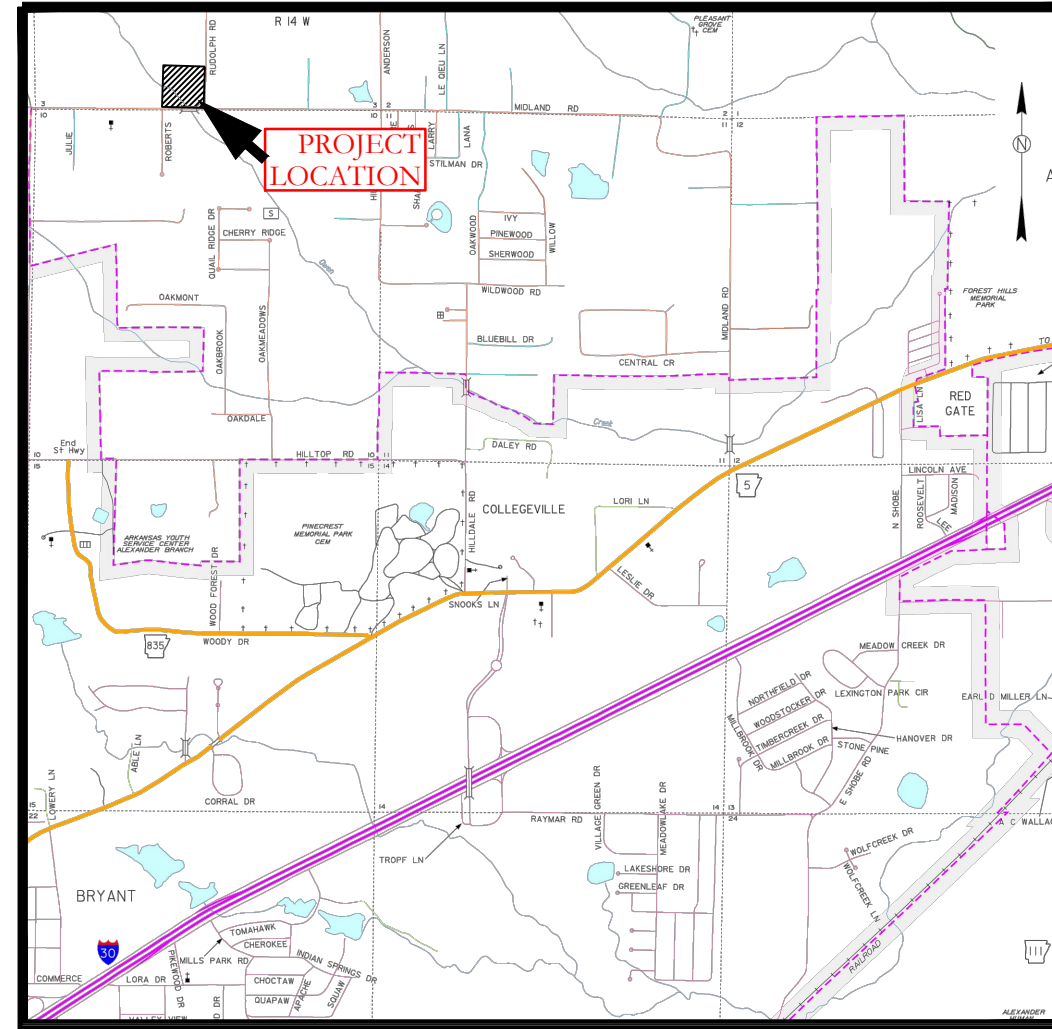


CONSTRUCTION PLANS JACOB'S CORNER SALINE COUNTY, AR



VICINITY MAP

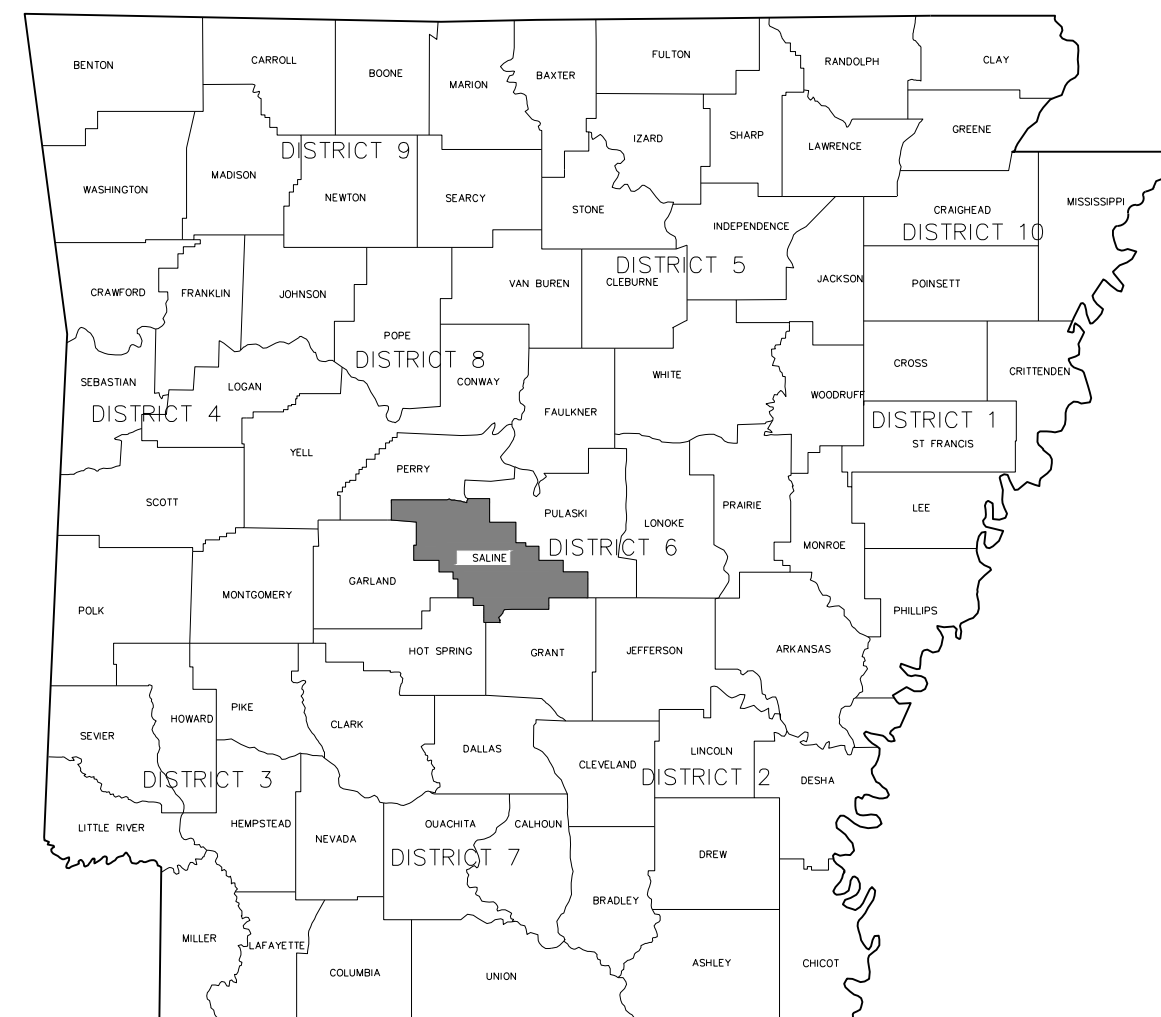
PREPARED BY:

HOPE
CONSULTING
ENGINEERS - SURVEYORS

117 S. Market Street,
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DRAWING INDEX

SHEET NO.	TITLE
	PLAT
C-1.0	RUDOLPH IMPROVEMENT
C-2.0	STREET PLAN & PROFILE
C-2.1	RUDOLPH IMPROVEMENT PAVEMENT PLAN VIEW
C-3.1	UTILITY PLAN AND PROFILE
C-4.0	UTILITY DETAILS 1
C-4.1	UTILITY DETAILS 2
C-5.0	CIVIL SPECS
C-6.0	DRAINAGE PLAN
C-7.0	EROSION CONTROL PLAN



CIVIL ENGINEER
HOPE CONSULTING INC
117 S. MARKET STREET
BENTON, AR 72015

ARCHITECT
N/A

STRUCTURAL ENGINEER
N/A

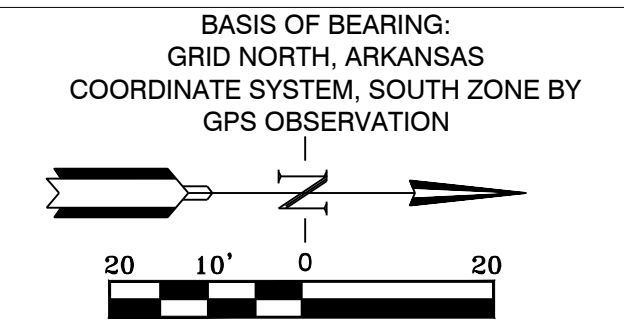
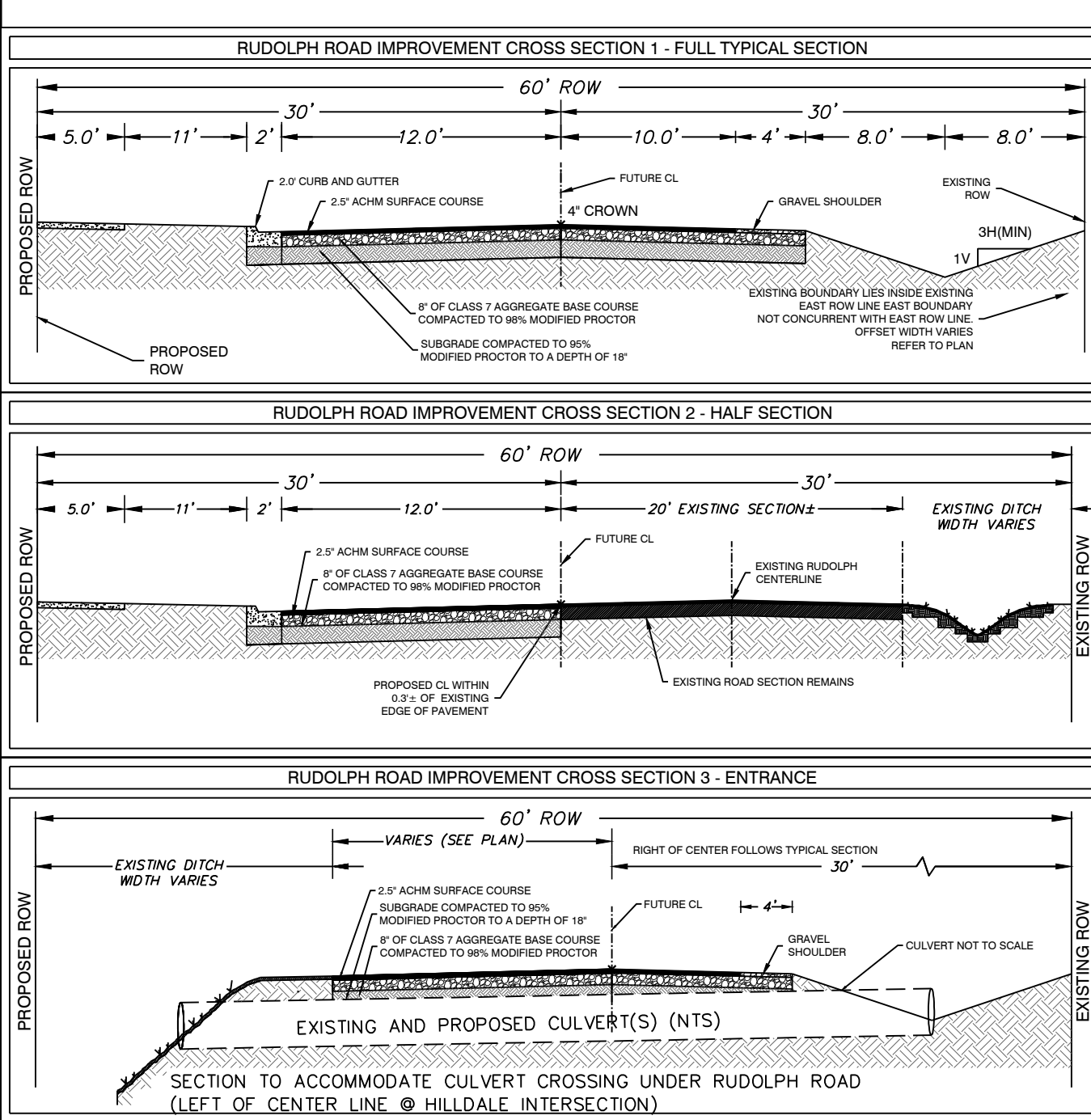
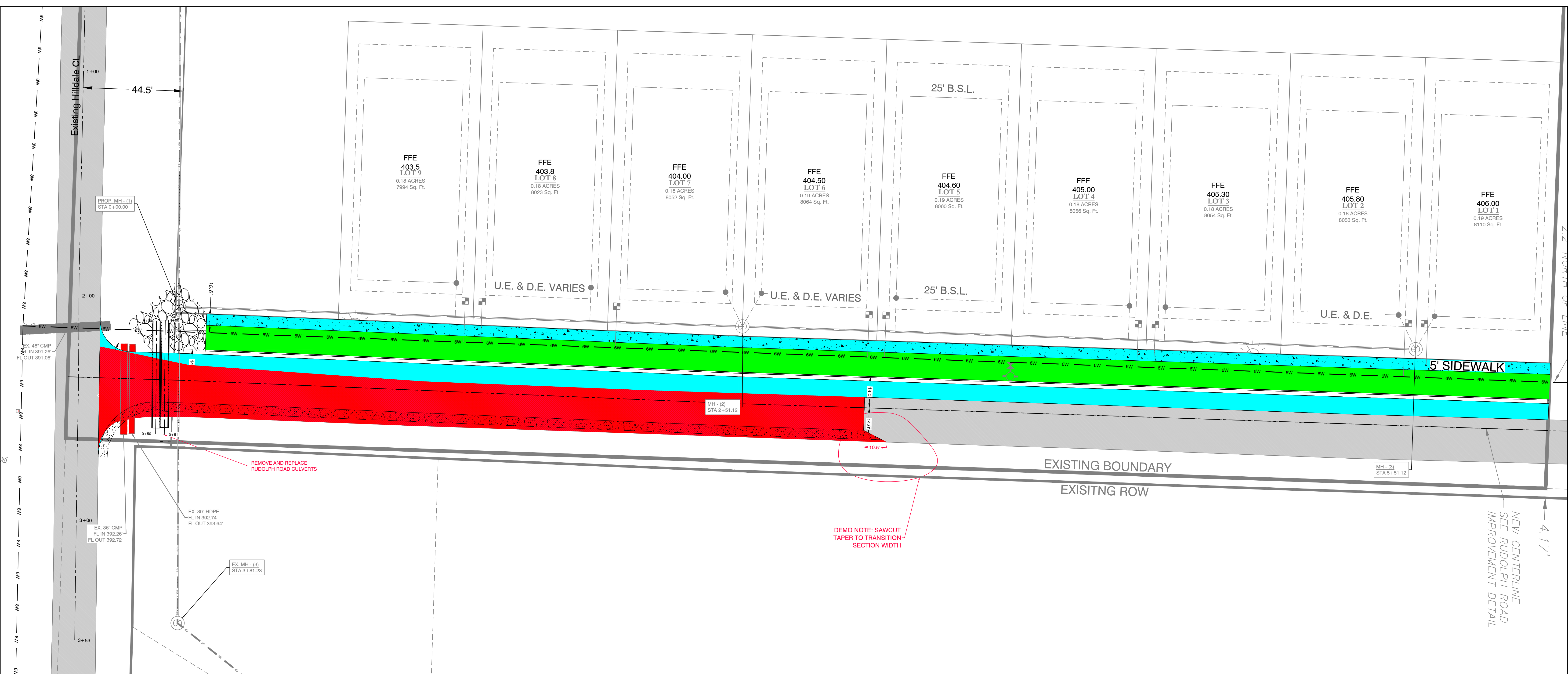
GEOTECHNICAL ENGINEER

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JACOB'S CORNER

DATE:	02-01-2022	C.A.D. BY:		DRAWING NUMBER:
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SHEET:		SCALE:		



HATCH LEGEND

- PROPOSED RIP RAP 630 SF
- PROPOSED GREEN STRIP 6571
- DEMO PAVEMENT 7242
- EXISTING PAVEMENT
- PROPOSED ASPHALT 9941 SF
- PROPOSED SHOULDER 1424 SF
- PROPOSED SIDEWALK (5' WIDTH)

HOPE CONSULTING ENGINEERS - SURVEYORS

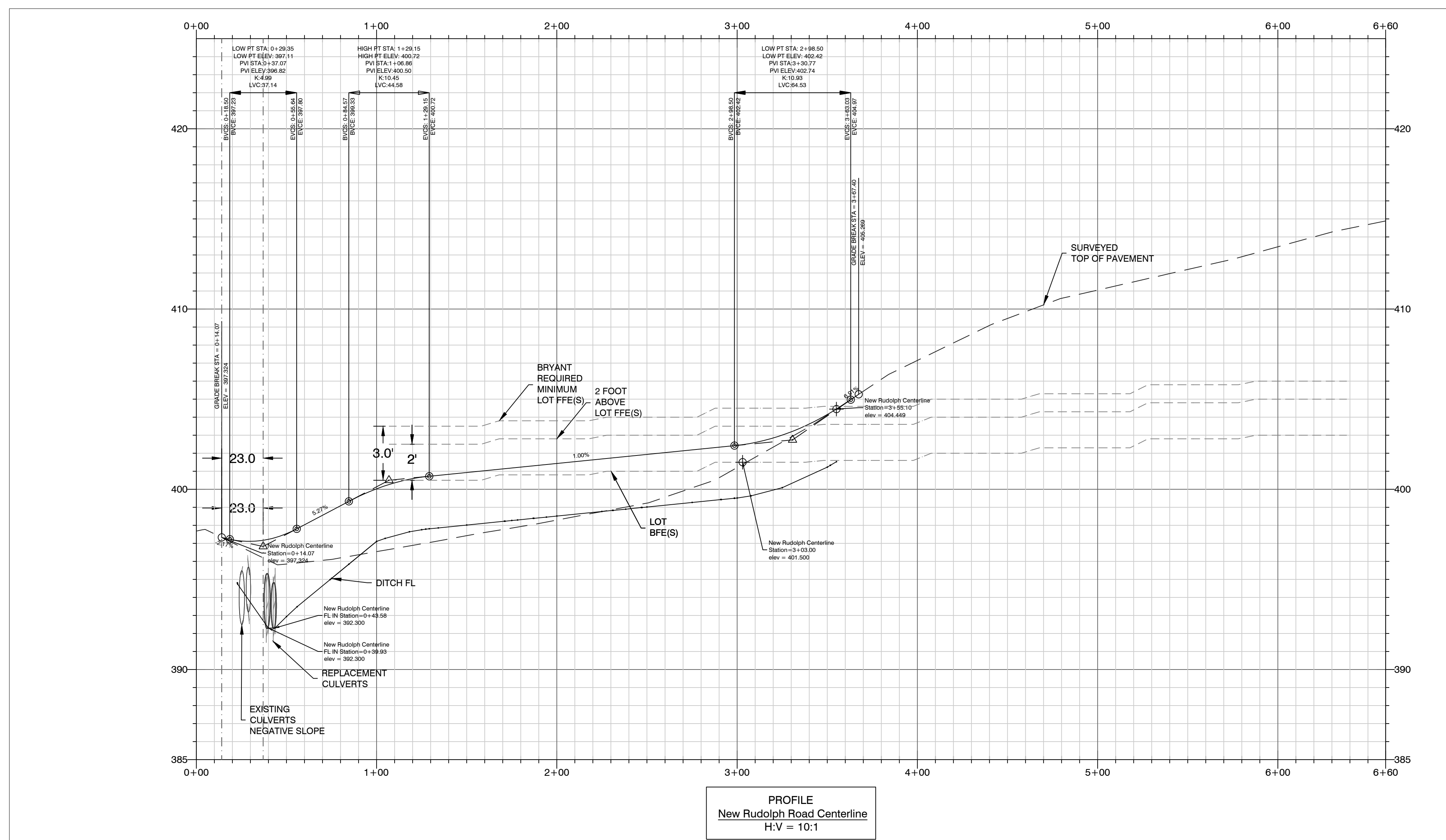
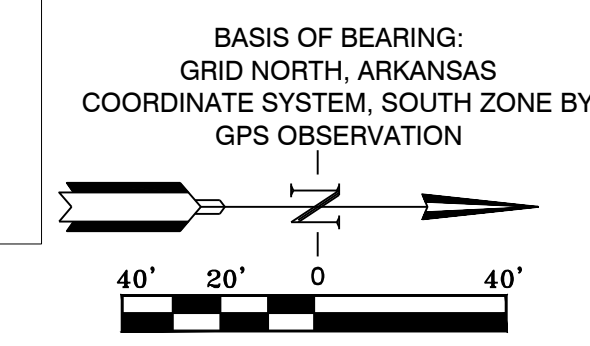
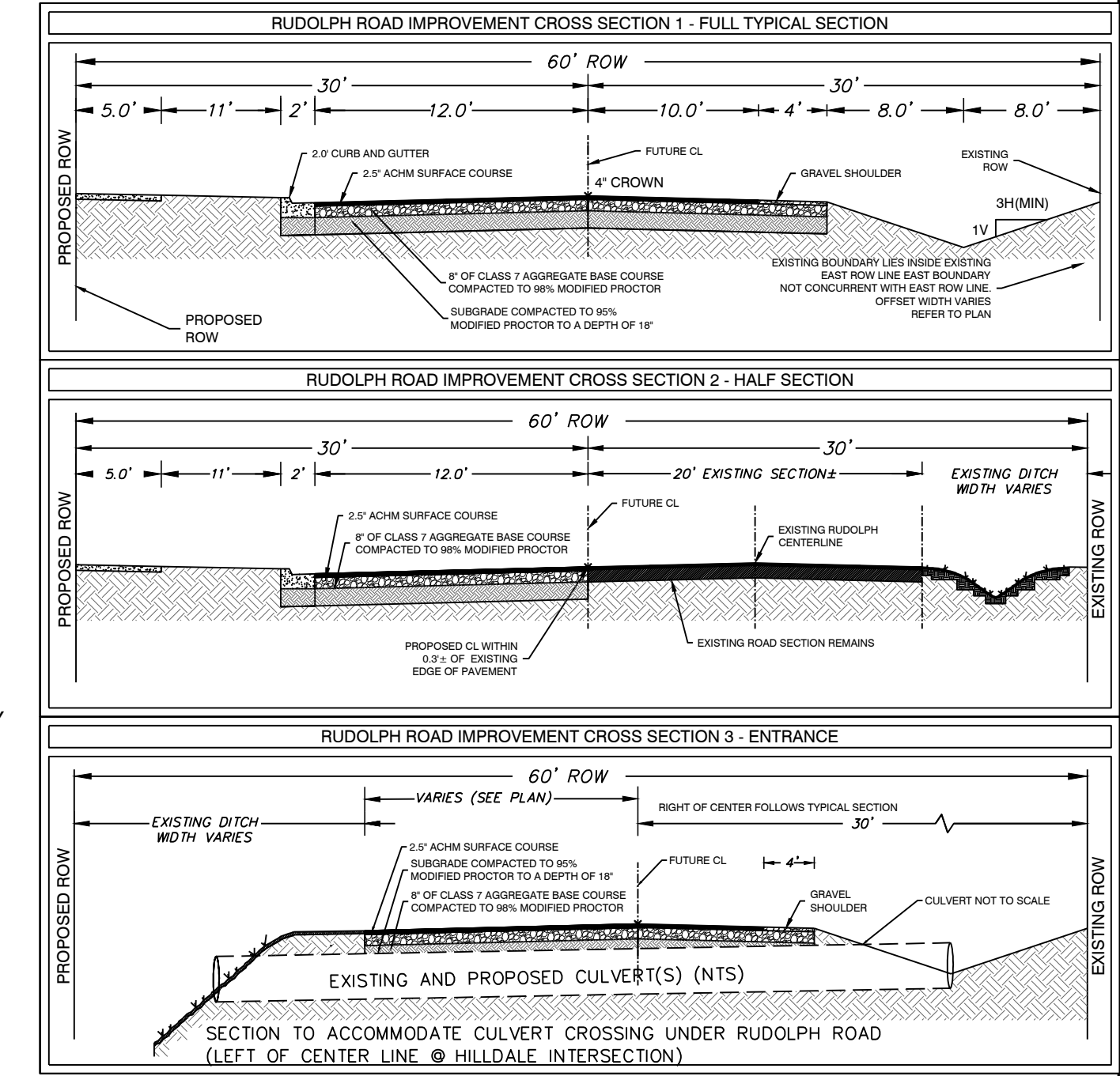
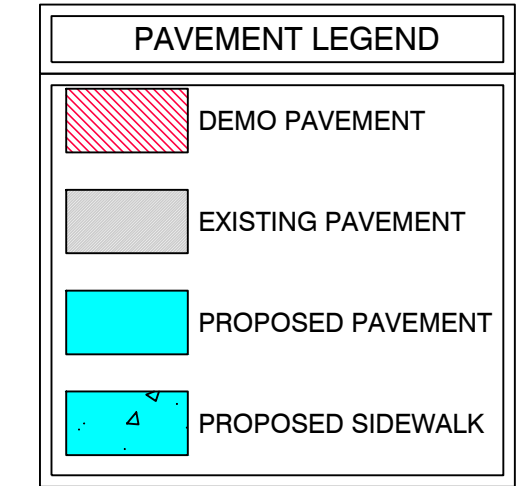
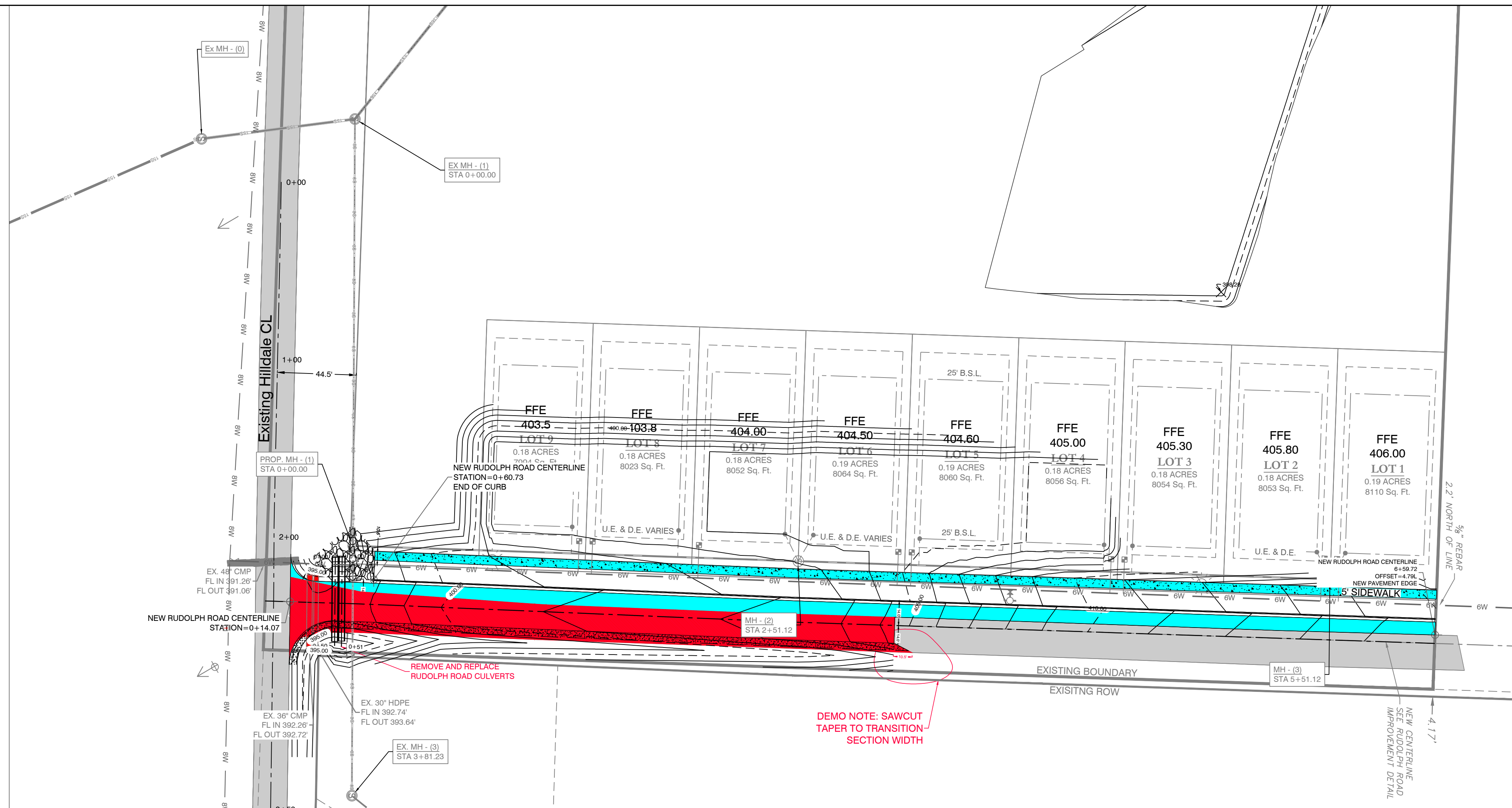
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JACOB'S CORNER
RUDOLPH ROAD IMPROVEMENT PLAN
SALINE COUNTY, ARKANSAS

DATE: 02-01-2022	C.A.D. BY:	DRAWING NUMBER:
REVISIONS:	CHECKED BY:	20-0722
SHEET: C-1.0	SCALE:	
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K:\LAND PROJECTS\2024\SUBDIVISIONS\2024\20-0722 GIRON SUBDIVISION\DWG\GIRON SUBDIVISION\JACOB'S CORNER\UPDATE\02-01-2022.DWG



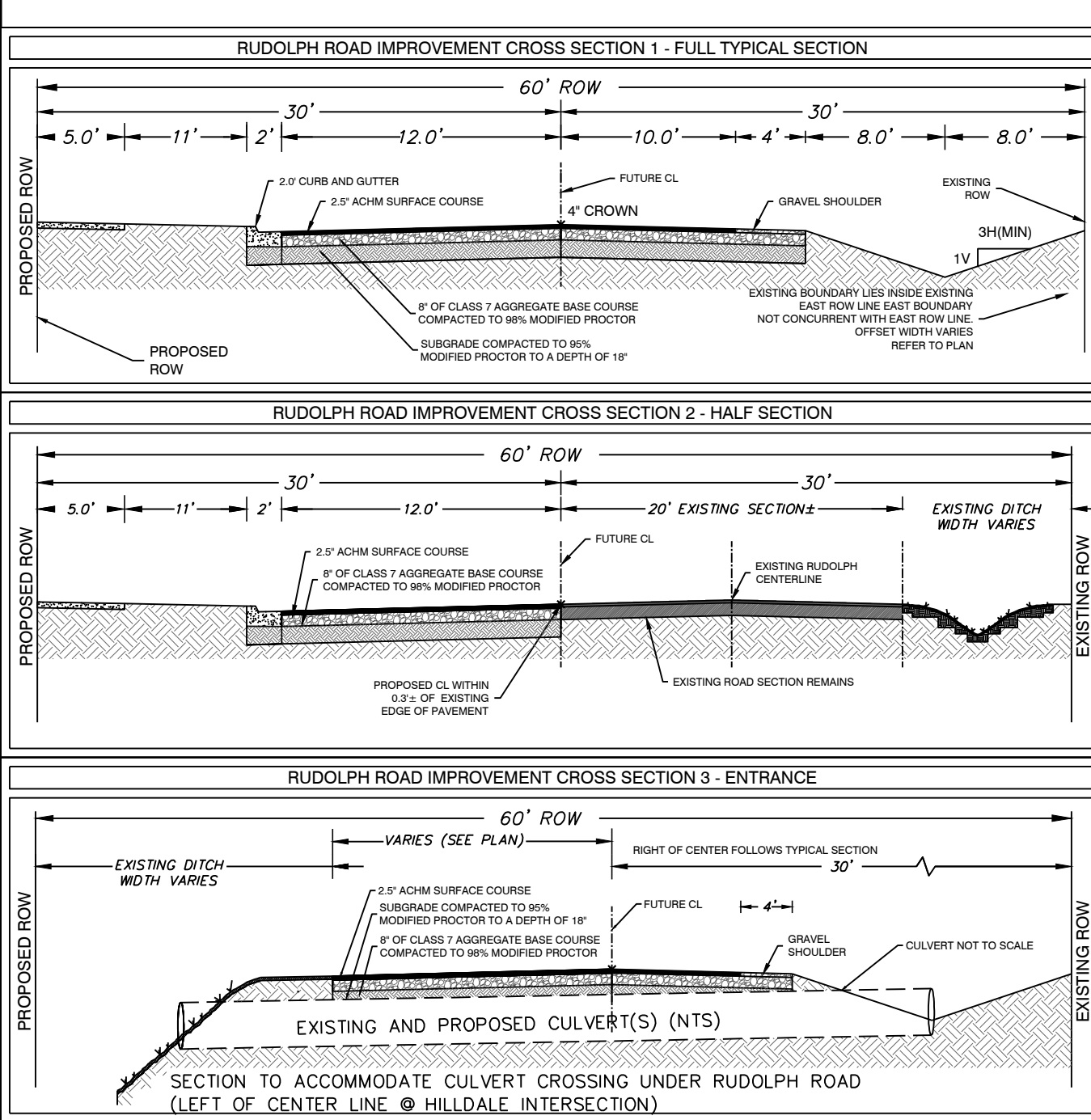
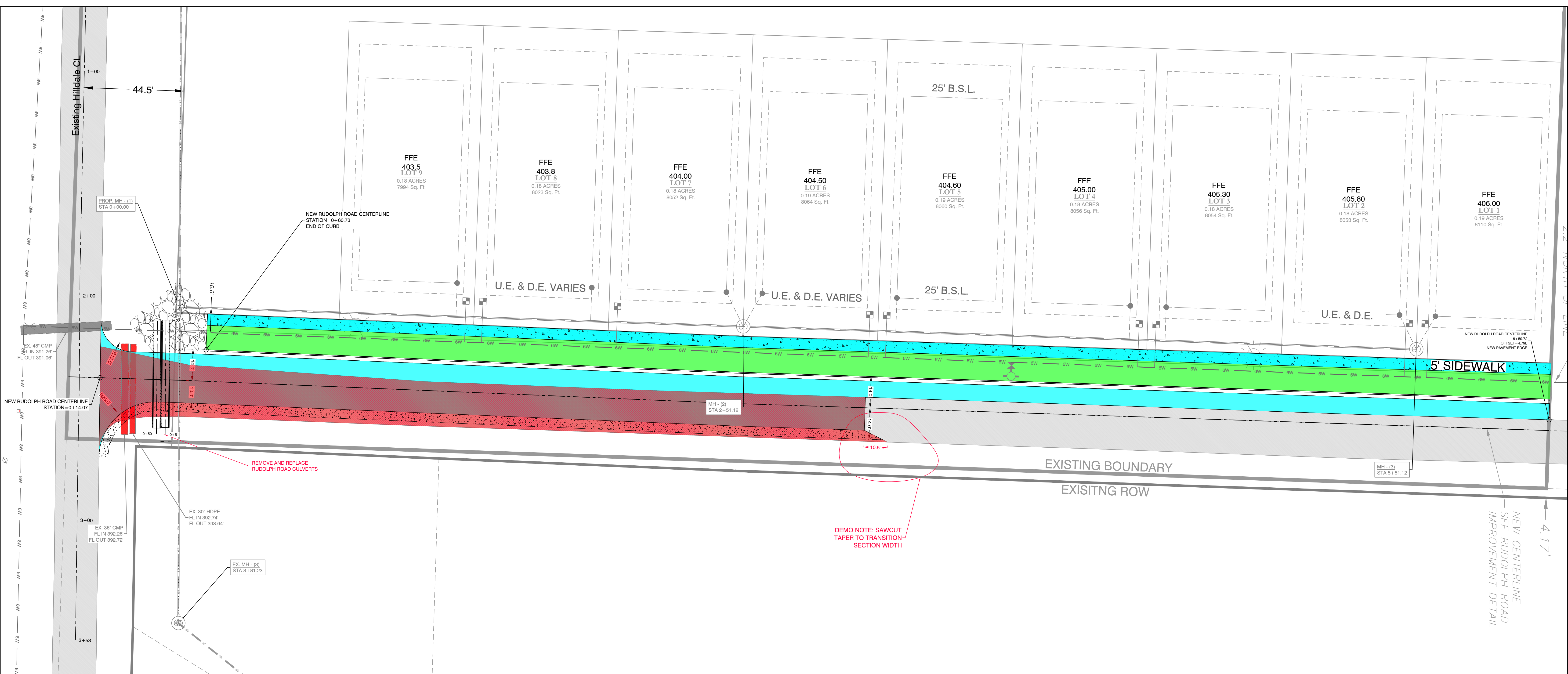
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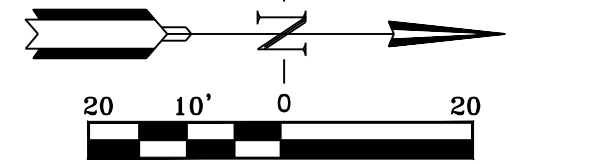
JACOB'S CORNER
 STREET PLAN AND PROFILES
 SALINE COUNTY, ARKANSAS

DATE:	02-01-2022	C.A.D. BY:		DRAWING NUMBER:
REVISION:		CHECKED BY:		20-0722
SHEET:	C-2-0	SCALE:		
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BASIS OF BEARING:
 GRID NORTH, ARKANSAS
 COORDINATE SYSTEM, SOUTH ZONE BY
 GPS OBSERVATION



HATCH LEGEND

[Hatched Pattern]	PROPOSED RIP RAP 630 SF
[Green Hatched Pattern]	PROPOSED GREEN STRIP 6571
[Red Hatched Pattern]	DEMOLITION PAVEMENT 7242
[Black Hatched Pattern]	EXISTING PAVEMENT
[Blue Hatched Pattern]	PROPOSED ASPHALT 9941 SF
[Light Blue Hatched Pattern]	PROPOSED SHOULDER 1424 SF
[Dark Blue Hatched Pattern]	PROPOSED SIDEWALK (5' WIDTH)

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 ENGINEERS - SURVEYORS

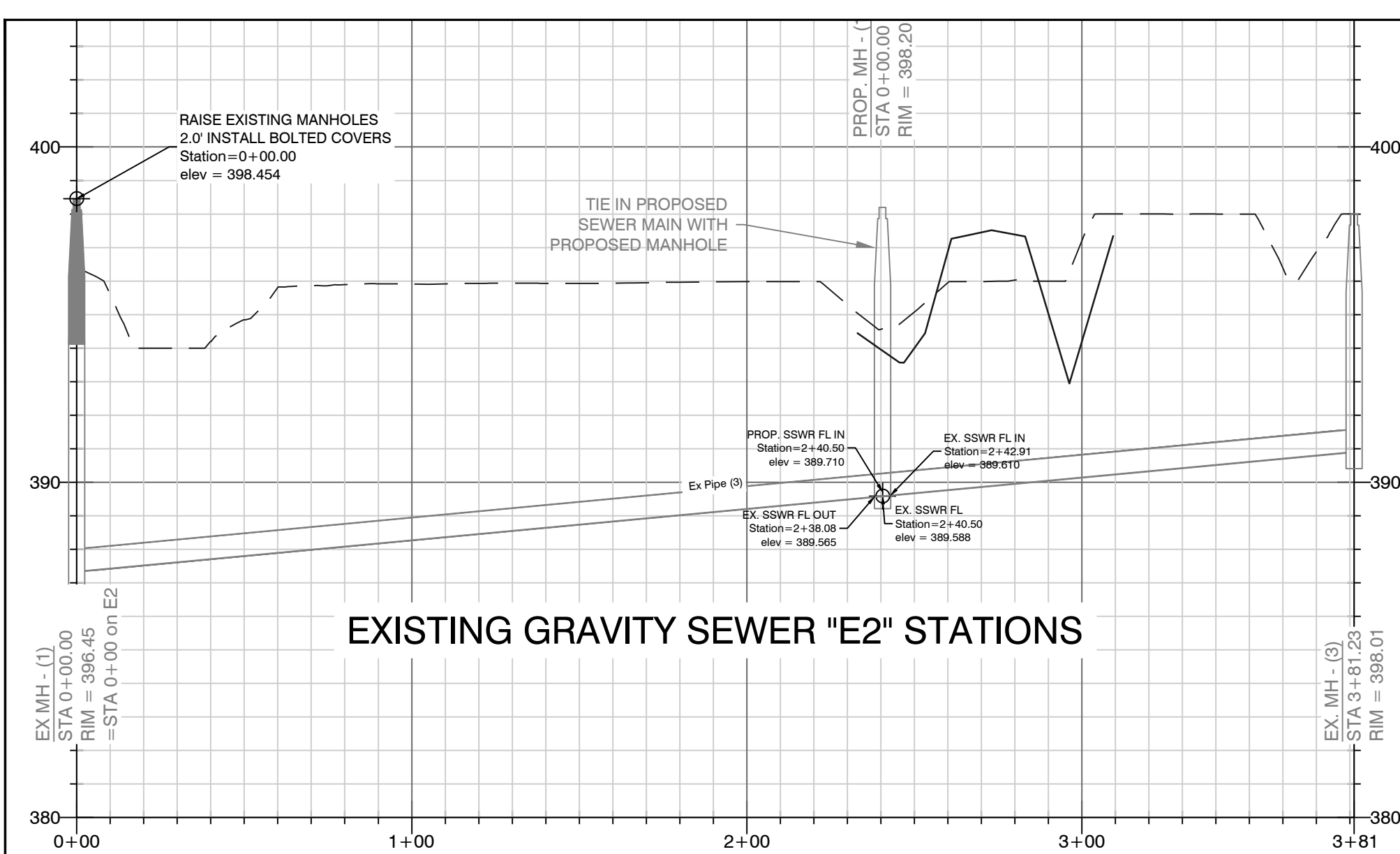
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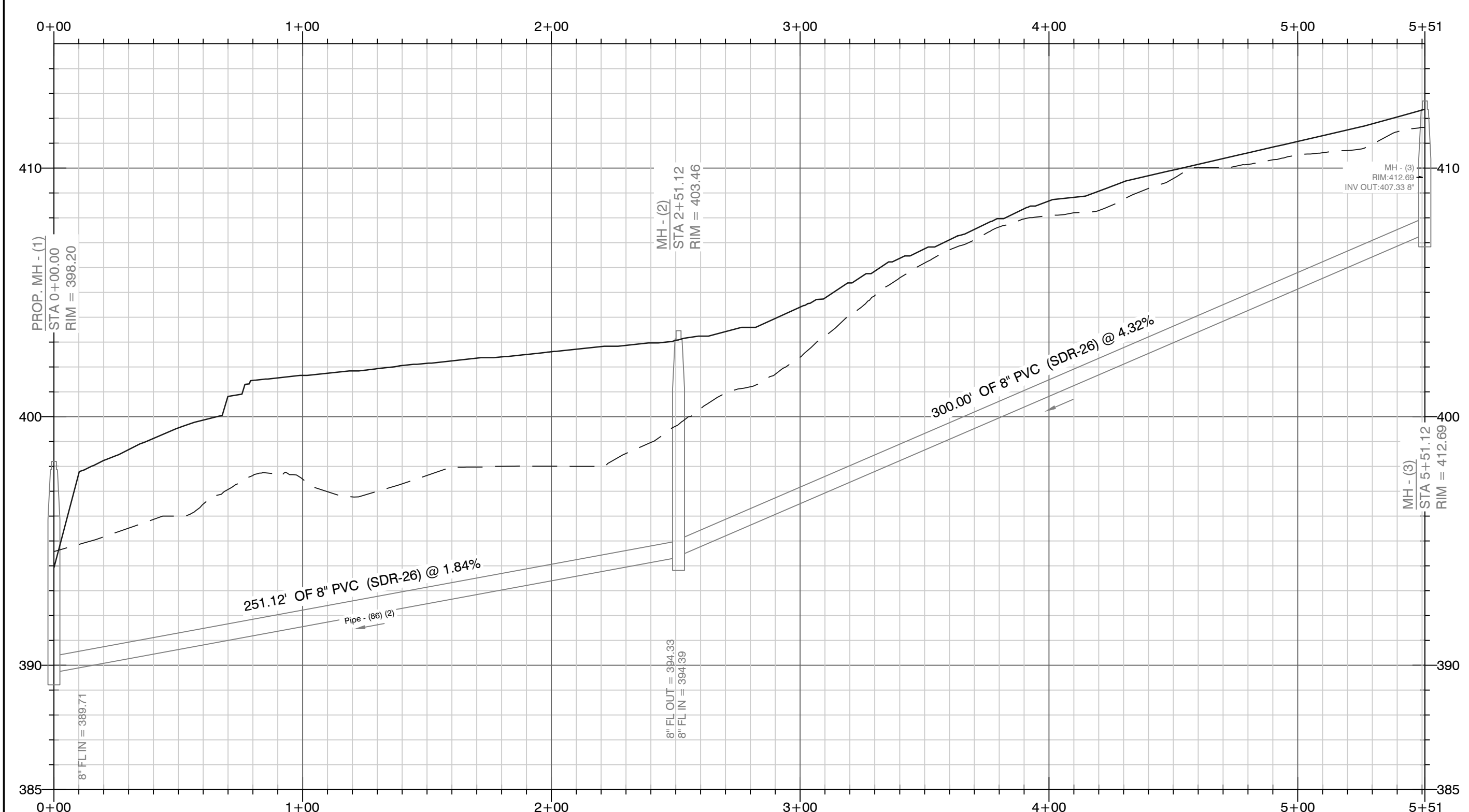
JACOB'S CORNER
 RUDOLPH ROAD PAVEMENT PLAN VIEW
 SALINE COUNTY, ARKANSAS

DATE: 02-01-2022	C.A.D. BY:	DRAWING NUMBER:
REVISION:	CHECKED BY:	20-0722
SHEET: C-2.1	SCALE:	
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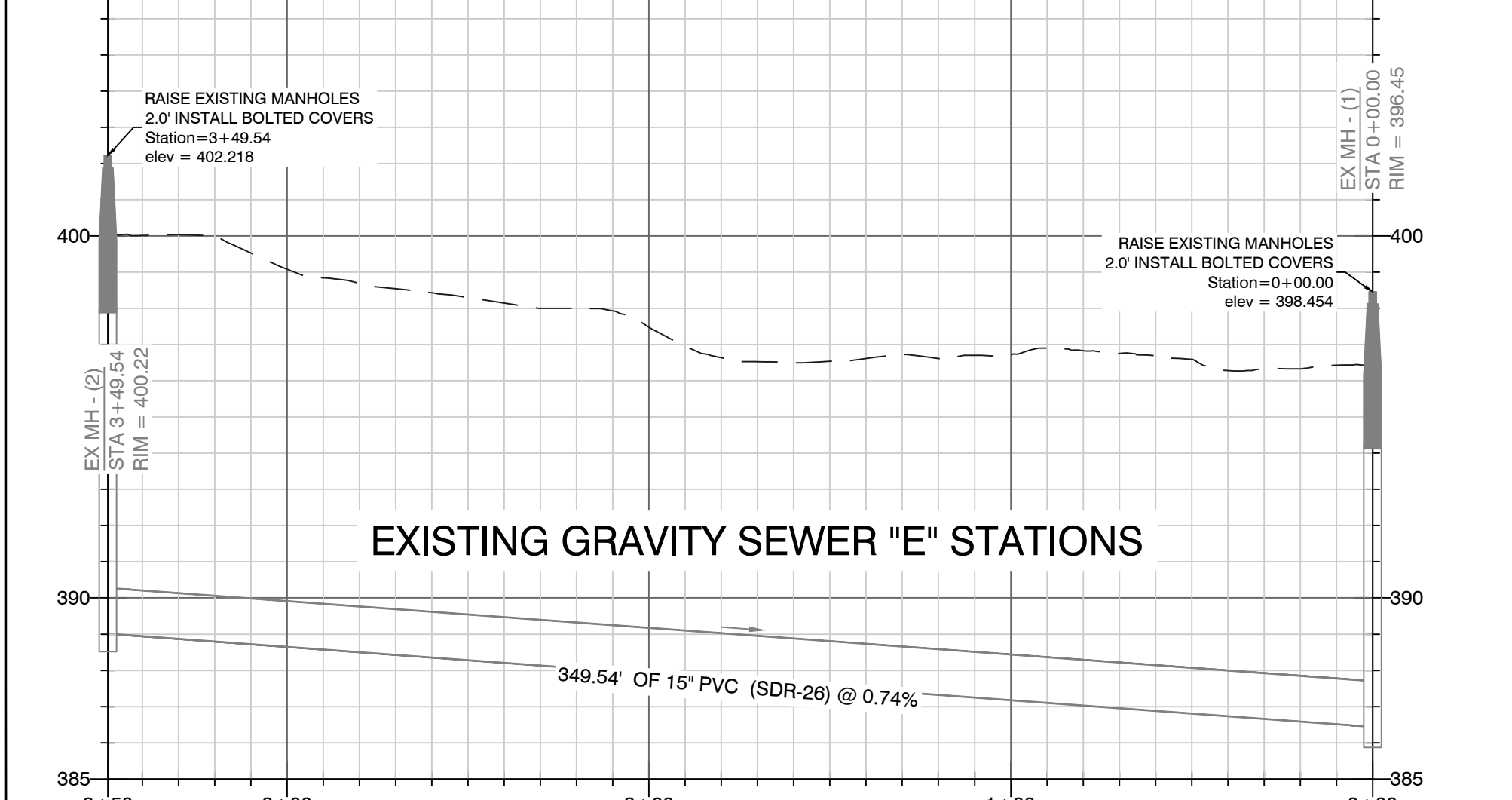
K:\LAND PROJECTS\2024\SUBDIVISIONS\2024\02-0722 GIRON SUBDIVISION\DWG\GIRON SUBDIVISION (JACOB'S CORNER).UPDATE (02-01-2022).DWG



PROFILE
Existing Sewer - (E2)
H:V = 10:1



PROFILE
Sewer Alignment - (2)
H:V = 10:1



PROFILE
Existing NW Sewer Alignment - (E)
H:V = 10:1

WATER LEGEND

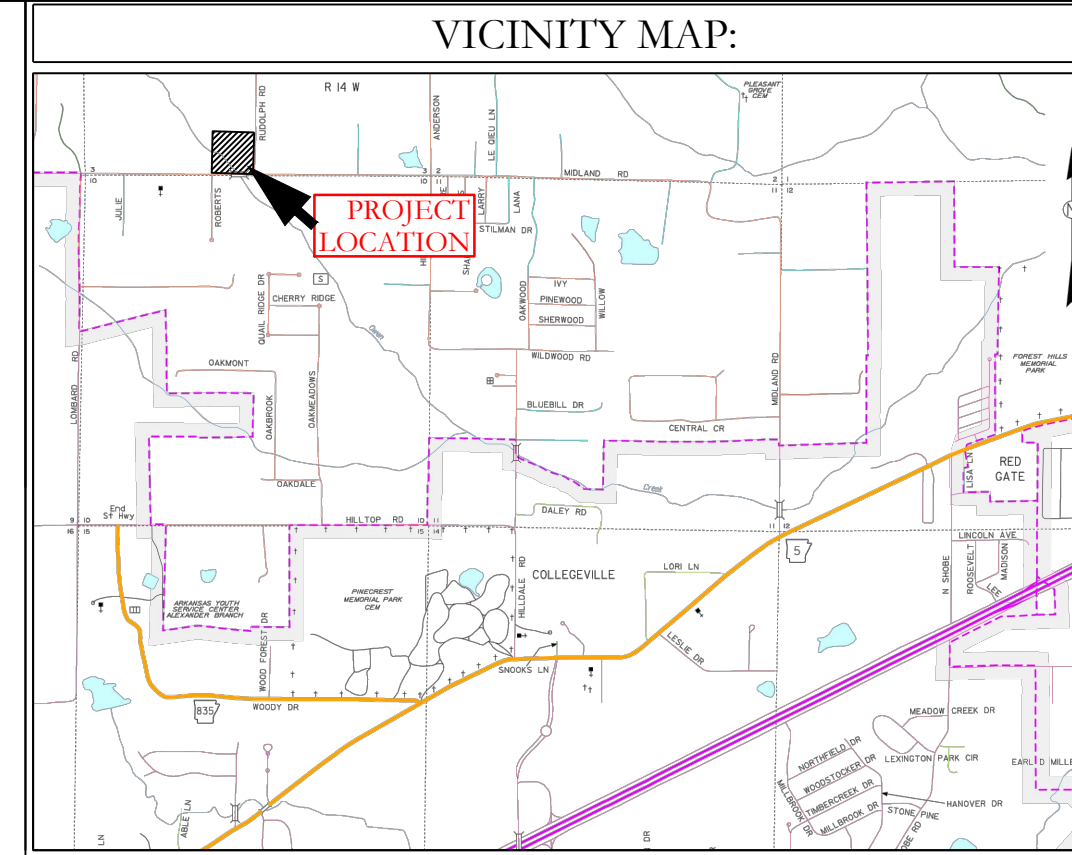
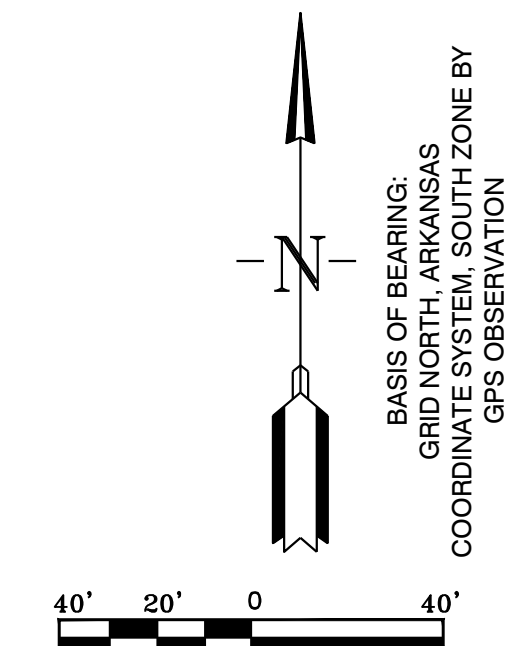
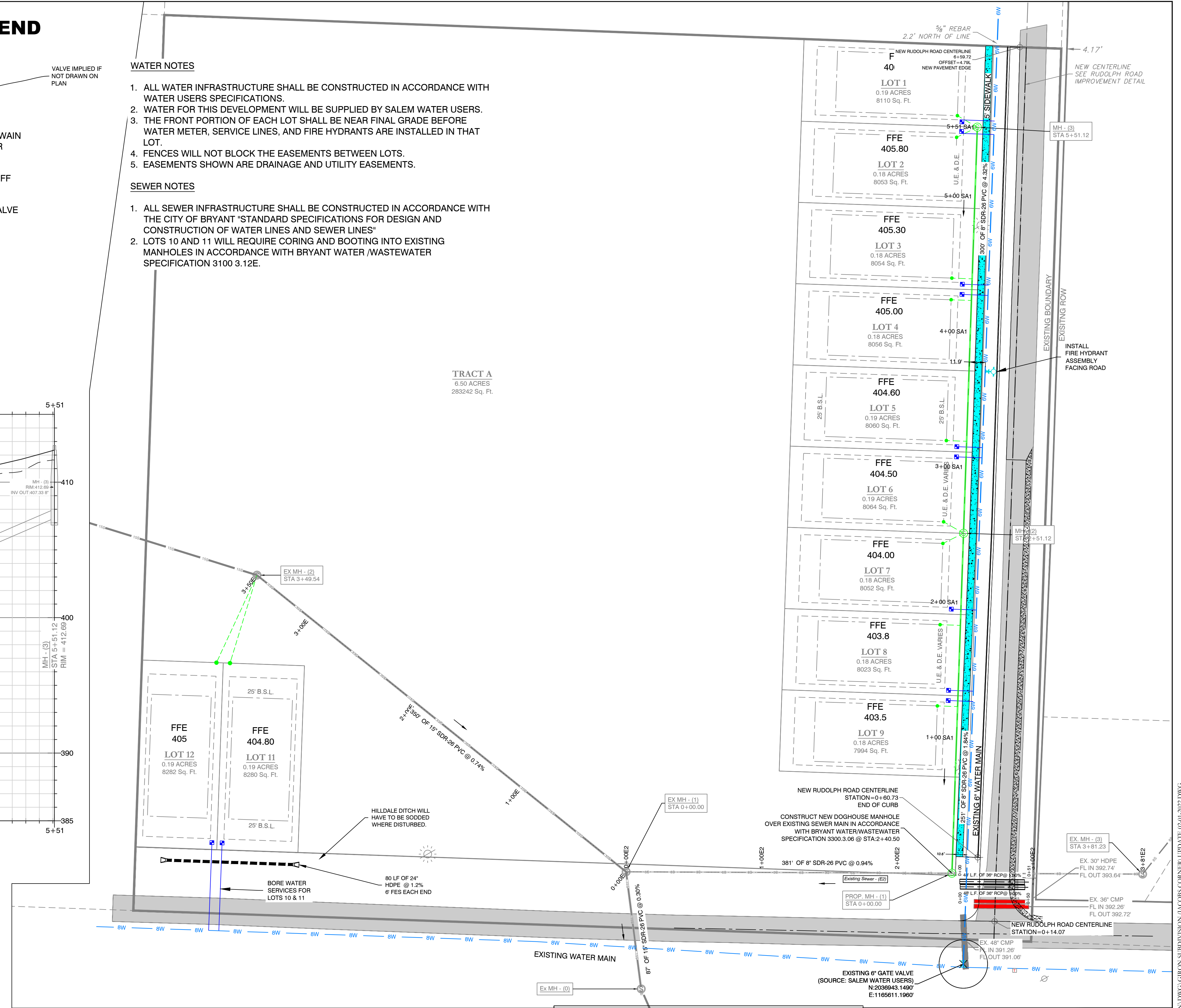
- FIRE HYDRANT ASSEMBLY
 - EXISTING WATER MAIN BY PIPE DIAMETER
 - EXISTING BLOW OFF
 - EXISTING GATE VALVE
 - WATER METER
- VALVE IMPLIED IF NOT DRAWN ON PLAN

WATER NOTES

1. ALL WATER INFRASTRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH WATER USERS SPECIFICATIONS.
2. WATER FOR THIS DEVELOPMENT WILL BE SUPPLIED BY SALEM WATER USERS.
3. THE FRONT PORTION OF EACH LOT SHALL BE NEAR FINAL GRADE BEFORE WATER METER, SERVICE LINES, AND FIRE HYDRANTS ARE INSTALLED IN THAT LOT.
4. FENCES WILL NOT BLOCK THE EASEMENTS BETWEEN LOTS.
5. EASEMENTS SHOWN ARE DRAINAGE AND UTILITY EASEMENTS.

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"
2. LOTS 10 AND 11 WILL REQUIRE CORING AND BOOTING INTO EXISTING MANHOLES IN ACCORDANCE WITH BRYANT WATER /WASTEWATER SPECIFICATION 3100 3.12E.



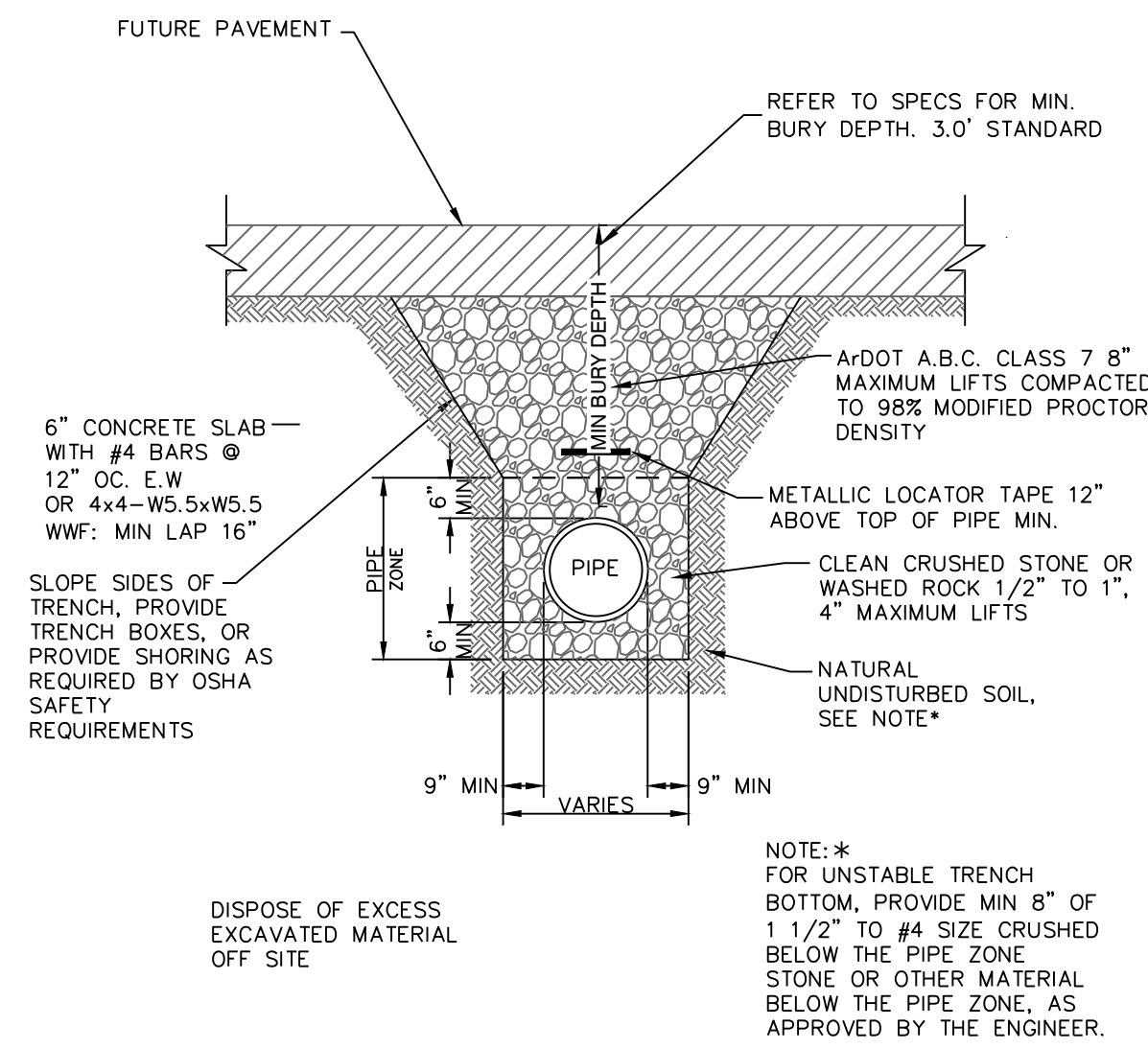
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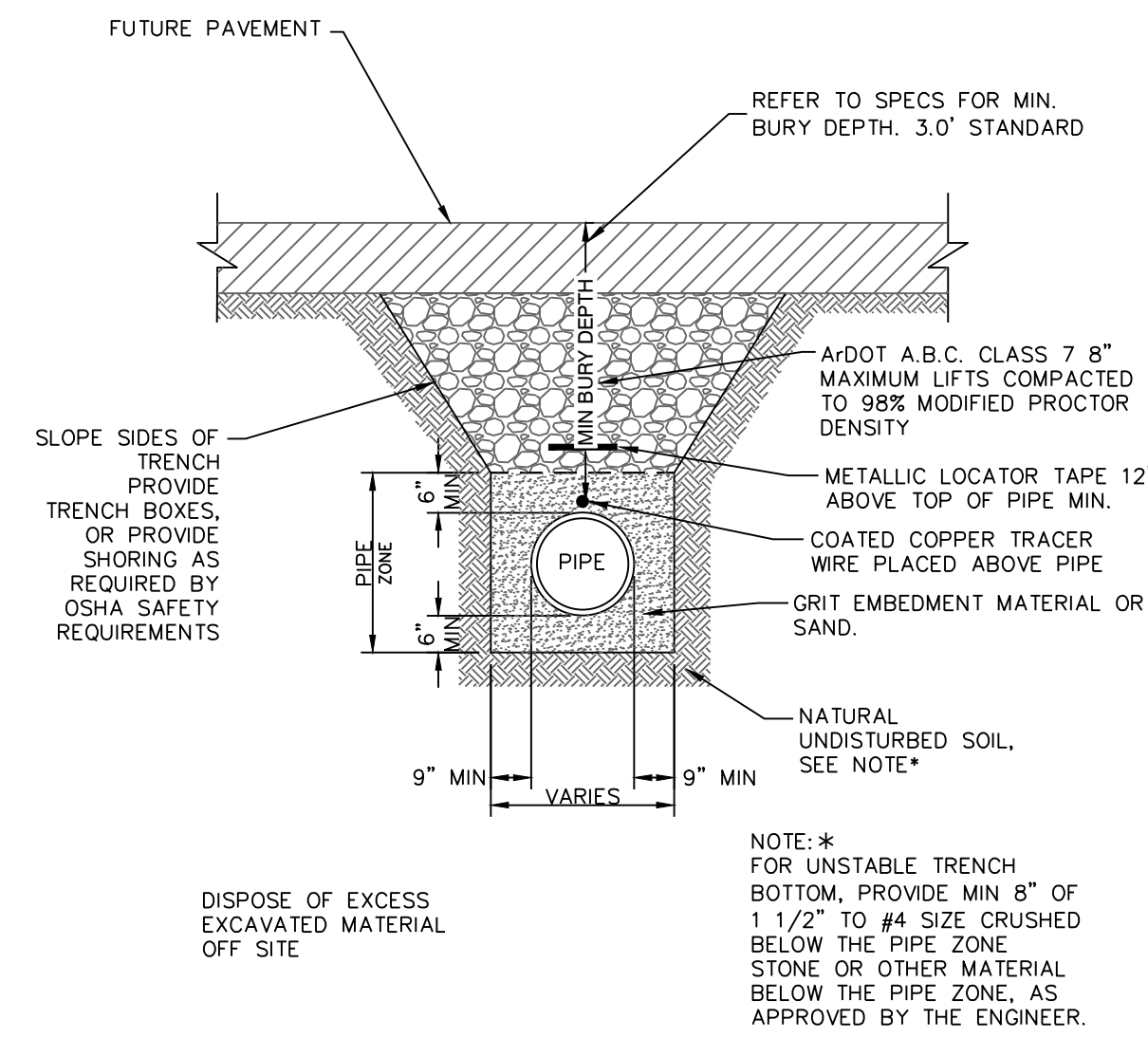
FOR USE AND BENEFIT OF: GIRON BUILDERS INC.		
JACOB'S CORNER UTILITY PLAN AND PROFILE SALINE COUNTY, ARKANSAS		
DATE: 02-01-2022	C.A.D. BY:	DRAWING NUMBER:
REVISIONS:	CHECKED BY:	20-0722
SHEET: C-3.1	SCALE:	
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JACOB'S CORNER SUBDIVISION SEWER PROFILES

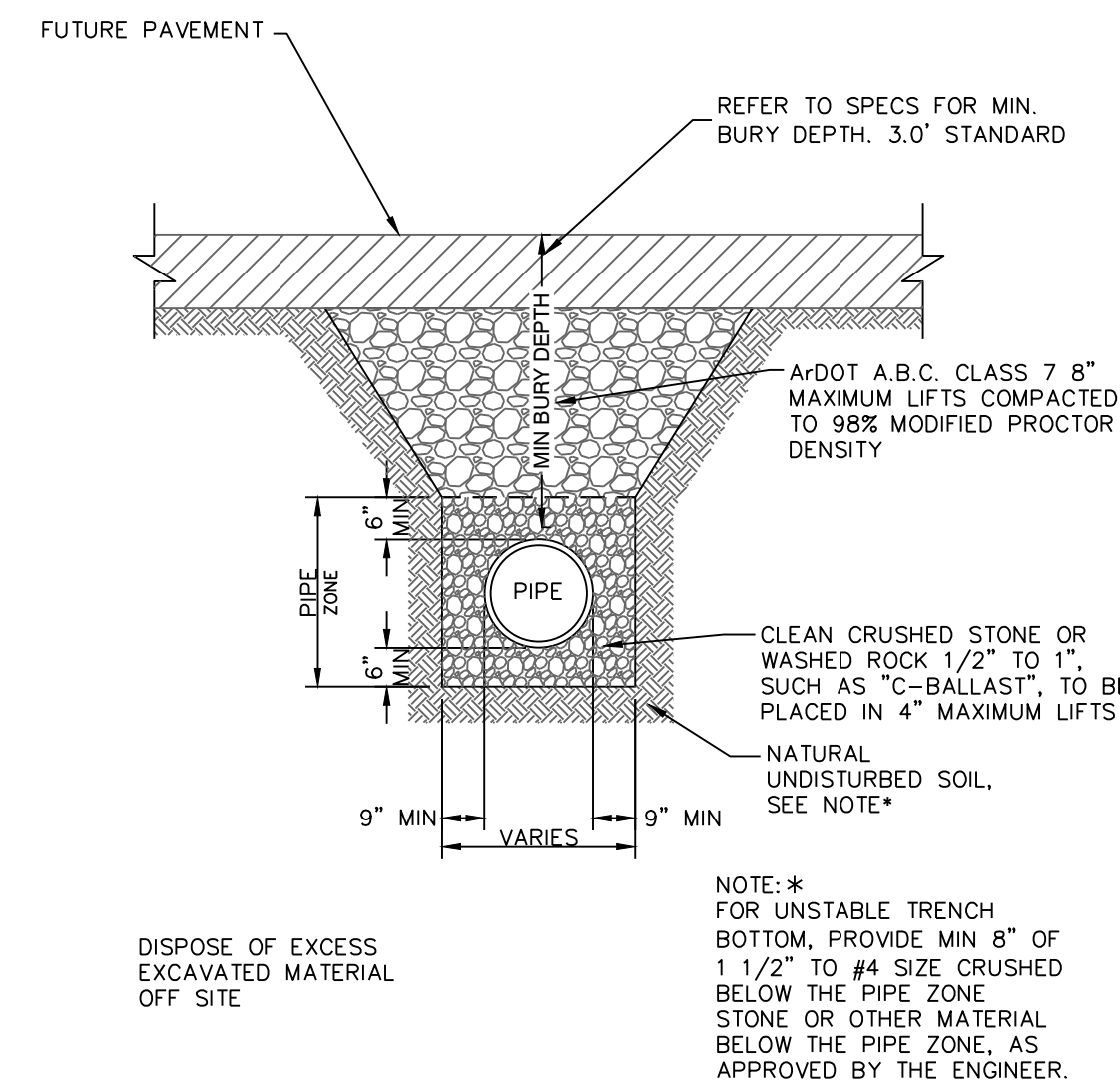
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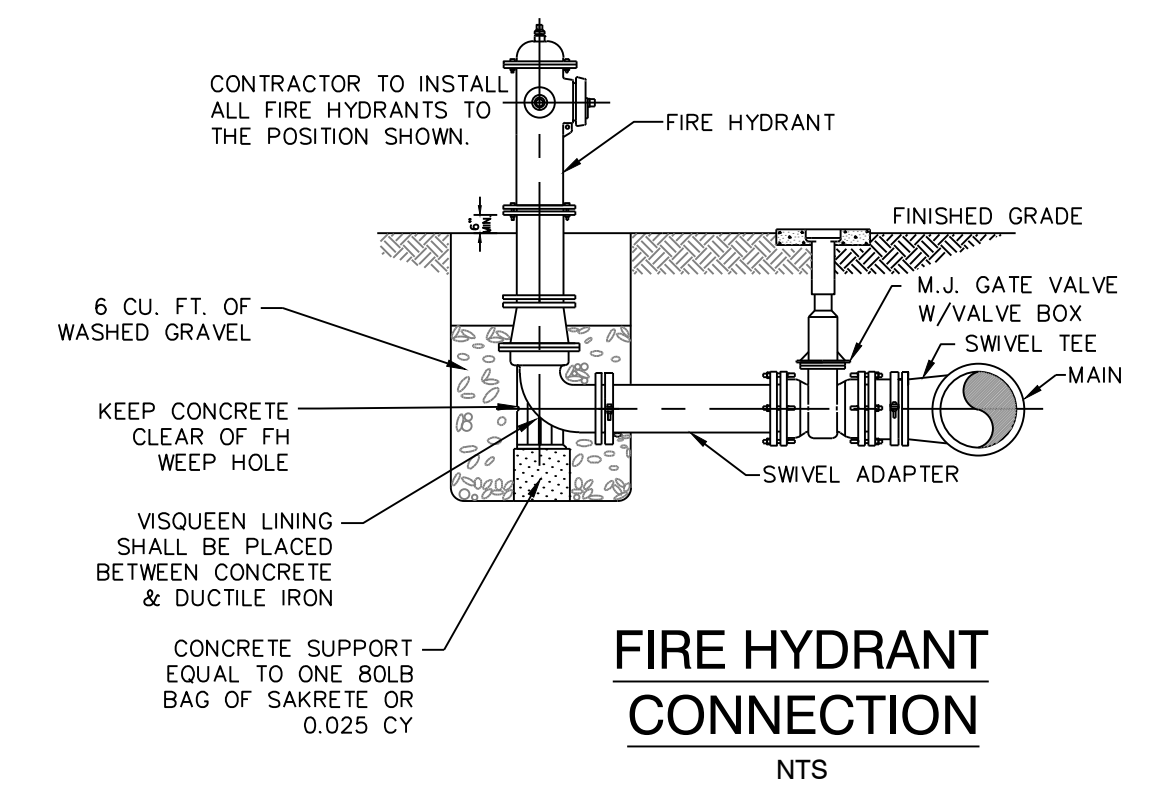
PVC SEWER TRENCH UNDER FUTURE ASPHALT STREET



PVC WATER LINE TRENCH UNDER FUTURE ASPHALT STREET

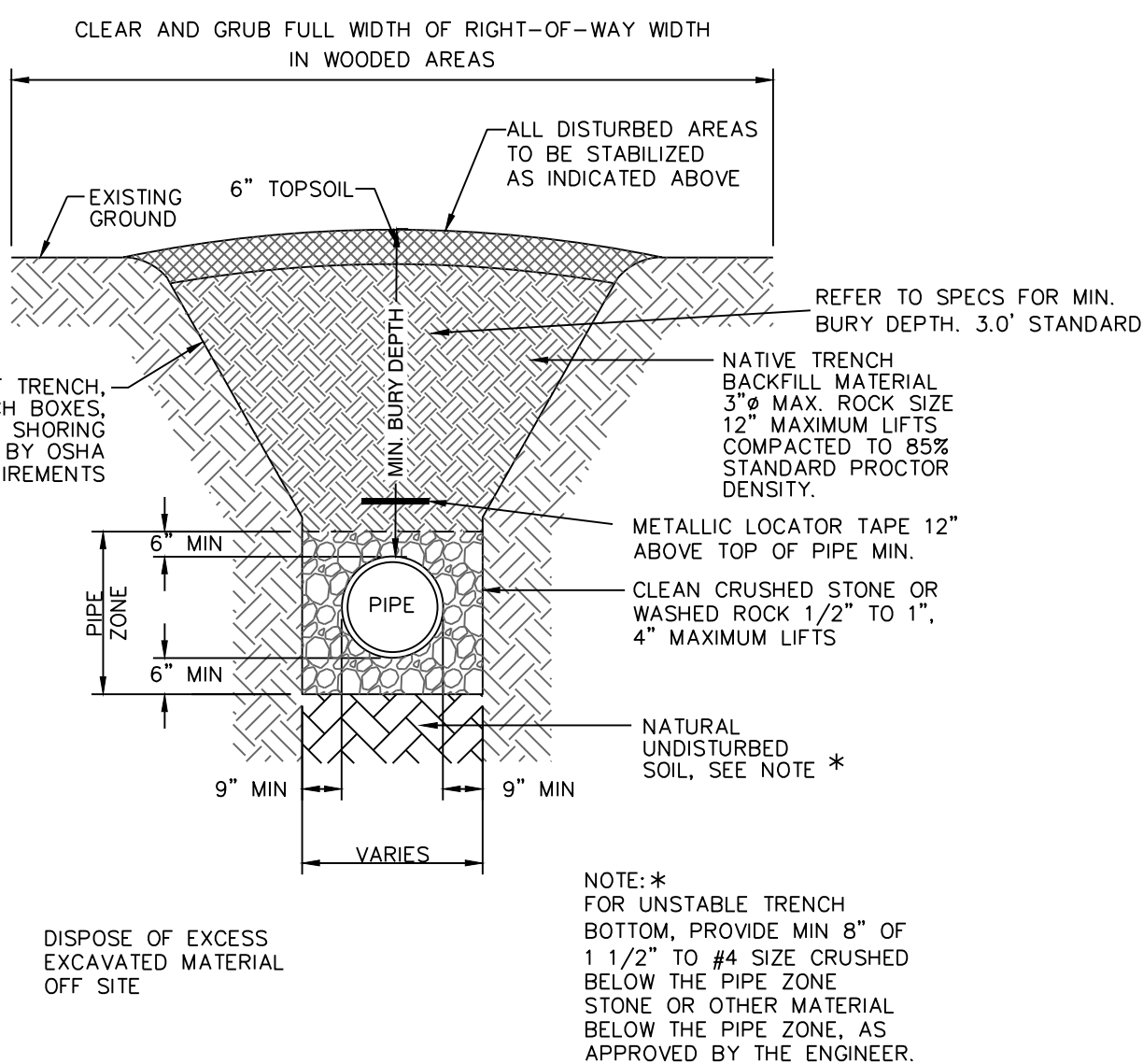


DRAINAGE PIPE TRENCH UNDER FUTURE ASPHALT STREET

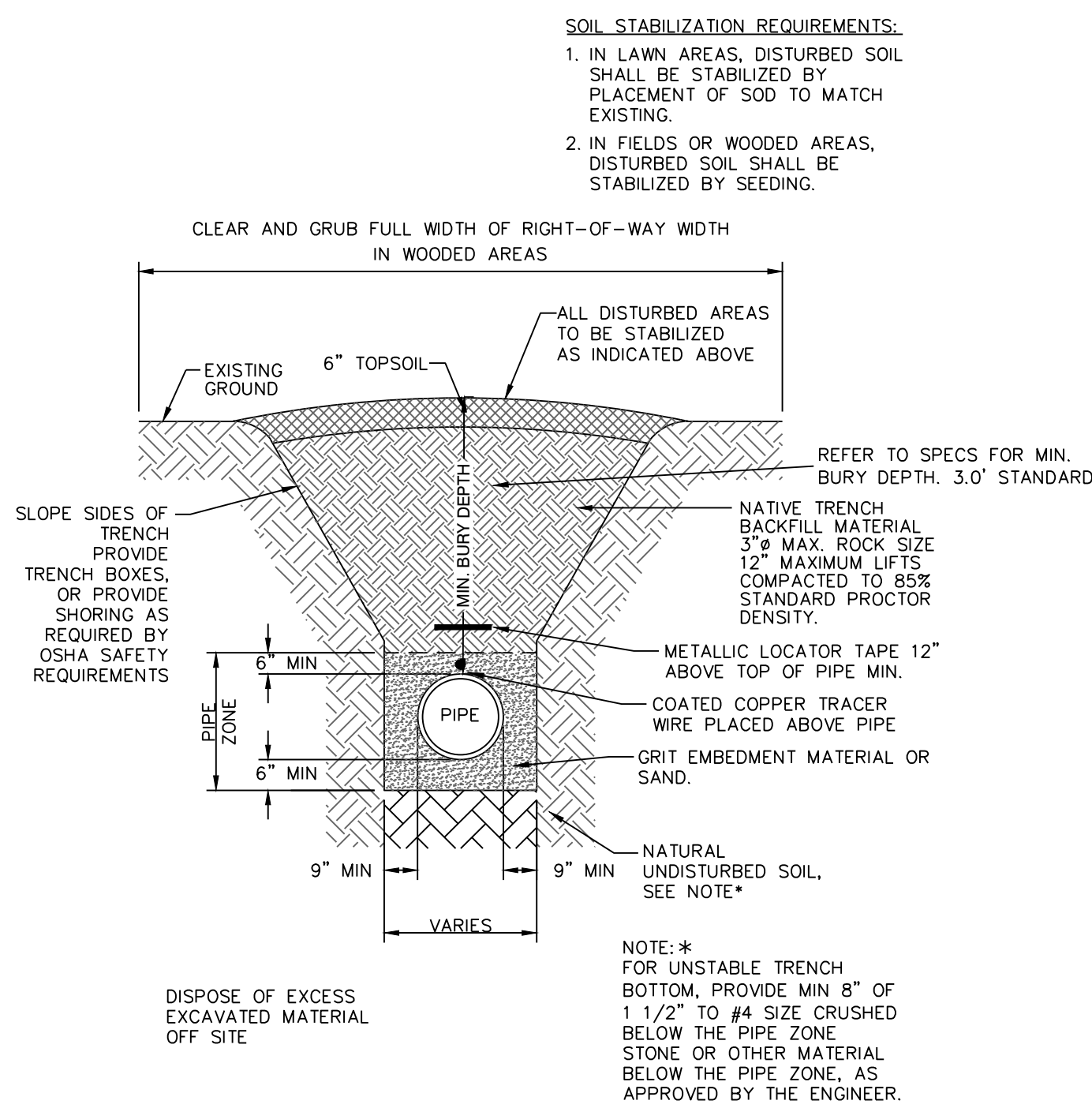


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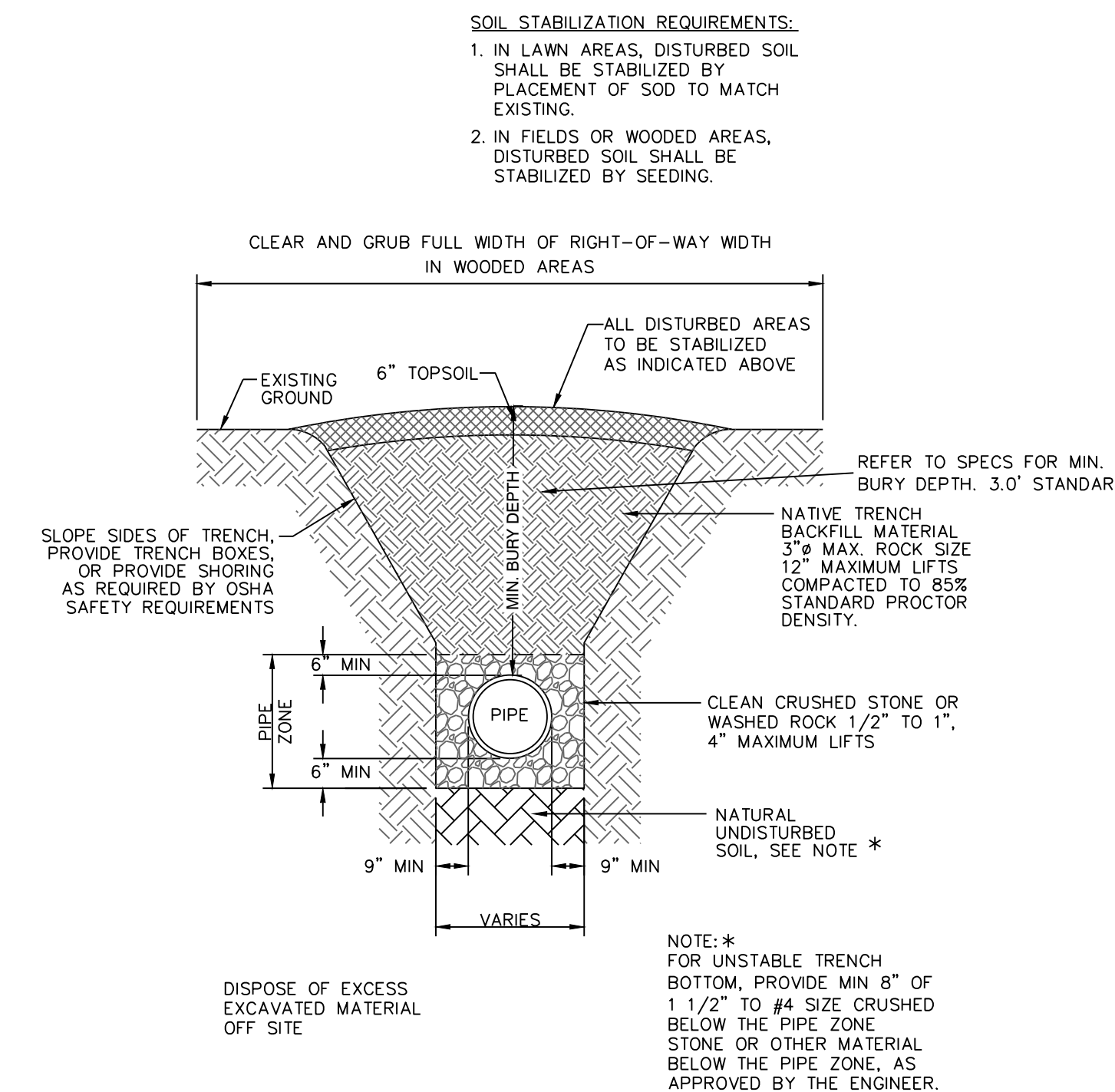
- SOIL STABILIZATION REQUIREMENTS:**
1. IN LAWN AREAS, DISTURBED SOIL SHALL BE STABILIZED BY PLACEMENT OF SOD TO MATCH EXISTING.
 2. IN FIELDS OR WOODED AREAS, DISTURBED SOIL SHALL BE STABILIZED BY SEEDING.



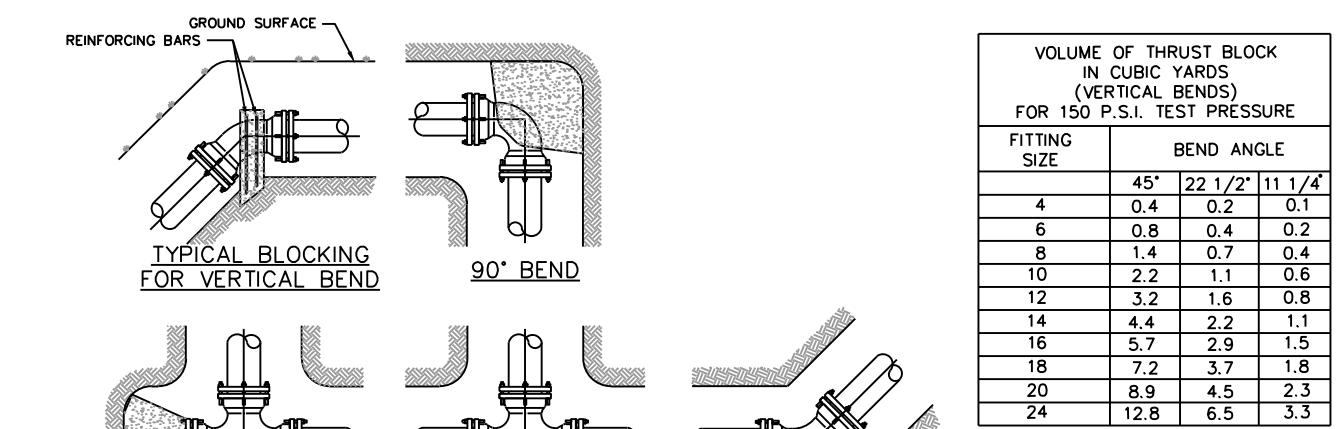
PVC SEWER TRENCH IN UNPAVED AREAS



PVC WATER LINE TRENCH IN UNPAVED AREAS



DRAINAGE PIPES IN UNPAVED AREAS

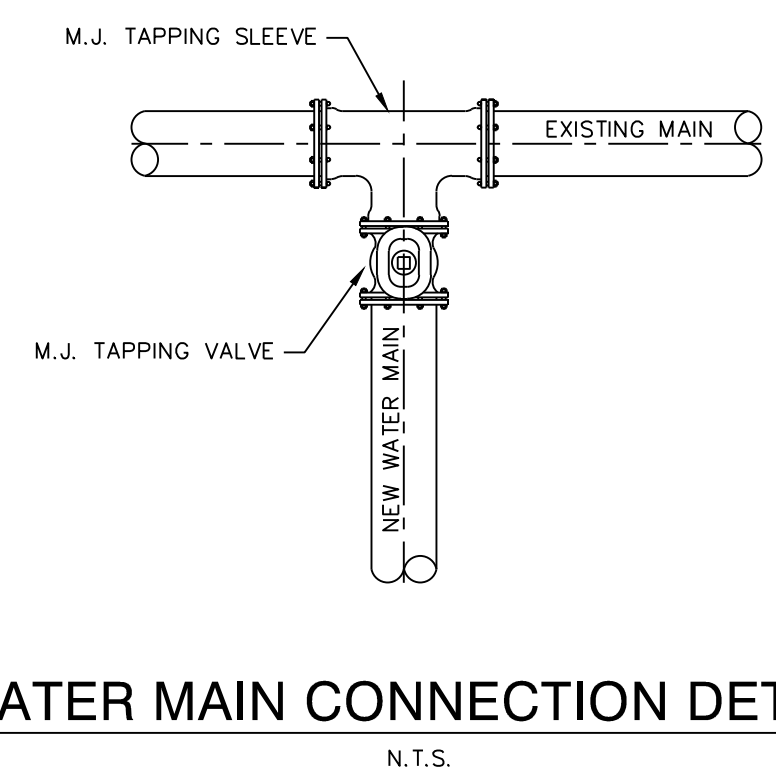
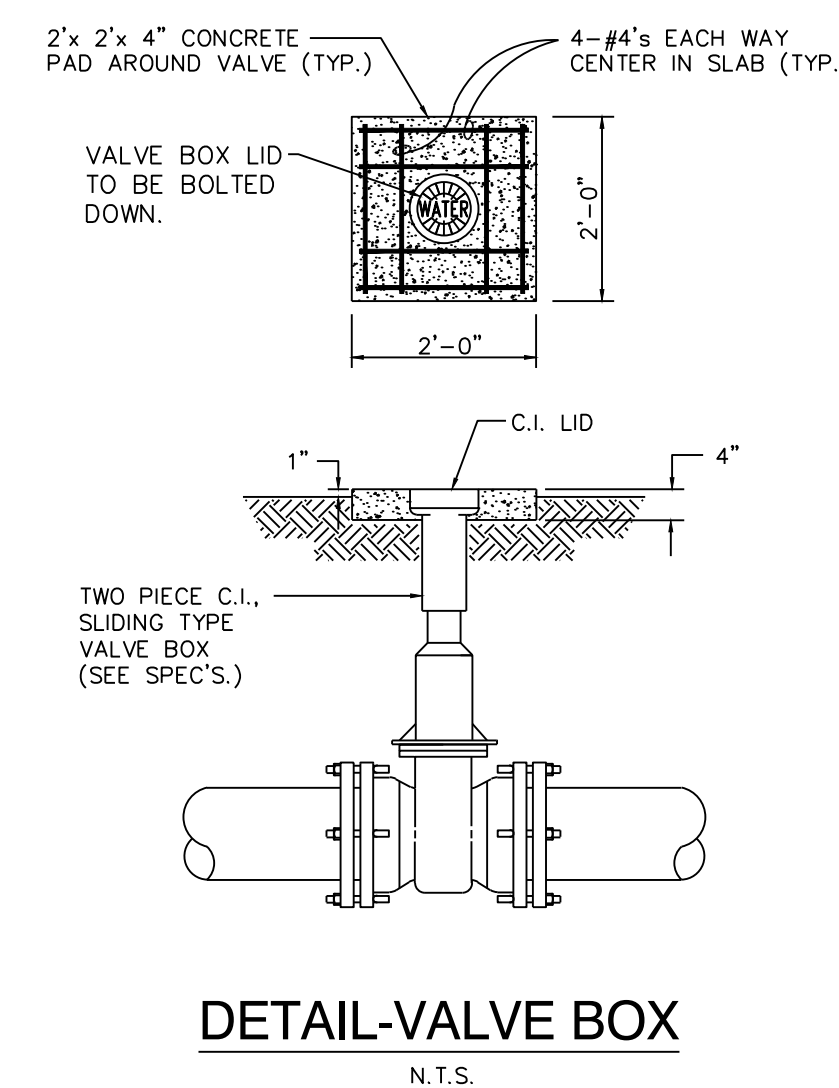


FITTING SIZE	BEARING AREA OF THRUST BLOCKS IN SQ. FT. (HORIZONTAL BENDS) FOR 150 P.S.I. TEST PRESSURE			
	TEE, WYE, PLUG OR CAP	90° BEND, PLUGGED CROSS	TEE PLUGGED ON RUN	BEND ANGLE
4	1.0	1.4	1.0	1.4
6	2.1	3.0	2.1	3.0
8	3.8	5.3	3.8	5.4
10	5.9	8.4	5.9	8.4
12	8.5	12.0	8.5	12.0
14	11.5	16.3	11.5	16.3
16	15.0	21.3	15.0	21.3
18	19.0	27.0	19.0	27.0
20	23.5	33.3	23.5	33.3
24	34.0	48.0	34.0	48.0

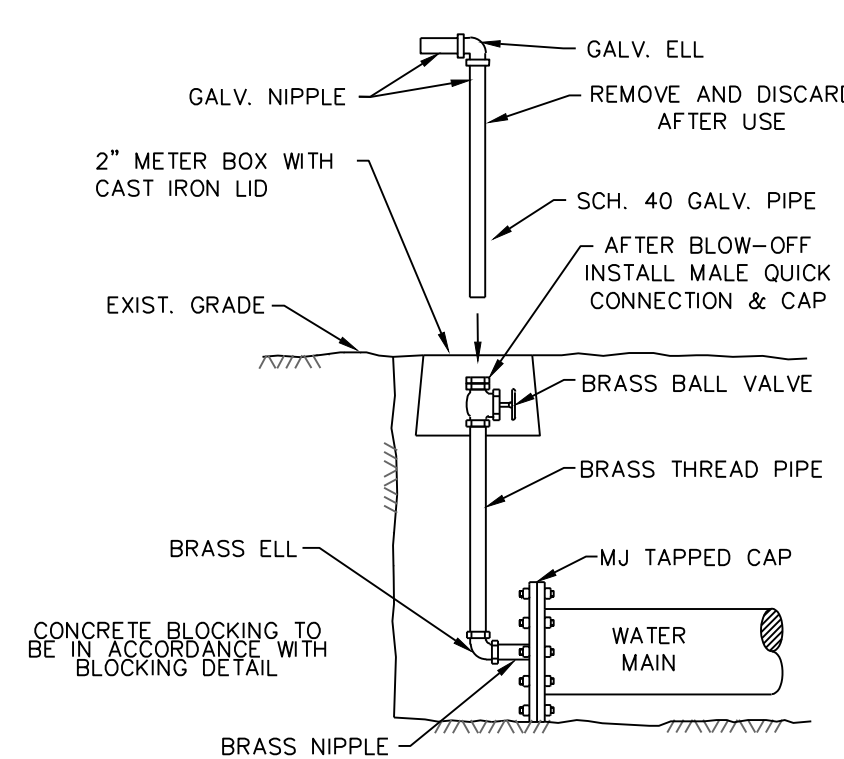
FITTING SIZE	VOLUME OF THRUST BLOCK IN CUBIC YARDS (VERTICAL BENDS) FOR 150 P.S.I. TEST PRESSURE		
	45°	22 1/2°	1 1/4°
4	0.4	0.2	0.1
6	0.8	0.4	0.2
8	1.4	0.7	0.4
10	2.2	1.1	0.6
12	3.2	1.6	0.8
14	4.4	2.2	1.1
16	5.7	2.9	1.5
18	7.2	3.7	1.8
20	8.9	4.5	2.3
24	12.8	6.5	3.3

- THRUST BLOCK NOTES:**
1. KEEP CONCRETE CLEAR OF JOINT ACCESSORIES.
 2. CONCRETE THRUST BLOCKING SHALL BE POURING AGAINST UNDISTURBED EARTH.
 3. 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.
 4. THRUST BLOCK VOLUMES FOR VERTICAL BENDS HAVING UPWARD RESULTANT THRUSTS 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).
 5. 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).
 6. THRUST BLOCKS FOR VERTICAL BENDS HAVING DOWNWARD RESULTANT THRUST SHALL BE THE SAME AS FOR HORIZONTAL BENDS.
 7. BEARING AREAS, VOLUMES, AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS TAKE PRECEDENCE OVER THIS STANDARD.
 8. BEARING AREA OF THRUST BLOCK SHALL NOT BE LESS THAN 1.0 SF.
 9. VERTICAL BENDS THAT REQUIRE A THRUST BLOCK VOLUME EXCEEDING 5 CY REQUIRE SPECIAL BLOCKING DETAILS. SEE PLANS.

TYPICAL BLOCKING DETAILS
N.T.S.



WATER MAIN CONNECTION DETAIL



2" BLOW-OFF RISER

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FOR USE AND BENEFIT OF: GIRON BUILDERS INC.		
JACOB'S CORNER UTILITY DETAILS 1 SALINE COUNTY, ARKANSAS		
DATE: 02-01-2022	C.A.D. BY:	DRAWING NUMBER:
REVISIONS:	CHECKED BY:	20-0722
SHEET: C-4.0	SCALE:	
500	01S	15W
0	11	100
62	1762	

MANHOLE INFORMATION TABLE

Inside Diameter of Manhole	Minimum Wall Thickness	Base Thickness	Minimum Ring & Cover Size
4' DIA	6"	6"	24" (< or Equal to 24" Pipes)
5' DIA	8"	8"	30" (> 24" Pipes)
6' DIA	8"	12"	36" (> 24" Pipes)

MANHOLE INFORMATION TABLE

CAST IN PLACE MANHOLE REQUIRES A CONCRETE MH ADAPTER (CMA) OR APPROVED EQUAL WHERE PIPES PASS THROUGH MANHOLE WALLS. INSTALL PER MANUFACTURERS INSTRUCTIONS.

CAST IN PLACE CONCRETE MANHOLE WALL.

CENTERLINES OF PIPES ENTERING AND EXITING MANHOLES ARE REQUIRED TO PASS THROUGH THE CENTER OF THE MANHOLE.

PROVIDE AS LARGE A CURVE AS POSSIBLE IN THE FLOW CHANNEL.

MANHOLE FLOW CHANNEL

CONCRETE MANHOLE ADAPTER (CMA) DETAIL

SEWER PIPE

FRAME SHALL BE INSTALLED AT THE TIME THE MANHOLE IS CONSTRUCTED (TYP.).

FRAME TO BE EMBEDDED IN CLASS 70 CONCRETE AT THE TIME OF CONSTRUCTION.

18" MAX.

24" MIN. 30" MAX.

WALL THICKNESS SEE TABLE ABOVE.

Varies

SEWER PIPE

SEWER PIPE

CONCRETE MH ADAPTER (REQUIRED).

SEWER PIPE

BENCH

NOTE: BENCH SHALL SLOPE FROM SPRINGLINE OF PIPE TO MANHOLE WALL. OUTLET CHANNEL SHALL BE FULL DEPTH UP FROM CENTER OF MANHOLE TO WALL.

UNYIELDING SUBGRADE (REPLACE WITH STONE AS REQUIRED).

6" MIN.

CAST-IN-PLACE MANHOLE

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 842-5888

SEWER DETAILS
CAST-IN-PLACE MANHOLE

DATE: APRIL 2015
REVISIONS: REVISED

S4

MANHOLE INFORMATION TABLE

Inside Diameter of Manhole	Minimum Wall Thickness	Base Thickness	Minimum Ring & Cover Size
4' DIA	5"	6"	24" (< or Equal to 24" Pipes)
5' DIA	7"	8"	30" (> 24" Pipes)
6' DIA	7"	8"	36" (> 24" Pipes)

MANHOLE INFORMATION TABLE

A-LOK OR KOR-N-SEAL BOOT, OR APPROVED EQUAL IS REQUIRED WHERE PIPES PASS THROUGH MANHOLE WALLS (TYP.). INSTALL PER MANUFACTURERS INSTRUCTIONS. DETAILS AT RIGHT.

CENTERLINES OF PIPES ENTERING AND EXITING MANHOLES ARE REQUIRED TO PASS THROUGH THE CENTER OF THE MANHOLE.

PROVIDE AS LARGE A CURVE AS POSSIBLE IN THE FLOW CHANNEL.

MANHOLE FLOW CHANNEL

MANHOLE WALL

SEWER PIPE

EXTERIOR ADJUSTMENT BAND

DO NOT FILL VOID.

GROUT INTERIOR VOID TO SPRINGLINE OF PIPE.

MANHOLE WALL

DO NOT FILL VOID.

A-LOK SEAL OR APPROVED EQUAL.

CONNECTION DETAILS

RAINCATCHER

STANDARD MH RING & LID (REQUIRED).

FRAME SHALL BE INSTALLED AT THE JOBSITE.

USE TWO ROWS EZ-STIK JOINT SEALANT, OR APPROVED EQUAL (REQUIRED).

18" MAX.

5" MIN. WALL THICKNESS

24" MIN. 30" MAX.

Varies

USE 6" BUTYL JOINT WRAP AROUND ALL EXTERIOR JOINTS (REQUIRED).

A-LOK OR APPROVED EQUAL (REQUIRED).

SEWER PIPE

BENCH

MH BASE (TABLE ABOVE)

6" MIN.

NOTE: BENCH SHALL SLOPE FROM SPRINGLINE OF PIPE TO MANHOLE WALL. OUTLET CHANNEL SHALL BE FULL DEPTH UP FROM CENTER OF MANHOLE TO WALL.

UNYIELDING SUBGRADE (REPLACE WITH STONE AS REQUIRED).

PRECAST MANHOLE

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 842-5888

SEWER DETAILS
PRECAST MANHOLE

DATE: APRIL 2015
REVISIONS: REVISED

S5

ALL CASTINGS SHALL BE "MADE IN USA"

7/8"

5/8"

1-1/2"

CLOSED PICK SLOT DETAIL

CLOSED PICK SLOT

COVER DETAIL

1. MINIMUM WEIGHT OF RING: 100 POUNDS
2. MINIMUM WEIGHT OF COVER: 110 POUNDS
3. COVERS ARE FURNISHED WITH TWO CLOSED PICK SLOTS.
4. CASTINGS SHALL BE "MADE IN USA"

* DIMENSIONAL TOLERANCES SHALL NOT EXCEED 1/16 INCH PER FOOT

23-1/2"

3/8"

6±1/4"

22" Opening

32±1/2"

RAIN CATCHER WITH 1" WOVEN STRAP

WHEN SETTING FRAME USE TWO ROWS EZ-STIK JOINT SEALANT, OR APPROVED EQUAL (REQUIRED).

FRAME AND COVER DETAIL

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 842-5888

SEWER DETAILS
MANHOLE FRAME AND COVER

DATE: APRIL 2015
REVISIONS: REVISED

S6

STANDARD MH FRAME & COVER

GRADE

WRAP FRAME EXTENSIONS

8" WIDE JOINT WRAP IS REQUIRED FOR ALL EXTERIOR MANHOLE JOINTS.

SEWER PIPE

COLD JOINTS

PLACE 8" x 8" SQUARE WRAP OVER ALL LIFTING HOLES (TYP.)

SEWER PIPE

UNYIELDING SUBGRADE (REPLACE WITH STONE AS REQUIRED)

NOTE:
JOINT WRAP TO BE USED:
• ON OUTSIDE OF COLD JOINTS
• ON EXTERIOR OF ALL PRECAST MANHOLE JOINTS
• ON LIFT HOLES / SOCKETS

MANHOLE JOINT WRAP

THE INSTALLATION SHALL BE DYE TESTED FOR ACCEPTANCE.

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 842-5888

SEWER DETAILS
MANHOLE JOINT WRAP

DATE: APRIL 2015
REVISIONS: REVISED

S9

NOTES:
1. MODIFIED RISER LATERAL SHALL BE USED WHEN DEPTH OF COVER EXCEEDS 7'-0"
2. PLACE CLASS "A" CONCRETE UNDER EACH WYE BRANCH TO PREVENT CRACKING OR TWISTING UNDER EARTH LOADS.
3. SERVICE LATERAL STUBS SHALL TERMINATE AT LEAST 2 FEET INSIDE THE PROPERTY LINE BUT IN NO CASE SHALL THE SERVICE LATERAL STUB TERMINATE AT A DISTANCE LESS THAN 8 FEET FROM THE SANITARY SEWER MAIN.
4. BURY A 1/2" x 4" STEEL TEE FENCE POST AT END OF SERVICE LATERAL STUB AND BACKFILL TO FINISHED GRADE OF PROPERTY.
5. 4" DUCTILE IRON PIPE, LINED FOR SANITARY SEWER AND 4" DUCTILE IRON M.J. FITTINGS, LINED FOR SANITARY SEWER, SHALL BE INSTALLED FOR SERVICES BURIED AT DEPTHS OF 14 FEET AND GREATER.

3" WIDE SAFETY GREEN MARKER TAPE 18" FROM PIPE IMPRINTED WITH "CAUTION-BURIED SEWER LINE BELOW"

SKI ROPE TERMINATED AT GROUND SURFACE IS REQUIRED

GLUED JOINT (TYP.)

ALTERNATE ADDITIONAL RISE AND BEND WHERE REQUIRED BY GREATER SEWER DEPTH

1/2" x 4" REBAR OR FENCE "TEE" POST

SLOPE UP (1% MIN.) TO PROP. LINE

45° MAX.

CLASS "A" CONCRETE

4" MIN. OF PIPE BEDDING MATERIAL (CLASS 67 STONE OR EQUAL) AROUND PIPE

PROFILE

3" WIDE SAFETY GREEN MARKER TAPE 18" FROM PIPE IMPRINTED WITH "CAUTION-BURIED SEWER LINE BELOW"

SCH 40 PVC CAP

1/2" x 4" FENCE "TEE" POST

SEWER MAIN

WYE BRANCH

CLASS "A" CONCRETE

ROTATE BENDS AS REQUIRED TO ALIGN SERVICE BRANCH WITH SERVICE PIPE

PLAN

SEWER SERVICE LATERAL

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 842-5888

SEWER DETAILS
SEWER SERVICE LATERAL

DATE: APRIL 2015
REVISIONS: REVISED

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COVER SECTION

COVER TOP VIEW

COVER BACK VIEW

VALVE BOX SECTION

CLEANOUT IN GRASS. STANDARD CLEANOUT SCREW CAP

2'-0"

CLEANOUT IN PAVED AREA. STANDARD CLEANOUT SCREW CAP PROTECTED BY EJ MODEL 70 VALVE BOX

6"

PLAIN CONC. COLLAR IN PAVED AREAS

VARIES

3" MIN.

SAME DIA AND MATERIAL AS LATERAL

TWO-WAY CLEANOUT

CLASS I EMBEDMENT

2'-0"

3'-0"

END VIEW

SIDE VIEW

TYPICAL CLEANOUT

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 842-5888

SEWER DETAILS
SEWER SERVICE CLEANOUT

DATE: APRIL 2015
REVISIONS: REVISED

S16

VARIES WITH MANHOLE ADJUSTMENT DEPTH

IF WHEN RAISING RING & COVER TO GRADE, NECK IS GREATER THAN 18", RAISE CORBEL/CONE

NEW STREET GRADE

NEW GROUND ELEVATION

EXISTING GRADE

STANDARD MH RING & COVER (REQUIRED).

EZ-STIK (REQUIRED)

ADJUST BARREL WITH NEW CONE TO FINISH GRADE ELEVATION

REMOVE EXISTING CONE

BACKFILL NOTES:
IN STREET:
• USE CLASS 7 FOR BACKFILL
IN OTHER AREAS:
• USE SELECT NATIVE BACKFILL

WHEN CONNECTING NEW CONE TO EXISTING MH, USE COLD JOINT MATERIAL

USE JOINT WRAP ON OUTSIDE WHEN RAISING CORBEL.

EXISTING MANHOLE

SEWER PIPE

CONCRETE MANHOLE WALL

CONCRETE MANHOLE ADAPTER (CMA) IS REQUIRED.

NON-SHRINK GROUT

INTERIOR VIEW

MANHOLE CORING DETAILS

USE TWO ROWS EZ-STIK JOINT SEALANT, OR APPROVED EQUAL (REQUIRED).

WRAP RING EXTENSIONS WITH 8-INCH WIDE BUTYL WRAP OR TROWELABLE BUTYL MASTIC.

SEALANT (REQUIRED)

RISER RING DETAIL

MANHOLE WALL

TWO ROWS OF 1/2" x 3/4" P-201 (OR APPROVED EQUAL) BEAD BETWEEN RISER RINGS (REQUIRED).

SEALANT SHALL BE ADEKA P-201 or MANUS-BOND 75AM

TYPICAL MANHOLE ADJUST TO GRADE DETAIL

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 842-5888

SEWER DETAILS
MANHOLE ADJUST TO GRADE

DATE: APRIL 2015
REVISIONS: REVISED

S12

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 842-5888

SEWER DETAILS
MANHOLE CORING

DATE: APRIL 2015
REVISIONS: REVISED

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

FOR USE AND BENEFIT OF:
GIRON BUILDERS INC.
JACOB'S CORNER
UTILITY DETAILS 2
SALINE COUNTY, ARKANSAS

DATE: 02-01-2022
C.A.D. BY:
REVISIONS:
CHECKED BY:
SCALE: C-4.1
DRAWING NUMBER:
20-0722

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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 behind 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.

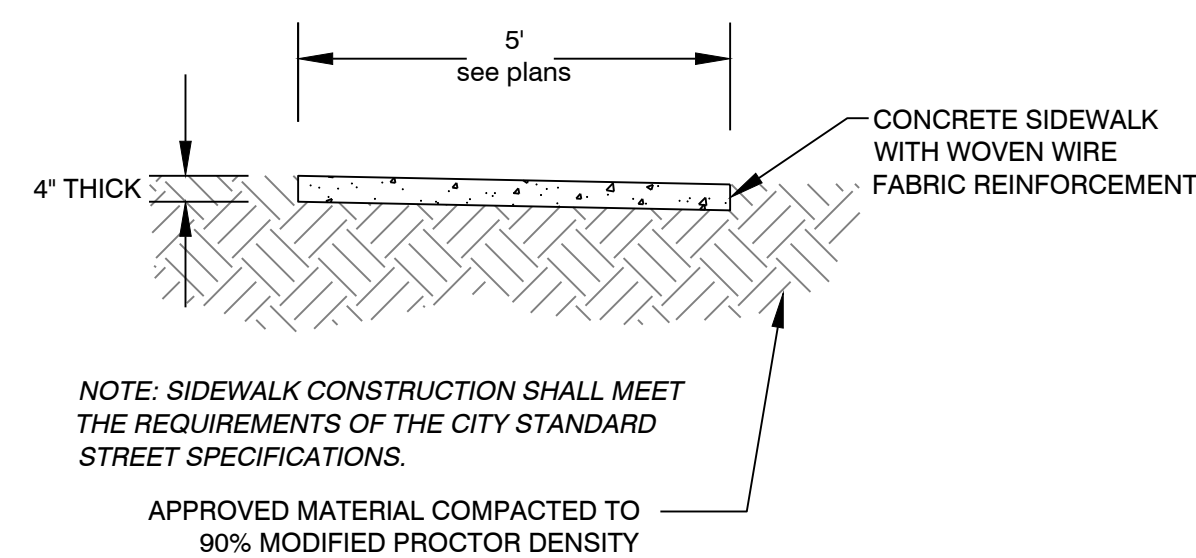
Subgrade

- 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.

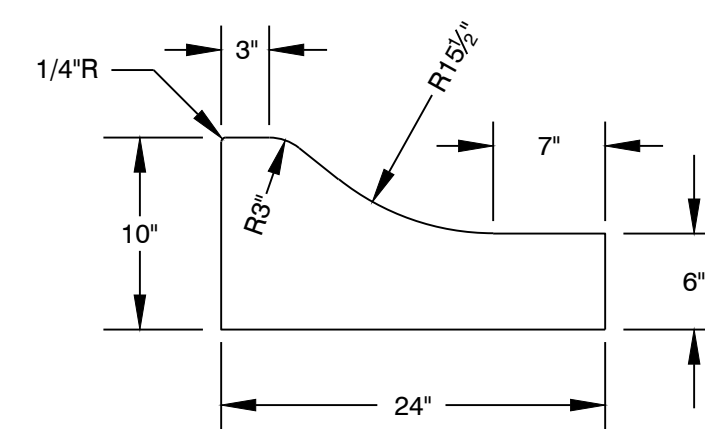
QUALITY CONTROL TESTING AND INSPECTIONS

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.

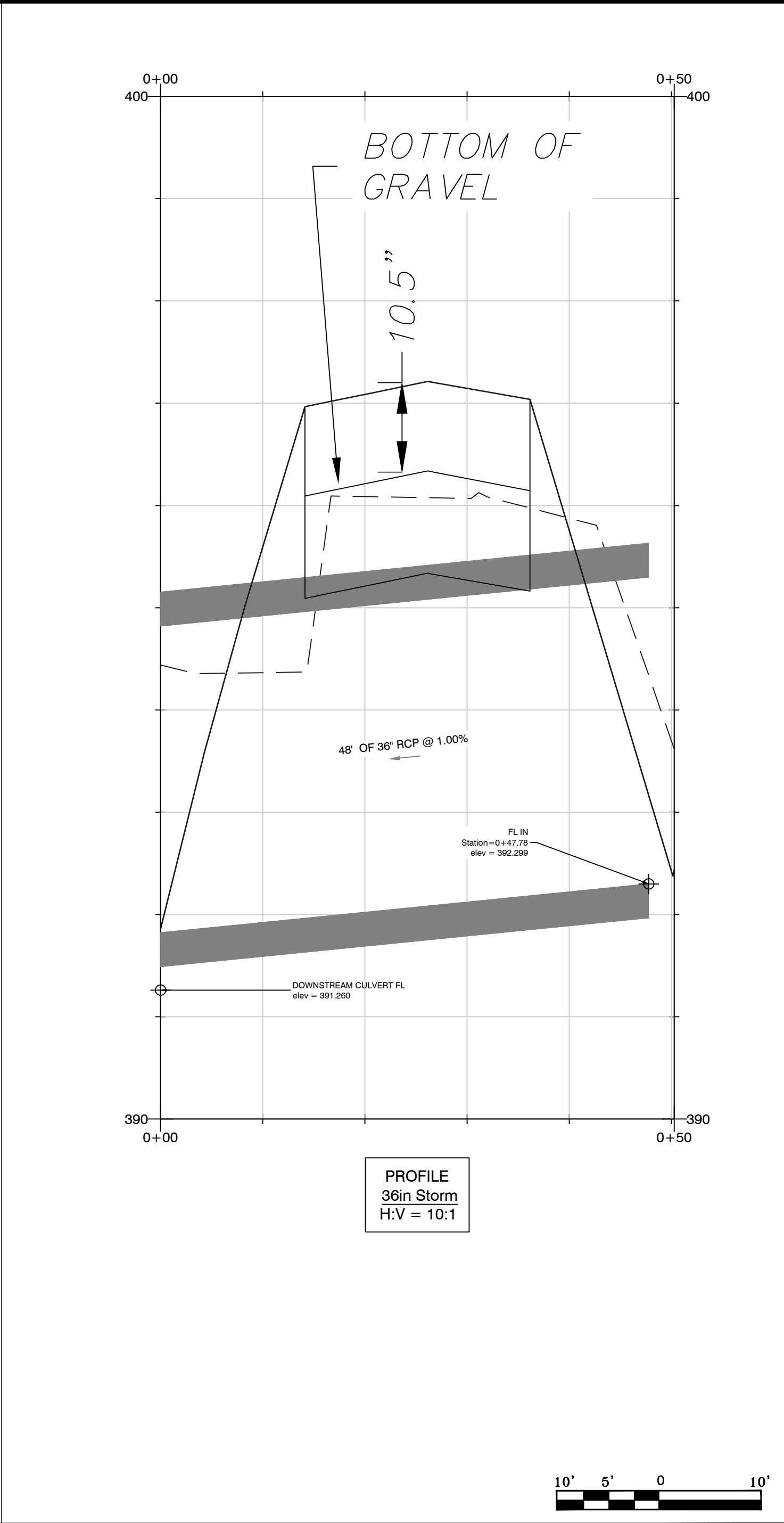
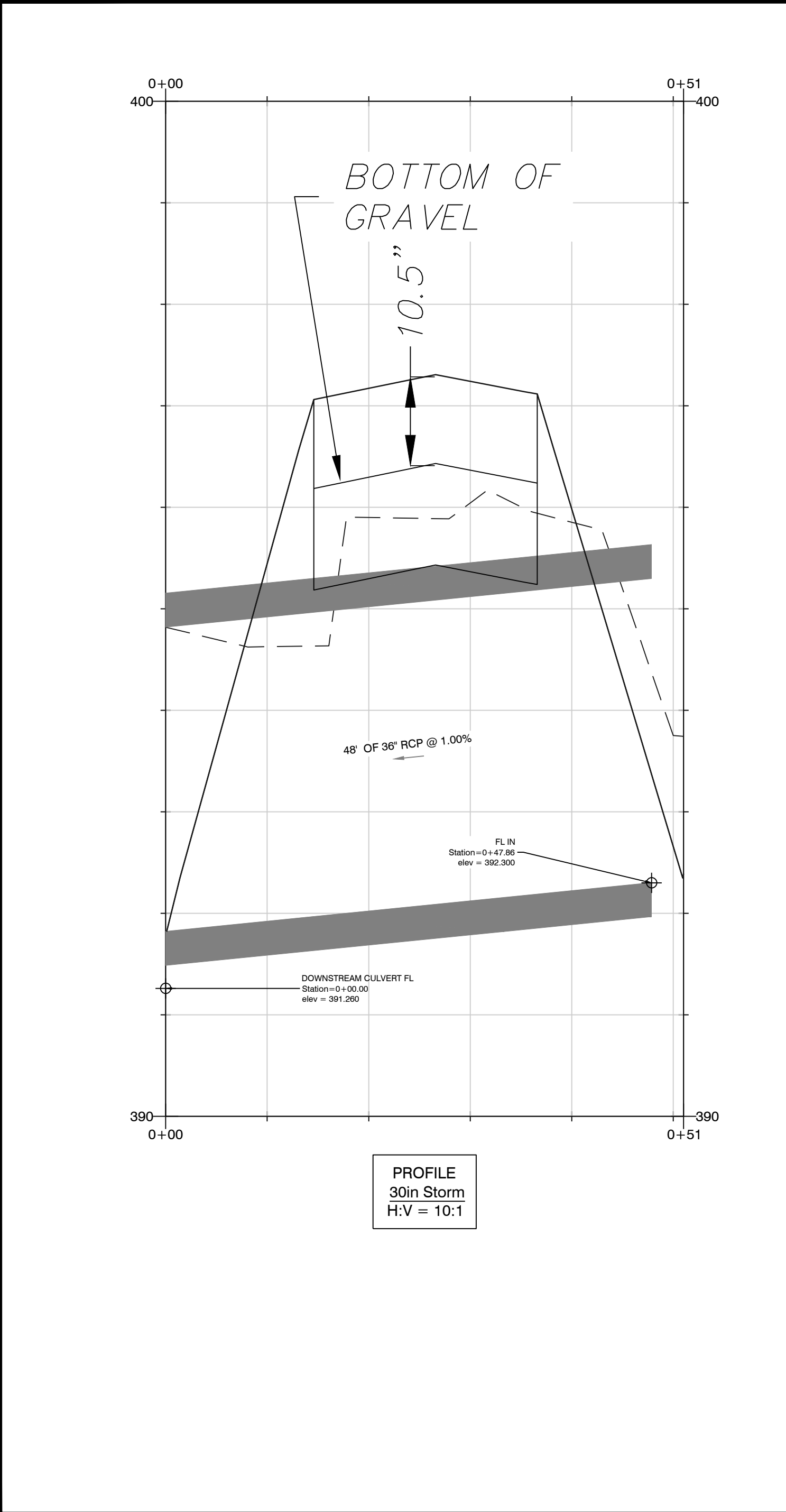
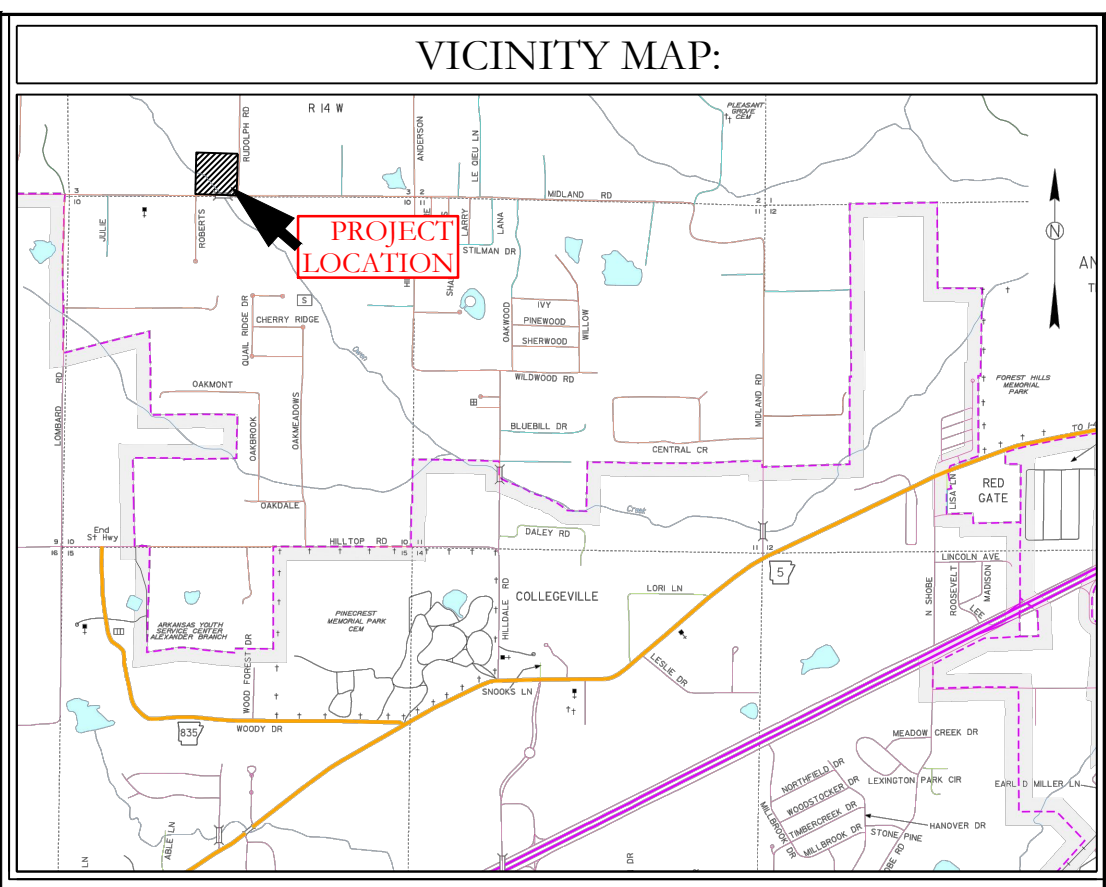
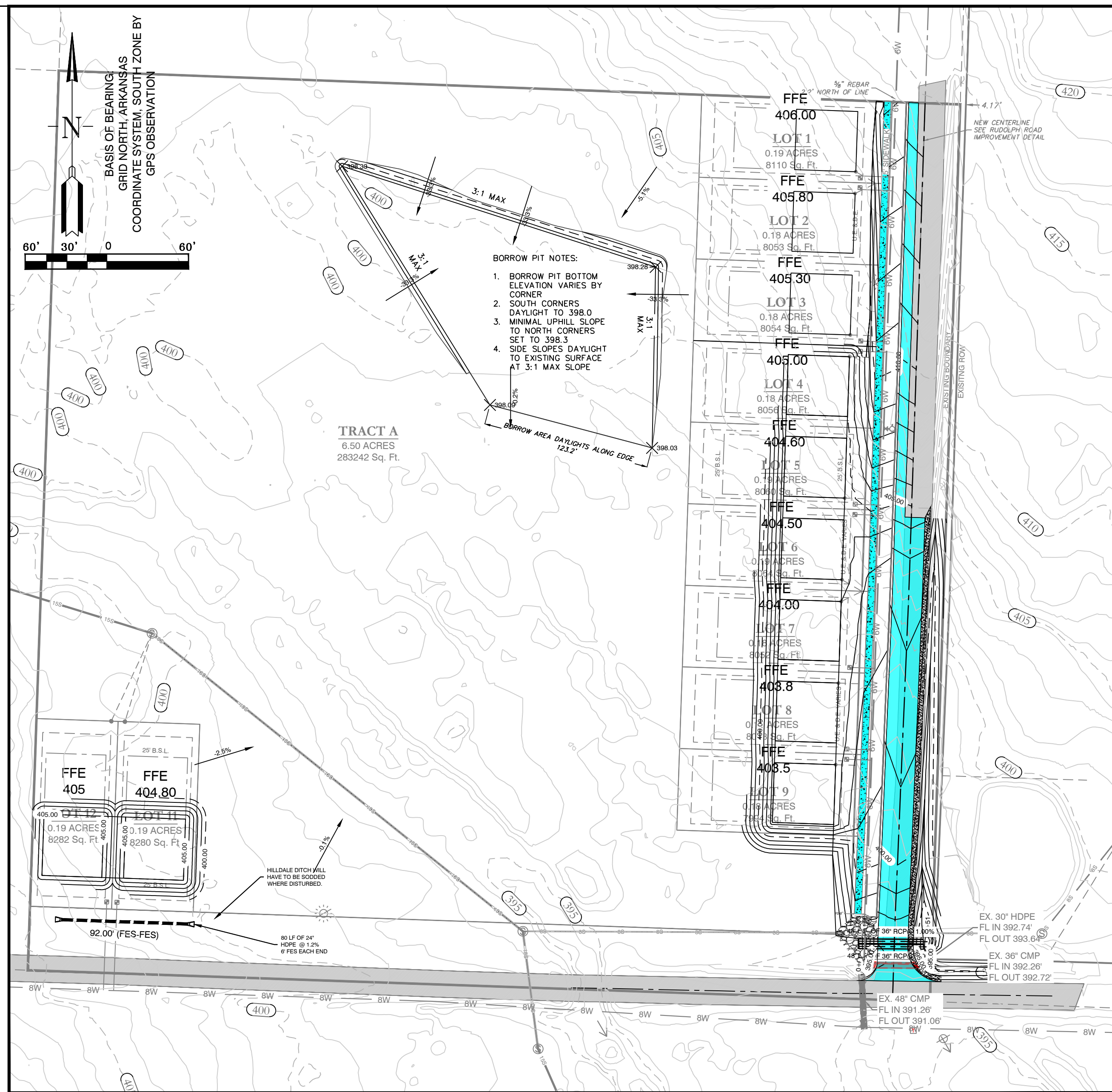
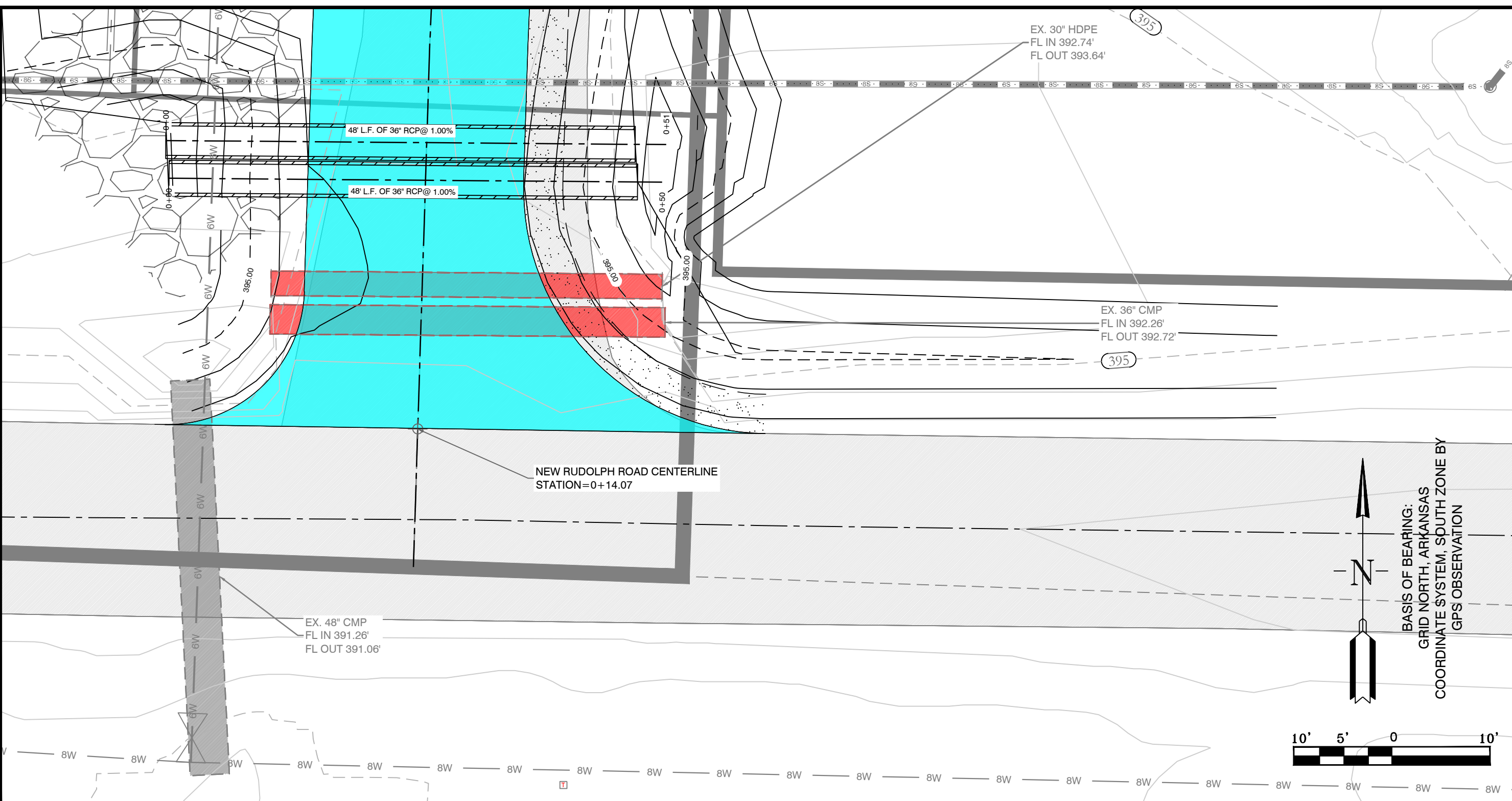


Typical Sidewalk Detail



Typical Curb & Gutter Detail
4,000 psi concrete

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: GIRON BUILDERS INC.			
JACOB'S CORNER CIVIL SPECS SALINE COUNTY, ARKANSAS			
DATE:	02-01-2022	C.A.D. BY:	DRAWING NUMBER:
REVISION:		CHECKED BY:	20-0722
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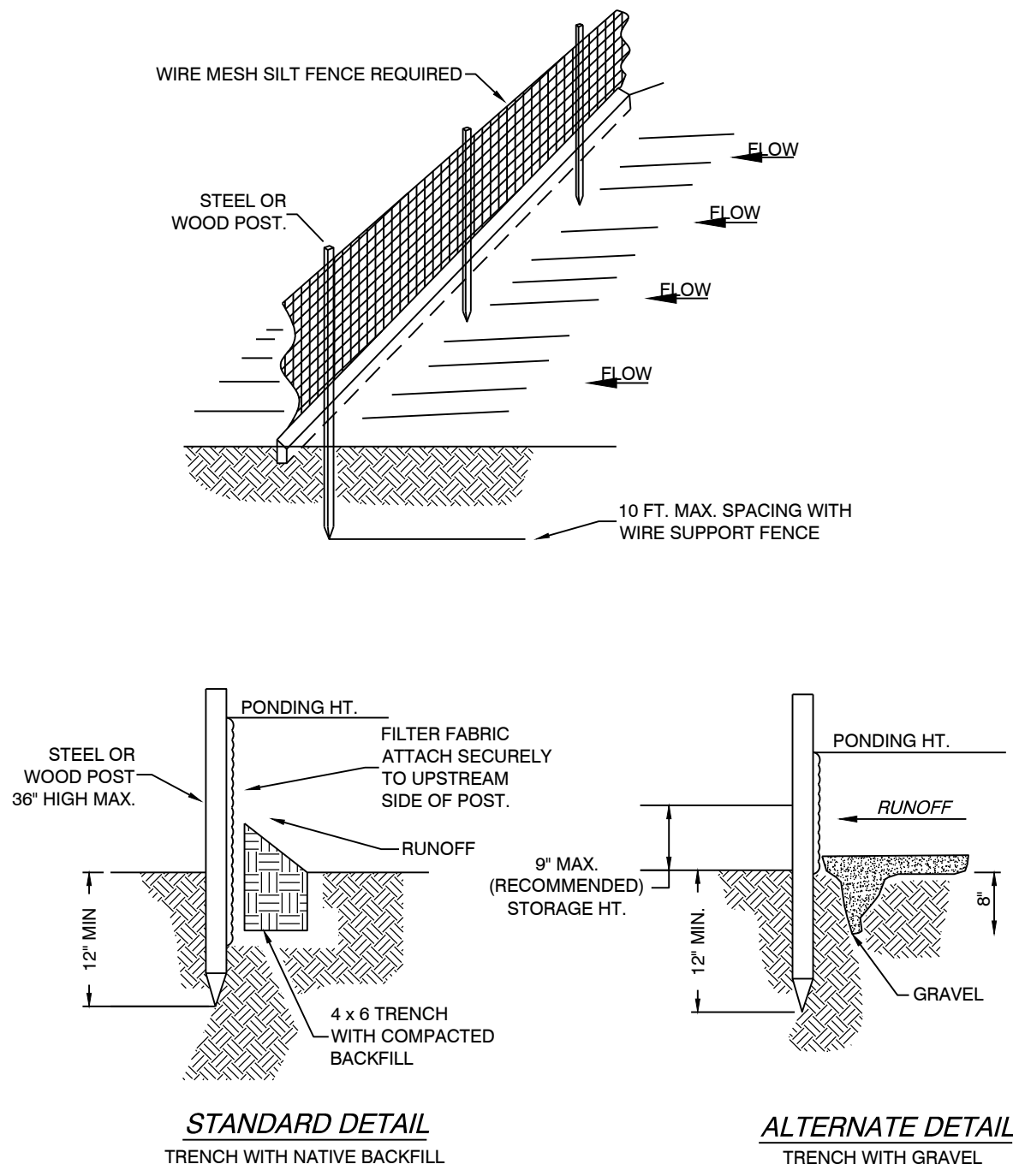
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117 S. Market Street,
Benton, Arkansas 72015
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GRADING AND DRAINAGE
SALINE COUNTY, ARKANSAS

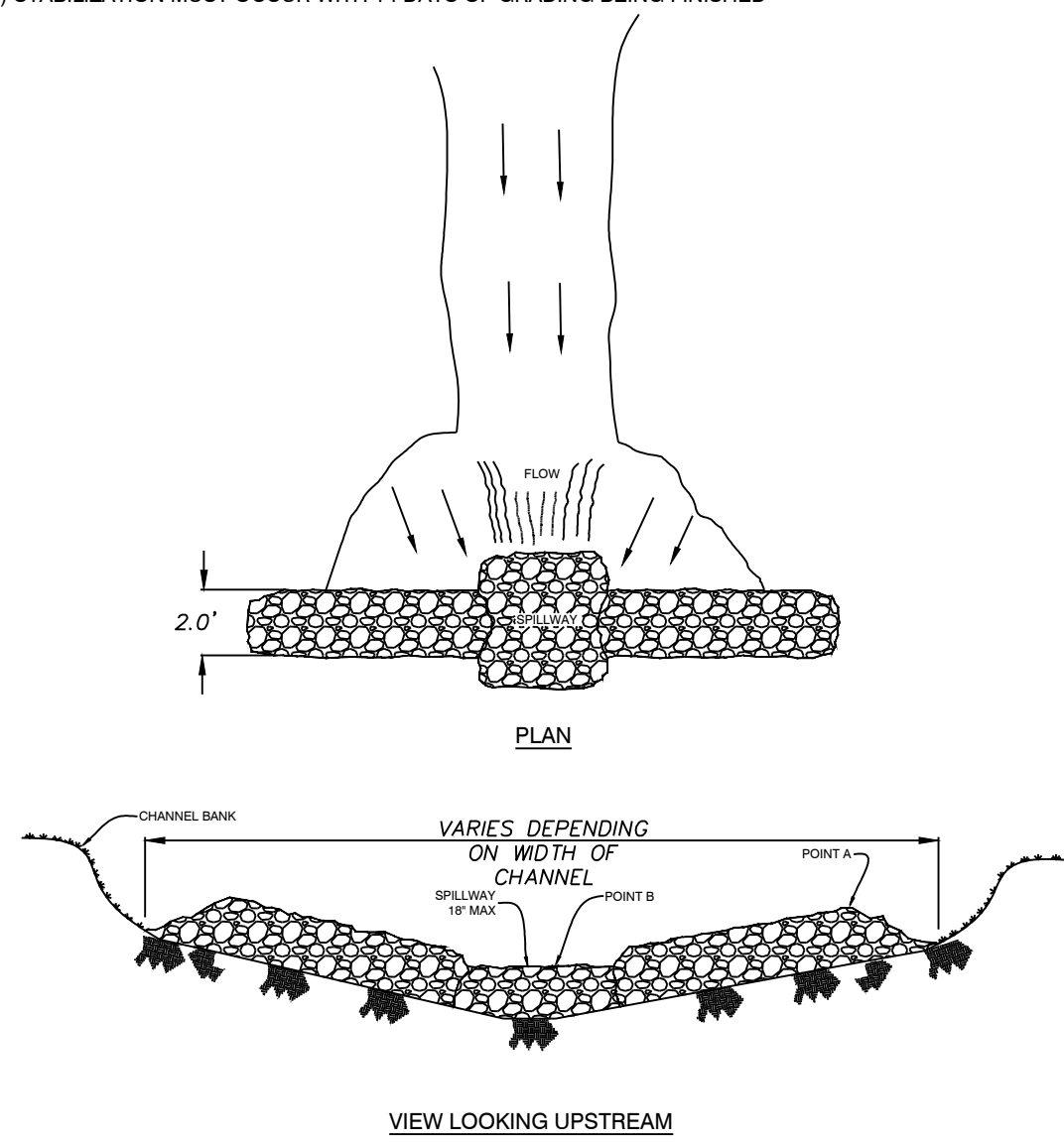
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- NOTE:**
- 1) INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
 - 2) REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
 - 3) SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
 - 4) STABILIZATION MUST OCCUR WITH 14 DAYS OF GRADING BEING FINISHED.

SILT FENCE

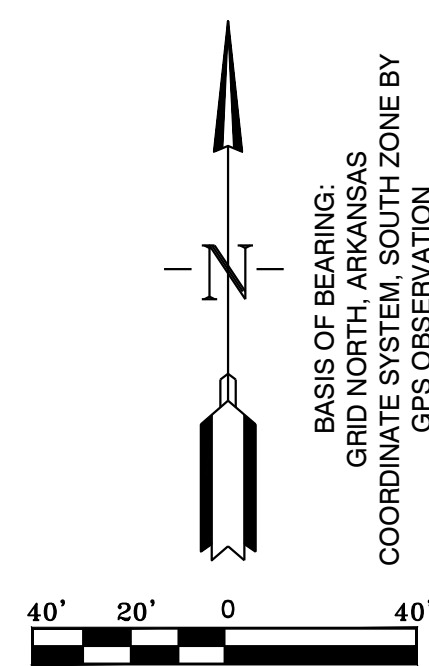


- NOTES:**
- 1) POINT A MUST BE HIGHER THAN POINT B (SPILLWAY HEIGHT).
 - 2) PLACE RIP-RAP BARRIERS PERPENDICULAR TO THE FLOW WITH TIGHT GROUPINGS.
 - 3) USE STRAW, ROCKS, OR FILTER FABRIC TO FILL ANY GAPS AND TAMP.
 - 4) CHECK SPILLWAY TO PREVENT EXCESSIVE FLOW HEIGHT THROUGH DAM.
 - 5) SPILLWAY HEIGHT SHALL NOT EXCEED 18" H.
 - 6) INSPECT AFTER EACH SIGNIFICANT STORM. MAINTAIN AND REPAIR PROMPTLY.

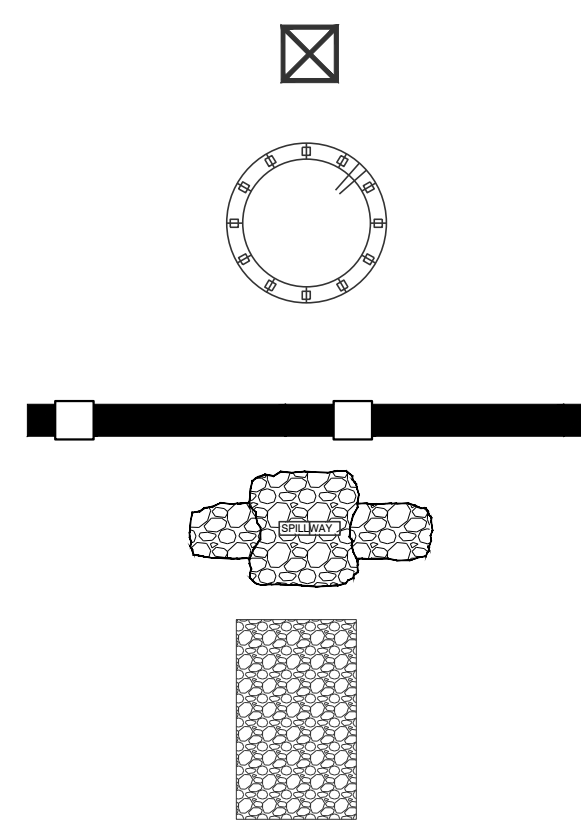
RIP-RAP CHECK DAM

EROSION CONTROL NOTES

SOD DETENTION AREA POST-CONSTRUCTION (IF APPLICABLE)
 MAXIMUM SLOPE OF 3H:1V ON DETENTION POND LEVES
 CONTRACTOR MUST HAVE INLET PROTECTION MEASURES INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF DRAINAGE INLETS/STRUCTURES IS COMPLETE. SEDIMENT BARRIERS SHALL BE MAINTAINED THROUGHOUT AND INSPECTED THROUGHOUT CONSTRUCTION PROCESS UNTIL PROJECT IS COMPLETE.
 RIP-RAP SEDIMENT BARRIERS SHALL BE USED AT ALL STORMWATER DISCHARGE POINTS SHOWN ON PLANS ASAP.
 CONTRACTOR SHOULD WORK WITH ENGINEER TO ESTABLISH EFFECTIVE AND EFFICIENT PLAN TO PREVENT SEDIMENT RUNOFF BY DETERMINING WHERE SILT FENCING OR OTHER TYPES OF CONTROLS ARE NECESSARY.
 SOME EROSION CONTROL MEASURES, 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.

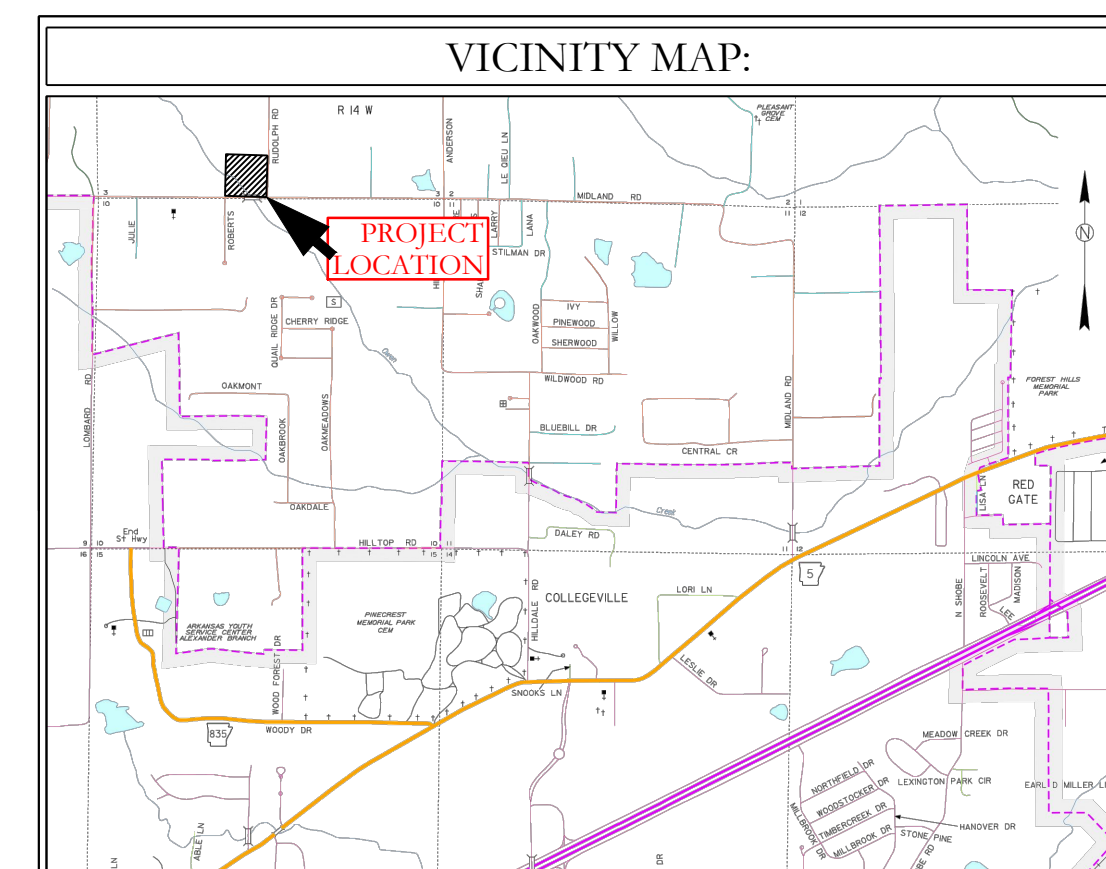


BASIS OF BEARING:
 GRID NORTH, ARKANSAS
 COORDINATE SYSTEM, SOUTH ZONE BY
 GPS OBSERVATION



ERC LEGEND

- SITE POSTING
- CONC. WASHOUT DETENTION AREA
- SILT FENCE
- RIP RAP CHECK DAM
- CONSTRUCTION ENTRANCE
- DISTURBED AREA



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FOR USE AND BENEFIT OF:
JACOB'S CORNER
 EROSION CONTROL PLAN
 SALINE COUNTY, ARKANSAS

DATE: 02-01-2022
 REVISIONS: C-7.0
 SCALE: 1" = 40'

C.A.D. BY:
 CHECKED BY:
 DRAWING NUMBER:
20-0722

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