



ARKANSAS DEPARTMENT OF TRANSPORTATION
CONSTRUCTION PLANS FOR STATE HIGHWAY



HWYS. 185 & 318
STRS. & APPRS. (S)

PHILLIPS COUNTY
ROUTE 185 SECTION 1
ROUTE 318 SECTION 2 & 3

JOB 110716

FED. AID PROJ. NHPP-0054(27)

NOT TO SCALE

PROJECT
LOCATIONS

VICINITY MAP

STA. 16+55.00
BEGIN JOB 110716
BEGIN SITE 1
LOG MILE = 1.47

STRUCTURES OVER 20'-0" SPAN

① STA. 17+07 CONST.
TRI. 8' X 6' X 69' R.C. BOX CULVERT
ON 30' LT. FWD. SKEW
WITH 3:1 WINGS LT. & RT.
Q25 = 1300 C.F.S. D.A. = 1.23 SQ. MI.
SPAN = 30'-7"
CHANNEL CHANGE = 69 CU. YDS.

② STA. 35+27 CONST.
QUINT. 12' X 11' X 50' R.C. BOX CULVERT
WITH 3:1 WINGS LT. & RT.
Q25 = 2600 C.F.S. D.A. = 22.3 SQ. MI.
SPAN = 64'-3"
CHANNEL CHANGE = 349 CU. YDS.

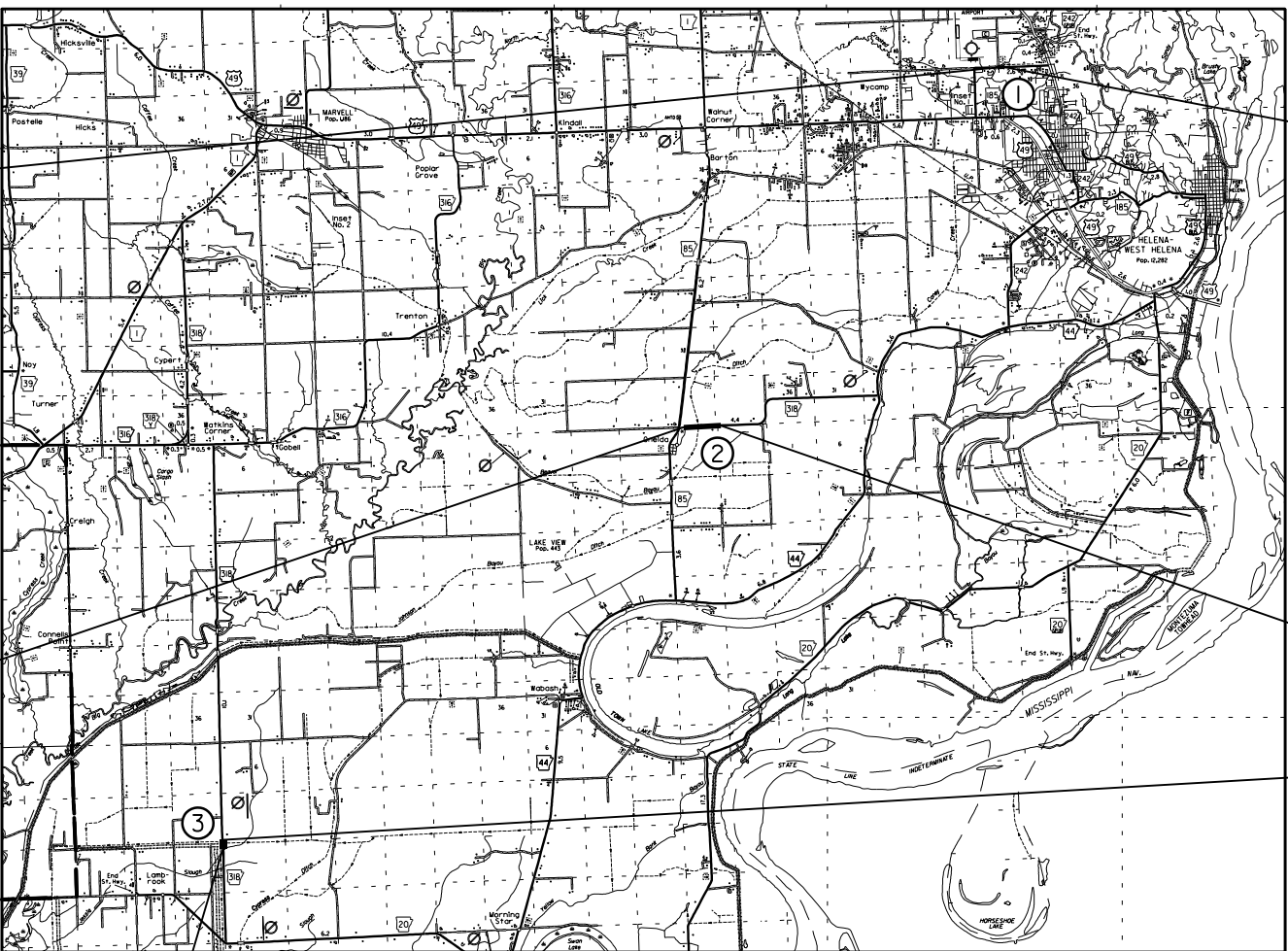
③ STA. 45+29 CONST.
TRI. 10' X 7' X 72' R.C. BOX CULVERT
ON 15' RT. FWD. SKEW
WITH 3:1 WINGS LT. & RT.
Q25 = 1010 C.F.S. D.A. = 6.77 SQ. MI.
SPAN = 33'-8"
CHANNEL CHANGE = 516 CU. YDS.

STA. 31+30.00
BEGIN SITE 2
LOG MILE = 4.00

PROJECT COORDINATES:

	BEGIN SITE 1	MID-POINT OF SITE 1	END OF SITE 1
LAT.	N34°34'09"	N34°34'09"	N34°34'09"
LONG.	W90°39'48"	W90°39'47"	W90°39'47"
	BEGIN SITE 2	MID-POINT OF SITE 2	END OF SITE 2
LAT.	N34°28'02"	N34°28'02"	N34°28'02"
LONG.	W90°46'35"	W90°46'30"	W90°46'26"
	BEGIN SITE 3	MID-POINT OF SITE 3	END OF SITE 3
LAT.	N34°21'00"	N34°21'01"	N34°21'02"
LONG.	W90°57'01"	W90°57'01"	W90°57'01"

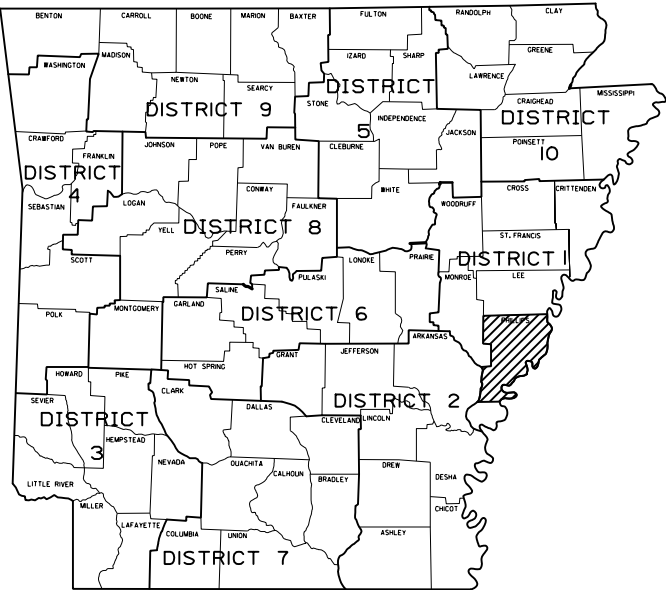
STA. 44+50.00
BEGIN SITE 3
LOG MILE = 13.08



GROSS LENGTH OF PROJECT 1030.00 FEET OR 0.195 MILES
NET LENGTH OF ROADWAY 901.50 FEET OR 0.171 MILES
NET LENGTH OF BRIDGES 128.50 FEET OR 0.024 MILES
NET LENGTH OF PROJECT 1030.00 FEET OR 0.195 MILES

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	110716		1	43

② HWYS. 185 & 318 STRS. & APPRS. (S)



ARKANSAS HWY. DIST. 1

STA. 17+60.00
END SITE 1

• DESIGN TRAFFIC DATA •

DESIGN YEAR-----2046
2026 ADT-----300
2046 ADT-----350
2046 DHV-----39
DIRECTIONAL DISTRIBUTION---0.60
TRUCKS-----8%
DESIGN SPEED-----55 MPH

STA. 38+95.00
END SITE 2

STA. 46+10.00
END SITE 3
END JOB 110716



8/28/2025

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.			110716	2
							43	

2 INDEX OF SHEETS AND STD. DRAWINGS



8/28/2025

INDEX OF SHEETS

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2	INDEX OF SHEETS AND STANDARD DRAWINGS
3	GOVERNING SPECIFICATIONS AND GENERAL NOTES
4	TYPICAL SECTIONS OF IMPROVEMENT
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19 - 21	MAINTENANCE OF TRAFFIC DETAILS
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23 - 25	QUANTITIES
26	SUMMARY OF QUANTITIES AND REVISIONS
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ROADWAY STANDARD DRAWINGS

DRWG.NO.	TITLE	DATE
DR-2	DETAILS OF DRIVEWAYS & STREET TURNOUTS	05-19-22
PBC-1	PRECAST CONCRETE BOX CULVERTS	01-28-15
PCC-1	CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING	02-27-14
PCM-1	METAL PIPE CULVERT FILL HEIGHTS & BEDDING	02-27-14
PCP-1	PLASTIC PIPE CULVERT (HIGH DENSITY POLYETHYLENE)	02-27-14
PCP-2	PLASTIC PIPE CULVERT (PVC F949)	02-27-14
PCP-3	PLASTIC PIPE CULVERT (POLYPROPYLENE)	02-27-20
PM-1	PAVEMENT MARKING DETAILS	02-27-20
PU-1	DETAILS OF PIPE UNDERDRAIN	12-08-16
RCB-1	REINFORCED CONCRETE BOX CULVERT DETAILS	07-26-12
RCB-2	EXCAVATION PAY LIMITS, BACKFILL, & SOLID SODDING FOR BOX CULVERTS	11-20-03
SE-2	TABLES AND METHOD OF SUPERELEVATION FOR TWO-WAY TRAFFIC	11-07-19
TC-1	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	11-07-19
TC-2	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	05-20-21
TC-3	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	05-22-25
TEC-1	TEMPORARY EROSION CONTROL DEVICES	11-16-17
TEC-2	TEMPORARY EROSION CONTROL DEVICES	06-02-94
TEC-3	TEMPORARY EROSION CONTROL DEVICES	11-03-94

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R030455 11-19-2019 .DGN
1/22/2020

NUMBER TITLE

- ERRATA ____ ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273 _ REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273 _ SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273 _ SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 140)
FHWA-1273 _ SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - GOALS AND TIMETABLES
FHWA-1273 _ SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - FEDERAL STANDARDS
FHWA-1273 _ SUPPLEMENT - POSTERS AND NOTICES REQUIRED FOR FEDERAL-AID PROJECTS
FHWA-1273 _ SUPPLEMENT - WAGE RATE DETERMINATION
100-3 ____ CONTRACTOR'S LICENSE
100-4 ____ DEPARTMENT NAME CHANGE
102-2 ____ ISSUANCE OF PROPOSALS
102-3 ____ PREQUALIFICATION OF BIDDERS
103-2 ____ CONTACT INFORMATION FOR MOTORIST DAMAGE CLAIMS
105-4 ____ MAINTENANCE DURING CONSTRUCTION
107-2 ____ RESTRAINING CONDITIONS
108-1 ____ LIQUIDATED DAMAGES
108-2 ____ WORK ALLOWED PRIOR TO ISSUANCE OF WORK ORDER
110-1 ____ PROTECTION OF WATER QUALITY AND WETLANDS
210-1 ____ UNCLASSIFIED EXCAVATION
303-1 ____ AGGREGATE BASE COURSE
306-1 ____ QUALITY CONTROL AND ACCEPTANCE
400-1 ____ TACK COATS
400-4 ____ DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
400-5 ____ PERCENT AIR VOIDS FOR ACHM MIX DESIGNS
400-6 ____ LIQUID ANTI-STRIP ADDITIVE
400-7 ____ TRACKLESS TACK
404-3 ____ DESIGN OF ASPHALT MIXTURES
409-2 ____ ASPHALT LABORATORY FACILITY
410-1 ____ CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
410-2 ____ DEVICES FOR MEASURING DENSITY FOR ROLLING PATTERNS
410-4 ____ EVALUATION OF ACHM SUBLOT REPLACEMENT MATERIAL
416-1 ____ RECYCLED ASPHALT PAVEMENT
501-3 ____ PORTLAND CEMENT CONCRETE PAVEMENT
600-2 ____ INCIDENTAL CONSTRUCTION
603-1 ____ LANE CLOSURE NOTIFICATION
604-1 ____ RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
604-3 ____ TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES (MASH)
606-1 ____ PIPE CULVERTS FOR SIDE DRAINS
620-1 ____ MULCH COVER
800-1 ____ STRUCTURES
802-5 ____ CONCRETE FOR STRUCTURES
804-2 ____ REINFORCING STEEL FOR STRUCTURES
JOB 110716 _ AIRPORT CLEARANCE REQUIREMENTS
JOB 110716 _ ASSESSMENT OF WORKING DAYS - MAINTENANCE OF TRAFFIC
JOB 110716 _ BIDDING REQUIREMENTS AND CONDITIONS
JOB 110716 _ BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOB 110716 _ BUY AMERICA - CONSTRUCTION MATERIALS
JOB 110716 _ CARGO PREFERENCE ACT REQUIREMENTS
JOB 110716 _ COLD MILLING - COUNTY PROPERTY
JOB 110716 _ CONSTRUCTION IN SPECIAL FLOOD HAZARD AREAS
JOB 110716 _ DESIGN AND QUALITY CONTROL OF ASPHALT MIXTURES
JOB 110716 _ DISADVANTAGED BUSINESS ENTERPRISE BIDDER'S RESPONSIBILITIES
JOB 110716 _ GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB 110716 _ LIQUIDATED DAMAGES PROCEDURE FOR BID LETTINGS
JOB 110716 _ MAINTENANCE OF TRAFFIC
JOB 110716 _ MANDATORY ELECTRONIC CONTRACT
JOB 110716 _ MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB 110716 _ NESTING SITES OF MIGRATORY BIRDS
JOB 110716 _ PARTNERING REQUIREMENTS
JOB 110716 _ PLASTIC PIPE
JOB 110716 _ PRICE ADJUSTMENT FOR ASPHALT BINDER
JOB 110716 _ PRICE ADJUSMENT FOR FUEL
JOB 110716 _ PROHIBITION OF CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT
JOB 110716 _ SHORING FOR CULVERTS
JOB 110716 _ SOIL STABILIZATION
JOB 110716 _ STORM WATER POLLUTION PREVENTION PLAN
JOB 110716 _ SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB 110716 _ UTILITY ADJUSTMENTS
JOB 110716 _ VALUE ENGINEERING
JOB 110716 _ WARM MIX ASPHALT
JOB 110716 _ WELLHEAD PROTECTION

GOVERNING SPECIFICATIONS

ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2014, AND THE FOLLOWING SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS:

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	110716		3	43

2 GOVERNING SPECS & GENERAL NOTES



8/28/2025

GENERAL NOTES

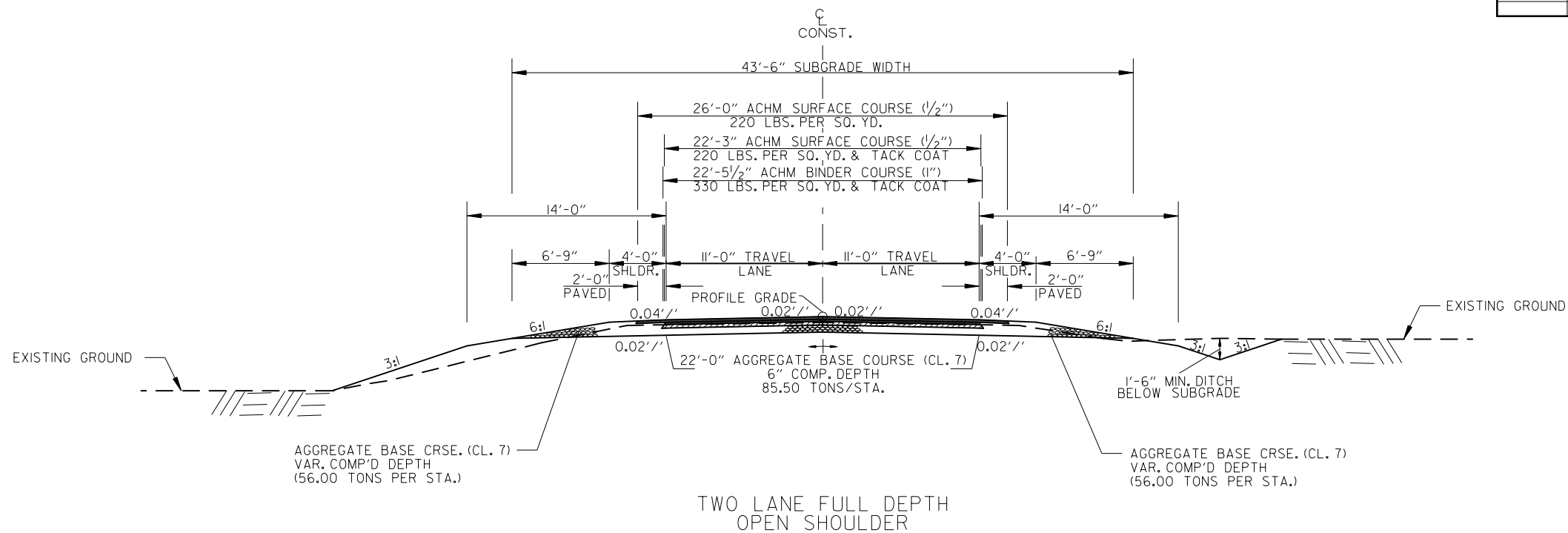
- GRADE LINE DENOTES FINISHED GRADE WHERE SHOWN ON PLANS.
- ALL PIPE LINES, POWER, TELEPHONE, AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE RESPECTIVE OWNERS AS PER AGREEMENT WITH SUCH OWNERS.
- ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAY BE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING U. S. MAILBOXES WITHIN THE PROJECT LIMITS IN SUCH A MANNER THAT THE PUBLIC MAY RECEIVE CONTINUED MAIL SERVICE. PAYMENT WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS BID ITEMS.
- ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
- ALL TREES THAT DO NOT DIRECTLY INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE SPARED AS DIRECTED BY THE ENGINEER. CARE AND DISCRETION SHALL BE USED TO ENSURE THAT ALL TREES NOT TO BE REMOVED SHALL BE HARMED AS LITTLE AS POSSIBLE DURING THE CONSTRUCTION OPERATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A FENCE TO CONTROL LIVESTOCK IN AREAS WHERE PASTURES ARE SEVERED. WIRE FENCE MAY BE CONSTRUCTED INITIALLY, OR IN LIEU THEREOF, THE CONTRACTOR AT HIS OWN EXPENSE, MAY ELECT TO PROVIDE TEMPORARY FENCING SUITABLE TO CONTAIN LIVESTOCK.
- THE SEQUENCE AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS IS A GENERAL OUTLINE FOR THE CONSTRUCTION OF THIS PROJECT, AND IN NO WAY IS IT INTENDED TO COVER EVERY ITEM IN THE PROJECT. ITEMS NOT CRITICAL TO THE CONSTRUCTION SEQUENCE MAY BE CONSTRUCTED IN ANY STAGE AS APPROVED BY THE RESIDENT ENGINEER.
- ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM NO. 210 - UNCLASSIFIED EXCAVATION.
- THE EXISTING ASPHALT PAVEMENT TO BE REMOVED FROM THE REMAINING PAVEMENT SHALL BE SEPARATED BY SAWING ALONG A NEAT LINE. AFTER SAWING, THE PAVEMENT TO BE REMOVED SHALL BE CAREFULLY REMOVED IN A MANNER THAT WILL NOT DAMAGE THE PAVEMENT THAT IS TO REMAIN. ANY DAMAGE OF THE ASPHALT PAVEMENT THAT IS TO REMAIN IN PLACE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- THIS PROJECT IS COVERED UNDER A SECTION 404 NATIONWIDE 14 PERMIT. REFER TO SECTION 110 OF THE STANDARD SPECIFICATIONS, EDITION OF 2014, FOR PERMIT REQUIREMENTS.

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				JOB NO.	110716		4	43

2 TYPICAL SECTIONS OF IMPROVEMENT



8/28/2025



HWY. 185 STA. 16+55.00 - STA. 17+60.00 (SITE 1)
HWY. 318 STA. 31+30.00 - STA. 38+95.00 (SITE 2)

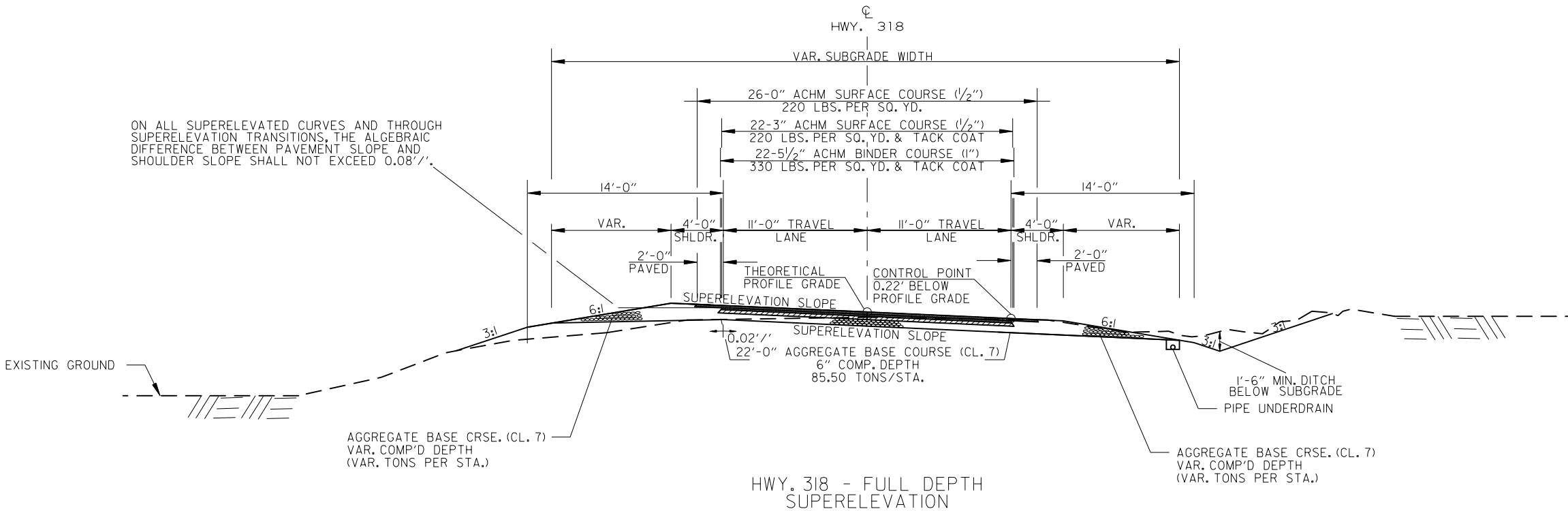
NOTES:
THE THICKNESS OF AGGREGATE BASE COURSE SHALL BE WITHIN PLUS OR MINUS ONE INCH OF THE PLAN THICKNESS SHOWN. THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET TOLERANCE INDICATED. PAYMENT WILL NOT BE MADE FOR MATERIAL PLACED IN EXCESS OF THE TOLERANCE INDICATED.

REFER TO CROSS SECTIONS FOR DEVIATION FROM THE NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.

ASPHALT FOR LEVELING OF EXISTING PAVEMENT SHALL BE PLACED ONLY IF AND WHERE DIRECTED BY THE ENGINEER. CALCULATIONS FOR THE AMOUNT OF LEVELING AND LEVELING OPERATIONS SHALL BE PERFORMED BEFORE CONSTRUCTING NOTCH AND WIDENING. CALCULATIONS WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED INCLUDED IN THE VARIOUS PAY ITEMS.

THE FINAL 2" OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. LONGITUDINAL JOINTS SHALL BE AT LANE LINES.

WITH THE APPROVAL OF THE ENGINEER, THE CONTRACTOR WILL BE ALLOWED TO SUBSTITUTE, AT NO ADDITIONAL COST TO THE DEPARTMENT, THE FIRST LIFT OF ACHM SURFACE COURSE (1/2") IN LIEU OF AGGREGATE BASE COURSE ON THE SHOULDERS.



HWY. 318 - FULL DEPTH SUPERELEVATION
HWY. 318 STA. 44+50.00 - STA. 46+10.00 (SITE 3)

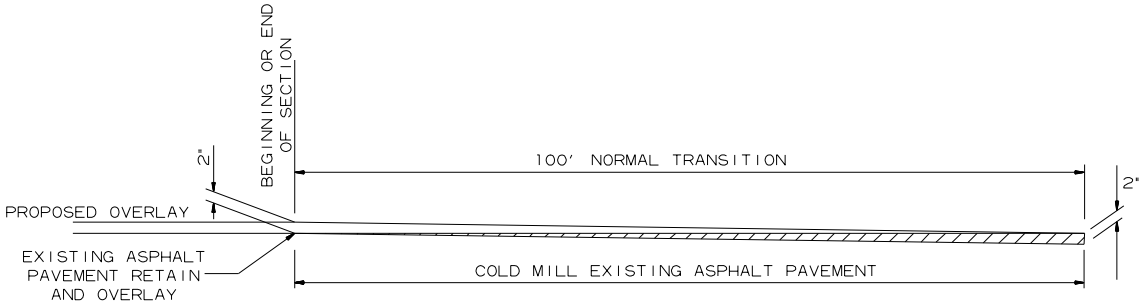
TYPICAL SECTIONS OF IMPROVEMENT

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO. 110716			5	43

2 SPECIAL DETAILS



8/28/2025



DETAIL FOR TRANSITIONS

MID-SECTION

R.C. BOX SECTION	DESIGN FILL DEPTH (FT.)			CLEAR SPAN (FT.)			CLEAR HEIGHT (FT.)			TOP SLAB THK.	BOTTOM SLAB THK.	SIDE WALL THK.	INTERIOR WALL THK.	OVER ALL WIDTH	OVER ALL HEIGHT	SECTION LENGTH (FT.)	TOP SLAB REINFORCING STEEL								BOTTOM SLAB REINFORCING STEEL								SIDE WALL REINFORCING STEEL				INTERIOR WALL REINFORCING STEEL				TOP SLAB DISTRIBUTION REINF. STEEL			BOTTOM SLAB DISTRIBUTION REINF. STEEL			SIDE WALL DISTRIBUTION REINF. STEEL			INTERIOR WALL DISTRIBUTION REINF. STEEL		
	LENGTH = OW - 4" + BENDS																LENGTH = OW - 4" + BENDS								"f0" LENGTH = OH - 4"				"f1" LENGTH = OH - 4"				"g" LENGTH = SL			"e" LENGTH = SL			"d1" LENGTH = SL			"d2" LENGTH = SL										
	"a"		Bent "b"		"c"		SPACING	NO. REQ'D	"d"								Bent "b1"		"e"		SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D	SIZE	SPACING	NO. REQ'D							
	SIZE	L	SIZE	L	SIZE	L			SIZE								L	SIZE	L	SIZE																										L	SIZE	L				
A	5	8	6	9	9	7	8	26'-6"	7'-6"	49.19	4	26'-2"	7	26'-7"	6	26'-2"	16	36	4	26'-2"	4	26'-6"	4	26'-2"	13	45	4	5.5	214	7'-2"	4	12	196	7'-2"	4	12	53	4	12	53	4	12	12	4	12	24						

99.74	CU. YDS.	CLASS "S" CONCRETE
13291	LBS.	REINFORCING STEEL (GR. 60)

SHEET 1 OF 2
DETAILS OF R.C. BOX CULVERT
TRIPLE BARREL BOX CULVERT
Sta. 17+07



INLET SLOPE SECTION(S)

[illegible]

	CU. YDS.	CLASS "S" CONCRETE
		REINFORCING STEEL (GR. 60)
TOTAL		

Design Fill Depth	Range of Actual Fill Depth
2	0.0 ft - 2.0 ft
5	>2.0 ft - 5.0 ft
10	>5.0 ft - 10.0 ft
15	>10.0 ft - 15.0 ft
20	>15.0 ft - 20.0 ft
25	>20.0 ft - 25.0 ft
30	>25.0 ft - 30.0 ft
35	>30.0 ft - 35.0 ft
40	>35.0 ft - 40.0 ft

Data shown for Mid-Section, Slope Section(s), and Skewed End Section is based on the design fill depth shown in the table, see PLAN AND PROFILE SHEETS for actual fill depth.

INLET SKEWED END SECTION

SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH	TOP SLAB REINFORCING STEEL				BOTTOM SLAB REINFORCING STEEL				SIDE WALL REINFORCING STEEL				INTERIOR WALL REINFORCING STEEL				TOP SLAB DISTRIBUTION REINFORCING STEEL				BOTTOM SLAB DISTRIBUTION REINFORCING STEEL				SIDE WALL DISTRIBUTION REINFORCING STEEL				INTERIOR WALL DISTRIBUTION REINFORCING STEEL				CLASS "S" CONCRETE (Includes HDWL)	REINFORCING STEEL (GR 60) (Includes HDWL)																		
													"a"				"c"				"d"				"f"				"f0"				"f1"				"g"				"e"						"d1"				"d2"													
													SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTHS VARY	SIZE	SPACING	NO. REQ'D	LENGTHS VARY	SIZE	SPACING	NO. REQ'D	LENGTH			SIZE	SPACING	NO. REQ'D	LENGTH														
30	3'-1"	5	8	6	9'-8"	9	3	9	7	8	26'-6"	7'-6"	4	4	Max 26'-2"	40	Min 3'-1"	6	7	Max 26'-2"	Min 3'-1"	23	4	6.5	Max 26'-2"	Min 3'-1"	25	4	7.5	Max 26'-2"	Min 3'-1"	22	4	5.5	43	7'-2"	4	12	44	7'-2"	4	12	53	Max 17'-2"	Min 1'-10"	4	12	53	Max 17'-2"	Min 1'-10"	4	12	6	LONG 16'-11"	6	SHORT 2'-1"	4	12	12	LONG 12'-0"	12	SHORT 7'-0"	20.18	3353
"k1" HDWL BARS													"k2" HDWL BARS			"h" HDWL BARS																																																
SIZE		LENGTH		NO. REQ'D		SIZE		LENGTH		NO. REQ'D		SIZE		LENGTH		Y		NO. REQ'D																																														
4		30'-3"		6		4		30'-3"		6		4		1'-8"		0'-8"		32																																														

① Any Bar Lap Required for the Skewed End Section shall be considered subsidiary to the item "Reinforcing Steel - Roadway (Grade 60)."

INLET WINGWALL TABLE

[illegible]

MID-SECTION

BAR LAP TABLE

# of Long. Laps Req'd.	SL = Section Length
0	< 40.0 ft
1	>40.0 ft - 78.0 ft
2	>78.0 ft - 116.0 ft
3	>116.0 ft - 154.0 ft
4	>154.0 ft - 192.0 ft
5	>192.0 ft - 230.0 ft
6	>230.0 ft - 268.0 ft
7	>268.0 ft - 306.0 ft
8	>306.0 ft - 344.0 ft

This drawing to be used in conjunction with
SHEET 1 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'GENERAL NOTES & LONGITUDINAL SECTION LENGTH SCHEDULE',
SHEET 3 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'DETAILS OF MULTI-BARREL R.C. BOX CULVERT',
SHEET 4 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'DETAILS OF WINGWALLS', and
STANDARD DRAWING RCB-2.

For additional information and outlet sections, see Sheet 2 of 2.

Min. Bar Lap Length	
#4	1'-9"
#5	2'-2"
#6	2'-7"
#7	3'-6"
#8	4'-7"

#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"



TABULAR DATA BY: BTF DATE: 1/18/2023
CHECKED BY: MAC DATE: 1/18/2023

[illegible]

#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"

STATE OF
ARKANSAS
LICENSED
PROFESSIONAL
ENGINEER
8-14-23
No. 20726
MARTIN A. CHORKEY

TABULAR DATA BY: BTF DATE: 1/18/2023
CHECKED BY: MAC DATE: 1/18/2023

① Any Bar Lap Required for the Skewed End Section shall be considered subsidiary to the item "Reinforcing Steel - Roadway (Grade 60)."



The required number of bars and lengths shown are for estimating purpose only.
The actual number and length required shall be determined in field.

Unless otherwise noted, all dimensions are in inches.

[illegible]

								CU. YDS.	CLASS "S" CONCRETE
								LBS.	REINFORCING STEEL (GR. 60)
TOTAL									
0.60								174	

Design Fill Depth	Range of Actual Fill Depth
2	0.0 ft - 2.0 ft
5	>2.0 ft - 5.0 ft
10	>5.0 ft - 10.0 ft
15	>10.0 ft - 15.0 ft
20	>15.0 ft - 20.0 ft
25	>20.0 ft - 25.0 ft
30	>25.0 ft - 30.0 ft
35	>30.0 ft - 35.0 ft
40	>35.0 ft - 40.0 ft

Data shown for Mid-Section, Slope Section(s), and Skewed End Section is based on the design fill depth shown in the table, see PLAN AND PROFILE SHEETS for actual fill depth.

[illegible]

	CU, YDS.	CLASS "S" CONCRETE (Includes HDWL)
	LBS.	① REINFORCING STEEL (GR 60) (Includes HDWL)

① Any Bar Lap Required for the Skewed End Section shall be considered subsidiary to the item "Reinforcing Steel - Roadway (Grade 60)."

OVER ALL WIDTH	CLEAR HEIGHT	FOOTING THK.	WING WALL THK.	BOX SKEW (DEG.)	SLOPE	HDWL LENGTH	HEEL	WALL HEIGHT		WING WALL ANGLE (DEGREE)		FOOTING WIDTH AT WALL END	WIDTH OF WING FOOTINGS AT HDWL		FOOTING DIMENSION PARALLEL WITH HDWL		LENGTH OF WING WALLS		LENGTH OF FOOTING HEEL		CLASS "S" CONCRETE (Includes apron)	REINFORCING STEEL (Includes apron and laps if required)
								AT HDWL	AT WING END				WING A	WING B	WING A	WING B	WING A	WING B	WING A	WING B		
OW	H	WB	CW	SK	SL	K	HL	WH1	WH2	AF1	AF2	WE	WF1	WF2	G1	G2	W1	W2	W3	W4		
64'-3"	11'-0"	1'-0"	0'-11"	0	3:1	62'-8"	2'-0"	11'-10"	3'-8"	0	30	3'-5"	5'-3 1/8"	5'-11 1/2"	2'-4 1/8"	2'-11 1/4"	27'-11 3/4"	35'-6"	27'-11 3/4"	38'-11 5/8"	32.68	2527

WING	F1				F2				F3				F4				F5				F6				F7		F8				F9		F10		F11		F12				REINF. STEEL QTY. PER WING (LBS)					
	BAR SIZE	MAX. SPACING	NO. REQ'D	LENGTHS VARY	BAR SIZE	SPACING	NO. REQ'D	LENGTHS	BAR SIZE	SPACING	NO. REQ'D	LENGTHS	BAR SIZE	SPACING	NO. REQ'D	LENGTHS	BAR SIZE	SPACING	NO. REQ'D	LENGTHS	BAR SIZE	SPACING	NO. REQ'D	LENGTHS	BAR SIZE	SPACING	NO. REQ'D	LENGTHS	BAR SIZE	SPACING	NO. REQ'D	LENGTHS	BAR SIZE	SPACING	NO. REQ'D	LENGTHS										
WING A	4	12	28	X L Min 5'-2" Max 15'-1" 1'-0" Max 2'-11"	5	12	4	X L 8'-7" 2'-8"	4	12	11	X L 6'-8" 2'-0"	4	18	10	Min 2'-1" Max 22'-8"	4	18	6	27'-8"	4	18	19	X L Min 6'-11" Max 14'-9" 2'-7" Max 2'-7"	4	8	27'-8"	6	18	18	X L Min 4'-5" Max 12'-3"	4	18	2	Min 23'-9" Max 23'-9"	4	2	28'-8"	4	2	28'-11"	6	12	11	L 3'-4" 1'-8"	1065
WING B	4	12	36	X L Min 5'-2" Max 15'-8" 1'-0" Max 3'-6" 4'-3" Max 12'-3"	5	12	9	X L 8'-10" 2'-11" 6'-0"	4	12	9	X L 5'-11" 2'-3" 3'-9"	4	18	10	Min 2'-9" Max 28'-10"	4	18	6	35'-2"	4	18	24	X L Min 6'-10" Max 14'-9" Min 2'-7" Max 2'-7" Min 4'-4" Max 12'-3"	4	8	39'-10"	6	18	25	X L Min 2'-11" Max 23'-3" 5'-6" 44'-7"	4	18	4	Min 23'-3" Max 44'-7"	4	2	35'-11"	4	2	38'-3"	6	12	11	L 3'-4" 1'-8"	1462

MID-SECTION
BAR LAP TABLE

# of Long. Laps Req'd.	SL = Section Length
0	< 40.0 ft
1	>40.0 ft - 78.0 ft
2	>78.0 ft - 116.0 ft
3	>116.0 ft - 154.0 ft
4	>154.0 ft - 192.0 ft
5	>192.0 ft - 230.0 ft
6	>230.0 ft - 268.0 ft
7	>268.0 ft - 306.0 ft
8	>306.0 ft - 344.0 ft

Min. Bar Lap Length	
#4	1'-9"
#5	2'-2"
#6	2'-7"
#7	3'-6"
#8	4'-7"

#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"



TABULAR DATA BY: BTF DATE: 1/18/2023
CHECKED BY: MAC DATE: 1/18/2023

This drawing to be used in conjunction with
SHEET 1 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'GENERAL NOTES & LONGITUDINAL SECTION LENGTH SCHEDULE',
SHEET 3 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'DETAILS OF MULTI-BARREL R.C. BOX CULVERT',
SHEET 4 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'DETAILS OF WINGWALLS', and
STANDARD DRAWING RCB-2.

For additional information and outlet sections, see Sheet 2 of 2.

									CU YDS.	CLASS "S" CONCRETE
									LBS.	REINFORCING STEEL (GR 60)
									TOTAL	
									0.60	174

① Any Bar Lap Required for the Skewed End Section shall be considered subsidiary to the item "Reinforcing Steel - Roadway (Grade 60)."

Min. Bar Lap Length	
#4	1'-9"
#5	2'-2"
#6	2'-7"
#7	3'-6"
#8	4'-7"

#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		110716	9	43
				1 SPECIAL DETAILS				



TABULAR DATA BY: BTF DATE: 1/18/2023
CHECKED BY: MAC DATE: 1/18/2023



185.70	CU. YDS.	CLASS "S" CONCRETE
25622	LBS.	REINFORCING STEEL (GR. 60)

SHEET 1 OF 2
DETAILS OF R.C. BOX CULVERT
TRIPLE BARREL BOX CULVERT
Sta. 45+29

[illegible]

	CU. YDS.	CLASS "S" CONCRETE
TOTAL		

Design Fill Depth	Range of Actual Fill Depth
2	0.0 ft - 2.0 ft
5	>2.0 ft - 5.0 ft
10	>5.0 ft - 10.0 ft
15	>10.0 ft - 15.0 ft
20	>15.0 ft - 20.0 ft
25	>20.0 ft - 25.0 ft
30	>25.0 ft - 30.0 ft
35	>30.0 ft - 35.0 ft
40	>35.0 ft - 40.0 ft

Data shown for Mid-Section, Slope Section(s), and Skewed End Section is based on the design fill depth shown in the table, see PLAN AND PROFILE SHEETS for actual fill depth.

SKEW (DEGREE)		SLOPE	DESIGN FILL DEPTH (FT.)		CLEAR SPAN (FT.)	CLEAR HEIGHT (FT.)	SECTION LENGTH	TOP SLAB THK.	HDWL DEPTH	BOTTOM SLAB THK.	SIDE WALL THK.	INTERIOR WALL THK.	OVER ALL WIDTH	OVER ALL HEIGHT	TOP SLAB REINFORCING STEEL				BOTTOM SLAB REINFORCING STEEL				SIDE WALL REINFORCING STEEL				INTERIOR WALL REINFORCING STEEL				TOP SLAB DISTRIBUTION REINFORCING STEEL				BOTTOM SLAB DISTRIBUTION REINFORCING STEEL				SIDE WALL DISTRIBUTION REINFORCING STEEL				INTERIOR WALL DISTRIBUTION REINFORCING STEEL				CLASS "S" CONCRETE (includes HDWL)	REINFORCING STEEL (GR 60) (includes HDWL)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTHS VARY	SIZE	SPACING	NO. REQ'D	LENGTHS VARY	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
10	3-1	2	10	7	4'-10"	12	3	12	6.5	8	32'-5"	9'-0"	6	9	Max	6	6	4	Max	13	4	9	Max	6	5	7	18	8'-8"	4	12	22	8'-8"	4	9	89	Max	4	12	89	Max	4	12	7	LONG	4	12			14	LONG																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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① Any Bar Lap Required for the Skewed End Section shall be considered subsidiary to the item "Reinforcing Steel - Roadway (Grade 60)."

[illegible]

MID-SECTION
BAR LAP TABLE

# of Long. Laps Req'd.	SL = Section Length
0	< 40.0 ft
1	> 40.0 ft - 78.0 ft
2	> 78.0 ft - 116.0 ft
3	> 116.0 ft - 154.0 ft
4	> 154.0 ft - 192.0 ft
5	> 192.0 ft - 230.0 ft
6	> 230.0 ft - 268.0 ft
7	> 268.0 ft - 306.0 ft
8	> 306.0 ft - 344.0 ft

This drawing to be used in conjunction with
SHEET 1 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'GENERAL NOTES & LONGITUDINAL SECTION LENGTH SCHEDULE',
SHEET 3 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'DETAILS OF MULTI-BARREL R.C. BOX CULVERT',
SHEET 4 OF 4, "GENERAL DETAILS OF R.C. BOX CULVERT", 'DETAILS OF WINGWALLS', and
STANDARD DRAWING RCB-2.

For additional information and outlet sections, see Sheet 2 of 2.

Min. Bar Lap Length	
#4	1'-9"
#5	2'-2"
#6	2'-7"
#7	3'-6"
#8	4'-7"

#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"



TABULAR DATA BY: BTF DATE: 1/18/2023
CHECKED BY: MAC DATE: 1/18/2023

OUTLET SLOPE SECTION(S)

[illegible][illegible]

OUTLET SKEWED END SECTION

SK	SL	D	S	H	LL	T	HD	B	C	W	OW	OH	TOP SLAB REINFORCING STEEL				BOTTOM SLAB REINFORCING STEEL				SIDE WALL REINFORCING STEEL				INTERIOR WALL REINFORCING STEEL				TOP SLAB DISTRIBUTION REINFORCING STEEL				BOTTOM SLAB DISTRIBUTION REINFORCING STEEL				SIDE WALL DISTRIBUTION REINFORCING STEEL				INTERIOR WALL DISTRIBUTION REINFORCING STEEL											
													"a"				"c"				"d"				"f"				"f0"				"f1"				"g"				"e"				"d1"				"d2"			
													SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	LENGTHS VARY	NO. REQ'D	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTHS VARY	SIZE	SPACING	NO. REQ'D	LENGTHS VARY	SIZE	SPACING	NO. REQ'D	LENGTH	SIZE	SPACING	NO. REQ'D	LENGTH
10	3'-1	2	10	7	4'-10"	12	3	12	6.5	8	32'-5"	9'-0"	6	9	Max 32'-1" Min 8'-10"	6	6	4	Max 32'-1" Min 8'-10"	13	4	9	Max 32'-1" Min 8'-10"	6	4	8.5	Max 32'-1" Min 8'-10"	6	5	7	18	8'-8"	4	12	22	8'-8"	4	9	89	Max 7'-7" Min 1'-10"	4	9	89	Max 7'-6" SHORT 1'-11"	4	12	7	LONG 7'-6" SHORT 3'-9"	4	12	14	SHORT 3'-9"
"k1" HDWL BARS							"k2" HDWL BARS					"h" HDWL BARS																																								
SIZE		LENGTH		NO. REQ'D		SIZE		LENGTH		NO. REQ'D		SIZE		LENGTH		Y		NO. REQ'D																																		
4		32'-7"		6		4		32'-7"		6		4		1'-11"		0'-11"		34																																		

15.37	CU. YDS.	CLASS "S" CONCRETE (Includes HDWL)
2597	LBS.	① REINFORCING STEEL (GR 60) (Includes HDWL)

OUTLET WINGWALL TABLE

[illegible]

Min. Bar Lap Length	
#4	1'-9"
#5	2'-2"
#6	2'-7"
#7	3'-6"
#8	4'-7"

#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	6"

① Any Bar Lap Required for the Skewed End Section shall be considered subsidiary to the item "Reinforcing Steel - Roadway (Grade 60)."



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		110716	11	43
				1 SPECIAL DETAILS				

©

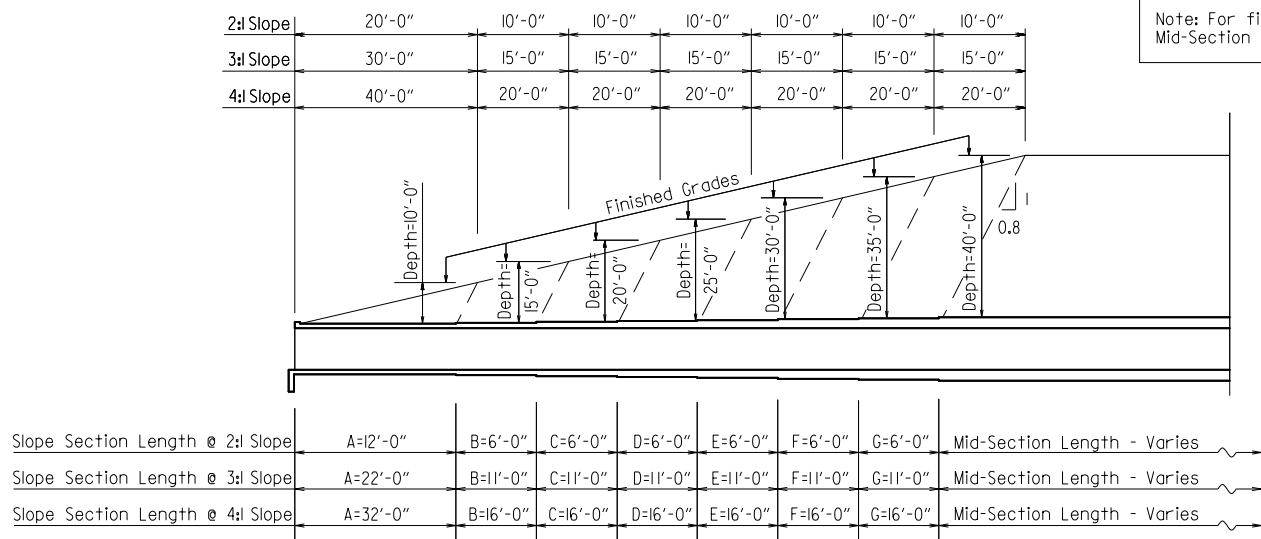
SHEET 2 OF 2
TAILS OF R.C. BOX CULVERT
TRIPLE BARREL BOX CULVERT
Sta. 45+29
SPECIAL DETAILS



The required number of bars and lengths shown are for estimating purpose only. The actual number and length required shall be determined in field.

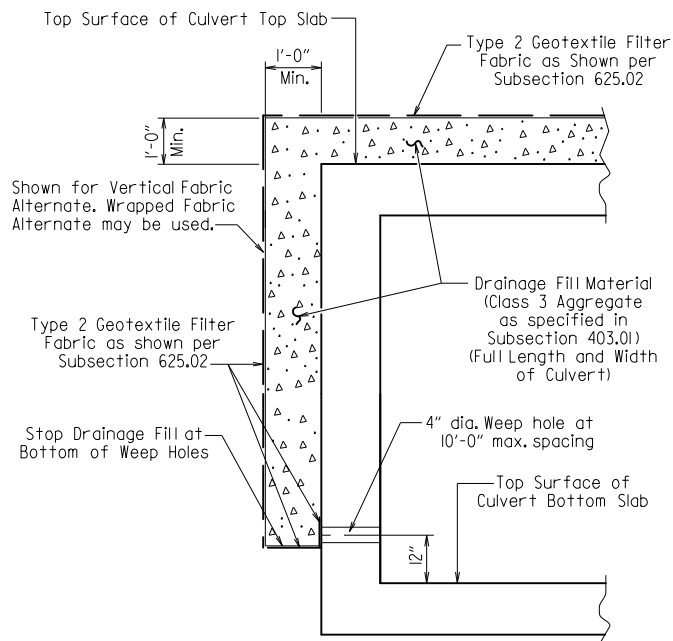
Unless otherwise noted, all dimensions are in inches.

V 1117 FILENAME



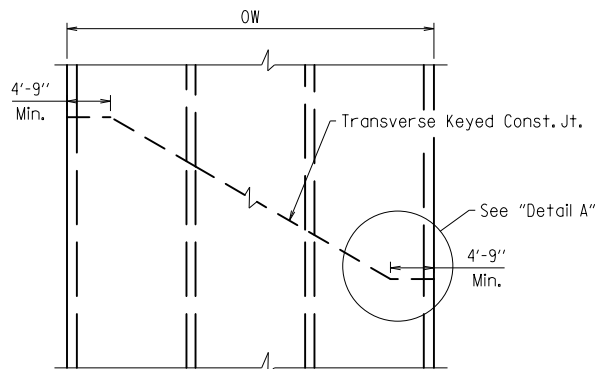
LONGITUDINAL SECTION LENGTH SCHEDULE FOR VARYING FILL DEPTHS OVER 10'

Lengths for Non-Skewed Boxes



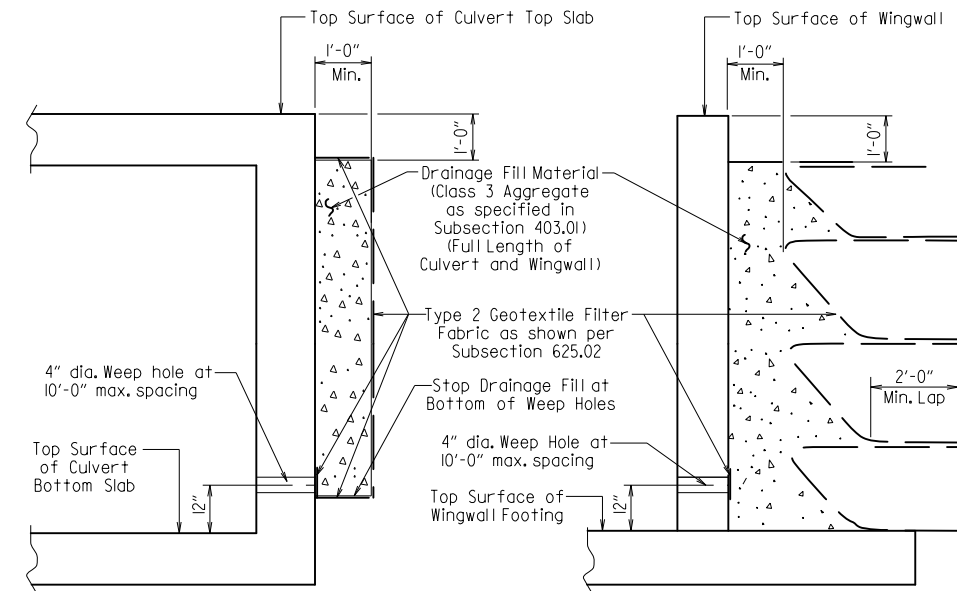
CULVERT DRAINAGE DETAIL FOR ROCK FILL

This detail shall be used when rock fill is specified for embankment construction.



SKewed TRANSVERSE JOINT DETAIL

This detail shall be used to construct a skewed transverse joint only for Multi-Barrel Culverts and only when required by the Maintenance of Traffic Plans. Otherwise, transverse joints should be made normal to the centerline of the barrel.



For Details of Excavation and Pay Limits, see Standard Drawing RCB-2.

VERTICAL FABRIC ALTERNATE

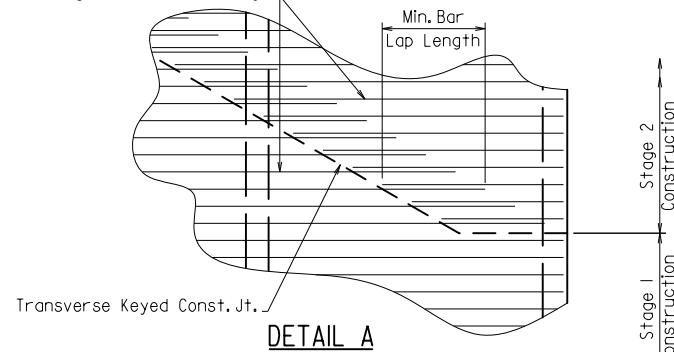
(Shown for Culvert, Similar for Wingwall)

WRAPPED FABRIC ALTERNATE

(Shown for Wingwall, Similar for Culvert)

WINGWALL & CULVERT DRAINAGE DETAIL

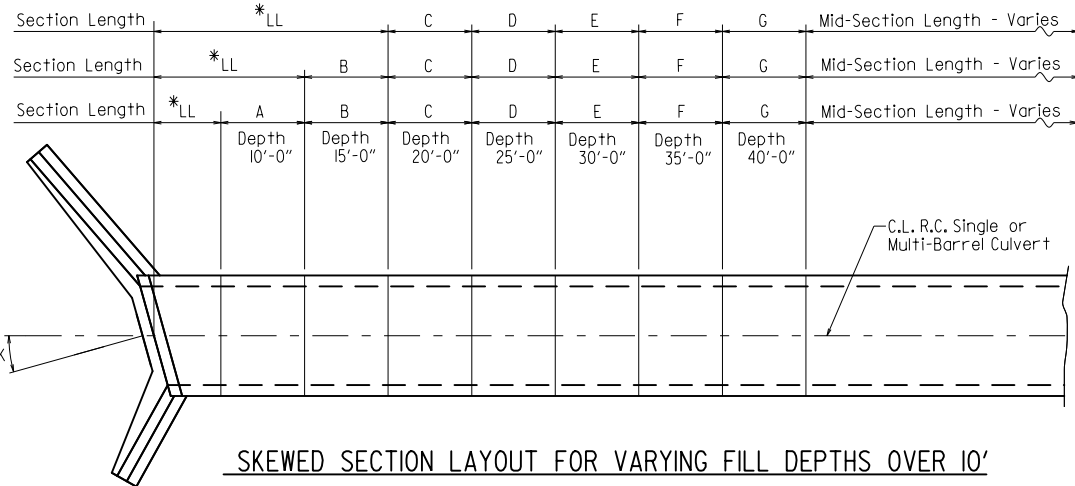
Slab bars "a", "b", "c", "d", "bl", or "f". Slab distribution and Wall reinforcing omitted for clarity.



See Tabular Data Sheets for Minimum Bar Lap Lengths.

Shown for transverse reinforcing, longitudinal reinforcing similar.

* LL = Skewed End Section Length - See "Skewed End Section Details" Length LL varies with skew angle, overall box width and fill depth and may eliminate the need for some slope section lengths as shown.



GENERAL NOTES:

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2014 edition) with applicable Supplemental Specifications and Special Provisions. Section and Subsection refer to the Standard Construction Specifications unless otherwise noted in the Plans.

DESIGN SPECIFICATIONS: AASHTO LRFD Bridge Design Specifications, Fifth Edition (2010) with 2010 interim revisions.

LIVE LOADING: HL-93

All concrete shall be Class 5 with a minimum 28-day compressive strength of 3,500 psi and shall be poured in the dry. All exposed corners to have 3/4" chamfers.

Reinforcing Steel shall be Grade 60 (yield strength = 60,000 psi) conforming to AASHTO M31 or M322, Type A, with mill test reports.

Reinforcing Steel Tolerances: The tolerances for reinforcing steel shall meet those listed in 'Manual of Standard Practice' published by Concrete Reinforcing Steel Institute (CRSI) except that the tolerance for truss bars such as Figure 3 on page 7-4 of the CRSI Manual shall be minus zero to plus 1/2 inch.

Excavation and backfilling shall be in accordance with the requirements of Section 801.

Membrane Waterproofing shall conform to the requirements of Section 815. Membrane Waterproofing shall be Type C and as directed by the Engineer applied to all construction joints in the top slab and the sidewalls of R.C. Box culverts and to the construction joint between wingwalls and R.C. Box culvert walls.

Weep Holes in box culvert walls shall have a maximum horizontal spacing of 10'-0" and shall be spaced to clear all reinforcing steel. The drain opening shall be 4" diameter and shall be placed 12" above the top of the bottom slab.

Weep Holes in wingwalls shall have a maximum horizontal spacing of 10'-0" and shall be spaced to clear all reinforcing steel. There shall be a minimum of two (2) weep holes in each wingwall. The drain opening shall be 4" diameter and shall be placed 12" above the top of the wingwall footing.

The barrel components of the culvert may be constructed using continuous pours. For longer culvert construction, the Contractor may use multiple pours with transverse construction joints spaced a minimum of 50 feet apart unless superseded by stage construction or site constraints as approved by the Engineer. Construction joints between footings and walls shall be made only where shown in the Plans. Joints shall be keyed and shall be normal to the centerline of barrel except as noted. Reinforcing shall be continuous through joints unless noted otherwise. Reinforcing through stage construction joints shall provide the minimum bar lap length shown on the Tabular Data Sheets. All longitudinal construction joints shall be submitted to the Engineer for approval.

Membrane Waterproofing, Weep Holes, Geotextile Filter Fabric, and Drainage Fill Material will not be paid for directly but shall be considered subsidiary to Class 5 Concrete.

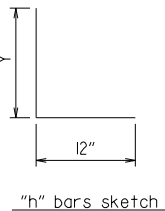
When the top slab of the box culvert serves as finished roadway surface, curing and finishing shall be in accordance with subsections 802.17 and 802.20 for bridge roadway surface and a tine finish shall be applied in accordance with subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish. Curing and finishing shall not be paid for directly, but shall be considered incidental to the item "Class 5 Concrete-Roadway". Class 1 Protective Surface Treatment shall be applied to the roadway surface and this work shall be paid for under the unit price bid for "Class 1 Protective Surface Treatment".

When precast reinforced concrete box culverts are substituted for cast in place box culverts, they shall be manufactured according to ASTM C 1577 and meet the requirements of Section 607. When the top slab of the box culvert serves as the finished roadway surface, a precast reinforced concrete box culvert substitution is not allowed.

SHEET 1 OF 4
GENERAL DETAILS OF R.C. BOX CULVERT
GENERAL NOTES &
LONGITUDINAL SECTION LENGTH SCHEDULE
SPECIAL DETAILS

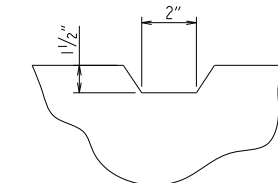


Note: When top slab of culvert serves as finished roadway surface, see General Notes on Sheet 1 of 4.

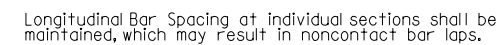
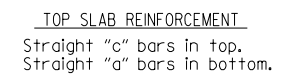
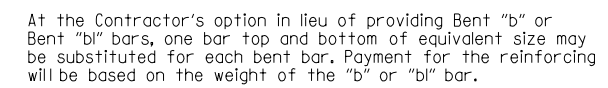


Bottom Slab

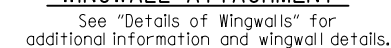
Straight "d" bars shall alternate with Bent "bl" bars in top.
Straight "f" bars shall alternate with Bent "bl" bars in bottom.



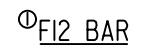
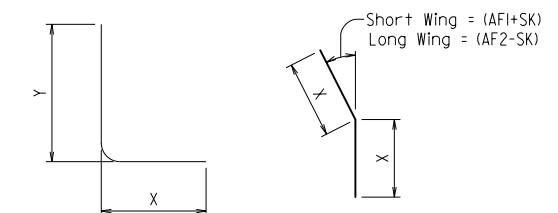
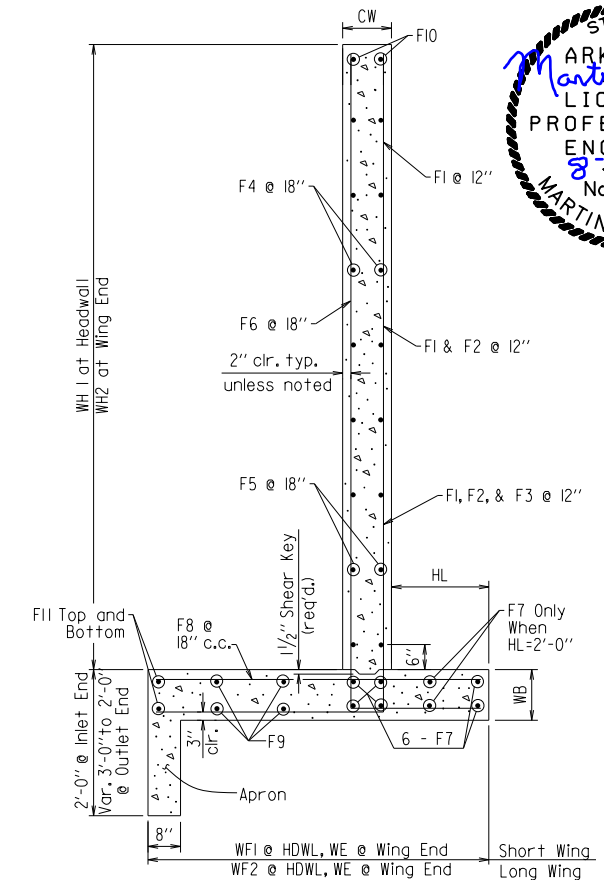
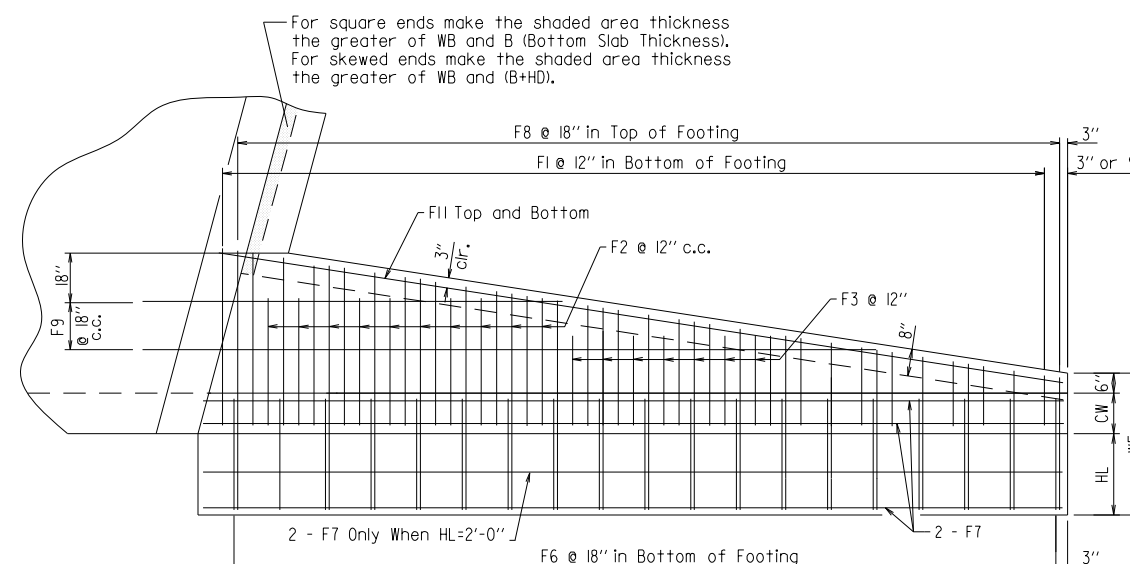
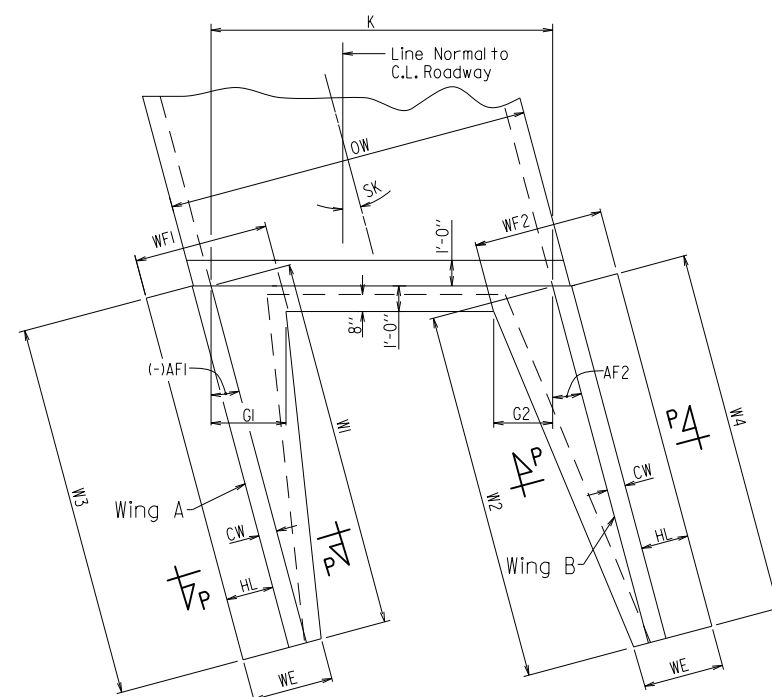
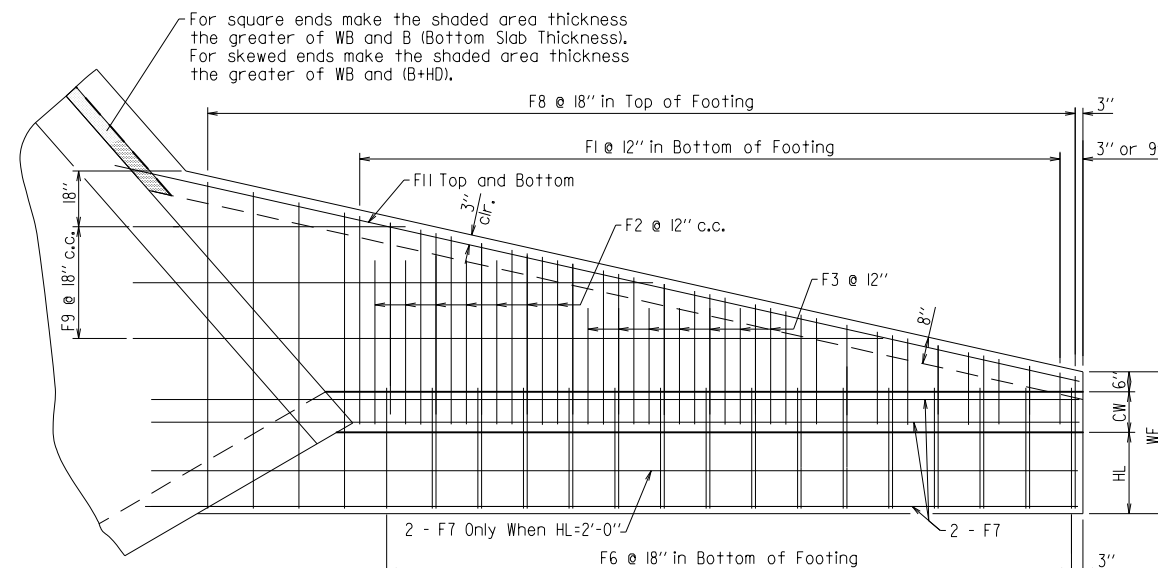
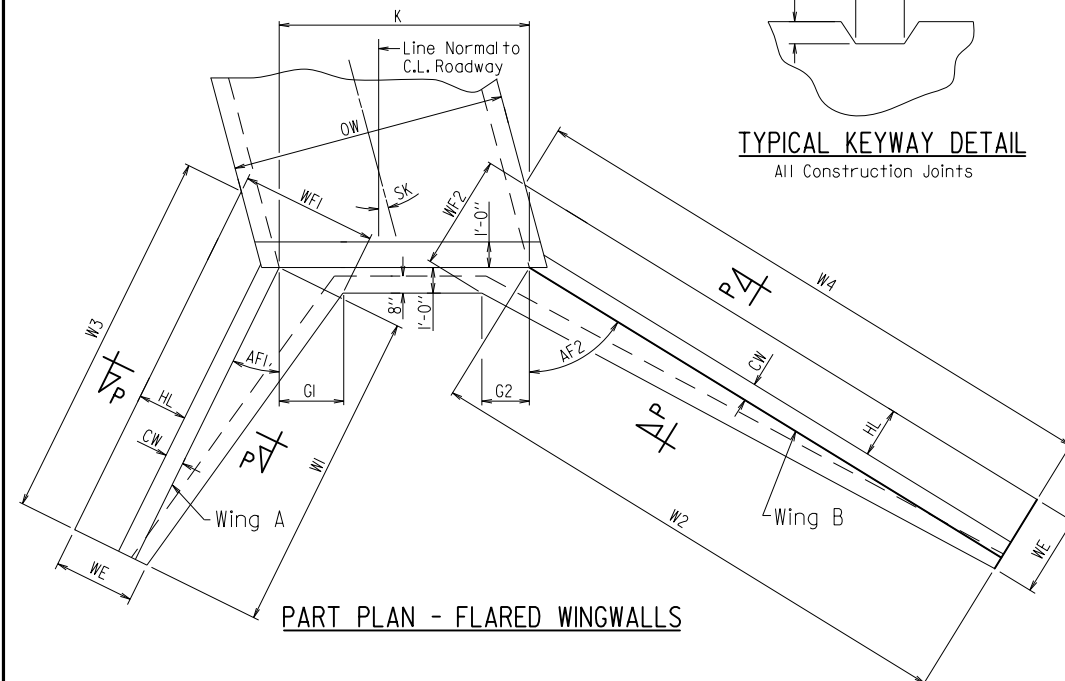
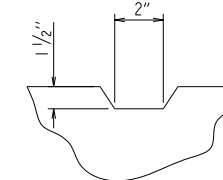
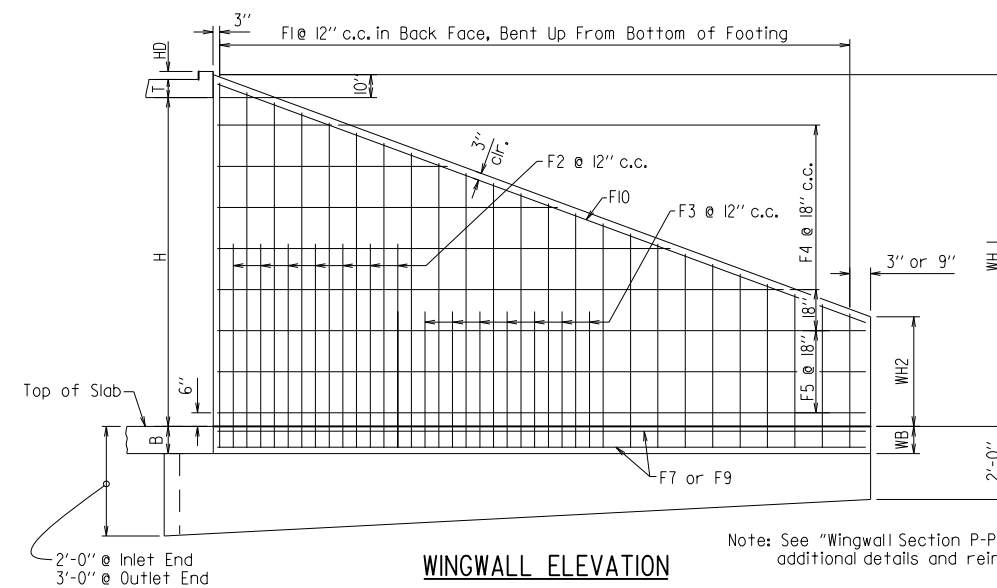
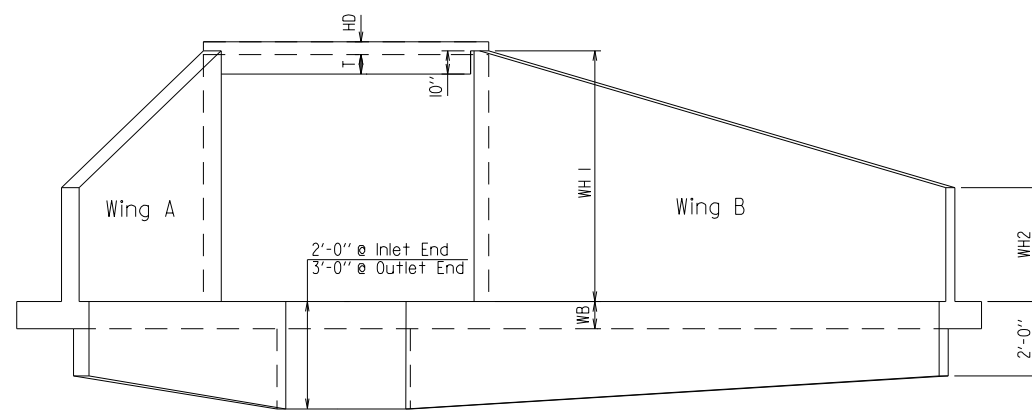
TYPICAL KEYWAY DETAIL
(All Construction Joints)



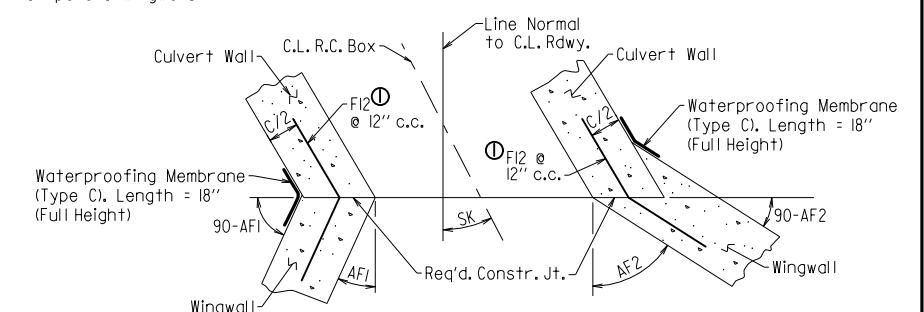
TOP SLAB SHOWN, BOTTOM SLAB SIMILAR



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		110716	15	43
				1 SPECIAL DETAILS				



① FI2 is a straight bar for parallel wingwalls



SHEET 4 OF 4

GENERAL DETAILS OF R.C. BOX CULVERT

DETAILS OF WINGWALLS

SPECIAL DETAILS



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	110716		17	43

2 TEMPORARY EROSION CONTROL DETAILS



8/28/2025

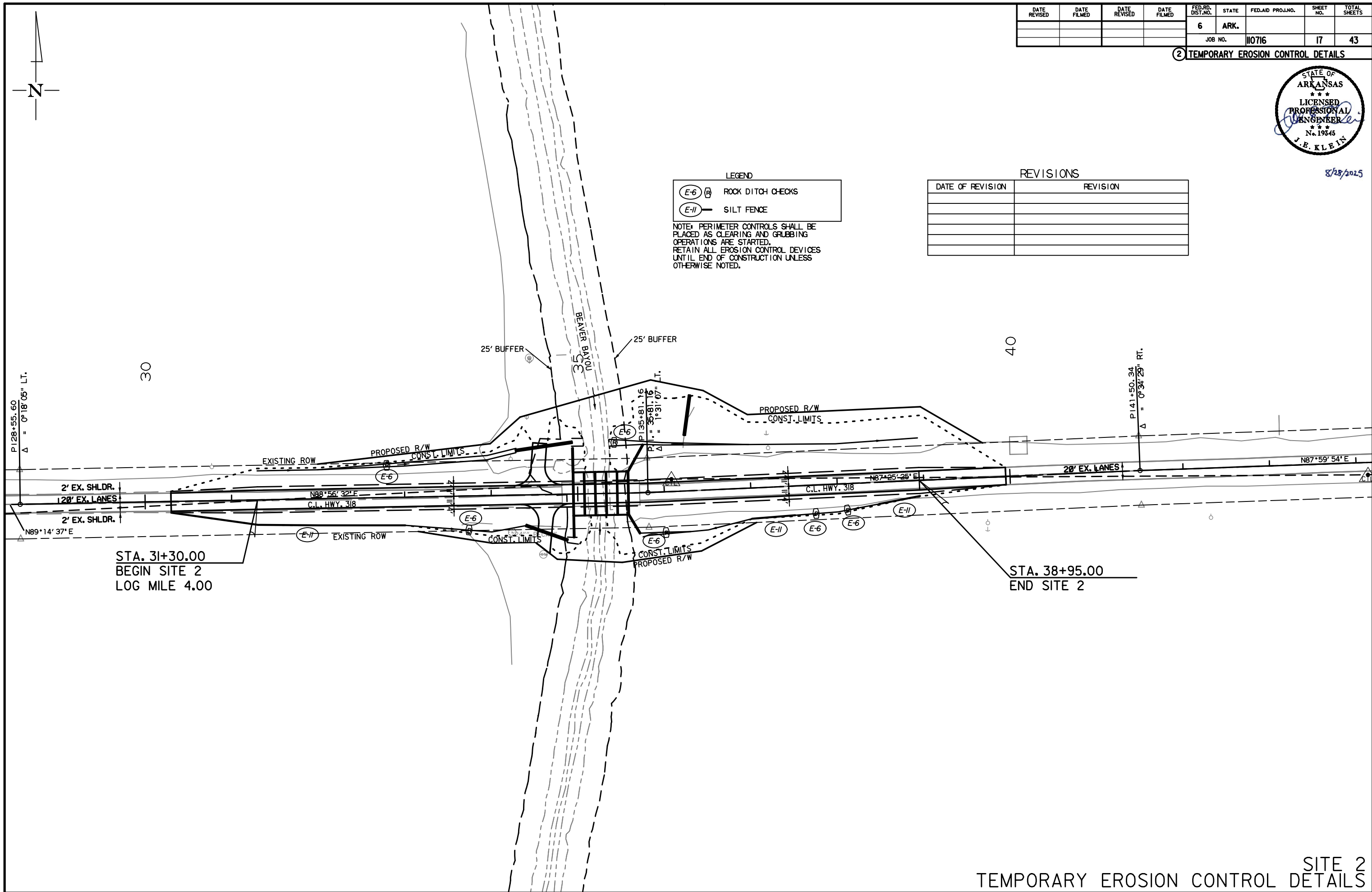
LEGEND

(E-6) @	ROCK DITCH CHECKS
(E-II) —	SILT FENCE

NOTE: PERIMETER CONTROLS SHALL BE PLACED AS CLEARING AND GRUBBING OPERATIONS ARE STARTED. RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

REVISIONS

DATE OF REVISION	REVISION

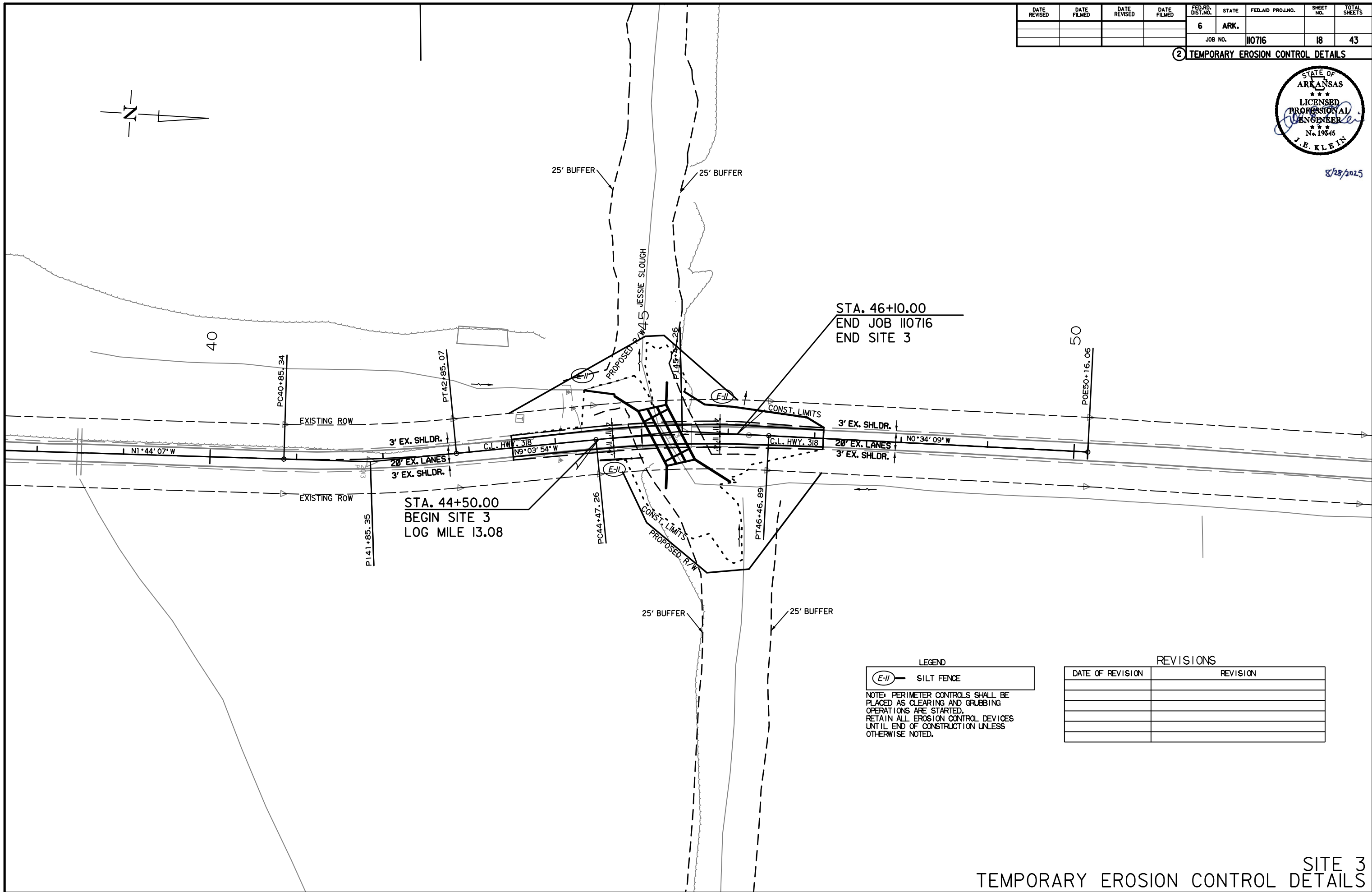


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO. 110716		18	43	

2 TEMPORARY EROSION CONTROL DETAILS

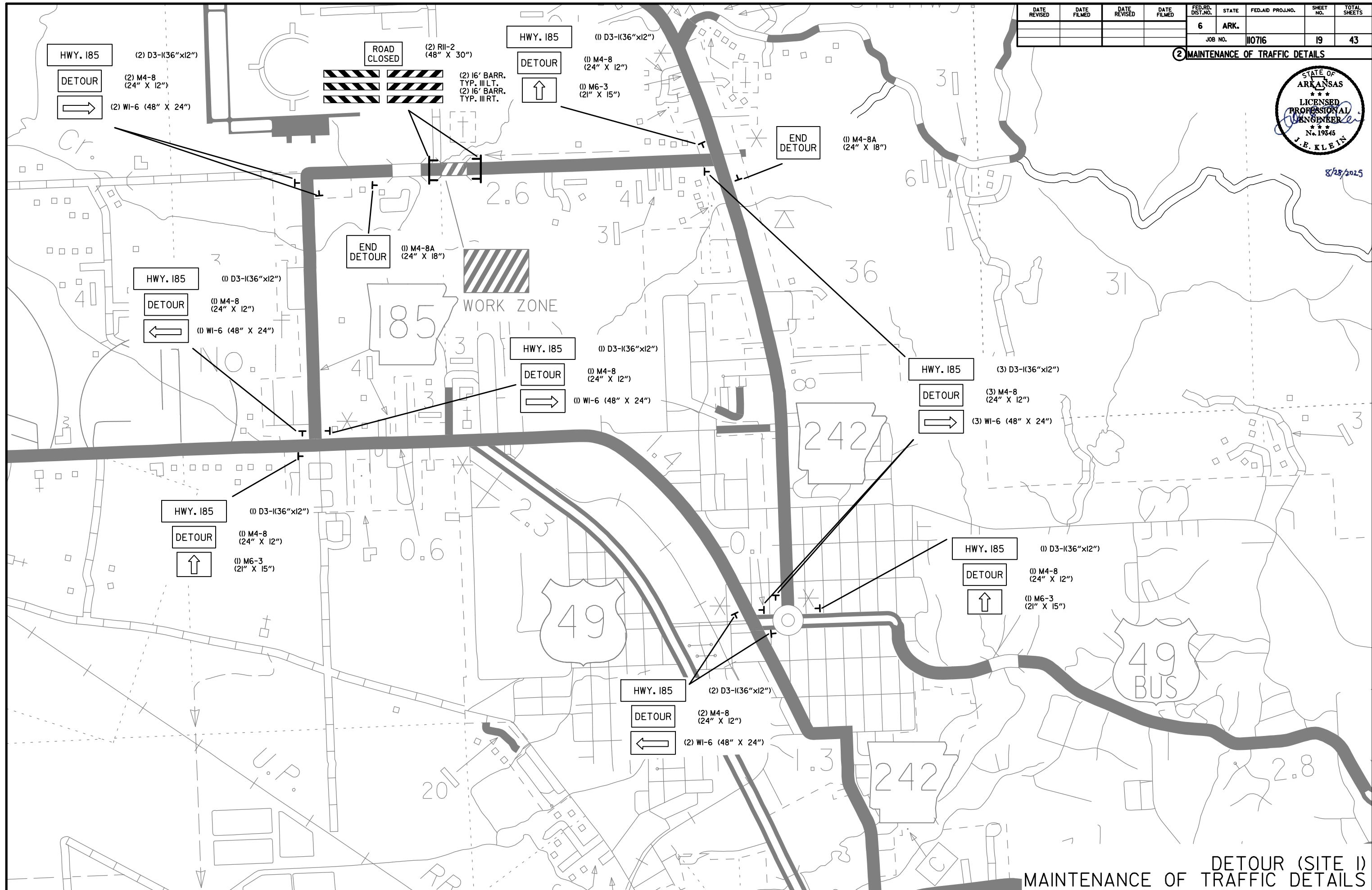


8/28/2025

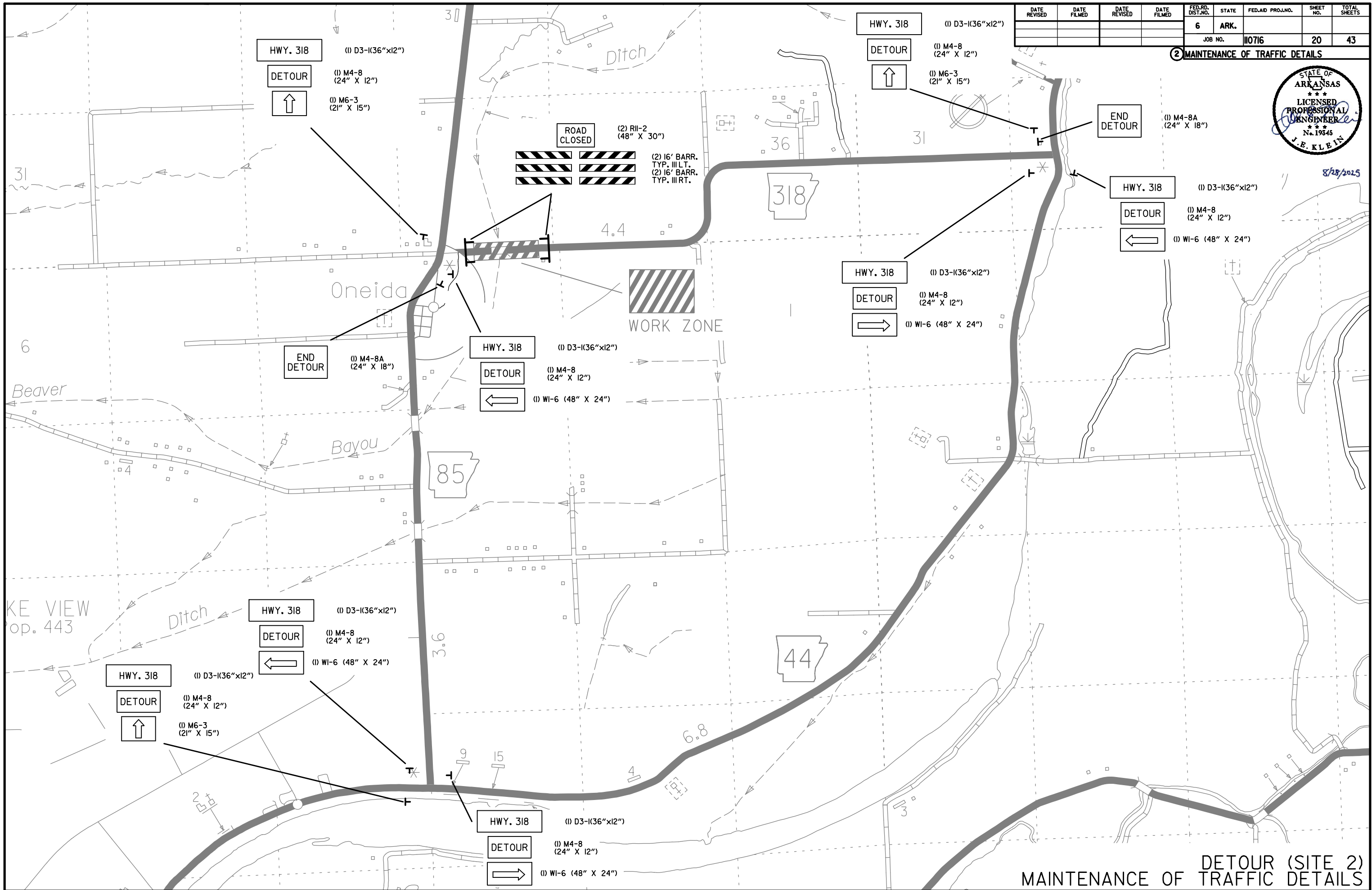


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	110716		19	43

2 MAINTENANCE OF TRAFFIC DETAILS



DETOUR (SITE 1)
MAINTENANCE OF TRAFFIC DETAILS



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO. 110716			22	43

2 PERMANENT PAVEMENT MARKING DETAILS



8/28/2025

PERMANENT PAVEMENT MARKINGS (SITE 1)

REFLECTORIZED PAINT PAVEMENT MARKINGS WHITE (6") = 610 LIN. FT.
REFLECTORIZED PAINT PAVEMENT MARKINGS YELLOW (6") = 610 LIN. FT.
RAISED PAVEMENT MARKERS TYPE II (YELLOW/YELLOW) (80' O.C.) = 4 EACH

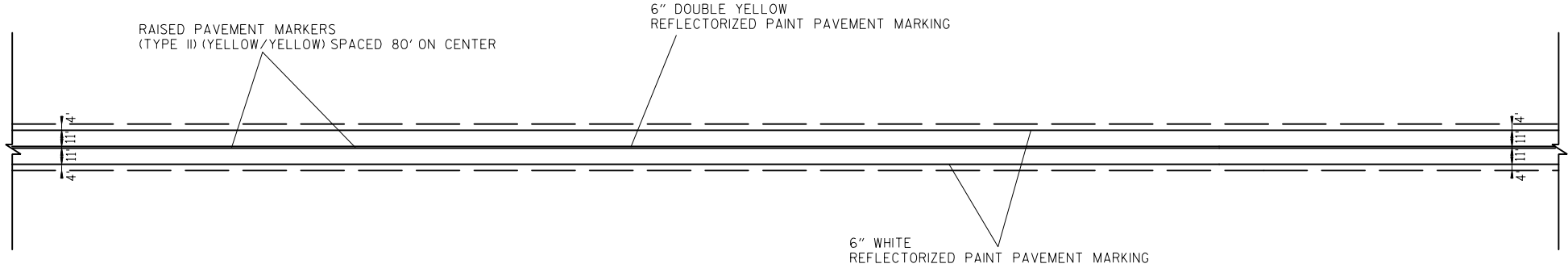
PERMANENT PAVEMENT MARKINGS (SITE 2)

REFLECTORIZED PAINT PAVEMENT MARKINGS WHITE (6") = 1930 LIN. FT.
REFLECTORIZED PAINT PAVEMENT MARKINGS YELLOW (6") = 1930 LIN. FT.
RAISED PAVEMENT MARKERS TYPE II (YELLOW/YELLOW) (80' O.C.) = 12 EACH

PERMANENT PAVEMENT MARKINGS (SITE 3)

REFLECTORIZED PAINT PAVEMENT MARKINGS WHITE (6") = 720 LIN. FT.
REFLECTORIZED PAINT PAVEMENT MARKINGS YELLOW (6") = 720 LIN. FT.
RAISED PAVEMENT MARKERS TYPE II (YELLOW/YELLOW) (80' O.C.) = 5 EACH

NOTE: THE 6" YELLOW STRIPING QUANTITY HAS BEEN ESTIMATED BASED ON A DOUBLE YELLOW CENTERLINE FOR THE ENTIRE PROJECT. THE PROJECT MUST BE MARKED FOR PASSING/NO PASSING ZONES PRIOR TO THE PLACEMENT OF ANY FINAL STRIPING. CONTACT THE MAINTENANCE DIVISION AFTER THE FINAL LIFT OF SURFACE COURSE HAS BEEN PLACED TO SCHEDULE THE ZONING OF THE PROJECT.



TYPICAL 2-LANE PERMANENT PAVEMENT MARKING LAYOUT

mjhartman 1/22/2020
R030455 11-19-2019 .DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO. 110716			23	43

2 QUANTITIES



8/28/2025

ADVANCE WARNING SIGNS AND DEVICES

SIGN NUMBER	DESCRIPTION	SIGN SIZE	SITE 1	SITE 2	SITE 3	MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		BARRICADES (TYPE III)	
									RIGHT	LEFT
			LIN. FT. - EACH				NO.	SQ. FT.	LIN. FT.	
R11-2	ROAD CLOSED	48"x30"	2	2	2	2	2	20.0		
W1-6	LARGE ARROW	48"x24"	9	5	10	10	10	80.0		
M6-3	DIRECTIONAL ARROW	21"x15"	3	3	6	6	6	13.1		
D3-1	"HWY. 185" PLAQUE	36"x12"	12			12	12	36.0		
D3-1	"HWY. 318" PLAQUE	36"x12"		8	16	16	16	48.0		
M4-8	DETOUR	24"x12"	12	8	16	16	16	32.0		
M4-8A	END DETOUR	24"x18"	2	2	2	2	2	6.0		
	TYPE III BARRICADE-RT. (16')		2	2	2	2			32	
	TYPE III BARRICADE-LT. (16')		2	2	2	2				32
TOTALS:								235.1	32	32

NOTE: THIS IS A LOW TRAFFIC VOLUME ROAD AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS

DESCRIPTION	SITE 1	SITE 2	SITE 3	RAISED PAVEMENT MARKERS	REFLECTORIZED PAINT PAVEMENT MARKING	
				TYPE II	6"	
				(YELLOW/YELLOW)	WHITE	YELLOW
	LIN. FT. - EACH			EACH	LIN. FT.	
RAISED PAVEMENT MARKERS TYPE II (YELLOW/YELLOW)	4	12	5	21		
REFLECTORIZED PAINT PAVEMENT MARKING WHITE (6")	610	1930	720		3260	
REFLECTORIZED PAINT PAVEMENT MARKING YELLOW (6")	610	1930	720			3260
TOTALS:				21	3260	3260

NOTE: THIS IS A LOW TRAFFIC VOLUME ROAD AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

NOTE: THE 6" YELLOW STRIPING QUANTITY HAS BEEN ESTIMATED BASED ON A DOUBLE YELLOW CENTERLINE STRIPE FOR THE ENTIRE PROJECT.
THE PROJECT MUST BE MARKED FOR PASSING/NO PASSING ZONES PRIOR TO THE PLACEMENT OF ANY FINAL STRIPING.
CONTACT THE MAINTENANCE DIVISION AFTER THE FINAL LIFT OF SURFACE COURSE HAS BEEN PLACED TO SCHEDULE THE ZONING OF THE PROJECT.

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1/22/2020

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		110716	24	43

② QUANTITIES



STRUCTURES OVER 20'-0" SPAN										
STATION	DESCRIPTION	SPAN	HEIGHT	LENGTH	CLASS S CONCRETE- ROADWAY	REINF. STEEL- ROADWAY (GRADE 60)	UNCL.EXC. FOR STR.- ROADWAY	SOLID SODDING	WATER	STD. DWG. NOS.
17+07	SITE 1- CONST. TRIPLE R.C. BOX CULVERT	8	6	69	169.19	22551	86	38	0.5	SPECIAL DETAILS, PCB-1, RCB-1, RCB-2
35+27	SITE 2 - CONST. QUINTUPLE R.C. BOX CULVERT	12	11	50	415.74	48791	192	55	0.7	SPECIAL DETAILS, PCB-1, RCB-1, RCB-2
45+29	SITE 3 - CONST. TRIPLE R.C. BOX CULVERT	10	7	72	257.71	34238	134	46	0.6	SPECIAL DETAILS, PCB-1, RCB-1, RCB-2
TOTALS:					842.64	105580	412	139	1.8	

BASIS OF ESTIMATE:

WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING

EARTHWORK				
STATION	STATION	LOCATION / DESCRIPTION	UNCLASSIFIED EXCAVATION	COMPACTED EMBANKMENT
			CU. YD.	CU. YD.
15+55.00	18+60.00	SITE 1	1853	571
30+30.00	39+95.00	SITE 2	3988	2991
43+50.00	47+10.00	SITE 3	1028	83
ENTIRE	PROJECT	APPROACHES	40	20
17+07.05		CHANNEL CHANGE - SITE 1	69	
35+26.75		CHANNEL CHANGE - SITE 2	349	
45+28.54		CHANNEL CHANGE - SITE 3	516	
ENTIRE	PROJECT	UNDERCUT AND BACKFILL - SITE 1	486	486
ENTIRE	PROJECT	UNDERCUT AND BACKFILL - SITE 2	2821	2821
ENTIRE	PROJECT	UNDERCUT AND BACKFILL - SITE 3	370	370
TOTALS:			11520	7342

NOTE: EARTHWORK QUANTITIES SHALL BE PAID AS PLAN QUANTITY

REMOVAL OF EXISTING BRIDGE STRUCTURE			
STATION	STATION	LOCATION	LUMP SUM
16+87	17+26	SITE 1- BRIDGE NO. M3630	1.00
34+82	35+72	SITE 2 - BRIDGE NO. M3806	1.00
45+01	45+57	SITE 3 - BRIDGE NO. M3814	1.00
TOTAL:			

EROSION CONTROL MATTING				
STATION	STATION	LOCATION	LENGTH	CLASS 3
			LIN. FT.	SQ. YD.
16+55.00	17+60.00	SITE 1	105.00	93.33
31+30.00	38+95.00	SITE 2	765.00	680.00
44+50.00	46+10.00	SITE 3	160.00	142.22
TOTAL:				915.55

NOTE: AVERAGE WIDTH = 8'-0"

SELECTED PIPE BEDDING

LOCATION	SELECTED PIPE BEDDING
	CU.YD.
ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	20
TOTAL:	20

NOTE: QUANTITY ESTIMATED.

SEE SECTION 104.03 OF THE STD. SPECS.

CLEARING AND GRUBBING

STATION	STATION	LOCATION	CLEARING	GRUBBING
			STATION	STATION
17+00	18+00	SITE 1	1	1
31+00	39+00	SITE 2	8	8
44+00	46+00	SITE 3	2	2
TOTALS:			11	11

REMOVAL AND DISPOSAL OF CULVERTS

STATION	DESCRIPTION	PIPE CULVERTS
		EACH
34+55	34" X 30' C.M. PIPE CULVERT (SITE 2)	1
34+63	24" X 40' C.M. PIPE CULVERT (SITE 2)	1
36+30	21" X 26' C.M. PIPE CULVERT W/ AUTOMATIC FLOODGATE (SITE 2)	1
TOTAL:		3

NOTE: QUANTITIES SHOWN ABOVE SHALL INCLUDE REMOVAL & DISPOSAL
OF ALL HEADWALLS AND FLARED END SECTIONS IF APPLICABLE.

SIDE DRAINS

STATION	SIDE	LOCATION	SIDE DRAINS	AUTOMATIC FLOODGATES	STANDARD DRAWINGS
			24"	24"	
			LIN. FT.	EACH	
36+30	LT	SITE 2	48	1	PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
TOTAL:			48	1	

EROSION CONTROL

STATION	STATION	LOCATION	PERMANENT EROSION CONTROL					TEMPORARY EROSION CONTROL								
			SEEDING	LIME	MULCH COVER	WATER	SECOND SEEDING APPLICATION	TEMPORARY SEEDING	MULCH COVER	WATER	SAND BAG DITCH CHECKS	ROCK DITCH CHECKS	SILT FENCE	SEDIMENT BASIN	OBLITERATION OF SEDIMENT BASIN	*SEDIMENT REMOVAL & DISPOSAL
											(E-5)	(E-6)	(E-11)	(E-14)		
			ACRE	TON	ACRE	M.GAL.	ACRE	ACRE	ACRE	M.GAL.	BAG	CU.YD.	LIN. FT.	CU.YD.	CU.YD.	CU. YD.
15+55	18+60	SITE 1	0.60	1.20	0.60	61.2	0.60	1.05	1.05	21.4		3				1
30+30	39+95	SITE 2	2.10	4.20	2.10	214.2	2.10	2.72	2.72	55.5		18	370			20
43+50	47+10	SITE 3	0.77	1.54	0.77	78.5	0.77	1.31	1.31	26.7			231			9
*ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.			0.87	1.74	0.87	88.7	0.87	1.27	1.27	25.9	110			133	133	133
TOTALS:			4.34	8.68	4.34	442.6	4.34	6.35	6.35	129.5	110	21	601	133	133	163

BASIS OF ESTIMATE:

LIME2 TONS / ACRE OF SEEDING

WATER.....102.0 M.G. / ACRE OF SEEDING

WATER.....20.4 M.G. / ACRE OF TEMPORARY SEEDING

WATER.....12.6 GAL. / SQ. YD. OF SOLID SODDING

SAND BAG DITCH CHECKS.....22 BAGS / LOCATION

ROCK DITCH CHECKS.....3 CU.YD./LOCATION

NOTE: THE TEMPORARY EROSION CONTROL DEVICES SHOWN ABOVE AND ON THE PLANS SHALL BE INSTALLED IN SUCH A SEQUENCE
AS TO DETER EROSION AND SEDIMENTATION ON U.S. WATERWAYS AS EXPLAINED BY THE NATIONAL POLLUTANT DISCHARGE ELIMINATION
SYSTEM PERMIT.

*QUANTITIES ESTIMATED.

SEE SECTION 104.03 OF THE STD. SPECS.

QUANTITIES

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R030455 11-19-2019 .DGN
1/22/2020

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		110716	25	43

② QUANTITIES

COLD MILLING ASPHALT PAVEMENT

STATION	STATION	LOCATION	AVG. WIDTH	COLD MILLING ASPHALT PAVEMENT
			FEET	SQ. YD.
15+55.00	16+55.00	SITE 1-MAIN LANES	28.00	311.11
17+60.00	18+60.00	SITE 1-MAIN LANES	28.00	311.11
30+30.00	31+30.00	SITE 2-MAIN LANES	20.00	222.22
38+95.00	39+95.00	SITE 2-MAIN LANES	20.00	222.22
43+50.00	44+50.00	SITE 3-MAIN LANES	26.00	288.89
45+10.00	46+10.00	SITE 3-MAIN LANES	26.00	288.89
TOTAL:				1644.44

NOTE: COORDINATE COLD MILLING STOCKPILE LOCATIONS WITH DISTRICT ENGINEER.
STOCKPILE LOCATIONS SHALL BE NO FURTHER THAN FIVE MILES FROM EACH SITE.

4" PIPE UNDERDRAIN

STATION	STATION	LOCATIONS	4" PIPE UNDERDRAINS	UNDERDRAIN OUTLET PROTECTORS
			LIN. FT.	EACH
ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER			500	2
TOTALS:			500	2

* NOTE: QUANTITY ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

BENCH MARKS

STATION	LOCATION	BENCH MARKS
		EACH
17+07	R.C. BOX CULVERT HEADWALL	1
35+27	R.C. BOX CULVERT HEADWALL	1
45+29	R.C. BOX CULVERT HEADWALL	1
TOTAL:		3

NOTE: SHOWN FOR INFORMATION ONLY. BENCH MARKS
SHALL BE FURNISHED AND PLACED BY STATE FORCES.



8/28/2025

DRIVEWAYS & TURNOUTS

STATION	SIDE	LOCATION	WIDTH	ACHM SURFACE COURSE (1/2") 220 LBS. PER SQ. YD. (PG 64-22)		AGGREGATE BASE COURSE (CLASS 7)	SIDE DRAINS	STANDARD DRAWINGS
			FEET	SQ. YD.	TON	TON	24"	
16+64	LT	HWY. 185 - SITE 1	21	118.51	13.04	48.39		
34+55	LT	HWY. 318 - SITE 2	16	87.48	9.62	35.72	66	PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
34+63	RT	HWY. 318 - SITE 2	16	93.62	10.30	38.23	52	PCC-1, PCM-1, PCP-1, PCP-2, PCP-3
* ENTIRE PROJECT TEMPORARY DRIVES						100.00		
TOTALS:				299.61	32.96	222.34	118	

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.8% MIN. AGGR.....5.2% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 115 FOR PG 64-22

* QUANTITY ESTIMATED
SEE SECTION 104.03 OF THE STD. SPECS.
TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.

NOTE: FOR R.C. PIPE CULVERT INSTALLATIONS USE TYPE 3 BEDDING UNLESS OTHERWISE SPECIFIED.
NOTE: FOR C.M. PIPE CULVERT INSTALLATIONS USE TYPE 2 BEDDING UNLESS OTHERWISE SPECIFIED.

STONE BACKFILL

STATION	STATION	LOCATION	STONE BACKFILL
			TONS
16+91.75	17+22.35	SITE 1	583
34+94.58	35+58.92	SITE 2	937
45+10.44	45+46.76	SITE 3	736
TOTAL:			2256

BASIS OF ESTIMATE:
STONE BACKFILL.....2.1 TONS / CU. YD.

NOTE: PLACE 3' DEPTH OF STONE BACFILL FOR BOX CULVERTS.

SOIL STABILIZATION

STATION	STATION	LOCATION / DESCRIPTION	SOIL STABILIZATION
			TON
ENTIRE	PROJECT	TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER	100
TOTAL:			100

QUANTITY ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

BASE AND SURFACING

STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT			ACHM BINDER COURSE (1")				ACHM SURFACE COURSE (1/2")								
						(0.05 GAL. PER SQ. YD.)			AVG. WID.	SQ. YD.	POUND / SQ. YD.	PG 64-22	AVG. WID.	SQ. YD.	POUND / SQ. YD.	PG 64-22	AVG. WID.	SQ. YD.	POUND / SQ. YD.	PG 64-22	TOTAL PG 64-22
						TOTAL WID.	SQ. YD.	GALLON													
			FEET	TON / STATION	TON	FEET			FEET			TON	FEET			TON	FEET			TON	TON
MAIN LANES																					
15+55.00	16+55.00	SITE 1- TRANSITION	100.00	56.00	56.00	20.00	222.22	11.11									26.00	288.89	220.00	31.78	31.78
16+55.00	17+60.00	SITE 1- FULL DEPTH	105.00	197.50	207.38	44.71	521.62	26.08	22.46	262.03	330.00	43.23	22.25	259.58	220.00	28.55	26.00	303.33	220.00	33.37	61.92
17+60.00	18+60.00	SITE 1- TRANSITION	100.00	56.00	56.00	20.00	222.22	11.11									26.00	288.89	220.00	31.78	31.78
30+30.00	31+30.00	SITE 2 - TRANSITION	100.00	56.00	56.00	20.00	222.22	11.11									26.00	288.89	220.00	31.78	31.78
31+30.00	38+95.00	SITE 2 - FULL DEPTH	765.00	197.50	1510.88	44.71	3800.35	190.02	22.46	1909.10	330.00	315.00	22.25	1891.25	220.00	208.04	26.00	2210.00	220.00	243.10	451.14
38+95.00	39+95.00	SITE 2 - TRANSITION	100.00	56.00	56.00	20.00	222.22	11.11									26.00	288.89	220.00	31.78	31.78
43+50.00	44+50.00	SITE 3 - TRANSITION	100.00	56.00	56.00	20.00	222.22	11.11									26.00	288.89	220.00	31.78	31.78
44+50.00	46+10.00	SITE 3 - FULL DEPTH	160.00	197.50	316.00	44.71	794.84	39.74	22.46	399.29	330.00	65.88	22.25	395.56	220.00	43.51	26.00	462.22	220.00	50.84	94.35
46+10.00	47+10.00	SITE 3 - TRANSITION	100.00	56.00	56.00	20.00	222.22	11.11													
ADDITIONAL FOR SUPERELEVATION																					
44+50.00	45+34.62	SUPERELEVATION TRANSITION	84.62	21.13	17.88																
45+34.62	45+59.53	MAXIMUM SUPERELEVATION	24.91	42.25	10.52																
45+59.53	46+10.00	SUPERELEVATION TRANSITION	50.47	21.13	10.66																
TOTALS:					2409.32		6450.13	322.50		2570.42		424.11		2546.39		280.10		4420.00		486.21	766.31

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.8% MIN. AGGR.....5.2% ASPHALT BINDER
ACHM BINDER COURSE (1").....95.7% MIN. AGGR.....4.3% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 115 FOR PG 64-22
TACK COAT QUANTITIES WERE CALCULATED USING THE EMULSIFIED ASPHALT RATES. REFER TO SS-400-1FOR THE RESIDUAL ASPHALT APPLICATION RATES.

QUANTITIES

SURVEY CONTROL COORDINATES

Project Name: s110716
Date: 9/23/2020
Coordinate System: ARKANSAS STATE PLANE - SOUTH ZONE BASED ON GPS CONTROL, 540014 - 540014A, 540004 - 540004A, STATIC GPS PN: 1,6 PROJECTED TO GROUND.

Units: U.S. SURVEY FOOT

Point Name	Northing	Easting	Elev	Feature	Description
1	1925407.7393	1629395.1780	158.002	CTL	STD. ARDOT MON STAMPED PN: 1
2	1926083.8441	1629352.2932	156.167	CTL	STD. ARDOT MON STAMPED PN: 2
3	1926802.0426	1629292.0464	159.381	CTL	STD. ARDOT MON STAMPED PN: 3
4	1927591.8956	1629247.4546	158.487	CTL	STD. ARDOT MON STAMPED PN: 4
5	1928576.8419	1629258.8143	160.311	CTL	STD. ARDOT MON STAMPED PN: 5
6	1969844.1533	1680142.1444	166.818	CTL	STD. ARDOT MON STAMPED PN: 6
7	1969852.7448	1680865.9172	165.763	CTL	STD. ARDOT MON STAMPED PN: 7
8	1969898.4087	1681740.9306	166.472	CTL	STD. ARDOT MON STAMPED PN: 8
9	1969903.3280	1682545.7945	167.904	CTL	STD. ARDOT MON STAMPED PN: 9
10	1969924.8724	1683218.1581	169.354	CTL	STD. ARDOT MON STAMPED PN: 10
11	2007402.1888	1713103.2949	236.882	CTL	STD. ARDOT MON STAMPED PN: 11
12	2007374.3300	1713738.6221	239.087	CTL	STD. ARDOT MON STAMPED PN: 12
13	2007378.1943	1714379.4557	239.667	CTL	STD. ARDOT MON STAMPED PN: 13
14	2007371.9229	1714839.3298	239.488	CTL	STD. ARDOT MON STAMPED PN: 14
15	2007369.2457	1715621.7653	240.505	CTL	STD. ARDOT MON STAMPED PN: 15
16	2007342.4230	1716335.7375	244.827	CTL	STD. ARDOT MON STAMPED PN: 16
100	1967087.7368	1678233.8286	171.062	GPS	ARDOT GPS MON. 540014
101	1967001.6033	1675869.0959	169.658	GPS	ARDOT GPS MON. 540014A
102	1999291.5644	1718686.5083	253.589	GPS	ARDOT GPS MON. 540004
103	2000786.2790	1717263.9573	244.038	GPS	ARDOT GPS MON. 540004A
900	1926673.8525	1629294.4116	161.042	TBM	CHLSD SQR IN CONC BR CORNER
901	1969864.7486	1682985.6004	169.852	TBM	TBM-901 CHSLD SQR
902	2007404.9980	1714530.6582	240.818	TBM	TBM-902 CHSLD SQR SE CNR OF W BR
903	1969419.3474	1679432.1604	169.151	TBM	903 IN SE 24"RCP E SIDE LN TBM
990	2007997.3435	1711989.7534	239.490	BM	NGS BM V 170

*Note - Rebar and Cap - Standard - 5/8" Rebar with 2" Aluminum Cap stamped
*(standard markings common to all caps), or as indicated
(other markings indicated in the point description of the individual point).
ALL DISTANCES ARE GROUND.
USE CAF = 1.0 FOR STAKEOUT FOR THIS PROJECT.
A PROJECT CAF OF 0.9999366974 HAS BEEN USED TO COMPUTE THE ABOVE GROUND COORDINATES.
THIS CAF IS INTENDED FOR USE WITHIN THE PROJECT LIMITS.
GRID DISTANCE = GROUND DISTANCE X CAF.
GRID COORDINATES ARE STORED UNDER FILE NAME s110716gi.CTL
HORIZONTAL DATUM: NAD 83 (19XX)
VERTICAL DATUM: NAVD 88 POSITIONAL ACCURACY THIRD ORDER, UNLESS SPECIFIED OTHERWISE
AT A SPECIFIC POINT.

REFERENCE POINTS (1500 SERIES) ARE TO BE USED TO ESTABLISH CONTROL
IF THE PRIMARY CONTROL POINTS LISTED ABOVE HAVE BEEN DESTROYED.
REFERENCE POINTS ARE NOT TO BE USED FOR VERTICAL CONTROL

BASIS OF BEARING:
ARKANSAS STATE PLANE GRID BEARINGS - 0302-SOUTH ZONE
DETERMINED FROM GPS CONTROL POINTS: 540014 - 540014A, 540004 - 540004A, STATIC GPS PN: 1,6
CONVERGENCE ANGLE: 00 41 08.8 RIGHT AT PN: 8 LT: 34-28-02N LG: 34-28-02N
GRID AZIMUTH = ASTRONOMICAL AZIMUTH - CONVERGENCE ANGLE.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	110716		27	43

2 SURVEY CONTROL DETAILS



SITE 1

POINT NO.	TYPE	STATION	NORTHING	EASTING
8000	POB	0+00.00	2007385.3497	1713176.2785
8001	PI	9+95.05	2007390.3335	1714171.3113
8002	PI	20+99.67	2007383.2223	1715275.9157
8003	POE	32+90.50	2007384.8507	1716466.7388

SITE 2

POINT NO.	TYPE	STATION	NORTHING	EASTING
8004	POB	20+00.00	1969857.9862	1680132.8523
8005	PI	28+55.60	1969869.2819	1680988.3751
8006	PI	35+81.16	1969882.6767	1681713.8093
8007	PI	41+50.34	1969908.2618	1682282.4166
8008	PI	48+96.42	1969934.3212	1683028.0391
8009	POE	50+73.11	1969938.9028	1683204.6708

SITE 3

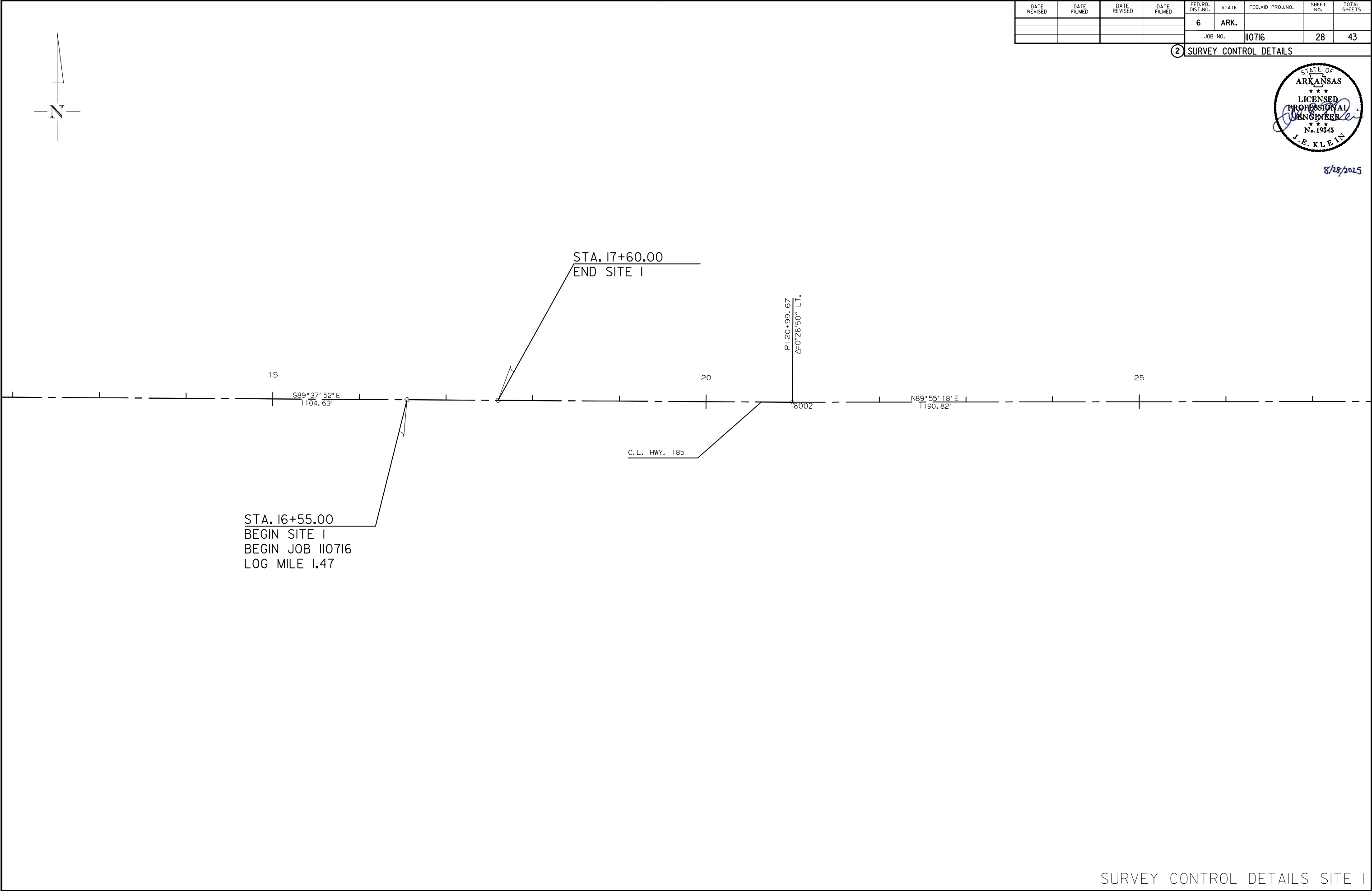
POINT NO.	TYPE	STATION	NORTHING	EASTING
8010	POB	30+00.00	1925175.7511	1629345.5078
8011	PI	32+47.41	1925423.1088	1629350.6619
8012	PI	35+18.01	1925693.7071	1629350.6599
8013	PC	40+85.34	1926260.7820	1629333.4799
8015	PT	42+85.07	1926459.4878	1629314.6959
8016	PC	44+47.12	1926619.5110	1629289.1642
8018	PT	46+47.03	1926818.5284	1629272.3923
8019	POE	50+16.06	1927187.5424	1629268.7268

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO. 110716			28	43

2 SURVEY CONTROL DETAILS



8/28/2025

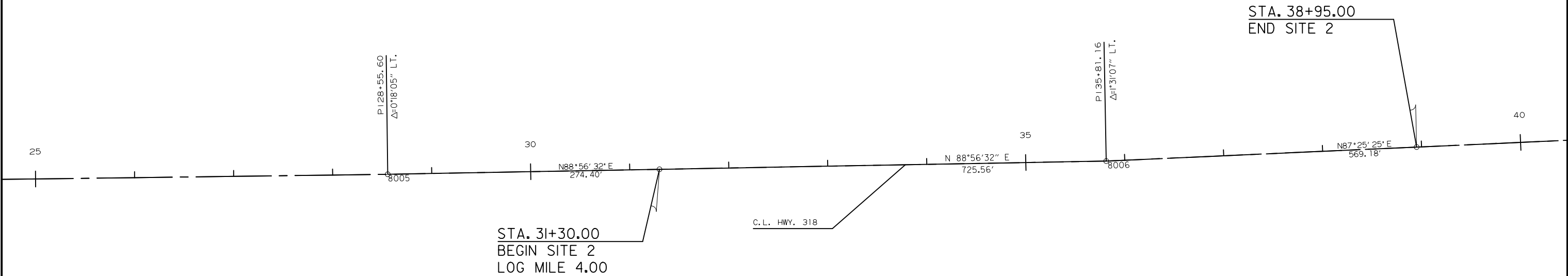
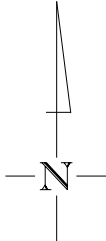


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		110716	29	43

2 SURVEY CONTROL DETAILS



8/28/2025

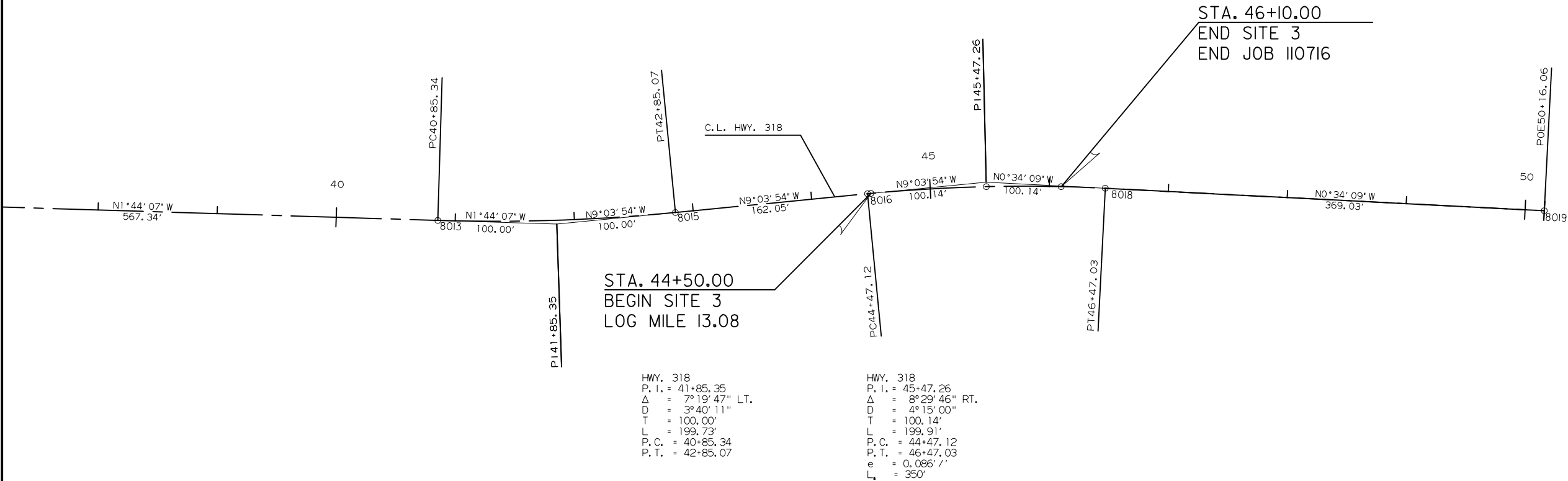


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO. 110716			30	43

2 SURVEY CONTROL DETAILS



8/28/2025

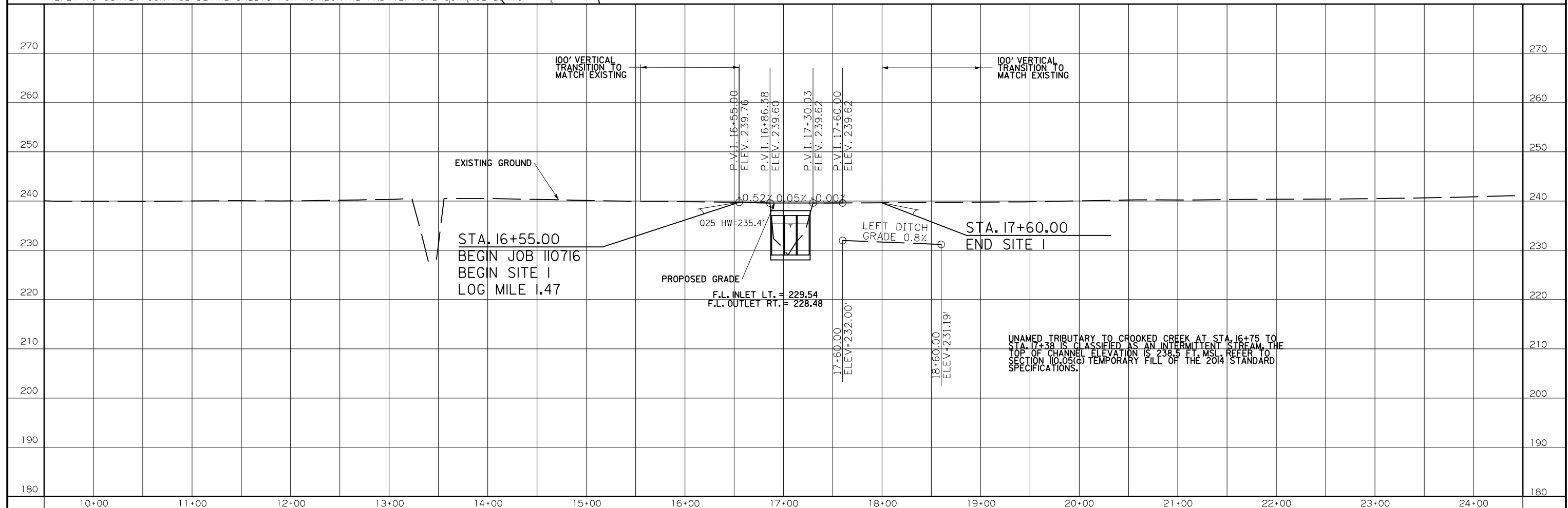
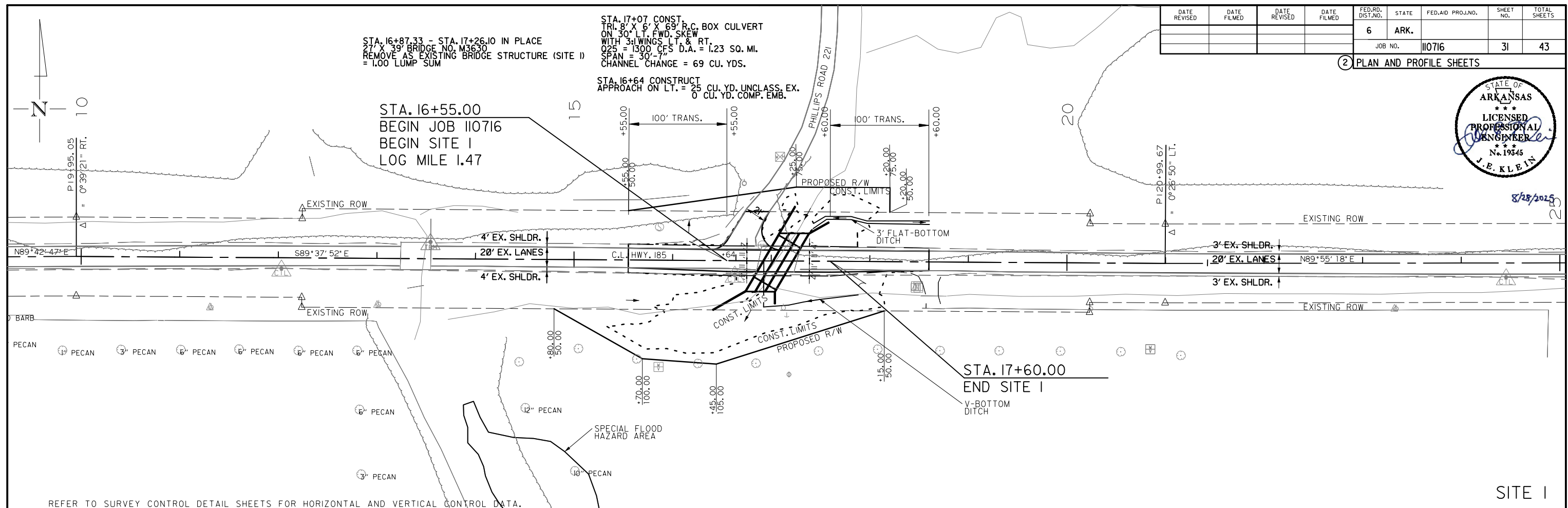


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	110716		31	43

② PLAN AND PROFILE SHEETS

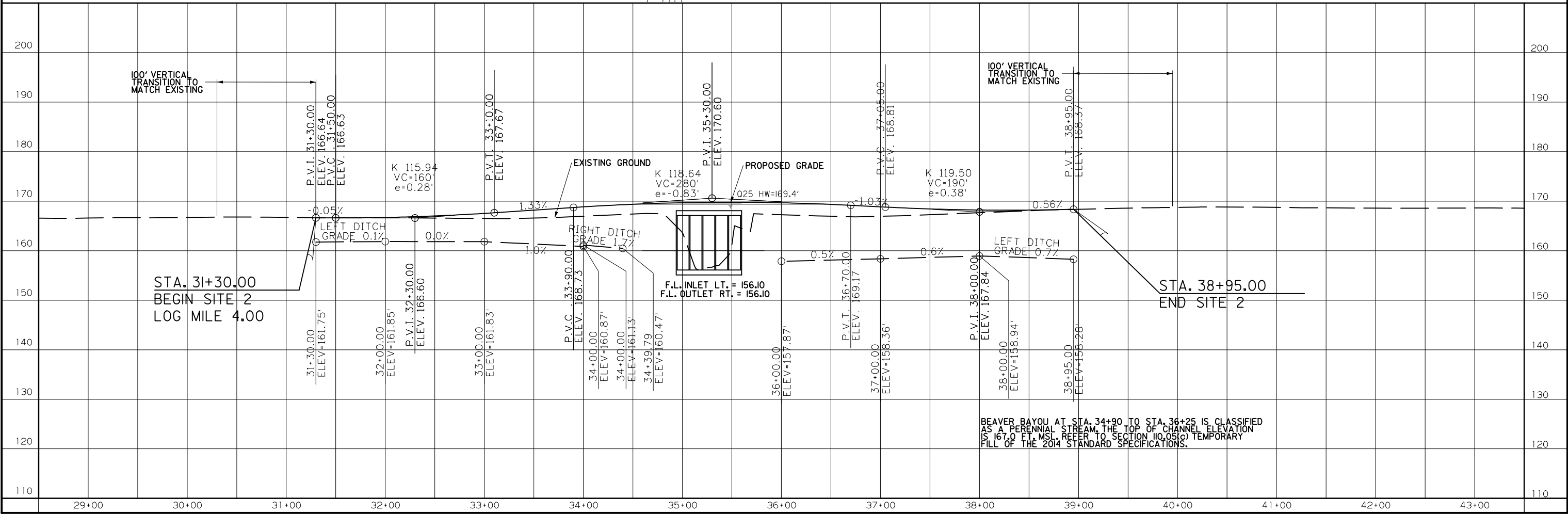
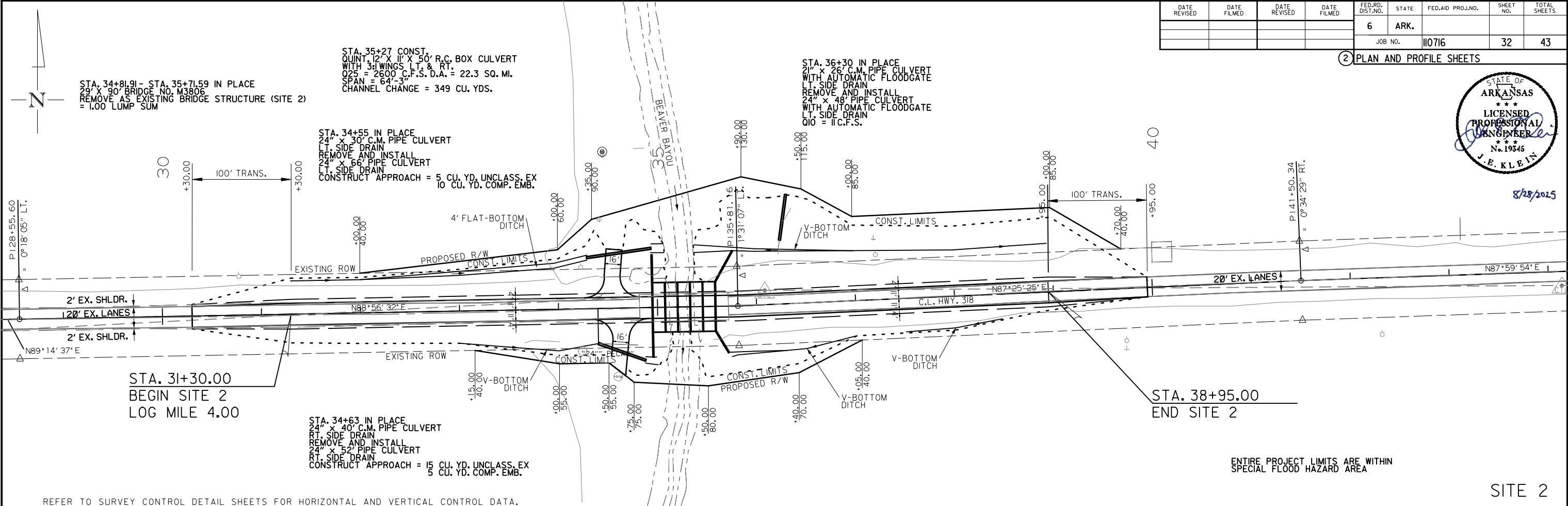


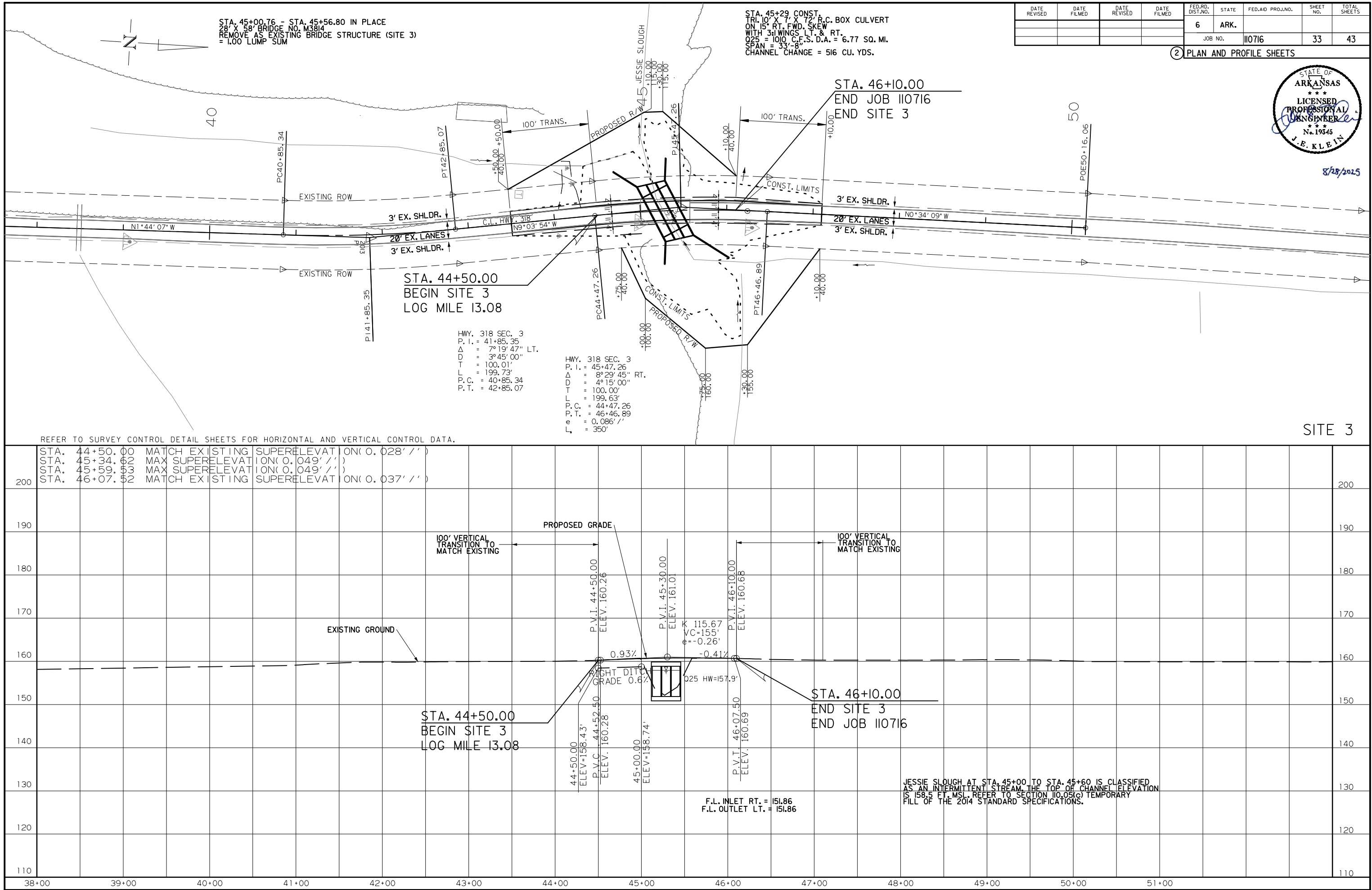
3/28/2025



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		110716	32	43

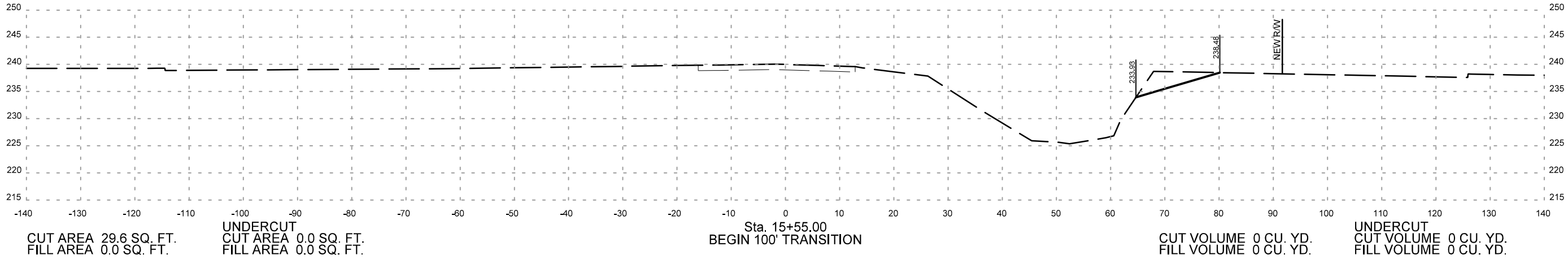
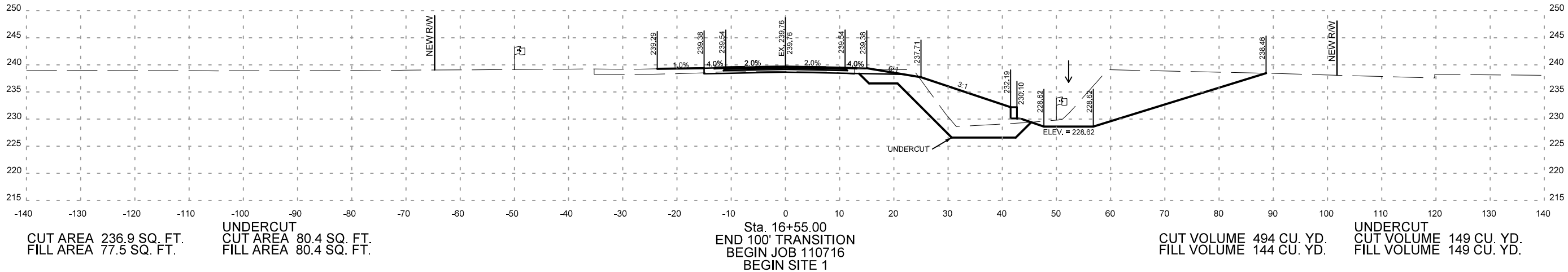
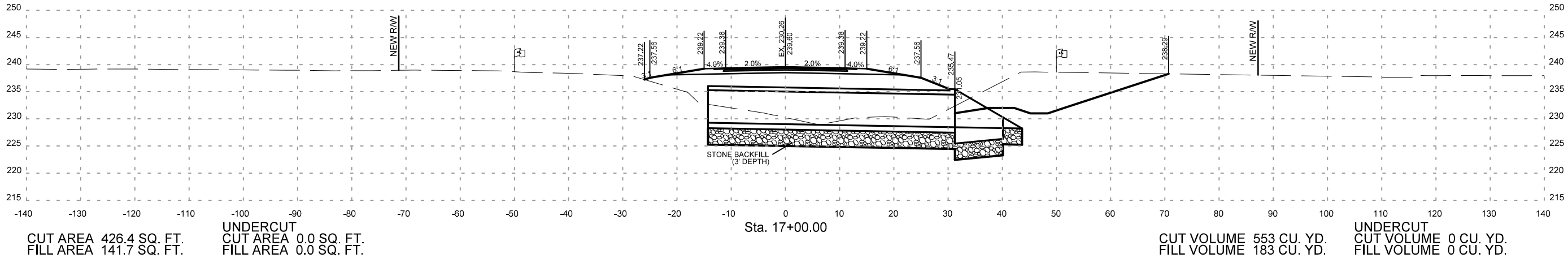
2 PLAN AND PROFILE SHEETS





DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO.						110716	34	43

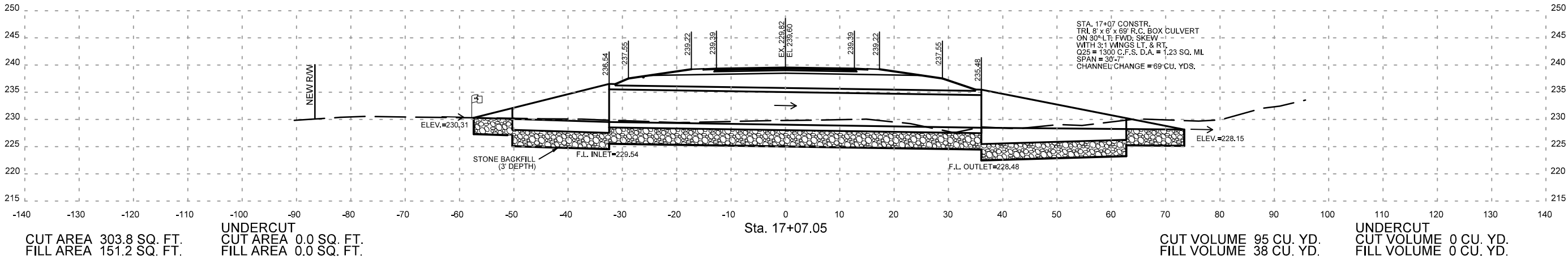
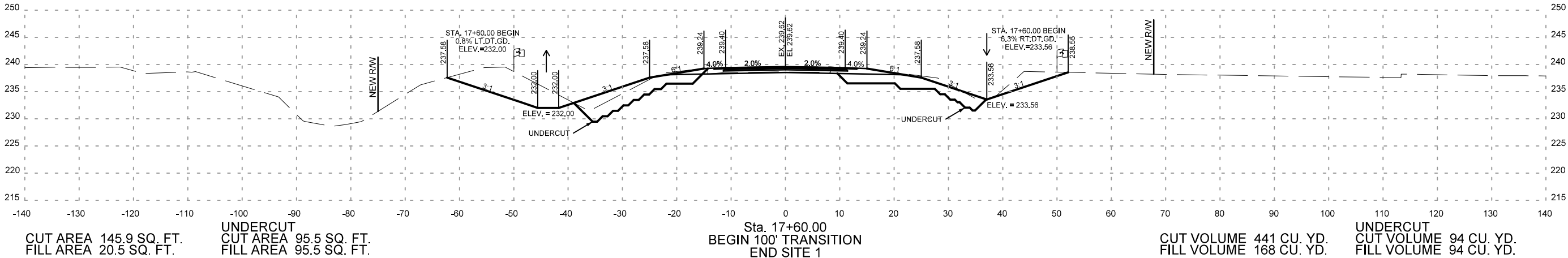
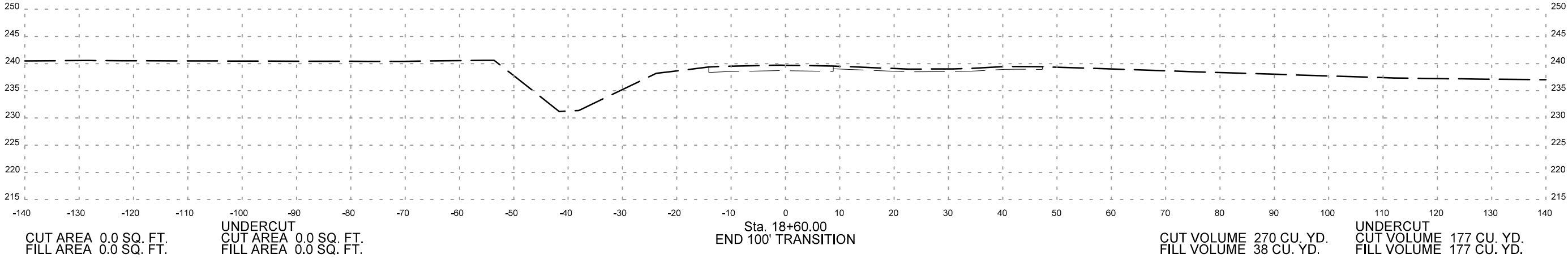
2 CROSS SECTIONS



STA. 15+55.00 TO STA. 17+00.00
HWY. 185
SITE 1

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO. 110716			35	43

2 CROSS SECTIONS

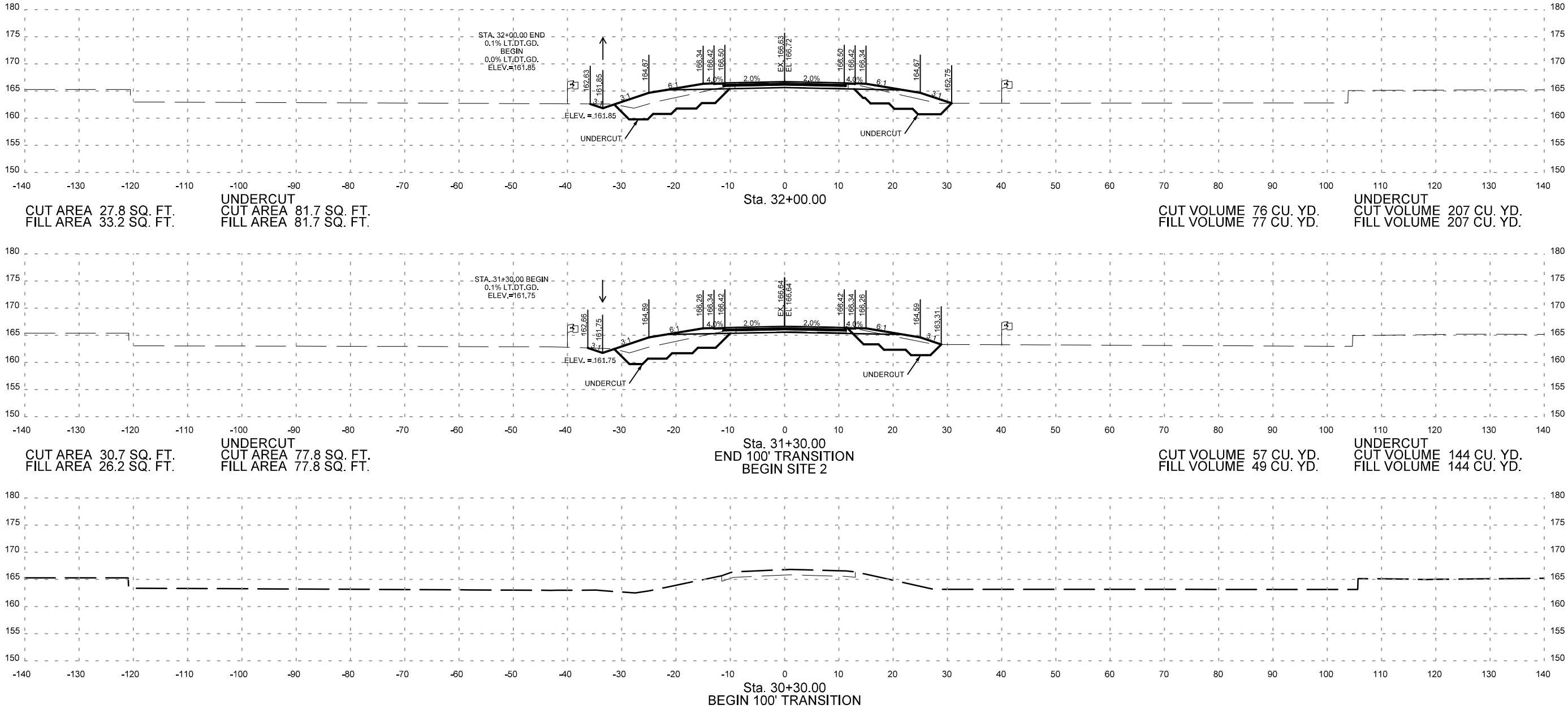


STA. 17+07.05 TO STA. 18+60.00
HWY. 185
SITE 1

tsj/ajc
1/23/2025
1925530_Hwy105-310_XS_BORDER.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		110716	36	43

2 CROSS SECTIONS

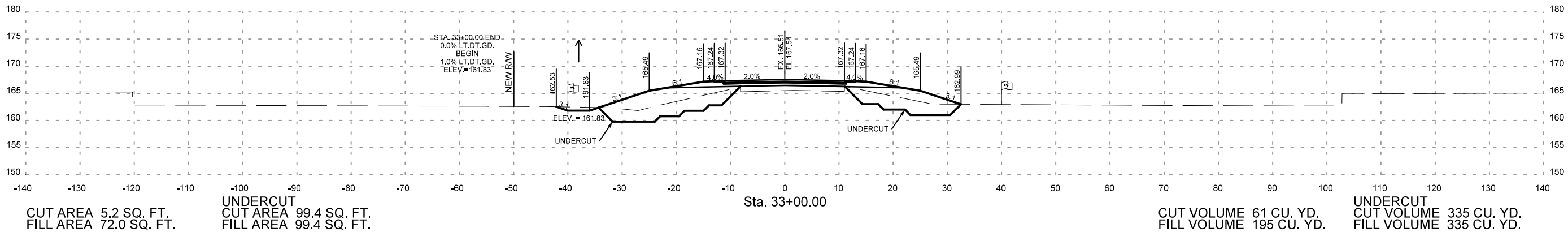
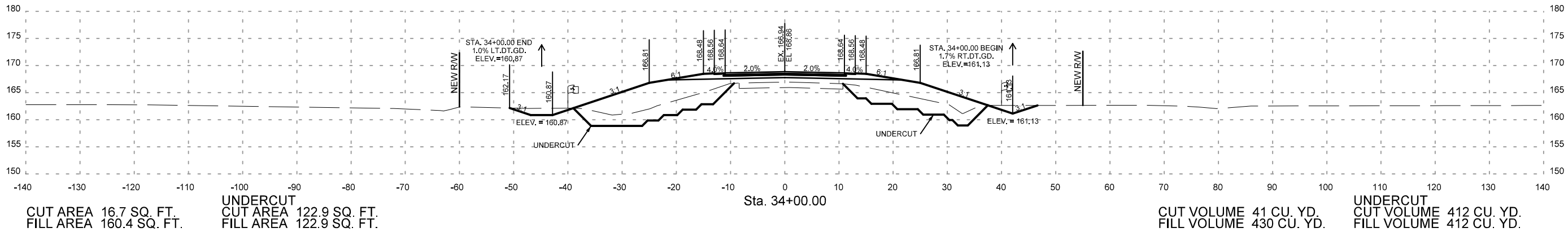
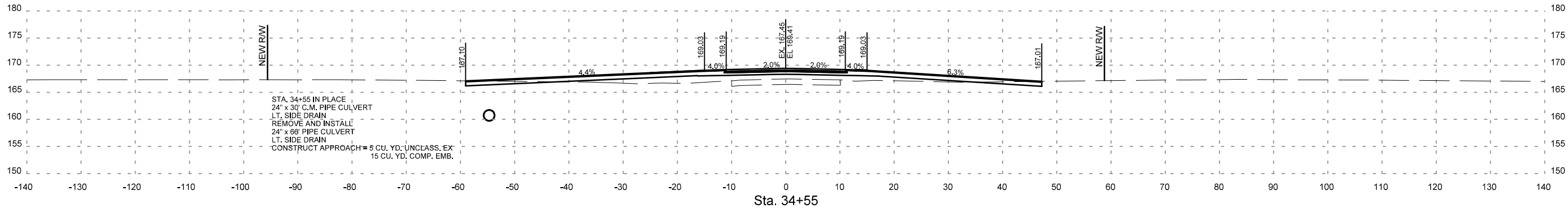


STA. 30+30.00 TO STA. 32+00.00
HWY. 318
SITE 2

tsjaycox 1/23/2025
1925530_Hwy105-310_XS_BORDER.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		110716	37	43

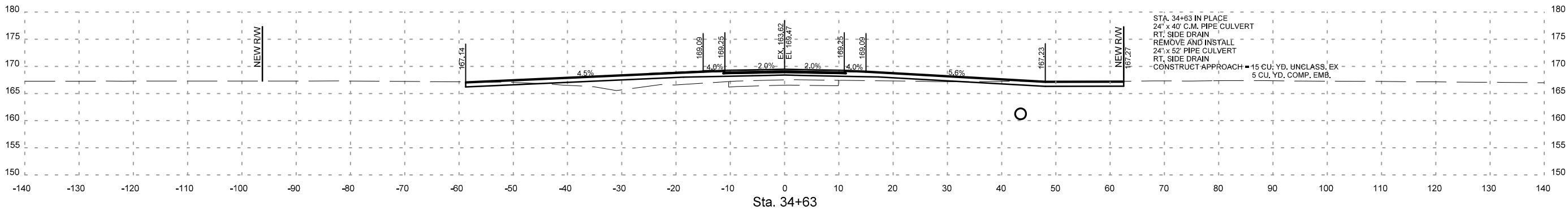
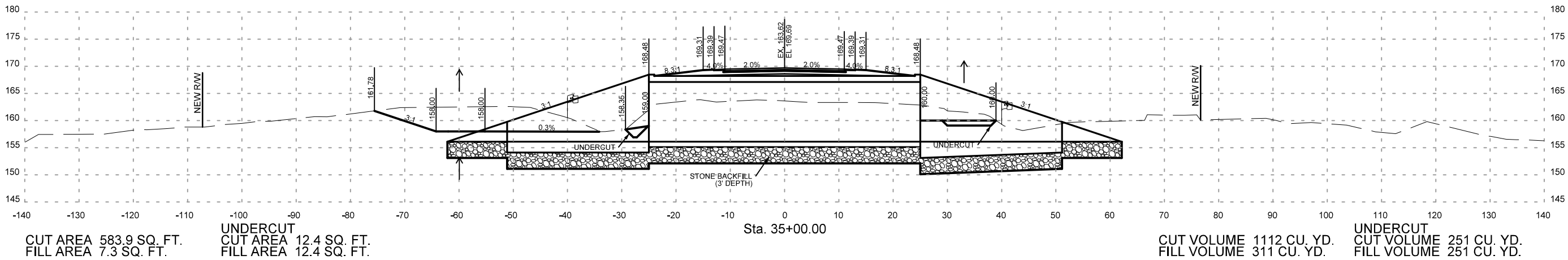
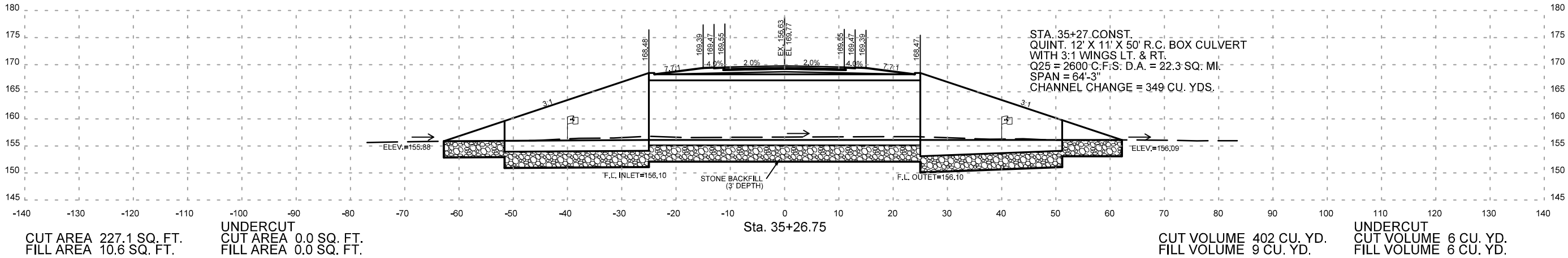
2 CROSS SECTIONS



STA. 33+00.00 TO STA. 34+55.00
HWY. 318
SITE 2

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO.						110716	38	43

2 CROSS SECTIONS

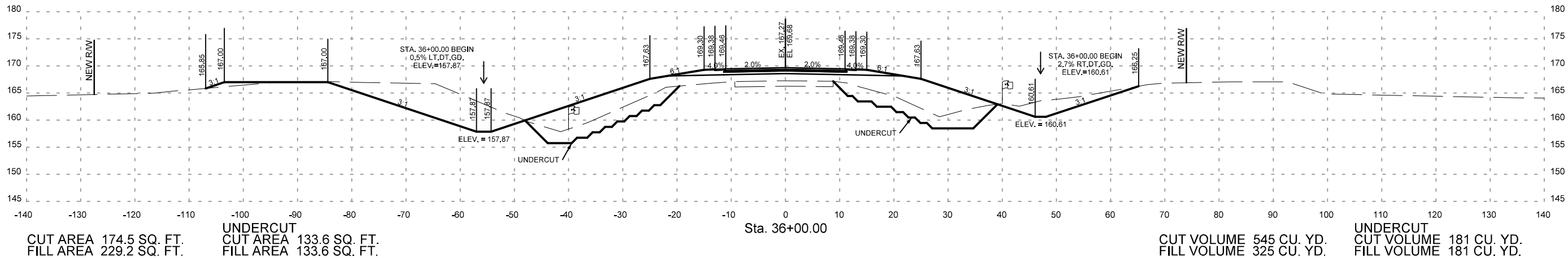
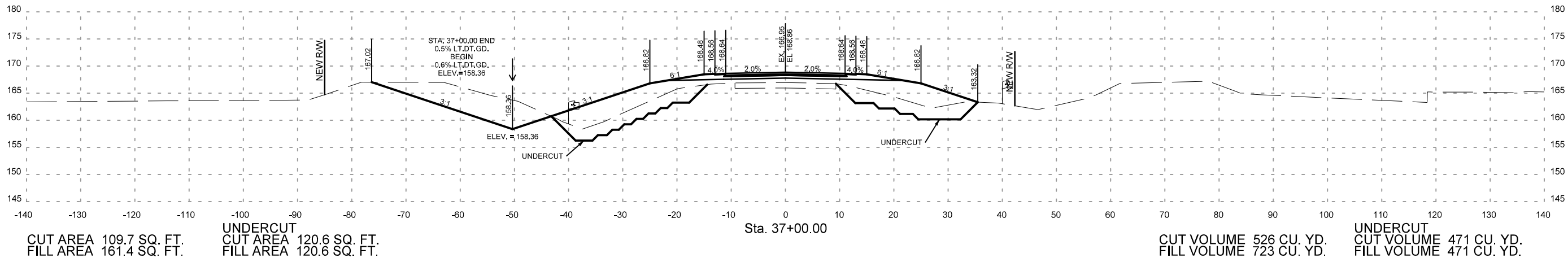
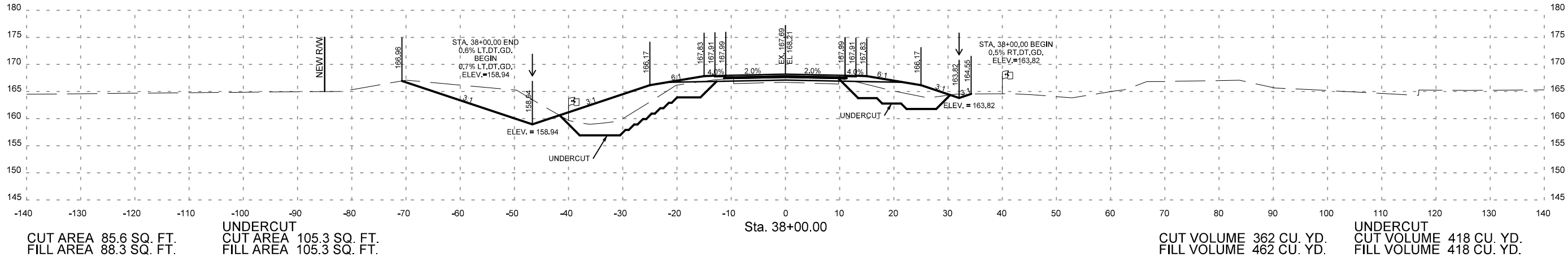


STA. 34+63.00 TO STA. 35+26.75
HWY. 318
SITE 2

tsj/ajc
1/23/2025
1925530_Hwy105-310_XS_BORDER.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO.						110716	39	43

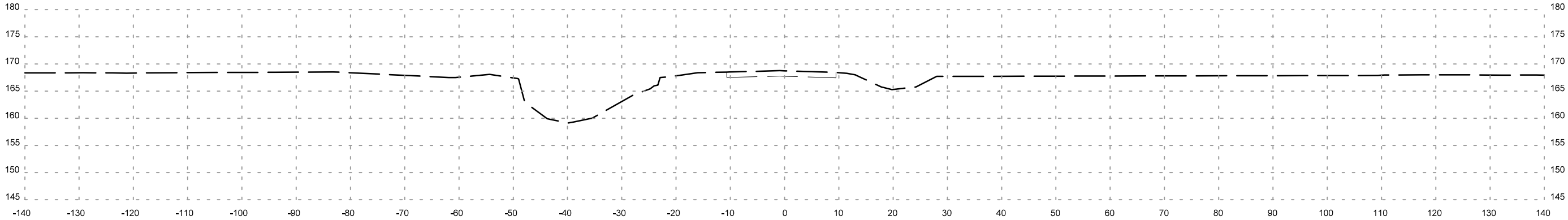
2 CROSS SECTIONS



STA. 36+00.00 TO STA. 38+00.00
HWY. 318
SITE 2

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		110716	40	43

2 CROSS SECTIONS



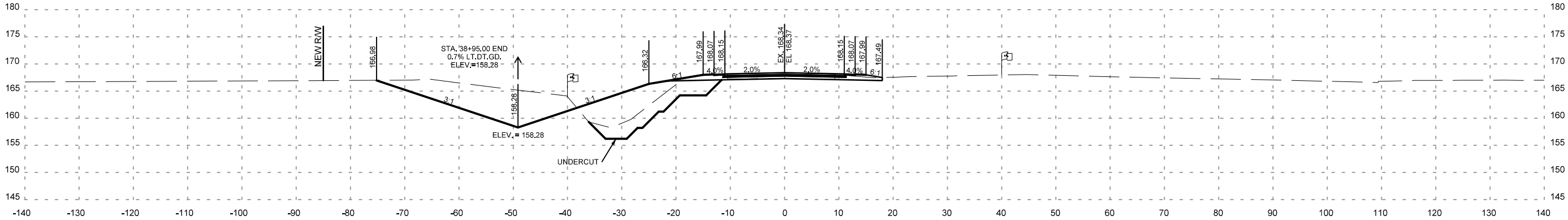
CUT AREA 0.0 SQ. FT.
FILL AREA 0.0 SQ. FT.

UNDERCUT
CUT AREA 0.0 SQ. FT.
FILL AREA 0.0 SQ. FT.

Sta. 39+95.00
END 100' TRANSITION

CUT VOLUME 337 CU. YD.
FILL VOLUME 131 CU. YD.

UNDERCUT
CUT VOLUME 108 CU. YD.
FILL VOLUME 108 CU. YD.



CUT AREA 181.8 SQ. FT.
FILL AREA 70.6 SQ. FT.

UNDERCUT
CUT AREA 58.5 SQ. FT.
FILL AREA 58.5 SQ. FT.

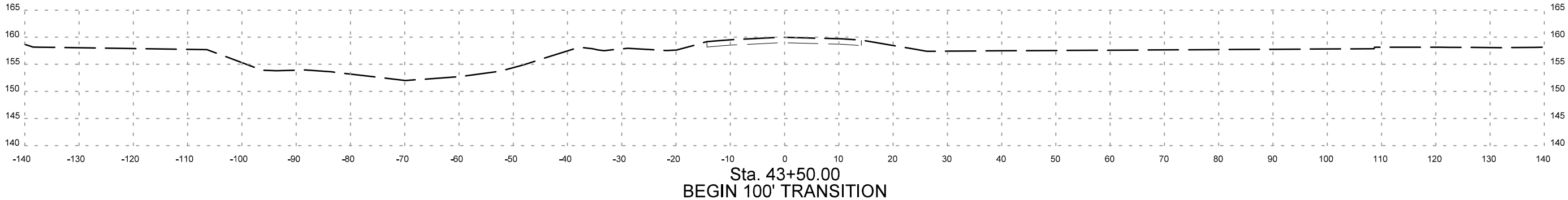
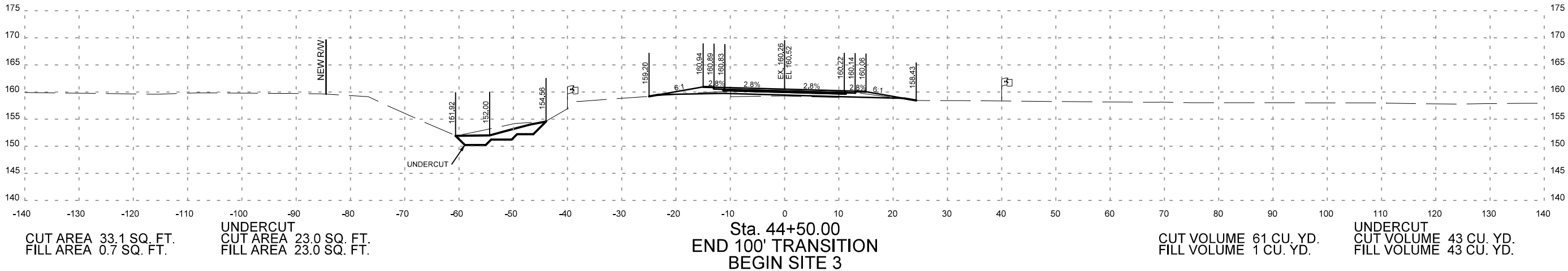
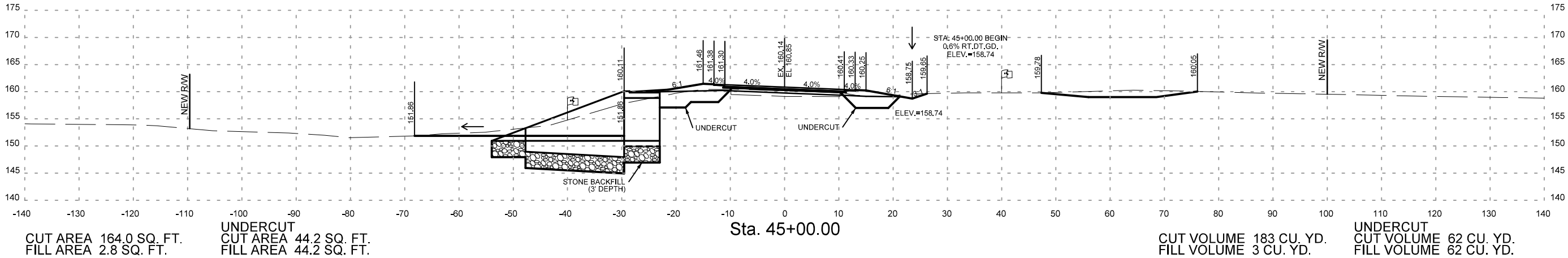
Sta. 38+95.00
BEGIN 100' TRANSITION
END SITE 2

CUT VOLUME 470 CU. YD.
FILL VOLUME 280 CU. YD.

UNDERCUT
CUT VOLUME 288 CU. YD.
FILL VOLUME 288 CU. YD.

STA. 38+95.00 TO STA. 39+95.00
HWY. 318
SITE 2

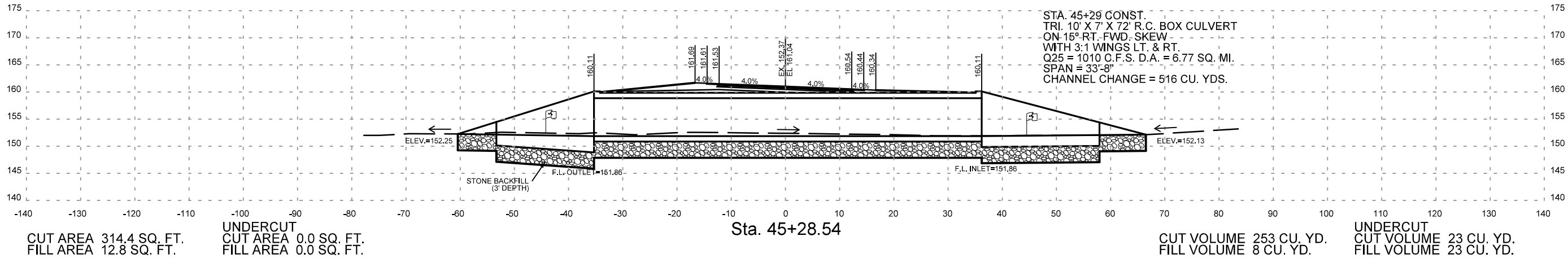
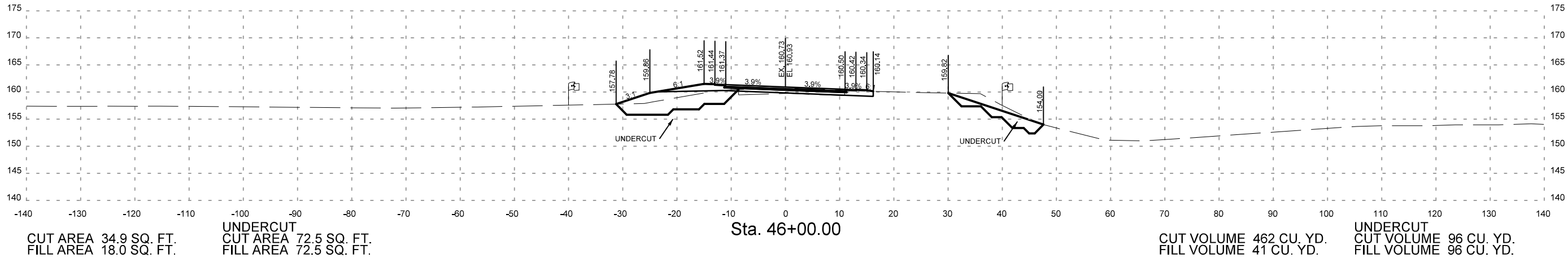
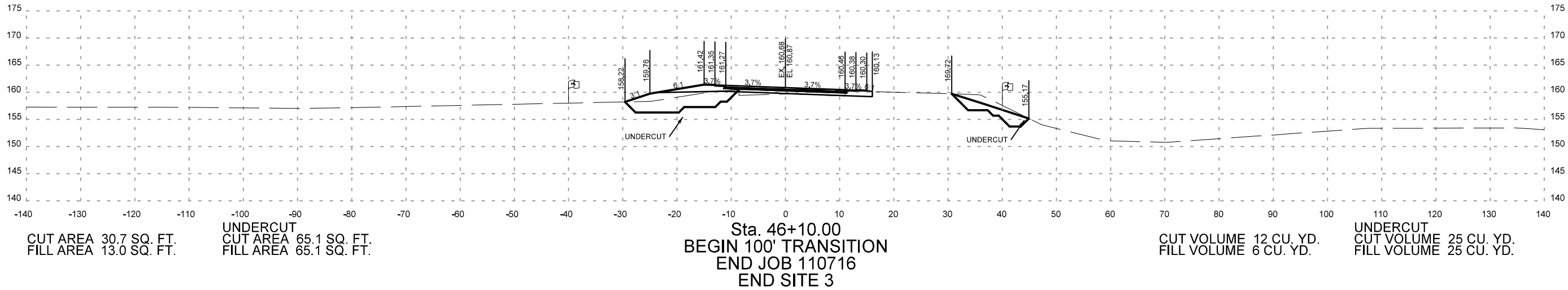
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO.						110716	41	43
2 CROSS SECTIONS								



STA. 43+50.00 TO STA. 45+00.00
HWY. 318
SITE 3

tsj/ajcox 1/23/2025 1925530_Hwy105-310_XS_BORDER.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
JOB NO.						110716	42	43
2 CROSS SECTIONS								

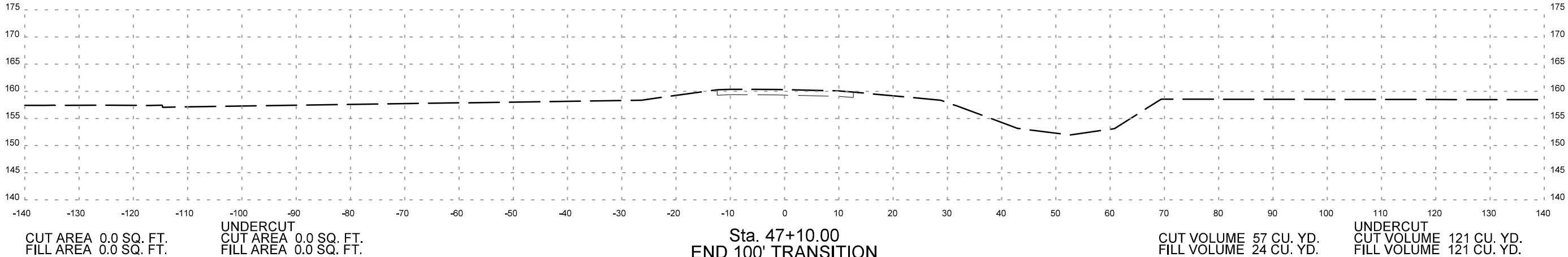


STA. 45+28.54 TO STA. 46+10.00
HWY. 318
SITE 3

tsj/ajc 1/23/2025
1925530_Hwy105-318_XS_BORDER.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		110716	43	43

2 CROSS SECTIONS



STA. 47+10.00
HWY. 318
SITE 3