



# Bryant Development and Review Committee Meeting

Boswell Municipal Complex - City Hall Conference Room

210 SW 3rd Street

**Date:** February 02, 2023 - **Time:** 9:00 AM

## Call to Order

## Old Business

## New Business

### 1. Shady Pine Plaza - 2228 Shady Pine Ln

*Richardson Engineering - Requesting Discussion and Comments For Site Plan*

- [0657-PLN-01.pdf](#)

### 2. Cypress Valley Phase 2 - Final Plat

*Hope Consulting - Requesting Recommendation for Approval*

- [0658-LTR-01.pdf](#)
- [0658-MTN-01.pdf](#)
- [0658-BND-01.pdf](#)
- [0658-PLN-02.pdf](#)
- [0658-PLT-01.pdf](#)
- [0658-PLN-01.pdf](#)

### 3. Aria Oil C-Store - Lowery and HWY 5

*Hope Consulting - Requesting Site Plan Approval*

- [0468-APP-01.pdf](#)
- [0468-DRN-01.pdf](#)
- [0468-LTR-01.pdf](#)
- [0656-PLN-01.pdf](#)

## Staff Approved

## Permit Report

## Adjournments





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

January 25, 2023

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

RE: Cypress Valley Phase 2 Final Plat

Dear Truett:

On behalf of the property owner, Hope Consulting is requesting the review of the Final Plat and As-Builts of Cypress Valley Phase 2.

The developer of this project is Gary Kennedy of Kennedy Development, LLC.

Gary Kennedy braggconstruction@yahoo.com 501-626-6202

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

Sincerely,

  
Jonathan Hope

129N. MAIN ST. BENTON, ARKANSAS 72015  
501-315-2626  
WWW.HOPECONSULTING.COM

# HOPE

## CONSULTING

---

### ENGINEERS - SURVEYORS

129 N Main Street Benton, AR 72015 \* 501-315-2626 \* Fax 501-315-0024

#### Stormwater Infrastructure Maintenance Plan Agreement

Gary Kennedy  
Kennedy Development, LLC  
braggconstruction@yahoo.com  
501-626-6202

#### Cypress Valley Phase 2

All maintenance basin maintenance plans shall contain or uphold, without limitation, the following provisions:

- (1) A description of the property on which the stormwater management facility is located and all easements from the site to the facility;
- (2) Size and configuration of the facility;
- (3) A statement that properties which will be served by the facility are granted rights to construct, use, reconstruct, repair and maintain access to the facility;
- (4) A statement that each lot served by the facility is responsible for repairs and maintenance of the facility and any unpaid ad valorem taxes, public assessments for improvements, and unsafe building and public nuisance abatement liens charged against the facility, including all interest charges together with attorney fees, costs, and expenses of collection. If an association is delegated these responsibilities, then membership into the association shall be mandatory for each parcel served by the facility and any successive buyer. The association shall have the power to levy assessments for these obligations, and all that unpaid assessments levied by the association shall become a lien on the individual parcel;
- (5) All stormwater facilities must be designed to minimize the need for maintenance, to provide easy vehicle and personal access for maintenance purpose, and be structurally sound. It shall be the responsibility of the applicant to obtain any necessary easements or other property interested to allow access to the facilities for inspection or maintenance;
- (6) Detention/retention areas, earthen berms, intake structures, piping, discharge structures, trickle channels, spillways, pipe flares, weirs and fencing shall be regularly inspected, maintained and repaired to ensure their proper operation and to prevent the creation of any hazards or nuisances;
- (7) Major deposits of sediment shall be removed from the detention/retention area on an annual basis or after any extreme storm event. Excavated materials shall be properly disposed of off-site. Every five years the detention area(s) shall be



surveyed to confirm that the original as-constructed contours have been maintained;

(8) Every three months piping and outlet structures shall be inspected and cleared of any accumulated debris;

(9) Erosion in detention/retention areas shall be promptly repaired and stabilized with appropriate Best Management Practices (BMP's);

(10) Detention/retention area shall be mowed during the growing season May through September to maintain the turf height of 6-inches or less. Any brush or trees that may grow within the detention areas bottom, slopes or banks shall be removed;

(11) Litter and foreign materials shall be removed from the detention area(s) weekly. Large or noxious pieces of litter shall be removed immediately. The area(s) shall be inspected visually after rainfall events in excess of 1" in 24 hours;

(12) Inspections of overall detention/retention area(s) and detention/retention components shall occur monthly with their conditions noted on an inspection form. If any remedial action is required, it should be noted and corrected;

(13) All inspection forms must be retained on-site, including the "As-Built" drawings and photographs of the improvements in their original condition;

(14) Items 1-13 shall be listed on the Stormwater Infrastructure Maintenance Plan Agreement.

(15) Inspection forms for Stormwater Infrastructure components are required. (An example of inspection forms are attached.)

\_\_\_\_\_  
Gary Kennedy

\_\_\_\_\_  
signature

\_\_\_\_\_  
date



## **City of Bryant Stormwater Department**

1019 SW 2<sup>nd</sup> St.

Bryant, Arkansas 72022

Office (501) 943-0453; Fax (501) 943-0851

---

### **WARRANTY BOND PROCEDURES**

#### **For Stormwater Infrastructure Public & Private**

These procedures are applicable to Stormwater Infrastructure that is to be dedicated to the public and maintained by the City of Bryant and for Private Stormwater Infrastructure that will be connected to overall City of Bryant Stormwater Infrastructure.

In accordance with Ordinance No. 2019-32 Article V., The City of Bryant Stormwater Department will require a Maintenance Warranty Bond as part of the process for approving Stormwater Infrastructure. The purpose of the bond is to cover the cost of correcting deficiencies not addressed by the developer during the warranty period and to insure no adverse effects will occur to the overall function of the City of Bryant Stormwater Infrastructure.

#### **ORDINANCE 2019-32 ARTICLE V. STORMWATER INFRASTRUCTURE WARRANTY BOND.**

- 1. Stormwater Infrastructure Warranty Bond.** A one year maintenance bond against defects in workmanship shall be required by the Administrative Authority for any portion of the stormwater management facilities privately owned or stormwater management improvements dedicated to the city, said maintenance bond is to be provide by cashier's check, irrevocable letter of credit or acceptable surety authorized to do business in the State of Arkansas. All forms of maintenance bonds shall be subject to approval by the Administrative Authority. The value of the bond shall be an amount equal to 100% of the value of the privately owned stormwater management facilities or stormwater system improvements being privately owned or dedicated to the city. A cost list must be provide to prove and verify the amount of the maintenance bond. The cost list shall include cost of stormwater infrastructure construction and components (piping, weirs, spillway structures, junction boxes, trickle channels, inlets, grates, riprap and site stabilization).
- 2. Procedurals.** These procedures are applicable to Stormwater Infrastructure that is to be dedicated to the public and maintained by the City of Bryant and for Private Stormwater Infrastructure that will be connected to overall City of Bryant Stormwater Infrastructure.

In accordance with Ordinance No. 2019-32 Article V., City of Bryant Stormwater Department will require a Maintenance Warranty Bond as part of the process for approving Stormwater Infrastructure. The bond will be equal to 100% of the cost of construction of the Stormwater Infrastructure System at the time of completion of the Stormwater Infrastructure System. The purpose of the bond is to cover the cost of correcting deficiencies not addressed by the developer during the warranty period and to insure no adverse effects will occur to the overall function of the City of Bryant Stormwater Infrastructure.

- 3. Determining the Maintenance Warranty Bond Amount.** During the final inspection process, the City of Bryant Stormwater Department will verify and approve the Warranty Bond estimate for all Stormwater Infrastructure within the proposed unit using:



- (a) The Warranty Bond cost list estimate shall be presented to the City of Bryant Stormwater Department by formal letter. The formal letter shall include project name, developer contact information and "Cost List for Construction of Stormwater Infrastructure Components" including but not limited to piping, weirs, spillway structures, junction boxes, trickle channels, riprap, inlets, grates, weirs and site stabilization;
  - (b) The Bond amount will need to be re-evaluated if more than 18 months have passed from the time of the estimate review to the time of providing the bond to the City of Bryant Stormwater Department;
4. **Submitting the bond to the city.** After requesting a final inspection of the Stormwater Infrastructure and approval of completion by the City of Bryant Stormwater Department, the developer must provide the City of Bryant Stormwater Department with a bond equal to amount determined in Article V. Section 3. of this document. The Bond must be for a period of 12 months and be a financial guarantee in the form of a bond, letter of credit, or trust agreement executed by a surety company authorized to do business in the State of Arkansas. The Bond must be payable to the City of Bryant Public Works Department, conditioned that the developer will maintain the Stormwater Infrastructure in accordance with the Stormwater Management Manual Ordinance No. 2019-31 and the Stormwater Management Ordinance No. 2019-32.
  5. **Warranty period.** After the Stormwater Infrastructure construction passes the final inspection and the one year warranty bond is received, the one year maintenance warranty period will begin. The one-year warranty period will start on the date the Maintenance Warranty Bond is received and accepted. There shall be no separate warranty period start dates for Stormwater Infrastructure within a single unit.
  6. **Follow-up inspection.** The City of Bryant Stormwater Department will conduct a follow-up inspection within the tenth month of the warranty period but in no event any later than two months prior to the bond expiring. The City of Bryant Stormwater Department will issue a punch list of deficiencies that will be sent to the developer or contractor for the unit. If no deficiencies are found and camera video passes inspection, release of the bond will proceed as set out and as listed in Article V. Section 10 of this document.
  7. **Correcting Deficiencies and Camera Video.** The developer must contact the City of Bryant Stormwater Department at least 24 hours before correcting any deficiencies or performing camera video. The developer shall also camera all stormwater infrastructure to ensure that there is no sediment laden infrastructure. Upon notification by the developer that all deficiencies have been corrected and camera video has been completed, the City of Bryant Stormwater Department will re-inspect to verify compliance with correction of deficiencies and reviewing the camera video to assure the stormwater infrastructure is not sediment laden or defective.
  8. **Calling in the bond.** If the developer does not contact the City of Bryant Stormwater Department, deficiencies have not been corrected and the stormwater infrastructures has not been camera videoed by the end of the 11th month or one (1) month prior to the expiration of the Bond, the City of Bryant Stormwater Department will prepare an estimate and list of work to be done to bring the stormwater infrastructure into compliance. The City of Bryant Stormwater Department will contact the bonding agency to submit the cost estimates for correcting the deficiencies.
  9. **Requesting Acceptance.** Once all deficiencies have been corrected, the City of Bryant Stormwater Department will prepare the paperwork for the Stormwater Infrastructure within the unit accepted for maintenance by the City of Bryant 'if dedicated', or paperwork will be prepared to release the bond if infrastructure is a private unit.

10. **Bond Release.** The Bond will be released once the City of Bryant has accepted the Stormwater Infrastructure for maintenance 'if dedicated', and an acceptance letter has been written by the City of Bryant Public Works. If all compliance has been met with a private Stormwater Infrastructure Unit(s) then the City of Bryant Stormwater Department shall contact the developer by formal letter and release the bond. No partial release of the Bond will be allowed at any time.

**ATTENTION: DO NOT FILL OUT INFORMATION BELOW UNTIL YOU ARE PRESENT WITH A NOTARY PUBLIC.  
(THIS DOCUMENT MUST BE NOTARIZED)**

By filling out the information below, signing and dating, you are hereby acknowledging that you have read, understand and agree to adhere to the Stormwater Infrastructure Warranty Bond Procedures and Processes listed in this document. You the applicant are hereby responsible for upholding, without limitation, the Stormwater Infrastructure Warranty Bond Procedures.

CYPRESS VALLEY PHASE 2

\_\_\_\_\_  
Name of Project Site/Addition

GARY KENNEDY

\_\_\_\_\_  
Applicant Name  
(Print)

\_\_\_\_\_  
Applicant Name  
(Signature)

KENNEDY DEVELOPMENT, LLC

\_\_\_\_\_  
Applicant Business Name

1229 HOT SPRINGS HWY BENTON ,AR

\_\_\_\_\_  
Applicant Mailing Address

**Notarization**

State of \_\_\_\_\_

County of \_\_\_\_\_

Subscribed and sworn before me, a Notary Public, on this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
Signature of Notary

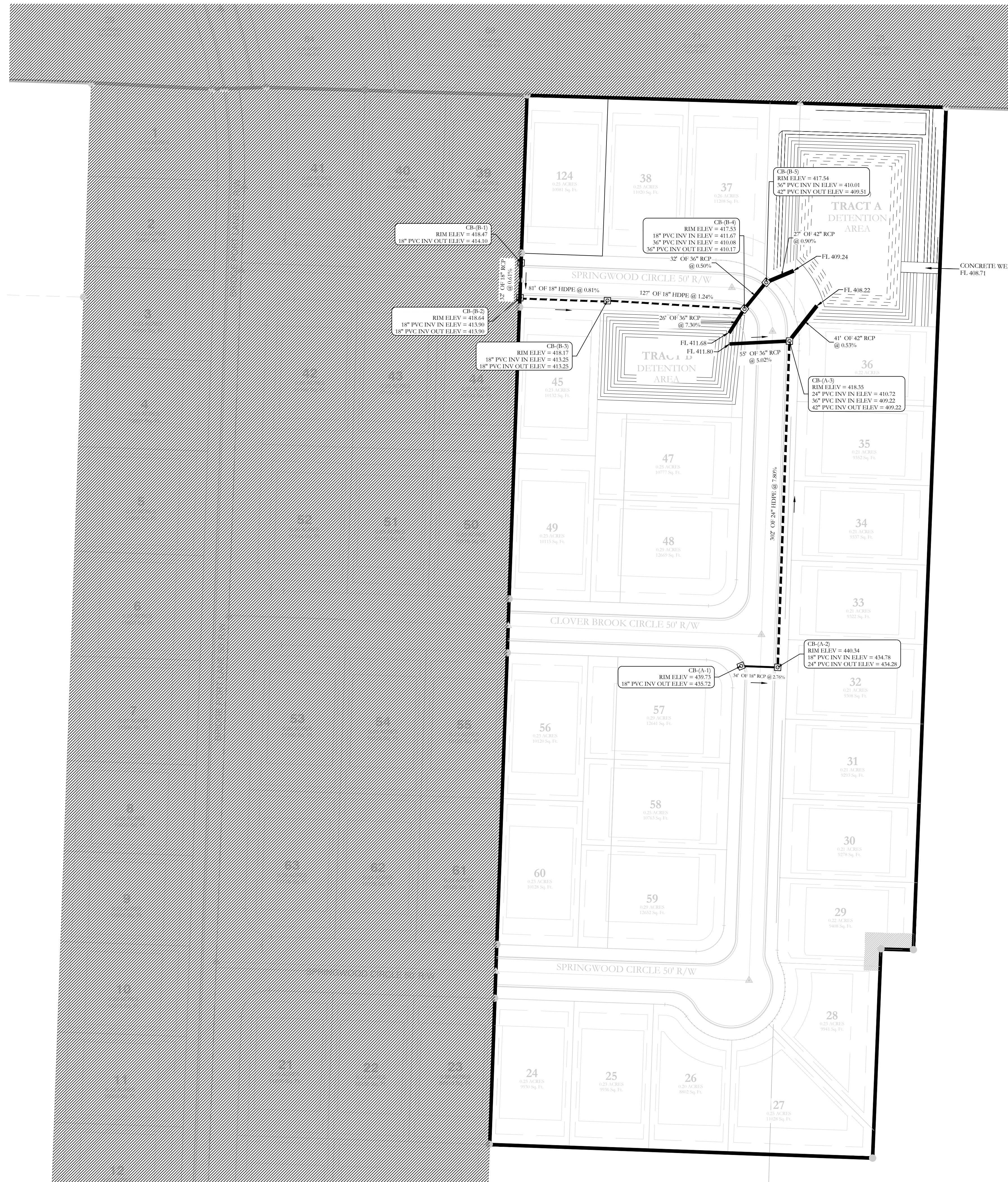
\_\_\_\_\_  
My commission expires:

Notary Seal Stamp Here:



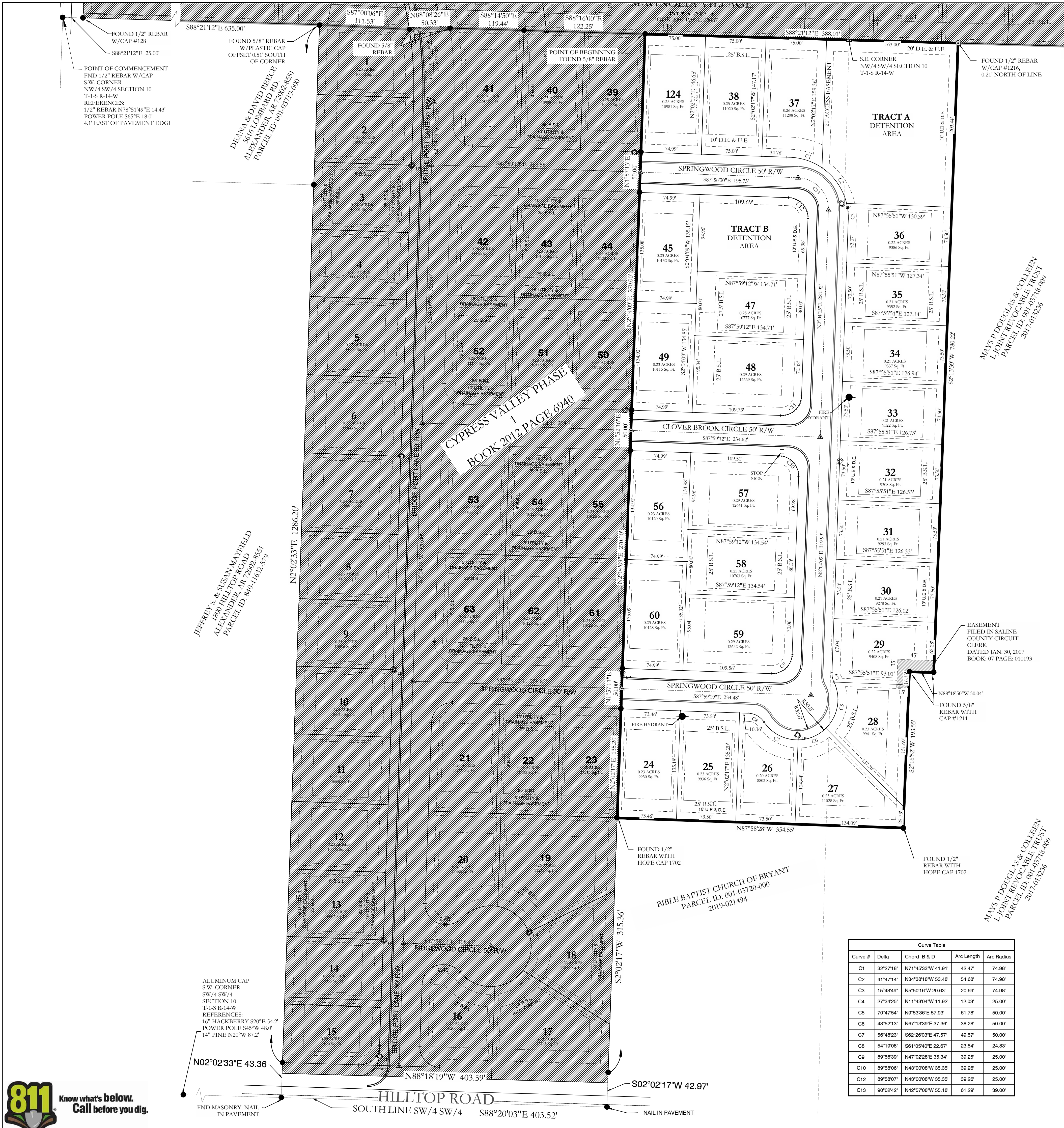


Know what's below.  
Call before you dig.



<b>HOPE CONSULTING</b> 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: <b>CYPRESS VALLEY</b>			
<b>DRAINAGE AS-BUILTS</b> <b>CYPRESS VALLEY, PHASE 2</b>			
A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS			
DATE: 01/17/2023	C.A.D. BY:	DRAWING NUMBER	
REVISED:	CHECKED BY:	21-0421	
SHEET:	SCALE: 1" = 50'		
500	01S	14W	0 10 300 62 1762





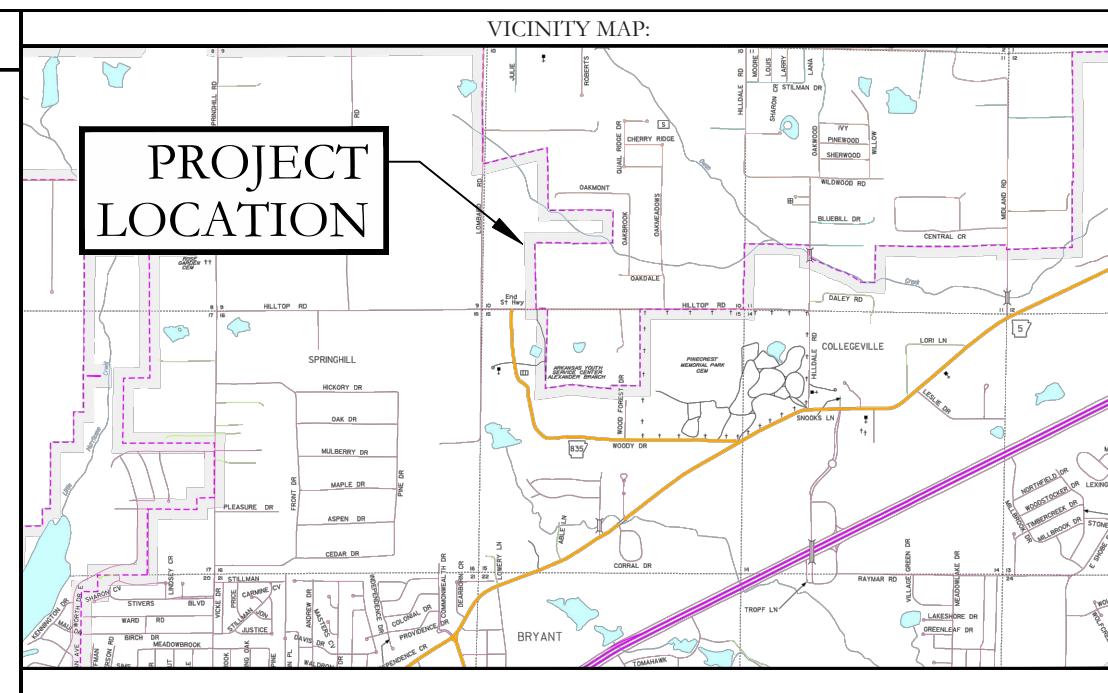
**NOTES**

DOCUMENTS USED IN THE PREPARATION OF THIS SURVEY:

- MAGNOLIA VILLAGE PHASE 1 FINAL PLAT FILED ON FEB. 27, 2007, SALINE COUNTY CLERK, BOOK 07, PAGE 20887
- WARRANTY DEED, BOOK 10 PAGE 059270 FILED FOR RECORD ON JULY 10, 2010 SALINE COUNTY
- CYPRESS VALLEY PHASE 1 FINAL PLAT FILED ON JANUARY 31, 2012, SALINE COUNTY CLERK, BOOK 2012, PAGE 6940
- DELTON BROWN SURVEY SIGNED ON JANUARY 23, 2004, FILED FOR RECORD ON MARCH 5, 2004, SALINE COUNTY CLERK, BOOK 04, PAGE 18723
- NO OTHER DOCUMENTS WERE PROVIDED FOR, NOR ARE REFERENCED ON THIS SURVEY.

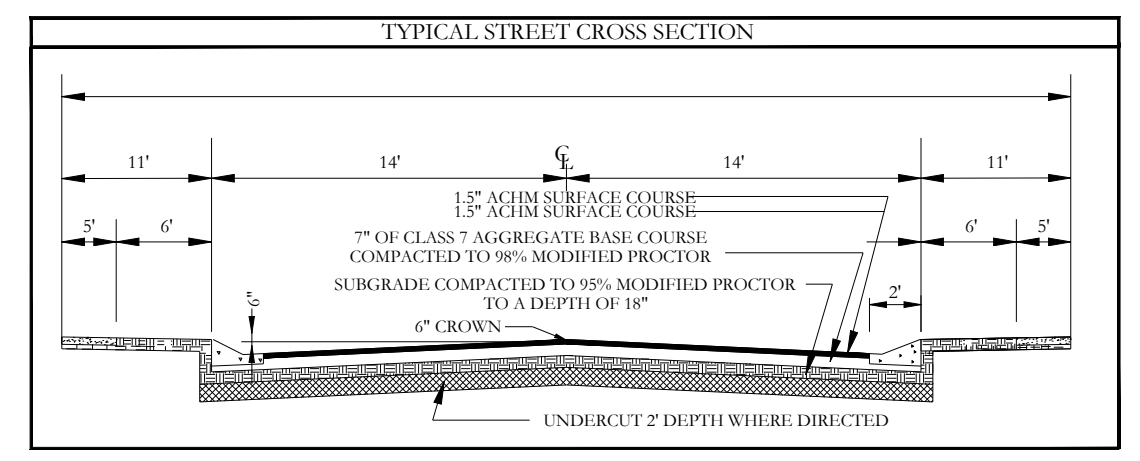
- AREAS AS SURVEYED

- IN SW/4 SW/4 5.72 ACRES
- IN SE/4 SW/4 2.78 ACRES



**OWNER:** Kennedy Development, LLC  
 Name: Kennedy Development, LLC  
 Address: 1229 Hot Springs Hwy, Benton, AR 72089

**DEVELOPER:** Kennedy Development, LLC  
 Name: Kennedy Development, LLC  
 Address: 1229 Hot Springs Hwy, Benton, AR 72089



PART OF THE SE/4 SW/4 OF SECTION 10, TOWNSHIP 1 SOUTH, RANGE 14 WEST, IN SALINE COUNTY, ARKANSAS, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHWEST CORNER OF THE NW/4 SW/4 OF SECTION 10, A FOUND 1/2" REBAR; THENCE S88°21'12"E 25.00' TO THE SOUTHWEST CORNER OF PHASE 1, MAGNOLIA VILLAGE, A FOUND 1/2" REBAR; THENCE AT PLATTED BEARING OF S88°21'12"E ALONG THE SOUTH BOUNDARY OF MAGNOLIA VILLAGE SUBDIVISION 635.00 FEET; THENCE S87°00'06"E 111.53 FEET TO A FOUND 5/8" REBAR; THENCE S88°08'26"E 50.33 FEET TO A FOUND 5/8" REBAR; THENCE S88°14'50"E 119.44 FEET TO A FOUND 5/8" REBAR; THENCE S88°16'00"E 122.25 FEET TO THE POINT OF BEGINNING, A FOUND 5/8" REBAR; THENCE S88°21'12"E 388.01 FEET ALONG SOUTH LINE OF MAGNOLIA VILLAGE PHASE 1 TO A SET 1/2" REBAR AND CAP, THENCE LEAVING THE SOUTH LINE OF MAGNOLIA VILLAGE PHASE 1 S2°13'39"W 780.22 FEET TO A FOUND 5/8" REBAR WITH CAP #1211, THENCE N88°18'50"W 30.04 FEET TO A FOUND #5 REBAR WITH CAP #1211, THENCE S02°16'52"W 193.55 FEET TO A FOUND #5 REBAR WITH CAP #1702, THENCE N87°58'28"W 354.55 FEET TO THE EAST BOUNDARY OF CYPRESS VALLEY PHASE 1; THENCE N02°02'17"E 135.20 FEET ALONG THE EAST BOUNDARY OF CYPRESS VALLEY PHASE 1, CONTINUING ALONG SAID BOUNDARY N01°57'11"E 50.00 FEET; N02°04'09"E 270.00 FEET; N01°52'16"E 50.00 FEET; N02°04'09"E 270.00 FEET; N01°57'13"E 50.00 FEET; N02°02'17"E 146.17 FEET TO THE SOUTH LINE OF MAGNOLIA VILLAGE PHASE 1, A FOUND #4 REBAR WITH HOPE CAP #1702 AND THE POINT OF BEGINNING. CONTAINING AN AREA OF 8.5 ACRES.

**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 the within plat.

Date of Execution: \_\_\_\_\_ Name: \_\_\_\_\_

Source of Title: 2021-010792

**CERTIFICATE OF 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 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 followed.

Date of Execution: \_\_\_\_\_ Kazi Islam  
 Registered Professional Engineer  
 Arkansas No. 20876

**CERTIFICATE OF FINAL APPROVAL:**

Pursuant to the City of Bryant Subdivision Rules and Regulations, this document was given approval by the Bryant Planning Commission at a meeting held \_\_\_\_\_, 20\_\_\_\_. All of the documents is hereby accepted, and this certificate executed under the authority of said rules and regulations.

Date of Execution: \_\_\_\_\_ Rick Jordan,  
 Bryant Planning Commission

PROPERTY SPECIFICATIONS:	
OWNER: KENNEDY DEVELOPMENT LLC 1229 HOT SPRINGS HWY BENTON, AR 72015	NUMBER OF LOTS: 25 SOURCE OF WATER: CITY OF BRYANT SOURCE OF SEWER: CITY OF BRYANT SOURCE OF ELECTRIC: ENTERTY SOURCE OF GAS: CENTERPOINT
DEVELOPER: KENNEDY DEVELOPMENT LLC 1229 HOT SPRINGS HWY BENTON, AR 72015	BUILDING SETBACKS: FRONT: 25' OR AS SHOWN REAR: 25' OR AS SHOWN SIDE: 8' OR AS SHOWN
ENGINEERS: HOPE CONSULTING INC. 129 N. MAIN STREET BENTON, AR 72015	UTILITY & DRAINAGE EASEMENTS: FRONT: 10' OR AS SHOWN REAR: 5' OR AS SHOWN SIDE: 5' OR AS SHOWN
NAME OF SUBDIVISION: CYPRESS VALLEY PHASE 2 SOURCE OF TITLE: DEED BOOK 2012, PAGE 6972 ZONING: PROPOSED R-2	

By affixing my seal and signature, I Jonathan L. Hope, Arkansas PLS No. 1762, hereby certify that this drawing correctly depicts a survey compiled by me or under my direct 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 Flood Insurance Rate Map, panel # 05125C0240E, \_\_\_\_\_, Dated: 06/05/2020

FOR USE AND BENEFIT OF:  
**KENNEDY DEVELOPMENT, LLC**

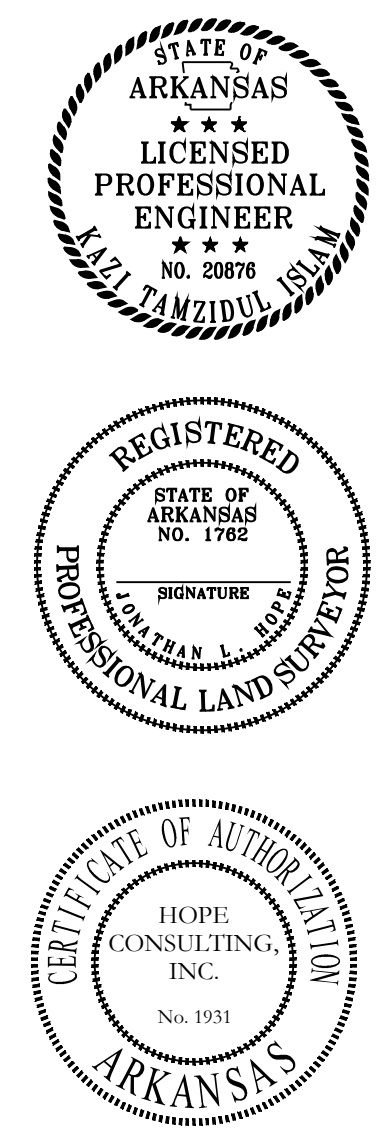
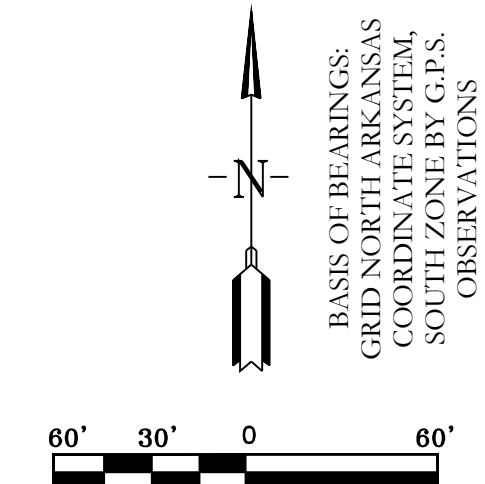
129 N. Main Street,  
Benton, Arkansas 72015  
PH. (501)315-2626  
FAX (501) 315-0024  
www.hopeconsulting.com

**FINAL PLAT**  
**CYPRESS VALLEY SUBDIVISION PHASE 2**  
 A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

DATE: 01/13/2023	C.A.D. BY: _____	DRAWING NUMBER: _____
REVISIONS: _____	CHECKED BY: _____	21-0421
SHEET: _____	SCALE: 1" = 60'	
500 01S	14W 0 10 300	62 1762



Curve #	Delta	Chord B & D	Arc Length	Arc Radius
C1	32°27'18"	N71°45'33"W 41.91'	42.47	74.98'
C2	41°47'14"	N34°38'16"W 53.48'	54.68	74.98'
C3	15°48'49"	N5°30'16"W 20.63'	20.69	74.98'
C4	27°34'25"	N11°43'04"W 11.92'	12.03	25.00'
C5	70°47'54"	N9°53'06"E 57.93'	61.78	50.00'
C6	43°52'13"	N67°13'39"E 37.36'	38.28	50.00'
C7	56°48'23"	S62°26'03"E 47.57'	48.57	50.00'
C8	54°19'08"	S61°05'40"E 22.67'	23.54	24.83'
C9	89°56'39"	N47°02'28"E 35.34'	39.25	25.00'
C10	89°59'00"	N43°00'08"W 35.35'	39.26	25.00'
C12	89°58'07"	N43°00'08"W 35.35'	39.26	25.00'
C13	90°02'42"	N42°57'08"W 55.18'	61.29	39.00'







- SEWER CONSTRUCTION NOTES:**
- ALL SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT \* STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION\*
  - ALL SEWER LINES CROSSING UNDER ALL CONCRETE STORM DRAINS OR ANY STORM DRAIN 30-INCH DIAMETER AND LARGER, OR ALL STORM DRAINS WITH MULTIPLE PIPE RUNS, SHALL BE STEEL ENCASED A MINIMUM OF 5 FEET EITHER SIDE OF THE STORM DRAIN
  - FORCE MAIN WILL BE TESTED IN ACCORDANCE WITH BRYANT WATER/WASTEWATER SPECIFICATION SECTION 5200-1.03.A.4
  - SANITARY SEWER FORCE MAIN SHALL BE INSTALLED IN ACCORDANCE WITH BRYANT WATER/WASTEWATER SPECIFICATIONS.
  - CONNECTING MANHOLE FROM FORCE MAIN SHALL BE REQUIRED TO BE COATED WITH AN EPOXY COATING ACCORDANCE WITH BRYANT WATER/WASTEWATER SPECIFICATION SECTION 1200-1.07A.1.1

**WATER UTILITY NOTES:**

ALL NEW 8-INCH AND 6-INCH WATER MAINS TO BE C900 DR 14 PVC

ALL WATER AND SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT \*STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION\*

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 ENCASEMENT PIPE. THE STEEL ENCASEMENT SHALL EXTEND FIVE FEET EITHER SIDE OF THE AREA.

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).

THE SEWER/WATER MAIN CROSSINGS THAT REQUIRE ENCASEMENT REQUIRE TEN (10) LINEAR FEET OF PIPE ON EITHER SIDE OF THE CROSSING.

ADH RULES PERTAINING TO PUBLIC WATER SYSTEMS NOTES REGARDING CROSS-CONNECTIONS AND SEPARATIONS OF WATER AND SEWER. WATER AND SEWER WILL BE 10 FEET APART IN PARALLEL AND IN THE CASE OF WATER CROSSING SEWER WATER LINE SHOULD BE MINIMUM 18" ABOVE SEWER LINE. AT THE EVENT OF WATER CROSSING BELOW SWER EITHER ONE OF THE PIPE WILL NEED TO BE ENCASED.

**SEWER LEGEND:**

SEWER SERVICE  
SEWER MAIN  
SEWER MANHOLE  
SERVICE DETAIL

NOTE:  
USE SDR-26 PVC SEWER PIPE EXCEPT WHERE DUCTILE IRON PIPE REQUIRED FOR COVER. USE DUCTILE IRON PIPE WHERE 3' MINIMUM COVER CANNOT BE MAINTAINED.  
CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL BURIED UTILITIES PRIOR TO CONSTRUCTION.

**STATE OF ARKANSAS**  
LICENSED PROFESSIONAL ENGINEER  
No. 20876  
AZA TAMZIDUL ISMAIL

**HOPE CONSULTING**  
ENGINEERS - SURVEYORS

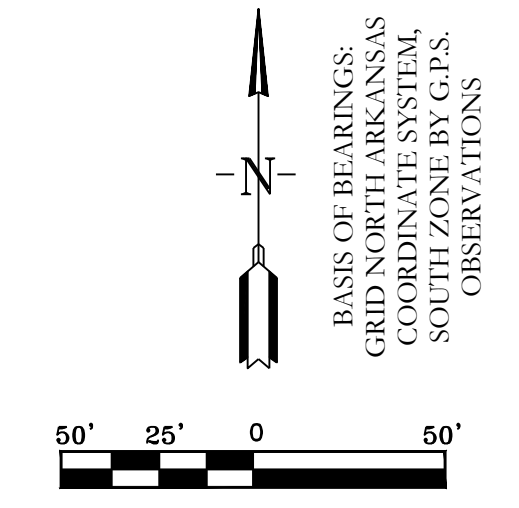
129 N. Main Street,  
Benton, Arkansas 72015  
PH. (501)315-2626  
FAX (501)315-0024  
www.hopiconsulting.com

FOR USE AND BENEFIT OF:  
**CYPRESS VALLEY**

**WATER & SEWER ASBUILTS**  
CYPRESS VALLEY, PHASE 2  
A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

DATE: 01/17/2023	C.A.D. BY:	DRAWING NUMBER:
REVISED:	CHECKED BY:	21-0421
SHEET:	SCALE: 1" = 50'	

500	01S	14W	0	10	300	62	1762
-----	-----	-----	---	----	-----	----	------





# Bryant Planning Commission

## SMALL SCALE DEVELOPMENT COMMERCIAL BUILDING CHECKLIST

CITY OF BRYANT  
210 SW 3<sup>RD</sup> STREET  
BRYANT, AR 72022  
501-943-0309

**PC MEETING DATE:** THURSDAY OF EACH WEEK  
**TIME:** 9:00 A.M.  
**PLACE:** ADMINISTRATION CONFERENCE ROOM-BRYANT OFFICE COMPLEX  
**AGENDA DEADLINE:** 5:00 P.M. FRIDAY PRIOR TO SCHEDULED MEETING DATE

### REQUIREMENTS FOR SUBMISSION

1. COMPLETED CHECKLIST (SUBDIVISION OR BUILDING)
2. ADA/ABA FORM COMPLETED
3. TWO FULL SETS OF BUILDING PLANS
4. 12 FOLDED COPIES OF SITE PLAN (MINIMUM SIZE 17" X 34") THAT INCLUDES THE FOLLOWING:
  - A. VICINITY MAP
  - B. LEGAL DESCRIPTION
  - C. LANDSCAPING PLAN
5. 12 FOLDED COPIES OF FLOOR PLAN
6. 12 COPIES OF FRONT AND REAR BUILDING ELEVATIONS
7. A CD IN .PDF FORMAT
8. COPY OF ADEQ STORMWATER POLLUTION PREVENTION PLAN FOR PROPERTY PARCEL CONTAINING ONE ACRE OR LARGER.
9. 2 COPIES OF STORMWATER DETENTION PLAN
10. \$250.00 FOR STORMWATER DETENTION AND DRAINAGE PLAN REVIEW

### ALL REQUIREMENTS LISTED ABOVE MUST BE COMPLETED AND ATTACHED BEFORE SUBMITTING APPLICATION TO BE PLACED ON THE PLANNING COMMISSION AGENDA.

NOTE: WHEN MAKING CHANGES TO AN APPROVED SITE PLAN, A REVISED SITE PLAN MUST BE SUBMITTED TO THE BRYANT PLANNING COMMISSION FOR APPROVAL. THIS MUST BE DONE PRIOR TO IMPLEMENTATION. FAILURE TO COMPLY WILL RESULT IN PENALTIES/FINES BEING IMPOSED IN ACCORDANCE WITH CITY ORDINANCES.

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

SIGNATURE

*Jonathan Ape*

5-2-2021

DATE

# City of Bryant Commercial Building Checklist

Name of Development Aria Oil Convenience Store  
Site Location Lowery and Highway 5 Intersection Current zoning C-2  
Owner Outdoor Management Displays, LLC Phone 501-860-0467

## I. BASIC INFORMATION NEEDED ON THE SITE PLAN

- ▲ 1. Name of Development
- ▲ 2. Current zoning
- ▲ 3. Name and Address of owner of Record
- ▲ 4. Name and address of the architect, landscape architect, engineer, surveyor, or other person involved in the preparation of the plan
- ▲ 5. Date of preparation of the plan
- ▲ 6. Vicinity map locating streets, highways, section lines, railroad, schools, & parks within ½ mile
- ▲ 7. Legal description of the property with exact boundary lines
- ▲ 8. North arrow & Scale
- ▲ 9. Identification of any land areas within the 100 year floodplain and within the 100 year floodway
- ▲ 10. Lot area in square feet
- ▲ 11. Show scale (not less than 1" = 100') (paper size minimum 17" X 34")
- ▲ 12. Existing streams, drainage channels, and other bodies of water
- ▲ 13. Drainage easements for stormwater run-off and detention shown & labeled
- ▲ 14. Location and name of existing streets
- ▲ 15. Show source of water supply
- ▲ 16. Show location of waste water connection to municipal system & sanitary sewer layout
- ▲ 17. Fire Hydrant placement
- ▲ 18. Proposed location of buildings and other structures, parking areas, drives, loading areas, service areas, alleys, walks, screening, and public streets
- ▲ 19. Sufficient dimensions to indicate relationship between buildings, property lines, parking areas and other elements of the plan
- ▲ 20. Extent and character of proposed landscaping. Common and/or Botanical plant names and sizes of new vegetation must be clearly indicated.
- ▲ 21. Location, massing and pattern of existing vegetation to be retained
- ▲ 22. Existing structures on the site
- ▲ 23. Pedestrian and vehicular access points, sidewalks, crosswalks, etc.
- ▲ 24. Typical building elevations depicting the style, size and exterior construction materials of the buildings proposed. Where several building types are proposed on the plan, such as apartments and commercial buildings, a separate sketch shall be prepared for each type. The elevations shall be drawn at a minimum scale of 1/16" to a foot and must show adjoining context.
- ▲ 25. Any variance approvals



**II ADDITIONAL INFORMATION NEEDED, BUT NOT ON THE SITE PLAN**

**COMMERCIAL BUILDING WORKSHEET**

	Yes	No
Site is compatible with Master Street Plan		
Proposed improvement is within building line setbacks Front <u>50'</u> ft. Side <u>25'</u> ft. CNR Side <u>0</u> ft. Back <u>15'</u> ft.	X	
Parking requirements can be satisfied Floor Space <u>3,500</u> sq.ft. divided by 300 = <u>11.6</u> (no. of parking spaces required)	X	
Improvement is outside 100 year flood plain (if answer is no - Provide 404 Permit for site)		X
Lowest building floor level and all mechanical equipment are above FEMA 100 year flood elevation	X	
Will there be a dumpster located on the site?	X	
Will there be a construction site office?	X	
Have you made "One Call"?	X	
Structure and site complies with ADA (Americans with Disability Act) and ABA (Architectural Barriers Act) Accessibility Guidelines	X	
Design complies with Arkansas Plumbing Code and National Electric Code requirements	X	
Foundation and structure meet earthquake requirements for Zone 1.	X	
Structure meets Arkansas Energy Code for specified use.	X	
Complies with Arkansas Fire Prevention Code	X	
Complies with International Code Council regulations	X	
Will a Site Clearance Permit be required? (City Ordinance 2002-03)		X
Are you granted any variances by the Board of Adjustment?		X
If you have been granted a variance please explain in detail:		

**III. LANDSCAPING COMPLIANCE WITH REQUIREMENTS**

	<u>YES</u>	<u>NO</u>
No planting within 5 feet of a fire hydrant	<u>X</u>	<u>      </u>
Spacing will be 40' between trees	<u>X</u>	<u>      </u>
Tree must be a minimum 3" in diameter at the base and 12' + tall	<u>X</u>	<u>      </u>
Existing trees meeting the minimum size can be counted to meet above criteria	<u>X</u>	<u>      </u>
No trees can be planted within 30 feet of a property corner or driveway	<u>X</u>	<u>      </u>
Shrubs along street right-of-way lines cannot exceed 30 inches in height	<u>X</u>	<u>      </u>

**IV. SITE COVERAGE COMPLIANCE WITH REQUIREMENTS**

(FOR YOUR CONVENIENCE WE HAVE LISTED THE THREE COMMERCIAL ZONING SITE COVERAGE REQUIREMENTS - CHOOSE THE ZONING FOR THIS PROJECT AND COMPLETE ONLY THAT SECTION)

	<u>YES</u>	<u>NO</u>
<b>1. C-1 Zoning - Neighborhood Commercial</b>		
Lot area: minimum of 2,500 square feet; maximum 16,000 square feet	_____	_____
Front Yard: none required	_____	_____
Side Yard: minimum of 5 feet each side	_____	_____
Rear Yard: minimum of 55 feet	_____	_____
Maximum lot coverage of 70% of the total area of the site for all principal, accessory buildings, parking lots, sidewalks, private streets, or drives.	_____	_____
Parking: one space per each 200 sq. ft. of commercial use	_____	_____
Loading areas: physically separated from all streets with 10 ft grassy area	_____	_____
When abuts a residential district, a minimum 6' high wood, rock, or masonry fence is required with a landscape screen	_____	_____
<b>2. C-2 Zoning - Lots fronting along roadways designated as Interstate 30 and frontage roads, State Highway 5 and 183</b>		
Front Yard: not less than 50 feet from front property line	_____	_____
Side Yard: not required, except where they abut a street or a residential lot line then a minimum of 25 feet is required	_____	_____
Rear Yard: minimum of 15 feet, except where they abut residential area then a minimum of 55 feet is required	_____	_____
A maximum lot coverage of 35% of the total area of the site for all principal and accessory buildings	_____	_____
Parking: one space per each 300 sq. ft. of occupied space	_____	_____
When abuts a residential district, a minimum 6' high wood, rock, or masonry fence is required with a landscape screen	_____	_____
<b>3. C-2 Zoning - Lots fronting along roadways designated as interior local.</b>		
Front Yard: none required	X _____	_____
Side Yard: not required, except where they abut a street or a residential lot line then a minimum of 25 percent of lot dimension	X _____	_____
Rear Yard: minimum of 15 feet, except where they abut residential area then a minimum of 55 feet is required	X _____	_____
A maximum lot coverage of 85% of the total area of the site for all principal, accessory buildings and parking	X _____	_____
Parking: one space per each 300 sq. ft. of occupied space	X _____	_____
When abuts a residential district, a minimum 6' high wood, rock, or masonry fence is required with a landscape screen	X _____	_____



Permit No. \_\_\_\_\_

## BUILDING PERMIT

### ADA/ABA ACCESSIBILITY STANDARDS

The *Americans with Disability Act* and *Architectural Barriers Act* Accessibility Guidelines were prepared by the U.S. Access Board and mandated by the U. S. Department of Justice regulations implementing Title III as the official ADA/ABA accessibility guidelines. **All new construction, remodeling, and modifications must conform to these building standards** for places of public accommodation and commercial facilities. Residential is exempt.

The ADA/ABA accessibility guidelines contain general design standards for building and site elements, such as accessible entrances and routes, ramps, parking spaces, stairs, elevators, restrooms, signage, etc. Also included are specific standards for restaurants, medical care facilities, libraries and transportation facilities and vehicles, and places of lodging.

The guidelines also include "scoping" requirements that outline the necessary features or appropriate quantity for achieving ready access. For example, at least 50 percent of all public entrances to buildings must be accessible with an accessible path of travel. In public restrooms, at least one bathroom stall must be accessible unless there are more than six stalls, in which case the number increases.

I hereby certify that I have read and examined the above notice and will comply with all guidelines of the ADA Accessibility Guidelines. I further understand that a copy of the ADA/ABA Regulations are available for inspection during business hours of City Hall or I may obtain a copy by writing:

**The Access Board**  
1331 F Street, NW, Suite 1000  
Washington, DC 20004-1111  
(202) 272-0080 (v) (202) 272-0082 (TTY) (202) 272-0081 (fax)  
(800) 872-2253 (v) (800) 993-2822 (TTY)  
email: [info@access-board.gov](mailto:info@access-board.gov)

Signature of Contractor  
or Authorized Agent \_\_\_\_\_ Date \_\_\_\_\_

Signature of Owner  
( if owner-builder) \_\_\_\_\_ Date \_\_\_\_\_

Application of Permit Approved: \_\_\_\_\_ Date \_\_\_\_\_  
Commission - Chairman



Bryant Water & Sewer Department

**GREASE TRAP STANDARDS**

The City of Bryant requires all commercial buildings comply with plumbing codes found in the Arkansas State Plumbing Code, Latest Edition. All new construction, remodeling, and modifications must conform to these plumbing standards for places of public accommodation and commercial facilities. These guidelines contain general design standards for construction and site elements relating to plumbing.

As of 7/27/04, the Bryant Sewer & Water Commission requires stringent specification standards for commercial or public businesses that involve any food preparation on the premise. The new standard requires calculations, and associated data to be submitted to the Bryant Water Utilities General Manager concurrent with the proposed building plumbing plans along with a grease trap calculation form. Building Permits will not be issued until this form has been received and approved by the Bryant Water Utilities General Manager.

All new buildings or strip centers containing sections designated for commercial enterprise are encouraged to provide a stub-out for a separate waste line for future grease interceptor installation. The owner of a new strip center shall consider suitable physical property space and sewer gradient that will be conducive for the installation of an exterior, in-ground grease interceptor(s) for any flex space contained within the strip center. Physical Property Restrictions and sewer gradient shall not be a defense for failure to install an exterior, in-ground grease interceptor.

I hereby certify that I have read and examined the above notice and will comply with all guidelines of the City of Bryant Water & Sewer Department. I further understand that copies of the Grease Interceptor Design and Structural Criteria regulations will be available from the Bryant Water/Wastewater Plant (501-847-8083) during business hours.

Project Name Aria Oil Convenience Store

Signature of Contractor  
or Authorized Agent \_\_\_\_\_ Date \_\_\_\_\_

Signature of Owner  
( if owner-builder) \_\_\_\_\_ Date \_\_\_\_\_

Calculations  
Approved: \_\_\_\_\_ Date \_\_\_\_\_  
Bryant Water Utilities General Manager

# **DRAINAGE REPORT**

**STORM RUNOFF IMPACT**

**FOR**

## **HIGHWAY 5 & LOWERY LN.**

**C-STORE**

7/30/2021  
Bryant, AR

PREPARED FOR  
City of Bryant

By:

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

## Summary

The calculations detailed in this report are related to the detention design of a proposed development of a property at the NE corner of the intersection of Highway 5 and Lowery Lane in Bryant. The study area considered is 2.11 acres  $\pm$  and accounts for areas that bypass the pond as well as upstream area being routed through the pond. The main tract under pre-development conditions is an undeveloped landscape. The proposed use of the site is a gas station/convenience store.

In particular these calculations detail the impact of a proposed development to a site on Highway 5, at the NE corner of the intersection with Lowery Lane in Bryant. The calculations on the following pages include:

- Pre and Post development C value for the Study area
- Rational method calculations for the pre and post development runoff leaving the pond.

The following summarized flows (cfs) are based upon a 100 year storm event:

*Before routing to detention*

<b>Event</b>	<b>Pre-dev</b>	<b>Post-dev</b>
100 year	6.04	11.21
50year	5.59	10.54
25 year	4.92	9.21
10 year	4.25	8.07
5 year	3.47	6.86
2 year	3.13	6.20

*After routing to detention*

<b>Event</b>	<b>Pre-dev</b>	<b>Post with Pond</b>
100 year	6.04	4.37
50year	5.59	3.60
25 year	4.92	2.89
10 year	4.25	2.62
5 year	3.47	2.32
2 year	3.13	2.15

### **Composite C**

Composite Values for the acre impact study area (acres):

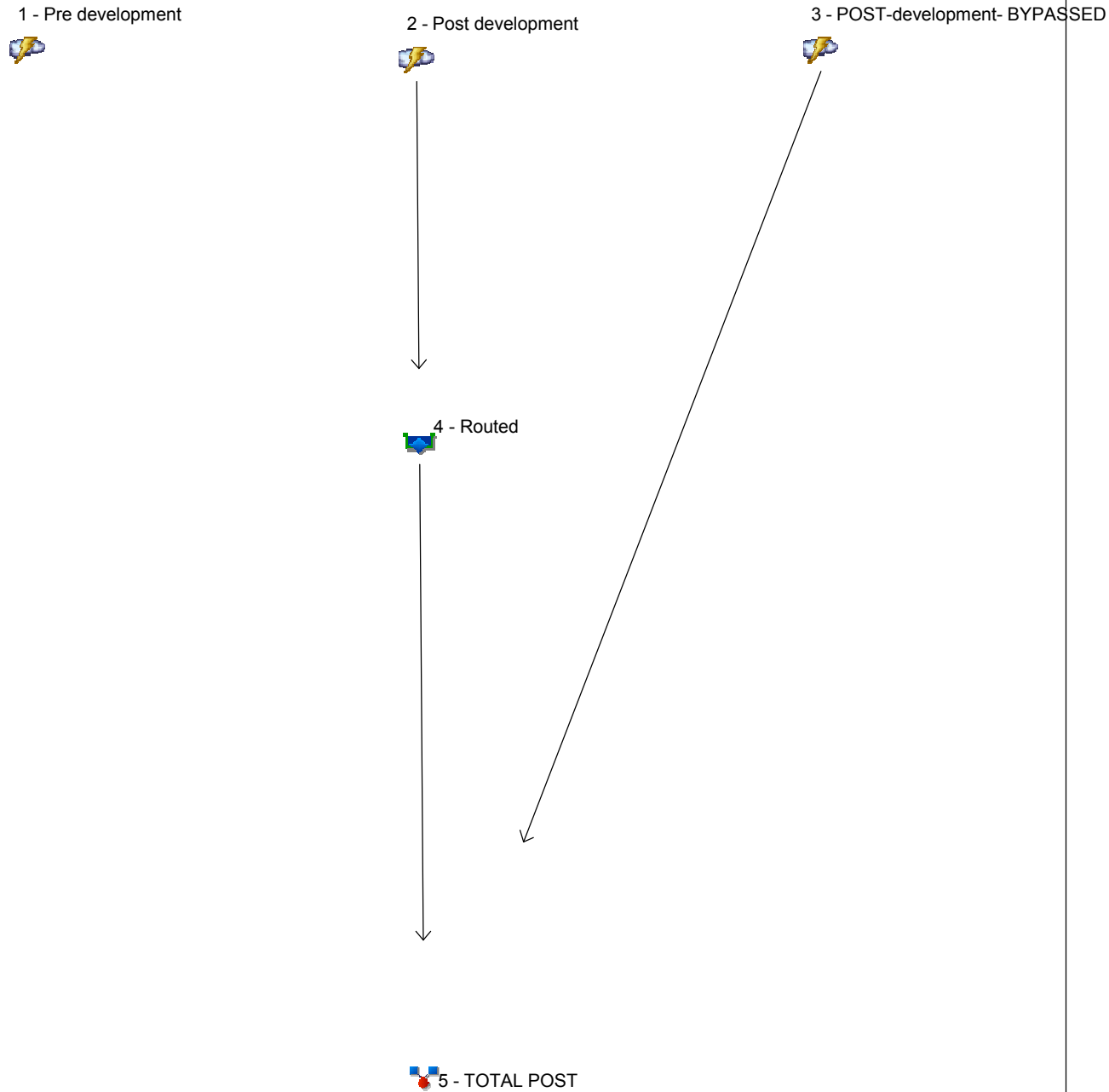
<i>Pre-development</i>	<i>0.46</i>
<i>Post-development</i>	<i>0.79</i>
<i>By-pass</i>	<i>0.46</i>

### **Time of Concentration**

*time of concentration (pre/post)* *30min/15min*

# Watershed Model Schematic

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021



## Legend

<u>Hyd. Origin</u>	<u>Description</u>
1 Rational	Pre development
2 Rational	Post development
3 Rational	POST-development- BYPASSED
4 Reservoir	Routed
5 Combine	TOTAL POST



# Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

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	-----	-----	3.131	-----	3.467	4.250	4.921	5.591	6.039	Pre development
2	Rational	-----	-----	5.851	-----	6.472	7.597	8.708	9.925	10.54	Post development
3	Rational	-----	-----	0.348	-----	0.385	0.472	0.546	0.621	0.671	POST-development-BYPASSED
4	Reservoir	2	-----	1.849	-----	1.980	2.205	2.391	3.075	3.815	Routed
5	Combine	3, 4	-----	2.150	-----	2.317	2.623	2.885	3.600	4.373	TOTAL POST

# Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

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	6.039	1	30	10,870	-----	-----	-----	Pre development
2	Rational	10.54	1	15	9,490	-----	-----	-----	Post development
3	Rational	0.671	1	30	1,207	-----	-----	-----	POST-development-BYPASSED
4	Reservoir	3.815	1	25	9,391	2	445.38	6,572	Routed
5	Combine	4.373	1	25	10,598	3, 4	-----	-----	TOTAL POST
BRYANT C-STORE (bypass pond total)R3.gpw Return Period: 100 Year									Wednesday, 07 / 21 / 2021

# Multi-Hydrograph Plot

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

## Hyd. No. 1

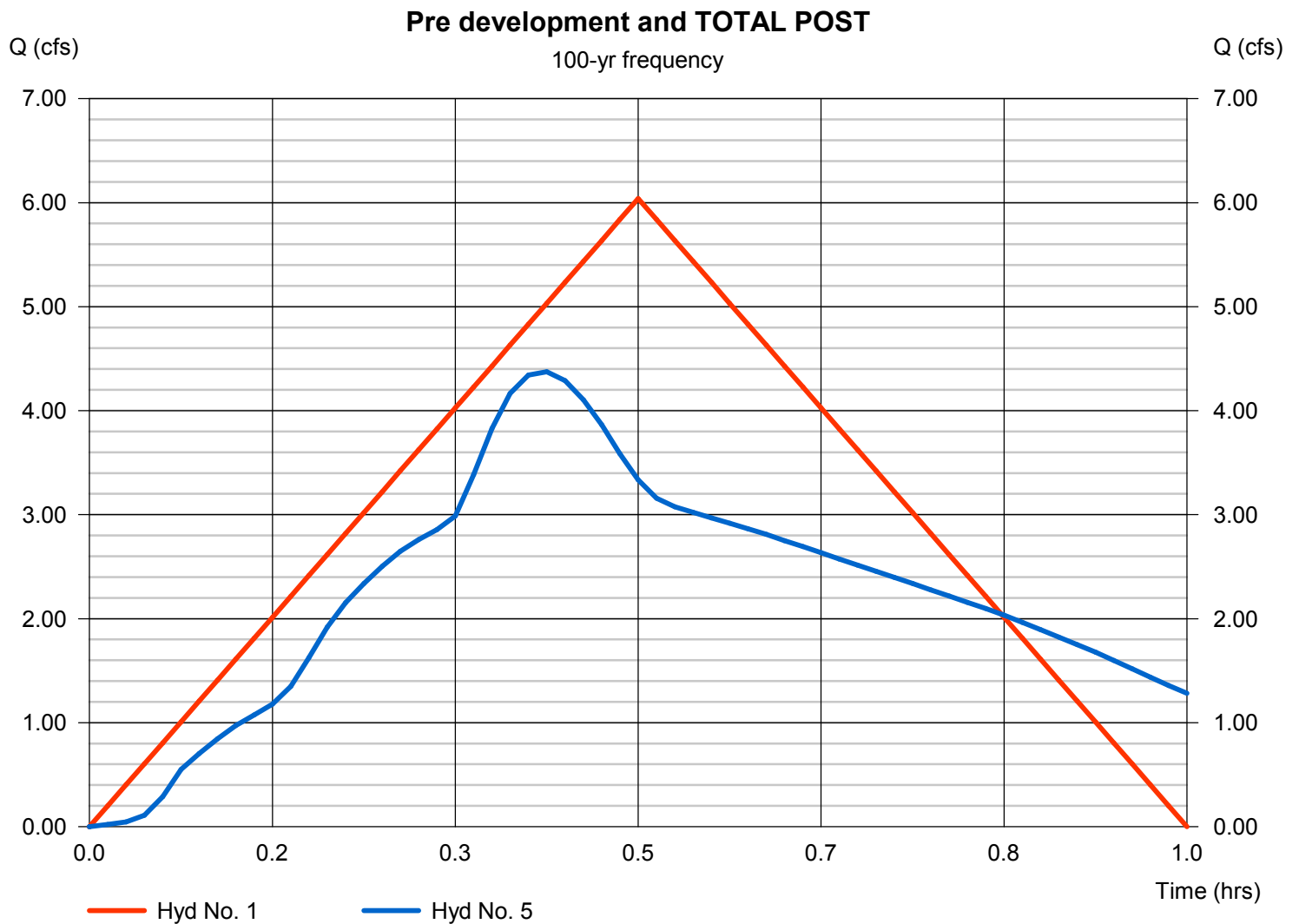
Pre development

Hydrograph type = Rational  
Peak discharge = 6.039 cfs  
Time to peak = 0.50 hrs  
Hyd. Volume = 10,870 cuft

## Hyd. No. 5

TOTAL POST

Hydrograph type = Combine  
Peak discharge = 4.37 cfs  
Time to peak = 0.42 hrs  
Hyd. Volume = 10,598 cuft



# Multi-Hydrograph Plot

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

## Hyd. No. 1

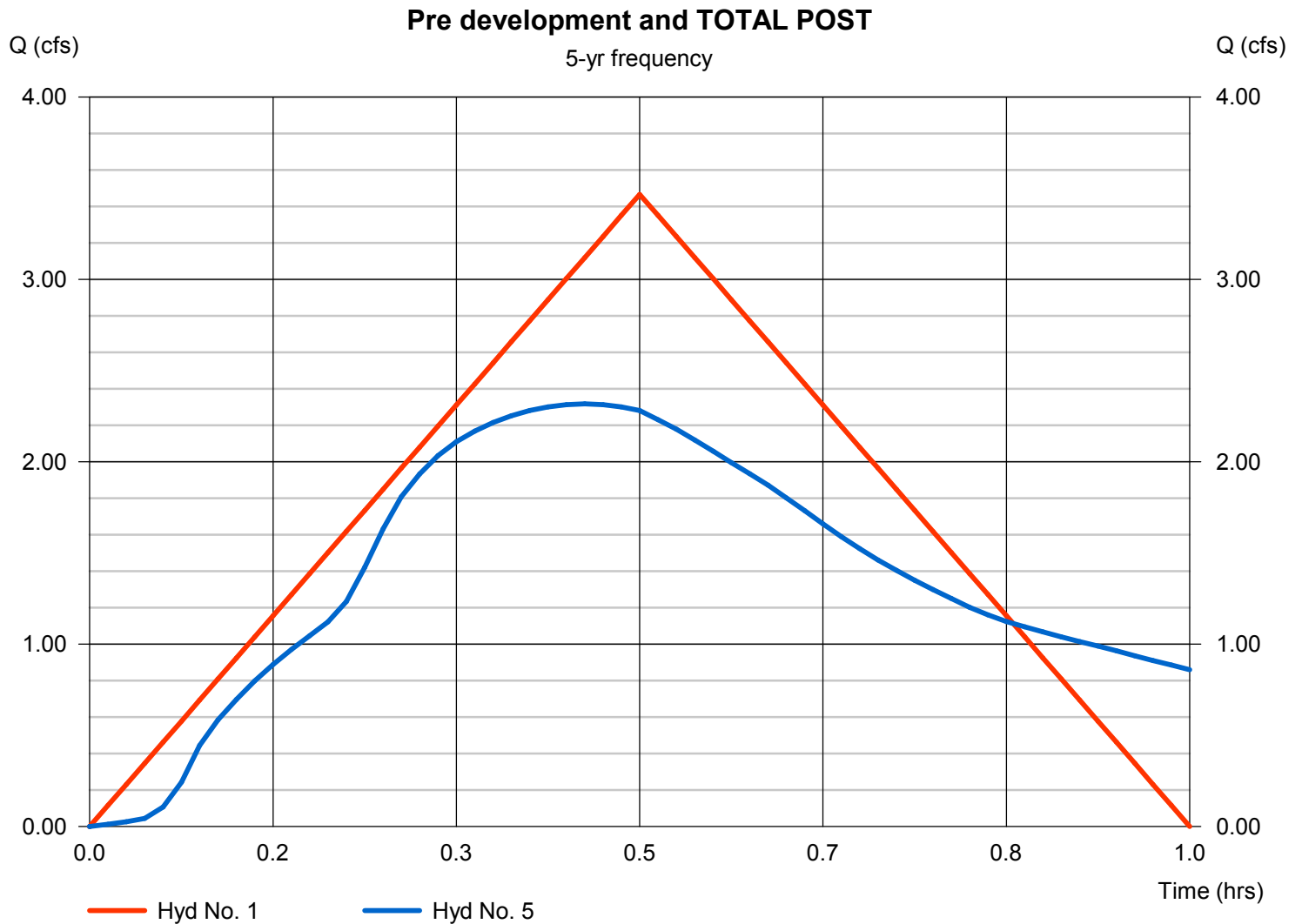
Pre development

Hydrograph type = Rational  
Peak discharge = 3.467 cfs  
Time to peak = 0.50 hrs  
Hyd. Volume = 6,240 cuft

## Hyd. No. 5

TOTAL POST

Hydrograph type = Combine  
Peak discharge = 2.32 cfs  
Time to peak = 0.45 hrs  
Hyd. Volume = 6,419 cuft



# Multi-Hydrograph Plot

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

## Hyd. No. 1

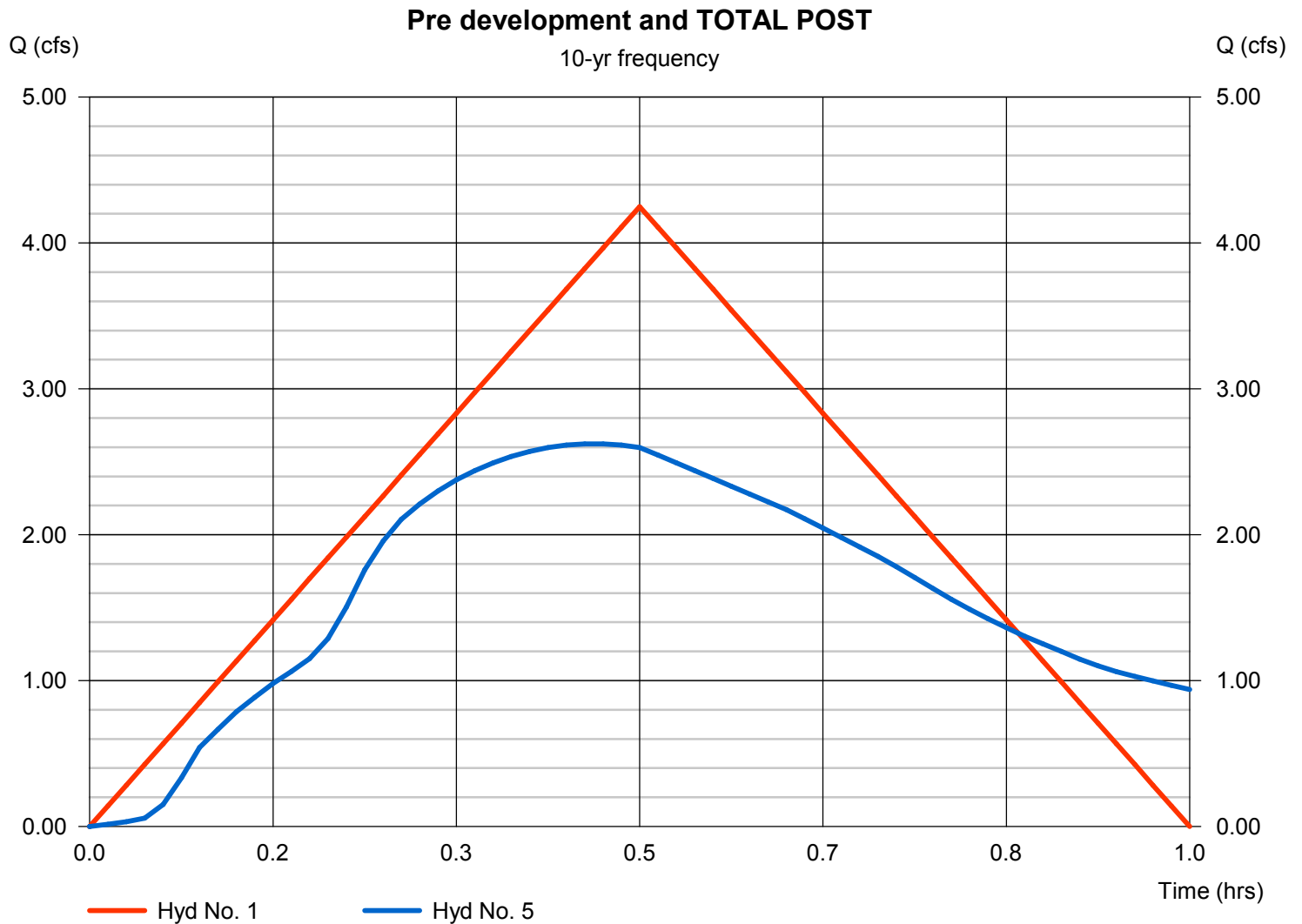
Pre development

Hydrograph type = Rational  
Peak discharge = 4.250 cfs  
Time to peak = 0.50 hrs  
Hyd. Volume = 7,649 cuft

## Hyd. No. 5

TOTAL POST

Hydrograph type = Combine  
Peak discharge = 2.62 cfs  
Time to peak = 0.47 hrs  
Hyd. Volume = 7,588 cuft



# Multi-Hydrograph Plot

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

## Hyd. No. 1

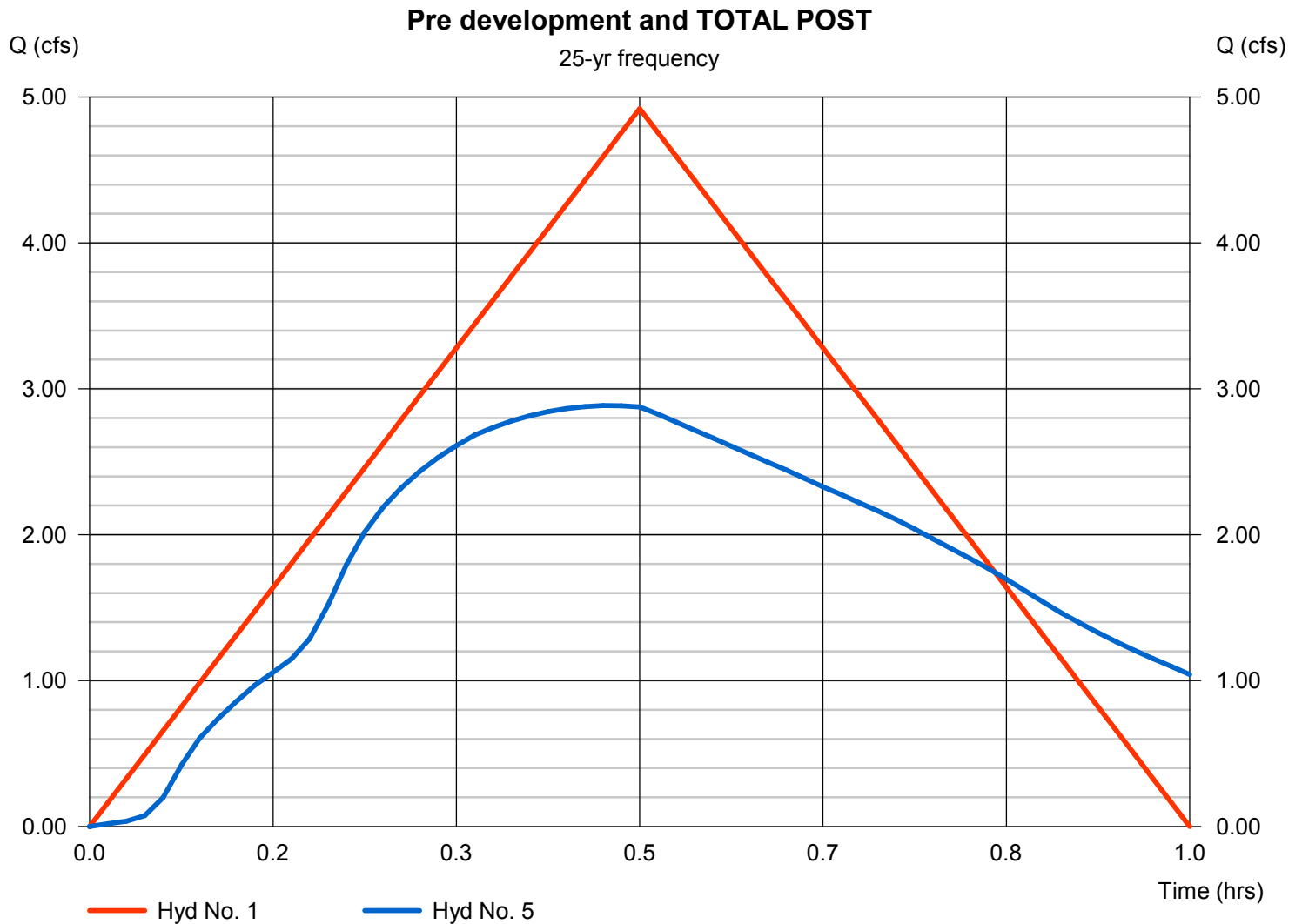
Pre development

Hydrograph type = Rational  
Peak discharge = 4.921 cfs  
Time to peak = 0.50 hrs  
Hyd. Volume = 8,857 cuft

## Hyd. No. 5

TOTAL POST

Hydrograph type = Combine  
Peak discharge = 2.88 cfs  
Time to peak = 0.47 hrs  
Hyd. Volume = 8,722 cuft



# Multi-Hydrograph Plot

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

## Hyd. No. 1

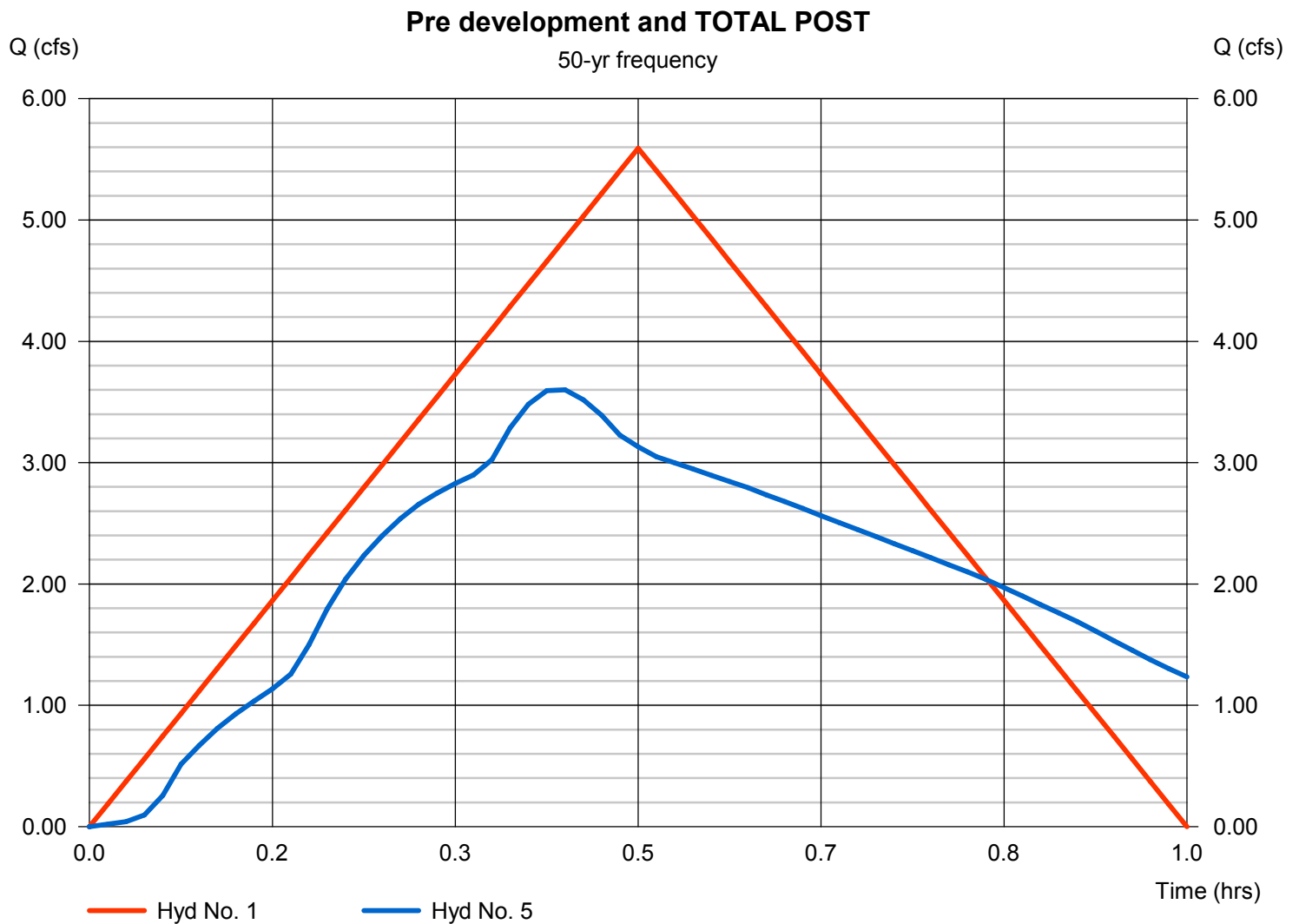
Pre development

Hydrograph type = Rational  
Peak discharge = 5.591 cfs  
Time to peak = 0.50 hrs  
Hyd. Volume = 10,065 cuft

## Hyd. No. 5

TOTAL POST

Hydrograph type = Combine  
Peak discharge = 3.60 cfs  
Time to peak = 0.43 hrs  
Hyd. Volume = 9,952 cuft





# Multi-Hydrograph Plot

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

## Hyd. No. 1

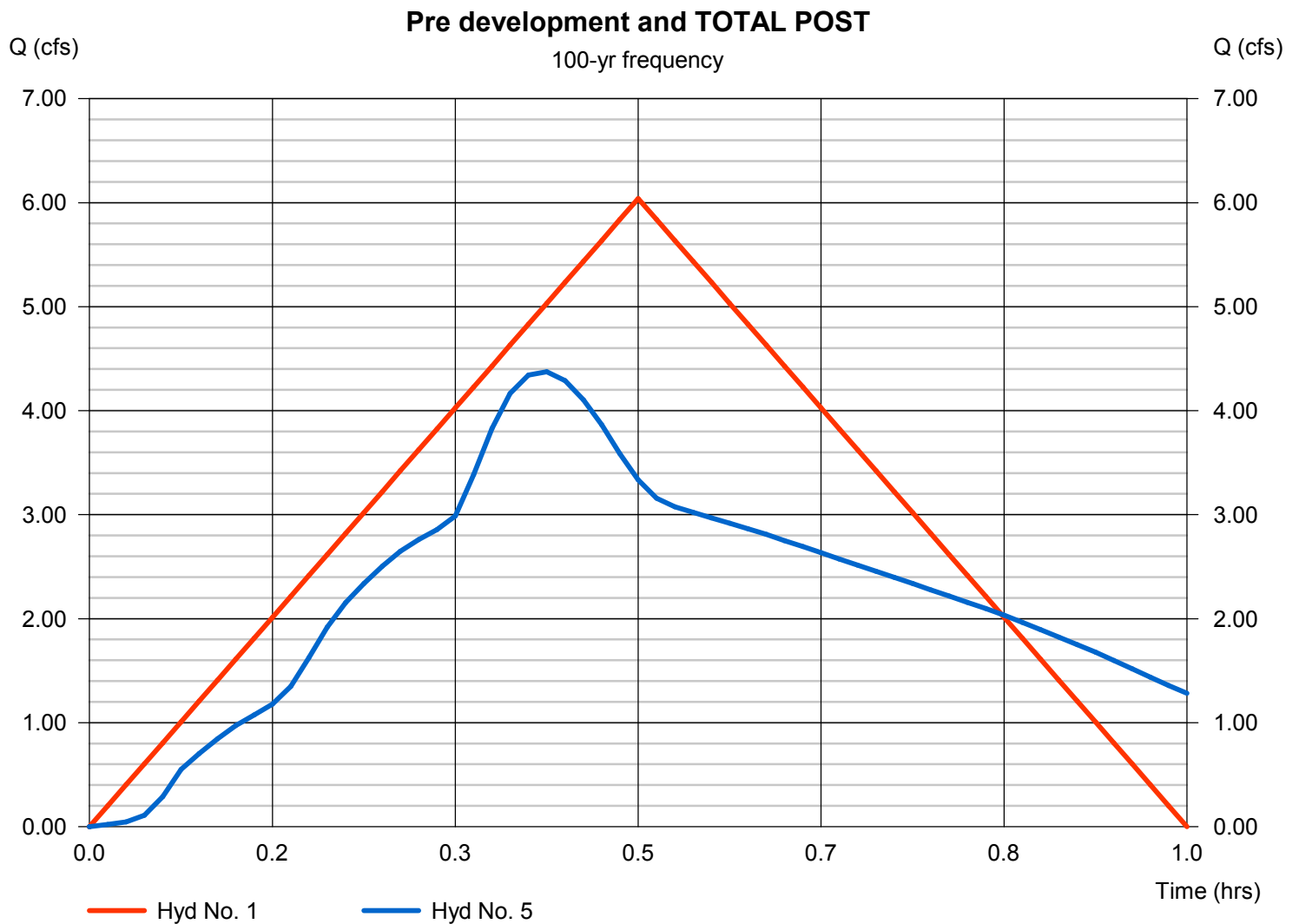
Pre development

Hydrograph type = Rational  
Peak discharge = 6.039 cfs  
Time to peak = 0.50 hrs  
Hyd. Volume = 10,870 cuft

## Hyd. No. 5

TOTAL POST

Hydrograph type = Combine  
Peak discharge = 4.37 cfs  
Time to peak = 0.42 hrs  
Hyd. Volume = 10,598 cuft



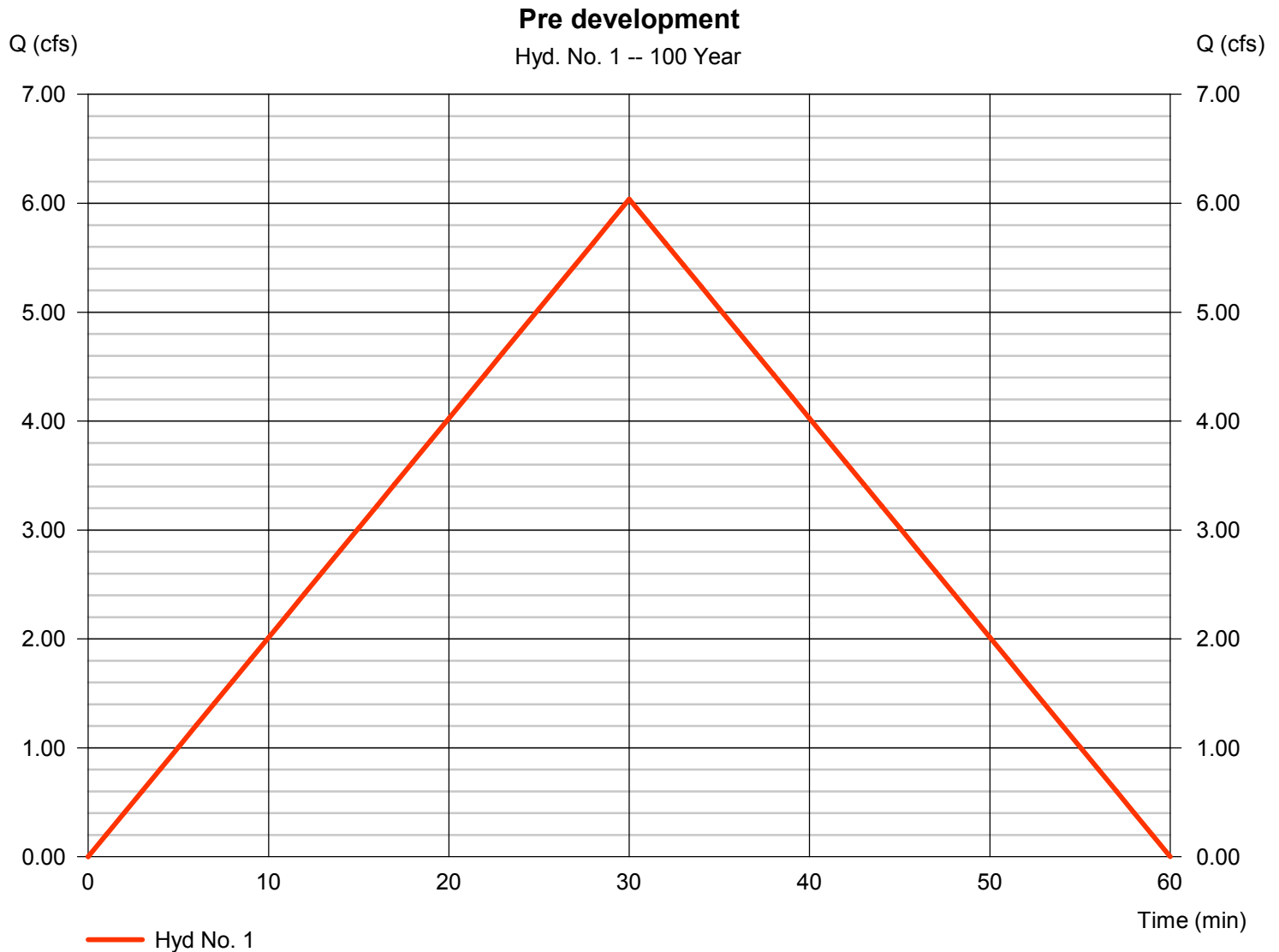
# Hydrograph Report

## Hyd. No. 1

Pre development

Hydrograph type	= Rational	Peak discharge	= 6.039 cfs
Storm frequency	= 100 yrs	Time to peak	= 30 min
Time interval	= 1 min	Hyd. volume	= 10,870 cuft
Drainage area	= 2.110 ac	Runoff coeff.	= 0.53*
Intensity	= 5.400 in/hr	Tc by User	= 30.00 min
IDF Curve	= bryant 2.idf	Asc/Rec limb fact	= 1/1

\* Composite (Area/C) = [(0.640 x 0.70) + (0.260 x 0.46) + (0.670 x 0.46) + (0.270 x 0.46) + (0.270 x 0.46)] / 2.110



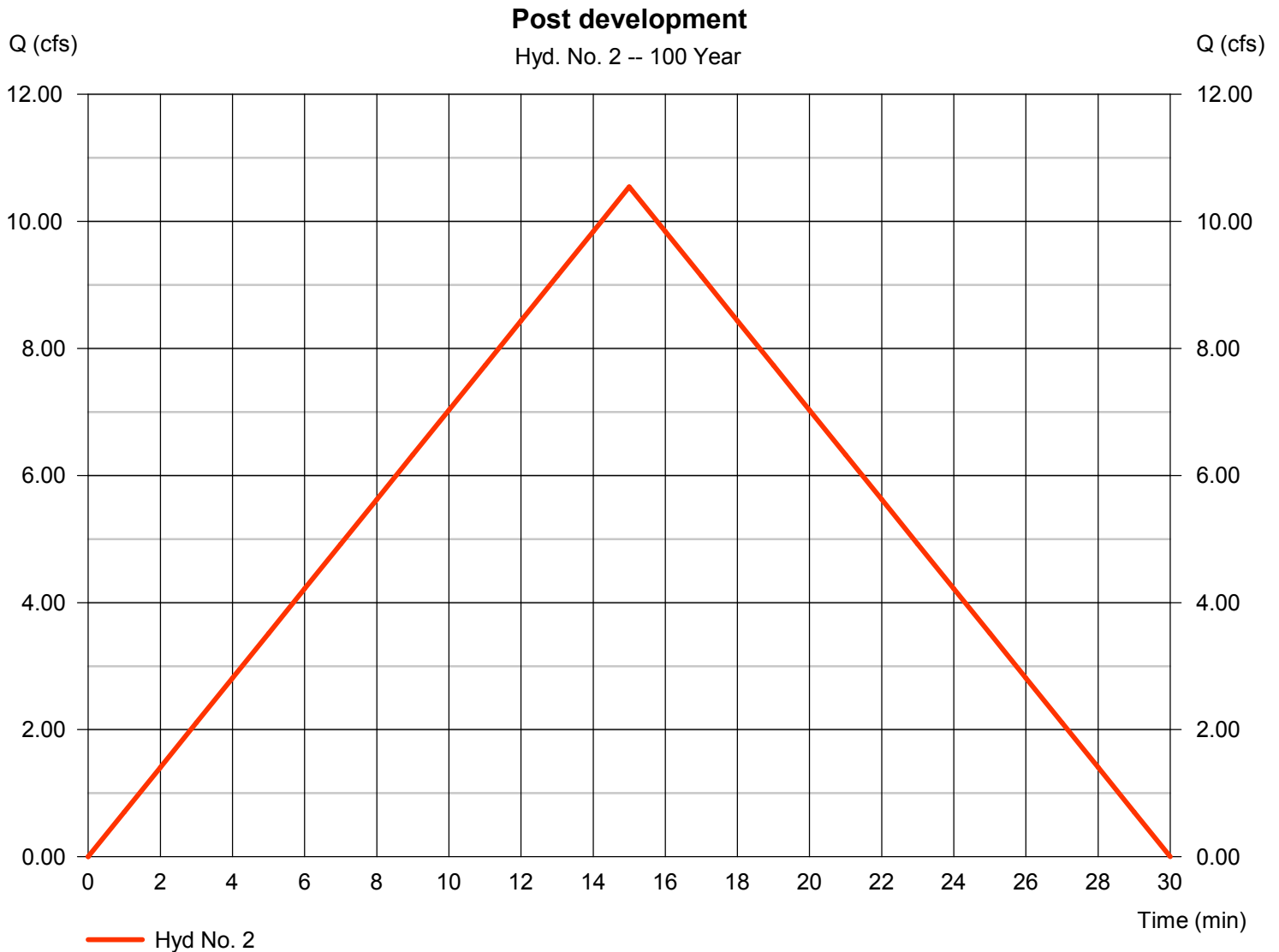
# Hydrograph Report

## Hyd. No. 2

Post development

Hydrograph type	= Rational	Peak discharge	= 10.54 cfs
Storm frequency	= 100 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 9,490 cuft
Drainage area	= 1.840 ac	Runoff coeff.	= 0.79*
Intensity	= 7.254 in/hr	Tc by User	= 15.00 min
IDF Curve	= bryant 2.idf	Asc/Rec limb fact	= 1/1

\* Composite (Area/C) = [(0.640 x 0.70) + (0.260 x 0.46) + (0.670 x 0.95) + (0.270 x 0.95)] / 1.840



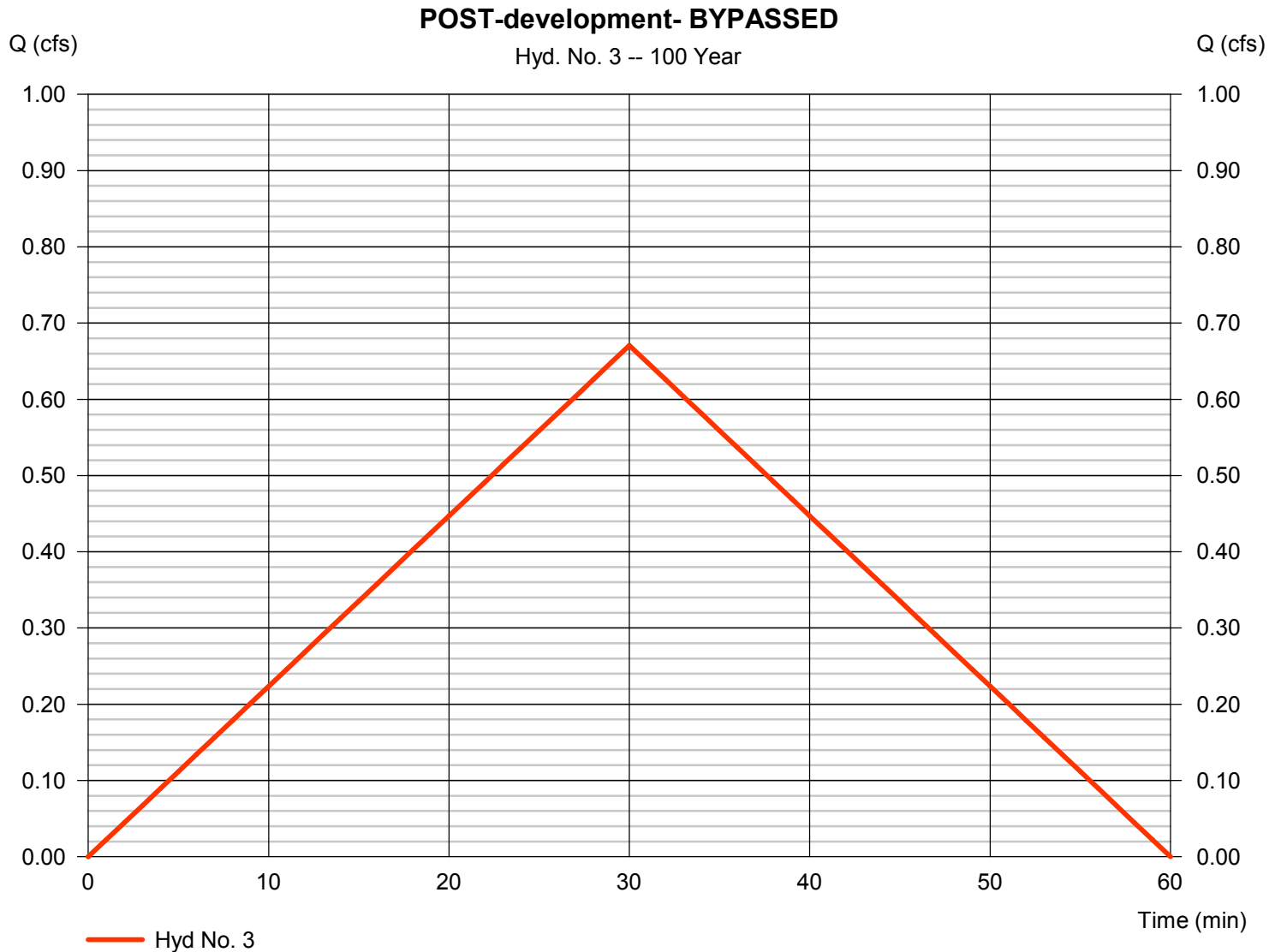
# Hydrograph Report

## Hyd. No. 3

POST-development- BYPASSED

Hydrograph type	= Rational	Peak discharge	= 0.671 cfs
Storm frequency	= 100 yrs	Time to peak	= 30 min
Time interval	= 1 min	Hyd. volume	= 1,207 cuft
Drainage area	= 0.270 ac	Runoff coeff.	= 0.46*
Intensity	= 5.400 in/hr	Tc by User	= 30.00 min
IDF Curve	= bryant 2.idf	Asc/Rec limb fact	= 1/1

\* Composite (Area/C) = [(0.270 x 0.46)] / 0.270



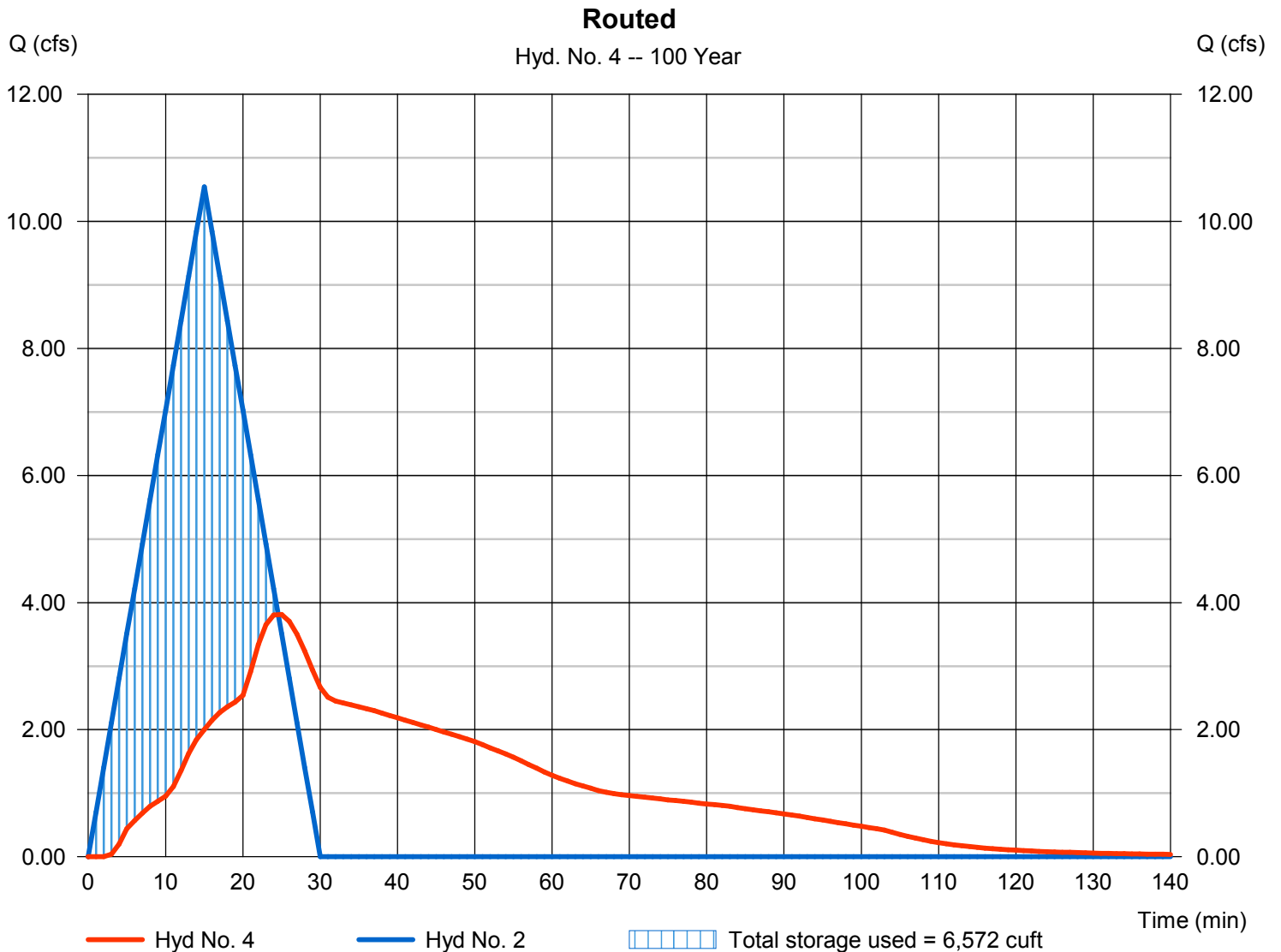
# Hydrograph Report

## Hyd. No. 4

Routed

Hydrograph type	= Reservoir	Peak discharge	= 3.815 cfs
Storm frequency	= 100 yrs	Time to peak	= 25 min
Time interval	= 1 min	Hyd. volume	= 9,391 cuft
Inflow hyd. No.	= 2 - Post development	Max. Elevation	= 445.38 ft
Reservoir name	= North Pond	Max. Storage	= 6,572 cuft

Storage Indication method used.



# Pond Report

## Pond No. 2 - North Pond

### Pond Data

Trapezoid -Bottom L x W = 130.0 x 5.0 ft, Side slope = 3.00:1, Bottom elev. = 442.20 ft, Depth = 5.50 ft

### Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	442.20	650	0	0
0.55	442.75	1,106	482	482
1.10	443.30	1,585	739	1,221
1.65	443.85	2,085	1,008	2,229
2.20	444.40	2,606	1,289	3,518
2.75	444.95	3,150	1,582	5,100
3.30	445.50	3,715	1,887	6,987
3.85	446.05	4,302	2,204	9,190
4.40	446.60	4,911	2,533	11,723
4.95	447.15	5,542	2,873	14,596
5.50	447.70	6,194	3,226	17,823

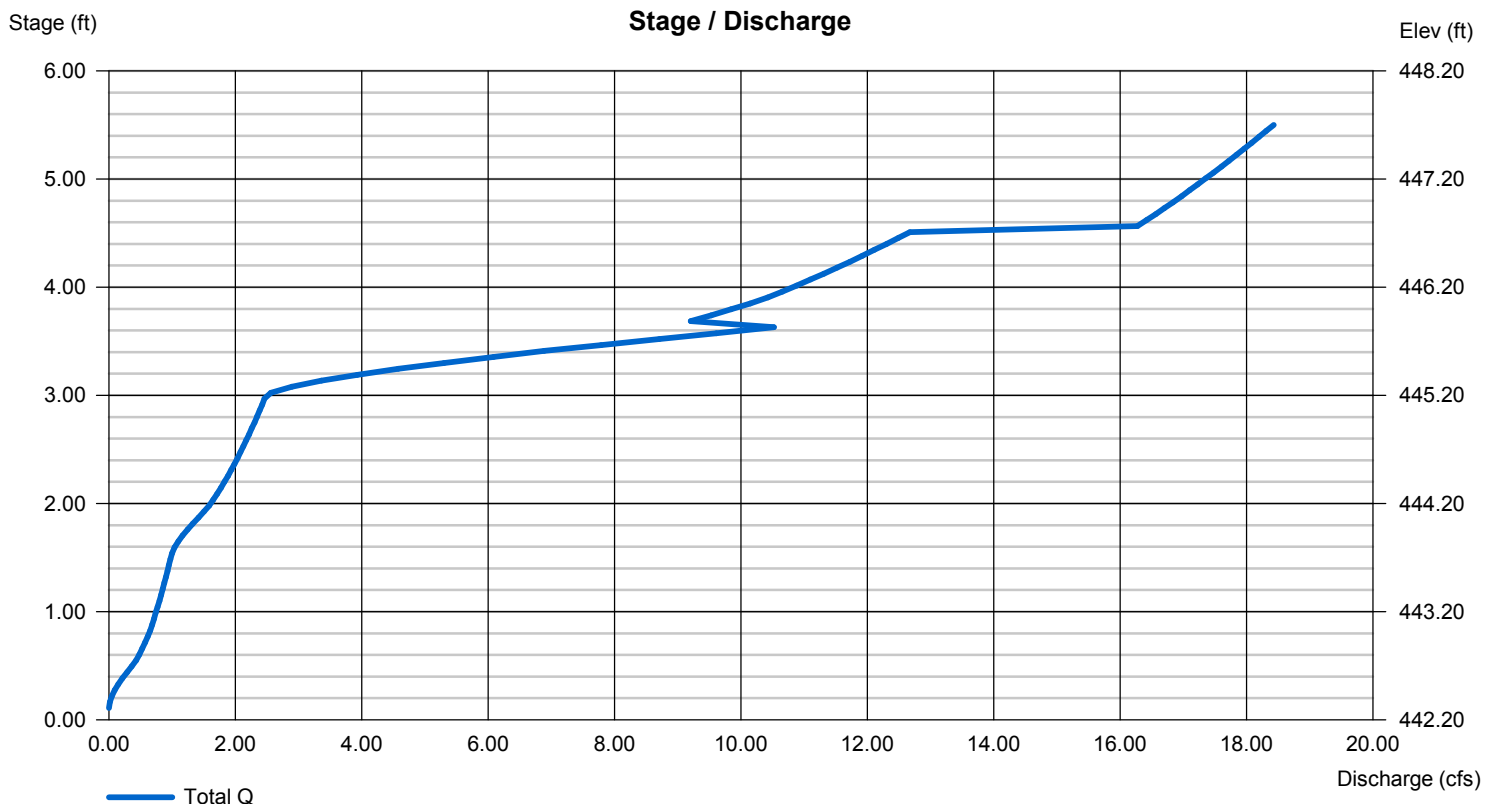
### Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 18.00	6.00	6.00	Inactive
Span (in)	= 18.00	6.00	6.00	0.00
No. Barrels	= 1	1	1	0
Invert El. (ft)	= 442.20	442.30	443.70	0.00
Length (ft)	= 30.00	0.50	0.50	0.00
Slope (%)	= 1.50	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	Yes	Yes	No

### Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 5.00	Inactive	Inactive	0.00
Crest El. (ft)	= 445.20	442.50	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= 1	Rect	---	---
Multi-Stage	= Yes	Yes	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).



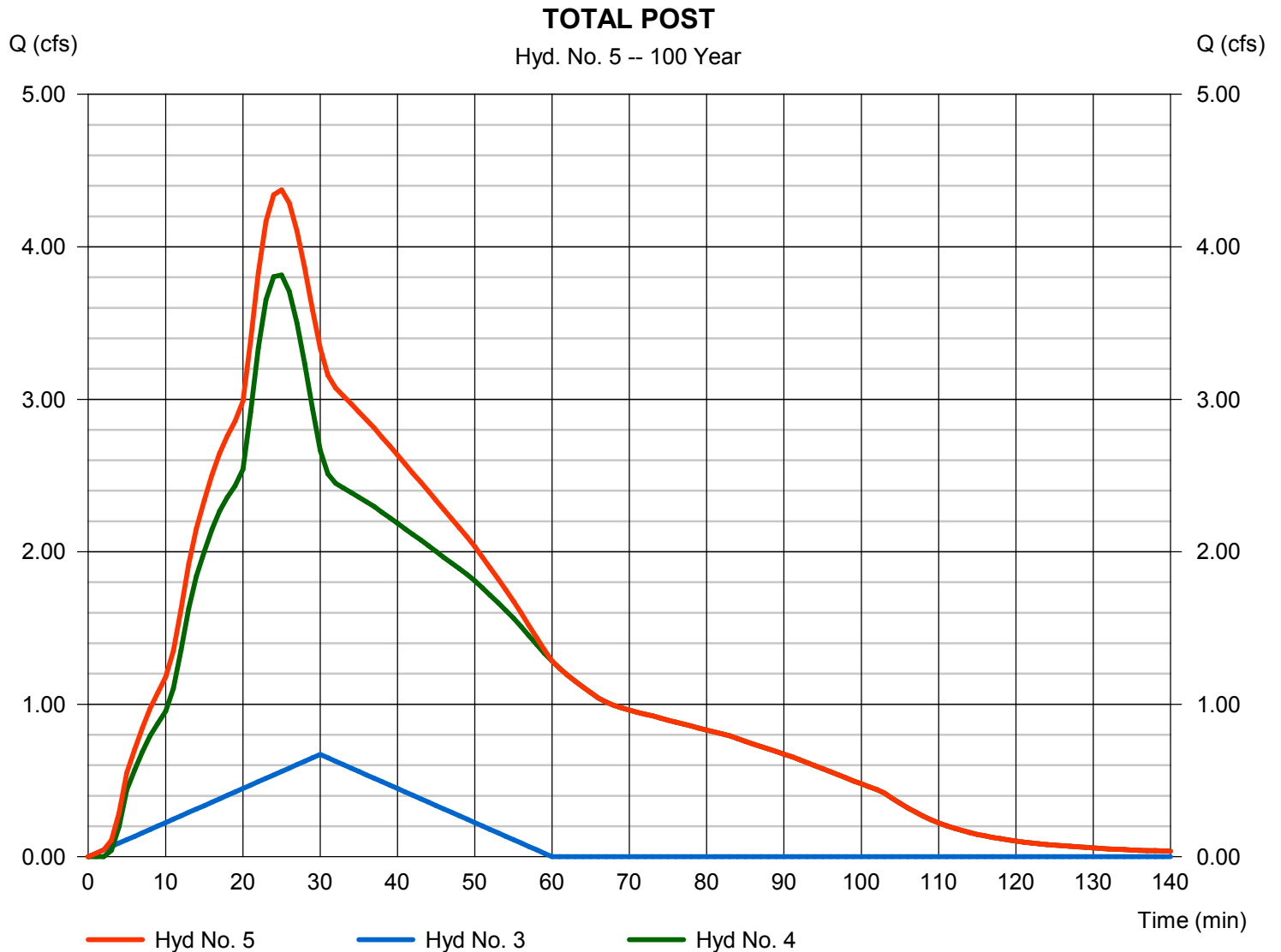
# Hydrograph Report

## Hyd. No. 5

### TOTAL POST

Hydrograph type = Combine  
Storm frequency = 100 yrs  
Time interval = 1 min  
Inflow hyds. = 3, 4

Peak discharge = 4.373 cfs  
Time to peak = 25 min  
Hyd. volume = 10,598 cuft  
Contrib. drain. area = 0.270 ac





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

July 6, 2021

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

RE: Site Oil Convivence Store

Dear Truett:

On behalf of the Aria Oil, Hope Consulting is requesting the review of this small commercial project located in the City of Bryant. This subdivision development consists of water and sewer provided by Bryant, Electric provided by Entergy.

The developer of this project is Blake Smith of Aria Oil.

Blake Smith: [blake@standard-devco.com](mailto:blake@standard-devco.com) 501-554-4400

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

Sincerely,



Jonathan Hope

117 SOUTH MARKET ST. BENTON, ARKANSAS 72015  
501-315-2626  
[WWW.HOPECONSULTING.COM](http://WWW.HOPECONSULTING.COM)

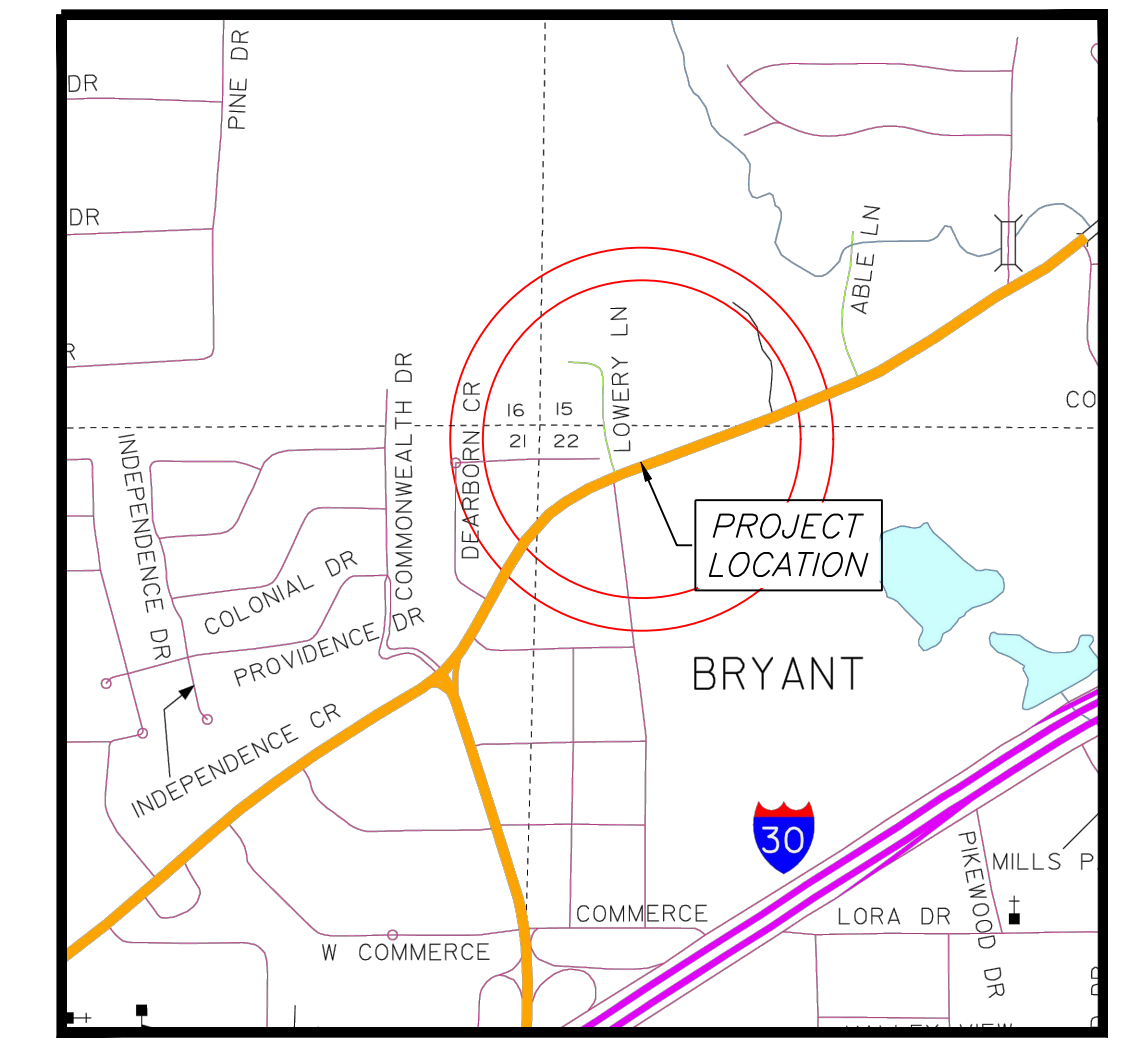
**LEGAL DESCRIPTION**

THOSE PORTIONS OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER, SECTION 22, AND THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER, SECTION 15, ALL IN T-1-S, R-14-2, SALINE COUNTY, ARKANSAS, DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF SAID NW 1/4 OF SECTION 22; THENCE S88°06'16"E, ALONG THE NORTH LINE THEREOF A DISTANCE OF 349.25 FEET A FOUND 1/2" REBAR (PS #1141); TO THE POINT OF BEGINNING OF HEREIN DESCRIBED TRACT; THENCE LEAVING SAID NORTH LINE, N70°07'03"E, A DISTANCE OF 32.82 FEET TO A FOUND 1/2" REBAR (PS #1141); THENCE N70°18'03"E, A DISTANCE OF 200.89 FEET TO A FOUND 1/2" REBAR (PS #1141); THENCE S10°42'25"E, A DISTANCE OF 274.60 FEET TO A FOUND 1/2" REBAR (PS #1141); ON THE NORTH RIGHT-OF-WAY OF HIGHWAY 5; THENCE ALONG SAID NORTH RIGHT-OF-WAY, S70°15'40"W, A DISTANCE OF 275.04 FEET TO A FOUND 1/2" REBAR; THENCE S70°18'52"W, A DISTANCE OF 66.65 FEET TO A FOUND 1/2" REBAR; THENCE LEAVING NORTH RIGHT-OF-WAY LINE, N01°58'50"E, A DISTANCE OF 272.07 FEET TO A PK-NAIL IN ASPHALT; THENCE N00°59'52"W, A DISTANCE OF 23.07 FEET TO THE POINT OF BEGINNING, CONTAINING 78,864 SQUARE FEET, OR 1.81 ACRES, MORE OR LESS.

# CONSTRUCTION PLANS BRYANT, AR C-STORE

## STANDARD DEVELOPMENT CO, LLC

HIGHWAY 5 NORTH OLD STAGECOACH  
CITY OF BRYANT



VICINITY MAP

### PREPARED BY:



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

**CIVIL ENGINEER**  
HOPE CONSULTING INC  
129 N. MAIN STREET  
BENTON, AR 72015  
CONTACT: KAZI ISLAM  
PHONE: 501.315.2626  
EMAIL: kazi@hopeconsulting.com

**ARCHITECT**  
WILLIAMS & DEAN  
18 CORPORATE HILL DRIVE #210  
LITTLE ROCK, AR 72205  
CONTACT: JOHN JOHNSON  
PHONE: 501.224.1900  
EMAIL: jjohnson@williamsdean.com

**GEOTECHNICAL ENGINEER**  
MATERIALS TESTING OF ARKANSAS  
8001 NATIONAL DRIVE  
LITTLE ROCK, AR 72209  
CONTACT: KELTON PRICE  
PHONE: 501.753.2526  
EMAIL: keltonp@mtaengineers.com

**STRUCTURAL ENGINEER**  
N/A

ZONING INFORMATION	
CURRENT ZONING	C-2 (HIGHWAY COMMERCIAL)
MINIMUM LOT AREA (SF)	N/A
MINIMUM LOT WIDTH (FT)	N/A
FRONT YARD SETBACK (FT)	50'
EXTERIOR SIDE YARD SETBACK (FT)	NOT REQ UNLESS ADJUT ROAD OR RESIDENTIAL LOT LINE THEN 25'
REAR YARD (NORTH) SETBACK (FT)	15'
MAXIMUM HEIGHT (FT)	45' OR NO MORE THAN 3 STORIES
MAXIMUM LOT COVERAGE	PRINCIPAL & ACCESSORY BLDG 35% OF THE TOTAL AREA OF THE SITE

<b>OWNER:</b>	<b>DEVELOPER:</b>
Name: STANDARD DEVELOPMENT CO, LLC	Name: STANDARD DEVELOPMENT CO, LLC
Address: 2917 KAVANAUGH BOULEVARD LITTLE ROCK, AR 72205	Address: 2917 KAVANAUGH BOULEVARD LITTLE ROCK, AR 72205



**DRAWING INDEX**

SHEET NO.	TITLE	PLAT
C-1.0	SITE PLAN	SITE PLAN
C-1.1	N/A	N/A
C-1.2	PAVING PLAN	PAVING PLAN
C-2.0	GRADING	GRADING
C-3.0	UTILITY PLAN	UTILITY PLAN
C-3.1	SEWER PLAN & PROFILE	SEWER PLAN & PROFILE
C-3.2	N/A	N/A
C-3.3	N/A	N/A
C-4.0	TRENCH DETAILS	TRENCH DETAILS
C-5.0	CIVIL SPECS	CIVIL SPECS
C-6.0	DETENTION PLAN	DETENTION PLAN
C-6.1	DRAINAGE PLAN	DRAINAGE PLAN
C-6.2	N/A	N/A
C-6.3	N/A	N/A
C-6.4	N/A	N/A
C-6.5	N/A	N/A
C-7.0	EROSION CONTROL PLAN	EROSION CONTROL PLAN
C-8.0	DEMO PLAN	DEMO PLAN
C-8.1	N/A	N/A
L-1.0	LANDSCAPE PLAN	LANDSCAPE PLAN
C-9.0	LOWERY PROFILE	LOWERY PROFILE
C-9.2	N/A	N/A

**FLOODPLAIN CERTIFICATION:**

By affixing my seal and signature, I Robert L. Johnston Jr., PLS No. 1626, 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.

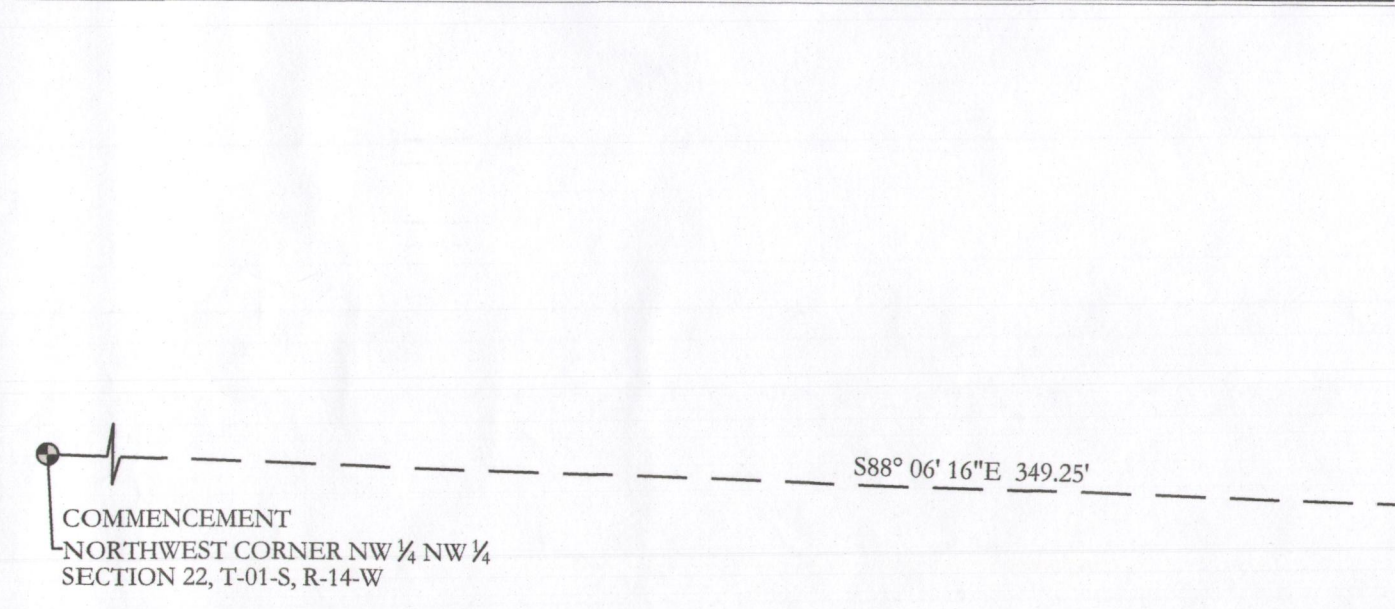
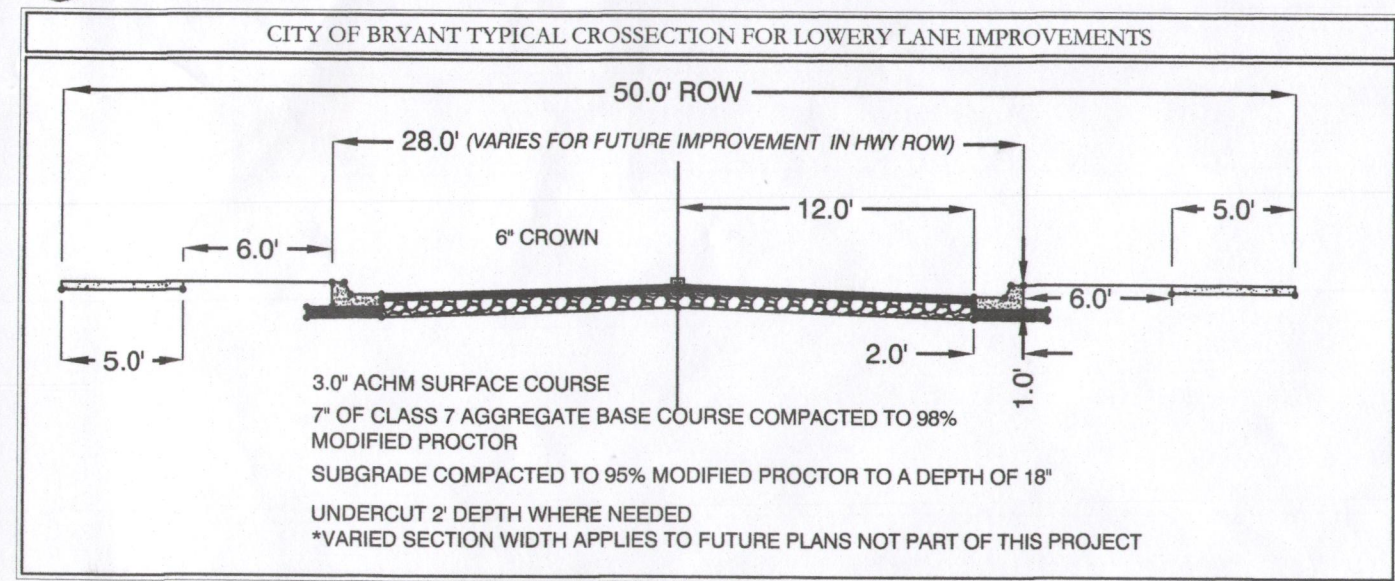
According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Benton County City of Rogers areas, panel # 05125C0240E, dated 06/05/2020, no portion of the property described hereon lies within the 100 year flood hazard boundary.

**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: STANDARD DEVELOPMENT COMPANY, LLC			
BRYANT C-STORE CITY OF BRYANT, SALINE COUNTY, ARKANSAS			
DATE:	09-20-2022	C.A.D. BY:	DRAWING NUMBER:
REVISED:	01/05/2023	CHECKED BY:	21-0275
SHEET:		SCALE:	
500	01S	14W	015/22 304 04 1762

K:\LAND PROJECTS\2004\COMMERCIAL\2021\21-0275 C-STORE BRYANT\CIVIL\DWG\21-0275 C-STORE REVISIT 2023\18-21-2022.DWG





**LEGAL DESCRIPTION:**

THOSE PORTIONS OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER, SECTION 22, AND THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER, SECTION 15, ALL IN T-1-S, R-14-W, SALINE COUNTY, ARKANSAS, DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER (NW 1/4 NW 1/4) OF SECTION 22; THENCE S88°06'16"E, ALONG THE NORTH LINE THEREOF A DISTANCE OF 349.25 FEET TO A FOUND PK NAIL IN ASPHALT; THENCE LEAVING SAID NORTH LINE, N00°58'25"W, A DISTANCE OF 23.07 FEET TO A FOUND 1/2" REBAR (PS #1141); THENCE N70°07'03"E, A DISTANCE OF 32.82 FEET TO A FOUND 1/2" REBAR (PS #1141); THENCE N70°18'03"E, A DISTANCE OF 17.57 FEET TO THE POINT OF BEGINNING OF HEREIN DESCRIBED TRACT; THENCE N70°18'03"E, A DISTANCE OF 183.32 FEET TO A FOUND 1/2" REBAR (PS #1141); THENCE S19°42'53"E, A DISTANCE OF 274.60 FEET TO A FOUND 1/2" REBAR (PS #1141) ON THE NORTH RIGHT-OF-WAY OF HIGHWAY 5; THENCE ALONG SAID NORTH RIGHT-OF-WAY, S70°15'40"W, A DISTANCE OF 275.04 FEET TO A FOUND 1/2" REBAR; THENCE S70°18'52"W, A DISTANCE OF 11.64 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF LOWERY LANE; THENCE N01°54'28"E, ALONG SAID EAST LINE THEREOF, A DISTANCE OF 255.52 FEET; THENCE N05°59'11"W, A DISTANCE OF 38.34 FEET TO THE POINT OF BEGINNING, CONTAINING 63,891 SQUARE FEET, OR 1.47 ACRES, MORE OR LESS.

**ALSO**

**SUBJECT TO A 20' CROSS ACCESS EASEMENT** BEING THOSE PORTIONS OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER, SECTION 22, IN T-1-S, R-14-W, SALINE COUNTY, ARKANSAS, DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER (NW 1/4 NW 1/4) OF SECTION 22; THENCE S88°06'16"E, ALONG THE NORTH LINE THEREOF A DISTANCE OF 349.25 FEET TO A FOUND PK NAIL IN ASPHALT; THENCE LEAVING SAID NORTH LINE, N00°58'25"W, A DISTANCE OF 23.07 FEET TO A FOUND 1/2" REBAR (PS #1141); THENCE N70°07'03"E, A DISTANCE OF 32.82 FEET TO A FOUND 1/2" REBAR (PS #1141); THENCE N70°18'03"E, A DISTANCE OF 17.57 FEET TO THE POINT OF BEGINNING OF HEREIN DESCRIBED ACCESS EASEMENT; THENCE S19°42'53"E, A DISTANCE OF 20.01 FEET; THENCE S68°25'02"W, A DISTANCE OF 257.95 FEET TO A POINT; THENCE N01°54'28"E, A DISTANCE OF 21.81 FEET TO A POINT; THENCE N68°25'02"E, A DISTANCE OF 244.91 FEET TO THE POINT OF BEGINNING, CONTAINING 5,078 SQ FT, OR 0.12 ACRES, MORE OR LESS.

**GENERAL SURVEYOR'S NOTES:**

THIS PLAT REPRESENTS A BOUNDARY SURVEY OF A PARCEL DESCRIBED IN SALINE COUNTY; DEED BOOK 2020, PAGE 012195.

ALL LISTED MEASUREMENTS ARE AS MEASURED IN THE FIELD. FOR RECORD MEASUREMENTS, SEE DEEDS OF RECORD.

ADJACENT OWNERSHIP IS LISTED AS FILED IN THE SALINE COUNTY TAX ASSESSOR'S OFFICE AND IS SHOWN FOR REFERENCE ONLY.

THIS SURVEY IS FOR THE EXCLUSIVE USE AND BENEFIT OF PARTIES SHOWN HEREIN. USE OR DUPLICATION OF THIS DOCUMENT BY ANY OTHER PARTIES IS PROHIBITED AND VOIDS SAID DOCUMENT.

**NOTE:** THIS SURVEY IS BASED ON LEGAL DESCRIPTIONS AND/OR TITLE WORK FURNISHED BY OTHERS. NO INVESTIGATION OR INDEPENDENT SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, OR ANY OTHER FACTS WHICH AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE. ANY LISTED EASEMENTS OR RIGHTS-OF-WAY WERE DETERMINED FROM LISTED REFERENCE DOCUMENTS AND HAVE NOT BEEN CHECKED FOR ACCURACY OR CORRECTNESS.

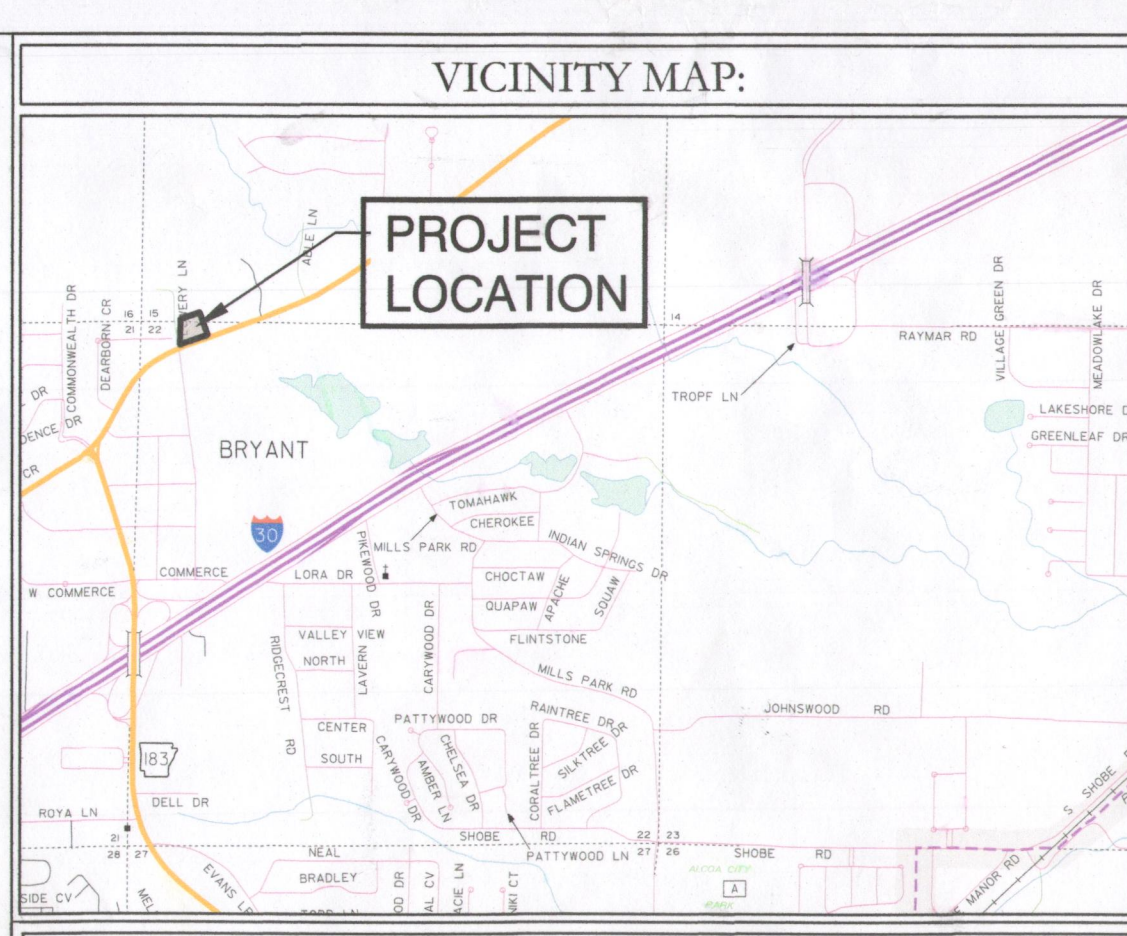
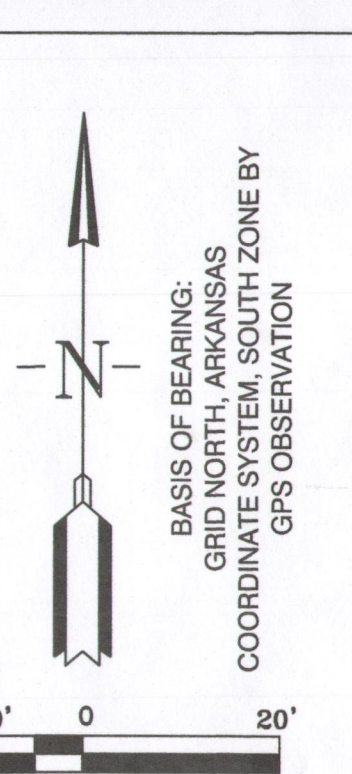
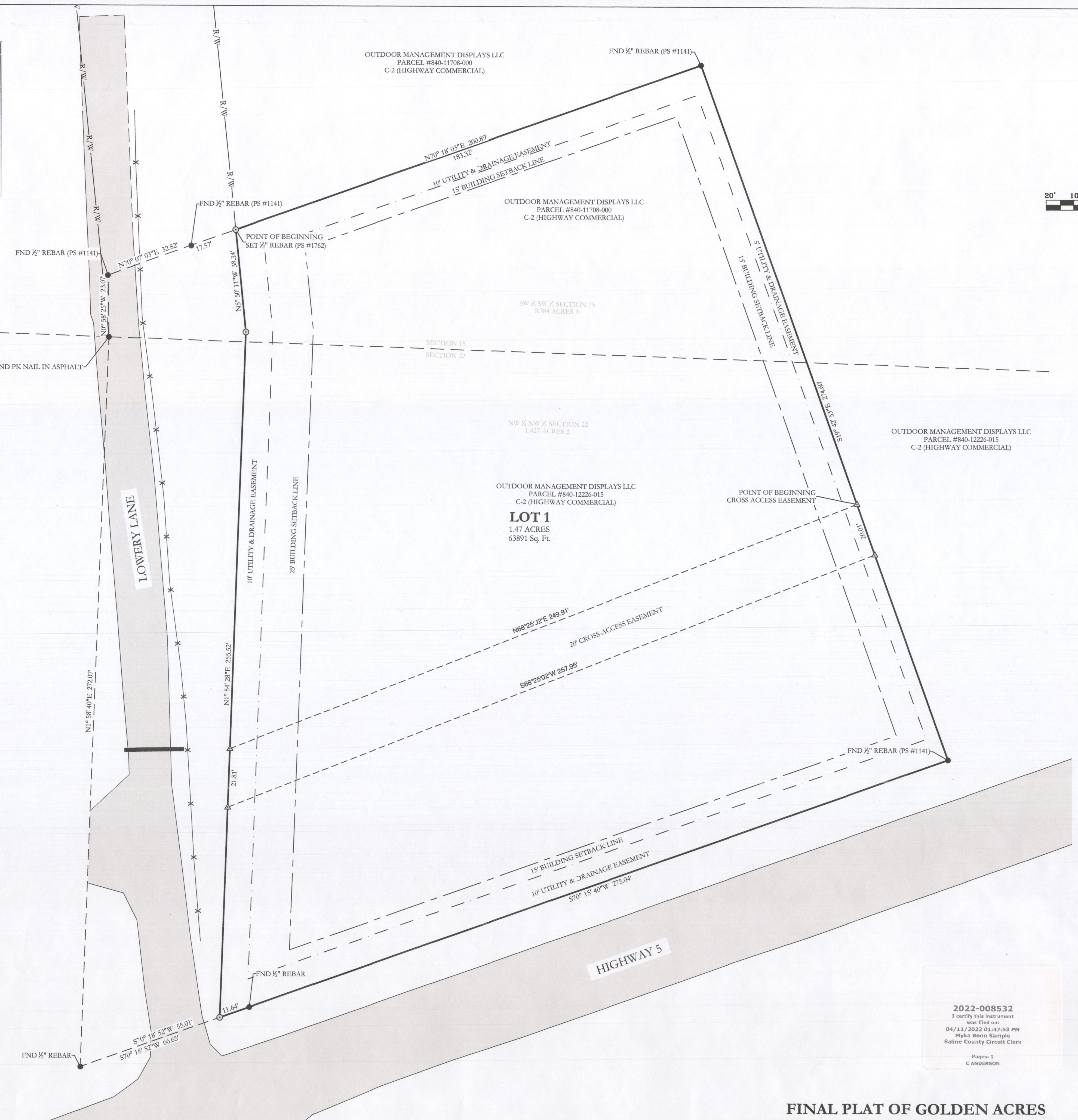
ONLY LISTED REFERENCE DOCUMENTS HEREON WERE USED AND CONSIDERED AS A PART OF THIS SURVEY. OTHER DOCUMENTS, IF ANY, COULD FURTHER AFFECT THIS TRACT.

**REFERENCE DOCUMENTS:**

WARRANTY DEED DOCUMENT BK-2020, PG-012195  
 SURVEY BY RASBURY SURVEYING JAMES A. RASBURY PS#1506 (DATED 06-10-2014)  
 SURVEY BY KERRY D. LANE, PS # 1141 (DATED 01-20-2021)  
 GLO NOTES AND PLATS T-1-S, R-14-W, SECTION 22

**SURVEYORS NOTES:**

1. RIGHT-OF-WAY ON LOWERY LANE WAS DERIVED FOR SURVEY DONE BY RASBURY SURVEYING, JAMES A. RASBURY PS#1506 (DATED 06-10-2014)



<b>OWNER:</b> Name: STANDARD OIL, LLC Address: 2917 KAVANAUGH BOULEVARD LITTLE ROCK, AR 72205	<b>DEVELOPER:</b> Name: STANDARD OIL, LLC Address: 2917 KAVANAUGH BOULEVARD LITTLE ROCK, AR 72205
--	--

**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 the within plat.

Date of Execution: 2/17/2022

Source of Title: Saline County Deed Book 2020, Page 012195.

**CERTIFICATE OF FINAL SURVEYING ACCURACY:**

I, Jonathan L. Hope, hereby certify that this plat correctly represents a survey completed by me, or under my supervision, that the boundary lines shown hereon correspond with the description in the deeds cited in the above Source of Titles; and that all monuments which were found or placed on the property are correctly described and located.

Date of Execution: 2/17/2022

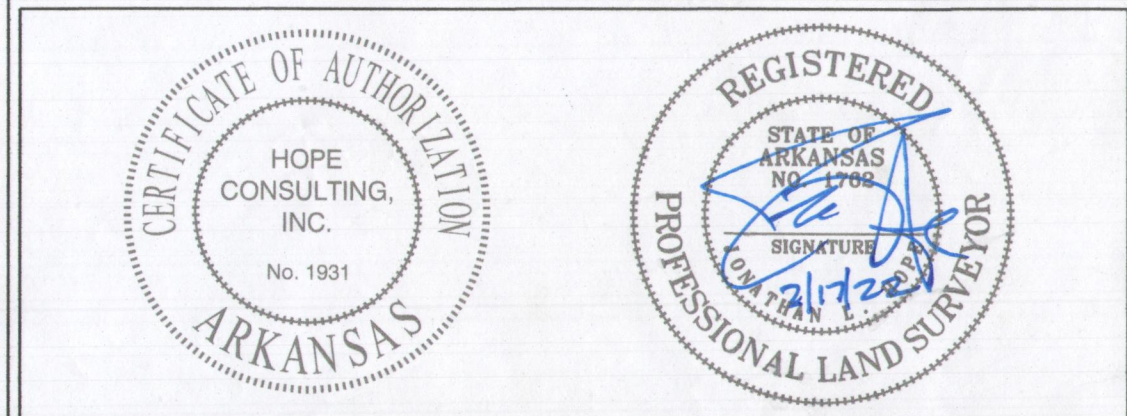
Name: Jonathan L. Hope, Registered Professional Land Surveyor, No. 1762 Arkansas

**CERTIFICATE OF FINAL APPROVAL:**

Pursuant to the City of Bryant Subdivision Rules and Regulations, this document was given approval by the Bryant Planning Commission at a meeting held on 2/17/2022. All documents is hereby accepted, and this certificate executed under the authority of said rules and regulations.

Date of Execution: 2/17/2022

Name: Rick Johnson, Bryant Planning Commission



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.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Saline County unincorporated areas, panel # 05125C0240E, dated 06/05/2020, no portion of the property described hereon does lie within the 100 year flood hazard boundary.

<b>PROPERTY SPECIFICATIONS:</b>	
<b>OWNER:</b> STANDARD OIL, LLC 2917 KAVANAUGH BOULEVARD LITTLE ROCK, AR 72205	<b>SOURCE OF WATER:</b> CITY OF BRYANT <b>SOURCE OF SEWER:</b> CITY OF BRYANT <b>SOURCE OF ELECTRIC:</b> FIRST ELECTRIC
<b>DEVELOPER / SUBDIVIDER:</b> STANDARD OIL, LLC 2917 KAVANAUGH BOULEVARD LITTLE ROCK, AR 72205	<b>BUILDING SETBACKS:</b> FRONT - 15' OR AS SHOWN REAR - 15' OR AS SHOWN SIDE - 25' OR AS SHOWN
<b>ENGINEERS:</b> HOPE CONSULTING, INC. 117 S MARKET STREET BENTON, AR 72015	<b>EASEMENTS: UTILITY &amp; DRAINAGE (D.E. &amp; U.E.):</b> FRONT - 10' OR AS SHOWN REAR - 10' OR AS SHOWN SIDE - 5' OR AS SHOWN
<b>NAME OF SUBDIVISION:</b> GOLDEN ACRES	<b>LOT CORNERS:</b> SET 1/2" REBAR WITH CAP
<b>ZONING CLASSIFICATION:</b> C-2 (HIGHWAY COMMERCIAL)	

2022-008532  
 I certify this instrument was filed on:  
 04/11/2022 01:47:53 PM  
 Myka Bono Sample  
 Saline County Circuit Clerk

Pages: 1  
 C ANDERSON

**FINAL PLAT OF GOLDEN ACRES**  
 A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, 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: STANDARD OIL, LLC			
<b>FINAL PLAT OF GOLDEN ACRES</b> A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS			
DATE: 11/24/2021	C.A.D. BY: JPP	DRAWING NUMBER:	
REVISED:	CHECKED BY:		21-0275
SHEET:	SCALE: 1" = 20'		

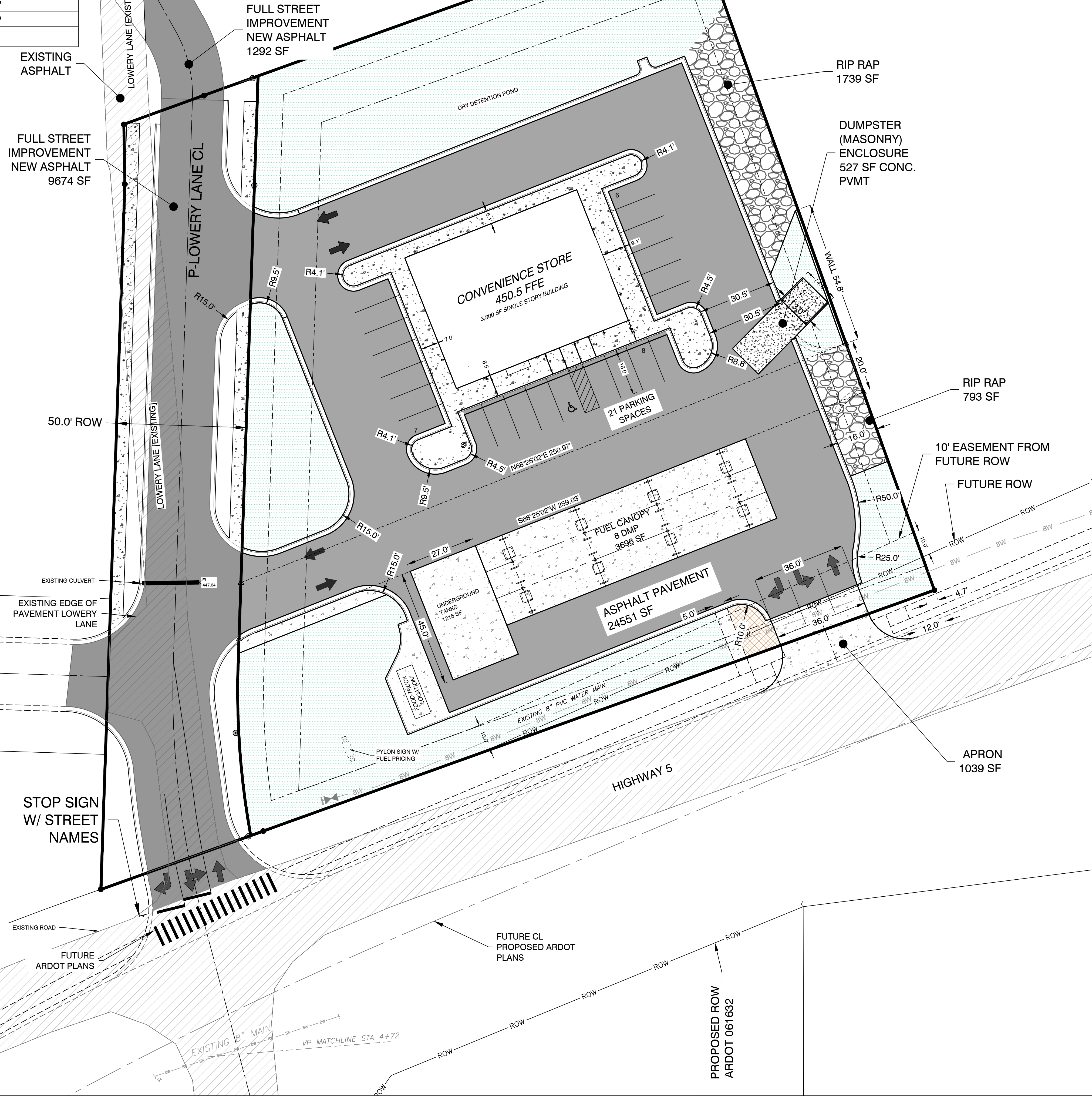
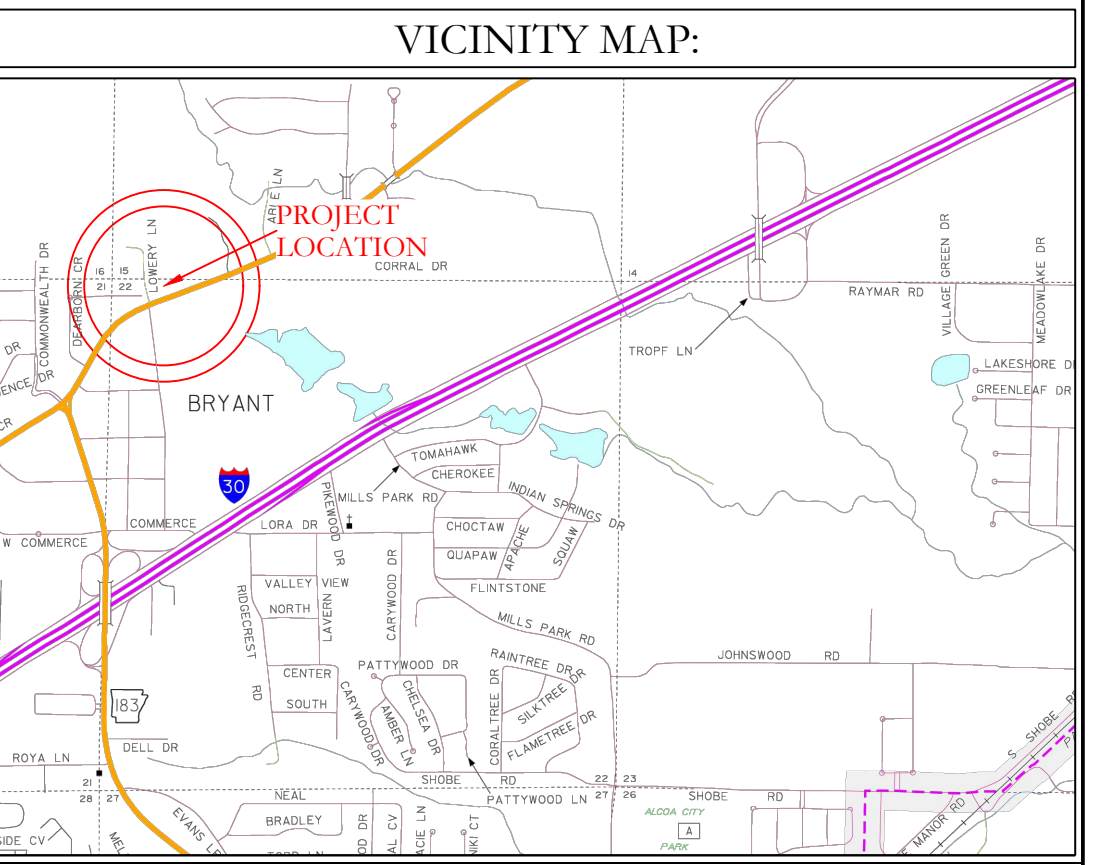


**CONTACTS UTILITIES AND CITY AND STATE AGENCIES**

AGENCY	TITLE	NAME	CONTACT
BRYANT PUBLIC WORKS	DIRECTOR	TIM FOURNIER	501-366-0343
BRYANT PUBLIC WORKS	ENGINEER	TED TAYLOR	501-366-0343
BRYANT WATER	INSPECTOR	JOE HENRY	501-246-0516
ENERGY	CONTACT	JEREMY HENDERSON	800-368-3749
CENTERPOINT (GAS)	CONTACT	ADAM GOBER	501-541-7509
ARDOT	PERMIT OFFICER DISTRICT SIX	CORY SUTTON	501 551-5207

**LOWERY LANE IMPROVEMENT NOTES**

- ENTIRE ROW TO BE DEDICATED TO CITY OF BRYANT
- LOWERY STREET IMPROVEMENT CONSTRUCTION IS A PLANNED PORTION OF THE CONSTRUCTION FOR THIS PROJECT.



**SITE PLAN NOTES**

**PARKING REQUIREMENTS:**

TOTAL: 21 SPACES (16 REQUIRED)  
1 HANDICAP (1 REQUIRED)

TOTAL AREA: 78,850 SF  
 PROPOSED PAVEMENT/ROOF: 55,589 SF  
 RIP RAP: 2,532 SF  
 PROPOSED GREEN SPACE: 20,729 SF  
 PROPOSED BUILDING: 3,500 SF

**ZONING AND SETBACKS**

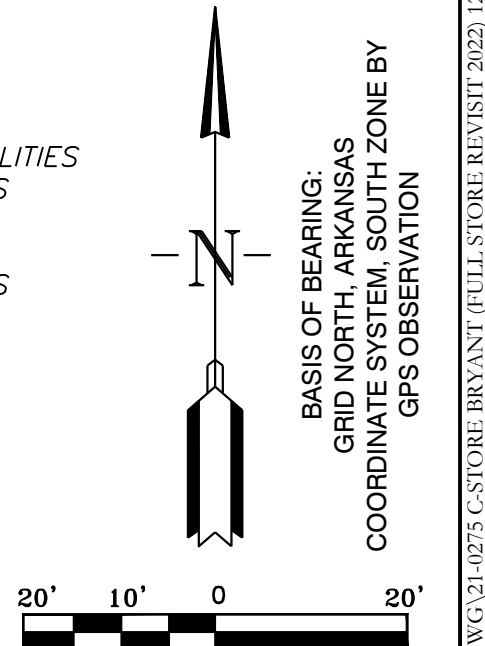
ZONING: C2  
 FRONT: 10'  
 SIDE: NONE (25' FOR RESIDENTIAL NEIGHBORS)  
 REAR: 25' (55 RESIDENTIAL NEIGHBORS)



**DISCLAIMER**  
 UTILITIES SHOWN ARE NOTED BY VISIBLE OBSERVATION ONLY. UNDERGROUND UTILITIES ARE APPROXIMATE. NO EXCAVATION HAS TAKEN PLACE AS OF THIS DATE TO DETERMINE THE EXACT LOCATION OF UNDERGROUND UTILITIES SHOWN ON THIS SURVEY.

**FLOOD STATEMENT**

NO PORTION OF THIS PROPERTY IS WITHIN THE 100 YEAR SPECIAL FLOOD HAZARD AREA ACCORDING TO THE FLOOD INSURANCE RATE MAP PANEL #05125C0240E DATED 06-05-2020.



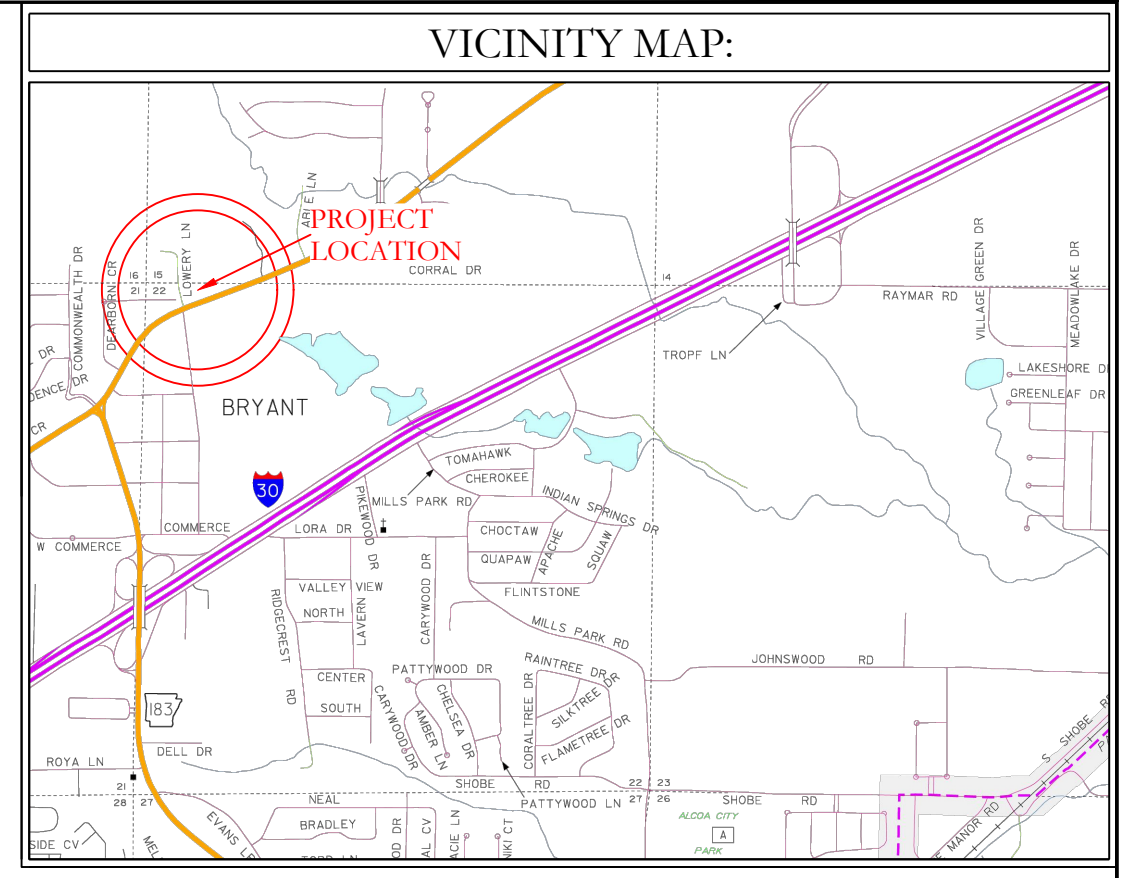
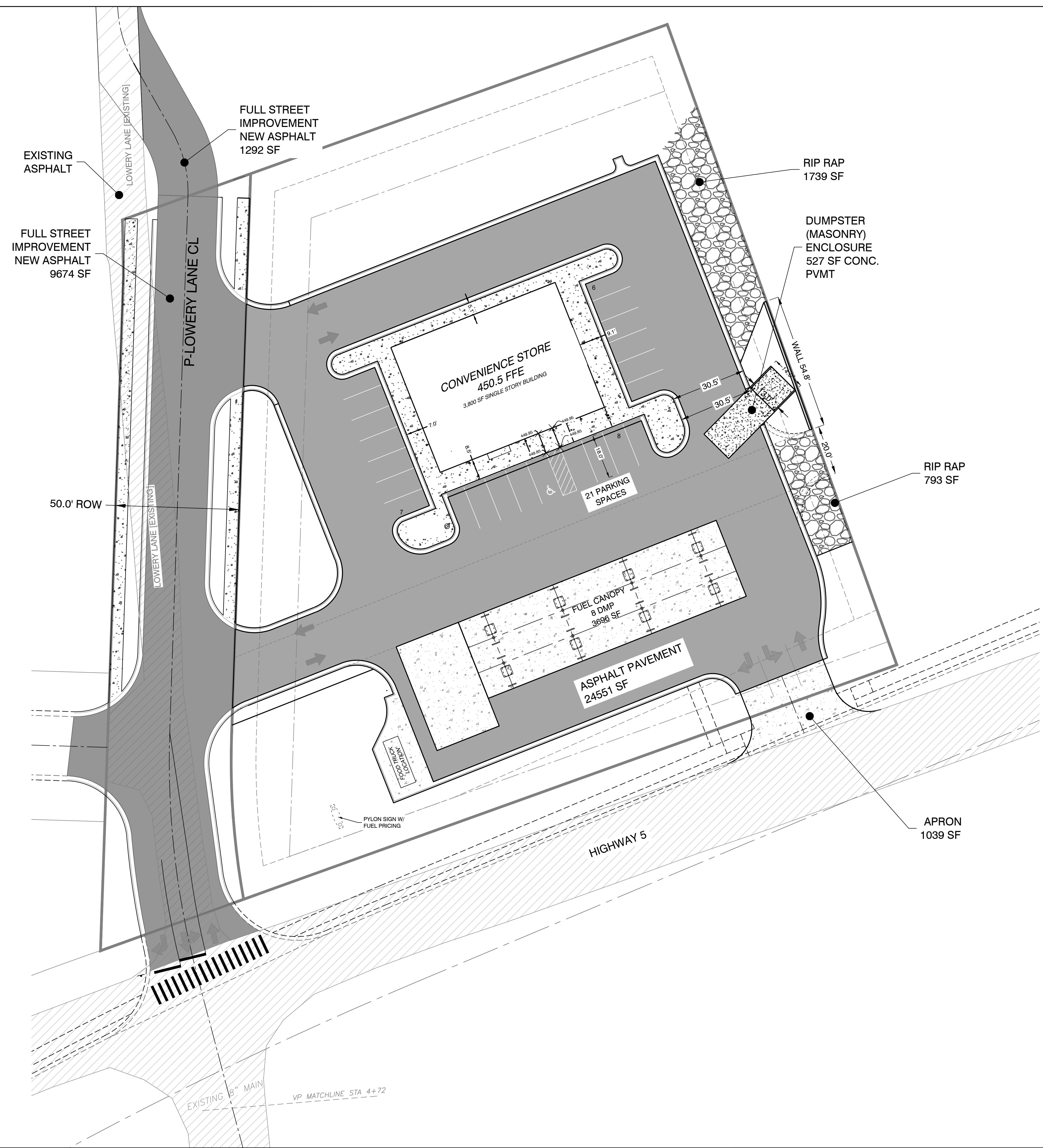
**HOPE CONSULTING ENGINEERS - SURVEYORS**  
 129 N. Main Street, Benton, Arkansas 72015  
 PH. (501)315-2626 FAX (501) 315-0024  
 www.hopeconsulting.com

FOR USE AND BENEFIT OF:  
**STANDARD DEVELOPMENT COMPANY, LLC**  
 BRYANT C-STORE  
 SITE PLAN  
 BRYANT, SALINE COUNTY, ARKANSAS

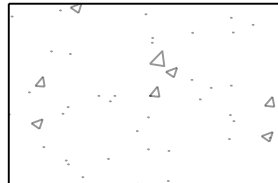
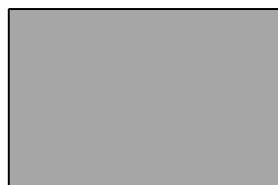


DATE: 9/20/2022	C.A.D. BY:	DRAWING NUMBER:
REVISED: 01/05/2023	CHECKED BY:	21-0275
SHEET: C-1.0	SCALE:	

500 01S 14W 0 15/22 304 62 1762





**PAVEMENT LEGEND**

-  PROPOSED CONCRETE PAVEMENT
-  PROPOSED ASPHALT PAVEMENT
-  EXISTING ASPHALT PAVEMENT
-  PROPOSED ASPHALT PAVEMENT FUTURE STREET IMPROVEMENTS



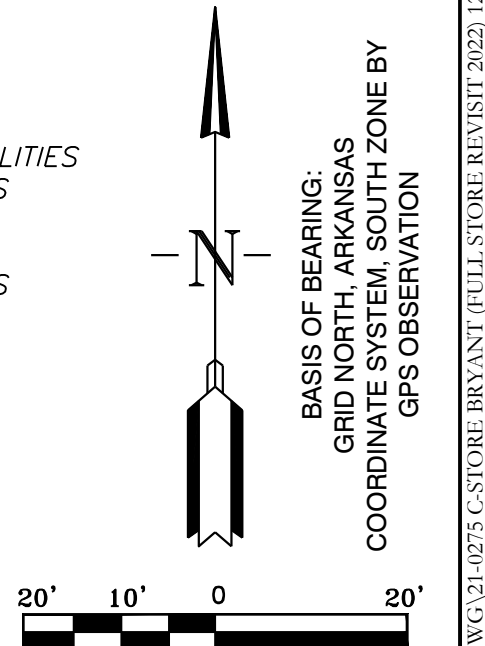
Know what's below.  
Call before you dig.

**DISCLAIMER**

UTILITIES SHOWN ARE NOTED BY VISIBLE OBSERVATION ONLY. UNDERGROUND UTILITIES ARE APPROXIMATE. NO EXCAVATION HAS TAKEN PLACE AS OF THIS DATE TO DETERMINE THE EXACT LOCATION OF UNDERGROUND UTILITIES SHOWN ON THIS SURVEY

**FLOOD STATEMENT**

NO PORTION OF THIS PROPERTY IS WITHIN THE 100 YEAR SPECIAL FLOOD HAZARD AREA ACCORDING TO THE FLOOD INSURANCE RATE MAP PANEL #05125C0240E DATED 06-05-2020.



**HOPE CONSULTING** ENGINEERS - SURVEYORS

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

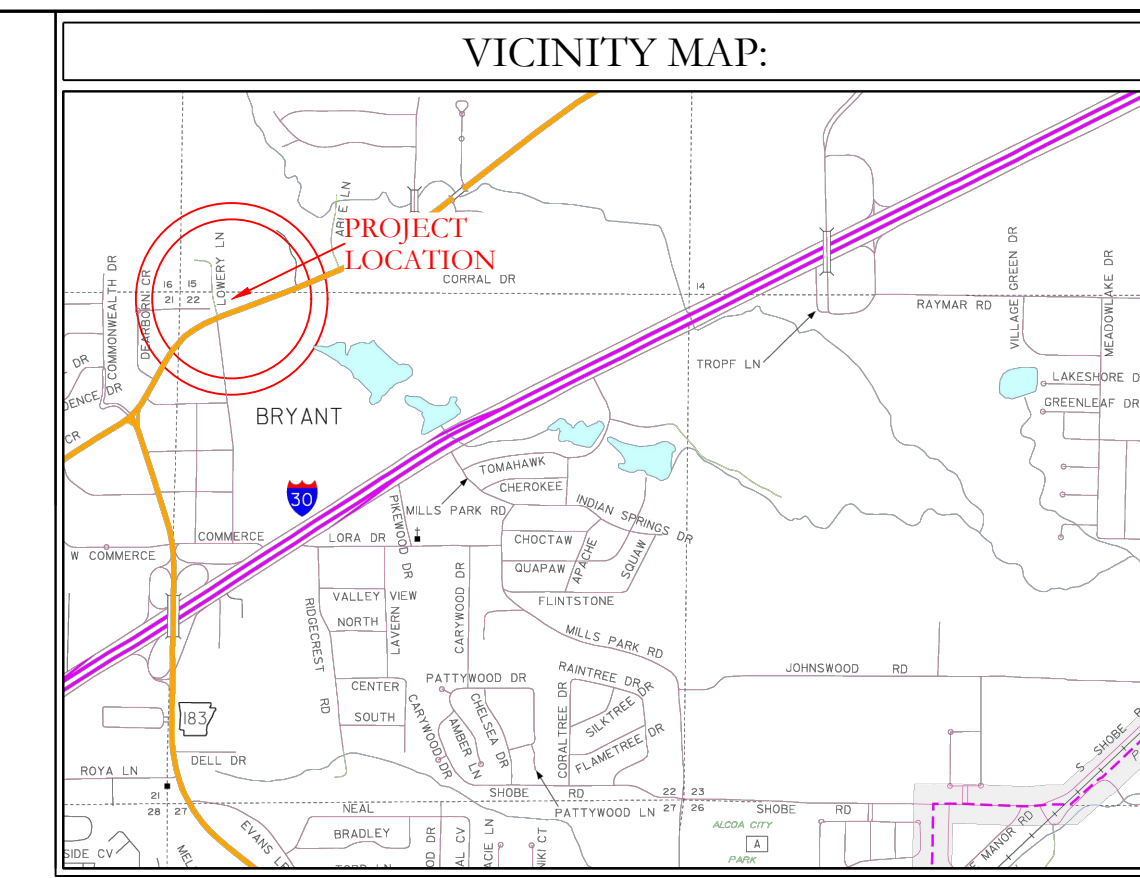
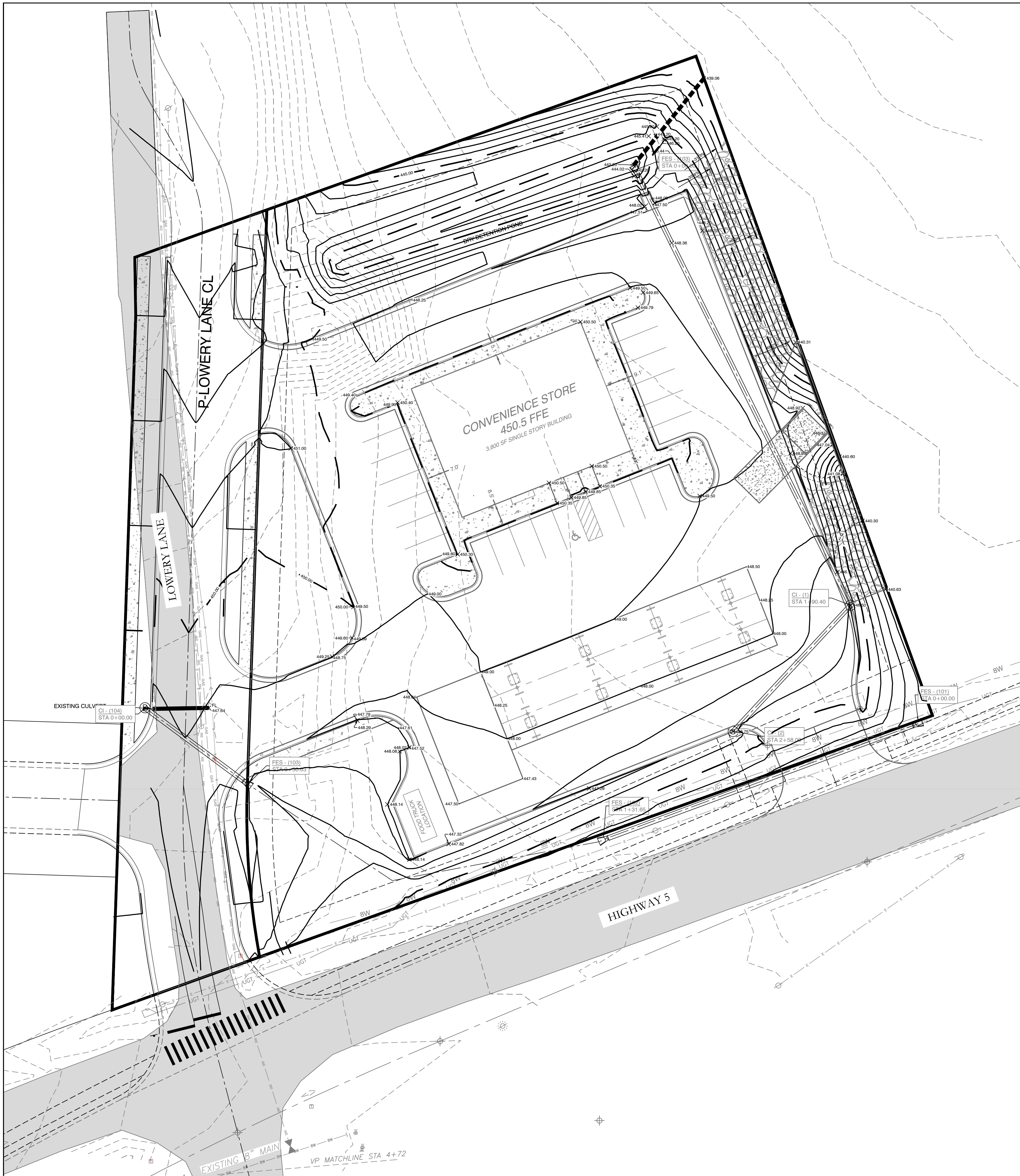
FOR USE AND BENEFIT OF:  
**STANDARD DEVELOPMENT COMPANY, LLC**

**BRYANT C-STORE**  
PAVING PLAN  
BRYANT, SALINE COUNTY, ARKANSAS

DATE:	9-20-2022	C.A.D. BY:		DRAWING NUMBER:
REVISED:	01/05/2023	CHECKED BY:		21-0275
SHEET:	C-1.2	SCALE:		
500	01S	14W	0 15/22	304 62 1762

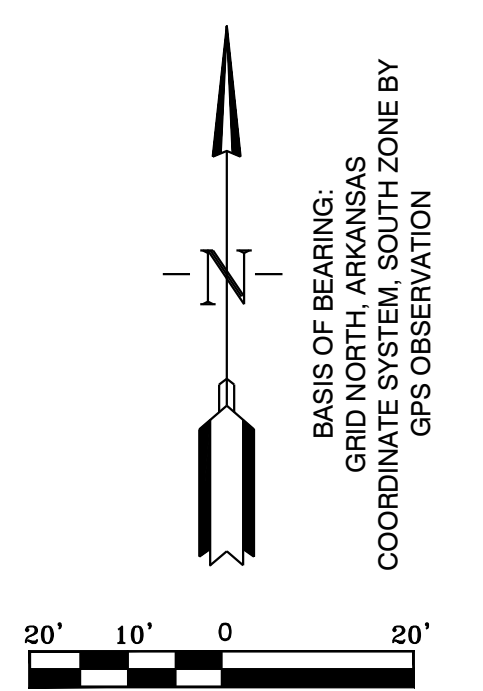
K:\LAND PROJECTS\2024\COMMERCE\2021-21-0275\C-STORE\_BRYANT\DWG\21-0275-C-STORE\_BRYANT (PULL STORE REVISION) 2022-12-21-2022.DWG





**GRADING PLAN NOTES**

1. DESIGN CONTOURS SHOWN ARE FINISHED GRADE.
2. SPOT ELEVATIONS SHOWN ARE FINISHED ASPHALT, GROUND OR CONCRETE ELEVATIONS.
3. CLEAR AND GRUB AREAS OF THE SITE WHERE CUT OR FILL IS TO OCCUR.
4. MAXIMUM SLOPE IN ANY DIRECTION IN ADA PARKING AREA IS 2%. IF SLOPES IN THESE AREAS EXCEED 2%, NOTIFY THE DESIGNER IMMEDIATELY. THE MAXIMUM LONGITUDINAL SLOPE OF SIDEWALKS IS 5% WITH A 2% MAXIMUM CROSS SLOPE.
5. STORM DRAINAGE PIPES ARE TO BE HDPE.
6. FILL SHALL BE COMPACTED TO AT LEAST 98% OF THE MATERIAL'S MAXIMUM STANDARD PROCTOR DRY DENSITY.
7. THE MOISTURE CONTENT OF FILL MATERIAL SHALL BE WITHIN THE RANGE OF 1% BELOW TO 3% ABOVE THE OPTIMUM MOISTURE CONTENT.
8. SUBGRADES SHALL BE PROOF-ROLLED WITH A LOADED DUMP TRUCK TO DETECT ZONES OF UNSUITABLE AND/OR EXCESSIVELY WET SOILS. IF PUMPING BEGINS, COMPACTION SHALL BE STOPPED IMMEDIATELY AND RESUMED ONLY WHEN THE MATERIAL IS SUFFICIENTLY DRY THAT PUMPING DOES NOT OCCUR.
9. ALL UNSUITABLE SOILS SHALL BE USED ON SITE FOR FILL PURPOSES OUTSIDE THE AREAS OF BUILDING AND PAVEMENT CONSTRUCTION.
10. PROPER DRAINAGE SHALL BE MAINTAINED THROUGHOUT THE PROJECT SITE TO PREVENT THE INCREASE OF THE IN-SITU SOILS MOISTURE CONTENT.

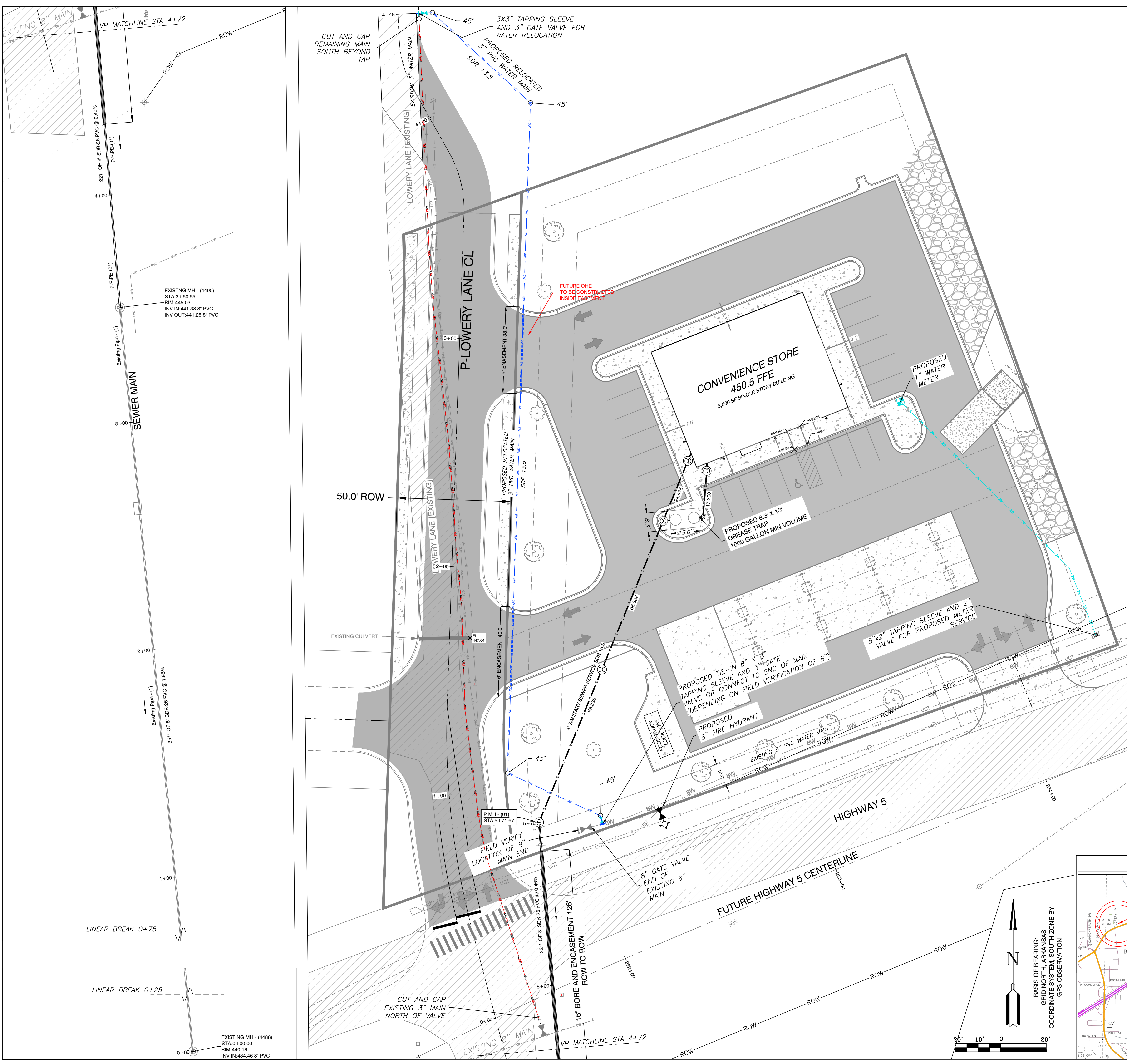


BASIS OF BEARING:  
 GRID NORTH, ARKANSAS  
 COORDINATE SYSTEM, SOUTH ZONE BY  
 GPS OBSERVATION

<b>HOPE CONSULTING</b> 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: <b>STANDARD DEVELOPMENT COMPANY, LLC</b>			
<b>BRYANT C-STORE</b> GRADING PLAN BRYANT, SALINE COUNTY, ARKANSAS			
DATE:	9/20/2022	C.A.D. BY:	DRAWING NUMBER:
REVISED:	01/05/2023	CHECKED BY:	<b>21-0275</b>
SHEET:	C-1.0	SCALE:	
500	01S	14W	0 15/22 304 62 1762

K:\LAND PROJECTS\2024\COMMERCIAL\2021-09-20\21-0275\C-STORE\_BRYANT\DWG\21-0275-C-STORE\_BRYANT (FULL STORE REVISION 2022).DWG





**SEWER LEGEND**

- SANITARY SEWER MANHOLE PROP.\*
- SANITARY SEWER MANHOLE EXIST.
- CLEANOUT
- PROPOSED SEWER SERVICE

**SEWER NOTES**

1. ALL SEWER INFRASTRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION".
2. INFORMATION ON DEPTH OF EXISTING TIE IN MANHOLE AND DOWNSTREAM MH OBTAINED FROM EFS EDGE GIS DATA.
3. 16" BORE AND ENCASEMENT FOR HIGHWAY 5 CROSSING OF 8" MAIN EXTENSION.
4. CASING SPACERS SHALL BE STAINLESS STEEL
5. THERE IS ONE PROPOSED SANITARY SEWER MH

**WATER LEGEND**

- FIRE HYDRANT
- BLOW OFF
- PROPOSED GATE VALVE
- PROPOSED 1" WATER METER
- PROPOSED WATER MAIN
- 2" PROPOSED WATER SERVICE LINE
- 3" ABANDONED PORTION

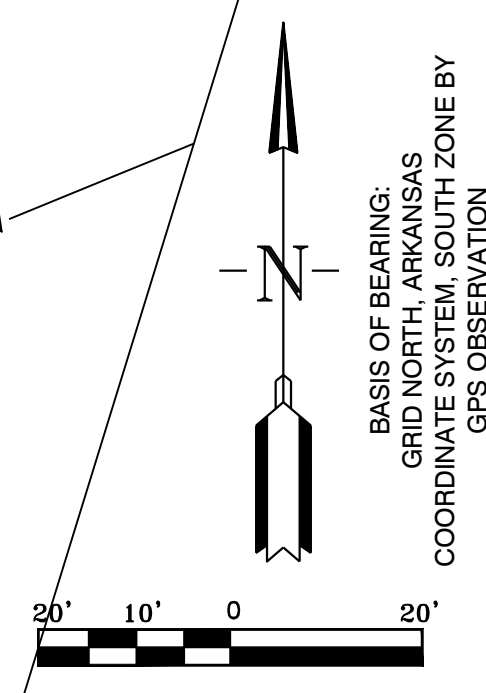
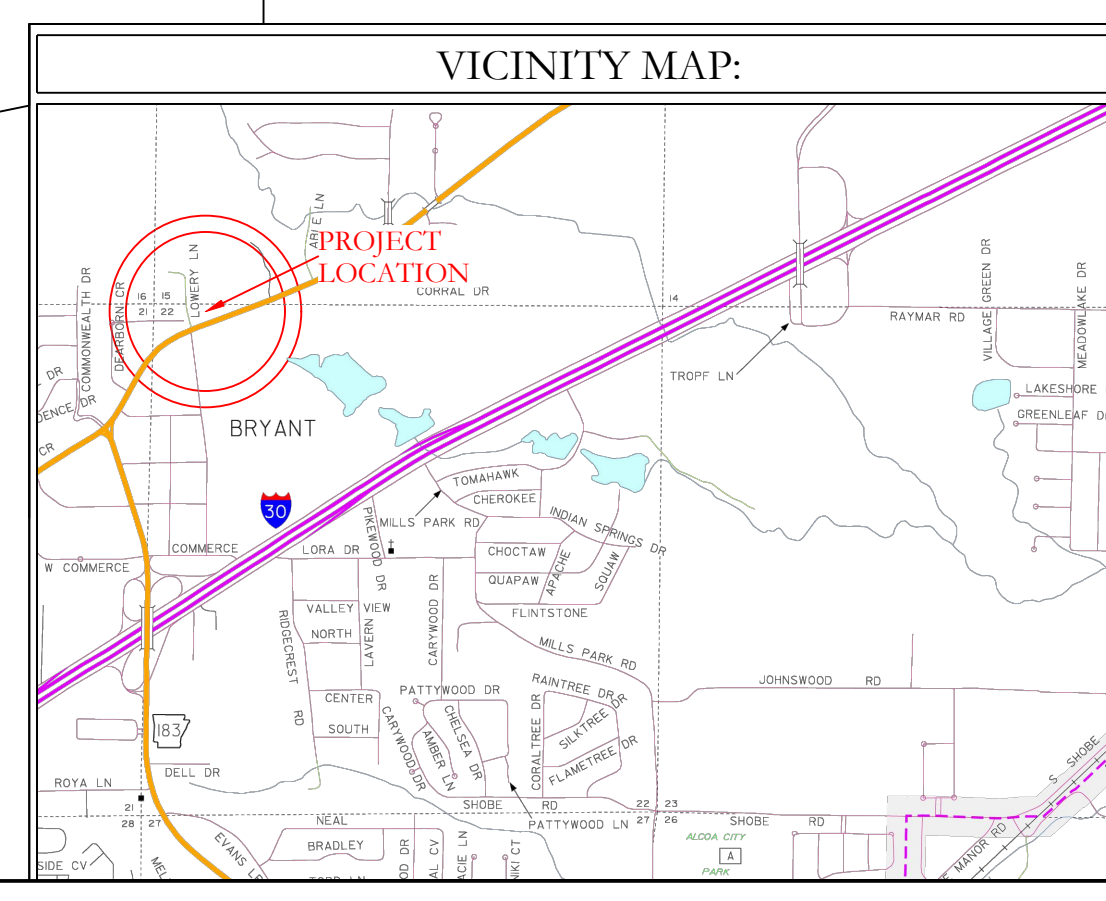
**WATER NOTES**

1. ALL WATER INFRASTRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION".
2. CONSTRUCT 3" SDR-13.5 ALONG LOWERY LANE.
3. 6" STEEL ENCASEMENT UNDER DRIVEWAYS ON 3" MAIN
4. CASING SPACERS SHALL BE STAINLESS STEEL.

**ELECTRIC/TELECOMMUNICATION NOTES**

1. OVERHEAD ELECTRIC UTILITIES AND PHONE/TELECOMMUNICATIONS LINES AFFECTED BY LOWERY LANE CHANGES WILL NEED TO BE RELOCATED IN COOPERATION WITH THE RESPECTIVE UTILITY PROVIDERS.

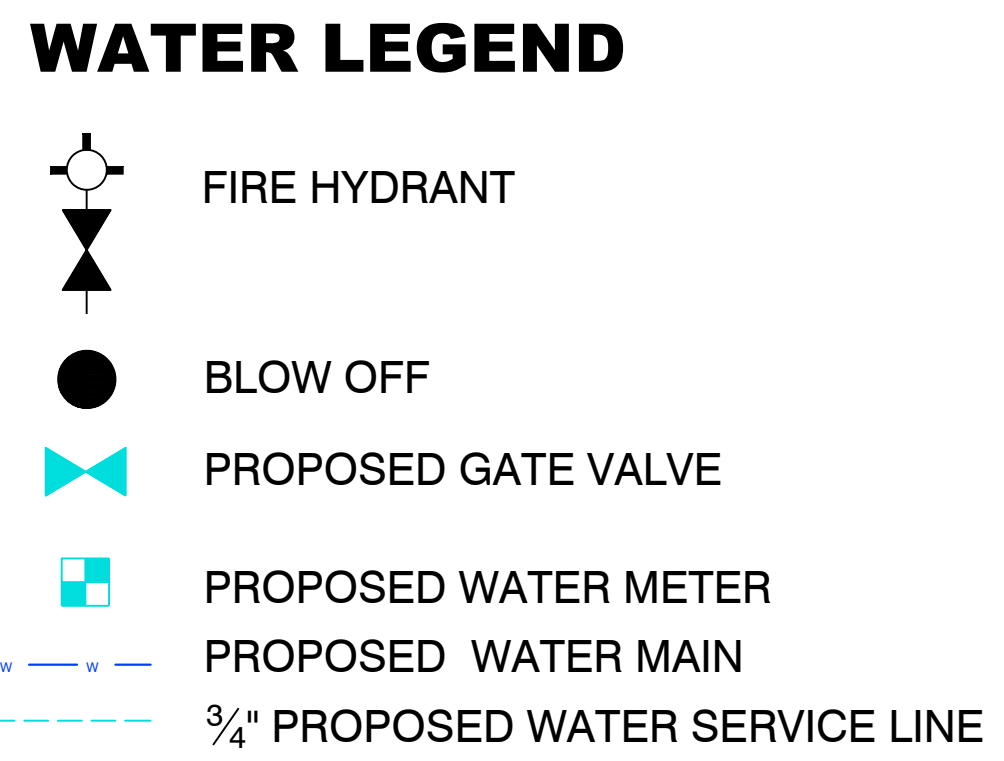
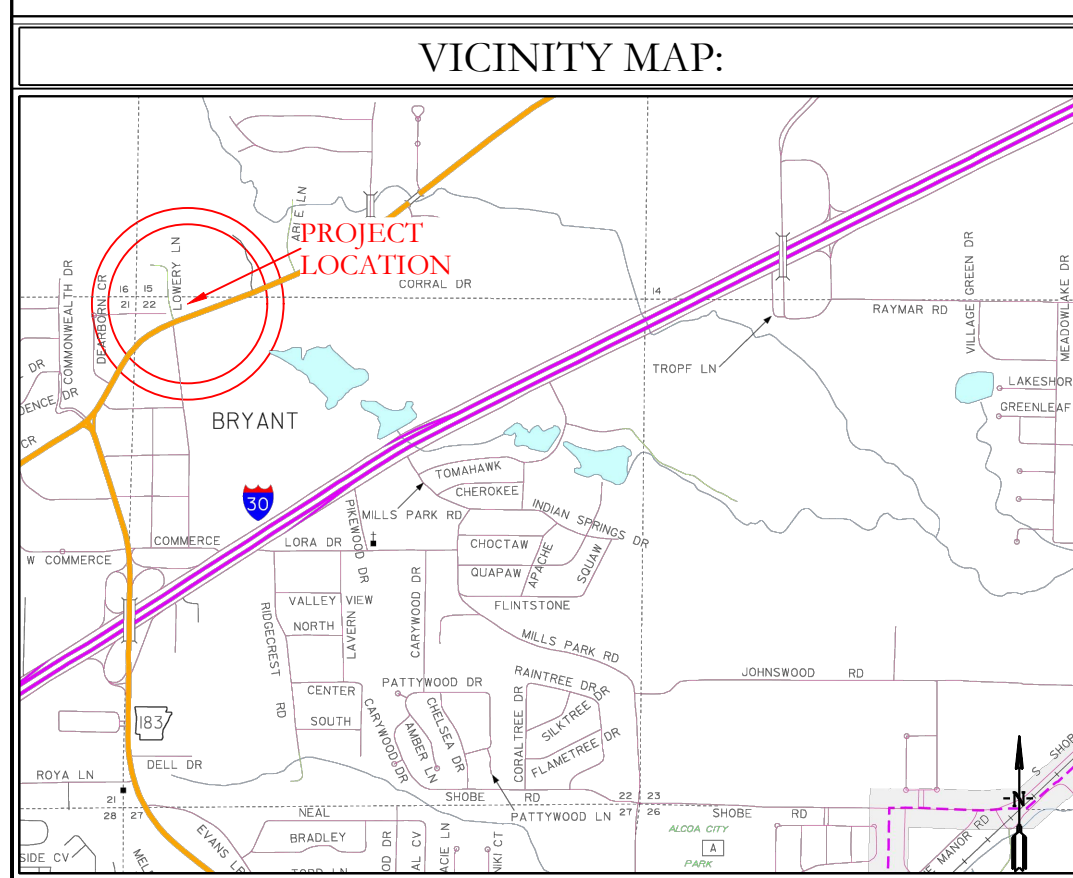
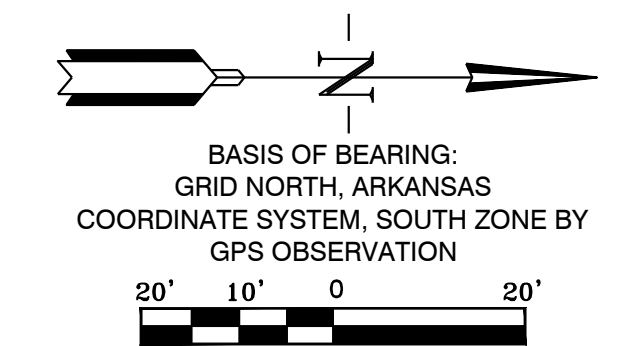
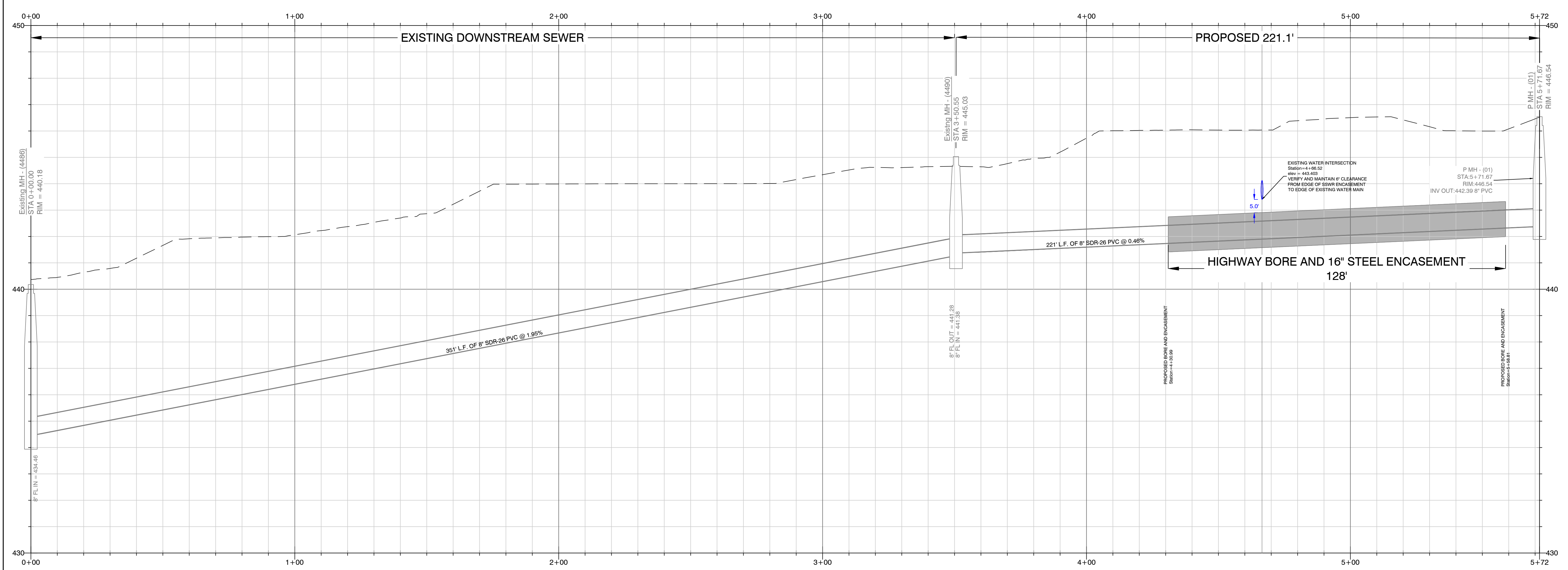
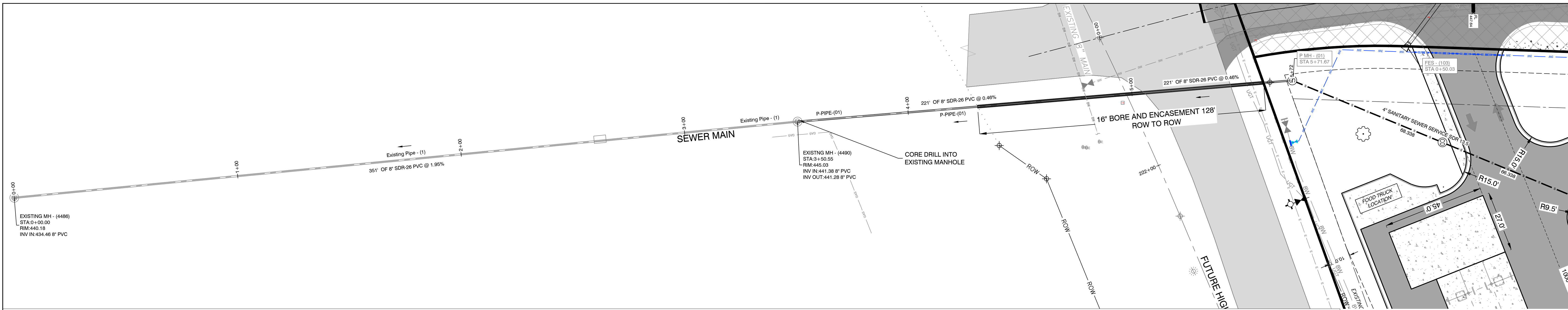
PROPOSED OVER HEAD POWER



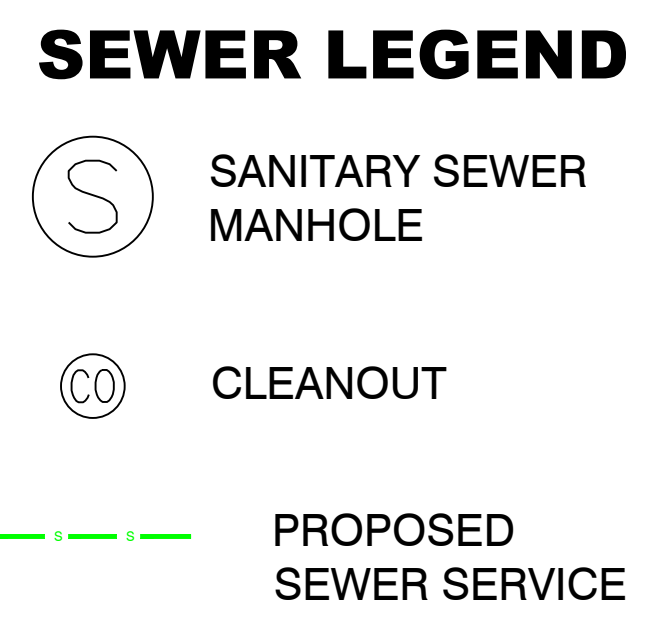
<b>HOPE CONSULTING</b> ENGINEERS - SURVEYORS		129 N. Main Street, Benton, Arkansas 72015 PH. (501)315-2626 FAX (501) 315-0024 www.hopeconsulting.com
FOR USE AND BENEFIT OF: <b>STANDARD DEVELOPMENT COMPANY, LLC</b>		
<b>BRYANT C-STORE UTILITY PLAN</b> BRYANT, SALINE COUNTY, ARKANSAS		
DATE: 9-20-2022	C.A.D. BY:	DRAWING NUMBER:
REVISED: 01/05/2023	CHECKED BY:	<b>21-0275</b>
SHEET: C-30	SCALE:	
500	01S	14W
		0 15/22
		304
		62
		1762

K:\LAND PROJECTS\2021\COMMERCIAL\2021-0275\C-STORE\BRYANT\UTILITY.DWG 21-0275-C-STORE-BRYANT (FULL STORE REVISIT 2022).12.21.2022.DWG





- WATER NOTES**
- ALL WATER AND SEWER INFRASTRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION".
  - CONSTRUCT 3" SDR 13.5 ALONG LOWERY LANE.
  - 6" STEEL ENCASUREMENT UNDER DRIVEWAYS ON 3" MAIN



- SEWER NOTES**
- ALL WATER AND SEWER INFRASTRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION".
  - INFORMATION ON DEPTH OF EXISTING TIE IN MANHOLE AND DOWNSTREAM MH OBTAINED FROM EFS EDGE GIS DATA.
  - 16" BORE AND ENCASUREMENT FOR HIGHWAY 5 CROSSING OF 8" MAIN EXTENSION.
  - CASING SPACERS SHALL BE STAINLESS STEEL

**HOPE CONSULTING**  
ENGINEERS - SURVEYORS

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

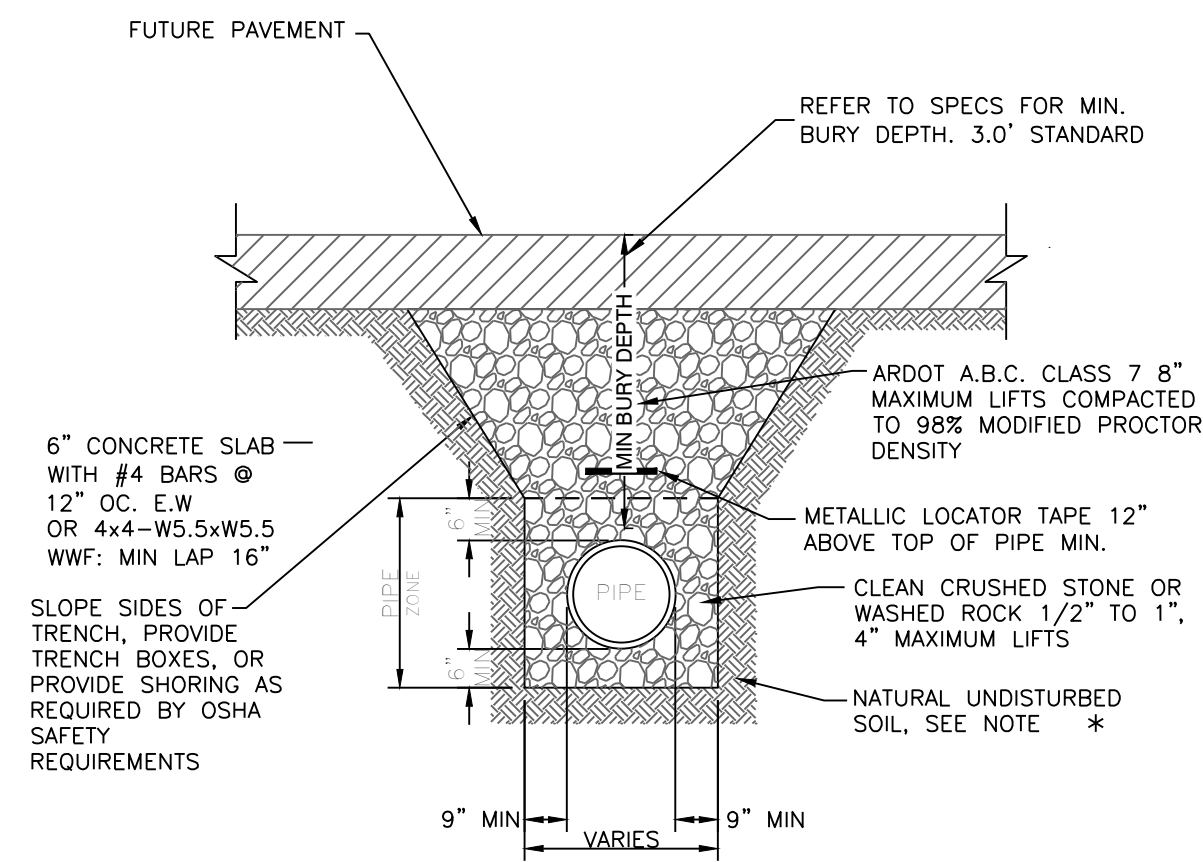
FOR USE AND BENEFIT OF:  
**STANDARD DEVELOPMENT COMPANY, LLC**

**BRYANT C-STORE  
SEWER UTILITY PLAN**  
BRYANT, SALINE COUNTY, ARKANSAS

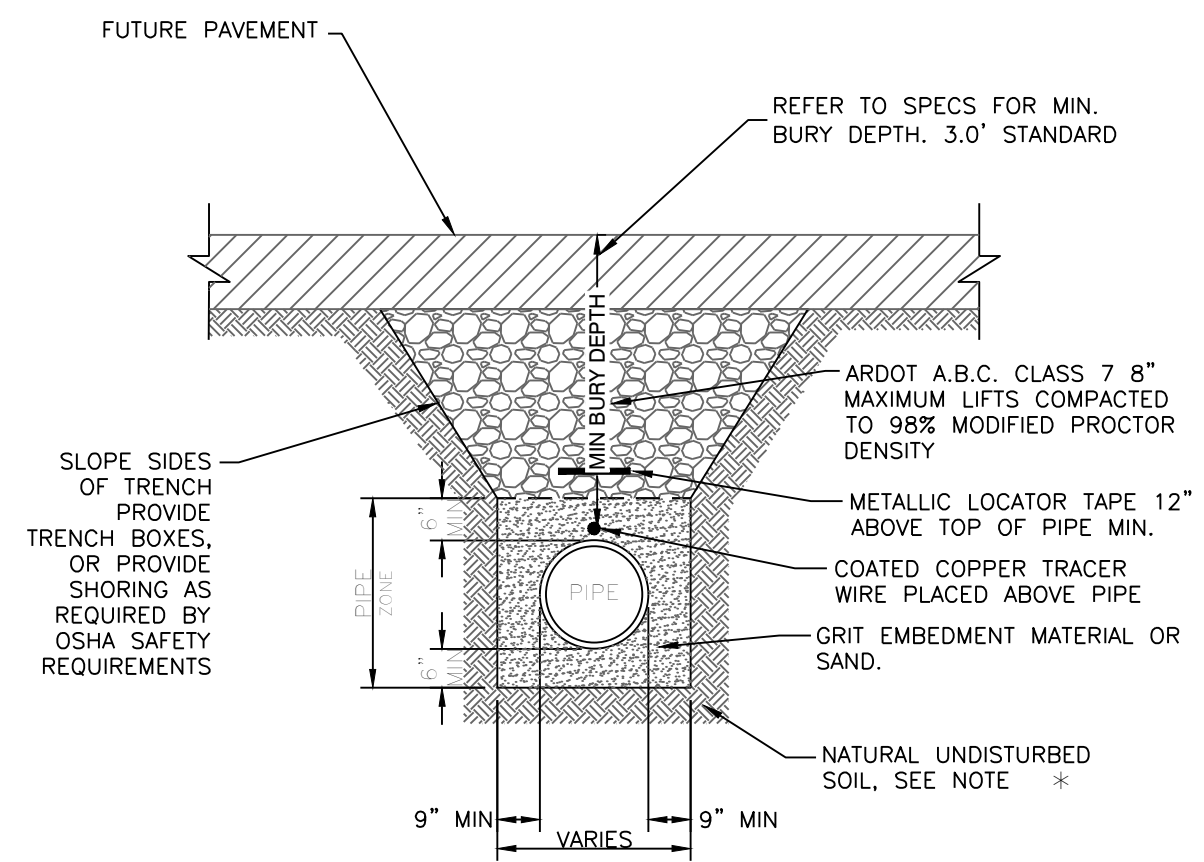
DATE: 9-20-2022	C.A.D. BY:	DRAWING NUMBER:
REVISED: 01/05/2023	CHECKED BY:	21-0275
SHEET: C-3.1	SCALE:	
500	01S	14W
0	15/22	304
62	1762	

K:\LAND PROJECTS\2024\COMMERCE\2024-0275 C-STORE.BRYANT\UTILITY.DWG 21-0275 C-STORE.BRYANT UTILITY STORE REVISED 2025 12-21-2022.DWG

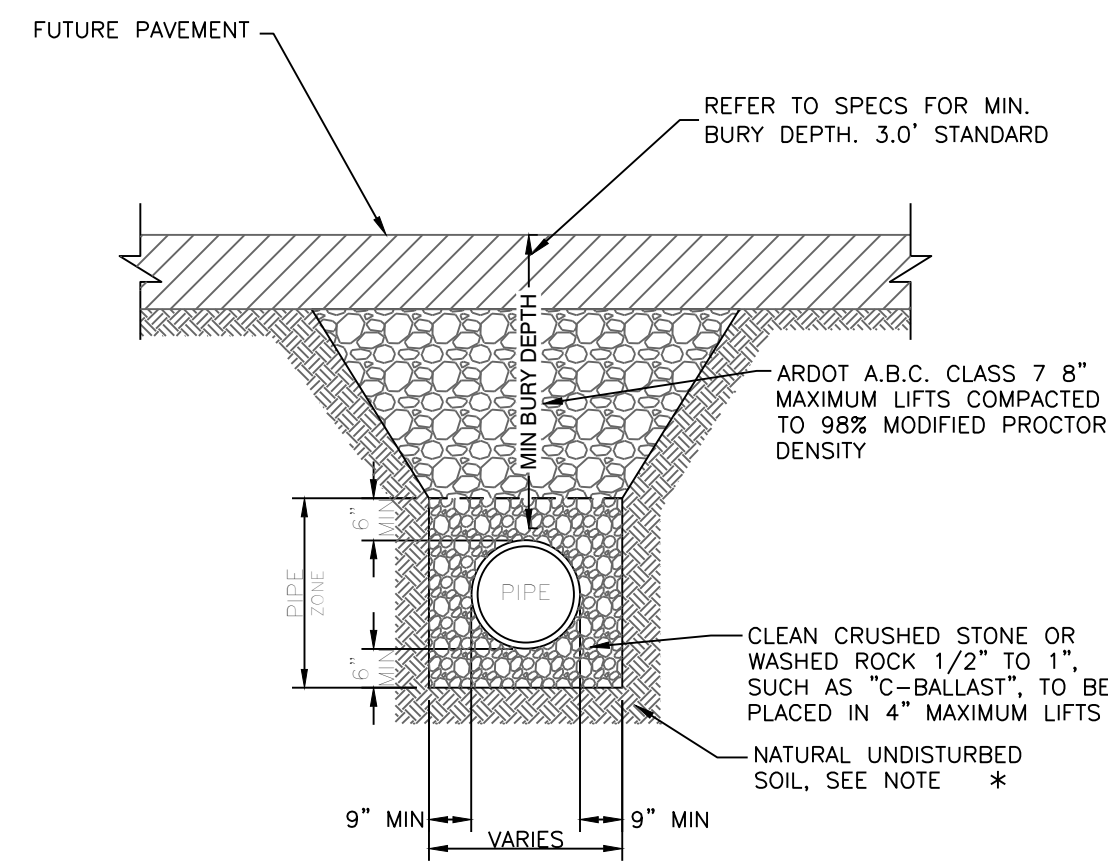




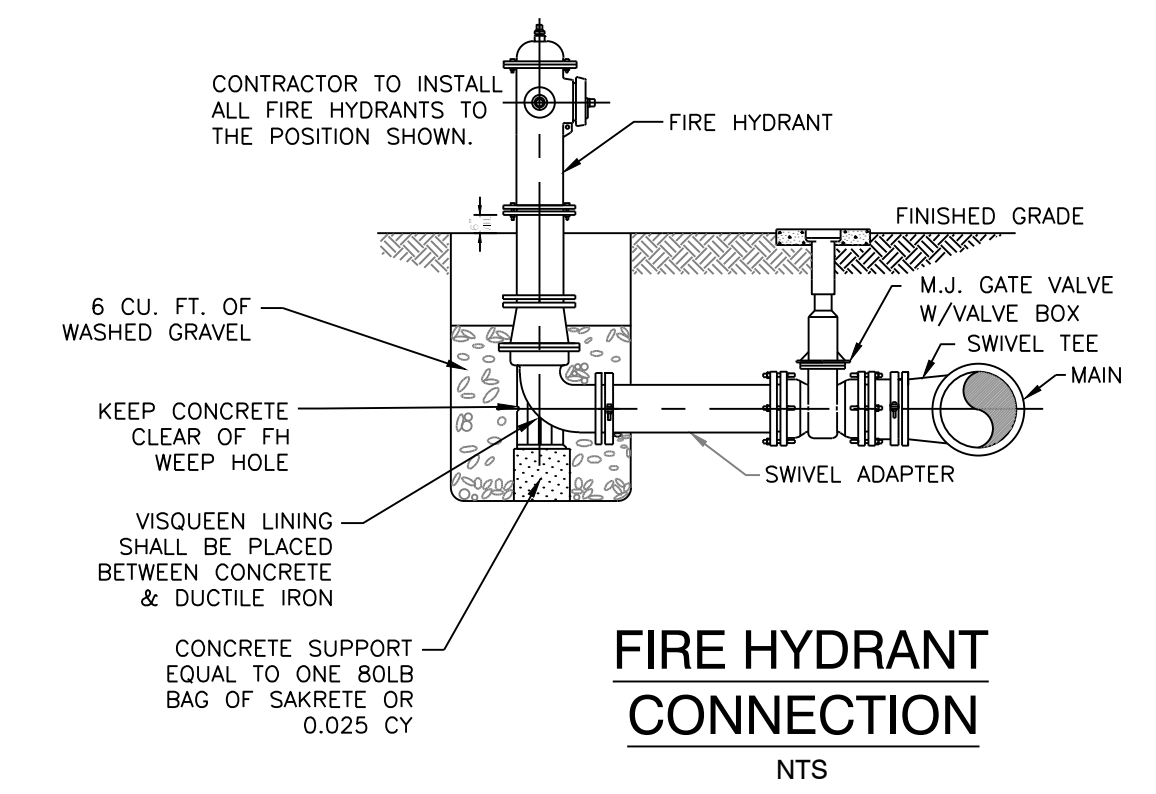
**PVC SEWER TRENCH UNDER FUTURE ASPHALT STREET**  
N.T.S.



**PVC WATER LINE TRENCH UNDER FUTURE ASPHALT STREET**  
N.T.S.



**DRAINAGE PIPE TRENCH UNDER FUTURE ASPHALT STREET**  
N.T.S.



**FIRE HYDRANT CONNECTION**  
N.T.S.

NOTE: \* FOR UNSTABLE TRENCH BOTTOM, PROVIDE MIN 8" OF 1 1/2" TO #4 SIZE CRUSHED BELOW THE PIPE ZONE STONE OR OTHER MATERIAL BELOW THE PIPE ZONE, AS APPROVED BY THE ENGINEER.

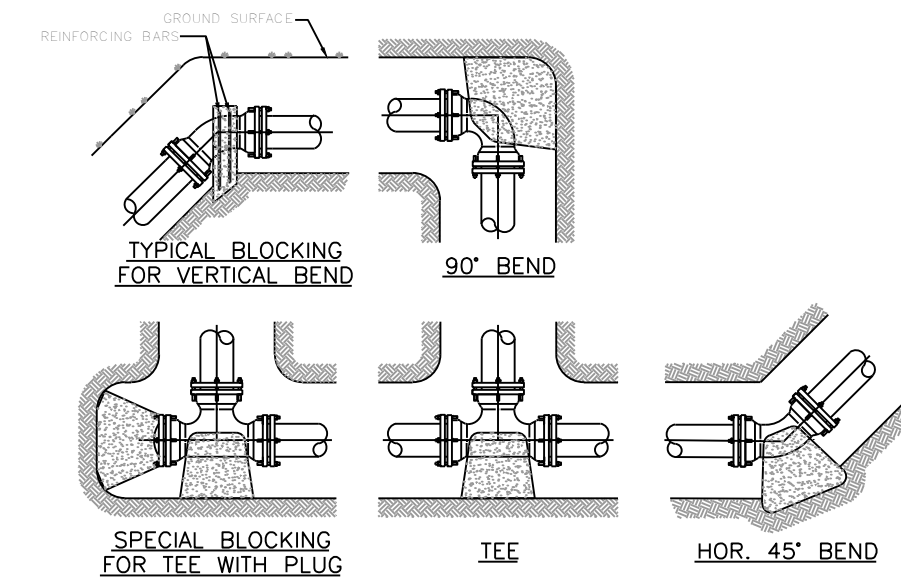
NOTE: \* FOR UNSTABLE TRENCH BOTTOM, PROVIDE MIN 8" OF 1 1/2" TO #4 SIZE CRUSHED BELOW THE PIPE ZONE STONE OR OTHER MATERIAL BELOW THE PIPE ZONE, AS APPROVED BY THE ENGINEER.

NOTE: \* FOR UNSTABLE TRENCH BOTTOM, PROVIDE MIN 8" OF 1 1/2" TO #4 SIZE CRUSHED BELOW THE PIPE ZONE STONE OR OTHER MATERIAL BELOW THE PIPE ZONE, AS APPROVED BY THE ENGINEER.

**SOIL STABILIZATION REQUIREMENTS:**  
1. IN LAWN AREAS, DISTURBED SOIL SHALL BE STABILIZED BY PLACEMENT OF SOO TO MATCH EXISTING.  
2. IN FIELDS OR WOODED AREAS, DISTURBED SOIL SHALL BE STABILIZED BY SEEDING.

**SOIL STABILIZATION REQUIREMENTS:**  
1. IN LAWN AREAS, DISTURBED SOIL SHALL BE STABILIZED BY PLACEMENT OF SOO TO MATCH EXISTING.  
2. IN FIELDS OR WOODED AREAS, DISTURBED SOIL SHALL BE STABILIZED BY SEEDING.

**SOIL STABILIZATION REQUIREMENTS:**  
1. IN LAWN AREAS, DISTURBED SOIL SHALL BE STABILIZED BY PLACEMENT OF SOO TO MATCH EXISTING.  
2. IN FIELDS OR WOODED AREAS, DISTURBED SOIL SHALL BE STABILIZED BY SEEDING.



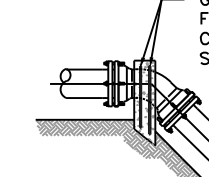
**TYPICAL BLOCKING DETAILS**  
N.T.S.

VOLUME OF THRUST BLOCK IN CUBIC YARDS (VERTICAL BENDS) FOR 150 P.S.I. TEST PRESSURE			
FITTING SIZE	BEND ANGLE	45°	22 1/2°
4	0.4	0.2	0.1
6	0.8	0.4	0.2
8	1.4	0.7	0.4
10	2.2	1.1	0.6
12	3.2	1.6	0.8
14	4.4	2.2	1.1
16	5.7	2.9	1.5
18	7.2	3.7	1.8
20	8.9	4.5	2.3
24	12.8	6.5	3.3

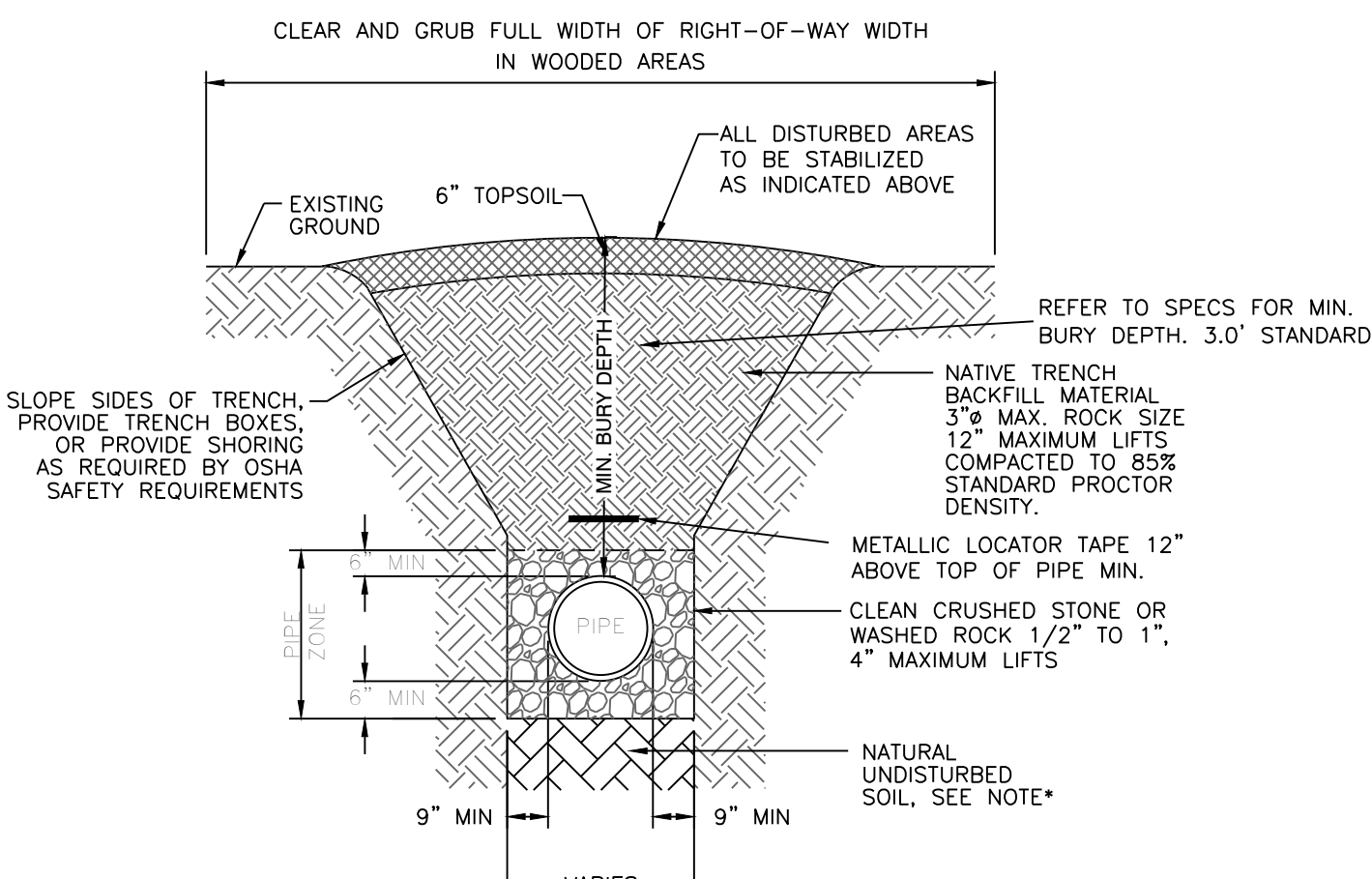
- THRUST BLOCK NOTES:**
- KEEP CONCRETE CLEAR OF JOINT ACCESSORIES.
  - CONCRETE THRUST BLOCKING SHALL BE POURED AGAINST UNDISTURBED EARTH.
  - REQUIRED VOLUMES OF BEARING AREAS AT FITTINGS SHALL BE AS INDICATED IN THE TABLES PROVIDED AND ADJUSTED, IF NECESSARY, TO CONFORM TO THE TEST PRESSURES AND ALLOWABLE SOIL BEARING STRESSES) STATED IN THE SPECIFICATIONS.
  - THRUST BLOCK VOLUMES FOR VERTICAL BENDS HAVING UPWARD RESULTANT THRUST ARE BASED ON TEST PRESSURE OF 150 PSIG AND THE WEIGHT OF CONCRETE (4,000 LB/CY). TO COMPUTE VOLUMES FOR DIFFERENT TEST PRESSURES, USE THE FOLLOWING EQUATION: VOLUME = (TEST PRESSURE / 150) x (TABLE VALUE).
  - BEARING AREAS FOR HORIZONTAL BEND THRUST BLOCKS ARE BASED ON TEST PRESSURE OF 150 PSIG AND AN ALLOWABLE SOIL BEARING STRESS OF 2,000 LB/SF TO COMPUTE BEARING STRESSES, USE THE FOLLOWING EQUATION: BEARING AREA = (TEST PRESSURE / 150) x (2,000 / SOIL BEARING STRESS) x (TABLE VALUE).
  - THRUST BLOCKS FOR VERTICAL BENDS HAVING DOWNWARD RESULTANT THRUST SHALL BE THE SAME AS FOR HORIZONTAL BENDS.
  - BEARING AREAS, VOLUMES, AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS TAKE PRECEDENCE OVER THIS STANDARD.
  - BEARING AREA OF THRUST BLOCK SHALL NOT BE LESS THAN 1.0 SF.
  - VERTICAL BENDS THAT REQUIRE A THRUST BLOCK VOLUME EXCEEDING 5 CY REQUIRE SPECIAL BLOCKING DETAILS. SEE PLANS.

BEARING AREA OF THRUST BLOCKS IN SQ. FT. (HORIZONTAL BENDS) FOR 150 P.S.I. TEST PRESSURE					
FITTING SIZE	TEE, WYE, PLUG, OR CAP	90° BEND PLUGGED CROSS	TEE PLUGGED ON RUN		
			45°	22 1/2°	11 1/4°
4	1.0	1.4	1.0	1.0	-
6	2.1	3.0	2.1	1.6	1.0
8	3.8	5.3	3.8	2.9	1.5
10	5.9	8.4	5.9	4.6	2.4
12	8.5	12.0	8.5	6.6	3.4
14	11.5	16.3	11.5	8.9	4.6
16	15.0	21.3	15.0	11.8	6.0
18	19.0	27.0	19.0	14.6	7.6
20	23.5	33.3	23.5	18.1	9.4
24	34.0	48.0	34.0	26.2	13.6

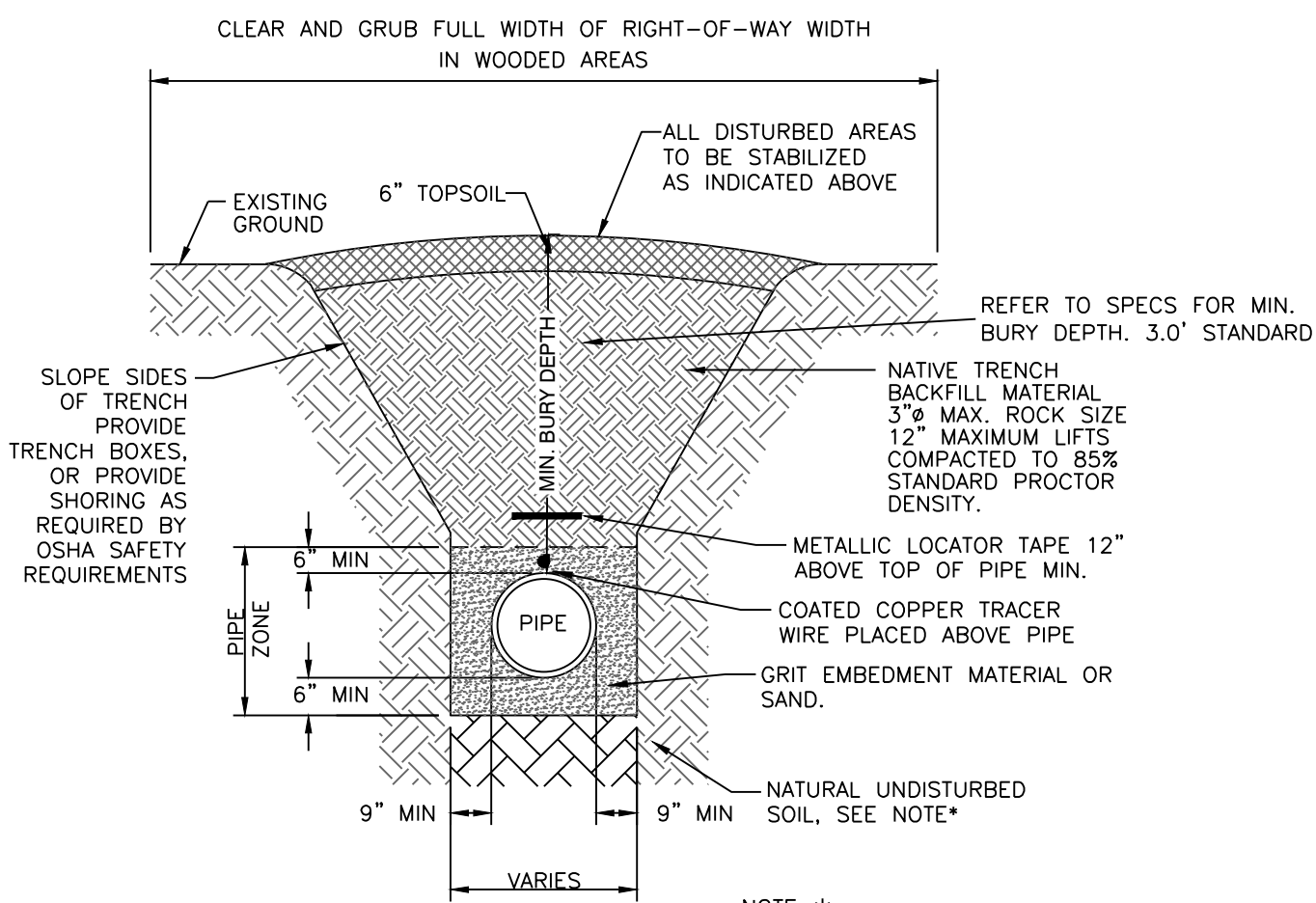
VOLUME OF THRUST BLOCK IN CUBIC YARDS (VERTICAL BENDS) FOR 150 P.S.I. TEST PRESSURE		
FITTING SIZE	BEND ANGLE	45°
4	0.4	0.2
6	0.8	0.4
8	1.4	0.7
10	2.2	1.1
12	3.2	1.6
14	4.4	2.2
16	5.7	2.9
18	7.2	3.7
20	8.9	4.5
24	12.8	6.5



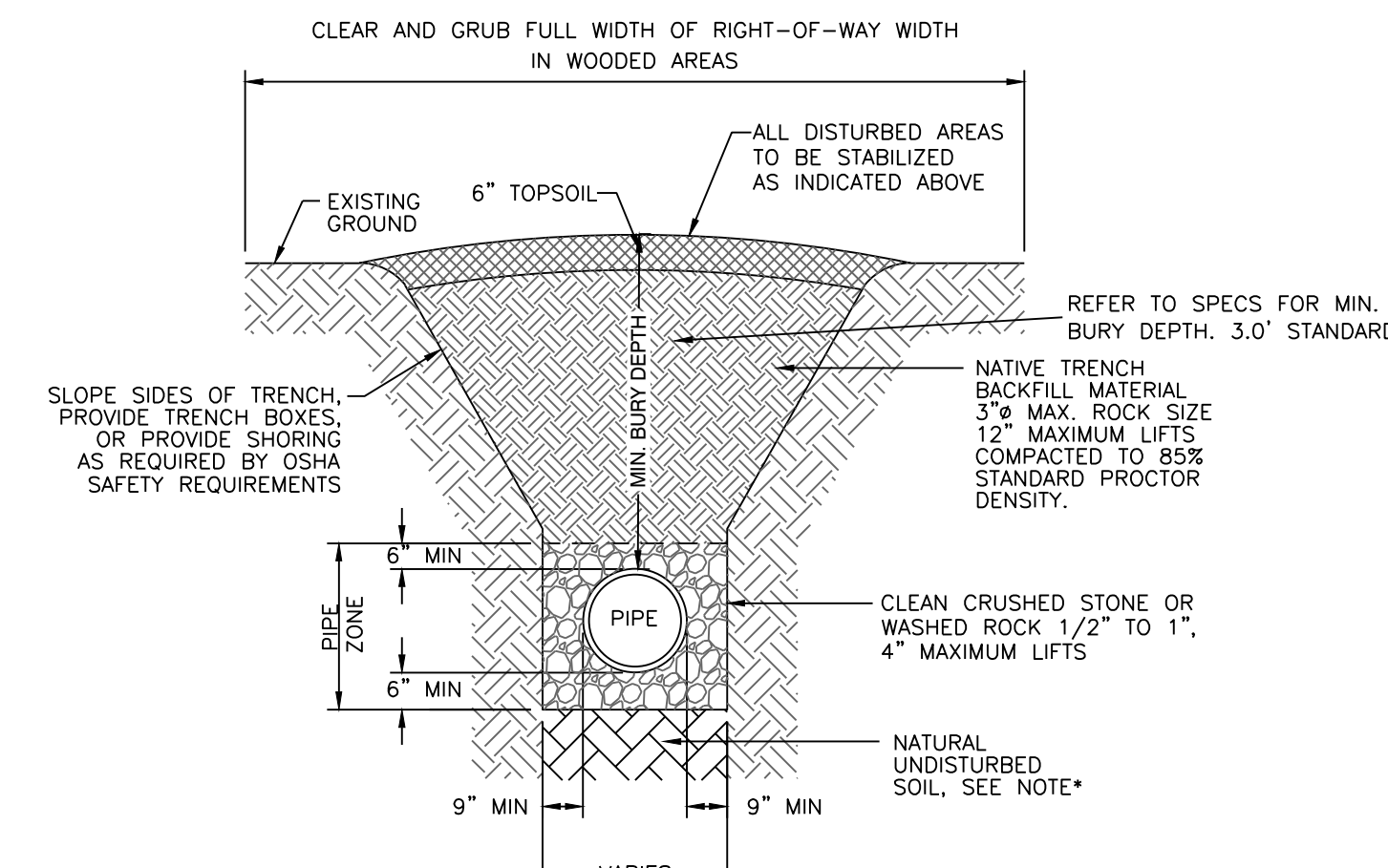
FITTING SIZES	ROD SIZES	EMBEDMENT
12" AND LESS	#6'S	30"
14" - 24"	#8'S	36"



**PVC SEWER TRENCH IN UNPAVED AREAS**  
N.T.S.

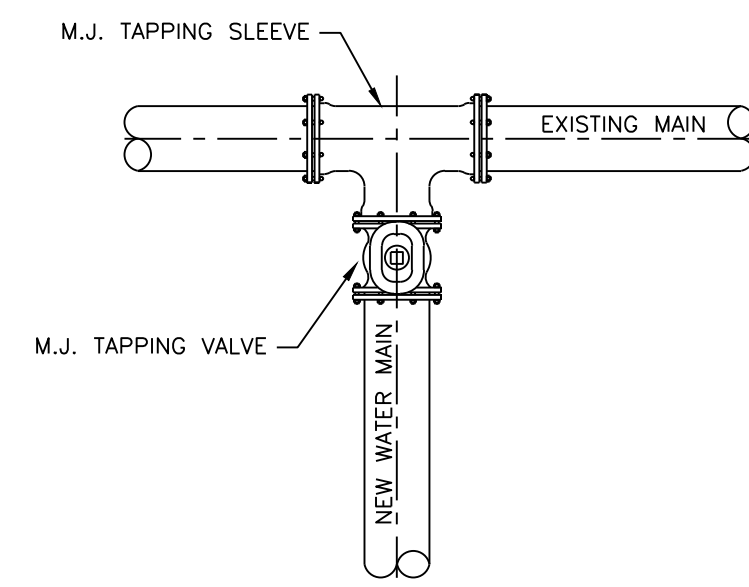


**PVC WATER LINE TRENCH IN UNPAVED AREAS**  
N.T.S.

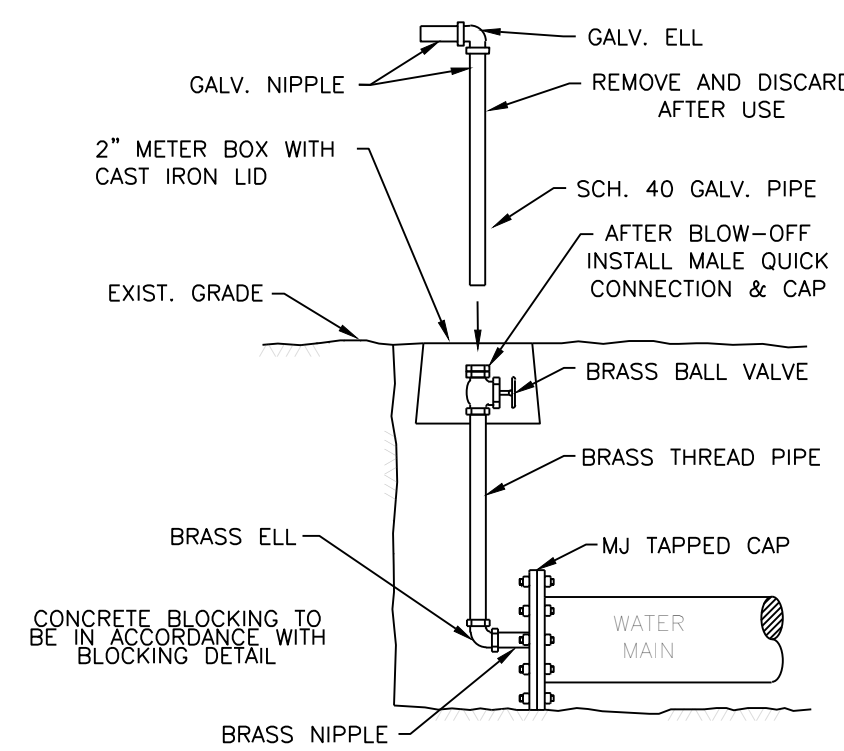


**DRAINAGE PIPES IN UNPAVED AREAS**  
N.T.S.

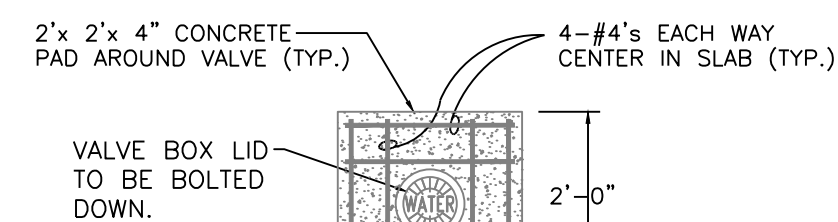
**TYPICAL BLOCKING DETAILS**  
N.T.S.



**WATER MAIN CONNECTION DETAIL**  
N.T.S.



**2" BLOW-OFF RISER**  
N.T.S.



**DETAIL-VALVE BOX**  
N.T.S.

**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: STANDARD DEVELOPMENT COMPANY, LLC			
BRYANT C-STORE TRENCH DETAILS BRYANT, SALINE COUNTY, ARKANSAS			
DATE:	9-20-2022	C.A.D. BY:	DRAWING NUMBER:
REVISED:	01/05/2023	CHECKED BY:	21-0275
SHEET:	C-4.0	SCALE:	
500	01S	14W	0 15/22 304 62 1762

KS-LAND PROJECTS 2048 COMMERCIAL BLVD #210275 C-STORE BRYANT FULL STORE REVISED 2022 12-21-2022.DWG



**SUBGRADE MATERIAL.**

- A. Subgrade soils shall be all materials used for subgrade including in-situ materials and fill materials.
- B. Subgrades for pavement shall be stabilized by mechanical compaction. Stabilization methods such as fabrics and chemical stabilization may be submitted for approval when supported by engineering data and calculations to substantiate the adequacy of the stabilized procedure.
- C. Subgrade shall be compacted to 95 percent modified proctor density minimum. Moisture content shall be +/- 3% of optimum moisture unless otherwise supported by the site specific geotechnical data and approved by City.
- D. Subgrade shall be prepared in such a manner that the base course shall be placed on a firm foundation that is stable and free from soft spots, pumping, dust pockets, wheel ruts, or other defects.
- E. The top 24 inches of the subgrade shall be a material not susceptible to frost action unless modified with cement, lime or another method approved specifically by the City to resist frost action. Soils classified as A-4 and A-5 including sandy silts, fine silty sand or lean clays are highly susceptible to frost action.
- F. In-situ soils meeting the requirements outlined in these specifications may be utilized as subgrade material. In-situ soils used as subgrade shall be scarified to a minimum depth of 8-inches below finish subgrade, recompact and tested as described below. Fill material for subgrade shall be placed in lifts not to exceed 8-inches compacted depth.
- G. Methods and procedures for establishing the total depth of soil replacement and/or modification shall be as specified by the design engineer and geotechnical investigations. The adequacy of in-situ soils and fill materials as pavement subgrade shall be evaluated based upon the soils classification, liquid limit, and plasticity index.
- H. Soils with a liquid limit greater than 40, or a plasticity index greater than 15 shall be undercut and removed from the street section or improved by a design method of stabilization approved by the City.
- I. Quality control testing shall be as specified below.
- J. Undercut 24" of soil below finished street base course. Proof roll to verify stability.
- K. Backfill the undercut subgrade with Class 7 aggregate or soil meeting the requirements of this section and compact in lifts not exceeding 8".

**BASE COURSE**

- A. Base course material shall be crushed stone meeting the requirements of ArDOT Class 7 aggregate base course as specified in the latest edition of ArDOT Standard Specifications.
- B. Base course shall be compacted to 98 percent modified proctor density minimum. Moisture content shall be +/- 3% of optimum moisture.

**SURFACE COURSE**

- A. Surface course for flexible pavement designs shall utilize plant mix bituminous base and binder courses conforming to ArDOT Standard Specifications.

**CURB AND GUTTER**

- A. Curb and gutter shall be Portland Cement Concrete with a minimum 28-day compressive strength of 4,000 psi. Concrete shall be air-entrained with a maximum of 4-inch slump.
- B. Compaction requirements under curb and gutter shall conform to the requirements for street subgrade materials. Compaction requirements shall extend to a minimum of 1 foot beyond the back of curb and gutter removing all soft spots and replacing with suitable material.
- C. Curb and gutter shall conform to the typical detail within these specifications or ArDOT Standard Roadway Drawing Details for curbing.
- D. Expansion joints shall be made with 1/2-inch preformed expansion joint filler of a non-extruding type. Expansion joints shall be placed at intervals not exceeding 195 feet, intersection radii, driveways, stationary structures, and sidewalks.
- E. Contraction joints shall be sawed or formed at intervals not greater than 20 feet. Depth of saw-cut shall be 1 1/2-inch and have a width of 1/4-inch. Contraction joints shall be sealed in accordance with ArDOT Standard Specifications.
- F. Forms shall be made of metal or wood and shall be properly braced. The minimum length of each section of form used shall be 10 feet. Each section of form shall be uniform and free from undesirable bends or warps. Forms shall be of such cross section and strength and so secured as to resist the pressure of the impact and vibration on any equipment which they support without springing or settlement.
- G. Curb and gutter placed with slip form or extruding equipment will be acceptable providing it complies with all of the above requirements.
- H. After curing, the curb shall be immediately backfilled to within 4 inches of the top curb to eliminate the possibility of washing beneath the curb. The remaining 4 inches shall be topsoil.
- I. Cold weather protection shall meet the requirements of the latest edition of ArDOT Standard Specifications.

**SIDEWALKS**

**General**

- A. Sidewalks shall be Portland Cement Concrete with a minimum 28-day compressive strength of 4,000 psi.
- B. Sidewalks shall be on both sides of streets in line with sidewalks on opposite corners of roads.
- C. All sidewalks including ramps shall meet all current Federal Americans with Disabilities (ADA) design guidelines or requirements.
- D. Traverse slopes shall not exceed 2 percent.
- E. Subgrade under sidewalks shall be compacted to 90 percent modified proctor density minimum.
- F. Sidewalks shall not be placed upon grassy or organic materials.
- G. Sidewalks which extend or link existing sidewalks shall adjoin the existing sidewalks to form a continuous, even pathway.
- H. Utility poles, utility boxes, mailboxes, fire hydrants, and other similar obstructions shall not be located in sidewalks. Sidewalk location may vary at the discretion of the City to avoid such obstacles.

**Minimum thickness and reinforcement**

- A. Sidewalks shall have a minimum thickness of 4 inches.
- B. Sidewalks shall be reinforced, at a minimum, with woven wire fabric reinforcement.

**Contraction and expansion joints**

- A. Contraction joints shall be provided perpendicular to the sidewalk at intervals equal to the sidewalk width.
- B. Expansion joints shall be constructed perpendicular to the sidewalk at intervals equal to five times the sidewalk width. Expansion joints shall be made with 1/2-inch preformed expansion joint filler of a non-extruding type. Expansion joints shall be placed at driveways, drop inlets, and curbs.

**Quality control testing and inspection by the City**

- A. Subgrade and formwork for sidewalks shall be inspected by the City prior to pouring of the sidewalk.
- B. All testing of materials and construction shall be provided and paid for by the Developer/Owner.
- C. All field tests required for a project shall be witnessed by the City, contractor, or their authorized representatives.
- D. All testing shall be accomplished by a testing firm approved by the City and shall be performed under the supervision of a licensed Professional Engineer.
- E. Sampling and testing locations shall be subject to approval by the City.
- F. Density tests on subgrades shall be taken every 300 feet or portion thereof.
- G. The City shall be notified at least one day in advance of the need to inspect subgrade and formwork of sidewalks.

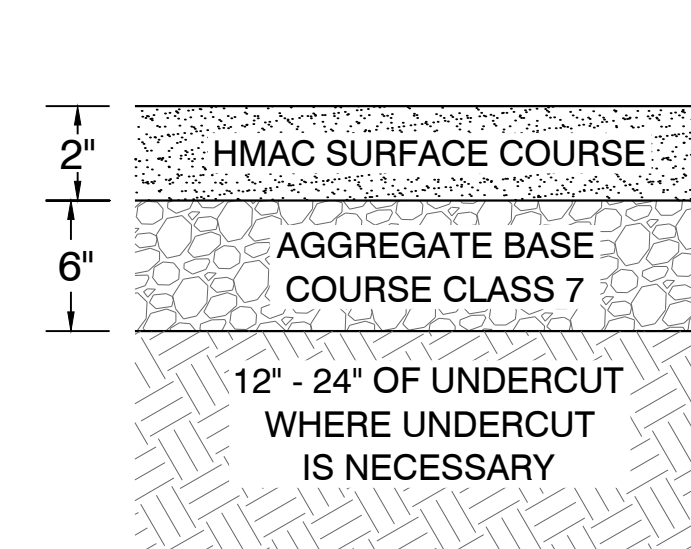
**Subgrade**

- A. Subgrade soils shall be all materials used for subgrade including in-situ materials and fill materials.
- B. Subgrade shall be compacted to 90 percent modified proctor density minimum. Moisture content shall be +/- 3% of optimum moisture unless otherwise supported by the site specific geotechnical data and approved by City.
- C. Subgrade shall be prepared in such a manner that the base course shall be placed on a firm foundation that is stable and free from soft spots, pumping, dust pockets, wheel ruts, or other defects.
- D. The top 24 inches of the subgrade shall be a material not susceptible to frost action unless modified with cement, lime or another method approved specifically by the City to resist frost action. Soils classified as A-4 and A-5 including sandy silts, fine silty sand or lean clays are highly susceptible to frost action.

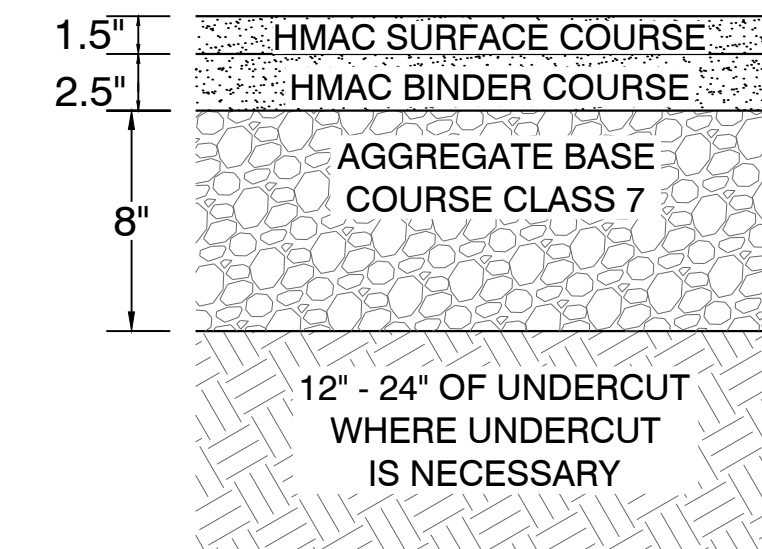
**QUALITY CONTROL TESTING AND INSPECTIONS**

**General**

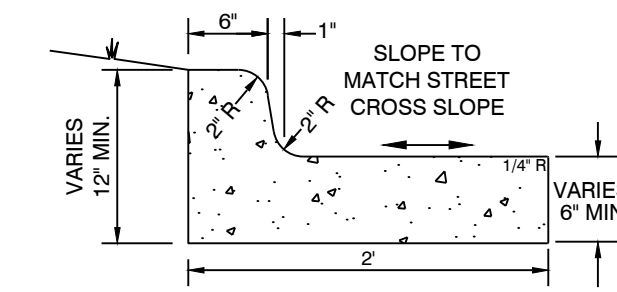
- A. Materials and construction employed in street improvements shall be subject to inspection and quality control testing. All testing of materials and construction shall be provided and paid for by the Developer/Owner.
- B. The Developer/Owner shall provide for inspections of street improvements during construction. The inspections shall be accomplished under the supervision of the Engineer of Record. The Engineer of Record shall provide certification that all materials and construction conform to the approved plans and specifications and with these minimum street standards.
- C. The Engineer of Record shall furnish inspection whenever a critical construction activity is taking place. This means that a representative of the Engineer of Record must be on-site whenever a critical construction activity is taking place.
- D. All field tests required for a project shall be witnessed by the City, Engineer of Record, contractor, or other authorized representatives.
- E. The City shall be notified at least one day in advance of any test(s). It is the responsibility of the contractor to coordinated the scheduling of all tests with the City.



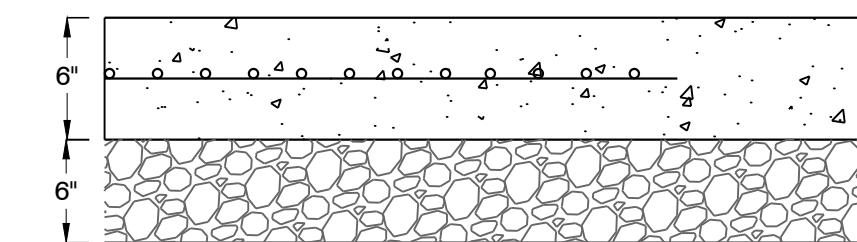
**STANDARD PAVEMENT SECTION**  
NOT TO SCALE



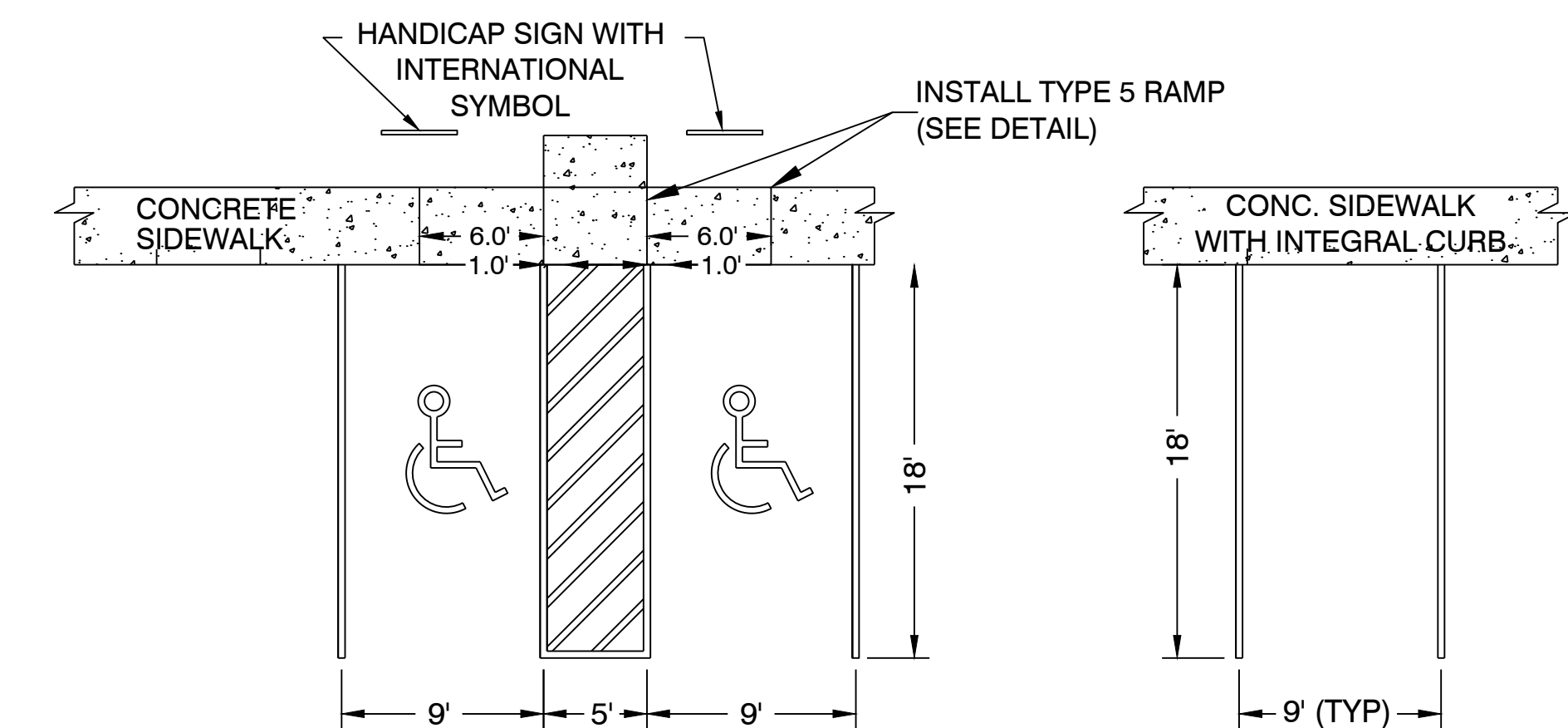
**HEAVY PAVEMENT SECTION**  
NOT TO SCALE



**TYPICAL CURB AND GUTTER DETAILS**  
4,000 PSI CONCRETE  
NOT TO SCALE



**CONCRETE PAVEMENT SECTION DETAIL**  
4,000 PSI  
NOT TO SCALE



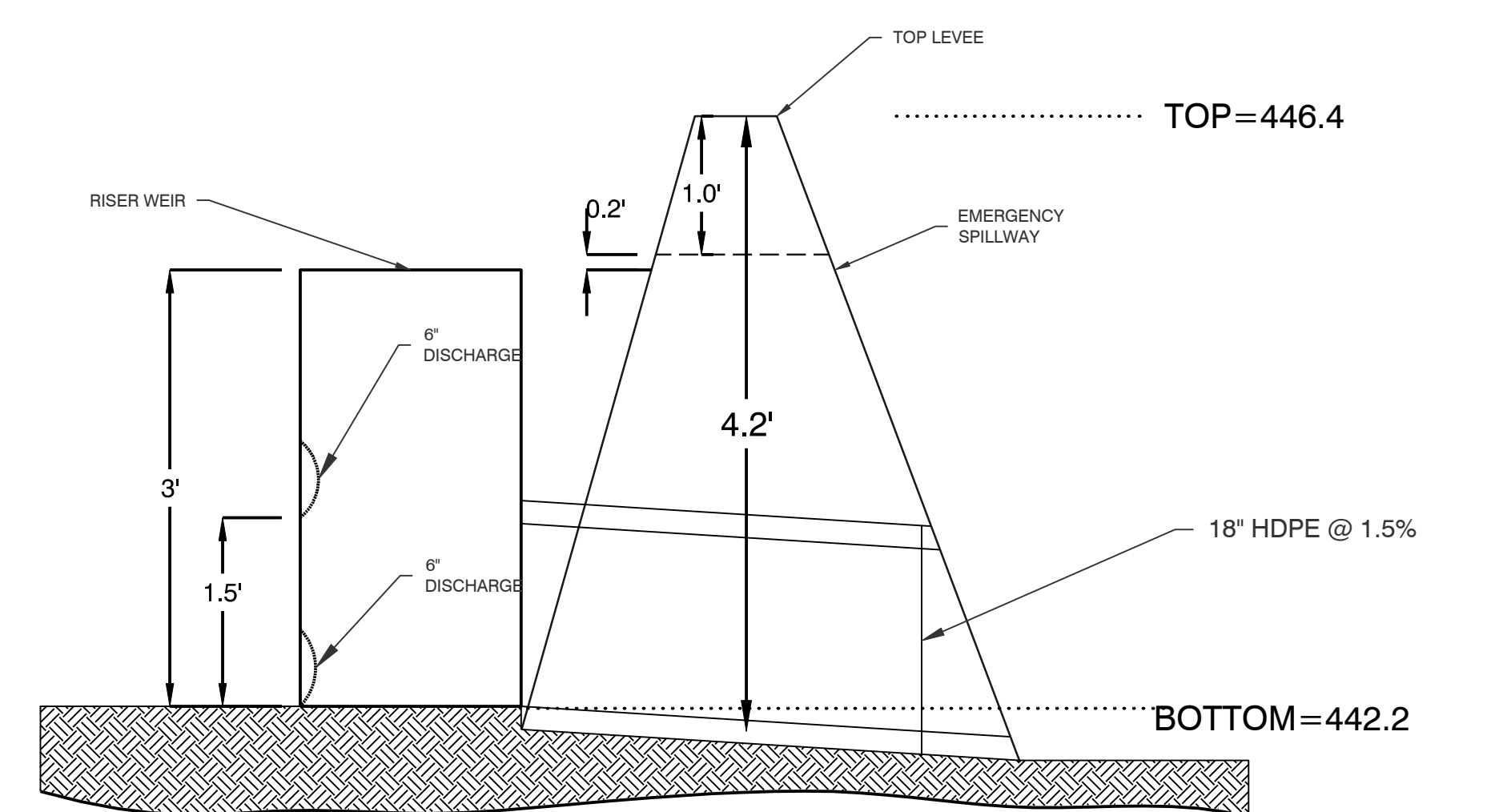
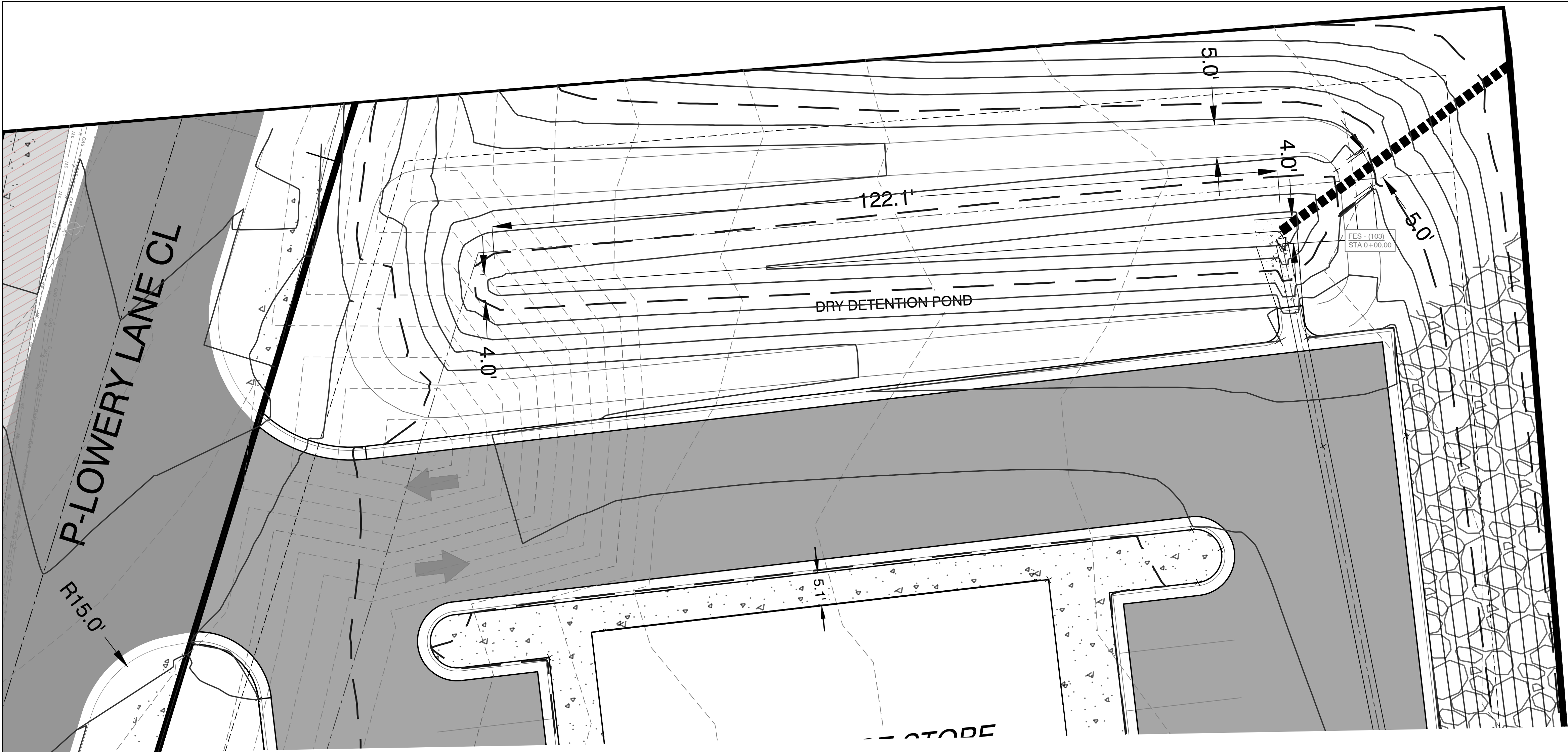
**USE DIMENSIONS ABOVE UNLESS OTHERWISE NOTED**

**PARKING STALL & SIDEWALK DETAIL**  
NOT TO SCALE

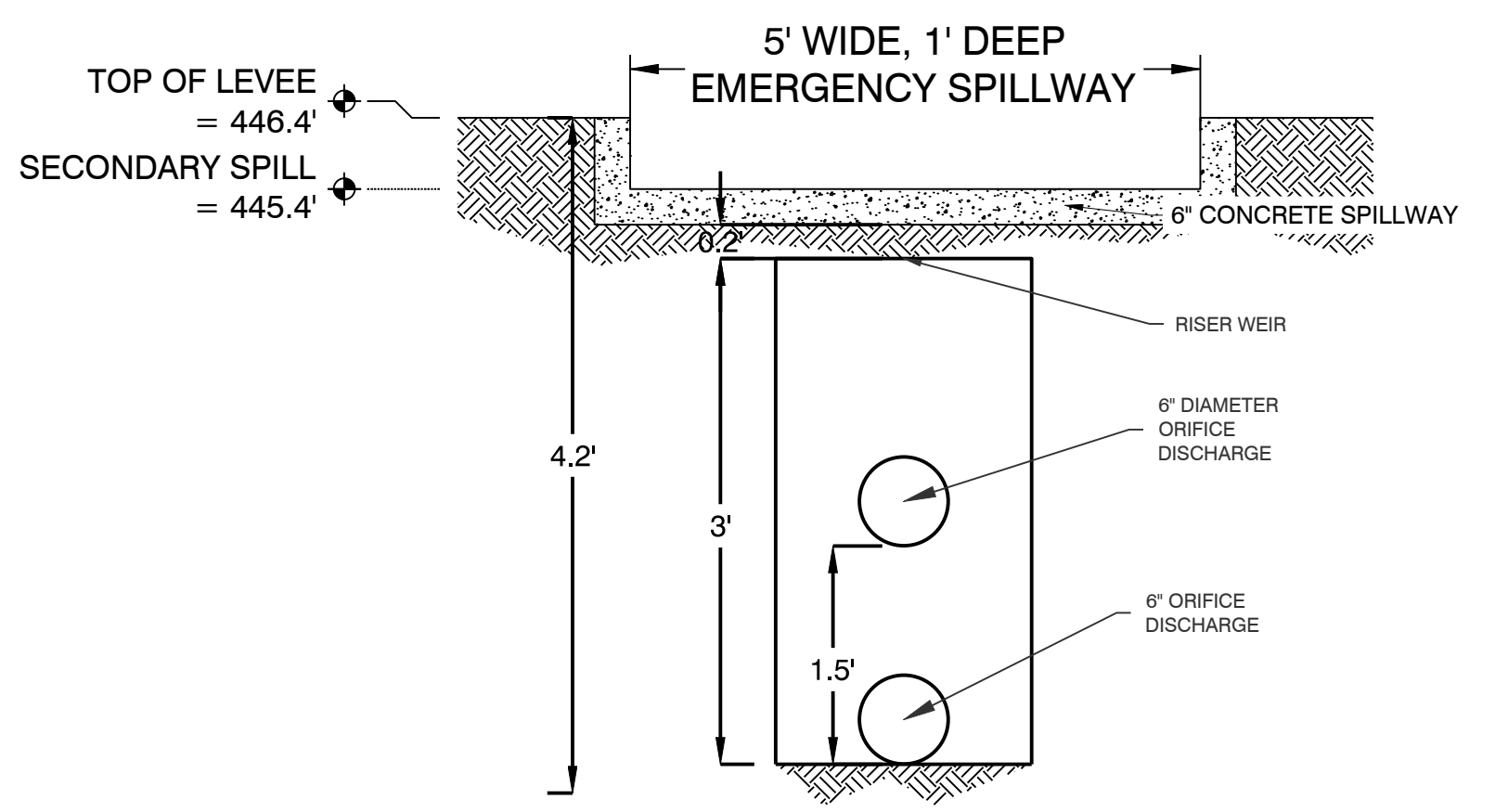
<b>HOPE CONSULTING</b> ENGINEERS - SURVEYORS		129 N. Main Street, Benton, Arkansas 72015 PH. (501)315-2626 FAX (501) 315-0024 www.hopeconsulting.com	
FOR USE AND BENEFIT OF: <b>STANDARD DEVELOPMENT COMPANY, LLC</b>			
<b>BRYANT C-STORE</b> CIVIL SPECS BRYANT, SALINE COUNTY, ARKANSAS			
DATE:	9-20-2022	C.A.D. BY:	DRAWING NUMBER:
REVISED:	01/05/2022	CHECKED BY:	<b>21-0275</b>
SHEET:	C-5.0	SCALE:	
500	01S	14W	0 15/22 304 62 1762

K:\LAND PROJECTS\204\COMMERCIAL\2021\21-0275 C-STORE\BRYANT\CIVIL\DWG\21-0275 C-STORE - BRYANT (FULL STORE REVISION) 2022\12-21-2022.DWG





SPILLWAY PROFILE VIEW  
NTS



SPILLWAY END VIEW  
NTS

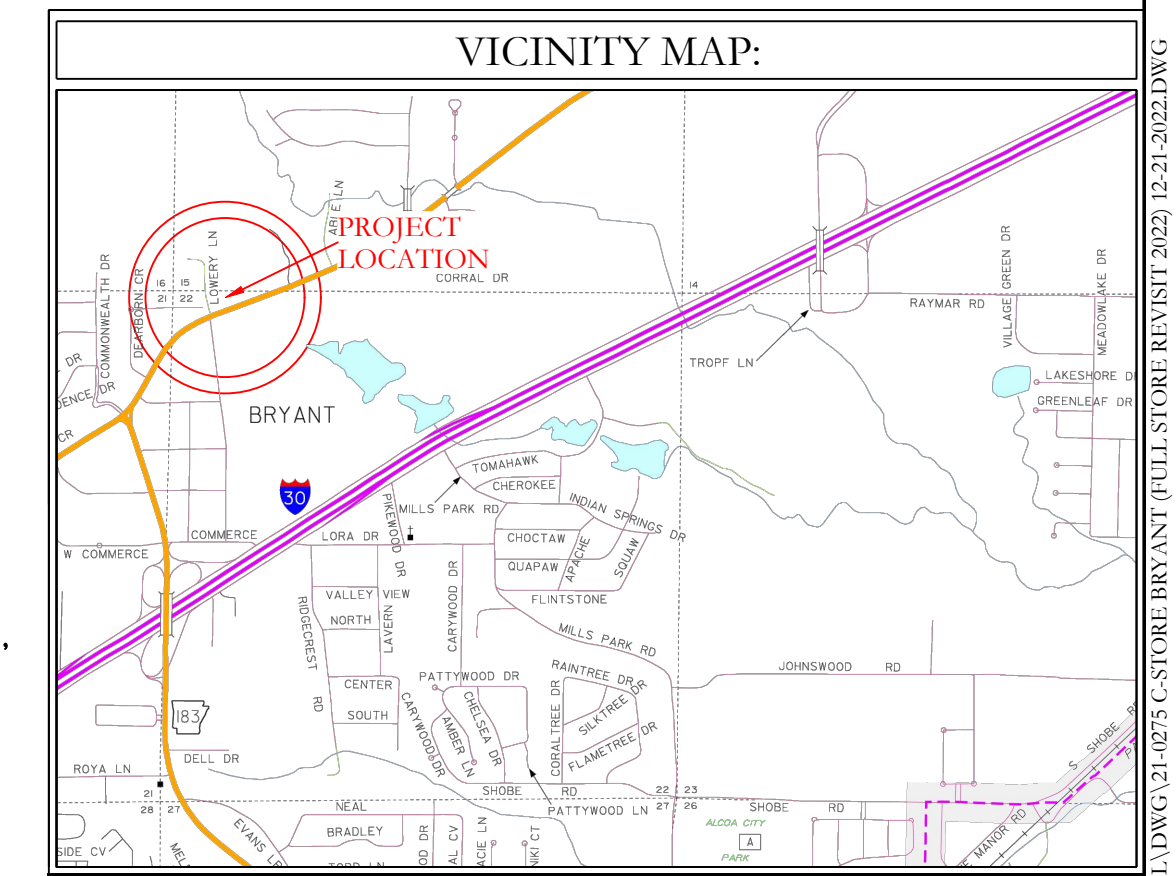
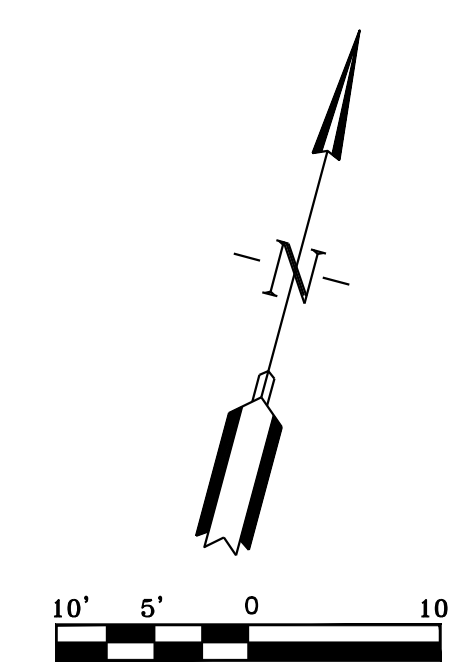
**DETENTION POND MAINTENANCE PLAN**

**Background**  
The detention pond is located along the north boundary of the property. The modifications are designed to temporarily detain stormwater to meet the City of Bryant's water quantity criteria before discharging from the pond.

**Routine Maintenance**  
Routine maintenance will include but not be limited to:  
-The primary discharge (1 HDPE 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 discharge weir for non-routine maintenance need.

**Periodic or Non-Routine Maintenance**  
The routine inspection of the pond area and discharge weir will identify needed repairs and non-routine maintenance. These items may include but not be limited to:  
-Bottom of pond will be sodded (except where trickle channel is located).  
-Embankments sloped 2:1 will be concrete stabilized, 3:1 slopes shall be sodded.  
-Re-growth of trees on or around the pond bank shall be cut and removed from the pond area.  
-Stabilization of 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.

For questions or concerns about the pond, contact \_\_\_ at 501- \_\_\_-\_\_\_.



**HOPE CONSULTING**  
ENGINEERS - SURVEYORS

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

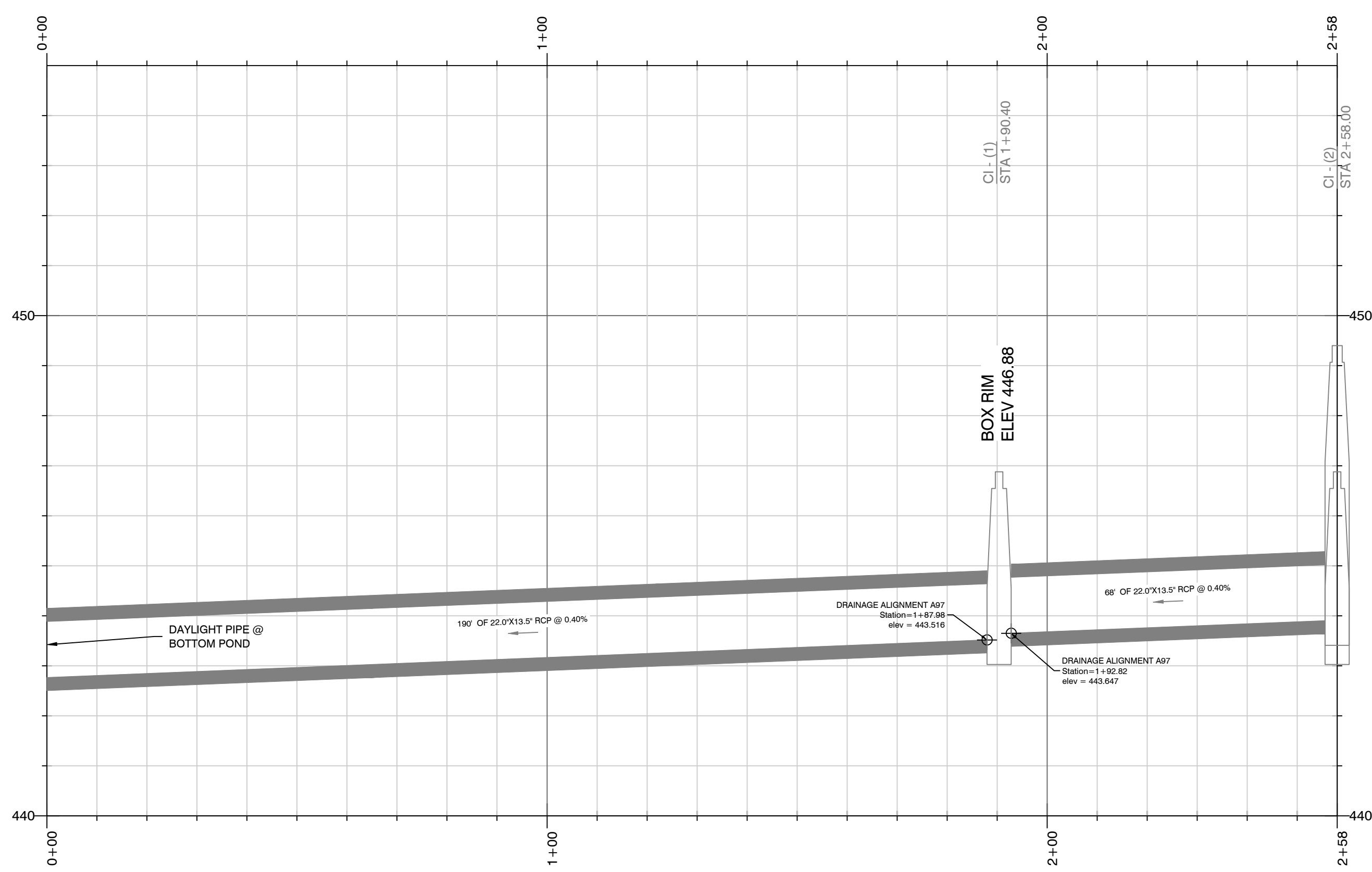
FOR USE AND BENEFIT OF:  
STANDARD DEVELOPMENT COMPANY, LLC

BRYANT C-STORE  
DETENTION PLAN  
BRYANT, SALINE COUNTY, ARKANSAS

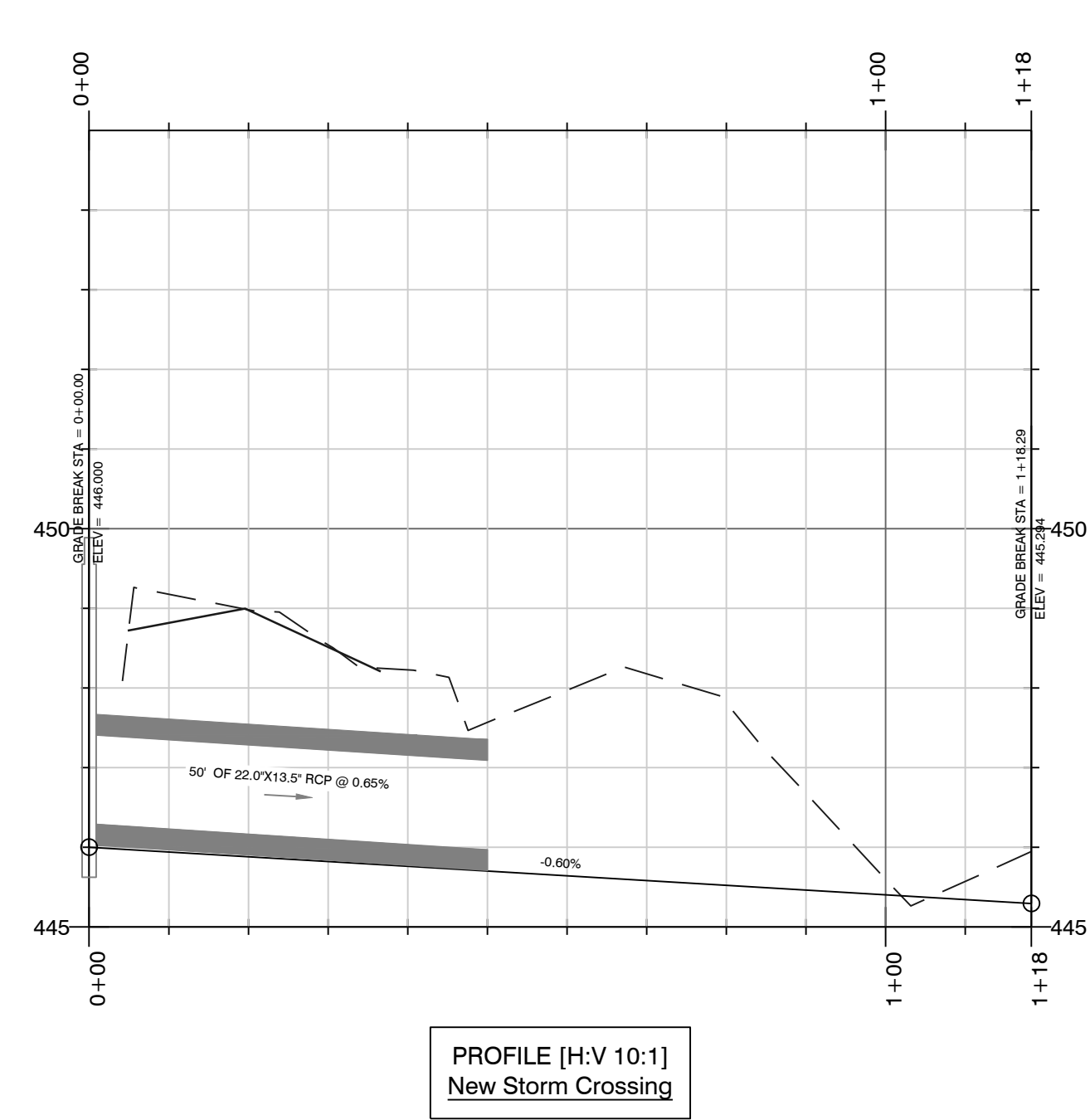
DATE:	9-20-2022	C.A.D. BY:		DRAWING NUMBER:
REVISID:	01/05/2023	CHECKED BY:		21-0275
SHEET:	C-6.0	SCALE:		
500	01S	14W	0 15/22	304 62 1762

K:\LAND PROJECTS\2044\COMMERCE\2021\21-0275-C-STORE\BRYANT\BRYANT (FULL STORE) (REVISED 2022) 12-24-2022.DWG

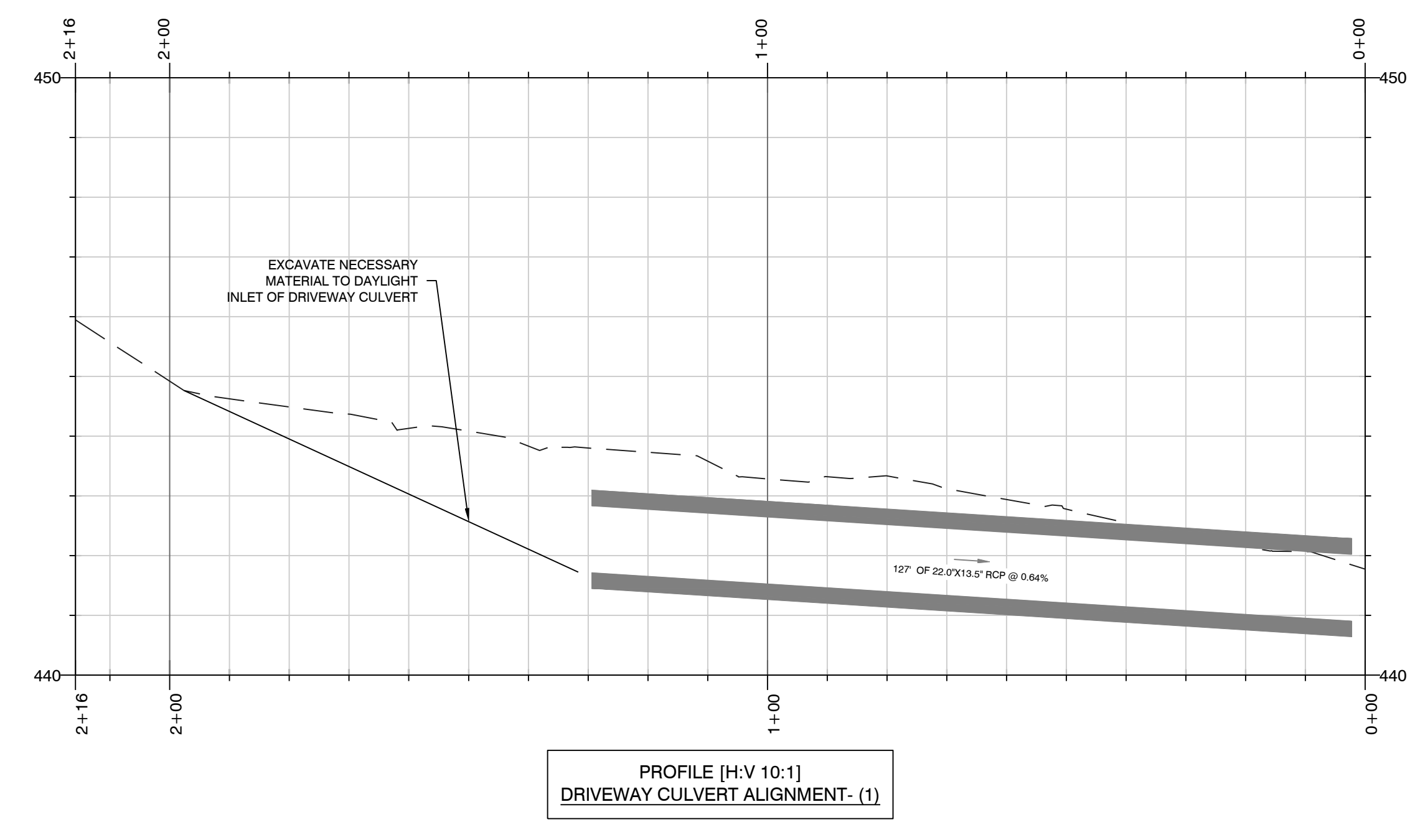




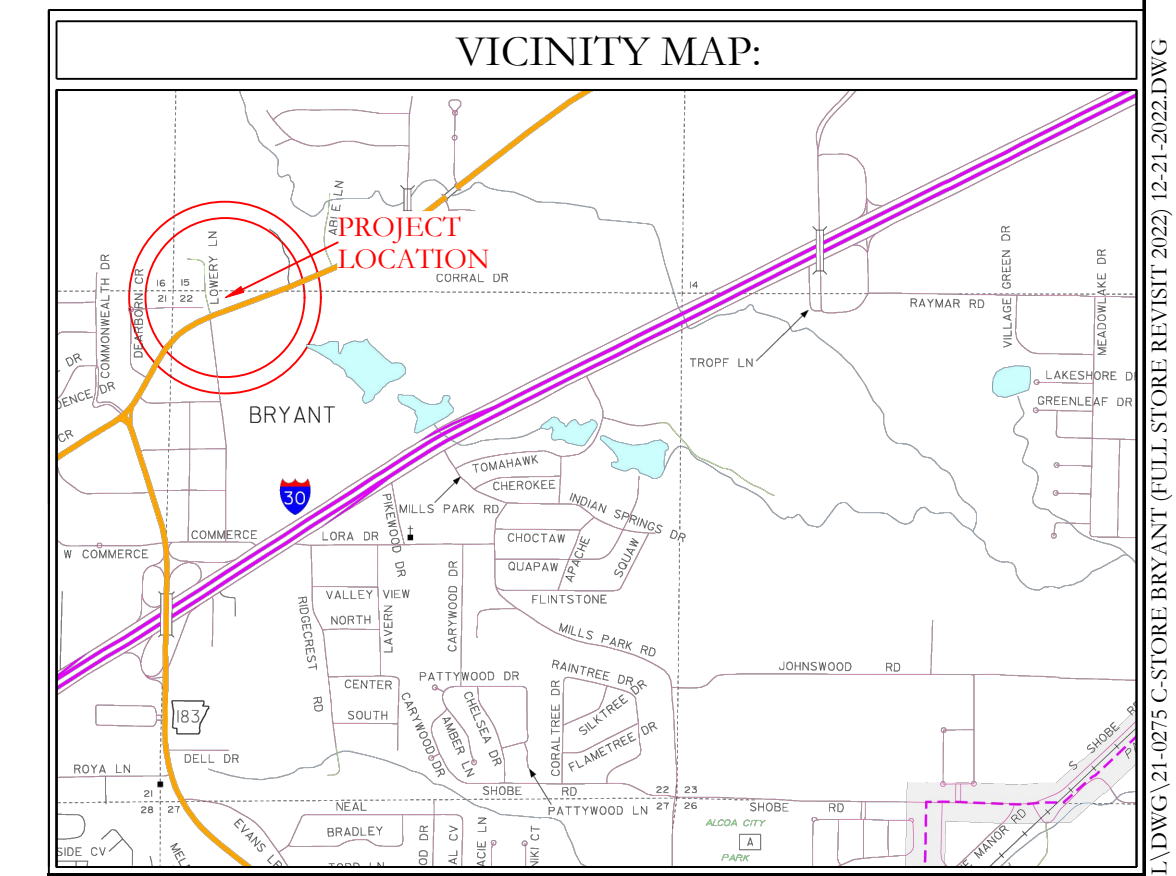
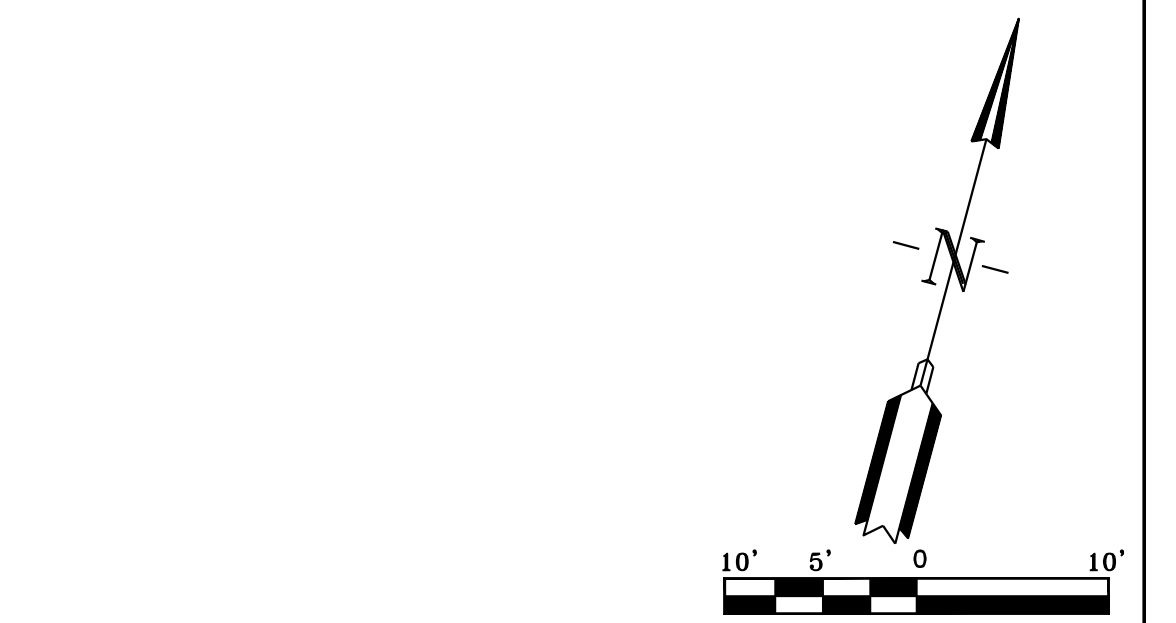
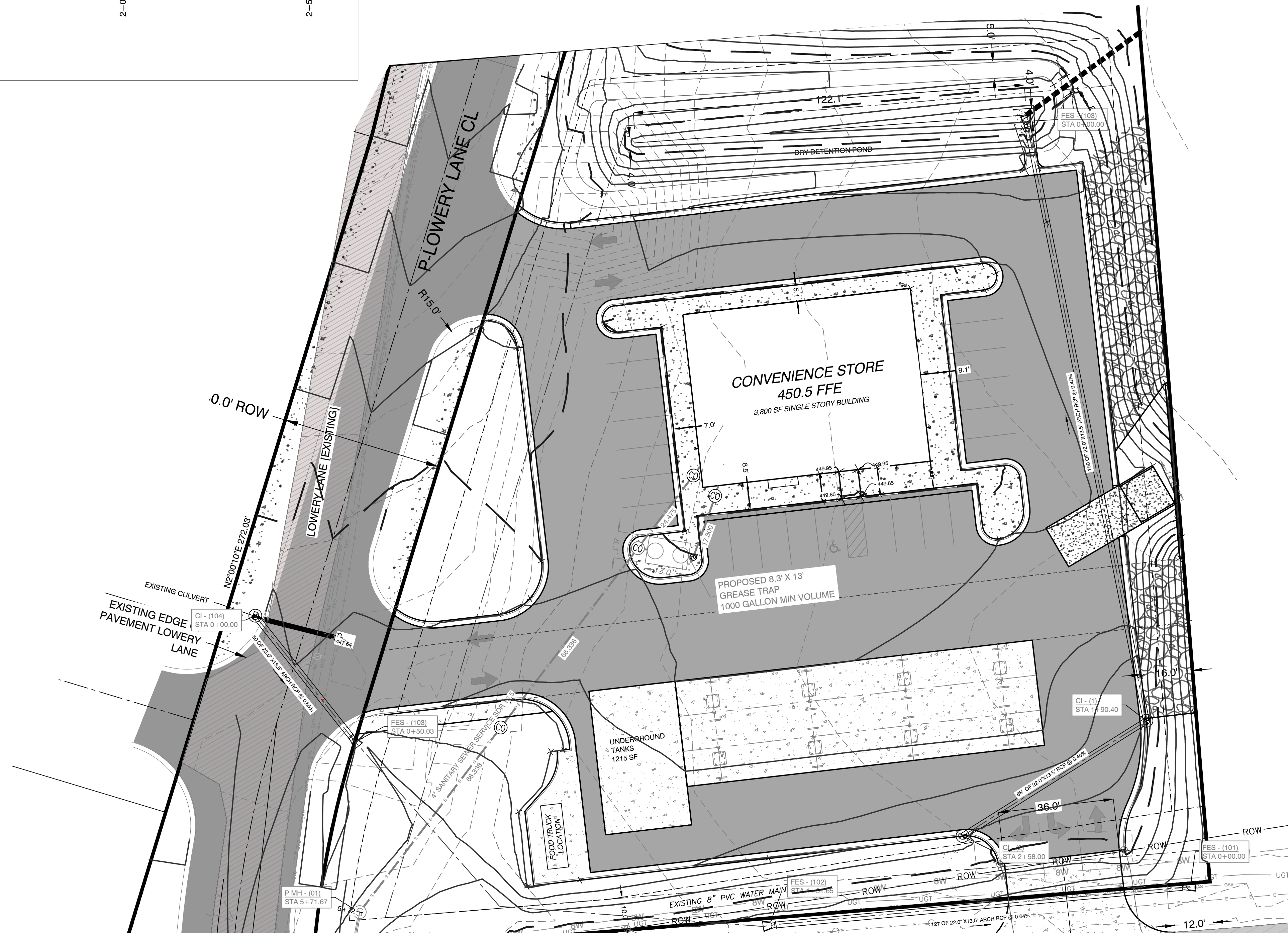
PROFILE [H:V 10:1]  
DRAINAGE ALIGNMENT A (1)



PROFILE [H:V 10:1]  
New Storm Crossing



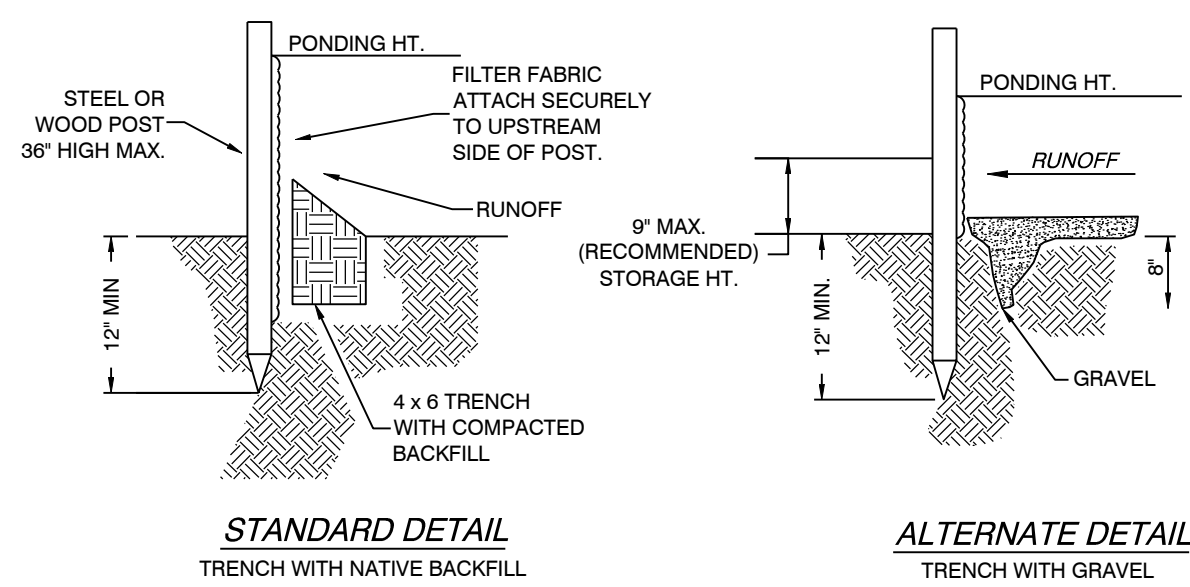
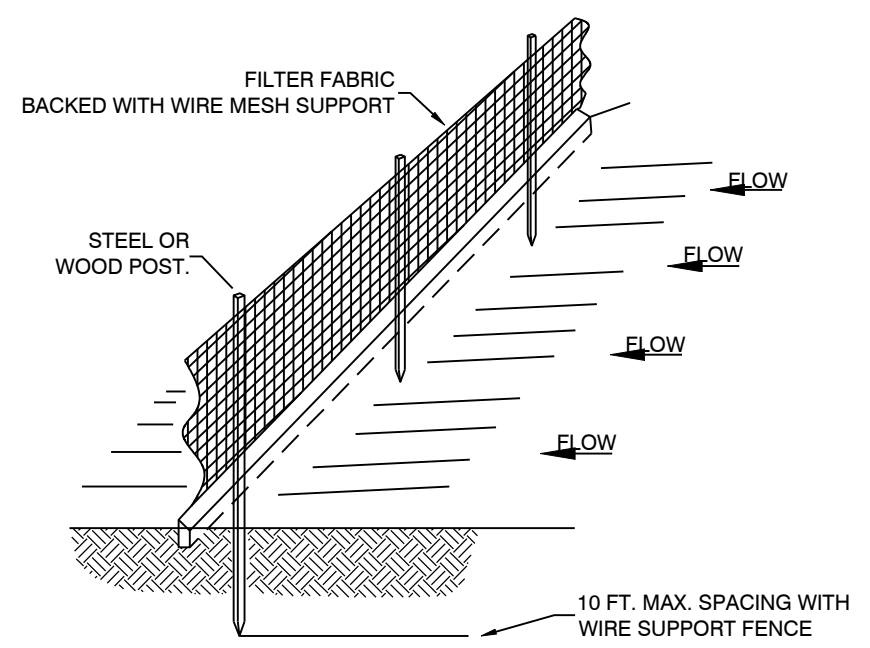
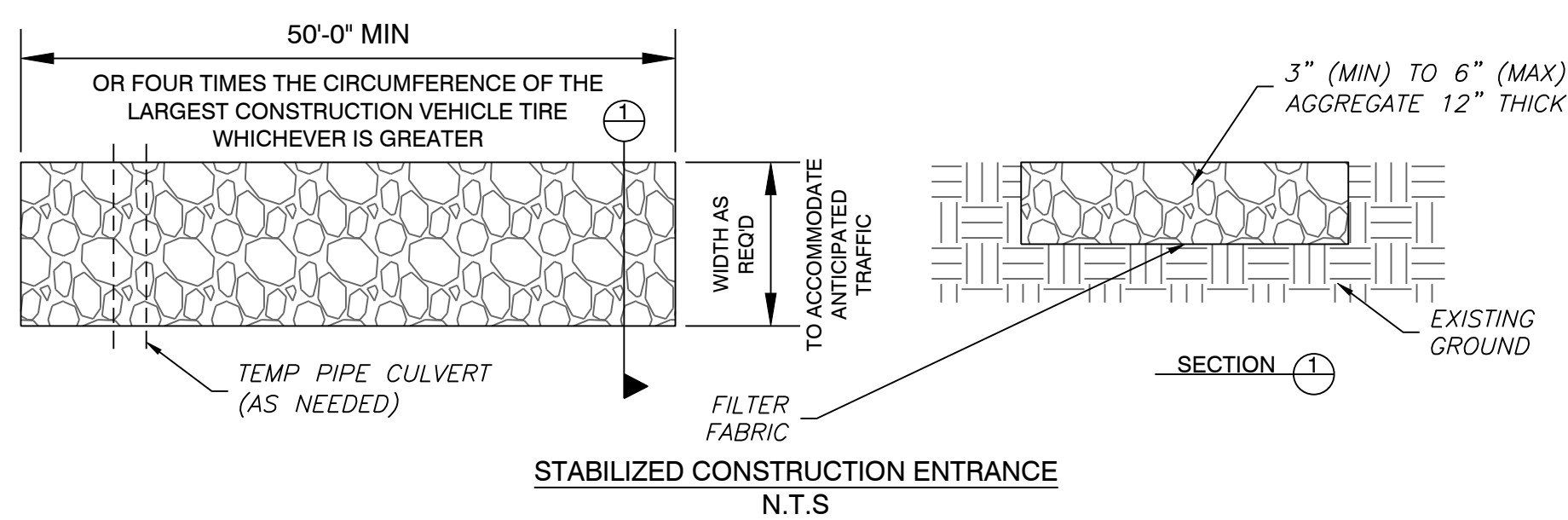
PROFILE [H:V 10:1]  
DRIVEWAY CULVERT ALIGNMENT- (1)



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

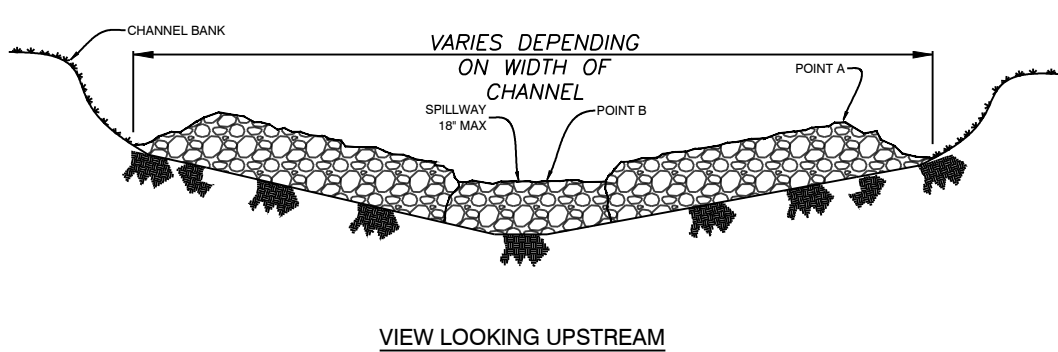
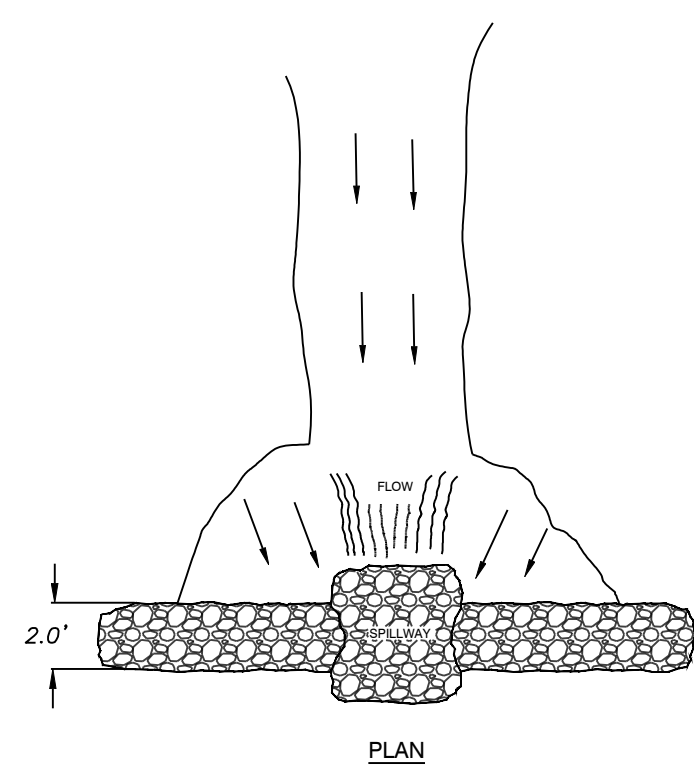
FOR USE AND BENEFIT OF: STANDARD DEVELOPMENT COMPANY, LLC			
<b>BRYANT C-STORE DRAINAGE PLAN</b> BRYANT, SALINE COUNTY, ARKANSAS			
DATE: 9-20-2022	C.A.D. BY:	DRAWING NUMBER:	
REVISID: 01/05/2023	CHECKED BY:	<b>21-0275</b>	
SHEET: C-6.1	SCALE:		
500	01S	14W	0 15/22 304 62 1762





- 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.

**SILT FENCE**



- NOTES:
- 1) POINT A MUST BE HIGHER THAN POINT B (ELEVATION HEIGHT)
  - 2) PLACE RIP RAP BARRIER PERPENDICULAR TO THE FLOW WITH TIGHT GROUPINGS
  - 3) USE STRAW, ROCKS, OR FILTER FABRIC TO FILL ANY GAPS AND TAMP BACKFILL MATERIAL TO PREVENT SEDIMENT FROM PASSING THROUGH
  - 4) INSPECT AFTER EACH SIGNIFICANT STORM, MAINTAIN AND REPAIR PROMPTLY

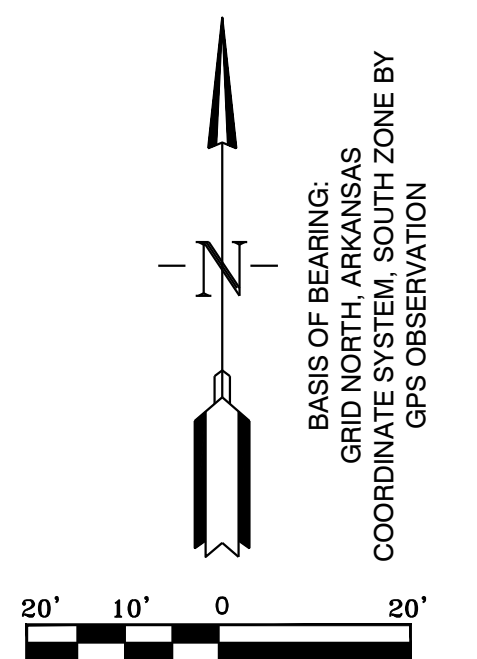
**RIP-RAP CHECK DAM**

**ERC LEGEND**

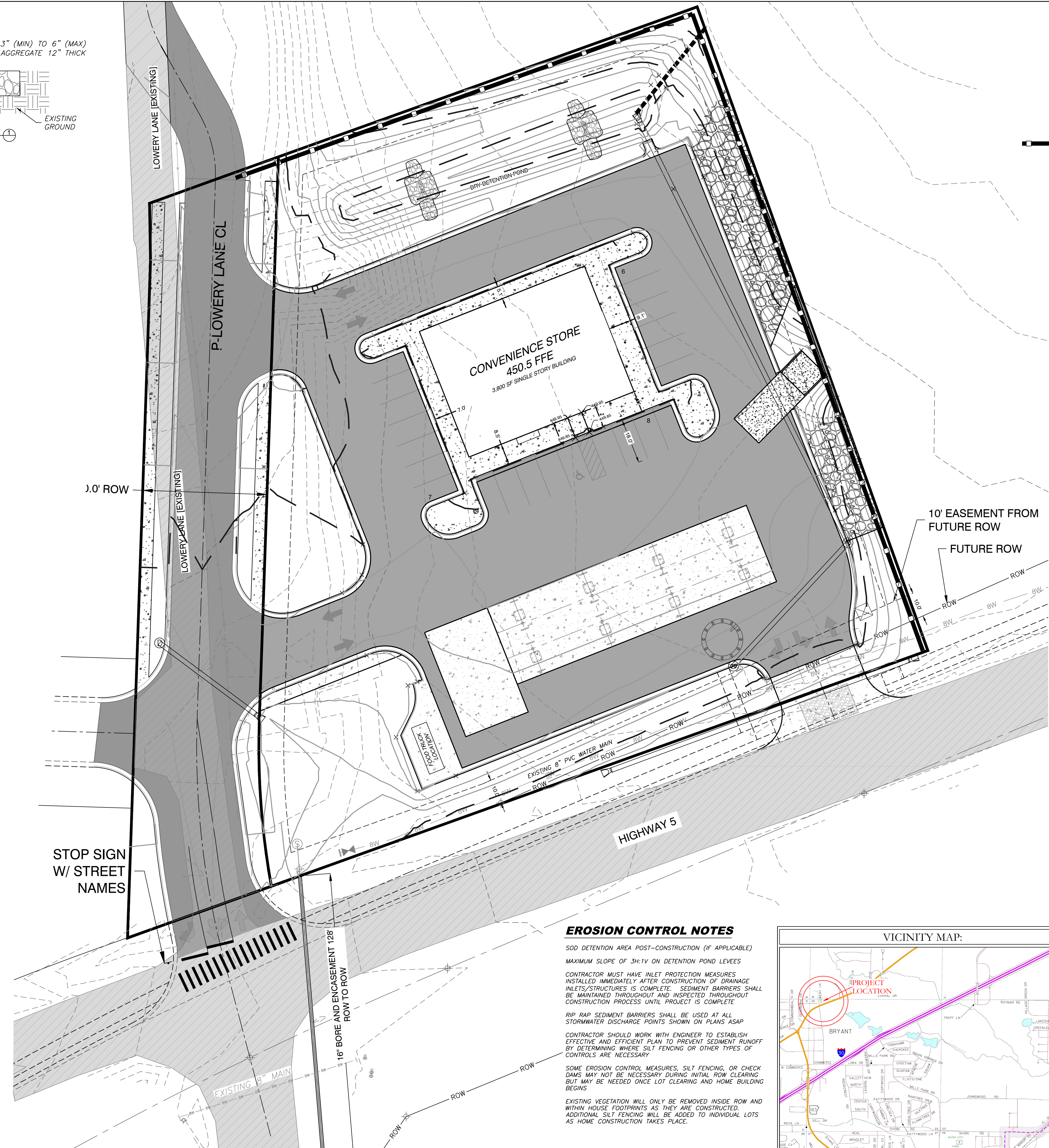
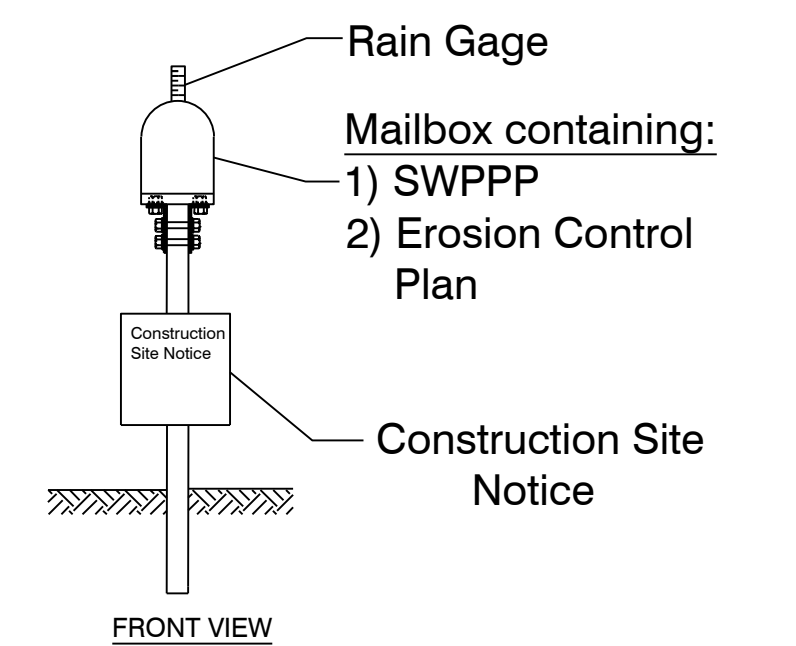
- SITE POSTING/ RAIN GAUGE
- CONC. WASHOUT DETENTION AREA
- SILT FENCE
- RIP RAP CHECK DAM
- CONSTRUCTION ENTRANCE
- DISTURBED AREA
- TRASH CONTAINER
- PORTABLE TOILET

**ORDINANCE NO. 2019-32 ARTICLE IV. (2)(J):**

DEADLINES FOR STABILIZATION AFTER CONSTRUCTION ACTIVITY TEMPORARILY CEASES. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY CEASED. DEADLINE FOR STABILIZATION AFTER CONSTRUCTION ACTIVITY PERMANENTLY CEASES. STABILIZATION MEASURES SHALL BE INITIATED IMMEDIATELY IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED.



**TYPICAL SITE POSTING:**



**EROSION CONTROL NOTES**

SOD DETENTION AREA POST-CONSTRUCTION (IF APPLICABLE)  
MAXIMUM SLOPE OF 3H:1V ON DETENTION POND LEEVES

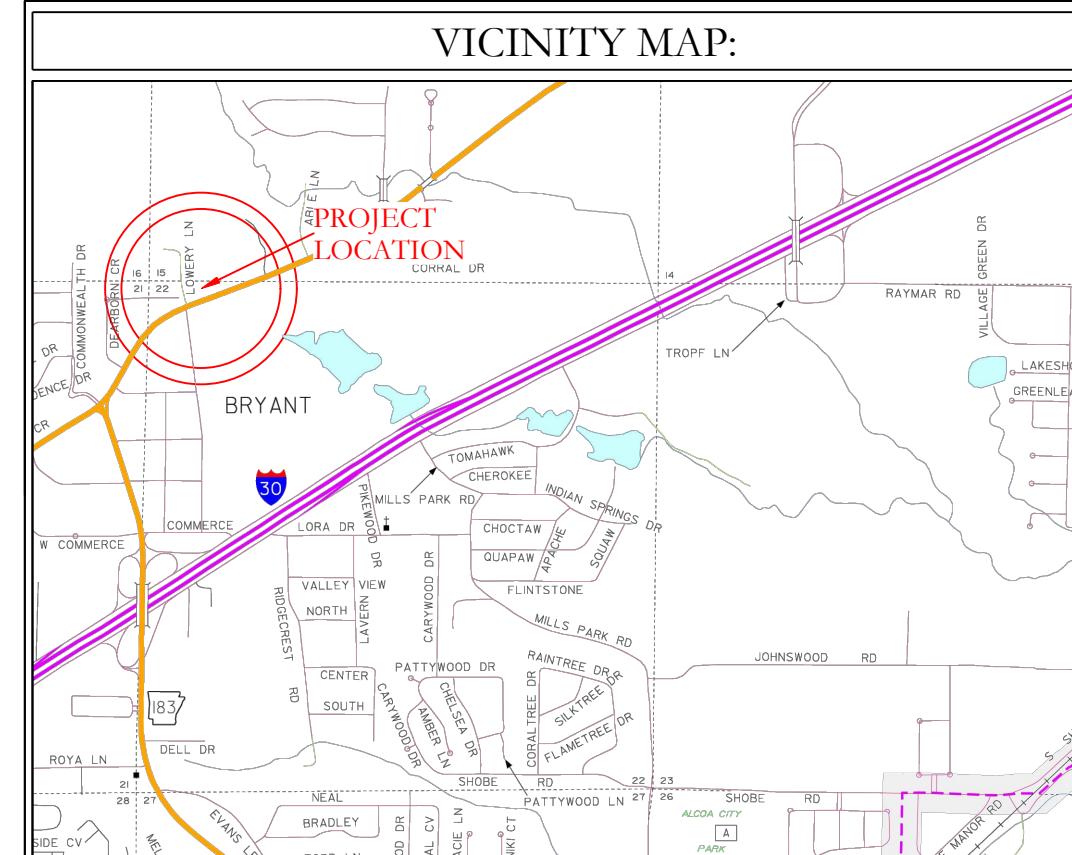
CONTRACTOR MUST HAVE INLET PROTECTION MEASURES INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF DRAINAGE INLETS/STRUCTURES IS COMPLETE. SEDIMENT BARRIERS SHALL BE MAINTAINED THROUGHOUT AND INSPECTED THROUGHOUT CONSTRUCTION PROCESS UNTIL PROJECT IS COMPLETE.

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, SILT FENCING, OR CHECK DAMS MAY NOT BE NECESSARY DURING INITIAL ROW CLEARING BUT MAY BE NEEDED ONCE LOT CLEARING AND HOME BUILDING BEGINS

EXISTING VEGETATION WILL ONLY BE REMOVED INSIDE ROW AND WITHIN HOUSE FOOTPRINTS AS THEY ARE CONSTRUCTED. ADDITIONAL SILT FENCING WILL BE ADDED TO INDIVIDUAL LOTS AS HOME CONSTRUCTION TAKES PLACE.



**HOPE CONSULTING**  
ENGINEERS - SURVEYORS

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

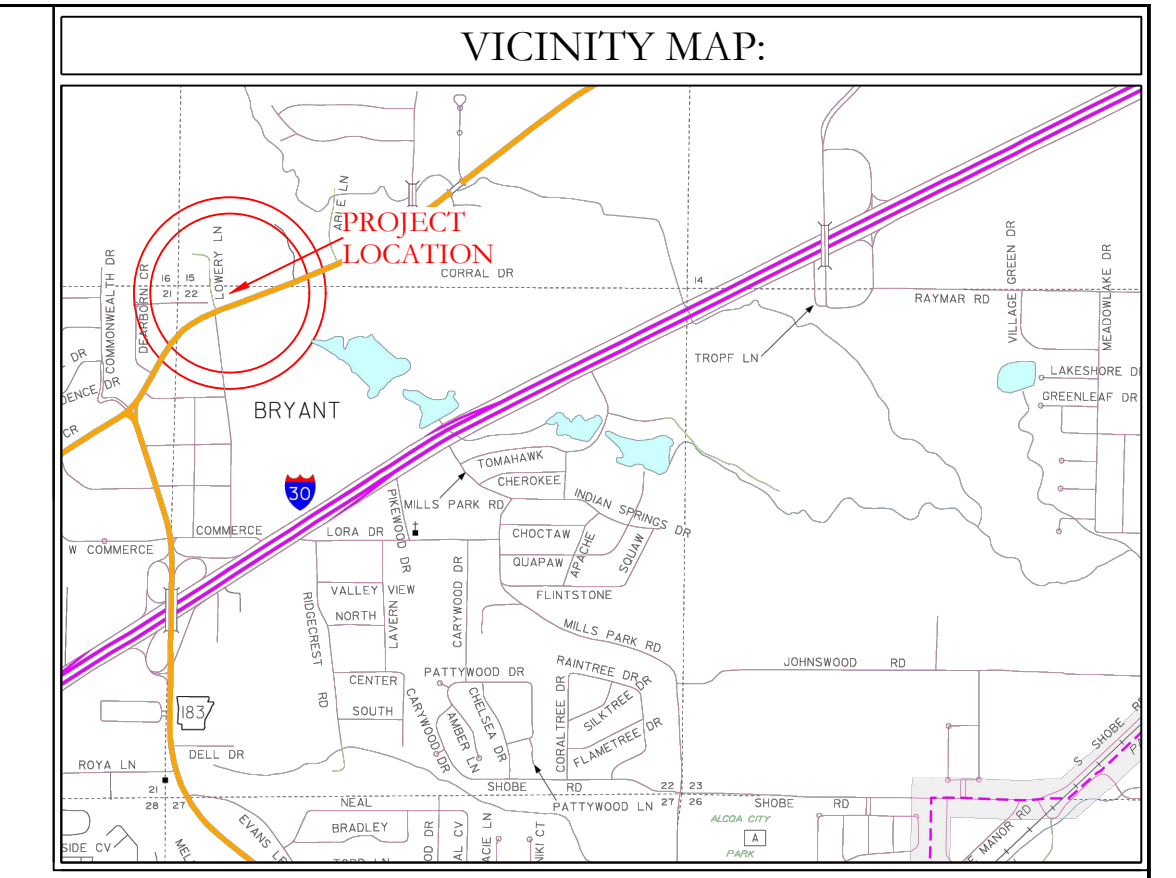
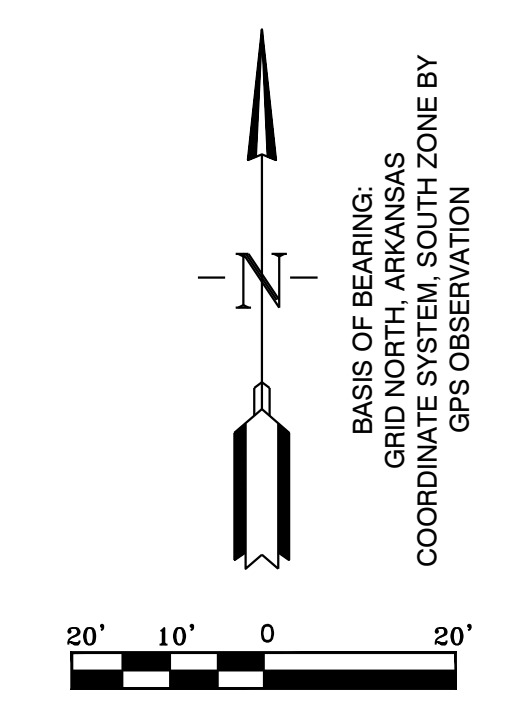
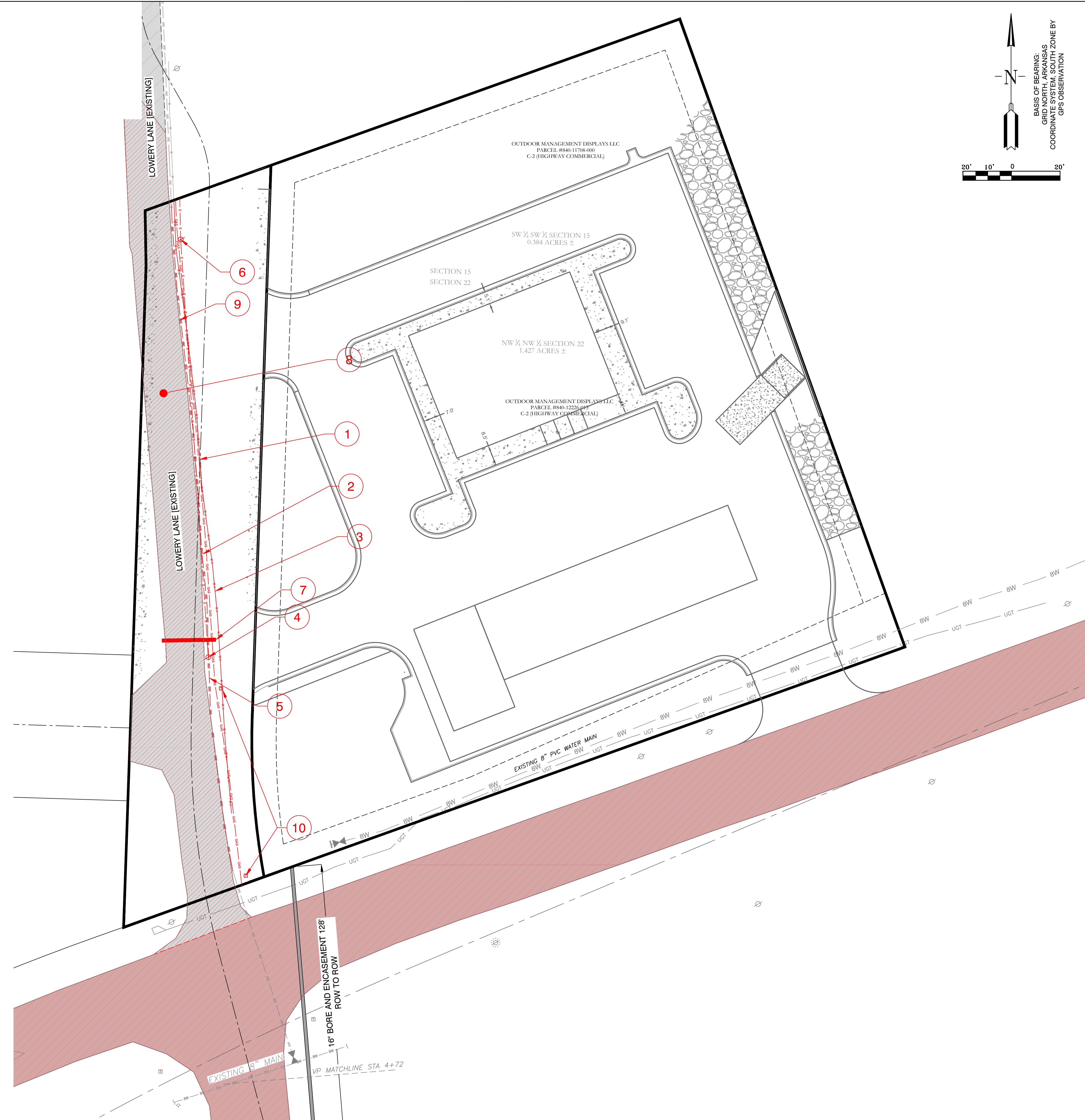
FOR USE AND BENEFIT OF:  
**STANDARD DEVELOPMENT COMPANY, LLC**

**BRYANT C-STORE  
EROSION CONTROL PLAN**  
BRYANT, SALINE COUNTY, ARKANSAS

DATE: 9-20-2022	C.A.D. BY:	DRAWING NUMBER:
REVISED: 01/05/2023	CHECKED BY:	21-0275
SHEET: C-7.0	SCALE:	
500	01S	14W 0 15/22 304 62 1762

K:\LAND PROJECTS\2044\COMMERCE\2021\21-0275-C-STORE\BRYANT\FULL STORE\REVISED 2022\12-21-2022.DWG





**DEMOLITION KEY NOTES**

1. GAS MAIN REMOVAL: COORDINATE WITH GAS MAIN
2. REMOVE EXISTING 3" WATER MAIN
3. REMOVE EXISTING FENCE
4. REMOVE POWER POLE
5. REMOVE 3" WATER MAIN
6. REMOVE POWER POLE
7. REMOVE EXISTING 18" CULVERT
8. OVERLAY EXISTING ASPHALT OR DEMO AND REMOVE WHERE NECESSARY
9. HWY 5 PAVEMENT WILL BE DEMOLISHED AND REPLACED BY ARDOT IN UPCOMING IMPROVEMENT PROJECT
10. REMOVE EXISTING TELEPHONE BOX

**GENERAL UTILITY LEGEND**

- O— O— O— O— O— O— OVERHEAD POWER
- W— W— W— W— W— WATER MAIN
- SS— SS— SS— SS— SS— EXISTING SEWER
- [Red Circle with X] — POWER POLE REMOVE
- [Sun Symbol] — EXISTING LIGHT POLE
- [Circle with S] — EXISTING SEWER
- [Red Line with Dashes] — REMOVE FENCE
- [Red Line with Dots] — WATER LINE TO BE REMOVED/REPLACED
- [Red Line with X] — OVERHEAD POWER REMOVE GAS
- [Red Line with Square] — TELEPHONE/COMMUNICATIONS

**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:  
**STANDARD DEVELOPMENT COMPANY, LLC**  
**BRYANT C-STORE**  
 DEMO PLAN  
 BRYANT, SALINE COUNTY, ARKANSAS

DATE:	9-20-2022	C.A.D. BY:		DRAWING NUMBER:	
REVISED:	01/05/2023	CHECKED BY:		21-0275	
SHEET:	C-8.0	SCALE:			
500	01S	14W	0 15/22	304	62 1762

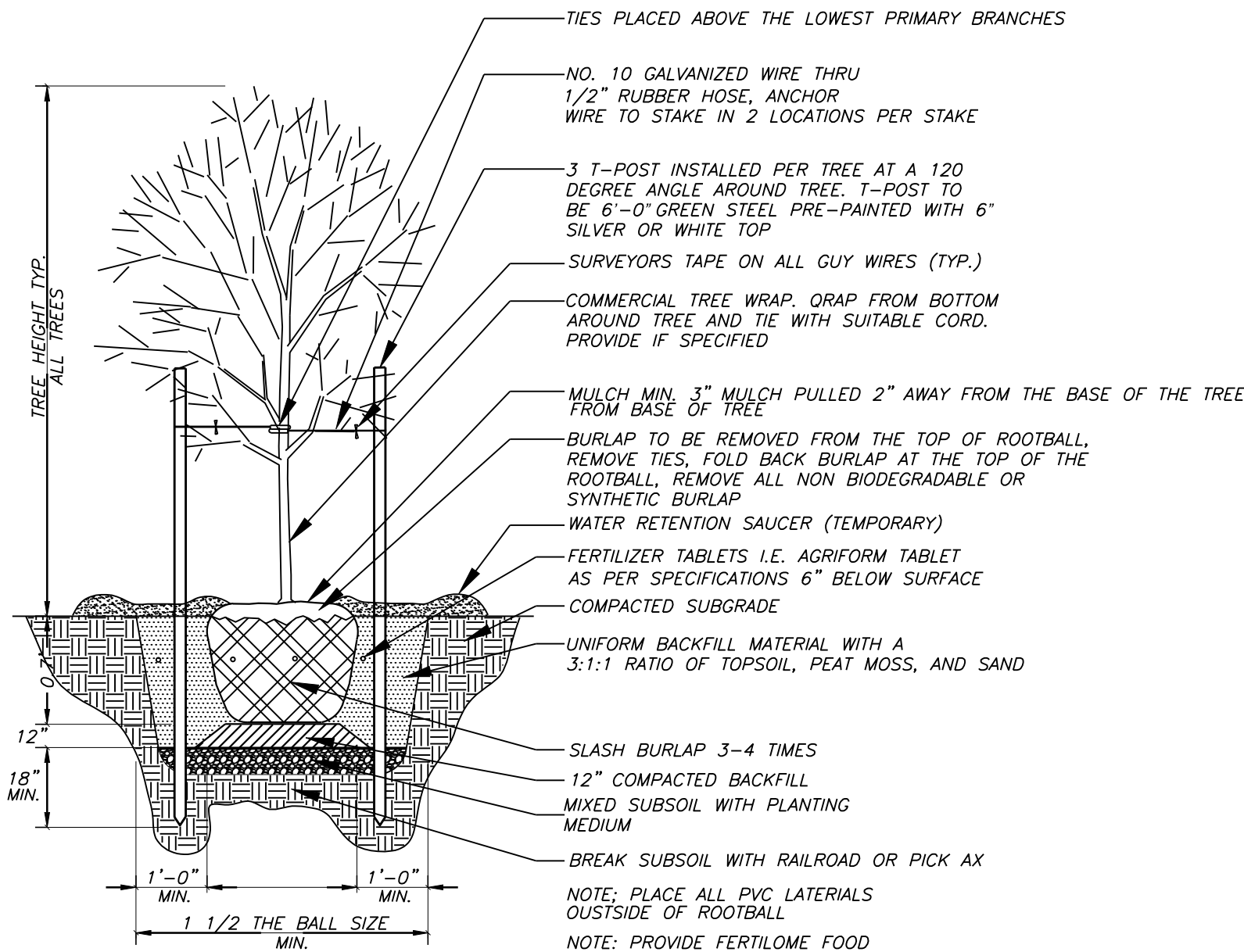
K:\LAND PROJECTS\2024\COMMERCIAL\2021-0275\C-STORE\BRYANT\21-0275\C-STORE.BRYANT\21-0275\C-STORE.BRYANT\21-0275.DWG (FULL STORE REVISED 2022) 12.21.2022.DWG



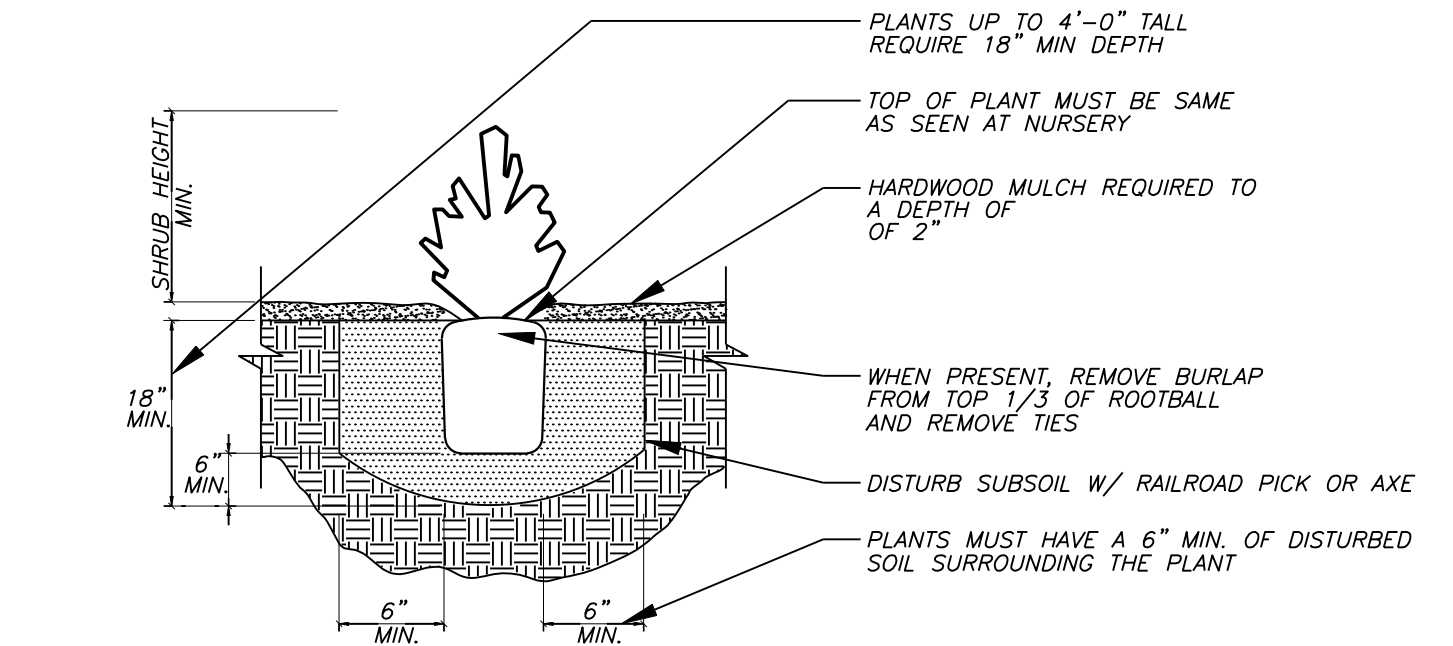
# LANDSCAPE LEGEND

COMMON NAME:	SCIENTIFIC NAME:	HEIGHT AT MATURITY:	QTY. (REQUIRED)
EVERGREEN/ 2000SF	CHOOSE FROM LIST OF SPECIES INCLUDED IN CITY OF BRYANT LANDSCAPING CODE	-	3
SHURBS			
COMPACTA HOLLY - 6' O.C. - 5 GAL.	ILEX CRENATA	6'-0"	0
CANOPY TREE	CHOOSE FROM LIST OF SPECIES INCLUDED IN CITY OF BRYANT LANDSCAPING CODE		9
SOD	BERMUDA		21360.0 SF
PLANTERS	N/A		247 SF (150)

NOTE: PLANTS TO BE INSTALLED SLIGHTLY HIGHER THAN GRADE ALLOWING FOR POSITIVE DRAINAGE AND SETTLING



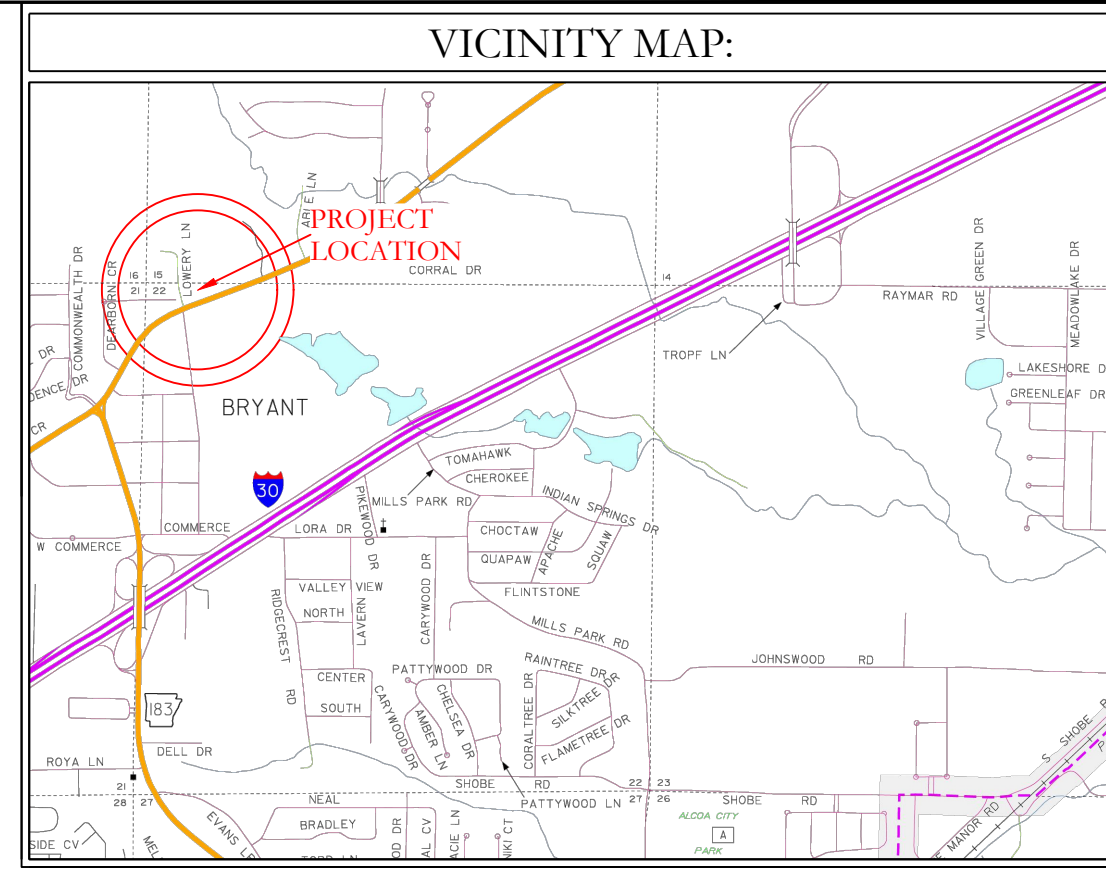
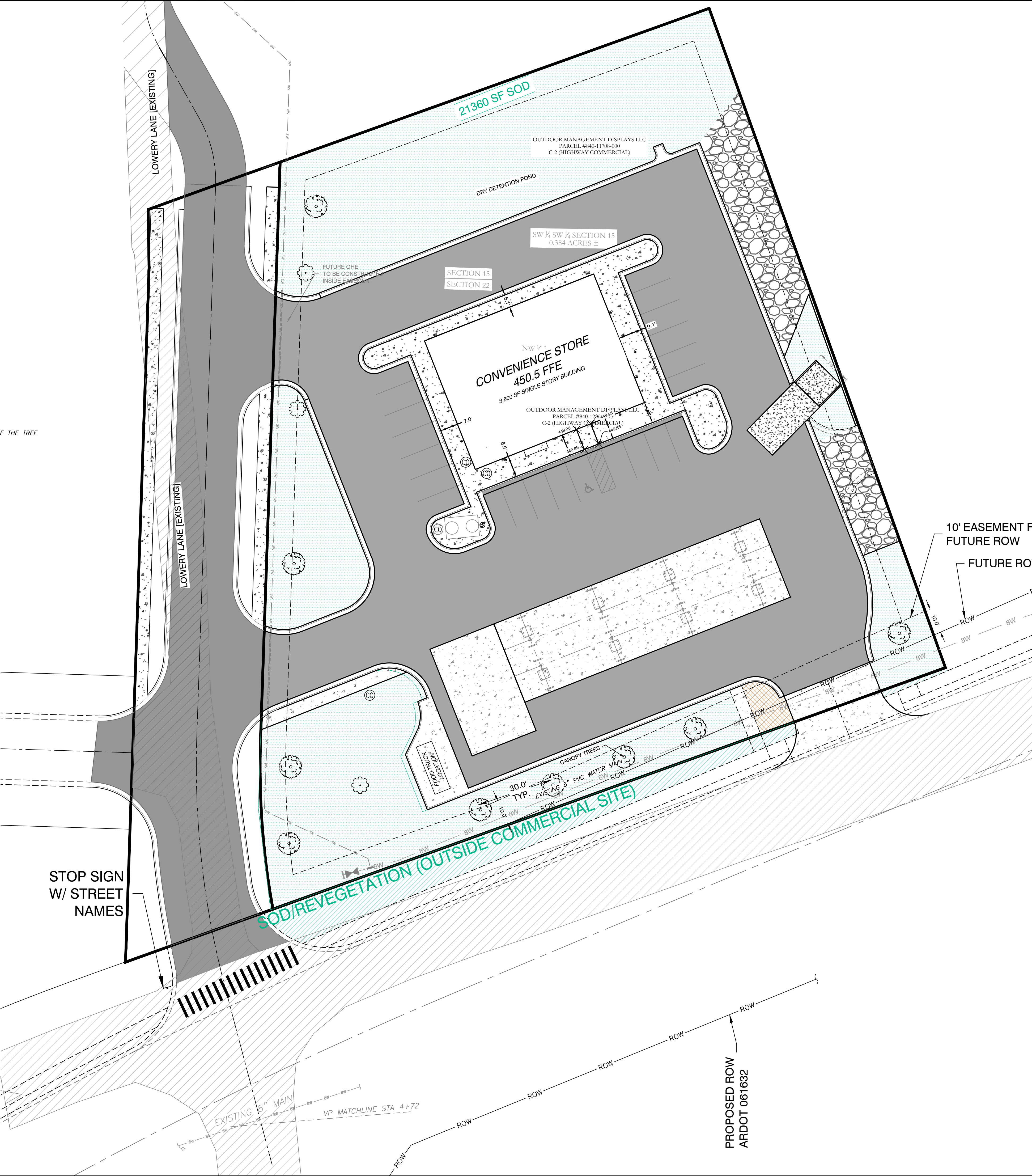
**1 TREE PLANTING DETAIL**  
NO SCALE



**2 SHRUB PLANTING DETAIL**  
NTS

**MAINTENANCE OF LANDSCAPING**

THE OWNER, TENANT, OR AGENT, IF ANY SHALL BE RESPONSIBLE FOR PROVIDING, PROTECTING AND MAINTAINING ALL LANDSCAPING IN HEALTHY GROWING CONDITIONS. REPLACING IT WHEN NECESSARY TO ENSURE CONTINUOUS CONFORMANCE WITH THESE GUIDELINES AND KEEPING IT FREE FROM REFUSE AND DEBRIS. MAINTENANCE SHALL INCLUDE THE REPLACEMENT OF ALL DEAD PLANT MATERIAL WITHIN THE GUARANTEED CONTRACT PERIOD.



- PLANTING REQUIREMENTS/CALCS (APPLICABLE)**
- PLANTING MINIMUM**  
TOTAL TREES 172 ACRES (PROPERTY) 3.0 ACRES  
EVERGREENS 2000 SF BUILDING FOOTPRINT
- PLANTER/GROUND COVERAGE**  
150 SF CONTAINED BEDS OR GROUND COVER
- LS BUFFER**  
10' WIDE BUFFER BETWEEN PARKING AND ADJ. LOTS
- TOTAL PROPERTY SIZE OF 1.5 ACRES USED FOR CALCULATIONS
- PLANTING NOTES**
- QUANTITIES SHOWN ARE FOR CONVENIENCE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING THEIR OWN COUNT.
  - ALL SHRUBS AND TREES SHALL RECEIVE PLANTING BACKFILL OF 2/3 TOPSOIL AND 1/3 COMPOST BY VOLUME AND 2 LBS OF 14-14-14 TIMED-RELEASE FERTILIZER PER CUBIC YARD OF BACKFILL.
  - ALL BEDS INSIDE LAWN AREAS TO BE EDGED WITH 4" PAINTED STEEL EDGING.
  - TOPSOIL SHALL BE ADDED AS NEEDED TO CREATE A SMOOTH FINISH GRADE ON PLANTING AND SODDED AREAS.
  - ALL TREES AND SHRUBS SHALL BE THOROUGHLY WATERED IMMEDIATELY AFTER PLANTING.
  - ALL NON-PAVED AREAS NOT SHOWN AS PLANTING BEDS SHALL BE SODDED WITH SOLID TIFWAY 419 BERMUDA SOD. CONTRACTOR SHALL CALCULATE ALL SODDED AREAS.
  - NO TREES MAY BE PLANTED WITHIN 5' OF PUBLIC UTILITIES. MAINTAIN 5' SEPARATION BETWEEN TREES AND ANY EXISTING / PROPOSED UTILITY MAINS.

NO PORTION OF THIS PROPERTY IS WITHIN THE 100 YEAR SPECIAL FLOOD HAZARD AREA ACCORDING TO THE FLOOD INSURANCE RATE MAP PANEL #05125C0240E DATED 06-05-2020.

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

20' 10' 0' 20'

**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:  
**STANDARD DEVELOPMENT COMPANY, LLC**

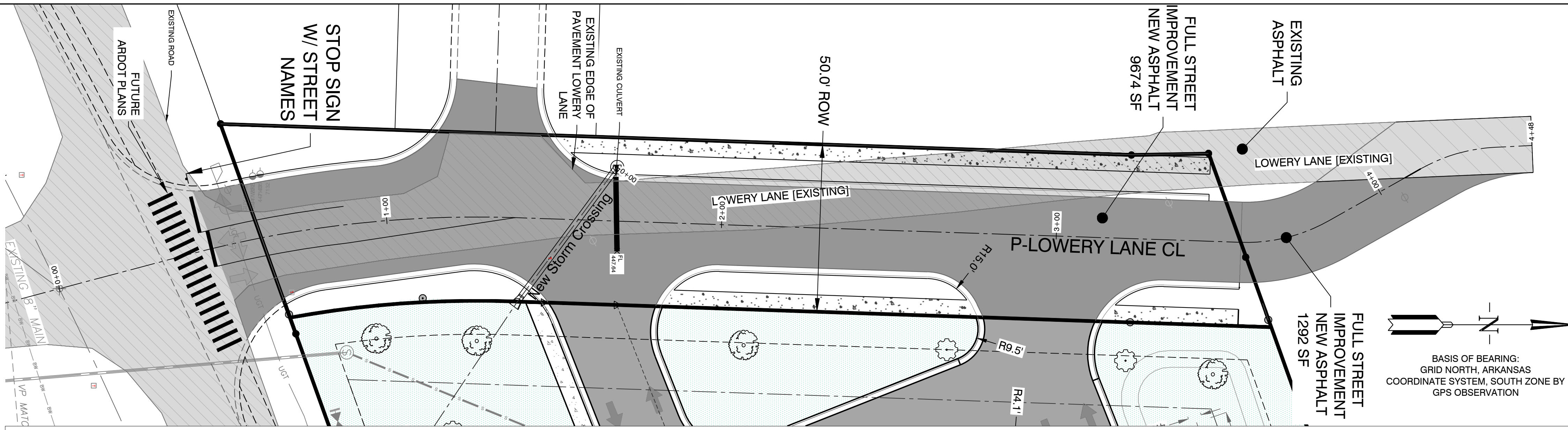
**BRYANT C-STORE  
LANDSCAPE PLAN**  
BRYANT, SALINE COUNTY, ARKANSAS

DATE: 9-20-2022	C.A.D. BY:	DRAWING NUMBER:
REVISED: 01/04/2023	CHECKED BY:	21-0275
SHEET: 1-10	SCALE:	

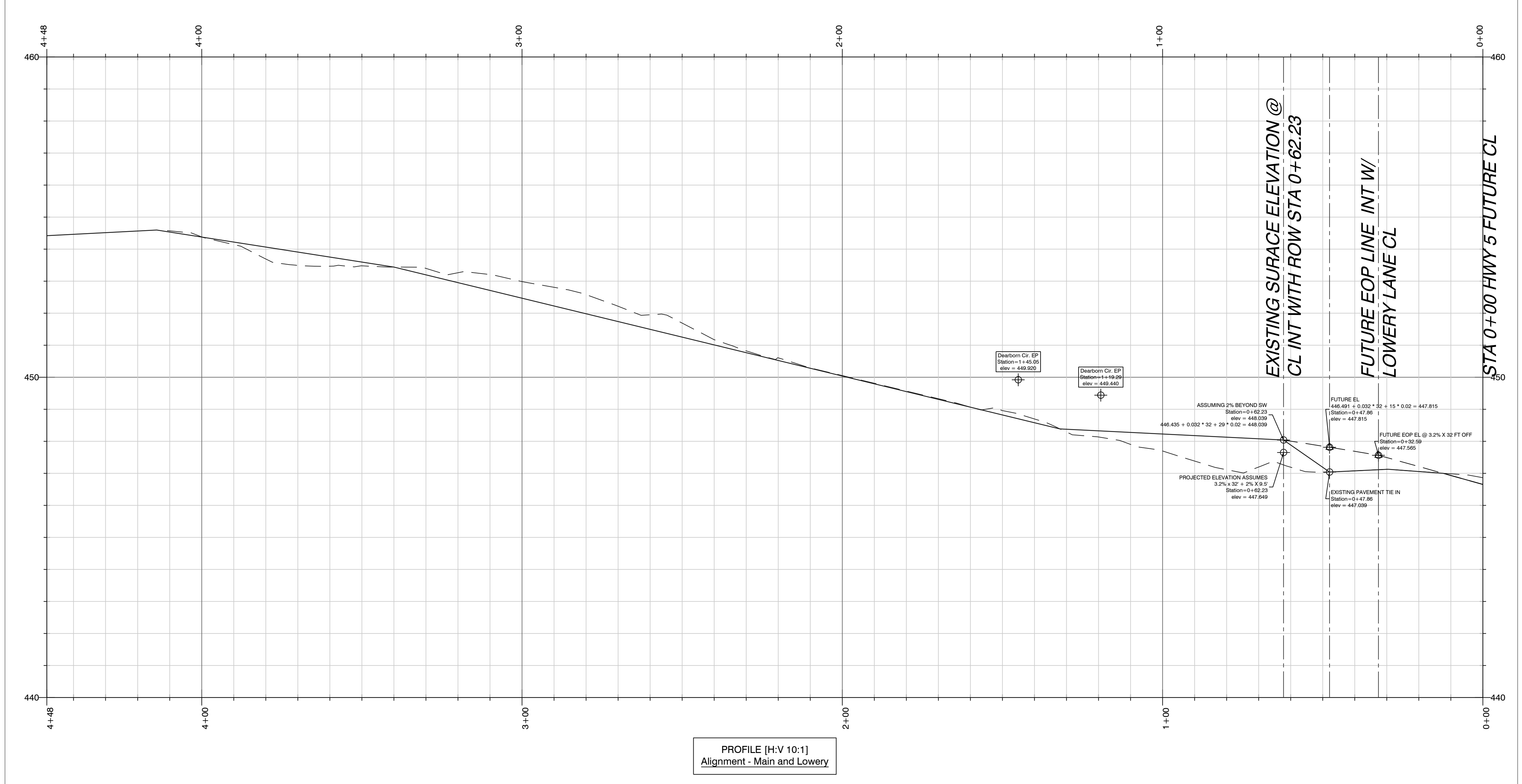
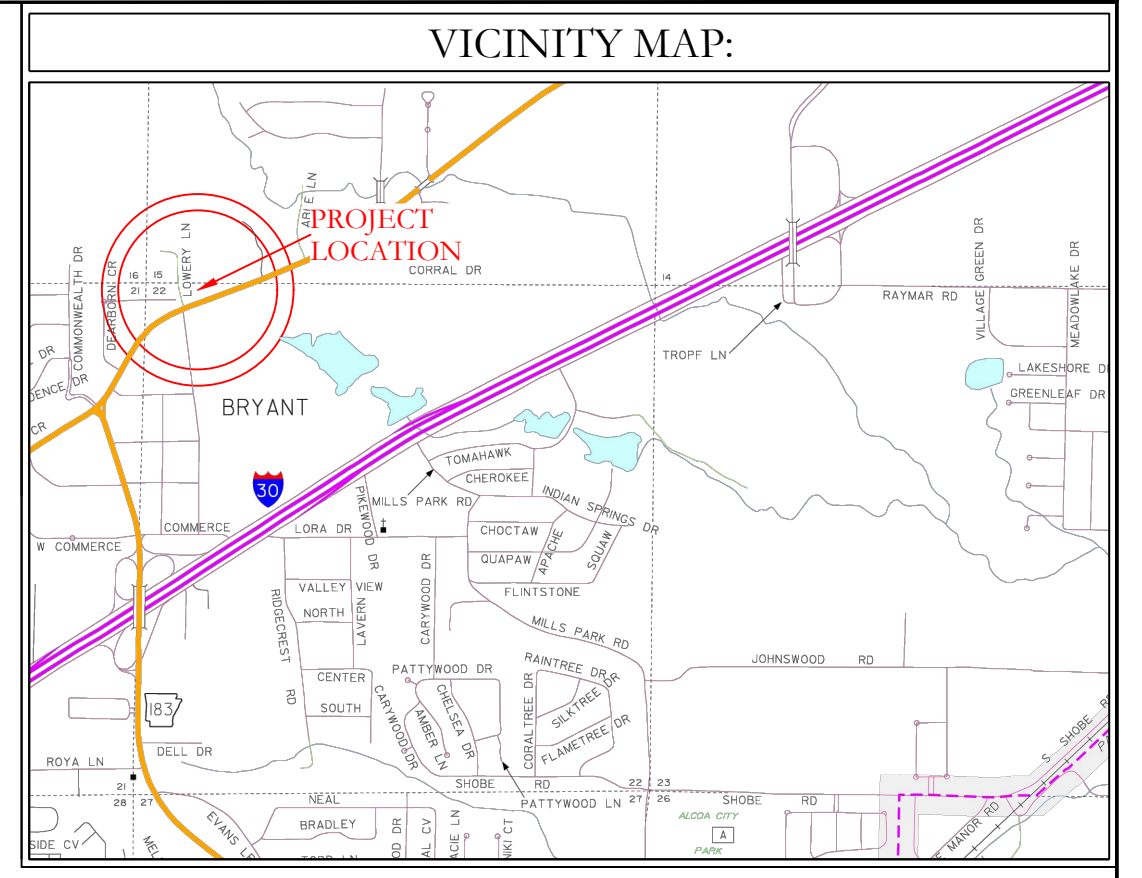
500 01S 14W 0 15/22 304 62 1762

K:\LAND PROJECTS\2024\COMMERCE\2024-09-20\24-CSTORE.BRYANT\LANDSCAPE\2024-09-20\24-CSTORE.BRYANT (P.L.L.) DWG 21-0275-CSTORE.BRYANT (P.L.L.) STORE REVISION 2022-12-21-2022.DWG





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

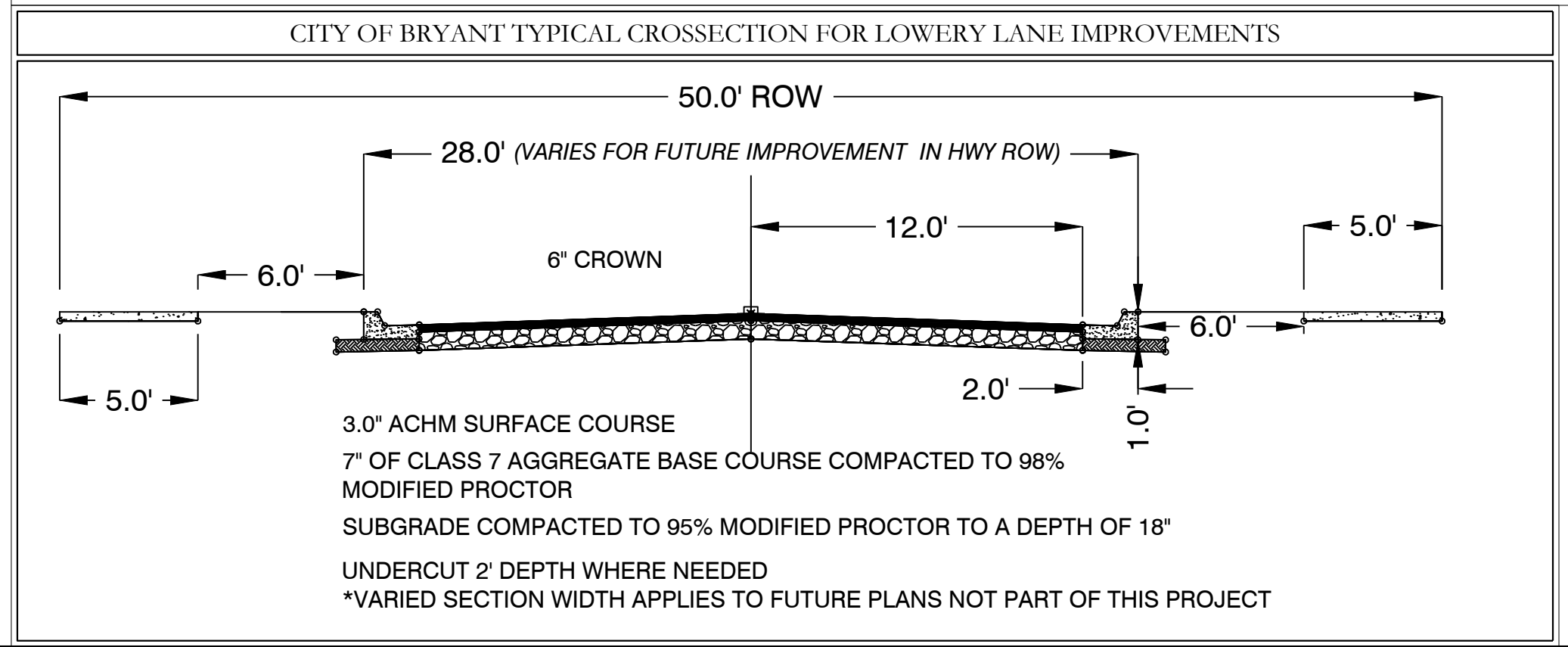
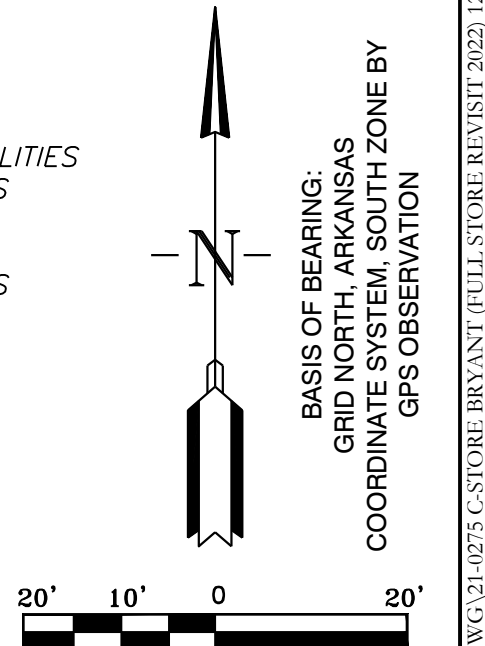


PROFILE [H:V 10:1]  
Alignment - Main and Lowery



**DISCLAIMER**  
UTILITIES SHOWN ARE NOTED BY VISIBLE OBSERVATION ONLY. UNDERGROUND UTILITIES ARE APPROXIMATE. NO EXCAVATION HAS TAKEN PLACE AS OF THIS DATE TO DETERMINE THE EXACT LOCATION OF UNDERGROUND UTILITIES SHOWN ON THIS SURVEY

**FLOOD STATEMENT**  
NO PORTION OF THIS PROPERTY IS WITHIN THE 100 YEAR SPECIAL FLOOD HAZARD AREA ACCORDING TO THE FLOOD INSURANCE RATE MAP PANEL #05125C0240E DATED 06-05-2020.



**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:  
**STANDARD DEVELOPMENT COMPANY, LLC**

BRYANT C-STORE  
LOWERY PROFILE - EXISTING EDGE OF PAVEMENT  
BRYANT, SALINE COUNTY, ARKANSAS

DATE:	9/20/2022	C.A.D. BY:		DRAWING NUMBER:
REVISED:	01/05/2023	CHECKED BY:		21-0275
SHEET:	C-9.0	SCALE:		

500	01S	14W	0 15/22	304	62	1762
-----	-----	-----	---------	-----	----	------

K:\LAND PROJECTS\2024\COMMERCE\2021-21-0275\C-STORE.BRYANT (FULL.DWG) 21-0275-C-STORE.BRYANT (FULL STORE REVISION) 2022, 12-21-2022.DWG