Bryant Development and Review Committee Meeting

Boswell Municipal Complex - City Hall Conference Room

210 SW 3rd Street

Date: September 28, 2023 - **Time:** 9:00 AM

Call to Order

Old Business

New Business

1. Hilldale Crossing Ph.3 - Final Plat

Hope Consulting- Requesting Recommendation for Final Plat Approval

- 0689-ASB-01.pdf
- 0689-ASB-02.pdf
- 0792-APP-01.pdf
- 0792-BNDLTR-01.pdf
- 0792-LTR-01.pdf
- 0792-PLT-01.pdf

2. REQUEST TO ADD: Summerwoods Sports Complex - Gym 3 - Bryant Parkway and Hwy 5

PLE Engineering - Requesting Recommendation for Site Plan Approval

- 0783-RPLT-01.pdf
- 0783-DRN-01.pdf
- 0783-PLN-02.pdf

Staff Approved

3. Springhill Grocery - Delek Oil - 2725 Springhill Road

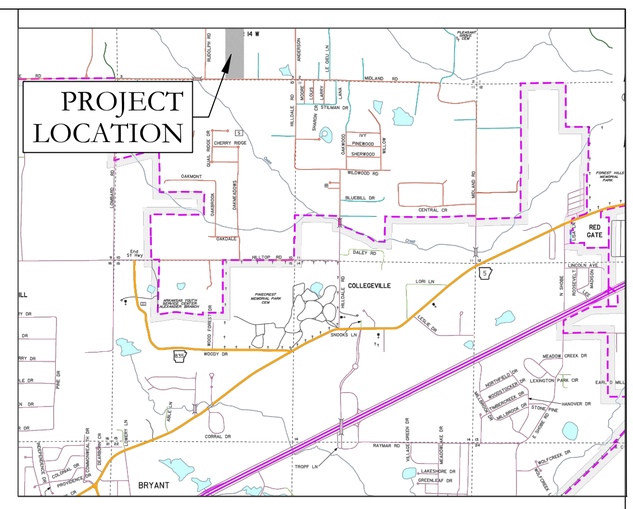
Edwards Sign Company - Requesting Sign Permit Approval - STAFF APPROVED

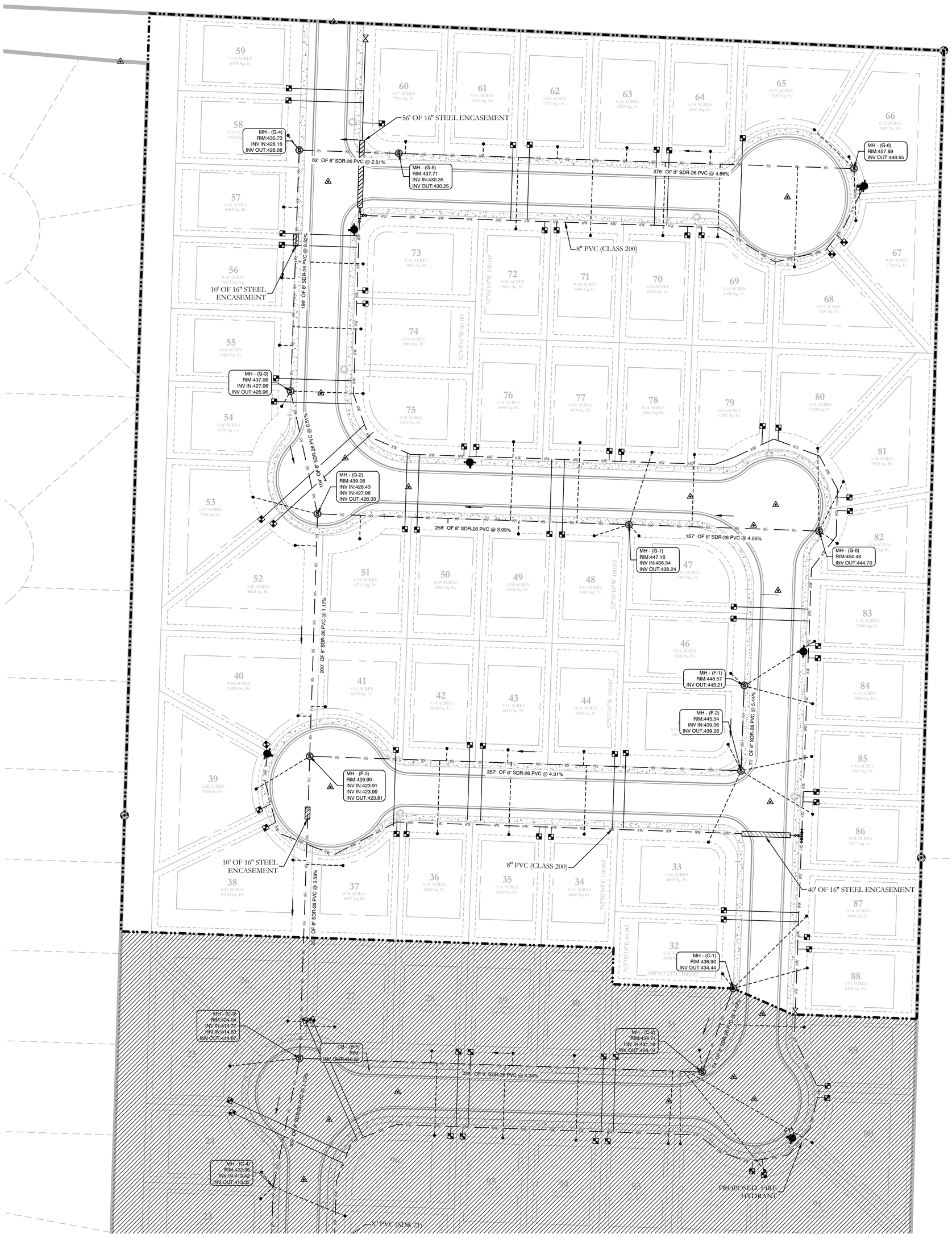
- 0789-APP-01.pdf
- 0787-APP-01.pdf

Permit Report

Adjournments

Know what's below. Call before you dig.





SANITARY SEWER AND WATER AS-BUILTS
HILLDALE CROSSING PHASE 2
A SUBDIVISION IN SALINE COUNTY, ARKANSAS

BASIS OF BEARINGS: GRID NORTH ARKANSAS COORDINATE SYSTEM, SOUTH ZONE BY G.P.S. OBSERVATIONS

50' 25' 0 50'
BAR SCALE: 1" = 60'

SEWER LEGEND:	WATER LEGEND:	TYPICAL FIRE HYDRANT:
AIR RELEASE VALVE	3" BLOW OFF	3" BLOW OFF
CLEAN OUT	GATE VALVE	REDUCER 8"
ISOLATION VALVE	REDUCER	GATE VALVE
SEWER SERVICE	WATER LINE	FIRE HYDRANT
SEWER SERVICE	FIRE HYDRANT	
	DOUBLE WATER SERVICE	
	SINGLE WATER SERVICE	

NOTE: PROPOSED SEWER MAINS IS TO HAVE TRACER WIRE. ALSO A NON-BIODEGRADABLE TAPE IDENTIFYING THE LINE AS "SEWER" MUST BE PLACED IN THE TRENCH ABOVE THE SEWER MIANS.

NOTE: ALL FIRE HYDRANT LEADERS HAVE A GATE VALVE BETWEEN MAIN AND FIRE HYDRANT.

CERTIFICATE OF AUTHORIZATION — HOPE CONSULTING, INC. — No. 1931 — ARKANSAS

HOPE CONSULTING
ENGINEERS - SURVEYORS
117 S. Market Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF:
HAVENS DEVELOPMENT, LLC

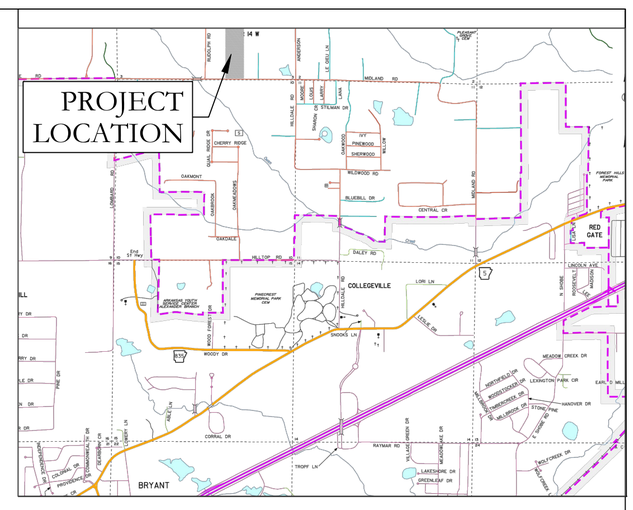
WATER & SEWER AS-BUILTS PLAN
HILLDALE CROSSING PHASE 2
A SUBDIVISION IN SALINE COUNTY, ARKANSAS

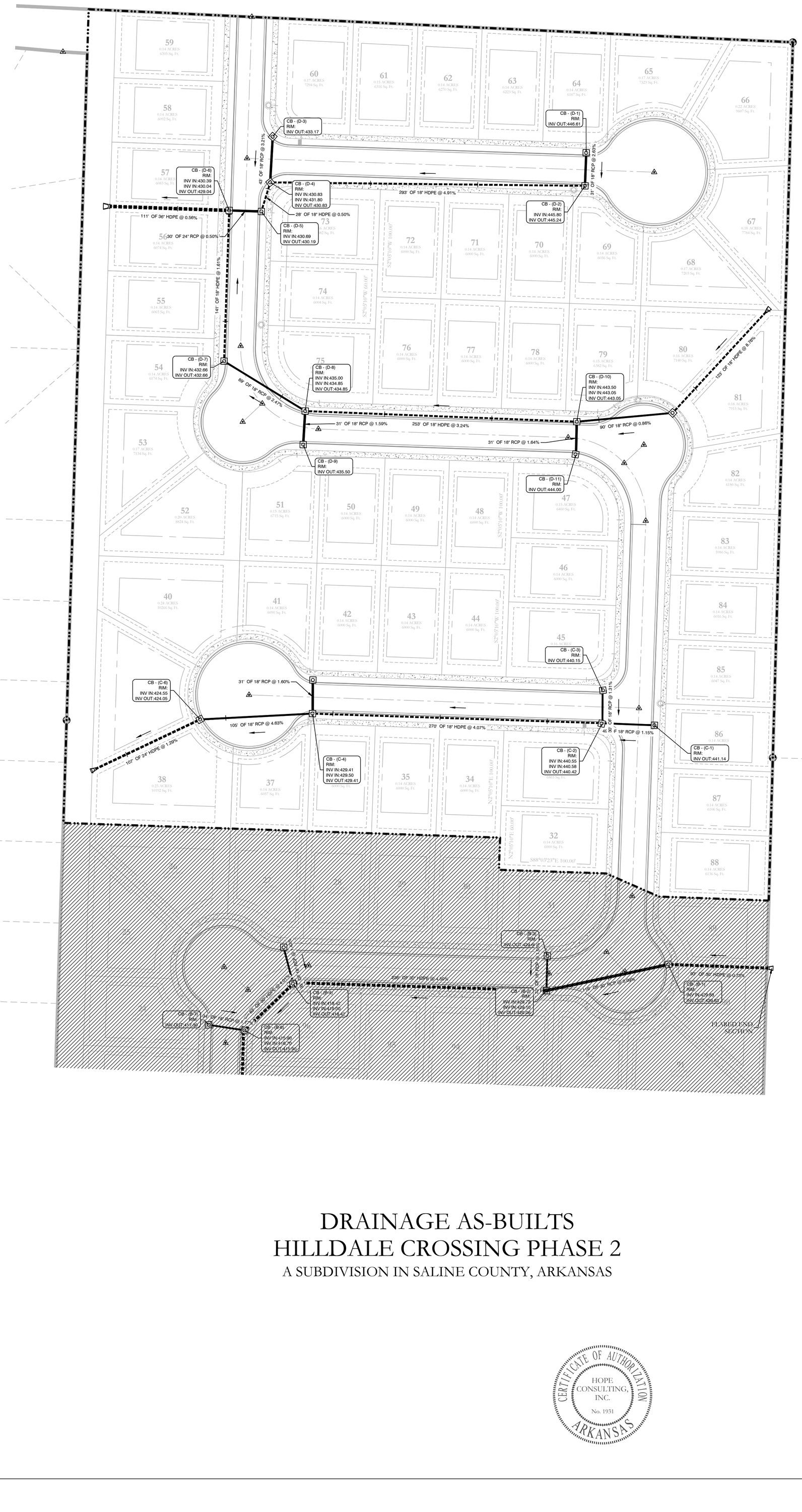
DATE: 12/20/2021		C.A.D. BY: B.JOHNSON	DRAWING NUMBER: 20-0169
REVISED:		CHECKED BY:	
		SCALE: 1"=50'	

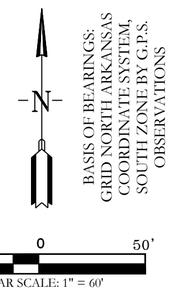
500	01S	14W	0	03	330	62	1762

K:\LAND PROJECTS 2004\SUBDIVISIONS\2020\20-0169 HILLDALE CROSSING\PHASE 2\20-0169 HILLDALE CROSSING PHASE 2-AS-BUILTS-11-29-2022.DWG

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







DRAINAGE AS-BUILTS
HILLDALE CROSSING PHASE 2
A SUBDIVISION IN SALINE COUNTY, ARKANSAS

CERTIFICATE OF AUTHORIZATION
HOPE CONSULTING, INC.
No. 1931
ARKANSAS

HOPE CONSULTING
ENGINEERS - SURVEYORS
117 S. Market Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF:
HAVENS DEVELOPMENT, LLC

DRAINAGE AS-BUILTS PLAN
HILLDALE CROSSING PHASE 2
A SUBDIVISION IN SALINE COUNTY, ARKANSAS

DATE: 12/20/2022			C.A.D. BY: B.JOHNSON		DRAWING NUMBER: 20-0169		
REVISED:			CHECKED BY:				
			SCALE: 1"=50'				
500	01S	14W	0	03	330	62	1762

K:\LAND PROJECTS 2004\SUBDIVISIONS\2020\20-0169 HILLDALE CROSSING\PHASE 2\20-0169 HILLDALE CROSSING PHASE 2-AS-BUILTS-11-29-2022.DWG

Bryant Planning Commission

Subdivision Checklist

Approved by
Bryant Planning Commission
07/14/2003 Revised 6/18/2007

Instructions

The attached checklist must be completed by the owner and subdivision engineer and must be submitted along with the Preliminary Plat Plan and other specified documentation for review and approval by the Planning Commission. The owner may not begin developing the subdivision until the review of the Preliminary Plat plan is approved.

No changes or alterations can be made to the approved Preliminary Plat Plan without Planning Commission approval.

When all lots have been surveyed, the utilities and drainage measures are in place, and roads have been constructed, the owner and engineer will submit a Final Plat Plan for approval by the Commission. This Final Plat Plan will incorporate all approved changes and will be verified by the City Engineer. No lots will be sold or rights-of-way and easements conveyed until the Final Plat has been submitted and approved.

Fees due to City of Bryant upon submission of Preliminary Plat application

- $300.00 + $3.00 per lot - for Subdivision preliminary plat review
- $250.00 or $25.00 per lot (**whichever is greater**) - Stormwater Detention and Drainage Plan Engineering Fee
- A Surety Bond or Cashier's check in the amount of 10% of the estimated development cost must be furnished within 10 days after Preliminary Plat approval.

Fees due to Bryant Water and Sewer Department upon submission of Final Plat application

- $100 per lot - Water/Sewer Impact Fee
- $100 per Subdivision Phase - Water/Sewer Flushing Fee

Fees due to City of Bryant upon submission of Final Plat application

- $25.00 + $1.00 per lot - for Subdivision Final Plat review

Final Plat Fees

Check Payable to City of Bryant for Review fee of $63
Check Payable to Bryant Water and Sewer Department for $7,600

City of Bryant Subdivision Checklist

Subdivision/Project Name Hilldale Crossing

Contact Person Jonathan Hope **Phone** 501-860-0467

Mailing Address 129 N. Main Street Benton, Arkansas

I. Basic Information Needed On The Plat

√ ▲ 1. Name of Subdivision/Project
√ ▲ 2. Current zoning N/A
√ ▲ 3. Name and Address of owner of Record
√ ▲ 4. Illustrate Source of Title giving deed record book and page number
√ ▲ 5. Name & address of the sub-divider
√ ▲ 6. Date of Survey
√ ▲ 7. Vicinity map locating streets, highways, section lines, railroad, schools, & parks within ½ mile
√ ▲ 8. Legal description of the property with exact boundary lines
√ ▲ 9. Acreage of property
√ ▲ 10. Number of Lots
√ ▲ 11. Lot area in square feet
√ ▲ 12. Lot lines with appropriate dimensions
√ ▲ 13. Building setback lines
√ ▲ 14. Preliminary Engineering certificate seal and signature on each page
√ ▲ 15. Certificate of Engineering Accuracy
√ ▲ 16. Certificate of Owner
√ ▲ 17. Certificate of Final Plat Approval
√ ▲ 18. Certificate of Recording
√ ▲ 19. Show scale (not less than 1" = 100')
√ ▲ 20. North Arrow
√ ▲ 21. Show Title block
√ ▲ 22. Show adjoining property owners
√ ▲ 23. Layout of all proposed streets including traffic control devices (stop signs, speed limit, etc.)
√ 24. Layout of all subdivision entrance street upgrades
√ ▲ 25. Layout of all proposed alleys
√ ▲ 26. Layout of all proposed sidewalk systems
√ ▲ 27. Layout identifies any FEMA flood plain and flood way property within the 100-year flood elevation. (Provide Corp of Engineers 404 Permit if required)
√ ▲ 28. Drainage easements for stormwater run-off and detention giving dimensions, locations, and purpose
√ ▲ 29. Layout accommodates Master Street Plan segments within the boundaries
√ ▲ 30. Street layout ties to existing adjoining subdivision stub-out streets and provides stub-out streets for future adjoining subdivisions.
√ ▲ 31. Street width and right-of-way properly shown for each functional classification
√ ▲ 32. Street centerlines showing angles of deflection, intersection, radii, length oftangents and arcs, and degree of curvature with basis of curve data
√ ▲ 33. Typical cross section of streets
√ ▲ 34. Location and name of existing streets
√ ▲ 35. New street names that are not similar to existing street names
√ ▲ 36. Show street lights
√ ▲ 37. Show Fire Hydrant placement

√ ▲ 38. Show and label all permanent & proposed easements
√ ▲ 39. Any proposed open space must be shown
√ ▲ 40. Show the direction and flow of all water courses entering the tract
√ ▲ 41. Show the direction and flow of all water courses leaving the tract
√ ▲ 42. The drainage area of all water courses above the points of entry.
√ ▲ 43. The downstream drainage channel and drainage structures substantially impacted by the subdivision/project.
√ ▲ 44. Show source of water supply
√ ▲ 45. Show location of waste water connection to municipal main & sanitary sewer layout
√ ▲ 46. A phasing plan outlining the boundaries for each phase

II. Additional Information Needed, But Not Necessarily On The Plat

√ ▲ 47. Natural features within the proposed subdivision including drainage channels, bodies of water, wooded areas, and other significant features
√ ▲ 48. Existing streets, buildings, water courses, railroads. Culverts, utilities and easement on and adjacent to the tract.
√ ▲ 49. Where method of disposal of wastewater is other than connection to a public waste water system, detailed information shall accompany the plat.
√ ▲ 50. Calculations and field notes, including drainage calculations along with support drawing
51. Stormwater detention plan approval from City Engineer (attach copy of approval)
√ ▲ 52. The Certificate of Preliminary Engineering Accuracy on each set of street and drainage plans.
√ ▲ 53. ADA Accessibility Standard Form completed (and attached)
√ ▲ 54. A Bill of Assurance has been prepared for this subdivision (and attached)
√ ▲ 55. All lots comply with minimum square footage area and minimum lot width at the front building line
√ ▲ 56. Street pavement design will be as specified by City or AHTD design procedures, approved by the City Engineer.
√ ▲ 57. Made the "One Call" prior to site clearance or other excavation activity

III. Preliminary Plat Attachments

(Application will not be accepted until all attachment requirements are met)

√ ▲ 58. **Letter to Planning Commission** stating your request
√ ▲ 59. Completed **Checklist**
√ ▲ **60. Completed agreement to provide performance assurance**
√ ▲ 61. **Subdivider Performance Bond or Cashier's Check** for infrastructure installation
√ ▲ 62. Landscaping plan of any proposed common open space
√ ▲ 63. **Draft of Bill of Assurance** proposed for the subdivision (if applicable)
√ ▲ 64. **20 copies of Preliminary Plat Plan (folded)** that includes vicinity map (minimum size 17" X 34" paper)
√ ▲ 65. **Two (2) IBM compatible diskettes or CDR's** with pertinent data and Plat in CAD compatible .DXF electronic file format
√ ▲ 66. Copy of **Stormwater Detention approval**
√ ▲ 67. 2 copies **Plan and profile** of all streets
√ ▲ 68. Receipt for **$300.00 + $3.00 per lot for preliminary Subdivision fee**
√ ▲ 69. Receipt for **$250.00 or $25.00 per lot (whichever is greater) for Stormwater Detention and Drainage Plan review**
√ ▲ 70. Copy of **ADEQ Stormwater Pollution Prevention Plan** for property parcel containing one acre or larger.

III. Final Plat Attachments

(Application will not be accepted until all attachment requirements are met)

- 71. **Letter to Planning Commission** stating your request
- 72. Completed **Checklist**
- 73. **20 copies of Final Plat Plan (folded)** that includes vicinity map (minimum size 17" X 34" paper)
- 74. **Two (2) IBM compatible diskettes or CDR's** with pertinent data and Plat in CAD compatible .DXF electronic file format
- 75. **Bill of Assurance** including provisions set out in Title 15 Subdivision Regulations 15.16.01
- 76. Copy of **Water & Sewer Commission approval** or....
- 77. State Health Department approval of any new water supply and/or sewage system.
- 78. **Letter submitted by a Registered Professional Engineer, certifying that all infrastructure improvements and installations have been installed** in accordance with the submitted construction plans and drawings and the standards established by the City of Bryant and are functioning properly.
- 79. Infrastructure Maintenance Bond or Cashier's check.
- 80. Check for **$25.00 + $1.00 per lot for final Subdivision fee**
- 81. Check for **Water Sewer impact fees ($100.00 Flushing Fee and $100.00 impact fee per lot)**

Hilldale Crossing
Name of Subdivision

Jonathan Hope
Surveyor

I HAVE COMPLIED WITH THE REQUIREMENTS LISTED ABOVE AND HAVE CHECKED ALL OF THE BOXES ON THE CHECKLIST WHICH APPLY TO THIS PROJECT SUBMITTAL.

Owner Signature

Kazi Islam
Engineer Signature

CITY USE

Preliminary Plat Approved _____

Planning Commission Date _____

Final Plat Approved _____

Planning Commission Date _____

Proof of Recording - County _____

County Clerk _____ Date _____

Saline County Road Department
5500 Cynamide Road
Benton, Arkansas 72015
(501) 303-5690

September 26, 2023

Havens Development
2615 North Prickett, Suite 5
Bryant, AR 72022

Ref: Maintenance Bond to Cover Roads in Hilldale Crossing Phase 3

Dear Mr. Havens;
The maintenance bond to ensure that Havens Development will either correct any defects that arise or that Saline County is compensated for costs resulting from repairs of any defects identified for a period of one year is required. The amount of bond is calculated as $25.00 per constructed foot of street. Based on the Final Plat, the footage of constructed roads is 1276 feet.

Required Maintenance Bond is 1276' x $25.00 = $31,900.0.

The date of expiration of this bond will be one year after the date of bond creation.

Thanks,
John Wofford PE, PLS

Saline County Engineer.

HOPE
CONSULTING
ENGINEERS • SURVEYORS

September 26, 2023

Truett Smith
City of Bryant
210 Southwest Third St., Bryant, AR 72022

RE: Hilldale Final Plat Phase 3

Dear Truett:

On behalf of the property owner, Hope Consulting is requesting the final review of this residential subdivision project located in the Bryant ETJ. This subdivision development consists of sewer provided by Bryant, Water provided by Water Users, and Electric provided by First Electric. We are submitting to start the review for the Final plat. It is the desire of our client to be on the October Planning Commission agenda.

The developer of this project is Todd and Callie Havens of Havens Development.

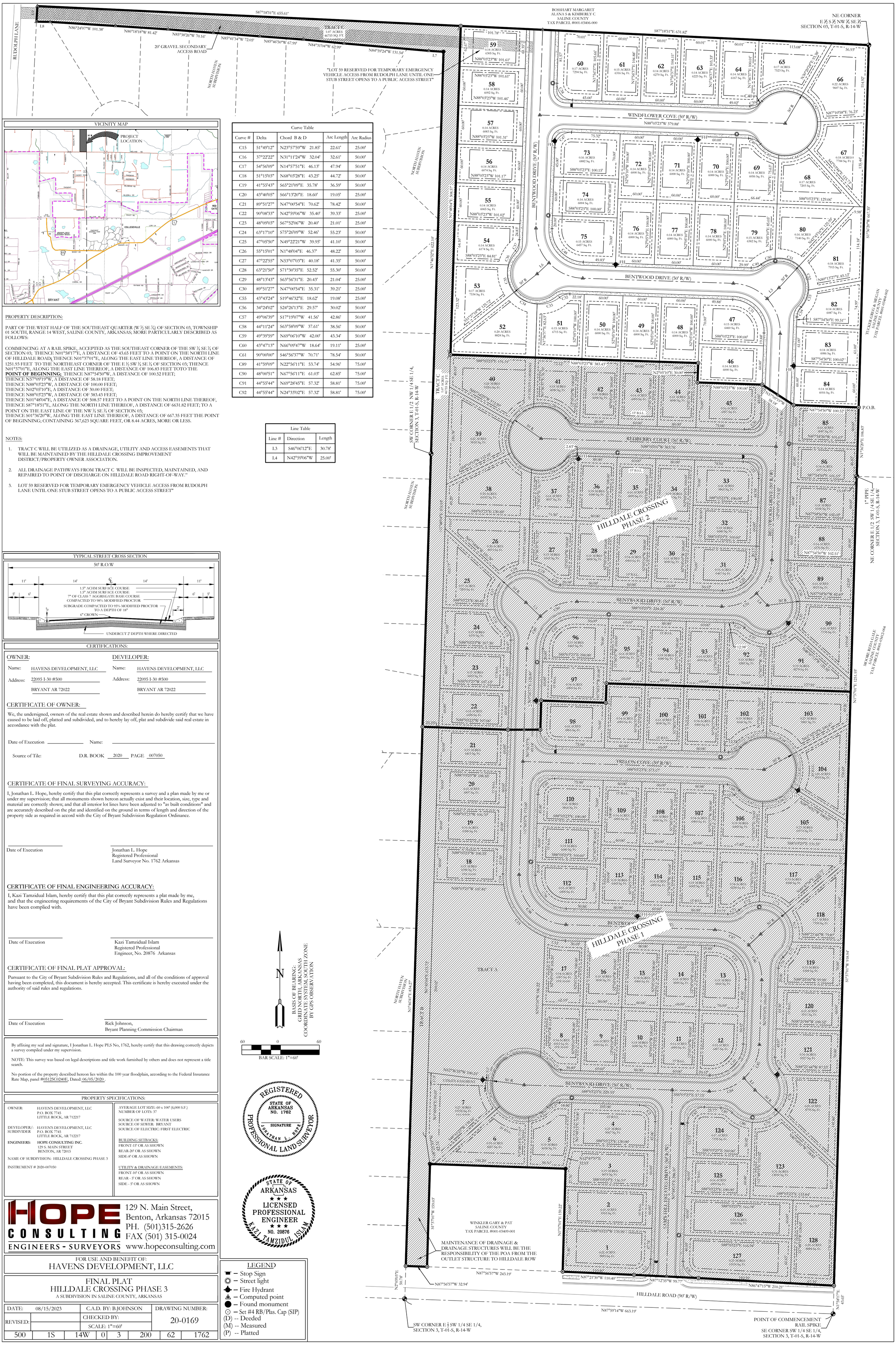
Todd Havens: todd@havensdev.com

Please feel free to contact me with any questions or concerns or if I can be of any further assistance.

Sincerely,

Jonathan Hope

129 N Main St. Benton, Arkansas 72015
501-315-2626
www.hopeconsulting.com



VICINITY MAP

Curve Table					
Curve #	Delta	Chord B & D		Arc Length	Arc Radius
C15	51°49'12"	N23°57'59"W	21.85'	22.61'	25.00'
C16	37°22'22"	N31°11'24"W	32.04'	32.61'	50.00'
C17	54°56'09"	N14°57'51"E	46.13'	47.94'	50.00'
C18	51°15'03"	N68°03'28"E	43.25'	44.72'	50.00'
C19	41°55'43"	S65°21'09"E	35.78'	36.59'	50.00'
C20	43°40'05"	S66°13'20"E	18.60'	19.05'	25.00'
C21	89°51'27"	N47°00'54"E	70.62'	78.42'	50.00'
C22	90°08'33"	N42°59'06"W	35.40'	39.33'	25.00'
C23	48°09'03"	S67°52'06"W	20.40'	21.01'	25.00'
C24	63°17'10"	S75°26'09"W	52.46'	55.23'	50.00'
C25	47°05'50"	N49°22'21"W	39.95'	41.10'	50.00'
C26	55°15'01"	N1°48'04"E	46.37'	48.22'	50.00'
C27	47°22'55"	N53°07'03"E	40.18'	41.35'	50.00'
C28	63°21'50"	S71°30'35"E	52.52'	55.30'	50.00'
C29	48°13'43"	S63°56'31"E	20.43'	21.04'	25.00'
C30	89°51'27"	N47°00'54"E	35.31'	39.21'	25.00'
C55	43°43'24"	S19°46'32"E	18.62'	19.08'	25.00'
C56	34°24'02"	S24°26'13"E	29.57'	30.02'	50.00'
C57	49°06'39"	S17°19'07"W	41.56'	42.86'	50.00'
C58	44°11'24"	S63°58'09"W	37.61'	38.56'	50.00'
C59	49°39'59"	N69°06'10"W	42.00'	43.34'	50.00'
C60	43°47'13"	N66°09'47"W	18.64'	19.11'	25.00'
C61	90°00'00"	S46°56'37"W	70.71'	78.54'	50.00'
C89	41°59'09"	N22°56'11"E	53.74'	54.96'	75.00'
C90	48°00'51"	N67°56'11"E	61.03'	62.85'	75.00'
C91	44°55'44"	N69°28'45"E	57.32'	58.81'	75.00'
C92	44°55'44"	N24°33'02"E	57.32'	58.81'	75.00'

Line Table		
Line #	Direction	Length
L3	S46°06'12"E	30.78'
L4	N42°59'06"W	25.00'

PROPERTY DESCRIPTION:

PART OF THE WEST HALF OF THE SOUTHEAST QUARTER (W ½ SE ¼) OF SECTION 03, TOWNSHIP 01 SOUTH, RANGE 14 WEST, SALINE COUNTY, ARKANSAS; MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A RAIL SPIKE, ACCEPTED AS THE SOUTHEAST CORNER OF THE SW ¼ SE ¼ OF SECTION 03; THENCE N01°58'17"E, A DISTANCE OF 43.65 FEET TO A POINT ON THE NORTH LINE OF HILLDALE ROAD; THENCE N01°37'01"E, ALONG THE EAST LINE THEREOF, A DISTANCE OF 1251.93 FEET TO THE NORTHEAST CORNER OF THE E ½ SW ¼ SE ¼ OF SECTION 03; THENCE N01°37'01"E, ALONG THE EAST LINE THEREOF, A DISTANCE OF 106.83 FEET TOTO THE **POINT OF BEGINNING;** THENCE N87°54'50"W, A DISTANCE OF 100.52 FEET; THENCE N57°09'19"W, A DISTANCE OF 58.18 FEET; THENCE N88°03'23"W, A DISTANCE OF 100.00 FEET; THENCE N02°05'10"E, A DISTANCE OF 30.00 FEET; THENCE N88°03'23"W, A DISTANCE OF 383.43 FEET; THENCE N01°48'04"E, A DISTANCE OF 508.57 FEET TO A POINT ON THE NORTH LINE THEREOF, THENCE S87°18'51"E, ALONG THE NORTH LINE THEREOF, A DISTANCE OF 6631.82 FEET; TO A POINT ON THE EAST LINE OF THE NW ¼ SE ¼ OF SECTION 03; THENCE S01°36'20"W, ALONG THE EAST LINE THEREOF, A DISTANCE OF 667.35 FEET THE POINT OF BEGINNING; CONTAINING 367,623 SQUARE FEET, OR 8.44 ACRES, MORE OR LESS.

NOTES:

1. TRACT C WILL BE UTILIZED AS A DRAINAGE, UTILITY AND ACCESS EASEMENTS THAT WILL BE MAINTAINED BY THE HILLDALE CROSSING IMPROVEMENT DISTRICT/PROPERTY OWNER ASSOCIATION.
2. ALL DRAINAGE PATHWAYS FROM TRACT C WILL BE INSPECTED, MAINTAINED, AND REPAIRED TO POINT OF DISCHARGE ON HILLDALE ROAD RIGHT-OF-WAY."
3. LOT 59 RESERVED FOR TEMPORARY EMERGENCY VEHICLE ACCESS FROM RUDOLPH LANE UNTIL ONE STUB STREET OPENS TO A PUBLIC ACCESS STREET"

TYPICAL STREET CROSS SECTION

CERTIFICATIONS:

OWNER:

Name: HAVENS DEVELOPMENT, LLC

Address: 22095 I-30 #500

BRYANT AR 72022

DEVELOPER:

Name: HAVENS DEVELOPMENT, LLC

Address: 22095 I-30 #500

BRYANT AR 72022

CERTIFICATE OF OWNER:

We, the undersigned, owners of the real estate shown and described herein do hereby certify that we have caused to be laid off, platted and subdivided, and to hereby lay off, plat and subdivide said real estate in accordance with the plat.

Date of Execution _____ Name: _____

Source of Tile: D.R. BOOK 2020 PAGE 007050

CERTIFICATE OF FINAL SURVEYING ACCURACY:

I, Jonathan L. Hope, hereby certify that this plat correctly represents a survey and a plan made by me or under my supervision; that all monuments shown hereon actually exist and their location, size, type and material are correctly shown; and that all interior lot lines have been adjusted to "as built conditions" and are accurately described on the plat and identified on the ground in terms of length and direction of the property side as required in accord with the City of Bryant Subdivision Regulation Ordinance.

Date of Execution

Jonathan L. Hope
Registered Professional
Land Surveyor No. 1762 Arkansas

CERTIFICATE OF FINAL ENGINEERING ACCURACY:

I, Kazi Tamzidual Islam, hereby certify that this plat correctly represents a plat made by me, and that the engineering requirements of the City of Bryant Subdivision Rules and Regulations have been complied with.

Date of Execution

Kazi Tamzidual Islam
Registered Professional
Engineer, No. 20876 Arkansas

CERTIFICATE OF FINAL PLAT APPROVAL:

Pursuant to the City of Bryant Subdivision Rules and Regulations, and all of the conditions of approval having been completed, this document is hereby accepted. This certificate is hereby executed under the authority of said rules and regulations.

Date of Execution

Rick Johnson,
Bryant Planning Commission Chairman

By affixing my seal and signature, I Jonathan L. Hope PLS No, 1762, hereby certify that this drawing correctly depicts a survey compiled under my supervision.

NOTE: This survey was based on legal descriptions and title work furnished by others and does not represent a title search.

No portion of the property described hereon lies within the 100 year floodplain, according to the Federal Insurance Rate Map, panel #05125C0240E, Dated: 06/05/2020 .

REGISTERED
STATE OF ARKANSAS
NO. 1762
SIGNATURE
JONATHAN L. HOPE
PROFESSIONAL LAND SURVEYOR

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
NO. 20876
KAZI TAMZIDUL ISLAM

PROPERTY SPECIFICATIONS:

OWNER: HAVEN'S DEVELOPMENT, LLC
P.O. BOX 7745
LITTLE ROCK, AR 712217

DEVELOPER/: HAVEN'S DEVELOPMENT, LLC
SUBDIVIDER P.O. BOX 7745
LITTLE ROCK, AR 712217

ENGINEERS: HOPE CONSULTING INC.
129 S. MAIN STREET
BENTON, AR 72015

NAME OF SUBDIVISION: HILLDALE CROSSING PHASE 3

INSTRUMENT # 2020-007050

AVERAGE LOT SIZE: 60 x 100' (6,000 S.F.)
NUMBER OF LOTS: 37

SOURCE OF WATER: WATER USERS
SOURCE OF SEWER: BRYANT
SOURCE OF ELECTRIC: FIRST ELECTRIC

BUILDING SETBACKS:
FRONT-15' OR AS SHOWN
REAR-20' OR AS SHOWN
SIDE-8' OR AS SHOWN

UTILITY & DRAINAGE EASEMENTS:
FRONT-10' OR AS SHOWN
REAR - 5' OR AS SHOWN
SIDE - 5' OR AS SHOWN

HOPE CONSULTING
ENGINEERS - SURVEYORS
129 N. Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

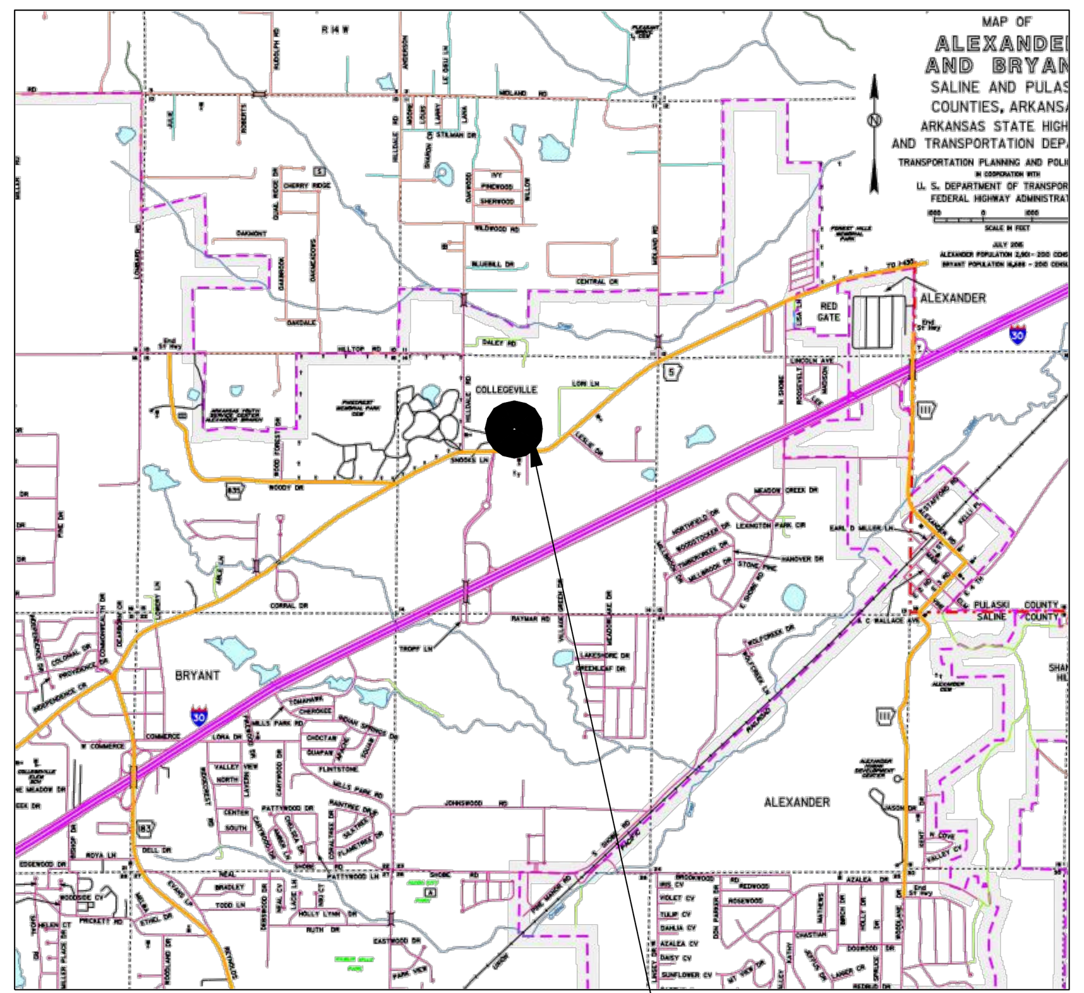
FOR USE AND BENEFIT OF:
HAVENS DEVELOPMENT, LLC

FINAL PLAT
HILLDALE CROSSING PHASE 3
A SUBDIVISION IN SALINE COUNTY, ARKANSAS

DATE: 08/15/2023	C.A.D. BY: B.JOHNSON	DRAWING NUMBER:
REVISED:	CHECKED BY:	20-0169
	SCALE: 1"=60'	

500	1S	14W	0	3	200	62	1762

LEGEND
- Stop Sign
- Street light
- Fire Hydrant
- Computed point
- Found monument
- Set #4 RB/Plas. Cap (SIP)
- (D) -- Deeded
- (M) -- Measured
- (P) -- Platted



VICINITY MAP

NTS

SITE LOCATION

CERTIFICATE OF SURVEY ACCURACY

I, ZANE ROBBINS, HEREBY CERTIFY THAT THIS REPLAT CORRECTLY REPRESENTS A BOUNDARY SURVEY MADE OR VERIFIED BY ME, THAT ALL SURVEYING REQUIREMENTS OF THE STATE OF ARKANSAS AND CITY OF BRYANT SUBDIVISION RULES AND REGULATIONS HAVE BEEN COMPLIED WITH AND FILED FOR RECORD AS REQUIRED.

9-20-23
DATE OF EXECUTION

Zane Robbins
REGISTERED PROFESSIONAL LAND SURVEYOR
NO. 1853 ARKANSAS

REGISTERED PROFESSIONAL LAND SURVEYOR STATE OF ARKANSAS NO. 1853 SIGNATURE Zane Robbins 09/20/2023 ZANE ROBBINS

CERTIFICATE OF AUTHORIZATION ROBBINS PROFESSIONAL LAND SERVICES #4151 ARKANSAS - SURVEYOR

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, PLAT AND SUBDIVIDE SAID REAL ESTATE IN ACCORDANCE WITH THIS PLAT.

DATE OF EXECUTION ______

SIGNED ______

NAME ______

ADDRESS ______

SOURCE OF TITLE: INSTRUMENT No.

CERTIFICATE OF ENGINEERING ACCURACY

I, PHILLIP A. LEWIS, HEREBY CERTIFY THAT THIS REPLAT CORRECTLY REPRESENTS A PLAT MADE BY ME, AND THAT ENGINEERING REQUIREMENTS OF THE CITY OF BRYANT SUBDIVISION RULES AND REGULATIONS HAVE BEEN COMPLIED WITH.

SIGNED,

DATE OF EXECUTION

REGISTERED PROFESSIONAL ENGINEER
NO. 9540 ARKANSAS

CERTIFICATE OF FINAL PLAT APPROVAL

ALL REQUIREMENTS OF THE BRYANT SUBDIVISION RULES AND REGULATIONS RELATIVE TO THE PREPARATION AND SUBMITTAL TO A FINAL PLAT HAVE BEEN FULFILLED, APPROVAL OF THIS PLAT IS HEREBY GRANTED, SUBJECT TO FURTHER PROVISIONS OF SAID RULES AND REGULATIONS.

SIGNED,

DATE OF EXECUTION

NAME,
BRYANT BUILDING OFFICIAL

OWNER OF RECORD:

AF PARTNERS LLC
1500 Christy Lane,
Alexander, AR,
72002

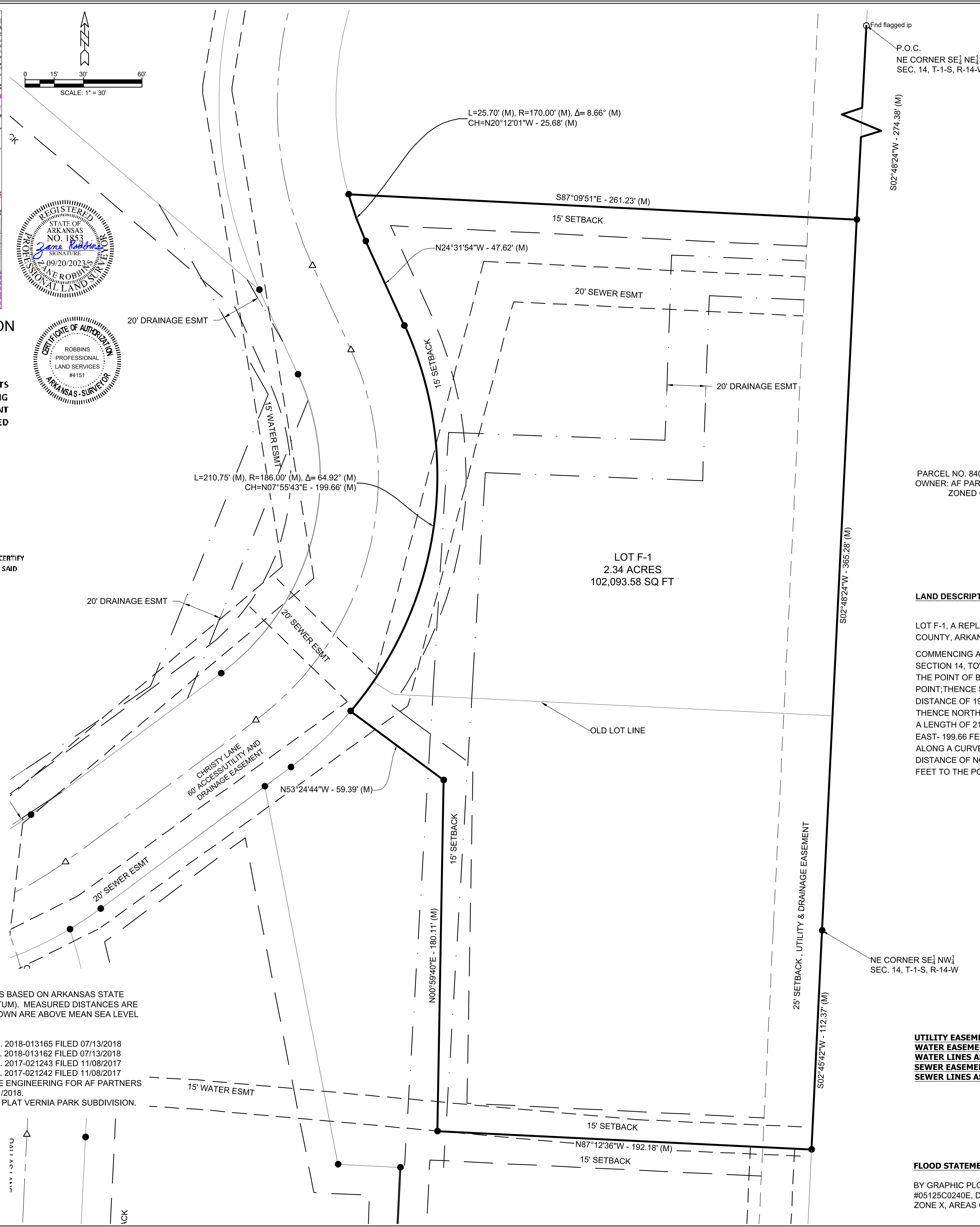
GENERAL NOTES

1. BASIS OF BEARING FOR THIS SURVEY IS BASED ON ARKANSAS STATE PLANE GRID COORDINATES (NAD83 DATUM). MEASURED DISTANCES ARE GROUND DISTANCES. ELEVATIONS SHOWN ARE ABOVE MEAN SEA LEVEL (NAVD88 DATUM).
2. REFERENCES:
   A. INSTRUMENT NO. 2018-013165 FILED 07/13/2018
   B. INSTRUMENT NO. 2018-013162 FILED 07/13/2018
   C. INSTRUMENT NO. 2017-021243 FILED 11/08/2017
   D. INSTRUMENT NO. 2017-021242 FILED 11/08/2017
   E. SURVEY BY HOPE ENGINEERING FOR AF PARTNERS LLC DATED 06/21/2018.
   F. AMENDED FINAL PLAT VERNIA PARK SUBDIVISION.

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



PARCEL NO. 840-11660-101
OWNER: AF PARTNERS LLC
ZONED C-2

LEGEND OF SYMBOLS & ABBREVIATIONS

GAS METER	N	NORTH	ASPHALT		
WATER METER	S	SOUTH	CONCRETE		
GUY WIRE	E	EAST			
POWER/UTILITY POLE	W	WEST			
TELEPHONE PEDESTAL	(M)	AS MEASURED			
SEWER MANHOLE	(D)	PER DEED	SET 1/2" REBAR w/ CAP #1853		
WATER VALVE	R/W	RIGHT-OF-WAY	SET COTTON-PICKER SPINDLE		
FIRE HYDRANT	L.A.	LANDSCAPED AREA	FOUND MONUMENT (DESC. NOTED)		
SIGNS	CR4	CAPPED 1/2" REBAR	COMPUTED CORNER (NOT SET)		
LIGHT POLE	CONC.	CONCRETE			
TELEPHONE MANHOLE	P.O.C.	POINT OF COMMENCEMENT			
SS — SANITARY SEWER LINE	P.O.B.	POINT OF BEGINNING			
W — WATER LINE	CMP	CORRUGATED METAL PIPE			
STORM SEWER PIPE	RCP	REINFORCED CONCRETE PIPE			
ROADWAY CENTERLINE	ESMT	EASEMENT			
WATER & SEWER EASEMENT	SUBD	SUBDIVISION			
BUILDING SETBACK LINE	HDPE	HIGH DENSITY POLYETHYLENE			
R/W — ROADWAY RIGHT-OF-WAY	FDC	FIRE DEPARTMENT CONNECTION			
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					

LAND DESCRIPTION

LOT F-1, A REPLAT OF LOT F, VERNIA PARK SUBDIVISION PHASE 1, AN ADDITION TO THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A 5/8' REBAR AS THE NORTHEAST CORNER OF THE SOUTHEAST ¼ NORTHEAST ¼ NORTHWEST ¼ OF SECTION 14, TOWNSHIP 1 SOUTH, RANGE14 WEST; THENCE SOUTH 02°48' 24" WEST A DISTANCE OF 274.38 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE SOUTH 02° 48' 24" WEST A DISTANCE OF 365.28 FEET TO A POINT;THENCE SOUTH 02° 45' 42" WEST A DISTANCE OF 112.37 FEET TO A POINT; THENCE NORTH 87° 12' 36" WEST A DISTANCE OF 192.18 FEET TO A POINT; THENCE NORTH 00° 59' 40" EAST A DISTANCE OF 180.11 FEET TO A POINT; THENCE NORTH 53° 24' 44" WEST A DISTANCE OF 59.39 FEET TO A POINT; THENCE ALONG A CURVE TO THE LEFT WITH A LENGTH OF 210.75 FEET, RADIUS OF 186.00 FEET, AND A CHORD BEARING AND DISTANCE OF NORTH 07° 55' 43" EAST- 199.66 FEET TO A POINT; THENCE NORTH 24°31'54" WEST A DISTANCE OF 47.62 FEET TO A POINT; THENCE ALONG A CURVE TO THE RIGHT WITH A LENGTH OF 25.70 FEET, RADIUS OF 170.00 FEET, AND A CHORD BEARING AND DISTANCE OF NORTH 20° 12' 01" WEST - 25.68 FEET TO A POINT; THENCE SOUTH 87° 09' 51" EAST A DISTANCE OF 261.23 FEET TO THE POINT OF BEGINNING , CONTAINING 2.34 ACRES MORE OR LESS.

UTILITY EASEMENTS:
WATER EASEMENTS TO BE 15' IN WIDTH CENTERED OVER CENTERLINE OF WATER LINES AS CONSTRUCTED.
SEWER EASEMENTS TO BE 20' IN WIDTH CENTERED OVER CENTER LINE OF SEWER LINES AS CONSTRUCTED

FLOOD STATEMENT

BY GRAPHIC PLOTTING ALONE, ACCORDING TO FEMA FIRM #05125C0240E, DATED JUNE 5, 2020, THIS PROPERTY LIES IN ZONE X, AREAS OF MINIMAL FLOOD HAZARD.

REVISIONS	DATE

LOT F-1, A REPLAT OF LOT "F" VERNIA PARK SUBDIVISION PHASE 1, AN ADDITION TO THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

REPLAT

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
DESIGNED
CHECKED ZR
DATE 9-20-23
SCALE 1" = 30'
PROJECT NO. 2023225
SHEET NO.

SUMMERWOOD SPORTS GYM #3

DRAINAGE REPORT

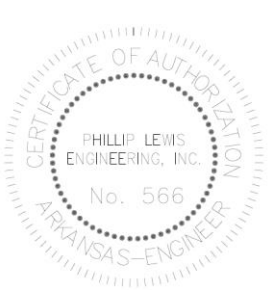
LOCATED IN
BRYANT, ARKANSAS

Prepared by:

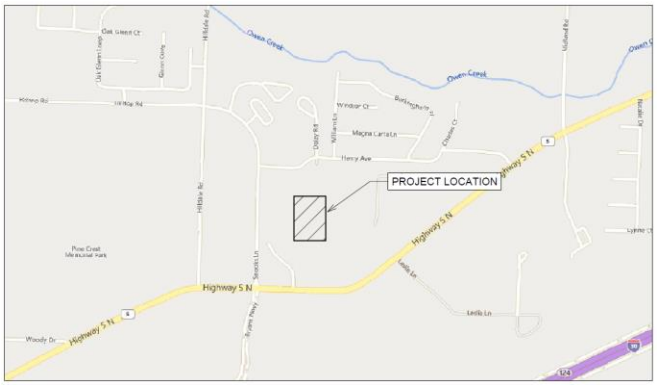
PHILLIP LEWIS ENGINEERING

Structural + Civil Consultants

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



PROJECT LOCATION MAP



Vacinity Map

PROJECT SUMMARY

The proposed project is for the consruction of the third gymnasium of the Summerwood Sports Complex located along Bryant Parkway and Hwy 5.

The proposed development is for a 30,000 sq. ft. building and parking lot that will utilize curb/gutter and concrete/asphalt to direct stormwater to the designated catch basins. The existing detention basin that was constructed for the first two gymnasiums will be abanoned to construct the new proposed gymnasium. A regional detention basin will be installed in the northwest corner of the remaining parcel to serve the entirety of the complex property.

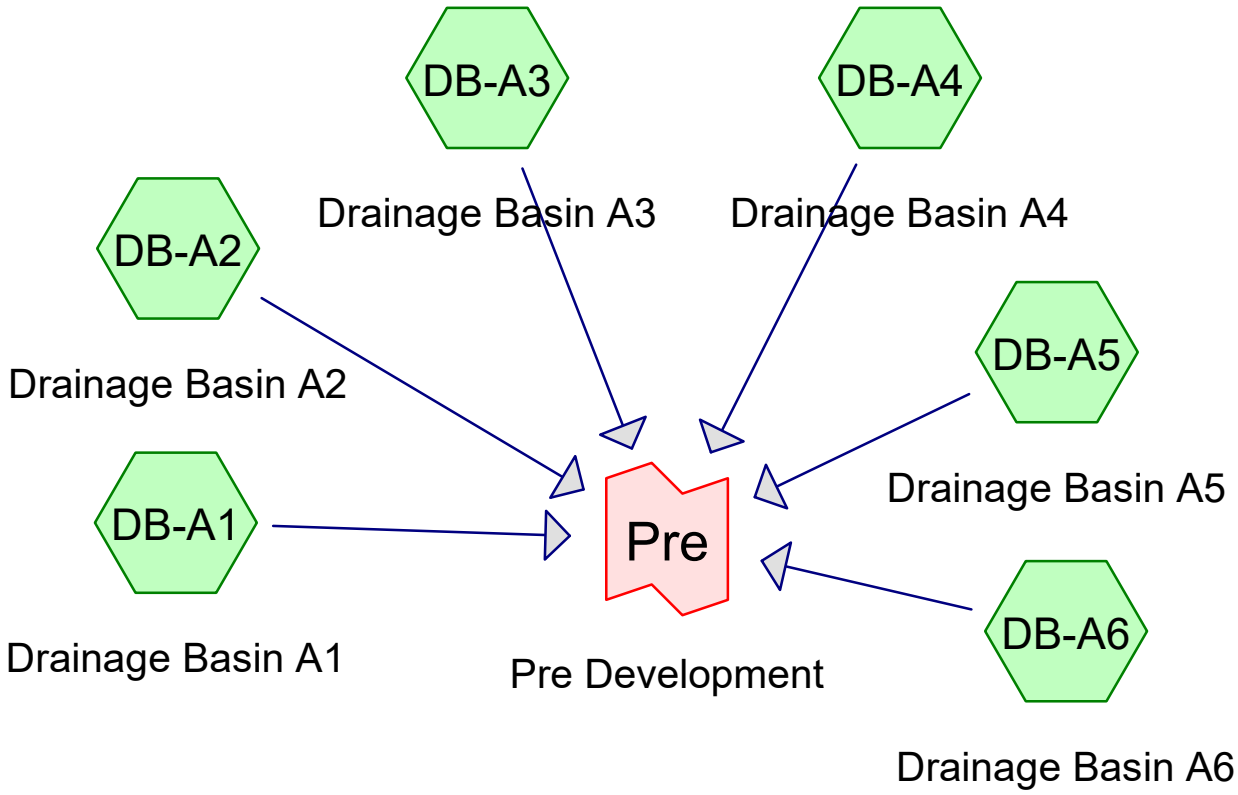
The existing storm sewer network will be interupted with new storm sewer and routed to the new detention basin. This regional detention basin is designed to allow the future to be developed at a rate of 80% impervious.

A stormwater analysis was ran on the development using HydroCAD software. Stormwater calculations were setup and run for the 2, 5, 10, 25, 50, and 100-year storm event using the rational method.

The final release rate of the detention pond is controlled by a 6" orificace cast into a concrete outlet structure, including an open top that allows flow to increase past the 2' ponding depth in the pond. Ponding past the 2' depth is then controlled by a single 24" rcp releasing at the east adjacent property line.

Post-development runoff rates were held to below pre-development runoff rates.

The results of the analysis for both pre-development and post-development, including the change in runoff volume and runoff rate, are shown below within the attached report.



Subcat Reach Pond Link

Routing Diagram for Summerwood Gym 3
Prepared by Phillip Lewis Engineering, Printed 9/19/2023

Summary for Subcatchment DB-A1: Drainage Basin A1

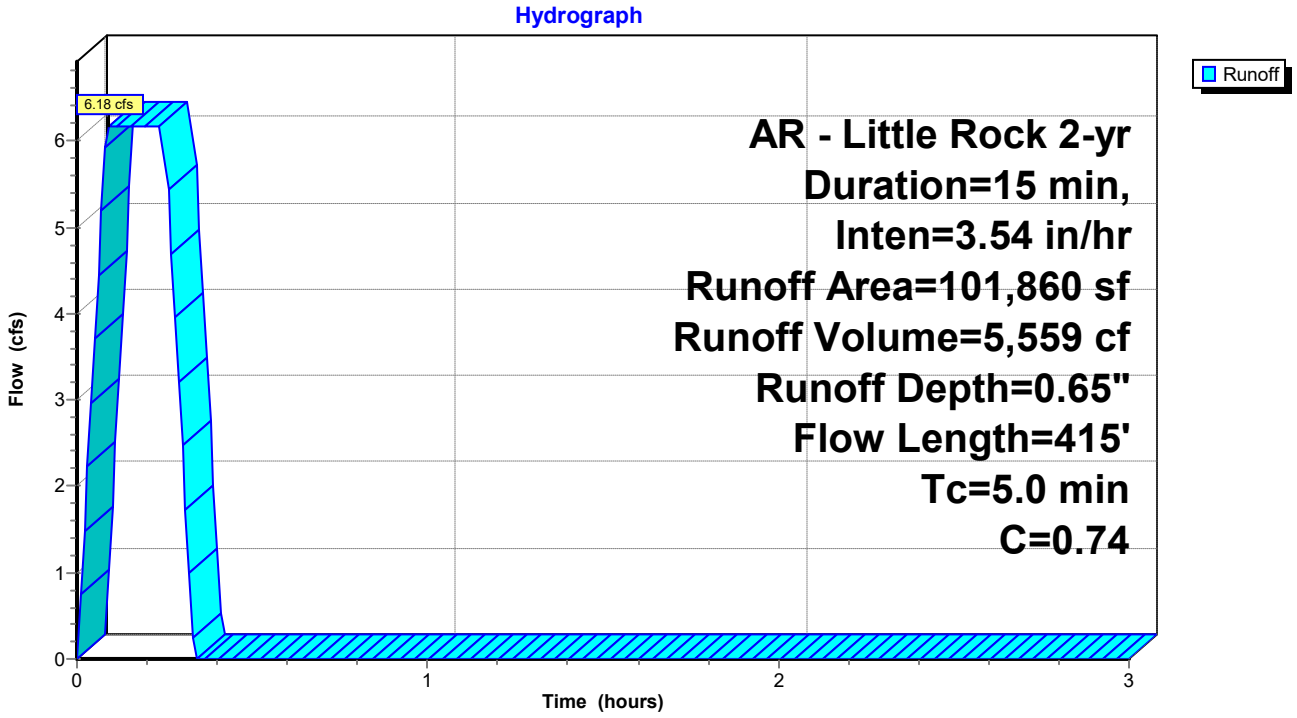
Runoff = 6.18 cfs @ 0.09 hrs, Volume= 5,559 cf, Depth= 0.65"
Routed to Link Pre : Pre Development

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=15 min, Inten=3.54 in/hr

Area (sf)	C	Description
101,860	0.74	
101,860		100.00% Pervious 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 DB-A1: Drainage Basin A1



Summary for Subcatchment DB-A2: Drainage Basin A2

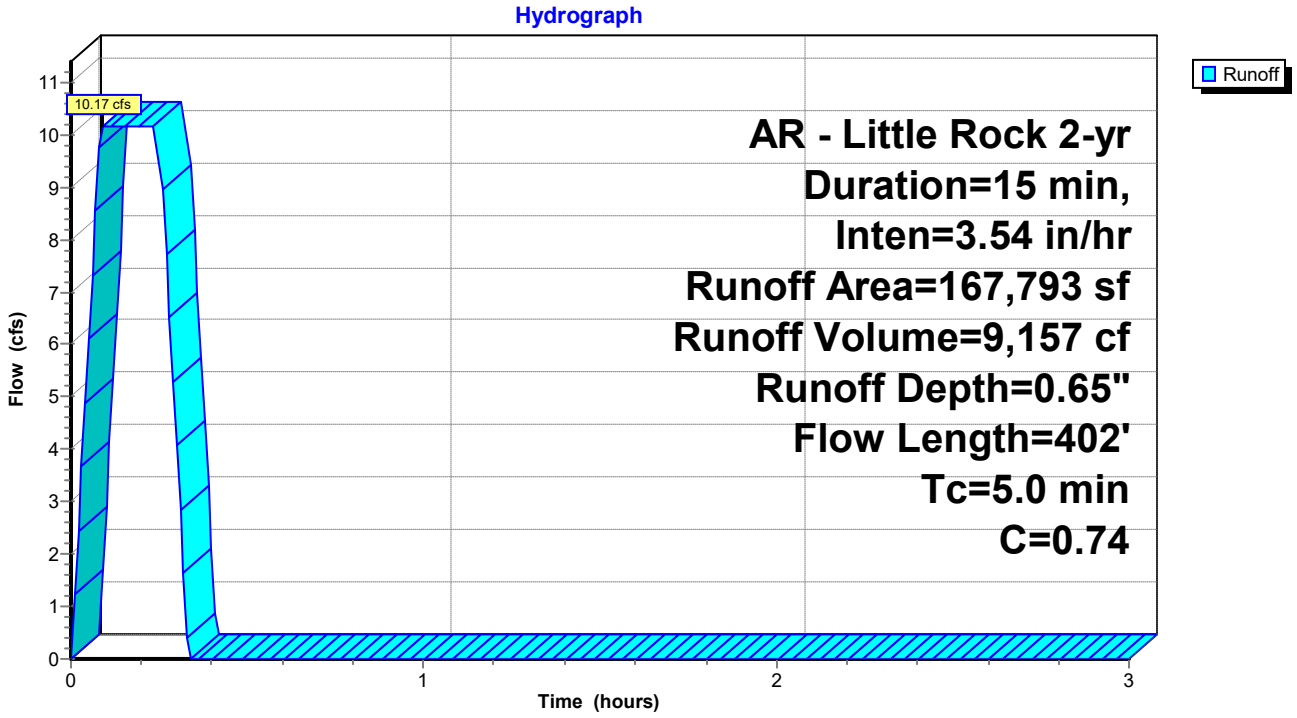
Runoff = 10.17 cfs @ 0.09 hrs, Volume= 9,157 cf, Depth= 0.65"
Routed to Link Pre : Pre Development

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=15 min, Inten=3.54 in/hr

Area (sf)	C	Description
167,793	0.74	
167,793		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	402		1.34		**Direct Entry, Overland Concentrated Flow (Min)**

Subcatchment DB-A2: Drainage Basin A2



Summary for Subcatchment DB-A3: Drainage Basin A3

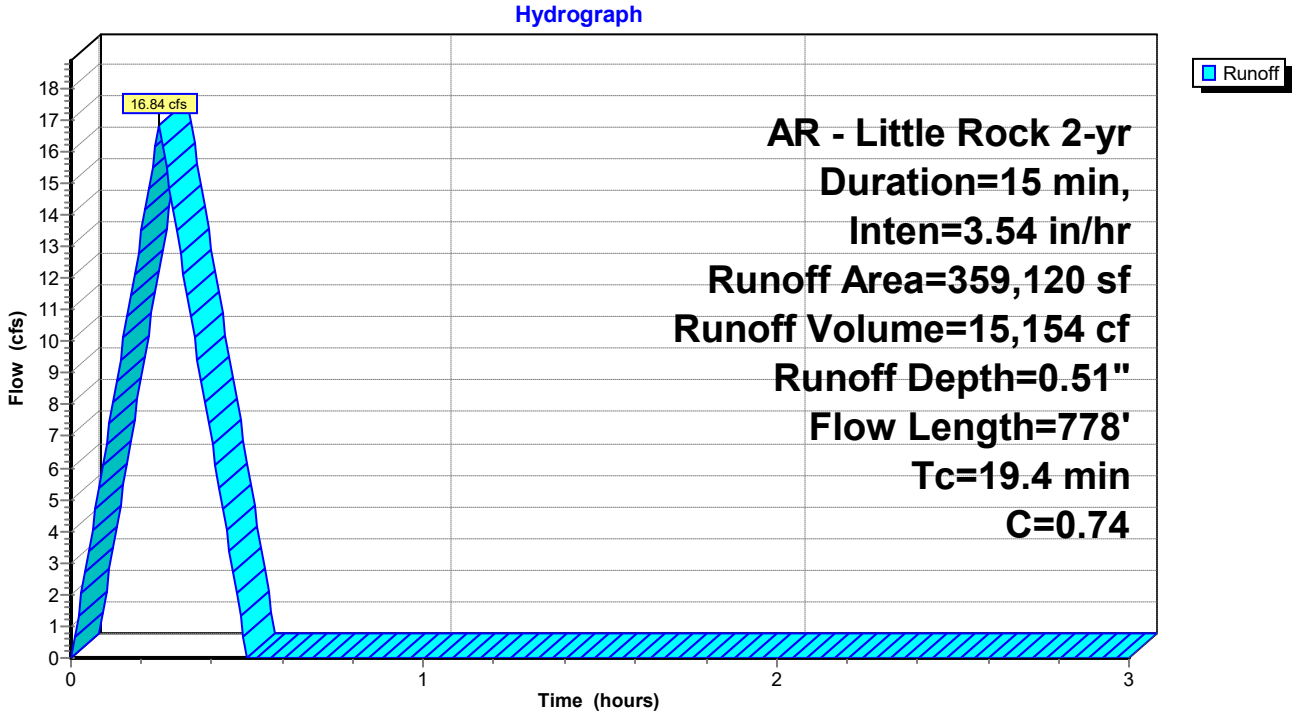
Runoff = 16.84 cfs @ 0.25 hrs, Volume= 15,154 cf, Depth= 0.51"
Routed to Link Pre : Pre Development

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=15 min, Inten=3.54 in/hr

Area (sf)	C	Description
359,120	0.74	
359,120		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.7	300	0.0420	0.37		**Sheet Flow, Overland Sheet Flow** Range n= 0.130 P2= 4.19"
1.2	103	0.0430	1.45		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.7	150	0.0460	1.50		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
2.8	225	0.0360	1.33		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
19.4	778	Total			

Subcatchment DB-A3: Drainage Basin A3



Summary for Subcatchment DB-A4: Drainage Basin A4

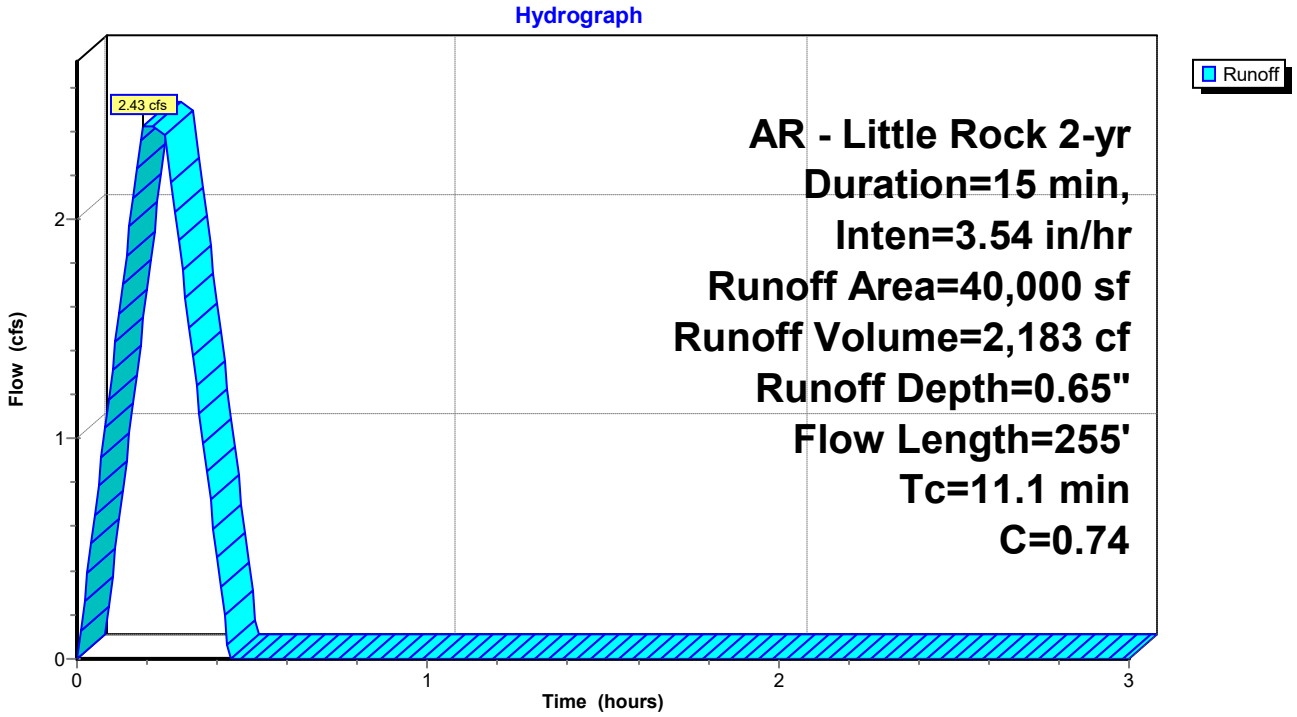
Runoff = 2.43 cfs @ 0.19 hrs, Volume= 2,183 cf, Depth= 0.65"
Routed to Link Pre : Pre Development

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=15 min, Inten=3.54 in/hr

Area (sf)	C	Description
40,000	0.74	
40,000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.8	50	0.0390	0.22		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
6.4	114	0.0530	0.30		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
0.9	91	0.0600	1.71		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
11.1	255	Total			

Subcatchment DB-A4: Drainage Basin A4



Summary for Subcatchment DB-A5: Drainage Basin A5

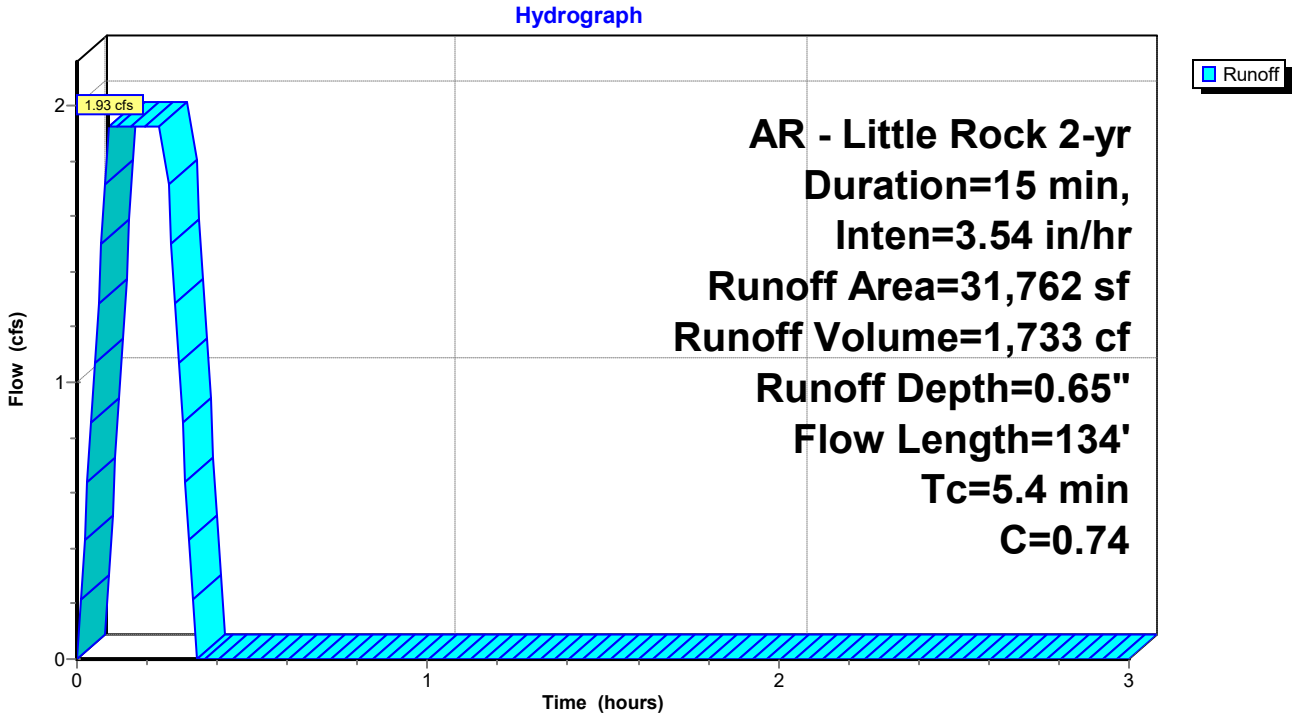
Runoff = 1.93 cfs @ 0.09 hrs, Volume= 1,733 cf, Depth= 0.65"
Routed to Link Pre : Pre Development

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=15 min, Inten=3.54 in/hr

Area (sf)	C	Description
31,762	0.74	
31,762		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	111	0.0850	0.35		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
0.2	23	0.0680	1.91		**Sheet Flow, Overland Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
5.4	134	Total			

Subcatchment DB-A5: Drainage Basin A5



Summary for Subcatchment DB-A6: Drainage Basin A6

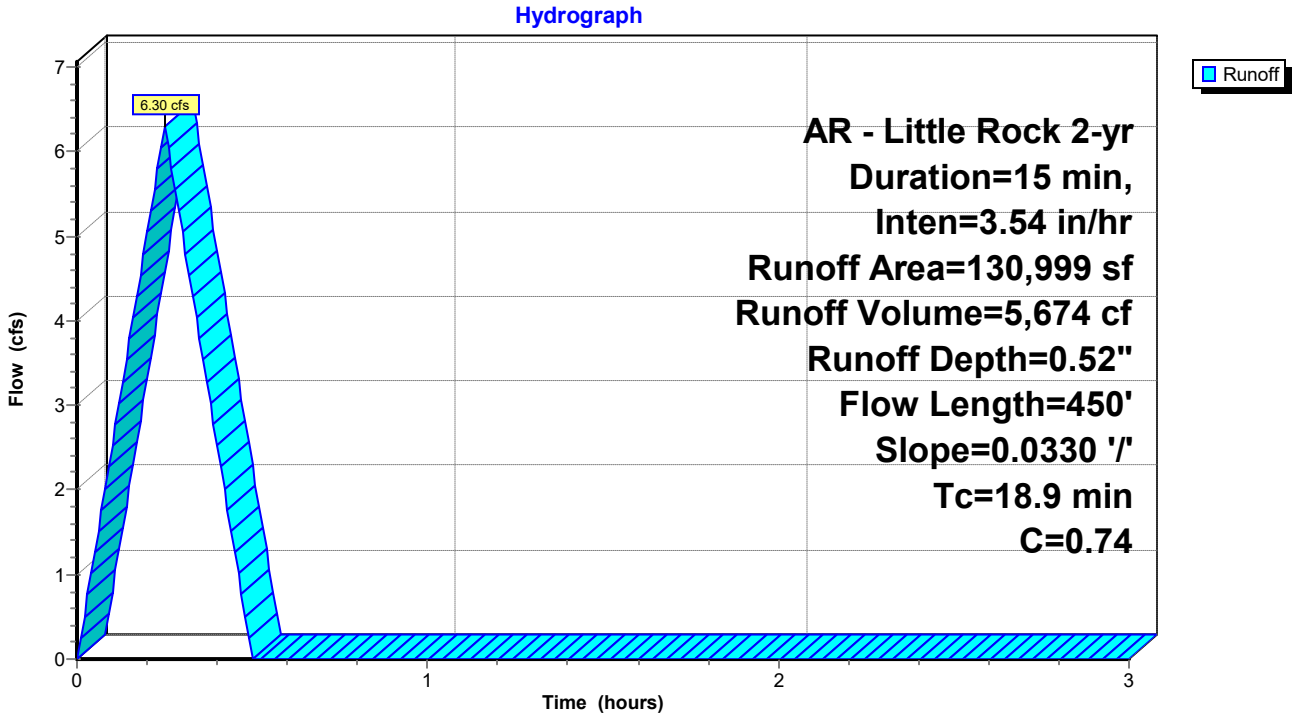
Runoff = 6.30 cfs @ 0.25 hrs, Volume= 5,674 cf, Depth= 0.52"
Routed to Link Pre : Pre Development

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=15 min, Inten=3.54 in/hr

Area (sf)	C	Description
130,999	0.74	
130,999		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.9	300	0.0330	0.30		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
2.0	150	0.0330	1.27		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
18.9	450	Total			

Subcatchment DB-A6: Drainage Basin A6

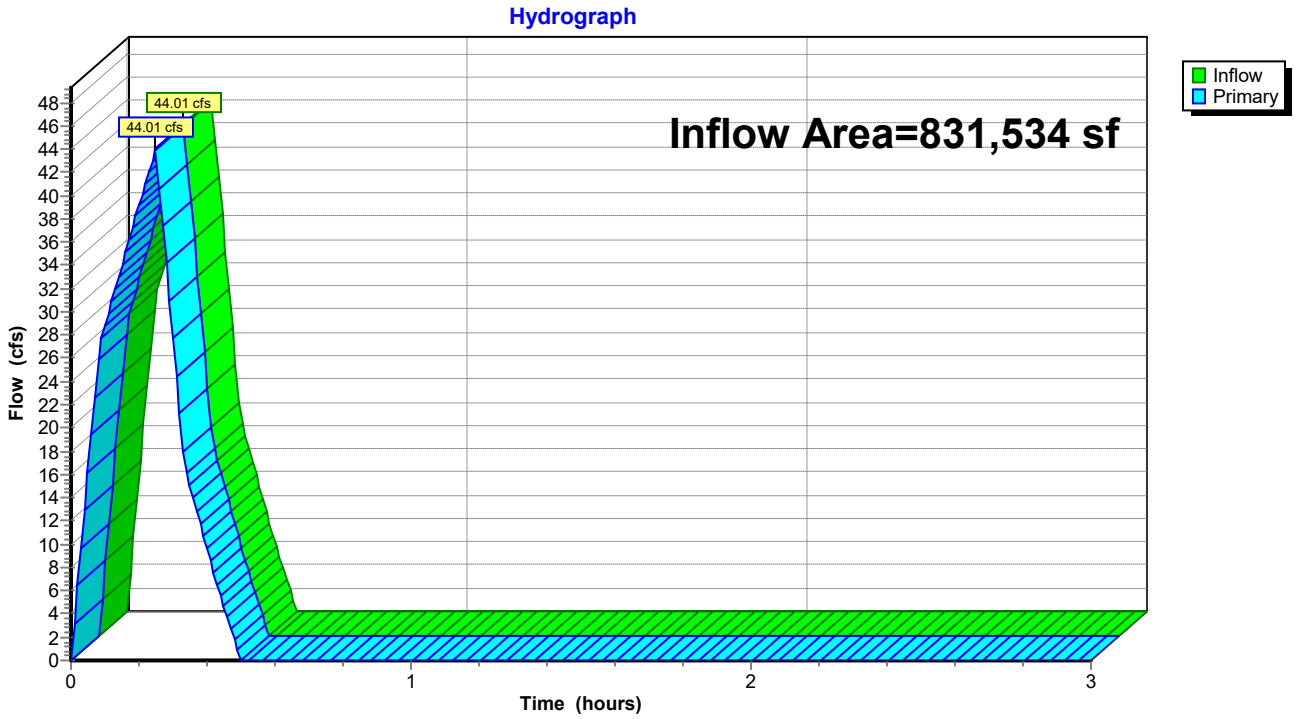


Summary for Link Pre: Pre Development

Inflow Area = 831,534 sf, 0.00% Impervious, Inflow Depth = 0.57" for 2-yr event
Inflow = 44.01 cfs @ 0.25 hrs, Volume= 39,461 cf
Primary = 44.01 cfs @ 0.25 hrs, Volume= 39,461 cf, Atten= 0%, Lag= 0.0 min

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

Link Pre: Pre Development



Summary for Subcatchment DB-A1: Drainage Basin A1

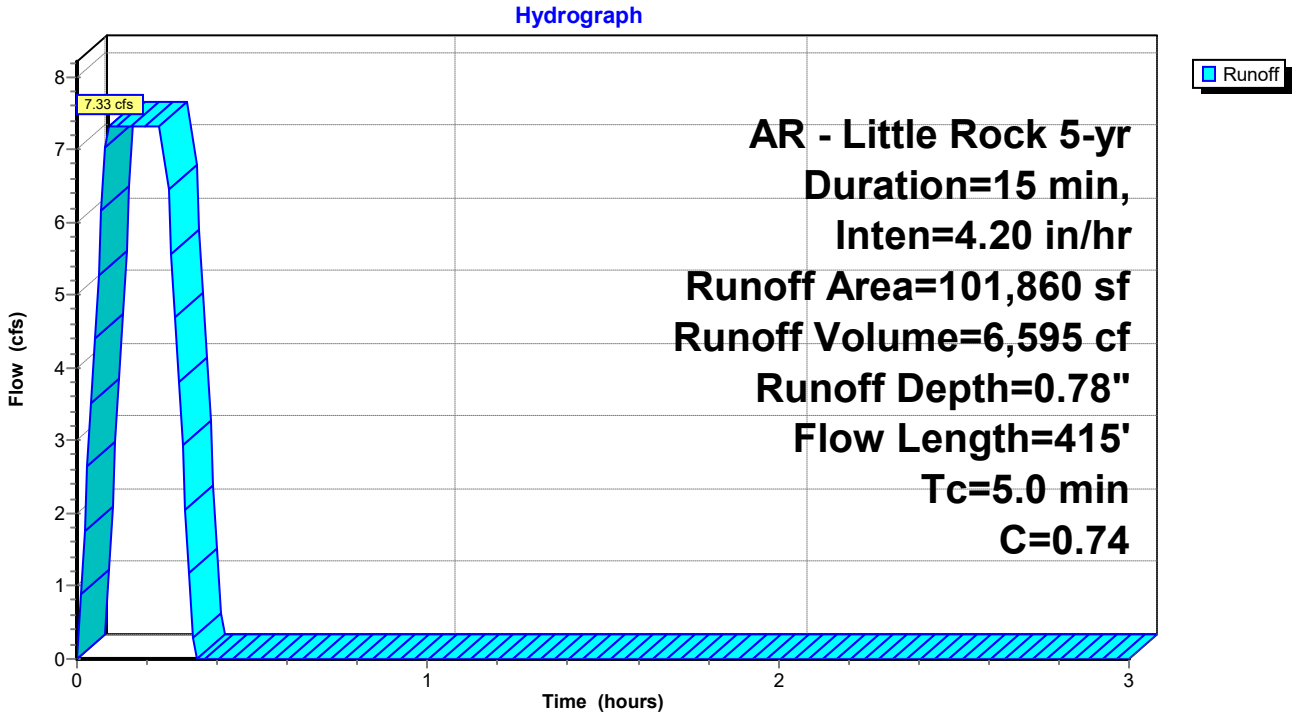
Runoff = 7.33 cfs @ 0.09 hrs, Volume= 6,595 cf, Depth= 0.78"
Routed to Link Pre : Pre Development

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=15 min, Inten=4.20 in/hr

Area (sf)	C	Description
101,860	0.74	
101,860		100.00% Pervious 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 DB-A1: Drainage Basin A1



Summary for Subcatchment DB-A2: Drainage Basin A2

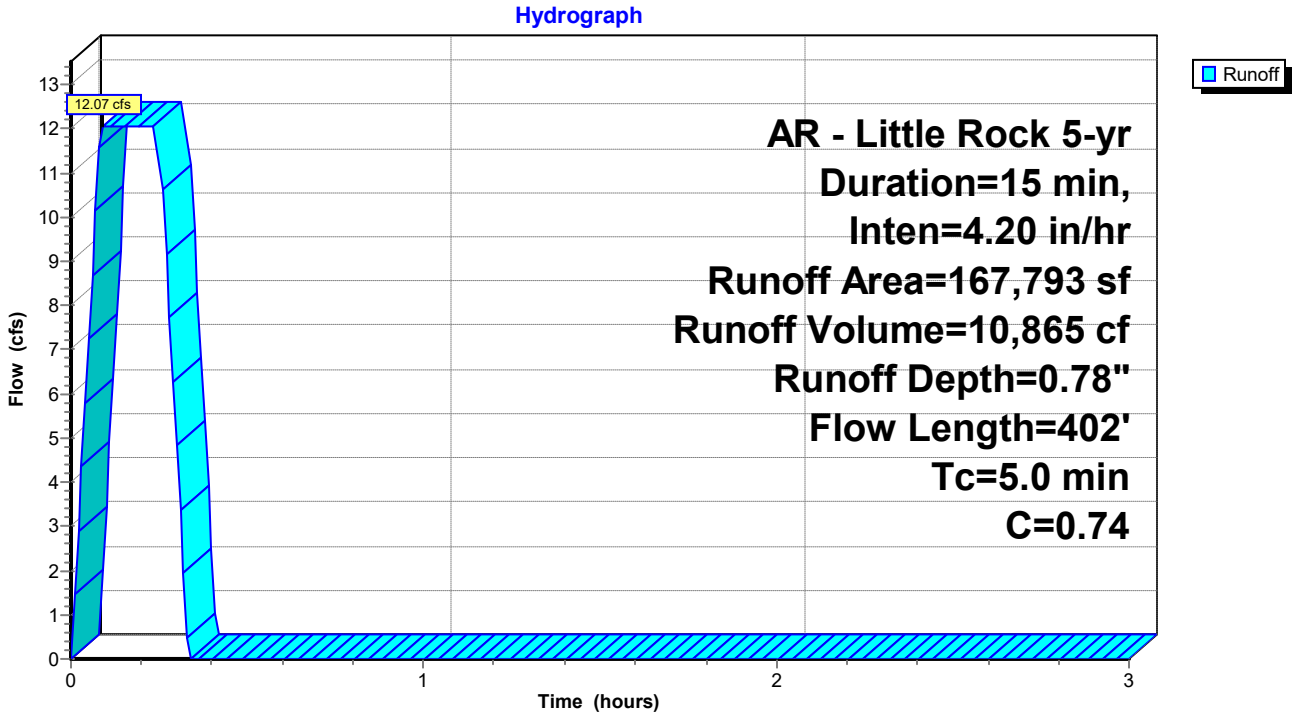
Runoff = 12.07 cfs @ 0.09 hrs, Volume= 10,865 cf, Depth= 0.78"
Routed to Link Pre : Pre Development

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=15 min, Inten=4.20 in/hr

Area (sf)	C	Description
167,793	0.74	
167,793		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	402		1.34		**Direct Entry, Overland Concentrated Flow (Min)**

Subcatchment DB-A2: Drainage Basin A2



Summary for Subcatchment DB-A3: Drainage Basin A3

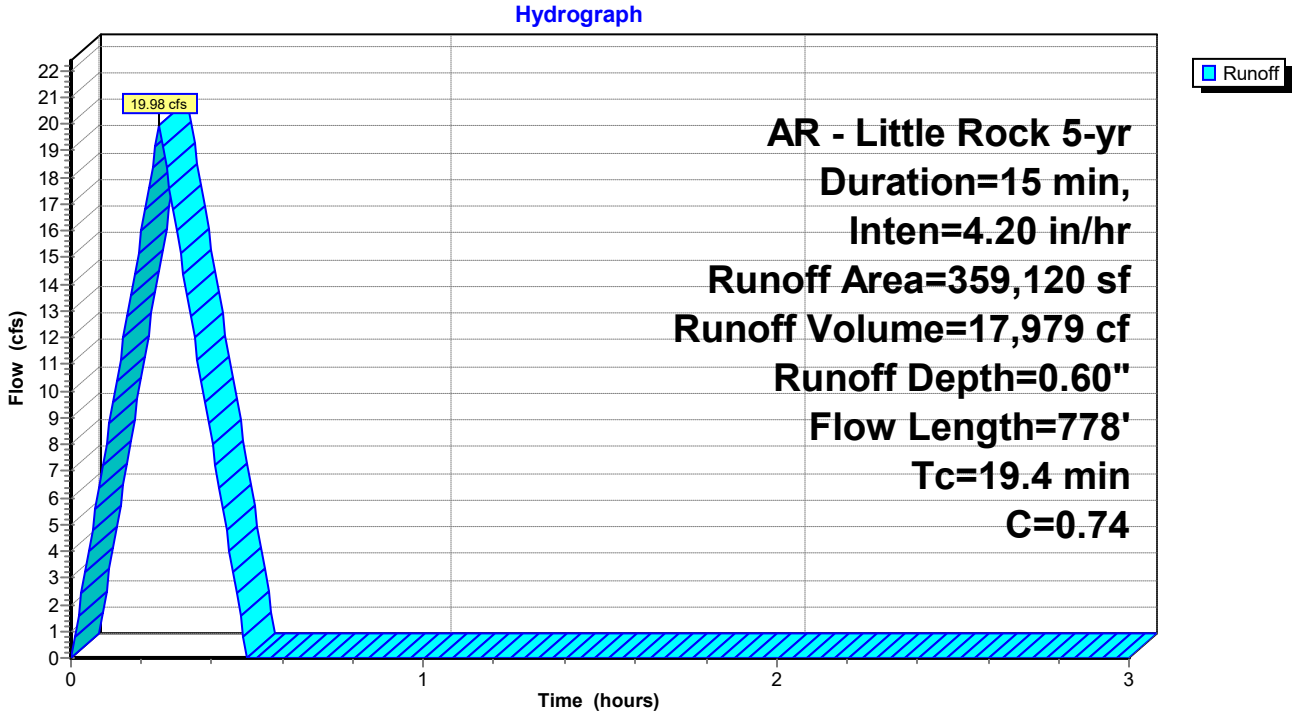
Runoff = 19.98 cfs @ 0.25 hrs, Volume= 17,979 cf, Depth= 0.60"
Routed to Link Pre : Pre Development

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=15 min, Inten=4.20 in/hr

Area (sf)	C	Description
359,120	0.74	
359,120		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.7	300	0.0420	0.37		**Sheet Flow, Overland Sheet Flow** Range n= 0.130 P2= 4.19"
1.2	103	0.0430	1.45		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.7	150	0.0460	1.50		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
2.8	225	0.0360	1.33		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
19.4	778	Total			

Subcatchment DB-A3: Drainage Basin A3



Summary for Subcatchment DB-A4: Drainage Basin A4

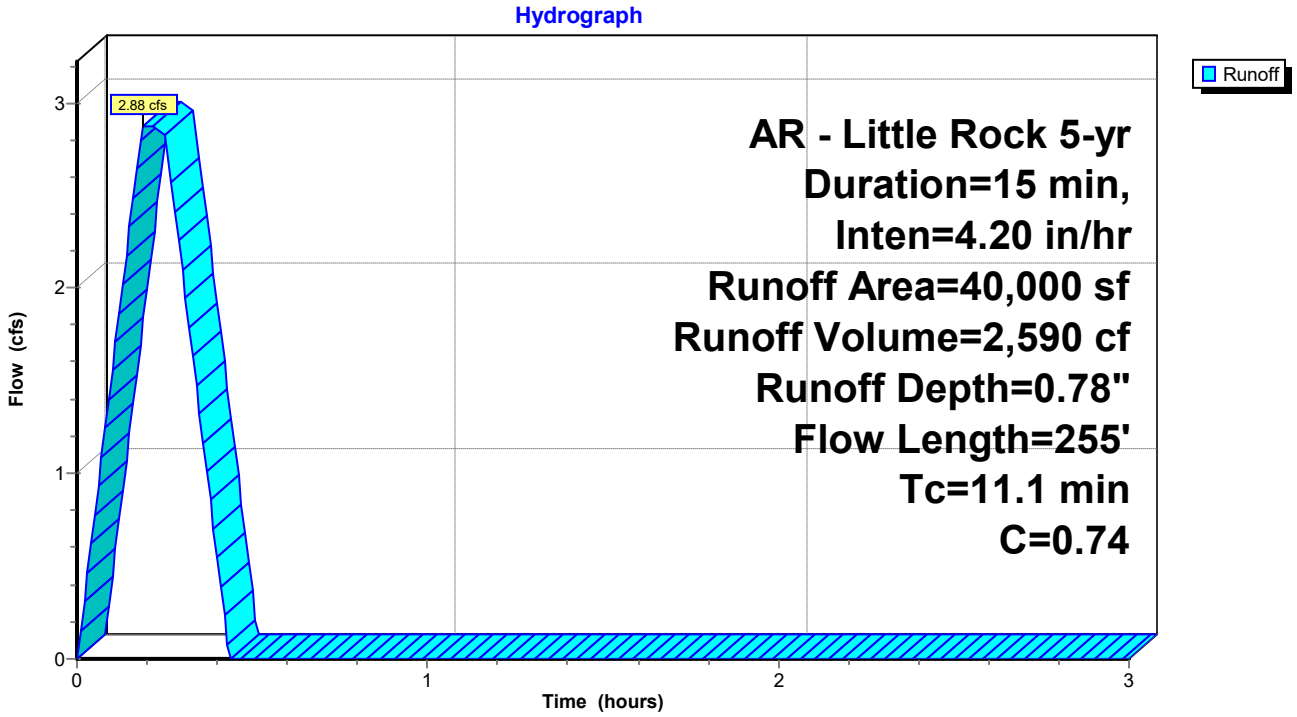
Runoff = 2.88 cfs @ 0.19 hrs, Volume= 2,590 cf, Depth= 0.78"
Routed to Link Pre : Pre Development

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=15 min, Inten=4.20 in/hr

Area (sf)	C	Description
40,000	0.74	
40,000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.8	50	0.0390	0.22		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
6.4	114	0.0530	0.30		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
0.9	91	0.0600	1.71		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
11.1	255	Total			

Subcatchment DB-A4: Drainage Basin A4



Summary for Subcatchment DB-A5: Drainage Basin A5

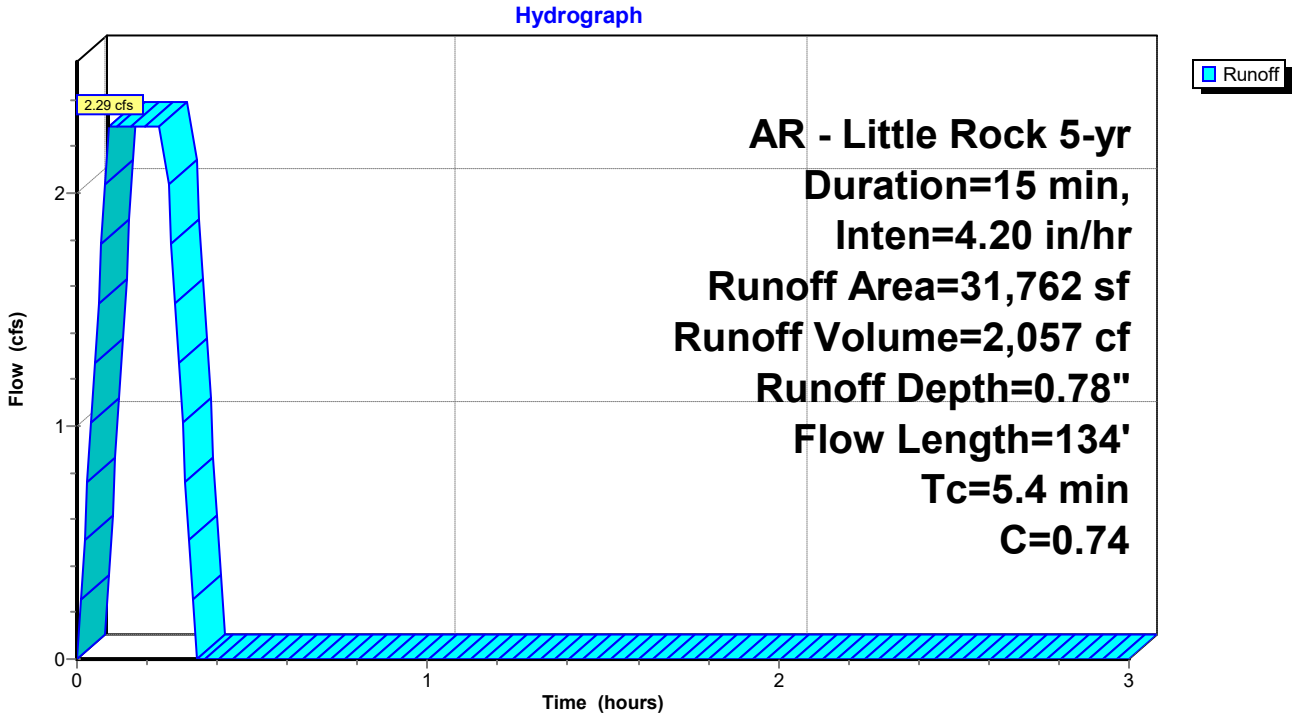
Runoff = 2.29 cfs @ 0.09 hrs, Volume= 2,057 cf, Depth= 0.78"
Routed to Link Pre : Pre Development

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=15 min, Inten=4.20 in/hr

Area (sf)	C	Description
31,762	0.74	
31,762		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	111	0.0850	0.35		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
0.2	23	0.0680	1.91		**Sheet Flow, Overland Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
5.4	134	Total			

Subcatchment DB-A5: Drainage Basin A5



Summary for Subcatchment DB-A6: Drainage Basin A6

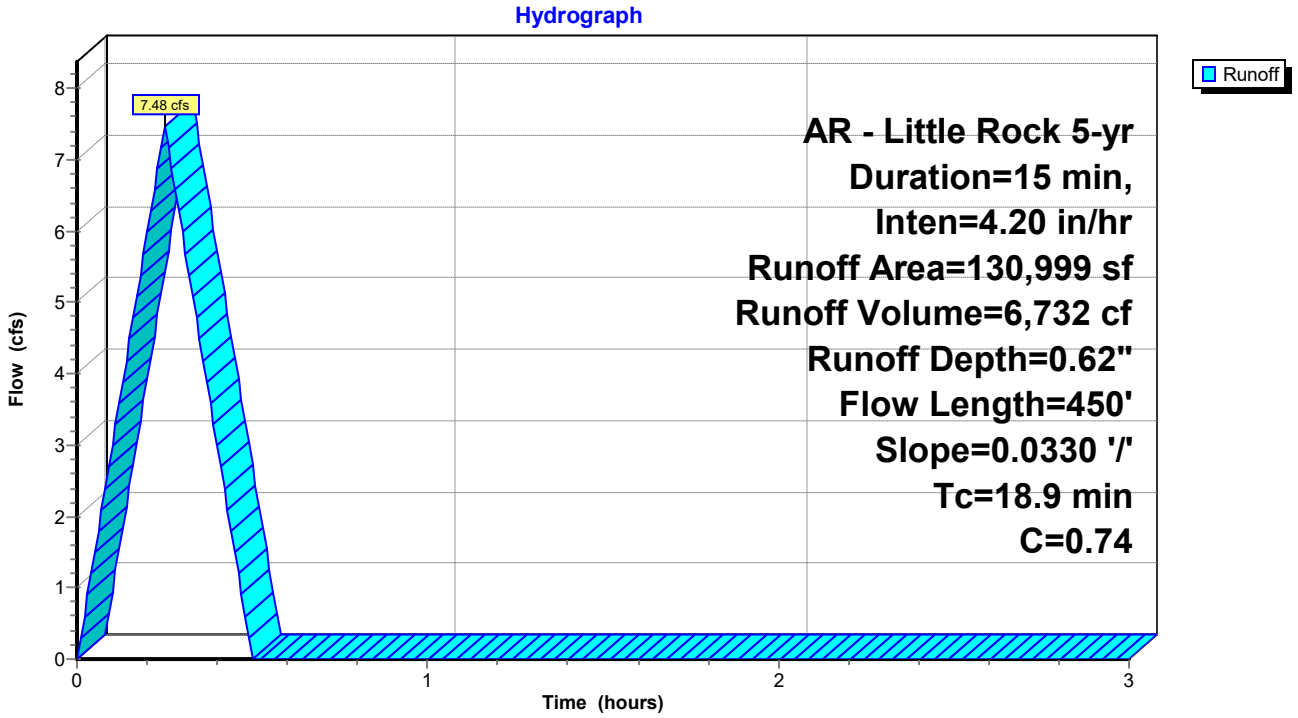
Runoff = 7.48 cfs @ 0.25 hrs, Volume= 6,732 cf, Depth= 0.62"
Routed to Link Pre : Pre Development

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=15 min, Inten=4.20 in/hr

Area (sf)	C	Description
130,999	0.74	
130,999		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.9	300	0.0330	0.30		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
2.0	150	0.0330	1.27		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
18.9	450	Total			

Subcatchment DB-A6: Drainage Basin A6

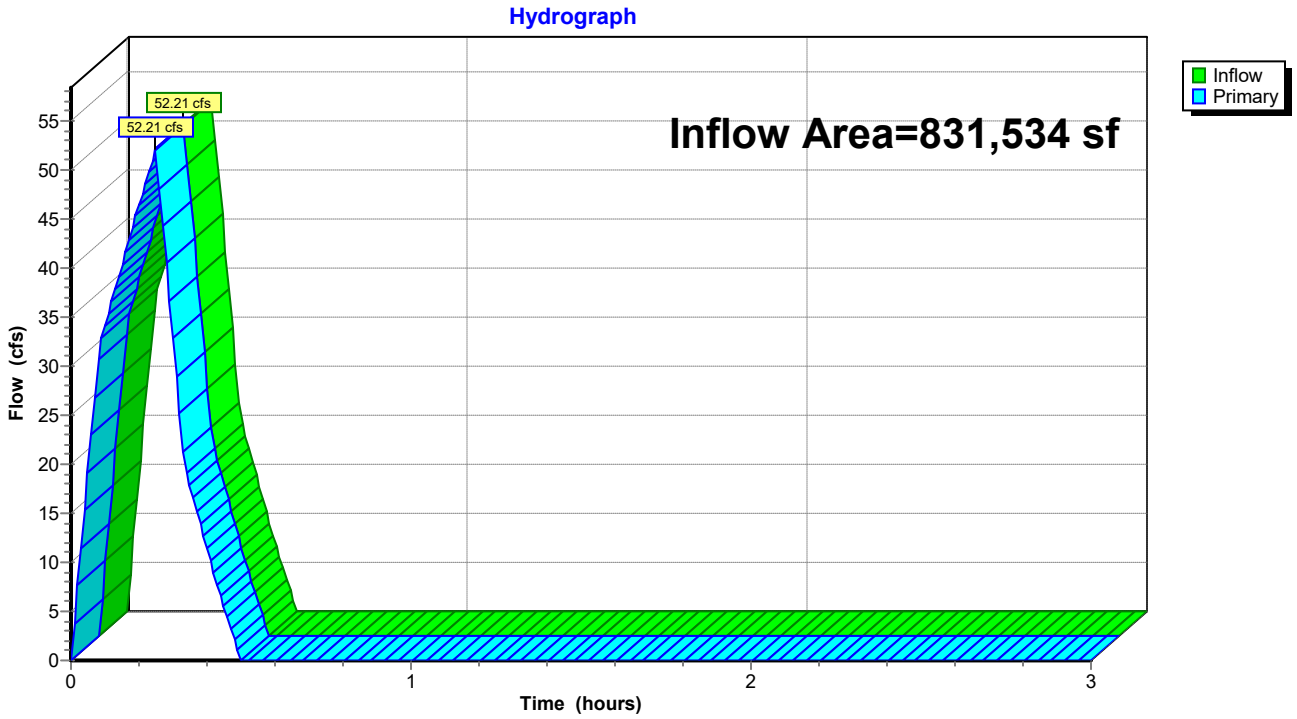


Summary for Link Pre: Pre Development

Inflow Area = 831,534 sf, 0.00% Impervious, Inflow Depth = 0.68" for 5-yr event
Inflow = 52.21 cfs @ 0.25 hrs, Volume= 46,818 cf
Primary = 52.21 cfs @ 0.25 hrs, Volume= 46,818 cf, Atten= 0%, Lag= 0.0 min

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

Link Pre: Pre Development



Summary for Subcatchment DB-A1: Drainage Basin A1

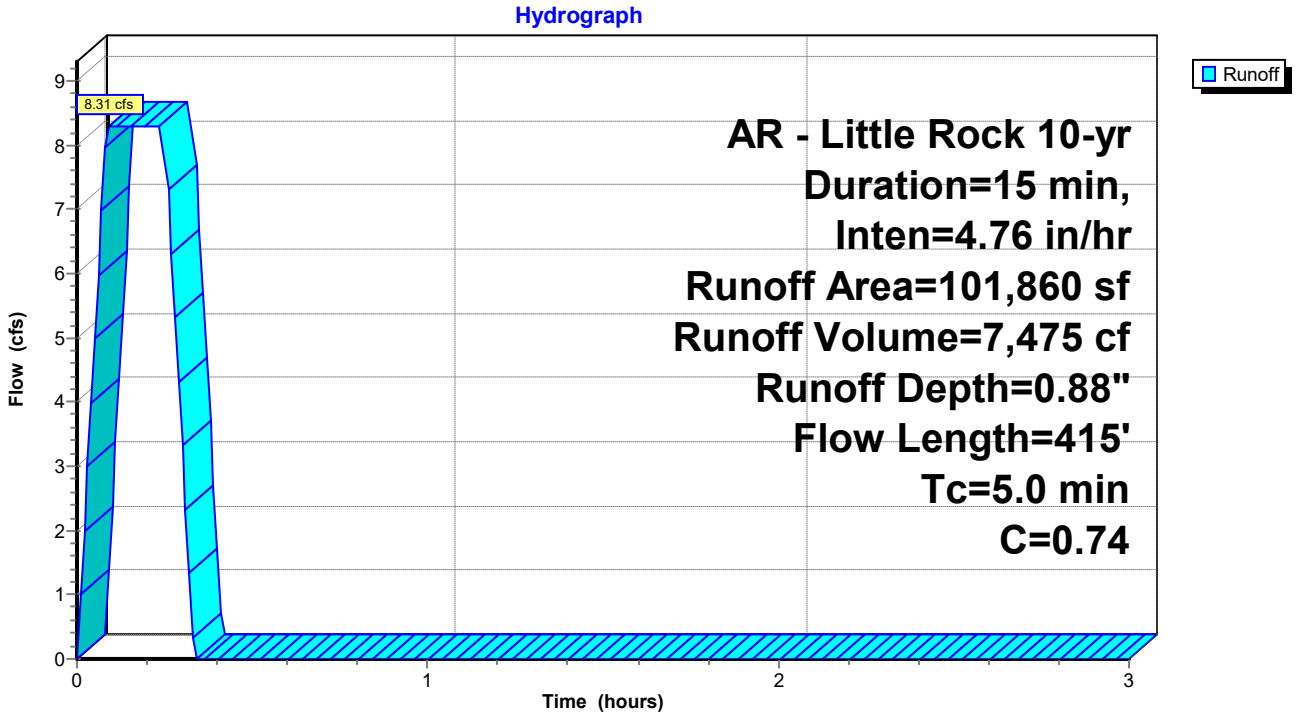
Runoff = 8.31 cfs @ 0.09 hrs, Volume= 7,475 cf, Depth= 0.88"
Routed to Link Pre : Pre Development

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=15 min, Inten=4.76 in/hr

Area (sf)	C	Description
101,860	0.74	
101,860		100.00% Pervious 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 DB-A1: Drainage Basin A1



Summary for Subcatchment DB-A2: Drainage Basin A2

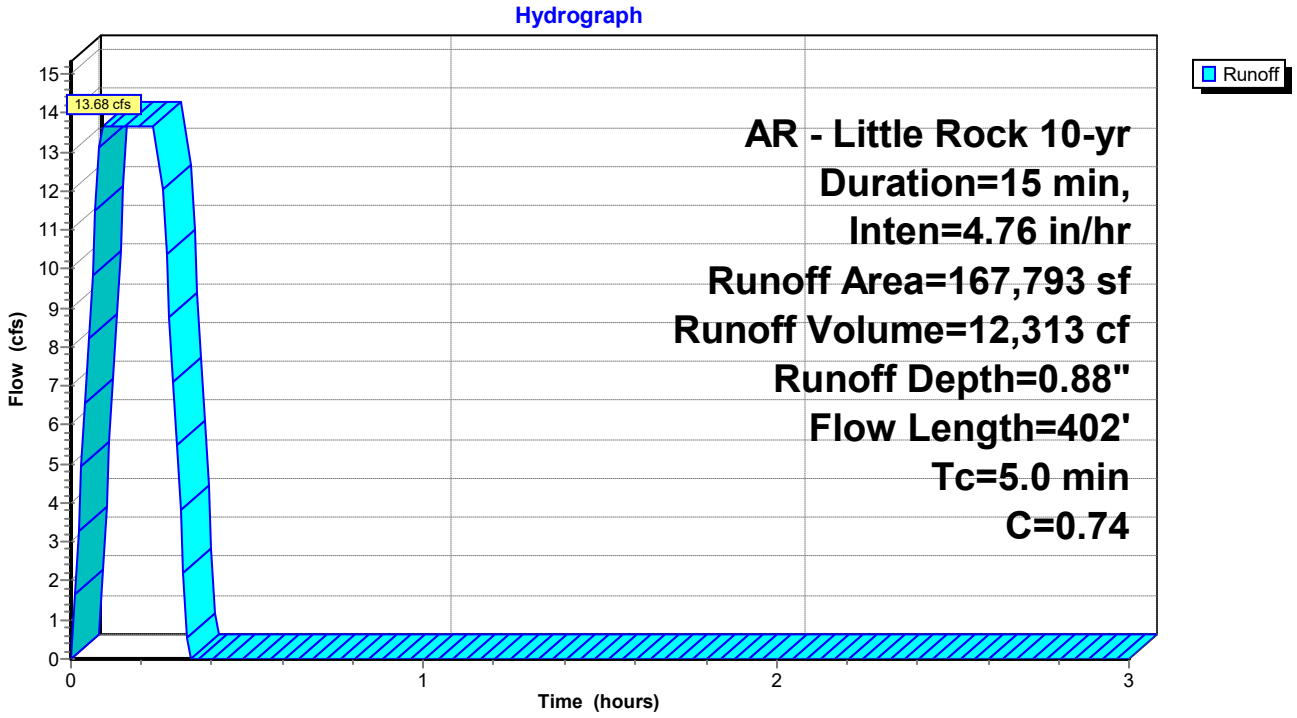
Runoff = 13.68 cfs @ 0.09 hrs, Volume= 12,313 cf, Depth= 0.88"
Routed to Link Pre : Pre Development

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=15 min, Inten=4.76 in/hr

Area (sf)	C	Description
167,793	0.74	
167,793		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	402		1.34		**Direct Entry, Overland Concentrated Flow (Min)**

Subcatchment DB-A2: Drainage Basin A2



Summary for Subcatchment DB-A3: Drainage Basin A3

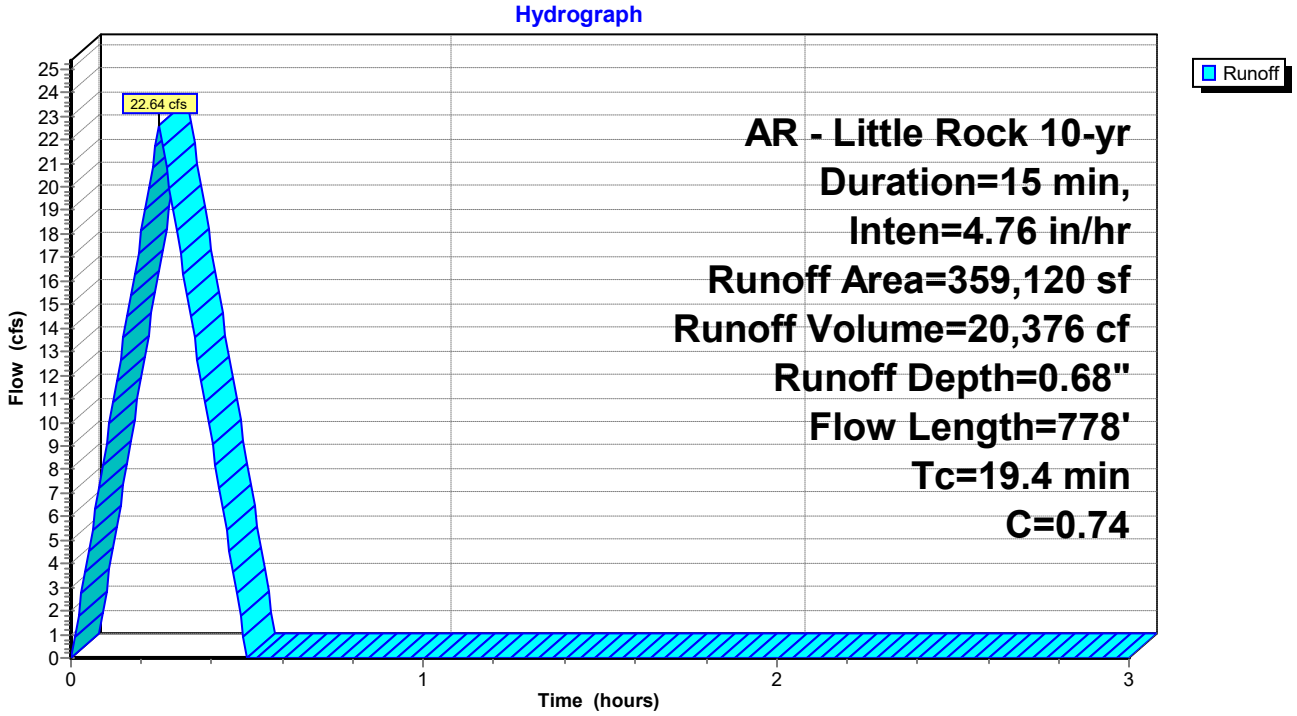
Runoff = 22.64 cfs @ 0.25 hrs, Volume= 20,376 cf, Depth= 0.68"
Routed to Link Pre : Pre Development

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=15 min, Inten=4.76 in/hr

Area (sf)	C	Description
359,120	0.74	
359,120		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.7	300	0.0420	0.37		**Sheet Flow, Overland Sheet Flow** Range n= 0.130 P2= 4.19"
1.2	103	0.0430	1.45		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.7	150	0.0460	1.50		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
2.8	225	0.0360	1.33		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
19.4	778	Total			

Subcatchment DB-A3: Drainage Basin A3



Summary for Subcatchment DB-A4: Drainage Basin A4

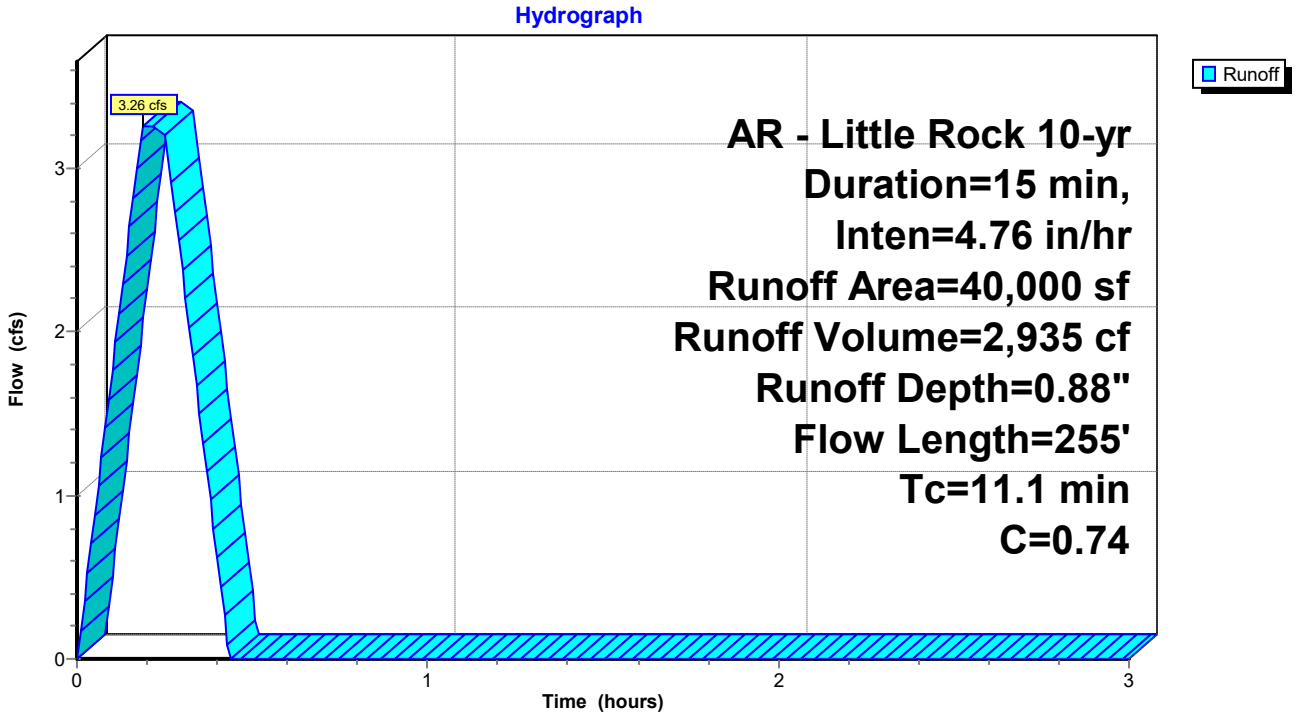
Runoff = 3.26 cfs @ 0.19 hrs, Volume= 2,935 cf, Depth= 0.88"
Routed to Link Pre : Pre Development

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=15 min, Inten=4.76 in/hr

Area (sf)	C	Description
40,000	0.74	
40,000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.8	50	0.0390	0.22		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
6.4	114	0.0530	0.30		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
0.9	91	0.0600	1.71		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
11.1	255	Total			

Subcatchment DB-A4: Drainage Basin A4



Summary for Subcatchment DB-A5: Drainage Basin A5

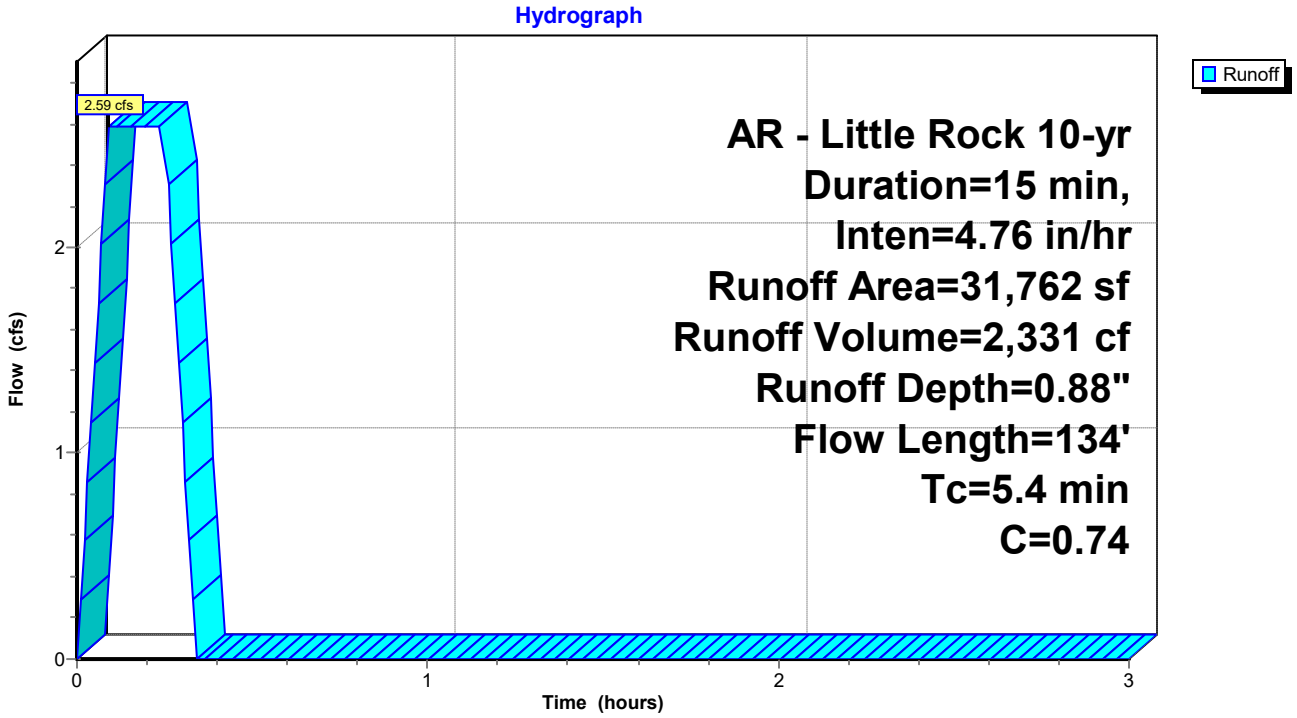
Runoff = 2.59 cfs @ 0.09 hrs, Volume= 2,331 cf, Depth= 0.88"
Routed to Link Pre : Pre Development

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=15 min, Inten=4.76 in/hr

Area (sf)	C	Description
31,762	0.74	
31,762		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	111	0.0850	0.35		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
0.2	23	0.0680	1.91		**Sheet Flow, Overland Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
5.4	134	Total			

Subcatchment DB-A5: Drainage Basin A5



Summary for Subcatchment DB-A6: Drainage Basin A6

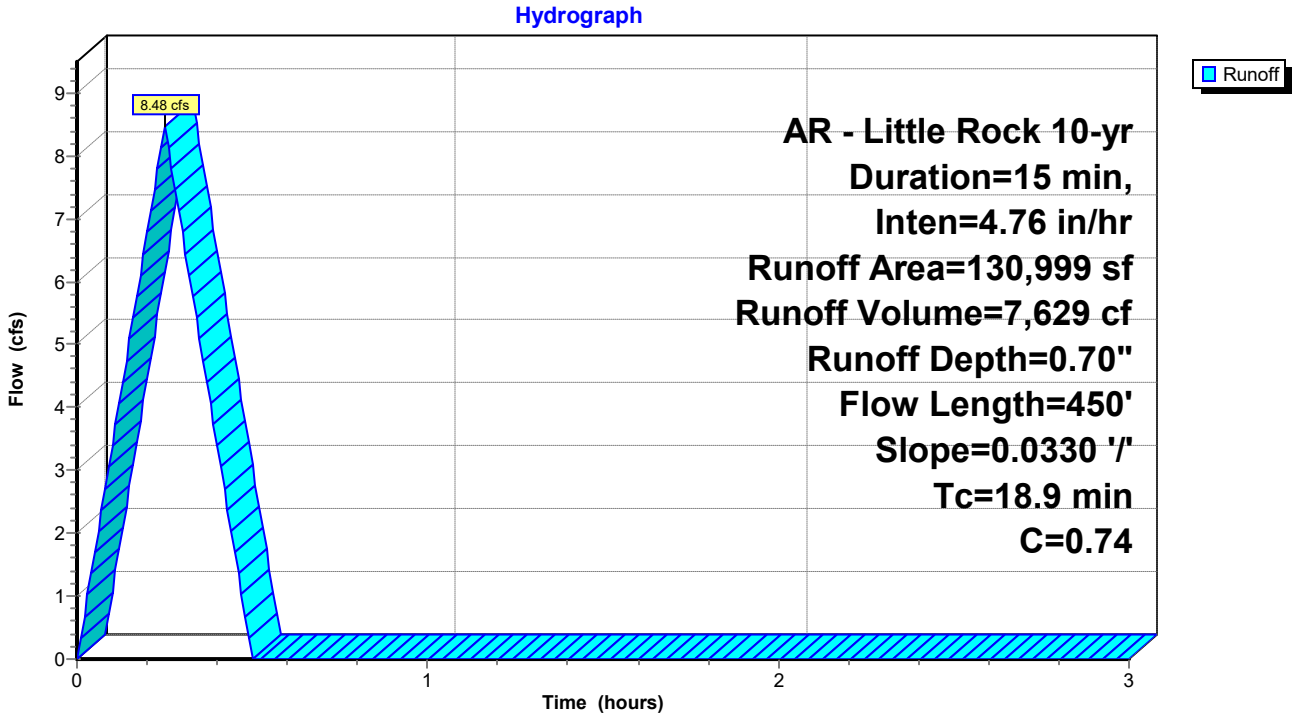
Runoff = 8.48 cfs @ 0.25 hrs, Volume= 7,629 cf, Depth= 0.70"
Routed to Link Pre : Pre Development

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=15 min, Inten=4.76 in/hr

Area (sf)	C	Description
130,999	0.74	
130,999		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.9	300	0.0330	0.30		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
2.0	150	0.0330	1.27		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
18.9	450	Total			

Subcatchment DB-A6: Drainage Basin A6

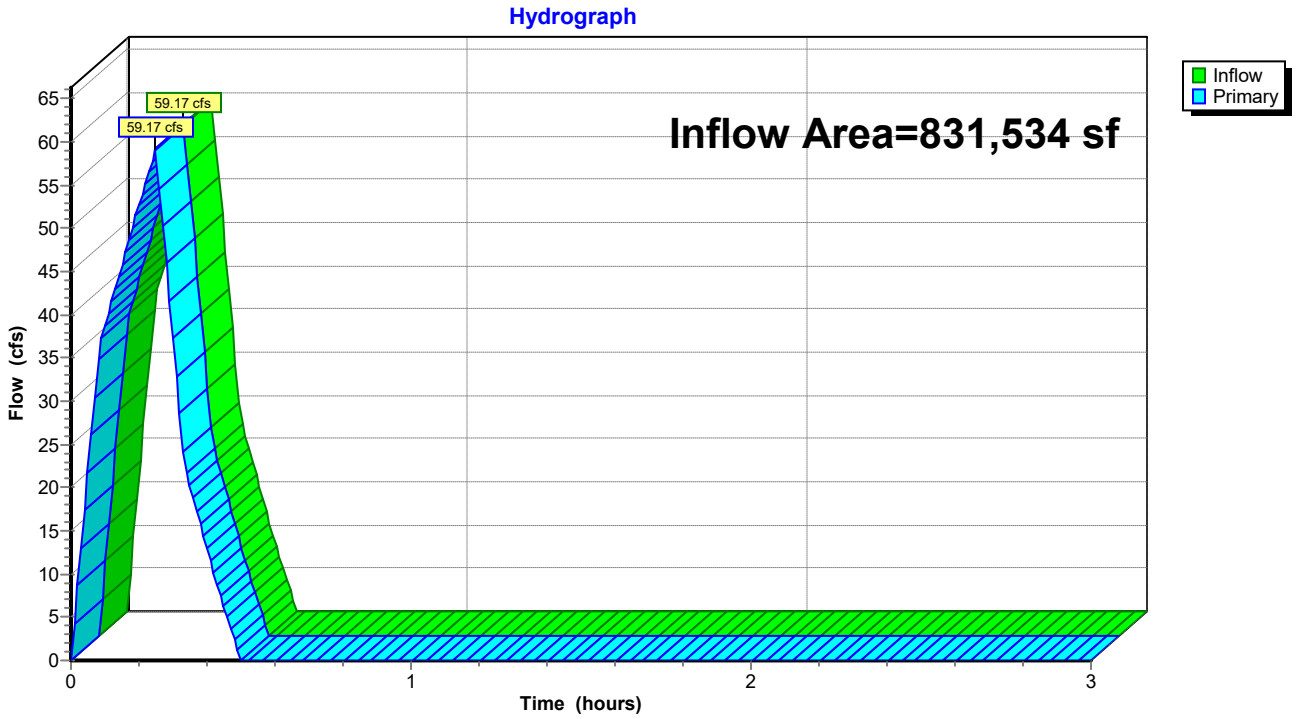


Summary for Link Pre: Pre Development

Inflow Area = 831,534 sf, 0.00% Impervious, Inflow Depth = 0.77" for 10-yr event
Inflow = 59.17 cfs @ 0.25 hrs, Volume= 53,060 cf
Primary = 59.17 cfs @ 0.25 hrs, Volume= 53,060 cf, Atten= 0%, Lag= 0.0 min

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

Link Pre: Pre Development



Summary for Subcatchment DB-A1: Drainage Basin A1

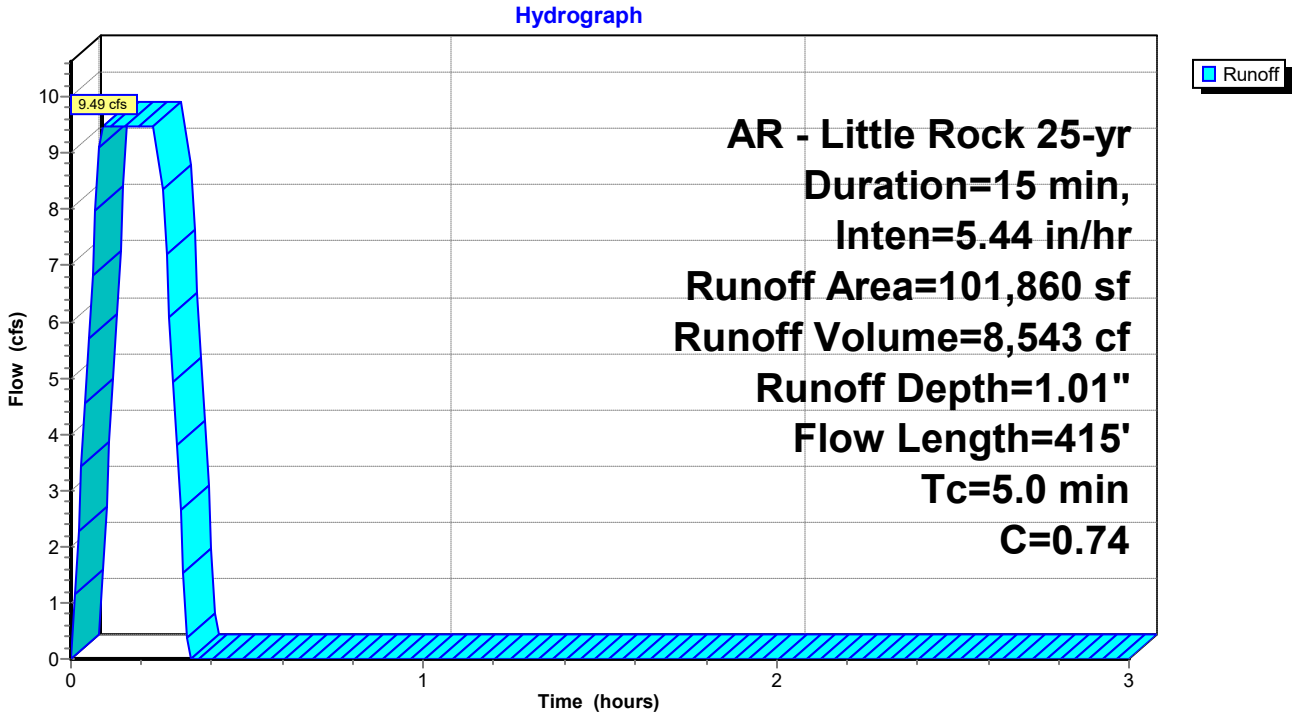
Runoff = 9.49 cfs @ 0.09 hrs, Volume= 8,543 cf, Depth= 1.01"
Routed to Link Pre : Pre Development

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=15 min, Inten=5.44 in/hr

Area (sf)	C	Description
101,860	0.74	
101,860		100.00% Pervious 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 DB-A1: Drainage Basin A1



Summary for Subcatchment DB-A2: Drainage Basin A2

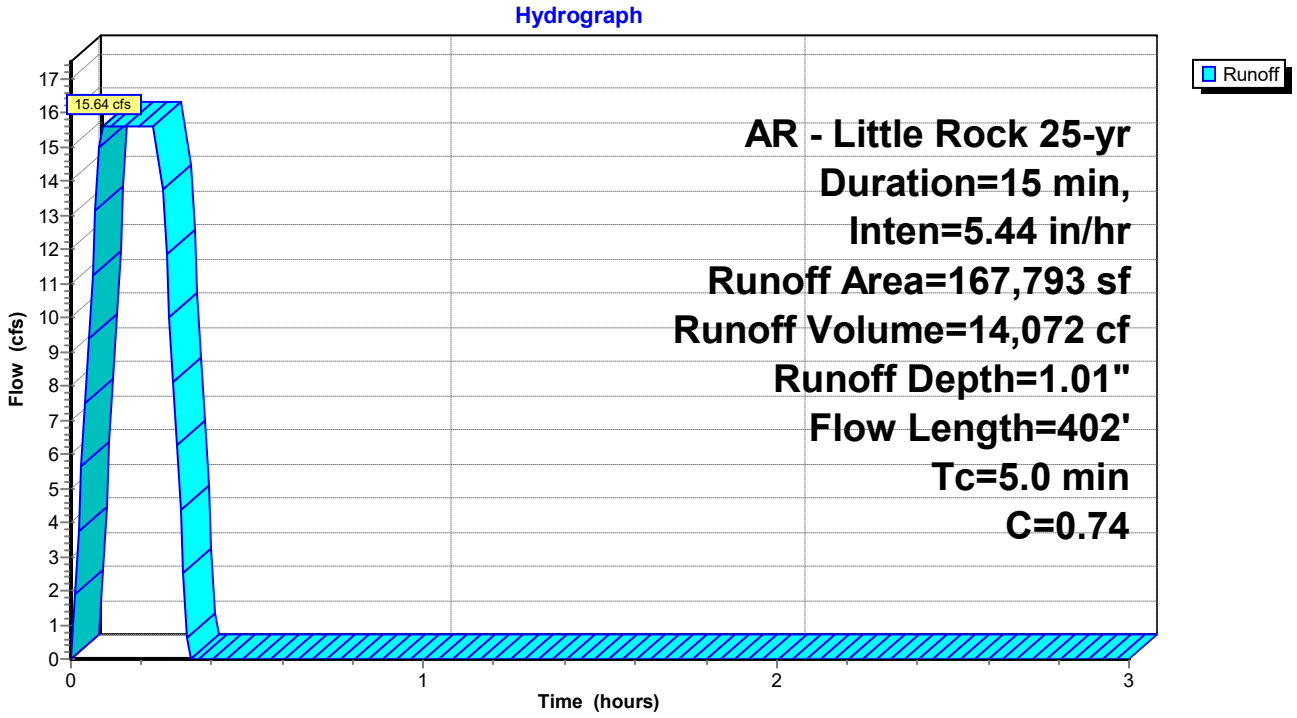
Runoff = 15.64 cfs @ 0.09 hrs, Volume= 14,072 cf, Depth= 1.01"
Routed to Link Pre : Pre Development

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=15 min, Inten=5.44 in/hr

Area (sf)	C	Description
167,793	0.74	
167,793		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	402		1.34		**Direct Entry, Overland Concentrated Flow (Min)**

Subcatchment DB-A2: Drainage Basin A2



Summary for Subcatchment DB-A3: Drainage Basin A3

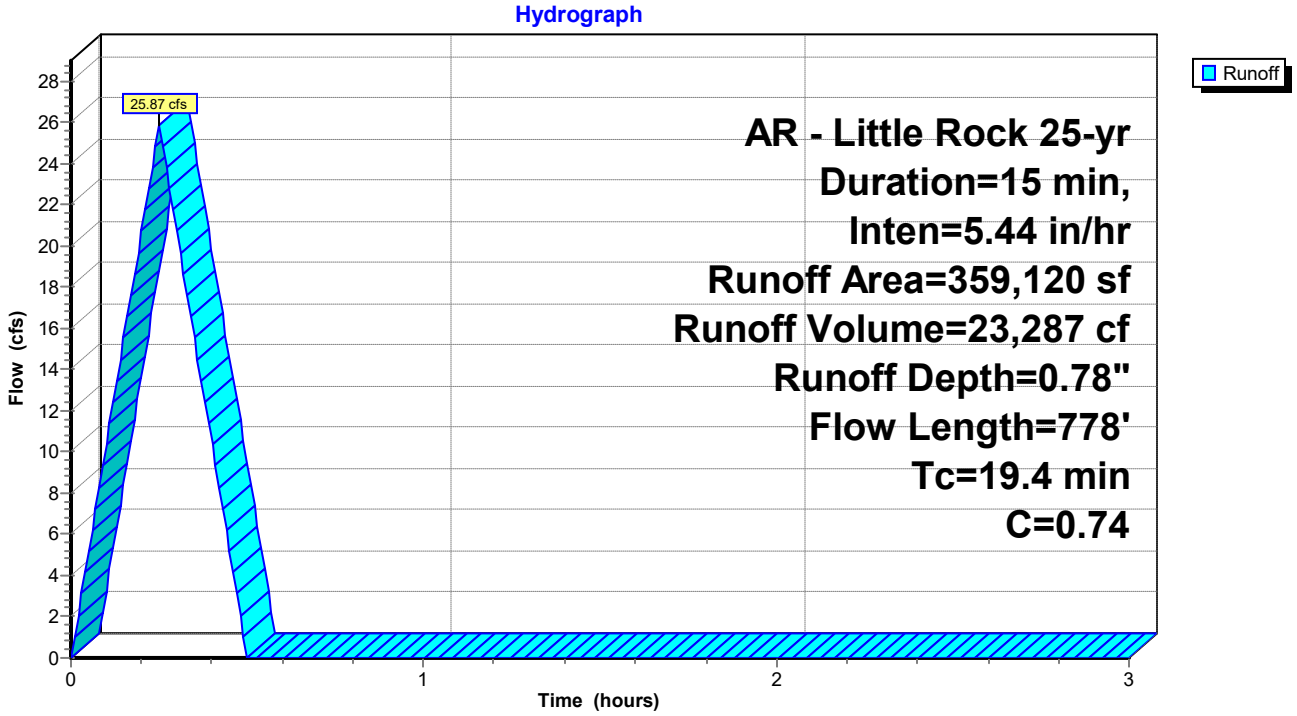
Runoff = 25.87 cfs @ 0.25 hrs, Volume= 23,287 cf, Depth= 0.78"
Routed to Link Pre : Pre Development

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=15 min, Inten=5.44 in/hr

Area (sf)	C	Description
359,120	0.74	
359,120		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.7	300	0.0420	0.37		**Sheet Flow, Overland Sheet Flow** Range n= 0.130 P2= 4.19"
1.2	103	0.0430	1.45		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.7	150	0.0460	1.50		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
2.8	225	0.0360	1.33		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
19.4	778	Total			

Subcatchment DB-A3: Drainage Basin A3



Summary for Subcatchment DB-A4: Drainage Basin A4

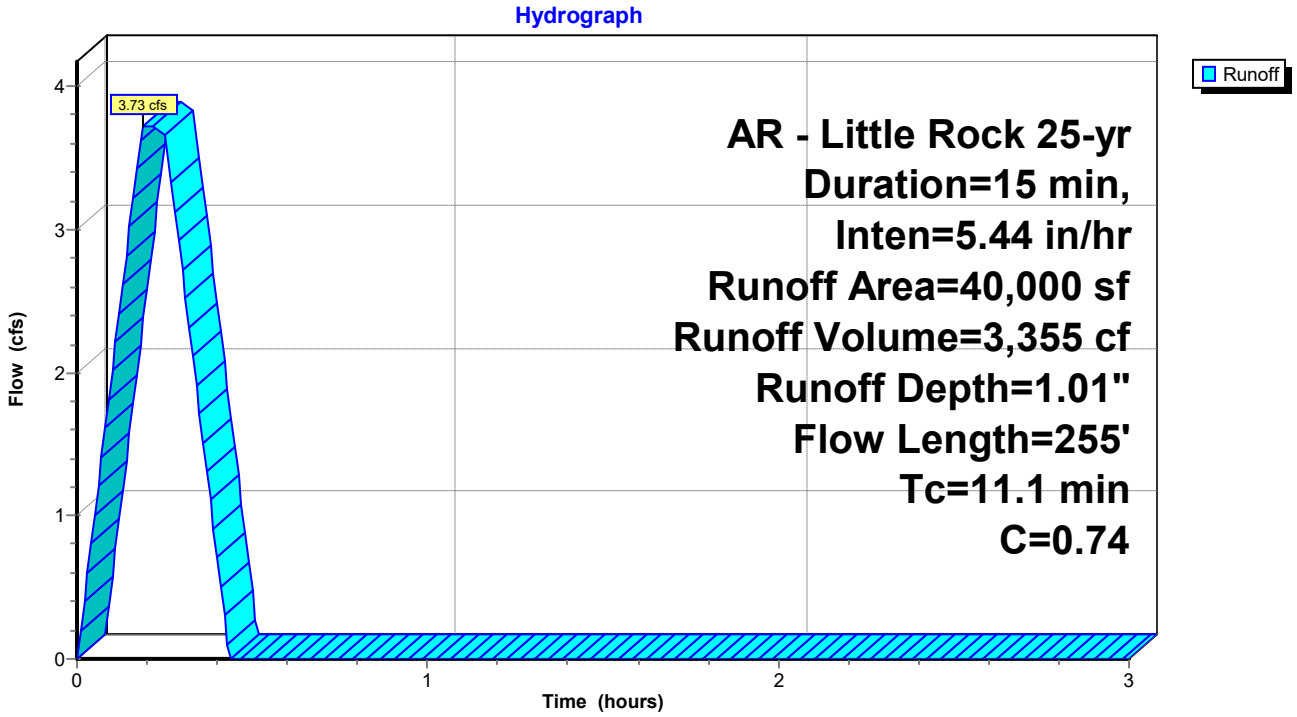
Runoff = 3.73 cfs @ 0.19 hrs, Volume= 3,355 cf, Depth= 1.01"
Routed to Link Pre : Pre Development

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=15 min, Inten=5.44 in/hr

Area (sf)	C	Description
40,000	0.74	
40,000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.8	50	0.0390	0.22		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
6.4	114	0.0530	0.30		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
0.9	91	0.0600	1.71		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
11.1	255	Total			

Subcatchment DB-A4: Drainage Basin A4



Summary for Subcatchment DB-A5: Drainage Basin A5

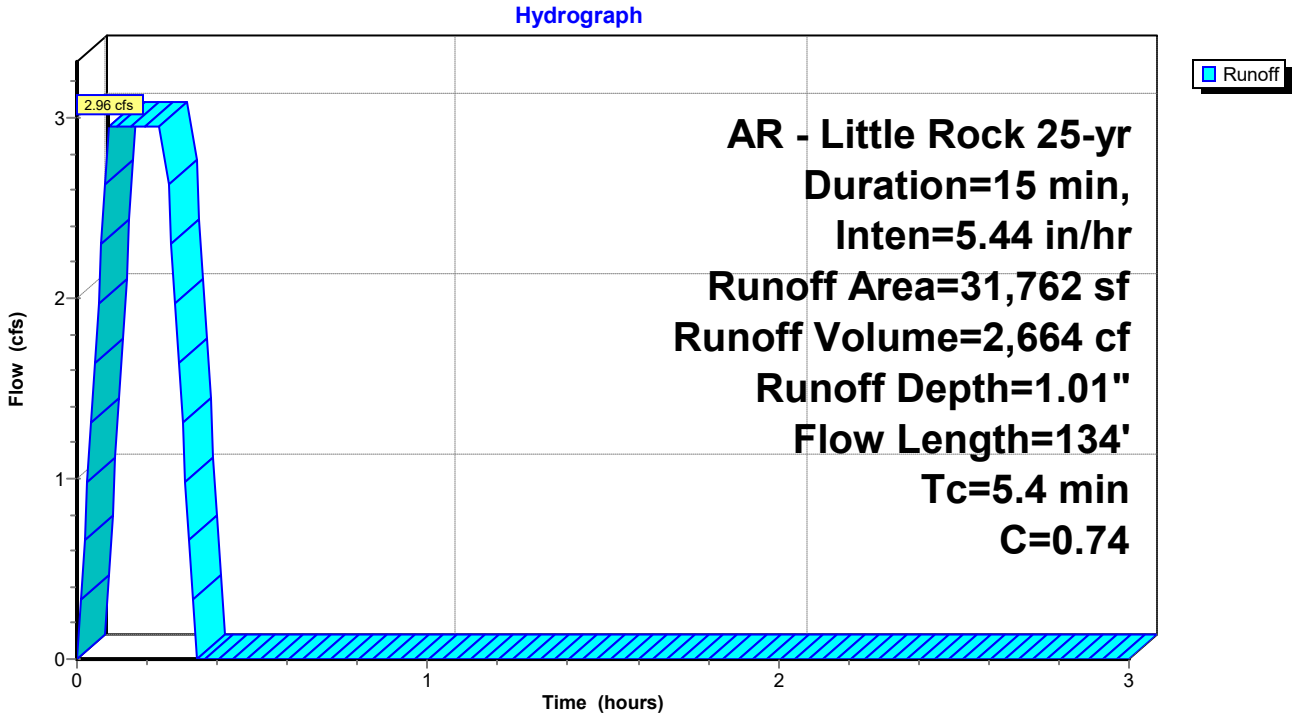
Runoff = 2.96 cfs @ 0.09 hrs, Volume= 2,664 cf, Depth= 1.01"
Routed to Link Pre : Pre Development

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=15 min, Inten=5.44 in/hr

Area (sf)	C	Description
31,762	0.74	
31,762		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	111	0.0850	0.35		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
0.2	23	0.0680	1.91		**Sheet Flow, Overland Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
5.4	134	Total			

Subcatchment DB-A5: Drainage Basin A5



Summary for Subcatchment DB-A6: Drainage Basin A6

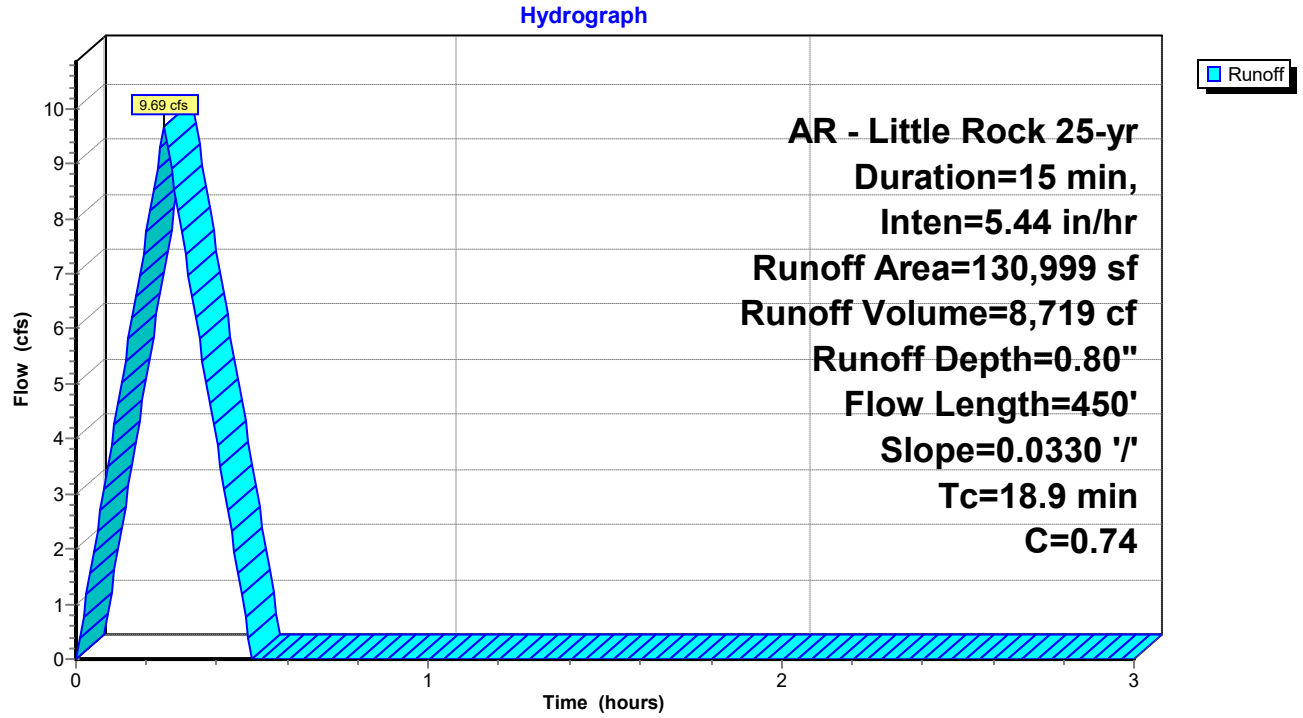
Runoff = 9.69 cfs @ 0.25 hrs, Volume= 8,719 cf, Depth= 0.80"
Routed to Link Pre : Pre Development

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=15 min, Inten=5.44 in/hr

Area (sf)	C	Description
130,999	0.74	
130,999		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.9	300	0.0330	0.30		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
2.0	150	0.0330	1.27		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
18.9	450	Total			

Subcatchment DB-A6: Drainage Basin A6

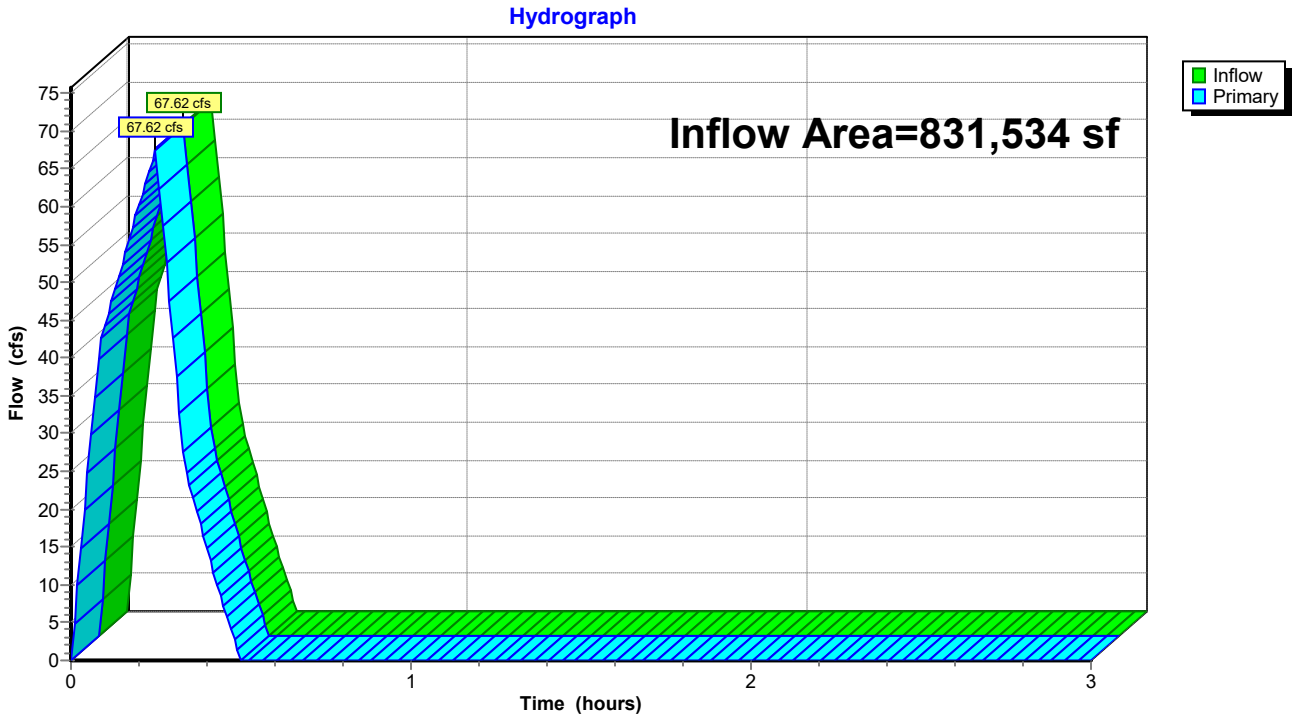


Summary for Link Pre: Pre Development

Inflow Area = 831,534 sf, 0.00% Impervious, Inflow Depth = 0.88" for 25-yr event
Inflow = 67.62 cfs @ 0.25 hrs, Volume= 60,640 cf
Primary = 67.62 cfs @ 0.25 hrs, Volume= 60,640 cf, Atten= 0%, Lag= 0.0 min

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

Link Pre: Pre Development



Summary for Subcatchment DB-A1: Drainage Basin A1

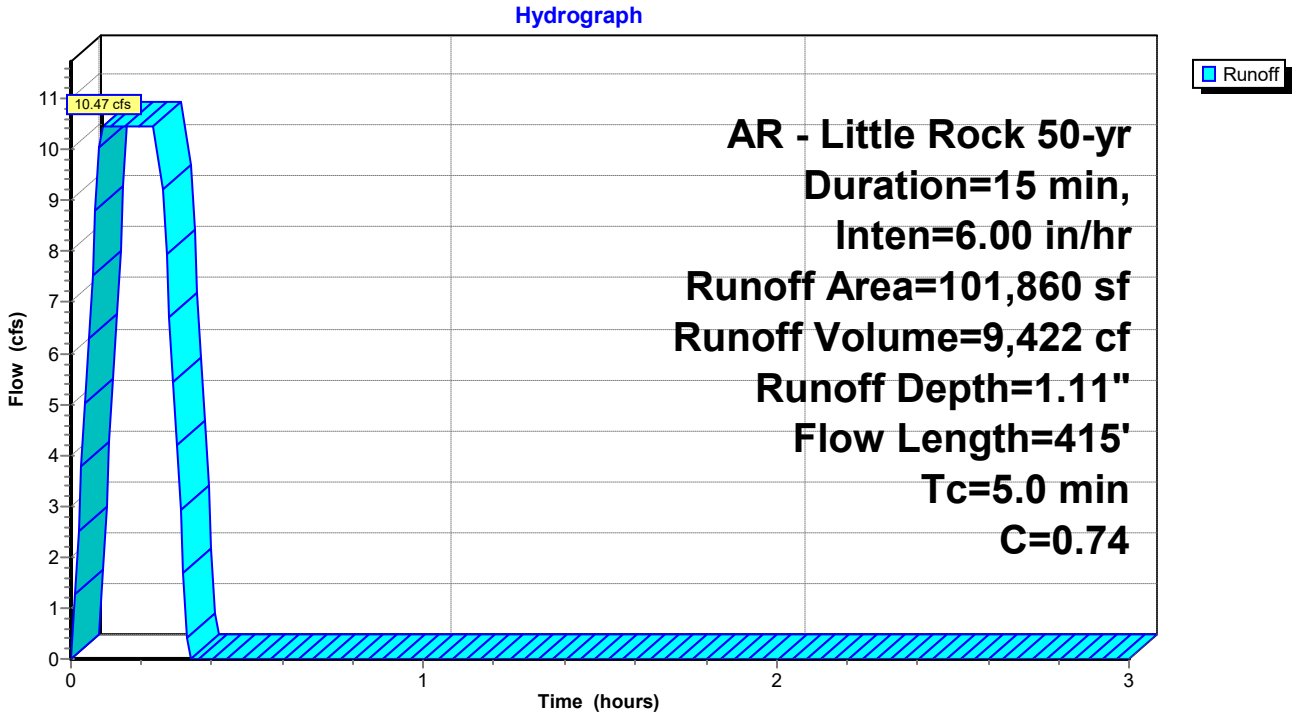
Runoff = 10.47 cfs @ 0.09 hrs, Volume= 9,422 cf, Depth= 1.11"
Routed to Link Pre : Pre Development

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 50-yr Duration=15 min, Inten=6.00 in/hr

Area (sf)	C	Description
101,860	0.74	
101,860		100.00% Pervious 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 DB-A1: Drainage Basin A1



Summary for Subcatchment DB-A2: Drainage Basin A2

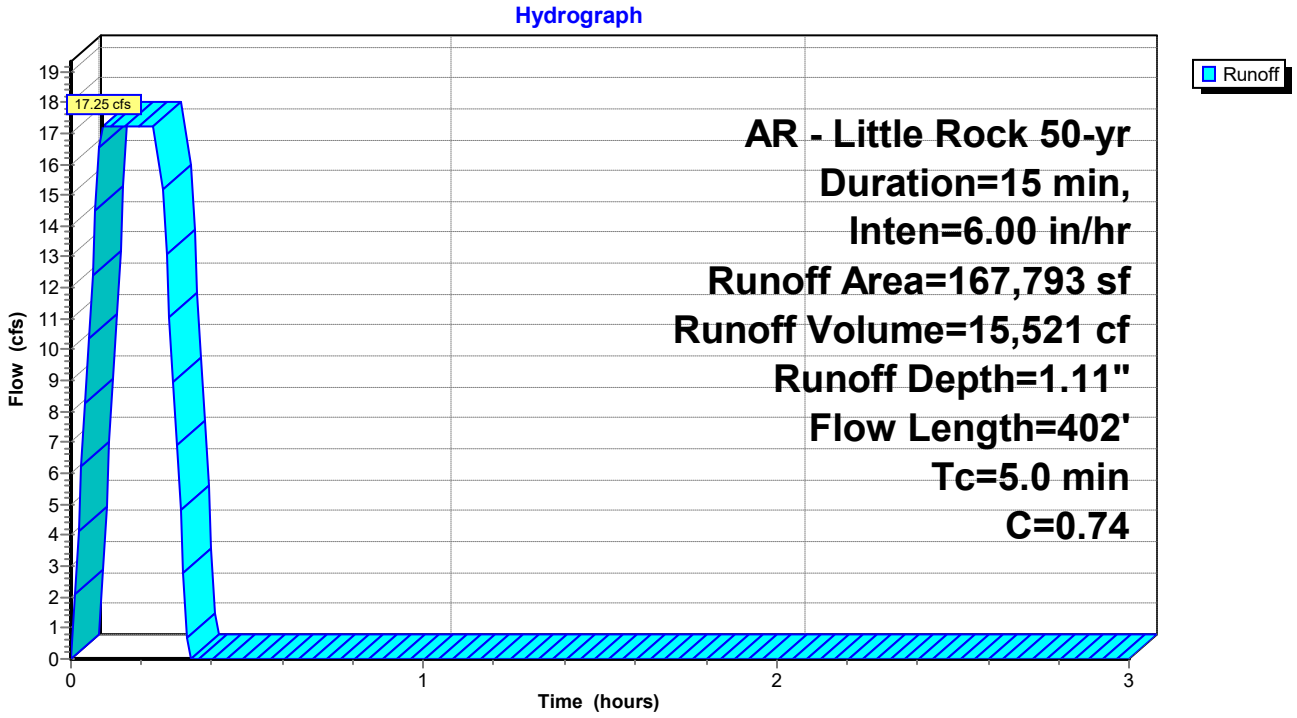
Runoff = 17.25 cfs @ 0.09 hrs, Volume= 15,521 cf, Depth= 1.11"
Routed to Link Pre : Pre Development

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 50-yr Duration=15 min, Inten=6.00 in/hr

Area (sf)	C	Description
167,793	0.74	
167,793		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	402		1.34		**Direct Entry, Overland Concentrated Flow (Min)**

Subcatchment DB-A2: Drainage Basin A2



Summary for Subcatchment DB-A3: Drainage Basin A3

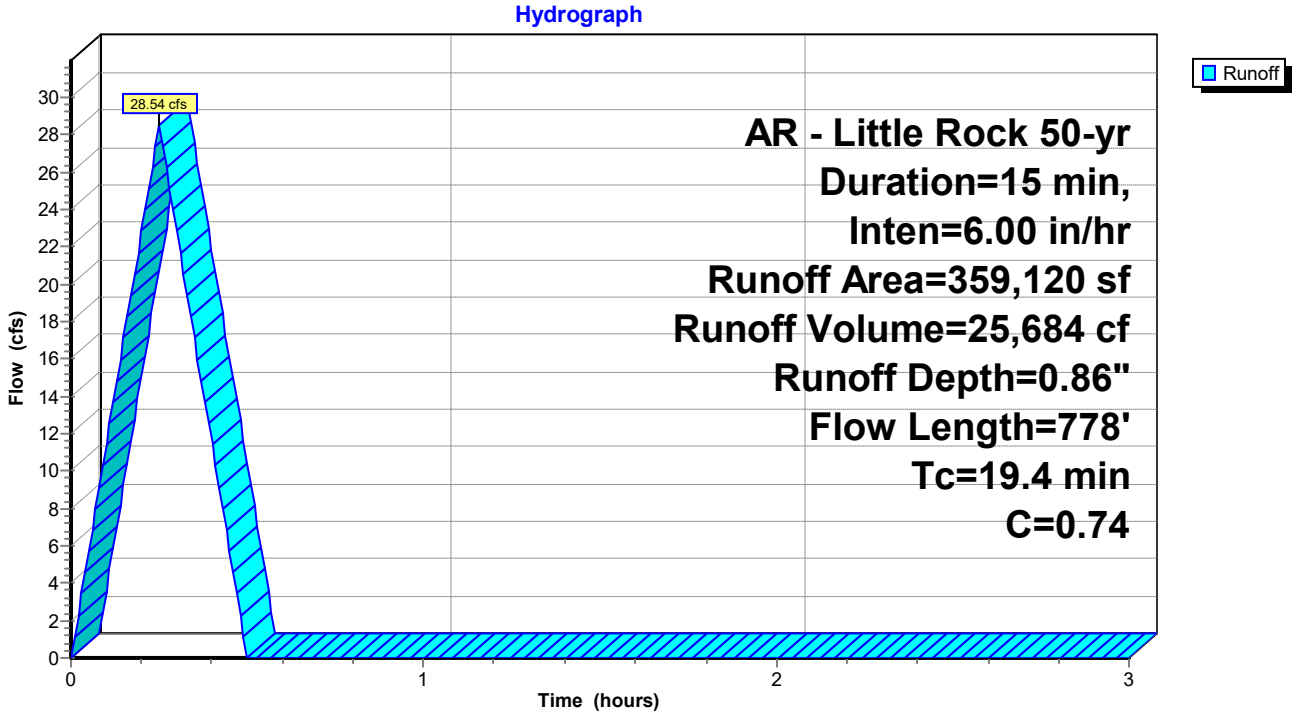
Runoff = 28.54 cfs @ 0.25 hrs, Volume= 25,684 cf, Depth= 0.86"
Routed to Link Pre : Pre Development

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 50-yr Duration=15 min, Inten=6.00 in/hr

Area (sf)	C	Description
359,120	0.74	
359,120		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.7	300	0.0420	0.37		**Sheet Flow, Overland Sheet Flow** Range n= 0.130 P2= 4.19"
1.2	103	0.0430	1.45		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.7	150	0.0460	1.50		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
2.8	225	0.0360	1.33		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
19.4	778	Total			

Subcatchment DB-A3: Drainage Basin A3



Summary for Subcatchment DB-A4: Drainage Basin A4

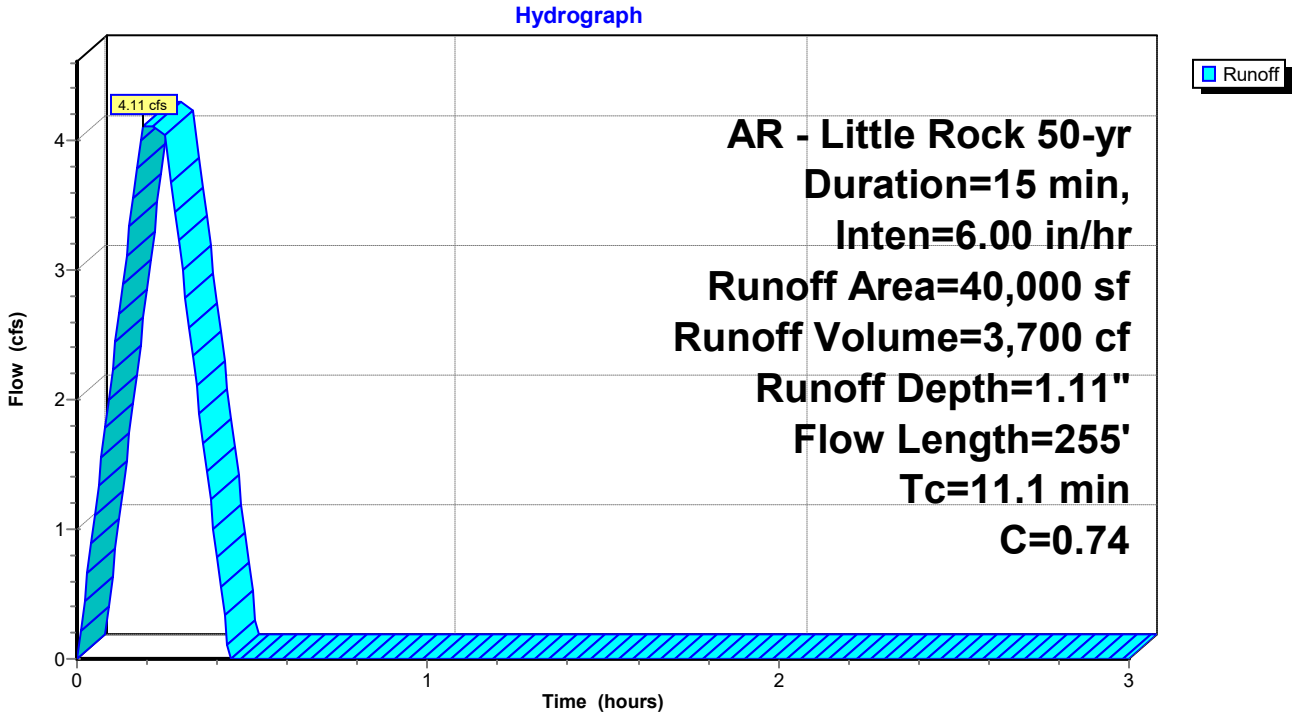
Runoff = 4.11 cfs @ 0.19 hrs, Volume= 3,700 cf, Depth= 1.11"
Routed to Link Pre : Pre Development

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 50-yr Duration=15 min, Inten=6.00 in/hr

Area (sf)	C	Description
40,000	0.74	
40,000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.8	50	0.0390	0.22		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
6.4	114	0.0530	0.30		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
0.9	91	0.0600	1.71		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
11.1	255	Total			

Subcatchment DB-A4: Drainage Basin A4



Summary for Subcatchment DB-A5: Drainage Basin A5

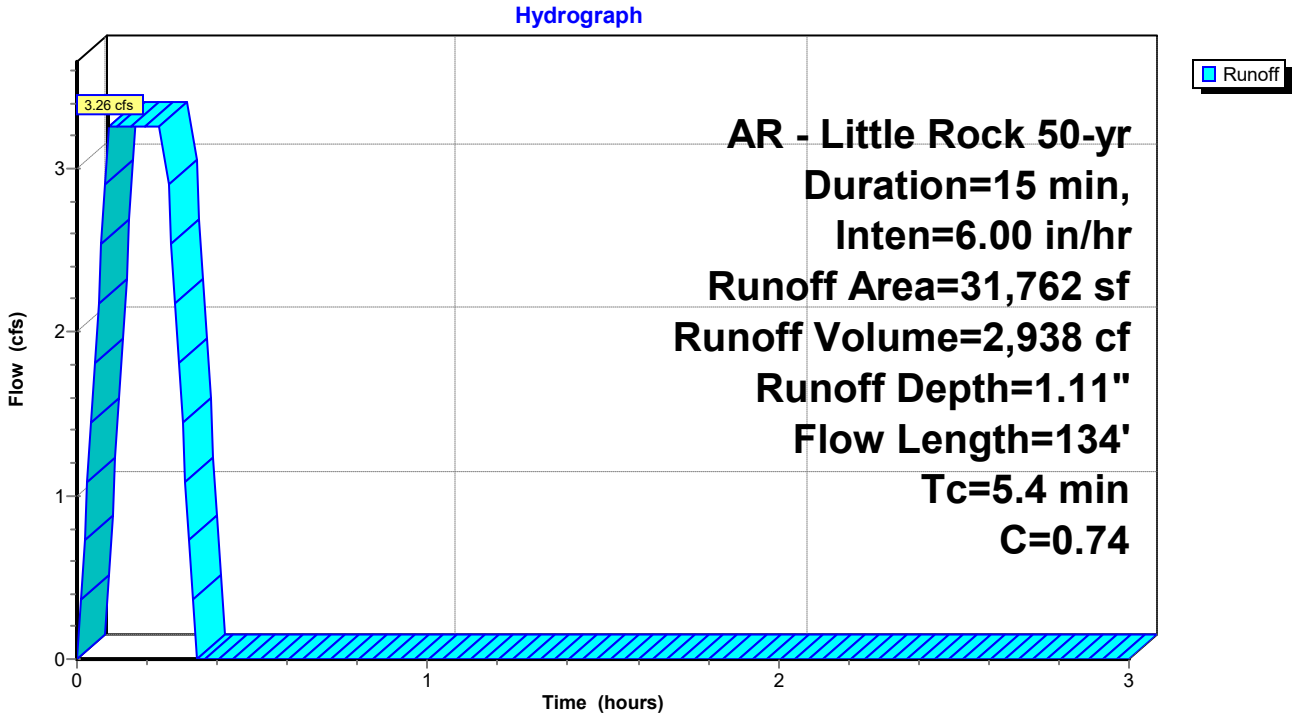
Runoff = 3.26 cfs @ 0.09 hrs, Volume= 2,938 cf, Depth= 1.11"
Routed to Link Pre : Pre Development

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 50-yr Duration=15 min, Inten=6.00 in/hr

Area (sf)	C	Description
31,762	0.74	
31,762		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	111	0.0850	0.35		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
0.2	23	0.0680	1.91		**Sheet Flow, Overland Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
5.4	134	Total			

Subcatchment DB-A5: Drainage Basin A5



Summary for Subcatchment DB-A6: Drainage Basin A6

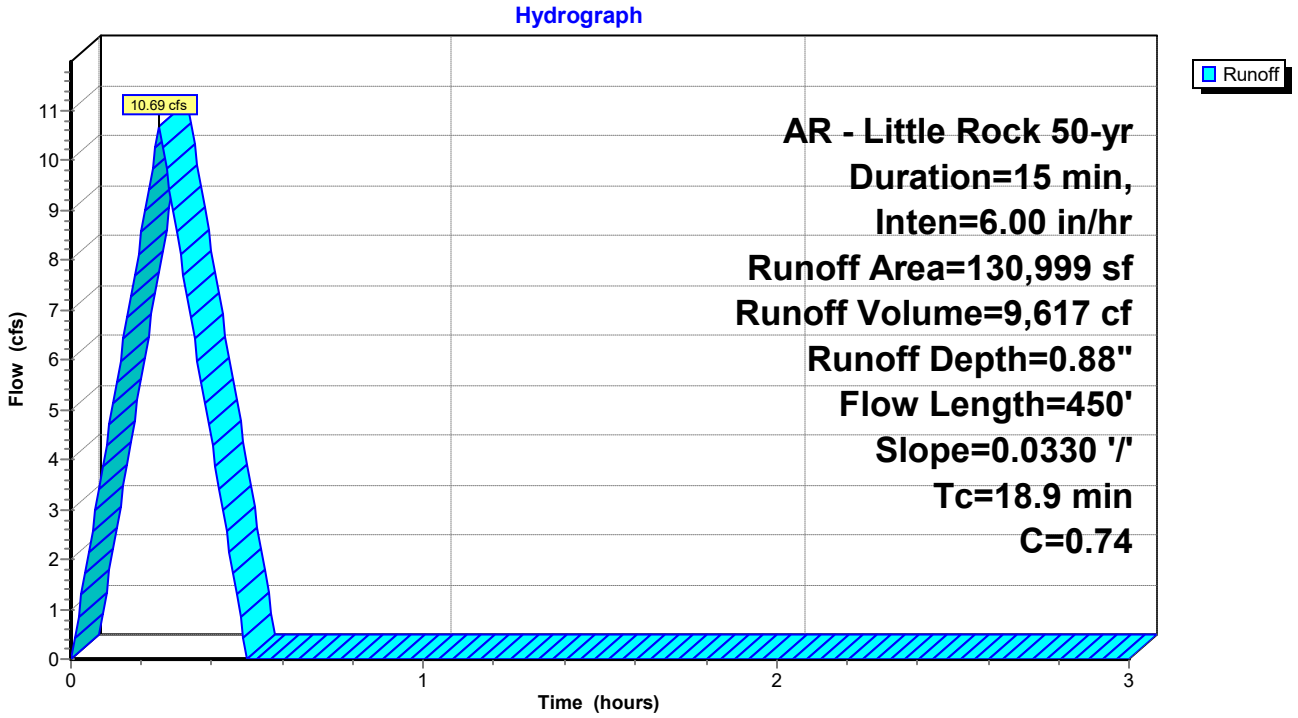
Runoff = 10.69 cfs @ 0.25 hrs, Volume= 9,617 cf, Depth= 0.88"
Routed to Link Pre : Pre Development

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 50-yr Duration=15 min, Inten=6.00 in/hr

Area (sf)	C	Description
130,999	0.74	
130,999		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.9	300	0.0330	0.30		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
2.0	150	0.0330	1.27		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
18.9	450	Total			

Subcatchment DB-A6: Drainage Basin A6

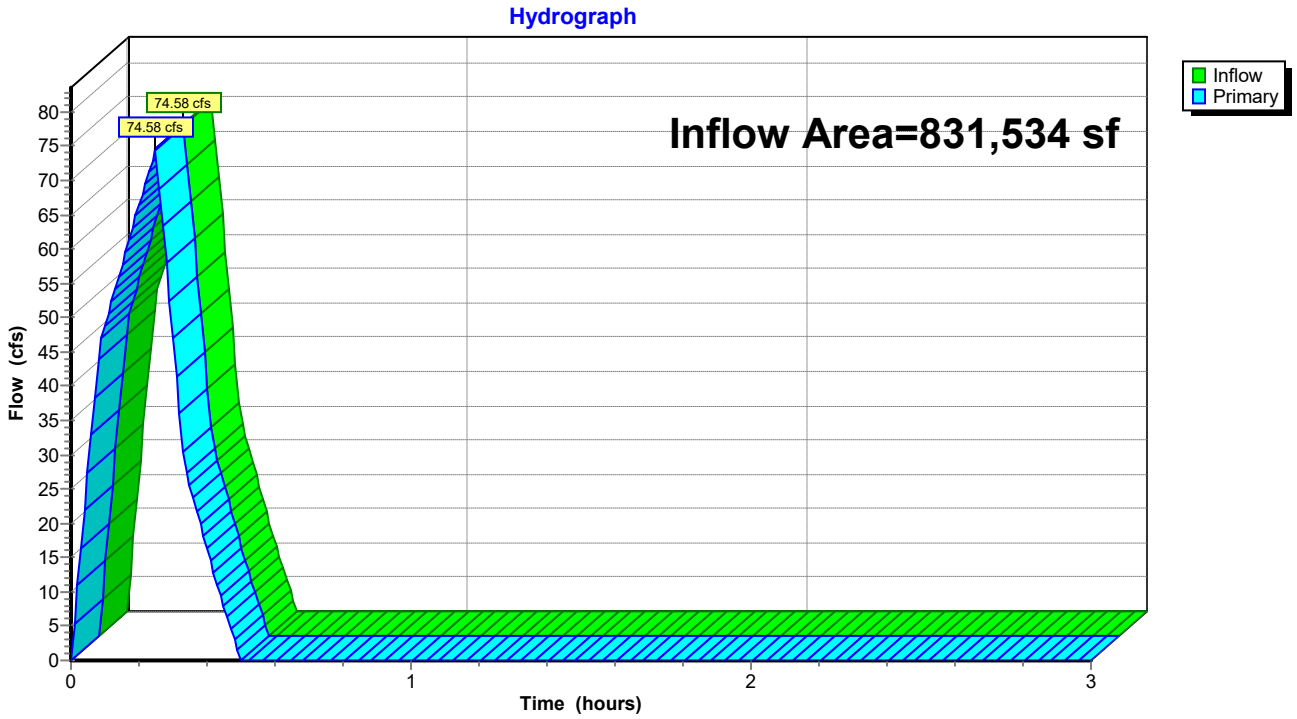


Summary for Link Pre: Pre Development

Inflow Area = 831,534 sf, 0.00% Impervious, Inflow Depth = 0.97" for 50-yr event
Inflow = 74.58 cfs @ 0.25 hrs, Volume= 66,882 cf
Primary = 74.58 cfs @ 0.25 hrs, Volume= 66,882 cf, Atten= 0%, Lag= 0.0 min

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

Link Pre: Pre Development



Summary for Subcatchment DB-A1: Drainage Basin A1

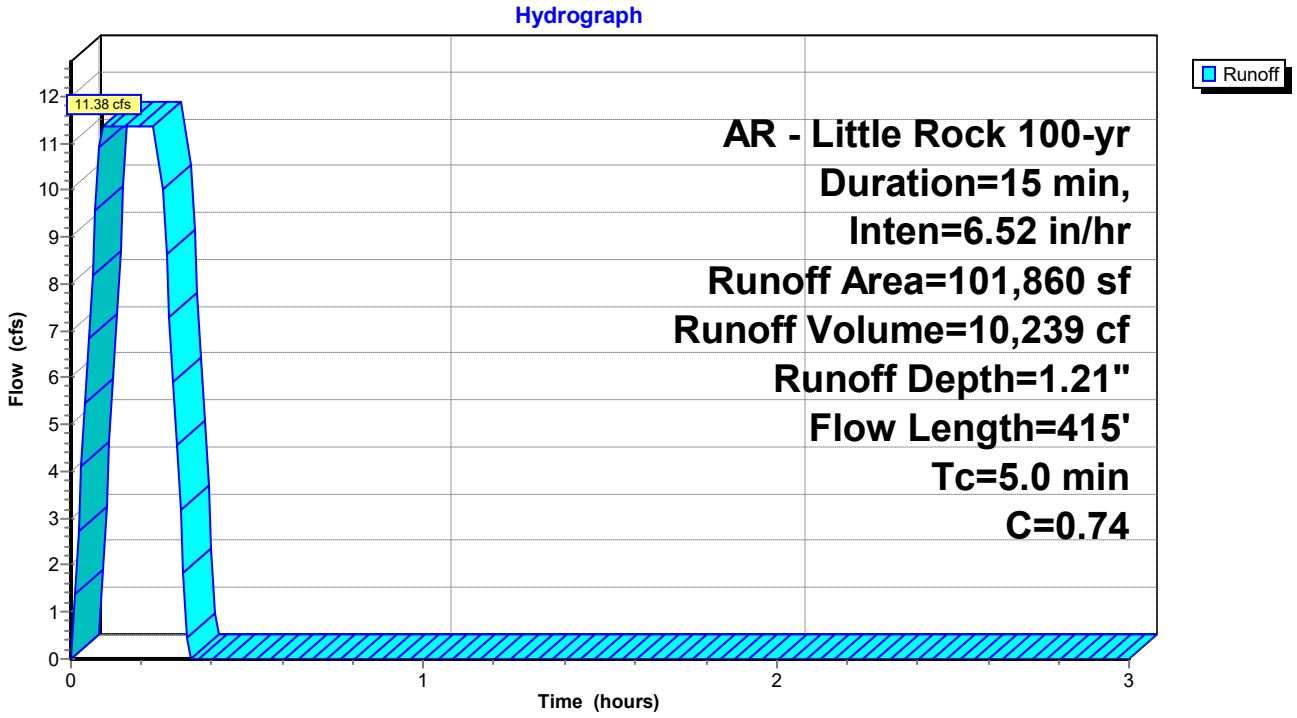
Runoff = 11.38 cfs @ 0.09 hrs, Volume= 10,239 cf, Depth= 1.21"
Routed to Link Pre : Pre Development

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=15 min, Inten=6.52 in/hr

Area (sf)	C	Description
101,860	0.74	
101,860		100.00% Pervious 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 DB-A1: Drainage Basin A1



Summary for Subcatchment DB-A2: Drainage Basin A2

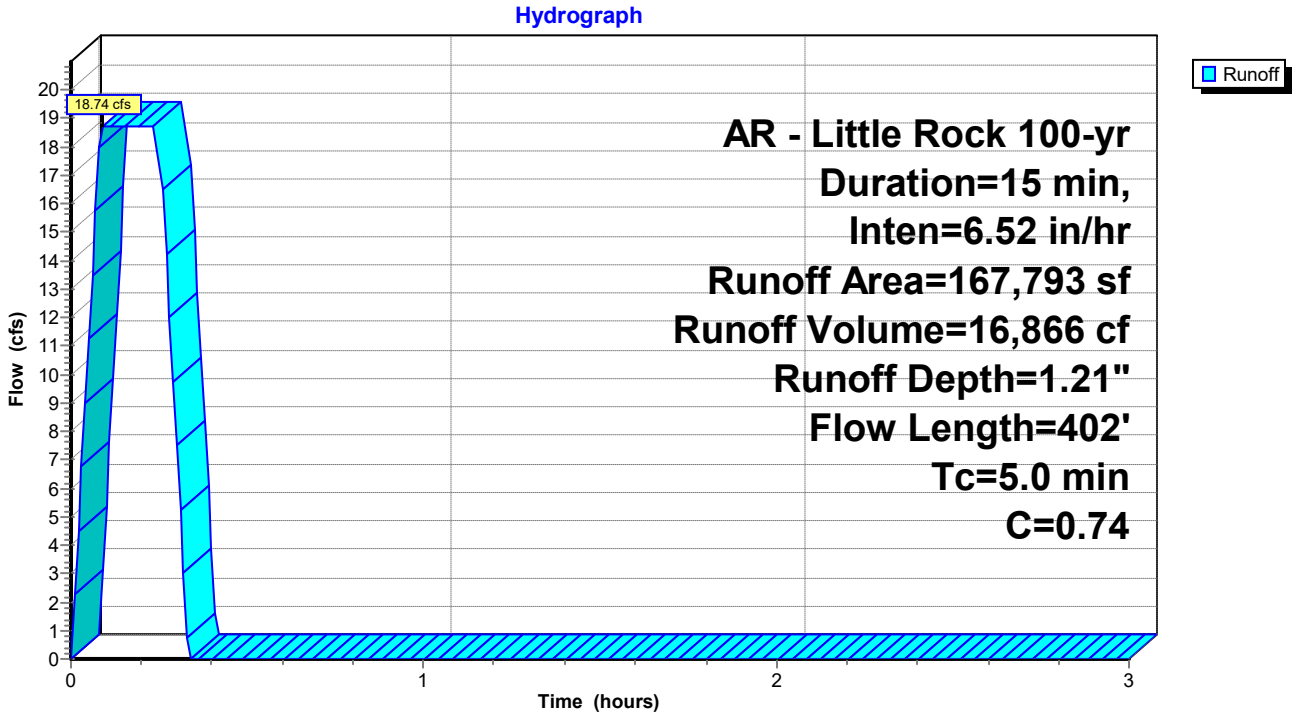
Runoff = 18.74 cfs @ 0.09 hrs, Volume= 16,866 cf, Depth= 1.21"
Routed to Link Pre : Pre Development

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=15 min, Inten=6.52 in/hr

Area (sf)	C	Description
167,793	0.74	
167,793		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	402		1.34		**Direct Entry, Overland Concentrated Flow (Min)**

Subcatchment DB-A2: Drainage Basin A2



Summary for Subcatchment DB-A3: Drainage Basin A3

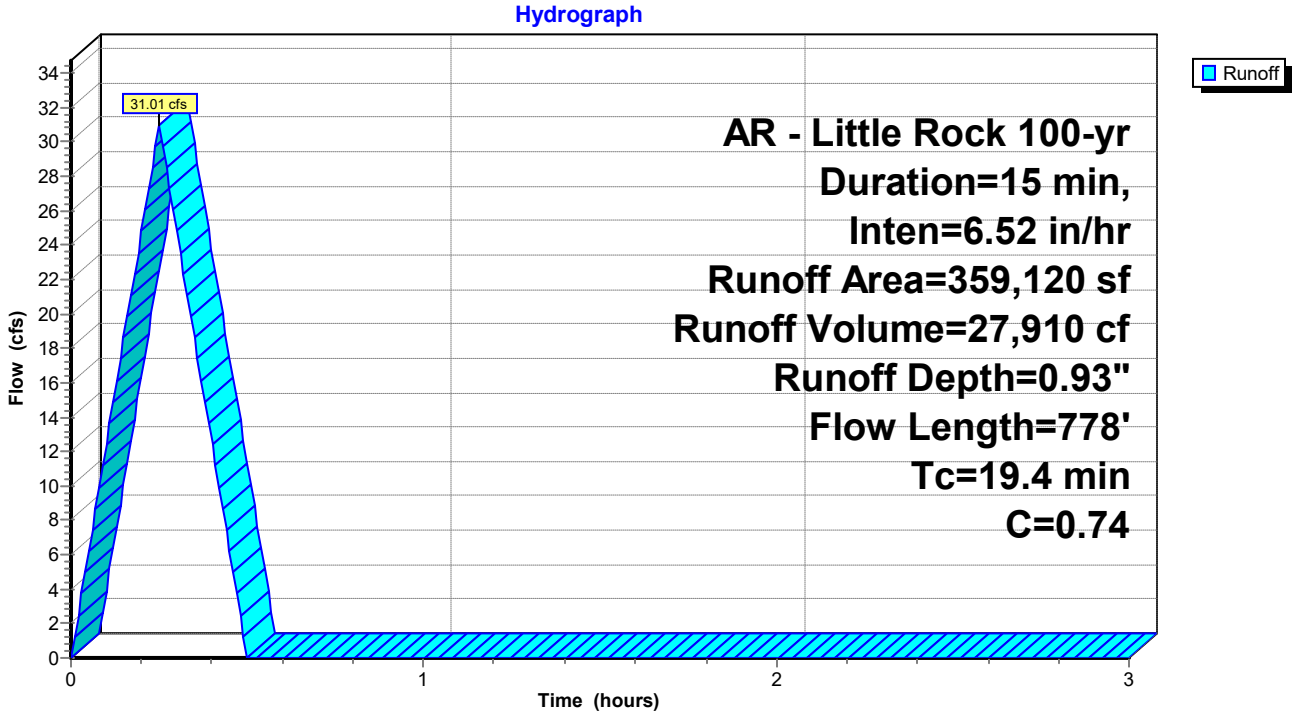
Runoff = 31.01 cfs @ 0.25 hrs, Volume= 27,910 cf, Depth= 0.93"
Routed to Link Pre : Pre Development

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=15 min, Inten=6.52 in/hr

Area (sf)	C	Description
359,120	0.74	
359,120		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.7	300	0.0420	0.37		**Sheet Flow, Overland Sheet Flow** Range n= 0.130 P2= 4.19"
1.2	103	0.0430	1.45		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
1.7	150	0.0460	1.50		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
2.8	225	0.0360	1.33		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
19.4	778	Total			

Subcatchment DB-A3: Drainage Basin A3



Summary for Subcatchment DB-A4: Drainage Basin A4

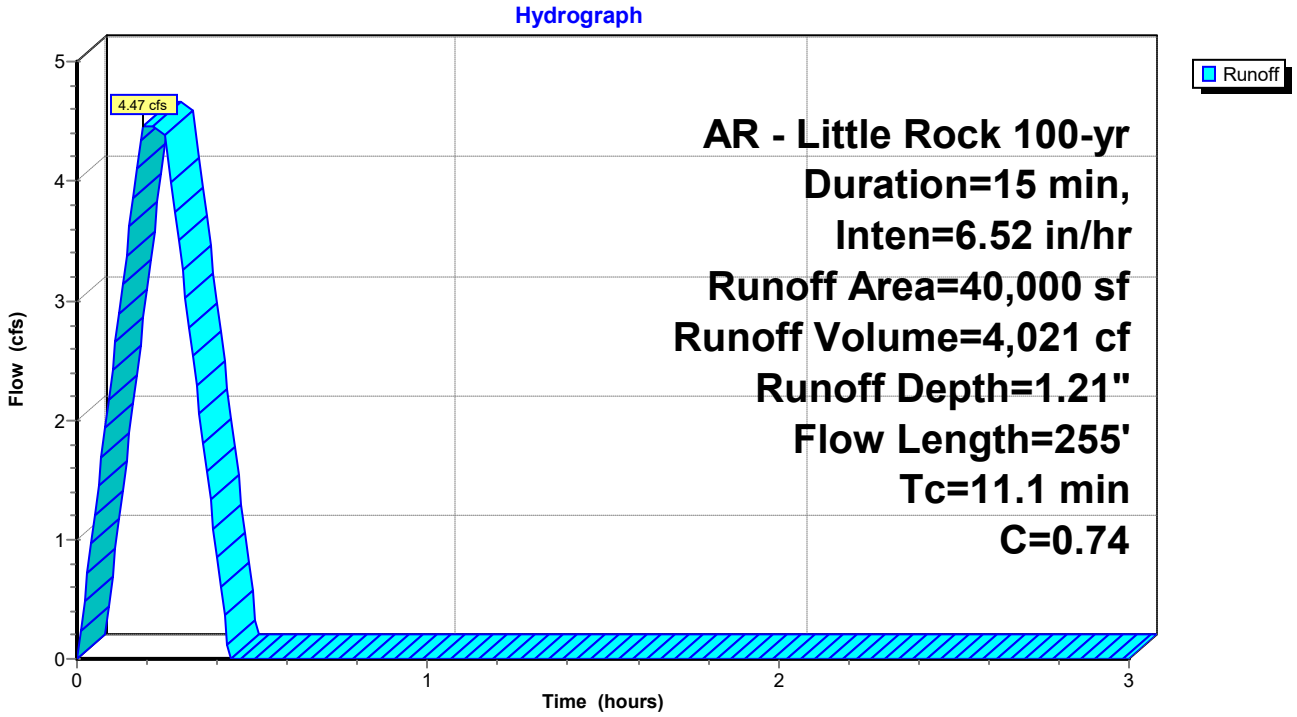
Runoff = 4.47 cfs @ 0.19 hrs, Volume= 4,021 cf, Depth= 1.21"
Routed to Link Pre : Pre Development

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=15 min, Inten=6.52 in/hr

Area (sf)	C	Description
40,000	0.74	
40,000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.8	50	0.0390	0.22		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
6.4	114	0.0530	0.30		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
0.9	91	0.0600	1.71		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
11.1	255	Total			

Subcatchment DB-A4: Drainage Basin A4



Summary for Subcatchment DB-A5: Drainage Basin A5

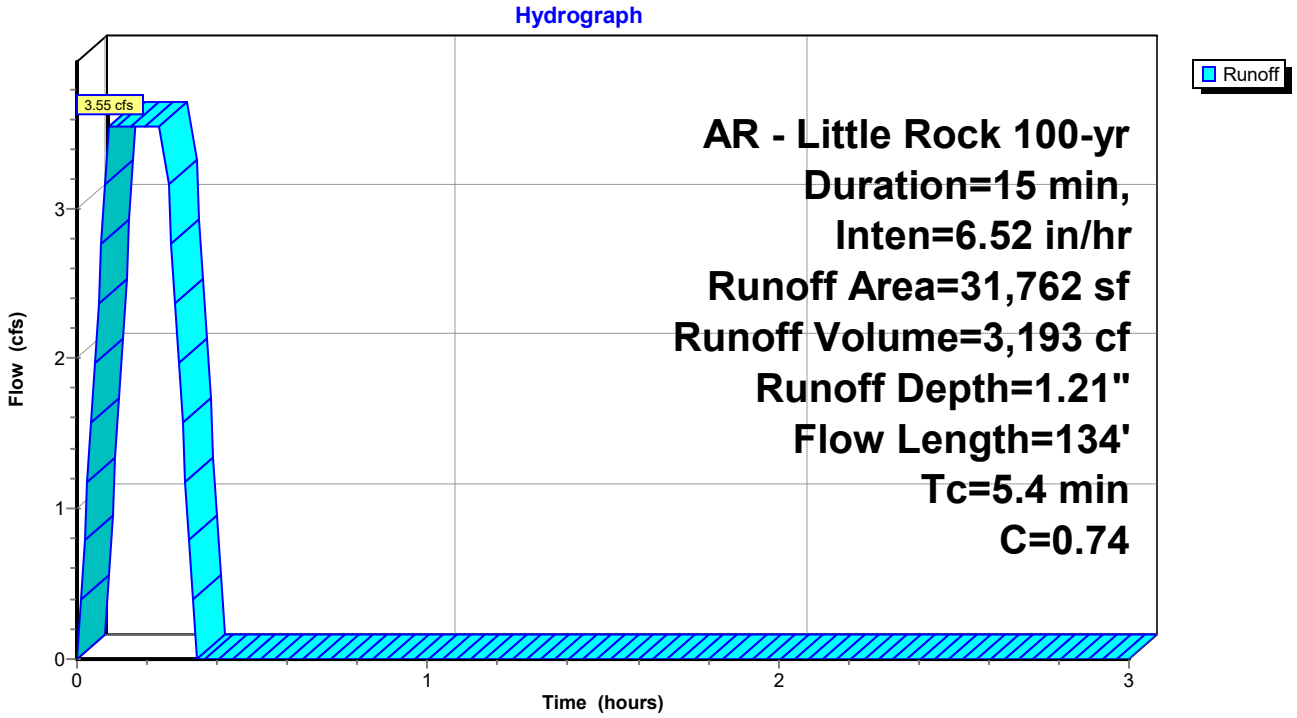
Runoff = 3.55 cfs @ 0.09 hrs, Volume= 3,193 cf, Depth= 1.21"
Routed to Link Pre : Pre Development

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=15 min, Inten=6.52 in/hr

Area (sf)	C	Description
31,762	0.74	
31,762		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	111	0.0850	0.35		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
0.2	23	0.0680	1.91		**Sheet Flow, Overland Sheet Flow** Smooth surfaces n= 0.011 P2= 4.19"
5.4	134	Total			

Subcatchment DB-A5: Drainage Basin A5



Summary for Subcatchment DB-A6: Drainage Basin A6

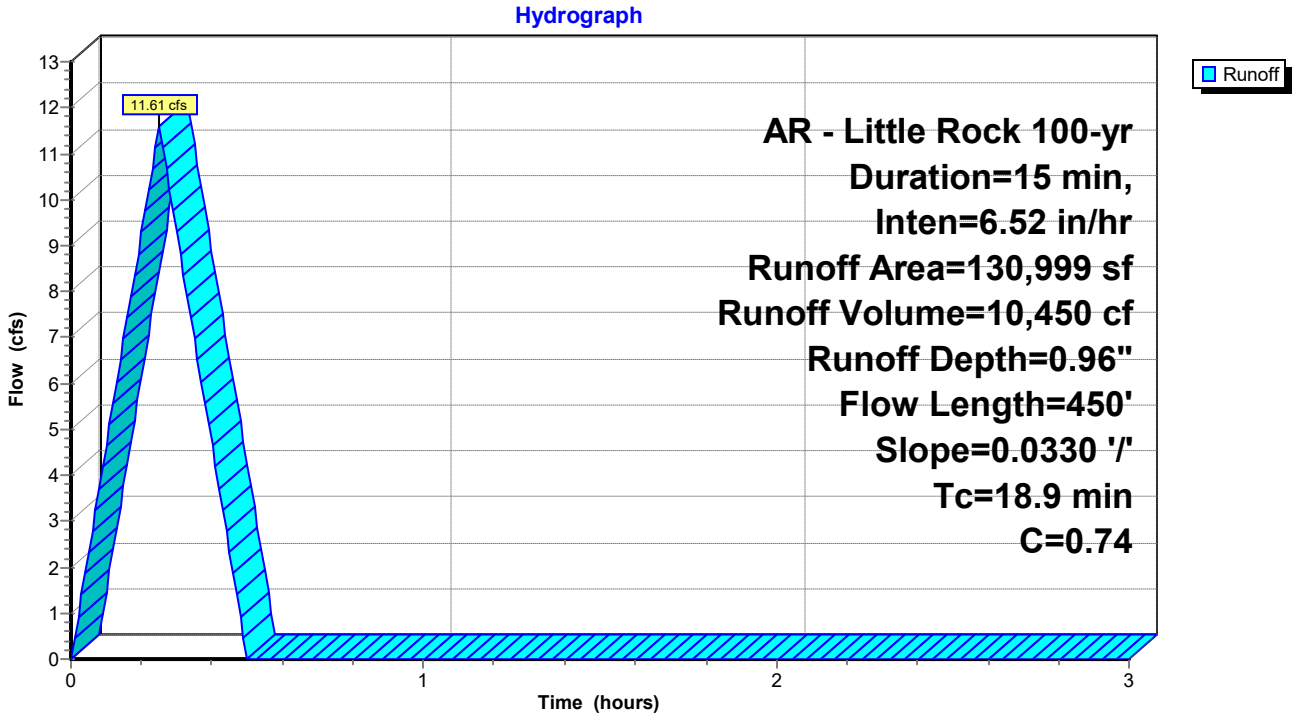
Runoff = 11.61 cfs @ 0.25 hrs, Volume= 10,450 cf, Depth= 0.96"
Routed to Link Pre : Pre Development

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=15 min, Inten=6.52 in/hr

Area (sf)	C	Description
130,999	0.74	
130,999		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.9	300	0.0330	0.30		**Sheet Flow, Overland Sheet Flow** Grass: Short n= 0.150 P2= 4.19"
2.0	150	0.0330	1.27		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
18.9	450	Total			

Subcatchment DB-A6: Drainage Basin A6

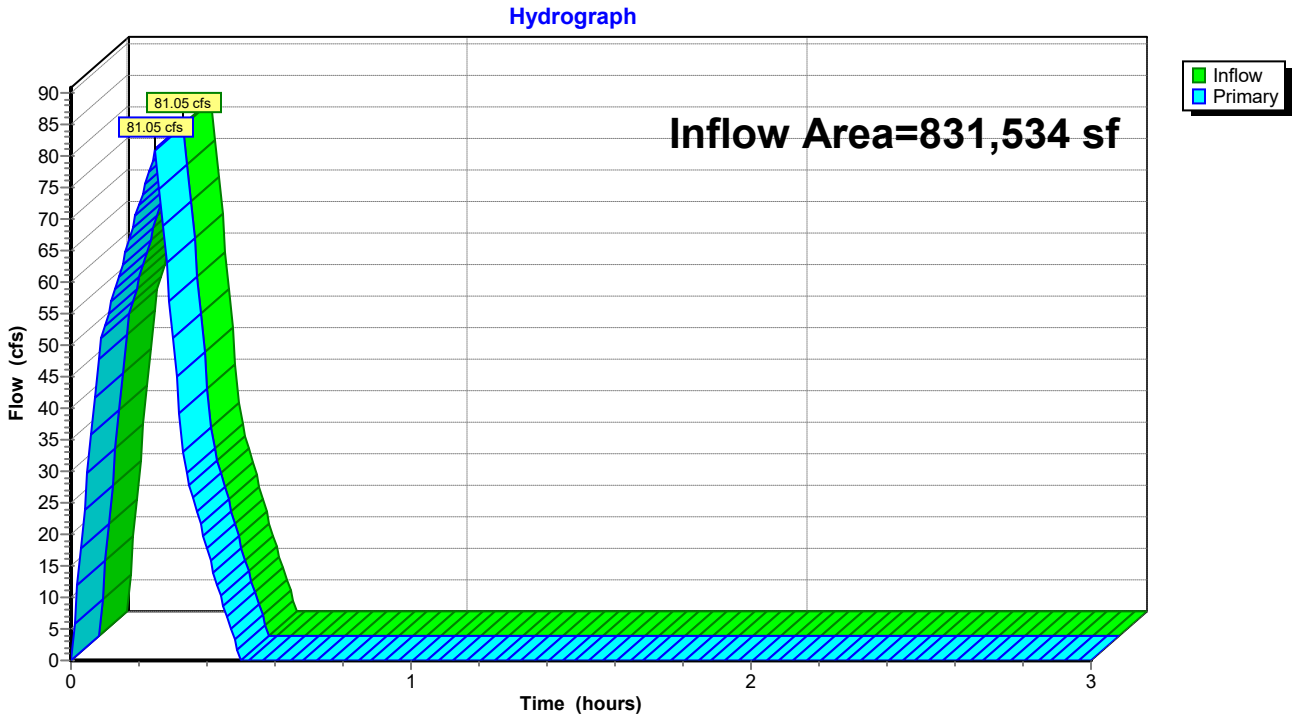


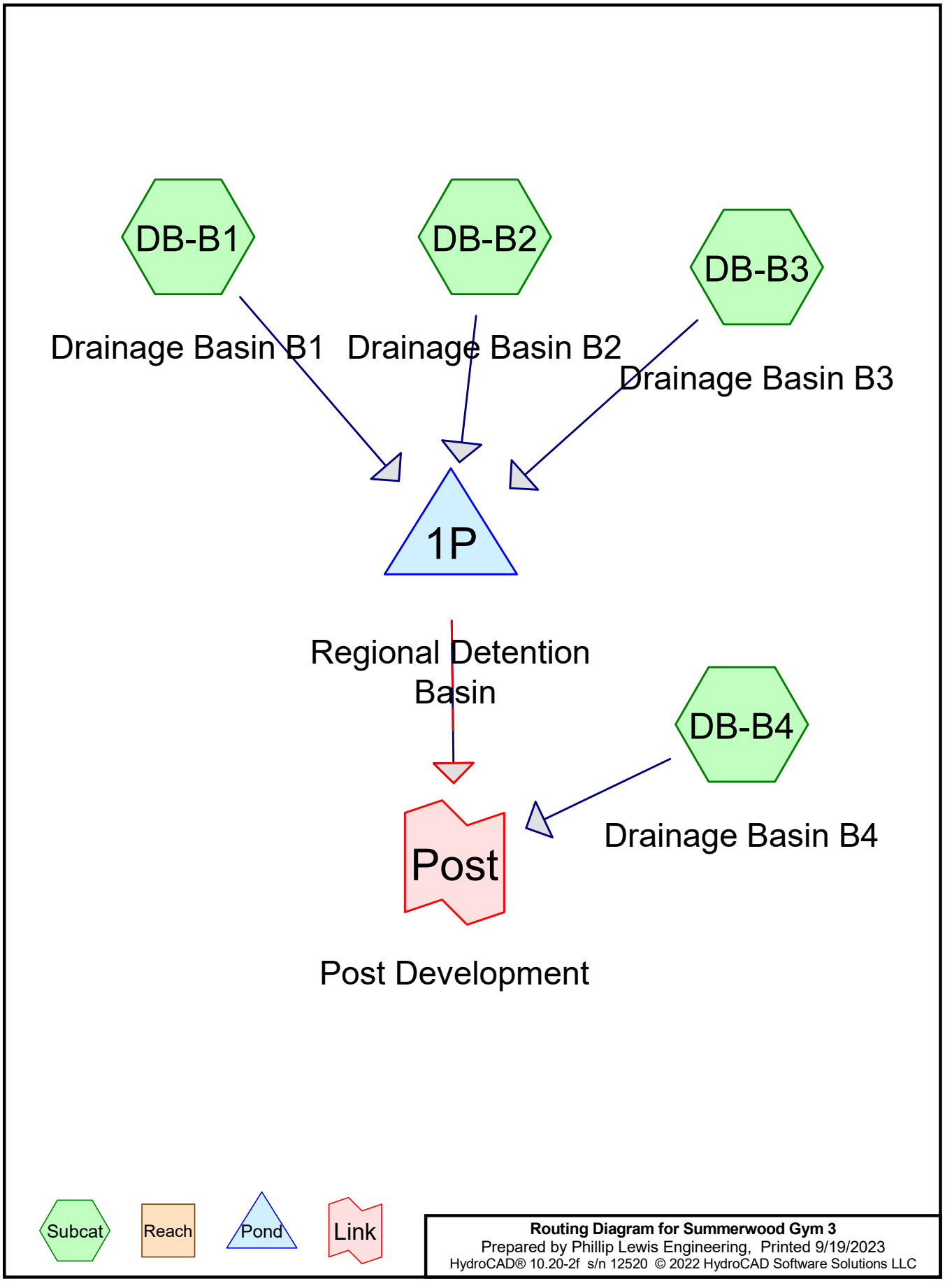
Summary for Link Pre: Pre Development

Inflow Area = 831,534 sf, 0.00% Impervious, Inflow Depth = 1.05" for 100-yr event
Inflow = 81.05 cfs @ 0.25 hrs, Volume= 72,679 cf
Primary = 81.05 cfs @ 0.25 hrs, Volume= 72,679 cf, Atten= 0%, Lag= 0.0 min

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

Link Pre: Pre Development





Routing Diagram for Summerwood Gym 3
Prepared by Phillip Lewis Engineering, Printed 9/19/2023

Summary for Subcatchment DB-B1: Drainage Basin B1

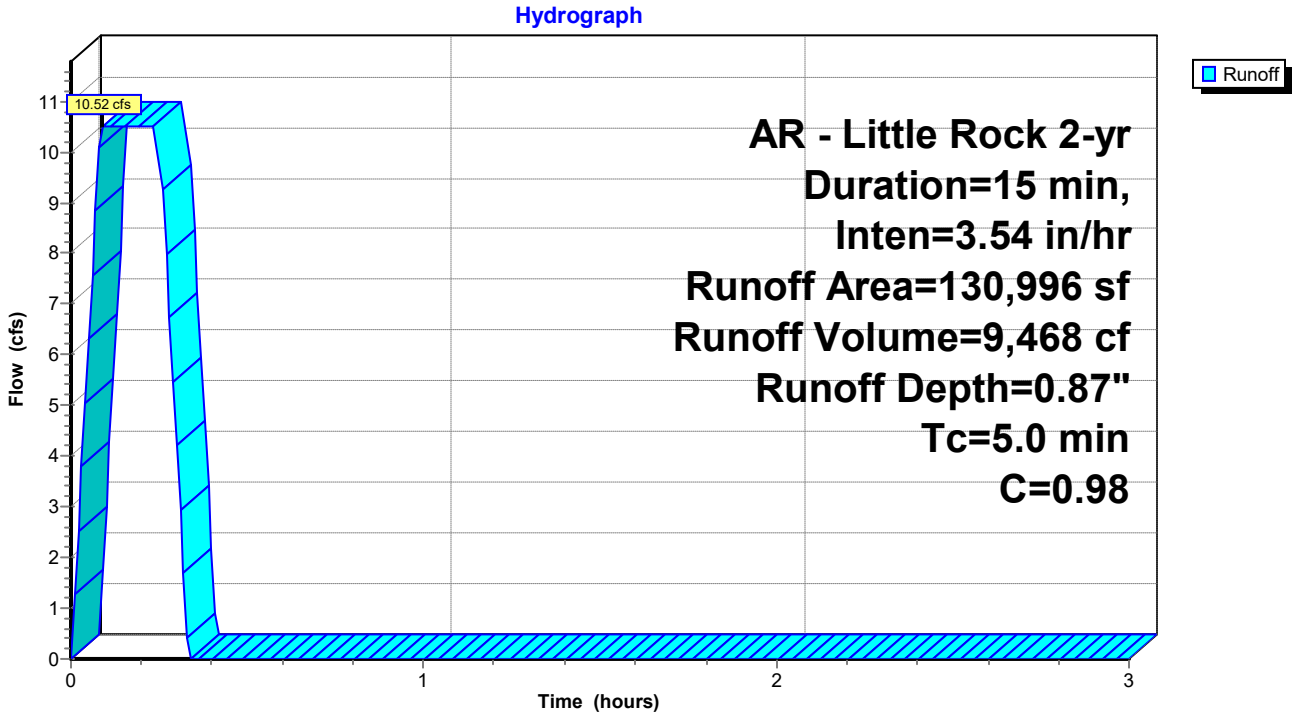
Runoff = 10.52 cfs @ 0.09 hrs, Volume= 9,468 cf, Depth= 0.87"
Routed to Pond 1P : Regional Detention Basin

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=15 min, Inten=3.54 in/hr

Area (sf)	C	Description
130,996	0.98	
130,996		100.00% Impervious Area

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

Subcatchment DB-B1: Drainage Basin B1



Summary for Subcatchment DB-B2: Drainage Basin B2

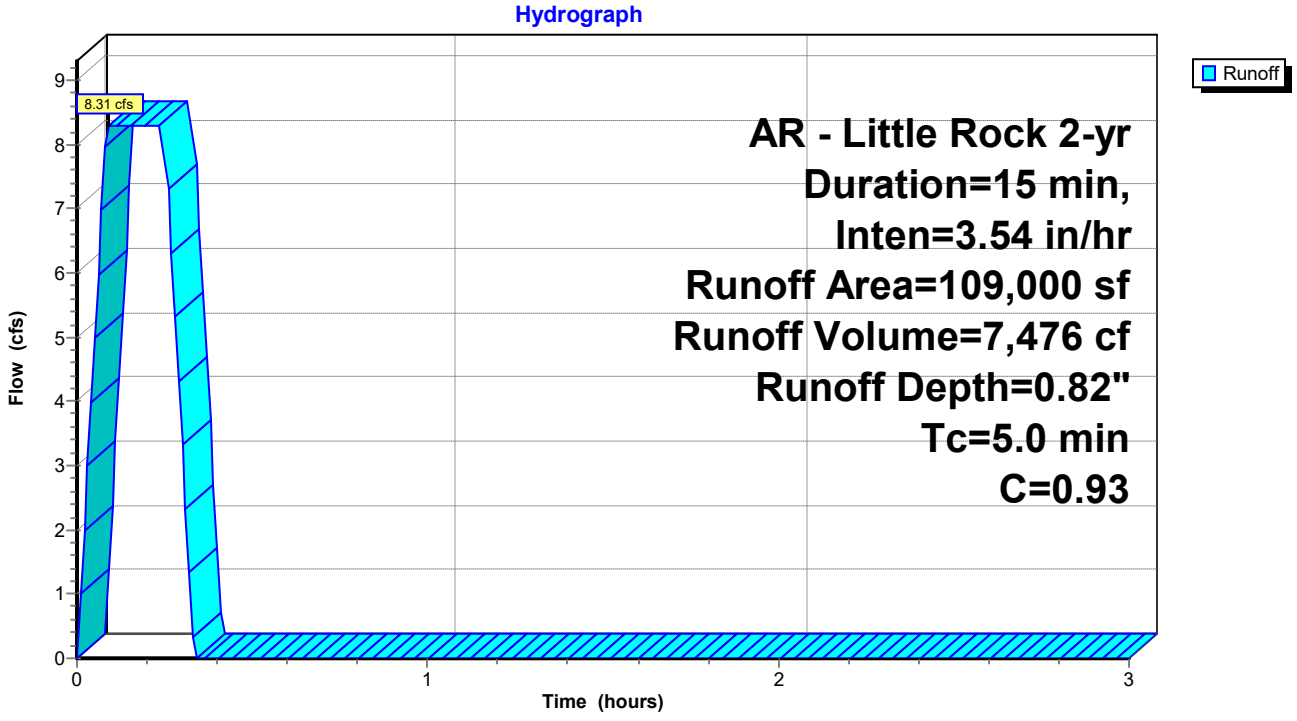
Runoff = 8.31 cfs @ 0.09 hrs, Volume= 7,476 cf, Depth= 0.82"
Routed to Pond 1P : Regional Detention Basin

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=15 min, Inten=3.54 in/hr

Area (sf)	C	Description
87,200	0.98	
21,800	0.74	
109,000	0.93	Weighted Average
21,800		20.00% Pervious Area
87,200		80.00% Impervious Area

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

Subcatchment DB-B2: Drainage Basin B2



Summary for Subcatchment DB-B3: Drainage Basin B3

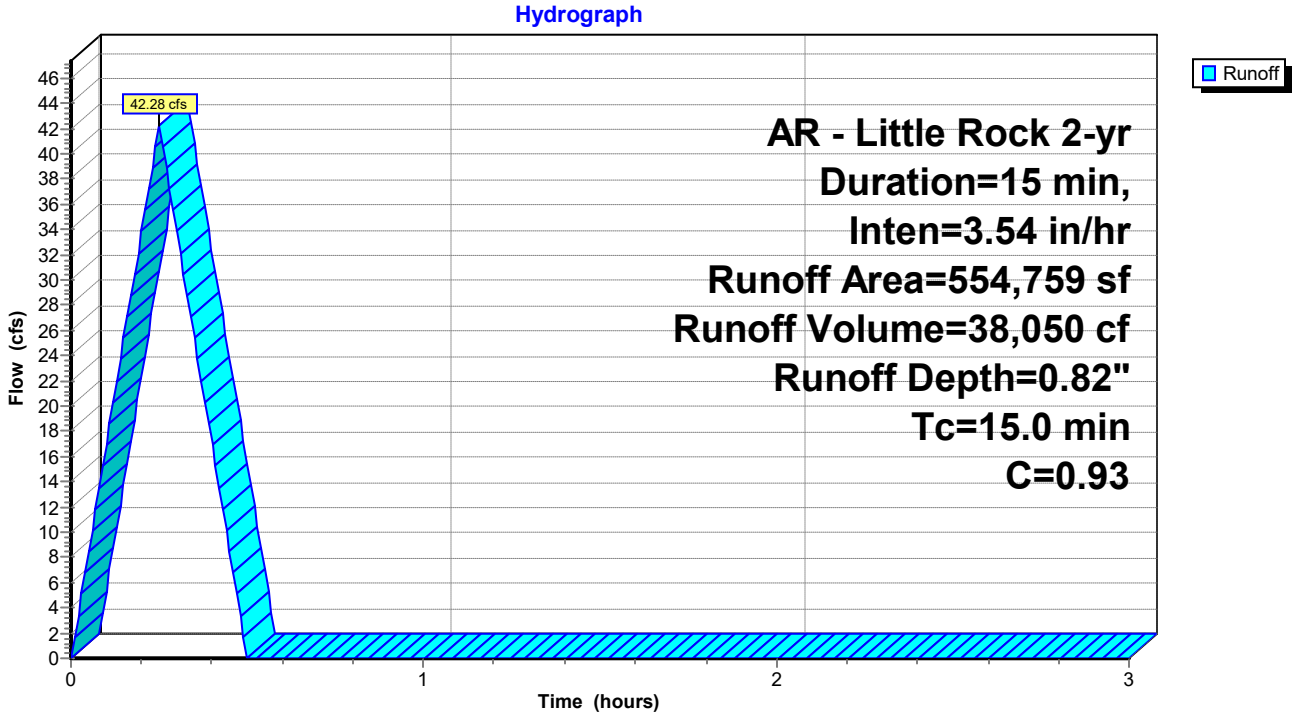
Runoff = 42.28 cfs @ 0.25 hrs, Volume= 38,050 cf, Depth= 0.82"
Routed to Pond 1P : Regional Detention Basin

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=15 min, Inten=3.54 in/hr

Area (sf)	C	Description
443,807	0.98	
110,952	0.74	
554,759	0.93	Weighted Average
110,952		20.00% Pervious Area
443,807		80.00% Impervious Area

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

Subcatchment DB-B3: Drainage Basin B3



Summary for Subcatchment DB-B4: Drainage Basin B4

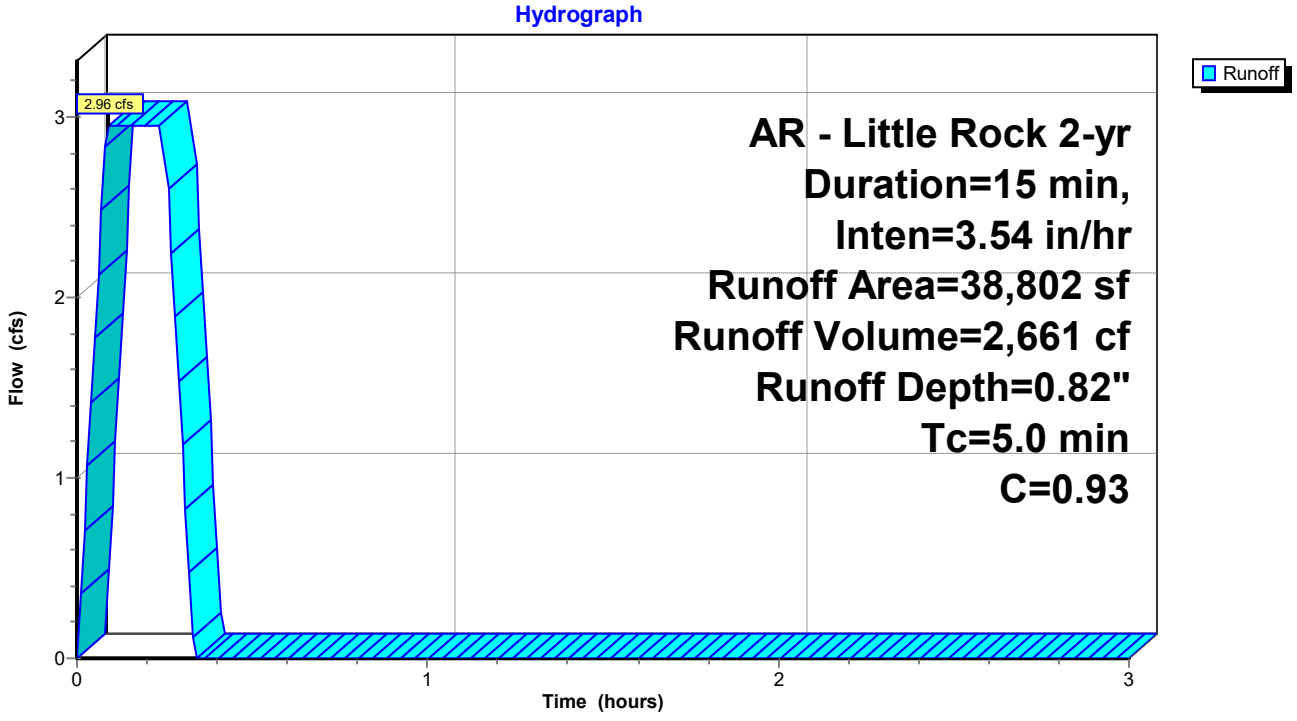
Runoff = 2.96 cfs @ 0.09 hrs, Volume= 2,661 cf, Depth= 0.82"
Routed to Link Post : Post Development

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=15 min, Inten=3.54 in/hr

Area (sf)	C	Description
31,042	0.98	
7,760	0.74	
38,802	0.93	Weighted Average
7,760		20.00% Pervious Area
31,042		80.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, 15**

Subcatchment DB-B4: Drainage Basin B4



Summary for Pond 1P: Regional Detention Basin

Inflow Area = 794,755 sf, 83.30% Impervious, Inflow Depth = 0.83" for 2-yr event
Inflow = 61.22 cfs @ 0.25 hrs, Volume= 54,993 cf
Outflow = 22.83 cfs @ 0.37 hrs, Volume= 51,485 cf, Atten= 63%, Lag= 7.0 min
Primary = 22.83 cfs @ 0.37 hrs, Volume= 51,485 cf
Routed to Link Post : Post Development
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Link Post : Post Development

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 385.28' @ 0.37 hrs Storage= 33,530 cf

Plug-Flow detention time= 27.7 min calculated for 51,314 cf (93% of inflow)
Center-of-Mass det. time= 27.3 min (40.8 - 13.5)

Volume	Invert	Avail.Storage	Storage Description
#1	382.00'	64,856 cf	**Custom Stage Data** Listed below

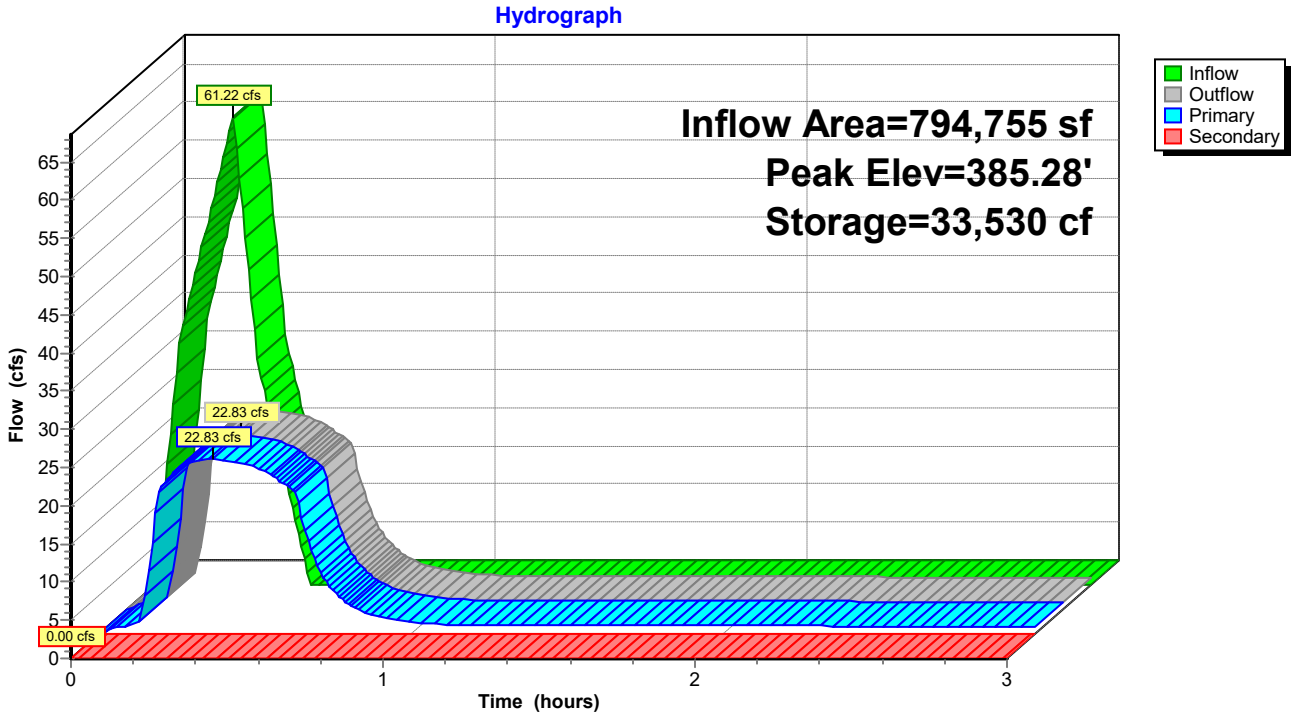
Elevation (feet)	Cum.Store (cubic-feet)
382.00	0
383.00	1,686
384.00	11,045
385.00	25,746
386.00	53,764
387.00	64,856

Device	Routing	Invert	Outlet Devices
#1	Primary	382.00'	**24.0" Round RCP_Round 24"** L= 20.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 382.00' / 381.00' S= 0.0500 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 3.14 sf
#2	Secondary	386.50'	**15.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#3	Device 1	384.00'	**15.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	382.00'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

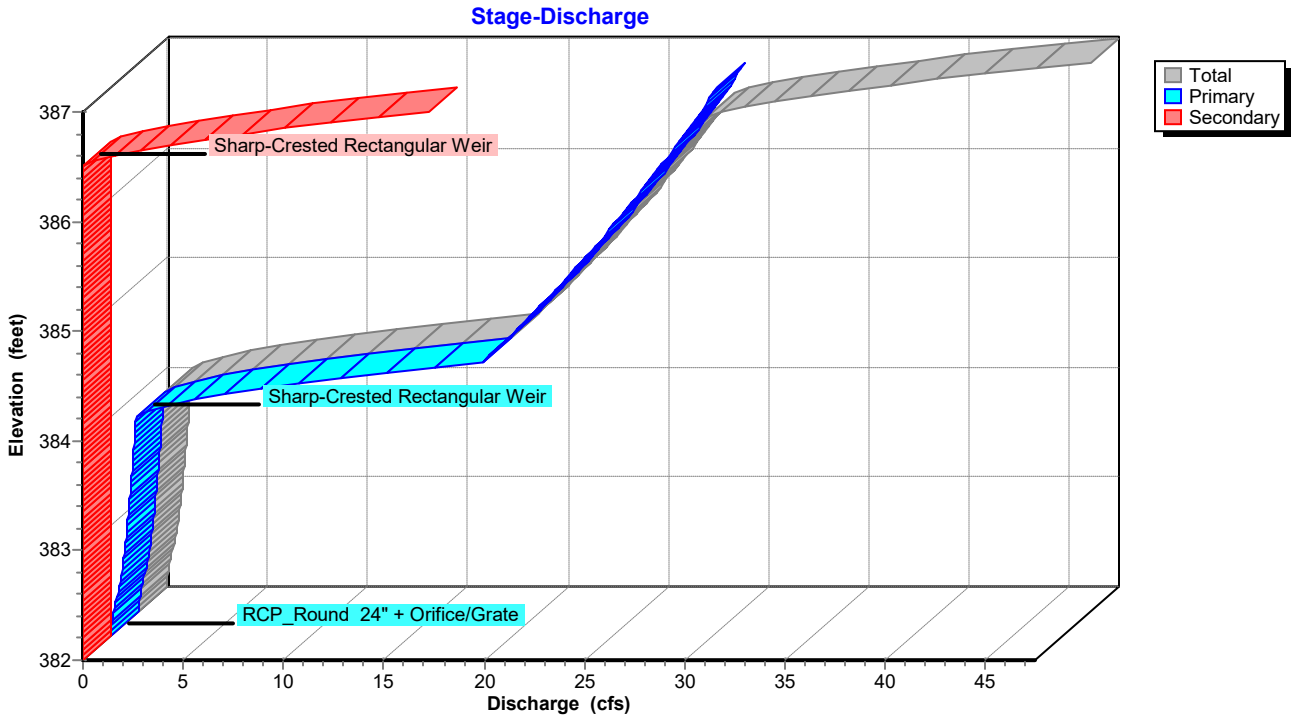
Primary OutFlow Max=22.83 cfs @ 0.37 hrs HW=385.28' (Free Discharge)
└**1=RCP_Round 24"** (Inlet Controls 22.83 cfs @ 7.27 fps)
├**3=Sharp-Crested Rectangular Weir** (Passes < 69.62 cfs potential flow)
└**4=Orifice/Grate** (Passes < 1.65 cfs potential flow)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=382.00' (Free Discharge)
└**2=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1P: Regional Detention Basin



Pond 1P: Regional Detention Basin



Stage-Area-Storage for Pond 1P: Regional Detention Basin

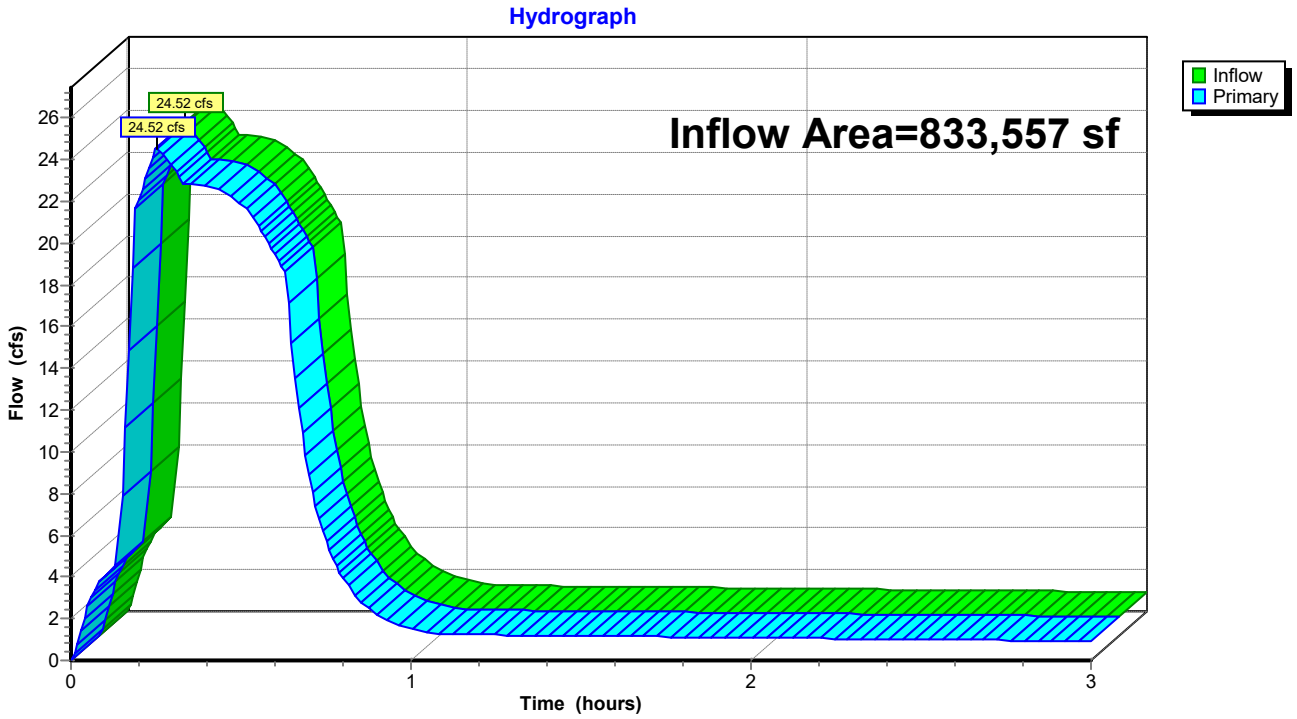
Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
382.00	0	384.60	19,866
382.05	84	384.65	20,601
382.10	169	384.70	21,336
382.15	253	384.75	22,071
382.20	337	384.80	22,806
382.25	422	384.85	23,541
382.30	506	384.90	24,276
382.35	590	384.95	25,011
382.40	674	385.00	25,746
382.45	759	385.05	27,147
382.50	843	385.10	28,548
382.55	927	385.15	29,949
382.60	1,012	385.20	31,350
382.65	1,096	385.25	32,751
382.70	1,180	385.30	34,151
382.75	1,265	385.35	35,552
382.80	1,349	385.40	36,953
382.85	1,433	385.45	38,354
382.90	1,517	385.50	39,755
382.95	1,602	385.55	41,156
383.00	1,686	385.60	42,557
383.05	2,154	385.65	43,958
383.10	2,622	385.70	45,359
383.15	3,090	385.75	46,760
383.20	3,558	385.80	48,160
383.25	4,026	385.85	49,561
383.30	4,494	385.90	50,962
383.35	4,962	385.95	52,363
383.40	5,430	386.00	53,764
383.45	5,898	386.05	54,319
383.50	6,366	386.10	54,873
383.55	6,833	386.15	55,428
383.60	7,301	386.20	55,982
383.65	7,769	386.25	56,537
383.70	8,237	386.30	57,092
383.75	8,705	386.35	57,646
383.80	9,173	386.40	58,201
383.85	9,641	386.45	58,755
383.90	10,109	386.50	59,310
383.95	10,577	386.55	59,865
384.00	11,045	386.60	60,419
384.05	11,780	386.65	60,974
384.10	12,515	386.70	61,528
384.15	13,250	386.75	62,083
384.20	13,985	386.80	62,638
384.25	14,720	386.85	63,192
384.30	15,455	386.90	63,747
384.35	16,190	386.95	64,301
384.40	16,925	387.00	**64,856**
384.45	17,660		
384.50	18,396		
384.55	19,131		

Summary for Link Post: Post Development

Inflow Area = 833,557 sf, 83.14% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 24.52 cfs @ 0.25 hrs, Volume= 54,147 cf
Primary = 24.52 cfs @ 0.25 hrs, Volume= 54,147 cf, Atten= 0%, Lag= 0.0 min

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

Link Post: Post Development



Summary for Subcatchment DB-B1: Drainage Basin B1

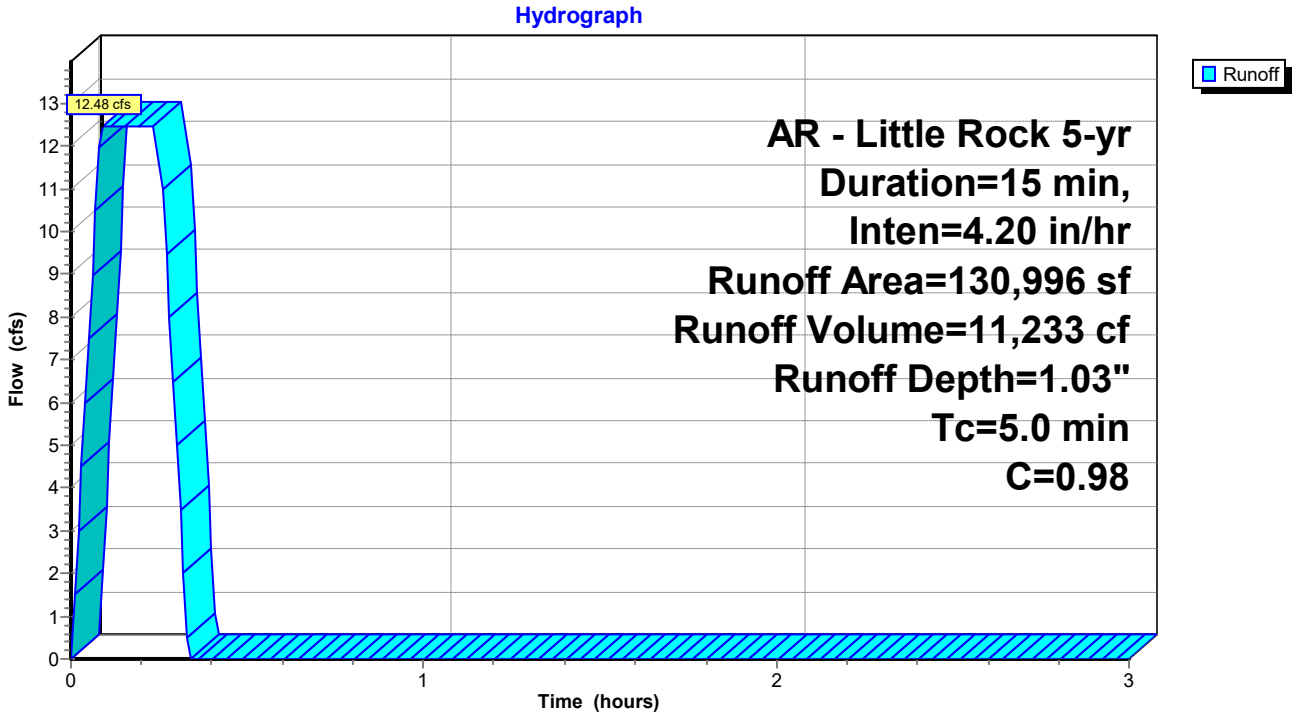
Runoff = 12.48 cfs @ 0.09 hrs, Volume= 11,233 cf, Depth= 1.03"
Routed to Pond 1P : Regional Detention Basin

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=15 min, Inten=4.20 in/hr

Area (sf)	C	Description
130,996	0.98	
130,996		100.00% Impervious Area

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

Subcatchment DB-B1: Drainage Basin B1



Summary for Subcatchment DB-B2: Drainage Basin B2

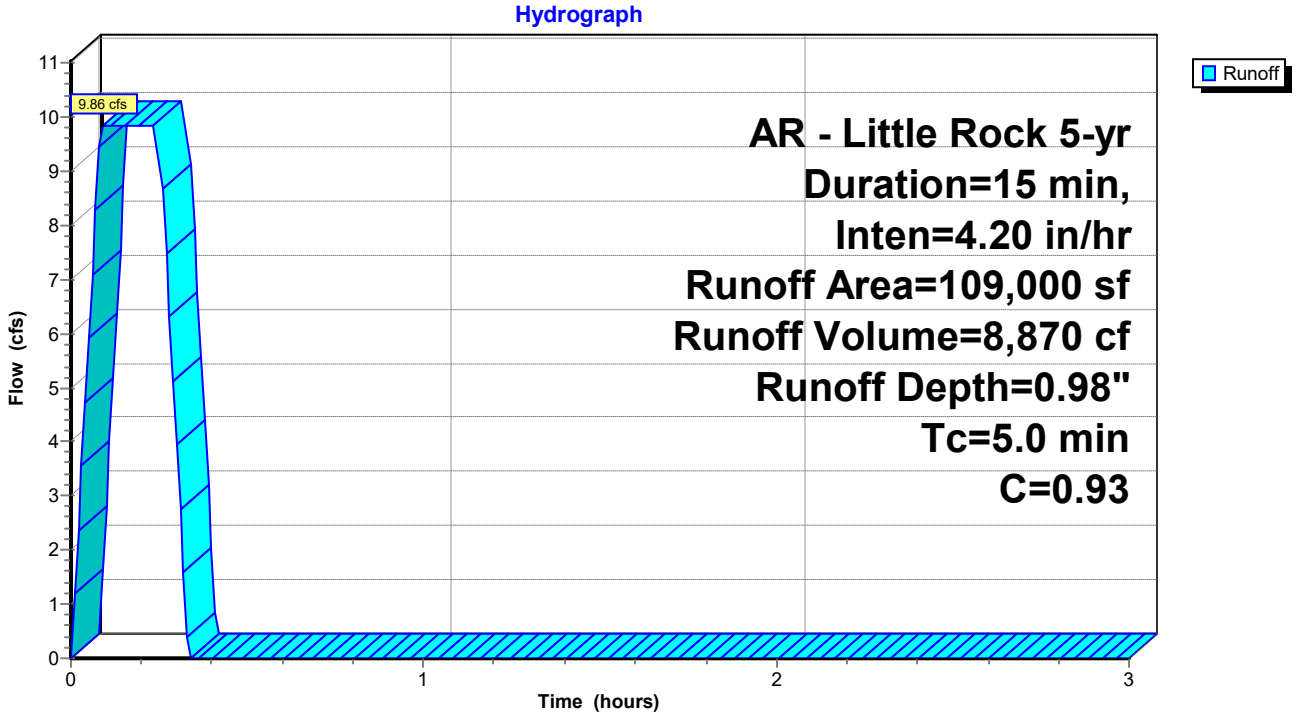
Runoff = 9.86 cfs @ 0.09 hrs, Volume= 8,870 cf, Depth= 0.98"
Routed to Pond 1P : Regional Detention Basin

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=15 min, Inten=4.20 in/hr

Area (sf)	C	Description
87,200	0.98	
21,800	0.74	
109,000	0.93	Weighted Average
21,800		20.00% Pervious Area
87,200		80.00% Impervious Area

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

Subcatchment DB-B2: Drainage Basin B2



Summary for Subcatchment DB-B3: Drainage Basin B3

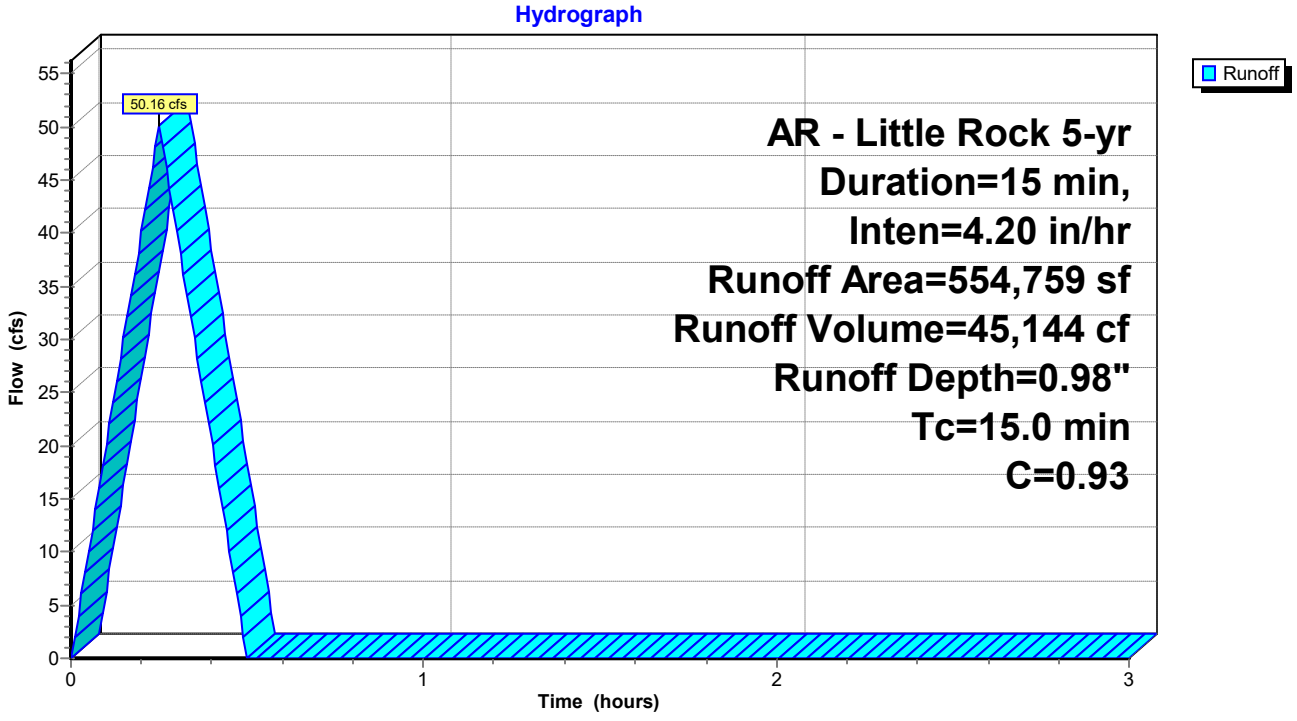
Runoff = 50.16 cfs @ 0.25 hrs, Volume= 45,144 cf, Depth= 0.98"
Routed to Pond 1P : Regional Detention Basin

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=15 min, Inten=4.20 in/hr

Area (sf)	C	Description
443,807	0.98	
110,952	0.74	
554,759	0.93	Weighted Average
110,952		20.00% Pervious Area
443,807		80.00% Impervious Area

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

Subcatchment DB-B3: Drainage Basin B3



Summary for Subcatchment DB-B4: Drainage Basin B4

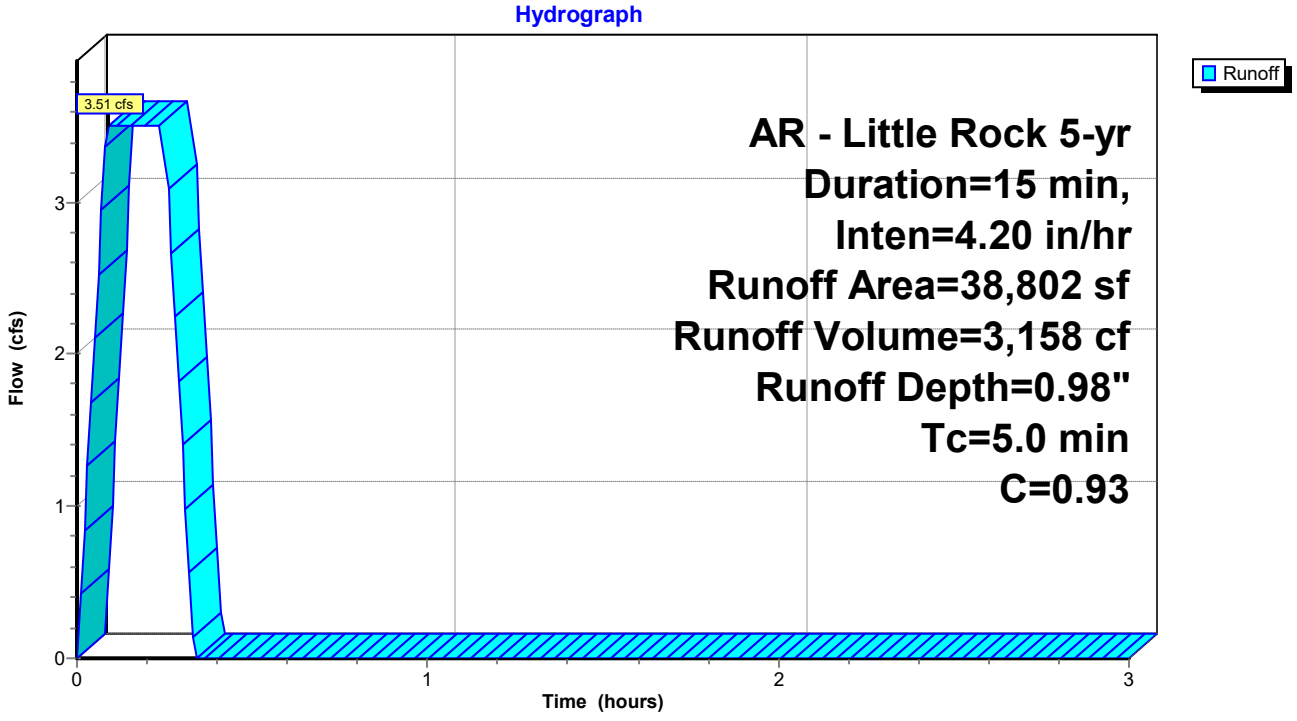
Runoff = 3.51 cfs @ 0.09 hrs, Volume= 3,158 cf, Depth= 0.98"
Routed to Link Post : Post Development

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=15 min, Inten=4.20 in/hr

Area (sf)	C	Description
31,042	0.98	
7,760	0.74	
38,802	0.93	Weighted Average
7,760		20.00% Pervious Area
31,042		80.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, 15**

Subcatchment DB-B4: Drainage Basin B4



Summary for Pond 1P: Regional Detention Basin

Inflow Area = 794,755 sf, 83.30% Impervious, Inflow Depth = 0.99" for 5-yr event
Inflow = 72.63 cfs @ 0.25 hrs, Volume= 65,246 cf
Outflow = 24.13 cfs @ 0.38 hrs, Volume= 61,419 cf, Atten= 67%, Lag= 7.9 min
Primary = 24.13 cfs @ 0.38 hrs, Volume= 61,419 cf
Routed to Link Post : Post Development
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Link Post : Post Development

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 385.54' @ 0.38 hrs Storage= 41,013 cf

Plug-Flow detention time= 27.2 min calculated for 61,215 cf (94% of inflow)
Center-of-Mass det. time= 26.9 min (40.3 - 13.5)

Volume	Invert	Avail.Storage	Storage Description
#1	382.00'	64,856 cf	**Custom Stage Data** Listed below

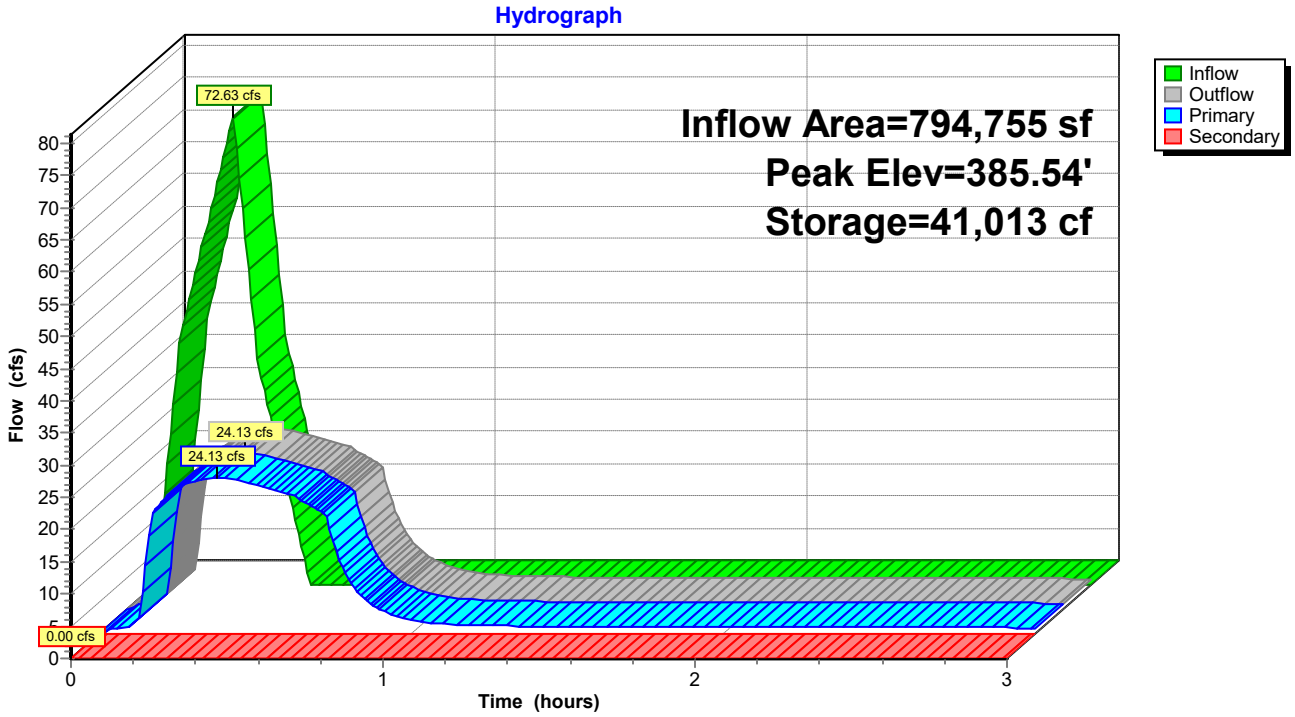
Elevation (feet)	Cum.Store (cubic-feet)
382.00	0
383.00	1,686
384.00	11,045
385.00	25,746
386.00	53,764
387.00	64,856

Device	Routing	Invert	Outlet Devices
#1	Primary	382.00'	**24.0" Round RCP_Round 24"** L= 20.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 382.00' / 381.00' S= 0.0500 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 3.14 sf
#2	Secondary	386.50'	**15.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#3	Device 1	384.00'	**15.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	382.00'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

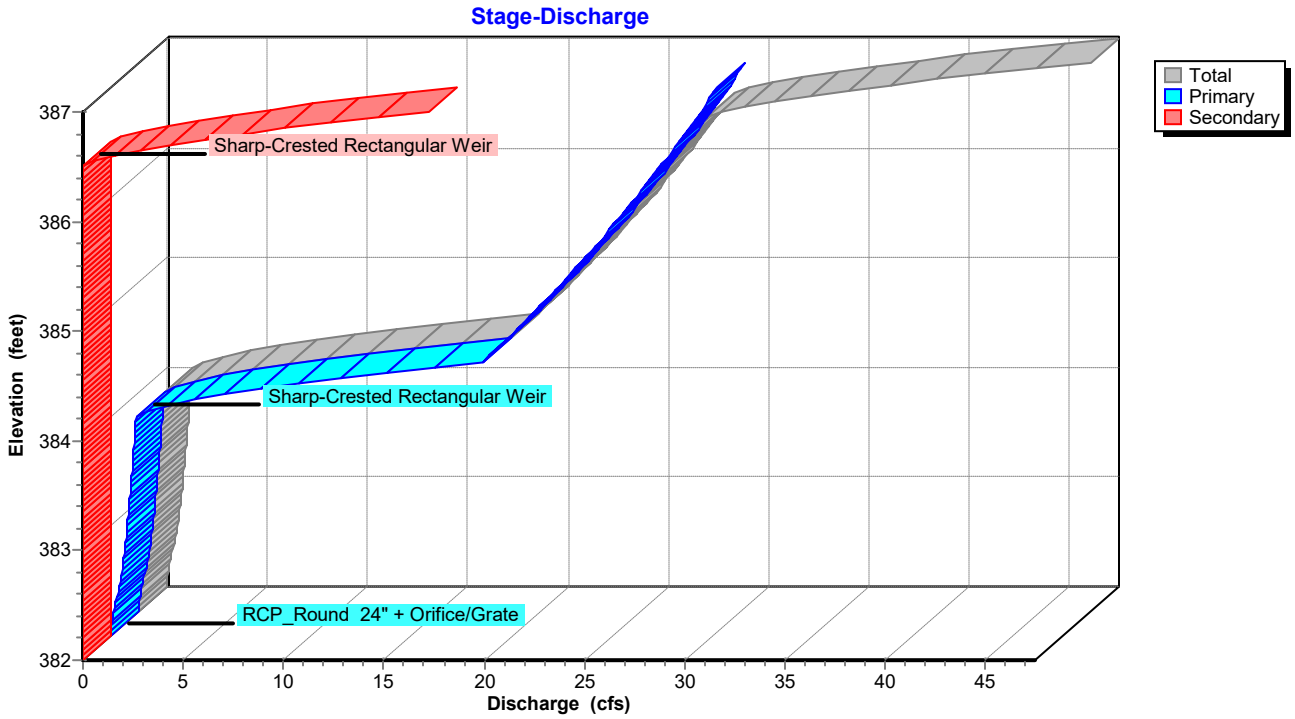
Primary OutFlow Max=24.13 cfs @ 0.38 hrs HW=385.54' (Free Discharge)
└**1=RCP_Round 24"** (Inlet Controls 24.13 cfs @ 7.68 fps)
└**3=Sharp-Crested Rectangular Weir** (Passes < 92.24 cfs potential flow)
└**4=Orifice/Grate** (Passes < 1.72 cfs potential flow)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=382.00' (Free Discharge)
└**2=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1P: Regional Detention Basin



Pond 1P: Regional Detention Basin



Stage-Area-Storage for Pond 1P: Regional Detention Basin

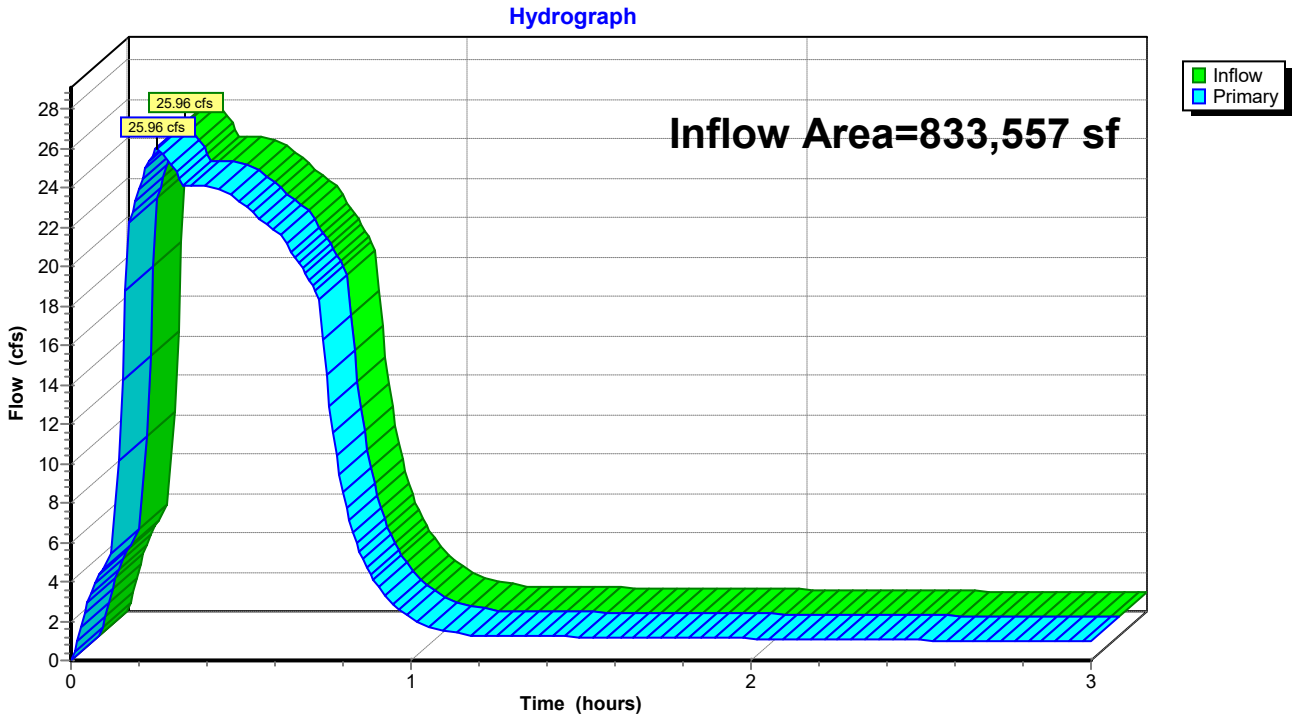
Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
382.00	0	384.60	19,866
382.05	84	384.65	20,601
382.10	169	384.70	21,336
382.15	253	384.75	22,071
382.20	337	384.80	22,806
382.25	422	384.85	23,541
382.30	506	384.90	24,276
382.35	590	384.95	25,011
382.40	674	385.00	25,746
382.45	759	385.05	27,147
382.50	843	385.10	28,548
382.55	927	385.15	29,949
382.60	1,012	385.20	31,350
382.65	1,096	385.25	32,751
382.70	1,180	385.30	34,151
382.75	1,265	385.35	35,552
382.80	1,349	385.40	36,953
382.85	1,433	385.45	38,354
382.90	1,517	385.50	39,755
382.95	1,602	385.55	41,156
383.00	1,686	385.60	42,557
383.05	2,154	385.65	43,958
383.10	2,622	385.70	45,359
383.15	3,090	385.75	46,760
383.20	3,558	385.80	48,160
383.25	4,026	385.85	49,561
383.30	4,494	385.90	50,962
383.35	4,962	385.95	52,363
383.40	5,430	386.00	53,764
383.45	5,898	386.05	54,319
383.50	6,366	386.10	54,873
383.55	6,833	386.15	55,428
383.60	7,301	386.20	55,982
383.65	7,769	386.25	56,537
383.70	8,237	386.30	57,092
383.75	8,705	386.35	57,646
383.80	9,173	386.40	58,201
383.85	9,641	386.45	58,755
383.90	10,109	386.50	59,310
383.95	10,577	386.55	59,865
384.00	11,045	386.60	60,419
384.05	11,780	386.65	60,974
384.10	12,515	386.70	61,528
384.15	13,250	386.75	62,083
384.20	13,985	386.80	62,638
384.25	14,720	386.85	63,192
384.30	15,455	386.90	63,747
384.35	16,190	386.95	64,301
384.40	16,925	387.00	**64,856**
384.45	17,660		
384.50	18,396		
384.55	19,131		

Summary for Link Post: Post Development

Inflow Area = 833,557 sf, 83.14% Impervious, Inflow Depth > 0.93" for 5-yr event
Inflow = 25.96 cfs @ 0.25 hrs, Volume= 64,577 cf
Primary = 25.96 cfs @ 0.25 hrs, Volume= 64,577 cf, Atten= 0%, Lag= 0.0 min

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

Link Post: Post Development



Summary for Subcatchment DB-B1: Drainage Basin B1

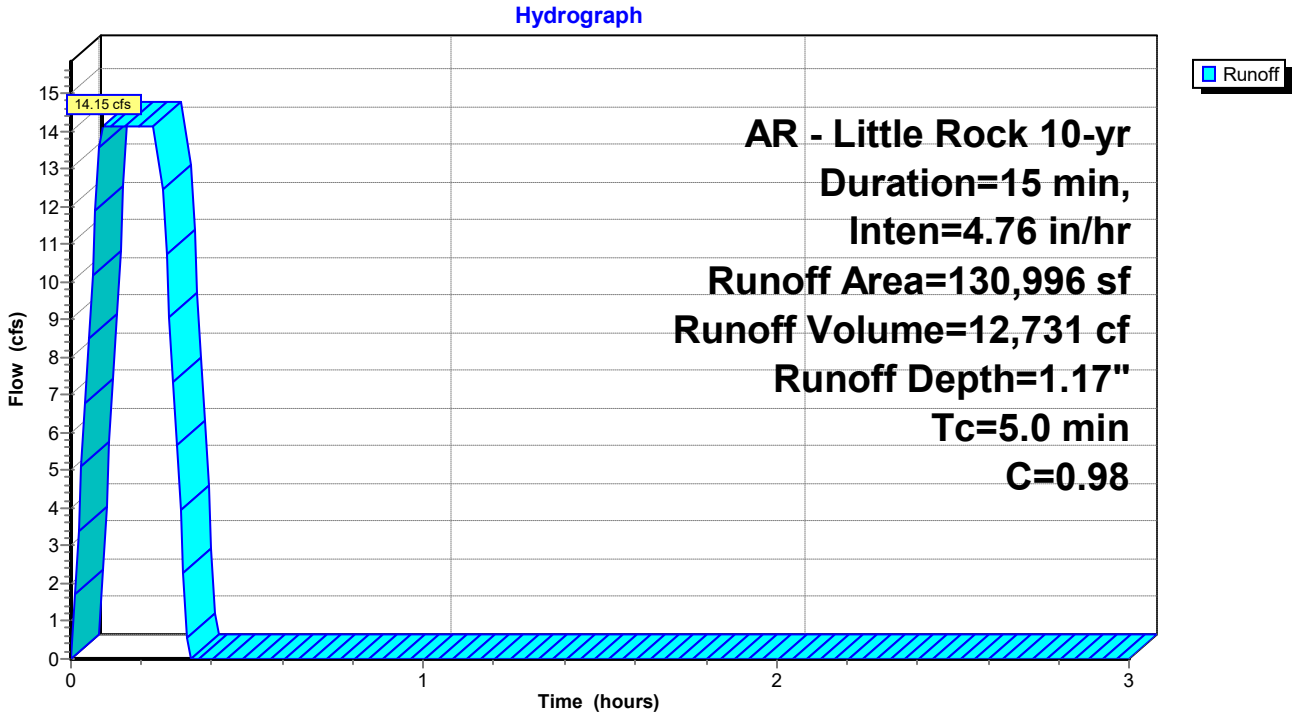
Runoff = 14.15 cfs @ 0.09 hrs, Volume= 12,731 cf, Depth= 1.17"
Routed to Pond 1P : Regional Detention Basin

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=15 min, Inten=4.76 in/hr

Area (sf)	C	Description
130,996	0.98	
130,996		100.00% Impervious Area

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

Subcatchment DB-B1: Drainage Basin B1



Summary for Subcatchment DB-B2: Drainage Basin B2

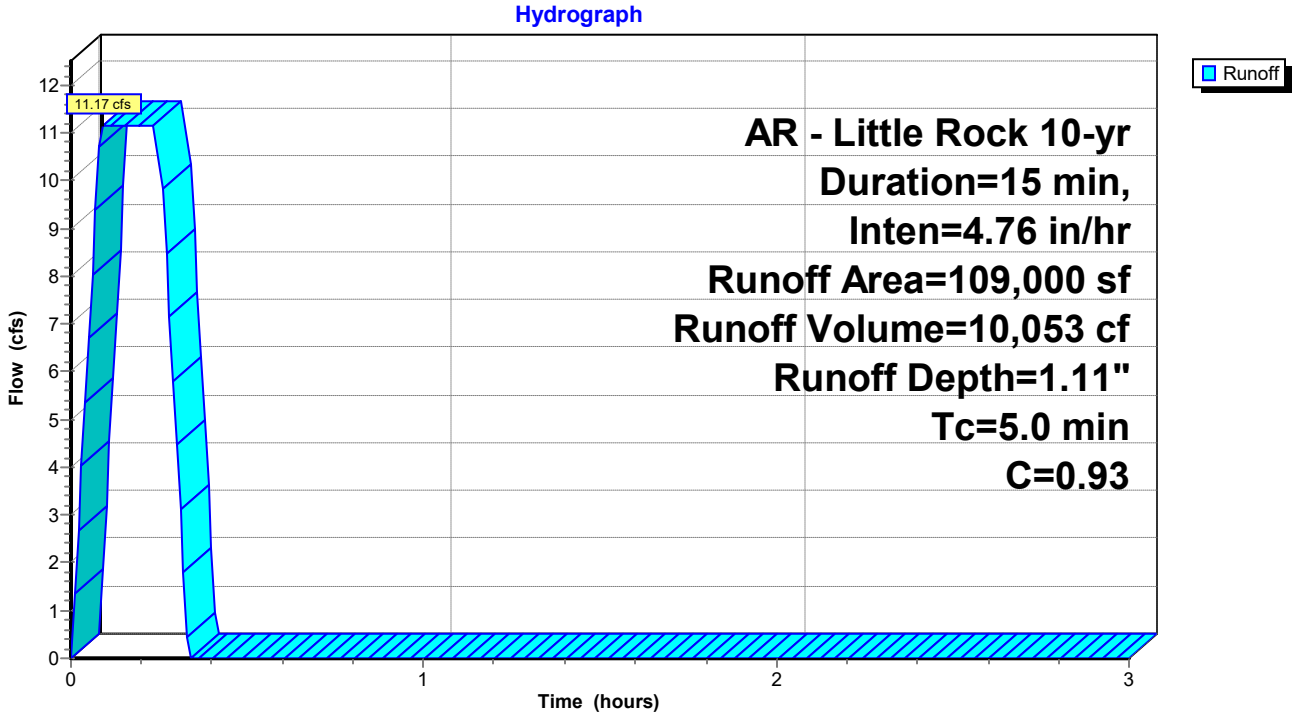
Runoff = 11.17 cfs @ 0.09 hrs, Volume= 10,053 cf, Depth= 1.11"
Routed to Pond 1P : Regional Detention Basin

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=15 min, Inten=4.76 in/hr

Area (sf)	C	Description
87,200	0.98	
21,800	0.74	
109,000	0.93	Weighted Average
21,800		20.00% Pervious Area
87,200		80.00% Impervious Area

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

Subcatchment DB-B2: Drainage Basin B2



Summary for Subcatchment DB-B3: Drainage Basin B3

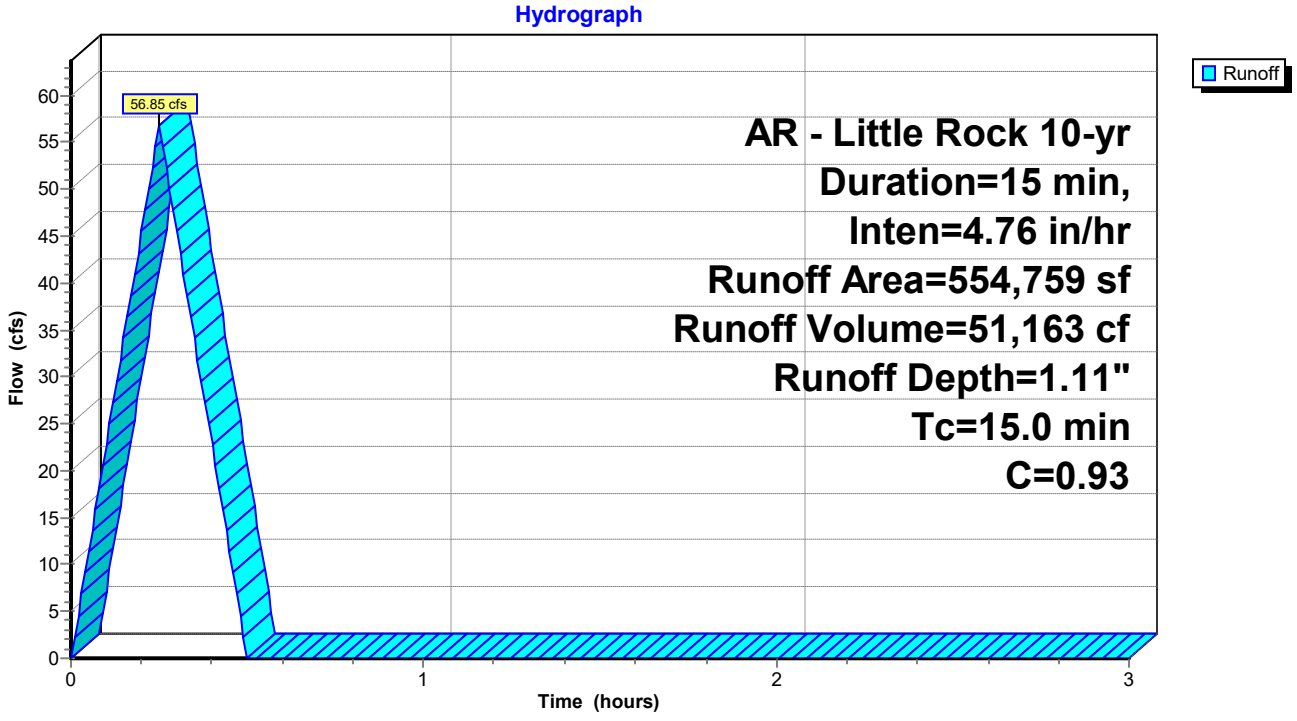
Runoff = 56.85 cfs @ 0.25 hrs, Volume= 51,163 cf, Depth= 1.11"
Routed to Pond 1P : Regional Detention Basin

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=15 min, Inten=4.76 in/hr

Area (sf)	C	Description
443,807	0.98	
110,952	0.74	
554,759	0.93	Weighted Average
110,952		20.00% Pervious Area
443,807		80.00% Impervious Area

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

Subcatchment DB-B3: Drainage Basin B3



Summary for Subcatchment DB-B4: Drainage Basin B4

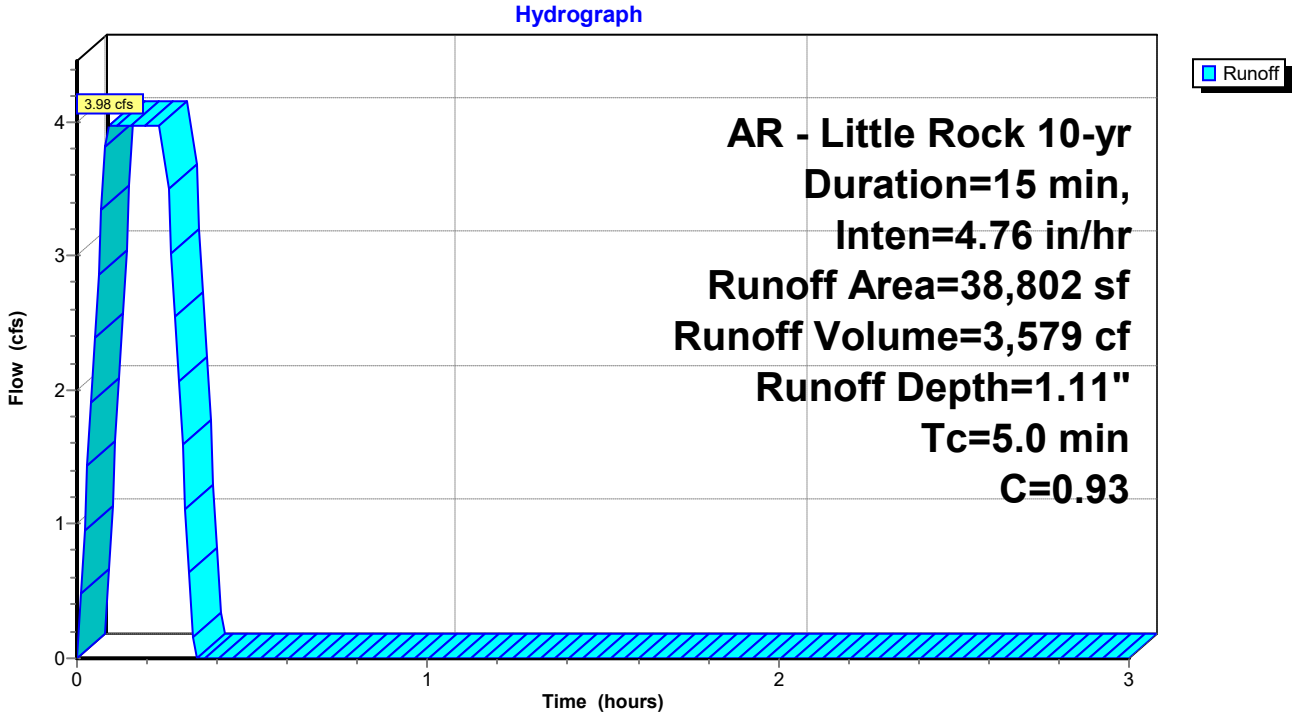
Runoff = 3.98 cfs @ 0.09 hrs, Volume= 3,579 cf, Depth= 1.11"
Routed to Link Post : Post Development

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=15 min, Inten=4.76 in/hr

Area (sf)	C	Description
31,042	0.98	
7,760	0.74	
38,802	0.93	Weighted Average
7,760		20.00% Pervious Area
31,042		80.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, 15**

Subcatchment DB-B4: Drainage Basin B4



Summary for Pond 1P: Regional Detention Basin

Inflow Area = 794,755 sf, 83.30% Impervious, Inflow Depth = 1.12" for 10-yr event
Inflow = 82.31 cfs @ 0.25 hrs, Volume= 73,946 cf
Outflow = 25.23 cfs @ 0.39 hrs, Volume= 69,849 cf, Atten= 69%, Lag= 8.5 min
Primary = 25.23 cfs @ 0.39 hrs, Volume= 69,849 cf
Routed to Link Post : Post Development
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Link Post : Post Development

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 385.78' @ 0.39 hrs Storage= 47,655 cf

Plug-Flow detention time= 27.4 min calculated for 69,617 cf (94% of inflow)
Center-of-Mass det. time= 27.1 min (40.5 - 13.5)

Volume	Invert	Avail.Storage	Storage Description
#1	382.00'	64,856 cf	**Custom Stage Data** Listed below

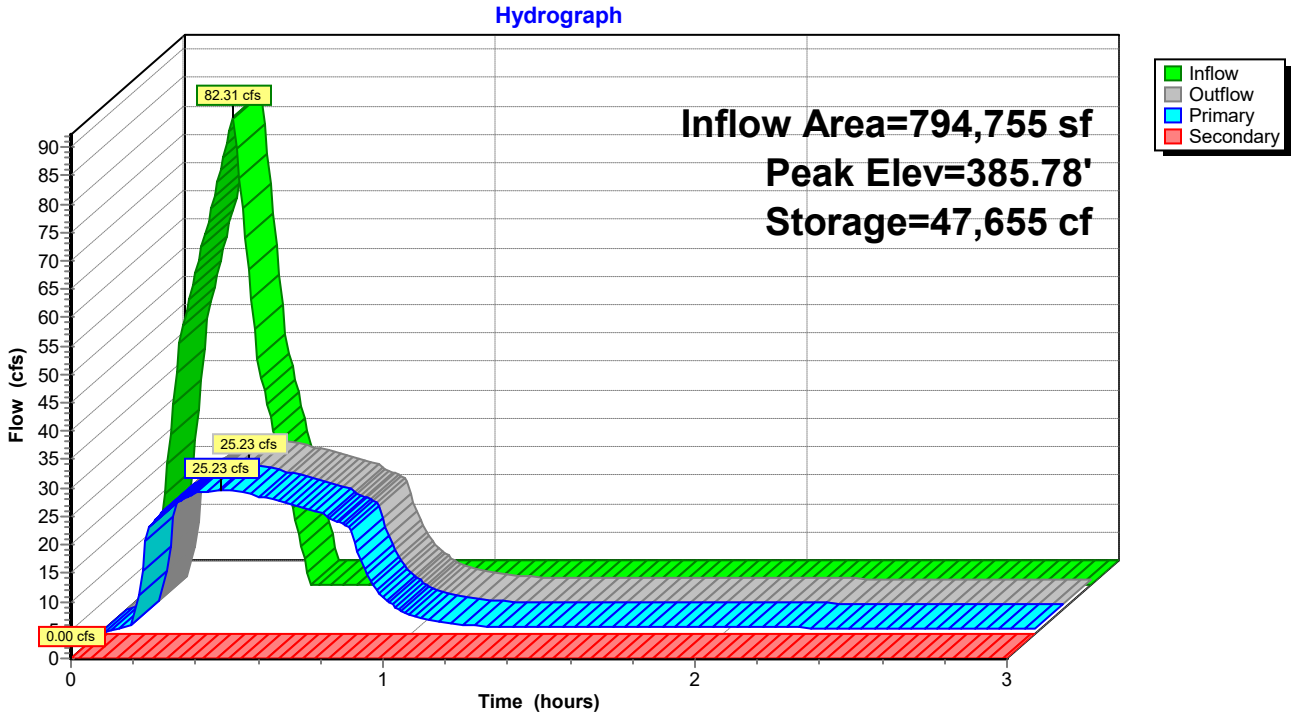
Elevation (feet)	Cum.Store (cubic-feet)
382.00	0
383.00	1,686
384.00	11,045
385.00	25,746
386.00	53,764
387.00	64,856

Device	Routing	Invert	Outlet Devices
#1	Primary	382.00'	**24.0" Round RCP_Round 24"** L= 20.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 382.00' / 381.00' S= 0.0500 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 3.14 sf
#2	Secondary	386.50'	**15.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#3	Device 1	384.00'	**15.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	382.00'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

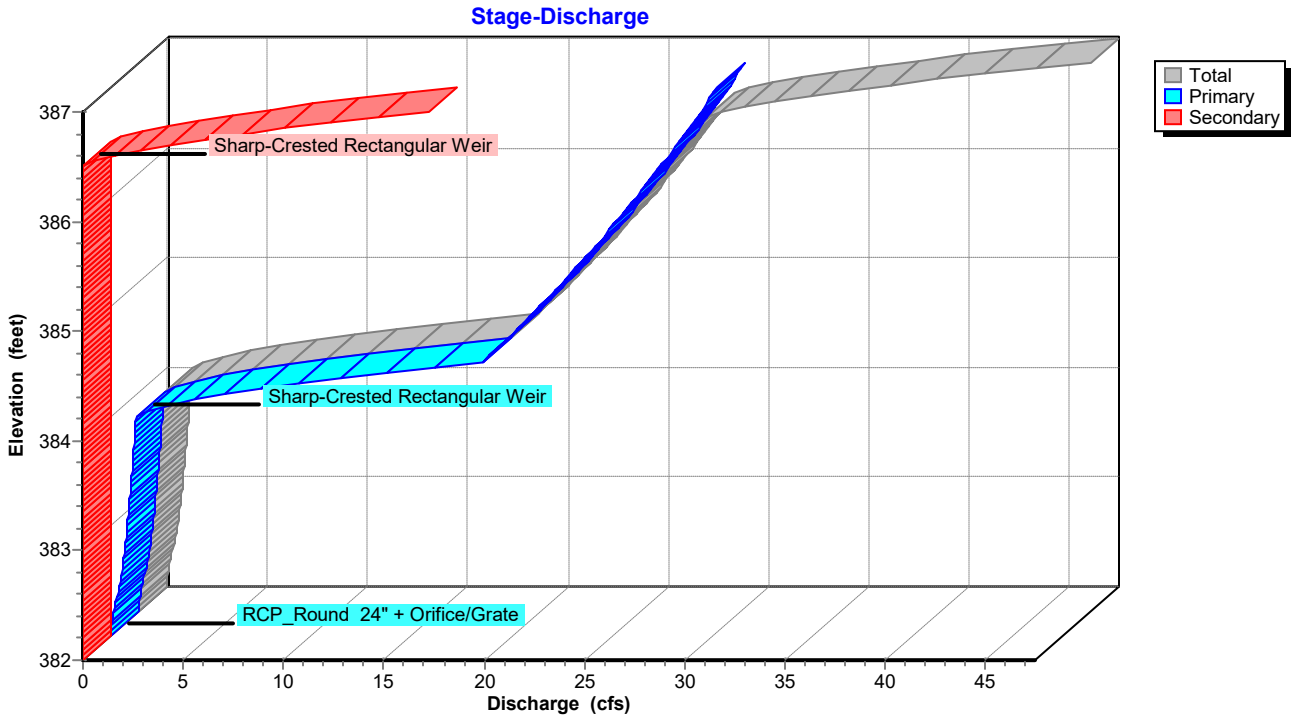
Primary OutFlow Max=25.23 cfs @ 0.39 hrs HW=385.78' (Free Discharge)
└**1=RCP_Round 24"** (Inlet Controls 25.23 cfs @ 8.03 fps)
├**3=Sharp-Crested Rectangular Weir** (Passes < 113.89 cfs potential flow)
└**4=Orifice/Grate** (Passes < 1.78 cfs potential flow)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=382.00' (Free Discharge)
└**2=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1P: Regional Detention Basin



Pond 1P: Regional Detention Basin



Stage-Area-Storage for Pond 1P: Regional Detention Basin

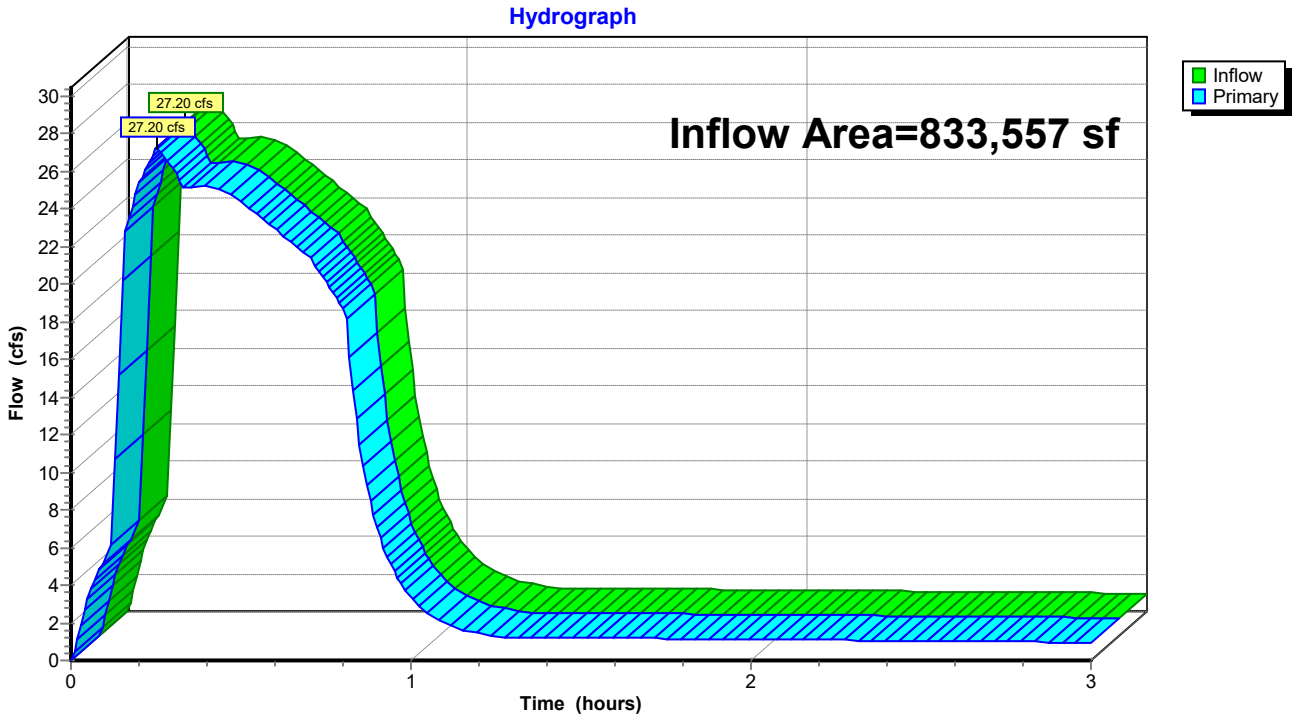
Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
382.00	0	384.60	19,866
382.05	84	384.65	20,601
382.10	169	384.70	21,336
382.15	253	384.75	22,071
382.20	337	384.80	22,806
382.25	422	384.85	23,541
382.30	506	384.90	24,276
382.35	590	384.95	25,011
382.40	674	385.00	25,746
382.45	759	385.05	27,147
382.50	843	385.10	28,548
382.55	927	385.15	29,949
382.60	1,012	385.20	31,350
382.65	1,096	385.25	32,751
382.70	1,180	385.30	34,151
382.75	1,265	385.35	35,552
382.80	1,349	385.40	36,953
382.85	1,433	385.45	38,354
382.90	1,517	385.50	39,755
382.95	1,602	385.55	41,156
383.00	1,686	385.60	42,557
383.05	2,154	385.65	43,958
383.10	2,622	385.70	45,359
383.15	3,090	385.75	46,760
383.20	3,558	385.80	48,160
383.25	4,026	385.85	49,561
383.30	4,494	385.90	50,962
383.35	4,962	385.95	52,363
383.40	5,430	386.00	53,764
383.45	5,898	386.05	54,319
383.50	6,366	386.10	54,873
383.55	6,833	386.15	55,428
383.60	7,301	386.20	55,982
383.65	7,769	386.25	56,537
383.70	8,237	386.30	57,092
383.75	8,705	386.35	57,646
383.80	9,173	386.40	58,201
383.85	9,641	386.45	58,755
383.90	10,109	386.50	59,310
383.95	10,577	386.55	59,865
384.00	11,045	386.60	60,419
384.05	11,780	386.65	60,974
384.10	12,515	386.70	61,528
384.15	13,250	386.75	62,083
384.20	13,985	386.80	62,638
384.25	14,720	386.85	63,192
384.30	15,455	386.90	63,747
384.35	16,190	386.95	64,301
384.40	16,925	387.00	**64,856**
384.45	17,660		
384.50	18,396		
384.55	19,131		

Summary for Link Post: Post Development

Inflow Area = 833,557 sf, 83.14% Impervious, Inflow Depth > 1.06" for 10-yr event
Inflow = 27.20 cfs @ 0.25 hrs, Volume= 73,428 cf
Primary = 27.20 cfs @ 0.25 hrs, Volume= 73,428 cf, Atten= 0%, Lag= 0.0 min

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

Link Post: Post Development



Summary for Subcatchment DB-B1: Drainage Basin B1

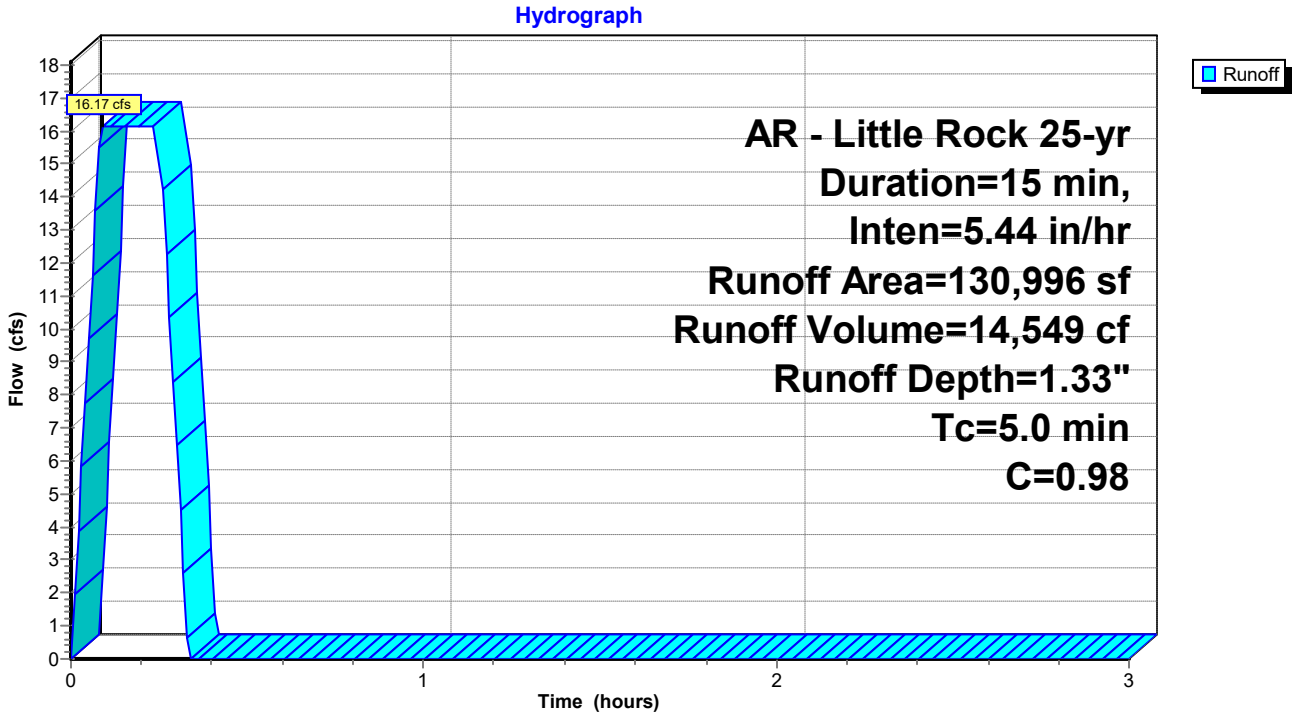
Runoff = 16.17 cfs @ 0.09 hrs, Volume= 14,549 cf, Depth= 1.33"
Routed to Pond 1P : Regional Detention Basin

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=15 min, Inten=5.44 in/hr

Area (sf)	C	Description
130,996	0.98	
130,996		100.00% Impervious Area

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

Subcatchment DB-B1: Drainage Basin B1



Summary for Subcatchment DB-B2: Drainage Basin B2

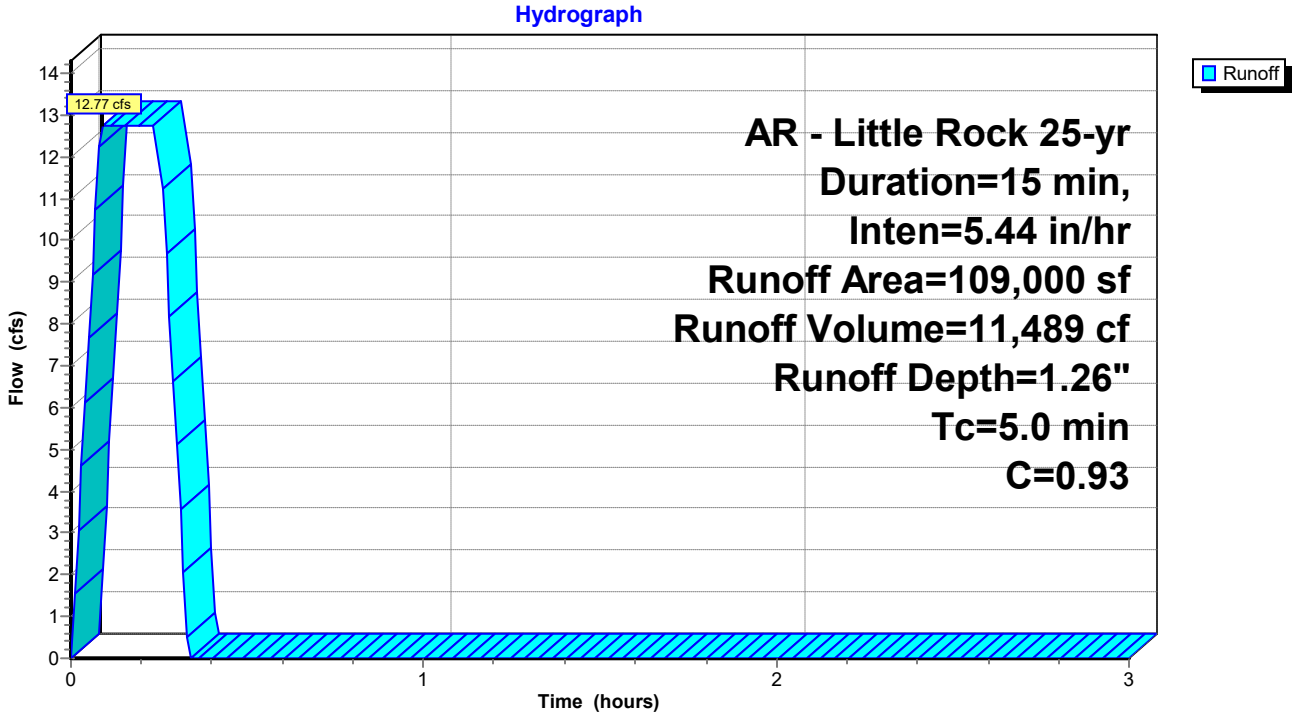
Runoff = 12.77 cfs @ 0.09 hrs, Volume= 11,489 cf, Depth= 1.26"
Routed to Pond 1P : Regional Detention Basin

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=15 min, Inten=5.44 in/hr

Area (sf)	C	Description
87,200	0.98	
21,800	0.74	
109,000	0.93	Weighted Average
21,800		20.00% Pervious Area
87,200		80.00% Impervious Area

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

Subcatchment DB-B2: Drainage Basin B2



Summary for Subcatchment DB-B3: Drainage Basin B3

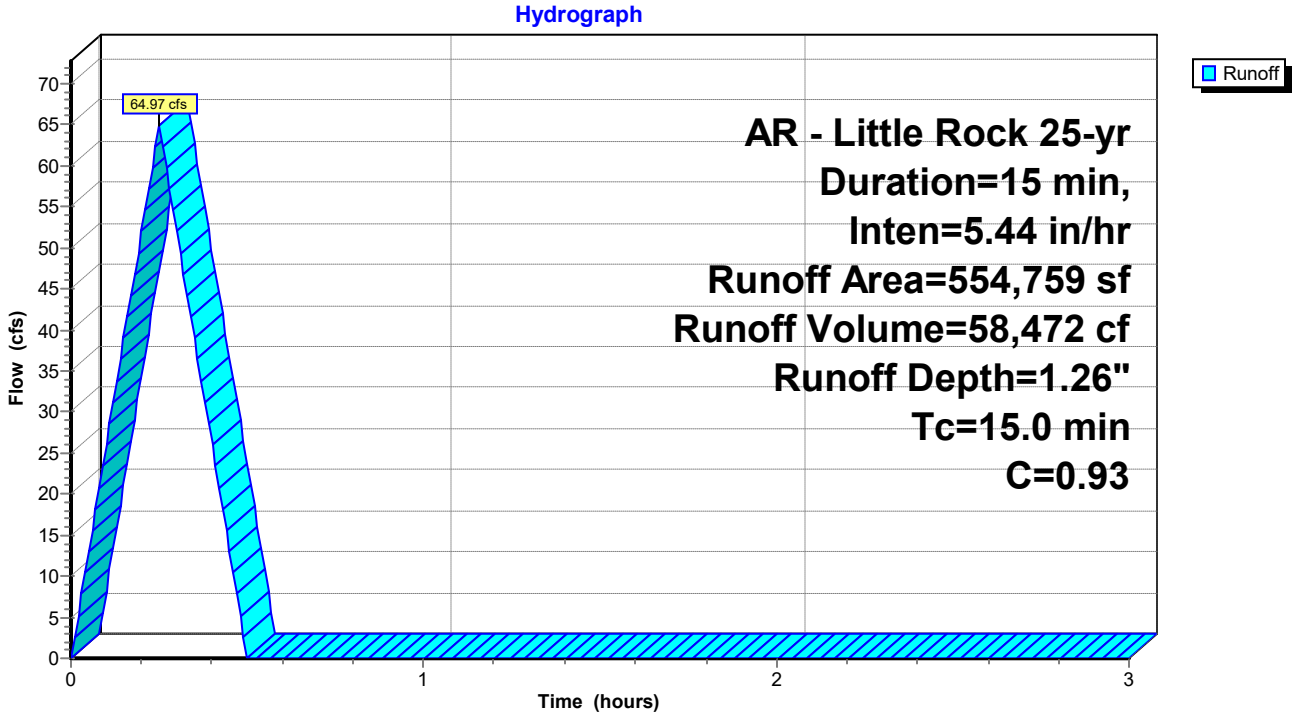
Runoff = 64.97 cfs @ 0.25 hrs, Volume= 58,472 cf, Depth= 1.26"
Routed to Pond 1P : Regional Detention Basin

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=15 min, Inten=5.44 in/hr

Area (sf)	C	Description
443,807	0.98	
110,952	0.74	
554,759	0.93	Weighted Average
110,952		20.00% Pervious Area
443,807		80.00% Impervious Area

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

Subcatchment DB-B3: Drainage Basin B3



Summary for Subcatchment DB-B4: Drainage Basin B4

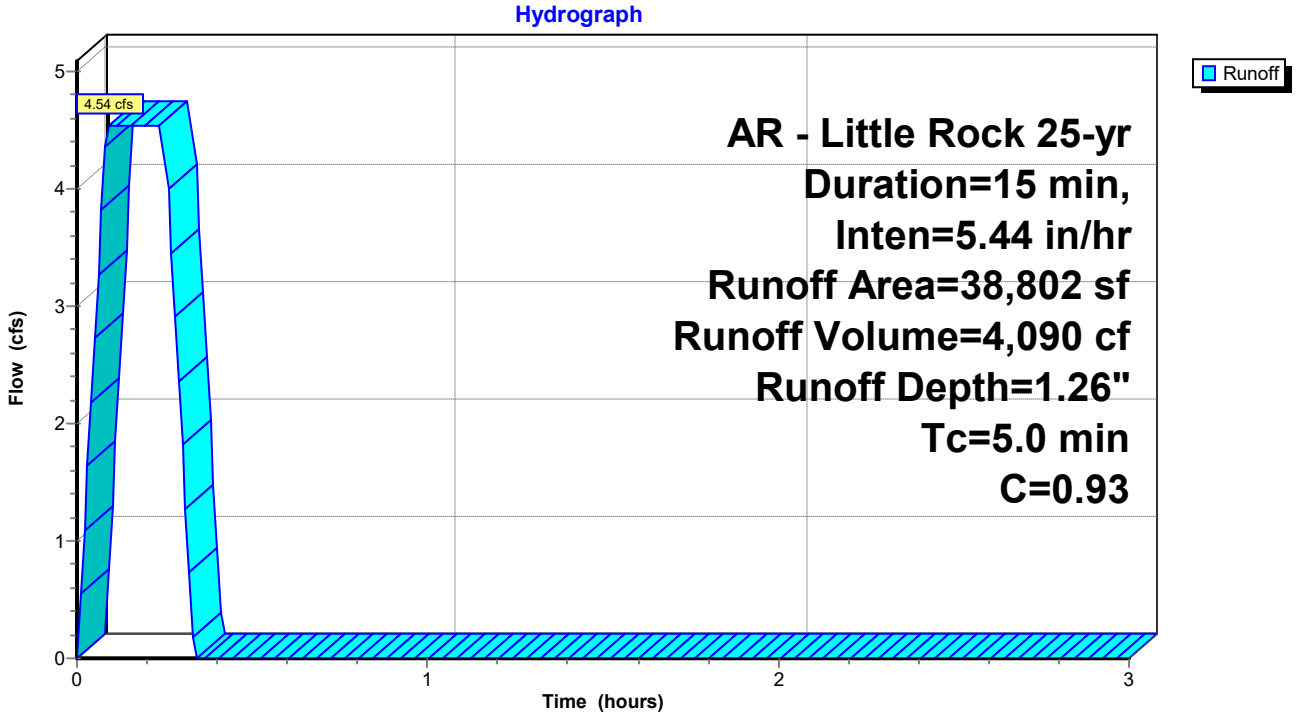
Runoff = 4.54 cfs @ 0.09 hrs, Volume= 4,090 cf, Depth= 1.26"
Routed to Link Post : Post Development

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=15 min, Inten=5.44 in/hr

Area (sf)	C	Description
31,042	0.98	
7,760	0.74	
38,802	0.93	Weighted Average
7,760		20.00% Pervious Area
31,042		80.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, 15**

Subcatchment DB-B4: Drainage Basin B4



Summary for Pond 1P: Regional Detention Basin

Inflow Area = 794,755 sf, 83.30% Impervious, Inflow Depth = 1.28" for 25-yr event
Inflow = 94.07 cfs @ 0.25 hrs, Volume= 84,509 cf
Outflow = 27.02 cfs @ 0.40 hrs, Volume= 80,097 cf, Atten= 71%, Lag= 8.9 min
Primary = 27.02 cfs @ 0.40 hrs, Volume= 80,097 cf
Routed to Link Post : Post Development
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Link Post : Post Development

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 386.19' @ 0.40 hrs Storage= 55,881 cf

Plug-Flow detention time= 28.0 min calculated for 79,831 cf (94% of inflow)
Center-of-Mass det. time= 27.7 min (41.1 - 13.5)

Volume	Invert	Avail.Storage	Storage Description
#1	382.00'	64,856 cf	**Custom Stage Data** Listed below

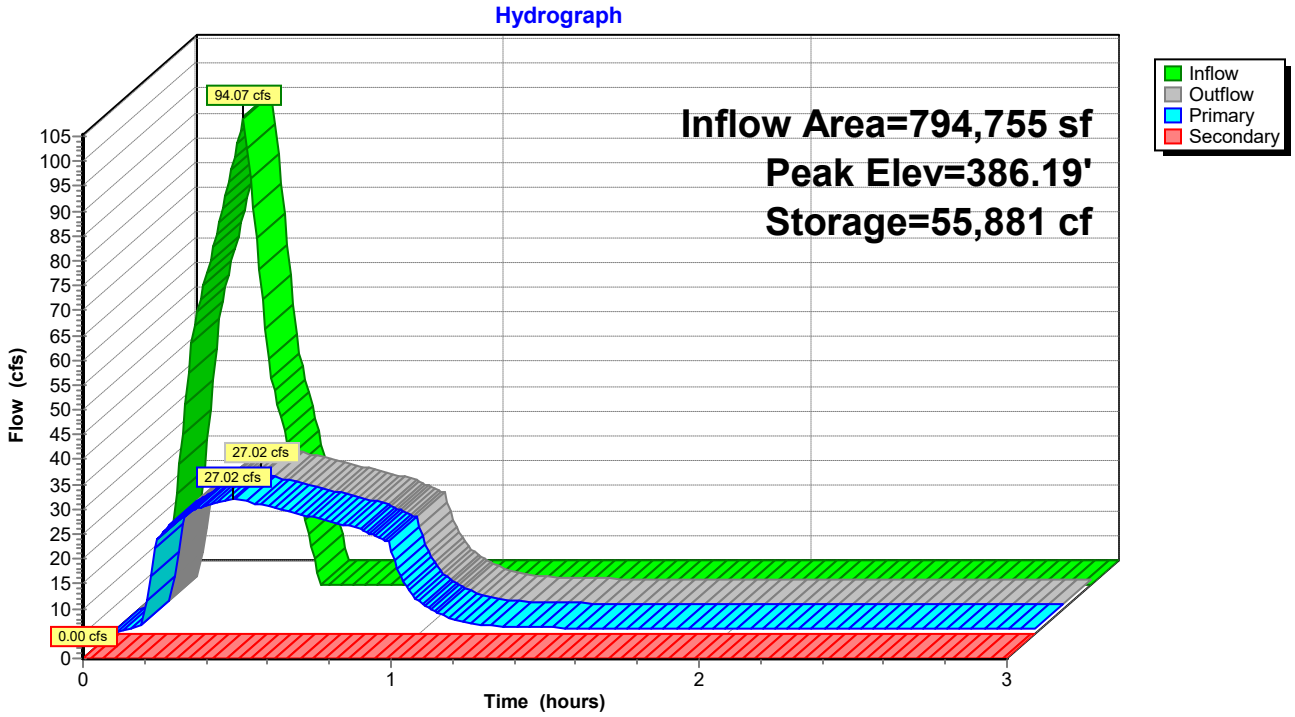
Elevation (feet)	Cum.Store (cubic-feet)
382.00	0
383.00	1,686
384.00	11,045
385.00	25,746
386.00	53,764
387.00	64,856

Device	Routing	Invert	Outlet Devices
#1	Primary	382.00'	**24.0" Round RCP_Round 24"** L= 20.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 382.00' / 381.00' S= 0.0500 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 3.14 sf
#2	Secondary	386.50'	**15.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#3	Device 1	384.00'	**15.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	382.00'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

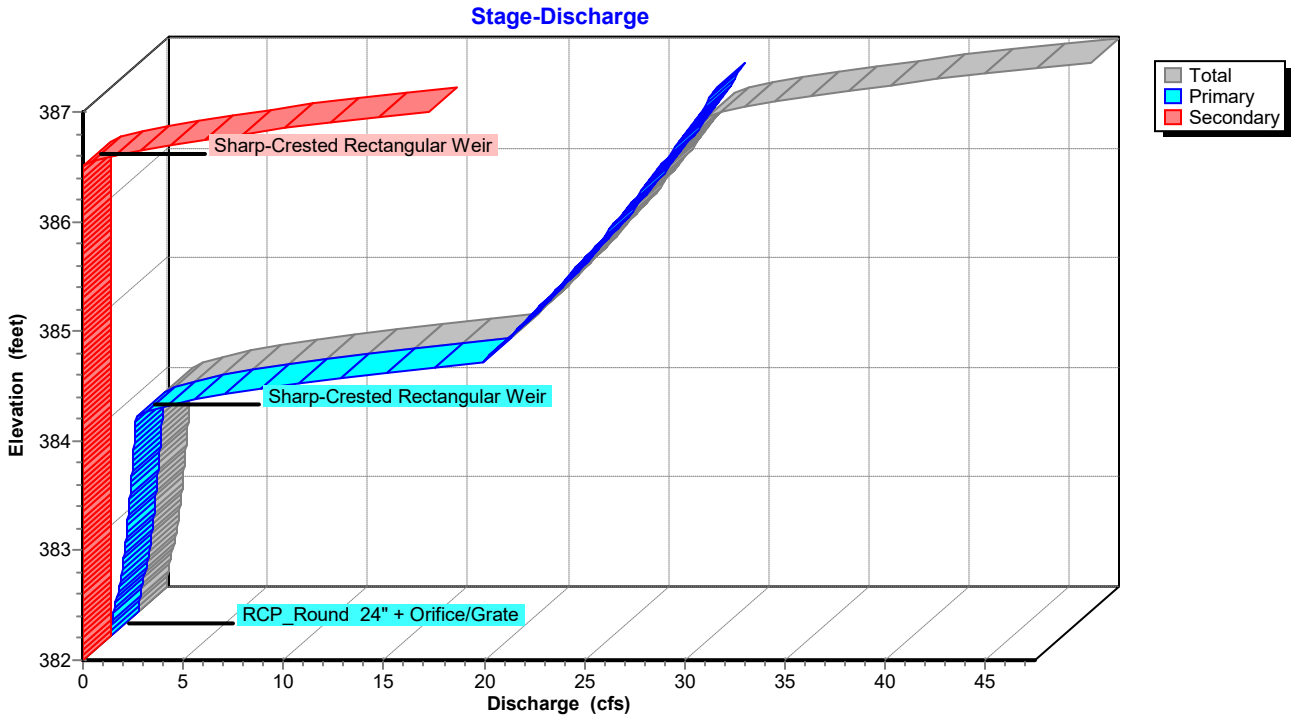
Primary OutFlow Max=27.02 cfs @ 0.40 hrs HW=386.19' (Free Discharge)
└**1=RCP_Round 24"** (Inlet Controls 27.02 cfs @ 8.60 fps)
├**3=Sharp-Crested Rectangular Weir** (Passes < 154.31 cfs potential flow)
└**4=Orifice/Grate** (Passes < 1.88 cfs potential flow)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=382.00' (Free Discharge)
└**2=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1P: Regional Detention Basin



Pond 1P: Regional Detention Basin



Stage-Area-Storage for Pond 1P: Regional Detention Basin

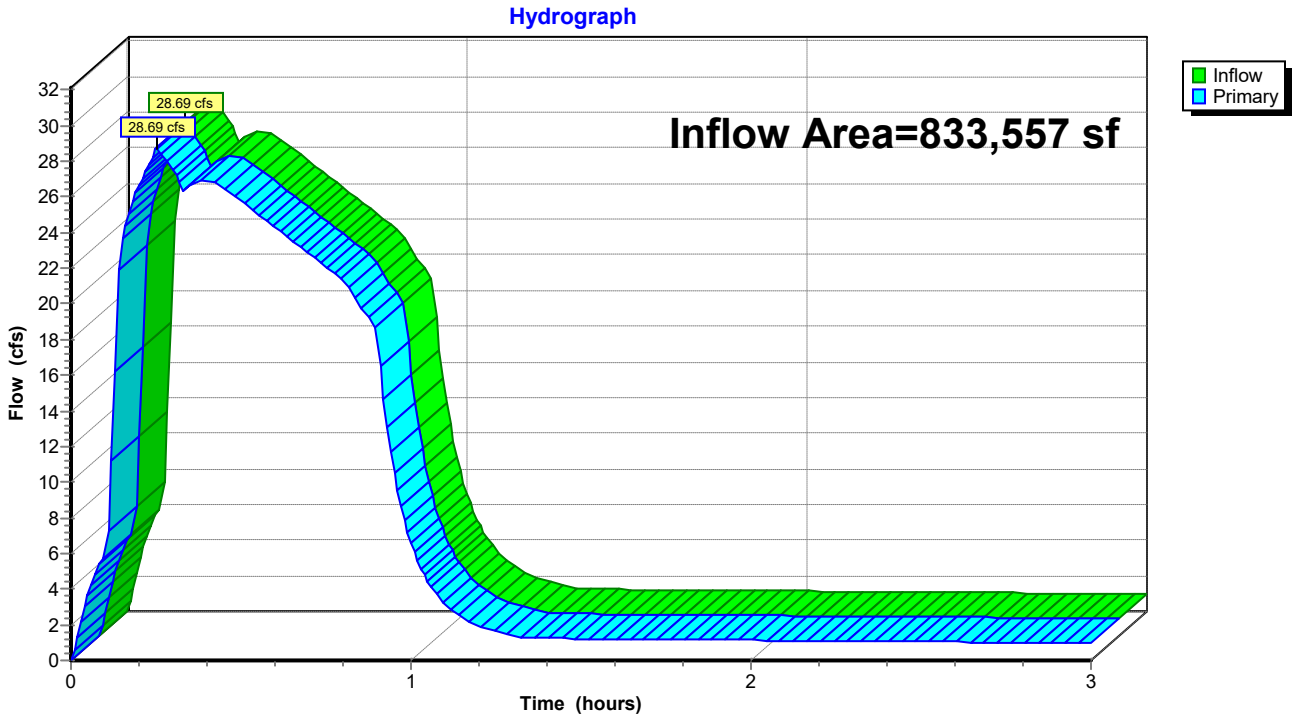
Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
382.00	0	384.60	19,866
382.05	84	384.65	20,601
382.10	169	384.70	21,336
382.15	253	384.75	22,071
382.20	337	384.80	22,806
382.25	422	384.85	23,541
382.30	506	384.90	24,276
382.35	590	384.95	25,011
382.40	674	385.00	25,746
382.45	759	385.05	27,147
382.50	843	385.10	28,548
382.55	927	385.15	29,949
382.60	1,012	385.20	31,350
382.65	1,096	385.25	32,751
382.70	1,180	385.30	34,151
382.75	1,265	385.35	35,552
382.80	1,349	385.40	36,953
382.85	1,433	385.45	38,354
382.90	1,517	385.50	39,755
382.95	1,602	385.55	41,156
383.00	1,686	385.60	42,557
383.05	2,154	385.65	43,958
383.10	2,622	385.70	45,359
383.15	3,090	385.75	46,760
383.20	3,558	385.80	48,160
383.25	4,026	385.85	49,561
383.30	4,494	385.90	50,962
383.35	4,962	385.95	52,363
383.40	5,430	386.00	53,764
383.45	5,898	386.05	54,319
383.50	6,366	386.10	54,873
383.55	6,833	386.15	55,428
383.60	7,301	386.20	55,982
383.65	7,769	386.25	56,537
383.70	8,237	386.30	57,092
383.75	8,705	386.35	57,646
383.80	9,173	386.40	58,201
383.85	9,641	386.45	58,755
383.90	10,109	386.50	59,310
383.95	10,577	386.55	59,865
384.00	11,045	386.60	60,419
384.05	11,780	386.65	60,974
384.10	12,515	386.70	61,528
384.15	13,250	386.75	62,083
384.20	13,985	386.80	62,638
384.25	14,720	386.85	63,192
384.30	15,455	386.90	63,747
384.35	16,190	386.95	64,301
384.40	16,925	387.00	**64,856**
384.45	17,660		
384.50	18,396		
384.55	19,131		

Summary for Link Post: Post Development

Inflow Area = 833,557 sf, 83.14% Impervious, Inflow Depth > 1.21" for 25-yr event
Inflow = 28.69 cfs @ 0.25 hrs, Volume= 84,187 cf
Primary = 28.69 cfs @ 0.25 hrs, Volume= 84,187 cf, Atten= 0%, Lag= 0.0 min

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

Link Post: Post Development



Summary for Subcatchment DB-B1: Drainage Basin B1

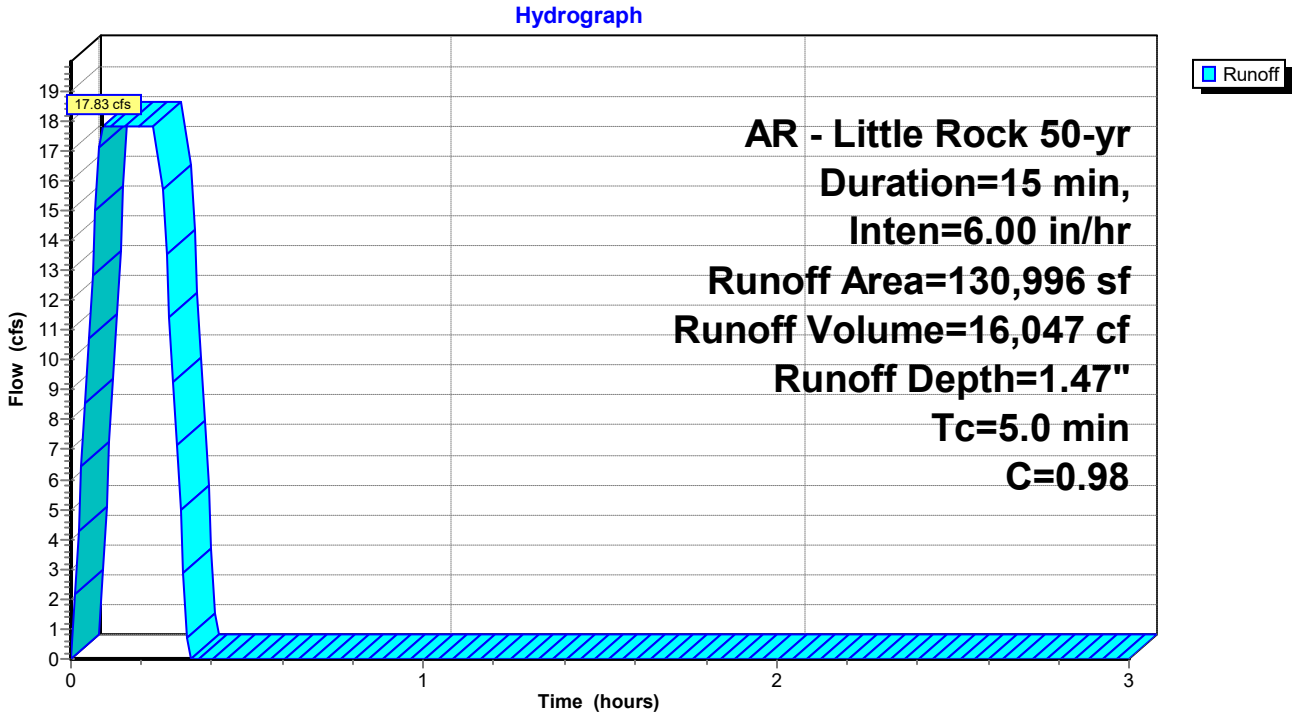
Runoff = 17.83 cfs @ 0.09 hrs, Volume= 16,047 cf, Depth= 1.47"
Routed to Pond 1P : Regional Detention Basin

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 50-yr Duration=15 min, Inten=6.00 in/hr

Area (sf)	C	Description
130,996	0.98	
130,996		100.00% Impervious Area

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

Subcatchment DB-B1: Drainage Basin B1



Summary for Subcatchment DB-B2: Drainage Basin B2

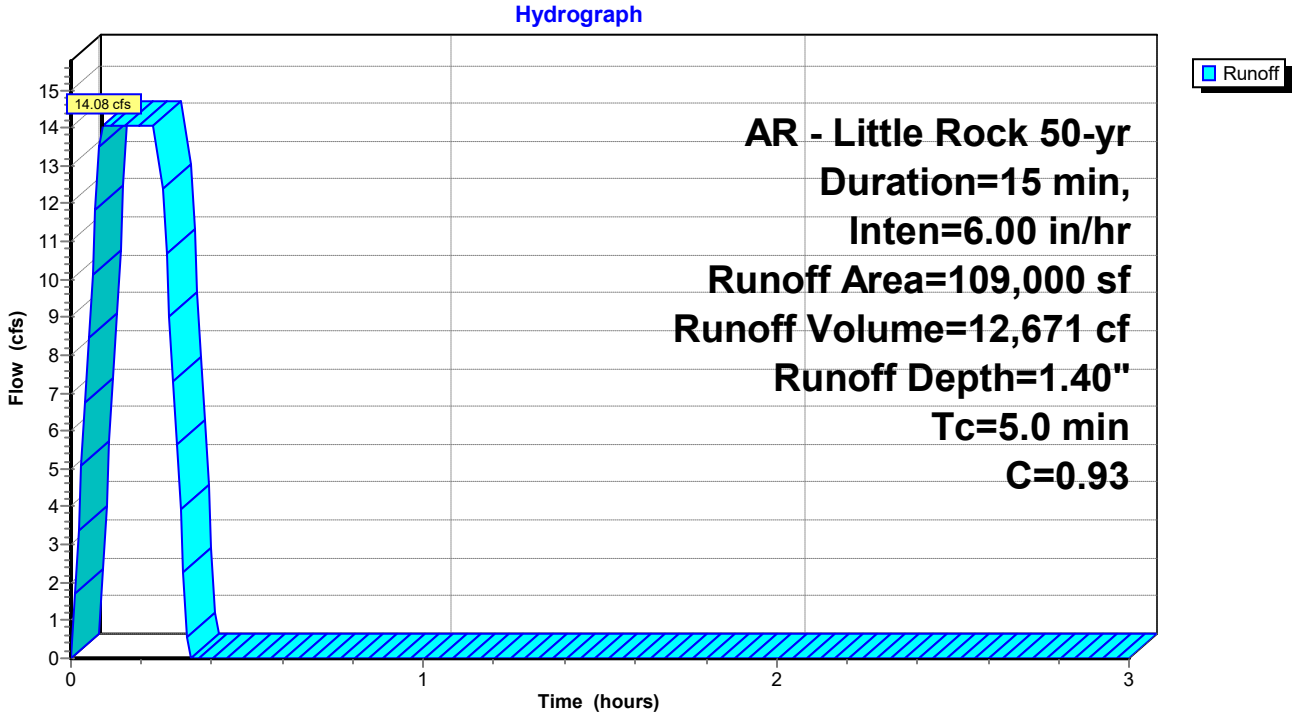
Runoff = 14.08 cfs @ 0.09 hrs, Volume= 12,671 cf, Depth= 1.40"
Routed to Pond 1P : Regional Detention Basin

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 50-yr Duration=15 min, Inten=6.00 in/hr

Area (sf)	C	Description
87,200	0.98	
21,800	0.74	
109,000	0.93	Weighted Average
21,800		20.00% Pervious Area
87,200		80.00% Impervious Area

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

Subcatchment DB-B2: Drainage Basin B2



Summary for Subcatchment DB-B3: Drainage Basin B3

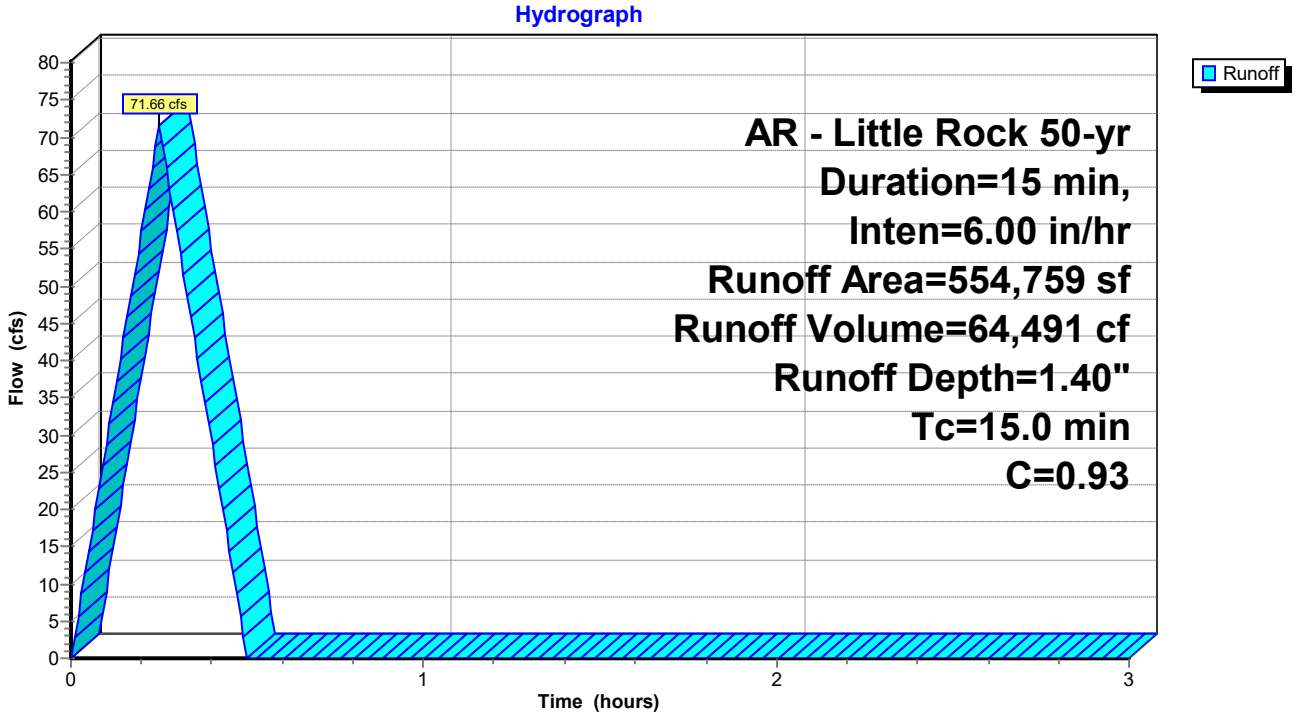
Runoff = 71.66 cfs @ 0.25 hrs, Volume= 64,491 cf, Depth= 1.40"
Routed to Pond 1P : Regional Detention Basin

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 50-yr Duration=15 min, Inten=6.00 in/hr

Area (sf)	C	Description
443,807	0.98	
110,952	0.74	
554,759	0.93	Weighted Average
110,952		20.00% Pervious Area
443,807		80.00% Impervious Area

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

Subcatchment DB-B3: Drainage Basin B3



Summary for Subcatchment DB-B4: Drainage Basin B4

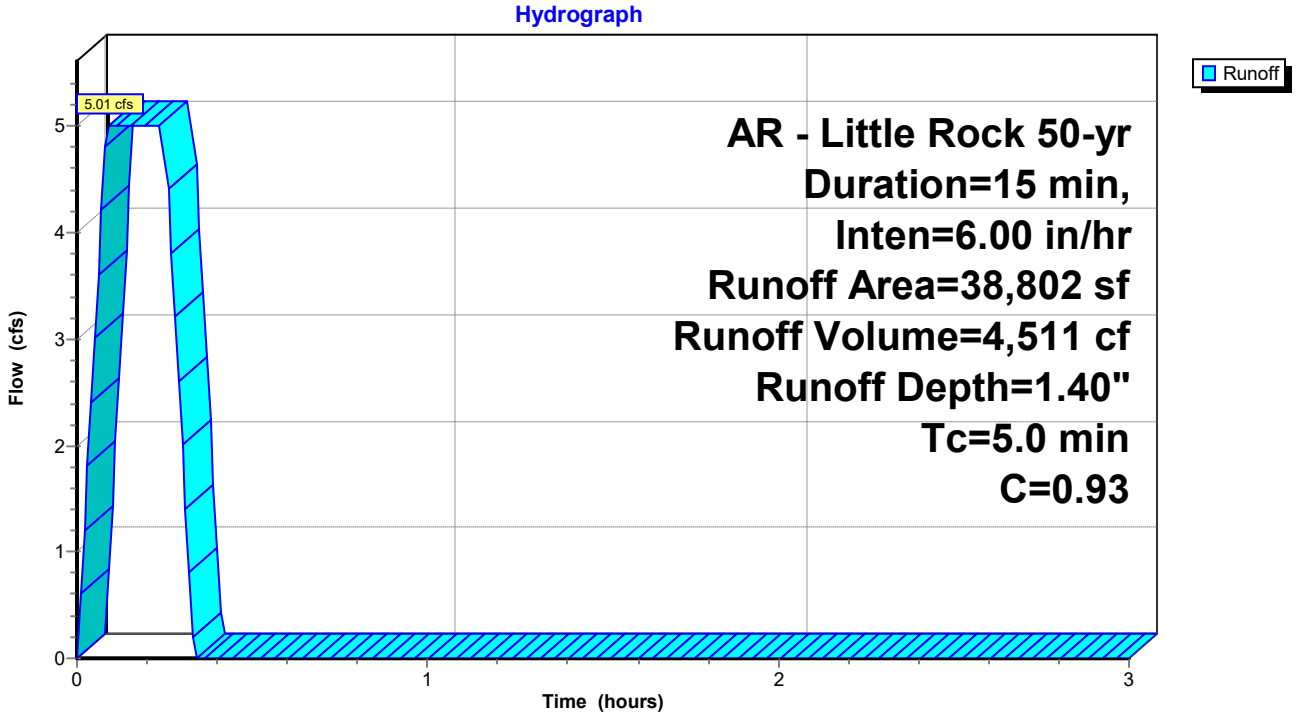
Runoff = 5.01 cfs @ 0.09 hrs, Volume= 4,511 cf, Depth= 1.40"
Routed to Link Post : Post Development

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 50-yr Duration=15 min, Inten=6.00 in/hr

Area (sf)	C	Description
31,042	0.98	
7,760	0.74	
38,802	0.93	Weighted Average
7,760		20.00% Pervious Area
31,042		80.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, 15**

Subcatchment DB-B4: Drainage Basin B4



Summary for Pond 1P: Regional Detention Basin

Inflow Area = 794,755 sf, 83.30% Impervious, Inflow Depth = 1.41" for 50-yr event
Inflow = 103.76 cfs @ 0.25 hrs, Volume= 93,209 cf
Outflow = 33.94 cfs @ 0.38 hrs, Volume= 88,612 cf, Atten= 67%, Lag= 8.0 min
Primary = 29.14 cfs @ 0.38 hrs, Volume= 87,226 cf
Routed to Link Post : Post Development
Secondary = 4.79 cfs @ 0.38 hrs, Volume= 1,386 cf
Routed to Link Post : Post Development

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 386.71' @ 0.38 hrs Storage= 61,662 cf

Plug-Flow detention time= 28.3 min calculated for 88,612 cf (95% of inflow)
Center-of-Mass det. time= 27.6 min (41.1 - 13.5)

Volume	Invert	Avail.Storage	Storage Description
#1	382.00'	64,856 cf	**Custom Stage Data** Listed below

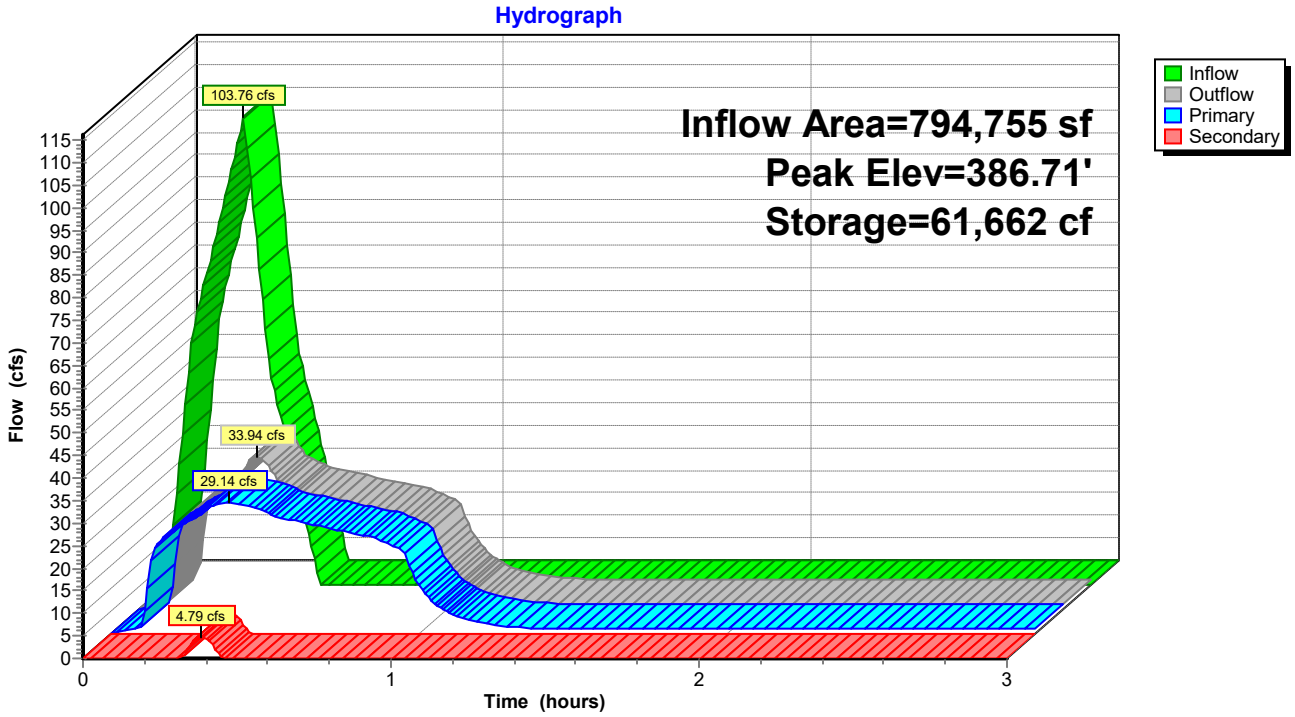
Elevation (feet)	Cum.Store (cubic-feet)
382.00	0
383.00	1,686
384.00	11,045
385.00	25,746
386.00	53,764
387.00	64,856

Device	Routing	Invert	Outlet Devices
#1	Primary	382.00'	**24.0" Round RCP_Round 24"** L= 20.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 382.00' / 381.00' S= 0.0500 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 3.14 sf
#2	Secondary	386.50'	**15.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#3	Device 1	384.00'	**15.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	382.00'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

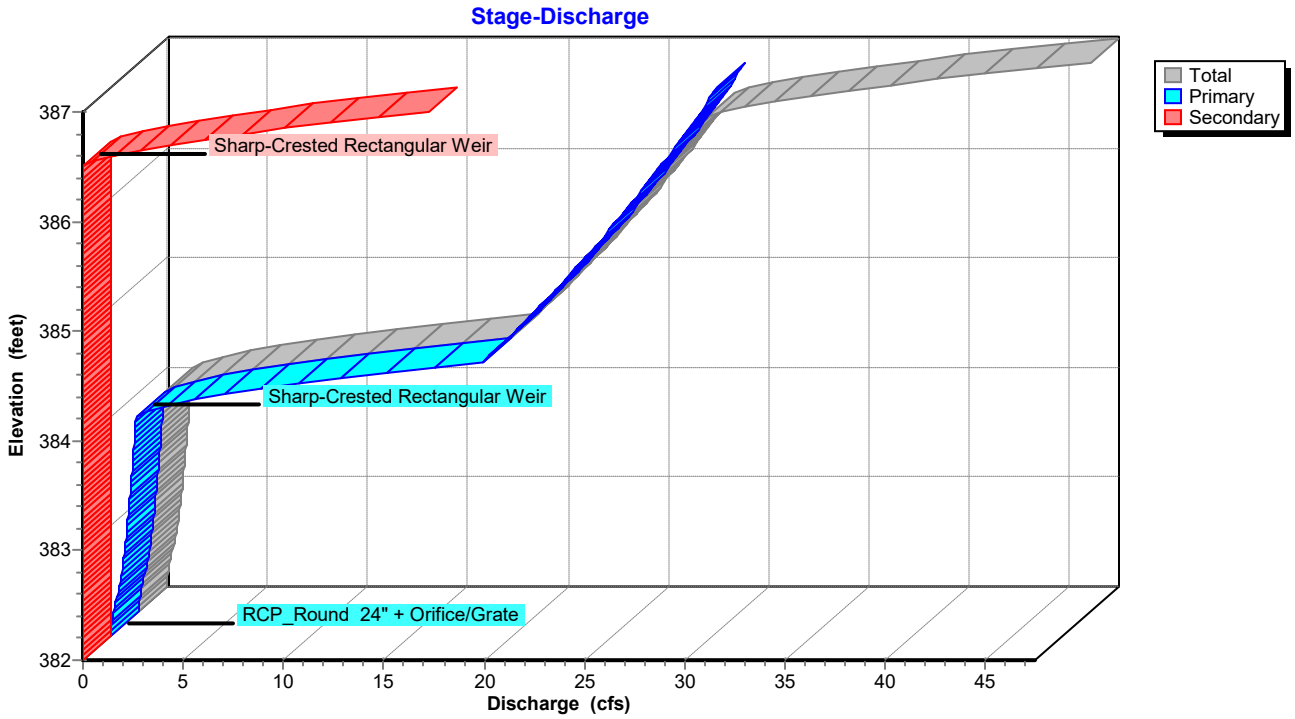
Primary OutFlow Max=29.14 cfs @ 0.38 hrs HW=386.71' (Free Discharge)
└**1=RCP_Round 24"** (Inlet Controls 29.14 cfs @ 9.28 fps)
└**3=Sharp-Crested Rectangular Weir** (Passes < 211.06 cfs potential flow)
└**4=Orifice/Grate** (Passes < 2.00 cfs potential flow)

Secondary OutFlow Max=4.75 cfs @ 0.38 hrs HW=386.71' (Free Discharge)
└**2=Sharp-Crested Rectangular Weir** (Weir Controls 4.75 cfs @ 1.50 fps)

Pond 1P: Regional Detention Basin



Pond 1P: Regional Detention Basin



Stage-Area-Storage for Pond 1P: Regional Detention Basin

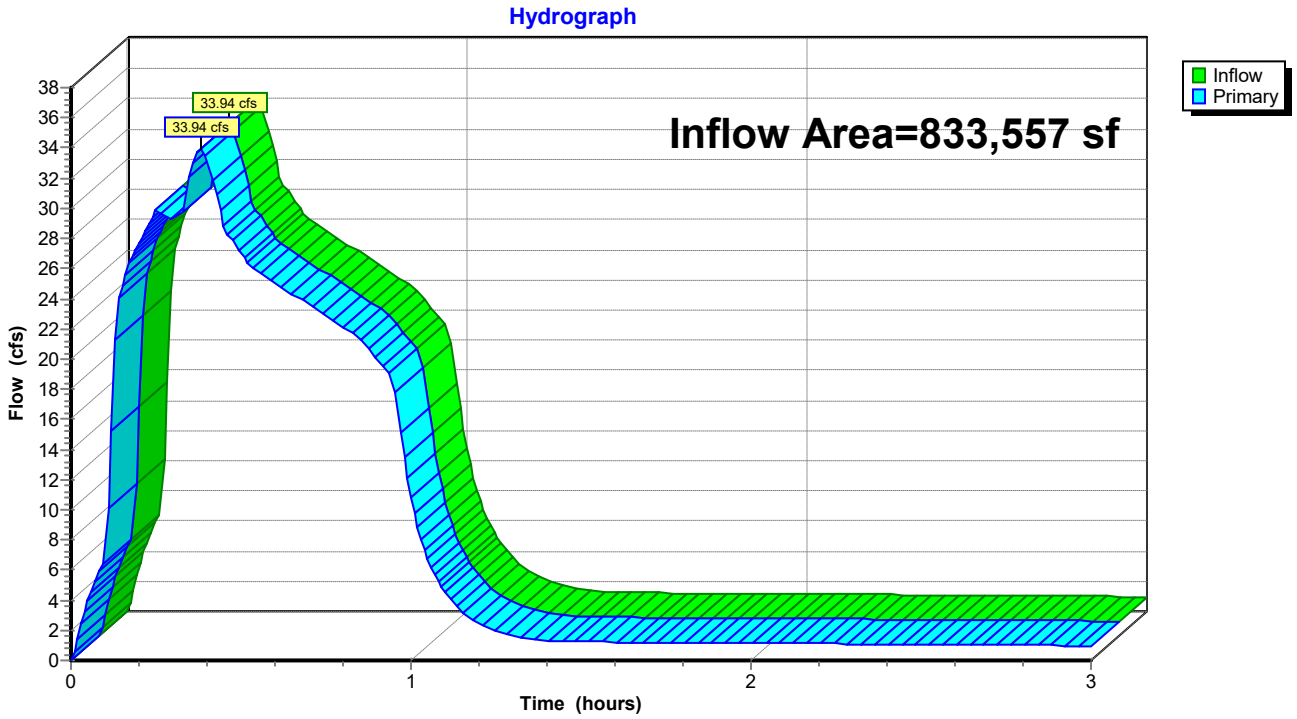
Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
382.00	0	384.60	19,866
382.05	84	384.65	20,601
382.10	169	384.70	21,336
382.15	253	384.75	22,071
382.20	337	384.80	22,806
382.25	422	384.85	23,541
382.30	506	384.90	24,276
382.35	590	384.95	25,011
382.40	674	385.00	25,746
382.45	759	385.05	27,147
382.50	843	385.10	28,548
382.55	927	385.15	29,949
382.60	1,012	385.20	31,350
382.65	1,096	385.25	32,751
382.70	1,180	385.30	34,151
382.75	1,265	385.35	35,552
382.80	1,349	385.40	36,953
382.85	1,433	385.45	38,354
382.90	1,517	385.50	39,755
382.95	1,602	385.55	41,156
383.00	1,686	385.60	42,557
383.05	2,154	385.65	43,958
383.10	2,622	385.70	45,359
383.15	3,090	385.75	46,760
383.20	3,558	385.80	48,160
383.25	4,026	385.85	49,561
383.30	4,494	385.90	50,962
383.35	4,962	385.95	52,363
383.40	5,430	386.00	53,764
383.45	5,898	386.05	54,319
383.50	6,366	386.10	54,873
383.55	6,833	386.15	55,428
383.60	7,301	386.20	55,982
383.65	7,769	386.25	56,537
383.70	8,237	386.30	57,092
383.75	8,705	386.35	57,646
383.80	9,173	386.40	58,201
383.85	9,641	386.45	58,755
383.90	10,109	386.50	59,310
383.95	10,577	386.55	59,865
384.00	11,045	386.60	60,419
384.05	11,780	386.65	60,974
384.10	12,515	386.70	61,528
384.15	13,250	386.75	62,083
384.20	13,985	386.80	62,638
384.25	14,720	386.85	63,192
384.30	15,455	386.90	63,747
384.35	16,190	386.95	64,301
384.40	16,925	387.00	**64,856**
384.45	17,660		
384.50	18,396		
384.55	19,131		

Summary for Link Post: Post Development

Inflow Area = 833,557 sf, 83.14% Impervious, Inflow Depth > 1.34" for 50-yr event
Inflow = 33.94 cfs @ 0.38 hrs, Volume= 93,123 cf
Primary = 33.94 cfs @ 0.38 hrs, Volume= 93,123 cf, Atten= 0%, Lag= 0.0 min

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

Link Post: Post Development



Summary for Subcatchment DB-B1: Drainage Basin B1

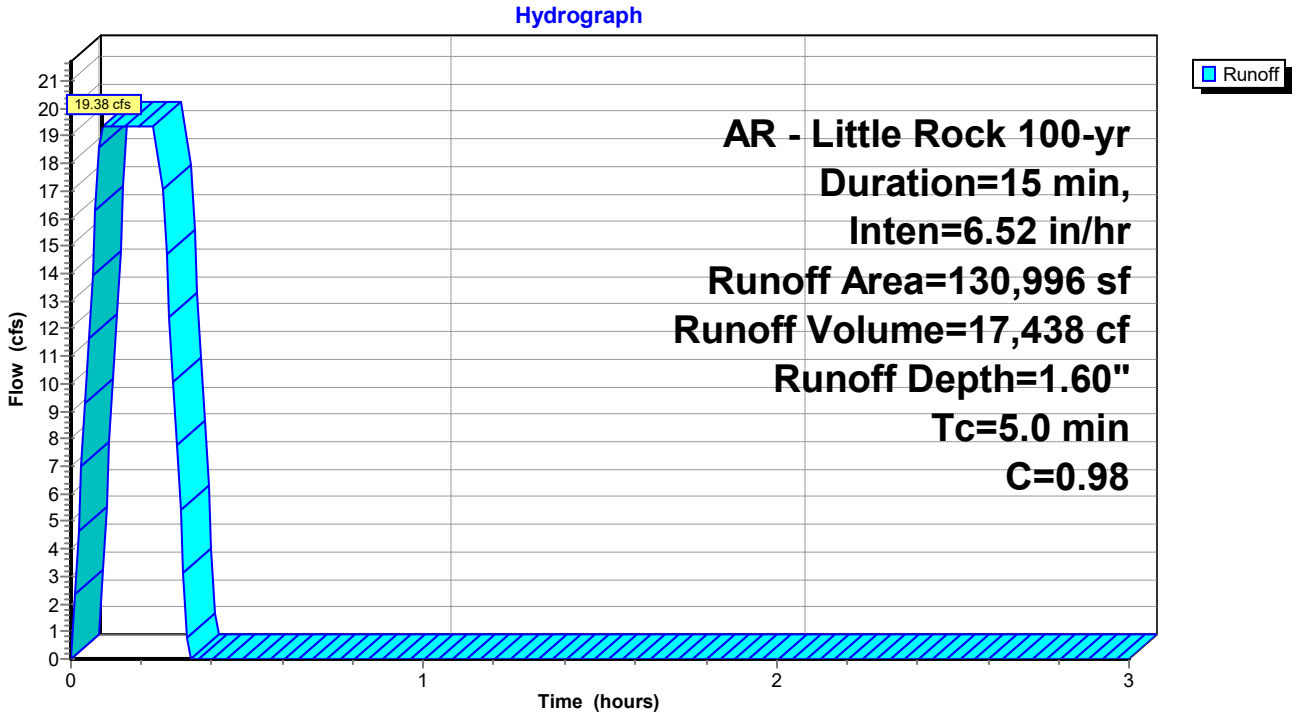
Runoff = 19.38 cfs @ 0.09 hrs, Volume= 17,438 cf, Depth= 1.60"
Routed to Pond 1P : Regional Detention Basin

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=15 min, Inten=6.52 in/hr

Area (sf)	C	Description
130,996	0.98	
130,996		100.00% Impervious Area

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

Subcatchment DB-B1: Drainage Basin B1



Summary for Subcatchment DB-B2: Drainage Basin B2

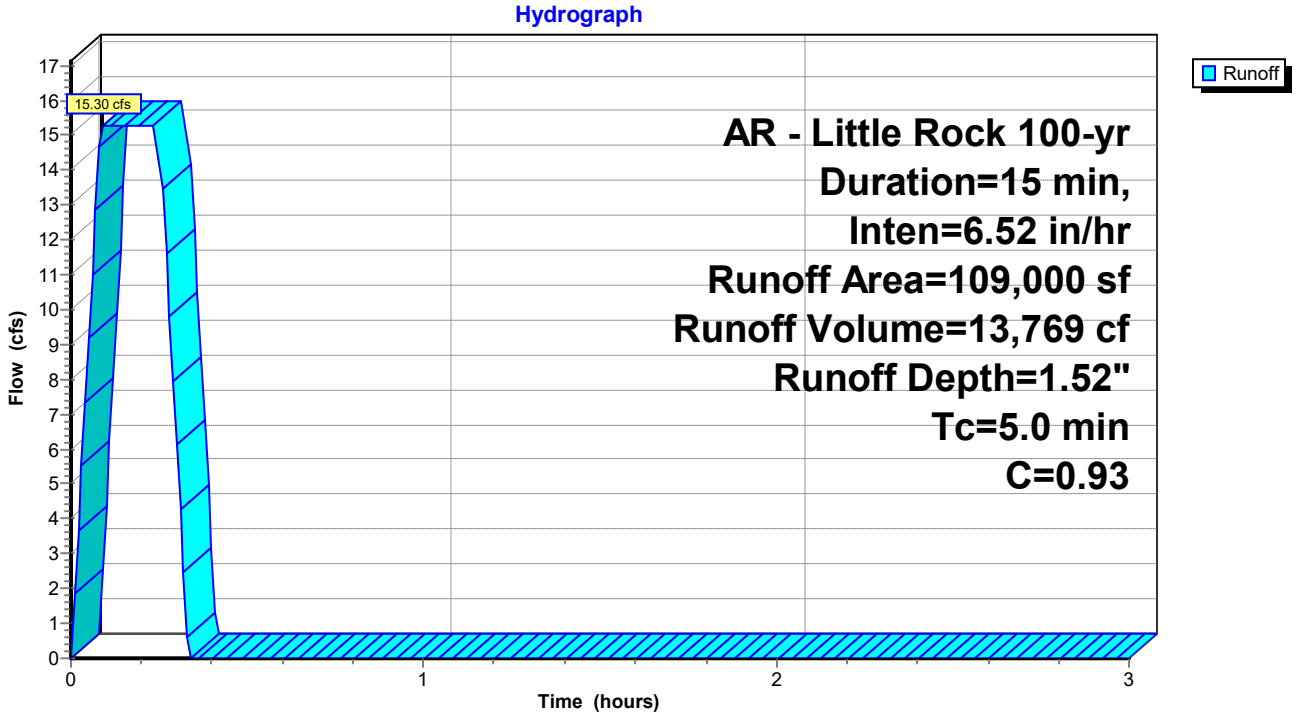
Runoff = 15.30 cfs @ 0.09 hrs, Volume= 13,769 cf, Depth= 1.52"
Routed to Pond 1P : Regional Detention Basin

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=15 min, Inten=6.52 in/hr

Area (sf)	C	Description
87,200	0.98	
21,800	0.74	
109,000	0.93	Weighted Average
21,800		20.00% Pervious Area
87,200		80.00% Impervious Area

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

Subcatchment DB-B2: Drainage Basin B2



Summary for Subcatchment DB-B3: Drainage Basin B3

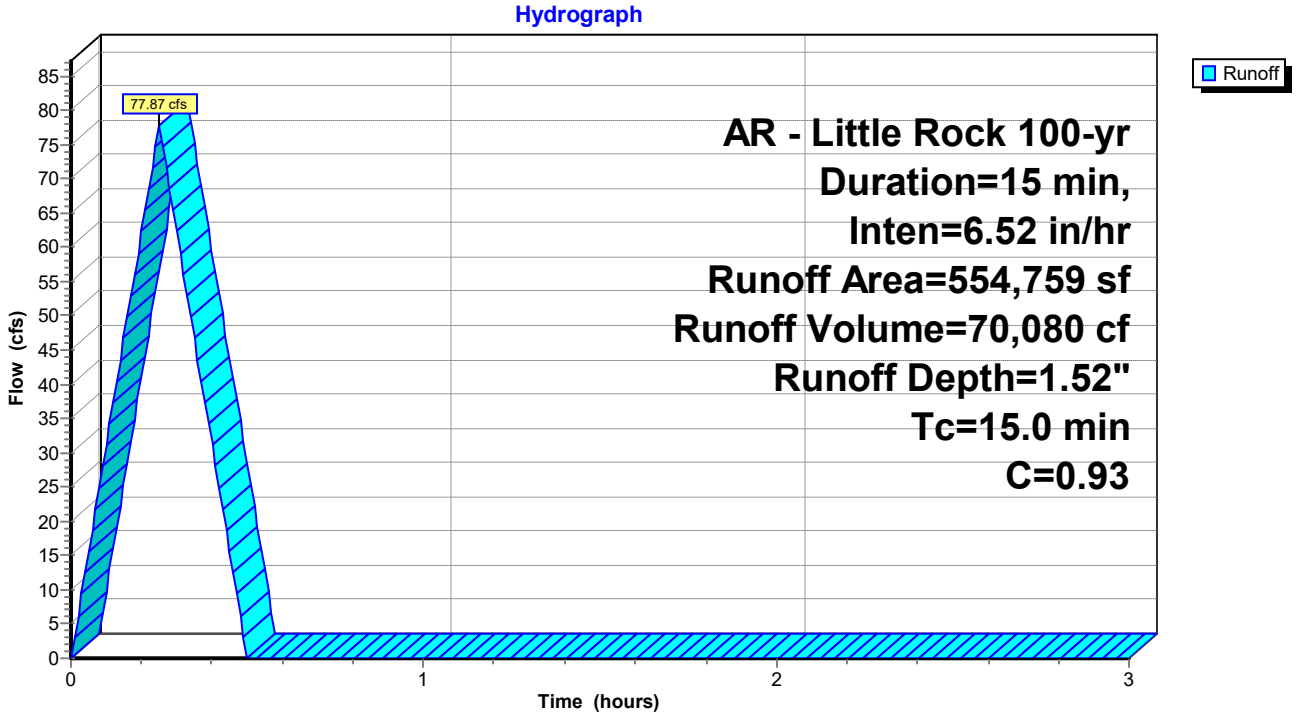
Runoff = 77.87 cfs @ 0.25 hrs, Volume= 70,080 cf, Depth= 1.52"
Routed to Pond 1P : Regional Detention Basin

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=15 min, Inten=6.52 in/hr

Area (sf)	C	Description
443,807	0.98	
110,952	0.74	
554,759	0.93	Weighted Average
110,952		20.00% Pervious Area
443,807		80.00% Impervious Area

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

Subcatchment DB-B3: Drainage Basin B3



Summary for Subcatchment DB-B4: Drainage Basin B4

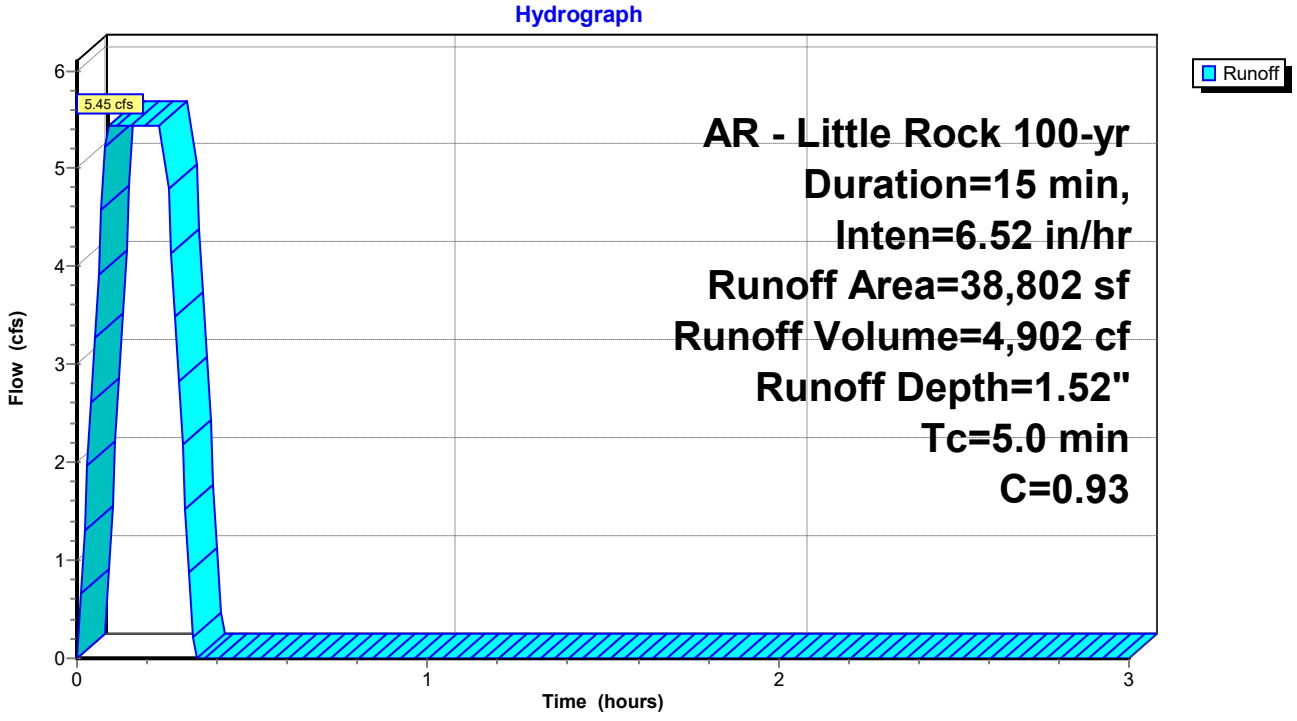
Runoff = 5.45 cfs @ 0.09 hrs, Volume= 4,902 cf, Depth= 1.52"
Routed to Link Post : Post Development

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=15 min, Inten=6.52 in/hr

Area (sf)	C	Description
31,042	0.98	
7,760	0.74	
38,802	0.93	Weighted Average
7,760		20.00% Pervious Area
31,042		80.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, 15**

Subcatchment DB-B4: Drainage Basin B4



Summary for Pond 1P: Regional Detention Basin

Inflow Area = 794,755 sf, 83.30% Impervious, Inflow Depth = 1.53" for 100-yr event
Inflow = 112.75 cfs @ 0.25 hrs, Volume= 101,287 cf
Outflow = 46.71 cfs @ 0.35 hrs, Volume= 96,644 cf, Atten= 59%, Lag= 6.1 min
Primary = 30.20 cfs @ 0.35 hrs, Volume= 90,003 cf
Routed to Link Post : Post Development
Secondary = 16.51 cfs @ 0.35 hrs, Volume= 6,641 cf
Routed to Link Post : Post Development

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 386.99' @ 0.35 hrs Storage= 64,697 cf

Plug-Flow detention time= 26.6 min calculated for 96,322 cf (95% of inflow)
Center-of-Mass det. time= 26.4 min (39.9 - 13.5)

Volume	Invert	Avail.Storage	Storage Description
#1	382.00'	64,856 cf	**Custom Stage Data** Listed below

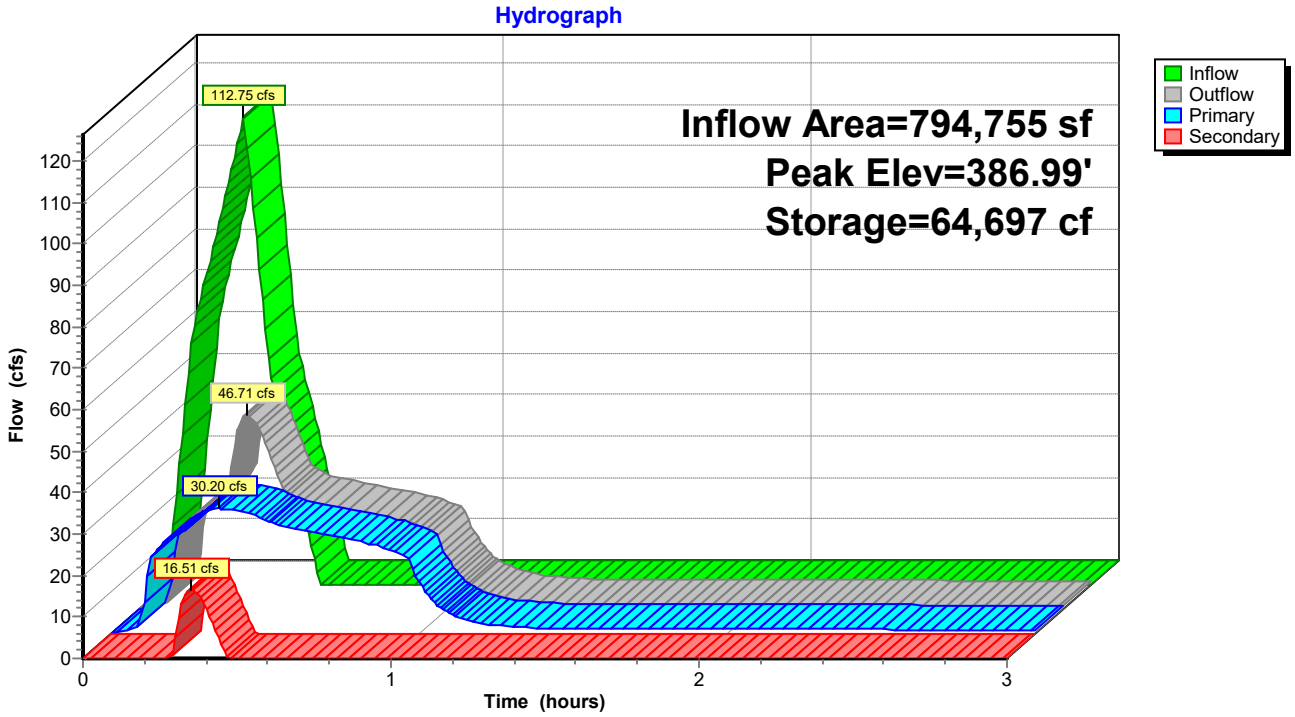
Elevation (feet)	Cum.Store (cubic-feet)
382.00	0
383.00	1,686
384.00	11,045
385.00	25,746
386.00	53,764
387.00	64,856

Device	Routing	Invert	Outlet Devices
#1	Primary	382.00'	**24.0" Round RCP_Round 24"** L= 20.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 382.00' / 381.00' S= 0.0500 '/' Cc= 0.900 n= 0.013 Concrete pipe, bends & connections, Flow Area= 3.14 sf
#2	Secondary	386.50'	**15.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#3	Device 1	384.00'	**15.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 1	382.00'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

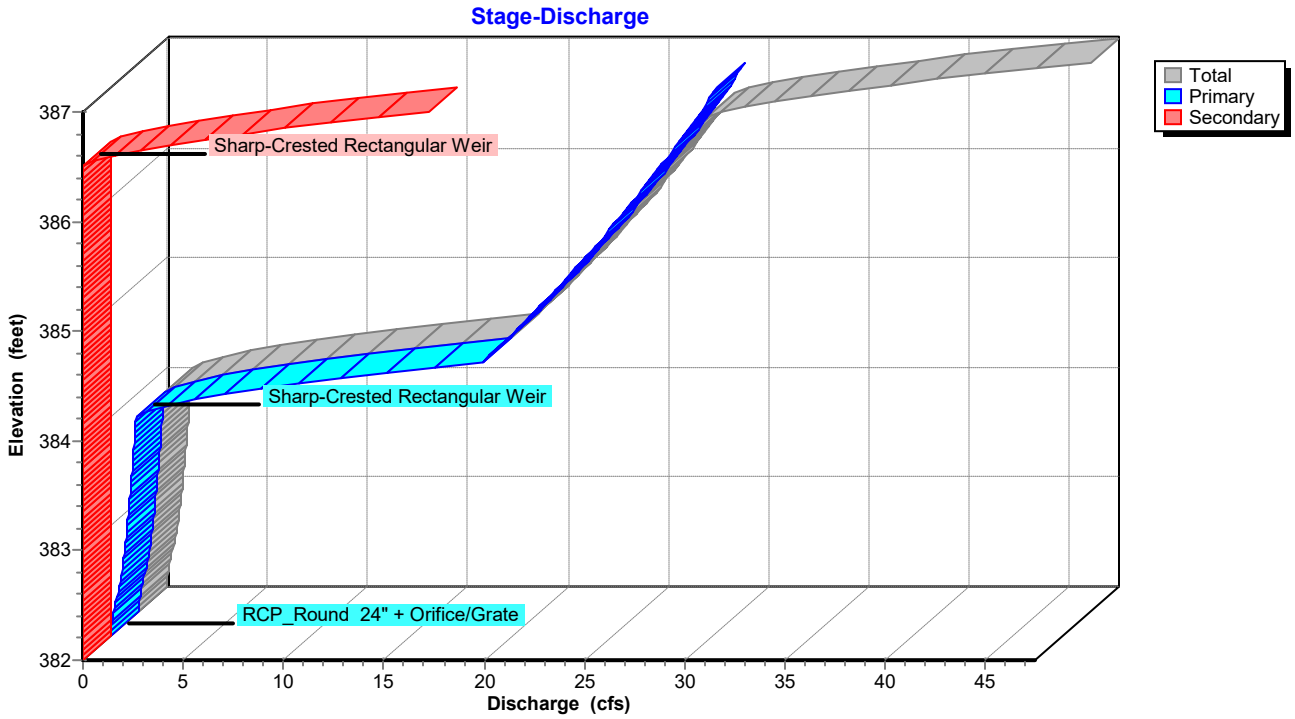
Primary OutFlow Max=30.20 cfs @ 0.35 hrs HW=386.99' (Free Discharge)
└**1=RCP_Round 24"** (Inlet Controls 30.20 cfs @ 9.61 fps)
├**3=Sharp-Crested Rectangular Weir** (Passes < 242.94 cfs potential flow)
└**4=Orifice/Grate** (Passes < 2.06 cfs potential flow)

Secondary OutFlow Max=16.48 cfs @ 0.35 hrs HW=386.99' (Free Discharge)
└**2=Sharp-Crested Rectangular Weir** (Weir Controls 16.48 cfs @ 2.28 fps)

Pond 1P: Regional Detention Basin



Pond 1P: Regional Detention Basin



Stage-Area-Storage for Pond 1P: Regional Detention Basin

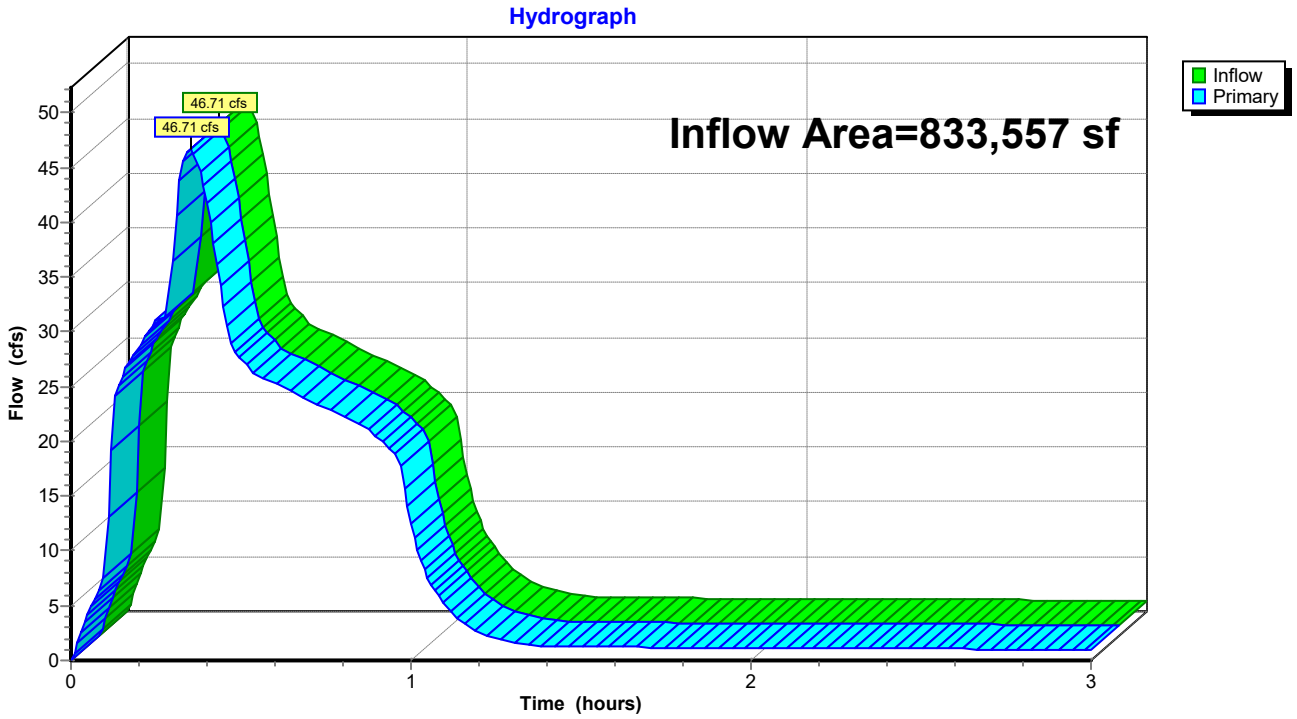
Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
382.00	0	384.60	19,866
382.05	84	384.65	20,601
382.10	169	384.70	21,336
382.15	253	384.75	22,071
382.20	337	384.80	22,806
382.25	422	384.85	23,541
382.30	506	384.90	24,276
382.35	590	384.95	25,011
382.40	674	385.00	25,746
382.45	759	385.05	27,147
382.50	843	385.10	28,548
382.55	927	385.15	29,949
382.60	1,012	385.20	31,350
382.65	1,096	385.25	32,751
382.70	1,180	385.30	34,151
382.75	1,265	385.35	35,552
382.80	1,349	385.40	36,953
382.85	1,433	385.45	38,354
382.90	1,517	385.50	39,755
382.95	1,602	385.55	41,156
383.00	1,686	385.60	42,557
383.05	2,154	385.65	43,958
383.10	2,622	385.70	45,359
383.15	3,090	385.75	46,760
383.20	3,558	385.80	48,160
383.25	4,026	385.85	49,561
383.30	4,494	385.90	50,962
383.35	4,962	385.95	52,363
383.40	5,430	386.00	53,764
383.45	5,898	386.05	54,319
383.50	6,366	386.10	54,873
383.55	6,833	386.15	55,428
383.60	7,301	386.20	55,982
383.65	7,769	386.25	56,537
383.70	8,237	386.30	57,092
383.75	8,705	386.35	57,646
383.80	9,173	386.40	58,201
383.85	9,641	386.45	58,755
383.90	10,109	386.50	59,310
383.95	10,577	386.55	59,865
384.00	11,045	386.60	60,419
384.05	11,780	386.65	60,974
384.10	12,515	386.70	61,528
384.15	13,250	386.75	62,083
384.20	13,985	386.80	62,638
384.25	14,720	386.85	63,192
384.30	15,455	386.90	63,747
384.35	16,190	386.95	64,301
384.40	16,925	387.00	**64,856**
384.45	17,660		
384.50	18,396		
384.55	19,131		

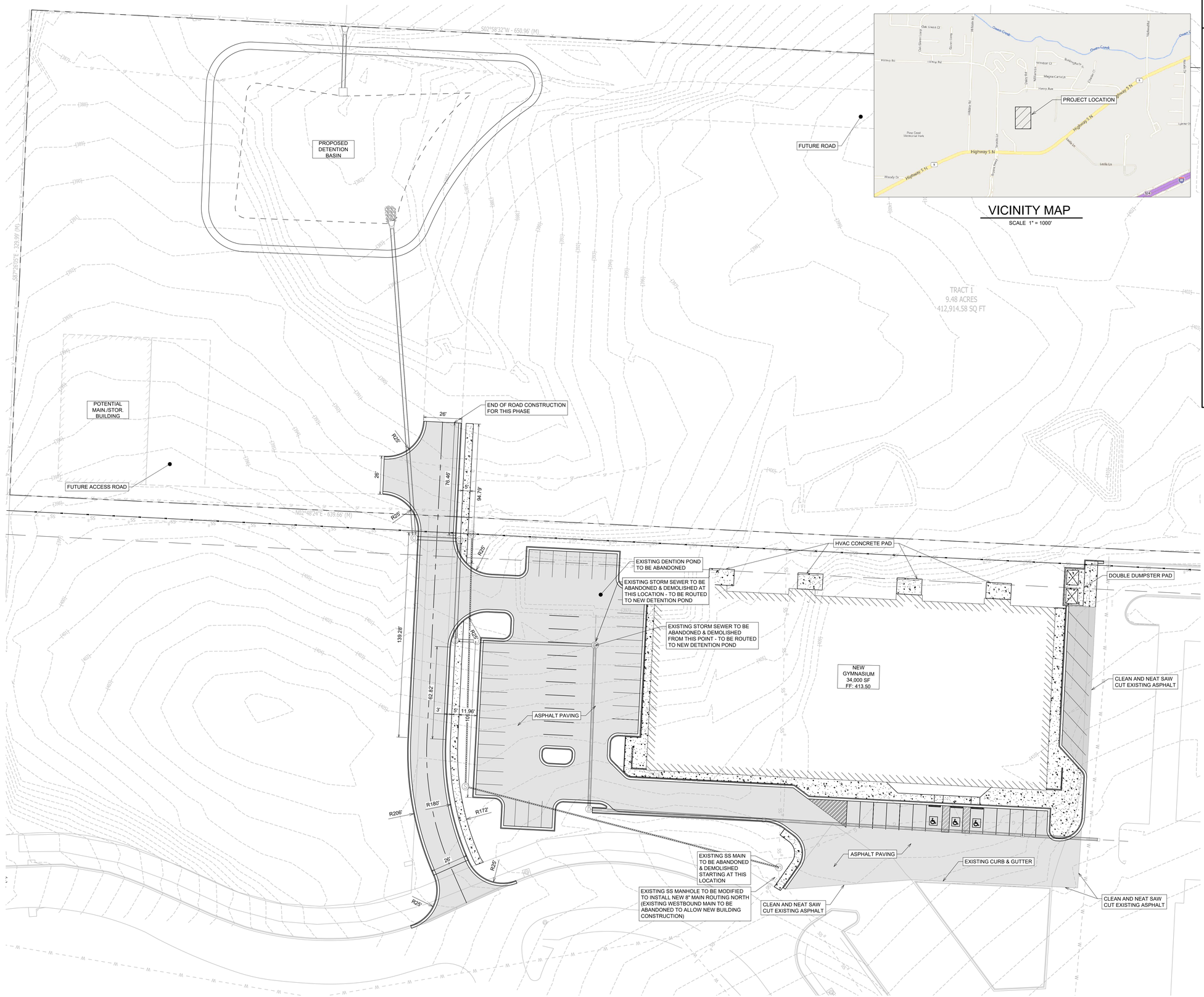
Summary for Link Post: Post Development

Inflow Area = 833,557 sf, 83.14% Impervious, Inflow Depth > 1.46" for 100-yr event
Inflow = 46.71 cfs @ 0.35 hrs, Volume= 101,545 cf
Primary = 46.71 cfs @ 0.35 hrs, Volume= 101,545 cf, Atten= 0%, Lag= 0.0 min

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

Link Post: Post Development





OVERALL SITE PLAN

SCALE 1" = 30'

VICINITY MAP

SCALE 1" = 1000'

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 UTILITIES 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 UTILITIES. 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:

SUMMERWOOD SPORTS GYMNASIUM #3
7817 Hwy 5 N
Bryant, Arkansas

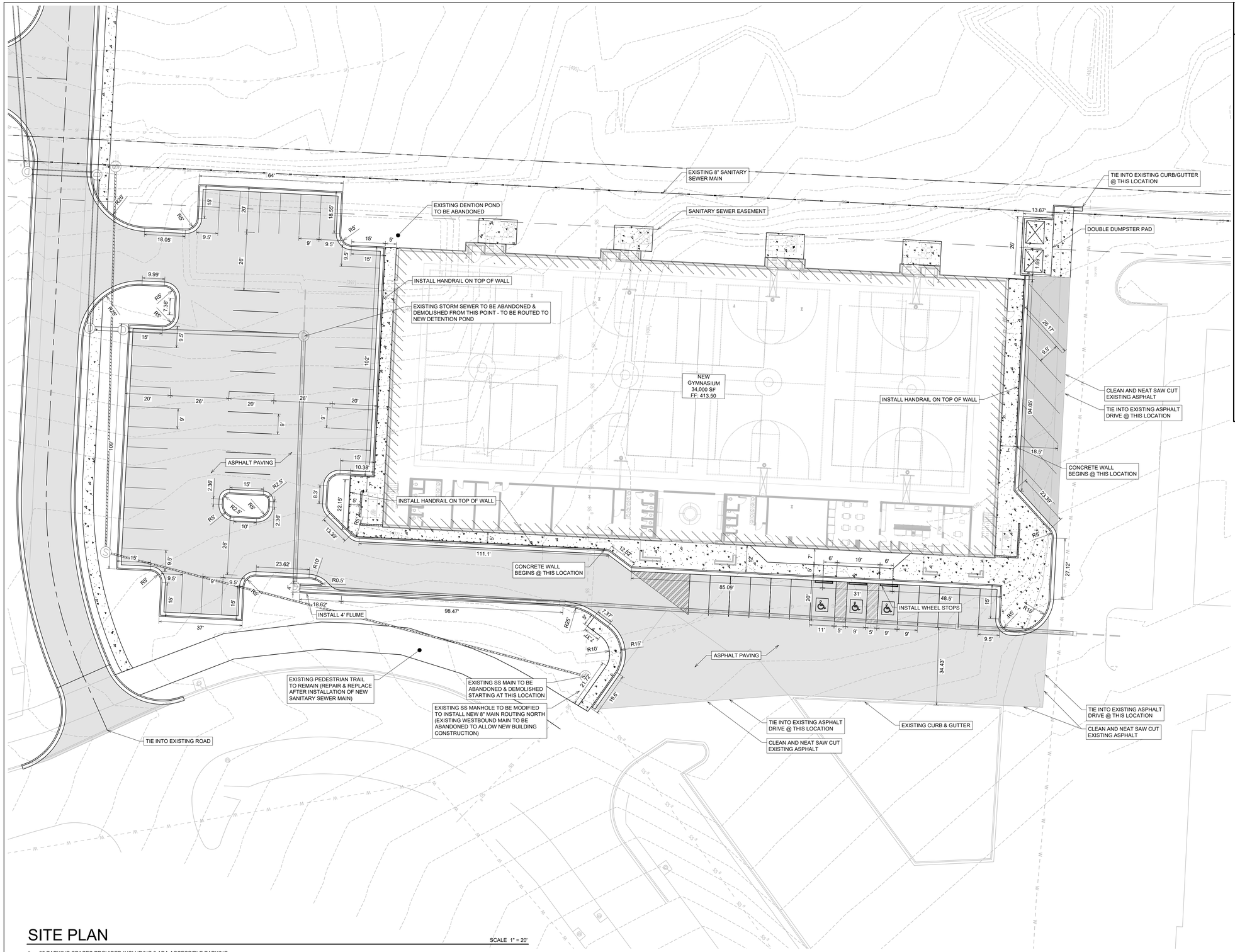
PRELIMINARY NOT FOR CONSTRUCTION

PROJECT NUMBER:

SHEET ISSUE DATE:
09/20/2023

PAGE TITLE:
OVERALL SITE PLAN

SHEET NUMBER:
C1.1



SITE PLAN

SCALE 1" = 20'

1. 65 PARKING SPACES PROVIDED INCLUDING 3 ADA ACCESSIBLE PARKING SPACES
2. ALL DIMENSIONS ARE TO THE BACK OF CURB AND/OR EDGE OF PAVEMENT
3. 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.
4. REPAIR, REPLACE, OR EXTEND EXISTING DAMAGED OR MISSING CURB AND GUTTER, SIDEWALK OR RAMPS WITHIN THE PUBLIC RIGHT OF WAY.
5. 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.

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 UTILITIES 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 UTILITIES. 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:

SUMMERWOOD SPORTS GYMNASIUM #3
7817 Hwy 5 N
Bryant, Arkansas

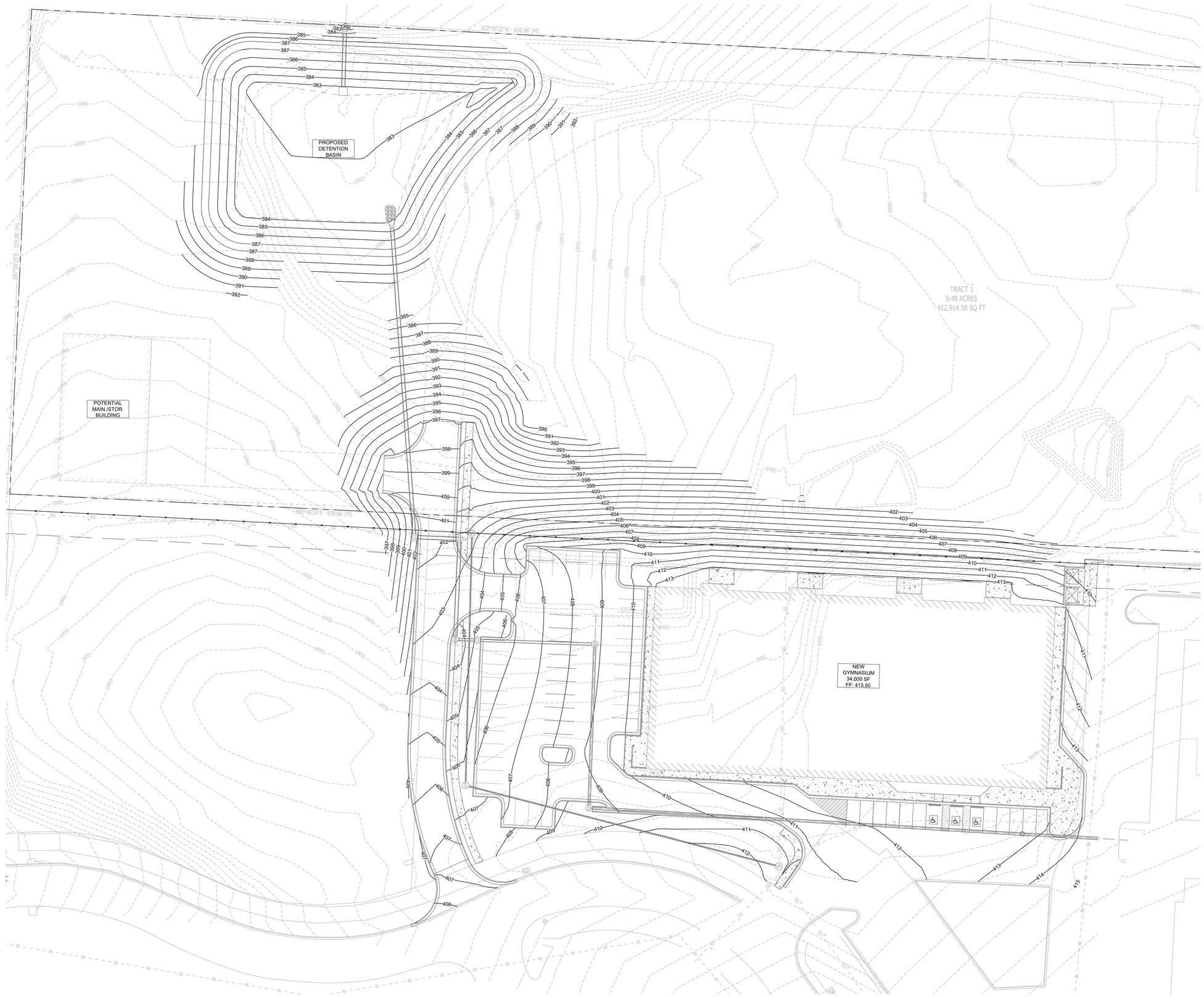
PRELIMINARY NOT FOR CONSTRUCTION

PROJECT NUMBER:

SHEET ISSUE DATE: 09/20/2023

PAGE TITLE: SITE PLAN

SHEET NUMBER: C1.2



OVERALL GRADING PLAN

SCALE 1" = 30'

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

REVISION:

SUMMERWOOD SPORTS GYMNASIUM #3
7817 Hwy 5 N
Bryant, Arkansas

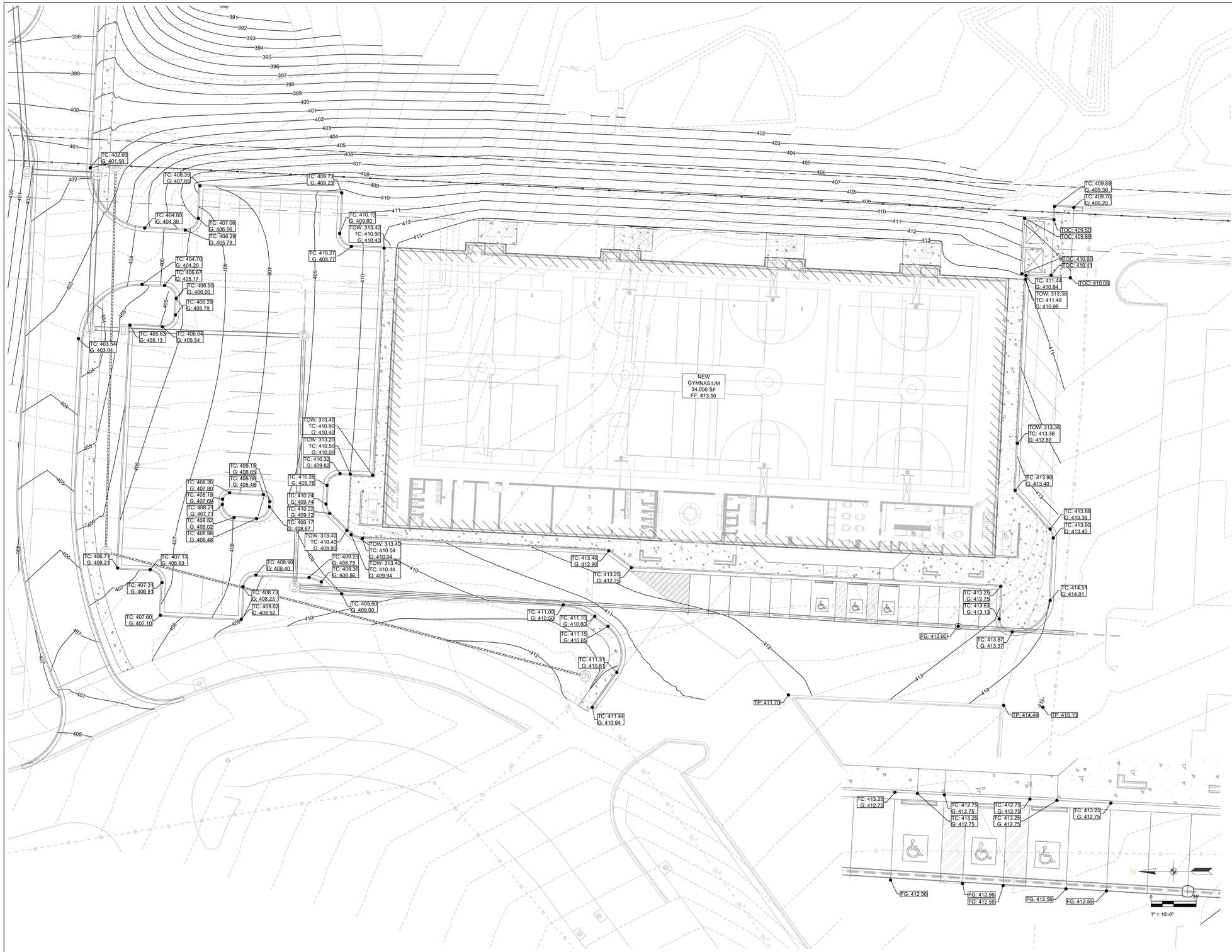
PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NUMBER:

SHEET ISSUE DATE:
09/20/2023

PAGE TITLE:
OVERALL GRADING PLAN

SHEET NUMBER:
C1.3



GRADING PLAN

SCALE 1" = 20'

G = GUTTER ELEVATION

TP = TOP OF PAVEMENT ELEVATION

TOC = TOP OF CONCRETE ELEVATION

FG = FINAL GRADE ELEVATION (NON PAVED AREAS)

TC = TOP OF CURB ELEVATION

TOW = TOP OF WALL

N

0 20'

1" = 20'-0"

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

REVISION:

SUMMERWOOD SPORTS GYMNASIUM #3
7817 Hwy 5 N
Bryant, Arkansas

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NUMBER:

SHEET ISSUE DATE:
09/20/2023

PAGE TITLE:
GRADING PLAN

SHEET NUMBER:
C1.4

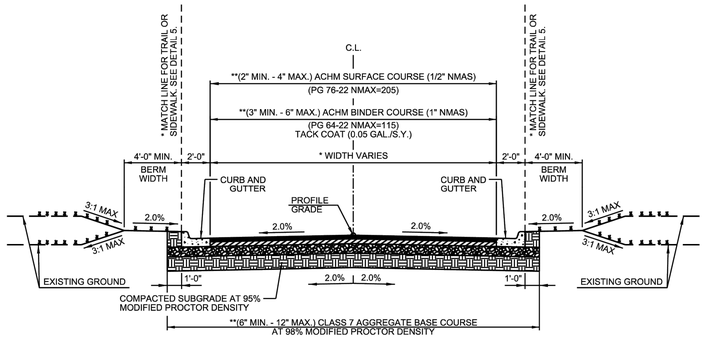
CITY OF BRYANT

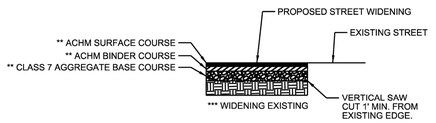
TYPICAL SECTION
MINOR ARTERIAL

ISSUE DATE
AUGUST 2021

DETAIL 1

REVISION DATE





GENERAL NOTES

1. IN AREAS TO RECEIVE BITUMINOUS PAVING, CONCRETE DRIVEWAYS OR CURB AND GUTTER, SUBGRADE SHALL BE COMPACTED TO A DENSITY NOT LESS THAN 95% OF MAXIMUM MODIFIED DENSITY OBTAINED AT OPTIMUM MOISTURE CONTENT.
2. FOR AREAS OF SUBGRADE PREPARATION TO RECEIVE CONCRETE SIDEWALKS, SUBGRADE SHALL BE COMPACTED TO DENSITY OF 90% MAXIMUM MODIFIED DENSITY.
3. CRUSHED STONE - MATERIAL IN EACH COURSE SHALL BE COMPACTED TO A DENSITY OF 98% MAXIMUM MODIFIED DENSITY.
4. ACHM BASE COURSE (4" MIN. - 12" MAX) (1 1/2" NMAS) MAY BE USED IF INCLUDED IN AN APPROVED PAVEMENT DESIGN.

* CROSS SECTIONS AND RIGHT-OF-WAY SHALL ADHERE TO THE MINIMUM WIDTH REQUIREMENTS SHOWN IN THE CITY OF BRYANT MASTER TRANSPORTATION PLAN. THE DEVELOPMENT REVIEW COMMITTEE SHALL DETERMINE WHICH VERSION OF STREET CLASSIFICATION AND WHAT WIDTHS WILL BE REQUIRED.

** THICKNESS TO BE DETERMINED BY PAVEMENT DESIGN IN ACCORDANCE WITH SECTION 5.0 OF THE MINIMUM STANDARD SPECIFICATIONS FOR STREETS.

*** PAVEMENT RECONSTRUCTION TO CENTERLINE IS REQUIRED WHEN EXISTING STREET DOES NOT MEET THESE STANDARDS.

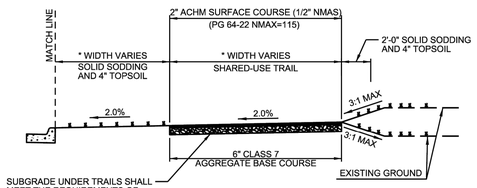
CITY OF BRYANT

TYPICAL SECTION
END CONDITIONS

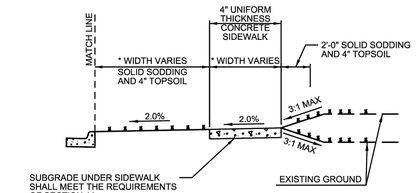
ISSUE DATE
AUGUST 2021

DETAIL 5

REVISION DATE

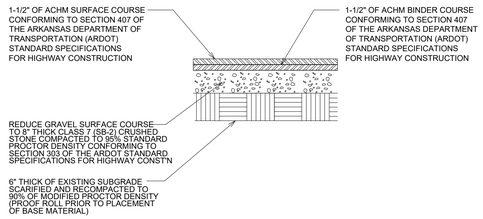


SHARED-USE TRAIL END CONDITION



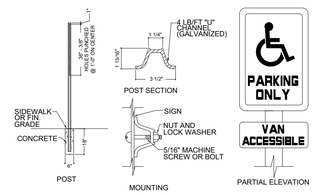
SIDEWALK END CONDITION

* WIDTH SHALL ADHERE TO THE MINIMUM WIDTH REQUIREMENTS SHOWN IN THE CITY OF BRYANT MASTER TRANSPORTATION PLAN. THE DEVELOPMENT REVIEW COMMITTEE SHALL DETERMINE WHICH VERSION OF STREET CLASSIFICATION AND WHAT WIDTHS WILL BE REQUIRED.



HMAC ASPHALT SURFACE COURSE LIGHT DUTY

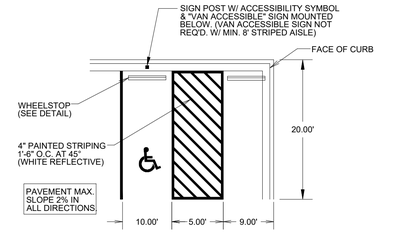
NOT TO SCALE



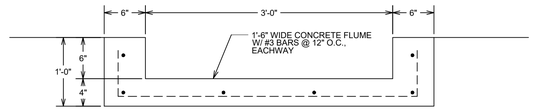
HANDICAP SIGN DETAIL

NOT TO SCALE

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

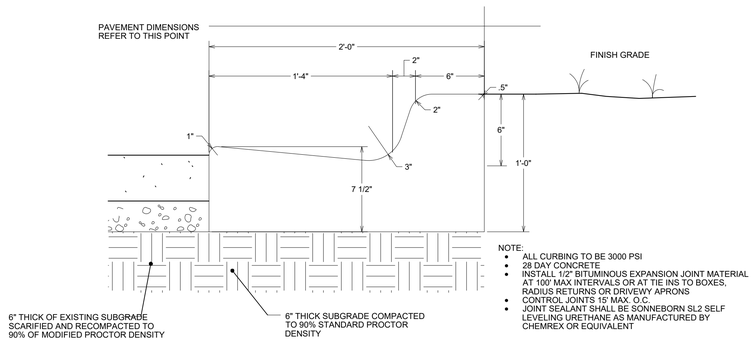


TYPICAL ACCESSIBLE PARKING STALLS



CONCRETE FLUME DETAIL

NOT TO SCALE



NOTE:
- ALL CURBING TO BE 3000 PSI
- 28 DAY CONCRETE
- INSTALL 1/2" BITUMINOUS EXPANSION JOINT MATERIAL AT 100' MAX INTERVALS OR AT TIE INS TO BOXES, RADIUS RETURNS OR DRIVEWY APRONS
- CONTROL JOINTS 15' MAX. O.C.
- JOINT SEALANT SHALL BE SONNEBORN SL2 SELF LEVELING URETHANE AS MANUFACTURED BY CHEMREX OR EQUIVALENT

2'-0" CONCRETE CURB & GUTTER

NOT TO SCALE

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

REVISION:

SUMMERWOOD SPORTS GYMNASIUM #3
7817 Hwy 5 N
Bryant, Arkansas

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NUMBER:

SHEET ISSUE DATE:
09/20/2023

PAGE TITLE:
SITE DETAILS

SHEET NUMBER:
C1.5

STORMWATER PLAN

SCALE 1" = 30'

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

REVISION:

SUMMERWOOD SPORTS GYMNASIUM #3
7817 Hwy 5 N
Bryant, Arkansas

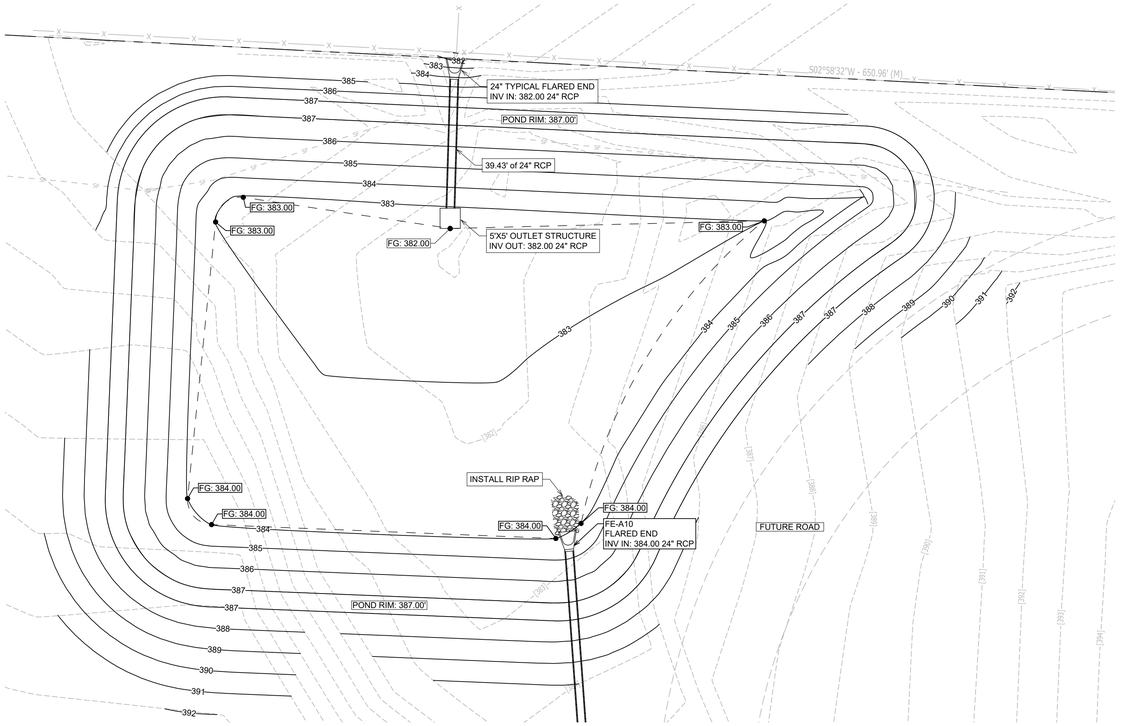
PRELIMINARY, NOT FOR CONSTRUCTION

PROJECT NUMBER:

SHEET ISSUE DATE:
09/20/2023

PAGE TITLE:
STORMWATER PLAN

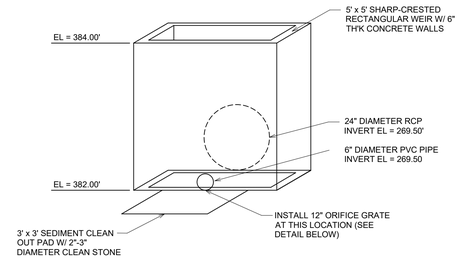
SHEET NUMBER:
C1.6



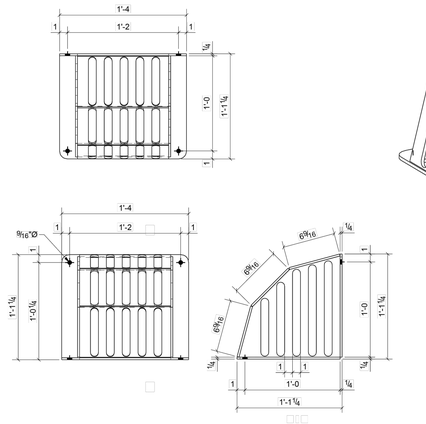
DETENTION PLAN

SCALE 1" = 20'

FG = FINAL GRADE ELEVATION (NON PAVED AREAS)

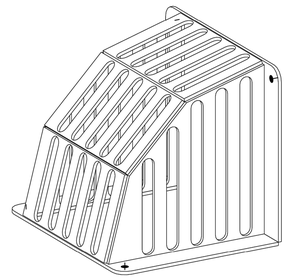


DETENTION POND OUTLET STRUCTURE DETAIL NOT TO SCALE



12" ORIFICE TRASH SCREEN

DETAILED ABOVE IS THE "TRASHRACK LPG-12" SCREEN. SIMILAR PRODUCT IS ALLOWED



N

0 10'

1" = 10'-0"

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

REVISION:

SUMMERWOOD SPORTS GYMNASIUM #3
7817 Hwy 5 N
Bryant, Arkansas

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NUMBER:

SHEET ISSUE DATE:
09/20/2023

PAGE TITLE:
DETENTION PLAN

SHEET NUMBER:
C1.7

PRE DRAINAGE MAP

SCALE 1" = 50'

N

0 50'

1" = 50'-0"

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

REVISION:

SUMMERWOOD SPORTS GYMNASIUM #3
7817 Hwy 5 N
Bryant, Arkansas

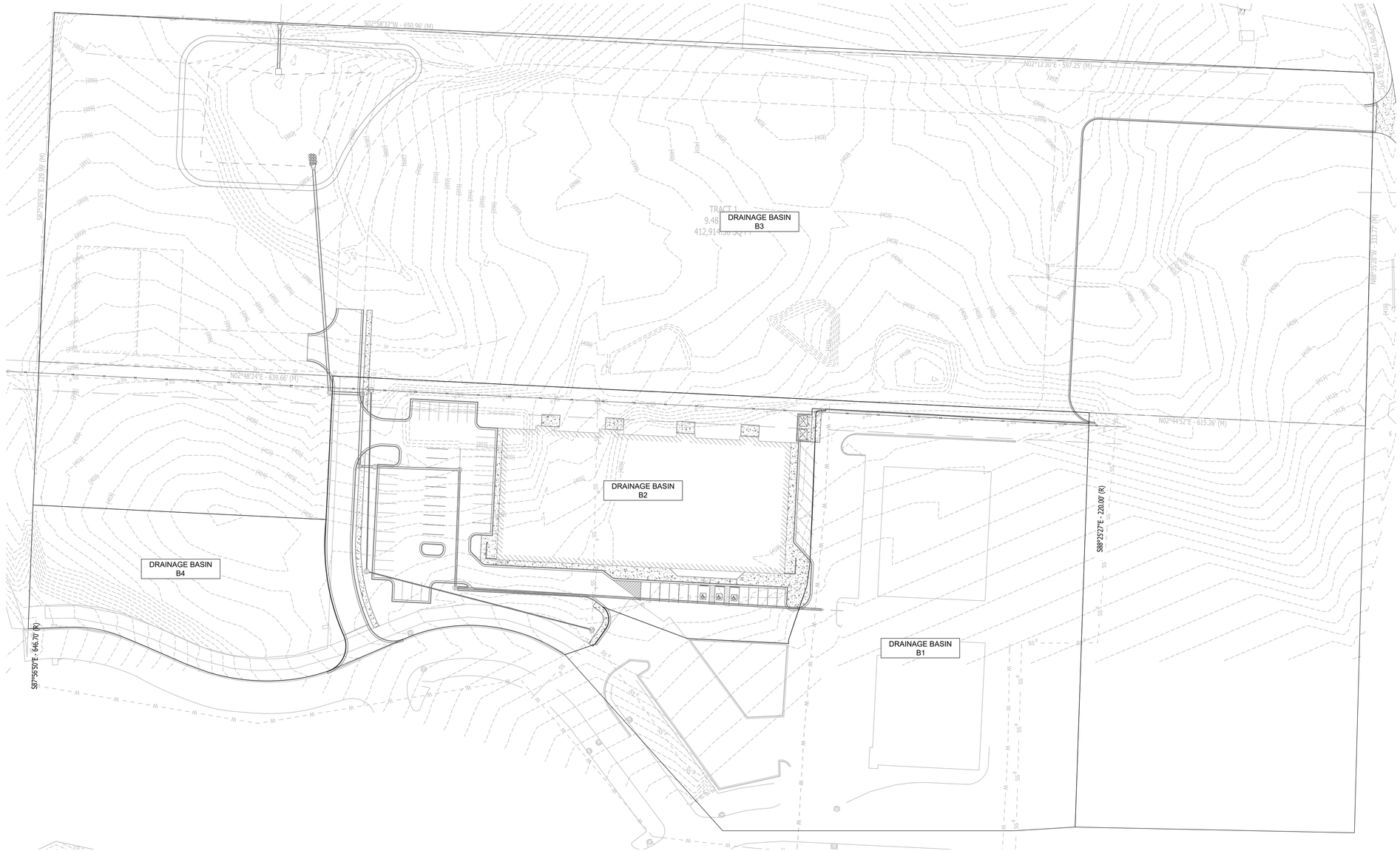
PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NUMBER:

SHEET ISSUE DATE:
09/20/2023

PAGE TITLE:
PRE DRAINAGE MAP

SHEET NUMBER:
C1.8



POST DRAINAGE MAP

SCALE 1" = 50'

N

0 50'

1" = 50'-0"

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

REVISION:

SUMMERWOOD SPORTS GYMNASIUM #3
7817 Hwy 5 N
Bryant, Arkansas

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NUMBER:

SHEET ISSUE DATE:
09/20/2023

PAGE TITLE:
POST DRAINAGE MAP

SHEET NUMBER:
C1.9

SS MH - C
STA:3+91.20
RIM:393.55
SUMP:390.03
INV IN:390.03 8" SDR-26 FROM SS MH - B

171.27' of 8" SDR-26 @ 5.76%

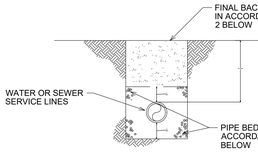
SS MH - B
STA:2+19.93
RIM:406.49
SUMP:399.90
INV IN:400.00 8" SDR-26 FROM SS MH - A
INV OUT:399.90 8" SDR-26 TO SS MH - C

219.93' of 8" SDR-26 @ 7.45%

NEW
GYMNASIUM
34,000 SF
FF: 413.50

EXISTING SS MAIN TO BE
ABANDONED & DEMOLISHED
STARTING AT THIS LOCATION

SS MH - A
STA:0+00.00
RIM:417.57
SUMP:416.38
INV OUT:416.38 8" SDR-26 TO SS MH - B



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.

SANITARY SEWER PLAN

SCALE 1" = 20'

N

0 20'

1" = 20'-0"

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

REVISION:

SUMMERWOOD SPORTS GYMNASIUM #3
7817 Hwy 5 N
Bryant, Arkansas

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NUMBER:

SHEET ISSUE DATE:
09/20/2023

PAGE TITLE:
SANITARY SEWER PLAN

SHEET NUMBER:
C1.10

SWPPP PHASE 1

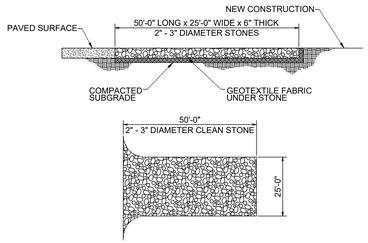
SCALE 1" = 50'

NOTES (GENERAL):

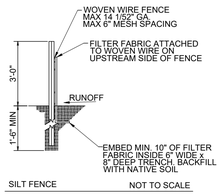
1. SEE EROSION CONTROL DETAILS IN SWPPP FOR EROSION CONTROL FACILITIES.
2. SEE SWPPP FOR INSTALLATION, MAINTENANCE, INSPECTION, AND RECORD KEEPING REQUIREMENTS.
3. CONTRACTOR SHALL SHOW EROSION CONTROL MEASURES ON SITE MAP.
4. EROSION AND SEDIMENT CONTROL STRUCTURES TO MEET SWPPP DETAILS - APPENDIX D.
5. INSTALL ROCK DITCH CHECKS OR SAND BAG SHECKS AS NECESSARY TO PREVENT SCOUR UNTIL LANDSCAPING IS ESTABLISHED.
6. CONTRACTOR MUST PLACE SEDIMENT BASIN WITH SEDIMENT FENCE OUTLET FOR ANY SEDIMENT CONTAMINATED DEWATERING DISCHARGE.
7. CONTRACTOR TO CONSTRUCT CONCRETE WAS OUT SUMP, AS NEEDED AND SHOWN ON CONSTRUCTION PLANS. DO NOT DISCHARGE TO SURFACE.
8. FINAL SLOPE WILL BE SAME DIRECTION AS EXISTING SLOPE.

LEGEND

- DISTURBED AREA
- BUFFER ZONE
- SEDIMENT FENCE WITH WIRE BACKING
- DRAINAGE DIRECTION



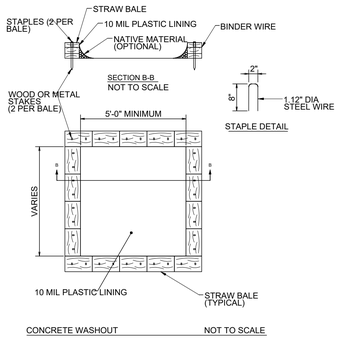
CONSTRUCTION ENTRANCE NOT TO SCALE



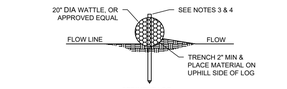
SILT FENCE NOT TO SCALE

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.

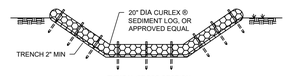


CONCRETE WASHOUT NOT TO SCALE

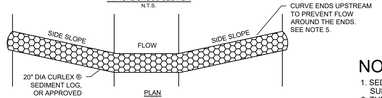


SEDIMENT LOG STAKING DETAIL
N.T.S.

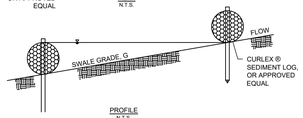
NOTE:
1. REPAIR ALL RILLS OR GULLIES PRIOR TO INSTALLATION
2. INSTALL CHECK DAMS IN SWALES PERPENDICULAR TO THE FLOWLINE
3. STAKE SEDIMENT LOGS IN PLACE WITH 1" X 1" WOODEN STAKES. DRIVE STAKES AT EACH END OF THE SEDIMENT LOG AT 2' (MAX) SPACING.
4. DRIVE STAKES INTO UNDISTURBED SOIL OF SWALE BOTTOM 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%



TYPICAL CROSS SECTION
N.T.S.



PLAN
N.T.S.



PROFILE
N.T.S.

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

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

SEDIMENT LOG

NOT TO SCALE

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

REVISION:

SUMMERWOOD SPORTS GYMNASIUM #3

7817 Hwy 5 N
Bryant, Arkansas

PRELIMINARY NOT FOR CONSTRUCTION

PROJECT NUMBER:

SHEET ISSUE DATE: 09/20/2023

PAGE TITLE: SWPPP PH. 1

SHEET NUMBER: C1.11

SWPPP PHASE 2

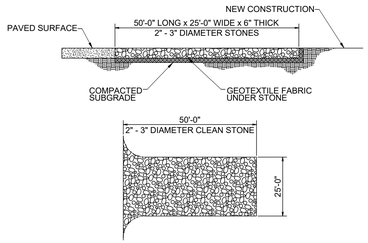
SCALE 1" = 50'

NOTES (GENERAL):

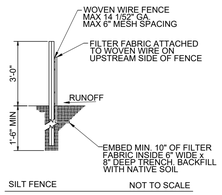
1. SEE EROSION CONTROL DETAILS IN SWPPP FOR EROSION CONTROL FACILITIES.
2. SEE SWPPP FOR INSTALLATION, MAINTENANCE, INSPECTION, AND RECORD KEEPING REQUIREMENTS.
3. CONTRACTOR SHALL SHOW EROSION CONTROL MEASURES ON SITE MAP.
4. EROSION AND SEDIMENT CONTROL STRUCTURES TO MEET SWPPP DETAILS - APPENDIX D.
5. INSTALL ROCK DITCH CHECKS OR SAND BAG SHECKS AS NECESSARY TO PREVENT SCOUR UNTIL LANDSCAPING IS ESTABLISHED.
6. CONTRACTOR MUST PLACE SEDIMENT BASIN WITH SEDIMENT FENCE OUTLET FOR ANY SEDIMENT CONTAMINATED DEWATERING DISCHARGE.
7. CONTRACTOR TO CONSTRUCT CONCRETE WAS OUT SUMP, AS NEEDED AND SHOWN ON CONSTRUCTION PLANS. DO NOT DISCHARGE TO SURFACE.
8. FINAL SLOPE WILL BE SAME DIRECTION AS EXISTING SLOPE.

LEGEND

- DISTURBED AREA
- BUFFER ZONE
- SEDIMENT FENCE WITH WIRE BACKING
- DRAINAGE DIRECTION



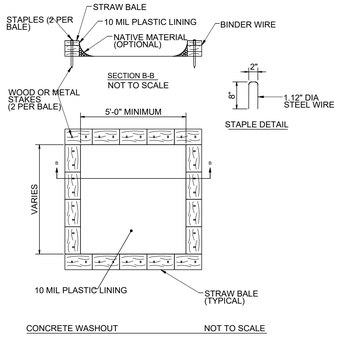
CONSTRUCTION ENTRANCE — NOT TO SCALE



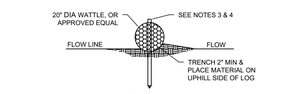
SILT FENCE — NOT TO SCALE

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.

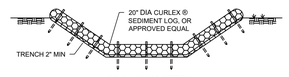


CONCRETE WASHOUT — NOT TO SCALE

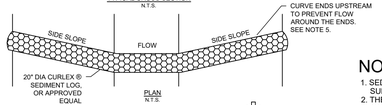


SEDIMENT LOG STAKING DETAIL
N.T.S.

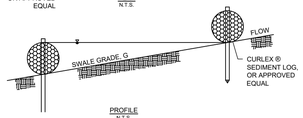
NOTE:
1. REPAIR ALL RILLS OR GULLIES PRIOR TO INSTALLATION
2. INSTALL CHECK DAMS IN SWALES PERPENDICULAR TO THE FLOWLINE
3. STAKE SEDIMENT LOGS IN PLACE WITH 1" X 1" WOODEN STAKES. DRIVE STAKES AT EACH END OF THE SEDIMENT LOG AT 2' (MAX) SPACING.
4. DRIVE STAKES INTO UNDISTURBED SOIL OF SWALE BOTTOM 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%



TYPICAL CROSS SECTION
N.T.S.



PLAN
N.T.S.



PROFILE
N.T.S.

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

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

SEDIMENT LOG

NOT TO SCALE

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

REVISION:

SUMMERWOOD SPORTS GYMNASIUM #3
7817 Hwy 5 N
Bryant, Arkansas

PRELIMINARY NOT FOR CONSTRUCTION

PROJECT NUMBER:

SHEET ISSUE DATE:
09/20/2023

PAGE TITLE:
SWPPP PH. 2

SHEET NUMBER:
C1.12

BRAND BOOK

Dak's Market

Address: 2725 Springhill Rd
Bryant, AR 72022

June 7th, 2023

CLOVIS SIGN SERVICE
Since 1962

1312 E. 1st
Clovis, NM 88101
1-575-763-5623 Fax: 1-575-763-6365

Created by: Glen Southard	Last Edited by: Glen Southard
Date: 6-8-23	Date: 6-19-23


DOUBLE HH
COUNTRY STORE
UNLEADED 2.94 9/10
DIESEL 3.49 9/10
Springhill
GROCERY
CINTAS
PLAY! HERE!


2725 Springhill Rd
B3
B2
B4
A1
B1
Springhill Rd.

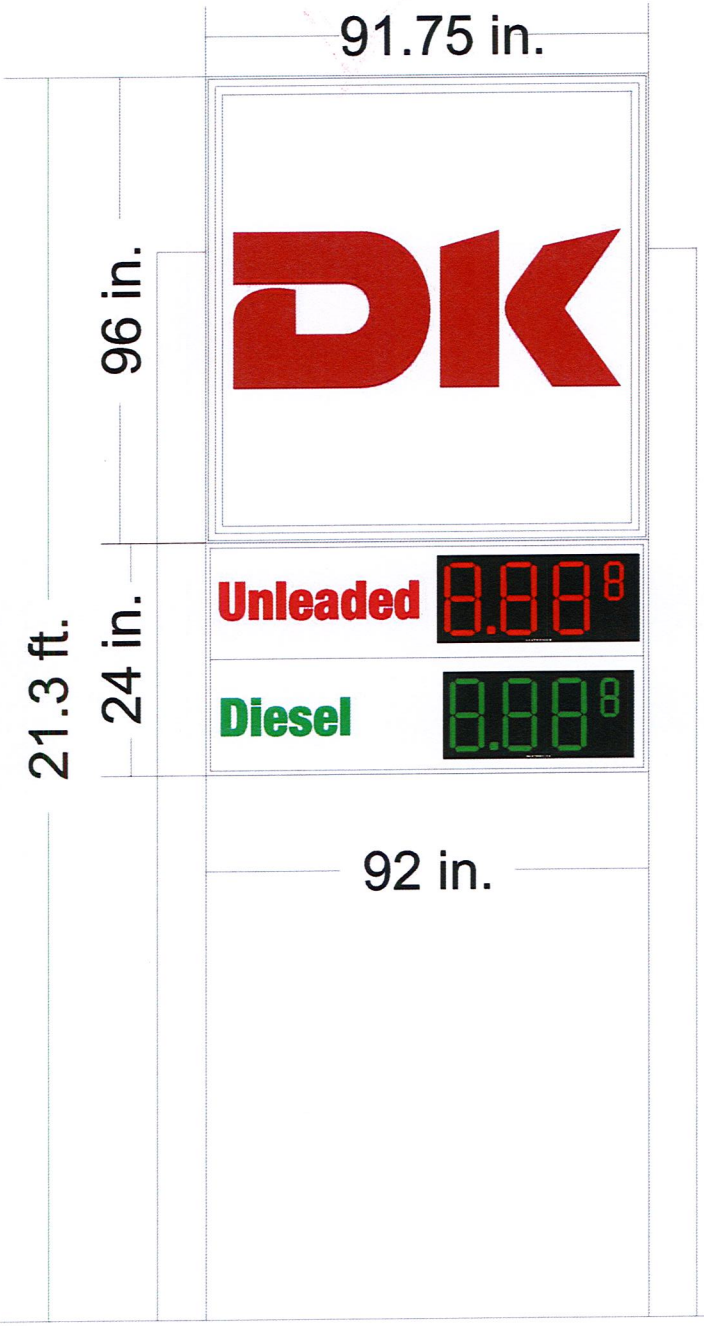
This Sign Permitted by Separate Application.

Pole Sign

Existing

A1

Proposed



ID Sign

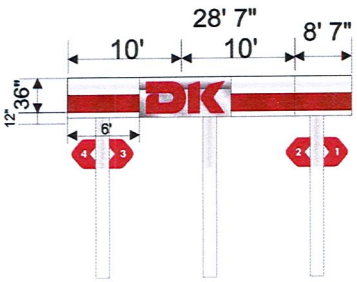
Cabinet:	12" Extrusion - White
Cabinet:	96 in H x 91.75 in W
Retainer:	2" - White
Face Material:	.177 - White
Type:	1st Surface Red Vinyl Letters
Face Size:	95 in H x 90.75 in W
Visual Opening:	92 in H x 87.75 in W
Upper Pan:	89 in H x 85 in W
Pan Depth:	2"

Price Sign

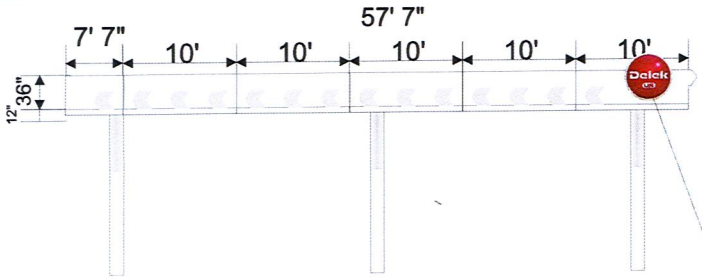
Cabinet:	12" Extrusion - White
Cabinet:	24 in H x 91.75 in W
Retainer:	2" - White
Face Material:	.177 - White
Type:	1st Surface Red/Green Letters
Face Size:	23 in H x 90.75 in W
Visual Opening:	20 in H x 87.75 in W

- Poles to be painted White
- Remove Crossbrace at top of Poles
- New MID Cabinet and Faces.
- Reface and Reuse Existing LED Digits in Price Sign

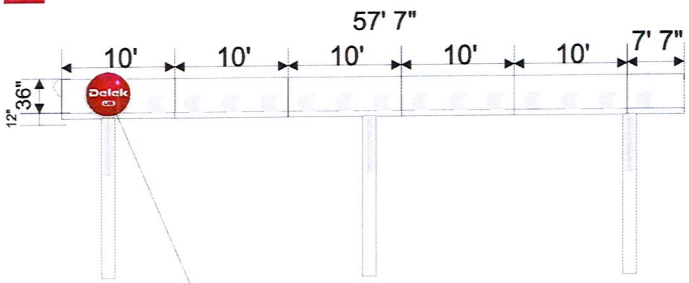
B1 Red Fascia w/ Vinyl Graphics, Lit DK Logo & Downlighting

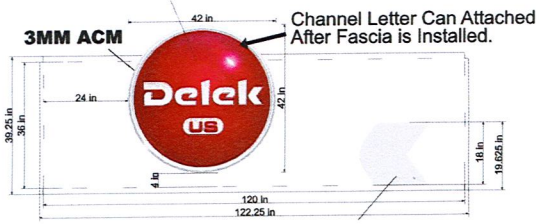


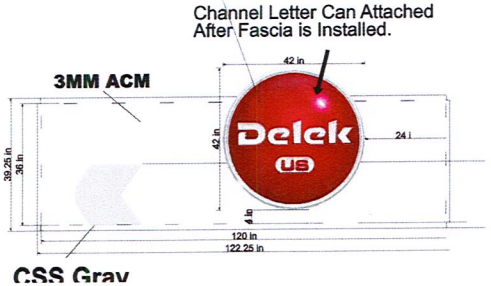
B2 White Fascia w/ Vinyl Graphics. Lit DK Globe Logo



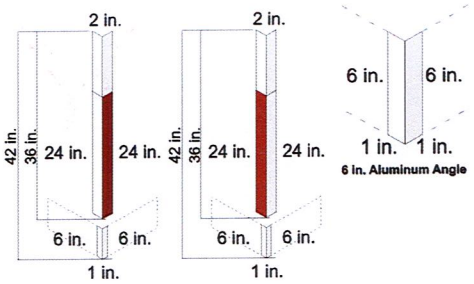
B4 White Fascia w/ Vinyl Graphics. Vinyl Globe Logo



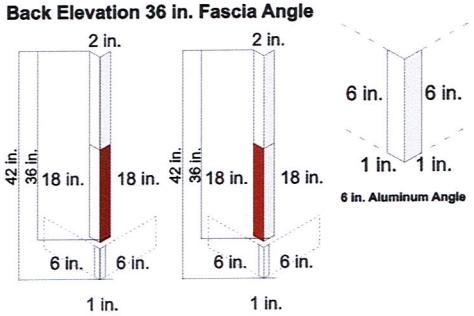




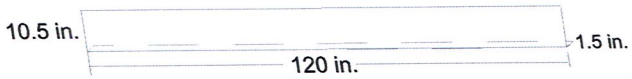
Front Elevation 36 in. Fascia Angle

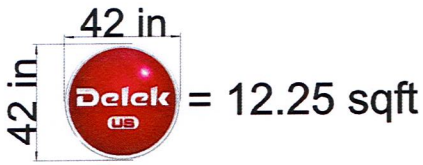


Back Elevation 36 in. Fascia Angle



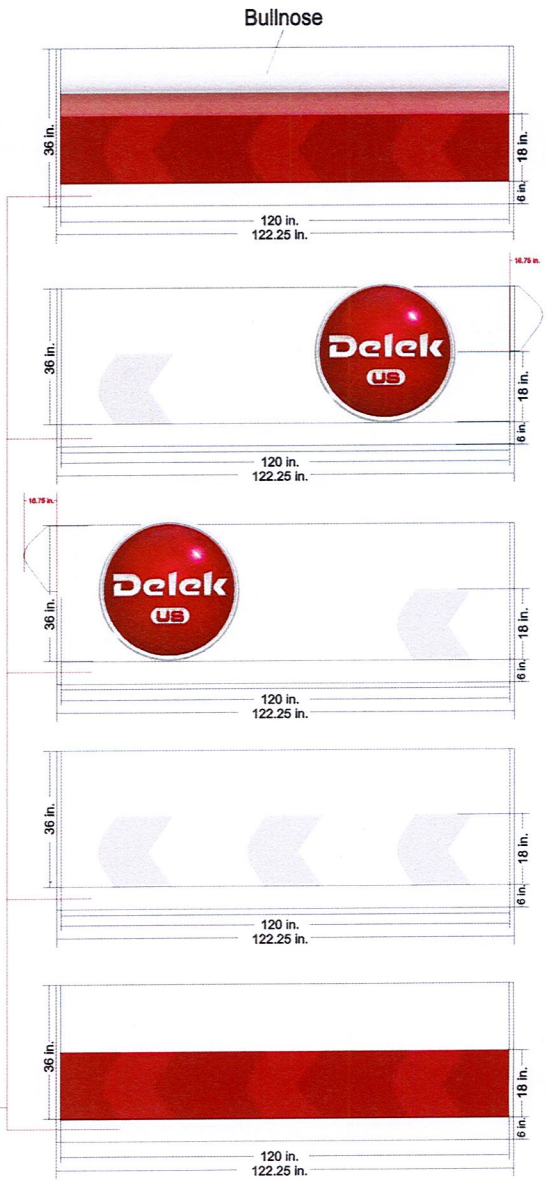
Side View: 36 in. Fascia Angle + 6 in. Aluminum Angle

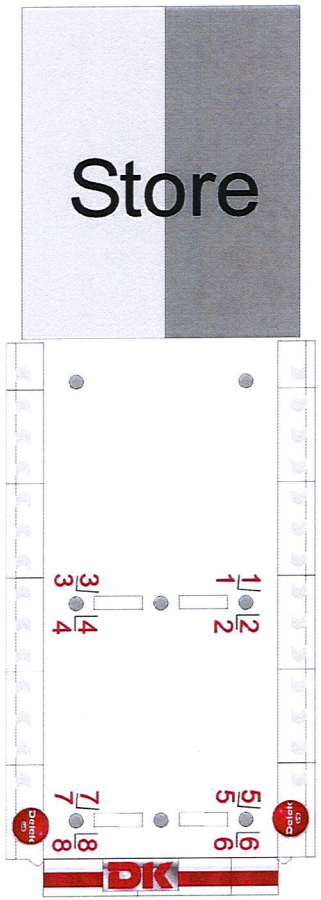




6 in. Flashing

36 in. Fascia with 6 in. Flashing





Springhill Rd.

City of Bryant, Arkansas
Community Development
210 SW 3rd Street Bryant, AR 72022
501-943-0943

SIGN PERMIT APPLICATION

Applicants are advised to read the Sign Ordinance prior to completing and signing this form. The Sign Ordinance is available at www.cityofbryant.com under the Planning and Community Development tab.

Note: Electrical Permits may be Required, Please contact the Community Development Office for more information.

Date: 9/8/23

Sign Co. or Sign Owner

Name EDWARDS SIGN CO.
Address 2208 AIRPORT RD.
City, State, Zip HOT SPRINGS, AR 71913
Phone 501 767 6525
Alternate Phone 501 627 6226

Property Owner

Name DELEK OIL
Address 2725 SPRINGHILL RD
City, State, Zip BRYANT, AR
Phone SAME
Alternate Phone _____

GENERAL INFORMATION

Name of Business SPRINGHILL GROCERY / HH COUNTRY STORE
Address/Location of sign 2725 SPRINGHILL RD
Zoning Classification C

Please use following page to provide details on the signs requesting approval. Along with information provided on this application, **a Site Plan showing placement of sign(s) and any existing sign(s) on the property is required** to be submitted. **Renderings of the sign(s) showing the correct dimensions is also required** to be submitted with the application. A thirty-five dollar ($35) per sign payment will be collected at the time of permit issuance. According to the Sign Ordinance a fee for and sign variance or special sign permit request shall be one hundred dollars ($100). Additional documentation may be required by Sign Administrator.

READ CAREFULLY BEFORE SIGNING

I _____, do hereby certify that all information contained within this application is true and correct. I fully understand that the terms of the Sign Ordinance supersede the Sign Administrator's approval and that all signs must fully comply with all terms of the Sign Ordinance regardless of approval. I further certify that the proposed sign is authorized by the owner of the property and that I am authorized by the property owner to make this application. I understand


EXISTING SIGN
DOUBLE HH COUNTRY STORE
UNLEADED 2.94 9/10
DIESEL 3.49 9/10
Springhill GROCERY
A
B
PROPOSED SIGN
92
96
48"
DK
UNLEADED 2.94 9/10
DIESEL 3.49 9/10
Springhill GROCERY
A
B

that no sign may be placed in public right of way. I understand that I must comply with all Building and Electrical Codes and that it is my responsibility to obtain all necessary permits.

Use table below to enter information regarding each sign for approval. Please use each letter to reference each sign rendering.

SIGN	**Type** (Façade, Pole, Monument, other)	**Dimensions** (Height, Length, Width)	**Sqft** (Measured in whole as rectangle)	**Height of Sign** (Measured from lot surface)		Column for Admin Certifying Approval
	EXISTING			Top of Sign	Bottom of Sign	
A	POLE SIGN	96"X92"X12	56	21 FT	13 FT	
B	EXISTING PRICE SIGN	96"X42"	28	13	9FT-6"IN	
C						
E						
F						
G						

(A) REMOVE EXISTING 108"X80" CURVED-TOP SIGN
REPLACE WITH 96" X92" SQUARE LIGHTED SIGN

(B) CHANGE FACES IN EXISTING 92"X42" PRICE SIGN