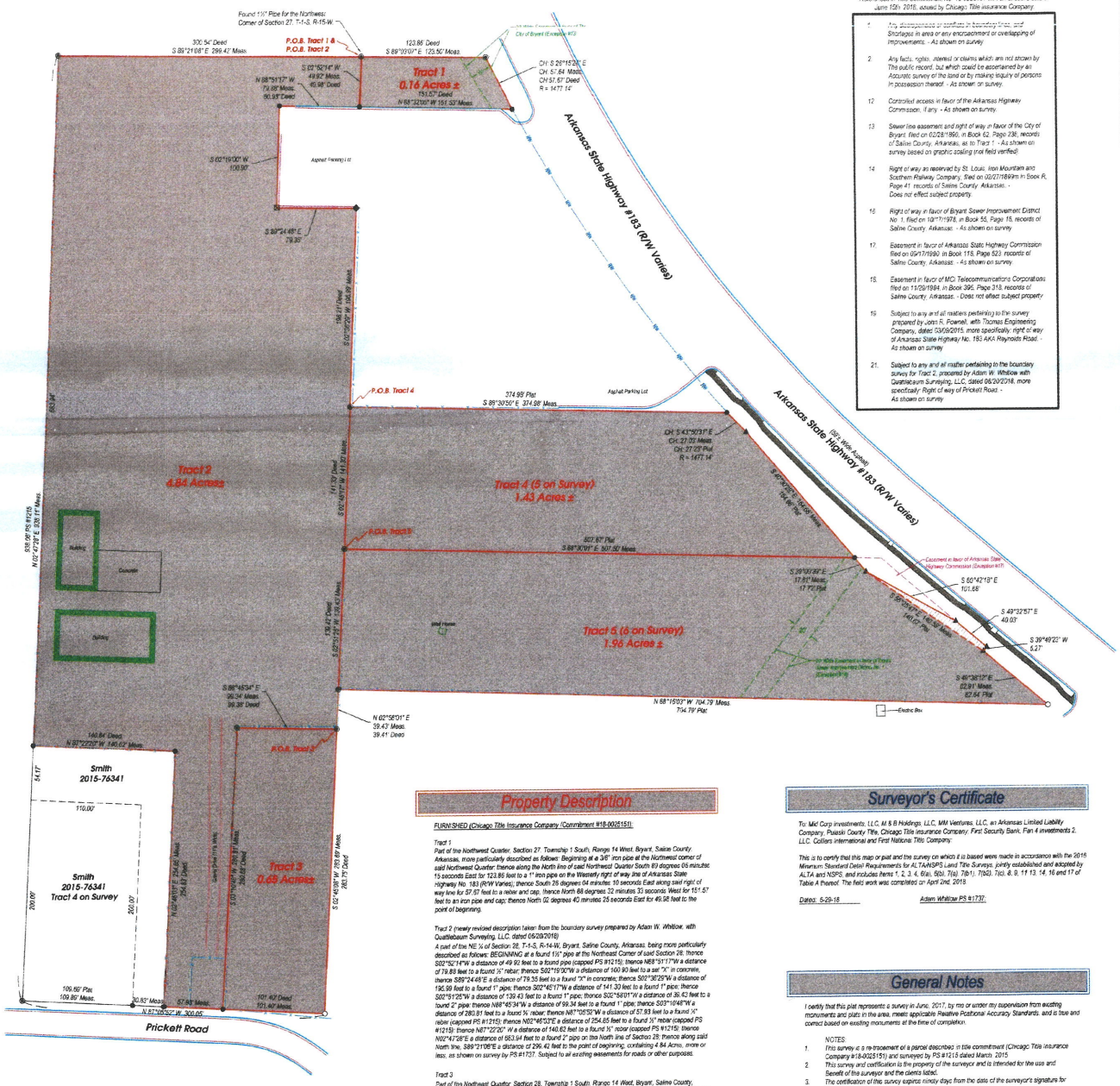
☐ Notification of adjacent landowners: Applicant shall attempt to inform by certified letter, return receipt requested, all owners of land within three hundred (300) feet of any boundary of the subject property of the public hearing. (Sample letter attached below)

☐ Certified list of property owners, all return receipts, and a copy of the notice shall be provided to the Community Development Department at least five (5) days prior to the public hearing.

Note: that this is not an exhaustive guideline regarding the Conditional Use Permit Process. Additional information is available in the Bryant Zoning Ordinance.

READ CAREFULLY BEFORE SIGNING

I _____, do hereby certify that all information contained within this application is true and correct. I further certify that the owner of the property authorizes this proposed application. I understand that I must comply with all City Codes that pertain to this project and that it is my responsibility to obtain all necessary permits as needed.



SCHEDULE B EXCEPTIONS

Referenced in Title Commitment No. 18-0025151 with an effective date of June 15th, 2018, issued by Chicago Title Insurance Company.

1. Any discrepancies or conflicts in boundary lines, and Shortages in area or any encroachment or overlapping of Improvements. - As shown on survey.
2. Any facts, rights, interest or claims which are not shown by The public record, but which could be ascertained by an Accurate survey of the land or by making inquiry of persons In possession thereof. - As shown on survey.
12. Controlled access in favor of the Arkansas Highway Commission, if any. - As shown on survey.
13. Sewer line easement and right of way in favor of the City of Bryant, filed on 02/28/1990, in Book 62, Page 336, records of Saline County, Arkansas, as to Tract 1. - As shown on survey based on graphic scaling (not field verified)
14. Right of way as reserved by St. Louis, Iron Mountain and Southern Railway Company, filed on 02/27/1899 in Book R, Page 41, records of Saline County, Arkansas. - Does not effect subject property.
16. Right of way in favor of Bryant Sewer Improvement District No. 1, filed on 10/17/1978, in Book 55, Page 15, records of Saline County, Arkansas. - As shown on survey
17. Easement in favor of Arkansas State Highway Commission filed on 05/17/1990, in Book 115, Page 523, records of Saline County, Arkansas. - As shown on survey.
18. Easement in favor of MCI Telecommunications Corporation filed on 11/29/1994, in Book 395, Page 218, records of Saline County, Arkansas. - Does not effect subject property
19. Subject to any and all matters pertaining to the survey prepared by John R. Rownell, with Thomas Engineering Company, dated 03/09/2015, more specifically: right of way of Arkansas State Highway No. 183 AKA Reynolds Road. - As shown on survey
21. Subject to any and all matter pertaining to the boundary survey for Tract 2, prepared by Adam W. Whitlow with Quattlebaum Surveying, LLC, dated 06/20/2018, more specifically: Right of way of Prickett Road. - As shown on survey

Property Description

FURNISHED (Chicago Title Insurance Company /Commitment #18-0025151)

Tract 1
Part of the Northwest Quarter, Section 27, Township 1 South, Range 14 West, Bryant, Saline County, Arkansas, more particularly described as follows: Beginning at a 3/8" iron pipe at the Northwest corner of said Northwest Quarter; thence along the North line of said Northwest Quarter South 89 degrees 09 minutes 15 seconds East for 123.86 feet to a 1" iron pipe on the Westerly right of way line of Arkansas State Highway No. 183 (R/W Varies); thence South 26 degrees 04 minutes 10 seconds East along said right of way line for 57.57 feet to a rebar and cap; thence North 68 degrees 32 minutes 33 seconds West for 151.57 feet to an iron pipe and cap; thence North 02 degrees 40 minutes 25 seconds East for 49.98 feet to the point of beginning.

Tract 2 (newly revised description taken from the boundary survey prepared by Adam W. Whitlow, with Quattlebaum Surveying, LLC, dated 06/20/2018)
A part of the NE ¼ of Section 28, T-1-S, R-14-W, Bryant, Saline County, Arkansas, being more particularly described as follows: BEGINNING at a found 1½" pipe at the Northeast Corner of said Section 28; thence S02°52'14"W a distance of 49.92 feet to a found pipe (capped PS #1215); thence N88°51'17"W a distance of 79.88 feet to a found ½" rebar; thence S02°19'00"W a distance of 100.90 feet to a set "X" in concrete, thence S89°24'48"E a distance of 79.35 feet to a found "X" in concrete; thence S02°36'25"W a distance of 196.99 feet to a found 1" pipe; thence S02°45'17"W a distance of 141.30 feet to a found 1" pipe; thence S02°51'25"W a distance of 139.43 feet to a found 1" pipe; thence S02°58'01"W a distance of 39.43 feet to a found 2" pipe; thence N88°45'34"W a distance of 99.34 feet to a found 1" pipe; thence S03°10'48"W a distance of 280.81 feet to a found ½" rebar; thence N87°05'50"W a distance of 57.93 feet to a found ½" rebar (capped PS #1215); thence N02°46'03"E a distance of 254.65 feet to a found ½" rebar (capped PS #1215); thence N87°22'20" W a distance of 140.62 feet to a found ½" rebar (capped PS #1215); thence N02°47'28"E a distance of 663.94 feet to a found 2" pipe on the North line of Section 28; thence along said North line, S89°21'08"E a distance of 299.42 feet to the point of beginning; containing 4.84 Acres, more or less, as shown on survey by PS #1737. Subject to all existing easements for roads or other purposes.

Tract 3
Part of the Northeast Quarter, Section 28, Township 1 South, Range 14 West, Bryant, Saline County, Arkansas, more particularly described as follows: Commencing at a 3/8" iron pipe at the Northeast corner of said Northeast Quarter; thence South 02 degrees 41 minutes 51 seconds West for 666.37 feet to a 1" pipe and the point of beginning; thence South 02 degrees 41 minutes 51 seconds West for 283.75 feet to an iron pipe and cap; thence North 87 degrees 09 minutes 05 seconds West for 101.40 feet to a 1/2" rebar; thence North 03 degrees 07 minutes 01 seconds East for 280.68 feet to a 1" iron pipe; thence South 86 degrees 48 minutes 19 seconds East for 99.38 feet to the point of beginning.

Tract 4 (5 on survey)
Part of the Northwest Quarter, Section 27, Township 1 South, Range 14 West, Bryant, Saline County, Arkansas, more particularly described as follows: Commencing at a 3/8" iron pipe at the Northwest corner of said Northwest Quarter; thence South 02 degrees 40 minutes 25 seconds West for 346.20 feet to a 1" iron pipe and the point of beginning; thence South 68 degrees 35 minutes 18 seconds East for 375.17 feet to a rebar and cap on the Westerly right of way line of Arkansas State Highway No. 183 (right of way varies); thence South 44 degrees 10 minutes 43 seconds East along said right of way line for 27.22 feet to a right of way disk; thence continue along said right of way line South 40 degrees 30 minutes 14 seconds East for 154.76 feet to a 5/8" rebar; thence North 86 degrees 32 minutes 55 seconds West for 507.67 feet to a 1" iron pipe; thence North 02 degrees 37 minutes 22 seconds East for 141.33 feet to the point of beginning.

Tract 5 (6 on survey)
Part of the Northwest Quarter, Section 27, Township 1 South, Range 14 West, Bryant, Saline County, Arkansas, more particularly described as follows: Commencing at a 3/8" iron pipe at the Northwest corner of said Northwest Quarter; thence South 02 degrees 40 minutes 25 seconds West for 346.20 feet to a 1" iron pipe; thence South 02 degrees 37 minutes 22 seconds West for 141.33 feet to a 1" iron pipe and the point of beginning; thence South 86 degrees 32 minutes 55 seconds East for 507.67 feet to a 5/8" rebar on the Westerly right of way line of Arkansas State Highway No. 183 (R/W Varies); thence along said right of way line the following courses; South 39 degrees 16 minutes 06 seconds East for 17.72 feet to a right of way disk, South 55 degrees 31 minutes 58 minutes East for 140.67 feet to a right of way disk, South 49 degrees 40 minutes 34 seconds East for 62.64 feet to a 2/5" iron pipe; thence leaving said right of way line North 68 degrees 20 minutes 25 seconds West for 704.79 feet to a 1" iron pipe; thence North 02 degrees 47 minutes 28 seconds East for 139.42 feet to the point of beginning.

Surveyed Descriptions

SURVEYED DESCRIPTION TO CORRECT ERRORS FOUND IN FURNISHED DESCRIPTION BASED ON SURVEY BY THOMAS ENGINEERING.

Tract 5 (Surveyed)
Part of the Northwest Quarter, Section 27, Township 1 South, Range 14 West, Bryant, Saline County, Arkansas, more particularly described as follows: Commencing at a found 1½" pipe for the Northwest Corner of said Section 27; thence S02°52'14"W a distance of 49.92 feet to a found iron (capped PS #1215); thence N88°51'17"W a distance of 79.88 feet to a found ½" rebar; thence S02°19'00"W a distance of 100.90 feet to a set "X" in concrete; thence S89°24'48"E a distance of 79.35 feet to a found "X" in concrete; thence S02°36'29"W a distance of 195.99 feet to a found 1" pipe; thence S02°45'17"W a distance of 141.30 feet to a found 1" pipe and the POINT OF BEGINNING; thence S88°30'01"E a distance of 507.50 feet to a found ½" rebar on the West right of way line of Arkansas State Highway #183; thence along said right of way line the following courses: (1) S39°09'39"E a distance of 17.81 feet to a found right of way marker; (2) S50°42'18"E a distance of 101.66 feet to a found right of way marker; (3) S49°32'57"E a distance of 40.03 feet to a found right of way marker; (4) S39°49'23"W a distance of 5.27 feet to a found right of way marker; (5) S49°38'12"E a distance of 62.91 feet to a set ½" rebar; thence departing from said right of way line, N68°15'03"W a distance of 704.79 feet to a found 1" pipe; thence N02°51'25"E a distance of 139.43 feet to the point of beginning, containing 1.96 Acres, more or less, as shown on survey by PS #1737. Subject to all existing easements for roads or other purposes.

Surveyor's Certificate

To: Mid Corp Investments, LLC, M & B Holdings, LLC, MN Ventures, LLC, an Arkansas Limited Liability Company, Pulaski County Title, Chicago Title Insurance Company, First Security Bank, Fan 4 Investments 2, LLC, Colliers International and First National Title Company:

This is to certify that this map or part and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 1, 2, 3, 4, 6(a), 6(b), 7(a), 7(b1), 7(b2), 7(c), 8, 9, 11 13, 14, 16 and 17 of Table A thereof. The field work was completed on April 2nd, 2018.

Dated: 5-29-18

Adam Whitlow PS #1737.

General Notes

I certify that this plat represents a survey in June, 2017, by me or under my supervision from existing monuments and plats in the area, meets applicable Relative Positional Accuracy Standards, and is true and correct based on existing monuments at the time of completion.

NOTES:
1. This survey is a re-traisement of a parcel described in title commitment (Chicago Title Insurance Company #18-0025151) and surveyed by PS #1215 dated March 2015.
2. This survey and certification is the property of the surveyor and is intended for the use and benefit of the surveyor and the clients listed.
3. The certification of this survey expires ninety days from the date of the surveyor's signature for The purpose of new or revised financing.
4. All iron pins set are ½" Rebar, unless noted otherwise.
5. Only copies with surveyor's signature in blue ink are valid copies.
6. This research completed for this survey includes the description furnished by clients (Commitment #18-0025151), and previous surveys by PS #1215.
7. Surveyor has made no investigation or independent search for easements of record Encumbrances, restrictive covenants, ownership, title evidence, or any other facts that an Accurate and current title search may disclose.
8. As a boundary survey there has not been any attempt to obtain or show any existence, location of Any overhead or underground utilities or their right of way, width. For any information regarding any Utilities contact the appropriate agencies.
9. Based on Community Panel #05125C0280D (Effective Date: June 19, 2012) This tract is shown to Be in Flood Zone X based on FEMA Flood Map Service Center website.

Legend

- ● Found Rebar
- ▲ Found Right of Way Marker
- ◉ Found Pipe
- ○ Set 1/2" Rebar (capped #1737;
- ⊠ Set "X" in Concrete
- △ Calculated Point
- ——— X ——— Fence Line
- - - - - - - Easement Line

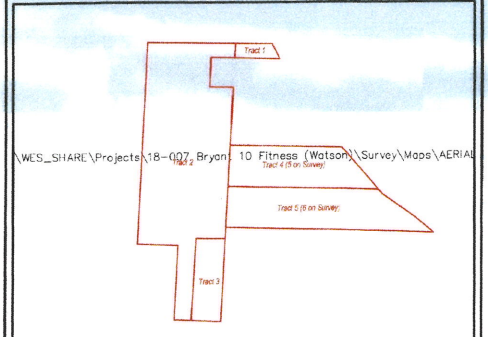
Utility Notes

UTILITIES SHOWN ARE NOTED BY VISIBLE OBSERVATION ONLY. UNDERGROUND UTILITIES ARE TAKEN FROM UTILITY MAPS. EXACT LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE. NO EXCAVATION HAS TAKEN PLACE AS OF THIS DATE TO DETERMINE THE EXACT LOCATION OF UNDERGROUND UTILITIES SHOWN ON THIS SURVEY.

FOR UNDERGROUND UTILITY LOCATIONS
CALL: THE ARKANSAS ONE-CALL SYSTEM
GIVE 48 HOURS NOTICE BEFORE CONSTRUCTION BEGINS

NOTE:
UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHERS, THE EXISTENCE AND LOCATIONS OF WHICH ARE UNKNOWN. THE CONTRACTOR MUST VERIFY THE EXACT LOCATIONS OF UTILITIES WITH THE UTILITY COMPANIES PRIOR TO CONSTRUCTION.

VICINITY MAP (1" = 250')



N E S W

0' 50' 100' 150'

BASIS OF BEARINGS DERIVED FROM GPS NORTH.

SURVEY CODE:
500-015-14W-0-27-400-62-1737
500-015-14W-0-28-100-62-1737

ALTA/NSPS LAND TITLE SURVEY

CERTIFICATE OF AUTHORIZATION TO PRACTICE SURVEYING IN ARKANSAS FOR QUATTLEBAUM SURVEYING LLC No. 1423

REGISTERED STATE OF ARKANSAS NO. 1737 SIGNATURE 5/29/18 ADAM W. WHITLOW PROFESSIONAL LAND SURVEYOR

No.	Revisions	Date	By

301 EAST LINCOLN AVE.
SEARCY, ARKANSAS 72143
(501) 268-2174 (501) 279-3498 FAX
QUATTLEBAUM SURVEYING, LLC
BOUNDARY • TOPO • CONSTRUCTION

DRAWN BY	DATE	APPROVED	DATE
JDC	6/29/18	AWW	6/29/18
PROJECT#		SCALE	SHEET
Bryant Survey 18-007		1" = 50'	1 of 1

HOPE CONSULTING

129 North Main Street, Benton, Arkansas 72015
(t) 501-315-2626 (e) www.HopeConsulting.com

March 23, 2026

Colton Leonard
City of Bryant
210 SW 3rd Street
Bryant, AR 72022

RE : Rezone Petition – Parcel #840-14856-000, 840-14849-002, & 840-14257-001

Colton,

On behalf of our client, Hope Consulting is formally requesting the City of Bryant Staff and Planning Commission begin the review and approval process for the Rezone of this property. These parcels, located on Prickett Road, Bryant, AR 72022 are currently zoned R-E and C-2, and C-2. Our client, Heritage Homes, is requesting to rezone all 3 parcels to R-1. We would like to be included in the April 13th Planning Commission Meeting. Please feel free to contact me with any questions, concerns, or if I can be of any further assistance.

Sincerely,

Jonathan Hope
Hope Consulting

HOPE CONSULTING
129 North Main Street, Benton, Arkansas 72015
(t) 501-315-2626 (e) www.HopeConsulting.com

HOPE CONSULTING
129 North Main Street, Benton, Arkansas 72015
(t) 501-315-2626 (e) www.HopeConsulting.com

March 23, 2026

Rezone Petition

Prickett Road, Bryant, AR 72022
Parcel #840-14856-000, 840-14849-002, & 840-14257-001

To Whom it May Concern,

The property described below is being considered for Rezone Approval. The property is more particularly described as follows:

LEGAL DESCRIPTION: Parcel# 840-14856-000, 840-14849-002, & 840-14257-001

Located at Prickett Road, Bryant, AR 72022

We have filed an application with the City of Bryant to Rezone Parcels # 840-14856-000, 840-14849-002, & 840-14257-001. As part of this process, a public hearing will be held on April 13, 2026, at 6:00 P.M. at the Boswell Municipal Complex located at 210 SW Third Street, Bryant, AR 72022. Attendance is not required, but public comments will be accepted at this time regarding the application. Since you own property that is adjacent to the property in consideration, you have been sent this letter via certified mail as required by the County ordinance. Should you have any questions regarding this matter, you may contact me at (501) 860-0467. Thank you for your consideration in this matter.

Sincerely,

Jonathan Hope
Hope Consulting

HOPE CONSULTING
129 North Main Street, Benton, Arkansas 72015
(t) 501-315-2626 (e) www.HopeConsulting.com

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March 20, 2026

Colton Leonard
City of Bryant
210 SW 3rd Street
Bryant, AR 72022

RE : Authorization Letter – Pricket Road, Bryant, AR 72022
(Parcel # 840-14856-000, 840-14849-002, & 840-14257-001)

Colton,

I, _____, hereby authorize Hope Consulting, Inc. to act on my behalf for the Rezone Process of our property located on Prickett Road, Bryant, AR. Thank you in advance for your assistance with this matter. Should you require further information, I can be reached at the contact details below.

E-Mail: _____ Phone: _____

Sincerely,

_____
Signature

_____
Date

HOPE CONSULTING
129 North Main Street, Benton, Arkansas 72015
(t) 501-315-2626 (e) www.HopeConsulting.com

STATE CODE

500-05S-12W-0-12-140-27-1665

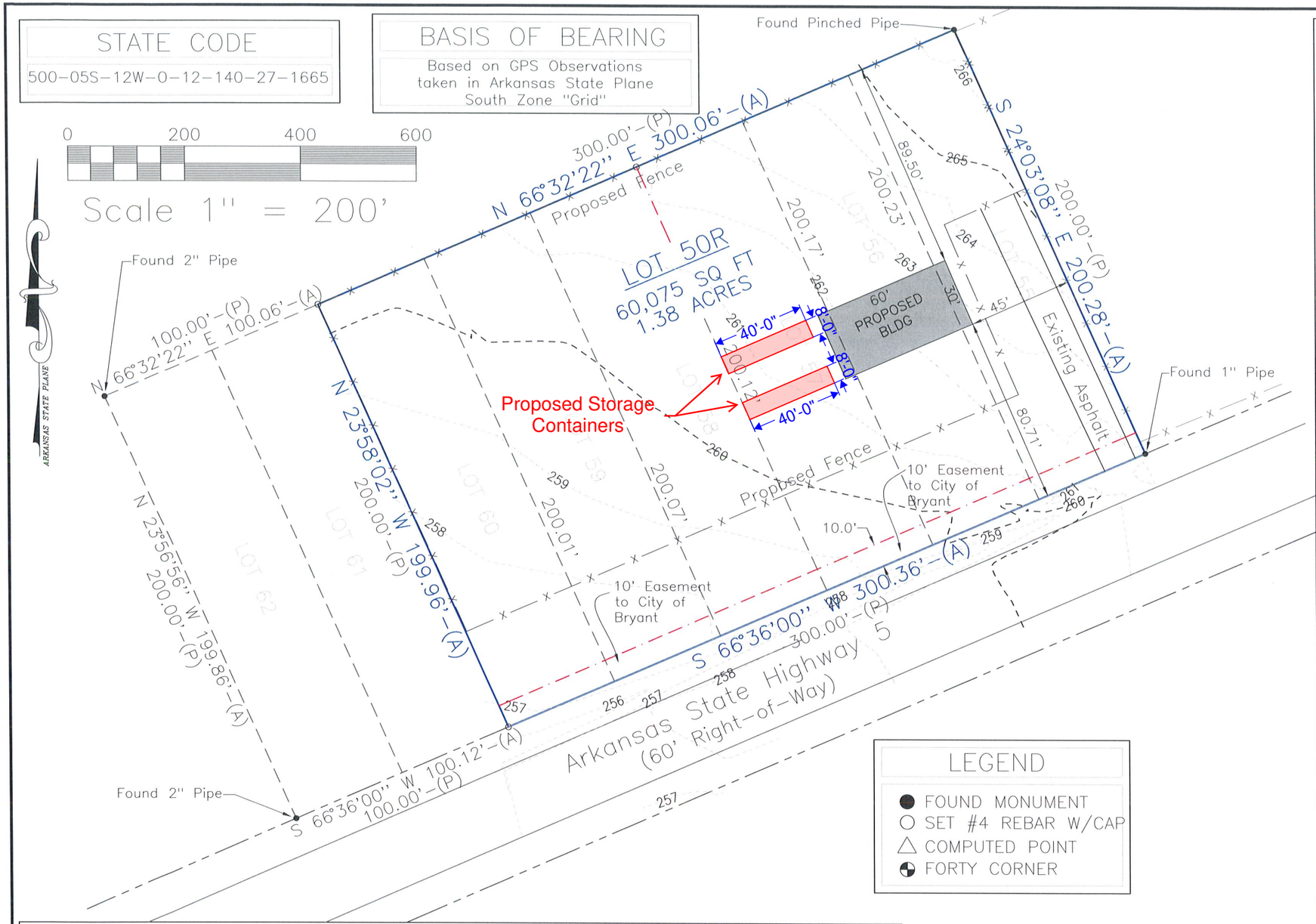
BASIS OF BEARING

Based on GPS Observations taken in Arkansas State Plane South Zone "Grid"

0 200 400 600

Scale 1" = 200'

ARKANSAS STATE PLANE



LEGEND

- ● FOUND MONUMENT
- ○ SET #4 REBAR W/CAP
- △ COMPUTED POINT
- ◒ FORTY CORNER

SURVEY DESCRIPTION

Lot 55R, a Replat of Lots 55, 56, 57, 58, 59 and 60, Midland Farm Subdivision, part of Section 12, Township 1 South, Range 14 West, Saline County, Arkansas, More Particularly Described As Follows: Commencing at a Found Pinched Pipe Accepted as the Northeast Corner of Said Lot 50 and Run Thence S24°03'08"E Along the East Line Thereof 200.28' to a Set 1/2" Rebar & Cap at the Southeast Corner of Said Lot 50; Thence Along The South Line of Midland Farm Subdivision S66°36'00"W 300.36' to a Set 1/2" Rebar & Cap at the Southwest Corner of Lot 55; Thence Along the West Line of Said Lot 55 N23°58'02"W 199.86' to a 2" Pipe at the Northwest Corner of Said Lot 55; Thence Along the North Line of Midland Farm Subdivision N66°32'22"E 300.06' to the Point of Beginning Containing 1.38 Acres (60,075 SQ. FT.)

Subject to A 10' Easement to The City of Bryant Along and Adjacent to the South Line.

CERTIFICATE OF SURVEYING ACCURACY

I, Kirt Sledge, hereby certify that this plat correctly represents a survey completed by me, or under my supervision on April 30, 2019, that the boundary lines shown herein correspond with the description in the deeds cited in the source of title(s); and that all monuments which were found or placed on the property are correctly described and located.

Kirt Sledge

Registered Professional Surveyor

No.1665, Arkansas

CERTIFICATE OF ENGINEERING ACCURACY

I, _____, hereby certify that this plat correctly represents a survey and a plan made by me or under my supervision; that all monuments shown hereon actualy exist and their locations, size, type, and material are correctly shown; and that all requirements of the City of Bryant Subdivision and Regulations have been fully complied with.

_____

Date of Execution
Registered Professional Engineer

No._____, Arkansas

CERTIFICATE OF REPLAT APPROVAL

Pursuant to the City of Bryant Subdivision Rules and Regulations, this document was given approval by the Bryant Planning Commission _____2019. All of the document is hereby accepted, and this certificate executed under the authority of said rules and regulations.

_____ _____

Bryant Planning Commission Date of Execution

CERTIFICATE OF OWNER

We the undersigned, owners of the real estate shown and described herein do hereby certify that we have laid off, platted and subdivided, and do hereby lay off, replat and subdivide said real estate in accordance with the within plat.

_____

Date of Execution
Name/Address

CERTIFICATE OF RECORDING

This document, number _____, filed for record _____, 19_____, in Plat Book _____, Page _____.

_____

Name (Clerk)
For Bill of Assurance see Deed Record Book _____, Page ____

LICENSED PROFESSIONAL SURVEYOR
STATE OF ARKANSAS
No. 1665
SIGNATURE
KIRT SLEDGE

CERTIFICATE OF AUTORIZATION
SOUTH POINT SURVEYING
No. 2408
ARKANSAS

SOUTH POINT SURVEYING, PLLC
P.O. Box 400 Sheridan, AR 72150
southpointsurveying@yahoo.com
501-285-5958 501-837-2342

Drawing:	Date:	Page:	Drawn by:
SEB/MIDLAND/ LOT 55R	2/6/23	1/1	MRO

RE-PLAT OF LOTS 55-60, MIDLAND FARM, SALINE COUNTY , ARKANSAS
AS LOT 55R MINDLAND FARM, SALINE COUNTY, ARKANSAS

Kind Regards...Good afternoon Ethan,

Good morning,

I am writing to request approval to resume operating an Airbnb at my residence. I would like to provide the City with the purpose and intent behind this request.

Short-Term Purpose The supplemental income from Airbnb will help cover the cost of my child's after-hours care. This support is essential for maintaining stable childcare arrangements for my family.

Long-Term Purpose The income will also contribute to building a livable space above my garage for my mother. This will allow her to maintain independence while staying close to family support. The Airbnb income will directly help fund this project.

I am committed to operating Airbnb responsibly and in full compliance with all city regulations, including safety, occupancy, and neighborhood standards. My goal is to maintain a respectful, well-managed environment that does not disrupt the surrounding community.

Thank you for your time and consideration. I am happy to provide any additional information needed to move forward with this request.

Sincerely,

See attached Receipt from benton courier; the add will run on friday april 27th 2026

Vanessa
501-283-4058

City of Bryant, Arkansas
Planning and Development
210 SW 3rd Street Bryant, AR 72022
501-943-0943

Conditional Use Permit Application

Applicants are advised to read the Conditional Use Permit section of Bryant Zoning Code prior to completing and signing this form. The Zoning Code is available at www.cityofbryant.com under the Planning and Community Development tab.

Date: 3-25-2026

Applicant or Designee:

Name DELIA VANESSA GUERRA-OCHOA

Address 2714 LAVERN ST.

Phone 501-283-4058

Email: _____

Project Location:

Property Address 2714 LAVERN ST.

Parcel Number 840-07238-000

Zoning Classification R-M

Property Owner (If different from Applicant):

Name _____

Phone _____

Address _____

Email Address _____

Additional Information:

Subdivision Lot and Block Number or Legal Description (Attach Legal Description to Application)

_____

Current Use of Property RESIDENCE

Description of Conditional Use Request / Proposed Use of Property (Attach any necessary drawings or images)

SHORT TERM RENTAL - INCOME

[Attachment 1]
SAMPLE NEWSPAPER NOTICE *- This notice is to be run in the legal notices section of the Saline Courier no less than fifteen (15) days prior to the public hearing.*

NOTICE OF PUBLIC HEARING

A public hearing will be held by the City of Bryant, AR Planning Commission on Monday, APRIL 2, 2026 at 6:00 P.M. at the Bryant City Office Complex, 210 Southwest 3rd Street, for the purpose of public comment on the application for DELIA VANESSA GUERRA-OCHOA (your name) to obtain a Conditional Use for the purpose of SHORT TERM RENTAL (use requested) within a R-M (current zoning) zone at the site of 2714 LAVERN ST. BRYANT, AR 72022 (address). A legal description of this property can be obtained by contacting the Bryant Planning and Development Department at 501-943-0488.

DATE	REVISIONS

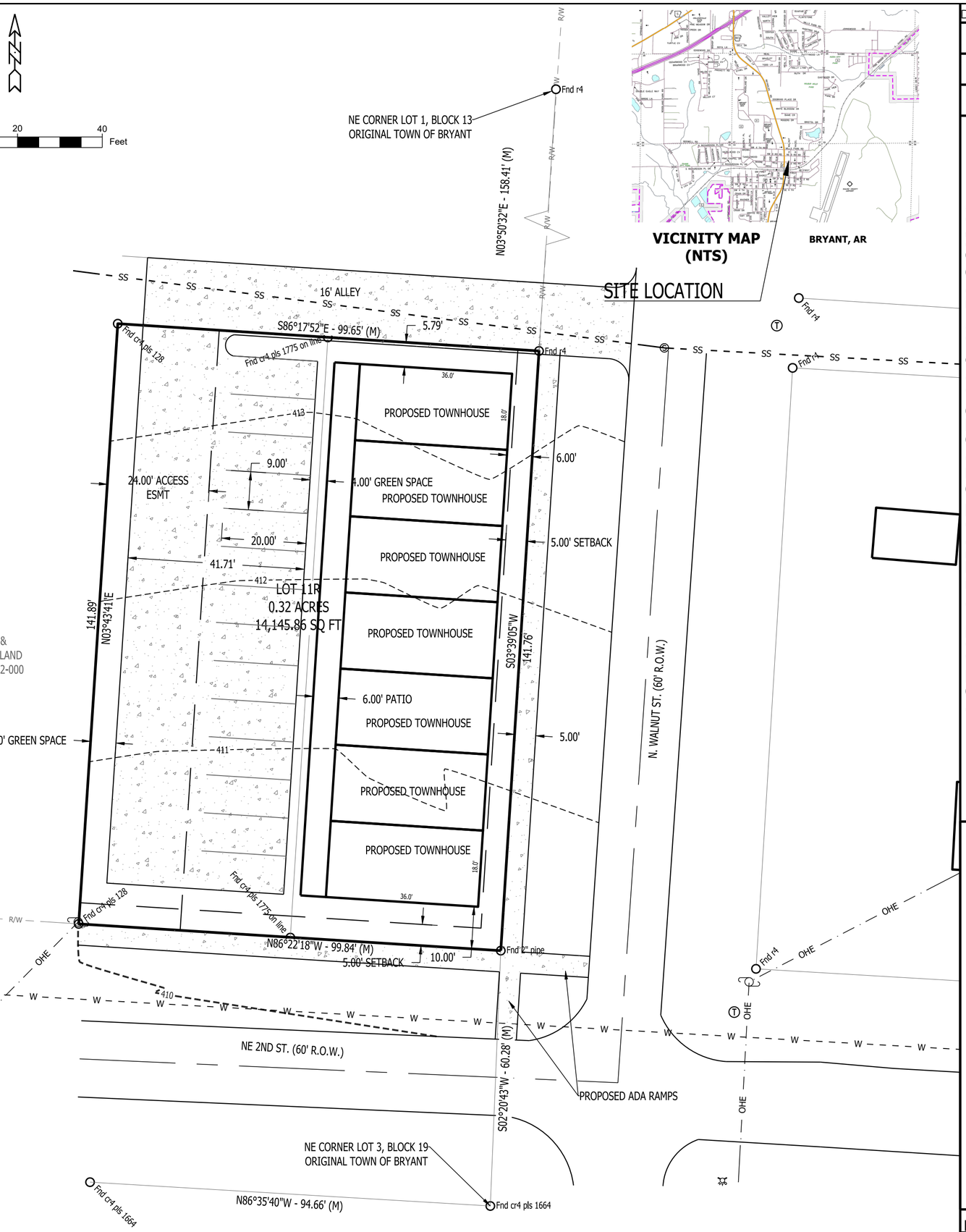
LOT 11R, A REPLAT OF LOTS 11 & 12, BLOCK 13
ORIGINAL TOWN OF BRYANT, ARKANSAS
SALINE COUNTY

PRELIMINARY PLOT PLAN

LEGEND

- SET 1/2" REBAR W/ CAP
- FOUND MONUMENT
- R/W — RIGHT-OF-WAY
- OHE — OVERHEAD UTILITIES
- x — FENCE
- ROADWAY CENTERLINE
- GUY WIRE
- POWER/LIGHT POLE
- (M) MEASURED
- (R) RECORDED DISTANCE
- (D) PER DEED
- BUILDING SETBACK LINE
- UTILITY EASEMENT
- WV — WATER VALVE
- FIRE HYDRANT
- W — WATER METER
- T — TELEPHONE PEDESTAL
- LIGHT POLE
- S — SANITARY SEWER MANHOLE
- E — ELECTRIC BOX
- D — STORM SEWER MANHOLE

0 20 40 Feet



LAND DESCRIPTION PROVIDED
LOT 11R, A REPLAT OF LOTS 11 & 12, BLOCK 13
ORIGINAL TOWN OF BRYANT, ARKANSAS

GENERAL NOTES

1. BASIS OF BEARING FOR THIS SURVEY IS ARKANSAS GRID SOUTH. DISTANCES SHOWN ARE GROUND DISTANCES.
2. REFERENCES:
   A. PLAT OF THE TOWN OF BRYANT.
   B. WARRANTY DEED AS INSTRUMENT NO. 2024-013539.
3. TRACT 1 WILL BE MAINTAINED BY THE PROPERTY OWNER MANAGEMENT GROUP.

CERTIFICATE OF AUTHORIZATION
ROBBINS PROFESSIONAL LAND SERVICES
#4151
ARKANSAS - SURVEYOR

REGISTERED
STATE OF ARKANSAS
NO. 1853
Zane Robbins
SIGNATURE
1/26/2026
ZANE ROBBINS
PROFESSIONAL LAND SURVEYOR

CERTIFICATION

I HEREBY CERTIFY THAT THE ABOVE PLAT REPRESENTS A SURVEY MADE BY ME OR UNDER MY SUPERVISION ON THIS DAY AND THAT ALL CORNERS ARE SET AS SHOWN. NO INDEPENDENT SEARCH FOR EASEMENTS, COVENANTS, ENCUMBRANCES, OR ANY OTHER FACTS WHICH AN ACCURATE TITLE SEARCH MAY DISCLOSE WAS PERFORMED.

Zane Robbins
ZANE ROBBINS, AR PLS #1853

PROPERTY ADDRESS
111 NE SECOND ST
BRYANT, AR 72022

UTILITIES DISCLAIMER

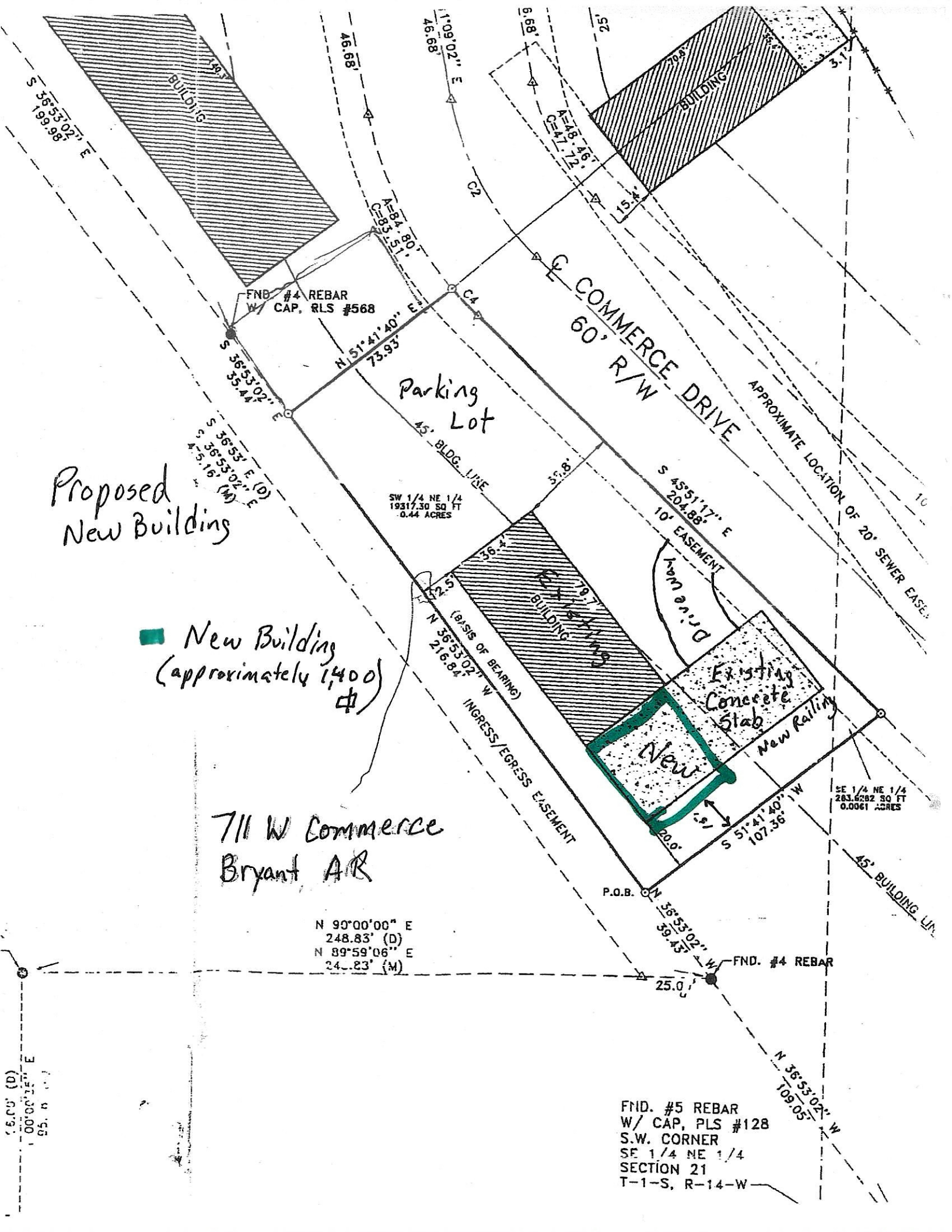
UTILITIES SHOWN ARE NOTED BY VISIBLE OBSERVATION ONLY. UNDERGROUND UTILITIES ARE TAKEN FROM UTILITY MAPS; EXACT LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE AS NO EXCAVATION HAS TAKEN PLACE AS OF THIS DATE TO DETERMINE THE EXACT LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THIS DRAWING.

PLAT CODE: 500-01S-14W-0-34-140-62-1853

ROBBINS PROFESSIONAL LAND SERVICES
INCORPORATED
SURVEYING | GIS | CONSTRUCTION STAKING
P.O. BOX 939 | BRYANT, ARKANSAS 72089
OFFICE: 501-425.6380 | EMAIL: ZANEROBBINS3@GMAIL.COM

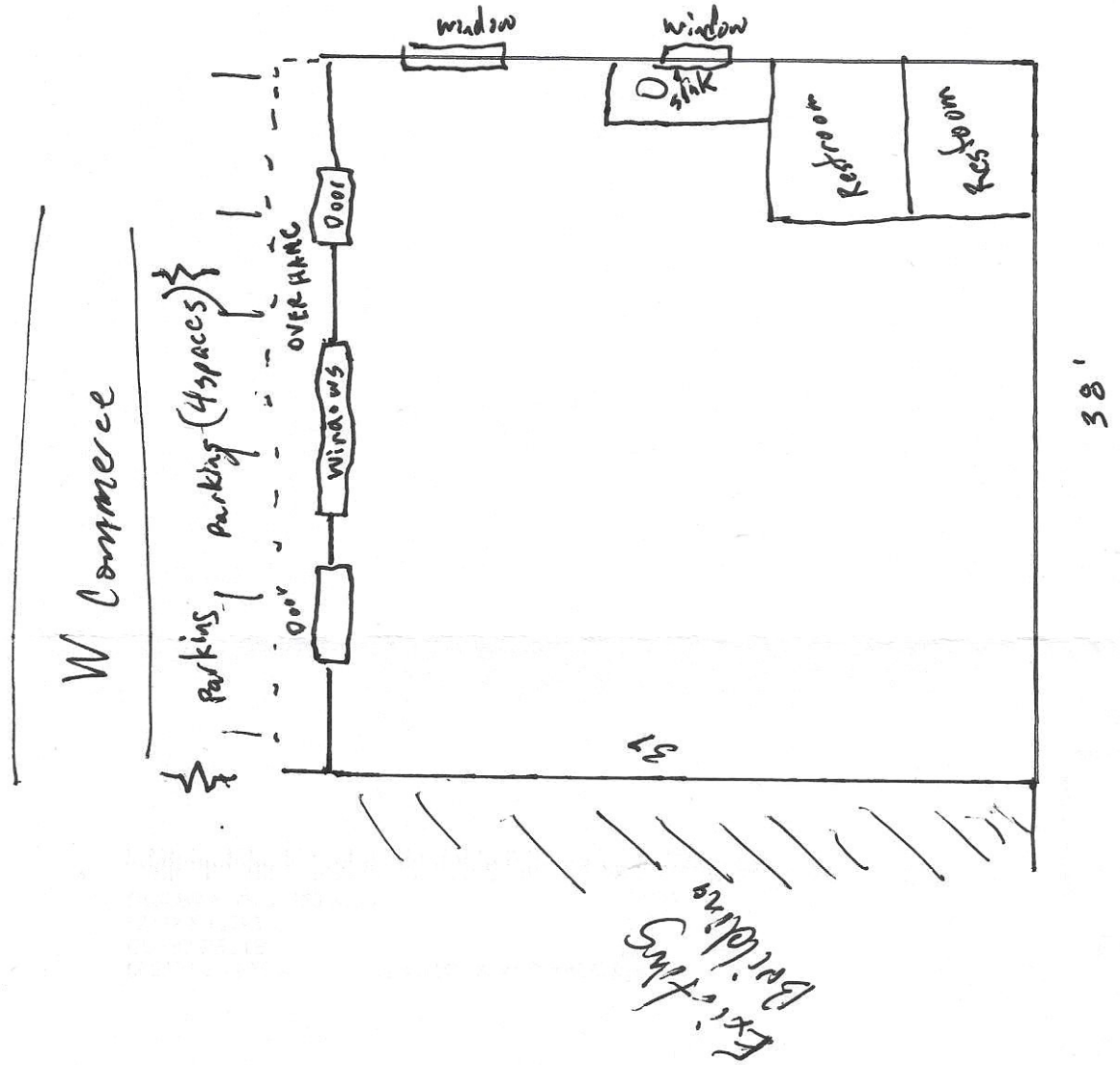
DRAWN BY	ZR
CHECKED BY	ZR
DATE	1/26/2026
SCALE	1"=20'
PROJECT No.	20251010-2
PAGE	1 of 1

Y:\2025\20251010 FERGUSON ORIGINAL TOWN OF BRYANT\20251010-2 REPLAT.dwg | PLOTTED BY: Ray | PLOT DATE: 3/19/2026 8:36:23 AM | ©2024 ROBBINS PROFESSIONAL LAND SERVICES INCORPORATED


Proposed New Building
New Building (approximately 1,400 sq ft)
711 W Commerce
Bryant AR
℄ COMMERCE DRIVE
60' R/W
Parking Lot
45' BLDG. LINE
Existing Building
Drive way
10' EASEMENT
INGRESS/EGRESS EASEMENT
APPROXIMATE LOCATION OF 20' SEWER EASE
Existing Concrete Slab
New
New Railing
BUILDING
FND #4 REBAR W/ CAP, RLS #568
FND. #4 REBAR
FND. #5 REBAR W/ CAP, PLS #128 S.W. CORNER SE 1/4 NE 1/4 SECTION 21 T-1-S, R-14-W
P.O.B.
SW 1/4 NE 1/4 19317.30 SQ FT 0.44 ACRES
SE 1/4 NE 1/4 283.6282 SQ FT 0.0061 ACRES
S 36°53'02" E 199.98'
N 51°41'40" E 73.93'
S 36°53'02" E 35.44'
S 36°53' E (D) S 36°53'02" E (M) 45.16' (M)
S 45°51'17" E 204.88'
N 36°53'02" W 216.84' (BASIS OF BEARING)
S 51°41'40" W 107.36'
N 36°53'02" W 39.43'
N 36°53'02" W 109.05'
N 90°00'00" E 248.83' (D)
N 89°59'06" E 24..83' (M)
A=84.80' C=83.51'
A=48.46' C=47.72'
C2
C4
46.68'
1°09'02" E 46.68'
6.68'
25'
70.8'
35.1'
3.1'
15.4'
149.3'
35.8'
36.4'
5.2'
20.0'
25.0'

Building Addition

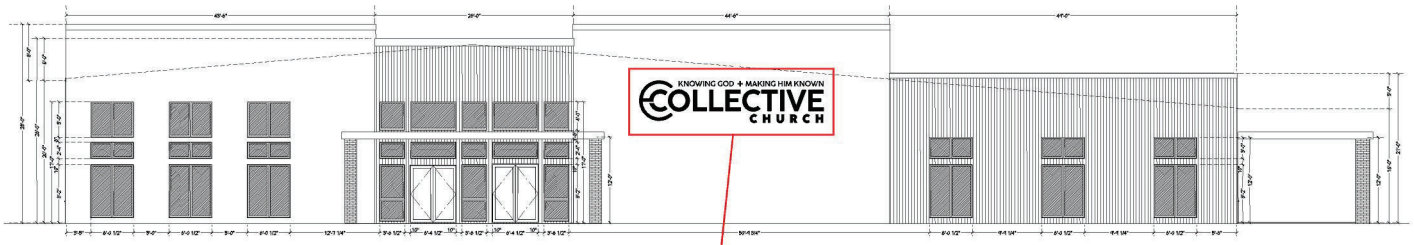
711 W. Commerce
Bryant, AR



Contact: Craig Betts
501-425-8904

1 CHANNEL LETTERS

PROPOSED



RENDERINGS NOT TO SCALE

KNOWING GOD + MAKING HIM KNOWN

COLLECTIVE

CHURCH

H5'-8" x W4'-8" halo-illuminated 5" deep logo
H3'-1" halo-illuminated 5" deep letters ***OLLECTIVE***
H1'-3" halo-illuminated 5" deep letters ***CHURCH***
H9" non-illuminated 3" deep dimensional letters ***KNOWING GOD + MAKING HIM KNOWN***
H6' x W26' overall dimensions

BLACK

ACE SIGNS

PROPERTY BRAND/EXTENSION: Collective Church	**PROPERTY LOCATION:** 3230 Market Place Avenue, Bryant , AR 72022 US	**PROPERTY CODE:**
DATE: 03/03/26	**SALES REP:** Tonya Hulett	**PREPARED BY:** Kayla Roy

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INITIALS: _____

4 MONUMENT SIGN

PROPOSED

H2'-1" x W9'-10" non-illuminated custom single sided cabinet
H2'-1" non-illuminated 3" deep dimensional logo
H1'-2" non-illuminated 3" deep dimensional letters ***OLLECTIVE***
H2'-2" x W9'-6" custom skirt
H5 1/2" non-illuminated 3" deep dimensional letters ***CHURCH***
H4' x W9'-10" overall dimensions

● BLACK
○ WHITE

ACE SIGNS

PROPERTY BRAND/EXTENSION: Collective Church

PROPERTY LOCATION: 3230 Market Place Avenue, Bryant , AR 72022 US

PROPERTY CODE:

DATE: 03/03/26

SALES REP: Tonya Hulett

PREPARED BY: Kayla Roy

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INITIALS: _____