



# Bryant Development and Review Committee Meeting

Boswell Municipal Complex - City Hall Conference Room

210 SW 3rd Street

**Date:** December 14, 2023 - **Time:** 9:00 AM

## Call to Order

## Old Business

## New Business

### 1. 2714 Lavern Dr - Short Term Rental - Conditional Use Permit

*Delia Guerra - Requesting Recommendation for Conditional Use Permit for use of Short Term Rental*

- [0820-APP-01.pdf](#)

### 2. Five Star Fireworks - Temporary Business Permit

*Mark Bradford - Requesting Approval for Temporary Business Permits for Firework Stands Located at: (1) 23395 I-30 (2) 5407 Hwy 5*

- [0818-APP-01.pdf](#)
- [0817-APP-01.pdf](#)

### 3. Arkansas Storage Center - I-30 Storage - 25300 I-30 N

*Hope Consulting - Requesting Recommendation for Site Plan Approval*

- [0768-DRN-03.pdf](#)
- [0768-PLN-03.pdf](#)

## Staff Approved

### 4. The Corner Office - 207 Progress Way Ste. 100 - Sign Permit

*L Graphics - Requesting Approval for Sign Permit - STAFF APPROVED*

- [0821-APP-01.pdf](#)

## Permit Report

## Adjournments



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

## Conditional Use Permit Application

Applicants are advised to read the Conditional Use Permit section of Bryant Zoning Code prior to completing and signing this form. The Zoning Code is available at [www.cityofbryant.com](http://www.cityofbryant.com) under the Planning and Community Development tab.

Date: 12/06/2023

**Applicant or Designee:**

**Project Location:**

Name Delia Vanessa Guerra-Ochoa Property Address 2714 Lavern St  
Address 2714 Lavern St, Bryant AR 72022 Bryant AR 72022  
Phone 501 283 4058 Parcel Number \_\_\_\_\_  
Email Address: deliaguerrara@gmail.com Zoning Classification sub 2

**Property Owner (If different from Applicant):**

Name Delia Vanessa Guerra-Ochoa  
Phone 501-283-4058  
Address 2714 Lavern, St, Bryant, AR, 72022  
Email Address deliaguerrara@gmail.com

**Additional Information:**

Legal Description (Attach description if necessary)

Pikewood sub. 2 lot

Description of Conditional Use Request (Attach any necessary drawings or images)

Short term rental

Proposed/Current Use of Property Residential → Short term rental

# Application Checklist

## Requirements for Submission

- Letter stating request of Conditional Use and reasoning for request
- Completed Conditional Use Permit Application
- Submit Conditional Use Permit Application Fee (\$125)
- Submit Copy of completed Public Notice
- Publication: Public Notice shall be published at least one (1) time fifteen (15) days prior to the public hearing at which the variance will be heard. Once published please provide a proof of publication to the Community Development office.  
*Sabine Courier Downtown Benton*
- Posting of Property: The city shall provide a sign to post on the property involved for the fifteen (15) consecutive days leading up to Public hearing. One (1) sign is required for every two hundred (200) feet of street frontage.
- Submit eight (8) Copies of the Development Plan (Site Plan) showing:
  - Location, size, and use of buildings/signs/land or improvements
  - Location, size, and arrangement of driveways and parking. Ingress/Egress
  - Existing topography and proposed grading
  - Proposed and existing lighting
  - Proposed landscaping and screening
  - Use of adjacent properties
  - Scale, North Arrow, Vicinity Map
  - Additional information that may be requested by the administrative official due to unique conditions of the site.

**Once the application is received, the material will be reviewed to make sure all the required information is provided. The applicant will be notified if additional information is required. The application will then go before the Development and Review Committee (DRC) for a recommendation to the Planning Commission. A public hearing will be held at this meeting for comments on the Conditional Use. After the public hearing, the Planning Commission will make a decision on the use.**

**Note: that this is not an exhaustive guideline regarding the Conditional Use Permit Process. Additional information is available in the Bryant Zoning Ordinance.**

### **READ CAREFULLY BEFORE SIGNING**

I \_\_\_\_\_, do hereby certify that all information contained within this application is true and correct. I further certify that the owner of the property authorizes this proposed application. I understand that I must comply with all City Codes and that it is my responsibility to obtain all necessary permits required.

## NOTICE OF PUBLIC HEARING

A public hearing will be held on Monday, January 8th, 2024 at 6:00 P.M.

at the Bryant City Office Complex, 210 Southwest 3<sup>rd</sup> Street, City of Bryant, Saline

County, for the purpose of public comment on a conditional use request at the site of

2714 Lavern St, Bryant, AR 72022 (address).

A legal description of this property can be obtained by contacting the Bryant Department of Community Development.

Rick Johnson  
Chairman Board of Zoning Adjustment  
City of Bryant

*This notice is to be run in the legal notices section of the Saline Courier  
no less than 15 days prior to the public hearing.*



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



## Temporary Business Application For the Sale of Fireworks

- Applications are due by 5:00PM Wednesday the week prior to the Scheduled Development and Review Committee Meeting.
- Application Deadlines and dates can be found at [www.cityofbryant.com](http://www.cityofbryant.com) under the Community Development tab.

Date: 12-1-23

### Business Information:

Name Five Star Fireworks  
 Federal Tax Employer ID Number 453216207  
 Arkansas State Sales Tax Number \_\_\_\_\_  
 Location of Proposed Temporary Business 5407 Hwy. 5

### Business Owner:

Name Mark Bradford  
 Address 17 Ashlee Blvd  
Nash, TX 75569  
 Phone 903-826-4453  
 Email imafreely76@  
gmail.com

### Contact Person:

Name Mark Bradford  
 Address 17 Ashlee Blvd  
Nash, TX 75569  
 Phone 903-826-4453  
 Email imafreely76@  
gmail.com

### Checklist for Submission

- Completed Application and Checklist
- Twenty-Five Dollar (\$25.00) Application fee
- Provide proof of 1,000,000 Liability Insurance or Surety Bond worth the same amount.  
 (Further information on the details of liability insurance can be found in Section 2-4 of the Temporary Business Section of the Bryant Business Ordinance.)

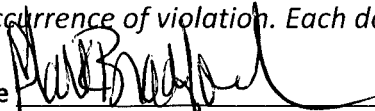
(Continued on Page 2)

- Eight (8) copies of a **Site Plan**:
  - Site Plan shall be to scale, all structures shall be identified. Clear identification of any open display areas
  - Fireworks tent / canopy shall have a minimum 50ft. setback from all other structures
  - Show parking spaces dedicated by the owner of the property for use by the temporary business.
- Exits shall be provided every 100 ft. with a minimum of 2 remotely located exits  
Minimum exit width shall be 72 in. All exits shall be identified with proper signage
- No smoking permitted within 50 ft. of firework tent / canopy. "NO SMOKING" signs shall be posted at all entrance / exits
- 2 ABC fire extinguishers, with a 2A rating or greater, shall be provided. The maximum travel distance to an extinguisher shall not exceed 75 ft. Additional extinguishers may be required. Extinguishers shall be clearly visible, marked with appropriate signage, and mounted height of not less than 36 in. from the ground
- Generators or other combustion power sources, including fuel, shall be separated from tents / canopies by a minimum of 25 ft.
- Applicant shall contact the Bryant Fire Dept. Fire Marshal's office and schedule an inspection once the business is ready for operation. The inspection shall be conducted prior to any sales to the public are allowed. Contact: 501-943-0964

**READ CAREFULLY BEFORE SIGNING**

I, Mark Bradford, do hereby certify that all information contained within this application is true and correct. I further certify that I agree too and will abide by all Temporary Business rules and regulations as outlined in the Bryant Business Ordinance. I also understand that I shall comply with all additional applicable ordinances of the City as well as the requirements of all state and federal laws. Furthermore, I understand violation of Temporary Business Ordinance 2007-43 is a misdemeanor punishable by a fine of up to \$500.00 per occurrence of violation. Each day's occurrence is a separate violation.

Owners Signature





**City of Bryant Community Development**  
210 SW 3rd Street  
Bryant, AR 72022  
PHONE: 501-943-0857  
FAX: 501-943-0992  
EMAIL: [tsmith@cityofbryant.com](mailto:tsmith@cityofbryant.com)

## Temporary Business Application and Information

- Applications are due by 5:00 Pm Wednesday the week prior to the scheduled Development Review Committee meeting.
- Application deadlines and meeting dates can be found on the City of Bryant's website under the Planning and Community Development page or by clicking [HERE](#).

### Requirements for Submission

- Letter stating your request
- Complete and submit a Temporary Business Application
- Submit \$25.00 application fee
- Submit 8 copies of **site plan** showing:
  - Exact location of proposed temporary business including setbacks from streets or highway right-of-way.
  - Clearly identifying any open display areas.
  - The parking spaces to be dedicated by the owner of the property for use by this temporary business.
- Submit a letter from the property owner stating that they are in agreement with the site plan. *ON FILE*
- If food establishment – show approval from **Arkansas Department of Health**.
- Provide \$1,000 surety bond made payable to City of Bryant conditioned for faithful performance of the payment of all applicable fees and penalties.  
*ON FILE*

Temporary Business Application

City of Bryant

Date: 12-1-23

Name of Business: FIVE STAR FIREWORKS

Federal Tax Employer Identification Number: 453216207

Arkansas State Sales Tax Number: \_\_\_\_\_

Type of Business: RETAIL SALES

Location of proposed Temporary Business: 5407 HWY 5

Parcel Number of Location of proposed Temporary Business: 5407 HWY 5

Owner Mailing Address: 17 ASHLEE BLVD NASH, TX 75569

Contact Person: MARK BRADFORD

Daytime Phone Number: 903-826-4453 Evening Phone Number: SAME

Please check the category you are applying for. Permits cannot exceed the following time limits:

- Carnivals 30 Days
- Fireworks stands or tents 30 Days
- Christmas tree stands, tents or lots 60 Days
- General commercial sales stands, tents or lots 90 Days
- Concession/Refreshment stands/Food Service 180 Days

Beginning Date Requested DEC 14, 2023 Ending Date Requested JAN 1ST 2024

I hereby certify the above to be true and correct, and state that I am operating a business in accordance with the city's zoning regulations and/or any other city, state, or federal laws which may be applicable. I understand violation of Temporary Business Ordinance 2007-43 is a misdemeanor punishable by a fine of up to \$500.00 per occurrence of violation. Each day's occurrence is a separate violation. No temporary business may operate for more than 180 days during any consecutive 12-month period.

Owners Signature Mark Bradford



City of Bryant

Greetings, I am requesting a temporary business license for the retail sale of Fireworks for the dates of Dec 14<sup>th</sup> to Jan 1, 2024.

The following locations are the places the Fireworks will be sold.

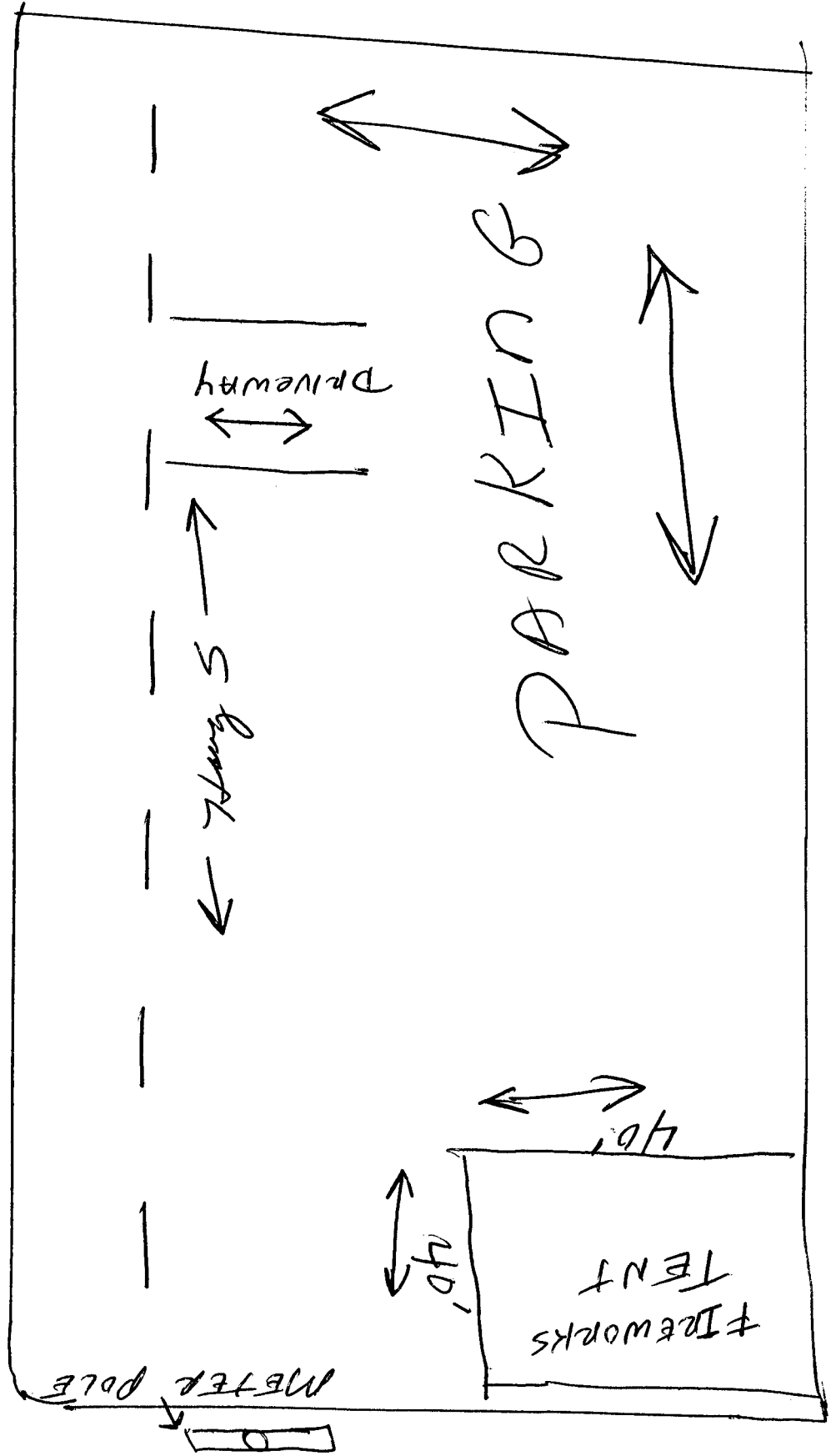
- 1) 23395 I-30 Bryant, Ark 72022
- 2) 5407 Hwy 5 Bryant, Ark 72022

Thank You,

Mark Bradford  
Fire Star Fireworks  
903-826-4453  
imafreely76@gmail.com

# Five Star Fireworks

Location 5407 Hwy 5 Bryant, Ark 72022





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



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Date: 12-1-23

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Name Five Star Fireworks  
 Federal Tax Employer ID Number 453216207  
 Arkansas State Sales Tax Number 3  
 Location of Proposed Temporary Business 22395 I-30

### Business Owner:

Name Mark Bradford  
 Address 17 Ashlee Blvd  
Nash, TX 75569  
 Phone 903-826-4453  
 Email imafreely76@gmail.com

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# Temporary Business Application

## City of Bryant

Date: 12-1-23

Name of Business: FIVE STAR FIREWORKS

Federal Tax Employer Identification Number: 453216207

Arkansas State Sales Tax Number: \_\_\_\_\_

Type of Business: RETAIL SALES

Location of proposed Temporary Business: ~~23395 I-30~~ 23395 I-30

Parcel Number of Location of proposed Temporary Business: ~~23395 I-30~~ 23395 I-30

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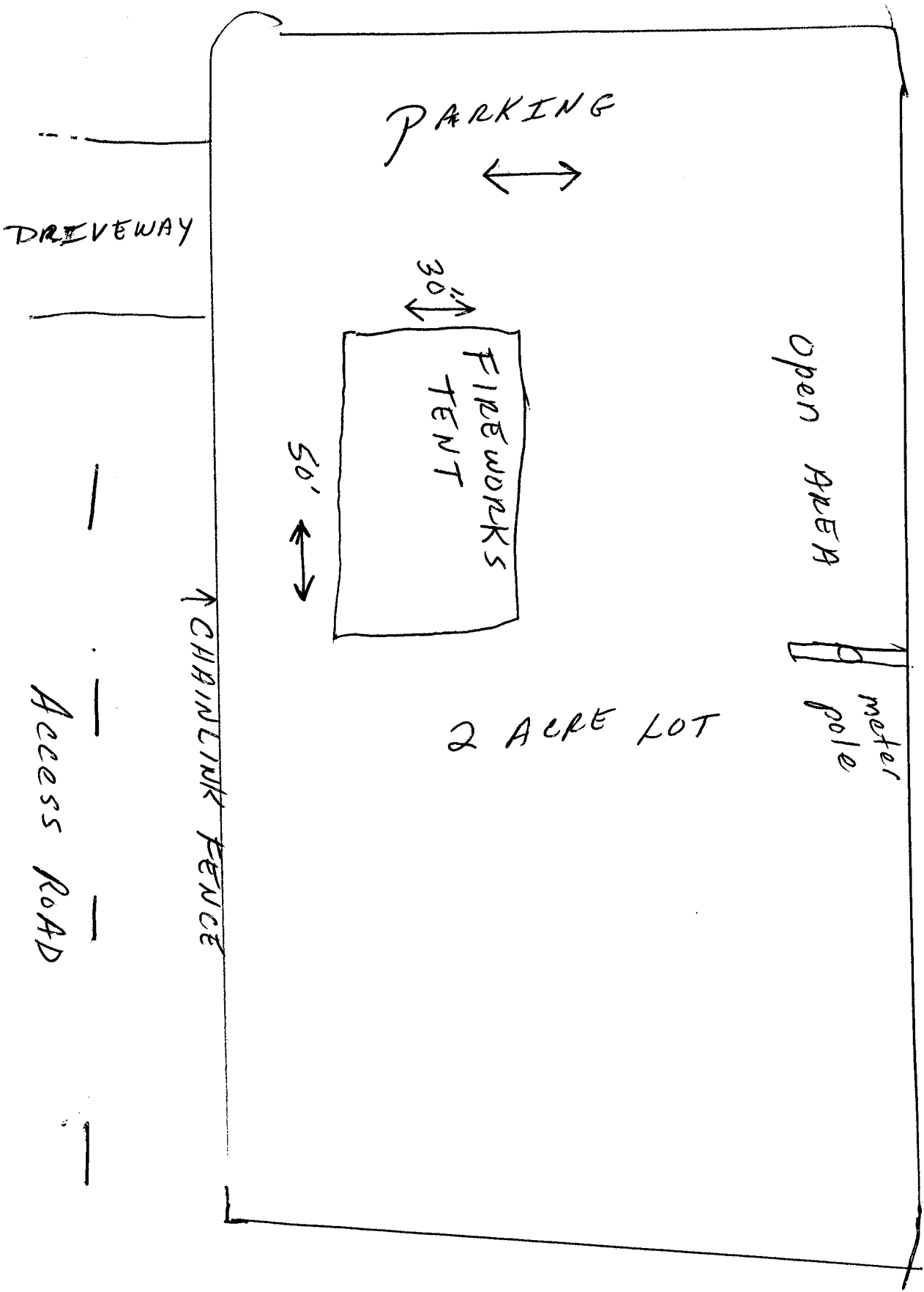
Thank You,

Mark Bradford  
Fire Star Fireworks

903-826-4453  
imafreely76@gmail.com

# Prime Star fireworks

Location 23395 E-30 Bryant, Ark



PARKING

DRIVEWAY

30'

FIREWORKS  
TENT

50'

Open AREA

meter  
pole

2 ACRE LOT

CHARMLINK FENCE

Access Road



*ARKANSAS STORAGE CENTER*  
*BRYANT, AR*  
*DRAINAGE REPORT*

*FOR*  
*City of Bryant, Saline County, AR*

December 2023

Owner & Developer: STUART FINLEY  
Address: P.O Box 10, Bryant, AR. 72089

By:

**HOPE**  
**CONSULTING**  
**ENGINEERS - SURVEYORS**

PROJECT TITLE

ARKANSAS STORAGE CENTER

**PROJECT PROPERTY OWNER**

STUART FINLEY

**PROJECT LOCATION**

25300 I-30 North, Bryant, AR

**PROJECT DESCRIPTION**

The proposed self-storage facility development is located on High-way I-30 in the city of Bryant, Arkansas. The total development area is 24.31 acres.

**DRAINAGE ANALYSIS**

**On Site Drainage-** Rational method was used to determine the existing and proposed flows from proposed site. Detailed drainage calculations considering the future expected development have been conducted. Summary of the calculations are below:

- Pre-development area: 28.91 acres.
- Post-development area: 28.91 acres.
- Pre-development runoff coefficient: 0.47.
- Post-development runoff coefficient: 0.88.
- Time of Concentration for Pre-development Area: 16.05 min
- Time of Concentration for Post-development Area: 10.58 min
- One 12” RCP with 0.5% slope is proposed for outflow culvert with an elevation of 353.5’

**Peak flows for Pre and post development phase of onsite area have been tabulated below-**

	Pre-Development	Post-Development without Detention	Post-Development with Detention
	Peak Flow (cfs)	Peak Flow (cfs)	Peak Flow (cfs)
2-Year	53.08	116.86	1.831
5-Year	58.66	130.27	3.033
10-Year	69.15	149.65	5.315
25-Year	79.33	176.93	8.288
50-Year	90.45	194.22	11.98
100-Year	96.16	205.89	13.95
<b>TOC</b>	<b>16.05 min</b>	<b>10.58 min</b>	

**CONCLUSION**

The onsite drainage calculation for pre and post condition has been provided.

# Watershed Model Schematic

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024



## Legend

<u>Hyd.</u>	<u>Origin</u>	<u>Description</u>
1	Rational	Pre-development
2	Rational	Post-Development
3	Reservoir	Pond

# Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	Rational	-----	-----	53.08	-----	58.66	69.15	79.33	90.45	96.16	Pre-development
2	Rational	-----	-----	116.86	-----	130.27	149.65	170.93	194.22	205.89	Post-Development
3	Reservoir	2	-----	1.831	-----	3.033	5.315	8.288	11.98	13.95	Pond

# Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description	
1	Rational	53.08	1	16	50,961	-----	-----	-----	Pre-development	
2	Rational	116.86	1	11	77,130	-----	-----	-----	Post-Development	
3	Reservoir	1.831	1	22	69,981	2	354.52	75,979	Pond	
22-0800 I-30 Self Storage Drainage Report PHASE 1					Run Period: 2 Year			Wednesday, 12 / 6 / 2023		

# Hydrograph Report

## Hyd. No. 1

Pre-development

Hydrograph type	= Rational	Peak discharge	= 53.08 cfs
Storm frequency	= 2 yrs	Time to peak	= 0.27 hrs
Time interval	= 1 min	Hyd. volume	= 50,961 cuft
Drainage area	= 28.910 ac	Runoff coeff.	= 0.47
Intensity	= 3.907 in/hr	Tc by User	= 16.00 min
IDF Curve	= Bryant 50.IDF	Asc/Rec limb fact	= 1/1



# Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description	
1	Rational	58.66	1	16	56,310	-----	-----	-----	Pre-development	
2	Rational	130.27	1	11	85,979	-----	-----	-----	Post-Development	
3	Reservoir	3.033	1	22	78,671	2	354.64	84,478	Pond	
22-0800 I-30 Self Storage Drainage Report PHASE 1					Return Period: 5 Year			Wednesday, 12 / 6 / 2023		

# Hydrograph Report

## Hyd. No. 1

Pre-development

Hydrograph type	= Rational	Peak discharge	= 58.66 cfs
Storm frequency	= 5 yrs	Time to peak	= 0.27 hrs
Time interval	= 1 min	Hyd. volume	= 56,310 cuft
Drainage area	= 28.910 ac	Runoff coeff.	= 0.47
Intensity	= 4.317 in/hr	Tc by User	= 16.00 min
IDF Curve	= Bryant 50.IDF	Asc/Rec limb fact	= 1/1





# Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

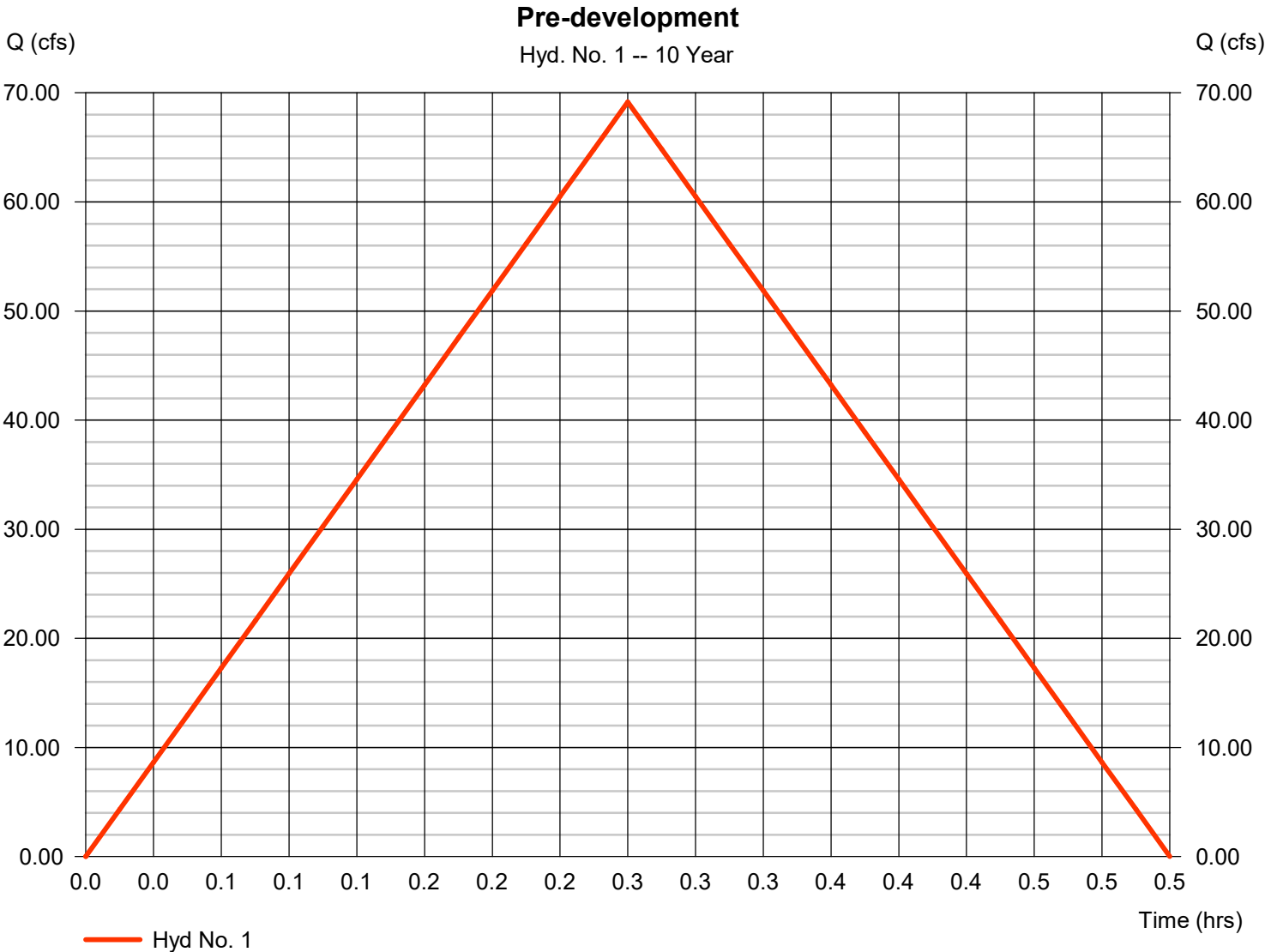
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	69.15	1	16	66,385	-----	-----	-----	Pre-development
2	Rational	149.65	1	11	98,770	-----	-----	-----	Post-Development
3	Reservoir	5.315	1	22	91,328	2	354.79	96,410	Pond

# Hydrograph Report

## Hyd. No. 1

Pre-development

Hydrograph type	= Rational	Peak discharge	= 69.15 cfs
Storm frequency	= 10 yrs	Time to peak	= 0.27 hrs
Time interval	= 1 min	Hyd. volume	= 66,385 cuft
Drainage area	= 28.910 ac	Runoff coeff.	= 0.47
Intensity	= 5.089 in/hr	Tc by User	= 16.00 min
IDF Curve	= Bryant 50.IDF	Asc/Rec limb fact	= 1/1



# Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

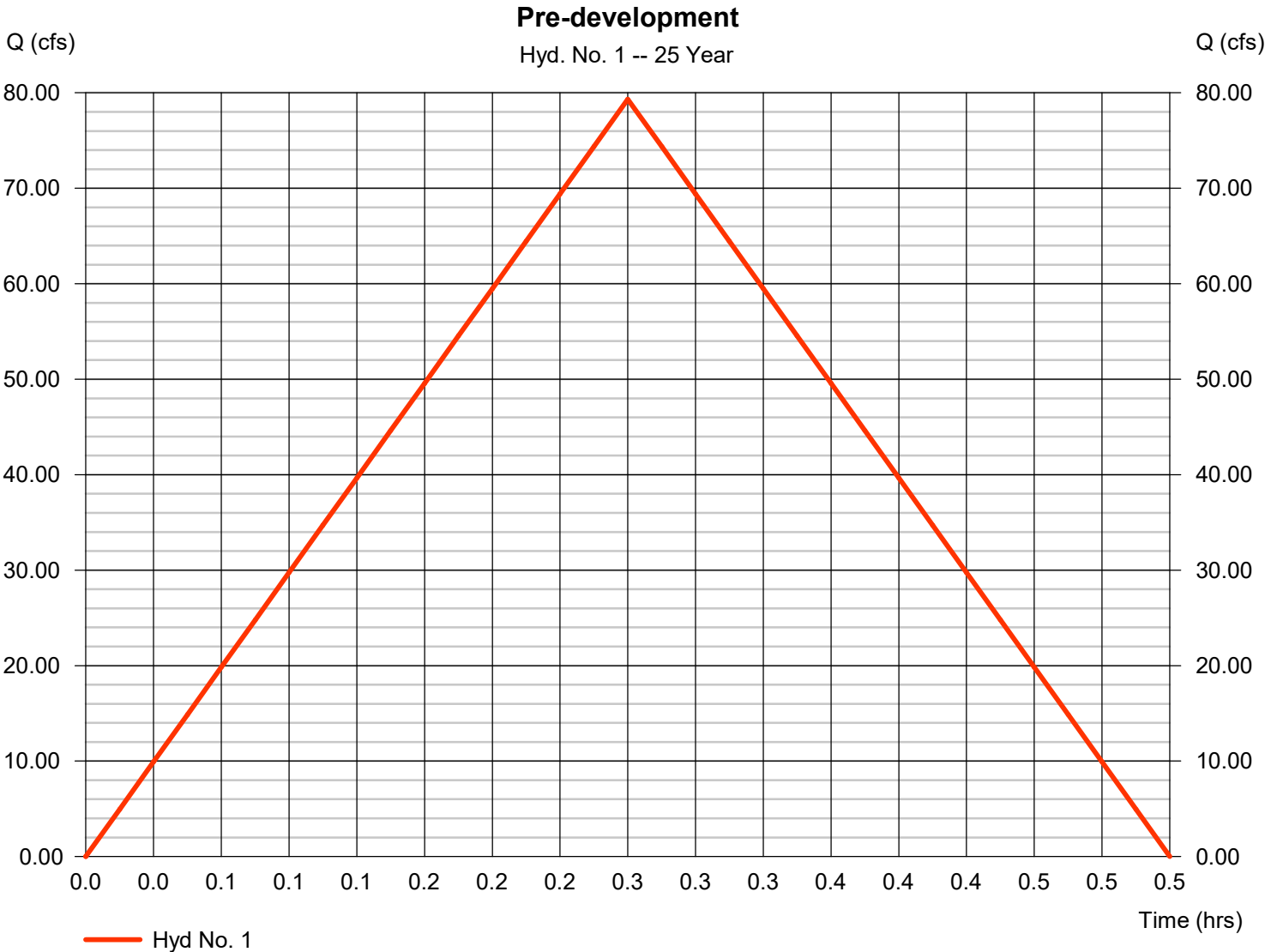
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	79.33	1	16	76,152	-----	-----	-----	Pre-development
2	Rational	170.93	1	11	112,816	-----	-----	-----	Post-Development
3	Reservoir	8.288	1	21	105,284	2	354.96	109,197	Pond

# Hydrograph Report

## Hyd. No. 1

Pre-development

Hydrograph type	= Rational	Peak discharge	= 79.33 cfs
Storm frequency	= 25 yrs	Time to peak	= 0.27 hrs
Time interval	= 1 min	Hyd. volume	= 76,152 cuft
Drainage area	= 28.910 ac	Runoff coeff.	= 0.47
Intensity	= 5.838 in/hr	Tc by User	= 16.00 min
IDF Curve	= Bryant 50.IDF	Asc/Rec limb fact	= 1/1



# Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	90.45	1	16	86,827	-----	-----	-----	Pre-development
2	Rational	194.22	1	11	128,188	-----	-----	-----	Post-Development
3	Reservoir	11.98	1	21	120,591	2	355.14	122,983	Pond
22-0800 I-30 Self Storage Drainage Report PHASE 1						Return Period: 50 Year		Wednesday, 12 / 6 / 2023	

# Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Wednesday, 12 / 6 / 2023

## Hyd. No. 1

Pre-development

Hydrograph type	= Rational	Peak discharge	= 90.45 cfs
Storm frequency	= 50 yrs	Time to peak	= 0.27 hrs
Time interval	= 1 min	Hyd. volume	= 86,827 cuft
Drainage area	= 28.910 ac	Runoff coeff.	= 0.47
Intensity	= 6.656 in/hr	Tc by User	= 16.00 min
IDF Curve	= Bryant 50.IDF	Asc/Rec limb fact	= 1/1



# Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	96.16	1	16	92,318	----	----	----	Pre-development
2	Rational	205.89	1	11	135,890	----	----	----	Post-Development
3	Reservoir	13.95	1	21	128,267	2	355.22	129,785	Pond

# Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Wednesday, 12 / 6 / 2023

## Hyd. No. 1

Pre-development

Hydrograph type	= Rational	Peak discharge	= 96.16 cfs
Storm frequency	= 100 yrs	Time to peak	= 0.27 hrs
Time interval	= 1 min	Hyd. volume	= 92,318 cuft
Drainage area	= 28.910 ac	Runoff coeff.	= 0.47
Intensity	= 7.077 in/hr	Tc by User	= 16.00 min
IDF Curve	= Bryant 50.IDF	Asc/Rec limb fact	= 1/1





# Multi-Hydrograph Plot

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

## Hyd. No. 1

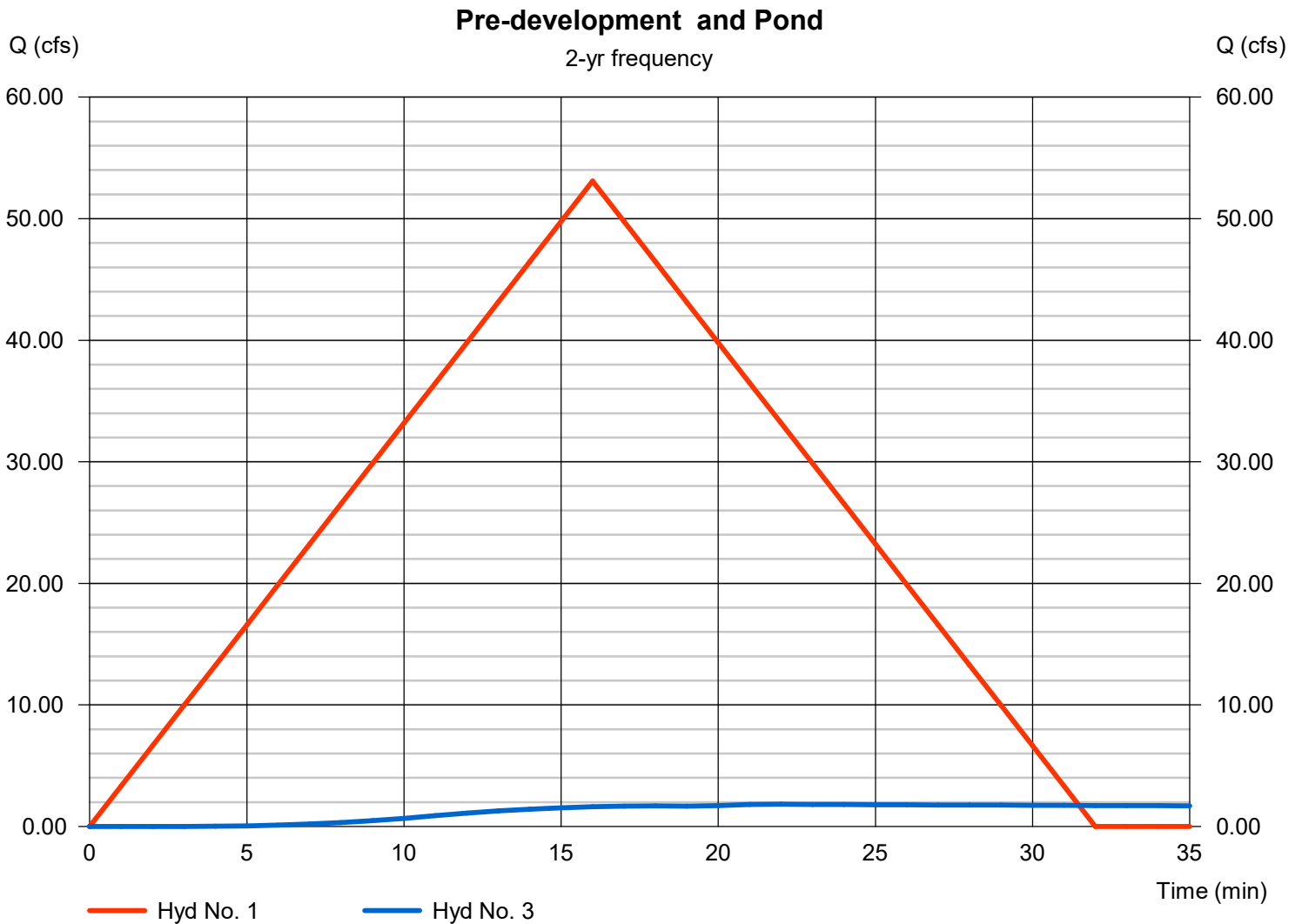
Pre-development

Hydrograph type = Rational  
Peak discharge = 53.08 cfs  
Time to peak = 16 min  
Hyd. Volume = 50,961 cuft

## Hyd. No. 3

Pond

Hydrograph type = Reservoir  
Peak discharge = 1.83 cfs  
Time to peak = 22 min  
Hyd. Volume = 69,981 cuft



# Multi-Hydrograph Plot

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

## Hyd. No. 1

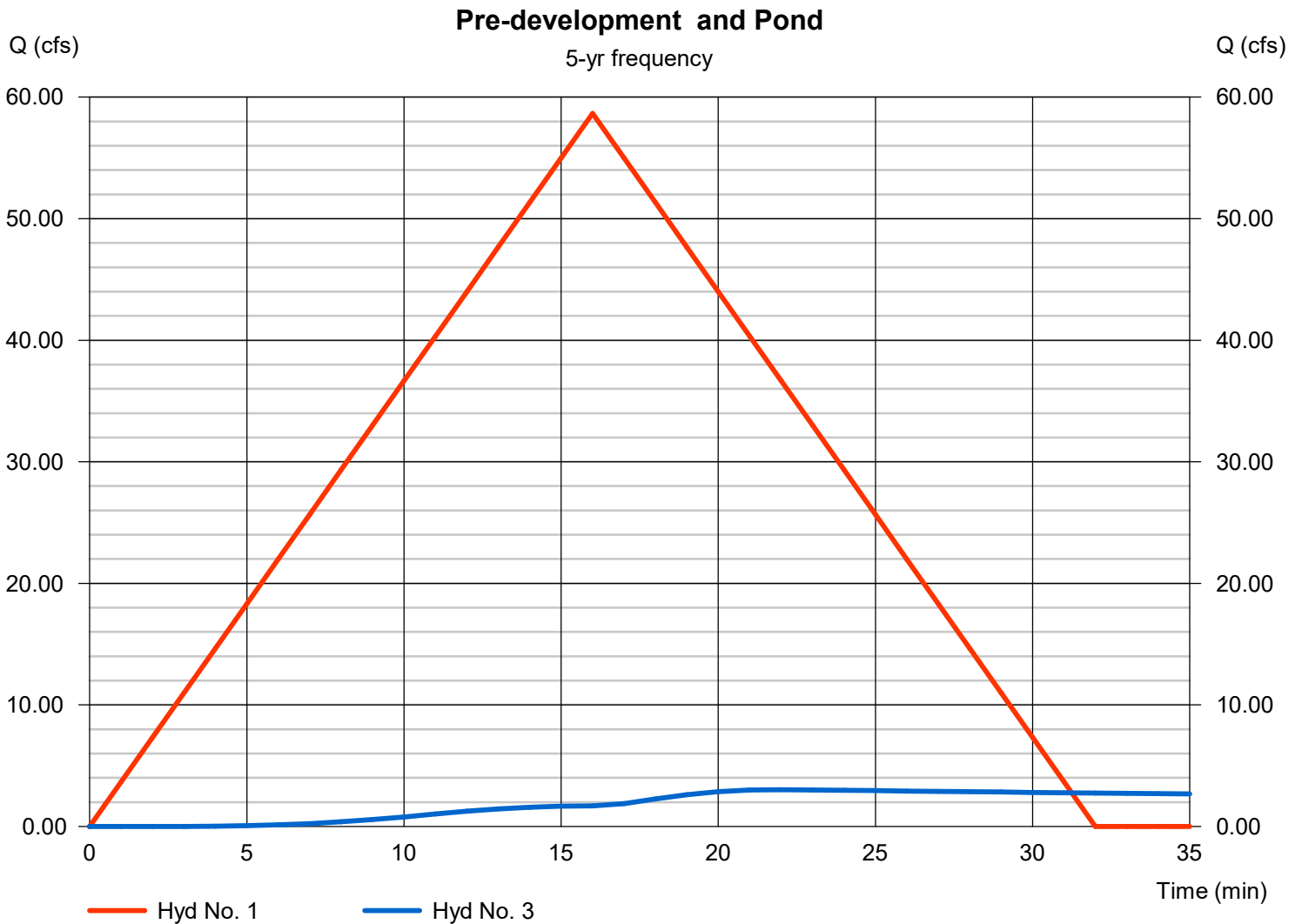
Pre-development

Hydrograph type = Rational  
Peak discharge = 58.66 cfs  
Time to peak = 16 min  
Hyd. Volume = 56,310 cuft

## Hyd. No. 3

Pond

Hydrograph type = Reservoir  
Peak discharge = 3.03 cfs  
Time to peak = 22 min  
Hyd. Volume = 78,671 cuft



# Multi-Hydrograph Plot

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

## Hyd. No. 1

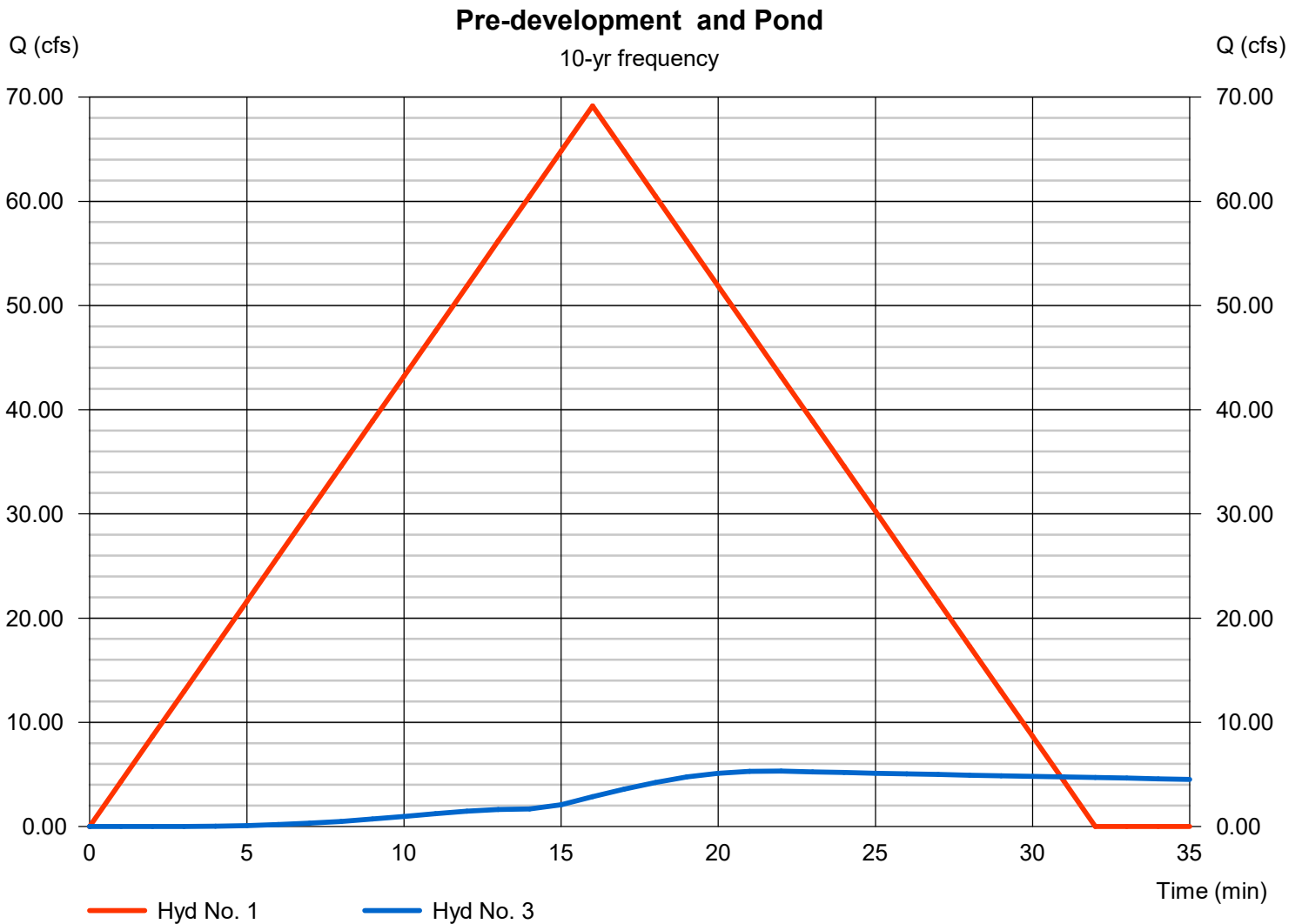
Pre-development

Hydrograph type = Rational  
Peak discharge = 69.15 cfs  
Time to peak = 16 min  
Hyd. Volume = 66,385 cuft

## Hyd. No. 3

Pond

Hydrograph type = Reservoir  
Peak discharge = 5.32 cfs  
Time to peak = 22 min  
Hyd. Volume = 91,328 cuft



# Multi-Hydrograph Plot

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

## Hyd. No. 1

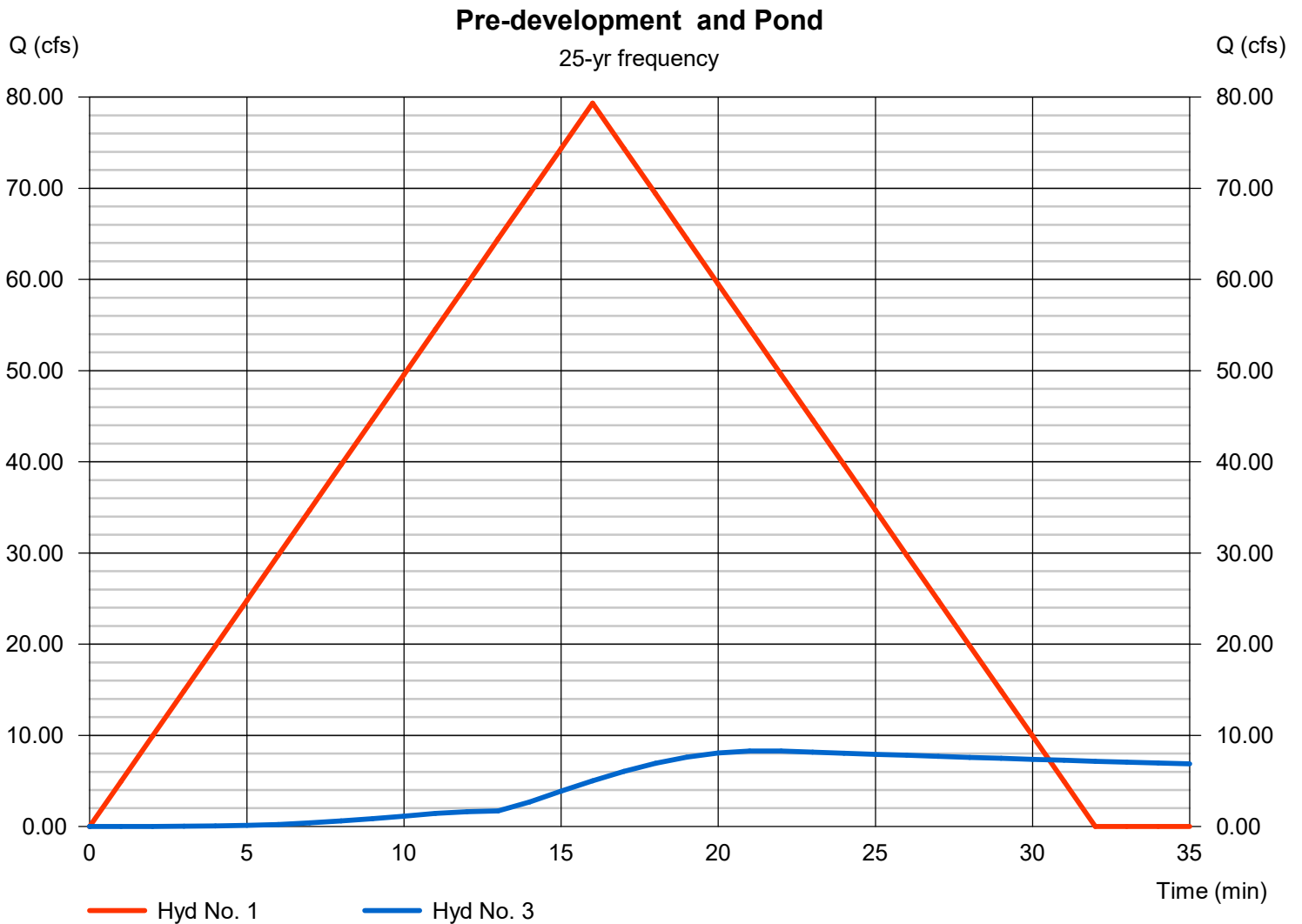
Pre-development

Hydrograph type = Rational  
Peak discharge = 79.33 cfs  
Time to peak = 16 min  
Hyd. Volume = 76,152 cuft

## Hyd. No. 3

Pond

Hydrograph type = Reservoir  
Peak discharge = 8.29 cfs  
Time to peak = 21 min  
Hyd. Volume = 105,284 cuft



# Multi-Hydrograph Plot

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

## Hyd. No. 1

Pre-development

Hydrograph type = Rational  
Peak discharge = 90.45 cfs  
Time to peak = 16 min  
Hyd. Volume = 86,827 cuft

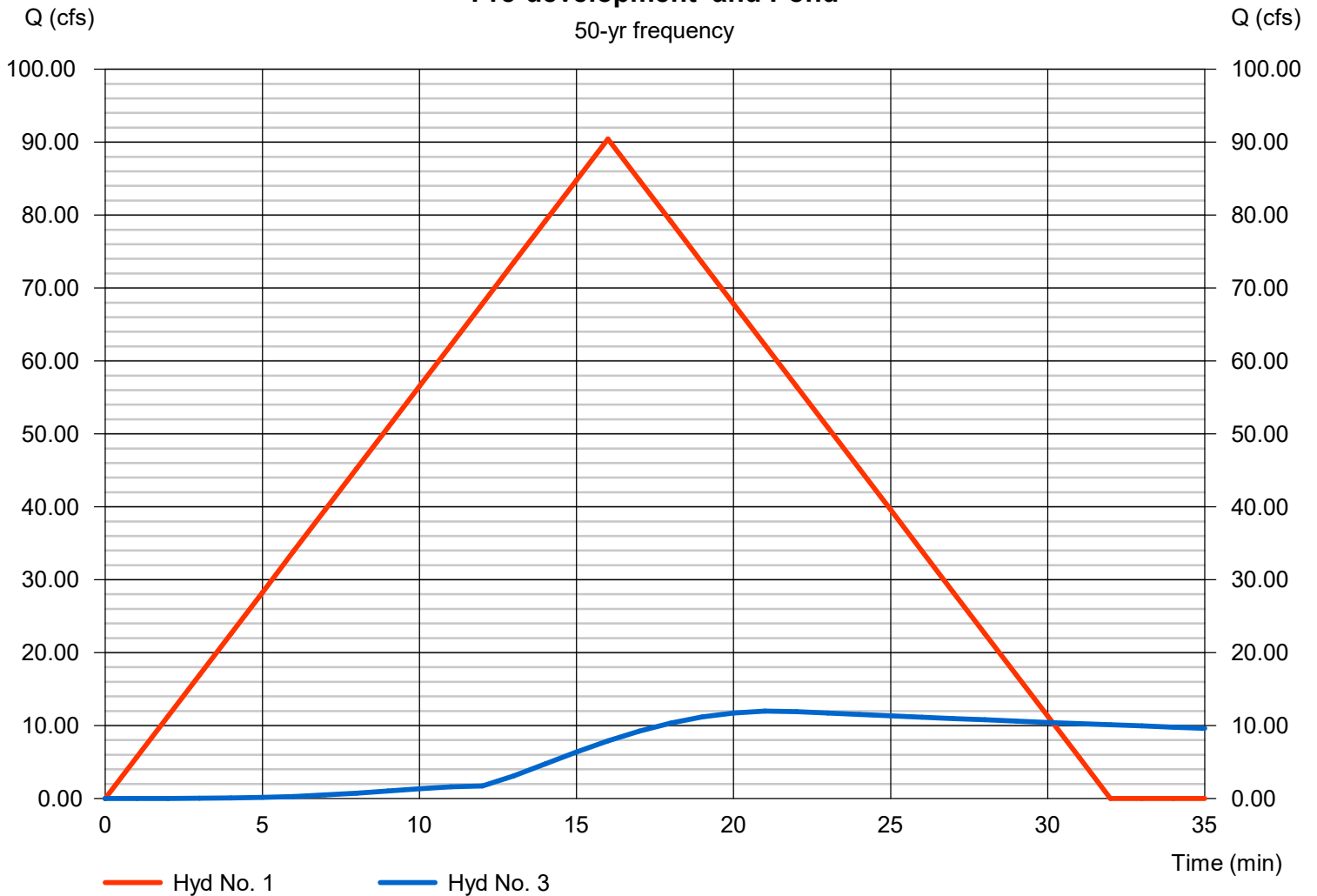
## Hyd. No. 3

Pond

Hydrograph type = Reservoir  
Peak discharge = 11.98 cfs  
Time to peak = 21 min  
Hyd. Volume = 120,591 cuft

### Pre-development and Pond

50-yr frequency



# Multi-Hydrograph Plot

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

## Hyd. No. 1

Pre-development

Hydrograph type = Rational  
Peak discharge = 96.16 cfs  
Time to peak = 16 min  
Hyd. Volume = 92,318 cuft

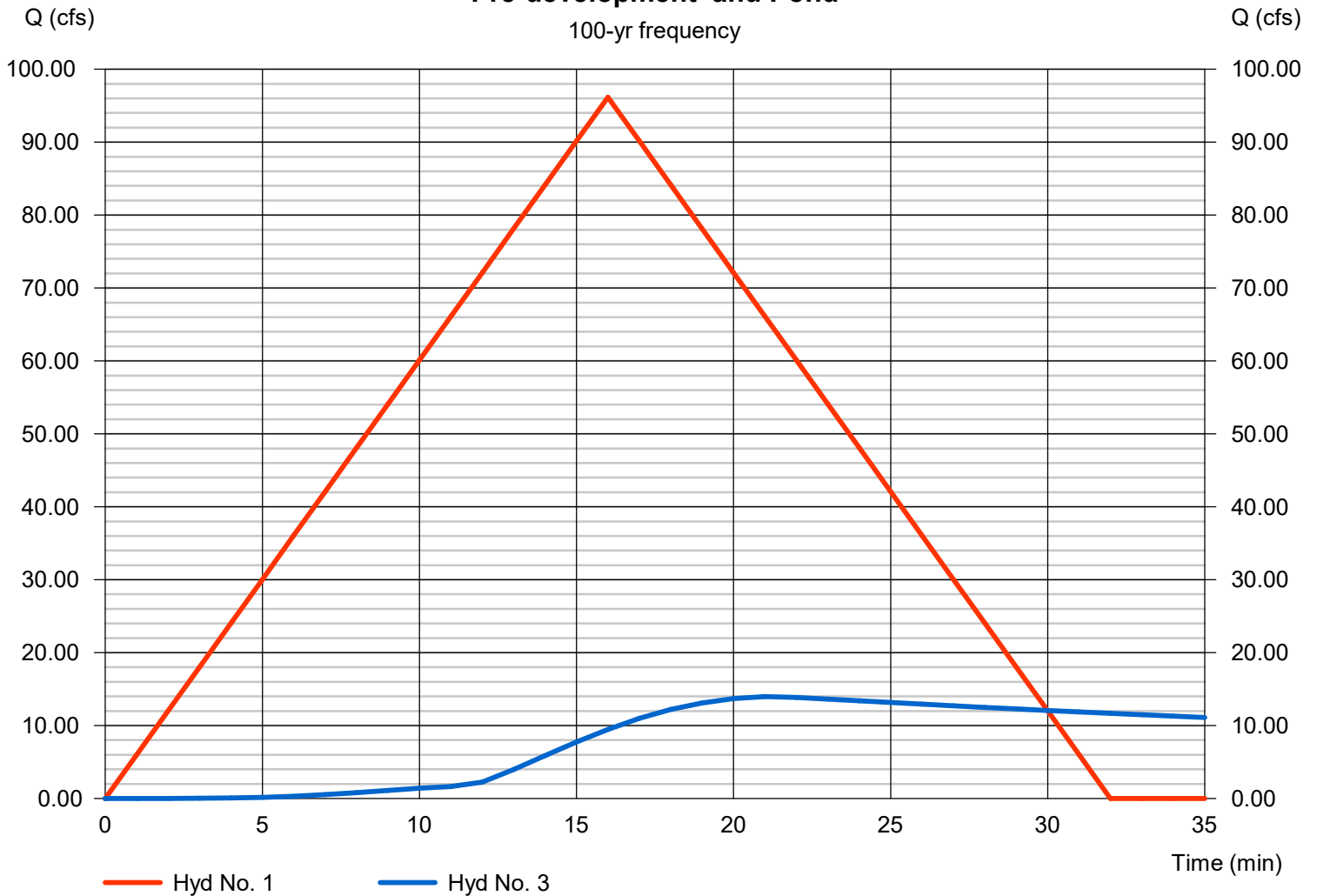
## Hyd. No. 3

Pond

Hydrograph type = Reservoir  
Peak discharge = 13.95 cfs  
Time to peak = 21 min  
Hyd. Volume = 128,267 cuft

### Pre-development and Pond

100-yr frequency



## Pond No. 1 - <New Pond>

### Pond Data

Trapezoid -Bottom L x W = 241.5 x 300.0 ft, Side slope = 3.00:1, Bottom elev. = 353.50 ft, Depth = 2.00 ft

### Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	353.50	72,450	0	0
0.20	353.70	73,101	14,555	14,555
0.40	353.90	73,755	14,686	29,241
0.60	354.10	74,412	14,817	44,057
0.80	354.30	75,072	14,948	59,006
1.00	354.50	75,735	15,081	74,087
1.20	354.70	76,401	15,214	89,300
1.40	354.90	77,069	15,347	104,647
1.60	355.10	77,741	15,481	120,128
1.80	355.30	78,415	15,616	135,743
2.00	355.50	79,092	15,751	151,494

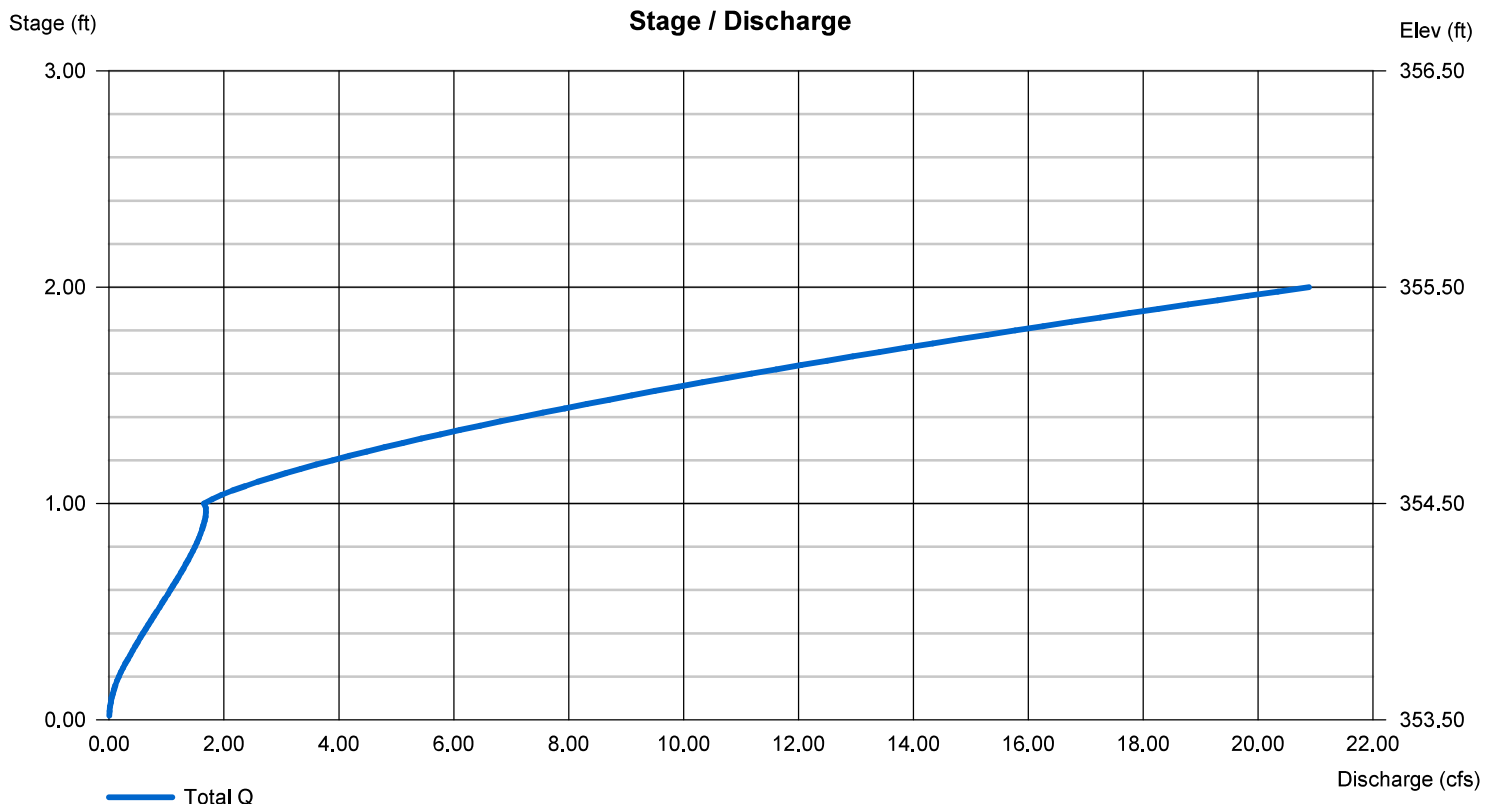
### Culvert / Orifice Structures

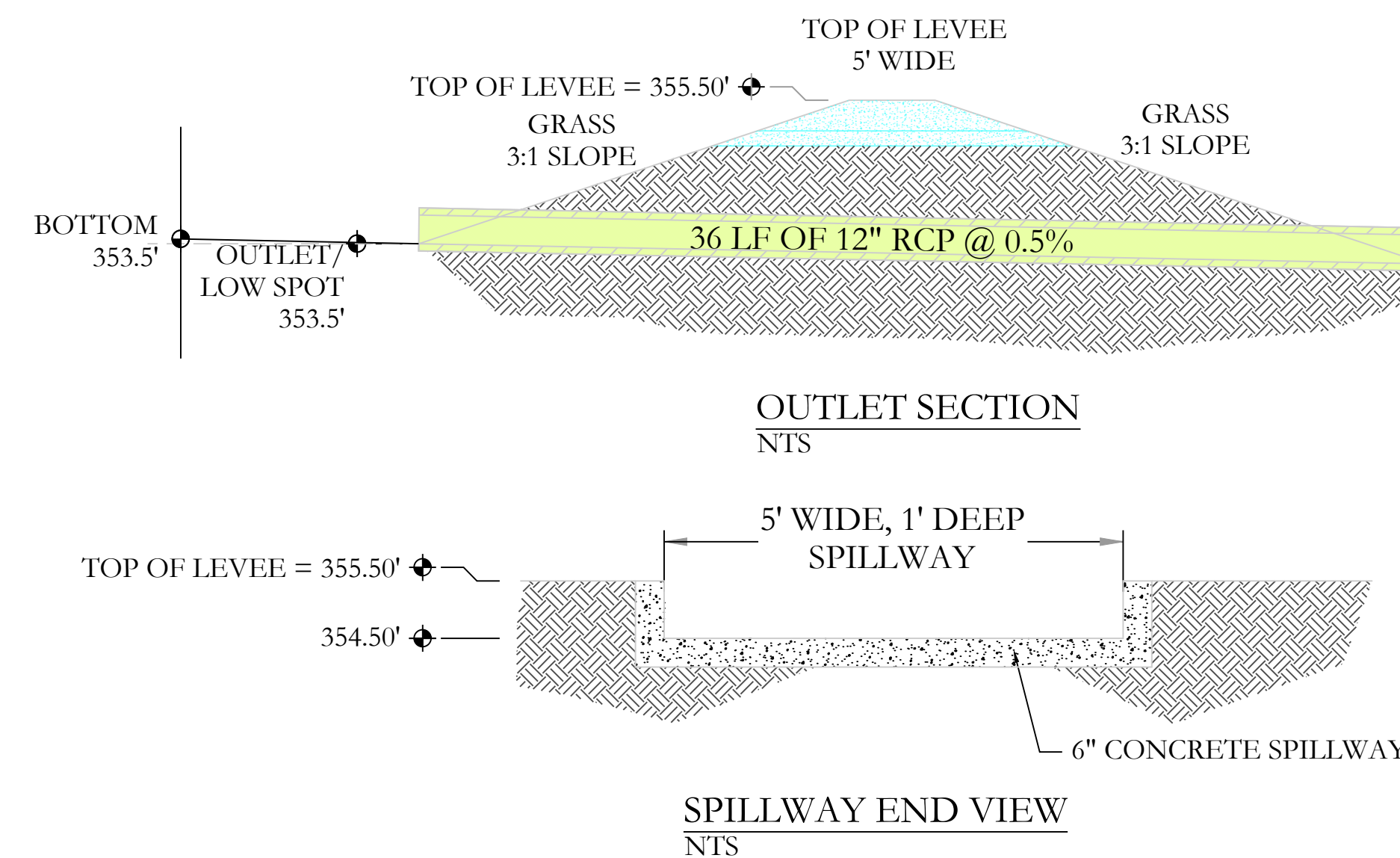
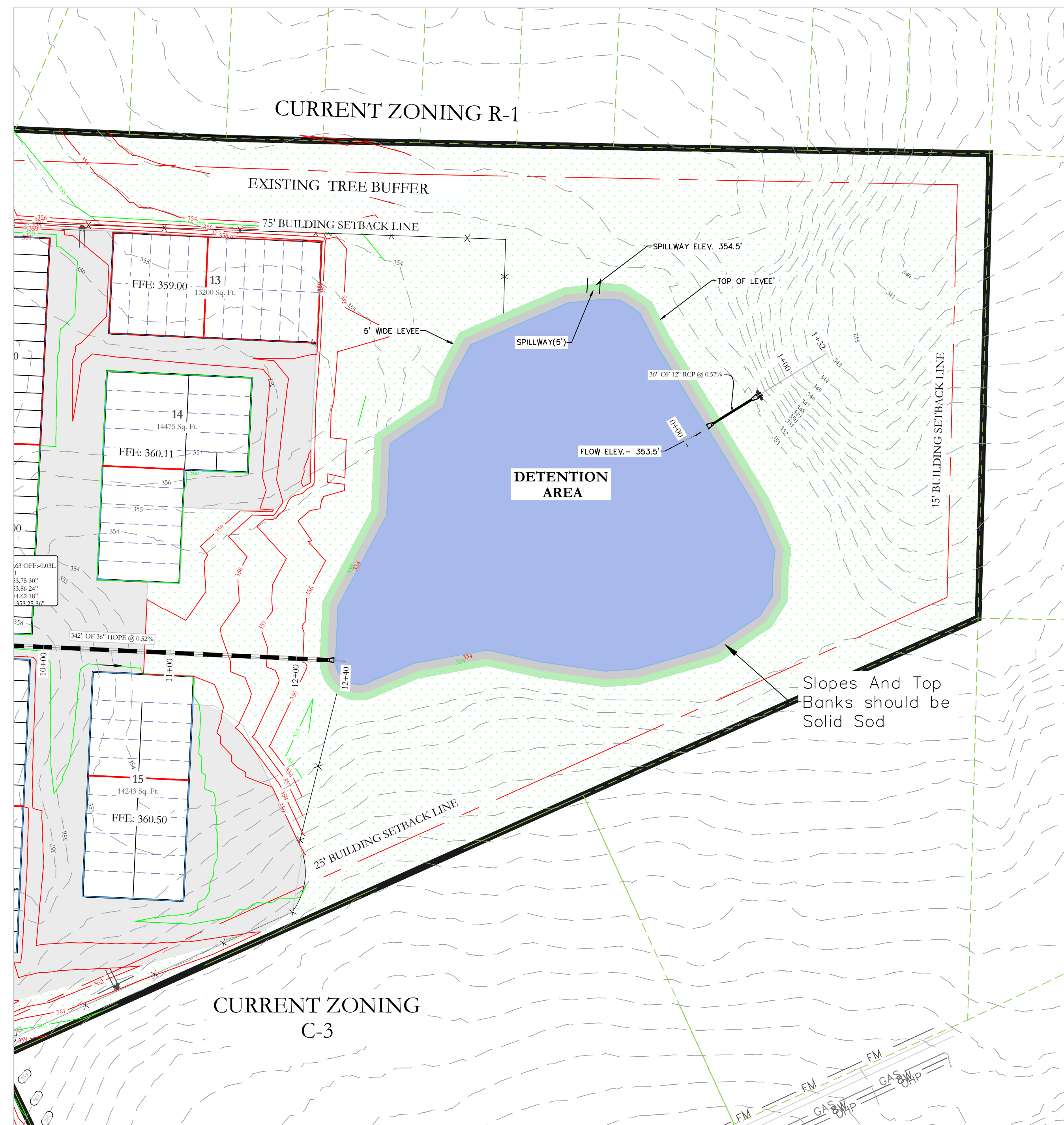
	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 12.00	Inactive	Inactive	0.00
Span (in)	= 12.00	0.00	0.00	0.00
No. Barrels	= 1	1	0	0
Invert El. (ft)	= 353.50	0.00	0.00	0.00
Length (ft)	= 36.00	0.00	0.00	0.00
Slope (%)	= 0.50	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	No	No	No

### Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 5.00	0.00	0.00	0.00
Crest El. (ft)	= 354.50	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= Rect	---	---	---
Multi-Stage	= No	No	No	No
Exfil.(in/hr)	= 0.000 (by Wet area)			
TW Elev. (ft)	= 0.00			

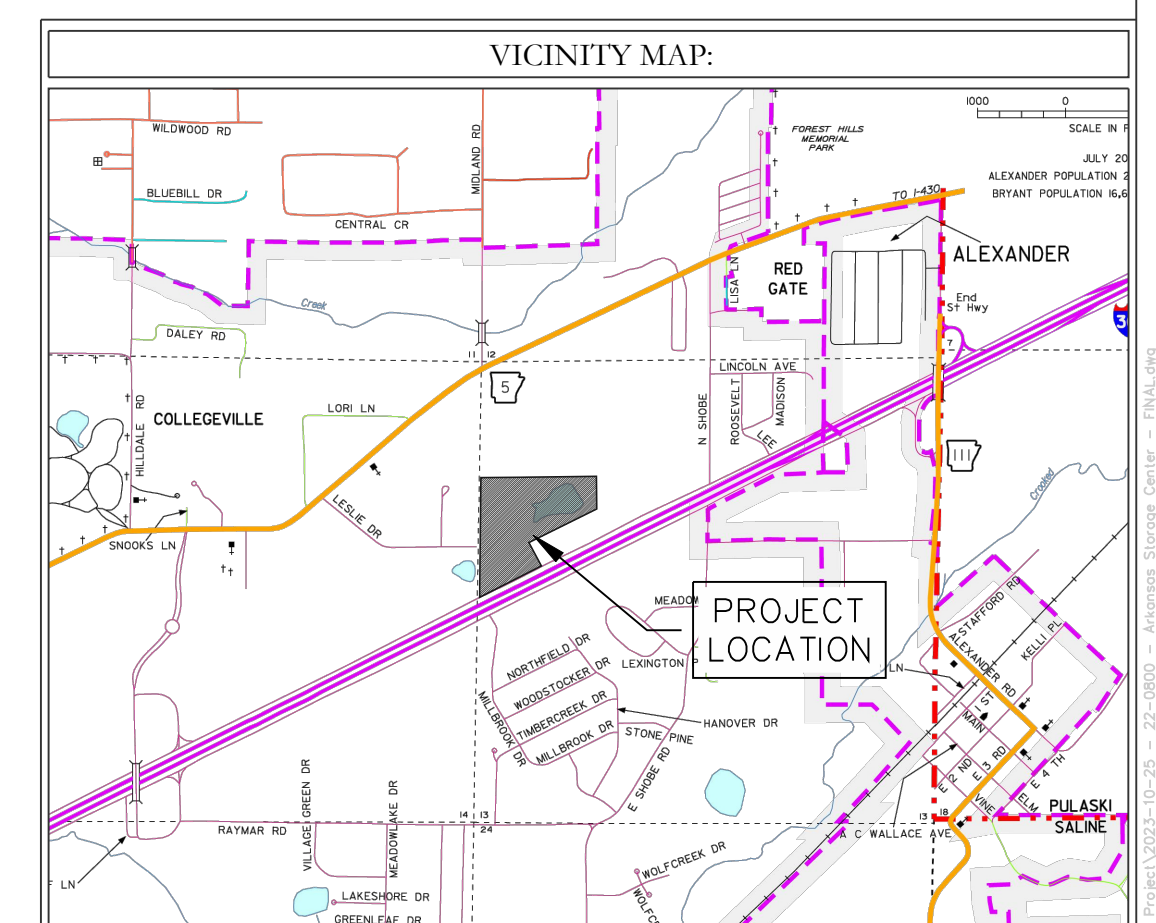
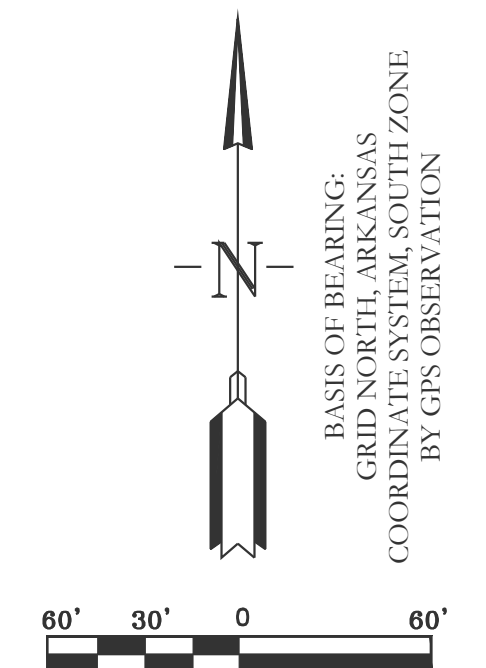
Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).





**LEGEND**

EXISTING CONTOUR LINE	---	363	---
PROPOSED CONTOUR LINE	---	363	---
PROPOSED HDPE STORM PIPE	---		---
PROPOSED RCP STORM PIPE	---		---



**DETENTION POND MAINTENANCE PLAN**

**Background**  
There will be one retention pond in this project. The retention pond is located at the North-East of the subject property. It is designed to temporarily detain stormwater to meet water quantity criteria before discharging off the property.

**Routine Maintenance**  
The property owners association will maintain the drainage easements. Routine maintenance will include but not be limited to:  
-Mowing of the bank slopes and area around the pond on a monthly basis during the growing season and as needed during the cooler months.

-The outlet pipe from the pond and other areas will be inspected monthly for debris which could inhibit the proper flow of discharge. Any debris will be removed immediately and disposed of or placed in a location to prevent future maintenance and to not cause impact up or downstream of the structure.

-Trash will be removed from around the pond to prevent entering the pond. Generally, the site should be kept free of loose trash which could be carried off site by wind or rain.

-Inspect the pond and outlet pipe for non-routine maintenance need.

**Periodic or Non-Routine Maintenance**

The routine inspection of the pond area and discharge pipe will identify needed repairs and non-routine maintenance. These items may include but not be limited to:

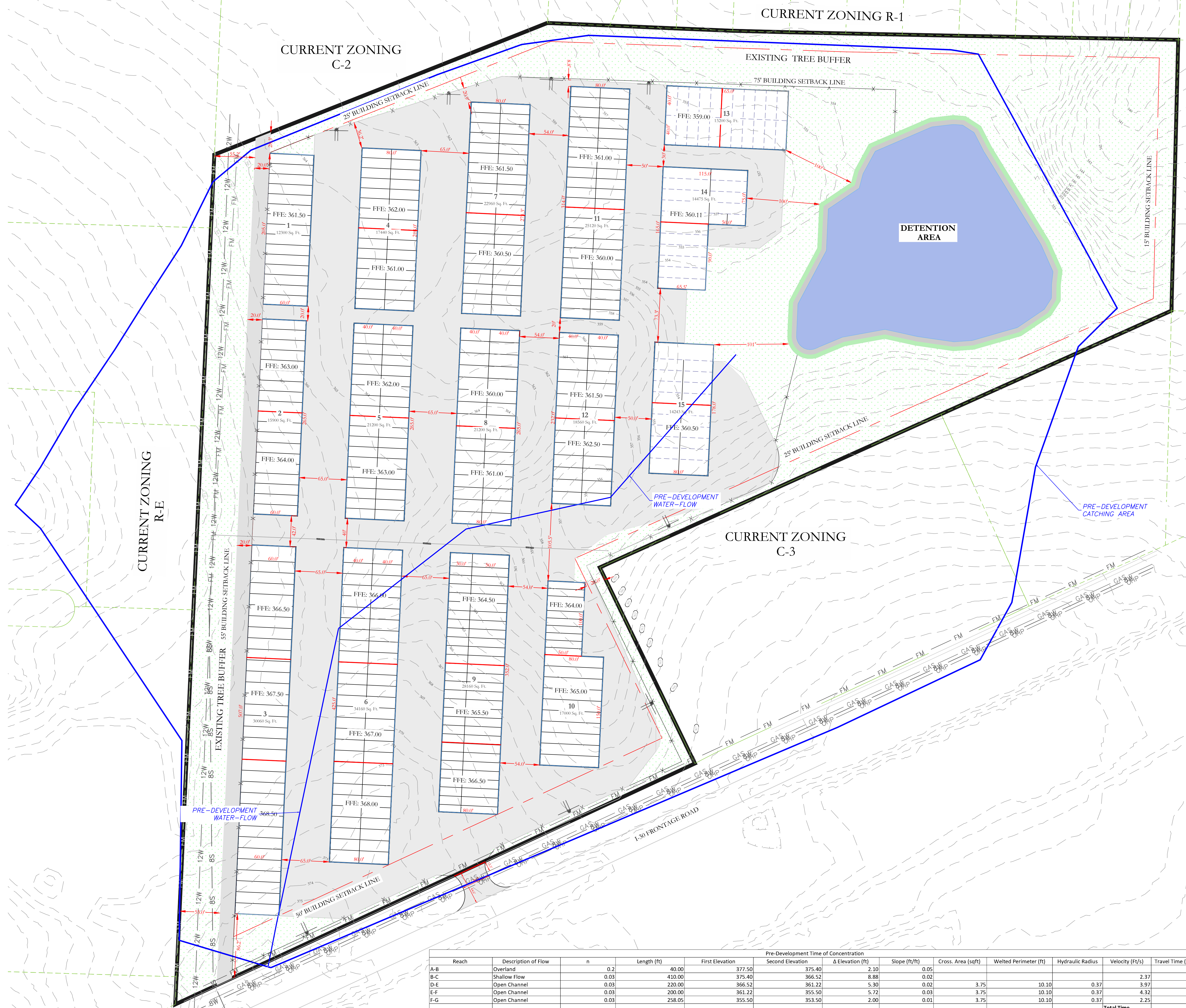
- Re-growth of trees on or around the pond bank. These should be cut and removed from the pond area.
- Sediment from the site may accumulate in the pond bottom and reduce the pond to below design volume requirements. The pond should be excavated if the pond bottom elevation reached a level that allows excessive aquatic growth or reduces the pond efficiency such, that the sediments are passing the discharge structure and release off site.
- Stabilization or re-grading of side slopes may be required periodically or after excessive rain events. Any disturbance of slopes should be reseeded or may require installation of erosion control materials until seeding can reestablish adequate grasses to prevent future erosion.
- Any other maintenance or repairs which would minimize other maintenance to the pond or outfall structures.

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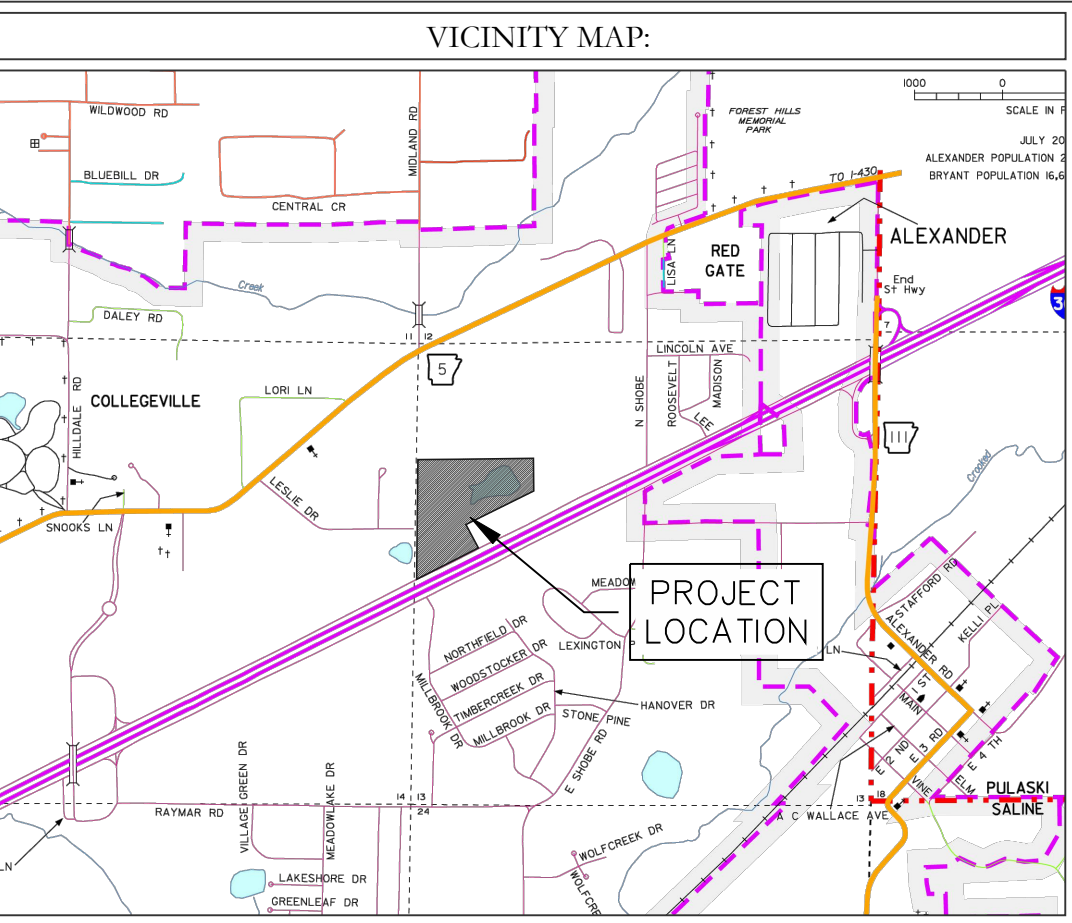
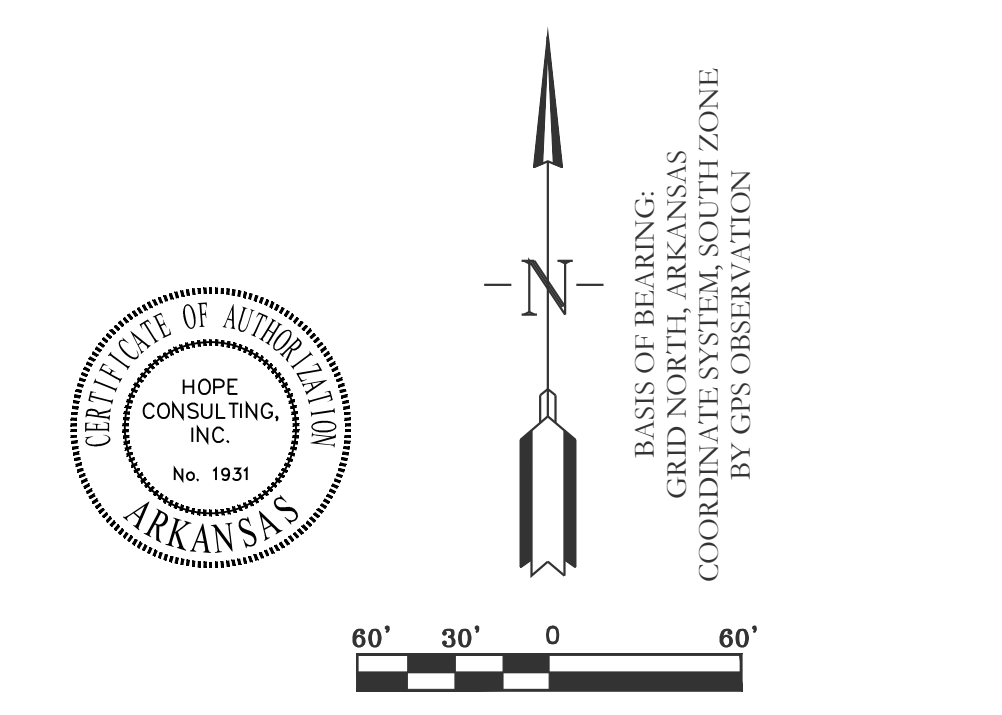
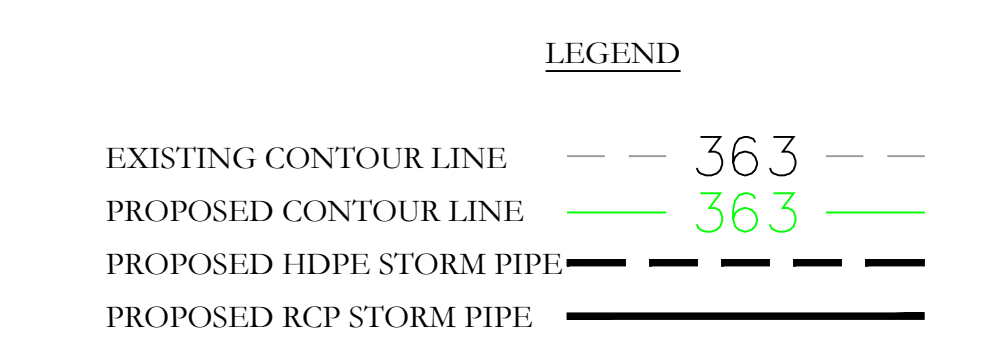
FOR USE AND BENEFIT OF:  
**STUART FINLEY**  
**ARKANSAS STORAGE CENTER**  
RETENTION POND PLAN  
BRYANT, SALINE COUNTY, ARKANSAS

DATE:	12-06-2023	C.A.D. BY:		DRAWING NUMBER:	
REVISED:		CHECKED BY:			22-0800
SHEET:	C-5.4	SCALE:			
500	01S	14W	0	21	300 62 1762





	Pre-Development Peak Flow (cfs)	Post-Development without Detention Peak Flow (cfs)	Post-Development with Detention Peak Flow (cfs)
2-Year	53.08	116.86	1.831
5-Year	58.66	130.27	3.033
10-Year	69.15	149.65	5.315
25-Year	79.33	176.93	8.288
50-Year	90.45	194.22	11.98
100-Year	96.16	205.89	13.95
<b>TOC</b>	<b>16.05 min</b>	<b>10.58 min</b>	



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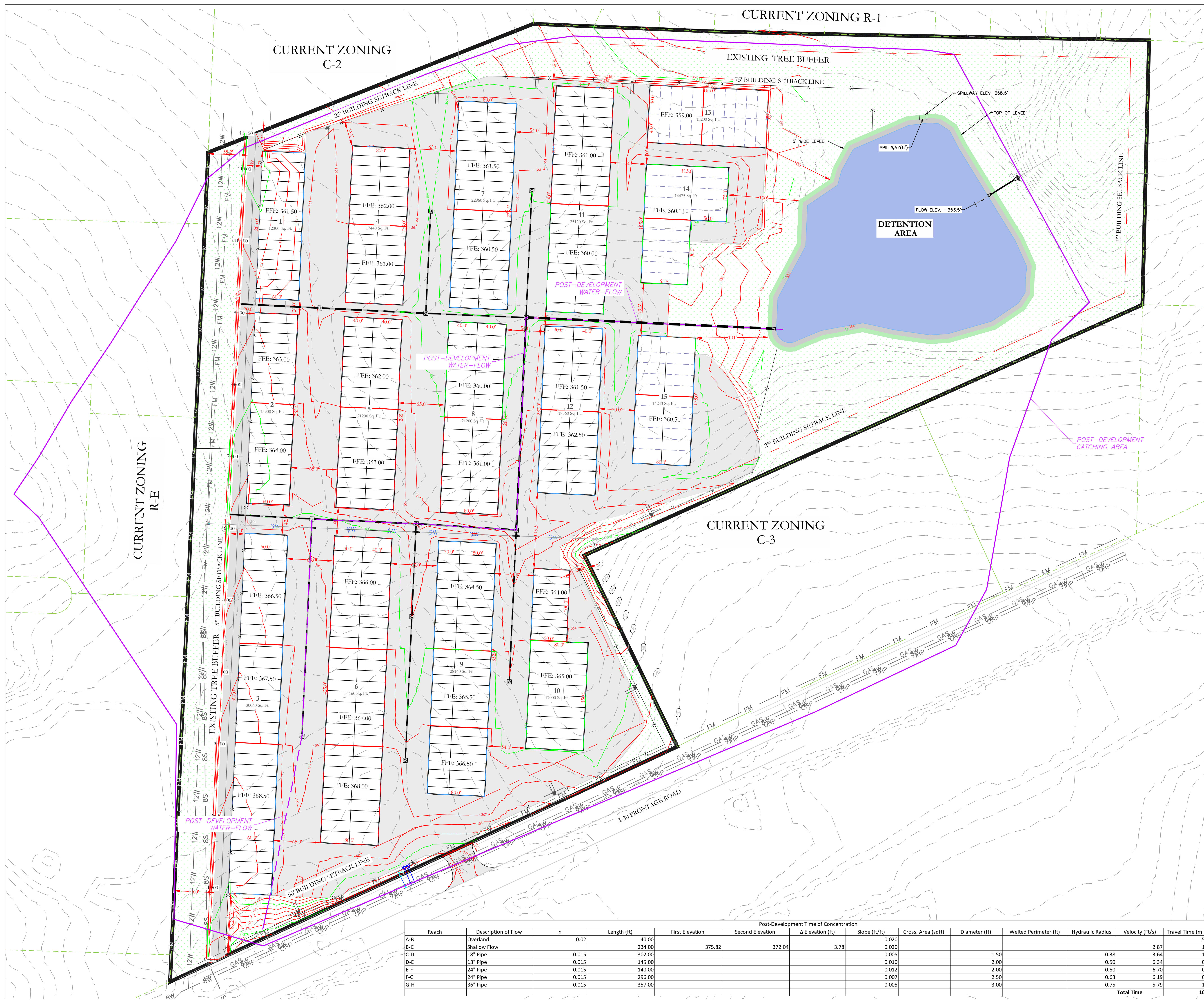
FOR USE AND BENEFIT OF:  
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**ARKANSAS STORAGE CENTER**  
PRE-DEVELOPMENT FLOW  
BRYANT, SALINE COUNTY, ARKANSAS

DATE: 12-06-2023	C.A.D. BY:	DRAWING NUMBER:
REVISED:	CHECKED BY:	22-0800
SHEET: C-5.5	SCALE: 1"=60'	

500 01S 14W 0 21 300 62 1762

Reach	Description of Flow	n	Length (ft)	First Elevation	Pre-Development Time of Concentration			Slope (ft/ft)	Cross. Area (sqft)	Wetted Perimeter (ft)	Hydraulic Radius	Velocity (ft/s)	Travel Time (min)
					Second Elevation	Δ Elevation (ft)							
A-B	Overland	0.2	40.00	377.50	375.40	2.10	0.05					9.57	
B-C	Shallow Flow	0.03	410.00	375.40	366.52	8.88	0.02				2.37	2.88	
D-E	Open Channel	0.03	220.00	366.52	361.22	5.30	0.02	3.75	10.10	0.37	3.97	0.92	
E-F	Open Channel	0.03	200.00	361.22	355.50	5.72	0.03	3.75	10.10	0.37	4.32	0.77	
F-G	Open Channel	0.03	258.05	355.50	353.50	2.00	0.01	3.75	10.10	0.37	2.25	1.91	
<b>Total Time</b>												<b>16.05</b>	



**LEGEND**

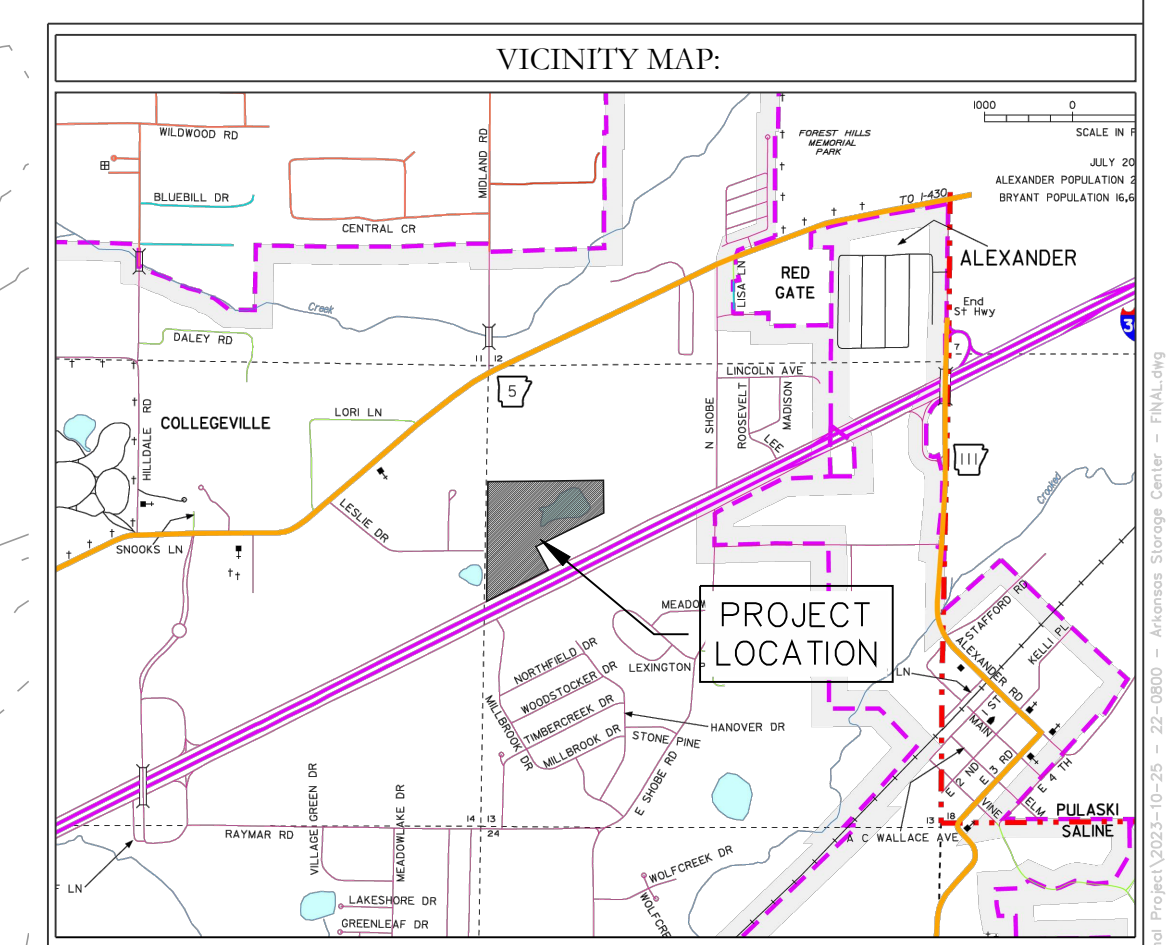
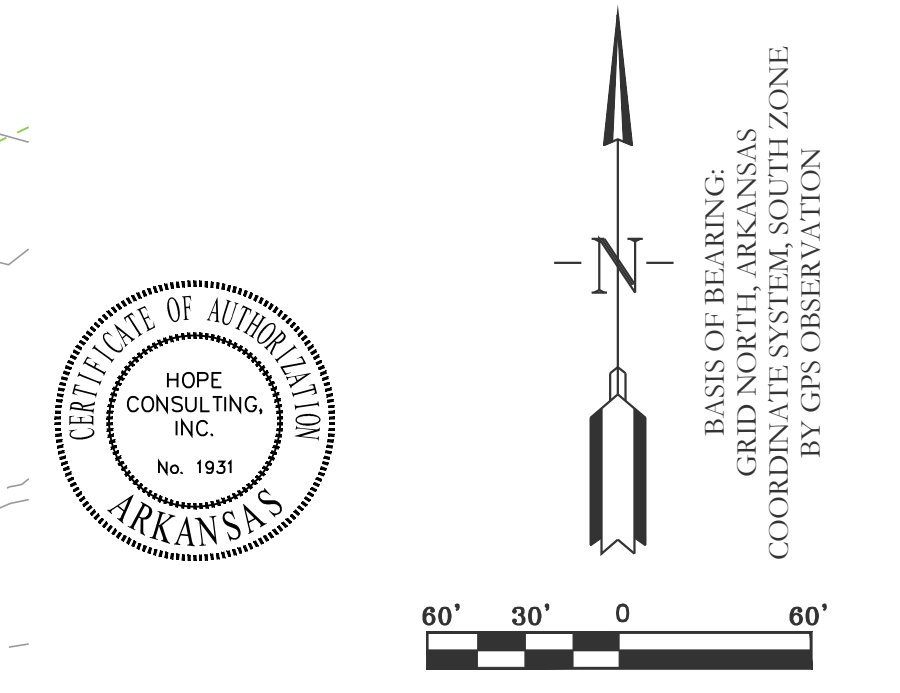
EXISTING CONTOUR LINE --- 363 ---

PROPOSED CONTOUR LINE --- 363 ---

PROPOSED HDPE STORM PIPE - - - - -

PROPOSED RCP STORM PIPE = = = = =

	Pre-Development		Post-Development without Detention		Post-Development with Detention	
	Peak Flow (cfs)	Peak Flow (cfs)	Peak Flow (cfs)	Peak Flow (cfs)	Peak Flow (cfs)	Peak Flow (cfs)
2-Year	53.08	116.86	130.27	2.028	2.263	2.617
5-Year	58.66	130.27	149.65	2.955	3.283	3.435
10-Year	69.15	149.65	176.93	3.283	3.435	3.435
25-Year	79.33	176.93	194.22	3.435	3.435	3.435
50-Year	90.45	194.22	205.89	3.435	3.435	3.435
100-Year	96.16	205.89	205.89	3.435	3.435	3.435
<b>TOC</b>	<b>16.05 min</b>	<b>10.58 min</b>				



Reach	Description of Flow	n	Length (ft)	First Elevation	Second Elevation	Δ Elevation (ft)	Slope (ft/ft)	Cross. Area (sqft)	Diameter (ft)	Wetted Perimeter (ft)	Hydraulic Radius	Velocity (ft/s)	Travel Time (min)
A-B	Overland	0.02	40.00				0.020					5.29	
B-C	Shallow Flow		234.00	375.82	372.04	3.78	0.020					2.87	1.36
C-D	18" Pipe	0.015	302.00				0.005		1.50		0.38	3.64	1.38
D-E	18" Pipe	0.015	145.00				0.010		2.00		0.50	6.34	0.38
E-F	24" Pipe	0.015	140.00				0.012		2.00		0.50	6.70	0.35
F-G	24" Pipe	0.015	296.00				0.007		2.50		0.63	6.19	0.80
G-H	36" Pipe	0.015	357.00				0.005		3.00		0.75	5.79	1.03
<b>Total Time</b>												<b>10.58</b>	

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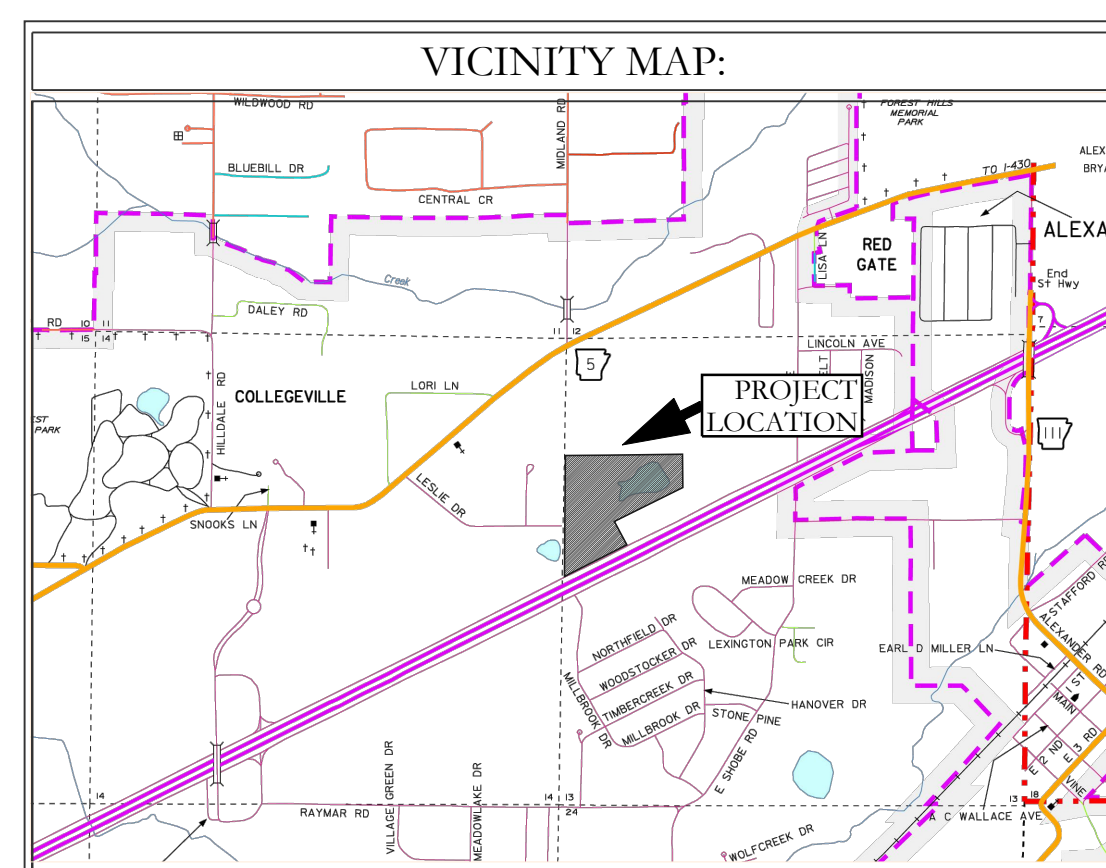
**ARKANSAS STORAGE CENTER**  
POST-DEVELOPMENT FLOW  
BRYANT, SALINE COUNTY, ARKANSAS

DATE: 12-05-2023	C.A.D. BY:	DRAWING NUMBER:
REVISED:	CHECKED BY:	22-0800
SHEET: C-4.6	SCALE: 1"=60'	

500 01S 14W 0 21 300 62 1762

# CONSTRUCTION PLANS ARKANSAS STORAGE CENTER

## BRYANT, AR



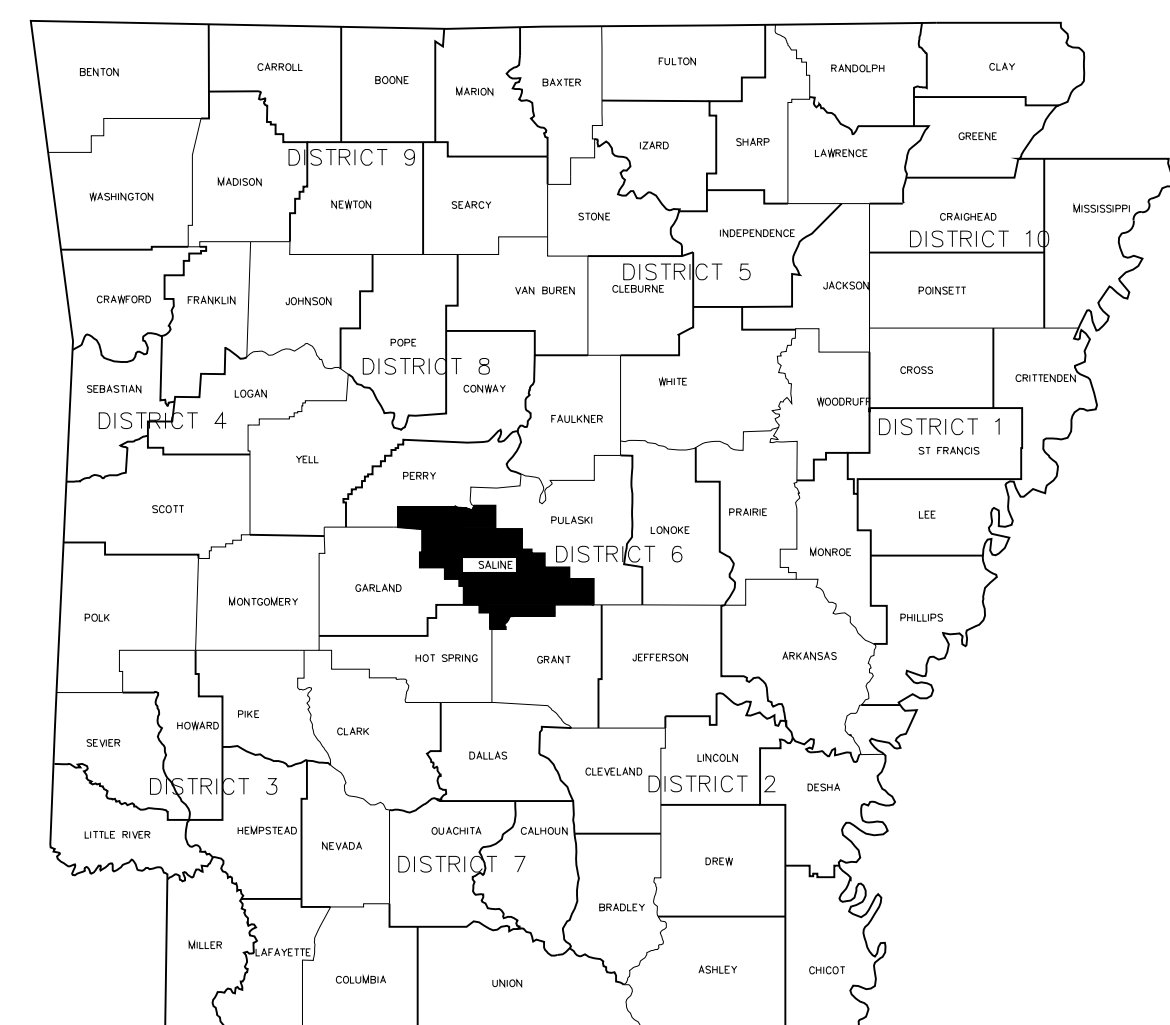
PREPARED BY:



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Benton, Arkansas 72015  
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### DRAWING INDEX

SHEET NO.	TITLE
	COVER
C-1.0	SITE PLAN
C-2.0	ROAD PLAN & PROFILE
C-3.0	UTILITY PLAN
C-4.0	GRADING PLAN
C-4.1	DRAINAGE PLAN
C-4.2	DRAINAGE PLAN & PROFILE
C-4.3	DRAINAGE PLAN & PROFILE
C-4.4	DRAINAGE PLAN & PROFILE
C-4.5	RETENTION PLAN
C-4.6	PRE-DEVELOPMENT FLOW
C-5.0	POST-DEVELOPMENT FLOW
C-6.0	LANDSCAPE PLAN
C-7.0	EROSION CONTROL PLAN



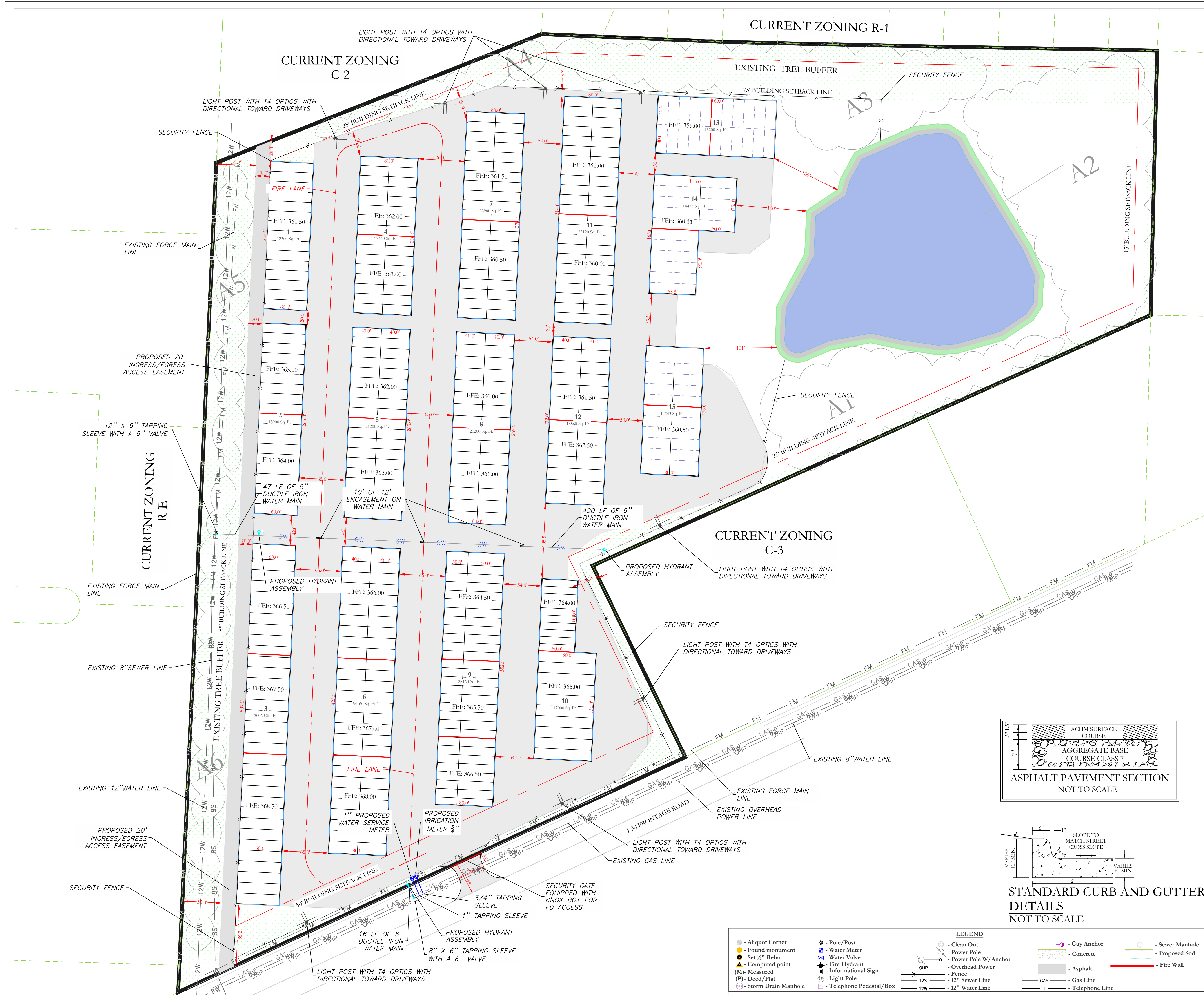
CIVIL ENGINEER  
HOPE CONSULTING INC  
129 NORTH MAIN STREET  
BENTON, AR 72015

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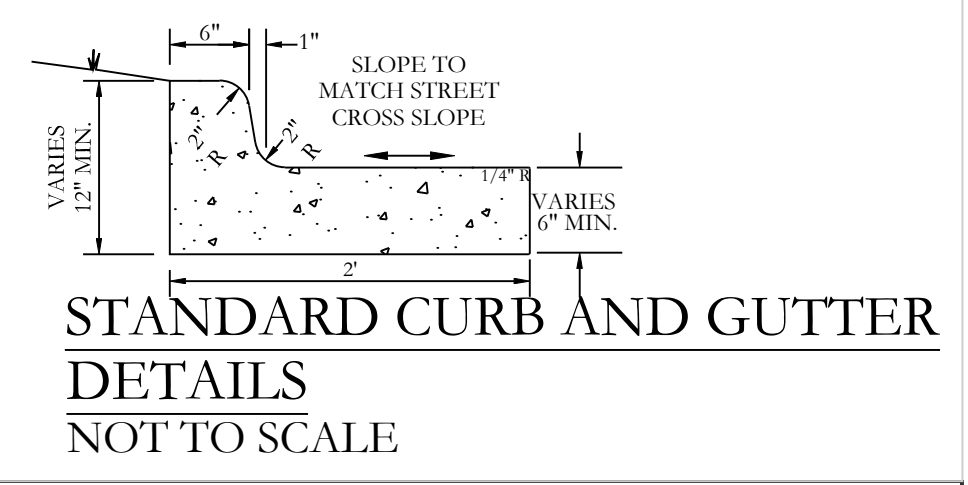
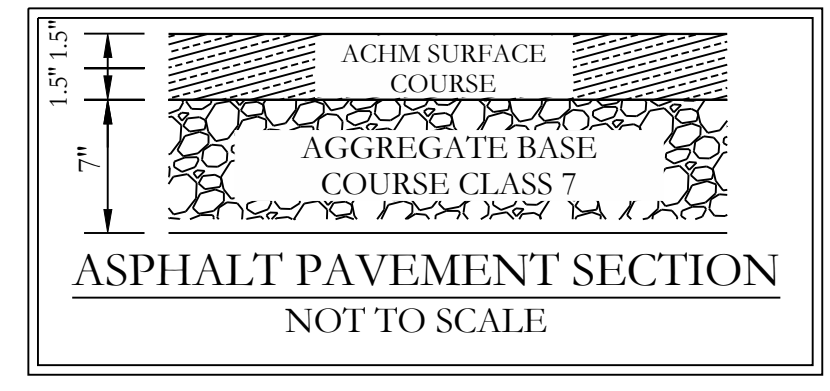
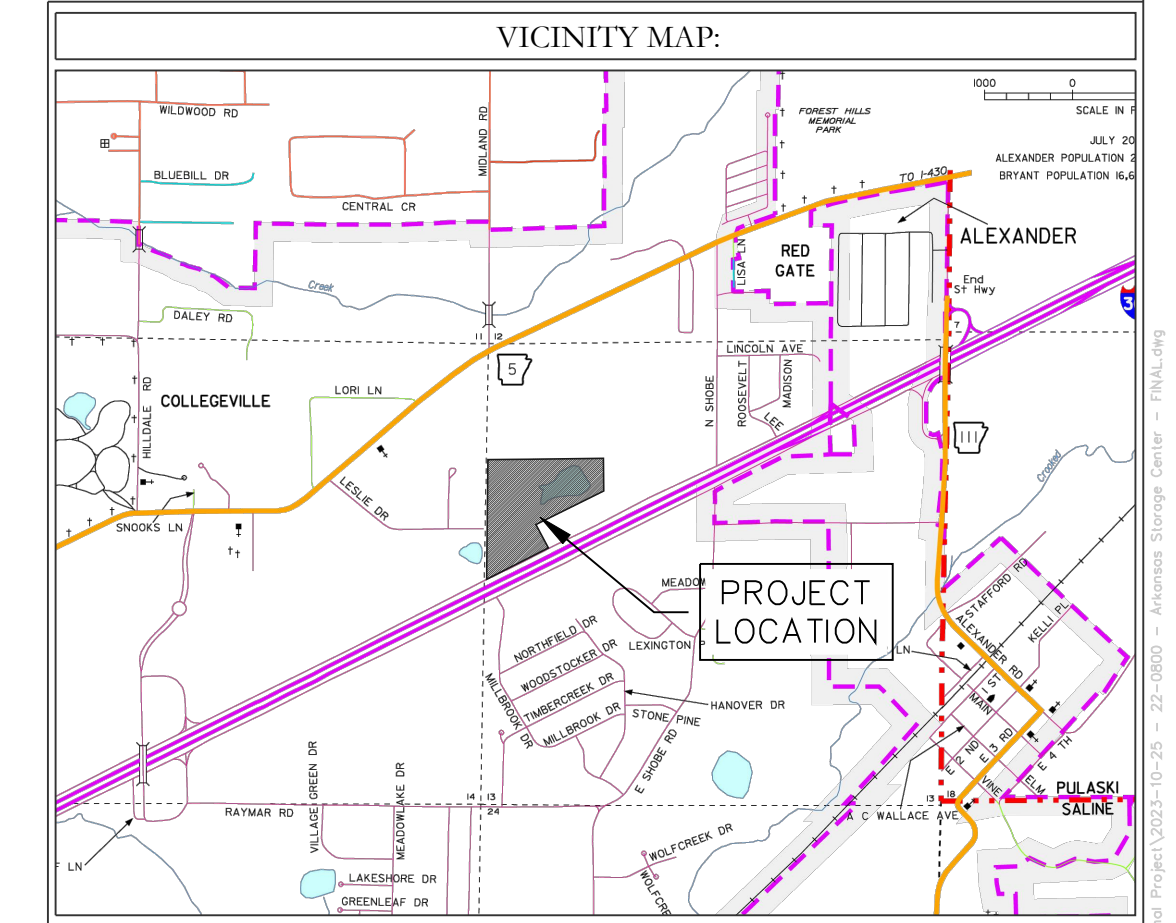
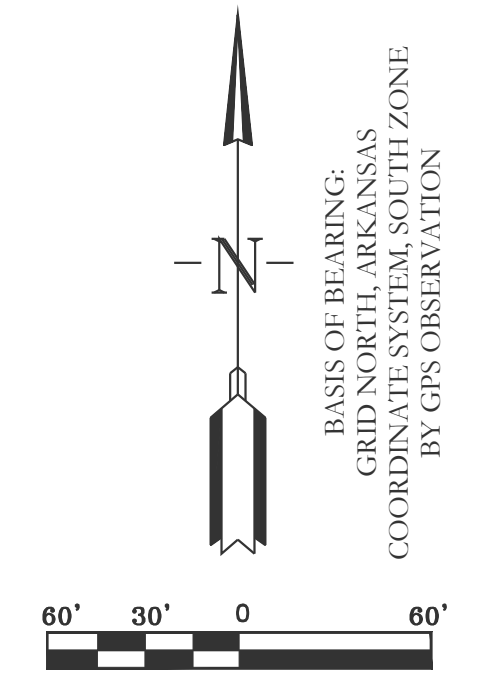
DATE:	12/06/2023	C.A.D. BY:		DRAWING NUMBER:
REVISED:		CHECKED BY:		
SHEET:		SCALE:		23-0024



SITE DATA	
TOTAL SITE AREA	24.32 ACRES
TOTAL DEVELOPMENT AREA	14.79 ACRES
GROSS BUILDING AREA	TOTAL BUILDING AREA 305,978 SF
BUILDING HEIGHTS	20'
BUILDING COVERAGE PERCENTAGE	305,978/1,059,263.30=0.29=29.0%
BUSINESS TYPE	MINI STORAGE

- NOTES:
1. ALL FIRE LANE WILL BE PRIVATE.
  2. NO SEWER SERVICE IS PROPOSED.
  3. GATE POST MUST BE CONSTRUCTED NO CLOSER THAN 7.5' OF UTILITY LINES.

CIVIL ENGINEER  
 HOPE CONSULTING INC  
 129 N. MAIN STREET  
 BENTON, AR 72015  
 CONTACT: KAZI TAMZIDUL ISLAM  
 PHONE: 504-315-2626  
 EMAIL: kazi@hopeconsulting.com



LEGEND			
● - Aliquot Corner	○ - Pole/Post	○ - Clean Out	○ - Guy Anchor
● - Found monument	○ - Water Meter	○ - Power Pole	○ - Concrete
● - Set 1/2" Rebar	○ - Water Valve	○ - Power Pole W/Anchor	○ - Asphalt
● - Computed point	○ - Fire Hydrant	○ - Overhead Power	○ - Gas
(M) - Measured	○ - Informational Sign	○ - Fence	○ - Gas Line
(P) - Deed/Plat	○ - Light Pole	○ - 12" Sewer Line	○ - Telephone
○ - Storm Drain Manhole	○ - Telephone Pedestal/Box	○ - 12" Water Line	○ - Sewer Manhole
			○ - Proposed Sod
			○ - Fire Wall

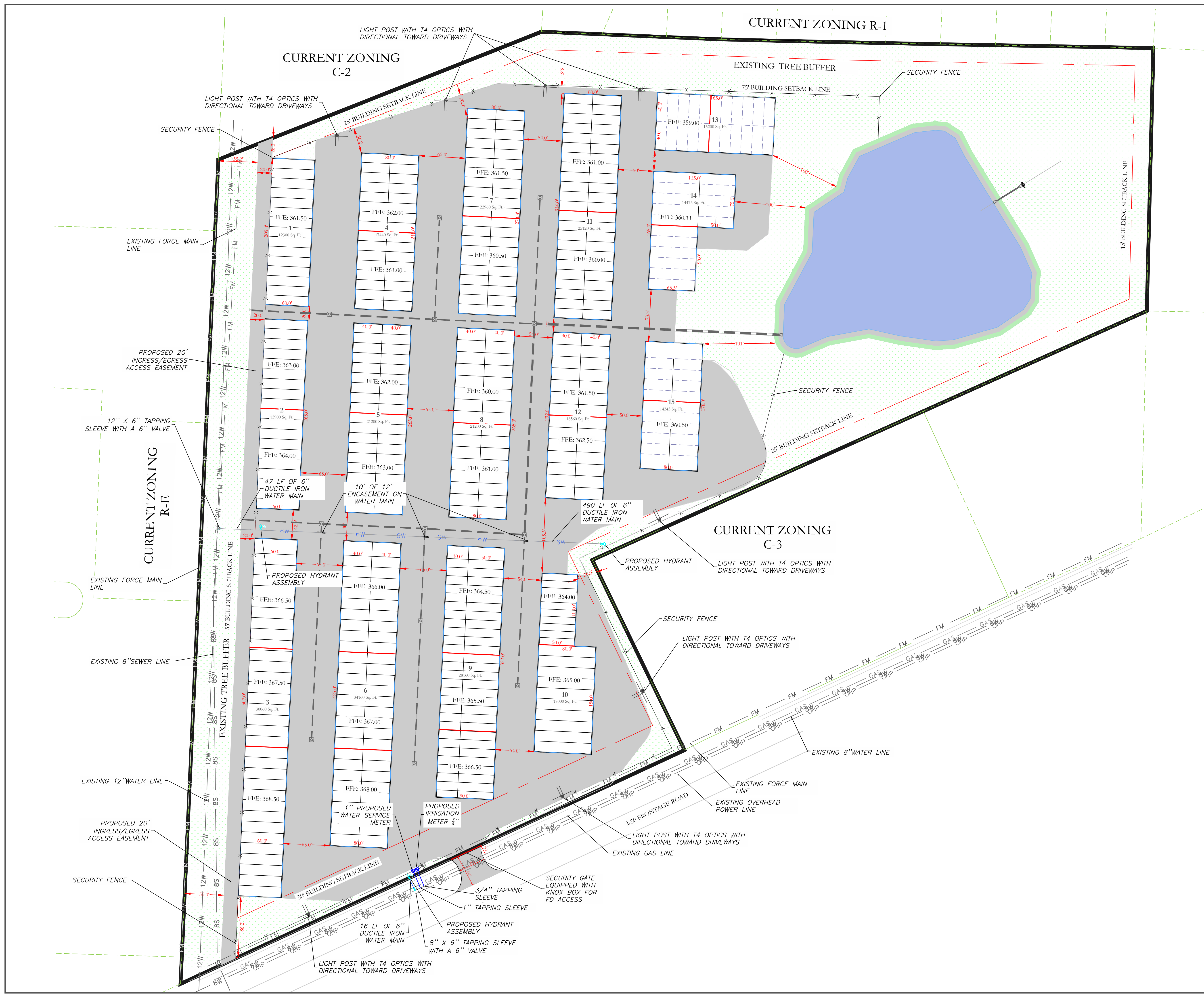
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 BRYANT, SALINE COUNTY, ARKANSAS

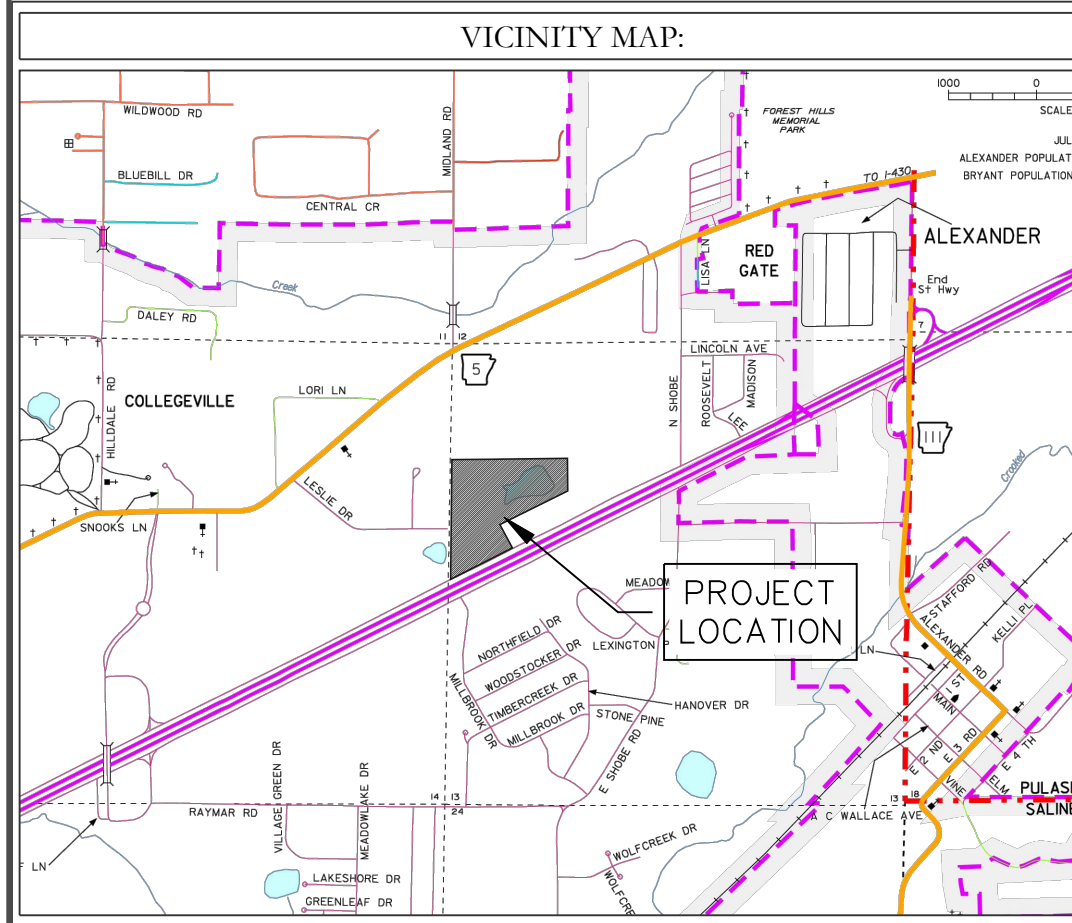
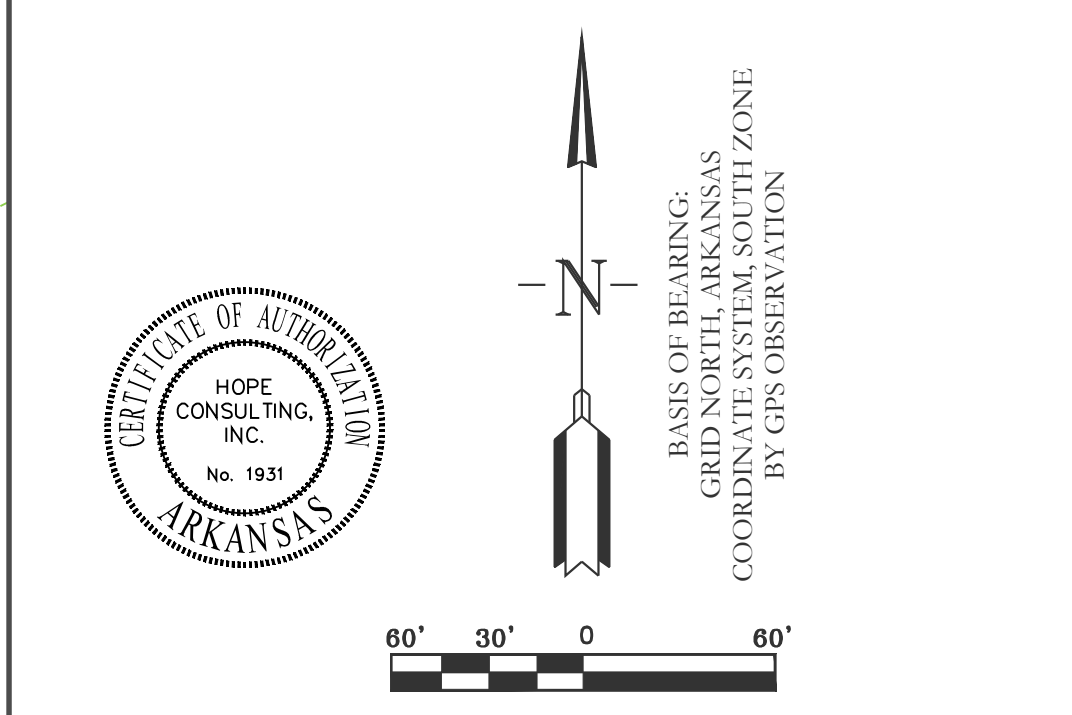
DATE: 12-06-2023	C.A.D. BY:	DRAWING NUMBER:
REVISED:	CHECKED BY:	22-0800
SHEET: C-1.0	SCALE: 1" = 60'	
500	01S	14W 0 21 300 62 1762





- NOTES:
1. ALL FIRE LINE WILL BE PRIVATE.
  2. NO SEWER SERVICE IS PROPOSED.
  3. GATE POST MUST BE CONSTRUCTED NO CLOSER THAN 7.5' OF UTILITY LINES.

- WATER UTILITY NOTES:
1. ALL NEW 6-INCH WATER MAINS TO BE DUCTILE IRON.
  2. ALL WATER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION".
  3. WATER LINES UNDER CULVERTS, CREEKS, CONCRETE CHANNELS, RETAINING WALLS, OR OTHER DIFFICULT AND/OR DANGEROUS TO MAINTAIN AREAS SHALL BE ENCASED IN A SMOOTH STEEL ENCASMENT PIPE. THE STEEL ENCASMENT SHALL EXTEND FIVE FEET EITHER SIDE OF THE AREA.
  4. EACH WATER SERVICE METER MUST HAVE ITS OWN SERVICE LINE CONNECTION TO THE MAIN (INCLUDES DOUBLE METERS DISPLAYED AS ONE SERVICE LINE ON THE PLAN).
  5. CASING SPACERS SHALL BE STAINLESS STEEL, CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATER MFG. CO., OR APPROVED EQUAL.



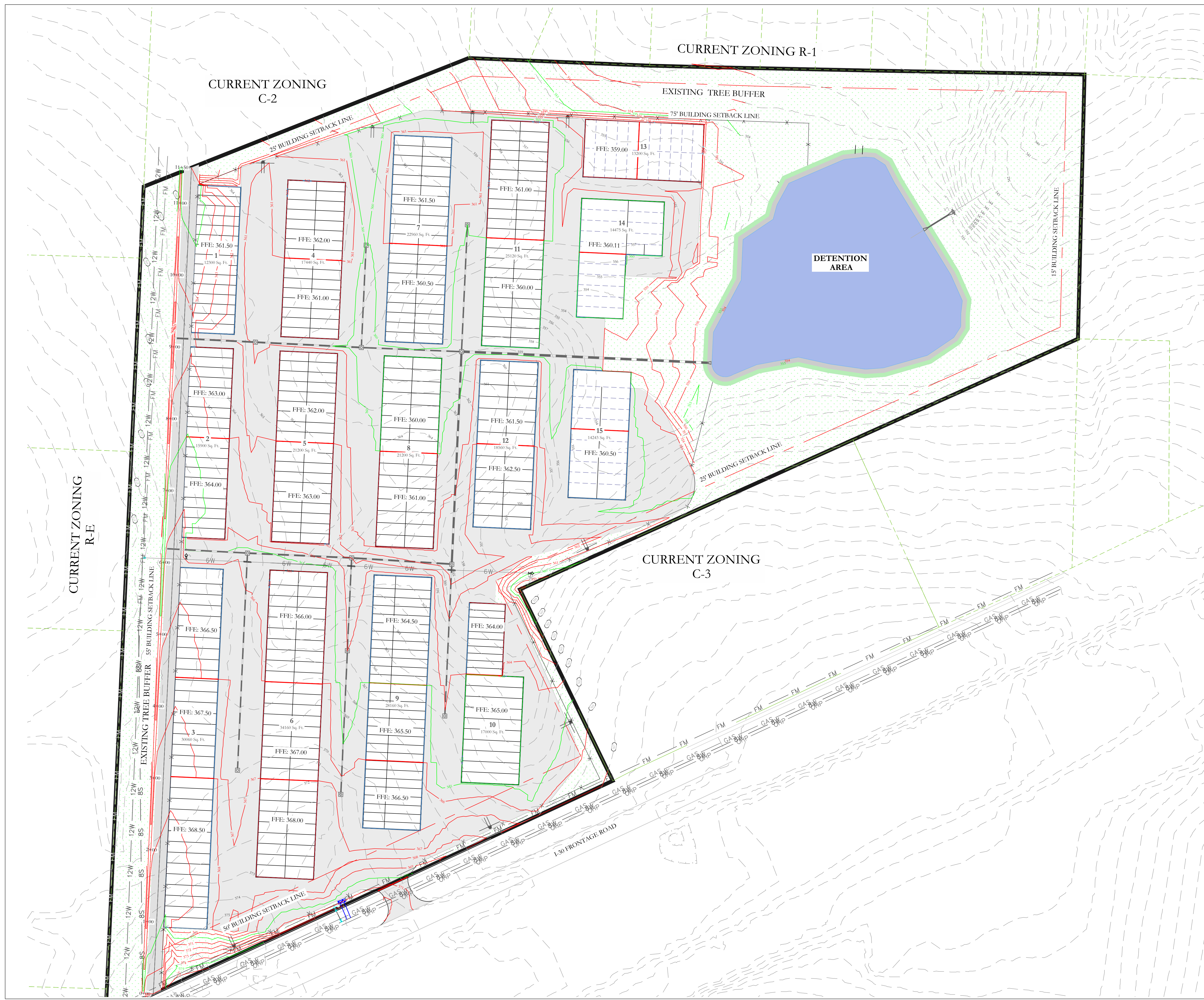
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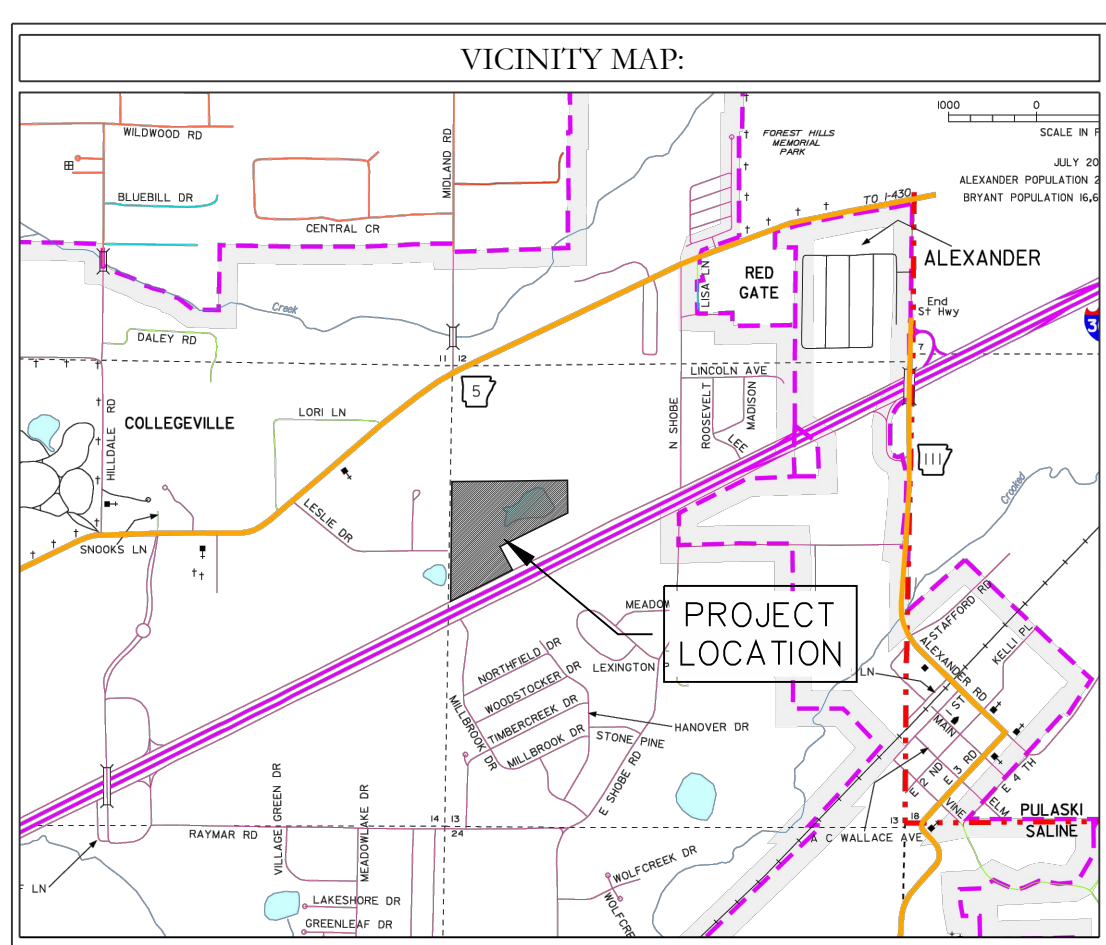
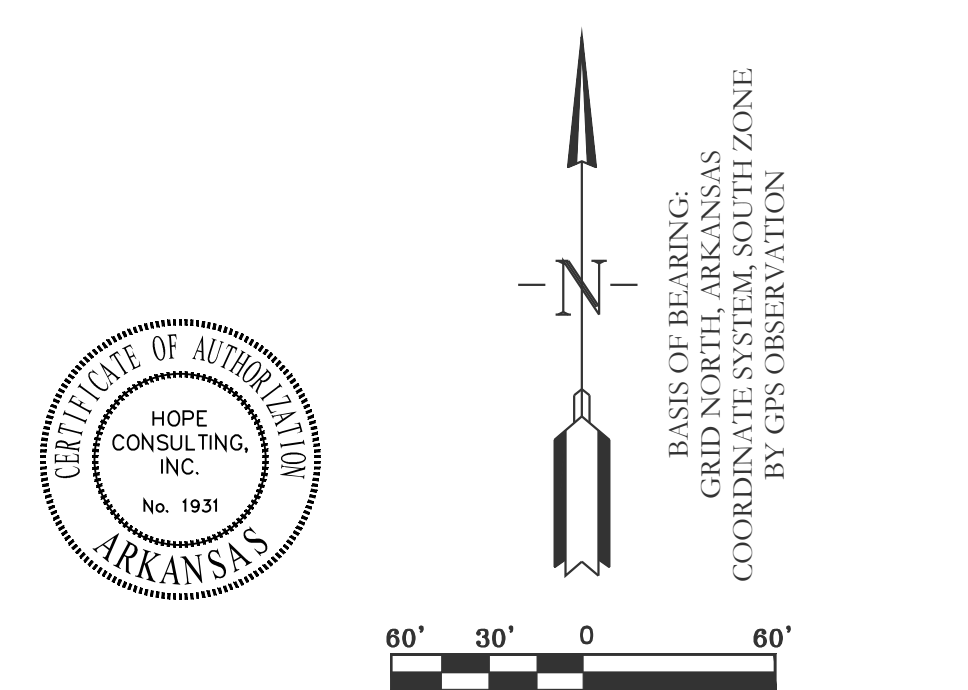
**ARKANSAS STORAGE CENTER**  
UTILITY PLAN  
BRYANT, SALINE COUNTY, ARKANSAS

DATE: 12-06-2023	C.A.D. BY:	DRAWING NUMBER:
REVISED:	CHECKED BY:	22-0800
SHEET: C-3.0	SCALE: 1"=60'	
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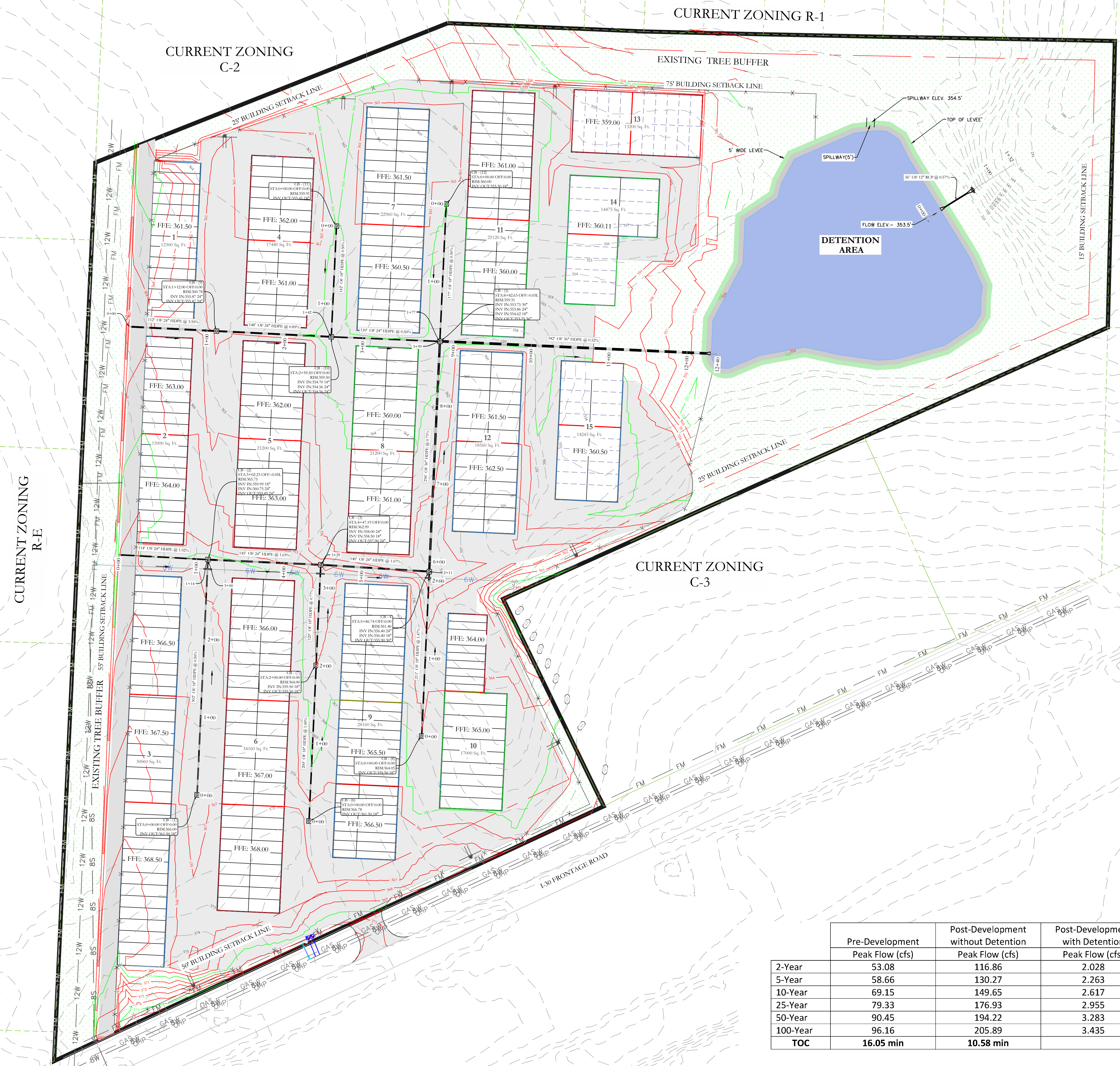


**LEGEND**

EXISTING CONTOUR LINE	363
PROPOSED CONTOUR LINE	363
PROPOSED HDPE STORM PIPE	
PROPOSED RCP STORM PIPE	



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<b>ARKANSAS STORAGE CENTER</b> GRADING PLAN BRYANT, SALINE COUNTY, ARKANSAS			
DATE:	12-06-2023	C.A.D. BY:	DRAWING NUMBER:
REVISED:		CHECKED BY:	22-0800
SHEET:	C-4.0	SCALE:	1"=60'
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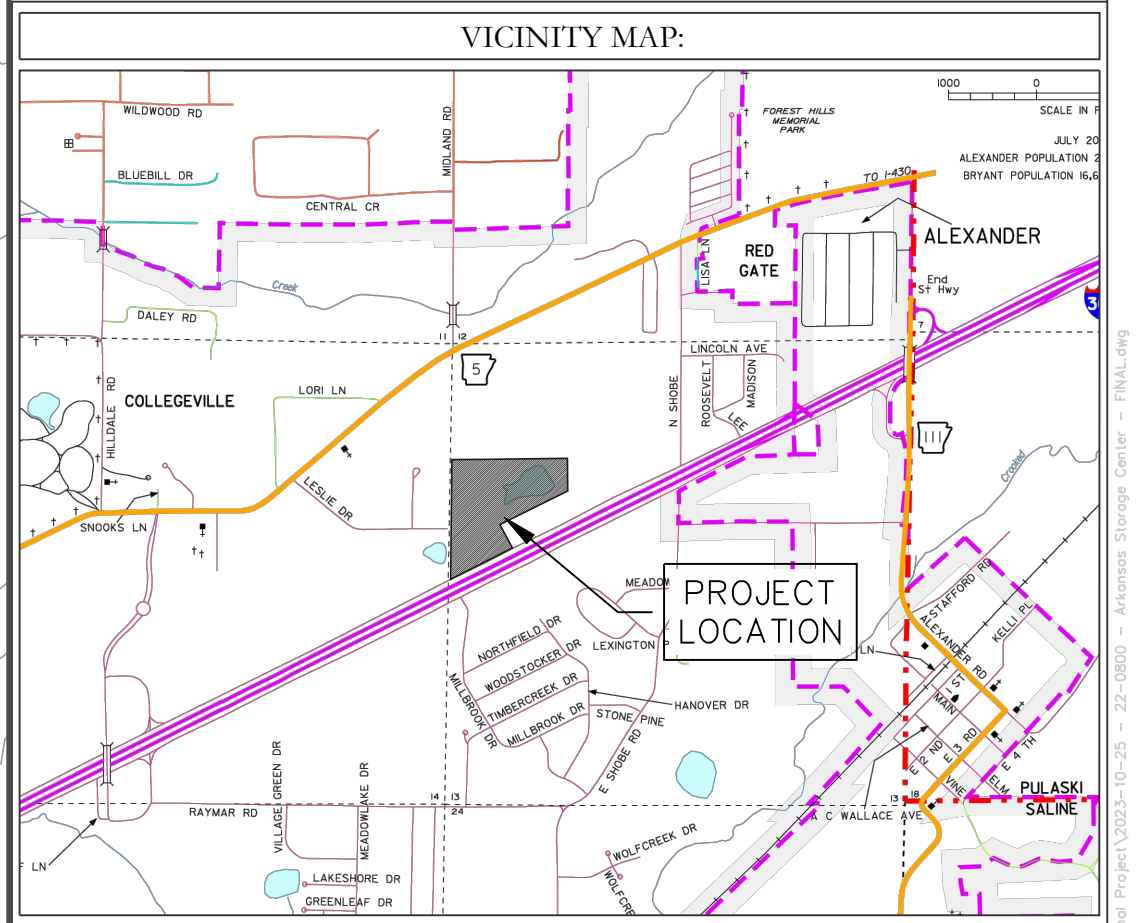
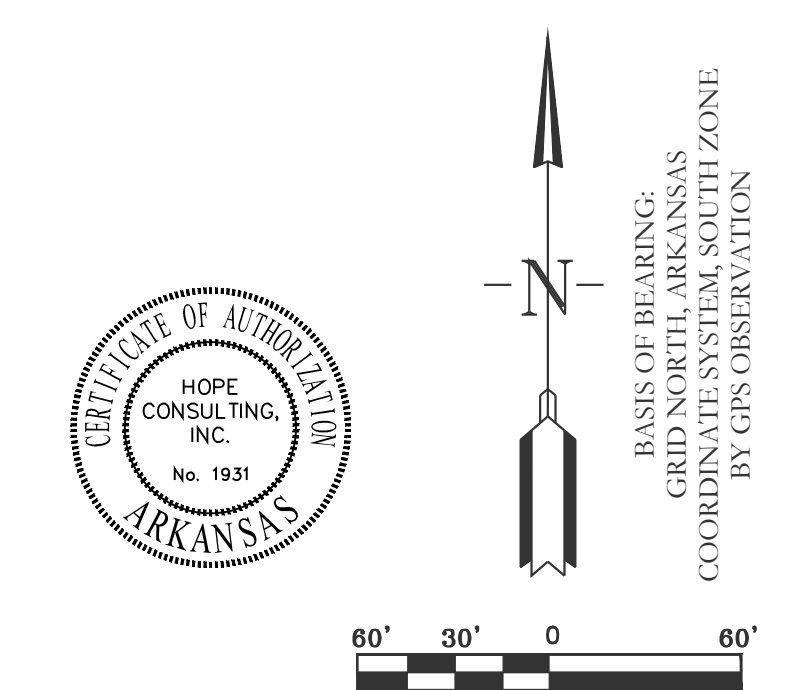


**LEGEND**

PROPOSED CONTOUR LINE ——— 363 ———

PROPOSED HDPE STORM PIPE ————

PROPOSED RCP STORM PIPE ————



	Pre-Development Peak Flow (cfs)	Post-Development without Detention Peak Flow (cfs)	Post-Development with Detention Peak Flow (cfs)
2-Year	53.08	116.86	2.028
5-Year	58.66	130.27	2.263
10-Year	69.15	149.65	2.617
25-Year	79.33	176.93	2.955
50-Year	90.45	194.22	3.283
100-Year	96.16	205.89	3.435
<b>TOC</b>	<b>16.05 min</b>	<b>10.58 min</b>	

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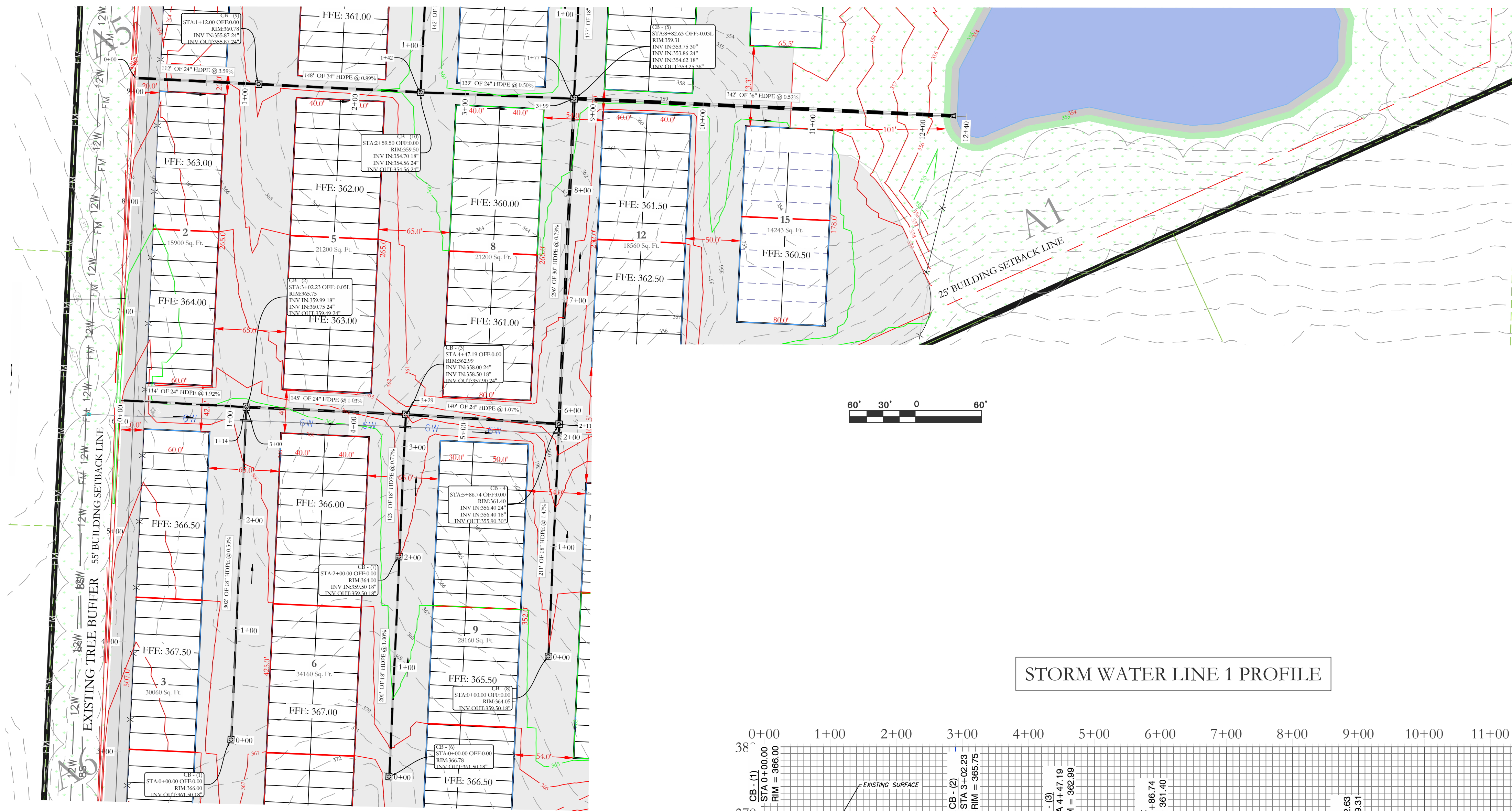
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**ARKANSAS STORAGE CENTER  
DRAINAGE PLAN**  
BRYANT, SALINE COUNTY, ARKANSAS

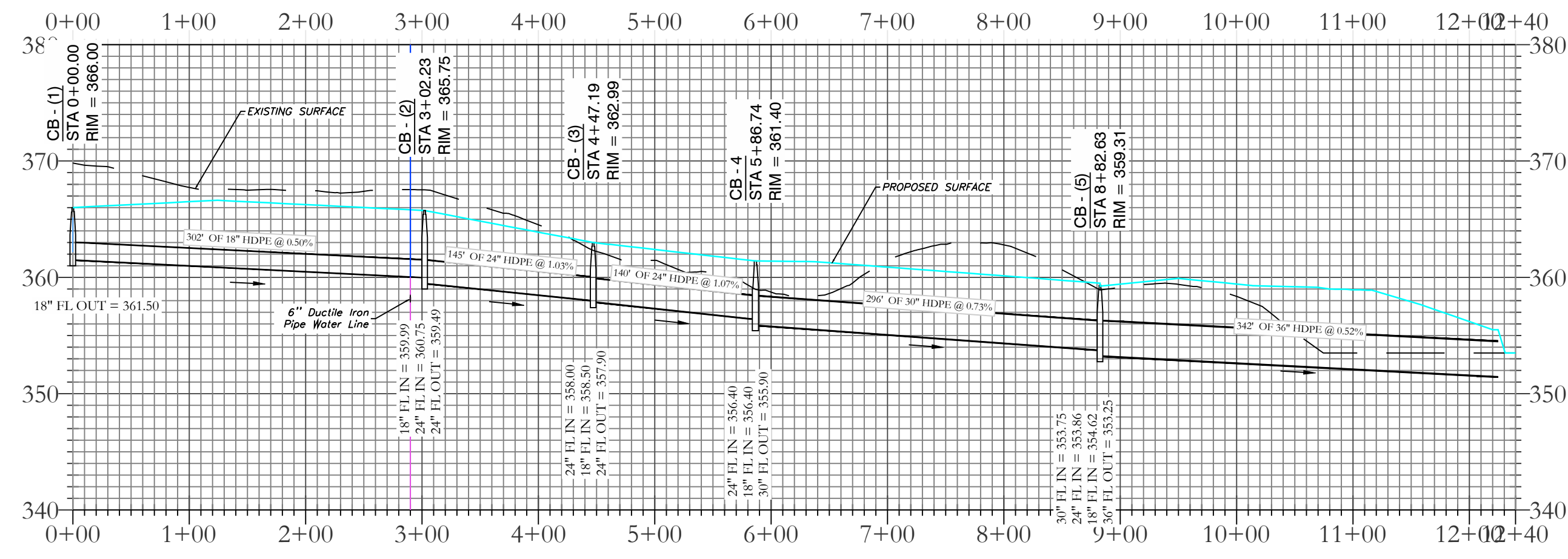
DATE: 12-06-2023	C.A.D. BY:	DRAWING NUMBER:
REVISED:	CHECKED BY:	22-0800
SHEET: C-5.0	SCALE: 1"=60'	

500 01S 14W 0 21 300 62 1762

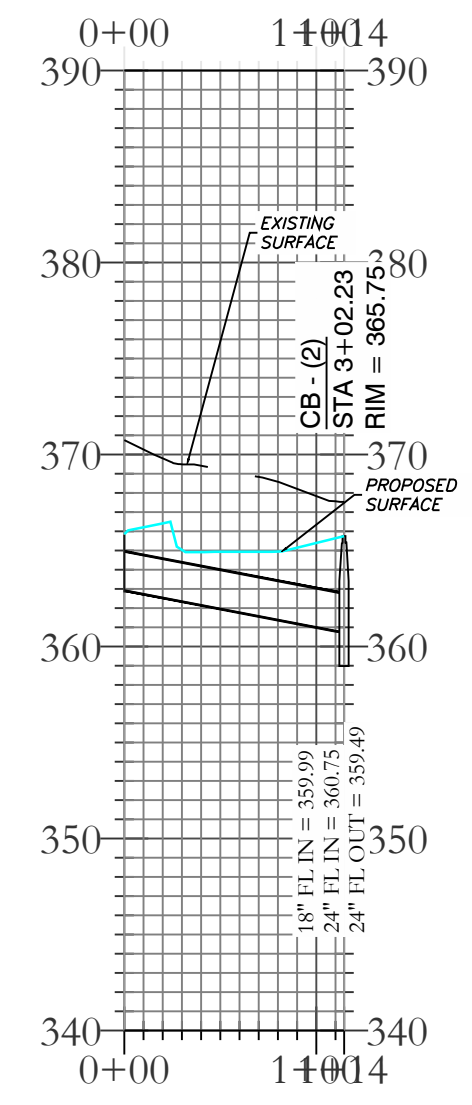




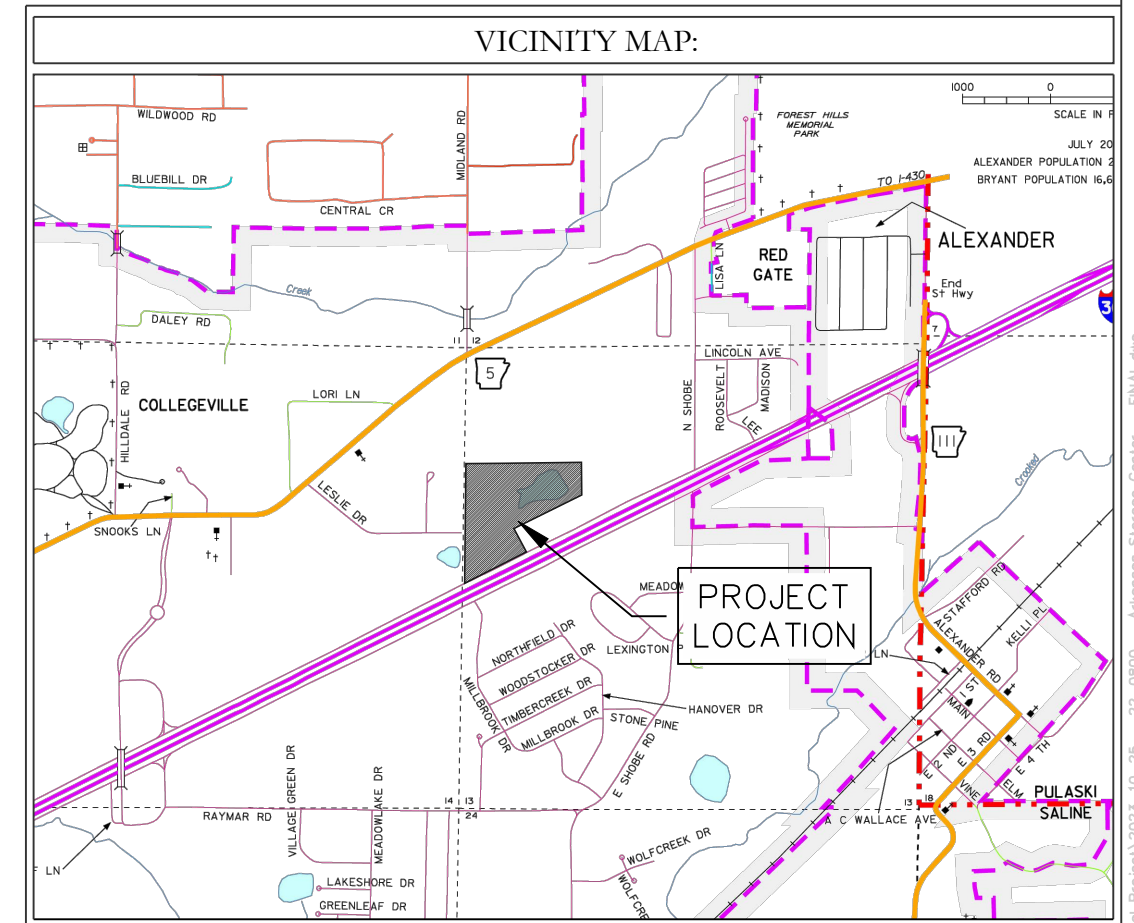
STORM WATER LINE 1 PROFILE



STORM WATER LINE 7 PROFILE



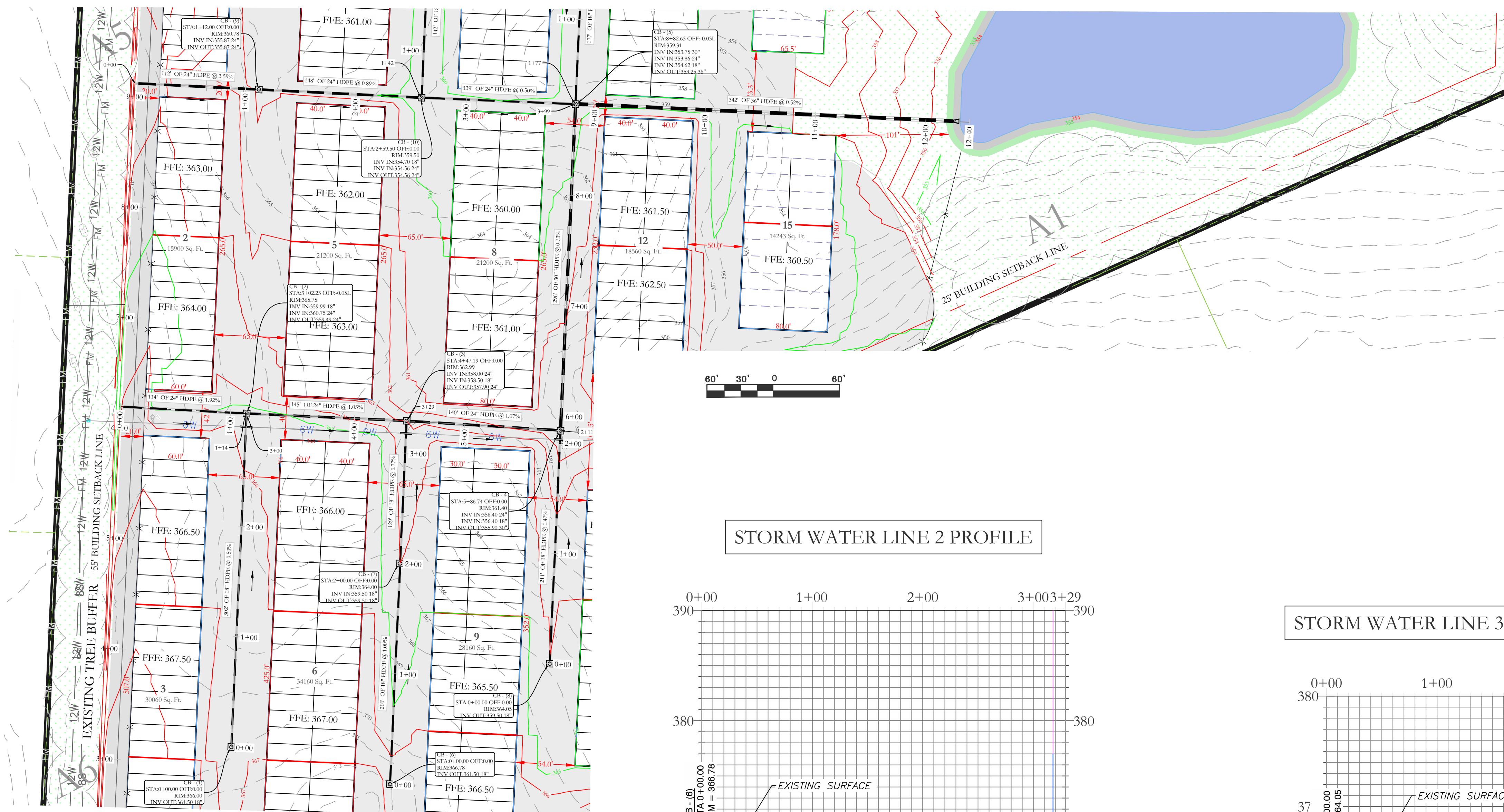
North Arrow  
BASIS OF BEARING:  
GRID NORTH, ARKANSAS  
COORDINATE SYSTEM, SOUTH ZONE  
BY GPS OBSERVATION



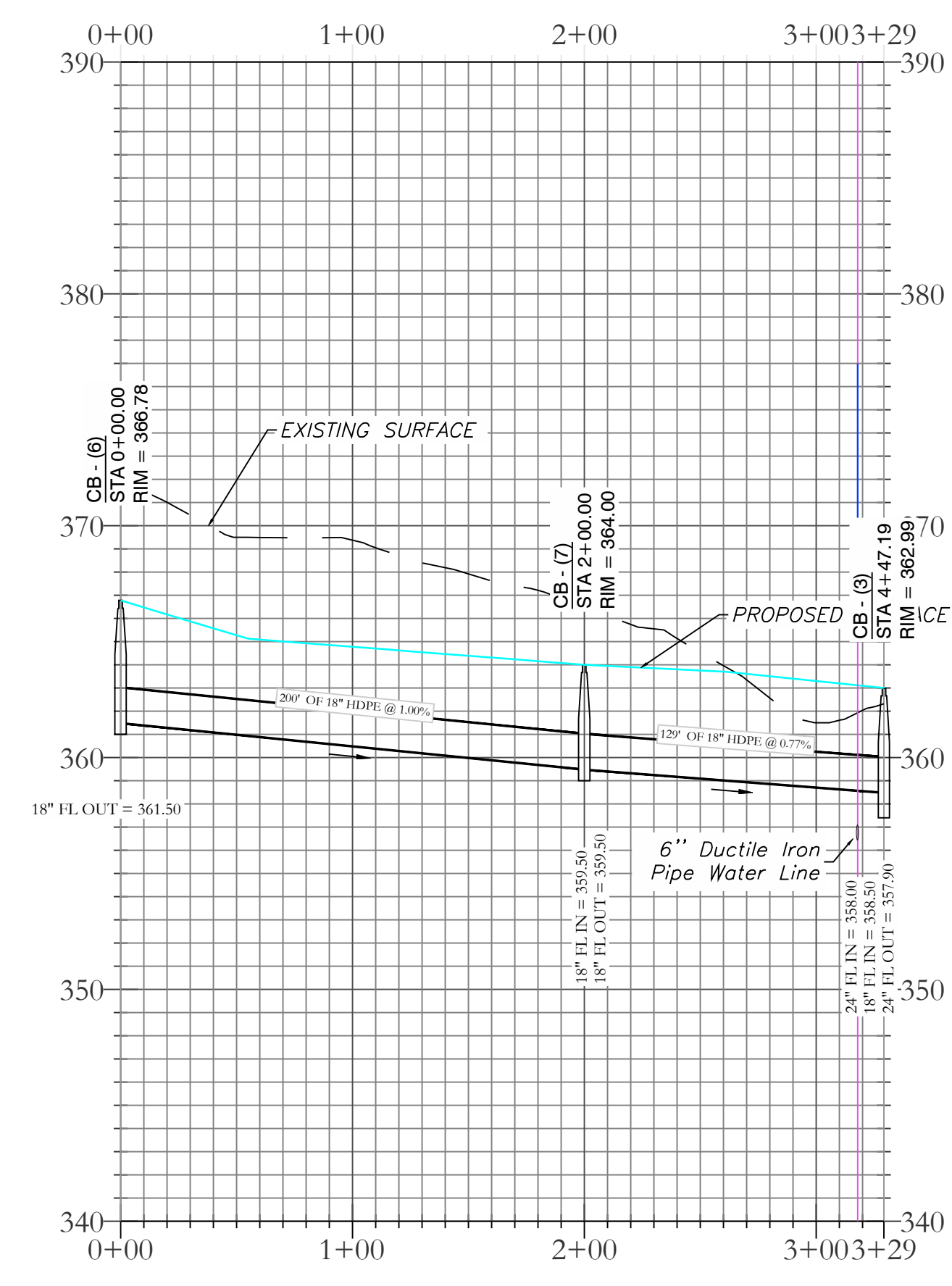
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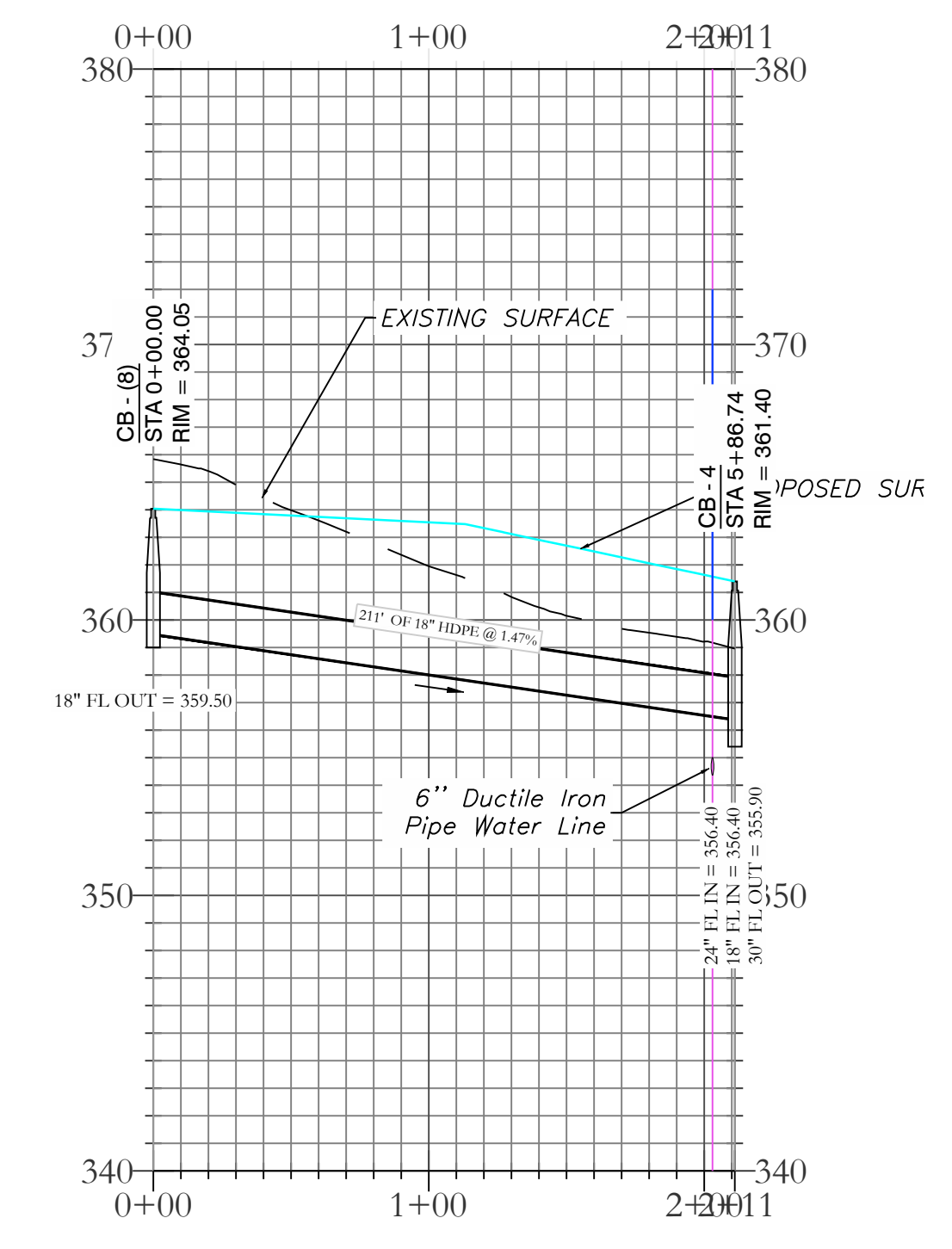
FOR USE AND BENEFIT OF: <b>STUART FINLEY</b>		
<b>ARKANSAS STORAGE CENTER</b> DRAINAGE PLAN BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 12-06-2023	C.A.D. BY:	DRAWING NUMBER:
REVISED:	CHECKED BY:	22-0800
SHEET: C-5.1	SCALE:	
500	01S	14W 0 21 300 62 1762



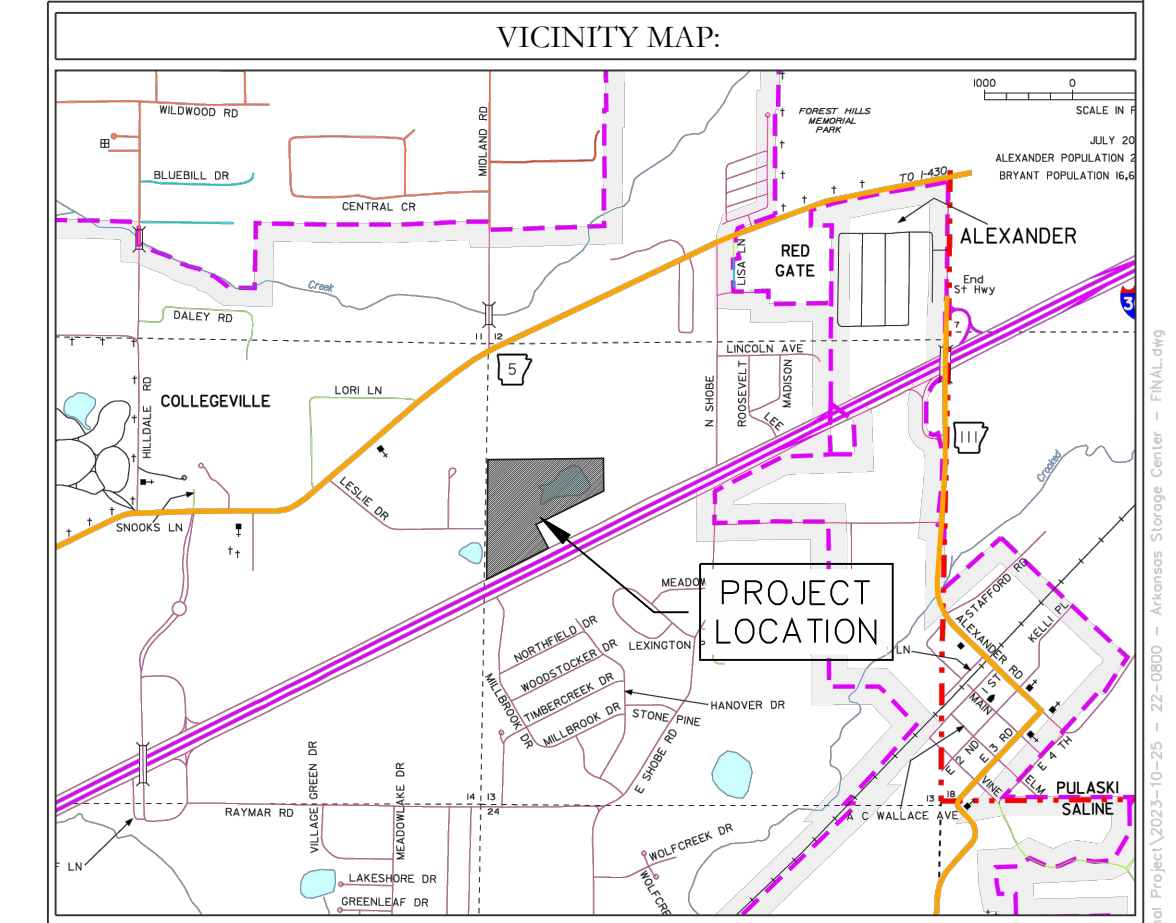
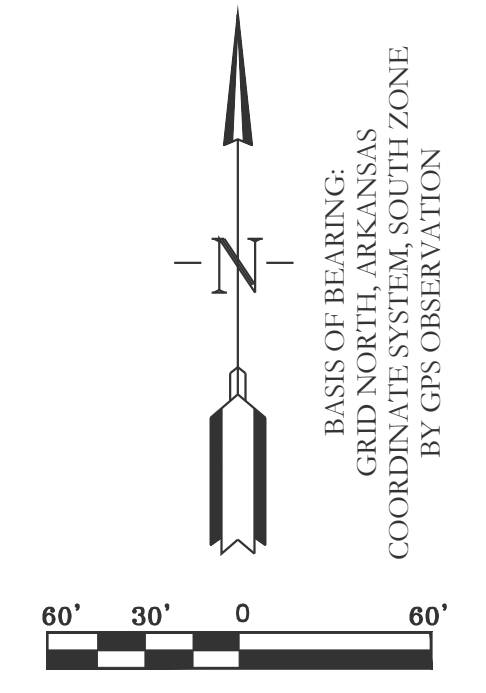
STORM WATER LINE 2 PROFILE



STORM WATER LINE 3 PROFILE



- LEGEND**
- EXISTING CONTOUR LINE --- 363 ---
  - PROPOSED CONTOUR LINE --- 363 ---
  - PROPOSED HDPE STORM PIPE - - - - -
  - PROPOSED RCP STORM PIPE ————



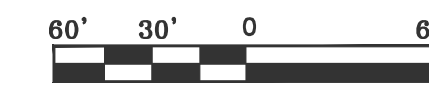
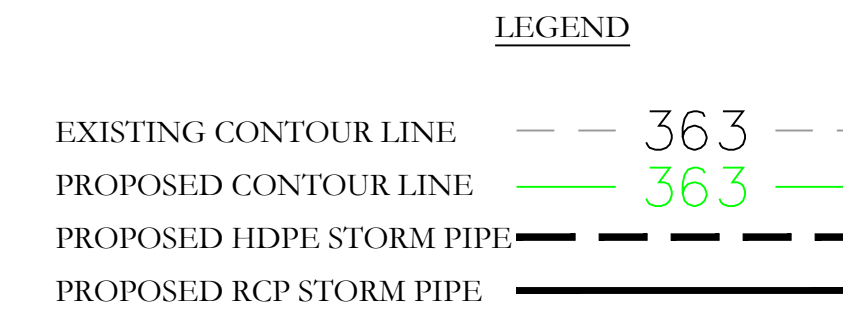
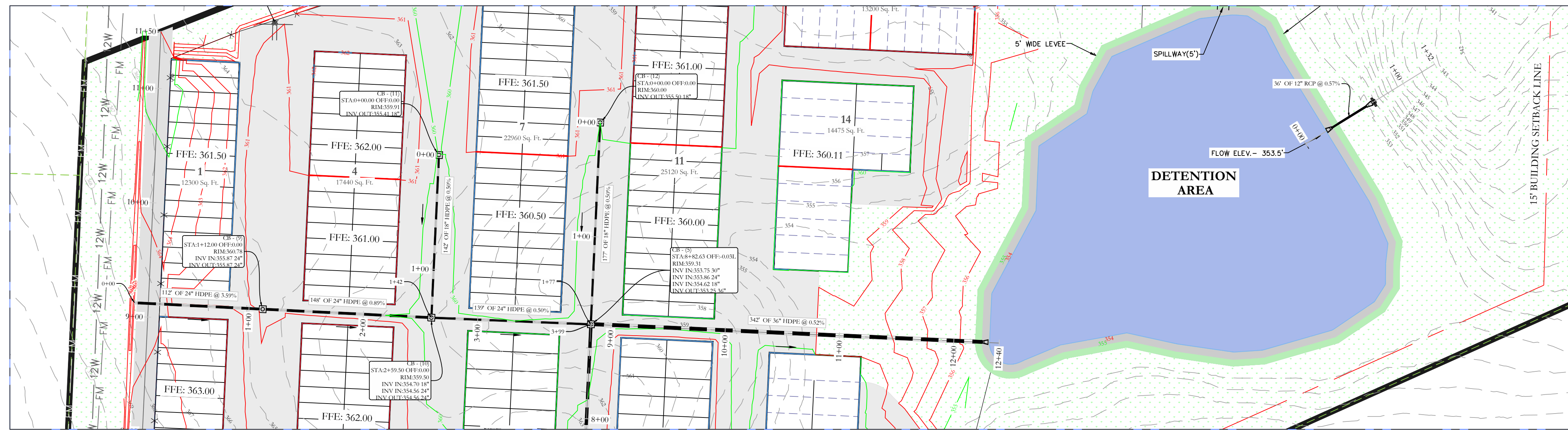
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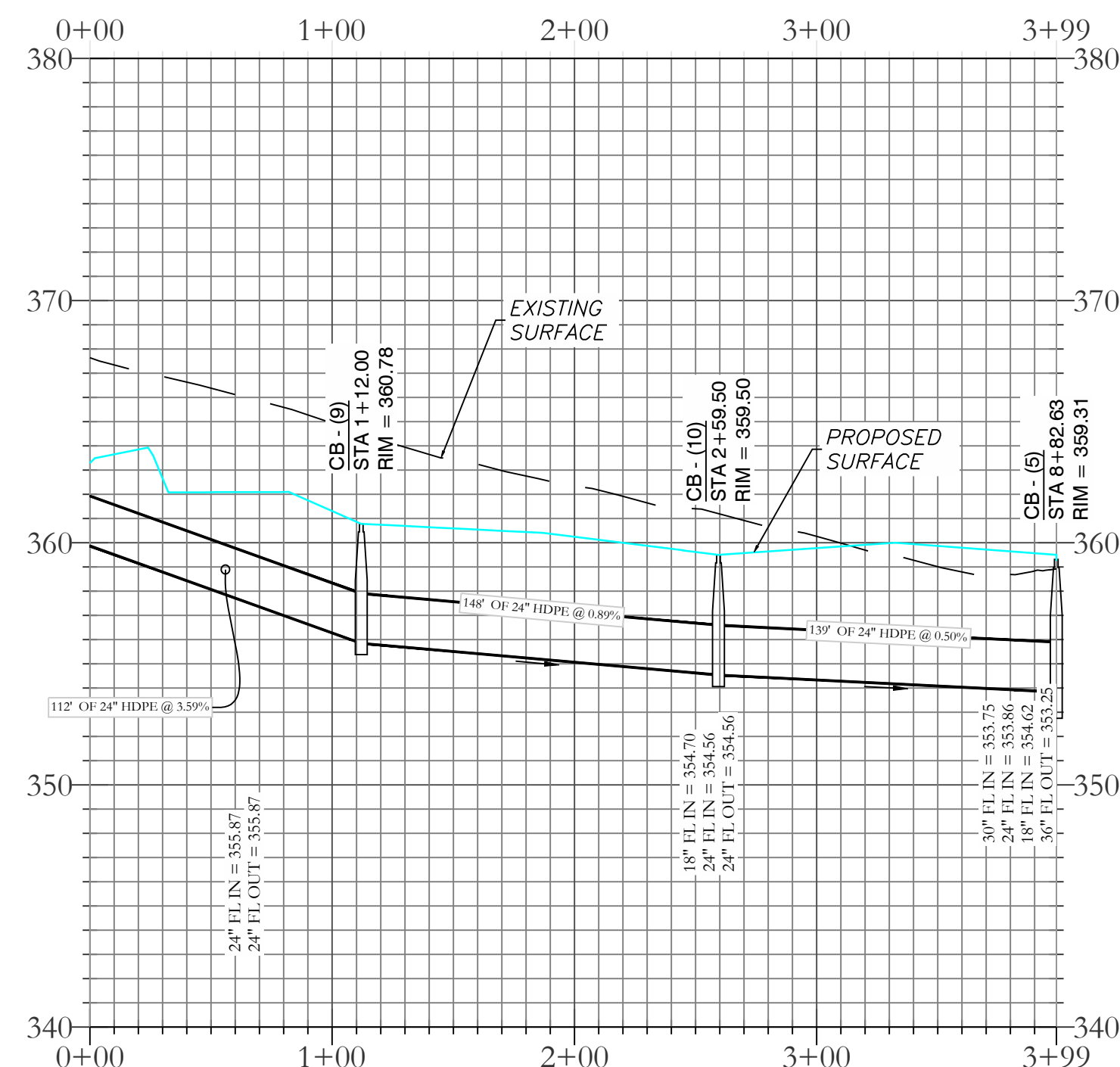
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DRAINAGE PLAN  
BRYANT, SALINE COUNTY, ARKANSAS

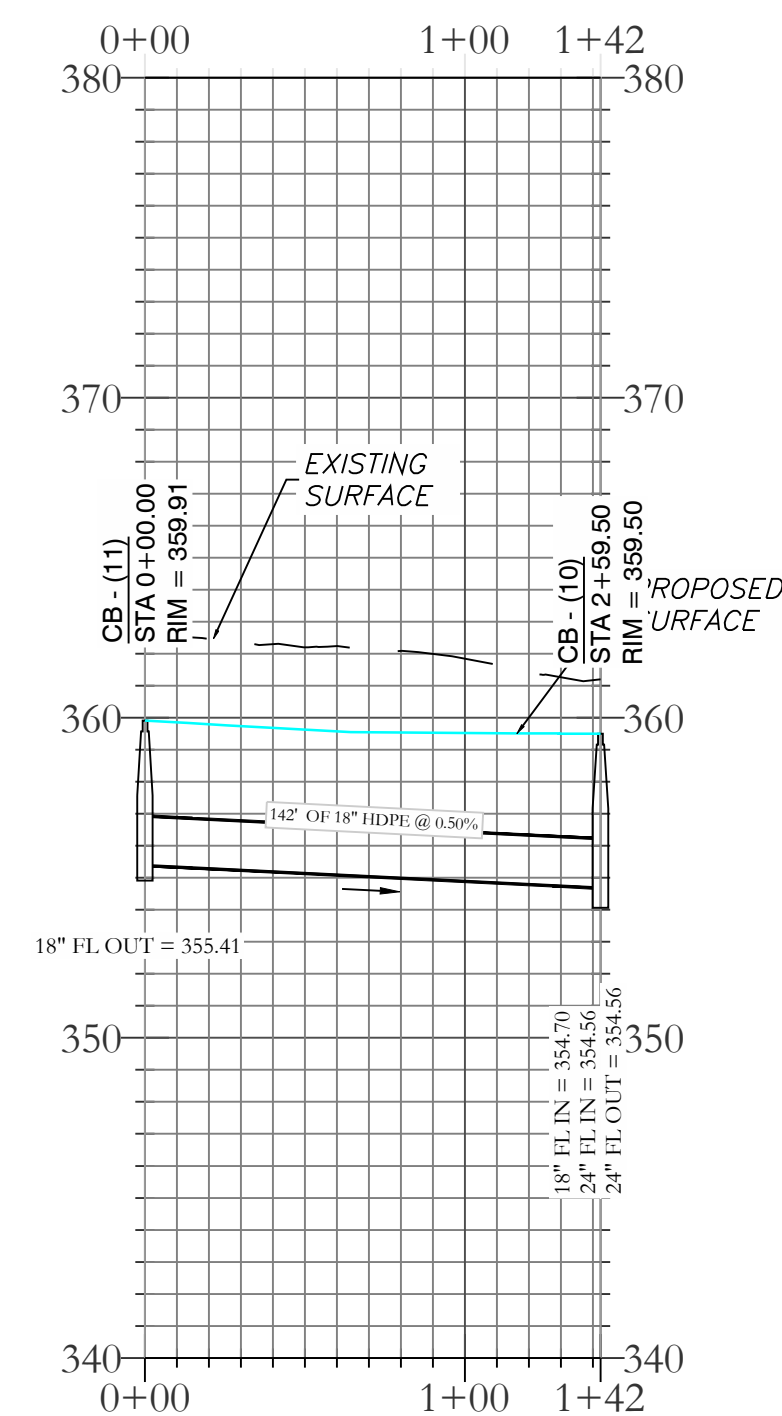
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REVISED:	CHECKED BY:	22-0800
SHEET: C-5.2	SCALE:	
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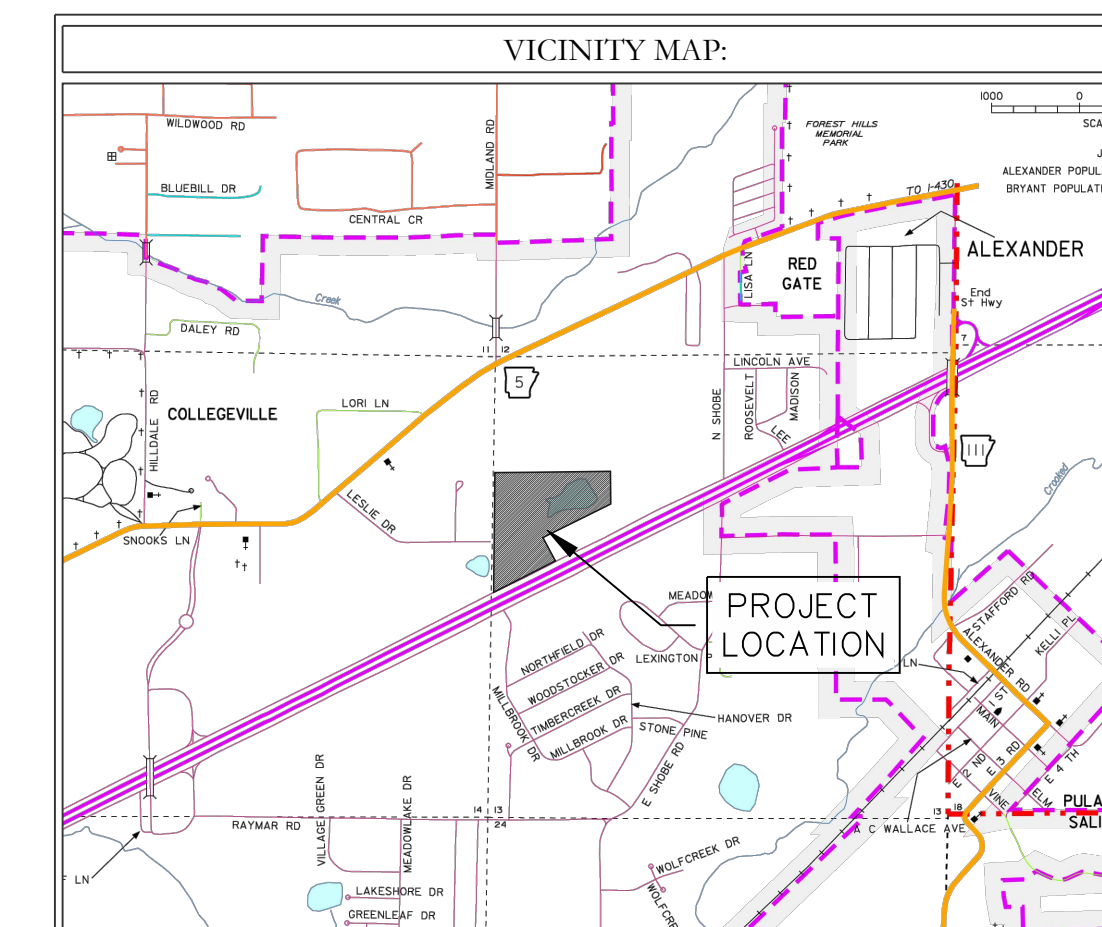
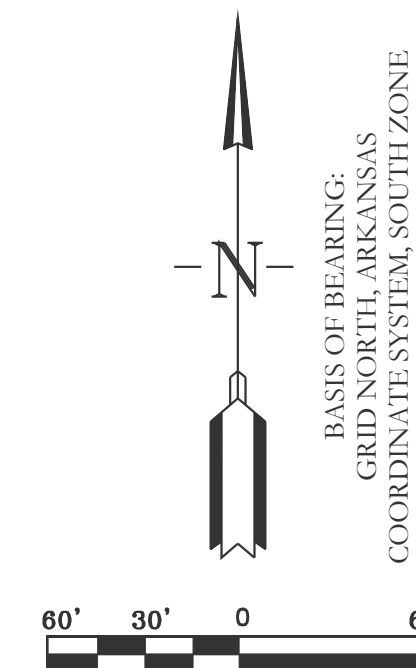
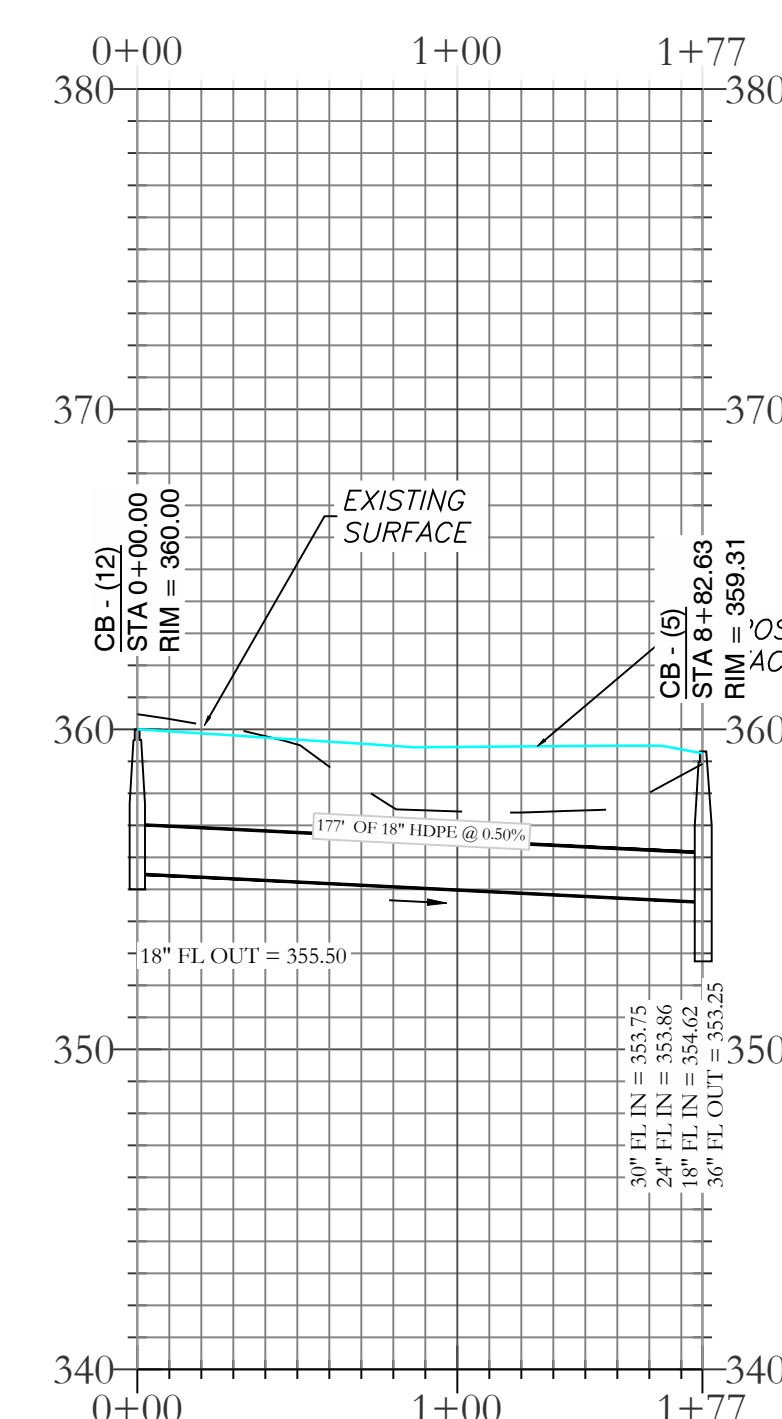
**STORM WATER LINE 4 PROFILE**



**STORM WATER LINE 5 PROFILE**



**STORM WATER LINE 6 PROFILE**



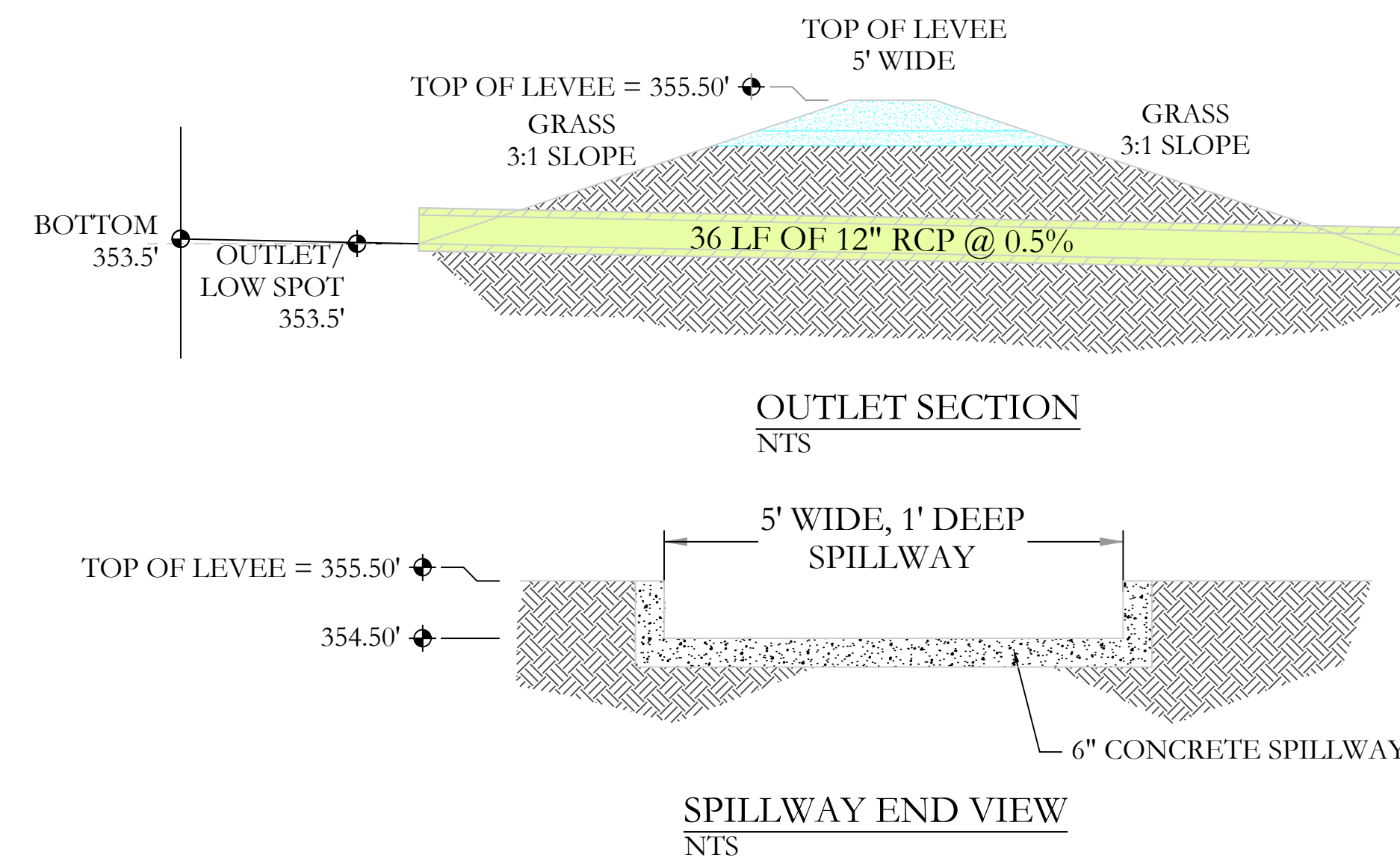
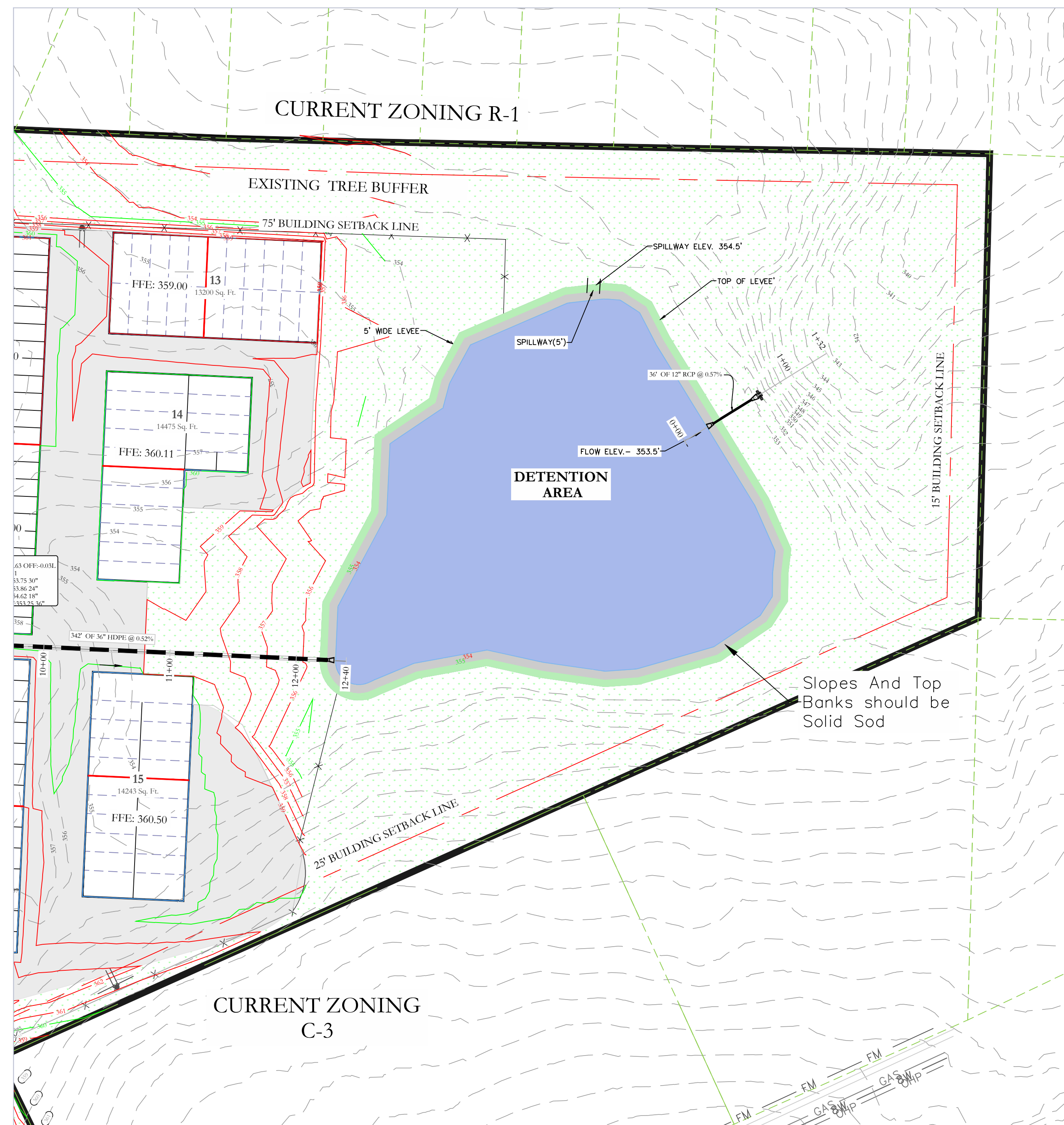
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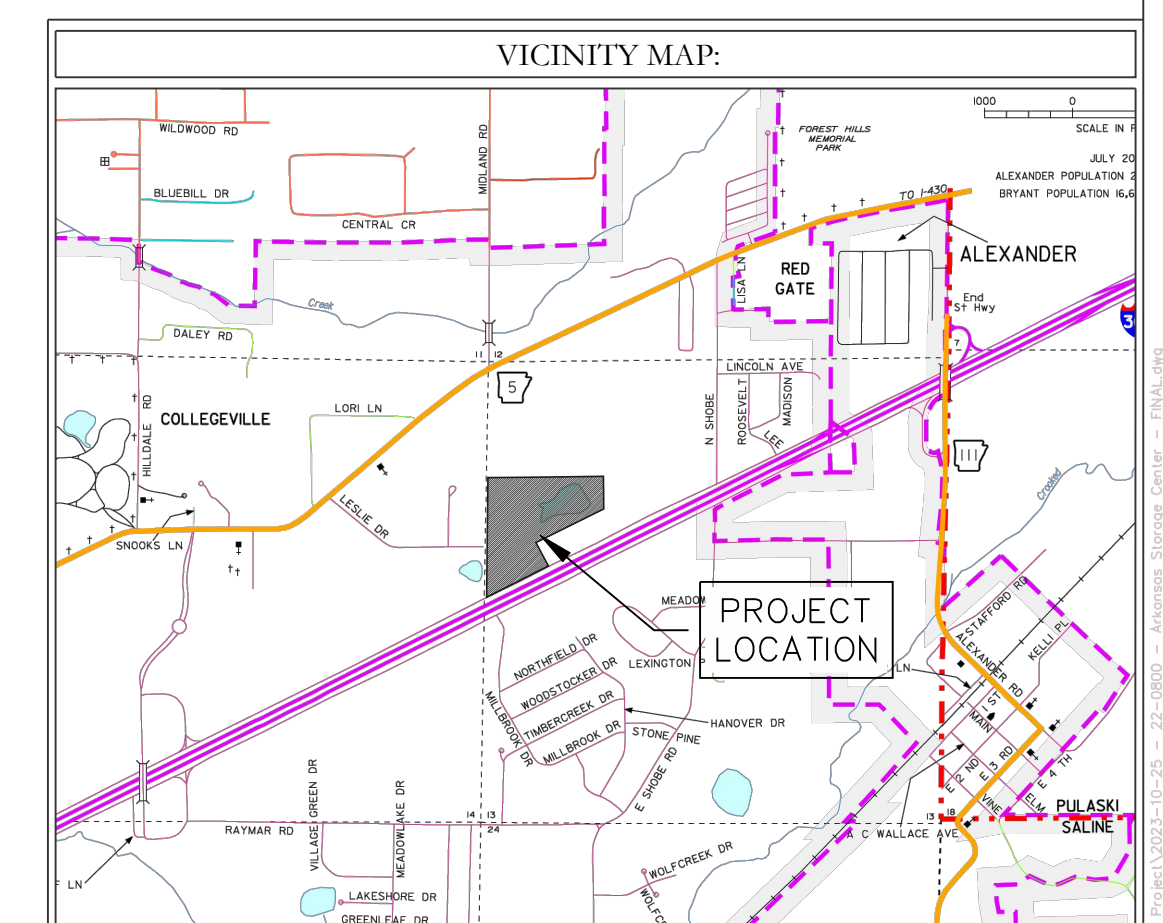
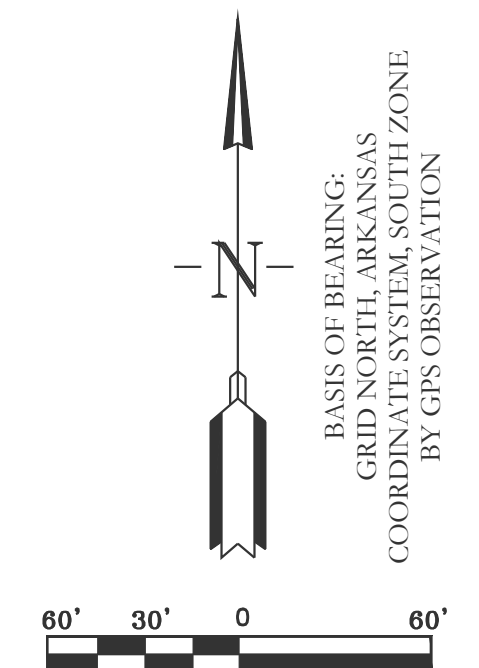
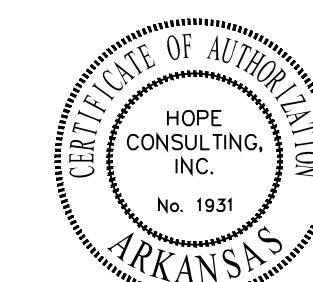
**ARKANSAS STORAGE CENTER**  
DRAINAGE PLAN  
BRYANT, SALINE COUNTY, ARKANSAS

DATE: 12-06-2023	C.A.D. BY:	DRAWING NUMBER:
REVISED:	CHECKED BY:	22-0800
SHEET: C-5.3	SCALE:	
500	01S	14W 0 21 300 62 1762



**LEGEND**

EXISTING CONTOUR LINE	---	363	---
PROPOSED CONTOUR LINE	---	363	---
PROPOSED HDPE STORM PIPE	---		---
PROPOSED RCP STORM PIPE	---		---



**DETENTION POND MAINTENANCE PLAN**

**Background**

There will be one retention pond in this project. The retention pond is located at the North-East of the subject property. It is designed to temporarily detain stormwater to meet water quantity criteria before discharging off the property.

**Routine Maintenance**

The property owners association will maintain the drainage easements. Routine maintenance will include but not be limited to:  
 -Mowing of the bank slopes and area around the pond on a monthly basis during the growing season and as needed during the cooler months.

-The outlet pipe from the pond and other areas will be inspected monthly for debris which could inhibit the proper flow of discharge. Any debris will be removed immediately and disposed of or placed in a location to prevent future maintenance and to not cause impact up or downstream of the structure.

-Trash will be removed from around the pond to prevent entering the pond. Generally, the site should be kept free of loose trash which could be carried off site by wind or rain.

-Inspect the pond and outlet pipe for non-routine maintenance need.

**Periodic or Non-Routine Maintenance**

The routine inspection of the pond area and discharge pipe will identify needed repairs and non-routine maintenance. These items may include but not be limited to:

-Re-growth of trees on or around the pond bank. These should be cut and removed from the pond area.

-Sediment from the site may accumulate in the pond bottom and reduce the pond to below design volume requirements. The pond should be excavated if the pond bottom elevation reached a level that allows excessive aquatic growth or reduces the pond efficiency such, that the sediments are passing the discharge structure and release off site.

-Stabilization or re-grading of side slopes may be required periodically or after excessive rain events. Any disturbance of slopes should be reseeded or may require installation of erosion control materials until seeding can reestablish adequate grasses to prevent future erosion.

-Any other maintenance or repairs which would minimize other maintenance to the pond or outfall structures.



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 RETENTION POND PLAN  
 BRYANT, SALINE COUNTY, ARKANSAS

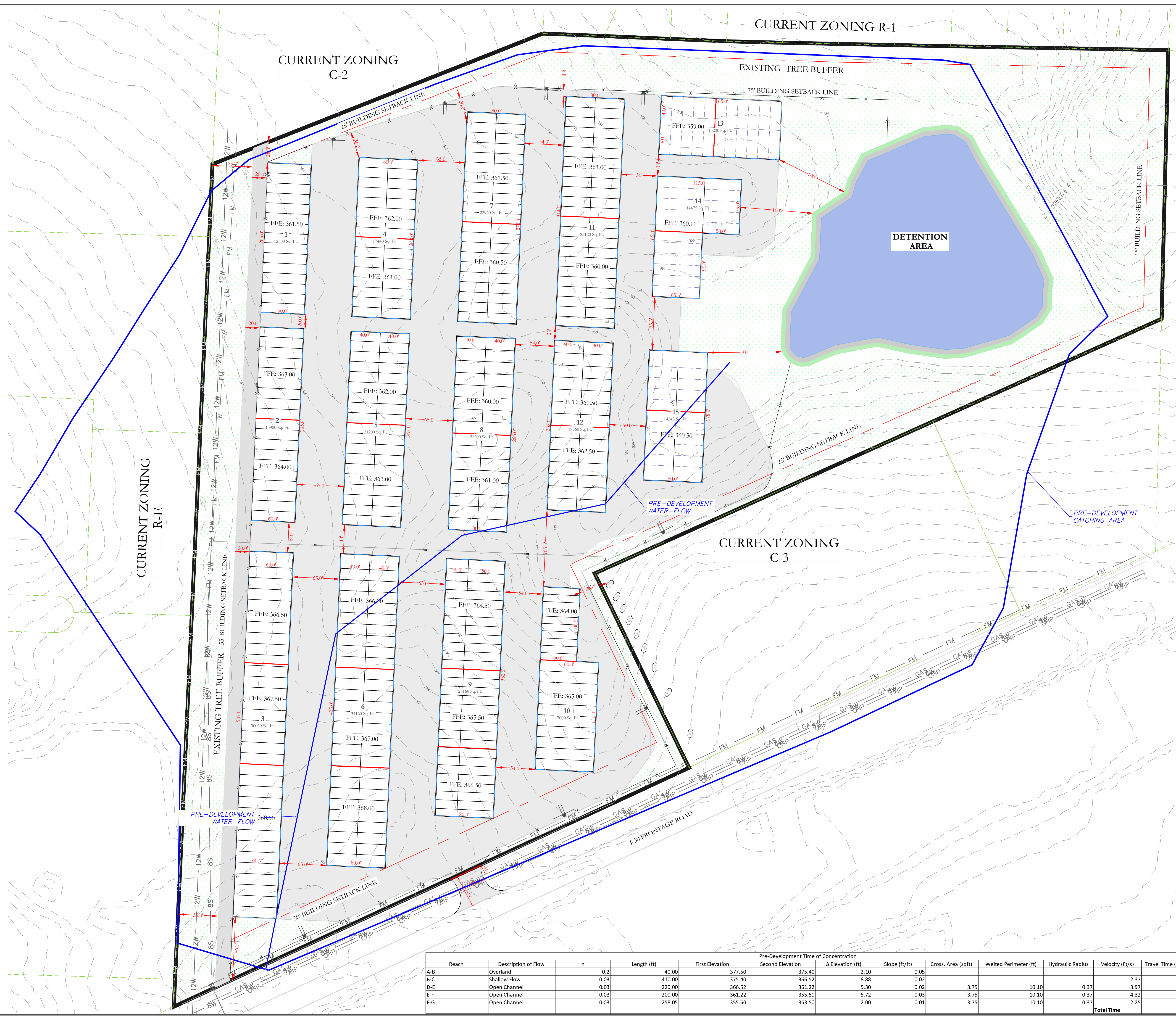
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REVISED:		CHECKED BY:			22-0800
SHEET:	C-5.4	SCALE:			
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CURRENT ZONING C-2

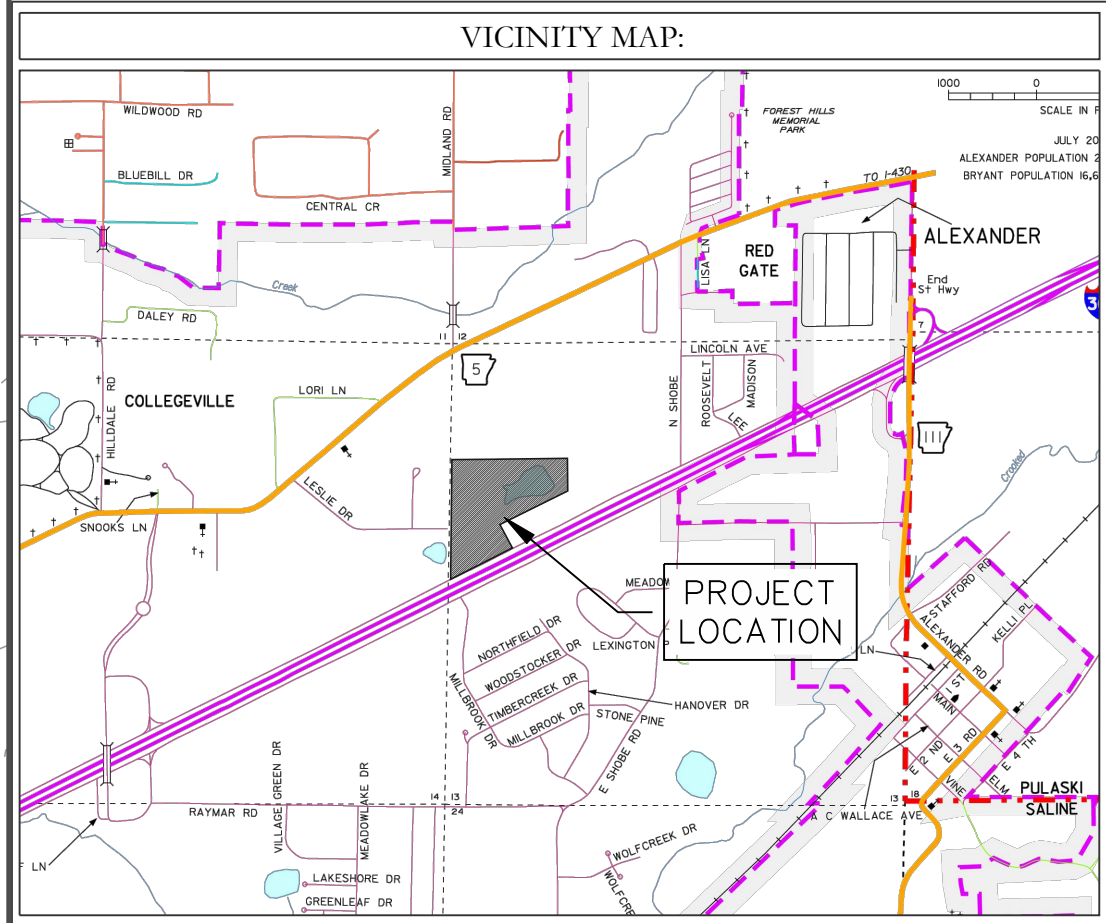
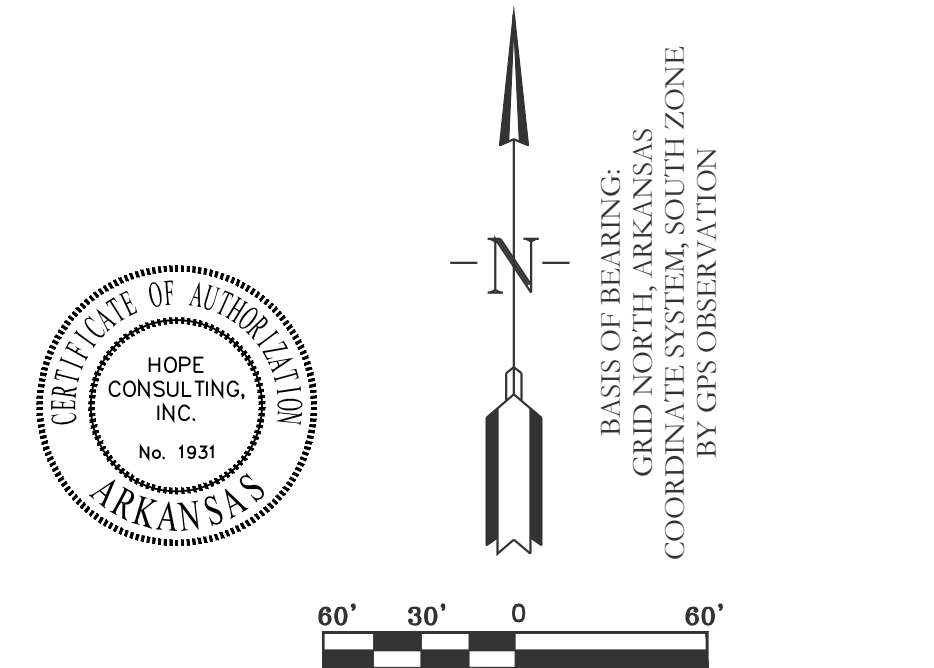
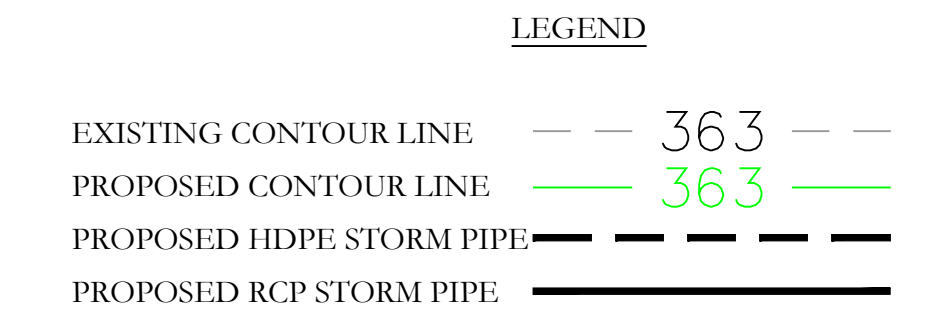
CURRENT ZONING R-1

CURRENT ZONING R-E

CURRENT ZONING C-3



	Pre-Development Peak Flow (cfs)	Post-Development without Detention Peak Flow (cfs)	Post-Development with Detention Peak Flow (cfs)
2-Year	53.08	116.86	1.831
5-Year	58.66	130.27	3.033
10-Year	69.15	149.65	5.315
25-Year	79.33	176.93	8.288
50-Year	90.45	194.22	11.98
100-Year	96.16	205.89	13.95
<b>TOC</b>	<b>16.05 min</b>	<b>10.58 min</b>	



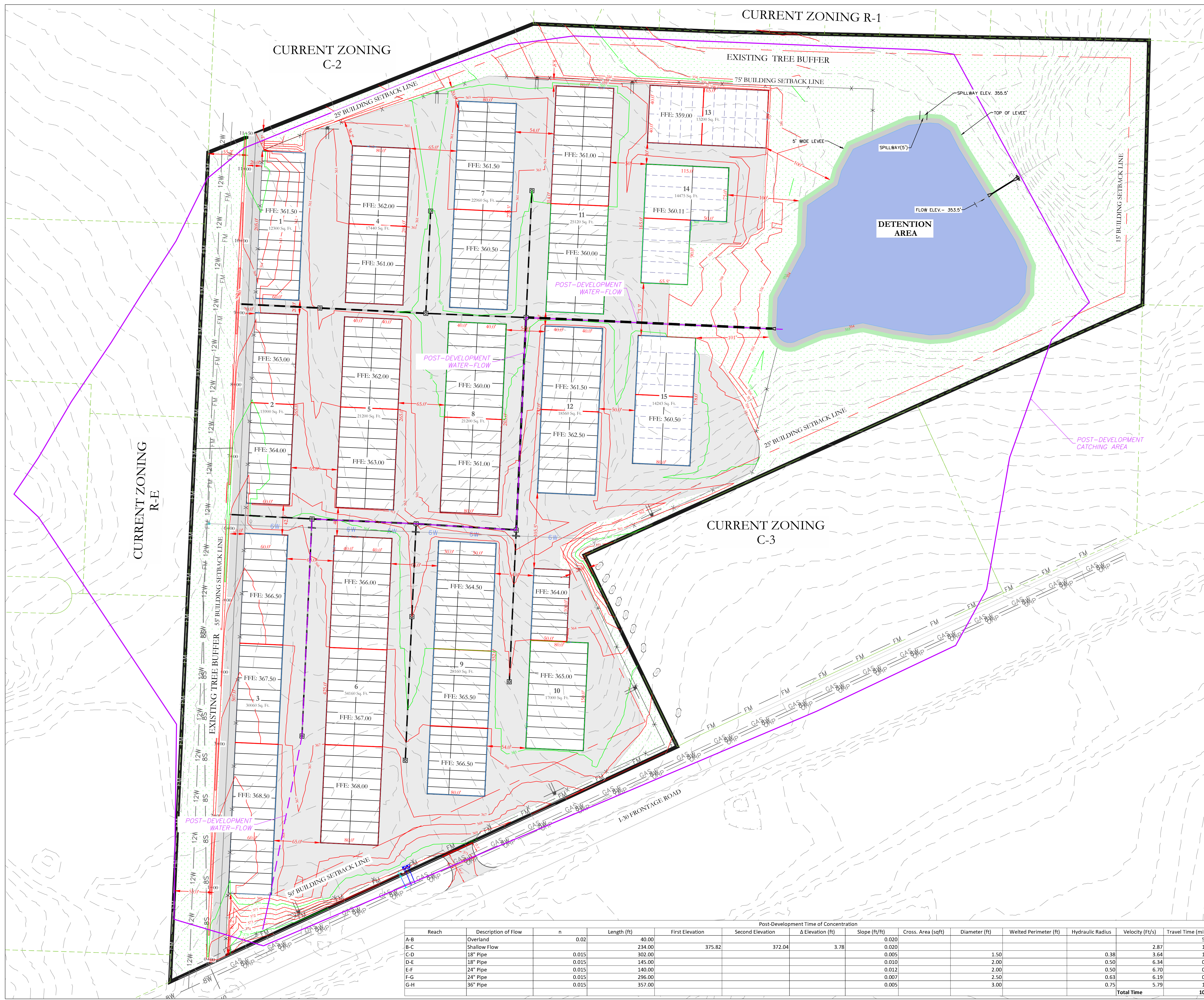
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**ARKANSAS STORAGE CENTER**  
PRE-DEVELOPMENT FLOW  
BRYANT, SALINE COUNTY, ARKANSAS

Reach	Description of Flow	n	Length (ft)	Pre-Development Time of Concentration			Slope (ft/ft)	Cross. Area (sqft)	Wetted Perimeter (ft)	Hydraulic Radius	Velocity (ft/s)	Travel Time (min)
				First Elevation	Second Elevation	Δ Elevation (ft)						
A-B	Overland	0.2	40.00	377.50	375.40	2.10	0.05				2.37	2.88
B-C	Shallow Flow	0.03	410.00	375.40	366.52	8.88	0.02				3.97	0.92
D-E	Open Channel	0.03	220.00	366.52	361.22	5.30	0.02	3.75	10.10	0.37	4.32	0.77
E-F	Open Channel	0.03	200.00	361.22	355.50	5.72	0.03	3.75	10.10	0.37	2.25	1.91
F-G	Open Channel	0.03	258.05	355.50	353.50	2.00	0.01	3.75	10.10	0.37		
<b>Total Time</b>											<b>16.05</b>	

DATE: 12-06-2023	C.A.D. BY:	DRAWING NUMBER:
REVISED:	CHECKED BY:	22-0800
SHEET: C-5.5	SCALE: 1"=60'	
500	01S	14W 0 21 300 62 1762



**LEGEND**

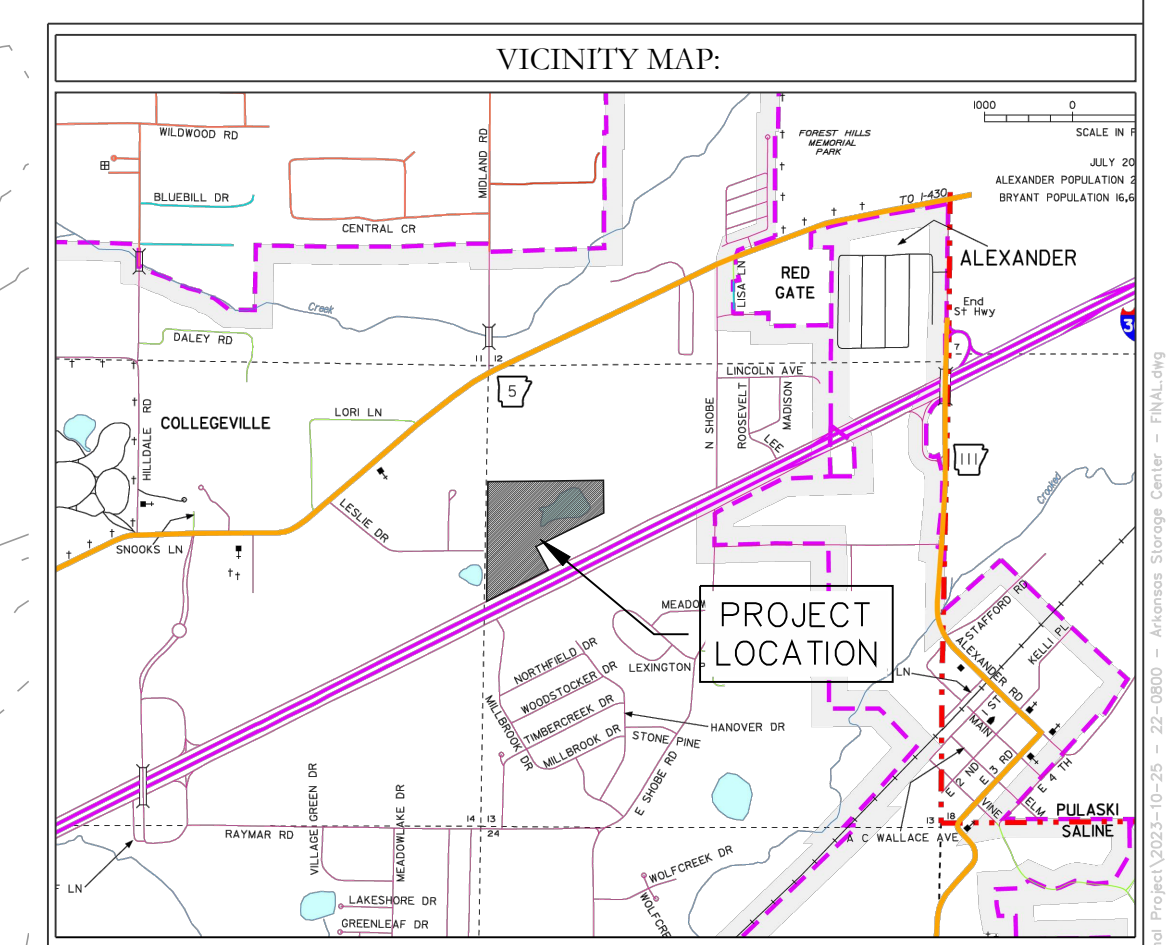
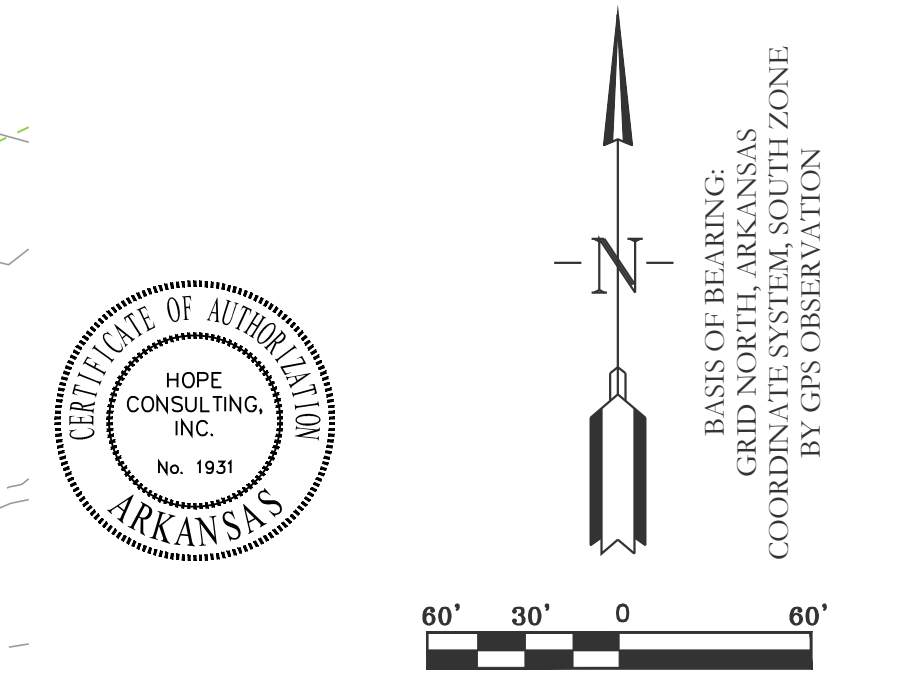
EXISTING CONTOUR LINE --- 363 ---

PROPOSED CONTOUR LINE --- 363 ---

PROPOSED HDPE STORM PIPE - - - - -

PROPOSED RCP STORM PIPE = = = = =

	Pre-Development		Post-Development without Detention		Post-Development with Detention	
	Peak Flow (cfs)	Peak Flow (cfs)	Peak Flow (cfs)	Peak Flow (cfs)	Peak Flow (cfs)	Peak Flow (cfs)
2-Year	53.08	116.86	130.27	2.028	2.263	2.617
5-Year	58.66	130.27	149.65	2.955	3.283	3.435
10-Year	69.15	149.65	176.93	3.283	3.435	3.435
25-Year	79.33	176.93	194.22	3.435	3.435	3.435
50-Year	90.45	194.22	205.89	3.435	3.435	3.435
100-Year	96.16	205.89	205.89	3.435	3.435	3.435
<b>TOC</b>	<b>16.05 min</b>	<b>10.58 min</b>				



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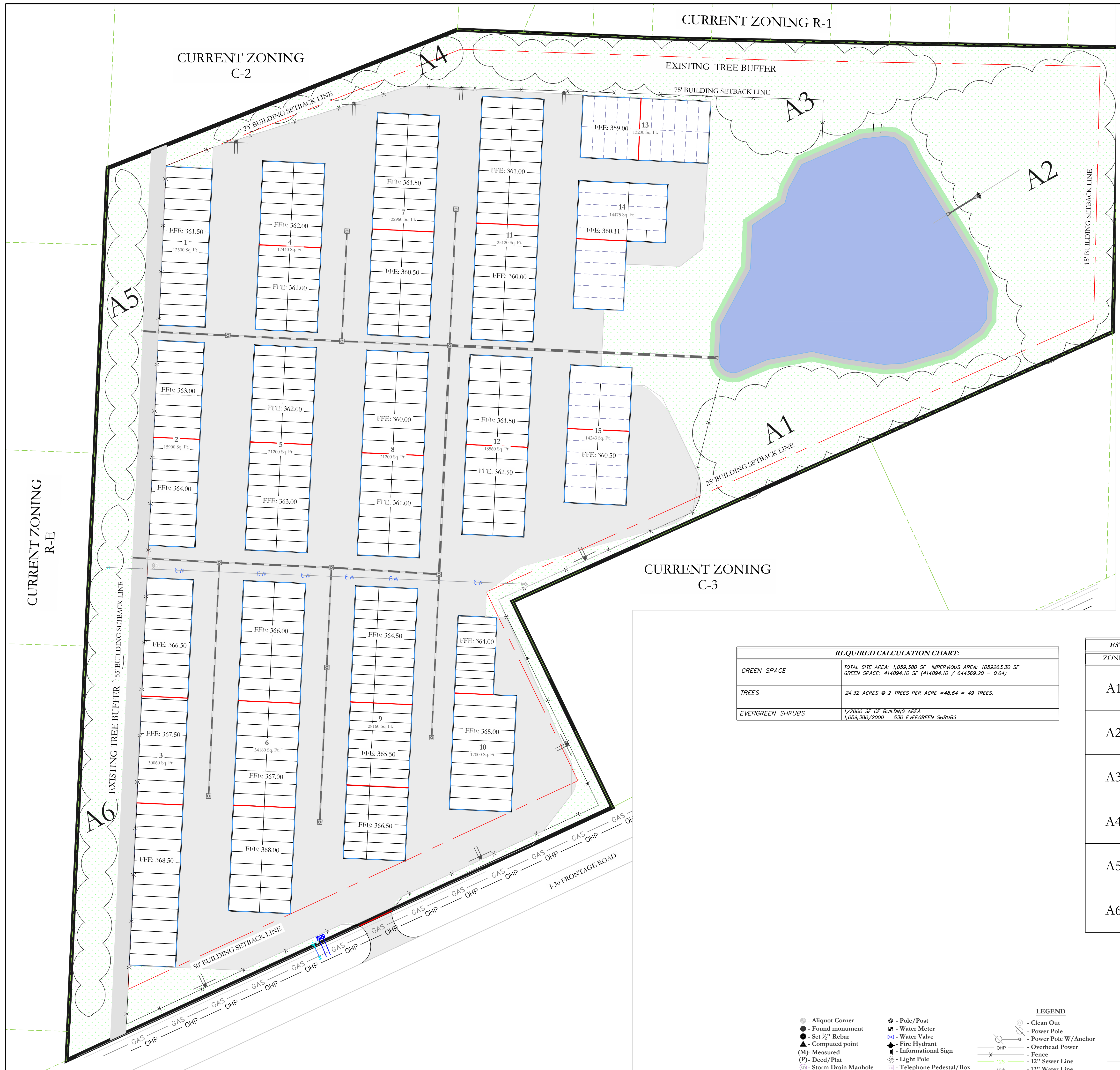
**ARKANSAS STORAGE CENTER**  
POST-DEVELOPMENT FLOW  
BRYANT, SALINE COUNTY, ARKANSAS

DATE: 12-05-2023 C.A.D. BY: DRAWING NUMBER:  
REVISION: CHECKED BY: 22-0800  
SHEET: C-4.6 SCALE: 1"=60'

500 01S 14W 0 21 300 62 1762

Post-Development Time of Concentration

Reach	Description of Flow	n	Length (ft)	First Elevation	Second Elevation	Δ Elevation (ft)	Slope (ft/ft)	Cross. Area (sqft)	Diameter (ft)	Wetted Perimeter (ft)	Hydraulic Radius	Velocity (ft/s)	Travel Time (min)
A-B	Overland	0.02	40.00				0.020					2.87	5.29
B-C	Shallow Flow		234.00	375.82	372.04	3.78	0.020					3.64	1.36
C-D	18" Pipe	0.015	302.00				0.005		1.50		0.38	2.87	1.38
D-E	18" Pipe	0.015	145.00				0.010		2.00		0.50	6.34	0.38
E-F	24" Pipe	0.015	140.00				0.012		2.00		0.50	6.70	0.35
F-G	24" Pipe	0.015	296.00				0.007		2.50		0.63	6.19	0.80
G-H	36" Pipe	0.015	357.00				0.005		3.00		0.75	5.79	1.03
<b>Total Time</b>												<b>10.58</b>	



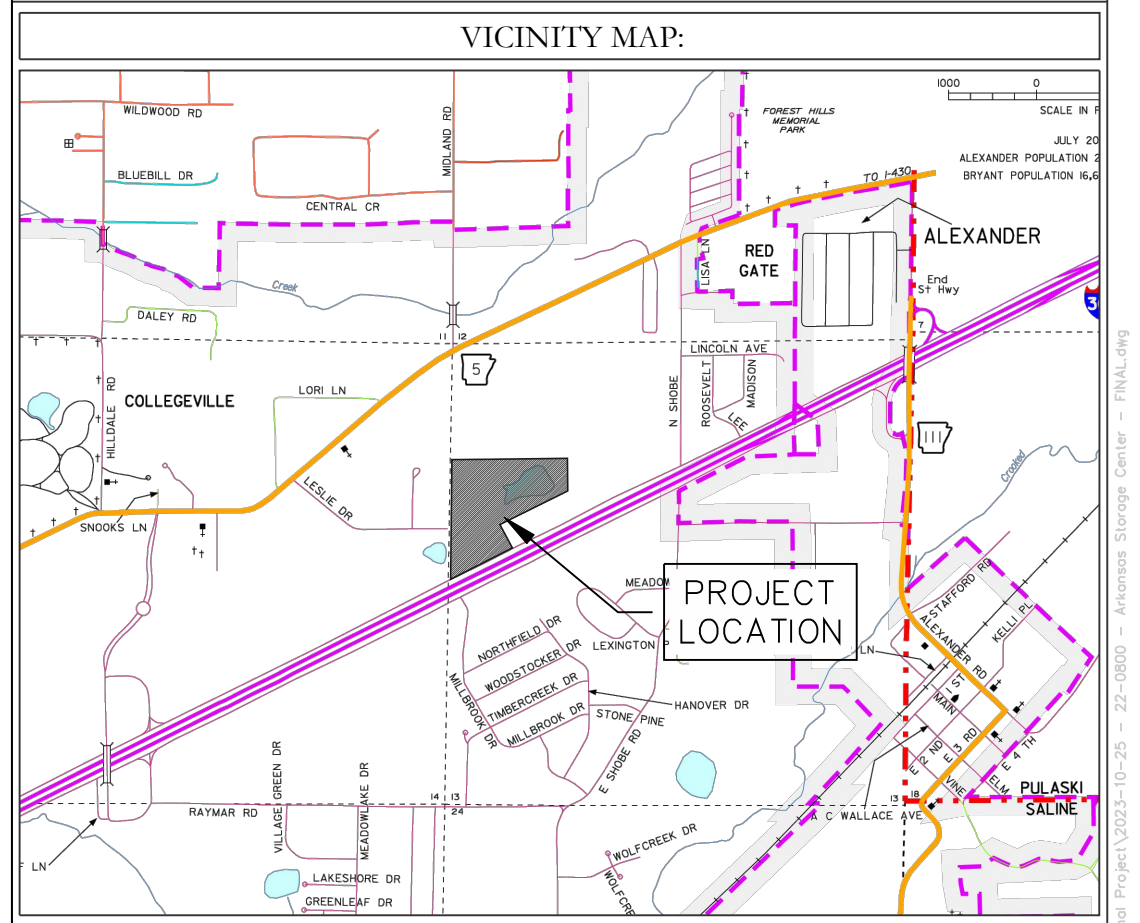
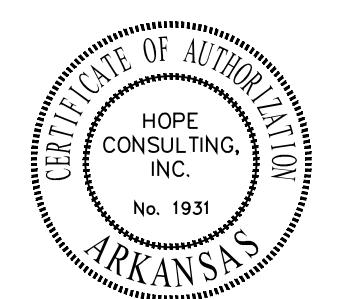
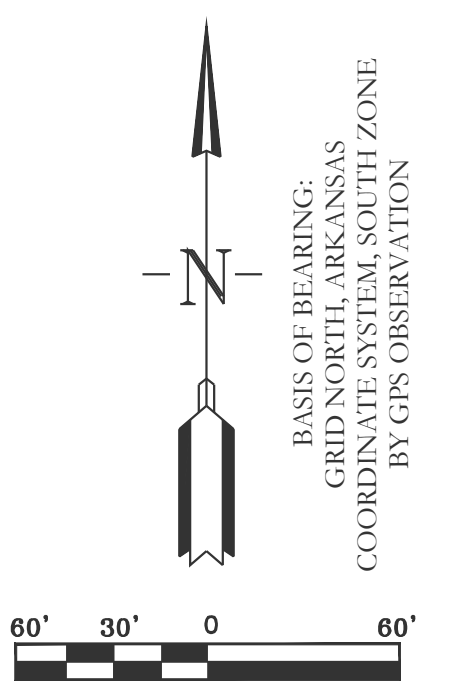
**REQUIRED CALCULATION CHART:**

GREEN SPACE	TOTAL SITE AREA: 1,059,380 SF IMPERVIOUS AREA: 1059263.30 SF GREEN SPACE: 414894.10 SF (414894.10 / 644369.20 = 0.64)
TREES	24.32 ACRES @ 2 TREES PER ACRE = 48.64 = 49 TREES.
EVERGREEN SHRUBS	1/2000 SF OF BUILDING AREA. 1,059,380/2000 = 530 EVERGREEN SHRUBS

**ESTIMATED EXISTING TREES ON SITE PER AREA**

ZONE	CONDITION	DENSITY	SIZE
A1	GOOD	THICK	24"-36" - 130
A2	GOOD	THICK	24"-36" - 89
A3	MIXED	MODERATE	24"-36" - 45
A4	GOOD	SPARSE	24"-36" - 25
A5	GOOD	MODERATE	15"-30" - 20
A6	GOOD	SPARSE	15"-30" - 40

CIVIL ENGINEER  
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 129 N. MAIN STREET  
 BENTON, AR 72015  
 CONTACT: KAZI TAMZIDUL ISLAM  
 PHONE: 504-315-2626  
 EMAIL: kazi@hopeconsulting.com



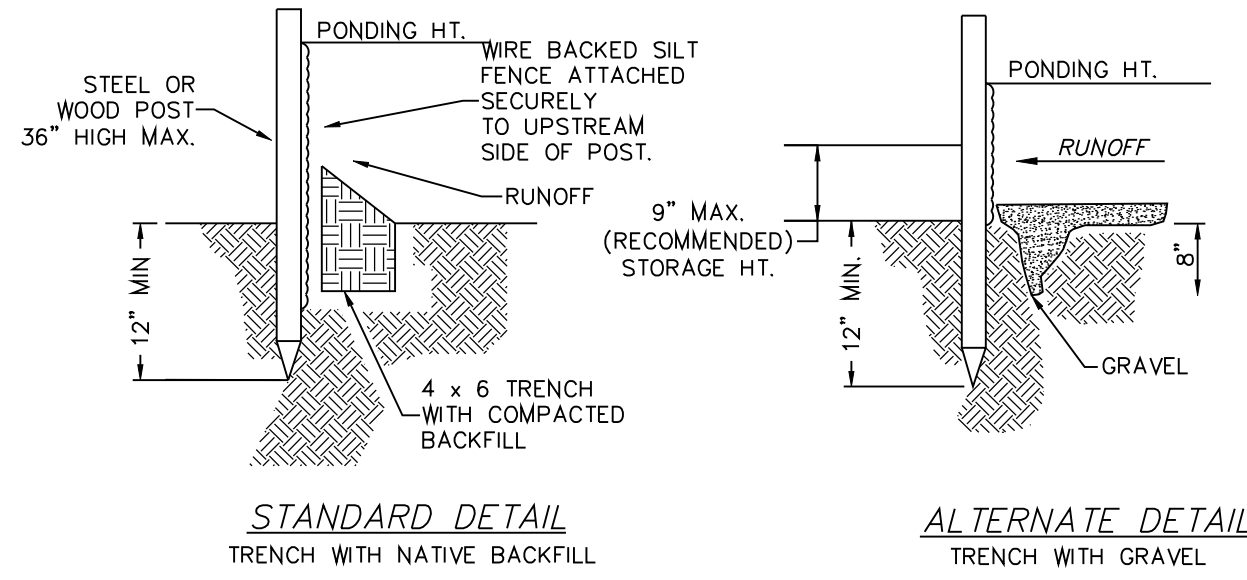
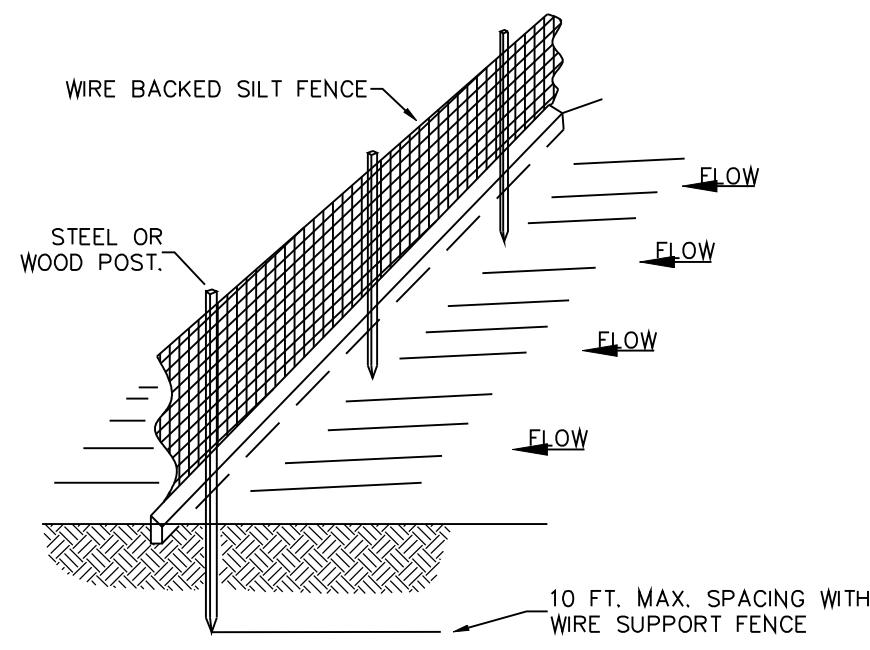
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 Benton, Arkansas 72015  
 PH. (501)315-2626  
 FAX (501) 315-0024  
 www.hopeconsulting.com

FOR USE AND BENEFIT OF:  
**STUART FINLEY**  
**ARKANSAS STORAGE CENTER**  
 LANDSCAPE PLAN  
 BRYANT, SALINE COUNTY, ARKANSAS

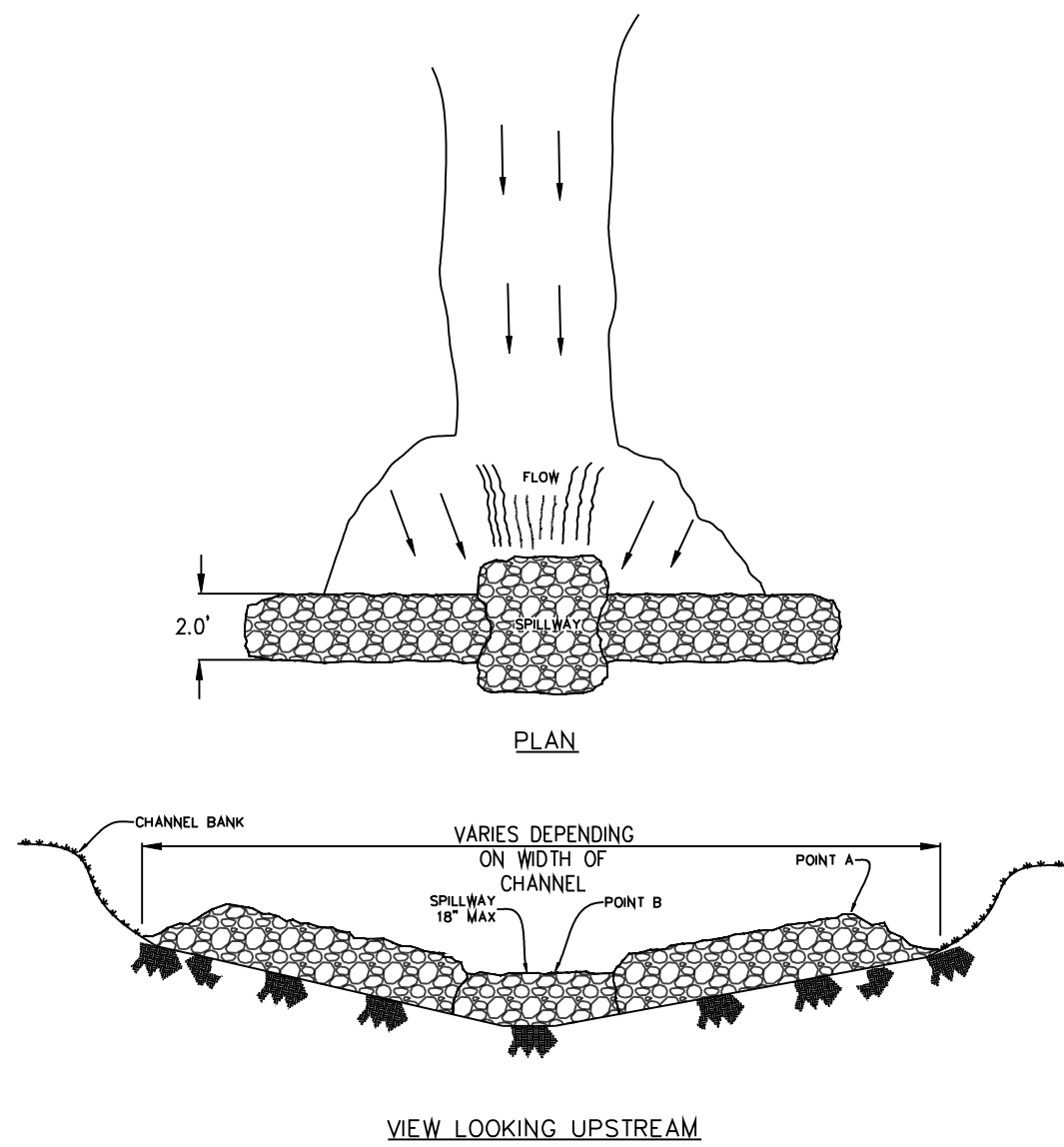
DATE: 12-06-2023	C.A.D. BY:	DRAWING NUMBER:
REVISED:	CHECKED BY:	22-0800
SHEET: C-6.0	SCALE: 1"=60'	
500	01S	14W 0 21 300 62 1762

- LEGEND**
- Aliquot Corner
  - Found monument
  - Set 1/2" Rebar
  - Computed point
  - (M) Measured
  - (P) Deed/Plat
  - Storm Drain Manhole
  - Pole/Post
  - Water Meter
  - Water Valve
  - Fire Hydrant
  - Informational Sign
  - Light Pole
  - Telephone Pedestal/Box
  - Clean Out
  - Power Pole
  - Power Pole W/Anchor
  - OHP
  - Overhead Power
  - Fence
  - 12" Sewer Line
  - 12" Water Line
  - Guy Anchor
  - Concrete
  - Asphalt
  - GAS
  - Gas Line
  - Telephone Line
  - Sewer Manhole
  - Proposed Sod



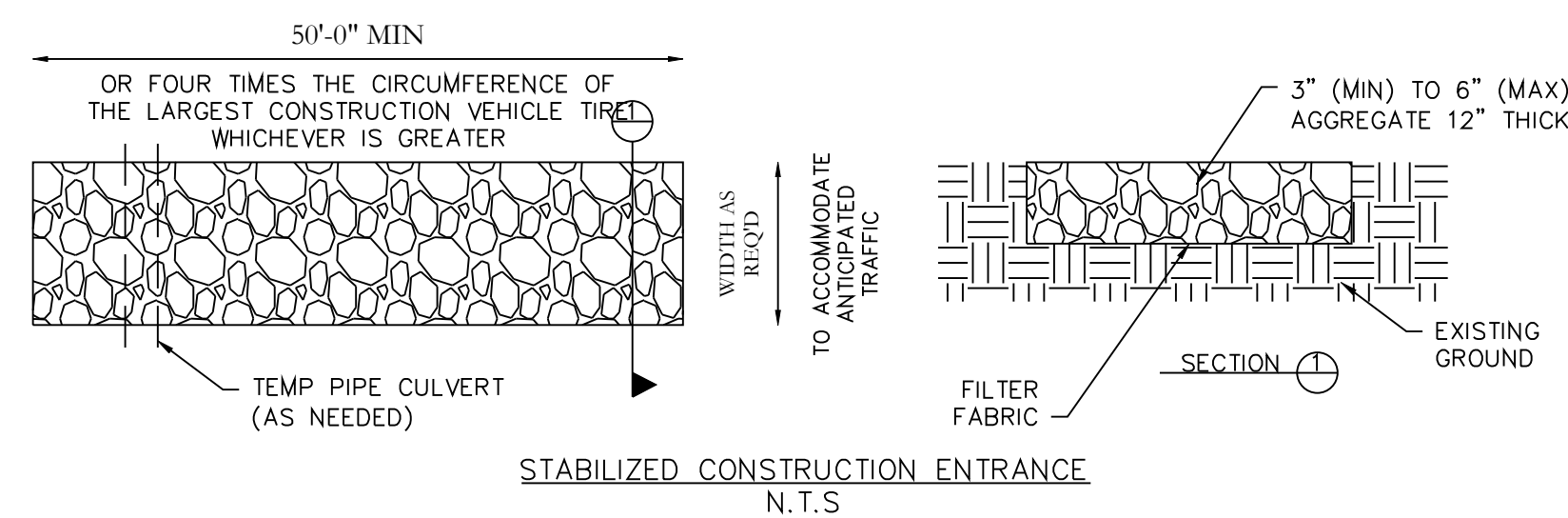
- NOTE:**
- 1.) INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
  - 2.) REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
  - 3.) SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
  - 4.) USE ONLY WIRE BACKED SILT FENCE.

**SILT FENCE**



- NOTE:**
- 1.) POINT 'A' MUST BE HIGHER THAN POINT 'B' (SPILLWAY HEIGHT)
  - 2.) PLACE RIP-RAP BARRIER PERPENDICULAR TO THE FLOW WITH SIGHT GRADING. USE STRAIN, ROCKS, OR FIBER FABRIC TO PREVENT OVERFLOW AND TAMING. SPECIFY MATERIAL TO PREVENT EROSION TO THE DOWN-SIDE OF THE DAM.
  - 3.) SPILLWAY HEIGHT SHALL NOT EXCEED 18"-24".
  - 4.) INSPECT AFTER EACH SIGNIFICANT STORM, MAINTAIN AND REPAIR PROMPTLY.

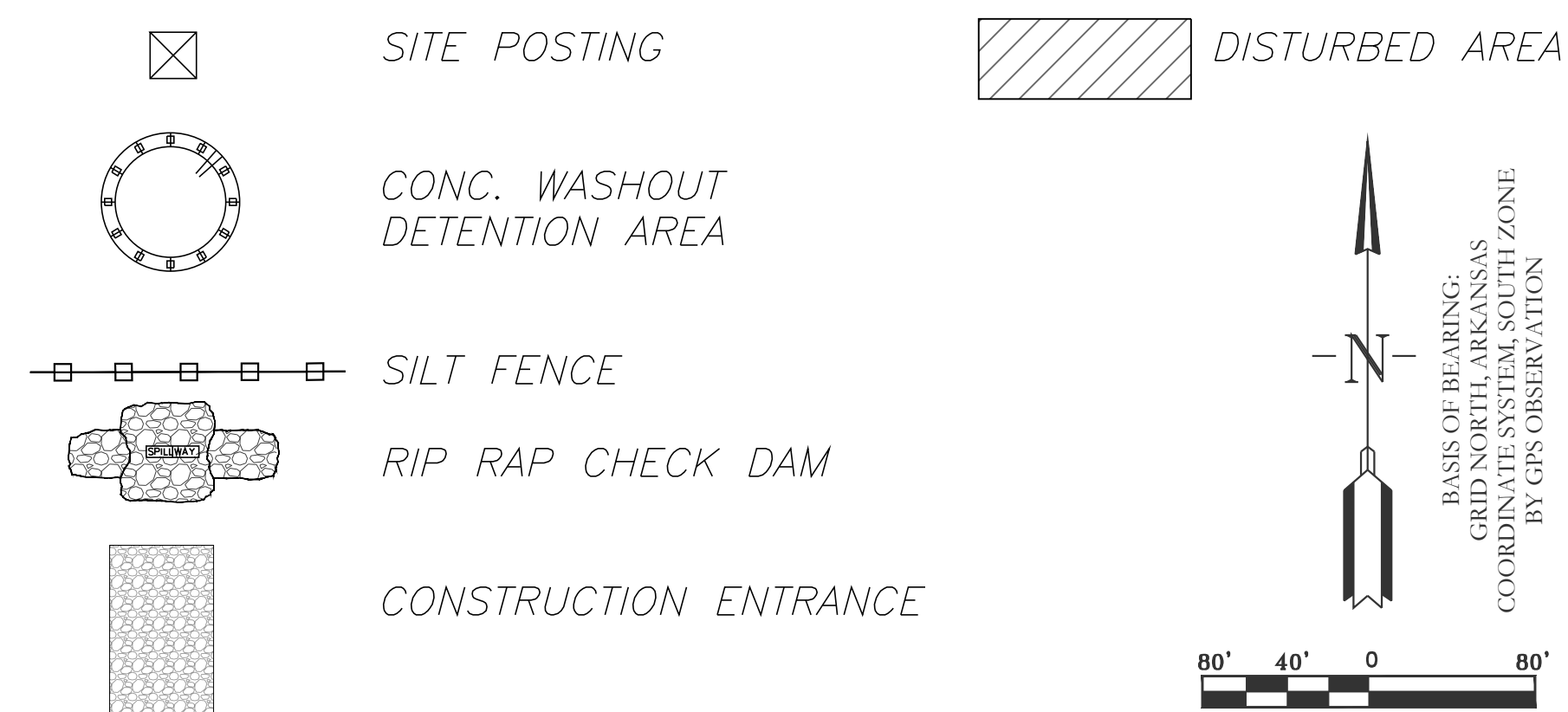
**RIP-RAP CHECK DAM**



**STABILIZED CONSTRUCTION ENTRANCE**  
N.T.S.



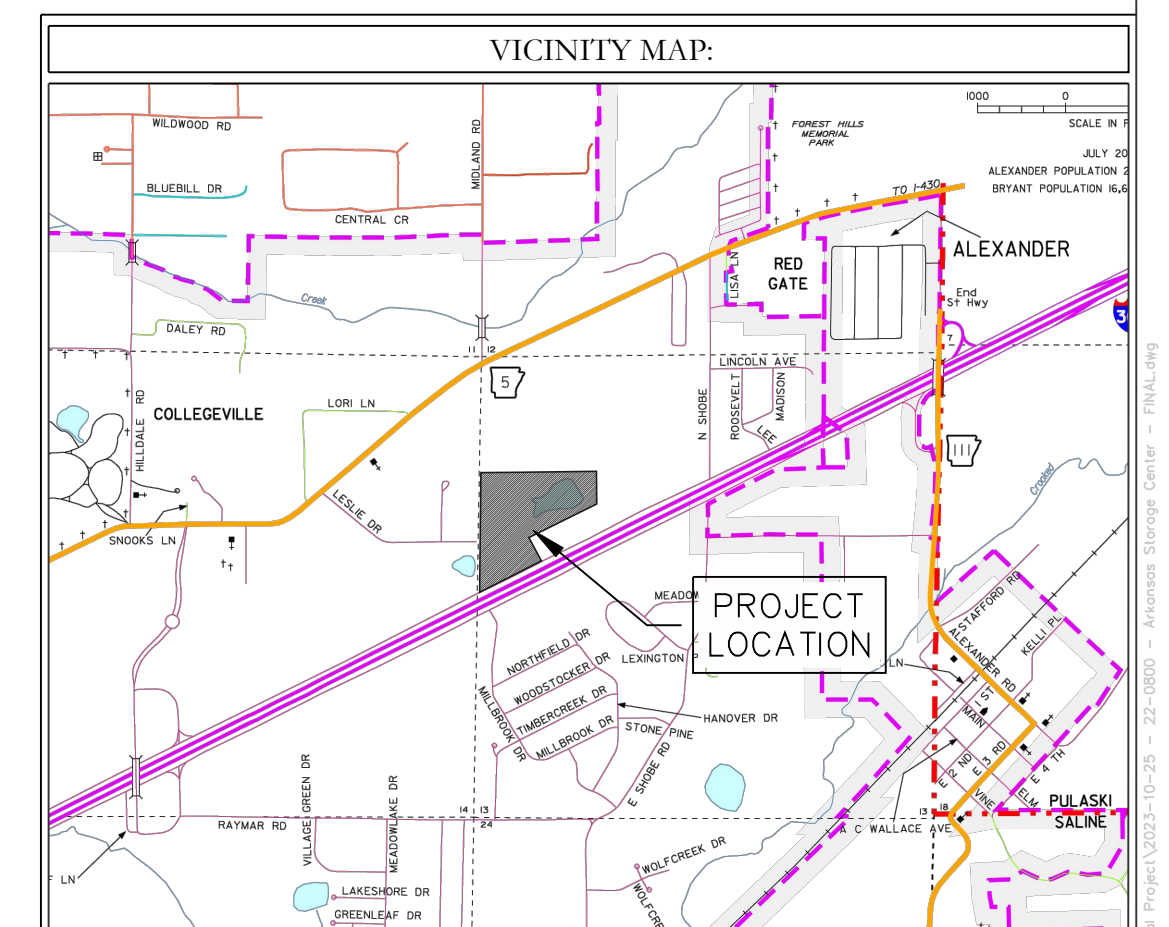
**ERC LEGEND**



**EROSION CONTROL NOTES**

- SOD DETENTION AREA POST-CONSTRUCTION IS REQUIRED  
MAXIMUM SLOPE OF 3H:1V ON DETENTION POND LEVES
- CONTRACTOR MUST HAVE INLET PROTECTION MEASURES INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF DRAINAGE INLETS/STRUCTURES IS COMPLETE. SEDIMENT BARRIERS SHALL BE MAINTAINED THROUGHOUT AND INSPECTED THROUGHOUT CONSTRUCTION PROCESS UNTIL PROJECT IS COMPLETE
- RIP RAP SEDIMENT BARRIERS SHALL BE USED AT ALL STORMWATER DISCHARGE POINTS SHOWN ON PLANS ASAP
- CONTRACTOR SHOULD WORK WITH ENGINEER TO ESTABLISH EFFECTIVE AND EFFICIENT PLAN TO PREVENT SEDIMENT RUNOFF BY DETERMINING WHERE SILT FENCING OR OTHER TYPES OF CONTROLS ARE NECESSARY
- SOME EROSION CONTROL MEASURES, WIRE BACKED SILT FENCING, OR CHECK DAMS MAY NOT BE NECESSARY DURING INITIAL ROW CLEARING BUT MAY BE NEEDED ONCE LOT CLEARING AND COMMERCIAL BUILDING BEGINS
- EXISTING VEGETATION WILL ONLY BE REMOVED INSIDE ROW AND WITHIN BUILDING FOOTPRINTS AS THEY ARE CONSTRUCTED. ADDITIONAL SILT FENCING WILL BE ADDED TO INDIVIDUAL LOTS AS COMMERCIAL CONSTRUCTION TAKES PLACE.

**CIVIL ENGINEER**  
HOPE CONSULTING INC  
129 N. MAIN STREET  
BENTON, AR 72015  
CONTACT: KAZI TAMZIDUL ISLAM  
PHONE: 504-315-2626  
EMAIL: kazi@hopeconsulting.com



**HOPE CONSULTING**  
ENGINEERS - SURVEYORS

129 N. Main Street,  
Benton, Arkansas 72015  
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**STUART FINLEY**  
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EROSION CONTROL PLAN  
BRYANT, SALINE COUNTY, ARKANSAS

DATE:	12-06-2023	C.A.D. BY:		DRAWING NUMBER:	
REVISED:		CHECKED BY:			22-0800
SHEET:	C-7.0	SCALE:	1"=80'		
500	01S	14W	0   21	300	62   1762





City of Bryant, Arkansas  
 Community Development  
 210 SW 3<sup>rd</sup> 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](http://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: 11/21/2023

**Sign Co. or Sign Owner**

Name L. Graphics - Joe lam  
 Address 701 N. Reynolds Rd  
 City, State, Zip Bryant, AR 72022  
 Phone (501) 653-4444  
 Alternate Phone \_\_\_\_\_

**Property Owner**

Name Bart Furgusson  
 Address 207 Progress Dr Ste 100  
 City, State, Zip Bryant, AR 72022  
 Phone (501) 840-2282  
 Alternate Phone \_\_\_\_\_

**GENERAL INFORMATION**

Name of Business The Corner office  
 Address/Location of sign 207 Progress Dr Ste. 100  
 Zoning Classification \_\_\_\_\_

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 Joe lam 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

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
				Top of Sign	Bottom of Sign	
A	Channel Letter	40" X 170"	49	16'	12'	
B						
C						
E						
F						
G						

14.75 in 9.6 in

the  
**corner office**

36.25"

21.5 in

14' 5"

44 feet

the  
corner office

