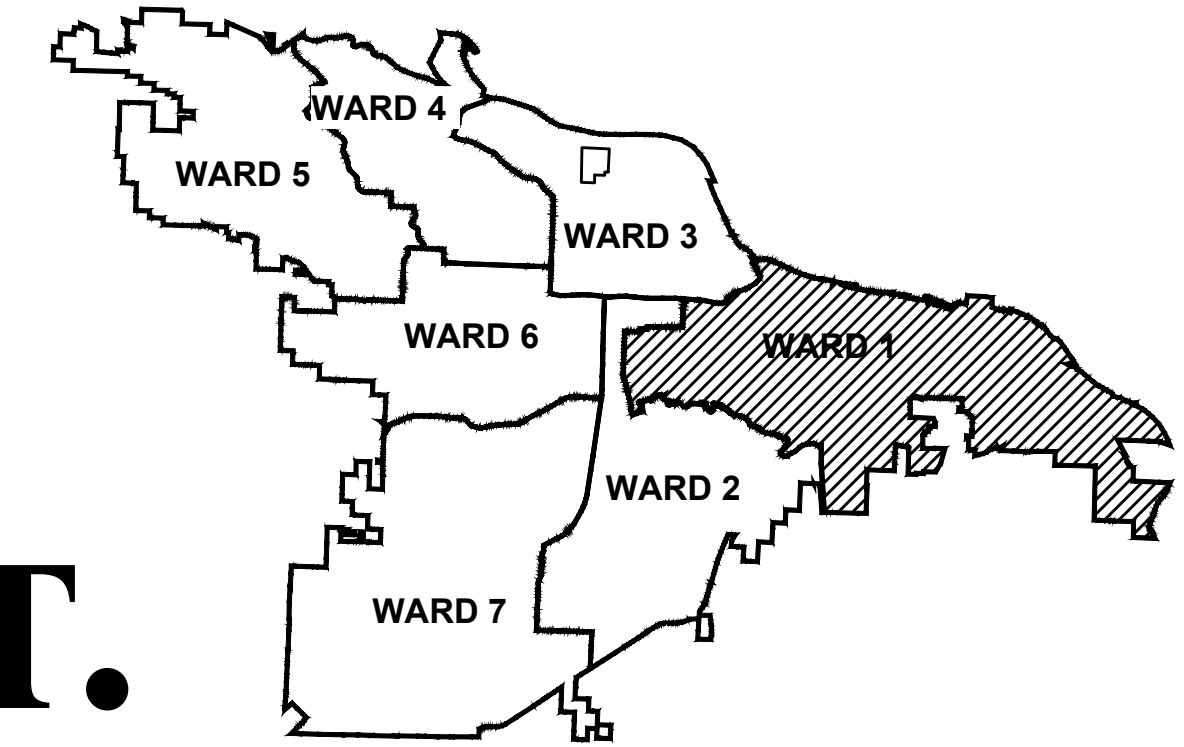


01-22-DR-01

EAST 39TH ST. DRAINAGE

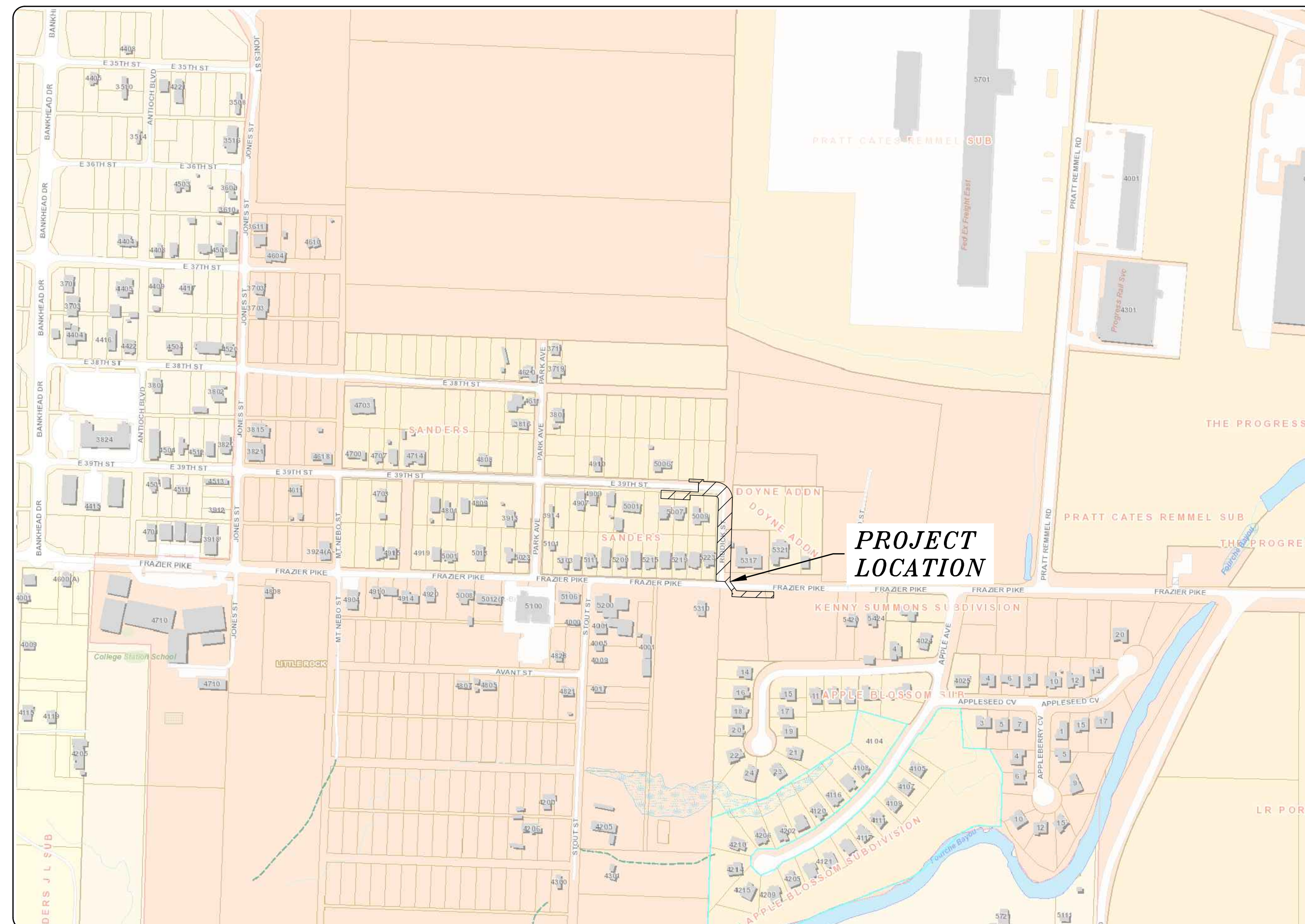
FROM PARK AVE. TO RIDDICK ST.

(INTERSECTION WITH PARK AVE. TO RIDDICK ST)



PROJECT LOCATION - WARD 2

SHEET NO.	TITLE
C 100	COVER SHEET
C 200	QUANTITIES, GENERAL NOTES, LEGEND
C 201	BOX CULVERT & HEADWALL DETAILS
C 202	BOX CULVERT & HEADWALL DETAILS
C 203	BOX CULVERT 24" WATER MAIN CROSSING DETAIL
C 300	FIELD TIES/LAYOUT SHEET
C 400	EXISTING CONDITIONS SITE PLAN
C 500	SITE DETAIL
C 501	DRAINAGE PLAN AND PROFILE
C 502	DRAINAGE PLAN AND PROFILE
C 503	DRAINAGE PLAN AND PROFILE
C 601	DRAINAGE DITCH CROSS-SECTIONS
C 602	DRAINAGE DITCH CROSS-SECTIONS
C 603	DRAINAGE DITCH CROSS-SECTIONS
C 604	DRAINAGE DITCH CROSS-SECTIONS
C 605	DRAINAGE DITCH CROSS-SECTIONS
C 606	GENERAL TOPO
C 701	EROSION CONTROL PLAN PHASE 1
C 702	EROSION CONTROL PLAN PHASE 2
C 703	EROSION CONTROL PLAN PHASE 3
C 800	MAINTENANCE OF TRAFFIC



2023-2025
BOND PROGRAM

DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 WEST MARKHAM STREET
LITTLE ROCK, ARKANSAS 72201



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CITY OF LITTLE ROCK, ARKANSAS
EAST 39TH ST. DRAINAGE IMPROVEMENTS

COVER SHEET

DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM



LITTLE ROCK, ARKANSAS 72201



DRAWN BY JNS
DESIGNED JNS
CHECKED AHR
DATE 6/26/2025
SCALE 1" = 300'
PROJECT NO. CLR # 01-22-DR-01
SHEET NO. C100

CLR PROJECT # 01-22-DR-01			
FROM PARK AVE. TO RIDDICK ST.			
6/26/2025			
ITEM NO.	DESCRIPTION OF ITEMS	CONTRACT QUANTITY	UNIT
2.01	SITE PREPARATION	1	L.S.
3.01	UNCLASSIFIED EXCAVATION NOT ADJUSTED FOR CONCRETE DEPTHS OF DRIVEWAYS AND DITCH LINING, JUNCTION BOXES AND HEADWALLS	300	C.Y.
3.02	COMPACTED EMBANKMENT NOT ADJUSTED FOR CONCRETE DEPTHS OF DRIVEWAYS AND DITCH LINING, JUNCTION BOXES AND HEADWALLS	227.2	C.Y.
7.04	CONCRETE DRIVEWAY (4" THICK), STANDARD FINISH (CHANNEL)	2912	S.F.
7.06	CONCRETE DRIVEWAY (6" THICK), STANDARD FINISH	3510	S.F.
10.01	JUNCTION BOX (5'X5' WITH AREA INLET)	2	EA
10.01	JUNCTION BOX (6'X5' WITH AREA INLET)	1	EA
10.01	JUNCTION BOX (5'X8' WITH AREA INLET)	2	EA
10.01	JUNCTION BOX (6'X9' WITH AREA INLET)	1	EA
10.01	JUNCTION BOX (7'X9' WITH AREA INLET)	1	EA
11.01	REINFORCED CONCRETE PRECAST BOX CULVERT (4'X3')	446.5	L.F.
11.01	REINFORCED CONCRETE PRECAST BOX CULVERT (6'X2')	32.9	L.F.
11.06	REINFORCED CONCRETE HEADWALL - TOTAL	14.7	C.Y.
13.15S	STORM DRAIN PIPE, 15" (SIDE)	27	L.F.
13.18S	STORM DRAIN PIPE, 18" (SIDE)	81	L.F.
14.01	SOLID SODDING (BERMUDA)	756	S.Y.
16.01	MAINTENANCE OF TRAFFIC	1	L.S.
17.01	PAVEMENT REPAIRS (BOX CULVERT CROSSING)	62	S.Y.
18.45	1" THICK RIP RAP (GROUTED)	19.1	S.Y.
19.01	FINAL CLEAN UP	1	L.S.
24.05	ROCK DAM, (RD)	7	EA
26.10	TRENCH & EXCAVATION SAFETY	1	L.S.
606.18	FLARED END SECTION, 18" SIDE DRAIN	1	EA
606.15	FLARED END SECTION, 15" SIDE DRAIN	1	EA
SP-1 RELOCATED POWER POLE			
SP-2 RELOCATE TELEPHONE Poles			
SP-3 UTILITIES RELOCATION(S) - TBD			
SP-4	PIER SUPPORT FOR BOX CULVERT	1	LS
13.24S	STORMDRAIN PIPE, 24" (SIDE)	24	L.F.

ABBREVIATION KEY		
1. SD - #:	PROPOSED STORM DRAINAGE STRUCTURES IDENTIFICATION	
2. STM - #:	PROPOSED STORM PIPES/BOX CULVERT IDENTIFICATION	
3. Ex.STM - #:	EXISTING STORM PIPE IDENTIFICATION	
4. CAW:	CENTRAL ARKANSAS WATER	
5. LRWRA:	LITTLE ROCK WATER RECLAMATION AUTHORITY	
6. CLR:	CITY OF LITTLE ROCK	
7. CBC:	CONCRETE BOX CULVERT	

EXISTING	PROPOSED
IRON ROD	PROPOSED CONTOUR
PK NAIL	PROPOSED SPOT ELEVATION
R.R. SPIKE	PROPOSED SPOT CURB ELEVATION
CONC. MONUMENT	STORM SEWER – PIPE
WATER VALVE	STORM SEWER – MITERED END SECTION
WATER METER	STORM SEWER – GRATE INLET
FIRE HYDRANT	STORM SEWER – JUNCTION BOX
GAS METER	STORM SEWER – FLARED END SECTION
GAS VALVE	STORM SEWER – HEADWALL
CLEAN-OUT	STORM SEWER – SINGLE WING
GUARD POST (BOLLARD)	STORM SEWER – DOUBLE WING
SIGN POST	STORM SEWER – AREA INLET
BENCHMARK	GRADE BREAK LINE
STORM SEWER MANHOLE	HIGH POINT
SANITARY SEWER MANHOLE	LOW POINT
TELEPHONE MANHOLE	CUT LINE
ELECTRIC MANHOLE	FILL LINE
TELEPHONE BOX	SANITARY SEWER PIPE
ELECTRIC BOX	SANITARY SEWER MANHOLE
CABLE BOX	PROPOSED CURB
UTILITY POLE	PROPOSED CONCRETE
GUY WIRE	CONSTRUCTION – ENTRANCE/EXIT
LIGHT POLE	CHECK DAM
POST OR POLE (TYPE AS NOTED)	DIVERSION BERM
MAILBOX	DOWNDRAIN STRUCTURE – TEMPORARY
DECIDUOUS TREE	ROCK DAM
EVERGREEN/CONIFEROUS TREE	SEDIMENT BARRIER – SILT FENCE
BUSH	SEDIMENT BARRIER – GRAVEL RING
PROPERTY LINE	SEDIMENT BARRIER – BLOCK & GRAVEL
SETBACK LINE	SEDIMENT BARRIER – BLOCK
EASEMENT LINE	TEMPORARY SEDIMENT BASIN
CURB	SILT FENCE – TYPE A
FENCE	SILT FENCE – TYPE B
OVERHEAD ELECTRIC	SILT FENCE – TYPE C
OVERHEAD TELEPHONE	STORM DRAIN OUTLET PROTECTION
OVERHEAD CABLE	SURFACE ROUGHENING
UNDERGROUND TELEPHONE	DISTURBED AREA STABILIZATION –TEMPORARY STABILIZATION
UNDERGROUND ELECTRIC	DISTURBED AREA STABILIZATION –TEMPORARY GRASSING
UNDERGROUND CABLE	DISTURBED AREA STABILIZATION –PERMANENT GRASSING
WATER LINE	MATTING/BLANKETS
SEWER LINE	PROPOSED BOX CULVERT
GAS LINE	PROPOSED DITCH CONCRETE
STORM SEWER/CULVERT	PROPOSED SEED/SOD TOP DITCH/SHOULDER
EDGE OF WOODS	GROUTED RIP RAP
CONTOUR LINE	
EXISTING DITCH	

GENERAL NOTES

- ANY DAMAGE TO LANDSCAPING AREAS, YARDS, FENCES OR SIGNS SHALL BE RESTORED TO CONDITION SATISFACTORY TO THE CITY OF LITTLE ROCK PUBLIC WORKS.
- DISTURBED GRASS AREAS SHALL BE REPLACED BY TOPSOIL AND SEEDING OR HYDROMULCH.
- ARKANSAS STATE LICENSING LAW FOR COMMERCIAL CONTRACTORS ACT 150 OF 1965 AND ACT 162 OF 1987 (AS AMENDED) REQUIRES THE INSTALLATION CONTRACTOR TO HAVE A VALID CONTRACTOR'S LICENSE.
- ALL WORK SHALL CONFORM AS APPLICABLE TO THE CITY OF LITTLE ROCK PUBLIC WORKS DEPARTMENT STANDARD DETAILS FOR STREET AND DRAINAGE FACILITIES IMPROVEMENTS.
- REFER TO TECHNICAL SPECIFICATIONS IN THE PROJECT MANUAL FOR SPECIFIC MATERIAL AND PRODUCT REQUIREMENTS.

REVISIONS	DATE
-	-

CITY OF LITTLE ROCK, ARKANSAS
EAST 39TH ST. DRAINAGE IMPROVEMENTS
GENERAL NOTES, LEGEND AND QUANTITIES

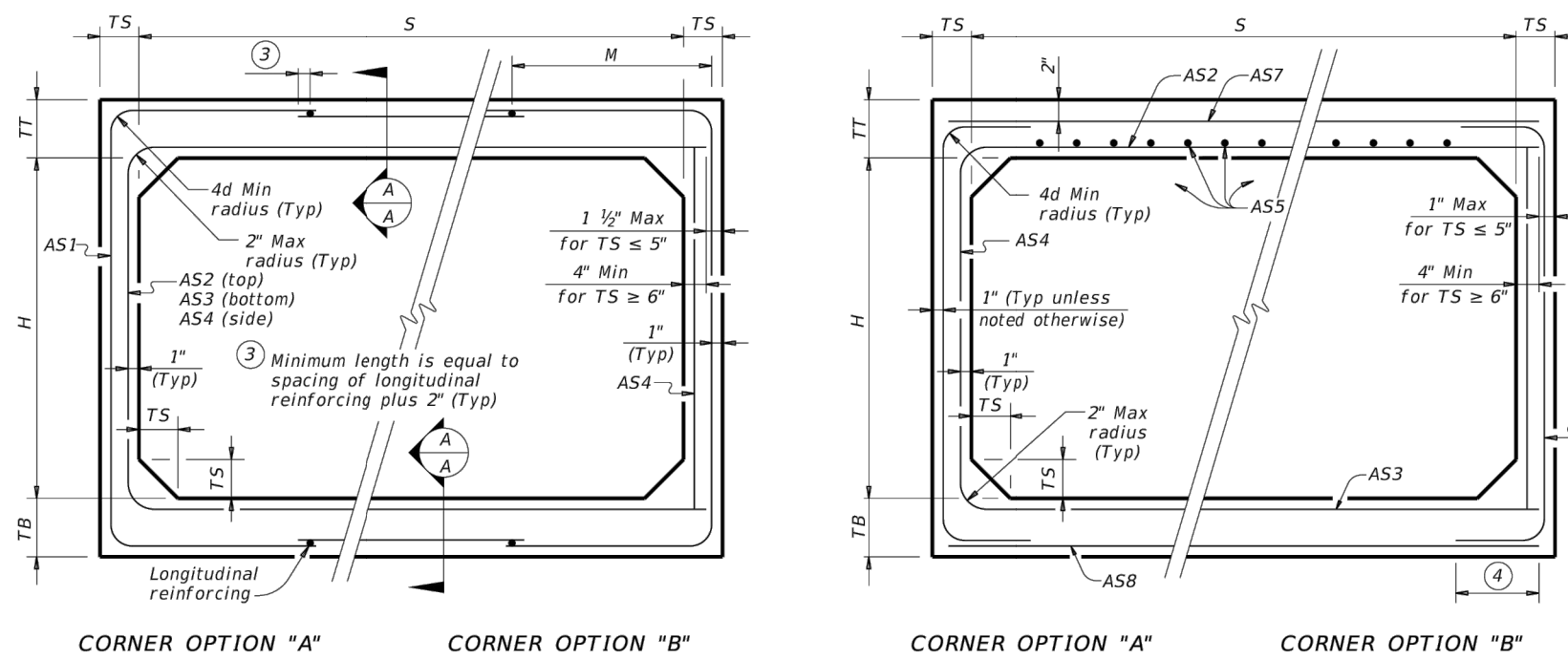
DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201



DRAWN BY	JNS
DESIGNED	JNS
CHECKED	AHR
DATE	6/26/2025
SCALE	N/A
PROJECT NO.	CLR # 01-22-DR-01
SHEET NO.	C200

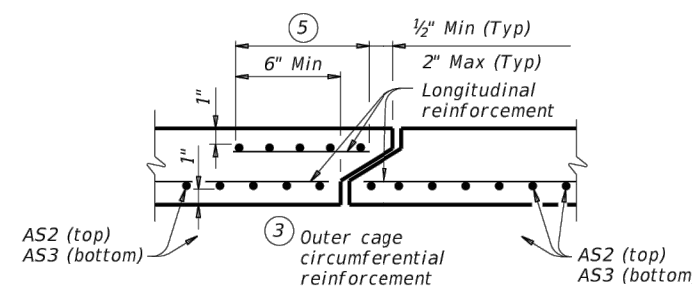
BOX DATA														
SECTION DIMENSIONS					Fill Height (ft.) (ft.)	REINFORCING (sq. in. / ft.) ⁽²⁾								① Lift Weight (tons)
S (ft.)	H (ft.)	TT (in.)	TB (in.)	TS (in.)		AS1	AS2	AS3	AS4	AS5	AS7	AS8		
6	2	8	7	7	< 2	-	0.23	0.27	0.19	0.17	0.19	0.17	7.2	
6	2	7	7	7	2 < 3	43	0.25	0.21	0.17	0.17	-	-	6.8	
6	2	7	7	7	3 - 5	43	0.20	0.17	0.17	0.17	-	-	6.8	
6	2	7	7	7	10	39	0.20	0.17	0.17	0.17	-	-	6.8	
6	2	7	7	7	15	39	0.26	0.20	0.20	0.17	-	-	6.8	
6	2	7	7	7	20	39	0.34	0.26	0.26	0.17	-	-	6.8	
6	2	7	7	7	25	39	0.43	0.32	0.32	0.17	-	-	6.8	
6	2	7	7	7	30	39	0.52	0.38	0.39	0.17	-	-	6.8	
6	3	8	7	7	< 2	-	0.20	0.31	0.22	0.17	0.19	0.19	7.5	
6	3	7	7	7	2 < 3	43	0.21	0.24	0.19	0.17	-	-	7.5	
6	3	7	7	7	3 - 5	39	0.17	0.18	0.17	0.17	-	-	7.5	
6	3	7	7	7	10	39	0.17	0.18	0.19	0.17	-	-	7.5	
6	3	7	7	7	15	38	0.22	0.24	0.24	0.17	-	-	7.5	
6	3	7	7	7	20	38	0.28	0.31	0.31	0.17	-	-	7.5	
6	3	7	7	7	25	38	0.35	0.38	0.39	0.17	-	-	7.5	
6	3	7	7	7	30	38	0.42	0.46	0.46	0.17	-	-	7.5	
6	4	8	7	7	< 2	-	0.19	0.34	0.25	0.17	0.19	0.19	8.2	
6	4	7	7	7	2 < 3	43	0.19	0.27	0.21	0.17	-	-	8.2	
6	4	7	7	7	3 - 5	39	0.17	0.21	0.19	0.17	-	-	8.2	
6	4	7	7	7	10	39	0.17	0.20	0.21	0.17	-	-	8.2	
6	4	7	7	7	15	38	0.18	0.27	0.27	0.17	-	-	8.2	
6	4	7	7	7	20	38	0.24	0.34	0.35	0.17	-	-	8.2	
6	4	7	7	7	25	38	0.29	0.43	0.42	0.17	-	-	8.2	
6	4	7	7	7	30	38	0.35	0.51	0.52	0.17	-	-	8.2	
6	5	8	7	7	< 2	-	0.19	0.37	0.28	0.17	0.19	0.19	8.9	
6	5	7	7	7	2 < 3	43	0.17	0.30	0.24	0.17	-	-	8.9	
6	5	7	7	7	3 - 5	43	0.17	0.23	0.21	0.17	-	-	8.9	
6	5	7	7	7	10	39	0.17	0.22	0.23	0.17	-	-	8.9	
6	5	7	7	7	15	38	0.17	0.26	0.29	0.17	-	-	8.9	
6	5	7	7	7	20	38	0.20	0.37	0.38	0.17	-	-	8.9	
6	5	7	7	7	25	38	0.25	0.45	0.46	0.17	-	-	8.9	
6	5	7	7	7	30	38	0.30	0.54	0.55	0.17	-	-	8.9	
6	6	8	7	7	< 2	-	0.19	0.38	0.30	0.17	0.19	0.19	9.6	
6	6	7	7	7	2 < 3	52	0.17	0.32	0.26	0.17	-	-	9.6	
6	6	7	7	7	3 - 5	52	0.17	0.24	0.22	0.17	-	-	9.6	
6	6	7	7	7	10	43	0.17	0.23	0.24	0.17	-	-	9.6	
6	6	7	7	7	15	39	0.17	0.29	0.31	0.17	-	-	9.6	
6	6	7	7	7	20	39	0.18	0.38	0.39	0.17	-	-	9.6	
6	6	7	7	7	25	38	0.23	0.46	0.48	0.17	-	-	9.6	
6	6	7	7	7	30	38	0.27	0.55	0.57	0.17	-	-	9.6	

- ① For box length = 8'-0"
- ② AS1 thru AS4, AS7 and AS8 are minimum required areas of reinforcement per linear foot of box length. AS5 is minimum required area of reinforcement per linear foot of box width.



FILL HEIGHT 2 FT AND GREATER

FILL HEIGHT LESS THAN 2 FT



SECTION A-A

(Showing top and bottom slab joint reinforcement.)

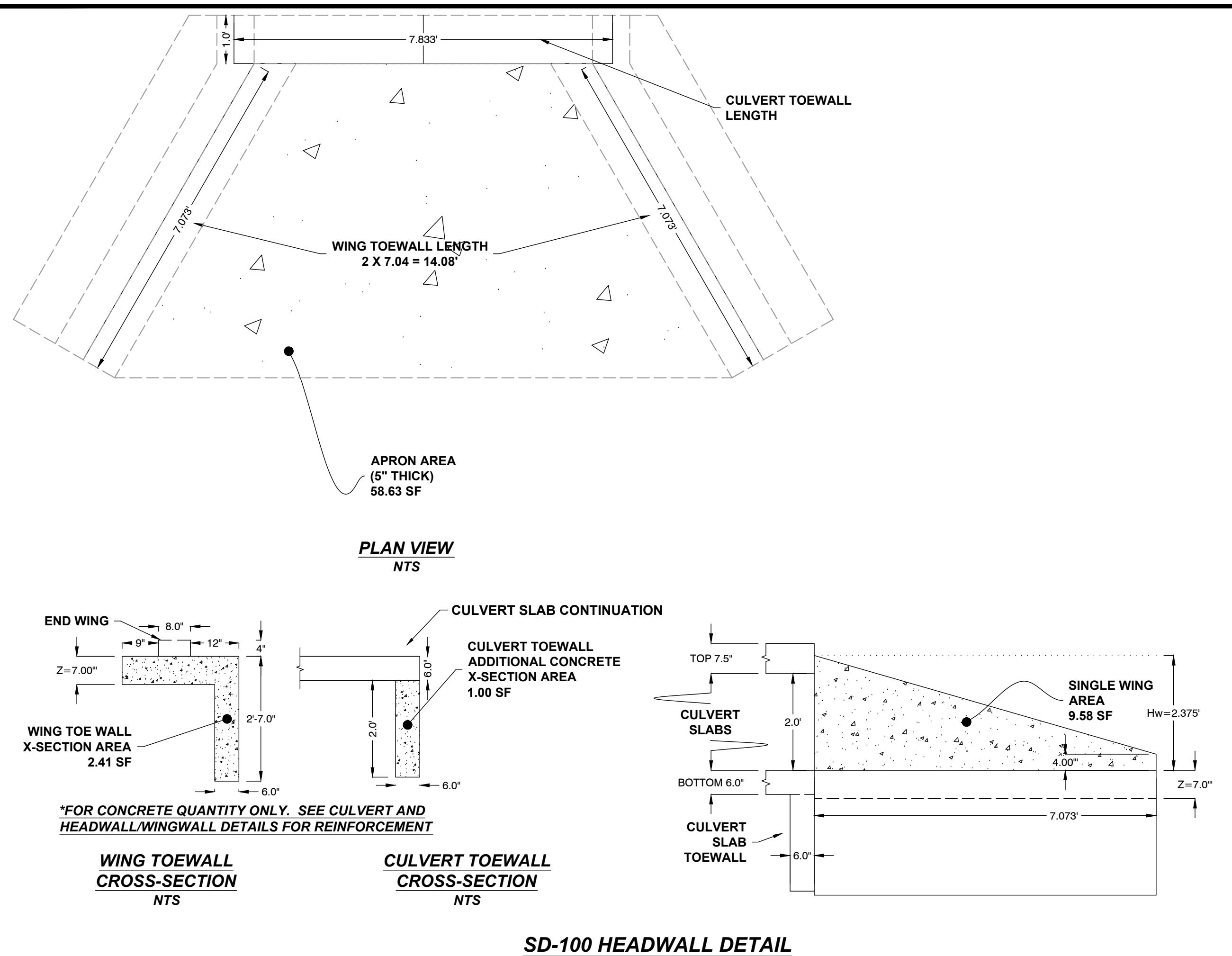
MATERIAL NOTES:
Provide 0.03 sq. in./ft. minimum longitudinal reinforcement at each face in slabs and walls. This minimum requirement may be met by the transverse wires when wire mesh reinforcement is used.
Provide Class H concrete ($f'_c = 5,000$ psi).

GENERAL NOTES:
Designs shown conform to ASTM C1577. Refer to ASTM C1577 for information or details not shown.
See Box Culverts Precast Miscellaneous Details (SCP-MD) standard sheet for details and notes not shown.
In lieu of furnishing the designs shown on this sheet, the contractor may furnish an alternate design that is equal to or exceeds the box design for the design fill height in the table. Submit shop plans for alternate designs in accordance with Item "Precast Concrete Structural Members (Fabrication)".

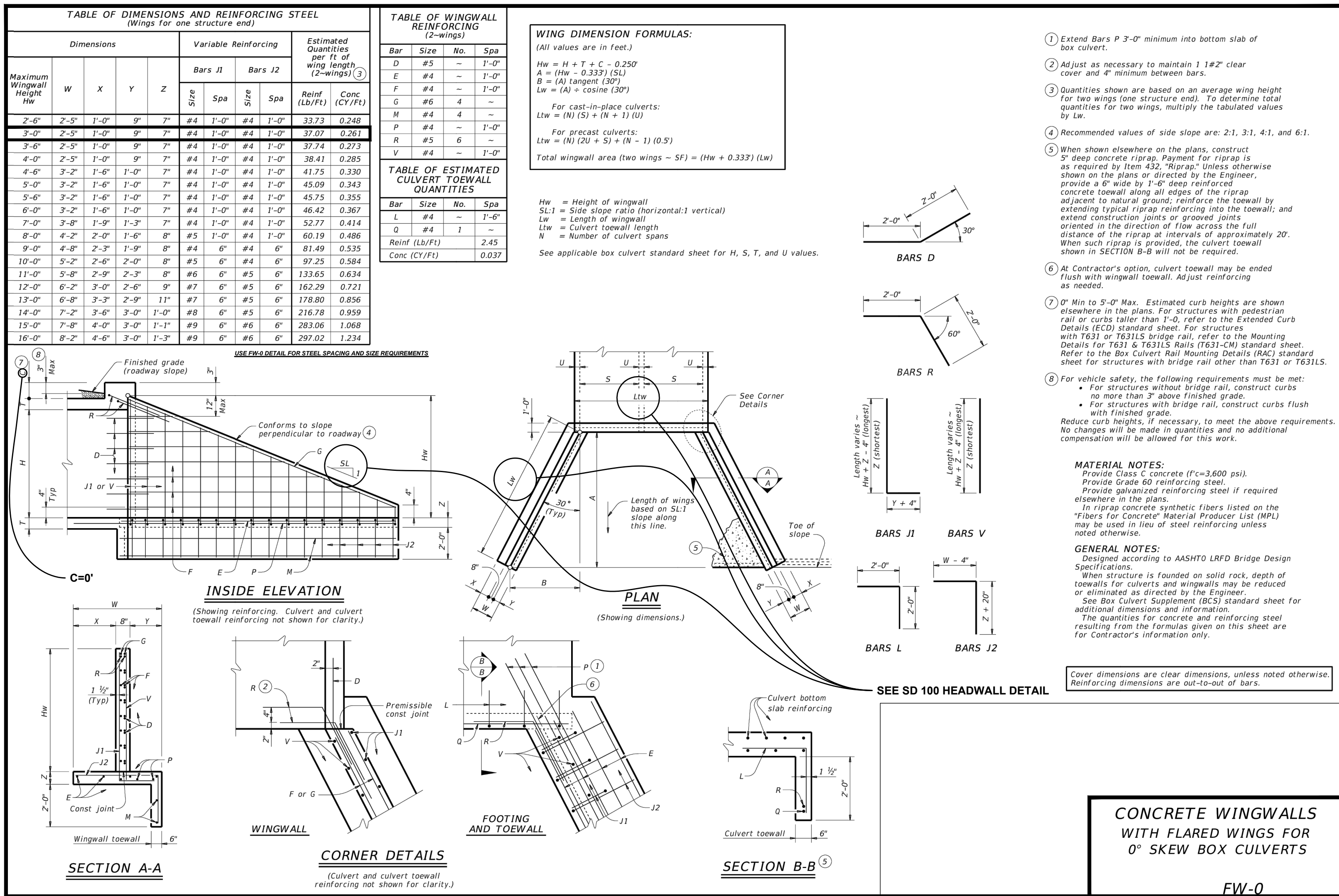
HL93 LOADING

SINGLE BOX CULVERTS
PRECAST
6'-0" SPAN

SCP-6



SD-100 HEADWALL DETAIL



CONCRETE WINGWALLS
WITH FLARED WINGS FOR
0° SKEW BOX CULVERTS

FW-0

REVISIONS	DATE
-	-

CITY OF LITTLE ROCK, ARKANSAS
EAST 39TH ST. DRAINAGE IMPROVEMENTS

BOX CULVERT & HEADWALL DETAILS

DEPARTMENT OF PUBLIC WORKS

CIVIL ENGINEERING

701 W. MARKHAM

LITTLE ROCK, ARKANSAS 72201

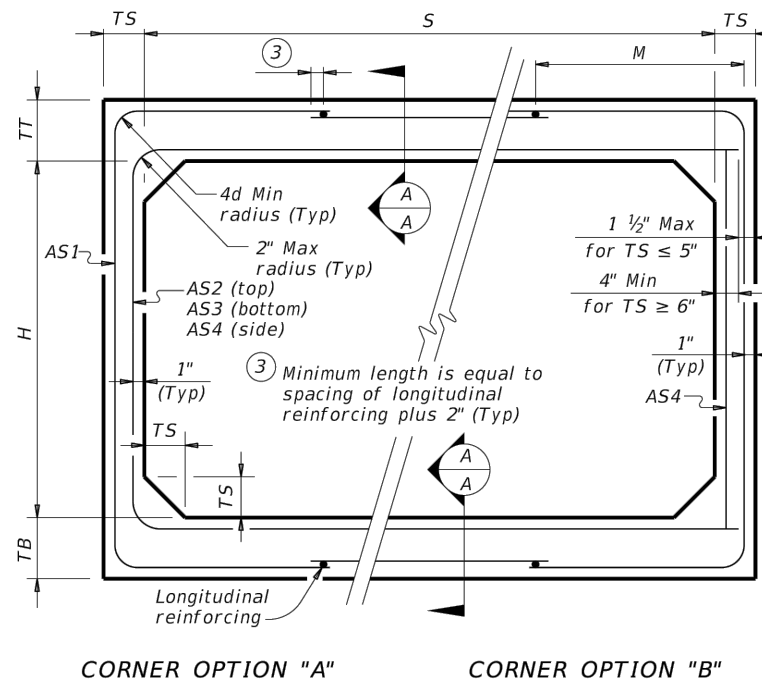


DRAWN BY
JNS
DESIGNED
JNS
CHECKED
AHR
DATE
6/26/2025
SCALE
N/A

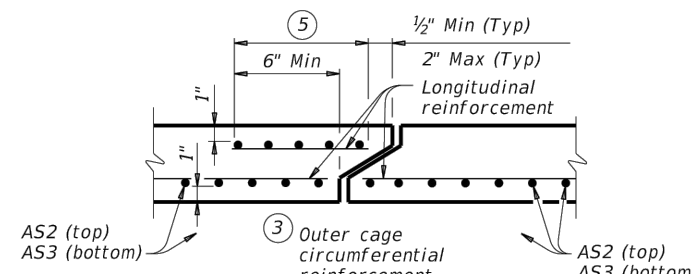
PROJECT NO.
CLR # 01-22-DR-01
SHEET NO.
C201

BOX DATA													
SECTION DIMENSIONS						REINFORCING (sq. in. / ft.) ⁽²⁾							
S	H	TT	TB	TS	Fill Height	M (Min)	AS1	AS2	AS3	AS4	AS5	AS7	AS8
(ft.)	(ft.)	(in.)	(in.)	(in.)	(ft.)	(in.)							
4	2	7.5	6	5	< 2	-	0.18	0.27	0.15	0.12	0.18	0.18	0.14
4	2	5	5	5	2 < 3	38	0.18	0.19	0.17	0.12	-	-	3.6
4	2	5	5	5	3 - 5	38	0.13	0.13	0.13	0.12	-	-	3.6
4	2	5	5	5	5	10	38	0.12	0.12	0.12	0.12	-	3.6
4	2	5	5	5	15	38	0.14	0.16	0.16	0.12	-	-	3.6
4	2	5	5	5	20	38	0.18	0.20	0.21	0.12	-	-	3.6
4	2	5	5	5	25	38	0.23	0.25	0.25	0.12	-	-	3.6
4	2	5	5	5	30	38	0.28	0.30	0.30	0.12	-	-	3.6
4	3	7.5	6	5	< 2	-	0.18	0.21	0.18	0.12	0.18	0.18	0.14
4	3	5	5	5	2 < 3	38	0.15	0.23	0.20	0.12	-	-	4.1
4	3	5	5	5	3 - 5	38	0.12	0.16	0.16	0.12	-	-	4.1
4	3	5	5	5	10	38	0.12	0.14	0.14	0.12	-	-	4.1
4	3	5	5	5	15	38	0.12	0.18	0.18	0.12	-	-	4.1
4	3	5	5	5	20	38	0.14	0.23	0.24	0.12	-	-	4.1
4	3	5	5	5	25	38	0.17	0.29	0.29	0.12	-	-	4.1
4	3	5	5	5	30	38	0.21	0.35	0.35	0.12	-	-	4.1
4	4	7.5	6	5	< 2	-	0.18	0.33	0.20	0.12	0.18	0.18	0.14
4	4	5	5	5	2 < 3	38	0.12	0.26	0.23	0.12	-	-	4.6
4	4	5	5	5	3 - 5	38	0.12	0.18	0.18	0.12	-	-	4.6
4	4	5	5	5	10	38	0.12	0.15	0.15	0.12	-	-	4.6
4	4	5	5	5	15	38	0.12	0.19	0.20	0.12	-	-	4.6
4	4	5	5	5	20	38	0.12	0.25	0.25	0.12	-	-	4.6
4	4	5	5	5	25	38	0.14	0.31	0.31	0.12	-	-	4.6
4	4	5	5	5	30	38	0.17	0.37	0.37	0.12	-	-	4.6

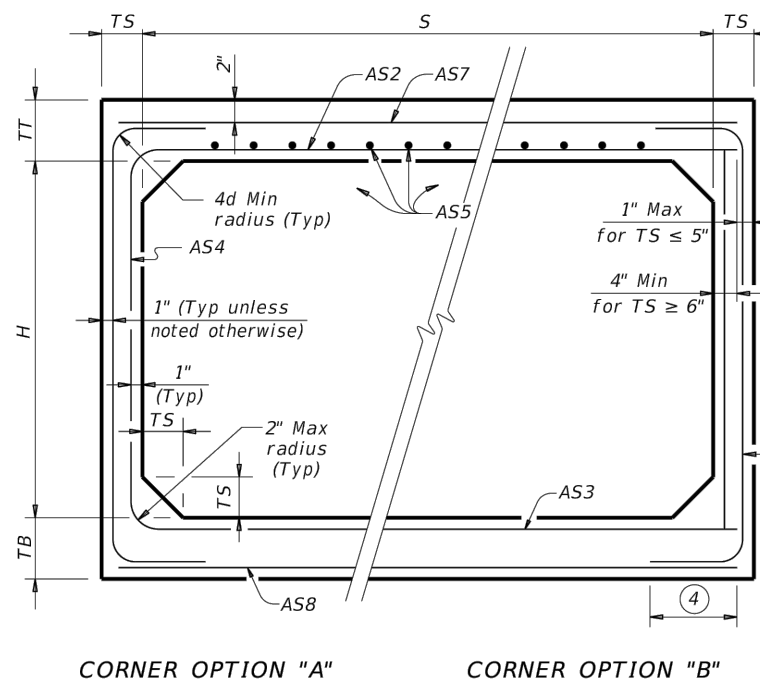
- ① For box length = 8'-0"
- ② AS1 thru AS4, AS7 and AS8 are minimum required areas of reinforcement per linear foot of box length. AS5 is minimum required area of reinforcement per linear foot of box width.



FILL HEIGHT 2 FT AND GREATER



SECTION A-A
(Showing top and bottom slab joint reinforcement.)



FILL HEIGHT LESS THAN 2 FT

- ④ Length is equal to spacing of longitudinal reinforcing plus 2' (10' Min) (Typ)

MATERIAL NOTES:
Provide 0.03 sq. in./ft. minimum longitudinal reinforcement at each face in slabs and walls. This minimum requirement may be met by the transverse wires when wire mesh reinforcement is used.
Provide Class II concrete ($f_c = 5,000$ psi).

GENERAL NOTES:
Designs shown conform to ASTM C1577. Refer to ASTM C1577 for information or details not shown.
See Box Culverts Precast Miscellaneous Details (SCP-MD) standard sheet for details and notes not shown.
In lieu of furnishing the designs shown on this sheet, the contractor may furnish an alternate design that is equal to or exceeds the box design for the design fill height in the Table. Submit shop plans for alternate designs in accordance with Item "Precast Concrete Structural Members (Fabrication)".

SINGLE BOX CULVERTS
PRECAST
4'-0" SPAN

SCP-4

BOX CULVERT AND HEADWALL NOTES

- REFER TO DETAIL PW (CONCRETE WINGWALLS WITH PARALLEL WINGS FOR BOX CULVERT TYPE PW-1) FOR PLACEMENT, SIZE, AND SPACING OF STEEL REINFORCEMENT IN STM-106 HEADWALL AND WINGWALLS.
- REFER TO DETAIL PW (CONCRETE WINGWALLS WITH PARALLEL WINGS FOR BOX CULVERT TYPE PW-1) FOR PLACEMENT, SIZE, AND SPACING OF STEEL REINFORCEMENT IN HEADWALL TO BE CONSTRUCTED AT EACH END OF PROPOSED BOX CULVERT STM-3.
- REFER TO STM - 3 & DOWNSTREAM STM - 106 HEADWALL DETAIL FOR SITE SPECIFIC HEADWALL/WINGWALL DIMENSIONS.
- CONCRETE VOLUMES FOR WINGWALL, CULVERT TOEWALL, WING TOEWALL, AND APRON ARE BASED ON DIMENSIONS PROVIDED IN STM - 3 & DOWNSTREAM STM - 106 HEADWALL DETAIL.
- SEE SITE DETAIL SHEET KEY NOTES FOR INFORMATION ON APPLICABILITY OF VARIOUS BOX CULVERT AND HEADWALL DETAILS.

TABLE OF DIMENSIONS AND REINFORCING STEEL (Wings for one structure end)													
Dimensions					Variable Reinforcing			Estimated Quantities per ft. of wing (2-wings)		Estimated Quantities per ft. of Toewall (1-toewall)		Estimated Quantities per ft. of Wing (2-wings)	
Maximum Wingwall Height, Hw	W	X	Y	Z	Bars J1	Bars J2	Spa	Reinf. (lb/ft)	Conc. (CY/ft)	Reinf. (lb/ft)	Conc. (CY/ft)	Reinf. (lb/ft)	Conc. (CY/ft)
2'-6"	2'-10"	10"	1'-0"	7"	#4	1'-0"	#4	1'-0"	48.64	0.406	6.85	0.071	
2'-9"	2'-10"	10"	1'-0"	7"	#4	1'-0"	#4	1'-0"	49.31	0.424	6.85	0.071	
3'-0"	2'-10"	10"	1'-0"	7"	#4	1'-0"	#4	1'-0"	49.98	0.444	6.85	0.071	
3'-3"	2'-10"	10"	1'-0"	7"	#4	1'-0"	#4	1'-0"	53.32	0.462	6.85	0.071	
4'-0"	2'-10"	10"	1'-0"	7"	#4	1'-0"	#4	1'-0"	53.98	0.480	6.85	0.071	
4'-3"	3'-2"	1'-2"	1'-0"	7"	#4	1'-0"	#4	1'-0"	55.77	0.532	6.85	0.071	
4'-6"	3'-2"	1'-2"	1'-0"	7"	#4	1'-0"	#4	1'-0"	59.77	0.568	6.85	0.071	
5'-0"	3'-9"	1'-7"	1'-2"	7"	#4	1'-0"	#4	1'-0"	63.45	0.632	6.96	0.075	
5'-6"	3'-9"	1'-7"	1'-2"	7"	#4	1'-0"	#4	1'-0"	67.46	0.668	6.96	0.075	
6'-0"	4'-4"	2'-0"	1'-4"	7"	#5	1'-0"	#5	1'-0"	80.67	0.730	7.07	0.078	
6'-6"	4'-4"	2'-0"	1'-4"	7"	#5	1'-0"	#5	1'-0"	85.05	0.768	7.07	0.078	
7'-0"	5'-0"	2'-3"	1'-9"	8"	#5	1'-0"	#5	1'-0"	92.15	0.864	8.07	0.093	
7'-6"	5'-0"	2'-3"	1'-9"	8"	#5	1'-0"	#5	1'-0"	96.54	0.902	8.07	0.093	
8'-0"	5'-6"	2'-8"	1'-10"	8"	#5	6"	#5	6"	139.04	0.962	8.13	0.095	
8'-6"	5'-6"	2'-8"	1'-10"	8"	#5	6"	#5	6"	144.47	1.000	8.13	0.095	
9'-6"	6'-0"	2'-10"	2'-2"	9"	#5	6"	#5	6"	156.93	1.136	8.41	0.110	
10'-6"	6'-5"	3'-0"	2'-5"	9"	#6	6"	#5	6"	196.27	1.234	8.57	0.117	
11'-6"	7'-2"	3'-6"	2'-8"	11"	#6	6"	#6	6"	230.13	1.438	9.52	0.140	
12'-6"	7'-8"	3'-9"	2'-11"	11"	#6	6"	#6	6"	283.41	1.592	9.74	0.157	
13'-6"	8'-2"	4'-0"	3'-2"	1'-2"	#8	6"	#6	6"	348.72	1.804	10.02	0.186	
14'-6"	8'-10"	4'-5"	3'-5"	1'-4"	#9	6"	#6	6"	432.94	2.046	10.30	0.218	
15'-6"	9'-6"	4'-10"	3'-8"	1'-6"	#9	6"	#7	6"	489.52	2.302	11.24	0.253	
16'-0"	9'-11"	5'-0"	3'-11"	1'-7"	#9	6"	#7	6"	505.72	2.448	11.47	0.279	

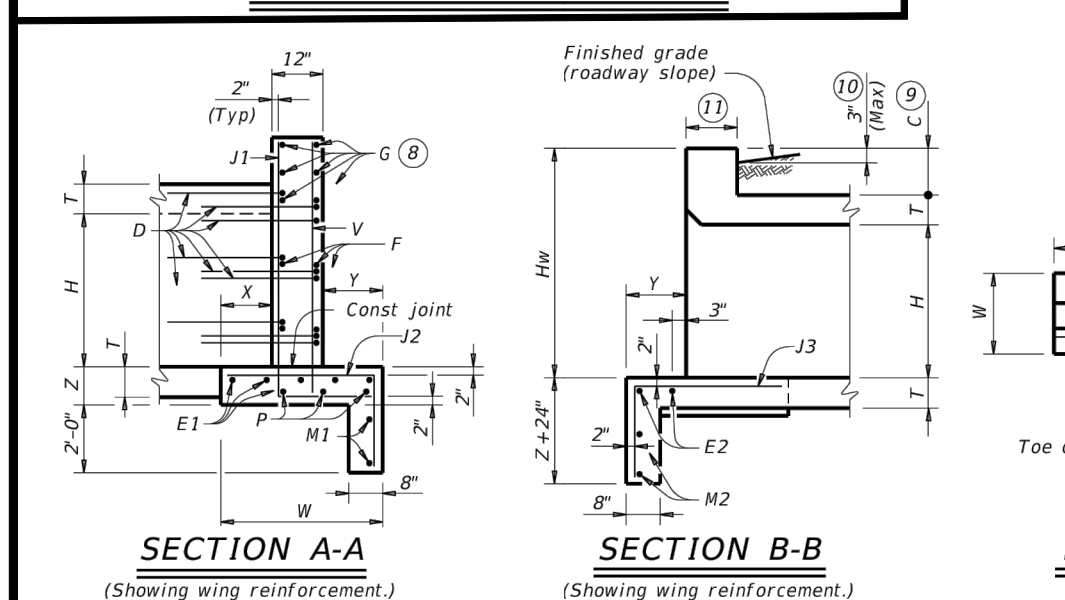
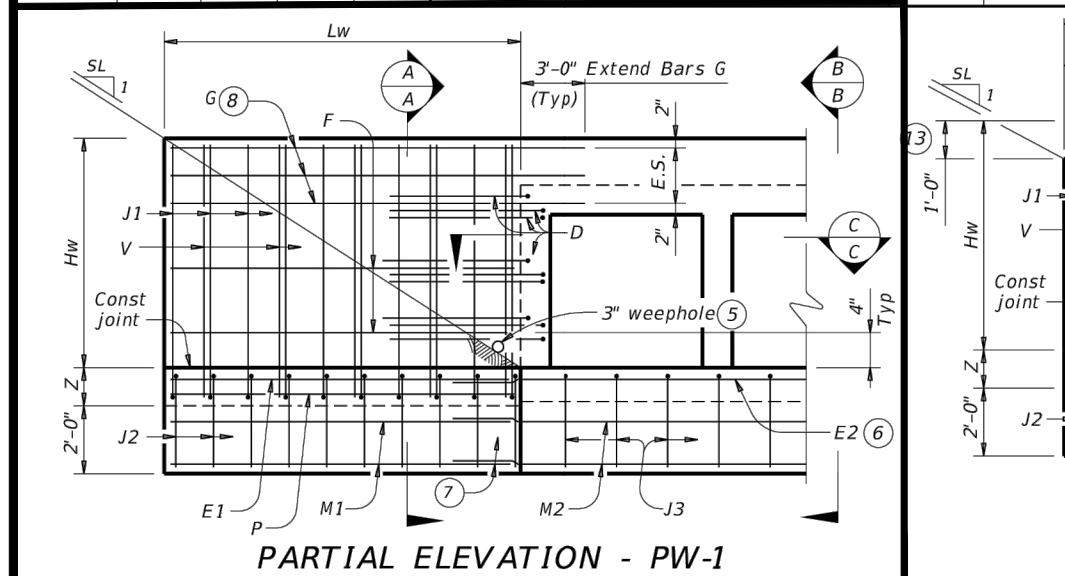
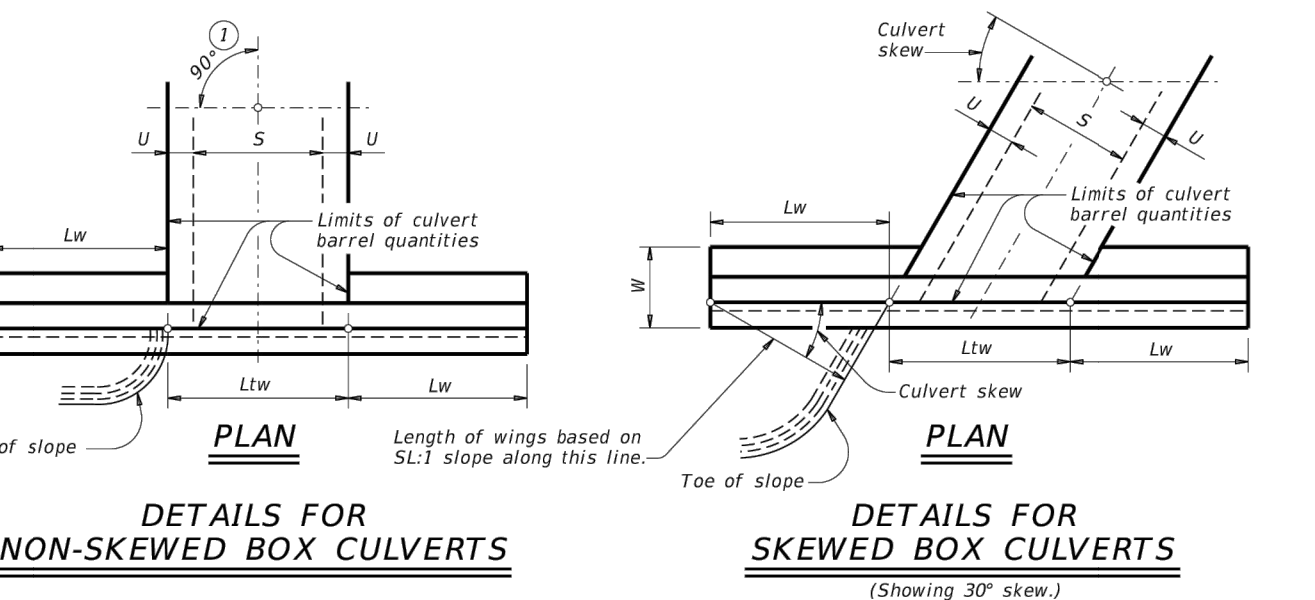
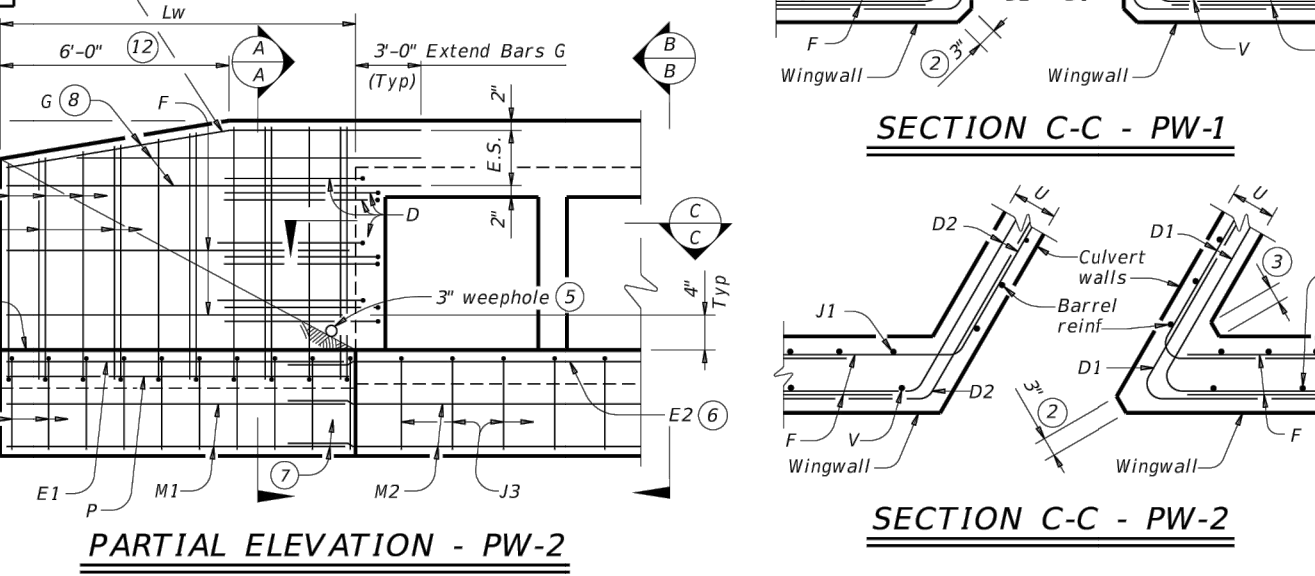


TABLE OF WINGWALL REINFORCING (2-wings)													
Bar	Size	No.	Spa	Bar	Size	No.	Spa	Bar	Size	No.	Spa	Bar	Size
D1	#6	-	1'-0"	D2	#6	-	1'-0"	E1	#4	-	1'-0"	F	#4
E1	#4	-	1'-0"	F	#4	-	1'-0"	G	#6	-	8"	M1	#4
G	#6	-	8"	M1	#4	4	-	P	#4	-	1'-0"	V	#4
M1	#4	4	-	P	#4	-	1'-0"	V	#4	-	1'-0"		



- Slew = 0°
- At discharge end, chanfer may be 3/4" minimum.
- For 15° skew = 1" For 30° skew = 2" For 45° skew = 3"
- Quantities shown are for two Type PW-1 wings. Adjust concrete volume for Type PW-2 wings. To determine estimated quantities for two wings, multiply the tabulated values by Lw. Quantities shown do not include weight of Bars D.
- Provide weepholes for Hw = 3'-0" and greater. Fill around weepholes with coarse gravel.
- Extend Bars E2 1'-6" minimum into the wingwall footing.
- Lap Bars M1 1'-6" minimum with Bars M2.
- Place Bars G as shown, equally spaced at 8" maximum. Provide at least two pairs of Bars G per wing.
- 0" Min to 5'-0" Max. Estimated curb heights are shown elsewhere in the plans. For structures with pedestrian rail or curbs taller than 1'-0, refer to the Extended Curb Details (ECD) standard sheet. For structures with T631 or T631LS bridge rail, refer to the Mounting Details for T631 and T631LS Rails (T631-CR) standard sheet. Refer to the Box Culvert Rail Mounting Details (RAC) standard sheet for structures with bridge rail other than T631 or T631LS.
- For vehicle safety, the following requirements must be met:
 - For structures without bridge rail, construct curbs no more than 3" above finished grade.
 - For structures with bridge rail, construct curbs flush with finished grade.
- Reduce curb heights, if necessary, to meet the above requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.
- 1'-0" typical, 2'-3" when the Box Culvert Rail Mounting Details (RAC) standard sheet is referred to elsewhere in the plans.
- 3'-0" for Hw < 4'.
- 6" for Hw < 4'.

DESIGNER NOTES:
Type PW-1 can be used for all applications and must be used if railing is to be mounted to the wingwall.
Type PW-2 can only be used for applications without a railing mounted to the wingwall.

MATERIAL NOTES:
Provide Class C concrete ($f_c=3,600$ psi).
Provide Grade 60 reinforcing steel.
Provide galvanized reinforcing steel if required elsewhere in the plans.

GENERAL NOTES:
Designed in accordance with AASHTO LRFD Bridge Design Specifications.
Depth of toewalls for wingwalls and culverts may be reduced or eliminated when founded on solid rock, when directed by the Engineer.
See Box Culvert Supplement (BCS) standard sheet for wingwall type and additional dimensions and information. Quantities for concrete and reinforcing steel resulting from the formulas given on this sheet are for the Contractor's information only.

CONCRETE WINGWALLS
WITH PARALLEL WINGS FOR
BOX CULVERTS
TYPES PW-1 AND PW-2
PW

REVISIONS	DATE
-	-

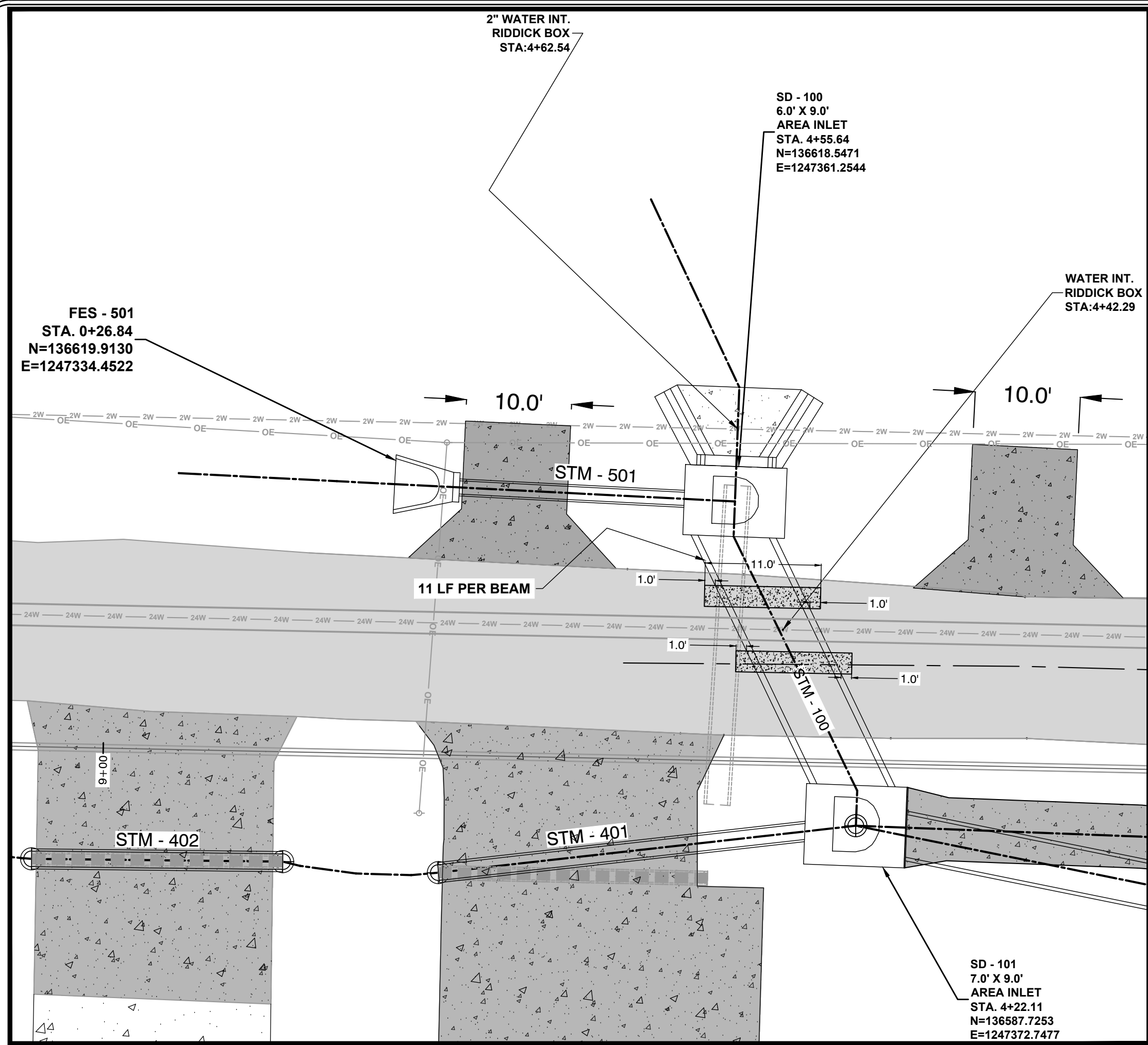
CITY OF LITTLE ROCK, ARKANSAS
EAST 39TH ST. DRAINAGE IMPROVEMENTS

BOX CULVERT & HEADWALL DETAILS

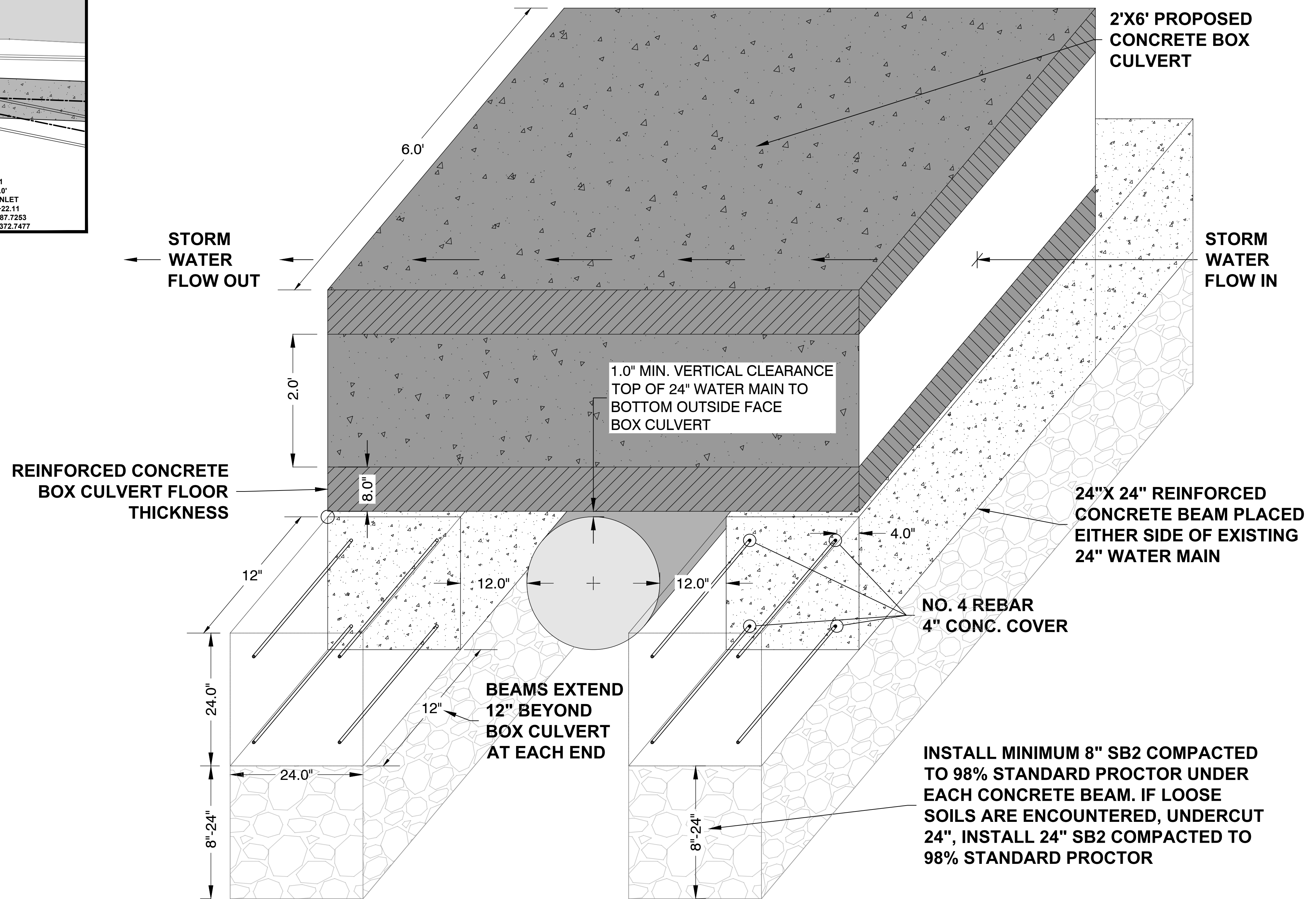
DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201

REGISTERED PROFESSIONAL ENGINEER
No. 10453
ANDREW H. PIKE

DRAWN BY
JNS
DESIGNED
JNS
CHECKED
AHR
DATE
6/26/2025
SCALE
N/A
PROJECT NO.
CLR # 01-22-DR-01
SHEET NO.
C202



BOX CULVERT WATER MAIN CROSSING WITH SUPPORT BEAMS
PLAN VIEW
SCALE: 1"=10'



BOX CULVERT WATER MAIN CROSSING WITH SUPPORT BEAMS
ISOMETRIC VIEW
SCALE: NTS

REVISIONS DATE

-	-
-	-
-	-

CITY OF LITTLE ROCK, ARKANSAS
EAST 39TH ST. DRAINAGE IMPROVEMENTS

CROSSING DETAIL EXISTING 24" WATER MAIN

DEPARTMENT OF PUBLIC WORKS

CIVIL ENGINEERING

701 W. MARKHAM

LITTLE ROCK, ARKANSAS 72201



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CLR # 01-22-DR-01

SHEET NO.

C203

RIDDICK BOX ALIGNMENT GEOMETRY			
Point #	Description	Northing	Easting
1001	0+00.00 BOA	136244.74	1247472.33
1002	0+15.29 PI	136245.23	1247457.05
1003	0+69.64 PI	136285.89	1247420.99
1004	3+59.33 PI	136575.28	1247434.28
1005	4+22.11 PI	136587.73	1247372.75
1006	4+25.44 PI	136591.06	1247372.87
1007	4+52.31 PI	136615.22	1247361.13
1008	4+55.64 PI	136618.55	1247361.25
1009	4+66.50 PI	136629.40	1247361.67
1010	4+86.23 EOA	136647.25	1247353.28

SWALE BRANCH ALIGNMENT GEOMETRY			
Point #	Description	Northing	Easting
1101	0+00.00 BOA	136575.28	1247434.28
1102	0+03.69 RP	136590.43	1247431.28
1103	0+03.69 PC	136575.45	1247430.60
1104	0+06.44 Mid	136575.82	1247427.87
1105	0+09.19 PT	136576.69	1247425.26
1106	0+31.02 RP	136571.70	1247399.25
1107	0+31.02 PC	136585.44	1247405.26
1108	0+33.83 Mid	136586.32	1247402.60
1109	0+36.64 PT	136586.69	1247399.82
1110	0+63.73 EOA	136587.73	1247372.75

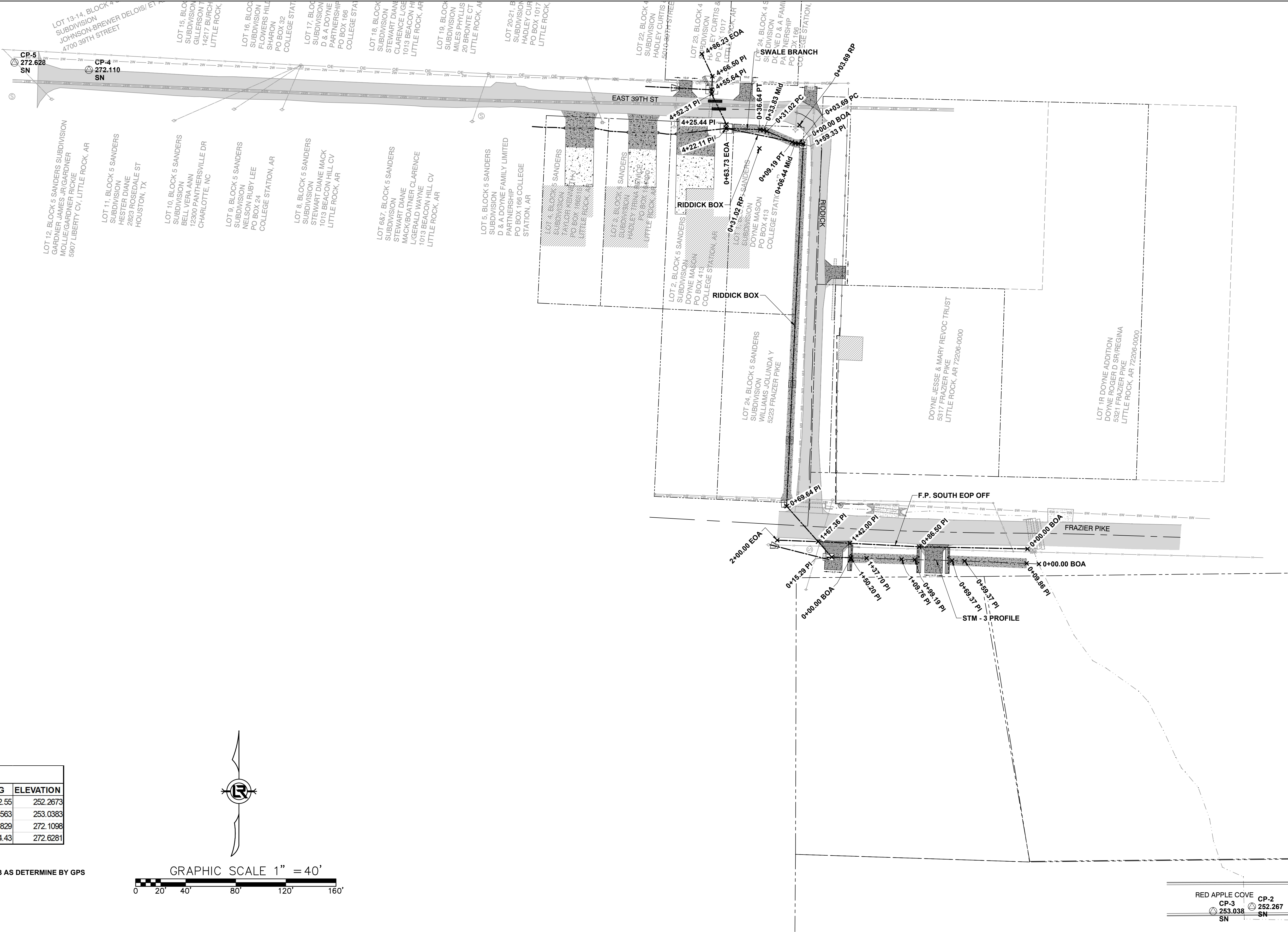
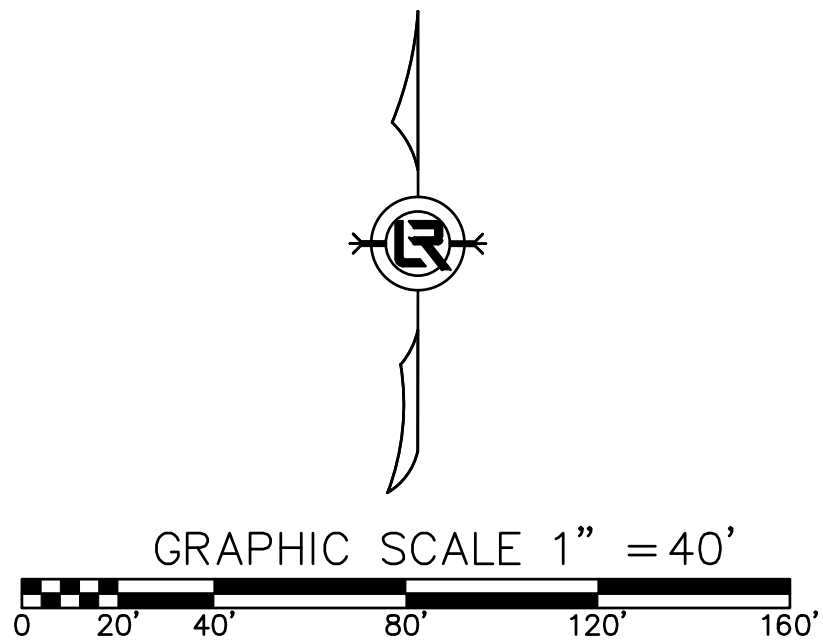
FRAZIER PIKE SOUTH EDGE PAVEMENT OFFSET ALIGNMENT GEOMETRY			
Point #	Description	Northing	Easting
1201	0+00.00 BOA	136251.78	1247613.32
1202	0+86.50 PI	136253.47	1247526.84
1203	1+42.00 PI	136256.28	1247471.41
1204	1+67.36 PI	136257.59	1247446.09
1205	2+00.00 EOA	136258.77	1247413.46

STM - 3 PROFILE ALIGNMENT GEOMETRY			
Point #	Description	Northing	Easting
1301	0+00.00 BOA	136239.72	1247622.44
1302	0+09.86 PI	136240.22	1247612.60
1303	0+59.37 PI	136242.09	1247563.12
1304	0+69.37 PI	136242.49	1247553.13

SURVEY BENCHMARKS				
NO.	DESCRIPTION	NORTHING	EASTING	ELEVATION
CP-2	SN	135966.0459	1247792.55	252.2673
CP-3	SN	135962.4045	1247761.563	253.0383
CP-4	SN	136634.5268	1246863.829	272.1098
CP-5	SN	136640.363	1246804.43	272.6281

VERTICAL DATUM: NGVD 29
BASIS OF BEARING: ARKANSAS GRID NORTH NAD 83 AS DETERMINE BY GPS

CONTROL POINT



RED APPLE COVE
CP-3 253.038
SN
CP-2 252.267
SN

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
EAST 39TH ST. DRAINAGE IMPROVEMENTS
FIELD TIES/LAYOUT SHEET

DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201



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DESIGNED
JNS
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AHR
DATE
6/27/2025
SCALE
AS NOTED
PROJECT NO.
CLR # 01-22-DR-01
SHEET NO.
C300

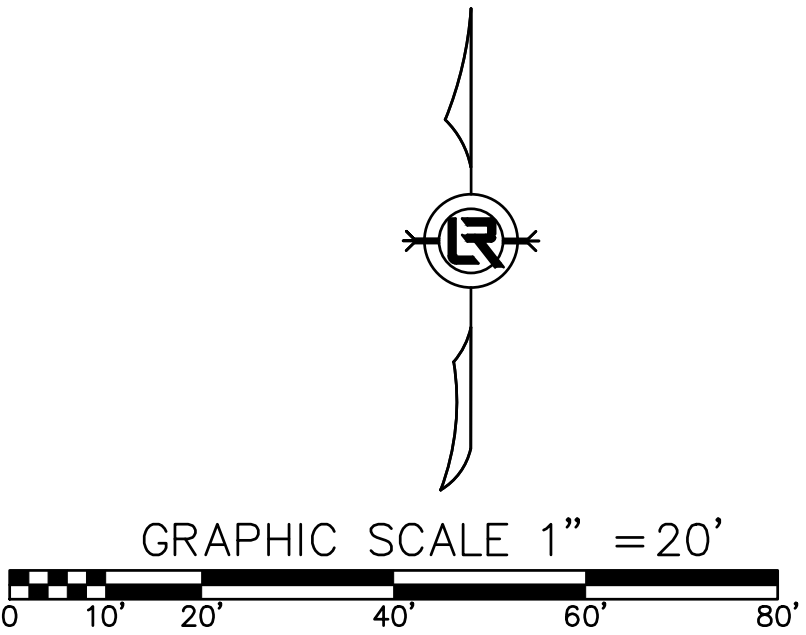


Existing Pipe Network				
NAME	SIZE	LENGTH	SLOPE	DESCRIPTION
ExSTM - 1	24"	30.39'	-0.27%	C.P.
ExSTM - 2	18"	48.83'	-0.74%	C.P.
ExSTM - 6	24"	24.89'	0.00%	C.P.
ExSTM - 7	24"	24.41'	0.00%	C.P.
ExSTM - 8	15"	20.50'	1.12%	EXISTING CUVERT

Existing Pipe Network				
NAME	SIZE	LENGTH	SLOPE	DESCRIPTION
ExSTM - 3	36.25" X 22.50"	27.86'	0.90%	CONC HORIZ. ELL. ARCH
ExSTM - 4	36.25" X 22.50"	21.79'	0.73%	CONC HORIZ. ELL. ARCH
ExSTM - 5	36.25" X 22.50"	23.83'	-0.00%	CONC HORIZ. ELL. ARCH

EXISTING DRIVEWAY CULVERTS			
NAME	SIZE	LENGTH	SLOPE
ExSTM - 14	12"	23.69'	0.08%
ExSTM - 15	12"	23.86'	-0.63%
ExSTM - 16	12"	25.58'	1.02%

NOTE:
1. SIZE/SHAPE OF EXISTING STORM PIPES ARE APPROXIMATE.



REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
EAST 39TH ST. DRAINAGE IMPROVEMENTS
EXISTING CONDITIONS SITE PLAN

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LITTLE ROCK, ARKANSAS 72201



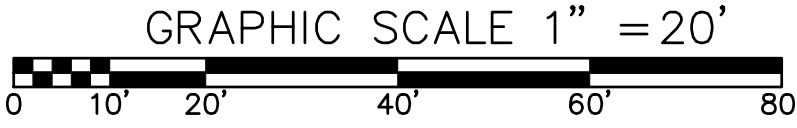
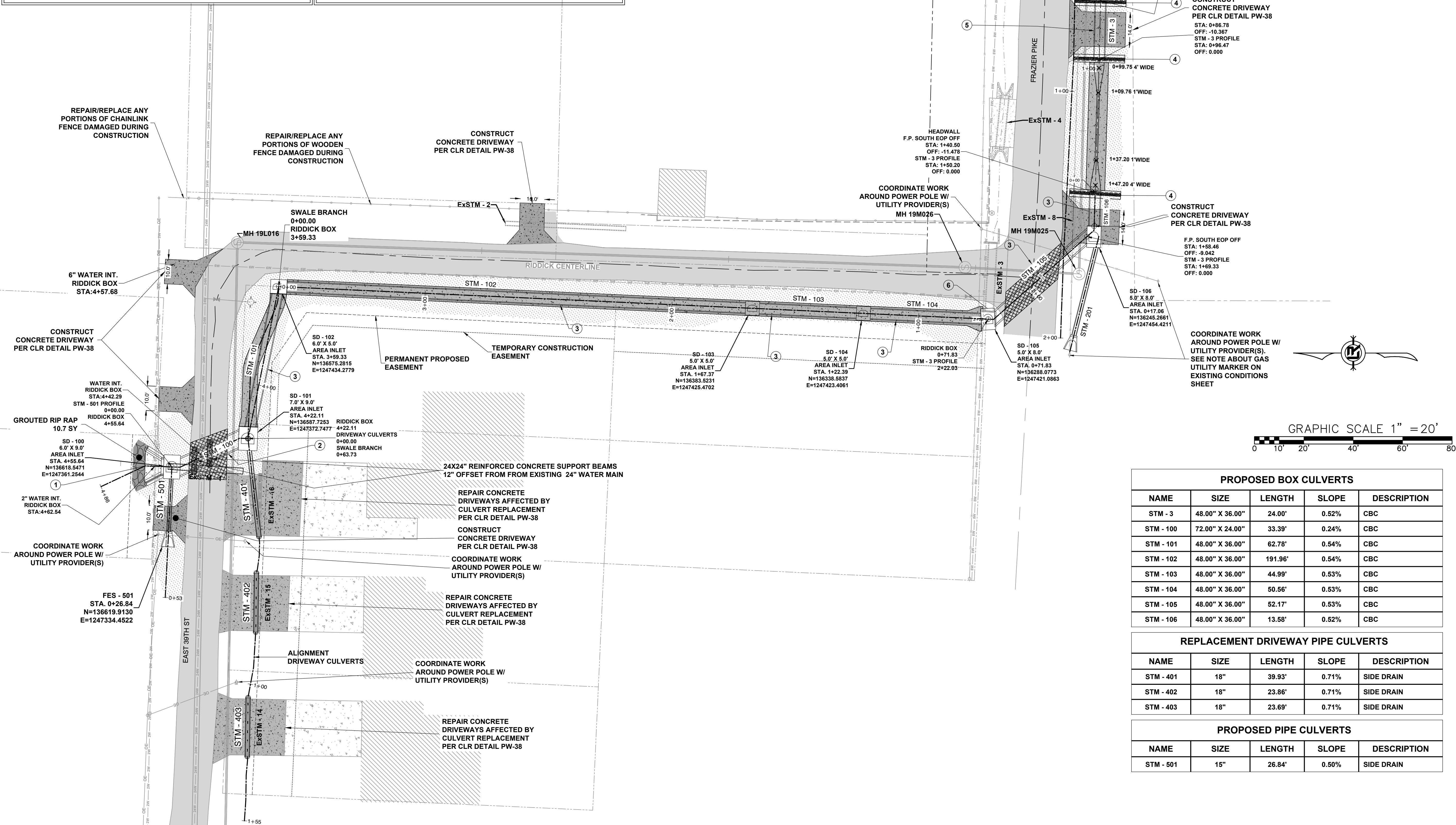
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DATE
6/26/2025
SCALE
AS NOTED
PROJECT NO.
CLR # 01-22-DR-01
SHEET NO.
C400

KEY NOTES

1. REFER TO DETAIL FW-0 CONCRETE WINGWALLS WITH FLARED WINGS FOR 0° SKEW BOX CULVERTS DETAIL FOR PLACEMENT, SIZE, AND SPACING OF STEEL REINFORCEMENT OF HEADWALL ON UPSTREAM SIDE OF JUNCTION BOX SD-100.
2. REFER TO DETAIL SINGLE BOX CULVERTS SCP-6 PRECAST 6'-0" SPAN FOR BOX CULVERT DIMENSIONS AND PLACEMENT, SIZE, AND, SPACING OF STEEL REINFORCEMENT OF BOX CULVERT STM-100.
3. REFER TO DETAIL SCP-4 SINGLE BOX CULVERTS PRECAST 4'-0" SPAN FOR BOX CULVERT DIMENSIONS AND PLACEMENT, SIZE, AND, SPACING OF STEEL REINFORCEMENT OF BOX CULVERTS STM - 101 - STM - 106.
4. REFER TO DETAIL PW CONCRETE WINGWALLS WITH PARALLEL WINGS FOR BOX CULVERT TYPE PW-1 FOR PLACEMENT, SIZE, AND SPACING OF STEEL REINFORCEMENT. REFER TO STM - 3 & DOWNSTREAM STM - 106 HEADWALL DETAIL FOR SITE SPECIFIC DIMENSIONS.
5. REFER TO DETAIL SCP- 4 SINGLE BOX CULVERTS PRECAST 4' SPAN FOR BOX CULVERT DIMENSIONS AND PLACEMENT SIZE, AND, SPACING OF STEEL REINFORCEMENT OF BOX CULVERT STM - 3.
6. REMOVE OR FILL WITH CONCRETE AND ABANDON EXISTING STORM CULVERT "Ex-STM - 3" AND DEMO ATTACHED EXISTING HEADWALL WITH CONSTRUCTION OF PROPOSED JUNCTION BOX SD-105.

SITE NOTES

1. CONSTRUCT STORM DRAIN JUNCTION BOXES LABELED WITH AREA INLETS IN ACCORDANCE WITH CITY OF LITTLE ROCK DETAIL PW-6.
2. JUNCTION BOXES WHICH HAVE A SIDE EQUAL TO OR LONGER THAN 6' REQUIRE AN ADDITIONAL PEDESTAL IN THE CENTER OF THE LONG SIDE.
3. F.P. SOUTH EOP OFF IS ABBREVIATION FOR THE ALIGNMENT FRAZIER PIKE SOUTH EDGE OF PAVEMENT OFFSET.
4. TRANSITION BOTTOM WIDTH AND SIDE SLOPE OF CONCRETE PORTION OF DITCH ALONG FRAZIER PIKE AT THE STATIONS INDICATED ON THE DRAWINGS TO CONFORM TO DIMENSIONS OF BOX. SEE TYPICAL SECTION DETAILS ON PLAN PROFILE SHEETS AND CROSS-SECTION VIEW SHEETS FOR MORE INFORMATION.
5. SANITARY SEWER MANHOLES ARE LABELED WITH NAMES PROVIDED BY LITTLE ROCK WATER RECLAMATION AUTHORITY SEWER MAP.
6. HORIZONTAL AND VERTICAL POSITIONS OF ALL EXISTING UTILITIES DISPLAYED ON PLANS ARE APPROXIMATE AND PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
7. THE CONTRACTOR IS RESPONSIBLE FOR CALLING ONE CALL PRIOR TO BEGINNING WORK AND SHALL FIELD VERIFY LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING WORK.



PROPOSED BOX CULVERTS				
NAME	SIZE	LENGTH	SLOPE	DESCRIPTION
STM - 3	48.00" X 36.00"	24.00'	0.52%	CBC
STM - 100	72.00" X 24.00"	33.39'	0.24%	CBC
STM - 101	48.00" X 36.00"	62.78'	0.54%	CBC
STM - 102	48.00" X 36.00"	191.96'	0.54%	CBC
STM - 103	48.00" X 36.00"	44.99'	0.53%	CBC
STM - 104	48.00" X 36.00"	50.56'	0.53%	CBC
STM - 105	48.00" X 36.00"	52.17'	0.53%	CBC
STM - 106	48.00" X 36.00"	13.58'	0.52%	CBC

REPLACEMENT DRIVEWAY PIPE CULVERTS				
NAME	SIZE	LENGTH	SLOPE	DESCRIPTION
STM - 401	18"	39.93'	0.71%	SIDE DRAIN
STM - 402	18"	23.86'	0.71%	SIDE DRAIN
STM - 403	18"	23.69'	0.71%	SIDE DRAIN

PROPOSED PIPE CULVERTS				
NAME	SIZE	LENGTH	SLOPE	DESCRIPTION
STM - 501	15"	26.84'	0.50%	SIDE DRAIN

REVISIONS	DATE

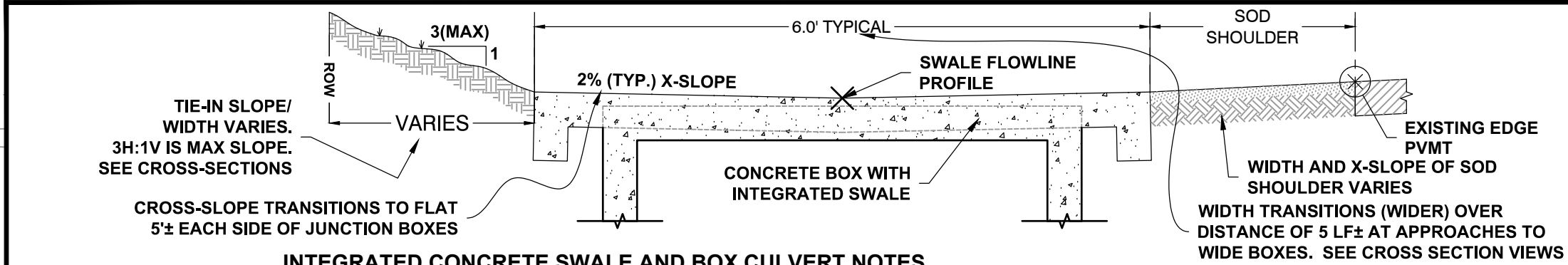
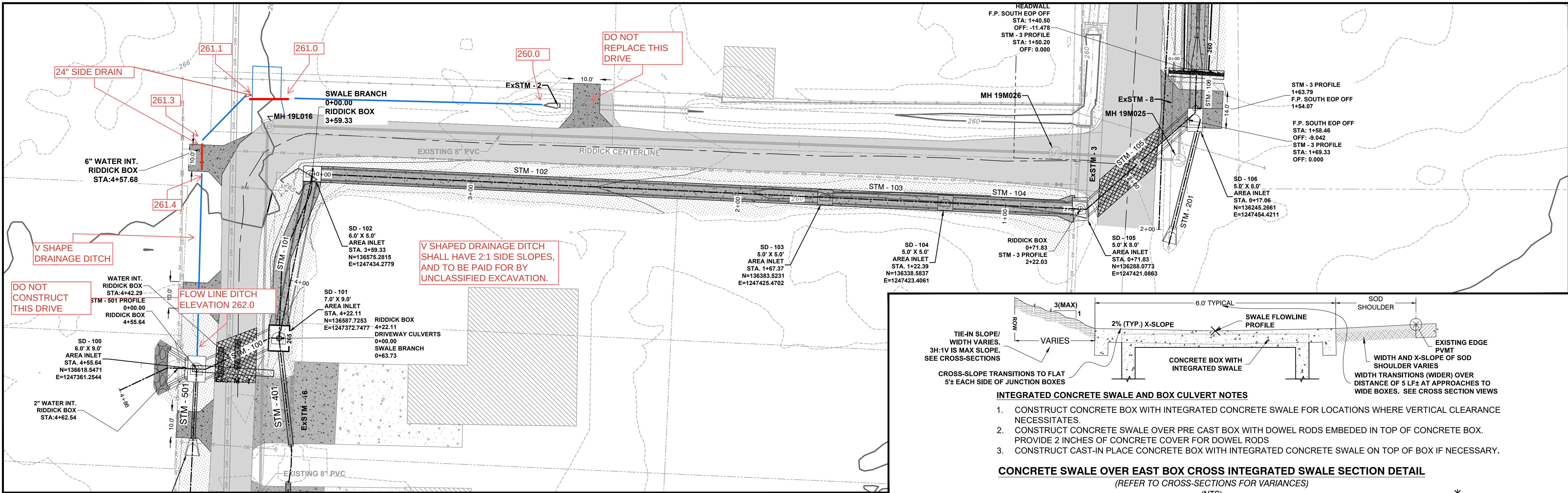
CITY OF LITTLE ROCK, ARKANSAS
EAST 39TH ST. DRAINAGE IMPROVEMENTS

SITE DETAIL

DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201



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6/26/2025
SCALE
AS NOTED
PROJECT NO.
CLR # 01-22-DR-01
SHEET NO.
C500

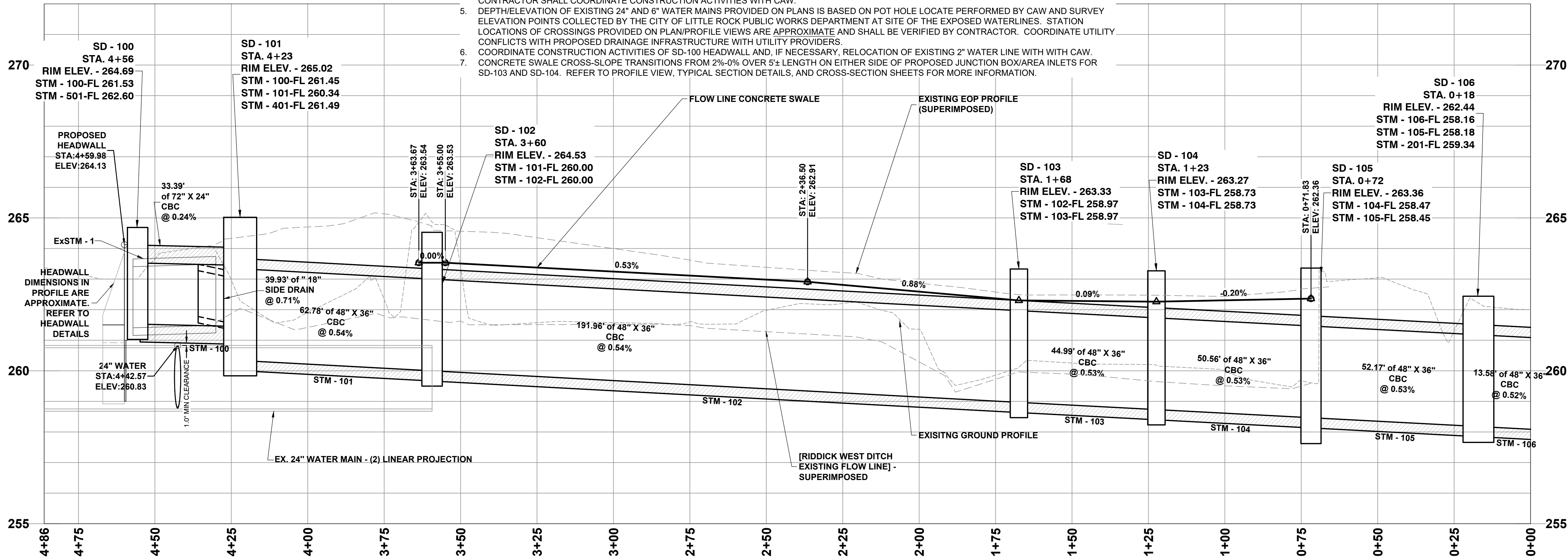
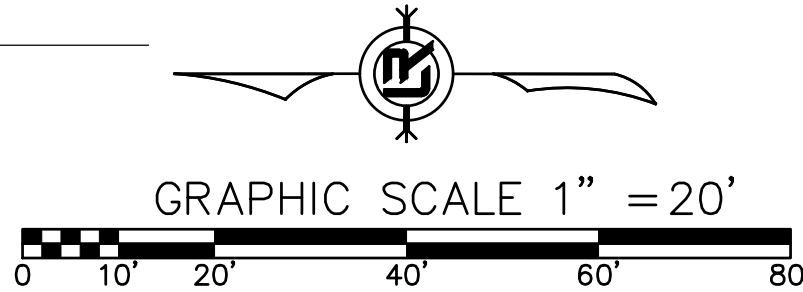


- INTEGRATED CONCRETE SWALE AND BOX CULVERT NOTES**
1. CONSTRUCT CONCRETE BOX WITH INTEGRATED CONCRETE SWALE FOR LOCATIONS WHERE VERTICAL CLEARANCE NECESSITATES.
 2. CONSTRUCT CONCRETE SWALE OVER PRE CAST BOX WITH DOWEL RODS EMBEDDED IN TOP OF CONCRETE BOX. PROVIDE 2 INCHES OF CONCRETE COVER FOR DOWEL RODS
 3. CONSTRUCT CAST-IN PLACE CONCRETE BOX WITH INTEGRATED CONCRETE SWALE ON TOP OF BOX IF NECESSARY.

CONCRETE SWALE OVER EAST BOX CROSS INTEGRATED SWALE SECTION DETAIL
(REFER TO CROSS-SECTIONS FOR VARIANCES)
(NTS)

PROFILE NOTES:

1. ELEVATION OF THE TOP OF THE EXISTING 6" WATER MAIN IS 261.78' AT THE STATION INDICATED ON THE PLAN VIEW.
2. THE APPROXIMATE HORIZONTAL POSITION OF THE EXISTING 2" WATER LINE AND STATION OF THE INTERSECTION WITH PROPOSED DRAINAGE ALIGNMENT ARE DISPLAYED IN THE PLAN VIEW. ELEVATION IS UNKNOWN. COORDINATE CONSTRUCTION ACTIVITIES AND RELOCATION WITH CAW.
3. ELEVATION OF THE TOP OF THE EXISTING 24" WATER MAIN IS DISPLAYED ON THE PROFILE VIEW AND THE STATION IS LABELED ON THE PLAN VIEW.
4. THE EXISTING 8" WATER MAIN WHICH RUNS NORTH OF AND PARALLEL TO FRAZIER PIKE CONFLICTS WITH PROPOSED DRAINAGE IMPROVEMENTS NEAR PROPOSED JUNCTION BOX SD-105 AND WILL BE LOWERED/RELOCATED AT TIME OF CONSTRUCTION BY CAW (CENTRAL ARKANSAS WATER). CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH CAW.
5. DEPTH/ELEVATION OF EXISTING 24" AND 6" WATER MAINS PROVIDED ON PLANS IS BASED ON POT HOLE LOCATE PERFORMED BY CAW AND SURVEY ELEVATION POINTS COLLECTED BY THE CITY OF LITTLE ROCK PUBLIC WORKS DEPARTMENT AT SITE OF THE EXPOSED WATERLINES. STATION LOCATIONS OF CROSSINGS PROVIDED ON PLAN/PROFILE VIEWS ARE APPROXIMATE AND SHALL BE VERIFIED BY CONTRACTOR. COORDINATE UTILITY CONFLICTS WITH PROPOSED DRAINAGE INFRASTRUCTURE WITH UTILITY PROVIDERS.
6. COORDINATE CONSTRUCTION ACTIVITIES OF SD-100 HEADWALL AND, IF NECESSARY, RELOCATION OF EXISTING 2" WATER LINE WITH WITH CAW.
7. CONCRETE SWALE CROSS-SLOPE TRANSITIONS FROM 2%-0% OVER 5± LENGTH ON EITHER SIDE OF PROPOSED JUNCTION BOX/AREA INLETS FOR SD-103 AND SD-104. REFER TO PROFILE VIEW, TYPICAL SECTION DETAILS, AND CROSS-SECTION SHEETS FOR MORE INFORMATION.



RIDDICK BOX

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
EAST 39TH ST. DRAINAGE IMPROVEMENTS

DRAINAGE PLAN & PROFILE

DEPARTMENT OF PUBLIC WORKS

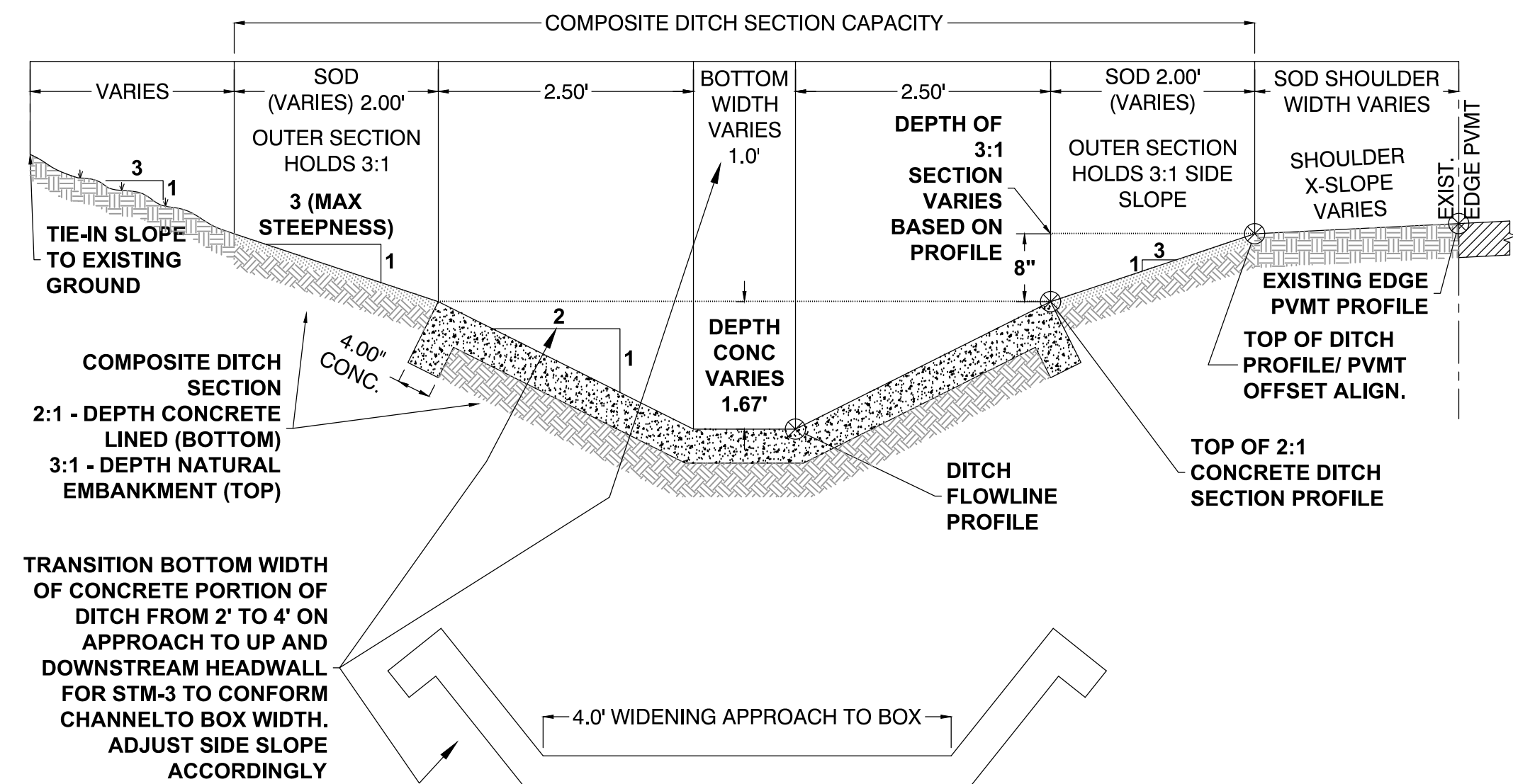
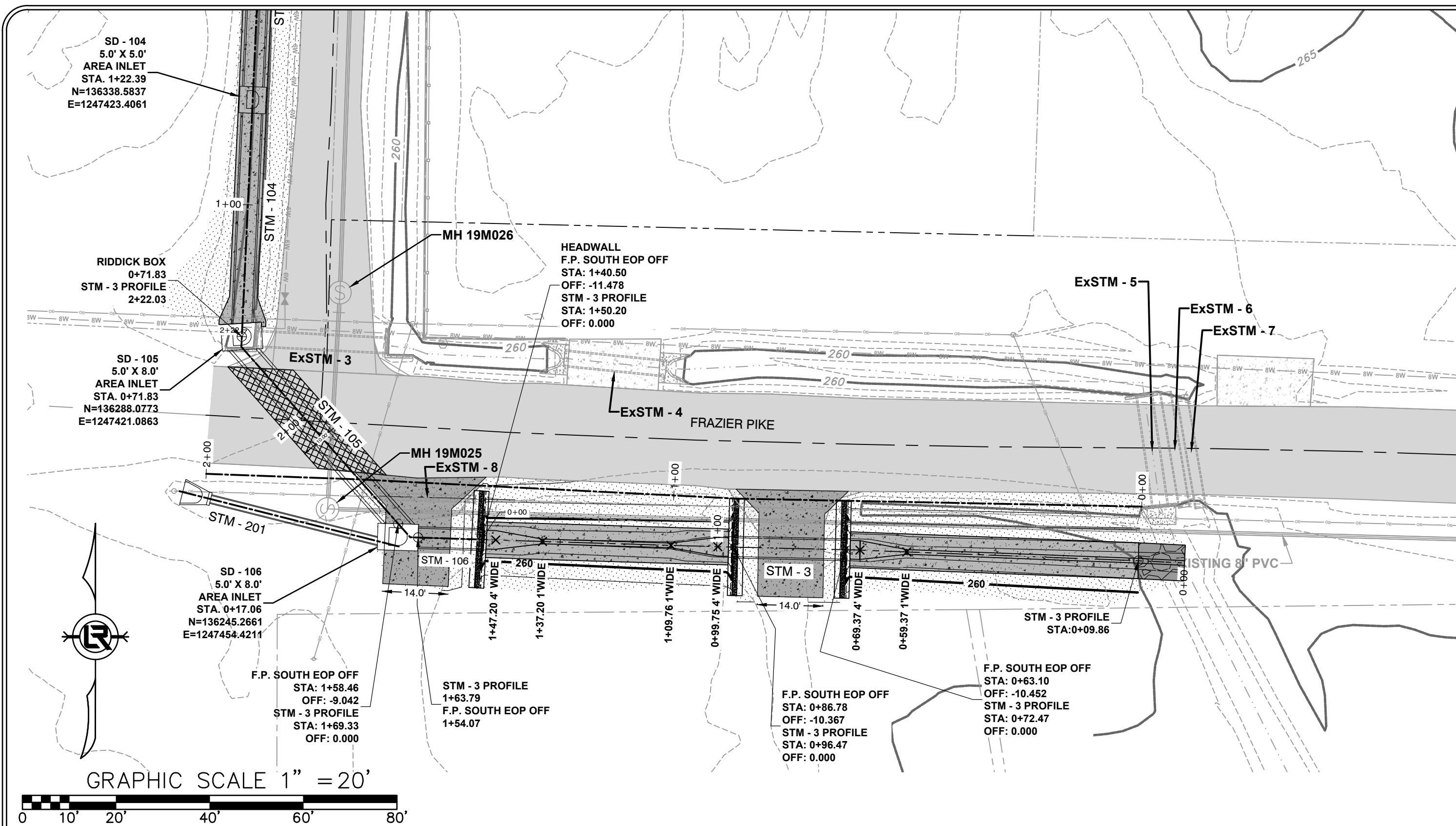
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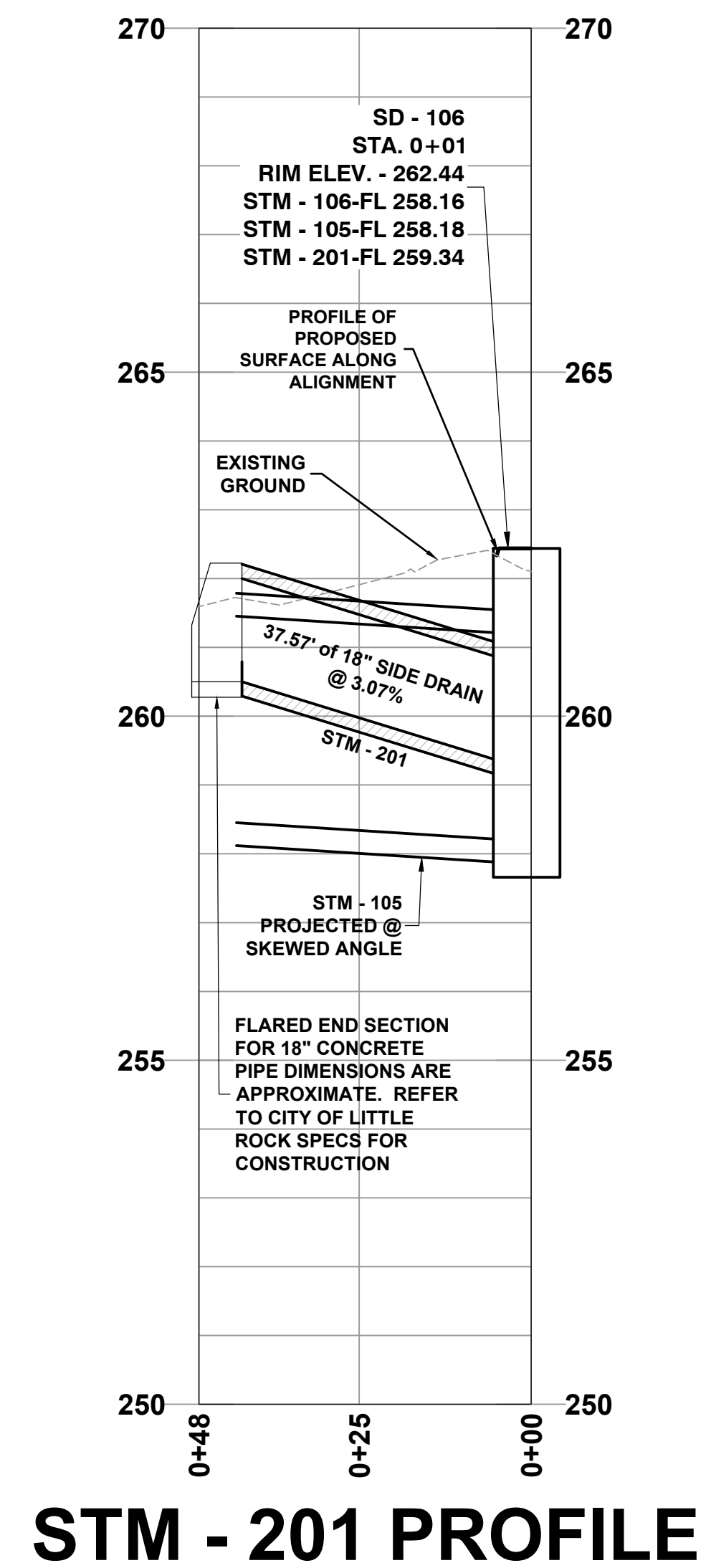
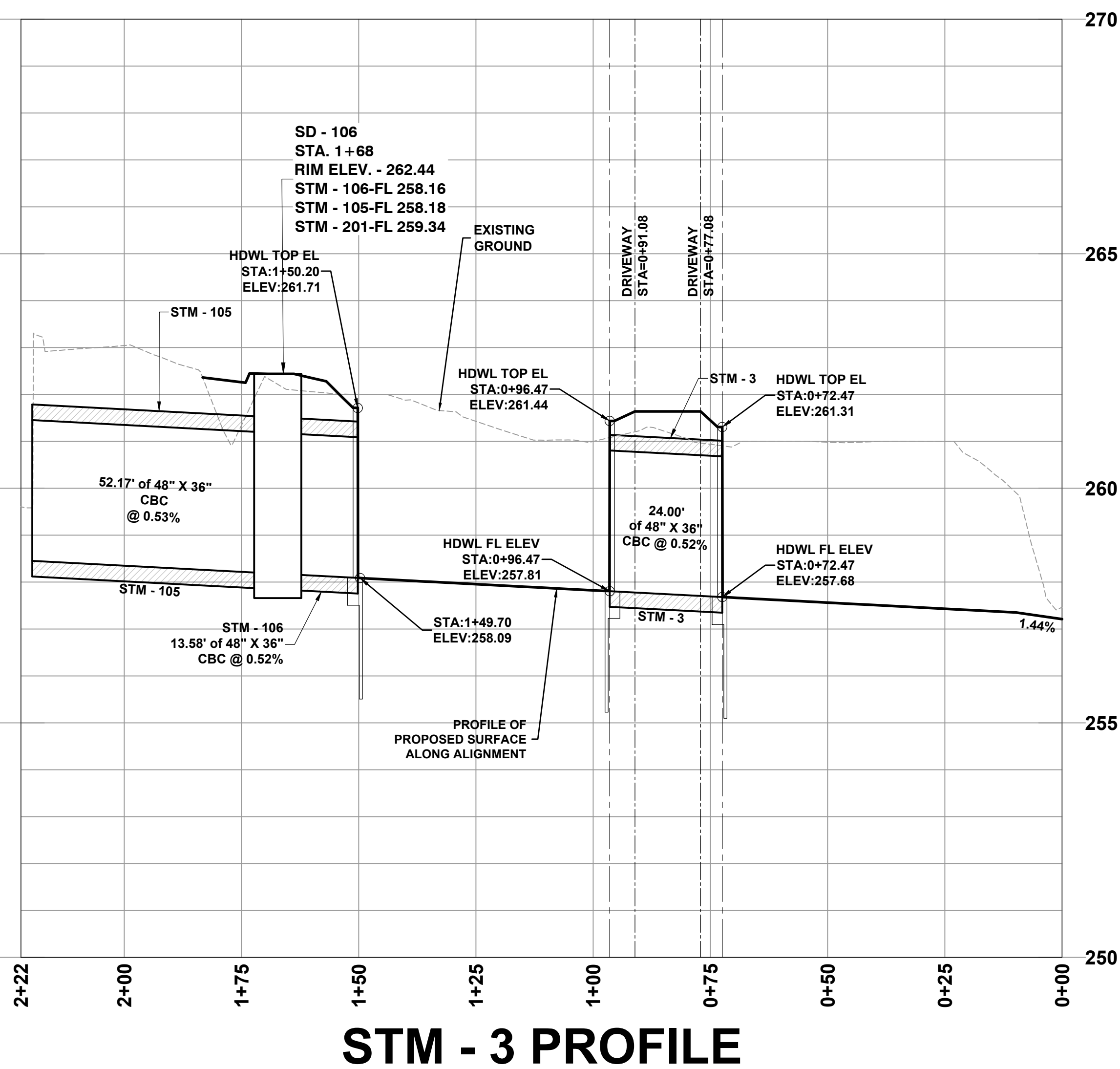
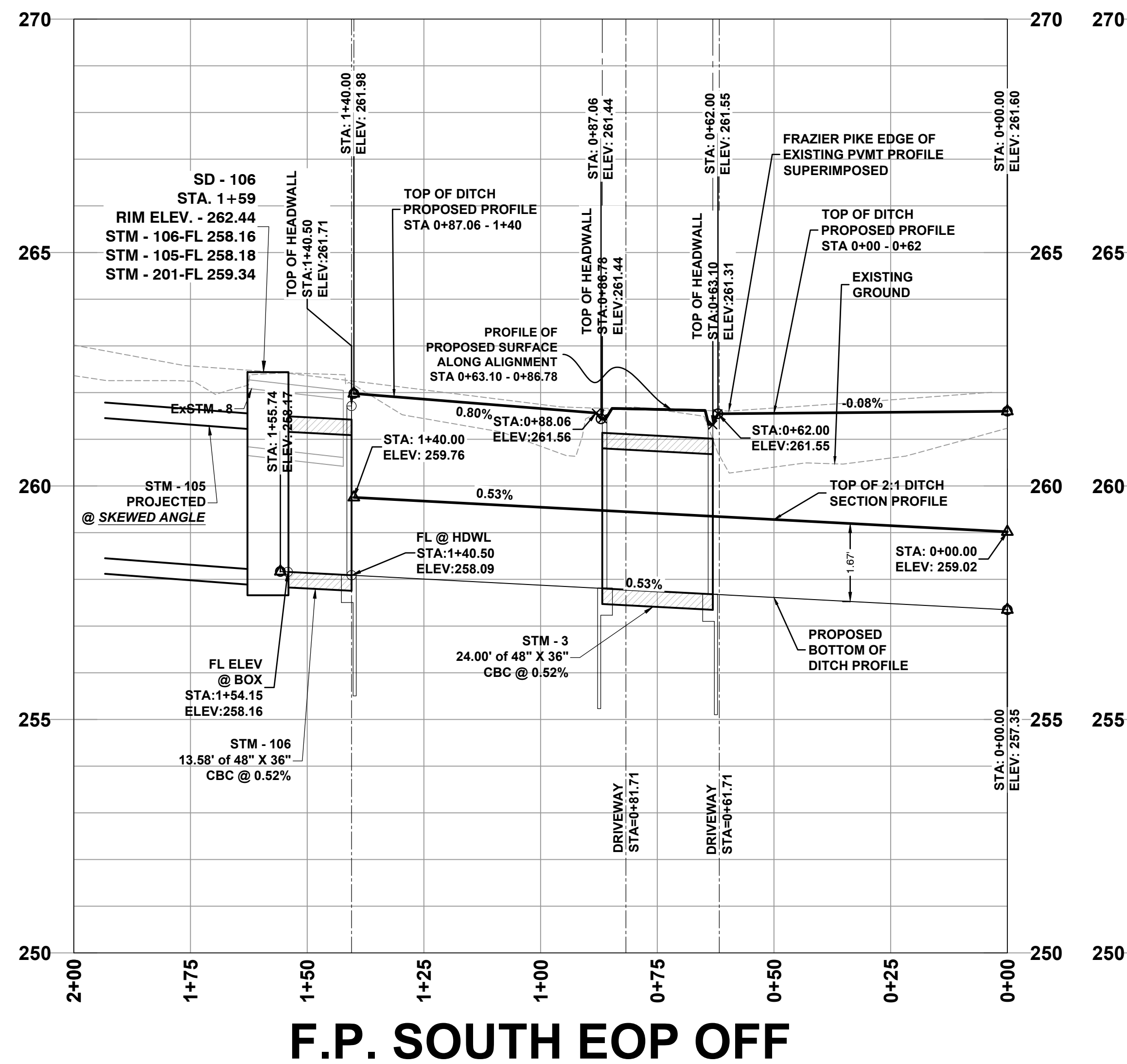
LITTLE ROCK, ARKANSAS 72201



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DESIGNED	JNS
CHECKED	AHR
DATE	6/26/2025
SCALE	H: 1" = 20' V: 1" = 2'
PROJECT NO.	CLR # 01-22-DR-01
SHEET NO.	C501



SOUTH FRAZIER PIKE REHAB CROSS SECTION DETAIL (TYP.)
(SEE CROSS-SECTIONS FOR VARIANCES)
(NTS)



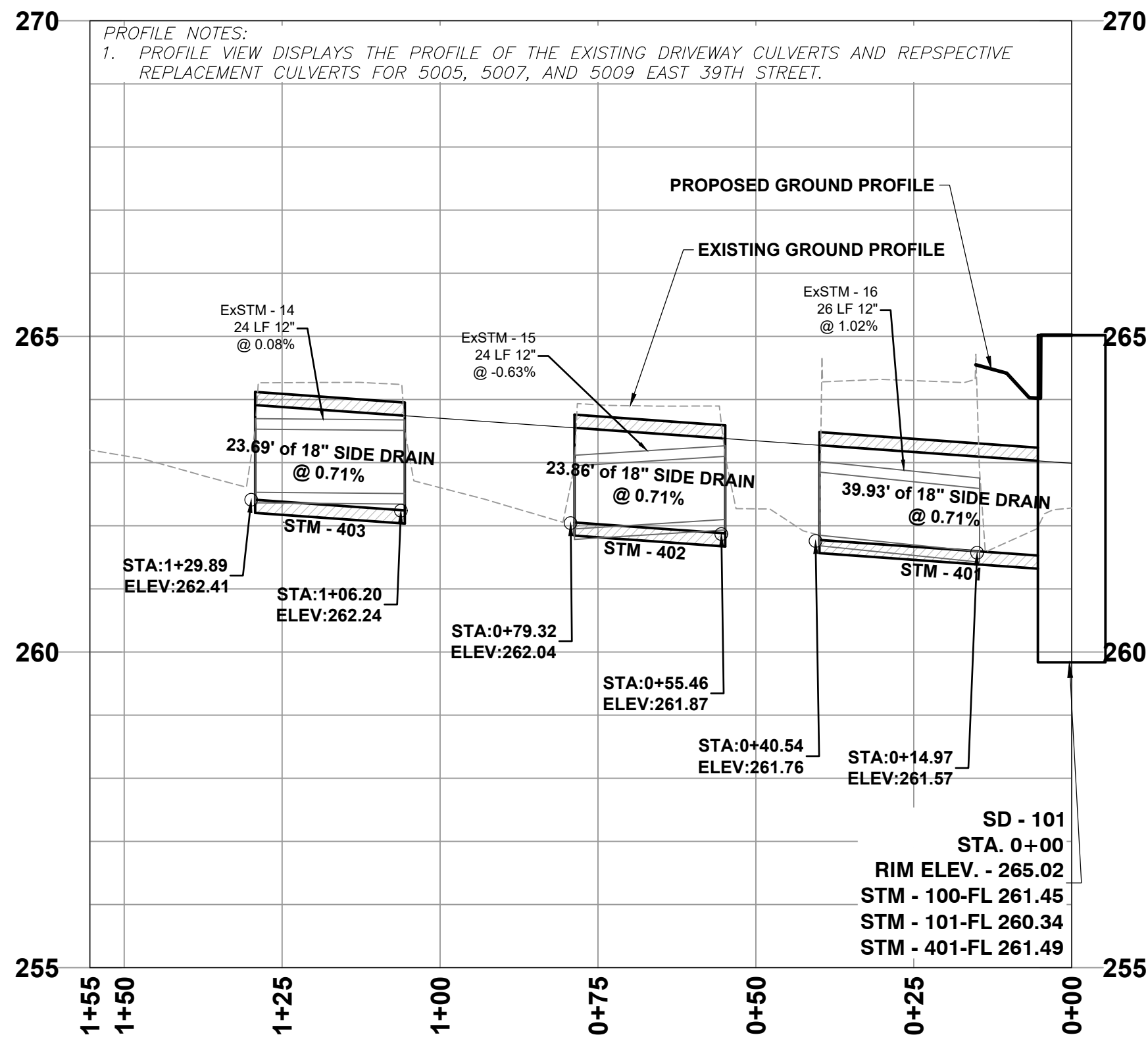
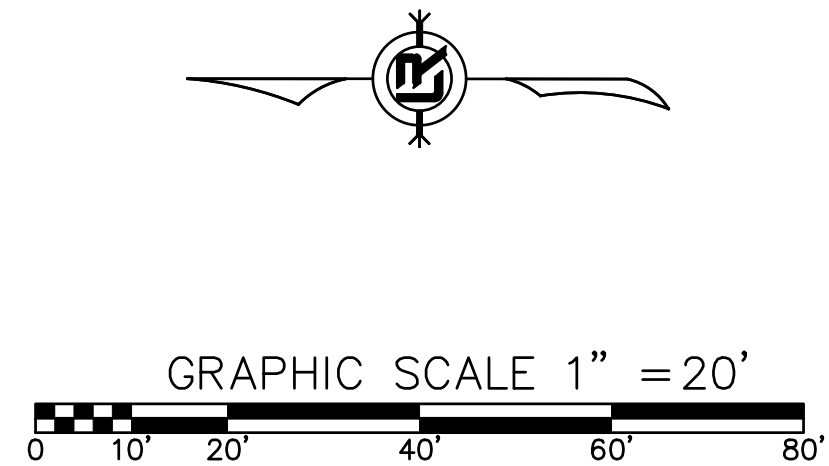
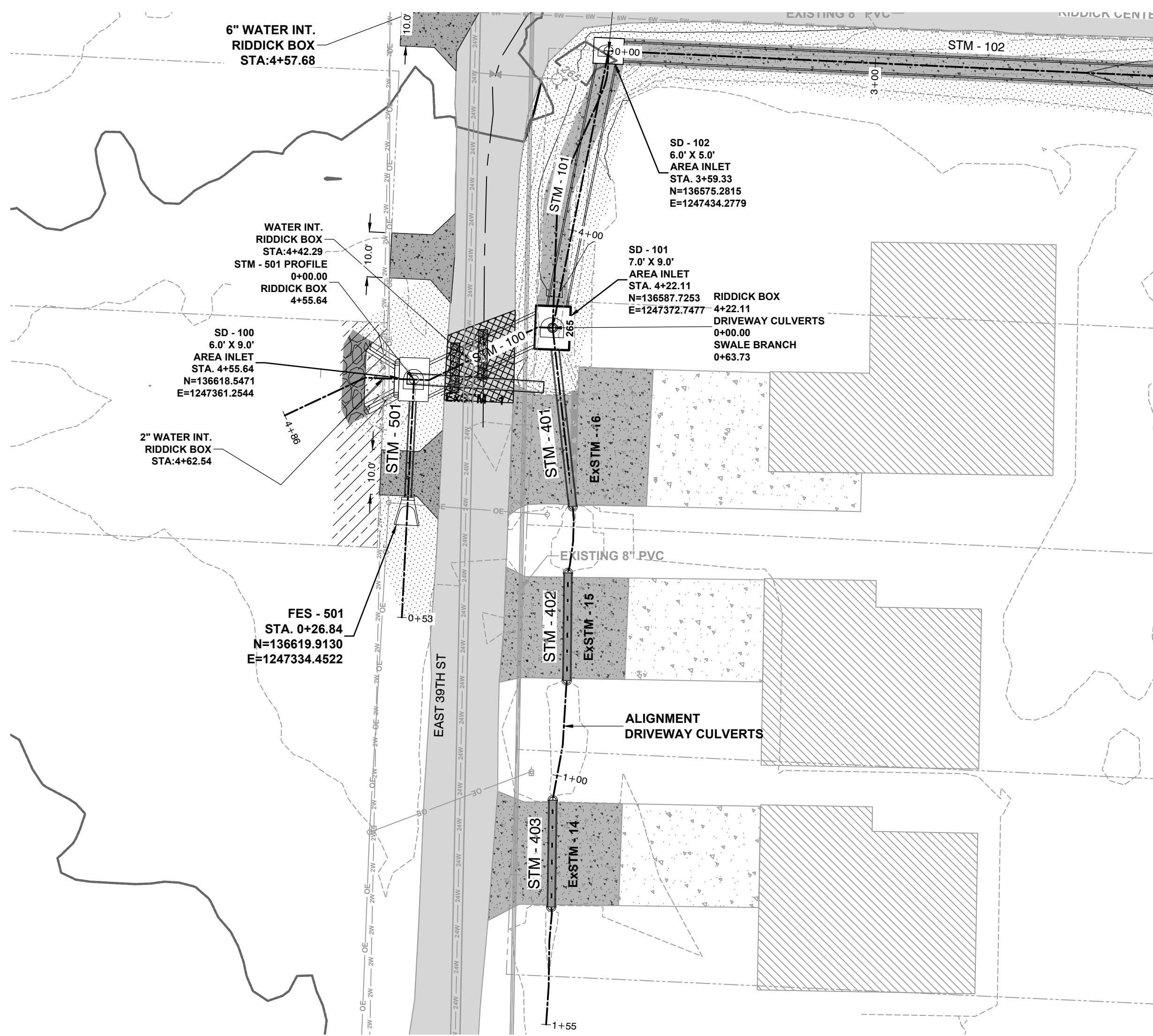
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
EAST 39TH ST. DRAINAGE IMPROVEMENTS
DRAINAGE PLAN & PROFILE

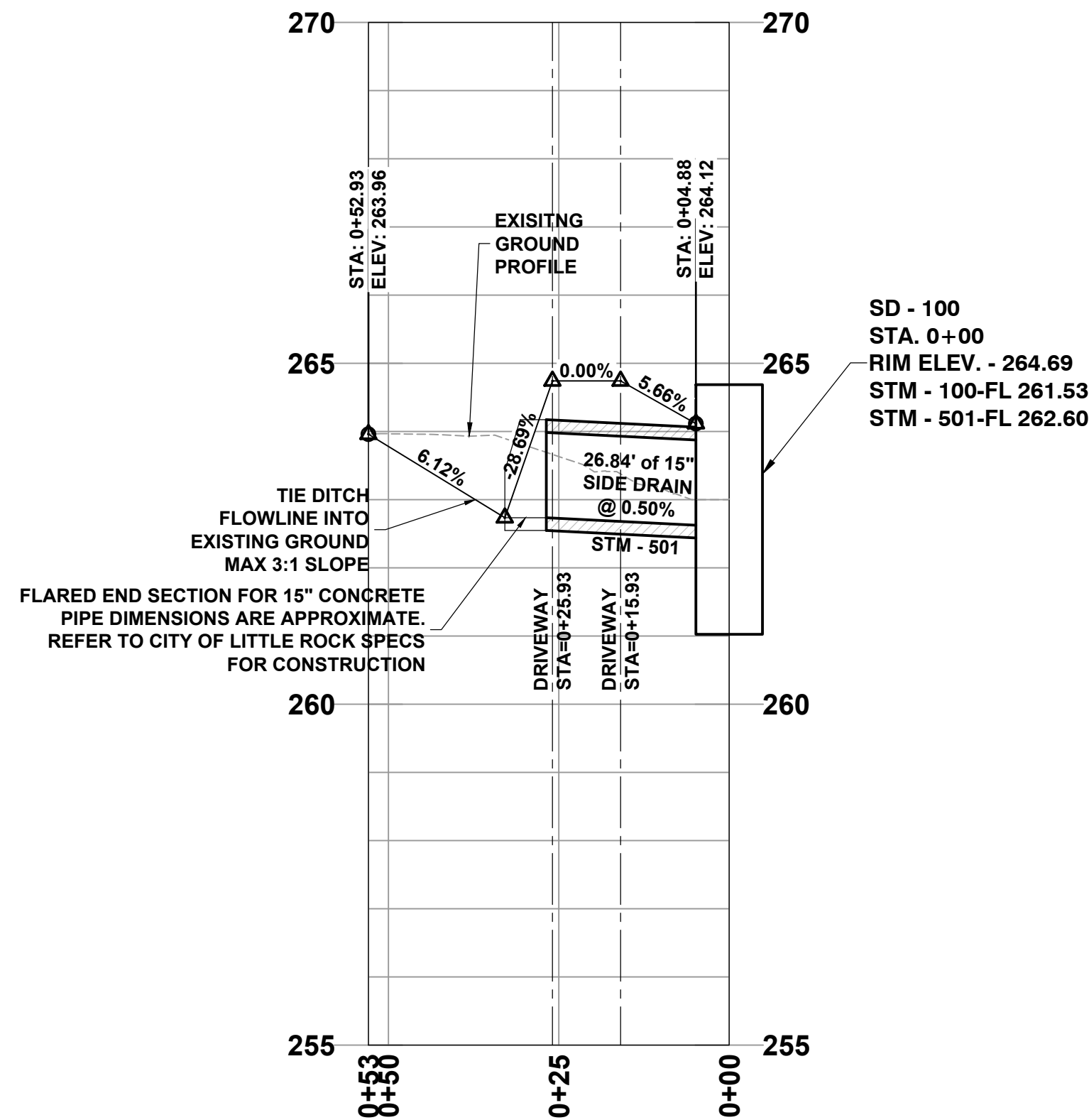
DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201



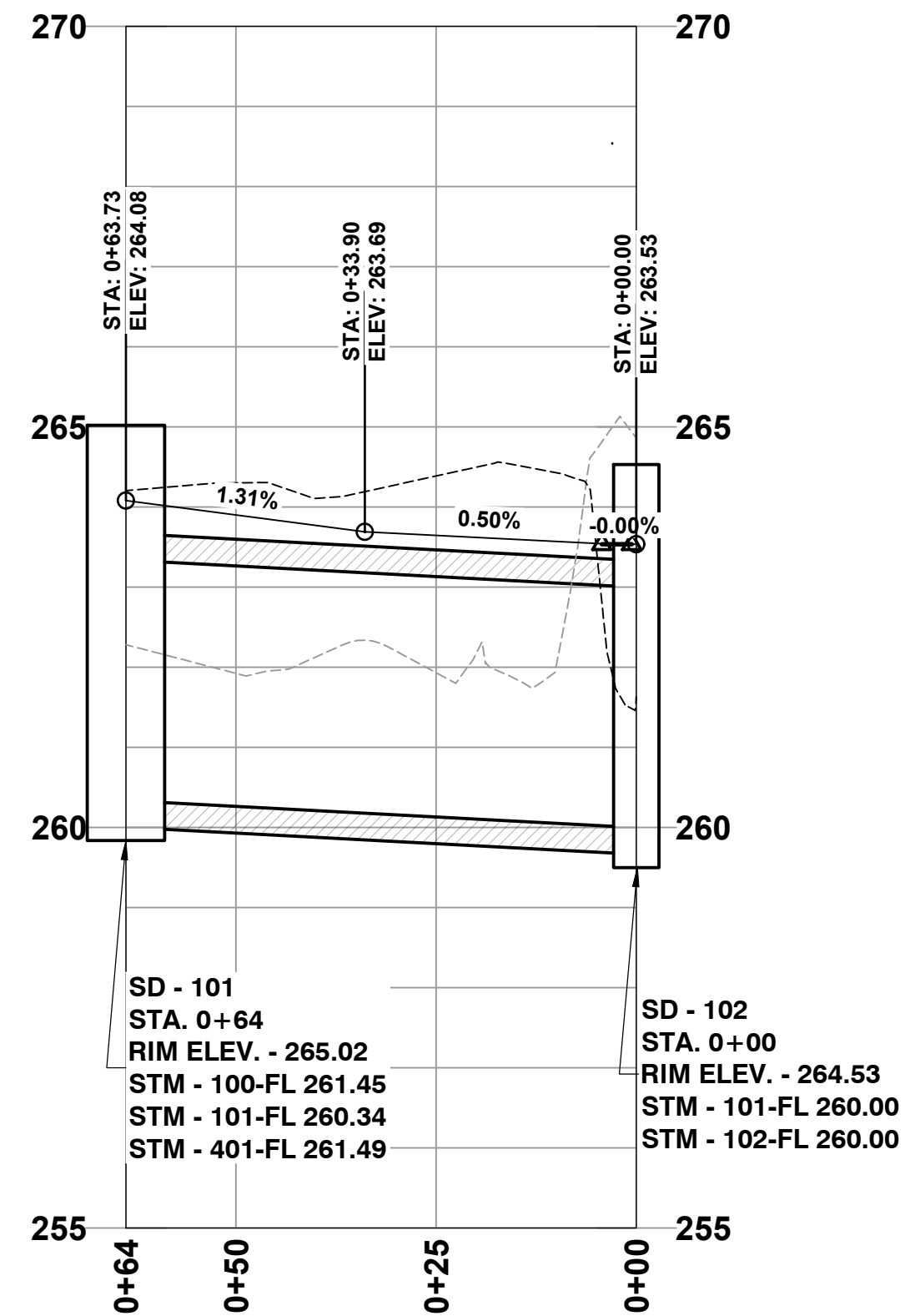
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JNS
DESIGNED
JNS
CHECKED
AHR
DATE
6/26/2025
SCALE
H: 1" = 20' V: 1" = 2'
PROJECT NO.
CLR # 01-22-DR-01
SHEET NO.
C502



DRIVEWAY CULVERTS



STM - 501 PROFILE



SWALE BRANCH

REVISIONS	DATE

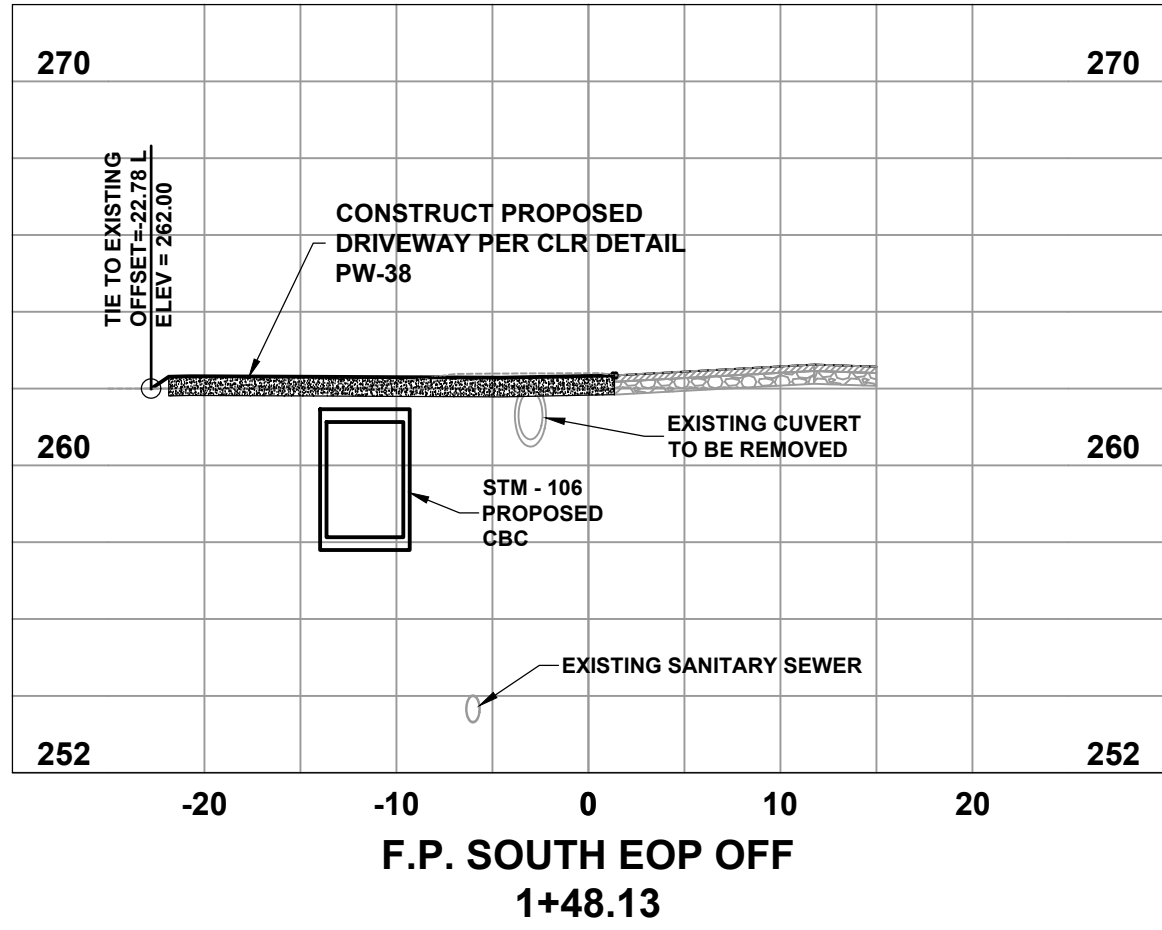
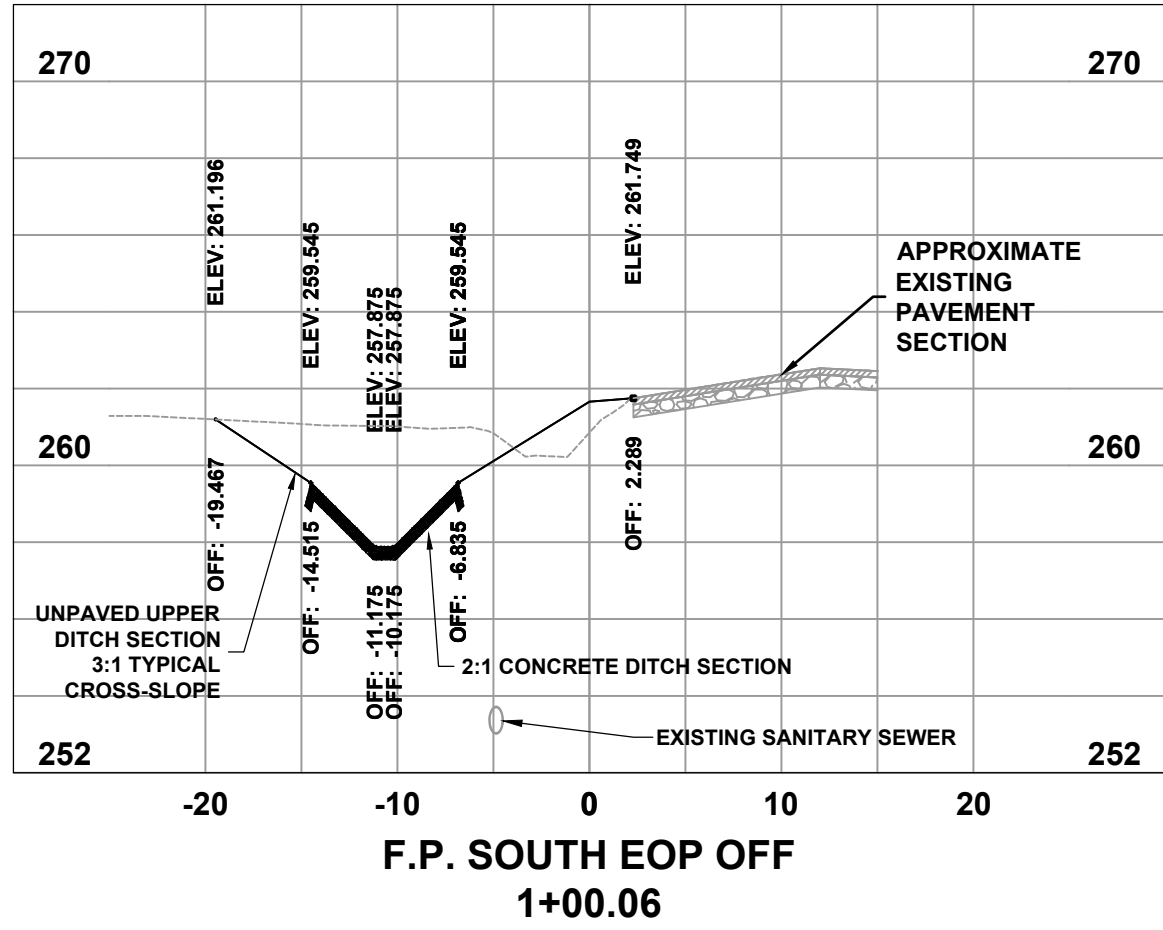
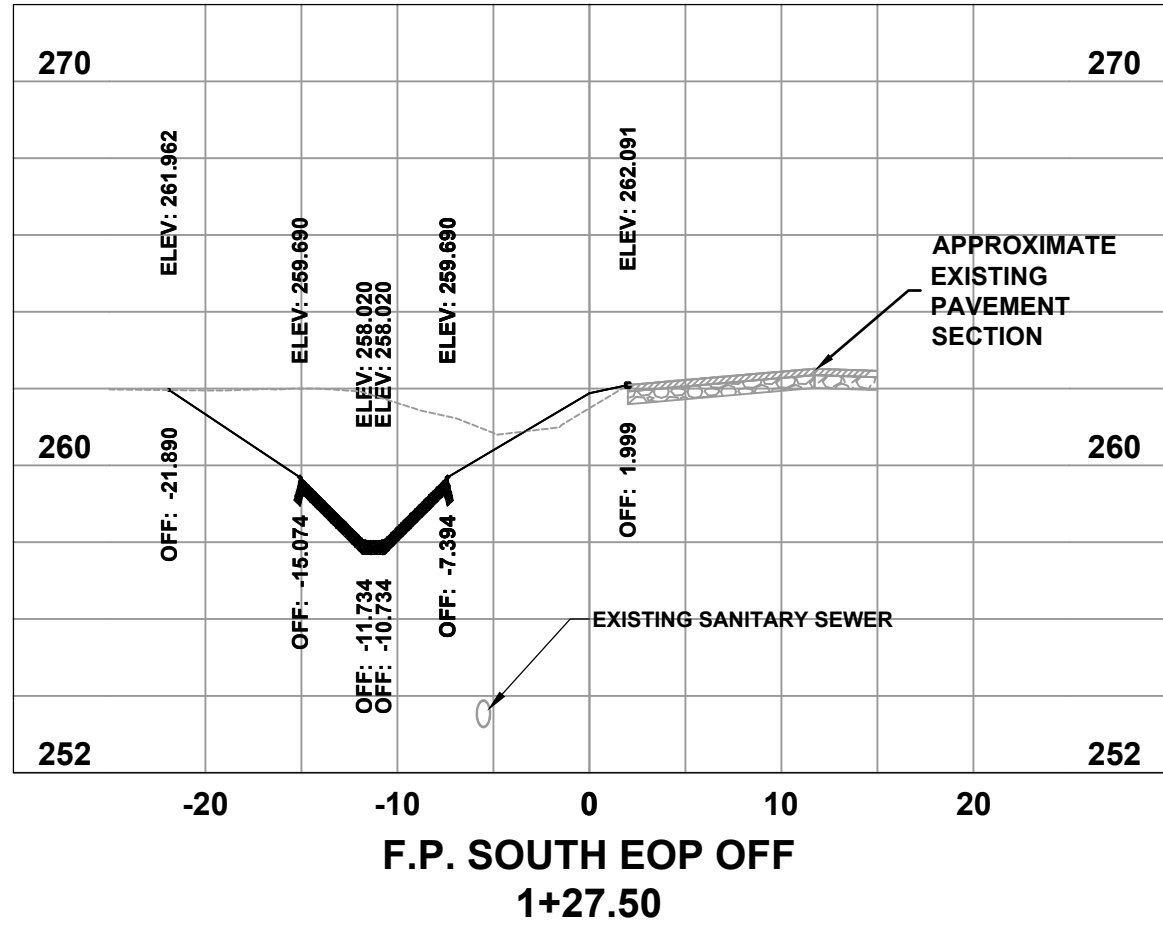
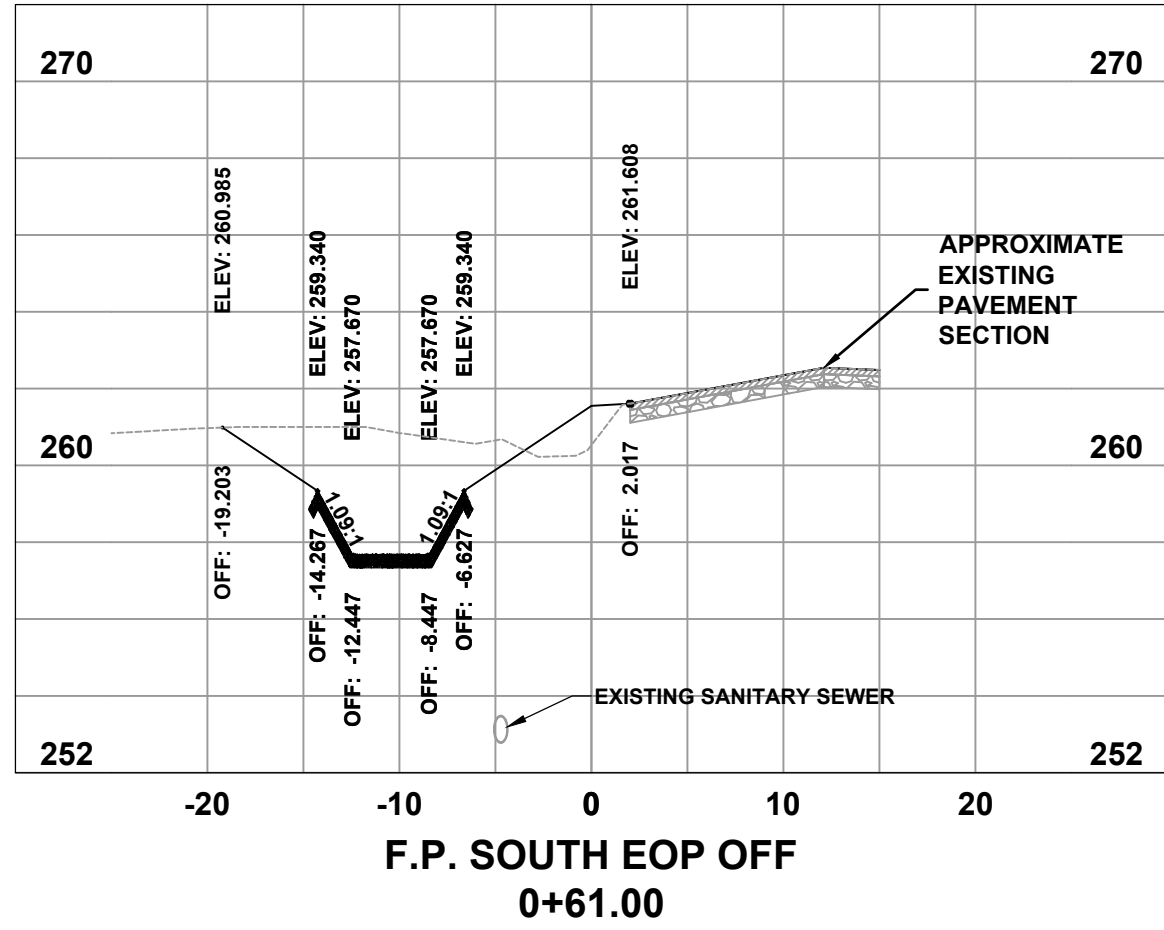
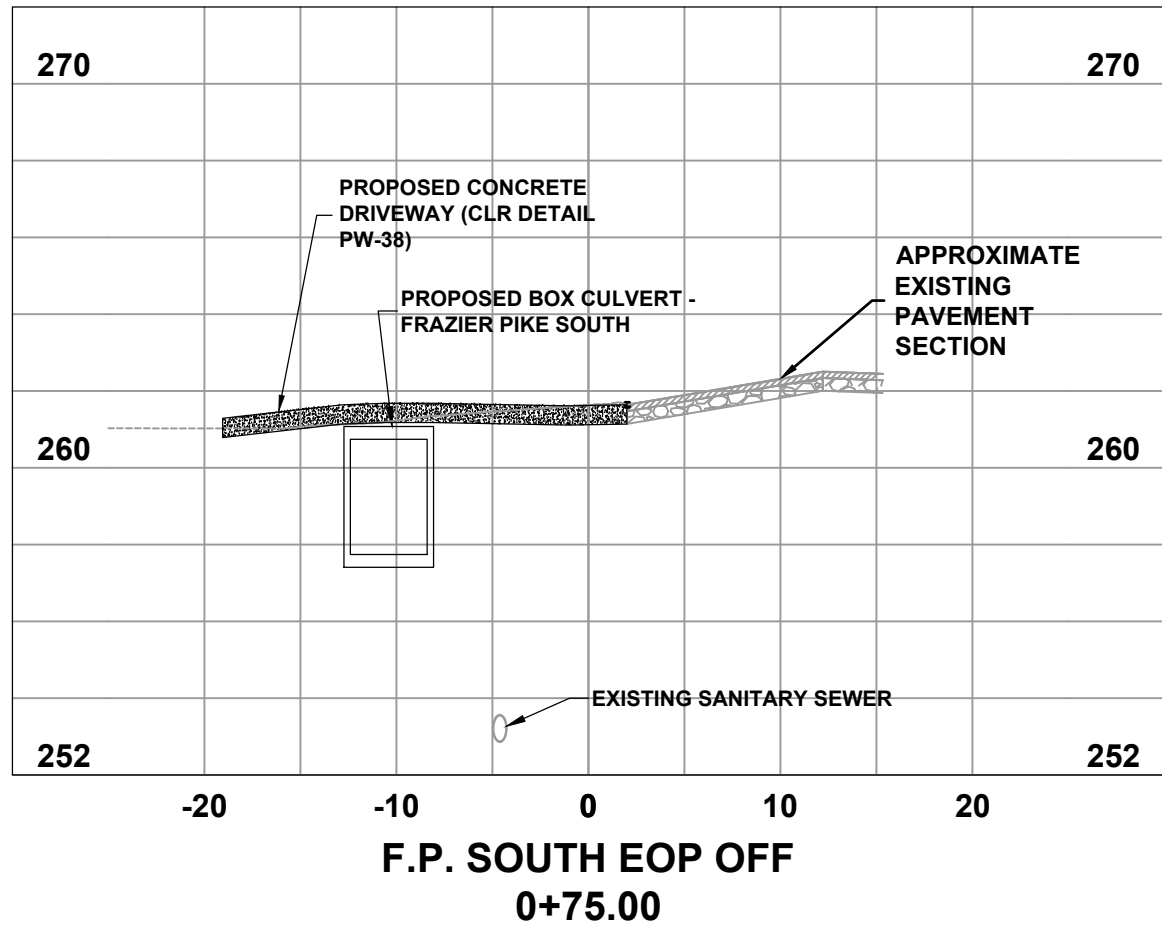
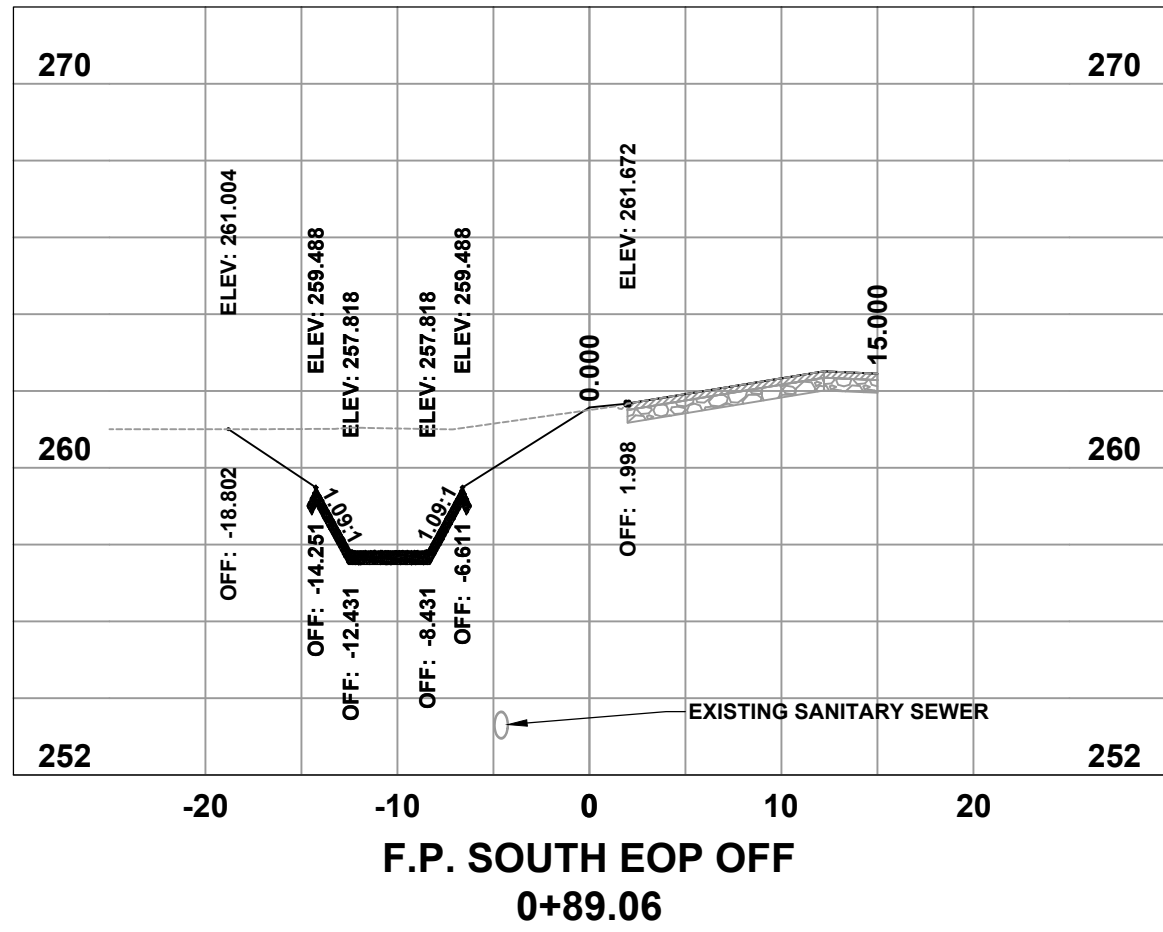
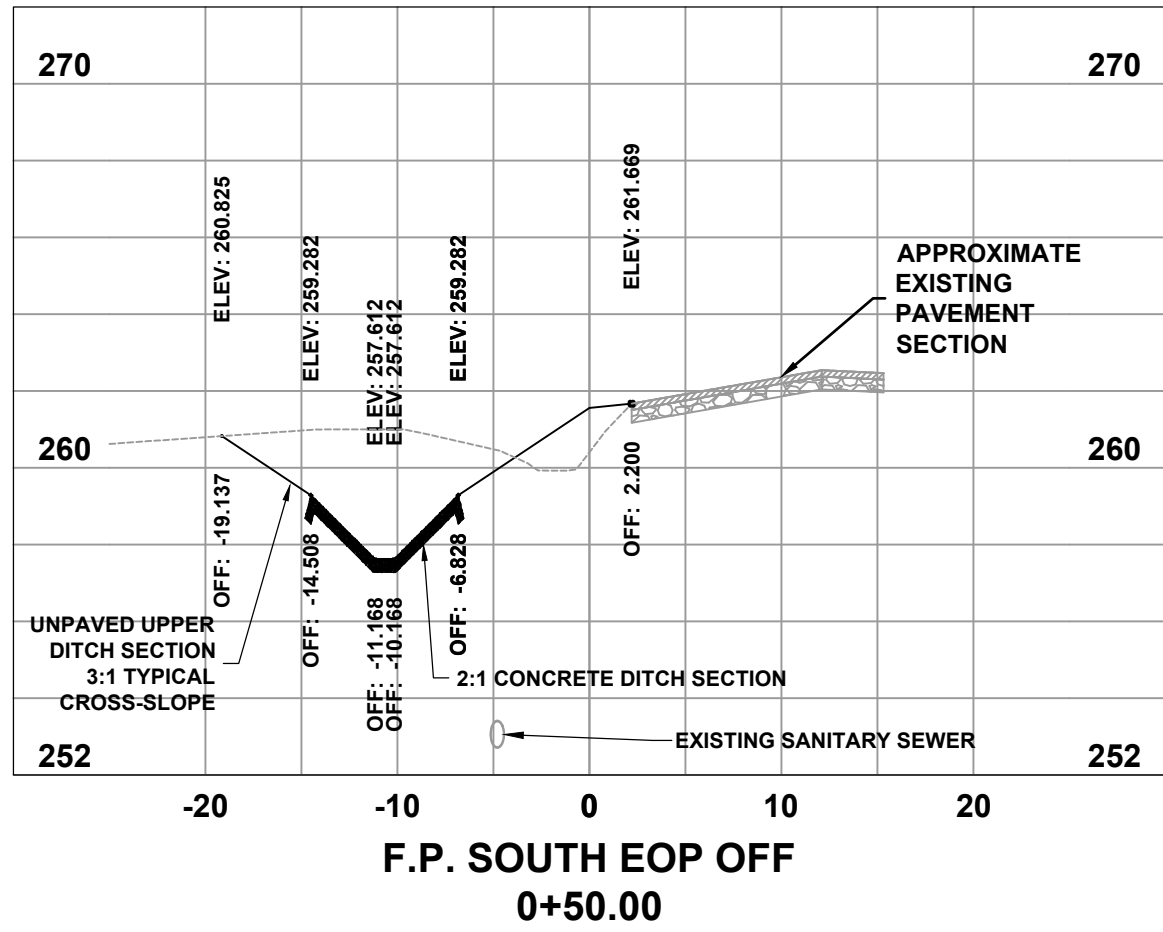
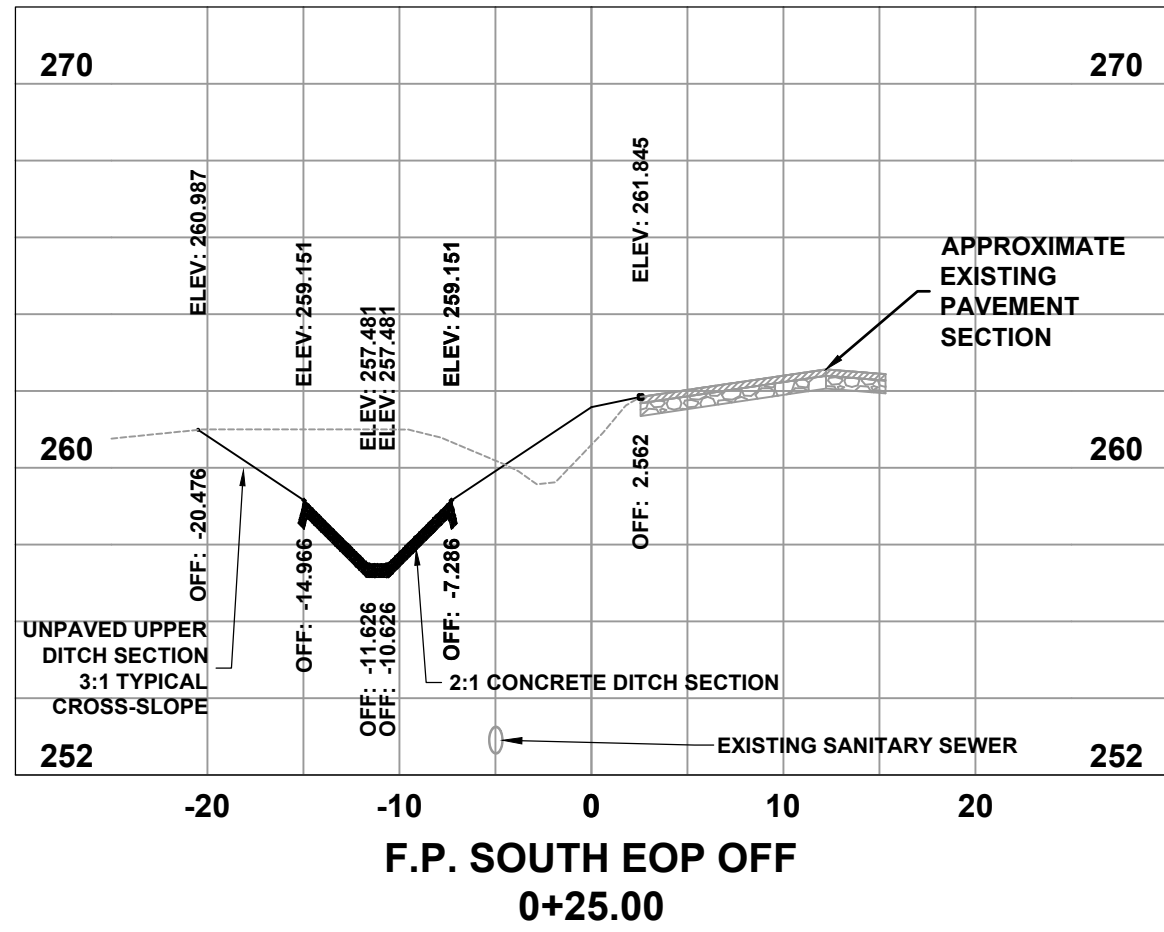
CITY OF LITTLE ROCK, ARKANSAS
EAST 39TH ST. DRAINAGE IMPROVEMENTS

DRAINAGE PLAN & PROFILE

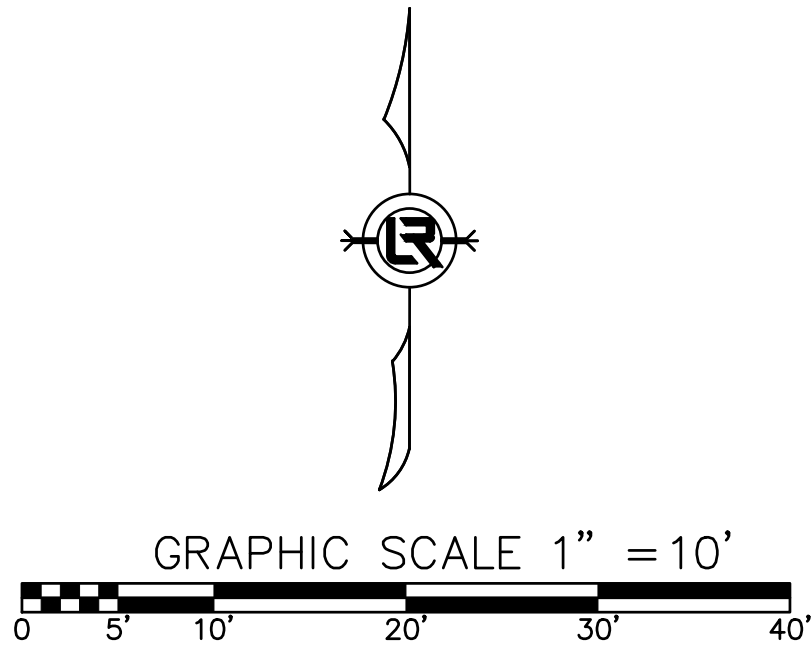
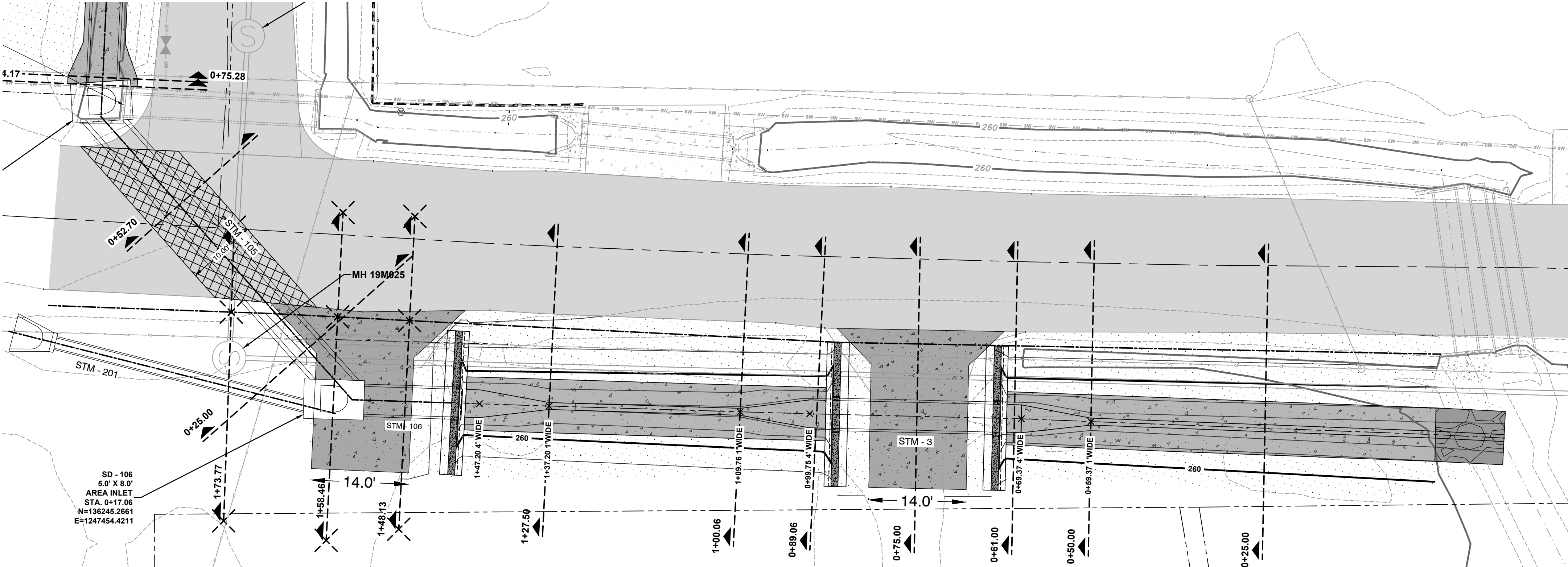
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701 W. MARKHAM
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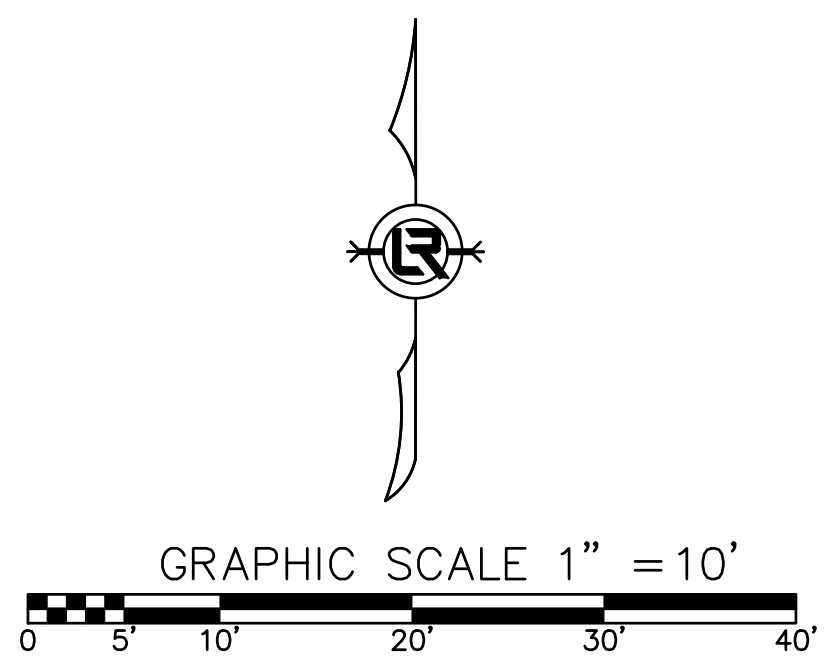
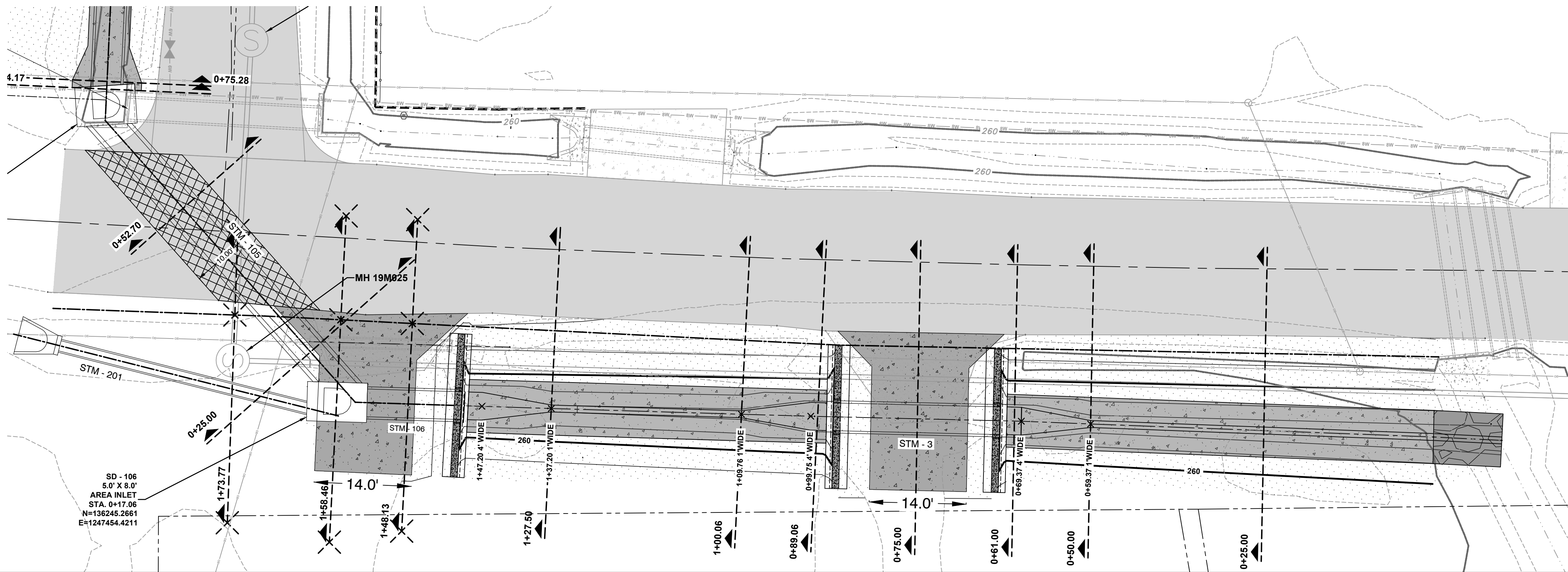
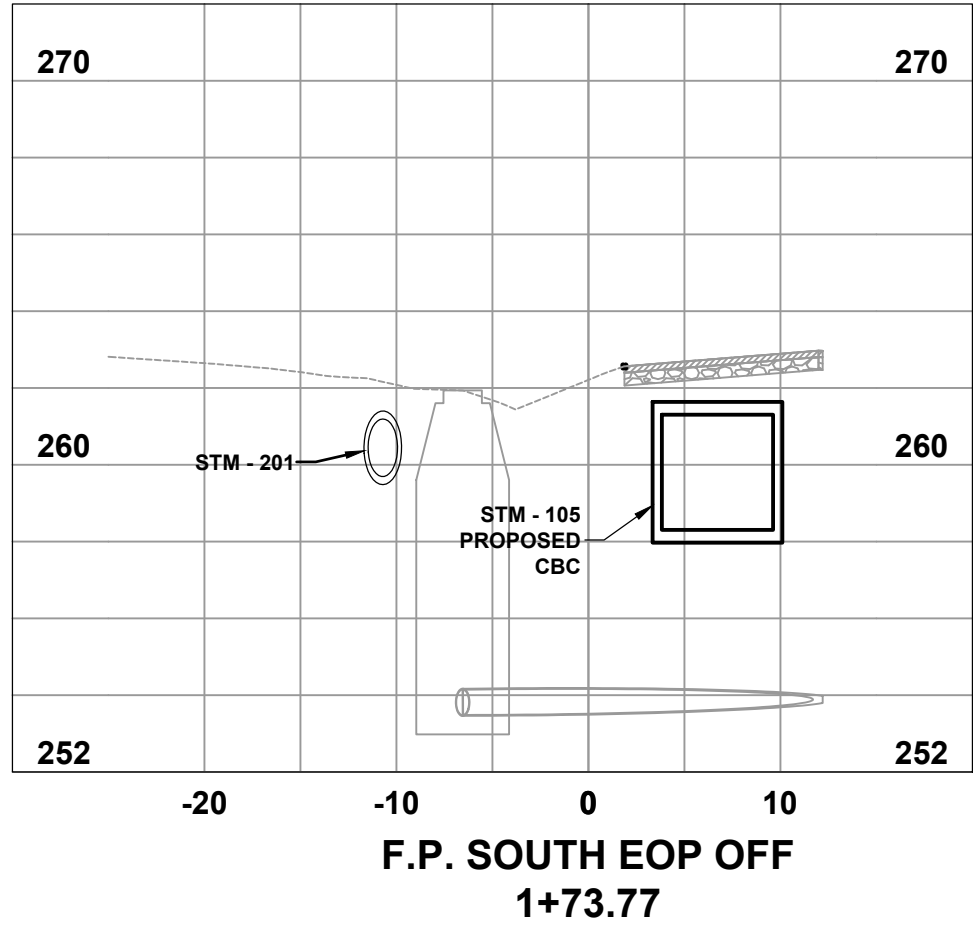
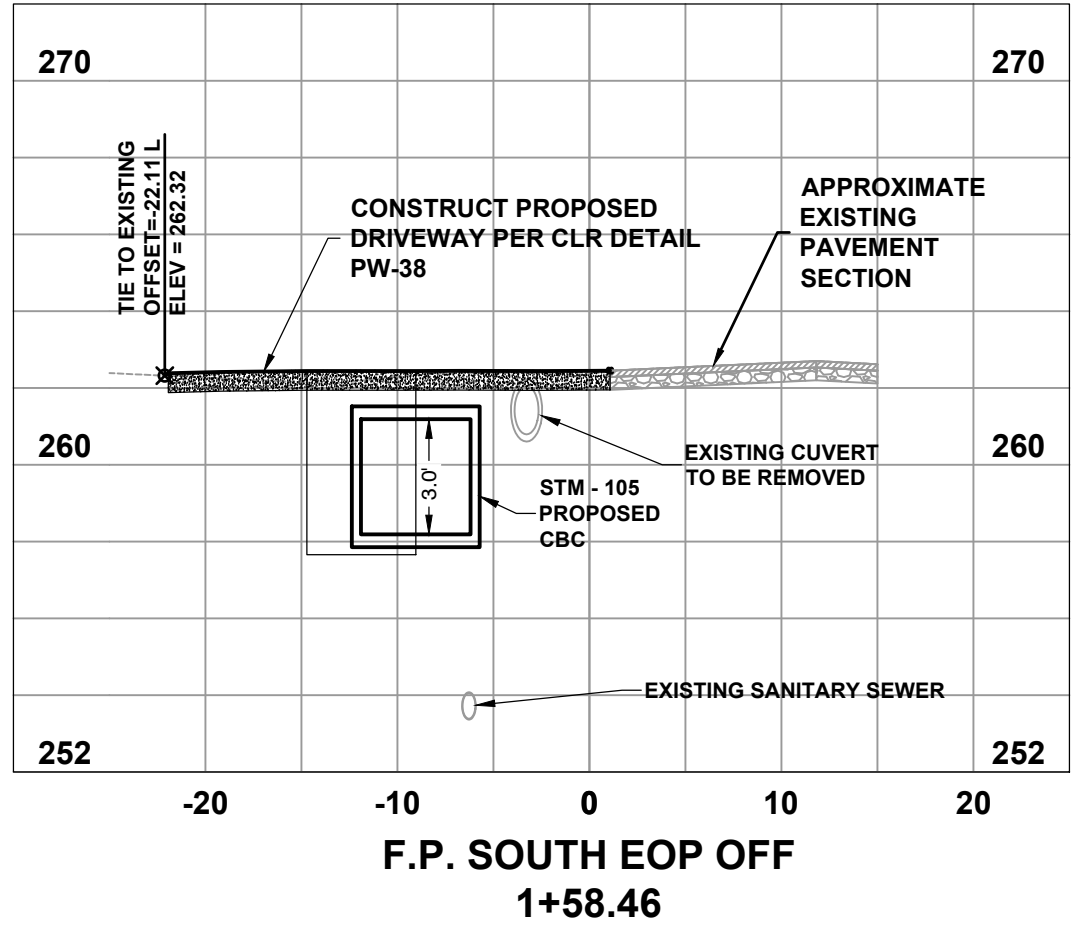


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SCALE H: 1" = 20' V: 1" = 2'
PROJECT NO. CLR # 01-22-DR-01
SHEET NO. C503



- CROSS-SECTION NOTES**
1. CONCRETE SWALE CROSS-SLOPE TRANSITIONS FROM 2% TO FLAT 5 LF± ON EACH SIDE OF JUNCTION BOXES. SEE CROSS SECTION VIEWS AT JUNCTION BOXES.
 2. CONCRETE SWALE WIDTH TRANSITIONS FROM 6' TO 10' WIDTH OF OVER 5 LF TO ACCOUNT FOR WIDER BOX AT SD-105. SEE CROSS SECTION VIEWS AT JUNCTION BOXES.
 3. CONCRETE SWALE WIDTH TRANSITIONS FROM 6' TO 7.67' WIDTH OF OVER 5 LF TO ACCOUNT FOR WIDER BOX AT SD-101. SEE CROSS SECTION VIEWS AT JUNCTION BOXES.



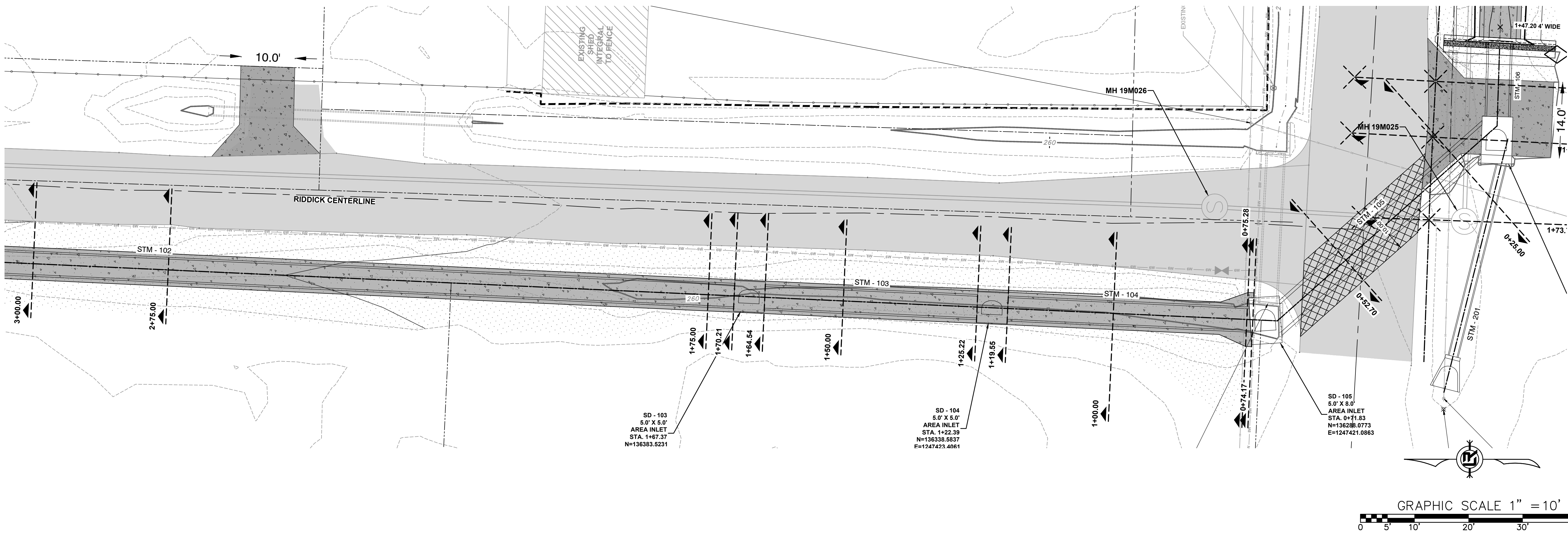
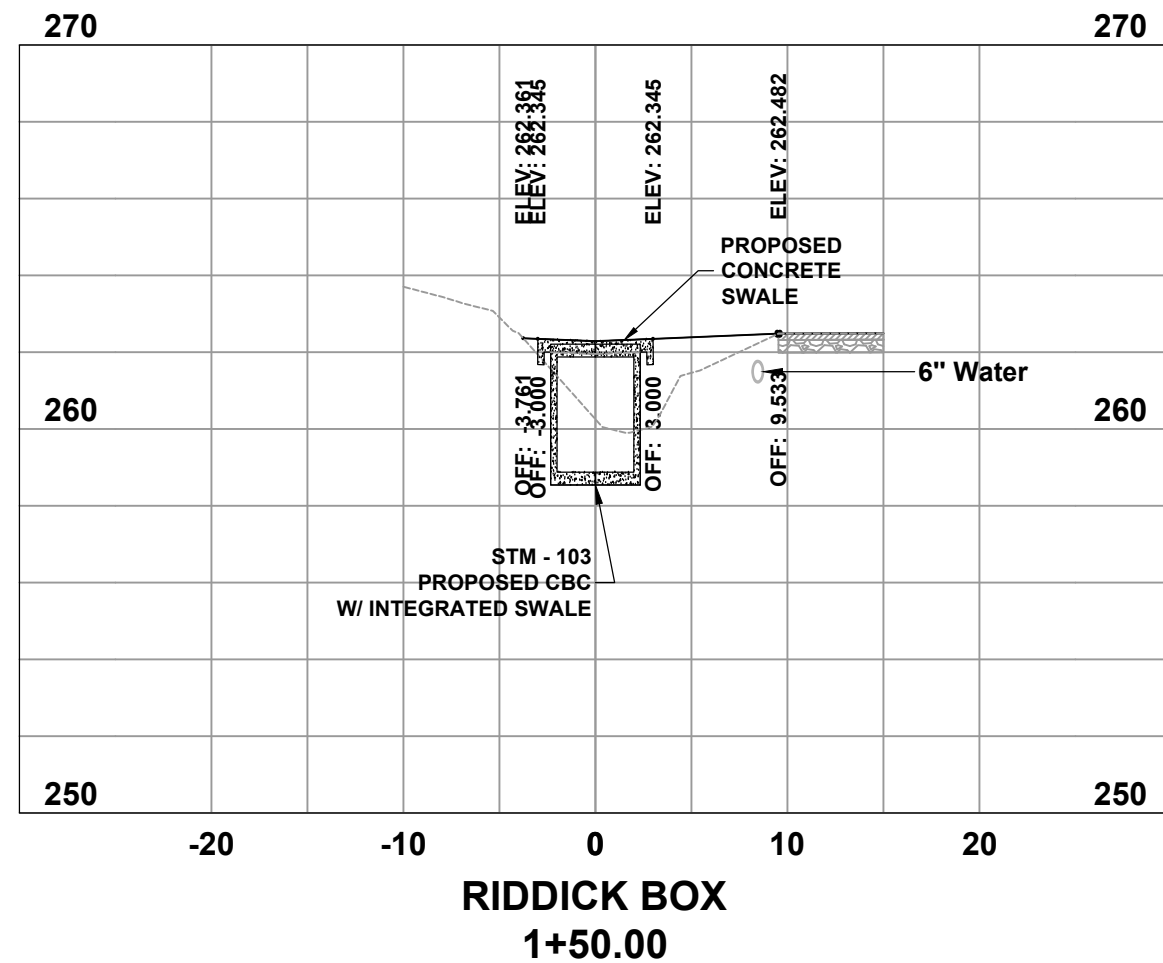
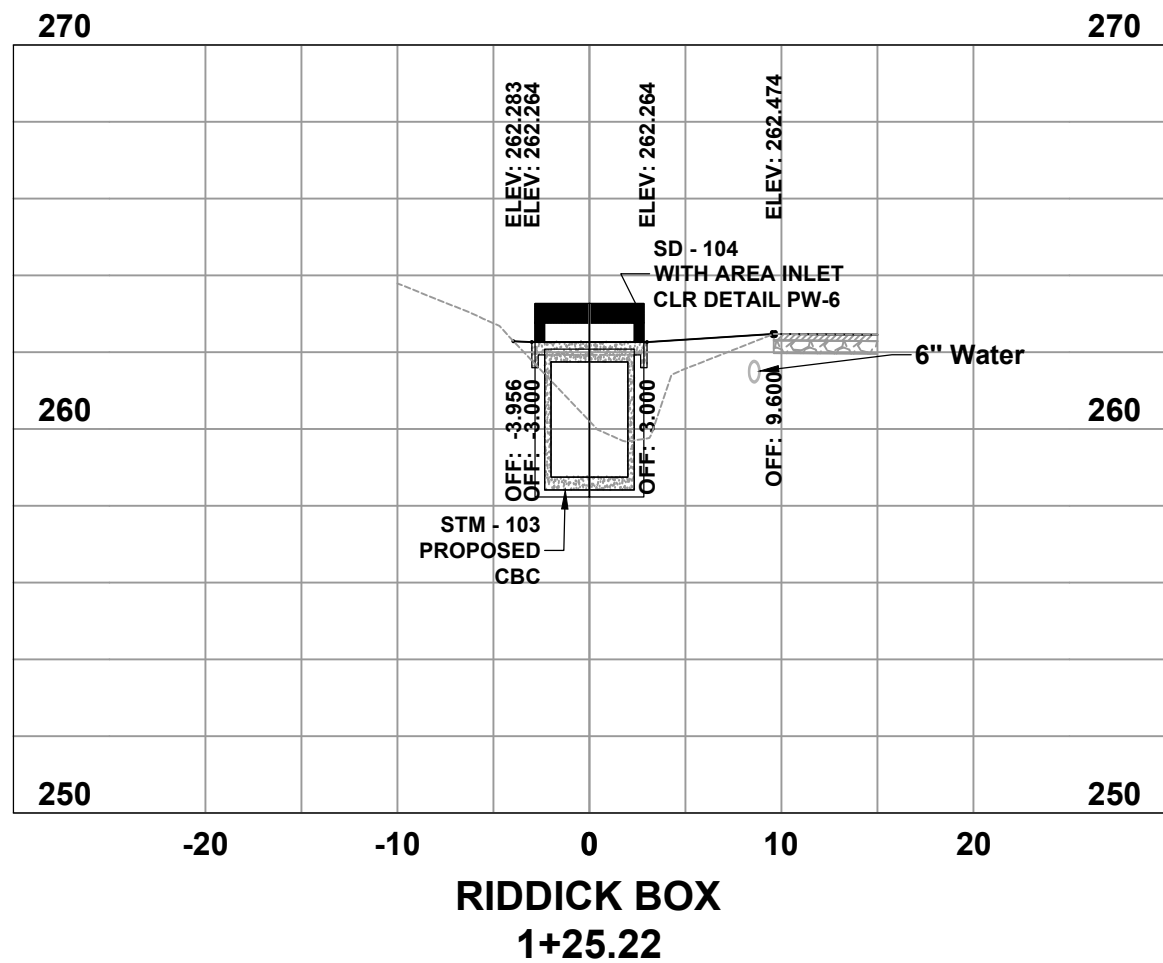
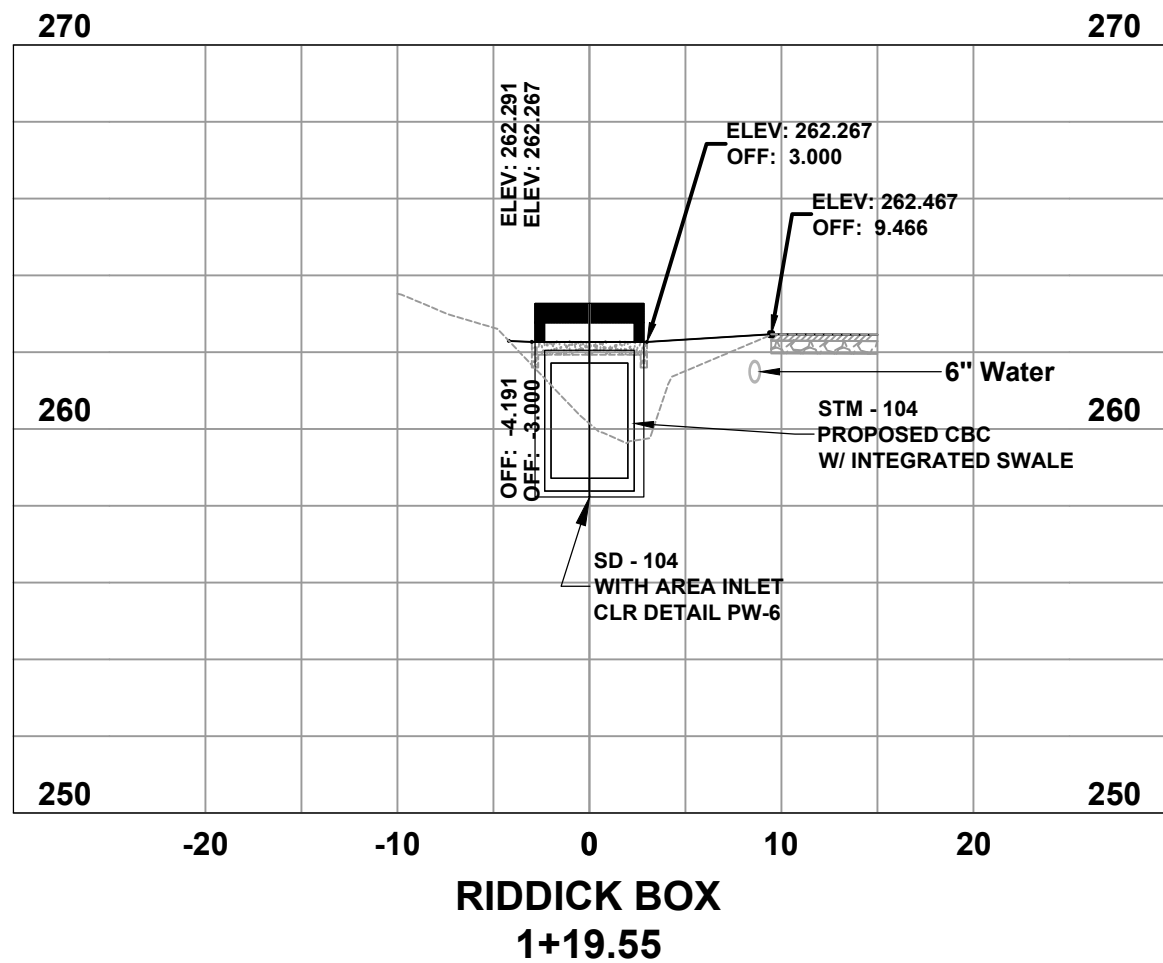
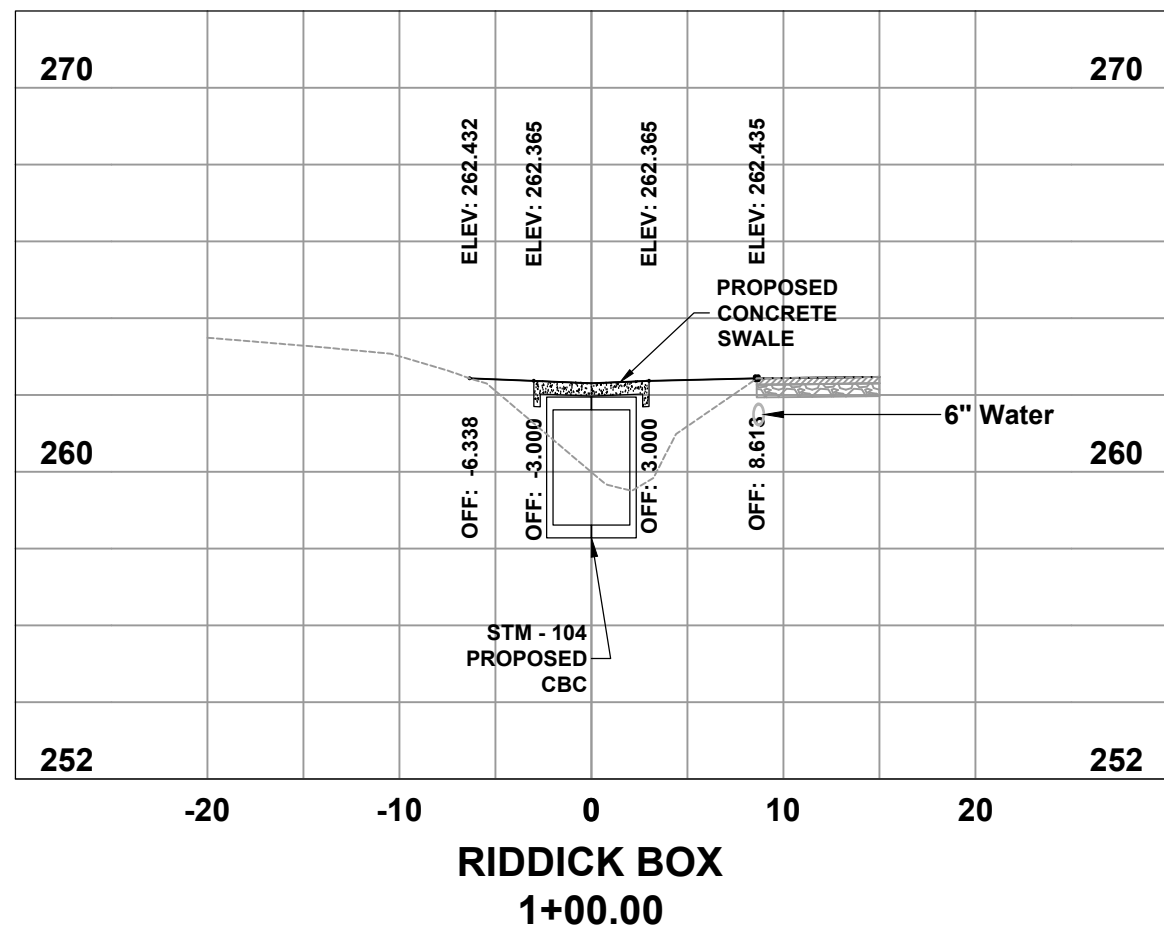
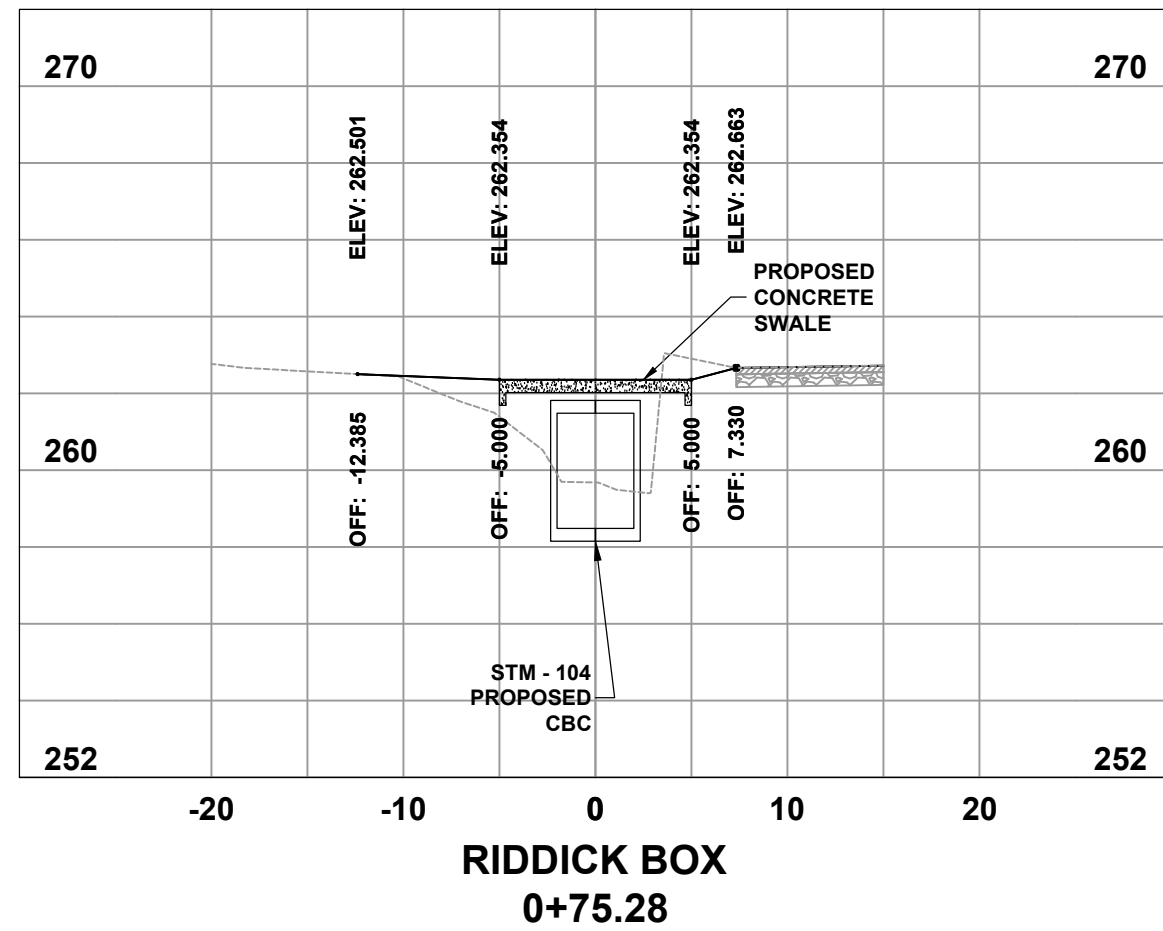
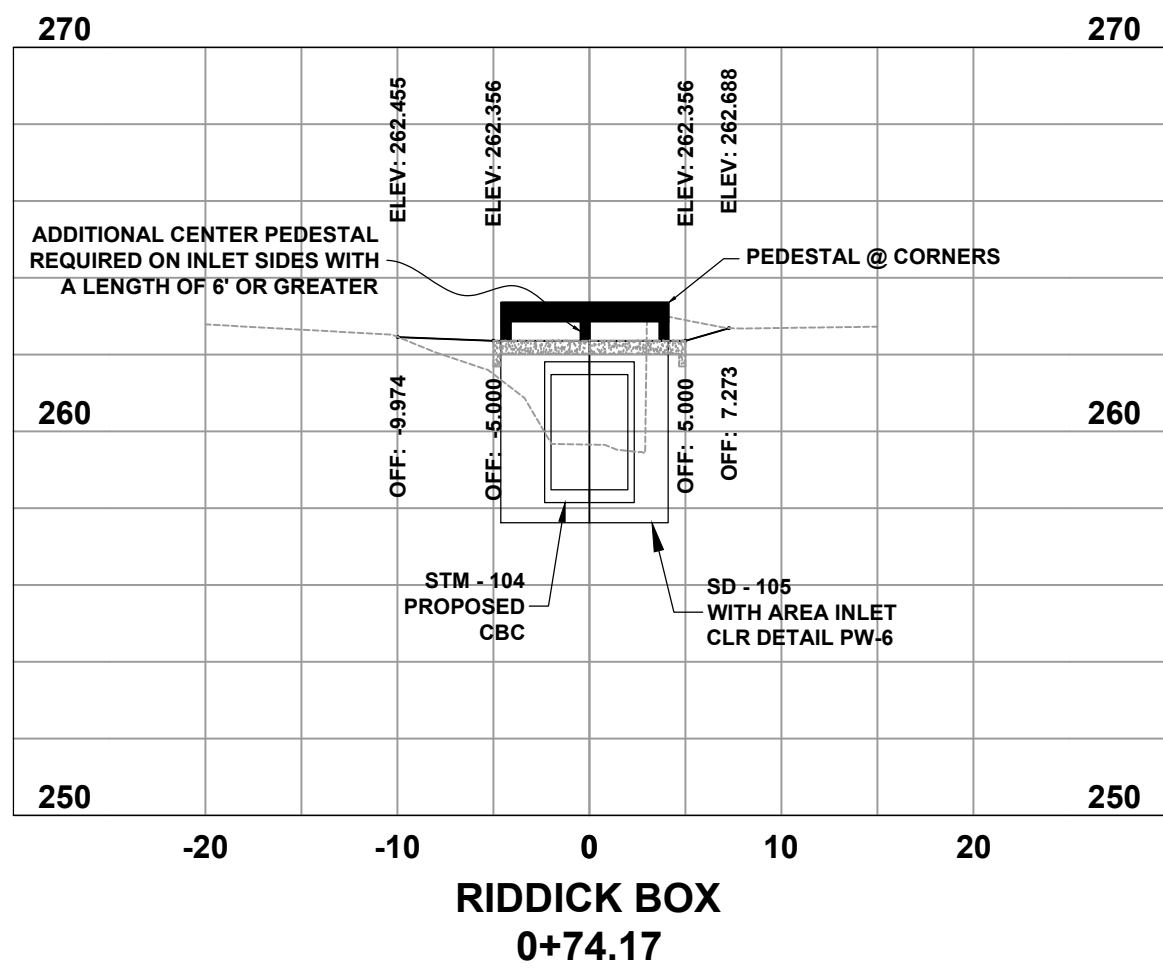
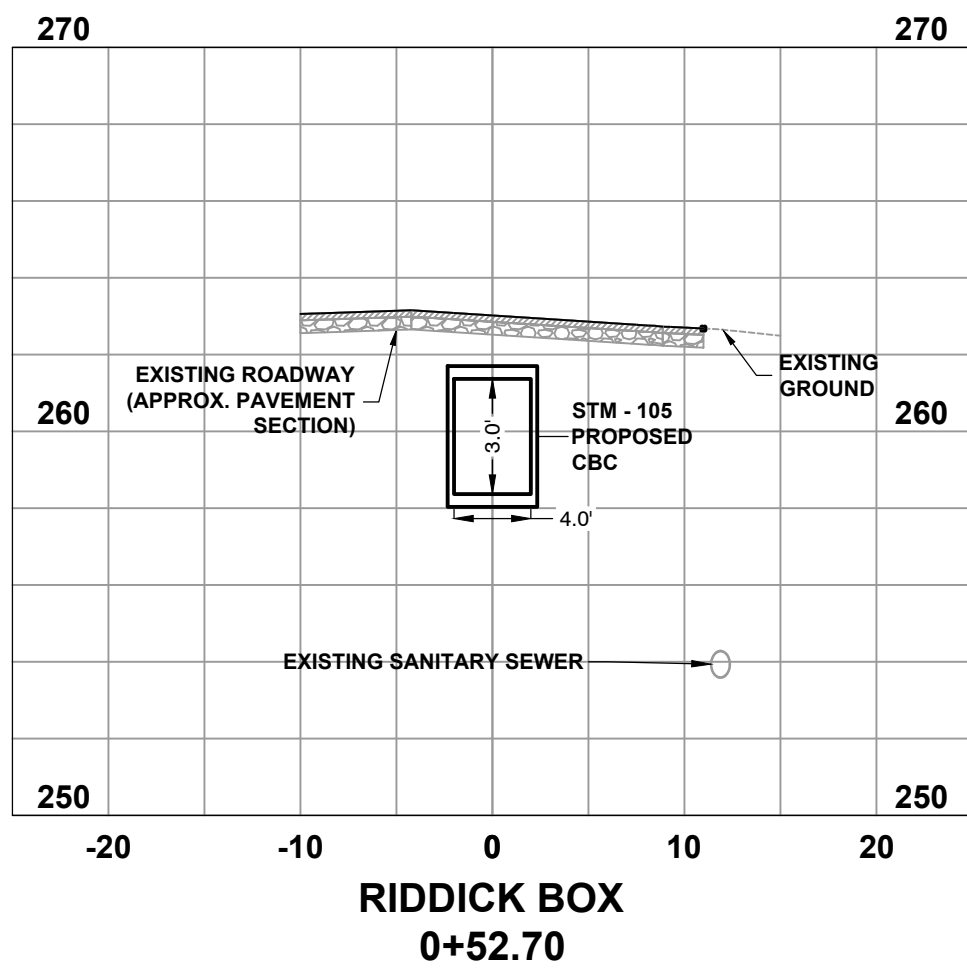
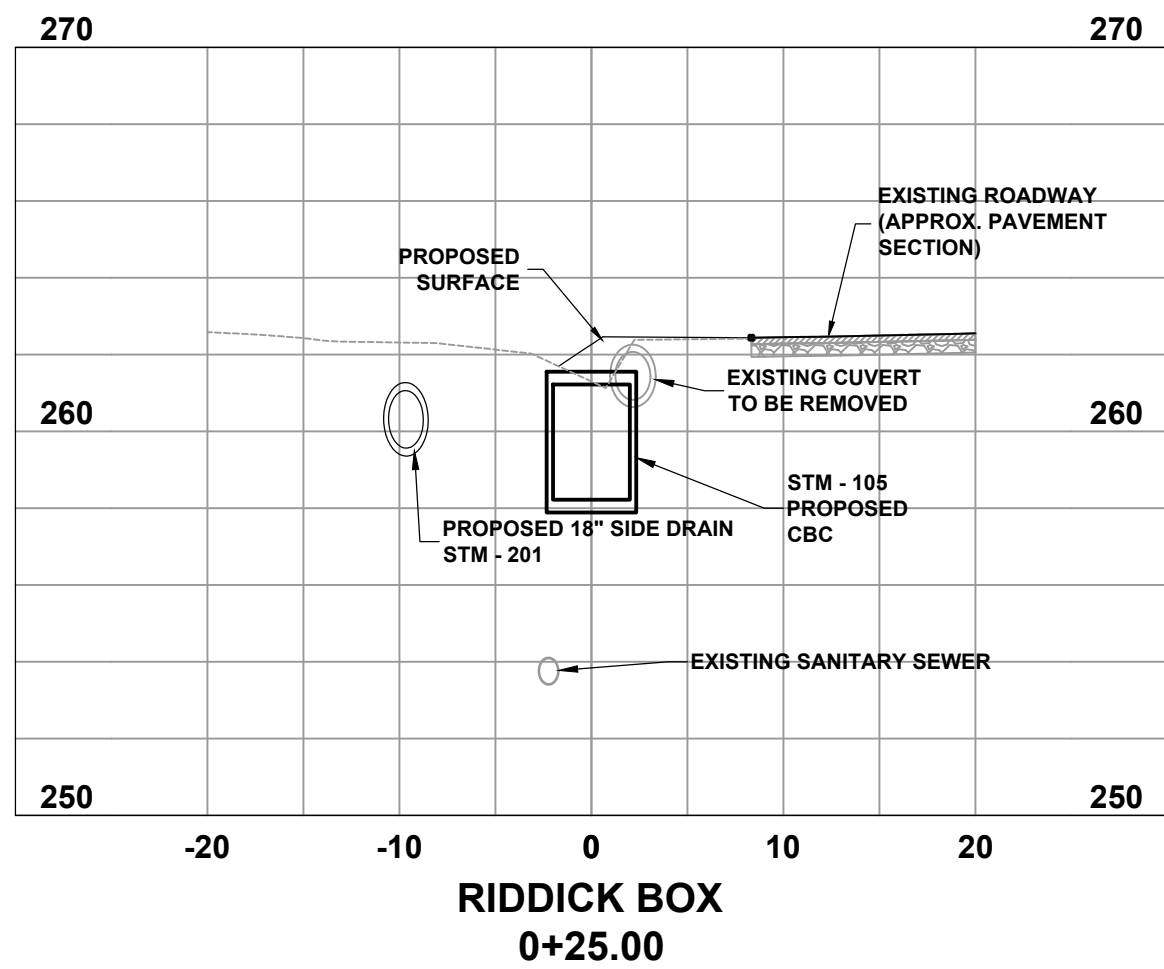


REVISIONS	DATE
CITY OF LITTLE ROCK, ARKANSAS EAST 39TH ST. DRAINAGE IMPROVEMENTS	
CROSS SECTIONS	

DEPARTMENT OF PUBLIC WORKS CIVIL ENGINEERING 701 W. MARKHAM LITTLE ROCK, ARKANSAS 72201



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DESIGNED JNS
CHECKED AHR
DATE 6/26/2025
SCALE H: 1" = 10' V: 1" = 5'
PROJECT NO. CLR # 01-22-DR-01
SHEET NO. C602



REVISIONS	DATE

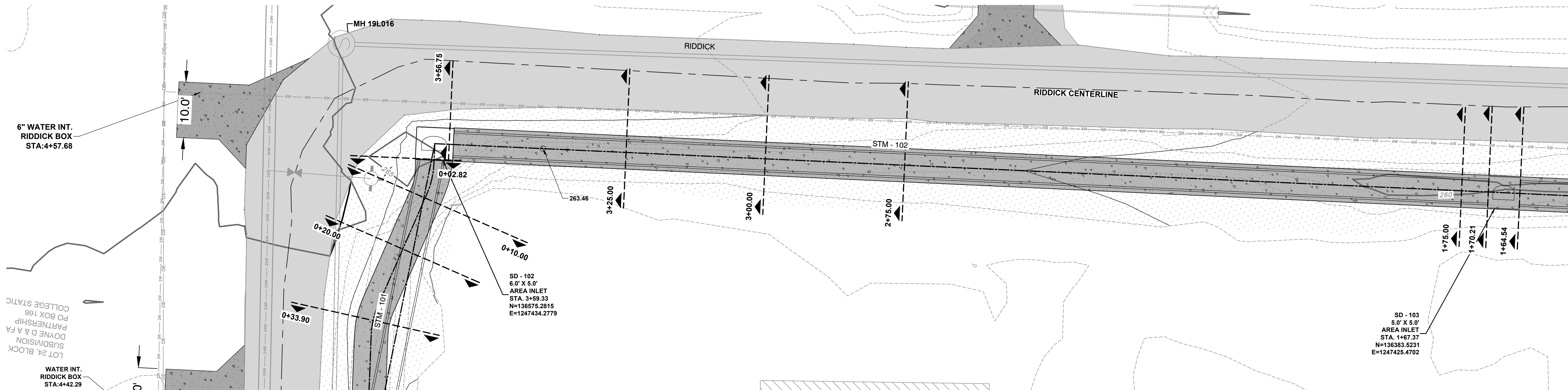
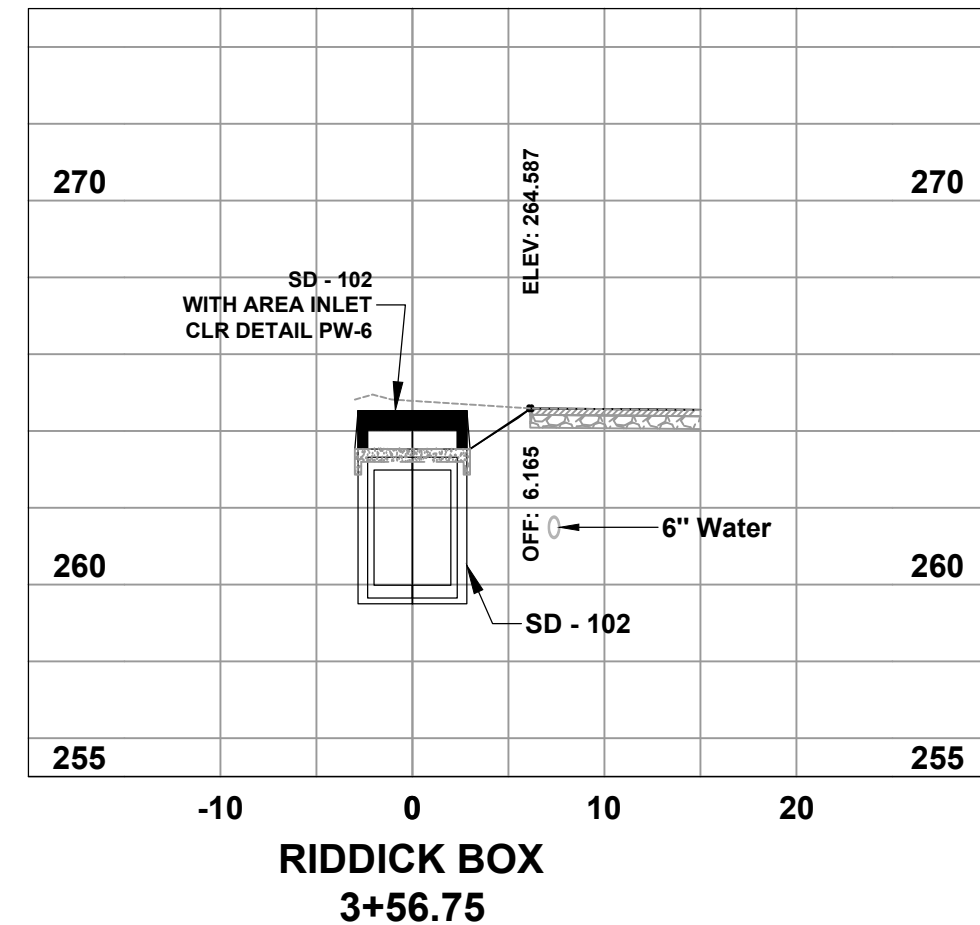
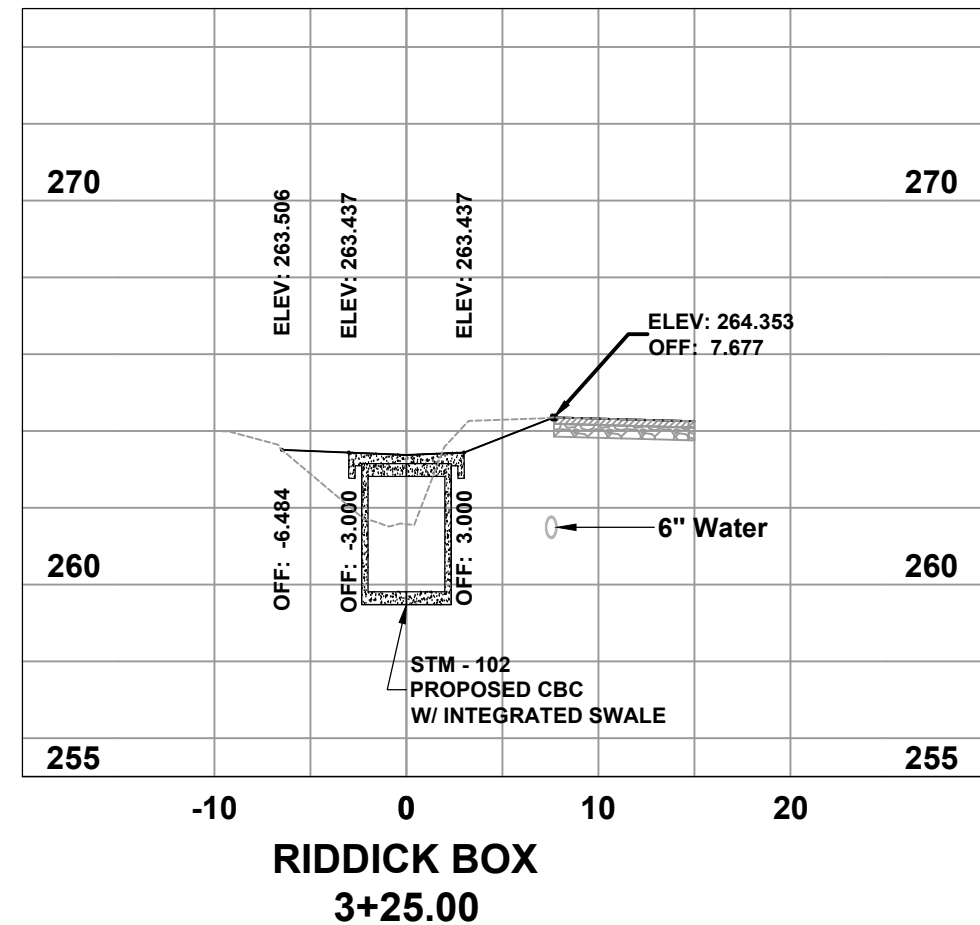
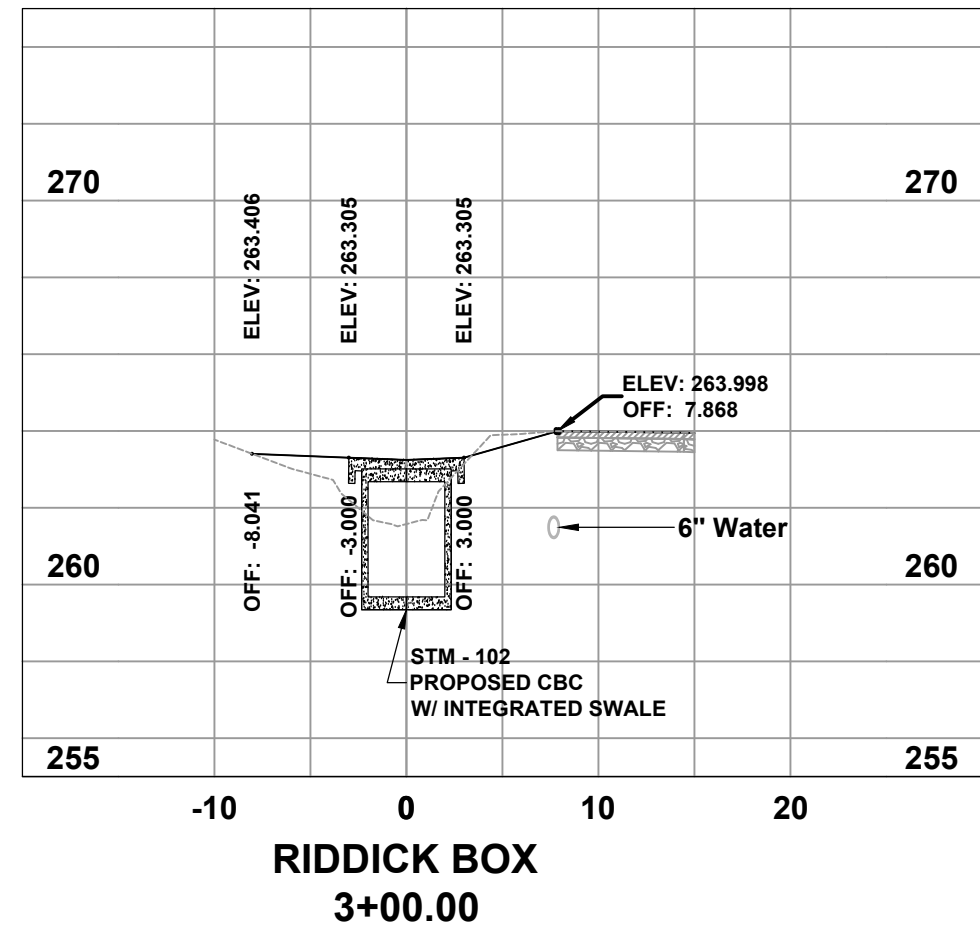
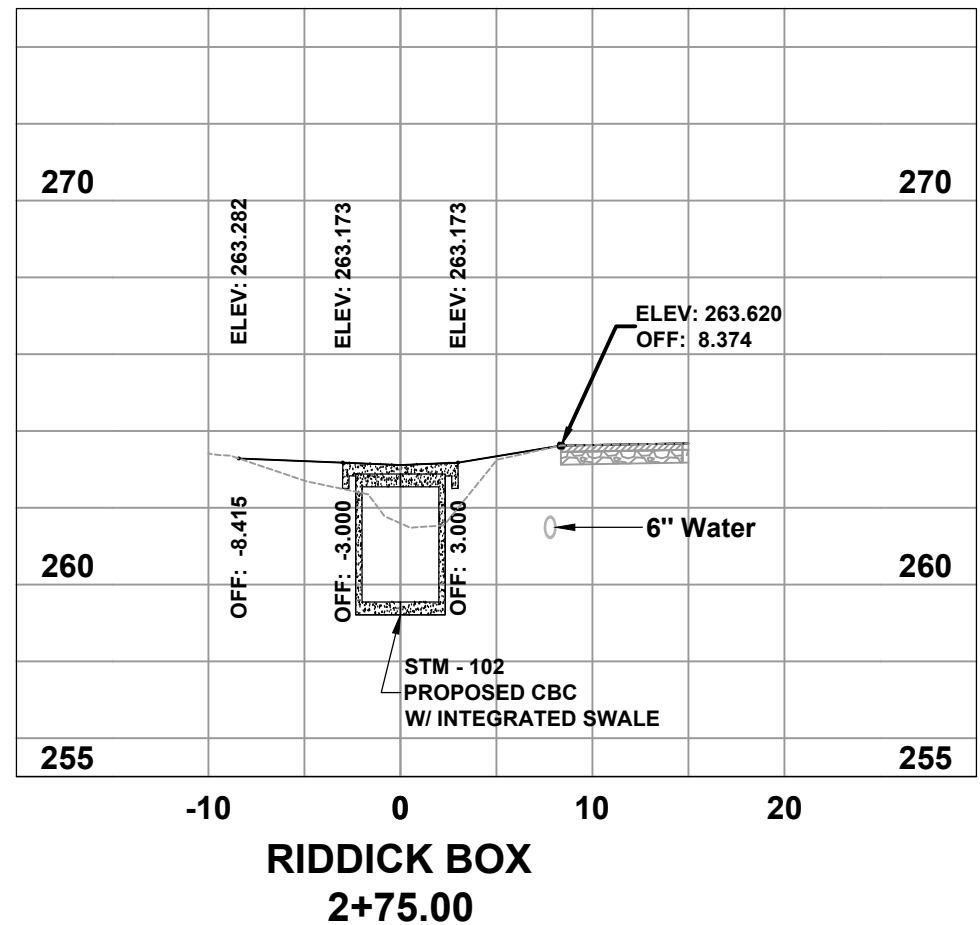
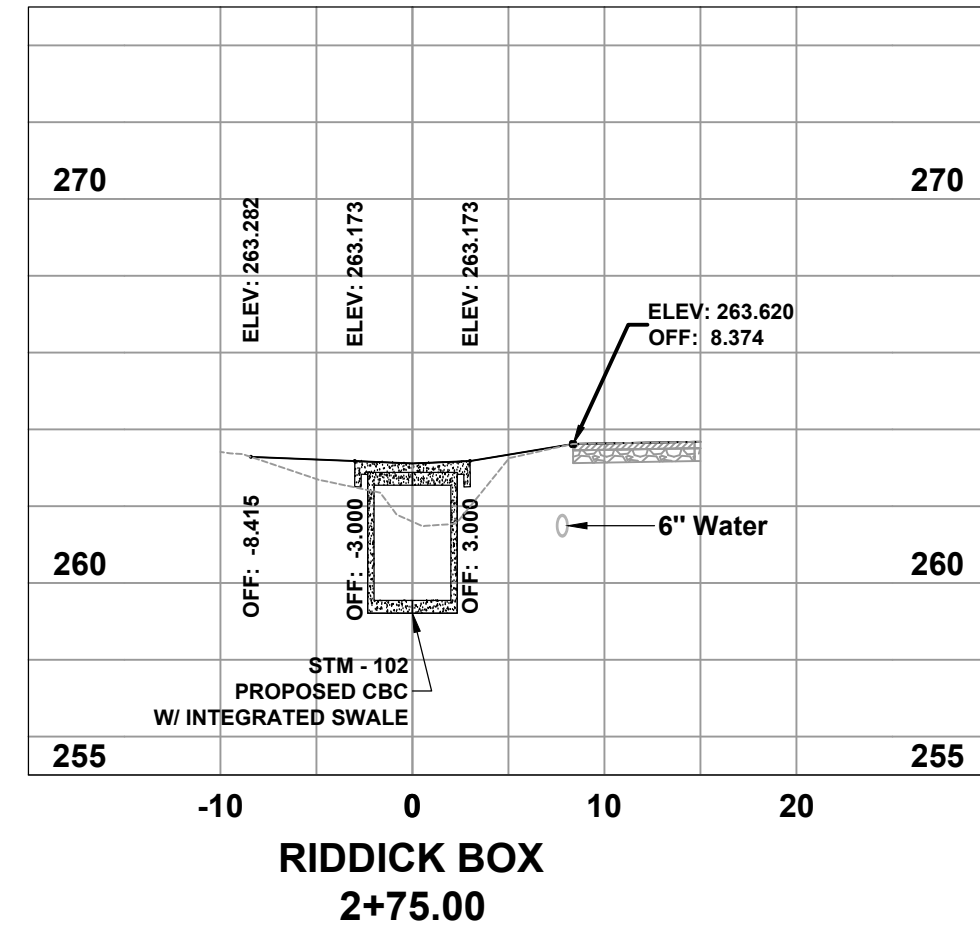
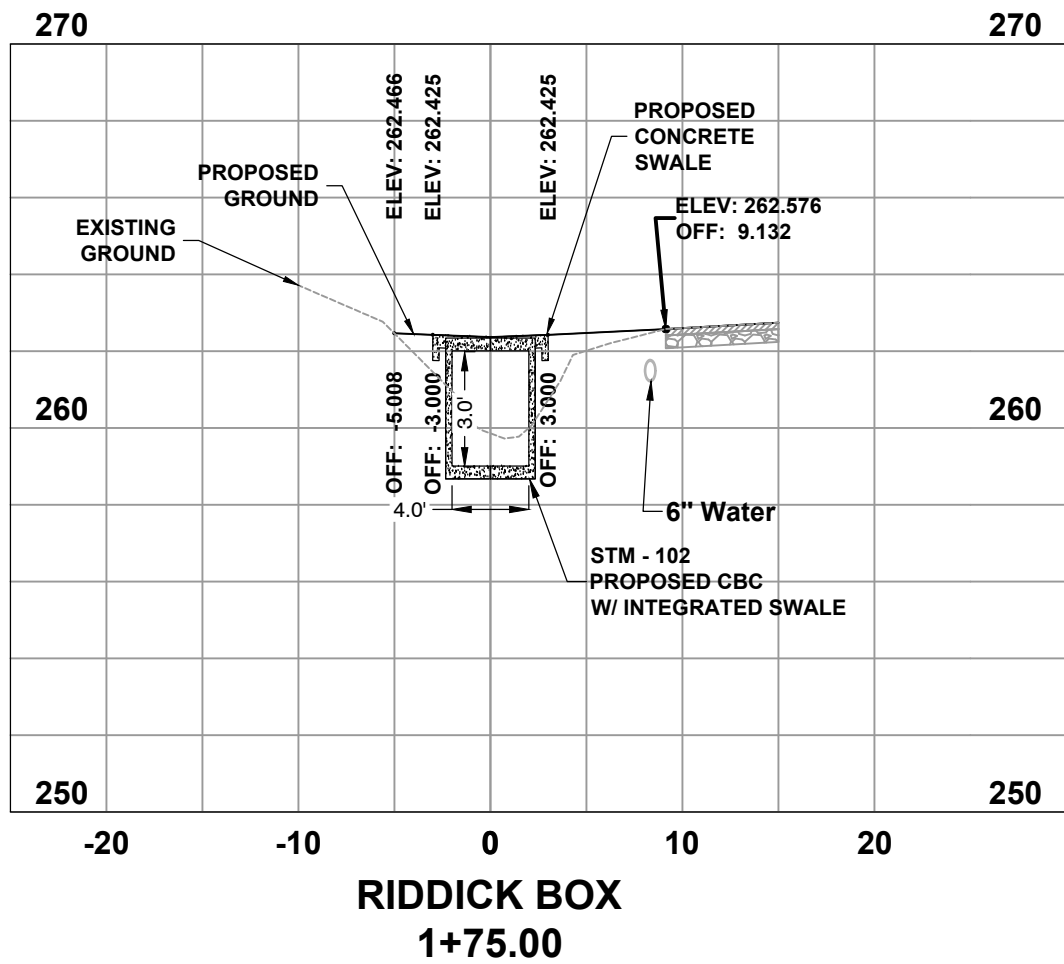
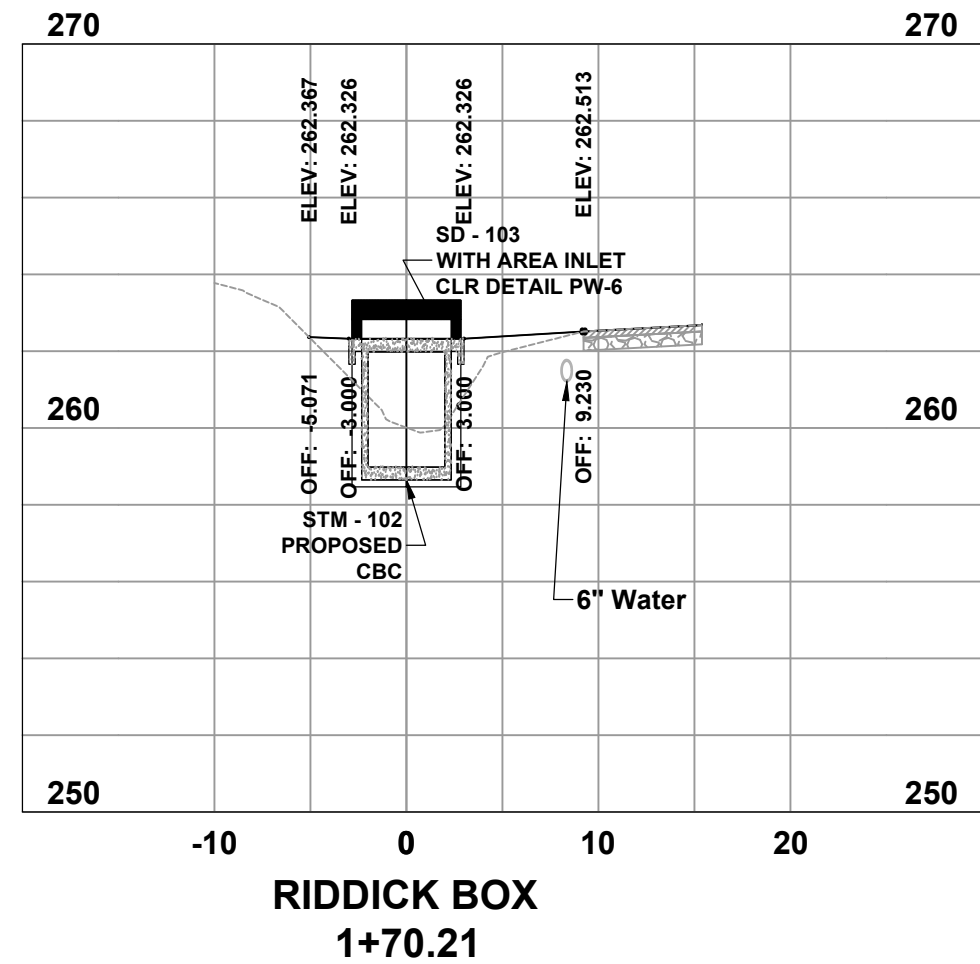
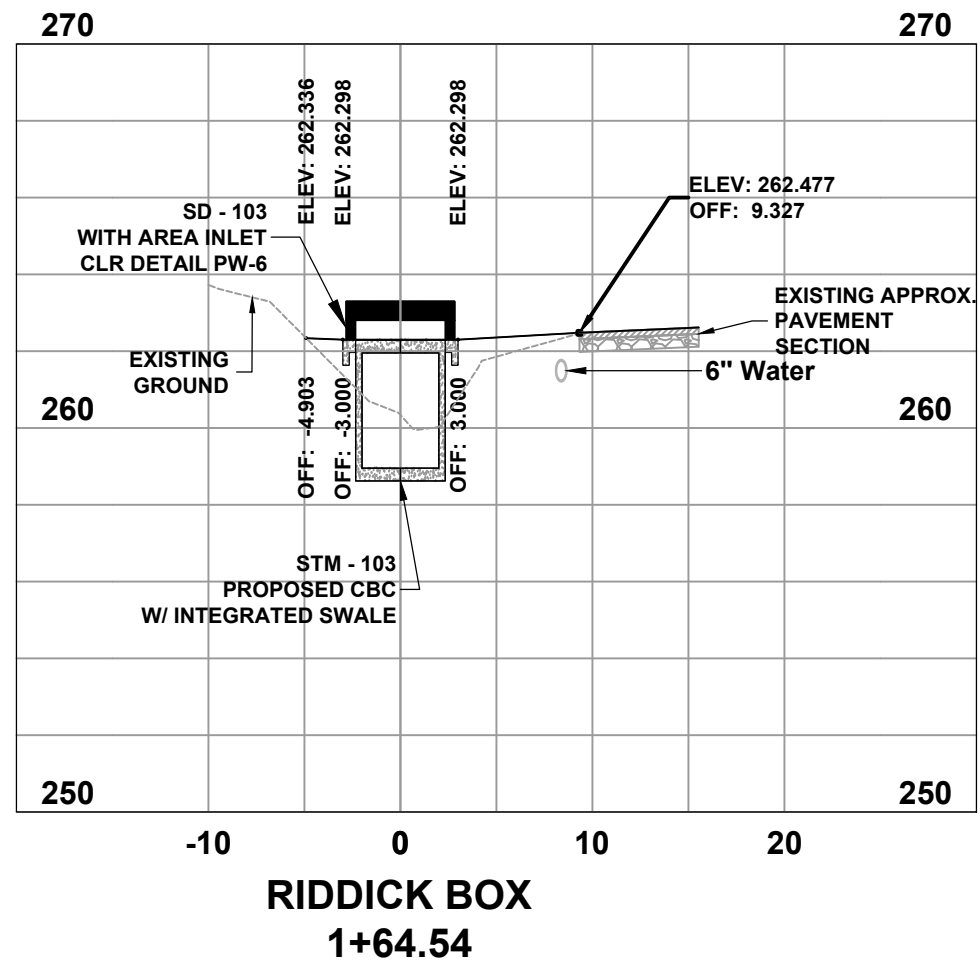
CITY OF LITTLE ROCK, ARKANSAS
EAST 39TH ST. DRAINAGE IMPROVEMENTS

CROSS SECTIONS

DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201



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JNS
CHECKED
AHR
DATE
6/26/2025
SCALE
H: 1" = 10' V: 1" = 5'
PROJECT NO.
CLR # 01-22-DR-01
SHEET NO.
C603



REVISIONS DATE

CITY OF LITTLE ROCK, ARKANSAS
EAST 39TH ST. DRAINAGE IMPROVEMENTS

CROSS SECTIONS

DEPARTMENT OF PUBLIC WORKS

CIVIL ENGINEERING

701 W. MARKHAM

LITTLE ROCK, ARKANSAS 72201



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DATE

6/26/2025

SCALE

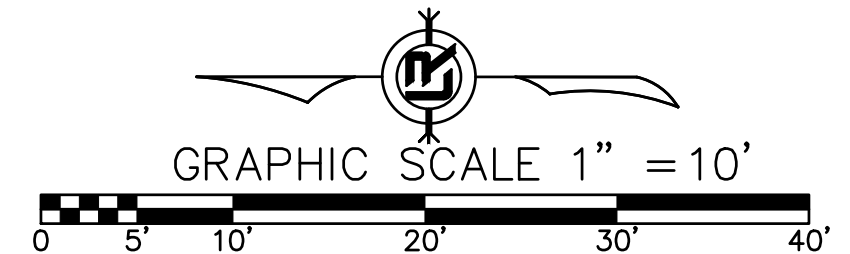
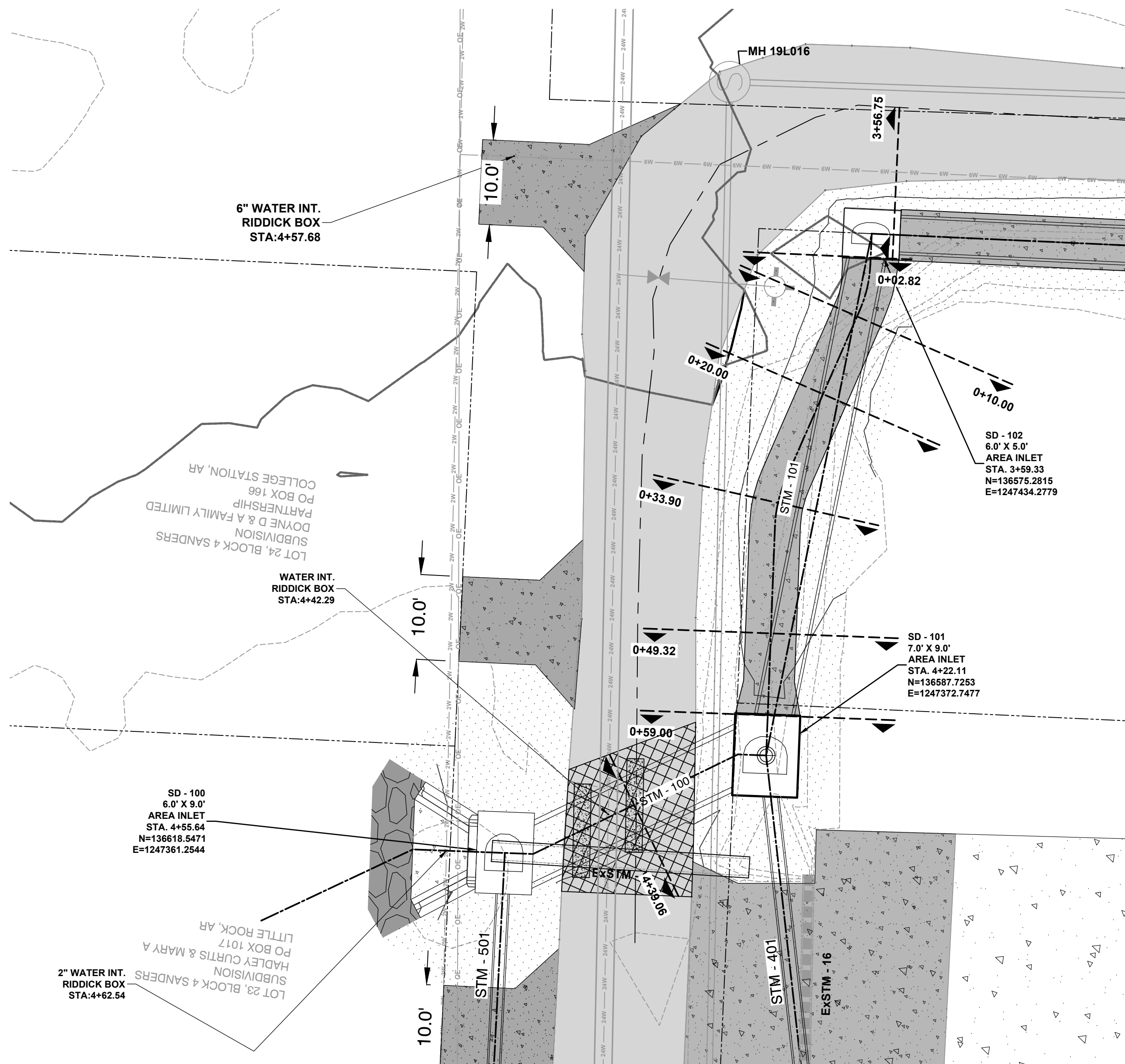
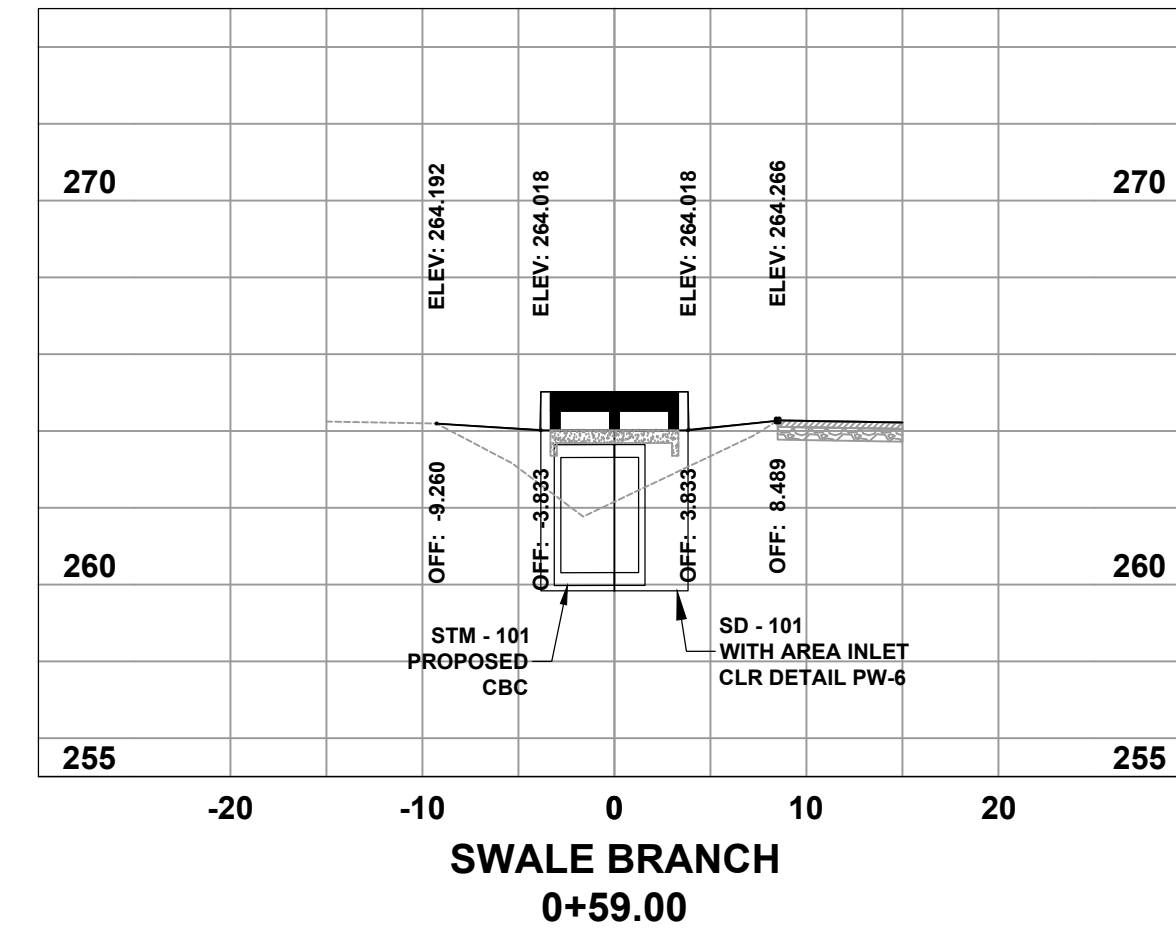
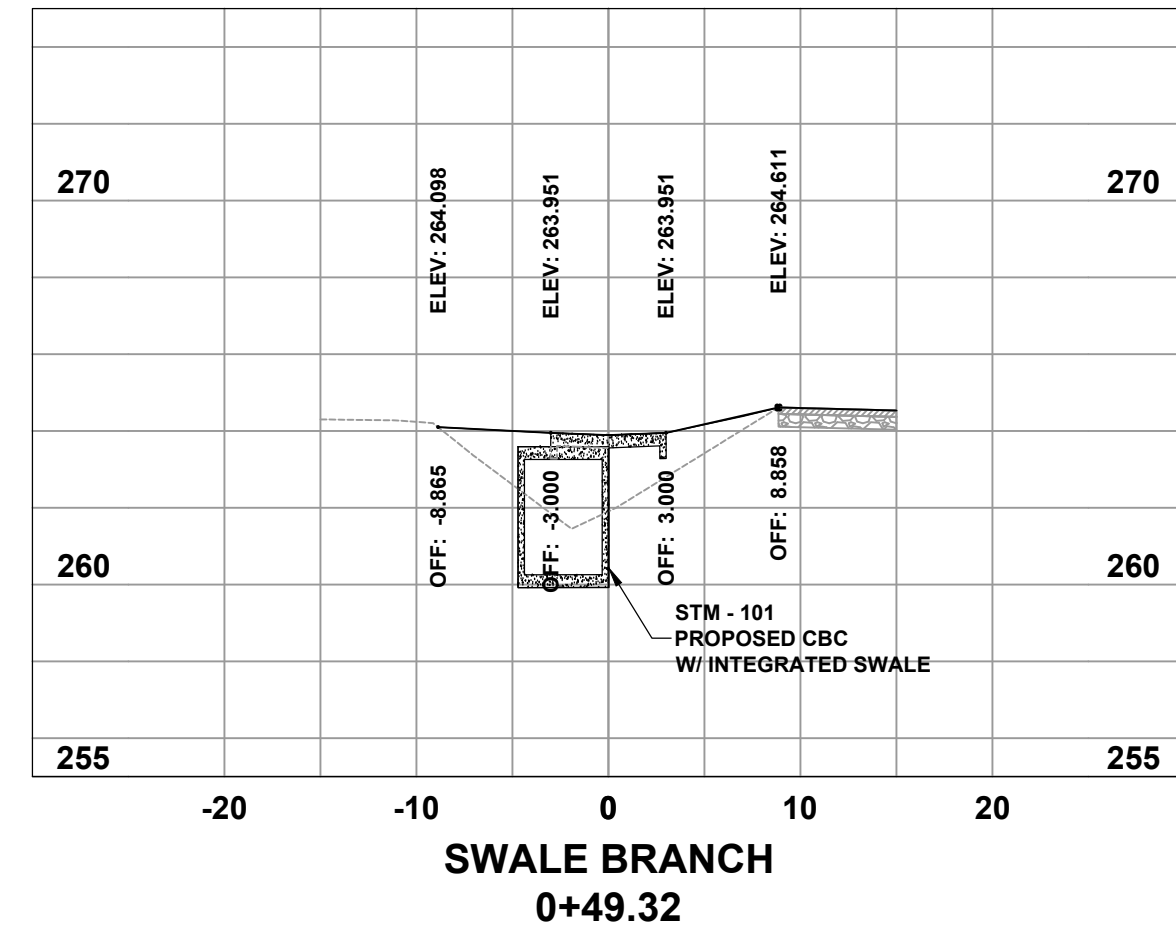
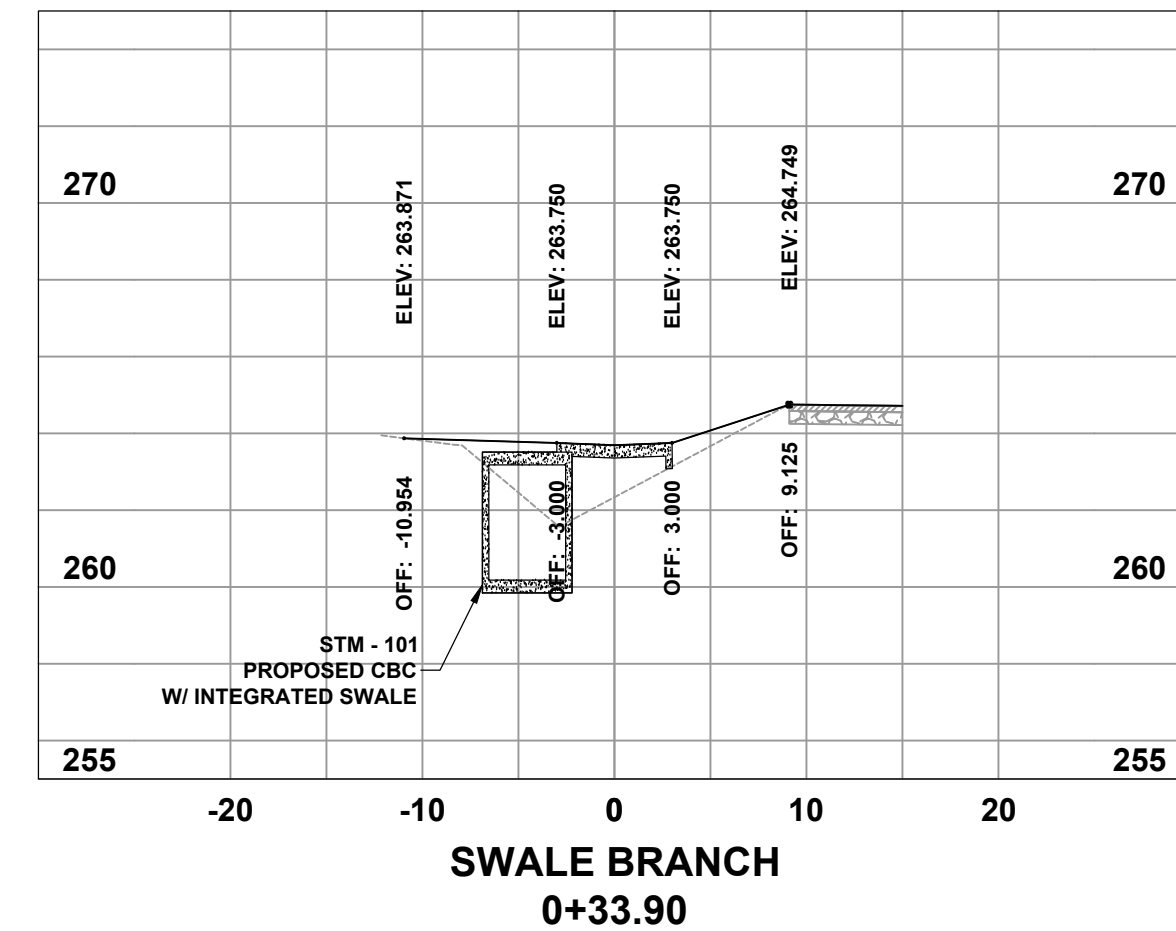
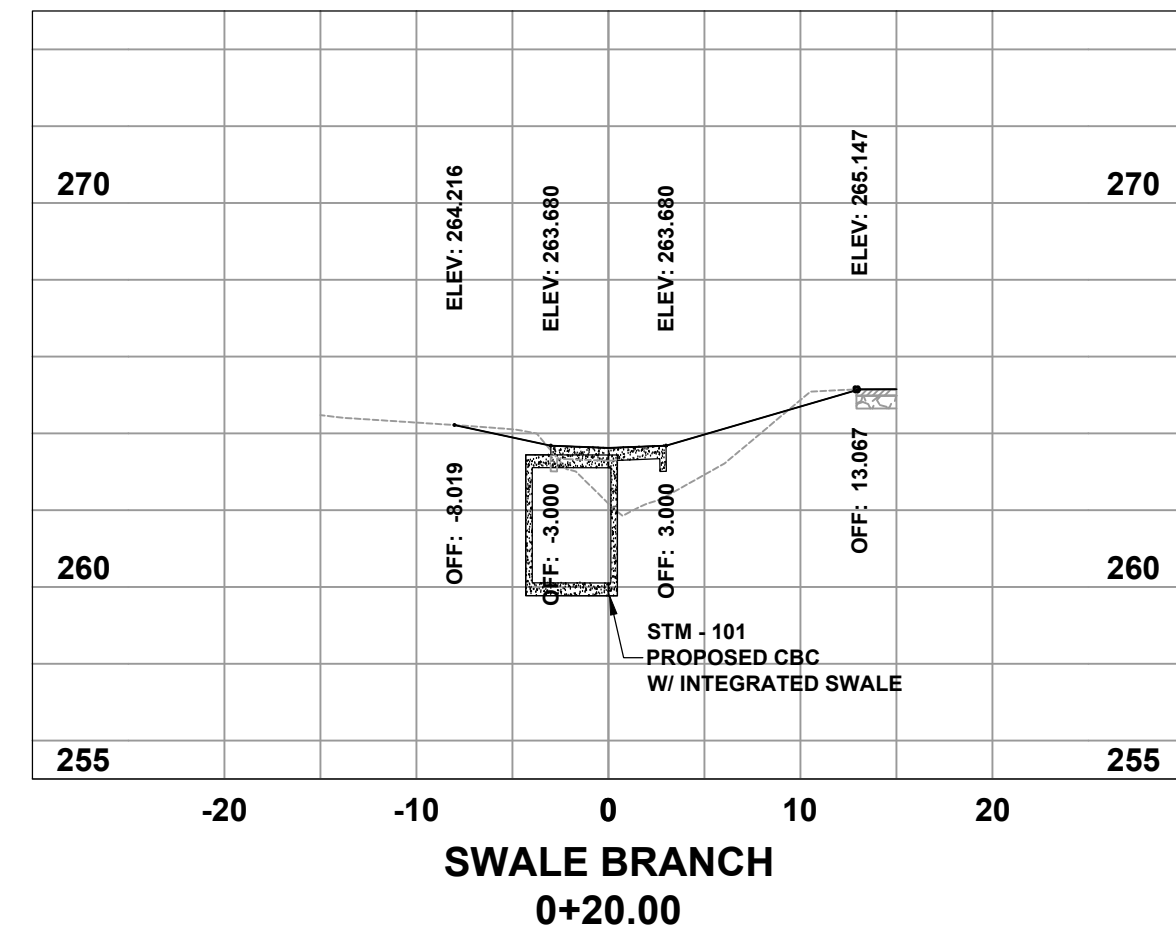
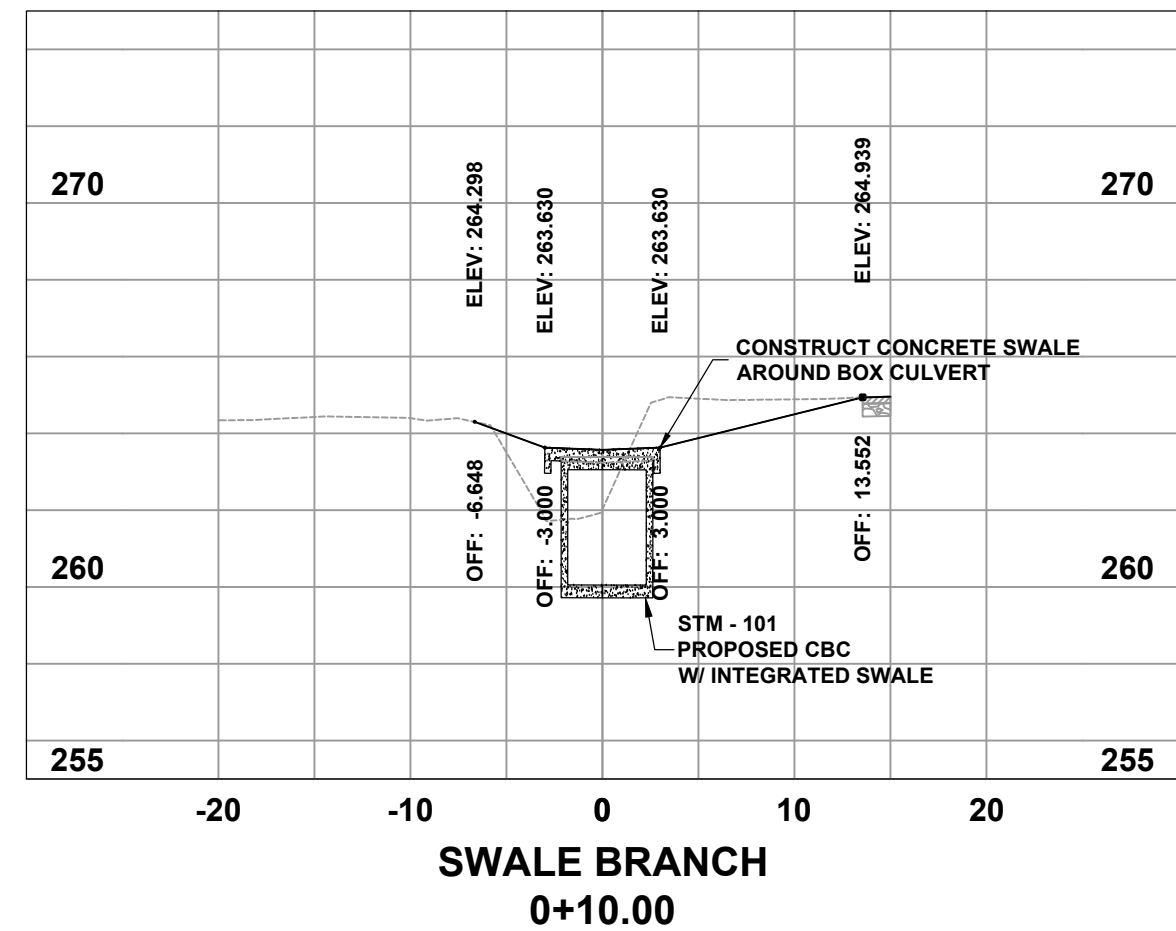
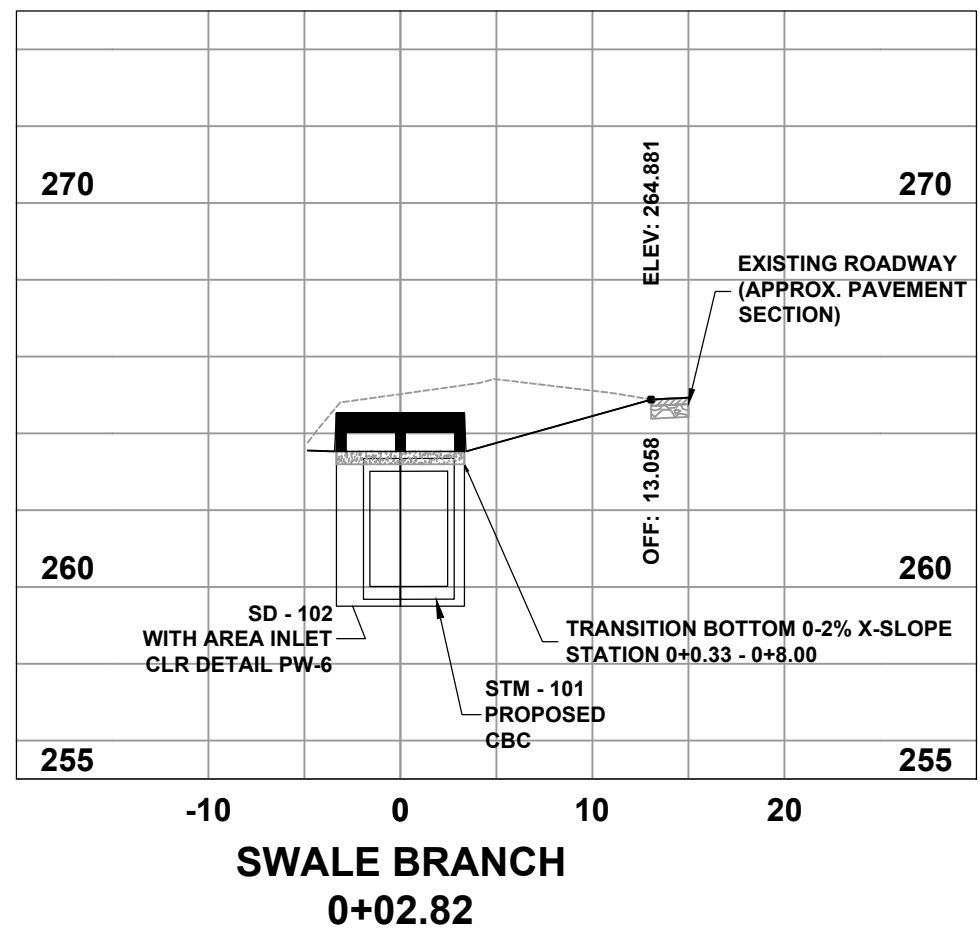
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PROJECT NO.

CLR # 01-22-DR-01

SHEET NO.

C604



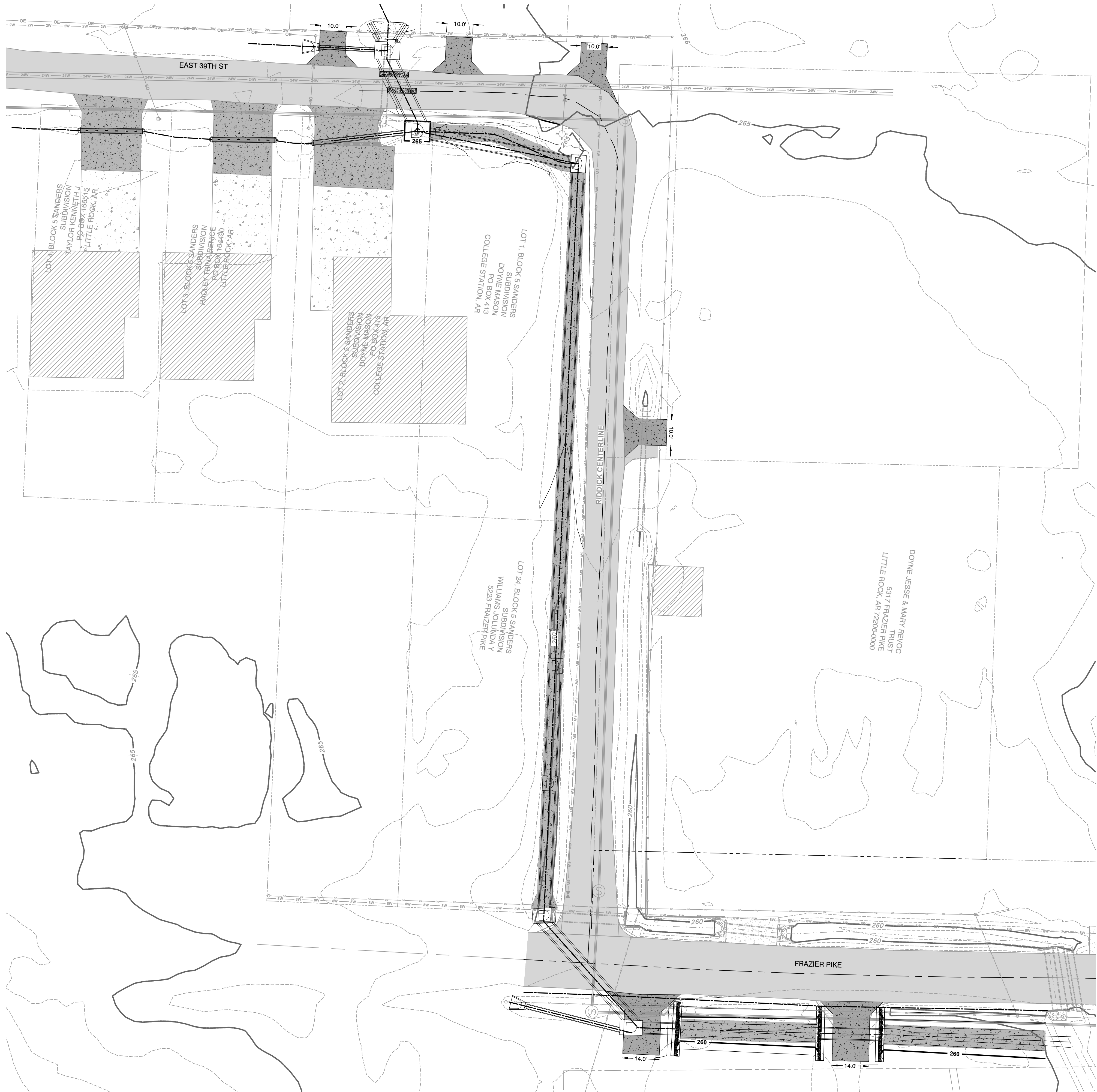
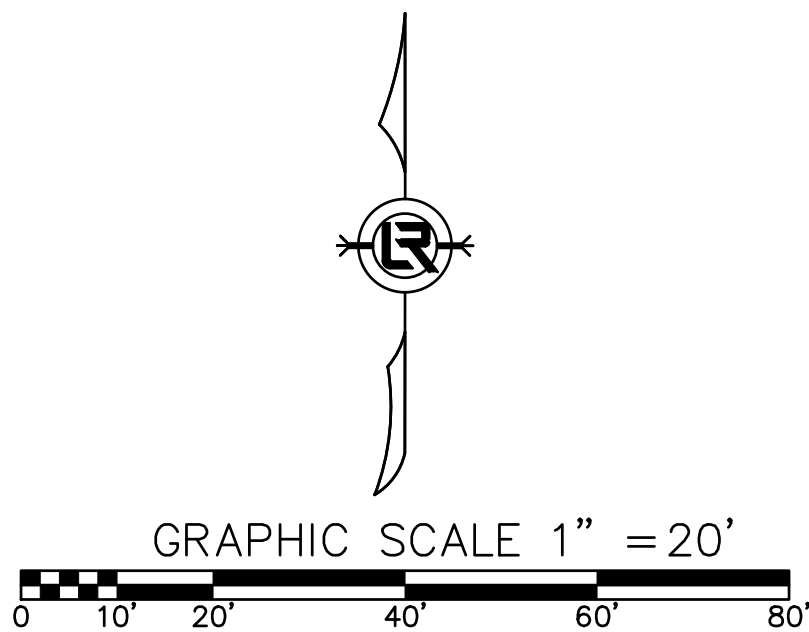
REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
EAST 39TH ST. DRAINAGE IMPROVEMENTS
CROSS SECTIONS

DEPARTMENT OF PUBLIC WORKS
CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201



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AHR
DATE
6/26/2025
SCALE
H: 1" = 10' V: 1" = 5'
PROJECT NO.
CLR # 01-22-DR-01
SHEET NO.
C605

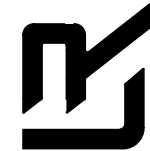


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CITY OF LITTLE ROCK, ARKANSAS
EAST 39TH ST. DRAINAGE IMPROVEMENTS

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DATE 6/26/2025
SCALE AS NOTED
PROJECT NO. CLR # 01-22-DR-01
SHEET NO. C606

PHASE 1
CONSTRUCTION EROSION CONTROL
BEST MANAGEMENT PRACTICES

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: PARKING, LAY DOWN, PORTA-POTTY, DUMPSTER, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS. IN ADDITION, NOTE ANY OFF-SITE AREA WHERE FILL IS IMPORTED FROM OR SOIL IS EXPORTED TO ON THE SITE MAP.

1. INSTALL CONSTRUCTION ENTRANCE/EXIT PER CITY STANDARD PW-64.
2. INSTALL SWPPP INFORMATION SIGN.
3. INSTALL SILT FENCE(S) ON THE SITE. CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL SILT FENCE.
4. INSTALL STORMWATER DETENTION BASIN AND OUTFALL STRUCTURE.
5. PREPARE TEMPORARY PARKING AND STORAGE AREA.
6. HALT ALL ACTIVITIES AND CONTACT THE CITY OF LITTLE ROCK TO PERFORM INSPECTION AND ACCEPTANCE OF BMP'S.
7. INSTALL AND STABILIZE HYDRAULIC CONTROL STRUCTURES (STORM DRAIN INLET PROTECTION, DIKES, SWALES, CHECK DAMS, ETC.). CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL HYDRAULIC CONTROL DEVICES.

CONSTRUCTION - ENTRANCE/EXIT	CO
CHECK DAM	CD
DIVERSION BERM	DI
DOWNDRAIN STRUCTURE - TEMPORARY	DN
ROCK DAM	RD
SEDIMENT BARRIER - SILT FENCE	SD1
SEDIMENT BARRIER - GRAVEL RING	SD2
SEDIMENT BARRIER - BLOCK & GRAVEL	SD3
SEDIMENT BARRIER - BLOCK	SD4
TEMPORARY SEDIMENT BASIN	SB1
SILT FENCE - TYPE A	SFA
SILT FENCE - TYPE B	SFB
SILT FENCE - TYPE C	SFC
STORM DRAIN INTLET PROTECTION	ST
SURFACE ROUGHENING	SU
DISTURBED AREA STABILIZATION -TEMPORARY STABILIZATION	TS1
DISTURBED AREA STABILIZATION -TEMPORARY GRASSING	TS2
DISTURBED AREA STABILIZATION -PERMANENT GRASSING	TS3
MATting/BLANKETS	MB



REVISIONS DATE

CITY OF LITTLE ROCK, ARKANSAS

EAST 39TH ST. DRAINAGE IMPROVEMENTS

EROSION CONTROL PLAN PHASE 1

DEPARTMENT OF PUBLIC WORKS

CIVIL ENGINEERING

701 W. MARKHAM

LITTLE ROCK, ARKANSAS 72201

STATE OF ARKANSAS

REGISTERED PROFESSIONAL ENGINEER

ANDREW H. RIKE

No. 10452

DRAWN BY
JNS

DESIGNED
JNS

CHECKED
AHR

DATE
6/26/2025

SCALE
AS NOTED

PROJECT NO.
CLR # 01-22-DR-01

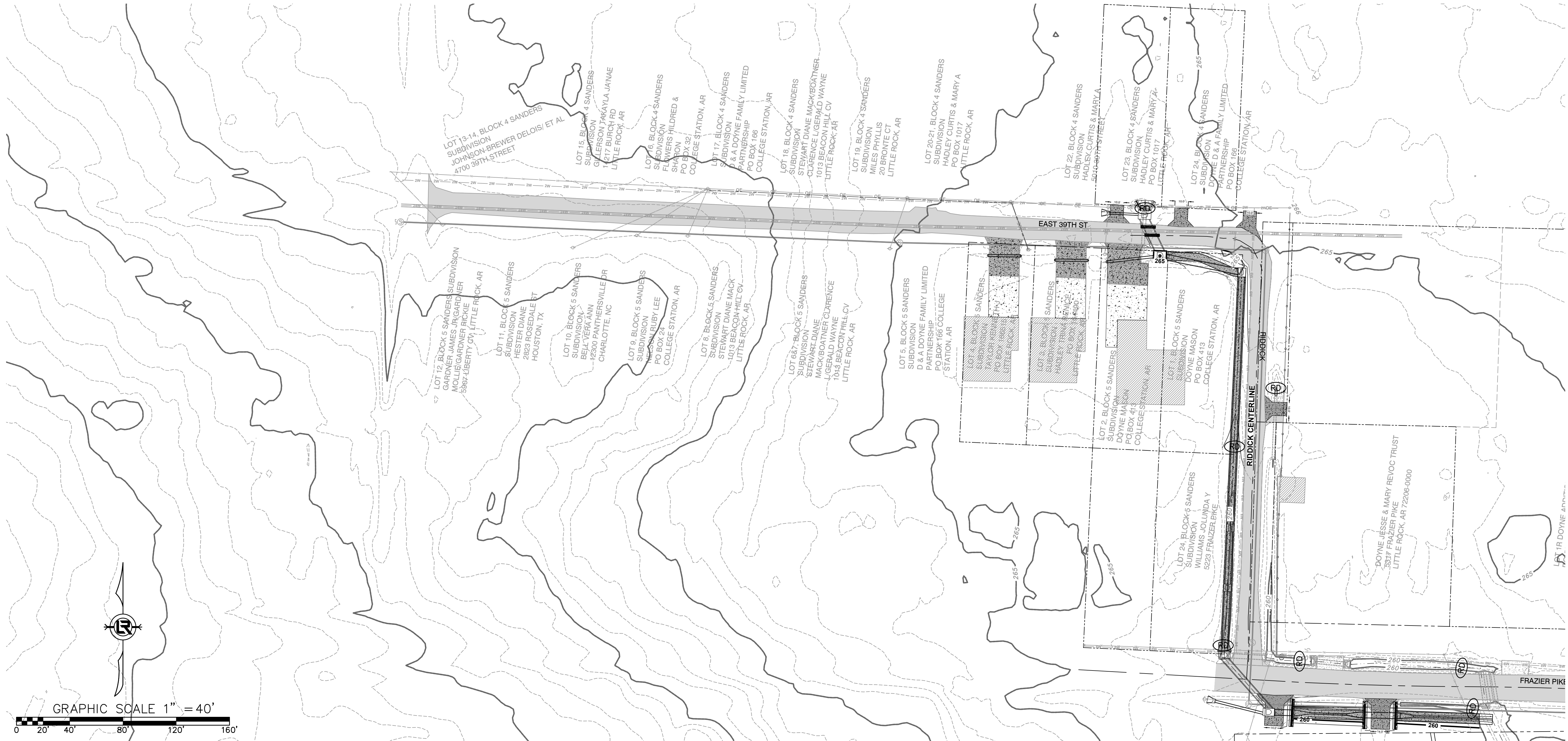
SHEET NO.
C701

PHASE 2
CONSTRUCTION EROSION CONTROL
BEST MANAGEMENT PRACTICES

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: PARKING, LAY DOWN, PORTA-POTTY, CONCRETE WASHOUT, DUMPSTER, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS. IN ADDITION, NOTE ANY OFF-SITE AREA WHERE FILL IS IMPORTED FROM OR SOIL IS EXPORTED TO ON THE SITE MAP.

1. INSTALL CONCRETE WASHOUT. RELOCATE DUMPSTER, PORTA-POTTY AND LAY DOWN AREA.
2. TEMPORARY STABILIZATION SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY CEASED.
3. INSTALL UNDERGROUND UTILITIES.
4. FINISH GRADING AND PREPARE SUBGRADES FOR BUILDING SLABS, PARKING LOT, ETC.
5. MAINTAIN SILT FENCES AND INLET PROTECTION THROUGHOUT CONSTRUCTION.
6. INSTALL CONCRETE FOUNDATIONS, PARKING LOT CURBS, AND BASE MATERIAL. UTILIZE CONCRETE WASHOUT; CONCRETE IS NOT TO BE WASHED ONTO THE GROUND, STREET, OR INTO THE STORM SEWER.
7. INSTALL ASPHALT AND FENCE.
8. INSTALL LANDSCAPING VEGETATION AND MULCH.

CONSTRUCTION - ENTRANCE/EXIT	CO
CHECK DAM	CD
DIVERSION BERM	DI
DOWNDRAIN STRUCTURE - TEMPORARY	DN
ROCK DAM	RD
SEDIMENT BARRIER - SILT FENCE	SD1
SEDIMENT BARRIER - GRAVEL RING	SD2
SEDIMENT BARRIER - BLOCK & GRAVEL	SD3
SEDIMENT BARRIER - BLOCK	SD4
TEMPORARY SEDIMENT BASIN	SB1
SILT FENCE - TYPE A	SFA
SILT FENCE - TYPE B	SFB
SILT FENCE - TYPE C	SFC
STORM DRAIN INTLET PROTECTION	ST
SURFACE ROUGHENING	SU
DISTURBED AREA STABILIZATION -TEMPORARY STABILIZATION	TS1
DISTURBED AREA STABILIZATION -TEMPORARY GRASSING	TS2
DISTURBED AREA STABILIZATION -PERMANENT GRASSING	TS3
MATting/BLANKETS	MB



REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS
EAST 39TH ST. DRAINAGE IMPROVEMENTS
EROSION CONTROL PLAN PHASE 2

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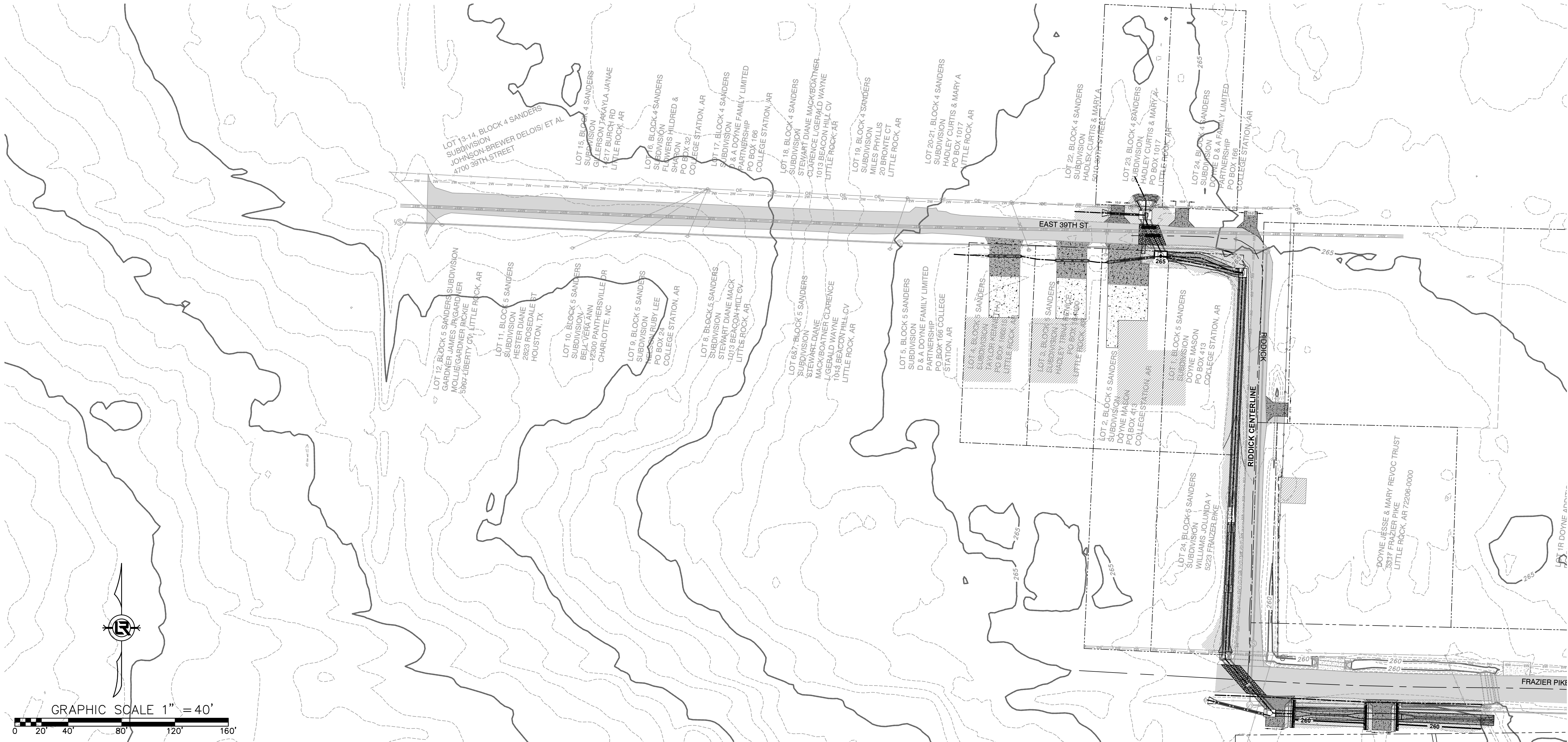
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SCALE
AS NOTED
PROJECT NO.
CLR # 01-22-DR-01
SHEET NO.
C702

PHASE 3
CONSTRUCTION EROSION CONTROL
BEST MANAGEMENT PRACTICES

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: PARKING, LAY DOWN, PORTA-POTTY, CONCRETE WASHOUT, DUMPSTER, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS. IN ADDITION, NOTE ANY OFF-SITE AREA WHERE FILL IS IMPORTED FROM OR SOIL IS EXPORTED TO ON THE SITE MAP.

1. STABILIZE ALL DISTURBED AREAS PER THE LANDSCAPING PLANS.
2. CONTINUE TO PERFORM WEEKLY MAINTENANCE INSPECTIONS.
3. REMOVE AND STABILIZE ALL TEMPORARY CONTROL MEASURES UNTIL PERMANENT STABILIZATION ACROSS THE SITE IS ACHIEVED.

CONSTRUCTION - ENTRANCE/EXIT	CO
CHECK DAM	CD
DIVERSION BERM	DI
DOWNDRAIN STRUCTURE - TEMPORARY	DN
ROCK DAM	RD
SEDIMENT BARRIER - SILT FENCE	SD1
SEDIMENT BARRIER - GRAVEL RING	SD2
SEDIMENT BARRIER - BLOCK & GRAVEL	SD3
SEDIMENT BARRIER - BLOCK	SD4
TEMPORARY SEDIMENT BASIN	SB1
SILT FENCE - TYPE A	SFA
SILT FENCE - TYPE B	SFB
SILT FENCE - TYPE C	SFC
STORM DRAIN INTLET PROTECTION	ST
SURFACE ROUGHENING	SU
DISTURBED AREA STABILIZATION -TEMPORARY STABILIZATION	TS1
DISTURBED AREA STABILIZATION -TEMPORARY GRASSING	TS2
DISTURBED AREA STABILIZATION -PERMANENT GRASSING	TS3
MATting/BLANKETS	MB



REVISIONS	DATE

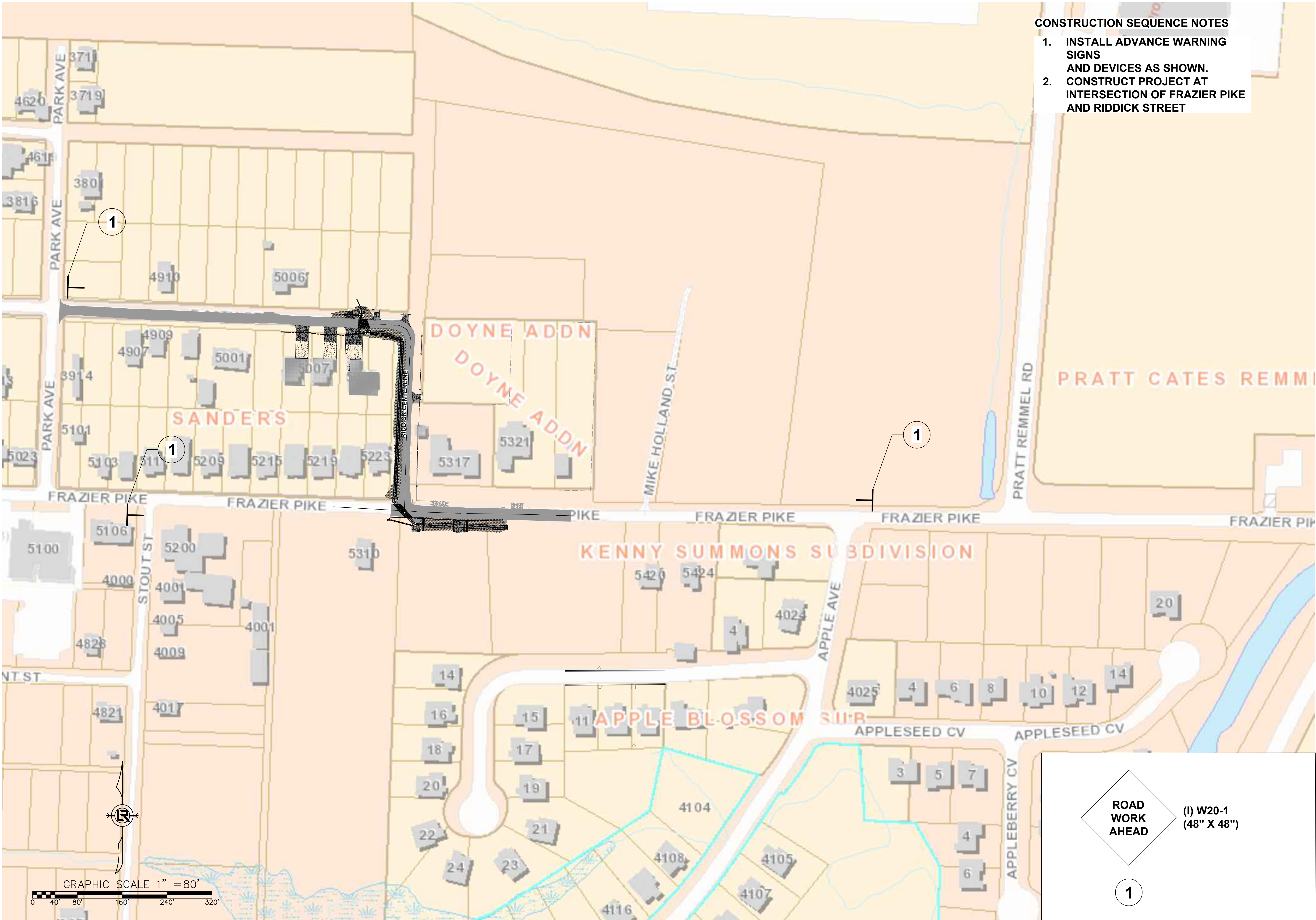
CITY OF LITTLE ROCK, ARKANSAS
EAST 39TH ST. DRAINAGE IMPROVEMENTS

EROSION CONTROL PLAN PHASE 3

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CIVIL ENGINEERING
701 W. MARKHAM
LITTLE ROCK, ARKANSAS 72201



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DATE 6/26/2025
SCALE AS NOTED
PROJECT NO. CLR # 01-22-DR-01
SHEET NO. C703



- CONSTRUCTION SEQUENCE NOTES
1. INSTALL ADVANCE WARNING SIGNS AND DEVICES AS SHOWN.
 2. CONSTRUCT PROJECT AT INTERSECTION OF FRAZIER PIKE AND RIDDICK STREET

REVISIONS	DATE

CITY OF LITTLE ROCK, ARKANSAS

EAST 39TH ST. DRAINAGE IMPROVEMENTS

MAINTENANCE OF TRAFFIC

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LITTLE ROCK, ARKANSAS 72201

STATE OF ARKANSAS

REGISTERED PROFESSIONAL ENGINEER

NO. 10452

ANDREW H. RIKE

DRAWN BY JNS

DESIGNED JNS

CHECKED AHR

DATE 6/26/2025

SCALE 1" = 80'

PROJECT NO. CLR # 01-22-DR-01

SHEET NO. C800

ROAD WORK AHEAD

(I) W20-1 (48" X 48")

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